

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

2.1 INTRODUCTION

Champlain Hudson Power Express (now CHPE LLC and CHPE Properties, Inc.) (collectively the "Certificate Holders" or "CHPE") hold a Certificate of Environmental Compatibility and Public Need ("Certificate") issued April 18, 2013 by 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). In the April 2013 Order approving the Certificate, and in amendments approved thereafter, the PSC approved a Facility route, as depicted on a series of maps included as Appendix B of a Joint Proposal reached among the parties to case 10-T-0139 (and as amended).

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), and certain adjacent areas as defined in Certificate Condition S8-5, 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 rights concerning property to be used for permanent facility components or ROW, the Certificate Holders have obtained or will obtain initial title information, where available and appropriate, and will continue to develop the required title reports in accordance with CC 143.

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). The Certificate Conditions require that, should conduit installation work be proposed outside of the ADZ, an explanation for the proposed deviations must be provided pursuant to CC 157. Provided those certain criteria are met, Condition 157 of the Certificate confers discretion on the Public Service Commission to approve, the Environmental Management Construction Plan (EM&CP) filings which include "deviations from the design depth, height, and location of facilities or structures." Specifically, Condition 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 10, the Certificate Holders are proposing minor shifts in the proposed conduit outside of the ADZ at 21 unique locations along the Project Corridor (shown in Attachment 1 – Segment 8 Deviation Zone Excursions Locations 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 exceedance is limited to the minimum extent necessary.
2. Confirmation that Certificate Holders either have (1) obtained or will obtain 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 are in the process of recording those rights with the appropriate County office, where required, and/or (2) have provided notice to any and all landowners owning any part of the ADZ Excursions with a written offer to such landowner for such rights to occupy and use their land(s) for Project purposes as would be needed for Certificate Holders under Section 11 of the Transportation Corporations Law.
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 areas are not material.
4. A demonstration that installation of the Facility conduits at the ADZ Excursion Areas will not substantially change the overall character of the Facility.

2.2 EXPLANATION FOR PROPOSED EXCURSIONS FROM THE DEVIATION ZONE IN SEGMENT 10

The ADZ in Segment 10 is located almost entirely within the CSX Rail ROW. The Certificate Holders have endeavored to keep the Facility located within the currently approved ADZ; however, adherence to certain CSX requirements and avoiding certain physical limitations and/or obstacles have resulted in necessary shifts in the Facility location. Excursions from the ADZ have been identified at 21 unique locations along the Segment 10 Project Corridor, within the 20.9-mile segment. Table 1-1 below each ADZ Excursion, their location on the Plan and Profile Drawings (Appendix C of the EM&CP), a justification for the excursion, and if there is any change in environmental impact. It is worth noting that some of these excursions consist mainly of construction via trenchless technologies (e.g., horizontal directional drill [HDD]) such that additional earth disturbance or adverse impacts can be avoided. Overall, these changes do not substantially change the overall character of the Facility or the proposed route, which still generally runs parallel to the CSX railroad line as approved in the Certificated Route.

Table 1-1. Deviation Zone Excursions in Segment 10

Deviation Zone Excursion Number	Parcel	Sheet	Location (approximate – see Drawings for Details)		Justification	Environmental Impact
			Stationing Start (Approximate Mile Post)	Stationing End (Approximate Mile Post)		
S10-1	144-1-24	C-107	60098 (200.6)	60100	rough terrain leading up and into the HDD	None – within HDD

Deviation Zone Excursion Number	Parcel	Sheet	Location (approximate – see Drawings for Details)		Justification	Environmental Impact
			Stationing Start (Approximate Mile Post)	Stationing End (Approximate Mile Post)		
S10-2	144-1-24	C-108	60111 (200.8)	60114+50 (200.9)	Rough terrain requires HDD to be pushed more west	None – within HDD
S10-3	144-1-24 144-1-51	C-108 and C- 109	60117 (200.95)	60127 (201.15)	Rough terrain requires HDD to be pushed more west; additional space required for Splice 198	See below
S10-4	156-2-1.11	C-112	60171+50 (201.95)	60174 (202)	Need for HDDs under CSX culverts and avoidance of stream impacts; HDD avoids Lafarge North America Cement Plant overhead conveyor belt structures; this area is the only location for the work areas for the HDDs on both sides	See below
S10-5	156-5-36	C-114	60204+50 (202.6)	60205+50	Village of Ravena Mosher Park requires act of state to obtain easements on property, so realignment was necessary to ensure easements would not be required South of this location.	See below
S10-6	NA	C-117	61249 (203.45)	61250	HDD for road crossing extended to avoid terrain and utilities	None – within HDD
S10-7	168.10-7-18 168-2-24.8 168-2-26 7.01-2-10	C-117 to C- 123	61254 (203.5)	61342 (205.2)	HDD for road crossing extended to avoid terrain and utilities; avoid terrain and utilities by staying towards the far edge of CSX ROW	See below
S10-8	7.03-2-23	C-124 and C- 125	61355 (205.4)	61374 (205.8)	Extreme terrain and utilities poles being avoided	See below
S10-9	7.00-6-1	C-126	61382 (206)	61385	Angle required for HDD entry and exit to avoid terrain	None – within HDD
S10-10	17.01-2-2 17.03-2-10	C-127 to C- 128	61390 (206.1)	61414 (206.55)	Additional space required for Splice 207; extreme terrain	See below

Deviation Zone Excursion Number	Parcel	Sheet	Location (approximate – see Drawings for Details)		Justification	Environmental Impact
			Stationing Start (Approximate Mile Post)	Stationing End (Approximate Mile Post)		
					avoided closer to tracks	
S10-11	17.03-2-28 17.03-2-27 17.03-2-27 29.01-2-19	C-129 to C- 133	62427 (206.6)	62491 (208)	Angle required for HDDs that avoids terrain and state- stream; Avoidance of CSX culvert; Overhead electric utility avoided; soil conditions pushes alignment away from railroad tracks	See below
S10-12	29.00-3-16	C-136	62531 (208.8)	62535+50	additional space required for Splice 211	See below
S10-13	29.00-3-16 41.00-1-30 41.00-1-29	C-138 to C- 140	62557 (209.25)	62588 (209.85)	Additional space required for Splice 213 and 214; embankment requires alignment to be more west of CSX tracks; HDD work areas to avoid culverts require more space	See below
S10-14	41.00-1-25	C-140	62594 (209.95)	62595	Space required for constructability of HDD that avoids state stream	None – within HDD
S10-15	41.00-5-6.11 41.00-5-40 56.10-2-52.111 56.10-2-52.112 56.10-2-46.2 56.10-2-40 56.10-2-37 56.10-2-34	C-142 to C- 146	62618 (210.4)	62681 (211.5)	Conflicting Conservation easements required realignment at this location	See below
S10-16	56.18-1-6	C-147	62694 (211.75)	62695	Angle required for HDD to cross CSX tracks	None – within HDD
S10-17	56.18-1-18 56.18-1-15 71.00-1-1	C-147 to C- 149	62697+50 (211.8)	62729 (212.4)	Angle required for HDD exit pit; avoidance of a variety of utilities; required offset for CHG&E transmission line; conservation easements	See below
S10-18	71.00-1-23	C-150	62738 (212.6)	62747 (212.7)	Conflicting Conservation easements required realignment at this location	See below

Deviation Zone Excursion Number	Parcel	Sheet	Location (approximate – see Drawings for Details)		Justification	Environmental Impact
			Stationing Start (Approximate Mile Post)	Stationing End (Approximate Mile Post)		
S10-19	71.00-1-25	C-150 to C- 175	62750 (212.8)	64113 (end) (219.8)	Avoidance of Central Hudson Gas & Electric (CHG&E)(infrastructure and offset requirement for future upgrades to infrastructure	See below
	71.00-1-33.2					
	71.00-1-33.1					
	71.00-1-37					
	71.00-4-11					
	88.00-1-1					
	88.00-1-2					
	88.00-1-46					
	87.00-4-9					
	104.00-4-1					
	104.00-4-37					
	104.00-4-35.2					
	104.00-4-34.1					
	104.00-4-33.1					
	104.00-4-32					
	104.00-4-39					
	104.00-4-27.2					
	121.00-4-50					
	121.00-4-65					
	121.00-3-19.2					
	121.00-3-22					
	121.00-3-21.1					
	121.00-3-25					
	139.00-2-13					
	139.00-4-37					

The following excursions have been determined to have no or limited additional environmental impact due to the minor nature of the shift, lack of sensitive resources present, or because installation methods (e.g., HDD) have allowed for impact avoidance; S10-1, S10-2, S10-6, S10-9, S10-14, and S10-16. Descriptions of the remaining excursions are provided below:

2.3 EXCURSION S10-3

1. Description of the Excursion

Excursion S10-3 is located within the Town of Coeymans beginning about 710 feet south of the Old Ravena Road crossing (approximately STA 60117 to 60127 on Sheet C-108 and C-109 of the Plan and Profile Drawings (Appendix C of the EM&CP; see also attached figure set).

2. Justification

Splice vault locations are required at a certain interval (at least every 3,200 feet, approximately) to correspond to the length of cable on each reel. At Excursion S10-3, additional space is required for Splice 198. The splice work area must be placed perpendicular to the alignment and therefore there is not enough space for the splice work area between the tracks and the alignment at this location.

Due to this spatial requirement and the rough terrain that leads up to and into the HDD, the alignment leading up to and out of the splice, the splice itself, and the alignment leading to the HDD will be placed outside and parallel to the ADZ for approximately 1,030 linear feet. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 32 feet perpendicular to the ADZ at its furthest point; 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 aerial imagery and field confirmation.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion S10-3 is not in the vicinity of any identified archaeological or historic resources and therefore does not result in any additional impact.

Terrestrial Ecology – Excursion S10-3 occurs along a vegetated forest stand along the CSX ROW. The same amount of tree and vegetation clearing is required at this location for the placement of the conduit regardless of being in or out of the ADZ, thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and CHPE will only remove what is required 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 CHPE's Certificate and/or private lease agreements.

Threatened and Endangered Species – The only RTE species within the vicinity of Excursion S10-3 as identified through consultation with the DEC or USFWS is the Indiana 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 and minimize impacts.

Wetlands and Streams – This excursion is within one wetland and one delineated stream. This wetland extends into the ADZ and would be impacted whether the Facility remained within the ADZ or not. This wetland was delineated within the Project Corridor and extends outside of the ADZ. A larger amount of wetland would 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. Impacts to the stream are avoided by the HDD within this excursion. Therefore, the

proposed ADZ Excursion does not significantly increase impacts to wetlands or streams as compared with the approved ADZ.

2.4 EXCURSION S10-4

1. Description of the Excursion

Excursion S10-4 is located within the Town of Coeymans beginning about 6,000 feet south of the Old Ravena Road crossing (approximately STA 60171+50 to 60174 on Sheet C-1112 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

Several constraints at this location require an excursion from the ADZ. First, there are several CSX culverts and streams that must be avoided by the HDDs on either side of the work area within this Excursion. Secondly, the Lafarge North America Cement overhead conveyor belt structures must be avoided by HDD to avoid impact to said structures. These constraints put the alignment just outside and parallel to the ADZ for approximately 312 linear feet. This ADZ Excursion request is grounded in engineering and environmental reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 13 feet perpendicular to the ADZ at its furthest point; environmental impacts will be minimized, and the overall character of the Facility will not be changed. The figures of the Appendix show this being within an HDD. That is due to the very close back-to-back HDD's. A review of the plans in Appendix C show this is a small work area between each HDD. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources – None present within the vicinity of Excursion based on desktop aerial imagery and field confirmation.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion S10-4 is not in the vicinity of any identified archaeological or historic resources and therefore does not result in any additional impact.

Terrestrial Ecology – Excursion S10-4 occurs along a vegetated forest stand along the CSX ROW. The same amount of tree and vegetation clearing is required at this location regardless of being in or out of the ADZ, with some being avoided by the HDD in this excursion thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be

selective and CHPE will only remove what is required 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 CHPE's certificate or private lease agreements.

Threatened and Endangered Species – The only RTE species within the vicinity of Excursion S10-4 as identified through consultation with the DEC and USFWS is the Indiana 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 and minimize impacts.

Wetlands and Streams – This excursion is within wetlands and delineated streams. These streams are avoided by the HDD within this excursion and are therefore not adversely impacted by infrastructure being placed outside the ADZ. The wetland is slightly impacted but would be impacted more if the alignment was within the ADZ. Therefore, there are no additional impacts.

2.5 EXCURSION S10-5

1. Description of the Excursion

Excursion S10-5 is located within the Village of Ravena beginning about 4,450 feet north of the Main Street crossing (approximately STA 60204+50 to 60205+50 on Sheet C-114 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

At Excursion S10-5, Village of Ravena Mosher Park requires an act of state to obtain property easement on their property. To avoid this, realignment was necessary to ensure easements would not be required south of this location. The Segment 10 alignment at Excursion S10-5 to will be placed outside and parallel the ADZ for a total of approximately 40 linear feet.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 4.5 feet perpendicular to the ADZ at its furthest point; 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 Excursion based on desktop aerial imagery and field confirmation.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion S10-5 is not in the vicinity of any identified archaeologic or historic resources and therefore does not result in any additional impact.

Terrestrial Ecology – Excursion S10-5 occurs along a vegetated forest stand along the CSX ROW. The same amount of tree and vegetation clearing is required at this location regardless of being in or out of the ADZ thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and only remove what is required 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 CHPE's Certificate or private lease agreements.

Threatened and Endangered Species – There are no RTE species within the vicinity of Excursion S10-5 as identified through consultation with the DEC or USFWS.

Wetlands and Streams – This excursion is within a delineated wetland. The wetland would be equally impacted if the alignment was within the ADZ. Therefore, there are no additional impacts.

2.6 EXCURSION S10-7

1. Description of the Excursion

Excursion S10-7 is located within the Village of Ravena beginning 480 feet south of the Main Street crossing (approximately STA 61254 to 61342 on Sheet C-117 to C-123 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

Several constraints at this location require an excursion from the ADZ. First, the HDD for the road crossing just north of this excursion is extended to avoid extreme terrain and several utility conflicts.. Secondly, CSX has requested the alignment be as far from the railroad tracks as possible. These constraints put the alignment just outside and parallel to the ADZ for approximately 1.67 miles. This ADZ Excursion request is grounded in engineering and environmental reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 107 feet perpendicular to the ADZ at its furthest point; 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 Excursion based on desktop aerial imagery and field confirmation.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion S10-7 is not in the vicinity of any identified archaeologic or historic resources and therefore does not result in any additional impact.

Terrestrial Ecology – Excursion S10-7 occurs along a vegetated forest stand along the CSX ROW. The same amount of tree and vegetation clearing is required at this location regardless of being in or out of the ADZ thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and CHPE will only remove what is required 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 CHPE's Certificate or private lease agreements.

Threatened and Endangered Species – There are no RTE species within the vicinity of Excursion S10-7 as identified through consultation with the DEC or USFWS.

Wetlands and Streams – There are several wetlands and streams within this excursion. The wetlands extend into the ADZ and would be impacted either way. One wetland impact is avoided by an HDD in the excursion. The area will be restored as described in Section 14 of the EM&CP. Impacts to the streams are avoided by the HDDs within this excursion. Therefore, the proposed ADZ Excursion does not significantly increase impacts to wetlands or streams as compared with the approved ADZ.

2.7 EXCURSION S10-8

1. Description of the Excursion

Excursion S10-8 is located within the Town of New Baltimore beginning approximately 1,090 feet south of the New Baltimore Road crossing (approximately STA 61355 to 61374 on Sheet C-124 to C-125 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

At this excursion, there is extreme terrain and several utility poles that require must be avoided. This requires the alignment to be placed outside and parallel to the ADZ for approximately 2,000 linear feet. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 260 feet perpendicular to the ADZ at its furthest point; 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 Excursion based on desktop aerial imagery and field confirmation.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and

Appendix O – Cultural Resources Management Plan). Excursion S10-8 is not in the vicinity of any identified archaeological or historic resources and therefore does not result in any additional impact.

Terrestrial Ecology – Excursion S10-8 occurs along a vegetated forest stand along the CSX ROW. Tree and vegetation clearing is required only at this location for the splice and that same amount is needed regardless of being in or out of the ADZ thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and CHPE will only remove what is required 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 CHPE's Certificate or private lease agreements.

Threatened and Endangered Species – There are no RTE species within the vicinity of Excursion S10-8 as identified through consultation with the DEC or USFWS.

Wetlands and Streams – This excursion includes one delineated wetland. Due to this excursion being further from the deviation zone due to the justification above, the delineation of this wetland does not reach the ADZ. It is likely, based on topography and observed features in the field, that this would extend into the ADZ and be impact if the alignment were placed inside as well. Where the wetland is impacted by the excursion, the area will be restored as described in Section 14 of the EM&CP. These impacts are rooted in the design justification described above and necessary to construct the Project.

2.8 EXCURSION S10-10

1. Description of the Excursion

Excursion S10-10 is located within the Town of New Baltimore beginning approximately 2,400 feet north of the State Route 144 crossing (approximately STA 61390 to 61414 on Sheet C-127 and C-128 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

At this location, there is extreme terrain closer to the CSX tracks that must be avoided to keep the alignment constructable. Additionally, 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. At Excursion S10-10, additional space is required for Splice 207. The splice work area must be placed perpendicular to the alignment and therefore there is not enough space for the splice work area between the tracks and the alignment at this location. Due to this spatial requirement and the extreme terrain present, the alignment leading up to and out of the splice, and the splice itself will be placed outside and parallel to the ADZ for approximately 2,300 linear feet. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 22 feet perpendicular to the ADZ at its furthest point; 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 Excursion based on desktop aerial imagery and field confirmation.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion S10-10 is not in the vicinity of any identified archaeological or historic resources and therefore does not result in any additional impact.

Terrestrial Ecology – Excursion S10-10 occurs along a vegetated forest stand along the CSX ROW. Tree and vegetation clearing is required only at this location for the splice and the same amount is needed regardless of being in or out of the ADZ thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and CHPE will only remove what is required 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 CHPE's Certificate or private lease agreements.

Threatened and Endangered Species – There are no RTE species within the vicinity of Excursion S10-10 as identified through consultation with the DEC or USFWS.

Wetlands and Streams – There is one delineated wetland within the vicinity of this excursion is wetland. This wetland extends into the ADZ and would be impacted either way. This wetland was delineated within the Project Corridor and extends outside of the ADZ. Where any wetland is impacted by the excursion, the area will be restored as described in Section 14 of the EM&CP.

2.9 EXCURSION S10-11

1. Description of the Excursion

Excursion S10-11 is located within the Town of New Baltimore beginning approximately 183 feet south of the State Route 144 crossing (approximately STA 62427 to 62491 on Sheet C-129 to C-133 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

This excursion is required for various reasons. At this excursion, the alignment shifts away from the ADZ for an HDD required to avoid terrain, to avoid impact to a CSX culvert, to avoid an overhead electric utility, to keep the alignment as far from CSX tracks as required by them, and for an HDD

that avoids a state-listed stream. Due to these avoidances, the alignment will be placed outside and parallel to the ADZ for approximately 1.38 miles. This ADZ Excursion request is grounded in engineering and environmental reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 157 feet perpendicular to the ADZ at its furthest point; 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 Excursion based on desktop aerial imagery and field confirmation.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion S10-11 is not in the vicinity of any identified archaeological or historic resources and therefore does not result in any additional impact.

Terrestrial Ecology – Excursion S10-11 occurs along a vegetated forest stand along the CSX ROW. The same amount of tree and vegetation clearing is required at this location regardless of being in or out of the ADZ thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and CHPE will only remove what is required 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 CHPE's Certificate or private lease agreements.

Threatened and Endangered Species – There are no RTE species within the vicinity of Excursion S10-11 as identified through consultation with the DEC or USFWS.

Wetlands and Streams – There are several delineated wetlands and streams within this excursion. All are avoided by the various HDDs or placing the alignment under culverts containing the stream. Therefore, there is no additional impacts to wetlands or streams.

2.10 EXCURSION S10-12

1. Description of the Excursion

Excursion S10-12 is located within the Town of New Baltimore beginning approximately 2,400 feet south of the NYS Thruway crossing (approximately STA 62531 to 62535+50 on Sheet C-136 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

Splice vault locations are required at a certain interval (at least every 3,200 feet, approximately) to correspond to the length of cable on each reel. At Excursion S10-12, additional space is required for Splice 211. The splice work area must be placed perpendicular to the alignment and therefore there is not enough space for the splice work area between the tracks and the alignment at this location. Due to this spatial requirement, the alignment leading up to and out of the splice, the splice itself, and the alignment leading to the HDD will be placed outside and parallel to the ADZ for approximately 470 linear feet. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 15 feet perpendicular to the ADZ at its furthest point; 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 Excursion based on desktop aerial imagery and field confirmation.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion S10-12 is not in the vicinity of any identified archaeological or historic resources and therefore does not result in any additional impact.

Terrestrial Ecology – Excursion S10-12 occurs along a vegetated forest stand along parallel to the CSX ROW. The same amount of tree and vegetation clearing is required at this location regardless of being in or out of the ADZ thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and only remove what is required 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 CHPE's Certificate or private lease agreements.

Threatened and Endangered Species – There are no RTE species within the vicinity of Excursion S10-12 as identified through consultation with the DEC or USFWS.

Wetlands and Streams – There is one wetland within the vicinity of this excursion, but it is avoided by the excursion. Therefore, there is less impact to this wetland due to the excursion than remaining inside the ADZ.

2.11 EXCURSION S10-13

1. Description of the Excursion

Excursion S10-13 is located within the Town of New Baltimore beginning approximately 4,800 feet north of the New Baltimore/Coxsackie town line (approximately STA 62557 to 62588 on Sheet C-138 to C-140 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

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. At Excursion S10-13, additional space is required for Splice 213 and 214. The splice work area must be placed perpendicular to the alignment and therefore there is not enough space for the splice work area between the tracks and the alignment at this location. Due to this spatial requirement, the alignment leading up to and out of the splices, and the splices themselves will be placed outside and parallel to the ADZ for approximately 3,100 linear feet. Additionally, the embankment along the rail tracks requires the alignment to be placed more west of the tracks. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 20 feet perpendicular to the ADZ at its furthest point; 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 desktop aerial imagery and field confirmation, this excursion is within Agricultural Land #1. Some impact to the active field is avoided by HDD. Where access roads are within the active field, timber matting will be used to minimize impact, which would be done whether construction was within or outside the ADZ at this location. Work areas and splice locations are kept as close to the edge of the field as possible. All BMPs and restoration requirements described in the EM&CP will be implemented to mitigate as much impact to the field as possible.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion S10-13 is not in the vicinity of any identified archaeological or historic resources and therefore does not result in any additional impact.

Terrestrial Ecology – Excursion S10-13 occurs along a vegetated forest stand along the CSX ROW. The same amount of tree and vegetation clearing is required at this location regardless of being in or out of the ADZ thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and CHPE will only remove what is required 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 CHPE's Certificate or private lease agreements.

Threatened and Endangered Species – The RTE species within the vicinity of Excursion S10-13 as identified through consultation with the DEC or USFWS are Northern Harrier and Short-eared Owl. The agricultural fields within this excursion are occupied habitat for these grassland bird species. Regardless of work in or outside the ADZ at this location, construction will not occur in this area between November 1 and March 31 to avoid impact to the species.

ESA 6 is also identified as having potential habitat in this area. Per Appendix T of the EM&CP, no suitable habitat was found to be present, therefore there is no impact.

Wetlands and Streams – Some delineated wetlands and all of the streams within the vicinity of this excursion are avoided by HDD. An equal amount of wetland would be impacted by the permanent placement of infrastructure even 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.

2.12 EXCURSION S10-15

1. Description of the Excursion

Excursion S10-15 is located within the Town of Cocksackie beginning approximately 1,070 feet south of the New Baltimore/Cocksackie town line (approximately STA 62618 to 62681 on Sheet C-142 to C-146 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

Within the ADZ in this area, there are state conservation easements that prevent the alignment from being installed within the ADZ. To avoid these conservation easements and utility poles within the realigned area, the alignment will be placed outside and parallel to the ADZ for approximately 1.25 miles. this ADZ Excursion request is grounded in environmental and engineering reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 760 feet perpendicular to the ADZ at its furthest point; 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 desktop aerial imagery and field confirmation, this excursion is within Agricultural Land #2 and #3. Some impact to the active field is avoided by HDD. Where access roads are within the active field, timber matting will be used to minimize impact, which would

be done whether construction was within or outside the ADZ at this location. Work areas and splice locations are kept as close to the edge of the field as possible while also avoiding utility conflicts. All BMPs and restoration requirements described in the EM&CP will be implemented to mitigate as much impact to the field as possible. These impacts are rooted in environmental justification and design requirements listed above.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion S10-15 is not in the vicinity of any identified archaeological or historic resources and therefore does not result in any additional impact.

Terrestrial Ecology – Excursion S10-14 occurs along the vegetated edge of the CSX ROW and within an active agricultural field. The same amount of tree and vegetation clearing is required at this location regardless of being in or out of the ADZ, with some being avoided by the HDDs within the excursion, thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and CHPE will only remove what is required 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 CHPE's Certificate or private lease agreements.

Threatened and Endangered Species – The RTE species within the vicinity of Excursion S10-15 as identified through consultation with the DEC or USFWS are Northern Harrier and Short-eared Owl. The agricultural fields within this excursion are occupied habitat for these grassland bird species. Regardless of work in or outside the ADZ at this location, the Certificate Holders will consult with NYSDEC regarding seasonal restrictions to avoid or minimize impacts to species during the wintering period..

ESA 6 is also identified as having potential habitat in this area. Per Appendix T of the EM&CP, no suitable habitat was found to be present, therefore there is no impact.

Wetlands and Streams – Most of the delineated wetlands within this excursion are avoided by HDD. Portions of the wetlands are impacted by the alignment. All BMPs will be followed and the area will be restored as described in Section 14 of the EM&CP. These impacts are rooted in the design justification described above and necessary to construct the Project.

2.13 EXCURSION S10-17

1. Description of the Excursion

Excursion S10-17 is located within the Town of Cossackie beginning approximately 1,175 feet north of the Bailey Street crossing (approximately STA 62697+50 to 62729 on Sheet C-147 to C-149 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

At this excursion, there is an angle requirement to construct the HDD and its associated exit pit. Additionally, the alignment must be shifted to avoid a variety of utilities, including CHG&E transmission infrastructure. Additionally, there are more conservation easements that must be avoided. To satisfy these requirements, the alignment has been shifted outside and parallel to the ADZ in this location for approximately 3,188 feet. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 127 feet perpendicular to the ADZ at its furthest point; 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 Excursion based on desktop aerial imagery and field confirmation.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion S10-17 is within the vicinity of cultural resource “Satisfaction NYSM 388” near station 60617. Archaeological testing or monitoring is recommended and will be done whether construction is within or outside the ADZ in this location. Therefore, the excursion results in no additional impact.

Terrestrial Ecology – Excursion S10-17 occurs along the vegetated edge of the CSX ROW. The same amount of tree and vegetation clearing is required at this location regardless of being in or out of the ADZ thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and CHPE will only remove what is required 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 CHPE’s Certificate or private lease agreements.

Threatened and Endangered Species – The RTE species within the vicinity of Excursion S10-17 as identified through consultation with the DEC or USFWS are Northern Harrier and Short-eared Owl. The agricultural fields within this excursion are occupied habitat for these grassland bird species. Regardless of work in or outside the ADZ at this location, the Certificate Holders will consult with NYSDEC regarding seasonal restrictions to avoid or minimize impacts to species during the wintering period.

Wetlands and Streams – Portions of the wetlands within this excursion are impacted by the alignment but was delineated within the Project Corridor and extend outside of the ADZ. Some additional wetland impact will occur, but all BMPs will be followed and the area will be restored as described in Section 14 of the EM&CP. These impacts are rooted in the design justification described above and necessary to construct the Project.

2.14 EXCURSION S10-18

1. Description of the Excursion

Excursion S10-18 is located within the Town of Coxsackie beginning approximately 2,900 feet south of the Bailey Street crossing (approximately STA 62738 to 62747 on Sheet C-150 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

Within the ADZ in this area, there are state conservation easements that prevent the alignment from being installed within the ADZ. To avoid these conservation easements the realigned area, the alignment will be placed outside and parallel to the ADZ for approximately 836 linear feet. this ADZ Excursion request is grounded in environmental and engineering reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 72 feet perpendicular to the ADZ at its furthest point; 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 desktop aerial imagery and field confirmation, this excursion is within Agricultural Land #4. Some impact to the active field is avoided by HDD. Where access roads are within the active field, timber matting will be used to minimize impact, which would be done whether construction was within or outside the ADZ at this location. Work areas and splice locations are kept as close to the edge of the field as possible while also avoiding utility conflicts. All BMPs and restoration requirements described in the EM&CP will be implemented to mitigate as much impact to the field as possible. These impacts are rooted in environmental justification and design requirements listed above.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion S10-18 is not in the vicinity of any identified archaeological or historic resources and therefore does not result in any additional impact.

Terrestrial Ecology – Excursion S10-18 occurs along the vegetated edge of the CSX ROW. The same amount of tree and vegetation clearing is required at this location regardless of being in or out of the ADZ thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and only remove what is required 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 CHPE Certificate or private lease agreements.

Threatened and Endangered Species – The RTE species within the vicinity of Excursion S10-17 as identified through consultation with the DEC or USFWS is the Northern Harrier. The agricultural fields within this excursion are occupied habitat for these grassland bird species. Regardless of work in or outside the ADZ at this location, the Certificate Holders will consult with NYSDEC regarding seasonal restrictions to avoid or minimize impacts to species during the wintering period.

Wetlands and Streams – There are no delineated wetlands or streams within this excursion.

2.15 EXCURSION S10-19

1. Description of the Excursion

Excursion S10-19 is located within the Town of Coxsackie and Town of Catskill beginning approximately 960 feet south of the Bailey Street crossing (approximately STA 62750 to the end of the segment on Sheet C-150 to C-175 of the Plan and Profile Drawings (Appendix C of the EM&CP); see also attached figure set).

2. Justification

At this excursion, there are both overhead electric and underground gas lines owned by CHG&E that run parallel to the CSX ROW. CHG&E has requested a specific offset from their infrastructure to their future improvement plans. There is not enough room to construct the Project between the utility lines and the CSX tracks. Therefore, the alignment must be placed east of the utility lines to avoid impact to infrastructure. To satisfy this requirement, the alignment has been shifted outside and parallel to the ADZ in this location for approximately 7.5 miles. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3. Environmental Impact

The anticipated ADZ exceedance constitutes a minor change as it is 230 feet perpendicular to the ADZ at its furthest point; 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 desktop aerial imagery and field confirmation, this excursion is within Agricultural Lands #5, #6, #7, #9, and #10. Where access roads are within the active field, topsoil stripping and gravel will be used to minimize impact, which would be done whether construction was within or outside the ADZ at this location. Work areas and splice locations are

kept as close to the edge of the field as possible. All BMPs and restoration requirements described in the EM&CP will be implemented to mitigate as much impact to the field as possible.

Cultural Resources – Hartgen Associates performed a review of the Segment 10 alignment and identified areas where the Facility may impact cultural resources (see Table 11-1 of the EM&CP and Appendix O – Cultural Resources Management Plan). Excursion 10-19 is within the vicinity of several cultural resources, seen in Table 11-1 of the EM&CP and the excerpt of that table below. Archaeological testing or monitoring is recommended and will be done whether construction is within or outside the ADZ in this location. Therefore, the excursion results in no additional impact.

Cultural Resource Name	Location	Impact	Protection Measure
Solar Field Precontact Site 11 (03905.000196)	Town of Coxsackie	Cable route is immediately adjacent to the site.	Testing or Monitoring.*
Russian Workshop (Flint Mine Archaeological District) (NYSM 405)	Town of Coxsackie	Site is on opposite side of the railroad from the cable route.	None.
Unnamed (NYSM 8280)	Town of Coxsackie	Cable route is within the site boundaries.	Testing or Monitoring.*
Fluted Point Find near Flint Mine Hill (NYSM 8025)	Town of Coxsackie	Cable route is within the site boundaries.	Testing or Monitoring. *
Solar Field Precontact Site 8 (03905.000193)	Town of Coxsackie	Cable route close to the site.	Testing or Monitoring. *
Solar Field Precontact Site 7 (03905.000192)	Town of Coxsackie	Cable route is within the site boundaries.	Testing or Monitoring. *
Solar Field Precontact Site 6 (03905.000191)	Town of Coxsackie	Cable route is immediately adjacent to the site.	Testing or Monitoring. *
Flats Road Precontact Site (03905.000203)	Town of Coxsackie	Cable route is within the site boundaries.	Site will be avoided with HDD.
Spoor Farm, 957 Flats Road (03905.000228) Eligible 18th-century farmhouse and property	Town of Coxsackie	Cable route passes under the property via an HDD.	Property determined eligible. To be avoided with HDD.
857 Flats Road (03905.00056)	Town of Coxsackie	Cable route and access roads at the rear of the property.	Property determined eligible. No adverse effects likely.
Possible Mound (NYSM 432) (03902.000007)	Town of Athens	Cable route is within the site boundaries.	Archeological testing in advance of construction is recommended.
Prehistoric Site 3 (P-3) (03902.000232)	Town of Athens	Site is on opposite side of the railroad from the cable route.	None.
JMA Sites 9 (03902.000249)	Town of Athens	Cable route is within site boundaries.	Determined not eligible. None.

Cultural Resource Name	Location	Impact	Protection Measure
JMA Site 8 (03902.000248)	Town of Athens	Cable route is within site boundaries.	Determined not eligible. None.
Rushmore Farm (10NR06093) National Register Listed Property	Town of Athens	Cable route is adjacent to the site.	None.
JMA Site 7 (03902.000247)	Town of Athens	Cable route is adjacent to the site.	Testing or Monitoring.*
JMA Site 6 (03902.000246)	Town of Athens	Cable route is adjacent to the site.	Testing or Monitoring.*
JMA Site 1 (03902.000241)	Town of Athens	Cable route is adjacent to the site.	Testing or Monitoring.*
JMA Site 2 (03902.000242)	Town of Athens	Cable route is adjacent to the site.	Testing or Monitoring.*
JMA Site 3 (03902.000243)	Town of Athens	Cable route is adjacent to the site.	Testing or Monitoring. *

Terrestrial Ecology – Excursion S10-19 occurs along the vegetated edge of the CSX ROW and within agricultural fields. The same amount of tree and vegetation clearing is required at this location regardless of being in or out of the ADZ, with some being avoided by HDDs within the excursion, thus, the movement outside of the ADZ does not change the environmental impact of the Facility. Clearing will be selective and CHPE will only remove what is required 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 CHPE's Certificate or private lease agreements.

Threatened and Endangered Species – The RTE species within the vicinity of Excursion S10-19 as identified through consultation with the DEC or USFWS are Northern Harrier, Short-eared Owl, and Northern Long-eared Bat. The agricultural field within this excursion are occupied habitat for these grassland bird species. Regardless of work in or outside the ADZ at this location, the Certificate Holders will consult with NYSDEC regarding seasonal restrictions to avoid or minimize impacts to species during the wintering period.

Wetlands and Streams – There are many delineated streams and wetlands within this ~7.5-mile stretch. Within this excursion, there are many HDDs that avoid impacts to wetlands and streams. Where there are resources impacted by the alignment, an equal or lesser amount of wetland would be impacted by the permanent placement of infrastructure even 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.

2.16 CONCLUSION

The adjusted route at the various excursions in Segment 10 presented above does 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 deviation requested is necessary for appropriate engineering and environmental reasons and does 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 10 EM&CP without modification to the Certificate.

Attachment 1

Figure Set



CHPE EM&CP
Albany and Greene County,
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EM&CP Appendix E

- Mile Post
- HDD Excursion
- HDD
- Segment 10 Trench
- Delineated Streams
- Delineated Wetland
- NWI Mapped Wetland
- NWI Mapped Lake/Pond/Riverine
- ESA 4
- Deviation Zone



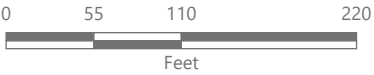
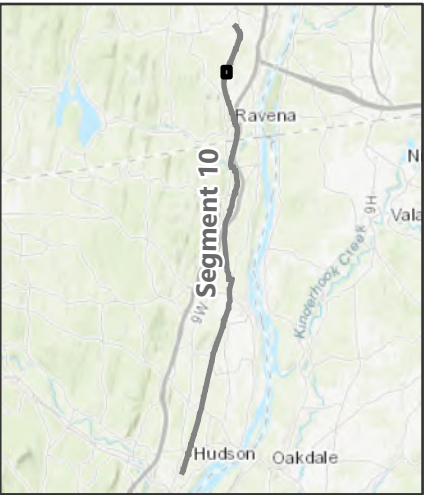
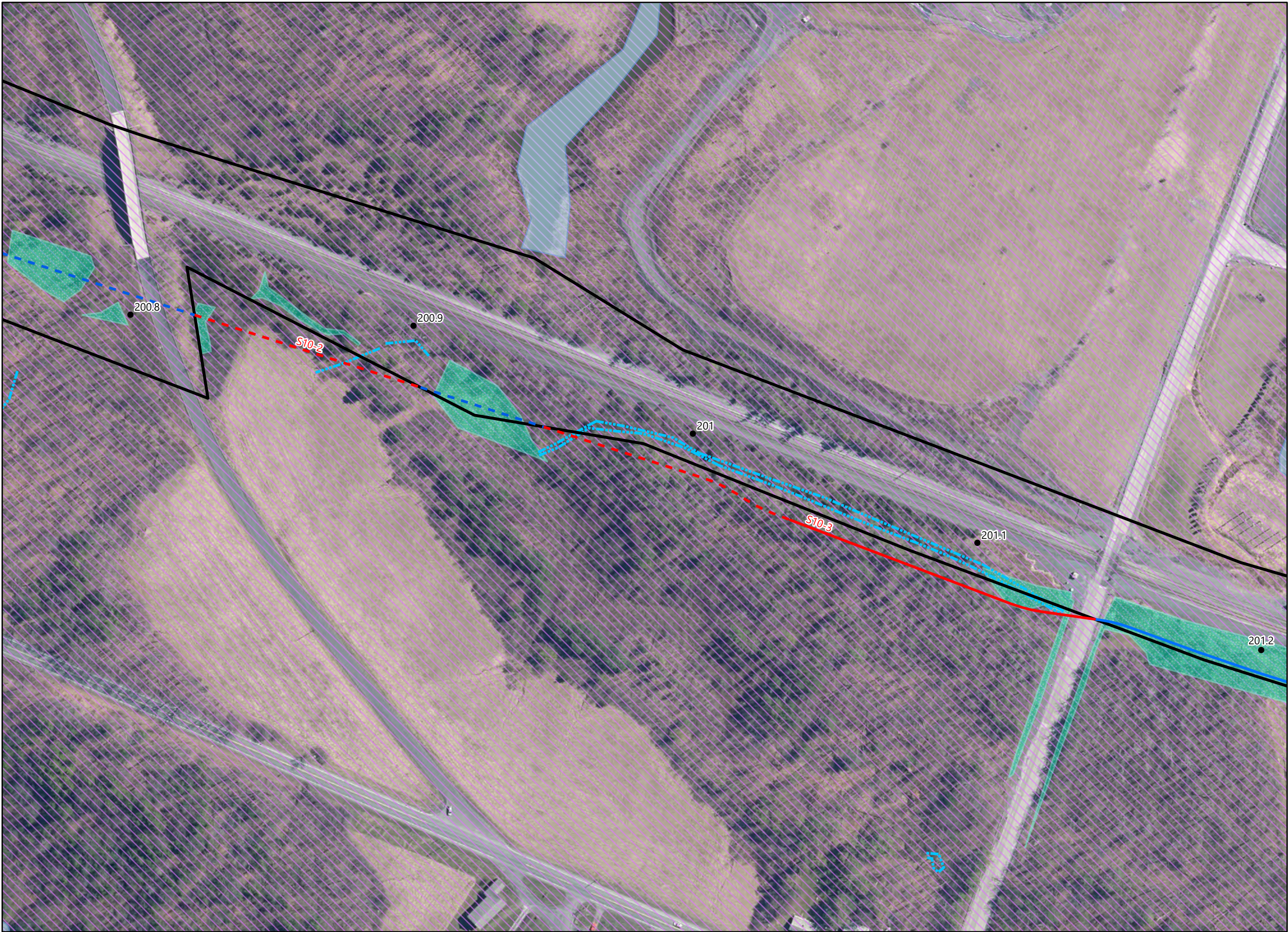
Prepared September 28, 2023
Basemap: Esri "World Imagery" map service

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New York

EM&CP Appendix E

- Mile Post
- Segment 10 Trench Excursion
- - - HDD Excursion
- - - HDD
- Segment 10 Trench
- ⋯ Delineated Streams
- ▨ Delineated Wetland
- ▨ NWI Mapped Lake/Pond/Riverine
- ▨ ESA 4
- ▭ Deviation Zone



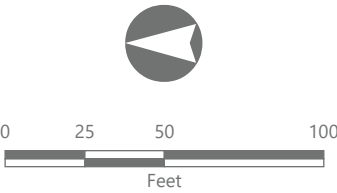
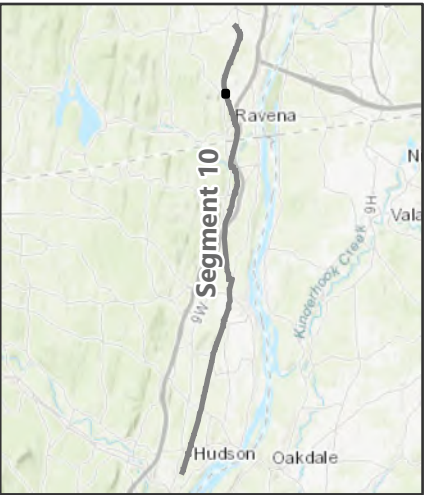
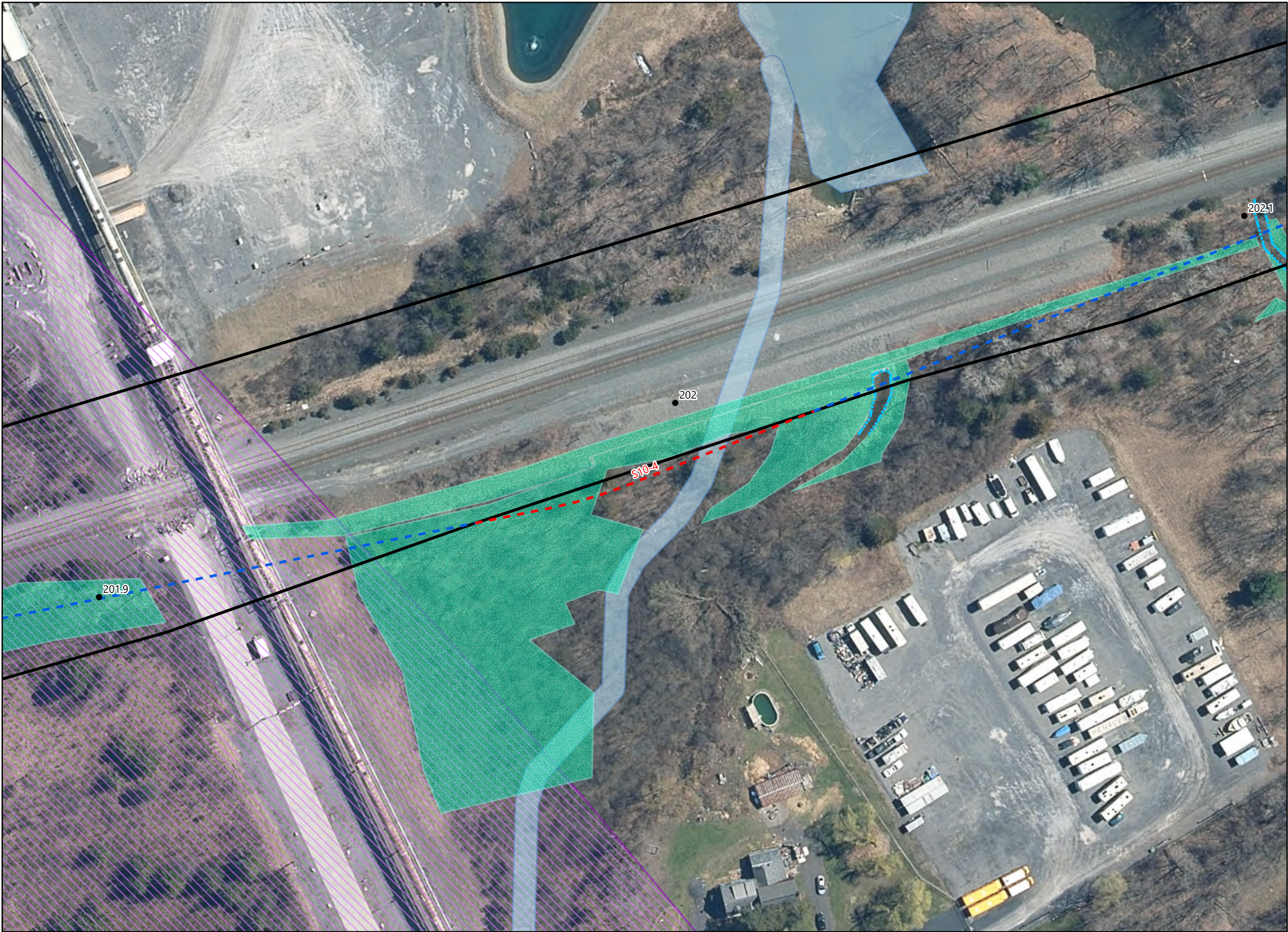
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EM&CP Appendix E

- Mile Post
- HDD Excursion
- - - HDD
- Delineated Streams
- Delineated Wetland
- NWI Mapped Lake/Pond/Riverine
- ESA 4
- Deviation Zone



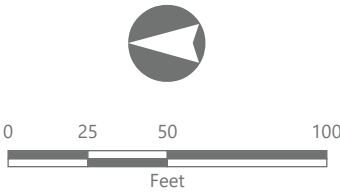
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New York

EM&CP Appendix E

- Mile Post
- Segment 10 Trench Excursion
- Segment 10 Trench
- ▨ Delineated Wetland
- ▭ Deviation Zone



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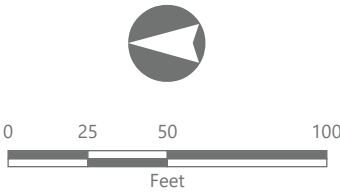


CHPE EM&CP

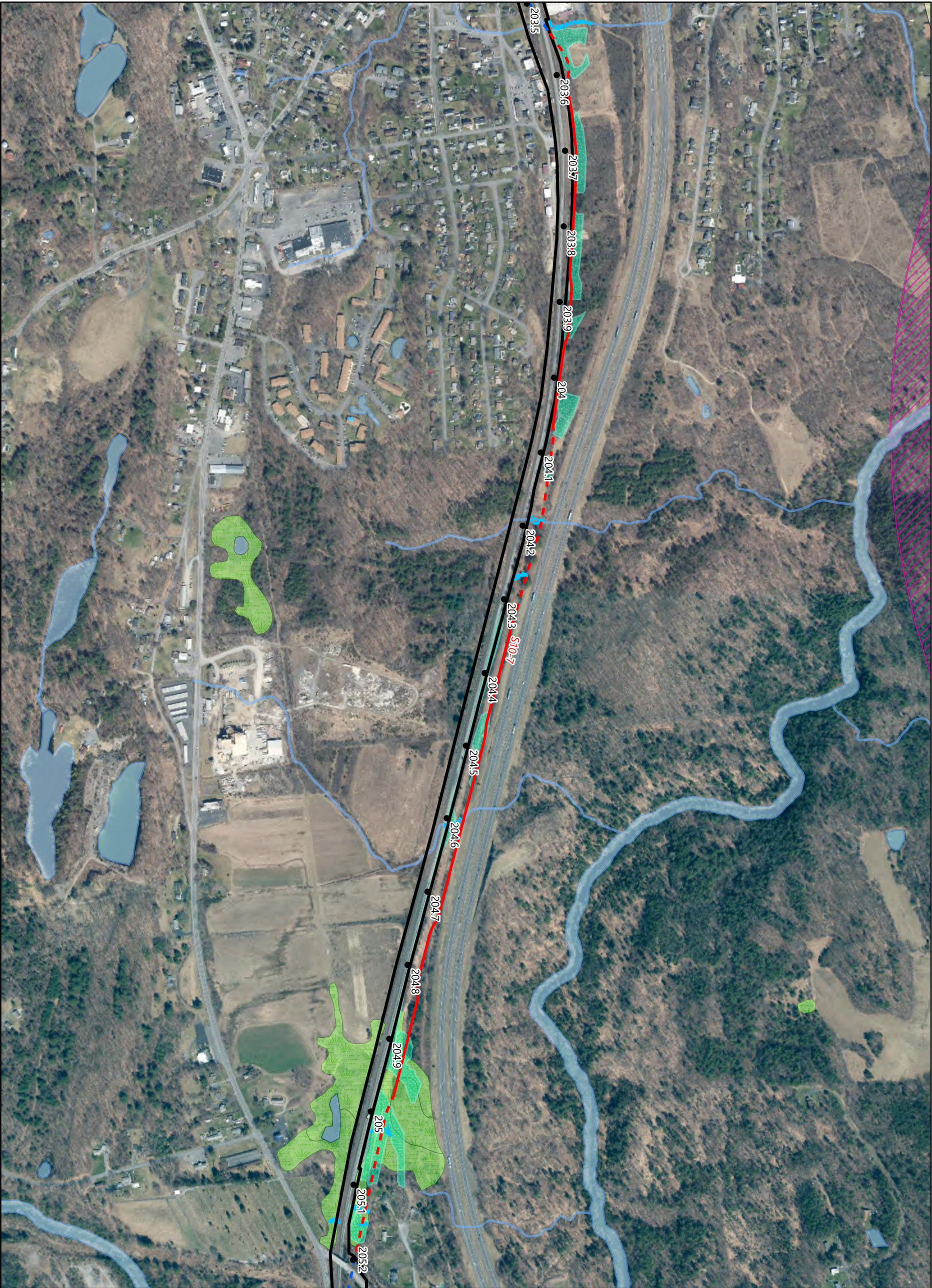
Albany and Greene County,
New York

EM&CP Appendix E

- Mile Post
- HDD Excursion
- HDD
- Delineated Streams
- Delineated Wetland
- NWI Mapped Lake/Pond/Riverine
- ▭ Deviation Zone



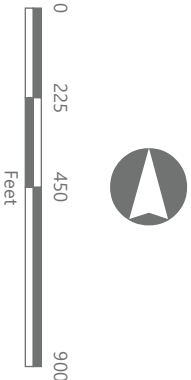
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New York

EM&CP Appendix E

- Mile Post
- Segment 10 Trench Excursion
- - - HDD Excursion
- - - HDD
- Delineated Streams
- Delineated Wetland
- NWI Mapped Wetland
- NWI Mapped Lake/Pond/Riverine
- ESA 1
- ESA 13
- Deviation Zone



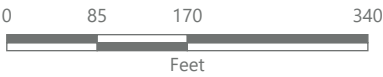
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CHPE EM&CP

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New York

EM&CP Appendix E

- Mile Post
- Segment 10 Trench Excursion
- - - HDD Excursion
- - - HDD
- - - Delineated Streams
- ▨ Delineated Wetland
- ▨ NWI Mapped Wetland
- ▨ NWI Mapped Lake/Pond/Riverine
- ▭ Deviation Zone



Prepared September 28, 2023
Basemap: Esri "World Imagery" map service

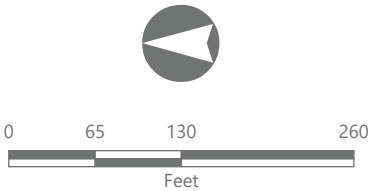


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New York

EM&CP Appendix E

- Mile Post
- Segment 10 Trench Excursion
- - - HDD Excursion
- - - HDD
- - - Delineated Streams
- ▨ Delineated Wetland
- ▭ Deviation Zone

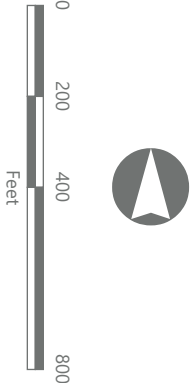


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CHPE EM&CP
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EM&CP Appendix E

- Mile Post
- Segment 10 Trench Excursion
- - - HDD Excursion
- - - HDD
- Delineated Streams
- ▨ Delineated Wetland
- ▨ NWI Mapped Wetland
- ▨ NWI Mapped Lake/Pond/Riverine
- ▭ Deviation Zone



Prepared September 28, 2023
Basemap: Esri "World Imagery" map service

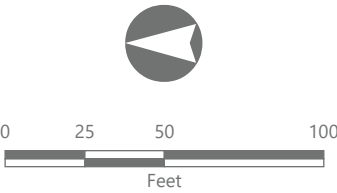


CHPE EM&CP

Albany and Greene County,
New York

EM&CP Appendix E

- Mile Post
- Segment 10 Trench Excursion
- - - HDD Excursion
- - - HDD
- Segment 10 Trench
- ⋯ Delineated Streams
- ▨ Delineated Wetland
- ▭ NWI Mapped Lake/Pond/Riverine
- ▭ Deviation Zone



Prepared September 28, 2023
Basemap: Esri "World Imagery" map service

CHPE EM&CP
Albany and Greene County,
New York

EM&CP Appendix E

- Mile Post
- Segment 10 Trench Excursion
- HDD Excursion
- HDD
- Segment 10 Trench
- Delineated Streams
- Delineated Wetland
- Regulated Adjacent Area
- NWI Mapped Lake/Pond/Riverine
- Agricultural Land
- ESA 12
- ESA 8
- ESA 6
- ESA 1
- Deviation Zone



Prepared September 28, 2023
Basemap: Esri "World Imagery" map service





CHPE EM&CP

Albany and Greene County,
New York

EM&CP Appendix E

- Mile Post
- Segment 10 Trench Excursion
- HDD Excursion
- HDD
- Delineated Streams
- Delineated Wetland
- Regulated Adjacent Area
- NWI Mapped Wetland
- NWI Mapped Lake/Pond/Riverine
- Agricultural Land
- ESA 12
- ESA 8
- ESA 6
- ESA 1
- ESA 13
- Deviation Zone

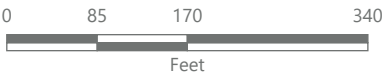
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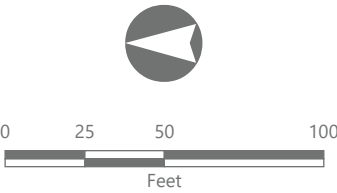
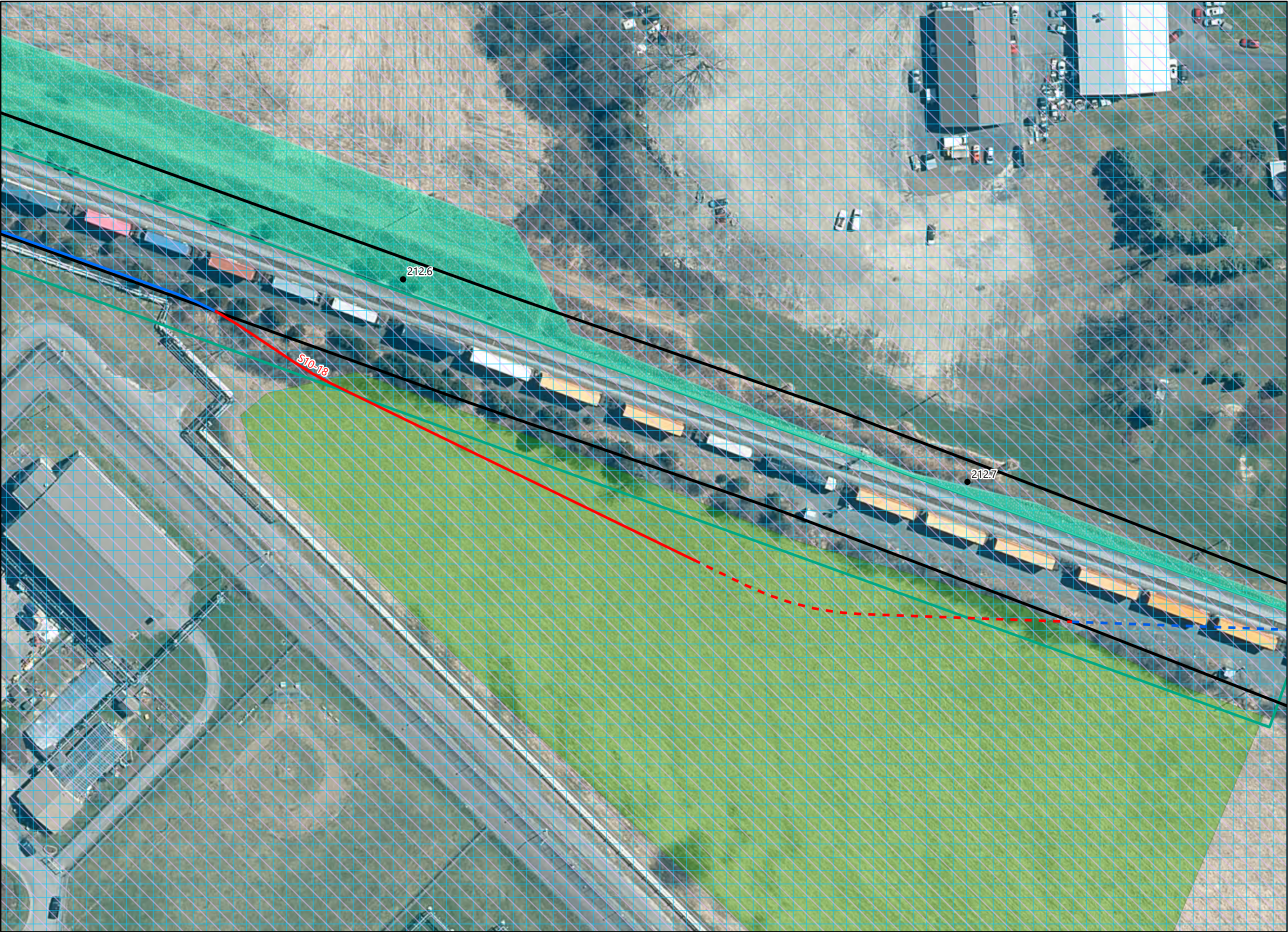
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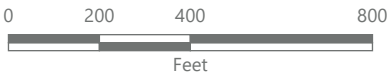
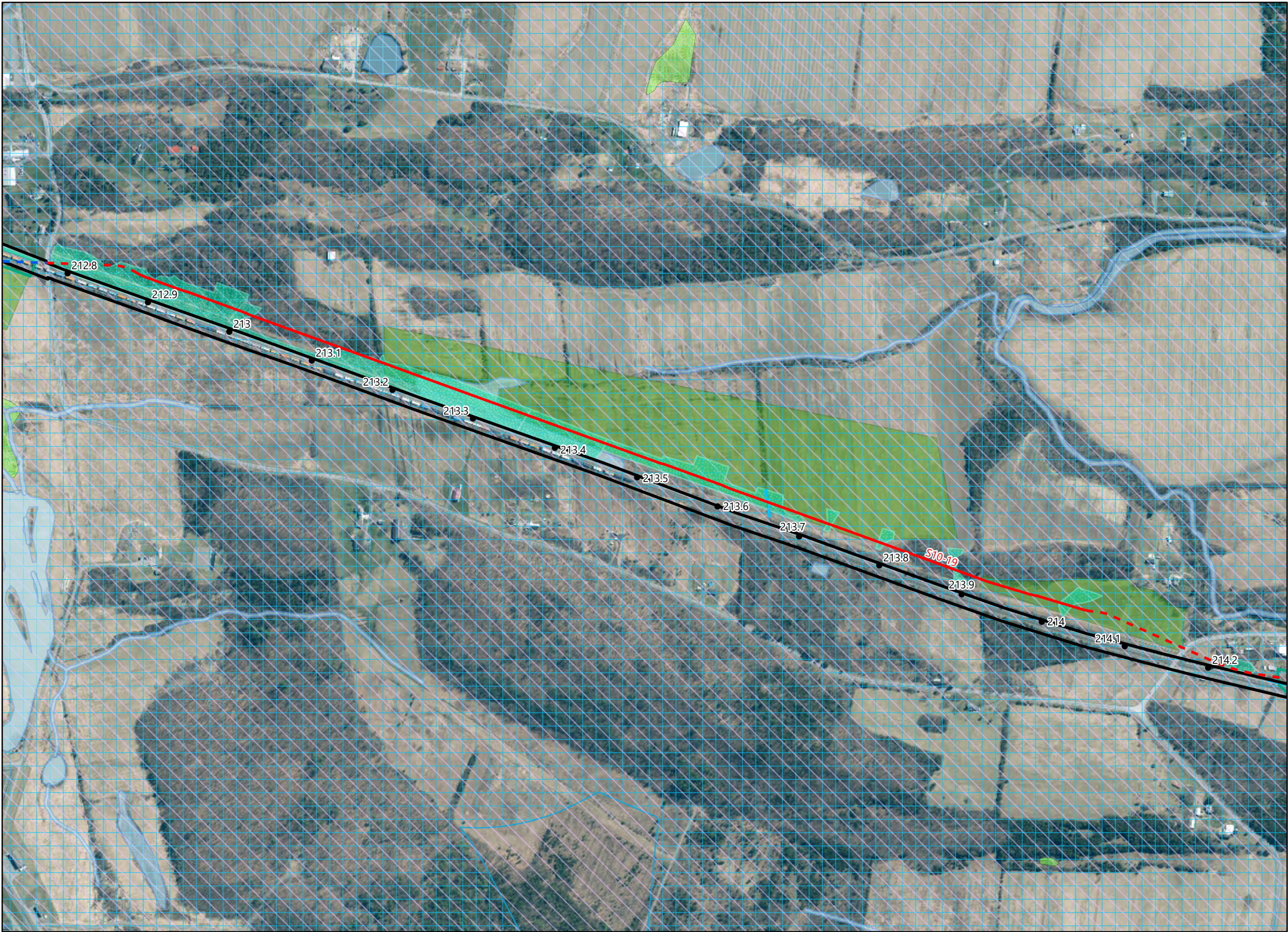
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- ▨ ESA 8
- ▭ Deviation Zone



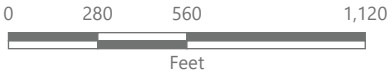
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- ▨ ESA 12
- ▨ ESA 9
- ▨ ESA 8
- ▭ Deviation Zone



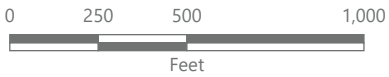
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- ▭ Deviation Zone



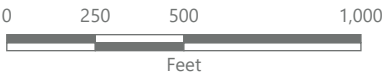
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