

APPENDIX E
CASE 10-T-0139
JUSTIFICATION FOR DEVIATION ZONE
EXCURSIONS IN SEGMENT 11

1.0 Introduction

On March 30, 2010, Champlain Hudson Power Express, Inc. (now CHPE LLC and CHPE Properties, Inc., collectively the "Certificate Holders") filed an Application for a Certificate of Environmental Compatibility and Public Need (the "Certificate") with the New York State Public Service Commission (PSC) pursuant to Article VII of the New York Public Service Law (PSL) to construct and operate the transmission project known as the Champlain Hudson Power Express Project (the "Facility") (PSC Case 10-T-0139). The PSC issued a Certificate for the Project on April 18, 2013, which adopted the terms of a Joint Proposal and associated Certificate Conditions (CCs).

The Facility route, as depicted on a series of maps included as Appendix B of the Joint Proposal and as amended, consists of a nominal centerline (the "Centerline") and an Allowed Deviation Zone (ADZ). Those portions of the ADZ that are determined to be affected by construction of the Facility, as well as certain areas outside the ADZ that are needed temporarily for site investigation, access, and construction, are referred to hereafter as the "Construction Zone". When the Facility is completed, the Certificate Holders will have land control through fee, easement, or other appropriate interest, or through rights granted to use permanent rights-of-way (ROW)s, and certain adjacent areas as defined in Certificate Condition #5, which states:

"The portions of the Allowed Deviation Zone to be occupied by the Facility once construction is complete are referred to herein as the Facility ROW. The Certificate Holder shall also acquire and maintain the continuing right to enter onto and use certain additional lands immediately adjacent to the Facility ROW needed for repair and maintenance purposes, including preclusion of vegetative encroachment, on terms prohibiting the owners of such land from taking any action on that land that would interfere with such repair and maintenance activities."

For all rights concerning property comprising the Facility ROW, the Construction Zone, off-ROW-access, storage or staging areas, or similar areas, the Certificate Holders have obtained initial title information and will continue to develop the required title reports in accordance with CC 143. Details of Facility ownership and easements are outlined in Table 4-4 of the EM&CP.

The Certificate Conditions state that construction of the overland portions of the Facility outside of the ADZ shall be allowed for appropriate environmental or engineering reasons, except where a conflict with other Certificate Conditions would be created (CC 156). Further, CC 157 requires that an explanation must be provided should cable installation work occur outside of the ADZ. Provided that certain criteria are met, CC 157 confers discretion on Department of Public Service (DPS) Staff to accept and review, without modification to the Certificate, Environmental Management & Construction Plan (EM&CP) filings which include design deviations, including deviations regarding location of facilities or structures. Specifically, CC 157 states that deviations "shall be allowed for appropriate environmental or engineering reasons without modification to [the] Certificate, except where a conflict with a specific provision of this Certificate would be created."

As part of the EM&CP filing for Segment 11, the Certificate Holders are proposing minor work outside of the ADZ along the Segment 11 Project Corridor (shown in Attachment 1 – Segment 11 Deviation Zone Excursions figure set). This memorandum provides the required supporting materials necessary for DPS staff to review and approve these minor excursions from the ADZ as part of the EM&CP process. Specifically, this includes:

1. A detailed description of and justification for each excursion from the ADZ based upon appropriate environmental and engineering reasons, including a demonstration that the excursion is limited to the minimum extent necessary.
2. Confirmation that Certificate Holders have obtained rights to occupy and use the land(s) associated with any such ADZ excursions and the consent of any and all landowners owning any part of the excursion area to the occupancy and use of their land(s) for Facility purposes and that the Certificate Holders are in the process of recording those rights with the appropriate County office.
3. A demonstration that any net incremental environmental impacts arising as a result of the construction, operation, and maintenance of the Facility at the excursion are not material.
4. A demonstration that installation of the Facility cables at the excursion will not substantially change the location of Facility components or structures and does not otherwise conflict with the other Certificate Conditions.

Further, this memorandum provides technical support for the Certificate Amendment requested in connection with S11-2, the "Catskill Reroute," which initial feedback from agency staff has suggested requires formal amendment of the Certified Route approved in Amendment 2 (approved August 13, 2020), which is addressed in the attached Petition for Amendment.

2.0 Explanation for Proposed Excursions from the Deviation Zone in Segment 11

The ADZ in Segment 11 is located predominately within private lands adjacent to existing ROWs of the CSXT railroad and public roads. The Certificate Holders have endeavored to keep the Facility located within the currently approved ADZ; however, certain physical limitations and obstacles have resulted in necessary shifts in the Facility location. Excursions from the ADZ have been identified at several unique locations along the Segment 11 Project Corridor. Table 1 summarizes each excursion, their location on the Plan and Profile Drawings (Appendix C of the EM&CP), and a justification for each excursion (see also Table 1-3 of the EM&CP). The following sections provide descriptions of each excursion in more detail, along with an evaluation of potential changes in environmental impact.

Table 1. Excursions from the Deviation Zone in Segment 11

Excursion #	Parcel ID	Location			Justification for Revision
		Sheet	Station Start	Station End	
# S11-1	139.00-10-10.1	C-101 -C-105	70000+ 00	70055+ 00	Overhead and subsurface utility conflicts; CSXT requirement for offset from rail; Avoid wetlands; Additional space needed for HDD bore pits and
	139.00-10-11				
	156.01-4-1				
	156-01-4-2				
	156.01-4-3				

Excursion #	Parcel ID	Location			Justification for Revision
		Sheet	Station Start	Station End	
	156.01-4-6 156.10-1-4 156.09-6-1				Splice Vaults 230 and 231 installations
# S11-2 ("Catskill Reroute")	156.09-5-13 156.13-1-10 156.09-3-16 156.13-1-9 156.13-1-10 156.13-9-13 156.13-9-12 156-13-9-11 156.13-10-37 156.13-10-19	C-105 – C-107	70058+ 50	70101+ 50	CSXT requirement for offset from rail; Avoid Catskill railroad bridge and utility conflicts close to rail, Route 9W, and along Allen Street. Additional space needed for Splice Vault 232 and HDD 113 and 115.
# S11-3	155.20-1-40	C-107.1 to C-108	70102+50	70115+ 50	CSXT requirement for offset from rail; Avoid utility conflicts close to rail and in Route 9W; Additional space needed for Splice Vault 233 and HDD 117 workspace installation
# S11-4	171.08-9-1	C-110	70137+00	70137+75	CSXT requirement for offset from rail; additional space needed for HDD
# S11-5	171.08-9-4	C-110	70142+00	70142+25	CSXT requirement for offset from rail; additional space needed for HDD
# S11-6	171.08-7-1; 171.08-7-27; 171.00-4-4; 171.00-4-3	C-111 to C-119	70150+00	70276+50	CSXT requirement for offset from rail; Avoid utility conflicts close to rail and in Route 9W; Additional space needed for Splice Vault 235 installation
# S11-7	202.00-1-1.1	C-119 to C-121	70279+50	70305+00	Holcim (US) requests to site alignment as close to rail as possible while complying with CSXT requirement for offset from rail; utility conflicts close to rail and Route 9W; Site in previously disturbed road corridor; Additional space needed for Splice Vault 240 installation
# S11-8	202.00-1-1.1 202.00-1-1.2	C-122 – C-123	70313+50	70332+00	Holcim (US) requests to site alignment as close to rail as possible while complying with CSXT requirement for offset from rail; Utilize existing disturbed area along roadside and rail yard; Additional space for Splice Vault 241 installation
# S11-9	202.00-1-1.2	C-123	70334+00	70342+00	Holcim (US) requests to site alignment as close to rail as possible while complying with CSXT requirement for offset from rail; Utilize existing disturbed area along roadside and rail yard; Additional space for HDD workspace

Excursion #	Parcel ID	Location			Justification for Revision
		Sheet	Station Start	Station End	
# S11-10	202.00-1-1.2	C-123 – C-124	70343+00	70355+50	Holcim (US) requests to site alignment as close to rail as possible while complying with CSXT requirement for offset from rail; Utilize existing disturbed area along roadside and rail yard; Additional space for HDD workspace
# S11-11	213.00-2-3	C-127	70392+00	70397+50	Holcim (US) requests to site alignment as close to rail as possible while complying with CSXT requirement for offset from rail; avoid utility conflicts close to rail and Route 9W.
# S11-12	213.00-2-3	C-127	70398+50	70402+50	Holcim (US) requests to site alignment as close to rail as possible while complying with CSXT requirement for offset from rail; avoid utility conflicts close to rail and Route 9W.
# S11-13	213.00-2-3	C-128	70408+00	70411+50	Holcim (US) requests to site alignment as close to rail as possible while complying with CSXT requirement for offset from rail; avoid utility conflicts close to rail and Route 9W.
# S11-14	213.00-2-3	C-129	70420+50	70424+00	Additional space for installation of Splice Vault 244
# S11-15	213.00-2-3	C-130 – C-131	70447+00	70452+50	Avoid private driveway; Avoid utility conflicts close to private driveway; Create proper angle to Transition Vault 2.

As noted in Table 1, design constraints within the ADZ are largely related to CSXT Railroad requirements and the constraints along both rail and public road ROWs, as well as general engineering requirements as listed below:

1. Cable facility centerline must be at least 25 feet off the center of railroad tracks.
2. Access road (minimum of 14 feet wide) is required for access and as a working area. This working area must be outside the zone of influence of the railroad (e.g., a 1 horizontal to 1 vertical theoretical slope line starting at bottom corner of railroad tie where excavation cannot occur), pushing work further away from the railroad tracks. This constraint, coupled with the required distance from the tracks requires the alignment to move further away from the railroad tracks.
3. Cable facility must be at least 5 feet from utilities. Most of the railroad ROW has buried utilities in the vicinity closest to track, forcing the cable facility alignment further away from the track.

4. HDDs require two separate entry and exit pits (one for each cable), spaced at least 15 feet apart, increasing the area of proposed disturbance which impacts ADZ construction within rail and public road ROWs.
5. Splice vault locations are required at a certain interval (at least every 3,200 feet, approximately) to correspond with the length of cable on each reel. The splice work area is placed perpendicular to the alignment and therefore there is not enough space for the splice work area between the tracks and the alignment. Due to this spatial requirement, the alignment leading up to and out of the splice, and the splice vault itself will be placed outside and parallel to the ADZ.

All proposed excursions are required in order to provide additional workspace for splice vaults, transition vaults, and/or work areas for horizontal directional drill (HDD) installations as well as ensure compliance with CSXT requirements. Each excursion has been minimized to the extent practicable thus avoiding substantial changes in Facility location.

The surrounding areas in Segment 11 are largely comprised of commercial, residential, and vacant uses as well as some smaller areas with adjacent agricultural and industrial areas.

2.1 Excursion #S11-1

1. Description of the Excursion

Excursion #S11-1 is located in the Town of Catskill, Greene County, New York north of State Route 23 and beginning near Station 70000+00 and extending to Station 70055+00 (see Figure 1 and Profile Drawings [Sheets C-100 to C-105, Appendix C of the EM&CP]).

2. Justification

At Excursion S11-1, the alignment was shifted east of the ADZ to avoid conflicts with utilities and comply with CSXT requirements. Additional space is also required for the installation of Splice Vaults 230 and 231 as well as the workspaces for boring HDD 111.B, HDD 112, and HDD 113.

3. Environmental Impact

The proposed excursion is approximately one mile in length but is immediately adjacent to the ADZ occurring approximately 80 feet perpendicular to the ADZ, or up to 260 feet at its farthest point. The proposed excursion constitutes a minor change in design, environmental impacts will be minimized, and the overall character of the Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Recreational Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Cultural Resources – Hartgen Associates identified two potential cultural resources in the vicinity of Excursion S11-1 (see EM&CP Table 11-1 and Appendix O – Cultural Resources Management Plan

to the EM&CP). No direct impacts are proposed; however additional testing or monitoring will be conducted at one of the two resources as recommended by Hartgen.

Terrestrial Ecology – Excursion S11-1 occurs along a vegetated edge of the CSXT railroad ROW and encroaches slightly into adjacent private properties. Minor tree and vegetation clearing would have been required within the ADZ at this location. This excursion is anticipated to require more tree and vegetation clearing as the alignment has been pushed out of the previously disturbed corridor and into a more forested area. Clearing will be selective and only remove what is required within the Limit of Work (LOW) for the construction of the Facility. The area will be restored as described in Section 14 of the EM&CP and any visual buffers will be replaced as required by DPS.

Threatened and Endangered Species – According to information provided by NYSDEC and USFWS, portions of the Segment 11 Project Corridor were mapped within one mile of bald eagle nests and within 5 miles of northern long-eared bat (NLEB) habitat. The Segment 11 Project Corridor would occur in the vicinity of these species both at this excursion and within the ADZ; therefore, no significant increase in potential impact to threatened and endangered species are anticipated as a result of this excursion.

Any tree clearing required for the construction of the Project will occur per the approved methods in the EM&CP (e.g., during the winter clearing window, or pending additional agency coordination) in order to avoid impacts to NLEB. No blasting or other extremely loud noises are proposed at this excursion area; therefore, no time of year restrictions relevant to bald eagles are applicable for construction of this excursion. Additional avoidance and minimization measures related to RTE species are provided in Section 9.3 of the EM&CP.

Wetlands and Streams – There are several wetlands along the edge of the railroad embankment, some of which were proposed for temporary impacts within the ADZ. A minor increase in wetlands impacted by the permanent placement of infrastructure is anticipated to result from Excursion S11-1 than if the conduit remained within the ADZ; however, the shift from the ADZ is required to comply with CSXT setbacks from the railroad ROW and adjacent utilities. The HDD entry and exit pits are not able to be shifted outside of the wetlands due to surrounding slope constraints and additional room needed for the HDD pads and turnaround areas. The current design avoids even further impacts to adjacent wetlands that could result from additional shifts in the HDD alignment. All disturbed wetlands will be restored as described in Section 14 of the EM&CP. Therefore, the proposed ADZ Excursion does not significantly increase impacts to wetlands or streams as compared with the approved ADZ.

2.2 Excursion #S11-2 (“Catskill Reroute”)

1. Description of the Excursion

Excursion #S11-2 is located in the Town and Village of Catskill, Greene County, New York just south of State Route 23 and north of West Main Street. The excursion begins near Station 70058+50 and extends to Station 70101+50 (see Figure 1 and Profile Drawings [Sheets C-105 to C-107, Appendix C of the EM&CP]). Note, this Excursion is also referred to in the attached Petition for Amendment of the Certificate as the Catskill Reroute.

2. Justification

At Excursion S11-2, the alignment was shifted west of the ADZ to compensate for several significant technical issues identified during design progression. Four fatal flaws along the ADZ were identified upon receipt of enough subsurface survey information to generate a complete route assessment:

- Inability to construct HDD from CSXT ROW (Certified Mile Point [MP] 220.9) to Allen St. (Alternate MP 0.15) due to insufficient HDD workspace and potential for substantial impact to utilities and local landowners on Allen Street. Additionally, the placement of a splice vault along Allen Street was not feasible without significant impacts to waterbodies, sanitary sewer and natural gas mains within the ADZ.
- Infeasible HDD across Catskill Creek from Allen Street (Alternate MP 0.21) to private property between the Route 9W ROW and the CSXT ROW (Alternate MP 0.45) due to insufficient space for HDD work areas, impractical and in-constructible complex HDD curvature, risk of impact to unknown abutments of CSXT rail bridge and potential impact to future development plans of a private landowner.
- Infeasible conduit "S-curve" alignment at the intersection of Route 9W and West Main Street (Alternate MP 0.5 to 0.55) due to significant roadway and utility impacts and impacts to travelling public. The "S-curve" alignment would have required full closure of Route 9W through-lanes and the intersection of Route 9W and West Main Street due to the need for the alignment to cross the travel lanes twice and due to the required depth of installation (9-13').
- Infeasible alignment at Intersection of Rte. 9W & Depot St. (East of Alt. MP 0.7) due to roadway, utility, traffic and/or structure impacts to existing house foundation. Required depth of conduit installation to avoid significant utility impacts and avoid impact to house foundation would have resulted in additional significant impacts to travelling public. Full closure

It was determined that an HDD crossing of Route 9W was not feasible given the minimum HDD design length is approximately 600 feet per project design criteria (if the ground surface is flat and has no elevation change) and there is a lack of locations available to implement this design criteria with workspace to setup a drill rig due to the surrounding slope constraints, and avoidance of existing utilities and structures.

Several alternative HDD routes (and non-HDD options) were considered for the crossing of Catskill Creek, of which at least partly occur outside of the ADZ and due to the constraints present within the ADZ. After an exhaustive engineering analysis of potential alternative routes, the alignment crossing Catskill Creek was considered not feasible or constructible if it remained within the ADZ. Non-HDD alternatives for crossing Catskill Creek (mostly within the ADZ) were deemed to result in substantial environmental impacts including to stream and floodplain encroachments. This excursion was selected as the preferred alternative as it successfully crosses under Catskill Creek is acceptable to the NYSDOT, Town and Village of Catskill and impacted landowners and does not result in any increased environmental impacts. Consultation with NYSDOT is provided in Appendix A. Additionally, procedures CHPE will implement to notify the public are provided in Appendix I.

3. Environmental Impact

The proposed excursion is approximately 0.8 mile in length and occurs approximately 860 linear feet west of the ADZ at the farthest point. Although, this excursion is not immediately adjacent to the ADZ, it is sited within previously disturbed public road ROWs to minimize environmental impacts and will also cross under Catskill Creek through HDD to avoid environmental impacts. The proposed excursion

therefore still constitutes a minor change in design. Environmental impacts will be minimized, and the overall character of the Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Recreational Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Cultural Resources – Based on the cultural resource analysis completed by Hartgen Associate, no cultural resources are present in the vicinity of Excursion S11-2 (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan).

Terrestrial Ecology – Excursion S11-2 occurs along a vegetated edge of the CSXT railroad ROW and encroaches slightly into adjacent private properties. Minor tree and vegetation clearing would have been required within the ADZ at this location. Although this excursion is still sited within a previously disturbed corridor, it has been pushed into forested edges of public road ROWs and is therefore anticipated to require more tree and vegetation clearing. Clearing will be selective and only remove what is required within the LOW for the construction of the Facility. The area will be restored as described in Section 14 of the EM&CP and any visual buffers will be replaced as required by DPS.

Threatened and Endangered Species – According to consultation with NYSDEC and USFWS, the only RTE species within the vicinity of Excursion S11-2 is northern long-eared bat (*Myotis septentrionalis*). The Project alignment would occur within northern long-eared bat range even if it remained within the ADZ. Therefore, although there may be slightly more tree clearing associated with this excursion, there would be no substantial increase in anticipated impact to northern long-eared bat at this location. Any tree clearing required for the construction of the Project will occur per the approved methods in the EM&CP (e.g., during the winter clearing window, or pending additional agency coordination) in order to avoid impacts. See Section 9.3 of the EM&CP for additional detail.

Wetlands and Streams – There are several wetlands along the edge of the railroad embankment, some of which were proposed for temporary impacts within the ADZ. An equal amount of wetland would likely be impacted by the permanent placement of infrastructure if the conduit remained within the ADZ. The area will be restored as described in Section 14 of the EM&CP. Therefore, the proposed ADZ Excursion does not significantly increase impacts to wetlands or streams as compared with the approved ADZ.

In addition, the Segment 11 alignment, both within the ADZ and at Excursion #S11-2 cross Catskill Creek. The crossing will be installed through HDD and no impacts to the waterbody are anticipated.

2.3 Excursion #S11-3

1. Description of the Excursion

Excursion #S11-3 is located in the Village of Catskill, Greene County, New York just south of Willow Lane and North of Newberry Street. The excursion begins near Station 70103 and extends to Station 7017 (see Figure 1 and Profile Drawings [Sheet C-107.1, Appendix C of the EM&CP]).

2. Justification

At Excursion S11-3, the alignment was shifted west of the ADZ to comply with CSXT setbacks and avoid conflicts with utilities close to the railroad and Route 9W, and site the Facility within previously disturbed public road ROWs. Additional space is also required for the installation of Splice Vault 233.

3. Environmental Impact

The proposed excursion is approximately 0.24 miles in length and immediately adjacent to the ADZ, occurring just 4.5 linear feet west of the ADZ at the farthest point. The proposed excursion is a minor change in design. Environmental impacts will be minimized, and the overall character of the Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Recreational Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Cultural Resources – Based on the cultural resource analysis completed by Hartgen Associate, no cultural resources are present in the vicinity of Excursion S11-3 (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan).

Terrestrial Ecology – Excursion S11-3 occurs along a vegetated edge of the CSXT railroad ROW and encroaches slightly into adjacent private properties. Minor tree and vegetation clearing would be required within the ADZ at this location. This excursion is anticipated to require more tree and vegetation clearing as the alignment has been pushed out of the previously disturbed corridor and into a more forested area. Clearing will be selective and only remove what is required within the LOW for the construction of the Facility. The area will be restored as described in Section 14 of the EM&CP and any visual buffers will be replaced as required by DPS.

Threatened and Endangered Species – According to consultation with NYSDEC and USFWS, the only RTE species within the vicinity of Excursion S11-3 is northern long-eared bat. Any tree clearing required for the construction of the Project will occur per the approved methods in the EM&CP (e.g., during the winter clearing window, or pending additional agency coordination) in order to avoid impacts. See Section 9.3 of the EM&CP for additional detail.

Wetlands and Streams – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

2.4 Excursion #S11-4 and S11-5

1. Description of the Excursion

Excursions #S11-4 and S11-5 are located in the Village of Catskill, Greene County, New York between Cauterskill Avenue and West Bridge Street. The excursions begin near Station 70137 and extends to Station 70142 (see Figure 1 and Profile Drawings [Sheets C-110, Appendix C of the EM&CP]).

2. Justification

At Excursions S11-4 and S11-5, the alignment was shifted slightly east of the ADZ to comply with CSXT setbacks, avoid conflicts with utilities close to the rail and near Route 9W and Cauterskill Ave, and provide additional space for the HDD workspace.

3. Environmental Impact

The proposed excursions are approximately 128 and 41 feet in length, respectively, and occur immediately adjacent to the ADZ boundary. The proposed excursion therefore constitutes a minor change in design. These excursions will be installed via HDD thereby avoiding and minimizing any environmental impacts.

2.5 Excursion #S11-6

4. Description of the Excursion

Excursion #S11-5 is located in the Town and Village of Catskill, Greene County, New York south of West Bridge Street to Depot Street). The excursion begins near Station 70150 and extends to Station 70276+50 (see Figure 1 and Profile Drawings [Sheets C-111 to C-119, Appendix C of the EM&CP]).

5. Justification

At Excursion S11-6, the alignment was shifted southeast of the ADZ to comply with CSXT setbacks, avoid conflicts with utilities, and provide additional space for the installation of Splice Vault 235.

6. Environmental Impact

The proposed excursion is approximately 2.4 mile in length and adjacent to the ADZ, occurring approximately 55 linear feet southeast of the ADZ at the farthest point. The proposed excursion constitutes a minor change in design. Environmental impacts will be minimized, and the overall character of the Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – Based on a review of existing land uses in the vicinity of the excursion, and confirmed during site visits, one agricultural field is present along S11-6. The trench construction will only impact the edge of the agricultural field. The Agricultural Trench Detail on Sheet C-621 will be utilized. Splice location 237 will remain outside of the agricultural field. The HDD work area will utilize all BMPs outlined in Section 7.1 and restoration requirements in Section 14.5 will be followed. See section 7.1 of the EM&CP for more information.

Recreational Resources – Based on a review of existing land uses in the vicinity of the excursion, and confirmed during site visits, one recreational area is present along S11-6. A temporary work area and temporary access will be the only impact to the recreational area and will be graveled or use timber matting. All trenching and splice location 181 will remain outside of the recreation area or

as close to the edge of the field as possible. Any grading will follow all BMPs outlined in Section 7.2 and restoration requirements in Section 14.2 will be followed.

Cultural Resources – Hartgen Associates identified potential cultural resources in the vicinity of Excursion S11-6 (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). No direct impacts are proposed; however, additional testing or monitoring will be conducted.

Terrestrial Ecology – Excursion S11-6 occurs along a vegetated edge of the CSXT railroad ROW and encroaches slightly into adjacent private properties. Minor tree and vegetation clearing would have been required within the ADZ at this location. This excursion is anticipated to require more tree and vegetation clearing as the alignment has been pushed out of the previously disturbed corridor and into a more forested area. Clearing will be selective and only remove what is required within the LOW for the construction of the Facility. The area will be restored as described in Section 14 of the EM&CP and any visual buffers will be replaced as required by DPS.

Threatened and Endangered Species – According to consultation with NYSDEC and USFWS, the only RTE species within the vicinity of Excursion S11-6 is northern long-eared bat. Any tree clearing required for the construction of the Project will occur per the approved methods in the EM&CP (e.g., during the winter clearing window, or pending additional agency coordination) in order to avoid impacts. See Section 9.3 of the EM&CP for additional detail.

Wetlands and Streams – There are several wetlands along the edge of the railroad embankment, some of which were proposed for temporary impacts within the ADZ. A minor increase in wetlands impacted by the permanent placement of infrastructure is anticipated to result from Excursion S11-6 than if the conduit remained within the ADZ; however, the shift from the ADZ is required to comply with CSX setbacks from the railroad ROW and adjacent utilities. HDD entry and exit pits are not able to be shifted outside of the wetlands due to slope constraints, and the length of the proposed HDD cannot be shortened due to an increased risk of inadvertent return as detailed in Appendix J of the EM&CP. All disturbed wetlands will be restored as described in Section 14 of the EM&CP.

2.6 Excursion #S11-7

1. Description of the Excursion

Excursion #S11-7 is located in the Town of Catskill, Greene County, New York just south of Embought Road. The excursion begins near Station 70280 and extends to Station 70305 (see Figure 1 and Profile Drawings [Sheets C-119 to C-121, Appendix C of the EM&CP]).

2. Justification

At Excursion S11-7, the alignment was shifted east of the ADZ to avoid utility conflicts and stream impacts and comply with CSXT setbacks and provide space required for splice vault installation. Additionally, the landowner agreements requested that the alignment be sited as close as possible to the CSXT ROW.

3. Environmental Impact

The proposed excursion is approximately 0.5 miles in length and immediately adjacent to the ADZ, occurring approximately 100 linear feet east of the ADZ at the farthest point. The proposed excursion constitutes a minor change in design. Environmental impacts will be minimized, and the overall character of the Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Recreational Resources – Based on a desktop review of aerial imagery and existing land uses, and confirmed during the site walk, one recreational area is present in the vicinity of S11-7.

Cultural Resources – Hartgen Associates identified potential cultural resources in the vicinity of Excursion S11-7 (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). No direct impacts are proposed; however, additional testing or monitoring will be conducted.

Terrestrial Ecology – Excursion S11-7 occurs along a vegetated edge of the CSXT railroad ROW and encroaches slightly into adjacent private properties. Minor tree and vegetation clearing would have been required within the ADZ at this location. This excursion is anticipated to require more tree and vegetation clearing as the alignment has been pushed out of the previously disturbed corridor and into a more forested area. Clearing will be selective and only remove what is required within the LOW for the construction of the Facility. The area will be restored as described in Section 14 of the EM&CP and any visual buffers will be replaced as required by DPS.

Threatened and Endangered Species – According to information provided by NYSDEC and USFWS, portions of the Segment 11 Project Corridor were mapped within one mile of bald eagle nests and northern long-eared bat habitat, including the ADZ and the area of Excursion S11-7. Any tree clearing required for the construction of the Project will occur per the approved methods in the EM&CP (e.g., during the winter clearing window, or pending additional agency coordination) in order to avoid impacts to NLEB. No blasting or other extremely loud noises are proposed at this excursion area; therefore, no time of year restrictions relevant to bald eagles are applicable for construction of this excursion. Additional avoidance and minimization measures related to RTE species are provided in Section 9.3 of the EM&CP.

Wetlands and Streams – There are several wetlands along the edge of the railroad embankment, some of which were proposed for temporary impacts within the ADZ. An equal amount of wetland would likely be impacted temporarily by the excursion; however, the alignment of Excursion S11-7 may result in increased permanent wetland impacts that occur along the edge of the ADZ. The area will be restored as described in Section 14 of the EM&CP. Therefore, the proposed ADZ Excursion does not significantly increase impacts to wetlands or streams as compared with the ADZ.

2.7 Excursion #S11-8

1. Description of the Excursion

Excursion #S11-8 is located in the Town of Catskill, Greene County, New York south of Embought Road and north of Lehigh Road. The excursion begins near Station 70313 and extends to Station 70332 (see Figure 1 and Profile Drawings [Sheets C-122 to C-123, Appendix C of the EM&CP]).

2. Justification

At Excursion S11-8, the alignment was shifted east of the ADZ to avoid utility conflicts and comply with CSXT setbacks from the rail and utilize an existing disturbed area alongside the rail and public road ROWs. Additional space is also required for the HDD 121 installation. Additionally, the landowner agreements requested that the alignment be sited as close as possible to the CSXT ROW.

3. Environmental Impact

The proposed excursion is approximately 0.3 mile in length and immediately adjacent to the ADZ. The proposed excursion constitutes a minor change in design and the overall character of the Facility will not be changed. Excursion S11-8 will be installed via HDD thereby avoiding and minimizing environmental impacts. no further evaluation is warranted.

2.8 Excursion #S11-9 and S11-10

4. Description of the Excursion

Excursions #S11-9 and S11-10 are located in the Town of Catskill, Greene County, New York east of Route 9W. The excursion begins near Station 70334 and extends to Station 70355 (see Figure 1 and Profile Drawings [Sheets C-123 to C-124, Appendix C of the EM&CP]).

5. Justification

At Excursions S11-9 and S11-10, the alignment was shifted east of the ADZ to utility conflicts and comply with CSXT setbacks from the rail and utilize an existing disturbed corridor alongside the rail. Additional space is also required for the HDD installation. Additionally, the landowner agreements requested that the alignment be sited as close as possible to the CSXT ROW.

6. Environmental Impact

The proposed excursions are approximately 919 feet and 1,205 feet in length, respectively, and immediately adjacent to the ADZ. The proposed excursions constitute a minor change in design. Environmental impacts will be minimized, and the overall character of the Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Recreational Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Cultural Resources – Based on the cultural resource analysis completed by Hartgen Associate, no cultural resources are present in the vicinity of Excursion S11-9 and S11-10 (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan).

Terrestrial Ecology – Excursions S11-9 and S11-10 occurs along a vegetated edge of the CSXT railroad ROW and encroaches slightly into adjacent private properties. Minor tree and vegetation clearing would have been required within the ADZ at this location. This excursion is anticipated to

require more tree and vegetation clearing as the alignment has been pushed out of the previously disturbed corridor and into a more forested area. Clearing will be selective and only remove what is required within the LOW for the construction of the Facility. The area will be restored as described in Section 14 of the EM&CP and any visual buffers will be replaced as required by DPS.

Threatened and Endangered Species – According to information provided by NYSDEC and USFWS, portions of the Segment 11 Project Corridor were mapped within one mile of a documented bald eagle location, including the ADZ and the area of Excursions S11-9 and S11-10. The alignment is towards the outer edge of the one-mile buffer. No blasting or other extremely loud noises are proposed at this excursion area; therefore, no time of year restrictions relevant to bald eagles are applicable for construction of this excursion. Additional avoidance and minimization measures related to RTE species are provided in Section 9.3 of the EM&CP.

Wetlands and Streams – There are several wetlands along the edge of the railroad embankment, some of which were proposed for temporary impacts within the ADZ. An equal amount of wetland would likely be impacted temporarily by the excursion; however, the alignment of Excursions S11-9 and S11-10 are sited along a previously disturbed pathway therefore placement of permanent infrastructure will not result in increased permanent wetland impacts. The HDD entry and exit pits are not able to be shifted outside of the wetlands due to surrounding slope constraints and additional room needed for the HDD pads and turnaround areas. The current design avoids even further impacts to adjacent wetlands that could result from additional shifts in the HDD alignment. The area will be restored as described in Section 14 of the EM&CP. Therefore, the proposed Excursions do not significantly increase impacts to wetlands or streams as compared with the ADZ.

2.9 Excursion #S11-11

7. Description of the Excursion

Excursion #S11-11 is located in the Town of Catskill, Greene County, New York east of Route 9W and the CSXT railroad and immediately west of Lehigh Road. The excursion begins near Station 70392 and extends to Station 70398 (see Figure 1 and Profile Drawings [Sheets C-127, Appendix C of the EM&CP]).

8. Justification

At Excursion S11-11, the alignment was shifted east of the ADZ to avoid utility conflicts and comply with CSXT setbacks from the rail and utilize an existing disturbed area alongside the rail and private road ROWs. Additionally, the landowner agreements requested that the alignment be sited as close as possible to the CSXT ROW and outside of Lehigh Road.

9. Environmental Impact

The proposed excursion is approximately 494 feet in length and immediately adjacent to the ADZ. The proposed excursion constitutes a minor change in design. Environmental impacts will be minimized, and the overall character of the Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Recreational Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Cultural Resources – Based on the cultural resource analysis completed by Hartgen Associate, no cultural resources are present in the vicinity of Excursion S11-11 (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan).

Terrestrial Ecology – Excursion S11-11 occurs along a disturbed edge of the CSXT railroad ROW and private road. Tree and vegetation clearing would have been required within the ADZ at this location. This excursion is actually anticipated to require less tree and vegetation clearing as the alignment has been pushed out of the forested area into a more disturbed corridor close to the private road. Any clearing will be selective and only remove what is required within the LOW for the construction of the Facility. The area will be restored as described in Section 14 of the EM&CP and any visual buffers will be replaced as required by DPS.

Threatened and Endangered Species – According to information provided by NYSDEC and USFWS, portions of the Segment 11 Project Corridor were mapped within one mile of a documented bald eagle location, including the ADZ and the area of Excursion S11-11. The alignment is towards the outer edge of the one-mile buffer. No blasting or other extremely loud noises are proposed at this excursion area; therefore, no time of year restrictions relevant to bald eagles are applicable for construction of this excursion. Additional avoidance and minimization measures related to RTE species are provided in Section 9.3 of the EM&CP.

Wetlands and Streams – There are several wetlands along the edge of the railroad embankment, some of which were proposed for temporary impacts within the ADZ. An equal amount of wetland would likely be impacted temporarily by the excursion; however, the alignment of Excursion S11-11 is sited along a previously disturbed pathway and is intended to reduce the anticipated permanent wetland impacts that would have occurred within the ADZ. The area will be restored as described in Section 14 of the EM&CP. Therefore, this proposed Excursion does not significantly increase impacts to wetlands or streams as compared with the ADZ but actually reduces the permanent impacts.

2.10 Excursion #S11-12

1. Description of the Excursion

Excursion #S11-12 is located in the Town of Catskill, Greene County, New York east of Route 9W and south of Lehigh Road. The excursion begins near Station 70398 and extends to Station 70403 (see Figure 1 and Profile Drawings [Sheets C-127, Appendix C of the EM&CP]).

2. Justification

At Excursion S11-12, the alignment was shifted east of the ADZ to avoid utility conflicts close to the public road ROW. Additionally, the landowner agreements requested that the alignment be sited as close as possible to public ROW.

3. Environmental Impact

The proposed excursion is approximately 286 feet in length and immediately adjacent to the ADZ. The proposed excursion constitutes a minor change in design. Environmental impacts will be minimized,

and the overall character of the Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Recreational Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Cultural Resources – Based on the cultural resource analysis completed by Hartgen Associate, no cultural resources are present in the vicinity of Excursion S11-12 (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan).

Terrestrial Ecology – Excursion S11-12 occurs along a vegetated edge of the Route 9W ROW and encroaches slightly into adjacent private properties. Minor tree and vegetation clearing would have been required within the ADZ at this location. This excursion is anticipated to require more tree and vegetation clearing as the alignment has been pushed out of the previously disturbed corridor and into a more forested area. Clearing will be selective and only remove what is required within the LOW for the construction of the Facility. The area will be restored as described in Section 14 of the EM&CP and any visual buffers will be replaced as required by DPS.

Threatened and Endangered Species – According to information provided by NYSDEC and USFWS, portions of the Segment 11 Project Corridor were mapped within one mile of a documented bald eagle location, including the ADZ and the area of Excursion S11-12. The alignment is located towards the outer edge of the one-mile buffer. No blasting or other extremely loud noises are proposed at this excursion area; therefore, no time of year restrictions relevant to bald eagles are applicable for construction of this excursion. Additional avoidance and minimization measures related to RTE species are provided in Section 9.3 of the EM&CP.

Wetlands and Streams – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

2.11 Excursion #S11-13

1. Description of the Excursion

Excursion #S11-13 is located in the Town of Catskill, Greene County, New York east of Route 9W. The excursion begins near Station 70408 and extends to Station 70412 (see Figure 1 and Profile Drawings [Sheets C-128, Appendix C of the EM&CP]).

2. Justification

At Excursion S11-13, the alignment was shifted east of the ADZ to avoid utility conflicts close to the public road ROW. Additionally, the landowner agreements requested that the alignment be sited as close as possible to public ROW.

3. Environmental Impact

The proposed excursion is approximately 286 feet in length and immediately adjacent to the ADZ. The proposed excursion constitutes a minor change in design. Environmental impacts will be minimized,

and the overall character of the Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Recreational Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Cultural Resources – Based on the cultural resource analysis completed by Hartgen Associate, no cultural resources are present in the vicinity of Excursion S11-13 (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan).

Terrestrial Ecology – Excursion S11-13 occurs along a vegetated edge of the Route 9W ROW and encroaches slightly into adjacent private properties. Minor tree and vegetation clearing would have been required within the ADZ at this location. This excursion is anticipated to require more tree and vegetation clearing as the alignment has been pushed out of the previously disturbed corridor and into a more forested area. Clearing will be selective and only remove what is required within the LOW for the construction of the Facility. The area will be restored as described in Section 14 of the EM&CP and any visual buffers will be replaced as required by DPS.

Threatened and Endangered Species – According to information provided by NYSDEC and USFWS, portions of the Segment 11 Project Corridor were mapped within one mile of a documented bald eagle location, including the ADZ and the area of Excursion S11-13. The alignment is located towards the outer edge of the one-mile buffer. No blasting or other extremely loud noises are proposed at this excursion area; therefore, no time of year restrictions relevant to bald eagles are applicable for construction of this excursion. Additional avoidance and minimization measures related to RTE species are provided in Section 9.3 of the EM&CP.

Wetlands and Streams – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

2.12 Excursion #S11-14

1. Description of the Excursion

Excursion #S11-14 is located in the Town of Catskill, Greene County, New York south of Alpha Boulevard. The excursion begins near Station 70420 and extends to Station 70424 (see Figure 1 and Profile Drawings [Sheets C-129, Appendix C of the EM&CP]).

2. Justification

At Excursion S11-14, the alignment was shifted east of the ADZ to provide additional space required for the installation of Splice Vault 244 while avoiding utility conflicts within and near Route 9W. Additionally, the landowner agreements requested that the alignment be sited as close as possible to the public ROW.

3. Environmental Impact

The proposed excursion is approximately 276 feet in length and immediately adjacent to the ADZ. The proposed excursion constitutes a minor change in design. Environmental impacts will be minimized,

and the overall character of the Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Recreational Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Cultural Resources –Hartgen Associates identified known cultural resources in the vicinity of Excursion S11-14. No direct impacts are proposed, however additional testing or monitoring will be conducted (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan).

Terrestrial Ecology – Excursion S11-14 occurs in an open field along the edge of the Route 9W ROW and encroaches slightly into adjacent private properties. A minor increase in vegetation clearing may be required in this area than what would have been needed within the road ROW. Given this is a previously disturbed area, there is no anticipated impact on terrestrial ecology. The area will be restored as described in Section 14 of the EM&CP and any visual buffers will be replaced as required by DPS.

Threatened and Endangered Species – According to information provided by NYSDEC and USFWS, portions of the Segment 11 Project Corridor were mapped within one mile of a documented bald eagle location, including the ADZ. The alignment is at the outer edge of the one-mile buffer and no blasting or other extremely loud noises are proposed at this excursion area; therefore, no time of year restrictions relevant to bald eagles are applicable for construction of this excursion. Additional avoidance and minimization measures related to RTE species are provided in Section 9.3 of the EM&CP.

Wetlands and Streams – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

2.13 Excursion #S11-15

1. Description of the Excursion

Excursion S11-15 is located in the Town of Catskill, Greene County, New York east of Alpha Boulevard. The excursion begins near Station 70447 and extends to Station 70463 (see Figure 1 and Profile Drawings [Sheets C-130 to C-131, Appendix C of the EM&CP]).

2. Justification

At Excursion S11-15, the alignment was shifted slightly north of the ADZ to obtain a better angle leading up to the transition vault and avoid disturbance to the Lehigh Cement facility road.

3. Environmental Impact

The proposed excursion is approximately 438 feet in length and immediately adjacent to the ADZ, occurring just 9 linear feet north of the ADZ at the farthest point. The proposed excursion constitutes a minor change in design. Environmental impacts will be minimized, and the overall character of the

Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Recreational Resources – None present within the vicinity of the excursion based on desktop analysis and field confirmation.

Cultural Resources – Based on the cultural resource analysis completed by Hartgen Associates, no cultural resources are present in the vicinity of Excursion S11-15 (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan).

Terrestrial Ecology – Excursion S11-15 occurs along a vegetated edge of a private driveway on Lehigh Cement Facility property. Minor tree and vegetation clearing would have been required within the ADZ at this location. This excursion is anticipated to require more tree and vegetation clearing as the alignment has been pushed out of the previously disturbed corridor and into a more forested area. Clearing will be selective and only remove what is required within the LOW for the construction of the Facility. The area will be restored as described in Section 14 of the EM&CP and any visual buffers will be replaced as required by DPS.

Threatened and Endangered Species – According to information provided by NYSDEC and USFWS, portions of the Segment 11 Project Corridor were mapped in the vicinity of bald eagle habitat, including the ADZ and the area of Excursion S11-15. More specifically, Excursion S11-15 is located within 330 feet of an active bald eagle nest. Construction would take place within 330 feet of the eagle nest even if the conduit remained within the ADZ. No blasting or other extremely loud noises are proposed at S11-15. All construction activities occurring within 660 feet of the nest will be conducted between October and December (outside of the bald eagle breeding season) in accordance with NYSDEC and USFWS guidance. Additional avoidance and minimization measures related to RTE species are provided in Section 9.3 of the EM&CP. Therefore, this excursion is not anticipated to result in increased impacts to threatened or endangered species.

Wetlands and Streams – A state regulated wetland complex is located to the north and south of the ADZ where it borders an existing private road ROW. Excursion S11-15 will occur within the regulated 100-foot adjacent area and comprises an equal amount of temporary impacts as compared to the ADZ. Impacts to state-regulated wetlands and adjacent areas have been conveyed to NYSDPS and NYSDEC and the Certificate Holders will develop and implement a mitigation plan as approved by and in consultation with NYSDEC. The area will be restored as described in Section 14 of the EM&CP; therefore, the proposed ADZ Excursion does not significantly increase impacts to wetlands or regulated adjacent areas as compared with the approved ADZ.

3.0 Conclusion

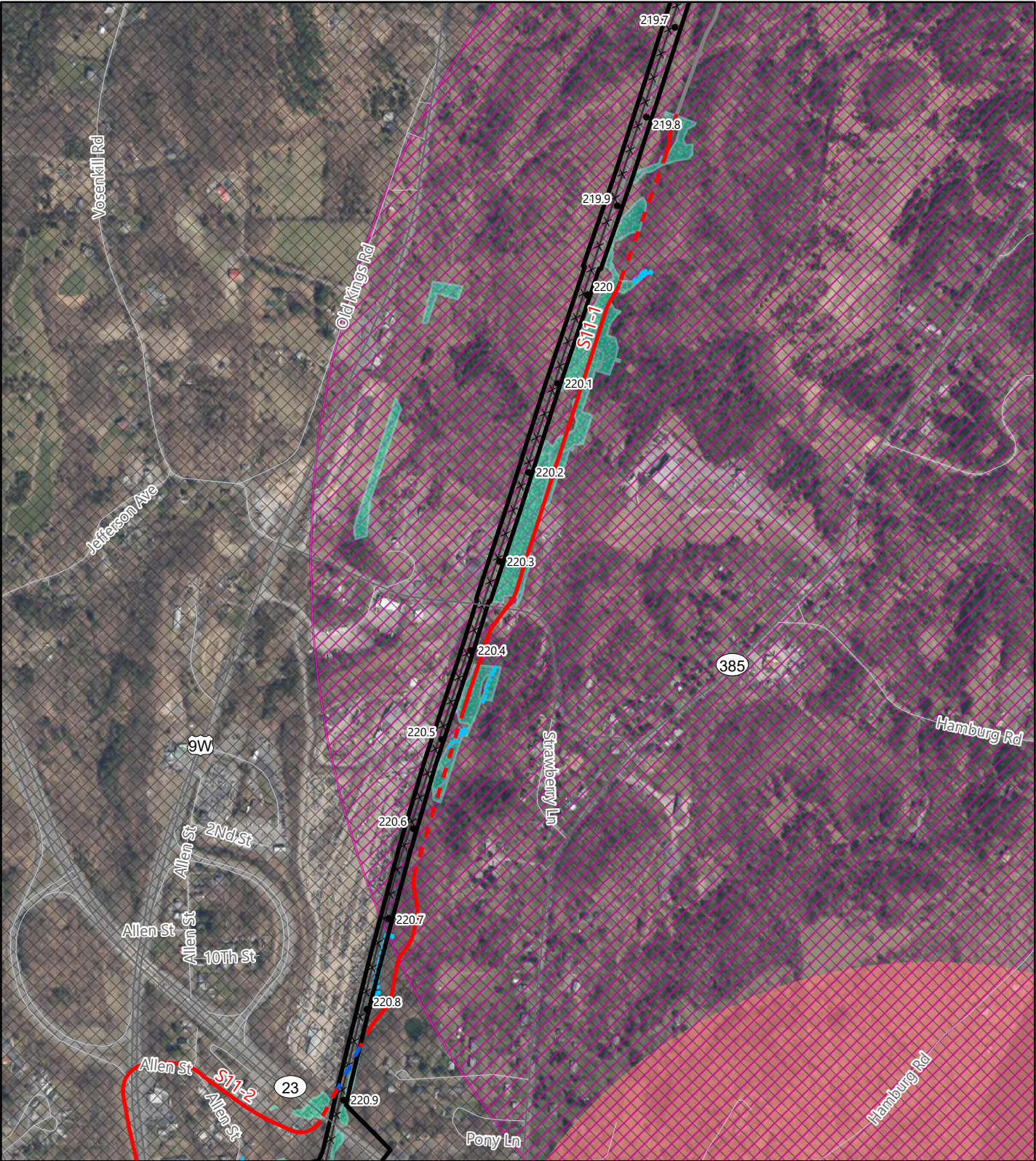
The adjusted route at the various excursions in Segment 11 presented above do not significantly increase adverse environmental impacts. Impacts associated with this work have been minimized and mitigated and can be addressed by the Certificate Conditions already approved by the Commission for the Facility. The requested excursions from the ADZ are necessary for appropriate engineering and environmental reasons and do not conflict with the other Certificate Conditions.

On that basis, the Certificate Holders respectfully request that DPS Staff approve the excursions from the ADZ with the Segment 11 EM&CP without modification to the Certificate, except as it relates to Excursion S11-2 (Catskill Reroute).

With regard to the Catskill Reroute, Certificate Holders respectfully request that the PSC consider this submission in concert with the appended petition for a modification. That this EM&CP submission, together with the petition, materially adhere to the same general procedural and substantive requirements which would otherwise be required for a modification (such as the dissemination of legal notices to affected landowners, notice to the public and host communities, and a robust justification for the changes requested). The ADZ changes will not result in any material increase in environmental impacts from the Facility—and, in fact, are intended to decrease environmental impacts at certain locations—and do not substantially change the location of the Facility for the reasons described in this memorandum. For these reasons, Certificate Holders submit that a hearing is not required or warranted in accordance with PSL Section 123(2).

Attachment 1

Figure Set

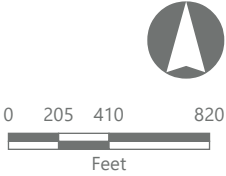
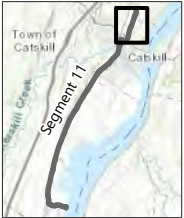


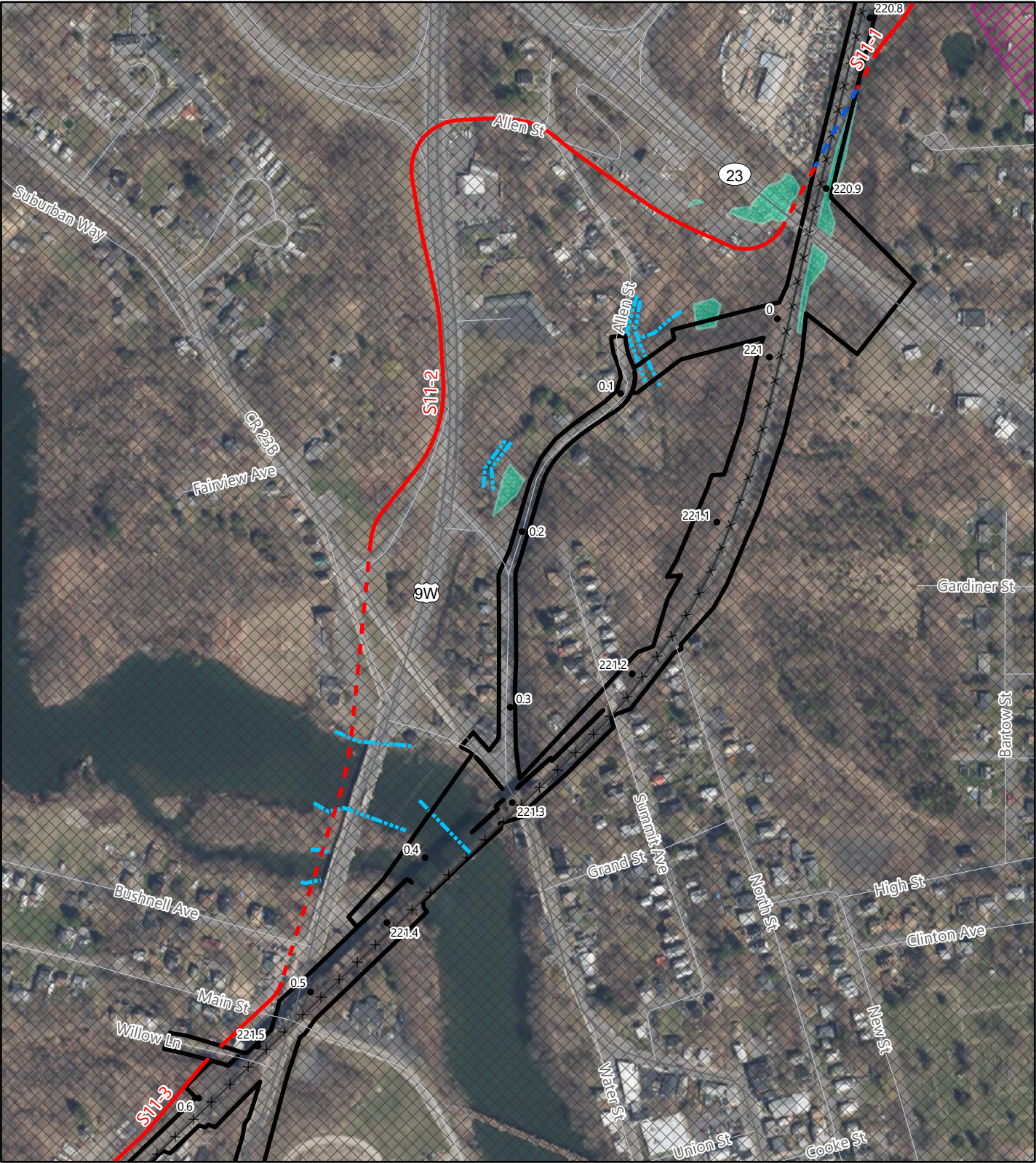
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EM&CP Appendix E



- Segment 11 Trench Excursion
- Segment 11 HDD Deviation Zone Excursion
- Segment 11 HDD within Deviation Zone
- Segment 10 Trench
- Railroad
- Delineated Stream
- Delineated Wetland
- ESA 1
- ESA 9
- ESA 10
- Deviation Zone



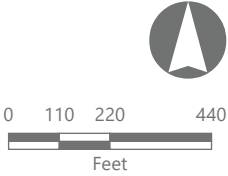


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- Segment 11 Trench Excursion
- Segment 11 HDD
- Deviation Zone Excursion
- Segment 11 HDD within Deviation Zone
- Railroad
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- Delineated Wetland
- ESA 1
- ESA 9
- Deviation Zone





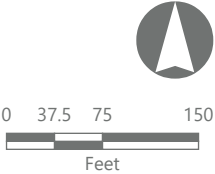
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- Segment 11 Trench Excursion
- Segment 11 HDD Deviation Zone Excursion
- Segment 11 HDD within Deviation Zone

- Railroad
- ESA 9
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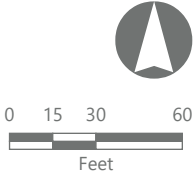
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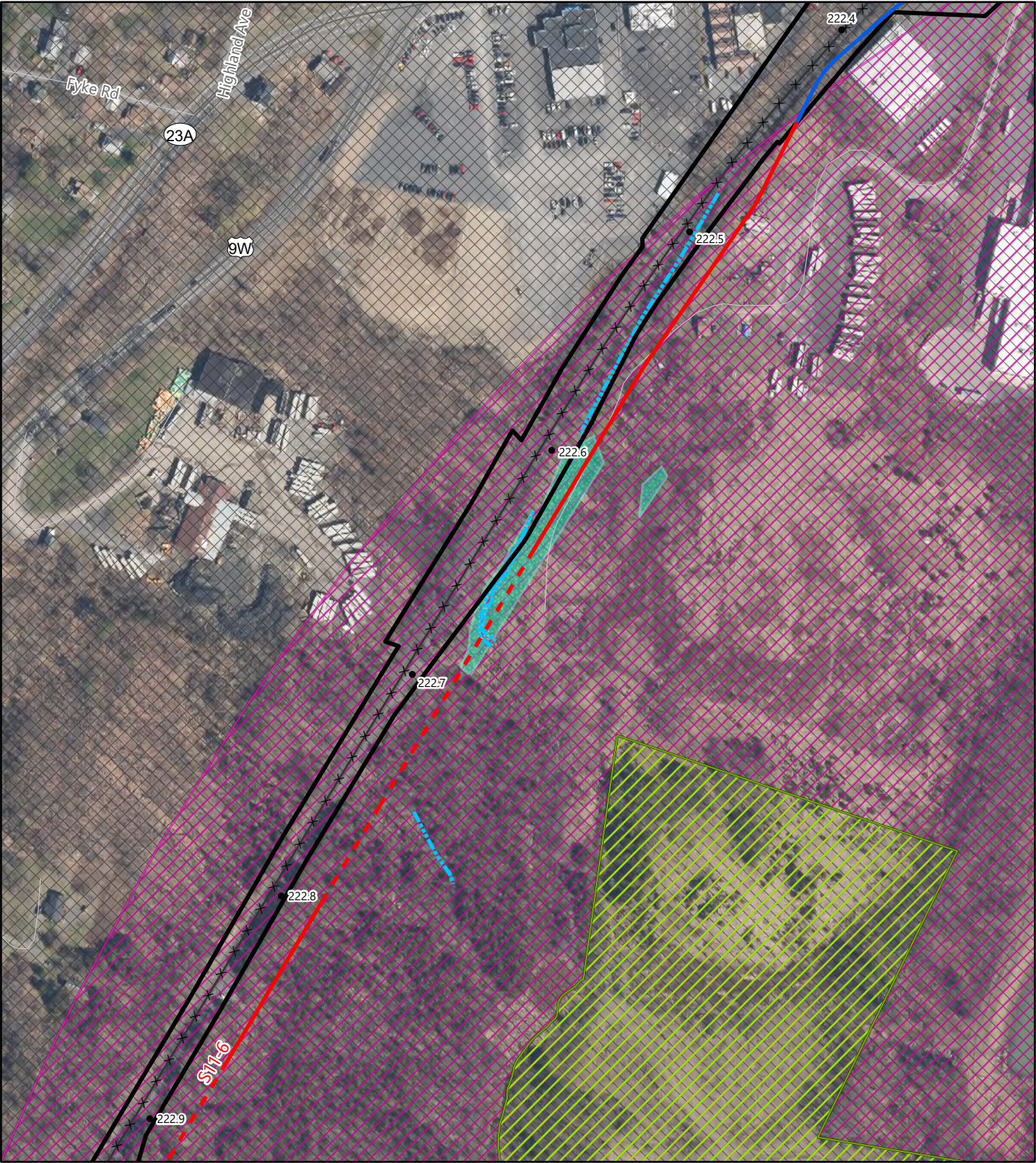
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EM&CP Appendix E

- Segment 11 HDD Deviation Zone Excursion
- Segment 11 HDD within Deviation Zone

- Railroad
- ESA 1
- ESA 9
- Deviation Zone





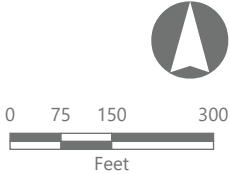
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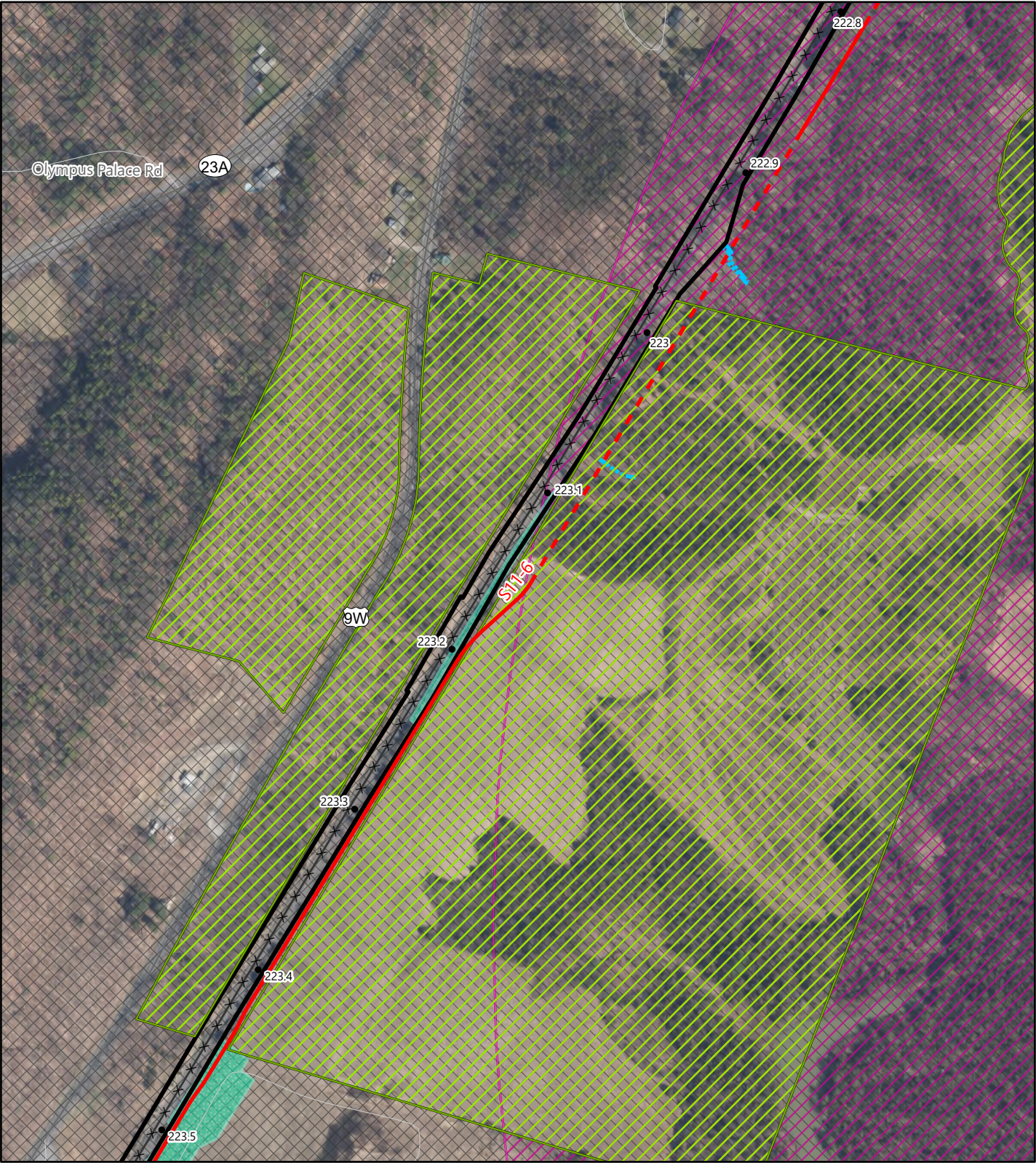
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- Segment 11 Trench Excursion
- Segment 11 HDD Deviation Zone Excursion
- Segment 11 Trench
- Railroad
- Delineated Stream

- Delineated Wetland
- Agricultural Land
- ESA 1
- ESA 9
- Deviation Zone



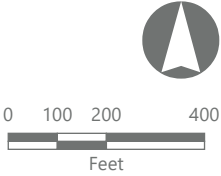


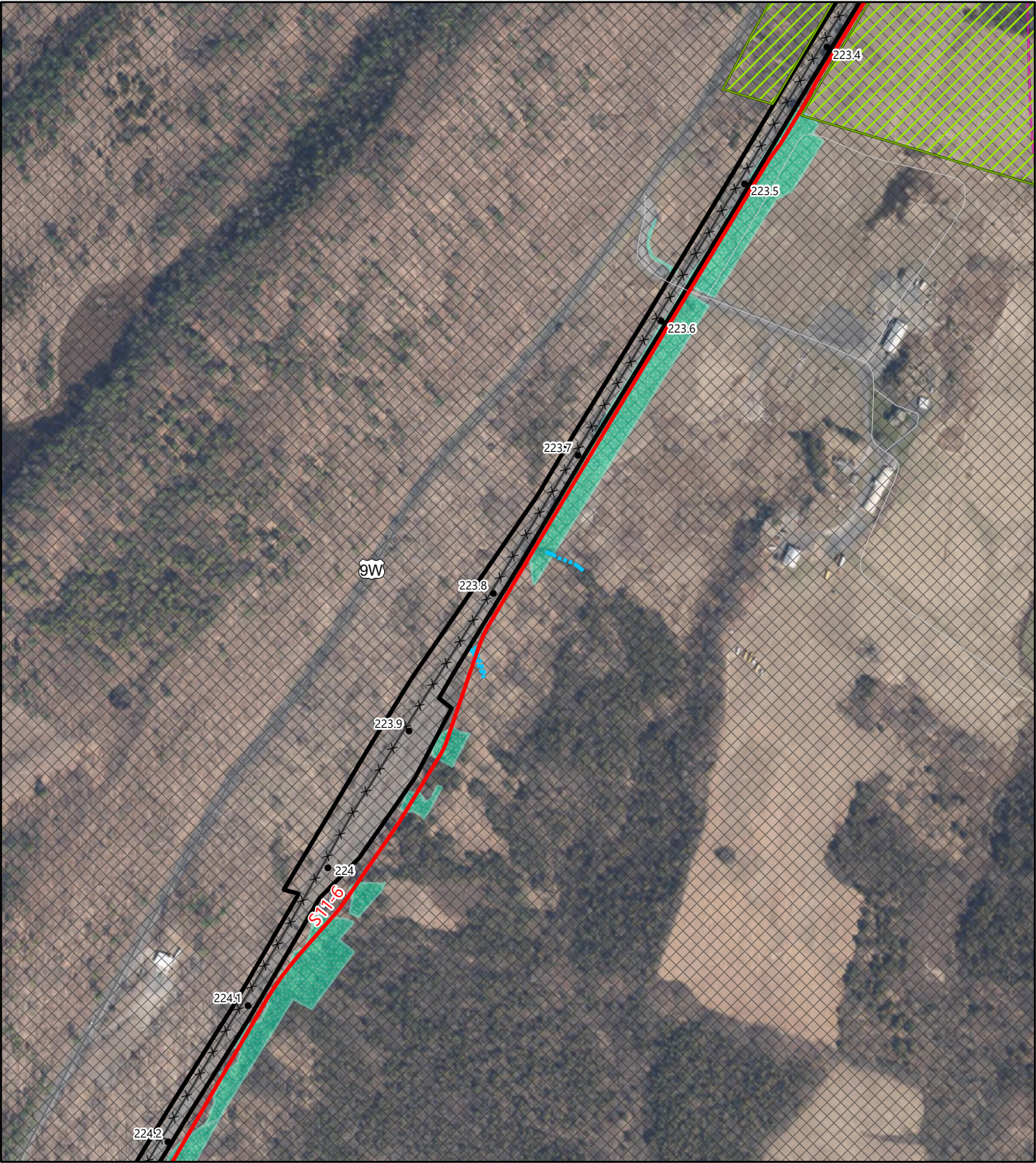
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- Segment 11 Trench Excursion
- Segment 11 HDD Deviation Zone Excursion
- Railroad
- Delineated Stream
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- ESA 1
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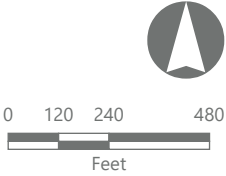


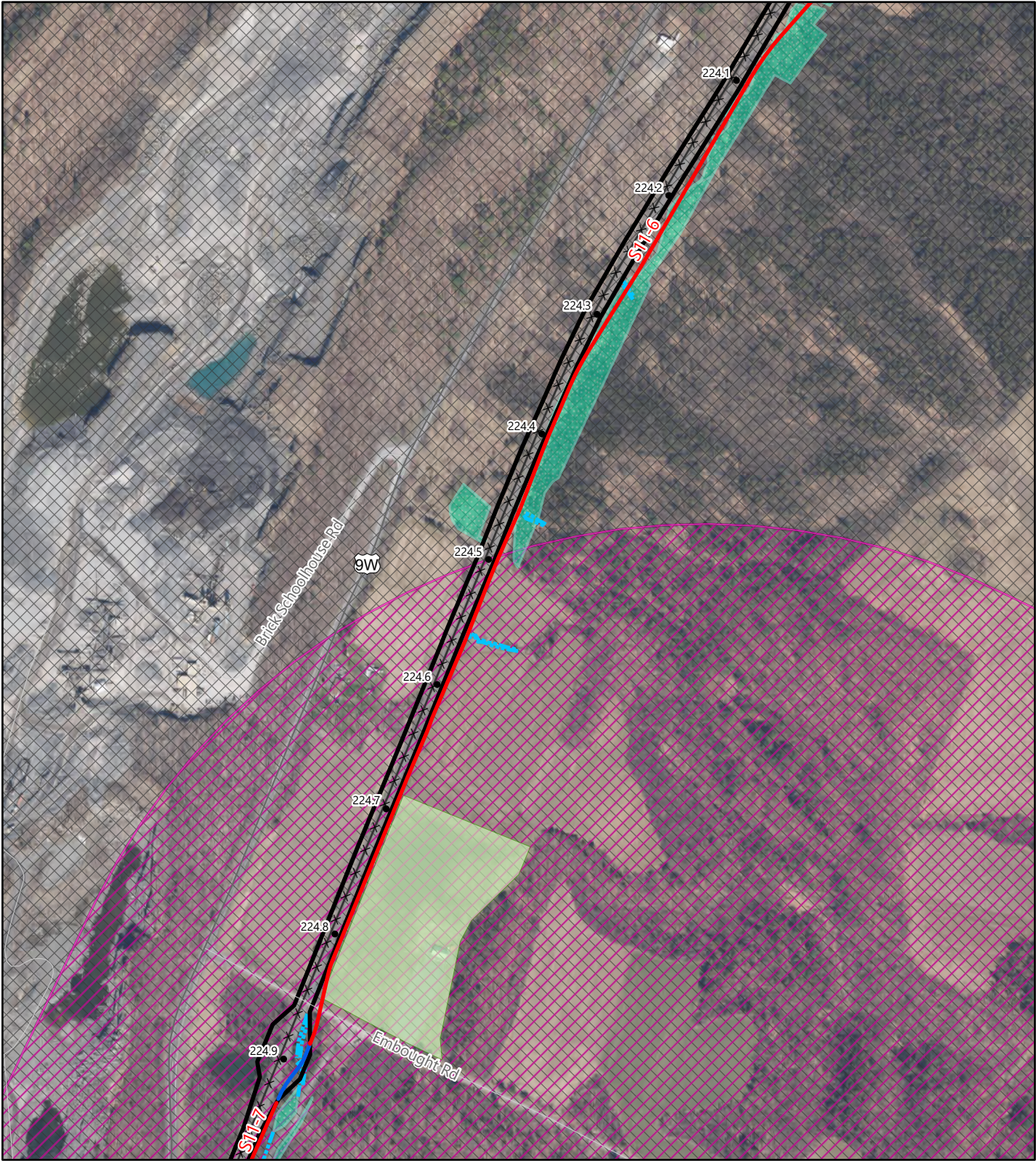
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- Segment 11 Trench Excursion
- Railroad
- Delineated Stream
- Delineated Wetland
- Agricultural Land
- ESA 1
- ESA 9
- Deviation Zone



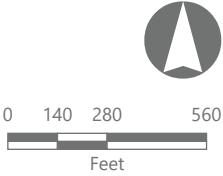


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- Segment 11 Trench Excursion
- Segment 11 Trench
- Railroad
- Delineated Stream
- Delineated Wetland
- Recreation Area
- ESA 1
- ESA 9
- Deviation Zone





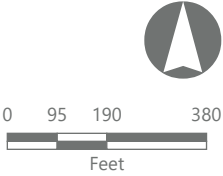
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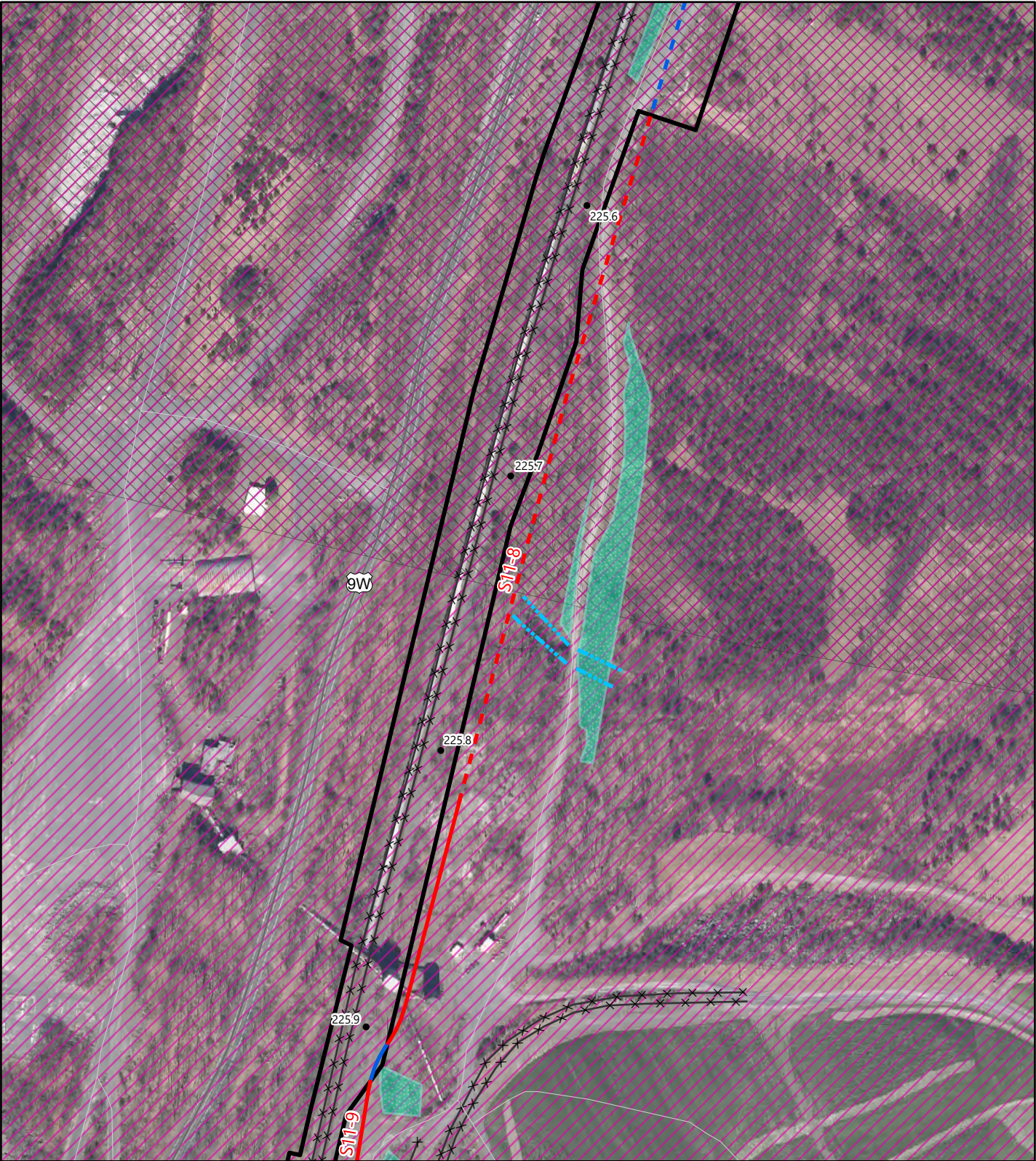
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EM&CP Appendix E



- Segment 11 Trench Excursion
- Segment 11 Trench
- Railroad
- Delineated Stream
- Delineated Wetland
- Recreation Area
- ESA 1
- ESA 9
- Deviation Zone



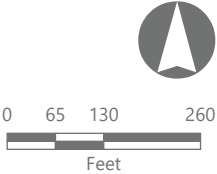


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- Segment 11 HDD Deviation Zone Excursion
- Segment 11 HDD within Deviation Zone
- Segment 11 Trench
- Railroad
- Delineated Stream
- Delineated Wetland
- ESA 1
- ESA 9
- Deviation Zone





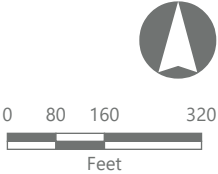
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- Segment 11 HDD within Deviation Zone
- Segment 11 Trench
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- Delineated Wetland
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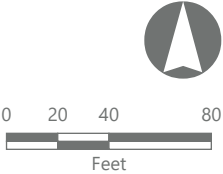


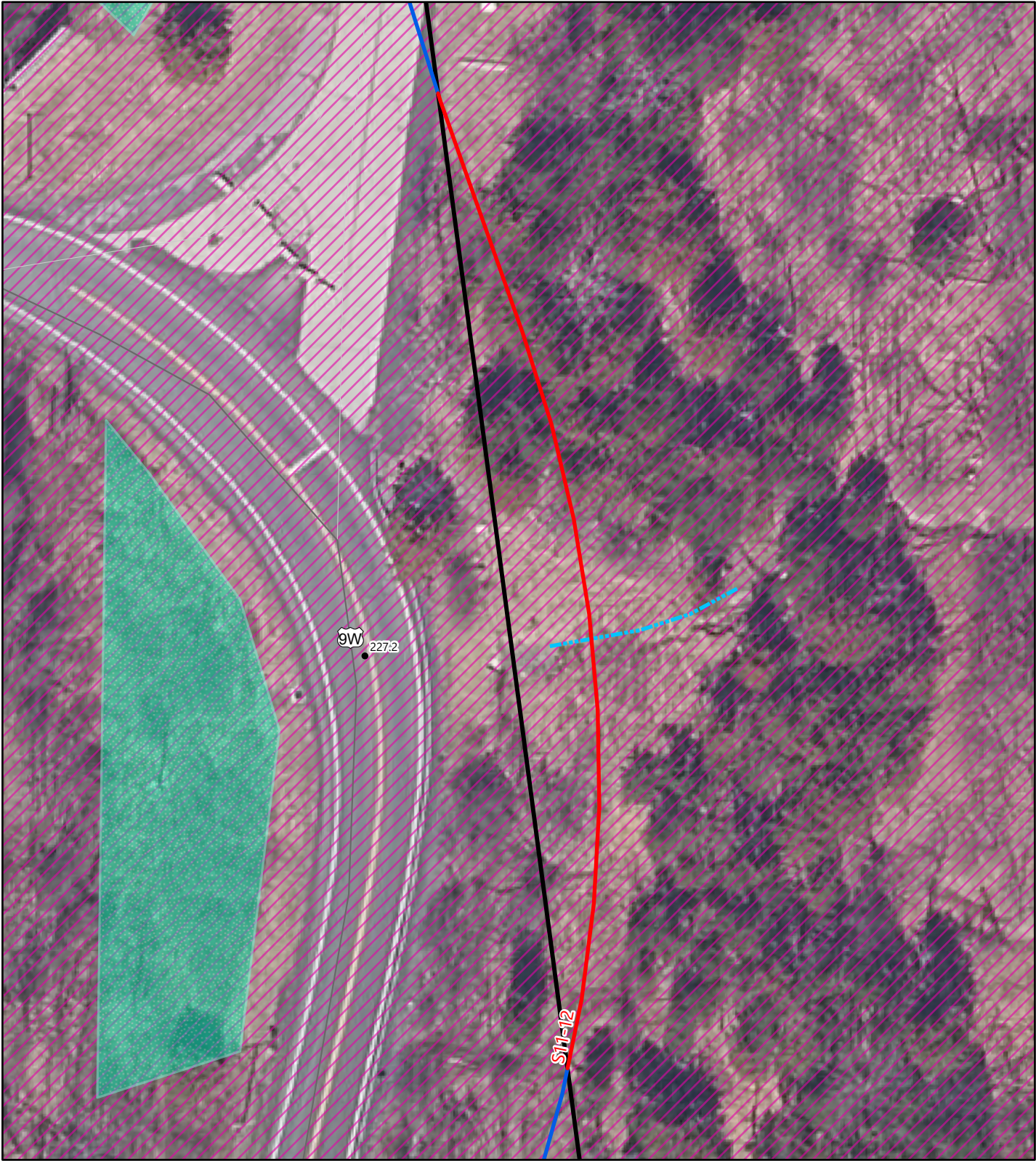


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- Segment 11 Trench Excursion
- Segment 11 Trench
- Railroad
- Delineated Wetland
- ESA 1
- Deviation Zone

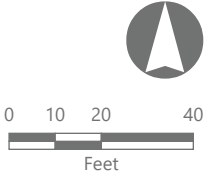




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- Segment 11 Trench Excursion
- Segment 11 Trench
- Delineated Stream
- Delineated Wetland
- ESA 1
- Deviation Zone

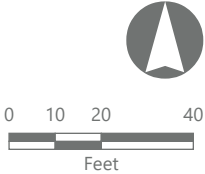




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- Segment 11 Trench Excursion
- Segment 11 Trench
- Railroad
- ESA 1
- Deviation Zone

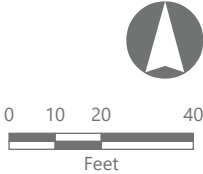




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- Segment 11 Trench
- ESA 1
- Deviation Zone





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- Segment 11 Trench Excursion
- Segment 11 Trench
- Delineated Wetland
- Regulated Adjacent Areas
- ESA 1
- Deviation Zone

