

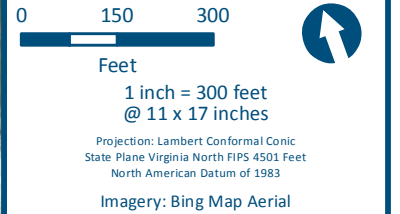
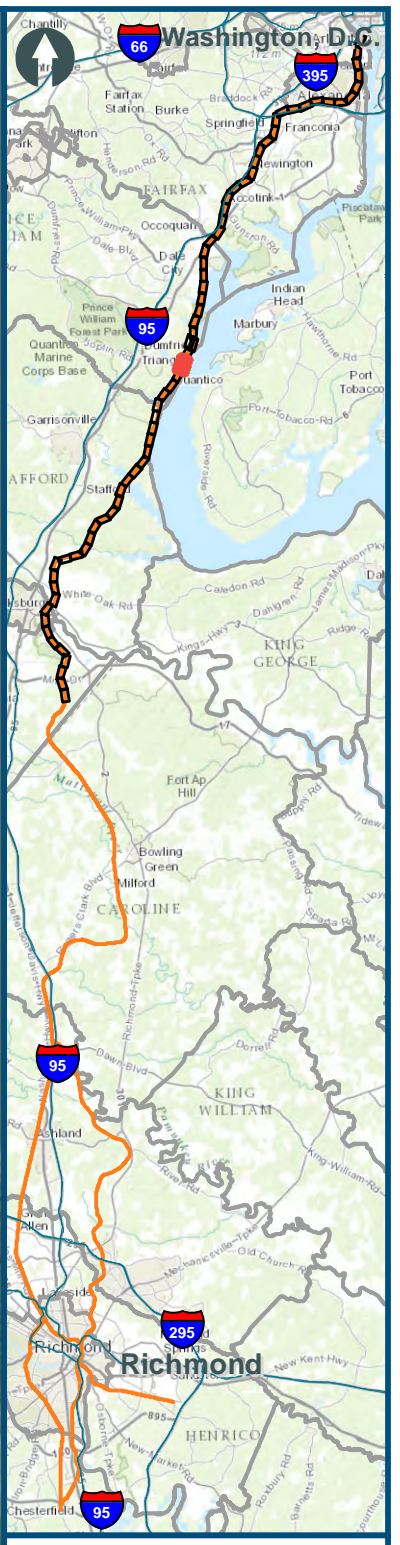
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0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - Third Track Under Construction by CSXT
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

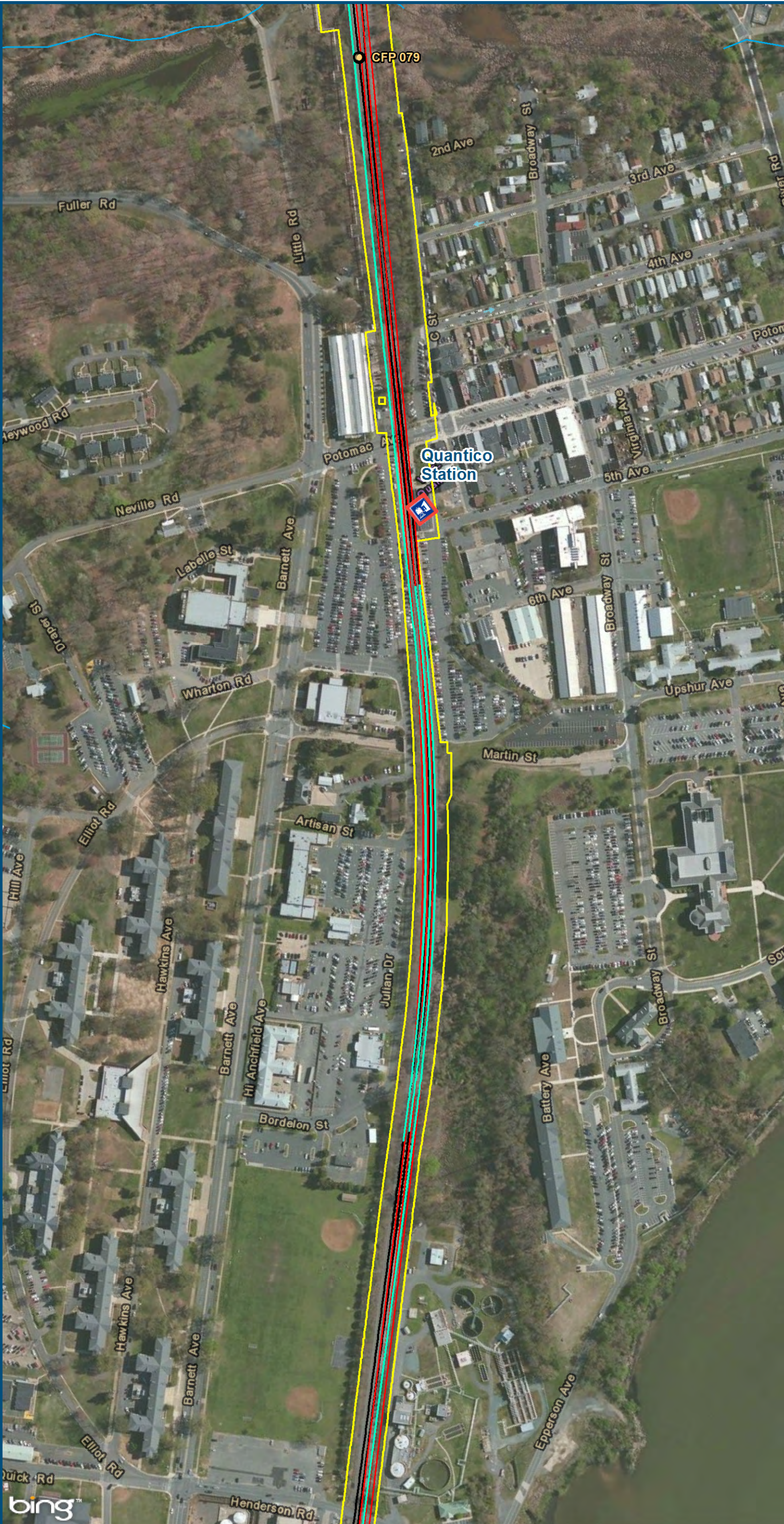
Figure F-35
Northern Virginia
Unconstrained
Alignment Option



- Legend**
- CSXT Mileposts
 - Third Track Under Construction by CSXT
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-36
Northern Virginia
Unconstrained
Alignment Option

\\dlmain\GIS_DATA\GIS\Projects\11545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AllDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Ch6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.11.2015



0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial








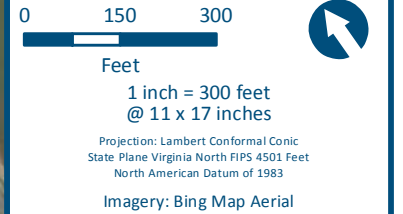
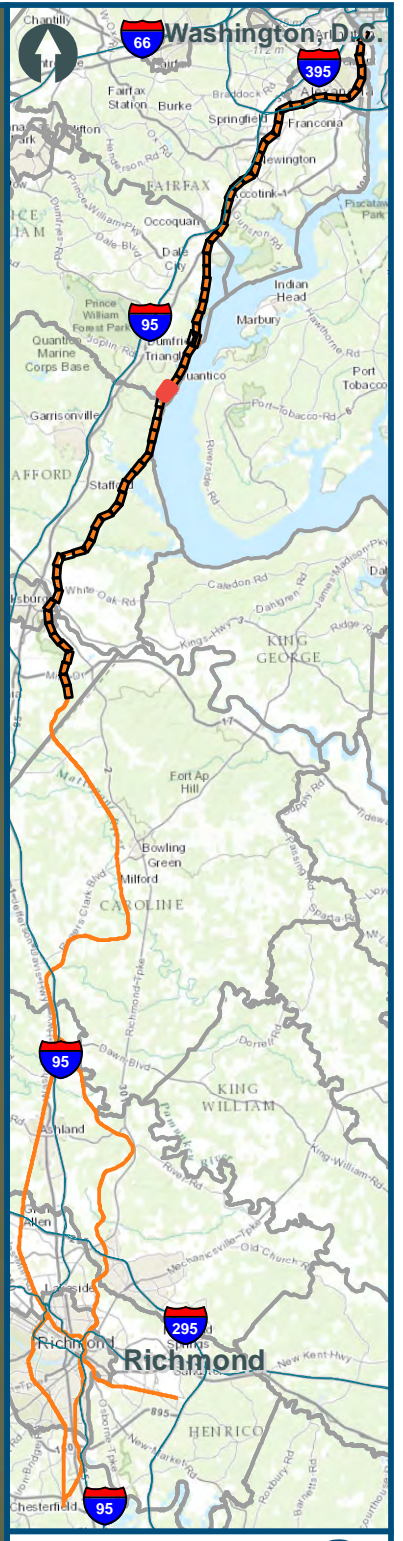
- Legend**
-  Amtrak/VRE Station
 -  CSXT Mileposts
 -  Third Track Under Construction by CSXT
 -  New Track
 -  Existing Track
 -  CSXT Right-of-Way
 -  Streams

Figure F-38
Northern Virginia
Unconstrained
Alignment Option

\\dlmain\GIS_DATA\GIS\Projects\11545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AIIDev-ConceptEngin\map_docs\mxd\Alt_Tech_Report\DC2RVA_Chr6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.11.2015







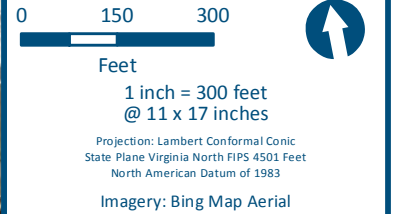
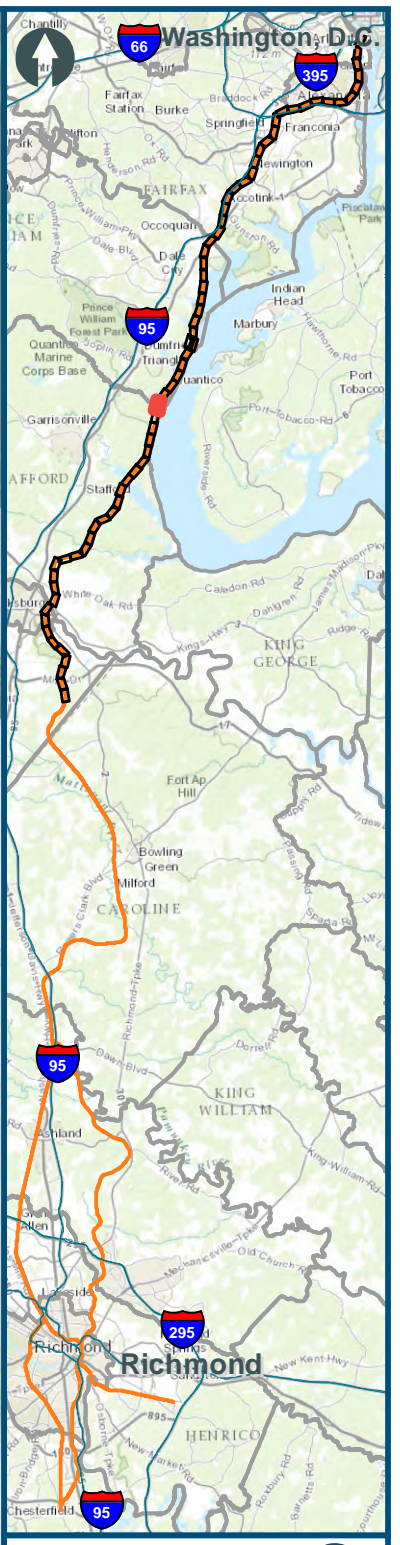
- Legend**
-  CSXT Mileposts
 -  Third Track Under Construction by CSXT
 -  New Track
 -  Existing Track
 -  CSXT Right-of-Way
 -  Streams

Figure F-39
Northern Virginia
Unconstrained
Alignment Option



- Legend**
- CSXT Mileposts
 - Third Track Under Construction by CSXT
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-40
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AIDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Chr6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.11.2015



0 150 300

Feet
1 inch = 300 feet
@ 11 x 17 inches

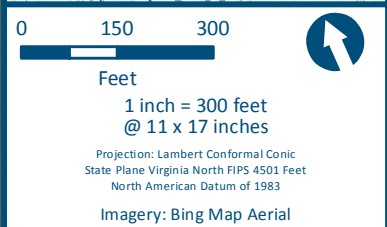
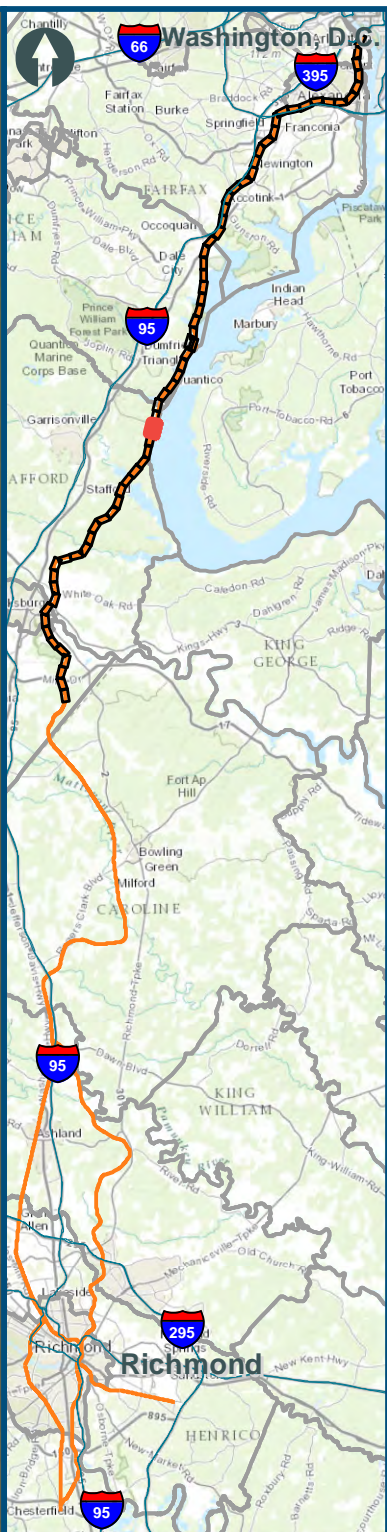
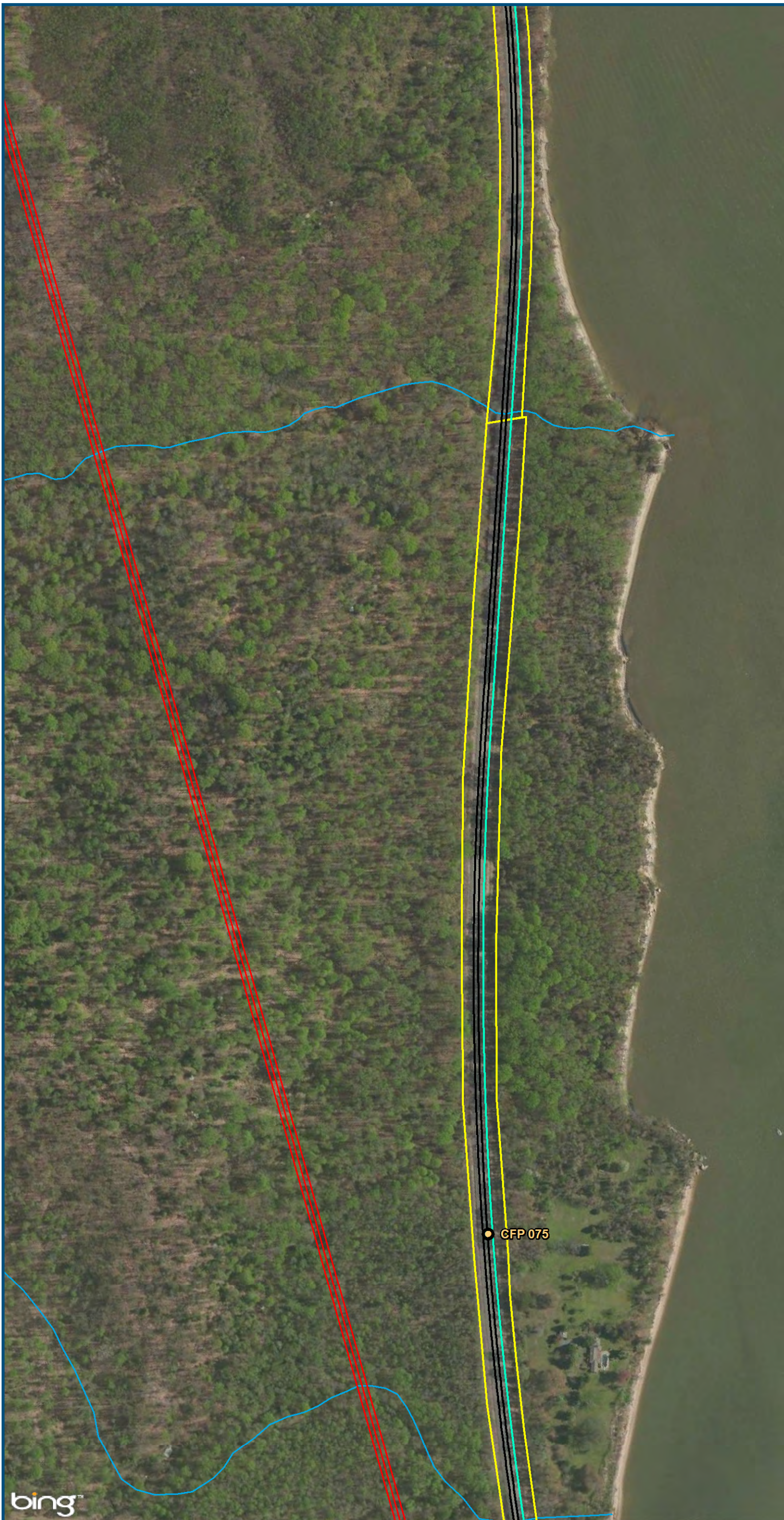
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983

Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - Third Track Under Construction by CSXT
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-41
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AllDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Chr6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.11.2015



- Legend**
- CSXT Mileposts
 - Third Track Under Construction by CSXT
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-42
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AIDev-ConceptEng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Chr6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.11.2015

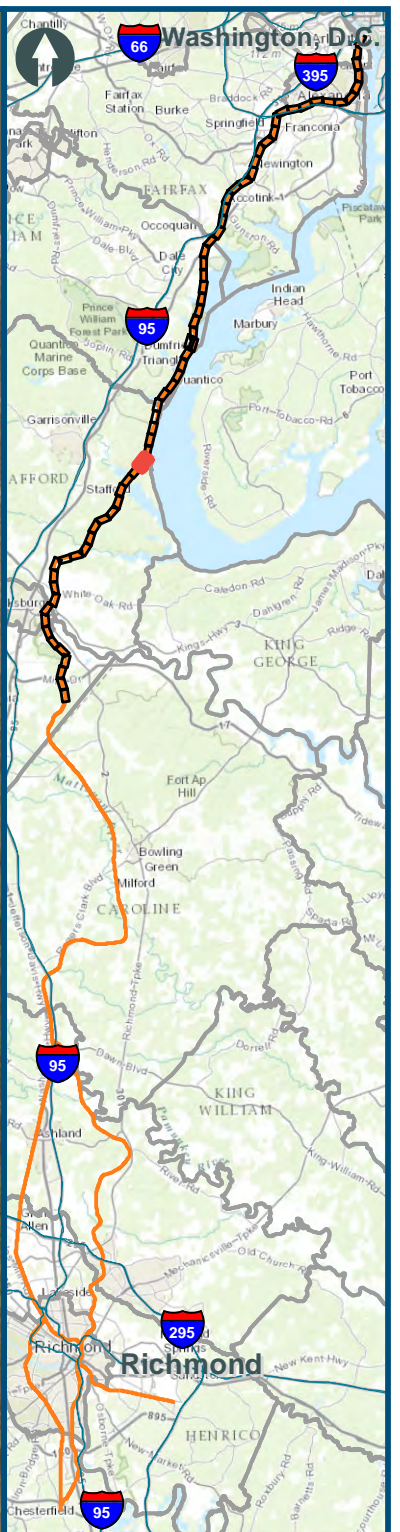


0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - Third Track Under Construction by CSXT
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-44
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AIDev-ConceptEng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Cht6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.11.2015



0 150 300
 Feet
 1 inch = 300 feet
 @ 11 x 17 inches
 Projection: Lambert Conformal Conic
 State Plane Virginia North FIPS 4501 Feet
 North American Datum of 1983
 Imagery: Bing Map Aerial

Legend

- CSXT Mileposts
- Third Track Under Construction by CSXT
- New Track
- Existing Track
- CSXT Right-of-Way
- Streams

Figure F-45
Northern Virginia
Unconstrained
Alignment Option

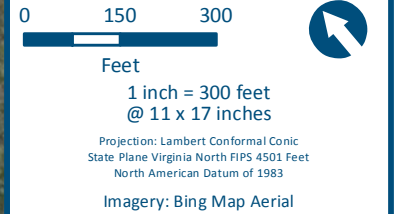
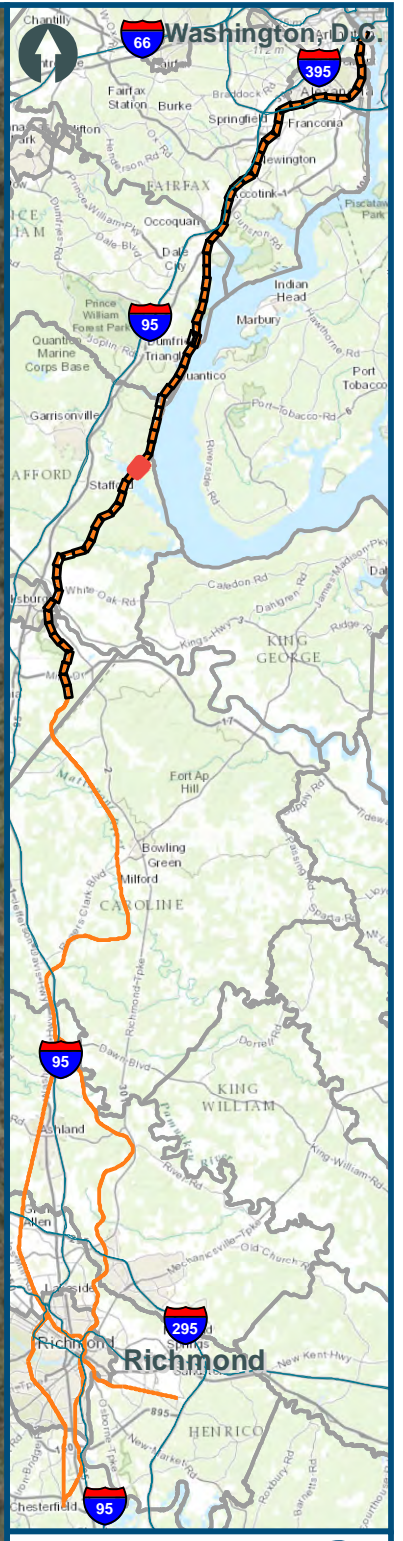
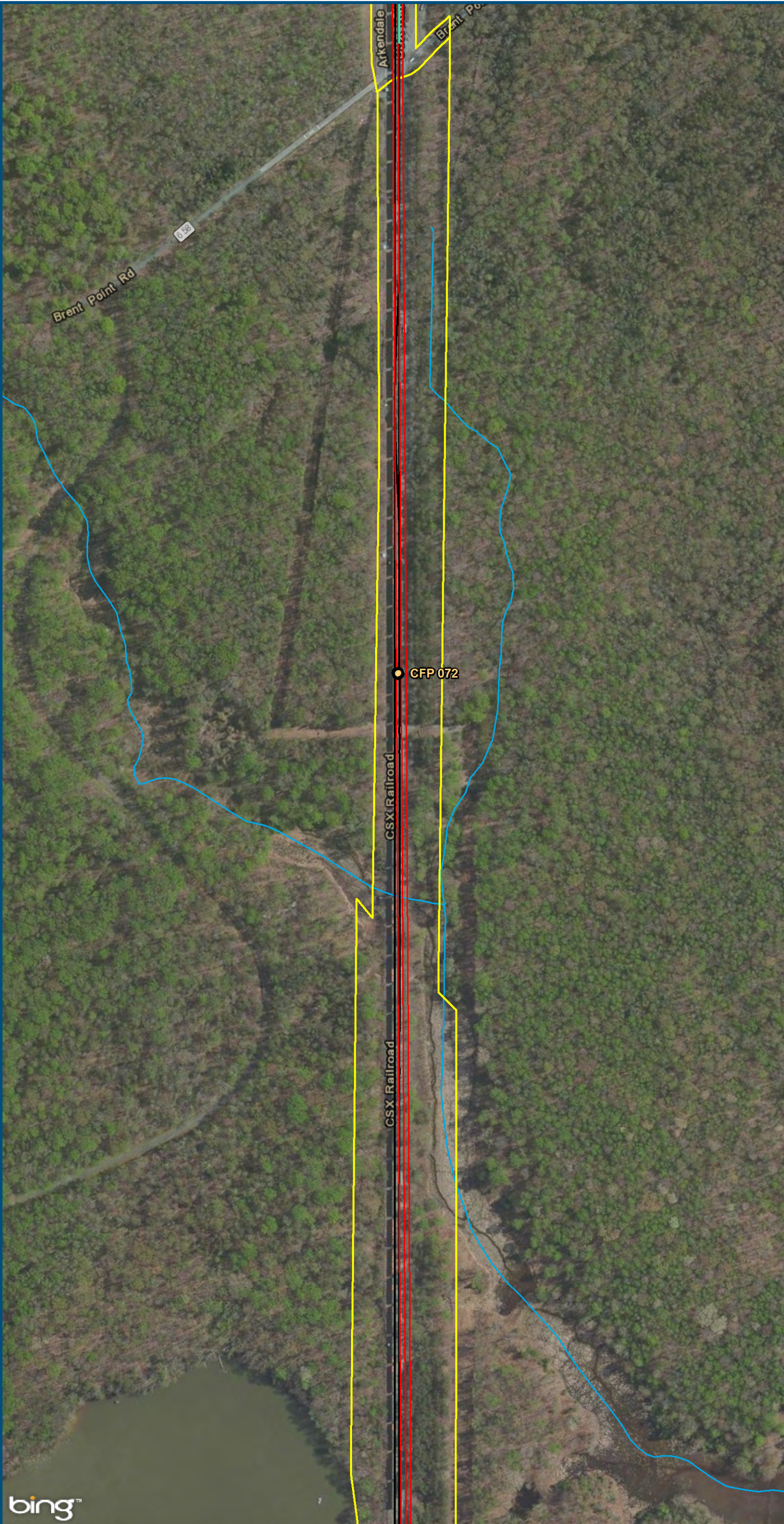


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 Federal Railroad Administration

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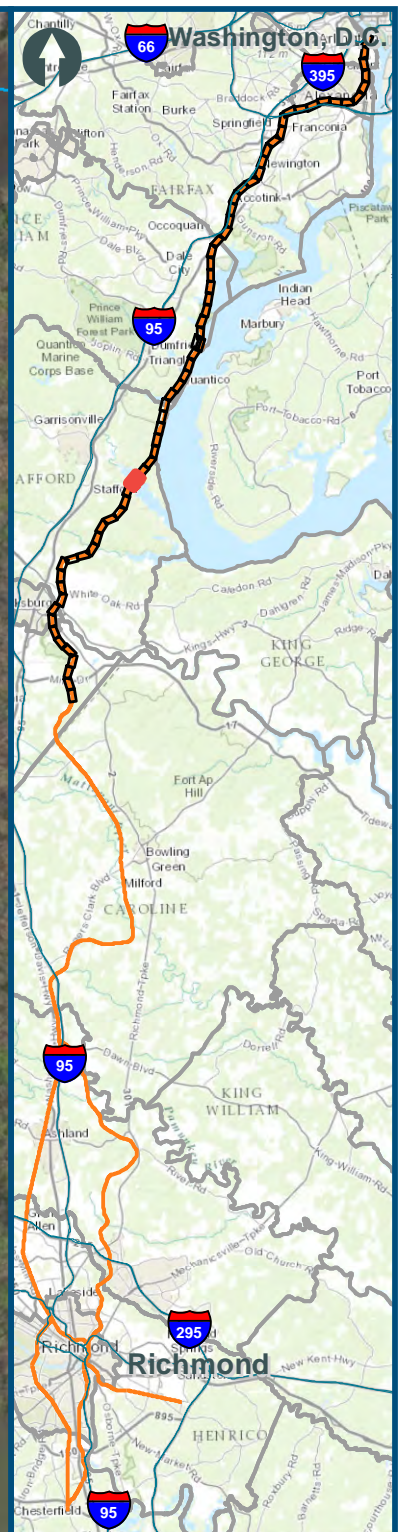


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- Legend**
- CSXT Mileposts
 - Third Track Under Construction by CSXT
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-46
Northern Virginia
Unconstrained
Alignment Option



Legend






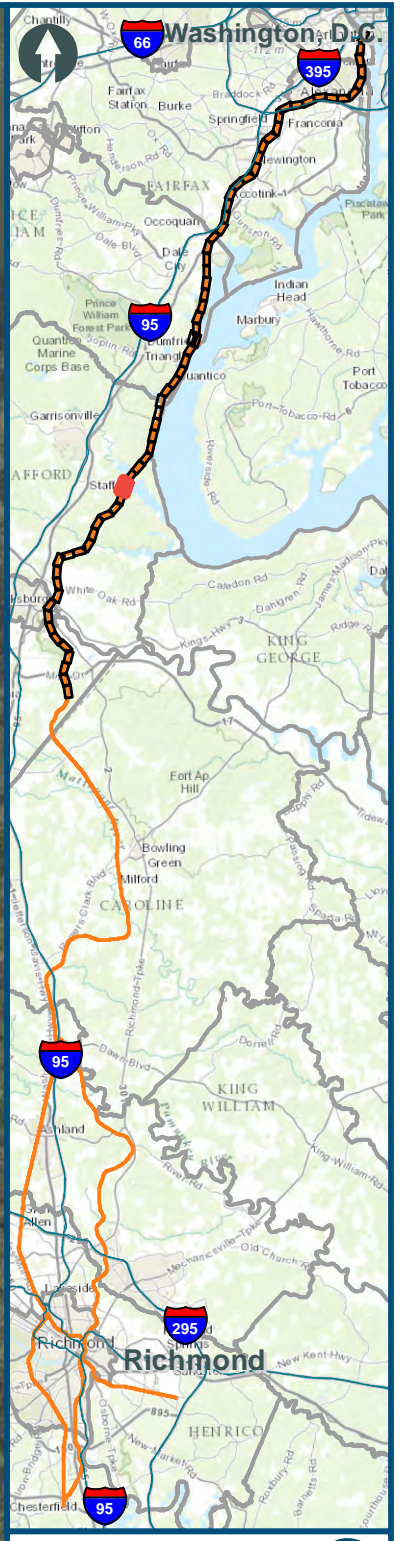
-  CSXT Mileposts
-  New Track
-  Existing Track
-  CSXT Right-of-Way
-  Streams

Figure F-47
Northern Virginia
Unconstrained
Alignment Option

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0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

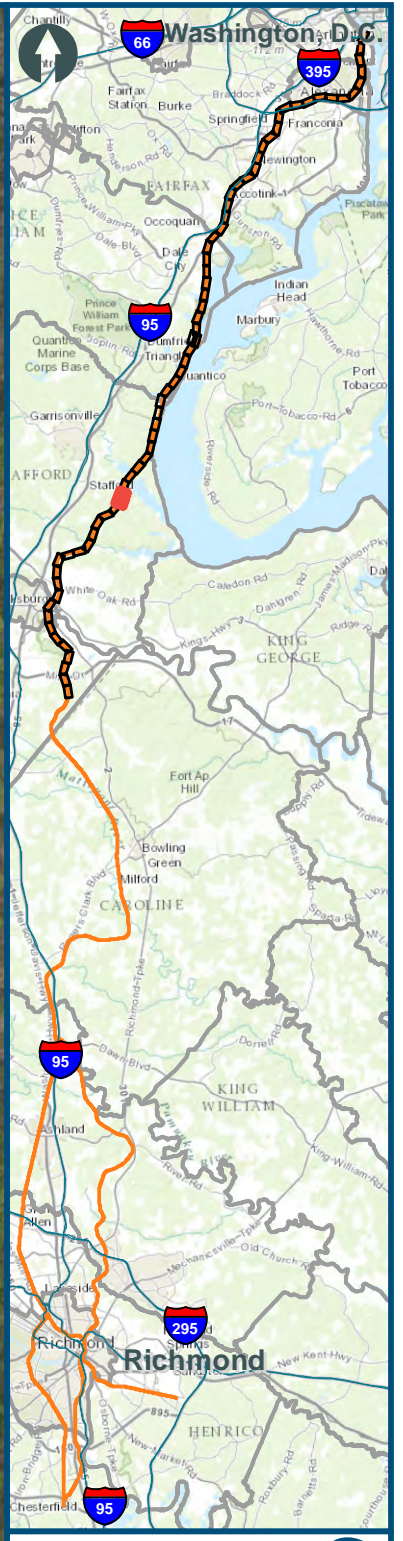
Figure F-48
Northern Virginia
Unconstrained
Alignment Option



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0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-49
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AllDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Chr6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.04.2015

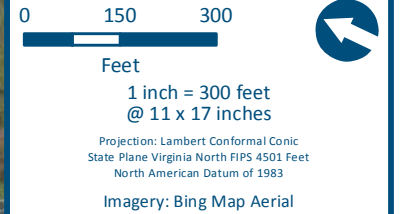
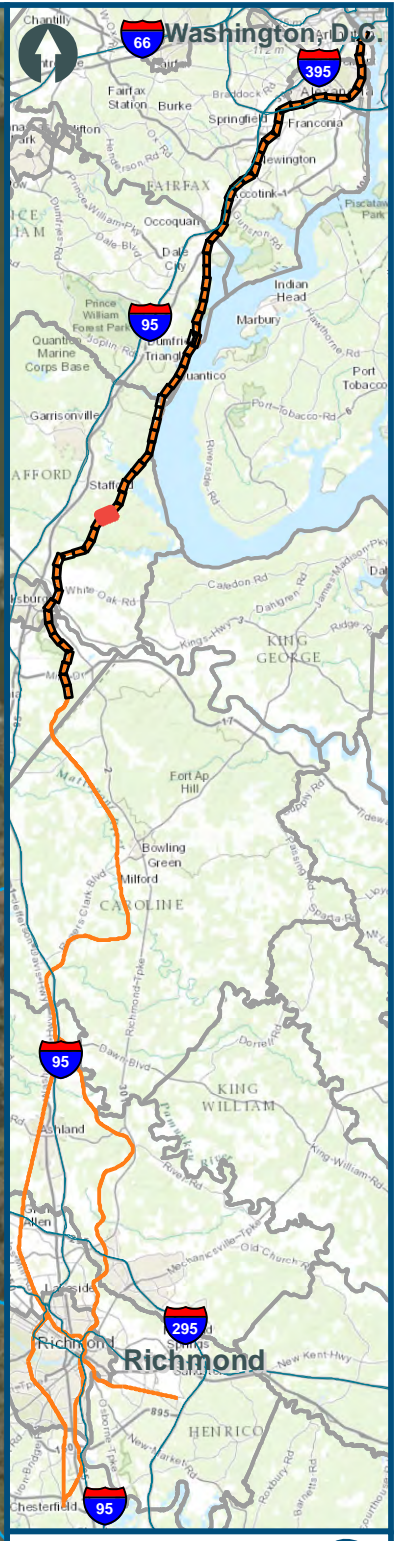


0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-50
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-Public\Transportation\0239056_RAPS-4\AllDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Cht6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.04.2015









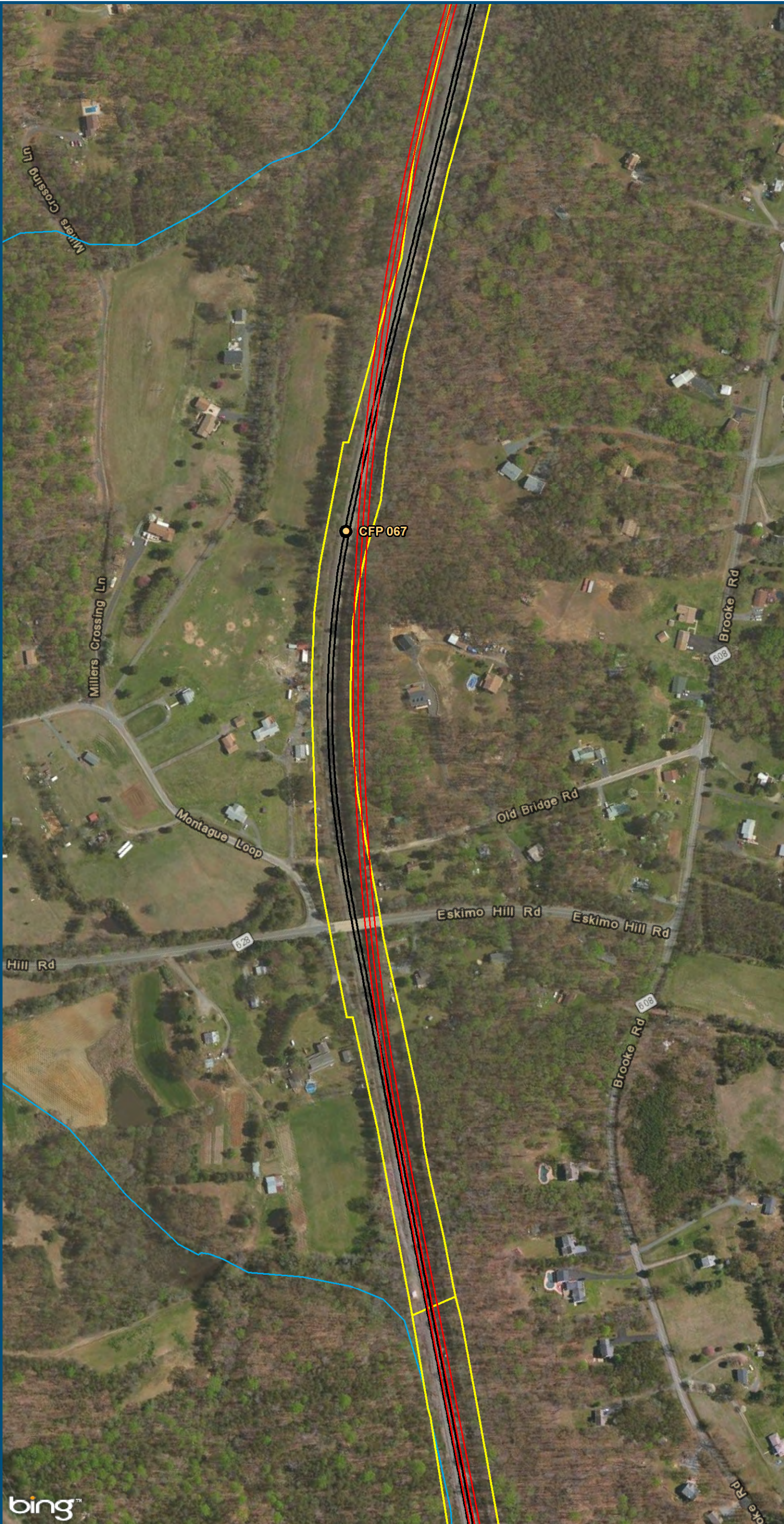
- Legend**
-  VRE Station
 -  CSXT Mileposts
 -  New Track
 -  Existing Track
 -  CSXT Right-of-Way
 -  Streams

Figure F-51
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-Public\Transportation\0239056_RAPS-4\AIDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Ch6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.04.2015

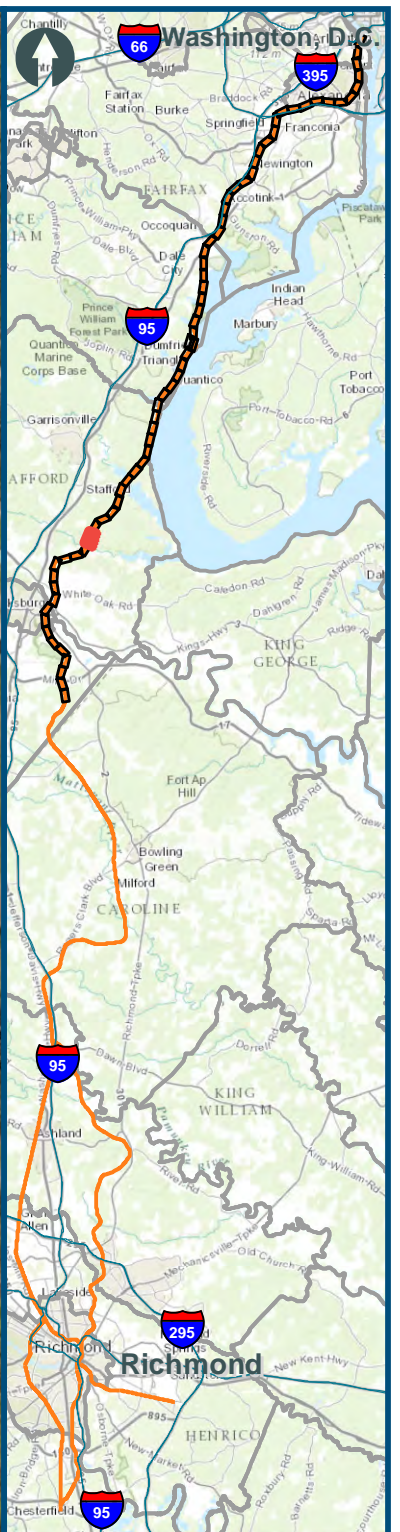
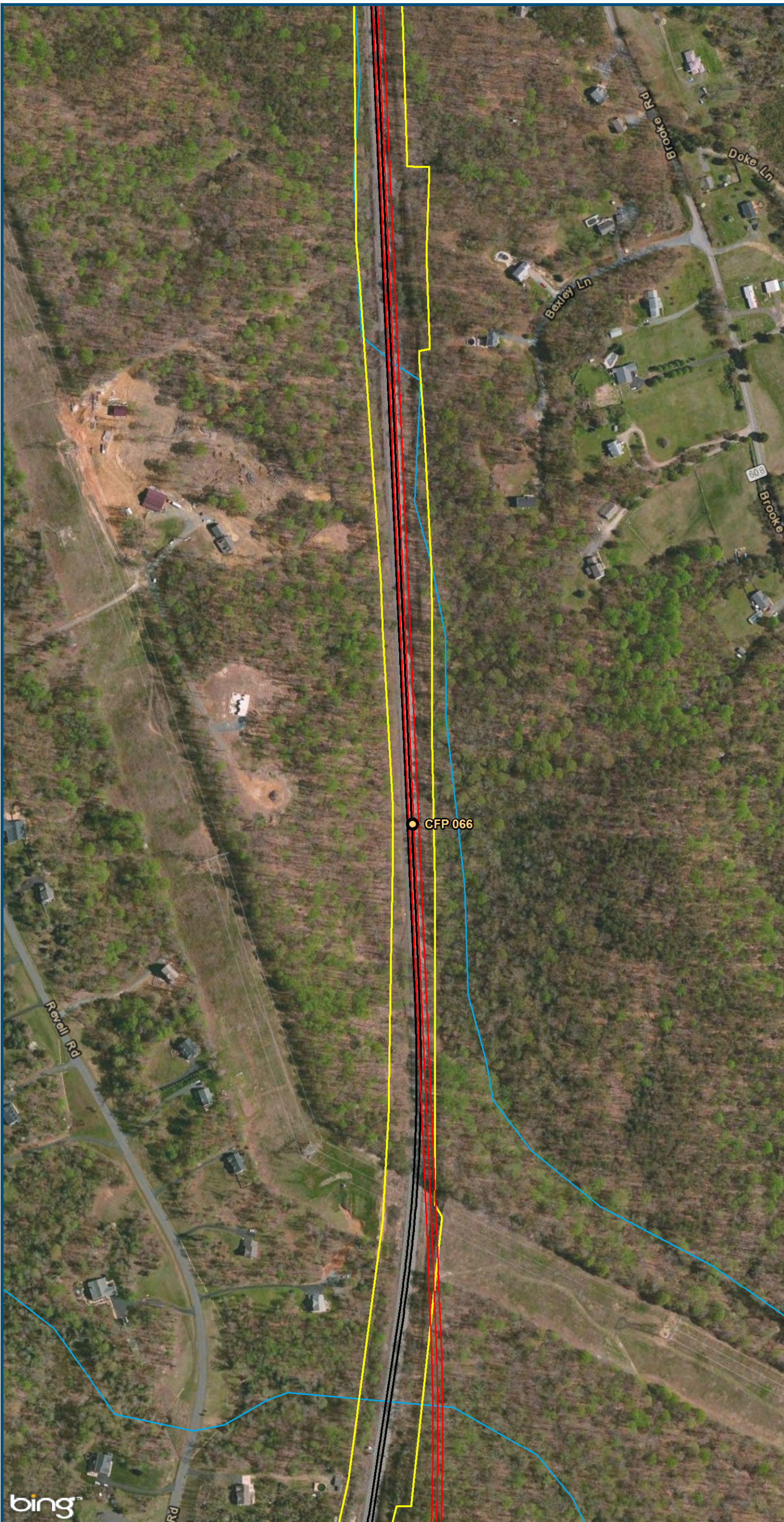


0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-52
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-Public\Transportation\0239056_RAPS-4\AIDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Ch6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.04.2015

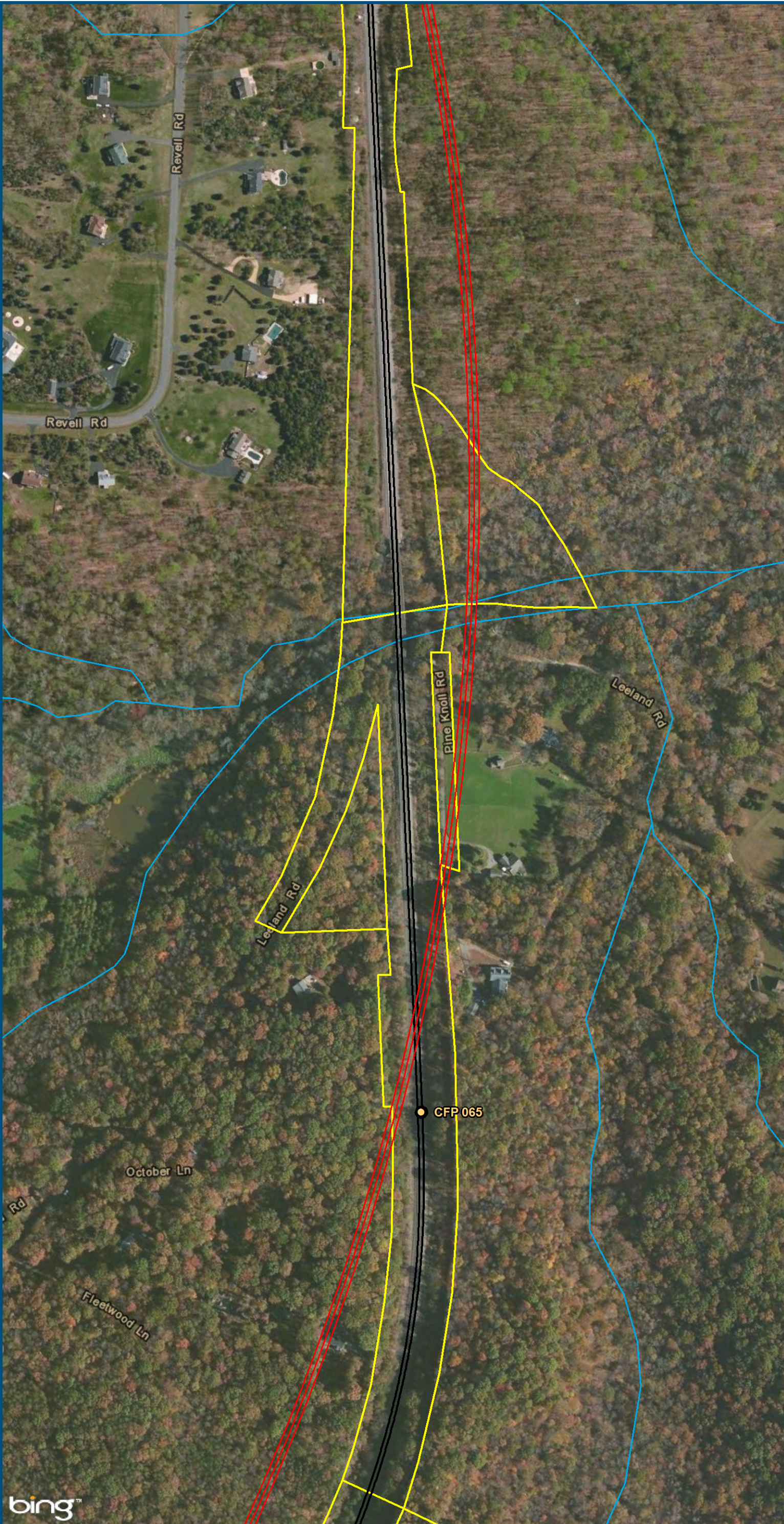


0 150 300
 Feet
 1 inch = 300 feet
 @ 11 x 17 inches
 Projection: Lambert Conformal Conic
 State Plane Virginia North FIPS 4501 Feet
 North American Datum of 1983
 Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-53
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AllDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Cht6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.04.2015



0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-54
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AIDev-ConceptEng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Chr6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.04.2015



0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-55
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\IDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Chr6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.04.2015



0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

Legend

- VRE Station
- CSXT Mileposts
- New Track
- Existing Track
- CSXT Right-of-Way
- Streams

Figure F-56
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\11545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AIDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Cht6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11/04/2015

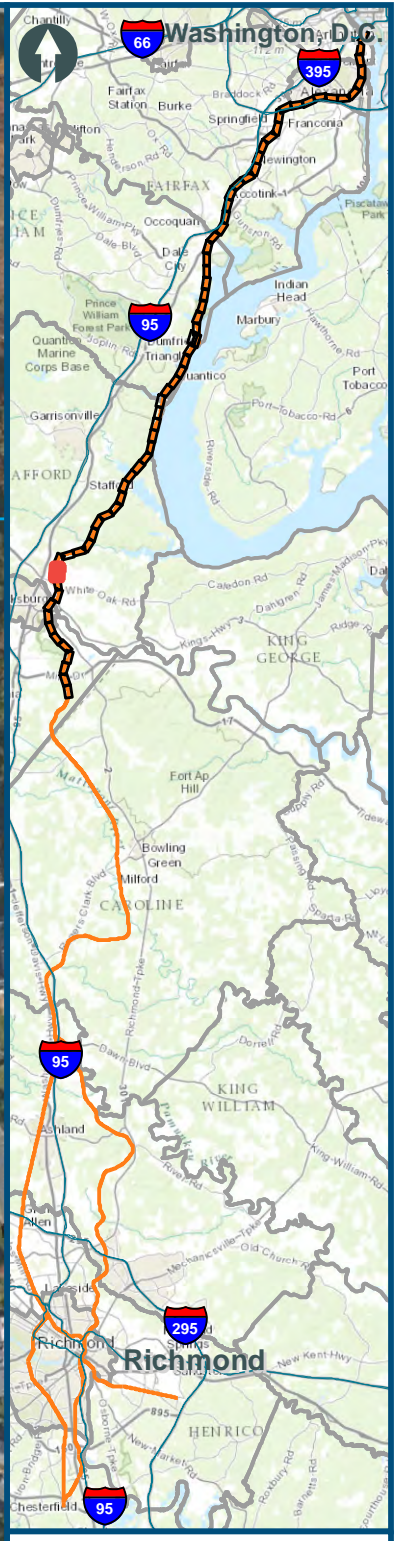
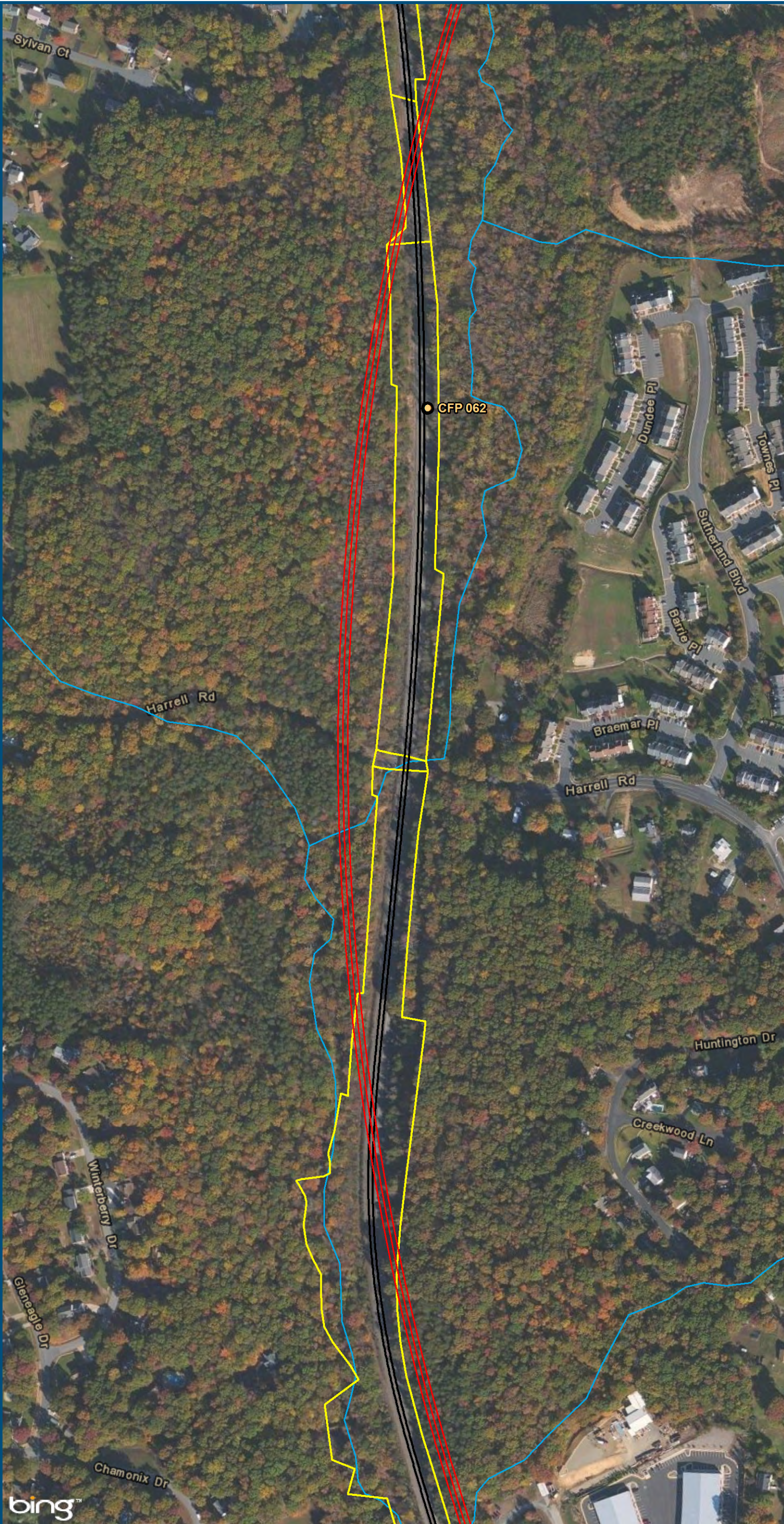


0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - ▭ CSXT Right-of-Way
 - Streams

Figure F-57
Northern Virginia
Unconstrained
Alignment Option

\\dlismain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AllDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Cht6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.04.2015



0 150 300

Feet
1 inch = 300 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983

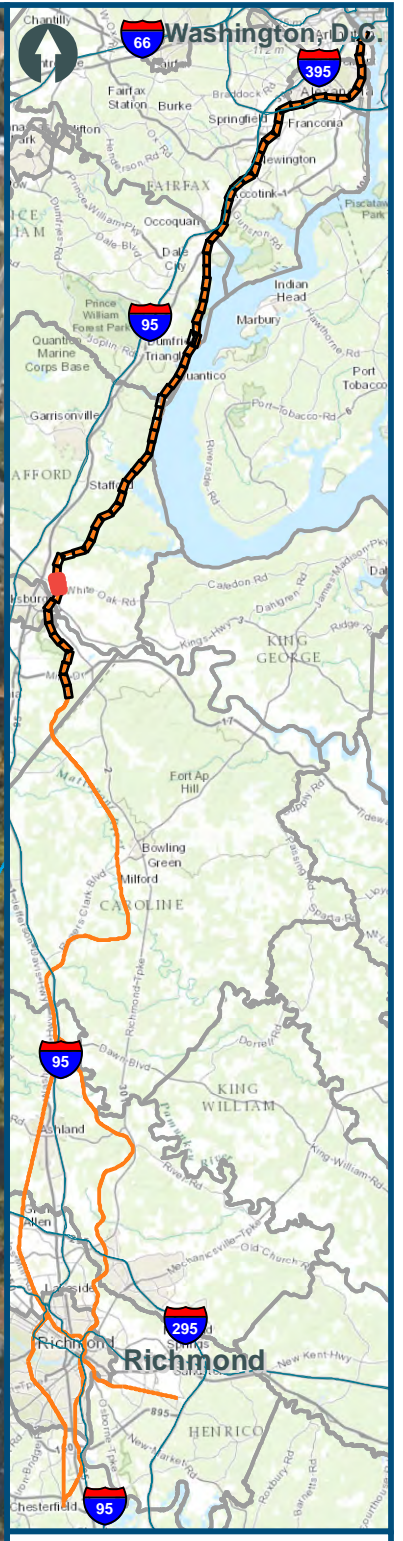
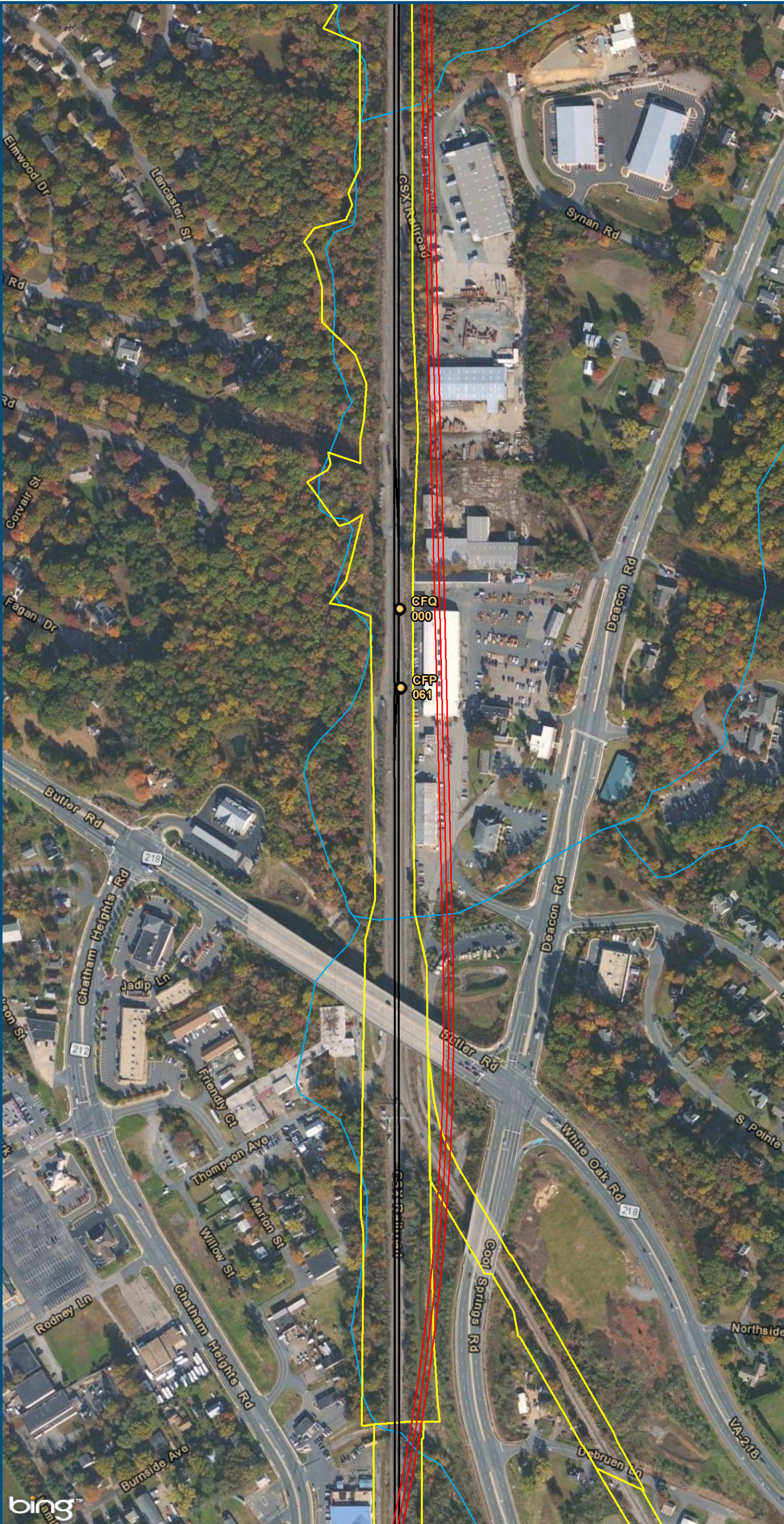
Imagery: Bing Map Aerial

Legend

- CSXT Mileposts
- New Track
- Existing Track
- CSXT Right-of-Way
- Streams

Figure F-58
Northern Virginia
Unconstrained
Alignment Option

\\dlmain\GIS_DATA\GIS\Projects\011545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AIDev-ConceptEng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Ch6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.04.2015

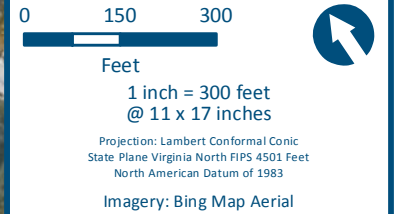
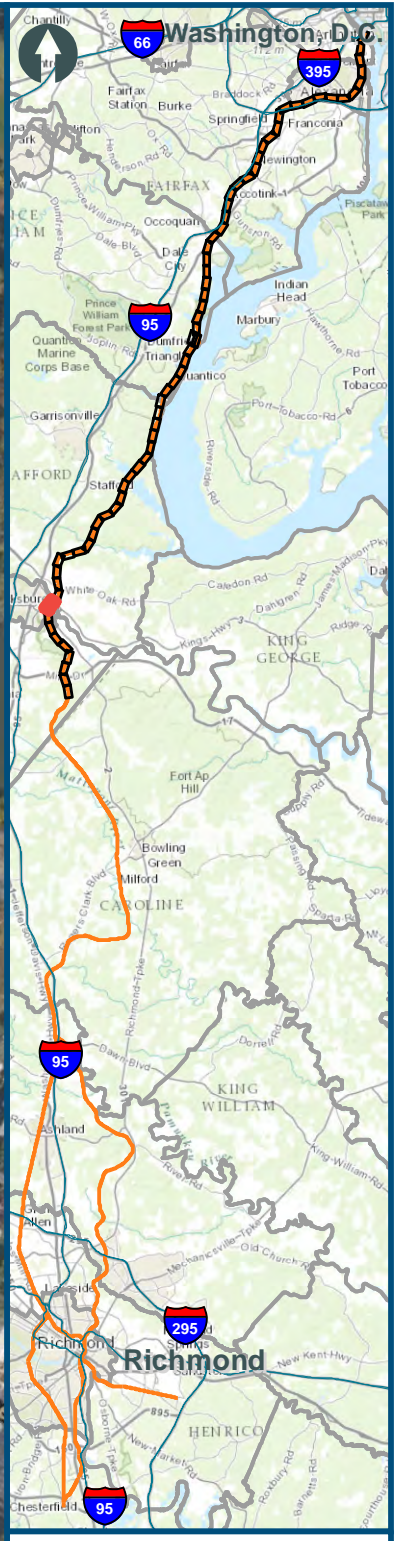


0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-59
Northern Virginia
Unconstrained
Alignment Option

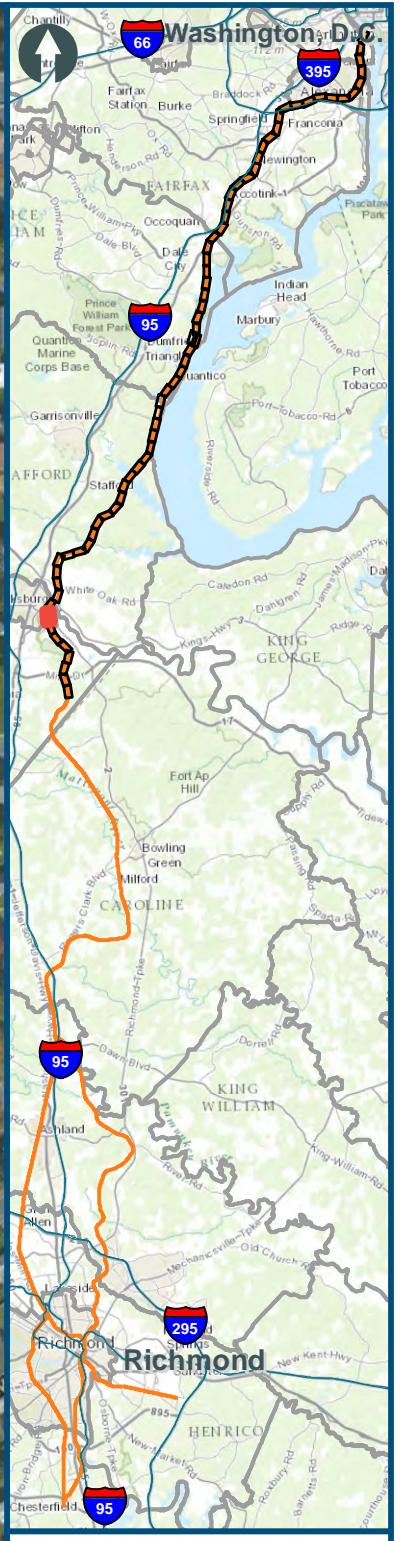
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- Legend**
- Amtrak/VRE Station
 - CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-61
Northern Virginia
Unconstrained
Alignment Option

\\dlmain\GIS_DATA\GIS\Projects\11545_VA\DeptofRails-PublicTransportation\0239056_RAPS-4\AIDev-Concept\Eng\map_docs\mxd\Alt_Tech_Report\DC2RVA_Cht6_Appendices_NOV_Unconstrained_Alignments_11x17.mxd | Last Updated: 11.04.2015



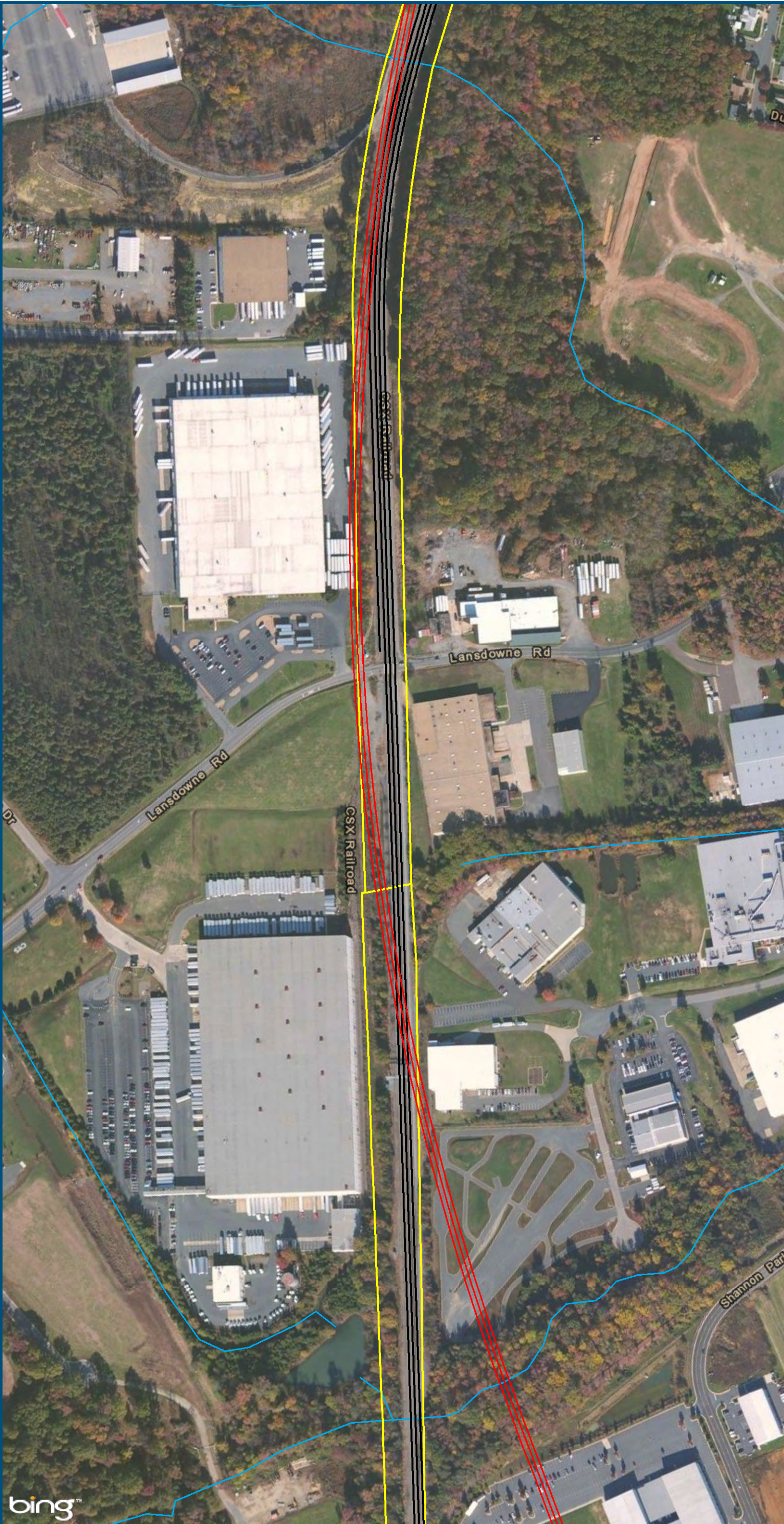
0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

Legend

- CSXT Mileposts
- New Track
- Existing Track
- CSXT Right-of-Way
- Streams

Figure F-62
Northern Virginia
Unconstrained
Alignment Option

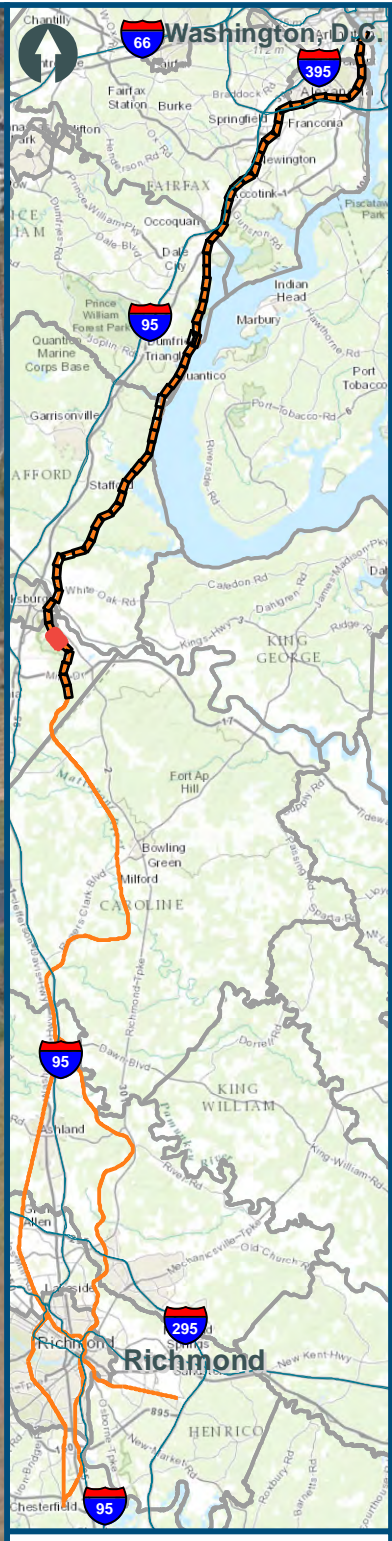
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0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-63
Northern Virginia
Unconstrained
Alignment Option



0 150 300
 Feet
 1 inch = 300 feet
 @ 11 x 17 inches
 Projection: Lambert Conformal Conic
 State Plane Virginia North FIPS 4501 Feet
 North American Datum of 1983
 Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-64
Northern Virginia
Unconstrained
Alignment Option

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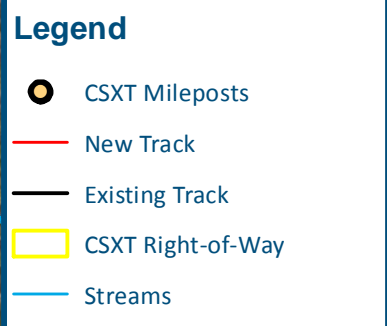
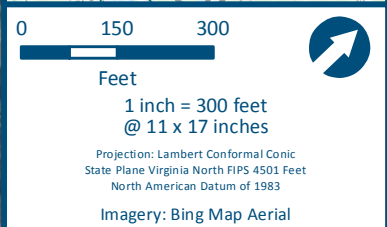
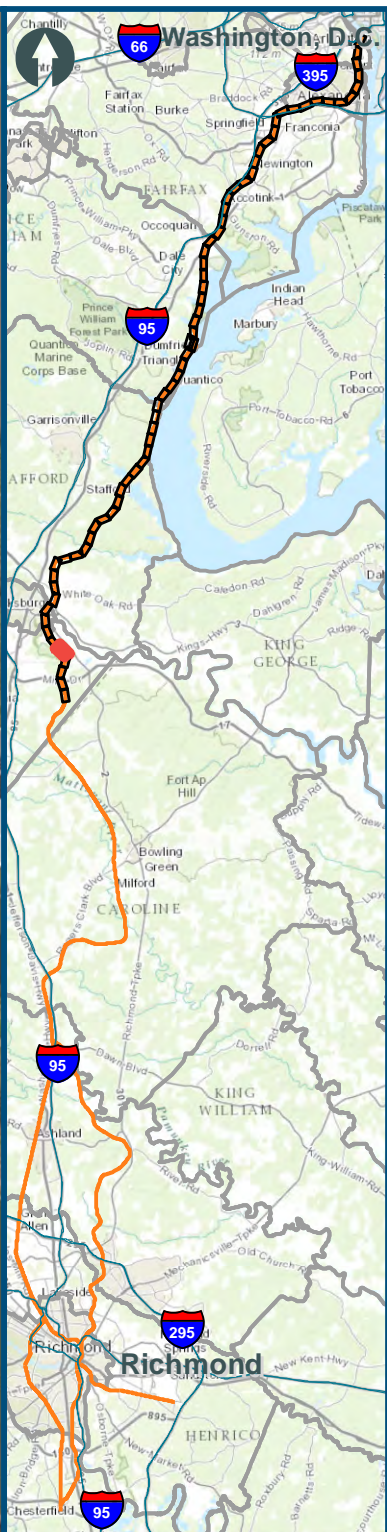
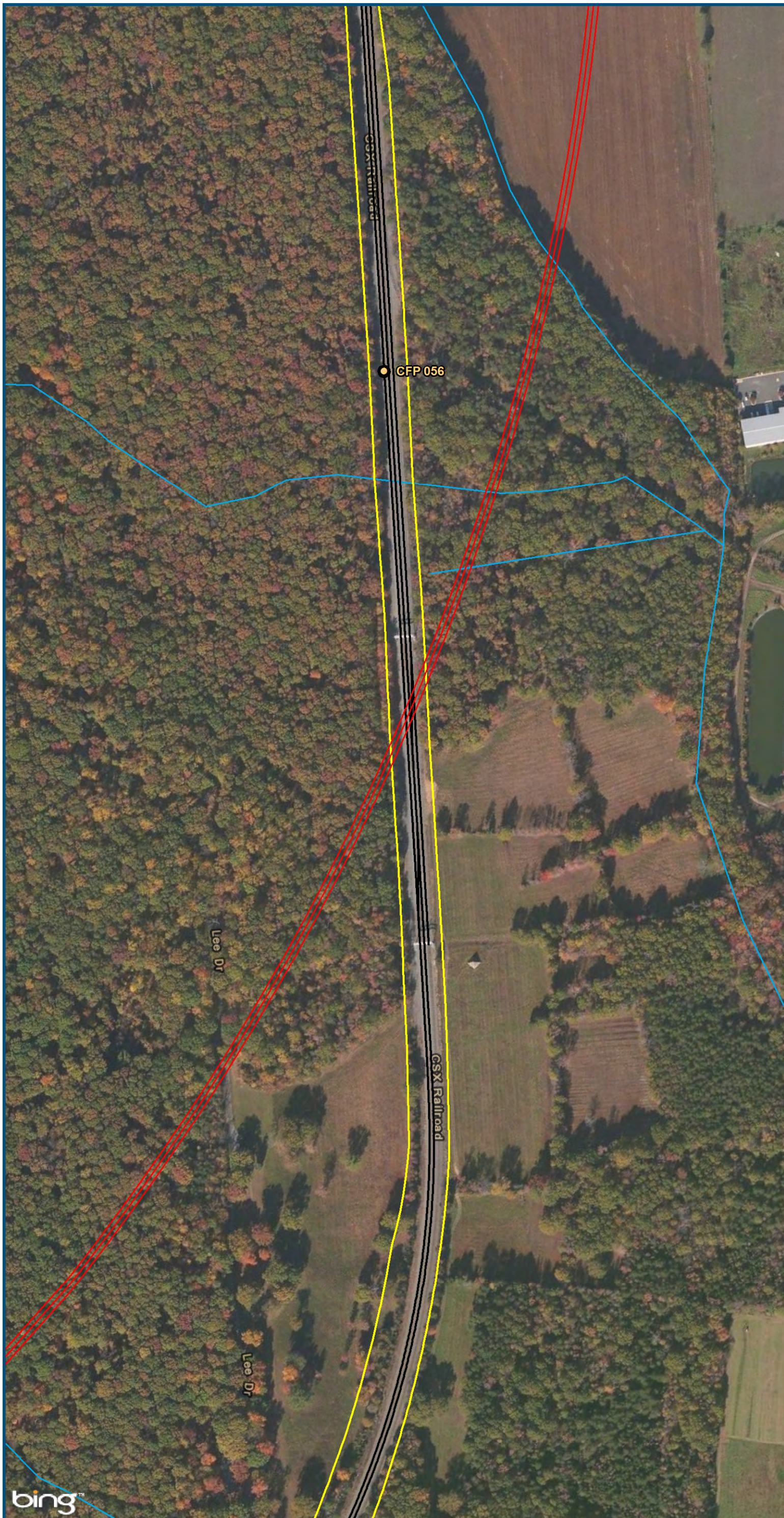
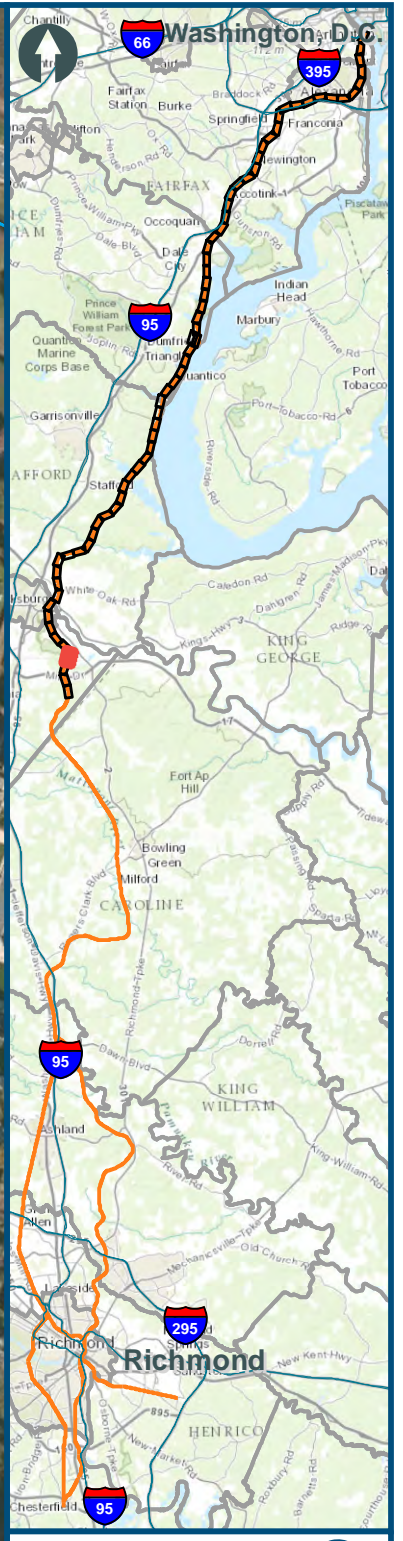
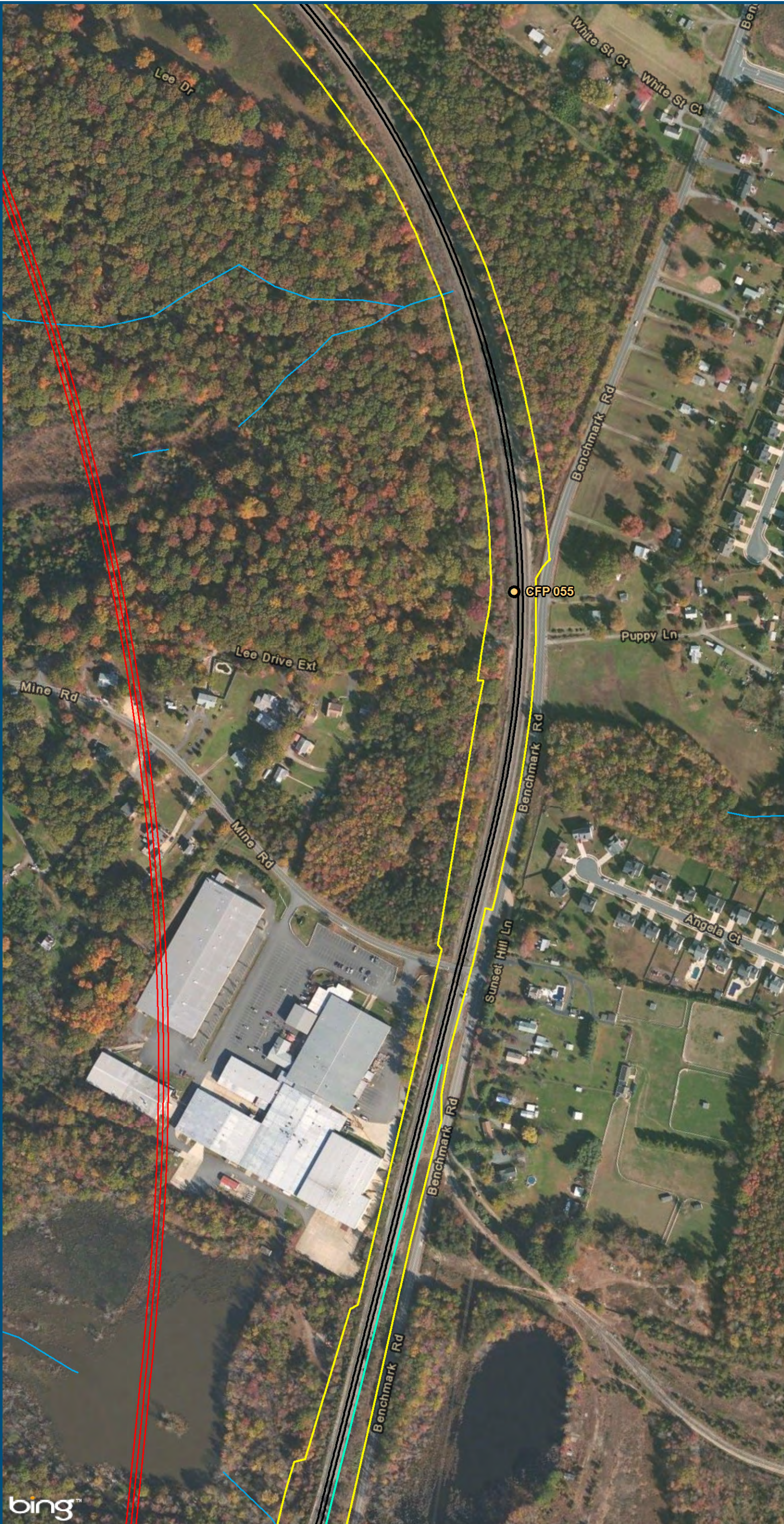


Figure F-65
Northern Virginia
Unconstrained
Alignment Option

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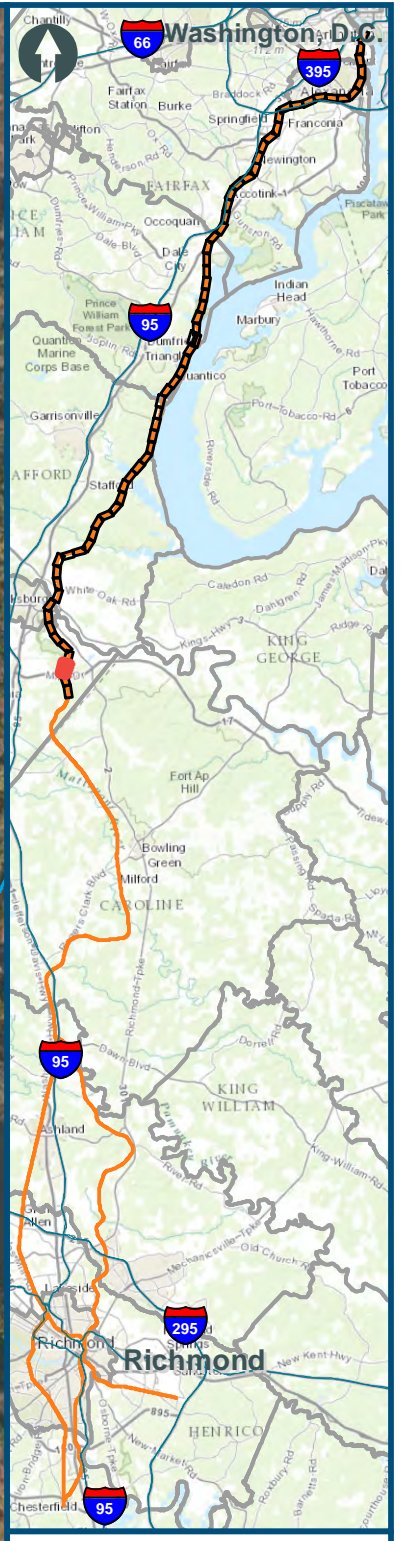
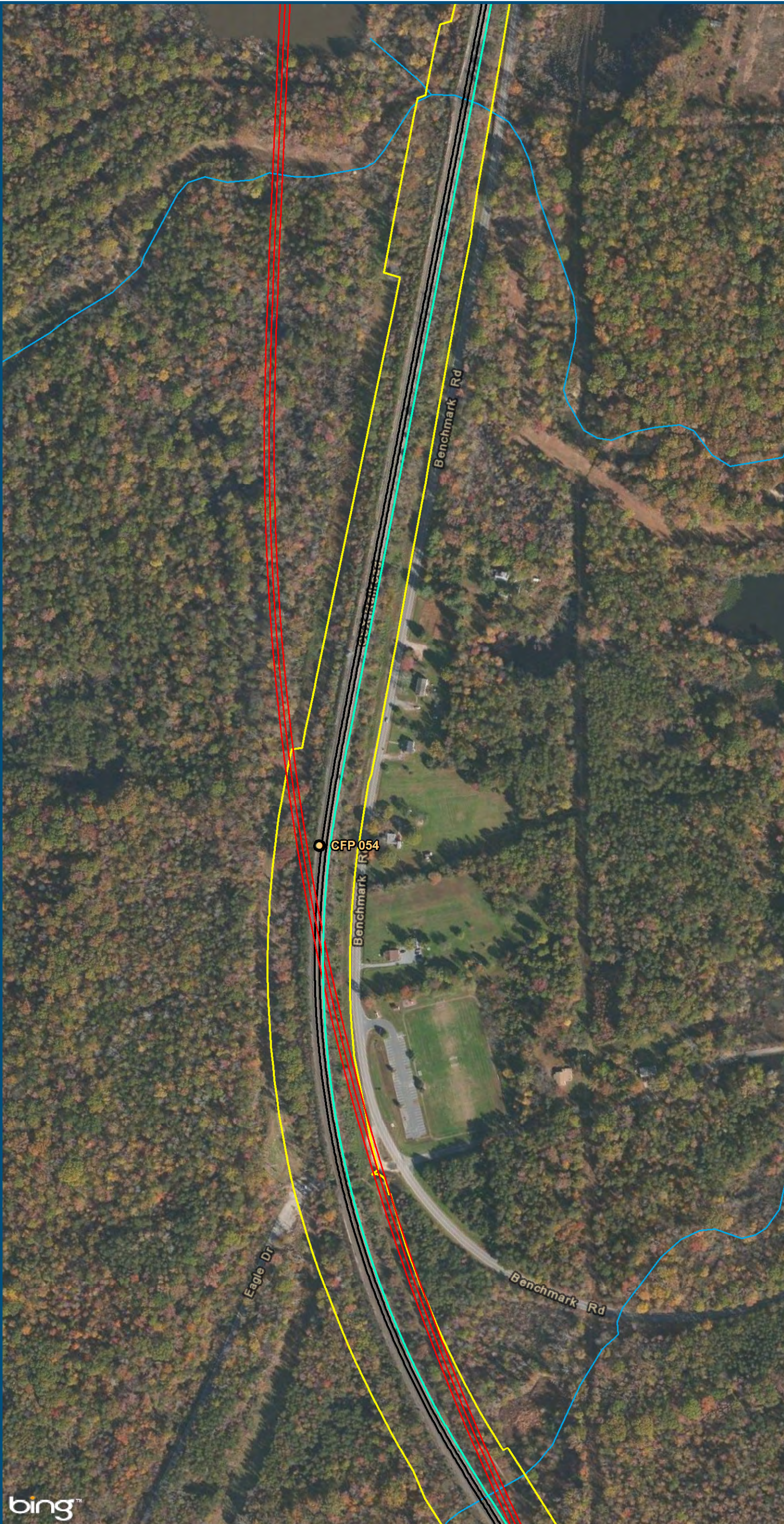


0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - Third Track Under Construction by CSXT
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-66
Northern Virginia
Unconstrained
Alignment Option

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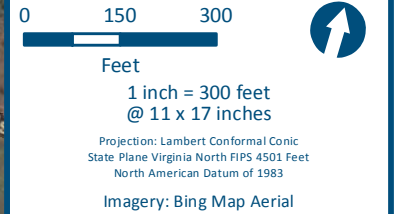
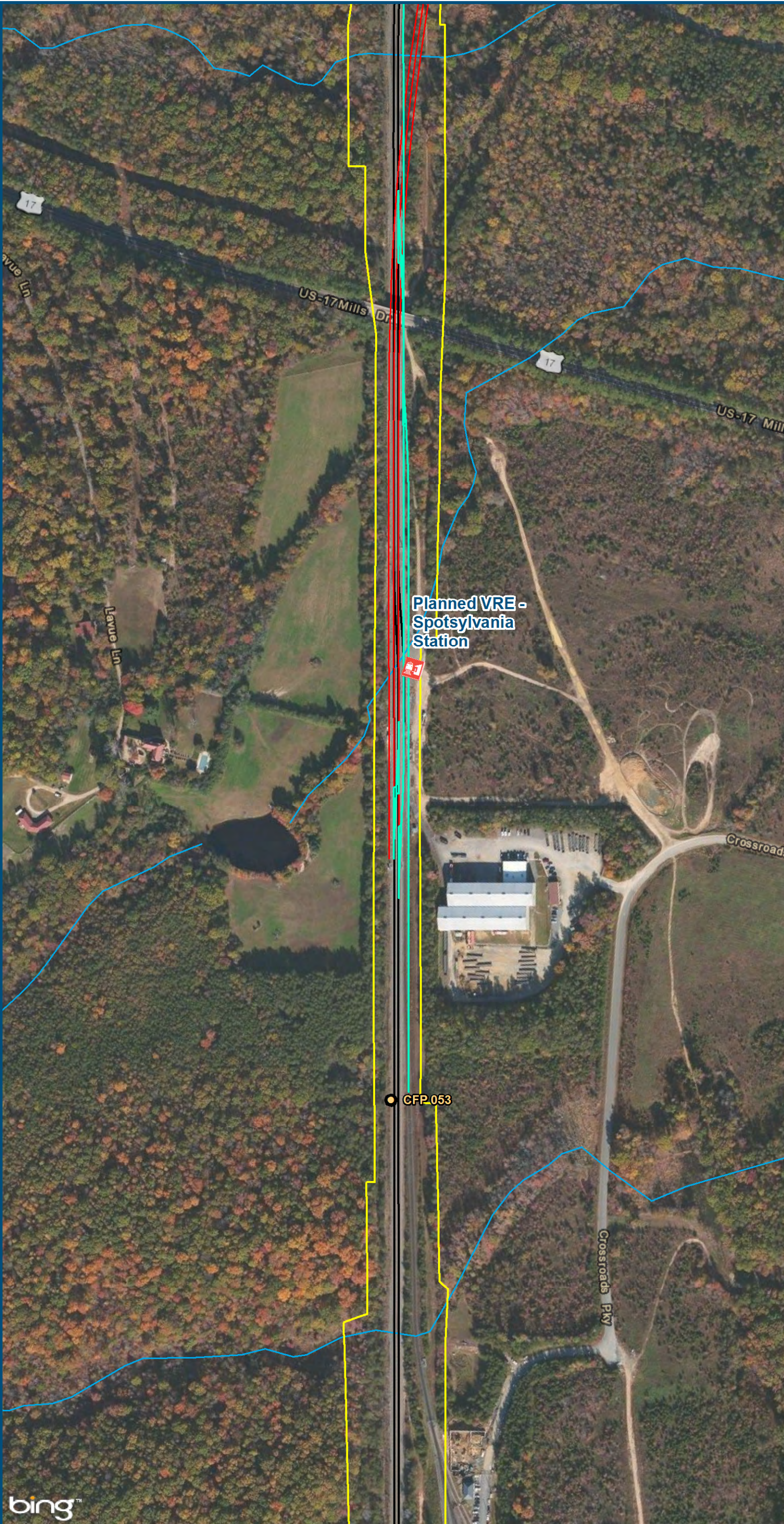


0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - Third Track Under Construction by CSXT
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-67
Northern Virginia
Unconstrained
Alignment Option

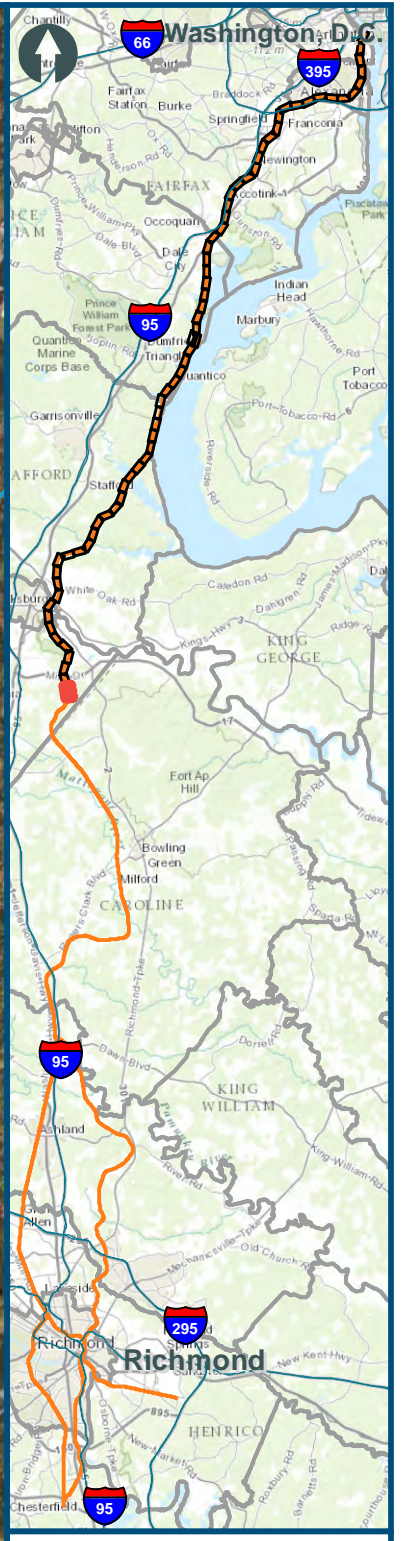
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- Legend**
-  VRE Station
 -  CSXT Mileposts
 -  Third Track Under Construction by CSXT
 -  New Track
 -  Existing Track
 -  CSXT Right-of-Way
 -  Streams

Figure F-68
Northern Virginia
Unconstrained
Alignment Option

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0 150 300
Feet
1 inch = 300 feet
@ 11 x 17 inches
Projection: Lambert Conformal Conic
State Plane Virginia North FIPS 4501 Feet
North American Datum of 1983
Imagery: Bing Map Aerial

- Legend**
- CSXT Mileposts
 - New Track
 - Existing Track
 - CSXT Right-of-Way
 - Streams

Figure F-69
Northern Virginia
Unconstrained
Alignment Option