

APPENDIX E
CASE 10-T-0139
REVISED DEVIATION ZONE JUSTIFICATION



Explanation for Proposed Deviations in Segment 6 – Package 4A

1.0 INTRODUCTION

CHPE LLC and CHPE Properties, Inc, (collectively “CHPE” or the "Certificate Holders") the holders of a Certificate of Environmental Compatibility and Public Need ("Certificate") issued 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) on April 18, 2013. This Certificate incorporates the terms of a Joint Proposal and associated Certificate Conditions (CCs) negotiated with parties to the proceeding and establishes an approved route for the CHPE facility.

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 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 (ROWs), 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 or are in the process of obtaining 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, CC157 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 of Department of Public Service (DPS) Staff to accept and review, without modification to the Certificate, the Environmental Management Construction Plan (EM&CP) filings which include “deviations from the design depth, height, and 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."

The purpose of this memorandum is to demonstrate the appropriate environmental and engineering reasons for the proposed modification to the Deviation Zone in Segment 6 – Package 4A, and to show that the deviation creates no conflict with the other Certificate Conditions.

As part of the EM&CP filing of Segment 6 – Package 4A, the Certificate Holders are proposing minor work outside of the ADZ as described in Table 1.3 of the Environmental Construction and Management Plan (EM&CP). This memorandum provides the required supporting materials necessary for DPS staff to review and approve this minor deviation as part of the EM&CP process. Specifically, this includes:

1. A detailed description of and justification for each of the ADZ exceedance areas based upon appropriate environmental and engineering reasons, including a demonstration that the exceedance is limited to the minimum extent necessary (i.e. the smallest deviation zone exceedance area plausible based on design and construction constraints).
2. Confirmation that Certificate Holders have obtained rights to occupy and use the land(s) associated with any such ADZ exceedances (Exceedance Area) and the consent of any and all landowners owning any part of the Exceedance 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 (See Easement Table 4.4 in EM&CP).
3. A demonstration that any net incremental environmental impacts arising as a result of the construction, operation, and maintenance of the Facility in the Exceedance Area are not material.
4. A demonstration that installation of the Facility cables in the Exceedance Area will not substantially change the location of Facility components or structures and does not otherwise conflict with the other Certificate Conditions.

2.0 DEVIATION ZONE EXCURSIONS SUMMARY

The ADZ in Segment 6 - Package 4A is located predominately adjacent to existing CP Rail ROWs. 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 11 unique locations along the Segment 6 – Package 4A Project Corridor. Table 1 identifies each excursion, its 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 resulting from the deviation (see also Table 1-3 of the EM&CP). 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 CP Rail ROW as approved in the Certificated Route.

The Certificate Holders have obtained or are in the process of obtaining necessary land rights to facilitate installation of the Facility in the identified ADZ exceedance areas, and/or have provide notices to any and all landowners owning any part of the ADZ exceedance areas with a written offer to use or occupy their land for Project purposes. Certificate Holders continue to diligently pursue such land rights to facilitate the proposed route, including ADZ exceedances, consistent with the Certificate.

2.1 DESIGN CONSTRAINTS WITHIN SEGMENT 6 – PACKAGE 4A

2.1.1 HDD

In several areas in the vicinity of HDD crossings, the alignment was shifted outside the ADZ due to the following reasoning:

1. Limited space between the railroad (CP Rail) and the road
2. Weak soils – A geotechnical analysis indicated that HDD pathways be increased in depth to prevent potential impacts to the wetlands and streams by inadvertent returns of drilling fluids.
3. Curvature – The curvature of the road and railroad (CP Rail) require adjustment of one or both ends of the HDD bore paths.

2.1.2 General Trench Design for Installation Conduit and Subsequently Cable

Other shifts outside of the ADZ in Segment 6 – Package 4A not related to HDD crossings were due to the following reasoning:

1. Slope – A review of the slope on the east and west sides of the railroad and road determined that the slope was too steep to construct the alignment on either side of the track.
2. Streams – As identified in Appendix M of the EM&CP several streams were identified adjacent to and within the vicinity of the alignment. The alignment was constrained by these streams and adjusted in order to avoid impacting these streams by crossing under them.
3. Utilities – The alignment was shifted outside the ADZ in order to avoid impacts to utilities located at close proximity to the railroad. National Grid requires a minimum of 15-foot separation from buried natural gas utilities which is located adjacent to the railroad ROW.
4. Lastly, temporary construction work areas for HDD installations and/or related to the installation of splice boxes required the use of larger areas in some locations, which pushed the limit of work outside of the ADZ. These larger areas are the minimum necessary to feasibly install the Facility utilizing the technologies proposed, such as HDD work areas, which are needed to allow use of HDD to avoid other impacts to sensitive resources such as streams

Table 1. Deviation Zone Excursions in Segment 6-Package 4A

Revision Area	Parcel ID	Sheet Number	Location (Approximate – see Drawings for Details)	Justification for Revision	Change in Environmental Impact
S6-P4A #1	216.33-2-26 216.41-1-12.5	C-100	40000+00 to 40007+00	HDD#51 to cross East High Street and Avoid Residences	None
S6-P4A #2	216.00-2-31	C-102	40021+50 to 40022+00 40024+75 to 40030+25	Steep Slope and Narrow CP Rail ROW	None
S6-P4A#3	216.00-2-32, 216.-2-29.2, Road ROW, 216.-2-29.1, 216.00-2-52, 216.00-2-38	C-102 to C-104	40034+55 to 40061+00	Steep Slope and Narrow CP Rail ROW	State Wetland FA-DT and crossing unmapped stream FA-S-DR
S6-P4A#4	216.00-2-38, 228.00-2-1, 228.00-2-32, 228.00-2-29.1, 228.00-2-41, Road ROW, 228.00-2-41, 228.00-3-18, 228.00-3-16.1, 228.00-1-1, 239.-1-15	C-104 to C-109	40061+00 to 40130+00	Steep Slope and Narrow CP Rail ROW; HDD#52 and HDD #53 to avoid impacting portion of wetland FA-DV and streams FA-S-DW, C-CP-S7, C-CP-S7	Wetlands
S6-P4A#5	228.00-3-58.11, 239.-1-15, 239.-1-6.1, 239.-1-10.31, 239.-1-10.321, Outlet Road ROW, 239.-1-38, Connolly Road ROW, 239.00-1-22.1, Whites Beach Road ROW, 249-4-4.2, 248.2-14.211, 239.-1-15, 248.-2-86.1, 257.-4-1.23, 257.-4-1.1, 257.-4-5, 257.12-1-28, 257.12-1-29, 257.12-1-84, NYS 146A ROW, 239-1-15, 263.-1-2, 257.00-5-7, 257.00-5-3.1, 257.00-2-1, 263.-2-71, 263.-2-70, Blue Barn Road ROW, 263.-1-42	C-109 to C-129	40130+00 to 40439+00	Separation distance required by CI owner adjacent to Railroad ROW and avoiding Recreation Area Veterans Bike Path	Wetlands, Streams and Agricultural Land

Revision Area	Parcel ID	Sheet Number	Location (Approximate – see Drawings for Details)	Justification for Revision	Change in Environmental Impact
S6-P4A#6	263.00-1-9.11, 263.00-1-9-3, 263.00-1-9-4, 263.11-1-1	C-129 to C-130	40441+00 to 40445+50	HDD59A work Area, Crossing to east side of tracks to avoid CI on west side of tracks.	None
S6-P4A#7	263.00-1-18,	C-130	40452+50 to 40456+00	Narrow ROW, Splice 135	None
S6-P4A#8	263.00-1-18, 264.00-2-15,	C-131	40462+00 to 40481+50	Narrow Steep ROW	None
S6-P4A#9	264.00-2-15	C-131 to C-132	40448+00 to 40493+00	HDD#59B work area	None
S6-P4A#10	23.-1-21, 23.-1-19.1, 23.-1-2.2, 23.-1-11.1, 23.-1-11.2,	C-133 to C-135	40495+00 to 40527+50	Narrow Steep ROW, HDD work areas,	Stream FA-S-ED
P6-P4A#11	23.-09-4-13.1, 23.08-3-4.3, 23.13-1-18.11	C-135 to C-136	40532+00 to 40542+97 (End of Package 4A)	Narrow ROW	Wetland C-CP-O

3.0 EXCURSIONS WITH NO CHANGES IN IMPACTS TO ENVIRONMENTAL IMPACT (S6-P4A #1, S6-P4A#2, S6-P4A#6, S6-P4A#7, S6-P4A#8, S6-P4A#9)

Each of the following excursions from the deviation zone result in no impacts to agricultural, cultural, threatened or endangered species, recreational, or wetlands/waterbodies in the area the excursions.

3.1 EXCURSION S6-P4A#1

3.1.1 Description of the Excursion Area S6-P4A#1

The alignment exits the CP Rail ROW to accommodate the conduit for HDD#51 from approximately 40000+00 to 40007+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S6-P4A#1 and ultimate Facility ROW is included in the attached figure set. The proposed excursion occurs approximately 12 linear feet west of the ADZ at the farthest point. The length of the excursion is approximately 700 linear feet and approximately 450 feet is HDD below grade with no surface disturbance.

3.1.2 Justification

The slight excursion is required in order to accommodate the required offset from tracks and HDD#51 work area. HDD#51 crosses East High Street. See Section 2.1 for a discussion on design constraints related to HDDs. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3.2 EXCURSION S6-P4A#2

3.2.1 Description of the Excursion Area S6-P4A#2

The alignment exits the CP Rail ROW to accommodate the work areas for HDD#51 exit pit and splice location 118 because the ROW is narrow with steep slopes adjacent to the tracks from approximately 40021+50 to 40022+00 and 40024+75 to 40030+25. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S6-P4A#2 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 600 linear feet and approximately 50 feet is HDD below grade with no surface disturbance. The proposed excursion occurs approximately 10 linear feet west of the ADZ at the farthest point.

3.2.2 Justification

The slight excursion is required in order to accommodate the required offset from tracks, HDD#51 work area and splice location 118 in area with a narrow railroad ROW with a steep embankment adjacent to the tracks. See Section 2.1 for a discussion on design constraints related to HDDs. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3.3 EXCURSION S6-P4A#6

3.3.1 Description of the Excursion Area S6-P4A#6

The alignment exits the CP Rail ROW to accommodate the work areas for HDD#59A exit pit from approximately 40441+00 to 40445+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S6-P4A#6 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 450 linear feet and approximately 267 feet is HDD below grade with no surface disturbance. The proposed excursion occurs approximately 65 linear feet west of the ADZ at the farthest point.

3.3.2 Justification

The slight excursion is required in order to accommodate the required offset from tracks, HDD#59A work area. HDD#59A crosses from the west side to the east side of the railroad tracks in order to avoid conflicts with a natural gas line on the east side of the railroad tracks. See Section 2.1 for a discussion on design constraints related to HDDs. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3.4 EXCURSION S6-P4A#7

3.4.1 Description of the Excursion Area S6-P4A#7

The alignment exits the CP Rail ROW to accommodate the splice location 135 from approximately 40452+50 to 40456+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S6-P4A#7 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 350 linear feet. The proposed excursion occurs approximately 20 linear feet west of the ADZ at the farthest point.

3.4.2 Justification

The slight excursion is required in order to accommodate the required offset from tracks, and splice location 135. The railroad ROW is narrow with a steep embankment adjacent to the tracks. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3.5 EXCURSION S6-P4A#8

3.5.1 Description of the Excursion Area S6-P4A#8

The alignment exits the CP Rail ROW from approximately 40462+00 to 40481+50 because the ROW is narrow with steep slopes adjacent to the tracks. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S6-P4A#8 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 240 linear feet. The proposed excursion occurs approximately 20 linear feet west of the ADZ at the farthest point.

3.5.2 Justification

The slight excursion is required in order to accommodate the required offset from the tracks in an area with a narrow railroad ROW with a steep embankment adjacent to the tracks. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3.6 EXCURSION S6-P4A#9

3.6.1 Description of the Excursion Area S6-P4A#9

The alignment exits the CP Rail Row from approximately 40448+00 to 40493+00 to accommodate the HDD#59B work area. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S6-P4A#9 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 450 linear feet. The proposed excursion occurs approximately 30 linear feet west of the ADZ at the farthest point.

3.6.2 Justification

The slight excursion is required in order to accommodate the HDD#59B work area and the required offset from the tracks. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasible achieve the installation.

4.0 EXCURSIONS WITH ENVIRONMENTAL IMPACTS (S6-P4A#3, S6-P4A#4, S6-P4A#5, S6-P4A#10, S6-P4A#11)

4.1 EXCURSION S6-P4A#3

4.1.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the splice locations 119 and 121 because the ROW is narrow with steep slopes adjacent to the tracks from approximately 40034+55 to 40061+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S6-P4A#3 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 325 linear feet. The proposed excursion occurs approximately 40 linear feet west of the ADZ at the farthest point.

4.1.2 Justification

The slight excursion is required in order to accommodate the required offset from tracks and splice locations 119 and 121 in areas with a narrow railroad ROW with a steep embankment adjacent to the tracks. See Section 2.1 for a discussion on design constraints related to HDDs. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

4.1.3 Environmental and Cultural Impact

4.1.3.1 *Agricultural Resources*

Excursion area S6-P4A#3 does not include any agricultural resources.

4.1.3.2 *Cultural Resources*

Excursion area S6-P4A#3 has no known Cultural sites.

4.1.3.3 *Threatened and Endangered Species*

Excursion area S6-P4A#3 will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

4.1.3.4 *Wetlands and Streams*

Excursion area S6-P4A#3 will result in a temporary impact to state wetland FA-DT and crossing unmapped stream FA-S-DR as described in Table 9.1 and Table 9.2 in the EM&CP.

4.2 EXCURSION S6-P4A#4

4.2.1 Description of the Excursion Area

The alignment exits the CP Rail ROW from approximately 40061+00 to 40130+00 to accommodate the HDD#52 and HDD#53 work areas. The alignment also exits the ADZ to accommodate for the narrow ROW with steep slopes adjacent to the tracks. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S6-P4A#4 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 690 linear feet and approximately 270 feet is HDD below grade with no surface disturbance. The proposed excursion occurs approximately 44 linear feet west of the ADZ at the farthest point.

4.2.2 Justification

The slight excursion is required in order to accommodate the required offset from tracks and HDD#52 and HDD#53 work areas and conduits in areas with a narrow railroad ROW with a steep embankment adjacent to the tracks. See Section 2.1 for a discussion on design constraints related to HDDs. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

4.2.3 Environmental and Cultural Impact

4.2.3.1 *Agricultural Resources*

Excursion area S6-P4A#4 does not include any agricultural resources.

4.2.3.2 *Cultural Resources*

Excursion area S6-P4A#4 has no known Cultural sites.

4.2.3.3 *Threatened and Endangered Species*

Excursion area S6-P4A#4 will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

4.2.3.4 Wetlands and Streams

Excursion area S6-P4A#4 will avoid impacts to streams FA-S-DW, C-CP-S7, C-CP-S6 (NYSDEC Classification C/C 941-162), and a portion of wetland FA-DV due to HDD#52 and HDD#53, as described in Tables 9.1 and 9.2 in the EM&CP. Wetlands C-CP-F and C-CP-D, and a portion of wetland FA-DV will be impacted by the excursion area S6-P4A#4, as described in Table 9.2 in the EM&CP.

4.3 EXCURSION S6-P4A#5

4.3.1 Description of the Excursion Area

The alignment exits the CP Rail ROW from approximately 40130+00 to 40439+00 to accommodate the separation distance required by the CI owner adjacent to the Railroad ROW and avoiding the Recreation Area Veterans Bike Path. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S6-P4A#5 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 30,900 linear feet and approximately 9,490 feet is HDD below grade with no surface disturbance. The proposed excursion occurs approximately 150 linear feet west of the ADZ at the farthest point.

4.3.2 Justification

The excursion is required in order to accommodate the separation distance required by the CI owner adjacent to the Railroad ROW and to avoid the Recreation Area Veterans Bike Path, and for work areas for HDD#53A, HDD#59, and HDD#59A to avoid streams and wetlands. See Section 2.1 for a discussion on design constraints related to HDDs. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

4.3.3 Environmental and Cultural Impact

4.3.3.1 Agricultural Resources

Excursion area S6-P4A#5 will avoid the Recreation Area Veterans Bike Path. There are no other agricultural lands located within the S6-P4A#5.

4.3.3.2 Cultural Resources

Excursion area S6-P4A#5 has no known Cultural sites.

4.3.3.3 *Threatened and Endangered Species*

Excursion area S6-P4A#5 will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

4.3.3.4 *Wetlands and Streams*

Excursion area S6-P4A#5 will result in temporary impacts to a stream as a result of a crossing stream C-CPS1, as described in Table 9.1. S6-P4A#5 will result in temporary construction impacts to wetlands 657446, 657446, 712595, 357343, 657304, 623151, 627289, 657226, 763925, 644644, 763569, and P4A-Q as described in Table 9.2 of the EM&CP.

4.4 EXCURSION S6-P4A#10

4.4.1 Description of the Excursion Area

The alignment exits the CP Rail ROW from approximately 40495+00 to 40527+50 to accommodate for the narrow ROW with steep slopes adjacent to the tracks and HDD work areas. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S6-P4A#10 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 3,250 linear feet and approximately 1,700 feet is HDD below grade with no surface disturbance. The proposed excursion occurs approximately 50 linear feet west of the ADZ at the farthest point.

4.4.2 Justification

The excursion is required in order to accommodate for the narrow ROW with steep slopes adjacent to the tracks and HDD work areas. See Section 2.1 for a discussion on design constraints related to HDDs. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

4.4.3 Environmental and Cultural Impact

4.4.3.1 *Agricultural Resources*

There are no agricultural lands located within excursion area S6-P4A#10.

4.4.3.2 *Cultural Resources*

Excursion area S6-P4A#10 has no known Cultural sites.

4.4.3.3 *Threatened and Endangered Species*

Excursion area S6-P4A#10 will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

4.4.3.4 *Wetlands and Streams*

Excursion area S6-P4A#10 will result in temporary impacts as a result of a crossing stream FA-S-ED, as described in Table 9.1 of the EM&CP.

4.5 EXCURSION S6-P4A#11

4.5.1 Description of the Excursion Area

The alignment exits the CP Rail ROW from approximately 40532+00 to 40542+97 to accommodate for the narrow ROW with steep slopes adjacent to the tracks. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S6-P4A#11 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 1,097 linear feet and approximately 250 feet is HDD below grade with no surface disturbance. The proposed excursion occurs approximately 30 linear feet west of the ADZ at the farthest point.

4.5.2 Justification

The excursion is required in order to accommodate for the narrow ROW with steep slopes adjacent to the tracks and HDD work areas. See Section 2.1 for a discussion on design constraints related to HDDs. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

4.5.3 Environmental and Cultural Impact

4.5.3.1 *Agricultural Resources*

There are no agricultural lands located within excursion area S6-P4A#11.

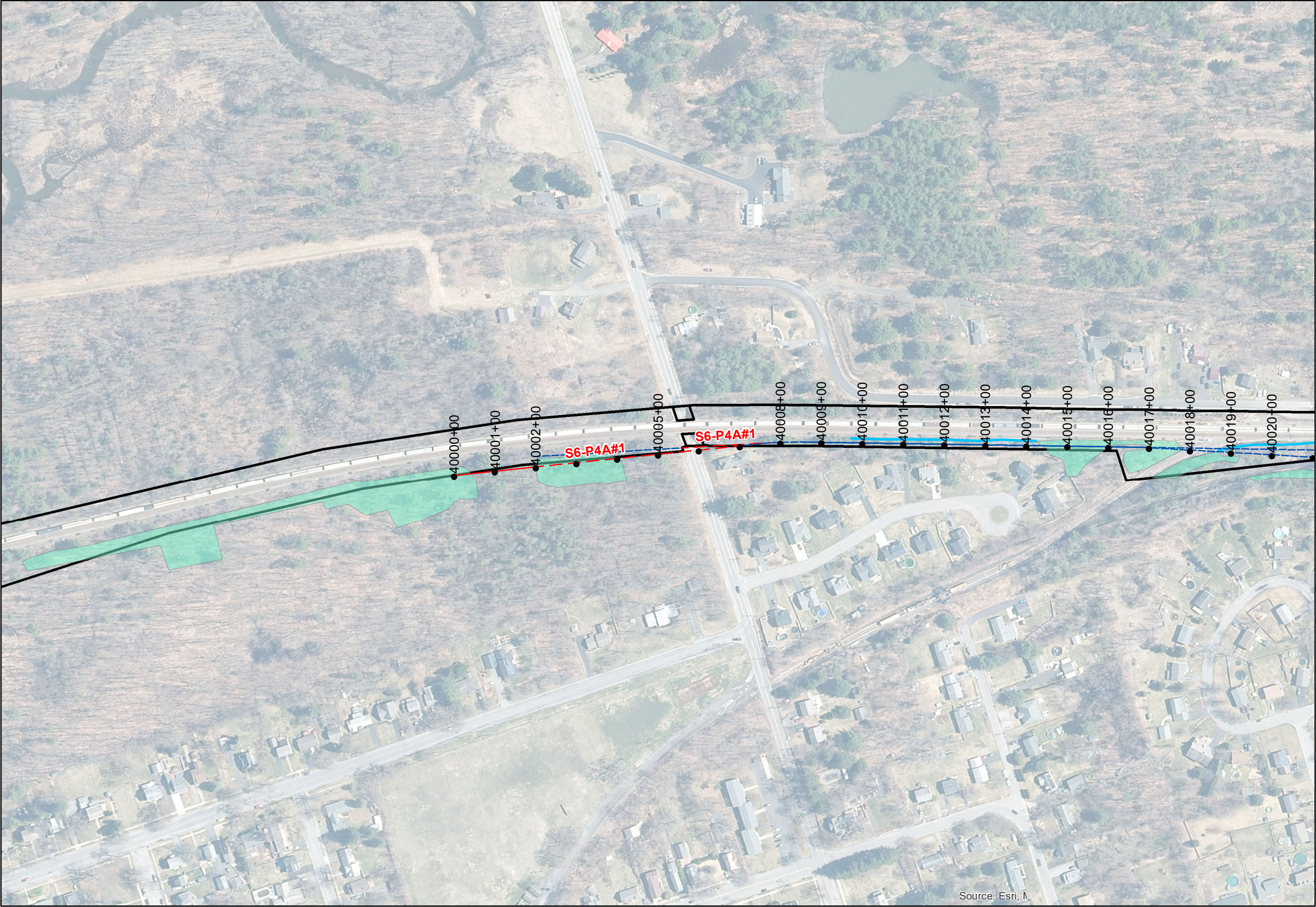
4.5.3.2 *Cultural Resources*

Excursion area S6-P4A#11 has no known Cultural sites.

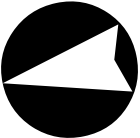
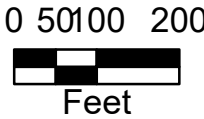
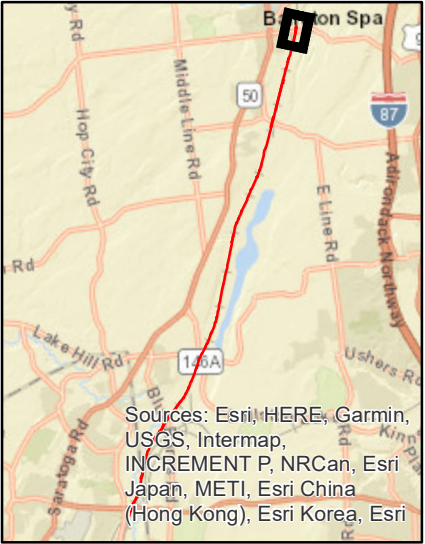
CHPE EM&CP

Saratoga and
Schenectady County,
New York

Deviation Zone Analysis



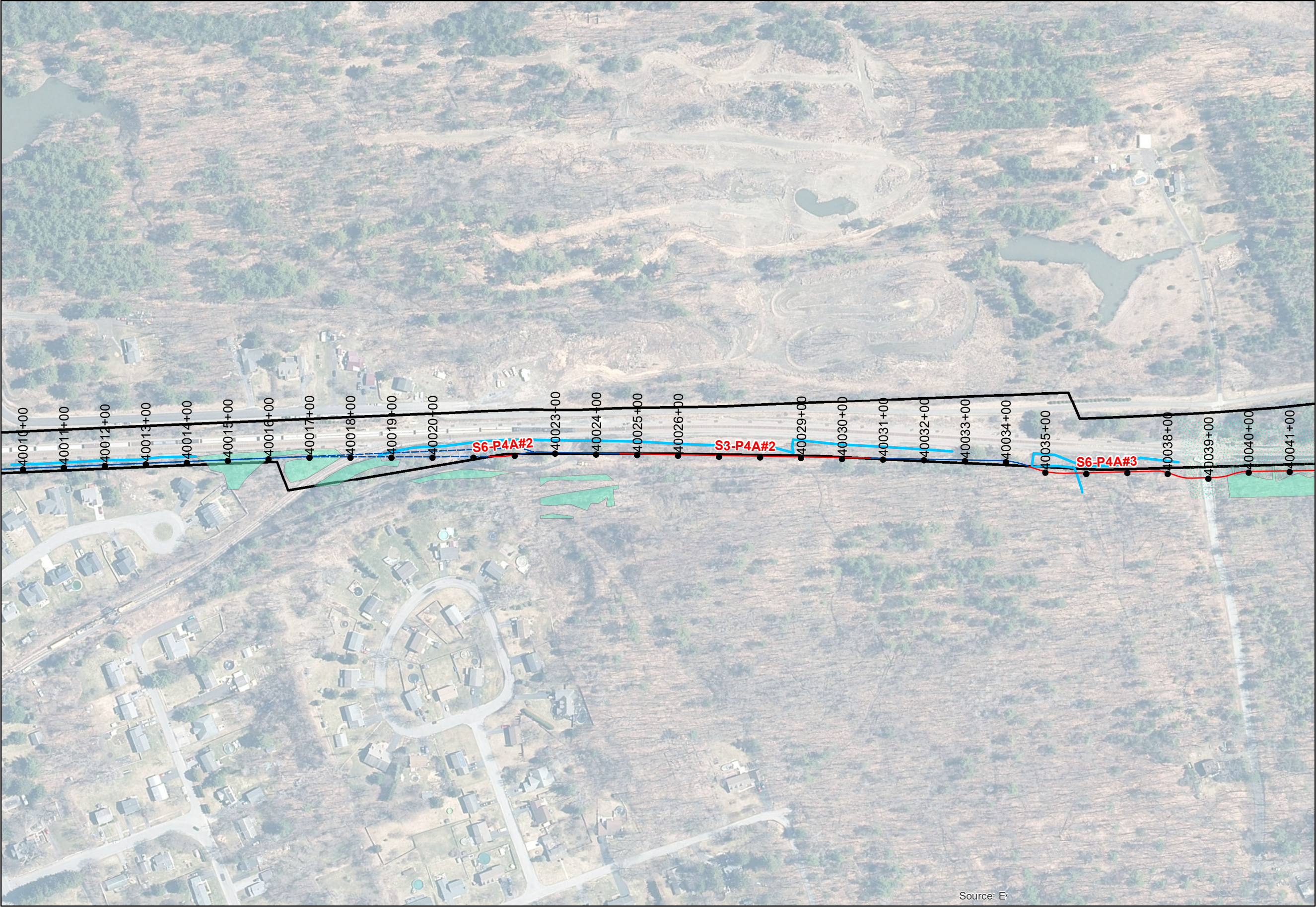
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- HDD
- Excursions
- HDD Excursions
- Delineated Streams
- Wetland Buffer
- Delineated Wetlands
- Deviation Zone



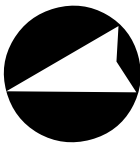
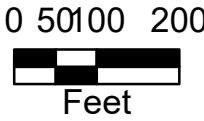
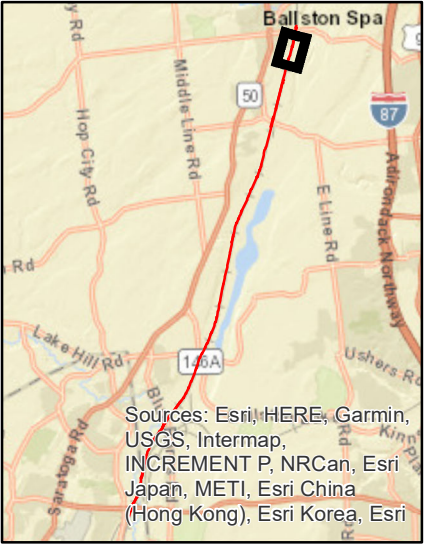
CHPE EM&CP

Saratoga and
Schenectady County,
New York

Deviation Zone Analysis



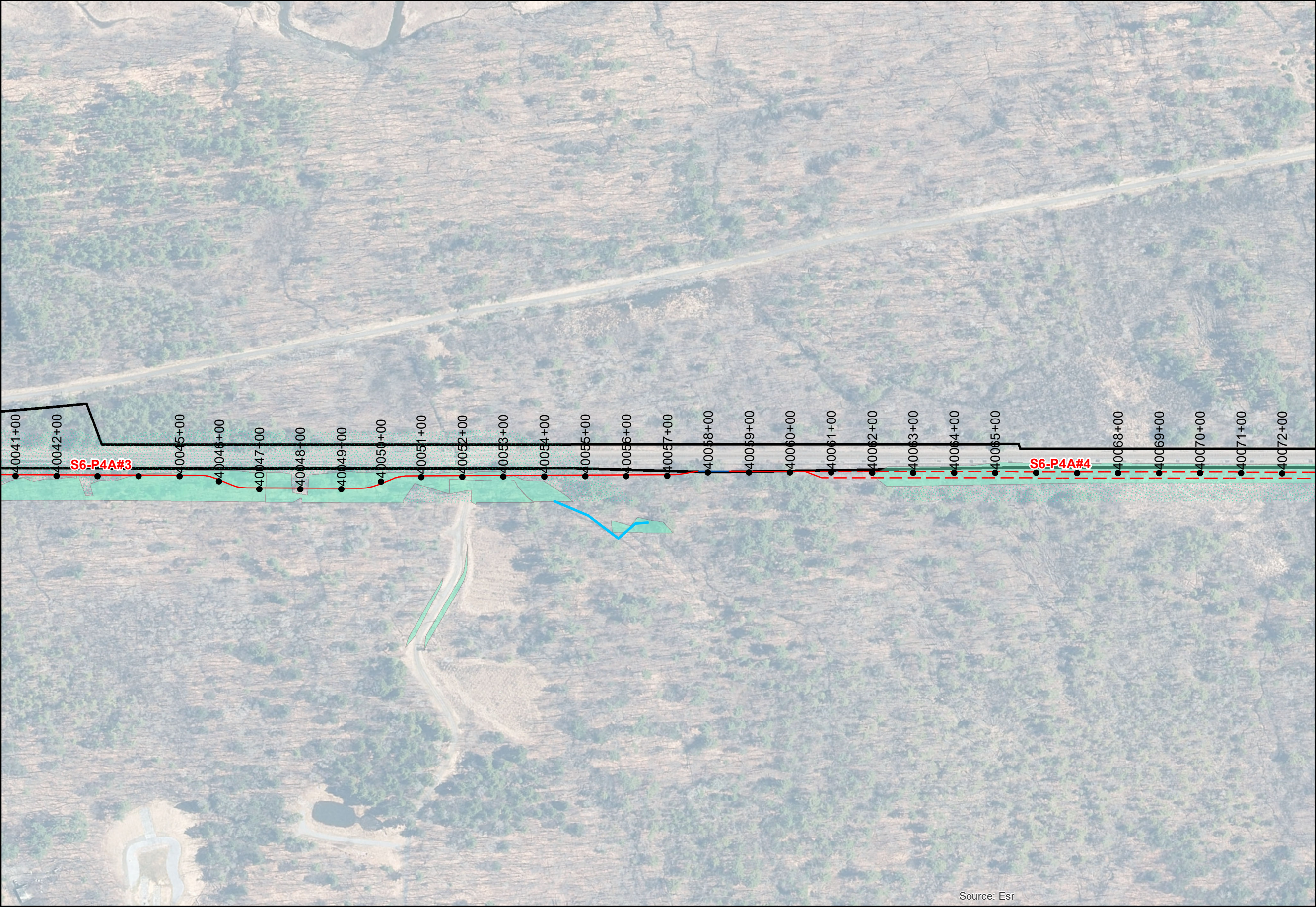
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- Excursions
- Delineated Streams
- Wetland Buffer
- Delineated Wetlands
- Deviation Zone



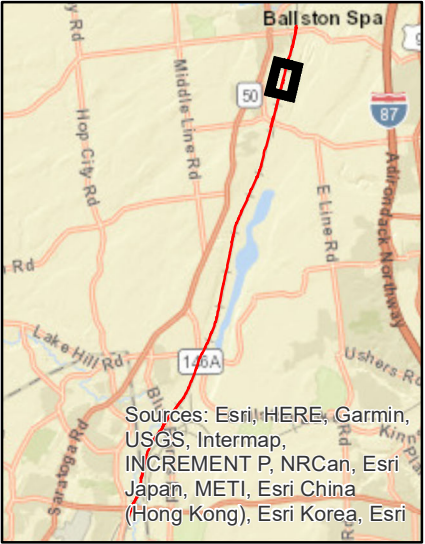
CHPE EM&CP

Saratoga and
Schenectady County,
New York

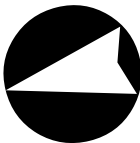
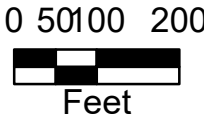
Deviation Zone Analysis



- Stations
- Trench
- Excursions
- - - HDD Excursions
- Delineated Streams
- Wetland Buffer
- Delineated Wetlands
- Deviation Zone



Sources: Esri, HERE, Garmin,
USGS, Intermap,
INCREMENT P, NRCAn, Esri
Japan, METI, Esri China
(Hong Kong), Esri Korea, Esri



Source: Esr

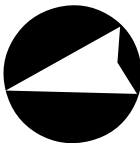
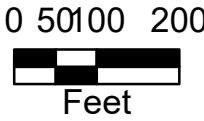
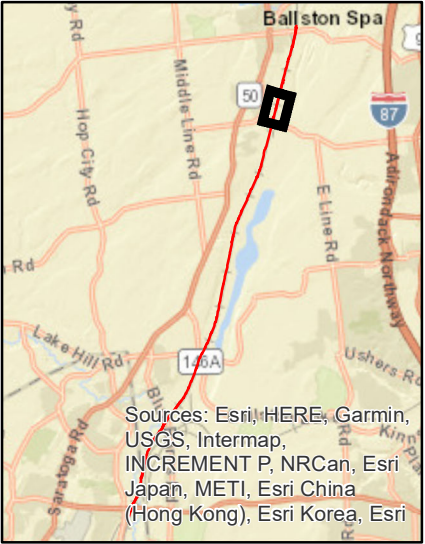
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Deviation Zone Analysis



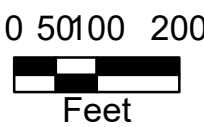
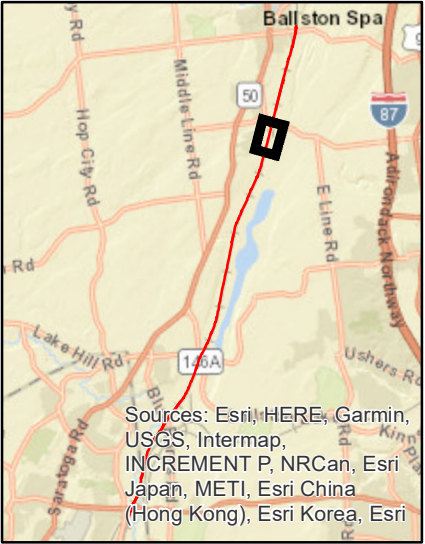
- Stations
- Excursions
- - - HDD Excursions
- Delineated Streams
- Wetland Buffer
- Delineated Wetlands
- Deviation Zone



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Deviation Zone Analysis



- Stations
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- - - HDD Excursions
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Deviation Zone Analysis



- Stations
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- Wetland Buffer
- Delineated Wetlands
- ESA 1
- Deviation Zone

