



Appendix E

Case 10-T-0139

JUSTIFICATION FOR DEVIATION ZONE EXCURSIONS

Segment 4 and 5-Package 3

1.0 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 between August 2020 and February 2022, 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 ultimately determined to be actually 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 either control of-via fee, easement, or other appropriate interest-or rights granted by a governmental authority to use such authority's permanent right-of-way (ROW), 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.

The Certificate Conditions require that, should cable installation work be proposed outside of the ADZ, an explanation for the proposed deviations must be provided pursuant to Certificate Condition 157. Provided that criteria are met, Condition 157 of the Certificate confers discretion on the Public Service Commission to approve 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." The purpose of this memorandum is to demonstrate the appropriate environmental and engineering reasons for the proposed modification to the Allowed Deviation Zone in Segment 4 and 5 - Package 3, and to show that the deviation creates no conflict with the other Certificate Conditions

As part of the EM&CP filing of Segments 4 and 5 – Package 3, the Certificate Holders are proposing minor shifts in the proposed conduit outside of the ADZ as described in Table 1.3 of the Environmental Construction and Management Plan (EM&CP) and in Table 1 below. 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 the ADZ Excursion 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 either (1) obtained or are in the process of obtaining rights to occupy and use the land(s) associated with any such ADZ Excursions (Excursion Areas) 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, where required, (see Easement Table 4.4 in EM&CP), 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 in the ADZ Excursion Area are not material.

4. A demonstration that installation of the Facility cables in the ADZ Excursion Area will not substantially change the overall character of the Facility or otherwise conflict with the other Certificate Conditions.

2.0 DEVIATION ZONE EXCURSIONS SUMMARY

The ADZ in Segment 4 and 5 - Package 3 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 33 unique locations along the Segment 4 and 5 - Package 3 Project Corridor. Table 1 identifies each 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 (see also Table 1-3 of the EM&CP). It is worth noting that some of these excursions consists 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 4 AND 5 – PACKAGE 3

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 must 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) requires adjustment of one or both ends of the HDD bore paths.
4. Contaminated Sites – the presence of certain hazardous waste, superfund, or otherwise environmentally impaired land uses in some locations necessitated the use of HDD to avoid disturbance of contaminated or potentially contaminated soils or materials.

2.1.2 General Trench Design for Installation Conduit and Subsequently Cable

Other shifts outside of the ADZ in Segment 4 and 5 – Package 3 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, requiring relocation outside of the ADZ.
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 at the required off-site distance from the railroad tracks.
3. Utilities – The alignment was shifted outside the ADZ in order to avoid potential adverse impacts to utilities located at close proximity to the railroad.
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 the Segment 4 and 5 – Package 3

Revision Area	Parcel ID	Sheet Number	Location (Approximate – see Drawings for Details)	Justification for Revision	Change in Environmental Impact
Excursion S4-P3#1	163.-2-1.3 163.-2-22 163.-2-20 163.-2-16 163.-2-20.1 163.-2-19.1 16.3-2-20.2	C-102 to C-105	30015+00 to 30066+50	Required offset from tracks and HDD#21B work area necessary for installation	None- HDD Avoids impacts to wetland G- R-TT, and Streams G- R S-AA, G-R-S-BB
Excursion S4-P3#2	163.15-1-2	C-106 to C-107	A-P3-5+25 to A- P3-9+50	Required offset from CP Railroad tracks	None
Excursion S4-P3#3	163.18-3-17	C-107	A-P3-17+00 to A- P3-21+50	Splice Location 68 and HDD #22 work area necessary for installation	None

Revision Area	Parcel ID	Sheet Number	Location (Approximate – see Drawings for Details)	Justification for Revision	Change in Environmental Impact
Excursion S4-P3#4	East Street 163.18.3-35.1 171.6-2-52 Center Street 171.6-2-51 Canal Street 163-3-18.35 Broadway 171.6-6-1 Hudson River 171.-5-1-20 171.10,1-1.1 171.10,1-1.2 65-1-9 65-1-10 W River Road 65.-1-17 65.-1-17 65.-1-16.2 64.-2-106.1	C-108to C-113	A-P3-31+00 to 30187+55	HDD#22, 24 and 24A conduits and work areas splice vault 69, 70 and 71 necessary for installation	None - Wetland Impact; HDD avoids wetlands and contaminated sites. HDD#25 avoids RAA for NYSDEC Wetland and state Regulated wetland G-R-WW
Excursion S4-P3#5	64.2-55.11 78.-1-7 78.-1-6	C-114 to C-115	30203+00 to 30223+91	HDD#25 Work Area, Splice Location #72 HDD#25A Work Areas necessary for installation	Agricultural Land (all parcels), but minimized by HDD. Impacts Stream GP3 and G-R-S-DD.
Excursion S4-P3#6	78.-1-13 78.-1-16.1 78.-1-21.112	C-116 to C-118	30225+00 to 30263+50	Steep slope within narrow ROW	Impacts Wetland G-R-XX, Stream G-R-S-EE, G-R-S-FF and

Revision Area	Parcel ID	Sheet Number	Location (Approximate – see Drawings for Details)	Justification for Revision	Change in Environmental Impact
	78.-1-93			Slice Location #73; HDD#26 work areas necessary for installation	Wetland GP-3-S; impact to state wetland G-R-YY avoided due to HDD#26 Agricultural Land
Excursion S4-P3#7	78.-1-63.1	C-120	30289+00 to 30293+00	HDD#27 second conduit and work area necessary for installation	Agricultural Land
Excursion S4-P3#8	91.-1-54	C-123 to C-124	30343+50 to 30346+40	HDD#29 and work areas necessary for installation	HDD work areas will impact state wetland C-R-AY; HDD avoids rest of wetland
Excursion S4-P3#9	91.-1-4	C-126 to C-127	30389+20 to 30395+75	HDD#30 work area necessary for installation	Wetland C-R-AX
Excursion S4-P3#10	91.-1-27.2 90.20-1-9	C-127 to C-128	30404+75 to 30416+00	HDD#30, work area, splice location #39 necessary for installation	Wetland C-R-AW
Excursion S4-P3#11	103-2-2.22	C-132	30465+75 to 30467+62	Off-set from culvert	None
Excursion S4-P3#12	103.-2-10	C-132 to C-133	30475+00 to 30489+00	Off-set from culvert for stream C-R-S-MM	Located in agricultural lands, Open cut crossing stream C-R-S-MM, crossing state wetland C-R-AU and impacts to 100-ft regulated buffer area

Revision Area	Parcel ID	Sheet Number	Location (Approximate – see Drawings for Details)	Justification for Revision	Change in Environmental Impact
Excursion S4-P3#13	103.-2-10	C-133 to C-134	30492+00 to 30507+31	Steep slope off tracks and narrow ROW	Agricultural Land, Open cut crossing stream C-R-S-MM and 100-ft buffer area; Wetlands P3-F and P3-G impacted by HDD#31 Work areas
	103.-2-22.2				
	103.3-6.4				
	103.3-6.3				
Excursion S4-P3#14	116.-1-.70.1	C-137 to C-138	30543+32 to 30559+98	HDD#31 and work areas necessary for installation	None - HDD Designed to avoid impact to state wetland C-R-AS and 100-ft regulated buffer area
Excursion S4-P3#15	116.-1-25	C-140	30587+19 to 30588+55	Off-set from Culvert	Crossing stream FA-S-BW and state wetland FA-BV
Excursion S4-P3#16	115.-3-46	C-142	30262+50 to 30669+50	HDD#32 and work areas necessary for installation	None
Excursion S4-P3#17	128.-1-8.1	C-142 to C-145	30264+50 to 30669+00	HDD#32, #32A, 33 work area, splice location 87, 88 and HDD #32A work areas necessary for installation, steep slope adjacent to tracks and narrow ROW	None
	128.-1-99				
	128.-1-18				
	128.-1-19.1				
	128.-1-21				
	128.-1-7.111				

Revision Area	Parcel ID	Sheet Number	Location (Approximate – see Drawings for Details)	Justification for Revision	Change in Environmental Impact
Excursion S4-P3#18	128.-1-7.111	C-145 to C-146	30672+00 to 30677+54	HDD#33 work area necessary for installation	None
Excursion S4-P3#19	128.-1-84	C-148 to C-150	30716+00 to 30743+00	HDD#35	None. State Wetland FA-BX avoided by HDD
	141.-2-12.1				
	141.-2-37				
Excursion S4-P3#20	141.-1-31.11	C-154	30795+42 to 30803+00	HDD#36	None
Excursion S4-P3#21	140.-2-55	C-156 to C-157	30837+00 to 30848+50	HDD#37	None
	140.-2-21.1				
	Adirondack Northway				
	140.-2-21.2				
Excursion S5-P3#1	152.-2-18	C-166 to C-167	30888+00 to 30991+00	Open Cut Road Crossing	None
	Clinton Street				
Excursion S5-P3#2	165.-2-79	C-171 to C-172	31063+00 to 31066+00	HDD#42 work area necessary for installation	Wetland C2-R-G
Excursion S5-P3#3	165.-2-75	C-173	31088+00 to 31090+25	HDD#43	None
Excursion S5-P3#4	165.-2-36.1	C-174	31099+50 to 31108+31	HDD#44	None
	162.-2-45.2				
Excursion S5-P3#5	178.-3-18	C-178	31157+00 to 31165+00	HDD#45	None
Excursion S5-P3#6	178.-3-18	C-179 to C-181	31176+00 to 31212+00	HDD#46 Avoid State Wetland FA-CQ, FA-CM	None
	191.-1-1				

Revision Area	Parcel ID	Sheet Number	Location (Approximate – see Drawings for Details)	Justification for Revision	Change in Environmental Impact
Excursion S5-P3#7	191.-1-1	C-182	31219+50 to 31226+50	HDD#47	Stream P3-S
	191.-1-59				
Excursion S5-P3#8	191.-1-50	C-183 to C-187	31238+00 to 31292+50	Steep Slope adjacent to tracks, Avoid Stream FA-D-DC	Wetland FA-DB, FA-D-CV, Stream FA-S-CZ, FA-S-CW, GP-3, GP3-Q
	191.-1-51				
	191.-1-35				
	191.-1-34				
	190.-2-9				
	190.-2-12				
	190.-2-15				
	190.-2-16				
	190.-2-17				
	190.-2-18				
	190.-2-19				
	190.-2-20				
	190.-2-21				
	203.-1-3				
Excursion S5-P3#9	203.-1-29	C-188	31309+50 to 31315+00	Northline Rd Crossing	Impacts Wetland GSW and S
	203.-1-37.1				
Excursion S5-P3#10	203.19-3-1	C-191	31355+00 to 31362+00	HDD#49	None
	203.-4-7				
	203.-4-8.1				

2.2 EXCURSION S4-P3 #1

2.2.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the conduit for HDD#21A from approximately 30015+00 to 30066+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S3-P2#1 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 5,150 linear feet.

2.2.2 Justification

The slight excursion is required in order to accommodate the required offset from tracks and HDD#21A work area. 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.

2.2.3 Environmental Impact

2.2.3.1 Agricultural Resources

The Excursion area S4-P3#1 does not impact any designated Agricultural Areas.

2.2.3.2 Cultural Resources

The Excursions areas S4-P3#1 have no known cultural sites.

2.2.3.3 Threatened and Endangered Species

Excursion area S4-P3#1 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.2.3.4 Wetlands and Streams

Excursion areas S4-P3#1 will not impact any wetlands. Wetland G-R-TT and streams G-R-S-AA and G-R-S-BB will be avoided.

2.3 EXCURSION S4-P3 #2

2.3.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the required offset from tracks from approximately A-P3-5+25 to A-P3-9+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#2 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 425 linear feet.

2.3.2 Justification

The slight excursion is required in order to accommodate the required offset from CP Railroad tracks. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

2.3.3 Environmental Impact

There are no agricultural or archeological resources, threatened or endangered species, or wetlands/waterbodies in the area Excursion S4-P3#2.

2.4 EXCURSION S4-P3 #3

2.4.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the conduit for HDD#22 from approximately A-P3-17+00 to A-P3-21+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P5#3 and ultimate Facility ROW is included as in the attached figure set. The length of the excursion is approximately 450 linear feet.

2.4.2 Justification

The slight excursion is required in order to accommodate Splice Location 68 and HDD #22 work area, which is necessary in order to install the Facility. 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.

2.4.3 Environmental Impact

There are no agricultural, archeological, threatened or endangered species, or wetlands/waterbodies in the area Excursion S4-P3#3.

2.5 EXCURSION S4-P3 #4

2.5.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate HDD#22, HDD#24, and HDD#24A from approximately A-P3-31+00 to 30187+55. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#4 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 7,030 linear feet. A-P3-31+00 to A-P3-33+20. The lengths of HDD#22, HDD#24, and HDD#24A within the excursion are 220 LF, 3,565 LF, and 885 LF, respectively, for a total of 4,670 LF of HDD within the excursion.

2.5.2 Justification

This excursion is required in order to meet the design constraints for HDD#22, HDD#24, and HDD#24A. These HDDs are required in order to cross the Hudson River while avoiding potentially contaminated site (Rogers Island), the archeological and historical resources on the island, and the state wetland G-R-22. Additional design alternatives were evaluated at this location, including trenching and bridge attachments within the rail corridor. The analysis included attaching the conduit to existing railroad bridges over Canal Street, Broadway, and the Hudson River while transitioning to an open trench between existing bridges. Ultimately, attaching the cable to the existing railroad bridge was not feasible and resulted in significant land disturbance within historic Rogers Island and the Village of Fort Edward due to increased excavation and constructability access points. For additional information on cultural resources considerations, please refer to Appendix O – Cultural Resources Management Plan for Segments 4 and 5 – Package 3.

The conduit alignment for HDD 24 will be located east of the existing CP Rail tracks. Apart from the entry and exit pits, splice vaults and short segment along Mill Site Road, this DZ Excursion is entirely below grade and will result in minimal land disturbance. 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.

2.5.3 Environmental Impact

There are no agricultural or archeological resources, threatened or endangered species, or wetlands/waterbodies in the area Excursion S4-P3#4.

2.6 EXCURSIONS S4-P3 #5

2.6.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the works areas for HDD#25 and HDD#25A and splice location #72 from approximately 30203+00 to 30223+91. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#5 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 2,091 linear feet.

2.6.2 Justification

The slight excursion is required in order to accommodate the avoidance of the designated agricultural land and HDD#25 and HDD#25A work areas and splice location #72. 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.

2.6.3 Environmental Impact

2.6.3.1 Agricultural Resources

The Excursion area S4-P3#5 includes parcels 64.2-55.11, 78.-1-7, and 78.-1-6 which are designated as agricultural land. The permanent infrastructure will be installed using best management practices described in Section 4.4.1 of the EM&CP. Temporary construction activities will be performed in accordance with Agricultural BMPs as described in Sections 4.10.4, 4.10.5, 7.1, and 14.5 in the EM&CP.

2.6.3.2 Cultural Resources

The Excursions areas S4-P3#5 have no known Cultural sites.

2.6.3.3 Threatened and Endangered Species

Excursion areas S4-P3#5 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.6.3.4 Wetlands and Streams

Excursion areas S4-P3#5 will not impact any wetlands or streams.

2.7 EXCURSION S4-P3 #6

2.7.1 Description of the Excursion Area

For Excursion Area S4-P3#8, the railroad ROW becomes narrow, the tracks are in the center of the ROW with a fairly steep slope drop off with the toe of the slope at the edge of the ROW boundary. As a result, the alignment was shifted to the east on private property from 30225+00 to 30263+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#6 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 3,850 linear feet.

2.7.2 Justification

A review of the slope on the side of the railroad and road determined that the slope was too steep to construct the alignment on either side of the track within the ROW boundaries. The excursion is also required in order to accommodate HDD #26 work areas and splice location #73. 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.

2.7.3 Environmental Impact

2.7.3.1 Agricultural Resources

The Excursion area S4-P3#6 includes parcels 78.-1-13, 78.-1-16.1, 78.-1-21.112, and 78.-1-93 which are designated as agricultural land. The permanent infrastructure will be installed using best management practices described in Section 4.4.1 of the EM&CP. Temporary construction activities will be performed in accordance with Agricultural BMPs as described in Sections 4.10.4, 4.10.5, 7.1, and 14.5 in the EM&CP.

2.7.3.2 Cultural Resources

The Excursions areas S4-P3#6 have no known Cultural sites.

2.7.3.3 Threatened and Endangered Species

Excursion areas S4-P3#6 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.7.3.4 Wetlands and Streams

Excursion areas S4-P3#6 will impact wetland G-R-XX, stream G-R-S-EE and G-R-S-FF as described in Table 9.2 of the EM&CP. Impact to state wetland G-R-YY will be avoided due to HDD#26.

2.8 EXCURSION S4-P3 #7

2.8.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the second conduit for HDD#27 and work area from approximately 30289+00 to 30293+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#7 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 400 linear feet.

2.8.2 Justification

The slight excursion is required in order to accommodate HDD #27 second conduit and work area. 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.

2.8.3 Environmental Impact

2.8.3.1 Agricultural Resources

The Excursion area S4-P3#7 does include parcel 78.-1-63.1 which is designated as agricultural land. The permanent infrastructure will be installed using best management practices described in Section 4.4.1 of the EM&CP. Temporary construction activities will be performed in accordance

with Agricultural BMPs as described in Sections 4.10.4, 4.10.5, 7.1, and 14.5 in the EM&CP.

2.8.3.2 Cultural Resources

The Excursions areas S4-P3#7 have no known Cultural sites.

2.8.3.3 Threatened and Endangered Species

Excursion area S4-P3#7 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.8.3.4 Wetlands and Streams

Excursion areas S4-P3#7 will not impact any wetlands or streams.

2.9 EXCURSION S4-P3 #8

2.9.1 Description of the Excursion Area

HDD 29 is an HDD used to avoid wetland C-R-AY. In order to accommodate the design constraints for this HDD entry and exit pit, as well as the second conduit, a small deviation zone occurs from 30343+50 to 30346+40. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S3-P2#8 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 290 linear feet.

2.9.2 Justification

The excursion is required in order to meet the design constraints for HDD#29 and 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.

2.9.3 Environmental Impact

2.9.3.1 Agricultural Resources

The Excursion areas S4-P3#8 does include any agricultural resources.

2.9.3.2 Cultural Resources

The Excursions areas S4-P3#8 have no known Cultural sites.

2.9.3.3 Threatened and Endangered Species

Excursion areas S4-P3#8 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.9.3.4 Wetlands and Streams

Excursion areas S4-P3#8 resulting from the HDD work areas will impact state wetland C-R-AY. Impact to state wetlands beyond the work areas will be avoided due to HDD#29.

2.10 EXCURSION S4-P3 #9

2.10.1 Description of the Excursion Area

In order to accommodate the design constraints for the HDD #30 work area, a small deviation zone occurs from 30389+20 to 30395+75. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#9 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 655 linear feet.

2.10.2 Justification

The slight excursion is required in order to meet the design constraints for the HDD #30 work area. 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.

2.10.3 Environmental Impact

2.10.3.1 Agricultural Resources

The Excursion area S4-P3#9 is not located within agricultural lands. Therefore, additional adverse impacts to agricultural resources will not occur from this change.

2.10.3.2 Cultural Resources

The Excursions areas S4-P3#9 have no known Cultural sites.

2.10.3.3 Threatened and Endangered Species

Excursion area S4-P3#9 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.10.3.4 Wetlands and Streams

S4-P3#9 will result in a temporary impact to wetland C-R-AX as described in Table 9.2 of the EM&CP.

2.11 EXCURSION S4-P3 #10

2.11.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the conduit for HDD#30, work area, and splice location 39 from approximately 30404+75 to 30416+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P5#10 and ultimate Facility ROW is included in the attached figure set. The proposed area of the excursion is approximately 1,125 linear feet.

2.11.2 Justification

The slight excursion is required in order to accommodate Splice Location 39, HDD #30, and work area. 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.

2.11.3 Environmental Impact

2.11.3.1 Agricultural Resources

The Excursion area S4-P3#10 is not located within agricultural lands. Therefore, additional adverse impacts to agricultural resources will not occur from this change.

2.11.3.2 Cultural Resources

The Excursions areas S4-P3#10 have no known Cultural sites.

2.11.3.3 Threatened and Endangered Species

Excursion area S4-P3#10 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.11.3.4 Wetlands and Streams

S4-P3#10 will result in a temporary impact to wetland C-R-AW as described in Table 9.2 of the EM&CP.

2.12 EXCURSION S4-P3 #11

2.12.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the required offset from the culvert from approximately 30465+75 to 30467+62. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#11 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 187 linear feet.

2.12.2 Justification

The slight excursion is required in order to accommodate the required offset from the culvert. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

2.12.3 Environmental Impact

There are no agricultural, archeological, threatened or endangered species, or wetlands/waterbodies in the area Excursion S4-P3#11.

2.13 EXCURSION S4-P3 #12

2.13.1 Description of the Excursion Area

The slight excursion is required in order to meet the design constraints for offset from culvert for stream C-R-S-MM. In order to accommodate the design constraints, a deviation zone occurs from 30475+00 to 30489+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#12 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 1400 linear feet.

2.13.2 Justification

The slight excursion is required in order to accommodate the required offset culvert. Due to this spatial requirement, the alignment will run underground outside and generally parallel to the ADZ for a total of approximately 1400 linear feet. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

2.13.3 Environmental Impact

2.13.3.1 Agricultural Resources

The Excursion area S4-P3#13 does include parcel 103.-2-10 which is designated as agricultural land. The permanent infrastructure will be installed using best management practices described in Section 4.4.1 of the EM&CP. Temporary construction activities will be performed in accordance with Agricultural BMPs as described in Sections 4.10.4, 4.10.5, 7.1, and 14.5 in the EM&CP

2.13.3.2 Cultural Resources

The Excursions areas S4-P3#12 have no known Cultural sites.

2.13.3.3 Threatened and Endangered Species

Excursion area S4-P3#12 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.13.3.4 Wetlands and Streams

S4-P3#12 will result in an open cut crossing stream C-R-S-MM (Class C/C) and state wetland

C-R-AU and impacts to the 100-ft regulated buffer area described in Table 9.2 of the EM&CP.

2.14 EXCURSION S4-P3 #13

2.14.1 Description of the Excursion Area

The slight excursion is required in order to meet the design constraints for steep slopes off tracks and narrow ROW. In order to accommodate the design constraints, a deviation zone occurs from 30492+00 to 30507+31. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#13 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 1,531 linear feet.

2.14.2 Justification

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 within the ROW boundaries. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

2.14.3 Environmental Impact

2.14.3.1 Agricultural Resources

The Excursion area S4-P3#13 does include parcels 103.-2-10, 103.-2-22.2, 103.3-6.4, 103.3-6.3 which is designated as agricultural land. The permanent infrastructure will be installed using best management practices described in Section 4.4.1 of the EM&CP. Temporary construction activities will be performed in accordance with Agricultural BMPs as described in Sections 4.10.4, 4.10.5, 7.1, and 14.5 in the EM&CP.

2.14.3.2 Cultural Resources

The Excursions areas S3-P2#13 have no known Cultural sites.

2.14.3.3 Threatened and Endangered Species

Excursion area S3-P2#13 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.14.3.4 Wetlands and Streams

S3-P2#13 will result in an open cut crossing stream C-R-S-MM (Class C/C) and State Wetland Regulated 100-ft buffer area as described in Table 9.1 and Table 9.2 of the EM&CP. Wetlands P3-F and P3-G will be impacted by HDD#31 work areas.

2.15 EXCURSION S4-P3 #14

2.15.1 Description of the Excursion Area

HDD#31 is an HDD used to avoid wetland G-R-AS and 100-ft regulated buffer area. In order to accommodate the design constraints for this HDD and work area, a small deviation zone occurs from 30543+32 to 30559+98. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#14 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 1,666 linear feet.

2.15.2 Justification

The slight excursion is required in order to meet the design constraints for HDD31 and 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.

2.15.3 Environmental Impact

There are no agricultural or archeological resources, threatened or endangered species, or wetlands/waterbodies in the Excursion S4-P3#14 area.

2.16 EXCURSION S4-P3 #15

2.16.1 Description of the Excursion Area

The slight excursion is required in order to meet the design constraints for culvert offsets. In order to accommodate the design constraints, a deviation zone occurs from 30587+19 to 30588+55. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#15 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 136 linear feet.

2.16.2 Justification

The slight excursion is required in order to accommodate the required offset culvert. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

2.16.3 Environmental Impact

2.16.3.1 Agricultural Resources

The Excursion area S4-P3#15 does include any agricultural resources.

2.16.3.2 Cultural Resources

The Excursions area S4-P3#15 have no known Cultural sites.

2.16.3.3 Threatened and Endangered Species

Excursion area S4-P3#15 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.16.3.4 Wetlands and Streams

S4-P3#15 will result in temporary impacts to a stream as a result of a crossing stream FA-S-BW (Class C/C) and will impact state wetland FA-BV as described in Table 9.1 and Table 9.2 of the EM&CP. These impacts are not substantially different than these resources within the Deviation Zone.

2.17 EXCURSION S4-P3 #16

2.17.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the conduit for HDD#32 and work areas from approximately 30617+00 to 30620+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#16 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 350 linear feet.

2.17.2 Justification

The slight excursion is required in order to accommodate HDD #32 and work area. 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.

2.17.3 Environmental Impact

There are no agricultural, archeological, threatened or endangered species, or wetlands/waterbodies in the Excursion S4-P3#16 area.

2.18 EXCURSION S4-P3 #18

2.18.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the conduit for HDD #32, HDD#32A, HDD#33 work area, splice location 87, splice location 88, and HDD#32A work areas from approximately 30623+00 to 30669+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P5#16 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 4,600 linear feet.

2.18.2 Justification

The slight excursion is required in order to accommodate HDD #32, HDD#32A, HDD#33 work area, splice location 87, splice location 88, and HDD#32A work areas. Additional constraints are steep slope adjacent to the tracks and narrow ROW. 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.

2.18.3 Environmental Impact

There are no agricultural, archeological, threatened or endangered species, or wetlands/waterbodies in the area Excursion S4-P3#16.

2.19 EXCURSION S4-P3 #18

2.19.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the HDD#33 work area from approximately 30672+00 to 30677+54. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#18 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 554 linear feet.

2.19.2 Justification

The slight excursion is required in order to accommodate the HDD #33 work area. 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.

2.19.3 Environmental Impact

There are no agricultural, archeological, threatened or endangered species, or wetlands/waterbodies in the area Excursion S4-P3#18.

2.20 EXCURSION S4-P3 #19

2.20.1 Description of the Excursion Area

HDD#35 is an HDD used to avoid state wetland FA-BX. In order to accommodate the design constraints for this HDD, a small deviation zone occurs from 30716+00 to 30743+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#19 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 2,700 linear feet.

2.20.2 Justification

The slight excursion is required in order to meet the design constraints for HDD#35. 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.

2.20.3 Environmental Impact

There are no agricultural, archeological, threatened or endangered species, or wetlands/waterbodies in the Excursion S4-P3#19 area.

2.21 EXCURSION S4-P3 #20

2.21.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the second conduit for HDD#36 from approximately 30795+42 to 30803+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#20 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 758 linear feet.

2.21.2 Justification

The slight excursion is required in order to accommodate the HDD #36 work area. 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.

2.21.3 Environmental Impact

There are no agricultural, archeological, threatened or endangered species, or wetlands/waterbodies in the Excursion S4-P3#20 area.

2.22 EXCURSION S4-P3 #21

2.22.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the second conduit for HDD#37 from approximately 30837+00 to 30848+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#21 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 1,150 linear feet.

2.22.2 Justification

The slight excursion is required in order to accommodate the HDD #37 work area, which is necessary to install the Facility and cross a road. 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.

2.22.3 Environmental Impact

There are no agricultural or archeological resources, threatened or endangered species, or wetlands/waterbodies in the Excursion S4-P3#21 area.

2.23 EXCURSION S5-P3 #1

2.23.1 Description of the Excursion Area

In order to accommodate the design constraints for this open cut road crossing, a small deviation zone occurs from 30888+00 to 30991+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S5-P3#1 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 10,300 linear feet.

2.23.2 Justification

The slight excursion is required in order to meet the design constraints for the open cut roading crossing. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

2.23.3 Environmental Impact

There are no agricultural or archeological resources, threatened or endangered species, or wetlands/waterbodies in the area Excursion S5-P3#1.

2.24 EXCURSION S5-P3 #2

2.24.1 Description of the Excursion Area

In order to accommodate the design constraints for the HDD #42 work area, a small deviation zone occurs from 31063+00 to 31066+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S5-P3#2 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 300 linear feet.

2.24.2 Justification

The slight excursion is required in order to meet the design constraints for the HDD #42 work area. 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.

2.24.3 Environmental Impact

2.24.3.1 Agricultural Resources

The Excursion area S5-P3#2 is not located within agricultural lands. Therefore, additional adverse impacts to agricultural resources will not occur from this change.

2.24.3.2 Cultural Resources

The Excursions areas S5-P3#2 have no known Cultural sites.

2.24.3.3 Threatened and Endangered Species

Excursion area S5-P3#2 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.24.3.4 Wetlands and Streams

S5-P3#2 will result in a temporary impact to wetland C2-R-G (as described in Table 9.2 of the EM&CP).

2.25 EXCURSION S5-P3 #3

2.25.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the conduit for HDD#43 from approximately 31088+00 to 31090+25. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S5-P3#3 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 225 linear feet.

2.25.2 Justification

The slight excursion is required in order to accommodate the HDD #43 work area. 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.

2.25.3 Environmental Impact

There are no agricultural, archeological, threatened or endangered species, or wetlands/waterbodies in the area Excursion S5-P3#3.

2.26 EXCURSION S5-P3 #4

2.26.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the conduit for HDD#44 from approximately 31099+50 to 31108+31. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S5-P3#4 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 881 linear feet.

2.26.2 Justification

The slight excursion is required in order to accommodate the HDD #44 work area. 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.

2.26.3 Environmental Impact

There are no agricultural, archeological, threatened or endangered species, or wetlands/waterbodies in the area Excursion S5-P3#4.

2.27 EXCURSION S5-P3 #5

2.27.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the conduit for HDD#45 from approximately 31157+00 to 31165+00. Pursuant to Condition 138, a detailed map showing the

location and boundary of the Exceedance Area S5-P3#5 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 800 linear feet.

2.27.2 Justification

The slight excursion is required in order to accommodate the HDD #45 work area. 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.

2.27.3 Environmental Impact

There are no agricultural or archeological resources, threatened or endangered species, or wetlands/waterbodies in the Excursion S5-P3#5 area.

2.28 EXCURSION S5-P3 #6

2.28.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the conduit for HDD#46 from approximately 31176+00 to 31212+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S5-P3#6 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 3,600 linear feet.

2.28.2 Justification

The slight excursion is required in order to accommodate HDD #46 and avoid state wetland FA-CQ and FA-CM. 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.

2.28.3 Environmental Impact

There are no agricultural or archeological resources, threatened or endangered species, or wetlands/waterbodies in the Excursion S5-P3#6 area.

2.29 EXCURSION S5-P3 #7

2.29.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the conduit for HDD#47 from approximately 31219+50 to 31226+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S5-P3#6 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 700 linear feet.

2.29.2 Justification

The slight excursion is required in order to accommodate HDD #47. 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.

2.29.3 Environmental Impact

2.29.3.1 Agricultural Resources

The Excursion area S5-P3#7 is not located within agricultural lands. Therefore, additional adverse impacts to agricultural resources will not occur from this change.

2.29.3.2 Cultural Resources

The Excursions areas S5-P3#7 have no known Cultural sites.

2.29.3.3 Threatened and Endangered Species

Excursion area S5-P3#7 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.29.3.4 Wetlands and Streams

S5-P3#7 will result in a temporary impact to stream P3-S.

2.30 EXCURSION S5-P3 #8

2.30.1 Description of the Excursion Area

For Excursion Area S5-P3#8, the railroad ROW becomes narrow, the tracks are in the center of the ROW with fairly steep slope drop off on either side of the tracks with the toe of the slope at the edge of the ROW boundary from 31238+00 to 31292+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S4-P3#8 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 5,450 linear feet.

2.30.2 Justification

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 within the ROW boundaries. Stream FA-D-DC will be avoided. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

2.30.3 Environmental Impact

2.30.3.1 Agricultural Resources

The Excursion area S5-P3#8 is not located within agricultural lands. Therefore, additional adverse impacts to agricultural resources will not occur from this change.

2.30.3.2 Cultural Resources

The Excursions areas S5-P3#8 have no known Cultural sites.

2.30.3.3 Threatened and Endangered Species

Excursion area S5-P3#8 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.30.3.4 Wetlands and Streams

S5-P3#8 will result in a temporary impact to wetland FA-DB and FA-D-CV and Streams FA-S-CZ, FA-S-CW, GP3-R, and GP3-Q as described in Table 9.2 of the EM&CP.

2.31 EXCURSION S5-P3 #9

2.31.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate Northline Road crossing from approximately 31309+50 to 31315+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S5-P3#9 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 550 linear feet.

2.31.2 Justification

The slight excursion is required in order to design criteria for the Northline Road crossing. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

2.31.3 Environmental Impact

2.31.3.1 Agricultural Resources

The Excursion area S5-P3#9 is not located within agricultural lands. Therefore, additional adverse impacts to agricultural resources will not occur from this change.

2.31.3.2 Cultural Resources

The Excursions areas S5-P3#9 have no known Cultural sites.

2.31.3.3 Threatened and Endangered Species

Excursion area S5-P3#9 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

2.31.3.4 Wetlands and Streams

S5-P3#9 will result in a temporary impact to wetland GP3-W as described in Table 9.2 in the EM&CP.

2.32 EXCURSION S5-P3 #10

2.32.1 Description of the Excursion Area

The alignment exits the CP Rail ROW to accommodate the conduit for HDD#49 from approximately 31355+00 to 31362+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S5-P3#10 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 700 linear feet.

2.32.2 Justification

The slight excursion is required in order to accommodate HDD #49. 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.

2.32.3 Environmental Impact

There are no agricultural or archeological resources, threatened or endangered species, or wetlands/waterbodies in the Excursion S5-P3#10 area.

3.0 CONCLUSION

The adjusted route at the various excursions in Segment 4/5 – Package 3 presented above do not significantly increase adverse environmental impacts. Impacts associated with this work have been minimized and mitigated and can be addressed by the Certificate Conditions already approved by the Commission for the Facility. The deviations requested are necessary for appropriate engineering and environmental reasons and do not conflict with the other Certificate Conditions. The Certificate Holders have kept the proposed excursions to the minimum area necessary to ensure construction of the Facility is feasible, while attempting to reduce impacts and stay within the approved ADZ to the extent practicable.

On that basis, the Certificate Holders respectfully request that DPS Staff approve these deviations from the ADZ with the Segment 4/5 – Package 3 EM&CP without modification to the Certificate.

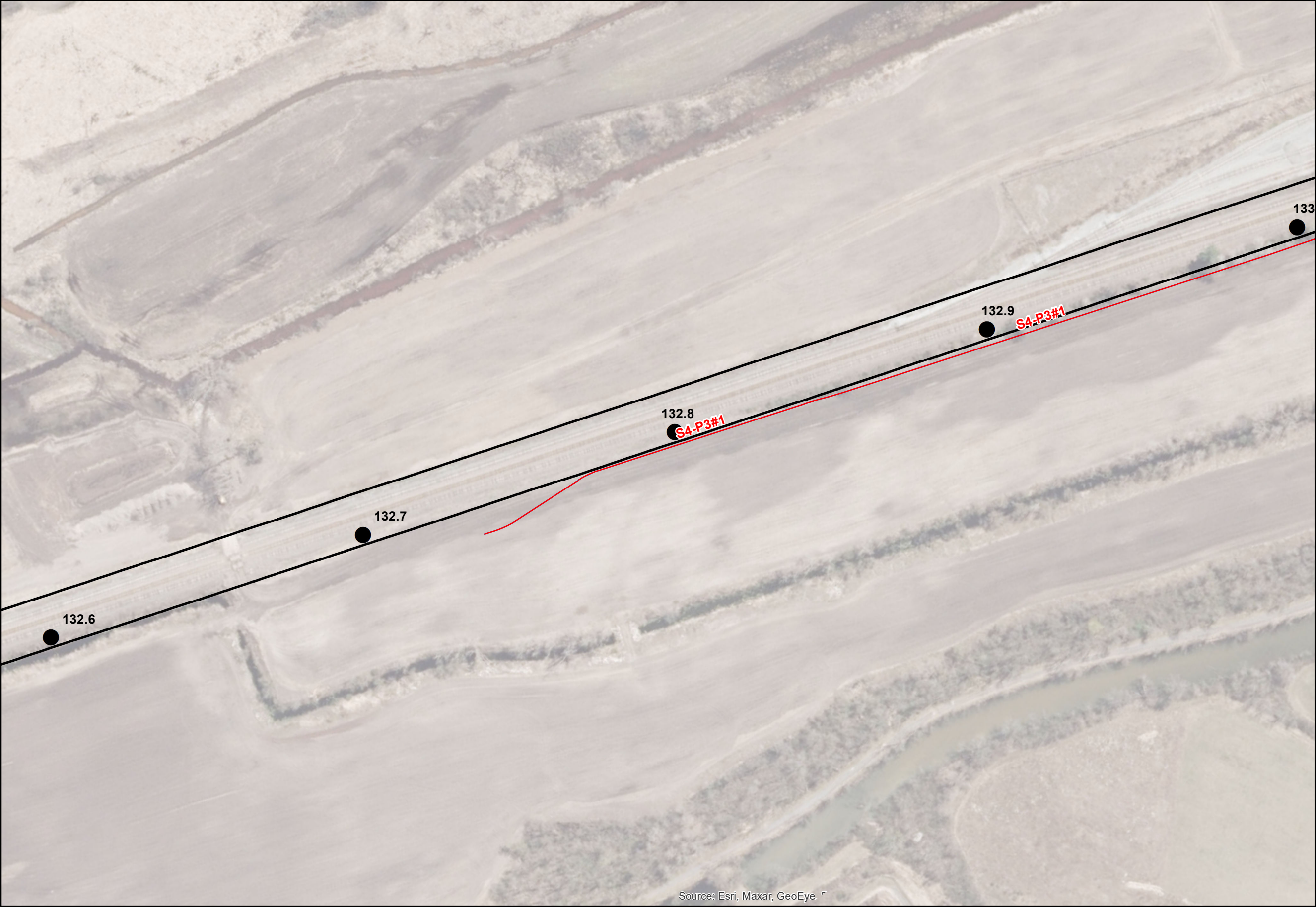
In the alternative, should DPS Staff determine that a Certificate amendment is required to effectuate any of these changes to the ADZ, Certificate Holders respectfully request that the PSC



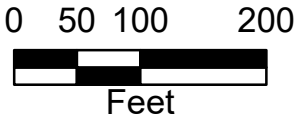
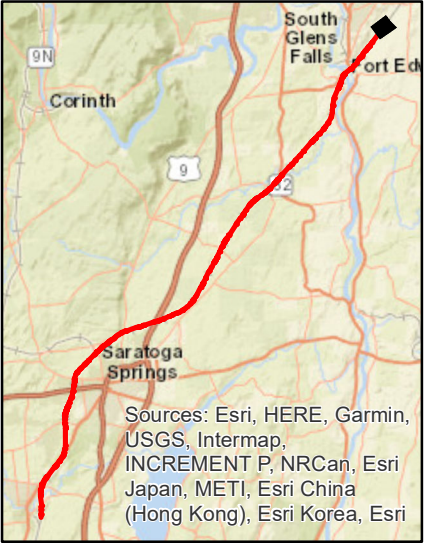
consider this submission in lieu of a separate petition for an amendment, given that this EM&CP submission materially adheres to the same general procedural and substantive requirements which would otherwise be required for such an amendment (such as the dissemination of legal notices to affected landowners, notice to the public and host communities, and a robust justification for the changes requested). The ADZ changes will not result in any material increase in environmental impacts from the Facility—and, in fact, are intended to decrease environmental impacts at certain locations—and do not substantially change the location of the Facility for the reasons described in this memorandum. While the Certificate Holders do not believe that the adjustments outline in this memorandum constitute an amendment to the Certificate, should an amendment be necessary, Certificate Holders submit that a hearing is not required or warranted in accordance with PSL Section 123(2).

CHPE EM&CP
Washington and
Schenectady County,
New York

Deviation Zone Analysis



- Deviation Zone Excursions
- HDD
- Trench
- HDD
- Deviation Zone
- Milepost



Source: Esri, Maxar, GeoEye

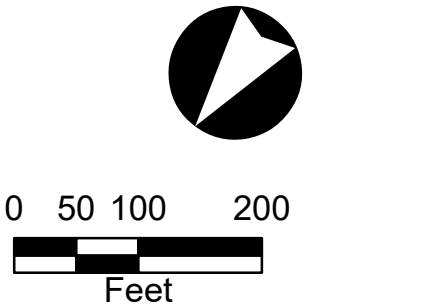
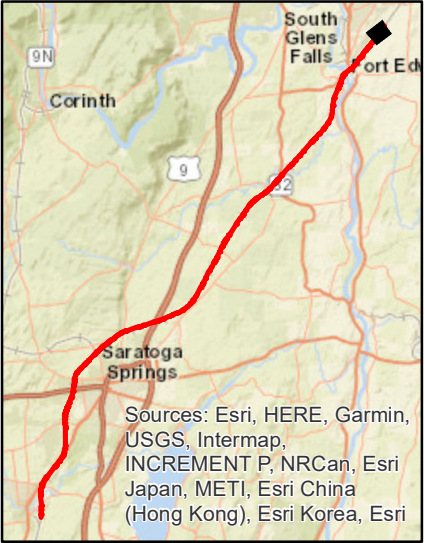
CHPE EM&CP

Washington and
Schenectady County,
New York

Deviation Zone Analysis



- Deviation Zone Excursions
- HDD
- Trench
- HDD
- Deviation Zone
- Milepost



Source: Esri, Maxar, GeoEye

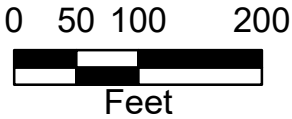
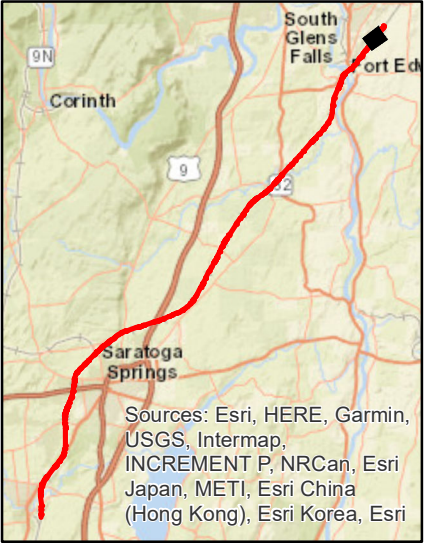
CHPE EM&CP

Washington and
Schenectady County,
New York

Deviation Zone Analysis



- Deviation Zone Excursions
- HDD
- Trench
- HDD
- Deviation Zone
- Milepost

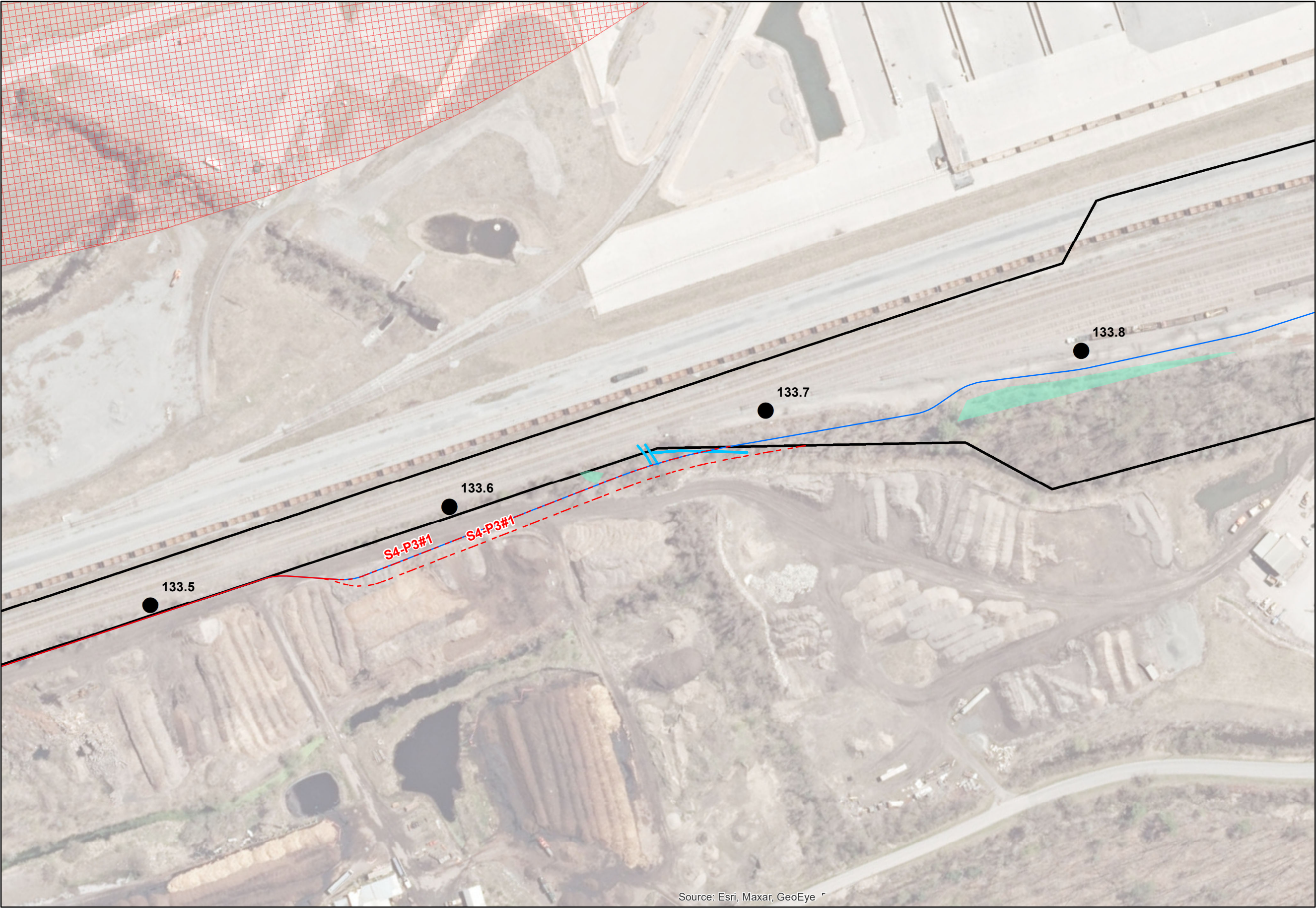
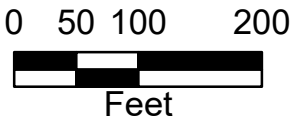
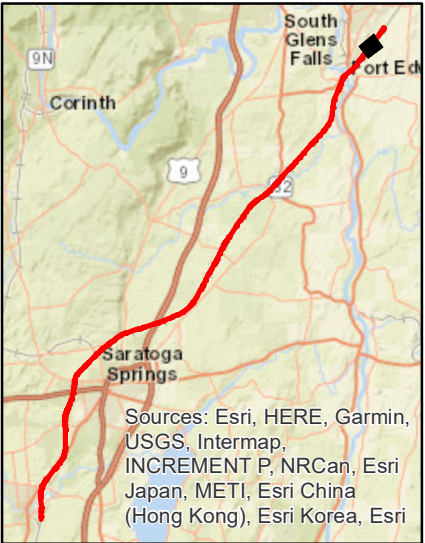


Source: Esri, Maxar, GeoEye

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Schenectady County,
New York*

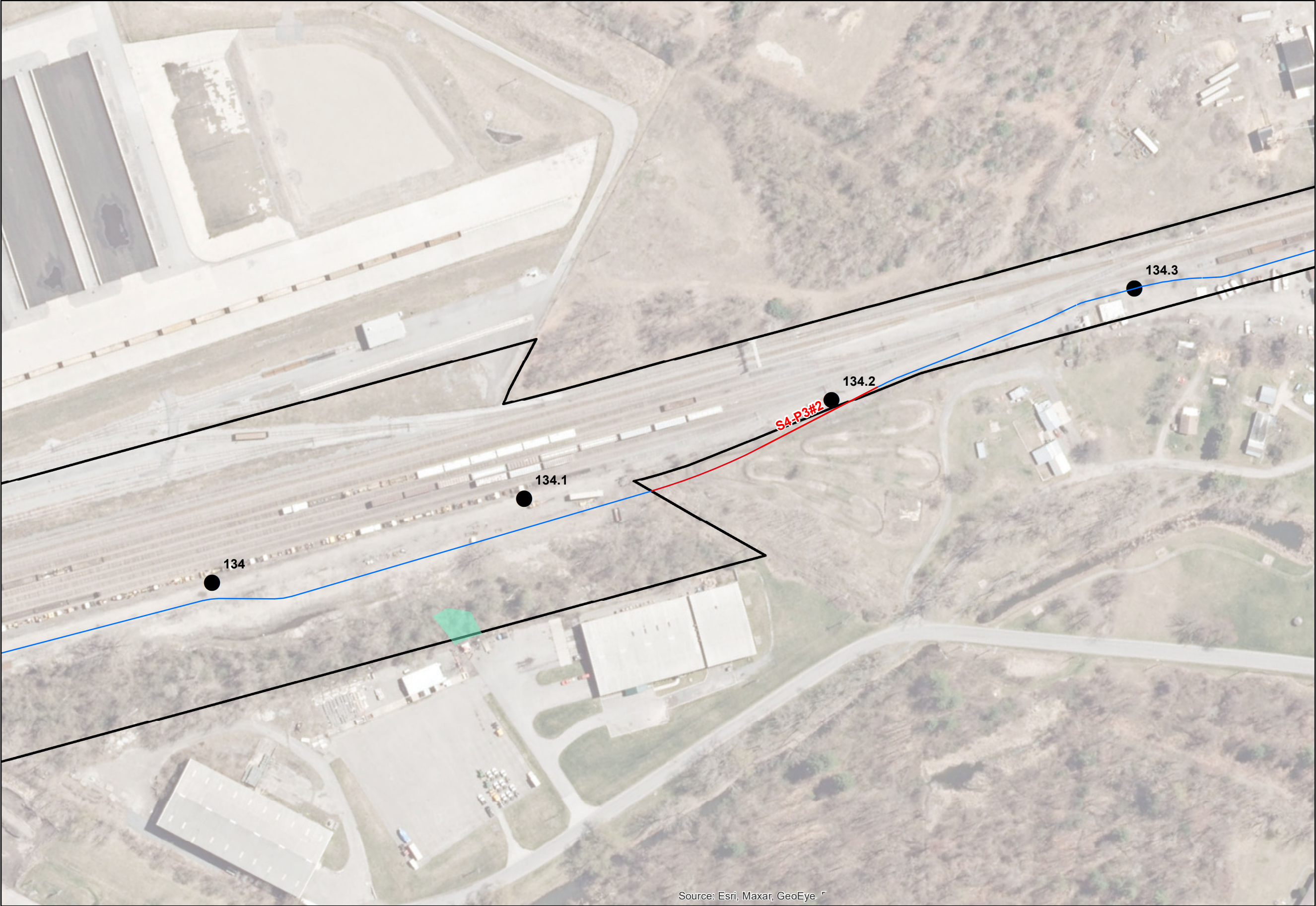
Deviation Zone Analysis

- Deviation Zone Excursions
- - - HDD
- Trench
- - - HDD
- Delineated Streams
- Delineated Wetlands
- Deviation Zone
- ▨ ESA
- Milepost

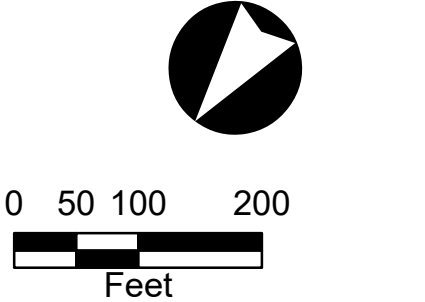
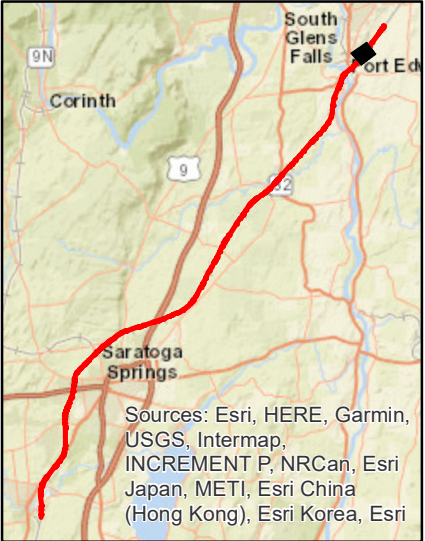


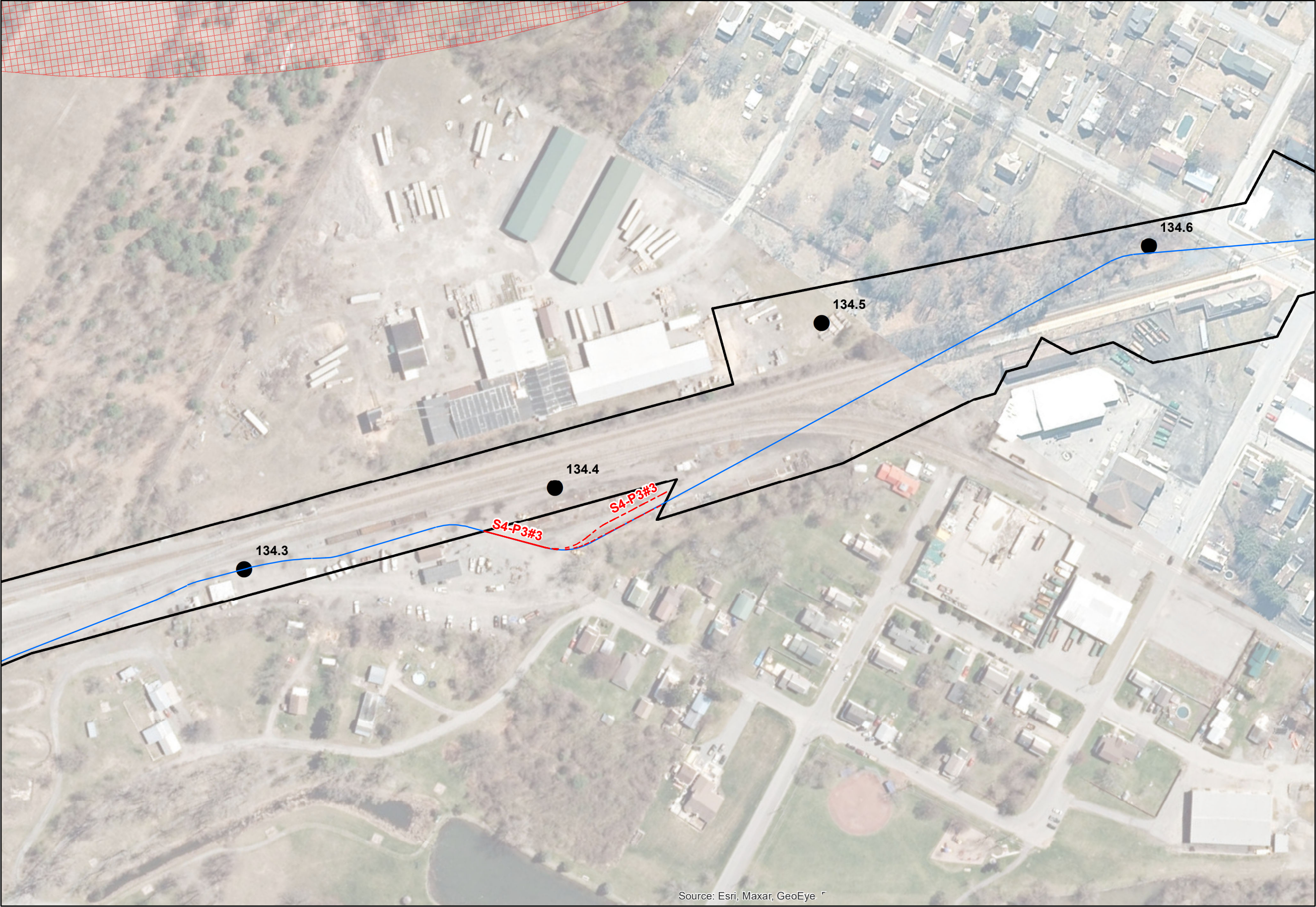
CHPE EM&CP
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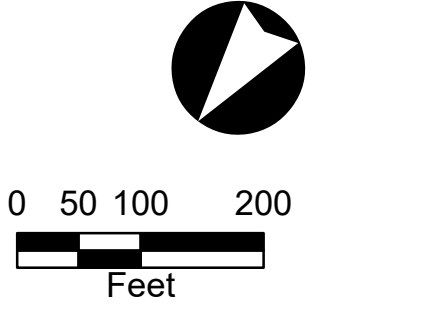
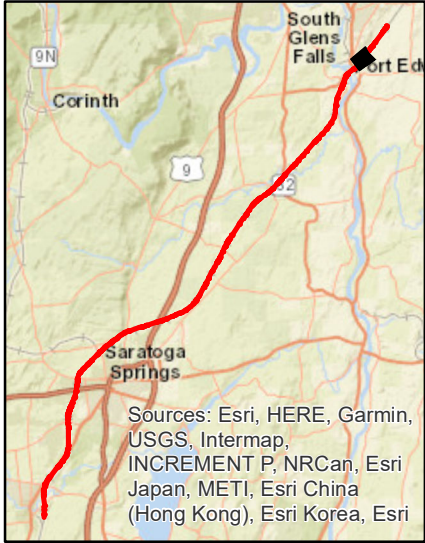


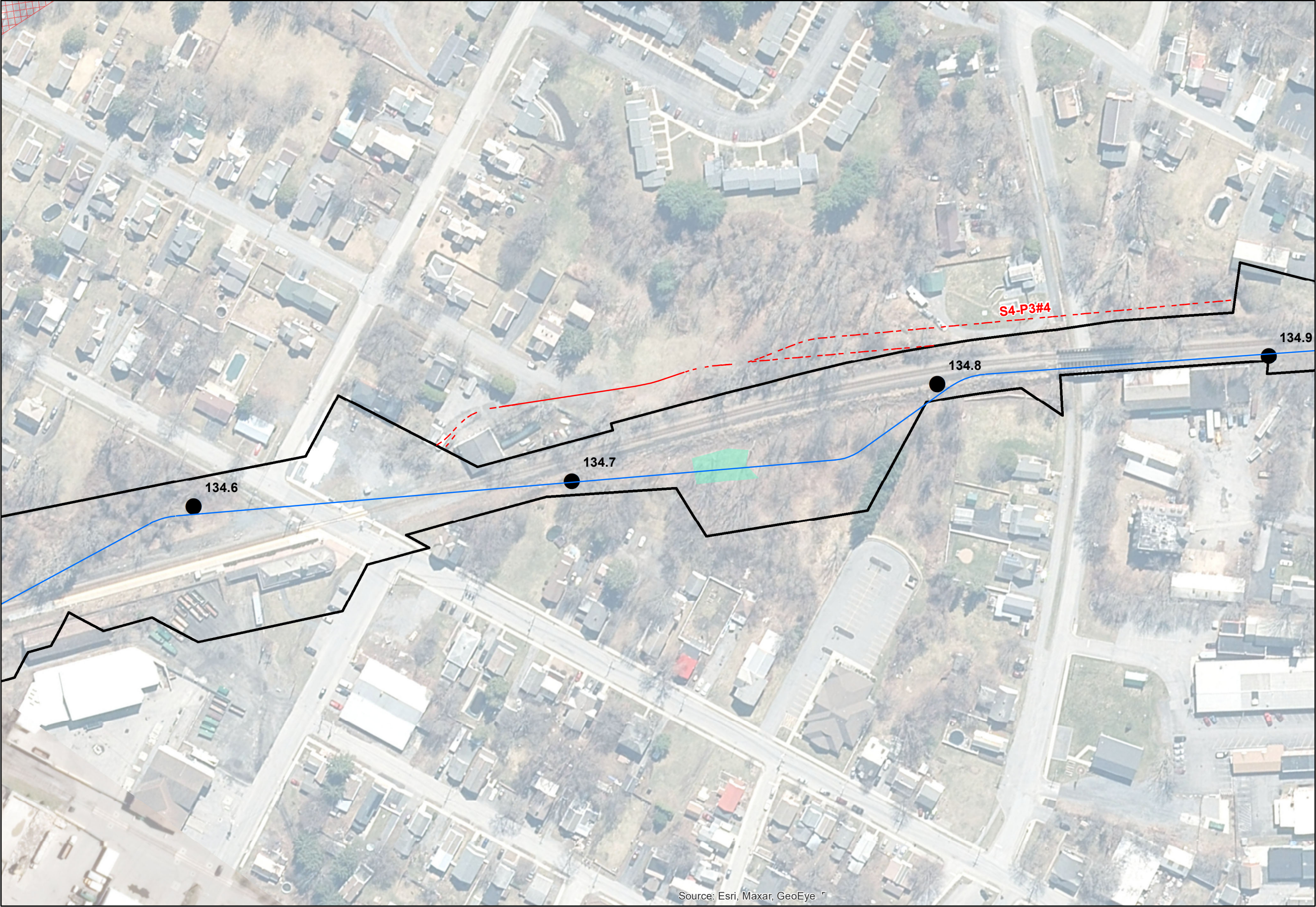


Source: Esri, Maxar, GeoEye

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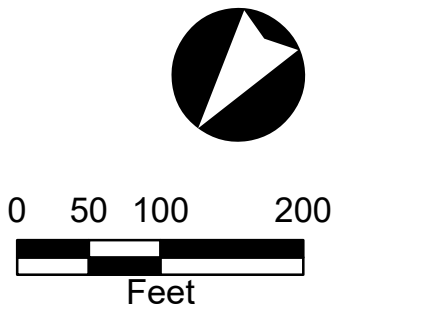
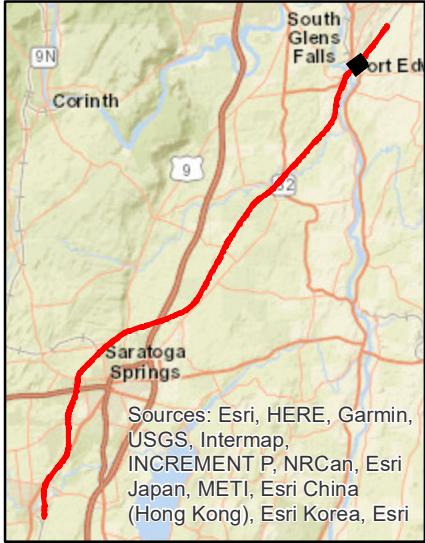
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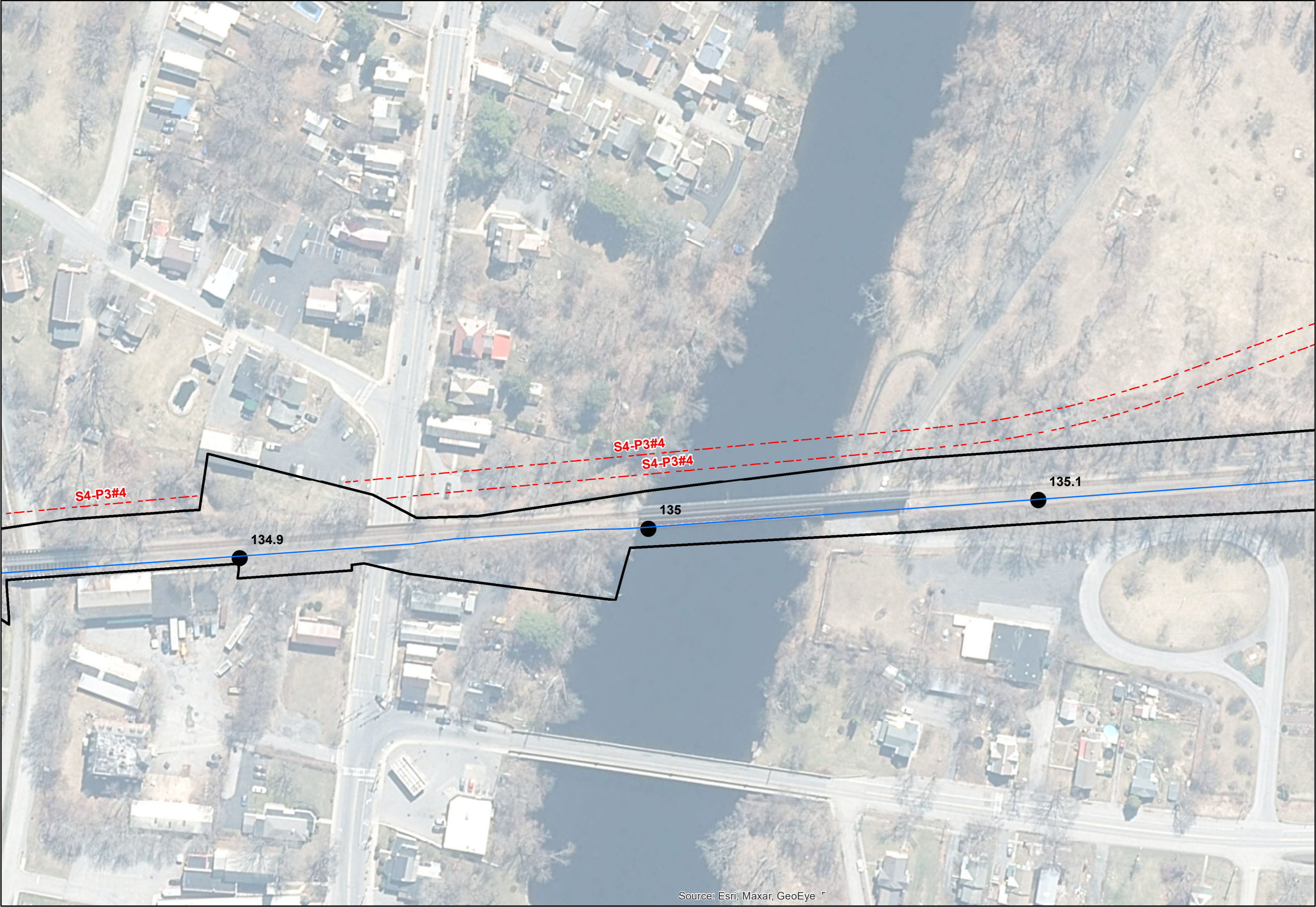




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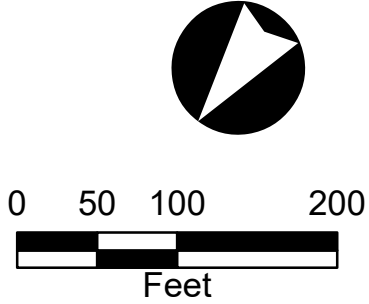
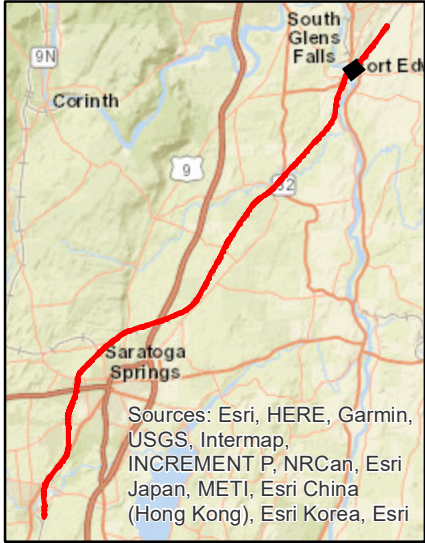
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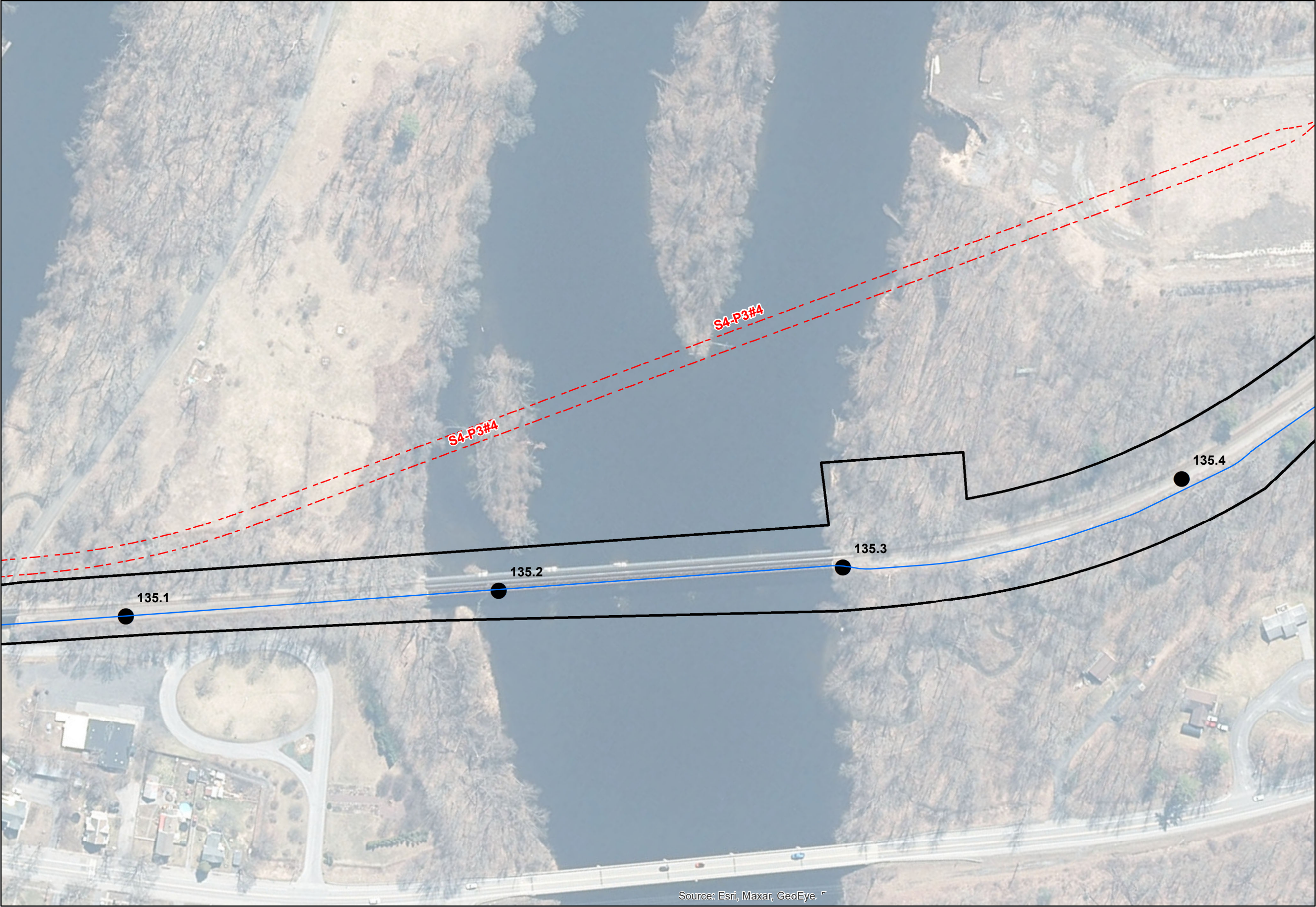
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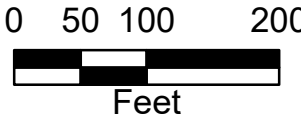
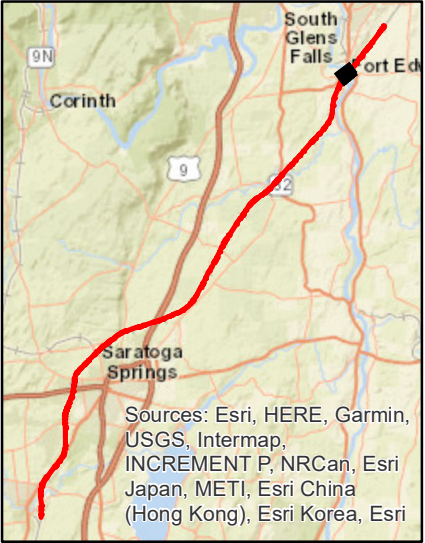


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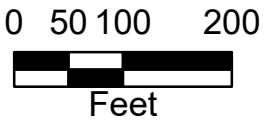
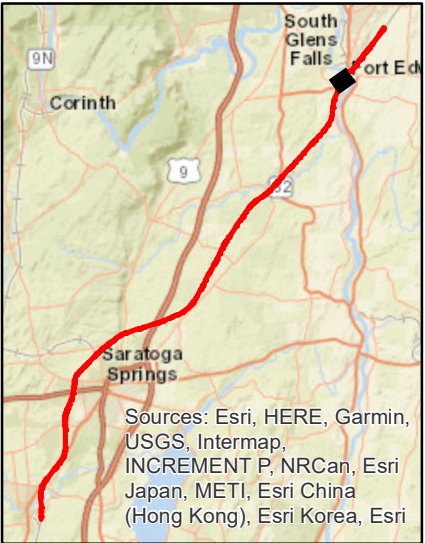
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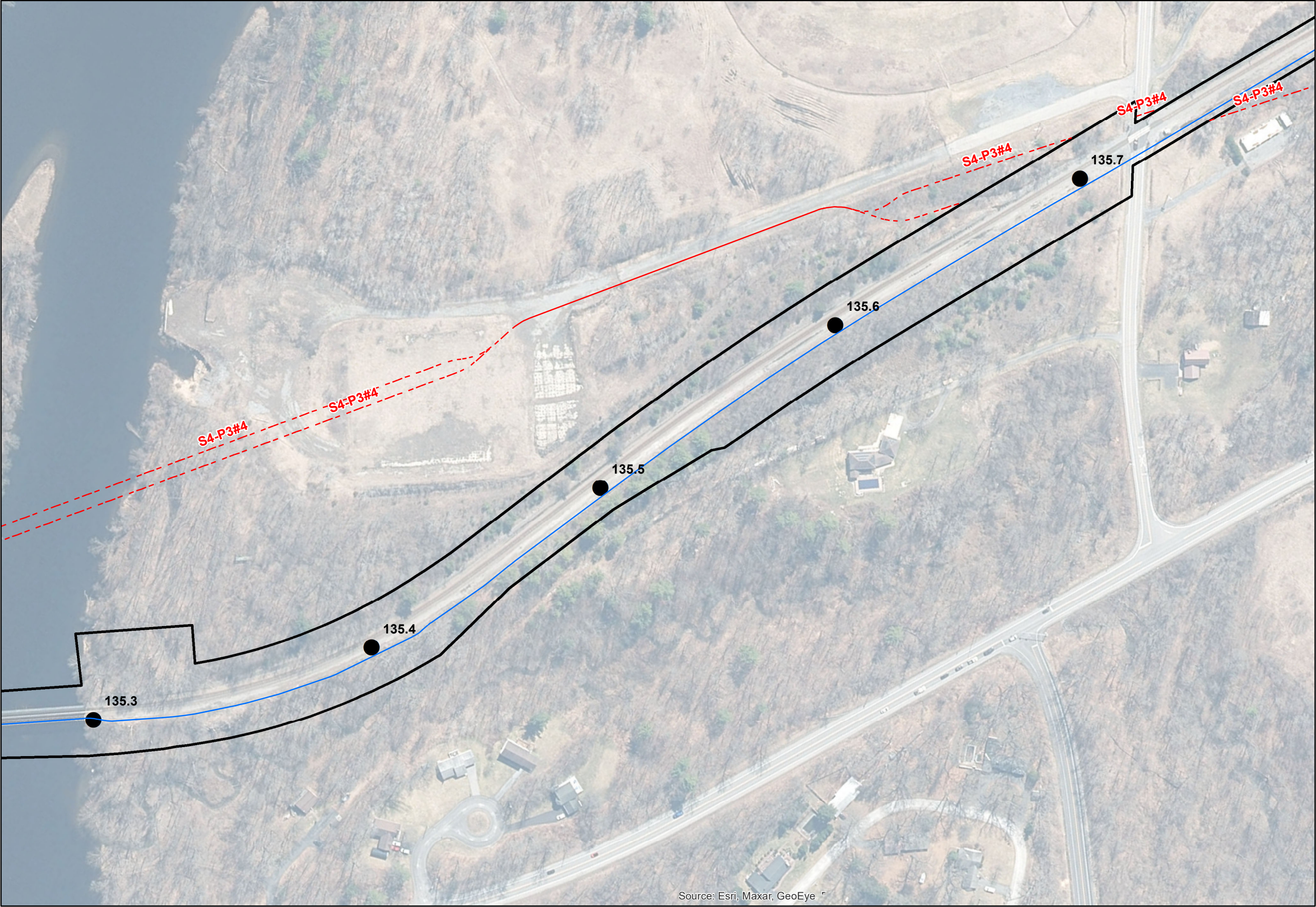
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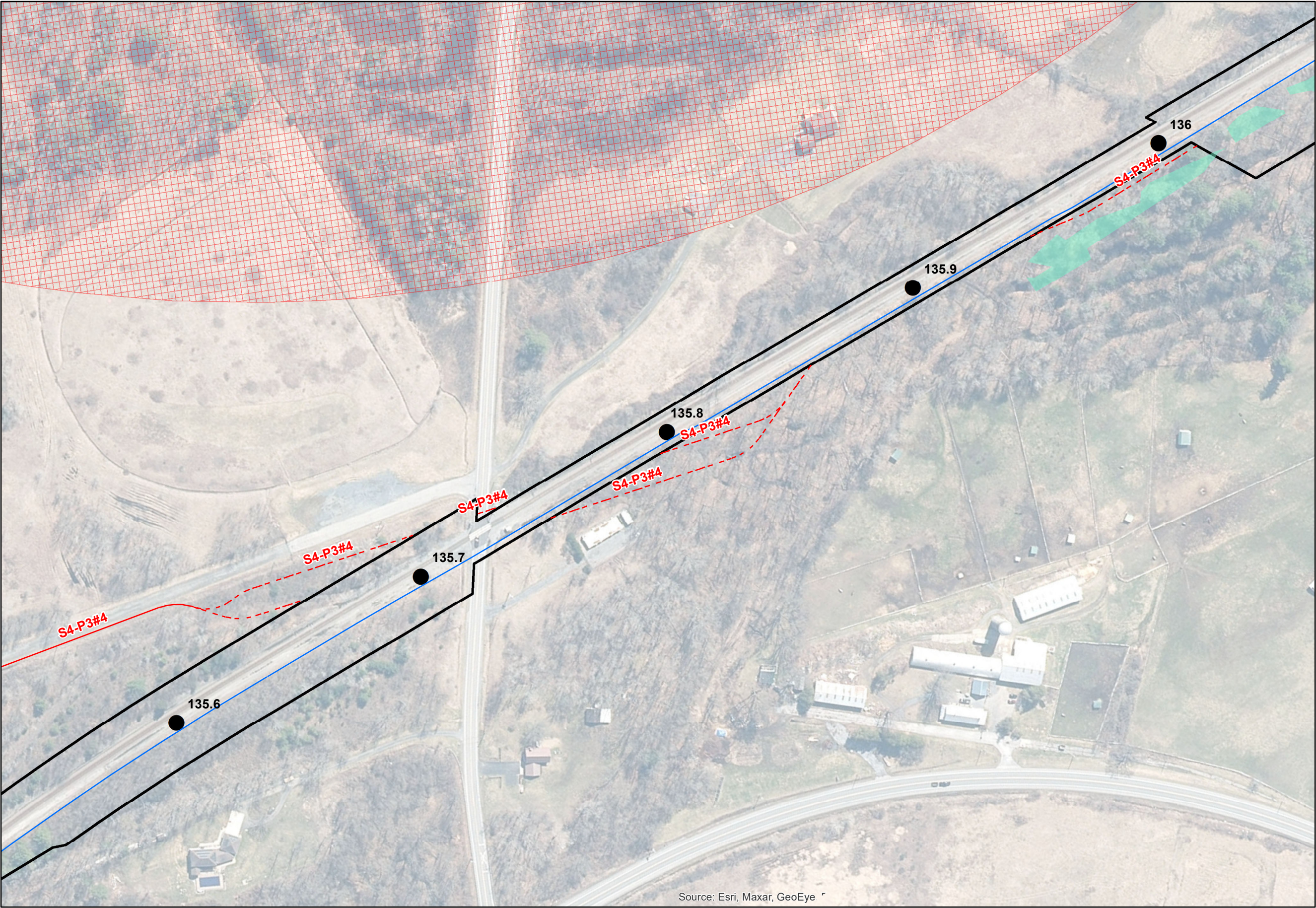
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