

Package Document

Funding

Federal Funding? Yes

Federal Oversight? Yes

[Federal Oversight Agreement \(June 2015\)](#)

Describe Federal Oversight: Federal oversight

Type

Is this project being documented as an emergency project?

Yes No

Phase: Evaluation

Classification: Categorical Exclusion (Class II)

CE Level: 2

CE Action: 04 05 06 07 08 09
 10 11 12 13 14 Other

The preferred process for creating an Evaluation is to use the Create Eval button from an existing Scoping to link it to this package.

- If an approved Scoping Package does not exist in the Expert System, provide reason and explanation below.

- If waived, provide direction/authority information. For paper copies, include file location.

Reason: Waived Paper Copy Other

Explanation: Scoping was completed as an Environmental Assessment (EA). The Federal Highway Administration (FHWA) reviewed PennDOT's justification for NEPA reclassification of the Bayfront Parkway Central Corridor Improvement Project from an EA to a Level 2 CEE, which includes the identification of the preferred alternative, a summary of project-area sensitive resources and potential impacts, and an overview of public involvement. FHWA agrees that the project would not result in either individual or cumulative significant impacts, and has approved the NEPA reclassification request on 4/15/2020 to a Level 2 CEE.

Projects

PDOT Project Manager: Thomas J McClelland

Federal Project Number: T012539 Z240

| MPMS Projects | | | | | |
|--|--|-----------------|------------|--|--|
| Lead? | Status/Title | District/County | SR/Sec | Description | |
| <input checked="" type="checkbox"/> 108952 | Active / Central Bayfront Project | 01 / Erie | 4034 / A01 | Multimodal/Congestion Reduction and safety improvement project on the Bayfront Parkway (SR 4034) | |
| <input type="checkbox"/> 115616 | Candidate / Central Bayfront Project - GAP | 01 / Erie | 4034 / A02 | Bayfront Parkway (State Route 4034); City of Erie, Erie County; GAP ROW Project | |
| <input type="checkbox"/> 115617 | Programmed / Central Bayfront Project - S&S | 01 / Erie | 4034 / A03 | Bayfront Parkway (State Route 4034); City of Erie, Erie County; Multimodal | |

*The last time MPMS data was added or refreshed was on Thursday, 28 May 2020 03:02 PM.

| Project Funding & Fiscal Constraint | | | | | | |
|---|---|-----------|-----------|------------|-------------------|-----------|
| MPMS | FD \$ | ROW \$ | UTL \$ | CON \$ | TIP | LRTP Date |
| 108952 | 1,500,000 | 1,500,000 | 1,000,000 | 15,000,000 | FFY 2019 Erie TIP | |
| | 1,000,000 | 1,500,000 | 1,000,000 | 25,500,000 | FFY 2021 Erie TIP | |
| 115616 | | | | | | |
| 115617 | | | | 2,000,000 | FFY 2019 Erie TIP | |
| Remarks: | No construction funding for MPMS#115616. MPMS# 115616 is only for the purchase of land for CSX railroad relocation. | | | | | |
| <p>For federally funded projects where the construction phase (and if needed, ROW and/or utilities phases) is not programmed on the current TIP, remarks provide a detailed reference to the current LRTP identifying full funding for the project.</p> <p>"LRTP Date" is the date of the last adopted Long Range Transportation Plan.</p> <p>Refer to Supplement to January 28, 2008 "Transportation Planning Requirements and Their Relationship to NEPA Process Completion"</p> | | | | | | |

Editors

Names & Groups: Autumn Kelley/PennDOT
david.galloway/PennDOT BP-000226
jim.o'mara/PennDOT BP-000226
Mark.Fedosick/PennDOT BP-000226
All District 01 Users

Reviewers

System User Names**Non-System / Other Addresses****Notify These Additional Emails Upon Approval:**

Mark Fedosick/PennDOT BP-000226

Package was submitted on Tuesday, 09 June 2020 04:46 PM by Autumn Kelley/PennDOT

| Email Notify | Reviewed By | Date/Time |
|--|------------------------------------|------------------------|
| EM: Autumn Kelley/PennDOT | Autumn Kelley/PennDOT | Tue, 06/09/20 04:47 PM |
| ADE: Brian A McNulty/PennDOT | Brian A McNulty/PennDOT | Wed, 06/10/20 12:50 PM |
| HDTS: Western Region Booker T Bates/PennDOT Brian E Shunk/PennDOT Harrison Knox/PennDOT Jeffrey Bucher/PennDOT Julius B Sanders/PennDOT Keith A Saloum/PennDOT Raymond M DeArmitt/PennDOT Ryan Vankirk/PennDOT Sarah A Cordek/PennDOT | Jeffrey Bucher/PennDOT | Thu, 06/11/20 08:22 AM |
| FHWA: Andrea Ebur/PennDOT BP-001391 Barbara J Shaffer/PennDOT BP-001391 Camille A Otto/PennDOT BP-001391 Christopher Walston/PennDOT BP-001391 Clint H Beck/PennDOT BP-001391 Deborah Suciusmith/PennDOT BP-001391 Eugene Porochniak/PennDOT BP-001391 Ezequiel Lujan/PennDOT BP-001391 FHWA PA Division Resource Account/PennDOT BP-001391 George Fleagle/PennDOT BP-001391 Jamie Lemon/PennDOT BP-001391 Jeff Engle/PennDOT BP-001391 Jennifer Crobak/PennDOT BP-001391 Jennifer Horn/PennDOT BP-001391 John Bork/PennDOT BP-001391 Jonathan Buck/PennDOT BP-001391 Jonathan Crum/PennDOT BP-001391 Karyn Vandervoort/PennDOT BP-001391 Keith Lynch/PennDOT BP-001391 Matt Smoker/PennDOT BP-001391 Pete Nanov/PennDOT BP-001391 Phillip Bobitz/PennDOT BP-001391 Regina Majercak/PennDOT BP-001391 Richard Kercher/PennDOT BP-001391 Spencer Stevens/PennDOT BP-001391 Tony Mento/PennDOT BP-001391 Veronica L Feliciano/PennDOT BP-001391 | Jonathan Crum/PennDOT BP-001391 | Mon, 06/15/20 12:37 PM |

CEES Package Number: 30980

Categorical Exclusion Evaluation

MPMS: 108952

Project: Central Bayfront Project



SR/Section: 4034 / A01

County: Erie

District: 01

CE Level: 2

CE Action: Other

Created: 04/15/20 by Autumn Kelley

Submitted: 06/01/20 by Autumn Kelley

Approved: 06/15/20 by Jonathan Crum

CE Evaluation Part A

General Project Identification & Description

Project Identification

Part A Prepared By: Mark Fedosick
ms consultants
inc.

Originating Office: District 01

Date: 04/15/20

Federal Project Number: T012539 Z240

Township/Municipality: Erie City, Erie City, Erie City

Local Name: Central Bayfront Project

Limits of Work (Segment/Offset)

Start: 0050/2894
End: 0080/0102

Construction Stations

Start: 502+50.00
End: 552+25.00

Total Length: 4975 ft

Program: 313 **Funding:** **federal** 59% **state** 41% **local** 0% **other** 0%

Date of First Federal Authorization for Preliminary Engineering:

June 12, 2017

Date of Federal Authorization Time Extension(s) for Preliminary Engineering (if applicable):

N/A

Project Description

Include narrative to describe the general project scope of work.

Attach Location Map(s) and Design Plan (only overview and sheets showing limits of work).

The City of Erie is experiencing a resurgence of both private—and public—sector development and investment in its downtown and on the waterfront. In the heart of these developments lies the Bayfront Parkway (SR 4034), which has served the community since the early 1990s. The parkway serves as an east-west connection, but with development, the need for north-south connections is growing. Planning studies have noted this need for greater connectivity between the waterfront and Erie's downtown and residential neighborhoods. In collaboration with local project stakeholders and the community, the Bayfront Parkway Central Corridor Improvements will enhance these connections and provide the infrastructure needed to support the growth of the region.

The proposed project consists of reconfiguring three major intersections, completing a multiuse trail network, and constructing three pedestrian bridges. The three intersections are:

- Bayfront Parkway (SR 4034-A01) at Sassafras Street Extension
- Bayfront Parkway (SR 4034-A01) at State Street
- Bayfront Parkway (SR 4034-A01) at Holland Street

The Bayfront Parkway at Sassafras Street Extension intersection will be upgraded to a dual lane three-leg roundabout. New sidewalks, crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

The Bayfront Parkway at State Street intersection will be upgraded to a grade-separated signalized intersection with a new structure to carry State Street over the Bayfront Parkway with interior ramps along the Bayfront Parkway to provide full access to and from State Street. Bayfront Parkway through traffic on the outside lanes pass beneath State Street. New sidewalks and crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

The Bayfront Parkway at Holland Street intersection will be upgraded to a dual lane four-leg roundabout. Sidewalks, crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

The existing Bayfront Bikeway offers a paved multiuse route across the city of Erie for pedestrians and bicyclists. However, the Bayfront Parkway currently acts as a barrier for pedestrians and bicyclists between the City of Erie to the south and the waterfront area to the north. There are also missing links of the Bayfront Bikeway in the project area. A multiuse trail connecting all three intersections on the north side of Bayfront Parkway will be completed to enhance bicycle and pedestrian access within the project area.

In order to accommodate the Central Corridor Improvements, the existing railroad track located between Sassafras Street Extension and Holland Street will be removed. CSX Transportation currently owns and operates the existing track, which served the heavy industrial facilities previously located on the waterfront. Since the waterfront no longer supports heavy industrial uses, the need for rail has diminished. However, CSX does currently utilize the track for switching operations and as storage for rail cars. In order to maintain their operations, CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. For safety and operational concerns, this crossing will be eliminated and a multi-modal bridge over the proposed CSX tracks will be constructed, located west of the existing crossing. These activities will be constructed separate from the Central Corridor Improvement Project.

As part of a separate project by others (Erie-Western PA Port Authority), the portion of Front Street located between Sassafras Street Extension and State Street will be improved. This project is anticipated to be constructed in 2021, in advance of the Bayfront Parkway Central Corridor Improvement project, and is anticipated to be utilized as a detour route during various phases of construction. This separate project is currently in design and in the process of acquiring its own NEPA clearance.

Project Purpose and Need

Include narrative to describe the project need.

Purpose:

The purpose of the project is to improve the pedestrian, bicycle, transit, and passenger vehicle connection of the Erie Central Business District and adjacent neighborhoods to the waterfront property north of the Bayfront Parkway, to reduce crashes as much as practical on the Bayfront Parkway (SR 4034), to improve future congestion to an acceptable level of service or delay, and to improve traffic operations and efficiency.

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Need:

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Mobility:

- Multimodal transportation connections between Downtown Erie and the Bayfront (north/south) are lacking.
- The Bayfront Parkway has limited existing transit service in the project area.
- Lack of consistent pedestrian and bicycle facilities along, or parallel to, the Bayfront Parkway.
- Lack of viable connections for pedestrians and bicycles between downtown and surrounding neighborhoods to the Bayfront.
- The Bayfront Parkway acts as a barrier to pedestrians and bicyclists traveling from downtown Erie to the Bayfront area.

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Crashes:

- 80 crashes within the project limits over a 5-year period.
- The locations with the crashes were as follows:
 - o 15 crashes occurred at the intersection of the Bayfront Parkway and Sassafras Street.
 - o 39 crashes occurred at the intersection of the Bayfront Parkway and State Street. (3 of these crashes involved pedestrians)
 - o 26 crashes occurred at the intersection of the Bayfront Parkway and Holland Street.

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Operations & Efficiency:

- Existing level-of-service (LOS) for the intersection of State Street and the Bayfront Parkway is "D" for the AM peak and future year LOS is projected to be an "F" with proposed Bayfront Development.
- Future years LOS are projected to be LOS of "D" or worse at the intersections of the Bayfront Parkway and Sassafras Street Extension, State Street, and Holland Street.
- Limited gaps for left turning vehicles along the Bayfront Parkway

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Project Setting and Distinct Project Features

Provide narrative to adequately describe the project setting (terrain, locale, land use, presence of bicycle/pedestrian or other unique facilities, etc.) and support the evaluation. Any additional information not otherwise covered by this form that is necessary to clearly understand project circumstances should also be included in this section. Narrative should be appropriate for the complexity of the CEE and project circumstances with the length and content varying accordingly.

The project is located in an urban setting and lies within the City of Erie. The topography is rolling throughout the project site. The City's downtown district lies to the south side of the parkway and is separated by a steep bluff. The Bayfront to Presque Isle Bay lies to the north with mixed use development (industry, retail, restaurant, marinas, museums)

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The Great Lakes Sea Way Trail and Bayfront Promenade Trail are located in the project area and offer a paved multiuse route across the City of Erie for pedestrians and bicyclists.

Describe the involvement with utilities with this project.

There are numerous aerial and underground utilities located within the project corridor, including the following:

- Century Link
- Charter Communications
- Erie City of Bureau of Sewers
- Erie Sewer Authority
- National Fuel
- Pennsylvania Electric Company
- Velocity Net Communications
- Verizon

Impacts and possible relocation options will be identified in preliminary design and will be discussed at a future utility meeting to be conducted prior to the DFV submission.

Describe the involvement with any railroad (active or inactive) including all rail lines, crossings, bridges, or signals.

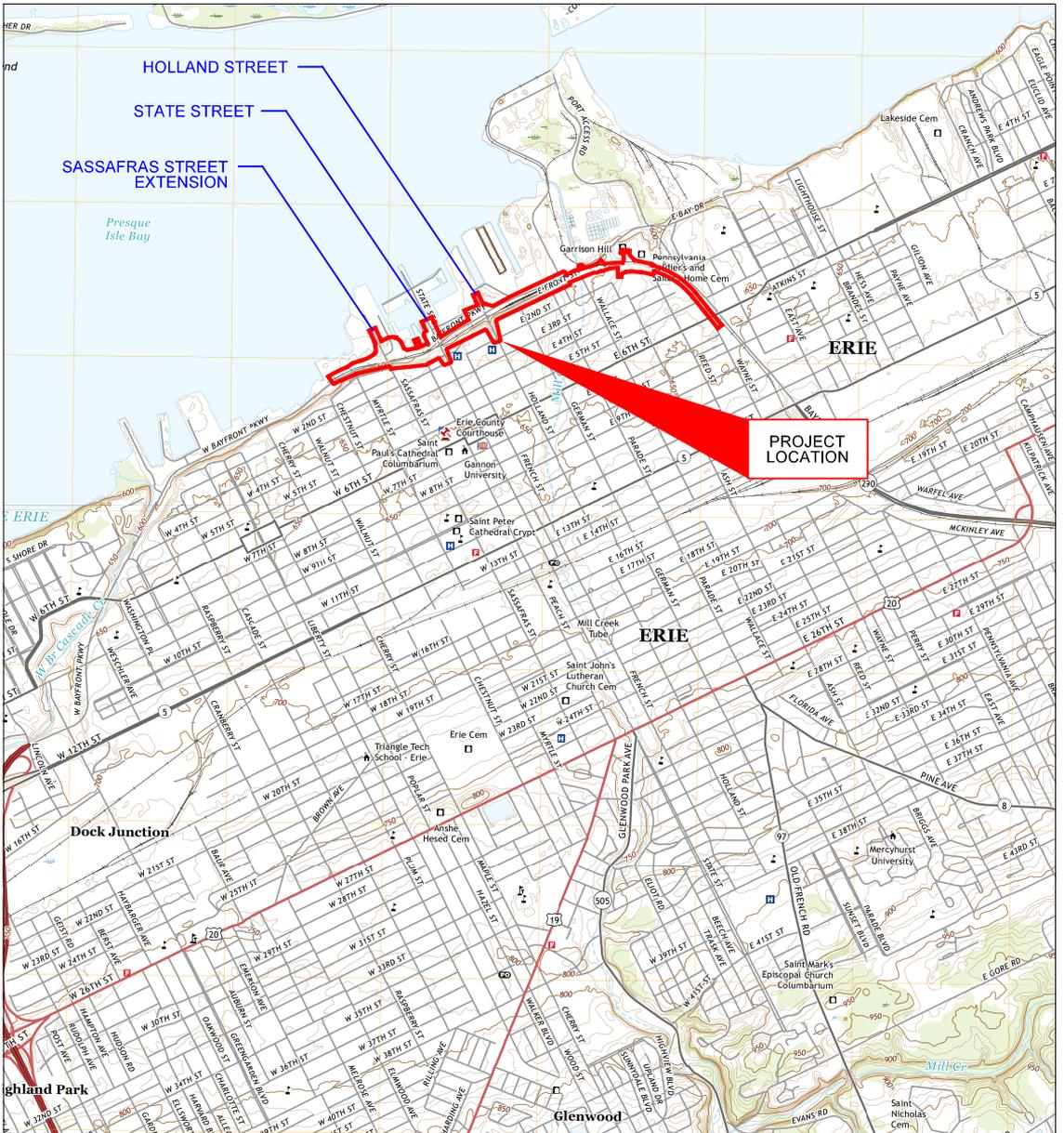
In order to accommodate the Central Corridor Improvements, the existing railroad track located between Sassafras Street Extension and Holland Street will be removed. CSX Transportation currently owns and operates the existing track, which served the heavy industrial facilities previously located on the waterfront. Since the waterfront no longer supports heavy industrial use, the need for a rail has diminished. However, CSX does currently maintain their operations adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. A multi-modal bridge over the proposed CSX railroad tracks will be constructed west of the existing at-grade crossing, which will be eliminated for safety and operational concerns. The bridge will be constructed on the same site as a former bridge that previously spanned the railroad tracks, which was removed in the mid 20th century. In effect, the project will restore the original circulatory system within the Soldiers and Sailors Home property, with the bridge once again facilitating vehicular and pedestrian access between the Home and the Cemetery and the Anthony Wayne Blockhouse. The bridge will remain the property of the Soldiers and Sailors Home.

Describe changes to access control.

The project involves improving the existing intersections along the Bayfront Parkway with Sassafras Street Extension State Street and Holland Street which will enhance the multimodal connections of the traveling public and the overall operation and efficiency of the intersections. The proposed improvements will provide full access to its users.

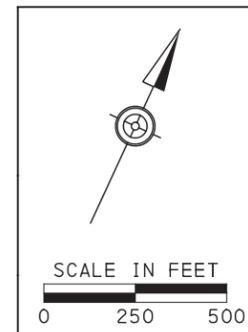
Additional Information**Remarks, Footnotes, Supplemental Data****Attachments**

1. [Location Map 6.5x8.5.pdf](#) (3142KB / 3.1MB)
2. [Bayfront Parkway - Design Plan.pdf](#) (2462KB / 2.4MB)
3. [2018-02-22 Scoping Field View.pdf](#) (2930KB / 2.9MB)
4. [2020-04-15 FHWA NEPA Downscoping Letter.pdf](#) (165KB / 0.2MB)
5. [Purpose and Needs.pdf](#) (86KB / 0.1MB)



LOCATION MAP

Scale: 1" = 4000'
U.S.G.S. Quad Map



Bayfront Parkway Improvements
 PennDOT District 1-0
 April 2020

CONNECTING ERIE'S WATERFRONT

OVERALL CORRIDOR IMPROVEMENTS INDEX




Bayfront Convention Center

Erie Water Works

Sassafras St Ext

Sassafras Pier

Front St

PRELIMINARY FRONT STREET ALIGNMENT BY OTHERS

Bayfront Parkway

Sassafras St

W Front St

Myrtle St

Sassafras St

Short St

LEGEND

- PROPOSED ROADWAY PAVING
- PROPOSED ROADWAY SHOULDER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE CURB GUTTER / ISLAND
- PROPOSED CONCRETE BARRIER / RETAINING WALL
- PROPOSED TRUCK APRON
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- PROPOSED PEDESTRIAN BRIDGE
- EXISTING SIDEWALK & BICYCLE PATH

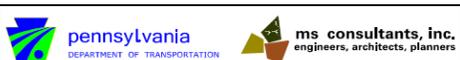


SCALE IN FEET
0 50 100

Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

SASSAFRAS STREET
IMPROVEMENTS



Presque Isle Yacht Club

Wolverine Park Marina

Erie Maritime Museum

Harbor View Miniature Golf

Harbor Place Development

PRELIMINARY FRONT STREET ALIGNMENT BY OTHERS

Grade Separated Intersection (Bayfront Parkway Through Traffic Passes Below State Street)

100 Peach Street

100 State Street

UPMC Hamot

Peach St

State St

LEGEND

- PROPOSED ROADWAY PAVING
- PROPOSED ROADWAY SHOULDER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE CURB GUTTER / ISLAND
- PROPOSED CONCRETE BARRIER / RETAINING WALL
- PROPOSED TRUCK APRON
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- PROPOSED PEDESTRIAN BRIDGE
- EXISTING SIDEWALK & BICYCLE PATH

Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

STATE STREET IMPROVEMENTS

Raymond M Blasco, MD
Memorial Library

Erie Intermodal
Transportation Center

Donjon
Shipbuilding And Repair

DaVita
Erie Dialysis

Greyhound
Bus Station

E Front St

Holland St

Bayfront Parkway

CSX Railroad Improvements

E Front St

UPMC Hamot

Holland St

E 2nd St

LEGEND

- PROPOSED ROADWAY PAVING
- PROPOSED ROADWAY SHOULDER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE CURB GUTTER / ISLAND
- PROPOSED CONCRETE BARRIER / RETAINING WALL
- PROPOSED TRUCK APRON
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- PROPOSED PEDESTRIAN BRIDGE
- EXISTING SIDEWALK & BICYCLE PATH



SCALE IN FEET
0 50 100

Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

**HOLLAND STREET
IMPROVEMENTS**



Bayfront Parkway

CSX Railroad Improvements

Pennsylvania
Soldier's And Sailor's Home

LEGEND

- PROPOSED BRIDGE / RETAINING WALL
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- EXISTING ACCESS DRIVE TO BE REMOVED



SCALE IN FEET
0 50 100

Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

**PENNSYLVANIA
SOLDIER'S AND SAILOR'S HOME
ACCESS IMPROVEMENTS**



MEMORANDUM OF SCOPING FIELD VIEW

On Thursday February 22, 2018 a scoping field view was conducted to determine the scope of the SR 4034-A01 (Bayfront Parkway) project located in the City of Erie, Erie County and identified as MPMS No. 108952. The scoping field view meeting was held in the conference room of the Erie County Planning Department.

The project's intent is to improve traffic congestion and operations as well as to enhance safety for vehicles, pedestrians and cyclists along the Bayfront Parkway (SR 4034) between Sassafras Street and Holland Street. The overall project length is approximately one-half (0.5) miles. The project will involve intersection improvements at Sassafras Street, State Street, and Holland Avenue. Other improvements to be evaluated include connection of recreational trail networks, sidewalks, ADA accessible curb ramps and drainage facilities.

A study of the Bayfront Parkway corridor from the I-79 terminus to East 12th Street was completed in June 2017. The study identified numerous deficiencies along the corridor, including traffic congestion, poor traffic operations, and safety concerns for vehicles, pedestrians, and cyclists.

The topography is rolling throughout the project site. The Bayfront Parkway profile slopes downward approximately 3.5% from State Street in both directions to the intersections with Sassafras Street and Holland Street.

A Project Location and Site View is shown on the last page of this document.

The following individuals participated in the scoping field view meeting:

| NAME | REPRESENTING | TELEPHONE |
|------------------|---------------------------------------|--------------|
| Mark Nicholson | PennDOT District 1-0 Design | 814-678-7057 |
| Michael McMullen | PennDOT District 1-0 Design | 814-678-7077 |
| Autumn Kelley | PennDOT District 1-0 Environmental | 814-678-7393 |
| Mike Hall | PennDOT District 1-0 Utilities | 814-678-7088 |
| Josh Dalton | PennDOT District 1-0 Utilities | 814-678-7131 |
| Greg Hughes | PennDOT District 1-0 Right-of-Way | 814-678-7069 |
| Greg Maser | PennDOT District 1-0 Traffic | 814-678-7014 |
| Jeff Bucher | PennDOT Central Office | 717-783-4586 |
| Pete Nanov | Federal Highway Administration (FHWA) | 717-221-3780 |
| Jon Tushak | City of Erie Engineering | 814-870-1377 |
| Amy Murdock | Erie County Planning | 814-451-7328 |
| Sean Sawford | ms consultants | 412-264-8701 |
| Jim O'Mara | ms consultants | 412-264-8701 |

Note: Representatives from PennDOT Construction and Maintenance Units were invited to attend, however unforeseen scheduling conflicts impacted their ability to attend.

SR 4034 (Bayfront Parkway)

| | |
|------------------------|--|
| Roadway Classification | Community Arterial |
| Design Speed | 40 mph (posted 35 mph) |
| ADT | 16,000 |
| ADTT | 1,120 |
| % Trucks | 7% |
| Pavement Width | 12' travel lanes with 12' turning lanes at intersections |
| Shoulder Width | 2' Curb & Gutter |
| Segment/Offset Limits | 0060/0000 to 0070/1140 |

The following items will be discussed:

Roadway:

- Existing pavement structure is 10" plain cement concrete pavement
- Roadway consists of two 12' travel lanes with 12' turning lanes at the intersections.
- Concrete curb and gutter located on both sides.
- Intersection improvements to be considered include grade separation of the Bayfront Parkway and State Street, as well as conventional intersection improvements.
- Intersection improvements, including roundabouts and traditional traffic signals, will be evaluated at the intersections along the Bayfront Parkway with Sassafras Street and Holland Street.
- The Bayfront Parkway will be resurfaced from Greengarden Boulevard to Sassafras Street in 2018. It is recommended that pavement patching be included if necessary from the eastern project limits to 6th Street. In addition, skid numbers and crash data should be reviewed to determine if a friction course is necessary.

Structure:

- An existing structure carries SR 4034 over a set of abandoned CSX railroad tracks at the intersection with State Street. Coordination will be required with CSX.
- Associated with the railroad structure are existing retaining walls supporting the Bayfront Parkway. Coordination will be required with CSX.
- An existing retaining wall is located on the south side of the Bayfront Parkway between Waterworks Drive and Sassafras Street which supports an embankment and Front Street along the "Bluffs".

Railroad:

- A single set of abandoned tracks owned by CSX exist within the project limits and pass under the Bayfront Parkway at the intersection with State Street.

- There is an existing at-grade crossing at Holland Street and an at-grade crossing of the Bayfront Parkway east of Holland Street.
- The railroad tracks end on the east side of Sassafras Street.
- Coordination with CSX will need to occur to determine if these abandoned tracks can be removed and r/w relinquished to PennDOT.

Environmental:

- See separate Environmental Scoping Field View document for a more in-depth review of environmental resources.
- Project may require Environmental Assessment (EA) due to complexity of design alternatives and heavy public involvement.
- Wetland and Aquatic Resources
 - One Palustrine Emergent (PEM) Wetland was mapped but is anticipated to be outside study limits.
 - Web Soil Survey – A minor component of Urban Land-Red Hook Complex (UrA) is comprised of Fredon, which is classified as a hydric inclusion.
 - A field investigation of wetland and stream boundaries will be conducted, though are expected to be minimal based on urban and developed land use.
- Hazardous Waste Investigation
 - Five (5) storage tanks are identified within the study area
 - One (1) municipal waste operation at UPMC Hamot (incinerator)
 - One (1) land recycling cleanup at Front Street (Penelec)
 - Twenty (20) waste sites identified within study area
 - EMAPPA indicated storage tanks within study area and railroad with likely presence of PCB's
 - EPA MAPPER indicated two (2) toxic release inventories and eleven (11) environmental facilities within study area.
 - Review of historic aerial photos reveals railroads with likely presence of PCB's, heavy industrial use, heavy smog & air pollution.
- Threatened and Endangered Species – PNDI
 - PA Game Commission indicated three (3) endangered/special concern species
 - PA DCNR indicated one (1) special concern species
 - PA Fish and Boat Commission indicated sixteen (16) endangered/special concern species

- US Fish and Wildlife Service indicated no impacts to federally listed or proposed species are anticipated.
- Cultural Resources
 - CRGIS indicated five (5) areas listed on the National Register of Historic Places
 - CRGIS indicated nine (9) areas are eligible for listing on the National Register of Historic Places.
 - Aggregate Area – Erie Pittsburgh Railroad may be eligible based on the significance the railroad had on the surrounding area and its growth
- Noise Evaluation
 - Residential areas were assessed presenting potential impacts due to increased traffic volumes.
 - Further investigation will be based on design alternatives.
 - Coordination with PennDOT and FHWA to be conducted.
- Section 4(f) and Section 6(f) Resources
 - Historic resources listed under Cultural Resources – potential Section 4(f)
 - Great Lakes Sea Way Trail – Section 4(f) likely
 - Bayfront Promenade – Section 4(f) likely
 - Bayview Park – potential Recreational Section 4(f)
 - Wolverine Park Marina – potential Recreational Section 4(f)
 - Nate Levy Jaycee Park – potential Recreational Section 4(f)
 - Park Rehabilitation and Development – Section 6(f) – This resource will need to be reviewed and clarified
- Coastal Zones
 - Coastal work to be performed in coordination with the Coastal Zone Coordination Act Federal Consistency Form.

Architectural History:

- Per PHMC’s Cultural Resources Geographic Information System (CRGIS) there are at least seven previously recorded resources within the immediate vicinity of the project area.
- The western leg of Bayfront Parkway, from approximately I-79 to the Lawrence Pier, occupies a former Erie & Pittsburgh Railroad alignment. An aggregate file for the railroad exists in CRGIS but a determination of National Register of Historic Places (NRHP) eligibility has not been made. Given the lack of historical integrity it appears unlikely that the resource would be determined eligible.

- The Frontier Place Historic District (Key No. 144264) borders the western side of Bayfront Parkway from West 8th Street to approximately Weschler Avenue. The Frontier Place Historic District was previously determined not eligible for the NRHP.
- The Chestnut Street Waterworks Pump House (Key No. 110374) at 340 West Bayfront Parkway has been determined eligible for the NRHP. The parkway skirts the edge of the building. Due to its proximity to the edge of the roadway this building could pose a concern. This resource should be considered during the design process with care taken to avoid alterations to the property. Upgrades to the existing ROW should not pose a problem, if activities remain confined to milling, curb or sidewalk replacement, or signal and lighting improvements.
- Dobbins Lane (Key No. 087163), located near Slate Street and West Bayfront Parkway, is a cobble stone road that has been previously-determined eligible for the NRHP. The cobble stone road is likely outside project limits. Furthermore, the setting has been altered by recent development, including a multi-story commercial building built ca. 1990.
- Toward the eastern half of the project area, East Bayfront occupies the former alignment of the Philadelphia & Erie Railroad (Key No. 144661). East Bayfront follows the former railroad alignment from just east of State Street to Shannon Road. The railroad has been determined not eligible for NRHP.
- Near Wallace Street the Bayfront Parkway crosses the Mill Creek Tube (Key No. 105322). The tube has been previously determined eligible for the NRHP. A deeply buried drainage structure, the Parkway project is not likely to affect the tube in any way.
- From approximately East 3rd Street to Twelfth Street, Bayfront Parkway extends through the Dobbins & Dunlap Subdivision (Key No. 103257). The subdivision was reviewed by SHPO in 1995 but the agency did not make a determination of eligibility. The neighborhood would need to be re-assessed if plans call for significant alterations to the Bayfront Parkway within the subdivision.
- The northern boundary of the East 12th Street Historic District begins at Twelfth Street at the eastern end of the proposed project area. The district has been previously-determined eligible for the NRHP. If parkway improvements extend into the boundaries of the historic district, we will need to assess for affects.
- Architectural History Recommendations: Bayfront Parkway skirts or extends through numerous previously-recorded above-ground resources of which three have been previously determined eligible for the NRHP. Unless the project calls for dramatic alterations to the existing roadway and streetscape, the project is not likely to affect those aspects of integrity that qualify the resources for the NRHP. A review of the plans will be necessary to help determine if the project will adversely affect historic resources. I [Donald Burden] will prepare an early notification form and submit it to Project PATH as a record of our initial review of the project.

Permits:

- Anticipated permits include:
 - Potential for Environmental Assessment (EA)
 - Categorical Exclusion
 - Chapter 102 Erosion and Sediment Control
 - NPDES/ E&S
 - Chapter 105 Water Obstruction and Encroachment (to be determined)
 - Section 4(f)
 - Section 6(f)

Right-of-Way:

- The Bayfront Parkway has a variable r/w width within the project limits, varying from 67' min to 95' max.
- State Street (City of Erie) has a 100' r/w width.
- Sassafras Street (City of Erie) has a 60' r/w width.
- Holland Avenue (City of Erie) has a 50' r/w width north of the Bayfront Parkway and a 60' r/w width south of the Bayfront Parkway.

Utilities:

- There are numerous existing facilities located within the project limits including water, sanitary, gas, electric and communication facilities. A summary of facility owners is included below:
 - AT&T Atlanta
 - AT&T Network Local Services
 - Erie City Bureau of Sewers
 - Erie Water Works
 - Millcreek Township Sewer Authority
 - National Fuel
 - Pennsylvania Electric Company
 - Level 3 Communications, LLC
 - Uniti Fiber
 - Velocity Net Communications, Inc.
 - Verizon
 - Zayo Bandwidth
- Penelec owned and operated steam lines within the project area. These lines may have been abandoned and may be encountered. The existing lines may contain asbestos.

Coordination with Penelec will be required to determine type, size and location of any active or abandoned steam lines within the project limits.

- Penelec may be providing new underground service to UPMC Hamot. They reached out to PennDOT to inquire where this line could be installed so it could be avoided with any future improvements to the Bayfront Parkway. Coordination with Penelec will be required to determine the location and anticipated schedule of installation.
- Existing Penelec substation near Bayfront Parkway and State Street may be costly to relocate.
- Due to substantial utility relocations anticipated, design to consider reserving a utility corridor for relocating facilities.

Design Exceptions:

- No design exceptions are anticipated at this time.

Public Involvement:

- Extensive public involvement is anticipated.
- Meetings with various project stakeholders, including the Project Advisory Committee (PAC) developed during the conceptual study, will be conducted throughout the alternatives analysis and design process.
- A PennDOT Connects meeting was held on January 10, 2018 and the local municipality (City of Erie) is to be continually engaged throughout the design development process.
- It was noted during the scoping field view meeting that various private entities (e.g., Scott Enterprises, UPMC-Hamot, Erie Insurance, etc.) are planning significant investments in and around the project area in the near future. These private entities are to be continually engaged throughout the design development process.

Bicycle and Pedestrian Facilities:

- Evaluation of the existing recreational trail network needs to be conducted to eliminate disconnects in the trail network.
- The City of Erie has indicated they may be incorporating bicycle lanes on State Street. As such, accommodation of bicycle lanes on State Street should be considered.

Safety:

- The Bayfront Parkway Study identified safety concerns exist within the Bayfront Parkway corridor between the I-79 terminus and East 12th Street. According to the Study:
 - 246 crashes within the Bayfront Parkway Study Corridor over a 5-year period.

- 80% of the crashes were located at an intersection.
- Crash rate between Port Access Road and East 12th Street is higher than the statewide average for similar roadways.
- Two (2) fatalities and two (2) major injuries occurred between East 6th Street and East 12th Street.
- Results of a public survey indicated a majority of respondents did not feel safe walking or biking across the Bayfront Parkway.
- As such, safety enhancements will need to be evaluated and incorporated into the project.

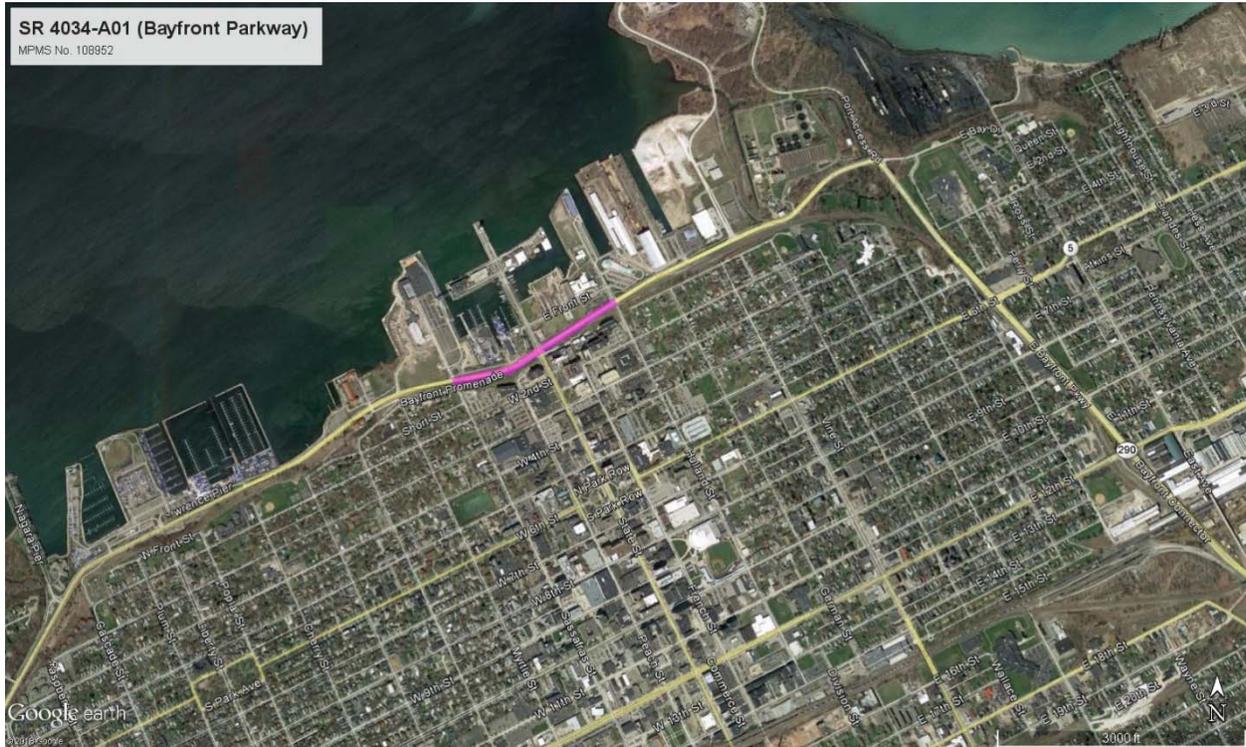
Traffic:

- Existing ITS equipment located at intersection of Bayfront Parkway and State Street may need relocated/reconfigured depending on proposed improvement at that intersection.

Constructability Issues:

- Lowering of the Bayfront Parkway and removal of the existing railroad structure will need to be evaluated for feasibility during staged construction.
- If a detour is necessary, improvements to detour routes will need to be evaluated.

Project Location:



Site View:



SCOPING FIELD VIEW – ENVIRONMENTAL

Wetland and Aquatic Resources:

National Wetland Inventory (NWI) – One Palustrine Emergent Wetland (PEM) was mapped but is anticipated to be outside of study limits. (Please Refer to Attached NWI Map)

Web Soil Survey- A minor component of UrA- Urban land-Red Hook Complex, 0 to 3 Percent Slopes is made up of Fredon, which is classified as a hydric inclusion. (Please Refer to Attached Soil Map)

Field Visit- Using proposed alternatives ms consultants, inc. will conduct wetland and stream investigations. Wetland and Stream Resources are expedited to minimal based of land use being urban and developed.

Hazardous Waste investigation: (Please See attached Hazardous Waste Map)

PennDOT One Map: <https://www.dot7.state.pa.us/OneMap>

Storage Tank Locations:

1. BLDG MATERIALS CORP
2. ERIE SAND & GRAVEL CO
3. FRONT STREET GENERATING STA (PA ELEC CO)
4. ERIE CITY SEW AUTH ERIE CNTY
5. CITY OF ERIE WWTP

Municipal waste operations:

-HAMOT MEDICAL CENTER - INCINERATOR

Land Recycling Cleanup:

-GPU FRONT ST STA PENELEC (PA ELEC CO)

EPA Waste Sites:

- | | |
|---|-------------------------------|
| 1. CHESTNUT FILTRATION PLANT | RMP REPORTER |
| 2. ERIE PORT AUTHORITY | UNSPECIFIED UNIVERSE |
| 3. SERVALL PLANT/ERIE | AIR MINOR |
| 4. ERIE SAND & GRAVEL CO | ICIS-NPDES NON-MAJOR |
| 5. CHESTNUT STREET WATER PLANT-CITY OF ERIE | COMPLIANCE ACTIVITY |
| 6. NIAGARA MACH | STATE MASTER |
| 7. BUILDING MATERIALS MANUFACTURING CORP | TRI REPORTER |
| 8. PHMC FLAGSHIP NIAGARA | STATE MASTER |
| 9. DONJON SHIPBUILDING & REPAIR | *AIR SYNTHETIC MINOR* |
| 10. MEDI-CENTER HOSPITAL | UNSPECIFIED UNIVERSE (N) |
| 11. FRONT STREET | AIR PROGRAM |
| 12. UPMC HAMOT ERIE | *CRITERIA AIR POLLUTANT MAJOR |
| 13. ERIE UNIVERSAL PROD/ERIE | AIR MINOR |

| | |
|--|------------------------------------|
| 14. BAYFRONT GARAGE | AIR MINOR |
| 15. ERIE INSUREANCE | SQG |
| 16. ERIE PA ARMY NATL GUARD RC | UNSPECIFIED UNIVERSE |
| 17. BP OIL 07070 | STATE MASTER |
| 18. FORMER FISHER HOSPITAL ASBESTOS RENOVATION | STATE MASTER |
| 19. RITE AID 11008 | *HAZARDOUS WASTE BIENNIAL REPORTER |
| 20. MCCARTY PRINTING COR/ERIE | STATE MASTER |

EMAPPA: <http://www.dep.state.pa.us/emappa/>

- Storage tanks within study area
- Railroad with likely Present of PCB's

EPA MAPPER:

- 2 Toxic Release inventory's within project area
- 11 Enviro Facility's within Project area

Historic Aerial Photos:

- Railroads with likely Present of PCB's
- Heavy Industrial Use
- Heavy Smog/ Air Pollution

DEP File Review:

- Pending
- TBD with Alternatives

Threatened and Endangered Species:

PNDI- a Pennsylvania Natural Diversity Inventory was Conducted to determine the possible presence of any T&E Species within the project area. Additional coordination is being made with the agencies, with alternatives being designed, potential T&E impacts will be clarified. With further coordination many impacts will be ruled out as a result to avoidance in our design.

PA GAME COMISSION

| Scientific Name | Common Name | Current Status |
|-----------------------|------------------|--------------------------|
| Cistothorus palustris | Marsh Wren | Special Concern Species* |
| Falco peregrinus | Peregrine Falcon | Endangered |
| Fulica americana | American Coot | Special Concern Species* |

PA Department of Conservation and Natural Resources

| Scientific Name | Common Name | Current Status | Proposed Status | Survey Window |
|-----------------|--------------|--------------------------|-----------------|--------------------------|
| Bidens laevis | Beggar-ticks | Special Concern Species* | Endangered | Flowers August - October |

PA Fish and Boat Commission

| Scientific Name | Common Name | Current Status |
|------------------------|------------------------|--------------------------|
| Acipenser fulvescens | Lake Sturgeon | Endangered |
| Amblema plicata | Three-ridge | Special Concern Species* |
| Anodontoides | Cylindrical Papershell | Special Concern Species* |
| Coregonus artedi | Cisco | Endangered |
| Etheostoma exile | Iowa Darter | Endangered |
| Etheostoma pellucida | Eastern Sand Darter | Endangered |
| Fusconaia flava | Wabash Pigtoe | Special Concern Species* |
| Lepisosteus oculatus | Spotted Gar | Endangered |
| Lepomis gulosus | Warmouth | Endangered |
| Leptodea fragilis | Fragile Papershell | Special Concern Species* |
| Ligumia nasuta | Eastern Pondmussel | Special Concern Species* |
| Noturus gyrinus | Tadpole Madtom | Endangered |
| Quadrula quadrula | Mapleleaf | Special Concern Species* |
| Toxolasma parvum | Lilliput | Special Concern Species* |
| Truncilla donaciformis | Fawnsfoot | Special Concern Species* |
| Truncilla truncata | Deertoe | Special Concern Species* |

U.S. Fish and Wildlife Service

No impacts to federally listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

Cultural Resources- (Please See Cultural Resource View Map)

CRGIS: Pennsylvania’s Cultural Resources Geographic Information System

Areas Listed on the National Register of Historic Places

1. Hamot, Pierre S.V., House
2. U.S.S. Niagara
3. Dickson Tavern
4. Modern Tool Company
5. Chandlery Corner

Areas Eligible for Listing on the National Register of Historic Places

1. Chestnut Street Waterworks Pump House
2. Dobbins Lane
3. Bonnell Block
4. De Luca Buildings
5. Balkan Baking Company Building
6. Richards, Captain John, House
7. Kennedy, David, House
8. Kennedy Double House
9. Lower street Historic District

Aggregate Area.

Erie Pittsburgh Rail Road may be eligible based on the significance the Rail Road has had on the area and its growth.

Walkover-

Walkover will be completed at the same time as the wetland and Stream investigation.

Noise Evaluation-

- Residential areas were assessed presenting potential impacts due to increased volumes.
- Further investigations will be based off of design alternatives
- To be coordinated With PennDOT and FHWA.

Section 4 (f) and Section 6 (f) Resources- (see attached section 4 (f) and section 6 (f) map)

Section 4(f)

- Historic resources listed under cultural are potential 4(f)
- Great Lakes Sea Way Trail Section 4 (f) likely
- Bayfront Promenade Section 4 (f) likely
- Bayview Park Potential Recreational 4(f)
- Wolverine Park Marina Potential Recreational 4(f)
- Nate Levy Jaycee Park Potential Recreational 4(f)

Section 6(f)

- Park Rehabilitation and Development (LWCF 42-00702)

Environmental Justice Populations- displacements are not currently anticipated

- EJ Screener
- Census Block Group 2015
- GEOID: 420490004001
- Tract: Census Tract 4
- Block: Block Group 1
- Non White %: 54
- Poverty %: 49

Environmental Costal Zone-

The CZMA federal consistency requirements are found at 15 CFR Part 930.

Costal work will be performed in coordination of the Coastal Zone Coordination Act Federal Consistency Form.

Environmental Approvals and Permits- (to be determined based on alternatives)

- Categorical Exclusion
- Chapter 102 Erosion and Sediment Control
- NPDES/ E&S
- Chapter 105 Water Obstruction and Encroachment (to be determined)
- Section 4 (f)
- Section 6 (f)

1. PROJECT INFORMATION

Project Name: **PennDOT and Bayfront Parkway Improvement Project**

Date of Review: **2/19/2018 09:19:29 AM**

Project Category: **Transportation, Roads, Other**

Project Area: **152.28 acres**

County(s): **Erie**

Township/Municipality(s): **ERIE**

ZIP Code: **16507**

Quadrangle Name(s): **ERIE NORTH**

Watersheds HUC 8: **Chautauqua-Conneaut**

Watersheds HUC 12: **Presque Isle Bay-Frontal Lake Erie**

Decimal Degrees: **42.133923, -80.088234**

Degrees Minutes Seconds: **42° 8' 2.1241" N, 80° 5' 17.6441" W**

This is a draft receipt for information only. It has not been submitted to jurisdictional agencies for review.

2. SEARCH RESULTS

| Agency | Results | Response |
|---|--------------------------|--|
| PA Game Commission | Potential Impact | FURTHER REVIEW IS REQUIRED, See Agency Response |
| PA Department of Conservation and Natural Resources | Avoidance Measure | See Agency Response |
| PA Fish and Boat Commission | Potential Impact | FURTHER REVIEW IS REQUIRED, See Agency Response |
| U.S. Fish and Wildlife Service | No Known Impact | No Further Review Required |

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

PennDOT and Bayfront Parkway Improvement Project



- Project Boundary
- Buffered Project Boundary



Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user

PennDOT and Bayfront Parkway Improvement Project



- Project Boundary
- Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



RESPONSE TO QUESTION(S) ASKED

Q1: Accurately describe what is known about wetland presence in the project area or on the land parcel by selecting ONE of the following. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.

Your answer is: The specific project area (that is, project layout or "footprint") has not yet been identified, but the land parcel on which the project will occur has been investigated by someone qualified to identify and delineate wetlands, and wetlands were located on the land parcel.

Q2: The proposed project is in the range of the Indiana bat. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this. Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).

Your answer is: The project will affect 1 to 39 acres of forests, woodlots and trees.

Q3: Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?

Your answer is: No

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PGC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

| Scientific Name | Common Name | Current Status |
|-----------------------|------------------|--------------------------|
| Cistothorus palustris | Marsh Wren | Special Concern Species* |
| Falco peregrinus | Peregrine Falcon | Endangered |
| Fulica americana | American Coot | Special Concern Species* |

PA Department of Conservation and Natural Resources

RESPONSE:

Avoidance Measure: In order to maintain or improve wetland habitat, conserve at least a 300-foot wide upland buffer around each wetland, a 150 foot wide buffer on each side of perennial waterways, as well as a buffer of 50 feet wide on each side of intermittent waterways. When adequately vegetated, these upland buffers will act to filter pollutants (e.g., sediment, fertilizers, pesticides, road salt), and stabilize streambanks (preventing or minimizing erosion). Avoid any construction, earth disturbance, and chemical application (e.g., fertilizer, pesticide) in the wetland and upland buffer. If other activities are being considered (e.g., timber harvesting, agricultural use, land development, streambank stabilization, tree planting, control of exotic plant species), conduct a review under those project categories.

As the project proponent or applicant, I certify that I will implement the above Avoidance Measure:

_____ (Signature)

SPECIAL NOTE: If you agree to implement the above Avoidance Measure, no further coordination with this agency regarding threatened and endangered species and/or special concern species and resources is required. If you are not able to comply with the Avoidance Measures, you are required to coordinate with this agency - please send project information to this agency for review (see "What to Send" section).

DCNR Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below. After desktop review, if a botanical survey is required by DCNR, we recommend the DCNR Botanical Survey Protocols, available here:

<https://conservationexplorer.dcnr.pa.gov/content/survey-protocols>)

| Scientific Name | Common Name | Current Status | Proposed Status | Survey Window |
|-----------------|--------------|--------------------------|-----------------|--------------------------|
| Bidens laevis | Beggar-ticks | Special Concern Species* | Endangered | Flowers August - October |

PA Fish and Boat Commission

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PFBC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

| Scientific Name | Common Name | Current Status |
|----------------------------|------------------------|--------------------------|
| Acipenser fulvescens | Lake Sturgeon | Endangered |
| Amblema plicata | Three-ridge | Special Concern Species* |
| Anodontoides ferussacianus | Cylindrical Papershell | Special Concern Species* |
| Coregonus artedi | Cisco | Endangered |
| Etheostoma exile | Iowa Darter | Endangered |
| Etheostoma pellucida | Eastern Sand Darter | Endangered |
| Fusconaia flava | Wabash Pigtoe | Special Concern Species* |
| Lepisosteus oculatus | Spotted Gar | Endangered |
| Lepomis gulosus | Warmouth | Endangered |
| Leptodea fragilis | Fragile Papershell | Special Concern Species* |
| Ligumia nasuta | Eastern Pondmussel | Special Concern Species* |
| Noturus gyrinus | Tadpole Madtom | Endangered |
| Quadrula quadrula | Mapleleaf | Special Concern Species* |
| Toxolasma parvum | Lilliput | Special Concern Species* |
| Truncilla donaciformis | Fawnsfoot | Special Concern Species* |
| Truncilla truncata | Deertoe | Special Concern Species* |

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

** Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email* the following information to the agency(s). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies. Alternatively, applicants may email or mail their project materials (see AGENCY CONTACT INFORMATION).

***Note:** U.S.Fish and Wildlife Service requires applicants to mail project materials to the USFWS PA field office (see AGENCY CONTACT INFORMATION). USFWS will not accept project materials submitted electronically (by upload or email).

Check-list of Minimum Materials to be submitted:

___ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

___ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

In addition to the materials listed above, USFWS REQUIRES the following

___ **SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.

___ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

___ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

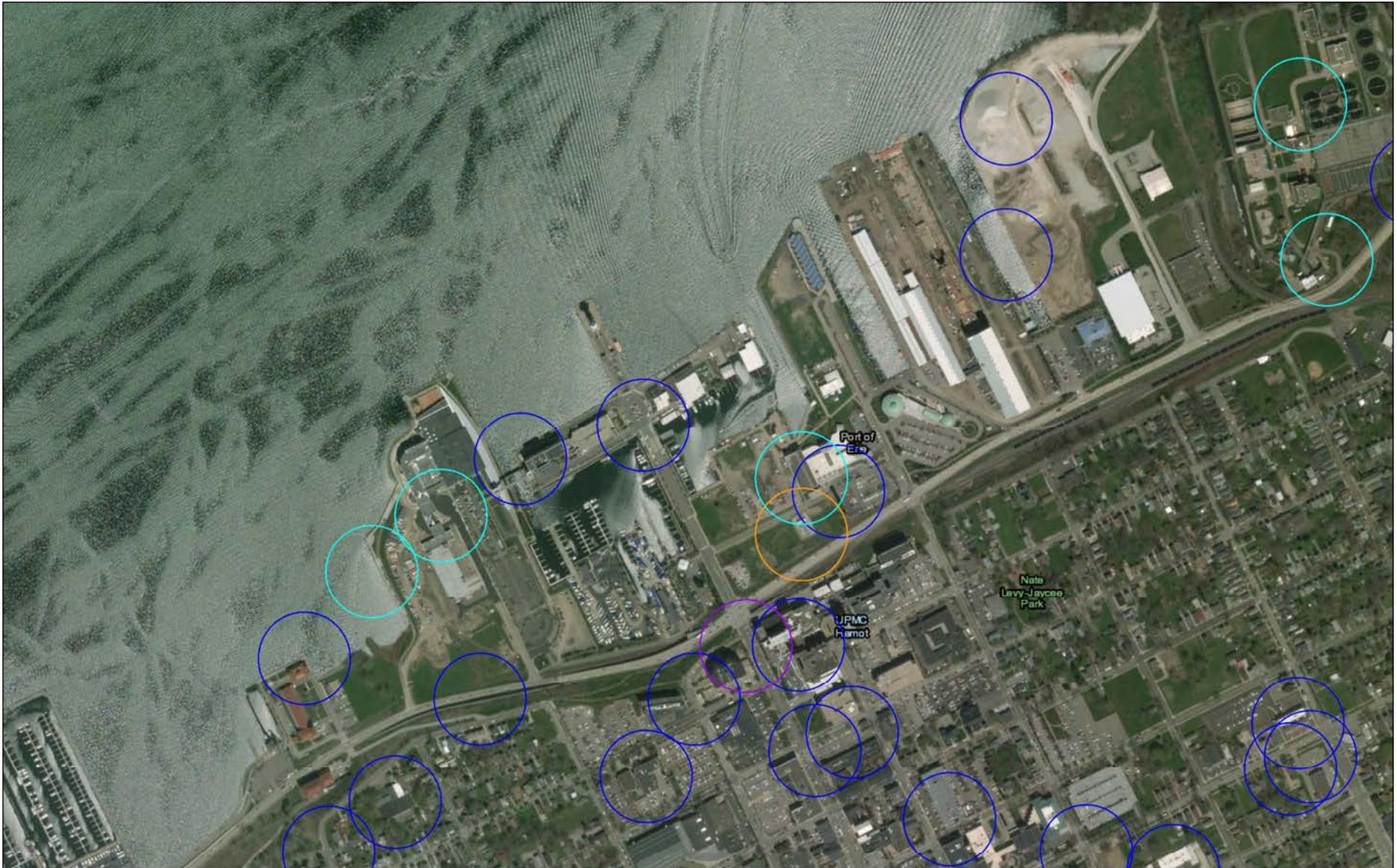
5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.



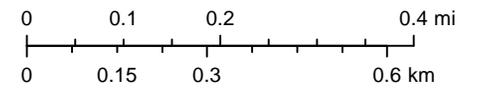
Hazardous Waste Map



February 19, 2018

- | | |
|--|--|
| Storage Tank Locations | EPA Waste Sites |
| Municipal Waste Operations | Commercial Waste Operations |
| Land Recycling Cleanup | Captive Hazardous Waste |

1:12,523

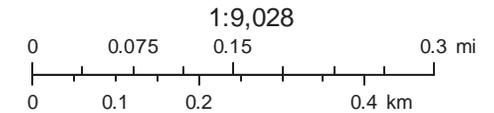


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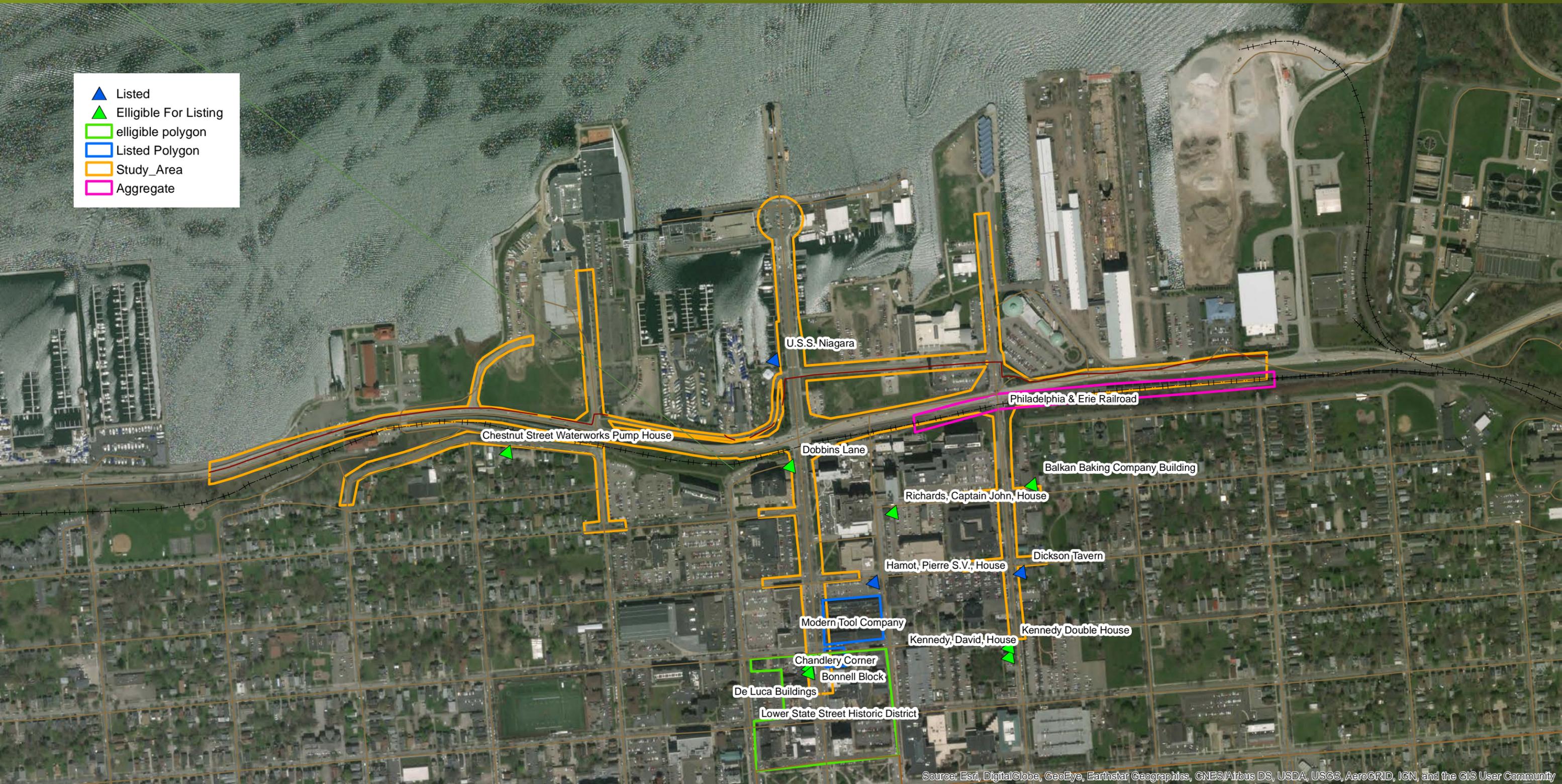
Legend

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> ● Toxic Release Inventory ● Envirofacts Facilities Process - AEP ● Unconventional Wells ● Conventional Wells | <ul style="list-style-type: none"> Discharge - WR Ground Water Withdrawal - WR Interconnection - WR Storage - WR Surface Water Withdrawal - WR Storage Tanks Active Storage Tanks Inactive | <ul style="list-style-type: none"> Mamography Quality Stds Act Tube XRay Machine Discharge Point - WPCF Pesticide Treatment Area |
|--|--|--|



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

- ▲ Listed
- ▲ Eligible For Listing
- eligible polygon
- Listed Polygon
- Study_Area
- Aggregate

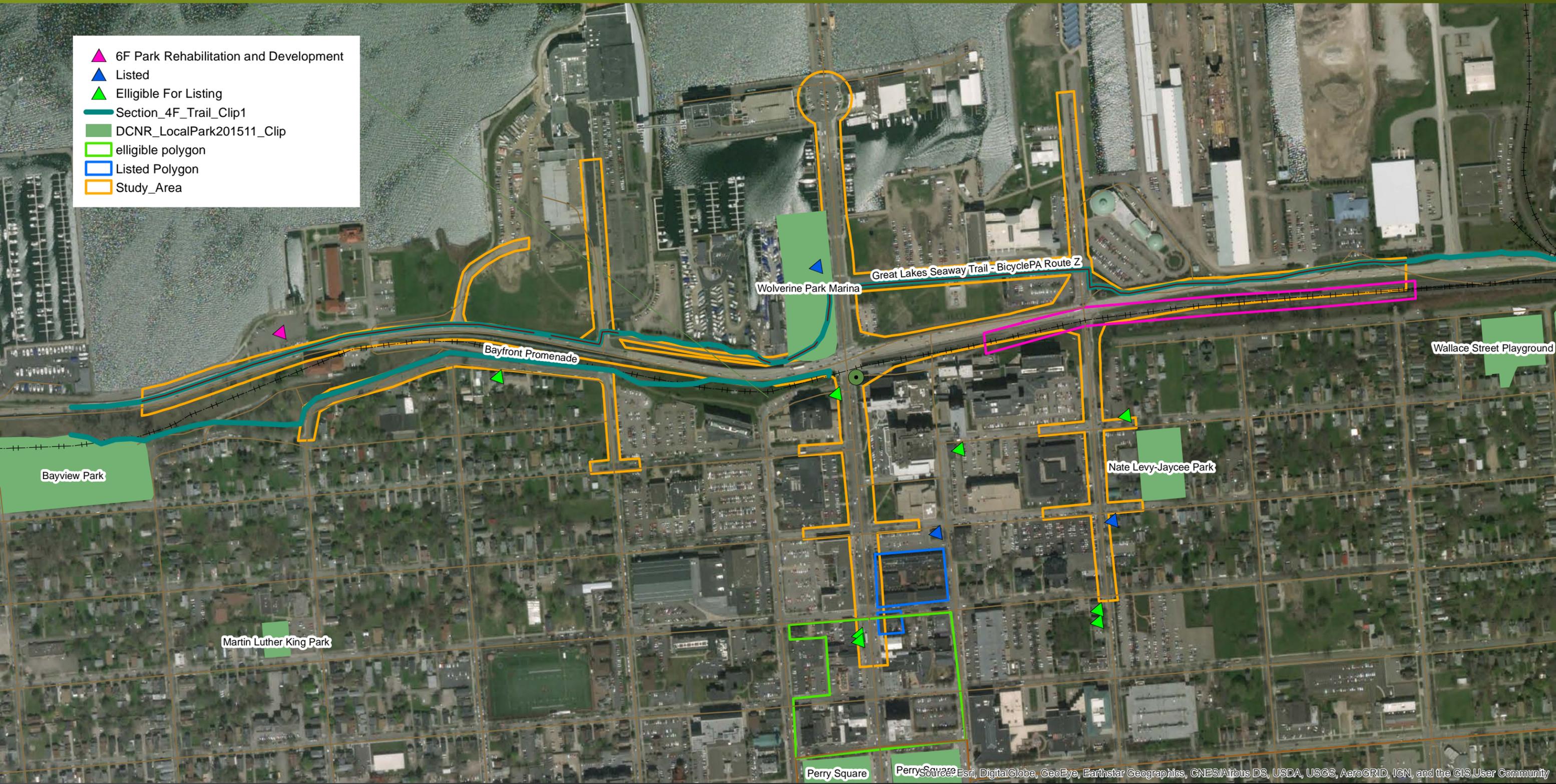


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Figure 04
Cultural Resource Map

- ▲ 6F Park Rehabilitation and Development
- ▲ Listed
- ▲ Eligible For Listing
- Section_4F_Trail_Clip1
- DCNR_LocalPark201511_Clip
- eligible polygon
- Listed Polygon
- Study_Area



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 06
Section 4(f) and Section 6 (f) Map



U. S. DEPARTMENT
OF TRANSPORTATION

Pennsylvania Division

228 Walnut Street, Room 508
Harrisburg, PA 17101-1720

**Federal Highway
Administration**

Reply refer to: HPD-PA

City of Erie, Pennsylvania
S.R. 4034-A01
Bayfront Parkway Central Corridor
Improvements
NEPA Downsizing Request

April 15, 2020

Mr. James A. Foringer, P.E.
District Executive
Pennsylvania Department of Transportation
Engineering District 1-0
255 Elm Street
Oil City, Pennsylvania 16301

Dear Mr. Foringer:

The Federal Highway Administration Pennsylvania Division (FHWA) is in receipt of your March 31, 2020 request to downscope the Bayfront Parkway Central Corridor Improvements Project from an Environmental Assessment (EA) to a Level 2 Categorical Exclusion Evaluation (CEE). PennDOT believes that the proposed improvements “will not either individually or cumulatively have any significant or adverse environmental impacts and therefore the project meets the definition for a Level 1B or Level 2 Categorical Exclusion action as defined in PennDOT Publication 10B, Design Manual Part 1B, *Post-TIP NEPA Procedures*.”

The FHWA participated in the February 22, 2018 Scoping Field View, at which time it was determined that the project should proceed as an EA due to the alternatives yet under consideration and the unknown extent of potential impacts. The FHWA formally concurred on the project scope and level of NEPA documentation on February 27, 2020.

Since the scoping field view, substantial progress has been made in evaluating the potential impacts to sensitive resources within the project area. The FHWA coordinated directly with PennDOT during this time and has reviewed the relevant documentation. Further, the FHWA acknowledges that PennDOT has conducted extensive public involvement with a variety of stakeholders, which has resulted in no substantial controversy.

The FHWA has reviewed PennDOT’s justification for downsizing the Bayfront Parkway Central Corridor Improvement Project from an EA to a Level 2 CEE, which includes the identification of the preferred alternative, a summary of project-area sensitive resources and potential impacts, and an overview of public involvement. Based on this information, the FHWA agrees that the project,

as proposed, would not result in either individual or cumulative significant impacts. Therefore, your request to downscope is approved.

Please feel free to contact me at Jonathan.Crum@dot.gov or (717) 221-3735 with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'JC', with a long horizontal line extending to the left.

Jon Crum
Multimodal Safety & Environmental Specialist

ec: Pete Nanov, FHWA
Veronica Feliciano, FHWA
Jeff Bucher, P.E. PennDOT
Tom McClelland, P.E. PennDOT 1-0
Autumn Kelley, PennDOT 1-0

BAYFRONT PARKWAY CENTRAL CORRIDOR IMPROVEMENTS CE 2 Evaluation

Purpose and Needs

Purpose:

The purpose of the project is to improve the pedestrian, bicycle, transit, and passenger vehicle connection of the Erie Central Business District and adjacent neighborhoods to the waterfront property north of the Bayfront Parkway, to reduce crashes as much as practical on the Bayfront Parkway (SR 4034), to improve future congestion to an acceptable level of service or delay, and to improve traffic operations and efficiency.

Needs:

Mobility:

- Multimodal transportation connections between Downtown Erie and the Bayfront (north/south) are lacking.
- The Bayfront Parkway has limited existing transit service in the project area.
- Lack of consistent pedestrian and bicycle facilities along, or parallel to, the Bayfront Parkway.
- Lack of viable connections for pedestrians and bicycles between downtown and surrounding neighborhoods to the Bayfront. *
- The Bayfront Parkway acts as a barrier to pedestrians and bicyclists traveling from downtown Erie to the Bayfront area. *

Crashes:

- 80 crashes within the project limits over a 5-year period.
- The locations with the crashes were as follows:
 - 15 crashes occurred at the intersection of the Bayfront Parkway and Sassafras Street.
 - 39 crashes occurred at the intersection of the Bayfront Parkway and State Street. (3 of these crashes involved pedestrians)
 - 26 crashes occurred at the intersection of the Bayfront Parkway and Holland Street.

Operations & Efficiency:

- Existing level-of-service (LOS) for the intersection of State Street and the Bayfront Parkway is “D” for the AM peak and future year LOS is projected to be an “F” with proposed Bayfront Development.
- Future years LOS are projected to be LOS of “D” or worse at the intersections of the Bayfront Parkway and Sassafras Street Extension, State Street, and Holland Street.
- Limited gaps for left turning vehicles along the Bayfront Parkway.

* The Erie Waterfront Master Plan Summary Report, March 2009; Erie Refocused, March 2016; Bayfront Parkway Study, June 2017

CE Evaluation Part A

Engineering Information

Design Criteria

Roadway Description: SR 4034 Section A01

Functional Classification: Principal Arterial

Urban Rural

Current ADT: 16,793 (2020)

Design Year No-Build / Build ADT, as well as Current / Design Year Build LOS, is only necessary when PM2.5 hot spot analysis is required.

If PM2.5 hot spot analysis is not needed (see exempt project list in Air Quality Handbook, Pub #321), "N/A" can be entered for these values.

Design Year No-Build ADT: 25,700

Current LOS: n/a

Design Year Build ADT: 25,700

Design Year Build LOS: n/a

DHV: 2,590

Truck %: 3

D (Directional Distribution) %: 55

Design Speed: 45 mi/h

Posted Speed: 35 mi/h

Required Minimum Widths

Lane Width: 10 ft

Shoulder Width: 4 ft

Bridge Curb-to-Curb: 28 ft

Design Exception Required? Yes No

If "Yes", explain.

Typology: Regional Arterial – Urban Core

Topography: Level Rolling Mountainous

Proposed Design Criteria: New and Reconstruction

Traffic Control Measures

The following traffic control measures will be implemented:

- Temporary Bridge(s)
- Temporary Roadway
- Detour
- Ramp Closure
- Other (specify)
- None

If any of the above traffic control measures will be implemented, indicate the following conditions.

Provisions for access by local traffic will be made and so posted. True False

Through-traffic dependent business will not be adversely affected. True False

There will be no interference with any local special event or festival. True False

There will be no substantial environmental consequences associated with the traffic control measure(s). True False

There is no substantial controversy associated with the traffic control measure(s). True False

There are no substantial impacts to bicycle or pedestrian routes. True False

If the answer to any of the above questions was "False", please explain.

Detours should be clearly shown on the map and described, including provisions for pedestrians, bicycles, disabled and the elderly.

Approximate length of planned detour: 10.3 miles Detour Map

Make the selection that best describes the planned detour:

- Detour will use local roads with no improvements.
- Detour will involve improvements to local roads with no resulting impacts on safety or the environment.
- Detour will involve improvements to local roads and will impact safety and/or the environment.
- Detour will use only state owned roads.

Describe impacts

- The State Street vehicular detours will be less than one mile and utilize SR 4034 (Bayfront Parkway), East Front Street, Holland Street, and East 3rd Street.
- The Holland Street vehicular detours will be less than one mile and utilize East Front Street, State Street, and East 3rd Street.
- The SR 4034 (Bayfront Parkway) is anticipated to be closed on three separate weekends. The vehicular detour is 10.2 miles and utilizes Interstate 79, US Route 20, and PA Route 5. The detour will be implemented for one weekend during beam erection for the State Street structure over SR 4034 (Bayfront Parkway). For the construction of the ramps between State Street and SR 4034 (Bayfront Parkway) the detour will be implemented one weekend for the eastbound direction and one weekend for the westbound direction.
- Pedestrian and bicycle traffic will be maintained throughout construction on ADA complaint facilities.
- Maintain access to the UPMC Hamot Hospital Service entrance at all times.

Bayfront Parkway Sequence of Construction

Stage 1A

1. Shift Bayfront Parkway traffic south from the Erie Water Works driveway to State Street, maintaining one lane of traffic in each direction.
2. Shift Sassafras Street Ext traffic to the east, maintaining one lane of traffic in each direction.
3. Install temporary traffic signal at Bayfront Parkway and Sassafras Street Ext.
4. Construct the Holland Street Pedestrian Bridge over SR 4034 (Bayfront Parkway).

Stage 1B

1. Close Sassafras Street Ext and detour traffic utilizing West Front Street and State Street (proposed weekend detour).
2. Continue to maintain one lane of traffic in each direction on Bayfront Parkway.
3. Construct Bayfront Parkway from STA 513+50 to STA 515+00 (a portion of the new roadway that crosses Sassafras Street).

Stage 2

1. Install a temporary traffic signal at the intersection of Bayfront Parkway with Sassafras Street Ext to maintain traffic.
2. Shift Bayfront Parkway traffic north from the Erie Water Works driveway (STA 530+50) to 400 feet east of Don John Shipping (STA

552+00), maintaining one lane of traffic in each direction.

3. Close the southern quadrants of the intersection of Bayfront Parkway with State Street to traffic and detour the south leg of State Street traffic utilizing Bayfront Parkway, Holland Street, and East 3rd Street.
4. Install a temporary traffic signal at the intersection of the north leg of State Street with Bayfront Parkway to maintain traffic.
5. Construct the southern abutment and wing walls for the State Street structure over Bayfront Parkway.
6. Construct State Street from West 2nd Street to the State Street structure southern abutment. Maintain traffic to the UPMC Hamot Hospital Service entrance at all times.
7. Construct eastern half of Sassafra Street Ext.

Stage 3A

1. Open the roundabout at Sassafra Street Ext to traffic, maintaining a single circulating lane of traffic.
2. Shift Bayfront Parkway traffic south from east of Sassafra Street Ext to Ore Dock Road (STA 554+00).
3. Maintain a single lane of traffic in each direction on Bayfront Parkway.
4. Close the northern quadrant of the intersection of Bayfront Parkway with State Street to traffic and detour the north leg of State Street traffic utilizing Bayfront Parkway, Holland Street, and East Front Street.
5. Continue the State Street south leg detour utilizing East Front Street, Holland Street, and East 3rd Street.
6. Construct the northern abutment and wing walls for the State Street structure over Bayfront Parkway.
7. Start construction of State Street from Front Street to Bayfront Parkway.

Stage 3B

1. Close Bayfront Parkway and detour traffic utilizing 12th Street (proposed weekend detour).
2. Install State Street bridge beams over the Bayfront Parkway.
3. Finish construction of the State Street structure over Bayfront Parkway.
4. (The ramps to connect Bayfront Parkway to State Street will be constructed in Stage 6.)
5. Finish construction of State Street from Front Street to Bayfront Parkway.

Stage 4

1. Shift Bayfront Parkway traffic north from east of Sassafra Street Ext to the eastern project limits.
2. Maintain a single circulating lane of traffic in the roundabout at Sassafra Street Ext.
3. Close Holland Street from East 2nd Street to the Bayfront Parkway to traffic. Detour Holland Street south leg traffic utilizing East 3rd Street, State Street, East Front Street, and Holland Street north leg to the Bayfront Parkway.
4. Maintain the Holland Street north leg traffic at Bayfront Parkway.
5. Open State Street to through traffic over the Bayfront Parkway. Maintain access to Bayfront Parkway for State Street traffic with a detour utilizing East Front Street to Holland Street north leg to the Bayfront Parkway.
6. Construct Holland Street from East 2nd Street to the Roundabout at Bayfront Parkway and construct the southern portion of the roundabout at Holland Street.

Stage 5

1. Shift Bayfront Parkway traffic south from east of Sassafra Street Ext to the eastern project limits.
2. Maintain a single circulating lane of traffic in the roundabout at Sassafra Street Ext.
3. Install a temporary signal for the intersection of Bayfront Parkway with Holland Street northbound approach.
4. Open Holland Street from East 2nd Street to the Bayfront Parkway.
5. Close Holland Street from East Front Street to the Bayfront Parkway to traffic. Detour Holland Street traffic utilizing East Front Street, State Street, and East 3rd Street.
6. Maintain through traffic on State Street over the Bayfront Parkway. Maintain access to Bayfront Parkway for State Street traffic with a detour utilizing East 3rd Street and Holland Street (southern).
7. Finish construction of roundabout at Holland Street.
8. Construct Holland Street from Front Street to Bayfront Parkway.

Stage 6

1. Shift eastbound Bayfront Parkway traffic to the south and westbound Bayfront Parkway traffic to the north.
2. Maintain a single circulating lane of traffic in the roundabout at Sassafra Street Ext.
3. Open the roundabout at Holland Street maintaining a single circulating lane of traffic.
4. Construct the center islands on Bayfront Parkway and eastbound and westbound Bayfront Parkway ramps to State Street.
5. Utilize weekend detours of the Bayfront Parkway to construct the ramps to State Street. Detour to be only one direction at a time on separate weekends.

Estimated Costs

Engineering: \$ 15,000,000

Right-of-Way: \$ 3,000,000

Construction: \$ 66,500,000

Utilities: \$ 2,000,000

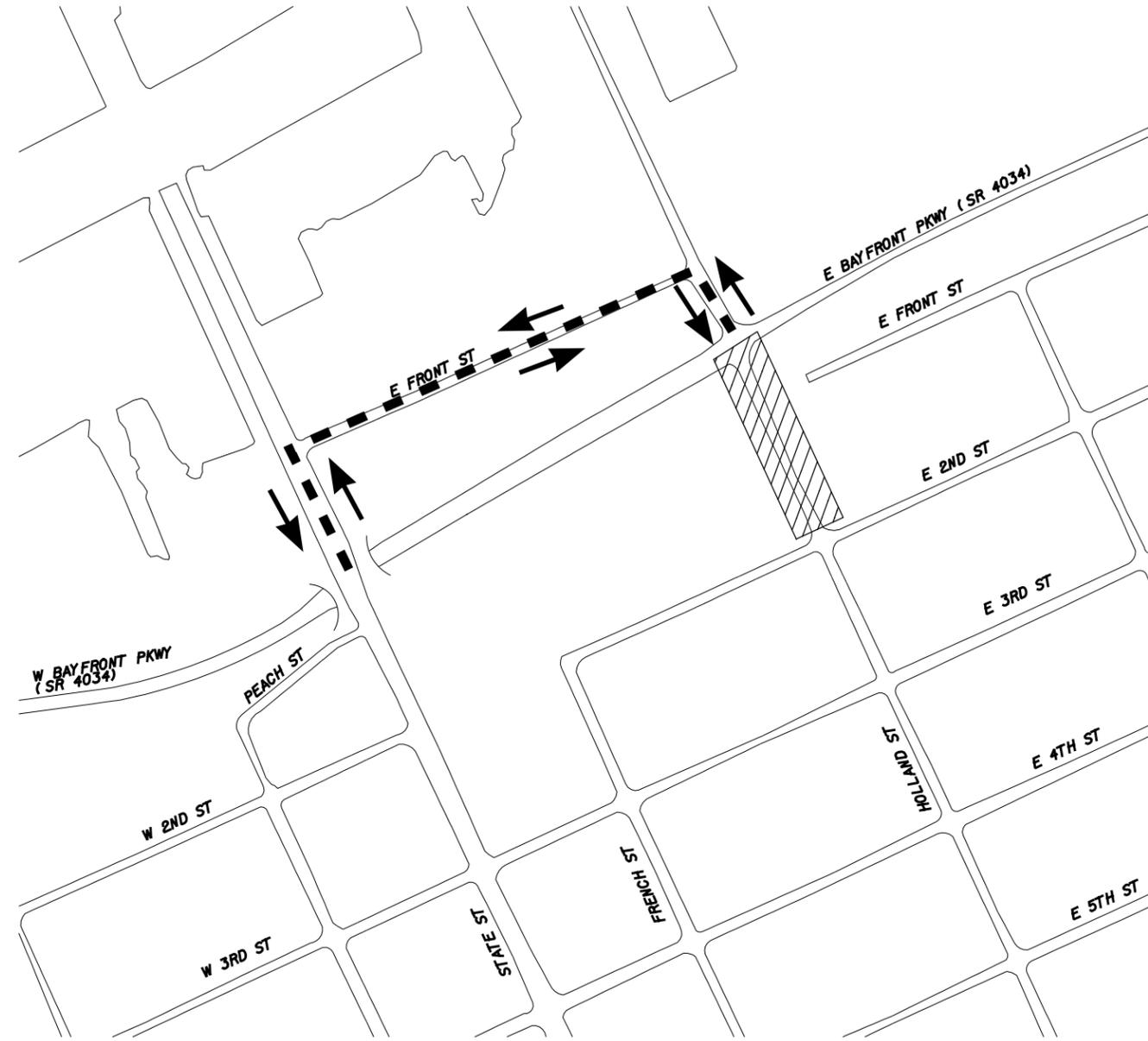
Additional Information

Remarks, Footnotes, Supplemental Data

The estimated costs indicated are for the overall project. The project will be constructed under three separate construction contracts: (1) Soldiers' & Sailors' Access Improvements, (2) CSX Railroad Track Modifications, (3) Bayfront Parkway Central Corridor Improvements (Intersection improvements at Sasssafras Street Ext, State Street, and Holland Street)

Attachments

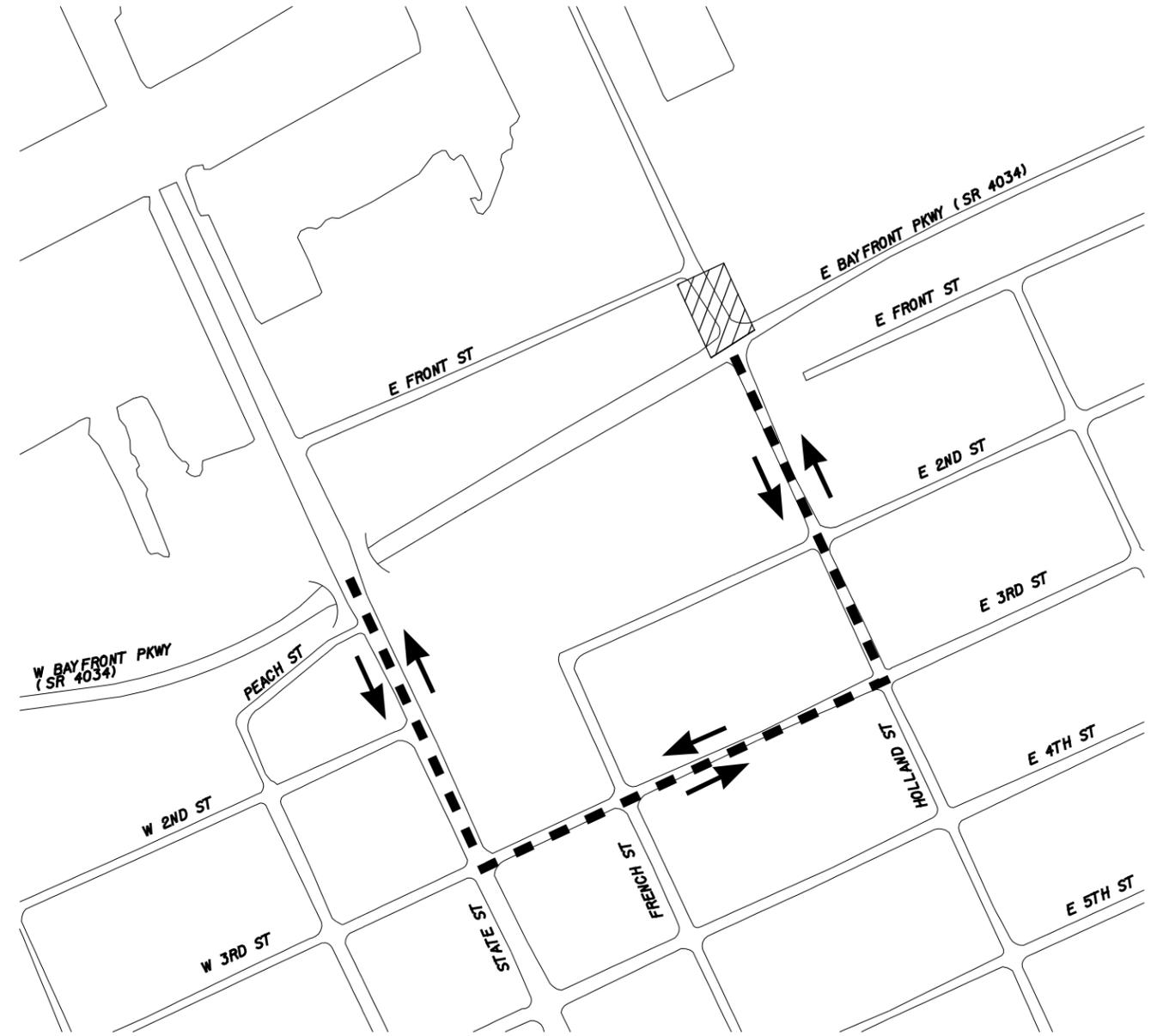
1. [Detour Plans.pdf](#) (1015KB / 1MB)



BAYFRONT PARKWAY (SR 4034) AND STATE STREET
SEVERED ACCESS DETOUR
STAGE 4

NOTES:

1. DETOUR LENGTH FOR SOUTHERN CLOSURE IS 0.3 MILES.
2. DURING STAGE 4, STATE STREET IS GRADE SEPARATED FROM BAYFRONT PARKWAY WITH NO ACCESS.
3. PEDESTRIANS WILL BE MAINTAINED DURING CONSTRUCTION.



BAYFRONT PARKWAY (SR 4034) AND STATE STREET
SEVERED ACCESS DETOUR
STAGE 5

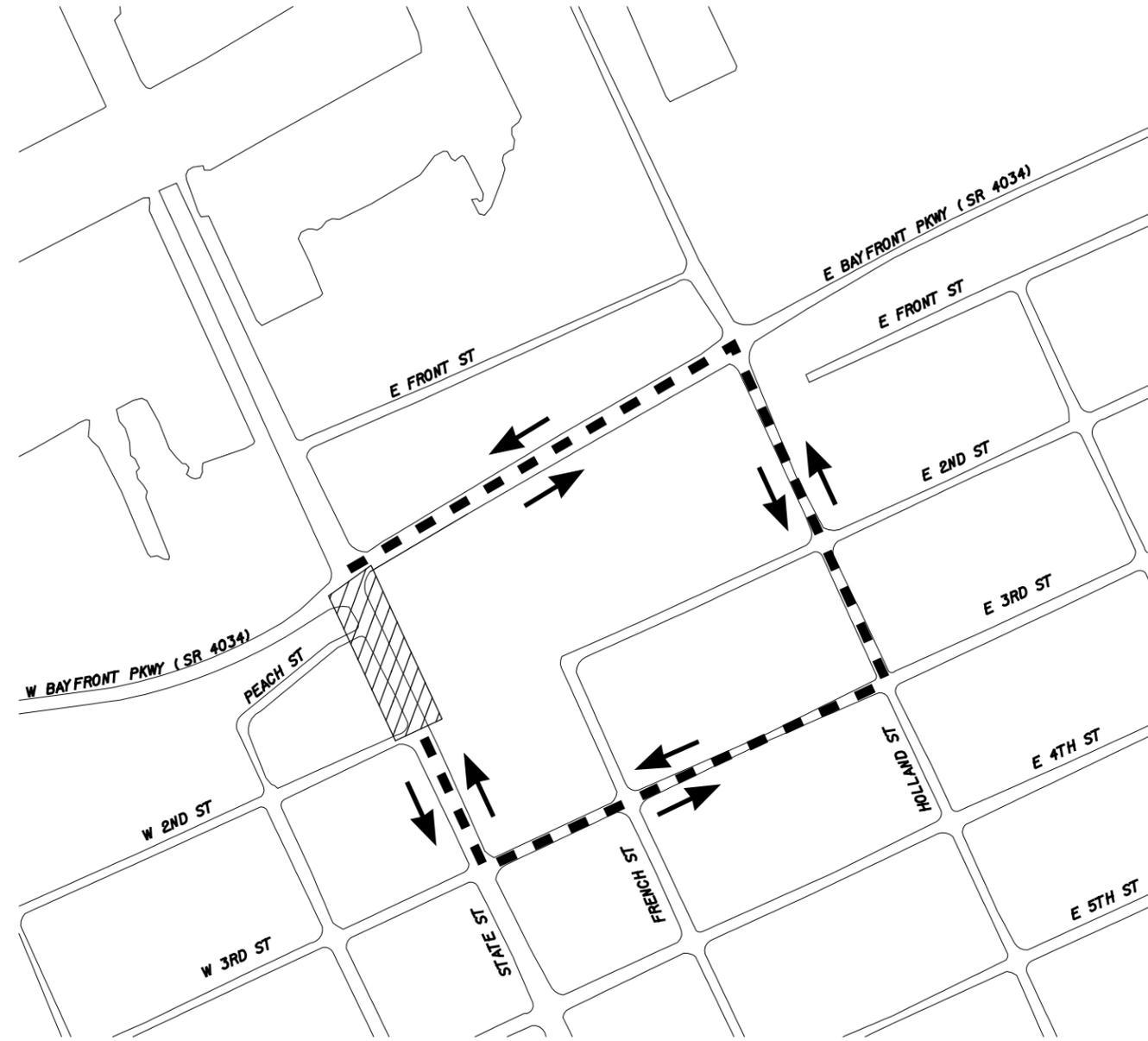
NOTES:

1. DETOUR LENGTH FOR SOUTHERN CLOSURE IS 0.5 MILES.
2. DURING STAGE 5, STATE STREET IS GRADE SEPARATED FROM BAYFRONT PARKWAY WITH NO ACCESS.
3. PEDESTRIANS WILL BE MAINTAINED DURING CONSTRUCTION.

LEGEND

- DETOUR
- TRAFFIC FLOW ARROW
- ▨ WORK AREA

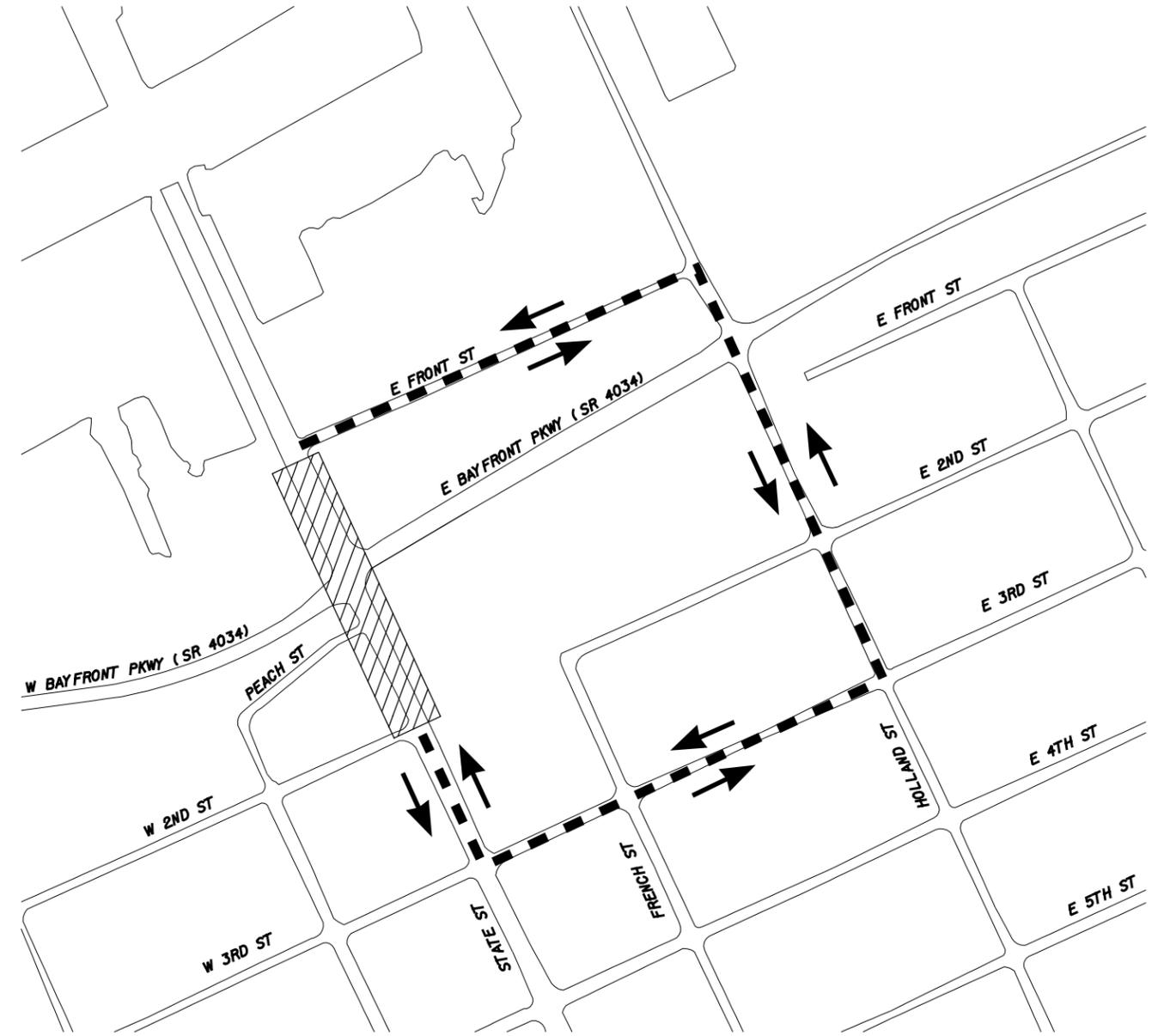




BAYFRONT PARKWAY (SR 4034) AND STATE STREET
SOUTHERN CLOSURE DETOUR
STAGE 2

NOTES:

1. DETOUR LENGTH FOR SOUTHERN CLOSURE IS 0.7 MILES.
2. ACCESS TO BE MAINTAINED TO UPMC HAMOT HOSPITAL SERVICE ENTRANCE AT ALL TIMES FROM THE SOUTH.
3. PEDESTRIANS WILL BE MAINTAINED DURING CONSTRUCTION.



BAYFRONT PARKWAY (SR 4034) AND STATE STREET
FULL CLOSURE DETOUR
STAGE 3A

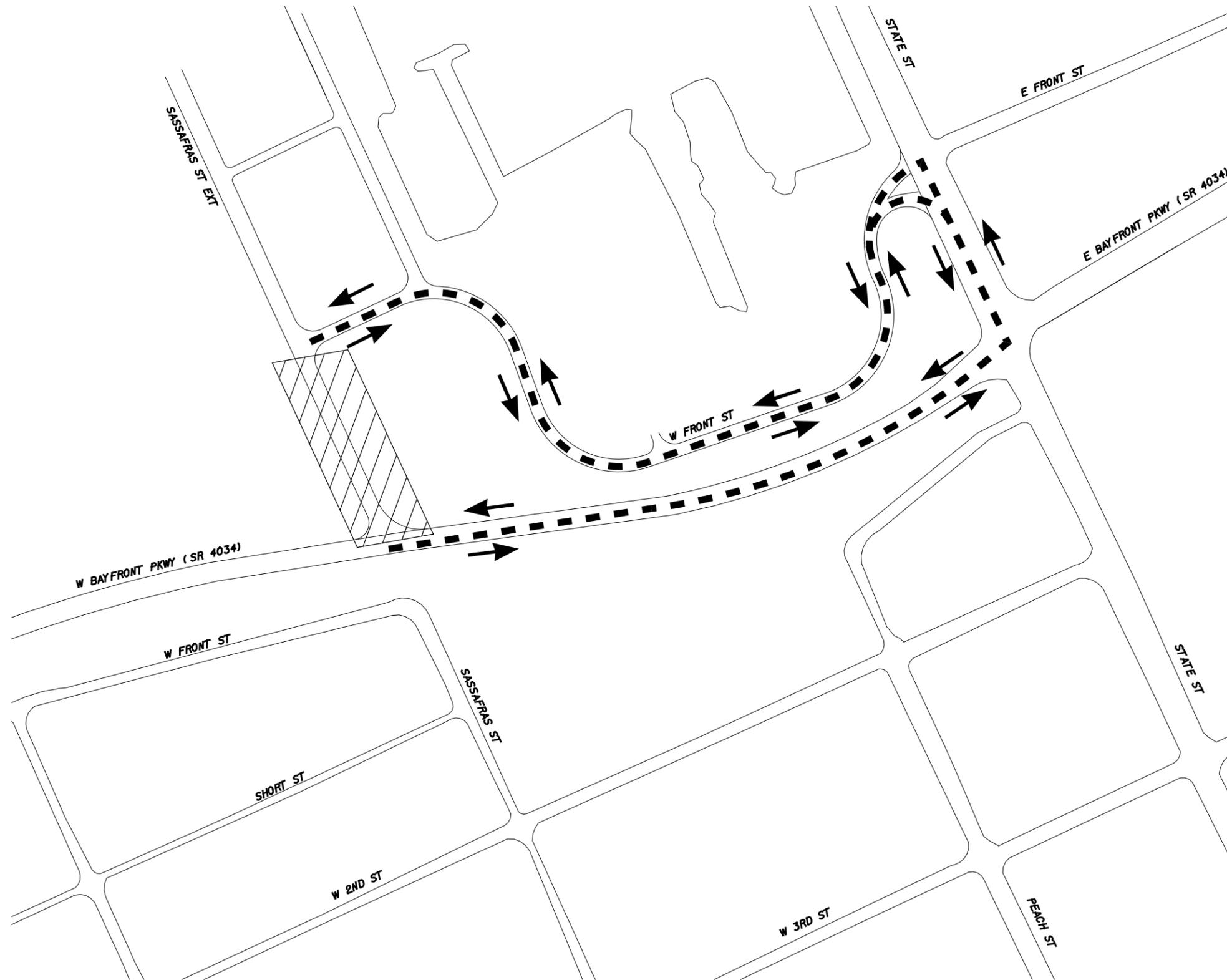
NOTES:

1. DETOUR LENGTH FOR FULL CLOSURE IS 0.7 MILES.
2. ACCESS TO BE MAINTAINED TO UPMC HAMOT HOSPITAL SERVICE ENTRANCE AT ALL TIMES FROM THE SOUTH.
3. PEDESTRIANS WILL BE MAINTAINED DURING CONSTRUCTION.

LEGEND

- DETOUR
- TRAFFIC FLOW ARROW
- ▨ WORK AREA





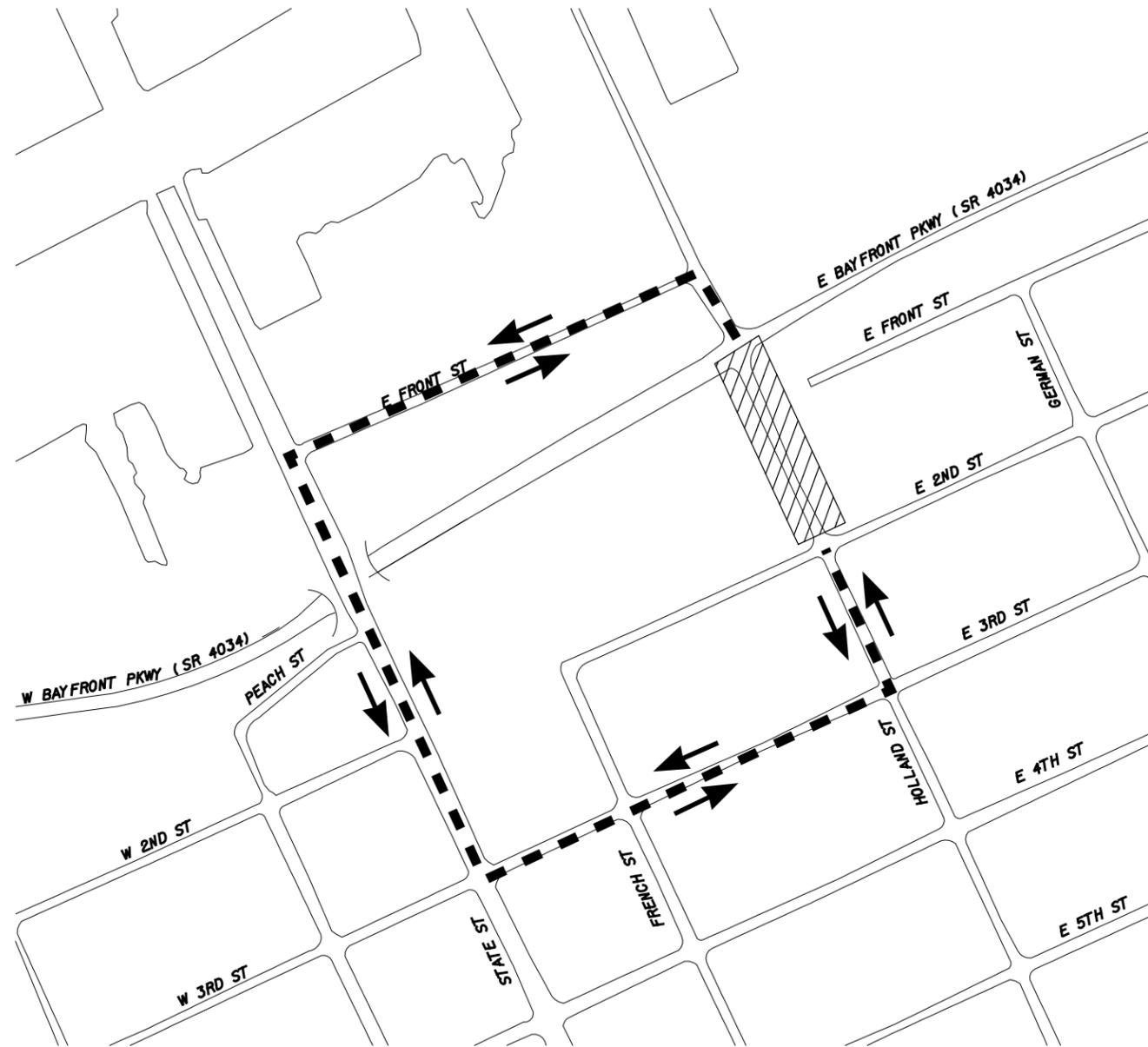
BAYFRONT PARKWAY (SR 4034) AND SASSAFRAS STREET EXTENSION
 NORTHERN CLOSURE DETOUR
 STAGE 1B

- NOTES:
1. DETOUR LENGTH IS 0.6 MILES.
 2. PEDESTRIANS TO BE MAINTAINED DURING CONSTRUCTION.

LEGEND

-  DETOUR
-  TRAFFIC FLOW ARROW
-  WORK AREA

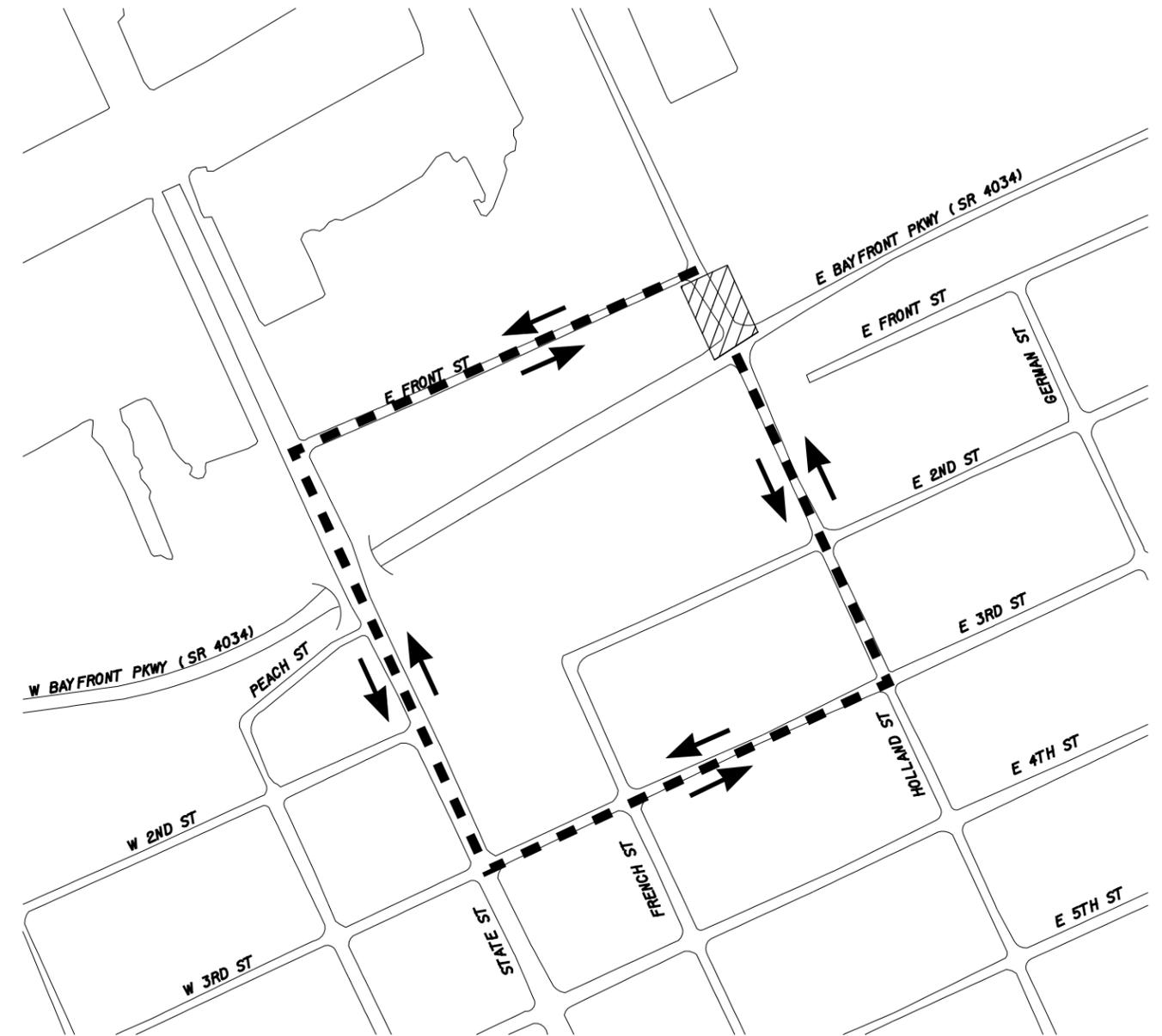




BAYFRONT PARKWAY (SR 4034) AND HOLLAND STREET
SOUTHERN CLOSURE DETOUR
STAGE 4

NOTES:

1. DETOUR LENGTH IS 0.8 MILES.
2. DURING STAGE 4, STATE STREET IS GRADE SEPARATED FROM BAYFRONT PARKWAY WITH NO ACCESS.
3. PEDESTRIANS WILL BE MAINTAINED DURING CONSTRUCTION.



BAYFRONT PARKWAY (SR 4034) AND HOLLAND STREET
NORTHERN CLOSURE DETOUR
STAGE 5

NOTES:

1. DETOUR LENGTH IS 0.8 MILES.
2. DURING STAGE 5, STATE STREET IS GRADE SEPARATED FROM BAYFRONT PARKWAY WITH NO ACCESS.
3. PEDESTRIANS WILL BE MAINTAINED DURING CONSTRUCTION.

LEGEND

- DETOUR
- TRAFFIC FLOW ARROW
- ▨ WORK AREA





BAYFRONT PARKWAY (SR 4034) EASTBOUND DETOUR
STAGES 3B AND 6

- NOTES:
1. DETOUR LENGTH IS 10.2 MILES.
 2. PEDESTRIANS WILL BE MAINTAINED DURING CONSTRUCTION.

LEGEND

-  DETOUR
-  TRAFFIC FLOW ARROW
-  WORK AREA



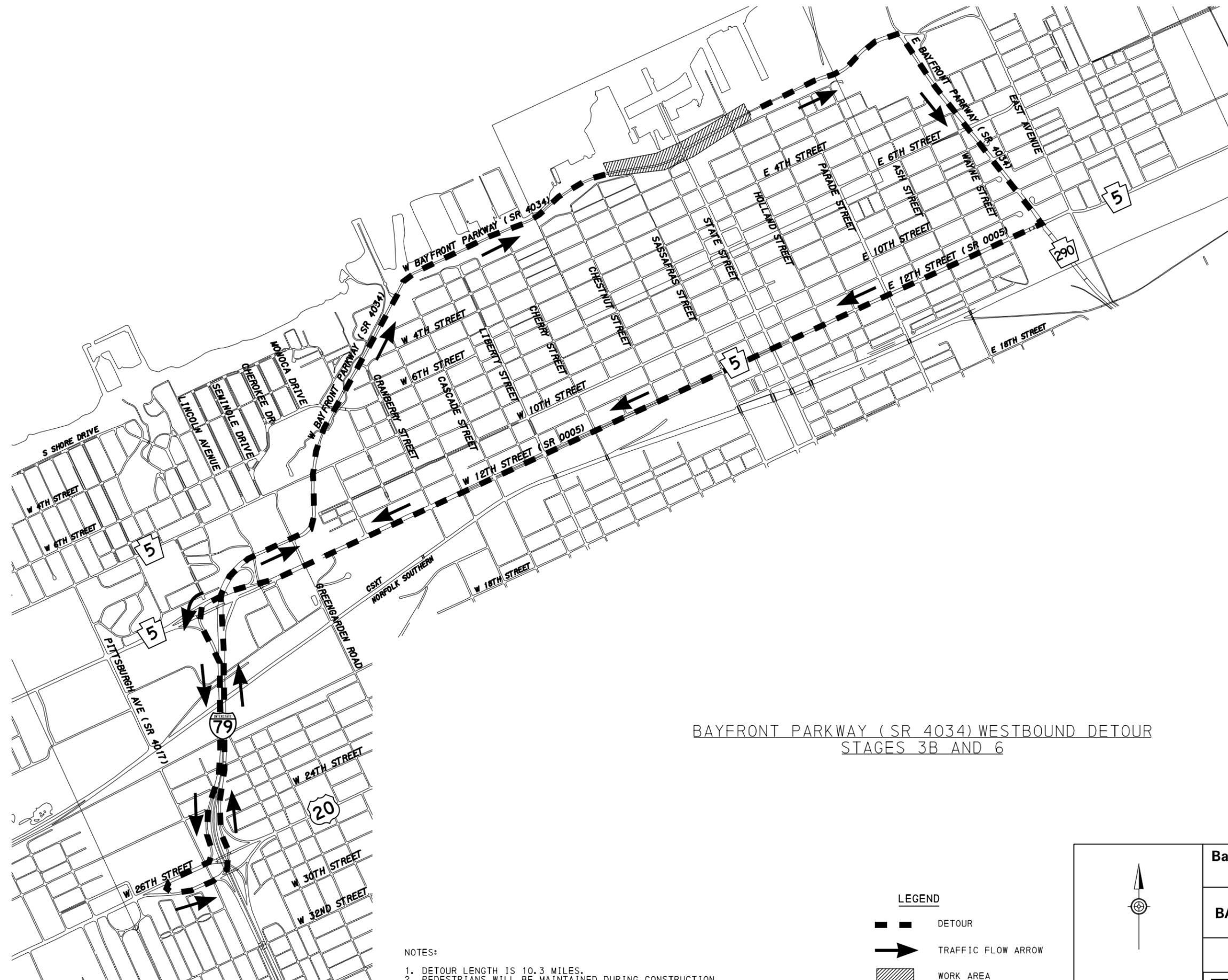
SHEET 1 OF 1

**Bayfront Parkway Improvements
PennDOT District 1-0**

BAYFRONT PARKWAY DETOUR

EASTBOUND DETOUR



BAYFRONT PARKWAY (SR 4034) WESTBOUND DETOUR STAGES 3B AND 6

- NOTES:
1. DETOUR LENGTH IS 10.3 MILES.
 2. PEDESTRIANS WILL BE MAINTAINED DURING CONSTRUCTION.

LEGEND

-  DETOUR
-  TRAFFIC FLOW ARROW
-  WORK AREA



SHEET 1 OF 1

**Bayfront Parkway Improvements
PennDOT District 1-0**

BAYFRONT PARKWAY DETOUR

WESTBOUND DETOUR




CE Evaluation Part A

Roadway

No roadways included with this project

Roadway Description

SR 4034 / Sec A01

| | Existing | Proposed |
|---------------------|----------|----------|
| Number of Lanes: | 3 | 4 |
| Lane Width: | 12 ft | 11 ft |
| Shoulder Width: | 3 ft | 4 ft |
| Median Width: | n/a ft | 11 ft |
| Sidewalk Width: | n/a ft | 10 ft |
| Bicycle Lane Width: | n/a ft | n/a ft |
| Clear Zone Width: | 10 ft | 14 ft |

Additional Information

Remarks, Footnotes, Supplemental Data

The existing Bayfront Parkway consists of two 12' lanes with 12' turning lanes at the intersections. The proposed Bayfront Parkway, within the project area is classified as an Urban Community Arterial- Town Center consisting of four 11' travel lanes with either 4' shoulder or 3.3' concrete curb gutter (width of curb gutter accommodates standard Type C inlets). The posted and design speed of the Bayfront Parkway is 35 mph; however, to enhance safety, encourage slower operating speeds, and achieve proper sight distance with horizontal and vertical geometry, a design speed and posted speed of 25 mph, is proposed on the ramp structures (inside lanes), where the Bayfront Parkway rises to the intersection with state street. The Bayfront Parkway is proposed with a maximum profile grade of 7.00%, normal crown cross slope of 2.00% in tangent sections, a 3.80% superelevation for the horizontal curve between Sassafra Street Extension and State Street (outside lanes), and a 2.40% superelevation for the horizontal curve between Sassafra Street Extension and State Street Extension on the ramp structures (inside lanes). A 10' wide sidewalk is proposed along the north side of the Bayfront Parkway through the entire project corridor, with the exception of the area between Sassafra Street Extension and State Street, as a sidewalk currently exists and will likely be replaced/reconfigured as part of the Erie-Western Pennsylvania Port Authority's Project along Front Street.

Attachments

CE Evaluation Part A

Roadway

No roadways included with this project

Roadway Description

State Street

| | Existing | Proposed |
|---------------------|----------|----------|
| Number of Lanes: | 4 | 3 |
| Lane Width: | 12 ft | 11 ft |
| Shoulder Width: | n/a ft | 5 ft |
| Median Width: | n/a ft | 8 ft |
| Sidewalk Width: | 12 ft | 6 ft |
| Bicycle Lane Width: | n/a ft | 5 ft |
| Clear Zone Width: | 14 ft | 14 ft |

Additional Information

Remarks, Footnotes, Supplemental Data

The proposed State Street is classified as an Urban Community Collector – Town Center and consists of two 11' travel lanes and 5' bike lanes with 8" concrete barrier curb and 11' turn lanes approaching the intersection with the Bayfront Parkway. This typical section is consistent with the City of Erie's Streetscape Plan. State Street is proposed with a 25 mph design speed, a maximum profile grade of 7.00% and a maximum cross slope of 2.00%. A grade separated intersection of the Bayfront Parkway and State Street is proposed to replace the existing at-grade signalized intersection. The straight through travel lanes of the Bayfront Parkway (outside lanes) will be lowered to pass beneath State Street and will be located at a similar elevation of the existing railroad tracks, which are anticipated to be removed by CSX as a separate project in 2021. The interior travel lanes of the Bayfront Parkway will ramp up and form a traditional signalized intersection with State Street and will maintain full access. Since approximately 80% of the current Bayfront Parkway vehicular traffic volumes pass straight through the State Street intersection, placing these lanes beneath State Street eliminates this large vehicular volume from the intersection, thus improving safety, enhancing multi-modal access across the Bayfront Parkway, and improving intersection capacity and operations. The intersection and radius returns are designed to accommodate a WB-50 truck; however, a WB-67 truck can physically navigate the intersection, however it encroaches into adjacent travel lanes. Barrier curb, grass buffers, and sidewalks are proposed along the east and west sides of State Street. Pedestrian crossings will be provided across each of the four legs of the intersection.

Attachments

CE Evaluation Part A

Roadway

No roadways included with this project

Roadway Description

Holland Street

| | Existing | Proposed |
|---------------------|----------|----------|
| Number of Lanes: | 3 | 3 |
| Lane Width: | 12 ft | 11 ft |
| Shoulder Width: | n/a ft | 4 ft |
| Median Width: | n/a ft | n/a ft |
| Sidewalk Width: | 6 ft | 10 ft |
| Bicycle Lane Width: | n/a ft | n/a ft |
| Clear Zone Width: | 12 ft | 14 ft |

Additional Information

Remarks, Footnotes, Supplemental Data

The proposed Holland Street is classified as an Urban Neighborhood Collector – Town Center and consists of two 11' travel lanes with either 3.3' concrete curb gutter or 4' shoulder with single face concrete barrier, and 11' turn lanes approaching the intersection with the Bayfront Parkway. The proposed design speed is 25 mph. Outside of the areas of graphic grade, Holland Street is proposed with a maximum profile grade is 8.74% and a normal 2.00% crown cross slope. A dual lane roundabout is proposed to replace the existing signalized intersection. The roundabout is proposed to be raised approximately 2.5' above the existing intersection elevation. This results from the desire for the proposed Holland Street profile south of the Bayfront Parkway not to be lowered, which would increase the height of the proposed retaining walls and require chasing the profile tie in location south of the intersection with East 2nd Street in order to not increase the existing profile grade. Instead of lowering the profile, a graphic grade is proposed along the southern portion of Holland Street, tying into the slightly elevated proposed roundabout with a sag vertical curve. The proposed roundabout will consist of a 180' inscribed diameter with an 84' diameter center island, which will be landscaped and encircled by 8" concrete barrier curb. Outside of the center island will be a 16' wide concrete truck apron, which will be encircled with mountable curb. The inside travel lane, or circulatory roadway, will vary between 16' and 16.5' in areas to ensure a minimum curb-to-curb width of 16.5', as requested by PennDOT Maintenance to accommodate snow plowing operations. The outside travel lane will consist of a 16' lane. At the southeast quadrant of the roundabout, a "dent" is introduced adjacent to the inside circulatory lane to accommodate dual left turns from northbound Holland Street to westbound Bayfront Parkway. Dual lane approaches widening between 13' and 20' with an approximately 6' painted traffic separator between approach lanes from all directions are included to provide improved capacity and efficiency, and to avoid vehicle path overlap of the design vehicle (WB-67). The circulatory roadway will be bordered by curb gutter, with a 10' sidewalk along the northern side of the roundabout to provide continuity of the Bayfront Bikeway, as well as along the east and west sides of Holland Street north of the Bayfront Parkway, and along the west side of Holland Street south of the Bayfront Parkway. An elevated pedestrian bridge is proposed across the Bayfront Parkway. An at-grade pedestrian crossing will be provided across the northern leg of Holland Street and will include a pedestrian refuge area within the concrete splitter island located between the opposing travel lanes.

Attachments

CE Evaluation Part A

Roadway

No roadways included with this project

Roadway Description

Sassafras Street Extension

| | Existing | Proposed |
|---------------------|----------|----------|
| Number of Lanes: | 3 | 3 |
| Lane Width: | 12 ft | 11 ft |
| Shoulder Width: | n/a ft | 4 ft |
| Median Width: | n/a ft | n/a ft |
| Sidewalk Width: | 6 ft | 10 ft |
| Bicycle Lane Width: | n/a ft | n/a ft |
| Clear Zone Width: | 10 ft | 12 ft |

Additional Information

Remarks, Footnotes, Supplemental Data

The proposed Sassafras Street Extension is classified as an Urban Local Road – Town Center and consists of two 11' travel lanes with 3.3' concrete curb gutter, opening to an additional turn lane in the southbound direction approaching the roundabout. Sassafras Street Extension is proposed with a design speed of 25 mph, a maximum profile grade of 2.00%, and a normal 2.00% crown cross slope. A dual lane roundabout is proposed to replace the existing signalized intersection. This roundabout is located northwest of the existing intersection location for ease of constructability, to accommodate gentle induced horizontal curves of the approaches to calm traffic, and to not affect the existing retaining wall on the south side of the Bayfront Parkway. The proposed roundabout will consist of a 180' inscribed diameter with an 84' diameter center island, which will be landscaped and encircled by 8" concrete barrier curb. Outside of the center island will be a 16' wide concrete truck apron, which will be encircled with mountable curb. The inside travel lane, or circulatory roadway, will vary between 16' and 16.5' in areas to ensure a minimum curb-to-curb width of 16.5', as requested by PennDOT Maintenance to accommodate snow plowing operations. The outside travel lane will consist of a 16' lane. Dual lane approaches widening to 13' with a 6' painted traffic separator between approach lanes from all directions are included to provide improved capacity and efficiency and to avoid vehicle path overlap of the design vehicle (WB-67). The circulatory roadway will be bordered by curb gutter, with a 10' sidewalk along the northern side of the roundabout to provide continuity of the Bayfront Bikeway, as well as along the east and west sides of Sassafras Street Extension. An at-grade pedestrian crossing will be provided across Sassafras Street Extension and will include a pedestrian refuge area within the concrete splitter island located between the opposing travel lanes.

Attachments

CE Evaluation Part A

Structure

No structures included with this project

BMS Number: 25-4034-0060-2024

BRKEY: 16514

Description: (provide name of waterway or facility structure crosses)

State Street over SR 4034 (Bayfront Parkway)

| | Existing | Proposed |
|-----------------------------|---|-------------|
| Structure Type: | Concrete | Concrete |
| Weight Restrictions: | none ton | none ton |
| Height Restrictions: | none ft | none ft |
| Curb to Curb Width: | 53.5 ft | varies ft |
| Lane Width: | 12 ft | 11 ft |
| Shoulder Width: | 3 ft | 4 ft |
| Sidewalk Width: | 8.3 ft | n/a ft |
| Total Bridge Width*: | n/a ft | 232'-10" ft |
| | *Total Bridge Width is measured from outside of barrier to outside of barrier, which should include sidewalks, when present. | |
| Under Clearance: | 20.17 ft | 16.5 ft |
| Lateral Clearance: | n/a ft | n/a ft |
| Sufficiency Rating: | 75.9 | |
| Structure Length: | 161 ft | 627 ft |

Additional Information

Remarks, Footnotes, Supplemental Data

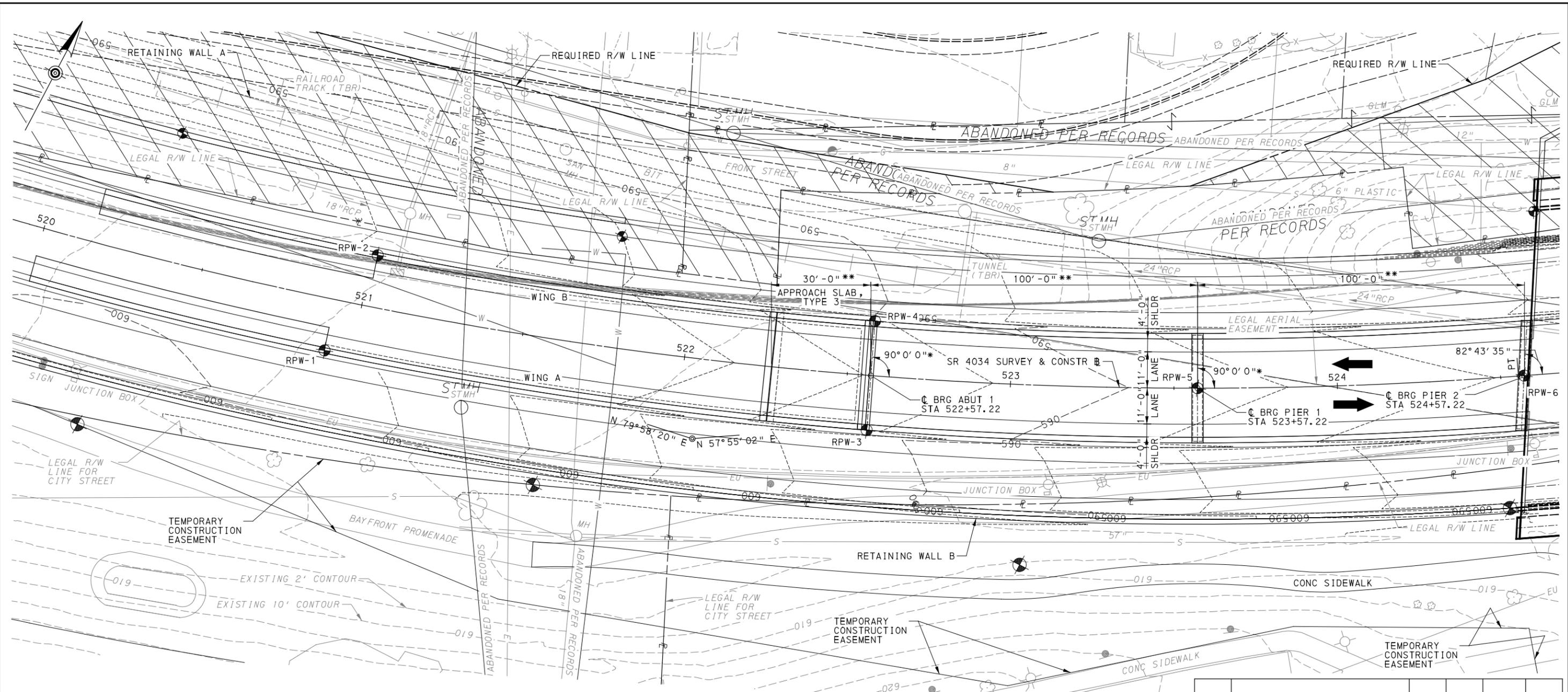
A single span structure is proposed on State Street, spanning approximately 85' over the Bayfront Parkway through lanes. The structure is proposed to be approximately 232'-10" in width, accommodating the three 11' lanes, two 5' bike lanes, and 8' median approaches from State Street, as well as the tie ins to the Bayfront Parkway Ramps. The structure will accommodate ramp structures (see below) on each of the fascia girders, providing a four leg signalized intersection on the bridge. It is anticipated the concrete deck will be the riding surface and any potential "green space" on the corners of the intersection will be provided above the bridge deck. Vertical clearance of 16'-6" over the Bayfront Parkway will be provided.

Attachments

1. [Bayfront West Ramp Plan Set.pdf](#) (434KB / 0.4MB)
2. [East ramp Plan set.pdf](#) (412KB / 0.4MB)

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4/22/2020
 PLOTTED:



HORIZONTAL ALIGNMENT DATA

SR 4034 SURVEY & CONSTR
 PI STA 522+08.36
 Δ 22° 03' 18" (LT)
 D 4° 24' 27"
 T 253.34'
 R 500.41'
 L 1,300.00'
 PC STA 519+55.02
 PT STA 524+55.44
 SUPERELEVATE = 2.4%

VERTICAL ALIGNMENT DATA

SR 4034 SURVEY & CONSTR
 +2.62% @ +1.00%
 PVI STA 520+00.00
 ELEV 600.50
 VC 300.00'
 MO = -0.61'
 SSD = 818'

SR 4034 WESTBOUND SURVEY & CONSTR
 +1.95% @ -5.04%
 PVI STA 520+50.00
 ELEV 600.63
 VC 140.00'
 MO = -1.22'
 SSD = 224'

SR 4034 EASTBOUND SURVEY & CONSTR
 +1.95% @ -5.04%
 PVI STA 520+50.00
 ELEV 601.15
 VC 140.00'
 MO = -1.22'
 SSD = 224'

NOTES:

1. FOR ELEVATION VIEW, SEE SHEET 2.
2. FOR TYPICAL SECTION, SEE SHEET 3.
3. FOR GENERAL NOTES, SEE SHEET 4.

LEGEND

- * MEASURED TO LOCAL TANGENT
- ** MEASURED ALONG CONSTRUCTION
- PROPOSED STRUCTURE BORING
- DIRECTION OF TRAFFIC FLOW

| WINGWALL LENGTHS (MEASURED ALONG INSIDE FACE) | |
|---|-----------|
| WINGWALL A | = 164'-7" |
| WINGWALL B | = 150'-9" |

PROPOSED STRUCTURAL BORING LOCATIONS

| NUMBER | STATION | OFFSET | T/GROUND ELEV |
|--------|-----------|-----------|---------------|
| RPW-1 | 520+91.63 | 15.84' RT | 604.25 |
| RPW-2 | 521+01.80 | 15.84' LT | 584.25 |
| RPW-3 | 522+57.22 | 16.69' RT | 607 |
| RPW-4 | 522+57.22 | 16.69' LT | 606.25 |
| RPW-5 | 523+57.22 | 0.00' | 607 |
| RPW-6 | 524+57.22 | 0.00' | 607 |

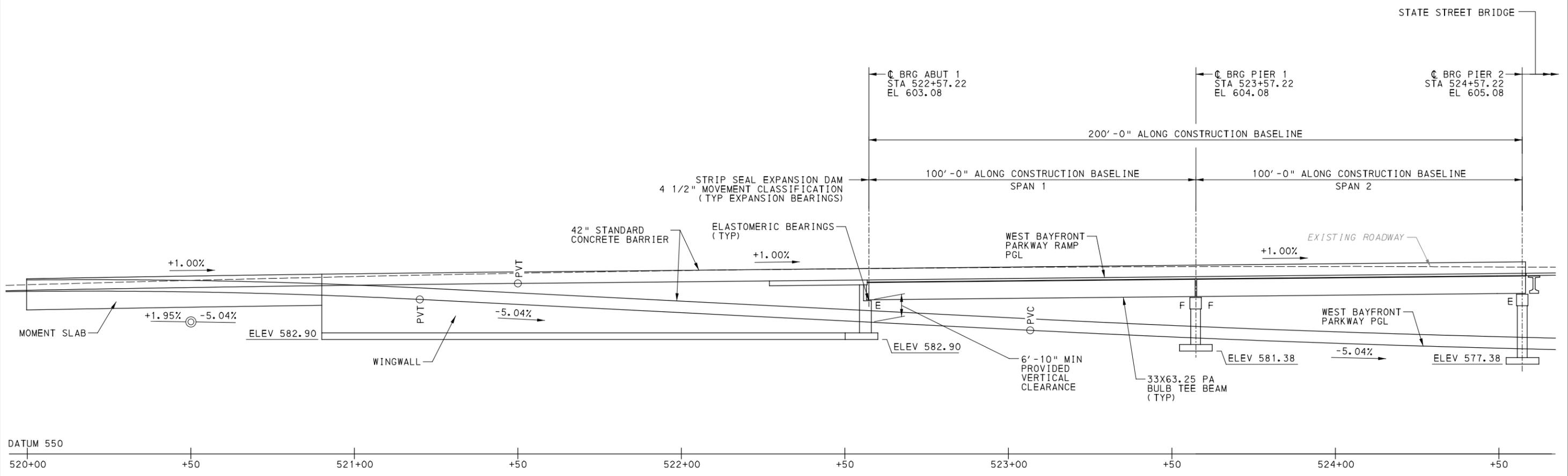
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| REVISIONS | | | | | |

BMS STR ID: 25-4034-0060-1943 MPMS PROJ: BRKEY: PENDING

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ERIE COUNTY
 SR 4034 SECTION A01
 SEGMENT 0060 OFFSET 1943
 WEST BAYFRONT PARKWAY RAMP STA. 523+57.22
 OVER S.R. 4034
 TYPE, SIZE & LOCATION
PLAN

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PLOTTED: 4/13/2020



WEST RAMP ELEVATION
 5 0 15 FEET

NOTES:

REFERENCES:

| Mark | Description | By | Chk'd. | Rec'd | Date |
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| REVISIONS | | | | | |

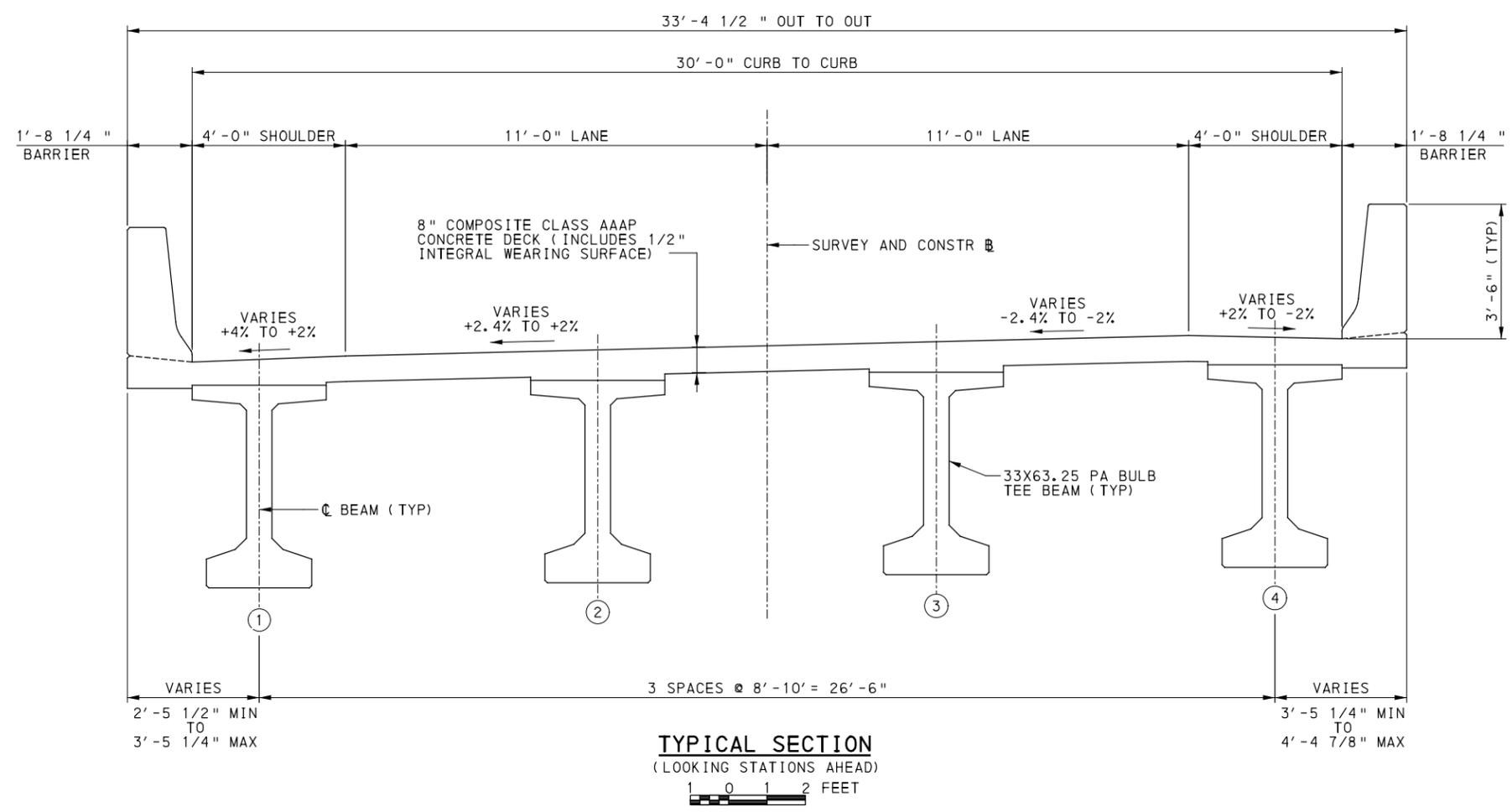
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COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ERIE COUNTY
SR 4034 SECTION A01
SEGMENT 0060 OFFSET 1943
WEST BAYFRONT PARKWAY RAMP STA. 523+57.22
OVER S.R. 4034
TYPE, SIZE & LOCATION
ELEVATION

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|-------------------------|---------------------|
| RECOMMENDED _____, 20__ | SHEET 2 OF 4 |
| _____ | S-PENDING |

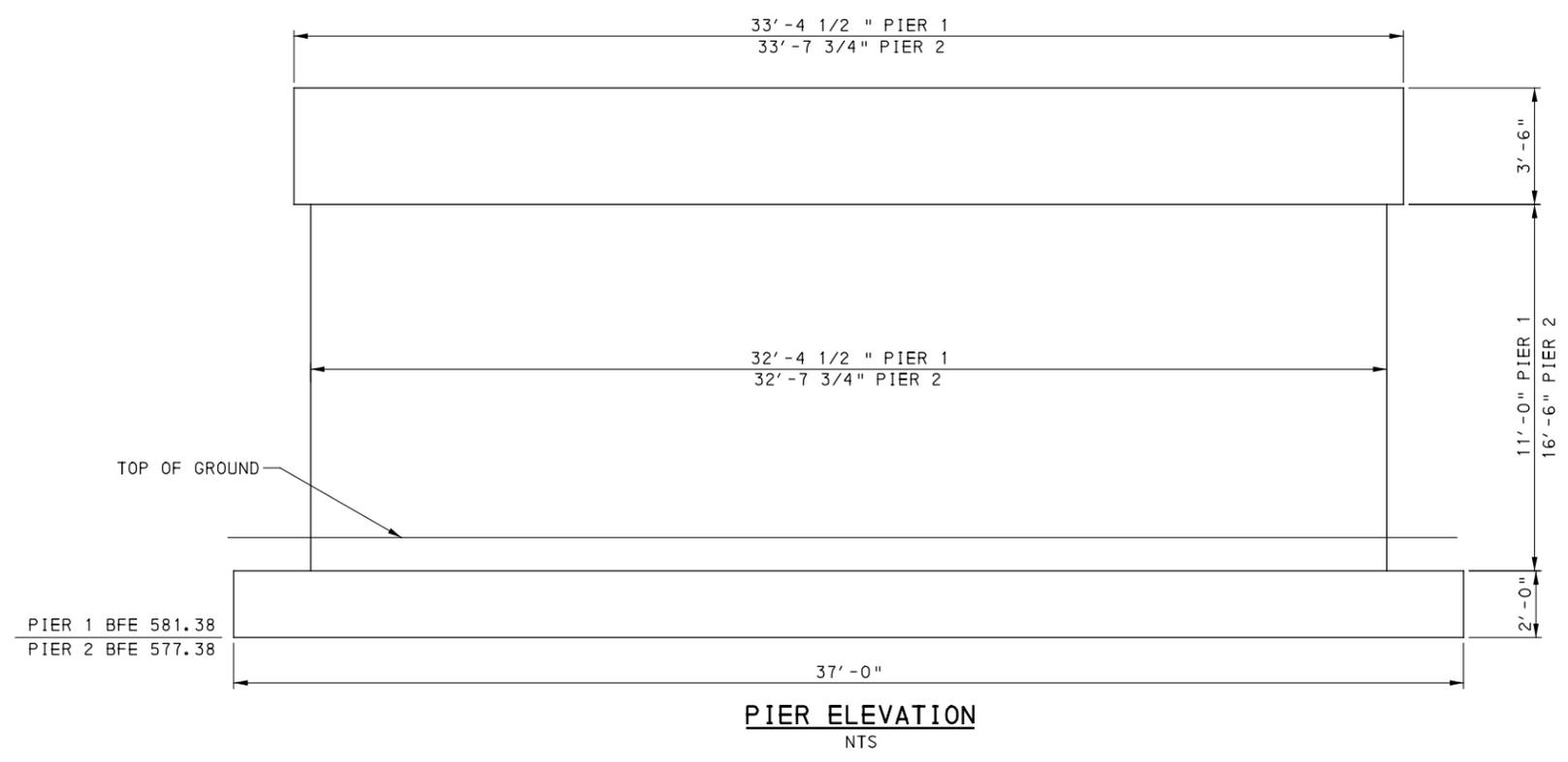
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PLOTTED: 4/14/2020



NOTES:

REFERENCES:



| Mark | Description | By | Chk'd. | Recm'd | Date |
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| REVISIONS | | | | | |

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COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

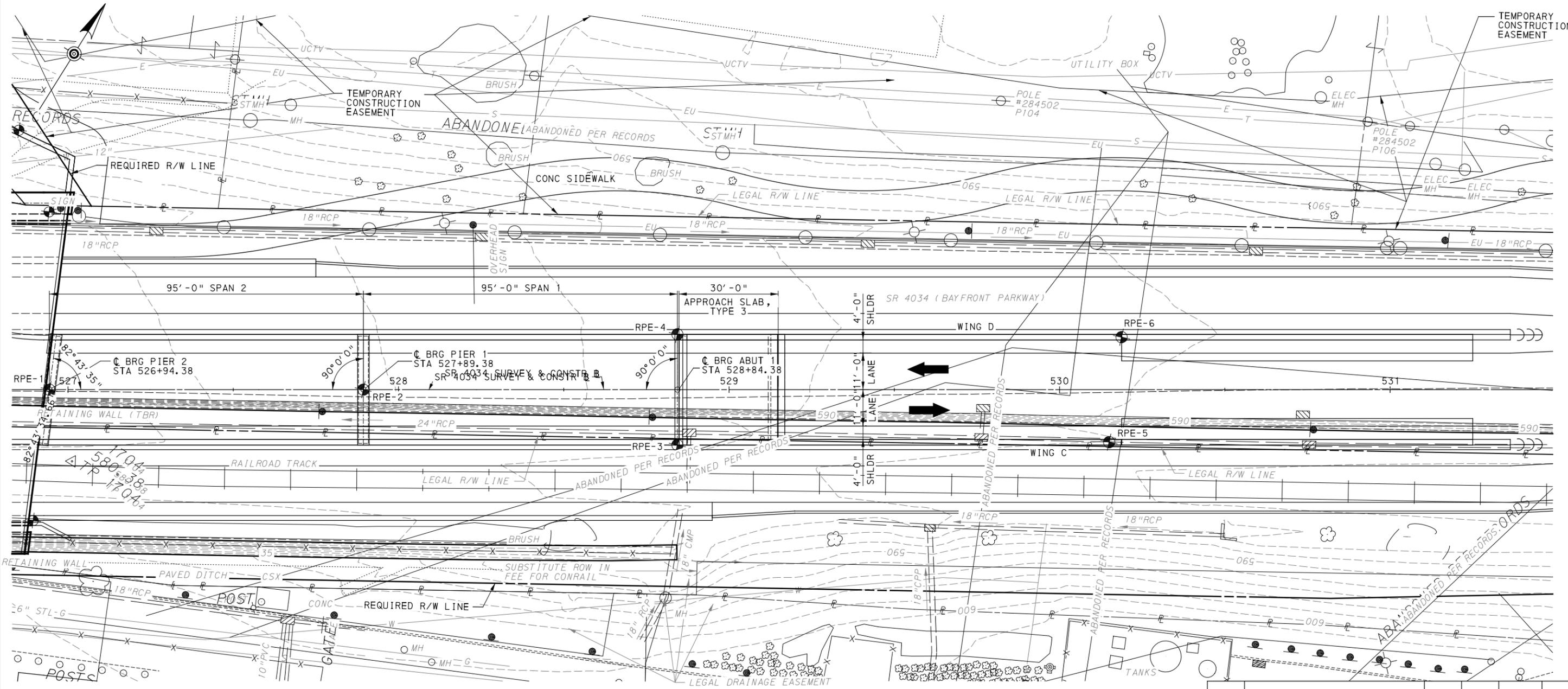
ERIE COUNTY
 SR 4034 SECTION A01
 SEGMENT 0060 OFFSET 1943
 WEST BAYFRONT PARKWAY RAMP STA. 523+57.22
 OVER S.R. 4034
 TYPE, SIZE & LOCATION
 TYPICAL SECTION

RECOMMENDED _____, 20__

SHEET 3 OF 4
 S-PENDING

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4/28/2020
 PLOTTED:



PLAN



HORIZONTAL ALIGNMENT DATA

SR 4034
 SURVEY & CONSTR
 TANGENT

VERTICAL ALIGNMENT DATA

SR 4034
 SURVEY & CONSTR
 -1.24% @ -7.00%

PVI STA 527+57.06
 ELEV 604.12
 VC 90.00'
 MO = -0.63'
 HLSD = 232'

SR 4034 EASTBOUND
 SURVEY & CONSTR
 -5.54% @ +1.00%

PVI STA 524+90.40
 ELEV 578.95
 VC 340.00'
 MO = 2.76'
 HLSD = 261'

SR 4034 WESTBOUND
 SURVEY & CONSTR
 -5.54% @ +1.00%

PVI STA 524+81.66
 ELEV 578.87
 VC 330.00'
 MO = 2.68'
 HLSD = 255'

LEGEND

- PROPOSED STRUCTURE BORING
- DIRECTION OF TRAFFIC FLOW

| WINGWALL LENGTHS | |
|------------------|-----------|
| WINGWALL C | = 131'-6" |
| WINGWALL D | = 131'-6" |

PROPOSED STRUCTURAL BORING LOCATIONS

| NUMBER | STATION | OFFSET | T/GROUND ELEV |
|--------|-----------|-----------|---------------|
| RPE-1 | 526+94.37 | 0.00' | 603 |
| RPE-2 | 527+89.37 | 0.00' | 600 |
| RPE-3 | 528+84.37 | 16.69' RT | 581.75 |
| RPE-4 | 528+84.37 | 16.69' LT | 597 |
| RPE-5 | 530+15.00 | 15.84' RT | 584 |
| RPE-6 | 530+18.75 | 15.84' LT | 594.50 |

NOTES:

1. FOR ELEVATION VIEW, SEE SHEET 2.
2. FOR TYPICAL SECTION, SEE SHEET 3.
3. FOR GENERAL NOTES, SEE SHEET 4.

| Mark | Description | By | Chk'd | Rec'd | Date |
|-----------|-------------|----|-------|-------|------|
| REVISIONS | | | | | |

BMS STR ID: 25-4034-0060-1943 MPMS PROJ: ---- BRKEY: PENDING

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

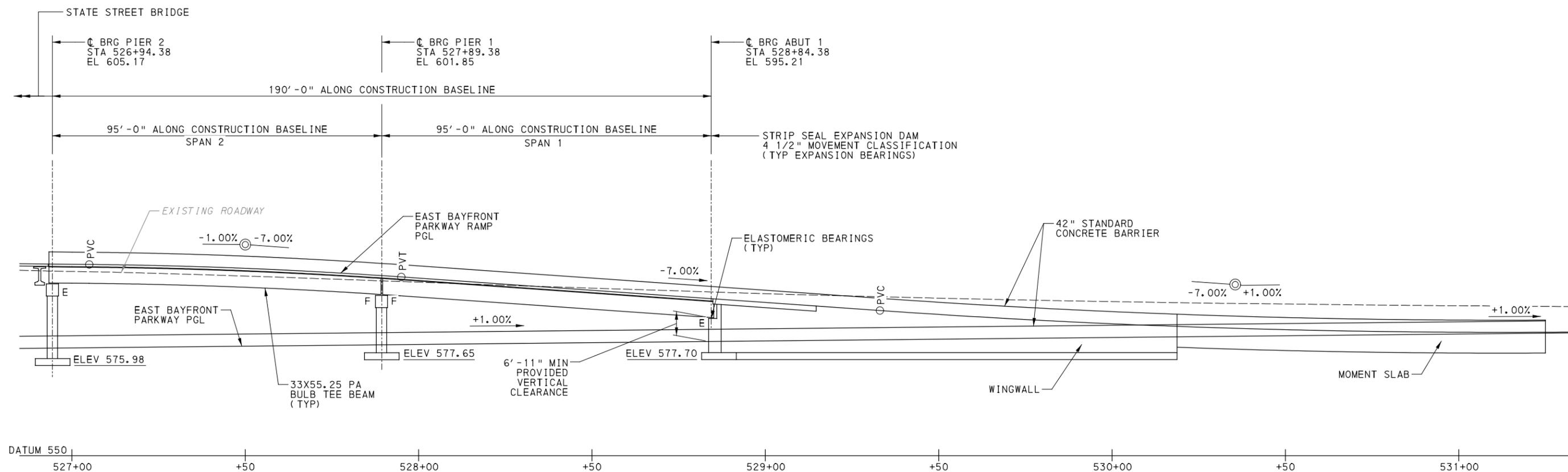
ERIE COUNTY
 SR 4034 SECTION A01
 SEGMENT 0060 OFFSET 1943
 EAST BAYFRONT PARKWAY RAMP STA. XXXX
 OVER S.R. 4034
 TYPE, SIZE & LOCATION
 PLAN

RECOMMENDED -----, 20--

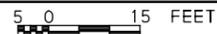
SHEET 1 OF 4

S-PENDING

4/28/2020
PLOTTED:



EAST RAMP ELEVATION



NOTES:

REFERENCES:

| Mark | Description | By | Chk' d. | Recm' d | Date |
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| REVISIONS | | | | | |

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

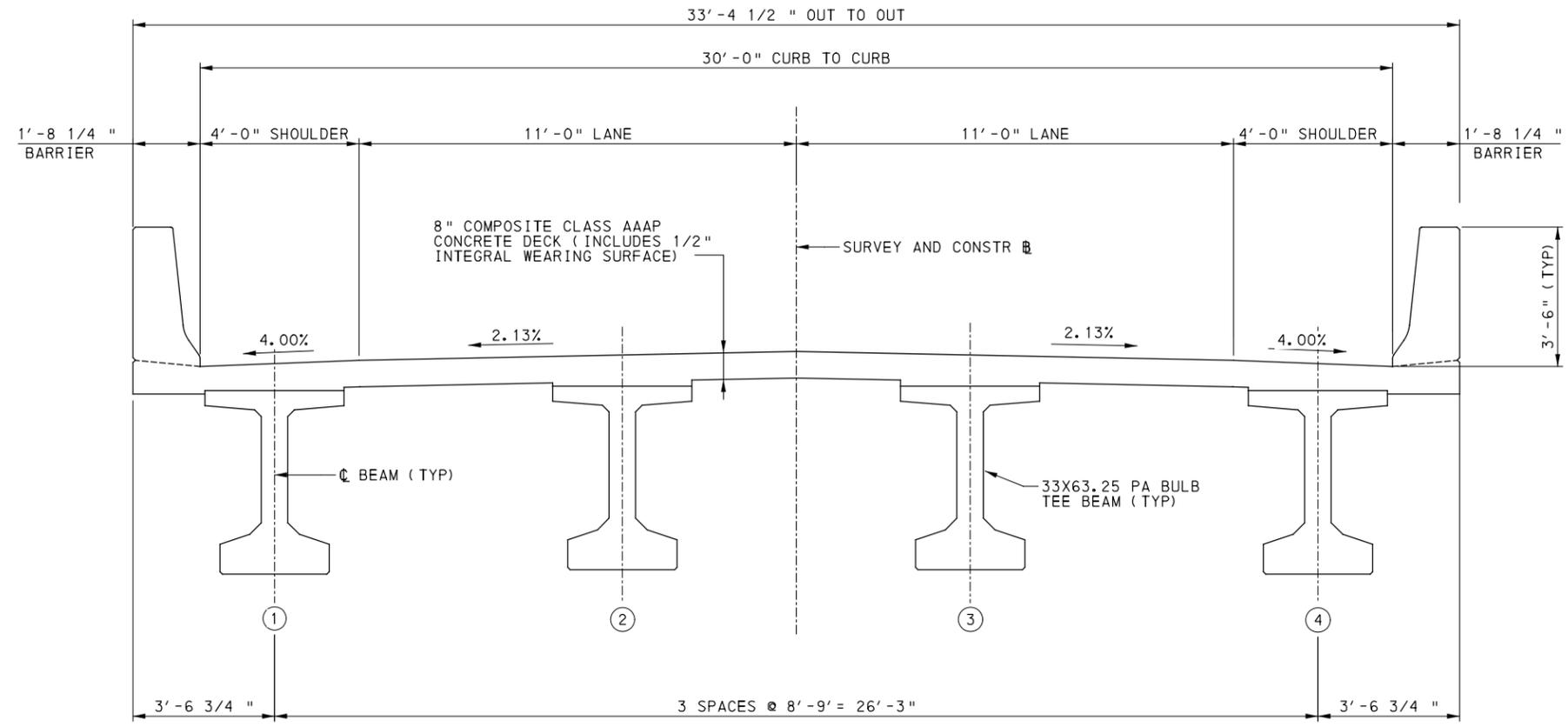
ERIE COUNTY
SR 4034 SECTION A01
SEGMENT 0060 OFFSET 1943
EAST BAYFRONT PARKWAY RAMP STA. XXXX
OVER S.R. 4034
TYPE, SIZE & LOCATION
ELEVATION

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| RECOMMENDED _____, 20__ | SHEET 2 OF 4 |
| _____ | S-PENDING |

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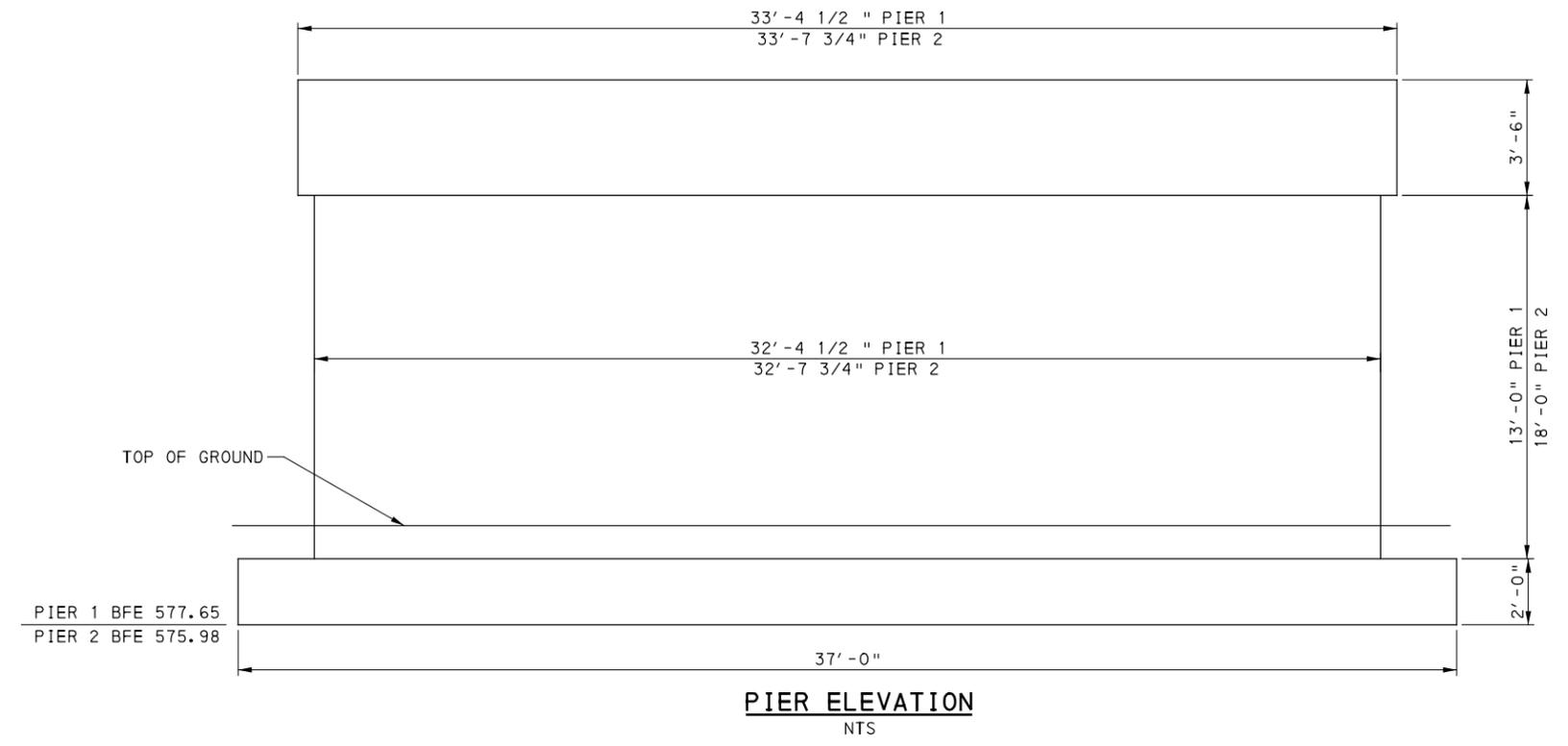
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TYPICAL SECTION
 (LOOKING STATIONS AHEAD)
 1 0 1 2 FEET

NOTES:

REFERENCES:



| Mark | Description | By | Chk'd | Rec'd | Date |
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| REVISIONS | | | | | |

BMS STR ID: 25-4034-0060-1943 MPMS PROJ: _____ BRKEY: PENDING

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ERIE COUNTY
 SR 4034 SECTION A01
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 EAST BAYFRONT PARKWAY RAMP STA. XXXX
 OVER S.R. 4034
TYPE, SIZE & LOCATION
TYPICAL SECTION

RECOMMENDED _____, 20__
 SHEET 3 OF 4
 S-PENDING

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4/28/2020

PLOTTED:

GENERAL NOTES:

DESIGN SPECIFICATIONS

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2017, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, (INCLUDING LATEST REVISIONS) DECEMBER 2019.

LIVE LOAD DISTRIBUTION TO BEAMS IS BASED UPON PENNDOT DESIGN MANUAL, PART 4 DISTRIBUTION FACTORS.

DESIGN IS IN ACCORDANCE WITH THE LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD.

DESIGN LIVE LOADS

PHL-93, P-82 (204K PERMIT LOAD) AND P2016-13 (330K PERMIT LOAD) AT OPERATING RATING.

FATIGUE DESIGN IS BASED ON THE FOLLOWING (PRESTRESSED CONCRETE):
ADTT = PENDING
(ONE DIRECTIONAL)

MAXIMUM ALLOWABLE TENSILE STRESS IN PRECOMPRESSED TENSILE ZONE: $0.0948\sqrt{f'c}$

DEAD LOADS:

INCLUDES A SURFACE AREA DENSITY OF 0.030 KSF FOR FUTURE WEARING SURFACE ON THE DECK SLAB.

INCLUDES A SURFACE AREA DENSITY OF 0.015 KSF FOR PERMANENT METAL DECK FORMS THAT TAKES INTO ACCOUNT THE WEIGHT OF THE FORM, PLUS THE WEIGHT OF THE CONCRETE IN THE VALLEYS OF THE STAY-IN-PLACE FORMS.

GENERAL CONSTRUCTION:

PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 408 /2020, AASHTO/AWS D1.5M/D1.5:2015 (USE AASHTO/AWS D1.1/D1.1M:2015 FOR WELDING NOT COVERED IN AASHTO/AWS D1.5M/D1.5:2015) BRIDGE WELDING CODE, AND CONTRACT SPECIAL PROVISIONS.

ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.

STATIONS AND ELEVATIONS ARE GIVEN IN FEET UNLESS OTHERWISE INDICATED.

DECK SLAB THICKNESS INCLUDES A 1/2 INCH INTEGRAL WEARING SURFACE.

USE EITHER PERMANENT METAL DECK FORMS OR REMOVABLE FORMS TO CONSTRUCT THE DECK SLAB. USE REMOVABLE FORMS TO CONSTRUCT THE OVERHANGS OUTSIDE THE EXTERIOR BEAMS.

CONSTRUCT DECK SLAB TRANSVERSE CONSTRUCTION JOINTS PARALLEL TO BRIDGE CENTERLINE OF BEARINGS.

SUPERSTRUCTURE DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68 DEG F.

PLANS OF THE EXISTING STRUCTURE ARE AVAILABLE.

DO NOT CONSIDER ANY OF THE DATA ON THE EXISTING STRUCTURE SUPPLIED IN THE ORIGINAL DESIGN DRAWINGS OR MADE AVAILABLE TO YOU BY THE DEPARTMENT OR ITS AUTHORIZED AGENTS AS POSITIVE REPRESENTATIONS OF ANY OF THE CONDITIONS THAT YOU WILL ENCOUNTER IN THE FIELD.

THE INFORMATION SHOWN ON THE PLANS FOR THE EXISTING BRIDGE IS NOT PART OF THE PLANS, PROPOSAL, OR CONTRACT AND IS NOT TO BE CONSIDERED A BASIS FOR COMPUTATION OF THE UNIT PRICES USED FOR BIDDING PURPOSES. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT THE INFORMATION IS CORRECTLY SHOWN. THE BIDDER IS NOT TO RELY ON THIS INFORMATION BUT IS TO ASSUME THE POSSIBILITY THAT CONDITIONS AFFECTING THE COST AND/OR QUANTITIES OF WORK TO BE PERFORMED MAY DIFFER FROM THOSE INDICATED.

PREPARE BEARING AREAS AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(k)9.

BRIDGE IS NOT WEIGHT RESTRICTED. SEE PUBLICATION 408 SECTION 105.17 FOR CONSTRUCTION LOADING LIMITS.

PROVIDE A MINIMUM WIDTH OF 2 1/2" AT 68°F FOR STRIP SEAL INSTALLATIONS UNLESS OTHERWISE INDICATED.

DO NOT USE ADHESIVE ANCHORS IN A TENSION APPLICATION FOR PERMANENT INSTALLATIONS.

DO NOT USE ADHESIVE ANCHORS IN A SUSTAINED TENSION APPLICATION FOR TEMPORARY INSTALLATIONS, INCLUDING DURING CONSTRUCTION.

SITE CLASS IS NOT CLASS E.

PROVIDE CAST-IN-PLACE BARRIERS. SLIP FORMING OR PRECAST BARRIERS ARE NOT PERMITTED ON THE DECK OR WINGWALLS.

SPREAD FOOTING MAY BE ORDERED BY THE ENGINEER TO BE AT ANY ELEVATION OR OF ANY DIMENSIONS NECESSARY TO PROVIDE A PROPER FOUNDATION.

CONTRACTOR IS SOLELY RESPONSIBLE FOR THE STABILITY OF ALL EXCAVATED SLOPES AND THE DESIGN OF ANY TEMPORARY SHORING AND BRACING THAT MAY BE USED. PERFORM ALL EXCAVATIONS IN ACCORDANCE WITH OSHA REQUIREMENTS.

DIRECT ALL SURFACE RUNOFF AWAY FROM EXCAVATIONS.

CONCRETE:

USE CLASS AAAP CEMENT CONCRETE IN THE DECK SLAB AND HAUNCHES AND TYPE 3 APPROACH SLAB.

USE CLASS AA CEMENT CONCRETE IN THE BARRIERS, DIAPHRAGMS, SHEAR BLOCKS, CHEEKWALLS, U-WINGS ABOVE BRIDGE SEAT CONSTRUCTION JOINT, SLEEPER SLAB, MOMENT SLABS AND TOE WALLS.

IF CONCRETE DIAPHRAGMS ARE POURED MONOLITHICALLY WITH THE DECK, USE CLASS AAAP CEMENT CONCRETE FOR THE DIAPHRAGMS AT NO ADDITIONAL COST TO THE DEPARTMENT.

USE CLASS A CEMENT CONCRETE IN THE PIERS, ABUTMENTS BELOW BRIDGE SEAT, WINGWALLS BELOW BRIDGE SEAT AND FOOTINGS.

USE CLASS C CEMENT CONCRETE BELOW THE BOTTOM OF FOOTINGS WHEN SPECIFIED.

A HIGHER CLASS OF CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS OF CONCRETE AT NO ADDITIONAL COST TO THE DEPARTMENT, IF APPROVED BY THE DISTRICT ENGINEER.

PROVIDE 2-INCH CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.

RAKE-FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, EXCEPT AS INDICATED.

CHAMFER EXPOSED CONCRETE EDGES 3/4 INCH BY 3/4 INCH, EXCEPT AS NOTED.

PLACE CHEEKWALL AND SHEAR BLOCK CONCRETE AFTER BEAMS ARE SET IN POSITION.

USE RETARDER ADMIXTURE CONFORMING TO PUBLICATION 40/2020 IN THE CONCRETE DECK SLAB.

USE AIR ENTRAINMENT AND A MAXIMUM WATER/CEMENT RATIO OF 0.45 (BY WEIGHT). CONCRETE ADDITIVES CONTAINING CHLORIDE ARE PROHIBITED.

USE SULFATE RESISTANT CEMENT, TYPE II IN ALL CONCRETE CLASSES IN CONTACT WITH EXISTING SOILS AND GROUND WATER.

USE CORROSION INHIBITING ADMIXTURE IN THE CONCRETE DECK SLAB.

APPLY PENETRATING SEALER TO ABUTMENT SEATS (EXCEPT BEARING AREAS), SHEAR BLOCKS AND TO THE INSIDE FACE OF CHEEKWALLS.

REINFORCEMENT STEEL:

PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM A 615/A 615M, A 996/A 996M, OR A 706/A 706M. DO NOT WELD GRADE 60 REINFORCING STEEL BARS UNLESS SPECIFIED. GRADE 40 REINFORCING STEEL BARS MAY BE SUBSTITUTED WITH A PROPORTIONAL INCREASE IN CROSS-SECTIONAL AREA, IF APPROVED BY THE CHIEF BRIDGE ENGINEER. DO NOT USE RAIL STEEL A 996/A 996M REINFORCEMENT BARS IN BRIDGE PIERS, ABUTMENTS, SHEAR BLOCKS, BEAMS, FOOTINGS, BARRIERS, OR WHERE BENDING OR WELDING OF THE REINFORCEMENT BARS IS INDICATED.

USE EPOXY-COATED REINFORCEMENT BARS.

GALVANIZED REINFORCING STEEL BARS MAY BE SUBSTITUTED FOR EPOXY-COATED REINFORCING STEEL BARS AT NO ADDITIONAL COST TO THE DEPARTMENT.

PROVIDE MINIMUM EMBEDMENT AND SPLICE LENGTHS IN ACCORDANCE WITH STANDARD DRAWING BC-736M, UNLESS OTHERWISE INDICATED.

WELDING OF REINFORCEMENT BARS DURING FABRICATION OR CONSTRUCTION IS NOT PERMITTED, UNLESS SPECIFIED.

USE STAINLESS STEEL DOWEL BARS PER PUBLICATION 408/2020 SECTION 709.1 (f).

PRESTRESSED CONCRETE BEAM NOTES:

DO NOT USE FORM SUPPORT SYSTEMS THAT WILL CAUSE UNACCEPTABLE OVERSTRESS OR DEFORMATION TO PERMANENT BRIDGE MEMBERS.

STABILITY OF PARTIAL BEAMS AND COMPLETE BEAMS IS TO BE MAINTAINED BY THE CONTRACTOR DURING ERECTION, UNTIL BEAMS AND DIAPHRAGMS ARE IN PLACE. ERECTION LOADS, INCLUDING SELF WEIGHT OF THE CONCRETE MEMBERS, WIND LOADING AND CONSTRUCTION LIVE LOAD EFFECTS, ARE TO BE EVALUATED BY THE CONTRACTOR FOR STABILITY, STRESSES AND DEFLECTIONS ON THE BRIDGE MEMBERS DURING ANY STAGE OF ERECTION.

BRACE PRESTRESSED CONCRETE MEMBERS IN LONGITUDINAL AND LATERAL DIRECTIONS UNTIL MEMBERS ARE IN STABLE (FINAL BRACED) CONDITION.

PRIOR TO ERECTING THE BEAMS, AND IN ACCORDANCE WITH SECTION 1050(c) 2.d, SUBMIT AN ERECTION PLAN SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA FOR REVIEW AND APPROVAL.

UTILITY NOTES:

COORDINATE, LOCATE AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408, SECTIONS 105.06 AND 107.12.

VERIFY AND LOCATE ALL EXISTING UTILITIES PRIOR TO STARTING WORK. CONDUCT OPERATIONS IN A MANNER WHICH ENSURES THAT THE UTILITIES WILL NOT BE DISTURBED OR ENDANGERED, AND ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE TO UTILITIES DURING CONSTRUCTION. THE DEPARTMENT DOES NOT ASSUME RESPONSIBILITY FOR REIMBURSEMENT, PARTICIPATION IN DESIGN AND/OR REVISIONS, OR LIABILITY FOR ACCURACY, TYPE, SIZE, AND LOCATION OF UTILITIES.

| Mark | Description | By | Chk'd. | Recm'd | Date |
|-----------|-------------|----|--------|--------|------|
| REVISIONS | | | | | |

BMS STR ID: 25-4034-0060-1943 MPMS PROJ:---- BRKEY: PENDING

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ERIE COUNTY
SR 4034 SECTION A01
SEGMENT 0060 OFFSET 1943
EAST BAYFRONT PARKWAY RAMP STA. XXXX
OVER S.R. 4034
TYPE, SIZE & LOCATION
GENERAL NOTES

RECOMMENDED -----, 20--

SHEET 4 OF 4

S-PENDING

CE Evaluation Part A

Structure

No structures included with this project

BMS Number: n/a

BRKEY: n/a

Description: (provide name of waterway or facility structure crosses)

Soldiers and Sailors Home Access Bridge Over CSX Railroad

| | Existing | Proposed |
|-----------------------------|---|--------------------------------|
| Structure Type: | n/a | Steel Girder Pedestrian Bridge |
| Weight Restrictions: | n/a ton | 95 ton |
| Height Restrictions: | n/a ft | 23 ft |
| Curb to Curb Width: | n/a ft | 18 ft |
| Lane Width: | n/a ft | n/a ft |
| Shoulder Width: | n/a ft | n/a ft |
| Sidewalk Width: | n/a ft | n/a ft |
| Total Bridge Width*: | n/a ft | 20.67 ft |
| | *Total Bridge Width is measured from outside of barrier to outside of barrier, which should include sidewalks, when present. | |
| Under Clearance: | n/a ft | 23.25 ft |
| Lateral Clearance: | n/a ft | 110 ft |
| Sufficiency Rating: | n/a | |
| Structure Length: | n/a ft | 117 ft |

Additional Information

Remarks, Footnotes, Supplemental Data

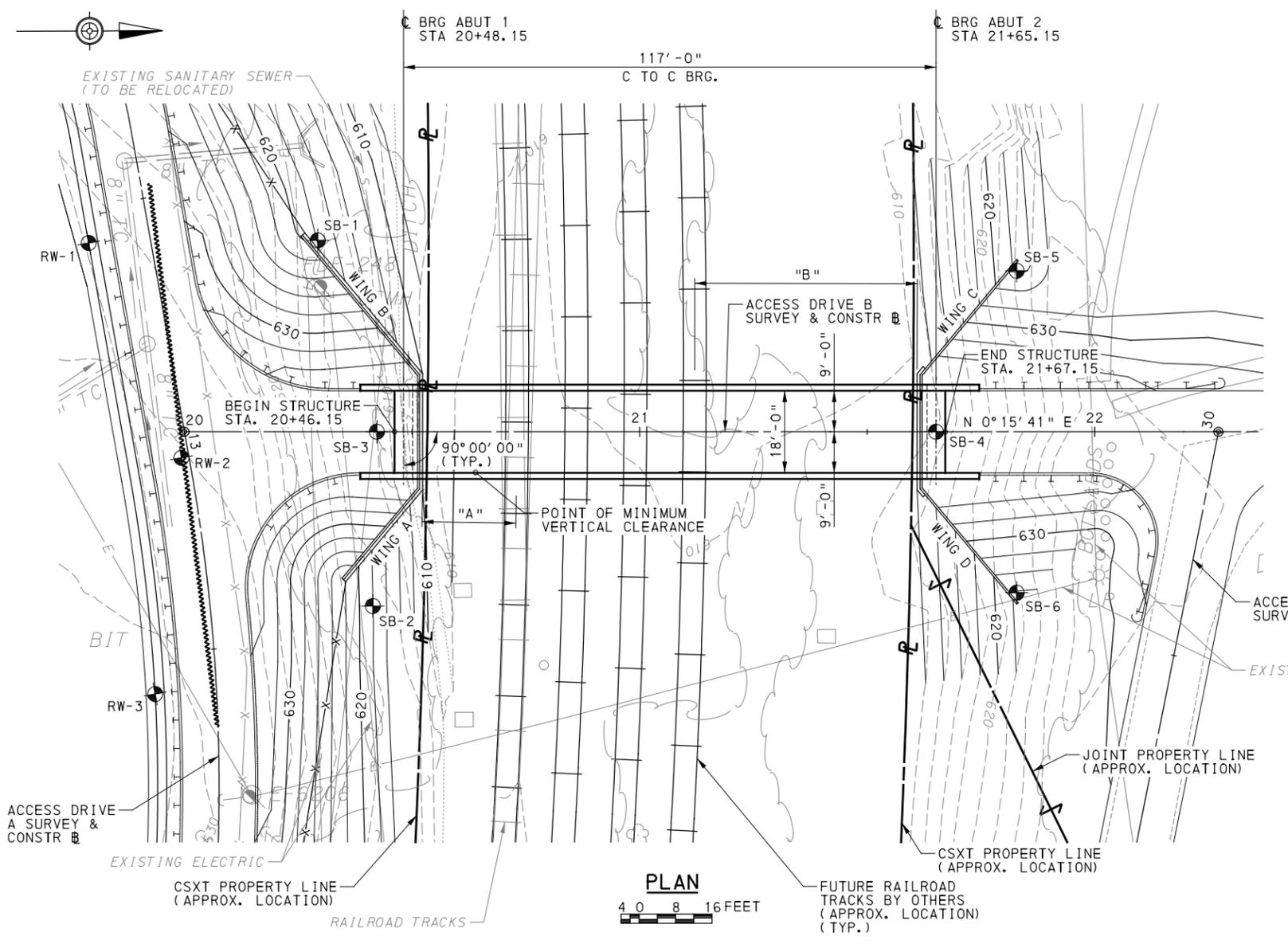
The proposed structure is a 117-foot bridge spanning the 106.6' CSX right-of-way and proposed railroad tracks. The abutments were located to minimize the span length while remaining outside of the CSX right-of-way per CSX direction. For estimating purposes, it was assumed that the substructure would include integral abutments constructed behind MSE retaining walls. The bridge is primarily intended to carry pedestrians, passenger vehicles and maintenance vehicles; therefore, it will be designed according to the LRFD Guide Specifications for the Design of Pedestrian Bridges which is a supplement to the AASHTO LRFD Bridge Design Specifications. Per the specifications, the structure will be designed for the maximum force effects from either a uniform pedestrian loading of 90 psf or a maintenance vehicle applied individually. The H15 design vehicle will be utilized as the maintenance vehicle instead of the H5 and H10 provided in the design specifications to account for the potential use by dump trucks, backhoes, and other equipment required at the Veterans Memorial Cemetery. A vertical clearance of 23-feet is required between the proposed bridge low chord and the proposed CSX railroad tracks. As such, the proposed access road profile will accommodate a superstructure depth of 41-inches. Preliminary investigation showed that a composite steel girder superstructure is the most feasible option for this structure. A benefit to utilizing steel girders is that the flange plates can be sized to allow for shallower members to span greater distances. Another benefit of this approach is that camber can be introduced to the girder to closely follow the profile of the road. The girders will be spliced together on-site to simplify delivery to the site as equipment will need to navigate through narrow residential streets and around the Soldiers' and Sailors' property. Prestressed concrete beams were also investigated but deemed not feasible. Concrete beams have little camber so a varying depth haunch will need to be constructed to match the profile of the road. The maximum haunch for this structure would be approximately 16-inches deep which significantly increases the dead load carried by each beam. The beam depth required to carry the large self-weight load for this span length would result in a superstructure depth greater than 4-feet. In addition, the 117- foot beams would be difficult to transport to the site and would require much larger equipment to install.

Attachments

1. [Soldiers and Sailors Home Type, Size and Location - Plans.pdf](#) (240KB / 0.2MB)

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1/31/2020
 PLOTTED:



WINGWALL LENGTHS:
 WINGWALL A = 28'-2"
 WINGWALL B = 42'-2"
 WINGWALL C = 35'-2"
 WINGWALL D = 35'-2"

WINGWALL LENGTHS MEASURED FROM THE END OF THE INTEGRAL ABUTMENT TO THE END OF THE WALL.

HORIZONTAL CLEARANCES:
 PROPOSED CONDITION:
 "A" = 20'-7" PROVIDED
 = 15'-0" REQUIRED
 "B" = 48'-10" PROVIDED
 = 15'-0" REQUIRED

VERTICAL CLEARANCES:
 MINIMUM 23'-0" OVER RR TRACKS (REQUIRED)
 * = 23'-3"

VERTICAL CURVE DATA:
 5.00 % \odot -5.00 %
 PVI STA 21+06.65
 ELEV 639.87
 VC 70.00'
 MO = -0.87'
 SSD = 142.9'
 HIGH POINT
 STA 21+06.65
 ELEV 639.00

PROPOSED STRUCTURAL BORING LOCATIONS

| NUMBER | ALIGNMENT | STATION | OFFSET | T/GROUND ELEV |
|--------|--------------|----------|-----------|---------------|
| SB-1 | ACCESS DR. B | 20+29.28 | 41.95' LT | 614.42 |
| SB-2 | ACCESS DR. B | 20+41.39 | 38.19' RT | 614.46 |
| SB-3 | ACCESS DR. B | 20+42.28 | 0.00' | 612.00 |
| SB-4 | ACCESS DR. B | 21+65.15 | 0.00' | 612.36 |
| SB-5 | ACCESS DR. B | 21+82.86 | 35.28' LT | 624.24 |
| SB-6 | ACCESS DR. B | 21+82.86 | 35.28' RT | 621.80 |
| RW-1 | ACCESS DR. A | 12+57.51 | 13.50' RT | 626.77 |
| RW-2 | ACCESS DR. A | 13+07.43 | 1.66' RT | 628.12 |
| RW-3 | ACCESS DR. A | 13+60.90 | 13.98' RT | 630.27 |

HORIZONTAL ALIGNMENT DATA:
 ACCESS DRIVE B SURVEY & CONSTR
 PI STA 22+68.87
 TANGENT DIRECTION = N 0°15'41" E
 TANGENT LENGTH = 243.72'

- LEGEND:**
- STRUCTURE BORING (PROPOSED)
 - APPROXIMATE LOCATION OF TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM
 - DENOTES EXISTING UTILITY POLES
 - DENOTES EXISTING LIGHT POLES
 - DENOTES EXISTING SANITARY SEWER UTILITY HOLE

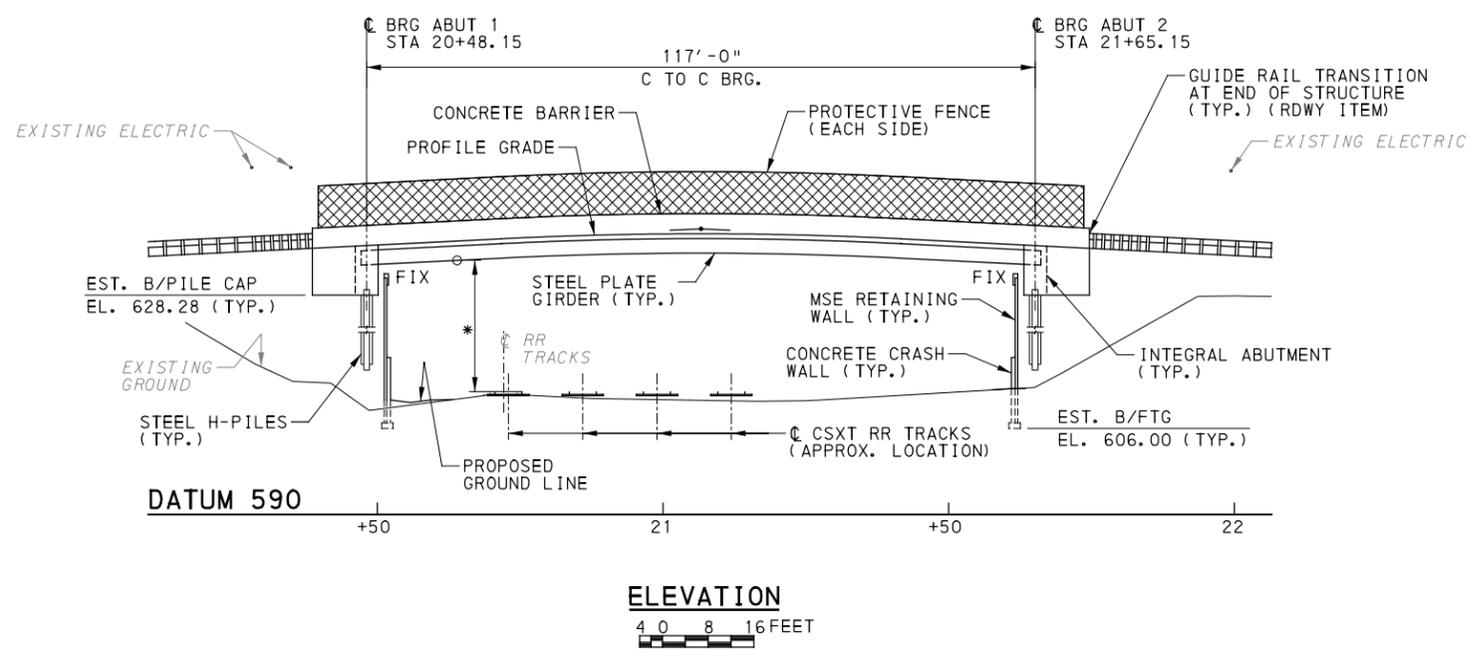
NOTES:

DESIGN SPECIFICATIONS:
 -AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 2014, AND AS SUPPLEMENTED BY LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES AND DESIGN MANUAL, PART 4 (DM-4), APRIL 2015.
 -DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.

DESIGN LIVE LOADS:
 -H15 DESIGN VEHICLE
 -UNIFORM PEDESTRIAN LOAD (PL) OF 90 PSF

DEAD LOADS:
 -INCLUDES A SURFACE AREA DENSITY OF 30 PSF FOR FUTURE WEARING SURFACE ON THE DECK SLAB.
 -INCLUDES A SURFACE AREA DENSITY OF 15 PSF FOR PERMANENT METAL DECK FORMS WHICH TAKES INTO ACCOUNT THE WEIGHT OF THE FORM, PLUS THE WEIGHT OF THE CONCRETE IN THE VALLEYS OF THE FORMS.

FUTURE RAILROAD TRACK LOCATIONS BASED ON CSXT 30% DESIGN PLANS DATED DECEMBER 16, 2019.



| Mark | Description | By | Chk'd | Rec'd | Date |
|-----------|-------------|----|-------|-------|------|
| REVISIONS | | | | | |

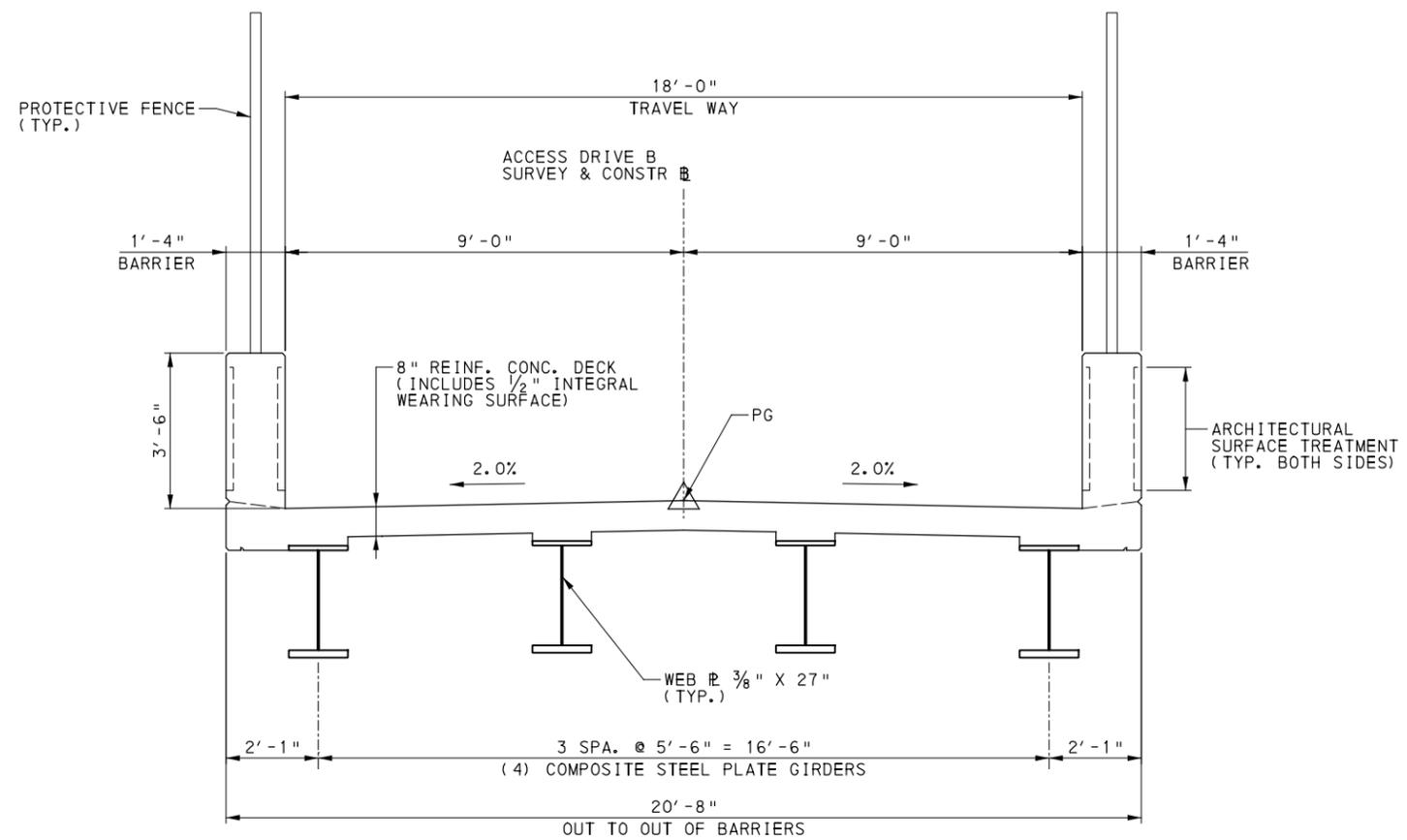
MPMS PROJ: 108952

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

ERIE COUNTY
ACCESS DRIVE B
 STA. 21+06.65
SOLDIERS AND SAILORS HOME ACCESS BRIDGE
 OVER CSX RAILROAD
 TYPE, SIZE & LOCATION
GENERAL PLAN & ELEVATION

RECOMMENDED _____

SHEET 1 OF 2



TYPICAL SECTION
1/2 0 1 2 FEET

| SUPPLEMENTAL DRAWINGS | | |
|---|---------|-----------|
| DESCRIPTION | DWG NO | APP DATE |
| CLASSIFICATION OF EARTHWORK FOR STRUCTURES | RC-11M | 6/1/2010 |
| BACKFILL AT STRUCTURES | RC-12M | 2/8/2019 |
| GUIDE RAIL TRANSITION AT END OF STRUCTURE | RC-50M | 2/8/2019 |
| PROTECTIVE FENCE | BC-701M | 1/31/2019 |
| PERMANENT METAL DECK FORMS | BC-732M | 1/31/2019 |
| ANCHOR SYSTEMS | BC-734M | 1/31/2019 |
| WALL CONSTR & EXP JOINT DETAILS | BC-735M | 9/30/2016 |
| REINFORCEMENT BAR FABRICATION DETAILS | BC-736M | 1/31/2019 |
| BRIDGE BARRIER TO GUIDE RAIL TRANSITION | BC-739M | 1/31/2019 |
| CONCRETE DECK SLAB DETAILS | BC-752M | 9/30/2016 |
| STEEL GIRDER DETAILS | BC-753M | 1/31/2019 |
| STEEL DIAPHRAGMS FOR STEEL BEAM/GIRDER STRUCTURES (STRAIGHT GIRDERS ONLY) | BC-754M | 1/31/2019 |
| STEEL PILE TIP REINFORCEMENTS & SPLICES | BC-757M | 9/30/2016 |
| TYPICAL WATERPROOFING AND EXPANSION DETAILS | BC-788M | 1/31/2019 |
| MECHANICALLY STABILIZED EARTH RETAINING WALLS | BC-799M | 1/31/2019 |

| BRIDGE LOAD RATINGS TABLE (WITH FUTURE WEARING SURFACE) | | | |
|--|---------------------|------------------------|--------------------|
| DESIGN METHOD: LOAD AND RESISTANCE FACTOR DESIGN (LRFD) | | | |
| CRITICAL MEMBER: EXTERIOR GIRDER | | | |
| | | 27" STEEL PLATE GIRDER | |
| | | H-15 (WITH FWS) | H-15 (WITHOUT FWS) |
| INVENTORY RATING (IR) | DISTRIBUTION FACTOR | 0.562 | 0.562 |
| | LOCATION (DISTANCE) | 0.50L | 0.50L |
| | LIMIT STATE | STR-I | STR-I |
| | RATING FACTOR | 1.775 M | 2.196 M |
| OPERATING RATING (OR) | DISTRIBUTION FACTOR | 0.562 | 0.562 |
| | LOCATION (DISTANCE) | 0.50L | 0.50L |
| | LIMIT STATE | STR-II | STR-II |
| | RATING FACTOR | 2.300 M | 2.847 M |
| MAXIMUM FACTORED FLEXURAL RESISTANCE (KIP-FT): 4,530.73 LOCATION: 0.50L | | | |
| MAXIMUM FACTORED SHEAR RESISTANCE (KIPS): 245.97 LOCATION: 0.00L | | | |

- NOTES :
- "M" DENOTES MOMENT (FLEXURE) GOVERNS, "S" DENOTES SHEAR GOVERNS THE RATING FACTOR
 - THE GIVEN DISTRIBUTION FACTOR IS THE VEHICULAR LOAD DISTRIBUTION FACTOR USED TO PRODUCE THE GIVEN RATING
 - SPAN LENGTH, L, EQUALS 117.0 FEET
 - RATINGS ARE OBTAINED FROM PENNDOT'S STLRFD PROGRAM, VERSION 2.5.0.0

NOTES:

- ARCHITECTURAL SURFACE TREATMENT TO BE APPLIED TO BOTH FACES OF THE BARRIERS.

| Mark | Description | By | Chk'd. | Rec'd | Date |
|-----------|-------------|----|--------|-------|------|
| REVISIONS | | | | | |

MPMS PROJ:108952

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ERIE COUNTY
ACCESS DRIVE B
STA. 21+06.65
SOLDIERS AND SAILORS HOME ACCESS BRIDGE
OVER CSX RAILROAD
TYPE, SIZE & LOCATION
TYPICAL SECTION & RATINGS

RECOMMENDED _____

SHEET 2 OF 2

CE Evaluation Part B, Section A-1

Environmental Evaluation Subject Areas (Aquatic Resources)

Federal Project Number: T012539 Z240

1. AQUATIC RESOURCES

PRESENCE

IMPACTS²

STREAMS, RIVERS & WATERCOURSES¹

Not Present Present

Remarks

No streams, rivers, & watercourses are present within the Bayfront Parkway Central Corridor Improvements project area.

PRESENCE

IMPACTS²

FEDERAL WILD & SCENIC RIVERS & STREAMS¹

Not Present Present

No Yes

Remarks

No federal wild & scenic rivers, and or streams are present within the Bayfront Parkway Central Corridor Improvements project area.

PRESENCE

IMPACTS²

STATE SCENIC RIVERS & STREAMS¹

Not Present Present

No Yes

Remarks

No state scenic rivers, or streams are present within the Bayfront Parkway Central Corridor Improvements project area.

PRESENCE

IMPACTS²

NAVIGABLE WATERWAYS¹

Not Present Present

Remarks

No navigable waterways are present within the Bayfront Parkway Central Corridor Improvements project area.
Lake Erie, a navigable waterway, is located near the project area but will not be affected as a result of the project.

PRESENCE

IMPACTS²

OTHER SURFACE WATERS¹

Not Present Present

Remarks

No other surface waters are present within the Bayfront Parkway Central Corridor Improvements project area. Lake Erie is located near the project area but will not be affected as a result of the project.

PRESENCE

IMPACTS²

GROUNDWATER RESOURCES¹

Not Present Present

Remarks

Minor effects on groundwater might occur, however, there are no significant groundwater aquifers or water supplies used for human consumption in the project area. A Post Construction Stormwater Management (PCSM) Plan will be implemented as part of the project. This plan outlines the types of stormwater BMPs that are proposed for the project that will be used to preserve the integrity of water quality and maintain and protect the physical, biological and chemical qualities of the aquatic resources. The PCSM plan is also designed to minimize impervious areas and maximize the protection of existing drainage features and existing vegetation. Care will be taken to minimize the amount of land clearing and grading as well as minimize soil compaction.

PRESENCE

IMPACTS²

WETLANDS¹

Not Present Present

Open Water

Not Present Present

No Yes

Vegetated

Emergent

Not Present Present

No Yes

Scrub Shrub

Not Present Present

No Yes

Forested

Not Present Present

No Yes

Exceptional Value

Not Present Present

No Yes

Documentation³

- Data Forms
- Wetland Identification and Delineation Report
- Conceptual Mitigation Plan
- 404 (b)(1) Alternative Analysis
- Jurisdictional Determination
- Functional Assessment Analysis

Methodology

Methodology – Jurisdictional wetlands within the study area are identified using United States Army Corps of Engineers 1987 Manual and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region. Jurisdictional wetlands were evaluated using the Pennsylvania Wetland Condition Level 2 Rapid Assessment Protocol.

Number of Wetlands permanently impacted: 2

Acreage of Wetlands permanently impacted: 0.015

Describe Any Permanent Impacts

Permanent Wetland fill in order to construct Holland street intersection.

Describe Any Temporary Impacts

N/A

Is mitigation incorporated? No Yes

Project Specific Replacement/Construction: *acres*

Banking: *acres*

Bank to be Debited:

Restoration: *acres*

Preservation: *acres*

In-Lieu Fee: *whole dollars*

Other:

Mitigation Remarks

Compensatory mitigation is not required for de minimus impacts. High-visibility protective fencing will be placed around wetland not to be disturbed to protect against accidental encroachment during construction.

Executive Order 11990 Compliance

Compliance requires the determination that there is no practicable alternative to the proposed construction in wetlands and the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

Options/design modifications were investigated to avoid impacts to wetlands: Yes No N/A

There are no practicable alternatives to construction within the wetlands: Yes No N/A

Alternative chosen (proposed project) includes all practicable measures to minimize harm to wetlands: Yes No N/A

If the answer to any of the above three questions is No, provide an explanation in the Remarks Section below.

Remarks

Wetland impacts are de minimus and do not require mitigation.

PRESENCE

IMPACTS²

COASTAL ZONE¹

Not Present Present

No Yes

Documentation³

DEP Coastal Zone Coordination Letter

Describe Any Permanent and Temporary Impacts

Is mitigation incorporated? No Yes

Describe Mitigation

1. Prior to construction, the applicant will acquire and maintain compliance with any general permit, individual permit, waiver, or other authorization that may be required under Title 25, Chapter 105 of the Pennsylvania Code (Chapter 105) for any instream work or wetland encroachments.

2. Prior to construction, the applicant will acquire and maintain compliance with Pennsylvania historic preservation programs and activities, including any clearances, concurrences, or other approval mechanism(s) required or requested by the Pennsylvania Historical Museum Commission, State Historic Preservation Office under the Pennsylvania Historical (Code Pa. Code Title 37) and the National Historic Preservation Act of 1966 (16 U.S.C. 470).

Remarks

The project is expected to have positive or no adverse effects to the Lake Erie Coastal Zone:

- Trail safety and alignment improvements
- Improved multimodal connections between the city and the bayfront
- Improved traffic and pedestrian safety at intersections and Soldiers and Sailors bridge crossing
- No adverse effect to historic resources
- Water quality improvements with improved stormwater design.

The Pennsylvania Coastal Resource Management (CRM) Program has reviewed the information for the Bayfront Parkway Central Corridor Improvement Project (Project) and provided consistency on April 16, 2020.

PRESENCE

IMPACTS²

FLOODPLAINS¹

Not Present Present

No Yes

Remarks

FEMA defines the 100-year floodplain as the Lake Erie shoreline, and outside of the project area limits.

SOIL EROSION & SEDIMENTATION¹

Are there activities that could cause erosion or sedimentation and would require E&S Controls? Yes No N/A

Documentation³

- Coordination w/County Conservation District
- E&S Control Plan
- NPDES Stormwater Construction Permit

Is mitigation incorporated? No Yes

Describe Mitigation

An Erosion and Sediment Control Plan will be implemented as part of the project. Erosion and sediment pollution control Best Management Practices (BMP) are designed in accordance with the Pennsylvania Department of Environmental Protection (PADEP) Erosion and Sediment Pollution Control Program Manual.

Remarks

A coordination meeting with PADEP and Erie County Conservation District to discuss the Bayfront Parkway Improvement Project was held on January 14, 2020. The Erie County Conservation District explained that due to the hazardous materials anticipated to be encountered at the former GAF property, an Individual NPDES would be required.

-
- 1 If the resource is not present, do not complete the remainder of this subject area.
 - 2 If the resource is present but no impacts are anticipated, describe in Remarks why there will be no impact. If there will be no impact because avoidance/mitigation measures will be included, describe those in the mitigation text box provided.
 - 3 Unless required as an attachment, documentation for subject areas should be maintained in the project's Technical Support Data and does not need to be submitted with the CEE.
-

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

1. [2020-04-16 CZMA Federal Consistency.pdf](#) (130KB / 0.1MB)



pennsylvania

DEPARTMENT OF ENVIRONMENTAL
PROTECTION

COMPACTS AND COMMISSIONS OFFICE

April 16, 2020

Autumn Kelley
District Environmental Specialist
PennDOT District 1-0
255 Elm Street
P.O. Box 398
Oil City, PA 16301

Re: CZMA Federal Consistency: Bayfront Parkway Central Corridor Improvement Project

Dear Ms. Kelley:

The Pennsylvania Coastal Resource Management (CRM) Program has reviewed the information for the Bayfront Parkway Central Corridor Improvement Project (Project) received in this office on 3/26/2020. The proposed activity includes reconfiguring three major intersections, completing a multiuse trail network, and constructing a pedestrian bridge within the City of Erie, Erie County.

The Project is subject to CRM's federal consistency review under Section 307 of the Coastal Zone Management Act (16 U.S.C. § 1456) and the National Oceanic and Atmospheric Administration regulations at 15 C.F.R. Part 930 Subpart F -- Consistency for Federal License and Permit Activities. CRM reviewed the Project for consistency with its enforceable policies in the *Commonwealth of Pennsylvania Coastal Resources Program (CRMP) Guidance Document* (394-0300-001).

CRM hereby concurs that the proposed activity is consistent with the program's enforceable policies, subject to the following conditions:

1. Prior to construction, the applicant will acquire and maintain compliance with any general permit, individual permit, waiver, or other authorization that may be required under Title 25, Chapter 105 of the Pennsylvania Code (Chapter 105) for any instream work or wetland encroachments.
2. Prior to construction, the applicant will acquire and maintain compliance with Pennsylvania historic preservation programs and activities, including any clearances, concurrences, or other approval mechanism(s) required or requested by the Pennsylvania Historical Museum Commission, State Historic Preservation Office under the Pennsylvania Historical (Code Pa. Code Title 37) and the National Historic Preservation Act of 1966 (16 U.S.C. 470).

This conditional concurrence is subject to the requirements described in 15 C.F.R. § 930.4 (relating to conditional concurrences). If the conditions described above are not acceptable to the applicant, then this letter serves as CRM's objection to the proposed activity. Pursuant to 15 C.F.R. part 930, Subpart H, and within 30 days from receipt of this letter, you may request that the Secretary of Commerce override this objection. In order to grant an override request, the Secretary must find that the activity is either consistent with the objectives and purpose of the Coastal Zone Management Act or is necessary in the interest of national security. A copy of the request and supporting information must be sent to CRM and the federal permitting, licensing, or funding agency. The Secretary may collect fees from you for administering and processing your request.

Under 15 C.F.R. § 930.4(a)(2), the project applicant must notify CRM immediately if the above conditions are unacceptable. Any modifications to the project scope or procedures from those submitted for this consistency review may require the submission of a new or supplemental federal consistency determination pursuant to 15 C.F.R. § 930.46 and/or § 930.51(e).

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH THE UNITED STATES SECRETARY OF COMMERCE WITHIN 30 DAYS OF RECEIPT OF THIS CONDITIONAL CONCURRENCE LETTER IN ACCORDANCE WITH THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION REGULATIONS AT 15 CFR 930.4(a) AND 15 CFR 930, SUBPART H.

Secretarial appeals should be mailed to:

Oceans and Coasts Section
Office of General Counsel
National Oceanic and Atmospheric Administration
1305 East-West Highway, Suite 6111
Silver Spring, Maryland 20910
301-713-2967

Please note that this conditional concurrence pertains only to the federal consistency review requirements under the Federal Coastal Zone Management Act of 1972, as amended, and does not constitute a waiver from further Department of Environmental Protection reviews or permits.

Sincerely,



Matthew D. Walderon
Federal Consistency Coordinator
Coastal Resources Management Program

Cc: Shelby Clark

CE Evaluation Part B, Section A-2 Environmental Evaluation Subject Areas (Land)

2. LAND

| | PRESENCE | IMPACTS ² |
|---|--|---|
| AGRICULTURAL RESOURCES¹ | <input type="radio"/> Not Present <input checked="" type="radio"/> Present | |
| Productive Agricultural Land | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Agricultural Security Areas | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Prime Agricultural Land | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Agricultural Conservation Easements | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Farmland Enrolled in Preferential Tax Assessments | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Agricultural Zoning | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Soil Capability Classes I, II, III, IV | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Prime or Unique Soil | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Statewide or Locally Important Soils | <input type="radio"/> Not Present <input checked="" type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |

Documentation³

- Farmland Assessment Report
- ALCAB Approval
- Agricultural Land Preservation Policy Conformance Statement
- Form AD-1006 - Farmland Conversion Impact Rating or Form NRCS-CPA-106 for Corridor Type Projects
- Coordination with County Tax Assessor

Describe Any Permanent and Temporary Impacts

No permanent or temporary impacts to agricultural resources will result from the Bayfront Parkway Central Corridor Improvements Project.

Is mitigation incorporated? No Yes

Remarks

No agricultural activities or prime farmland exist in the project vicinity. Colonie (CsB) loamy fine sand, 3 to 8 percent slopes is classified as Farmland of local importance, and is located in the eastern portion of the study area. The past and present land use of the Colonie loamy fine sand soil within the project area is active railroad corridor. The proposed land use for the Colonie loamy fine sand soil within the project area will remain consistent with its current land use.

| | PRESENCE | IMPACTS ² |
|-------------------------------|--|----------------------|
| VEGETATION¹ | <input type="radio"/> Not Present <input checked="" type="radio"/> Present | |

- Landscaped Not Present Present No Yes
- Agricultural Not Present Present No Yes
- Forest Land Not Present Present No Yes
- Rangeland Not Present Present No Yes
- Other (describe in remarks) Not Present Present No Yes

Describe Any Permanent and Temporary Impacts

Areas of roadside vegetation will be impacted permanently by intersection construction and temporarily by the access road.

Invasive Non-Native Plants are Present

Mitigation:

Are measures being taken to minimize movement of invasive plant parts (roots, tubers, seeds)? Yes No

Will native plants be used in project landscaping or mitigation? Yes No **If Yes, explain in Describe Mitigation.**

Other? Yes No **If Yes, explain in Describe Mitigation.**

Describe Mitigation

In accordance with PennDOT Publication 756 - Invasive Species Best Management Practices, the project will develop best management practices for implementation during design and construction to minimize the spread of invasive species such as Japanese knotweed (*Fallopia japonica*) and tree-of-heaven (*Ailanthus altissima*). Anticipated methods will include minimizing soil disturbances, developing species-specific control plans (as necessary) to include in the erosion and sedimentation plans, stabilizing disturbed areas quickly, utilizing appropriate seed mixes, keeping equipment clean to avoid spreading invasive species seeds, and spraying as needed to control invasive species during construction.

PennDOT will coordinate to include the appropriate seed mix to promote the pollinator species (bees, butterflies, etc.).

Remarks

Other areas of impact, areas of roadside vegetation, will be reseeded and mulched per the E & S Plan.

GEOLOGIC RESOURCES¹ **PRESENCE** **IMPACTS²**
 Not Present Present

Remarks

No geologic resources present within the Bayfront Parkway Central Corridor Improvements project area.

PARKS & RECREATION FACILITIES¹ **PRESENCE** **IMPACTS²**

- National Not Present Present No Yes
- State Not Present Present No Yes
- Local Not Present Present No Yes
- Other (describe in remarks) Not Present Present No Yes

If any Impacts are "Yes", a Section 4(f) Evaluation may be needed.

Were any of the impacted properties acquired through the use of : (If applicable, check one or more of the boxes below)

- Land and Water Conservation Fund (Section 6(f))
- Project 70 Fund
- Project 500 Fund
- Recreational Improvement and Rehabilitation Act (RIRA)
- Growing Greener Bond Fund (GG2)
- Keystone Recreation, Park and Conservation Fund (Key 93)
- Environmental Stewardship Fund Act (ESF)

Documentation³

- Coordination with DCNR as representative for NPS (LWCF)
- Coordination with DCNR and PA General Assembly (Project 70)
- Coordination with DCNR (Project 500, GG2, Key93, RIRA or ESF)

Describe Any Permanent and Temporary Impacts

The Great Lakes Sea Way Trail will be affected at three locations

1. Sassafras Street Extension area will relocate 1181 linear feet of the Great Lakes Sea Way Trail to safer roadway crossing location on at Sassafras Street Extension. This will add 113 linear feet to the Great Lakes Sea Way Trail.
- 2 a new portion of trail; the trail is currently shared-use on Front Street, the new trail alignment will provide a safer alternative away from the roadway and traffic. Construction of the new trail will add 1265 linear feet to the Great Lakes Sea Way Trail.
3. Holland Street; relocation of 428 linear feet of the Great Lakes Sea Way Trail to create a safer roadway crossing location at Holland Street. This will add 22 linear feet to the Great Lakes Sea Way Trail.

The Bayfront Promenade Trail will be affected at 1 location:

1. The proposed project will involve relocating 340 linear feet of the Bayfront Promenade Trail to create a safer roadway crossing location at State Street. This will add 2 linear feet to the Bayfront Promenade Trail.

Is mitigation incorporated? No Yes

Describe Mitigation

Trail access and use will be maintained through staged construction, speed limit signs, stop signs, and flagging, as necessary for trail users. Signage will be incorporated to ensure that users are notified of upcoming construction. Fencing will be placed to protect trail users from adjacent construction activities. If necessary,, temporary detours will be utilized. The contractor will be required to install protective shielding near the trails during construction in order to prevent materials and other debris from falling within the limits of the trail.

Construction related mitigation: Fencing will be placed to protect the trail and users from adjacent construction activities. Clearly delineate any construction areas adjacent to the trails to ensure that only planned construction activities occur. Coordination with the Western Pennsylvania Port Authority will be continuous throughout the project duration. The duration of temporary use on the Great Lakes Sea Way Trail and Bayfront Promenade Trails will last less than the construction period for the Bayfront Parkway Central Corridor Improvement Project. An erosion and sediment pollution control plan will be implemented to control and maintain earth work activities. The Great Lakes Sea Way Trail and Bayfront Promenade Trail will be fully restored after construction.

Remarks

The Great Lakes Sea Way Trail & Bayfront Promenade Trail Section 4(f)Temporary Use Form is provided in section A-5.

FOREST & GAMELANDS¹ **PRESENCE** **IMPACTS²**

Not Present Present

Remarks

No forest or gamelands are present within the Bayfront Parkway Central Corridor Improvements project area.

PRESENCE

IMPACTS²

WILDERNESS, NATURAL & WILD AREAS¹ Not Present Present

Remarks

No wilderness, natural, and or wild areas are present within the Bayfront Parkway Central Corridor Improvements project area.

PRESENCE

IMPACTS²

NATIONAL NATURAL LANDMARKS¹ Not Present Present

No Yes

Remarks

No national natural landmarks are present within the Bayfront Parkway Central Corridor Improvements project area.

PRESENCE

IMPACTS²

HAZARDOUS OR RESIDUAL WASTE SITES¹ Not Present Present

No Yes

Documentation³

- Phase I
- Phase II
- Phase III
- Other
- No Documentation Required

Describe Any Permanent and Temporary Impacts

Two properties having potential for contaminated materials, and under the purview of Environmental Covenants were identified in the project area:

GAF Buildings Materials— The former GAF Building Materials Manufacturing Corporation (GAF) is currently a brown field site that contains hazardous materials, waste storage, staining, discoloration, etching, stressed vegetation, storage tanks, sumps or clarifiers, and transformers. The GAF Property was remediated between June 2012 and June 2014. The GAF site is under the protection of an Environmental Covenant between the Port Authority of Erie and PADEP.

The proposed SassafRAS Street intersection work will encroach on areas that used to be the GAF main office, storage building, and storage tanks.

CSX Railroad

The existing railroad track located between SassafRAS Street Extension and Holland Street, and the existing at-grade crossing at Holland Street will also be eliminated. CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. In the vicinity of the Soldiers' and Sailors' Home, the railroad track will be expanded and an access bridge constructed over the CSX Railroad, along with the existing at-grade crossing to be eliminated.

Is remediation/mitigation incorporated? No Yes Unknown at this time

Describe Remediation/Mitigation

An Environmental Covenant exists for the former GAF site and CSX Railroad (Sassafras Street area) that requires PADEP and Holder notification of any planned changes in land use or ownership for any portion of the former sites. PennDOT will coordinate any required Environmental Covenant changes as part of right-of-way activities.

After the design plans for the project are completed, a Waste Management Plan (WMP), and a Site Specific Health and Safety Plan (SSHASP) should be prepared to address soil, sediment, groundwater management, environmental health, and worker safety during all project construction activities. The WMP should address all known or suspected contaminants that may be associated with the identified sites of potential concern.

Within CSX Railroad, and former GAF property any earthwork activities will be required to be conducted in accordance with their Environmental Covenant.

PennDOT has determined a Phase II is not necessary and mitigation will be handled with including specifications in the construction contract to inform contractor how to test, handle and dispose of any contaminated material encountered.

Remarks

-
- 1 If the resource is not present, do not complete the remainder of this subject area.**
 - 2 If the resource is present but no impacts are anticipated, describe in Remarks why there will be no impact. If there will be no impact because avoidance/mitigation measures will be included, describe those in the mitigation text box provided.**
 - 3 Unless required as an attachment, documentation for subject areas should be maintained in the project's Technical Support Data and does not need to be submitted with the CEE.**
-

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

CE Evaluation Part B, Section A-3

Environmental Evaluation Subject Areas (Wildlife)

3. WILDLIFE

| | PRESENCE | IMPACTS ² |
|---------------------------------|--|----------------------|
| WILDLIFE & HABITAT ¹ | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | |
| Remarks | | |

| | PRESENCE | IMPACTS ² |
|--|---|---|
| THREATENED & ENDANGERED PLANTS & ANIMALS ¹ | <input type="radio"/> Not Present <input checked="" type="radio"/> Present <input type="radio"/> No Coordination Needed | <input checked="" type="checkbox"/> No Potential Impacts <input type="checkbox"/> Potential Impacts with Avoidance Measures <input type="checkbox"/> Potential Impacts with Conservation Measures <input type="checkbox"/> Potential Impacts |

Reviews, concurrences and approvals for Threatened and Endangered Species searches/coordination are time sensitive. If the coordination is greater than two years old, a new coordination effort will be required with the commenting/review agency(s).

Documentation

PNDI ER Receipt

Agency Documentation

PFBC Correspondence

PGC Correspondence

DCNR Correspondence

USFWS Correspondence

Describe Avoidance Measures to be Implemented

Describe Planned Conservation Measures to be Implemented

Describe Other Mitigation

Remarks

PNDI project search was conducted on November 19, 2019 and resulted in potential impacts. Involved agencies were contacted for further review and resulted in "no adverse impacts" response from all agencies. (see attachments)

- 1 If the resource is not present, do not complete the remainder of this subject area.
 - 2 If the resource is present but no impacts are anticipated, describe in Remarks why there will be no impact. If there will be no impact because avoidance/mitigation measures will be included, describe those in the mitigation text box provided.
 - 3 Unless required as an attachment, documentation for subject areas should be maintained in the project's Technical Support Data and does not need to be submitted with the CEE.
-

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

1. [2019-11-19 FINAL PNDI.pdf](#) (1136KB / 1.1MB)
2. [2019-11-21 PFBC Clearance Letter.pdf](#) (207KB / 0.2MB)
3. [2019-11-22 DCNR Clearance Letter.pdf](#) (150KB / 0.1MB)
4. [2019-12-2 PGC Clearance Letter.pdf](#) (215KB / 0.2MB)

1. PROJECT INFORMATION

Project Name: **PennDOT and Bayfront Parkway Improvement Project**

Date of Review: **11/19/2019 03:13:48 PM**

Project Category: **Transportation, Roads, Other**

Project Area: **68.12 acres**

County(s): **Erie**

Township/Municipality(s): **ERIE**

ZIP Code: **16503; 16507**

Quadrangle Name(s): **ERIE NORTH**

Watersheds HUC 8: **Chautauqua-Conneaut**

Watersheds HUC 12: **Presque Isle Bay-Frontal Lake Erie**

Decimal Degrees: **42.135922, -80.084489**

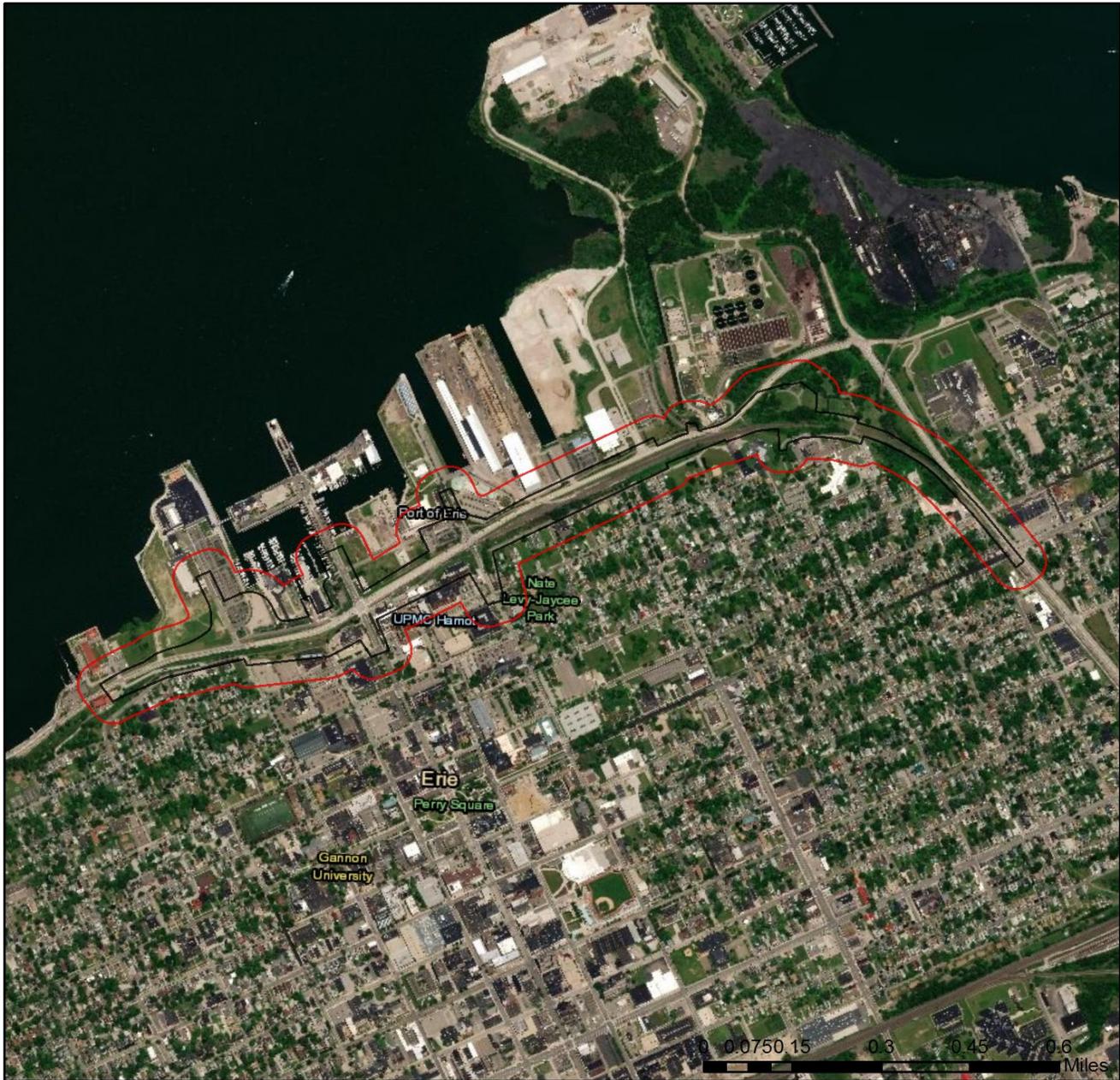
Degrees Minutes Seconds: **42° 8' 9.3193" N, 80° 5' 4.1607" W**

2. SEARCH RESULTS

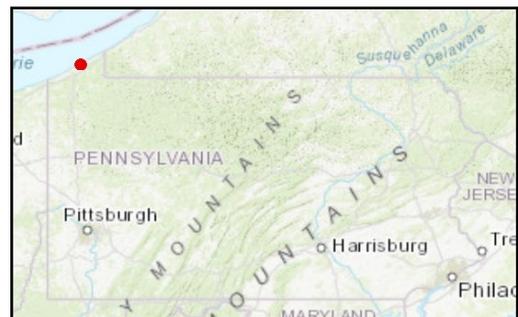
| Agency | Results | Response |
|---|-------------------------|--|
| PA Game Commission | Potential Impact | FURTHER REVIEW IS REQUIRED, See Agency Response |
| PA Department of Conservation and Natural Resources | Potential Impact | FURTHER REVIEW IS REQUIRED, See Agency Response |
| PA Fish and Boat Commission | Potential Impact | FURTHER REVIEW IS REQUIRED, See Agency Response |
| U.S. Fish and Wildlife Service | No Known Impact | No Further Review Required |

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

PennDOT and Bayfront Parkway Improvement Project



- Project Boundary
- Buffered Project Boundary



Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

RESPONSE TO QUESTION(S) ASKED

Q1: Accurately describe what is known about wetland presence in the project area or on the land parcel by selecting ONE of the following. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.

Your answer is: Someone qualified to identify and delineate wetlands has investigated the site, and determined that wetlands ARE located in or within 300 feet of the project area. (A written report from a wetland specialist, and detailed project maps should document this.)

Q2: The proposed project is in the range of the Indiana bat. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this. Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).

Your answer is: The project will affect 1 to 39 acres of forests, woodlots and trees.

Q3: Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?

Your answer is: No

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PGC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

| Scientific Name | Common Name | Current Status |
|-----------------------|------------------|--------------------------|
| Cistothorus palustris | Marsh Wren | Special Concern Species* |
| Falco peregrinus | Peregrine Falcon | Threatened |
| Fulica americana | American Coot | Special Concern Species* |

PA Department of Conservation and Natural Resources

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

DCNR Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below. After desktop review, if a botanical survey is required by DCNR, we recommend the DCNR Botanical Survey Protocols, available here:

<https://conservationexplorer.dcnr.pa.gov/content/survey-protocols>)

| Scientific Name | Common Name | Current Status | Proposed Status | Survey Window |
|-----------------|--------------|--------------------------|-----------------|--------------------------|
| Bidens laevis | Beggar-ticks | Special Concern Species* | Endangered | Flowers August - October |

PA Fish and Boat Commission

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PFBC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

| Scientific Name | Common Name | Current Status |
|----------------------------|------------------------|--------------------------|
| Acipenser fulvescens | Lake Sturgeon | Endangered |
| Amblema plicata | Three-ridge | Special Concern Species* |
| Anodontoides ferussacianus | Cylindrical Papershell | Special Concern Species* |
| Coregonus artedi | Cisco | Endangered |
| Etheostoma exile | Iowa Darter | Endangered |
| Etheostoma pellucida | Eastern Sand Darter | Endangered |
| Fusconaia flava | Wabash Pigtoe | Special Concern Species* |
| Ictiobus cyprinellus | Bigmouth Buffalo | Endangered |
| Lepisosteus oculatus | Spotted Gar | Endangered |
| Lepomis gulosus | Warmouth | Endangered |
| Leptodea fragilis | Fragile Papershell | Special Concern Species* |
| Ligumia nasuta | Eastern Pondmussel | Special Concern Species* |
| Noturus gyrinus | Tadpole Madtom | Endangered |
| Quadrula quadrula | Mapleleaf | Special Concern Species* |
| Toxolasma parvum | Lilliput | Special Concern Species* |
| Truncilla donaciformis | Fawnsfoot | Special Concern Species* |
| Truncilla truncata | Deertoe | Special Concern Species* |

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

** Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email* the following information to the agency(s). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies. Alternatively, applicants may email or mail their project materials (see AGENCY CONTACT INFORMATION).

***Note:** U.S.Fish and Wildlife Service requires applicants to mail project materials to the USFWS PA field office (see AGENCY CONTACT INFORMATION). USFWS will not accept project materials submitted electronically (by upload or email).

Check-list of Minimum Materials to be submitted:

___ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

___ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

In addition to the materials listed above, USFWS REQUIRES the following

___ **SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.

___ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

___ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
NO Faxes Please

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

PA Game Commission

Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: David Galloway
Company/Business Name: ms consultants, inc.
Address: Airport Office Park 4, Second Floor, 333 Rouser Road
City, State, Zip: Coraopolis, PA 15108-2773
Phone: (412) 264-8701 Fax: (412) 264-2076
Email: dgalloway@msconsultants.com

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.


applicant/project proponent signature

11-19-2019

date



Pennsylvania Fish & Boat Commission

Division of Environmental Services
Watershed Analysis Section
595 E Rolling Ridge Dr.
Bellefonte, PA 16823

November 21, 2019

IN REPLY REFER TO
SIR# 52224

MS CONSULTANTS
David Galloway

333 Rouser Road
Coraopolis, Pennsylvania 15108

**RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species
PNDI Search No. 650149
Bayfront Parkway Improvement Project
ERIE County: Erie City**

Dear David Galloway:

This responds to your inquiry about a Pennsylvania Natural Diversity Inventory (PNDI) Internet Database search “potential conflict” or a threatened and endangered species impact review. These projects are screened for potential conflicts with rare, candidate, threatened or endangered species under Pennsylvania Fish & Boat Commission jurisdiction (fish, reptiles, amphibians, aquatic invertebrates only) using the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files. These species of special concern are listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, and the Pennsylvania Fish & Boat Code (Chapter 75), or the Wildlife Code.

An element occurrence of a rare, candidate, threatened, or endangered species under our jurisdiction is known from the vicinity of the proposed project. However, given the nature of the proposed project, the immediate location, or the current status of the nearby element occurrence(s), no adverse impacts are expected to the species of special concern.

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

Our Mission:

www.fish.state.pa.us

To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.

If you have any questions regarding this review, please contact Dakota Raab at 814-359-5117 and refer to the SIR # 52224. Thank you for your cooperation and attention to this important matter of species conservation and habitat protection.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dakota Raab".

Dakota Raab, Fisheries Biologist
Watershed Analysis Section

DR/dn

November 22, 2019

PNDI Number: 650149
Version: Final_1; 11/19/19

David Galloway
MS Consultants
333 Rouser Rd
Coraopolis, PA 15108
Email: dgalloway@msconsultants.com (hard copy will not follow)

Re: PennDOT and Bayfront Parkway Improvement Project
City of Erie, Erie County, PA

Dear David Galloway,

Thank you for the submission of the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt Number **650149**. PA Department of Conservation and Natural Resources screened this project for potential impacts to species and resources under DCNR's responsibility, which includes plants, terrestrial invertebrates, natural communities, and geologic features only.

No Impact Anticipated

PNDI records indicate species or resources under DCNR's jurisdiction are located in the vicinity of this project. The October 9, 2019 site visit identified several wetlands within the project study area. However, these features, were located along roadsides and railroad tracks and were dominated by the invasive *Phragmites australis*. Based on the findings of the wetland delineation survey, the developed nature of the project corridor, street view imagery, the project scope of work, and our detailed resource information, DCNR has determined that no impact is likely. No further coordination with our agency is needed for this project.

This response represents the most up-to-date review of the PNDI data files and is valid for two (2) years only. If project plans change or more information on listed or proposed species becomes available, our determination may be reconsidered. Should the proposed work continue beyond the period covered by this letter and a permit has not been acquired, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative, description of project changes and accurate map). As a reminder, this finding applies to potential impacts under DCNR's jurisdiction only. Visit the PNHP website for directions on contacting the Commonwealth's other resource agencies for environmental review.

Should you have any questions or concerns, please contact Megan Pulver, Ecological Information Specialist, by phone (717-705-2819) or via email (c-mpulver@pa.gov).

Sincerely



Greg Podnieszinski, Section Chief
Natural Heritage Section

conserve

sustain

enjoy

P.O. Box 8552, Harrisburg, PA 17015-8552 717-787-3444 (fax) 717-772-0271



December 2, 2019

Mr. David Galloway
MS Consultants
333 Rouser Road
Coraopolis, PA 15108

Project Search ID: PNNDI-650149

PNNDI Receipt: *project_receipt_penndot_bayfront_parkway__650149_FINAL_1.pdf*

Re: PennDOT and Bayfront Parkway Improvement Project

City of Erie, Erie County, PA

Dear Mr. Galloway,

Thank you for submitting the Pennsylvania Natural Diversity Inventory (PNNDI) Environmental Review Receipt *project_receipt_penndot_bayfront_parkway__650149_FINAL_1.pdf* for review. The Pennsylvania Game Commission (PGC) screened this project for potential impacts to species and resources of concern under PGC responsibility, which includes birds and mammals only.

No Impact Anticipated

PNNDI records indicate species or resources of concern are located in the vicinity of the project. However, based on the information you submitted concerning the nature of the project, the immediate location, and our detailed resource information, the PGC has determined that no impact is likely. Therefore, no further coordination with the PGC will be necessary for this project at this time.

This response represents the most up-to-date summary of the PNNDI data files and is valid for two (2) years from the date of this letter. An absence of recorded information does not necessarily imply actual conditions on site. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered.

Should the proposed work continue beyond the period covered by this letter, please resubmit the project to this agency as an "Update" (including an updated PNNDI receipt, project narrative and accurate map). If the proposed work has not changed and no additional information concerning listed species is found, the project will be cleared for PNNDI requirements under this agency for two additional years.

This finding applies to impacts to birds and mammals only. To complete your review of state and federally-listed threatened and endangered species and species of special concern, please be sure that the U.S. Fish and Wildlife Service, the PA Department of Conservation and Natural

Resources, and/or the PA Fish and Boat Commission have been contacted regarding this project as directed by the online PNDI ER Tool found at www.naturalheritage.state.pa.us.

Sincerely,



Tracey Librandi Mumma
Division of Environmental Planning & Habitat Protection
Bureau of Wildlife Habitat Management
Phone: 717-787-4250, Extension 73614
Fax: 717-787-6957
E-mail: tlibrandi@pa.gov

A PNHP Partner



TLM/tlm

CE Evaluation Part B, Section A-4

Environmental Evaluation Subject Areas (Cultural Resources)

4. CULTURAL RESOURCES

Were Cultural Resource Professionals (CRPs) needed for project scoping? Yes No

CRP Scoping Field View Date: 03/01/18

CRP Architectural Historian in Attendance: Donald Burden

CRP Archaeologist in Attendance: Scott Shaffer

Was a Project Early Notification / Scoping Results Form completed? Yes No

For projects exempted from further Section 106 review under Appendix C of the Statewide Section 106 Programmatic Agreement, determine whether eligible resources are present for application of Section 4(f).

Is the project exempted from review by the District Designee or CRP as per Appendix C of the Statewide Section 106 Programmatic Agreement? Yes No

Is the project exempted from review by the District Designee or CRP as per Stipulation III of the Emergency Relief Projects Programmatic Agreement (2005)? Yes No

| | <u>PRESENCE</u> | | | | <u>LEVEL OF EFFECTS</u> | | |
|--|-------------------------------------|---------------------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|
| | Not Present | Potentially Eligible Resource Present | Eligible Resource Present | Listed Resource Present | No Historic Properties Affected | No Adverse Effect | Adverse Effect |
| CULTURAL RESOURCES | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <u>Archaeology</u> | | | | | | | |
| Pre-Contact: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Contact Native American: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Historic: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <u>Above-Ground Historic Properties</u> | | | | | | | |
| Structure/Building: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| District: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Documentation

Conclusion of Section 106 consultation must be documented in the following ways:

For projects *having an adverse effect*, one of the following:

- Memorandum of Agreement (MOA)
- Letter of Agreement (LOA)
- Memorandum of Understanding (MOU)
- Letter of Understanding (LOU)
- Specific Programmatic Agreement (PA)
- Standard Treatment
- Deferral of Archaeological Testing

For projects *not having a known adverse effect*, one from each column:

Above-Ground Historic Properties

- Above-Ground Historic Properties Field Assessment and Finding
- Above-Ground Historic Properties Finding Letter
- Section 106 (Above-Ground Historic Properties) Effect Concurrence Letter
- TE Project Field Assessment and Finding Checklist

Archaeology

- Archaeology Field Assessment and Finding
- Archaeology Finding Letter
- Section 106 (Archaeology) Effect Concurrence Letter
- TE Project Field Assessment and Finding Checklist
- Deferred Archaeological Testing Form
- Project Specific Programmatic Agreement

Supplemental documentation should be completed as warranted:

- Historic Structures Survey / Determination of Eligibility Report
- Phase Ia Archaeological Sensitivity Report
- Geomorphological Survey Report
- Archaeological Disturbance Report
- Archaeology Identification (Phase I) Report
- Archaeology Negative Survey Form
- Archaeology Evaluation (Phase II) Report
- Combined Archaeology Identification/Evaluation Report
- Determination of Effects Report
- (Bridge) Feasibility Report
- Other **(describe in remarks)**

Include Section 106 Public Involvement in Part B, Section C, Public Involvement.

Describe Any Permanent and Temporary Impacts

Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse

Proposed Action: CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. A multi-modal bridge over the proposed CSX railroad tracks will be constructed west of the existing at-grade crossing, which will be eliminated for safety and operational concerns. The bridge will be constructed on the same site as a former bridge that previously spanned the railroad tracks, which was removed in the late 20th century. In effect, the project will restore the original circulatory system within the Soldiers and Sailors Home property, with the bridge once again facilitating vehicular and pedestrian access between the Home and the Cemetery/Anthony Wayne Blockhouse. The bridge will remain the property of the Soldiers and Sailors Home.

In order to accommodate the multi-modal bridge over the proposed CSX tracks, the existing driveway grade will be adjusted, along earth work grading of clean fill. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact the Soldiers and Sailors Home.

Construction materials will be transported through the Pennsylvania Soldiers' and Sailors' property using existing driveways accommodated with flagging operations to ensure user safety.

Are mitigation and/or standard treatments required? No Yes

Remarks

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

1. [2019-11-22 PHMC Concurrence.pdf](#) (128KB / 0.1MB)
2. [PennDOT Project Early Notification Scoping Results Form .pdf](#) (597KB / 0.6MB)
3. [Erie-108952-Above-ground Finding.pdf](#) (6710KB / 6.6MB)
4. [Erie- 108952- Deferral of Archaeology.pdf](#) (941KB / 0.9MB)

PHMC E-Notification Details -- For PHMC Use Only



Notification Details (/NotificationDetails.aspx?ProjectID=54110&PostingID=28894&NotificationID=19333&Tab=1)

MPMS 108952 • Central Bayfront Prkwy Multimodal Improvements • Erie Co. • SR 4034 Section A01

Email Content

Sent Date: 11/22/2019 12:00:00 AM

Create Date: 11/22/2019 12:17:54 PM

Subject: PennDOT Request for PHMC Response: ER2018-8122-049 - MPMS108952

Message:

PennDOT has posted updated information on the PATH website for the project listed below.

COUNTY: Erie

MUNICIPALITY: ERIE CITY (Erie)

SR: 4034

SECTION: A01

PROJECT NAME: Central Bayfront Prkwy Multimodal Improvements

MPMS: 108952

ER NUMBER: 2018-8122-049

PROJECT DESCRIPTION: Multimodal/Congestion Reduction and safety improvement project on the Bayfront Parkway (SR4034)

SECTION 106 Effect: No Effect

SECTION 106 Stage: Determination of Effects

Posting Name: SR 4034 A01 Bayfront Parkway Improvement Above-ground Finding

PHMC COMMENT: Thank you for providing the concurrence comment regarding eligibility/criterion/boundaries for the previously identified resources; we concur regarding the contributing status of the outbuilding at the Soldiers & Sailors Home. Thank you for providing the narrative regarding the bridge. The PA SHPO concurs with the no effect to above ground historic resources (as archaeology is under review).

The associated documents for this consultation are available at: <https://path.penndot.gov/PostingDetails.aspx?ProjectID=54110&PostingID=28894>

The PHMC Contact is Cheryl Nagle and can be reached at chnagle@pa.gov.

Administrative Notes:

Received Notifications





**PennDOT
Project Early Notification/
Scoping Results Form**

MPMS: 108952

Structure (Bridge) #¹:

County: Erie

SR: 4034

Section: A01

Project Name: SR 4034 A01 Bayfront Parkway Improvement

Municipality: City of Erie

Funding: Federal
Lead Agency: FHWA

Project Description (from CE scoping form or MPMS):

The project's intent is to improve traffic congestion and operations as well as to enhance safety for vehicles, pedestrians and cyclists along the Bayfront Parkway (SR 4034) between Sassafras Street and Holland Street. The overall project length is approximately one-half (0.5) miles. The project will involve intersection improvements at Sassafras Street, State Street, and Holland Avenue. Other improvements to be evaluated include connection of recreational trail networks, sidewalks, ADA accessible curb ramps and drainage facilities.

(Attach USGS map)

Cultural Resource Scoping Date: 03/01/2018

Other CR Scoping Dates:

CRP Participants: Donald Burden and Scott Shaffer

SFV Date: 02/22/2018 Project Let Date: TBD NEPA Clearance Date:

Likely 106 Process:

- Findings of No Effect or No Adverse Effect
- Finding of consulted No Adverse Effect or Adverse Effect

Check if Additional studies needed: Archaeology: Above Ground Historic Structures:

List known historic resources in APE:

1. Chestnut Street Waterworks Pump House (Key No. 110374) NRHP Eligible
2. Dobbins Lane (Key No. 087163) NRHP Eligible
3. USS Niagara (Key No. 000852) NRHP Listed
4. Philadelphia & Erie Railroad (Key No. 155661) Aggregate file, undetermined

(If additional space is required, please use the Other Comments section at the end of this form.)

¹ Structure number is not the A01 number in BMS (14 digits coding county, SR, Segment, and Offset), but a unique identifier found in the BRKEY field in BMS that does not change.

List known archaeological resources in APE:

1. 36ER250
2. 36ER259
3. 36ER282
4. _____

(If additional space is required, please use the Other Comments section at the end of this form.)

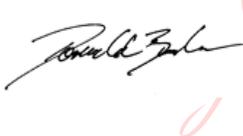
Results and Recommendations from Scoping Field View (attach, if needed): Project alternatives remain loosely defined at this early stage of the planning process. The preliminary APE includes one listed NRHP property (USS Niagara), two eligible NRHP properties (Dobbins Lane and Chestnut Street Waterworks Pump House), and one undetermined resource (Philadelphia & Erie Railroad). Depending on how future alternatives develop, it is possible that additional NRHP eligible or listed resources might fall within the boundaries of an expanded APE. Initial proposed improvements include possible roundabout construction, recreational trail, sidewalk, and ADA improvements. It remains to be determined how these activities might or might not impact historic resources.

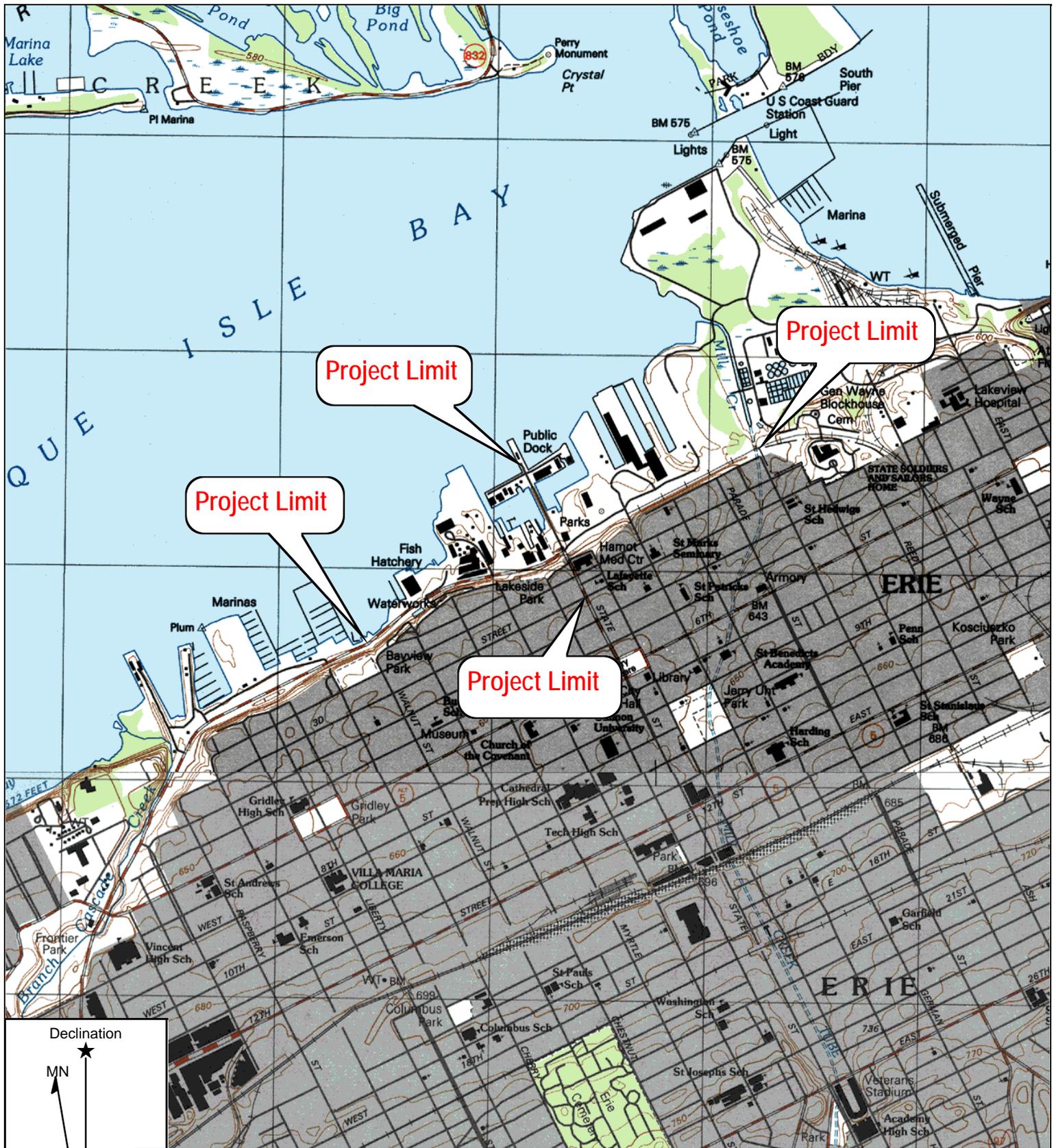
| | |
|---|-------------------------------------|
| <i>Recommended Level of CR Public Involvement:</i> | |
| NEPA only: | <input type="checkbox"/> |
| Seek consulting parties: | <input checked="" type="checkbox"/> |
| Other (add to Other comments): | <input type="checkbox"/> |

(To be completed by CRP only)

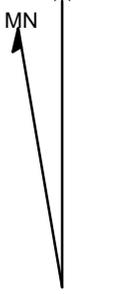
| | |
|---|--|
| <i>ER Number Requested:</i> | |
| <input checked="" type="checkbox"/> Yes | |
| <input type="checkbox"/> No | |

Other comments: Local historical societies will be notified of the proposed project and will be given an opportunity to provide input on the identification of additional historical structures in the area.


Digitally signed by Donald Burden
DN: cn=Donald Burden, o=PA
Department of Transportation,
ou=Bureau of Project Delivery,
Highway Delivery Division,
email=doburden@pa.gov, c=US
Date: 2018.03.08 10:45:33 -05'00'



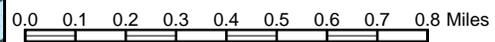
Declination



MN 9.61° W

Erie County MPMS# 108952
 SR 4034, A01
 Central Bayfront Parkway Multimodal Improvements

SCALE 1:24000



Name: ERIE NORTH
 Date: 03/08/18
 Scale: 1 inch = 2,000 ft.

Location: 042° 07' 49.4711" N, 080° 05' 26.9099" W
 Caption: <<Type caption here.>>

**PennDOT
Section 106
Effects Finding**

Combined Early Notification/Finding
 Yes No
Concurrence required or requested:
Archaeology: Yes No
Historic Structures: Yes No

MPMS: 108952

Funding Source: Federal Highway-Funded

County: Erie

Lead Agency: FHWA

Municipality: City of Erie

SHPO ER#: 2018-8122-049

SR: 4034

Section: A01

Name of Project: SR 4034 A01 Bayfront Parkway Improvement

USGS Quad: Erie North, PA

Field View Date: 09/24/2019

Project Description (describe project activities or note attachment):

The project's intent is to improve traffic congestion and operations as well as to enhance safety for vehicles, pedestrians and cyclists along the Bayfront Parkway (SR 4034) between Sassafras Street and Holland Street. The overall project length is approximately one-half (0.5) miles. The project will involve intersection improvements at Sassafras Street, State Street, and Holland Avenue. Other improvements to be evaluated include connection of recreational trail networks, sidewalks, ADA accessible curb ramps and drainage facilities.

Finding of Effects:

- Project Effects (include Attachments A and B)
- Archaeological Effects – Partial (include Attachment A)
- Above-ground Resources Effects – Partial (include Attachment B)

Archaeology Finding:

Blank

Project Effects Finding:

No Historic Properties Affected

Above Ground Finding:

No Above Ground Properties Affected

District Archaeologist:

Date:

District Architectural Historian:

**Donald
Burden**

Digitally signed by
Donald Burden

Date: 11/07/2019

Date: 2019.11.07

11:19:57 -05'00'

Date:

PHMC Concurrence: _____

Name:

Archaeology Attachment – A

This project does not have the potential to affect archaeological resources, and, meets all of these criteria from Appendix C-Exempted Projects, from the Section 106 Delegation PA:

- The undertaking is limited to the Section 2 List of Exempted Activities by either the District Designee or Cultural Resources Professional
- The undertaking is classified as categorically excluded under NEPA
- The undertaking is on an existing transportation facility.
- The undertaking is not within or adjacent to a National Historic Landmark or National Park, or property under the jurisdiction of the National Park Service
- The undertaking has no known public controversy based on historic preservation issues
- The undertaking requires no more than 3.6 m (12 ft) of new right-of-way on each side of the road, rail bed, existing trail or pedestrian facility

Comment:

[Do not complete the remainder of Attachment A]

Area of Potential Effect *(describe dimensions of APE, land use, and type and % of disturbance, if present):*

Background Research Sources Checked:

- CRGIS/PASS Files *(list Known Archaeological Sites below)*
- Historic Maps *(list):*
- USDA- SGS/NRCS County Soils Map(s) *(list soils in APE):*
- Stream Order *(if stream present):*
- Other *(list):*

Known Archaeological Sites:

(List PASS number and National Register determination [if known]. Do not release site locations to the public.)

| |
|----|
| 1. |
| 2. |
| 3. |
| 4. |

Consultation with Federally Recognized Tribes & Nations, Consulting Parties and the Public:

Archaeological potential (explain probability and likely location(s) for sites based on the background research, field view, and consultation):

Historic:

Pre-Contact:

National Register Eligibility Determination (if site(s) identified in APE):

Site Name(s) & Number(s):

| | |
|---------------------------------------|--|
| <input type="checkbox"/> Not eligible | <div style="border: 1px solid black; width: 550px; height: 20px;"></div> |
| <input type="checkbox"/> Eligible | <div style="border: 1px solid black; width: 550px; height: 20px;"></div> |
| <input type="checkbox"/> Undetermined | <div style="border: 1px solid black; width: 550px; height: 20px;"></div> |

Archaeology Finding:

- No Archaeological Properties Affected
 - No Archaeological Properties Present
 - Archaeological Properties Present but Not Affected
- No Adverse Effect
 - Site protected with geotextile and fill during construction
 - Site protected with fencing or other barrier during construction
- Adverse Effect

Effects Explanation:

Attachments:

- Project Plans
- PHMC Negative Survey Form
- PHMC Record of Disturbance Form
- Geomorphology Report
- Archaeology Sensitivity Report (Phase IA)
- Archaeology Identification (Phase I) Report
- Archaeology Identification and Evaluation (Phase I & II) Report
- Other (*List*):

Above-Ground Resources Attachment - B

- This project does not have the potential to affect above-ground resources, and, meets all of these criteria from Appendix C-Exempted Projects, from the Section 106 Delegation PA:
 - The undertaking is limited to the Section 2 List of Exempted Activities by either the District Designee or Cultural Resources Professional
 - The undertaking is classified as categorically excluded under NEPA
 - The undertaking is on an existing transportation facility.
 - The undertaking is not within or adjacent to a National Historic Landmark or National Park, or property under the jurisdiction of the National Park Service
 - The undertaking has no known public controversy based on historic preservation issues

Comment:

[Do not complete the remainder of Attachment B]

Area of Potential Effect: *(describe dimensions of APE, land use, and type and % of disturbance, if present):*

The APE includes all properties fronting Bayfront Parkway within proposed construction limits, which extend along West Bayfront Parkway from about Chestnut Street on the west to about Parade Street on the east. While the APE boundaries do indeed extend eastward to the Soldiers and Sailors Home, project activities along this stretch of APE are largely confined to railroad track-work within the existing CSX right of way at the Soldiers and Sailors Home; essentially, the relaying of track and the re installation of a bridge that was removed in the 1980s (see attached Phase IA Historic Structures Reconnaissance Survey).

The project is in an urban setting and lies within the City of Erie. The topography is rolling throughout the project site.

Background Research Sources Checked:

- CRGIS/PHRS/National Register Files
- Historic Maps (*list*): 1899, 1900, 1957, 1969, 1975, 1977, 1996 (USGS Topographic Maps); 1939,
- Local Historic Society or Library (*name*): Erie Public Library
- State Archives
- Historic Bridge Inventory
- Other (*list*):

Previously Recorded and Evaluated Resources:

(Name and address [or location] of resource, PHMC Key No. and determination)

| |
|---|
| 1. Chestnut Street Waterworks Pump House (Key No. 110374) NRHP Eligible, 03/08/2002 |
| 2. Dobbins Lane (Key No. 087163) NRHP Eligible, 06/04/1986 |
| 3. Soldiers & Sailors Home (Key No. 079908) NRHP Eligible, 04/11/1999 |
| 4. Anthony Wayne Memorial Blockhouse (Key No. 067787) NRHP Eligible - Contributes to Soldiers & Sailors Home (Key No. 079908) |

Historic Resource Survey Forms Completed (if applicable) - National Register Eligibility Determination

1. Property Name & Address

(or Location):

Erie Water Works
340 West Bayfront Parkway,
Erie, PA 16507-0001

Not Eligible

Eligible

2. Property Name & Address

(or Location):

Dobbins Lane
100 State Street
Erie, PA 16507

Not Eligible

Eligible

3. Property Name & Address

(or Location):

Soldiers and Sailors Home
560 East 3rd Street
Erie, PA 16507

Not Eligible

Eligible

Above Ground Finding:

No Above Ground Properties Affected

No Above Ground Properties Present

Above Ground Properties Present but Not Affected

No Adverse Effect

Adverse Effect

Effects Explanation:

The project is largely confined to improvements to Bayfront Parkway at the intersections of Sassafras Street, State Street, and Holland Street, with an isolated section of railroad track-work proposed at the Soldiers and Sailors Home at the eastern end of the APE (see attached Phase I Historic Structures Reconnaissance Survey). Current plans call for roundabout installations at Sassafras and Holland streets with conventional intersection improvements at State Street. Intersection improvements also call for pedestrian safety enhancements, including installation of a pedestrian bridge over Bayfront Parkway at Holland Street. The Parkway itself is a relatively recent roadway,

Attachments:

- Historic Resource Survey Form(s) (*full or short forms*)
- Identification and Evaluation Report
- Rehabilitation Analysis (*typically for bridges*)
- Determination of Effect Tables
- Determination of Effect Report
- Other (*list*)

Additional Comments:

Mill Creek Tube (Key No. 105322) NRHP Eligible, 04/07/1995

Philadelphia & Erie Railroad (Key No. 103249) Not eligible per SHPO, 03/14/1995

Because the initial plans for the Bayfront project were considerably more extensive than those currently proposed, PennDOT anticipated a consulted No Adverse Effect and solicited for Consulting Parties at the outset of the project. PennDOT received responses from the Erie County Historical Society and Erie Maritime Museum. Since the time of the Project Early Notification/Scoping Results posting in March 2018, the overall scope of the project has decreased considerably, with very select improvement sites confined to those locations described above. Public consultation for the project remains on-going and the PennDOT Cultural Resources Professional will apprise the Consulting Parties of project plans as they come available. At present, however, the proposed plans do not pose direct impacts to any historic properties in the APE. However, given the presence of three, potentially NRHP-eligible resources, within the APE, PennDOT requests PHMC concurrence for the proposed project.



HEBERLING ASSOCIATES, INC.
 Bayfront Parkway Improvements
 SR 4034 Section A01
 City of Erie, Erie County, Pennsylvania
 ER No. 2018-8122-049
 Base Map: USGS 7.5-min Topographic Series

Figure 1: General location map.



Figure 2: Project location.

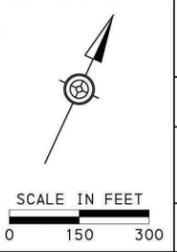


**PRELIMINARY
APE**

**FORMER LOCATION OF
ERIE EXTENSION CANAL**

LEGEND

- PROPOSED ROADWAY PAVING
- PROPOSED ROADWAY SHOULDER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE CURB GUTTER / ISLAND
- PROPOSED CONCRETE BARRIER / RETAINING WALL
- PROPOSED TRUCK APRON
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- PROPOSED PEDESTRIAN BRIDGE



**Bayfront Parkway Improvements
 PennDOT District 1-0
 April 2019**

**CONCEPTUAL INTERSECTION
 ALTERNATIVES**

**OVERALL CORRIDOR
 IMPROVEMENTS**

pennsylvania
DEPARTMENT OF TRANSPORTATION ms consultants, inc.
engineers, architects, planners



PennDOT
Deferral of Archaeological Testing
For Identification/Evaluation*
 Per 36 CFR 800.4(b)(2) and Stipulation III.C.2.f.3

County: Erie

SR/SEC: 4034/A01

MPMS: 108952

Name of Project: Central Bayfront Prkwy Multimodal Imp **ER#:** 2018-8122-049

Municipality: City of Erie

Lead Agency: FHWA

Funding Source: Federal

Brief Description of Project:

Planning studies have noted this need for greater connectivity between the waterfront and Erie’s downtown and residential neighborhoods. In collaboration with local project stakeholders and the community, the Bayfront Parkway Central Corridor Improvements will enhance these connections and provide the infrastructure needed to support the growth of the region.

Reason for Deferring Archaeological Testing

(Select all that apply)

- Multiple Alternatives under consideration
- Access to property restricted
- APE is not known for the locations of items typically included as part of final design and permitting, including bridge piers, wetland mitigation sites, or storm water detention basins (*specify*)

Proposed Plan for Archaeological Testing

(Describe the location(s) and method(s) for testing the APE, or reference a Predictive Model or Archaeological Sensitivity Study or Geomorphology Report, as appropriate)

A preliminary APE has been established, but a final APE will not be known until final design.

To date, Phase Ia survey consisting of preliminary reconnaissance, geomorphology testing, background research, and development of a predictive model for pre-contact and historic sites has been completed. In addition, a geophysical survey has been conducted on Soldiers and Sailor's property at the location of a previously recorded pre-contact and historic site 36ER0286 Garrison Hill site. The Phase Ia determined that most of the APE contains disturbed soils and/or fill. Although a section of the Erie Extension Canal was identified under a thick package of fill,

Susanne M. Haney Digitally signed by Susanne M. Haney
Date: 2020.03.06 14:42:01 -05'00'

03/06/2020

District Archaeologist

Date

* If eligible sites are identified in preliminary engineering and data recovery excavations cannot be completed before NEPA approval, an agreement document must be prepared.

CE Evaluation Part B, Section A-5

Environmental Evaluation Subject Areas (Section 4(f) Resources)

5. SECTION 4(f) RESOURCES

SECTION 4(f) RESOURCES **PRESENCE** **USE¹**
 Not Present Present No Yes

Documentation²

- Individual Section 4(f) Evaluation
- Programmatic Section 4(f) Evaluation
- Section 2002 Evaluation
- De Minimis Use/No Adverse Use Checklist
- Non-Applicability/No Use Checklist
- Temporary Use Checklist
- FHWA Coordination Documents

Will temporary easements during construction be necessary from Section 4(f) resources? No Yes

Describe Any Permanent and Temporary Impacts

Section 4(f) Temporary use:

The Great Lakes Sea Way Trail:

1. The proposed project will involve relocating 1181 linear feet of the Great Lakes Sea Way Trail to create a safer roadway crossing at Sassafras Street Extension. This will add (113) linear feet to the Great Lakes Sea Way Trail.
2. The proposed project will construct a new portion of trail from State Street to Holland street. Trail users currently use Front Street, the new trail will provide a safer alternative away from the roadway and traffic. Construction of the new trail will add (1265) linear feet to the Great Lakes Sea Way Trail.
3. The proposed project will involve relocating 428 linear feet of the Great Lakes Sea Way Trail to create a safer roadway crossing at Holland Street. This will add (22) linear feet added to the Great Lakes Sea Way Trail.

The Bayfront Promenade Trail:

The proposed project will involve relocating 340 linear feet of the Bayfront Promenade Trail to create a safer roadway crossing at State Street. This will add (2) linear feet added to the Bayfront Promenade Trail.

Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse

Proposed Action: CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. A multi-modal bridge over the proposed CSX railroad tracks will be constructed west of the existing at-grade crossing, which will be eliminated for safety and operational concerns. The bridge will be constructed on the same site as a former bridge that previously spanned the railroad tracks, which was removed in the late 20th century. In effect, the project will restore the original circulatory system within the Soldiers and Sailors Home property, with the bridge once again facilitating vehicular and pedestrian access between the Home and the Cemetery/Anthony Wayne Blockhouse. The bridge will remain the property of the Soldiers and Sailors Home.

Section 4(f) Non-Applicability/No Use Checklist

1. Erie Waterworks, Chestnut Street Pump House: Roadway and sidewalk reconstruction on the Bayfront Parkway adjacent to the Erie Waterworks, Chestnut Street Pump House property. No proposed work will be completed within the Section 4(f) property. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features.

2. Dobbins Lane: Roadway and sidewalk reconstruction on state street adjacent to Dobbins Lane. No proposed work will be completed within the Section 4(f) property specifically; the roadway blocks that constitute the historic resource will not be disturbed. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features.

3. The Pennsylvania Veterans' Memorial Cemetery: CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. For safety and operational concerns, this crossing will be eliminated and a multi-modal bridge over the proposed CSX tracks will be constructed, located west of the existing crossing. Railroad work results in re-installation of tracks that were previously in use during the 1970's. This work will result in a Section 4(f) Non- Applicability/No Use action; the proposed work will have no impact or temporary occupancy associated with The Pennsylvania Veterans 'Memorial Cemetery.

Is mitigation incorporated? No Yes

Describe Mitigation

Section 4(f) Temporary use:

The Great Lakes Sea Way Trail: 1400 LF of Trail added to incorporate trail user safety.

Trail access and use will be maintained through staged construction, speed limit signs, stop signs, and flagging, as necessary for trail users. Signage will be incorporated to ensure that users are notified of upcoming construction. Fencing will be placed to protect section 4(f) resource and users from adjacent construction activities. If necessary temporary detours will be utilized to ensure trail access, use and mobility remain operational for trail users. The contractor will be required to install protective shielding near the trails during construction in order to prevent materials and other debris from falling within the limits of the trail.

The project is designed to minimize any tree clearing and shrub removal to the greatest extent practical. All earth disturbance will be revegetated to ensure no negative changes to the viewshed.

Construction related mitigation: Fencing will be placed to protect the trail and users from adjacent construction activities. Clearly delineate any construction areas adjacent to the Section 4(f) Resources to ensure that only planned construction activities occur. Coordination with the Western Pennsylvania Port Authority will be continuous throughout the project duration. The duration of temporary use on the Great Lakes Sea Way Trail will last less than the construction period for The Bayfront Parkway Central Corridor Improvement Project. An erosion and sediment pollution control plan will be implemented to control and maintain earth work activities. The Great Lakes Sea Way Trail will be fully restored after construction.

The Bayfront Promenade Trail : 2 LF of Trail added to incorporate trail user safety.

Trail access and use will be maintained through staged construction, speed limit signs, stop signs, and flagging, as necessary for trail users. Signage will be incorporated to ensure that users are notified of upcoming construction. Fencing will be placed to protect section 4(f) resource and users from adjacent construction activities. If necessary temporary detours will be utilized to ensure trail access, use and mobility remain operational for trail users. The contractor will be required to install protective shielding near the trails during construction in order to prevent materials and other debris from falling within the limits of the trail.

The project is designed to minimize any tree clearing and shrub removal to the greatest extent practical. All earth disturbance will be revegetated to ensure no negative changes to the viewshed.

Construction related mitigation: Fencing will be placed to protect the trail and users from adjacent construction activities. Clearly delineate any construction areas adjacent to the Section 4(f) Resources to ensure that only planned construction activities occur. Coordination with the Western Pennsylvania Port Authority will be continuous throughout the project duration. The duration of temporary use on the Bayfront Promenade Trail will last less than the construction period for The Bayfront Parkway Central Corridor Improvement Project. An erosion and sediment pollution control plan will be implemented to control and maintain earth work activities. The Bayfront Promenade Trail will be fully restored after construction.

Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse:

Work on historic properties would be limited to construction of the multi-modal bridge at the Soldiers' and Sailors' Home over the railroad, which is being coordinated with the PA Department of Military and Veterans Affairs. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. The project is designed to minimize tree clearing and shrub removal to the greatest extent practical. All earth disturbance will be revegetated to ensure no negative changes to the viewshed. Access to the cemetery will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction.

Temporary Construction Access: Construction materials will be transported through the Pennsylvania Soldiers' and Sailors' property using existing driveways accommodated with flagging operations to ensure user safety. Temporary Construction access will not result in impacts to historic features on the Pennsylvania Soldiers' and Sailors' property.

Construction related mitigation: Clearly delineate any construction areas adjacent to the Section 4(f) Resources to ensure that only planned construction activities occur. Proposed work associated with the section 4(f) property will be constructed separately from The Bayfront Parkway Central Corridor Improvement Project. Duration of the construction for the Pennsylvania Soldier's and Sailor's Home Railroad Bridge is not to exceed construction of the overall Bayfront Parkway Central Corridor Improvement Project. An erosion and sediment pollution control plan will be implemented to control and maintain earth work activities. The Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse property will be fully restored after construction.

Section 4(f) Non-Applicability/No Use Checklist

Erie Waterworks, Chestnut Street Pump House: No proposed work will be completed within the Section 4(f) property, No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. Operations at Chestnut Street Pump House will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction. Clearly delineate any construction areas adjacent to the Chestnut Street Pump House to ensure that only planned construction activities occur.

Dobbins Lane: No proposed work will be completed within the Section 4(f) property specifically, the roadway pavers that constitute the historic resource will not be disturbed. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. Access to Dobbins Lane will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction. Fencing will be placed to protect Dobbins Lane and users from adjacent construction activities. Clearly delineate any construction areas adjacent to Dobbins Lane to ensure that only planned construction activities occur.

The Pennsylvania Veterans' Memorial Cemetery: Work on historic properties would be limited to construction of the multi-modal bridge at the Soldiers' and Sailors' Home over the railroad, which is being coordinated with the PA Department of Military and Veterans Affairs. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. Access to the cemetery will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction. Clearly delineate any construction areas adjacent to the Veterans Memorial Cemetery to ensure that only planned construction activities occur.

Remarks

-
- 1 If the resource is present but no use is anticipated, describe in Remarks why there will be no use. If there will be no use because avoidance/mitigation measures will be included, describe those in the mitigation text box provided.**
 - 2 Unless required as an attachment, documentation for subject areas should be maintained in the project's Technical Support Data and does not need to be submitted with the CEE.**
-

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

1. [2020-05-07 Section 4f Non-Applicability No Use Signed.pdf](#) (6162KB / 6MB)
2. [2020-05-07 Trail Section 4f Temporary Occupancy Signed.pdf](#) (4716KB / 4.6MB)
3. [2020-05-07 Pennsylvania Soldiers' and Sailors' Home and Anthony Wayne Blockhouse signed..pdf](#) (4431KB / 4.3MB)

BAYFRONT PARKWAY CENTRAL CORRIDOR IMPROVEMENTS

Section 4(f) Non-Applicability No Use

SR 4034 A01
City of Erie
Erie County, Pennsylvania



PREPARED FOR



April 2020

Section 4(f) Non-Applicability/No Use

May 2014 Version

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR 4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

SELECT ONE: EIS EA CE EER ED

PROJECT DESCRIPTION:

(Provide a concise but thorough description of the proposed action.)

The Bayfront Parkway Central Corridor Improvement Project is located in the City of Erie, Erie County Pennsylvania. The City of Erie is experiencing a resurgence of both private—and public—sector development and investment in its downtown and on the waterfront. In the heart of these developments lies the Bayfront Parkway (SR 4034), which has served the community since the early 1990s. The parkway serves as an east-west connection, but with development, the need for north-south connections is growing. Planning studies have noted this need for greater connectivity between the waterfront and Erie’s downtown and residential neighborhoods. In collaboration with local project stakeholders and the community, the Bayfront Parkway Central Corridor Improvements will enhance these connections and provide the infrastructure needed to support the growth of the region.

The proposed project consists of reconfiguring three major intersections, completing a multiuse trail network, and constructing three pedestrian bridges for each intersection. The three intersections are:

- Bayfront Parkway (SR 4034-A01) at Sassafras Street Extension
- Bayfront Parkway (SR 4034-A01) at State Street
- Bayfront Parkway (SR 4034-A01) at Holland Street

The Bayfront Parkway at Sassafras Street Extension intersection will be upgraded to a dual lane three-leg roundabout. New sidewalks, crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

The Bayfront Parkway at State Street intersection will be upgraded to a grade-separated signalized intersection with a new structure to carry State Street over the Bayfront Parkway with interior ramps along the Bayfront Parkway to provide full access to and from State Street. Bayfront Parkway through traffic on the outside lanes pass beneath State Street. New sidewalks, crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

The Bayfront Parkway at Holland Street intersection will be upgraded to a dual lane four-leg roundabout. Sidewalks, crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

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The existing Bayfront Bikeway offers a paved multiuse route across the city of Erie for pedestrians and bicyclists. However, the Bayfront Parkway currently acts as a barrier for pedestrians and bicyclists between the City of Erie to the south and the waterfront area to the north. There are also missing links of the Bayfront Bikeway in the project area. A multiuse trail connecting all three intersections on the north side of Bayfront Parkway will be completed to enhance bicycle and pedestrian access within the project area.

In order to accommodate the Central Corridor Improvements, the existing railroad track located between Sassafra Street Extension and Holland Street will be removed. CSX Transportation currently owns and operates the existing track, which served the heavy industrial facilities previously located on the waterfront. Since the waterfront no longer supports heavy industrial uses, the need for rail has diminished. However, CSX does currently utilize the track for switching operations and as storage for rail cars. In order to maintain their operations, CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. For safety and operational concerns, this crossing will be eliminated and a multi-modal bridge over the proposed CSX tracks will be constructed, located west of the existing crossing. These activities will be constructed separate from the Central Corridor Improvement Project.

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IDENTIFICATION OF SECTION 4(f) PROPERTY:

(List the property and provide a description of the property as per Chapter 6 of the *Section 4(f)/Section 2002 Handbook*. Attach a map, photo(s), etc. as appropriate.)

1. Erie Waterworks, Chestnut Street Pump House– The Erie Waterworks, Chestnut Street Pump House and Filtration Plant is located at 340 West Bayfront Parkway. The facility has been providing water to the City of Erie since 1869 although the existing buildings were built several decades later. The site is bisected by the Bayfront Parkway, constructed in the 1990s on a former railroad alignment. The Pump House/Boiler House (1893/1897/1913) is located south of the Parkway. The building is constructed of stone and brick and embody a strong Italianate stylistic influence.

When documented in 1998, the Pump House consisted of three sections which were built at different times. The 40-ft by 60-ft middle section (No. 2 pump house) was built in 1893 as an addition to the original 1868 waterworks. A new boiler house, 102 feet wide by 74 feet deep by 37 feet high, was erected in 1897 as a free-standing building 20 feet east of No. 2 pump house; it was later expanded to fill in the gap between the two buildings. In 1913 the original 1868 building was replaced with a new pump house measuring 100 feet wide by 62 feet deep, attached to the west end of the No. 2 pump house (Kidder 1998). A 1998 grant application proposed a comprehensive renovation of the complex, but in 2001 the 1893 No. 2 pump house and 1897 boiler house were demolished and replaced by a new building attached to the east end of the restored 1913 pump house.

The 1998 Pennsylvania Historic Resource Form (Kidder 1998) was explicitly for the pump house complex alone, the larger property, the Erie Waterworks, Chestnut Street Pump House and Filtration Plant, was determined eligible for the NRHP in 1998 as a result of project review for the proposed renovation. It was determined eligible under Criteria A (Community Planning and Development) and C (Architecture, Engineering). In a letter dated August 31, 1998 the PA SHPO noted that the property “represents an integrated social, civic, and engineering effort to provide community water service during the age of the City Beautiful movement” (PA SHPO, letter from Brenda Barrett to D. Jeff Kidder, August 31, 1998).

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In 2019 Further Coordination with PA SHPO identified that the Erie Waterworks, Chestnut Street Pump House and Filtration Plant and Boathouse Complex Key # 110374 retains sufficient integrity and continues to be eligible for the NRHP under Criterion A (Community Planning and Development) and Criterion C (Architecture, Engineering) with a Period of Significance of circa 1913 (date of construction) to 1969 (50 years from the present). The NRHP boundary for Erie Waterworks, Chestnut Street Pump House encompasses the entire parcel. **(See Correspondence with the Official with Jurisdiction)**

No impacts to the Erie Waterworks, Chestnut Street Pump House is anticipated due to the Bayfront Parkway project. The project involves activities within the existing transportation right-of-way and would not result in proximity impacts that would substantially impair the features, activities, or attributes that make the property eligible for protection under Section 4(f). **(See Figure 3: NRHP Properties and Potential NRHP Properties in the APE.)**

2. Dobbins Lane – The roadway known as Dobbins Lane consists of a short section of Medina stone pavement extending from State Street to Peach Street at the edge of the bluff which parallels the Erie waterfront. The lane originally functioned as part of Front Street, although it appears that it was never officially laid out which accounts for its narrow width and winding configuration. It is located at the upper edge of the former Lakeside Park, an abandoned urban space created in 1890. The roadway probably was paved with Medina stone when Lakeside Park was developed since other roadways in the park were paved with the same material. It was named Dobbins Lane in 1963 to honor Daniel Dobbins who supervised the construction of several ships in Perry’s fleet in the nearby shipyard at the foot of Sassafras Street (Erie County Historical Society 1986).

Dobbins Lane was surveyed by the City of Erie in 1982 and recommended eligible for the National Register of Historical Places (NRHP). In 1986 it was determined to be eligible by the Pennsylvania State Historic Preservation Office (SHPO) under Criteria A and C. In a letter dated June 4, 1986 the PA SHPO stated its opinion that “Dobbins Lane has historic significance as a rare survival of the once common, 19th century use of Medina Stone paving material. It illustrates the early development of public works and the street system in Erie and is worthy of preservation” (PA SHPO, letter from Larry E. Tise to John E. Cooper, Esq., June 4, 1986).

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In 1988 the stones were taken up when the Bayfront Development Corporation constructed the office building at 100 State Street. The stones were re-laid in 1989 (Erie Yesterday website n.d.). Dobbins Lane is now part of the building's parking lot which borders it for most of its length. These changes substantially diminish the resource's integrity of setting, design, workmanship, association, and feeling.

In 2019 Further Coordination with PA SHPO identified that Dobbins Lane, Key # 087163 retains sufficient integrity and continues to be eligible for the NRHP under Criterion A (Transportation), with a POS of 1890 (date of construction). The NRHP boundary for Dobbins Lane, Key # 087163 is limited to the footprint of the blocks as well as its historic paving border. **(See Correspondence with the Official with Jurisdiction)**

No Impact to Dobbins Lane is anticipated due to the Bayfront Parkway project. The project involves activities within the existing transportation right-of-way and would not result in proximity impacts that would substantially impair the features, activities, or attributes that make the property eligible for protection under Section 4(f). **(See Figure 4: Location of Dobbins Lane.)**

3. The Pennsylvania Veterans' Memorial Cemetery- The Pennsylvania Soldiers' and Sailors' Home is located at the east end of the project, bounded by Bayfront Parkway to the north and Third Street to the south. As presently constituted, the property is only a remnant of a much larger tract that once extended north to Lake Erie but was diminished in size over the years. Contributing resources within the property include the Soldiers and Sailors Home, the Staff Housing, the Pennsylvania Soldiers and Sailors Cemetery/Veterans Memorial Cemetery, and the General Anthony Wayne Blockhouse. Eligible property associated with the Section 4(f) Non-Applicability/No Use includes The Pennsylvania Veterans' Memorial Cemetery.

The property is bisected by the right-of-way of the former Philadelphia and Erie Railroad (now CSX), with the Soldiers' and Sailors' Home lying south of the railroad and the cemetery lying to the north. cursory documentation for the Soldiers' and Sailors' Home was prepared by the Northwest Institute of Research in 1982 in connection with its historic sites survey of the City of Erie, but no determination of eligibility was made at that time (Wolyneec 1982; CRGIS).

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In 1988 the PA SHPO determined the Soldiers' and Sailors' Home to be eligible for the NRHP under Criteria A and C as a result of a review prompted by demolition of part of the building by the Bureau of Veteran Affairs (PA SHPO, letter from Brenda Barrett to Joseph Clelan, May 9, 1988). No historic boundaries were defined for the property.

In 2019 Further Coordination with PA SHPO identified that the Soldiers and Sailors Home, Key #079908 retains sufficient integrity and continues to be eligible for the NRHP under Criterion A (Health Care, Politics/Government, Social History), with a POS of 1879 (date of construction of the blockhouse) to 1969 (50 years from the present). Contributing resources within the property include the Soldiers and Sailors Home, the Staff Housing, the Pennsylvania Soldiers and Sailors Cemetery/Veterans Memorial Cemetery (an integral part of the district, notable as the commonwealth's only state cemetery, with graves dating back to the Civil War era) and the General Anthony Wayne Blockhouse which is a commemorative structure that was built in 1879. The complex does not retain sufficient integrity to be eligible under Criterion C (Architecture). Historic Boundaries were identified as the current tax parcel, inclusive of the buildings and cemetery and monument and circulation patterns. (See **Correspondence with the Official with Jurisdiction**)

No impact to The Pennsylvania Veterans' Memorial Cemetery is anticipated due to the Bayfront Parkway project. The project area includes a Section 4(f) property but the proposed work results in no permanent incorporation or conversion of land into a transportation facility and will not involve temporary occupancy on the Pennsylvania Veterans' Memorial Cemetery. (See **Figure 5: Location of Pennsylvania Soldier's and Sailor's Home as depicted on 1917 Mueller map of Erie**)

OFFICIAL WITH JURISDICTION OVER SECTION 4(f) PROPERTY:

1. Identify agency with jurisdiction:
 1. Erie Waterworks, Chestnut Street Pump House
(Pennsylvania Historical and Museum Commission)
 2. Dobbins Lane
(Pennsylvania Historical and Museum Commission)

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3. The Pennsylvania Veterans' Memorial Cemetery
(Pennsylvania Historical and Museum Commission)

2. Name and title of contact person at agency:

1. Erie Waterworks, Chestnut Street Pump House
(Cheryl Nagle, Historic Building Project Reviewer)

2. Dobbins Lane
(Cheryl Nagle, Historic Building Project Reviewer)

3. The Pennsylvania
Veterans' Memorial Cemetery
(Cheryl Nagle, Historic Building Project Reviewer)

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DETERMINATION OF NON-APPLICABILITY:

PennDOT has the autonomy to decide the applicability of Section 4(f) protection. However, per the *Section 4(f)/Section 2002 Handbook*, PennDOT is advised to consult with FHWA with questionable circumstances by completing the appropriate forms or through other means of correspondence.

Indicate which of the following apply (More than one may be applicable, indicate all that apply):
(*Requires concurrence by the official with jurisdiction over the Section 4(f) property.) Provide additional information regarding each checked item.

1. The project area includes a Section 4(f) property but results in no permanent incorporation or conversion of land into a transportation facility, no temporary occupancy, or does not result in a constructive use as determined by FHWA.

The Pennsylvania Veterans' Memorial Cemetery

- *2. The project is a bike or walkway project sponsored by the officials with jurisdiction over the Section 4(f) property [Negative Declaration applies]. (**Note:** does not require FHWA signature).

[Click here to enter text.](#)

- *3. The project involves permanent acquisition of land within the boundaries of a historic district, but the land to be used does not contribute to the characteristics that make the district eligible for the *National Register* or has been determined to be part of a non-contributing element.

- *4. The project involves a multiple-use facility (state, federal, National Forest, large municipal-owned land, etc.) but does not impact an area that is managed for/functions specifically as a Section 4(f) property.

[Click here to enter text.](#)

- *5. The project involves an aerial crossing of a Section 4(f) property, but it does not impact the qualifying characteristics of the property, or it does not result in the conversion of land into a transportation facility, such as placement of a bridge over a historic railroad yard.

[Click here to enter text.](#)

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- *6. The project involves activities within the existing transportation right-of-way and would not result in proximity impacts that would substantially impair the features, activities, or attributes that make the property eligible for protection under Section 4(f).

1. Erie Waterworks, Chestnut Street Pump House
2. Dobbins Lane

- *7. The project involves underground activities such as tie-backs, horizontal borings, etc. and does not impact the qualifying characteristics of the Section 4(f) property or involve archaeology that warrants preservation in place.

[Click here to enter text.](#)

- *8. The project involves the restoration, rehabilitation, or maintenance of transportation facilities that are on or eligible for the *National Register* and would not adversely affect the historic qualities of the facility that caused it to be on or eligible for listing.

[Click here to enter text.](#)

- *9. The project involves a transportation enhancement or is a mitigation project where the use of the Section 4(f) property is solely for the purpose of preserving or enhancing the activities, features, or attributes that qualify the property for Section 4(f) protection.

[Click here to enter text.](#)

- *10. The project involves improvements to the interstate system, but does not require the use of any interstate elements formally designated by FHWA for Section 4(f) protection on the basis of national or exceptional historic significance.

[Click here to enter text.](#)

- *11. The project involves certain trails, paths, bikeways, and sidewalks where (1) the trail-related project is funded under the Recreational Trails Program (23 U.S.C. 206(h)(2)); (2) the trail is a national historic trail designated under the National Trails System Act (with the exception of segments that are historic sites) (16 U.S.C. 1241-1251); (3) the trail/path/bikeway/sidewalk occupies a transportation facility right-of-way and can be maintained somewhere within that right-of-way; or (4) the trail/path/bikeway/sidewalk is part of the local transportation system and functions primarily for transportation.

[Click here to enter text.](#)

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Provide additional information regarding each checked item:

[Click here to enter text.](#)

1. Erie Waterworks, Chestnut Street Pump House

Proposed Action: Roadway and sidewalk reconstruction on the Bayfront Parkway adjacent to the Erie Waterworks, Chestnut Street Pump House property. No proposed work will be completed within the Section 4(f) property. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. (See **Project Plan Sheet: Sassafras Street Extension Sidewalk & Bicycle Path Network**)

2. Dobbins Lane

Proposed Action: Roadway and sidewalk reconstruction on state street adjacent to Dobbins Lane. No proposed work will be completed within the Section 4(f) property specifically; the roadway blocks that constitute the historic resource will not be disturbed. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. (See **Project Plan Sheet: State Street Sidewalk & Bicycle Path Network**)

3. The Pennsylvania Veterans' Memorial Cemetery

Proposed Action: CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. For safety and operational concerns, this crossing will be eliminated and a multi-modal bridge over the proposed CSX tracks will be constructed, located west of the existing crossing. Railroad work results in re-installation of tracks that were previously in use during the 1970's. This work will result in a Section 4(f) Non-Applicability/No Use action; the proposed work will have no impact or temporary occupancy associated with The Pennsylvania Veterans' Memorial Cemetery. (See **Project Plan Sheet: Pennsylvania Soldier's and Sailor's Home Railroad Bridge**)

****Construction of multi-modal bridge over the proposed CSX tracks and removal of the at grade crossing will be prepared under Section 4f Temporary Occupancy for the Pennsylvania Soldiers' and Sailors' Home & Anthony Wayne Blockhouse****

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SUMMARY AND DETERMINATION:

The proposed action will not involve temporary or permanent incorporation or conversion of Section 4(f) land into a transportation facility, including construction easements and/or staging, therefore the proposed action does not constitute a use within the meaning of Section 4(f).

Section 4(f) Property:

1. Erie Waterworks, Chestnut Street Pump House
2. Dobbins Lane
3. The Pennsylvania Veterans' Memorial Cemetery

Official with Jurisdiction: Cheryl Nagle (PHMC)

Date: 11/22/2019

(Optional: other documentation such as attached letters or meeting minutes may be used in replacement of signing this page)

Other documentation is included in the following Attachment:

PA SHPO Concurrence attached under (Correspondence with the Official with Jurisdiction)

Name and Organization of Preparer: Mark Fedosick /ms consultants, inc.

Date: 4/16/2020

Project Manager: /s/ Thomas J. McClelland, PennDOT

Date: 05/06/2020

Environmental Manager: Autumn Kelley

Digitally signed by Autumn Kelley
Date: 2020.05.06 13:01:34 -04'00'

Date:

PennDOT, BOPD: Raymond DeArmitt

Digitally signed by Raymond DeArmitt
Date: 2020.05.07 09:33:46 -04'00'

Date:

FHWA:

Date:

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List Section 4(f) environmental commitments associated with this non-applicability/no use that are part of this project:

1. Erie Waterworks, Chestnut Street Pump House

No proposed work will be completed within the Section 4(f) property, No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. Operations at Chestnut Street Pump House will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction.

Construction related mitigation: Clearly delineate any construction areas adjacent to the Chestnut Street Pump House to ensure that only planned construction activities occur.

2. Dobbins Lane

No proposed work will be completed within the Section 4(f) property specifically, the roadway pavers that constitute the historic resource will not be disturbed. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. Access to Dobbins Lane will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction.

Construction related mitigation: Fencing will be placed to protect Dobbins Lane and users from adjacent construction activities. Clearly delineate any construction areas adjacent to Dobbins Lane to ensure that only planned construction activities occur.

3. The Pennsylvania Veterans' Memorial Cemetery

Work on historic properties would be limited to construction of the multi-modal bridge at the Soldiers' and Sailors' Home over the railroad, which is being coordinated with the PA Department of Military and Veterans Affairs. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features.

Access to the cemetery will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction.

Construction related mitigation: Clearly delineate any construction areas adjacent to the Veterans Memorial Cemetery to ensure that only planned construction activities occur.

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On Behalf of the Federal Highway
Administration–Pennsylvania Division Office

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Typical attachments for this form include, but are not limited to:

- Project location map
- Map of affected Section 4(f) property and other Section 4(f) property(ies) in the project vicinity
- Photographs of the Section 4(f) property
- Project plan sheet
- Correspondence with the official with jurisdiction
- Public involvement information

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Project Location Map

See Attached Figures



HEBERLING ASSOCIATES, INC.
 Bayfront Parkway Improvements
 SR 4034 Section A01
 City of Erie, Erie County, Pennsylvania
 ER No. 2018-8122-049
 Base Map: USGS 7.5-min Topographic Series

Figure 1: General location map.



Figure 2: Project location.

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Map of affected Section 4(f) Property and other Section 4(f) property(ies) in the project vicinity
See Attached Figuredashed Figures

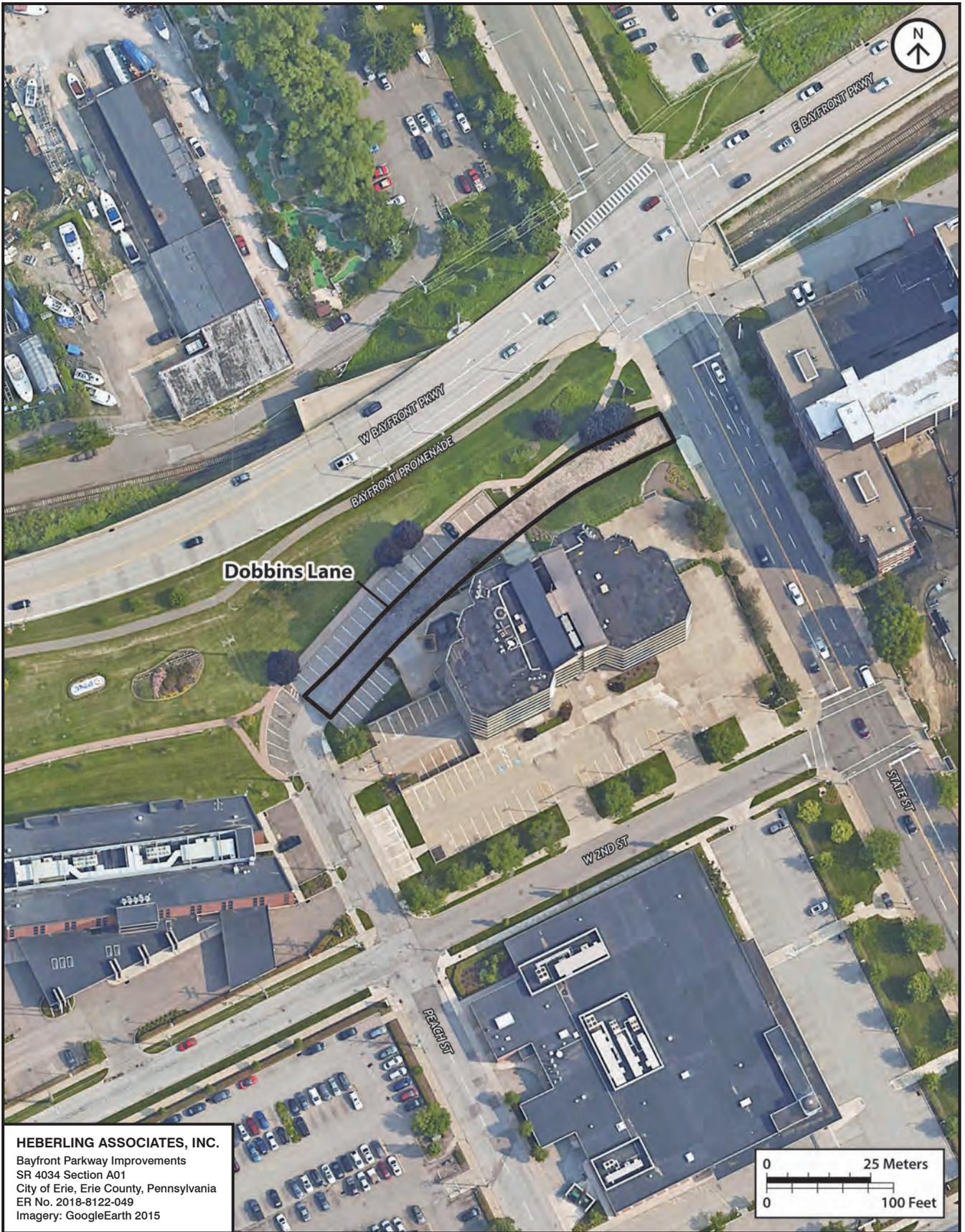


Figure 4: Location of Dobbins Lane.

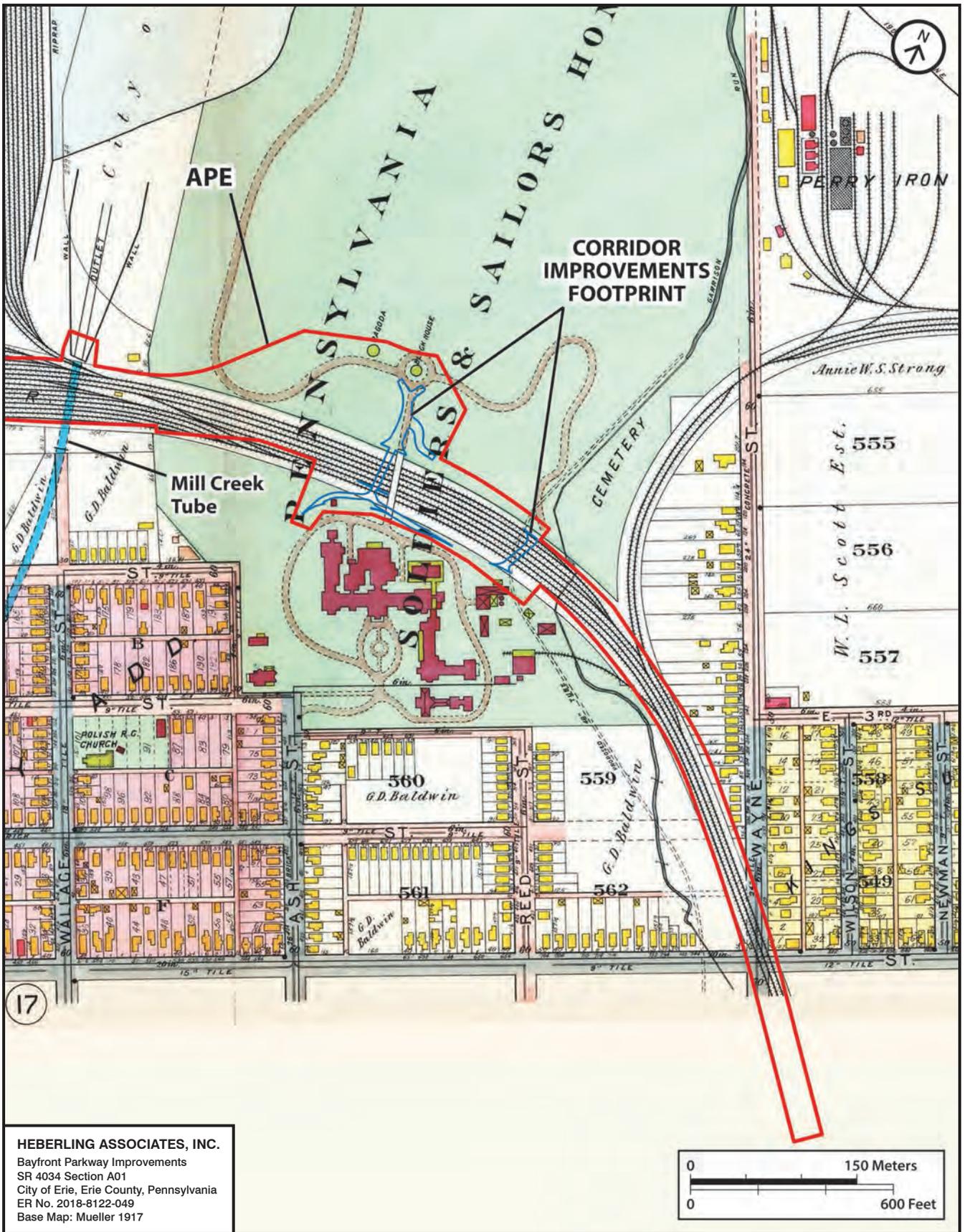


Figure 5: Location of Pennsylvania Soldier's and Sailor's Home as depicted on 1917 Mueller map of Erie.

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Photographs of the Section 4(f) Property

See Attached Photographs



Erie Waterworks, Administration Building (1914).



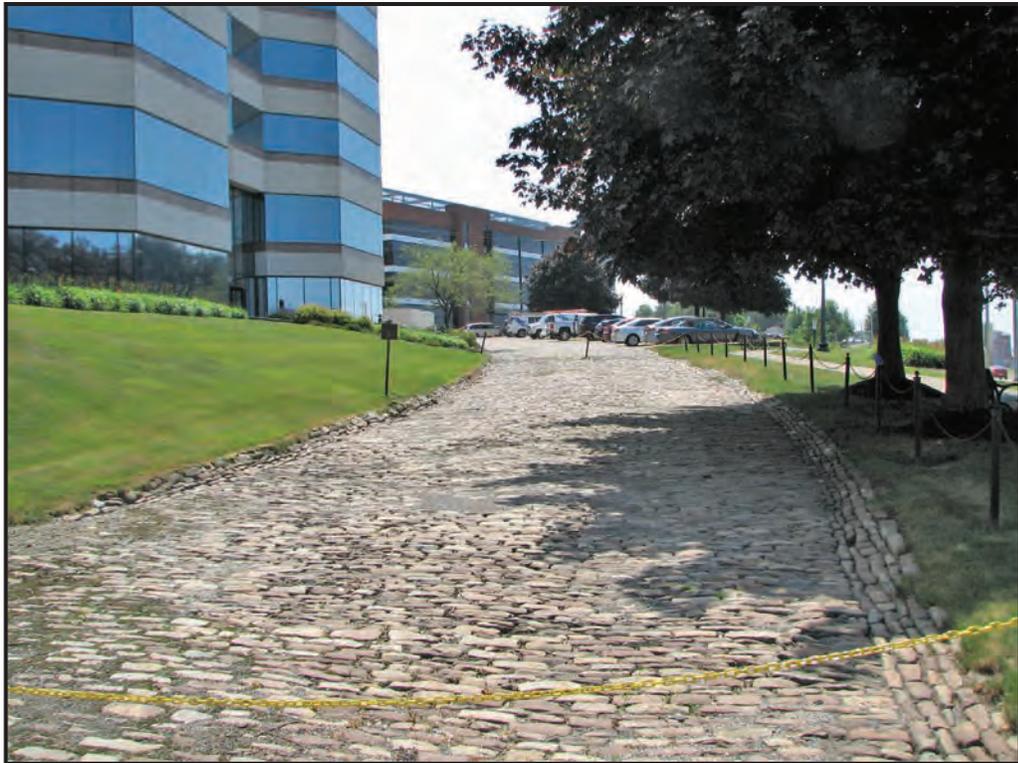
Erie Waterworks, Filtration Building (1913).



Erie Waterworks, Boat House (1908).



Erie Waterworks, Pump House (1913/2001).



Dobbins Lane looking southwest from State Street.



Dobbins Lane looking northeast from Peach Street.



Pennsylvania Soldiers and Sailors Home looking northeast.



Anthony Wayne Blockhouse and Grounds looking northwest.



Pennsylvania Veterans' Memorial Cemetery (left) and CSX Railroad right-of-way (right), looking southeast.

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Correspondence with the Official with Jurisdiction

See Attached Correspondence

PHMC E-Notification Details -- For PHMC Use Only



Notification Details (/NotificationDetails.aspx?ProjectID=54110&PostingID=28894&NotificationID=19333&Tab=1)

MPMS 108952 • Central Bayfront Prkwy Multimodal Improvements • Erie Co. • SR 4034 Section A01

Email Content

Sent Date: 11/22/2019 12:00:00 AM

Create Date: 11/22/2019 12:17:54 PM

Subject: PennDOT Request for PHMC Response: ER2018-8122-049 - MPMS108952

Message:

PennDOT has posted updated information on the PATH website for the project listed below.

COUNTY: Erie

MUNICIPALITY: ERIE CITY (Erie)

SR: 4034

SECTION: A01

PROJECT NAME: Central Bayfront Prkwy Multimodal Improvements

MPMS: 108952

ER NUMBER: 2018-8122-049

PROJECT DESCRIPTION: Multimodal/Congestion Reduction and safety improvement project on the Bayfront Parkway (SR4034)

SECTION 106 Effect: No Effect

SECTION 106 Stage: Determination of Effects

Posting Name: SR 4034 A01 Bayfront Parkway Improvement Above-ground Finding

PHMC COMMENT: Thank you for providing the concurrence comment regarding eligibility/criterion/boundaries for the previously identified resources; we concur regarding the contributing status of the outbuilding at the Soldiers & Sailors Home. Thank you for providing the narrative regarding the bridge. The PA SHPO concurs with the no effect to above ground historic resources (as archaeology is under review).

The associated documents for this consultation are available at: <https://path.penndot.gov/PostingDetails.aspx?ProjectID=54110&PostingID=28894>

The PHMC Contact is Cheryl Nagle and can be reached at chnagle@pa.gov.

Administrative Notes:

outbuilding, however, retains better than average integrity when compared to the few surviving historic buildings on the property.

Regarding SHPO comments pertaining to the Above Ground Resources – Assessment of Effect, the bridge installation in question is a roadway/pedestrian bridge that will provide vehicular and pedestrian access between the south and north halves of the property (see attached preliminary plan and historic plan sheets). To provide a little more background, the Philadelphia and Erie Railroad (P&E) laid several yard tracks along the Erie waterfront, ca. 1864. The railroad yard predated the Soldiers and Sailors Home by roughly 20 years. When the Commonwealth developed the Home and associated Cemetery in the mid-1880s, the plan required installation of a pedestrian/carriage bridge over the P&E yard to provide access between the south and north halves of the property. This arrangement remained in effect up to about the mid-1980s, when Conrail (now CSX) removed all but one set of tracks through the Soldiers and Sailors property, and the Home removed the bridge and installed the extant at-grade crossing, just east of the old bridge alignment. CSX continues to maintain a remnant of the railroad yard, immediately west of the Soldiers and Sailors Home property. Proposed plans for the Bayfront Parkway require that CSX move these yard tracks a bit further to the east, meaning that CSX now needs to re-lay the yard tracks, within its own right of way, through the original yard alignment that bisects the Soldiers and Sailors Home property. The extant at-grade crossing, installed in the mid-1980s, must now be removed and the old overpass bridge reinstalled. In effect, the project will restore the original circulatory system within the Soldiers and Sailors Home property, with the bridge once again facilitating vehicular and pedestrian access between the Home and the Cemetery/Anthony Wayne Blockhouse. The bridge will remain the property of the Soldiers and Sailors Home.

The PennDOT CRP has proposed utilizing a historic truss bridge at this location. However, due to the exceedingly high clearance requirements mandated by CSX, the bridge will have to have a considerable hump or curve in the floor system to clear the tracks. In short, the unique design parameters preclude the use of a historic truss at this location. The PennDOT CRP, however, will work closely with the consulting engineer to develop a context sensitive design.

If you have any questions, please contact Donald Burden at (814) 678-7194

Associated Files: Erie 108952 Field Assessment and Finding above ground

Enclosure

4432/ /

cc:



Photo 1. West and south sides of outbuilding at Soldiers and Sailors Home, looking north.

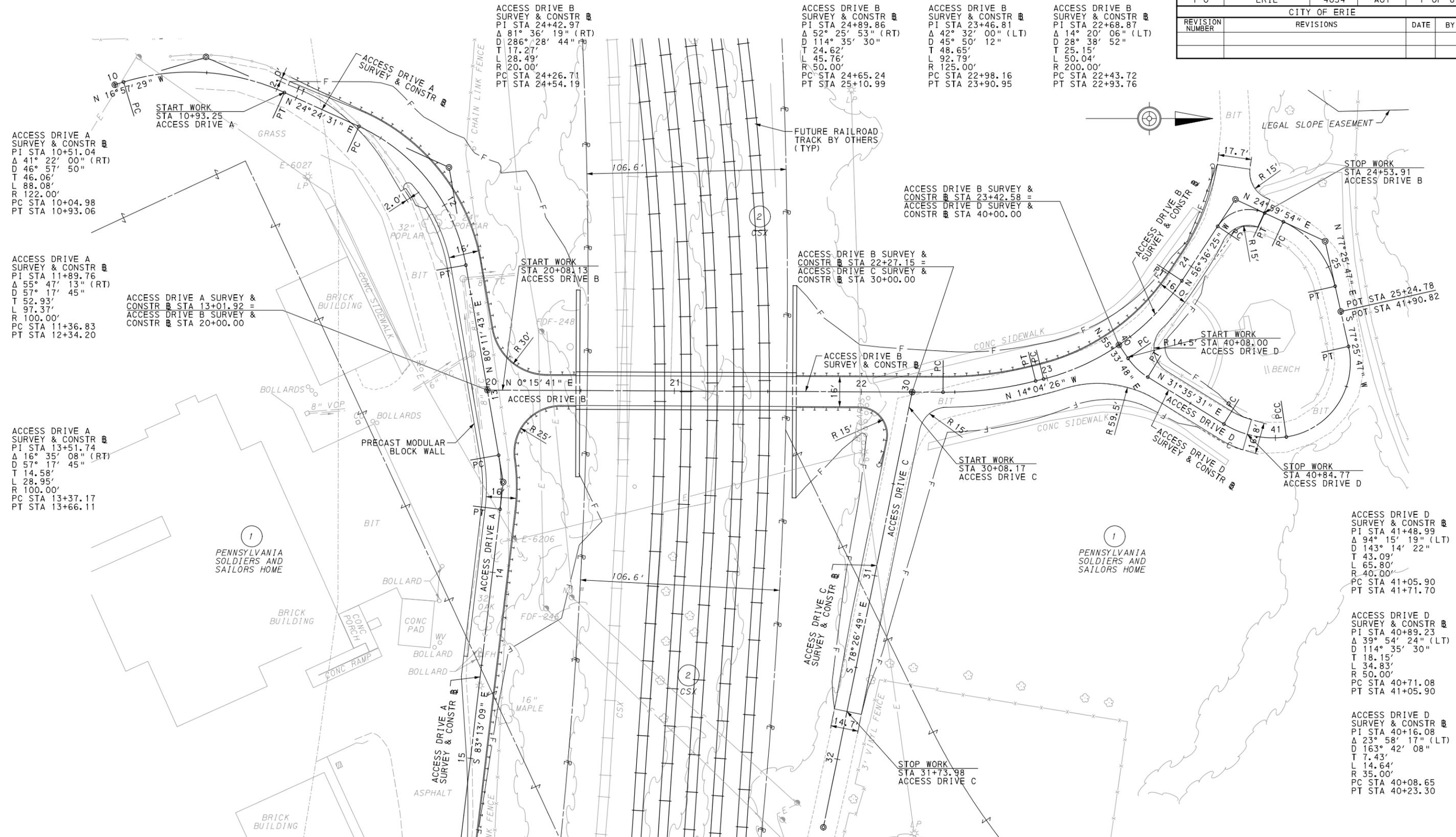


Photo 2. South and east sides of outbuilding at Soldiers and Sailors Home, looking southeast.

PLOTTED: 11/19/2019

FILE NAME: \\msconsultants.com\files\production\08\60\06808\roadway\sheets\soldiers and sailors\RDpl 01.dgn

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|-----------------|-----------|-------|---------|--------|
| 1-0 | ERIE | 4034 | A01 | 7 OF 8 |
| CITY OF ERIE | | | | |
| REVISION NUMBER | REVISIONS | DATE | BY | |
| | | | | |



ACCESS DRIVE A SURVEY & CONSTR
 PI STA 10+51.04
 Δ 41° 22' 00" (RT)
 D 46° 57' 50"
 T 46.06'
 L 88.08'
 R 122.00'
 PC STA 10+04.98
 PT STA 10+93.06

ACCESS DRIVE A SURVEY & CONSTR
 PI STA 11+89.76
 Δ 55° 47' 13" (RT)
 D 57° 17' 45"
 T 52.93'
 L 97.37'
 R 100.00'
 PC STA 11+36.83
 PT STA 12+34.20

ACCESS DRIVE A SURVEY & CONSTR
 PI STA 13+51.74
 Δ 16° 35' 08" (RT)
 D 57° 17' 45"
 T 14.58'
 L 28.95'
 R 100.00'
 PC STA 13+37.17
 PT STA 13+66.11

ACCESS DRIVE B SURVEY & CONSTR
 PI STA 24+42.97
 Δ 81° 36' 19" (RT)
 D 286° 28' 44"
 T 17.27'
 L 28.49'
 R 20.00'
 PC STA 24+26.71
 PT STA 24+54.19

ACCESS DRIVE B SURVEY & CONSTR
 PI STA 24+89.86
 Δ 52° 25' 53" (RT)
 D 114° 35' 30"
 T 24.62'
 L 45.76'
 R 50.00'
 PC STA 24+65.24
 PT STA 25+10.99

ACCESS DRIVE B SURVEY & CONSTR
 PI STA 23+46.81
 Δ 42° 32' 00" (LT)
 D 45° 50' 12"
 T 48.65'
 L 92.79'
 R 125.00'
 PC STA 22+98.16
 PT STA 23+90.95

ACCESS DRIVE B SURVEY & CONSTR
 PI STA 22+68.87
 Δ 14° 20' 06" (LT)
 D 28° 38' 52"
 T 25.15'
 L 50.04'
 R 200.00'
 PC STA 22+43.72
 PT STA 22+93.76

STOP WORK
 STA 24+53.91
 ACCESS DRIVE B

START WORK
 STA 20+08.13
 ACCESS DRIVE B

ACCESS DRIVE B SURVEY & CONSTR
 STA 22+27.15 =
 ACCESS DRIVE C SURVEY & CONSTR
 STA 30+00.00

ACCESS DRIVE B SURVEY & CONSTR
 STA 23+42.58 =
 ACCESS DRIVE D SURVEY & CONSTR
 STA 40+00.00

START WORK
 STA 40+08.00
 ACCESS DRIVE D

STOP WORK
 STA 40+84.77
 ACCESS DRIVE D

START WORK
 STA 30+08.17
 ACCESS DRIVE C

ACCESS DRIVE D SURVEY & CONSTR
 PI STA 41+48.99
 Δ 94° 15' 19" (LT)
 D 143° 14' 22"
 T 43.09'
 L 65.80'
 R 40.00'
 PC STA 41+05.90
 PT STA 41+71.70

ACCESS DRIVE D SURVEY & CONSTR
 PI STA 40+89.23
 Δ 39° 54' 24" (LT)
 D 114° 35' 30"
 T 18.15'
 L 34.83'
 R 50.00'
 PC STA 40+71.08
 PT STA 41+05.90

ACCESS DRIVE D SURVEY & CONSTR
 PI STA 40+16.08
 Δ 23° 58' 17" (LT)
 D 163° 42' 08"
 T 7.43'
 L 14.64'
 R 35.00'
 PC STA 40+08.65
 PT STA 40+23.30

MATCH LINE SHEET OF

PROPOSED STRUCTURE
 STA XX+XX.XX
 TYPE: X
 SPAN: XX' X"
 UNDER CLEARANCE: X' - X"
 SKEW: XX°
 ROADWAY WIDTH: XX' - X"
 STRUCTURE X-XXXX

| REFERENCE DRAWINGS | SHEET |
|--------------------------|-------|
| PROFILE - ACCESS DRIVE A | |
| PROFILE - ACCESS DRIVE B | |
| PROFILE - ACCESS DRIVE C | |
| PROFILE - ACCESS DRIVE D | |



DES: MJQ CKD: JPO DWG: SNP CKD: JPO



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

November 18, 2019

Brian Thompson, Director
Bureau of Project Delivery
Attn: Don Burden
PA Department of Transportation
PO Box 2966
Harrisburg, PA 17105

ER 2018-8122-049-B: Central Bayfront Parkway Multimodal Improvements, SR 4034, Section A01, MPMS 108952, Erie, Erie County, receipt of Above Ground Resource Effects Finding, Phase I Historic Structures Reconnaissance Survey and HRSFs

Dear Mr. Thompson,

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution, and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 *et seq.* (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources - Assessment of Eligibility

Based on the information received and available in our files, we concur with the finding of the agency that the following properties are eligible for listing in the National Register of Historic Places:

It is the opinion of the PA SHPO that the ***Erie Waterworks, Chestnut Street Pump House and Filtration Plant and Boathouse Complex Key # 110374*** retains sufficient integrity and continues to be eligible for the NRHP under Criterion A (Community Planning and Development) and Criterion C (Architecture, Engineering) with a Period of Significance of circa 1913 (date of construction) to 1969 (50 years from the present); and a NRHP boundary that encompasses the entire parcel. The historically associated State Fish Hatchery & Aquarium/Erie Water Works Administration Building does not retain sufficient integrity and is non-contributing to the district. This resource has not been evaluated for archaeological potential.

In our opinion, the boundary should include all of the land on the north and south sides of Bayfront Parkway and all of the built environment as well as "Big Bertha", the engine in the pump house.

Please note, the PHMC holds a Covenant on the Chestnut Street Waterworks Boat House. Therefore, the 1998 eligibility determination for the entire site remains the same and a boundary that encompasses the whole site is appropriate.

It is the opinion of the PA SHPO that the ***West Front Street/Dobbins Lane, Key # 087163*** retains sufficient integrity and continues to be eligible for the NRHP under Criterion A (Transportation), with a POS of 1890 (date of construction) and a boundary limited to the footprint of the blocks as well as its historic paving border.

In our opinion the resource is not significant under Criterion C.

It is the opinion of the PA SHPO that the ***Soldiers and Sailors Home, Key #079908*** retains sufficient integrity and continues to be eligible for the NRHP under Criterion A (Health Care, Politics/Government, Social History), with a POS of 1879 (date of construction of the blockhouse) to 1969 (50 years from the present). Contributing resources within the property include the Soldiers and Sailors Home, the Staff Housing, the Pennsylvania Soldiers and Sailors Cemetery/Veterans Memorial Cemetery (an integral part of the district, notable as the commonwealth's only state cemetery, with graves dating back to the Civil War era) and the General Anthony Wayne Blockhouse which is a commemorative structure that was built in 1879. We cannot comment on the potential for the former agricultural building to contribute as photographs of the building were not provided.

In our opinion the complex does not retain sufficient integrity to be eligible under Criterion C (Architecture), and the PA SHPO does not concur with the boundary proposed by the agency. The boundary should be the current tax parcel, inclusive of the buildings and cemetery and monument and circulation patterns.

This resource has not been evaluated for archaeological potential. However, we would like to note there is potential for Criterion D significance in the area of Military History as this was the site of military fortification dating back to 1795. The boundary for the above ground resource may not best reflect the location of any archaeological resources associated with the original blockhouse and defensive systems.

Our determinations of eligibility are based upon the information provided and available in our files for review. If National Register listing for this property is sought in the future, additional documentation of the property's significance and integrity may be required to both verify this determination of eligibility and satisfy the requirements of the National Park Service (36 CFR Part 60). Thus, the outcome of the National Register listing process cannot be assured by this determination of eligibility.

Finally, we would like to note that we found the documentation to be well researched and well written.

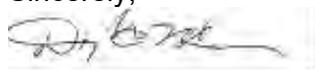
Above Ground Resources - Assessment of Effect

Please provide more information regarding the relaying of track and the re-installation of the bridge that was removed in the 1980s within the existing CSX right of way at the Soldiers and Sailors Home.

- Will installation of the bridge reduce accessibility to the cemetery?
- Will the bridge be designed in a manner that is context sensitive?
- Is the bridge to serve roadway, railway or pedestrian traffic?

If you need further information on above ground resources, please consult Cheryl Nagle at chnagle@pa.gov or (717) 772-4519.

Sincerely,



Douglas C. McLearn, Chief
Division Environmental Review

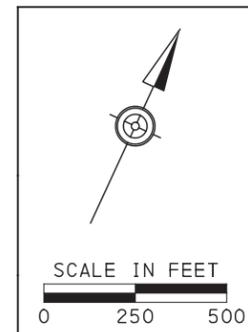
Section 4(f) Non-Applicability/No Use

May 2014 Version

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR 4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

Project Plan Sheet

See Attached Project Plans



Bayfront Parkway Improvements
 PennDOT District 1-0
 April 2020

CONNECTING ERIE'S WATERFRONT

OVERALL CORRIDOR IMPROVEMENTS INDEX




Bayfront Convention Center

Erie Water Works

Sassafras St Ext

Sassafras Pier

Front St

PRELIMINARY FRONT STREET ALIGNMENT BY OTHERS

Bayfront Parkway

Sassafras St

1. Erie Waterworks, Chestnut Street Pump House

W Front St

Myrtle St

Sassafras St

Short St

LEGEND

- PROPOSED ROADWAY PAVING
- PROPOSED ROADWAY SHOULDER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE CURB GUTTER / ISLAND
- PROPOSED CONCRETE BARRIER / RETAINING WALL
- PROPOSED TRUCK APRON
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- PROPOSED PEDESTRIAN BRIDGE
- EXISTING SIDEWALK & BICYCLE PATH



SCALE IN FEET
0 50 100

Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

SASSAFRAS STREET IMPROVEMENTS



Presque Isle Yacht Club

Wolverine Park Marina

Erie Maritime Museum

Harbor View Miniature Golf

Harbor Place Development

PRELIMINARY FRONT STREET ALIGNMENT BY OTHERS

Grade Separated Intersection (Bayfront Parkway Through Traffic Passes Below State Street)

2. Dobbins Lane

UPMC Hamot

100 Peach Street

100 State Street

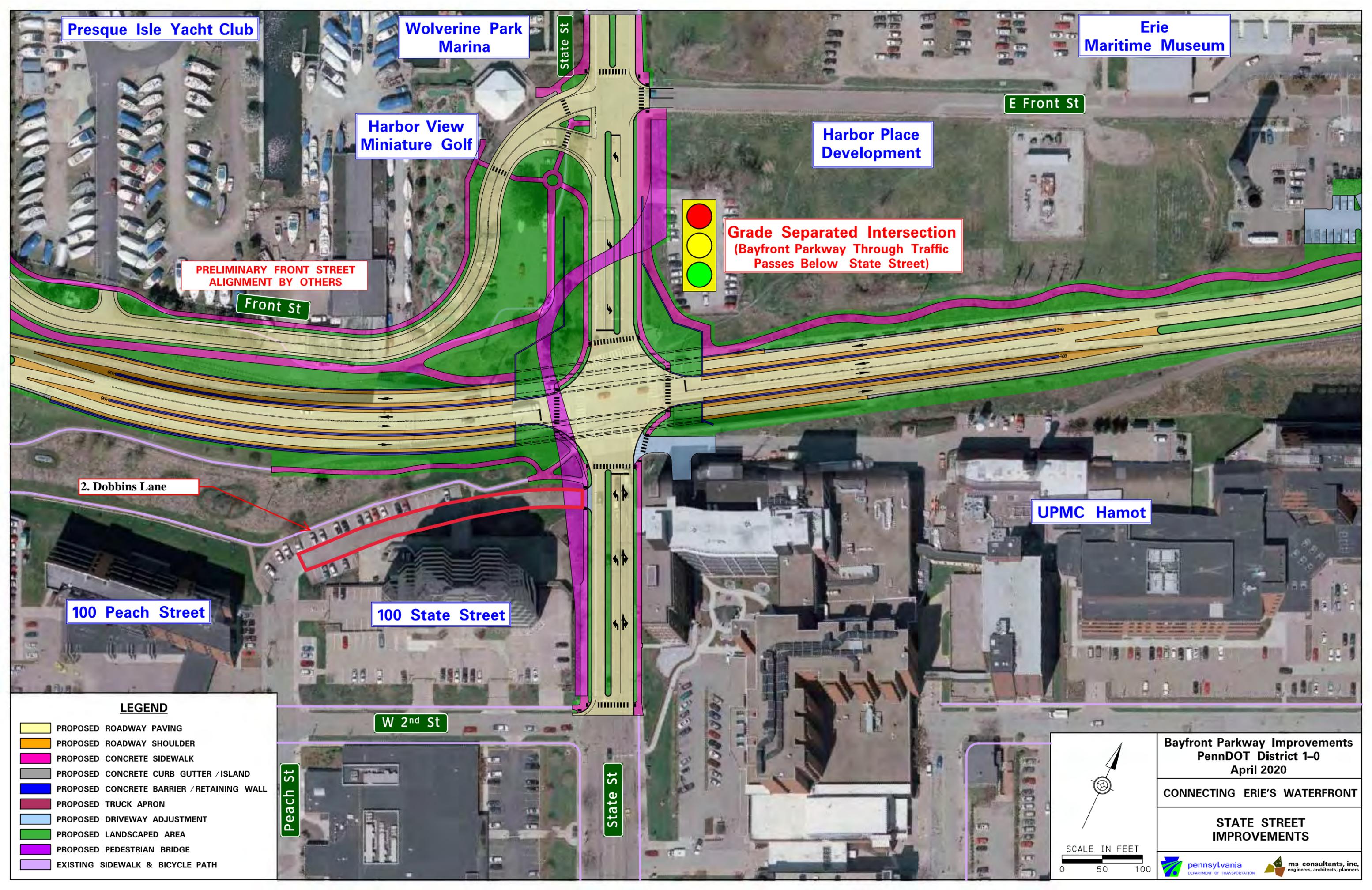
LEGEND

- PROPOSED ROADWAY PAVING
- PROPOSED ROADWAY SHOULDER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE CURB GUTTER / ISLAND
- PROPOSED CONCRETE BARRIER / RETAINING WALL
- PROPOSED TRUCK APRON
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- PROPOSED PEDESTRIAN BRIDGE
- EXISTING SIDEWALK & BICYCLE PATH

Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

STATE STREET IMPROVEMENTS



Raymond M Blasco, MD
Memorial Library

Erie Intermodal
Transportation Center

Donjon
Shipbuilding And Repair

DaVita
Erie Dialysis

Greyhound
Bus Station

E Front St

Holland St

Bayfront Parkway

CSX Railroad Improvements

E Front St

UPMC Hamot

Holland St

E 2nd St

LEGEND

- PROPOSED ROADWAY PAVING
- PROPOSED ROADWAY SHOULDER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE CURB GUTTER / ISLAND
- PROPOSED CONCRETE BARRIER / RETAINING WALL
- PROPOSED TRUCK APRON
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- PROPOSED PEDESTRIAN BRIDGE
- EXISTING SIDEWALK & BICYCLE PATH



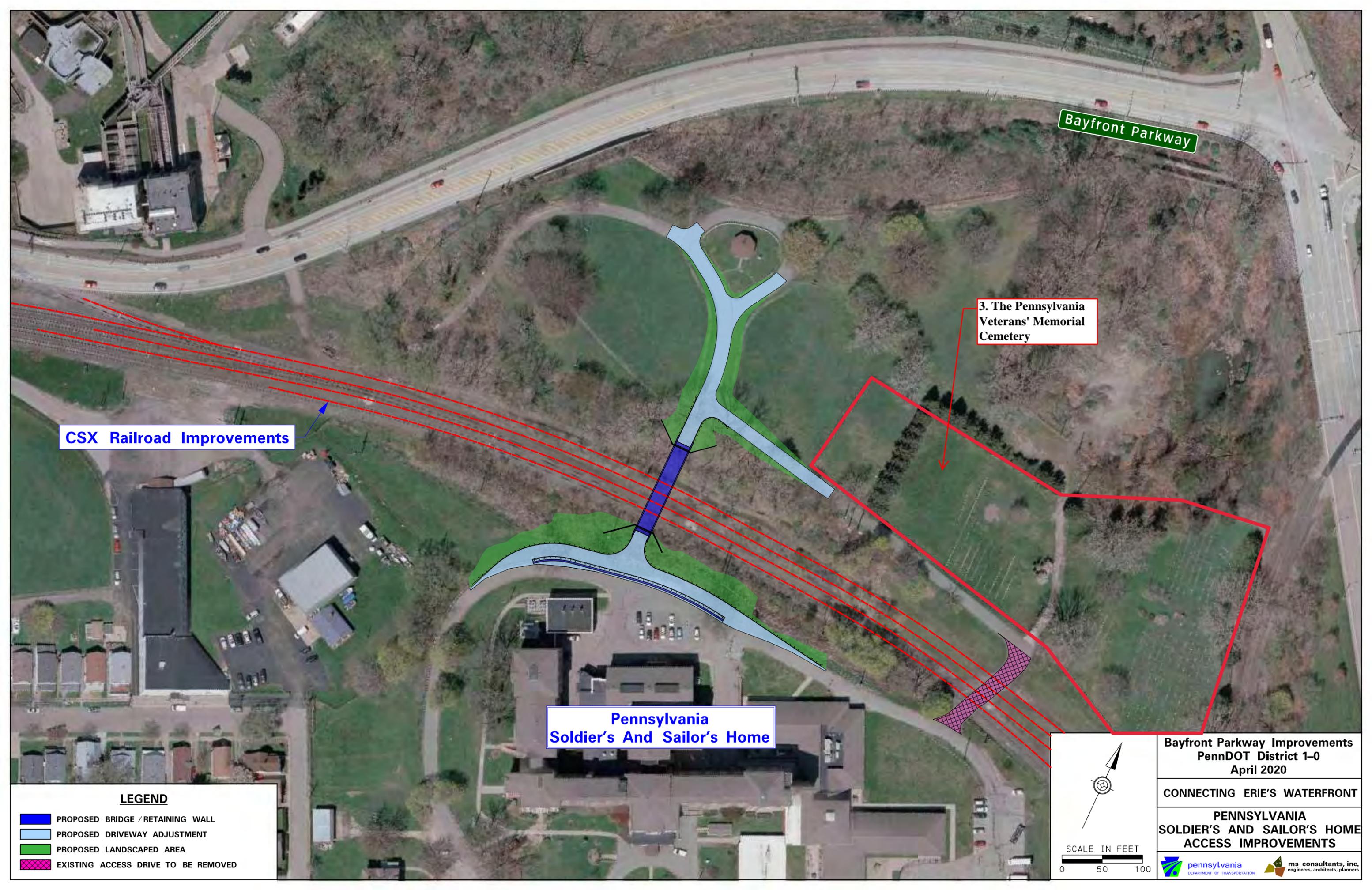
SCALE IN FEET
0 50 100

Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

**HOLLAND STREET
IMPROVEMENTS**





Bayfront Parkway

3. The Pennsylvania Veterans' Memorial Cemetery

CSX Railroad Improvements

Pennsylvania Soldier's And Sailor's Home

LEGEND

- PROPOSED BRIDGE / RETAINING WALL
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- EXISTING ACCESS DRIVE TO BE REMOVED



SCALE IN FEET
0 50 100

Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

**PENNSYLVANIA
SOLDIER'S AND SAILOR'S HOME
ACCESS IMPROVEMENTS**



Section 4(f) Non-Applicability/No Use

May 2014 Version

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR 4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

Public Involvement Information

Summary of Public Outreach Efforts

Extensive public outreach has been conducted as part of the Bayfront Parkway Study and during the alternatives analysis of the Bayfront Parkway Central Corridor Improvement project. Outreach efforts consisted of:

- Over 60 Stakeholder Meetings
- Online Survey (completed by nearly 500 participants)
- 10 Project Advisory Committee (PAC) Meetings
- 11 Coordinating Committee (CC) Meetings
- 3 Technical Advisory Committee (TAC) Meetings
- 3 Public Meetings (including two 8-hour open house displays)
- Project Website (www.BayfrontParkwayProject.com)
- Facebook Group Page (<https://www.facebook.com/groups/BayfrontParkwayProject/>)

The PAC consists of 80+ individuals and includes project stakeholders, community advocacy groups, public organizations and local officials who are intended to represent a variety of interests, their constituents, and the general public. The CC and TAC are subsets of the PAC and were formed to have more intimate discussions of specific project details and design elements.

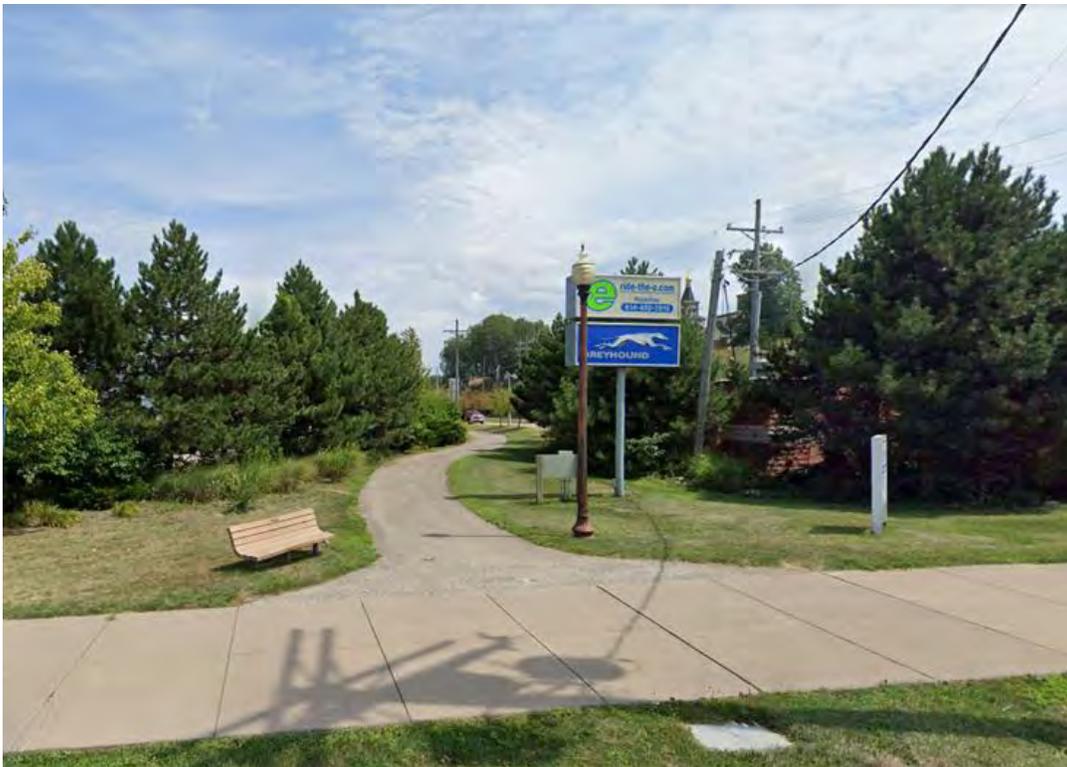
Section 4(f) Coordination with Property Owners and Stakeholders

Section 4(f) property owners have been involved in various stakeholder meetings and invited to all public meetings to review the project design and express their concerns and/or desires. Section 4(f) property owners and stakeholders were solicited for any concerns or input related to the proposed improvements. To date, no concerns have been voiced or identified relative to Section 4(f) resources. Section 4(f) owners and stakeholders will continue to be involved in the project development as the design advances.

BAYFRONT PARKWAY CENTRAL CORRIDOR IMPROVEMENTS

Section 4(f) Temporary Occupancy Great Lakes Sea Way Trail & Bayfront Promenade Trail

SR 4034 A01
City of Erie
Erie County, Pennsylvania



PREPARED FOR



April 2020

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

SELECT ONE: EIS EA CE EER ED

PROJECT DESCRIPTION:

(Provide a concise but thorough description of the proposed action.)

The Bayfront Parkway Central Corridor Improvement Project is located in the City of Erie, Erie County Pennsylvania. The City of Erie is experiencing a resurgence of both private–and public–sector development and investment in its downtown and on the waterfront. In the heart of these developments lies the Bayfront Parkway (SR 4034), which has served the community since the early 1990s. The parkway serves as an east-west connection, but with development, the need for north-south connections is growing. Planning studies have noted this need for greater connectivity between the waterfront and Erie’s downtown and residential neighborhoods. In collaboration with local project stakeholders and the community, the Bayfront Parkway Central Corridor Improvements will enhance these connections and provide the infrastructure needed to support the growth of the region.

The proposed project consists of reconfiguring three major intersections, completing a multiuse trail network, and constructing three pedestrian bridges for each intersection. The three intersections are:

- Bayfront Parkway (SR 4034-A01) at Sassafras Street Extension
- Bayfront Parkway (SR 4034-A01) at State Street
- Bayfront Parkway (SR 4034-A01) at Holland Street

The Bayfront Parkway at Sassafras Street Extension intersection will be upgraded to a dual lane three-leg roundabout. New sidewalks, crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

The Bayfront Parkway at State Street intersection will be upgraded to a grade-separated signalized intersection with a new structure to carry State Street over the Bayfront Parkway with interior ramps along the Bayfront Parkway to provide full access to and from State Street. Bayfront Parkway through traffic on the outside lanes pass beneath State Street. New sidewalks, crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

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|----------------------|--|---------------------|--------------|-----------------|--------|
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The Bayfront Parkway at Holland Street intersection will be upgraded to a dual lane four-leg roundabout. Sidewalks, crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

The existing Bayfront Bikeway offers a paved multiuse route across the city of Erie for pedestrians and bicyclists. However, the Bayfront Parkway currently acts as a barrier for pedestrians and bicyclists between the City of Erie to the south and the waterfront area to the north. There are also missing links of the Bayfront Bikeway in the project area. A multiuse trail connecting all three intersections on the north side of Bayfront Parkway will be completed to enhance bicycle and pedestrian access within the project area.

In order to accommodate the Central Corridor Improvements, the existing railroad track located between Sassafra Street Extension and Holland Street will be removed. CSX Transportation currently owns and operates the existing track, which served the heavy industrial facilities previously located on the waterfront. Since the waterfront no longer supports heavy industrial uses, the need for rail has diminished. However, CSX does currently utilize the track for switching operations and as storage for rail cars. In order to maintain their operations, CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. For safety and operational concerns, this crossing will be eliminated and a multi-modal bridge over the proposed CSX tracks will be constructed, located west of the existing crossing. These activities will be constructed separate from the Central Corridor Improvement Project.

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| County: | Erie | State Route: | SR4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

IDENTIFICATION OF SECTION 4(f) PROPERTY:

(List the property and provide a description of the property as per Chapter 6 of the *Section 4(f)/Section 2002 Handbook*. Attach a map, photo(s), etc. as appropriate.)

Great Lakes Sea Way Trail

Great Lakes Sea Way Trail is a 518-mile-long trail with 48.55 miles contained within Pennsylvania. The Great Lakes Seaway Trail is a National Scenic Byway, also known as U.S. Bicycle Route (USBR) 30. USBR 30 extends along the shore of Lake Erie, from Ohio to New York. Within Pennsylvania USBR 30 is locally known as Bicycle PA Route Z. Cyclists utilizing USBR 30 enjoy sandy beaches, historic lighthouses, ecological diversity, as well as Presque Isle State Park ranked the #1 Freshwater Beach in North America.

Within the project area the Great Lakes Sea Way Trail provides Lake Erie Coastal views and connectivity to the Erie Bayfront. Within the Erie Bayfront project, the Trail runs parallel and adjacent to the Bayfront Parkway on the north side. The trail is not part of the street system, except for a portion of Front Street (See **Figure 1 Section 4(f) Location Map**).

Within the project area the Great Lakes Sea Way Trail is maintained by Erie-Western PA Port Authority.

The purpose of The Great Lakes Sea Way is to provide a multi-use path for passive recreation/cycling, taking advantage of good views and points of historical and natural history. It also provides recreation for neighborhood residents, the local workforce, and visitors to the area. The Great Lakes Sea Way Trail provides a link to other waterfront facilities and the State Street corridor.

The trail use is mainly walking, running, biking, but it is also used for leashed dog walks.

| | | | | | |
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| County: | Erie | State Route: | SR4034 | Section: | A01 |
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The Bayfront Promenade Trail

The Bayfront Promenade is located on the bluffs that overlook the Bayfront and Lake Erie. Within the project limits, the trail runs parallel south of the Bayfront Parkway. The Bayfront Promenade starts near State Street and ends a block past Bayview Park located in Erie, Pennsylvania (See **Figure 1 Section 4(f) Location Map**).

The Property is owned and maintained by Erie-Western PA Port Authority.

The purpose of The Bayfront Promenade is to provide a multi-use path for passive recreation/cycling, taking advantage of good views and points of historical and natural history. It also provides recreation for neighborhood residents, the local workforce, and visitors to the area. The Bayfront Promenade Trail provides a link to other waterfront facilities and the State Street corridor.

The trail use is mainly walking, running, biking, but it is also used for leashed dog walks.

BRIEF DESCRIPTION OF THE TEMPORARY USE:

(Describe the temporary occupancy including size, location, activity, duration, etc. including temporary construction easements (TCEs) as per Chapter 6 of the *Section 4(f)/Section 2002 Handbook*.)

Great Lakes Sea Way Trail

Proposed Action: The Great Lakes Sea Way Trail will be affected at three locations 1. Sassafras Street Extension, 2. a new portion of trail, 3. Holland Street.

1. The proposed project will involve relocating 1181 linear feet of the Great Lakes Sea Way Trail to create a safer roadway crossing at Sassafras Street Extension. This will add (113) linear feet to the Great Lakes Sea Way Trail. (See **Figure 2 Section 4(f) Temporary Use Map**)
2. The proposed project will construct a new portion of trail from State Street to Holland street. Trail users currently use Front Street, the new trail will provide a safer alternative away from the roadway and traffic. Construction of the new trail will add (1265) linear feet to the Great Lakes Sea Way Trail. (See **Figure 2 Section 4(f) Temporary Use Map**)

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|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

- The proposed project will involve relocating 428 linear feet of the Great Lakes Sea Way Trail to create a safer roadway crossing at Holland Street. This will add (22) linear feet added to the Great Lakes Sea Way Trail. (See **Figure 2 Section 4(f) Temporary Use Map**)

The duration of temporary use on the Great Lakes Sea Way Trail will last less than the construction period for The Bayfront Parkway Central Corridor Improvement Project.

The scope of the work is minor, both the nature and the magnitude of the changes to the Great Lakes Sea Way Trail are minimal. There is no permanent, adverse physical impacts anticipated to the Great Lakes Sea Way Trail. The project will not interfere with protected activities, features, or attributes of the property on either a temporary or permanent basis. Trail access and use will be maintained through staged construction. Trail relocations result in enhanced user safety. Proposed work will not result in change in the ownership of the land.

The Great Lakes Sea Way Trail will be fully restored to a condition better than that which it existed prior to the project. Trail upgrades were designed to enhance user safety; a new portion of trail will provide a standalone trail away from Front Street traffic, additional enhancements were designed to introduce safe roadway crossings. (See **Project Plan Sheet**)

Bayfront Promenade Trail

Proposed Action:

The proposed project will involve relocating 340 linear feet of the Bayfront Promenade Trail to create a safer roadway crossing at State Street. This will add (2) linear feet added to the Bayfront Promenade Trail. (See **Figure 2 Section 4(f) Temporary Use Map**)

The scope of the work is minor, both the nature and the magnitude of the changes to the Bayfront Promenade Trail are minimal. There is no permanent, adverse physical impacts anticipated to the Bayfront Promenade Trail. The project will not interfere with protected activities, features, or attributes of the property on either a temporary or permanent basis. Trail access and use will be maintained through staged construction. Trail relocations result in a enhanced user safety. Proposed work will not result in change in the ownership of the land.

The Bayfront Promenade Trail will be fully restored to a condition better than that which it existed prior to the project. Trail upgrades were designed to enhance user safety incorporating a safe roadway crossing. (See **Project Plan Sheet**)

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|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

OFFICIAL WITH JURISDICTION OVER SECTION 4(f) PROPERTY:

(Note: historic sites fall to the jurisdiction of PHMC, BHP)

1. Identify agency with jurisdiction:
 1. Great Lakes Sea Way Trail (Erie-Western PA Port Authority)
 2. Bayfront Promenade Trail (Erie-Western PA Port Authority)

2. Name and title of contact person at agency:
 1. Great Lakes Sea Way Trail (Brenda A. Sandberg)
 2. Bayfront Promenade Trail (Brenda A. Sandberg)

Executive Director / Erie-Western PA Port Authority

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

APPLICABILITY DETERMINATION:

1. Based on adequate documentation, including mapping, verify that all of the following are true. **(If any of the items below are not true, the project would result in an actual use, and this form cannot be used.):**

- The project involves no permanent right-of-way acquisition or other change in ownership or result in the retention of long-term or indefinite interests in the land for transportation purposes.
- Be of temporary duration; i.e. less than the time needed for construction of the project.
- Not result in any permanent adverse physical impacts or interfere with the protected activities, features, or attributes which are important to the purposes or functions that qualify the property for protection under Section 4(f) on a temporary or permanent basis.
- Be minor in that the nature and magnitude of the changes to the Section 4(f) property will be minimal.
- Be fully restored to a condition at least as good as that which existed prior to the project.

2. The official with jurisdiction over the Section 4(f) property agrees that the temporary occupancy would meet all of the above criteria.

(Either by signature of this checklist or agreement documentation in the following Attachment: Enter Attachment number and description.)

3. Does the temporary occupancy involve a water trail designated by the PA Fish and Boat Commission, a federal wild and scenic river that qualifies as a Section 4(f) property, and/or a national recreational trail that is a water trail? YES NO

If Yes, will a temporary causeway be constructed, and/or will the path of the water trail be affected (temporarily closed, altered, etc.)? YES NO

If Yes, has coordination with the official with jurisdiction been conducted regarding the need for an Aid to Navigation (ATON) Plan? YES NO

Explain. Appropriate correspondence and an ATON (if one is needed) is included in the following Attachment: Enter Attachment number and description.

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
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4. The project does not involve any uses that would require an individual Section 4(f) evaluation. (It is acceptable if there are other Section 4(f) uses that are *de minimis* or covered by one of the nationwide programmatic Section 4(f) evaluations.) YES

If there are other Section 4(f) properties used, list them here, briefly describe the use, and identify which form(s) will be completed to address the use:

Section 4(f) Non-Applicability/No Use action: Erie Waterworks, Chestnut Street Pump House (PHMC official with jurisdiction)

Proposed Action: Roadway and sidewalk reconstruction on the Bayfront Parkway adjacent to the Erie Waterworks, Chestnut Street Pump House property. No proposed work will be completed within the Section 4(f) property. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. This work will result in a Section 4(f) Non-Applicability/No Use action.

Section 4(f) Non-Applicability/No Use action: Dobbins Lane (PHMC official with jurisdiction)

Proposed Action: Roadway and sidewalk reconstruction on state street adjacent to Dobbins Lane. No proposed work will be completed within the Section 4(f) property specifically; the roadway blocks that constitute the historic resource will not be disturbed. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. This work will result in a Section 4(f) Non-Applicability/No Use action.

Section 4(f) Non-Applicability/No Use action: The Pennsylvania Veterans’ Memorial Cemetery (PHMC official with jurisdiction)

Proposed Action: CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers’ and Sailors’ Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers’ and Sailors’ Home and the Veterans Memorial Cemetery. For safety and operational concerns, this crossing will be eliminated and a multi-modal bridge over the proposed CSX tracks will be constructed, located west of the existing crossing. Railroad work results in re-installation of tracks that were previously in use during the 1970’s. This work will result in a Section 4(f) Non-Applicability/No Use action; the proposed work will have no impact or temporary occupancy associated with The Pennsylvania Veterans ‘Memorial Cemetery.

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Section 4(f) Section 4f Temporary Occupancy: Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse (PHMC official with jurisdiction)

Proposed Action: CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. For safety and operational concerns, this crossing will be eliminated and a multi-modal bridge over the proposed CSX tracks will be constructed, located west of the existing crossing. Railroad work results in re-installation of tracks that were previously in use during the 1970's. This work will result in a Section 4(f) Section 4f Temporary Occupancy. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact section 4(f) features.

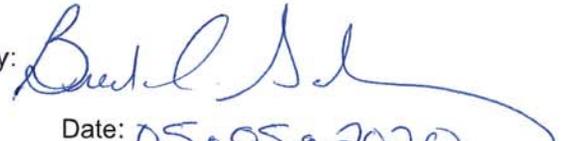
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|----------------------|---|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR4034 | Section: | A01 |
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SUMMARY AND DETERMINATION:

PennDOT will provide a copy of this evaluation to the official with jurisdiction over the Section 4(f) property and to other parties, as requested, and maintain this documentation with the project files.

The temporary occupancy of Section 4(f) property does not constitute a use within the meaning of Section 4(f).

Concurrence by official with jurisdiction over the Section 4(f) property:



Date: 05.05.2020

Official with Jurisdiction: Brenda A. Sandberg
Erie-Western PA Port Authority

(Optional: other documentation such as attached letters or meeting minutes may be used in replacement of signing this page¹) Check here if other documentation is attached.

Name and Organization of Preparer: Mark Fedosick ms consultants, inc. Date: 4/17/2020

Project Manager: /s/ Thomas J. McClelland, PennDOT Date: 5/6/2020

Environmental Manager: Autumn Kelley Digitally signed by Autumn Kelley Date: 2020.05.06 11:34:12 -04'00' Date:

PennDOT, BOPD: Raymond DeArmitt Digitally signed by Raymond DeArmitt Date: 2020.05.07 09:56:20 -04'00' Date:

FHWA: Date:

¹Documentation of the SHPO's (PHMC's) concurrence is acceptable with the no effect or no adverse effect finding as long as the temporary occupancy was described in the effects submission. **If the temporary occupancy was not specified, then separate SHPO written agreement is required.**

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List Section 4(f) mitigation measures associated with this temporary occupancy that are part of this project:

Great Lakes Sea Way Trail & Bayfront Promenade Trail Mitigation Measures

Trail access and use will be maintained through staged construction, speed limit signs, stop signs, and flagging, as necessary for trail users. Signage will be incorporated to ensure that users are notified of upcoming construction. Fencing will be placed to protect section 4(f) resource and users from adjacent construction activities. If necessary temporary detours will be utilized to ensure trail access, use and mobility remain operational for trail users. The contractor will be required to install protective shielding near the trails during construction in order to prevent materials and other debris from falling within the limits of the trail.

The project is designed to minimize any tree clearing and shrub removal to the greatest extent practical. All earth disturbance will be revegetated to ensure no negative changes to the viewshed.

Construction related mitigation: Fencing will be placed to protect the trail and users from adjacent construction activities. Clearly delineate any construction areas adjacent to the Section 4(f) Resources to ensure that only planned construction activities occur. Coordination with the Western Pennsylvania Port Authority will be continuous throughout the project duration. The duration of temporary use on the Great Lakes Sea Way Trail and Bayfront Promenade Trails will last less than the construction period for The Bayfront Parkway Central Corridor Improvement Project. An erosion and sediment pollution control plan will be implemented to control and maintain earth work activities. The Great Lakes Sea Way Trail and Bayfront Promenade Trail will be fully restored after construction.

Typical attachments for this form include, but are not limited to:

- Project location map
- Map of affected Section 4(f) property and other Section 4(f) property(ies) in the project vicinity
- Photographs of the Section 4(f) property
- Project plan sheet to show impacts
- Correspondence with the official with jurisdiction
- ATON plan, if applicable

Determination of Section 4(f) Applicability
Involving Temporary Occupancy
May 2014 Version

| | | | | | |
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Project Location Map

See Attached Figures



Figure 1: General location map.



Figure 2: Project location.

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|----------------------|--|---------------------|--------------|-----------------|--------|
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Map of affected Section 4(f) Property and other Section 4(f) property(ies) in the project vicinity
See Attached Figured Figures

Bayfront Parkway Central Corridor Improvements Project

PennDOT District 1-0



- Relocated Trail
- Great Lakes Seaway Trail
- Bayfront Promenade Trail
- Project Study Area



Figure 01
Section 4(f) Location Map

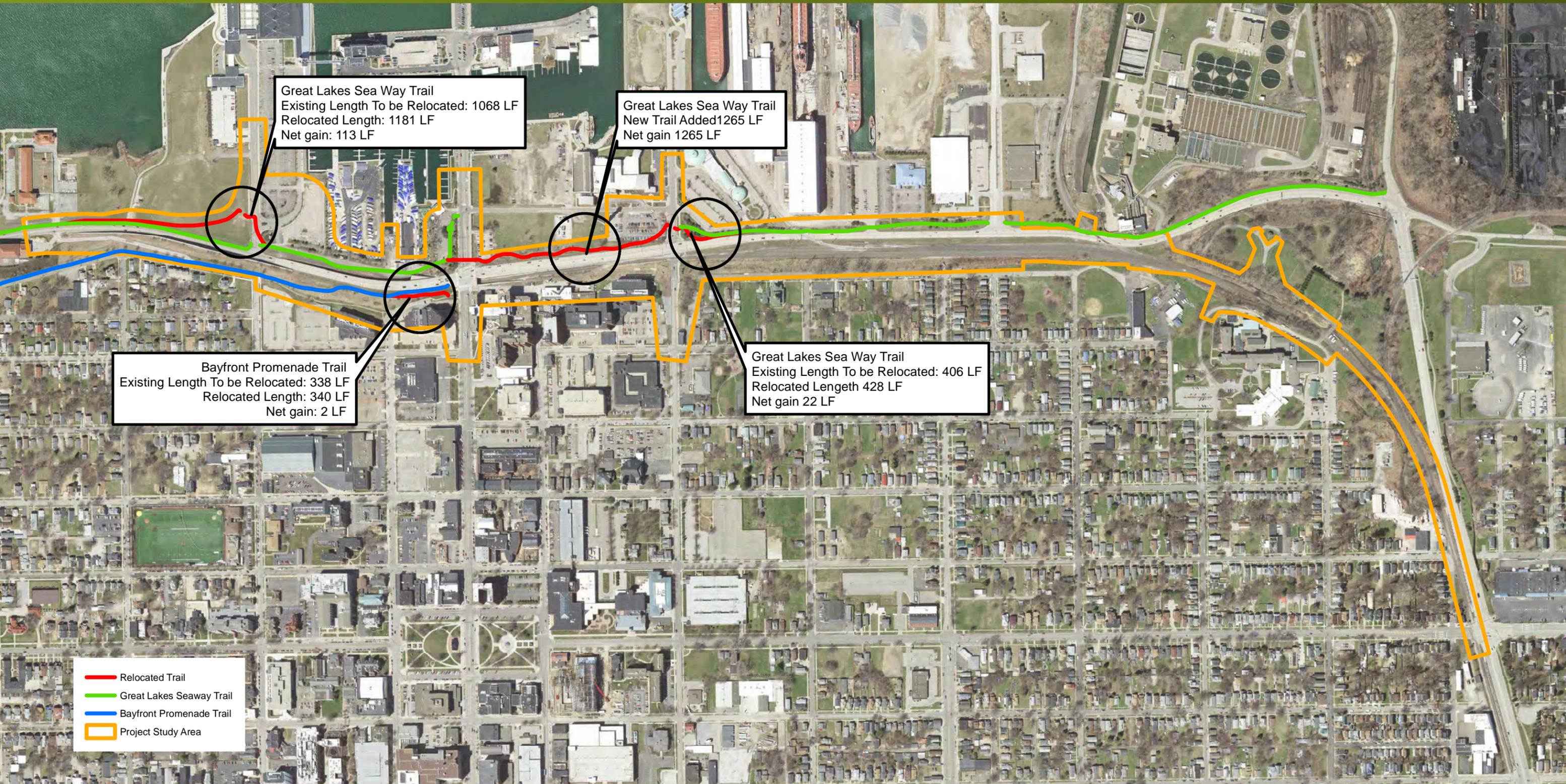


Figure 02
Section 4(f) Temporary Use Map

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
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Photographs of the Section 4(f) Property

See Attached Photographs



Photo 1: Great Lakes Sea Way Trail looking east near Sassafra Street



Photo 2: Great Lakes Sea Way Trail looking west near Sassafra Street



Photo 3: Great Lakes Sea Way Trail looking east near Holland Street



Photo 4: Great Lakes Sea Way Trail looking north near State Street



Photo 5: of Bayfront Promenade Trail looking east from Sassafras Street.

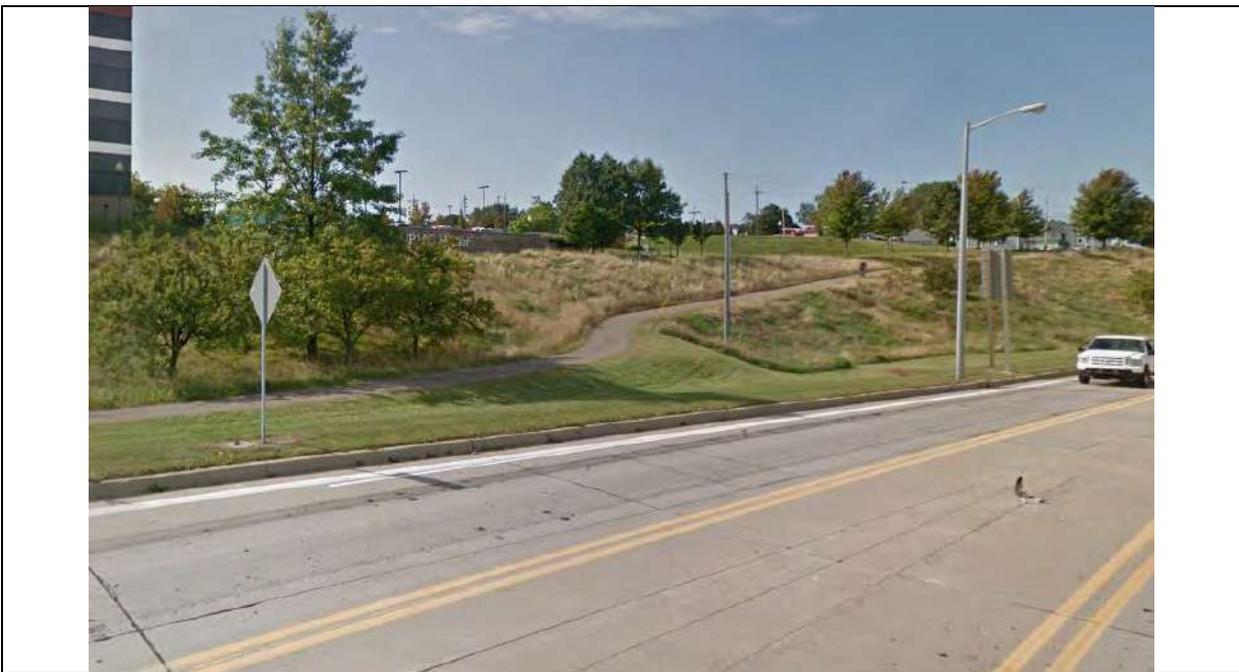


Photo 6: : of Bayfront Promenade Trail looking west from Bayfront Parkway.



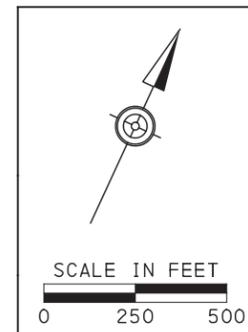
Photo 7: of Bayfront Promenade Trail looking west from State Street intersection.

Determination of Section 4(f) Applicability
Involving Temporary Occupancy
May 2014 Version

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Project Plan Sheet

See Attached Project Plans



Bayfront Parkway Improvements
 PennDOT District 1-0
 April 2020

CONNECTING ERIE'S WATERFRONT

OVERALL CORRIDOR IMPROVEMENTS INDEX




Bayfront Convention Center

Erie Water Works

Great Lakes Sea Way Trail
(proposed relocation)

Bayfront Parkway

Sassafras St Ext

Sassafras Pier

Front St

PRELIMINARY FRONT STREET
ALIGNMENT BY OTHERS

Great Lakes Sea Way Trail
(portion of proposed work to be
completed by Port Authority
prior to construction of Bayfront
Parkway Improvements)

1. Erie Waterworks,
Chestnut Street
Pump House

Sassafras St

W Front St

Myrtle St

Bayfront Promenade Trail

Sassafras St

Short St

LEGEND

- PROPOSED ROADWAY PAVING
- PROPOSED ROADWAY SHOULDER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE CURB /GUTTER / ISLAND
- PROPOSED CONCRETE BARRIER /RETAINING WALL
- PROPOSED TRUCK APRON
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- PROPOSED PEDESTRIAN BRIDGE
- EXISTING SIDEWALK & BICYCLE PATH



SCALE IN FEET
0 50 100

Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

SASSAFRAS STREET
IMPROVEMENTS



Presque Isle Yacht Club

Wolverine Park Marina

Erie Maritime Museum

Harbor View Miniature Golf

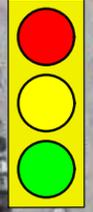
Harbor Place Development

Great Lakes Sea Way Trail
(portion of proposed work to be completed by Port Authority prior to construction of Bayfront Parkway Improvements)

Great Lakes Sea Way Trail
(New portion of trail to be added)

PRELIMINARY FRONT STREET ALIGNMENT BY OTHERS

Grade Separated Intersection
(Bayfront Parkway Through Traffic Passes Below State Street)



Bayfront Promenade Trail
(proposed relocation)

UPMC Hamot

100 Peach Street

100 State Street

2. Dobbins Lane

LEGEND

- PROPOSED ROADWAY PAVING
- PROPOSED ROADWAY SHOULDER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE CURB GUTTER / ISLAND
- PROPOSED CONCRETE BARRIER / RETAINING WALL
- PROPOSED TRUCK APRON
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- PROPOSED PEDESTRIAN BRIDGE
- EXISTING SIDEWALK & BICYCLE PATH

Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

STATE STREET IMPROVEMENTS

Raymond M Blasco, MD
Memorial Library

Erie Intermodal
Transportation Center

Donjon
Shipbuilding And Repair

DaVita
Erie Dialysis

Greyhound
Bus Station

Great Lakes Sea Way Trail
(proposed relocation)

E Front St

Holland St

Bayfront Parkway

CSX Railroad Improvements

E Front St

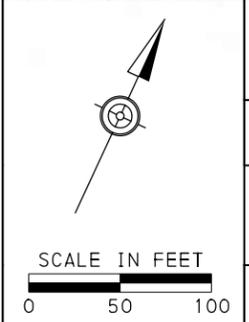
UPMC Hamot

Holland St

E 2nd St

LEGEND

| | |
|---|--|
|  | PROPOSED ROADWAY PAVING |
|  | PROPOSED ROADWAY SHOULDER |
|  | PROPOSED CONCRETE SIDEWALK |
|  | PROPOSED CONCRETE CURB GUTTER / ISLAND |
|  | PROPOSED CONCRETE BARRIER / RETAINING WALL |
|  | PROPOSED TRUCK APRON |
|  | PROPOSED DRIVEWAY ADJUSTMENT |
|  | PROPOSED LANDSCAPED AREA |
|  | PROPOSED PEDESTRIAN BRIDGE |
|  | EXISTING SIDEWALK & BICYCLE PATH |

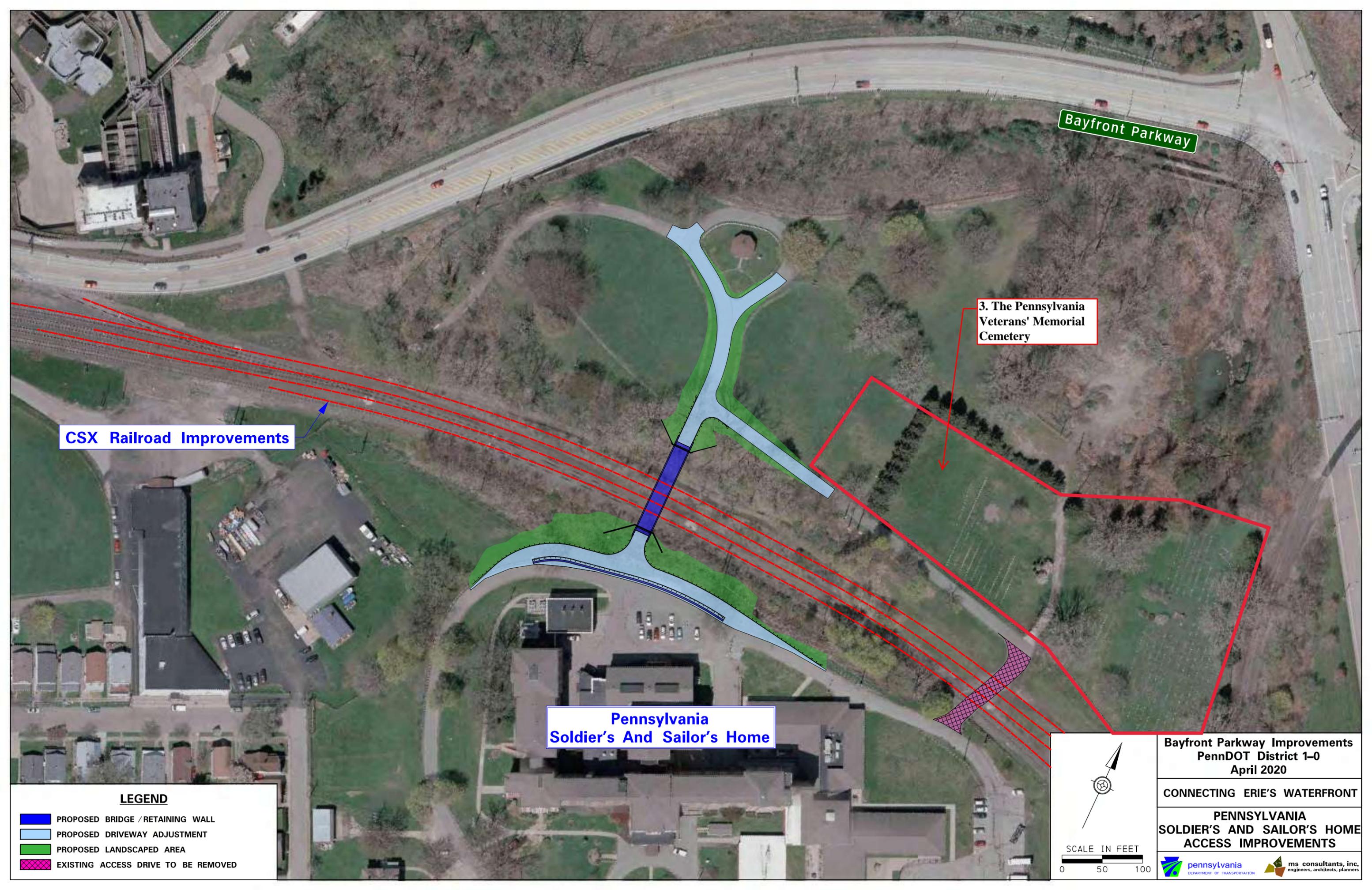


Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

HOLLAND STREET IMPROVEMENTS



Bayfront Parkway

3. The Pennsylvania Veterans' Memorial Cemetery

CSX Railroad Improvements

Pennsylvania Soldier's And Sailor's Home

LEGEND

- PROPOSED BRIDGE / RETAINING WALL
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- EXISTING ACCESS DRIVE TO BE REMOVED



SCALE IN FEET
0 50 100

Bayfront Parkway Improvements
PennDOT District 1-0
April 2020

CONNECTING ERIE'S WATERFRONT

PENNSYLVANIA
SOLDIER'S AND SAILOR'S HOME
ACCESS IMPROVEMENTS



Determination of Section 4(f) Applicability
Involving Temporary Occupancy
May 2014 Version

| | | | | | |
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Correspondence with the Official with Jurisdiction

See Attached Correspondence

| | | | | | |
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Public Involvement Information

Summary of Public Outreach Efforts

Extensive public outreach has been conducted as part of the Bayfront Parkway Study and during the alternatives analysis of the Bayfront Parkway Central Corridor Improvement project. Outreach efforts consisted of:

- Over 60 Stakeholder Meetings
- Online Survey (completed by nearly 500 participants)
- 10 Project Advisory Committee (PAC) Meetings
- 11 Coordinating Committee (CC) Meetings
- 3 Technical Advisory Committee (TAC) Meetings
- 3 Public Meetings (including two 8-hour open house displays)
- Project Website (www.BayfrontParkwayProject.com)
- Facebook Group Page (<https://www.facebook.com/groups/BayfrontParkwayProject/>)

The PAC consists of 80+ individuals and includes project stakeholders, community advocacy groups, public organizations and local officials who are intended to represent a variety of interests, their constituents, and the general public. The CC and TAC are subsets of the PAC and were formed to have more intimate discussions of specific project details and design elements.

Section 4(f) Coordination with Property Owners and Stakeholders

Section 4(f) property owners have been involved in various stakeholder meetings and invited to all public meetings to review the project design and express their concerns and/or desires. Section 4(f) property owners and stakeholders were solicited for any concerns or input related to the proposed improvements. To date, no concerns have been voiced or identified relative to Section 4(f) resources. Section 4(f) owners and stakeholders will continue to be involved in the project development as the design advances.

The project design efforts have been coordinated with Erie-Western PA Port Authority, specifically with Brenda A. Sandberg (Executive Director), and no concerns have been expressed related to the proposed work associated with the section 4(f) resources.

BAYFRONT PARKWAY CENTRAL CORRIDOR IMPROVEMENTS

Section 4(f) Temporary Occupancy

Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse

SR 4034 A01

City of Erie

Erie County, Pennsylvania



PREPARED FOR



April 2020

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

SELECT ONE: EIS EA CE EER ED

PROJECT DESCRIPTION:

(Provide a concise but thorough description of the proposed action.)

The Bayfront Parkway Central Corridor Improvement Project is located in the City of Erie, Erie County Pennsylvania. The City of Erie is experiencing a resurgence of both private–and public–sector development and investment in its downtown and on the waterfront. In the heart of these developments lies the Bayfront Parkway (SR 4034), which has served the community since the early 1990s. The parkway serves as an east-west connection, but with development, the need for north-south connections is growing. Planning studies have noted this need for greater connectivity between the waterfront and Erie’s downtown and residential neighborhoods. In collaboration with local project stakeholders and the community, the Bayfront Parkway Central Corridor Improvements will enhance these connections and provide the infrastructure needed to support the growth of the region.

The proposed project consists of reconfiguring three major intersections, completing a multiuse trail network, and constructing three pedestrian bridges for each intersection. The three intersections are:

- Bayfront Parkway (SR 4034-A01) at Sassafras Street Extension
- Bayfront Parkway (SR 4034-A01) at State Street
- Bayfront Parkway (SR 4034-A01) at Holland Street

The Bayfront Parkway at Sassafras Street Extension intersection will be upgraded to a dual lane three-leg roundabout. New sidewalks, crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

The Bayfront Parkway at State Street intersection will be upgraded to a grade-separated signalized intersection with a new structure to carry State Street over the Bayfront Parkway with interior ramps along the Bayfront Parkway to provide full access to and from State Street. Bayfront Parkway through traffic on the outside lanes pass beneath State Street. New sidewalks, crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

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The Bayfront Parkway at Holland Street intersection will be upgraded to a dual lane four-leg roundabout. Sidewalks, crosswalks and an elevated pedestrian bridge will be added across the Bayfront Parkway to connect the residential neighborhood and Downtown Erie to the waterfront.

The existing Bayfront Bikeway offers a paved multiuse route across the city of Erie for pedestrians and bicyclists. However, the Bayfront Parkway currently acts as a barrier for pedestrians and bicyclists between the City of Erie to the south and the waterfront area to the north. There are also missing links of the Bayfront Bikeway in the project area. A multiuse trail connecting all three intersections on the north side of Bayfront Parkway will be completed to enhance bicycle and pedestrian access within the project area.

In order to accommodate the Central Corridor Improvements, the existing railroad track located between Sassafra Street Extension and Holland Street will be removed. CSX Transportation currently owns and operates the existing track, which served the heavy industrial facilities previously located on the waterfront. Since the waterfront no longer supports heavy industrial uses, the need for rail has diminished. However, CSX does currently utilize the track for switching operations and as storage for rail cars. In order to maintain their operations, CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. For safety and operational concerns, this crossing will be eliminated and a multi-modal bridge over the proposed CSX tracks will be constructed, located west of the existing crossing. These activities will be constructed separate from the Central Corridor Improvement Project.

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IDENTIFICATION OF SECTION 4(f) PROPERTY:

(List the property and provide a description of the property as per Chapter 6 of the *Section 4(f)/Section 2002 Handbook*. Attach a map, photo(s), etc. as appropriate.)

Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse

The Pennsylvania Soldiers' and Sailors' Home is located at the east end of the project, bounded by Bayfront Parkway to the north and Third Street to the south. As presently constituted, the Property is only a remnant of a much larger tract that once extended north to Lake Erie but was diminished in size over the years. Contributing resources within the property include the Soldiers and Sailors Home, the Staff Housing, the Pennsylvania Soldiers and Sailors Cemetery/Veterans Memorial Cemetery, and the General Anthony Wayne Blockhouse. The resources associated with the Section 4(f) Temporary Occupancy includes two components: The Pennsylvania Soldiers' and Sailors' Home, and the Anthony Wayne Blockhouse. (See **Figure 5: Location of Pennsylvania Soldier's and Sailor's Home as depicted on 1917 Mueller map of Erie**)

The property is bisected by the right-of-way of the former Philadelphia and Erie Railroad (now CSX), with the Soldiers' and Sailors' Home lying south of the railroad and the Blockhouse and cemetery lying to the north. cursory documentation for both the Soldiers' and Sailors' Home and the Anthony Wayne Blockhouse was prepared by the Northwest Institute of Research in 1982 in connection with its historic sites survey of the City of Erie, but no determination of eligibility was made at that time (Wolynec 1982; CRGIS).

In 1988 the PA SHPO determined the Soldiers' and Sailors' Home to be eligible for the NRHP under Criteria A and C as a result of a review prompted by demolition of part of the building by the Bureau of Veteran Affairs (PA SHPO, letter from Brenda Barrett to Joseph Clelan, May 9, 1988). No historic boundaries were defined for the property.

In 2019 Further Coordination with PA SHPO identified that the Soldiers and Sailors Home, Key #079908 retains sufficient integrity and continues to be eligible for the NRHP under Criterion A (Health Care, Politics/Government, Social History), with a POS of 1879 (date of construction of the blockhouse) to 1969 (50 years from the present). Contributing resources within the property include the Soldiers and Sailors Home, the Staff Housing, the Pennsylvania Soldiers and Sailors Cemetery/Veterans Memorial Cemetery (an integral part of the district, notable as the commonwealth's only state cemetery, with graves dating back to the Civil War era) and the General Anthony Wayne Blockhouse which is a commemorative structure that was built in 1879. The complex does not retain sufficient integrity to be eligible under Criterion C (Architecture). Historic Boundaries were identified as the current tax parcel, inclusive of the buildings and cemetery and monument and circulation patterns. (See **Correspondence with the Official with Jurisdiction**)

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BRIEF DESCRIPTION OF THE TEMPORARY USE:

(Describe the temporary occupancy including size, location, activity, duration, etc. including temporary construction easements (TCEs) as per Chapter 6 of the *Section 4(f)/Section 2002 Handbook*.)

Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse

Proposed Action: CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. A multi-modal bridge over the proposed CSX railroad tracks will be constructed west of the existing at-grade crossing, which will be eliminated for safety and operational concerns. The bridge will be constructed on the same site as a former bridge that previously spanned the railroad tracks, which was removed in the late 20th century. In effect, the project will restore the original circulatory system within the Soldiers and Sailors Home property, with the bridge once again facilitating vehicular and pedestrian access between the Home and the Cemetery/Anthony Wayne Blockhouse. The bridge will remain the property of the Soldiers and Sailors Home.

In order to accommodate the multi-modal bridge over the proposed CSX tracks, the existing driveway grade will be adjusted, and earth work grading with the use of clean fill will be required. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact section 4(f) features. An erosion and sediment pollution control plan will be implemented to control and maintain all earthwork activities.

Construction materials will be transported through the Pennsylvania Soldiers' and Sailors' property using existing driveways accommodated with flagging operations to ensure user safety.

Anticipated area of proposed construction activities on the Soldiers' and Sailors' property:

- Proposed Bridge /Retaining wall: 3158.3 sqft
- Proposed Driveway Adjustment: 18615.7 sqft (existing driveway reconstructed)
- Proposed Landscaped Area: 21060.1 sqft
- Existing Access Drive to Be Removed: 2989.1 sqft

This work will result in Section 4(f) Temporary Occupancy; proposed work associated with the section 4(f) property will be constructed separately from the Bayfront Parkway Central Corridor Improvement Project. Construction of the Pennsylvania Soldier's and Sailor's Home Railroad Bridge is anticipated to last approximately 8 months. Construction of the overall Bayfront Parkway Central Corridor Improvement Project is anticipated to last approximately 2 years. The proposed work will have no adverse impact associated with Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse and will not result in a change of ownership. (See **Project Plan Sheet: Pennsylvania Soldier's and Sailor's Home Railroad Bridge**)

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OFFICIAL WITH JURISDICTION OVER SECTION 4(f) PROPERTY:

(Note: historic sites fall to the jurisdiction of PHMC, BHP)

1. Identify agency with jurisdiction:
Pennsylvania Historical and Museum Commission
2. Name and title of contact person at agency:
Cheryl Nagle

Historic Building Project Reviewer

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR4034 | Section: | A01 |
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APPLICABILITY DETERMINATION:

1. Based on adequate documentation, including mapping, verify that all of the following are true. **(If any of the items below are not true, the project would result in an actual use, and this form cannot be used.):**

- The project involves no permanent right-of-way acquisition or other change in ownership or result in the retention of long-term or indefinite interests in the land for transportation purposes.
- Be of temporary duration; i.e. less than the time needed for construction of the project.
- Not result in any permanent adverse physical impacts or interfere with the protected activities, features, or attributes which are important to the purposes or functions that qualify the property for protection under Section 4(f) on a temporary or permanent basis.
- Be minor in that the nature and magnitude of the changes to the Section 4(f) property will be minimal.
- Be fully restored to a condition at least as good as that which existed prior to the project.

2. The official with jurisdiction over the Section 4(f) property agrees that the temporary occupancy would meet all of the above criteria.

(Either by signature of this checklist or agreement documentation in the following Attachment: PA SHPO Concurrence attached under (Correspondence with the Official with Jurisdiction))

3. Does the temporary occupancy involve a water trail designated by the PA Fish and Boat Commission, a federal wild and scenic river that qualifies as a Section 4(f) property, and/or a national recreational trail that is a water trail? YES NO

If Yes, will a temporary causeway be constructed, and/or will the path of the water trail be affected (temporarily closed, altered, etc.)? YES NO

If Yes, has coordination with the official with jurisdiction been conducted regarding the need for an Aid to Navigation (ATON) Plan? YES NO

Explain. Appropriate correspondence and an ATON (if one is needed) is included in the following Attachment: Enter Attachment number and description.

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

4. The project does not involve any uses that would require an individual Section 4(f) evaluation. (It is acceptable if there are other Section 4(f) uses that are *de minimis* or covered by one of the nationwide programmatic Section 4(f) evaluations.) YES

If there are other Section 4(f) properties used, list them here, briefly describe the use, and identify which form(s) will be completed to address the use:

Section 4(f) Non-Applicability/No Use action: Erie Waterworks, Chestnut Street Pump House (PHMC official with jurisdiction)

Proposed Action: Roadway and sidewalk reconstruction on the Bayfront Parkway adjacent to the Erie Waterworks, Chestnut Street Pump House property. No proposed work will be completed within the Section 4(f) property. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. This work will result in a Section 4(f) Non-Applicability/No Use action.

Section 4(f) Non-Applicability/No Use action: Dobbins Lane (PHMC official with jurisdiction)

Proposed Action: Roadway and sidewalk reconstruction on state street adjacent to Dobbins Lane. No proposed work will be completed within the Section 4(f) property specifically; the roadway blocks that constitute the historic resource will not be disturbed. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. This work will result in a Section 4(f) Non-Applicability/No Use action.

Section 4(f) Non-Applicability/No Use action: The Pennsylvania Veterans' Memorial Cemetery (PHMC official with jurisdiction)

Proposed Action: CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. For safety and operational concerns, this crossing will be eliminated and a multi-modal bridge over the proposed CSX tracks will be reconstructed, located west of the existing crossing. Railroad work results in re-installation of tracks that were previously in use during the 1970's. This work will result in a Section 4(f) Non-Applicability/No Use action; the proposed work will have no impact or temporary occupancy associated with The Pennsylvania Veterans' Memorial Cemetery.

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR4034 | Section: | A01 |
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**Section 4(f) Section 4f Temporary Occupancy: Bayfront Promenade Trail
(City of Erie official with jurisdiction)**

Proposed Action: Bayfront Promenade Trail minor relocation to incorporate a safe roadway crossing at State Street. Trail access and use will be maintained through staged construction, speed limit signs, stop signs, and flagging, as necessary for trail users. This work will result in a Section 4(f) Section 4f Temporary Occupancy.

**Section 4(f) Section 4f Temporary Occupancy: Great Lakes Sea Way Trail (Western
Pennsylvania Port Authority official with jurisdiction)**

Proposed Action: Relocation of the Great Lakes Sea Way at Sassafras Street Extension, and State Street Extension to incorporate safe roadway crossing. Creation of a new section of trail removing pedestrians and cyclist away from Front Street and improving pedestrian and cyclist safety. This work will result in a Section 4(f) Section 4f Temporary Occupancy.

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

SUMMARY AND DETERMINATION:

PennDOT will provide a copy of this evaluation to the official with jurisdiction over the Section 4(f) property and to other parties, as requested, and maintain this documentation with the project files.

The temporary occupancy of Section 4(f) property does not constitute a use within the meaning of Section 4(f).

Concurrence by official with jurisdiction over the Section 4(f) property: Cheryl Nagle (PHMC)

Official with Jurisdiction: Cheryl Nagle (PHMC) Date: 11/22/2019
PA SHPO Concurrence attached under (Correspondence with the Official with Jurisdiction)

(Optional: other documentation such as attached letters or meeting minutes may be used in replacement of signing this page¹) Check here if other documentation is attached.

Name and Organization of Preparer: Mark Fedosick ms consultants, inc. Date: 4/15/2020

Project Manager: /s/ Thomas J. McClelland, PennDOT Date: 05/06/2020

Environmental Manager: Autumn Kelley Date:
Digitally signed by Autumn Kelley
Date: 2020.05.06 13:00:13 -04'00'

PennDOT, BOPD: Raymond DeArmitt Date:
Digitally signed by Raymond DeArmitt
Date: 2020.05.07 09:39:28 -04'00'

FHWA: Date:

¹Documentation of the SHPO's (PHMC's) concurrence is acceptable with the no effect or no adverse effect finding as long as the temporary occupancy was described in the effects submission. **If the temporary occupancy was not specified, then separate SHPO written agreement is required.**

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

List Section 4(f) mitigation measures associated with this temporary occupancy that are part of this project:

Work on historic properties would be limited to construction of the multi-modal bridge at the Soldiers' and Sailors' Home over the railroad, which is being coordinated with the PA Department of Military and Veterans Affairs. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features.

The project is designed to minimize tree clearing and shrub removal to the greatest extent practical. All earth disturbance will be revegetated to ensure no negative changes to the viewshed.

Access to the cemetery will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction.

Temporary Construction Access: Construction materials will be transported through the Pennsylvania Soldiers' and Sailors' property using existing driveways accommodated with flagging operations to ensure user safety. Temporary Construction access will not result in impacts to historic features on the Pennsylvania Soldiers' and Sailors' property.

Construction related mitigation: Clearly delineate any construction areas adjacent to the Section 4(f) Resources to ensure that only planned construction activities occur. Proposed work associated with the section 4(f) property will be constructed separately from The Bayfront Parkway Central Corridor Improvement Project. Duration of the construction for the Pennsylvania Soldier's and Sailor's Home Railroad Bridge is not to exceed construction of the overall Bayfront Parkway Central Corridor Improvement Project. An erosion and sediment pollution control plan will be implemented to control and maintain earth work activities. The Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse property will be fully restored after construction.

Typical attachments for this form include, but are not limited to:

- Project location map
- Map of affected Section 4(f) property and other Section 4(f) property(ies) in the project vicinity
- Photographs of the Section 4(f) property
- Project plan sheet to show impacts
- Correspondence with the official with jurisdiction
- ATON plan, if applicable

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR 4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

Project Location Map

See Attached Figures



Figure 2: Project location.

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR 4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

Map of affected Section 4(f) Property and other Section 4(f) property(ies) in the project vicinity
See Attached Figured Figures

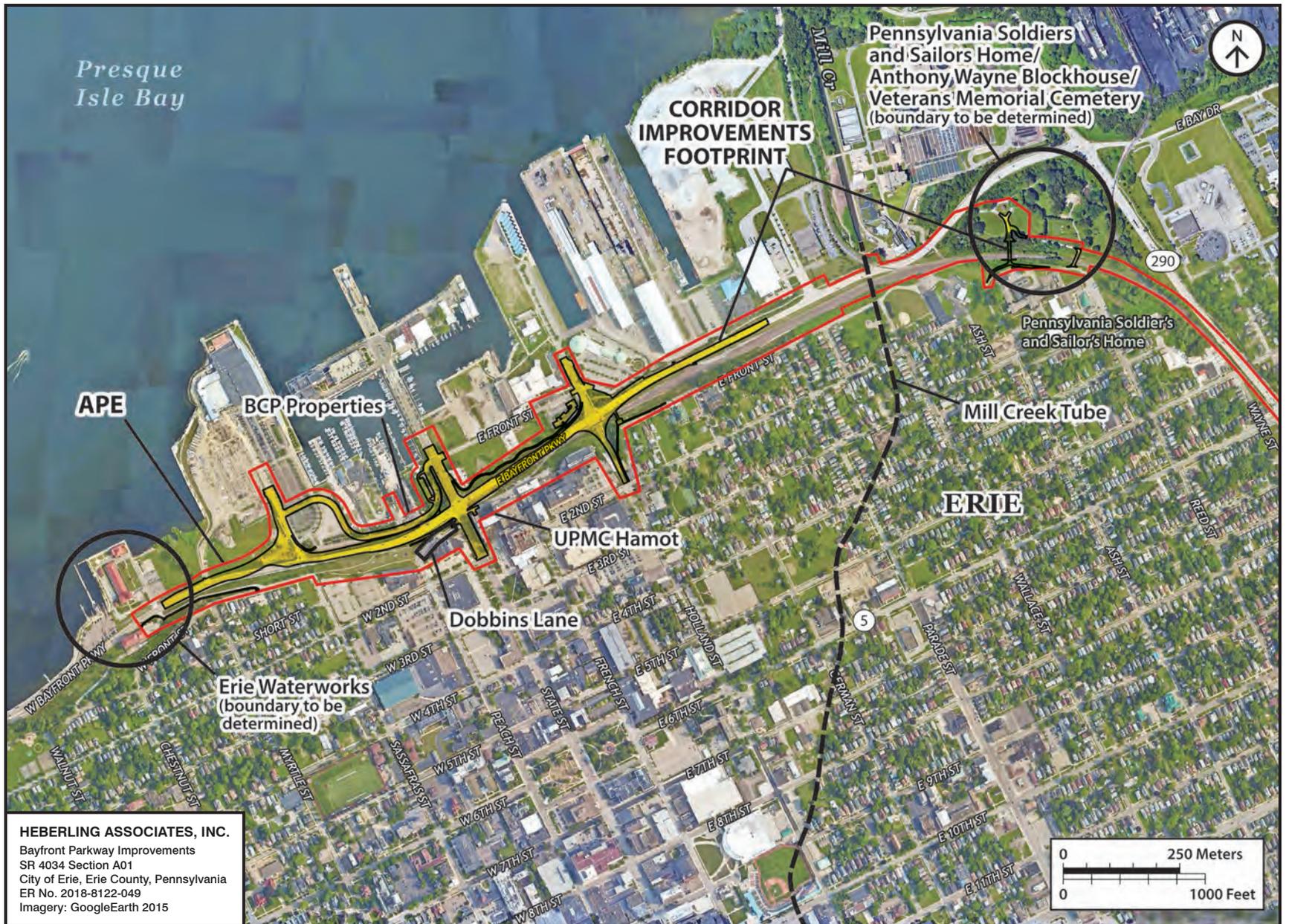


Figure 3: NRHP Properties and Potential NRHP Properties in the APE.

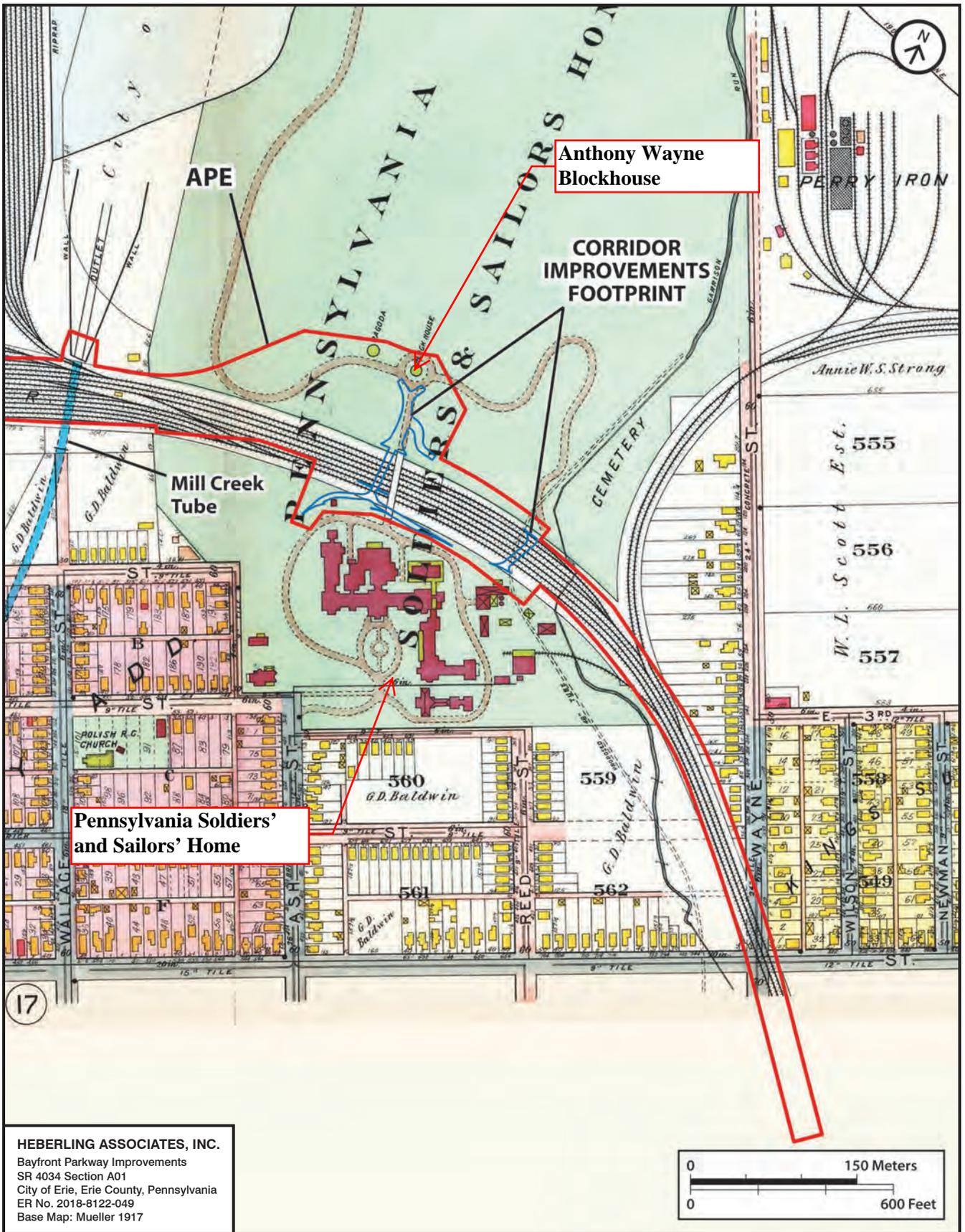


Figure 3: Location of Mill Creek Tube as depicted on 1917 Mueller map of Erie.

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR 4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

Photographs of the Section 4(f) Property

See Attached Photographs



Pennsylvania Soldiers and Sailors Home looking northeast.



Anthony Wayne Blockhouse and Grounds looking northwest.



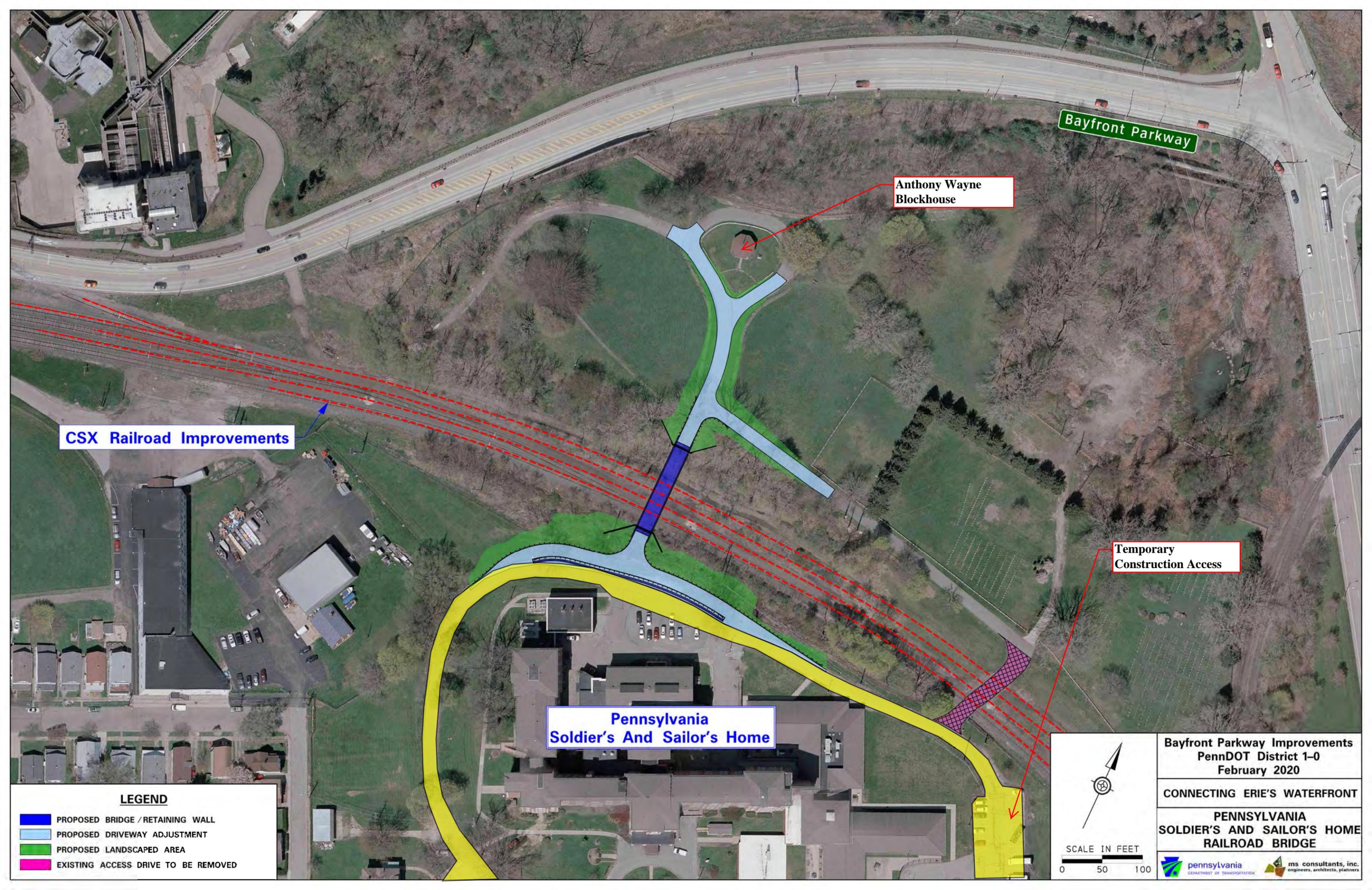
Pennsylvania Veterans' Memorial Cemetery (left) and CSX Railroad right-of-way (right), looking southeast.

Determination of Section 4(f) Applicability
Involving Temporary Occupancy
May 2014 Version

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR 4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

Project Plan Sheet

See Attached Project Plans



Bayfront Parkway

Anthony Wayne Blockhouse

CSX Railroad Improvements

Temporary Construction Access

Pennsylvania Soldier's And Sailor's Home

Bayfront Parkway Improvements
PennDOT District 1-0
February 2020

CONNECTING ERIE'S WATERFRONT

PENNSYLVANIA
SOLDIER'S AND SAILOR'S HOME
RAILROAD BRIDGE

LEGEND

- PROPOSED BRIDGE / RETAINING WALL
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- EXISTING ACCESS DRIVE TO BE REMOVED

SCALE IN FEET

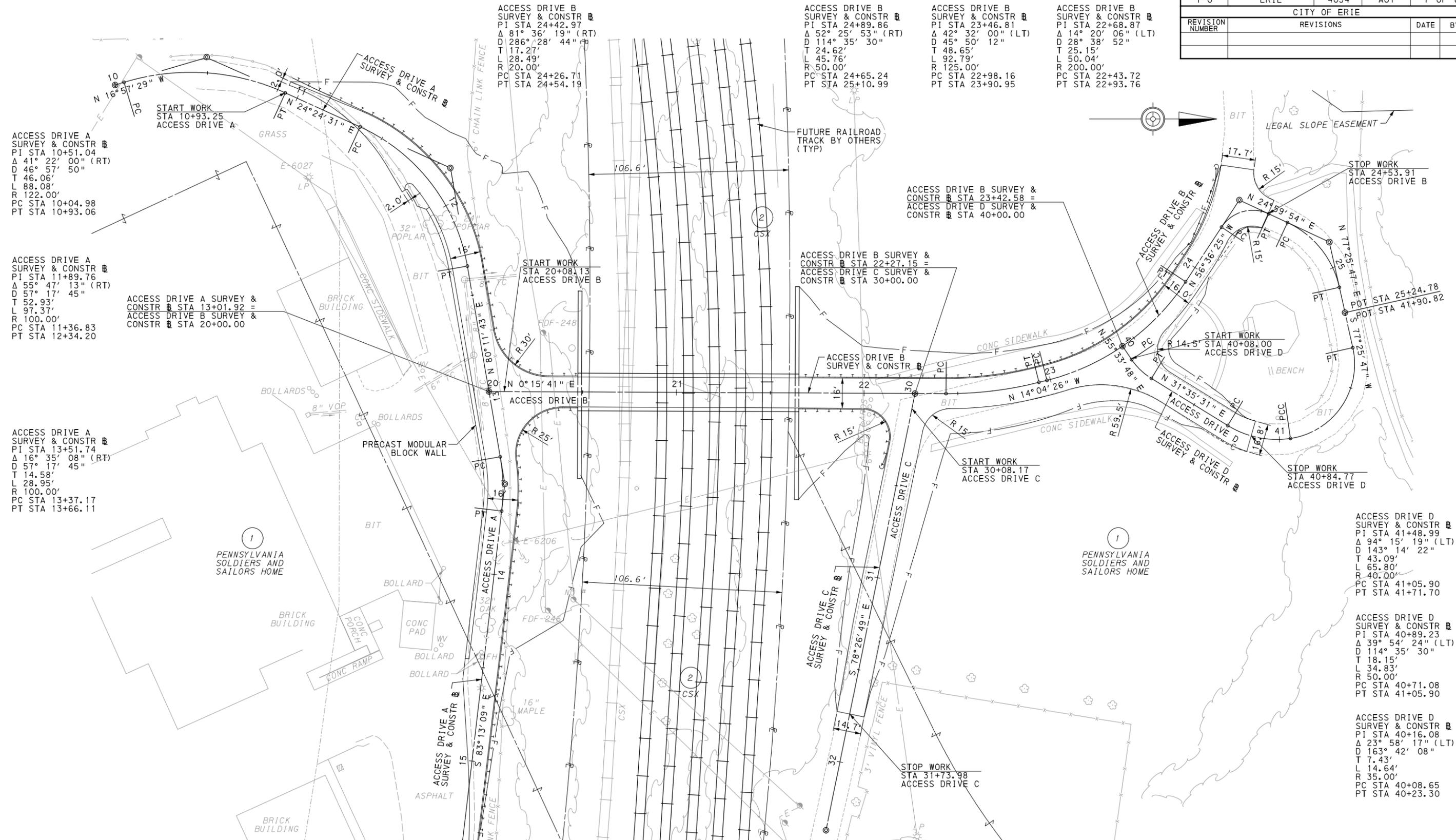
0 50 100

pennsylvania DEPARTMENT OF TRANSPORTATION ms consultants, inc. engineers, architects, planners

PLOTTED: 11/19/2019

FILE NAME: \\msconsultants.com\files\production\08\60\06808\roadway\sheets\soldiers and sailors\RDpl 01.dgn

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|-----------------|-----------|-------|---------|--------|
| 1-0 | ERIE | 4034 | A01 | 7 OF 8 |
| CITY OF ERIE | | | | |
| REVISION NUMBER | REVISIONS | DATE | BY | |
| | | | | |



MATCH LINE SHEET OF

PROPOSED STRUCTURE
 STA XX+XX.XX
 TYPE: X
 SPAN: XX' X"
 UNDER CLEARANCE: X' - X"
 SKEW: XX°
 ROADWAY WIDTH: XX' - X"
 STRUCTURE X-XXXXX

| REFERENCE DRAWINGS | SHEET |
|--------------------------|-------|
| PROFILE - ACCESS DRIVE A | |
| PROFILE - ACCESS DRIVE B | |
| PROFILE - ACCESS DRIVE C | |
| PROFILE - ACCESS DRIVE D | |



DES: MJQ CKD: JPO DWG: SNP CKD: JPO

ACCESS DRIVE D SURVEY & CONSTR
 PI STA 41+48.99
 Δ 94° 15' 19" (LT)
 D 143' 14' 22"
 T 43.09'
 L 65.80'
 R 40.00'
 PC STA 41+05.90
 PT STA 41+71.70

ACCESS DRIVE D SURVEY & CONSTR
 PI STA 40+89.23
 Δ 39° 54' 24" (LT)
 D 114' 35' 30"
 T 18.15'
 L 34.83'
 R 50.00'
 PC STA 40+71.08
 PT STA 41+05.90

ACCESS DRIVE D SURVEY & CONSTR
 PI STA 40+16.08
 Δ 23° 58' 17" (LT)
 D 163' 42' 08"
 T 7.43'
 L 14.64'
 R 35.00'
 PC STA 40+08.65
 PT STA 40+23.30

ACCESS DRIVE B SURVEY & CONSTR
 STA 23+42.58 =
 ACCESS DRIVE D SURVEY & CONSTR
 STA 40+00.00

ACCESS DRIVE B SURVEY & CONSTR
 STA 22+27.15 =
 ACCESS DRIVE C SURVEY & CONSTR
 STA 30+00.00

START WORK
 STA 30+08.17
 ACCESS DRIVE C

STOP WORK
 STA 40+84.77
 ACCESS DRIVE D

STOP WORK
 STA 31+73.98
 ACCESS DRIVE C

STOP WORK
 STA 24+53.91
 ACCESS DRIVE B

ACCESS DRIVE A SURVEY & CONSTR
 PI STA 10+51.04
 Δ 41° 22' 00" (RT)
 D 46° 57' 50"
 T 46.06'
 L 88.08'
 R 122.00'
 PC STA 10+04.98
 PT STA 10+93.06

ACCESS DRIVE A SURVEY & CONSTR
 PI STA 11+89.76
 Δ 55° 47' 13" (RT)
 D 57° 17' 45"
 T 52.93'
 L 97.37'
 R 100.00'
 PC STA 11+36.83
 PT STA 12+34.20

ACCESS DRIVE A SURVEY & CONSTR
 PI STA 13+51.74
 Δ 16° 35' 08" (RT)
 D 57° 17' 45"
 T 14.58'
 L 28.95'
 R 100.00'
 PC STA 13+37.17
 PT STA 13+66.11

ACCESS DRIVE B SURVEY & CONSTR
 PI STA 24+42.97
 Δ 81° 36' 19" (RT)
 D 286° 28' 44"
 T 17.27'
 L 28.49'
 R 20.00'
 PC STA 24+26.71
 PT STA 24+54.19

ACCESS DRIVE B SURVEY & CONSTR
 PI STA 24+89.86
 Δ 52° 25' 53" (RT)
 D 114° 35' 30"
 T 24.62'
 L 45.76'
 R 50.00'
 PC STA 24+65.24
 PT STA 25+10.99

ACCESS DRIVE B SURVEY & CONSTR
 PI STA 23+46.81
 Δ 42° 32' 00" (LT)
 D 45° 50' 12"
 T 48.65'
 L 92.79'
 R 125.00'
 PC STA 22+98.16
 PT STA 23+90.95

ACCESS DRIVE B SURVEY & CONSTR
 PI STA 22+68.87
 Δ 14° 20' 06" (LT)
 D 28° 38' 52"
 T 25.15'
 L 50.04'
 R 200.00'
 PC STA 22+43.72
 PT STA 22+93.76

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR 4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

Correspondence with the Official with Jurisdiction

See Attached Correspondence

PHMC E-Notification Details -- For PHMC Use Only



Notification Details (/NotificationDetails.aspx?ProjectID=54110&PostingID=28894&NotificationID=19333&Tab=1)

MPMS 108952 • Central Bayfront Prkwy Multimodal Improvements • Erie Co. • SR 4034 Section A01

Email Content

Sent Date: 11/22/2019 12:00:00 AM

Create Date: 11/22/2019 12:17:54 PM

Subject: PennDOT Request for PHMC Response: ER2018-8122-049 - MPMS108952

Message:

PennDOT has posted updated information on the PATH website for the project listed below.

COUNTY: Erie

MUNICIPALITY: ERIE CITY (Erie)

SR: 4034

SECTION: A01

PROJECT NAME: Central Bayfront Prkwy Multimodal Improvements

MPMS: 108952

ER NUMBER: 2018-8122-049

PROJECT DESCRIPTION: Multimodal/Congestion Reduction and safety improvement project on the Bayfront Parkway (SR4034)

SECTION 106 Effect: No Effect

SECTION 106 Stage: Determination of Effects

Posting Name: SR 4034 A01 Bayfront Parkway Improvement Above-ground Finding

PHMC COMMENT: Thank you for providing the concurrence comment regarding eligibility/criterion/boundaries for the previously identified resources; we concur regarding the contributing status of the outbuilding at the Soldiers & Sailors Home. Thank you for providing the narrative regarding the bridge. The PA SHPO concurs with the no effect to above ground historic resources (as archaeology is under review).

The associated documents for this consultation are available at: <https://path.penndot.gov/PostingDetails.aspx?ProjectID=54110&PostingID=28894>

The PHMC Contact is Cheryl Nagle and can be reached at chnagle@pa.gov.

Administrative Notes:

outbuilding, however, retains better than average integrity when compared to the few surviving historic buildings on the property.

Regarding SHPO comments pertaining to the Above Ground Resources – Assessment of Effect, the bridge installation in question is a roadway/pedestrian bridge that will provide vehicular and pedestrian access between the south and north halves of the property (see attached preliminary plan and historic plan sheets). To provide a little more background, the Philadelphia and Erie Railroad (P&E) laid several yard tracks along the Erie waterfront, ca. 1864. The railroad yard predated the Soldiers and Sailors Home by roughly 20 years. When the Commonwealth developed the Home and associated Cemetery in the mid-1880s, the plan required installation of a pedestrian/carriage bridge over the P&E yard to provide access between the south and north halves of the property. This arrangement remained in effect up to about the mid-1980s, when Conrail (now CSX) removed all but one set of tracks through the Soldiers and Sailors property, and the Home removed the bridge and installed the extant at-grade crossing, just east of the old bridge alignment. CSX continues to maintain a remnant of the railroad yard, immediately west of the Soldiers and Sailors Home property. Proposed plans for the Bayfront Parkway require that CSX move these yard tracks a bit further to the east, meaning that CSX now needs to re-lay the yard tracks, within its own right of way, through the original yard alignment that bisects the Soldiers and Sailors Home property. The extant at-grade crossing, installed in the mid-1980s, must now be removed and the old overpass bridge reinstalled. In effect, the project will restore the original circulatory system within the Soldiers and Sailors Home property, with the bridge once again facilitating vehicular and pedestrian access between the Home and the Cemetery/Anthony Wayne Blockhouse. The bridge will remain the property of the Soldiers and Sailors Home.

The PennDOT CRP has proposed utilizing a historic truss bridge at this location. However, due to the exceedingly high clearance requirements mandated by CSX, the bridge will have to have a considerable hump or curve in the floor system to clear the tracks. In short, the unique design parameters preclude the use of a historic truss at this location. The PennDOT CRP, however, will work closely with the consulting engineer to develop a context sensitive design.

If you have any questions, please contact Donald Burden at (814) 678-7194

Associated Files: Erie 108952 Field Assessment and Finding above ground

Enclosure

4432/ /

cc:



Photo 1. West and south sides of outbuilding at Soldiers and Sailors Home, looking north.

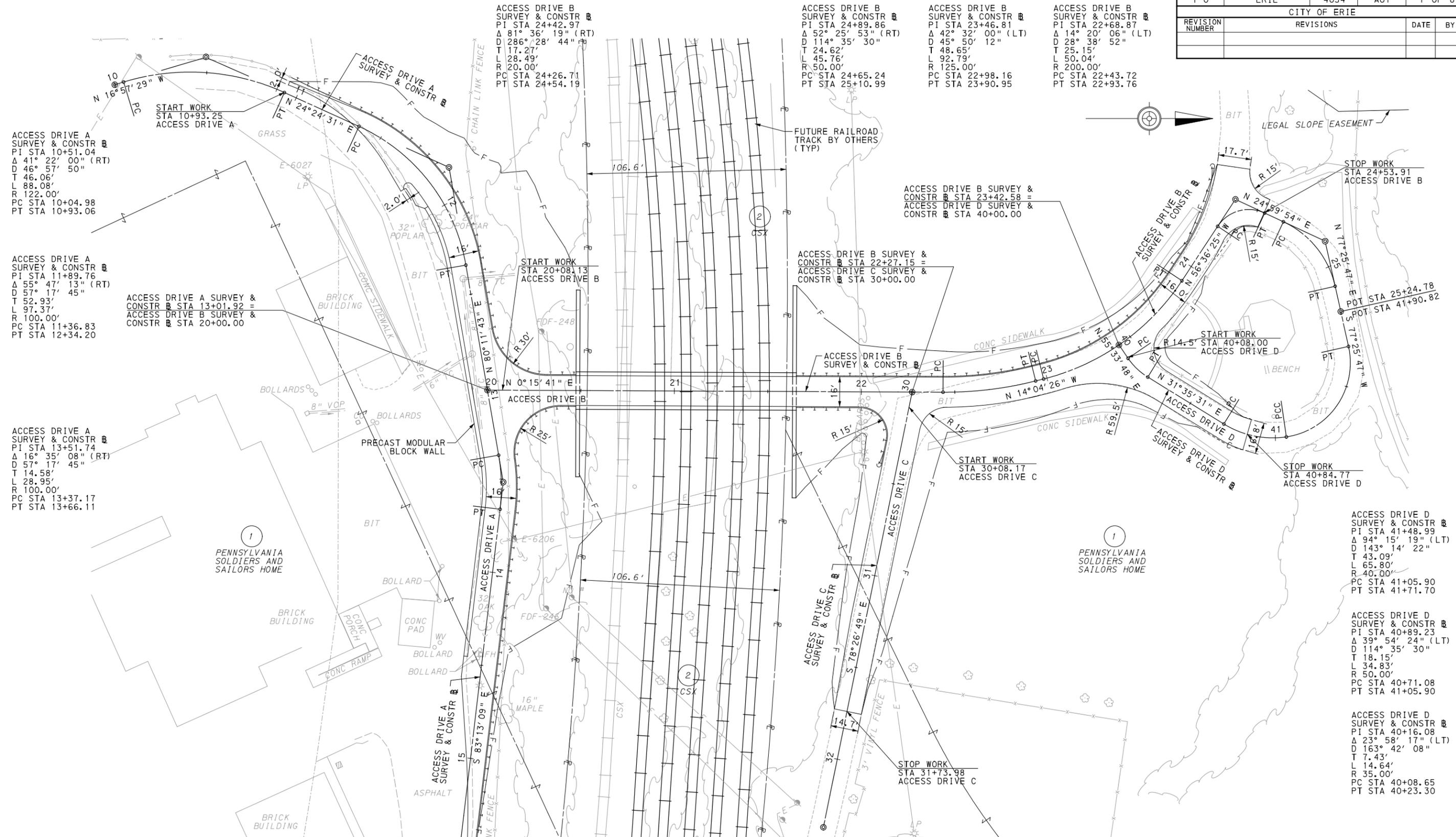


Photo 2. South and east sides of outbuilding at Soldiers and Sailors Home, looking southeast.

PLOTTED: 11/19/2019

FILE NAME: \\msconsultants.com\files\production\08\60\06808\roadway\sheets\soldiers and sailors\RDpl 01.dgn

| | | | | |
|-----------------|-----------|-------|---------|--------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | A01 | 7 OF 8 |
| CITY OF ERIE | | | | |
| REVISION NUMBER | REVISIONS | DATE | BY | |
| | | | | |



MATCH LINE SHEET OF

PROPOSED STRUCTURE
 STA XX+XX.XX
 TYPE: X
 SPAN: XX' X"
 UNDER CLEARANCE: X' - X"
 SKEW: XX°
 ROADWAY WIDTH: XX' - X"
 STRUCTURE X-XXXXX

| REFERENCE DRAWINGS | SHEET |
|--------------------------|-------|
| PROFILE - ACCESS DRIVE A | |
| PROFILE - ACCESS DRIVE B | |
| PROFILE - ACCESS DRIVE C | |
| PROFILE - ACCESS DRIVE D | |



DES: MJQ CKD: JPO DWG: SNP CKD: JPO

ACCESS DRIVE D SURVEY & CONSTR
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 D 143' 14' 22"
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 R 125.00'
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 PT STA 22+93.76

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 R 50.00'
 PC STA 24+65.24
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 R 20.00'
 PC STA 24+26.71
 PT STA 24+54.19

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 PI STA 10+51.04
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 PT STA 10+93.06

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 Δ 55° 47' 13" (RT)
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 Δ 16° 35' 08" (RT)
 D 57' 17' 45"
 T 14.58'
 L 28.95'
 R 100.00'
 PC STA 13+37.17
 PT STA 13+66.11

ACCESS DRIVE A SURVEY & CONSTR
 STA 13+01.92 =
 ACCESS DRIVE B SURVEY & CONSTR
 STA 20+00.00

START WORK
 STA 20+08.13
 ACCESS DRIVE B

ACCESS DRIVE B SURVEY & CONSTR
 STA 22+27.15 =
 ACCESS DRIVE C SURVEY & CONSTR
 STA 30+00.00

ACCESS DRIVE B SURVEY & CONSTR
 STA 23+42.58 =
 ACCESS DRIVE D SURVEY & CONSTR
 STA 40+00.00

START WORK
 STA 30+08.17
 ACCESS DRIVE C

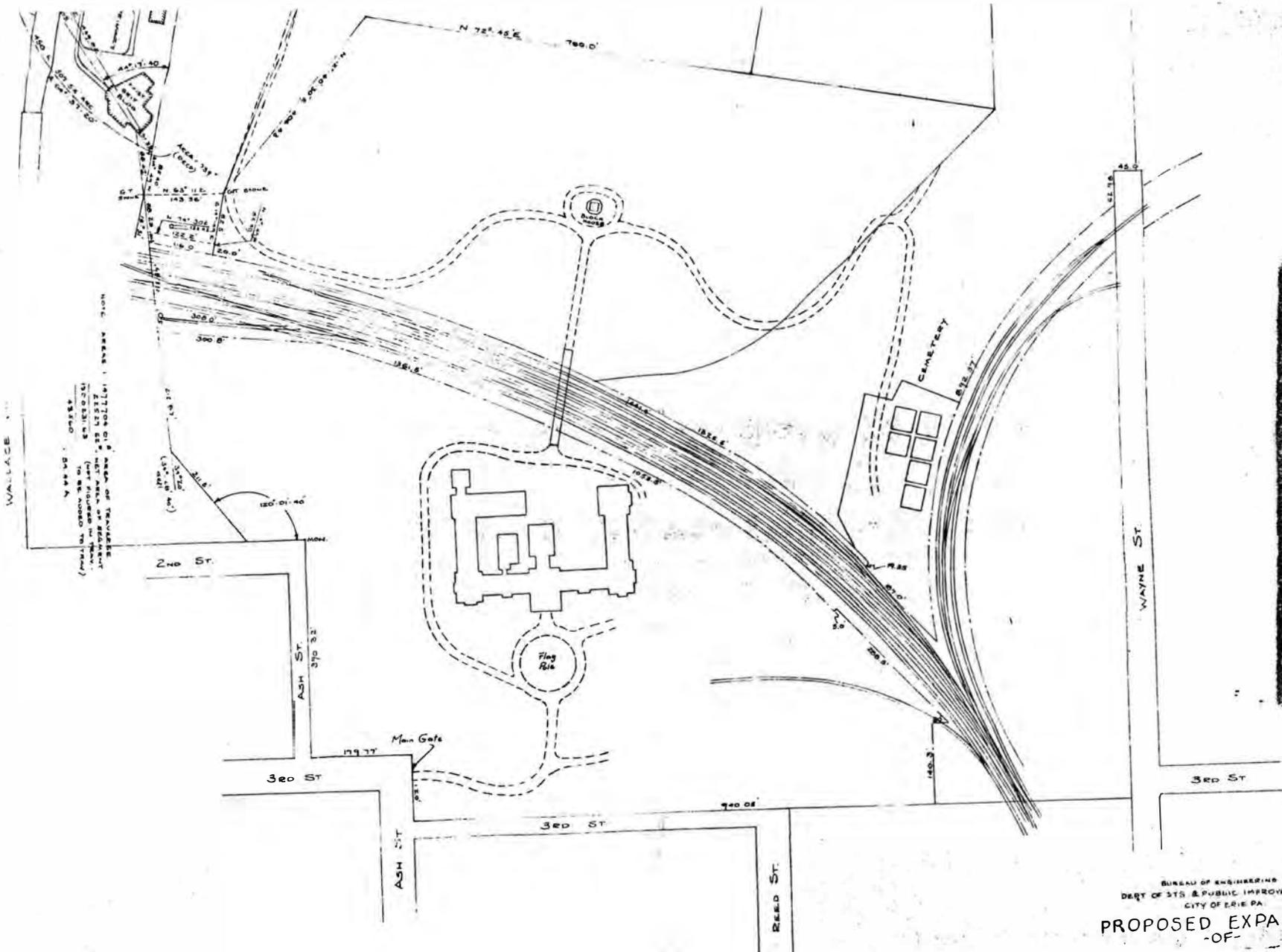
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 STA 40+08.00
 ACCESS DRIVE D

STOP WORK
 STA 40+84.77
 ACCESS DRIVE D

STOP WORK
 STA 31+73.98
 ACCESS DRIVE C

STOP WORK
 STA 24+53.91
 ACCESS DRIVE B

POT STA 25+24.78
 POT STA 41+90.82



WALLACE ST
 124 ST
 3RD ST
 3RD ST
 WAYNE ST
 3RD ST

BUREAU OF ENGINEERING
 DEPT OF STS & PUBLIC IMPROVEMENT
 CITY OF ERIE PA
 PROPOSED EXPAN
 -OF-

SOLDIERS AND
SAILORS HOME



TRANSFERED AREA
CONTAINING
2.19 ACRES

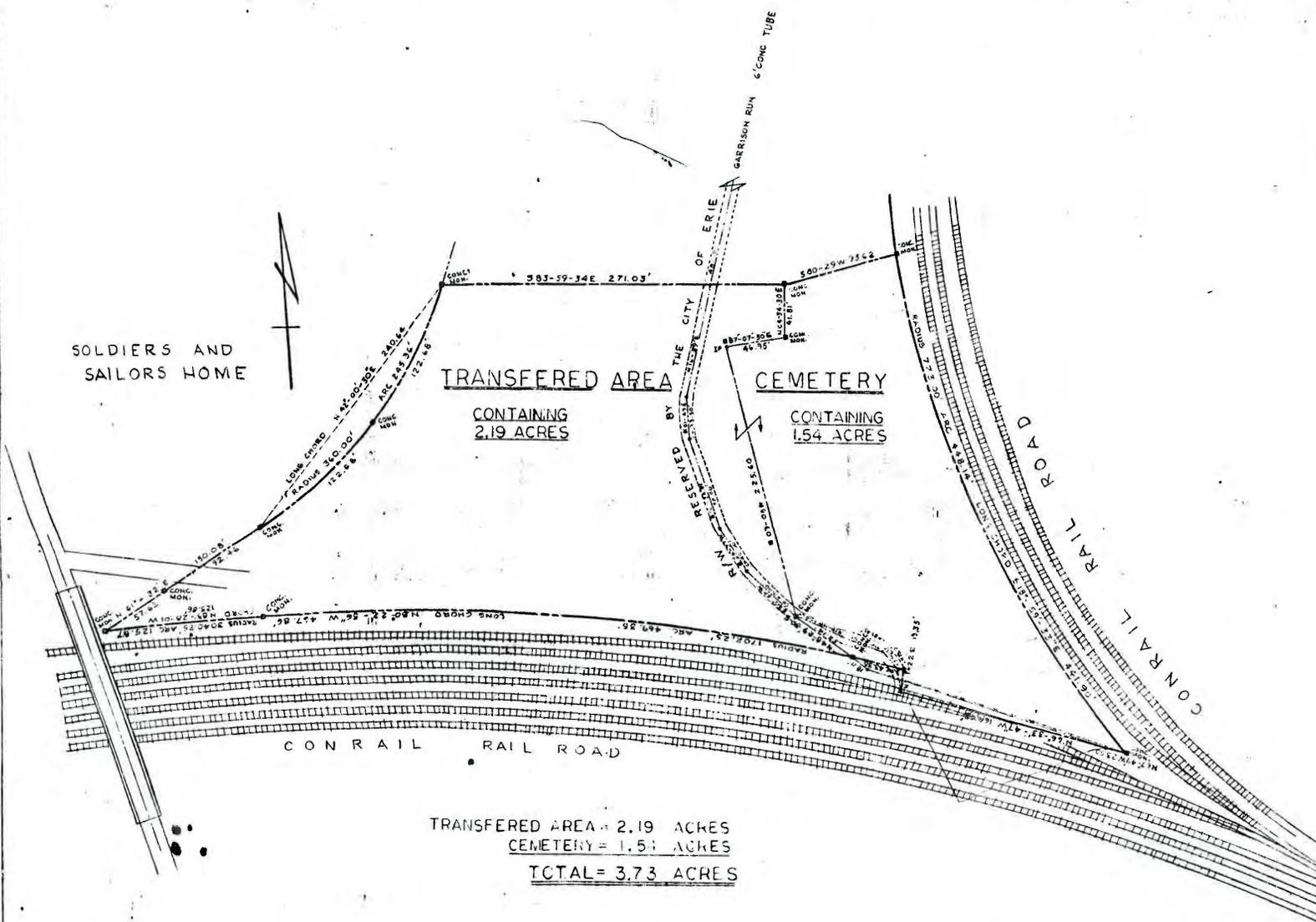
CEMETERY
CONTAINING
1.54 ACRES

GARRISON RUN & CONC TUBE
RESERVED BY THE CITY OF ERIE

CON RAIL RAIL ROAD

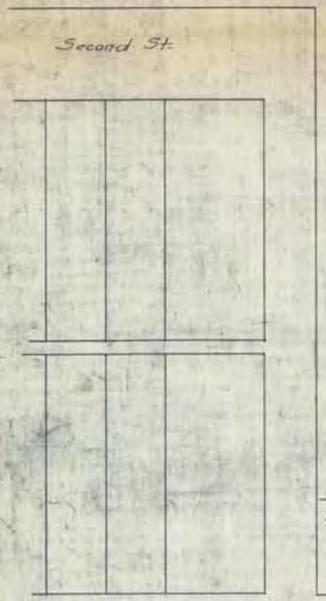
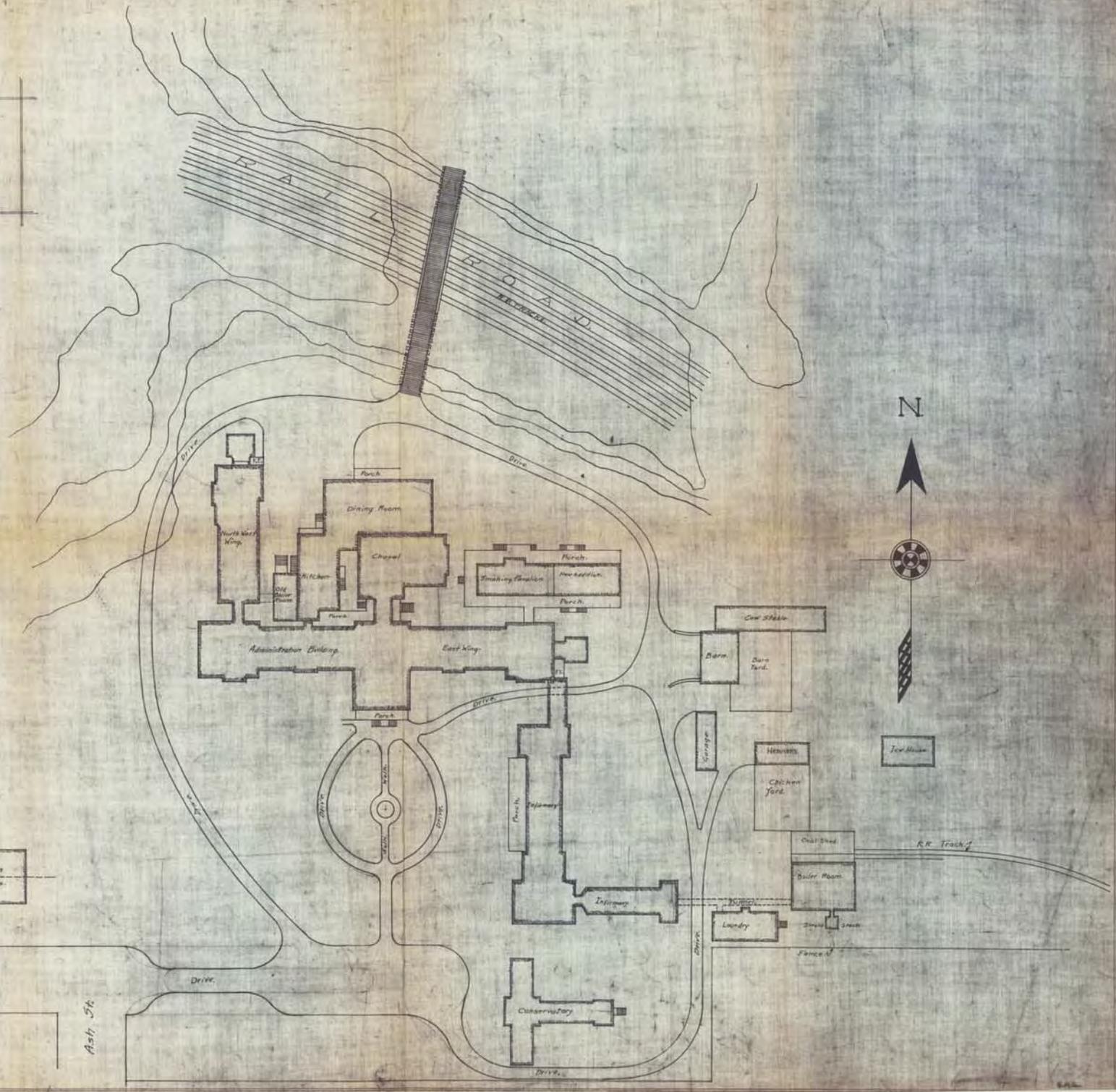
CON RAIL RAIL ROAD

TRANSFERED AREA = 2.19 ACRES
CEMETERY = 1.54 ACRES
TOTAL = 3.73 ACRES



H 74908 7983-A

PLOT
 SHOWING GROUNDS & BLDGS.
 OF
 SOLDIERS & SAILORS HOME
 ERIE, PA.
 SCALE: 1" = 50'-0"



Officers Dwellings

Third St

Ash St



Ice House

R.R. Track

Fence



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

November 18, 2019

Brian Thompson, Director
Bureau of Project Delivery
Attn: Don Burden
PA Department of Transportation
PO Box 2966
Harrisburg, PA 17105

ER 2018-8122-049-B: Central Bayfront Parkway Multimodal Improvements, SR 4034, Section A01, MPMS 108952, Erie, Erie County, receipt of Above Ground Resource Effects Finding, Phase I Historic Structures Reconnaissance Survey and HRSFs

Dear Mr. Thompson,

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution, and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 *et seq.* (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources - Assessment of Eligibility

Based on the information received and available in our files, we concur with the finding of the agency that the following properties are eligible for listing in the National Register of Historic Places:

It is the opinion of the PA SHPO that the ***Erie Waterworks, Chestnut Street Pump House and Filtration Plant and Boathouse Complex Key # 110374*** retains sufficient integrity and continues to be eligible for the NRHP under Criterion A (Community Planning and Development) and Criterion C (Architecture, Engineering) with a Period of Significance of circa 1913 (date of construction) to 1969 (50 years from the present); and a NRHP boundary that encompasses the entire parcel. The historically associated State Fish Hatchery & Aquarium/Erie Water Works Administration Building does not retain sufficient integrity and is non-contributing to the district. This resource has not been evaluated for archaeological potential.

In our opinion, the boundary should include all of the land on the north and south sides of Bayfront Parkway and all of the built environment as well as "Big Bertha", the engine in the pump house.

Please note, the PHMC holds a Covenant on the Chestnut Street Waterworks Boat House. Therefore, the 1998 eligibility determination for the entire site remains the same and a boundary that encompasses the whole site is appropriate.

It is the opinion of the PA SHPO that the ***West Front Street/Dobbins Lane, Key # 087163*** retains sufficient integrity and continues to be eligible for the NRHP under Criterion A (Transportation), with a POS of 1890 (date of construction) and a boundary limited to the footprint of the blocks as well as its historic paving border.

In our opinion the resource is not significant under Criterion C.

It is the opinion of the PA SHPO that the ***Soldiers and Sailors Home, Key #079908*** retains sufficient integrity and continues to be eligible for the NRHP under Criterion A (Health Care, Politics/Government, Social History), with a POS of 1879 (date of construction of the blockhouse) to 1969 (50 years from the present). Contributing resources within the property include the Soldiers and Sailors Home, the Staff Housing, the Pennsylvania Soldiers and Sailors Cemetery/Veterans Memorial Cemetery (an integral part of the district, notable as the commonwealth's only state cemetery, with graves dating back to the Civil War era) and the General Anthony Wayne Blockhouse which is a commemorative structure that was built in 1879. We cannot comment on the potential for the former agricultural building to contribute as photographs of the building were not provided.

In our opinion the complex does not retain sufficient integrity to be eligible under Criterion C (Architecture), and the PA SHPO does not concur with the boundary proposed by the agency. The boundary should be the current tax parcel, inclusive of the buildings and cemetery and monument and circulation patterns.

This resource has not been evaluated for archaeological potential. However, we would like to note there is potential for Criterion D significance in the area of Military History as this was the site of military fortification dating back to 1795. The boundary for the above ground resource may not best reflect the location of any archaeological resources associated with the original blockhouse and defensive systems.

Our determinations of eligibility are based upon the information provided and available in our files for review. If National Register listing for this property is sought in the future, additional documentation of the property's significance and integrity may be required to both verify this determination of eligibility and satisfy the requirements of the National Park Service (36 CFR Part 60). Thus, the outcome of the National Register listing process cannot be assured by this determination of eligibility.

Finally, we would like to note that we found the documentation to be well researched and well written.

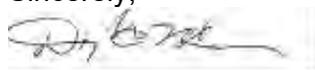
Above Ground Resources - Assessment of Effect

Please provide more information regarding the relaying of track and the re-installation of the bridge that was removed in the 1980s within the existing CSX right of way at the Soldiers and Sailors Home.

- Will installation of the bridge reduce accessibility to the cemetery?
- Will the bridge be designed in a manner that is context sensitive?
- Is the bridge to serve roadway, railway or pedestrian traffic?

If you need further information on above ground resources, please consult Cheryl Nagle at chnagle@pa.gov or (717) 772-4519.

Sincerely,



Douglas C. McLearn, Chief
Division Environmental Review

| | | | | | |
|----------------------|--|---------------------|--------------|-----------------|--------|
| County: | Erie | State Route: | SR 4034 | Section: | A01 |
| Project Name: | Bayfront Parkway Central Corridor Improvements | FPN: | T012539 Z240 | MPMS: | 108952 |

Public Involvement Information

Summary of Public Outreach Efforts

Extensive public outreach has been conducted as part of the Bayfront Parkway Study and during the alternatives analysis of the Bayfront Parkway Central Corridor Improvement project. Outreach efforts consisted of:

- Over 60 Stakeholder Meetings
- Online Survey (completed by nearly 500 participants)
- 10 Project Advisory Committee (PAC) Meetings
- 11 Coordinating Committee (CC) Meetings
- 3 Technical Advisory Committee (TAC) Meetings
- 3 Public Meetings (including two 8-hour open house displays)
- Project Website (www.BayfrontParkwayProject.com)
- Facebook Group Page (<https://www.facebook.com/groups/BayfrontParkwayProject/>)

The PAC consists of 80+ individuals and includes project stakeholders, community advocacy groups, public organizations and local officials who are intended to represent a variety of interests, their constituents, and the general public. The CC and TAC are subsets of the PAC and were formed to have more intimate discussions of specific project details and design elements.

Section 4(f) Coordination with Property Owners and Stakeholders

Section 4(f) property owners have been involved in various stakeholder meetings and invited to all public meetings to review the project design and express their concerns and/or desires. Section 4(f) property owners and stakeholders were solicited for any concerns or input related to the proposed improvements. To date, no concerns have been voiced or identified relative to Section 4(f) resources. Section 4(f) owners and stakeholders will continue to be involved in the project development as the design advances.

The project design efforts have been coordinated with the PA Department of Military and Veterans Affairs, specifically with Greg Lehman (Project Manager) and Stephanie Olsen (Cultural Resource Manager), and no concerns have been expressed related to the proposed work associated with the section 4(f) resource.

CE Evaluation Part B, Section A-6

Environmental Evaluation Subject Areas (Air Quality and Noise)

6. AIR QUALITY AND NOISE

AIR QUALITY

Is the project exempt from regional ozone conformity analysis and a CO, PM10 & PM2.5 Hot-Spot analysis? Yes No

See exempt project list in Air Quality Handbook, Pub #321.

If Yes, the system skips the next few questions.

Mobile Source Air Toxics (MSATs)

Is the project exempt from an analysis for MSATs based on Pub #321? Yes No

See Air Quality Handbook, Pub #321, for exemptions.

If Yes, the system skips the remainder of this section.

Air Quality Remarks

The Bayfront project is included in the AIR QUALITY CONFORMITY DETERMINATION REPORT, as part of the Transportation Improvement Program (TIP) and Long Range Transportation Plan (LRTP) ; no separate analysis needed: Regionally Significant Highway Projects For the purposes of conformity analysis, highway networks are created for each analysis year. For the horizon years, regionally significant projects from the LRTP were coded onto the networks. Detailed assessments were only performed for those new projects which may have a significant effect on emissions in accordance with 40 CFR Parts 51 and 93. Only those projects which would increase capacity or significantly impact vehicular speeds were considered. Projects such as bridge replacements and roadway restoration projects, which constitute the majority of the TIP and LRTP list, have been excluded from consideration since they are considered exempt under 40 CFR 93.126 127. A list of highway projects is shown in Attachment A. The TIP and LRTP for the Erie Metropolitan Planning Organization (MPO) area is found to conform to the applicable air quality State Implementation Plan (SIP) or EPA conformity requirements. This finding of conformity positively reflects on the efforts of the Erie MPO and its partners in meeting the regional air quality goals, while maintaining and building an effective transportation system. The Bayfront Project is included as follows: 108952 Central Bayfront Parkway Multimodal This project is a direct result of the Erie Bayfront Parkway study. This Multimodal/Congestion Reduction/ safety improvement project will be on the Bayfront Parkway (SR 4034) and will improve safety and access for vehicular, pedestrian, and bicycle traffic.

NOISE

1. Is the project a:

Reference PennDOT Pub #24 for additional information on Type I, II and III Projects.

A. Type I Project? Yes No

Indicate the applicable construction type:

Highway on new alignment

Through lanes that increase capacity

Significant change in the horizontal or vertical alignment

Other

Other Description:

B. Type II Project? Yes No

C. Type III Project? **If Yes, the system skips questions 2 and 3.** Yes No

2. A. Are sensitive receptors present? Yes No

If No, the system skips questions 2B and 3. Provide any additional comments in the Remarks section.

If Yes, how many noise sensitive receptors are within the project area? 79

If Yes, what type(s) of sensitive receptors are present?

- residential
- hospital
- church
- commercial
- office
- industrial
- hotel
- museum / library
- municipal offices
- institutional
- park
- recreation

B. What Land Use Activity Category is present in the project area as defined by PennDOT Pub #24? (Due to potential mixed land uses, there could be several categories.)

- A B C D E F G

3. A. Do the predicted noise levels approach or exceed FHWA/PennDOT Noise Abatement Criteria for the Land Use Activity Category(s) identified in 2B? Yes No

B. Will there be a substantial increase of 10 dB(A) over existing level? Yes No

If both 3A and 3B are No, provide a qualitative (narrative) analysis in Noise Remarks below. Qualitative Analysis Quantitative Analysis

If 3A or 3B is Yes, provide the conclusion of the quantitative analysis in Noise Remarks below. The full quantitative analysis should be maintained in the project technical file. Attach the FHWA Approval Letter for the Noise Report.

Noise Remarks

The TNM 2.5 analysis found that no receivers in the study area would approach or exceed FHWA Noise Abatement Criteria in the design year (2040) with either the no-build or build alternative. Also, no receivers were predicted to have a substantial increase in traffic noise levels as a result of the build alternative. Therefore, the project has no traffic noise impacts according to PennDOT Publication No. 24. Because the project has no traffic noise impacts, the investigation of traffic noise abatement was not warranted and noise mitigation, using noise walls, was not evaluated.

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

1. [Bayfront Noise Report 02-20-2020 red_Part1.pdf](#) (4770KB / 4.7MB)
2. [Bayfront Noise Report 02-20-2020 red_Part2.pdf](#) (4187KB / 4.1MB)

**AGREEMENT NO. E03975
MPMS NO. 108952**

**SR 4034, SECTION A01 (BAYFRONT PARKWAY)
CENTRAL CORRIDOR IMPROVEMENTS
CITY OF ERIE, ERIE COUNTY, PA**

Preliminary Design Traffic Noise Report

PREPARED FOR



DISTRICT 1-0

PREPARED BY



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February 2020

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

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Executive Summary

The proposed Bayfront Parkway Improvement project is intended to improve the pedestrian, bicycle, transit, and passenger vehicle connections between downtown Erie, existing neighborhoods, and Lake Erie waterfront properties. It is also intended to reduce crashes on the Bayfront Parkway (SR 4034), reduce future congestion, and improve traffic operations and efficiency. The study area for this Preliminary Design Traffic Noise Report covers about 1.5 miles of existing Bayfront Parkway (SR 4034) in the City of Erie, Erie County, Pennsylvania. This Preliminary Design Traffic Noise Report presents the results of a traffic noise analysis using the current project plans and procedures contained in *PennDOT Publication No. 24 (Project Level Traffic Noise Handbook)* issued May 2019.

The study area was divided into eight Noise Study Areas (NSAs) based upon existing land use patterns and topography. An Ambient Noise Monitoring work plan was approved by PennDOT prior to any traffic noise monitoring activity. The work plan included a discussion of noise monitoring procedures, a map of the eleven monitoring locations, and an explanation of site access procedures. Ambient noise monitoring was conducted in November 2019, during weather conditions suitable for outdoor activity. FHWA's Traffic Noise Model (TNM Version 2.5) computer program was used to predict the existing and design year (2040) noise levels generated by traffic on the existing and proposed Bayfront Parkway and other local roads associated with the build alternative. To verify the accuracy of TNM 2.5, traffic noise levels were predicted for multiple monitoring sites and compared to the on-site monitoring results. The findings showed that TNM 2.5 was accurately predicting noise levels as required by *PennDOT Publication No. 24*.

The TNM 2.5 analysis of existing and design year (2040) traffic noise used roadway location and elevation data from project plans, profiles, and cross-sections available in late 2019. Receiver locations and elevations were developed from project plans and recent aerial photography. The TNM models used traffic data from project specific traffic forecasts. Existing year and design year no-build analysis involved 2018/2040 traffic traveling at the observed speeds or posted speed limits. The design year build analysis involved 2040 traffic traveling at a maximum of 35 mph on proposed Bayfront Parkway and observed speeds or posted speed limits on other local roads.

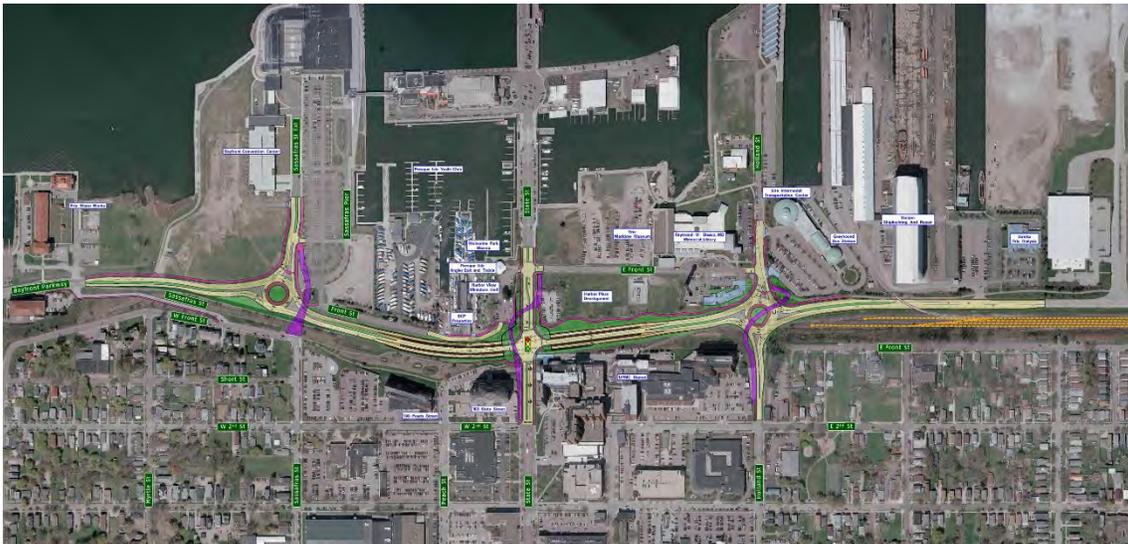
The TNM 2.5 analysis found that no receivers in the study area would approach or exceed FHWA Noise Abatement Criteria in the design year (2040) with either the no-build or build alternative. Also, no receivers were predicted to have a substantial increase in traffic noise levels as a result of the build alternative. Therefore, **the project has no traffic noise impacts** according to *PennDOT Publication No. 24*. Because the project has no traffic noise impacts, the investigation of traffic noise abatement was not warranted and noise mitigation, using noise walls, was not evaluated.

Project specific construction-related noise levels have not been predicted for the Bayfront Parkway Improvements project. It can be assumed that all developed land uses and activities adjacent to the proposed project will be temporarily affected by noise generated from power equipment used for highway construction.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

1. Introduction

The proposed Bayfront Parkway Improvement project is intended to improve the pedestrian, bicycle, transit, and passenger vehicle connections between downtown Erie, existing neighborhoods, and Lake Erie waterfront properties. It is also intended to reduce crashes on the Bayfront Parkway (SR 4034), reduce future congestion, and improve traffic operations and efficiency. As shown below, the project involves a grade-separated intersection between State Street and Bayfront Parkway, which includes a single eastbound and a single westbound bypass lane that travels under State Street. A two-lane bi-directional roadway with one eastbound lane and one westbound lane will be constructed on ramp structures on the east and west sides of the grade-separated structure that carries local traffic to State Street. In addition, the project proposes roundabouts along the Bayfront Parkway at Sassafra Street and Holland Street. The project also proposes the construction of additional shared-use trail connections between neighborhoods, downtown, and the waterfront.



As part of the Bayfront Parkway Improvements project, the existing railroad track located between Sassafra Street Extension and Holland Street will be removed to accommodate the proposed improvements. In order to maintain operations, CSX is proposing to add additional track east of Holland Street and adjacent to the Pennsylvania Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Currently, an at-grade railroad crossing exists between the Soldiers' and Sailors' Home and the Veterans Memorial Cemetery. Also part of the Bayfront Parkway Improvements project, this crossing will be eliminated and a multi-modal bridge over the proposed CSX tracks will be constructed just west of the existing crossing.

The study area for this Preliminary Design Traffic Noise Report covers about 1.5 miles of existing Bayfront Parkway (SR 4034) in the City of Erie, Erie County, Pennsylvania. See Figure 1. This Preliminary Design Traffic Noise Report presents the results of a traffic noise analysis using the current project plans and procedures contained in *PennDOT Publication No. 24 (Project Level Traffic Noise Handbook)* issued May 2019.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

2. Noise Study Areas

The project area has been divided into eight Noise Study Areas (NSAs) based upon existing land use patterns and topography. See Figure 2.

NSA A

NSA A is located along W Front Street from Chestnut Street on the west to Sassafras Street to the east and south of Bayfront Parkway. NSA A contains primarily residential land uses, FHWA NAC Category B Receivers. However, it also includes Niagra Machine Inc. at 325 W Front Street, and Erie Water Works at 340 W Bayfront Parkway which are industrial and office land uses respectively, FHWA NAC Category E and F Receivers. See Figure 3a.



NSA B

NSA B is located south of W Bayfront Parkway from Sassafras Street on the west to State Street to the east. It contains two multi-story office buildings which are commercial land uses and have no outdoor activity areas. See Figure 3b.

NSA C

NSA C is located south of E Bayfront Parkway from State Street on the west to Holland Street to the east. It contains the UPMC Hamot Campus which is a hospital complex, and therefore FHWA NAC Category C or Category D land use. See Figure 3c.



NSA D

NSA D is located south of E Bayfront Parkway from Holland Street on the west to Wallace Street to the east. NSA D contains primarily residential land uses, FHWA NAC Category B Receivers, however it also includes a small office complex near the corner of 2nd Street and Holland Street, the Russian Old Rite Orthodox Church of the Nativity at 247 E 1st Street, a commercial building at the corner of E 1st Street and German Street, and a park at the corner of E 1st Street and Wallace Street. See Figure 3d.

NSA E

NSA E is located north of W Bayfront Parkway from just east of Sassafras Street on the west to State Street to the east. It contains commercial and industrial land uses including the Presque Isle Yacht Club, Bayshore Marine Services, Harborview Miniature Golf and Presque Isle Bait and Tackle, which are considered FHWA NAC Category E receivers. See Figure 3e.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

NSA F

NSA F is located north of E Bayfront Parkway from State Street on the west to Holland Street to the east. It contains commercial and institutional land uses including a Hampton Inn (currently under construction), the Erie Maritime Museum, Erie County Planning, and Raymond M Blasco Memorial Library. The Hampton Inn is an FHWA NAC Category E land use. The Erie Maritime Museum, Erie County Planning, and Raymond M Blasco Memorial Library, are Category C or Category D land uses. See Figure 3f.



NSA G

NSA G is located north of E Bayfront Parkway from Holland Street on the west to the railroad tracks west of the Erie Water Treatment Plant to the east. It contains commercial and industrial land uses including the Erie Greyhound Bus Station, Donjon Shipbuilding and Repair, DaVita Erie Dialysis, eCycle Group, and Sunburst Electronics, which are FHWA NAC Category F land uses. See Figure 3g.

NSA H

NSA H is located south and west of E Bayfront Parkway at the east end of the project area. It contains institutional land uses including facilities surrounding the Pennsylvania Soldiers' and Sailors' Home. Those facilities include the Fort Presque Isle Blockhouse Memorial and Veterans Memorial Cemetery. The Pennsylvania Soldiers' and Sailors' Home itself is primarily a retirement facility with a Gazebo near the main entrance. See Figure 3h.



3. Purpose

The purpose of this Preliminary Design Traffic Noise Report is to document the existing noise levels and noise sources in the project area, compare the predicted future noise levels associated with the no-build alternative and the build alternative, identify any future noise impacts, and evaluate the possible mitigation of identified noise impacts.

4. Regulations and Guidance

ms consultants, inc. conducted this noise analysis according to the procedures contained in *PennDOT Publication No. 24 (Project Level Highway Traffic Noise Handbook)* issued May 2019.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

5. Methodology

Noise Descriptors

Noise levels are described as an hourly A-weighted equivalent sound level in decibels, or dB(A) Leq(h). The decibel (dB) is a measure used to express the relative measure of a sound in comparison with a standard reference level. At the threshold of pain, the sound pressure is one million times greater than the sound pressure at the threshold of hearing. The decibel scale is used to logarithmically compress this large range of numeric values. By using the decibel scale, the range of sounds can be expressed as 0 to 120 dB rather than 1 to 1,000,000. In general, the average person cannot detect an increase or decrease in noise (sound pressure) level of less than 3 dB(A). A change in noise level of 5 dB(A) is readily perceptible by most people. An increase or decrease in noise level of 10 dB(A) is perceived as a doubling or halving of the noise level.

Sound frequency is expressed as cycles per second or Hertz (Hz). The human ear can detect a wide range of frequencies from 20 to 20,000 Hz, but is most sensitive to sounds over a frequency range of 200 to 5,000 Hz. The human ear does not respond in a uniform manner to different frequency sounds. A sound pressure level of 70 dB will be perceived as much louder at 1,000 Hz than at 100 Hz. To account for this, various weighting methods have been developed to reflect human sensitivity to noise. The purpose of a weighting method is to de-emphasize the frequency ranges in which the human ear is less sensitive. The most commonly used measure of noise level is the A-weighted sound level (dB(A)). The dB(A) sound level is widely used for transportation-related noise measurements and specifications for community noise ordinances and standards. The dB(A) has been shown to be highly correlated to human response to noise.

In addition to noise fluctuating in frequency, environmental noise will fluctuate in intensity from moment to moment. Over a period of time there will be quiet moments and peak levels resulting from noisy, identifiable sources (trucks, aircraft, etc.). Because of these fluctuations, it is common practice to average these noise level fluctuations over a specified period of time. The equivalent sound level over a given period of interest, Leq, is equal to the equivalent steady-state noise level which, in a stated time period, would contain the same acoustical energy as the time-varying noise levels that actually occurred during the same time period. The hourly value of Leq, based upon the peak-hour percentage of the annual average daily traffic, is referred to as Leq(h). Surveys have shown that Leq properly predicts annoyance, and this descriptor is commonly used for noise measurement, prediction, and impact assessment.

Noise Monitoring

An Ambient Noise Monitoring work plan was prepared by **ms consultants, inc.** and approved by PennDOT on November 7, 2019, prior to any traffic noise monitoring activity on private property. The work plan included a discussion of noise monitoring procedures, a map of short-term (15-minute) monitoring locations, and an explanation of site access procedures.

RION NL-31 Sound Level Meters and Metrosonics db-3100 sound analyzers (dosimeters) were utilized to obtain existing traffic noise levels. Standardized field data sheets for existing condition documentation were also completed at the noise monitoring sites.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

Short-term ambient noise monitoring was conducted in November 2019, during weather conditions suitable for outdoor activity. Each site was monitored for a period of at least 15 minutes. Weather conditions and noise sources were noted at each site (See Appendix 1). During short-term traffic noise monitoring, traffic counts on Bayfront Parkway, State Street, Holland Street and several other crossroads were conducted using video replay and manual methods. Observed travel speed was determined by visual observation and by driving Bayfront Parkway in each direction.

Noise Level Prediction

FHWA's Traffic Noise Model (Version 2.5) computer program was used to predict the Existing and Design Year (2040) noise levels generated by traffic on the proposed Bayfront Parkway, intersections and the other local roads associated with the build alternative. Roadway location and elevation data was determined from project plans, profiles, and cross-sections available in late 2019. Receiver locations and elevations were developed from project plans and recent aerial photography.

The Existing Year conditions, Design Year no-build, and Design Year build TNM models used traffic data that was developed from traffic forecasts prepared specifically for the project (See Appendix 2). Observed traffic was used only for TNM model validation. Existing year and design year no-build analysis involved 2018/2040 traffic traveling at the observed speeds or posted speed limits. The design year build analysis involved 2040 traffic traveling at a maximum of 35 mph on proposed Bayfront Parkway and observed speeds or posted speed limits on other local roads. TNM Traffic Control Devices, software settings, were used to appropriately replicate stop-and-go traffic at the proposed intersections and slow-moving traffic accelerating away from the proposed roundabouts.

Undeveloped Lands

PennDOT *Publication No. 24* explains that in order to assist local planning officials, the distance to impact thresholds for the various FHWA land use activity categories should be determined in undeveloped areas. The Bayfront Parkway Improvements project area, located between downtown Erie and the Lake Erie waterfront, has been developed for many years. Therefore, no undeveloped lands noise analysis has been conducted.

It is understood that the project area contains areas that were previously developed, are currently vacant, and are being considered for future waterfront redevelopment. However, there are no final approved permits for this redevelopment, so these areas were not included in this noise analysis.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

Noise Impact Assessment

According to PennDOT *Publication No. 24*, a project is defined as having a traffic noise impact if either of the following conditions occur:

1. Predicted noise levels for the design year approach or exceed the FHWA Noise Abatement Criteria (NAC) as presented in Table 1.
2. Predicted noise levels are a substantial increase over the existing noise levels. According to PennDOT *Publication No. 24*, a substantial increase occurs where the design year noise level increases 10 dB(A) or more above the existing noise level.

| Table 1 Noise Abatement Criteria (23 CFR 772) Hourly Weighted Sound Levels dB(A) For Various Land Use Activity Categories | | |
|--|------------------|--|
| Land Use Activity Category | Leq(h)* | Description of Land Use Activity Category |
| A | 57 (exterior) | Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. |
| B** | 67 (exterior) | Residential. |
| C** | 67 (exterior) | Active sports areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings. |
| D | 52 (interior) | Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios. |
| E** | 72 (exterior) | Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A, B, or C. |
| F | -- | Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, ship yards, utilities, (water resources, water treatment, electrical), and warehousing. |
| G | -- | Undeveloped lands that are not permitted. |
| * Impact thresholds should not be used as design standards for noise abatement purposes. | | |
| ** Includes undeveloped lands permitted for this activity category. | | |

Because no receivers had predicted noise levels for the Design Year 2040 that approached or exceeded FHWA Noise Abatement Criteria and no receivers had a predicted Design Year 2040 noise level that were substantial increases, no traffic noise impacts were identified with the Build Alternative. Therefore, traffic noise abatement was not warranted and noise mitigation was not evaluated according the guidance contained in *PennDOT Publication No. 24*.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

6. TNM Model Validation

To verify the accuracy of TNM 2.5, existing traffic noise levels were predicted for the monitoring sites and compared to monitoring results. This was accomplished by developing a TNM model of the existing roadways including the traffic volume, average vehicular speed, and number of trucks observed during the monitoring period. As shown in Table 2, the difference in the two values was within +/- 3 dB(A) indicating the model was within the level of accuracy required by PennDOT *Publication No. 24* (See Appendix 3).



| Table 2 Model Validation Results - dB(A) | | | |
|---|-----------------------|-----------------------|------------|
| Location | Monitored Noise Level | Predicted Noise Level | Difference |
| Site A-1 | 49.0 | 49.5 | 0.5 |
| Site A-1ii | 48.0 | 47.4 | -0.6 |
| Site B-1 | 66.1 | 66.0 | -0.1 |
| Site C-1 | 64.9 | 64.3 | -0.6 |
| Site D-1 | 55.3 | 55.7 | 0.4 |
| Site D-2 | 56.9 | 56.0 | -0.9 |
| Site E-1 | 55.9 | 56.7 | 0.8 |
| Site F-1* | 60.1 | 57.3 | -2.8 |
| Site F-2 | 57.1 | 58.1 | 1.0 |
| Site H-1 | 56.5 | 57.0 | 0.5 |
| Site H-2** | 52.0 | n/a | n/a |

* Site F-1 monitored level elevated due to hotel construction activity.

** Site H-2 had no discernable traffic noise (see Figure 2).

7. Noise Modeling

Because TNM was predicting existing noise levels accurately, similar models were developed to predict existing peak-hour noise levels in each NSA. Because the highest design year traffic volumes are associated with the PM peak-hour, PM peak-hour traffic volumes were used throughout this study including the existing and predicted future traffic on Bayfront Parkway and other roadways. Appendix 4 contains the TNM output from the existing conditions model. This modeled existing noise level was later used as the existing noise level in future no-build and build models.

TNM 2.5 was also used to predict Design Year (2040) traffic noise levels associated with the no-build and build alternatives. Design Year traffic noise was predicted for a total of 171 receiver sites (See Figure 3a thru Figure 3h). These modeling sites represent numerous residential sites, a

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church, and a shared-use trail, all of which are located adjacent to the proposed Bayfront Parkway, and the other local roads associated with the project.

- TNM 2.5 output for the no-build alternative is presented in Appendix 5.
- TNM 2.5 output for the build alternative is in Appendix 6.

NSA A

NSA A is located along W Front Street from Chestnut Street on the west to Sassafras Street to the east and south of Bayfront Parkway. NSA A contains primarily residential land uses, FHWA NAC Category B Receivers, however also includes Niagra Machine Inc. (not modeled), and Erie Water Works (A-4), which are industrial and office land uses respectively, FHWA NAC Category F and E Receivers.

| Table 3 | | | | | | |
|---|-----------------------|----------|-----------------------------|----------|--------------------------|----------|
| NSA A - Predicted Noise Levels dB(A) | | | | | | |
| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative – 2040 | |
| | | | Predicted | Increase | Predicted | Increase |
| A-4 (Office) | E | 66 | 66 | 0 | 66 | 0 |
| A-9 | B | 47 | 48 | 1 | 48 | 1 |
| A-10 | B | 47 | 48 | 1 | 48 | 1 |
| A-12 | B | 46 | 48 | 2 | 48 | 2 |
| A-13 | B | 47 | 48 | 1 | 49 | 2 |
| A-14 | B | 49 | 50 | 1 | 51 | 2 |
| A-15 | B | 50 | 51 | 1 | 51 | 1 |
| A-16 | B | 49 | 51 | 2 | 51 | 2 |
| A-17 | B | 50 | 51 | 1 | 51 | 1 |
| A-18 | B | 50 | 52 | 2 | 51 | 1 |
| A-19 | B | 51 | 53 | 2 | 53 | 2 |
| A-20 | B | 51 | 53 | 2 | 54 | 3 |
| A-21 | B | 52 | 53 | 1 | 54 | 2 |
| A-22 | B | 52 | 53 | 1 | 54 | 2 |
| A-23 | B | 52 | 53 | 1 | 53 | 1 |
| A-24 | B | 53 | 54 | 1 | 54 | 1 |
| A-27 | B | 54 | 55 | 1 | 55 | 1 |
| A-2ii | B | 45 | 46 | 1 | 47 | 2 |
| A-1iii | B | 41 | 42 | 1 | 41 | 0 |
| A-2iii | B | 40 | 42 | 2 | 41 | 1 |
| A-3ii | B | 45 | 46 | 1 | 47 | 2 |
| A-4ii | B | 45 | 47 | 2 | 47 | 2 |

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| Table 3 NSA A - Predicted Noise Levels dB(A) | | | | | | |
|---|-----------------------|----------|-----------------------------|----------|--------------------------|----------|
| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative - 2040 | |
| | | | Predicted | Increase | Predicted | Increase |
| A-4iii | B | 40 | 42 | 2 | 41 | 1 |
| A-5iii | B | 41 | 42 | 1 | 41 | 0 |
| A-6iii | B | 41 | 42 | 1 | 41 | 0 |
| A-7iii | B | 40 | 42 | 2 | 41 | 1 |
| A-8iii | B | 40 | 42 | 2 | 41 | 1 |
| A-9iii | B | 40 | 41 | 1 | 40 | 0 |
| A-10iii | B | 41 | 42 | 1 | 41 | 0 |
| A-11iii | B | 41 | 43 | 2 | 41 | 0 |
| A-13ii | B | 42 | 44 | 2 | 44 | 2 |
| A-13iii | B | 42 | 43 | 1 | 43 | 1 |
| A-13iv | B | 40 | 41 | 1 | 41 | 1 |
| A-13v | B | 42 | 44 | 2 | 42 | 0 |
| A-13vi | B | 42 | 43 | 1 | 41 | -1 |
| A-14ii | B | 44 | 46 | 2 | 47 | 3 |
| A-14iii | B | 44 | 45 | 1 | 46 | 2 |
| A-14iv | B | 43 | 44 | 1 | 45 | 2 |
| A-14v | B | 42 | 44 | 2 | 44 | 2 |
| A-14vi | B | 42 | 43 | 1 | 43 | 1 |
| A-14vii | B | 42 | 43 | 1 | 42 | 0 |
| A-15ii | B | 45 | 46 | 1 | 45 | 0 |
| A-15iii | B | 42 | 44 | 2 | 42 | 0 |
| A-16ii | B | 45 | 46 | 1 | 45 | 0 |
| A-17ii | B | 45 | 46 | 1 | 45 | 0 |
| A-18ii | B | 45 | 47 | 2 | 45 | 0 |
| A-18iii | B | 43 | 44 | 1 | 42 | -1 |
| A-19ii | B | 46 | 47 | 1 | 45 | -1 |
| A-19iii | B | 43 | 44 | 1 | 43 | 0 |
| A-20ii | B | 46 | 48 | 2 | 45 | -1 |
| A-21ii | B | 46 | 48 | 2 | 46 | 0 |
| A-21iii | B | 44 | 45 | 1 | 43 | -1 |
| A-22ii | B | 46 | 48 | 2 | 46 | 0 |
| A-23ii | B | 47 | 48 | 1 | 46 | -1 |
| A-23iii | B | 44 | 45 | 1 | 44 | 0 |
| A-24ii | B | 47 | 49 | 2 | 47 | 0 |

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| Table 3 NSA A - Predicted Noise Levels dB(A) | | | | | | |
|---|-----------------------------|----------|--------------------------------|----------|-----------------------------|----------|
| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative – 2040 | |
| | | | Predicted | Increase | Predicted | Increase |
| A-24iii | B | 45 | 46 | 1 | 44 | -1 |
| A-25ii | B | 48 | 49 | 1 | 48 | 0 |
| A-25iii | B | 46 | 47 | 1 | 45 | -1 |
| A-26iii | B | 46 | 47 | 1 | 46 | 0 |
| A-27ii | B | 49 | 51 | 2 | 49 | 0 |
| A-27iii | B | 47 | 48 | 1 | 46 | -1 |
| A-28iii | B | 47 | 48 | 1 | 47 | -1 |

As shown in Table 3, predicted No-Build Alternative Year 2040 peak-hour noise levels in NSA A do not approach or exceed FHWA NAC for Activity Category B land uses, therefore, there were no traffic noise impacts identified in the No-Build Alternative. The predicted Build Alternative Year 2040 peak-hour noise levels in NSA A also do not approach or exceed FHWA NAC for Activity Category B land uses. The Build Alternative noise levels also do not increase 10 dB(A) or more above the existing noise levels and are not considered a substantial increase.

At some receivers in NSA A, predicted traffic noise levels did not increase or decreased slightly with the Build Alternative due to the proposed overall decrease in traffic speed on the Bayfront Parkway and the reduction of acceleration/deceleration related noise due to the proposed roundabout replacing the existing intersection at Sassafrass Street Extension.

Because the noise levels do not approach or exceed FHWA NAC Criteria for the Build Alternative Year 2040 and are not considered a substantial increase, NSA A is not predicted to have traffic noise impacts.

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NSA B

NSA B is located south of W Bayfront Parkway from Sassafras Street on the west to State Street to the east. It contains two multi-story office buildings which are commercial land uses. There is also a shared-use trail adjacent to W Bayfront Parkway. The four receivers below represent points along the shared-use trail which are considered Activity Category C receivers.

| Table 4 NSA B - Predicted Noise Levels dB(A) | | | | | | |
|---|-----------------------------|----------|--------------------------------|----------|-----------------------------|----------|
| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative - 2040 | |
| | | | Predicted | Increase | Predicted | Increase |
| B-1 | C | 61 | 62 | 1 | 61 | 0 |
| B-2 | C | 56 | 57 | 1 | 56 | 0 |
| B-3 | C | 60 | 61 | 1 | 60 | 0 |
| B-4 | C | 64 | 65 | 1 | 64 | 0 |

As shown in Table 4, predicted No-Build Alternative Year 2040 peak-hour noise levels do not approach or exceed FHWA NAC for Activity Category C land uses, therefore, there were no traffic noise impacts identified in the No-Build Alternative. The predicted Build Alternative Year 2040 peak-hour noise levels in NSA B also do not approach or exceed FHWA NAC for Activity Category C land uses. The Build Alternative noise levels also do not increase 10 dB(A) or more above the existing noise levels and are not considered a substantial increase.

The predicted traffic noise levels in NSA B did not increase with the Build Alternative due to the proposed decrease in overall traffic speed on the Bayfront Parkway, the reduction of acceleration/deceleration related noise due to the proposed roundabouts replacing the existing intersections, and the shielding of traffic on the bypass lanes that travel under the proposed State Street grade separated intersection.

Because the noise levels do not approach or exceed FHWA NAC Criteria for the Build Alternative Year 2040 and are not considered a substantial increase, NSA B is not predicted to have traffic noise impacts.

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NSA C

NSA C is located south of E Bayfront Parkway from State Street on the west to Holland Street to the east. It contains the UPMC Hamot Campus which is a hospital complex, which is an FHWA NAC Category C or Category D land use.

| Table 5 NSA C - Predicted Noise Levels dB(A) | | | | | | |
|---|-----------------------|----------|-----------------------------|----------|--------------------------|----------|
| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative - 2040 | |
| | | | Predicted | Increase | Predicted | Increase |
| C-1 | C or D | 51 | 53 | 2 | 51 | 0 |
| C-2 | C or D | 61 | 62 | 1 | 60 | -1 |

As shown in Table 5, predicted No-Build Alternative Year 2040 peak-hour noise levels do not approach or exceed FHWA NAC for Activity Category C land uses, therefore, there were no traffic noise impacts identified in the No-Build Alternative. The predicted Build Alternative Year 2040 peak-hour noise levels in NSA B also do not approach or exceed FHWA NAC for Activity Category C and also do not increase 10 dB(A) or more above the existing noise level and therefore are not considered a substantial increase. At receiver C-2, predicted traffic noise decreased with the Build Alternative due to proposed decreases in speed limit, minimization of acceleration noise because of the removed signal and roundabout construction at Holland Street, and shielding due to the proposed depressed roadway at State Street.

The predicted traffic noise levels in NSA C did not increase or decreased slightly with the Build Alternative due to the proposed decrease in overall traffic speed on the Bayfront Parkway, the reduction of acceleration/deceleration related noise due to the proposed roundabouts replacing the existing intersections, and the shielding of traffic on the bypass lanes that travel under the proposed State Street grade separated intersection.

Field review confirmed that there are no outdoor activity areas facing Bayfront Parkway at the UPMC Hamot Campus (See Figure 03c). Therefore, FHWA NAC is Activity Category D (interior) is also applicable. Because the hospital buildings are of modern masonry construction, according to FHWA guidance they can be assumed to have at least a 25 dB difference between exterior and interior levels. Therefore, the highest exterior noise level (Receiver C-2) equates to an interior noise level of 35 dBA, which is below the FHWA NAC of 51 dBA (See Table 1). As a result, the predicted interior traffic noise levels in NSA C cannot be considered an impact.

Because the noise levels do not approach or exceed FHWA NAC Criteria for the Build Alternative Year 2040 and are not considered a substantial increase, NSA C is not predicted to have traffic noise impacts.

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NSA D

NSA D is located south of E Bayfront Parkway from Holland Street on the west to Holland Street to Wallace Street to the east. NSA D contains primarily residential land uses, FHWA NAC Category B Receivers, however it also includes a small office complex (D-1iii, D-2iii), the Russian Old Rite Orthodox Church of the Nativity (D-6), a commercial building (D-8), and a park (D-28).

**Table 6
NSA D - Predicted Noise Levels dB(A)**

| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative - 2040 | |
|-----------------|-----------------------|----------|-----------------------------|----------|--------------------------|----------|
| | | | Predicted | Increase | Predicted | Increase |
| D-3 | B | 55 | 56 | 1 | 54 | -1 |
| D-4 | B | 54 | 55 | 1 | 54 | 0 |
| D-5 | B | 53 | 54 | 1 | 53 | 0 |
| D-6 (Church) | C | 52 | 53 | 1 | 52 | 0 |
| D-8 (Office) | E | 49 | 50 | 1 | 49 | 0 |
| D-9 | B | 56 | 57 | 1 | 56 | 0 |
| D-10 | B | 55 | 55 | 0 | 55 | 0 |
| D-11 | B | 57 | 57 | 0 | 56 | -1 |
| D-12 | B | 56 | 56 | 0 | 56 | 0 |
| D-13 | B | 57 | 57 | 0 | 56 | -1 |
| D-14 | B | 57 | 58 | 1 | 57 | 0 |
| D-15 | B | 55 | 56 | 1 | 54 | -1 |
| D-16 | B | 55 | 56 | 1 | 55 | 0 |
| D-17 | B | 58 | 59 | 1 | 58 | 0 |
| D-21 | B | 56 | 56 | 0 | 55 | -1 |
| D-22 | B | 55 | 55 | 0 | 54 | -1 |
| D-28 (Park) | C | 52 | 52 | 0 | 51 | -1 |
| D-1iii (Office) | E | 64 | 65 | 1 | 63 | -1 |
| D-2iii (Office) | E | 53 | 54 | 1 | 53 | 0 |
| D-3ii | B | 51 | 52 | 1 | 51 | 0 |
| D-3iii | B | 50 | 51 | 1 | 50 | 0 |
| D-3iva | B | 51 | 52 | 1 | 51 | 0 |
| D-3ivb | B | 50 | 51 | 1 | 50 | 0 |
| D-4ii | B | 49 | 50 | 1 | 49 | 0 |
| D-4iii | B | 48 | 49 | 1 | 48 | 0 |
| D-6iii | B | 45 | 46 | 1 | 45 | 0 |
| D-7ii | B | 45 | 45 | 0 | 44 | -1 |
| D-8iii | B | 44 | 44 | 0 | 43 | -1 |
| D-9iia | B | 44 | 44 | 0 | 43 | -1 |
| D-9iib | B | 43 | 44 | 1 | 43 | 0 |

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| Table 6 NSA D - Predicted Noise Levels dB(A) | | | | | | |
|---|-----------------------|----------|-----------------------------|----------|--------------------------|----------|
| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative - 2040 | |
| | | | Predicted | Increase | Predicted | Increase |
| D-10iii | B | 44 | 44 | 0 | 43 | -1 |
| D-11iia | B | 44 | 44 | 0 | 43 | -1 |
| D-11iib | B | 44 | 44 | 0 | 43 | -1 |
| D-12ii | B | 46 | 47 | 1 | 45 | -1 |
| D-12iia | B | 44 | 45 | 1 | 44 | 0 |
| D-12iib | B | 44 | 45 | 1 | 44 | 0 |
| D-13ii | B | 47 | 48 | 1 | 47 | 0 |
| D-13iii | B | 44 | 44 | 0 | 43 | -1 |
| D-15ii | B | 52 | 53 | 1 | 51 | -1 |
| D-15iii | B | 50 | 50 | 0 | 49 | -1 |
| D-15iv | B | 49 | 49 | 0 | 48 | -1 |
| D-15v | B | 46 | 47 | 1 | 46 | 0 |
| D-15vi | B | 45 | 46 | 1 | 45 | 0 |
| D-15vii | B | 44 | 45 | 1 | 44 | 0 |
| D-15viii | B | 44 | 44 | 0 | 43 | -1 |
| D-15ix | B | 43 | 43 | 0 | 42 | -1 |
| D-15x | B | 42 | 43 | 1 | 42 | 0 |
| D-16ii | B | 52 | 53 | 1 | 52 | 0 |
| D-16iii | B | 50 | 50 | 0 | 49 | -1 |
| D-16iv | B | 48 | 49 | 1 | 48 | 0 |
| D-16v | B | 47 | 48 | 1 | 47 | 0 |
| D-16vi | B | 46 | 47 | 1 | 46 | 0 |
| D-16vii | B | 45 | 46 | 1 | 44 | -1 |
| D-16viii | B | 44 | 45 | 1 | 44 | 0 |
| D-16ix | B | 43 | 44 | 1 | 43 | 0 |
| D-16x | B | 42 | 43 | 1 | 42 | 0 |
| D-17iii | B | 45 | 46 | 1 | 45 | 0 |
| D-18iii | B | 44 | 45 | 1 | 44 | 0 |
| D-19iii | B | 44 | 44 | 0 | 43 | -1 |
| D-20iii | B | 44 | 44 | 0 | 43 | -1 |
| D-21ii | B | 53 | 53 | 0 | 51 | -2 |
| D-21iii | B | 51 | 51 | 0 | 49 | -2 |
| D-21iv | B | 49 | 49 | 0 | 48 | -1 |
| D-21v | B | 48 | 48 | 0 | 47 | -1 |
| D-21vi | B | 47 | 47 | 0 | 46 | -1 |

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| Table 6 NSA D - Predicted Noise Levels dB(A) | | | | | | |
|---|-----------------------|----------|-----------------------------|----------|--------------------------|----------|
| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative - 2040 | |
| | | | Predicted | Increase | Predicted | Increase |
| D-21vii | B | 46 | 46 | 0 | 45 | -1 |
| D-21viii | B | 45 | 46 | 1 | 45 | 0 |
| D-21ix | B | 45 | 45 | 0 | 44 | -1 |
| D-22ii | B | 52 | 52 | 0 | 51 | -1 |
| D-22iii | B | 50 | 50 | 0 | 49 | -1 |
| D-22iv | B | 49 | 49 | 0 | 48 | -1 |
| D-22v | B | 48 | 48 | 0 | 47 | -1 |
| D-22vi | B | 47 | 47 | 0 | 46 | -1 |
| D-22vii | B | 46 | 47 | 1 | 45 | -1 |
| D-22viii | B | 45 | 46 | 1 | 45 | 0 |
| D-22ix | B | 44 | 45 | 1 | 44 | 0 |
| D-23iii | B | 46 | 47 | 1 | 46 | 0 |
| D-24iii | B | 46 | 47 | 1 | 45 | -1 |
| D-25iii | B | 46 | 47 | 1 | 46 | 0 |
| D-26iii | B | 47 | 48 | 1 | 46 | -1 |
| D-27iii | B | 47 | 48 | 1 | 46 | -1 |
| D-28iii | B | 47 | 48 | 1 | 47 | 0 |
| D-29iii | B | 47 | 48 | 1 | 47 | 0 |
| D-30iii | B | 47 | 48 | 1 | 46 | -1 |
| D-31iii | B | 48 | 48 | 0 | 47 | -1 |

As shown in Table 6, predicted No-Build Alternative Year 2040 peak-hour noise levels do not approach or exceed FHWA NAC for their Activity Category therefore, there were no traffic noise impacts identified in the No-Build Alternative. The predicted Build Alternative Year 2040 peak-hour noise levels in NSA D are also not predicted to approach or exceed FHWA NAC for their Activity Category. Also, predicted Build Alternative noise levels do not increase 10 dB(A) or more above the existing noise level and are not considered a substantial increase.

At some receivers in NSA D, predicted traffic noise levels did not increase or decreased slightly with the Build Alternative due to the proposed overall decrease in traffic speed on the Bayfront Parkway and the reduction of acceleration/deceleration related noise due to the proposed roundabout replacing the existing intersection at Holland Street.

Because the noise levels do not approach or exceed FHWA NAC Criteria for the Build Alternative Year 2040 and are not considered a substantial increase, NSA D is not predicted to have traffic noise impacts.

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NSA E

NSA E is located north of W Bayfront Parkway from just east of Sassafras Street on the west to State Street to the east. It contains commercial and industrial land uses including the Presque Isle Yacht Club (E-1iii), Bayshore Marine Services (E-2iii), Harborview Miniature Golf (E-3, E-3ii) and Presque Isle Bait and Tackle (E-3ii).

| Table 7 NSA E - Predicted Noise Levels dB(A) | | | | | | |
|---|-----------------------|----------|-----------------------------|----------|--------------------------|----------|
| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative - 2040 | |
| | | | Predicted | Increase | Predicted | Increase |
| E-1iii | E | 53 | 55 | 2 | 58 | 5 |
| E-2ii | E | 52 | 54 | 2 | 53 | 1 |
| E-3 | E | 57 | 60 | 3 | 51 | -6 |
| E-3ii | E | 54 | 56 | 2 | 54 | 0 |

As shown in Table 7, predicted No-Build Alternative Year 2040 peak-hour noise levels do not approach or exceed FHWA NAC for Activity Category E land uses, therefore, there were no traffic noise impacts identified in the No-Build Alternative. The predicted Build Alternative Year 2040 peak-hour noise levels in NSA E also do not approach or exceed FHWA NAC for Activity Category E land uses. Also, predicted Build Alternative noise levels do not increase 10 dB(A) or more above the existing noise level and are not considered a substantial increase.

At some receivers in NSA E, predicted traffic noise levels did not increase or decreased with the Build Alternative due to the proposed decrease in overall traffic speed on the Bayfront Parkway, the reduction of acceleration/deceleration related noise due to the proposed roundabouts replacing the existing intersections, and the shielding of traffic on the bypass lanes that travel under the proposed State Street grade separated intersection.

Because the noise levels do not approach or exceed FHWA NAC Criteria for the Build Alternative Year 2040 and are not considered a substantial increase, NSA E is not predicted to have traffic noise impacts.

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NSA F

NSA F is located north of E Bayfront Parkway from State Street on the west to Holland Street to the east. It contains commercial and institutional land uses including a Hampton Inn (currently under construction), the Erie Maritime Museum (F-1), Erie County Planning, and Raymond M Blasco Memorial Library (F-2). The Hampton Inn (F-3) construction includes an adjacent parking lot. See Figure 3f.

| Table 8 NSA F - Predicted Noise Levels dB(A) | | | | | | |
|---|-----------------------|----------|-----------------------------|----------|--------------------------|----------|
| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative - 2040 | |
| | | | Predicted | Increase | Predicted | Increase |
| F-1 | C or D | 56 | 56 | 0 | 54 | -2 |
| F-2 | C or D | 58 | 59 | 1 | 58 | 0 |
| F-3 | E | 53 | 52 | -1 | 54 | 1 |

As shown in Table 8, predicted No-Build Alternative Year 2040 peak-hour noise levels do not approach or exceed FHWA NAC for Activity Category C land uses, therefore, there were no traffic noise impacts identified in the No-Build Alternative. The predicted Build Alternative Year 2040 peak-hour noise levels in NSA F also do not approach or exceed FHWA NAC for Activity Category C land uses. Also, predicted Build Alternative noise levels do not increase 10 dB(A) or more above the existing noise level and are not considered a substantial increase.

At some receivers in NSA F, predicted traffic noise levels in NSA F did not increase or decreased slightly with the Build Alternative due to the proposed decrease in overall traffic speed on the Bayfront Parkway, the reduction of acceleration/deceleration related noise due to the proposed roundabouts replacing the existing intersections, and the shielding of traffic on the bypass lanes that travel under the proposed State Street grade separated intersection.

The Erie Maritime Museum (F-1) and the Raymond M Blasco Memorial Library (F-2) can also be considered FHWA NAC Activity Category D (interior) receivers because they are public or non-profit institutional structures. Because the buildings are of modern masonry construction, according to FHWA guidance they can be assumed to have at least a 25 dB difference between exterior and interior levels. Therefore, the highest exterior noise level (Receiver F-2) equates to an interior noise level of 33 dBA, which is below the FHWA NAC of 51 dBA (See Table 1). As a result, the predicted interior traffic noise levels in NSA F cannot be considered an impact.

Because the noise levels do not approach or exceed FHWA NAC Criteria for the Build Alternative Year 2040 and are not considered a substantial increase, NSA F is not predicted to have traffic noise impacts.

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NSA G

NSA G is located north of E Bayfront Parkway from Holland Street on the west to the railroad tracks west of the Erie Water Treatment Plant to the east. It contains commercial and industrial land uses including the Erie Greyhound Bus Station (G-1, G-1iii), Donjon Shipbuilding and Repair (not modeled), DaVita Erie Dialysis (G-3), eCycle Group, and Sunburst Electronics (G-4). Receivers G-1, G-3, G-4, G-5 and G-1iii are considered Activity Category F land uses and therefore not considered noise sensitive. Receivers G-2iii and G-3iii appear to have an outdoor use area with picnic tables.

| Table 9 NSA G - Predicted Noise Levels dB(A) | | | | | | |
|---|-----------------------|----------|-----------------------------|----------|--------------------------|----------|
| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative – 2040 | |
| | | | Predicted | Increase | Predicted | Increase |
| G-1 | F | 58 | 59 | 1 | 56 | -2 |
| G-3 | F | 54 | 56 | 2 | 54 | 0 |
| G-4 | F | 58 | 59 | 1 | 57 | -1 |
| G-5 | F | 55 | 56 | 1 | 54 | -1 |
| G-1iii | F | 55 | 56 | 1 | 55 | 0 |
| G-2iii | C | 47 | 50 | 3 | 47 | 0 |
| G-3iii | C | 47 | 50 | 3 | 47 | 0 |

As shown in Table 9, predicted No-Build Alternative Year 2040 peak-hour noise levels do not approach or exceed FHWA NAC for Activity Category C land uses, therefore, there were no traffic noise impacts identified in the No-Build Alternative. The predicted Build Alternative Year 2040 peak-hour noise levels also do not approach or exceed FHWA NAC for Activity Category C land uses. Also, predicted Build Alternative Year 2040 noise levels do not increase 10 dB(A) or more above the existing noise level and are not considered a substantial increase.

At some receivers in NSA G, predicted traffic noise levels did not increase or decreased slightly with the Build Alternative due to the proposed overall decrease in traffic speed on the Bayfront Parkway and the reduction of acceleration/deceleration related noise due to the proposed roundabout replacing the existing intersection at Holland Street.

Because the noise levels do not approach or exceed FHWA NAC Criteria for Activity Category C for the Build Alternative Year 2040 and are not considered a substantial increase, NSA G is not predicted to have traffic noise impacts.

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NSA H

NSA H is located south and west of E Bayfront Parkway at the east end of the project area. It contains institutional land uses including activities surrounding the Pennsylvania Soldiers' and Sailors' Home. It includes the Fort Presque Isle Blockhouse Memorial and a cemetery. The Pennsylvania Soldiers' and Sailors' Home itself is primarily a retirement facility with a Gazebo near the main entrance.

| Table 10 NSA H - Predicted Noise Levels dB(A) | | | | | | |
|--|-----------------------------|----------|--------------------------------|----------|-----------------------------|----------|
| Receiver | NAC Activity Category | Existing | No Build Alternative - 2040 | | Build Alternative – 2040 | |
| | | | Predicted | Increase | Predicted | Increase |
| H-1 | C | 56 | 56 | 0 | 55 | -1 |
| H-2 | C | 50 | 50 | 0 | 50 | 0 |
| H-3 | C | 53 | 53 | 0 | 53 | 0 |
| H-1ii | C | 39 | 40 | 1 | 39 | 0 |

Note: At receiver H-1, predicted traffic noise decreased with the Build Alternative due to proposed decreases in speed limit.

As shown in Table 10, predicted No-Build Alternative Year 2040 peak-hour noise levels do not approach or exceed FHWA NAC for Activity Category C land uses, therefore, there were no traffic noise impacts identified in the No-Build Alternative. The predicted Build Alternative Year 2040 peak-hour noise levels in NSA H also do not approach or exceed FHWA NAC for Activity Category C land uses. Also, predicted Build Alternative Year 2040 noise levels do not increase 10 dB(A) or more above the existing noise level and are not considered a substantial increase.

At some receivers in NSA H, predicted traffic noise levels did not increase or decreased slightly with the Build Alternative due to the proposed overall decrease in traffic speed on the Bayfront Parkway.

Because the noise levels do not approach or exceed FHWA NAC Criteria for Activity Category C for the Build Alternative Year 2040 and are not considered a substantial increase, NSA H is not predicted to have traffic noise impacts.

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8. Traffic Noise Abatement

Because no receivers had predicted noise levels for the Design Year 2040 that approached or exceeded FHWA Noise Abatement Criteria and no receivers had a predicted Design Year 2040 noise level that were substantial increases, no traffic noise impacts were identified with the Build Alternative. Therefore, traffic noise abatement was not warranted and noise mitigation was not evaluated according to the guidance contained in PennDOT Publication No. 24.

9. Construction Noise

Project specific construction-related noise levels have not been predicted for the Bayfront Parkway Improvements project. However, it can be assumed that all developed land uses and activities adjacent to the proposed project will be temporarily affected by noise generated from power equipment used for highway construction. Such equipment may include, however is not limited to, front loaders, backhoes, bulldozers, trucks, tractors, scrapers, graders, pavers, roller compactors, slip-form equipment, concrete mixers, cranes, compressors, generators, pumps, jack hammers, pneumatic tools, saws, and vibrators. This equipment will operate intermittently and usually produces noise in the range of 70 - 98 dB(A) at a distance of approximately 50 feet.



10. Conclusions

NSA A

NSA A is located along W Front Street from Chestnut Street on the west to Sassafras Street to the east and south of Bayfront Parkway and contains primarily residential land uses with a couple of industrial and office land uses. Because predicted noise levels do not approach or exceed FHWA NAC Criteria with the Year 2040 Build Alternative and are not considered a substantial increase, NSA A is not predicted to have traffic noise impacts. At some receivers in NSA A, predicted traffic noise levels did not increase or decreased slightly with the Build Alternative due to the proposed overall decrease in traffic speed on the Bayfront Parkway and the reduction of acceleration/deceleration related noise due to the proposed roundabout replacing the existing intersection.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

NSA B

NSA B is located south of W Bayfront Parkway from Sassafras Street on the west to State Street to the east. It contains two multi-story office buildings which are commercial land uses. Because predicted noise levels do not approach or exceed FHWA NAC Criteria with the Year 2040 Build Alternative and are not considered a substantial increase, NSA B is not predicted to have traffic noise impacts.

The predicted traffic noise levels in NSA B did not increase with the Build Alternative due to the proposed decrease in overall traffic speed on the Bayfront Parkway, the reduction of acceleration/deceleration related noise due to the proposed roundabouts replacing the existing intersections, and the shielding of traffic on the bypass lanes that travel under the proposed State Street grade separated intersection.

NSA C

NSA C is located south of E Bayfront Parkway from State Street on the west to Holland Street to the east and contains the UPMC Hamot Campus which is a hospital complex. Because the predicted noise levels do not approach or exceed FHWA NAC Criteria for either Category C (exterior) or Category D (interior) with the Year 2040 Build Alternative and are not considered a substantial increase, NSA C is not predicted to have traffic noise impacts.

The predicted traffic noise levels in NSA C did not increase or decreased slightly with the Build Alternative due to the proposed decrease in overall traffic speed on the Bayfront Parkway, the reduction of acceleration/deceleration related noise due to the proposed roundabouts replacing the existing intersections, and the shielding of traffic on the bypass lanes that travel under the proposed State Street grade separated intersection.

NSA D

NSA D is located south of E Bayfront Parkway from Holland Street on the west to Wallace Street to the east and contains primarily residential land uses and a couple of office buildings and a church. Because the predicted noise levels do not approach or exceed FHWA NAC Criteria with the Year 2040 Build Alternative and are not considered a substantial increase, NSA D is not predicted to have traffic noise impacts.

At some receivers in NSA D, predicted traffic noise levels did not increase or decreased slightly with the Build Alternative due to the proposed overall decrease in traffic speed on the Bayfront Parkway and the reduction of acceleration/deceleration related noise due to the proposed roundabout replacing the existing intersection.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

NSA E

NSA E is located north of W Bayfront Parkway from just east of Sassafras Street on the west to State Street to the east and contains commercial and industrial land uses. Because the predicted noise levels do not approach or exceed FHWA NAC Criteria with the Year 2040 Build Alternative and are not considered a substantial increase, NSA E is not predicted to have traffic noise impacts.

At some receivers in NSA E, predicted traffic noise levels did not increase or decreased with the Build Alternative due to the proposed decrease in overall traffic speed on the Bayfront Parkway, the reduction of acceleration/deceleration related noise due to the proposed roundabouts replacing the existing intersections, and the shielding of traffic on the bypass lanes that travel under the proposed State Street grade separated intersection.

NSA F

NSA F is located north of E Bayfront Parkway from State Street on the west to Holland Street to the east and contains commercial and institutional land uses. It also contains the Hampton Inn (currently under construction). Because the predicted noise levels do not approach or exceed FHWA NAC Criteria for either Category C (exterior) or Category D (interior) with the Year 2040 Build Alternative and are not considered a substantial increase, NSA F is not predicted to have traffic noise impacts.

At some receivers in NSA F predicted traffic noise levels in NSA F did not increase or decreased slightly with the Build Alternative due to the proposed decrease in overall traffic speed on the Bayfront Parkway, the reduction of acceleration/deceleration related noise due to the proposed roundabouts replacing the existing intersections, and the shielding of traffic on the bypass lanes that travel under the proposed State Street grade separated intersection.

NSA G

NSA G is located north of E Bayfront Parkway from Holland Street on the west to the railroad tracks west of the Erie Water Treatment Plant to the east and contains commercial and industrial land uses. Because the predicted noise levels do not approach or exceed FHWA NAC with the Year 2040 Build Alternative and are not considered a substantial increase, NSA G is not predicted to have traffic noise impacts.

At some receivers in NSA G, predicted traffic noise levels did not increase or decreased slightly with the Build Alternative due to the proposed overall decrease in traffic speed on the Bayfront Parkway and the reduction of acceleration/deceleration related noise due to the proposed roundabout replacing the existing intersection at Holland Street.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

NSA H

NSA H is located south and west of E Bayfront Parkway at the east end of the project area. It contains institutional land uses including activities surrounding the Pennsylvania Soldiers' and Sailors' Home. It also includes the Fort Presque Isle Blockhouse Memorial and a cemetery. Because the predicted noise levels do not approach or exceed FHWA NAC with the Year 2040 Build Alternative and are not considered a substantial increase, NSA H is not predicted to have traffic noise impacts.

At some receivers in NSA H, predicted traffic noise levels did not increase or decreased slightly with the Build Alternative due to the proposed overall decrease in traffic speed on the Bayfront Parkway.

In summary, no receivers in the Bayfront Parkway Improvements Project area were predicted to have noise levels from the Year 2040 Build Alternative that approached or exceeded FHWA Noise Abatement Criteria and no receivers were predicted to have Year 2040 Build Alternative noise levels that would be considered substantial increases. Therefore, no traffic noise impacts were identified, traffic noise abatement was not warranted, and traffic noise mitigation was not evaluated.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

11. Public Involvement

PennDOT *Publication No. 24* indicates that the public involvement relative to traffic noise should not be conducted until the Preliminary Design Traffic Noise Report has been approved by FHWA and/or and PennDOT Central Office Environmental.

To date, no public involvement relative to the results of this traffic noise analysis has been conducted for the Bayfront Parkway Improvements Project.

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

Figures

Bayfront Parkway Improvements

PennDOT District 1-0



Figure 1
Project Location Map

Source: USGS



● Short-Term Noise Monitoring Locations
▭ Noise Sensitive Area



Figure 02
Proposed Noise Study Areas and Monitoring Locations

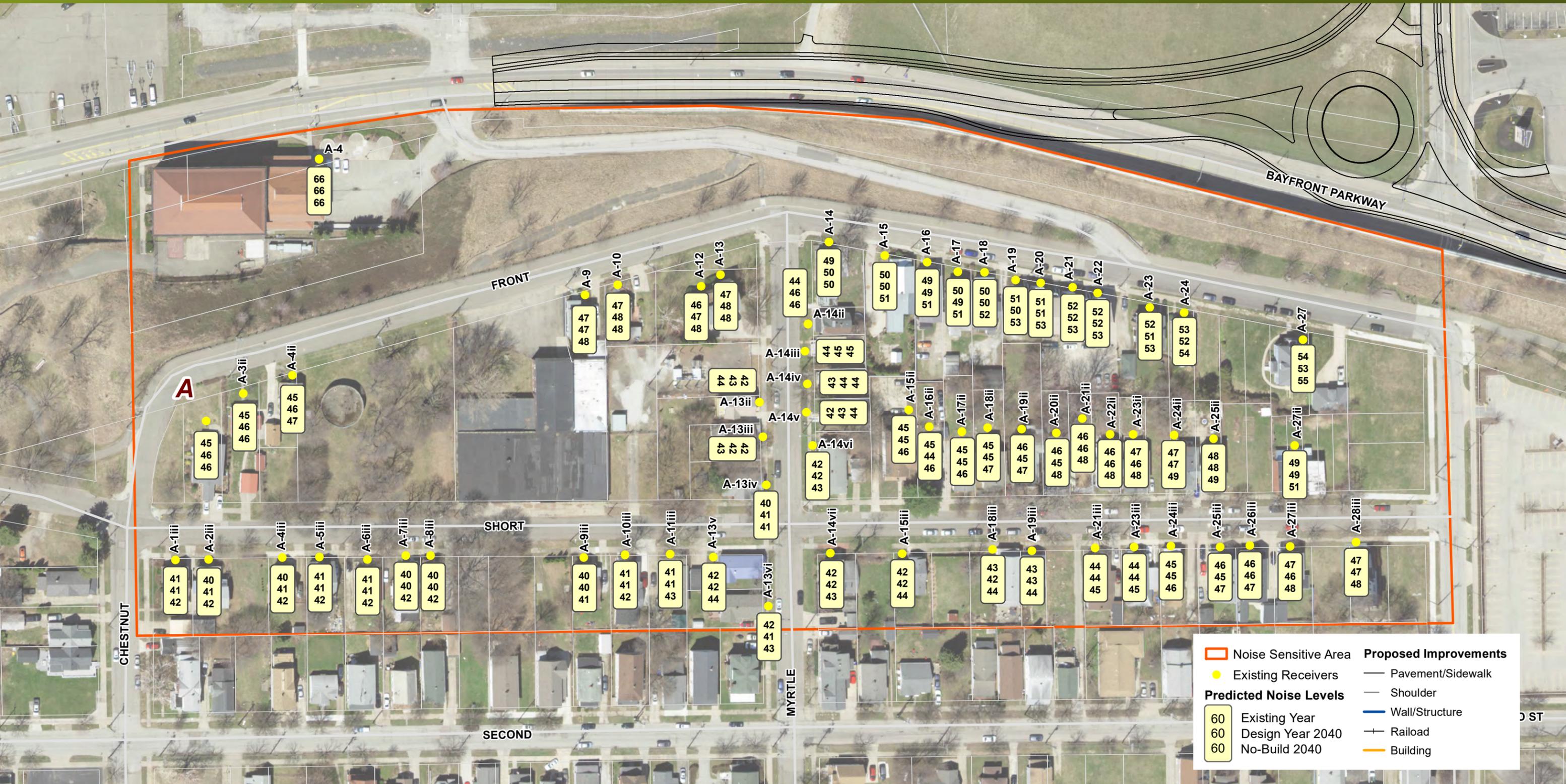
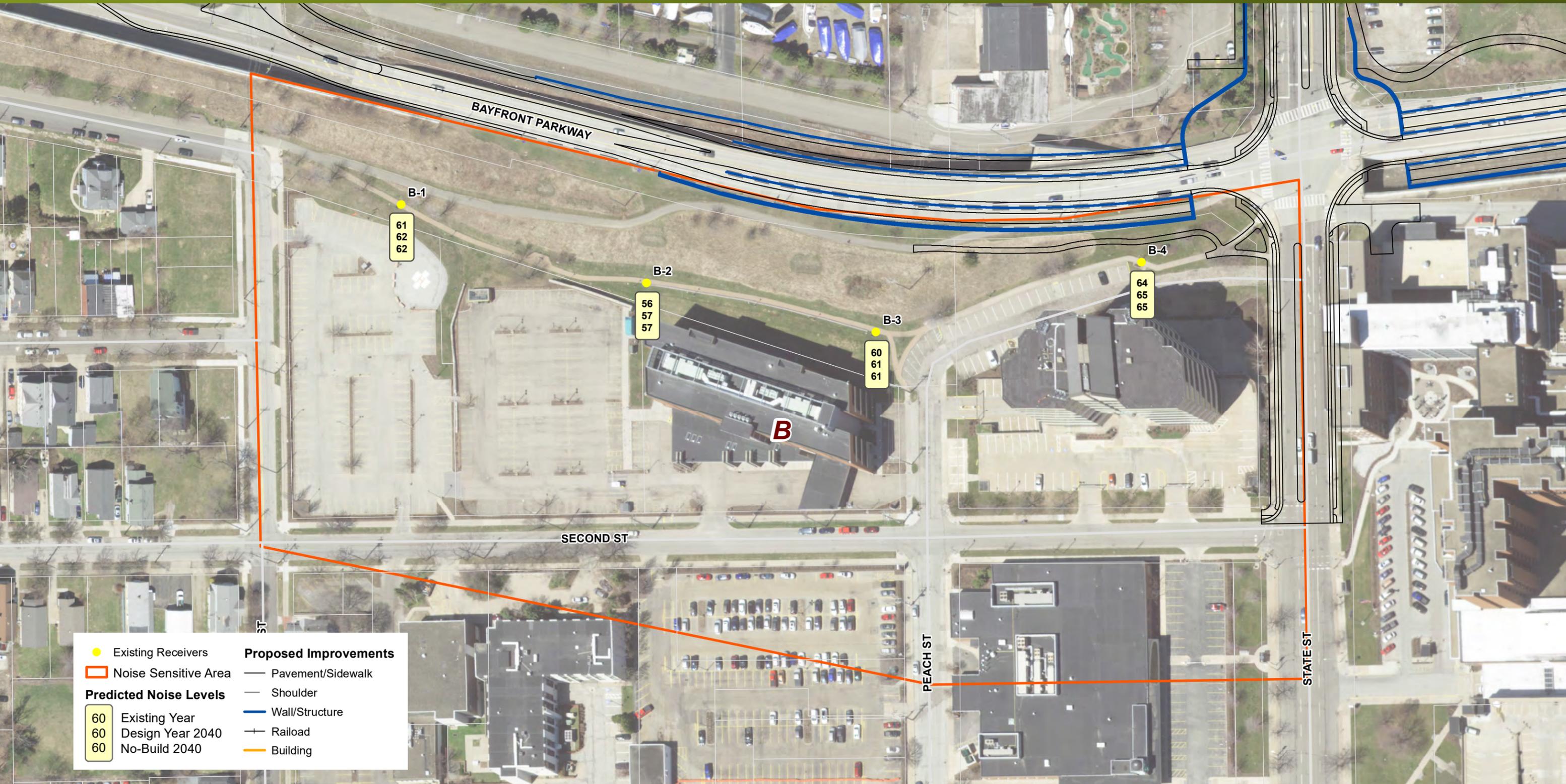


Figure 03a
NSA A



| | |
|-------------------------------|------------------------------|
| ● Existing Receivers | Proposed Improvements |
| ▭ Noise Sensitive Area | — Pavement/Sidewalk |
| Predicted Noise Levels | — Shoulder |
| 60 Existing Year | — Wall/Structure |
| 60 Design Year 2040 | — Railroad |
| 60 No-Build 2040 | — Building |



Figure 03b
NSA B

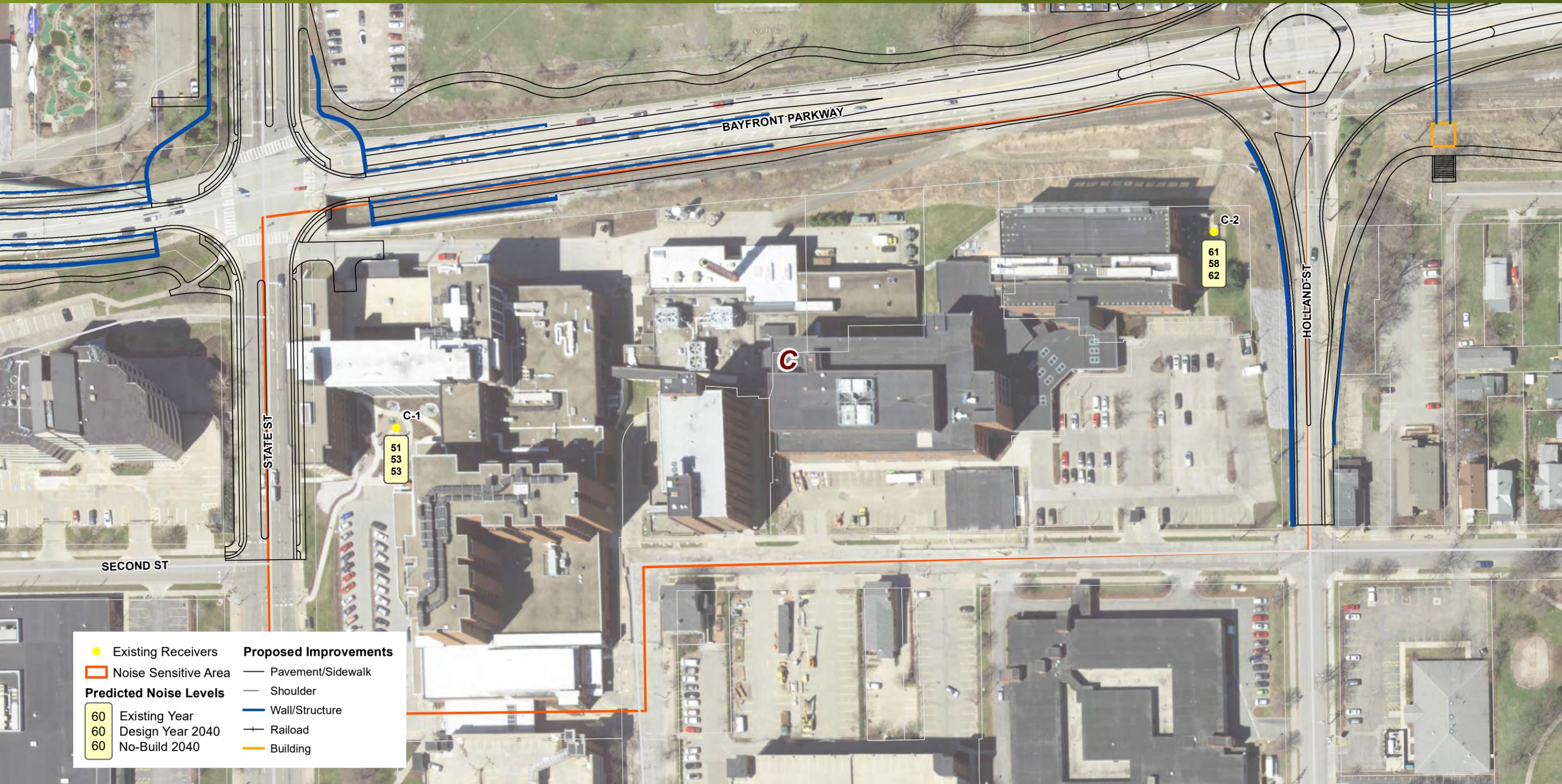


Figure 03c
NSA C

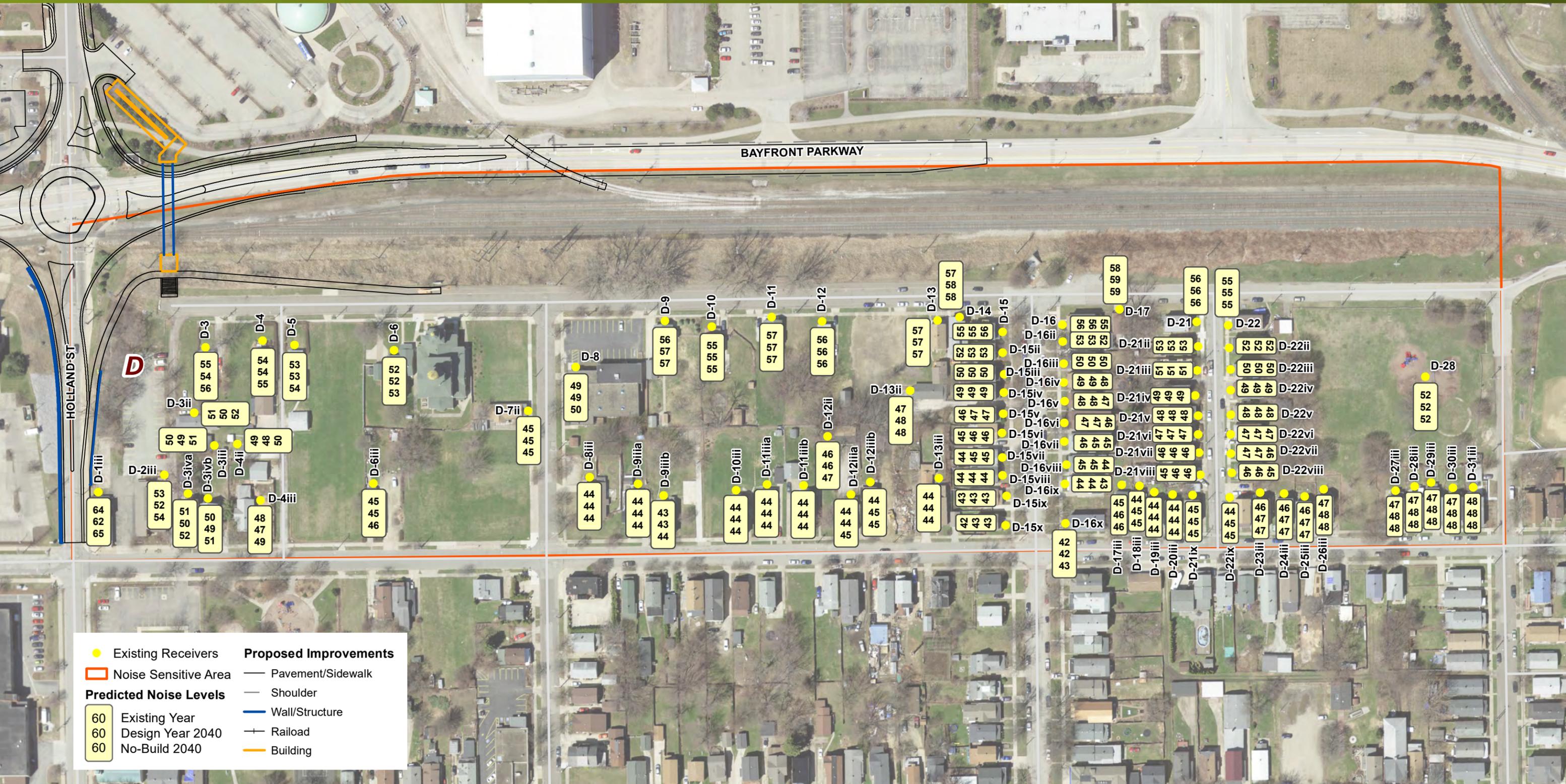
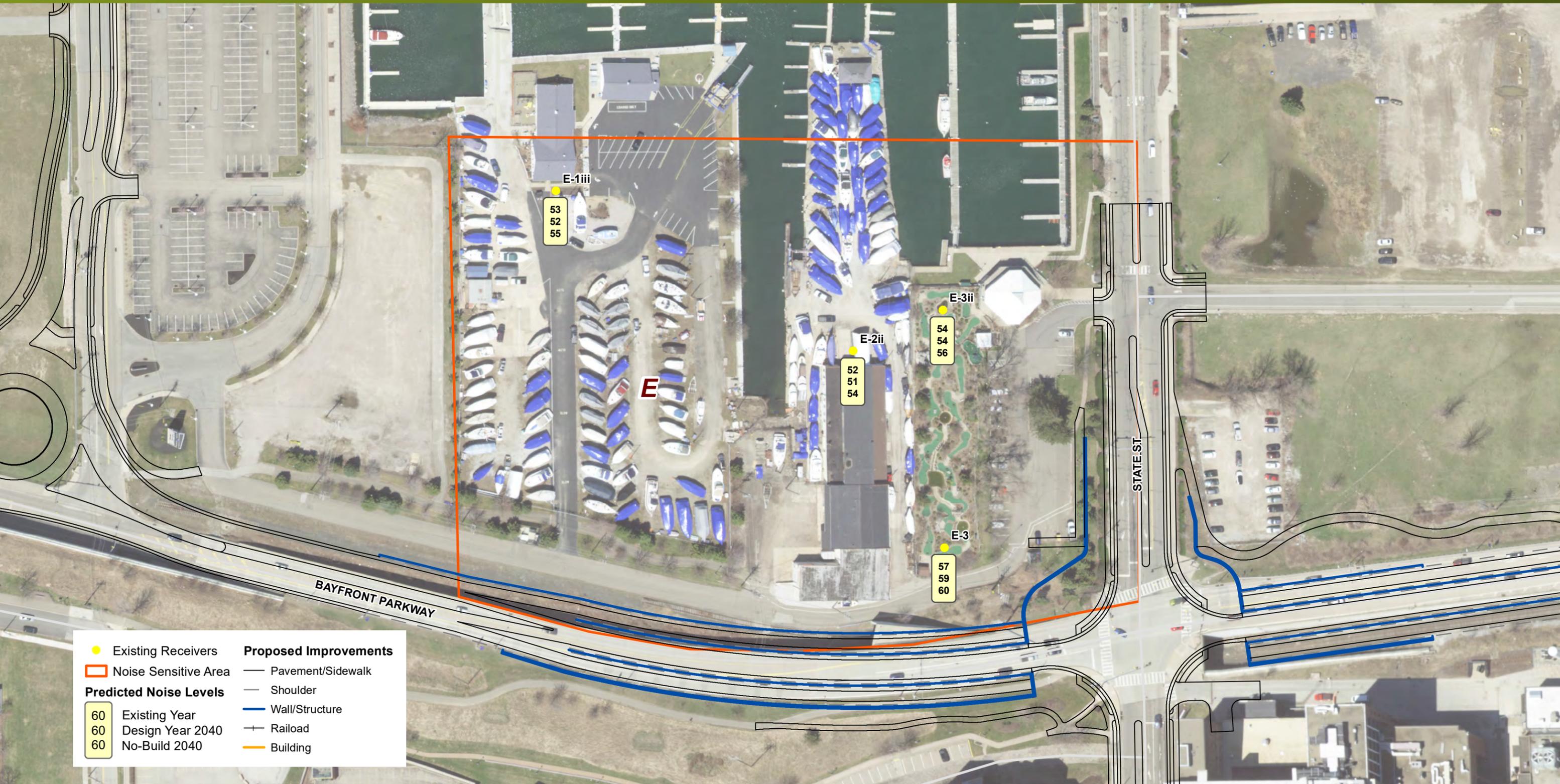


Figure 03d
NSA D



| | |
|-------------------------------|------------------------------|
| ● Existing Receivers | Proposed Improvements |
| ▭ Noise Sensitive Area | — Pavement/Sidewalk |
| Predicted Noise Levels | — Shoulder |
| 60 Existing Year | — Wall/Structure |
| 60 Design Year 2040 | — Railroad |
| 60 No-Build 2040 | — Building |



Figure 03e
NSA E

| | |
|-------------------------------|------------------------------|
| ● Existing Receivers | Proposed Improvements |
| ▭ Noise Sensitive Area | — Pavement/Sidewalk |
| Predicted Noise Levels | — Shoulder |
| 60 Existing Year | — Wall/Structure |
| 60 Design Year 2040 | + Railroad |
| 60 No-Build 2040 | — Building |

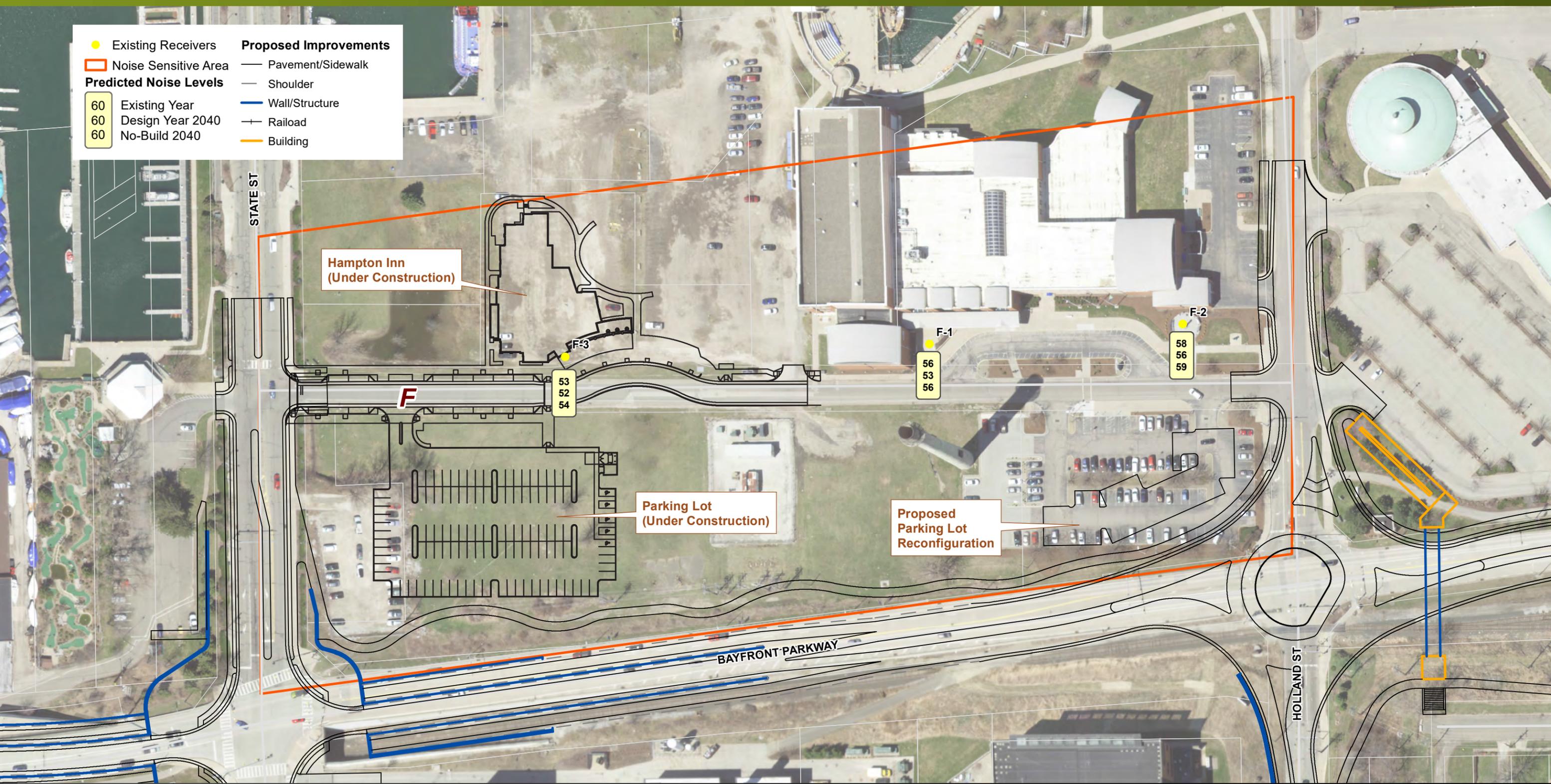


Figure 03f
NSA F



| | |
|-------------------------------|------------------------------|
| ● Existing Receivers | Proposed Improvements |
| ▭ Noise Sensitive Area | — Pavement/Sidewalk |
| | — Shoulder |
| Predicted Noise Levels | — Wall/Structure |
| 60 Existing Year | — Railroad |
| 60 Design Year 2040 | — Building |
| 60 No-Build 2040 | |



Figure 03g
NSA G



| | |
|--|------------------------------|
| ● Existing Receivers | Proposed Improvements |
| Noise Sensitive Area | — Pavement/Sidewalk |
| Predicted Noise Levels | — Shoulder |
| 60 Existing Year | — Wall/Structure |
| 60 Design Year 2040 | — Railroad |
| 60 No-Build 2040 | — Building |



Figure 03h
NSA H

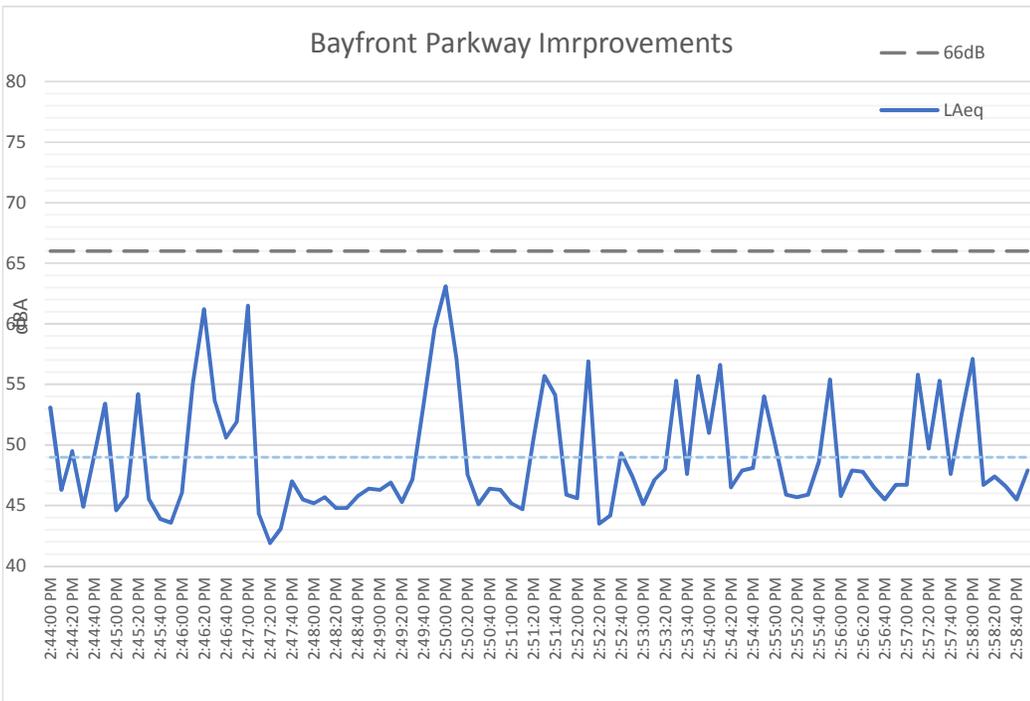
Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

Appendix 1

Short-term Noise Monitoring Data

Noise Monitoring Recorded Data

| | | | |
|--------------------|-------------------------------|---------------------|------------|
| File Name..... | Site A-1 Data Sheet | Date Recorded..... | 11/25/2019 |
| Logger..... | Rion A, Seq. 0101 | Start Time..... | 2:44:00 PM |
| Project Name..... | Bayfront Parkway Improvements | Stop Time..... | 2:59:00 PM |
| Test Location..... | Site A-1 | | |
| Employee Name..... | VRM | | |
| | | | |
| Site Address..... | 223 W. Front St. Erie, PA | Site Notes..... | Side Yard |
| Temperature..... | 51 F | Wind Speed..... | Calm |
| Cloud Cover..... | Clear | Wind Direction..... | E |



| Sound Measurements dBA | |
|---------------------------|----------|
| Min | Mon. Leq |
| 1 | 49.4 |
| 2 | 46.3 |
| 3 | 53.1 |
| 4 | 47.2 |
| 5 | 45.5 |
| 6 | 49.8 |
| 7 | 50.9 |
| 8 | 49.3 |
| 9 | 47.8 |
| 10 | 49.8 |
| 11 | 50.7 |
| 12 | 48.6 |
| 13 | 46.7 |
| 14 | 51.3 |
| 15 | 48.5 |

| | |
|------------------------|-------------|
| 15 Min. Leq | 49.0 |
|------------------------|-------------|



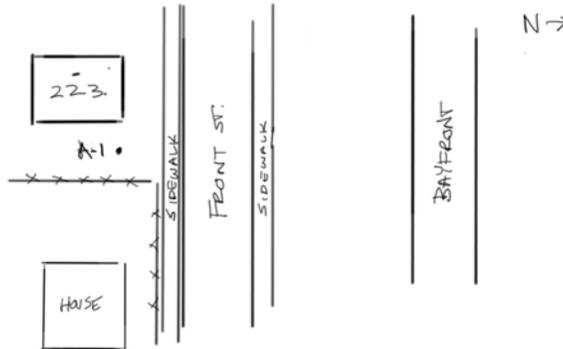
NOISE MONITORING DATA

Project: Bayfront Parkway Improvements, PennDOT District 1-0

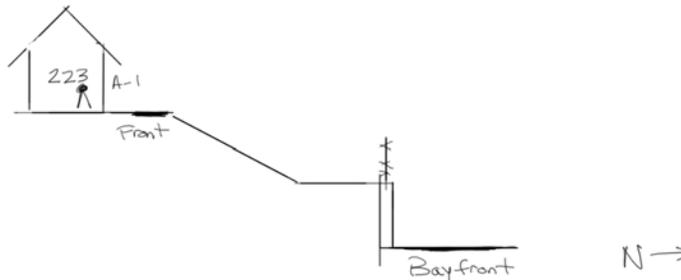
| | | | |
|-------------------------|------------------------|----------------------------|-------------------|
| Observer: VRM | | | |
| Site ID: A-1 | Date: 11/25/19 | Location: 223 W. Front St. | |
| Site Surface: Grass | | Landmark: Side Yard | |
| Near Lane Direction: EB | Pavement Type: Asphalt | | |
| Temperature: 51 | Cloud Cover: Clear | Wind Speed: Calm | Wind Direction: E |
| Start Time: 2:44:00 pm | | Stop Time: 2:59:00 pm | |

Noise Sources: Traffic, Leaves, Dog, 2:45:50 Car Starting, 2:49:00 Sirens in Distance, 2:53:00 Barking/Siren in Distance/Train Horn in Distance, 2:55:40 Sirens

PLAN VIEW



ELEVATION VIEW

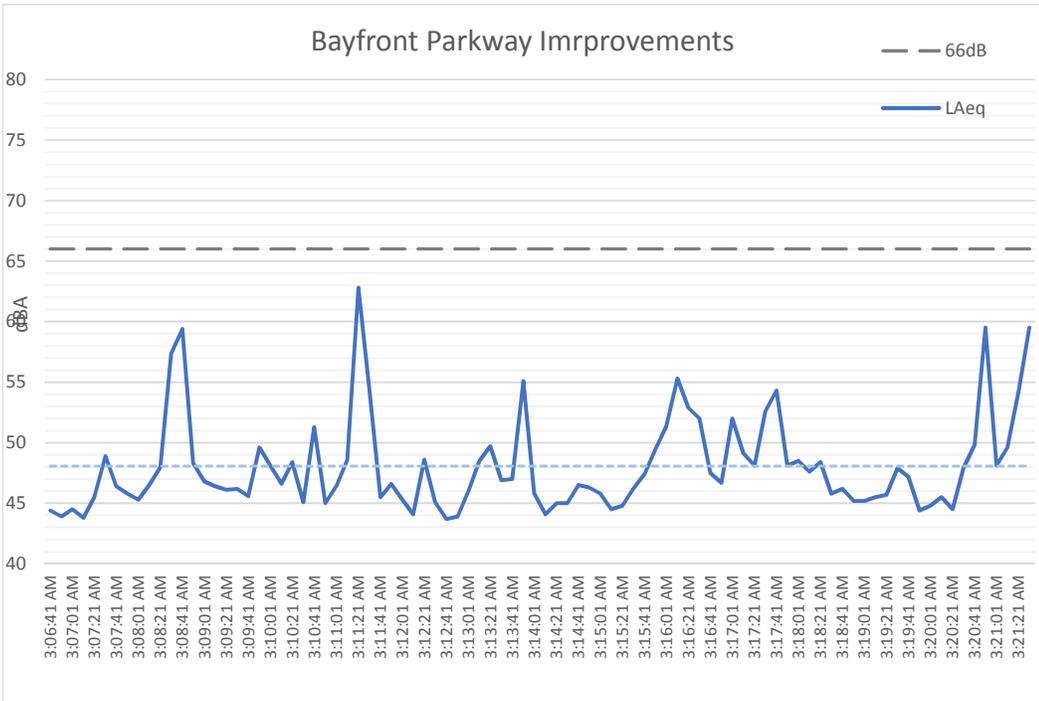


Meter No: A

Seq. No: 0101

Noise Monitoring Recorded Data

| | | | |
|--------------------|-------------------------------|---------------------|------------|
| File Name..... | Site A-1ii Data Sheet | Date Recorded..... | 11/25/2019 |
| Logger..... | Rion A, Seq. 0102 | Start Time..... | 3:06:50 PM |
| Project Name..... | Bayfront Parkway Improvements | Stop Time..... | 3:21:50 PM |
| Test Location..... | Site A-1ii | | |
| Employee Name..... | VRM | | |
| | | | |
| Site Address..... | 215 Short St. Erie, PA | Site Notes..... | Side Yard |
| Temperature..... | 51 F | Wind Speed..... | Calm |
| Cloud Cover..... | Clear | Wind Direction..... | E |



Sound Measurements dBA

| Min | Mon. Leq |
|-----|----------|
| 1 | 45.2 |
| 2 | 48.2 |
| 3 | 48.9 |
| 4 | 47.2 |
| 5 | 51.4 |
| 6 | 45.9 |
| 7 | 46.5 |
| 8 | 47.0 |
| 9 | 45.7 |
| 10 | 51.4 |
| 11 | 49.3 |
| 12 | 48.8 |
| 13 | 46.0 |
| 14 | 45.7 |
| 15 | 53.5 |

| | |
|------------------------|-------------|
| 15 Min. Leq | 48.0 |
|------------------------|-------------|



NOISE MONITORING DATA

Project: Bayfront Parkway Improvements, PennDOT District 1-0

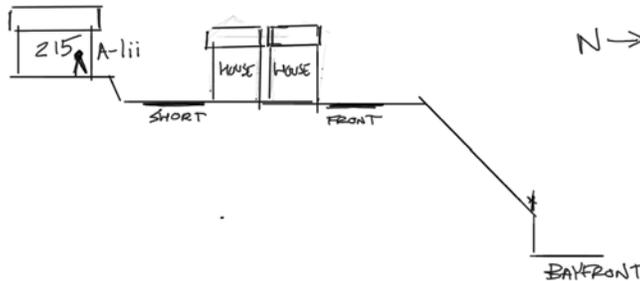
| | | | |
|-------------------------|------------------------|-------------------------|-------------------|
| Observer: VRM | | | |
| Site ID: A-1ii | Date: 11/25/19 | Location: 215 Short St. | |
| Site Surface: Grass | | Landmark: Side Yard | |
| Near Lane Direction: EB | Pavement Type: Asphalt | | |
| Temperature: 51 | Cloud Cover: Clear | Wind Speed: Calm | Wind Direction: E |
| Start Time: 3:06:50 pm | | Stop Time: 3:21:50 pm | |

Noise Sources: Traffic, Birds, 3:16 School Bus in Distance/Train in Distance, 3:21 Airplane Overhead, 3:19 Car idling down the street

PLAN VIEW



ELEVATION VIEW



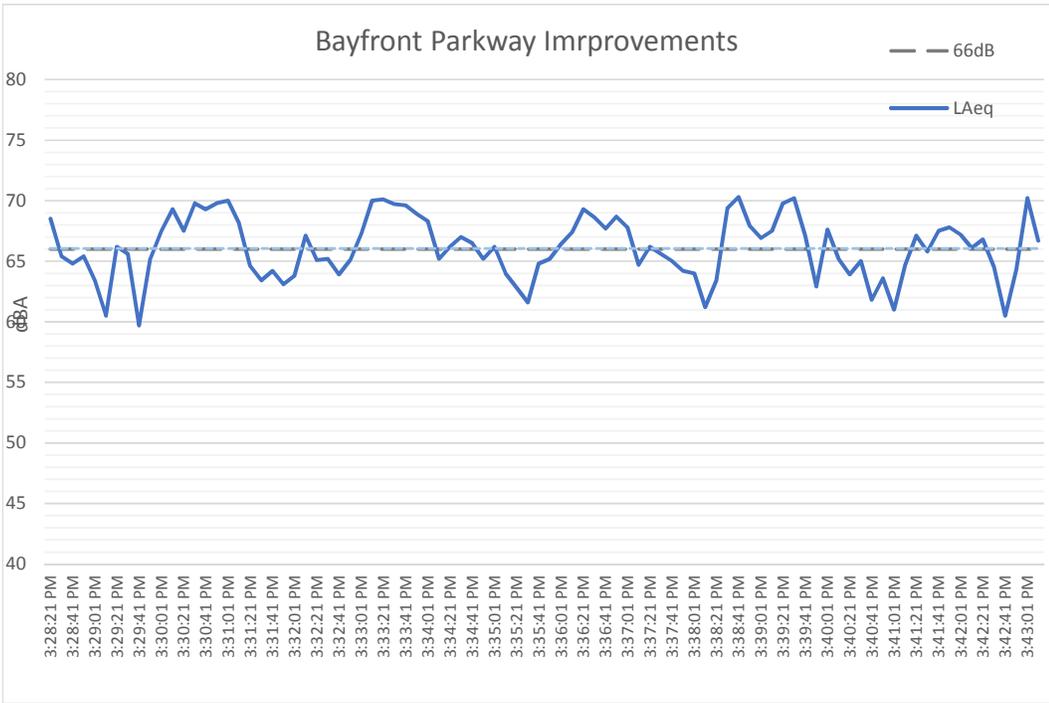
Meter No: A

Seq. No: 0102

Noise Monitoring Recorded Data

File Name..... Site B-1 Data Sheet Date Recorded..... 11/25/2019
 Logger..... Rion A, Seq. 0103 Start Time..... 3:28:30 PM
 Project Name..... Bayfront Parkway Improvements Stop Time..... 3:43:30 PM
 Test Location..... Site B-1
 Employee Name..... VRM

Site Address..... 100 State St. Site Notes..... Near Pathway, top level
 Erie, PA
 Temperature..... 50 F Wind Speed..... Calm
 Cloud Cover..... Clear Wind Direction..... E



NOISE MONITORING DATA

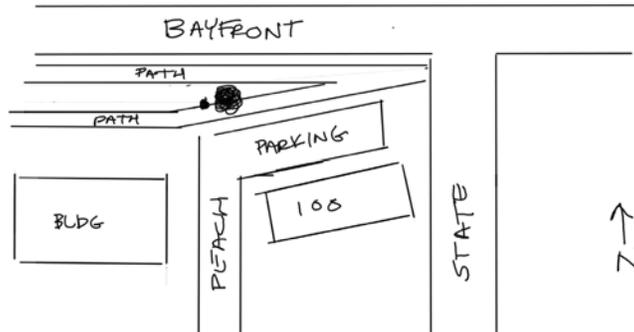
Project: Bayfront Parkway Improvements, PennDOT District 1-0

| | | | |
|-------------------------|------------------------|----------------------------------|-------------------|
| Observer: VRM | | | |
| Site ID: B-1 | Date: 11/25/19 | Location: 100 State St. | |
| Site Surface: Grass | | Landmark: Near Pathway Top Level | |
| Near Lane Direction: EB | Pavement Type: Asphalt | | |
| Temperature: 50 | Cloud Cover: Clear | Wind Speed: Calm | Wind Direction: E |
| Start Time: 3:28:30 pm | | Stop Time: 3:43:30 pm | |

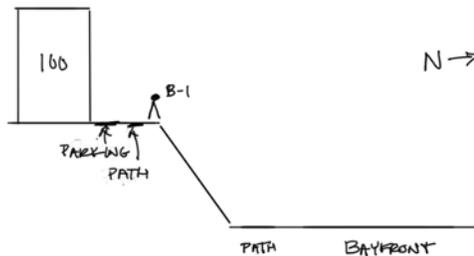
Noise Sources: Traffic, Birds, 3:38 Sirens in Distance, 3:40 Backing Alarm

Video 3:30-3:40

PLAN VIEW



ELEVATION VIEW



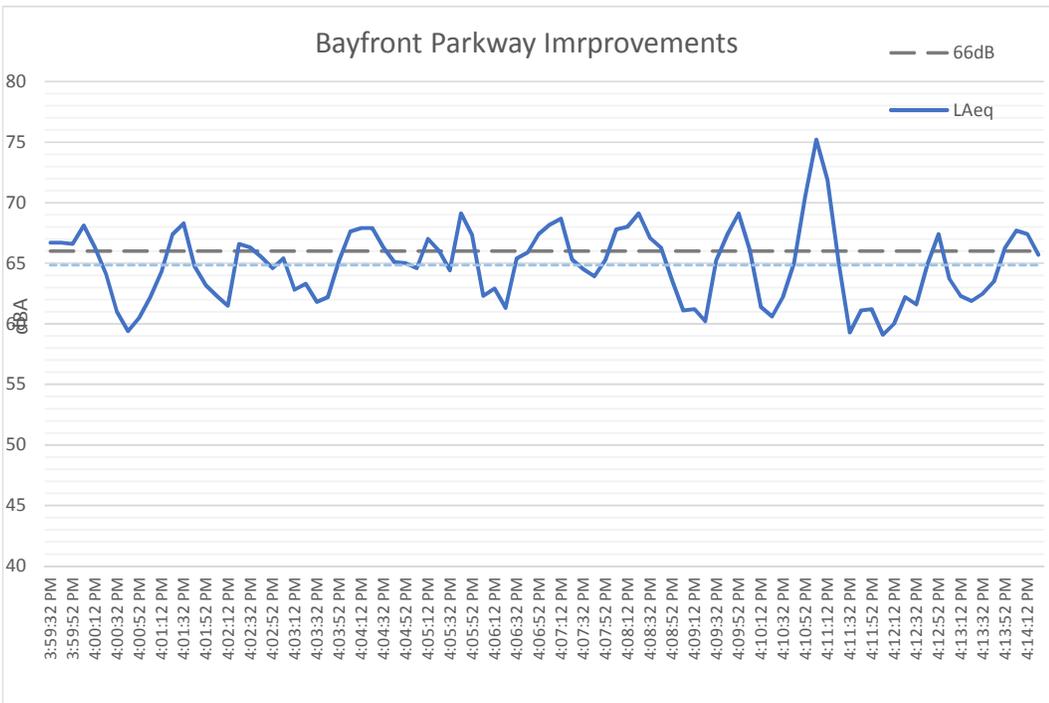
Meter No: A

Seq. No: 0103

Noise Monitoring Recorded Data

File Name..... Site C-1 Data Sheet Date Recorded..... 11/25/2019
 Logger..... Rion A, Seq. 0104 Start Time..... 3:59:40 PM
 Project Name..... Bayfront Parkway Improvements Stop Time..... 4:14:40 PM
 Test Location..... Site C-1
 Employee Name..... VRM

Site Address..... UPMC Hamot Heart Institute Site Notes..... Top of hill between building and
 120 E. 2nd St., Erie, PA Bayfront Parkway
 Temperature..... 50 F Wind Speed..... 3-5 mph
 Cloud Cover..... Overcast Wind Direction..... E



| Sound Measurements dBA | |
|---------------------------|----------|
| Min | Mon. Leq |
| 1 | 66.4 |
| 2 | 62.5 |
| 3 | 64.4 |
| 4 | 64.7 |
| 5 | 65.4 |
| 6 | 65.7 |
| 7 | 64.6 |
| 8 | 66.8 |
| 9 | 66.4 |
| 10 | 63.3 |
| 11 | 65.0 |
| 12 | 68.3 |
| 13 | 60.5 |
| 14 | 63.6 |
| 15 | 65.5 |

| | |
|------------------------|-------------|
| 15 Min. Leq | 64.9 |
|------------------------|-------------|



NOISE MONITORING DATA

Project: Bayfront Parkway Improvements, PennDOT District 1-0

| | | | |
|---|------------------------|--|-------------------|
| Observer: VRM | | | |
| Site ID: C-1 | Date: 11/25/19 | Location: UPMC Hamot Heart Institute 120 E 2 nd Street | |
| Site Surface: Grass | | Landmark: Top of Hill Between Building and Bayfront Pkwy | |
| Near Lane Direction: EB | Pavement Type: Asphalt | | |
| Temperature: 50 | Cloud Cover: Overcast | Wind Speed: 3-5mph | Wind Direction: E |
| Start Time: 3:59:40 pm | | Stop Time: 4:14:40 pm | |
| Noise Sources: Traffic | | | |
| PLAN VIEW | | | |
| <p>The plan view diagram shows a top-down perspective. On the left is a rectangular building labeled 'UPMC'. To its right is a small square labeled 'C-1' with a dot inside. Below these is a horizontal line labeled 'HOLLAND'. To the right of Holland is a vertical line with cross-ticks labeled 'RR'. Further right is another vertical line labeled 'BAYFRONT'. A north arrow 'N' with a right-pointing arrow is located to the right of the RR line.</p> | | | |
| ELEVATION VIEW | | | |
| <p>The elevation view diagram shows a side profile. On the left is a rectangular building labeled 'UPMC'. To its right is a small figure labeled 'C-1'. A line connects 'C-1' to a horizontal line representing the ground level. Below this ground level is a horizontal line labeled 'RR' with cross-ticks. To the right of the RR line is another horizontal line labeled 'BAYFRONT'. Further right is a rectangular building labeled 'LIBRARY'. A north arrow 'N' with a right-pointing arrow is located to the right of the RR line.</p> | | | |

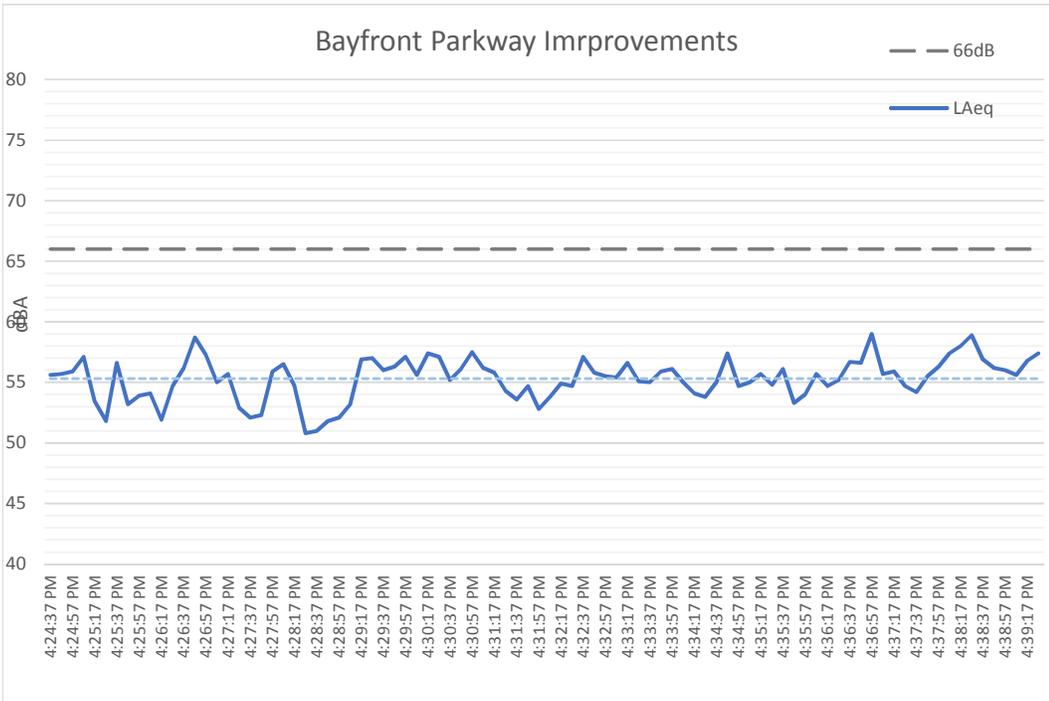
Meter No: A

Seq. No: 0104

Noise Monitoring Recorded Data

File Name..... Site D-1 Data Sheet Date Recorded..... 11/25/2019
 Logger..... Rion A, Seq. 0105 Start Time..... 4:24:45 PM
 Project Name..... Bayfront Parkway Improvements Stop Time..... 4:39:45 PM
 Test Location..... Site D-1
 Employee Name..... VRM

Site Address..... 247 Front St. Site Notes..... Front yard of house near church
 Erie, PA
 Temperature..... 47 F Wind Speed..... 3-5 mph
 Cloud Cover..... Overcast Wind Direction..... E



**Sound Measurements
dBA**

| Min | Mon. Leq |
|-----|----------|
| 1 | 54.9 |
| 2 | 54.1 |
| 3 | 56.0 |
| 4 | 53.7 |
| 5 | 53.7 |
| 6 | 56.6 |
| 7 | 55.9 |
| 8 | 54.1 |
| 9 | 55.9 |
| 10 | 55.0 |
| 11 | 55.4 |
| 12 | 54.8 |
| 13 | 56.4 |
| 14 | 56.7 |
| 15 | 56.5 |

| | |
|------------------------|-------------|
| 15 Min. Leq | 55.3 |
|------------------------|-------------|

NOISE MONITORING DATA

Project: Bayfront Parkway Improvements, PennDOT District 1-0

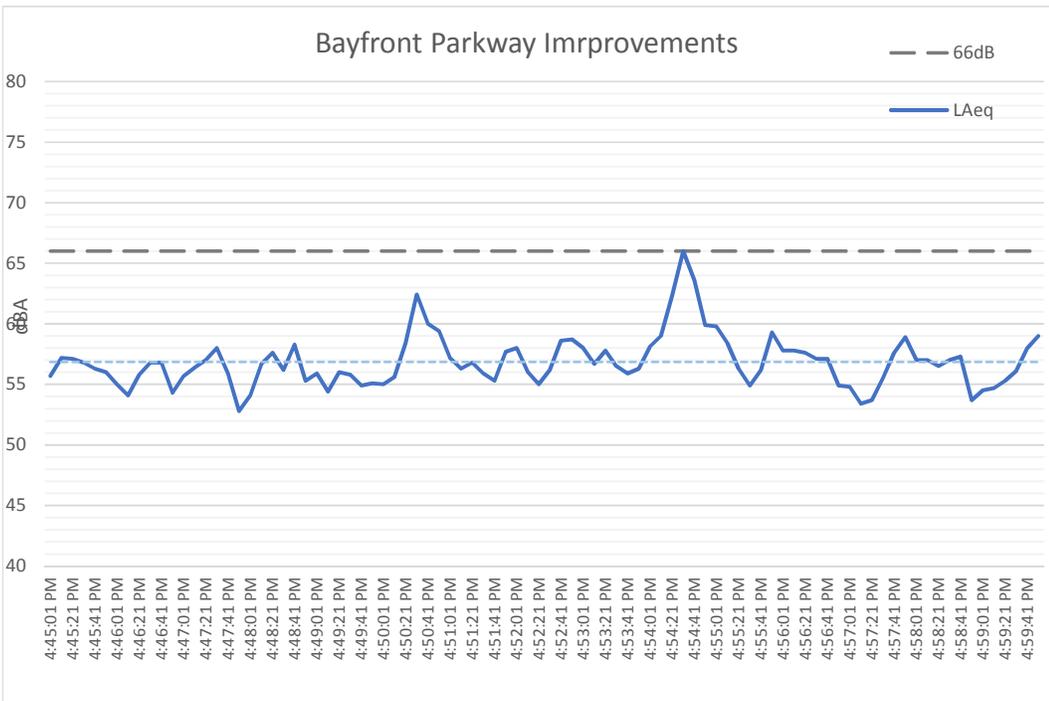
| | | | |
|---|------------------------|---|-------------------|
| Observer: VRM | | | |
| Site ID: D-1 | Date: 11/25/19 | Location: 247 Front St. | |
| Site Surface: Grass | | Landmark: Front Yard of house near Church | |
| Near Lane Direction: EB | Pavement Type: Asphalt | | |
| Temperature: 47 | Cloud Cover: Overcast | Wind Speed: 3-5mph | Wind Direction: E |
| Start Time: 4:24:45 pm | | Stop Time: 4:39:45 pm | |
| Noise Sources: Traffic, Birds, 4:33 Sirens to south | | | |
| Video: 4:27-4:37 | | | |
| PLAN VIEW | | | |
| | | | |
| ELEVATION VIEW | | | |
| | | | |

Meter No: A

Seq. No: 0105

Noise Monitoring Recorded Data

| | | | |
|--------------------|-------------------------------|---------------------|------------|
| File Name..... | Site D-2 Data Sheet | Date Recorded..... | 11/25/2019 |
| Logger..... | Rion A, Seq. 0106 | Start Time..... | 4:45:10 PM |
| Project Name..... | Bayfront Parkway Improvements | Stop Time..... | 5:00:10 PM |
| Test Location..... | Site D-2 | | |
| Employee Name..... | VRM | | |
| | | | |
| Site Address..... | 331 Front St. Erie, PA | Site Notes..... | Side Yard |
| Temperature..... | 45 F | Wind Speed..... | Calm |
| Cloud Cover..... | Overcast | Wind Direction..... | E |



Sound Measurements dBA

| Min | Mon. Leq |
|-----|----------|
| 1 | 56.5 |
| 2 | 55.5 |
| 3 | 56.0 |
| 4 | 56.4 |
| 5 | 55.4 |
| 6 | 58.5 |
| 7 | 56.5 |
| 8 | 57.1 |
| 9 | 56.9 |
| 10 | 61.5 |
| 11 | 57.5 |
| 12 | 57.1 |
| 13 | 55.7 |
| 14 | 56.4 |
| 15 | 56.3 |

| | |
|------------------------|-------------|
| 15 Min. Leq | 56.9 |
|------------------------|-------------|

NOISE MONITORING DATA

Project: Bayfront Parkway Improvements, PennDOT District 1-0

| | | | |
|--|------------------------|-------------------------|-------------------|
| Observer: VRM | | | |
| Site ID: D-2 | Date: 11/25/19 | Location: 331 Front St. | |
| Site Surface: Grass | | Landmark: Side yard | |
| Near Lane Direction: EB | Pavement Type: Asphalt | | |
| Temperature: 45 | Cloud Cover: Overcast | Wind Speed: Calm | Wind Direction: E |
| Start Time: 4:45:10 pm | | Stop Time: 5:00:10 pm | |
| Noise Sources: Traffic, Intermittent Hammering, 4:50 Airplane Overhead, 4:52 Heavy Hammering, 4:54 Airplane Overhead, 4:55 Neighbor Opening Door Video: 4:46-4:56 | | | |
| PLAN VIEW | | | |
| | | | |
| ELEVATION VIEW | | | |
| | | | |

Meter No: A

Seq. No: 0106

NOISE MONITORING DATA

Project: Bayfront Parkway Improvements, PennDOT District 1-0

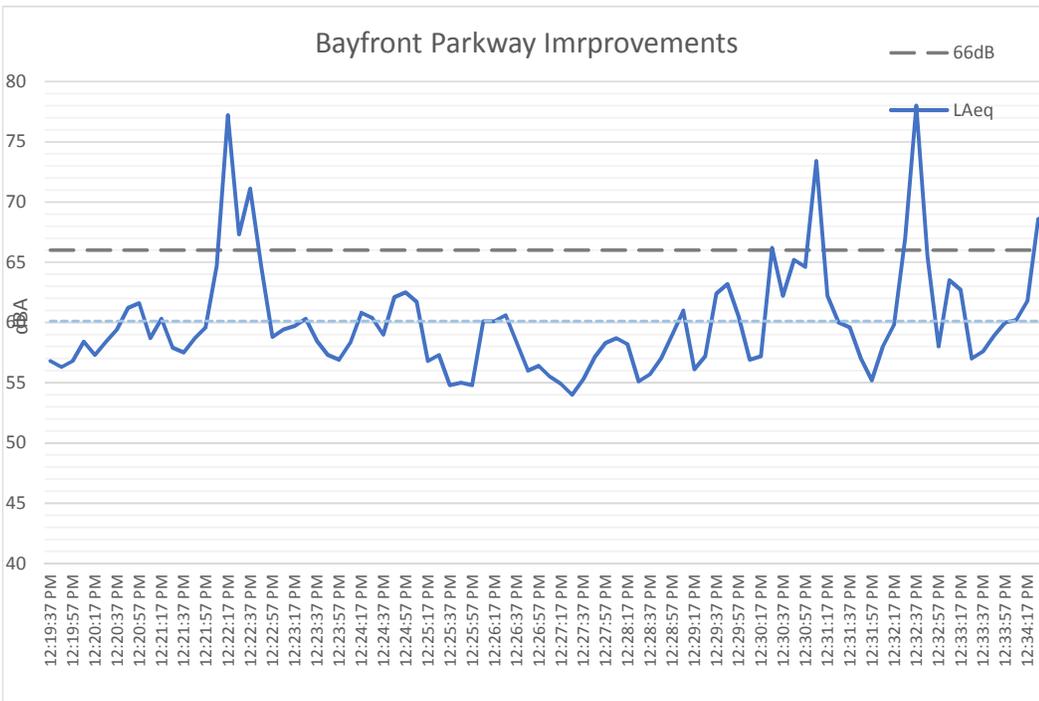
| | | | |
|----------------------------|---------------------------|--|-------------------|
| Observer: VRM | | | |
| Site ID: E-1 | Date: 11/26/19 | Location: Harbor View Miniature Golf 36 State Street | |
| Site Surface: Grass | | Landmark: Southeast Corner of Course near Parking Lot | |
| Near Lane Direction: EB | Pavement Type: Asphalt | | |
| Temperature: 52 | Cloud Cover: Clear | Wind Speed: 11:46 3-5mph 11:56 5-7mph | Wind Direction: E |
| Start Time: 11:46:30 am | | Stop Time: 12:01:30 pm | |
| Noise Sources: Traffic | | | |
| Video: 11:49-11:59 | | | |
| PLAN VIEW | | | |
| | | | |
| ELEVATION VIEW | | | |
| | | | |

Meter No: A

Seq. No: 0109

Noise Monitoring Recorded Data

| | | | |
|---|-------------------------------|---------------------|-------------------------|
| File Name..... | Site F-1 Data Sheet | Date Recorded..... | 11/26/2019 |
| Logger..... | Rion A, Seq. 0110 | Start Time..... | 12:19:45 PM |
| Project Name..... | Bayfront Parkway Improvements | Stop Time..... | 12:34:45 PM |
| Test Location..... | Site F-1 | | |
| Employee Name..... | VRM | | |
| Site Address..... | | Site Notes..... | Near corner of building |
| Erie Maritime Museum 150 Front St., Erie, PA | | | |
| Temperature..... | 52 F | Wind Speed..... | 3-5 mph |
| Cloud Cover..... | Clear | Wind Direction..... | E |

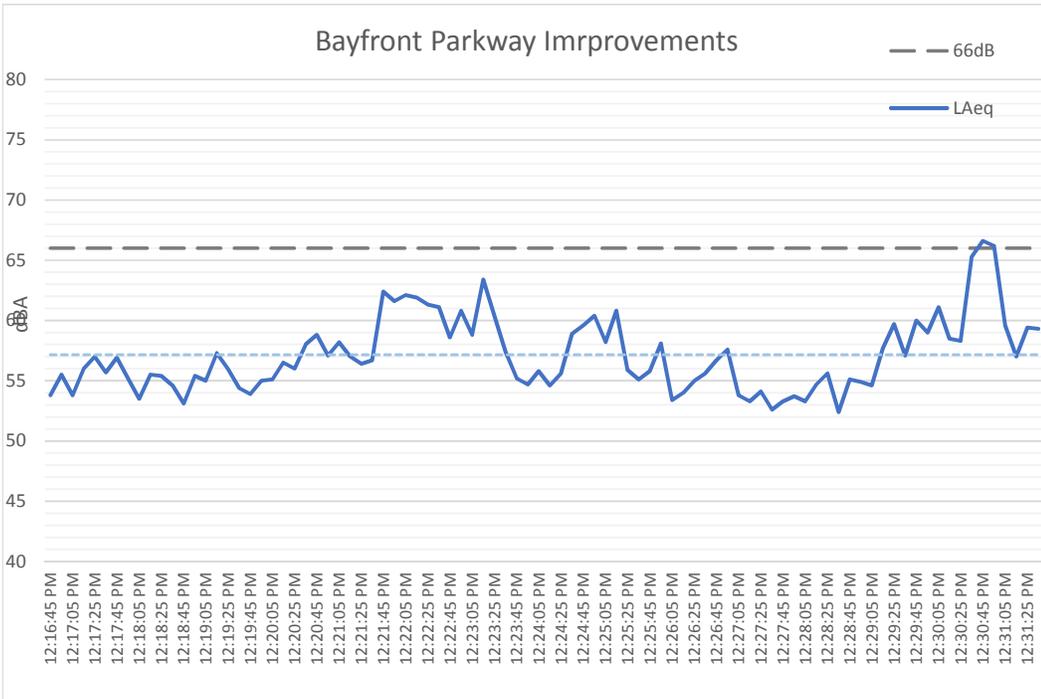


| Sound Measurements dBA | |
|---------------------------|-------------|
| Min | Mon. Leq |
| 1 | 57.3 |
| 2 | 59.9 |
| 3 | 64.2 |
| 4 | 62.3 |
| 5 | 58.7 |
| 6 | 59.9 |
| 7 | 57.6 |
| 8 | 55.9 |
| 9 | 57.1 |
| 10 | 57.7 |
| 11 | 61.1 |
| 12 | 64.6 |
| 13 | 59.4 |
| 14 | 64.1 |
| 15 | 61.2 |
| 15 Min. Leq | 60.1 |



Noise Monitoring Recorded Data

| | | | |
|-------------------------|-------------------------------|---------------------|-------------------------|
| File Name..... | Site F-2 Data Sheet | Date Recorded..... | 11/26/2019 |
| Logger..... | Rion B, Seq. 0201 | Start Time..... | 12:16:45 PM |
| Project Name..... | Bayfront Parkway Improvements | Stop Time..... | 12:31:45 PM |
| Test Location..... | Site F-2 | | |
| Employee Name..... | VRM | | |
| Site Address..... | | Site Notes..... | Near corner of building |
| Blasco Memorial Library | | | |
| 160 Front St., Erie, PA | | | |
| Temperature..... | 52 F | Wind Speed..... | 3-5 mph |
| Cloud Cover..... | Clear | Wind Direction..... | E |



NOISE MONITORING DATA

Project: Bayfront Parkway Improvements, PennDOT District 1-0

| | | | |
|---|---------------------------|---|-------------------|
| Observer: VRM | | | |
| Site ID: F-1, F-2 | Date: 11/26/19 | Location: Erie Maritime Museum (F-1) 150 Front Street, Blasco Memorial Library (F-2) 160 Front Street | |
| Site Surface: Dirt (F-1), Grass (F-2) | | Landmark: F-1 – Near Corner of Building near Stairs, F-2 – Just East of Monument | |
| Near Lane Direction: EB | Pavement Type: Asphalt | | |
| Temperature: 52 | Cloud Cover: Clear | Wind Speed: 3-5mph | Wind Direction: E |
| Start Time: F-1 - 12:19:45 pm F-2 – 12:16:45 pm | | Stop Time: F-1 - 12:34:45 pm F-2 – 12:31:45 pm | |
| Noise Sources: Traffic, Birds, Customers, 12:31 Horn, Construction Noise at F-1 | | | |
| PLAN VIEW | | | |
| | | | |
| ELEVATION VIEW | | | |
| | | | |

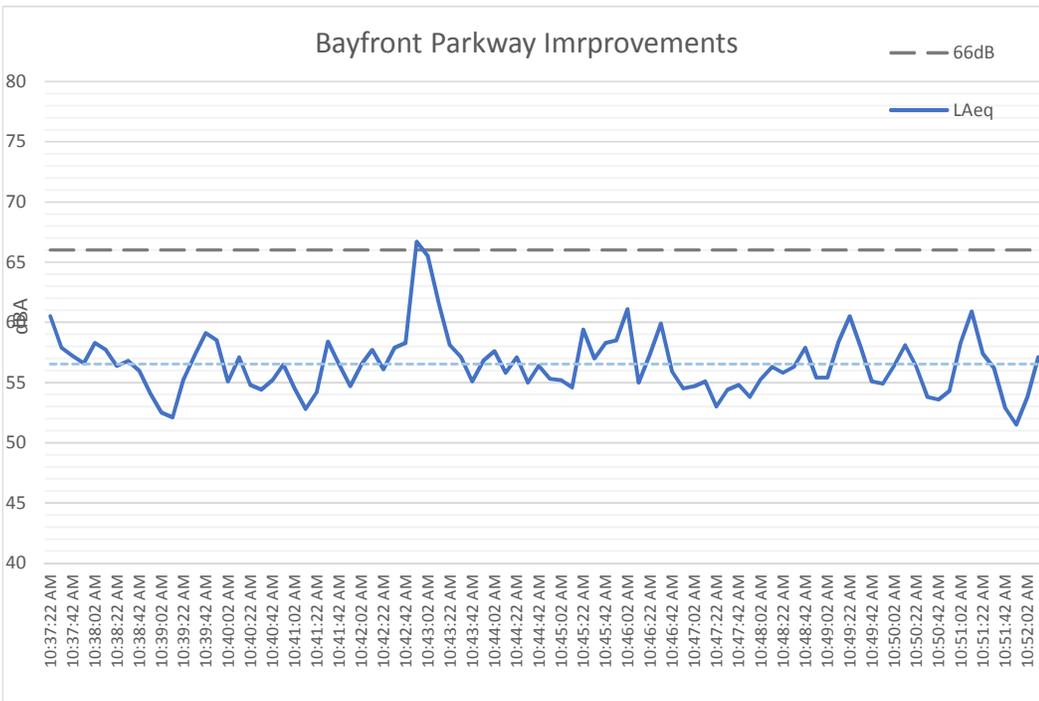
Meter No: _A (F-1), B (F-2)_

Seq. No: __0110 (F-1), 0201 (F-2)__

Noise Monitoring Recorded Data

File Name..... Site H-1 Data Sheet Date Recorded..... 11/26/2019
 Logger..... Rion B, Seq. 0107 Start Time..... 10:37:30 AM
 Project Name..... Bayfront Parkway Improvements Stop Time..... 10:52:30 AM
 Test Location..... Site H-1
 Employee Name..... VRM

Site Address..... General Wayne Anthony Memorial Site Notes..... Just east of monument
 Erie, PA
 Temperature..... 51 F Wind Speed..... 0-5 mph
 Cloud Cover..... Partly Cloudy Wind Direction..... E



**Sound Measurements
dBA**

| Min | Mon. Leq |
|-----|----------|
| 1 | 58.0 |
| 2 | 54.7 |
| 3 | 57.1 |
| 4 | 54.7 |
| 5 | 56.3 |
| 6 | 61.0 |
| 7 | 56.8 |
| 8 | 55.6 |
| 9 | 58.2 |
| 10 | 56.2 |
| 11 | 54.6 |
| 12 | 56.5 |
| 13 | 57.2 |
| 14 | 56.2 |
| 15 | 54.8 |

| | |
|------------------------|-------------|
| 15 Min. Leq | 56.5 |
|------------------------|-------------|



NOISE MONITORING DATA

Project: Bayfront Parkway Improvements, PennDOT District 1-0

| | | | |
|---|----------------------------|--|-------------------|
| Observer: VRM | | | |
| Site ID: H-1 | Date: 11/26/19 | Location: General Anthony Wayne Memorial | |
| Site Surface: Grass | | Landmark: Just East of Monument | |
| Near Lane Direction: EB | Pavement Type: Asphalt | | |
| Temperature: 51 | Cloud Cover: Partly Cloudy | Wind Speed: 0-5mph | Wind Direction: E |
| Start Time: 10:37:30 am | | Stop Time: 10:52:30 pm | |
| Noise Sources: Traffic, Leaves, 10:43 Airplane Overhead | | | |
| Video: 10:40:40-10:50:40 | | | |
| PLAN VIEW | | | |
| | | | |
| ELEVATION VIEW | | | |
| | | | |

Meter No: A

Seq. No: 0107

NOISE MONITORING DATA

Project: Bayfront Parkway Improvements, PennDOT District 1-0

| | | | |
|---|----------------------------|--|-------------------|
| Observer: VRM | | | |
| Site ID: H-2 | Date: 11/26/19 | Location: PA Soldiers and Sailors Home 560 E 3 rd Street | |
| Site Surface: Grass | | Landmark: West of Gazebo | |
| Near Lane Direction: EB | Pavement Type: Asphalt | | |
| Temperature: 51 | Cloud Cover: Partly Cloudy | Wind Speed: 3-5mph | Wind Direction: E |
| Start Time: 11:11:20 am | | Stop Time: 11:26:20 am | |
| Noise Sources: Birds, Leaves, 11:11-11:14 Leaf Blower, 11:16 Conversation Nearby, 11:17-11:21 Leaf Blower, 11:21 Siren in Distance, 11:22 Truck in Parking Lot, 11:25-end Leaf Blower, 11:25-end Siren in Distance, No discernable roadway traffic noise. | | | |
| PLAN VIEW | | | |
| | | | |
| ELEVATION VIEW | | | |
| | | | |

Meter No: A

Seq. No: 0108



Weather observations for the past three days



Erie, Erie International Airport

Enter Your "City, ST" or zip code

metric

| Date | Time (est) | Wind (mph) | Vis. (mi.) | Weather | Sky Cond. | Temperature (°F) | | | | Relative Humidity | Wind Chill (°F) | Heat Index (°F) | Pressure | | Precipitation (in.) | | |
|------|------------|------------|------------|-------------------------|----------------------------|------------------|------|--------|----|-------------------|-----------------|-----------------|----------------|----------------|---------------------|------|------|
| | | | | | | Air | Dwpt | 6 hour | | | | | altimeter (in) | sea level (mb) | 1 hr | 3 hr | 6 hr |
| 27 | 12:51 | SW 17 G 25 | 10.00 | Partly Cloudy | SCT065 | 56 | 49 | 57 | 52 | 77% | NA | NA | 29.43 | 996.6 | | | 0.12 |
| 27 | 11:51 | S 14 G 25 | 7.00 | Light Rain | FEW016 BKN022 OVC070 | 54 | 49 | | | 83% | NA | NA | 29.42 | 996.3 | 0.09 | | |
| 27 | 10:51 | S 22 G 36 | 10.00 | Overcast and Breezy | SCT025 SCT036 OVC090 | 53 | 47 | | | 80% | NA | NA | 29.46 | 997.7 | 0.02 | | |
| 27 | 09:51 | S 25 G 48 | 10.00 | Overcast and Breezy | FEW035 OVC043 | 54 | 44 | | | 69% | NA | NA | 29.48 | 998.2 | | 0.01 | |
| 27 | 08:51 | S 29 G 49 | 10.00 | Mostly Cloudy and Windy | SCT033 SCT055 BKN075 | 53 | 41 | | | 64% | NA | NA | 29.53 | 1000.0 | | | |
| 27 | 07:51 | S 16 G 32 | 10.00 | Overcast | OVC090 | 54 | 38 | | | 55% | NA | NA | 29.57 | 1001.6 | 0.01 | | |
| 27 | 06:51 | S 18 G 25 | 10.00 | Overcast | OVC090 | 53 | 39 | 55 | 50 | 59% | NA | NA | 29.61 | 1002.8 | | | 0.03 |
| 27 | 05:51 | SE 10 | 10.00 | Overcast | OVC080 | 52 | 37 | | | 57% | NA | NA | 29.67 | 1004.8 | | | |
| 27 | 04:51 | S 10 | 7.00 | Light Rain | OVC060 | 50 | 40 | | | 68% | 46 | NA | 29.73 | 1007.1 | 0.03 | | |
| 27 | 03:51 | S 14 | 10.00 | Light Rain | FEW060 OVC080 | 55 | 34 | | | 45% | NA | NA | 29.77 | 1008.3 | | | |
| 27 | 02:51 | SE 10 G 17 | 10.00 | Overcast | OVC095 | 55 | 34 | | | 45% | NA | NA | 29.80 | 1009.1 | | | |
| 27 | 01:51 | SE 8 | 10.00 | Overcast | BKN090 OVC110 | 55 | 35 | | | 47% | NA | NA | 29.80 | 1009.2 | | | |
| 27 | 00:51 | SE 9 | 10.00 | Overcast | OVC090 | 54 | 36 | 55 | 45 | 51% | NA | NA | 29.83 | 1010.4 | | | |
| 26 | 23:51 | SE 9 | 10.00 | Overcast | OVC095 | 54 | 37 | | | 53% | NA | NA | 29.86 | 1011.3 | | | |
| 26 | 22:51 | SE 6 | 10.00 | Partly Cloudy | SCT120 | 52 | 38 | | | 59% | NA | NA | 29.89 | 1012.3 | | | |
| 26 | 21:51 | SE 6 | 10.00 | Partly Cloudy | SCT100 | 50 | 38 | | | 63% | 48 | NA | 29.91 | 1013.1 | | | |
| 26 | 20:51 | S 5 | 10.00 | Overcast | OVC100 | 50 | 39 | | | 66% | 48 | NA | 29.92 | 1013.4 | | | |
| 26 | 19:51 | Calm | 7.00 | Overcast | BKN065 OVC100 | 46 | 40 | | | 79% | NA | NA | 29.93 | 1013.8 | | | |
| 26 | 18:51 | E 3 | 9.00 | Overcast | BKN065 OVC075 | 47 | 40 | 52 | 45 | 77% | NA | NA | 29.94 | 1014.0 | | | |
| 26 | 17:51 | Calm | 9.00 | Partly Cloudy | SCT080 | 47 | 40 | | | 77% | NA | NA | 29.92 | 1013.6 | | | |
| 26 | 16:51 | E 6 | 9.00 | Mostly Cloudy | FEW060 SCT080 | 47 | 41 | | | 80% | 44 | NA | 29.93 | 1013.8 | | | |

BKN090

| | | | | | | | | | | | | | | | |
|----|-------|---------------|-------|--------------------------|--------|----|----|----|----|-----|----|----|-------|--------|-----------|
| 26 | 15:51 | Calm | 10.00 | Fair | CLR | 49 | 40 | | | 71% | NA | NA | 29.93 | 1013.9 | |
| 26 | 14:51 | NW 5 | 10.00 | Fair | CLR | 51 | 40 | | | 66% | NA | NA | 29.92 | 1013.4 | |
| 26 | 13:51 | W 6 | 10.00 | Fair | CLR | 51 | 40 | | | 66% | NA | NA | 29.93 | 1013.7 | |
| 26 | 12:51 | W 9 | 10.00 | Fair | CLR | 52 | 39 | 54 | 46 | 61% | NA | NA | 29.94 | 1013.9 | |
| 26 | 11:51 | W 9 G 16 | 10.00 | Fair | CLR | 53 | 38 | | | 57% | NA | NA | 29.93 | 1013.8 | |
| 26 | 10:51 | W 13 | 10.00 | Fair | CLR | 54 | 38 | | | 55% | NA | NA | 29.94 | 1014.1 | |
| 26 | 09:51 | SW 9 | 10.00 | Fair | CLR | 52 | 38 | | | 59% | NA | NA | 29.93 | 1013.6 | |
| 26 | 08:51 | SW 10 | 10.00 | Fair | CLR | 50 | 37 | | | 61% | 46 | NA | 29.90 | 1012.8 | |
| 26 | 07:51 | S 12 | 10.00 | Fair | CLR | 47 | 36 | | | 66% | 42 | NA | 29.88 | 1012.1 | |
| 26 | 06:51 | SW 10 | 10.00 | Fair | CLR | 48 | 36 | 51 | 47 | 63% | 44 | NA | 29.85 | 1011.1 | |
| 26 | 05:51 | S 13 | 10.00 | Fair | CLR | 48 | 36 | | | 63% | 43 | NA | 29.82 | 1010.1 | |
| 26 | 04:51 | S 14 | 10.00 | Fair | CLR | 49 | 36 | | | 61% | 44 | NA | 29.81 | 1009.6 | |
| 26 | 03:51 | S 14 | 10.00 | Fair | CLR | 50 | 36 | | | 59% | 45 | NA | 29.79 | 1009.0 | |
| 26 | 02:51 | S 17 | 10.00 | Fair | CLR | 50 | 36 | | | 59% | 44 | NA | 29.79 | 1008.9 | |
| 26 | 01:51 | S 17 G 24 | 10.00 | Fair | CLR | 50 | 35 | | | 57% | 44 | NA | 29.77 | 1008.4 | |
| 26 | 00:51 | SW 15 G 26 | 10.00 | Fair | CLR | 51 | 35 | 52 | 49 | 54% | NA | NA | 29.77 | 1008.3 | |
| 25 | 23:51 | S 18 G 30 | 10.00 | Fair | CLR | 51 | 35 | | | 54% | NA | NA | 29.76 | 1008.2 | |
| 25 | 22:51 | S 14 G 23 | 10.00 | Fair | CLR | 50 | 35 | | | 57% | 45 | NA | 29.76 | 1008.0 | |
| 25 | 21:51 | S 15 G 26 | 10.00 | Fair | CLR | 50 | 36 | | | 59% | 45 | NA | 29.76 | 1008.0 | |
| 25 | 20:51 | S 16 | 10.00 | Fair | CLR | 50 | 37 | | | 61% | 44 | NA | 29.74 | 1007.6 | |
| 25 | 19:51 | S 16 G 22 | 10.00 | Partly Cloudy | SCT110 | 51 | 37 | | | 59% | NA | NA | 29.74 | 1007.3 | |
| 25 | 18:51 | S 14 | 10.00 | Fair | CLR | 50 | 37 | 54 | 50 | 61% | 45 | NA | 29.74 | 1007.4 | 0.48 |
| 25 | 17:51 | S 7 | 10.00 | Fair | CLR | 50 | 37 | | | 61% | 47 | NA | 29.74 | 1007.5 | |
| 25 | 16:51 | S 7 | 10.00 | Fair | CLR | 51 | 36 | | | 56% | NA | NA | 29.73 | 1007.2 | |
| 25 | 15:51 | SW 10 | 10.00 | Fair | CLR | 53 | 36 | | | 52% | NA | NA | 29.73 | 1006.9 | 0.01 0.48 |
| 25 | 14:51 | SW 13 | 10.00 | Fair | CLR | 53 | 37 | | | 55% | NA | NA | 29.72 | 1006.6 | 0.47 |
| 25 | 13:51 | SW 12 | 10.00 | Fair | CLR | 53 | 37 | | | 55% | NA | NA | 29.71 | 1006.5 | |
| 25 | 12:51 | S 13 | 10.00 | Fair | CLR | 51 | 37 | 51 | 40 | 59% | NA | NA | 29.71 | 1006.3 | |
| 25 | 11:51 | SW 14 | 10.00 | Fair | CLR | 49 | 37 | | | 64% | 44 | NA | 29.73 | 1007.0 | |
| 25 | 10:51 | SW 14 | 10.00 | Fair | CLR | 47 | 36 | | | 66% | 41 | NA | 29.73 | 1007.2 | |
| 25 | 09:51 | S 15 | 10.00 | Overcast | OVC110 | 43 | 35 | | | 74% | 36 | NA | 29.74 | 1007.4 | |
| 25 | 08:51 | S 13 | 8.00 | Overcast | OVC120 | 41 | 35 | | | 79% | 34 | NA | 29.71 | 1006.7 | |
| 25 | 07:51 | S 14 G 23 | 6.00 | Overcast with Haze | OVC090 | 40 | 35 | | | 83% | 32 | NA | 29.72 | 1006.8 | |

11/27/2019

National Weather Service : Observed Weather for past 3 Days : Erie, Erie International Airport

| | | | | | | | | | | | | | | | | |
|----|-------|------------------|-------|------------------|------------------|----|----|----|----|-----|----|----|-------|--------|------|------|
| 25 | 06:51 | S 13 | 6.00 | Fog/Mist | BKN060 OVC090 | 40 | 36 | 42 | 40 | 86% | 32 | NA | 29.72 | 1006.8 | 0.02 | 0.04 |
| 25 | 05:51 | S 12 | 6.00 | Light Rain | SCT017 OVC046 | 41 | 36 | | | 82% | 34 | NA | 29.73 | 1007.4 | 0.01 | |
| 25 | 04:51 | S 10 | 7.00 | Light Rain | BKN016 OVC046 | 41 | 36 | | | 82% | 35 | NA | 29.73 | 1007.2 | 0.01 | |
| 25 | 03:51 | S 7 | 8.00 | Overcast | OVC016 | 41 | 35 | | | 79% | 36 | NA | 29.71 | 1006.6 | | |
| 25 | 02:51 | SW 10 | 9.00 | Overcast | SCT016 OVC100 | 41 | 34 | | | 76% | 35 | NA | 29.71 | 1006.3 | | |
| 25 | 01:51 | S 10 | 9.00 | Overcast | OVC015 | 41 | 34 | | | 76% | 35 | NA | 29.69 | 1005.8 | | |
| 25 | 00:51 | S 13 | 10.00 | Overcast | OVC015 | 41 | 34 | 41 | 37 | 76% | 34 | NA | 29.69 | 1005.7 | | |
| 24 | 23:51 | SW 15 | 10.00 | Overcast | OVC017 | 41 | 34 | | | 76% | 33 | NA | 29.68 | 1005.6 | | |
| 24 | 22:51 | S 12 | 10.00 | Overcast | OVC019 | 41 | 33 | | | 73% | 34 | NA | 29.68 | 1005.6 | | |
| 24 | 21:51 | SW 13 | 10.00 | Overcast | OVC020 | 40 | 32 | | | 73% | 32 | NA | 29.68 | 1005.6 | | |
| 24 | 20:51 | SW 9 | 10.00 | Mostly Cloudy | BKN023 | 39 | 32 | | | 76% | 33 | NA | 29.66 | 1005.0 | | |
| 24 | 19:51 | SW 9 | 10.00 | Fair | CLR | 38 | 30 | | | 73% | 32 | NA | 29.65 | 1004.6 | | |
| 24 | 18:51 | SW 8 | 10.00 | Fair | CLR | 38 | 29 | 41 | 38 | 70% | 32 | NA | 29.63 | 1003.8 | | |
| 24 | 17:51 | S 9 | 10.00 | Fair | CLR | 39 | 30 | | | 70% | 33 | NA | 29.61 | 1003.1 | | |
| 24 | 16:51 | S 9 | 8.00 | Fair | CLR | 39 | 30 | | | 70% | 33 | NA | 29.60 | 1002.8 | | |
| 24 | 15:51 | SW 9 | 8.00 | Partly Cloudy | SCT022 | 40 | 31 | | | 70% | 34 | NA | 29.60 | 1002.7 | | |
| 24 | 14:51 | SW 13 G 20 | 7.00 | Overcast | OVC016 | 40 | 31 | | | 70% | 32 | NA | 29.60 | 1002.8 | | |
| 24 | 13:51 | SW 13 | 7.00 | Overcast | OVC015 | 40 | 31 | | | 70% | 32 | NA | 29.60 | 1003.0 | | |

| Date | Time (est) | Wind (mph) | Vis. (mi.) | Weather | Sky Cond. | Air | Dwpt | Max. | Min. | Relative Humidity | Wind Chill (°F) | Heat Index (°F) | altimeter (in.) | sea level (mb) | 1 hr | 3 hr | 6 hr |
|------|------------|------------|------------|---------|-----------|-----|------|------------------|------|-------------------|-----------------|-----------------|-----------------|----------------|---------------------|------|------|
| | | | | | | | | Temperature (°F) | | | | | | | Precipitation (in.) | | |

National Weather Service
Southern Region Headquarters
Fort Worth, Texas
[Disclaimer](#)

[Back to previous page](#)

Last Modified: February, 7 2012
[Privacy Policy](#)

Calibration Certificate No.42925

Instrument: Acoustical Calibrator
Model: NC-74
Manufacturer: Rion
Serial number: 34557100
Class (IEC 60942): 1
Barometer type:
Barometer s/n:
Customer: MS Consultants, Inc.
Tel/Fax: 330-258-9920 / 330-258-9921

Date Calibrated: 5/22/2019 **Cal Due:**
Status:

| | |
|----------|------|
| Received | Sent |
| X | X |

In tolerance:

| | |
|---|---|
| X | X |
|---|---|

Out of tolerance:

| | |
|--|--|
| | |
|--|--|

See comments:

| | |
|--|--|
| | |
|--|--|

Contains non-accredited tests: Yes X No
Address: One Cascade Plaza, Suite 140,
Akron, OH 44308-1116

Tested in accordance with the following procedures and standards:
Calibration of Acoustical Calibrators, Scantek Inc., Rev. 10/1/2010

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

| Instrument - Manufacturer | Description | S/N | Cal. Date | Traceability evidence | Cal. Due |
|-----------------------------|----------------------|---------------|--------------------|--------------------------|--------------|
| | | | | Cal. Lab / Accreditation | |
| 483B-Norsonic | SME Cal Unit | 31052 | Oct 31, 2018 | Scantek, Inc./ NVLAP | Oct 31, 2019 |
| DS-360-SRS | Function Generator | 33584 | Oct 24, 2017 | ACR Env./ A2LA | Oct 24, 2019 |
| 34401A-Agilent Technologies | Digital Voltmeter | MY47011118 | Oct 1, 2018 | ACR Env. / A2LA | Oct 1, 2019 |
| HM30-Thommen | Meteo Station | 1040170/39633 | Nov 13, 2018 | ACR Env./ A2LA | Nov 13, 2019 |
| 140-Norsonic | Real Time Analyzer | 1406423 | Nov 3, 2018 | Scantek / NVLAP | Nov 3, 2019 |
| PC Program 1018 Norsonic | Calibration software | v.6.1T | Validated Nov 2014 | Scantek, Inc. | - |
| 4134-Brüel&Kjær | Microphone | 173368 | Nov 11, 2018 | Scantek, Inc. / NVLAP | Nov 11, 2019 |
| 1203-Norsonic | Preamplifier | 14059 | Feb 28, 2019 | Scantek, Inc./ NVLAP | Feb 28, 2020 |

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK)

| | | | |
|-----------------------|----------------------|------------------------------|---------------------------|
| Calibrated by: | Lydon Dawkins | Authorized signatory: | Steven E. Marshall |
| Signature | <i>Lydon Dawkins</i> | Signature | <i>Steven E. Marshall</i> |
| Date | 5/22/2019 | Date | 5/23/2019 |

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory. This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Results summary: Device was tested and complies with following clauses of mentioned specifications:

| CLAUSES ¹ FROM STANDARDS REFERENCED IN PROCEDURES: | MET ² | NOT MET | COMMENTS |
|--|------------------|---------|----------|
| Manufacturer specifications | | | |
| Manufacturer specifications: Sound pressure level | X | | |
| Manufacturer specifications: Frequency | X | | |
| Manufacturer specifications: Total harmonic distortion | X | | |
| Current standards | | | |
| ANSI S1.40:2006 B.3 / IEC 60942: 2003 B.2 - Preliminary inspection | X | | |
| ANSI S1.40:2006 B.4.4 / IEC 60942: 2003 B.3.4 - Sound pressure level | X | | |
| ANSI S1.40:2006 A.5.4 / IEC 60942: 2003 A.4.4 - Sound pressure level stability | - | - | |
| ANSI S1.40:2006 B.4.5 / IEC 60942: 2003 B.3.5 - Frequency | X | | |
| ANSI S1.40:2006 B.4.6 / IEC 60942: 2003 B.3.6 - Total harmonic distortion | X | | |

¹ The results of this calibration apply only to the instrument type with serial number identified in this report.

² The tests marked with (*) are not covered by the current NVLAP accreditation.

Main measured parameters ³:

| Measured ⁴ /Acceptable ⁵ Tone frequency (Hz): | Measured ⁴ /Acceptable ⁵ Total Harmonic Distortion (%): | Measured ⁴ /Acceptable Level ⁵ (dB): |
|--|--|---|
| 1001.78 ± 1.0/1000.0 ± 10.0 | 1.20 ± 0.10/ < 3 | 94.00 ± 0.12/94.0 ± 0.4 |

³ The stated level is valid at measurement conditions.

⁴ The above expanded uncertainties for frequency and distortion are calculated with a coverage factor k=2; for level k=2.00

⁵ Acceptable parameters values are from the current standards

Environmental conditions:

| Temperature (°C) | Barometric pressure (kPa) | Relative Humidity (%) |
|------------------|---------------------------|-----------------------|
| 23.3 ± 1.1 | 100.98 ± 0.000 | 42.7 ± 2.2 |

Tests made with following attachments to instrument:

| |
|---------------------------------------|
| Calibrator ½" Adaptor Type: NC-74-002 |
| Other: |

Adjustments: Unit was not adjusted.

Comments: The instrument was tested and met all specifications found in the referenced procedures.

Note: The instrument was tested for the parameters listed in the table above, using the test methods described in the listed standards. All tests were performed around the reference conditions. The test results were compared with the manufacturer's or with the standard's specifications, whichever are larger.

Compliance with any standard cannot be claimed based solely on the periodic tests.

Measured Data: in Acoustical Calibrator Test Report # 42925 of one page.

Place of Calibration: Scantek, Inc.

6430 Dobbin Road, Suite C
Columbia, MD 21045 USA

Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory. This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Document stored as: Z:\Calibration Lab\Cal 2019\RIONNC74-0.5in_34557100_M1.doc

Page 2 of 2

Test Report No.:42925

Manufacturer: Rion
Type: NC-74
Serial no: 34557100

Customer: MS Consultants, Inc.
Department:
Address: One Cascade Plaza, Suite 140, Akron, OH 44308-1116
Order No:
Contact Person: Vincent Matheney
Phone No.: 330-258-9920
Fax No.: 330-258-9921
eMail: vmatheney@msconsultants.com

Measurement Results:

| | Level: | P. Stab : | Frequency: | F. Stab : | Distortion: |
|--------------------------|--------------|-------------|----------------|-------------|-------------|
| | (dB) | (dB) | (Hz) | (%) | (% TD) |
| 1: | 94.01 | 0.02 | 1001.79 | 0.00 | 1.21 |
| 2: | 94.00 | 0.03 | 1001.79 | 0.00 | 1.21 |
| 3: | 94.00 | 0.01 | 1001.77 | 0.01 | 1.19 |
| Result (Average): | 94.00 | 0.02 | 1001.78 | 0.00 | 1.20 |
| Expanded Uncertainty: | 0.12 | 0.02 | 1.00 | 0.01 | 0.10 |
| Degree of Freedom: | >100 | 32 | >100 | >100 | >100 |
| Coverage Factor: | 2.00 | 2.13 | 2.00 | 2.00 | 2.00 |

The stated levels are relative to 20 μ Pa.

The stated level is valid at measurement conditions.

Reference microphone: 4134-173368. Volume correction: 0.006 dB

Records:Z:\Calibration Lab\Cal 2019\RIONNC74-0.5in_34557100_M1.nmf

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k = 2$, which for a normal distribution corresponds to coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in accordance with EA publication EA-4/02.

Environmental conditions:

Pressure: 100.980 \pm 0.020 kPa
Temperature: 23.3 \pm 1.1 $^{\circ}$ C
Relative humidity: 42.7 \pm 2.2 %RH

Date of calibration: 5/22/2019

Date of issue: 5/22/2019

Supervisor : Steven E. Marshall
Measurements performed by:

LD

Lydon Dawkins
Software version: 6.1T

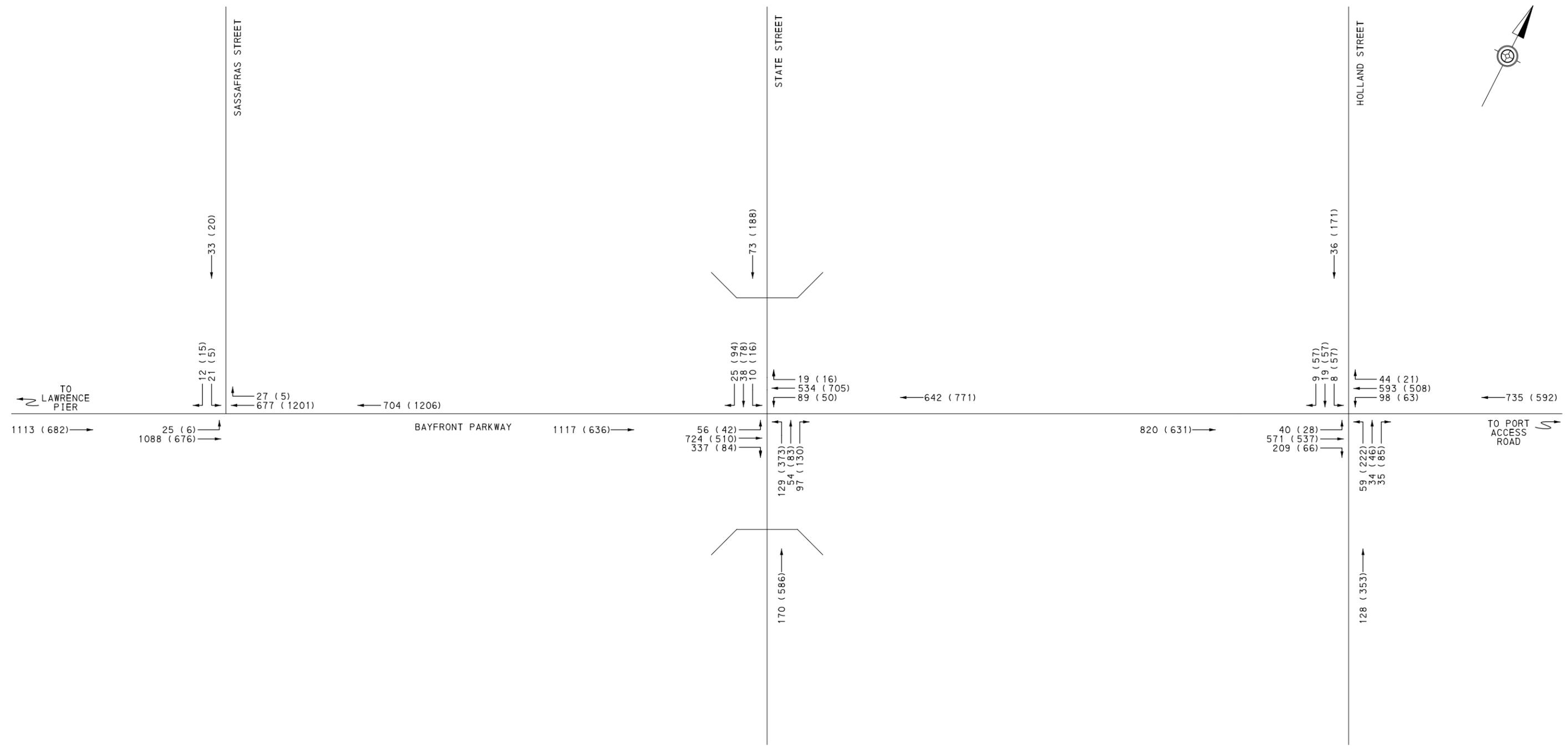
Scantek, Inc.

6430 Dobbin Rd., Suite C, Columbia, MD 21045
Ph: 410-290-7726 eMail: callab@scantekinc.com

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

Appendix 2

Traffic Data



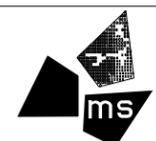
LEGEND

X = AM PEAK HOUR VOLUME
 (X) = PM PEAK HOUR VOLUME

SCALE: NOT TO SCALE

PENNDOT DISTRICT 1-0

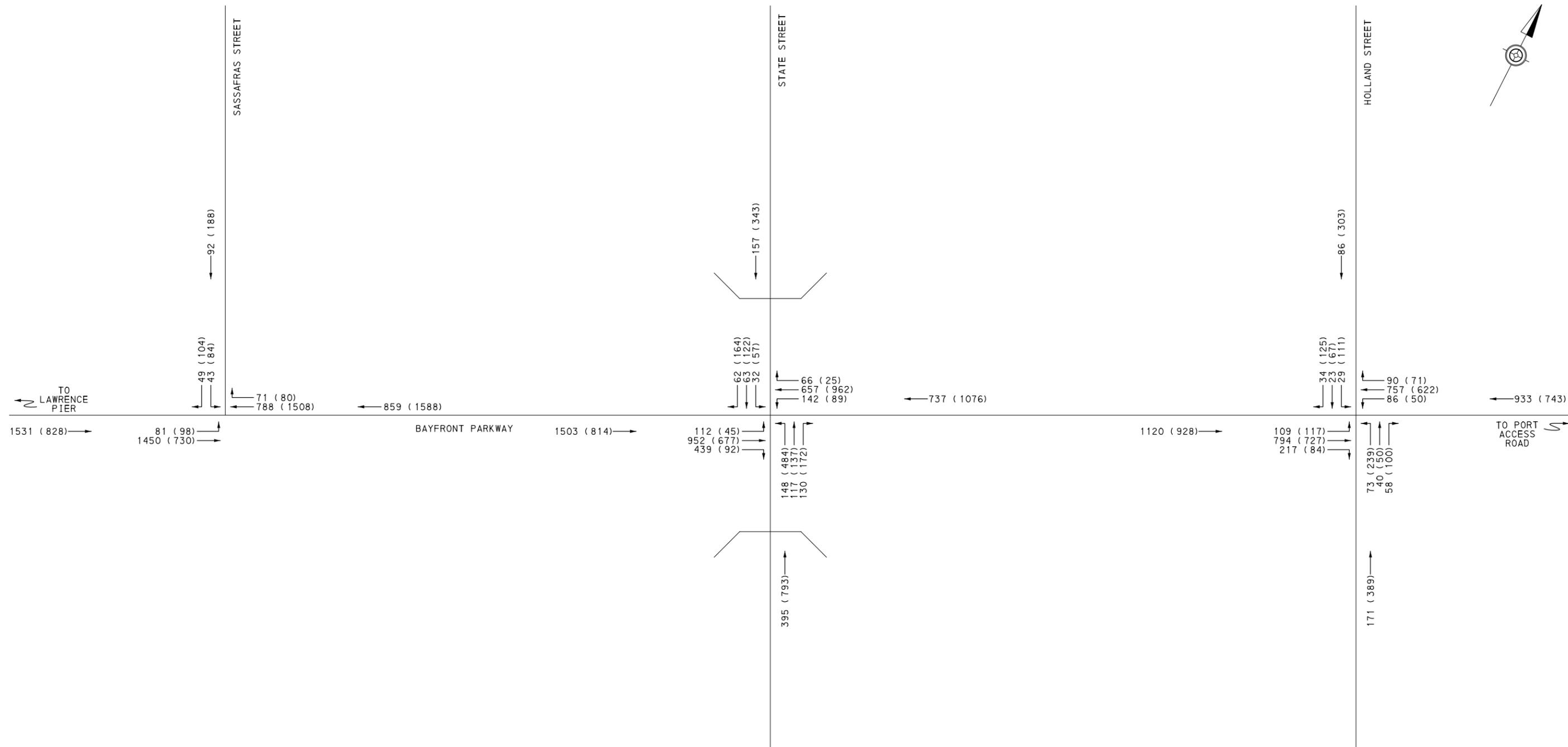
ERIE BAYFRONT PARKWAY



PREPARED BY:
 ms consultants, inc.

EXISTING YEAR 2018
 PEAK HOUR
 TRAFFIC VOLUMES

EXHIBIT 1



LEGEND

X = AM PEAK HOUR VOLUME
 (X) = PM PEAK HOUR VOLUME

SCALE: NOT TO SCALE

PENNDOT DISTRICT 1-0

ERIE BAYFRONT PARKWAY



PREPARED BY:
 ms consultants, inc.

DESIGN YEAR 2040
 PEAK HOUR TRAFFIC
 VOLUMES WITH ALL
 DEVELOPMENT

EXHIBIT 2

SR 4034 Section A01

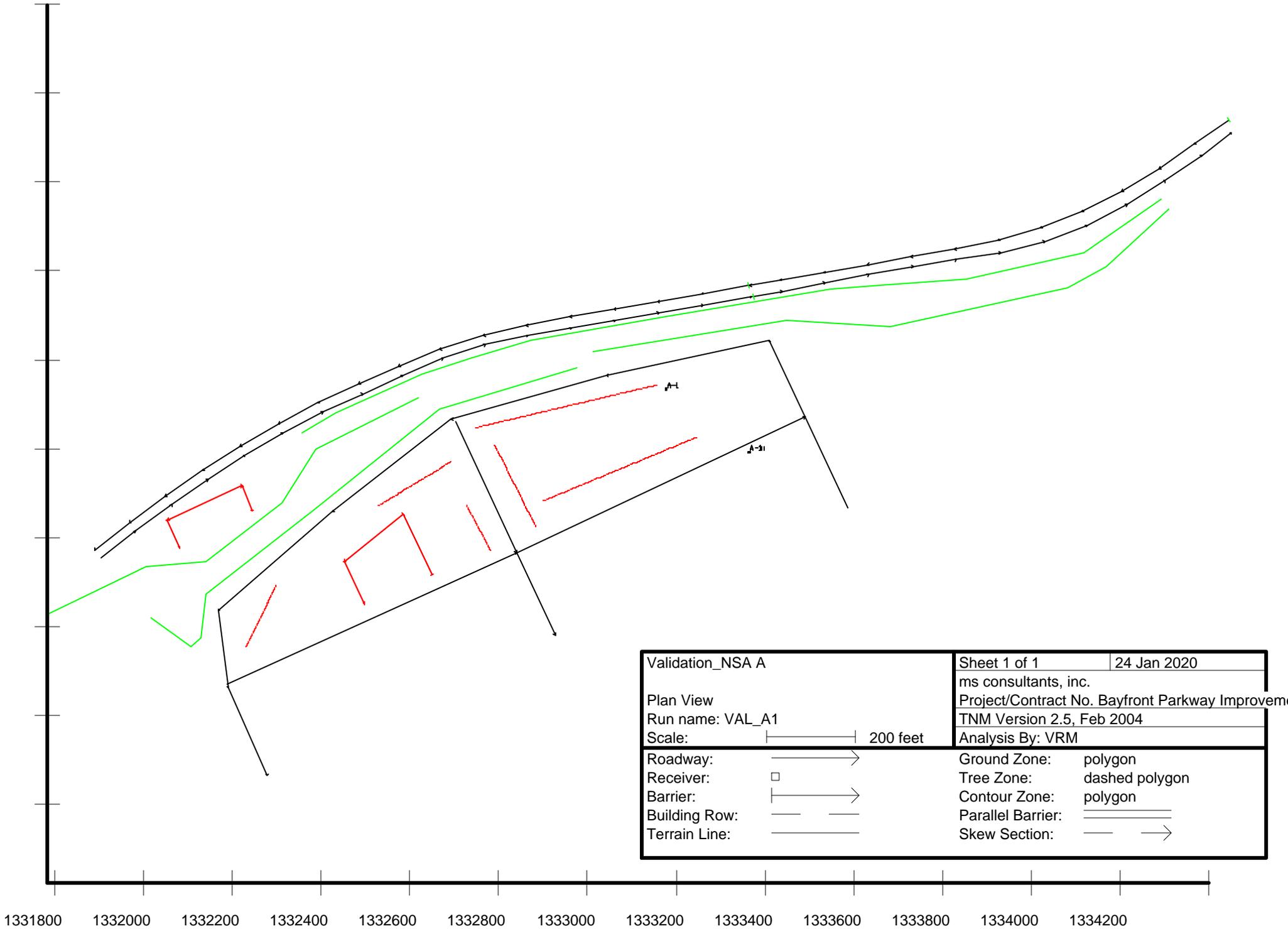
Traffic Data Information:

| Roadway | Current ADT | Posted Speed (MPH) | K | D | T | Design Year ADT | DHV |
|----------------|--------------------|---------------------------|----------|----------|----------|------------------------|------------|
| SR 4034 | 19,039 | 35 | 10 | 64 | 2 | 19,700 | 1,970 |
| State St | 13,400 | 25 | 10 | 62 | 4 | 13,900 | 1,390 |
| Holland St | 5,400 | 25 | 10 | 65 | 4 | 5,600 | 560 |
| Sassafras St | 900 | 25 | 10 | 61 | 4 | 1,000 | 100 |
| Front St | 1,700 | 25 | 10 | 52 | 9 | 1,800 | 180 |

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

Appendix 3

TNM Validation Models

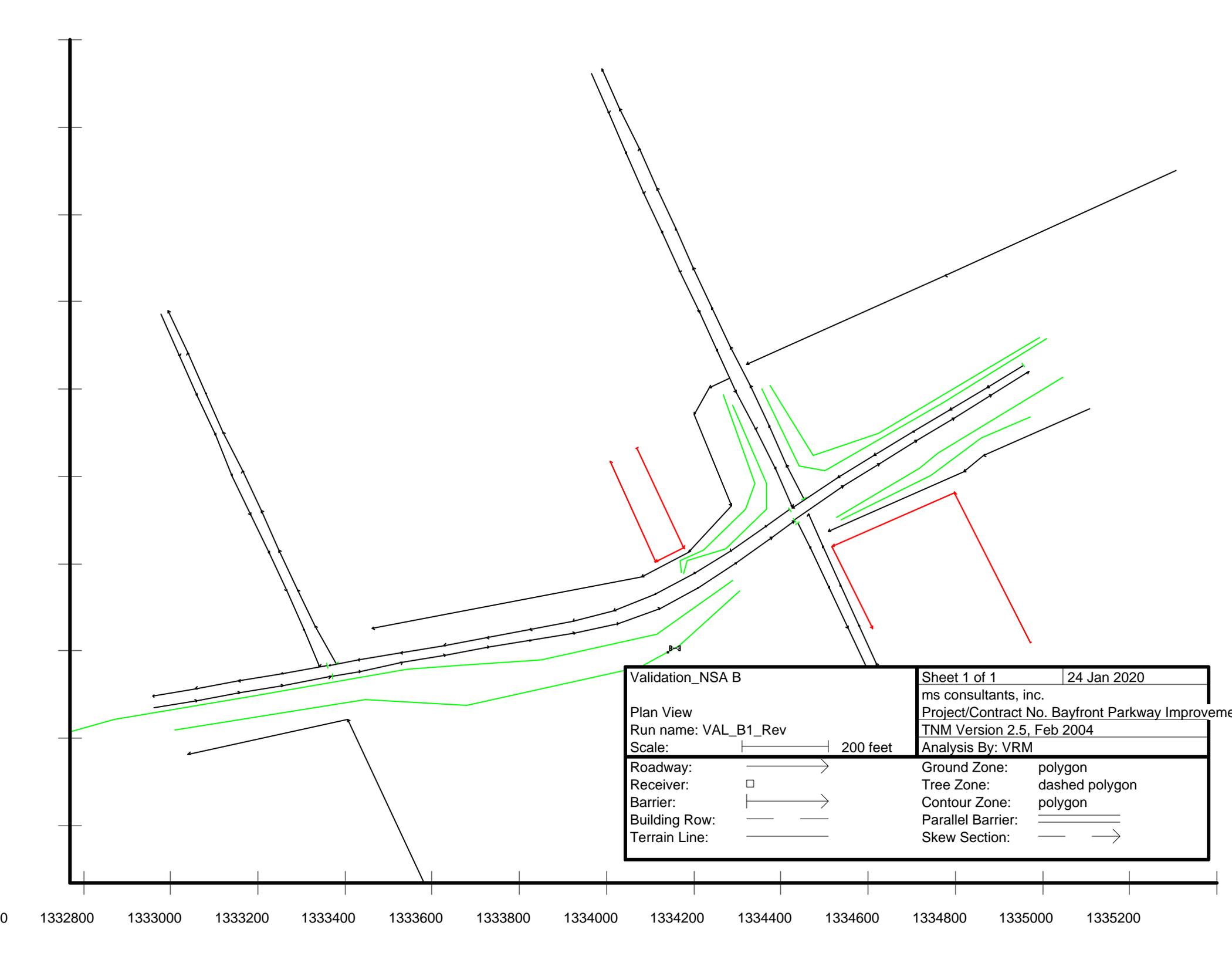


| | | | |
|---|---|---|---|
| Validation_NSA A | | Sheet 1 of 1 | 24 Jan 2020 |
| Plan View | | ms consultants, inc. | |
| Run name: VAL_A1 | | Project/Contract No. Bayfront Parkway Improvement | |
| Scale:  200 feet | | TNM Version 2.5, Feb 2004 | |
| Analysis By: VRM | | | |
| Roadway: |  | Ground Zone: | polygon |
| Receiver: |  | Tree Zone: | dashed polygon |
| Barrier: |  | Contour Zone: | polygon |
| Building Row: |  | Parallel Barrier: |  |
| Terrain Line: |  | Skew Section: |  |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|------------------------------|------------|-------------------------------|------------------------|-------------------------------------|---------------|-------------------------------|--|--------------------|--------------------------|------------------------|-------------|------------------------------|
| ms consultants, inc. | | | | | | 24 January 2020 | | | | | | |
| VRM | | | | | | TNM 2.5 | | | | | | |
| | | | | | | Calculated with TNM 2.5 | | | | | | |
| RESULTS: SOUND LEVELS | | | | | | | | | | | | |
| PROJECT/CONTRACT: | | Bayfront Parkway Improvements | | | | | | | | | | |
| RUN: | | Validation_NSA A | | | | | | | | | | |
| BARRIER DESIGN: | | INPUT HEIGHTS | | | | | Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. | | | | | |
| ATMOSPHERICS: | | 68 deg F, 50% RH | | | | | | | | | | |
| Receiver | | | | | | | | | | | | |
| Name | No. | #DUs | Existing LAeq1h | No Barrier LAeq1h Calculated | Crit'n | Increase over existing | | Type Impact | With Barrier | | | |
| | | | | | | Calculated | Crit'n | | Calculated LAeq1h | Noise Reduction | | Calculated minus Goal |
| | | | | | | | Sub'l Inc | | | Calculated | Goal | Calculated minus Goal |
| | | | dB | dB | dB | dB | dB | | dB | dB | dB | dB |
| A-1 | 17 | 1 | 49.0 | 49.5 | 66 | 0.5 | 10 | ---- | 49.5 | 0.0 | 5 | -5.0 |
| A-1ii | 61 | 1 | 48.0 | 47.4 | 66 | -0.6 | 10 | ---- | 47.4 | 0.0 | 5 | -5.0 |
| Dwelling Units | | # DUs | Noise Reduction | | | | | | | | | |
| | | | Min | Avg | Max | | | | | | | |
| | | | dB | dB | dB | | | | | | | |
| All Selected | | 2 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All Impacted | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All that meet NR Goal | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |

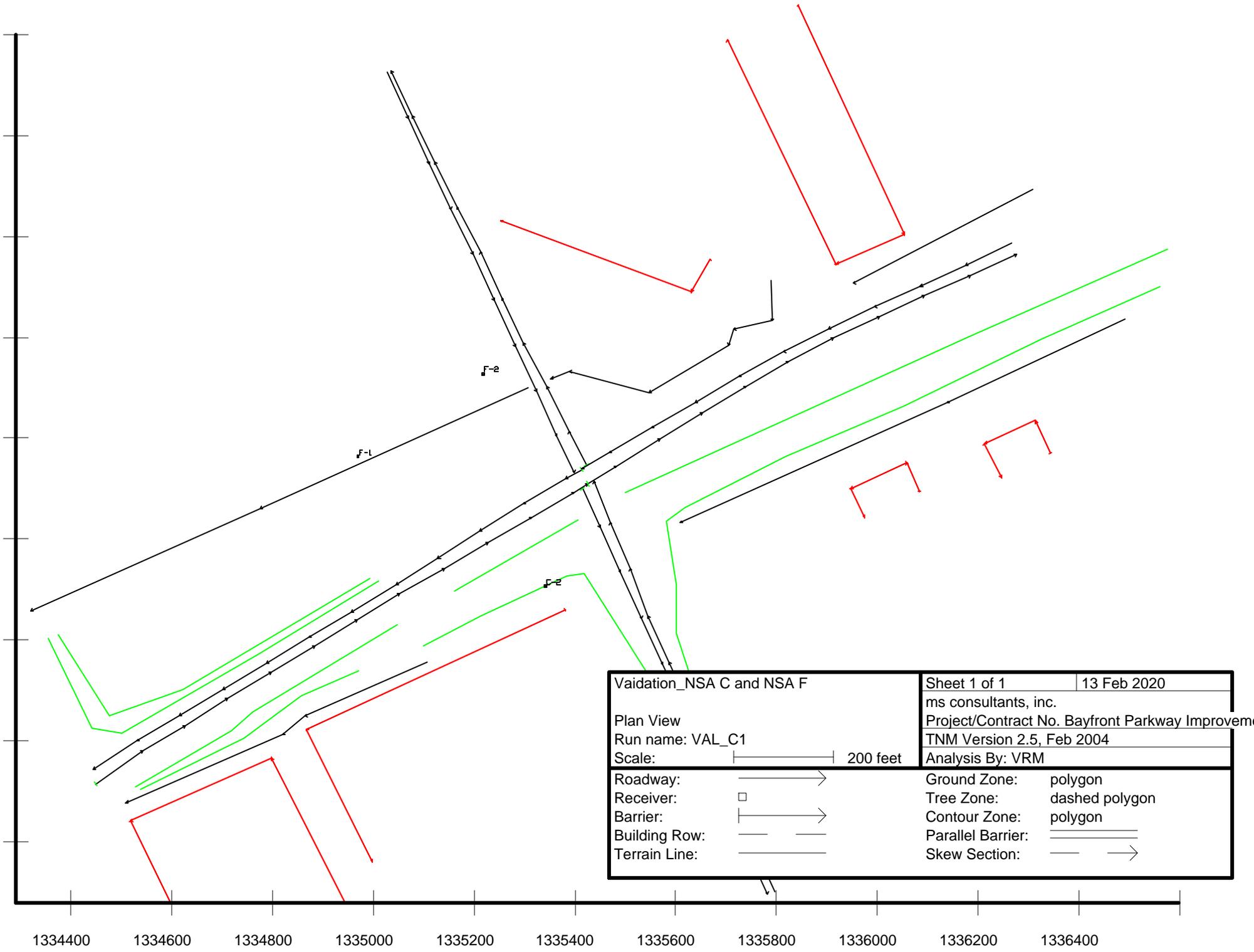


| | | | |
|--|---|---|---|
| Validation_NSA B | | Sheet 1 of 1 | 24 Jan 2020 |
| Plan View | | ms consultants, inc. | |
| Run name: VAL_B1_Rev | | Project/Contract No. Bayfront Parkway Improvement | |
| Scale:  | | TNM Version 2.5, Feb 2004 | |
| | | Analysis By: VRM | |
| Roadway: |  | Ground Zone: | polygon |
| Receiver: |  | Tree Zone: | dashed polygon |
| Barrier: |  | Contour Zone: | polygon |
| Building Row: |  | Parallel Barrier: |  |
| Terrain Line: |  | Skew Section: |  |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | | |
|------------------------------|--|-------------------------------|------------------------|------------------------|-------------------------------------|---------------|-------------------------------|---------------|---------------------|--------------------------|------------------------|--|------------------------------|
| ms consultants, inc. | | | | | | | | | | 24 January 2020 | | | |
| VRM | | | | | | | | | | TNM 2.5 | | | |
| | | | | | | | | | | Calculated with TNM 2.5 | | | |
| RESULTS: SOUND LEVELS | | | | | | | | | | | | | |
| PROJECT/CONTRACT: | | Bayfront Parkway Improvements | | | | | | | | | | | |
| RUN: | | Validation_NSA B | | | | | | | | | | | |
| BARRIER DESIGN: | | INPUT HEIGHTS | | | | | | | | | | Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. | |
| ATMOSPHERICS: | | 68 deg F, 50% RH | | | | | | | | | | | |
| Receiver | | | | | | | | | | | | | |
| Name | | No. | #DUs | Existing LAeq1h | No Barrier LAeq1h Calculated | Crit'n | Increase over existing | | With Barrier | | | | |
| | | | | | | | Calculated | Crit'n | Type Impact | Calculated LAeq1h | Noise Reduction | | Calculated minus Goal |
| | | | | dB | dB | dB | dB | dB | | dB | dB | dB | dB |
| B-3 | | 66 | 1 | 66.1 | 66.0 | 66 | -0.1 | 10 | Snd Lvl | 66.0 | 0.0 | 5 | -5.0 |
| Dwelling Units | | # DUs | Noise Reduction | | | | | | | | | | |
| | | | Min | Avg | Max | | | | | | | | |
| | | | dB | dB | dB | | | | | | | | |
| All Selected | | 1 | 0.0 | 0.0 | 0.0 | | | | | | | | |
| All Impacted | | 1 | 0.0 | 0.0 | 0.0 | | | | | | | | |
| All that meet NR Goal | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | | |

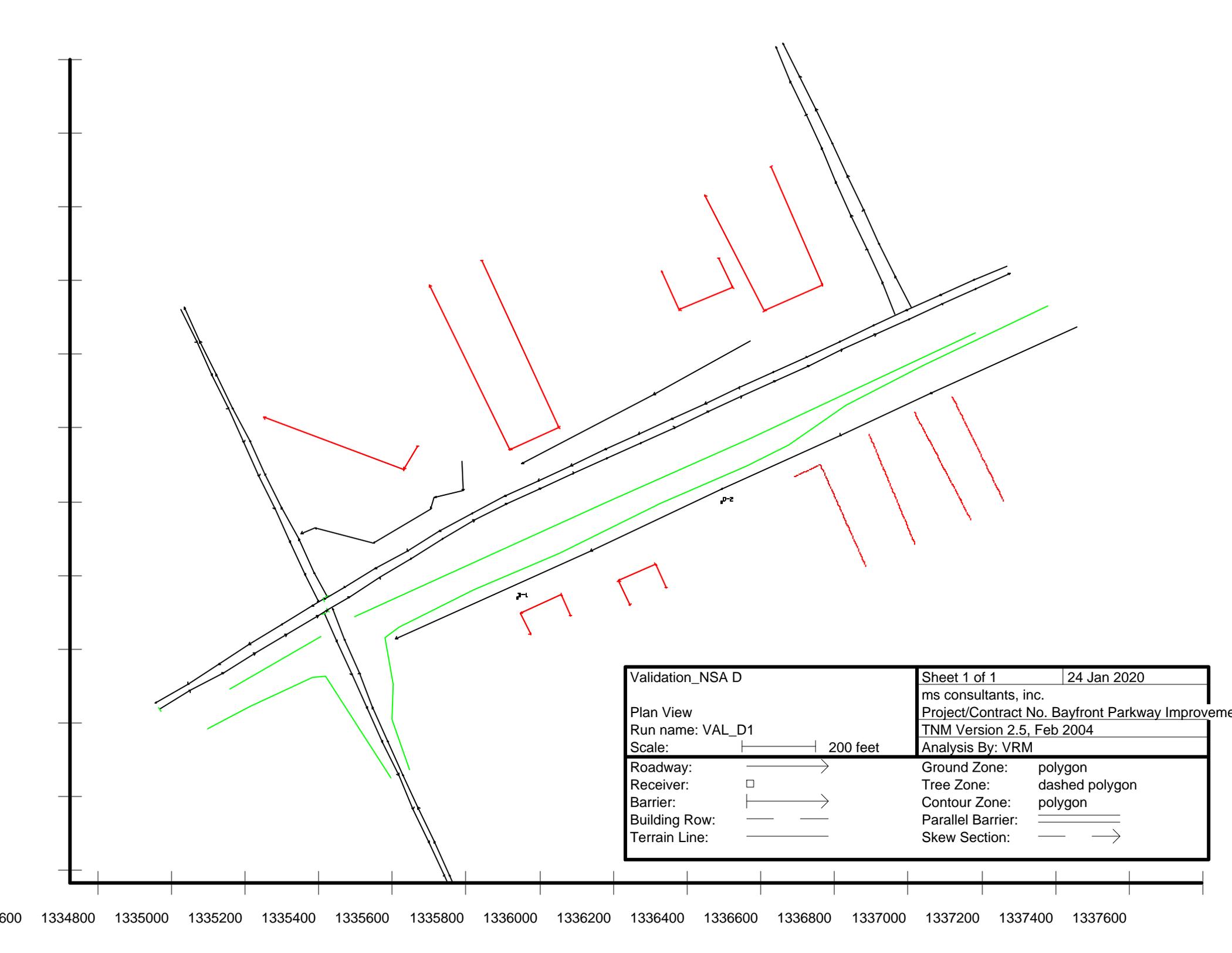


| | | | |
|---|---|---|---|
| Validation_NSA C and NSA F | | Sheet 1 of 1 | 13 Feb 2020 |
| Plan View | | ms consultants, inc. | |
| Run name: VAL_C1 | | Project/Contract No. Bayfront Parkway Improvement | |
| Scale:  200 feet | | TNM Version 2.5, Feb 2004 | |
| Analysis By: VRM | | | |
| Roadway: |  | Ground Zone: | polygon |
| Receiver: |  | Tree Zone: | dashed polygon |
| Barrier: |  | Contour Zone: | polygon |
| Building Row: |  | Parallel Barrier: |  |
| Terrain Line: |  | Skew Section: |  |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | | |
|------------------------------|------------|--------------|-------------------------------|-------------------------------------|---------------|--|--|--------------------|---------------------------------------|------------------------|-------------------|-------------|------------------------------|
| ms consultants, inc. | | | | | | 13 February 2020 | | | | | | | |
| VRM | | | | | | TNM 2.5 | | | | | | | |
| | | | | | | Calculated with TNM 2.5 | | | | | | | |
| RESULTS: SOUND LEVELS | | | | | | | | | | | | | |
| PROJECT/CONTRACT: | | | Bayfront Parkway Improvements | | | | | | | | | | |
| RUN: | | | Validation_NSA C and NSA F | | | | | | | | | | |
| BARRIER DESIGN: | | | INPUT HEIGHTS | | | | Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. | | | | | | |
| ATMOSPHERICS: | | | 68 deg F, 50% RH | | | | | | | | | | |
| Receiver | | | | | | | | | | | | | |
| Name | No. | #DUs | Existing LAeq1h | No Barrier LAeq1h Calculated | Crit'n | Increase over existing Calculated | Crit'n Sub'l Inc | Type Impact | With Barrier Calculated LAeq1h | Noise Reduction | | | Calculated minus Goal |
| | | | | | | | | | | Calculated | Calculated | Goal | Calculated minus Goal |
| | | | dB | dB | dB | dB | dB | | dB | dB | dB | dB | dB |
| C-2 | 69 | 1 | 64.9 | 64.3 | 66 | -0.6 | 10 | ---- | 64.3 | 0.0 | 5 | -5.0 | |
| F-1 | 173 | 1 | 60.1 | 57.3 | 66 | -2.8 | 10 | ---- | 57.3 | 0.0 | 5 | -5.0 | |
| F-2 | 174 | 1 | 57.1 | 58.1 | 66 | 1.0 | 10 | ---- | 58.1 | 0.0 | 5 | -5.0 | |
| Dwelling Units | | # DUs | Noise Reduction | | | | | | | | | | |
| | | | Min | Avg | Max | | | | | | | | |
| | | | dB | dB | dB | | | | | | | | |
| All Selected | | 3 | 0.0 | 0.0 | 0.0 | | | | | | | | |
| All Impacted | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | | |
| All that meet NR Goal | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | | |

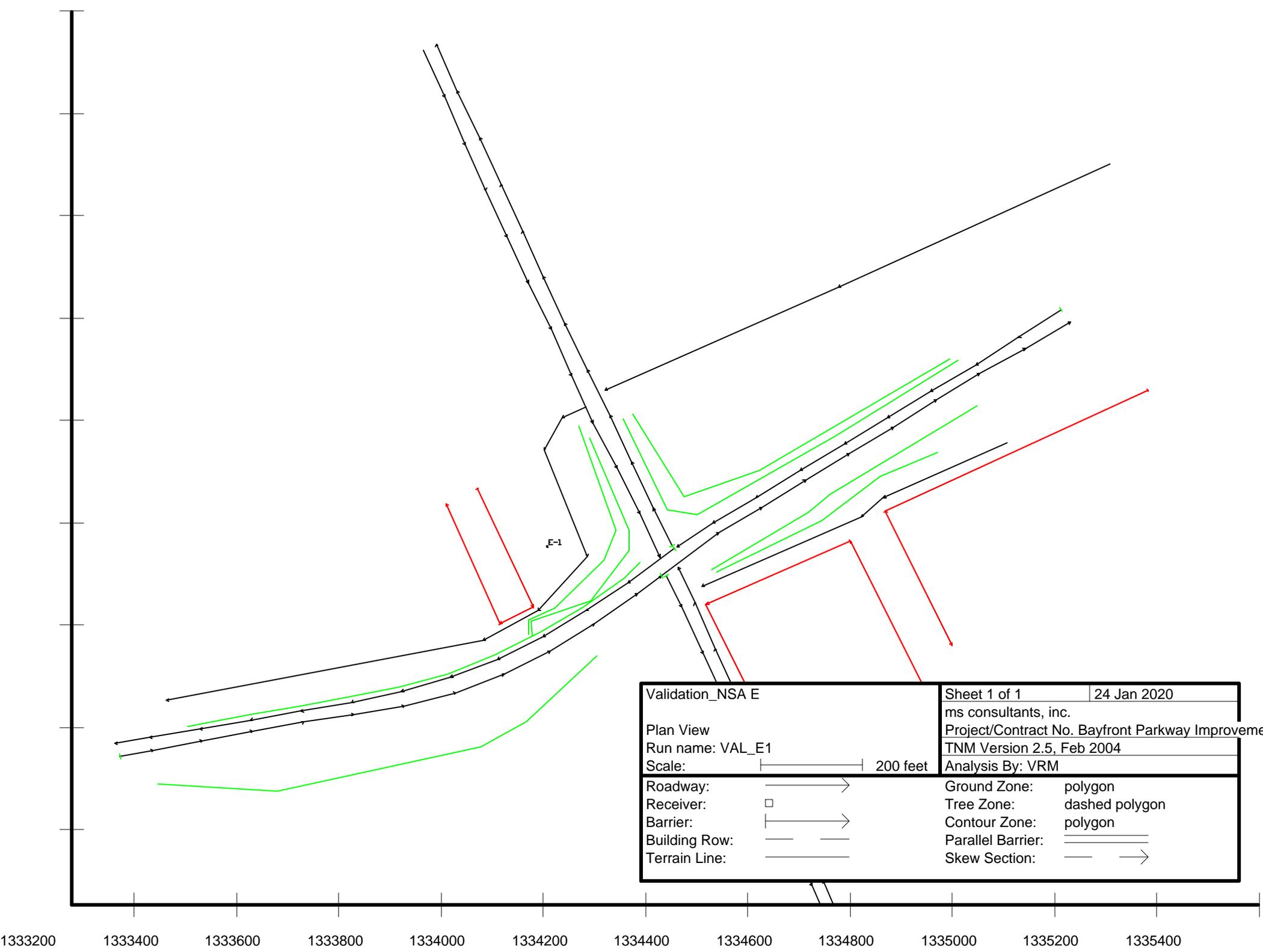


| | | | |
|--|---|---|---|
| Validation_NSA D | | Sheet 1 of 1 | 24 Jan 2020 |
| Plan View | | ms consultants, inc. | |
| Run name: VAL_D1 | | Project/Contract No. Bayfront Parkway Improvement | |
| Scale:  | | TNM Version 2.5, Feb 2004 | |
| | | Analysis By: VRM | |
| Roadway: |  | Ground Zone: | polygon |
| Receiver: |  | Tree Zone: | dashed polygon |
| Barrier: |  | Contour Zone: | polygon |
| Building Row: |  | Parallel Barrier: |  |
| Terrain Line: |  | Skew Section: |  |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | | |
|------------------------------|--|------------|-------------------------------|------------------------|-------------------------------------|-------------------------|-------------------------------|------------------|--------------------|--|------------------------|-------------|------------------------------|
| ms consultants, inc. | | | | | | 24 January 2020 | | | | | | | |
| VRM | | | | | | TNM 2.5 | | | | | | | |
| | | | | | | Calculated with TNM 2.5 | | | | | | | |
| RESULTS: SOUND LEVELS | | | | | | | | | | | | | |
| PROJECT/CONTRACT: | | | Bayfront Parkway Improvements | | | | | | | | | | |
| RUN: | | | Validation_NSA D | | | | | | | | | | |
| BARRIER DESIGN: | | | INPUT HEIGHTS | | | | | | | Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. | | | |
| ATMOSPHERICS: | | | 68 deg F, 50% RH | | | | | | | | | | |
| Receiver | | | | | | | | | | | | | |
| Name | | No. | #DUs | Existing LAeq1h | No Barrier LAeq1h Calculated | Crit'n | Increase over existing | | Type Impact | With Barrier | | | |
| | | | | | | | Calculated | Crit'n | | Calculated LAeq1h | Noise Reduction | | Calculated minus Goal |
| | | | | | | | | Sub'l Inc | | | Calculated | Goal | Calculated minus Goal |
| | | | | dB | dB | dB | dB | dB | | dB | dB | dB | dB |
| D-1 | | 74 | 1 | 55.3 | 55.7 | 66 | 0.4 | 10 | ---- | 55.7 | 0.0 | 5 | -5.0 |
| D-2 | | 75 | 1 | 56.9 | 56.0 | 66 | -0.9 | 10 | ---- | 56.0 | 0.0 | 5 | -5.0 |
| Dwelling Units | | | # DUs | Noise Reduction | | | | | | | | | |
| | | | | Min | Avg | Max | | | | | | | |
| | | | | dB | dB | dB | | | | | | | |
| All Selected | | | 2 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All Impacted | | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All that meet NR Goal | | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |



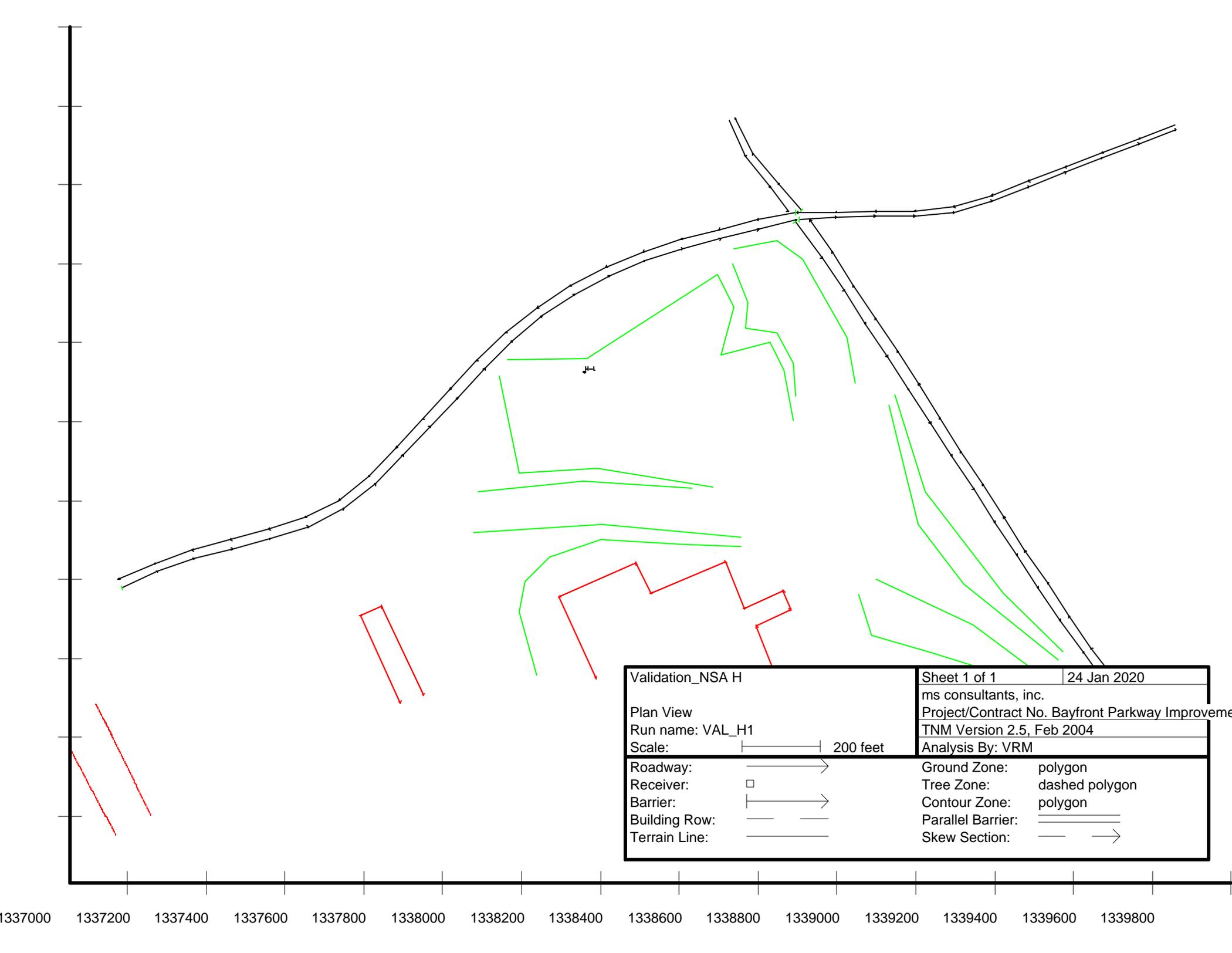
E-1

| | | | |
|--|---|---|---|
| Validation_NSA E | | Sheet 1 of 1 | 24 Jan 2020 |
| Plan View | | ms consultants, inc. | |
| Run name: VAL_E1 | | Project/Contract No. Bayfront Parkway Improvement | |
| Scale:  | | TNM Version 2.5, Feb 2004 | |
| | | Analysis By: VRM | |
| Roadway: |  | Ground Zone: | polygon |
| Receiver: |  | Tree Zone: | dashed polygon |
| Barrier: |  | Contour Zone: | polygon |
| Building Row: |  | Parallel Barrier: |  |
| Terrain Line: |  | Skew Section: |  |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | | |
|------------------------------|--|------------|-------------------------------|------------------------|-------------------------------------|-------------------------|-------------------------------|---------------|--|--------------------------|------------------------|----|------------------------------|
| ms consultants, inc. | | | | | | 24 January 2020 | | | | | | | |
| VRM | | | | | | TNM 2.5 | | | | | | | |
| | | | | | | Calculated with TNM 2.5 | | | | | | | |
| RESULTS: SOUND LEVELS | | | | | | | | | | | | | |
| PROJECT/CONTRACT: | | | Bayfront Parkway Improvements | | | | | | | | | | |
| RUN: | | | Validation_NSA E | | | | | | | | | | |
| BARRIER DESIGN: | | | INPUT HEIGHTS | | | | | | Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. | | | | |
| ATMOSPHERICS: | | | 68 deg F, 50% RH | | | | | | | | | | |
| Receiver | | | | | | | | | | | | | |
| Name | | No. | #DUs | Existing LAeq1h | No Barrier LAeq1h Calculated | Crit'n | Increase over existing | | With Barrier | | | | |
| | | | | | | | Calculated | Crit'n | Type Impact | Calculated LAeq1h | Noise Reduction | | Calculated minus Goal |
| | | | | dB | dB | dB | dB | dB | | dB | dB | dB | dB |
| E-1 | | 155 | 1 | 55.9 | 56.7 | 66 | 0.8 | 10 | ---- | 56.7 | 0.0 | 5 | -5.0 |
| Dwelling Units | | | # DUs | Noise Reduction | | | | | | | | | |
| | | | | Min | Avg | Max | | | | | | | |
| | | | | dB | dB | dB | | | | | | | |
| All Selected | | | 1 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All Impacted | | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All that meet NR Goal | | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |



| | | | |
|---|---|---|---|
| Validation_NSA H | | Sheet 1 of 1 | 24 Jan 2020 |
| Plan View | | ms consultants, inc. | |
| Run name: VAL_H1 | | Project/Contract No. Bayfront Parkway Improvement | |
| Scale:  200 feet | | TNM Version 2.5, Feb 2004 | |
| Analysis By: VRM | | | |
| Roadway: |  | Ground Zone: | polyline |
| Receiver: |  | Tree Zone: | dashed polygon |
| Barrier: |  | Contour Zone: | polyline |
| Building Row: |  | Parallel Barrier: |  |
| Terrain Line: |  | Skew Section: |  |

RESULTS: SOUND LEVELS

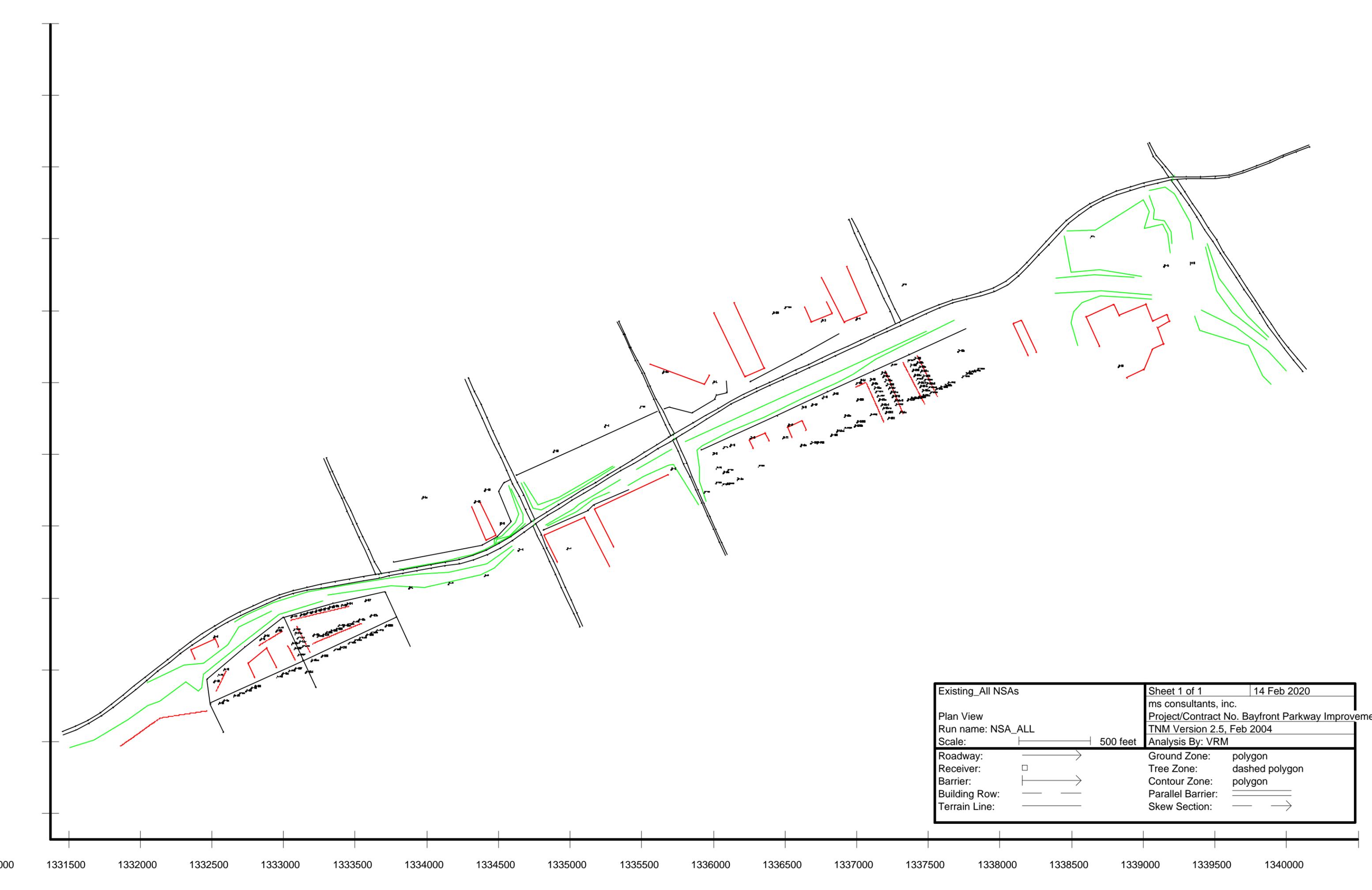
Bayfront Parkway Improvements

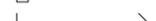
| | | | | | | | | | | | | | | |
|------------------------------|--|------------|-------------------------------|------------------------|-------------------------------------|---------------|-------------------------------|------------------|---------------------|--------------------------|------------------------|-------------|------------------------------|--|
| ms consultants, inc. | | | | | | | | | | | | | 24 January 2020 | |
| VRM | | | | | | | | | | | | | TNM 2.5 | |
| | | | | | | | | | | | | | Calculated with TNM 2.5 | |
| RESULTS: SOUND LEVELS | | | | | | | | | | | | | | |
| PROJECT/CONTRACT: | | | Bayfront Parkway Improvements | | | | | | | | | | | |
| RUN: | | | Validation_NSA H | | | | | | | | | | | |
| BARRIER DESIGN: | | | INPUT HEIGHTS | | | | | | | | | | | |
| ATMOSPHERICS: | | | 68 deg F, 50% RH | | | | | | | | | | | |
| Receiver | | | | | | | | | | | | | | |
| Name | | No. | #DUs | Existing LAeq1h | No Barrier LAeq1h Calculated | Crit'n | Increase over existing | | With Barrier | | | | | |
| | | | | | | | Calculated | Crit'n | Type Impact | Calculated LAeq1h | Noise Reduction | | Calculated minus Goal | |
| | | | | | | | | Sub'l Inc | | | Calculated | Goal | Calculated minus Goal | |
| | | | | dB | dB | dB | dB | dB | | dB | dB | dB | dB | |
| H-1 | | 168 | 1 | 56.5 | 57.0 | 66 | 0.5 | 10 | ---- | 57.0 | 0.0 | 5 | -5.0 | |
| Dwelling Units | | | # DUs | Noise Reduction | | | | | | | | | | |
| | | | | Min | Avg | Max | | | | | | | | |
| | | | | dB | dB | dB | | | | | | | | |
| All Selected | | | 1 | 0.0 | 0.0 | 0.0 | | | | | | | | |
| All Impacted | | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | | |
| All that meet NR Goal | | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | | |

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

Appendix 4

TNM Existing Conditions Models



| | | | |
|--|---|---|---|
| Existing_All NSAs | | Sheet 1 of 1 | 14 Feb 2020 |
| Plan View | | ms consultants, inc. | |
| Run name: NSA_ALL | | Project/Contract No. Bayfront Parkway Improvement | |
| Scale:  | | TNM Version 2.5, Feb 2004 | |
| | | Analysis By: VRM | |
| Roadway: |  | Ground Zone: | polygon |
| Receiver: |  | Tree Zone: | dashed polygon |
| Barrier: |  | Contour Zone: | polygon |
| Building Row: |  | Parallel Barrier: |  |
| Terrain Line: |  | Skew Section: |  |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|---------|----|---|-----|------|----|------|----|------|------|-----|---|------|
| A-6iii | 25 | 1 | 0.0 | 40.5 | 66 | 40.5 | 10 | ---- | 40.5 | 0.0 | 5 | -5.0 |
| A-7iii | 26 | 1 | 0.0 | 40.2 | 66 | 40.2 | 10 | ---- | 40.2 | 0.0 | 5 | -5.0 |
| A-8iii | 27 | 1 | 0.0 | 40.1 | 66 | 40.1 | 10 | ---- | 40.1 | 0.0 | 5 | -5.0 |
| A-9iii | 28 | 1 | 0.0 | 39.6 | 66 | 39.6 | 10 | ---- | 39.6 | 0.0 | 5 | -5.0 |
| A-10iii | 29 | 1 | 0.0 | 40.8 | 66 | 40.8 | 10 | ---- | 40.8 | 0.0 | 5 | -5.0 |
| A-11iii | 30 | 1 | 0.0 | 41.3 | 66 | 41.3 | 10 | ---- | 41.3 | 0.0 | 5 | -5.0 |
| A-13ii | 31 | 1 | 0.0 | 42.4 | 66 | 42.4 | 10 | ---- | 42.4 | 0.0 | 5 | -5.0 |
| A-13iii | 32 | 1 | 0.0 | 41.7 | 66 | 41.7 | 10 | ---- | 41.7 | 0.0 | 5 | -5.0 |
| A-13iv | 33 | 1 | 0.0 | 39.9 | 66 | 39.9 | 10 | ---- | 39.9 | 0.0 | 5 | -5.0 |
| A-13v | 34 | 1 | 0.0 | 42.0 | 66 | 42.0 | 10 | ---- | 42.0 | 0.0 | 5 | -5.0 |
| A-13vi | 35 | 1 | 0.0 | 42.1 | 66 | 42.1 | 10 | ---- | 42.1 | 0.0 | 5 | -5.0 |
| A-14ii | 36 | 1 | 0.0 | 44.2 | 66 | 44.2 | 10 | ---- | 44.2 | 0.0 | 5 | -5.0 |
| A-14iii | 37 | 1 | 0.0 | 43.6 | 66 | 43.6 | 10 | ---- | 43.6 | 0.0 | 5 | -5.0 |
| A-14iv | 38 | 1 | 0.0 | 43.1 | 66 | 43.1 | 10 | ---- | 43.1 | 0.0 | 5 | -5.0 |
| A-14v | 39 | 1 | 0.0 | 42.4 | 66 | 42.4 | 10 | ---- | 42.4 | 0.0 | 5 | -5.0 |
| A-14vi | 40 | 1 | 0.0 | 42.1 | 66 | 42.1 | 10 | ---- | 42.1 | 0.0 | 5 | -5.0 |
| A-14vii | 41 | 1 | 0.0 | 41.7 | 66 | 41.7 | 10 | ---- | 41.7 | 0.0 | 5 | -5.0 |
| A-15ii | 42 | 1 | 0.0 | 44.5 | 66 | 44.5 | 10 | ---- | 44.5 | 0.0 | 5 | -5.0 |
| A-15iii | 43 | 1 | 0.0 | 42.3 | 66 | 42.3 | 10 | ---- | 42.3 | 0.0 | 5 | -5.0 |
| A-16ii | 44 | 1 | 0.0 | 44.5 | 66 | 44.5 | 10 | ---- | 44.5 | 0.0 | 5 | -5.0 |
| A-17ii | 45 | 1 | 0.0 | 44.9 | 66 | 44.9 | 10 | ---- | 44.9 | 0.0 | 5 | -5.0 |
| A-18ii | 46 | 1 | 0.0 | 45.3 | 66 | 45.3 | 10 | ---- | 45.3 | 0.0 | 5 | -5.0 |
| A-18iii | 47 | 1 | 0.0 | 42.8 | 66 | 42.8 | 10 | ---- | 42.8 | 0.0 | 5 | -5.0 |
| A-19ii | 48 | 1 | 0.0 | 45.7 | 66 | 45.7 | 10 | ---- | 45.7 | 0.0 | 5 | -5.0 |
| A-19iii | 49 | 1 | 0.0 | 42.9 | 66 | 42.9 | 10 | ---- | 42.9 | 0.0 | 5 | -5.0 |
| A-20ii | 50 | 1 | 0.0 | 46.0 | 66 | 46.0 | 10 | ---- | 46.0 | 0.0 | 5 | -5.0 |
| A-21ii | 51 | 1 | 0.0 | 46.3 | 66 | 46.3 | 10 | ---- | 46.3 | 0.0 | 5 | -5.0 |
| A-21iii | 52 | 1 | 0.0 | 43.7 | 66 | 43.7 | 10 | ---- | 43.7 | 0.0 | 5 | -5.0 |
| A-22ii | 53 | 1 | 0.0 | 46.4 | 66 | 46.4 | 10 | ---- | 46.4 | 0.0 | 5 | -5.0 |
| A-23ii | 54 | 1 | 0.0 | 46.7 | 66 | 46.7 | 10 | ---- | 46.7 | 0.0 | 5 | -5.0 |
| A-23iii | 55 | 1 | 0.0 | 44.2 | 66 | 44.2 | 10 | ---- | 44.2 | 0.0 | 5 | -5.0 |
| A-24ii | 56 | 1 | 0.0 | 47.2 | 66 | 47.2 | 10 | ---- | 47.2 | 0.0 | 5 | -5.0 |
| A-24iii | 57 | 1 | 0.0 | 45.1 | 66 | 45.1 | 10 | ---- | 45.1 | 0.0 | 5 | -5.0 |
| A-25ii | 58 | 1 | 0.0 | 47.8 | 66 | 47.8 | 10 | ---- | 47.8 | 0.0 | 5 | -5.0 |
| A-25iii | 59 | 1 | 0.0 | 45.7 | 66 | 45.7 | 10 | ---- | 45.7 | 0.0 | 5 | -5.0 |
| A-26iii | 60 | 1 | 0.0 | 46.0 | 66 | 46.0 | 10 | ---- | 46.0 | 0.0 | 5 | -5.0 |
| A-27ii | 61 | 1 | 0.0 | 49.2 | 66 | 49.2 | 10 | ---- | 49.2 | 0.0 | 5 | -5.0 |
| A-27iii | 62 | 1 | 0.0 | 46.8 | 66 | 46.8 | 10 | ---- | 46.8 | 0.0 | 5 | -5.0 |
| A-28iii | 63 | 1 | 0.0 | 47.4 | 66 | 47.4 | 10 | ---- | 47.4 | 0.0 | 5 | -5.0 |
| B-1 | 64 | 1 | 0.0 | 60.8 | 66 | 60.8 | 10 | ---- | 60.8 | 0.0 | 5 | -5.0 |
| B-2 | 65 | 1 | 0.0 | 56.4 | 66 | 56.4 | 10 | ---- | 56.4 | 0.0 | 5 | -5.0 |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|---------|-----|---|-----|------|----|------|----|------|------|-----|---|------|
| B-3 | 66 | 1 | 0.0 | 60.0 | 66 | 60.0 | 10 | ---- | 60.0 | 0.0 | 5 | -5.0 |
| B-4 | 67 | 1 | 0.0 | 64.1 | 66 | 64.1 | 10 | ---- | 64.1 | 0.0 | 5 | -5.0 |
| C-1 | 68 | 1 | 0.0 | 50.8 | 66 | 50.8 | 10 | ---- | 50.8 | 0.0 | 5 | -5.0 |
| C-2 | 69 | 1 | 0.0 | 60.5 | 66 | 60.5 | 10 | ---- | 60.5 | 0.0 | 5 | -5.0 |
| D-3 | 70 | 1 | 0.0 | 54.5 | 66 | 54.5 | 10 | ---- | 54.5 | 0.0 | 5 | -5.0 |
| D-4 | 71 | 1 | 0.0 | 54.4 | 66 | 54.4 | 10 | ---- | 54.4 | 0.0 | 5 | -5.0 |
| D-5 | 72 | 1 | 0.0 | 53.3 | 66 | 53.3 | 10 | ---- | 53.3 | 0.0 | 5 | -5.0 |
| D-6 | 73 | 1 | 0.0 | 52.1 | 66 | 52.1 | 10 | ---- | 52.1 | 0.0 | 5 | -5.0 |
| D-8 | 74 | 1 | 0.0 | 49.2 | 66 | 49.2 | 10 | ---- | 49.2 | 0.0 | 5 | -5.0 |
| D-9 | 75 | 1 | 0.0 | 56.4 | 66 | 56.4 | 10 | ---- | 56.4 | 0.0 | 5 | -5.0 |
| D-10 | 76 | 1 | 0.0 | 55.0 | 66 | 55.0 | 10 | ---- | 55.0 | 0.0 | 5 | -5.0 |
| D-11 | 77 | 1 | 0.0 | 56.5 | 66 | 56.5 | 10 | ---- | 56.5 | 0.0 | 5 | -5.0 |
| D-12 | 78 | 1 | 0.0 | 55.8 | 66 | 55.8 | 10 | ---- | 55.8 | 0.0 | 5 | -5.0 |
| D-13 | 79 | 1 | 0.0 | 56.7 | 66 | 56.7 | 10 | ---- | 56.7 | 0.0 | 5 | -5.0 |
| D-14 | 80 | 1 | 0.0 | 57.2 | 66 | 57.2 | 10 | ---- | 57.2 | 0.0 | 5 | -5.0 |
| D-15 | 81 | 1 | 0.0 | 55.0 | 66 | 55.0 | 10 | ---- | 55.0 | 0.0 | 5 | -5.0 |
| D-16 | 82 | 1 | 0.0 | 55.3 | 66 | 55.3 | 10 | ---- | 55.3 | 0.0 | 5 | -5.0 |
| D-17 | 83 | 1 | 0.0 | 58.4 | 66 | 58.4 | 10 | ---- | 58.4 | 0.0 | 5 | -5.0 |
| D-21 | 84 | 1 | 0.0 | 56.1 | 66 | 56.1 | 10 | ---- | 56.1 | 0.0 | 5 | -5.0 |
| D-22 | 85 | 1 | 0.0 | 55.4 | 66 | 55.4 | 10 | ---- | 55.4 | 0.0 | 5 | -5.0 |
| D-28 | 86 | 1 | 0.0 | 51.5 | 66 | 51.5 | 10 | ---- | 51.5 | 0.0 | 5 | -5.0 |
| D-1iii | 87 | 1 | 0.0 | 64.4 | 66 | 64.4 | 10 | ---- | 64.4 | 0.0 | 5 | -5.0 |
| D-2iii | 88 | 1 | 0.0 | 53.2 | 66 | 53.2 | 10 | ---- | 53.2 | 0.0 | 5 | -5.0 |
| D-3ii | 89 | 1 | 0.0 | 51.2 | 66 | 51.2 | 10 | ---- | 51.2 | 0.0 | 5 | -5.0 |
| D-3iii | 90 | 1 | 0.0 | 50.0 | 66 | 50.0 | 10 | ---- | 50.0 | 0.0 | 5 | -5.0 |
| D-3iva | 91 | 1 | 0.0 | 51.4 | 66 | 51.4 | 10 | ---- | 51.4 | 0.0 | 5 | -5.0 |
| D-3ivb | 92 | 1 | 0.0 | 50.3 | 66 | 50.3 | 10 | ---- | 50.3 | 0.0 | 5 | -5.0 |
| D-4ii | 93 | 1 | 0.0 | 49.2 | 66 | 49.2 | 10 | ---- | 49.2 | 0.0 | 5 | -5.0 |
| D-4iii | 94 | 1 | 0.0 | 48.0 | 66 | 48.0 | 10 | ---- | 48.0 | 0.0 | 5 | -5.0 |
| D-6iii | 95 | 1 | 0.0 | 45.2 | 66 | 45.2 | 10 | ---- | 45.2 | 0.0 | 5 | -5.0 |
| D-7ii | 96 | 1 | 0.0 | 44.6 | 66 | 44.6 | 10 | ---- | 44.6 | 0.0 | 5 | -5.0 |
| D-8iii | 97 | 1 | 0.0 | 43.5 | 66 | 43.5 | 10 | ---- | 43.5 | 0.0 | 5 | -5.0 |
| D-9iia | 98 | 1 | 0.0 | 43.5 | 66 | 43.5 | 10 | ---- | 43.5 | 0.0 | 5 | -5.0 |
| D-9iib | 99 | 1 | 0.0 | 43.3 | 66 | 43.3 | 10 | ---- | 43.3 | 0.0 | 5 | -5.0 |
| D-10iii | 100 | 1 | 0.0 | 43.5 | 66 | 43.5 | 10 | ---- | 43.5 | 0.0 | 5 | -5.0 |
| D-11iia | 101 | 1 | 0.0 | 43.8 | 66 | 43.8 | 10 | ---- | 43.8 | 0.0 | 5 | -5.0 |
| D-11iib | 102 | 1 | 0.0 | 43.7 | 66 | 43.7 | 10 | ---- | 43.7 | 0.0 | 5 | -5.0 |
| D-12ii | 103 | 1 | 0.0 | 45.9 | 66 | 45.9 | 10 | ---- | 45.9 | 0.0 | 5 | -5.0 |
| D-12iia | 104 | 1 | 0.0 | 43.9 | 66 | 43.9 | 10 | ---- | 43.9 | 0.0 | 5 | -5.0 |
| D-12iib | 105 | 1 | 0.0 | 44.3 | 66 | 44.3 | 10 | ---- | 44.3 | 0.0 | 5 | -5.0 |
| D-13ii | 106 | 1 | 0.0 | 47.2 | 66 | 47.2 | 10 | ---- | 47.2 | 0.0 | 5 | -5.0 |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|----------|-----|---|-----|------|----|------|----|------|------|-----|---|------|
| D-13iii | 107 | 1 | 0.0 | 43.5 | 66 | 43.5 | 10 | ---- | 43.5 | 0.0 | 5 | -5.0 |
| D-15ii | 108 | 1 | 0.0 | 52.0 | 66 | 52.0 | 10 | ---- | 52.0 | 0.0 | 5 | -5.0 |
| D-15iii | 109 | 1 | 0.0 | 49.9 | 66 | 49.9 | 10 | ---- | 49.9 | 0.0 | 5 | -5.0 |
| D-15iv | 110 | 1 | 0.0 | 48.6 | 66 | 48.6 | 10 | ---- | 48.6 | 0.0 | 5 | -5.0 |
| D-15v | 111 | 1 | 0.0 | 46.4 | 66 | 46.4 | 10 | ---- | 46.4 | 0.0 | 5 | -5.0 |
| D-15vi | 112 | 1 | 0.0 | 45.3 | 66 | 45.3 | 10 | ---- | 45.3 | 0.0 | 5 | -5.0 |
| D-15vii | 113 | 1 | 0.0 | 44.3 | 66 | 44.3 | 10 | ---- | 44.3 | 0.0 | 5 | -5.0 |
| D-15viii | 114 | 1 | 0.0 | 43.7 | 66 | 43.7 | 10 | ---- | 43.7 | 0.0 | 5 | -5.0 |
| D-15ix | 115 | 1 | 0.0 | 42.7 | 66 | 42.7 | 10 | ---- | 42.7 | 0.0 | 5 | -5.0 |
| D-15x | 116 | 1 | 0.0 | 42.1 | 66 | 42.1 | 10 | ---- | 42.1 | 0.0 | 5 | -5.0 |
| D-16ii | 117 | 1 | 0.0 | 52.3 | 66 | 52.3 | 10 | ---- | 52.3 | 0.0 | 5 | -5.0 |
| D-16iii | 118 | 1 | 0.0 | 49.8 | 66 | 49.8 | 10 | ---- | 49.8 | 0.0 | 5 | -5.0 |
| D-16iv | 119 | 1 | 0.0 | 48.3 | 66 | 48.3 | 10 | ---- | 48.3 | 0.0 | 5 | -5.0 |
| D-16v | 120 | 1 | 0.0 | 47.3 | 66 | 47.3 | 10 | ---- | 47.3 | 0.0 | 5 | -5.0 |
| D-16vi | 121 | 1 | 0.0 | 46.3 | 66 | 46.3 | 10 | ---- | 46.3 | 0.0 | 5 | -5.0 |
| D-16vii | 122 | 1 | 0.0 | 44.9 | 66 | 44.9 | 10 | ---- | 44.9 | 0.0 | 5 | -5.0 |
| D-16viii | 123 | 1 | 0.0 | 44.2 | 66 | 44.2 | 10 | ---- | 44.2 | 0.0 | 5 | -5.0 |
| D-16ix | 124 | 1 | 0.0 | 43.4 | 66 | 43.4 | 10 | ---- | 43.4 | 0.0 | 5 | -5.0 |
| D-16x | 125 | 1 | 0.0 | 41.8 | 66 | 41.8 | 10 | ---- | 41.8 | 0.0 | 5 | -5.0 |
| D-17iii | 126 | 1 | 0.0 | 45.2 | 66 | 45.2 | 10 | ---- | 45.2 | 0.0 | 5 | -5.0 |
| D-18iii | 127 | 1 | 0.0 | 44.3 | 66 | 44.3 | 10 | ---- | 44.3 | 0.0 | 5 | -5.0 |
| D-19iii | 128 | 1 | 0.0 | 43.7 | 66 | 43.7 | 10 | ---- | 43.7 | 0.0 | 5 | -5.0 |
| D-20iii | 129 | 1 | 0.0 | 43.5 | 66 | 43.5 | 10 | ---- | 43.5 | 0.0 | 5 | -5.0 |
| D-21ii | 130 | 1 | 0.0 | 52.6 | 66 | 52.6 | 10 | ---- | 52.6 | 0.0 | 5 | -5.0 |
| D-21iii | 131 | 1 | 0.0 | 50.5 | 66 | 50.5 | 10 | ---- | 50.5 | 0.0 | 5 | -5.0 |
| D-21iv | 132 | 1 | 0.0 | 49.2 | 66 | 49.2 | 10 | ---- | 49.2 | 0.0 | 5 | -5.0 |
| D-21v | 133 | 1 | 0.0 | 47.7 | 66 | 47.7 | 10 | ---- | 47.7 | 0.0 | 5 | -5.0 |
| D-21vi | 134 | 1 | 0.0 | 46.6 | 66 | 46.6 | 10 | ---- | 46.6 | 0.0 | 5 | -5.0 |
| D-21vii | 135 | 1 | 0.0 | 46.0 | 66 | 46.0 | 10 | ---- | 46.0 | 0.0 | 5 | -5.0 |
| D-21viii | 136 | 1 | 0.0 | 45.4 | 66 | 45.4 | 10 | ---- | 45.4 | 0.0 | 5 | -5.0 |
| D-21ix | 137 | 1 | 0.0 | 45.2 | 66 | 45.2 | 10 | ---- | 45.2 | 0.0 | 5 | -5.0 |
| D-22ii | 138 | 1 | 0.0 | 52.0 | 66 | 52.0 | 10 | ---- | 52.0 | 0.0 | 5 | -5.0 |
| D-22iii | 139 | 1 | 0.0 | 49.8 | 66 | 49.8 | 10 | ---- | 49.8 | 0.0 | 5 | -5.0 |
| D-22iv | 140 | 1 | 0.0 | 48.7 | 66 | 48.7 | 10 | ---- | 48.7 | 0.0 | 5 | -5.0 |
| D-22v | 141 | 1 | 0.0 | 47.6 | 66 | 47.6 | 10 | ---- | 47.6 | 0.0 | 5 | -5.0 |
| D-22vi | 142 | 1 | 0.0 | 46.9 | 66 | 46.9 | 10 | ---- | 46.9 | 0.0 | 5 | -5.0 |
| D-22vii | 143 | 1 | 0.0 | 46.0 | 66 | 46.0 | 10 | ---- | 46.0 | 0.0 | 5 | -5.0 |
| D-22viii | 144 | 1 | 0.0 | 45.0 | 66 | 45.0 | 10 | ---- | 45.0 | 0.0 | 5 | -5.0 |
| D-22ix | 145 | 1 | 0.0 | 44.3 | 66 | 44.3 | 10 | ---- | 44.3 | 0.0 | 5 | -5.0 |
| D-23iii | 146 | 1 | 0.0 | 46.0 | 66 | 46.0 | 10 | ---- | 46.0 | 0.0 | 5 | -5.0 |
| D-24iii | 147 | 1 | 0.0 | 45.7 | 66 | 45.7 | 10 | ---- | 45.7 | 0.0 | 5 | -5.0 |

RESULTS: SOUND LEVELS

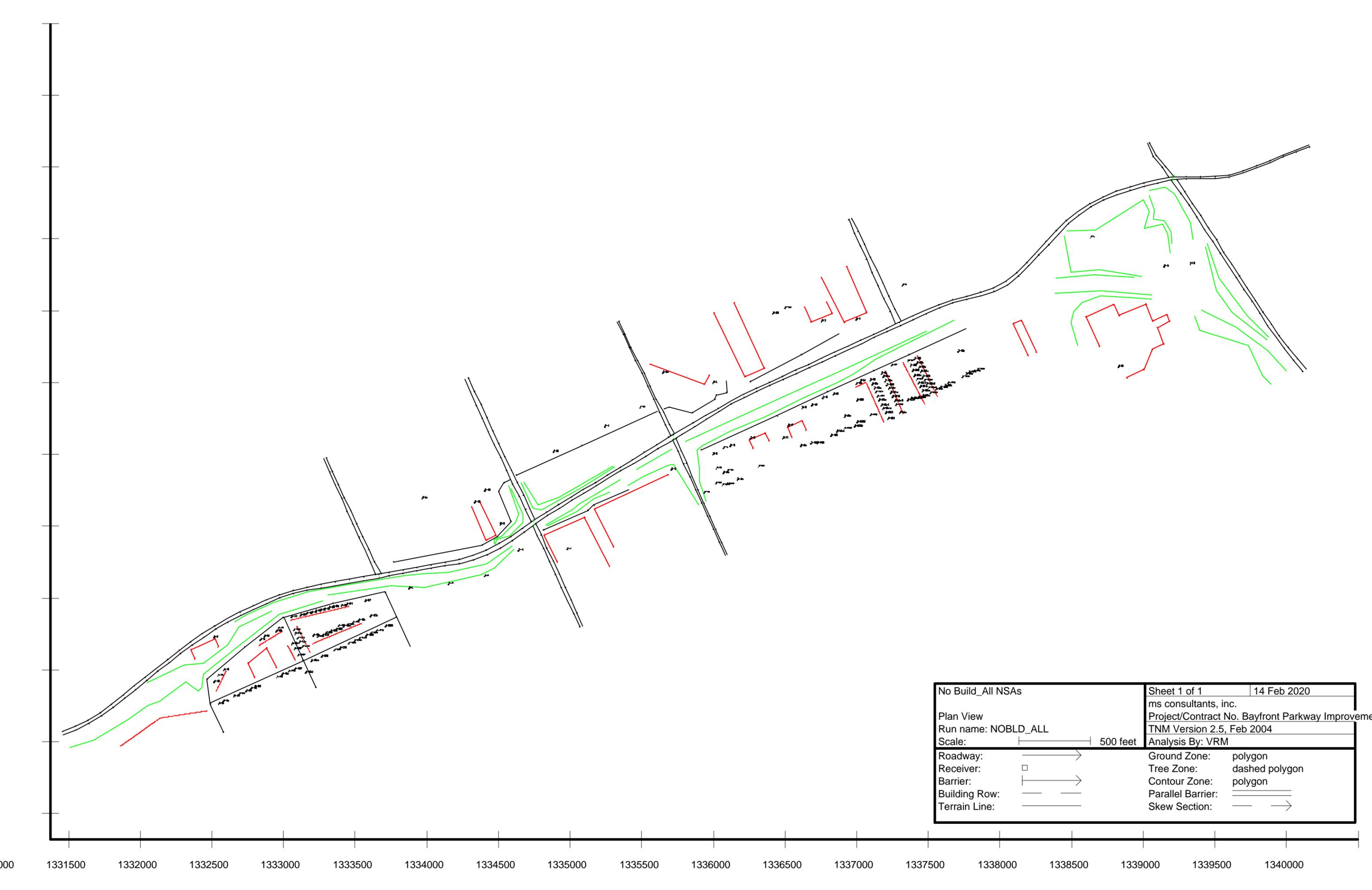
Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|-----------------------|-----|--------------|------------------------|------------|------------|------|----|------|------|-----|---|------|
| D-25iii | 148 | 1 | 0.0 | 46.4 | 66 | 46.4 | 10 | ---- | 46.4 | 0.0 | 5 | -5.0 |
| D-26iii | 149 | 1 | 0.0 | 46.8 | 66 | 46.8 | 10 | ---- | 46.8 | 0.0 | 5 | -5.0 |
| D-27iii | 150 | 1 | 0.0 | 47.1 | 66 | 47.1 | 10 | ---- | 47.1 | 0.0 | 5 | -5.0 |
| D-28iii | 151 | 1 | 0.0 | 47.2 | 66 | 47.2 | 10 | ---- | 47.2 | 0.0 | 5 | -5.0 |
| D-29iii | 152 | 1 | 0.0 | 47.4 | 66 | 47.4 | 10 | ---- | 47.4 | 0.0 | 5 | -5.0 |
| D-30iii | 153 | 1 | 0.0 | 47.3 | 66 | 47.3 | 10 | ---- | 47.3 | 0.0 | 5 | -5.0 |
| D-31iii | 154 | 1 | 0.0 | 47.5 | 66 | 47.5 | 10 | ---- | 47.5 | 0.0 | 5 | -5.0 |
| E-3 | 155 | 1 | 0.0 | 57.2 | 66 | 57.2 | 10 | ---- | 57.2 | 0.0 | 5 | -5.0 |
| E-1iii | 156 | 1 | 0.0 | 52.9 | 66 | 52.9 | 10 | ---- | 52.9 | 0.0 | 5 | -5.0 |
| E-2ii | 157 | 1 | 0.0 | 51.5 | 66 | 51.5 | 10 | ---- | 51.5 | 0.0 | 5 | -5.0 |
| E-3ii | 158 | 1 | 0.0 | 54.4 | 66 | 54.4 | 10 | ---- | 54.4 | 0.0 | 5 | -5.0 |
| F-1 | 159 | 1 | 0.0 | 55.7 | 66 | 55.7 | 10 | ---- | 55.7 | 0.0 | 5 | -5.0 |
| F-2 | 160 | 1 | 0.0 | 58.2 | 66 | 58.2 | 10 | ---- | 58.2 | 0.0 | 5 | -5.0 |
| G-1 | 161 | 1 | 0.0 | 58.4 | 66 | 58.4 | 10 | ---- | 58.4 | 0.0 | 5 | -5.0 |
| G-3 | 162 | 1 | 0.0 | 53.7 | 66 | 53.7 | 10 | ---- | 53.7 | 0.0 | 5 | -5.0 |
| G-4 | 163 | 1 | 0.0 | 58.2 | 66 | 58.2 | 10 | ---- | 58.2 | 0.0 | 5 | -5.0 |
| G-5 | 164 | 1 | 0.0 | 55.2 | 66 | 55.2 | 10 | ---- | 55.2 | 0.0 | 5 | -5.0 |
| G-1iii | 165 | 1 | 0.0 | 54.9 | 66 | 54.9 | 10 | ---- | 54.9 | 0.0 | 5 | -5.0 |
| G-2iii | 166 | 1 | 0.0 | 46.8 | 66 | 46.8 | 10 | ---- | 46.8 | 0.0 | 5 | -5.0 |
| G-3iii | 167 | 1 | 0.0 | 46.6 | 66 | 46.6 | 10 | ---- | 46.6 | 0.0 | 5 | -5.0 |
| H-1 | 168 | 1 | 0.0 | 55.5 | 66 | 55.5 | 10 | ---- | 55.5 | 0.0 | 5 | -5.0 |
| H-2 | 169 | 1 | 0.0 | 49.6 | 66 | 49.6 | 10 | ---- | 49.6 | 0.0 | 5 | -5.0 |
| H-3 | 170 | 1 | 0.0 | 52.7 | 66 | 52.7 | 10 | ---- | 52.7 | 0.0 | 5 | -5.0 |
| H-1ii | 171 | 1 | 0.0 | 39.0 | 66 | 39.0 | 10 | ---- | 39.0 | 0.0 | 5 | -5.0 |
| F-3 | 173 | 1 | 0.0 | 52.7 | 66 | 52.7 | 10 | ---- | 52.7 | 0.0 | 5 | -5.0 |
| Dwelling Units | | # DUs | Noise Reduction | | | | | | | | | |
| | | | Min | Avg | Max | | | | | | | |
| | | | dB | dB | dB | | | | | | | |
| All Selected | | 172 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All Impacted | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All that meet NR Goal | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

Appendix 5

TNM No-Build Models



RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|---------|----|---|------|------|----|-----|----|------|------|-----|---|------|
| A-6iii | 25 | 1 | 40.5 | 41.7 | 66 | 1.2 | 10 | ---- | 41.7 | 0.0 | 5 | -5.0 |
| A-7iii | 26 | 1 | 40.2 | 41.5 | 66 | 1.3 | 10 | ---- | 41.5 | 0.0 | 5 | -5.0 |
| A-8iii | 27 | 1 | 40.1 | 41.5 | 66 | 1.4 | 10 | ---- | 41.5 | 0.0 | 5 | -5.0 |
| A-9iii | 28 | 1 | 39.6 | 40.9 | 66 | 1.3 | 10 | ---- | 40.9 | 0.0 | 5 | -5.0 |
| A-10iii | 29 | 1 | 40.8 | 42.3 | 66 | 1.5 | 10 | ---- | 42.3 | 0.0 | 5 | -5.0 |
| A-11iii | 30 | 1 | 41.3 | 42.8 | 66 | 1.5 | 10 | ---- | 42.8 | 0.0 | 5 | -5.0 |
| A-13ii | 31 | 1 | 42.4 | 43.8 | 66 | 1.4 | 10 | ---- | 43.8 | 0.0 | 5 | -5.0 |
| A-13iii | 32 | 1 | 41.7 | 43.1 | 66 | 1.4 | 10 | ---- | 43.1 | 0.0 | 5 | -5.0 |
| A-13iv | 33 | 1 | 39.9 | 41.3 | 66 | 1.4 | 10 | ---- | 41.3 | 0.0 | 5 | -5.0 |
| A-13v | 34 | 1 | 42.0 | 43.6 | 66 | 1.6 | 10 | ---- | 43.6 | 0.0 | 5 | -5.0 |
| A-13vi | 35 | 1 | 42.1 | 43.2 | 66 | 1.1 | 10 | ---- | 43.2 | 0.0 | 5 | -5.0 |
| A-14ii | 36 | 1 | 44.2 | 45.5 | 66 | 1.3 | 10 | ---- | 45.5 | 0.0 | 5 | -5.0 |
| A-14iii | 37 | 1 | 43.6 | 44.9 | 66 | 1.3 | 10 | ---- | 44.9 | 0.0 | 5 | -5.0 |
| A-14iv | 38 | 1 | 43.1 | 44.4 | 66 | 1.3 | 10 | ---- | 44.4 | 0.0 | 5 | -5.0 |
| A-14v | 39 | 1 | 42.4 | 43.8 | 66 | 1.4 | 10 | ---- | 43.8 | 0.0 | 5 | -5.0 |
| A-14vi | 40 | 1 | 42.1 | 43.4 | 66 | 1.3 | 10 | ---- | 43.4 | 0.0 | 5 | -5.0 |
| A-14vii | 41 | 1 | 41.7 | 43.1 | 66 | 1.4 | 10 | ---- | 43.1 | 0.0 | 5 | -5.0 |
| A-15ii | 42 | 1 | 44.5 | 46.0 | 66 | 1.5 | 10 | ---- | 46.0 | 0.0 | 5 | -5.0 |
| A-15iii | 43 | 1 | 42.3 | 43.5 | 66 | 1.2 | 10 | ---- | 43.5 | 0.0 | 5 | -5.0 |
| A-16ii | 44 | 1 | 44.5 | 46.0 | 66 | 1.5 | 10 | ---- | 46.0 | 0.0 | 5 | -5.0 |
| A-17ii | 45 | 1 | 44.9 | 46.4 | 66 | 1.5 | 10 | ---- | 46.4 | 0.0 | 5 | -5.0 |
| A-18ii | 46 | 1 | 45.3 | 46.7 | 66 | 1.4 | 10 | ---- | 46.7 | 0.0 | 5 | -5.0 |
| A-18iii | 47 | 1 | 42.8 | 44.0 | 66 | 1.2 | 10 | ---- | 44.0 | 0.0 | 5 | -5.0 |
| A-19ii | 48 | 1 | 45.7 | 47.2 | 66 | 1.5 | 10 | ---- | 47.2 | 0.0 | 5 | -5.0 |
| A-19iii | 49 | 1 | 42.9 | 44.2 | 66 | 1.3 | 10 | ---- | 44.2 | 0.0 | 5 | -5.0 |
| A-20ii | 50 | 1 | 46.0 | 47.5 | 66 | 1.5 | 10 | ---- | 47.5 | 0.0 | 5 | -5.0 |
| A-21ii | 51 | 1 | 46.3 | 47.7 | 66 | 1.4 | 10 | ---- | 47.7 | 0.0 | 5 | -5.0 |
| A-21iii | 52 | 1 | 43.7 | 44.9 | 66 | 1.2 | 10 | ---- | 44.9 | 0.0 | 5 | -5.0 |
| A-22ii | 53 | 1 | 46.4 | 47.8 | 66 | 1.4 | 10 | ---- | 47.8 | 0.0 | 5 | -5.0 |
| A-23ii | 54 | 1 | 46.7 | 48.1 | 66 | 1.4 | 10 | ---- | 48.1 | 0.0 | 5 | -5.0 |
| A-23iii | 55 | 1 | 44.2 | 45.3 | 66 | 1.1 | 10 | ---- | 45.3 | 0.0 | 5 | -5.0 |
| A-24ii | 56 | 1 | 47.2 | 48.7 | 66 | 1.5 | 10 | ---- | 48.7 | 0.0 | 5 | -5.0 |
| A-24iii | 57 | 1 | 45.1 | 46.2 | 66 | 1.1 | 10 | ---- | 46.2 | 0.0 | 5 | -5.0 |
| A-25ii | 58 | 1 | 47.8 | 49.4 | 66 | 1.6 | 10 | ---- | 49.4 | 0.0 | 5 | -5.0 |
| A-25iii | 59 | 1 | 45.7 | 46.8 | 66 | 1.1 | 10 | ---- | 46.8 | 0.0 | 5 | -5.0 |
| A-26iii | 60 | 1 | 46.0 | 47.1 | 66 | 1.1 | 10 | ---- | 47.1 | 0.0 | 5 | -5.0 |
| A-27ii | 61 | 1 | 49.2 | 50.6 | 66 | 1.4 | 10 | ---- | 50.6 | 0.0 | 5 | -5.0 |
| A-27iii | 62 | 1 | 46.8 | 47.9 | 66 | 1.1 | 10 | ---- | 47.9 | 0.0 | 5 | -5.0 |
| A-28iii | 63 | 1 | 47.4 | 48.4 | 66 | 1.0 | 10 | ---- | 48.4 | 0.0 | 5 | -5.0 |
| B-1 | 64 | 1 | 60.8 | 61.6 | 66 | 0.8 | 10 | ---- | 61.6 | 0.0 | 5 | -5.0 |
| B-2 | 65 | 1 | 56.4 | 57.2 | 66 | 0.8 | 10 | ---- | 57.2 | 0.0 | 5 | -5.0 |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|----------|-----|---|------|------|----|------|----|------|------|-----|---|------|
| B-3 | 66 | 1 | 60.0 | 60.7 | 66 | 0.7 | 10 | ---- | 60.7 | 0.0 | 5 | -5.0 |
| B-4 | 67 | 1 | 64.1 | 65.0 | 66 | 0.9 | 10 | ---- | 65.0 | 0.0 | 5 | -5.0 |
| C-1 | 68 | 1 | 50.8 | 52.8 | 66 | 2.0 | 10 | ---- | 52.8 | 0.0 | 5 | -5.0 |
| C-2 | 69 | 1 | 60.5 | 61.6 | 66 | 1.1 | 10 | ---- | 61.6 | 0.0 | 5 | -5.0 |
| D-3 | 70 | 1 | 54.5 | 55.5 | 66 | 1.0 | 10 | ---- | 55.5 | 0.0 | 5 | -5.0 |
| D-4 | 71 | 1 | 54.4 | 55.1 | 66 | 0.7 | 10 | ---- | 55.1 | 0.0 | 5 | -5.0 |
| D-5 | 72 | 1 | 53.3 | 53.9 | 66 | 0.6 | 10 | ---- | 53.9 | 0.0 | 5 | -5.0 |
| D-6 | 73 | 1 | 52.1 | 52.7 | 66 | 0.6 | 10 | ---- | 52.7 | 0.0 | 5 | -5.0 |
| D-8 | 74 | 1 | 49.2 | 49.8 | 66 | 0.6 | 10 | ---- | 49.8 | 0.0 | 5 | -5.0 |
| D-9 | 75 | 1 | 56.4 | 56.8 | 66 | 0.4 | 10 | ---- | 56.8 | 0.0 | 5 | -5.0 |
| D-10 | 76 | 1 | 55.0 | 55.4 | 66 | 0.4 | 10 | ---- | 55.4 | 0.0 | 5 | -5.0 |
| D-11 | 77 | 1 | 56.5 | 56.8 | 66 | 0.3 | 10 | ---- | 56.8 | 0.0 | 5 | -5.0 |
| D-12 | 78 | 1 | 55.8 | 56.3 | 66 | 0.5 | 10 | ---- | 56.3 | 0.0 | 5 | -5.0 |
| D-13 | 79 | 1 | 56.7 | 57.2 | 66 | 0.5 | 10 | ---- | 57.2 | 0.0 | 5 | -5.0 |
| D-14 | 80 | 1 | 57.2 | 57.7 | 66 | 0.5 | 10 | ---- | 57.7 | 0.0 | 5 | -5.0 |
| D-15 | 81 | 1 | 55.0 | 55.5 | 66 | 0.5 | 10 | ---- | 55.5 | 0.0 | 5 | -5.0 |
| D-16 | 82 | 1 | 55.3 | 55.6 | 66 | 0.3 | 10 | ---- | 55.6 | 0.0 | 5 | -5.0 |
| D-17 | 83 | 1 | 58.4 | 58.7 | 66 | 0.3 | 10 | ---- | 58.7 | 0.0 | 5 | -5.0 |
| D-21 | 84 | 1 | 56.1 | 56.2 | 66 | 0.1 | 10 | ---- | 56.2 | 0.0 | 5 | -5.0 |
| D-22 | 85 | 1 | 55.4 | 55.3 | 66 | -0.1 | 10 | ---- | 55.3 | 0.0 | 5 | -5.0 |
| D-28 | 86 | 1 | 51.5 | 52.0 | 66 | 0.5 | 10 | ---- | 52.0 | 0.0 | 5 | -5.0 |
| D-1iii | 87 | 1 | 64.4 | 64.7 | 66 | 0.3 | 10 | ---- | 64.7 | 0.0 | 5 | -5.0 |
| D-2iii | 88 | 1 | 53.2 | 53.6 | 66 | 0.4 | 10 | ---- | 53.6 | 0.0 | 5 | -5.0 |
| D-3ii | 89 | 1 | 51.2 | 51.9 | 66 | 0.7 | 10 | ---- | 51.9 | 0.0 | 5 | -5.0 |
| D-3iii | 90 | 1 | 50.0 | 50.6 | 66 | 0.6 | 10 | ---- | 50.6 | 0.0 | 5 | -5.0 |
| D-3iva | 91 | 1 | 51.4 | 51.8 | 66 | 0.4 | 10 | ---- | 51.8 | 0.0 | 5 | -5.0 |
| D-3ivb | 92 | 1 | 50.3 | 50.7 | 66 | 0.4 | 10 | ---- | 50.7 | 0.0 | 5 | -5.0 |
| D-4ii | 93 | 1 | 49.2 | 49.9 | 66 | 0.7 | 10 | ---- | 49.9 | 0.0 | 5 | -5.0 |
| D-4iii | 94 | 1 | 48.0 | 48.5 | 66 | 0.5 | 10 | ---- | 48.5 | 0.0 | 5 | -5.0 |
| D-6iii | 95 | 1 | 45.2 | 45.9 | 66 | 0.7 | 10 | ---- | 45.9 | 0.0 | 5 | -5.0 |
| D-7ii | 96 | 1 | 44.6 | 45.3 | 66 | 0.7 | 10 | ---- | 45.3 | 0.0 | 5 | -5.0 |
| D-8iii | 97 | 1 | 43.5 | 44.3 | 66 | 0.8 | 10 | ---- | 44.3 | 0.0 | 5 | -5.0 |
| D-9iiia | 98 | 1 | 43.5 | 44.2 | 66 | 0.7 | 10 | ---- | 44.2 | 0.0 | 5 | -5.0 |
| D-9iiib | 99 | 1 | 43.3 | 43.9 | 66 | 0.6 | 10 | ---- | 43.9 | 0.0 | 5 | -5.0 |
| D-10iii | 100 | 1 | 43.5 | 44.2 | 66 | 0.7 | 10 | ---- | 44.2 | 0.0 | 5 | -5.0 |
| D-11iiia | 101 | 1 | 43.8 | 44.4 | 66 | 0.6 | 10 | ---- | 44.4 | 0.0 | 5 | -5.0 |
| D-11iiib | 102 | 1 | 43.7 | 44.4 | 66 | 0.7 | 10 | ---- | 44.4 | 0.0 | 5 | -5.0 |
| D-12ii | 103 | 1 | 45.9 | 46.5 | 66 | 0.6 | 10 | ---- | 46.5 | 0.0 | 5 | -5.0 |
| D-12iiia | 104 | 1 | 43.9 | 44.6 | 66 | 0.7 | 10 | ---- | 44.6 | 0.0 | 5 | -5.0 |
| D-12iiib | 105 | 1 | 44.3 | 44.9 | 66 | 0.6 | 10 | ---- | 44.9 | 0.0 | 5 | -5.0 |
| D-13ii | 106 | 1 | 47.2 | 47.8 | 66 | 0.6 | 10 | ---- | 47.8 | 0.0 | 5 | -5.0 |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|----------|-----|---|------|------|----|-----|----|------|------|-----|---|------|
| D-13iii | 107 | 1 | 43.5 | 44.1 | 66 | 0.6 | 10 | ---- | 44.1 | 0.0 | 5 | -5.0 |
| D-15ii | 108 | 1 | 52.0 | 52.5 | 66 | 0.5 | 10 | ---- | 52.5 | 0.0 | 5 | -5.0 |
| D-15iii | 109 | 1 | 49.9 | 50.3 | 66 | 0.4 | 10 | ---- | 50.3 | 0.0 | 5 | -5.0 |
| D-15iv | 110 | 1 | 48.6 | 49.3 | 66 | 0.7 | 10 | ---- | 49.3 | 0.0 | 5 | -5.0 |
| D-15v | 111 | 1 | 46.4 | 46.7 | 66 | 0.3 | 10 | ---- | 46.7 | 0.0 | 5 | -5.0 |
| D-15vi | 112 | 1 | 45.3 | 45.9 | 66 | 0.6 | 10 | ---- | 45.9 | 0.0 | 5 | -5.0 |
| D-15vii | 113 | 1 | 44.3 | 44.9 | 66 | 0.6 | 10 | ---- | 44.9 | 0.0 | 5 | -5.0 |
| D-15viii | 114 | 1 | 43.7 | 44.2 | 66 | 0.5 | 10 | ---- | 44.2 | 0.0 | 5 | -5.0 |
| D-15ix | 115 | 1 | 42.7 | 43.3 | 66 | 0.6 | 10 | ---- | 43.3 | 0.0 | 5 | -5.0 |
| D-15x | 116 | 1 | 42.1 | 42.7 | 66 | 0.6 | 10 | ---- | 42.7 | 0.0 | 5 | -5.0 |
| D-16ii | 117 | 1 | 52.3 | 52.6 | 66 | 0.3 | 10 | ---- | 52.6 | 0.0 | 5 | -5.0 |
| D-16iii | 118 | 1 | 49.8 | 50.3 | 66 | 0.5 | 10 | ---- | 50.3 | 0.0 | 5 | -5.0 |
| D-16iv | 119 | 1 | 48.3 | 49.0 | 66 | 0.7 | 10 | ---- | 49.0 | 0.0 | 5 | -5.0 |
| D-16v | 120 | 1 | 47.3 | 47.9 | 66 | 0.6 | 10 | ---- | 47.9 | 0.0 | 5 | -5.0 |
| D-16vi | 121 | 1 | 46.3 | 46.9 | 66 | 0.6 | 10 | ---- | 46.9 | 0.0 | 5 | -5.0 |
| D-16vii | 122 | 1 | 44.9 | 45.5 | 66 | 0.6 | 10 | ---- | 45.5 | 0.0 | 5 | -5.0 |
| D-16viii | 123 | 1 | 44.2 | 44.7 | 66 | 0.5 | 10 | ---- | 44.7 | 0.0 | 5 | -5.0 |
| D-16ix | 124 | 1 | 43.4 | 44.0 | 66 | 0.6 | 10 | ---- | 44.0 | 0.0 | 5 | -5.0 |
| D-16x | 125 | 1 | 41.8 | 42.5 | 66 | 0.7 | 10 | ---- | 42.5 | 0.0 | 5 | -5.0 |
| D-17iii | 126 | 1 | 45.2 | 45.7 | 66 | 0.5 | 10 | ---- | 45.7 | 0.0 | 5 | -5.0 |
| D-18iii | 127 | 1 | 44.3 | 45.0 | 66 | 0.7 | 10 | ---- | 45.0 | 0.0 | 5 | -5.0 |
| D-19iii | 128 | 1 | 43.7 | 44.3 | 66 | 0.6 | 10 | ---- | 44.3 | 0.0 | 5 | -5.0 |
| D-20iii | 129 | 1 | 43.5 | 44.1 | 66 | 0.6 | 10 | ---- | 44.1 | 0.0 | 5 | -5.0 |
| D-21ii | 130 | 1 | 52.6 | 52.6 | 66 | 0.0 | 10 | ---- | 52.6 | 0.0 | 5 | -5.0 |
| D-21iii | 131 | 1 | 50.5 | 50.6 | 66 | 0.1 | 10 | ---- | 50.6 | 0.0 | 5 | -5.0 |
| D-21iv | 132 | 1 | 49.2 | 49.4 | 66 | 0.2 | 10 | ---- | 49.4 | 0.0 | 5 | -5.0 |
| D-21v | 133 | 1 | 47.7 | 48.1 | 66 | 0.4 | 10 | ---- | 48.1 | 0.0 | 5 | -5.0 |
| D-21vi | 134 | 1 | 46.6 | 46.9 | 66 | 0.3 | 10 | ---- | 46.9 | 0.0 | 5 | -5.0 |
| D-21vii | 135 | 1 | 46.0 | 46.3 | 66 | 0.3 | 10 | ---- | 46.3 | 0.0 | 5 | -5.0 |
| D-21viii | 136 | 1 | 45.4 | 45.6 | 66 | 0.2 | 10 | ---- | 45.6 | 0.0 | 5 | -5.0 |
| D-21ix | 137 | 1 | 45.2 | 45.3 | 66 | 0.1 | 10 | ---- | 45.3 | 0.0 | 5 | -5.0 |
| D-22ii | 138 | 1 | 52.0 | 52.1 | 66 | 0.1 | 10 | ---- | 52.1 | 0.0 | 5 | -5.0 |
| D-22iii | 139 | 1 | 49.8 | 50.1 | 66 | 0.3 | 10 | ---- | 50.1 | 0.0 | 5 | -5.0 |
| D-22iv | 140 | 1 | 48.7 | 48.8 | 66 | 0.1 | 10 | ---- | 48.8 | 0.0 | 5 | -5.0 |
| D-22v | 141 | 1 | 47.6 | 47.8 | 66 | 0.2 | 10 | ---- | 47.8 | 0.0 | 5 | -5.0 |
| D-22vi | 142 | 1 | 46.9 | 47.1 | 66 | 0.2 | 10 | ---- | 47.1 | 0.0 | 5 | -5.0 |
| D-22vii | 143 | 1 | 46.0 | 46.5 | 66 | 0.5 | 10 | ---- | 46.5 | 0.0 | 5 | -5.0 |
| D-22viii | 144 | 1 | 45.0 | 45.7 | 66 | 0.7 | 10 | ---- | 45.7 | 0.0 | 5 | -5.0 |
| D-22ix | 145 | 1 | 44.3 | 45.0 | 66 | 0.7 | 10 | ---- | 45.0 | 0.0 | 5 | -5.0 |
| D-23iii | 146 | 1 | 46.0 | 46.6 | 66 | 0.6 | 10 | ---- | 46.6 | 0.0 | 5 | -5.0 |
| D-24iii | 147 | 1 | 45.7 | 46.5 | 66 | 0.8 | 10 | ---- | 46.5 | 0.0 | 5 | -5.0 |

RESULTS: SOUND LEVELS

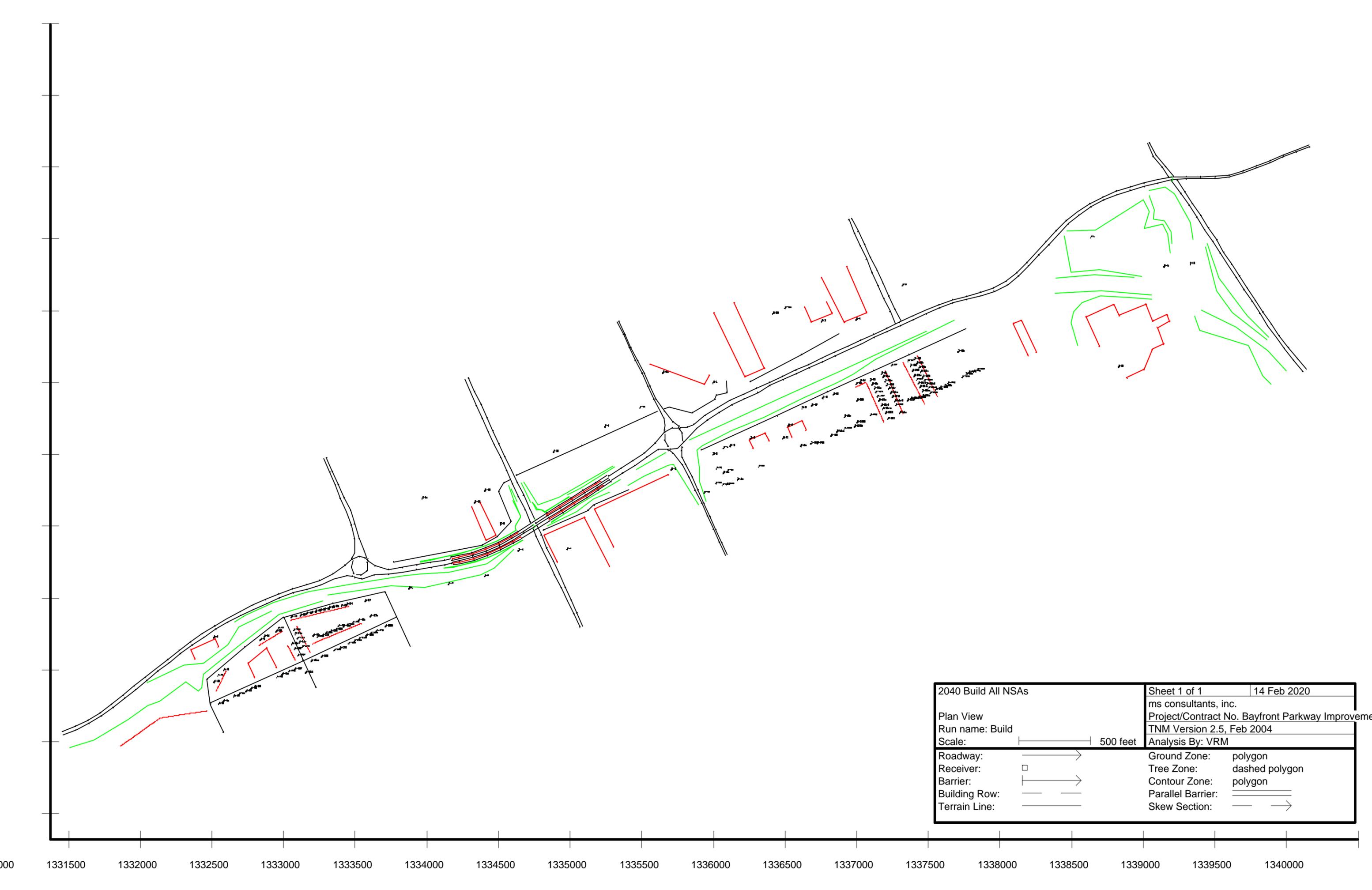
Bayfront Parkway Improvements

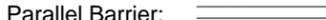
| | | | | | | | | | | | | |
|-----------------------|-----|--------------|------------------------|------------|------------|-----|----|------|------|-----|---|------|
| D-25iii | 148 | 1 | 46.4 | 46.9 | 66 | 0.5 | 10 | ---- | 46.9 | 0.0 | 5 | -5.0 |
| D-26iii | 149 | 1 | 46.8 | 47.5 | 66 | 0.7 | 10 | ---- | 47.5 | 0.0 | 5 | -5.0 |
| D-27iii | 150 | 1 | 47.1 | 47.7 | 66 | 0.6 | 10 | ---- | 47.7 | 0.0 | 5 | -5.0 |
| D-28iii | 151 | 1 | 47.2 | 47.9 | 66 | 0.7 | 10 | ---- | 47.9 | 0.0 | 5 | -5.0 |
| D-29iii | 152 | 1 | 47.4 | 48.0 | 66 | 0.6 | 10 | ---- | 48.0 | 0.0 | 5 | -5.0 |
| D-30iii | 153 | 1 | 47.3 | 47.8 | 66 | 0.5 | 10 | ---- | 47.8 | 0.0 | 5 | -5.0 |
| D-31iii | 154 | 1 | 47.5 | 48.0 | 66 | 0.5 | 10 | ---- | 48.0 | 0.0 | 5 | -5.0 |
| E-3 | 155 | 1 | 57.2 | 59.7 | 66 | 2.5 | 10 | ---- | 59.7 | 0.0 | 5 | -5.0 |
| E-1iii | 156 | 1 | 52.9 | 54.5 | 66 | 1.6 | 10 | ---- | 54.5 | 0.0 | 5 | -5.0 |
| E-2ii | 157 | 1 | 51.5 | 54.0 | 66 | 2.5 | 10 | ---- | 54.0 | 0.0 | 5 | -5.0 |
| E-3ii | 158 | 1 | 54.4 | 56.4 | 66 | 2.0 | 10 | ---- | 56.4 | 0.0 | 5 | -5.0 |
| F-1 | 159 | 1 | 55.7 | 56.1 | 66 | 0.4 | 10 | ---- | 56.1 | 0.0 | 5 | -5.0 |
| F-2 | 160 | 1 | 58.2 | 58.8 | 66 | 0.6 | 10 | ---- | 58.8 | 0.0 | 5 | -5.0 |
| G-1 | 161 | 1 | 58.4 | 59.1 | 66 | 0.7 | 10 | ---- | 59.1 | 0.0 | 5 | -5.0 |
| G-3 | 162 | 1 | 53.7 | 56.0 | 66 | 2.3 | 10 | ---- | 56.0 | 0.0 | 5 | -5.0 |
| G-4 | 163 | 1 | 58.2 | 59.4 | 66 | 1.2 | 10 | ---- | 59.4 | 0.0 | 5 | -5.0 |
| G-5 | 164 | 1 | 55.2 | 56.3 | 66 | 1.1 | 10 | ---- | 56.3 | 0.0 | 5 | -5.0 |
| G-1iii | 165 | 1 | 54.9 | 55.7 | 66 | 0.8 | 10 | ---- | 55.7 | 0.0 | 5 | -5.0 |
| G-2iii | 166 | 1 | 46.8 | 49.7 | 66 | 2.9 | 10 | ---- | 49.7 | 0.0 | 5 | -5.0 |
| G-3iii | 167 | 1 | 46.6 | 49.7 | 66 | 3.1 | 10 | ---- | 49.7 | 0.0 | 5 | -5.0 |
| H-1 | 168 | 1 | 55.5 | 55.7 | 66 | 0.2 | 10 | ---- | 55.7 | 0.0 | 5 | -5.0 |
| H-2 | 169 | 1 | 49.6 | 49.6 | 66 | 0.0 | 10 | ---- | 49.6 | 0.0 | 5 | -5.0 |
| H-3 | 170 | 1 | 52.7 | 52.8 | 66 | 0.1 | 10 | ---- | 52.8 | 0.0 | 5 | -5.0 |
| H-1ii | 171 | 1 | 39.0 | 39.7 | 66 | 0.7 | 10 | ---- | 39.7 | 0.0 | 5 | -5.0 |
| F-3 | 173 | 1 | 52.7 | 53.5 | 66 | 0.8 | 10 | ---- | 53.5 | 0.0 | 5 | -5.0 |
| Dwelling Units | | # DUs | Noise Reduction | | | | | | | | | |
| | | | Min | Avg | Max | | | | | | | |
| | | | dB | dB | dB | | | | | | | |
| All Selected | | 172 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All Impacted | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All that meet NR Goal | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

Appendix 6

TNM Build Models



| | | | |
|---|---|---|---|
| 2040 Build All NSAs | | Sheet 1 of 1 | 14 Feb 2020 |
| Plan View | | ms consultants, inc. | |
| Run name: Build | | Project/Contract No. Bayfront Parkway Improvement | |
| Scale:  500 feet | | TNM Version 2.5, Feb 2004 | |
| | | Analysis By: VRM | |
| Roadway: |  | Ground Zone: | polygon |
| Receiver: |  | Tree Zone: | dashed polygon |
| Barrier: |  | Contour Zone: | polygon |
| Building Row: |  | Parallel Barrier: |  |
| Terrain Line: |  | Skew Section: |  |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|---------|----|---|------|------|----|------|----|------|------|-----|---|------|
| A-6iii | 25 | 1 | 40.5 | 40.5 | 66 | 0.0 | 10 | ---- | 40.5 | 0.0 | 5 | -5.0 |
| A-7iii | 26 | 1 | 40.2 | 40.5 | 66 | 0.3 | 10 | ---- | 40.5 | 0.0 | 5 | -5.0 |
| A-8iii | 27 | 1 | 40.1 | 40.5 | 66 | 0.4 | 10 | ---- | 40.5 | 0.0 | 5 | -5.0 |
| A-9iii | 28 | 1 | 39.6 | 40.0 | 66 | 0.4 | 10 | ---- | 40.0 | 0.0 | 5 | -5.0 |
| A-10iii | 29 | 1 | 40.8 | 41.0 | 66 | 0.2 | 10 | ---- | 41.0 | 0.0 | 5 | -5.0 |
| A-11iii | 30 | 1 | 41.3 | 41.3 | 66 | 0.0 | 10 | ---- | 41.3 | 0.0 | 5 | -5.0 |
| A-13ii | 31 | 1 | 42.4 | 43.9 | 66 | 1.5 | 10 | ---- | 43.9 | 0.0 | 5 | -5.0 |
| A-13iii | 32 | 1 | 41.7 | 42.9 | 66 | 1.2 | 10 | ---- | 42.9 | 0.0 | 5 | -5.0 |
| A-13iv | 33 | 1 | 39.9 | 41.4 | 66 | 1.5 | 10 | ---- | 41.4 | 0.0 | 5 | -5.0 |
| A-13v | 34 | 1 | 42.0 | 41.9 | 66 | -0.1 | 10 | ---- | 41.9 | 0.0 | 5 | -5.0 |
| A-13vi | 35 | 1 | 42.1 | 41.2 | 66 | -0.9 | 10 | ---- | 41.2 | 0.0 | 5 | -5.0 |
| A-14ii | 36 | 1 | 44.2 | 46.5 | 66 | 2.3 | 10 | ---- | 46.5 | 0.0 | 5 | -5.0 |
| A-14iii | 37 | 1 | 43.6 | 45.5 | 66 | 1.9 | 10 | ---- | 45.5 | 0.0 | 5 | -5.0 |
| A-14iv | 38 | 1 | 43.1 | 44.5 | 66 | 1.4 | 10 | ---- | 44.5 | 0.0 | 5 | -5.0 |
| A-14v | 39 | 1 | 42.4 | 43.7 | 66 | 1.3 | 10 | ---- | 43.7 | 0.0 | 5 | -5.0 |
| A-14vi | 40 | 1 | 42.1 | 43.0 | 66 | 0.9 | 10 | ---- | 43.0 | 0.0 | 5 | -5.0 |
| A-14vii | 41 | 1 | 41.7 | 41.8 | 66 | 0.1 | 10 | ---- | 41.8 | 0.0 | 5 | -5.0 |
| A-15ii | 42 | 1 | 44.5 | 45.1 | 66 | 0.6 | 10 | ---- | 45.1 | 0.0 | 5 | -5.0 |
| A-15iii | 43 | 1 | 42.3 | 41.9 | 66 | -0.4 | 10 | ---- | 41.9 | 0.0 | 5 | -5.0 |
| A-16ii | 44 | 1 | 44.5 | 44.8 | 66 | 0.3 | 10 | ---- | 44.8 | 0.0 | 5 | -5.0 |
| A-17ii | 45 | 1 | 44.9 | 44.9 | 66 | 0.0 | 10 | ---- | 44.9 | 0.0 | 5 | -5.0 |
| A-18ii | 46 | 1 | 45.3 | 45.2 | 66 | -0.1 | 10 | ---- | 45.2 | 0.0 | 5 | -5.0 |
| A-18iii | 47 | 1 | 42.8 | 42.2 | 66 | -0.6 | 10 | ---- | 42.2 | 0.0 | 5 | -5.0 |
| A-19ii | 48 | 1 | 45.7 | 45.3 | 66 | -0.4 | 10 | ---- | 45.3 | 0.0 | 5 | -5.0 |
| A-19iii | 49 | 1 | 42.9 | 42.6 | 66 | -0.3 | 10 | ---- | 42.6 | 0.0 | 5 | -5.0 |
| A-20ii | 50 | 1 | 46.0 | 45.4 | 66 | -0.6 | 10 | ---- | 45.4 | 0.0 | 5 | -5.0 |
| A-21ii | 51 | 1 | 46.3 | 45.9 | 66 | -0.4 | 10 | ---- | 45.9 | 0.0 | 5 | -5.0 |
| A-21iii | 52 | 1 | 43.7 | 43.3 | 66 | -0.4 | 10 | ---- | 43.3 | 0.0 | 5 | -5.0 |
| A-22ii | 53 | 1 | 46.4 | 46.0 | 66 | -0.4 | 10 | ---- | 46.0 | 0.0 | 5 | -5.0 |
| A-23ii | 54 | 1 | 46.7 | 46.4 | 66 | -0.3 | 10 | ---- | 46.4 | 0.0 | 5 | -5.0 |
| A-23iii | 55 | 1 | 44.2 | 43.9 | 66 | -0.3 | 10 | ---- | 43.9 | 0.0 | 5 | -5.0 |
| A-24ii | 56 | 1 | 47.2 | 47.2 | 66 | 0.0 | 10 | ---- | 47.2 | 0.0 | 5 | -5.0 |
| A-24iii | 57 | 1 | 45.1 | 44.3 | 66 | -0.8 | 10 | ---- | 44.3 | 0.0 | 5 | -5.0 |
| A-25ii | 58 | 1 | 47.8 | 47.9 | 66 | 0.1 | 10 | ---- | 47.9 | 0.0 | 5 | -5.0 |
| A-25iii | 59 | 1 | 45.7 | 45.2 | 66 | -0.5 | 10 | ---- | 45.2 | 0.0 | 5 | -5.0 |
| A-26iii | 60 | 1 | 46.0 | 45.5 | 66 | -0.5 | 10 | ---- | 45.5 | 0.0 | 5 | -5.0 |
| A-27ii | 61 | 1 | 49.2 | 48.8 | 66 | -0.4 | 10 | ---- | 48.8 | 0.0 | 5 | -5.0 |
| A-27iii | 62 | 1 | 46.8 | 46.1 | 66 | -0.7 | 10 | ---- | 46.1 | 0.0 | 5 | -5.0 |
| A-28iii | 63 | 1 | 47.4 | 46.7 | 66 | -0.7 | 10 | ---- | 46.7 | 0.0 | 5 | -5.0 |
| B-1 | 64 | 1 | 60.8 | 60.9 | 66 | 0.1 | 10 | ---- | 60.9 | 0.0 | 5 | -5.0 |
| B-2 | 65 | 1 | 56.4 | 56.3 | 66 | -0.1 | 10 | ---- | 56.3 | 0.0 | 5 | -5.0 |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|---------|-----|---|------|------|----|------|----|------|------|-----|---|------|
| B-3 | 66 | 1 | 60.0 | 60.2 | 66 | 0.2 | 10 | ---- | 60.2 | 0.0 | 5 | -5.0 |
| B-4 | 67 | 1 | 64.1 | 63.6 | 66 | -0.5 | 10 | ---- | 63.6 | 0.0 | 5 | -5.0 |
| C-1 | 68 | 1 | 50.8 | 50.5 | 66 | -0.3 | 10 | ---- | 50.5 | 0.0 | 5 | -5.0 |
| C-2 | 69 | 1 | 60.5 | 60.3 | 66 | -0.2 | 10 | ---- | 60.3 | 0.0 | 5 | -5.0 |
| D-3 | 70 | 1 | 54.5 | 54.4 | 66 | -0.1 | 10 | ---- | 54.4 | 0.0 | 5 | -5.0 |
| D-4 | 71 | 1 | 54.4 | 54.1 | 66 | -0.3 | 10 | ---- | 54.1 | 0.0 | 5 | -5.0 |
| D-5 | 72 | 1 | 53.3 | 53.1 | 66 | -0.2 | 10 | ---- | 53.1 | 0.0 | 5 | -5.0 |
| D-6 | 73 | 1 | 52.1 | 51.8 | 66 | -0.3 | 10 | ---- | 51.8 | 0.0 | 5 | -5.0 |
| D-8 | 74 | 1 | 49.2 | 49.0 | 66 | -0.2 | 10 | ---- | 49.0 | 0.0 | 5 | -5.0 |
| D-9 | 75 | 1 | 56.4 | 56.1 | 66 | -0.3 | 10 | ---- | 56.1 | 0.0 | 5 | -5.0 |
| D-10 | 76 | 1 | 55.0 | 54.7 | 66 | -0.3 | 10 | ---- | 54.7 | 0.0 | 5 | -5.0 |
| D-11 | 77 | 1 | 56.5 | 56.2 | 66 | -0.3 | 10 | ---- | 56.2 | 0.0 | 5 | -5.0 |
| D-12 | 78 | 1 | 55.8 | 55.5 | 66 | -0.3 | 10 | ---- | 55.5 | 0.0 | 5 | -5.0 |
| D-13 | 79 | 1 | 56.7 | 56.1 | 66 | -0.6 | 10 | ---- | 56.1 | 0.0 | 5 | -5.0 |
| D-14 | 80 | 1 | 57.2 | 56.6 | 66 | -0.6 | 10 | ---- | 56.6 | 0.0 | 5 | -5.0 |
| D-15 | 81 | 1 | 55.0 | 54.3 | 66 | -0.7 | 10 | ---- | 54.3 | 0.0 | 5 | -5.0 |
| D-16 | 82 | 1 | 55.3 | 54.5 | 66 | -0.8 | 10 | ---- | 54.5 | 0.0 | 5 | -5.0 |
| D-17 | 83 | 1 | 58.4 | 57.8 | 66 | -0.6 | 10 | ---- | 57.8 | 0.0 | 5 | -5.0 |
| D-21 | 84 | 1 | 56.1 | 55.2 | 66 | -0.9 | 10 | ---- | 55.2 | 0.0 | 5 | -5.0 |
| D-22 | 85 | 1 | 55.4 | 54.3 | 66 | -1.1 | 10 | ---- | 54.3 | 0.0 | 5 | -5.0 |
| D-28 | 86 | 1 | 51.5 | 50.6 | 66 | -0.9 | 10 | ---- | 50.6 | 0.0 | 5 | -5.0 |
| D-1iii | 87 | 1 | 64.4 | 63.1 | 66 | -1.3 | 10 | ---- | 63.1 | 0.0 | 5 | -5.0 |
| D-2iii | 88 | 1 | 53.2 | 52.5 | 66 | -0.7 | 10 | ---- | 52.5 | 0.0 | 5 | -5.0 |
| D-3ii | 89 | 1 | 51.2 | 50.8 | 66 | -0.4 | 10 | ---- | 50.8 | 0.0 | 5 | -5.0 |
| D-3iii | 90 | 1 | 50.0 | 49.6 | 66 | -0.4 | 10 | ---- | 49.6 | 0.0 | 5 | -5.0 |
| D-3iva | 91 | 1 | 51.4 | 50.8 | 66 | -0.6 | 10 | ---- | 50.8 | 0.0 | 5 | -5.0 |
| D-3ivb | 92 | 1 | 50.3 | 49.7 | 66 | -0.6 | 10 | ---- | 49.7 | 0.0 | 5 | -5.0 |
| D-4ii | 93 | 1 | 49.2 | 48.8 | 66 | -0.4 | 10 | ---- | 48.8 | 0.0 | 5 | -5.0 |
| D-4iii | 94 | 1 | 48.0 | 47.5 | 66 | -0.5 | 10 | ---- | 47.5 | 0.0 | 5 | -5.0 |
| D-6iii | 95 | 1 | 45.2 | 44.7 | 66 | -0.5 | 10 | ---- | 44.7 | 0.0 | 5 | -5.0 |
| D-7ii | 96 | 1 | 44.6 | 44.2 | 66 | -0.4 | 10 | ---- | 44.2 | 0.0 | 5 | -5.0 |
| D-8iii | 97 | 1 | 43.5 | 43.0 | 66 | -0.5 | 10 | ---- | 43.0 | 0.0 | 5 | -5.0 |
| D-9iia | 98 | 1 | 43.5 | 43.0 | 66 | -0.5 | 10 | ---- | 43.0 | 0.0 | 5 | -5.0 |
| D-9iib | 99 | 1 | 43.3 | 42.8 | 66 | -0.5 | 10 | ---- | 42.8 | 0.0 | 5 | -5.0 |
| D-10iii | 100 | 1 | 43.5 | 43.1 | 66 | -0.4 | 10 | ---- | 43.1 | 0.0 | 5 | -5.0 |
| D-11iia | 101 | 1 | 43.8 | 43.3 | 66 | -0.5 | 10 | ---- | 43.3 | 0.0 | 5 | -5.0 |
| D-11iib | 102 | 1 | 43.7 | 43.3 | 66 | -0.4 | 10 | ---- | 43.3 | 0.0 | 5 | -5.0 |
| D-12ii | 103 | 1 | 45.9 | 45.4 | 66 | -0.5 | 10 | ---- | 45.4 | 0.0 | 5 | -5.0 |
| D-12iia | 104 | 1 | 43.9 | 43.5 | 66 | -0.4 | 10 | ---- | 43.5 | 0.0 | 5 | -5.0 |
| D-12iib | 105 | 1 | 44.3 | 43.8 | 66 | -0.5 | 10 | ---- | 43.8 | 0.0 | 5 | -5.0 |
| D-13ii | 106 | 1 | 47.2 | 46.7 | 66 | -0.5 | 10 | ---- | 46.7 | 0.0 | 5 | -5.0 |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|----------|-----|---|------|------|----|------|----|------|------|-----|---|------|
| D-13iii | 107 | 1 | 43.5 | 43.1 | 66 | -0.4 | 10 | ---- | 43.1 | 0.0 | 5 | -5.0 |
| D-15ii | 108 | 1 | 52.0 | 51.2 | 66 | -0.8 | 10 | ---- | 51.2 | 0.0 | 5 | -5.0 |
| D-15iii | 109 | 1 | 49.9 | 48.9 | 66 | -1.0 | 10 | ---- | 48.9 | 0.0 | 5 | -5.0 |
| D-15iv | 110 | 1 | 48.6 | 47.7 | 66 | -0.9 | 10 | ---- | 47.7 | 0.0 | 5 | -5.0 |
| D-15v | 111 | 1 | 46.4 | 45.6 | 66 | -0.8 | 10 | ---- | 45.6 | 0.0 | 5 | -5.0 |
| D-15vi | 112 | 1 | 45.3 | 44.8 | 66 | -0.5 | 10 | ---- | 44.8 | 0.0 | 5 | -5.0 |
| D-15vii | 113 | 1 | 44.3 | 43.8 | 66 | -0.5 | 10 | ---- | 43.8 | 0.0 | 5 | -5.0 |
| D-15viii | 114 | 1 | 43.7 | 43.2 | 66 | -0.5 | 10 | ---- | 43.2 | 0.0 | 5 | -5.0 |
| D-15ix | 115 | 1 | 42.7 | 42.3 | 66 | -0.4 | 10 | ---- | 42.3 | 0.0 | 5 | -5.0 |
| D-15x | 116 | 1 | 42.1 | 41.7 | 66 | -0.4 | 10 | ---- | 41.7 | 0.0 | 5 | -5.0 |
| D-16ii | 117 | 1 | 52.3 | 51.5 | 66 | -0.8 | 10 | ---- | 51.5 | 0.0 | 5 | -5.0 |
| D-16iii | 118 | 1 | 49.8 | 49.1 | 66 | -0.7 | 10 | ---- | 49.1 | 0.0 | 5 | -5.0 |
| D-16iv | 119 | 1 | 48.3 | 47.6 | 66 | -0.7 | 10 | ---- | 47.6 | 0.0 | 5 | -5.0 |
| D-16v | 120 | 1 | 47.3 | 46.5 | 66 | -0.8 | 10 | ---- | 46.5 | 0.0 | 5 | -5.0 |
| D-16vi | 121 | 1 | 46.3 | 45.5 | 66 | -0.8 | 10 | ---- | 45.5 | 0.0 | 5 | -5.0 |
| D-16vii | 122 | 1 | 44.9 | 44.3 | 66 | -0.6 | 10 | ---- | 44.3 | 0.0 | 5 | -5.0 |
| D-16viii | 123 | 1 | 44.2 | 43.6 | 66 | -0.6 | 10 | ---- | 43.6 | 0.0 | 5 | -5.0 |
| D-16ix | 124 | 1 | 43.4 | 42.9 | 66 | -0.5 | 10 | ---- | 42.9 | 0.0 | 5 | -5.0 |
| D-16x | 125 | 1 | 41.8 | 41.5 | 66 | -0.3 | 10 | ---- | 41.5 | 0.0 | 5 | -5.0 |
| D-17iii | 126 | 1 | 45.2 | 44.7 | 66 | -0.5 | 10 | ---- | 44.7 | 0.0 | 5 | -5.0 |
| D-18iii | 127 | 1 | 44.3 | 43.9 | 66 | -0.4 | 10 | ---- | 43.9 | 0.0 | 5 | -5.0 |
| D-19iii | 128 | 1 | 43.7 | 43.3 | 66 | -0.4 | 10 | ---- | 43.3 | 0.0 | 5 | -5.0 |
| D-20iii | 129 | 1 | 43.5 | 43.0 | 66 | -0.5 | 10 | ---- | 43.0 | 0.0 | 5 | -5.0 |
| D-21ii | 130 | 1 | 52.6 | 51.3 | 66 | -1.3 | 10 | ---- | 51.3 | 0.0 | 5 | -5.0 |
| D-21iii | 131 | 1 | 50.5 | 49.3 | 66 | -1.2 | 10 | ---- | 49.3 | 0.0 | 5 | -5.0 |
| D-21iv | 132 | 1 | 49.2 | 48.1 | 66 | -1.1 | 10 | ---- | 48.1 | 0.0 | 5 | -5.0 |
| D-21v | 133 | 1 | 47.7 | 46.9 | 66 | -0.8 | 10 | ---- | 46.9 | 0.0 | 5 | -5.0 |
| D-21vi | 134 | 1 | 46.6 | 45.9 | 66 | -0.7 | 10 | ---- | 45.9 | 0.0 | 5 | -5.0 |
| D-21vii | 135 | 1 | 46.0 | 45.3 | 66 | -0.7 | 10 | ---- | 45.3 | 0.0 | 5 | -5.0 |
| D-21viii | 136 | 1 | 45.4 | 44.7 | 66 | -0.7 | 10 | ---- | 44.7 | 0.0 | 5 | -5.0 |
| D-21ix | 137 | 1 | 45.2 | 44.3 | 66 | -0.9 | 10 | ---- | 44.3 | 0.0 | 5 | -5.0 |
| D-22ii | 138 | 1 | 52.0 | 50.9 | 66 | -1.1 | 10 | ---- | 50.9 | 0.0 | 5 | -5.0 |
| D-22iii | 139 | 1 | 49.8 | 48.9 | 66 | -0.9 | 10 | ---- | 48.9 | 0.0 | 5 | -5.0 |
| D-22iv | 140 | 1 | 48.7 | 47.7 | 66 | -1.0 | 10 | ---- | 47.7 | 0.0 | 5 | -5.0 |
| D-22v | 141 | 1 | 47.6 | 46.6 | 66 | -1.0 | 10 | ---- | 46.6 | 0.0 | 5 | -5.0 |
| D-22vi | 142 | 1 | 46.9 | 46.0 | 66 | -0.9 | 10 | ---- | 46.0 | 0.0 | 5 | -5.0 |
| D-22vii | 143 | 1 | 46.0 | 45.4 | 66 | -0.6 | 10 | ---- | 45.4 | 0.0 | 5 | -5.0 |
| D-22viii | 144 | 1 | 45.0 | 44.6 | 66 | -0.4 | 10 | ---- | 44.6 | 0.0 | 5 | -5.0 |
| D-22ix | 145 | 1 | 44.3 | 43.9 | 66 | -0.4 | 10 | ---- | 43.9 | 0.0 | 5 | -5.0 |
| D-23iii | 146 | 1 | 46.0 | 45.5 | 66 | -0.5 | 10 | ---- | 45.5 | 0.0 | 5 | -5.0 |
| D-24iii | 147 | 1 | 45.7 | 45.4 | 66 | -0.3 | 10 | ---- | 45.4 | 0.0 | 5 | -5.0 |

RESULTS: SOUND LEVELS

Bayfront Parkway Improvements

| | | | | | | | | | | | | |
|-----------------------|-----|--------------|------------------------|------------|------------|------|----|------|------|-----|---|------|
| D-25iii | 148 | 1 | 46.4 | 45.6 | 66 | -0.8 | 10 | ---- | 45.6 | 0.0 | 5 | -5.0 |
| D-26iii | 149 | 1 | 46.8 | 46.1 | 66 | -0.7 | 10 | ---- | 46.1 | 0.0 | 5 | -5.0 |
| D-27iii | 150 | 1 | 47.1 | 46.2 | 66 | -0.9 | 10 | ---- | 46.2 | 0.0 | 5 | -5.0 |
| D-28iii | 151 | 1 | 47.2 | 46.5 | 66 | -0.7 | 10 | ---- | 46.5 | 0.0 | 5 | -5.0 |
| D-29iii | 152 | 1 | 47.4 | 46.5 | 66 | -0.9 | 10 | ---- | 46.5 | 0.0 | 5 | -5.0 |
| D-30iii | 153 | 1 | 47.3 | 46.4 | 66 | -0.9 | 10 | ---- | 46.4 | 0.0 | 5 | -5.0 |
| D-31iii | 154 | 1 | 47.5 | 46.6 | 66 | -0.9 | 10 | ---- | 46.6 | 0.0 | 5 | -5.0 |
| E-3 | 155 | 1 | 57.2 | 57.5 | 66 | 0.3 | 10 | ---- | 57.5 | 0.0 | 5 | -5.0 |
| E-1iii | 156 | 1 | 52.9 | 52.6 | 66 | -0.3 | 10 | ---- | 52.6 | 0.0 | 5 | -5.0 |
| E-2ii | 157 | 1 | 51.5 | 50.7 | 66 | -0.8 | 10 | ---- | 50.7 | 0.0 | 5 | -5.0 |
| E-3ii | 158 | 1 | 54.4 | 54.0 | 66 | -0.4 | 10 | ---- | 54.0 | 0.0 | 5 | -5.0 |
| F-1 | 159 | 1 | 55.7 | 54.4 | 66 | -1.3 | 10 | ---- | 54.4 | 0.0 | 5 | -5.0 |
| F-2 | 160 | 1 | 58.2 | 58.1 | 66 | -0.1 | 10 | ---- | 58.1 | 0.0 | 5 | -5.0 |
| G-1 | 161 | 1 | 58.4 | 55.9 | 66 | -2.5 | 10 | ---- | 55.9 | 0.0 | 5 | -5.0 |
| G-3 | 162 | 1 | 53.7 | 53.6 | 66 | -0.1 | 10 | ---- | 53.6 | 0.0 | 5 | -5.0 |
| G-4 | 163 | 1 | 58.2 | 56.8 | 66 | -1.4 | 10 | ---- | 56.8 | 0.0 | 5 | -5.0 |
| G-5 | 164 | 1 | 55.2 | 54.2 | 66 | -1.0 | 10 | ---- | 54.2 | 0.0 | 5 | -5.0 |
| G-1iii | 165 | 1 | 54.9 | 54.9 | 66 | 0.0 | 10 | ---- | 54.9 | 0.0 | 5 | -5.0 |
| G-2iii | 166 | 1 | 46.8 | 46.7 | 66 | -0.1 | 10 | ---- | 46.7 | 0.0 | 5 | -5.0 |
| G-3iii | 167 | 1 | 46.6 | 46.6 | 66 | 0.0 | 10 | ---- | 46.6 | 0.0 | 5 | -5.0 |
| H-1 | 168 | 1 | 55.5 | 55.2 | 66 | -0.3 | 10 | ---- | 55.2 | 0.0 | 5 | -5.0 |
| H-2 | 169 | 1 | 49.6 | 49.5 | 66 | -0.1 | 10 | ---- | 49.5 | 0.0 | 5 | -5.0 |
| H-3 | 170 | 1 | 52.7 | 52.8 | 66 | 0.1 | 10 | ---- | 52.8 | 0.0 | 5 | -5.0 |
| H-1ii | 171 | 1 | 39.0 | 38.8 | 66 | -0.2 | 10 | ---- | 38.8 | 0.0 | 5 | -5.0 |
| F-3 | 173 | 1 | 52.7 | 51.6 | 66 | -1.1 | 10 | ---- | 51.6 | 0.0 | 5 | -5.0 |
| Dwelling Units | | # DUs | Noise Reduction | | | | | | | | | |
| | | | Min | Avg | Max | | | | | | | |
| | | | dB | dB | dB | | | | | | | |
| All Selected | | 172 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All Impacted | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |
| All that meet NR Goal | | 0 | 0.0 | 0.0 | 0.0 | | | | | | | |

Bayfront Parkway Improvements, PennDOT District 1-0 Preliminary Design Traffic Noise Report

Appendix 7

CD ROM - TNM Files

CE Evaluation Part B, Section A-7

Environmental Evaluation Subject Areas (Socioeconomic Areas)

Where mitigation is incorporated for socioeconomic impacts, add the mitigation commitments to form B: E.

REGIONAL & COMMUNITY GROWTH

Will the project induce impacts (positive and negative) on planned growth, land use, or development patterns for the area? Yes No

If Yes, explain.

Erie is experiencing a shift from an industrial harbor to a place-oriented waterfront filled with recreational, community, tourist/museum, and residential uses. The project is designed to incorporate future development and connectivity to the Erie Bayfront. The project is located within an existing roadway corridor and the proposed work will improve the aesthetic of the surrounding land use.

Is the project consistent with planned growth? Yes No

Basis of this determination:

The project is on the Transportation Improvement Program (TIP).

Will the project induce secondary growth? Yes No

PUBLIC FACILITIES & SERVICES

Will the project induce negative impacts on health and educational facilities; public utilities; fire, police and emergency services; civil defense; religious institutions; or public transportation? Yes No

Does the project incorporate bicycle or pedestrian facilities into the overall design or operations (including construction)? Yes No

Explain. (Complete a bicycle/pedestrian checklist if applicable for this project.)

The overall design of the project includes a multiuse trail network connecting all three intersections on the north side of Bayfront Parkway, in order to enhance bicycle and pedestrian access. Elevated pedestrian walkways will be incorporated to connect the Bayfront area to Downtown Erie. Throughout construction, pedestrians and cyclists will be maintained either around the work area or utilizing detours.

Will the project have a positive impact to the public facilities and services listed above? Yes No

If Yes, explain.

No long-term impacts to surrounding land uses, or socioeconomic displacements/ impacts will result from the project activity. No residences, nonprofit organizations, or community facilities, such as hospitals, parks, places of worship, day care centers, schools, government offices such as post offices, police and fire stations, cultural centers, or special service providers would be displaced or significantly impacted. Project would result in improvements to fire/rescue and police response capability and improved access across and along the Bayfront Parkway.

COMMUNITY COHESION

Will the project induce impacts to community cohesion?

Yes No

If Yes, explain.

The Central Bayfront Parkway Improvements project will have a positive impact on community cohesion by providing improved mobility and safety for pedestrian and bicyclists. These improvements primarily include sidewalks, American with Disabilities Act accommodations, lighting, and multi-use trails.

Will the project induce impacts to the local tax base or property values?

Yes No

ENVIRONMENTAL JUSTICE

Is the project exempt from Detailed Project Level Environmental Justice Analysis per Section 2.1 of Publication 746, Project Level Environmental Justice Guidance? Yes No

Is an Environmental Justice population, as identified in Executive Order 12898, present? ¹

Yes No

If Yes, briefly summarize the methods used to determine the presence of an Environmental Justice Population.

The Environmental Justice analysis for the Central Bayfront Parkway Improvements project was conducted in a three-step process. Steps one and two addressed how the presences of Environmental Justice populations were determined for the project and Step three outlined the analysis of the project to determine if it would have a disproportionately high and adverse human health or environmental effects on the Environmental Justice community. Specifically, the three steps include:

- Step one: Identified the presences and extent of minority and low-income populations within the study area utilizing US census data, field observations, and community outreach to determine if environmental justice populations live within the project area. According to the EPA's EJ Mapper, Environmental justice populations are present with a high percentage of low income population at (75%). Additionally, census data indicates the largest minority populations as Asian (5%), and Hispanic (8%) both with some level of non-English speaking or limited English speaking.
- Step two: Conducted targeted outreach to interview community leaders to obtain an understanding of the community context and how limited financial means and mobility challenges influence the community relative to accessing basic goods and services or employment and higher educational opportunities.
- Step three: Developed project design features and engineering practice for the project that minimizes potential effects on and potentially provide benefits to the environmental justice community. Then, conducted an analysis to determine if the project could cause a disproportionately high and adverse human health or environmental effects on Environmental Justice community.

The three-step investigation determined that transportation improvements to address the project purpose and need will not disproportionately affect minority or low-income populations by the project as determined above.

The project involves improving the existing intersections along the Bayfront Parkway with Sassafras Street Extension, State Street and Holland Street. Substantial realignment or relocation of the roadways relative to EJ populations is not proposed. The proposed improvements will enhance the multimodal connections of the traveling public and the overall operation and efficiency of the intersections. Improved efficiency of the intersections will reduce congestion, which will in turn, reduce local pollution levels. The TIP and LRTP for the Erie Metropolitan Planning Organization (MPO) area, including the Bayfront Parkway Central Corridor Improvement Project, is found to conform to the applicable air quality State Implementation Plan (SIP) or EPA conformity requirements. This finding of conformity positively reflects on the efforts of the Erie MPO and its partners in meeting the regional air quality goals, while maintaining and building an effective transportation system. The TNM 2.5 noise analysis found that no receivers in the study area would approach or exceed FHWA Noise

Abatement Criteria in the design year (2040) with either the no-build or build alternative. Also, no receivers were predicted to have a substantial increase in traffic noise levels as a result of the build alternative. Therefore, the project has no traffic noise impacts according to PennDOT Publication No. 24.

The study found that numerous benefits would result in the community including overall improved mobility, safe bicycle and pedestrian facilities and crossings of SR 4034, safety improvements associated with modern roadway design features. Although environmental justice populations exist within the proposed study area, the project provides benefits to the environmental justice community. There are no displacements of residential or commercial structures as result of this project. Public coordination and involvement will be continued throughout the project span.

Will the project induce disproportionately high and adverse impacts to minority or low income populations? Yes No

No known minority or low-income populations have been identified that would be disproportionately highly and adversely affected by this project as determined above. Therefore, this project has met the provisions of Executive Order 12898.

RIGHT-OF-WAY ACQUISITIONS OR DISPLACEMENTS OF PEOPLE, BUSINESSES OR FARMS

How many parcels require right-of-way acquisition, either partial or total?

12

Describe the extent and locations of acquisitions. Indicate for each acquisition whether it is temporary or permanent.

It is anticipated that approximately 12 parcels will require the acquisition of permanent right-of-way and/or easements. Right-of-way impacts and temporary construction easements will be further evaluated as the design advances.

Will the project require the relocation of people, businesses or farms? Yes No

Will the project induce impacts to economic activity, including employment gains and losses? Yes No

MAINTENANCE AND OPERATING COSTS OF THE PROJECT AND RELATED FACILITIES

Will the project induce increases of operating or maintenance costs? Yes No

If Yes, is the cost justified? Please explain:

The increases in maintenance/operating costs will be due to additional highway lighting, snow plowing, and long-term maintenance of the bridge at State Street and stormwater facilities. This cost is justified to improve pedestrian, bicycle, transit, and passenger vehicle connections of the Erie Central Business District and adjacent neighborhoods to the waterfront property north of the Bayfront Parkway, to reduce crashes as much as practical on the Bayfront Parkway, to improve future congestion to an acceptable level of service or delay, and to improve traffic operations and efficiency.

PUBLIC CONTROVERSY ON ENVIRONMENTAL GROUNDS

Will the project involve substantial controversy concerning social, cultural, or natural resource impacts?

Yes No

AESTHETIC AND OTHER VALUES

Will the project be visually intrusive to the surrounding environment?

Yes No

Will the project include "multiple use" opportunities? ²

Yes No

If Yes, explain.

The overall design of the project includes a multiuse trail network connecting all three intersections on the north side of Bayfront Parkway, in order to enhance bicycle and pedestrian access.

Will the project involve "joint development" activities? ³

Yes No

If Yes, explain.

The Central Bayfront Parkway Improvements project provides greater connectivity between the waterfront and Erie's downtown and residential neighborhoods. The Bayfront Parkway Central Corridor Improvements enhances connections, through intersection improvements, multimodal trail networks, and pedestrian bridges. Increased connectivity between the waterfront and Erie's downtown will provide infrastructure needed to support the growth of the region and local businesses.

-
- Copies of pertinent EJ information, data, analyses, and outreach activities should be placed in the project's Technical Support Data files.**
 - Examples of "multiple use" may include historical monuments, parking areas, bikeways, pedestrian paths, and other shared-use facilities on highway right-of-way.**
 - "Joint development" involves compatible development in conjunction with the highway. Examples could include construction of highway facilities such as highways, turning lanes, interchanges, or lane widening in conjunction with planned residential, shopping, commercial, or industrial facilities.**
-

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

CE Evaluation Part B, Section B

Consistency Determinations

If the project is not consistent with established guidelines or will be made consistent through agreed upon mitigation, describe mitigation measures.

- DEP Coastal Zone Management Plan: Not Applicable Consistent Not Consistent
- DCNR/NPS Wild and Scenic River Management Plan: Not Applicable Consistent Not Consistent
- FEMA Flood Map: Not Applicable Consistent Not Consistent
- Other (describe in Remarks): Not Applicable Consistent Not Consistent

Describe Mitigation

Remarks

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

1. [2020-04-16 CZMA Federal Consistency.pdf](#) (130KB / 0.1MB)



pennsylvania

DEPARTMENT OF ENVIRONMENTAL
PROTECTION

COMPACTS AND COMMISSIONS OFFICE

April 16, 2020

Autumn Kelley
District Environmental Specialist
PennDOT District 1-0
255 Elm Street
P.O. Box 398
Oil City, PA 16301

Re: CZMA Federal Consistency: Bayfront Parkway Central Corridor Improvement Project

Dear Ms. Kelley:

The Pennsylvania Coastal Resource Management (CRM) Program has reviewed the information for the Bayfront Parkway Central Corridor Improvement Project (Project) received in this office on 3/26/2020. The proposed activity includes reconfiguring three major intersections, completing a multiuse trail network, and constructing a pedestrian bridge within the City of Erie, Erie County.

The Project is subject to CRM's federal consistency review under Section 307 of the Coastal Zone Management Act (16 U.S.C. § 1456) and the National Oceanic and Atmospheric Administration regulations at 15 C.F.R. Part 930 Subpart F -- Consistency for Federal License and Permit Activities. CRM reviewed the Project for consistency with its enforceable policies in the *Commonwealth of Pennsylvania Coastal Resources Program (CRMP) Guidance Document* (394-0300-001).

CRM hereby concurs that the proposed activity is consistent with the program's enforceable policies, subject to the following conditions:

1. Prior to construction, the applicant will acquire and maintain compliance with any general permit, individual permit, waiver, or other authorization that may be required under Title 25, Chapter 105 of the Pennsylvania Code (Chapter 105) for any instream work or wetland encroachments.
2. Prior to construction, the applicant will acquire and maintain compliance with Pennsylvania historic preservation programs and activities, including any clearances, concurrences, or other approval mechanism(s) required or requested by the Pennsylvania Historical Museum Commission, State Historic Preservation Office under the Pennsylvania Historical (Code Pa. Code Title 37) and the National Historic Preservation Act of 1966 (16 U.S.C. 470).

This conditional concurrence is subject to the requirements described in 15 C.F.R. § 930.4 (relating to conditional concurrences). If the conditions described above are not acceptable to the applicant, then this letter serves as CRM's objection to the proposed activity. Pursuant to 15 C.F.R. part 930, Subpart H, and within 30 days from receipt of this letter, you may request that the Secretary of Commerce override this objection. In order to grant an override request, the Secretary must find that the activity is either consistent with the objectives and purpose of the Coastal Zone Management Act or is necessary in the interest of national security. A copy of the request and supporting information must be sent to CRM and the federal permitting, licensing, or funding agency. The Secretary may collect fees from you for administering and processing your request.

Under 15 C.F.R. § 930.4(a)(2), the project applicant must notify CRM immediately if the above conditions are unacceptable. Any modifications to the project scope or procedures from those submitted for this consistency review may require the submission of a new or supplemental federal consistency determination pursuant to 15 C.F.R. § 930.46 and/or § 930.51(e).

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH THE UNITED STATES SECRETARY OF COMMERCE WITHIN 30 DAYS OF RECEIPT OF THIS CONDITIONAL CONCURRENCE LETTER IN ACCORDANCE WITH THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION REGULATIONS AT 15 CFR 930.4(a) AND 15 CFR 930, SUBPART H.

Secretarial appeals should be mailed to:

Oceans and Coasts Section
Office of General Counsel
National Oceanic and Atmospheric Administration
1305 East-West Highway, Suite 6111
Silver Spring, Maryland 20910
301-713-2967

Please note that this conditional concurrence pertains only to the federal consistency review requirements under the Federal Coastal Zone Management Act of 1972, as amended, and does not constitute a waiver from further Department of Environmental Protection reviews or permits.

Sincerely,



Matthew D. Walderon
Federal Consistency Coordinator
Coastal Resources Management Program

Cc: Shelby Clark

CE Evaluation Part B, Section C

Public Involvement

Document all public involvement efforts, including but not limited to, meetings, intent to enter letters, and displays. Indicate number of events when applicable. Include in the project technical file: notification of public involvement activities, and the resolution to relevant issues or concerns raised during public involvement.

| | # | Comments |
|--|---|---|
| <input checked="" type="checkbox"/> Plans Display | 2 | See attached public involvement description |
| <input checked="" type="checkbox"/> Public Officials Meetings | 2 | See attached public involvement description |
| <input checked="" type="checkbox"/> Public Meetings | 2 | See attached public involvement description |
| <input type="checkbox"/> Public Hearing | | |
| <input type="checkbox"/> Special Purpose Meetings (specify) | | |
| <input checked="" type="checkbox"/> Section 106 Public Involvement / Consulting Parties (specify) | | See attached public involvement description |
| <input type="checkbox"/> Section 106 Tribal Consultation (specify Tribe(s) contacted and Tribal response) | | |
| <input checked="" type="checkbox"/> Environmental Justice Community Involvement (if applicable) | | Environmental Justice Community was invited to all public meetings and the design team conducted several meetings with local advocacy groups such as Bayfront East Side Taskforce and Our West Bayfront. See attached public involvement description |
| <input checked="" type="checkbox"/> Other information dissemination activities (specify) | | See attached public involvement description |
| <input checked="" type="checkbox"/> Commitment for Further Public Involvement | | PennDOT and the Design Team will conduct additional public outreach efforts and meetings throughout the project design and construction to share design details including aesthetics, construction schedule, and proposed detours. |

Remarks

See attached public involvement description. All public meeting materials are located in the project file.

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

1. [Public Involvement.pdf](#) (149KB / 0.1MB)

BAYFRONT PARKWAY CENTRAL CORRIDOR IMPROVEMENTS LEVEL 2 CATEGORICAL EXCLUSION EVALUATION

Public Involvement

AGENCY COORDINATION

In the process of preparing this document, the federal, state, regional, and local agencies listed below were consulted to obtain pertinent information and to identify key issues regarding potential environmental impacts.

- Pennsylvania Department of Environmental Protection (DEP)
- Pennsylvania Department of Community & Economic Development (DCED)
- Pennsylvania Department of Conservation and Natural Resources (DCNR)
- Pennsylvania Department of Military and Veterans Affairs
- Pennsylvania Fish and Boat Commission
- Pennsylvania Game Commission
- Pennsylvania Historical & Museum Commission (PHMC)
- Pennsylvania State Historic Preservation Office (SHPO)
- DEP Coastal Zone Management Program
- US Fish and Wildlife Service
- City of Erie – Planning
- City of Erie – Fire Department
- City of Erie – Police Department
- Erie Arts and Culture
- Erie Community Foundation
- Erie County – Planning
- Erie County Conservation District (ECCD)
- Erie County Hazardous Materials Response Team
- Erie Downtown Partnership (EDP)
- Erie-Western Pennsylvania Port Authority
- CSX Transportation
- Our West Bayfront (OWB)
- Bayfront Eastside Task Force (BEST)
- Environmental Protection Agency (EPA)
- US Army Corps of Engineers (USACE)

PUBLIC INVOLVEMENT

There has been extensive public involvement as a part of the Bayfront Parkway Central Corridor Improvement Project. Below is an abbreviated list of activities that have been conducted as part of this public involvement. In addition to the public outreach conducted, the Design Team anticipates continued public outreach efforts as the project continues to develop. In light of the current COVID-19 pandemic, the project anticipates the use of *'virtual public involvement'* to keep the public engaged in the project development and as a means to collect feedback from the public.

BAYFRONT PARKWAY CENTRAL CORRIDOR IMPROVEMENTS LEVEL 2 CATEGORICAL EXCLUSION EVALUATION

Previous outreach efforts consisted of:

- Over 60 Stakeholder Meetings
- Online Survey (completed by nearly 500 participants)
- 10 Project Advisory Committee (PAC) Meetings
- 11 Coordinating Committee (CC) Meetings
- 3 Technical Advisory Committee (TAC) Meetings
- 3 Public Meetings (including two 8-hour open house displays)
- Project Website (www.BayfrontParkwayProject.com)
- Facebook Group Page (<https://www.facebook.com/groups/BayfrontParkwayProject/>)

The PAC consists of 80+ individuals and includes project stakeholders, community advocacy groups, public organizations and local officials who are intended to represent a variety of interests, their constituents, and the general public. The CC and TAC are subsets of the PAC and were formed to have more intimate discussions of specific project details and design elements. A complete summary of all public outreach conducted for the project is located in the project file.

Below is an expanded summary of public outreach efforts conducted:

Bayfront Parkway Study (2014 to 2017):

This study focused on defining the transportation needs of the entire Bayfront Parkway corridor and developing a series of conceptual improvements to address these needs. The transportation needs were developed based upon a safety analysis, the existing and future operations, the physical conditions of the Bayfront, and placed an emphasis on engaging the community to better understand how the Bayfront was functioning. Technical studies were performed, an online public survey and stakeholder interviews were conducted, and a Project Advisory Committee (PAC) was formed to assist the study team to understand the existing conditions along the Bayfront, including current and proposed land use, and to develop appropriate conceptual improvements. Below is a brief summary of the major components of the study:

- Stakeholder Interviews – To learn more about the Bayfront Parkway Corridor, the study team conducted a series of Stakeholder Interviews. Over 50 participants were contacted to take part in the interviews representing various interest groups.
- Online Survey – A public survey launched in December 2014 asked participants to identify their priority areas for transportation improvements along the Bayfront Parkway Corridor.
- Project Advisory Committee (PAC) – a total of six (6) PAC meetings were conducted during the study to collect input on the development of the Bayfront Parkway Corridor. The PAC members are intended to represent a variety of interests and concerns that were identified during the stakeholder interview process.
- Public Meeting – a public meeting was conducted in June 2015 to discuss the study to date, present improvement concepts to the PAC, Public Officials and the Public, and gather additional input.

BAYFRONT PARKWAY CENTRAL CORRIDOR IMPROVEMENTS LEVEL 2 CATEGORICAL EXCLUSION EVALUATION

February 2018:

- Meeting held with representatives of the Bayfront East Side Taskforce (BEST). The purpose of the meeting was to discuss the project with BEST in order to understand the goals of BEST and also to solicit input from this community group on how best to reach the residents of this large east side neighborhood. The representative from BEST noted that although there is a diverse community, he did not feel there were any issues with language that PennDOT should be aware of as the public involvement continues. He indicated the Multicultural Community Resource Center (MCRC) helps to assist minorities achieve acceptance, respect, independence, and self-sufficiency in the community and could be a source for outreach. He also stated it would be beneficial to hold public meetings at a venue within the eastside community, and that social media might be effective.
- Meeting held with representatives of Our West Bayfront (OWB). The purpose of the meeting was to discuss the project with OWB in order to understand the goals of OWB and also to solicit input from this community group on how best to reach the residents of this large west side neighborhood. A representative of OWB indicated the Martin Luther King Center is the neighborhood center and is source for outreach.
- Meeting held with the Erie Downtown Partnership (EDP), which represents over 500 employers in the Erie Region. EDP is also represented in the Project Advisory Committee (PAC), and can be contacted with information that will be distributed to the employers represented by EDP as well as their employees.

March 2018:

- The seventh Project Advisory Committee (PAC) meeting was conducted to provide the group with an update of progress made by PennDOT and to provide a forum for the community to inform PennDOT of new and relevant information. The PAC consists of 80+ project stakeholders and community advocacy groups and all were invited and encouraged to attend the PAC meeting.

May 2018:

- Stakeholder meetings held with the Erie ADA and PA Rehab Council to inform the representatives of current status and project development. Input was also collected to ensure the project is meeting the needs of these groups. The representatives provide design considerations for the project and also suggested that we continue to work with the City ADA roundtable group.
- Meeting held with Erie School District. Representatives from the school district provided specific information relative to student access to the various schools in the City. They also explained the bus system utilized by the District, the use of crossing guards, and where students walk to school.

October 2018:

- The 8th Project Advisory Committee (PAC) was conducted to provide the group with an update of progress made by PennDOT, and to provide a forum for the community to inform PennDOT of new and relevant information. Community groups were invited and attended the PAC meeting. The Design Team also engaged the PAC for their input on public outreach for the project. All PAC meeting attendees were provided a questionnaire and were encouraged to provide their

BAYFRONT PARKWAY CENTRAL CORRIDOR IMPROVEMENTS LEVEL 2 CATEGORICAL EXCLUSION EVALUATION

feedback regarding how many meetings should be conducted, the duration/time of the meeting(s), and potential meeting location(s).

December 2018:

- Two (2) Public Plans Displays to present Purpose and Needs and preliminary design alternatives for the Bayfront Parkway Improvement Project were conducted on December 4, 2018 at Emerson Gridley School and on December 11, 2018 at the Russian Orthodox Church of the Nativity Community Center. The Public Plans Displays were held from 12:00pm to 8:00pm, to accommodate variability of personal schedules (school, shift work, family, etc.). The meeting locations were within the neighborhoods immediately adjacent to the project to minimize travel of residents. Also, the meeting locations were on the Erie Mass Transit Authority bus routes (see exhibit) to assist the public without personal vehicles. Facilities were ADA compliant.

All attendees from the public were encouraged to sign in and were provided an opportunity to complete a project questionnaire form. The Public Plans Display was an open house style set up with no formal presentation. Members of the public could arrive at any time, browse the Display Boards and ask questions to any design team member. Many efforts were made to inform the public of these meetings and that the purpose of the meeting was to gather public input. This included:

The meetings were advertised via PennDOT press release, local TV news, and advertisement on the project website, PennDOT's website, and social media (Facebook). Websites were available in different languages and configured for the visually impaired. Hardcopy flyers were distributed and posted at numerous locations. In addition, the flyer was distributed in electronic form to the Bayfront Parkway Project Advisory Committee (PAC), who were strongly encouraged to forward to their constituents, coworkers, family, friends and neighbors.

April 2019:

- PennDOT presented a project update at regularly scheduled community meeting for Our West Bayfront (OWB). A crowd of approximately 80 residents were in attendance. PennDOT provided a summary of the December public meetings and an overview of the project. An open discussion and Q&A session took place after the presentation.

June 2019:

- The 9th Project Advisory Committee (PAC) was conducted to provide the group with an update of progress made by PennDOT, and to provide a forum for the community to inform PennDOT of new and relevant information. Community groups were invited and attended the PAC meeting. The Design Team also provided the PAC with a summary of the feedback received at the December 2018 public meetings and presented the leading alternative which will be presented to the public at an upcoming public meeting in August 2019.

BAYFRONT PARKWAY CENTRAL CORRIDOR IMPROVEMENTS LEVEL 2 CATEGORICAL EXCLUSION EVALUATION

August 2019:

- A Public Plans Display to present the revised Purpose and Needs and leading design alternatives for the Bayfront Parkway Improvement Project was conducted on August 7, 2019 at Gannon University's Yehl Ballroom at the Waldron Campus Center. The open-house Public Plans Display was held from 4:00pm to 7:00pm with formal presentations at 4:30pm and 6:00pm, each followed by an open discussion and Q/A session. The meeting location was centrally located to minimize travel of residents. Also, the meeting location was on the Erie Mass Transit Authority bus routes to assist the public without personal vehicles, and free parking was made available in an adjacent garage. The facility was also ADA compliant.

All attendees from the public were encouraged to sign in and were provided an opportunity to complete a project questionnaire form. The Public Plans Display was an open house style set up with various display boards in the back of the room. Before, between, and after the formal presentations, members of the public could browse the display boards and ask questions to any design team member. Many efforts were made to inform the public of the meeting and that the purpose of the meeting was to gather public input. This included:

The meeting was advertised via PennDOT press release, local TV news, and advertisement on the project website, PennDOT's website, and social media (Facebook). Websites were available in different languages and configured for the visually impaired. Hardcopy flyers were distributed and posted at numerous locations. In addition, the flyer was distributed in electronic form to the Bayfront Parkway Project Advisory Committee (PAC), who were strongly encouraged to forward to their constituents, coworkers, family, friends and neighbors.

August 2019:

- The Design Team coordinated with representatives of Our West Bayfront (OWB) and the First Presbyterian Church, in order to participate in the annual First Covenant Community Block Party which was held on August 28, 2019 in Erie's west neighborhood. This annual event is open to anyone, and was scheduled from 6:00pm to 8:00pm and attracted many local residents, estimated at 500 people. The Design Team had display boards depicting the revised Purpose and Needs and the leading alternative and were on hand to discuss the project and answer questions. In addition, members of the public were encouraged to complete a project questionnaire form to document their feedback.

September 2019:

- The Design Team coordinated with representatives of the Bayfront East Side Taskforce (BEST), in order to participate in their quarterly neighborhood watch meeting on September 9, 2019 at 5:30pm at the Polish Falcons Nest 610 located in Erie's East neighborhood. It is anticipated approximately 25 people were in attendance. The Design Team had display boards depicting the revised Purpose and Needs and the leading alternative and were on hand to discuss the project and answer questions. In addition, members of the public were encouraged to complete a project questionnaire form to document their feedback.

BAYFRONT PARKWAY CENTRAL CORRIDOR IMPROVEMENTS LEVEL 2 CATEGORICAL EXCLUSION EVALUATION

October 2019:

- PennDOT representatives were invited by Our West Bayfront (OWB) to attend their regularly scheduled community meeting to be conducted on October 1, 2019. It is anticipated approximately 75 residents were in attendance. PennDOT representative had display boards depicting the revised Purpose and Needs and the leading alternative and were on hand to discuss the project and answer questions. In addition, members of the public were encouraged to complete a project questionnaire form to document their feedback.

April 2020:

- PennDOT announced the preferred alternatives for the project by means of a press release and encouraged the public and project stakeholders to visit the project website to provide their feedback. In light of the COVID-19 pandemic, the project anticipates the use of this '*virtual public involvement*' to continue to keep the public engaged in the project development and as a means to collect feedback from the public.

Anticipated Future Public Involvement:

- PennDOT and the Design Team anticipates conducting additional public outreach efforts and meetings throughout the project design and construction to share design details including aesthetics, construction schedule, and proposed detours.

CE Evaluation Part B, Section D

Permits Checklist

Check all permits required for permanent and temporary actions.

No Permits Required

United States Army Corps of Engineers Section 404 and/or Section 10 Permit

Individual Nationwide PASPGP

DEP Waterway Encroachment (105) Permit

Standard Small Project General Other

DEP 401 Water Quality Certification

Coast Guard Permit

NPDES Permit

General Individual Exempt

Other Permits

Other Permits Information

Pennsylvania Department of Environmental Protection Waterway 401 Water quality permits will be required for de minimus wetland impacts at Holland Street and aerial wetland crossings at the Holland Street pedestrian bridge, an Army Corps of Engineers PASPGS-5 authorization will serve as 404 Clean Water Act approval.

CSX railroad improvements will not require a NPDES permit as coordination with Erie County Conservation District and Pennsylvania Department of Environmental Protection agreed all track work is considered maintenance activity.

An Individual NPDES permit will be required for Bayfront Parkway and intersection improvements due to the potential for contaminated materials to be encountered by construction activities located within the former GAF Building Materials Manufacturing Corporation (GAF) property and CSX Railroad, located adjacent to the intersection of the Bayfront Parkway and Sassafras Street Extension.

Additional Information

Remarks, Footnotes, Supplemental Data

AN

Attachments

CE Evaluation Part B, Section E

Resources To Be Avoided and Mitigation Measures

The mitigation measures summarized in this section should be incorporated into the project's design documents. In order to track and transfer mitigation commitments through the project development process, [Environmental Commitments & Mitigation Tracking System \(ECMTS\)](#) documentation should be prepared and submitted to the appropriate channels, including the Contract Management Unit, as the project moves through Final Design and Construction. Mitigation is automatically completed for the resource specific areas in this document. Non-resourced specific mitigation should be added to this page for documentation purposes.

Mitigation measures are COMMITMENTS of both the Department and FHWA and are agreed to and approved by the District Executive for Level 1 CEEs and by the Division Administrator of FHWA for Level 2 CEEs.

Impacts and mitigation commitments are based on Preliminary Design and may change as the project moves through Final Design and Construction. Final design information and final mitigation commitments are included in the ECMTS documentation.

1. Specific Permanent Impacts

Streams (B:A-1): *linear feet*

Wetlands (B:A-1): *0.015 acres*

State Gamelands (B:A-2): *acres*

2. Specific Mitigation Commitments

STREAMS (B:A-1)

Project Specific Restoration/Enhancement: *linear feet*

Advanced Compensation/Banking: *linear feet*

Other:

Mitigation Remarks:

WETLANDS (B:A-1)

Project Specific Replacement/Construction: *acres*

Banking: *acres*

Bank to be Debited:

Restoration: *acres*

Preservation: *acres*

In-Lieu Fee: *whole dollars*

Other:

Mitigation Remarks: Compensatory mitigation is not required for de minimus impacts. High-visibility protective fencing will be placed around wetland not to be disturbed to protect against accidental encroachment during construction.

STATE GAMELANDS (B:A-2)

Project Specific Replacement: *acres*

Banking: *acres*

Bank to be Debited:

Other:

Mitigation Remarks:

COMMITMENTS FOR FURTHER PUBLIC INVOLVEMENT (B:C)

PennDOT and the Design Team will conduct additional public outreach efforts and meetings throughout the project design and construction to share design details including aesthetics, construction schedule, and proposed detours.

3. Other Mitigation Commitments

RESOURCE SPECIFIC

Coastal Zone (B:A-1)

1. Prior to construction, the applicant will acquire and maintain compliance with any general permit, individual permit, waiver, or other authorization that may be required under Title 25, Chapter 105 of the Pennsylvania Code (Chapter 105) for any instream work or wetland encroachments.
2. Prior to construction, the applicant will acquire and maintain compliance with Pennsylvania historic preservation programs and activities, including any clearances, concurrences, or other approval mechanism(s) required or requested by the Pennsylvania Historical Museum Commission, State Historic Preservation Office under the Pennsylvania Historical (Code Pa. Code Title 37) and the National Historic Preservation Act of 1966 (16 U.S.C. 470).

Soil Erosion & Sedimentation (B:A-1)

An Erosion and Sediment Control Plan will be implemented as part of the project. Erosion and sediment pollution control Best Management Practices (BMP) are designed in accordance with the Pennsylvania Department of Environmental Protection (PADEP) Erosion and Sediment Pollution Control Program Manual.

Vegetation (B:A-2)

In accordance with PennDOT Publication 756 - Invasive Species Best Management Practices, the project will develop best management practices for implementation during design and construction to minimize the spread of invasive species such as Japanese knotweed (*Fallopia japonica*) and tree-of-heaven (*Ailanthus altissima*). Anticipated methods will include minimizing soil disturbances, developing species-specific control plans (as necessary) to include in the erosion and sedimentation plans, stabilizing disturbed areas quickly, utilizing appropriate seed mixes, keeping equipment clean to avoid spreading invasive species seeds, and spraying as needed to control invasive species during construction. PennDOT will coordinate to include the appropriate seed mix to promote the pollinator species (bees, butterflies, etc.).

Parks & Recreation Facilities (B:A-2)

Trail access and use will be maintained through staged construction, speed limit signs, stop signs, and flagging, as necessary for trail users. Signage will be incorporated to ensure that users are notified of upcoming construction. Fencing will be placed to protect trail users from adjacent construction activities. If necessary, temporary detours will be utilized. The contractor will be required to install protective shielding near the trails during construction in order to prevent materials and other debris from falling within the limits of the trail.

Construction related mitigation: Fencing will be placed to protect the trail and users from adjacent construction activities. Clearly delineate any construction areas adjacent to the trails to ensure that only planned construction activities occur. Coordination with the Western Pennsylvania Port Authority will be continuous throughout the project duration. The duration of temporary use on the Great Lakes Sea Way Trail and Bayfront Promenade Trails will last less than the construction period for the Bayfront Parkway Central Corridor Improvement Project. An erosion and sediment pollution control plan will be implemented to control and maintain earth work activities. The Great Lakes Sea Way Trail and Bayfront Promenade Trail will be fully restored after construction.

Hazardous or Residual Waste Sites (B:A-2)

An Environmental Covenant exists for the former GAF site and CSX Railroad (Sassafras Street area) that requires PADEP and Holder notification of any planned changes in land use or ownership for any portion of the former sites. PennDOT will coordinate any required Environmental Covenant changes as part of right-of-way activities.

After the design plans for the project are completed, a Waste Management Plan (WMP), and a Site Specific Health and Safety Plan (SSHASP) should be prepared to address soil, sediment, groundwater management, environmental health, and worker safety during all project construction activities. The WMP should address all known or suspected contaminants that may be associated with the identified sites of potential concern.

Within CSX Railroad, and former GAF property any earthwork activities will be required to be conducted in accordance with their Environmental Covenant.

PennDOT has determined a Phase II is not necessary and mitigation will be handled with including specifications in the construction contract to inform contractor how to test, handle and dispose of any contaminated material encountered.

Section 4(f) Resources (B:A-5)

Section 4(f) Temporary use:

The Great Lakes Sea Way Trail: 1400 LF of Trail added to incorporate trail user safety.

Trail access and use will be maintained through staged construction, speed limit signs, stop signs, and flagging, as necessary for trail users. Signage will be incorporated to ensure that users are notified of upcoming construction. Fencing will be placed to protect section 4(f) resource and users from adjacent construction activities. If necessary temporary detours will be utilized to ensure trail access, use and mobility remain operational for trail users. The contractor will be required to install protective shielding near the trails during construction in order to prevent materials and other debris from falling within the limits of the trail.

The project is designed to minimize any tree clearing and shrub removal to the greatest extent practical. All earth disturbance will be revegetated to ensure no negative changes to the viewshed.

Construction related mitigation: Fencing will be placed to protect the trail and users from adjacent construction activities. Clearly delineate any construction areas adjacent to the Section 4(f) Resources to ensure that only planned construction activities occur. Coordination with the Western Pennsylvania Port Authority will be continuous throughout the project duration. The duration of temporary use on the Great Lakes Sea Way Trail will last less than the construction period for The Bayfront Parkway Central Corridor Improvement Project. An erosion and sediment pollution control plan will be implemented to control and maintain earth work activities. The Great Lakes Sea Way Trail will be fully restored after construction.

The Bayfront Promenade Trail : 2 LF of Trail added to incorporate trail user safety.

Trail access and use will be maintained through staged construction, speed limit signs, stop signs, and flagging, as necessary for trail users. Signage will be incorporated to ensure that users are notified of upcoming construction. Fencing will be placed to protect section 4(f) resource and users from adjacent construction activities. If necessary temporary detours will be utilized to ensure trail access, use and mobility remain operational for trail users. The contractor will be required to install protective shielding near the trails during construction in order to prevent materials and other debris from falling within the limits of the trail.

The project is designed to minimize any tree clearing and shrub removal to the greatest extent practical. All earth disturbance will be revegetated to ensure no negative changes to the viewshed.

Construction related mitigation: Fencing will be placed to protect the trail and users from adjacent construction activities. Clearly delineate any construction areas adjacent to the Section 4(f) Resources to ensure that only planned construction activities occur. Coordination with the Western Pennsylvania Port Authority will be continuous throughout the project duration. The duration of temporary use on the Bayfront Promenade Trail will last less than the construction period for The Bayfront Parkway Central Corridor Improvement Project. An erosion and sediment pollution control plan will be implemented to control and maintain earth work activities. The Bayfront Promenade Trail will be fully restored after construction.

Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse:

Work on historic properties would be limited to construction of the multi-modal bridge at the Soldiers' and Sailors' Home over the railroad, which is being coordinated with the PA Department of Military and Veterans Affairs. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. The project is designed to

minimize tree clearing and shrub removal to the greatest extent practical. All earth disturbance will be revegetated to ensure no negative changes to the viewshed. Access to the cemetery will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction.

Temporary Construction Access: Construction materials will be transported through the Pennsylvania Soldiers' and Sailors' property using existing driveways accommodated with flagging operations to ensure user safety. Temporary Construction access will not result in impacts to historic features on the Pennsylvania Soldiers' and Sailors' property.

Construction related mitigation: Clearly delineate any construction areas adjacent to the Section 4(f) Resources to ensure that only planned construction activities occur. Proposed work associated with the section 4(f) property will be constructed separately from The Bayfront Parkway Central Corridor Improvement Project. Duration of the construction for the Pennsylvania Soldier's and Sailor's Home Railroad Bridge is not to exceed construction of the overall Bayfront Parkway Central Corridor Improvement Project. An erosion and sediment pollution control plan will be implemented to control and maintain earth work activities. The Pennsylvania Soldiers' and Sailors' Home / Anthony Wayne Blockhouse property will be fully restored after construction.

Section 4(f) Non-Applicability/No Use Checklist

Erie Waterworks, Chestnut Street Pump House: No proposed work will be completed within the Section 4(f) property, No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. Operations at Chestnut Street Pump House will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction. Clearly delineate any construction areas adjacent to the Chestnut Street Pump House to ensure that only planned construction activities occur.

Dobbins Lane: No proposed work will be completed within the Section 4(f) property specifically, the roadway pavers that constitute the historic resource will not be disturbed. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. Access to Dobbins Lane will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction. Fencing will be placed to protect Dobbins Lane and users from adjacent construction activities. Clearly delineate any construction areas adjacent to Dobbins Lane to ensure that only planned construction activities occur.

The Pennsylvania Veterans' Memorial Cemetery: Work on historic properties would be limited to construction of the multi-modal bridge at the Soldiers' and Sailors' Home over the railroad, which is being coordinated with the PA Department of Military and Veterans Affairs. No wasting, staging, storing, or stockpiling of construction materials or equipment would be allowed to impact historic features. Access to the cemetery will be maintained. Signage will be incorporated to ensure that users are notified of upcoming construction. Clearly delineate any construction areas adjacent to the Veterans Memorial Cemetery to ensure that only planned construction activities occur.

NON-RESOURCE SPECIFIC

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

CE Evaluation Part B, Section F

Scoping Field View

Date of Scoping Field View: 02/22/18

Attendee List (Name, Organization)

See attached meeting minutes under Gen Info page

Anticipated NEPA Documentation

As supported by the information available at the time of scoping, this project appears to qualify for a Level 2 Categorical Exclusion in accordance with 23 CFR Part 771.117(d), Item Number Other.

Remarks Provide a brief description of NEPA documentation requirements agreed to at the field view.

Minutes attached under Gen Info

Scoping Field View Documentation Concurrences

Print this page, gather signatures, scan and attach to this document.

County: Erie **SR/Sec:** 4034/A01 **MPMS:** 108952 **Project:** Central Bayfront Project

| | | | |
|-----------------------------------|-------|--------------------------------|-------|
| _____ | _____ | _____ | _____ |
| District Environmental Manager | Date | District Project Manager | Date |
| _____ | _____ | _____ | _____ |
| Asst. District Executive - Design | Date | BOD Project Dev. Engineer | Date |
| _____ | _____ | _____ | _____ |
| Authorized FHWA Representative | Date | Authorized FHWA Representative | Date |

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

CE Evaluation Part C

CEE Approval Processing

Section B - Level 2 CEE Approval

As supported by the attached Categorical Exclusion Evaluation, this project qualifies for a Level 2 Categorical Exclusion in accordance with 23 CFR 771.117(d), Item Number Other . Furthermore, the project will not result in any of the four circumstances cited in 23 CFR 771.117(b).

County: Erie **SR/Sec:** 4034/A01 **MPMS:** 108952 **Project:** Central Bayfront Project

Prepared By: Mark Fedosick
Title: Environmental Manager **Date:** 04/22/20

Approved By: Jonathan Crum **Date:** 06/15/20
Title: Federal Highway Administration

The following individuals concurred with the statement above.

District Environmental Manager: Autumn Kelley **Date:** 06/09/20

Assistant District Executive for Design: Brian A McNulty **Date:** 06/10/20

Additional Information

Remarks, Footnotes, Supplemental Data

Attachments