

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



Explanation for Proposed Deviations in Package 4B - Segment 7

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 7 – Package 4B, 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.

Table 1 - Deviation Zone Excursions in the Package 4B – Segment 7

| Revision Area | Parcel ID | Sheet Number | Location (Approximate – see Drawings for Details) | Justification for Revision | Change in Environmental Impact |
|---------------|------------------|----------------|--|--|--|
| DZ-S7-P4B#1 | 23.13-1-19 | C-101 | 45000+00 to 45008+50 | Additional space required for HDD#62 and work areas | None |
| | 23.13-1-18.12 | | | | |
| | 23-2-31.11 | | | | |
| DZ-S7-P4B#2 | 23.13-1-33.1 | C-102 | 45019+20 to 45029+00 | Additional space required for HDD#62A and work areas | None. HDD#62A avoids crossing unmapped stream C-PA-6 |
| | 23.13-1-34.1 | | | | |
| | 23.17-1-49 | | | | |
| | 23.17-1-50 | | | | |
| | 23.17-1-1.4 | | | | |
| | 23.17-1-38 | | | | |
| DZ-S7-P4B#3 | 22.4-1-32 | C-104 | 45049+64 to 45050+20 45051+00 to 45058+50 | Additional space required to cross stream C-PA-S5, for HDD#63 and work area | Intermittent Stream Crossing C-PA-S5 (no change since stream is crossed within DZ) HDD#63 avoid crossing unmapped stream C-PA-5; |
| | 22.4-1-33 | | | | |
| | 22.4-1-34 | | | | |
| | 22.4-1-35 | | | | |
| | 22.4-1-70 | | | | |
| DZ-S7-P4B#4 | 22.-1-29 | C-105 | 45064+00 to 45070+50 | Additional space required for HDD#63, HDD work area, and Splice Location 141 | Wetland CP-A-D |
| DZ-S7-P4B#5 | Maple Avenue ROW | C-105 to C-106 | 45070+50 to 45085+75 | Limiting permanent impacts to Wetland CP-A-D Steep Slopes and offset from a stormwater culvert | Avoid Wetland CP-A-D None |
| DZ-S7-P4B#6 | 30.-1-5.1 | C-107 to C-108 | 45096+75 to 45114+60 | Additional space required for HDD#64 and work areas. | Avoid trout designated stream C-PA-S2 (876-88), |
| | 30.-1-3 | | | | |

| Revision Area | Parcel ID | Sheet Number | Location (Approximate – see Drawings for Details) | Justification for Revision | Change in Environmental Impact |
|---------------|---------------|----------------|--|---|---|
| | | | | | PEM wetland C-PA-C, and PFO wetland C-PA-B. |
| DZ-S7-P4B#7 | 30.15-1-13.3 | C-109 | 45127+00 to 45128+00 | Offset from culvert | Open cut crossing of Intermittent unmapped stream C-PA-S1 |
| | 30.15-1-14 | | 45129+25 to 45130+30 | Offset from utilities | None |
| DZ-S7-P4B#8 | 30.14-2-12 | C-109 to C-113 | 45131+25 to 45183+50 | Additional space required for Clearance for Utilities, Splice Location 145 HDD#64A, HDD#65A, and HDD work areas | Avoid wetland C-PA-F, and Streams C-PA-S7, C-PA-S8, C-PA-S9, C-PA-S10. Impact to PEM Wetland C-PA-E and Agricultural Land impacts in HDD work areas |
| | 30.-1-24.411 | | | | |
| | 30.-1-24.51 | | | | |
| | 39.23-1-3.111 | | | | |
| | 30.78-1-2.1 | | | | |
| | 30.77-1-10 | | | | |
| DZ-S7-P4B#9 | 29.84-2-2 | C-114 | 45195+50 to 45204+00 | Additional space required for HDD#65A required due to limited space between the railroad and existing residential uses. | None |
| DZ-S7-P4B#10 | 29.66-1-17.1 | C-116 | 45228+00 to 45239+00 | Additional space required for HDD#66 and work area | None |
| | 29.66-1-17.2 | | | | |
| | 29.66-1-22.1 | | | | |
| | 29.66-1-23.2 | | | | |
| | 29.66-1-24 | | | | |
| | 29.3-24.1 | | | | |

| Revision Area | Parcel ID | Sheet Number | Location (Approximate – see Drawings for Details) | Justification for Revision | Change in Environmental Impact |
|------------------|--------------------------|-----------------|--|--|--------------------------------------|
| DZ-S7- P4B#11 | 29.3-24.1 | C-119 | 45278+00 to 45285+00 | Additional space required for HDD#67 and work area | None |
| DZ-S7- P4B#12 | 29.-3-1.11 | C-121 to C-125 | 45313+00 to 45357+500 | Additional space required for HDD#68 and work area, Splice Location 150, HDD #69 and work areas, Crossing I- 890 | None |
| | 29.-2-22 | | | | |
| | I-890 | | | | |
| DZ-S7- P4B#13 | 28.-3-11 | C-125 | 45358+50 to 45369+00 | Additional space required for HDD#69 work area, Splice Location 151 | None |
| DZ-S7- P4B#14 | 28.-3-11 38-1-1 | C-125 to C-126 | 45373+50 to 45386+00 | HDD#69A area | Recreation Area |
| DZ-S7- P4B#15 | 38.-13-1 | C-129 | 45431+50 to 43432+50 | Additional space required for HDD#70A | None |
| DZ-S7- P4B#16 | 38.13-1-6.1 38.17-3-1 | C-130 and C-131 | 45444+50 to 45453+50 | Additional space required for Splice Location 154, HDD#70B work area, and HDD#70B | None |
| DZ-S7- P4B#17 | 48.5-1-1 | C-132 and C-133 | 45472+00 to 45486+00 | Additional space required for Splice Location 154A | None |
| DZ-S7- P4B#18 | /Princeton Road | C-133 | 45493+75 to 45494+83 | HDD#71, Narrow ROW due to adjacent Princeton Road | None |

2.0 DEVIATION ZONE EXCURSIONS SUMMARY

The ADZ in Package 4B - Segment 7 is located predominately adjacent to existing CSX 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 18 unique locations along the Package 4B – Segment 7 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 consist mainly of construction via trenchless technologies (e.g., horizontal directional drill [HDD]) such that additional earth disturbance or adverse impacts can be avoided. Overall, these changes do not substantially change the overall character of the Facility or the proposed route, which still generally runs parallel to the CSX 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 PACKAGE 4B – SEGMENT 7

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 (CSX 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 (CSX Rail) requires 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 Package 4B – Segment 7 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 at the required off-site distance from the railroad tracks.
3. Utilities – The alignment was shifted outside the ADZ in order to avoid impacts to utilities located at close proximity to the railroad.

3.0 EXCURSIONS WITH NO CHANGES IN IMPACTS TO ENVIRONMENTAL IMPACT (S7-P4B #1, S7-P4B #2, S7-P4B #8, S7-P4B#9, S7-P4B#10, S7-P4B#11, S7-P4B#12, S7-P4B#13, S7-P4B#15, S7-P4B#17, S7-P4B#18)

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. Tree clearing within the HDD work areas will be performed in accordance with project wide mitigation measures described in Sections 8 and Section 9.3 of the EM&CP to avoid impacting potentially threatened species.

3.1 EXCURSION S7-P4B #1

3.1.1 Description of the Excursion Area

The alignment exits the CSX ROW to accommodate the conduit for HDD#62 (to cross Maple Ave) from approximately 45000+00 to 45008+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#1 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 850 linear feet of which approximately 655 feet is HDD (i.e., all disturbances below grade). The proposed excursion occurs approximately 35 linear feet west of the ADZ at the farthest point.

3.1.2 Justification

The slight excursion is needed to accommodate the required offset from tracks, road crossing, and required space for HDD#62 and associated HDD#62 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.

3.2 EXCURSION S7-P4B #2

3.2.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to accommodate the space required offset from tracks from approximately 45019+20 to 45029+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#2 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 980 linear feet of which approximately 722 is HDD (i.e., all disturbances below grade). The proposed excursion occurs approximately 50 linear feet west of the ADZ at the farthest point.

3.2.2 Justification

The excursion is needed to accommodate the required offset from the railroad tracks as well as accommodate the space required for HDD#62A and associated HDD#62A 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.

3.3 EXCURSION S7-P4B #9

3.3.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to allow for additional space required for HDD#65A work areas due to the limited space between the railroad and existing residential uses from approximately 45195+50 to 45204+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#8 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 850 linear feet of which approximately 360 feet is HDD (i.e., all disturbance below grade). The proposed excursion occurs approximately 45 linear feet southwest of the ADZ at the farthest point.

3.3.2 Justification

The excursion is required to allow for additional space required for HDD#65A work areas due to the limited space between the railroad and existing residential uses. Additionally, the curvature of the existing railroad established the tangents requiring the excursion from the deviation zone. 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 S7-P4B #10

3.4.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to allow for additional space required for HDD#66 and associated work area from approximately 45228+00 to 45239+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#10 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 1,100 linear feet of which approximately 950 feet is HDD (i.e., all disturbance below grade). The proposed excursion occurs approximately 15 linear feet southwest of the ADZ at the farthest point.

3.4.2 Justification

The excursion is required to allow for additional space required for HDD#66 and associated 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.

3.5 EXCURSION S7-P4B #11

3.5.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to allow for additional space required for HDD#67 and associated work area from approximately 45278+00 to 45285+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#11 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 700 linear feet of which approximately 400 feet is HDD (i.e., all disturbance below grade). The proposed excursion occurs approximately 10 linear feet southwest of the ADZ at the farthest point.

3.5.2 Justification

The excursion is required to allow for additional space required for HDD#67 and associated 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.

3.6 EXCURSION S7-P4B #12

3.6.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to allow for additional space required for HDD#68, HDD#69, HDD#70A-1 and associated work areas as well as Splice Locations 150 and 151. The total excursion area extends from approximately 45313+00 to 45357+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#12 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 4,400 linear feet of which approximately 4,300 feet is HDD (i.e., all disturbance below grade). The proposed excursion occurs approximately 190 linear feet west of the ADZ at the farthest point.

3.6.2 Justification

The excursion is required to allow for additional space required for HDD#68, HDD#69, and crossing I-890. 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.

3.7 EXCURSION S7-P4B #13

3.7.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to allow for additional space required for HDD#69 work area, Splice Location 151 from 45358+50 to 45369+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#13 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 1,100 linear



feet of which approximately 85 feet is HDD (i.e., all disturbance below grade). The proposed excursion occurs approximately 185 linear feet southwest of the ADZ at the farthest point.

3.7.2 Justification

The excursion is required to allow for additional space required for HDD#69 work area, Splice Location 151 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.

3.8 EXCURSION S7-P4B #15

3.8.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to allow for additional space required for HDD#70A from 45431+50 to 43432+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#15 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 100 linear feet of which 44 feet is HDD (i.e., all disturbance below grade). The proposed excursion occurs less than 5 linear feet east of the ADZ at the farthest point.

3.8.2 Justification

The excursion is required to allow for additional space required for HDD#70A. 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.

3.9 EXCURSION S7-P4B #17

3.9.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to allow for additional space required for Splice Location 154A from 45472+00 to 45486+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#17 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 1,400 linear feet. The proposed excursion occurs approximately 15 linear feet east of the ADZ at the farthest point.

3.9.2 Justification

The excursion is required to allow for additional space required for Splice Location 154A. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

3.10 EXCURSION S7-P4B #18

3.10.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to allow for additional space required for HDD#71 which is in the beginning of Segment 8 – Package 5A from 45493+75 to 45494+83. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#18 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 108 linear feet. The proposed excursion occurs less than 10 linear feet east of the ADZ at the farthest point.

3.10.2 Justification

The excursion is required to allow for additional space required for HDD #71 which is in the beginning of Segment 8 – Package 5A. The CSX Rail ROW narrows at the start of the excursion area due to the adjacent Princetown Road. The ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

4.0 EXCURSIONS WITH ENVIRONMENTAL IMPACTS (S7-P4B #3, S7-P4B #4, S7-P4B #5, S7-P4B #6, S7-P4B#7, S7-P4B#8, S7-P4B#14, S7-P4B#16)

4.1 EXCURSION S7-P4B #3

4.1.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to accommodate the crossing of stream C-PA-S5, the conduit, and work areas for HDD#63 from approximately 45049+64 to 45050+20 and 45051+00 to 45058+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P5#3 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 806 linear feet of which 575 feet is HDD (i.e., all

disturbances below grade). The proposed excursion occurs approximately 40 linear feet west of the ADZ at the farthest point.

4.1.2 Justification

The excursion is required in to accommodate the required clearance between the alignment and CSX's existing storm culverts as well as the work area for HDD#63. 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 Impact

4.1.3.1 Agricultural Resources

Excursion area S7-P4B#3 will not impact any agricultural resources.

4.1.3.2 Archeological Resources

Excursion area S7-P4B#3 will not impact any archeological resources.

4.1.3.3 Threatened or Endangered Species

Excursion area S7-P4B#3 will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat. Tree clearing within the HDD work areas will be performed in accordance with project wide mitigation measures described in Sections 8 and Section 9.3 of the EM&CP to avoid impacting potentially threatened species.

4.1.3.4 Wetlands and Streams

Excursion area S7-P4B#3 will avoid one stream crossing (C-PA-S4) by HDD and result in the crossing of intermittent stream C-PA-S5. Due to the required offset between the alignment and existing CSX storm culverts the alignment will cross under the stream. All avoidance, protection, and mitigation measures described in Section 9.1 of the EM&CP will be employed and impacts to stream C-PA-S5 will be restored in accordance with Section 9.1 and 14.4 of the EM&CP.

4.2 EXCURSION S7-P4B #4

4.2.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to accommodate the space required for HDD#63, HDD work area, and Splice Location 141 from approximately 45064+00 to 45070+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#4 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 600 linear feet with approximately 50 HDD (i.e., all disturbances below grade). The proposed excursion occurs approximately 25 linear feet east of the ADZ at the farthest point.

4.2.2 Justification

The excursion is required to meet the design constraints for HDD#63 and Splice Location 141. 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 Impact

4.2.3.1 Agricultural Resources

Excursion area S7-P4B#4 does not impact any agricultural resources.

4.2.3.2 Archaeological Resources

Excursion area S7-P4B#4 has no known archaeological sites.

4.2.3.3 Threatened and Endangered Species

Excursion areas S7-P4B#4 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat. Tree clearing within the HDD work areas will be performed in accordance with project wide mitigation measures described in Sections 8 and Section 9.3 of the EM&CP to avoid impacting potentially threatened species.

4.2.3.4 Wetlands and Streams

Excursion areas S7-P4B#4 will result in impacts to the wetland CP-A-5 as described and quantified in Table 9.2 of the EM&CP. The wetland is a PEM community developed in a road side ditch and will be restored after the completion of the project in accordance with Section 14 of the EM&CP. The excursion did not result in revisions to the impacts to this wetland as the wetland is adjacent to the deviation zone and impacts are unavoidable.

4.3 EXCURSION S7-P4B #5

4.3.1 Description of the Excursion Area

The excursion is required to meet the constructability constraints to avoid steep slopes between the CSX ROW and the adjacent Maple Avenue and a stormwater culvert. In order accommodate the design constraints, a deviation zone occurs from 45070+50 to 45085+75. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#5 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 1,525 linear feet. The proposed excursion occurs approximately 25 linear feet east of the ADZ at the farthest point.

4.3.2 Justification

The excursion is required in order to meet the constructability constraints to avoid steep slopes and a stormwater culvert. Additionally, Wetland CP-A-D is located between the railroad tracks and the deviation zone, therefore excursion area S7-P4B#5 allows the alignment to limit significant permanent impacts to this wetland. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

4.3.3 Environmental Impact

Excursion area S7-P4B#5 will result in less permanent impacts to Wetland CP-A-D because it avoids the majority of the wetland and limits the impacts to two locations at the start and end of the excursion area.

4.3.3.1 Agricultural Resources

Excursion area S7-P4B#5 will not impact any agricultural resources.

4.3.3.2 Archeological Resources

Excursion area S7-P4B#5 has no known archaeological sites.

4.3.3.3 Threatened and Endangered Species

Excursion areas S7-P4B#5 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat. Tree clearing within the HDD work areas will be performed in accordance with project wide mitigation measures described in Sections 8 and Section 9.3 of the EM&CP to avoid impacting potential threatened species.

4.3.3.4 Wetlands and Streams

Excursion areas S7-P4B#5 will result in impacts to the wetland CP-A-D as described and quantified in Table 9.2 of the EM&CP. The wetland is a PEM community, and all impacts will be restored after completion of the project in accordance with Section 14 of the EM&CP. The excursion results in reduced permanent to this wetland, by avoiding the majority of the wetland that is located inside the ADZ.

4.4 EXCURSIONS S7-P4B #6

4.4.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to accommodate the works areas for HDD#64 from approximately 45096+75 to 45114+60. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#6 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 1,800 linear feet of which approximately 1,306 feet are HDD (i.e., no land disturbance above grade). The proposed excursion occurs approximately 45 linear feet east of the ADZ at the farthest point.

4.4.2 Justification

The excursion is required in order to accommodate the required space for HDD#64. 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 Impact

The excursion area S7-P4B#6 does not result in any impacts to any archeological areas; rare, threatened, or endangered species; or wetlands and streams. Impacts to two wetlands (C-PA-C and C-PA-B) and a trout stream (C-PA-S2) will be avoided via HDD. Tree clearing within the HDD work areas will be performed in accordance with project wide mitigation measures described in Sections 8 and Section 9.3 of the EM&CP to avoid impacting potential threatened species.

4.4.3.1 Agricultural Resources

The alignment is installed via HDD#64 through agricultural lands registered with Schenectady County, therefore permanent impacts will be avoided and temporary impacts from HDD#64 work area will be restored in accordance with the measures described in Section 14 of the EM&CP.

4.5 EXCURSION S7-P4B#7

The alignment exits the CSX Rail ROW to allow for additional space required for clearance for a stream culvert and existing utilities from approximately 45127+00 to 45128+00 and 45129+25 to 45130+30. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#7 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 195 linear. The proposed excursion occurs approximately 10 linear feet east of the ADZ at the farthest point.

4.5.1 Justification

The excursion is required in order to meet required clearance for existing utilities and culverts. This ADZ Excursion request is grounded in engineering reasons and is the minimum necessary to feasibly achieve the installation.

4.5.2 Environmental Impact

4.5.2.1 Agricultural Resources

Excursion area S7-P4B#7 will not impact any registered agricultural lands.

4.5.2.2 Archaeological Resources

Excursion area S7-P4B#7 has no known archaeological resources.

4.5.2.3 Threatened and Endangered Species

Excursion areas S7-P4B#7 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat.

4.5.2.4 Wetlands and Streams

Excursion area S7-P4B#7 will result in temporary impacts to the unmapped stream C-PA-S1 as described in Table 9.1 of the EM&CP.

4.6 EXCURSION S7-P4B #8

4.6.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to allow for additional space required for clearance for existing utilities and HDD#64A work areas from approximately 45131+25 to 45183+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#7 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 5,225 linear feet of which approximately 2,000 feet is HDD (i.e., all disturbances below grade). The proposed excursion occurs approximately 45 linear feet east of the ADZ at the farthest point.

4.6.2 Justification

The excursion is required in order to meet required clearance for existing utilities and to meet the design constraints for HDD#64A and HDD#65A. 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.

4.6.3 Environmental Impact

Excursion area S7-P4B#8 will result in impacts to agricultural areas and Wetland C-PA-E as described below. Excursion area S7-P4B#8 will not impact any archaeological areas or threatened and endangered species.

4.6.3.1 Agricultural Resources

Excursion area will impact agricultural lands not registered with Schenectady County. Impacts will be reduced by installing the alignment via HDD. Temporary impacts will be restored in accordance with Section 14 of the EM&CP.

4.6.3.2 Archaeological Resources

Excursion area S7-P4B#8 has no known archaeological resources.

4.6.3.3 Threatened and Endangered Species

Excursion areas S7-P4B#8 described above will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat. Tree clearing within the HDD work areas will be performed in accordance with project wide mitigation measures described in Sections 8 and Section 9.3 of the EM&CP to avoid impacting potential threatened species.

4.6.3.4 Wetlands and Streams

Excursion area S7-P4B#8 will result in temporary and permanent impacts to Wetland C-PA-E as described and quantified in Table 9.2 of the EM&CP. The wetland is a PEM community, and all impacts will be restored after completion of the project in accordance with Section 14 of the EM&CP. Impacts to wetland C-PA-F and four streams C-PA-S7, C-PA-S8, C-PA-S9 (trout stream), C-PA-S10 is avoided by HDD.

4.7 EXCURSION S7-P4B#14

4.7.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to allow for additional space required for HDD#69A work area from 45373+50 to 45386+00. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#14 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 1250 linear feet of which approximately 840 feet all is HDD (i.e., all disturbance below grade). The proposed excursion occurs approximately 55 linear feet east of the ADZ at the farthest point.



4.7.2 Justification

The excursion is required to allow for additional space required for HDD#69A 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.

4.7.3 Environmental Impact

The excursion area S7-P4B#69A does not result in any impacts to any agricultural areas archaeological or historical resources; rare, threatened, or endangered species; or wetlands and streams. The parcel is the Vincent J Schaefer Preserve . Tree clearing within the HDD work areas will be performed in accordance with project wide mitigation measures described in Sections 8 and Section 9.3 of the EM&CP to avoid impacting potential threatened species. Noise mitigation measures will be followed to minimize impact to the recreational area.

4.8 EXCURSION S7-P4B #16

4.8.1 Description of the Excursion Area

The alignment exits the CSX Rail ROW to allow for additional space required for Splice Location 154, HDD#70B, and HDD#70B work area from 45444+50 to 45453+50. Pursuant to Condition 138, a detailed map showing the location and boundary of the Exceedance Area S7-P4B#16 and ultimate Facility ROW is included in the attached figure set. The length of the excursion is approximately 900 linear feet of which approximately 600 feet all is HDD (i.e., all disturbance below grade). The proposed excursion occurs approximately 50 linear feet east of the ADZ at the farthest point.

4.8.2 Justification

The excursion is required to allow for additional space required for Splice Location 154, HDD#70B, and HDD#70B 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.

4.8.3 Environmental Impact

The excursion area S7-P4B#16 does not result in any impacts to any agricultural areas; rare, threatened, or endangered species; or wetlands and streams. Tree clearing within the HDD work areas will be performed in accordance with project wide mitigation measures described in Sections 8 and Section 9.3 of the EM&CP to avoid impacting potential threatened species.

4.8.3.1 Archaeological Resources

The excursion area S7-P4B#16 has one known archeological resource near 45445+30 and as described in Section 11.0 of the EM&CP and Appendix O will require archaeological testing or monitoring.

5.0 CONCLUSION

The adjusted route at the various excursions in Package 4B – Segment 7 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 does 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 Package 4B – Segment 7 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

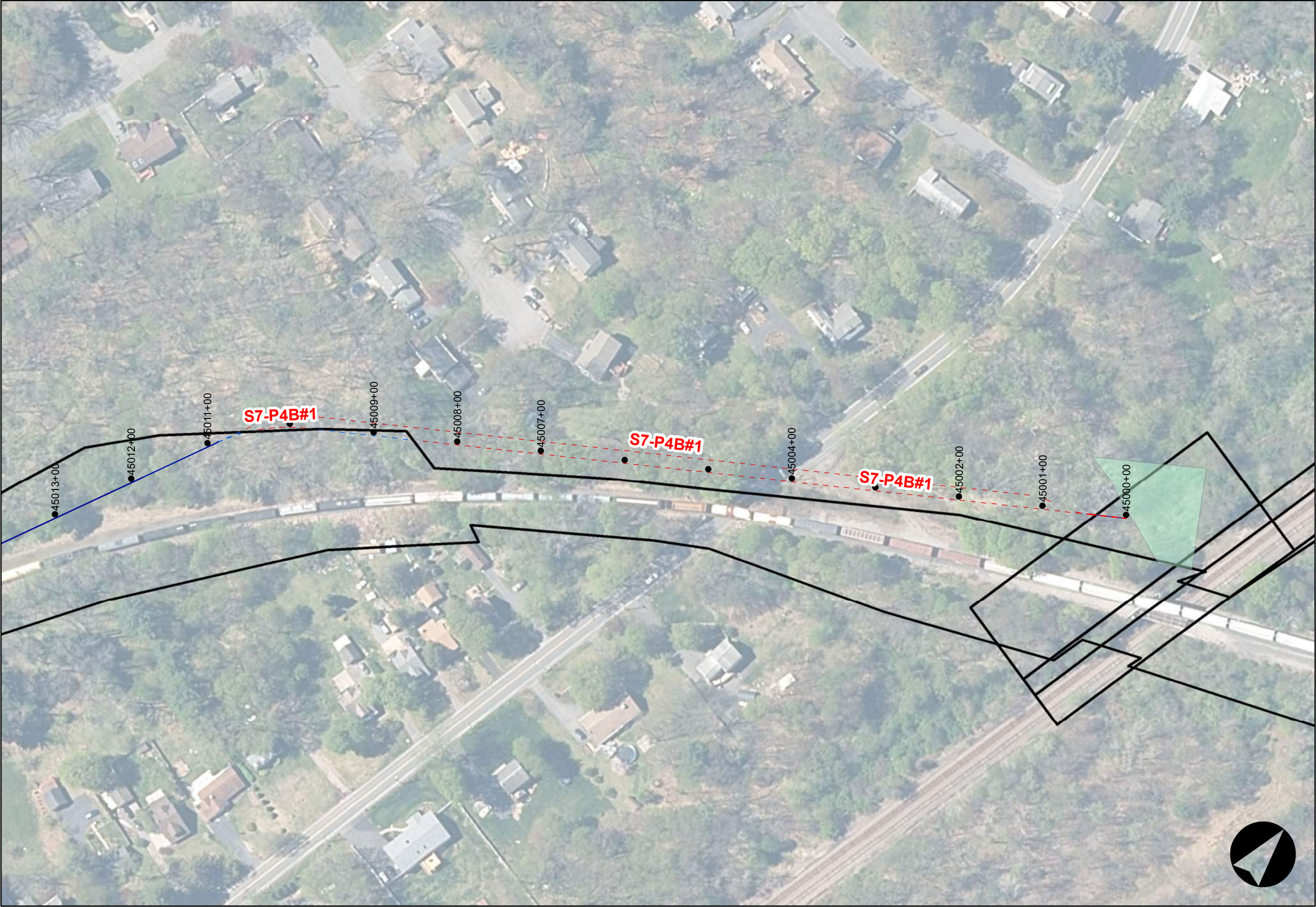


impacts at certain locations—and do not substantially change the location of the Facility for the reasons described in this memorandum. While the Certificate Holders do not believe that the adjustments outline in this memorandum constitute an amendment to the Certificate, should an amendment be necessary, Certificate Holders submit that a hearing is not required or warranted in accordance with PSL Section 123(2).

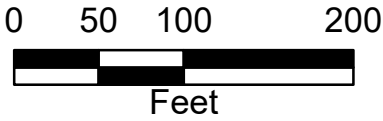
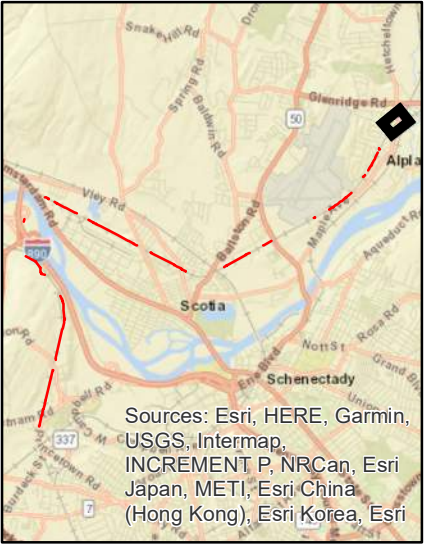
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- Stations
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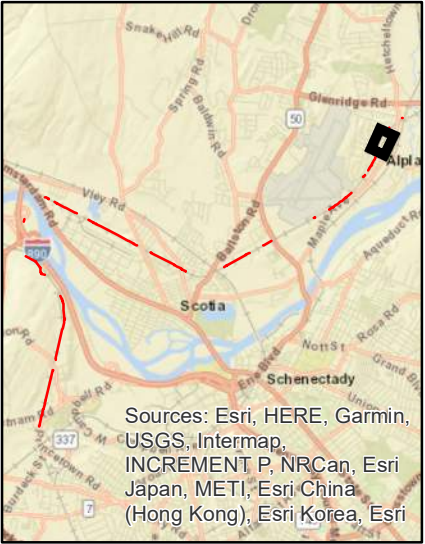
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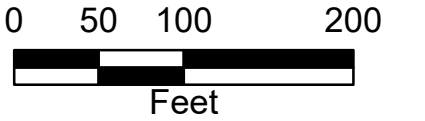
Deviation Zone Analysis



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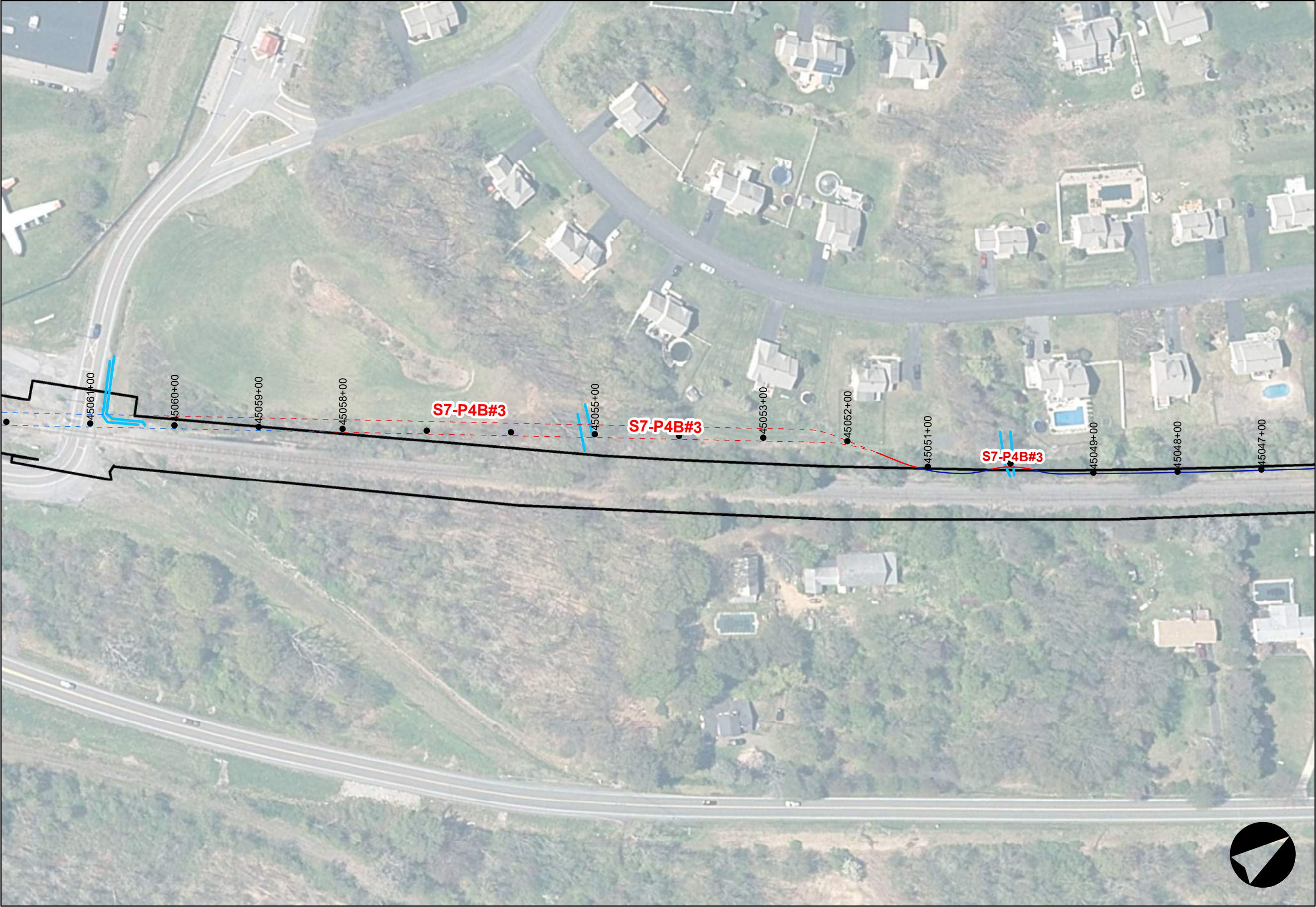
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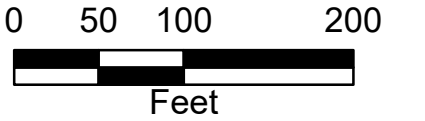
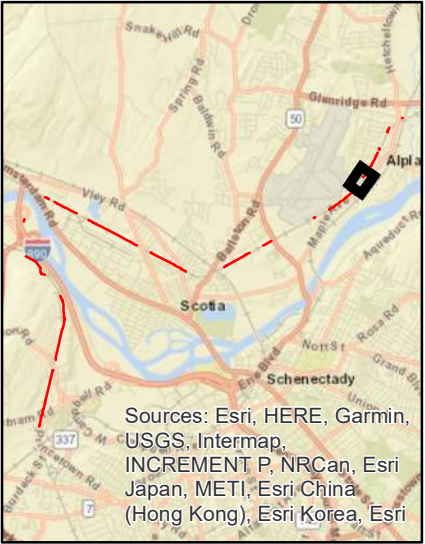
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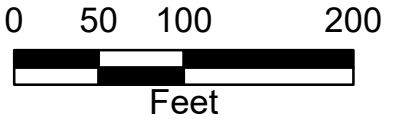
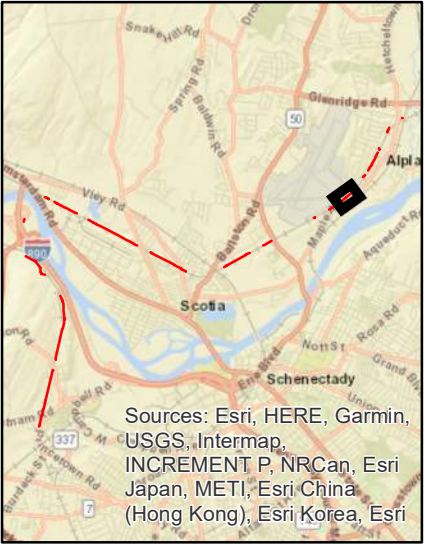
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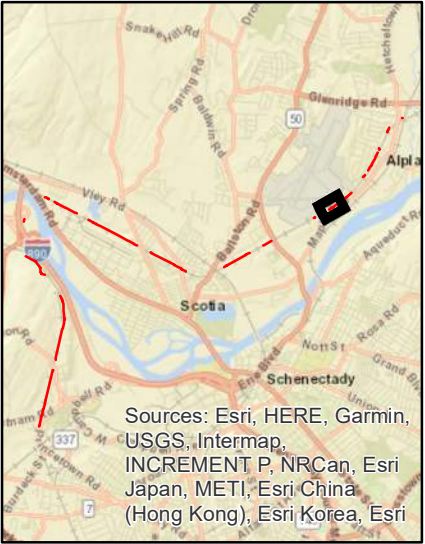
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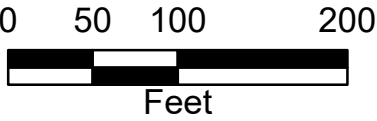
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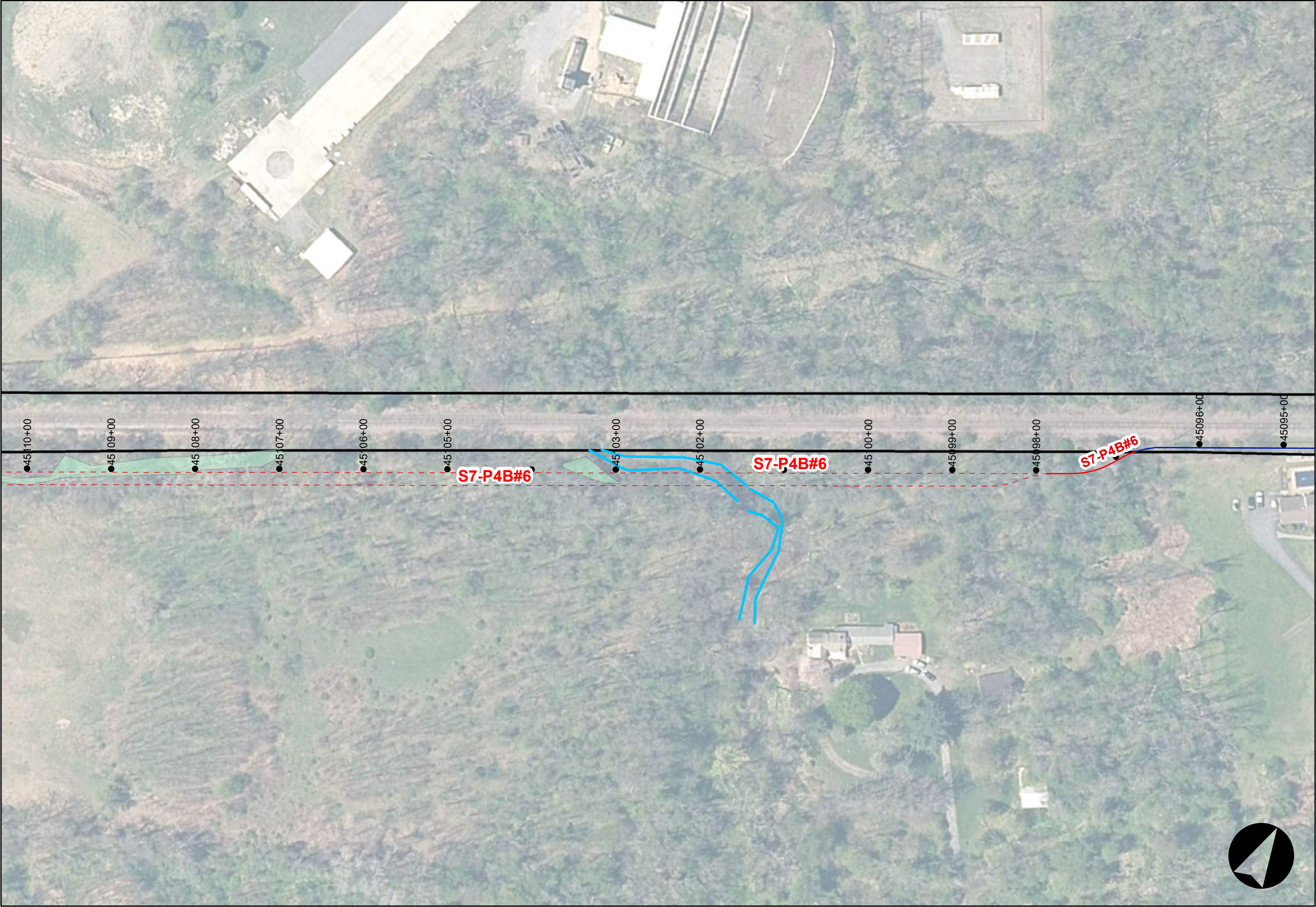
- Stations
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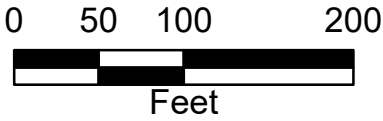
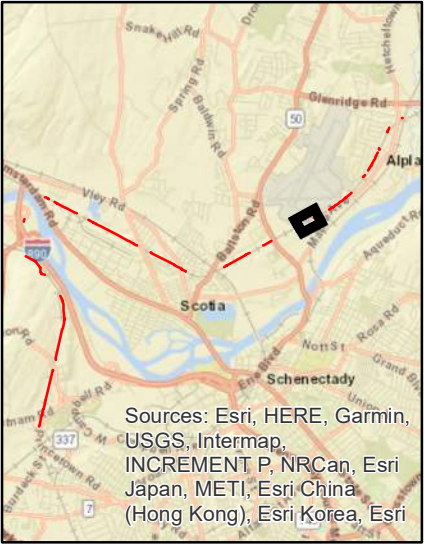
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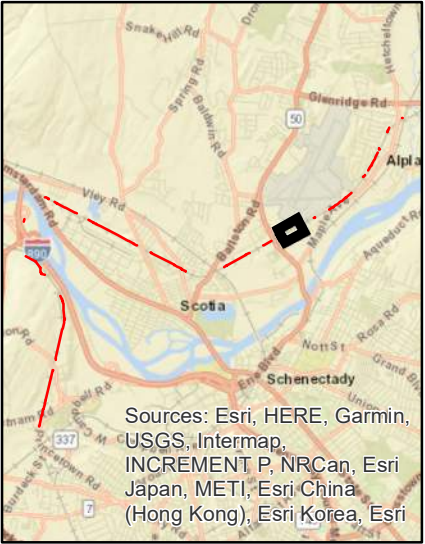
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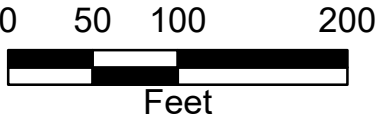
Deviation Zone Analysis



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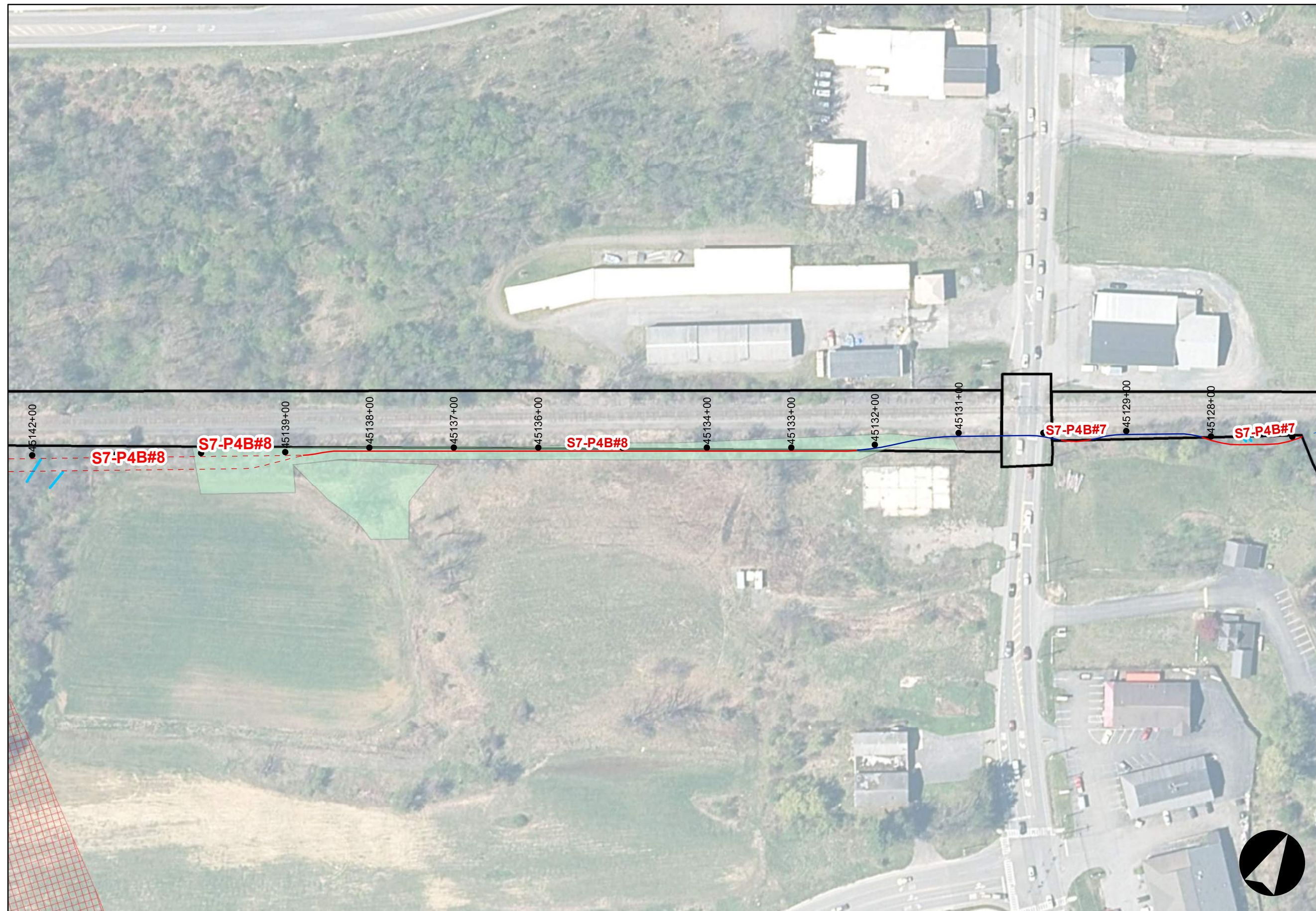
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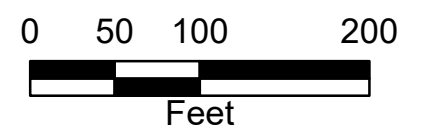
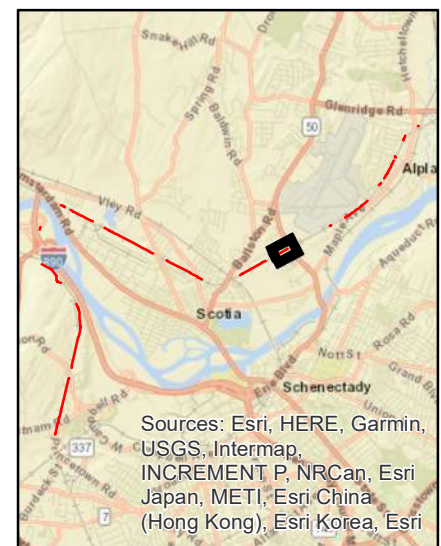
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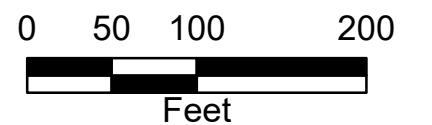
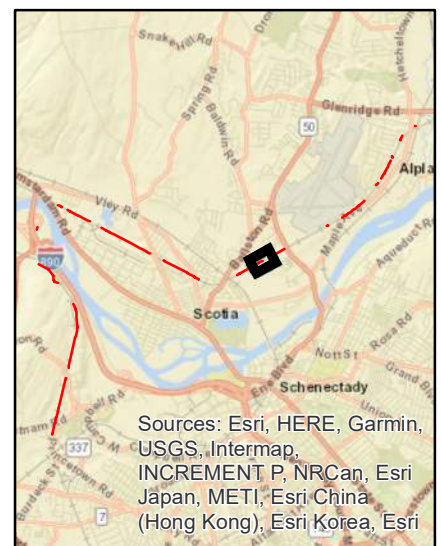
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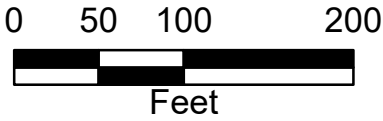
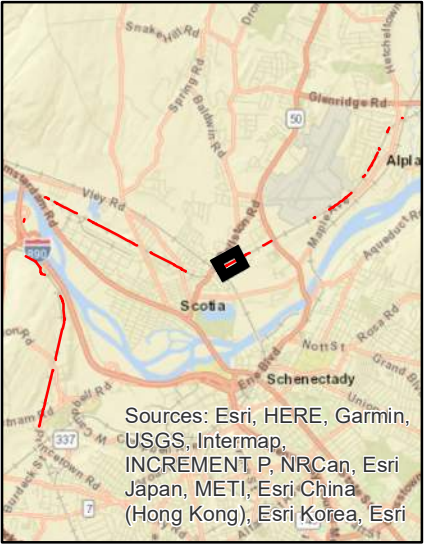
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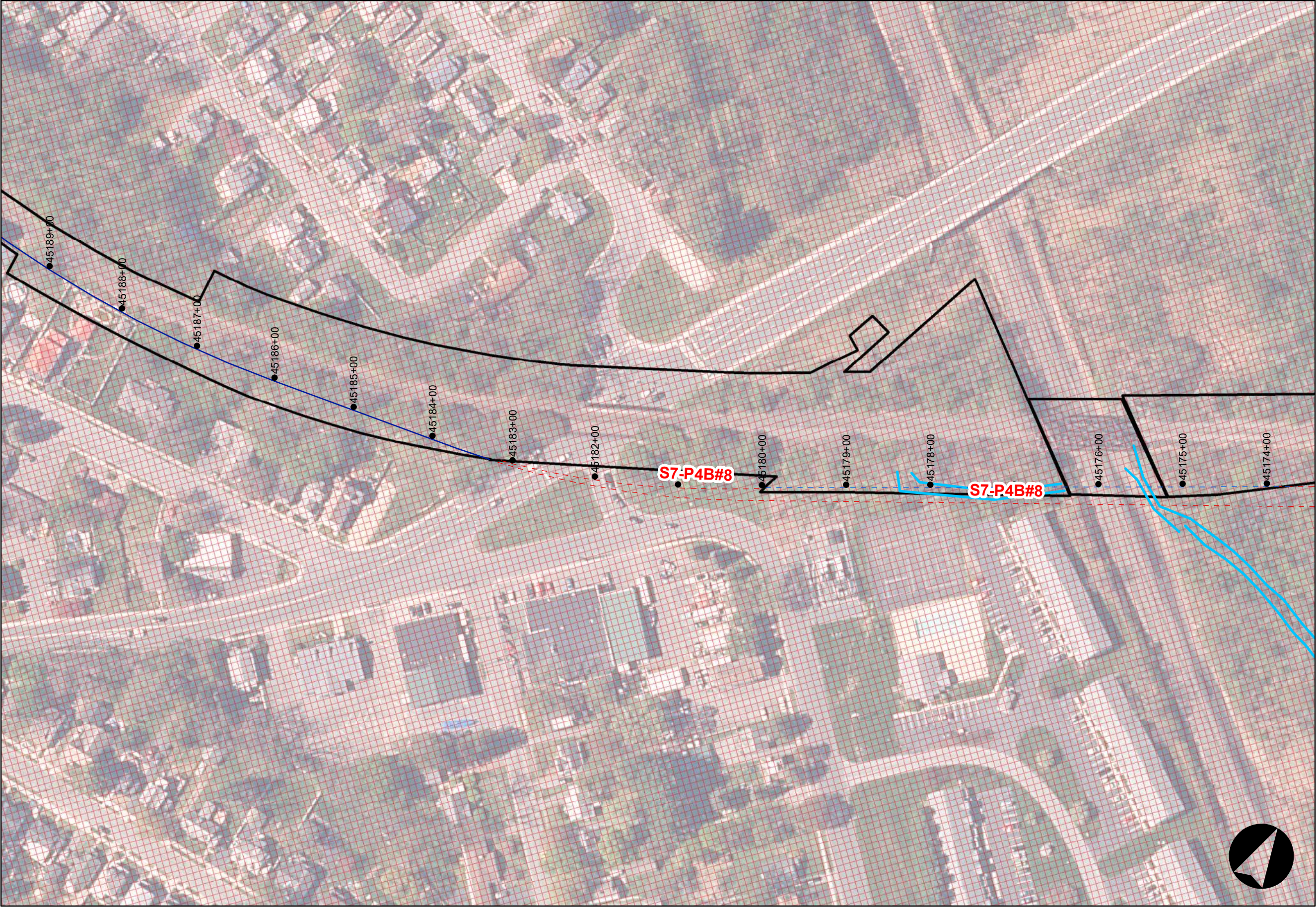
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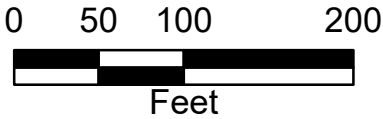
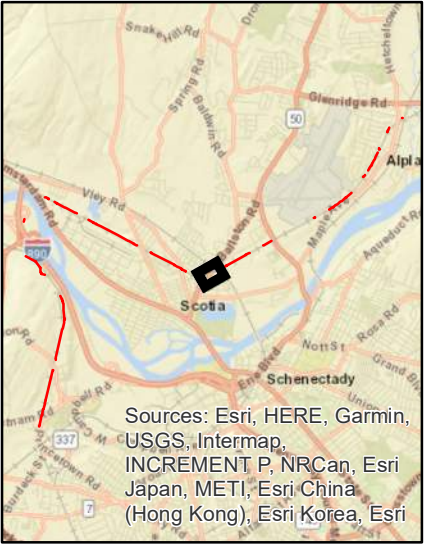
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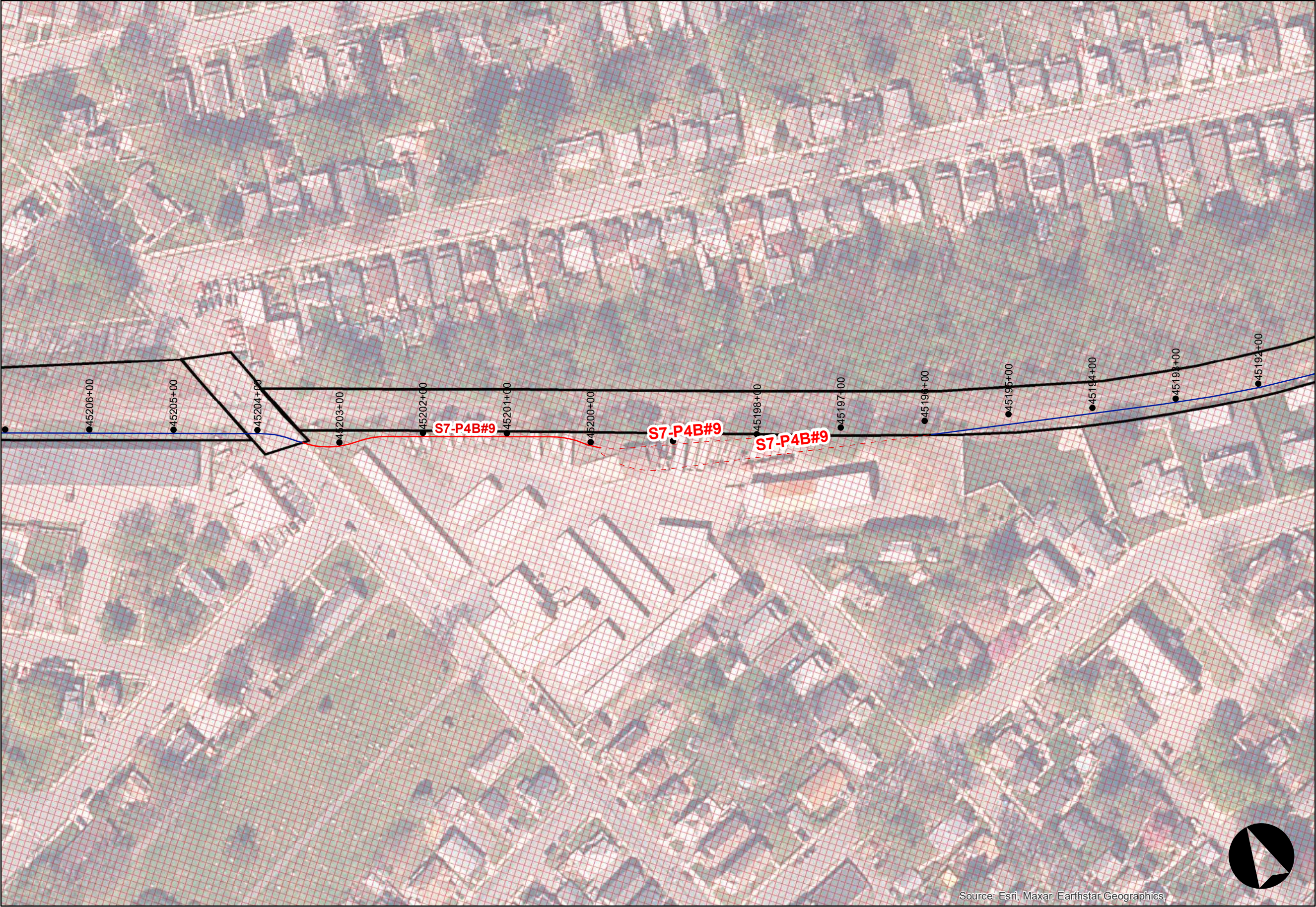
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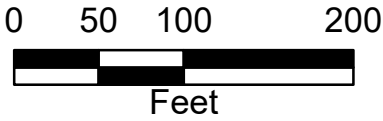
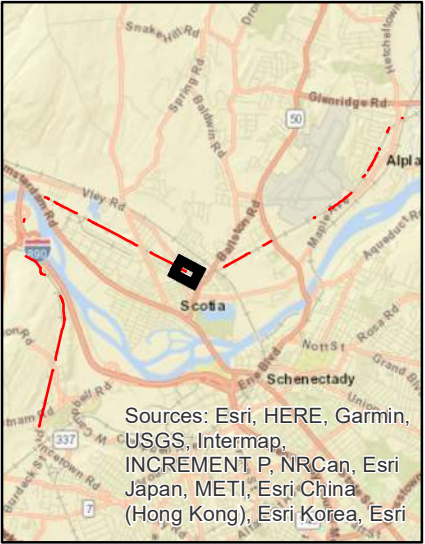
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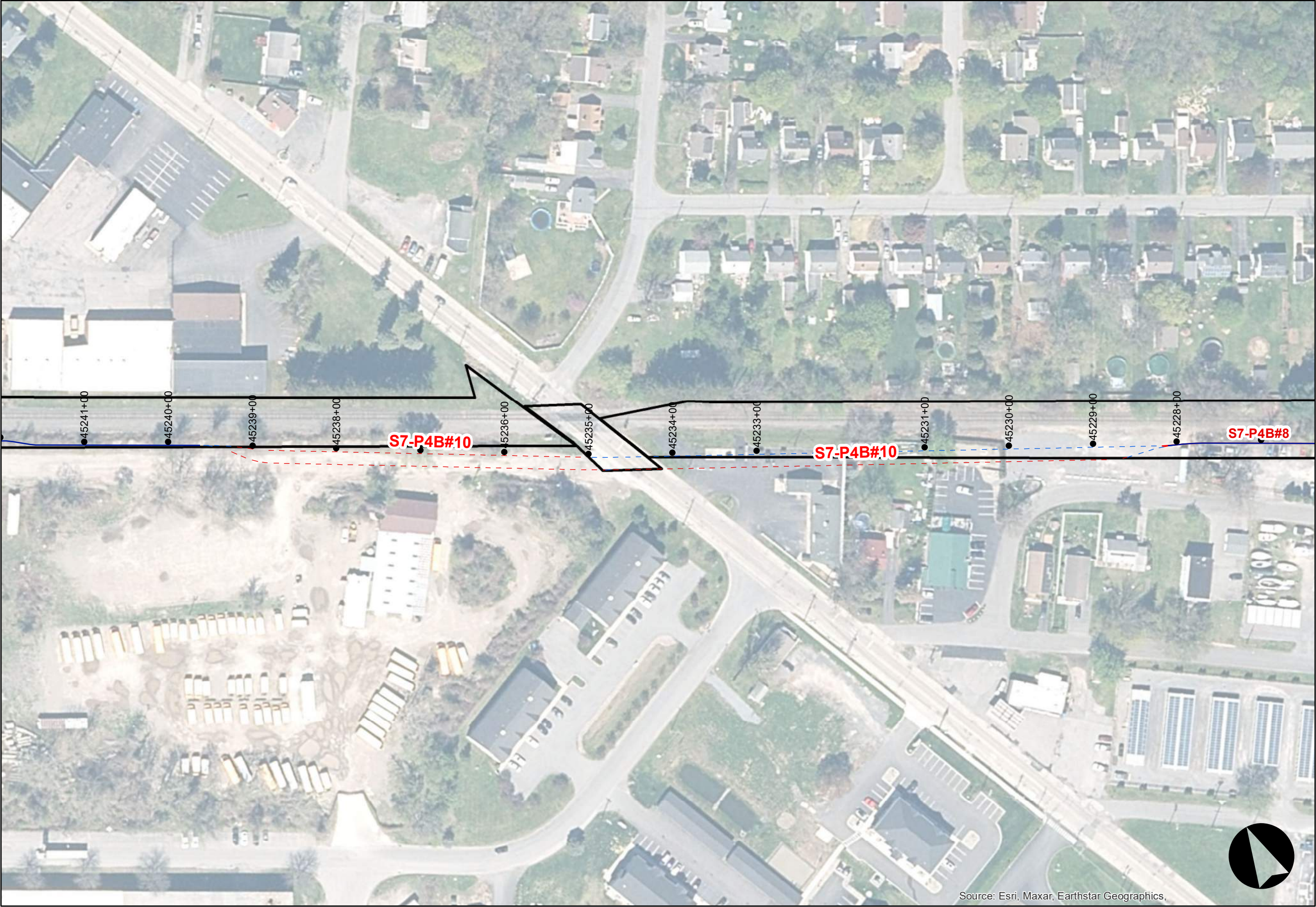
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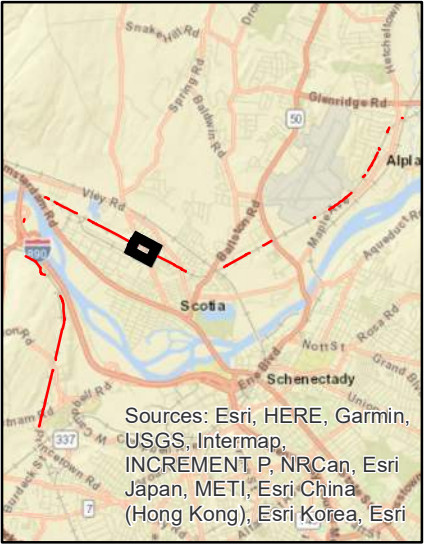
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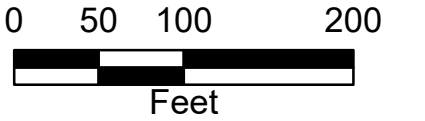
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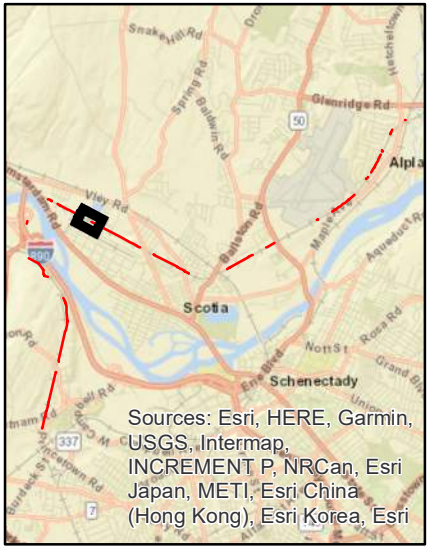
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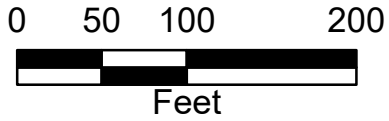


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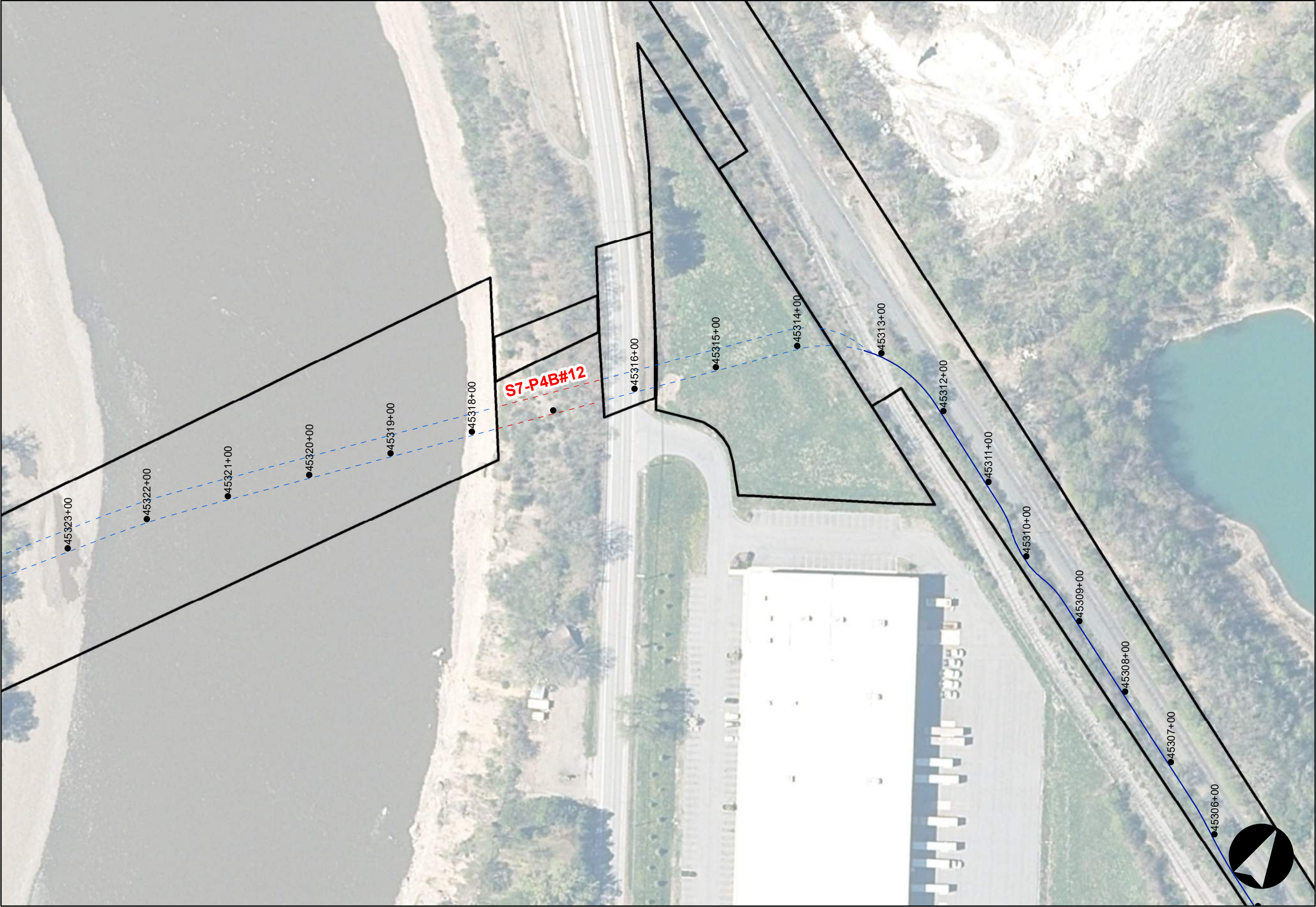


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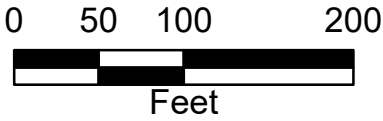
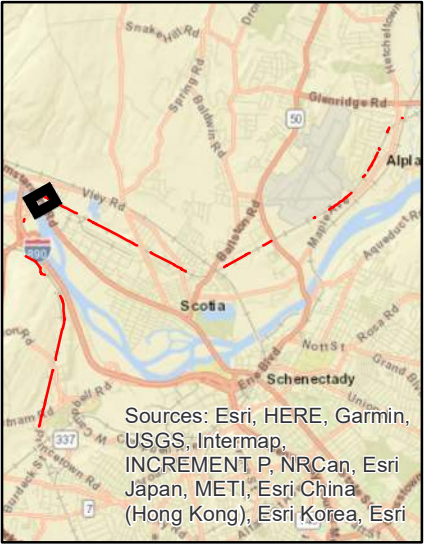


Source: Esri, Maxar, Earthstar Geographics.

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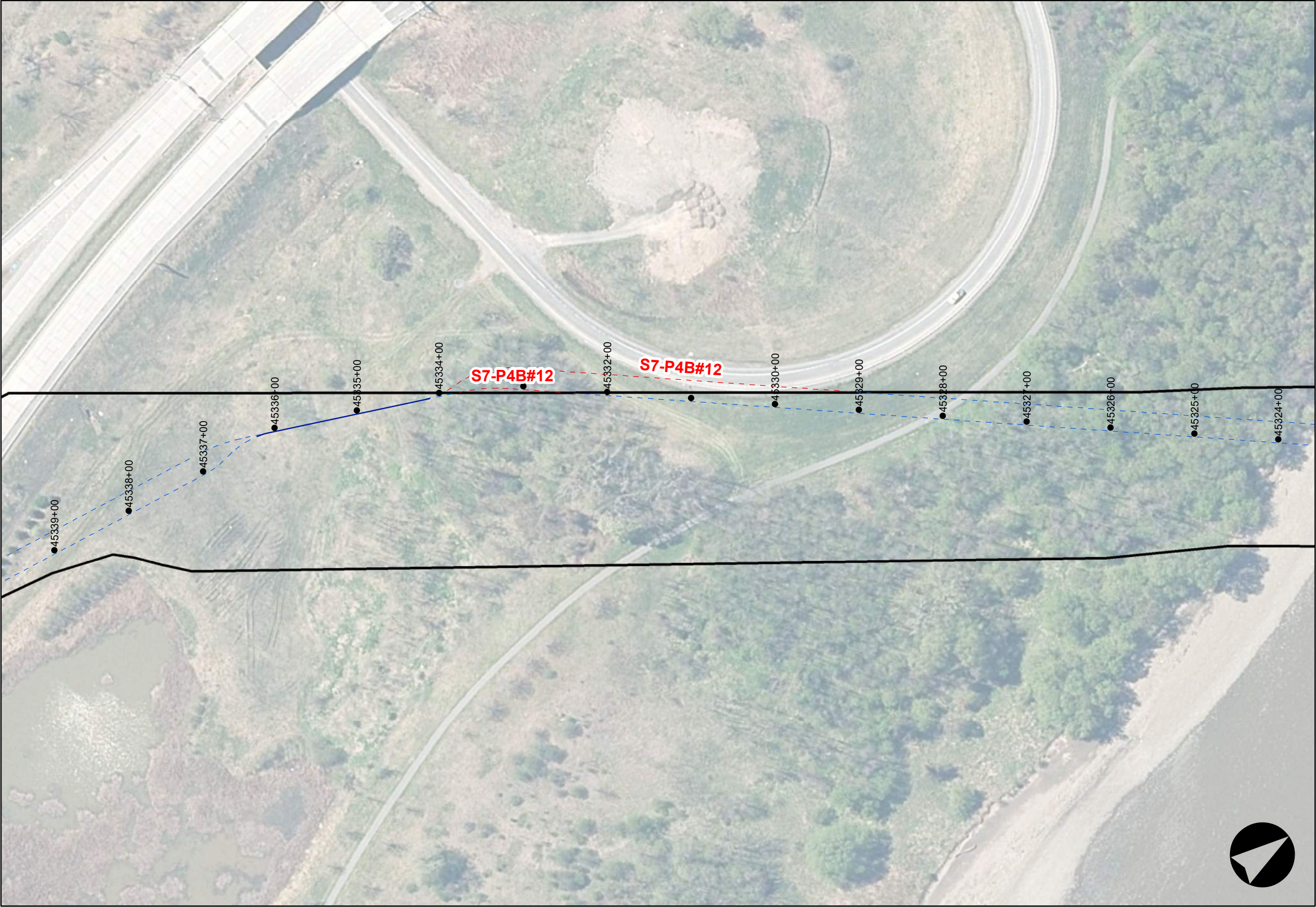
- Stations
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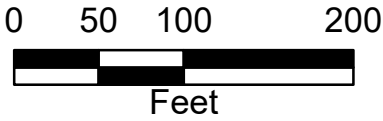
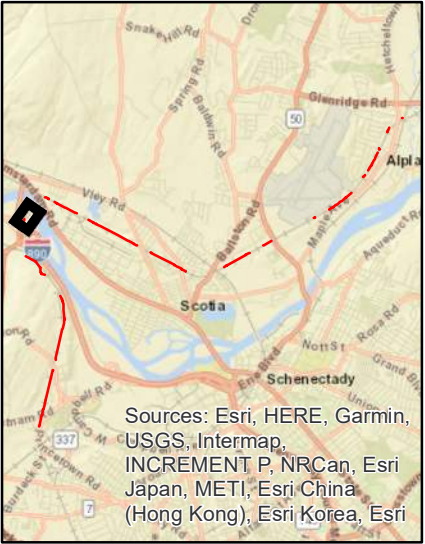
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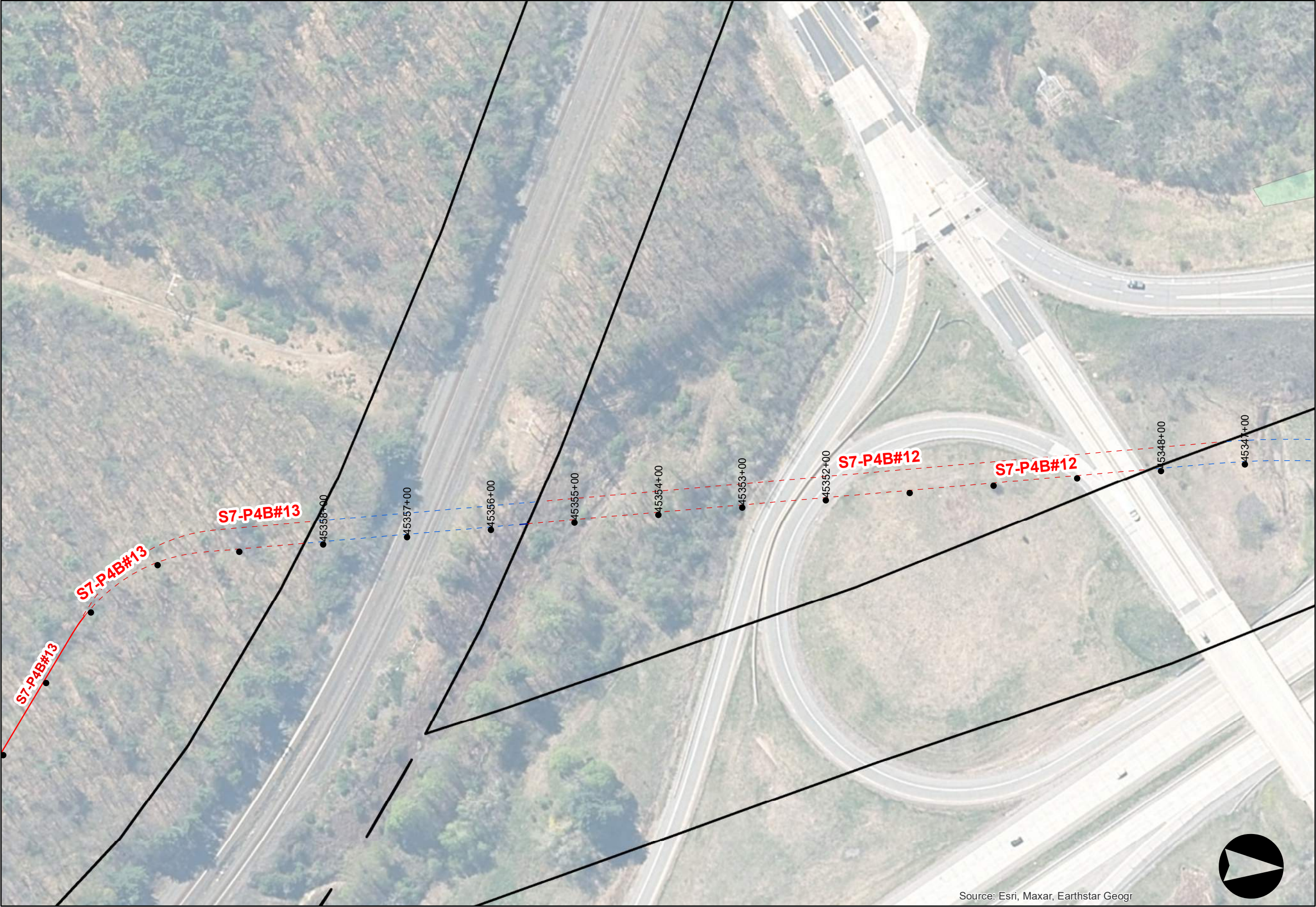
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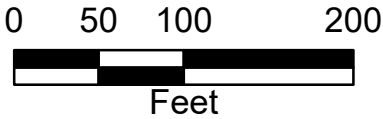
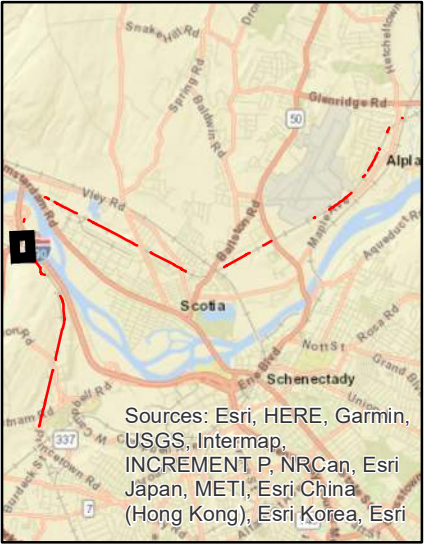
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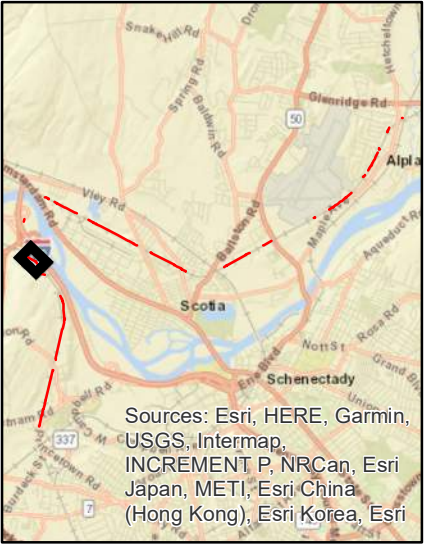
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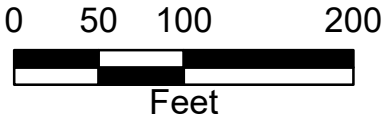
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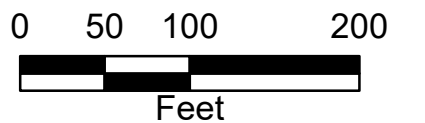
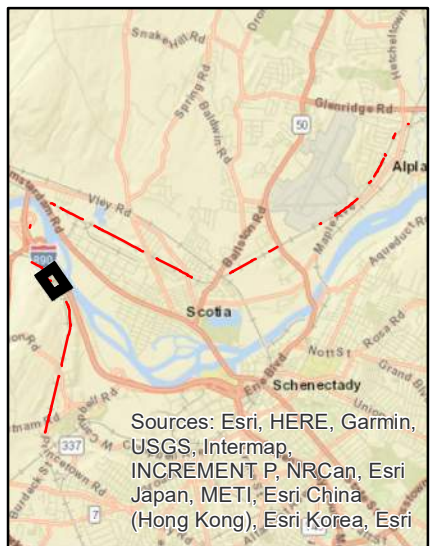
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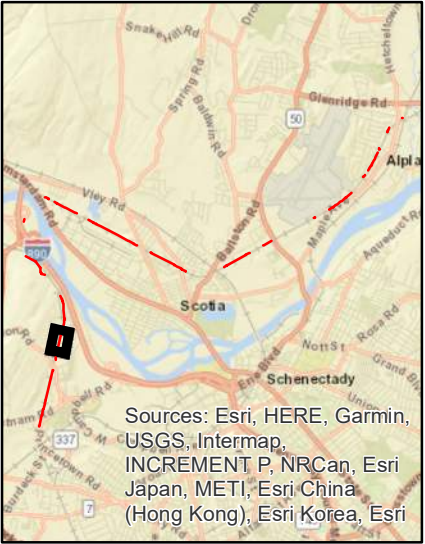
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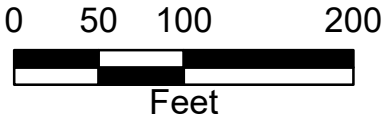
Deviation Zone Analysis



- Stations
- Trench
- - - HDD
- - - HDD Excursions
- Delineated Wetlands
- Deviation Zone



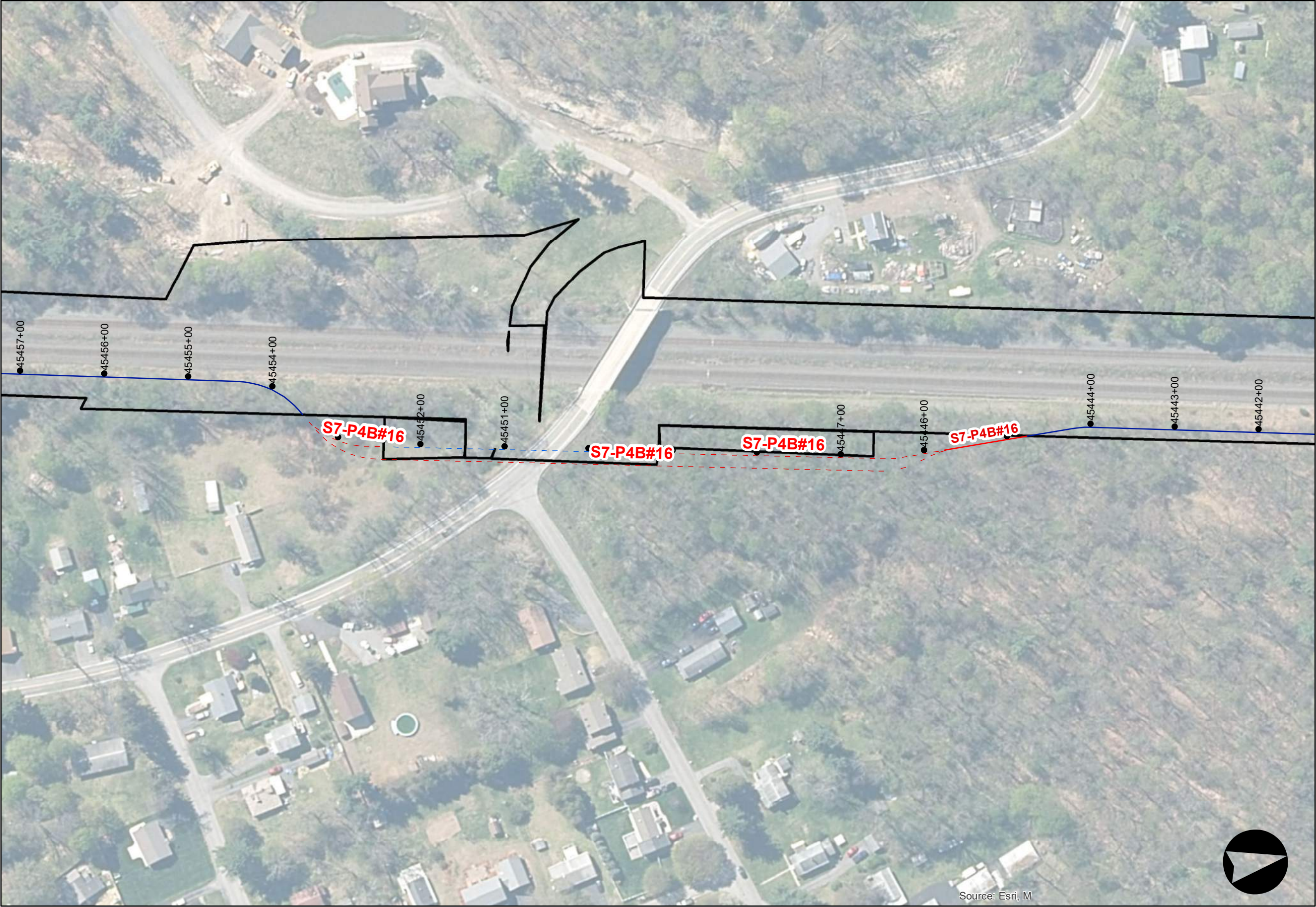
Sources: Esri, HERE, Garmin,
USGS, Intermap,
INCREMENT P, NRCap, Esri
Japan, METI, Esri China
(Hong Kong), Esri Korea, Esri



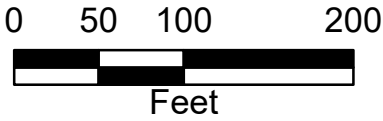
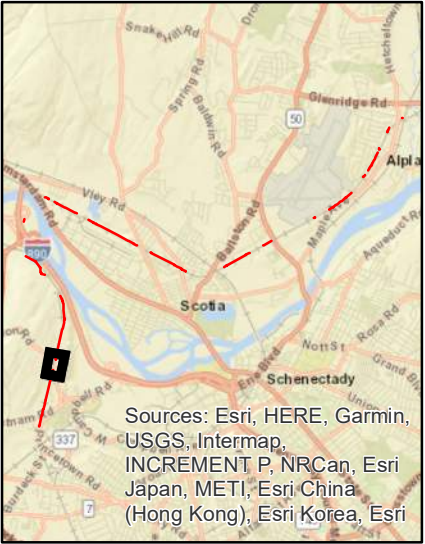
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Saratoga and
Schenectady County,
New York

Deviation Zone Analysis



- Stations
- Trench
- - - HDD
- - - HDD Excursions
- Excursions
- Deviation Zone



Source: Esri, M

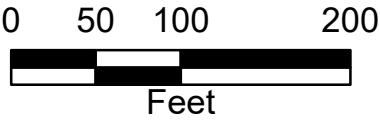
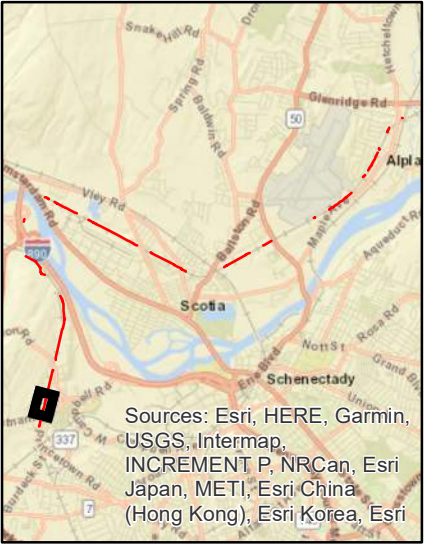
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New York***

Deviation Zone Analysis



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