MEMORANDUM OF AGREEMENT AMONG THE FEDERAL RAILROAD ADMINISTRATION, MARYLAND TRANSIT ADMINISTRATION, THE MARYLAND STATE HIGHWAY ADMINISTRATION, AND THE MARYLAND STATE HISTORIC PRESERVATION OFFICER PURSUANT TO 36 CFR 800 REGARDING THE BALTIMORE WASHINGTON INTERNATIONAL (BWI) RAIL STATION IMPROVEMENTS AND FOURTH TRACK PROJECT FROM GROVE INTERLOCKING TO WINANS INTERLOCKING, ANNE ARUNDEL AND BALTIMORE COUNTIES, MARYLAND

WHEREAS, the Maryland Transit Administration (MTA) proposes to replace the Baltimore Washington International (BWI) Rail Station, add a third platform, and install approximately nine miles of a fourth mainline track along the Northeast Corridor between Grove Interlocking in Anne Arundel County and Winans Interlocking in Baltimore County, Maryland ("the Undertaking"); and

WHEREAS, the MTA entered into Agreement Number FR-HSR-0011-10-01-00 in the amount of $9,400,000.00 with Federal Railroad Administration (FRA) on August 1, 2010 and which has subsequently been amended; and

WHEREAS, the FRA established the Undertaking's Area of Potential Effects (APE) as shown on Attachment A; and

WHEREAS, FRA has determined that the Undertaking will have an adverse effect pursuant to 36 CFR 800, the regulations implementing Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), on Bridge No. 0207500 (Maryland Inventory of Historic Places [MIHP] No. AA-2125), also known as the Reece Road Bridge, which carries MD 174 over the Baltimore & Potomac Railroad (now Amtrak) and is eligible for listing in the National Register of Historic Places (NRHP); and

WHEREAS, FRA has determined that the Undertaking may have an adverse effect on archeological sites 18AN29B, 18AN1478, and 18AN1482 within the APE that are potentially eligible for the NRHP but have not yet been evaluated; and

WHEREAS, FRA and MTA have consulted with the Maryland State Historic Preservation Office (MD SHPO) and agreed to enter into this Memorandum of Agreement (MOA) to resolve the adverse effects of the Undertaking pursuant to 36 CFR 800; and

WHEREAS, MTA has participated in the consultation, has responsibilities for implementing stipulations under this MOA, and has been invited to be a signatory to the MOA pursuant to 36 CFR §800.6(c)(2); and

WHEREAS, the Maryland State Highway Administration (SHA) owns the affected historic property Bridge No. 0207500, has been consulted on the effects of this Undertaking, and has been invited to be a signatory to the MOA pursuant to 36 CFR §800.6(c)(2) ; and

WHEREAS, FRA invited the following tribal parties to consult in the Section 106 process: The Delaware Nation, Delaware Tribe of Indians, Eastern Shawnee Tribe, Oneida Indian Nation, Onondaga Nation, Saint Regis Mohawk Tribe, Stockbridge Munsee Community of Wisconsin and Tuscarora Nation. The Oneida Indian Nation responded requesting consulting party status. The Eastern Shawnee Tribe and The Delaware Nation responded but did not request consulting party status. The Delaware Nation requested to be informed should unanticipated prehistoric archeological sites be discovered.

WHEREAS, FRA has identified the following parties to consult in the Section 106 process regarding the effects of the Undertaking on historic properties: the Oneida Indian Nation, Baltimore County Office of Planning, Historic Preservation Division, and Anne Arundel County Office on Planning and Zoning, Cultural Resources Division;

WHEREAS, FRA and MTA sought and considered the views of the public regarding this Undertaking through the combined public involvement process with the National Environmental Policy Act (NEPA) process, including newspaper advertisements, post card mailings, and a public meeting held on May 12, 2015; and

WHEREAS, FRA and MTA notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect determination and the ACHP declined to participate in the consultation in a letter dated June 4, 2012; and

WHEREAS, the fulfillment of the terms of this MOA will satisfy the responsibilities of MTA and any other Maryland state agency under the requirements of the Maryland Historical Trust Act of 1985, as amended, State Finance Procurement Article §§5A-325 and 5A-326 of the Annotated Code of Maryland, for the components of the Undertaking that require licensing, permitting, and/or funding actions from Maryland State agencies;

NOW, THEREFORE, FRA, MD SHPO, SHA, and MTA (collectively the Signatories) agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties and that these stipulations shall govern the Undertaking and all its parts until this MOA expires or is terminated.

STIPULATIONS

FRA and MTA shall ensure that the following stipulations are implemented:

I. BRIDGE No. 0207500 (MIHP No. AA-2125) - RECORDATION

A. Recordation

MTA will complete an updated MIHP form, including black and white photographs sufficient to portray the bridge's elevations, its architectural and engineering details and its context in order to provide an accurate record of the bridge and its setting. MTA will complete photographs for the MIHP form according to the photographic documentation requirements outlined on pages 36-38 of the Standards and Guidelines for Architectural and Historical Investigations in Maryland (Maryland Historical Trust 2000) or Appendix E – Guidelines for Digital Images in the Trust's Guidelines and Resources for Compliance-Generated Determinations of Eligibility (Maryland Historical Trust 2009). FRA and SHA will review and approve all materials.

B. Existing Records

MTA will coordinate with the SHA architectural history staff to identify and obtain copies of plans or documentation related to Bridge No. 0207500. MTA will use the records to complete the updated MIHP documentation for the bridge.

C. Review and Acceptance

MTA will provide a recordation package, including the updated MIHP, photographs, and, where appropriate, other records or documentation identified through coordination the SHA, to the FRA and SHA for a 30-day review and comment period prior to submission to MD SHPO for their review. FRA and MTA will submit the final version of the required documentation to MD SHPO for review and acceptance prior to any demolition work, in accordance with the steps described in Stipulation VII.

II. ARCHEOLOGICAL SITES 18AN29B, 18AN1478 and 18AN1482 – EVALUATION AND TREATMENT

A. Site Evaluations: MTA will complete Phase II investigations to determine the NRHP eligibility of archeological sites 18AN29B, 18AN1478 and 18AN1482 that may be impacted by the Undertaking prior to completing 100 percent design. MTA will complete the investigations in consultation with MD SHPO and in accordance with 36 CFR 800.4(c) and will assure that all work adheres to the relevant performance standards in Stipulation VIII.B of this MOA. MTA, in coordination with FRA, will provide the results of any such evaluation

efforts to MD SHPO and consulting parties for review and comment in accordance with the steps described in Stipulation VII.

B. Treatment of NRHP Eligible Archeological Sites:

1. Consultation to Resolve Adverse Effects

If FRA, MTA and MD SHPO determine that any of the sites evaluated pursuant to Stipulation II.A are eligible for listing in the NRHP, the MTA, in coordination with FRA, will develop a plan for its avoidance, protection, recovery, or destruction without recovery, and public education/interpretation in consultation with MD SHPO and consulting parties. MTA shall submit a treatment plan to MD SHPO and FRA for a 30-day concurrent review period. Unless MD SHPO objects within 30 days after receipt of the plan, MTA will implement the treatment plan prior to the start of the project ground disturbance activities within or adjacent to the site area.

2. Data Recovery

Should data recovery investigations be selected as the treatment measure, MTA will ensure that a data recovery plan is developed in consultation with MD SHPO, FRA and consulting parties consistent with the performance standards outlined in Stipulation VIII.B. The plan will specify, at a minimum:

- The portions of the property where mitigation will occur;
- Any portions of the property that will be destroyed without data recovery;
- The research questions to be addressed through data recovery with a description of the relevance and importance;
- The research and field methods to be used, with the explanation of their relevance to the research questions;
- The methods to be used in analysis, data management and dissemination of data including a schedule;
- The proposed disposition of recovered materials and records;
- Proposed methods for involving and informing the public;
- A proposed schedule for the submission of progress reports to the MTA and MD SHPO; and
- Concepts for a public interpretive component (which may include but not be limited to interpretive displays within the terminal or station area).

MD SHPO shall review and comment on such plan and will be governed by the process set forth in Stipulation VII that follows. MTA will be responsible for the implementation of such a plan, as appropriate.

MTA and MD SHPO will meet on-site to evaluate the success of the fieldwork phase of any data recovery program, near the end of the fieldwork effort. MTA shall submit a management summary to MD SHPO documenting the completion of fieldwork for 15-day review. Upon receipt of written concurrence from MD SHPO, the MTA may proceed with the construction activities in the site areas concurrent with the completion of the remaining laboratory, analysis and reporting phases of the data recovery work.

III. THE HIGGINS SITE (18AN489) – AVOIDANCE AND PROTECTION

FRA and MTA will ensure that the Higgins Site (18AN489), which is eligible for the NRHP and situated within and immediately adjacent to the APE, is protected and avoided by any construction related activities, equipment, or other potential ground disturbance to ensure the safeguarding of this highly significant site. MTA will implement the following protective measures before and throughout construction:

a. Coordination with construction personnel before and during construction to assure archeological site protection.
b. Archeological site 18AN489, will be marked on the plans as a "Restricted Access Area," and depicted on design plans for the Undertaking. All construction activities, including ancillary activities, will avoid the archeological site. No access, construction activities, staging, storage, or work of any kind is permitted within the orange safety fencing that MTA will require the contractor to install around the protection area designated on the plans. MTA will require the contractor to place the orange safety fencing as a first item of construction, prior to any construction or staging activities. The purpose of the fencing is to protect and avoid all disturbance within the protection area.
c. Protective fencing will not include any excavation within the archeological site limits and MTA will require the contractor to limit any ground disturbance during its installation. MTA will require the contractor to install orange safety fencing along the perimeter of the final limits of disturbance adjacent to the site with hand driven stakes (Attachment B). Archeological staff from MD SHPO and SHA will review the fencing plan prior to installation.

d. Prior to construction, MTA will meet with MD SHPO and SHA archeological staff to verify the final placement of the protective fencing based on the 100 percent design.
e. MTA will have a qualified archeologist perform onsite monitoring during all construction activities in the vicinity of the site.
f. MTA will design and install the permanent retaining walls to prevent future slumping of intact soil stratigraphy resulting from excavation of the hillside during construction.

IV. ARCHEOLOGICAL SITES 18AN1209 and 1480 - PROTECTION

a. MTA will implement avoidance provisions to protect archeological sites 18AN1209 and 18AN1480, which have not been evaluated for their NRHP eligibility and are situated adjacent to the limits of disturbance based on the current design drawings. MTA will ensure that archeological site 18AN1209 and 1480 is marked on the plans as a "Restricted Access Area," and depicted on design plans for the Undertaking.
b. All construction activities, including ancillary activities, will avoid the archeological sites. MTA will not permit any access, construction activities, staging, storage, or work of any kind within the orange safety fencing, which MTA will require the contractor to install around the protection area designated on the plans. MTA will require the contractor to place the orange safety fencing as a first item of construction, prior to any construction or staging activities.
c. The purpose of the fencing is to protect and avoid all disturbance within the protection area. Protective fencing will not include any excavation within the archeological site limits and MTA will require the contractor to limit any ground disturbance during its installation. MTA will require the contractor to install orange safety fencing along the perimeter of the final limits of disturbance adjacent to the site with hand driven stakes (Attachment B). Archeological staff of SHA will review the fencing plan prior to installation.

V. UNANTICIPATED DISCOVERIES FOR ARCHEOLOGICAL PROPERTIES

In the event of any unanticipated discoveries of potential historic properties during construction, MTA will notify MD SHPO and FRA within 48 hours after the discovery, and will immediately halt all construction involving subsurface disturbance in the area of the discovered resource and in the area immediately surrounding the resource where further subsurface deposits may reasonably be expected to occur. MTA

and MD SHPO, or an archeologist approved by MD SHPO, will inspect the work site without unreasonable delay and determine the parameters of the affected archeological site. Construction work may then continue in the project area outside of those parameters.

Within fifteen (15) working days of first notifying MD SHPO and FRA, MTA, in consultation with MD SHPO and FRA, will assess the NRHP eligibility of the resource. If FRA in consultation with MD SHPO determines that the resource is eligible for the NRHP, FRA in consultation with the Signatories to this MOA will consider amending the MOA to ensure that the Signatories implement the appropriate avoidance, protection, and treatment measures.

VI. DESIGN DEVELOPMENT, ALIGNMENT MODIFICATIONS AND ANCILLARY ACTIVITIES

The Undertaking may result in unforeseen effects on other historic properties and archeological sites due to changes made during design development, alignment modifications, or as a result of associated ancillary activities including, but not limited to, construction staging areas, stormwater management facilities, wetland mitigation areas, reforestation areas, environmental stewardship activities, or other actions. Should such activities be added for which cultural resources studies or assessments have not been completed, MTA will consult with FRA, MD SHPO and consulting parties, including, as appropriate, any newly identified consulting parties that have an interest as a result of the additions or changes, and implement all required cultural resources studies in accordance with the applicable professional standards in Stipulation VIII.B and with the following procedures:

A. Identification

MTA, in coordination with FRA, will review any additions or changes to the Undertaking and implement identification investigations as necessary to identify any historic properties that the additions or changes to the Undertaking may impact. MTA will provide all completed information to MD SHPO, FRA, and consulting parties under this MOA for review and comment in accordance with the steps described in Stipulation VII.

B. Evaluation

MTA will evaluate all cultural resources identified in the areas inventoried under Stipulation II.A in accordance with 36 CFR 800.4(c) to determine their eligibility for the NRHP. MTA shall provide the results of any such evaluation efforts to MD SHPO, FRA, and consulting parties, for review and comment in accordance with the steps described in Stipulation VII.

C. Treatment

Should any property eligible for inclusion in the NRHP be identified under Stipulation II.A, MTA will make a reasonable and good faith effort to avoid adversely impacting the resources by realigning or modifying the Undertaking. If adverse effects are unavoidable, MTA will consult with FRA, MD SHPO, and consulting parties in accordance with 36 CFR 800.6 to develop and implement appropriate treatment options. MTA will perform cultural resources work in accordance with the relevant professional standards in Stipulation VIII.A.

VII. DOCUMENT AND DESIGN REVIEW

During the implementation of this MOA, MTA, in coordination with FRA, will provide MD SHPO, and the other consulting parties with the opportunity to review and comment on appropriate documents, reports, and design plans as specified in the stipulations throughout the MOA. In general, review periods will encompass a timeframe not to exceed 30 calendar days from receipt of the item for review, unless otherwise specified in the MOA.

A. MD SHPO shall provide comments to MTA and FRA regarding any plan or document submitted pursuant to this MOA, as promptly as possible, but not to exceed 30 calendar days of the receipt of such revisions.

B. If MD SHPO does not submit comments in writing within 30 calendar days of the receipt of any such submissions, MTA may assume MD SHPO acceptance of the submitted document.

C. If MD SHPO objects within 30 calendar days of the receipt of any submissions, then FRA, MTA, and MD SHPO shall consult expeditiously in an effort to resolve the objection.

D. If FRA and MTA cannot resolve MD SHPO, objections, and if further consultation with MD SHPO is deemed unproductive by any party, then the Signatories shall adhere to the dispute resolution procedures detailed under Stipulation X.

E. FRA, MTA, and MD SHPO acknowledge that the timeframes set forth in this stipulation will be the maximum allowable under normal circumstances. In exigent circumstances (such as when construction activities have been suspended or delayed pending resolution of the matter), each Signatory agrees to expedite their respective document review and dispute resolution obligations.

VIII. PROFESSIONAL STANDARDS

A. Qualifications

MTA will ensure that all cultural resources work performed pursuant to this MOA is carried out by or under the direct supervision of personnel meeting The Secretary of the Interior's Professional Qualifications Standards (48 FR 44716) (hereinafter cited as "qualifications") with experience and background in History, Architectural History, Historic Architecture, and Archeology, as appropriate. These personnel shall perform or directly supervise all cultural resources work pursuant to this MOA.

B. Standards and Guidelines

MTA will complete all cultural resources investigations and preservation work executed as part of this MOA according to the following accepted professional standards and guidelines:

1. Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716; 1983 and successors);
2. Standards and Guidelines for Archeological Investigations in Maryland (Shaffer and Cole 1994);
3. Collections and Conservation Standards, Technical Update No. 1 of the Standards and Guidelines for Archeological Investigations in Maryland (Maryland Historical Trust 2005);
4. Standards and Guidelines for Architectural and Historical Investigations in Maryland (Maryland Historical Trust 2000);
5. General Guidelines for Compliance-Generated Determinations of Eligibility and Standards and Guidelines for Architectural and Historical Investigations in Maryland (Maryland Historical Trust, 2002);
6. Advisory Council on Historic Preservation—Section 106 Archeology Guidance (ACHP 2007);
7. Recommended Approach for Consultation on Recovery of Significant Information for Archeological Sites, ACHP 2007 (64 FR 27085-27087);
8. Advisory Council on Historic Preservation Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects, ACHP 2007; and
9. Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68).

C. Curation

All materials and records resulting from archeological investigations conducted for the Undertaking will be curated in accordance with 36 CFR 79 at the Maryland Archeological Conservation Laboratory (MAC Lab), unless clear title, cannot be obtained. MTA will consult with MD SHPO regarding the appropriate disposition of any materials or records not proposed for curation at the MAC Lab.

IX. ONGOING COORDINATION AND OVERSIGHT

MTA and MD SHPO will regularly consult to review implementation of the terms of this MOA. FRA and MD SHPO will monitor activities carried out pursuant to this MOA. MTA will cooperate with the Signatories in carrying out their monitoring efforts.

X. DISPUTE RESOLUTION

A. Objections by the Signatories

Should any of the Signatories to this MOA object in writing to FRA within 30 days of receipt of any plans or actions proposed pursuant to this MOA, FRA shall first consult with the objecting party to resolve the objection. If FRA determines that such objection cannot be resolved through such consultation, FRA will within a 30-day time period:

1. Forward all documentation relevant to the objection, including FRA's proposed resolution, to the ACHP and request that ACHP review and provide comments on the objection to FRA and the other Signatories within 30 days of provision of documentation.

2. If the ACHP does not provide its advice regarding the objection within the 30-day time period, FRA may make a final decision on the dispute and proceed accordingly.

3. FRA shall prepare a written response describing its final decision on the dispute that takes into account any timely comments regarding the dispute from the ACHP, Signatories, and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.

4. FRA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remains unchanged.

B. Objections by Consulting Parties and the Public

At any time during the implementation of this MOA, should a consulting party or member of the public object in writing to MTA pertaining to this

MOA or the effect of the Undertaking on historic properties, MTA will consult with FRA, the objector, Amtrak, and the Signatories to this agreement, as needed. After considering these discussions and based on joint recommendations from MTA, MD SHPO, and FRA shall account for and resolve the objection.

XI. OTHER

A. Contact Information

For purposes of notices and consulting pursuant to this MOA, the following contact information should be used for the Signatory agencies:

MTA
Danyell Diggs
Office of Planning
Maryland Transit Administration
6 St. Paul Street
Baltimore, MD 21202-1614

FRA
Michelle Fishburne
Office of Railroad Policy and Development
1200 New Jersey Avenue, SE
West Building – Mail Stop 20
Washington DC 20590

MD SHPO
Elizabeth Hughes
Maryland Historical Trust
100 Community Place
Crownsville, MD 21032-2023

SHA
Julie Schablitsky
Office of Planning and Preliminary Engineering
State Highway Administration
707 N. Calvert Street
Baltimore, MD 21202

B. Emergency Situations

If an emergency situation that represents an immediate threat to public health, safety, life, or property creating the potential to affect a historic property should occur during the duration of this MOA, the Signatories shall follow the regulations set forth in 36 CFR 800.12. MTA will notify FRA and MD SHPO of the condition that has created the situation and the

measures to be taken to respond to the emergency or hazardous condition. FRA and MD SHPO may submit comments to MTA within seven days of the notification. If MTA determines that circumstances do not permit seven days for comment, MTA will notify FRA and MD SHPO and invite any comments in the determined and stated time available. MTA, MD SHPO and FRA will consider these comments in developing a response to the treatment of historic properties in relation to the emergency.

C. Anti-Deficiency Act – Federal Signatories

The obligations of Federal agencies under this MOA are pursuant to 31 USC 1341(a)(1); therefore nothing in this MOA shall be construed as binding the United States to expend in any one fiscal year any sum in excess of appropriations made by Congress for this purpose, or to involve the United States in any contract or obligation for the further expenditure of money in excess of such appropriations.

XIII. AMENDMENTS

Any Signatory to this MOA may propose to FRA that the MOA be amended, whereupon FRA will consult with all Signatories and consulting parties to consider such an amendment. This MOA will be amended when agreed to in writing by all Signatories. MTA will provide a copy of the amended MOA to all consulting parties within thirty (30) days of execution by the Signatories.

XIV. TERMINATION

If any Signatory to this MOA determines that its terms will not or cannot be carried out, that Signatory shall immediately consult with the other Signatories to attempt to develop an amendment per Stipulation XIII. If within thirty (30) days (or another time period agreed to by all Signatories) agreement on an amendment cannot be reached, any Signatory may terminate the MOA upon written notification to the other Signatories. If the MOA is terminated, MTA and FRA must comply with subpart B of 36 CFR 800 with regard to individual undertakings of the program covered by the MOA, prior to work continuing on the Undertaking. MTA and FRA will notify the Signatories as to the course of action it will pursue.

XV. DURATION

This MOA will be null and void if its terms are not carried out within ten (10) years from the date of execution, unless the Signatories agree to amend it in accordance with Stipulation XIII. If FRA and MTA have not fulfilled the terms of the MOA prior to its expiration, the Signatories will

consult to reconsider the terms of the MOA and amend it according to Stipulation XIII or terminate it in accordance with Stipulation XIV.

XVI. EFFECTIVE DATE OF AGREEMENT

The MOA shall become effective when executed by the last of the Signatories and FRA has submitted a copy of the executed MOA to the ACHP. Execution of the MOA by FRA, MD SHPO, MTA and MD SHA and implementation of its terms evidence that FRA has afforded the Signatories an opportunity to comment on the Undertaking and its effects on historic properties, and that FRA has taken into account the potential effects of the undertaking on historic properties.

SIGNATORIES:

FEDERAL RAILROAD ADMINISTRATION

By: _____ Date: 9/30/2015
David Valenstein,
Division Chief, Environmental and Corridor Planning

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION

By: _____ Date: 7/27/15
Paul W. Comfort
Administrator

Approved for legal sufficiency

By: _____ Date: 7-13-15
Office of the Attorney General

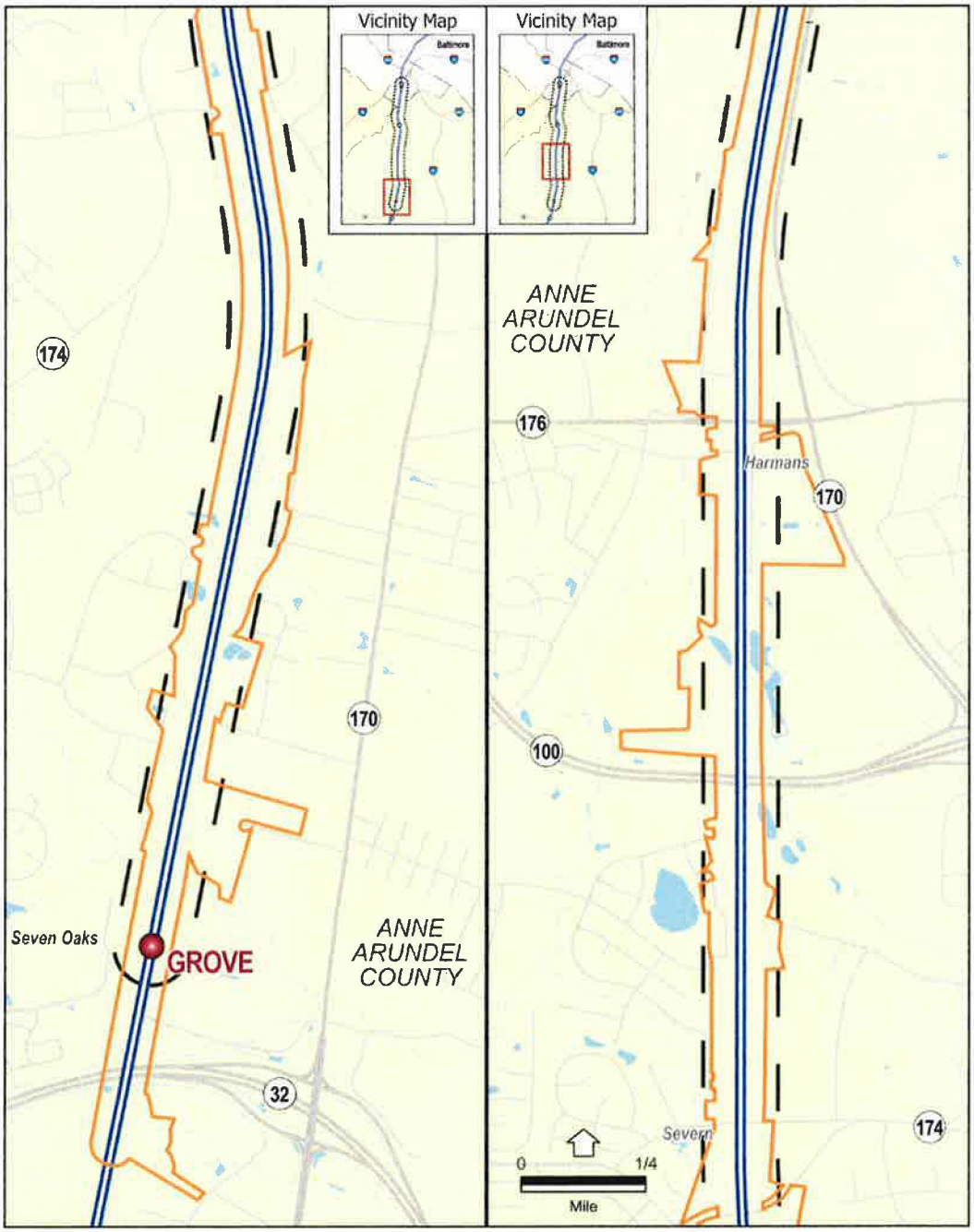
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

By: _____ Date: 7/30/15
Douglas Simmons
Acting Administrator

MARYLAND STATE HISTORIC PRESERVATION OFFICE

By: _____ Date: 8·7·15
Elizabeth Hughes
Acting Maryland State Historic Preservation Officer

Attachment A
Area of Potential Effects (APE)
BWI Rail Station Improvements and Fourth Track Project

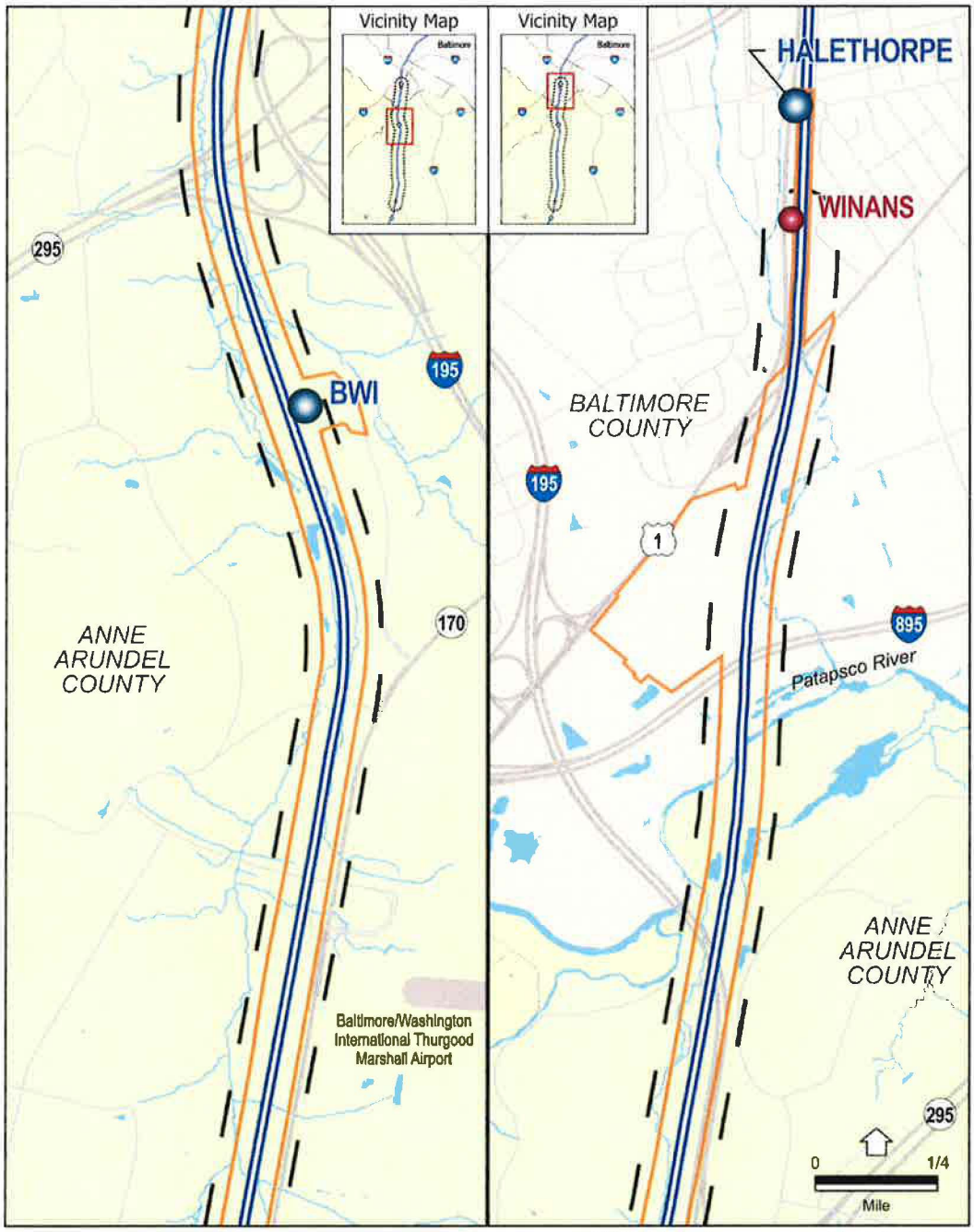


LEGEND

- Rail Station
- Interlocking
- 500 Foot Radius Study Corridor
- Architectural APE

BWI Rail Station Improvements and Fourth Track Project

Area of Potential Effects (APE)



LEGEND

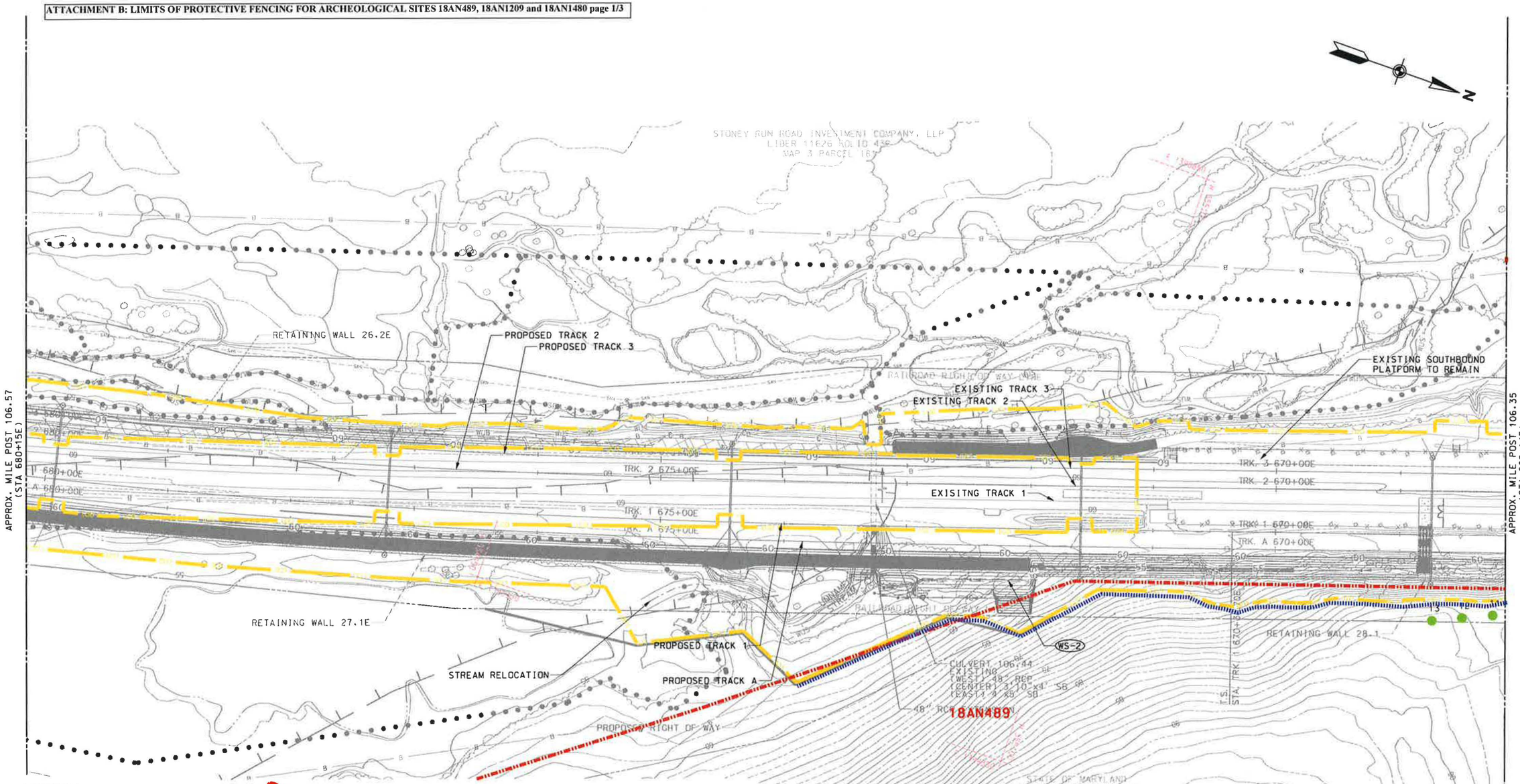
- Rail Station
- Interlocking
- 500 Foot Radius Study Corridor
- Architectural APE

BWI Rail Station Improvements and Fourth Track Project

Area of Potential Effects (APE)

Attachment B
Limits of Protective Fencing for Archeological Sites
BWI Rail Station Improvements and Fourth Track Project

ATTACHMENT B: LIMITS OF PROTECTIVE FENCING FOR ARCHEOLOGICAL SITES 18AN489, 18AN1209 and 18AN1480 page 1/3



LEGEND

- PROPOSED ACCESS ROAD
- REMOVAL OF EXISTING ACCESS ROAD
- RETAINING WALL
- GS 1-1 SWM FACILITY LABEL
- PROPOSED SWM FOOTPRINT
- ARCHEOLOGICAL SITE
- LIMIT OF DISTURBANCE
- POSITIVE SHOVEL TEST PIT LOCATION
- NEGATIVE SHOVEL TEST PIT LOCATION
- RRSP: RIPRAP SLOPE PROTECTION
- ROP: RIPRAP OUTLET PROTECTION
- LIMITS OF PROTECTIVE FENCE

NOTES:
1. THIS PLAN SHEET IS BASED ON AERIAL SURVEY. SEE GENERAL NOTES ON DRAWING NO. GN-001 FOR ADDITIONAL SURVEY INFORMATION.
2. PROPOSED CONTOURS REPRESENT THE TOP OF BALLAST. SEE TYPICAL SECTIONS FOR LIMITS OF EXCAVATION.

NO PUBLIC DISSEMINATION/NOT FOIA IN ACCORDANCE WITH SECTION 304 OF THE NATIONAL HISTORIC PRESERVATION ACT

NOTES:
1) THIS PLAN SHEET IS BASED ON AERIAL SURVEY SUPPLEMENTED BY GROUND SURVEY. SEE GENERAL NOTES ON DRAWING NO. GN-001E FOR ADDITIONAL SURVEY INFORMATION.
2) ALL STATIONS AND OFFSETS ARE BASED OFF TRACK A.

HIGGINS SITE 18AN489/
SELBY GRIST MILL SITE 18AN1209–
Map 10 of 12

40' 0 40' 80'
SCALE: 1"=40'

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION
MTA Maryland

STV Incorporated
Baltimore, MD

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland
License No. Expiration Date

NO.	DESCRIPTION	BY	DATE
	PRELIMINARY DESIGN (30%)		

REVISIONS

DESIGN / DRAWN / CHECK / APPR

BWI RAIL STATION IMPROVEMENTS AND FOURTH TRACK PROJECT

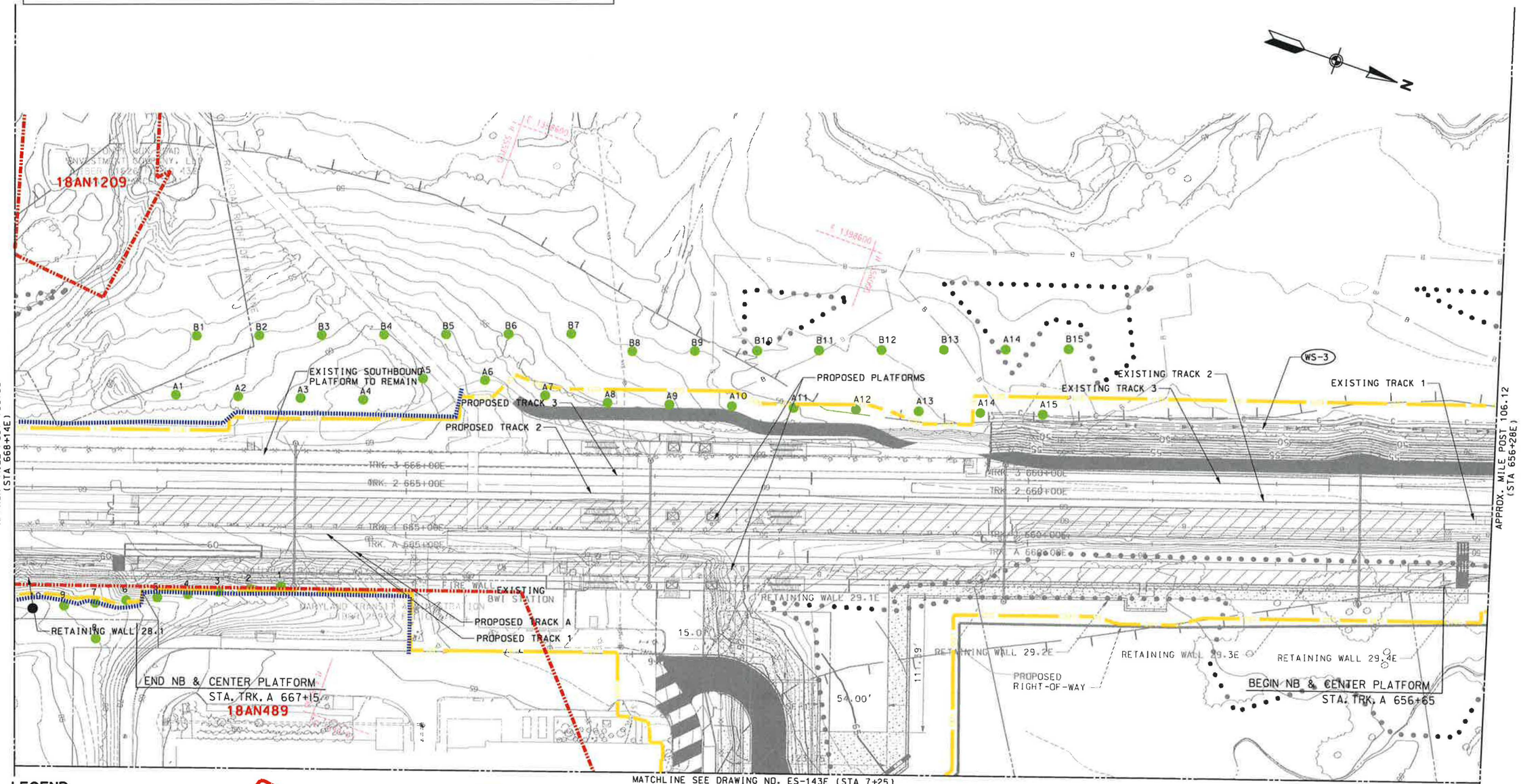
EROSION & SEDIMENT CONTROL PLAN
STA 680+15E TO STA 668+14E

DATE: DECEMBER 2013 SCALE: 1"=40'

CONTRACT NO. T-0183-0120
DRAWING NO. ES-128E
SHEET NO. ___ OF ___

pw:\\00 - Current Projects\8031 - BWI Area MARC-Amtrak Improvements\04 Project Engineering\Track & Structural Preservation\Cadd Files\Civil PB\8031pES128E_PB.dgn
8/26/2014

ATTACHMENT B: LIMITS OF PROTECTIVE FENCING FOR ARCHEOLOGICAL SITES 18AN489, 18AN1209 and 18AN1480 page 2/3



LEGEND

- PROPOSED ACCESS ROAD
- REMOVAL OF EXISTING ACCESS ROAD
- RETAINING WALL
- GS 1-1 SWM FACILITY LABEL
- PROPOSED SWM FOOTPRINT
- ARCHEOLOGICAL SITE
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- NEGATIVE SHOVEL TEST PIT LOCATION
- RRSP: RIPRAP SLOPE PROTECTION
- ROP: RIPRAP OUTLET PROTECTION
- LIMITS OF PROTECTIVE FENCE

NOTES:
1. THIS PLAN SHEET IS BASED ON AERIAL SURVEY. SEE GENERAL NOTES ON DRAWING NO. GN-001 FOR ADDITIONAL SURVEY INFORMATION.
2. PROPOSED CONTOURS REPRESENT THE TOP OF BALLAST. SEE TYPICAL SECTIONS FOR LIMITS OF EXCAVATION.

NO PUBLIC DISSEMINATION/NOT FOIA IN ACCORDANCE WITH SECTION 304 OF THE NATIONAL HISTORIC PRESERVATION ACT

NOTES:
1) THIS PLAN SHEET IS BASED ON AERIAL SURVEY AND SUPPLEMENTED BY GROUND SURVEY. SEE GENERAL NOTES ON DRAWING NO. GN-001E FOR ADDITIONAL SURVEY INFORMATION.
2) ALL STATIONS AND OFFSETS ARE BASED OFF TRACK A.

HIGGINS SITE 18AN489/
SELBY GRIST MILL SITE 18AN1209–
Map 11 of 12

40' 0 40' 80'
SCALE: 1"=40'

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION
MTA Maryland

STV Incorporated
Baltimore, MD

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland
License No. Expiration Date

NO.	DESCRIPTION	BY	DATE
	PRELIMINARY DESIGN (30%)		

REVISIONS

DESIGN / DRAWN / CHECK / APPR

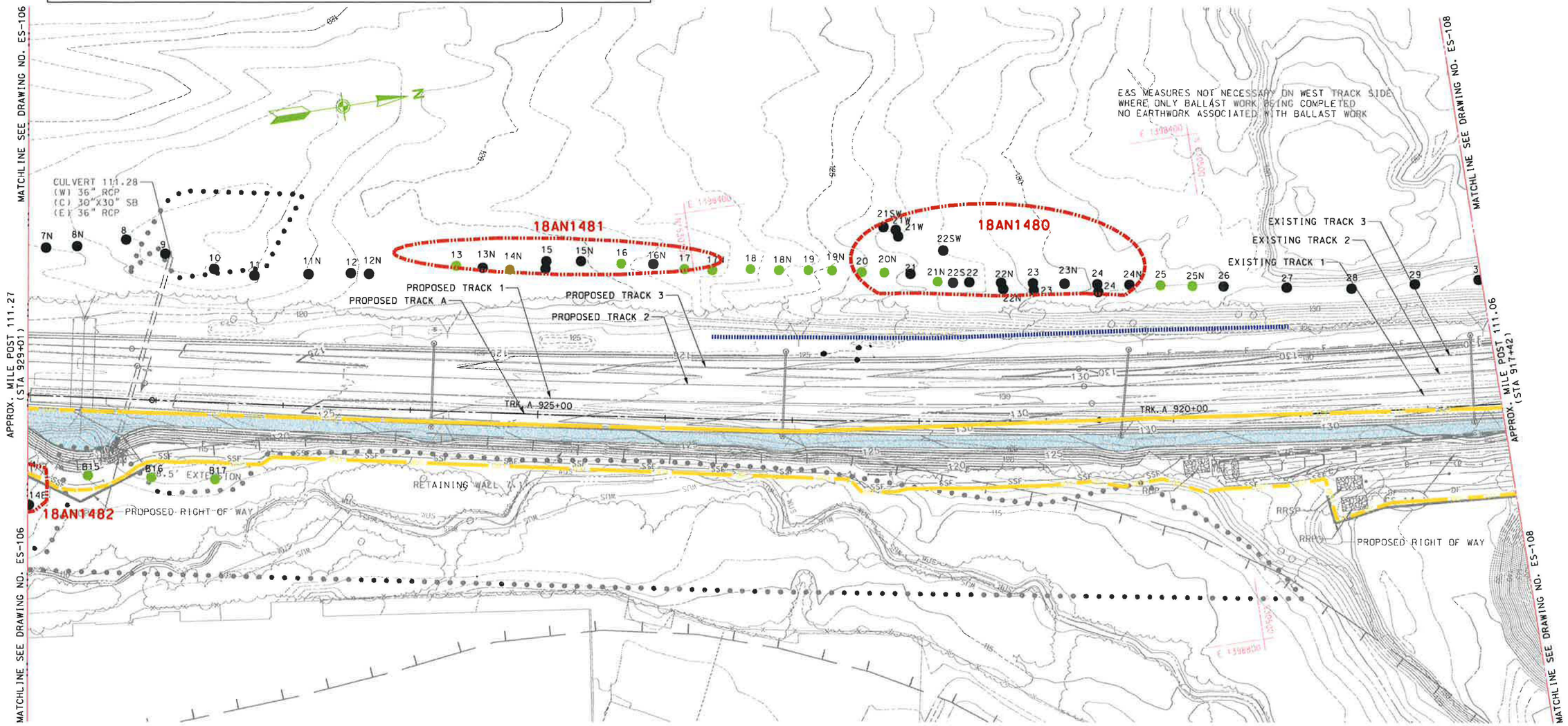
BWI RAIL STATION IMPROVEMENTS AND FOURTH TRACK PROJECT

EROSION & SEDIMENT CONTROL PLAN
STA 668+14E TO STA 656+28E
DATE: DECEMBER 2013 SCALE: 1"=40'

CONTRACT NO. T-0183-0120
DRAWING NO. ES-129E
SHEET NO. ___ OF ___

pw:\\00 – Current Projects\B031 – BWI Area MARC–Amtrak Improvements\04 Project Engineering\Track & Structural Preservation\Cadd Files\Civil PB\B031pES129E_PB.dgn
8/26/2014

ATTACHMENT B: LIMITS OF PROTECTIVE FENCING FOR ARCHEOLOGICAL SITES 18AN489, 18AN1209 and 18AN1480 page 3/3



LEGEND

- PROPOSED ACCESS ROAD
- REMOVAL OF EXISTING ACCESS ROAD
- RETAINING WALL
- GS 1-1 SWM FACILITY LABEL
- PROPOSED SWM FOOTPRINT
- ARCHEOLOGICAL SITE
- LIMIT OF DISTURBANCE
- POSITIVE SHOVEL TEST PIT LOCATION
- NEGATIVE SHOVEL TEST PIT LOCATION
- RRSP: RIPRAP SLOPE PROTECTION
- ROP: RIPRAP OUTLET PROTECTION
- LIMITS OF PROTECTIVE FENCE

NOTES:
1. THIS PLAN SHEET IS BASED ON AERIAL SURVEY. SEE GENERAL NOTES ON DRAWING NO. GN-001 FOR ADDITIONAL SURVEY INFORMATION.
2. PROPOSED CONTOURS REPRESENT THE TOP OF BALLAST. SEE TYPICAL SECTIONS FOR LIMITS OF EXCAVATION.

NO PUBLIC DISSEMINATION/NOT FOIA IN ACCORDANCE WITH SECTION 304 OF THE NATIONAL HISTORIC PRESERVATION ACT

O'KEEFE SITE NORTH 18AN1480/
O'KEEFE SITE SOUTH 18AN1481–
Map 2 of 12

40' 0 40' 80'
SCALE: 1"=40'

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION
MTA Maryland

STV Incorporated
Baltimore, MD

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland
License No. Expiration Date

NO.	DESCRIPTION	BY	DATE
	PRELIMINARY DESIGN (30%)		

REVISIONS

DESGN SBE
DRAWN JNS
CHECK FLG
APPR

BWI RAIL STATION IMPROVEMENTS AND FOURTH TRACK PROJECT

EROSION & SEDIMENT CONTROL PLAN
STA 929+01 TO STA 917+42

DATE: SCALE: 1"=40'

CONTRACT NO. T-0183-0120
DRAWING NO. ES-107
SHEET NO. ___ OF ___

pw:\\DD - Current Projects\BG31 - BWI Area MARC-Amtrak Improvements\04 Project Engineering\Track & Structural Preservation\Cadd Files\Civil PB\8031pES107_PB.dgn
8/26/2014

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

June 19, 2015

9043.1
ER 15/0286

Michelle Fishburne
Federal Railroad Administration
1200 New Jersey Avenue, SE
Harrisburg, Pennsylvania 20590

Subject: Environmental Assessment and Draft Section 4(f) Baltimore/Washington International (BWI) Rail Station Improvements and Fourth Track Project.

Dear Ms. Fishburne:

The Department of the Interior (Department) has reviewed the Environmental Assessment and Draft Section 4(f) Evaluation for the proposed Baltimore/Washington International (BWI) Rail Station Improvements and Fourth Track Project in Anne Arundel and Baltimore Counties, MD. The US Department of Transportation, Federal Railroad Administration and Maryland Department of Transportation, Maryland Transit Administration are proposing to improve the Baltimore/Washington International Thurgood Marshall Airport Rail Station (BWI Rail Station) and to add nine miles of fourth track to the mainline of the Northeast Corridor (NEC) centered on the station. We offer the following comments on this project for your consideration.

Section 4(f) Evaluation Comments

The Department concurs that there is no prudent and feasible alternative to the proposed use of 4(f) lands, which consist of the Patapsco Valley State Park and Reece Road Bridge. The Build Alternative would locate the fourth track on the east side of the existing rail alignment and MTA would construct the track on a new bridge over the Patapsco River, immediately parallel to the existing railroad bridge. Three narrow strips of additional right-of-way, a total of approximately 0.65 acre, would be required from park property. The Department concurs that this will be a *de minimus* impact, in that it will not adversely affect the activities, features, or attributes of Patapsco Valley State Park. The Build Alternative would require the demolition of the Reece Road Bridge to accommodate the fourth trace and track design speed curves which will have an adverse effect on the historic bridge under Section 106 of the National Historic Preservation Act and constitutes a Section 4(f) use under Section 4(f) of the United States Department of Transportation Act.

We note that a draft Memorandum of Agreement (MOA) is being developed among the Federal Railroad Administration, Maryland Transit Administration, the Maryland State Highway Administration and the Maryland State Historic Preservation Office. We agree that these are appropriate measures to mitigate the Adverse Effect of the Section 4(f) property.

We appreciate the opportunity to provide these comments.

Sincerely,

Lindy Nelson
Regional Environmental Officer

cc: SHPO-MD (Elizabeth.Hughes@maryland.gov)
MD-MTA (jwolfers-lawrence@mta.maryland.gov)

Resource		Regulation/Legislation/Standard	Commitment/Mitigation
Land Use and Acquistions		• Uniform Relocation Assistance Real Property Acquisition Policy Act of 1970, as amended • Title 49, Part 24 of the Code of Federal Regulations (49 CFR Part 24) • All applicable Maryland regulations and policies.	All land acquisitions will be completed according to federal and state regulations.
Air Quality		Clean Air Act, as amended	• Construction consistent with State Implementation Plans (SIPs) SIP Revision 03-14, SIP Number: 07-04, and SIP Number: 08-04. • MTA to consider short-term construction mitigation measures.
Wetlands and Waters of the United States and Floodplains	Wetlands and Waters of the U.S.	• Section 404 of the Clean Water Act • Section 10 of the Rivers and Harbors Act • Mitigation Requirements under the Clean Water Act Section 404 and Code of Maryland Regulations (COMAR) 26.23.06 • Federal Mitigation Rule and state mitigation guidelines	• MTA will prepare a Joint Federal/State Application for the Alteration of any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland permit application during final design. • Mitigation measures employed to compensate for unavoidable project effects to Waters of the U.S., including wetlands, will follow federal and state mitigation regulations and guidelines, as well as other recommendations from federal and state resource agencies. • MTA would mitigate for permanent impacts to streams at a ratio determined in coordination with USACE and MDE to provide functional replacement of impacted streams. A replacement ratio of 1:1 linear feet of stream improvement is anticipated; however, the resource agencies may adjust this ratio as exact ratios can only be determined during final design of a selected mitigation site. • MTA would determine the ratio of wetland acres replaced to wetland acres lost to achieve functional replacement of impacted wetlands. Mitigation for emergent wetlands typically occur on a 1:1 replacement basis, while mitigation of forested and scrub-shrub wetlands typically occur on a 2:1 replacement basis, although these ratios may be adjusted during final mitigation site selection and design. WSSC are typically mitigated on a 3:1 replacement basis; however, this also could increase during development of the final mitigation plan. The regulatory agencies will determine the final replacement ratio for WSSC based on the functional replacement of impacted resources. • A Phase II Final Mitigation Plan will be developed as part of the final design and permitting phase of the project. • The MTA would install wetland protection fencing to protect wetlands and wetland buffers during construction.
	Bridge Permit	Section 9 of the Rivers and Harbors Act of 1899	Coordinate, again, with the United States Coast Guard (USCG) regarding the potential need for a Bridge Permit if the project is not constructed within five years.
	Floodplains	EO 11988, Floodplain Management and United States Department of Transportation (USDOT) Order 5650.2	• All construction occurring within the Federal Emergency Management Agency (FEMA) designated 100-year floodplain will comply with FEMA approved local floodplain construction requirements. • Waterway Construction Permit from MDE.
Stormwater Runoff and Water Quality		Maryland Department of the Environment's Standards and Specifications for Soil Erosion and Sediment Control	Sediment and erosion control plans will be prepared in accordance with standards.

		• Stormwater Management Act of 2007 • Guidance by MDE in 2010 and 2011 on the technical procedures and calculations for environmental site design (ESD)requirements	MTA would design stormwater management facilities required to address water quality and quantity requirements consistent with ESD criteria to the maximum extent practicable.
		• Maryland's Erosion and Sediment Control (E&SC) (COMAR 26.17.01) • Stormwater Management regulations (COMAR 26.17.02).	MTA would address potential effects through the MDE stormwater and sediment and erosion control permitting process as required.
Ecological Resources	Aquatics Species and Rare, Threatened and Endangered Species	Section 7 of the Endangered Species Act	• Aquatic species will be protected with the Use I and Use IV in-stream work prohibition time-of-year restrictions, through sediment and erosion control measures, and through other BMPs. • Coordination with DNR-WHS during final design will determine specific mitigation measures for impacts to the giant cane, as State-listed species.
	Forests	Maryland Forest Conservation Act	• Forest Conservation Plans will be prepared during final design and would detail additional impact avoidance and minimization techniques to be applied during construction. MTA will submit Forest Conservation Plans to DNR for review and approval during final design. • During final design, MTA will identify forest mitigation sites in cooperation with DNR within the LOD, and identify undisturbed portions of the right-of-way. If mitigation requirements cannot take place wholly or partially on-site, the MTA would expand the search for a mitigation site (or sites) to areas within the project's watersheds or into the affected counties. • Tree protection fencing will be installed along the outside edge of the limit of disturbance where necessary to prevent access by construction equipment, staging, and stockpiling of materials within forest retention areas.
Chesapeake Bay Critical Area (CBCA)		• Section 307 of the Federal Coastal Zone Management Act of 1972, as amended (CZMA) • NOAA regulations (15 CFR part 930)	MTA will coordinate with CBCA Commission to define the project-specific mitigation related for tree clearing any new impervious area within the Critical Area and/or any planting requirements.
Cultural Resources		Section 106 of the National Historic Preservation Act of 1966 (NHPA) and its implementing regulations at 36 CRF 800	• Proper safeguards (e.g., protective fencing, field orientation/education for construction personnel, and on-site archeological monitoring will reduce potential effects to the Higgins archeological site. Where impacts to other archeological sites in the LOD are unavoidable, additional Phase II archeological investigations would evaluate sites for National Register eligibility. As project planning proceeds, FRA and MTA will continue to identify design modifications that could further avoid or minimize potential effects on archeological resources. • MTA will record the Reece Road Bridge in coordination with MHT prior to construction or demolition. MTA will develop provisions for continued coordination and site protection during construction in consultation with MHT and other consulting parties, which are included as commitments in the MOA.
Hazardous Materials		• Resource Conservation and Recovery Act of 1976 (RCRA) • Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)	A Phase I and/or Phase II Environmental Site Assessment (ESA) will be required for additional right-of-way areas needed for the project. During final design and construction, if the project encounters contaminated soils, MTA would evaluate off-site remediation, chemical stabilization, or other treatments and disposal options.

BWI 4th Track and Station Improvement Project – Public Comments and Responses **Attachment D**

Person and Contact	Comment Date	Comment Format	Comment	Response	Response Date
Nancy J. Reed Senior Administrative Assistant to Executive Dean, Continuing Education CCBC nreed@ccbcmd.edu	May 13 2015	Email	I was at the information session last night in Severn. The last poster board that was displayed showed a possible timeline for getting funding, etc. with dates of 2015, 2016, and 2017. I don't see that information on the link that was provided. Is it possible to get a snapshot of that information?	Please know that I do not have a copy handy of the actual Board that was on display concerning dates, but I was responsible for providing the dates that went on the board. Please see below for the dates. Please also note that the below dates assume funding is found in the next few months to start final design which is not likely so the dates at this point are theoretical. --Initiate Final Design = October 2015 --Begin Construction = October 2017 --Open Busway, New Station Building, & Pedestrian Bridge = March 2020 --Open Center Platform and all Four Tracks in Operation = April 2021	May 13 2015
Sherell Brooks Knapps Way Odenton MD 21113	May 12 2015	Comment card at public meeting	My concerns would be how this affects existing and up and coming communities situated near the tracks. How will this affect taxes (will tax payers some how have to eat the cost?) How cost effective is this for the State of MD, will it bring in revenue during and	The funding source for the project beyond the Environmental Assessment process has not yet been determined. Construction of the project would likely provide many construction	

Person and Contact	Comment Date	Comment Format	Comment	Response	Response Date
			after the project. If noise is a factor, how will this be resolved. Is CSX in agreement with the project? If not how will that affect the plans moving forward?	jobs. The project's proposed improvements to the station facilities and fourth track would likely encourage increased ridership and ticket sales with more reliable service and improved amenities. However, a cost benefit analysis has yet to be completed for the project. As described in Section 3.5 of the Environmental Assessment, there will be no impact to the surrounding communities due to short-term or long-term noise. CSX does not operate on this portion of the Northeast Corridor.	
Mark Muha 1228 Pine Cone Court Severn MD 21144	May 12 2015	Comment card at the public meeting	Would like MTA to consider visitor/observation room or area at new BWI Station. There are many rail fans in the area but Amtrak security does not allow casual train viewing. Note – airports have observation areas! There currently is no known Amtrak viewing area – only CSX in state park.	The recommendation for an observation area will be considered during the final design portion of this project.	
John V. Edwards General Director Passenger Policy Norfolk Southern Corporation Three Commercial Place	August 7 2015	Email	NS traffic currently moves through the station 6 days per week, generally at 50 mph, which barely allows the necessary freight work to be done during a constrained night operating window. If a high level platform is added next to each track at the BWI station, NS	Installing gauntlet tracks at all high level platforms for passenger train use would result in unacceptable delays to passenger train operations and fail to meet the purpose and need of the project. In addition, the proposed	August 10 2015

Person and Contact	Comment Date	Comment Format	Comment	Response	Response Date
Northfolk, VA 23510			standard dimensional loads will have a clearance of only 3 inches. With this significantly diminished clearance, NS would be forced to operate through the station at walking speed in order to operate through the station safely, severely diminishing our capacity and our ability to provide freight service to our customers. In addition, and as a separate matter, the current proposal would preclude the wide loads without the addition of new infrastructure. We welcome the fact that the FRA does not want the passenger rail service enhancements at BWI to reduce or impact that potential service. The high level platform on all tracks moving through the BWI station would cause a close clearance situation that would cause a reduction in the acceptable speed for standard dimensional traffic, and preclude the movement of extra-dimensional traffic. Therefore, the proposal, if implemented as presented, would cause an immediate and material diminishment in freight capacity through the BWI location.	design of a gauntlet track for freight train use past a high level platform at normal operating speed has been successfully used at other stations for many decades.	

#	Page	Comment	Commenter	Date Received	Response
FAA					
1	General	The BWI Airport Property Line should be shown on the project maps so that an understanding of where the rail line falls within BWI Airport Property can be developed. Right now, the language just references that part of the line goes through part of the airport property.	Marcus Brundage	6/11/2015	Revised appropriate EA figures to show the BWI Airport Property Line as well as enhanced figure clarity by using contrasting coloration. Figures illustrating the details of proposed station improvements revised to included detailed property lines. Section 3.1 revised to include a description of the BWI Airport runways.
2	General	A concise discussion of the Federal Actions being sought would be helpful. This would facilitate our decision making process in the long run.	Marcus Brundage	6/11/2015	Document revised to include a new Section 2.4 which lists the Federal Actions required.
3	Chapter 3	In Chapter 3, language should be added that specifies the rail embankment transects the Runway 10 ALSF; however, widening of the embankment to accommodate the additional rail line will not impact any of the ALSF towers. Without this clearly spelled out, in remains ambiguous. It should also acknowledge that the rail line transitions through the Runway RPZ.	Marcus Brundage	6/11/2015	Section 3.1 revised to include the requested discussion.
4	General	Please be sure that all of the FAA's resource categories are covered in the analysis because we need to issue a separate FINDING prior to construction.	Marcus Brundage	6/11/2015	In February 2015, MTA sent FAA a document entitled "Locations of Environmental Impact Category Information in Draft EA" to demonstrate where each FAA resource category is located in the document. Please see the attached document for reference.

RESPONSE TO FAA COMMENTS:

RESPONSE TO COMMENT 1:

2.4 REQUIRED FEDERAL ACTIONS TO IMPLEMENT BUILD ALTERNATIVE

Implementation of the Build Alternative would require the following actions to be taken by FRA:

- Acquire land in accordance with Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended; Title 49, Part 24 of the Code of Federal Regulations (49 CFR Part 24); and all applicable Maryland regulations and policies.
- Execution and implementation of the MOA, including all mitigation measures, to conclude the Section 106 process under the National Historic Preservation Act of 1966 (NHPA).
- Obtain appropriate United States Army Corps of Engineers (USACE) Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 permit.
- Coordinate with United States Coast Guard (USCG) if project is not constructed prior to June 20, 2019 for compliance with United States Coast Guard (USCG) Bridge Permit, Under Section 9 of the Rivers and Harbors Act of 1899.
- Obtain permits from Maryland Department of the Environment (MDE) to comply with USACE 404 Permit for projects altering a floodplain, waterway, or tidal or nontidal wetland and EPA's National Pollutant Discharge Elimination System (NPDES) regulations.
- Document the federal consistency requirements have been satisfied to comply with Coastal Zone Consistency Determination.

RESPONSE TO COMMENTS 2 AND 3:

3.1.2 Affected Environment

Air

The BWI Thurgood Marshall Airport is located adjacent to the project corridor. The BWI Airport has two primary runways (RW). One is located in the East-West direction (RW 10-28) and one in the Southeast-Northwest direction (RW 15-33L). The NEC is located within the Runway Protection Zone (RPZ) at the western approach to RW 10-28. The NEC is located within the glide path at the northwestern approach to RW 15-33L.

3.1.3 Probable Consequences

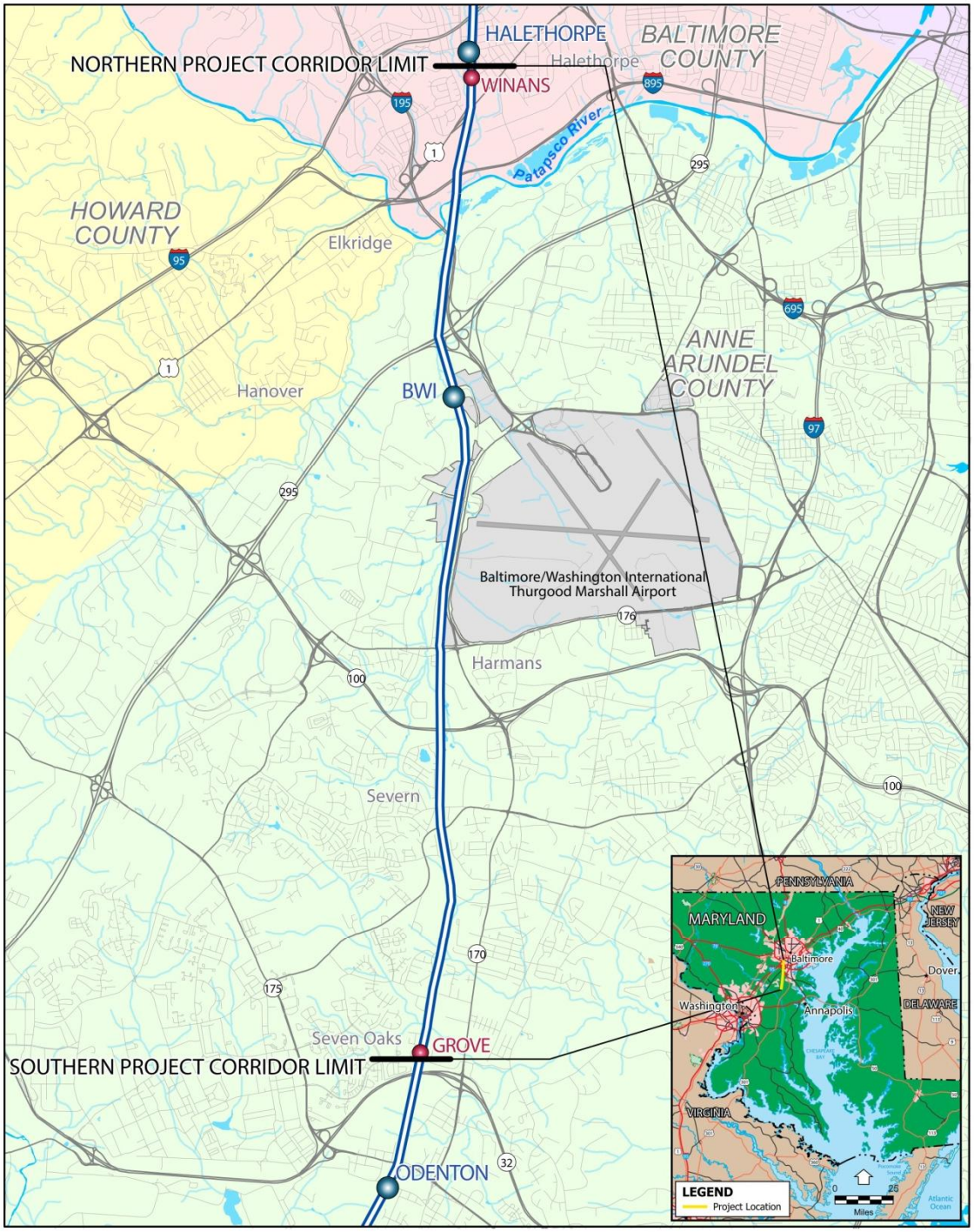
- Air Transportation. The Build Alternative is consistent with the goals of the *BWI Airport Layout Plan* (February 2011), to provide improved intermodal connectivity between airport and rail services.

  Runway 10-28. Construction of the fourth track would be within the RPZ of BWI Airport runway RW 10-28. Widening of the embankment to accommodate the fourth track will be accomplished without impacting the Approach Lighting System Flashing Lights (ALSF) towers and tower foundations. Although the elevation of the fourth track is to be substantially below the BWI Airport established airport elevation, construction specifications will be written to require the contractor to adhere to FAR Part 77 regulations concerning the use of any construction equipment including cranes.

  RW 15-33R. Construction of the fourth track and BWI Rail Station improvements would be within the northwest approach of runway RW 15-33R. As the elevation of the fourth track and the BWI Station property is substantially below the glide path of runway RW 15-33R, there should be no issues with construction or construction techniques in this area in relation to FAR Part 77 regulations.

RESPONSE TO COMMENT 3:

FIGURE ES.1-1, 1.2-1, and 2.1-1: PROJECT STUDY AREA



LEGEND

- Rail Station
- Interlocking
- MARC/Amtrak Rail Line
- BWI Property

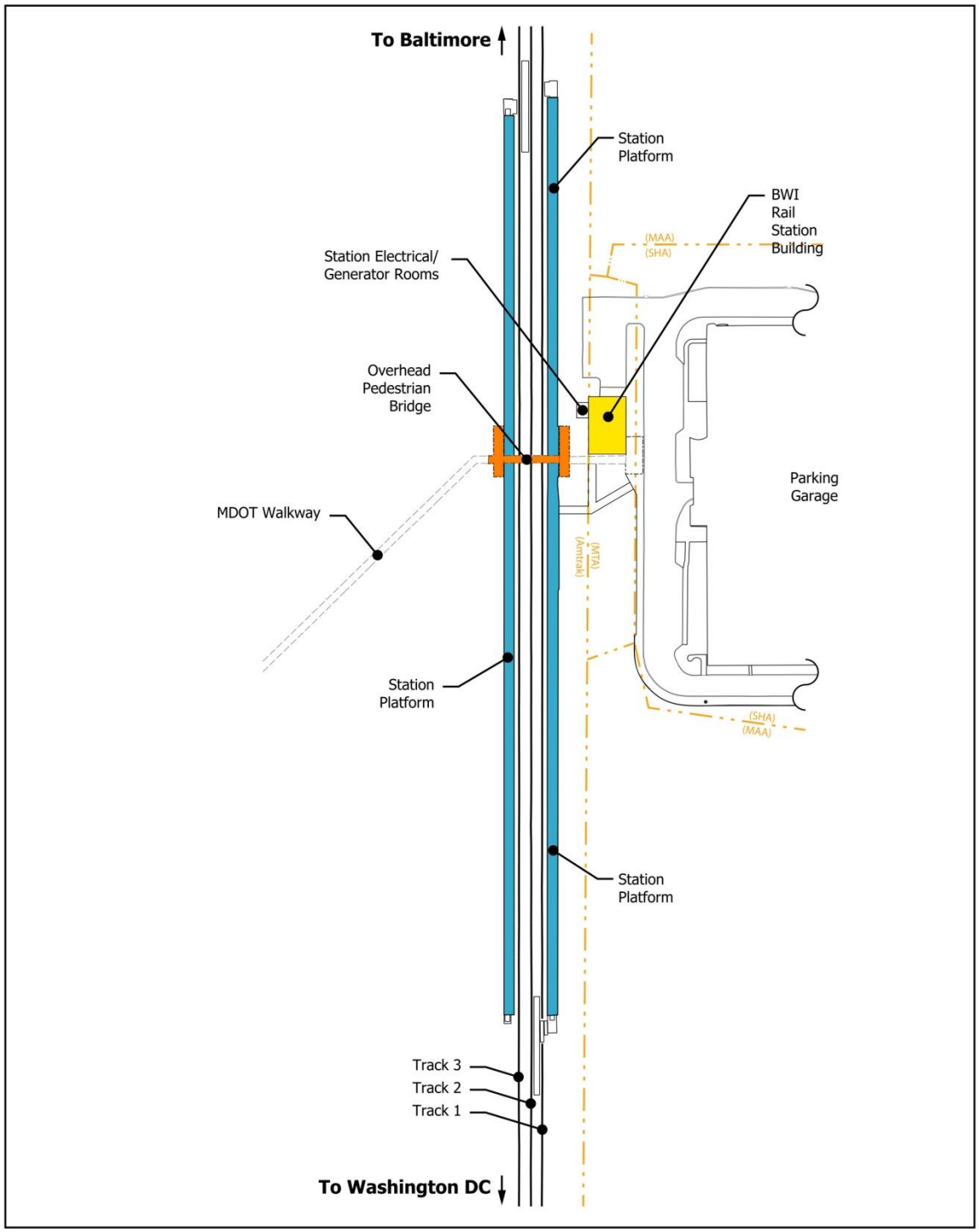
BWI Rail Station Improvements and Fourth Track Project

0 1.25 Mile

Project Study Area
(Grove Interlocking to Winans Interlocking)

Figure ES-1

FIGURE 1.2-2: EXISTING BWI STATION CONFIGURATION



LEGEND

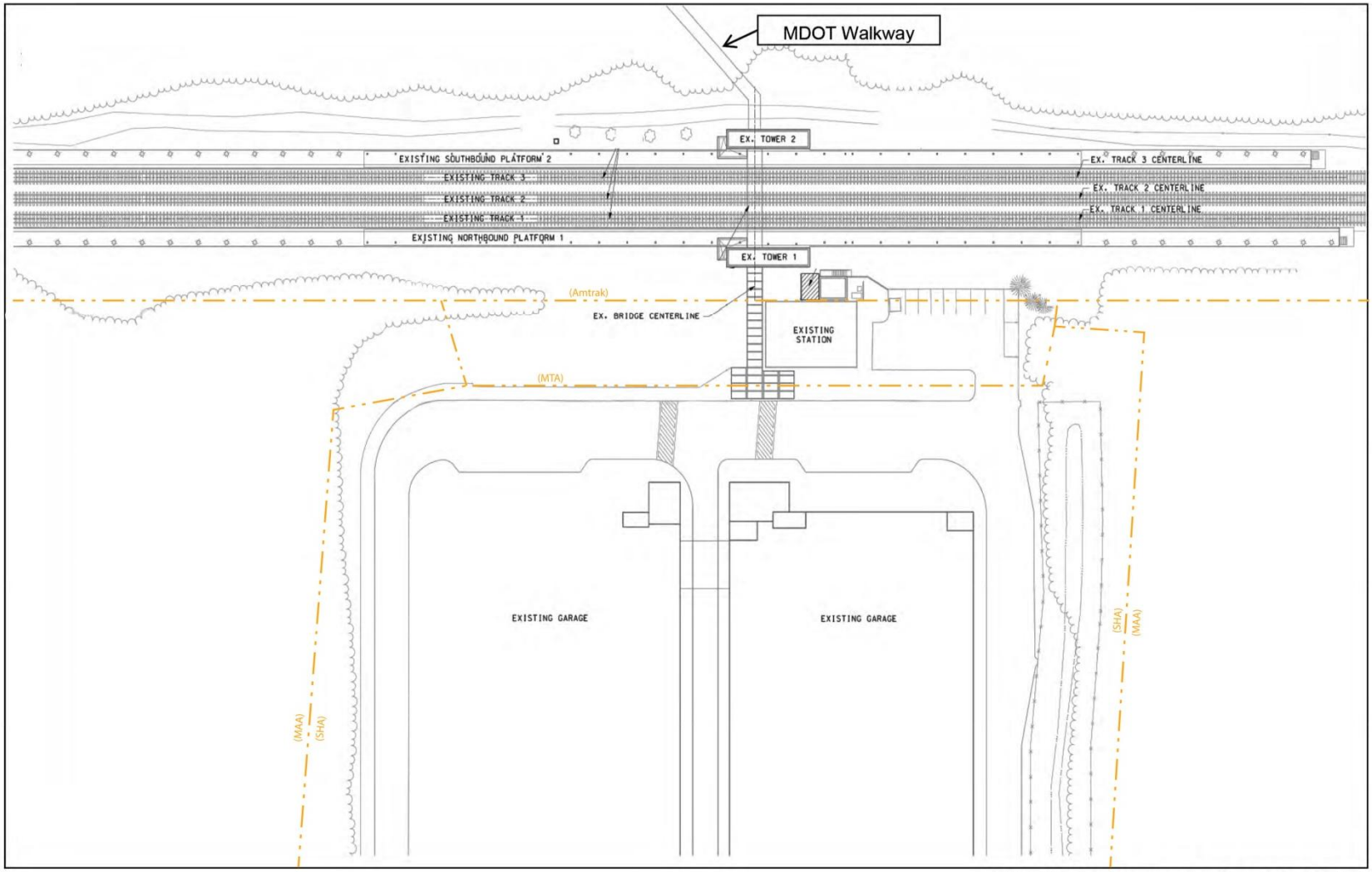
- BWI Rail Station Building
- Overhead Pedestrian Bridge
- Station Platform

BWI Rail Station Improvements and Fourth Track Project

Not to Scale

Existing BWI Station Configuration

FIGURE 2.1-2: TRACK DIAGRAM OF EXISTING BWI RAIL STATION CONFIGURATION

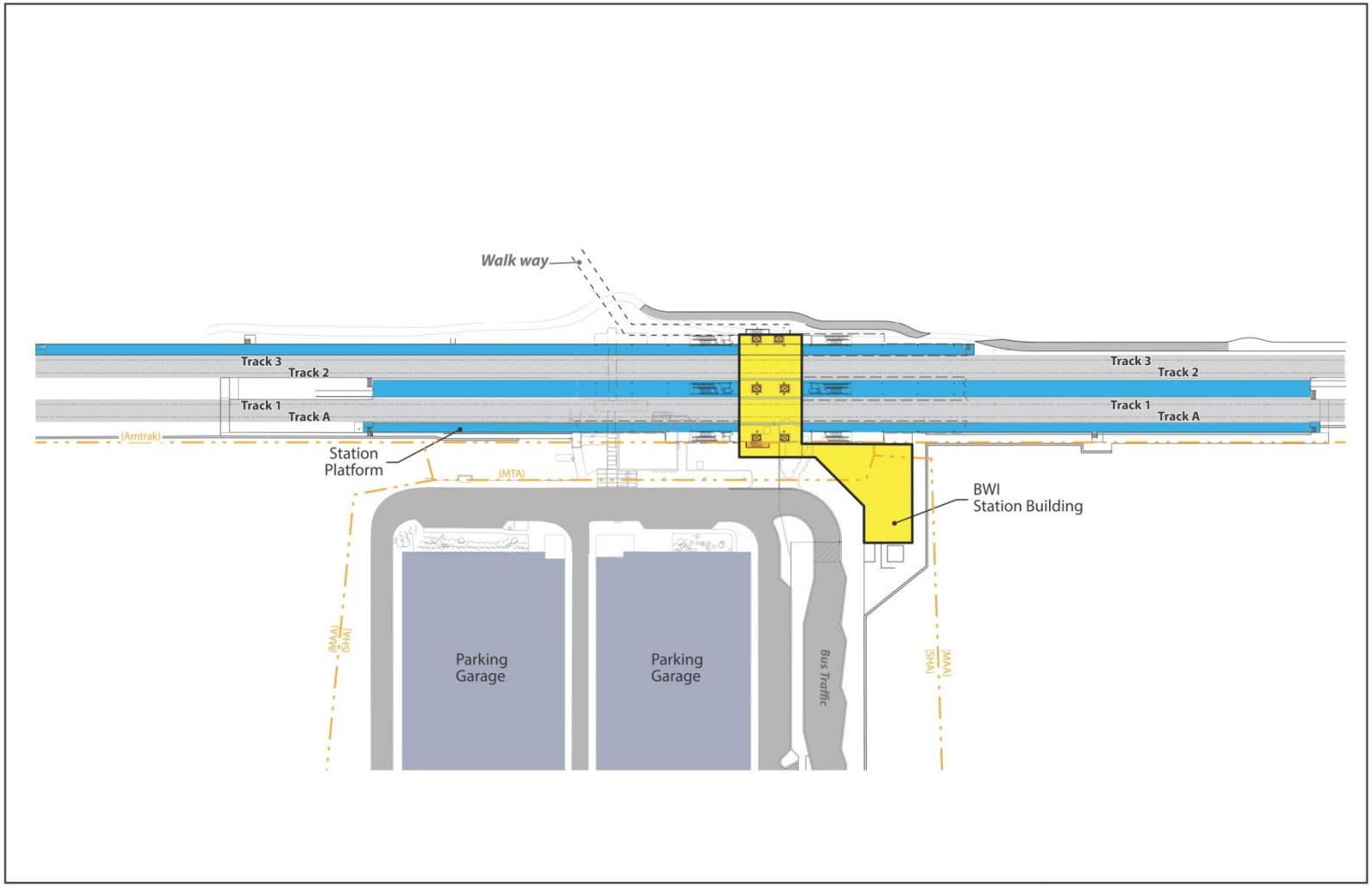


BWI Rail Station Improvements and Fourth Track Project

Not to scale

Existing Station and Platforms

FIGURE 2.2-6: PLAN VIEW OF PROPOSED STATION

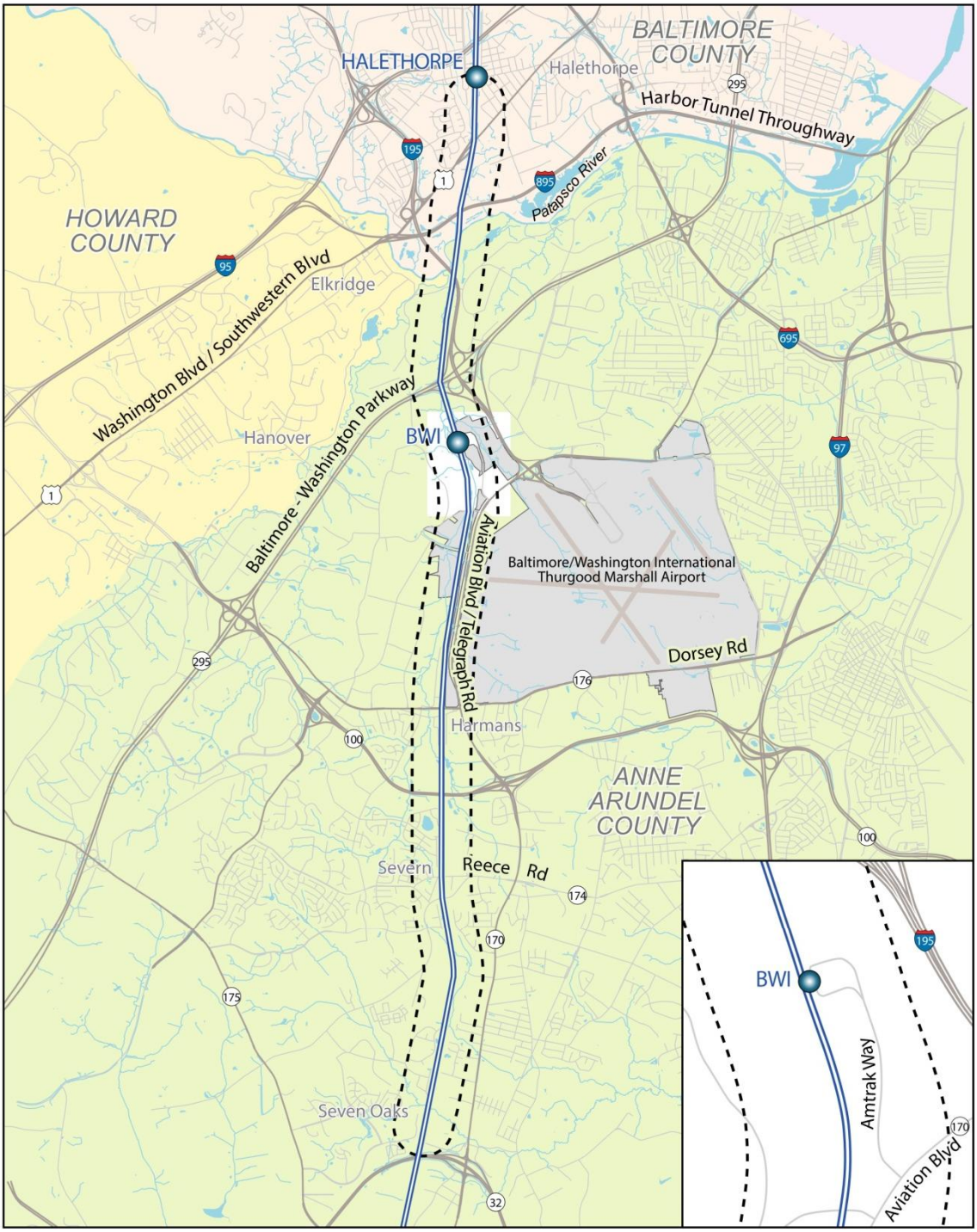


BWI Rail Station Improvements and Fourth Track Project

Not to scale

Plan View of Proposed Station

FIGURE 3.1-1: REGIONAL AND LOCAL TRANSPORTATION



LEGEND

- Rail Station
- Interlocking
- BWI Property
- MARC/Amtrak Rail Line
- 1/4 Mile Radius Study Corridor

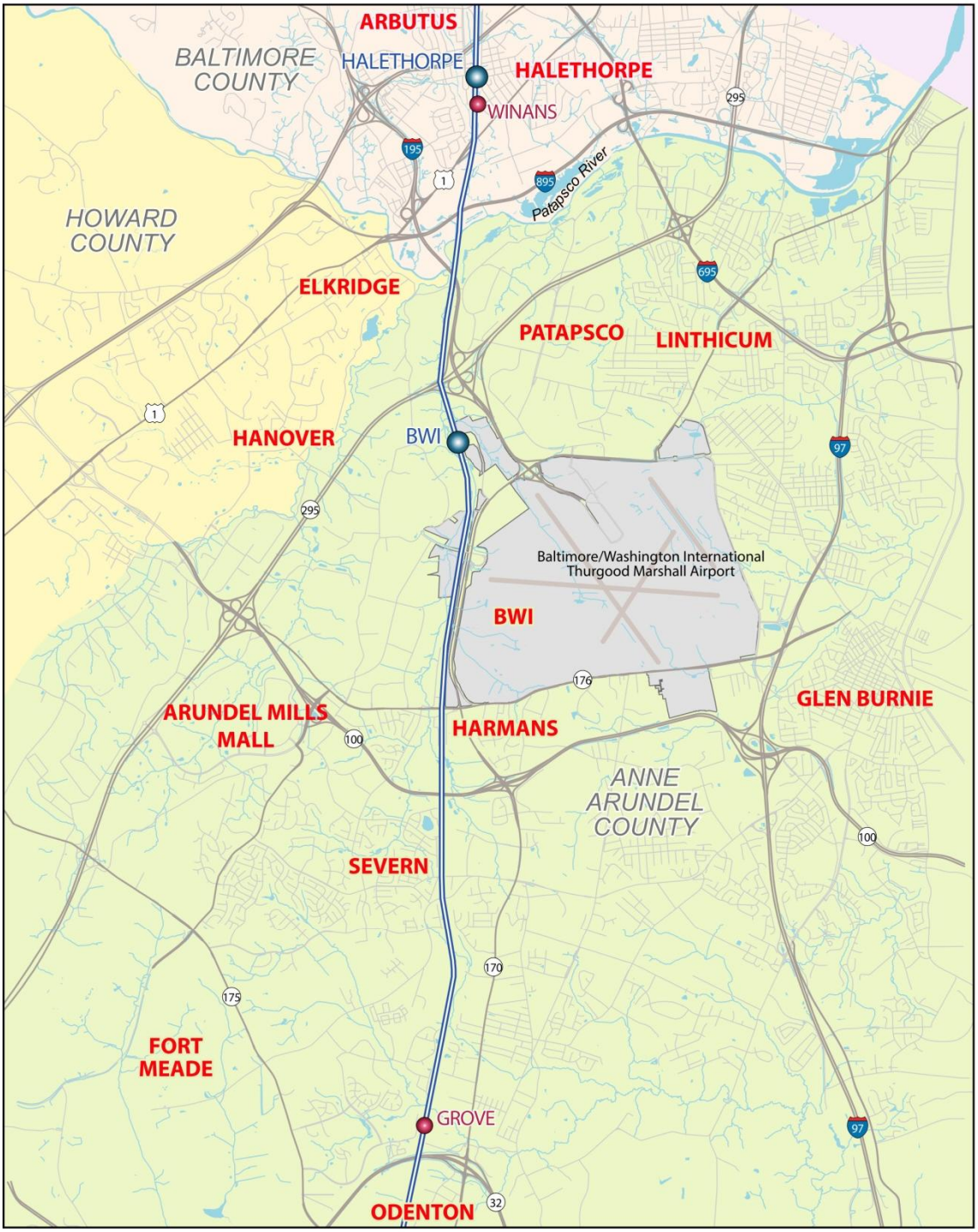
BWI Rail Station Improvements and Fourth Track Project

0 1 Mile

Regional and Local Transportation
(Grove Interlocking to Winans Interlocking)

Figure 3.1-1

FIGURE 3.2-2: COMMUNITIES AND MAJOR ACTIVITY CENTERS



LEGEND

- Rail Station
- Interlocking
- MARC/Amtrak Rail Line
- XX Community/Major Activity Area
- BWI Property

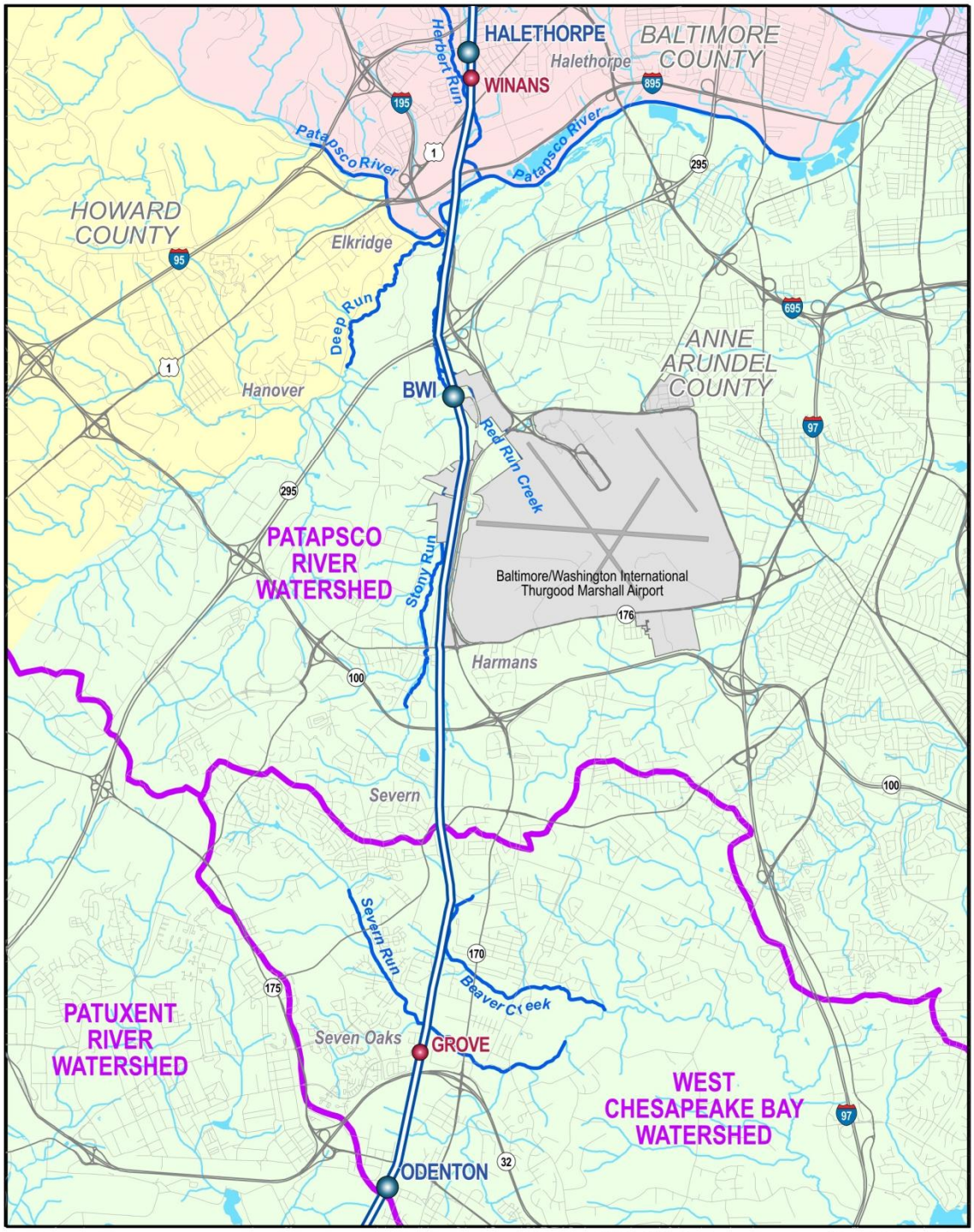
BWI Rail Station Improvements and Fourth Track Project

0 1 Mile

Communities and Major Activity Centers

Figure 3.2-2

FIGURE 3.7-1: PRIMARY SURFACE WATERS AND WATERBODIES



LEGEND

- Rail Station
- Interlocking
- MARC/Amtrak Rail Line
- BWI Property

Water Resources

- Named Streams and Rivers
- Watershed Boundary
- Surface Waters

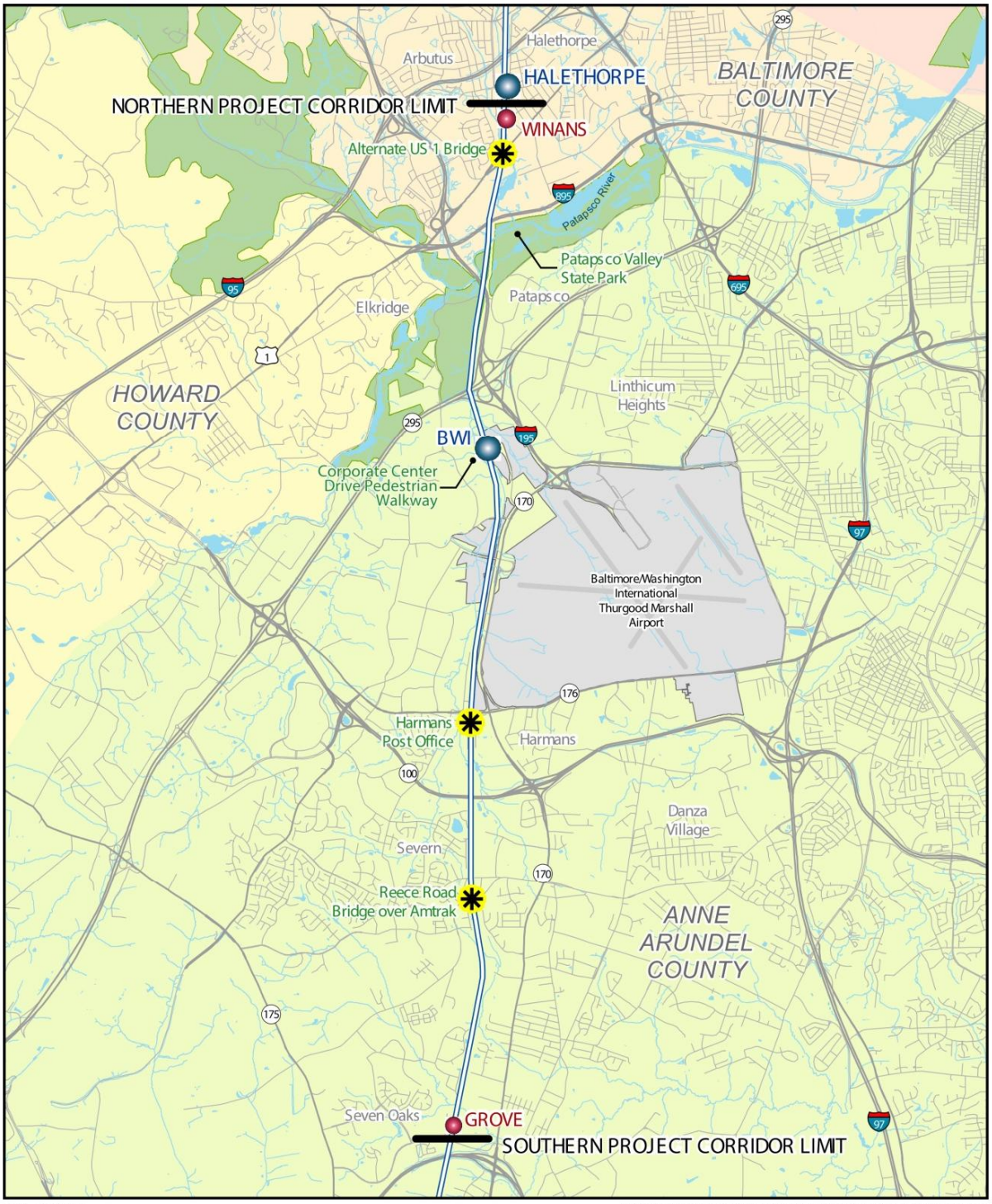
0 1.25 Mile

BWI Rail Station Improvements and Fourth Track Project

Watersheds and Named Streams and Rivers

Figure 3.7-1

FIGURE 3.11-1: VISUAL RESOURCES



LEGEND

- Rail Station
- Interlocking
- MARC/Amtrak Rail Line
- Visual Resource
- BWI Property

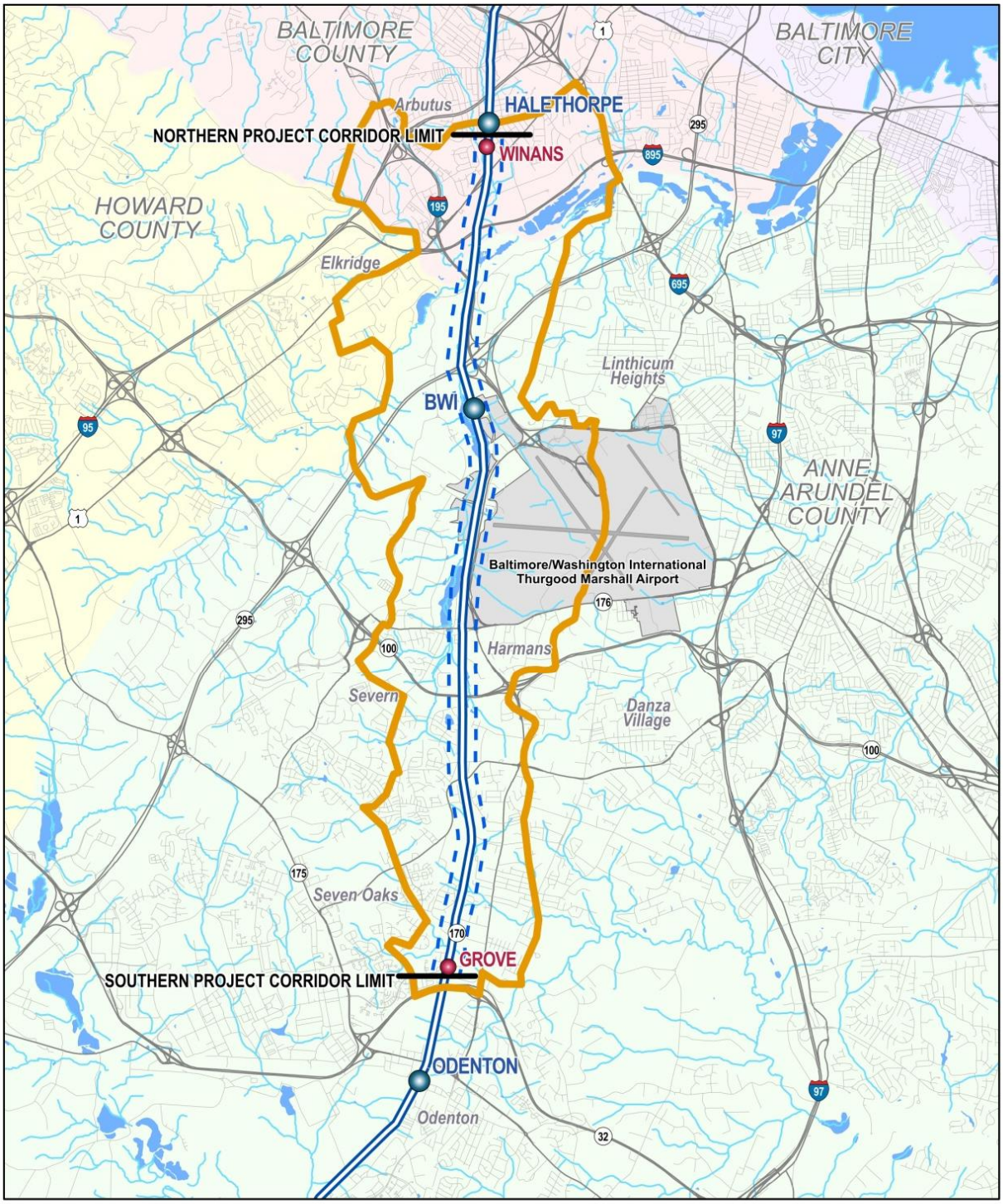
0 1 Miles

BWI Rail Station Improvements and Fourth Track Project

Visual Resources

Figure 3.11-1

FIGURE 3.16-1: INDIRECT AND CUMULATIVE EFFECTS (ICE) GEOGRAPHIC BOUNDARY



LEGEND

- Rail Station
- Interlocking
- MARC/Amtrak Rail Line
- 1000 Foot Potential Impact Area
- ICE Geographic Boundary
- BWI Property

BWI Rail Station Improvements and Fourth Track Project

0 1 Miles

Indirect and Cumulative Effects (ICE)

Figure 3.16-1

RESPONSE TO COMMENT 4:

Locations of Environmental Impact Category Information in Draft EA:

The following table was prepared to provide the locations of the Environmental Impact Categories as outlined in the *Environmental Desk Reference for Airport Actions* (October 2007) in *the Draft Environmental Assessment and Section 4(f) Evaluation for the Baltimore/Washington International (BWI) Rail Station Improvements and Fourth Track Project* (January 2015).

Table ES.3-1 Environmental Consequences of the Build Alternative and Table 4.1-1 Summary of Environmental Consequences of the Environmental Assessment (EA) summarize each section and any potential impacts.

Environmental Impact Category	Section in EA	Page
Air Quality	Section 3.4 Air Quality	pg. 3-32
	Environmental Commitments: Section 4.3.2 Air Quality	pg. 4-11
Biotic Resources	Section 3.9 Ecological Resources	pg. 3-84
	Section 4.2.4 Forests	pg. 4-8
	Environmental Commitments: Section 4.3.5 Ecological Resources	pg. 4-12
Coastal Barriers	This project does not occur on or near a coastal barrier island; therefore impacts to coastal barriers were not evaluated.	NA
Coastal Zone Management	Section 3.9.5 Coastal Zone Management and Chesapeake Bay Critical Area	pg. 3-95
	Environmental Commitments: Section 4.3.6 Chesapeake Bay Critical Area	pg. 4-12
Compatible Land Use	Section 3.5 Noise and Vibration Pg 3-52 specifically states there would be no impact to noise and vibration levels due to the Build Alternative.	Pg. 3-40
Construction Impacts	Section 3.15 Construction Impacts	pg. 3.-135
Section 4(f) Resources	Chapter 6 Draft Section 4(f) Evaluation	pg. 6-1
	Section 4.2.6 Section 4(f) Resources	pg. 4-10
Federally-listed Endangered or Threatened Species	Section 3.9.1 Rare, Threatened, and Endangered Species	pg. 3-84

Environmental Impact Category	Section in EA	Page
	Section 4.2.3 State-listed Rare, Threatened, and Endangered Species	pg. 4-8
Energy Supplies, Natural Resources, and Sustainable Design	Section 3.6 Energy and Sustainable Design	pg. 3-53
Environmental Justice	Section 3.3.4 Environmental Justice and the Public Involvement Process	pg. 3-31
	Section 5.1.3 Environmental Justice Outreach	pg. 5-4
Farmlands	Section 3.13.3 Prime, Unique, and Special Farmlands	pg. 3-126
Floodplains	Section 3.8.2 Floodplains	pg. 3-80
	Section 4.2.2 Floodplains	pg. 4-7
Hazardous Materials	Section 3.14 Hazardous Materials	pg. 3-127
	Environmental Commitments: Section 4.3.8 Hazardous Materials	pg. 4-13
Historic Properties	Section 3.12 Cultural Resources	pg. 3-110
	Section 4.2.5 Cultural Resources	Pg. 4-9
	Environmental Commitments: Section 4.3.7 Cultural Resources	pg. 4-12
Induced Socioeconomic Impacts	Section 3.3 Socioeconomic and Community Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks	pg. 3-23
Light Emissions and Visual Effects	Section 3.11 Visual Impacts and Light Emissions	pg. 3-105
Noise	Section 3.5 Noise and Vibration	pg. 3-40
Social Impacts	Section 3.1 Regional and Local Transportation	pg. 3-1
	Section 3.2 Land Use, Neighborhoods, and Community Facilities	pg. 3-10
	Section 3.3 Socioeconomic and Community Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks	pg. 3-23
Solid Waste	Section 3.15 Construction Impacts,	pg. 3-135
Water Quality	Section 3.7.3 Water Quality	pg. 3-62

Environmental Impact Category	Section in EA	Page
	Section 3.7.4 Groundwater/Aquifers/Wells	pg. 3-65
	Environmental Commitments: Section 4.3.4 Stormwater Runoff and Water Quality	pg. 4-11
Wetlands	Section 3.8.1 Wetlands	pg. 3-68
	Section 4.2.2 Wetlands	pg. 4-6
	Environmental Commitments: Section 4.3.3 Wetlands and Waters of the United States and Floodplains	pg. 4-11
Wild and Scenic Rivers	Section 3.7.2 Wild and Scenic Rivers	Pg. 3-61
Cumulative Impacts	Section 3.16 Indirect and Cumulative Effects	pg. 3-136

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, Maryland 21401
http://www.fws.gov/chesapeakebay

July 30, 2015

Mr. Dan Reagle
Maryland Transit Administration
Env. Planning Div.
6 St. Paul Street, Rm 923
Baltimore, MD 21202

RE: NLAA Determination for Northern long-eared bat for BWI Rail Station Improvements and 4th track to Railway, Anne Arundel County, and Baltimore County, MD

Dear Mr. Reagle:

This responds to your July16th, 2015 e-mail requesting review of the proposed BWI Rail Station improvements and 4th track to railway. This project proposes to add a 4th track to the Northeast Corridor between approximately Odenton and Halethorpe MARC Stations, adding a 3rd platform to the BWI Rail Station and constructing a new BWI Rail Station. The following comments are provided pursuant to Section 7 of the Endangered Species Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq).

The proposed project occurs in both Anne Arundel and Baltimore County, MD which are both considered to be part of the range for northern long-eared bats (*Myotis septentrionalis)*, a federally listed threatened species. The northern long-eared bat is a temperate, insectivorous migratory bat that hibernates in mines and caves in the winter and summers in wooded areas. Since the tree clearing will occur within 100' of pavement along a linear corridor; there are no records of northern long-eared bats in the project vicinity; and the project is located in an highly urbanized area, the project is not likely to have an adverse effect on this species. Except for occasional transient individuals, no other Federal proposed or listed endangered or threatened species under our jurisdiction are known to exist within the project impact area. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

We appreciate the opportunity to provide information relevant to threatened and endangered fish and wildlife resources. This ESA determination does not exempt this project from obtaining all permits and approvals that may be required by other state or federal agencies.

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Should you have any questions or concerns regarding this letter, please contact Julie Slacum of my Endangered Species staff at (410) 573-4595 or by email at Julie_thompson@fws.gov.

Sincerely,

G. La Rouche

Genevieve LaRouche
Field Supervisor
Author: Julie Slacum