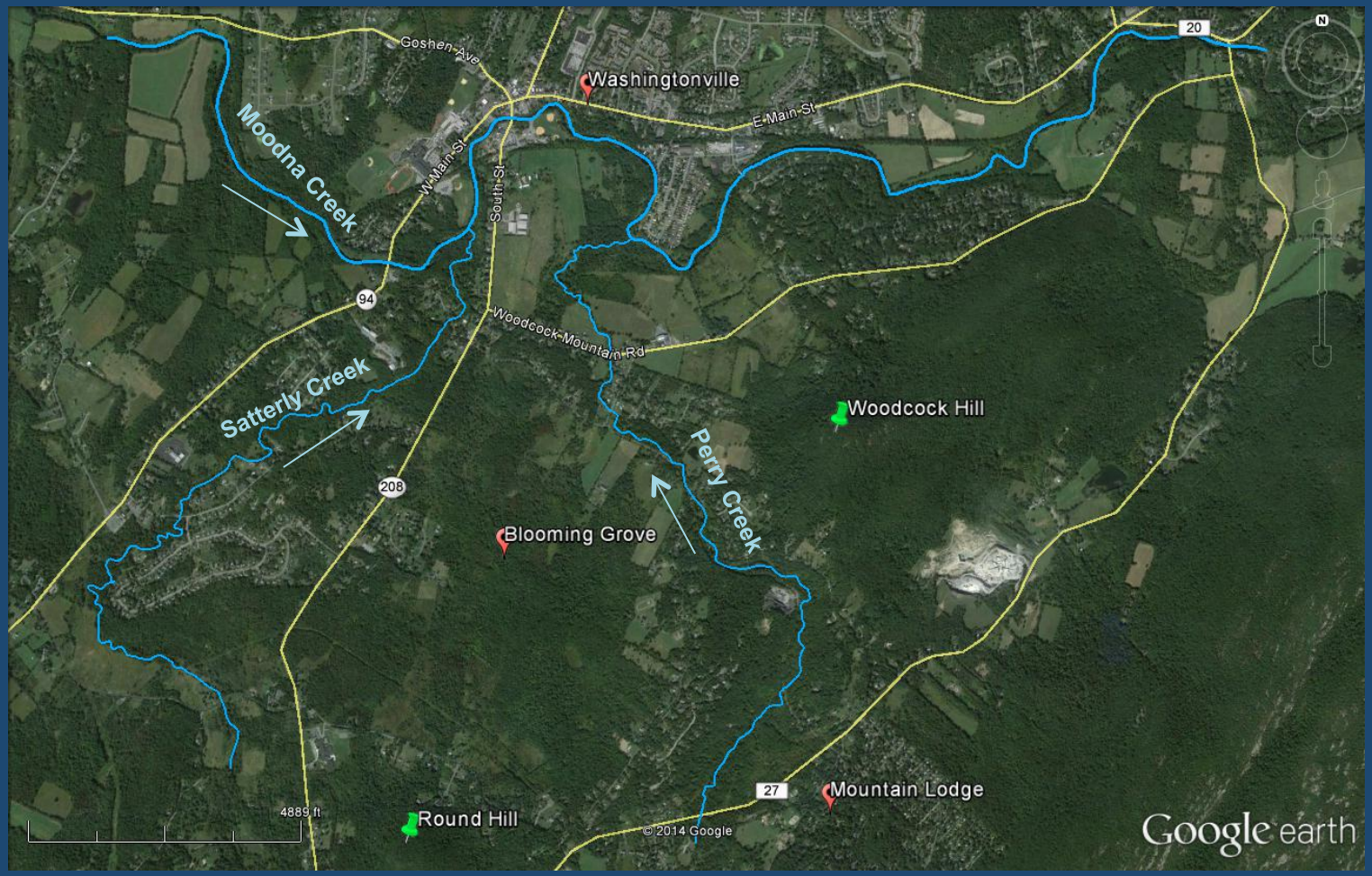
NYRCR
Town of Blooming Grove
Hydraulic Modeling Baseline

August 20, 2014

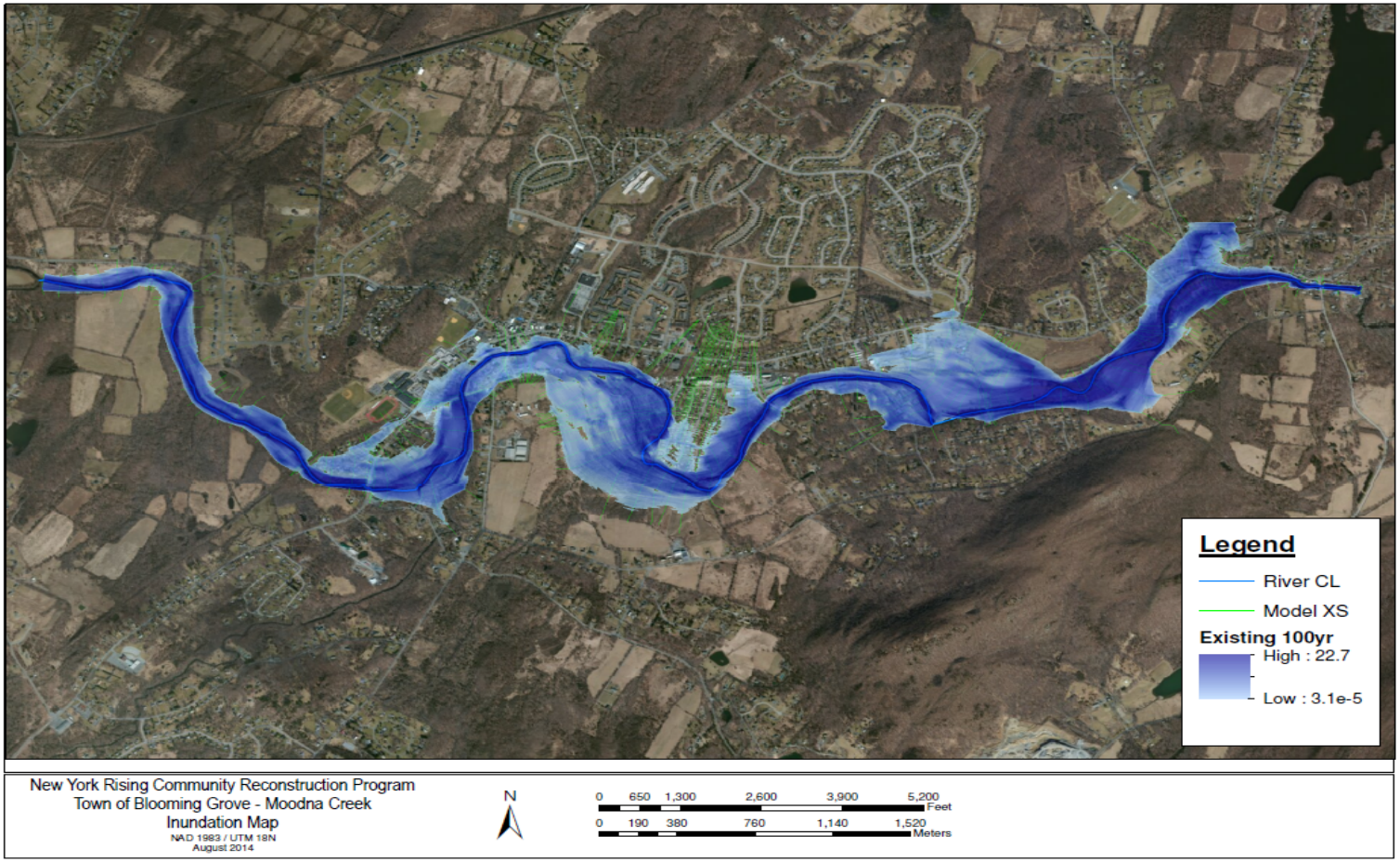
Study Area


Goshen Ave
Washingtonville
E Main St
W Main St
South St
Moodna Creek
94
Woodcock Mountain Rd
Satterly Creek
Woodcock Hill
Perry Creek
208
Blooming Grove
20
27
Mountain Lodge
Round Hill
4889 ft
© 2014 Google
Google earth

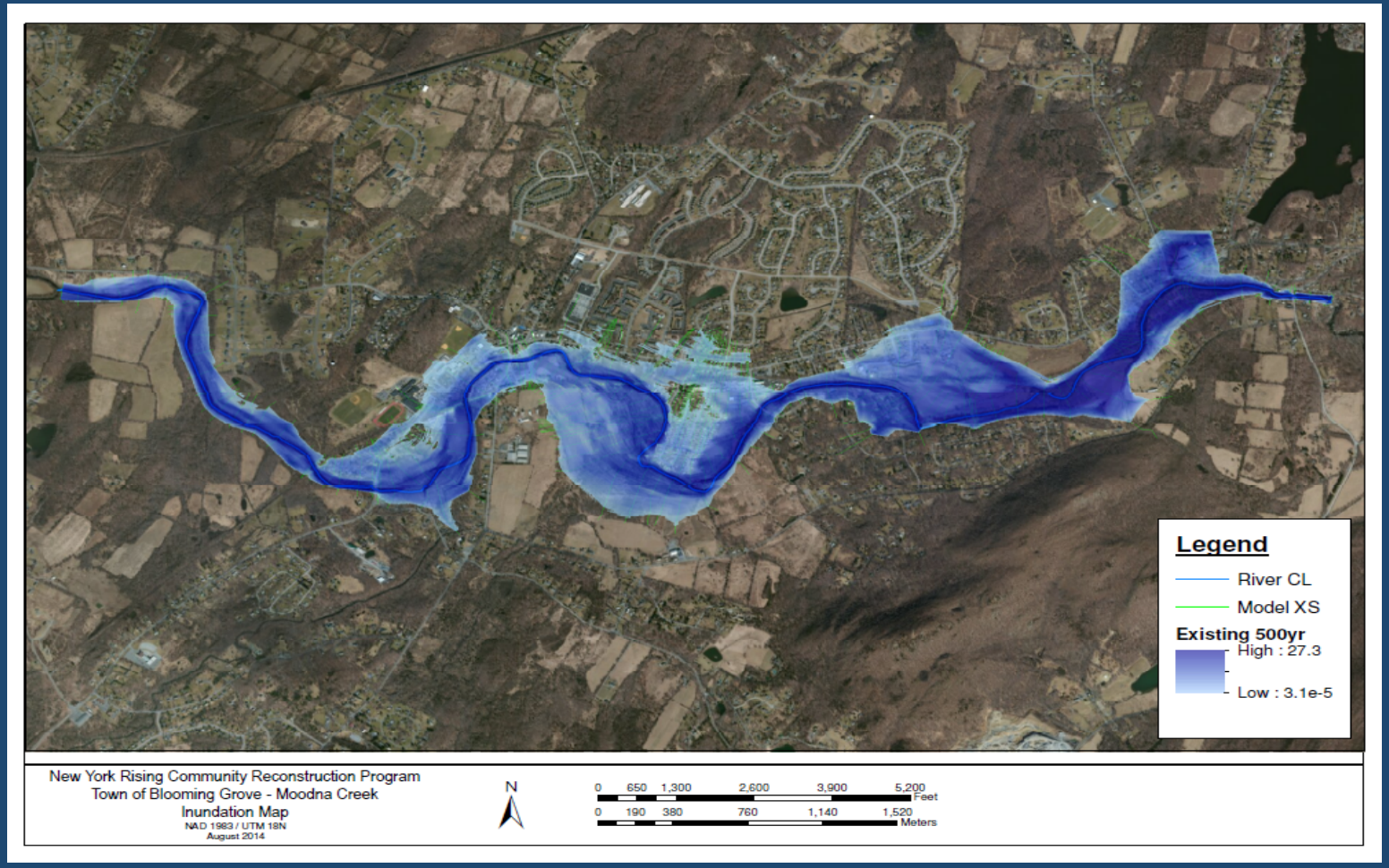
HEC-RAS Model

- Developed by U.S. Army Corps of Engineers
  - Simulate the water flow through a drainage area
- Predict the Water Surface Elevation (WSE) and extents of flooding for a given storm event
  - E.g., 100-year or 1% annual-chance event
- Assess the effectiveness of flood mitigation alternatives
  - Evaluate and compare potential benefits in terms of reduced flooding WSE and extents

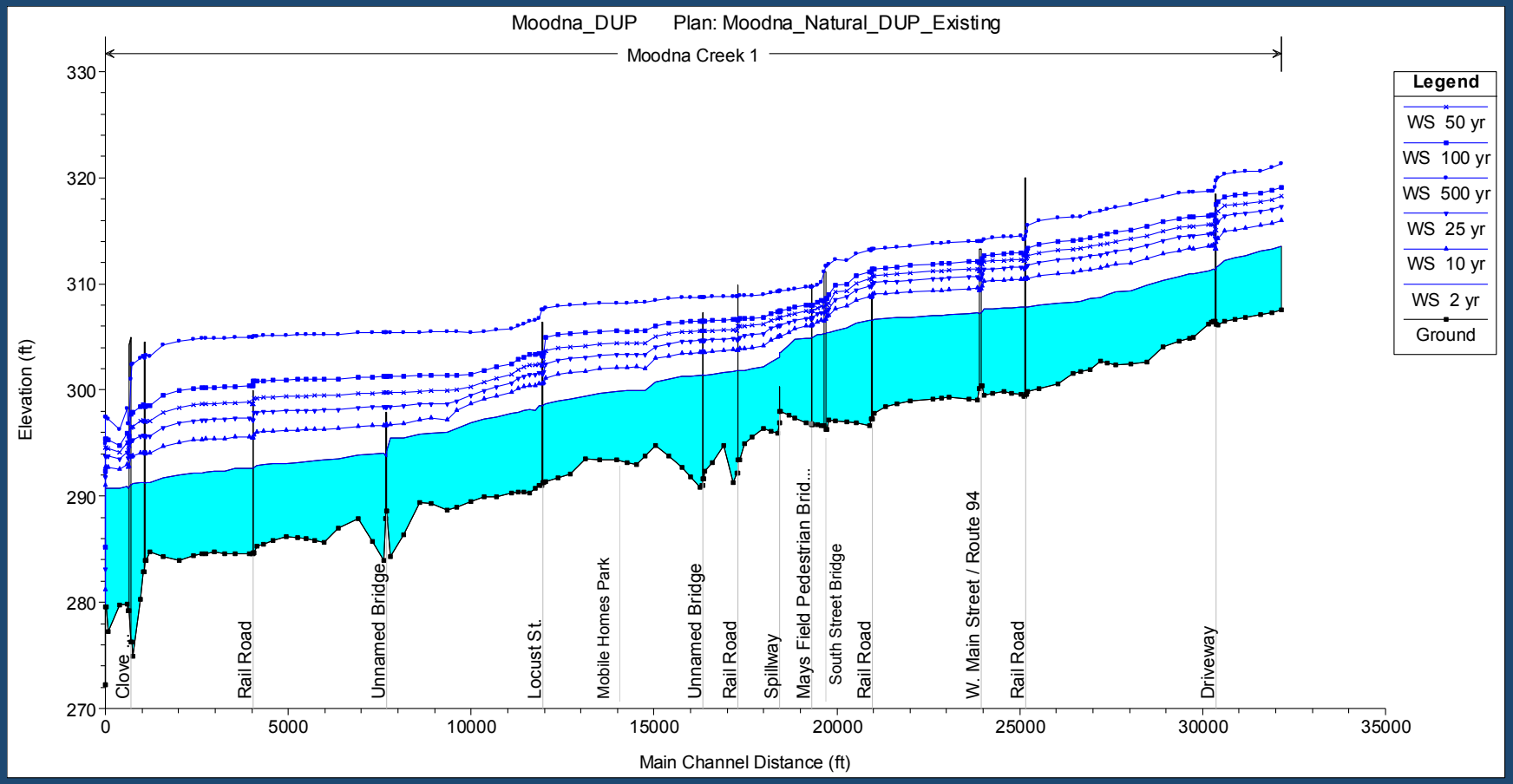
Moodna Creek – Existing Floodplain (100-year)



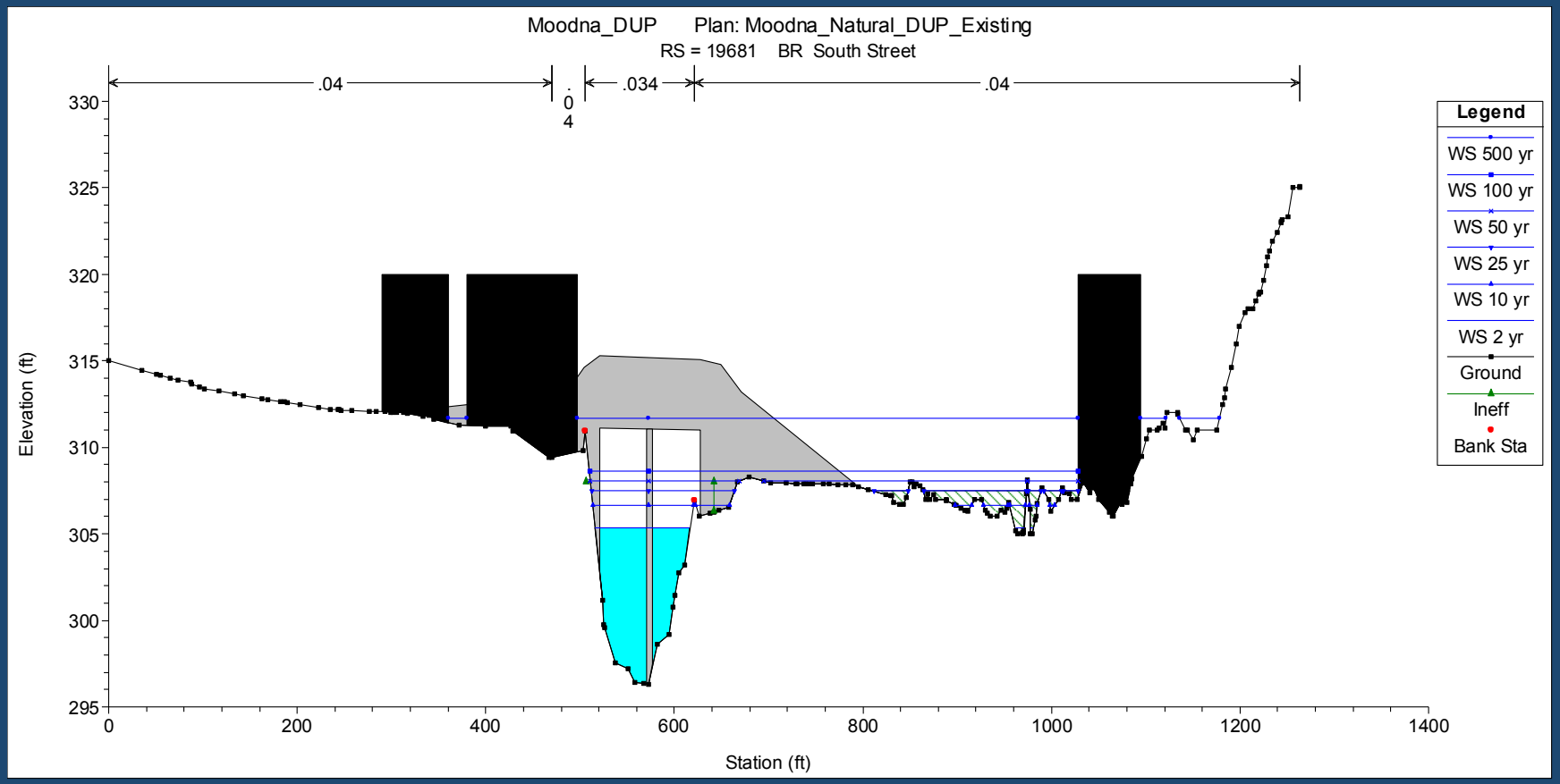
Moodna Creek – Existing Floodplain (500-year)



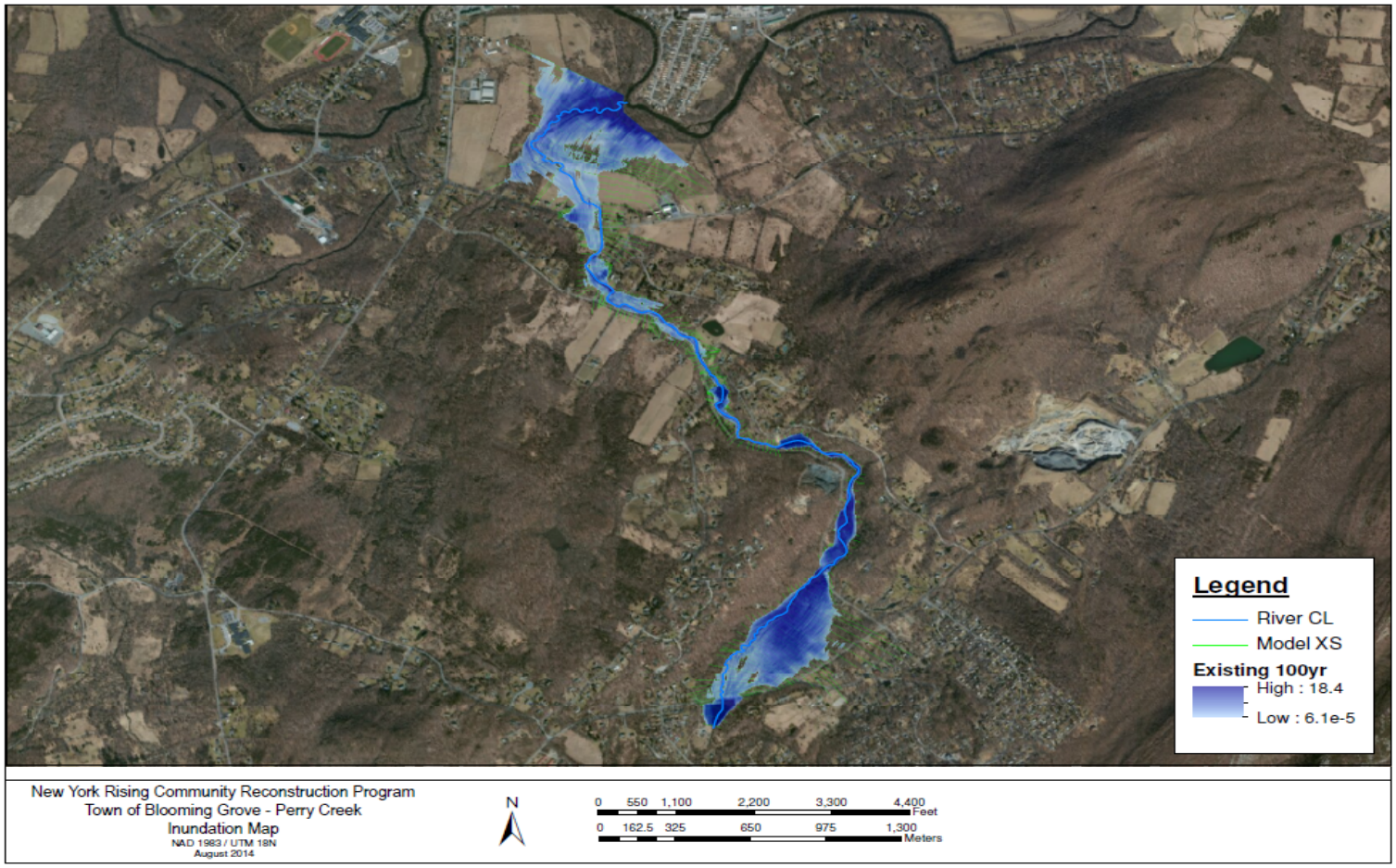
Moodna Creek (Water Surface Profile)



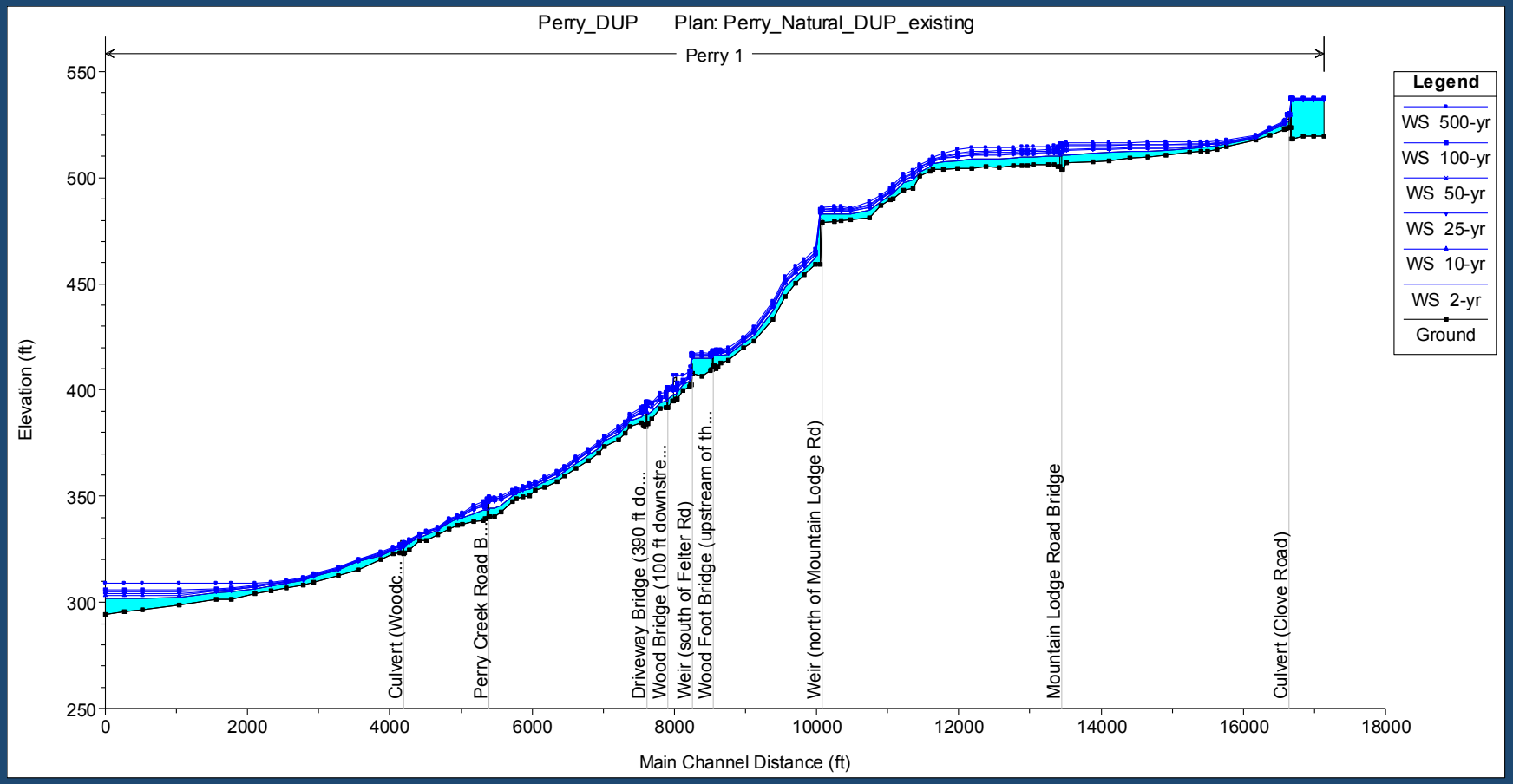
Moodna Creek – South St. Bridge (Cross Section)



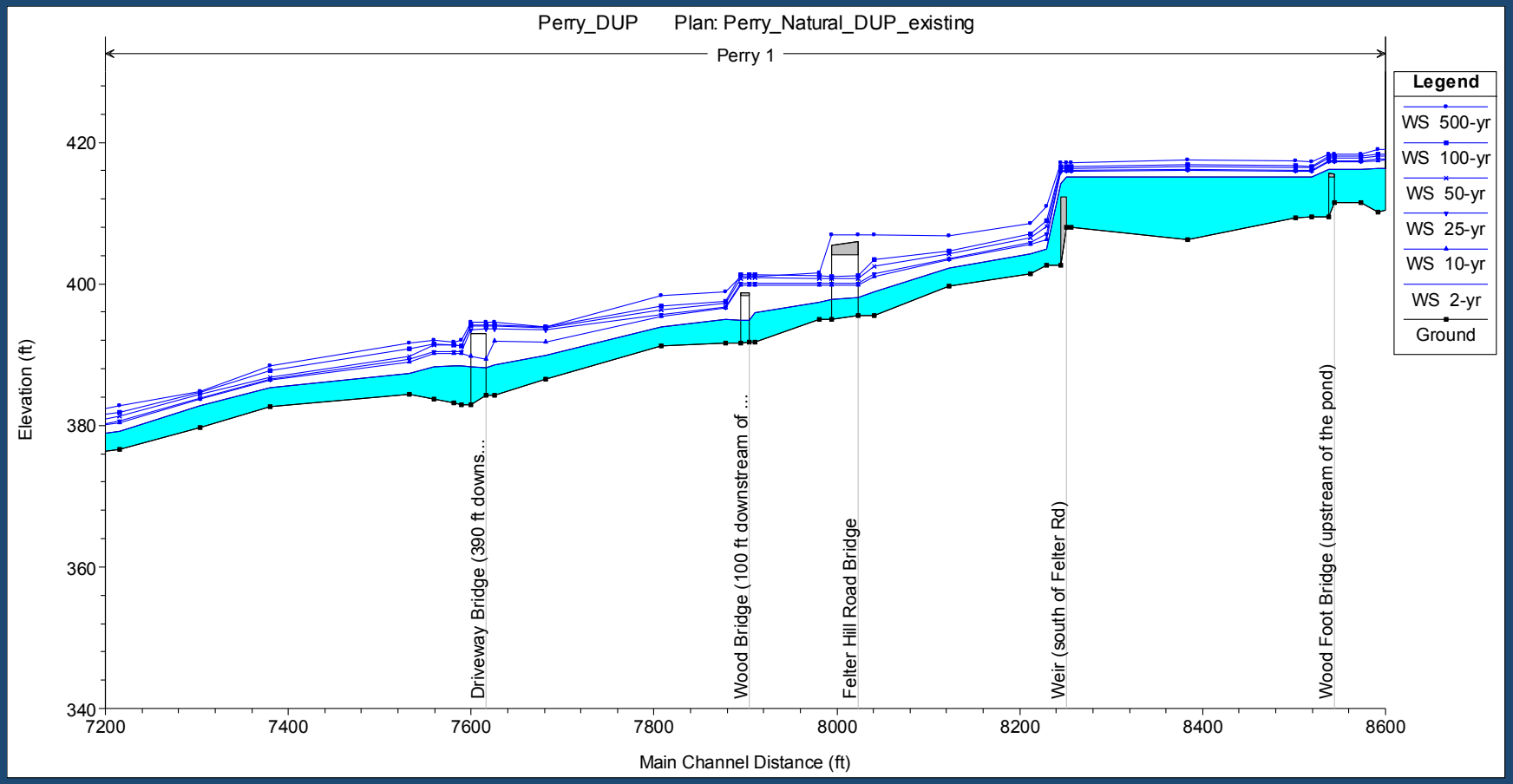
Perry Creek – Existing Floodplain (100-year)



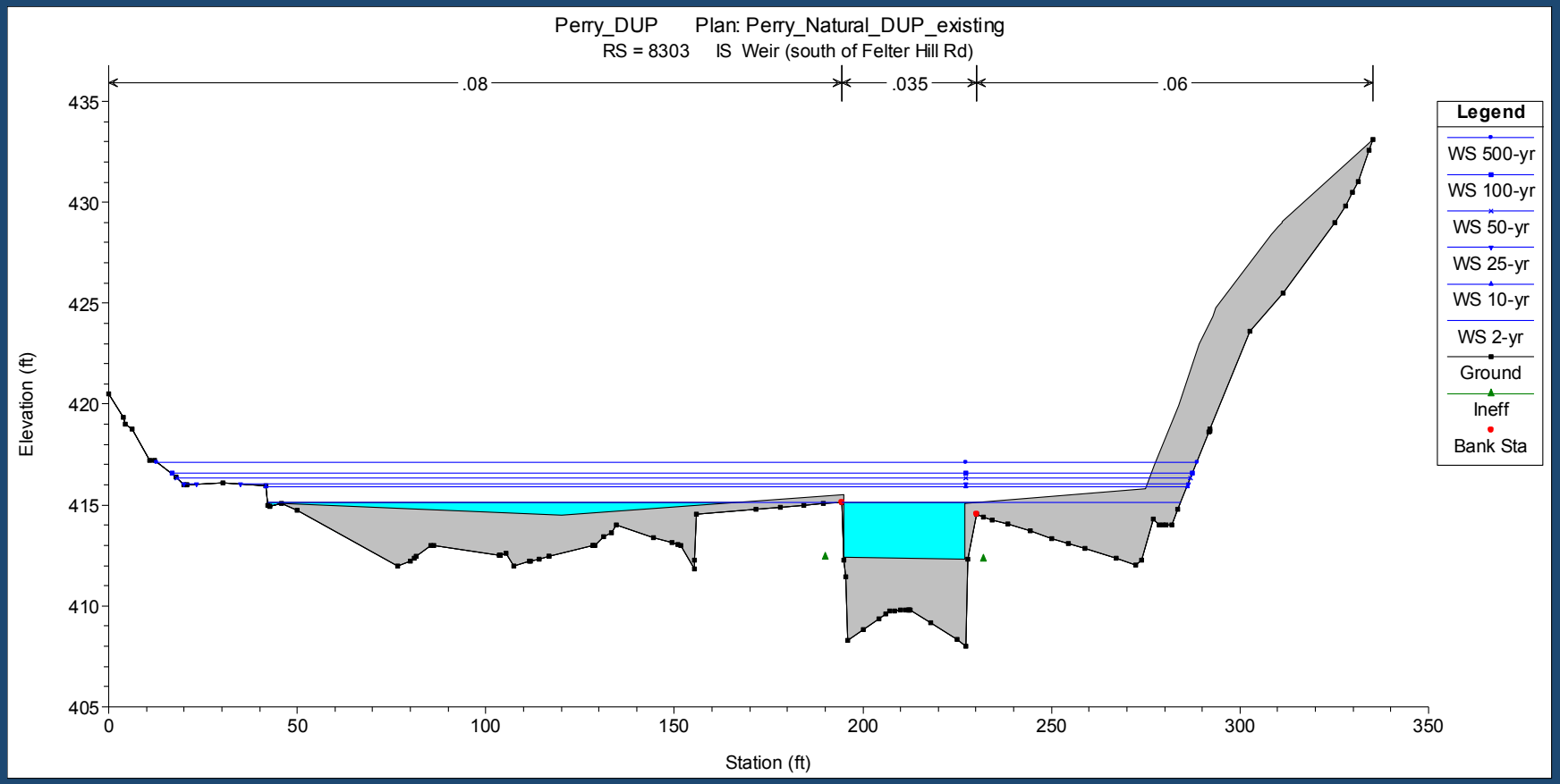
Perry Creek (Water Surface Profile)



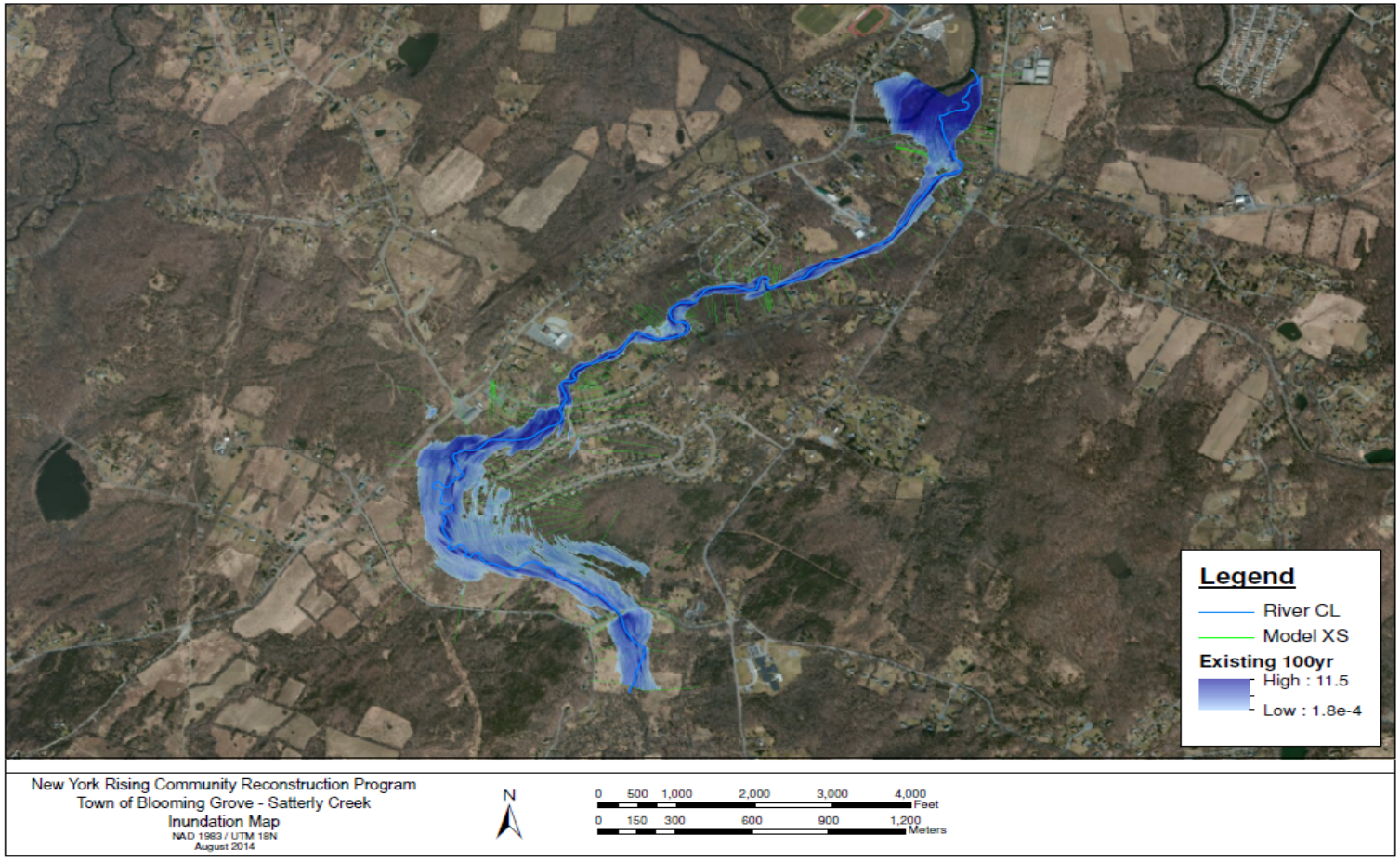
Perry Creek (Water Surface Profile)



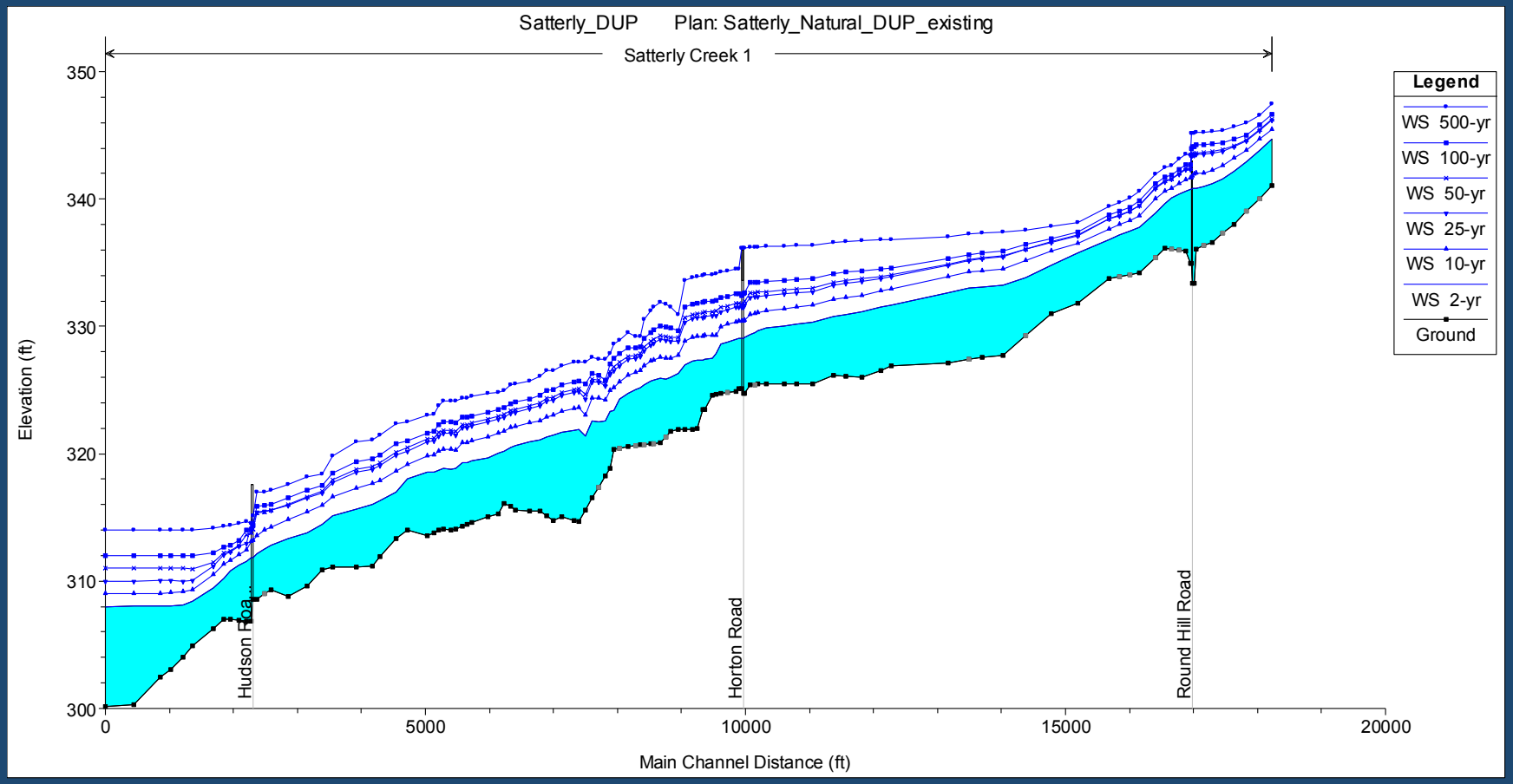
Perry Creek – Weir at Felter Hill Rd (Cross Section)



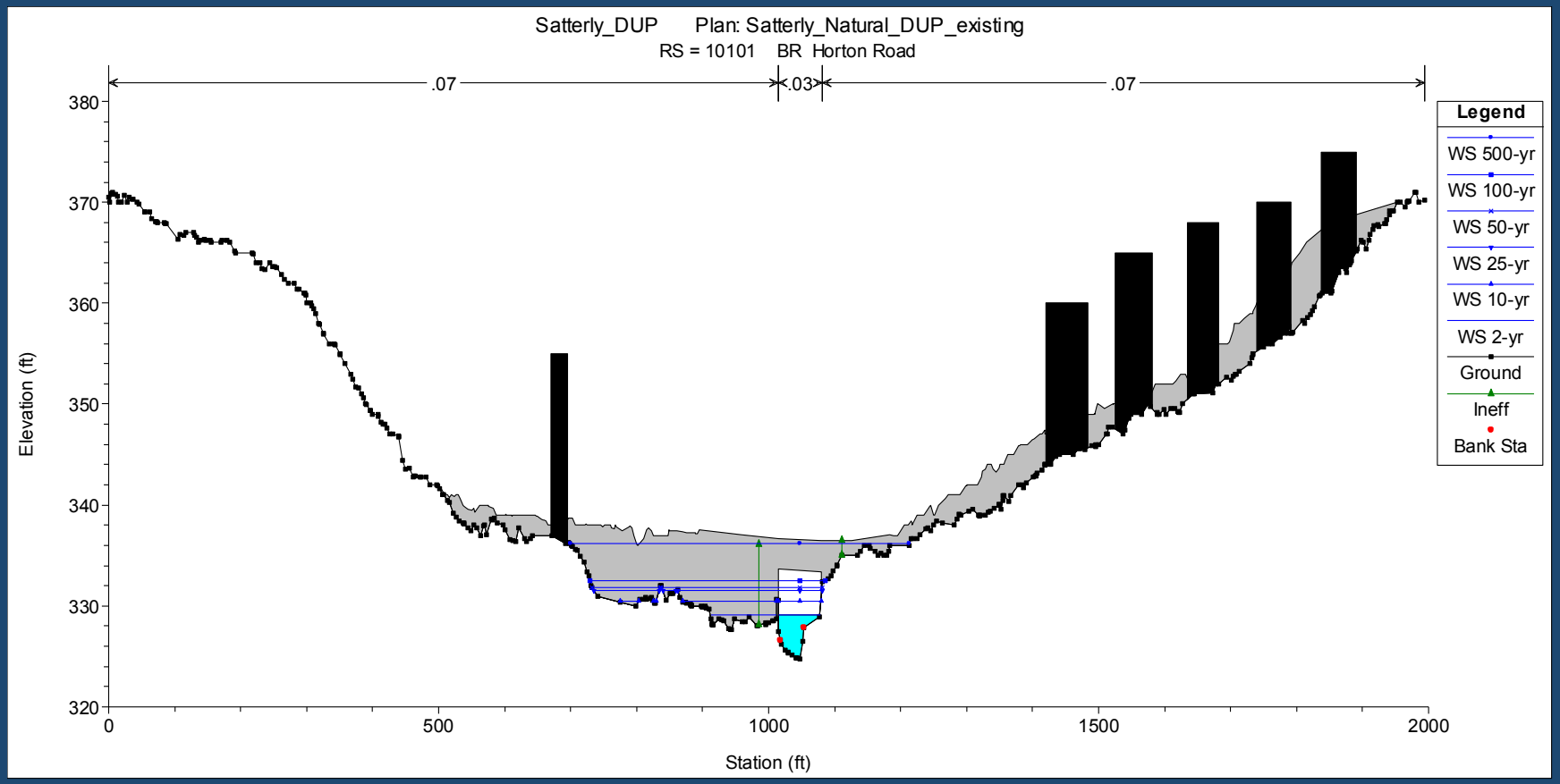
Satterly Creek – Existing Floodplain (100-year)



Satterly Creek (Water Surface Profile)

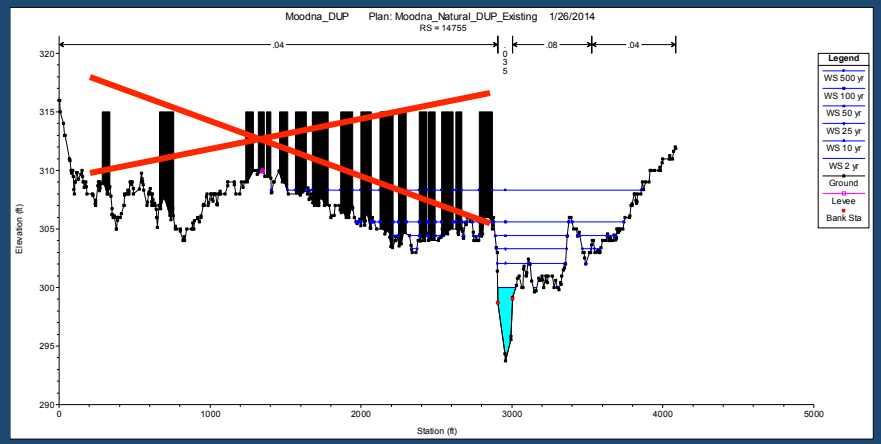


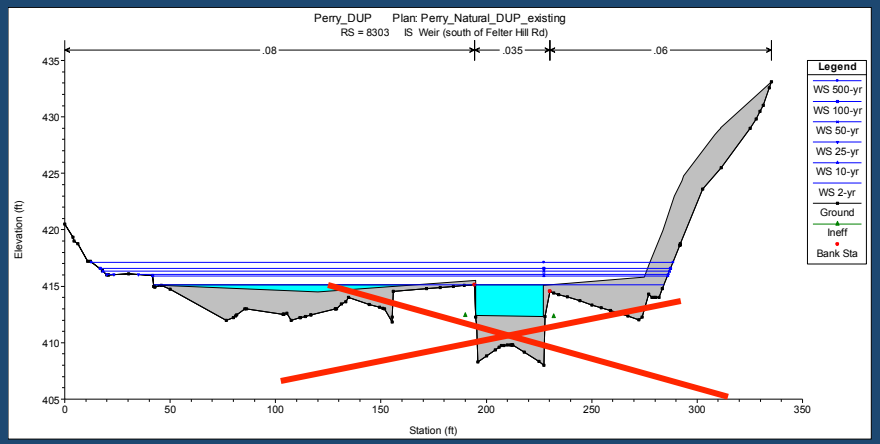
Satterly Creek – Horton Road Bridge (Cross Section)

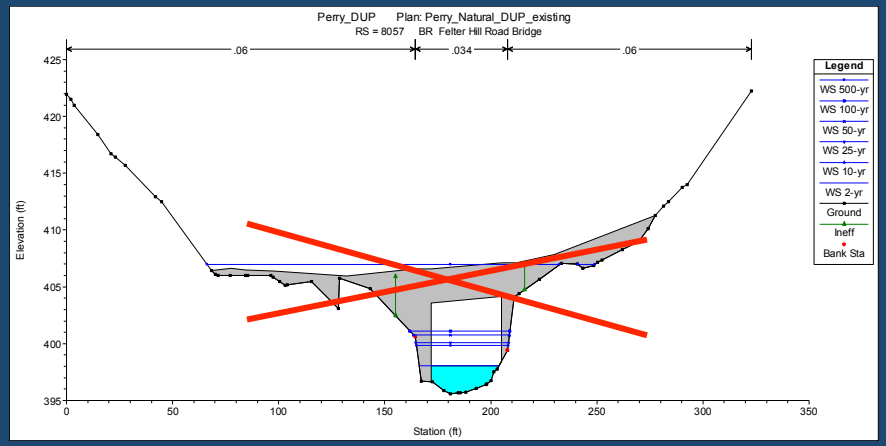


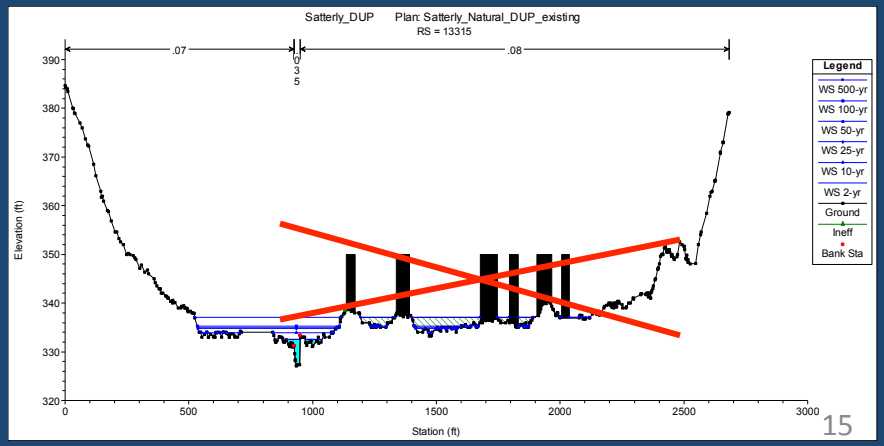
Preliminary Scenario

Remove all buildings and structures

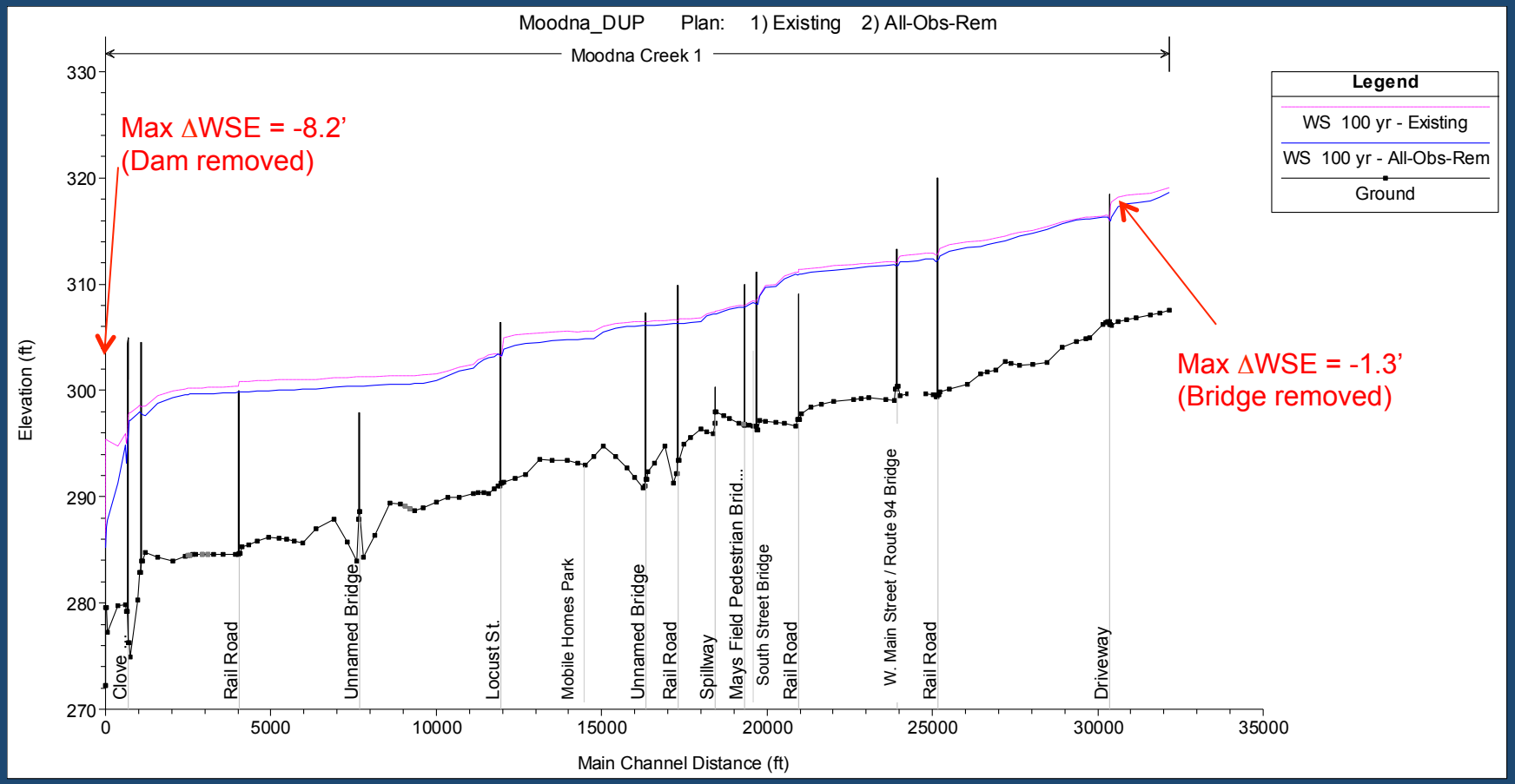




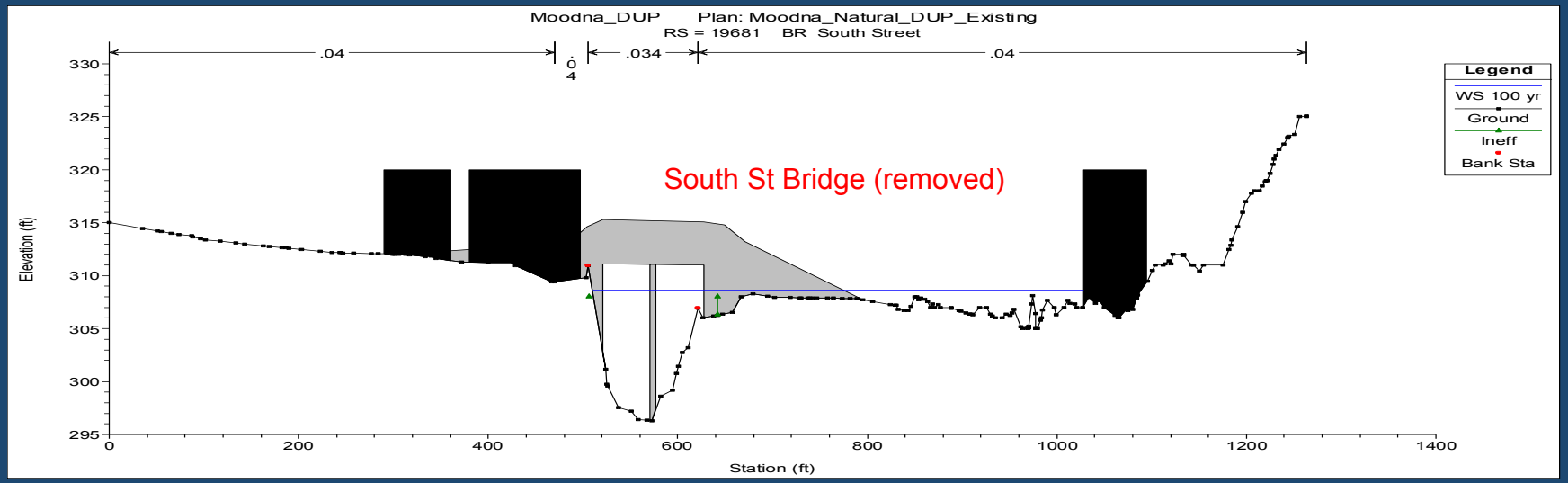


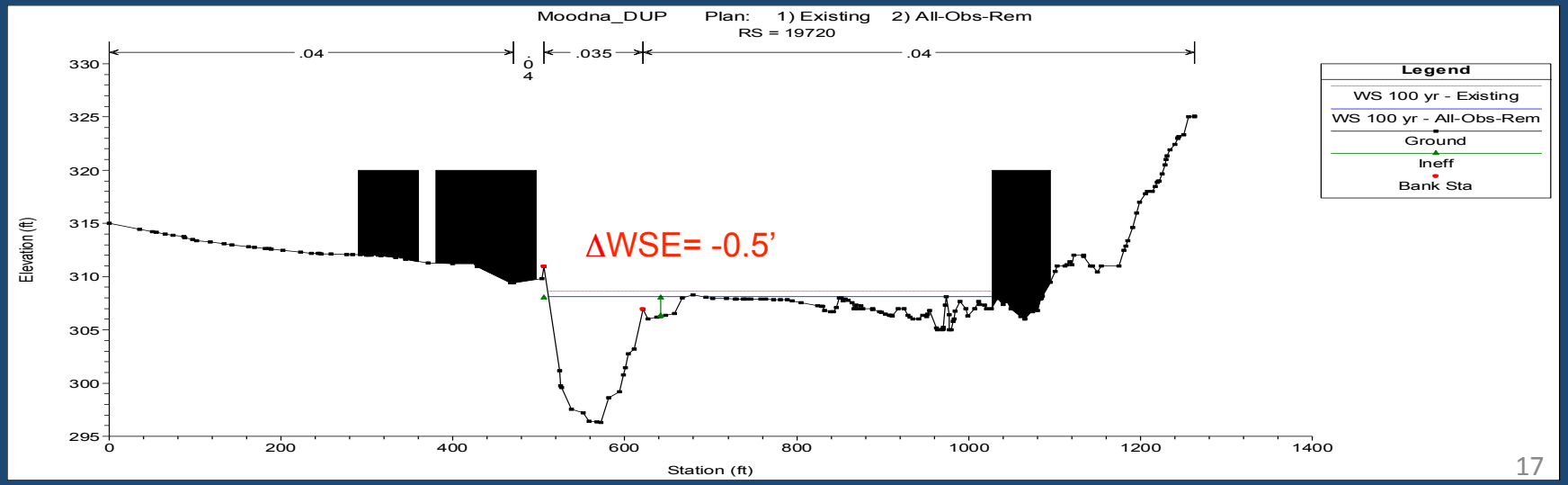


Remove All Buildings/Structures Moodna Creek (Profile)

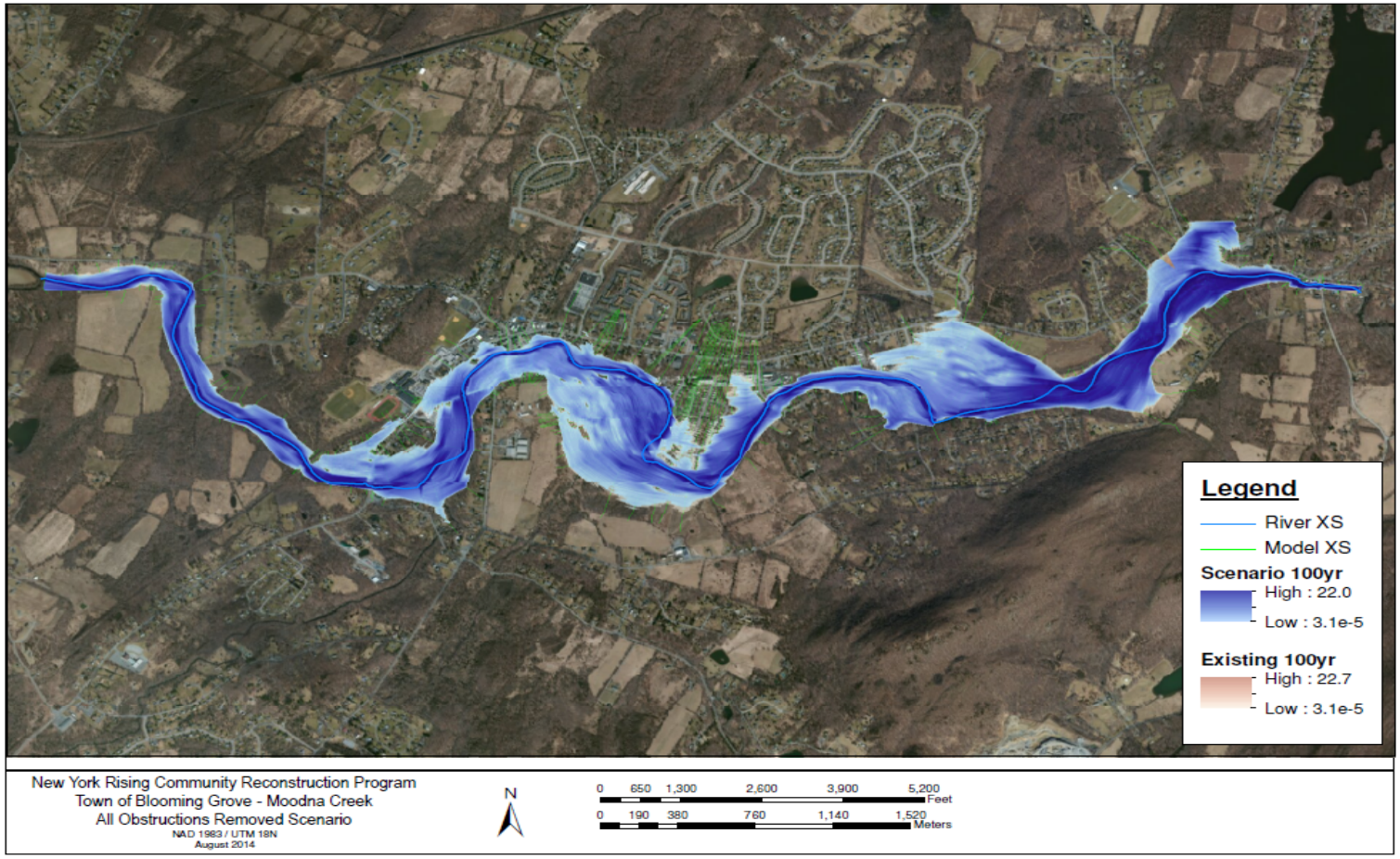


Remove All Buildings/Structures Moodna Creek (Cross Section)

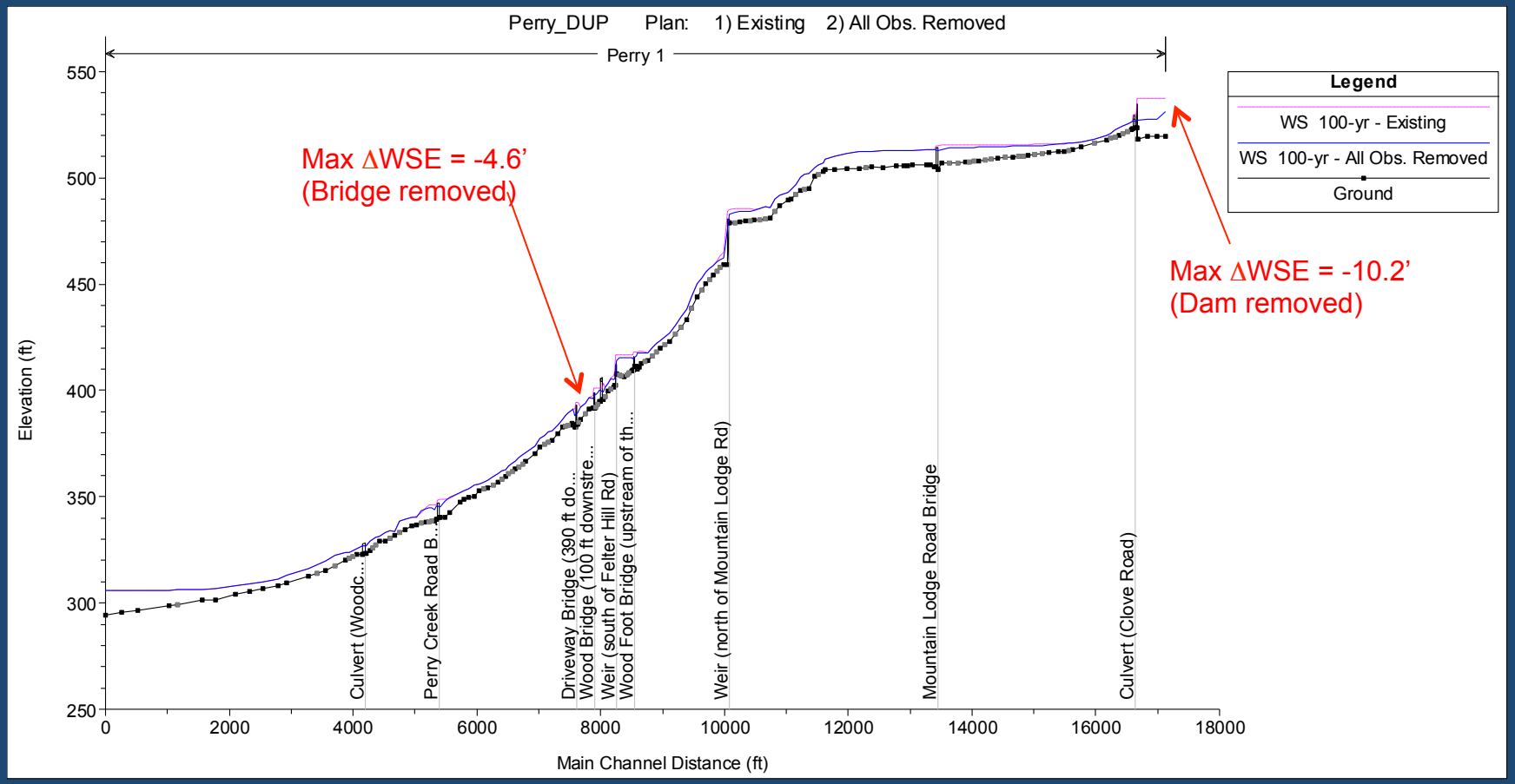




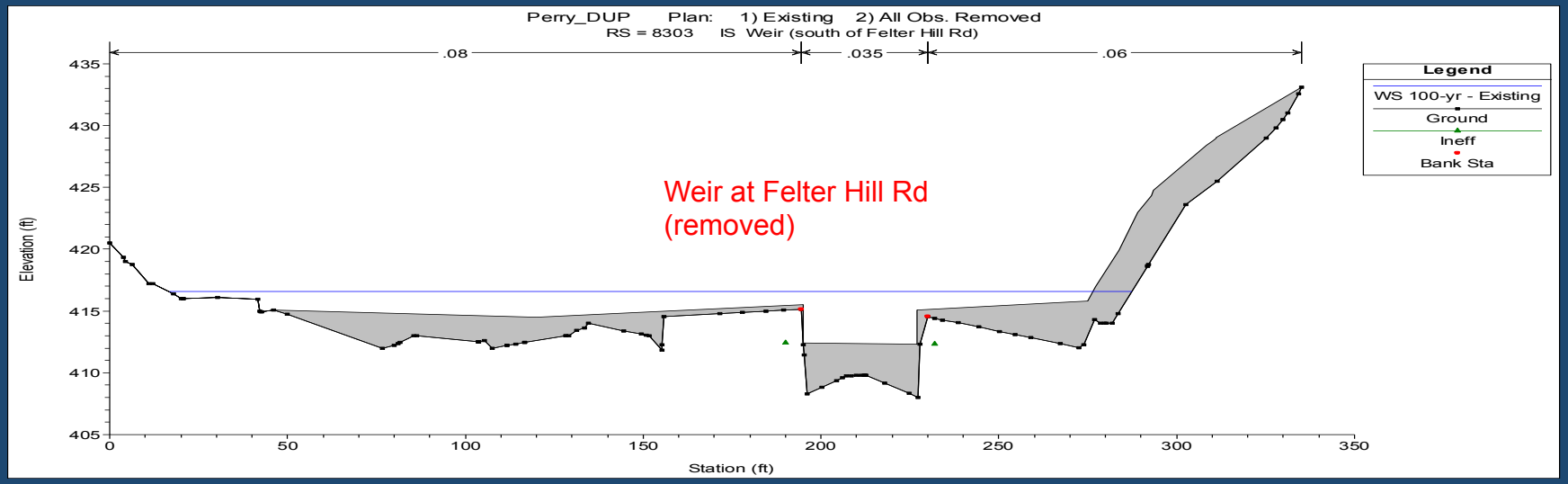
Remove All Buildings/Structures Moodna Creek (100-year Floodplain)

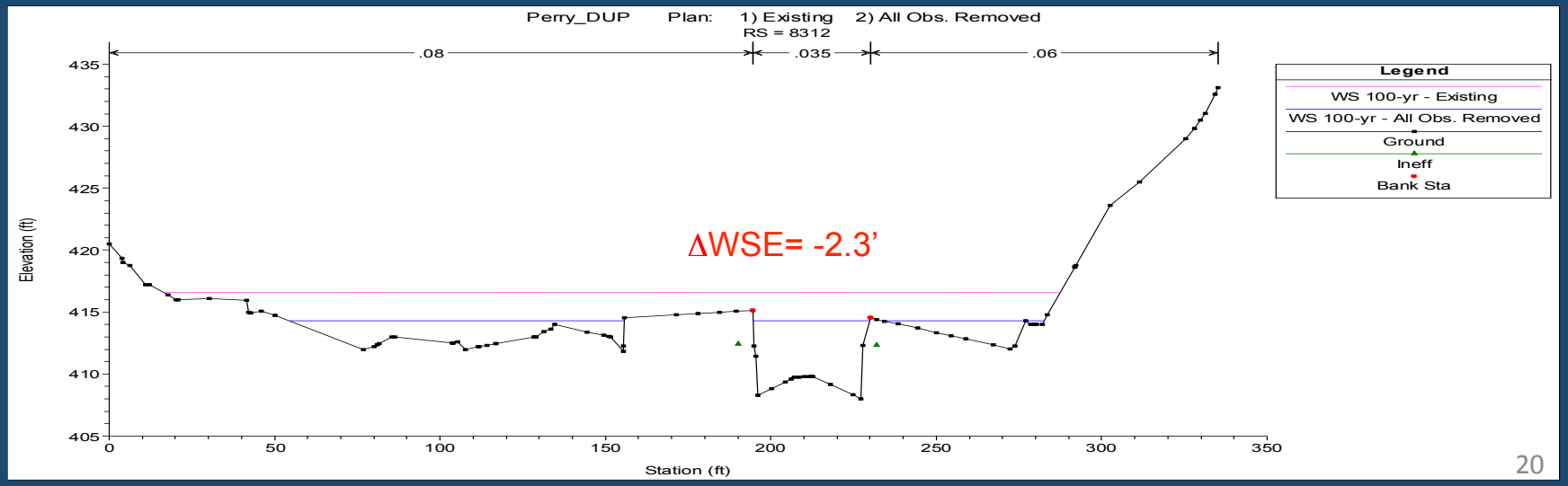


Remove All Buildings/Structures Perry Creek (Profile)

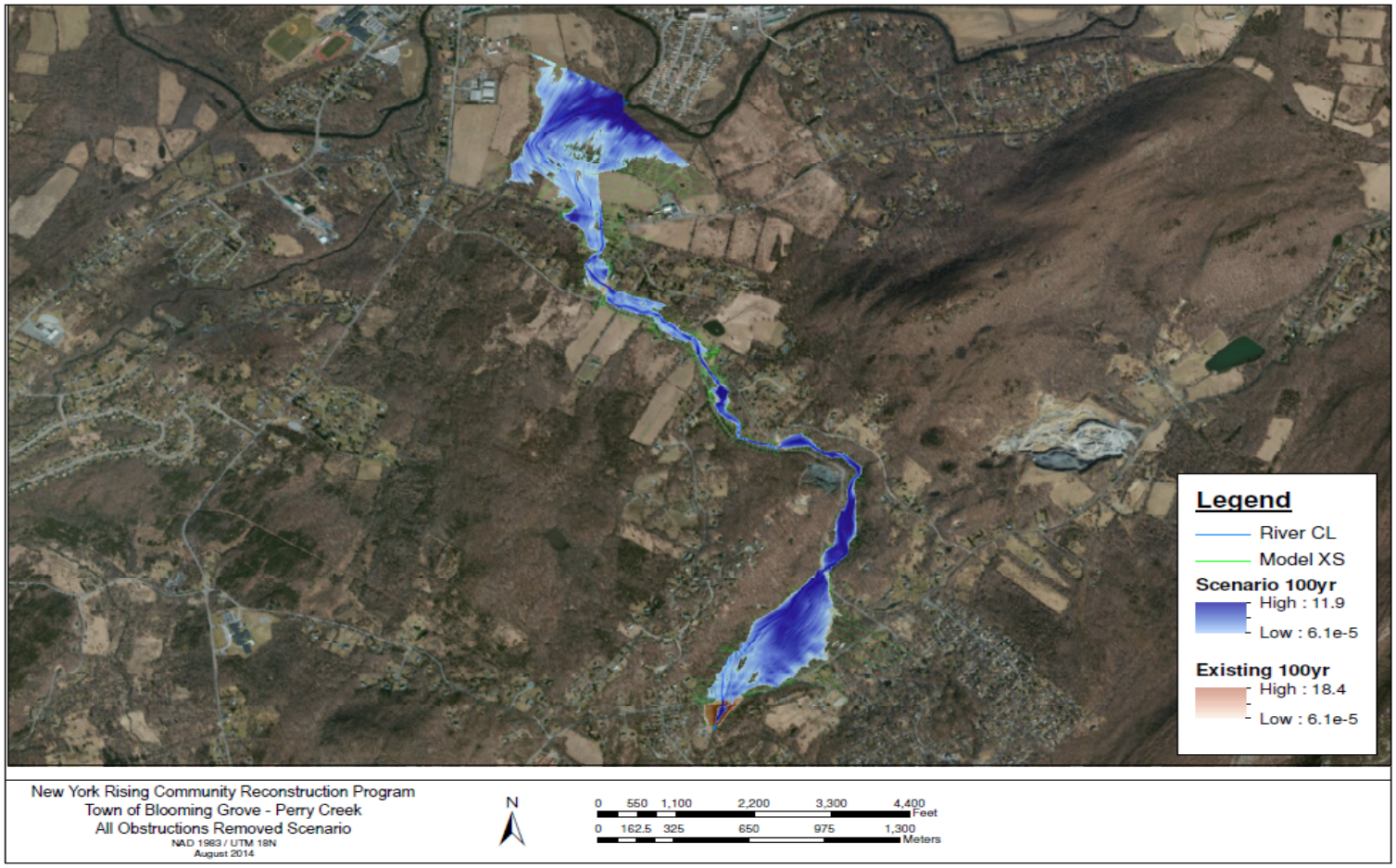
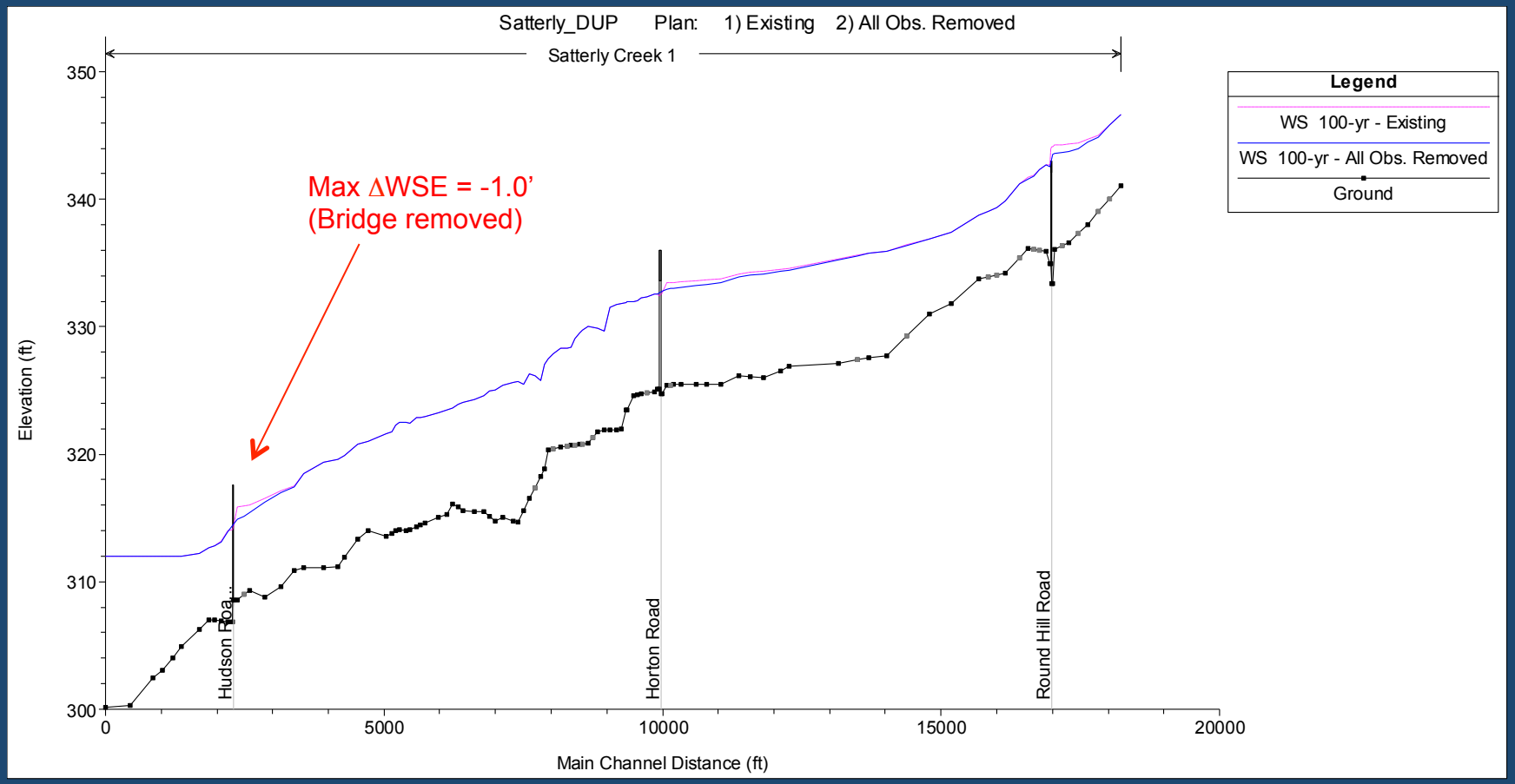


Remove All Buildings/Structures Perry Creek (Cross Section)





Remove All Buildings/Structures Perry Creek (100-year Floodplain)



Remove All Buildings/Structures Satterly Creek (Profile)