

90% Remedial Design Basis of Design Report

Appendix L

No-Rise Evaluation

TABLE OF CONTENTS

1	Introduction	1
1.1	Background	1
1.1.1	Summary of Upper Reach Remedy	1
1.2	No-Rise Criteria.....	2
1.3	Project Setting	2
1.4	Objectives of Evaluation	2
2	Hydraulic Model Development	3
2.1	Model Background	3
2.1.1	Effective Model.....	3
2.1.2	Effective Model Revisions.....	4
2.2	Methods.....	4
2.2.1	Effective Model.....	5
2.2.2	Duplicate Effective Model	5
2.2.3	Existing Conditions Model.....	5
2.2.4	Proposed Conditions Model	6
3	Results.....	7
4	Summary and Conclusions	10
5	References	11

TABLE

Table L3-1	Water Surface Elevation Results for the 10- and 100-Year Events.....	8
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ATTACHMENTS

Attachment L.1	FEMA Flood Insurance Rate Maps
Attachment L.2	Complete Water Surface Elevation Results
Attachment L.3	HEC-RAS Model Outputs

ABBREVIATIONS

BODR	<i>Basis of Design Report</i>
cfs	cubic feet per second
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FIS	flood insurance study
ENR	enhanced natural recovery
LDW	Lower Duwamish Waterway
LiDAR	Light Detection and Ranging
Manning's n	Manning's roughness coefficient
MHHW	mean higher high water
NAVD88	North American Vertical Datum of 1988
NHC	Northwest Hydraulic Consultants
NOAA	National Oceanic and Atmospheric Administration
RAA	remedial action area
RD	remedial design
RM	river mile
RMC	residuals management cover
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

1 Introduction

1.1 Background

This “no-rise” evaluation evaluates the potential hydraulic effects for the proposed Pre-Final (90%) Remedial Design (RD) for the upper reach of the Lower Duwamish Waterway (LDW) Superfund Site in King County, Washington on the 10- and 100-year flood water surface elevation in the LDW. The upper reach of the Superfund Site spans river miles (RMs) 3 to 5. The sediment cleanup remedy will include dredging, backfill, capping, and thin-cover material placement, which will result in changes to the riverbed elevation in the waterway.

1.1.1 Summary of Upper Reach Remedy

Over the length of the upper reach area, the total quantity of material dredged will be greater than the total fill quantity placed for backfill, capping, enhanced natural recovery (ENR), residuals management cover (RMC), and amended cover. At Pre-Final (90%) RD, the estimated total dredging volume (including assumed contingency re-dredging volume) is 134,200 cubic yards; the estimated total placement volume for backfill, capping, ENR, RMC, and amended cover is 96,000 cubic yards. Apart from placement of thin layers of material for ENR, RMC for dredge residuals, and amended cover at limited locations, the Pre-Final (90%) RD does not incorporate placement of fill to elevations greater than the existing mudline.

ENR placement entails placing a thin layer of clean, sandy material that is intended to enhance the natural sedimentation that will otherwise occur over time in the same area. The increase in bed elevation due to ENR placement will result in a riverbed condition that is no different than the long-term, post-construction bed elevation that will naturally proliferate in the same area as incoming sediment is deposited. Therefore, ENR placement is not expected to have any effect on water surface elevations.

Amended cover will be placed in a few small areas where the remedial technology is dredging, but dredging right up against an existing structure is not practical. Amended cover is placement of a thin layer of clean, gravelly sand material amended with activated carbon over the small offset distance (3 to 5 feet in width) that cannot be dredged.

RMC placement entails using a layer of clean, sandy material to manage dredging-generated residuals, which are a thin layer of disturbed contaminated sediment that remains on the post-dredge surface due to material loss during dredging or the inability of the dredge to fully remove the material disturbed during the excavation process. The purpose of RMC is to provide a clean post-remedial surface condition. RMC placement is not a permanent change to elevations because the material may mix or move under natural processes. Initial RMC placement thickness is anticipated to be a targeted thickness of 9 inches in all dredge areas that are not backfilled and a targeted thickness of 24 inches

on dredge side slopes. Outside of the dredge footprint, RMC only affects localized areas (i.e., inner and outer perimeters; Pre-Final [90%] RD *Basis of Design Report* [BODR], Section 10.2.9). Within the dredging footprint, the bed elevation post-dredging will be the same (in backfilled areas) or deeper than pre-dredge elevations, even after RMC placement. Therefore, RMC placement is not considered to have any effect on water surface elevations.

1.2 No-Rise Criteria

Per the Federal Emergency Management Agency (FEMA) Region 10 guidance document, *Procedures for "No-Rise" Certification for Proposed Developments in the Regulatory Floodway* (FEMA 2013), the equivalent to a "no-rise" certification may need to be demonstrated for the upper reach remedial action based on hydraulic analyses to demonstrate substantive compliance with Section 60.3(d)(3) of the National Flood Insurance Program and implementing regulation King County Code Section 21A.24.240 (zero-rise flood fringe). These codes stipulate that any development or alterations to the floodplain shall not increase the base flood elevation during the occurrence of the 10- or 100-year flood discharge. A no-rise evaluation has been performed to support the assessment of substantive compliance of Applicable or Relevant and Appropriate Requirements.

1.3 Project Setting

The LDW upper reach is located between RMs 3 and 5 upstream of Elliot Bay in Seattle, which corresponds to the U.S. Army Corps of Engineers (USACE) river stations 186+00 and 292+50. Note that the Pre-Final (90%) Drawings (Volume III of the BODR) use alternative stationing to the USACE stations upstream of the turning basin beginning at USACE station 273+00.

The upper reach consists of stable and net depositional estuarine river channel. The side banks consist of armored slopes (primarily rock riprap), unarmored slopes, and vertical bulkhead walls. The northeast (river-right) floodplain consists primarily of industrial land use, including large structures and buildings, and a significant portion of the floodplain is composed of paved surfaces. The southwest (river-left) floodplain is a mixture of industrial and residential land uses and some open space. The FEMA flood insurance rate maps (FIRMs) showing the effective mapped floodplains are shown in Attachment L.1. The upper reach of the LDW corresponds to the downstream-most section of the lower reach of the Green River as the lower reach of the Green River is defined in the effective HEC-RAS model.

1.4 Objectives of Evaluation

The objective of this no-rise evaluation is to evaluate a hydraulic model of the existing and proposed conditions for the 10- and 100-year flood event to determine if the remedial action described in the Pre-Final (90%) RD results in increases to the base flood elevations.

2 Hydraulic Model Development

2.1 Model Background

The USACE HEC-RAS model is a 1D model that can compute water surface elevations and velocities for steady and unsteady state boundary conditions and subcritical, supercritical, and mixed flow regimes. The USACE HEC-RAS model framework is the standard and FEMA-accepted modeling tool for determining the base flood elevations reported in FEMA flood insurance studies (FISs). The no-rise evaluation was conducted to evaluate the potential effects of the Pre-Final (90%) RD on the flood stage in the Lower Green River/Upper LDW during the 10- and 100-year return interval. The 10- and 100-year flood flows rates were combined with the downstream mean higher high water (MHHW) tidal conditions to simulate the 10- and 100-year flood conditions.

The HEC-RAS model used in this study was developed from a combination of data sources, including the FEMA 2020 King County FIS (FEMA 2020), the 2010 *Floodplain Mapping Study for Lower Green River* model (the “effective” model) (NHC 2010), the South Park Bridge no-rise study model (Herrera 2007), *Green River HEC-RAS 1D Unsteady Model Development* (King County 2019), and the existing bathymetry and floodplain elevation data and upper reach pre-design investigation topography and bathymetry data. The existing conditions include the South Park Bridge, which was not included in the 2020 FEMA FIS. The available hydraulic models for the Lower Green River overlap with the most of the LDW upper reach but do not encompass the entire extent. To model the Pre-Final (90%) RD remedial action impacts on the 10- and 100-year flood levels, the model used in this study was extended downstream to capture the downstream extents of upper reach Pre-Final (90%) RD. All HEC-RAS model domain stationing corresponds to the USACE stationing for the LDW and Green River.

2.1.1 Effective Model

The effective model is the hydraulic model used in development of the published FEMA FIS and FIRMs. Anchor QEA, LLC, reviewed the FIS published by FEMA for King County (FEMA 2020). The FIS summarizes results of the effective hydrologic and hydraulic evaluations performed to establish return interval flow rates, flood level water surface elevations, and flood hazard boundaries throughout the county. Section 1.3.8 of the 2020 FIS describes that the effective model study used to develop the 2020 FIS and corresponding FIRMs was the 2010 *Floodplain Mapping Study for Lower Green River* (NHC 2010). The Northwest Hydraulic Consultants (NHC) 2010 Effective Model domain was between stations 202+07 and 2341+05 at the Flaming Geyser State Park and includes the 1D steady-state flows and boundary conditions used in this no-rise evaluation.

2.1.2 Effective Model Revisions

Anchor QEA obtained HEC-RAS model files from the *Green River HEC-RAS 1D Unsteady Model Development* (King County 2019). This model combined the 2010 NHC effective Green River model with a model developed by USACE in 2012 to examine the Green River hydrographs and associated confidence limits at the U.S. Geological Survey (USGS) Green River near Auburn, Washington, gage (USGS Gage 12113000). The 2012 USACE model domain was from station 202+07 to station 3394+78, just downstream of Howard Hanson Dam.

The 2019 King County model updates included combining the NHC 2010 and USACE 2012 models, removing interpolated cross sections, addressing schematic errors, updating the bridge modeling approach to "Pressure and/or Weir" as needed, resolving instabilities in the unsteady model scenarios, addressing inflow hydrograph errors, adjusting channel and overbank Manning's roughness coefficient (Manning's n), adding ineffective areas, and incorporating recent projects (King County 2019). Projects incorporated include the Reddington Levee Setback and Extension project and the 277th Street Revetment project.

The 2019 King County revised model was used as the basis for the existing conditions model in this no-rise study because it is considered the best available model.

2.2 Methods

The HEC-RAS models evaluated for this study were subcritical, steady-state models that employ constant flow rate at the upstream boundary, with constant but spatially variable flow rates at intermediate reach locations (flow change locations) and a constant water level at the downstream boundary condition.

The downstream boundary condition of the models for the 10- and 100-year event is the MHHW level in the tidal waters of the Lower Green River/Upper LDW, selected from the 2020 FIS (FEMA 2020), which was determined from the Seattle tidal gage located in Elliott Bay (National Oceanic and Atmospheric Administration [NOAA] gage No. 9447130). The MHHW downstream water surface elevation boundary was set to 9.02 feet North American Vertical Datum of 1988 (NAVD88).

It should be noted that the regulatory base flood elevations shown in the 2020 FEMA FIS are based on the 100-year tidal elevation at the Seattle tide gage (NOAA gage No. 9447130) as computed by the USACE Seattle District. Under these flood conditions, the hydraulic conditions for the LDW upper reach are tidally dominated, and the river backwaters at the 100-year tidal elevation of 12.39 feet NAVD88 upstream to station 331+80 (FEMA 2020). Combining the 100-year flow with the 100-year tidal elevation is likely an extreme event with greater than a 100-year recurrence interval, and the backwater tidal effects may mask any changes to the river hydraulics caused by the remedial actions described in the Pre-Final (90%) RD. The extreme tidal scenario with the 100-year tide elevation

downstream boundary condition was evaluated as part of the no-rise study, but the 10- and 100-year events represented by the MHHW downstream boundary condition were the primary scenarios considered for meeting the no-rise criteria.

2.2.1 Effective Model

The effective model is the hydraulic model used to determine the current published FEMA FIS and FIRMs. The effective model developed in 2010 by NHC was not modified, and results were reused from model files without re-evaluating the model. The upstream flow boundary condition for the 100-year event was a constant flow (steady state) of 12,070 cubic feet per second (cfs) at station 2335+55. The downstream boundary condition was set to the MHHW elevation of 9.02 feet at station 202+07.

2.2.2 Duplicate Effective Model

The duplicate effective model is a copy of the effective model files that is created to evaluate changes to the effective model results caused by updates to HEC-RAS modeling software. The duplicate model was run using USACE HEC-RAS version 6.2. The results of the duplicate effective model for the 100-year steady flow scenario water surface elevations are compared to the effective model in Attachment L.1. The difference in water surface elevations between the effective model results and the duplicate effective model are most likely due to updates to the HEC-RAS model software between version 6.2 used for this evaluation and the HEC-RAS version used in the 2010 study. The maximum difference between the effective model results and the duplicate model results is 0.18 foot.

2.2.3 Existing Conditions Model

The existing conditions model represents the best available knowledge of current conditions of the upper reach. The existing conditions model was developed starting with the 2019 King County revised model, which combined the NHC 2010 effective model and USACE 2012 model and revised and updated the combined model. The following modifications and parameters were used to develop the existing conditions model.

2.2.3.1 Geometry

The model was extended approximately 1,540 feet downstream from station 202+70 to station 186+70 to include the portion of the LDW upper reach downstream of the effective and revised effective models where modifications to the channel occur in the Pre-Final (90%) RD. Station 3394+78 was the upstream extent of the existing conditions model domain. Fifty-one additional cross sections were added to the model in order to capture all changes due to the RD. Additionally, the South Park Bridge was added to the model at station 204+28 based on the South Park Bridge no-rise model study (Herrera 2007). Reach lengths for the duplicate and new cross sections were updated.

The cross-section profiles were updated using a combination of bathymetry and topography data sources including the 2019 Northwest Hydro Bathymetry survey, 2021 True North bank topography survey, and 2021 Light Detection and Ranging (LiDAR) from USGS (2021; acquired from the Washington Geological Survey).

2.2.3.2 Manning's Roughness Coefficient

Bank Manning's n values were updated for the duplicate and new cross sections based on applying updated shoreline classifications for armored shoreline areas in the upper reach, as observed during upper reach pre-design investigation. Armored shorelines were assigned an updated Manning's n value of 0.09. For unarmored and bulkhead shoreline classifications, the floodplain Manning's n value of 0.05 was unchanged from 0.05. All channel Manning's n values were unchanged from 0.03.

2.2.3.3 Bridge Modeling Approach

The bridge modeling approach for the South Park Bridge was updated from "Energy Only" to "Pressure and/or Weir" to conform with updates made to bridge modeling approaches for all other bridges within the model domain in the 2019 King County updates.

2.2.3.4 Boundary Conditions

The upstream flow boundary condition for the 100-year and extreme tidal events was a constant flow (steady state) of 12,070 cfs at station 3394+78. The upstream flow boundary condition for the 10-year event was a constant flow of 11,060 cfs at station 3394+78. The downstream boundary condition for the 10- and 100-year events were set to the MHHW elevation of 9.02 feet at station 186+70. The downstream boundary condition for the extreme tidal event was set to the 100-year tidal elevation of 12.39 feet at station 186+70.

2.2.4 Proposed Conditions Model

The proposed conditions model represents the conditions that will exist following completion of the RD remedial action, based on the design. The proposed conditions model was developed by updating the geometry of the existing conditions model using the final dredge, capping, and backfill grade from the Pre-Final (90%) RD. Boundary conditions, bridge geometry, modeling approaches, and cross-section locations were not modified. Manning's n values were updated as needed if the shoreline classification was changed in the RD. Proposed condition model results were compared to the existing conditions model results for the 10-, 100-year, and extreme tidal events to evaluate potential effects of the RD on flood levels.

3 Results

The effect of the LDW upper reach remedial actions on the 10- and 100-year flood stage modeled with a downstream boundary condition of the MHHW level was determined by subtracting the existing condition water surface elevation results from the proposed condition water surface elevation results. The 10- and 100-year return period water surface elevation results for station 186+70 to station 291+14 (the model domain), and the difference between the proposed and existing water surface elevations are shown in Table L3-1. The remedial action areas (RAAs) and other applicable locations corresponding to the cross sections are also listed in Table L3-1.

The water surface elevation results shown in Table L3-1 indicate that for the 10- and 100-year return periods, no increases in water surface elevation are expected due to the Pre-Final (90%) RD. The FEMA requirements for the “no-rise” certification require the evaluation demonstrates there will not be any increase (nothing greater than 0.00 foot) in the base flood elevation due to the project (FEMA 2021). The results of the evaluation show there are no increases in predicted water level from the remedial actions, and the negative values indicate decreases in the base flood elevation of 0.01 to 0.04 foot at some cross sections (Table L3-1). Additionally, for the extreme tidal event, no increases in water surface elevation are expected due to the remedial actions (Attachment L.2).

The modeling results are consistent with expectations; the Pre-Final (90%) RD generally does not increase mudline elevations within the upper reach area with the exception of ENR, RMC, and amended cover placement and lowers mudline elevations in dredging areas that are not backfilled. ENR and RMC placement are not permanent changes to elevations and are not expected to have an effect on water surface elevations. The net difference between dredging and material placement indicates an overall net increase in flow capacity within the waterway. Therefore, the RD does not have any significant effects on the conveyance of the 10- or 100-year flood.

Additional 100-year water surface elevation results for the effective and duplicate effective models and 10-, 100-year, and extreme tidal water surface elevation results for the existing and proposed condition models for the entire model domain (RM 3.536 to 64.295) are shown in Attachment L.2. HEC-RAS model cross sections and profiles for the existing and proposed conditions are presented in Attachment L.3.

Table L3-1
Water Surface Elevation Results for the 10- and 100-Year Events

Model Cross Section (USACE Station)	Location Note	Existing Condition 100-Year Water Surface Elevation (feet NAVD88)	Proposed Condition 100-Year Water Surface Elevation (feet NAVD88)	100-Year Elevation Difference (feet, Proposed to Existing)	Existing Condition 10-Year Water Surface Elevation (feet NAVD88)	Proposed Condition 10-Year Water Surface Elevation (feet NAVD88)	10-Year Elevation Difference (feet, Proposed to Existing)
291+14		9.53	9.49	-0.04	9.46	9.43	-0.03
286+49	RAA 33/34/35	9.48	9.45	-0.03	9.42	9.39	-0.03
285+91	RAA 33/34/35	9.47	9.44	-0.03	9.41	9.38	-0.03
285+28	RAA 33/34/35	9.47	9.44	-0.03	9.41	9.38	-0.03
284+64	RAA 33/34/35	9.47	9.43	-0.04	9.41	9.38	-0.03
283+69	RAA 32	9.45	9.42	-0.03	9.39	9.36	-0.03
283+22	RAA 32	9.45	9.42	-0.03	9.39	9.36	-0.03
282+43		9.44	9.41	-0.03	9.38	9.35	-0.03
281+90	Boeing Access Bridge	0.00	0.00	0.00	0.00	0.00	0.00
281+64		9.41	9.37	-0.04	9.35	9.32	-0.03
277+78	RAA 31	9.42	9.38	-0.04	9.36	9.33	-0.03
276+78	RAA 30	9.37	9.34	-0.03	9.32	9.30	-0.02
273+72	RAA 29, Turning Basin	9.39	9.36	-0.03	9.34	9.31	-0.03
254+39		9.34	9.30	-0.04	9.29	9.26	-0.03
250+85	RAA 28, Slip 6	9.35	9.32	-0.03	9.31	9.28	-0.03
246+52	RAA 27	9.33	9.30	-0.03	9.29	9.26	-0.03
245+63	RAA 27	9.33	9.30	-0.03	9.29	9.26	-0.03
244+73	RAA 27	9.33	9.30	-0.03	9.29	9.26	-0.03
243+83	RAA 27	9.33	9.30	-0.03	9.29	9.26	-0.03
242+83	RAA 27	9.33	9.30	-0.03	9.29	9.26	-0.03
241+72	RAA 27	9.32	9.28	-0.04	9.27	9.25	-0.02
239+24	RAA 24/25/26	9.30	9.27	-0.03	9.26	9.23	-0.03
237+86	RAA 24/25/26	9.29	9.26	-0.03	9.26	9.23	-0.03
237+18	RAA 24/25/26	9.29	9.26	-0.03	9.25	9.23	-0.02
236+49	RAA 24/25/26	9.29	9.26	-0.03	9.25	9.22	-0.03
234+96	RAA 22, RAA 23	9.27	9.24	-0.03	9.24	9.21	-0.03
234+17	RAA 22	9.27	9.24	-0.03	9.23	9.21	-0.02
233+27	RAA 22	9.26	9.23	-0.03	9.23	9.20	-0.03
230+52		9.25	9.22	-0.03	9.22	9.19	-0.03
229+89		9.25	9.22	-0.03	9.21	9.19	-0.02
228+89	RAA 19/20	9.24	9.21	-0.03	9.21	9.18	-0.03
227+94	RAA 19/20	9.23	9.20	-0.03	9.20	9.17	-0.03
226+88		9.22	9.19	-0.03	9.19	9.16	-0.03
225+98		9.21	9.18	-0.03	9.19	9.16	-0.03

Model Cross Section (USACE Station)	Location Note	Existing Condition 100-Year Water Surface Elevation (feet NAVD88)	Proposed Condition 100-Year Water Surface Elevation (feet NAVD88)	100-Year Elevation Difference (feet, Proposed to Existing)	Existing Condition 10-Year Water Surface Elevation (feet NAVD88)	Proposed Condition 10-Year Water Surface Elevation (feet NAVD88)	10-Year Elevation Difference (feet, Proposed to Existing)
225+40		9.21	9.18	-0.03	9.18	9.16	-0.02
223+34	RAA 17	9.20	9.17	-0.03	9.17	9.15	-0.02
222+71	RAA 17	9.20	9.17	-0.03	9.17	9.15	-0.02
221+28	RAA 14/15/16	9.19	9.16	-0.03	9.17	9.14	-0.03
220+39	RAA 14/15/16	9.19	9.16	-0.03	9.17	9.14	-0.03
219+23	RAA 14/15/16	9.19	9.16	-0.03	9.16	9.14	-0.02
218+43	RAA 14/15/16	9.18	9.16	-0.02	9.16	9.14	-0.02
213+58	RAA 13	9.17	9.15	-0.02	9.15	9.13	-0.02
207+93	RAA 12	9.16	9.13	-0.03	9.14	9.11	-0.03
205+44	RAA 4/5/6	9.15	9.13	-0.02	9.13	9.11	-0.02
204+92	RAA 4/5/6	9.15	9.12	-0.03	9.13	9.11	-0.02
204+28	South Park Bridge	0.00	0.00	0.00	0.00	0.00	0.00
204+18	RAA 4/5/6, RAA 8	9.10	9.08	-0.02	9.09	9.07	-0.02
202+07	RAA 4/5/6	9.09	9.07	-0.02	9.08	9.06	-0.02
200+90	RAA 4/5/6	9.08	9.07	-0.01	9.07	9.06	-0.01
199+90	RAA 4/5/6, RAA 7	9.08	9.06	-0.02	9.07	9.06	-0.01
198+95	RAA 4/5/6	9.07	9.06	-0.01	9.07	9.06	-0.01
197+95	RAA 4/5/6	9.07	9.06	-0.01	9.06	9.05	-0.01
197+21	RAA 4/5/6	9.07	9.06	-0.01	9.06	9.05	-0.01
195+84	RAA 4/5/6	9.07	9.06	-0.01	9.06	9.05	-0.01
194+88	RAA 4/5/6	9.06	9.05	-0.01	9.05	9.05	0.00
193+56	RAA 4/5/6	9.05	9.05	0.00	9.05	9.04	-0.01
191+88	RAA 1/2/3	9.05	9.04	-0.01	9.04	9.04	0.00
190+77	RAA 1/2/3	9.04	9.04	0.00	9.04	9.04	0.00
189+66	RAA 1/2/3	9.04	9.04	0.00	9.04	9.04	0.00
188+76	RAA 1/2/3	9.04	9.04	0.00	9.04	9.04	0.00
187+81	RAA 1/2/3	9.03	9.03	0.00	9.03	9.03	0.00
186+70	RAA 1/2/3	9.02	9.02	0.00	9.02	9.02	0.00

Notes:

Values less than one indicate the Pre-Final (90%) RD will increase the flood capacity of the waterway within the modeled reach.

NAVD88: North American Vertical Datum of 1988

RAA: remedial action area

RD: remedial design

USACE: U.S. Army Corps of Engineers

4 Summary and Conclusions

The results of the hydraulic modeling analysis indicate that the base flood elevation is not expected to be significantly affected by the LDW upper reach remedial actions. Modeled water surface elevations within the upper reach are slightly lower under proposed conditions compared to existing conditions. HEC-RAS model files used in this evaluation are available upon request.

5 References

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Appendix L – No-Rise Evaluation

Attachment L.1

FEMA Flood Insurance Rate Maps

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

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Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NINGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base Map information shown on the FIRM was derived from multiple sources. Base map files were provided in digital format by King County GIS, WA DNR, WSDOT, and Pierce County GIS. This information was compiled at scales of 1:12,000 to 24,000 during the time period of 1994-2012.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

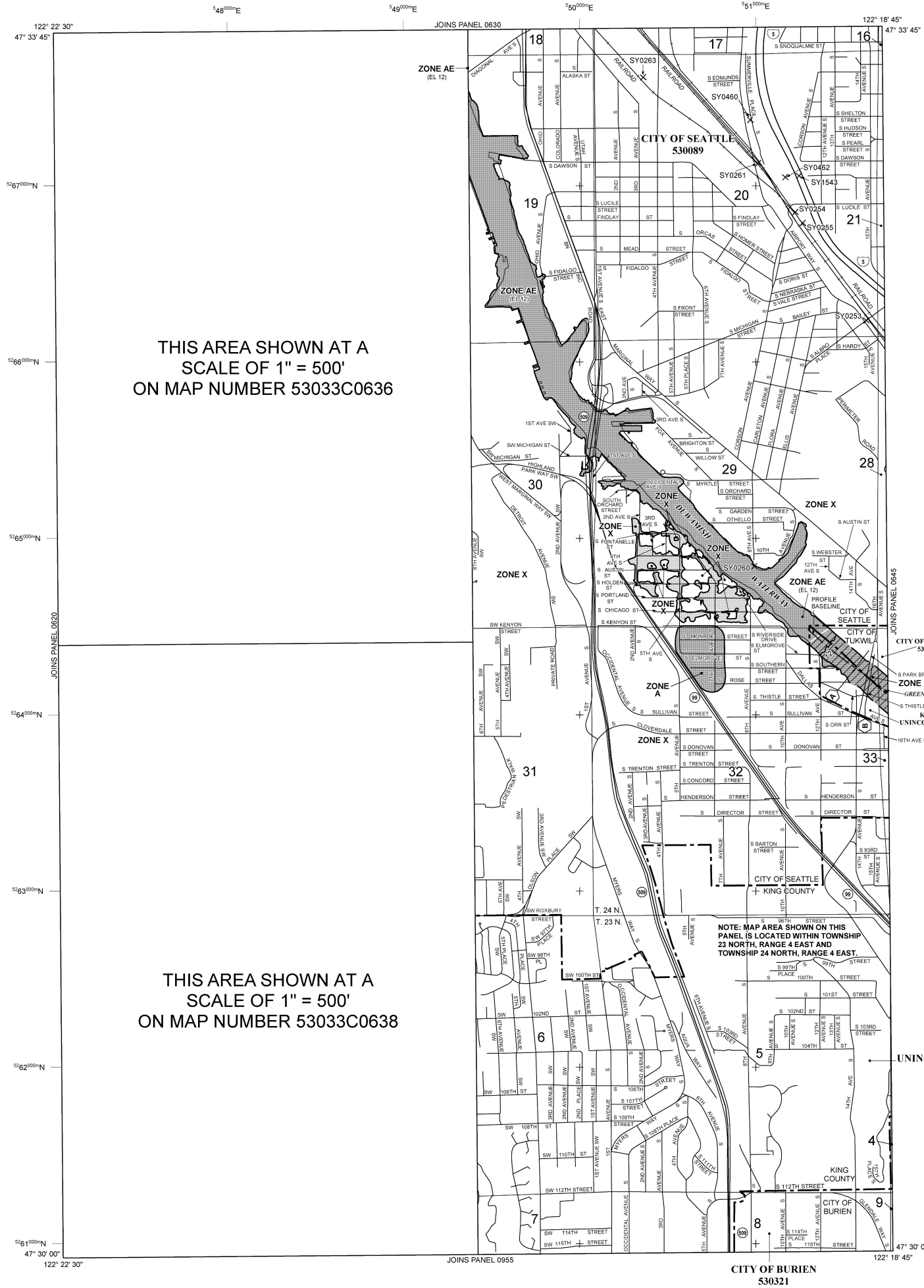
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THIS AREA SHOWN AT A SCALE OF 1" = 500' ON MAP NUMBER 53033C0636

THIS AREA SHOWN AT A SCALE OF 1" = 500' ON MAP NUMBER 53033C0638

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 23 NORTH, RANGE 4 EAST AND TOWNSHIP 24 NORTH, RANGE 4 EAST.

KING COUNTY UNINCORPORATED AREAS 530071

CITY OF BURIEEN 530321

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently deteriorated. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% Annual Chance Floodplain Boundary

0.2% Annual Chance Floodplain Boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.

Base Flood Elevation line and value; elevation in feet*

Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

⊕ ⊕ Cross section line

⊕ ⊕ Transect line

45° 02' 08", 93° 02' 12" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere

#690000 N 1000-meter Universal Transverse Mercator grid values, zone 10

DX5510 X Bench mark (see explanation in Notes to Users section of this FIRM panel)

* MI 5 River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
September 28, 1989

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
May 16, 1995
August 19, 2020 - to change Base Flood Elevations, to update corporate limits, to add roads and road names, to update the effects of wave action, to change Special Flood Hazard Areas, to change zone designations and to incorporate previously issued Letters of Map Revision.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Programs at 1-800-638-6620.

MAP SCALE 1" = 1000'
500 1000 2000
300 0 300 600 METERS

NFP **PANEL 0640G**

FIRM
FLOOD INSURANCE RATE MAP
KING COUNTY, WASHINGTON AND INCORPORATED AREAS

PANEL 640 OF 1725
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BURIEEN CITY OF	530321	0640	G
KING COUNTY	530071	0640	G
SEATTLE CITY OF	530089	0640	G
TUKWILA CITY OF	530091	0640	G

Notice to User: The **Map Number** shown below should be used when placing map orders, the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER 53033C0640G
MAP REVISED AUGUST 19, 2020
Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

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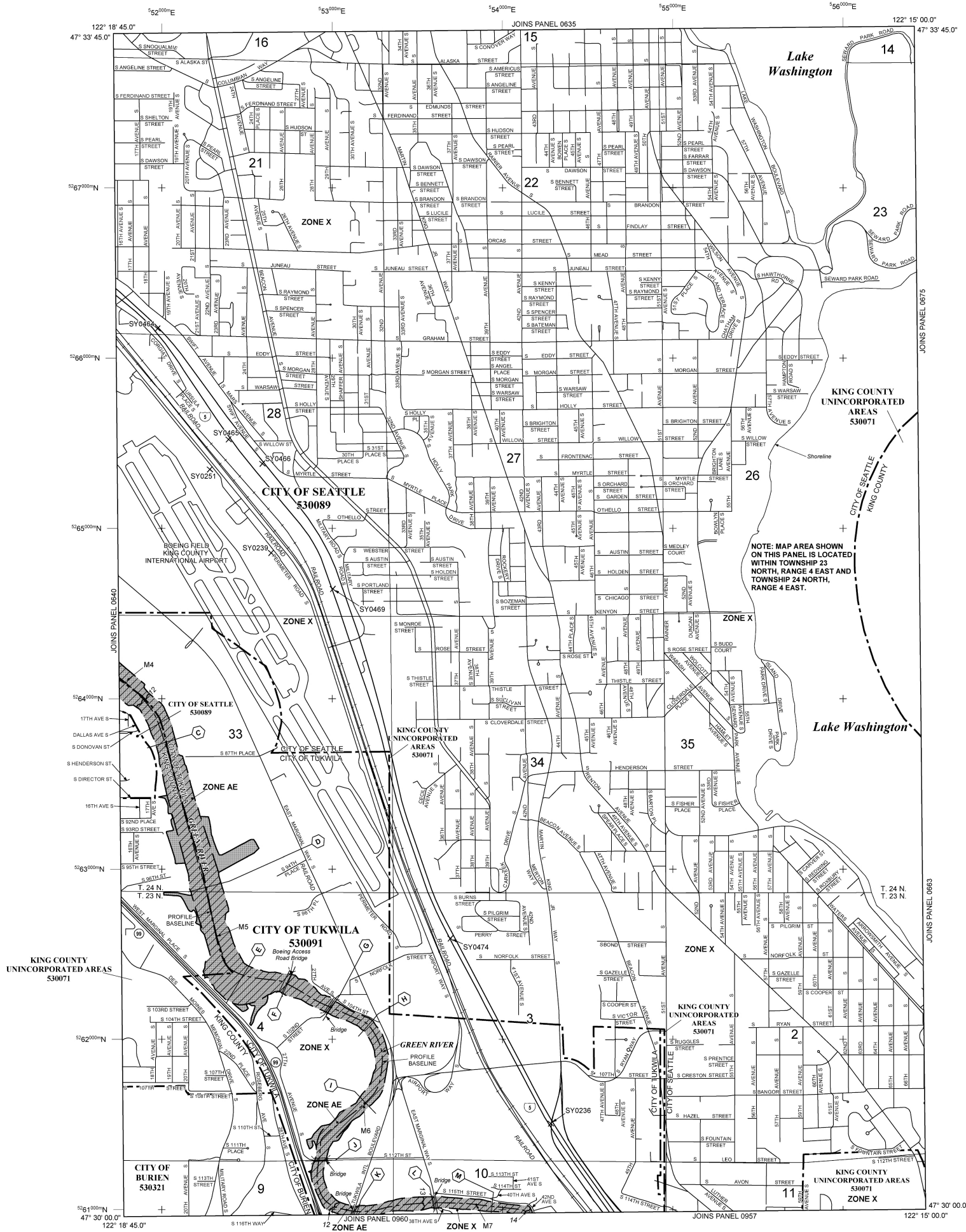
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LEGEND

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CBRS and OPA boundary
Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
Base Flood Elevation line and value; elevation in feet*
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Cross section line
Transect line
45° 02' 08", 93° 02' 12"
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
#690000N
1000-meter Universal Transverse Mercator grid values, zone 10
DX5510 X
Bench mark (see explanation in Notes to Users section of this FIRM panel)
* M1.5
River Mile

MAP REPOSITORIES
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EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
September 28, 1999
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
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500 1000 2000
300 0 300 600 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0645G

FIRM
FLOOD INSURANCE RATE MAP
KING COUNTY, WASHINGTON AND INCORPORATED AREAS

PANEL 645 OF 1725
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BURDEN CITY OF	530321	0645	G
KING COUNTY	530071	0645	G
SEATTLE CITY OF	530089	0645	G
TUKWILA CITY OF	530091	0645	G

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MAP NUMBER
53033C0645G
MAP REVISED
AUGUST 19, 2020
Federal Emergency Management Agency

Appendix L – No-Rise Evaluation

Attachment L.2

Complete Water Surface Elevation Results

Cross-section River Mile	100-year Event							Extreme Tide Event			10-year Event		
	Effective Water surface Elevation (ft, NAVD88)	Duplicate Water Surface Elevation (ft, NAVD88)	Existing Condition Water Surface Elevation (ft, NAVD88)	Proposed Condition Water Surface Elevation (ft, NAVD88)	Duplicate - Effective WSEL	Existing - Duplicate WSEL	Proposed - Existing WSEL	Existing Condition Water Surface Elevation (ft, NAVD88)	Proposed Condition Water Surface Elevation (ft, NAVD88)	Proposed - Existing WSEL	Existing Condition Water Surface Elevation (ft, NAVD88)	Proposed Condition Water Surface Elevation (ft, NAVD88)	Proposed - Existing WSEL
22334	--	--	9.20	9.17	--	--	-0.03	12.50	12.48	-0.02	9.17	9.15	-0.02
22271	--	--	9.20	9.17	--	--	-0.03	12.50	12.48	-0.02	9.17	9.15	-0.02
22128	--	--	9.19	9.16	--	--	-0.03	12.49	12.48	-0.01	9.17	9.14	-0.03
22039	--	--	9.19	9.16	--	--	-0.03	12.49	12.48	-0.01	9.17	9.14	-0.03
21923	--	--	9.19	9.16	--	--	-0.03	12.49	12.48	-0.01	9.16	9.14	-0.02
21843	--	--	9.18	9.16	--	--	-0.02	12.49	12.48	-0.01	9.16	9.14	-0.02
21358	--	--	9.17	9.15	--	--	-0.02	12.48	12.47	-0.01	9.15	9.13	-0.02
20793	--	--	9.16	9.13	--	--	-0.03	12.48	12.46	-0.02	9.14	9.11	-0.03
20544	9.04	9.04	9.15	9.13	0.00	0.11	-0.02	12.47	12.46	-0.01	9.13	9.11	-0.02
20492	--	--	9.15	9.12	--	--	-0.03	12.47	12.46	-0.01	9.13	9.11	-0.02
20428	--	--	0.00	0.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20418	--	--	9.10	9.08	--	--	-0.02	12.44	12.43	-0.01	9.09	9.07	-0.02
20207	9.02	9.02	9.09	9.07	0.00	0.07	-0.02	12.43	12.42	-0.01	9.08	9.06	-0.02
20090	--	--	9.08	9.07	--	--	-0.01	12.43	12.42	-0.01	9.07	9.06	-0.01
19990	--	--	9.08	9.06	--	--	-0.02	12.42	12.42	0.00	9.07	9.06	-0.01
19895	--	--	9.07	9.06	--	--	-0.01	12.42	12.42	0.00	9.07	9.06	-0.01
19795	--	--	9.07	9.06	--	--	-0.01	12.42	12.41	-0.01	9.06	9.05	-0.01
19721	--	--	9.07	9.06	--	--	-0.01	12.42	12.42	0.00	9.06	9.05	-0.01
19584	--	--	9.07	9.06	--	--	-0.01	12.42	12.41	-0.01	9.06	9.05	-0.01
19488	--	--	9.06	9.05	--	--	-0.01	12.42	12.41	-0.01	9.05	9.05	0.00
19356	--	--	9.05	9.05	--	--	0.00	12.41	12.41	0.00	9.05	9.04	-0.01
19188	--	--	9.05	9.04	--	--	-0.01	12.41	12.41	0.00	9.04	9.04	0.00
19077	--	--	9.04	9.04	--	--	0.00	12.40	12.40	0.00	9.04	9.04	0.00
18966	--	--	9.04	9.04	--	--	0.00	12.40	12.40	0.00	9.04	9.04	0.00
18876	--	--	9.04	9.04	--	--	0.00	12.40	12.40	0.00	9.04	9.04	0.00
18781	--	--	9.03	9.03	--	--	0.00	12.40	12.40	0.00	9.03	9.03	0.00
18670	--	--	9.02	9.02	--	--	0.00	12.39	12.39	0.00	9.02	9.02	0.00

Appendix L – No-Rise Evaluation

Attachment L.3

HEC-RAS Model Outputs

HEC-RAS Plan: Exst River: Green River Reach: Mainstem Profile: 10-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	81333	10-year	11930.00	0.84	31.53	14.43	32.03	0.000440	5.83	2624.72	162.86	0.20
Mainstem	80504	10-year	11930.00	2.88	31.35	13.71	31.70	0.000269	4.79	2963.29	170.39	0.17
Mainstem	79728	10-year	11930.00	3.61	30.96	14.47	31.44	0.000384	5.72	2623.42	155.06	0.20
Mainstem	79052	10-year	11930.00	4.50	30.82	14.44	31.17	0.000298	4.79	2821.57	159.80	0.17
Mainstem	78978	10-year	11930.00	3.79	30.82	13.44	31.14	0.000234	4.62	2960.36	158.54	0.16
Mainstem	78852	10-year	11930.00	-0.49	30.68	14.74	31.10	0.000414	5.22	2620.76	156.34	0.19
Mainstem	77869	10-year	11930.00	3.20	30.08	14.27	30.65	0.000475	6.17	2378.44	145.75	0.22
Mainstem	77848	Bridge										
Mainstem	77832	10-year	11930.00	3.20	30.08	14.35	30.62	0.000478	6.07	2381.69	145.74	0.21
Mainstem	77579	10-year	11930.00	3.50	30.11	13.81	30.47	0.000281	4.89	2837.54	157.38	0.18
Mainstem	77400	10-year	11930.00	2.77	29.99	14.22	30.41	0.000430	5.30	2771.90	163.50	0.19
Mainstem	76740	10-year	11930.00	2.96	29.49	14.31	30.08	0.000499	6.29	2334.89	142.82	0.22
Mainstem	75662	10-year	11930.00	3.63	28.93	15.29	29.52	0.000551	6.32	2395.19	173.59	0.23
Mainstem	75610	Bridge										
Mainstem	75557	10-year	11930.00	3.63	28.97	14.05	29.42	0.000364	5.51	2549.02	161.47	0.20
Mainstem	74812	10-year	11930.00	2.01	28.76	12.37	29.15	0.000331	5.06	2783.53	162.25	0.18
Mainstem	74036	10-year	11930.00	1.60	28.27	13.28	28.83	0.000469	6.11	2393.28	152.33	0.22
Mainstem	73350	10-year	11930.00	3.13	28.10	12.99	28.51	0.000343	5.19	2674.79	160.28	0.19
Mainstem	72626	10-year	11930.00	2.18	27.74	12.72	28.23	0.000410	5.72	2498.10	152.50	0.21
Mainstem	71444	10-year	11930.00	-0.11	27.20	12.20	27.72	0.000443	5.86	2361.57	134.10	0.21
Mainstem	70520	10-year	11930.00	2.26	26.89	12.25	27.32	0.000375	5.36	2603.07	160.27	0.20
Mainstem	70483	Bridge										
Mainstem	70472	10-year	11930.00	2.26	26.89	12.17	27.29	0.000344	5.15	2608.57	156.97	0.19
Mainstem	69796	10-year	11930.00	2.09	26.66	12.22	27.05	0.000351	5.12	2624.43	151.31	0.19
Mainstem	68930	10-year	11930.00	2.12	26.22	12.95	26.71	0.000439	5.64	2395.77	152.89	0.22
Mainstem	68878	Bridge										
Mainstem	68814	10-year	11930.00	2.84	26.14	12.36	26.60	0.000449	5.53	2520.14	163.32	0.21
Mainstem	68181	10-year	11930.00	-2.79	25.99	10.71	26.33	0.000314	4.71	2680.51	154.04	0.18
Mainstem	67220	10-year	11930.00	-3.21	25.71	10.92	26.04	0.000292	4.66	3152.79	283.70	0.18
Mainstem	66327	10-year	11930.00	-0.29	25.30	11.16	25.73	0.000376	5.30	2585.72	168.20	0.20
Mainstem	65704	10-year	11930.00	2.34	25.12	11.18	25.49	0.000354	4.95	2771.01	185.26	0.19
Mainstem	65615	Bridge										
Mainstem	65535	10-year	11930.00	-0.46	25.05	10.27	25.34	0.000313	4.37	2952.75	192.28	0.17
Mainstem	65366	10-year	11930.00	-2.38	24.83	9.59	25.26	0.000445	5.38	2612.13	165.57	0.20
Mainstem	65314	Bridge										
Mainstem	65277	10-year	11930.00	-2.38	24.66	9.52	25.20	0.000548	6.00	2376.49	145.87	0.22
Mainstem	64907	10-year	11930.00	-1.17	24.39	10.90	24.99	0.000541	6.31	2237.57	142.11	0.24
Mainstem	64854	Bridge										
Mainstem	64812	10-year	11930.00	-2.16	24.44	8.62	24.90	0.000394	5.49	2475.24	150.96	0.20
Mainstem	64664	10-year	11930.00	-4.94	24.13	9.57	24.79	0.000759	6.63	2082.23	143.52	0.24
Mainstem	64611	Bridge										
Mainstem	64564	10-year	11930.00	-1.06	24.18	9.70	24.69	0.000478	5.84	2332.55	149.23	0.22
Mainstem	64490	10-year	11930.00	-2.57	24.31	7.35	24.60	0.000239	4.35	2951.45	157.62	0.16
Mainstem	64474	Bridge										
Mainstem	64453	10-year	11930.00	-2.57	24.29	7.34	24.59	0.000241	4.47	2959.48	160.75	0.16
Mainstem	63809	10-year	11930.00	3.01	24.10	10.69	24.42	0.000298	4.61	3105.19	207.42	0.18
Mainstem	62610	10-year	11930.00	2.08	23.74	10.59	24.06	0.000297	4.55	2877.94	178.38	0.18
Mainstem	61570	10-year	11930.00	-0.98	23.14	10.01	23.66	0.000471	5.83	2372.54	157.41	0.22
Mainstem	61533	Bridge										
Mainstem	61501	10-year	11930.00	-0.98	23.09	9.98	23.61	0.000471	5.84	2358.17	147.98	0.22
Mainstem	60646	10-year	11930.00	-0.37	22.80	10.16	23.19	0.000409	5.03	2487.63	159.09	0.21
Mainstem	60504	10-year	11930.00	-6.53	22.82	6.44	23.12	0.000259	4.39	2976.48	170.77	0.16
Mainstem	59796	10-year	11930.00	-4.05	22.47	7.13	22.89	0.000358	5.24	2523.37	145.92	0.19
Mainstem	59036	10-year	11930.00	-1.28	22.15	8.61	22.59	0.000449	5.33	2390.99	143.50	0.21
Mainstem	58075	10-year	11930.00	-2.23	21.80	8.71	22.16	0.000396	4.89	2643.50	173.07	0.20
Mainstem	58011	Bridge										
Mainstem	57980	10-year	11930.00	-0.91	21.81	8.00	22.11	0.000287	4.43	2883.97	182.80	0.17
Mainstem	57119	10-year	12410.00	1.48	21.47	9.95	21.82	0.000363	4.81	2839.71	197.32	0.20
Mainstem	57045	10-year	12410.00	0.97	21.49	8.79	21.78	0.000312	4.38	2948.93	189.63	0.18
Mainstem	56380	10-year	12410.00	-2.70	21.00	9.56	21.49	0.000551	5.66	2395.74	200.53	0.23
Mainstem	55672	10-year	12410.00	-0.24	20.80	8.31	21.13	0.000363	4.60	2849.71	208.84	0.19
Mainstem	54907	10-year	12410.00	-7.84	20.42	7.30	20.82	0.000430	5.13	2640.42	172.63	0.20
Mainstem	54896	Bridge										
Mainstem	54886	10-year	12410.00	-7.84	20.40		20.79	0.000418	5.05	2619.20	164.06	0.20
Mainstem	53756	10-year	12410.00	-0.71	20.02	7.99	20.34	0.000347	4.54	2926.38	262.51	0.19
Mainstem	52858	10-year	12410.00	-0.45	19.69	7.91	20.01	0.000378	4.67	3266.23	398.65	0.20
Mainstem	51855	10-year	12410.00	-7.58	19.27	6.27	19.61	0.000424	4.70	2933.92	242.51	0.20
Mainstem	50894	10-year	12410.00	-2.28	18.90	7.07	19.24	0.000357	4.67	2898.94	199.46	0.19
Mainstem	49959	10-year	12410.00	-4.51	18.54	6.93	18.88	0.000411	4.65	2772.23	209.66	0.20
Mainstem	48909	10-year	12410.00	-9.47	17.91	5.39	18.37	0.000555	5.46	2462.31	190.11	0.22
Mainstem	48877	Bridge										
Mainstem	48840	10-year	12410.00	-9.47	17.86	5.37	18.33	0.000594	5.54	2437.69	204.47	0.23
Mainstem	47583	10-year	12410.00	-3.57	17.31		17.65	0.000434	4.74	2795.31	237.19	0.21
Mainstem	46469	10-year	12410.00	-6.77	16.82		17.17	0.000428	4.78	2632.14	179.15	0.20
Mainstem	45651	10-year	12410.00	-8.06	16.30		16.75	0.000599	5.39	2381.05	172.96	0.24

HEC-RAS Plan: Exst River: Green River Reach: Mainstem Profile: 10-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	44822	10-year	12410.00	-16.74	16.14		16.35	0.000281	3.73	3573.23	292.25	0.16
Mainstem	44030	10-year	12410.00	-10.52	15.74		16.08	0.000412	4.63	2793.86	189.30	0.20
Mainstem	43322	10-year	12410.00	-5.44	15.56		15.79	0.000325	3.89	3317.48	271.13	0.18
Mainstem	42557	10-year	12410.00	-3.65	15.17		15.50	0.000423	4.58	2826.39	224.88	0.20
Mainstem	41601	10-year	12410.00	-9.33	14.71	4.03	15.06	0.000488	4.77	2714.99	206.04	0.21
Mainstem	41554											
Mainstem	41506	10-year	12410.00	-9.33	14.50	4.70	14.97	0.000716	5.55	2336.90	176.51	0.25
Mainstem	40403	10-year	12410.00	-3.69	14.12		14.38	0.000342	4.14	3057.11	219.49	0.19
Mainstem	39077	10-year	12410.00	-7.62	13.56	2.70	13.88	0.000407	4.54	2778.14	188.83	0.20
Mainstem	39056											
Mainstem	39014	10-year	12410.00	-5.87	13.53		13.83	0.000367	4.39	2878.79	198.51	0.20
Mainstem	38343	10-year	12410.00	-5.39	13.23		13.55	0.000440	4.58	2736.14	191.73	0.21
Mainstem	37261	10-year	12410.00	-6.47	12.78		13.10	0.000401	4.54	2760.90	185.82	0.20
Mainstem	36226	10-year	12410.00	-9.10	12.39	2.07	12.68	0.000395	4.34	2888.96	207.26	0.20
Mainstem	36173											
Mainstem	36120	10-year	12410.00	-9.10	12.28	2.22	12.62	0.000467	4.72	2695.05	208.85	0.22
Mainstem	35434	10-year	12410.00	-4.42	12.01		12.30	0.000426	4.35	2869.76	216.56	0.21
Mainstem	34653	10-year	12410.00	-9.97	11.70	0.74	11.99	0.000368	4.35	2864.10	211.51	0.19
Mainstem	34579											
Mainstem	34510	10-year	12410.00	-9.97	11.59	0.91	11.93	0.000454	4.68	2677.64	181.87	0.21
Mainstem	33180	10-year	12410.00	-7.14	10.86	1.31	11.23	0.000602	4.91	2546.32	186.87	0.23
Mainstem	33164											
Mainstem	33137	10-year	12410.00	-5.66	10.73	2.61	11.19	0.000772	5.45	2331.38	209.76	0.27
Mainstem	31659	10-year	12410.00	-9.25	10.14	-1.04	10.40	0.000343	4.11	3104.63	237.67	0.18
Mainstem	30814	10-year	12410.00	-10.52	9.88		10.12	0.000305	3.89	3245.61	218.51	0.17
Mainstem	30001	10-year	12410.00	-9.50	9.67		9.88	0.000262	3.62	3462.25	245.95	0.17
Mainstem	29209	10-year	12410.00	-9.72	9.49	-1.83	9.68	0.000232	3.46	3619.04	245.59	0.16
Mainstem	29172											
Mainstem	29114	10-year	12410.00	-11.54	9.46	-2.16	9.61	0.000185	3.10	4020.12	279.53	0.14
Mainstem	28649	10-year	12410.00	-8.94	9.42		9.52	0.000134	2.56	4864.31	353.44	0.12
Mainstem	28591	10-year	12410.00	-8.12	9.41		9.51	0.000131	2.54	4932.23	366.06	0.12
Mainstem	28528	10-year	12410.00	-8.34	9.41		9.50	0.000112	2.37	5264.19	377.46	0.11
Mainstem	28464	10-year	12410.00	-11.43	9.41		9.49	0.000115	2.36	5298.65	390.97	0.11
Mainstem	28369	10-year	12410.00	-8.48	9.39		9.48	0.000123	2.39	5217.46	392.16	0.11
Mainstem	28322	10-year	12410.00	-8.95	9.39		9.47	0.000110	2.28	5507.06	418.91	0.11
Mainstem	28243	10-year	12410.00	-9.92	9.38	-2.60	9.46	0.000111	2.28	5447.63	406.79	0.11
Mainstem	28190											
Mainstem	28164	10-year	12410.00	-10.62	9.35		9.44	0.000113	2.35	5295.81	379.03	0.11
Mainstem	27778	10-year	12410.00	-12.40	9.36		9.39	0.000054	1.46	8520.49	726.68	0.07
Mainstem	27678	10-year	12410.00	-9.82	9.32		9.38	0.000106	2.01	6539.40	680.29	0.10
Mainstem	27372	10-year	12410.00	-19.62	9.34		9.36	0.000018	1.05	11866.80	758.12	0.04
Mainstem	25439	10-year	12410.00	-18.93	9.29		9.32	0.000027	1.27	9762.97	597.27	0.06
Mainstem	25085	10-year	12410.00	-18.00	9.31		9.31	0.000002	0.43	28754.71	1441.77	0.02
Mainstem	24652	10-year	12410.00	-18.66	9.29		9.30	0.000016	0.96	12934.69	806.34	0.04
Mainstem	24563	10-year	12410.00	-19.46	9.29		9.30	0.000015	0.95	13114.28	806.17	0.04
Mainstem	24473	10-year	12410.00	-18.92	9.29		9.30	0.000014	0.94	13203.46	802.19	0.04
Mainstem	24383	10-year	12410.00	-19.03	9.29		9.30	0.000014	0.92	13520.64	833.13	0.04
Mainstem	24283	10-year	12410.00	-18.35	9.29		9.30	0.000014	0.91	13634.61	840.69	0.04
Mainstem	24172	10-year	12410.00	-15.01	9.27		9.30	0.000026	1.17	10584.66	713.25	0.05
Mainstem	23924	10-year	12410.00	-15.13	9.26		9.29	0.000040	1.33	9410.46	551.43	0.06
Mainstem	23786	10-year	12410.00	-15.45	9.26		9.28	0.000028	1.34	9306.95	549.08	0.06
Mainstem	23718	10-year	12410.00	-15.64	9.25		9.28	0.000029	1.37	9118.99	546.85	0.06
Mainstem	23649	10-year	12410.00	-15.78	9.25		9.28	0.000031	1.39	9030.96	578.43	0.06
Mainstem	23496	10-year	12410.00	-15.62	9.24		9.27	0.000039	1.55	8066.72	510.82	0.07
Mainstem	23417	10-year	12410.00	-15.59	9.23		9.27	0.000038	1.55	8061.85	492.93	0.07
Mainstem	23327	10-year	12410.00	-15.43	9.23		9.27	0.000039	1.57	7951.74	485.14	0.07
Mainstem	23052	10-year	12410.00	-15.55	9.22		9.26	0.000040	1.57	7916.42	465.11	0.07
Mainstem	22989	10-year	12410.00	-15.75	9.21		9.25	0.000038	1.58	7906.42	464.29	0.07
Mainstem	22889	10-year	12410.00	-15.99	9.21		9.25	0.000040	1.59	7826.99	466.35	0.07
Mainstem	22794	10-year	12410.00	-16.26	9.20		9.24	0.000044	1.73	7169.87	406.07	0.07
Mainstem	22688	10-year	12410.00	-16.25	9.19		9.24	0.000047	1.77	7009.87	398.92	0.07
Mainstem	22598	10-year	12410.00	-16.28	9.19		9.23	0.000045	1.74	7135.48	412.19	0.07
Mainstem	22540	10-year	12410.00	-16.40	9.18		9.23	0.000122	1.72	7221.43	408.79	0.07
Mainstem	22334	10-year	12410.00	-19.84	9.17		9.22	0.000041	1.65	7540.66	420.40	0.07
Mainstem	22271	10-year	12410.00	-21.51	9.17		9.21	0.000038	1.64	7603.76	417.54	0.07
Mainstem	22128	10-year	12410.00	-17.95	9.17		9.21	0.000035	1.60	7759.32	410.77	0.06
Mainstem	22039	10-year	12410.00	-18.51	9.17		9.20	0.000033	1.57	7930.02	416.36	0.06
Mainstem	21923	10-year	12410.00	-19.56	9.16		9.20	0.000033	1.56	7961.64	431.02	0.06
Mainstem	21843	10-year	12410.00	-20.81	9.16		9.20	0.000034	1.58	7858.85	423.38	0.06
Mainstem	21358	10-year	12410.00	-20.14	9.15		9.18	0.000029	1.36	9182.23	550.80	0.06
Mainstem	20793	10-year	12410.00	-20.69	9.14		9.16	0.000026	1.31	9468.18	552.33	0.06
Mainstem	20544	10-year	12410.00	-23.49	9.13		9.16	0.000023	1.25	10007.22	572.18	0.05
Mainstem	20492	10-year	12410.00	-24.57	9.13	-15.44	9.15	0.000020	1.29	9949.54	548.85	0.05
Mainstem	20428											
Mainstem	20418	10-year	12410.00	-24.04	9.09		9.12	0.000066	1.38	9119.40	495.77	0.05

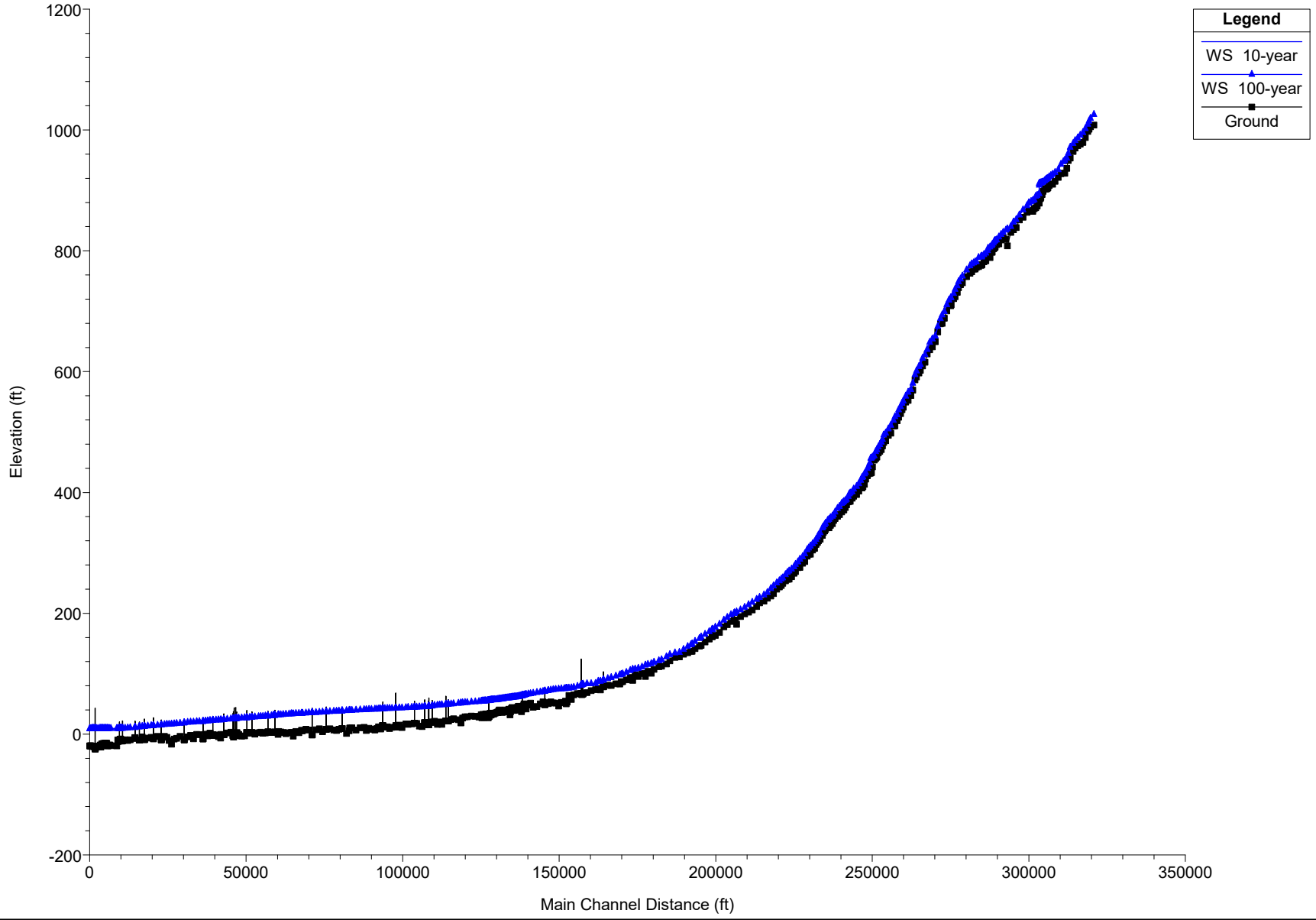
HEC-RAS Plan: Exst River: Green River Reach: Mainstem Profile: 10-year (Continued)

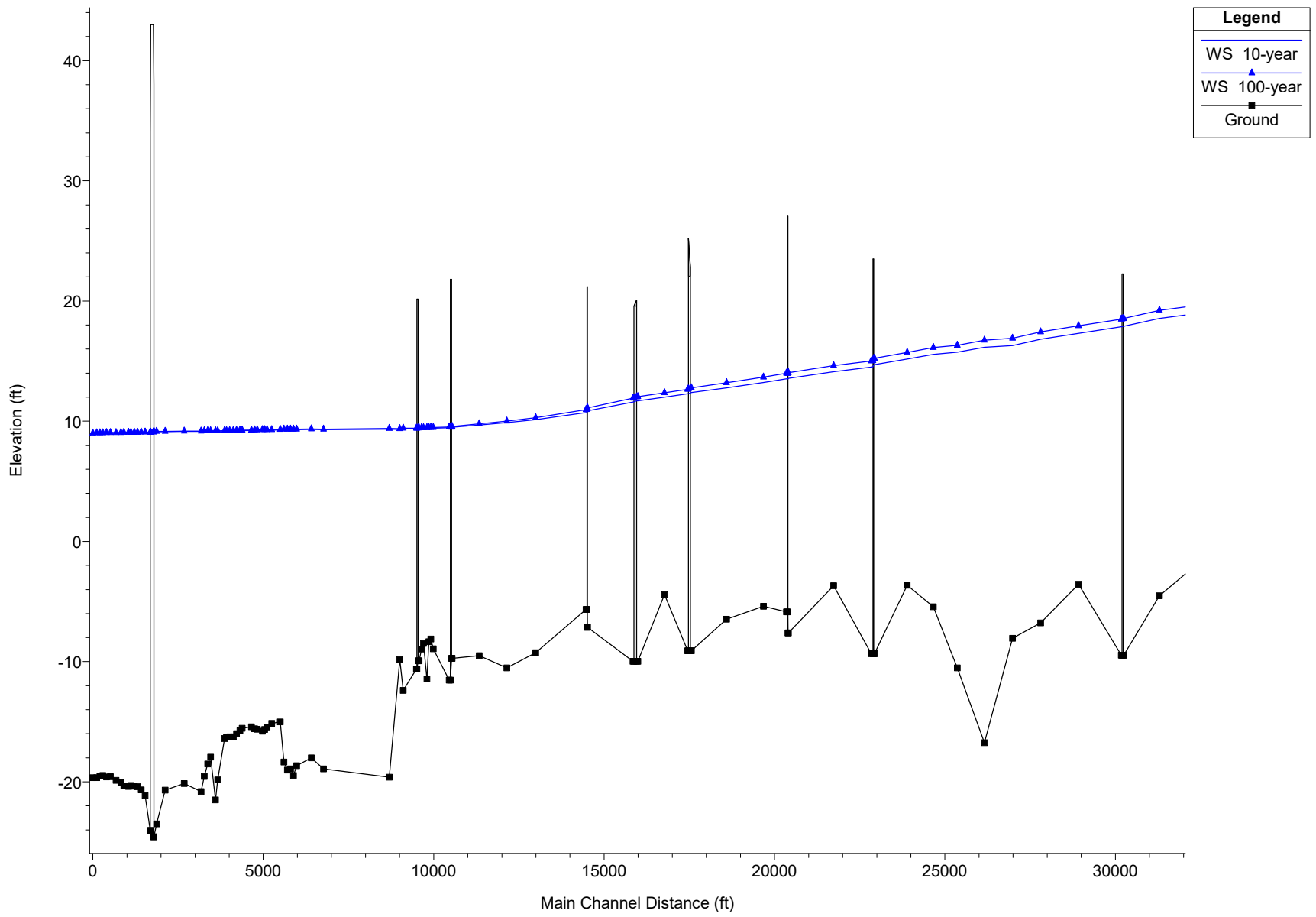
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	20207	10-year	12410.00	-21.14	9.08		9.11	0.000036	1.46	8525.20	464.99	0.06
Mainstem	20090	10-year	12410.00	-20.67	9.07		9.11	0.000031	1.47	8464.93	461.69	0.06
Mainstem	19990	10-year	12410.00	-20.41	9.07		9.10	0.000047	1.50	8300.96	451.35	0.06
Mainstem	19895	10-year	12410.00	-20.36	9.07		9.10	0.000031	1.48	8468.43	496.79	0.06
Mainstem	19795	10-year	12410.00	-20.30	9.06		9.10	0.000032	1.44	8796.23	578.03	0.06
Mainstem	19721	10-year	12410.00	-20.39	9.06		9.09	0.000028	1.40	9146.76	630.91	0.06
Mainstem	19584	10-year	12410.00	-20.35	9.06		9.09	0.000038	1.38	9163.19	627.71	0.06
Mainstem	19488	10-year	12410.00	-20.09	9.05		9.09	0.000034	1.41	9003.19	612.30	0.06
Mainstem	19356	10-year	12410.00	-19.87	9.05		9.08	0.000036	1.42	8944.41	610.06	0.06
Mainstem	19188	10-year	12410.00	-19.58	9.04		9.07	0.000034	1.44	8754.86	537.41	0.06
Mainstem	19077	10-year	12410.00	-19.59	9.04		9.07	0.000029	1.43	8723.43	488.64	0.06
Mainstem	18966	10-year	12410.00	-19.48	9.04		9.07	0.000030	1.40	8920.32	523.20	0.06
Mainstem	18876	10-year	12410.00	-19.52	9.04		9.06	0.000029	1.33	9327.12	566.40	0.06
Mainstem	18781	10-year	12410.00	-19.66	9.03		9.06	0.000029	1.43	8773.08	501.49	0.06
Mainstem	18670	10-year	12410.00	-19.65	9.02	-12.73	9.06	0.000033	1.54	8072.24	439.97	0.06

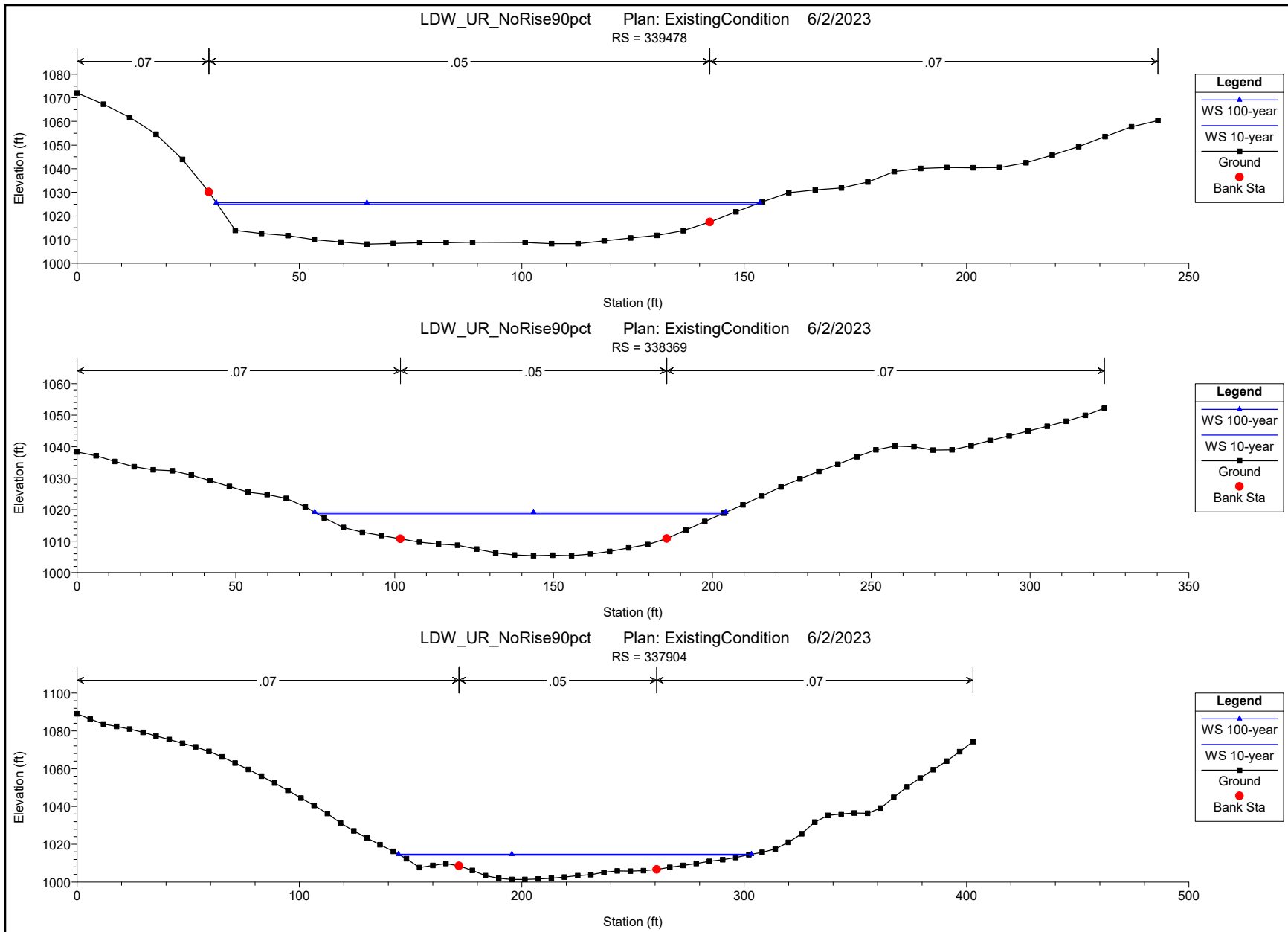
HEC-RAS Plan: Exst River: Green River Reach: Mainstem Profile: 100-year (Continued)

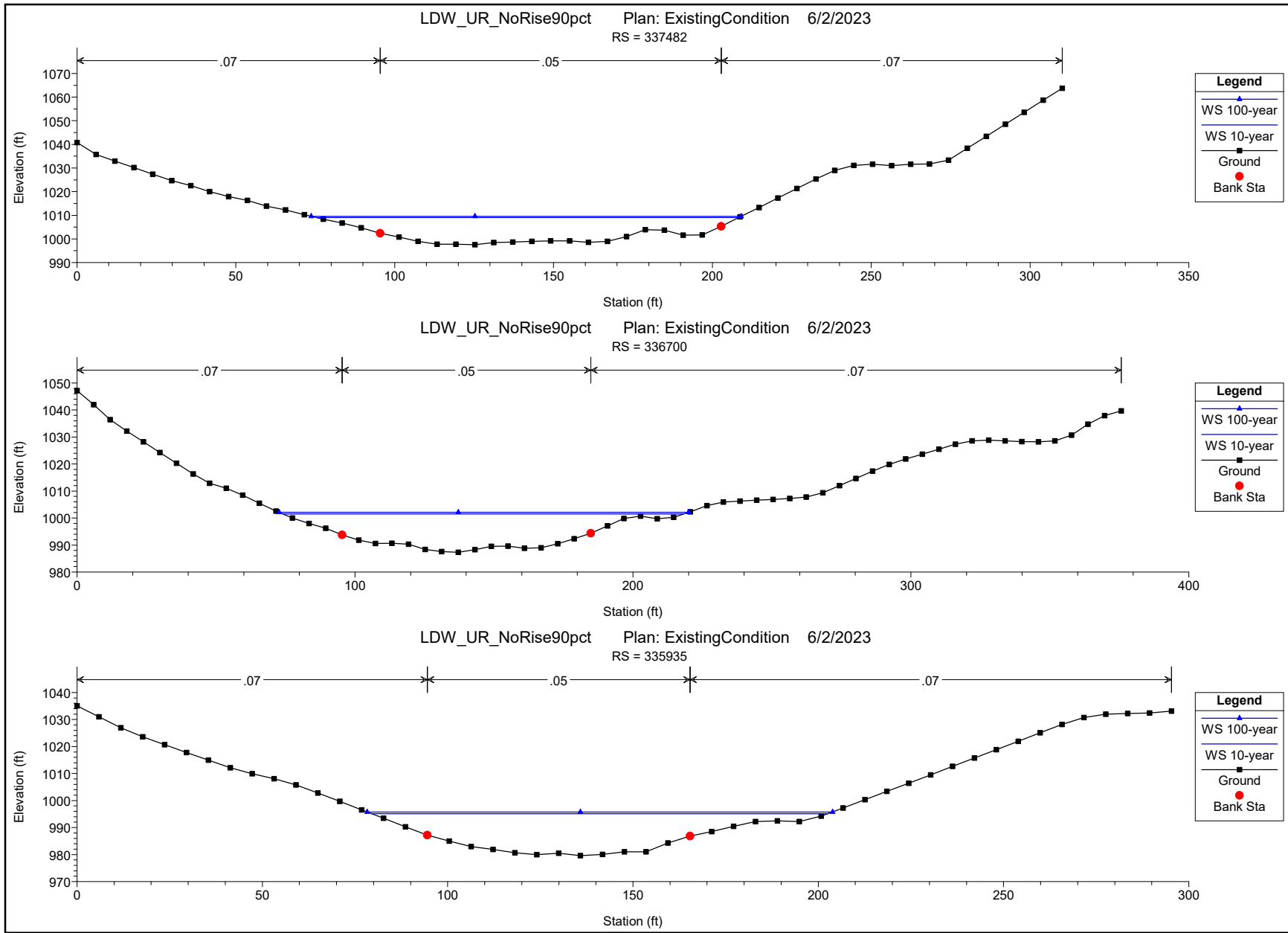
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	20207	100-year	13410.00	-21.14	9.09		9.13	0.000042	1.58	8529.76	465.01	0.06
Mainstem	20090	100-year	13410.00	-20.67	9.08		9.12	0.000036	1.59	8469.11	461.70	0.06
Mainstem	19990	100-year	13410.00	-20.41	9.08		9.12	0.000055	1.62	8304.66	451.36	0.07
Mainstem	19895	100-year	13410.00	-20.36	9.07		9.11	0.000036	1.59	8472.26	496.88	0.07
Mainstem	19795	100-year	13410.00	-20.30	9.07		9.11	0.000037	1.56	8800.50	578.30	0.06
Mainstem	19721	100-year	13410.00	-20.39	9.07		9.11	0.000033	1.51	9151.33	631.17	0.06
Mainstem	19584	100-year	13410.00	-20.35	9.07		9.10	0.000044	1.49	9167.35	627.94	0.06
Mainstem	19488	100-year	13410.00	-20.09	9.06		9.10	0.000040	1.52	9006.76	612.51	0.06
Mainstem	19356	100-year	13410.00	-19.87	9.05		9.09	0.000042	1.53	8947.42	610.24	0.06
Mainstem	19188	100-year	13410.00	-19.58	9.05		9.08	0.000039	1.55	8756.90	537.59	0.06
Mainstem	19077	100-year	13410.00	-19.59	9.04		9.08	0.000034	1.54	8725.02	488.66	0.06
Mainstem	18966	100-year	13410.00	-19.48	9.04		9.08	0.000034	1.51	8921.83	523.22	0.06
Mainstem	18876	100-year	13410.00	-19.52	9.04		9.07	0.000034	1.44	9328.69	566.40	0.06
Mainstem	18781	100-year	13410.00	-19.66	9.03		9.07	0.000034	1.54	8773.87	501.50	0.06
Mainstem	18670	100-year	13410.00	-19.65	9.02	-12.45	9.06	0.000038	1.67	8072.24	439.97	0.07

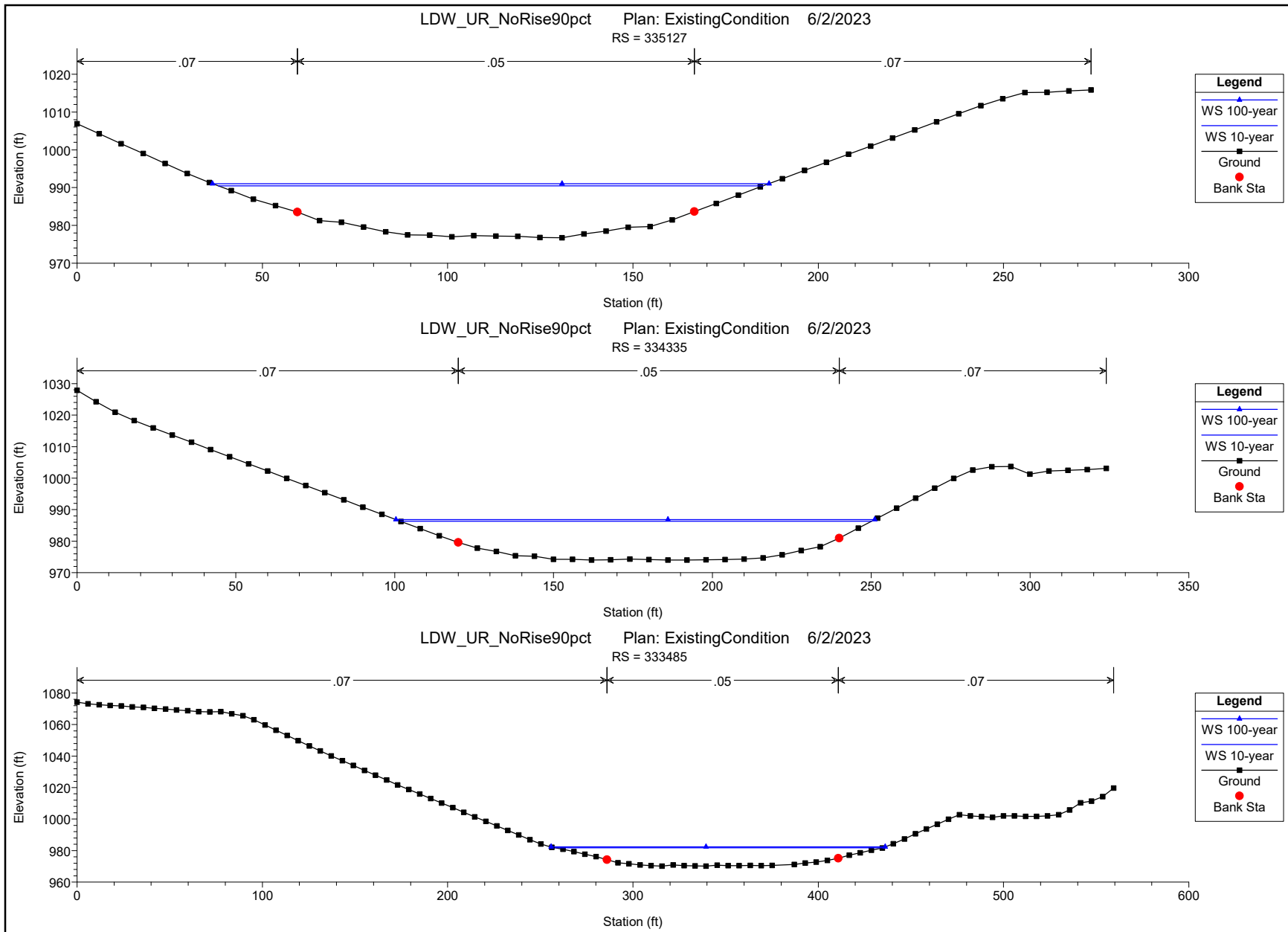
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023

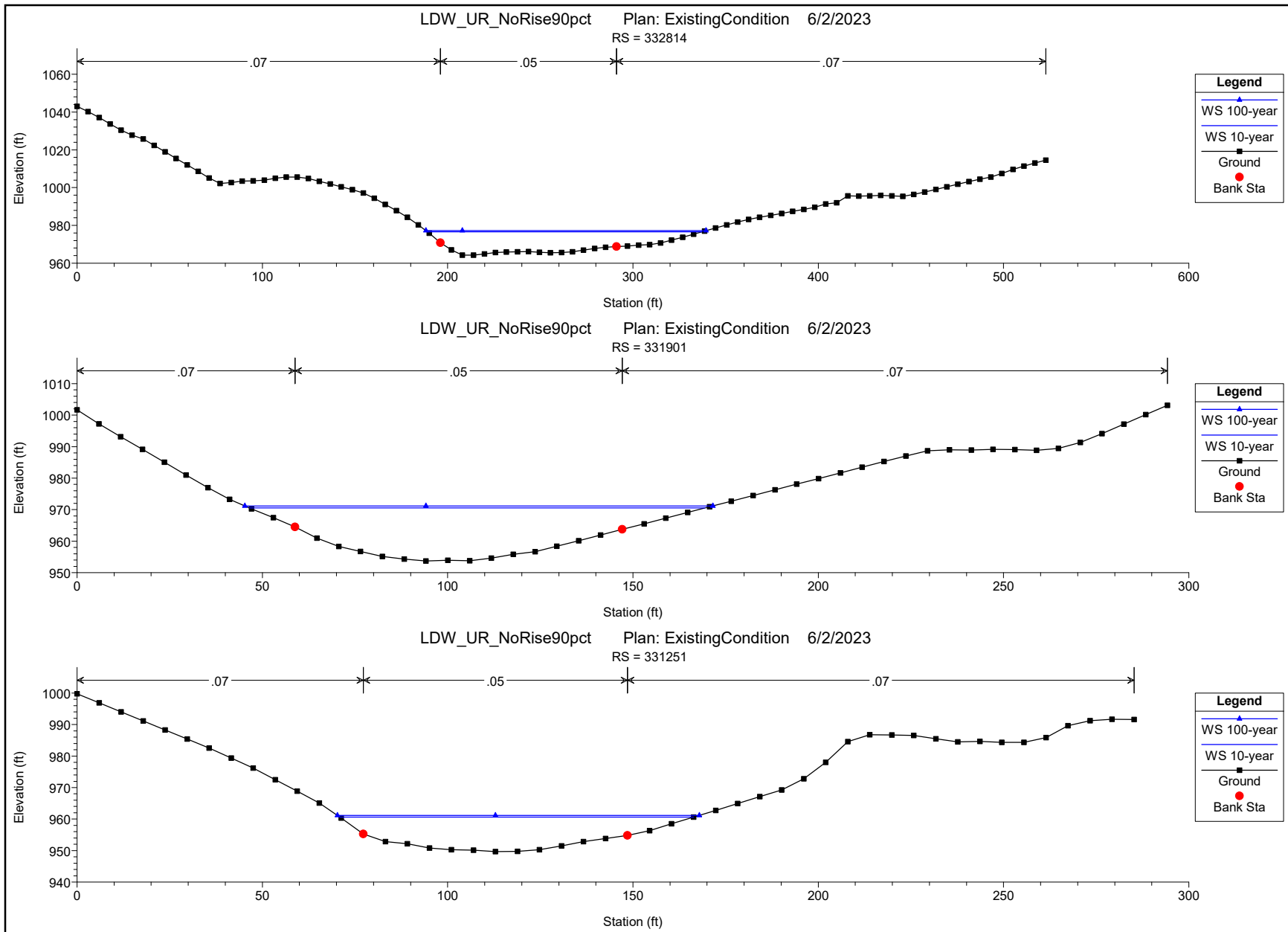


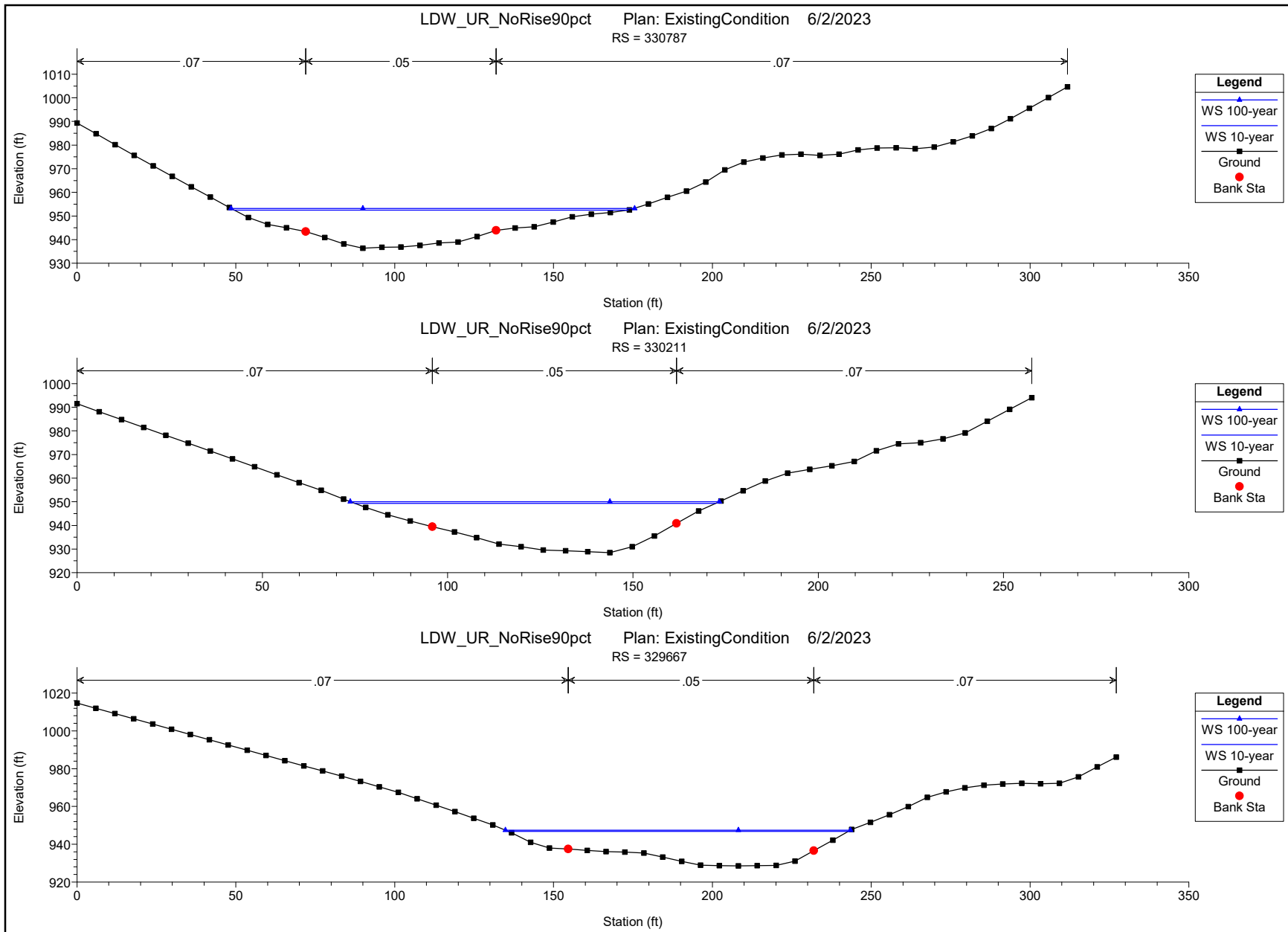


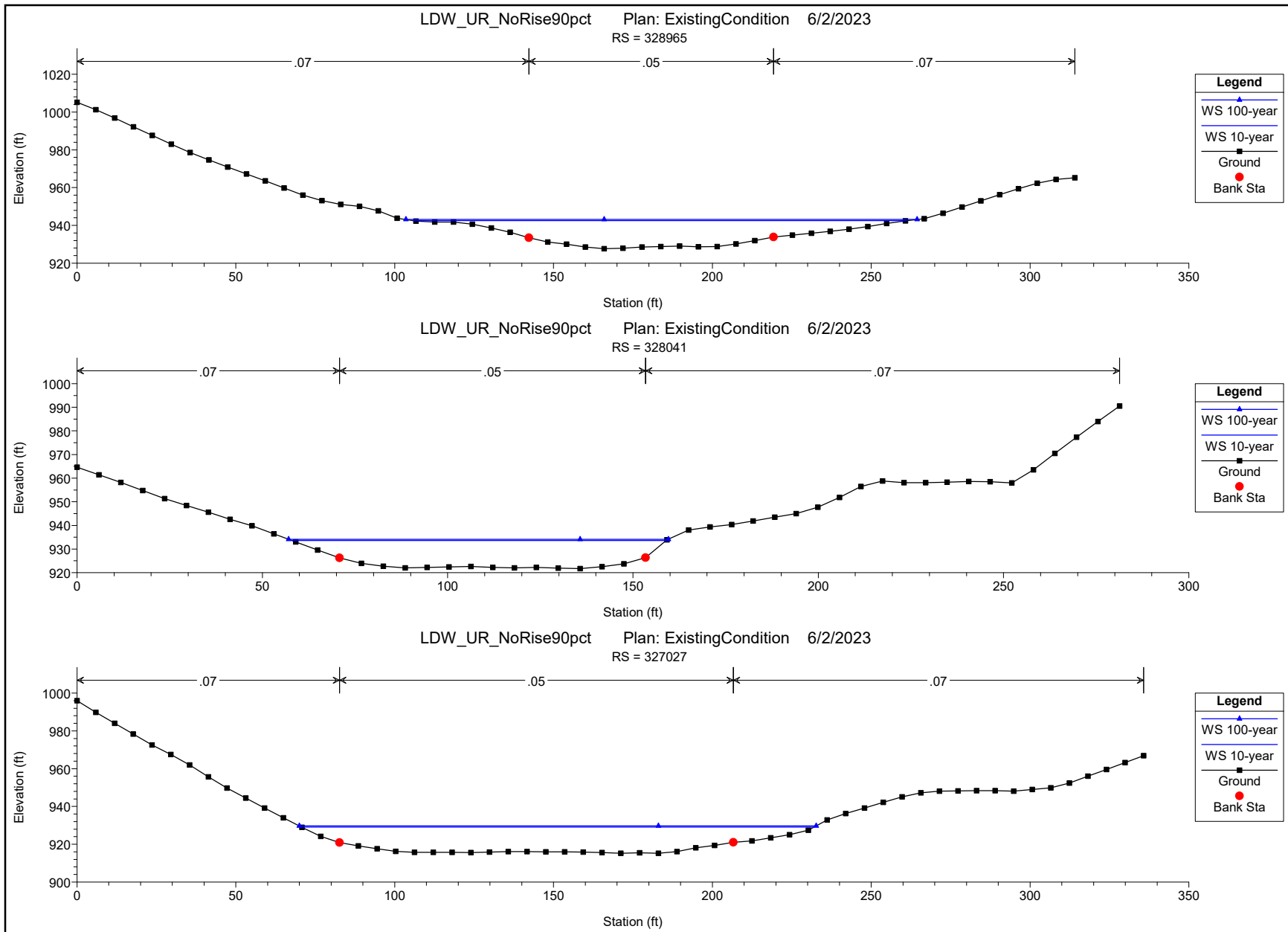


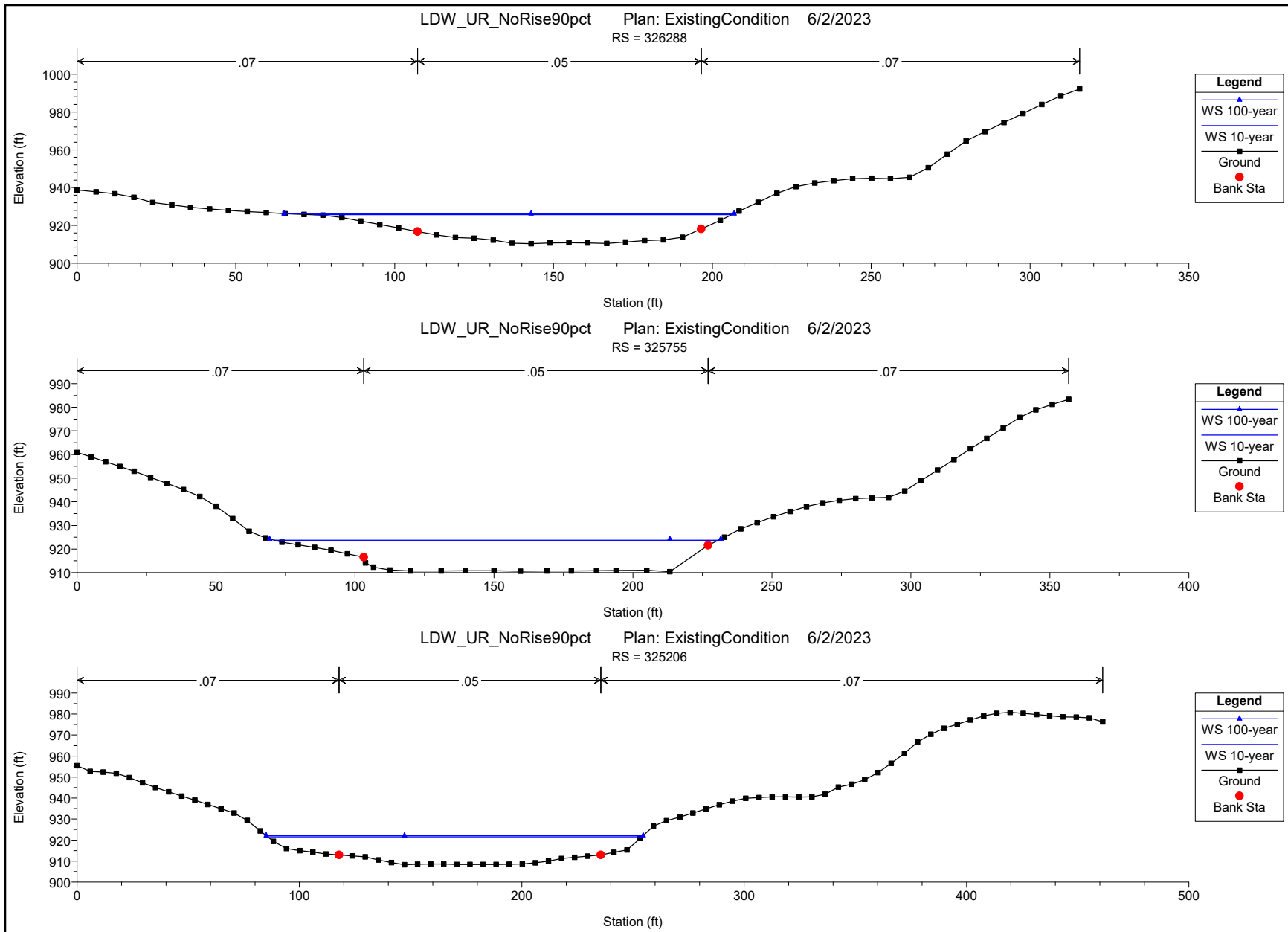


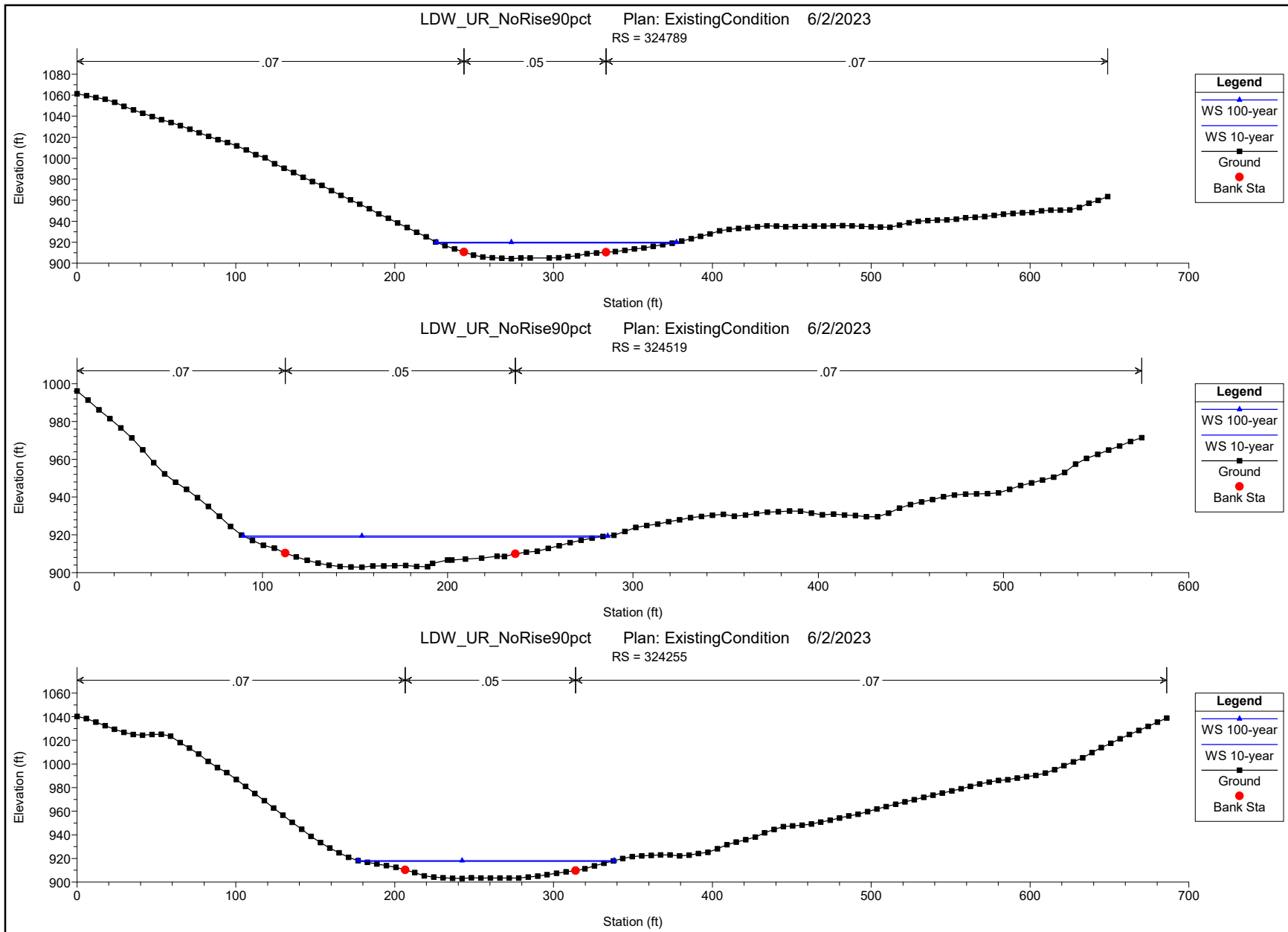


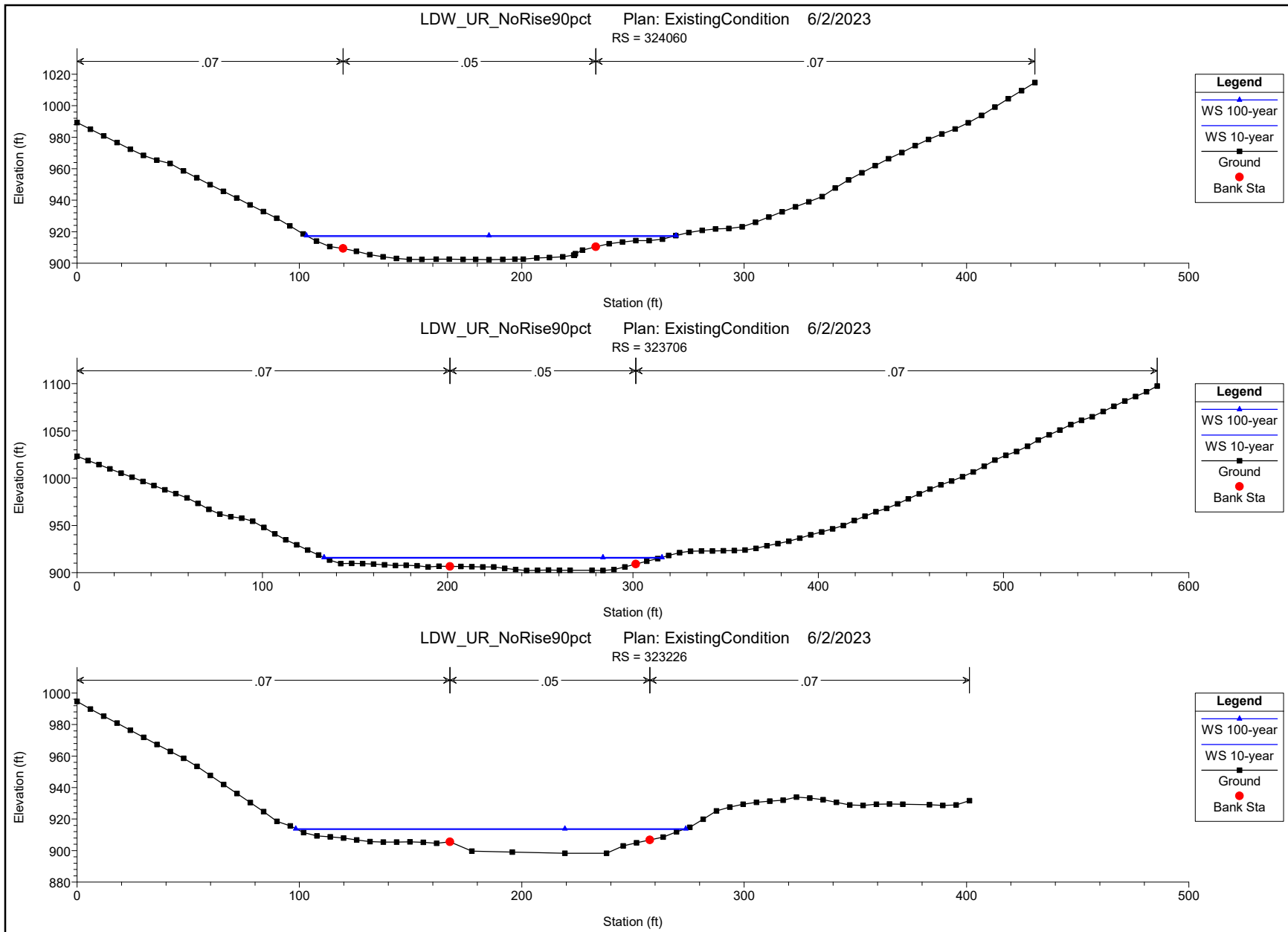


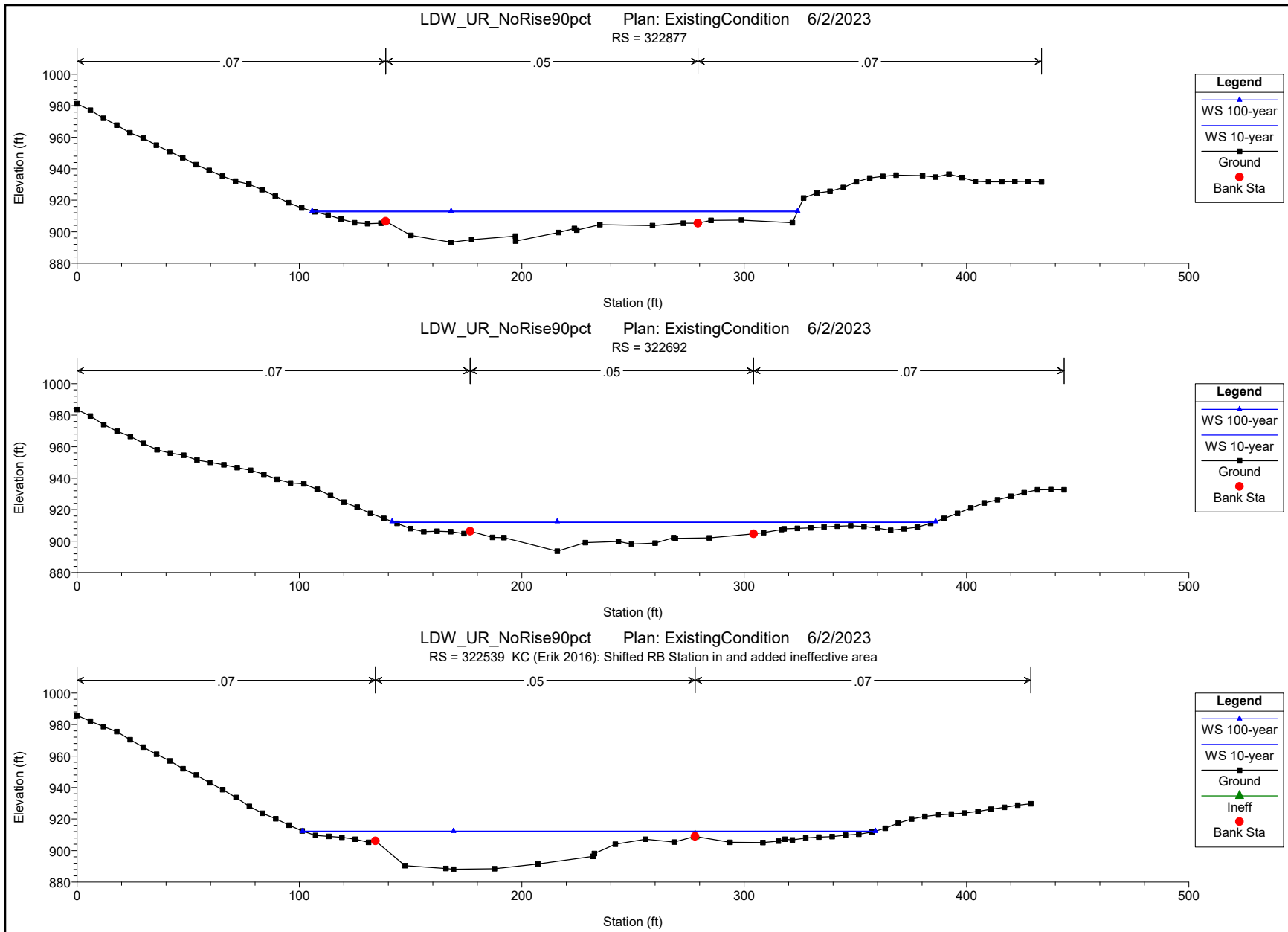


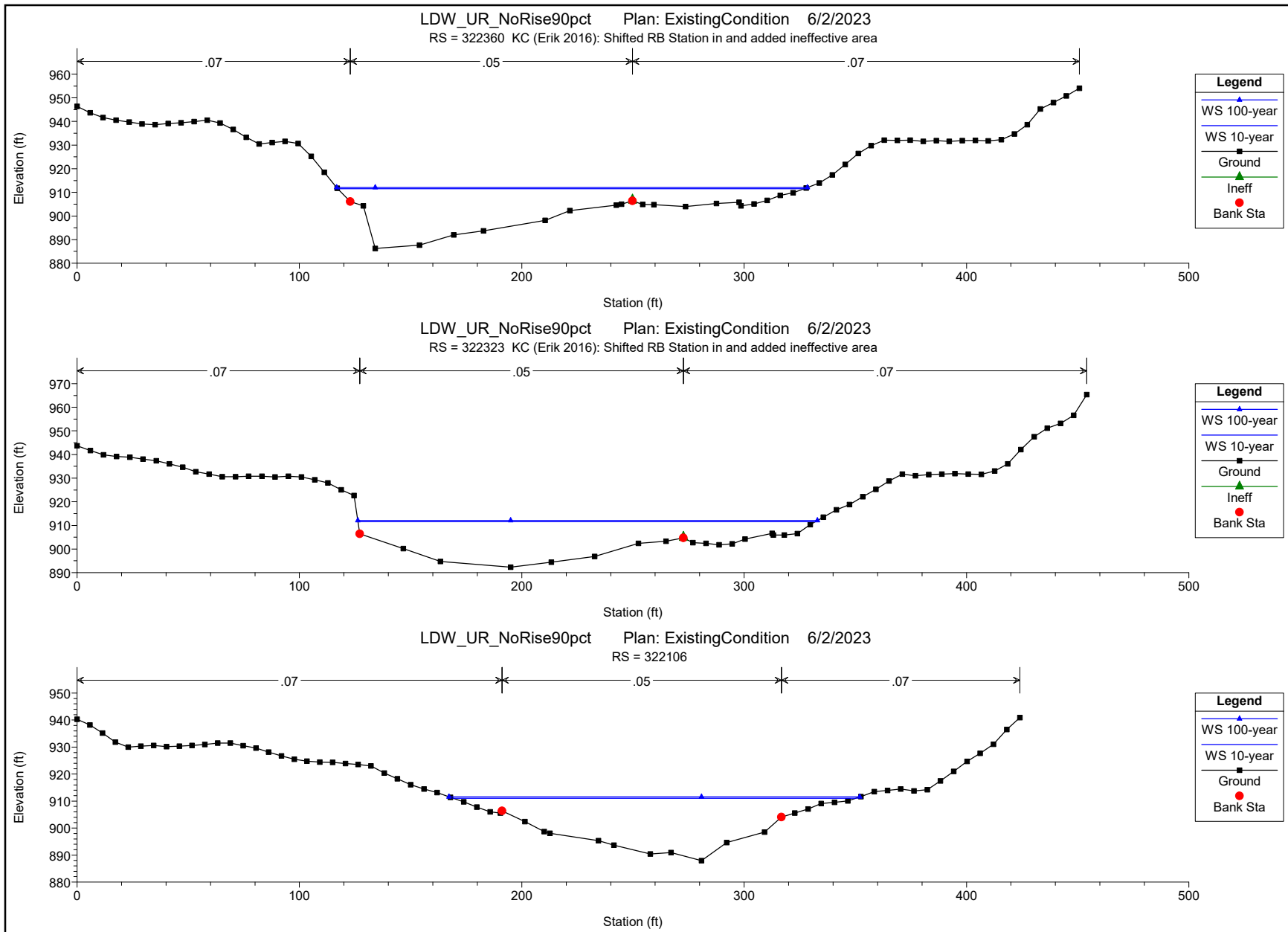


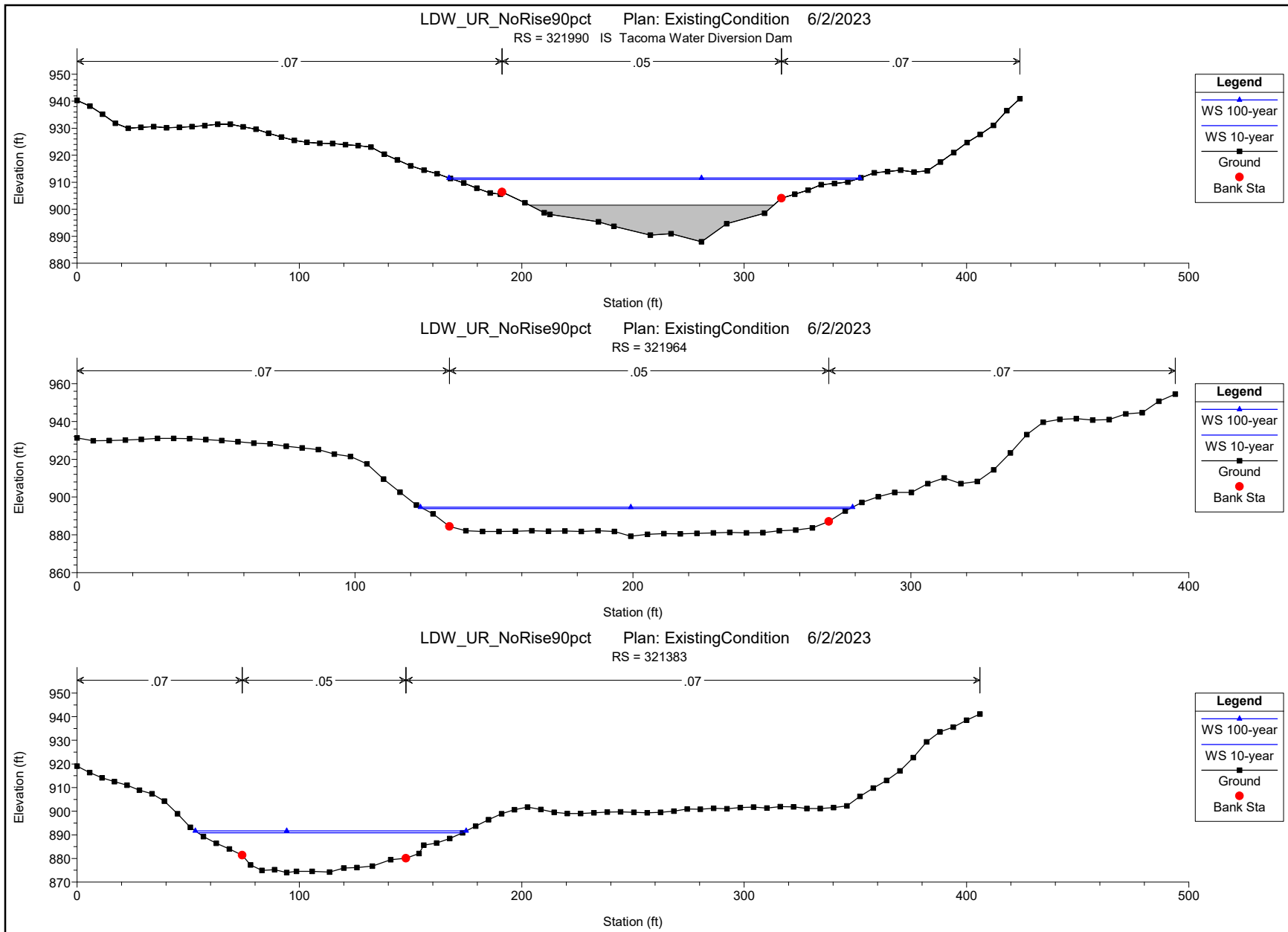


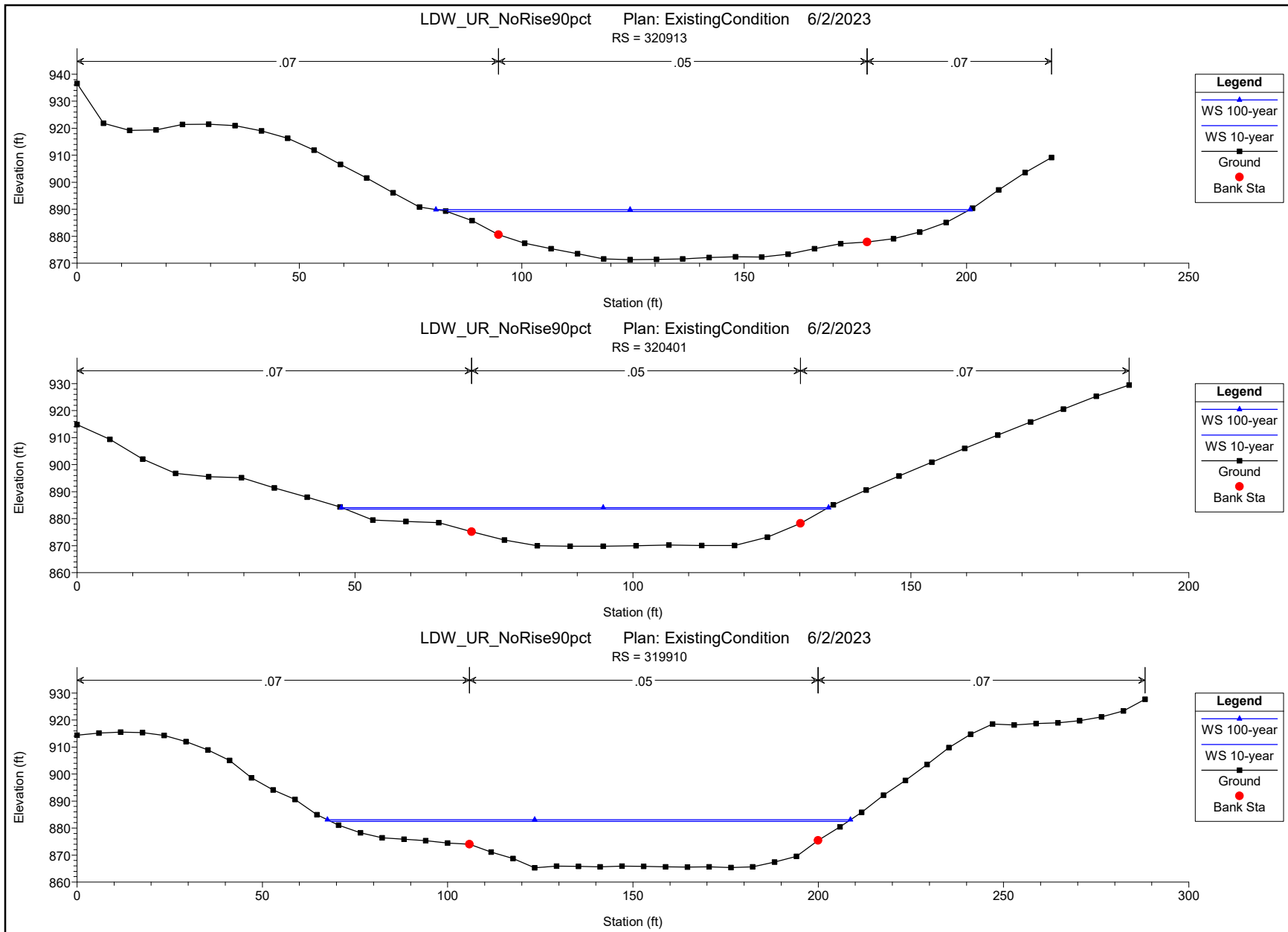


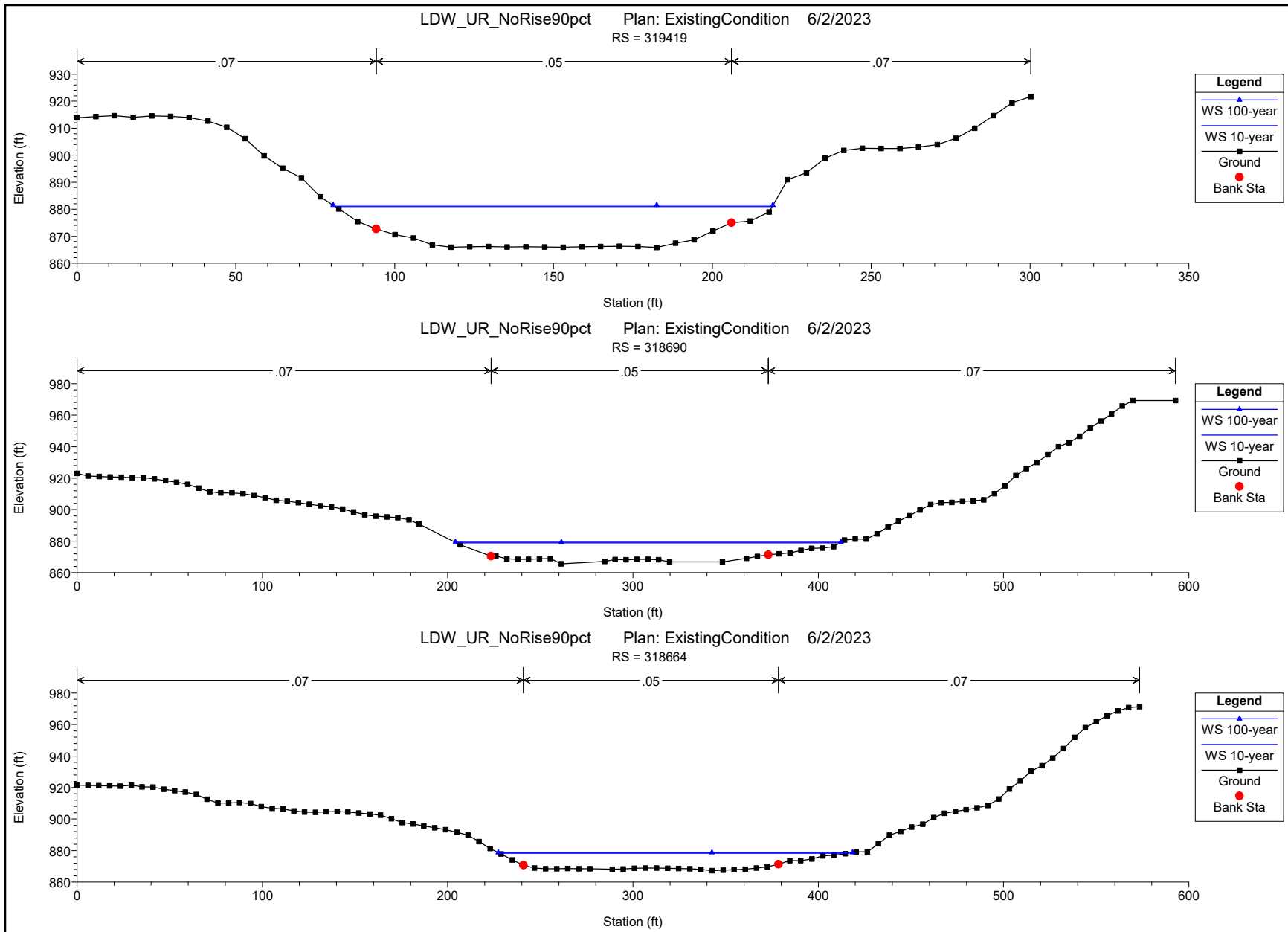


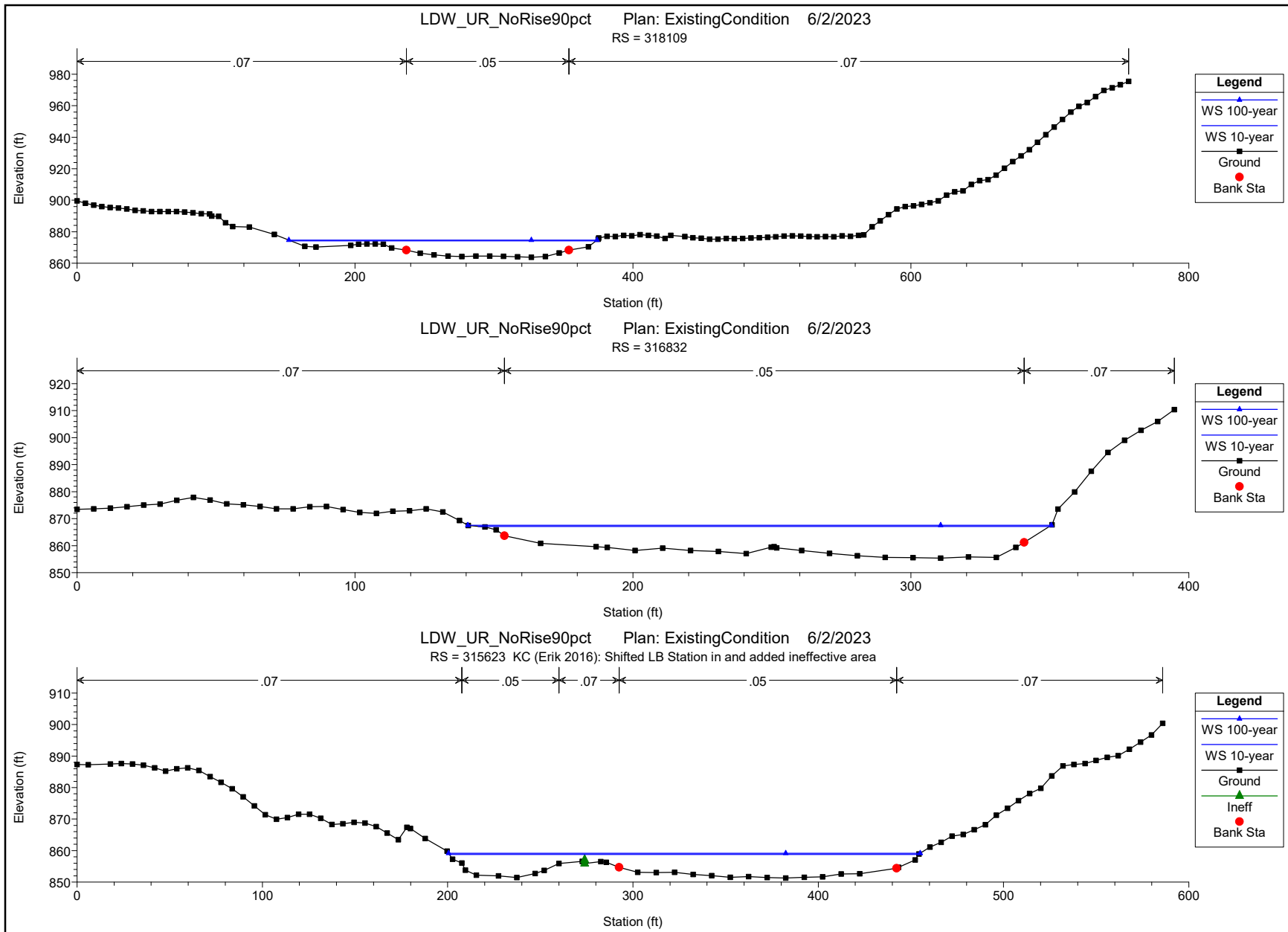


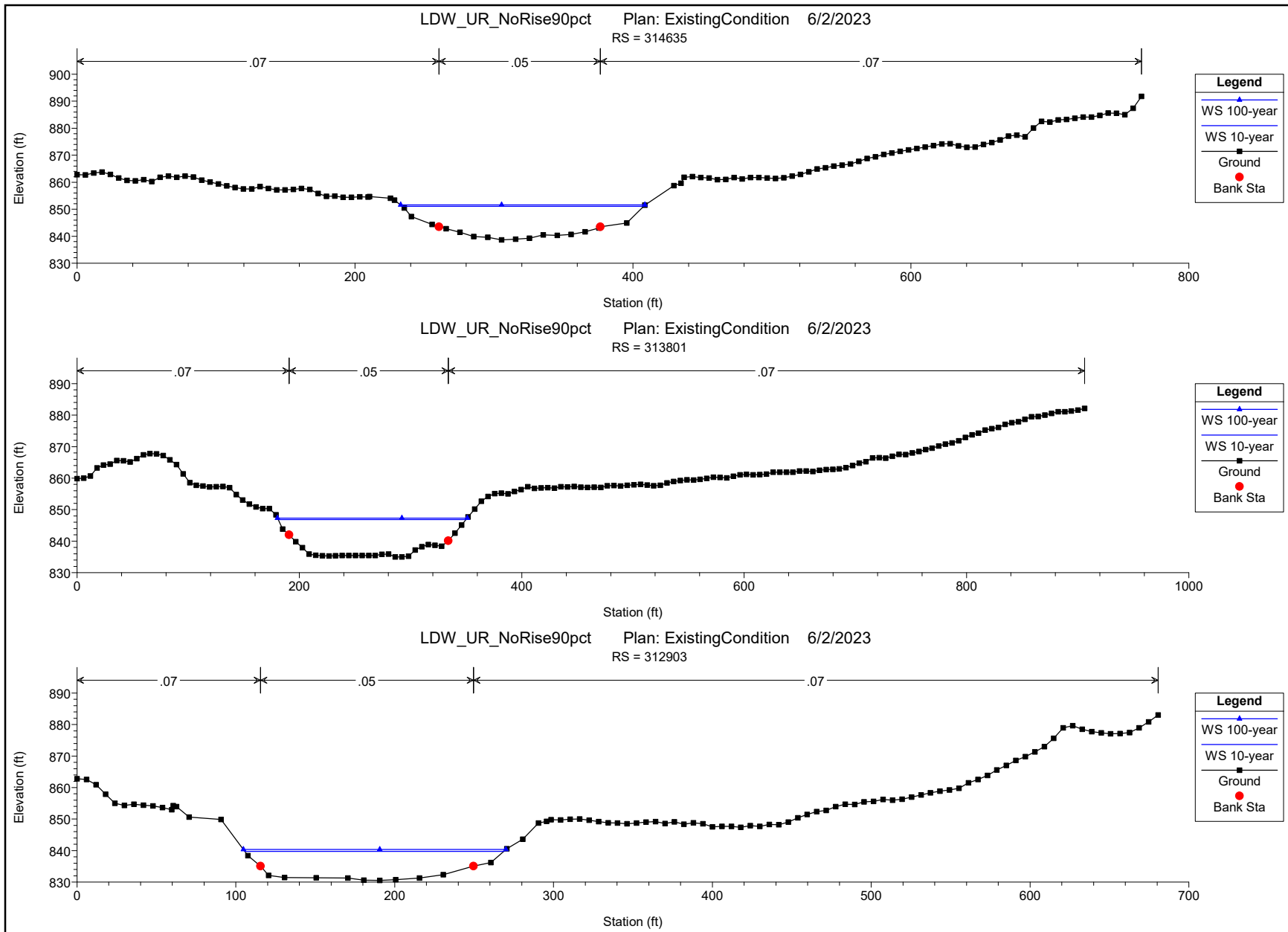


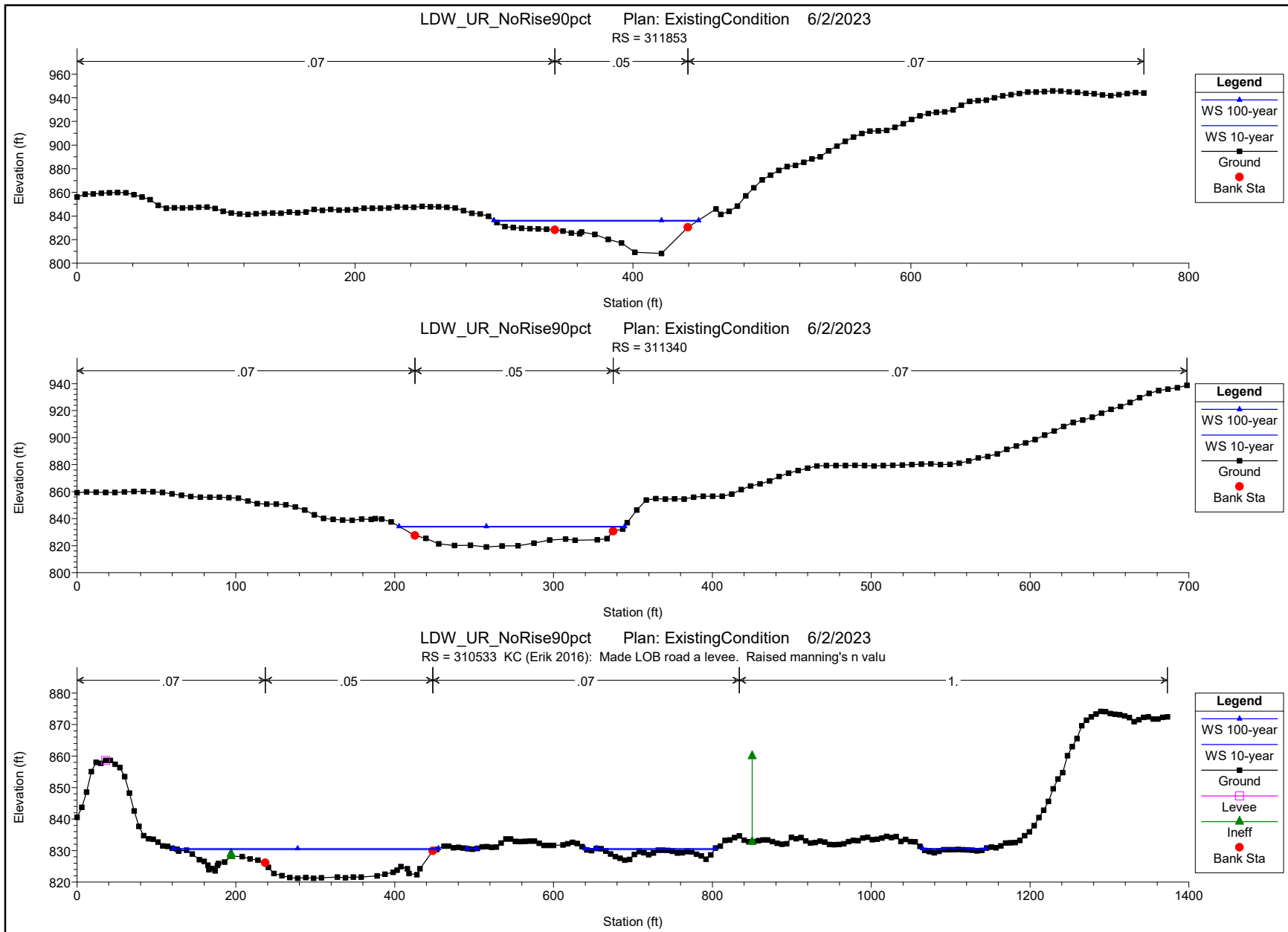


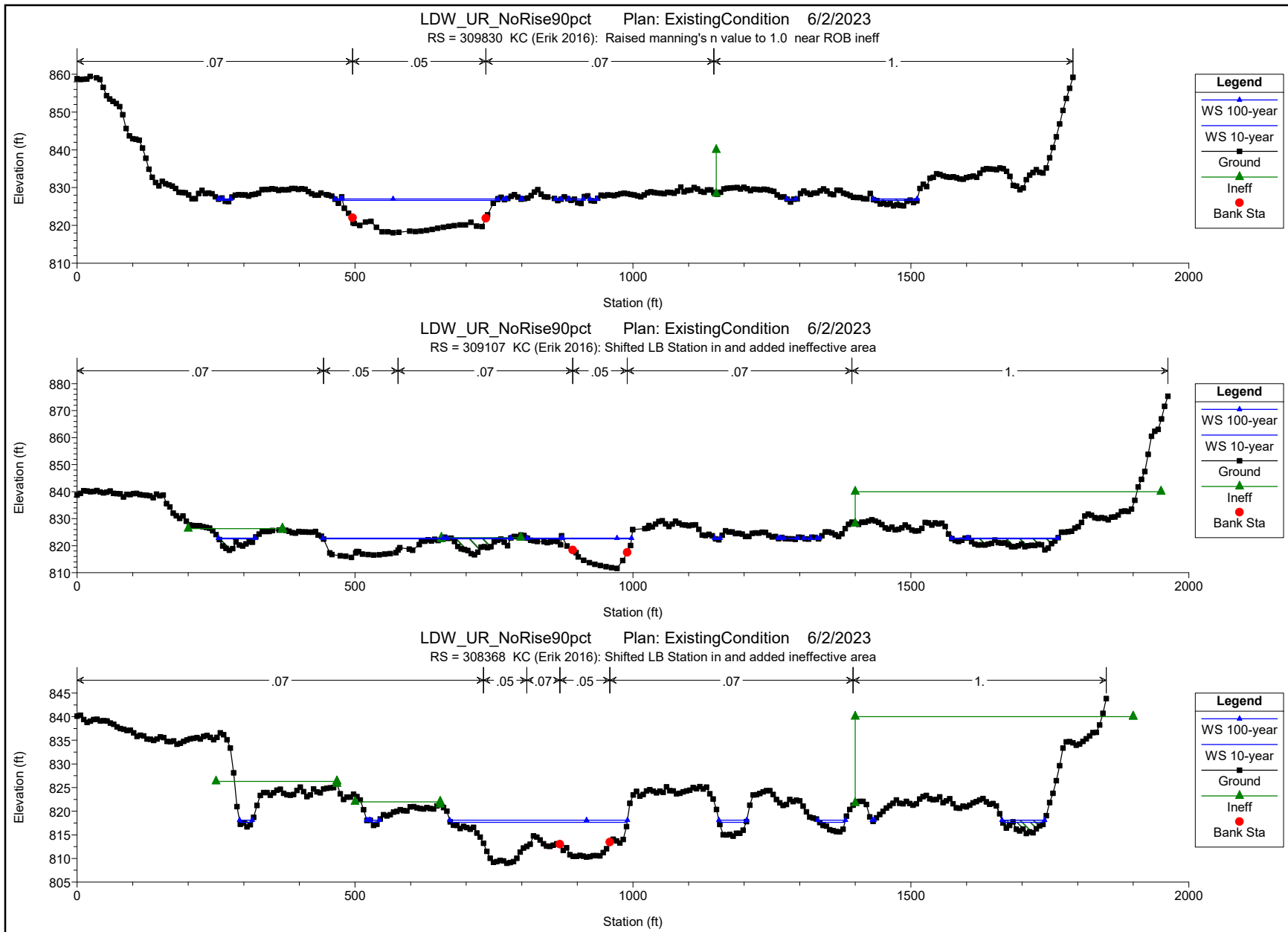


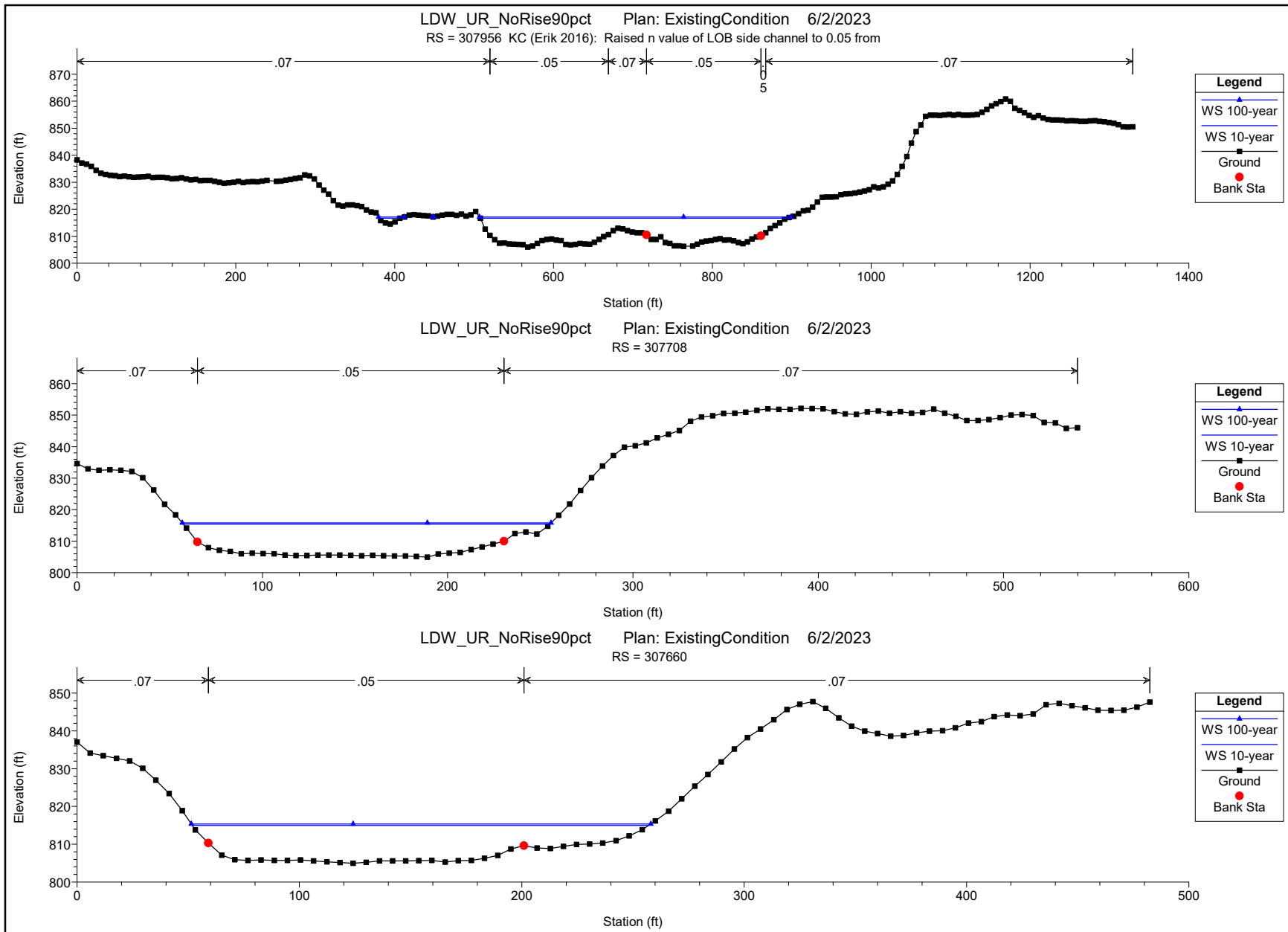


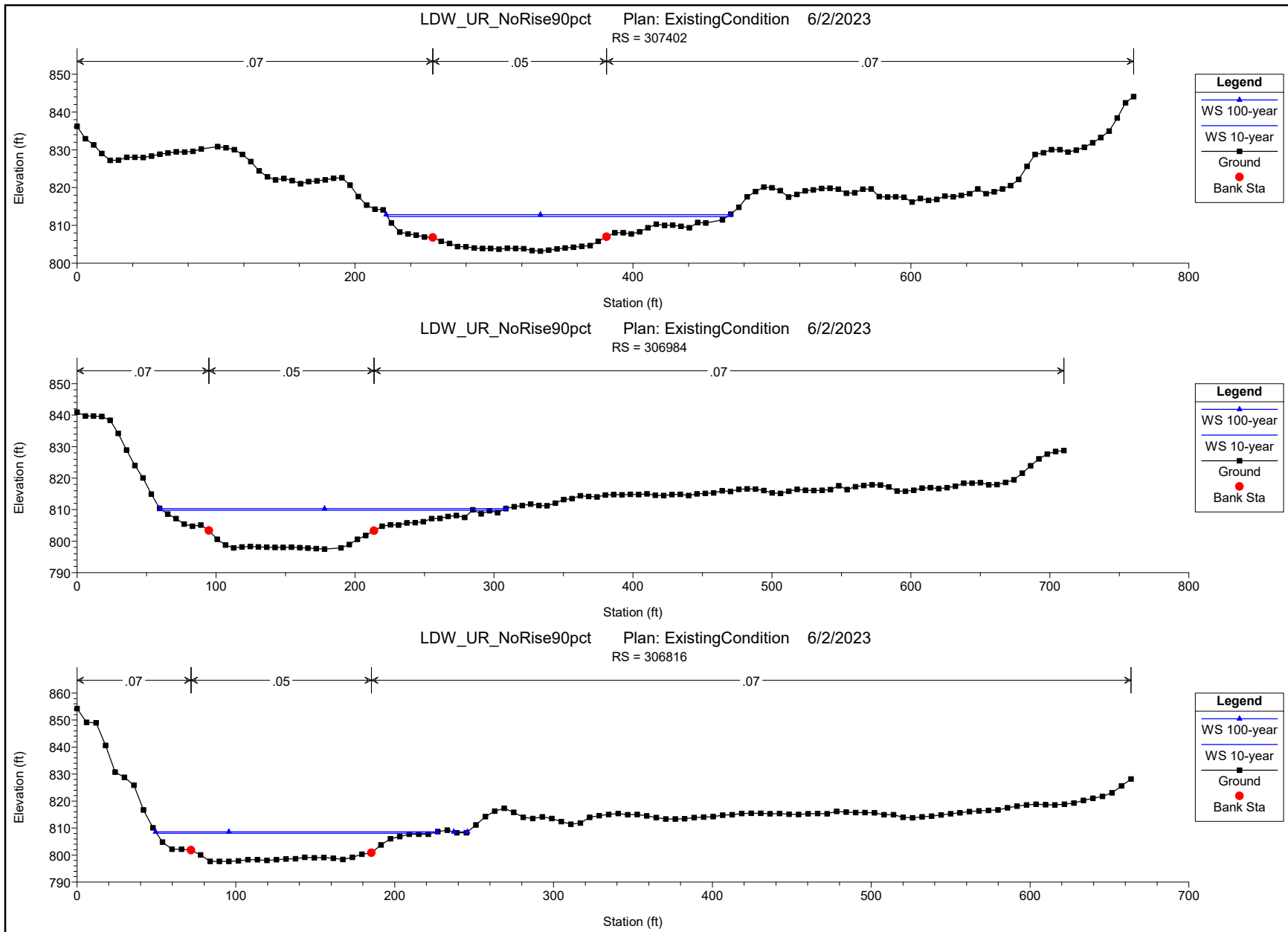


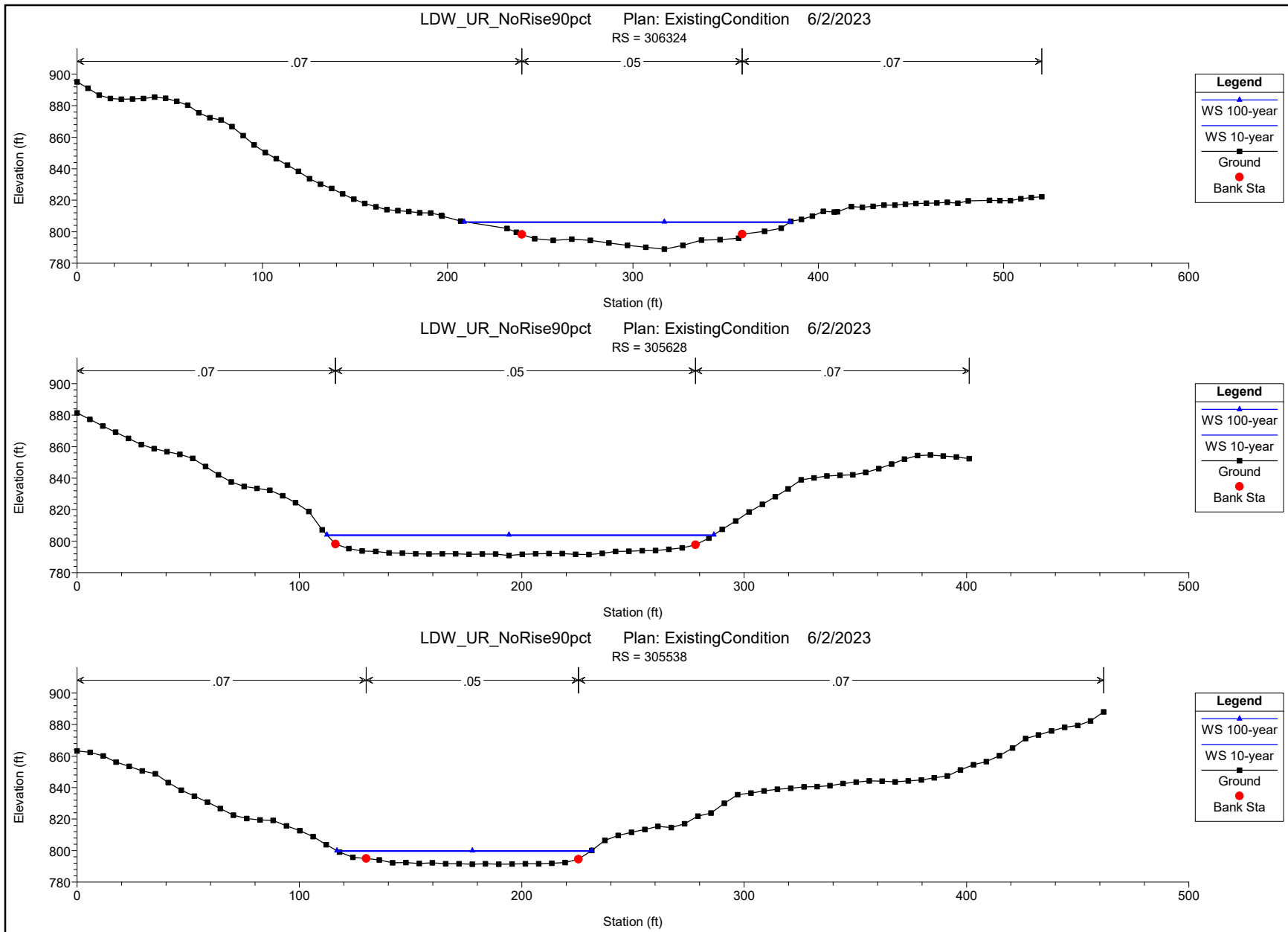


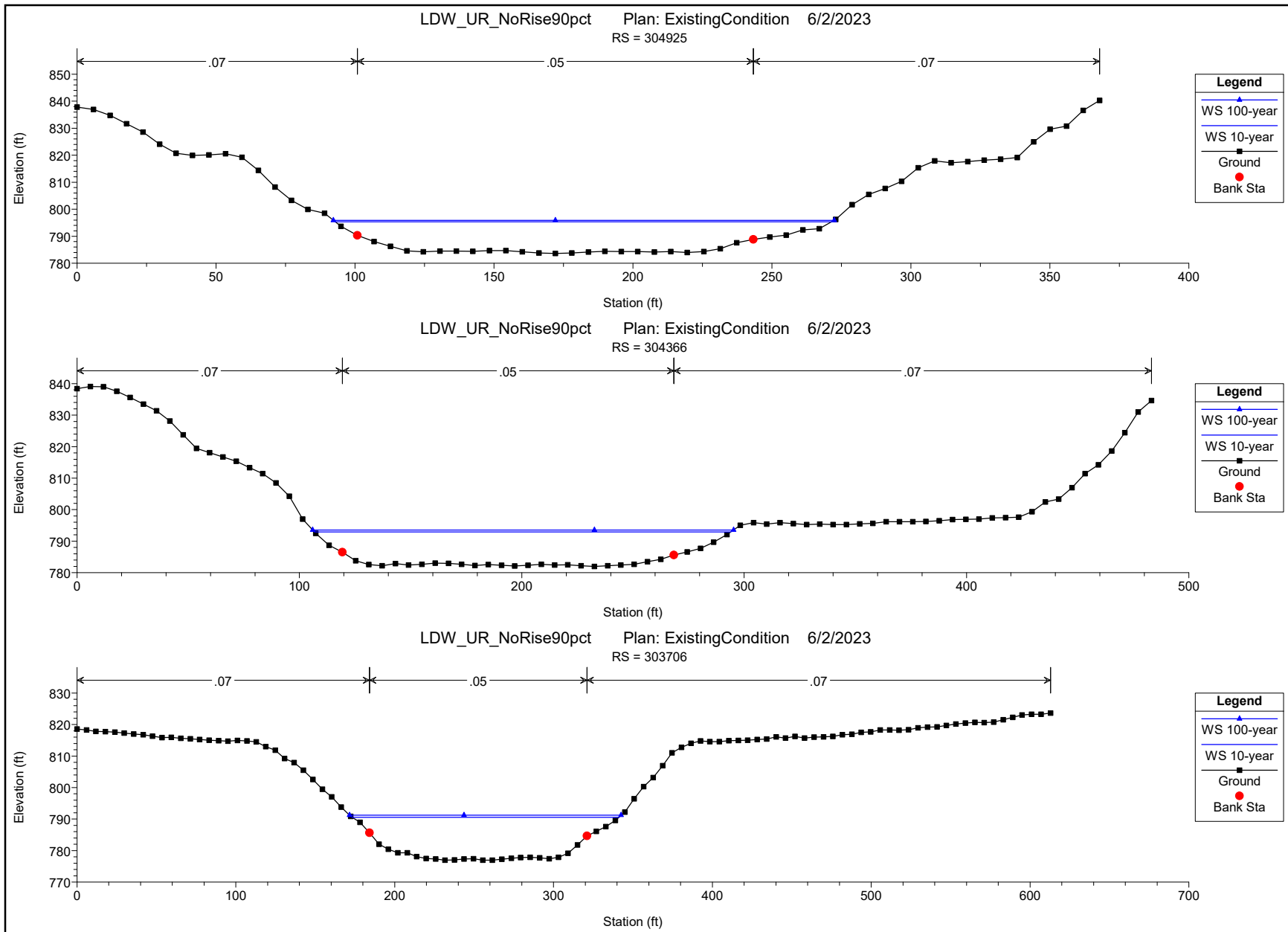


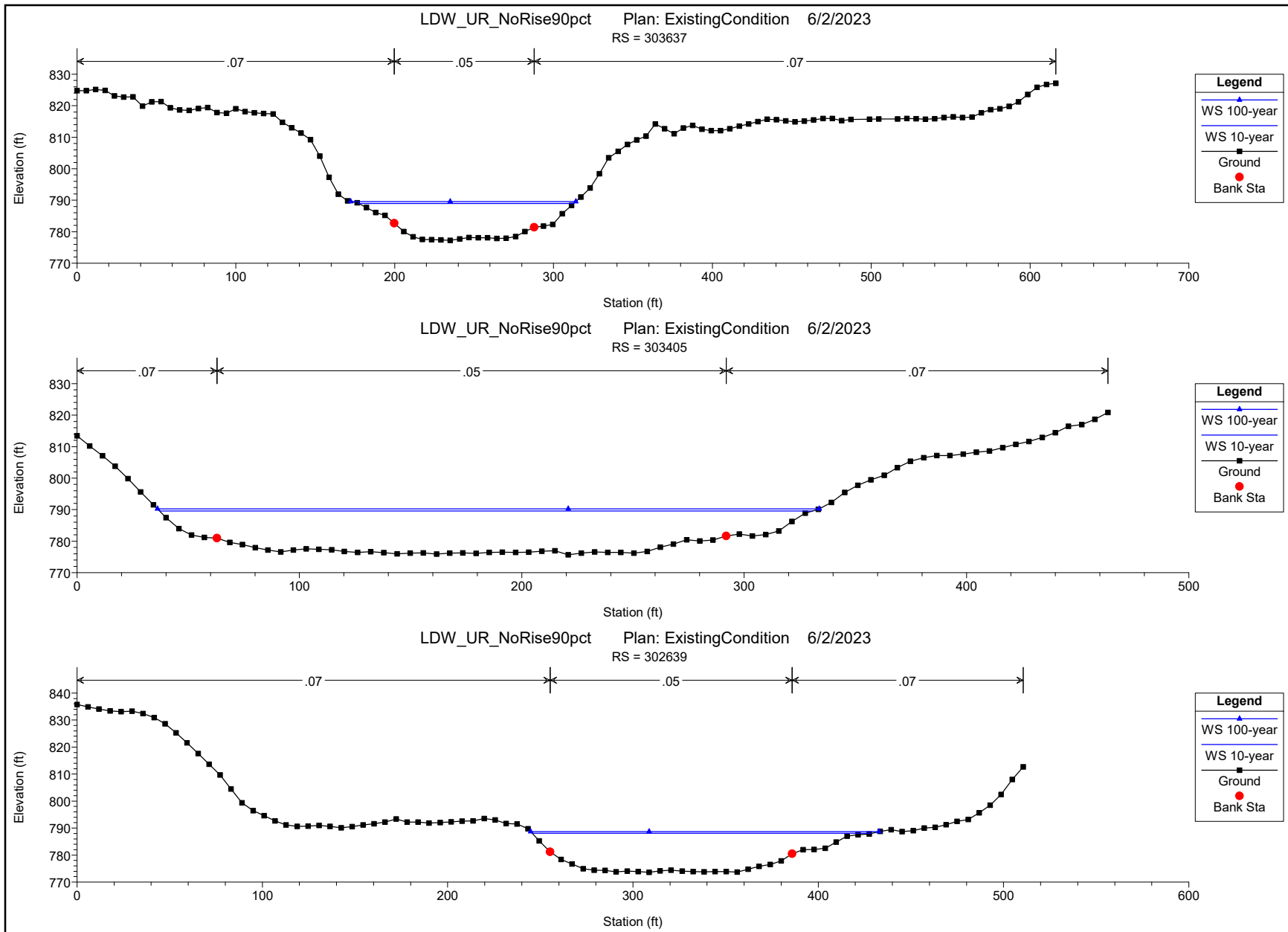


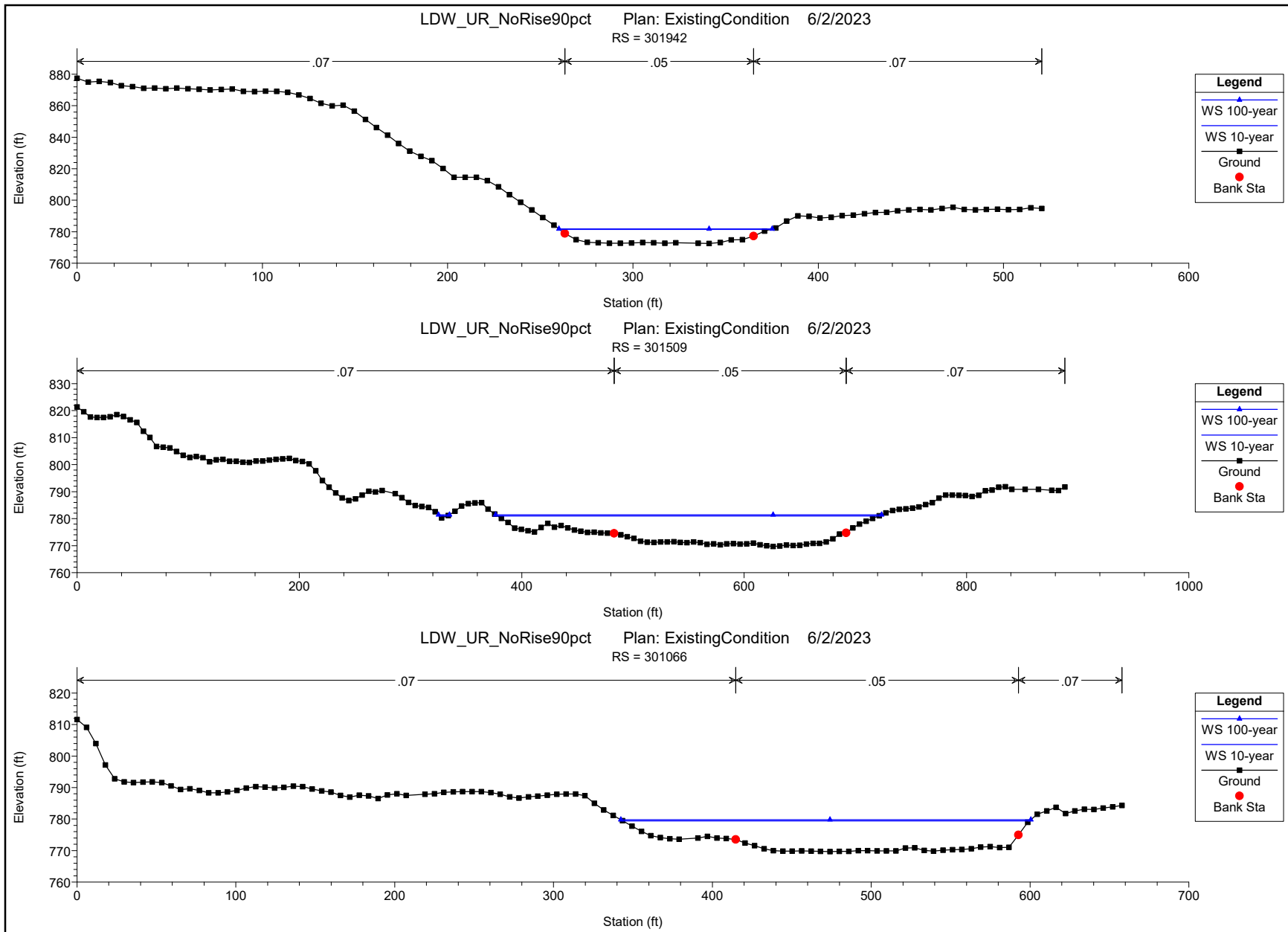


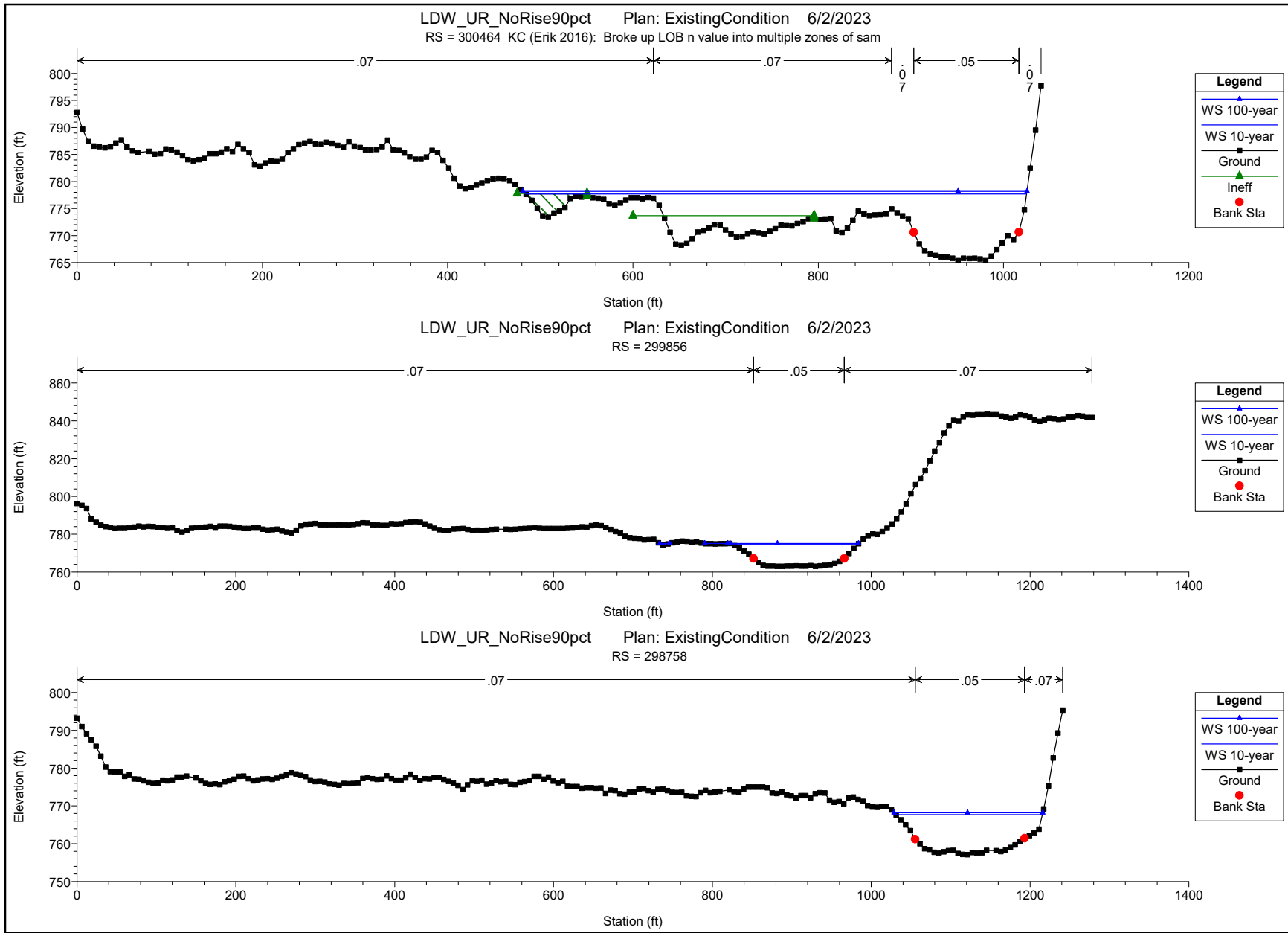




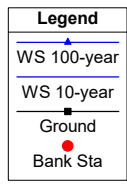
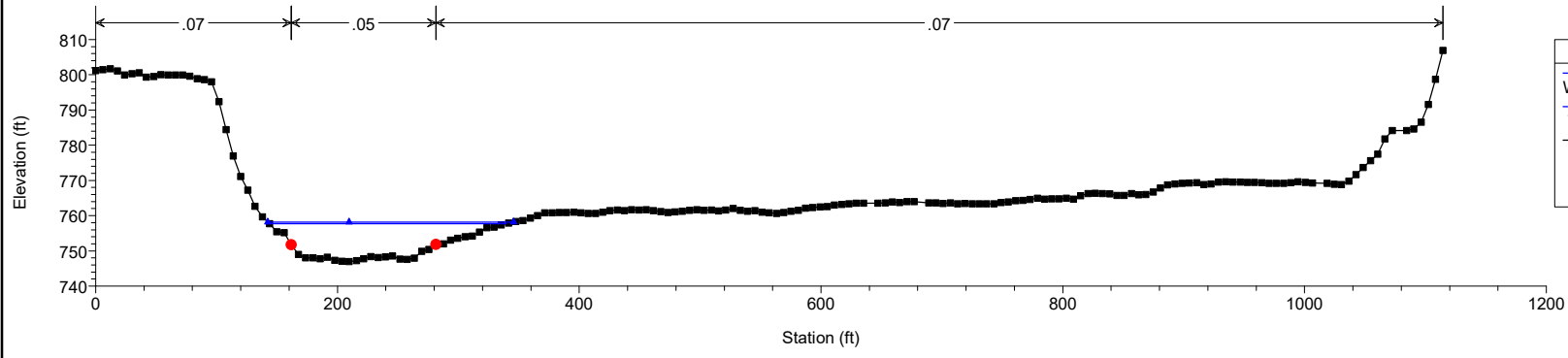




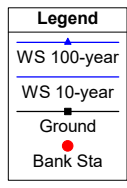
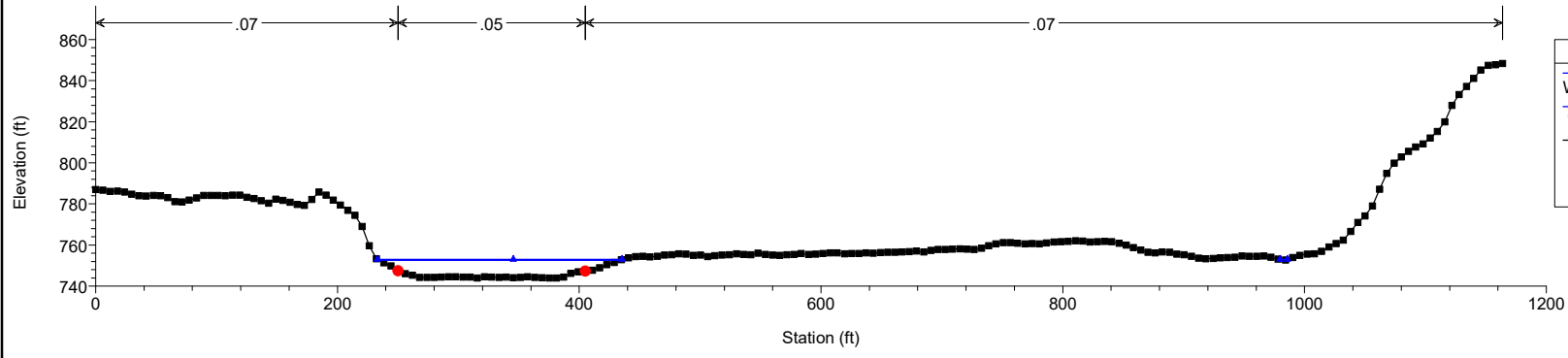




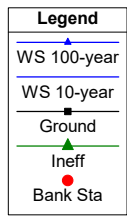
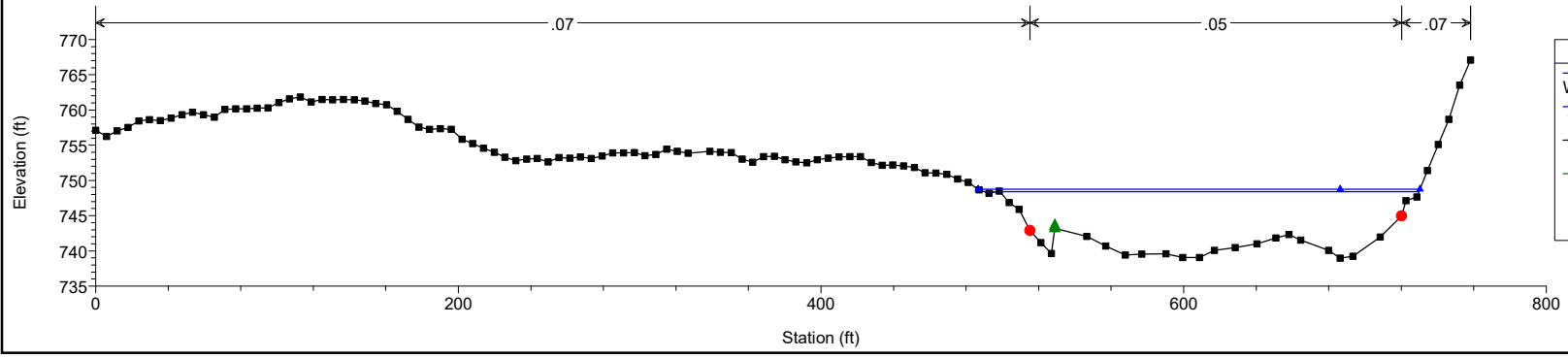
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 297428

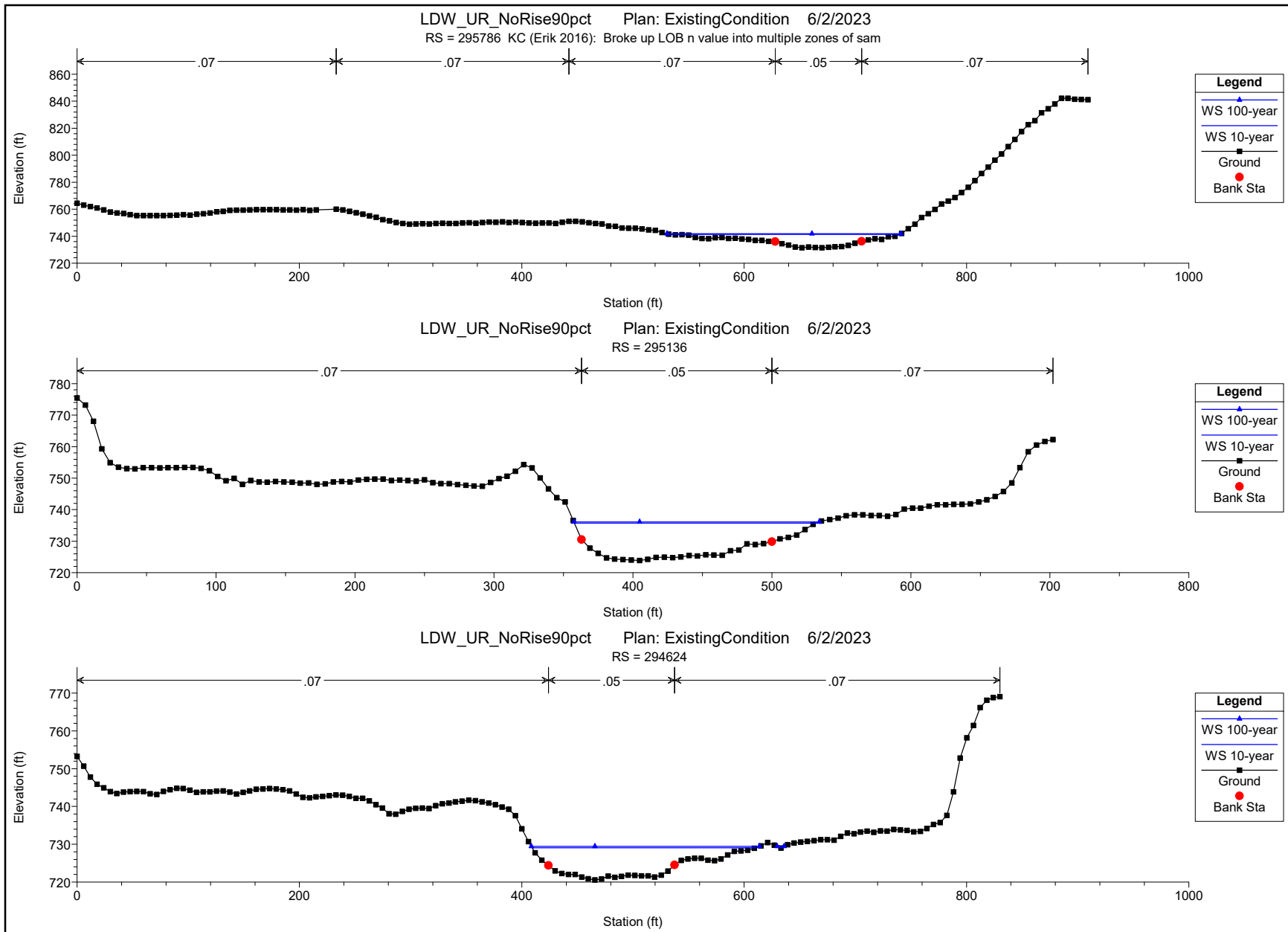


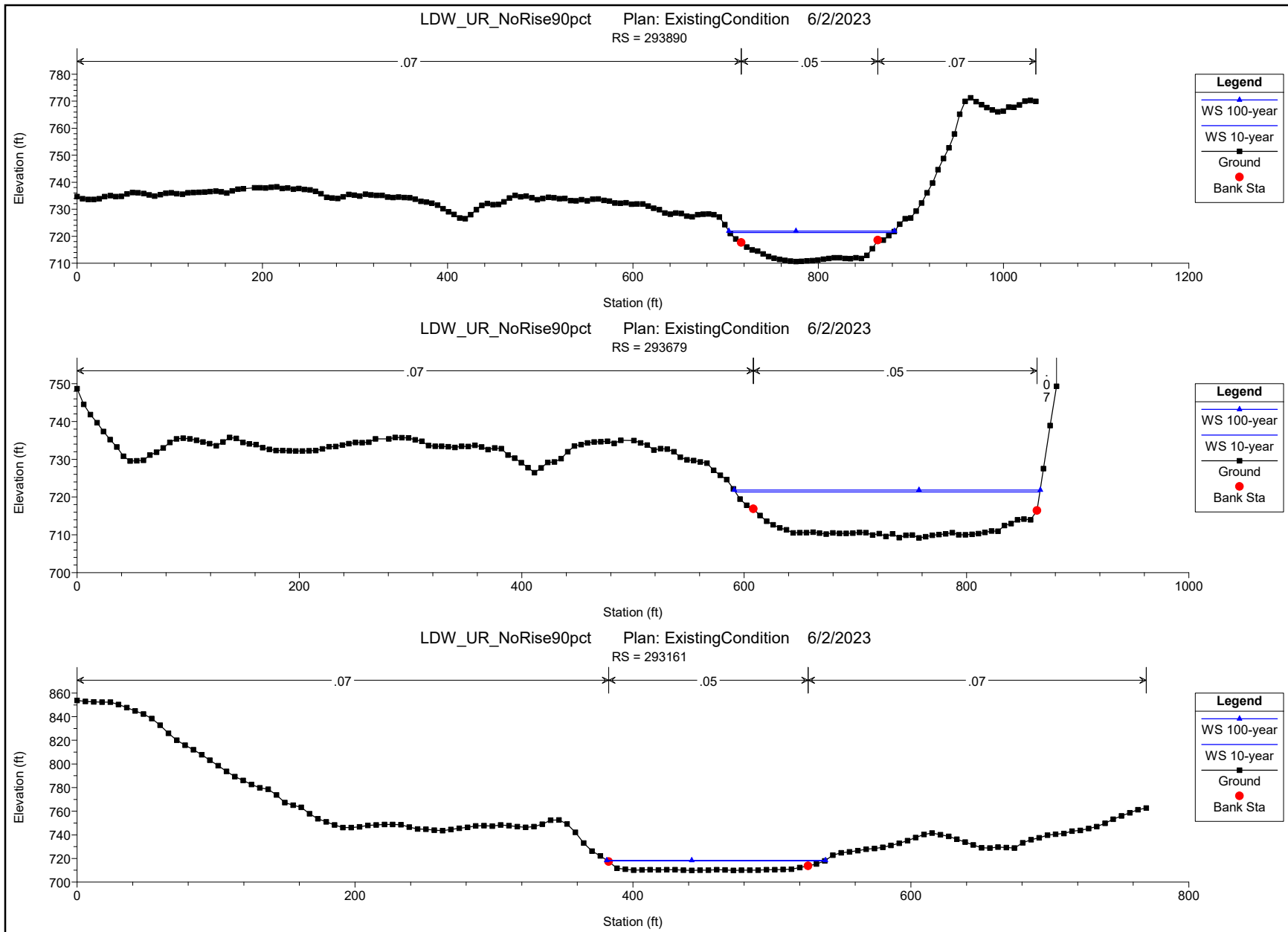
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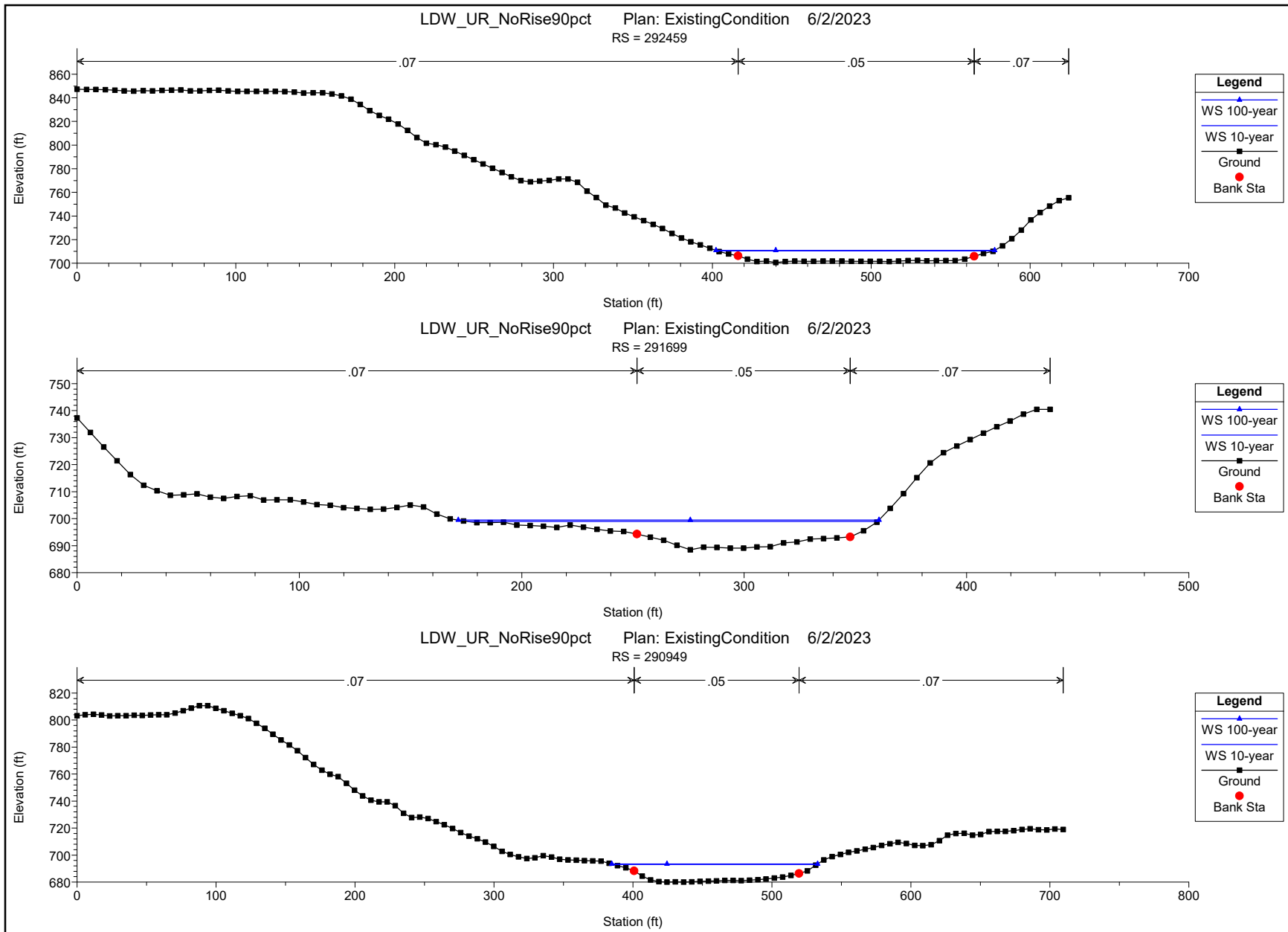


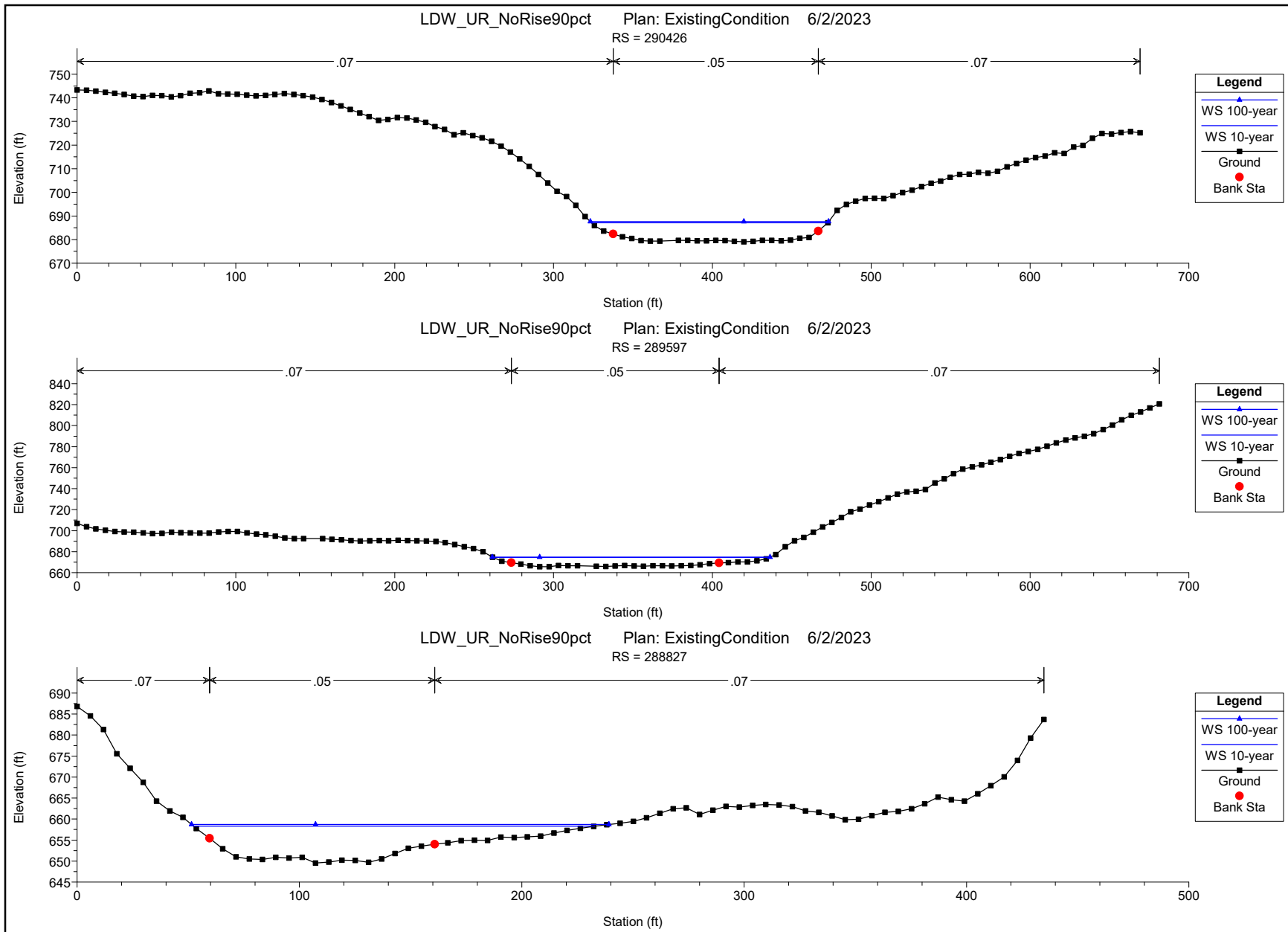
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RS = 296245

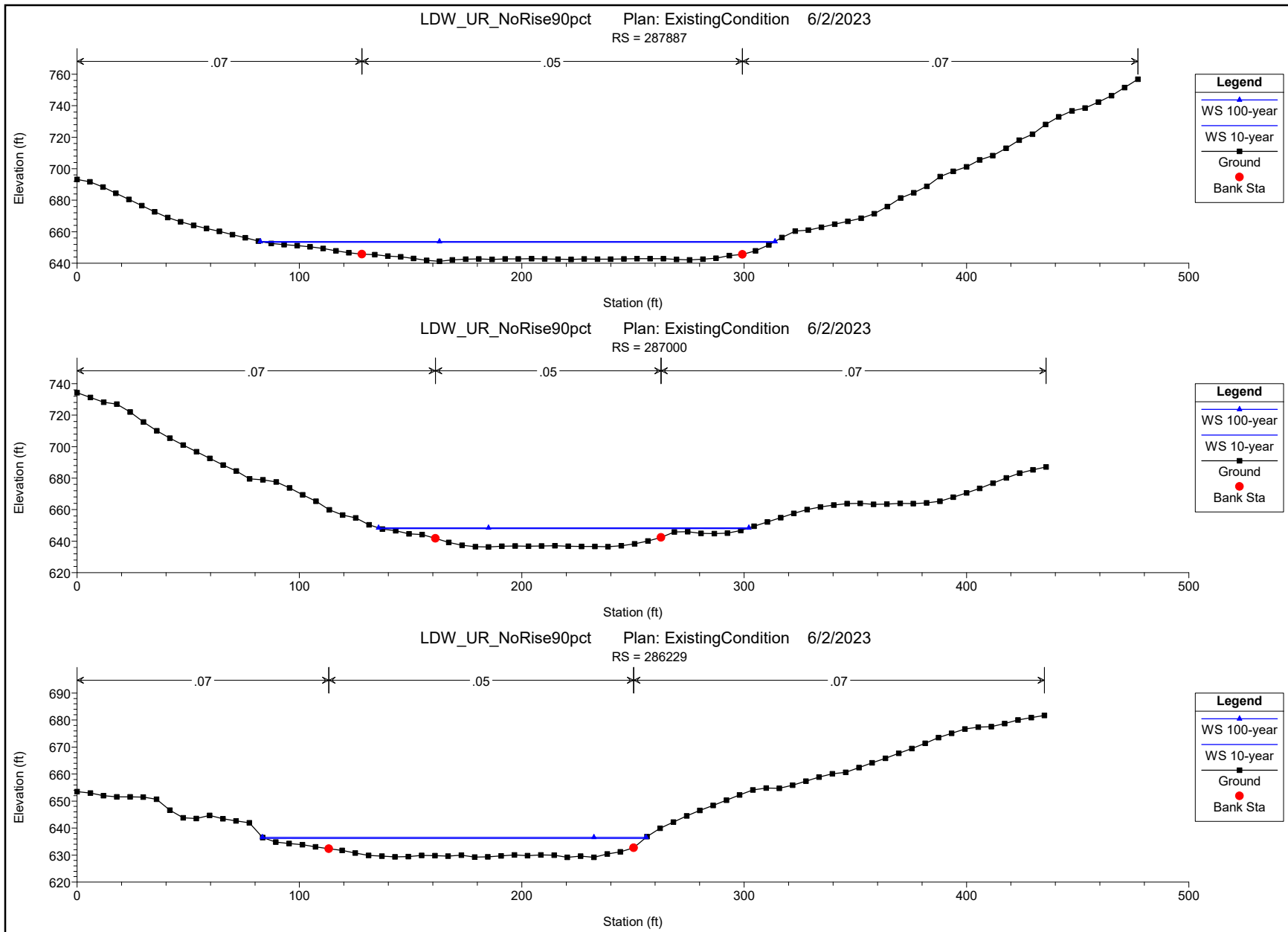


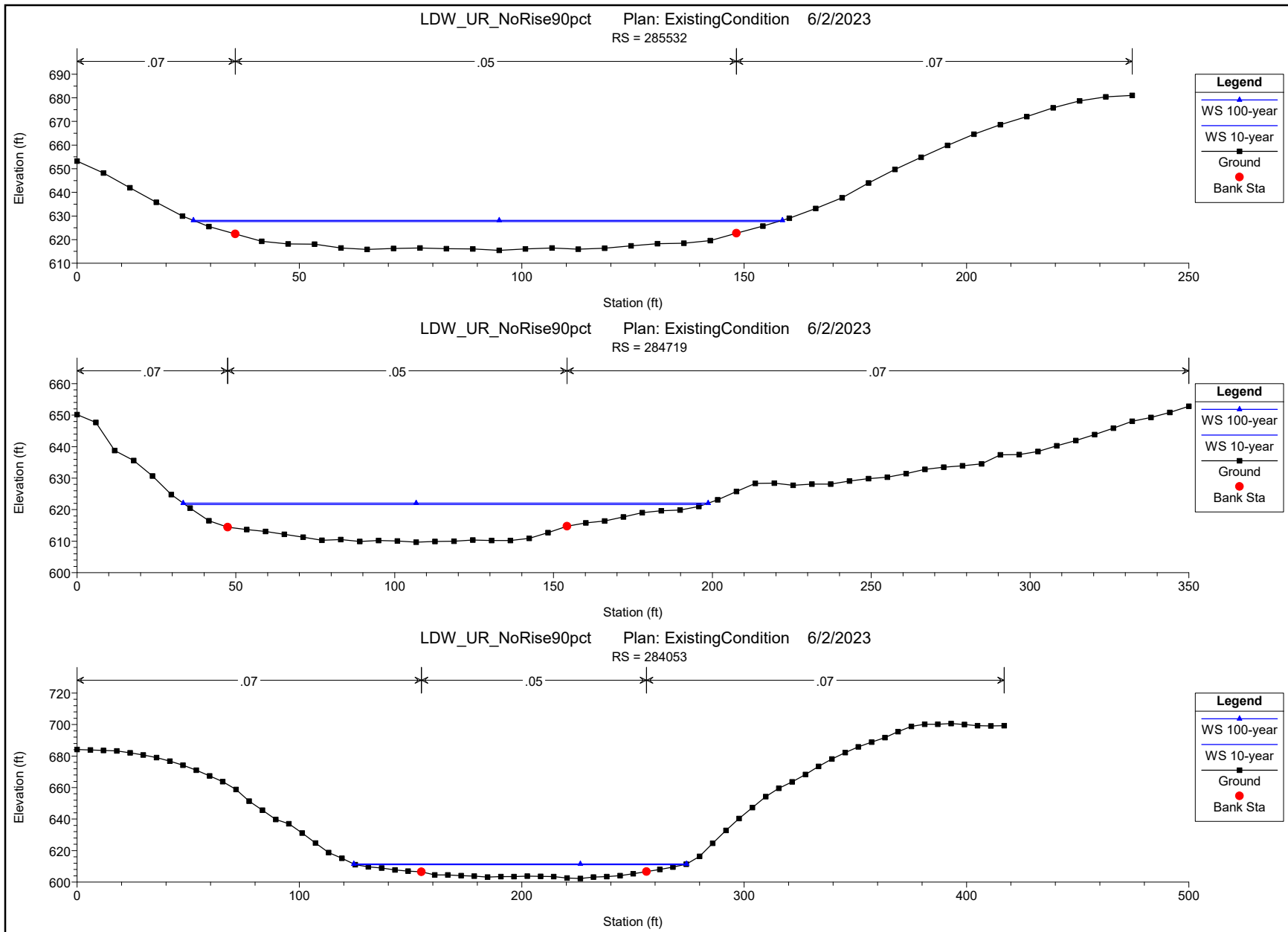


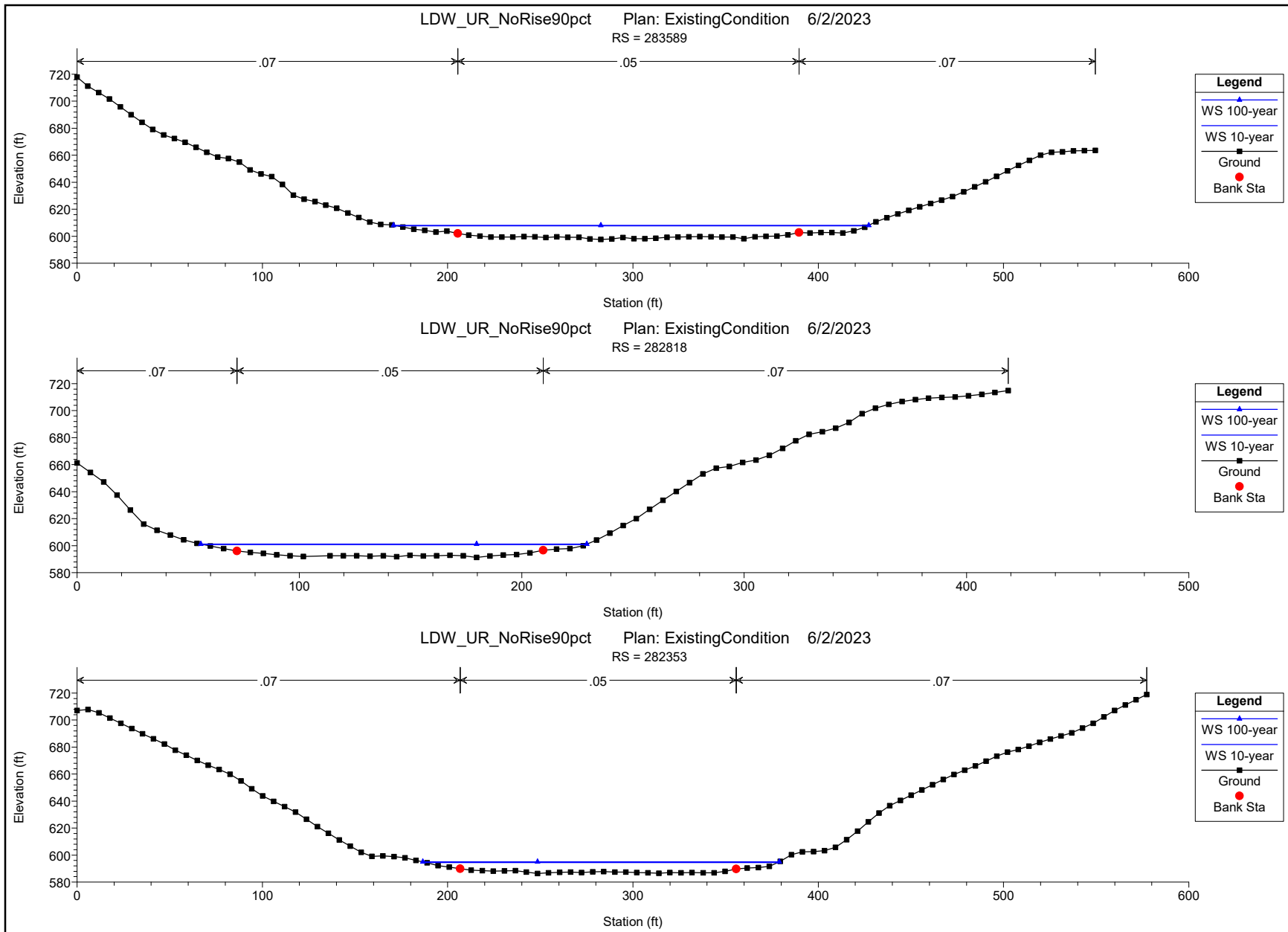


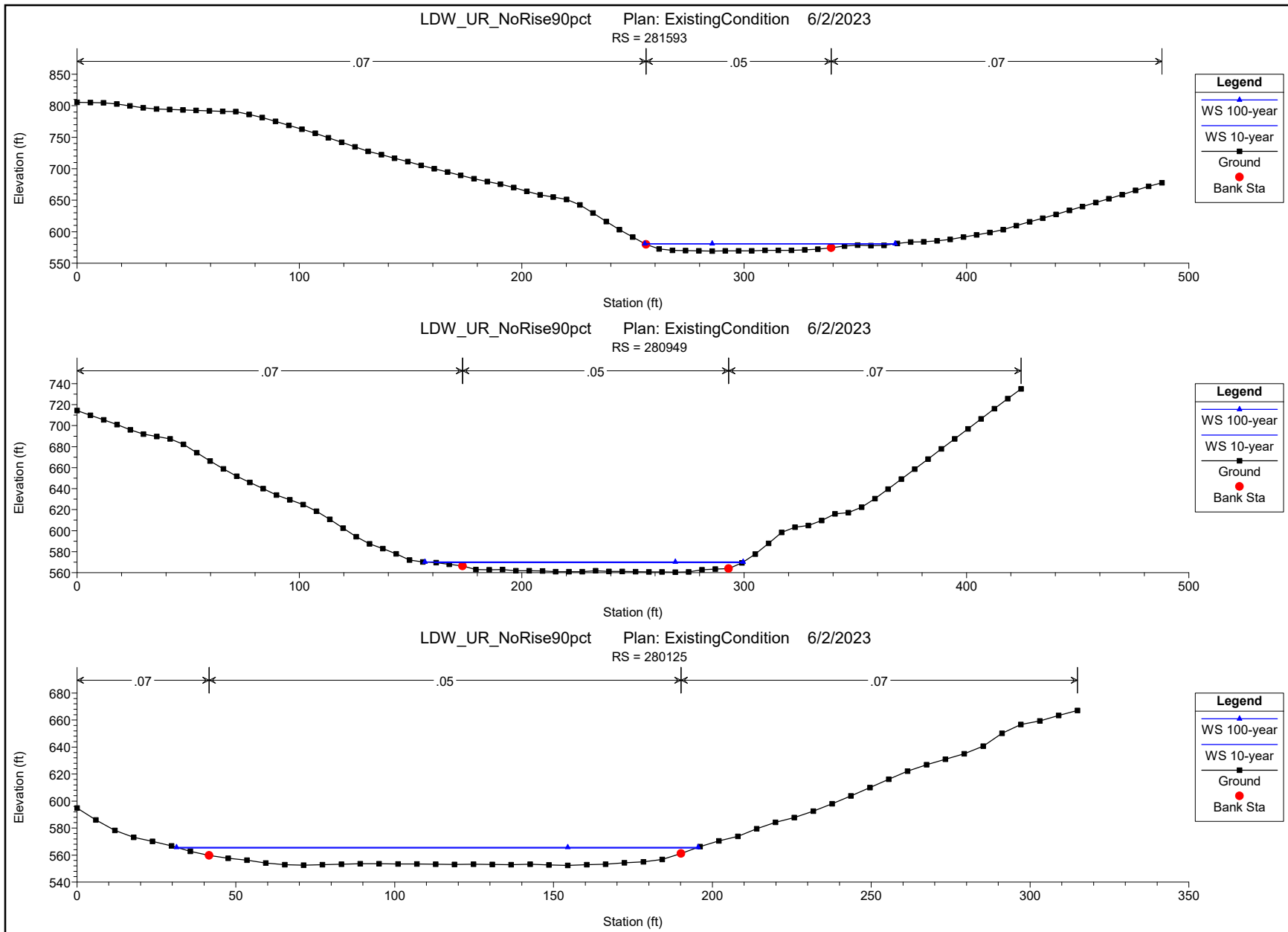


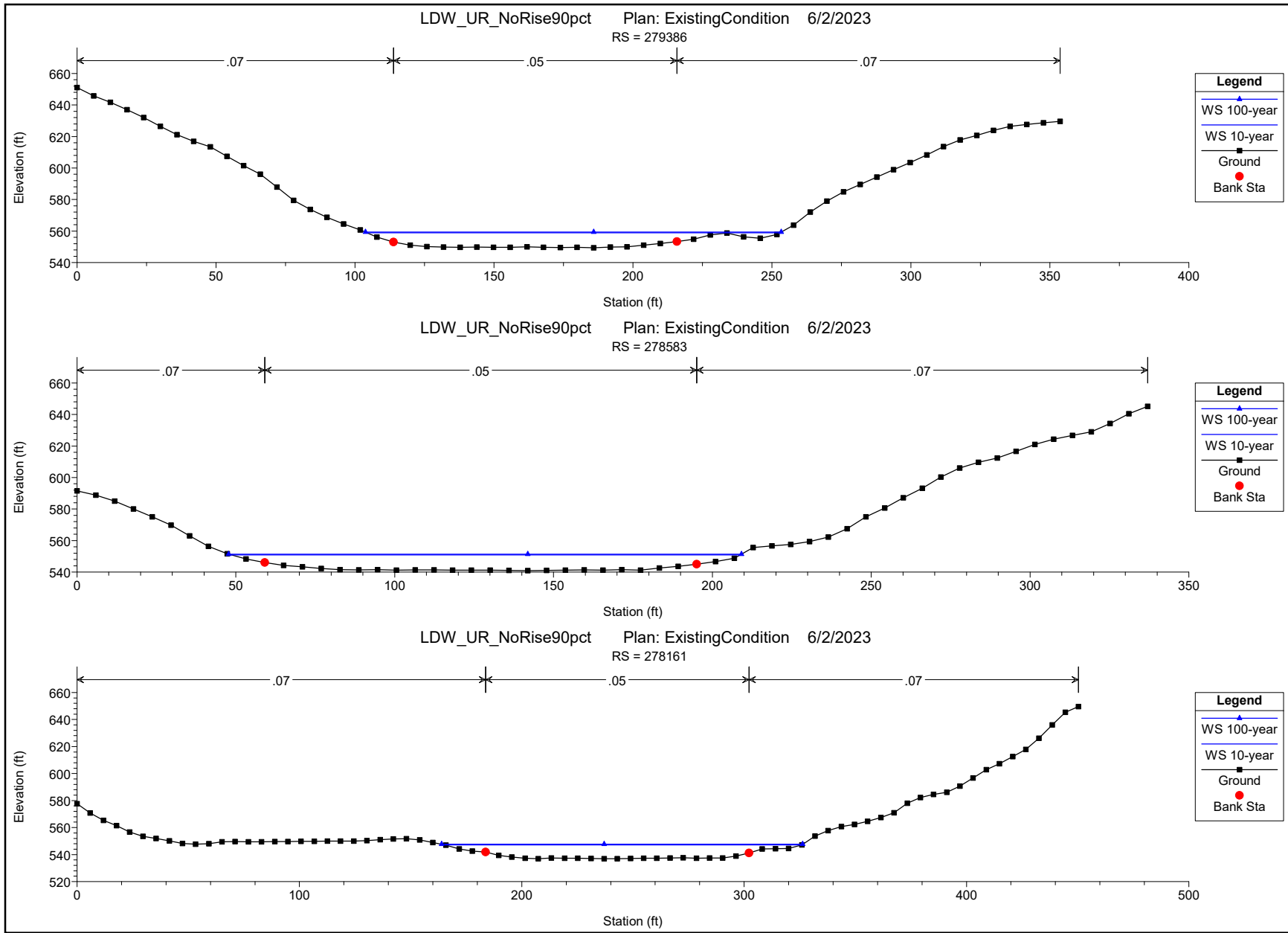


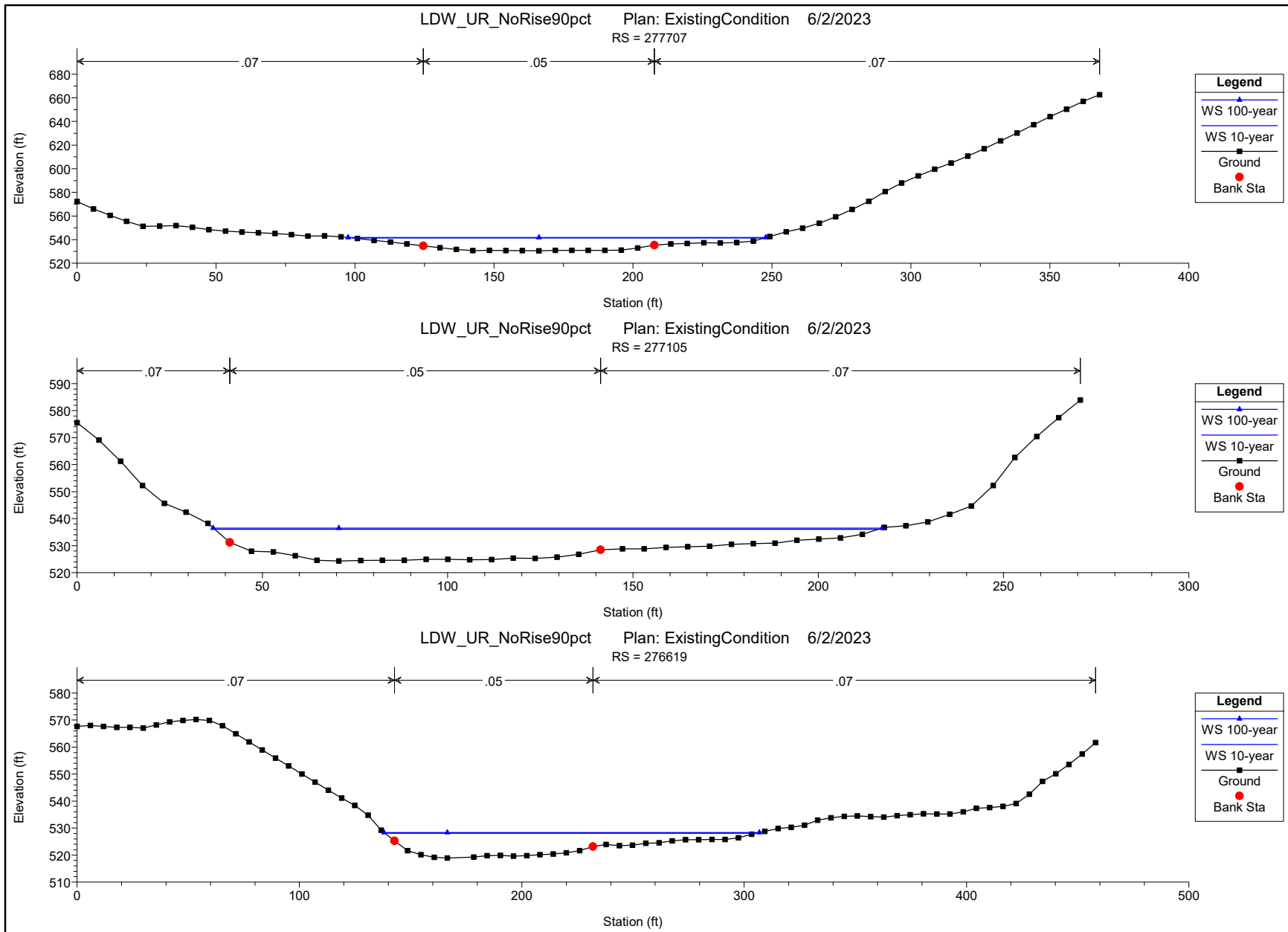


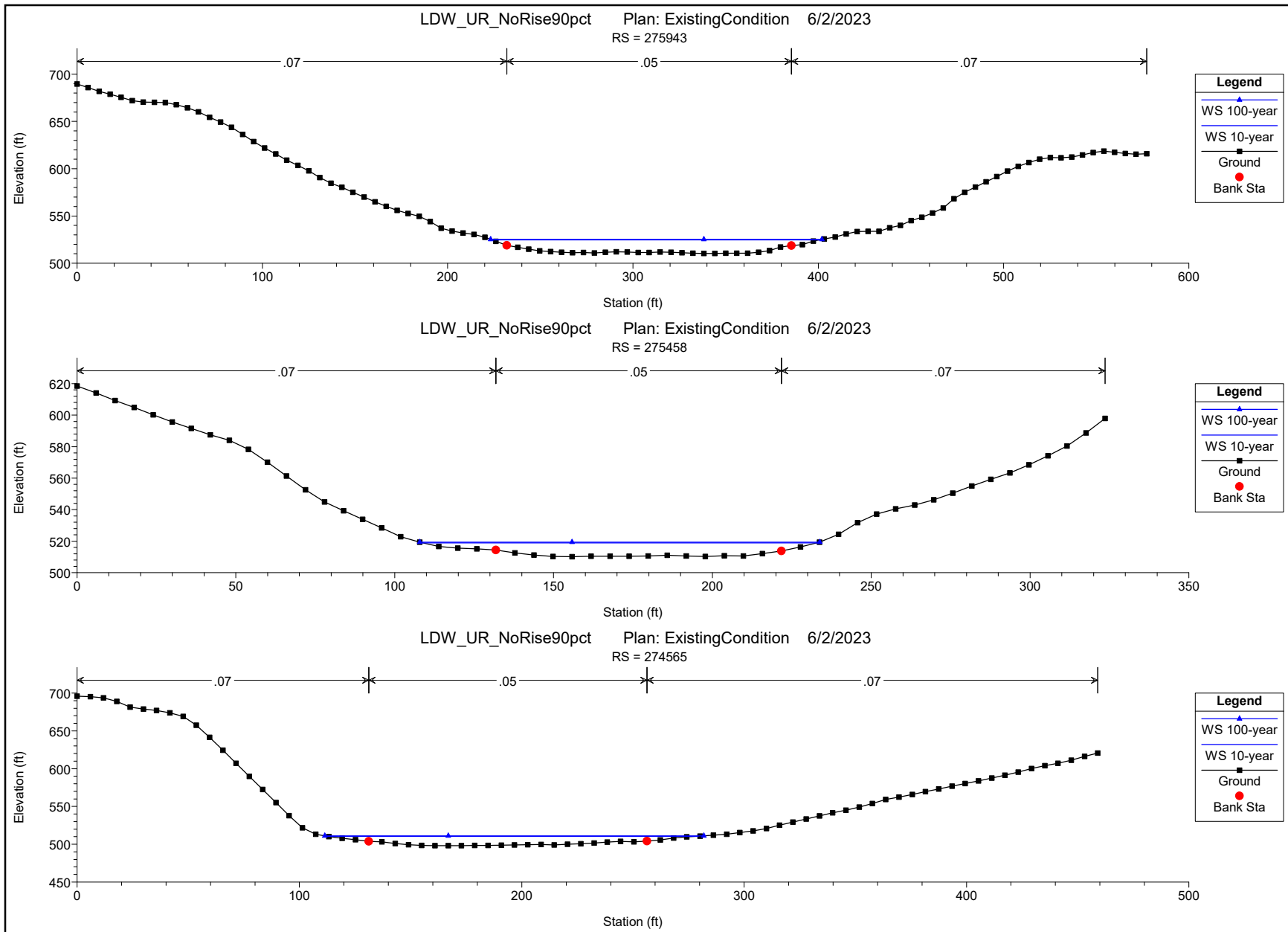


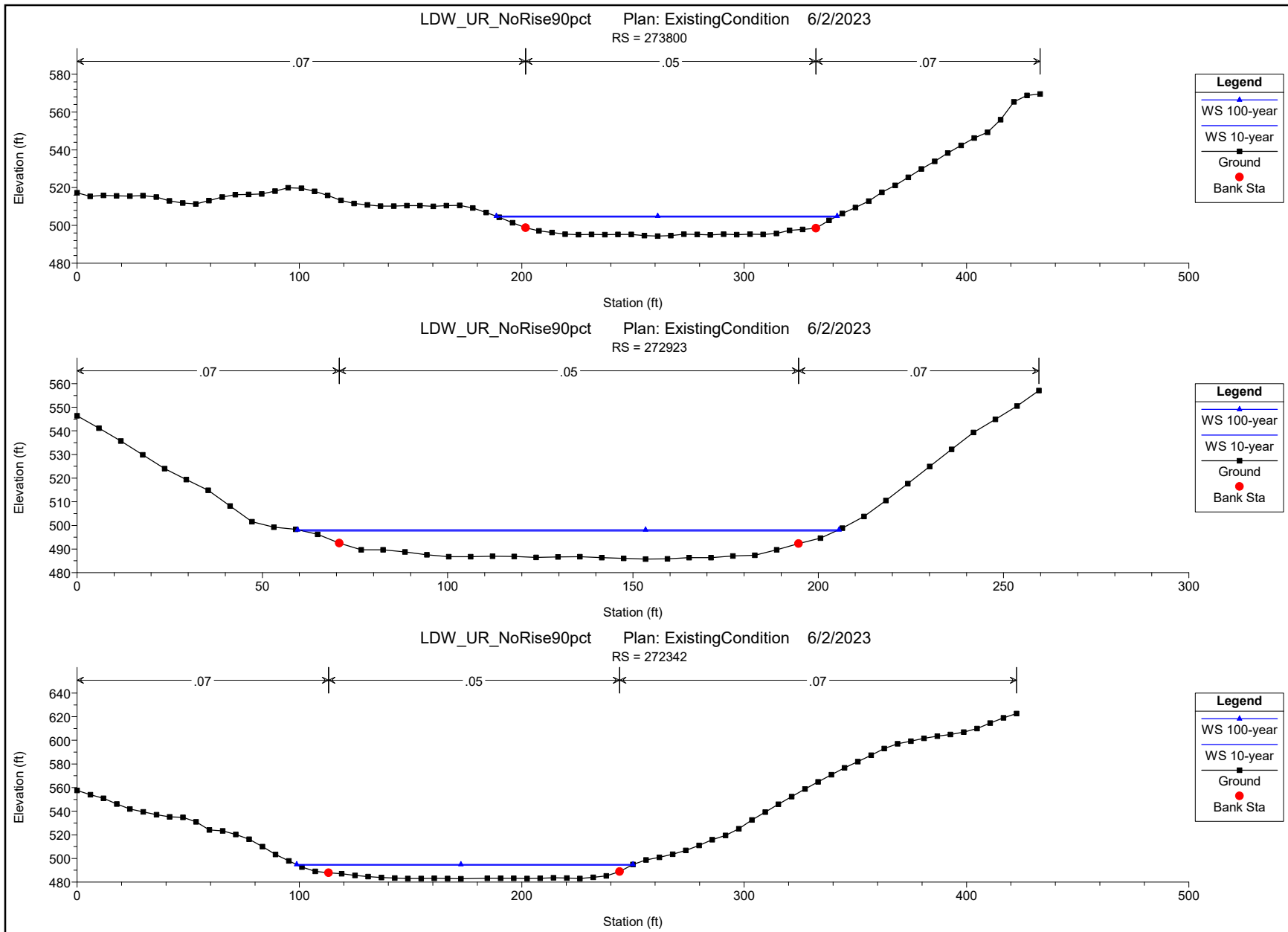


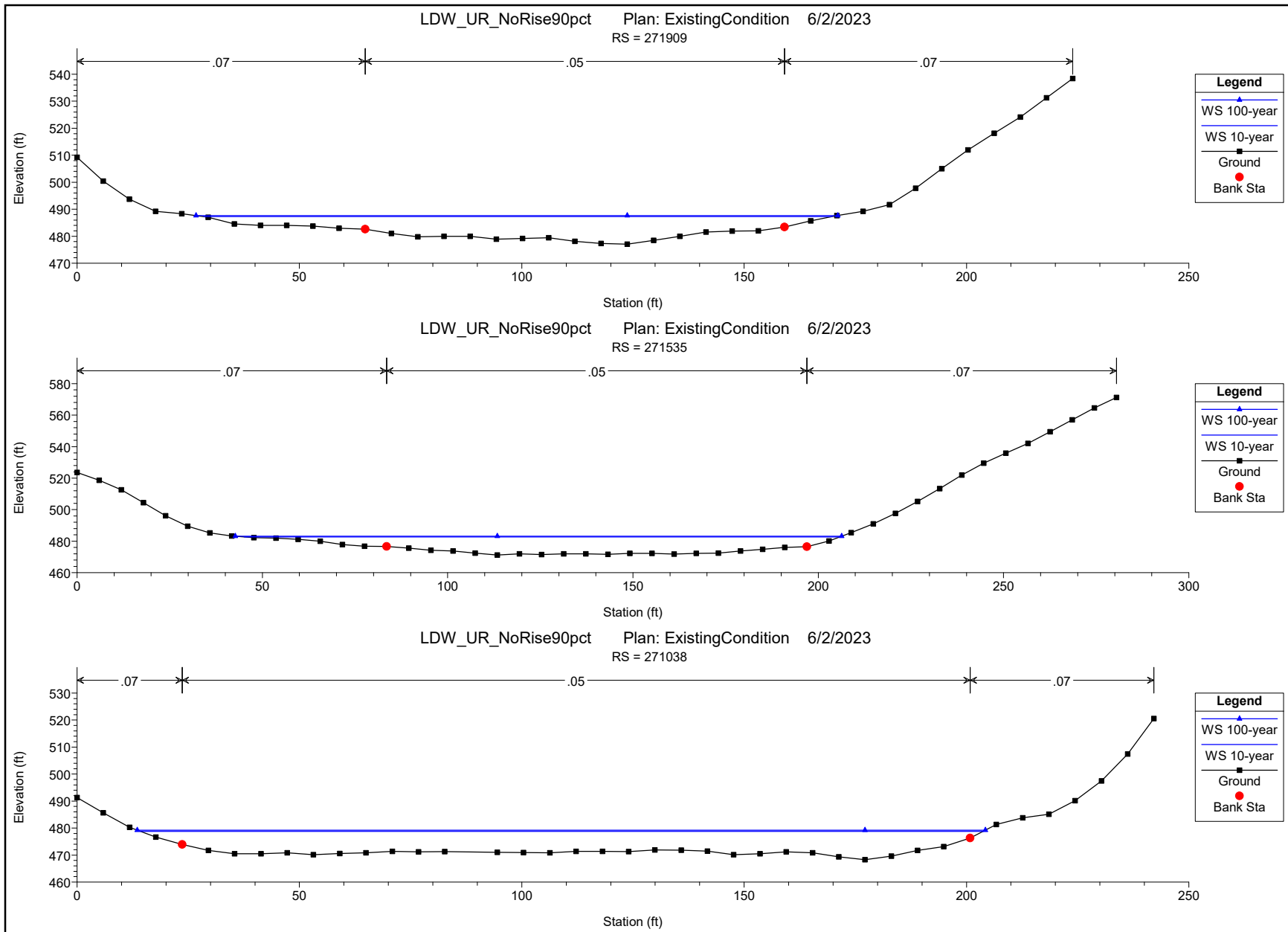


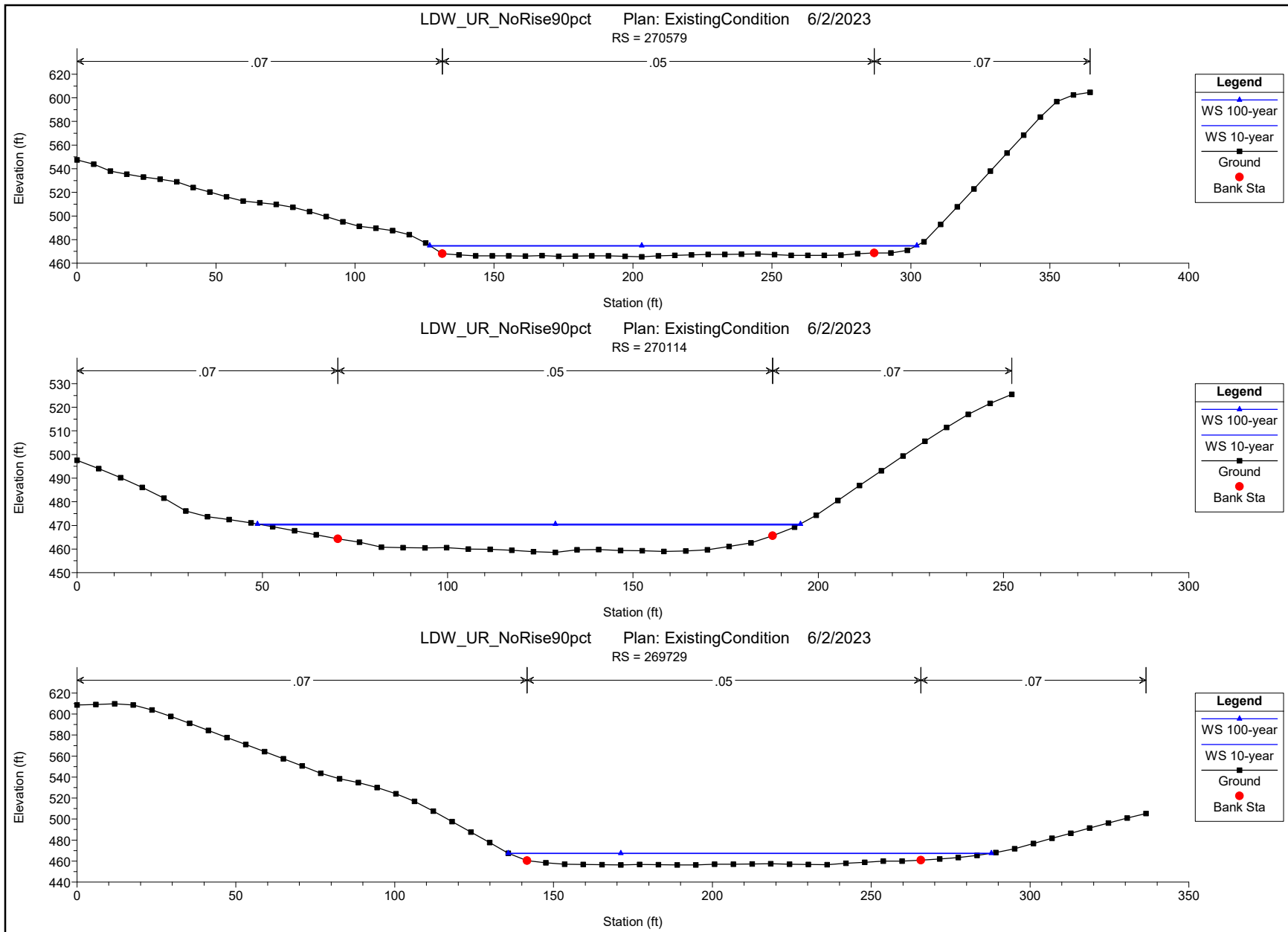


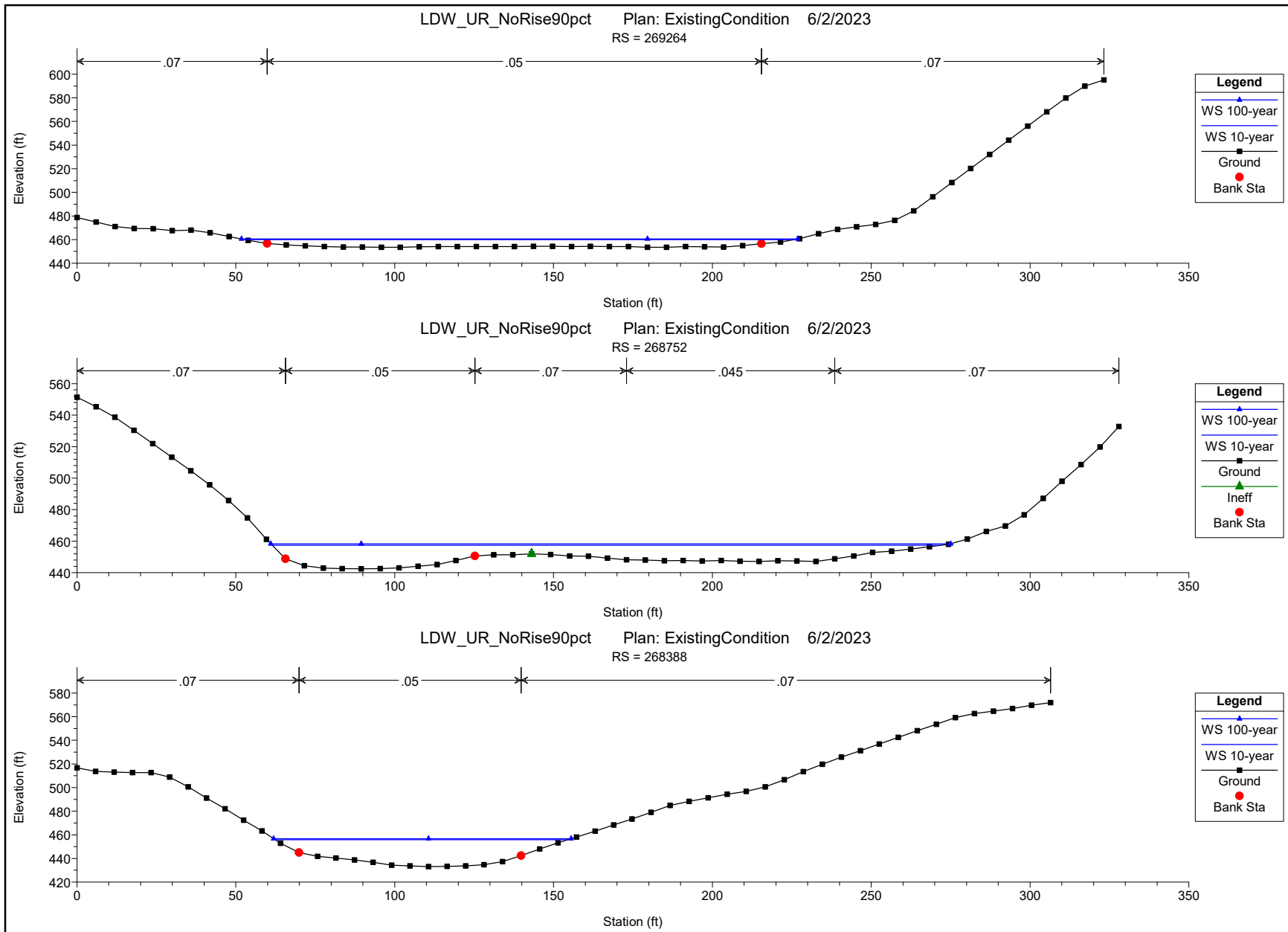


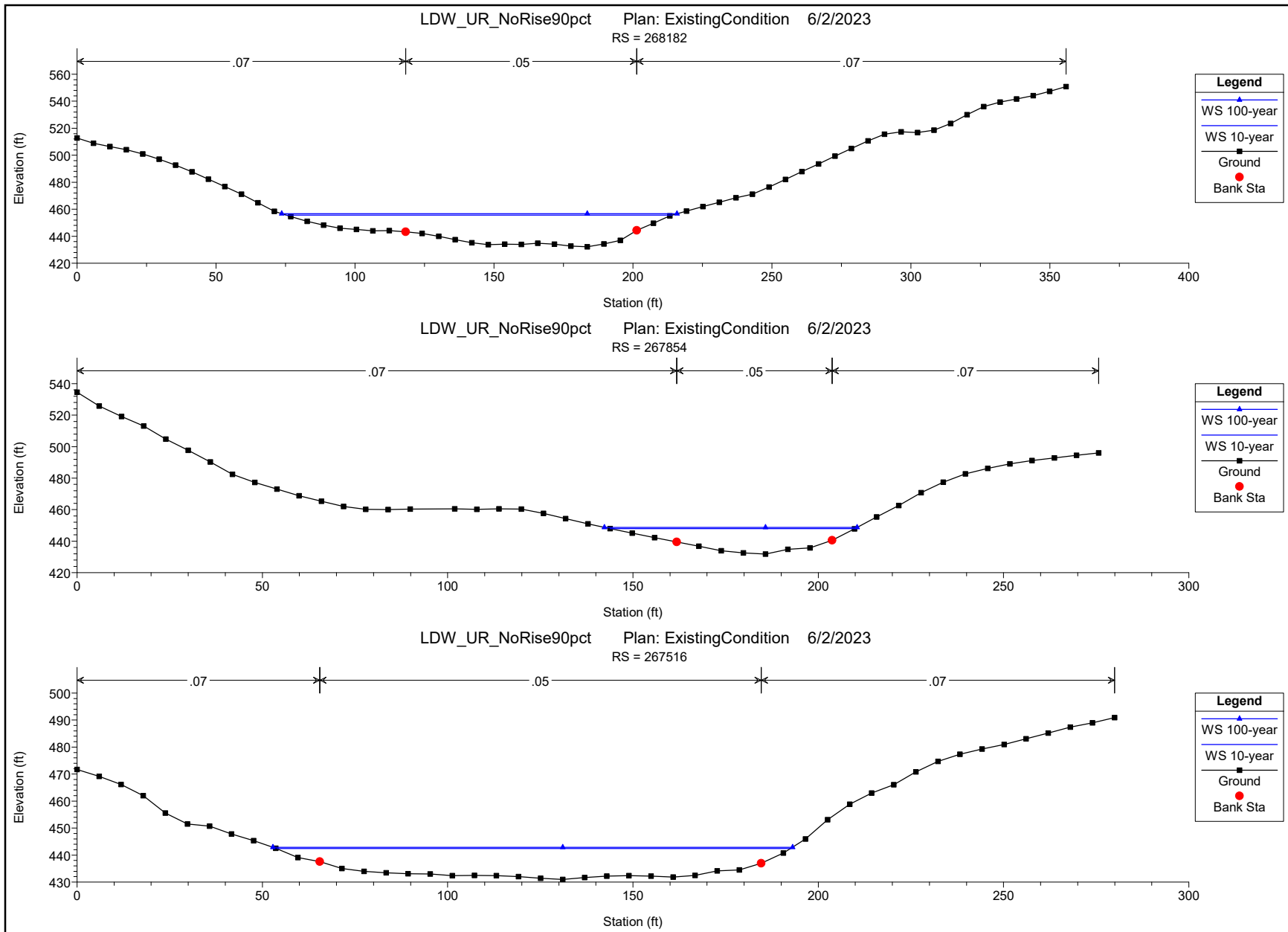


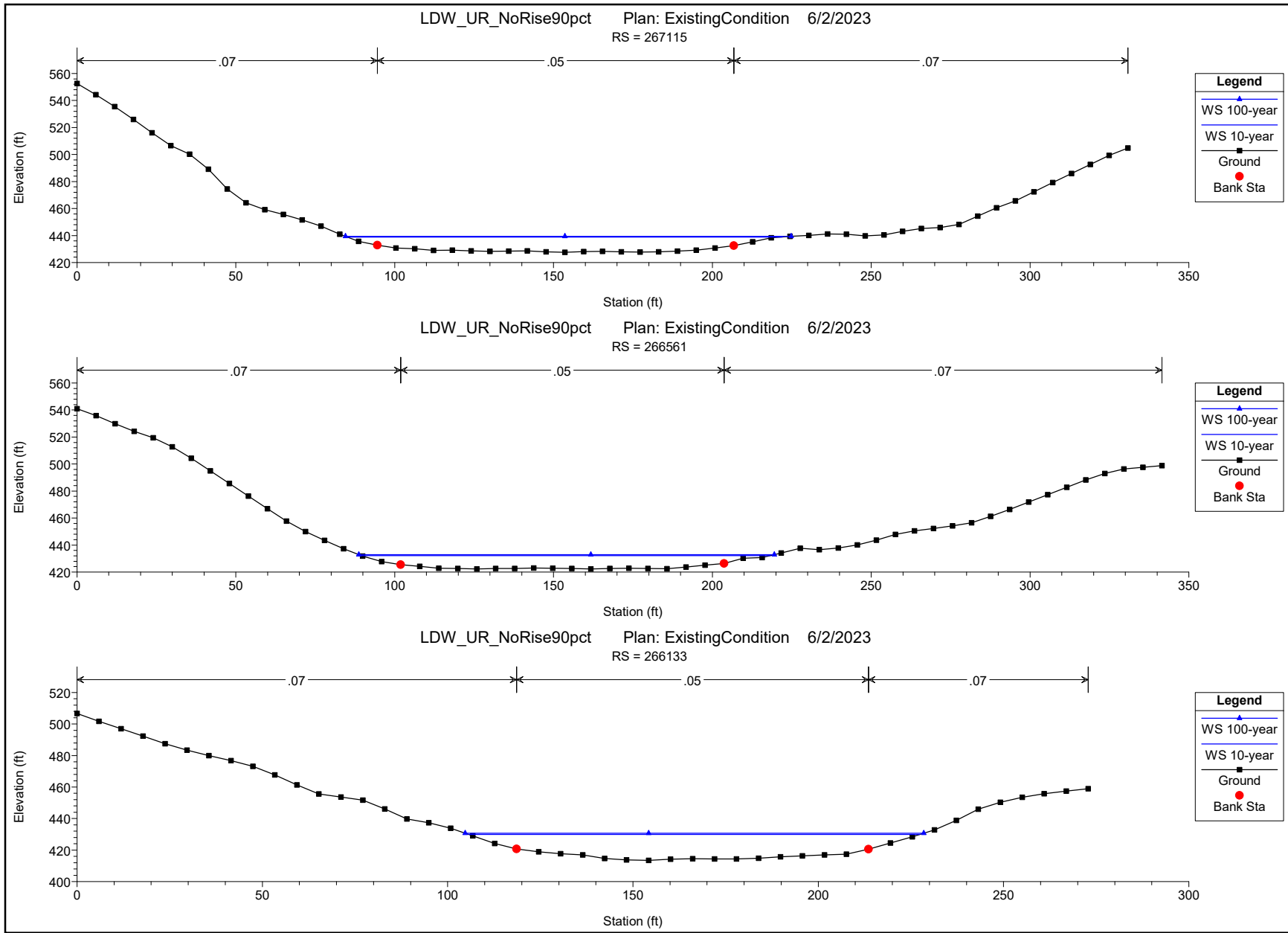


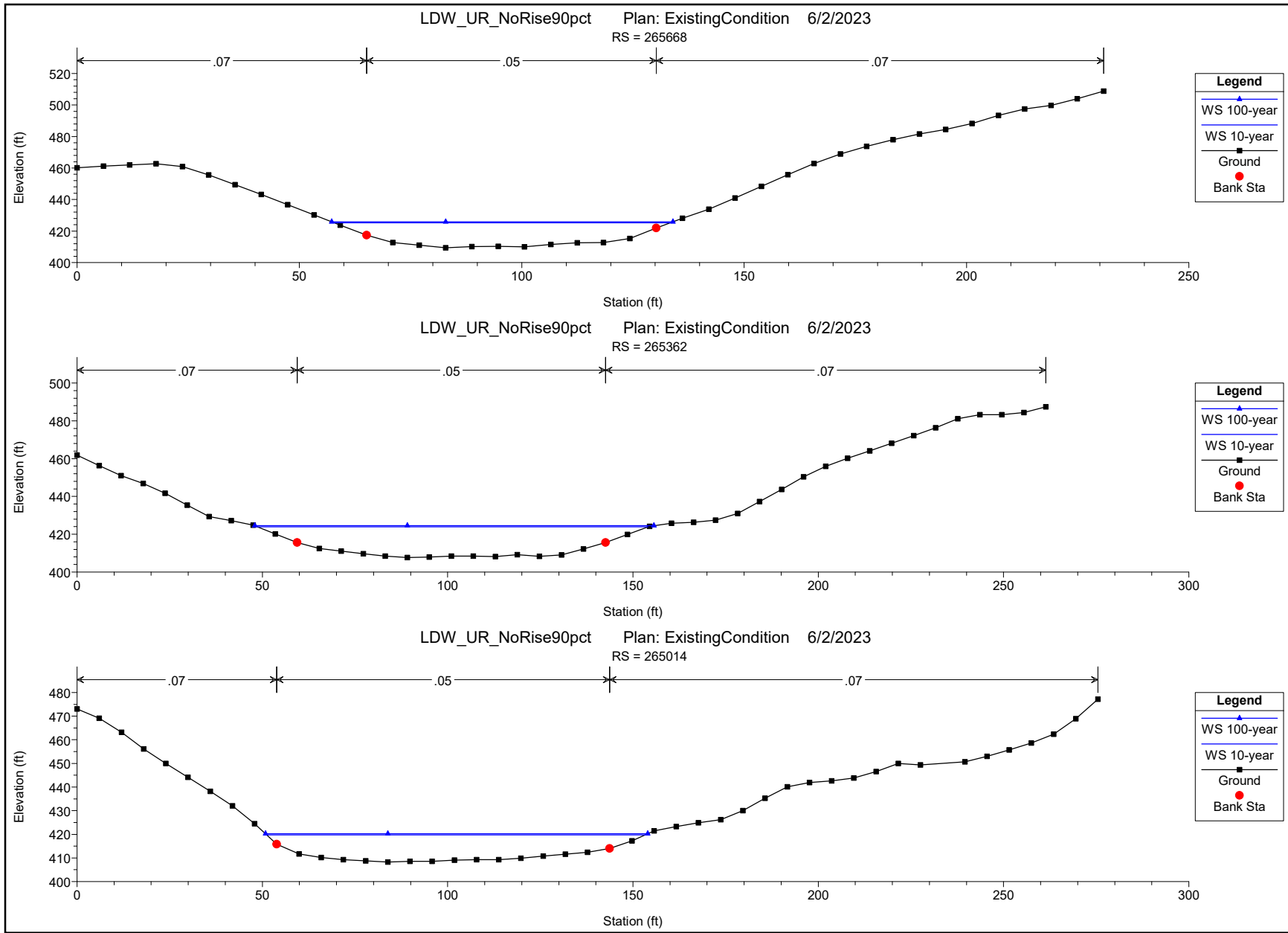


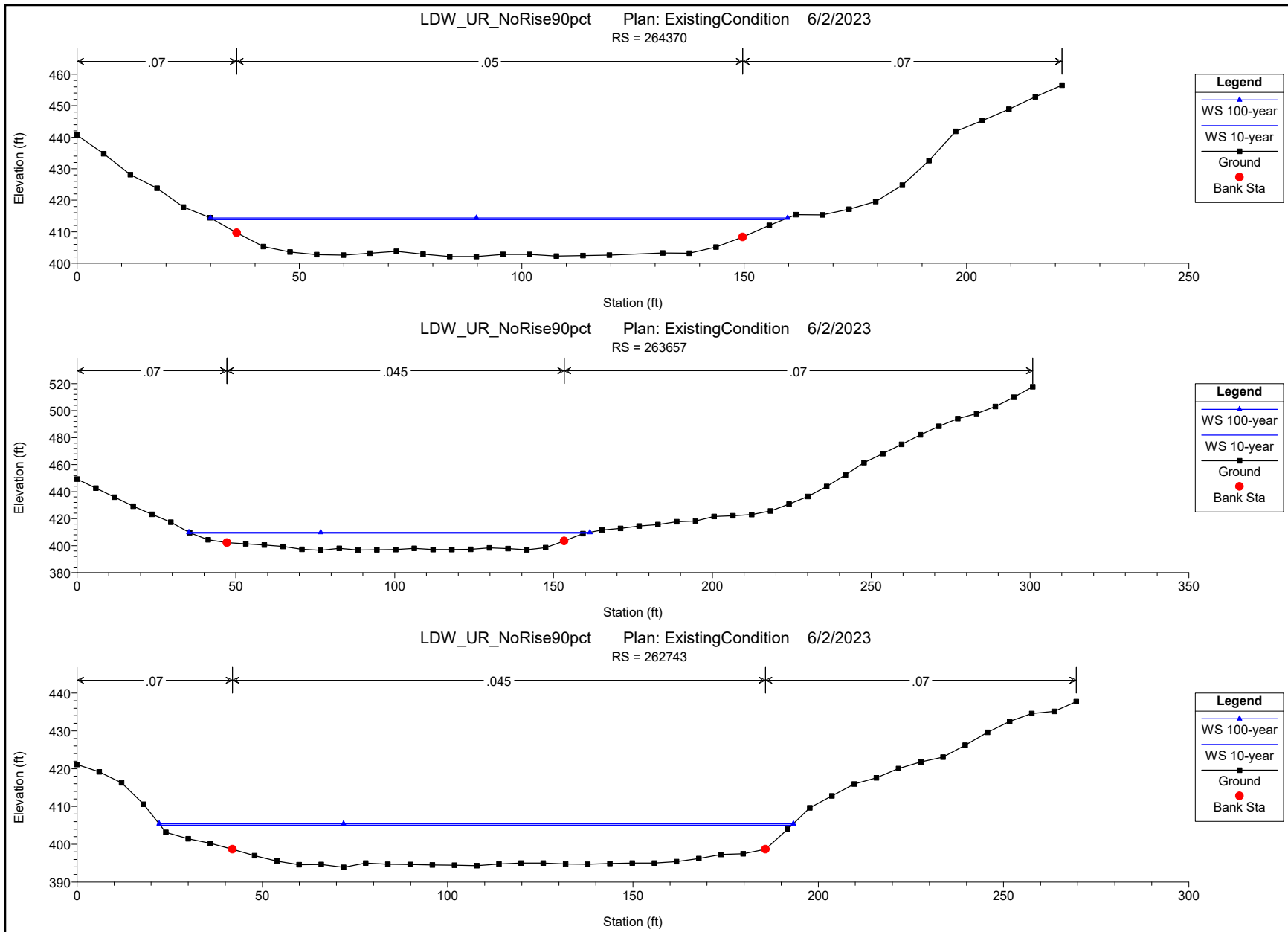


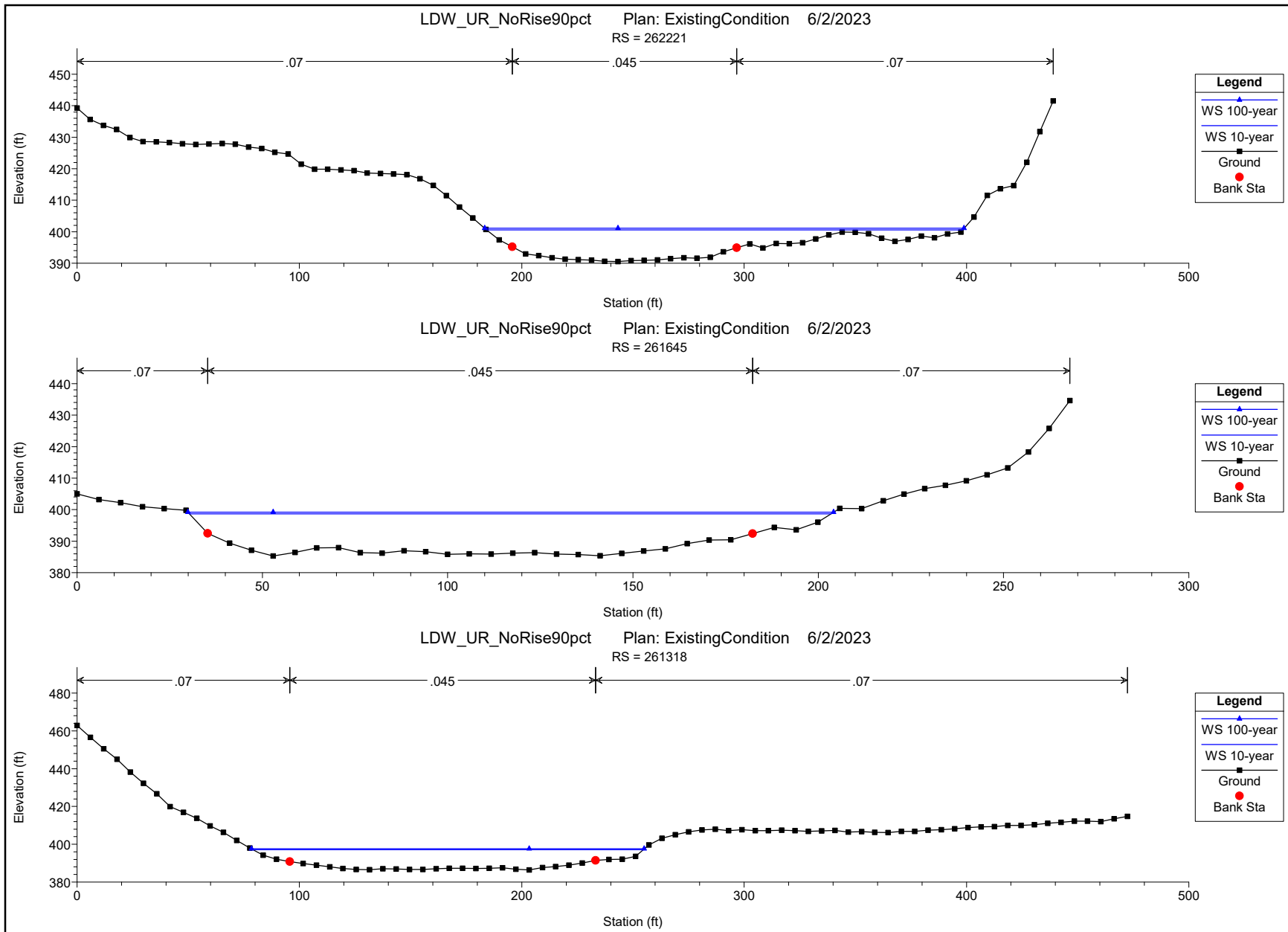


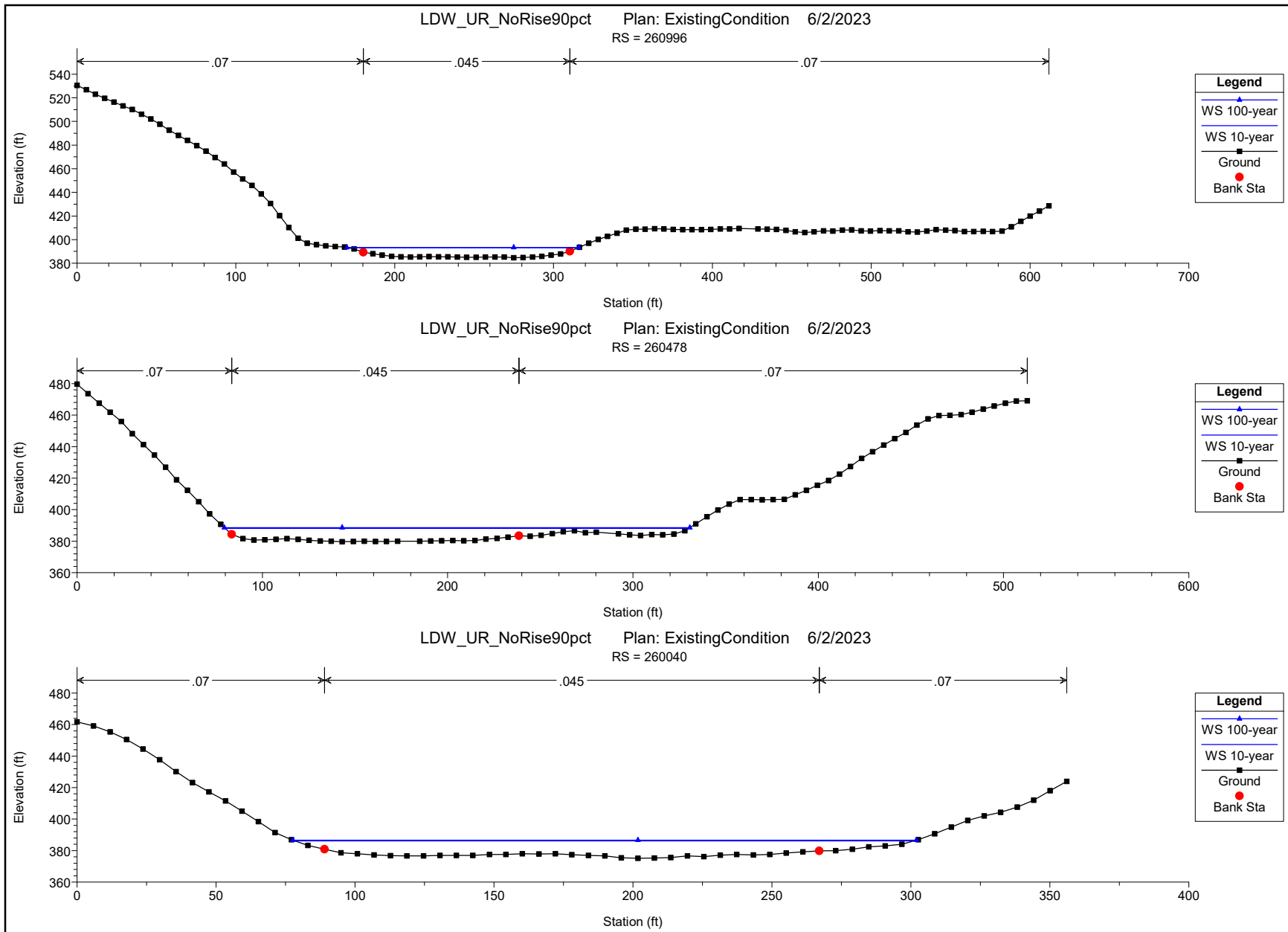


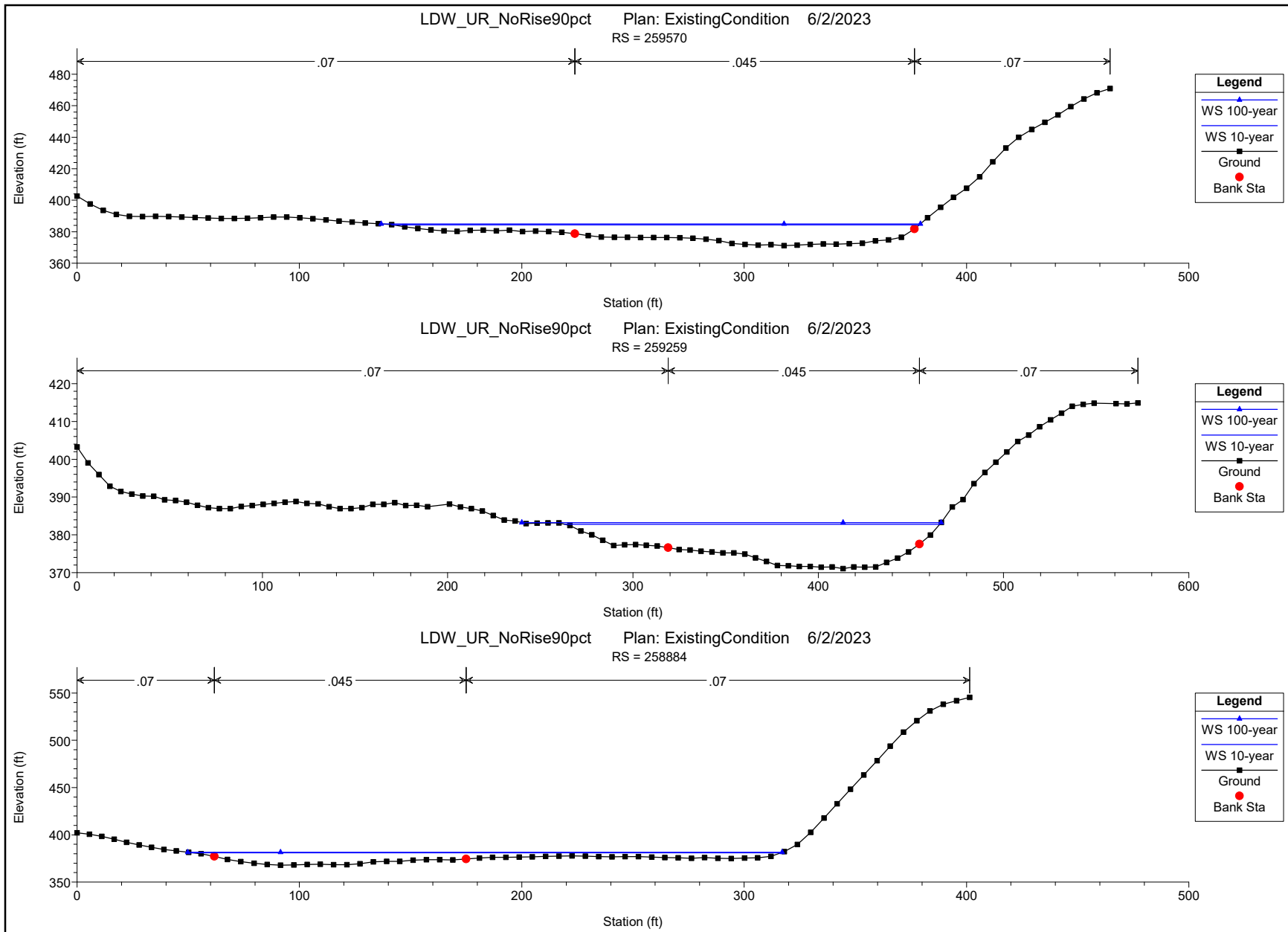


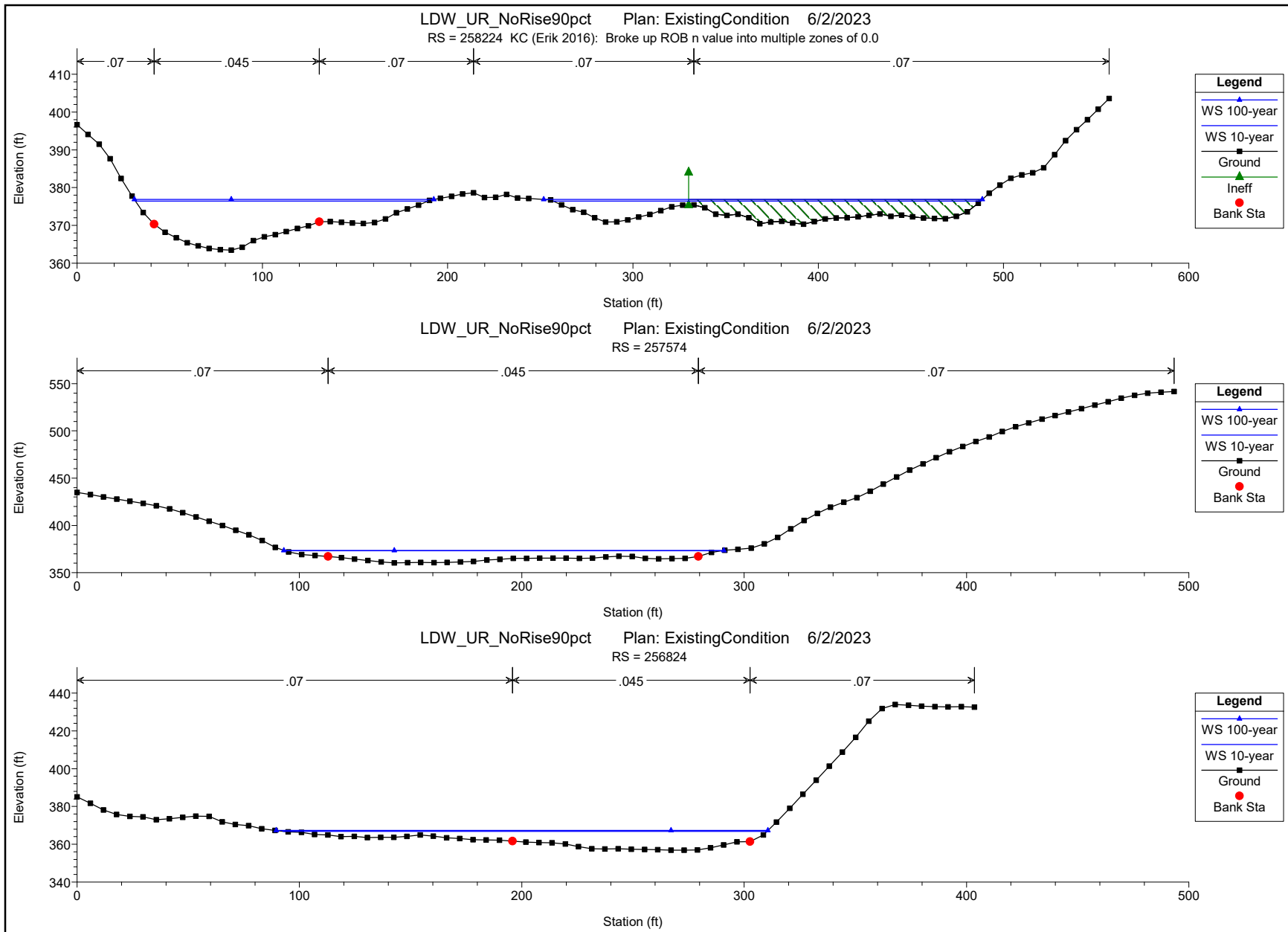


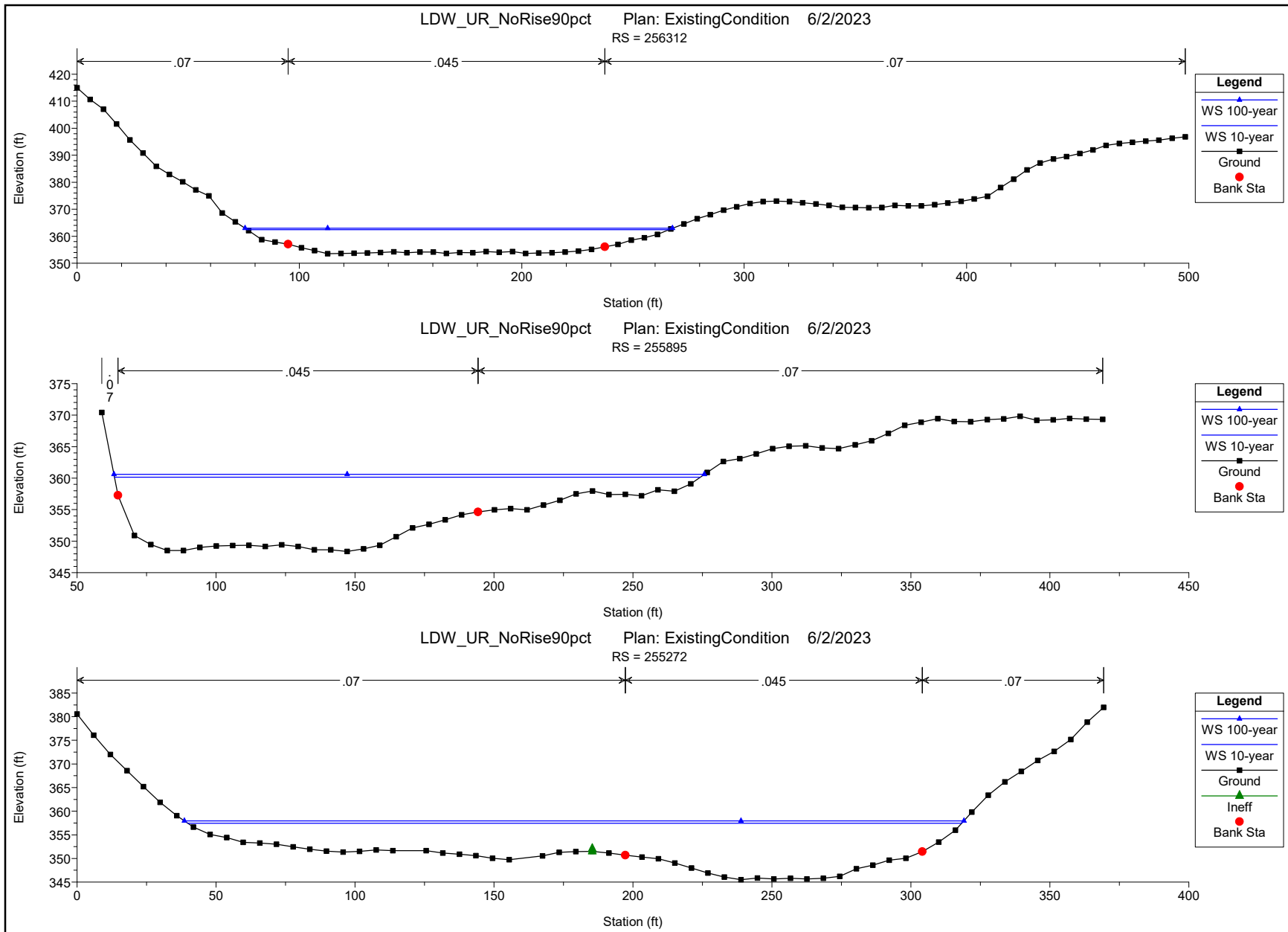


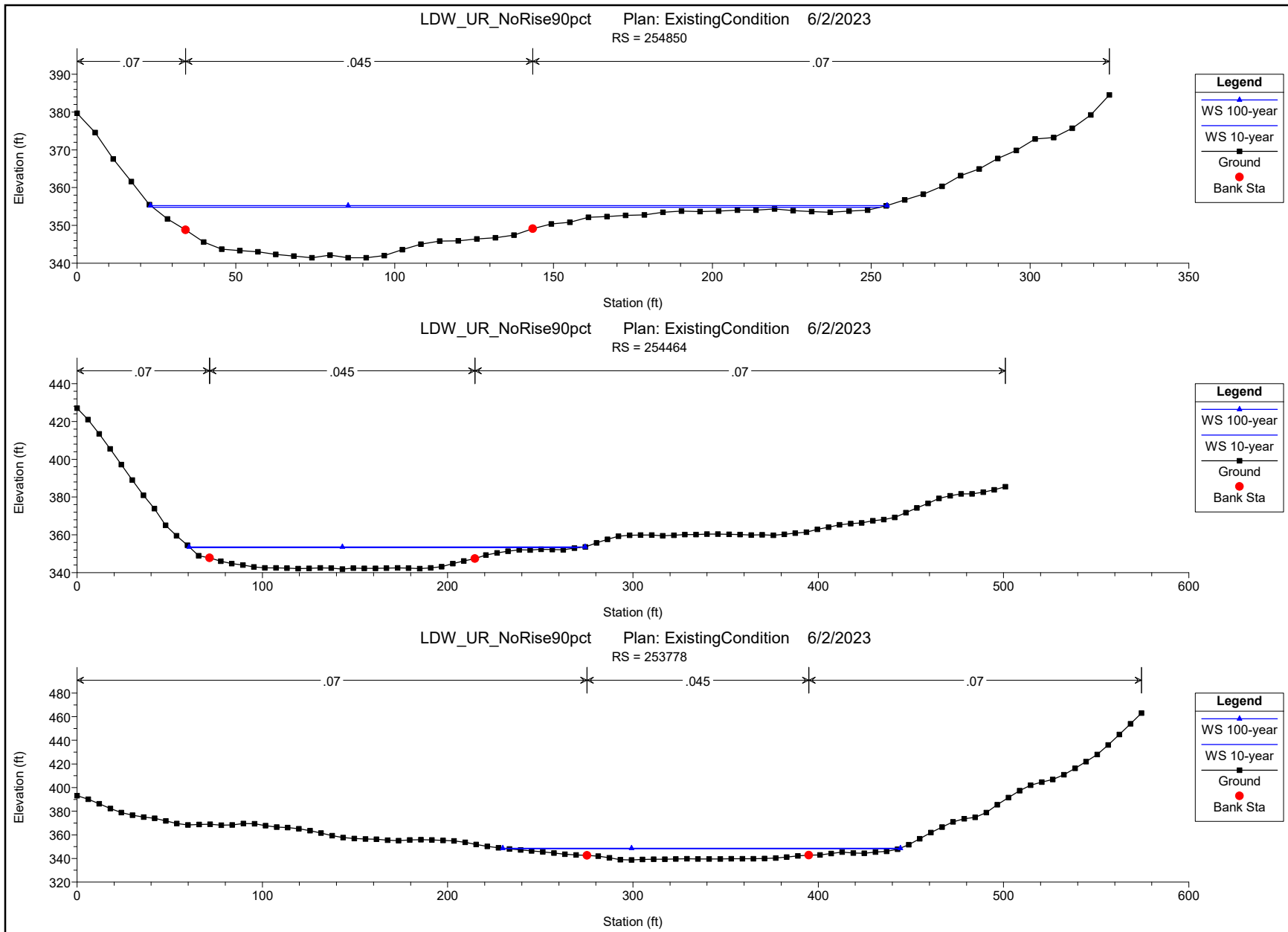


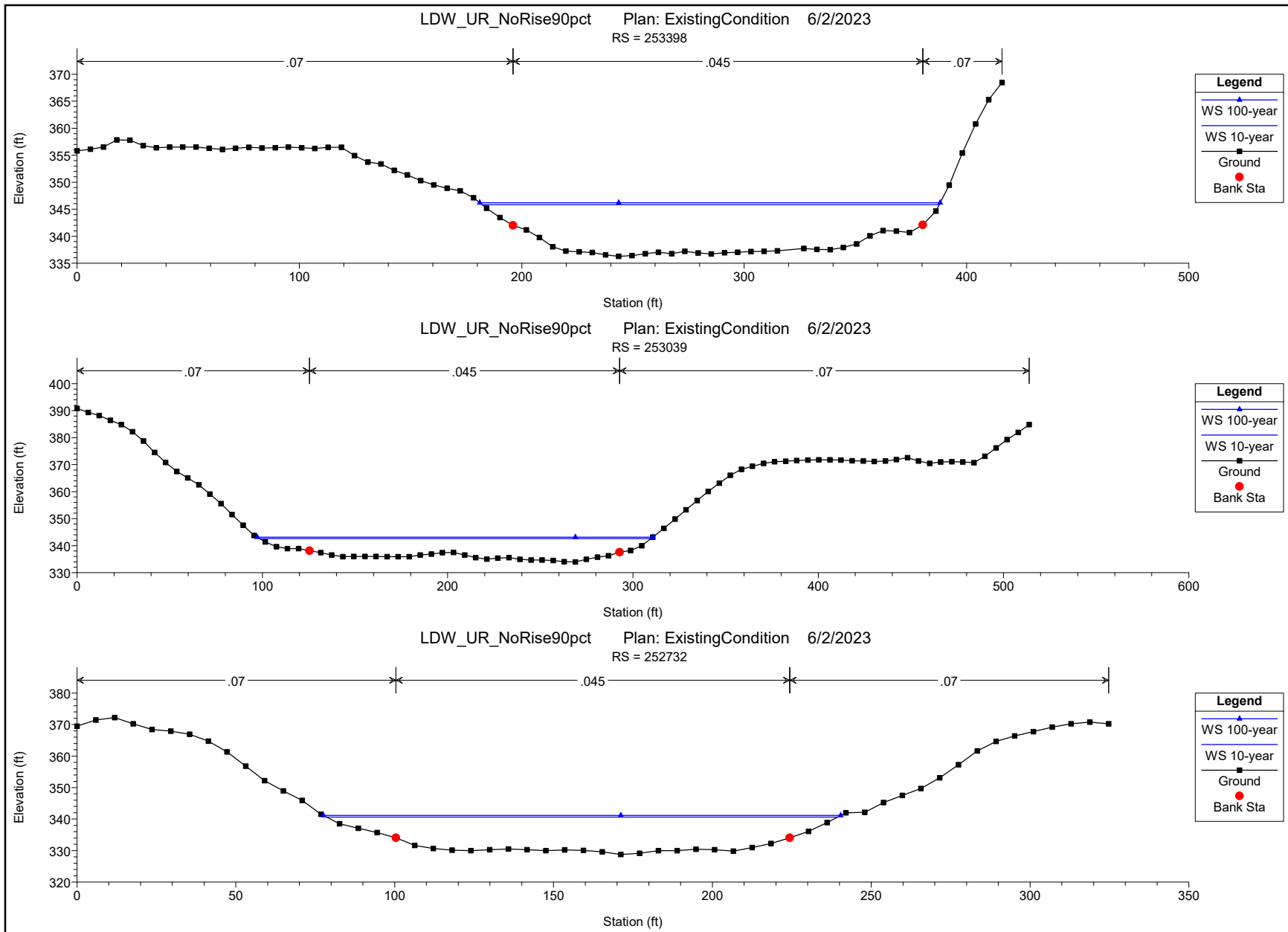


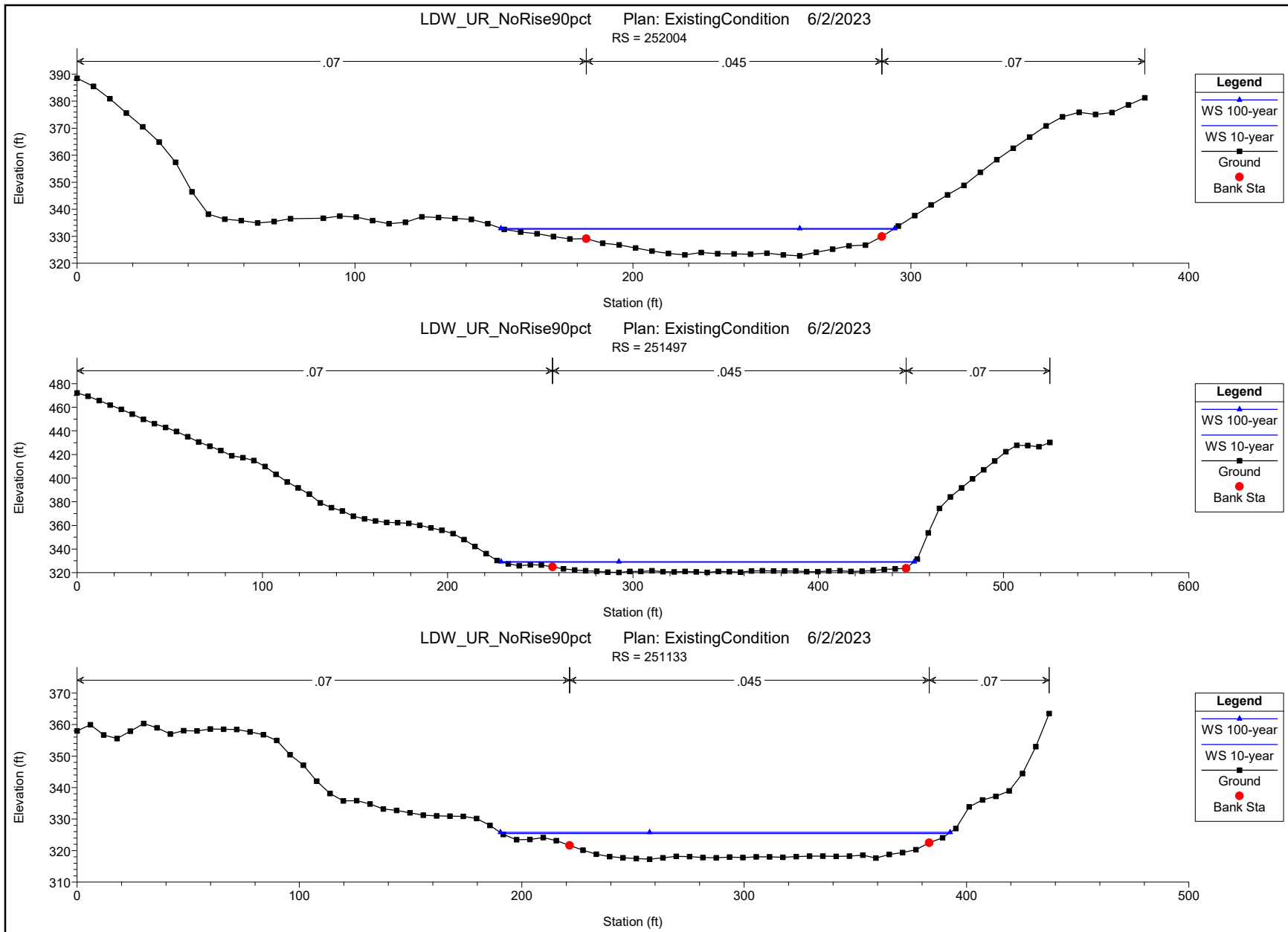


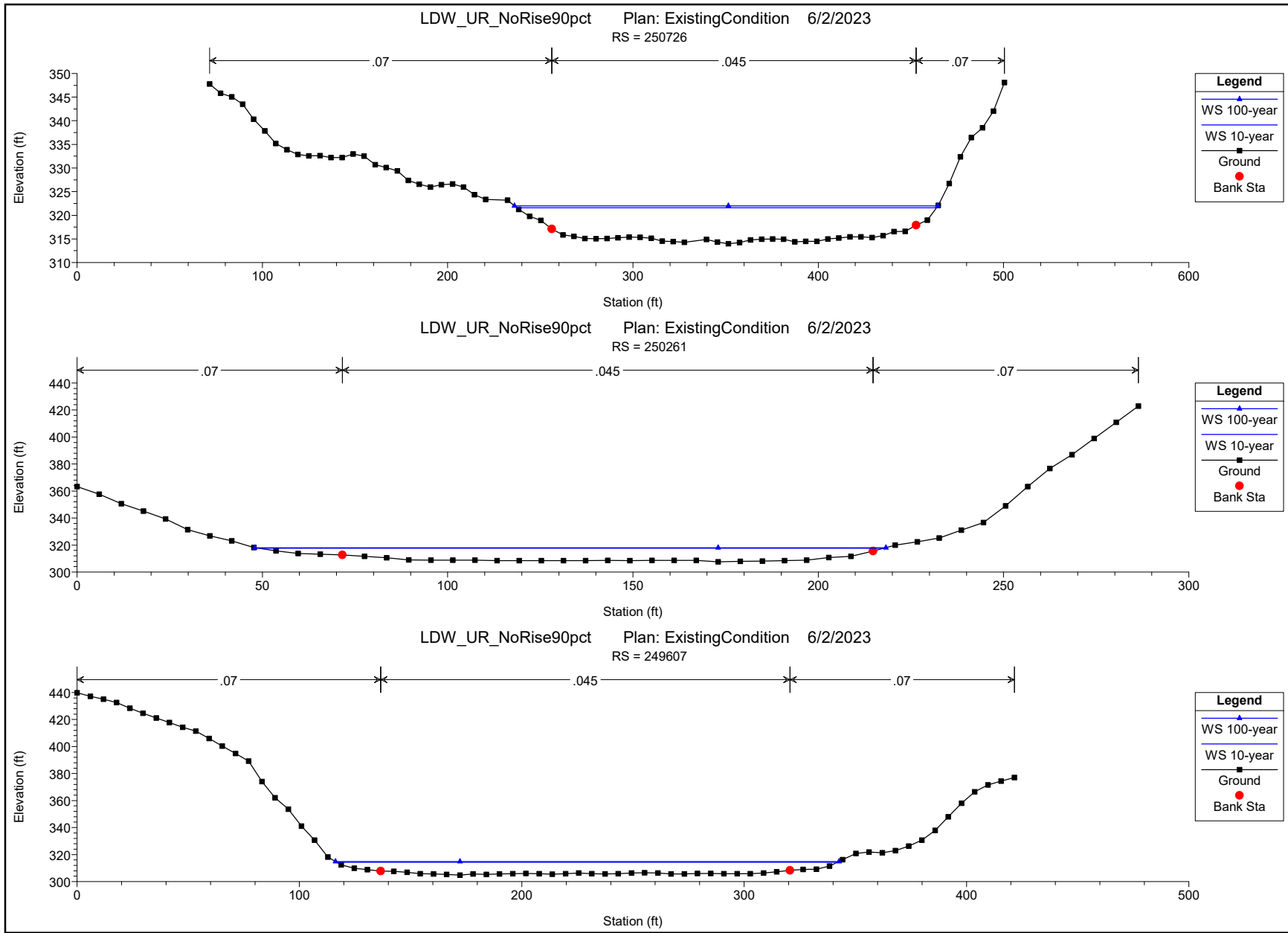


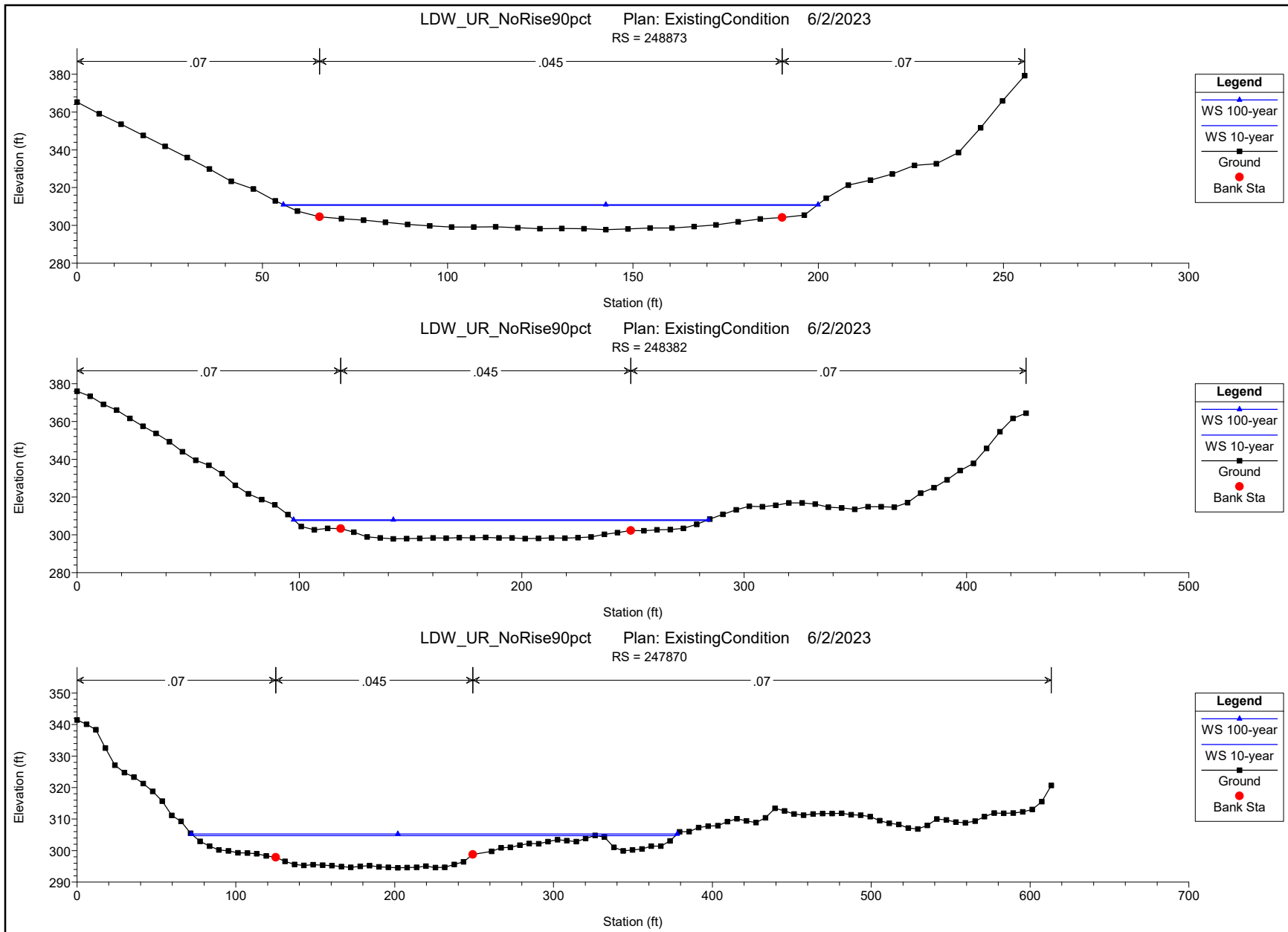


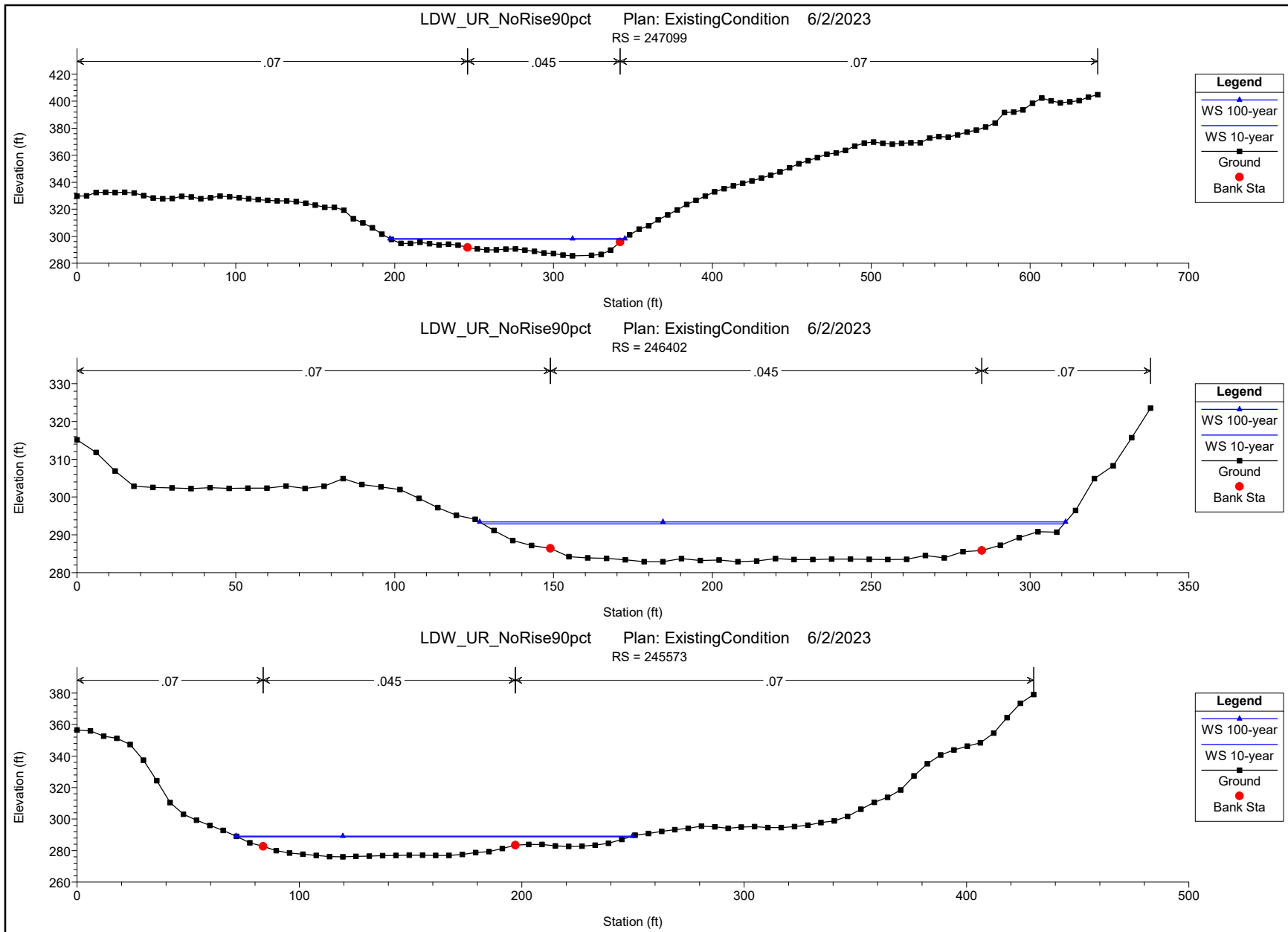


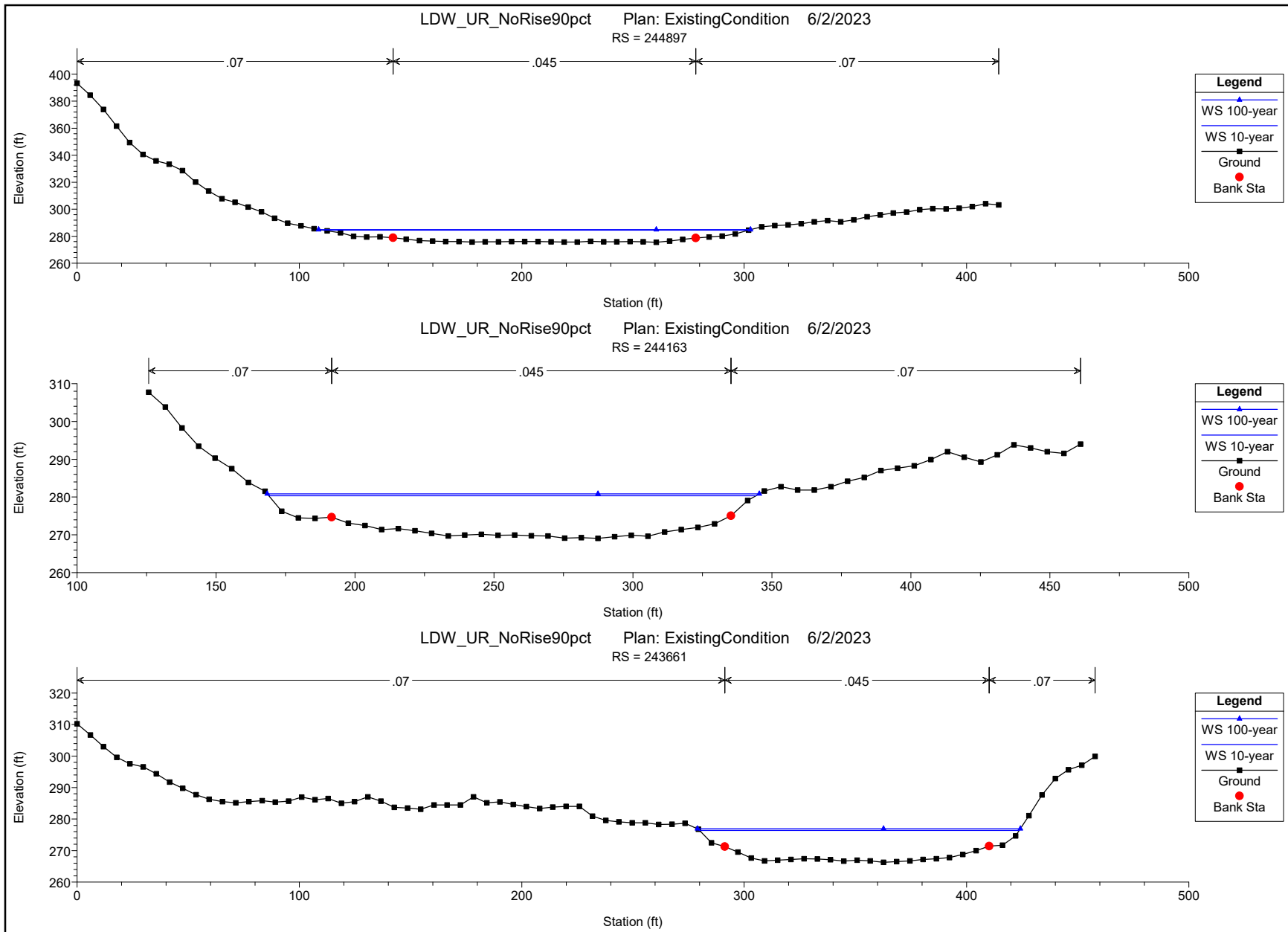


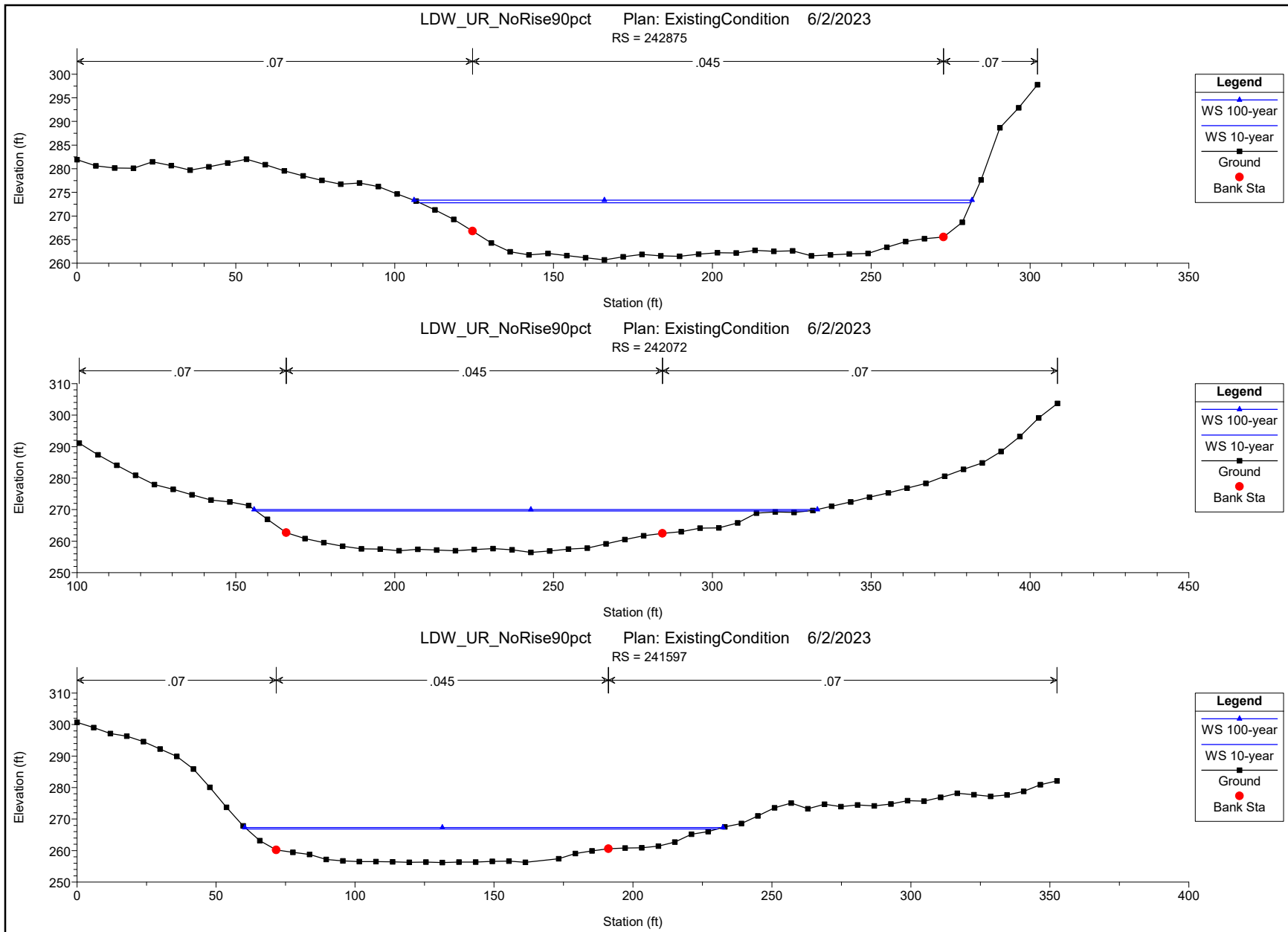


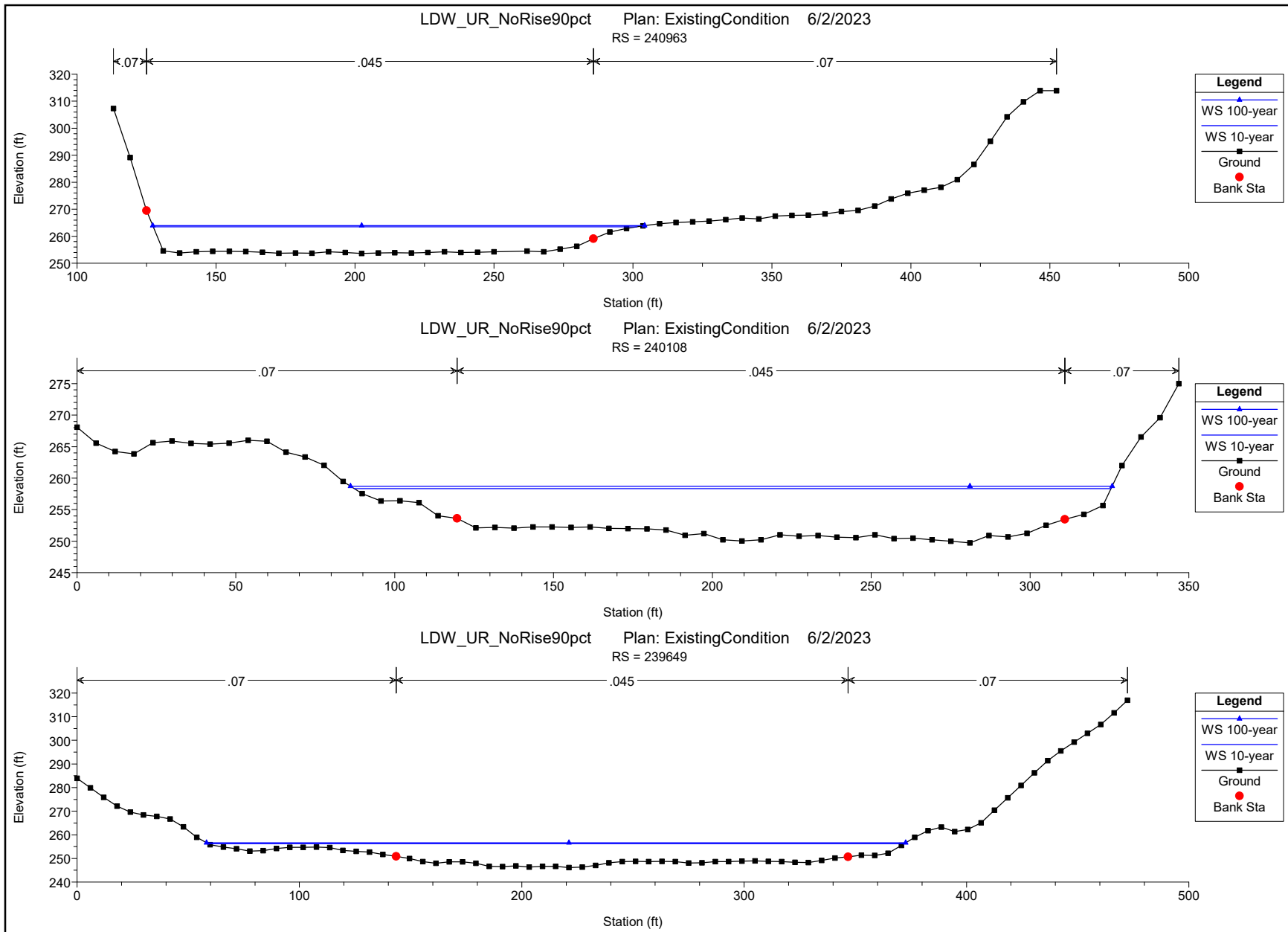


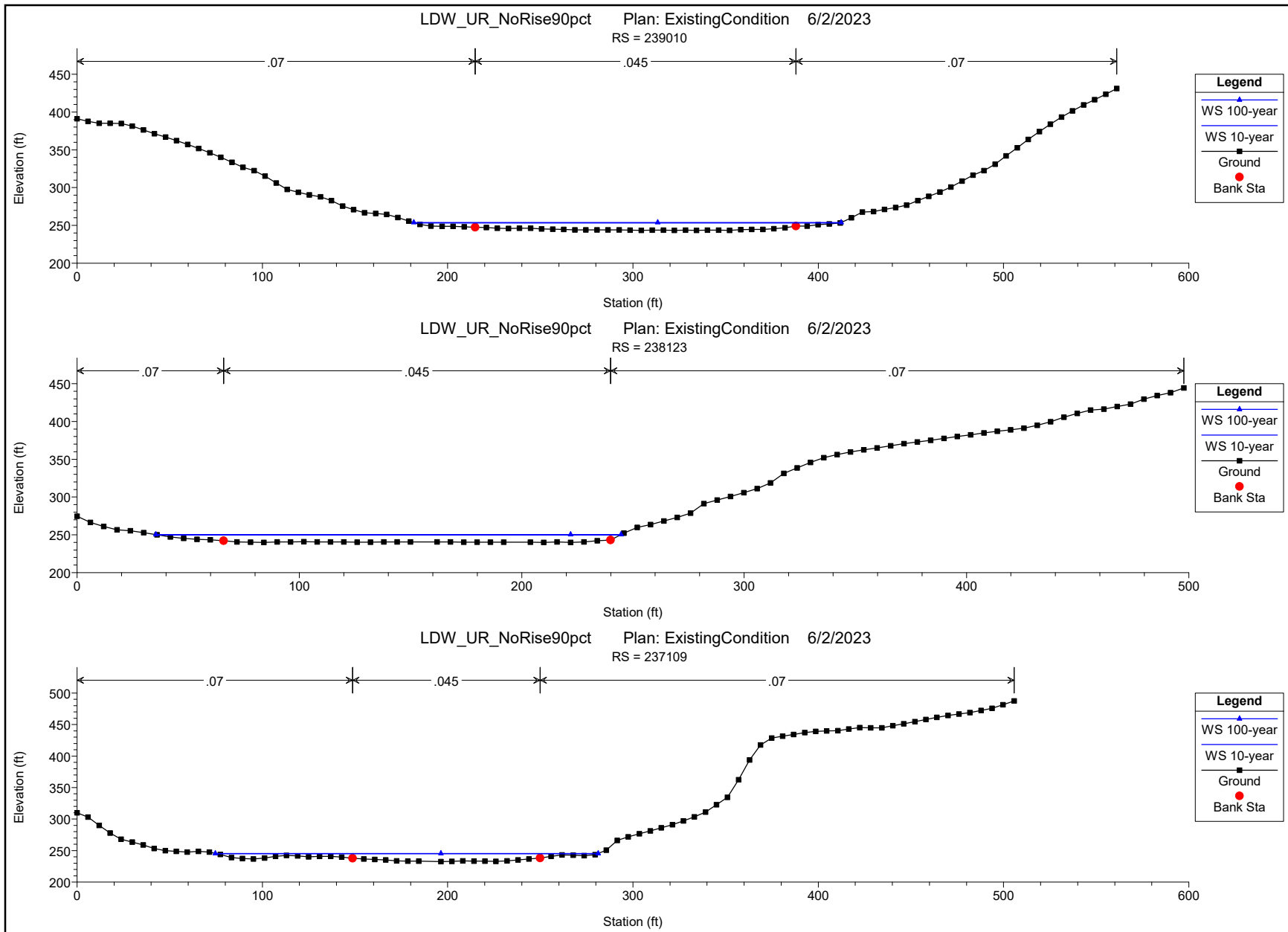


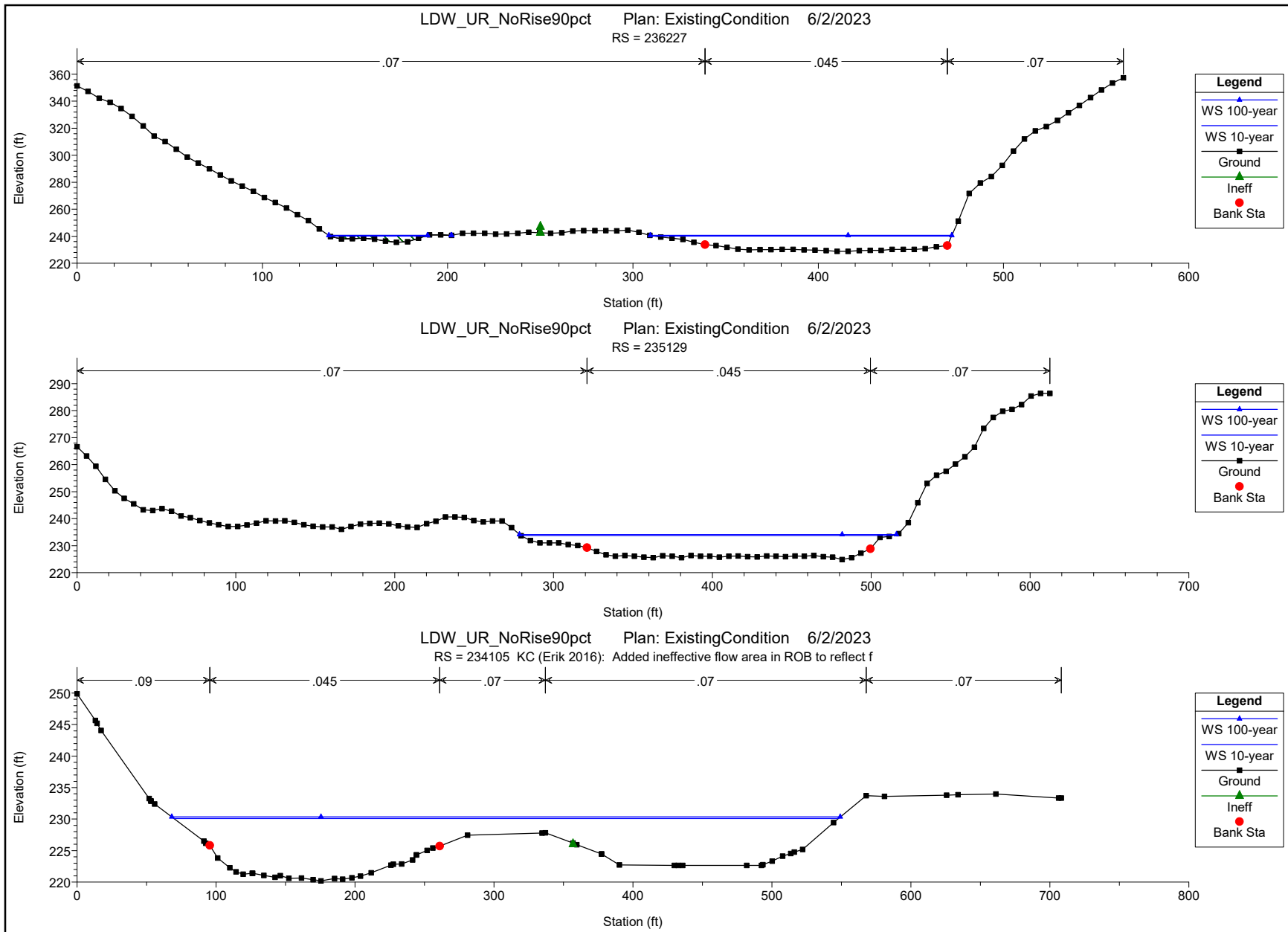


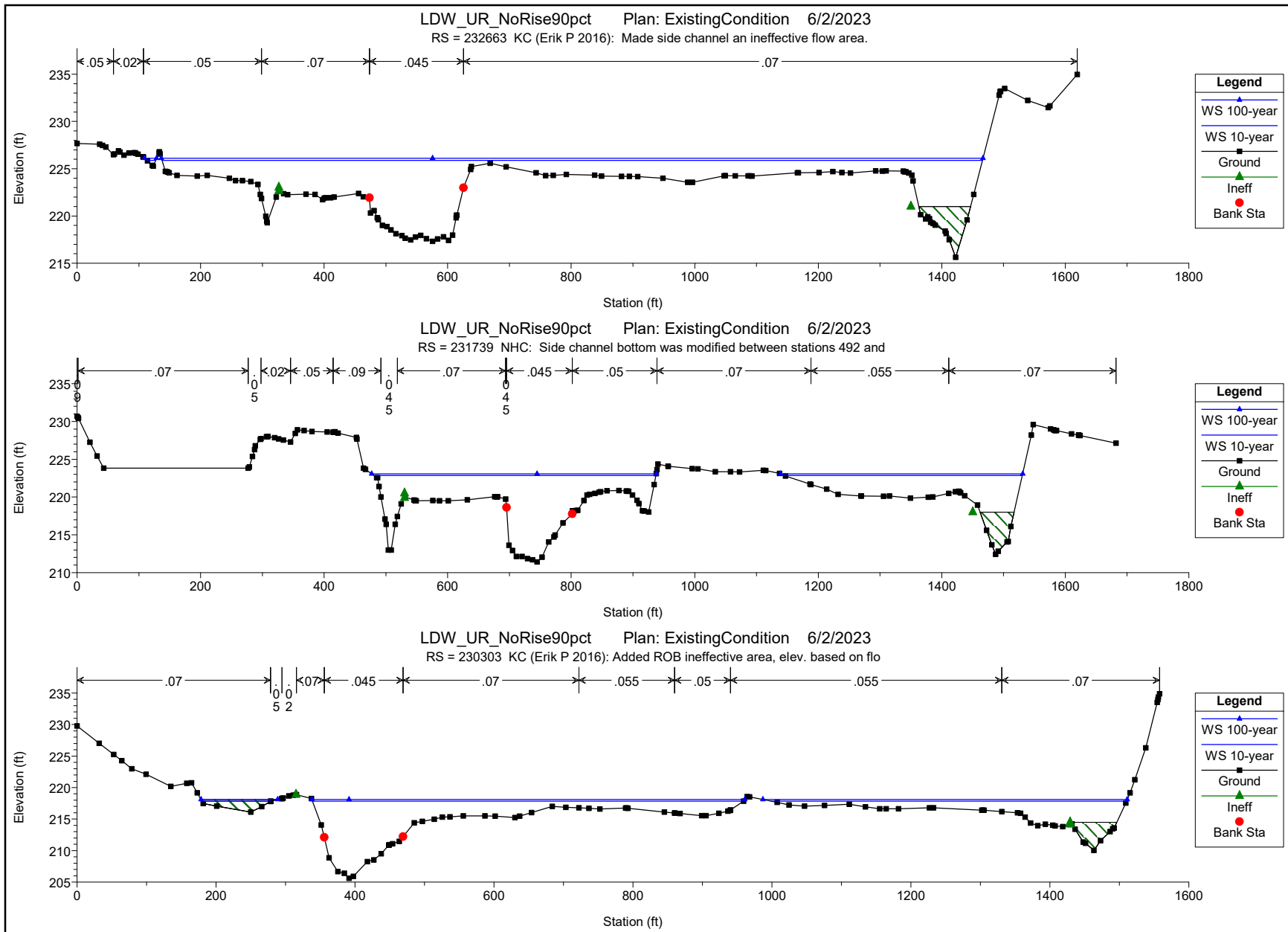




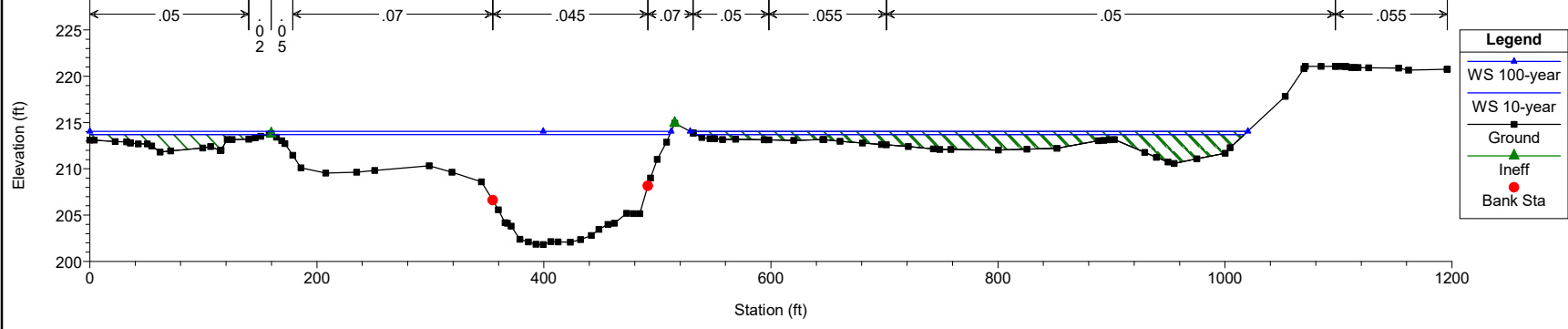




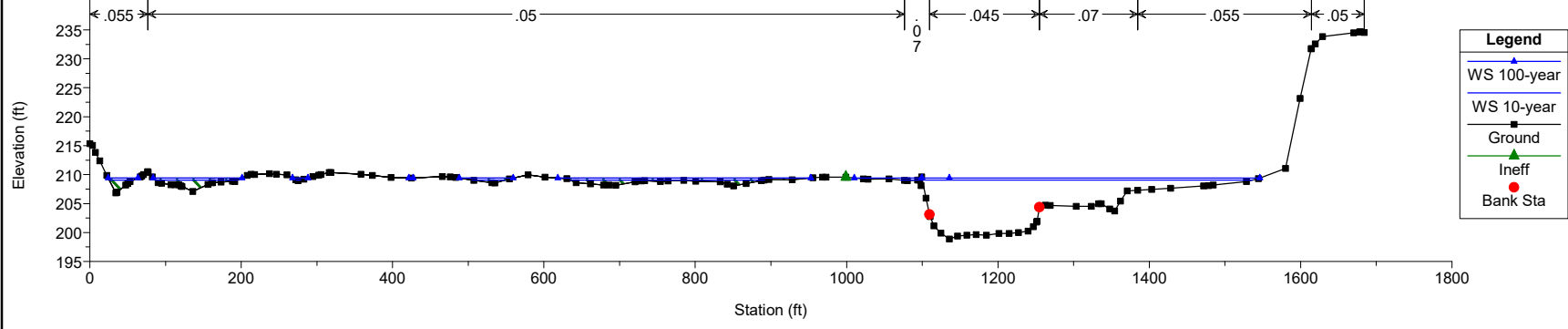




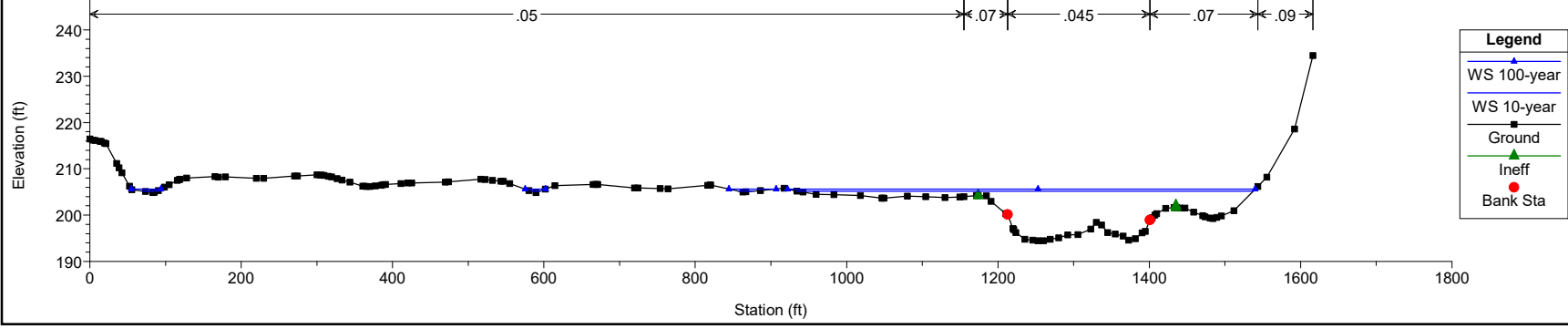
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 229141

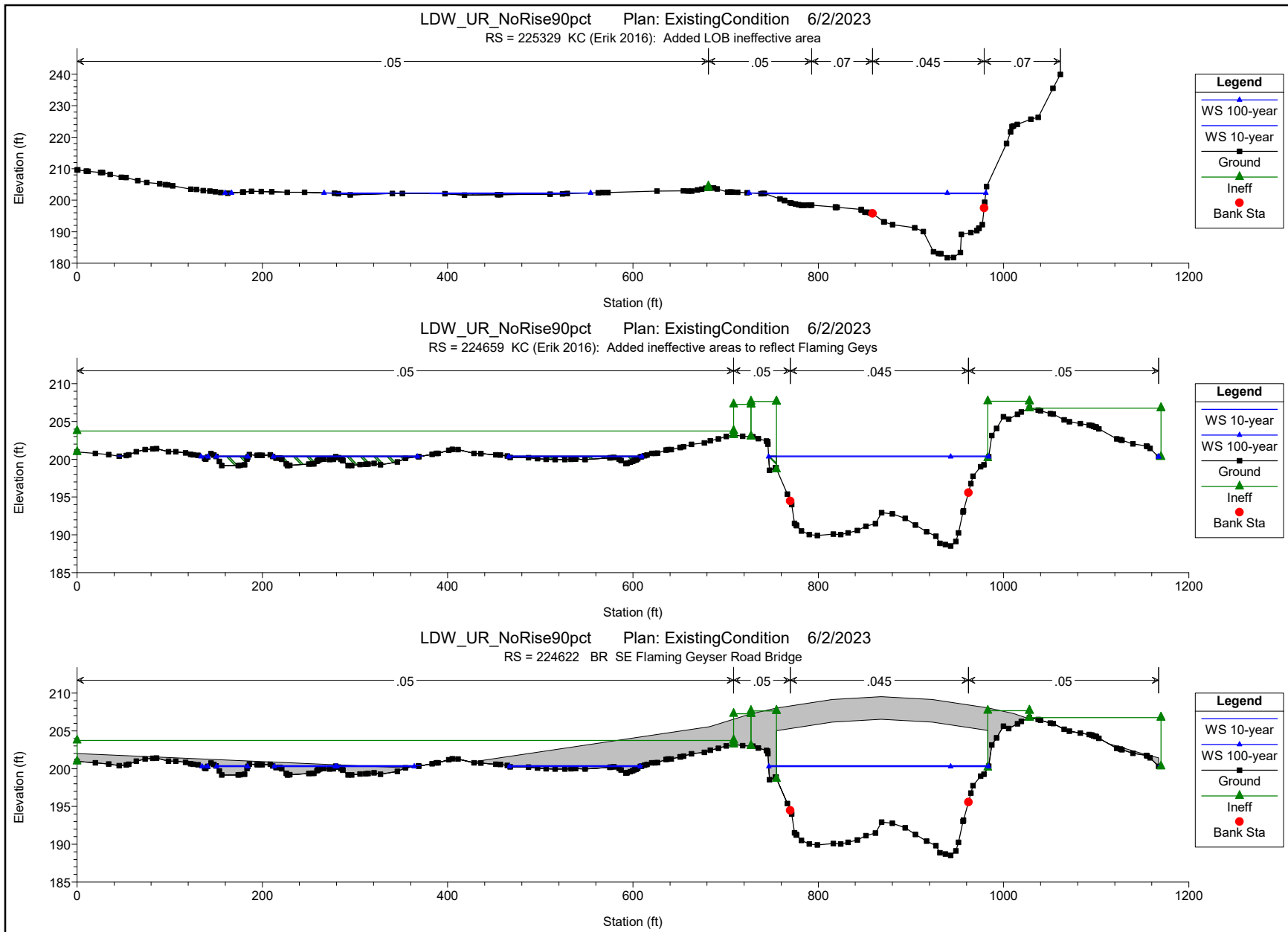


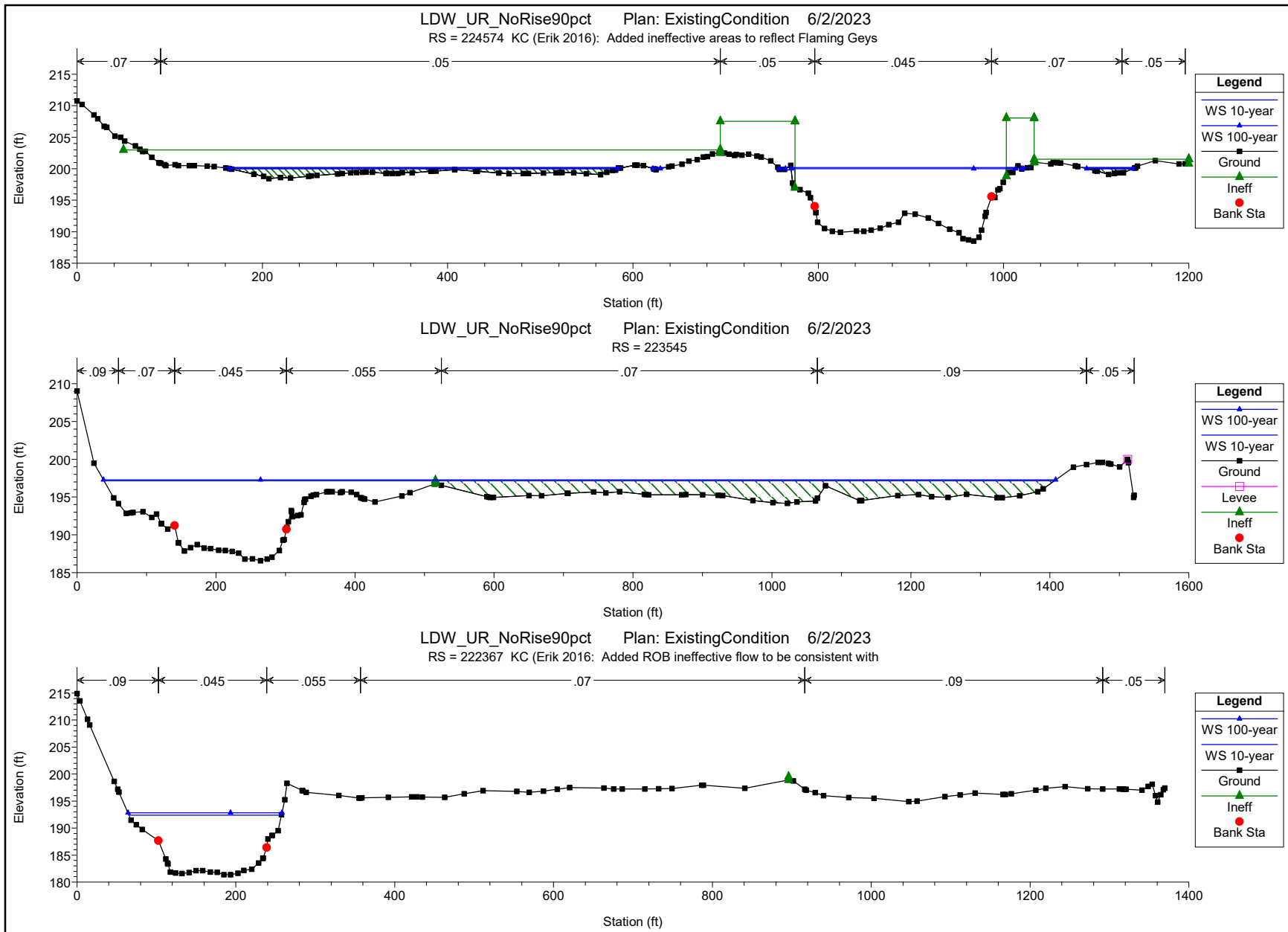
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 227869

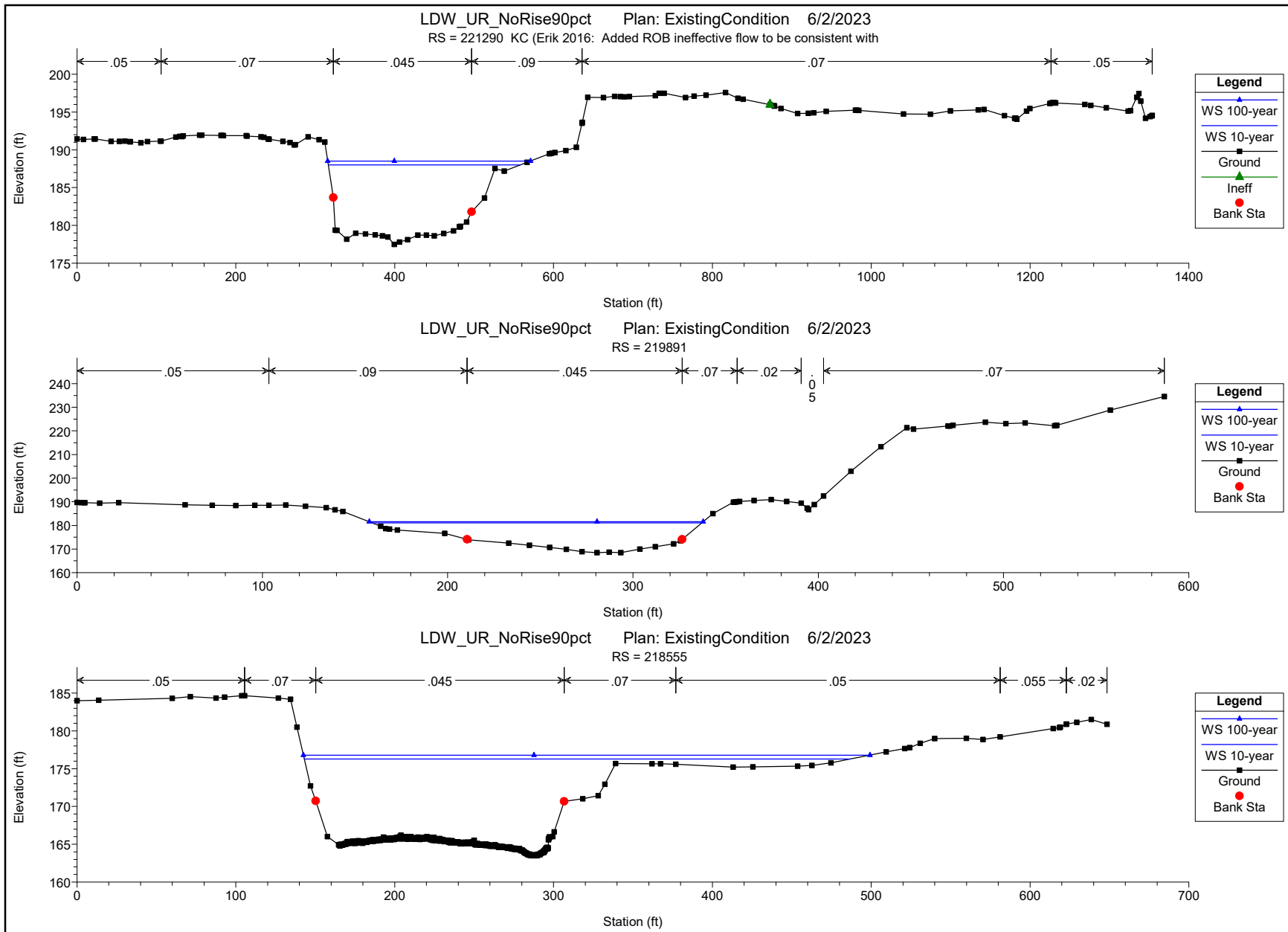


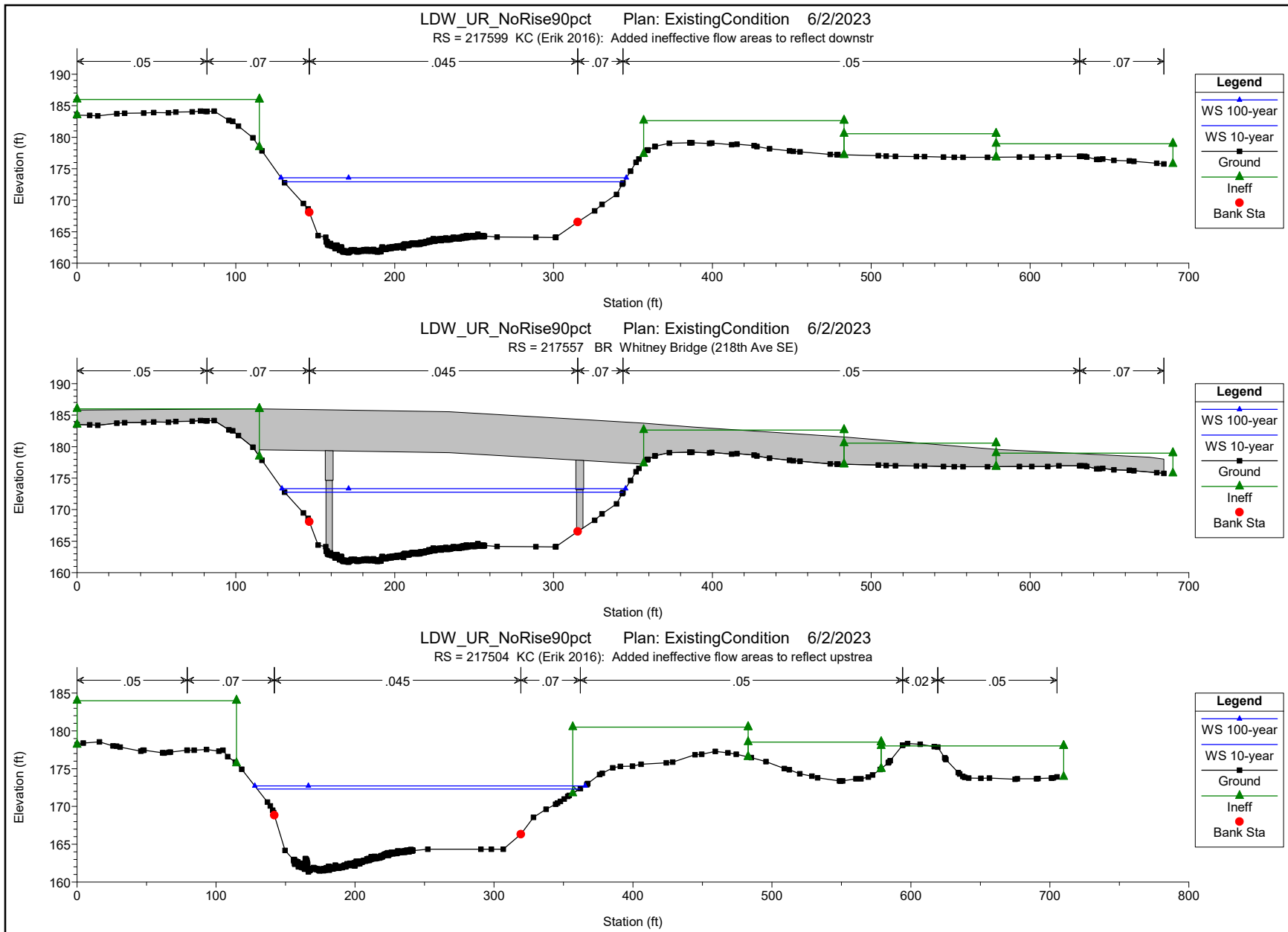
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 226549 KC (Erik 2016): Added ROB ineffective area

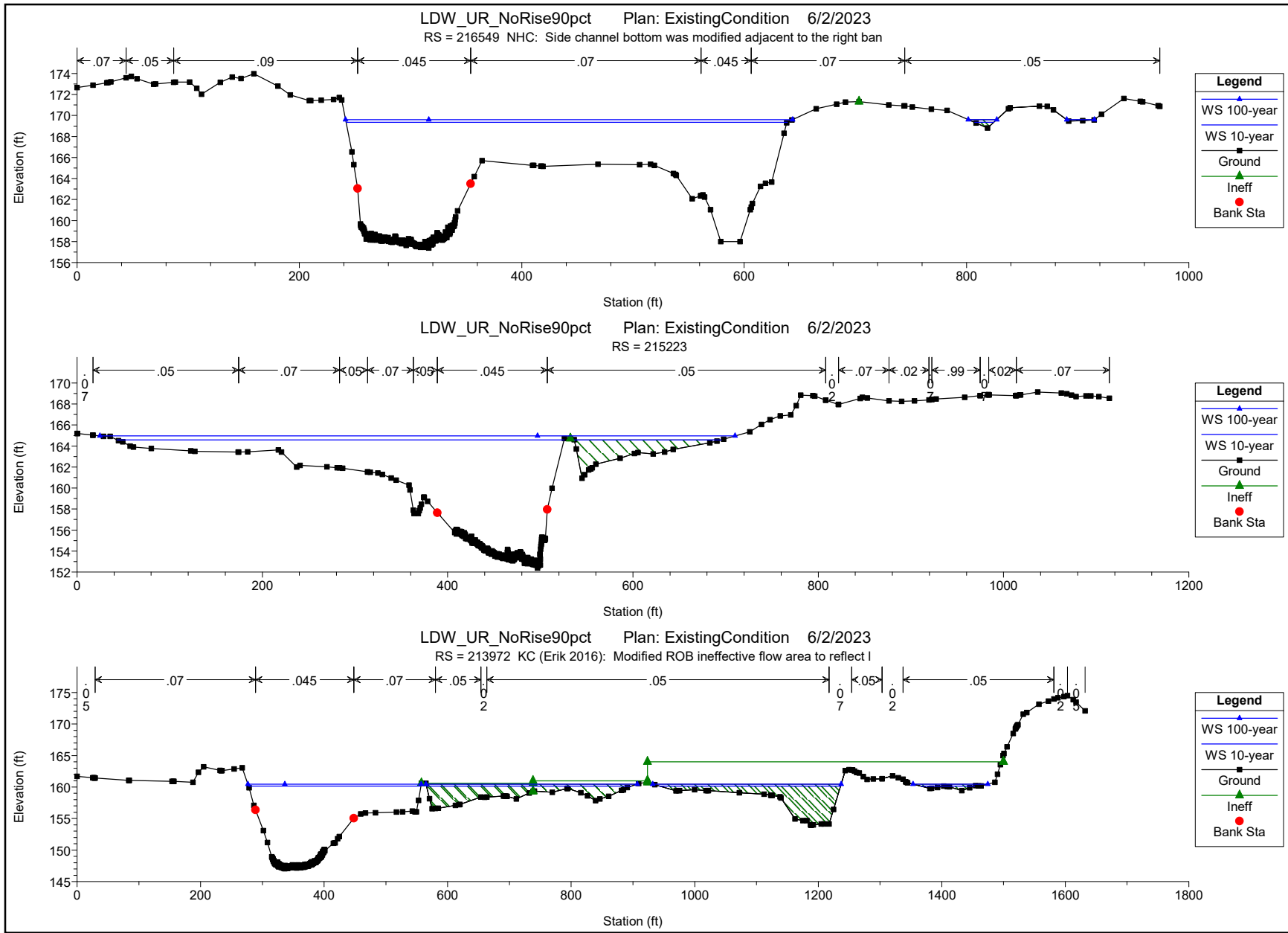


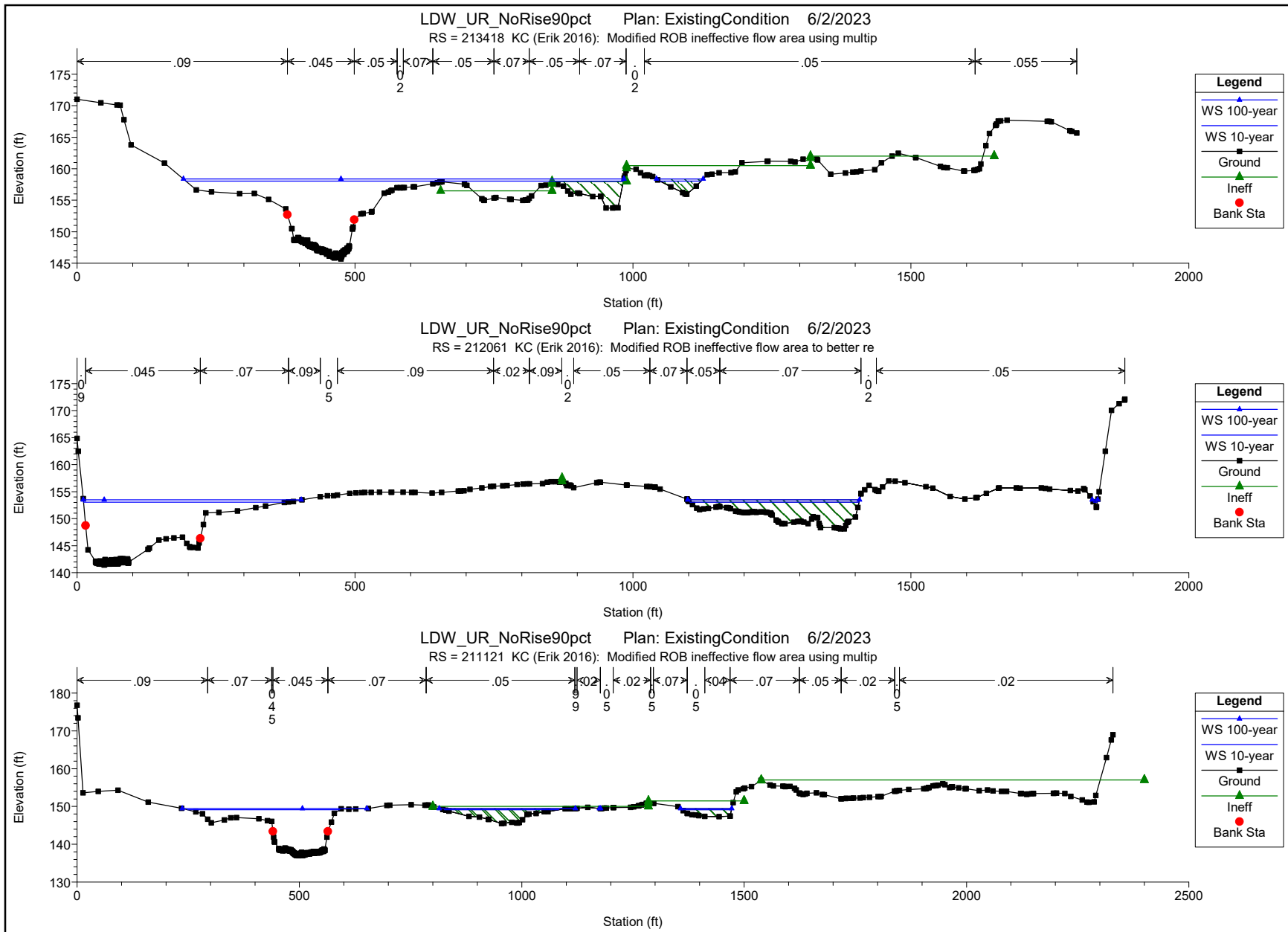


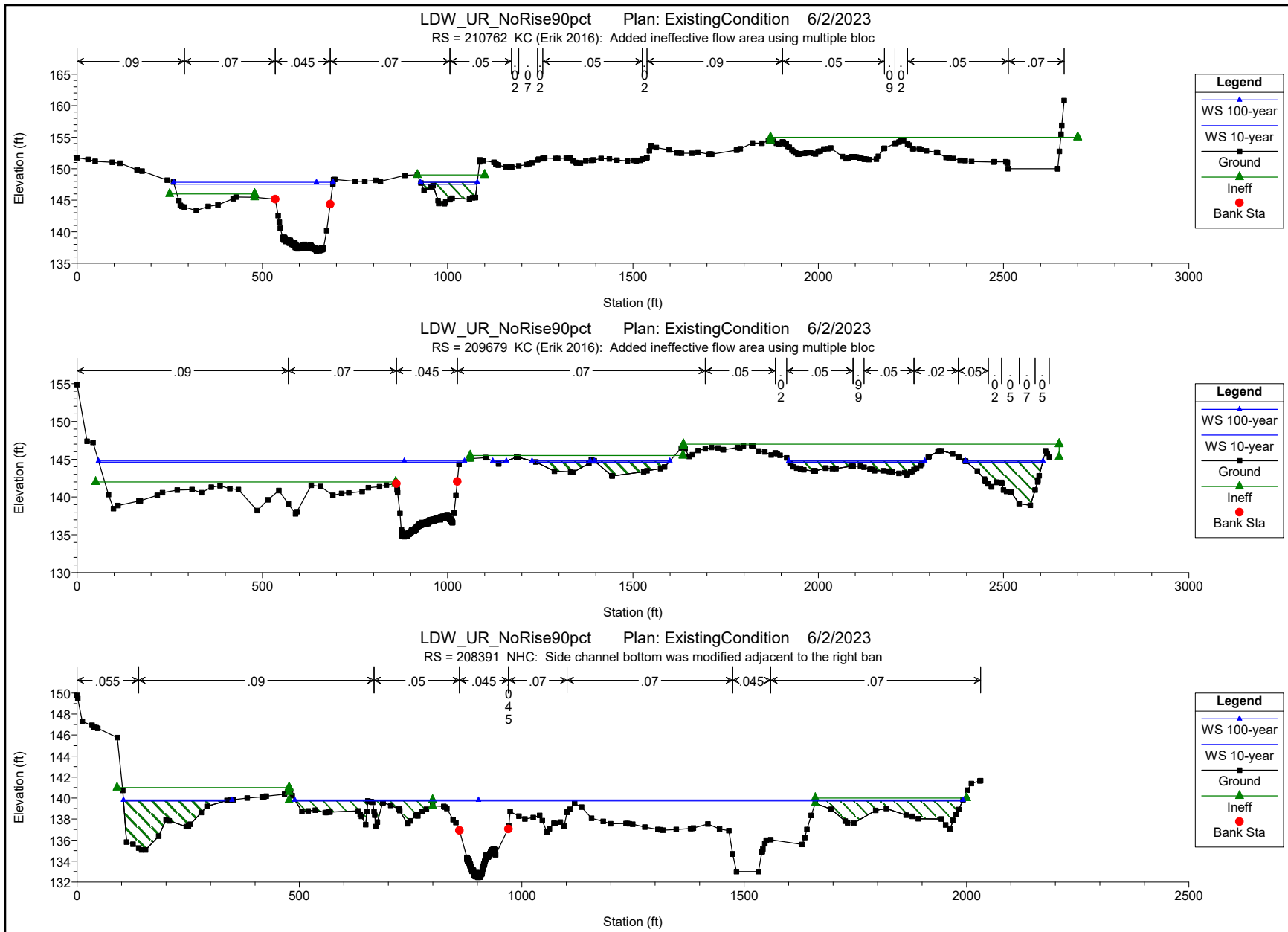


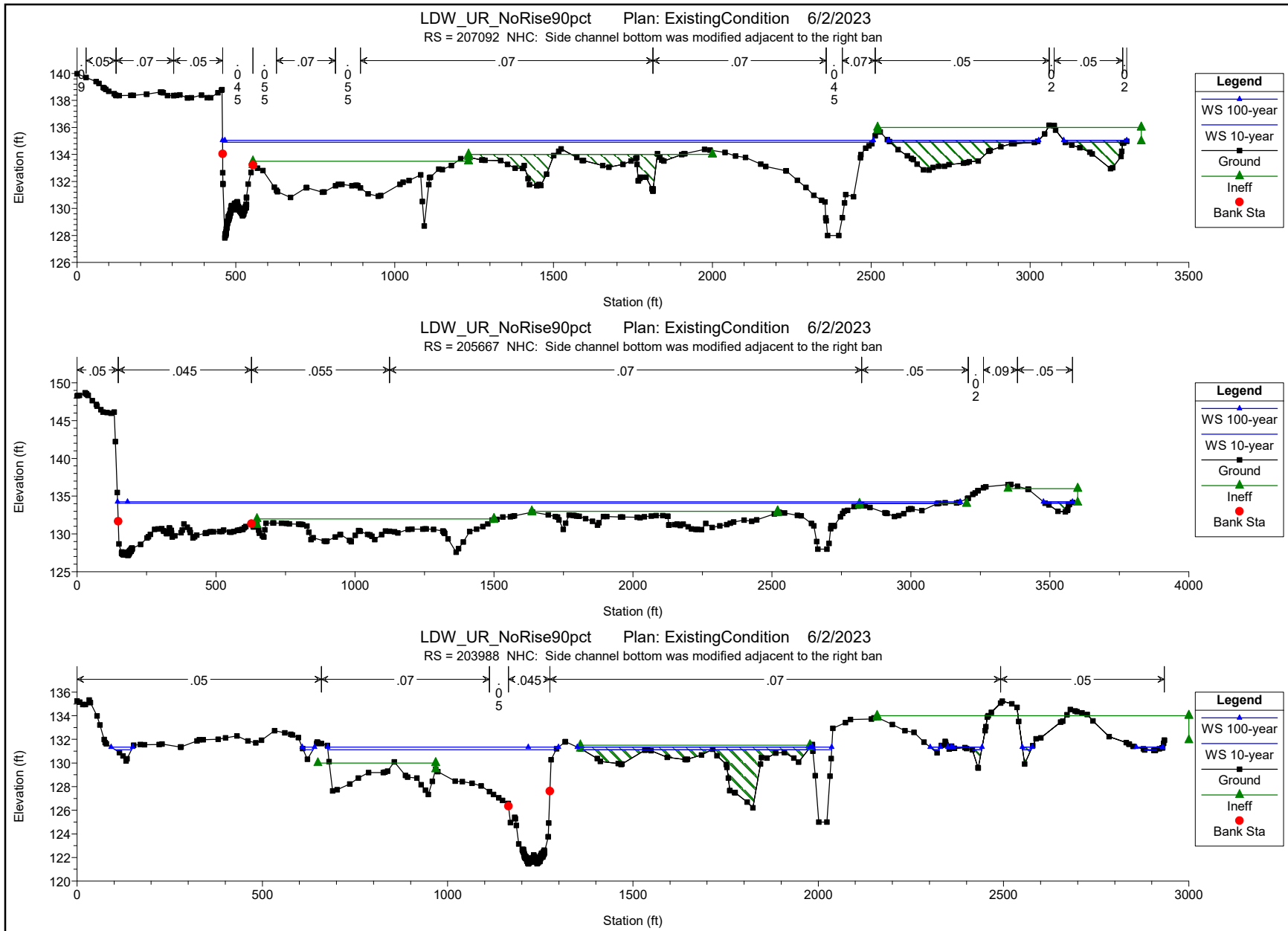


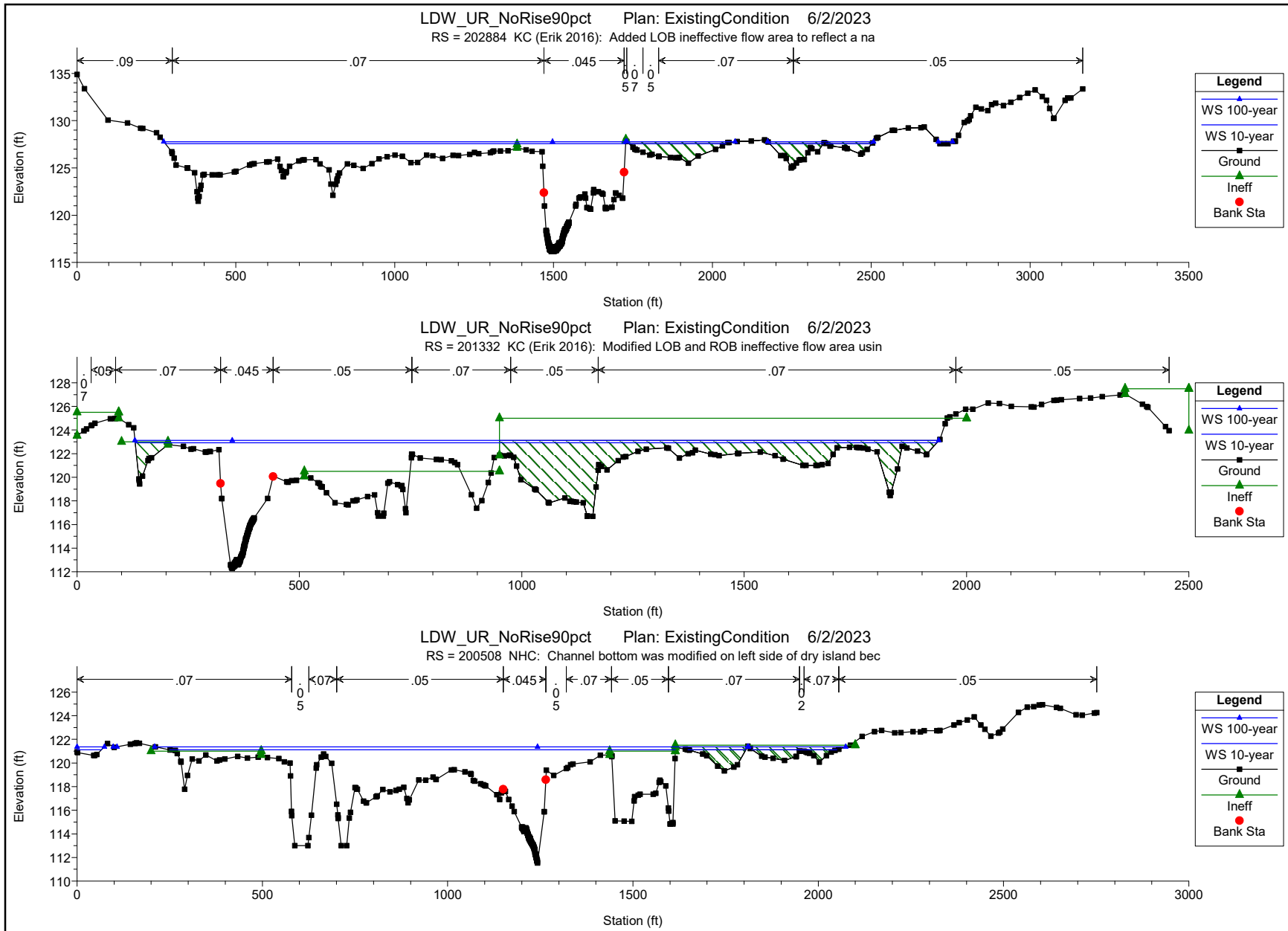


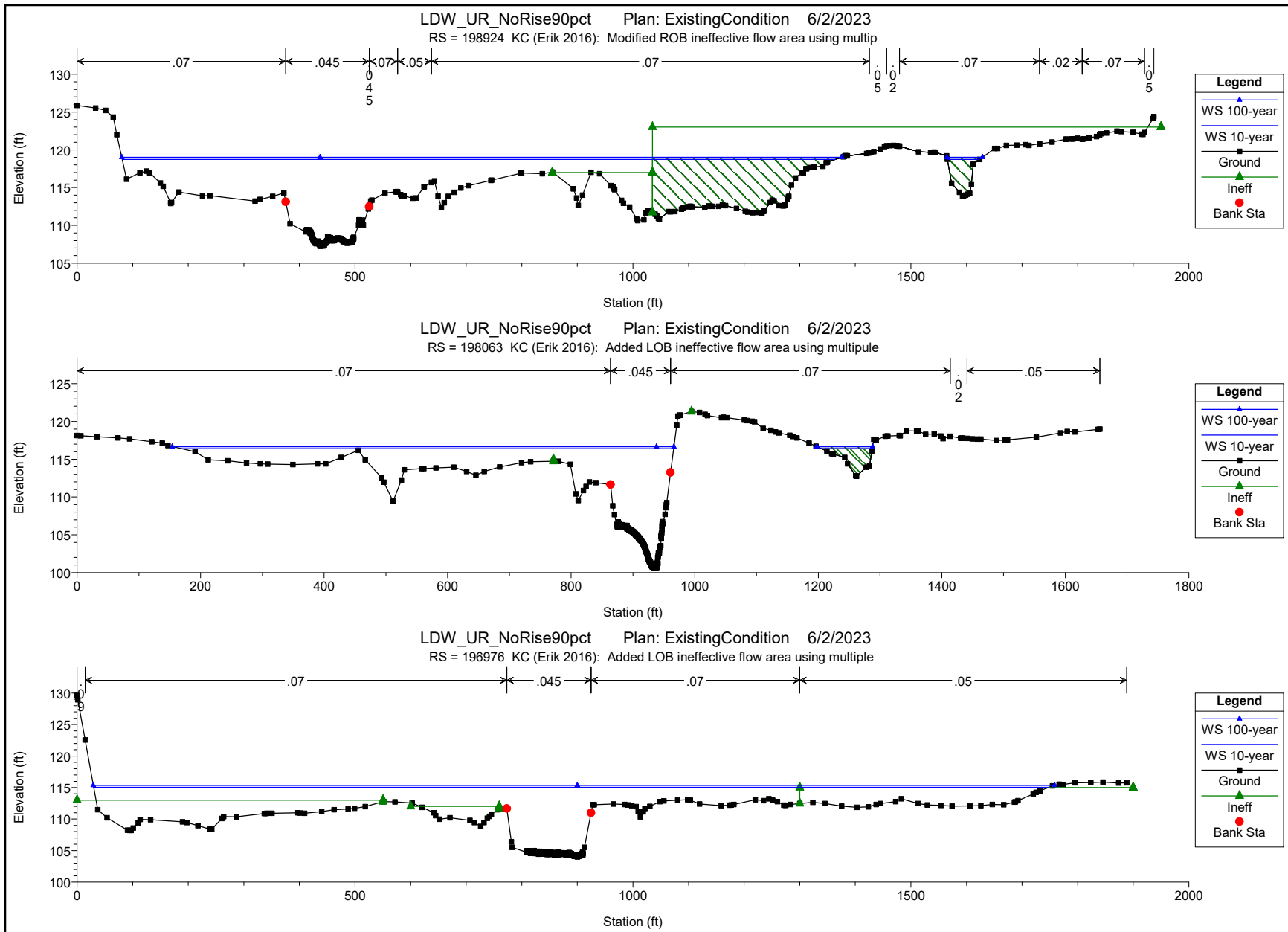


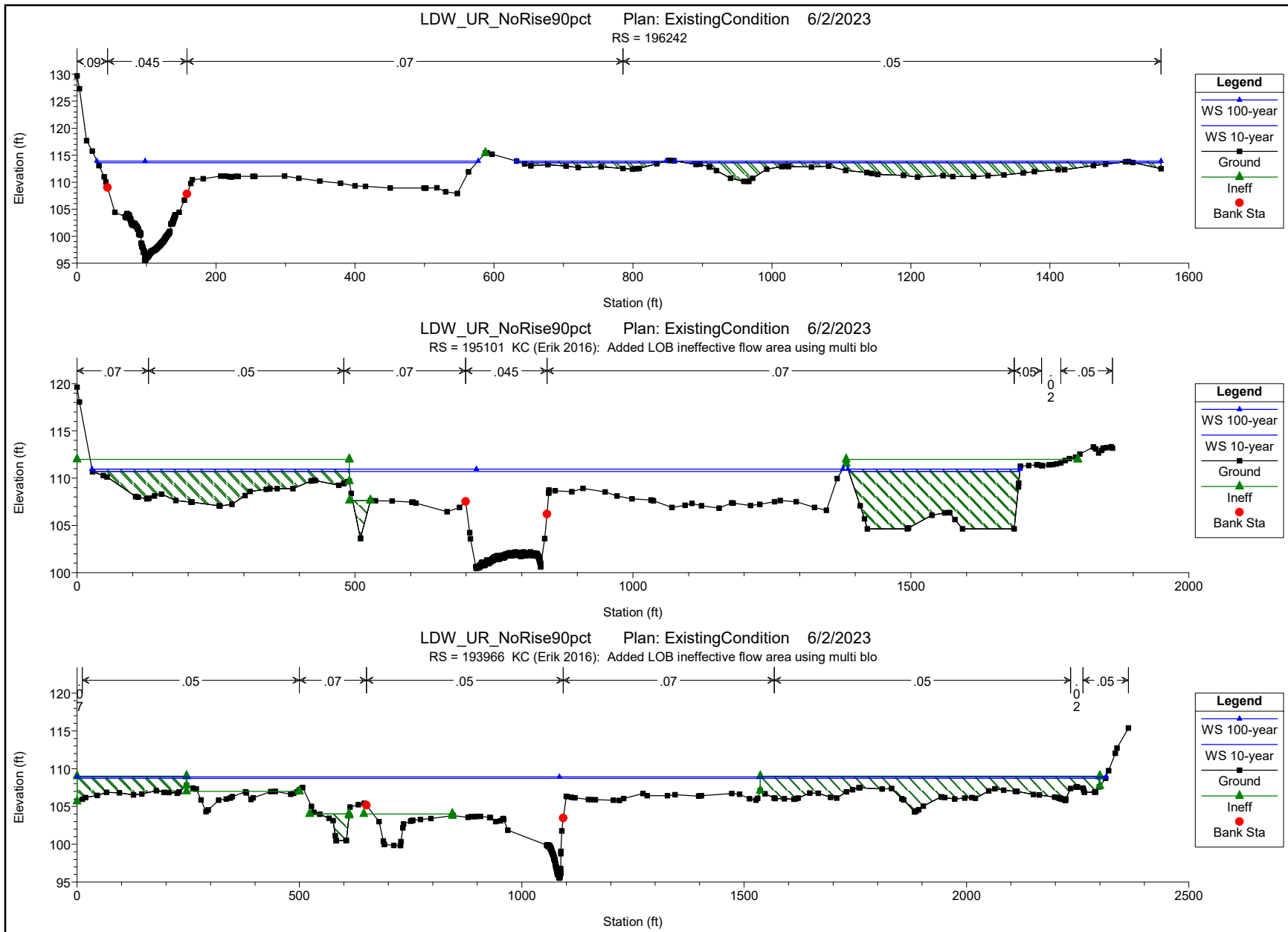


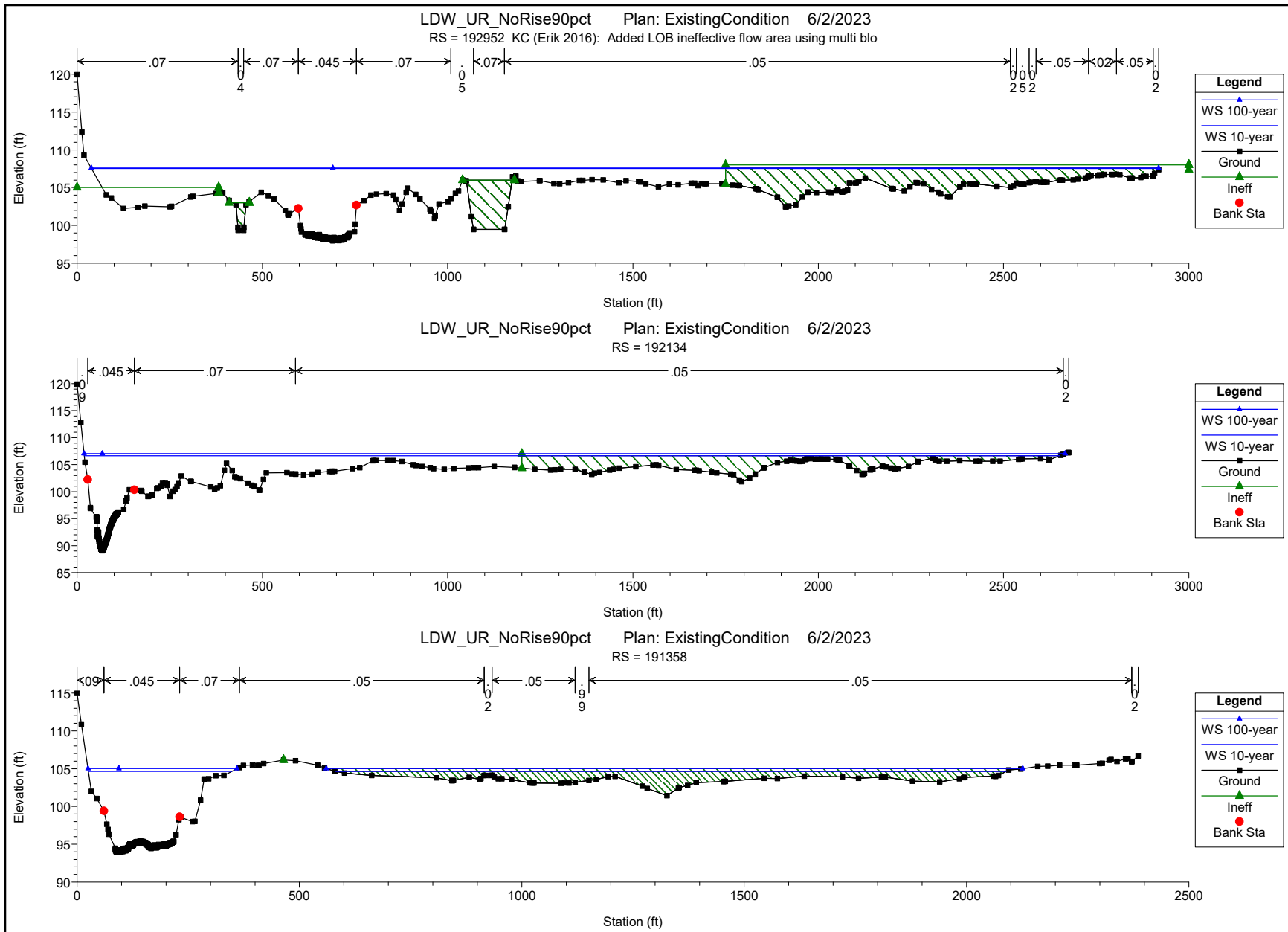


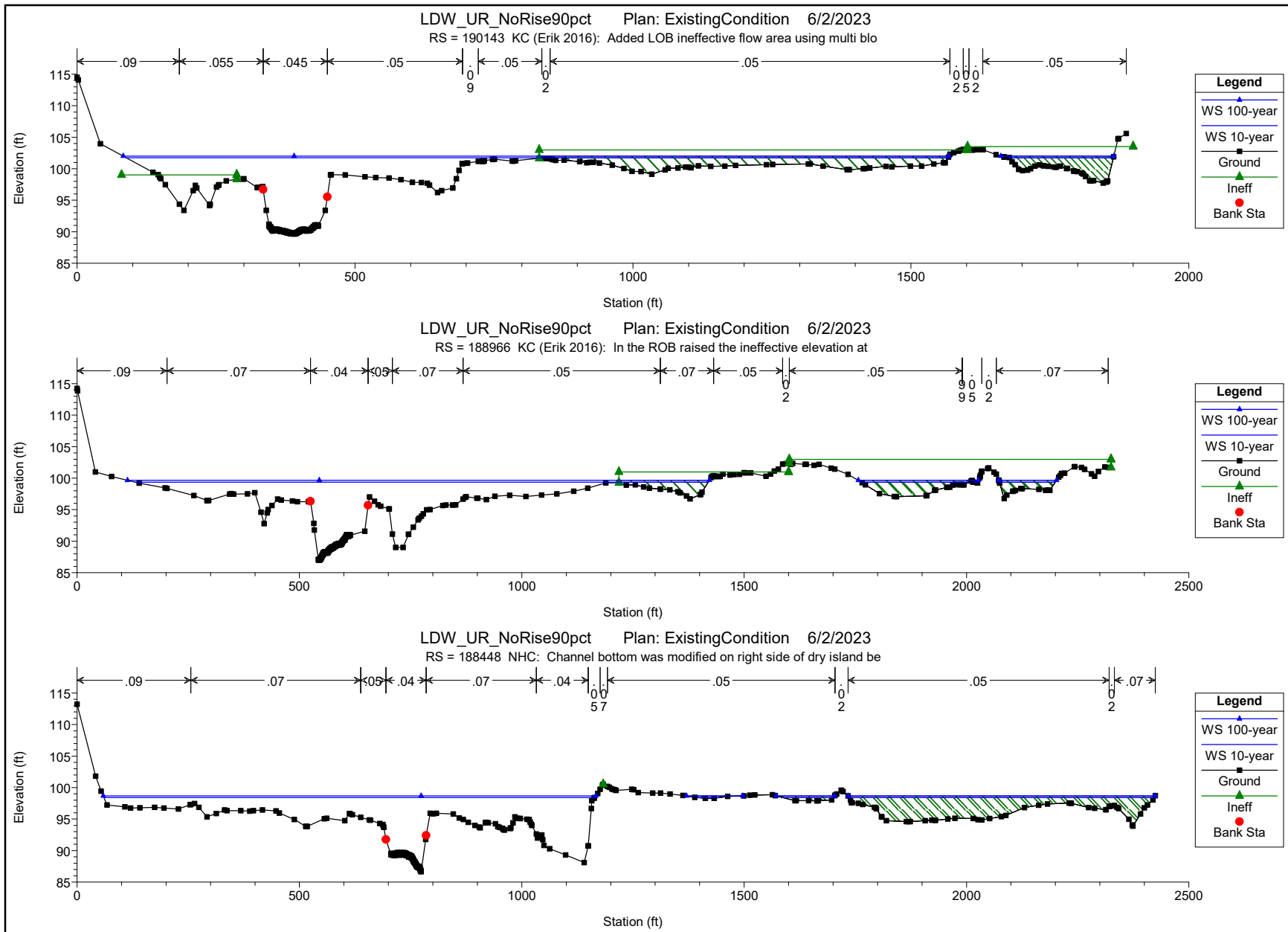


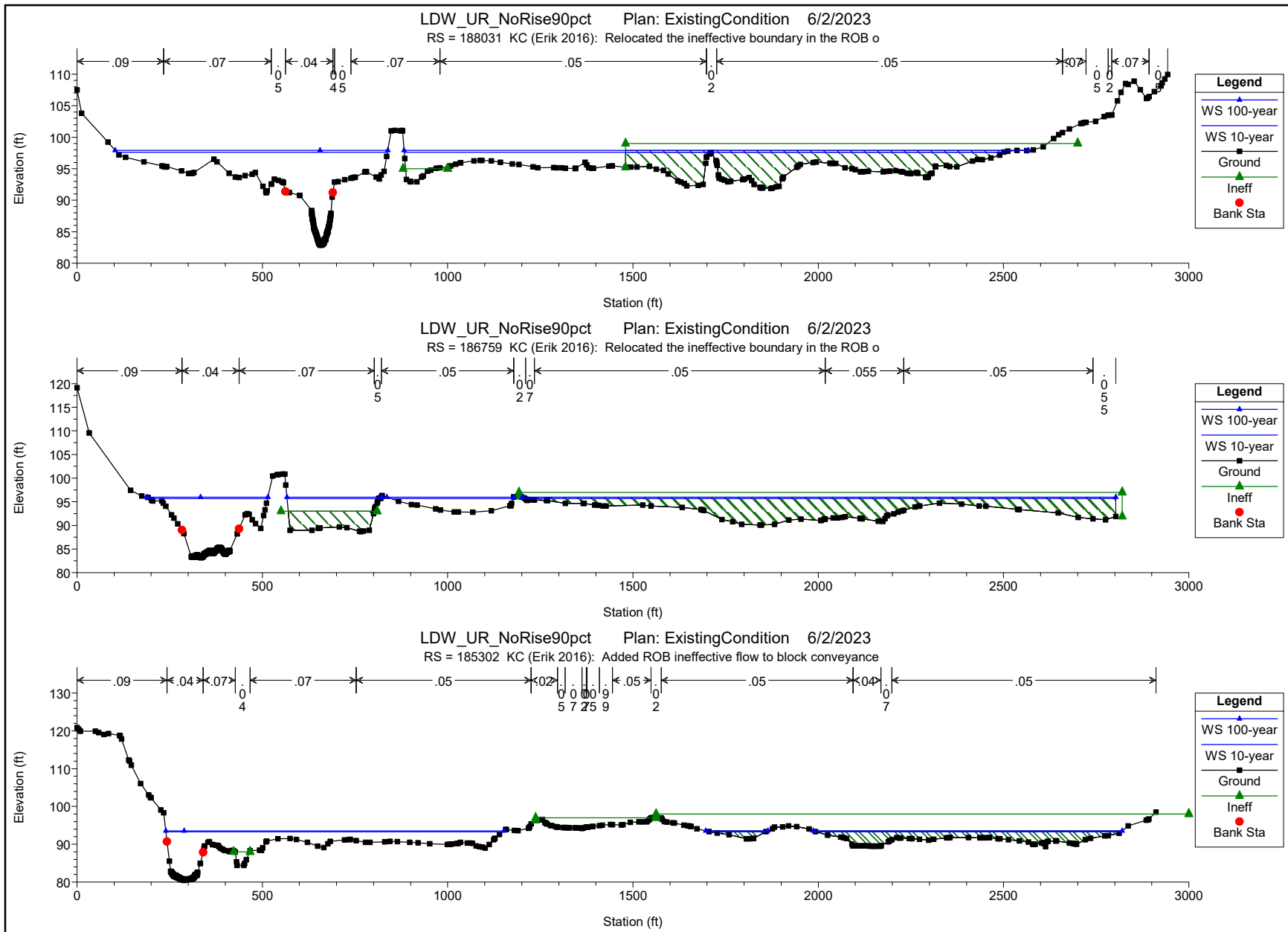


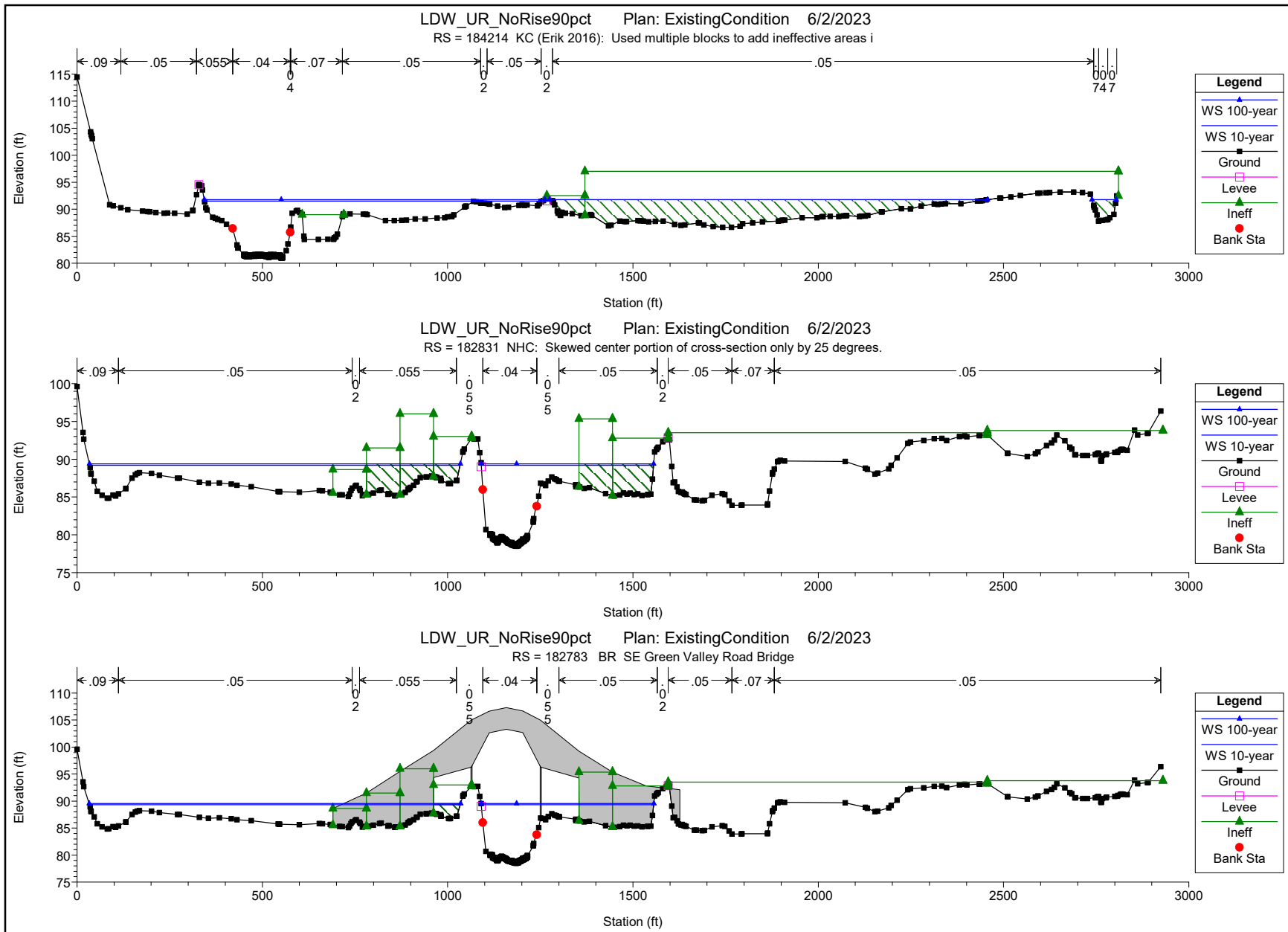


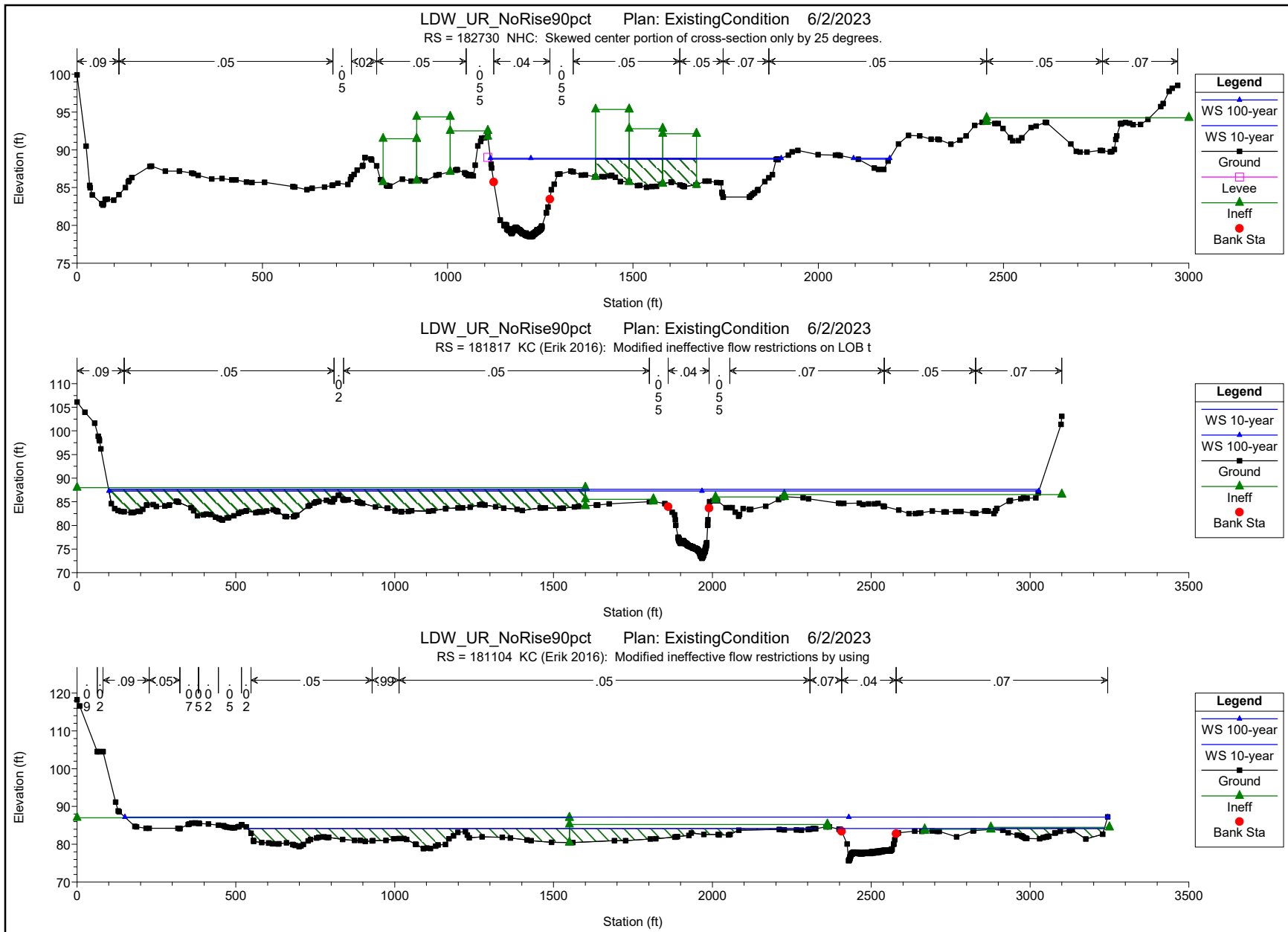


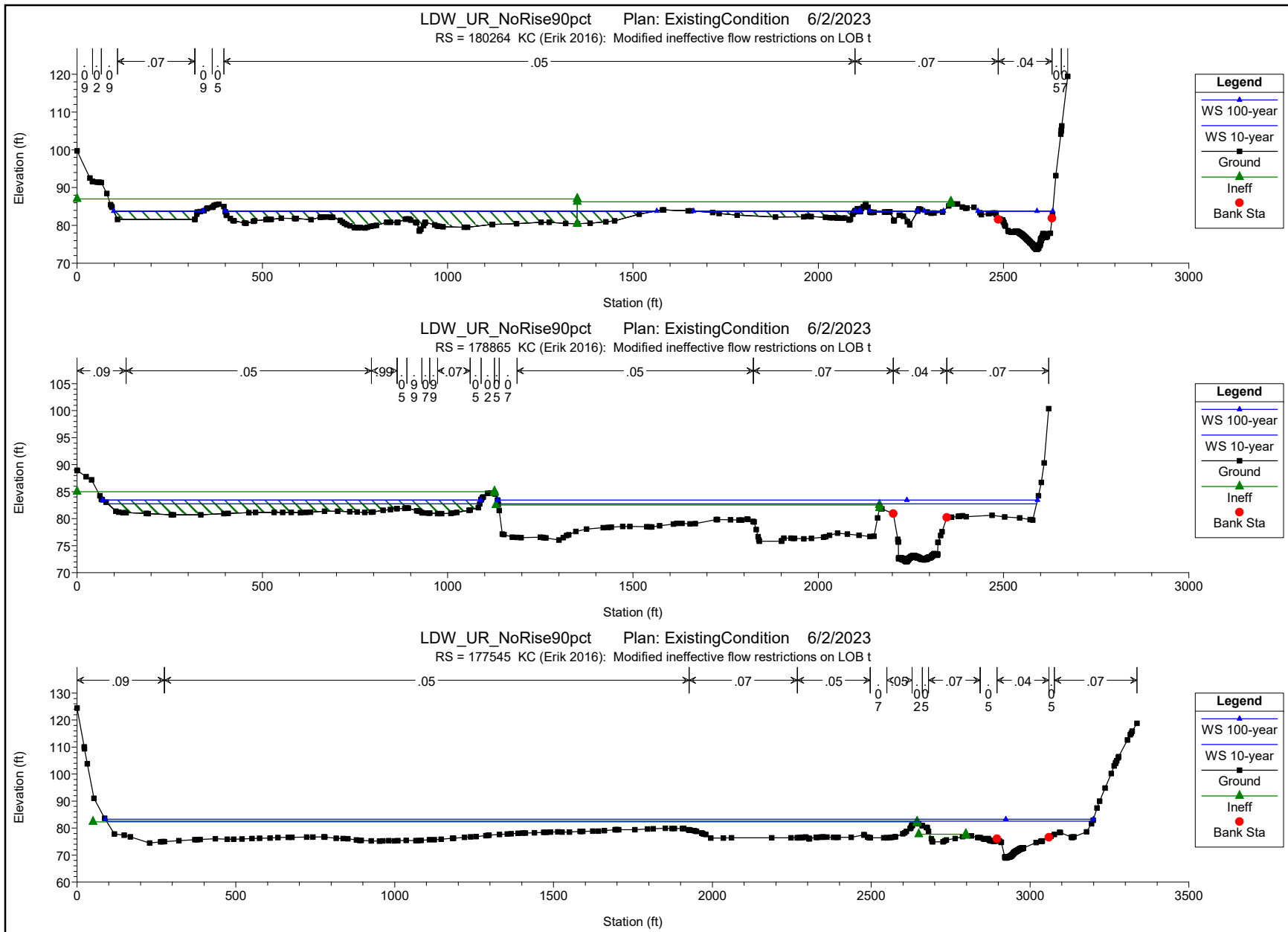


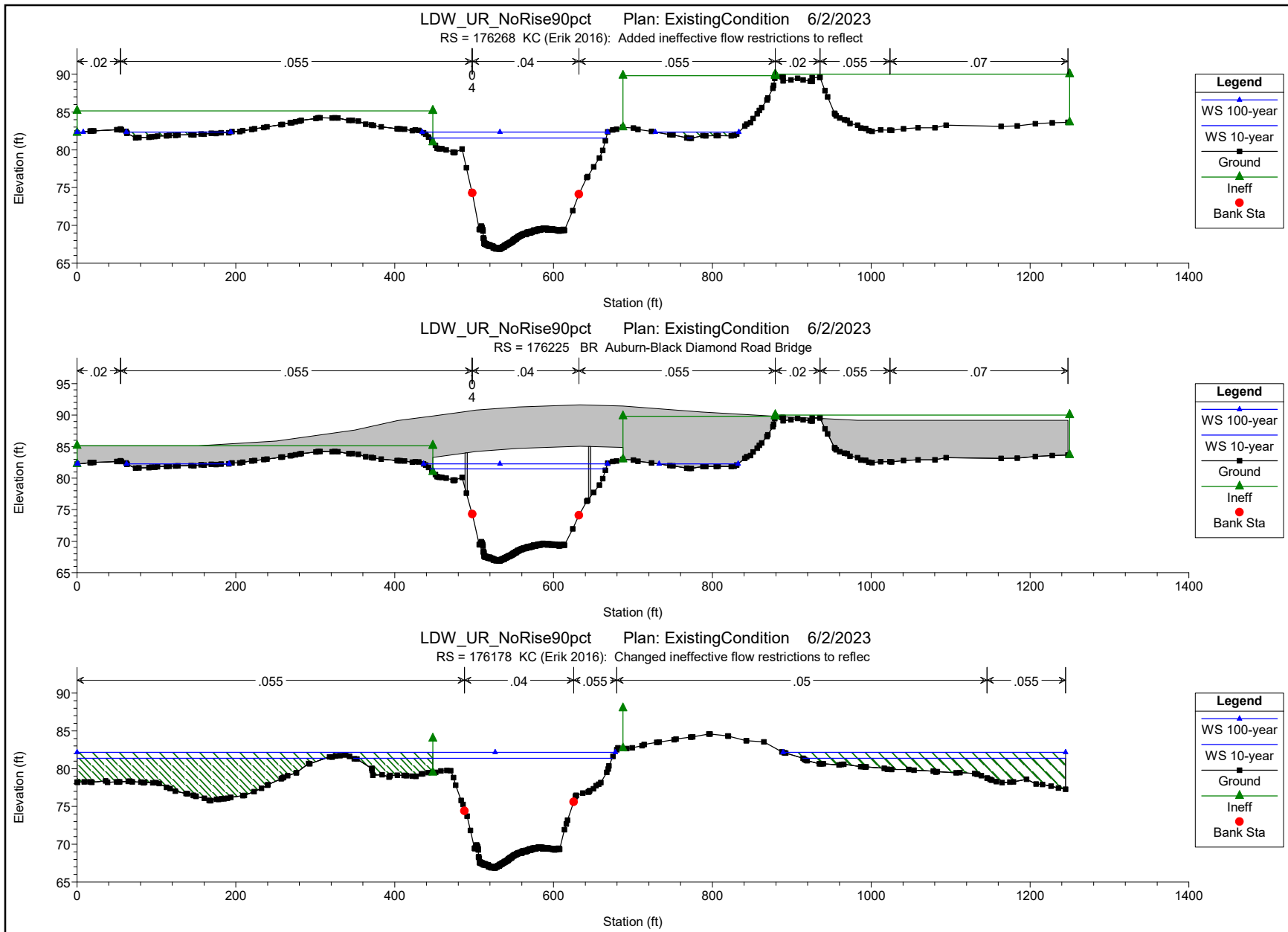




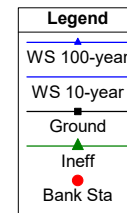
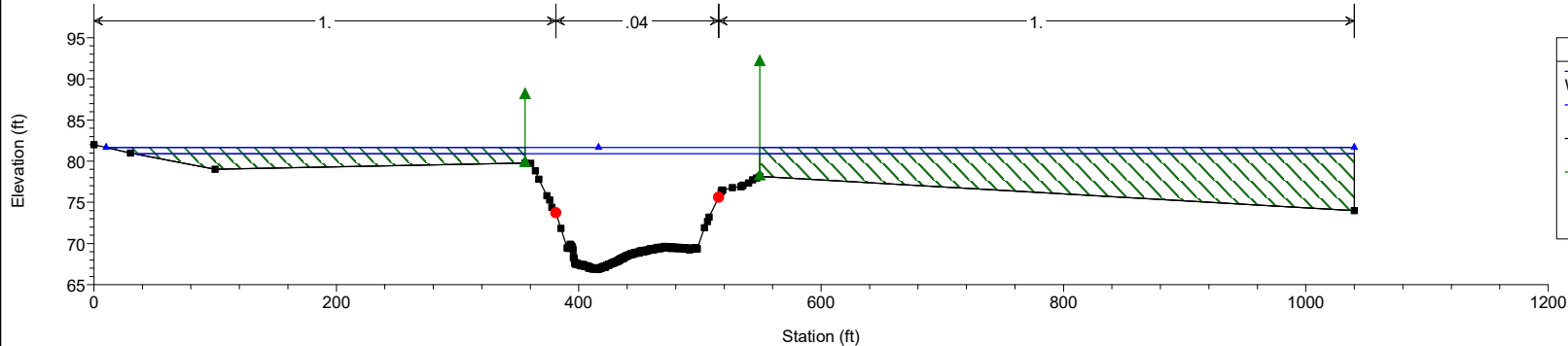




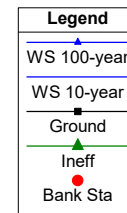
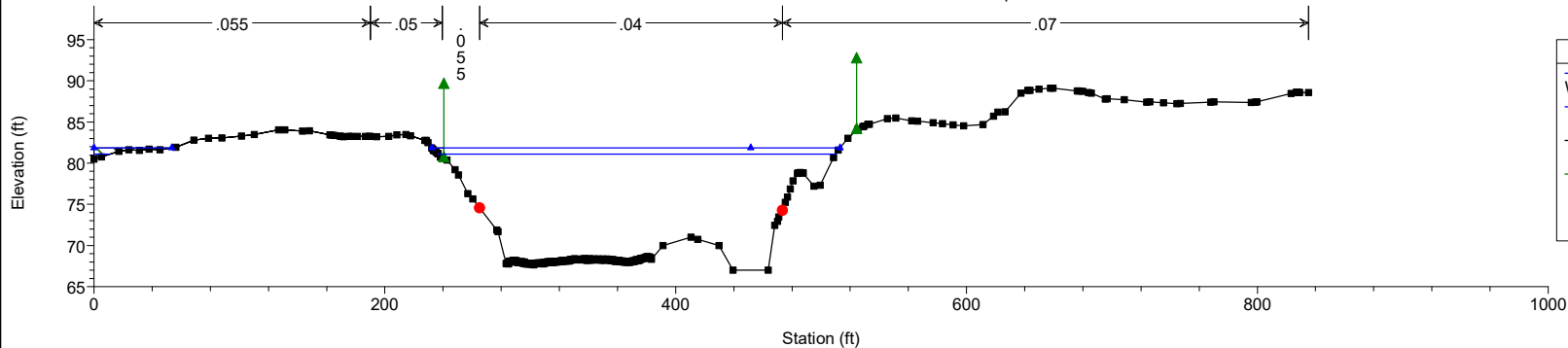




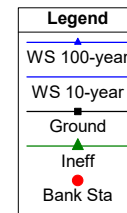
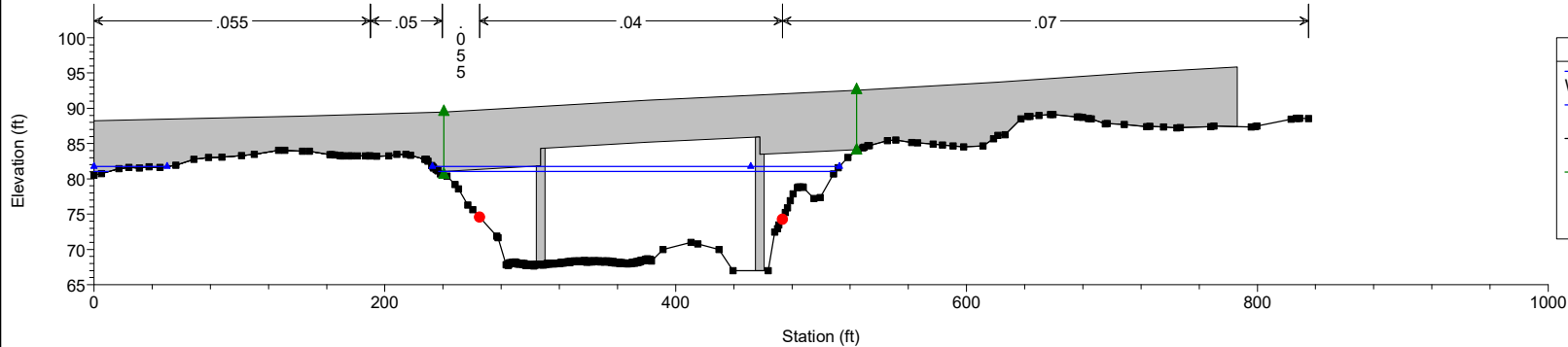
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
 RS = 176056 KC (Erik 2016): Added XS in order to shift Soos Cr lateral infl

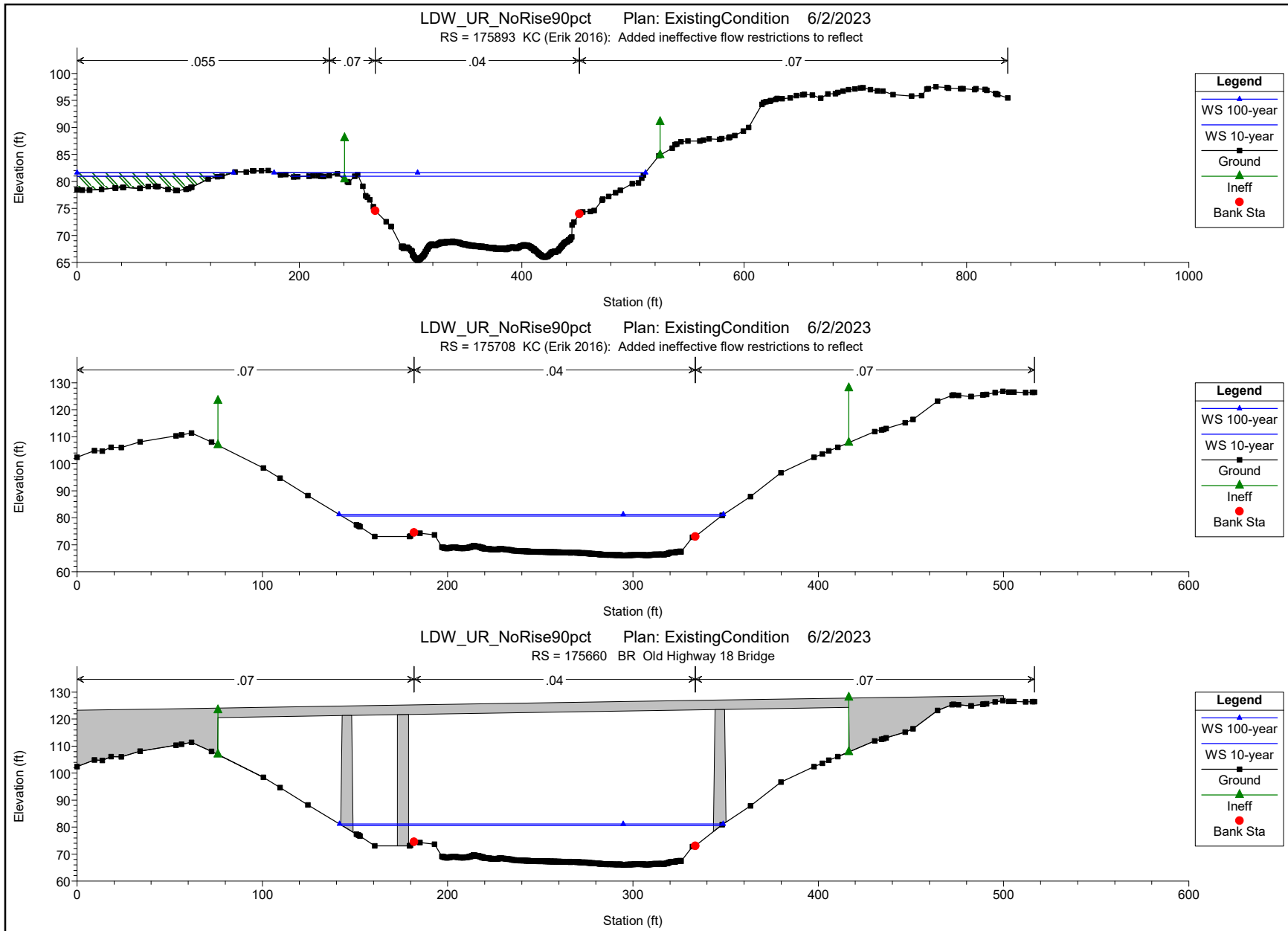


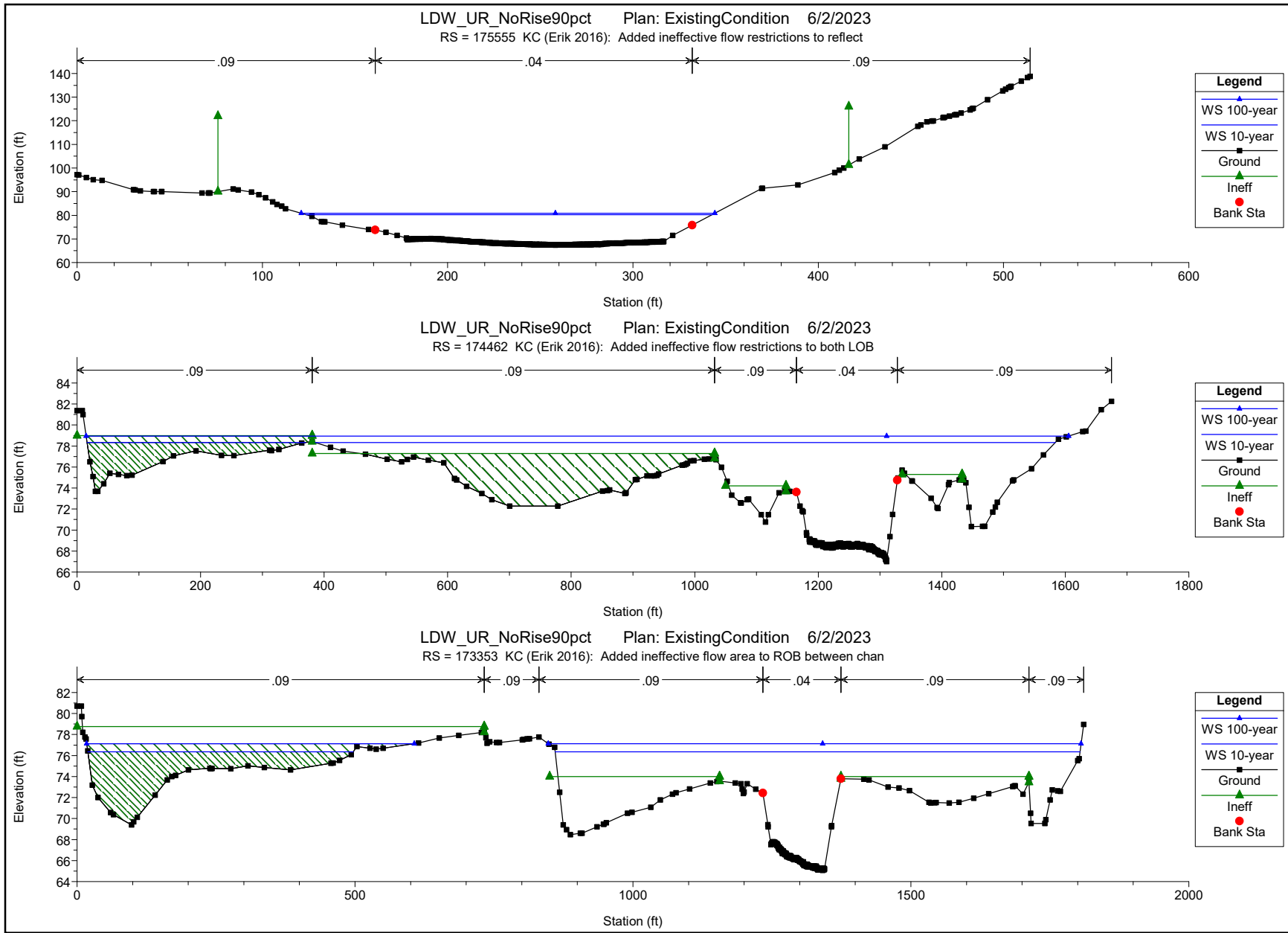
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
 RS = 175940 NHC: Cross Section modified to account for separation between G

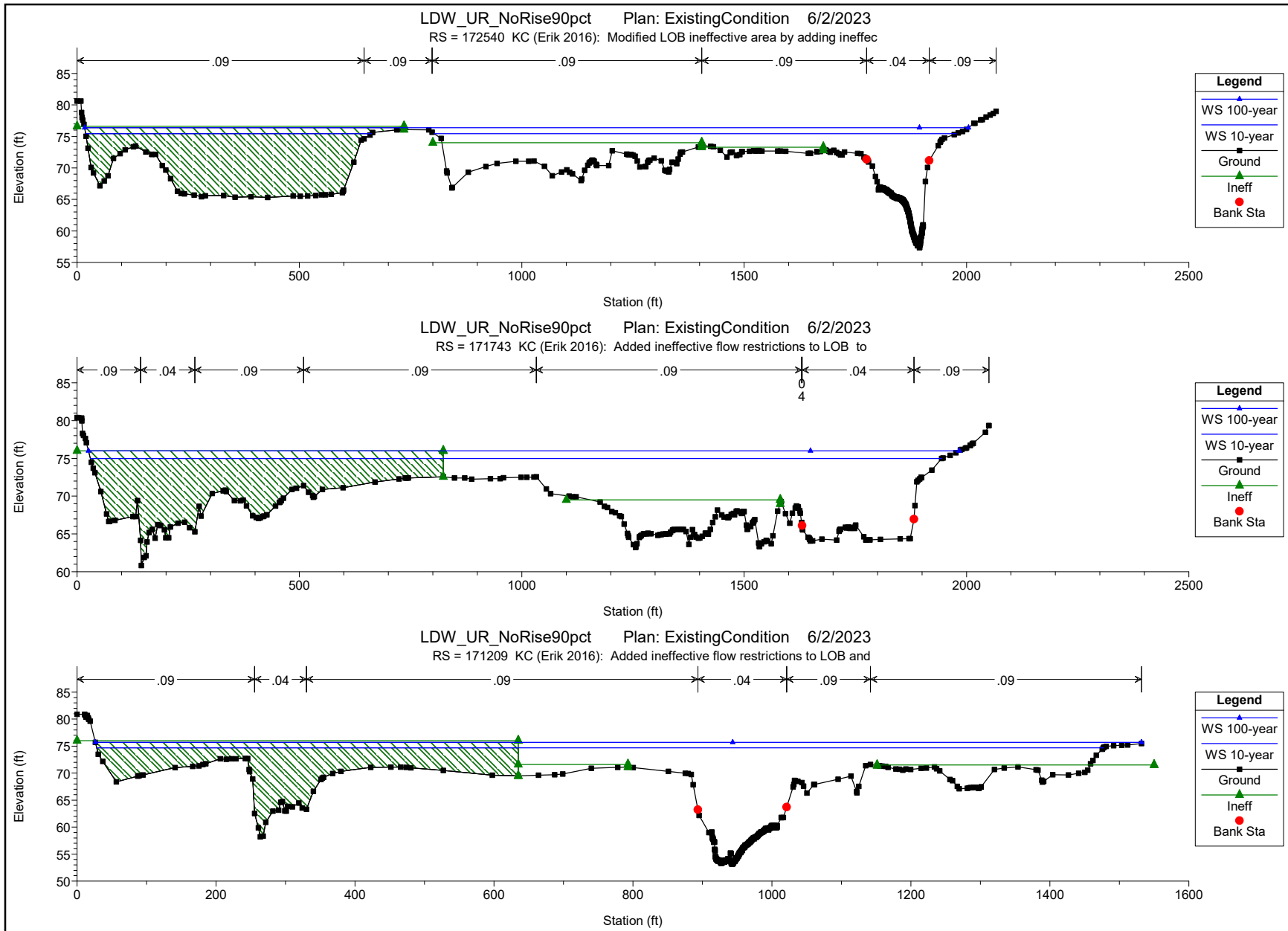


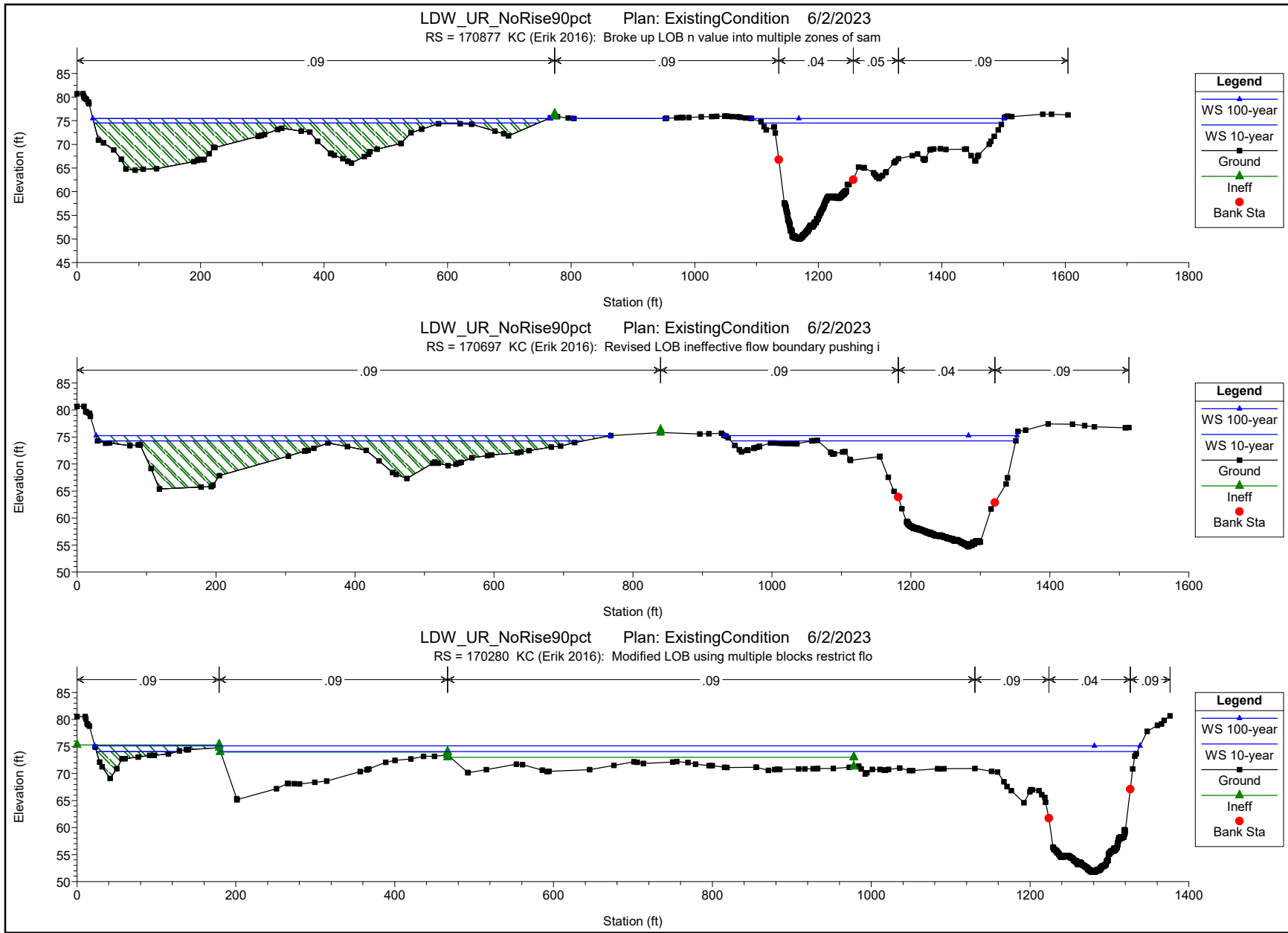
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
 RS = 175919 BR Burlington Northern Railroad Bridge



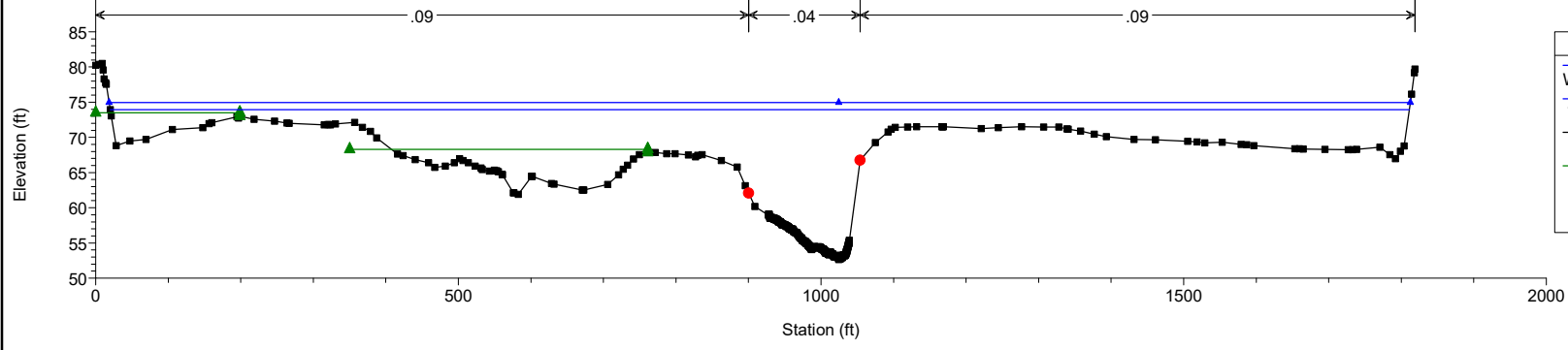




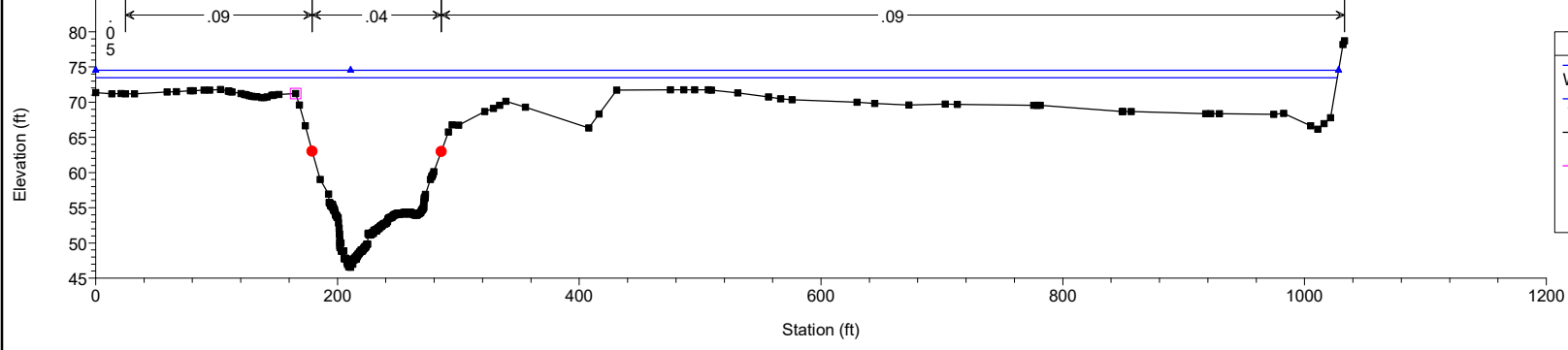




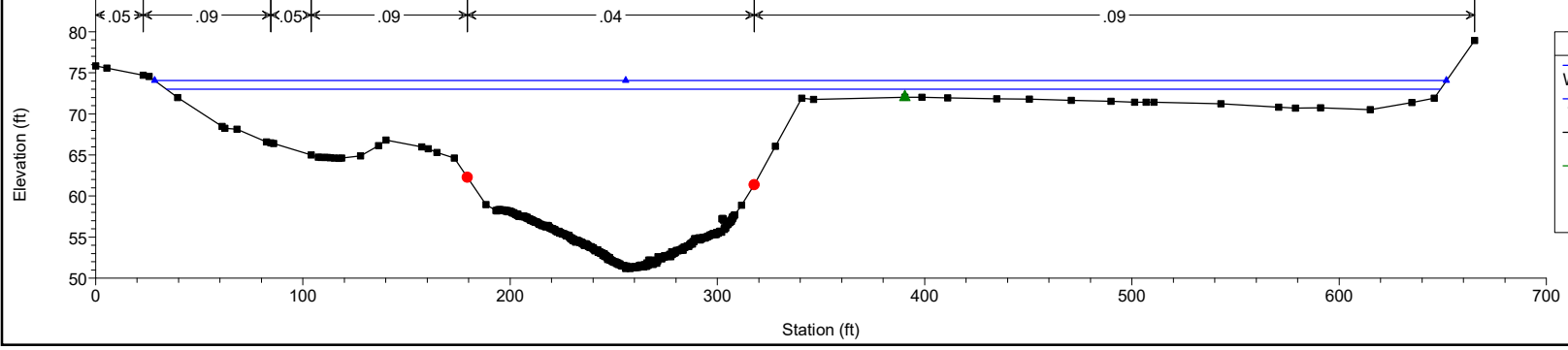
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 169351 KC (Erik 2016): Added LOB ineffective area using multiple block

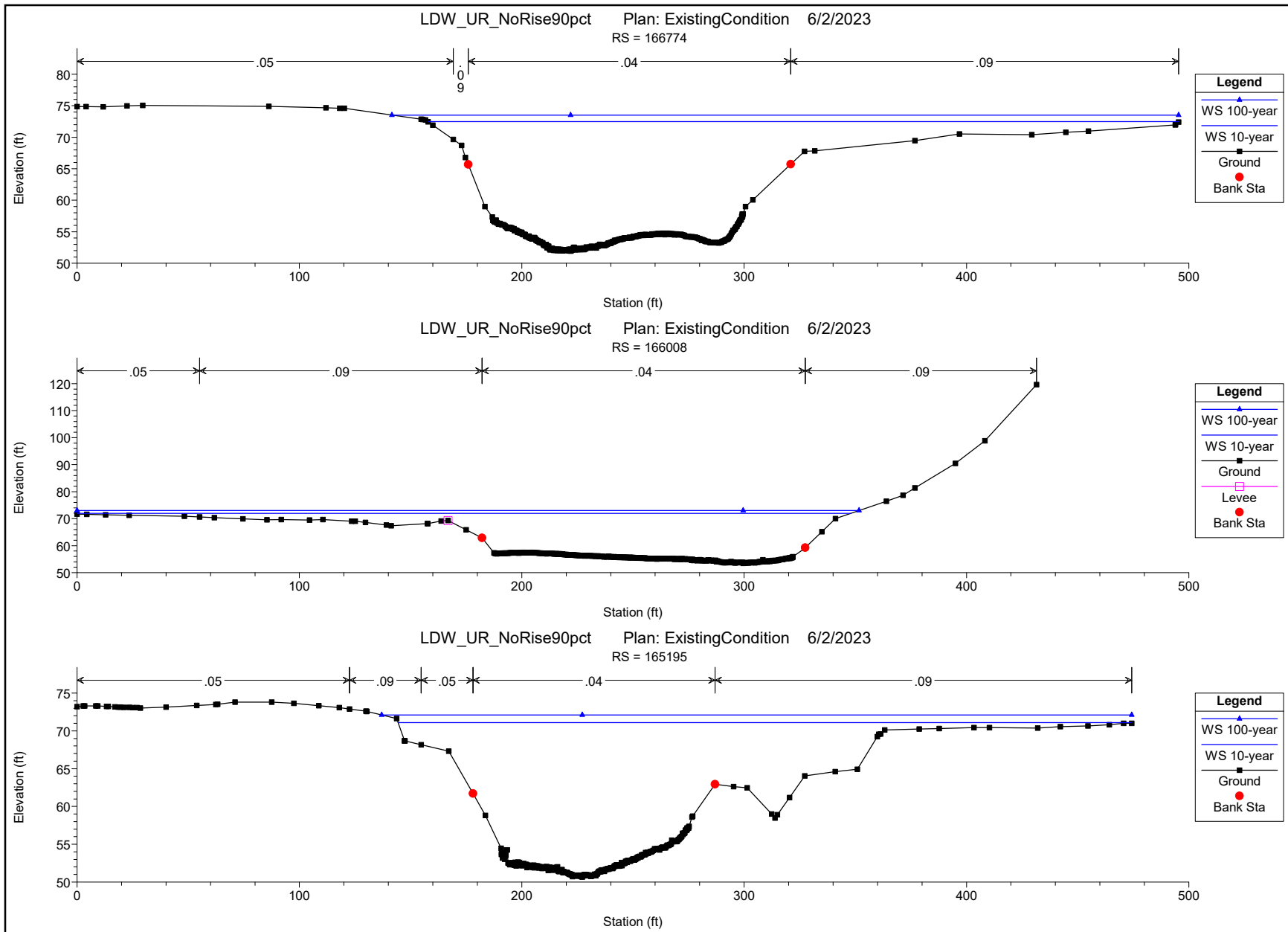


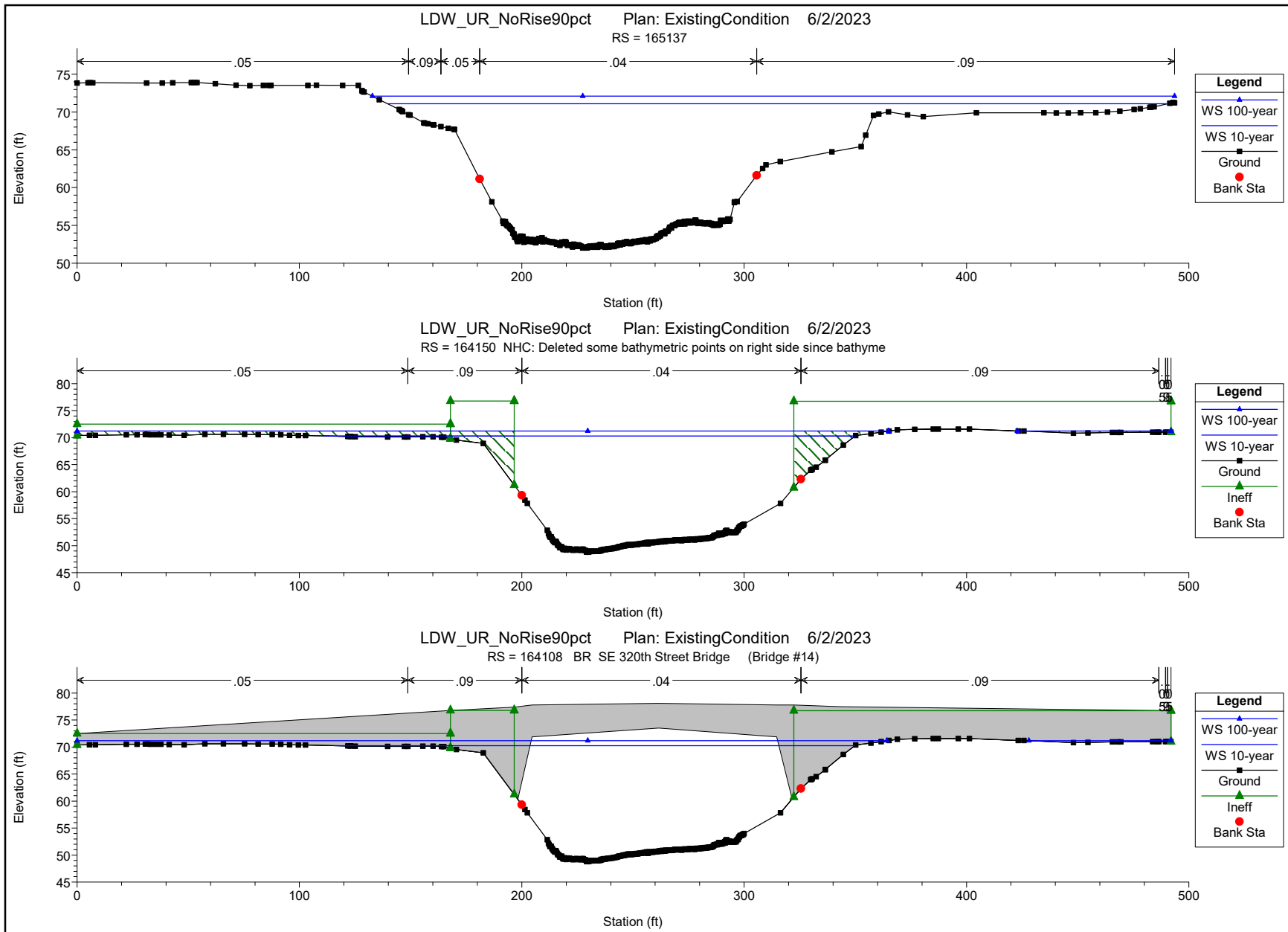
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RS = 168448

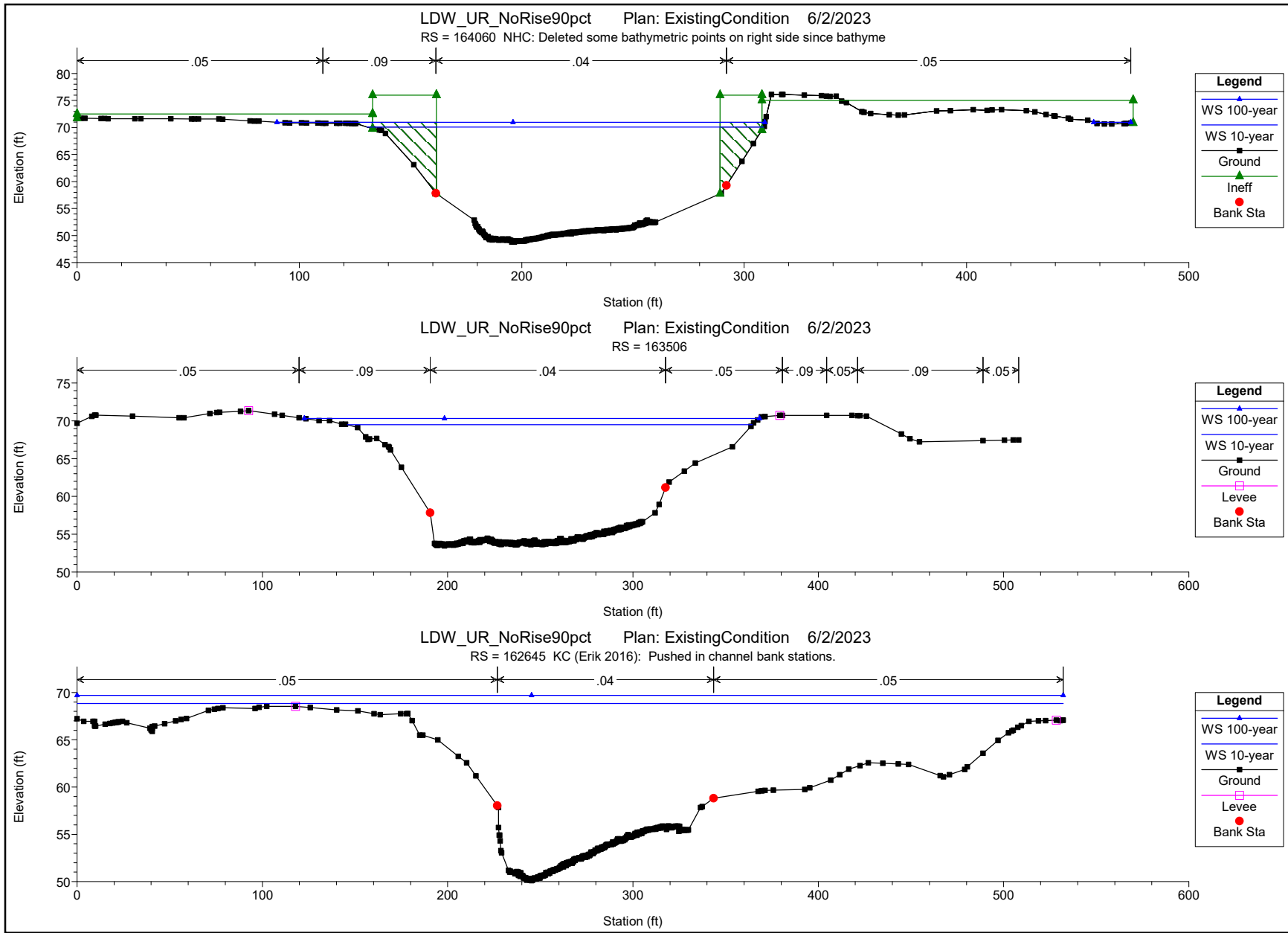


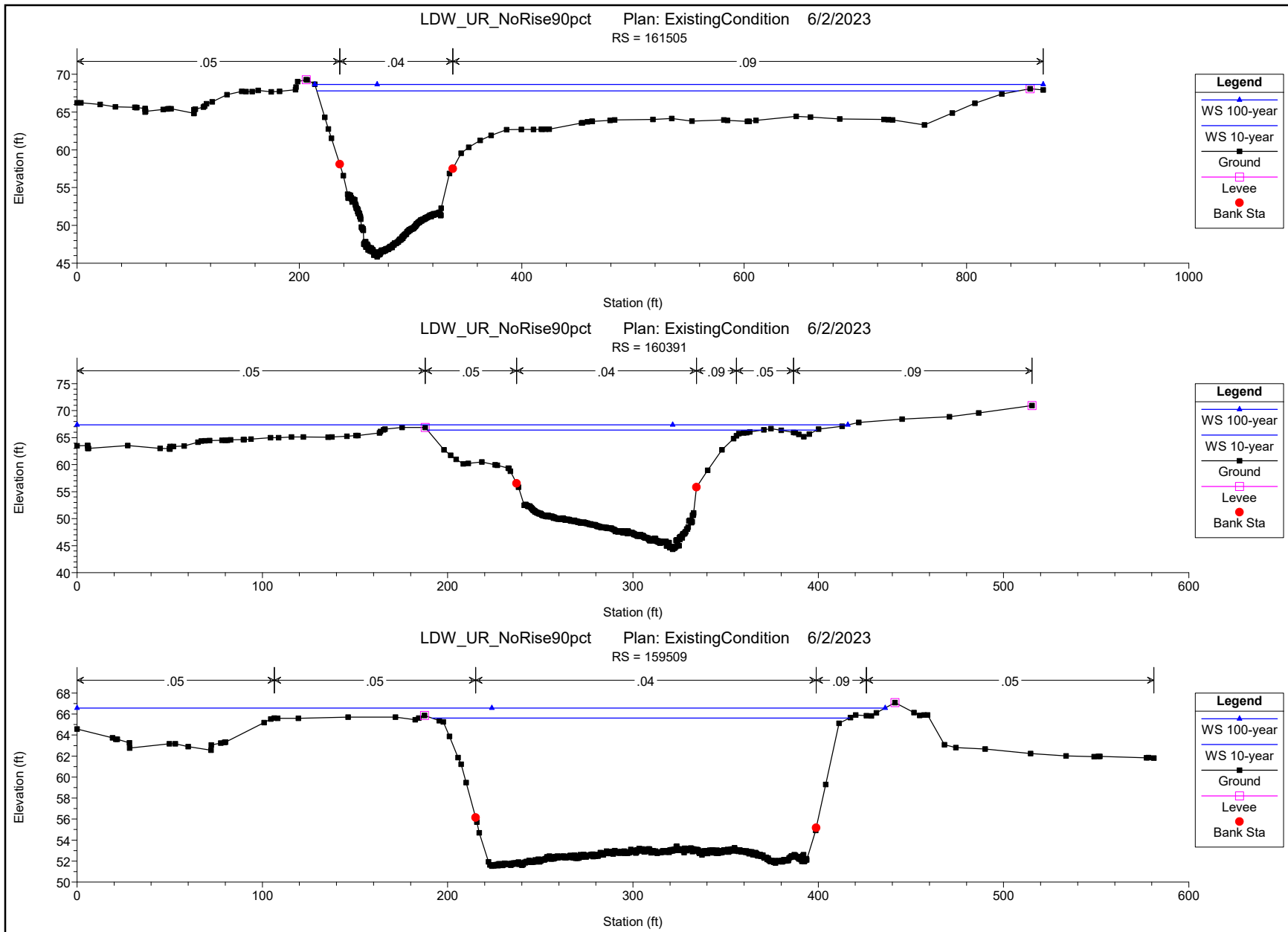
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 167556

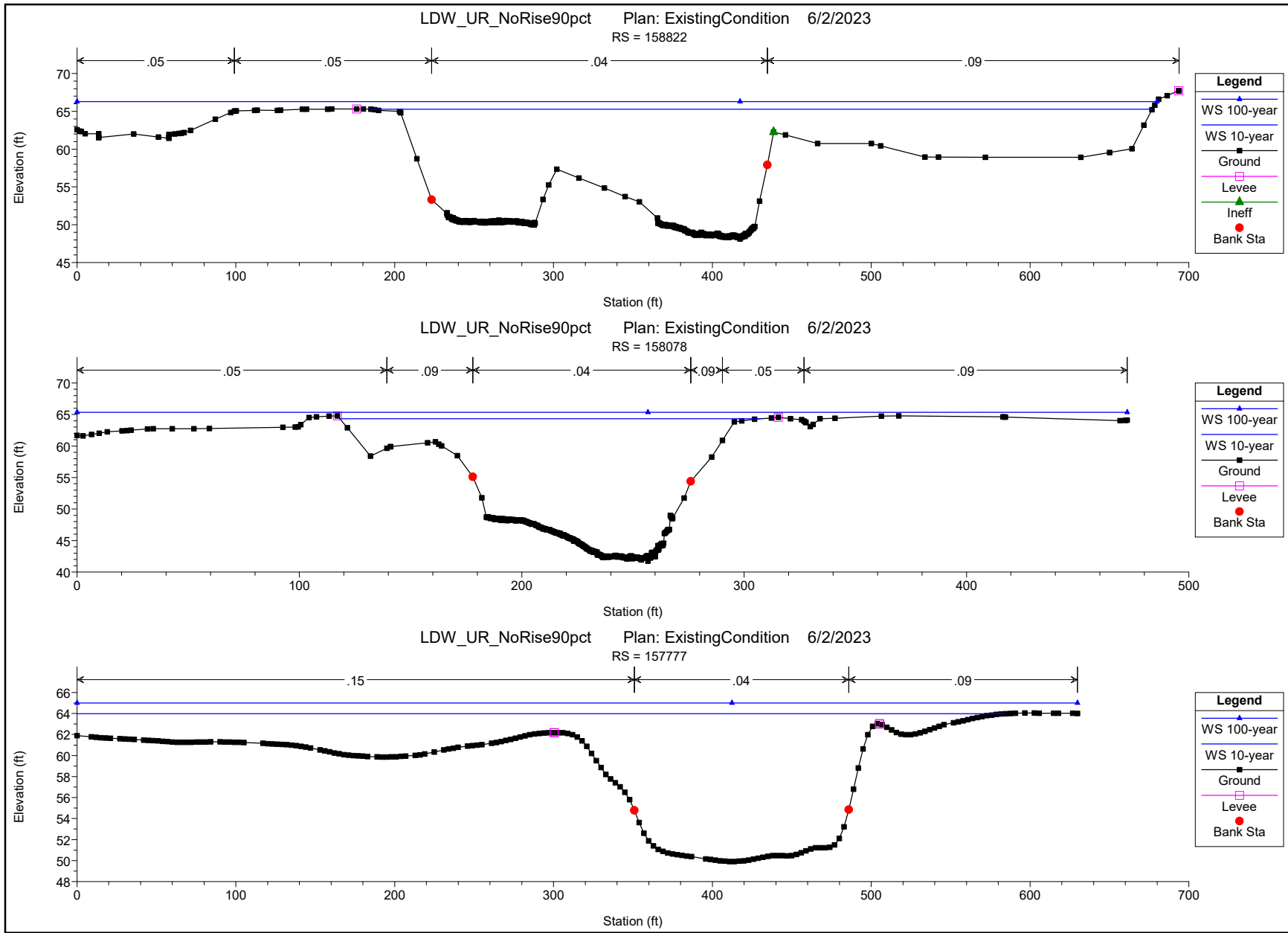


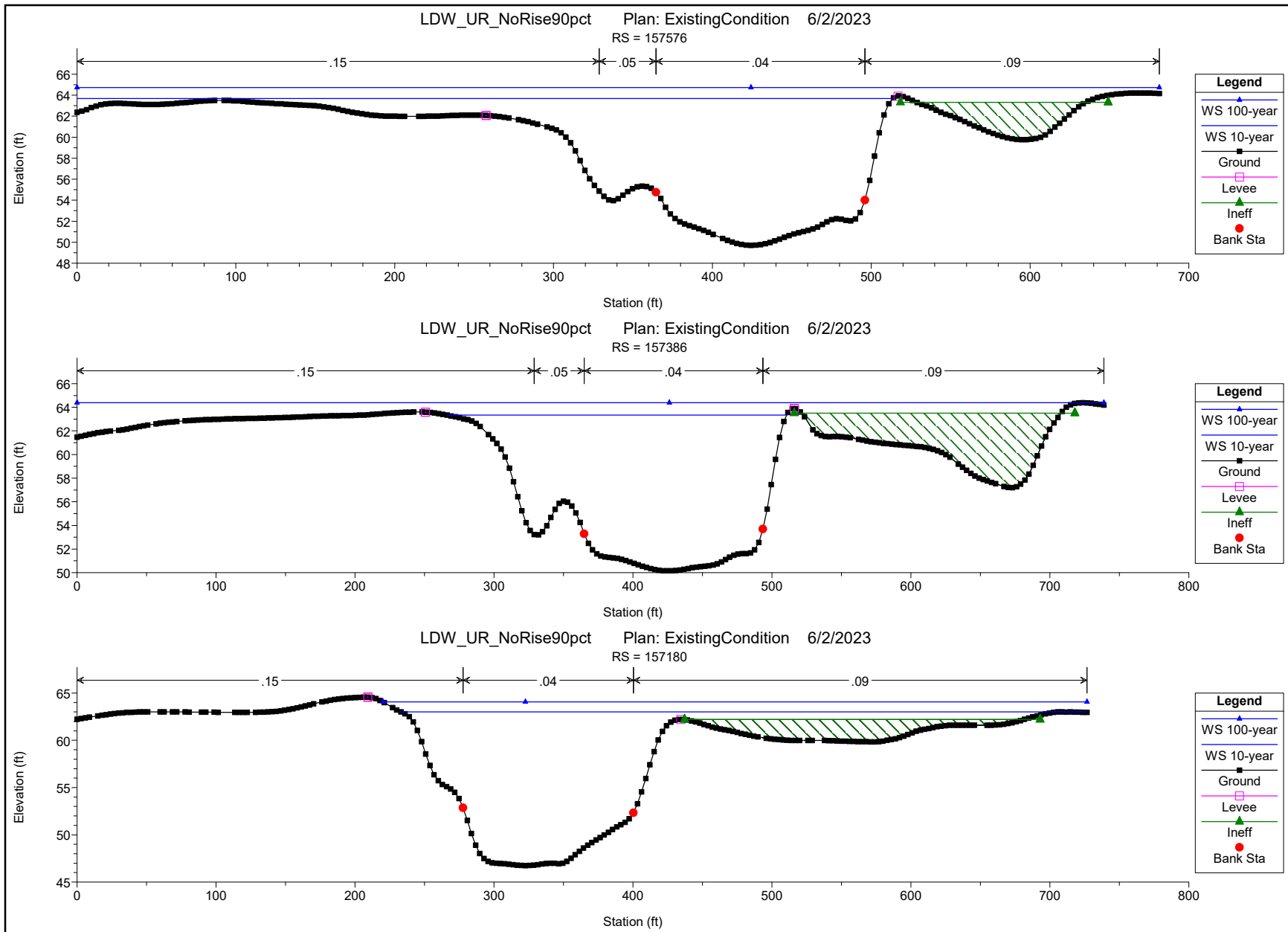


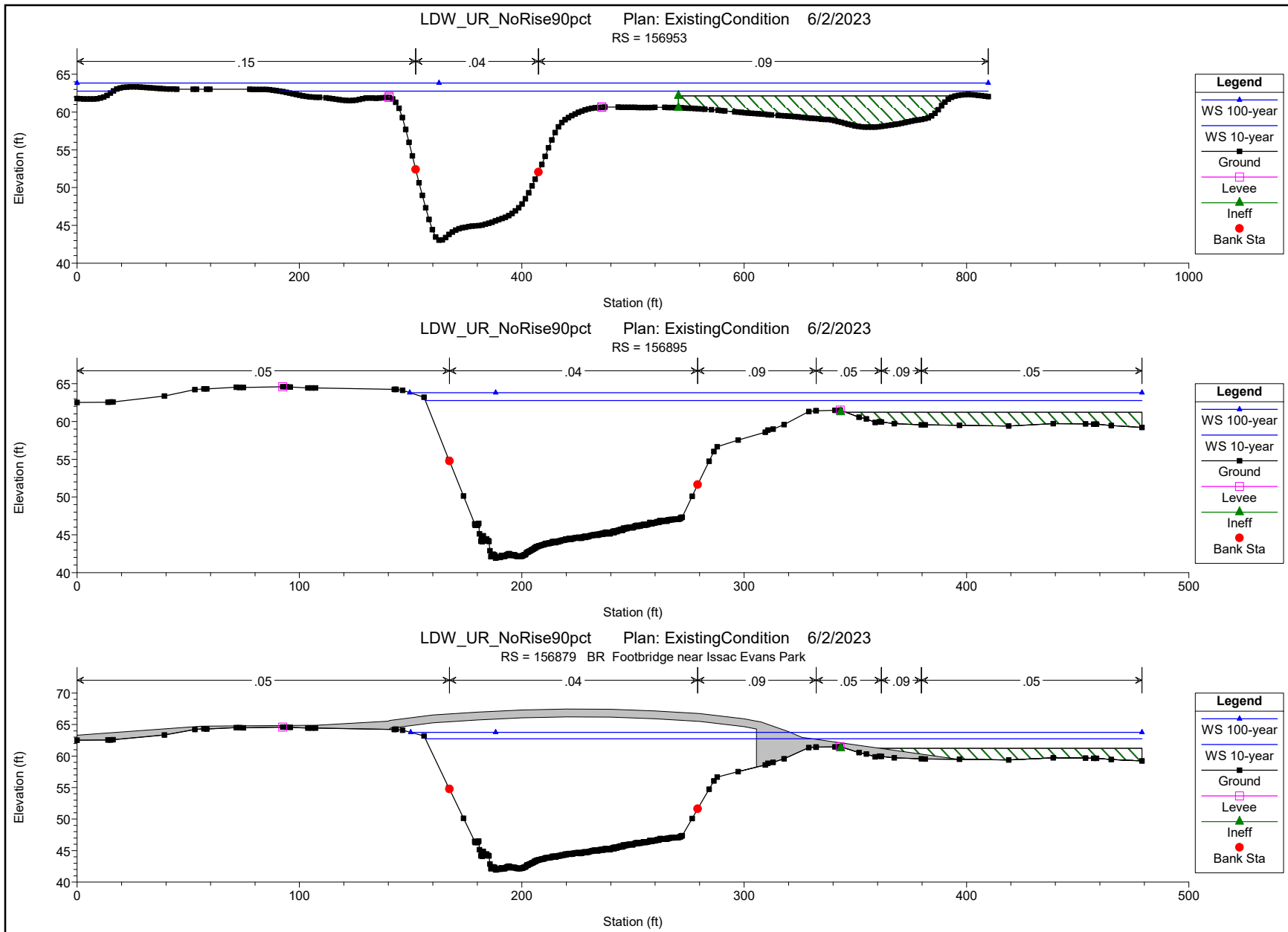


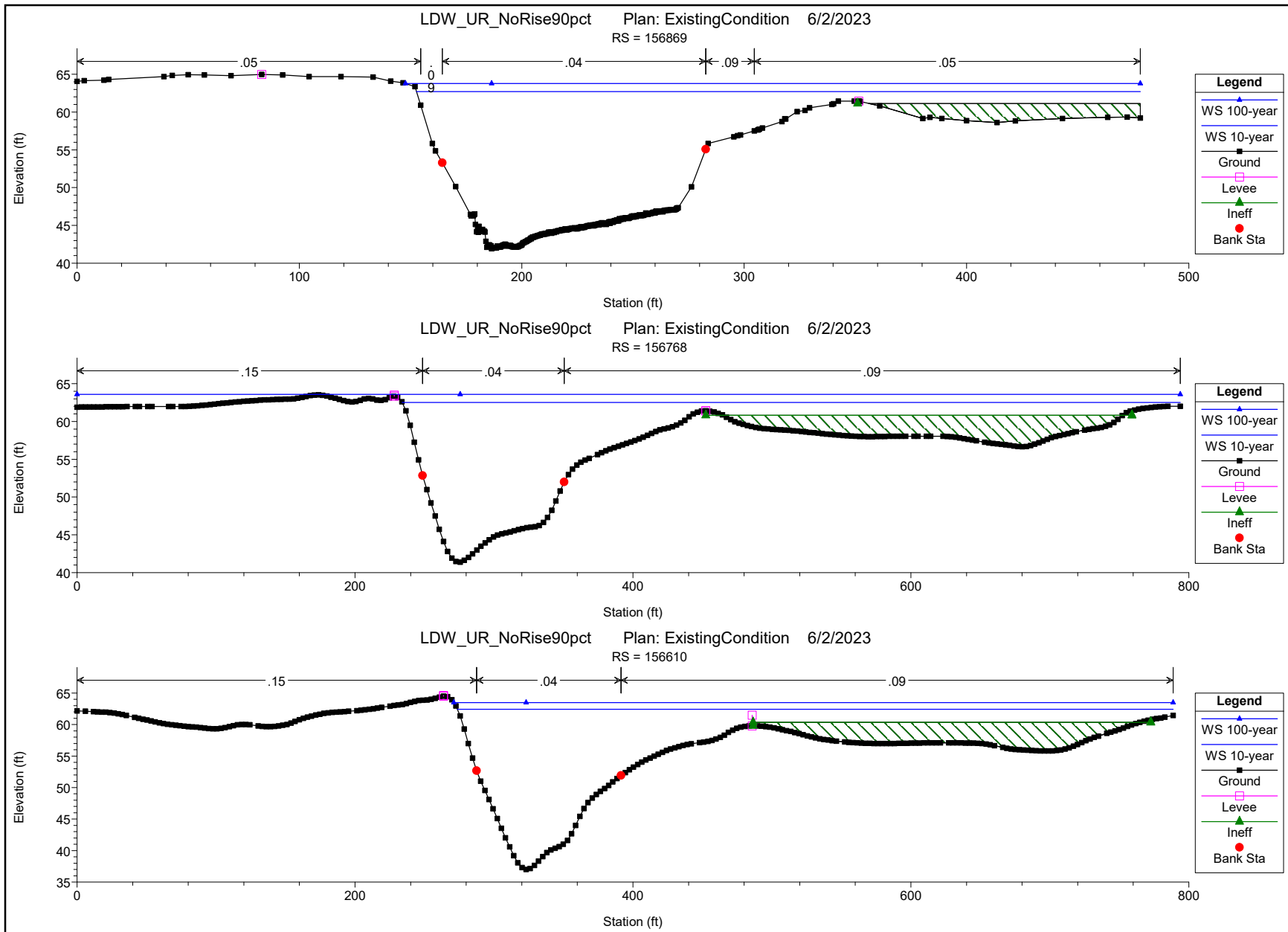


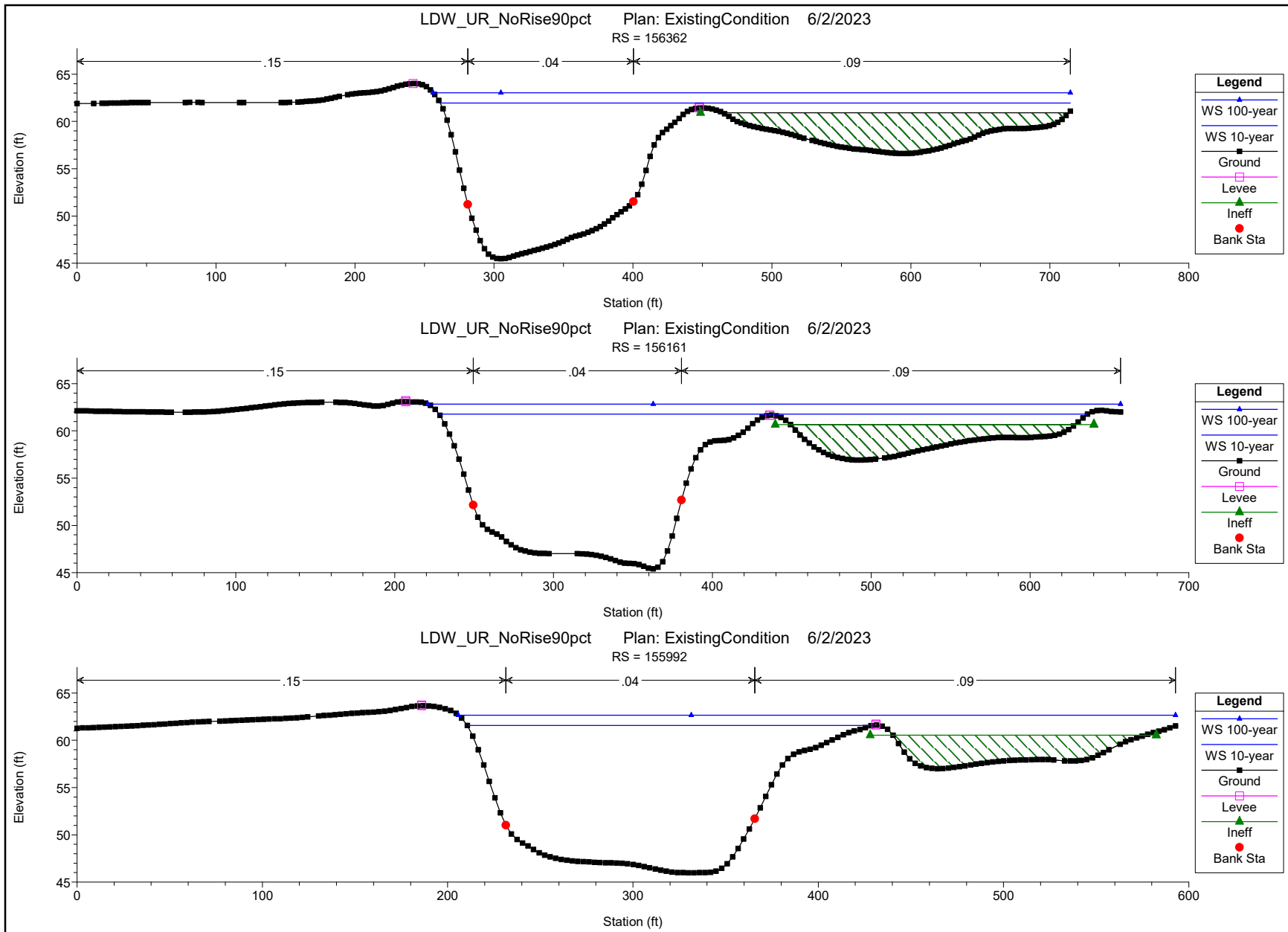


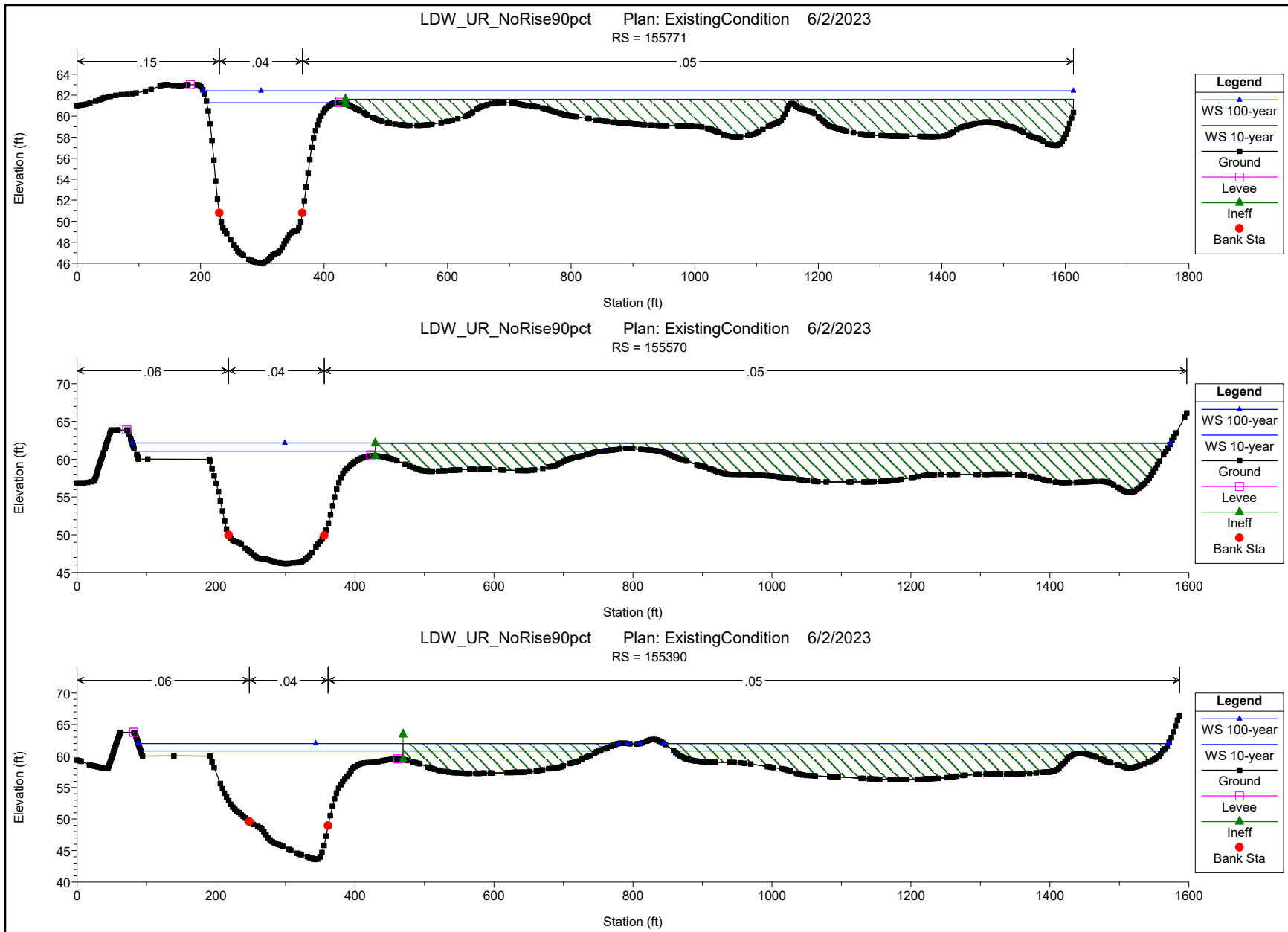


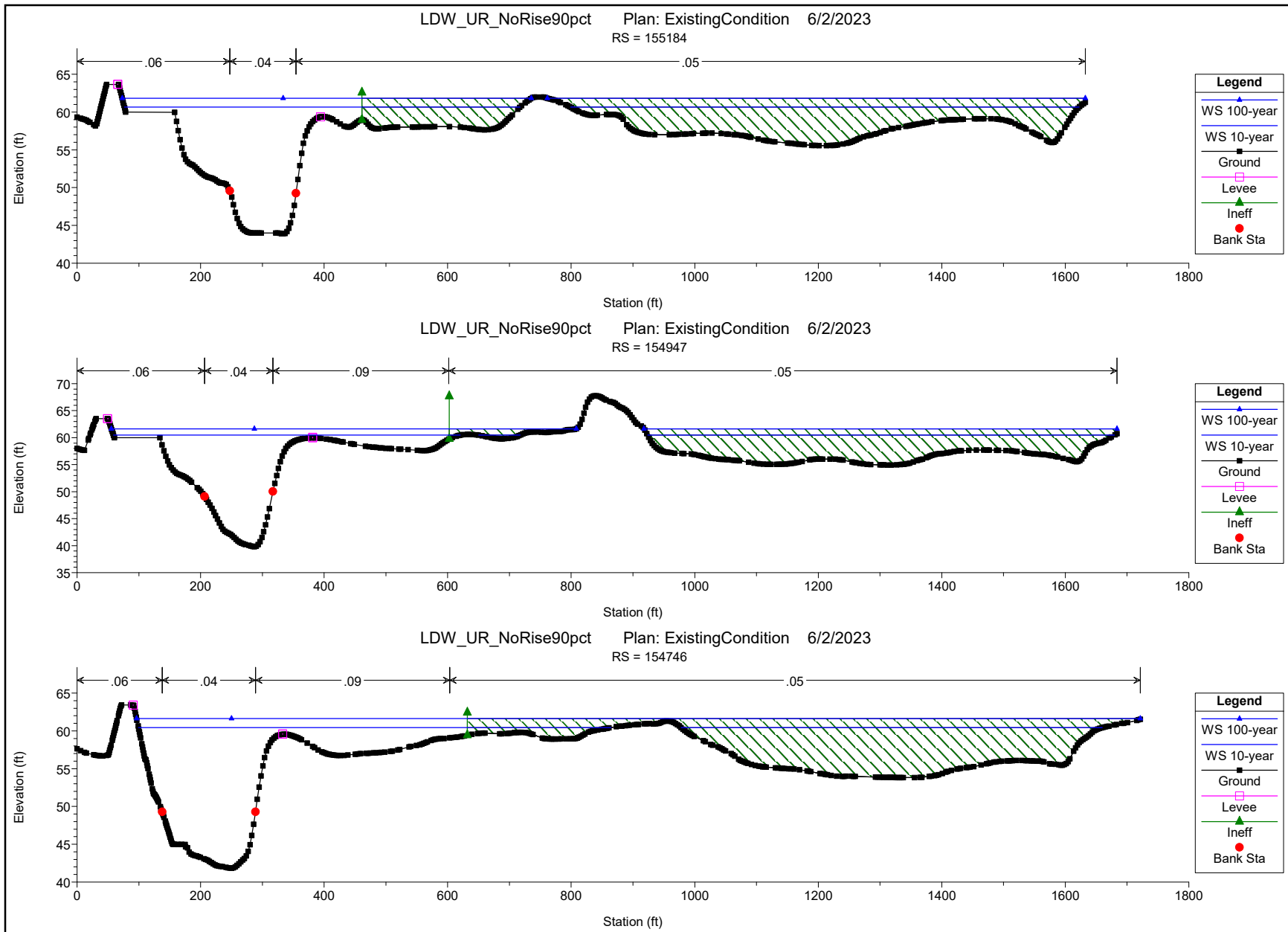


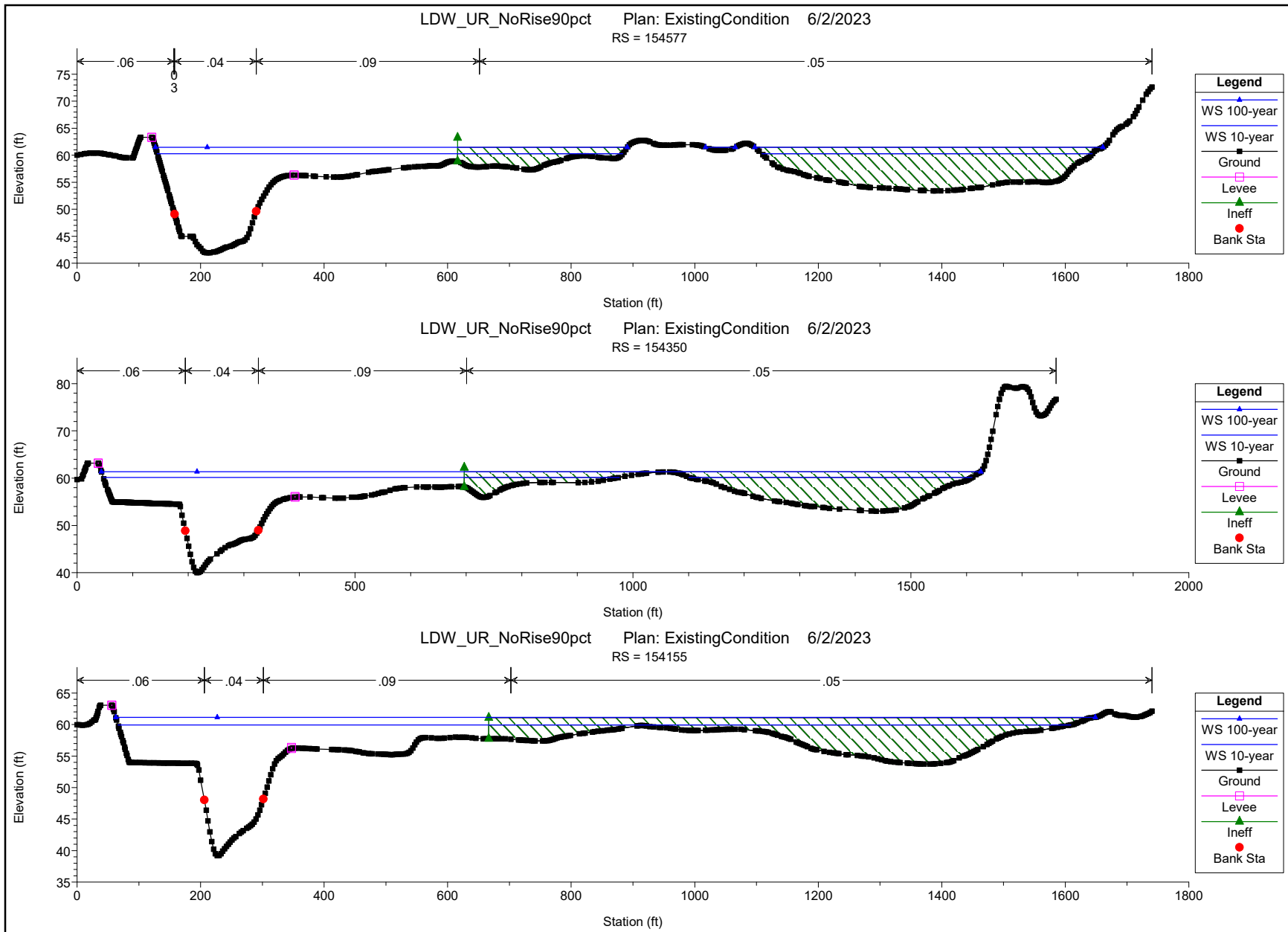


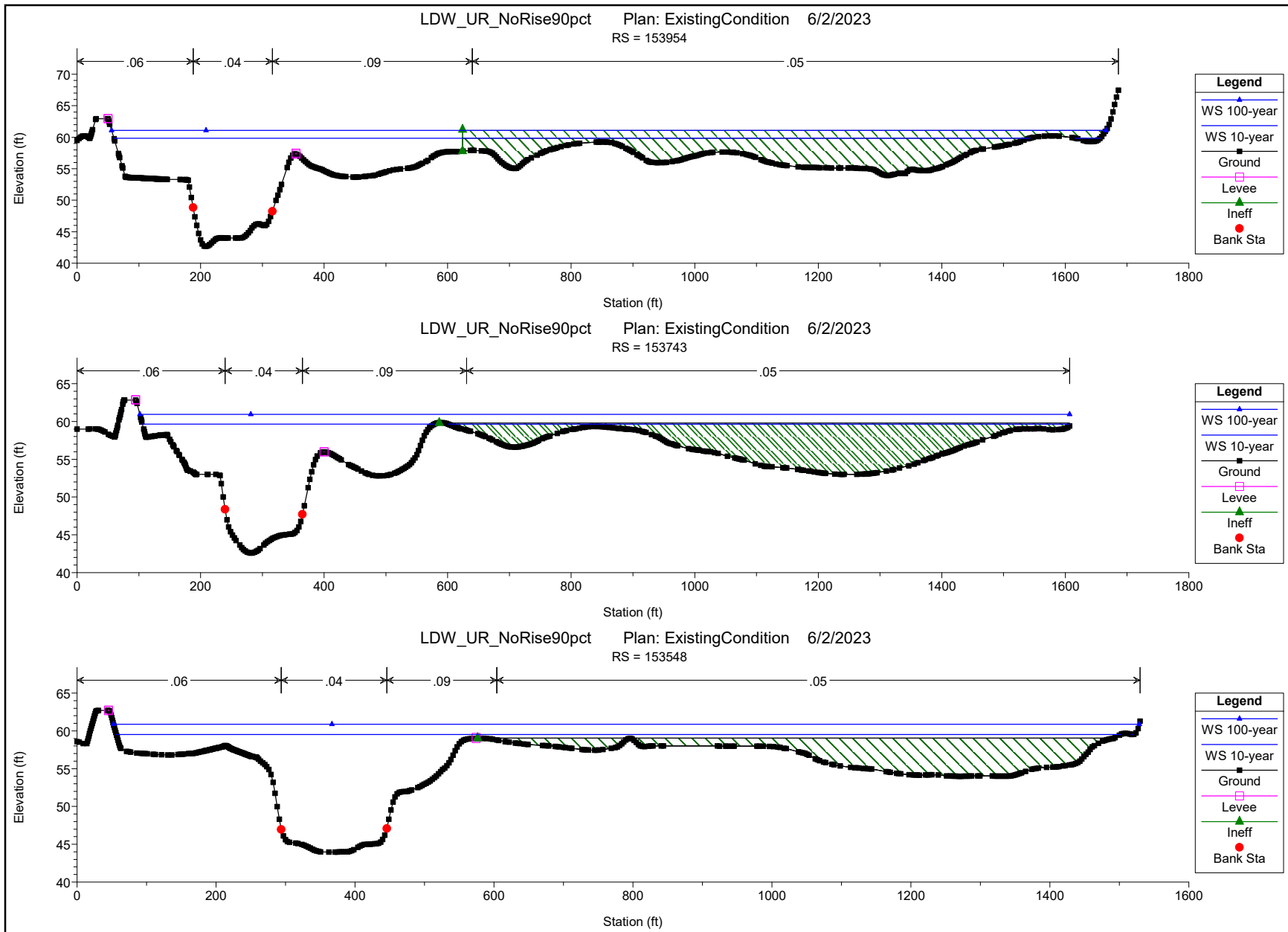


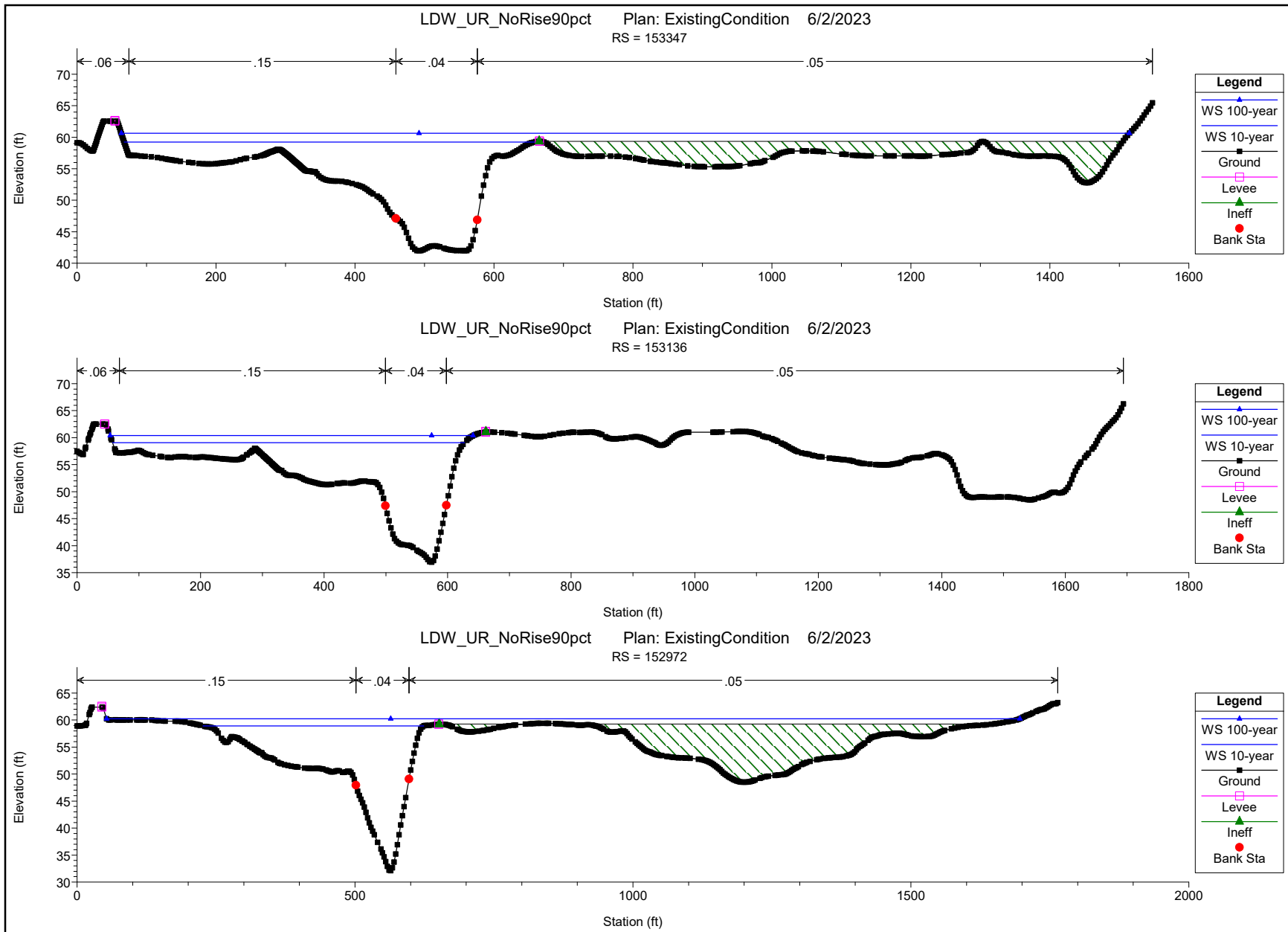


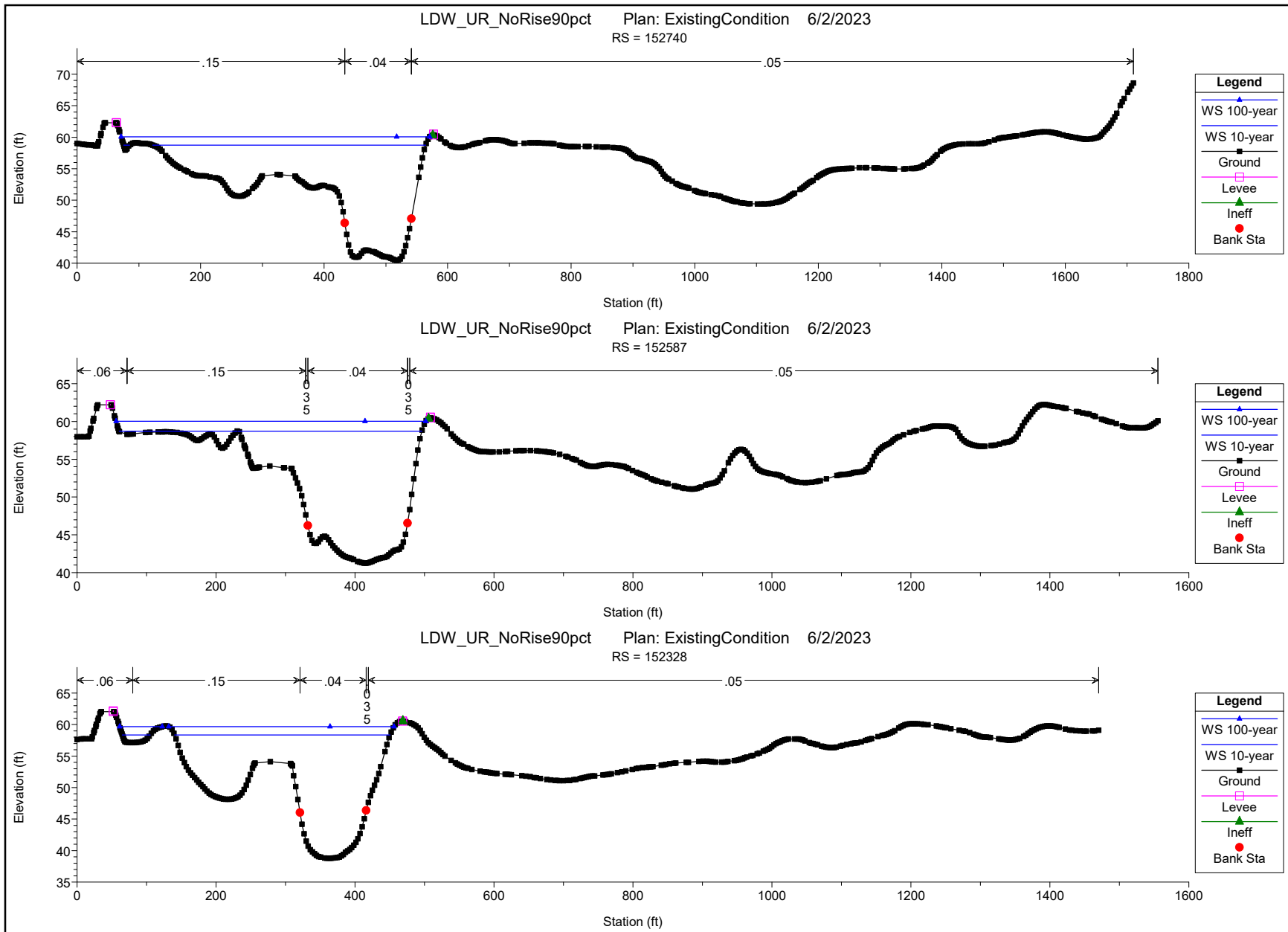


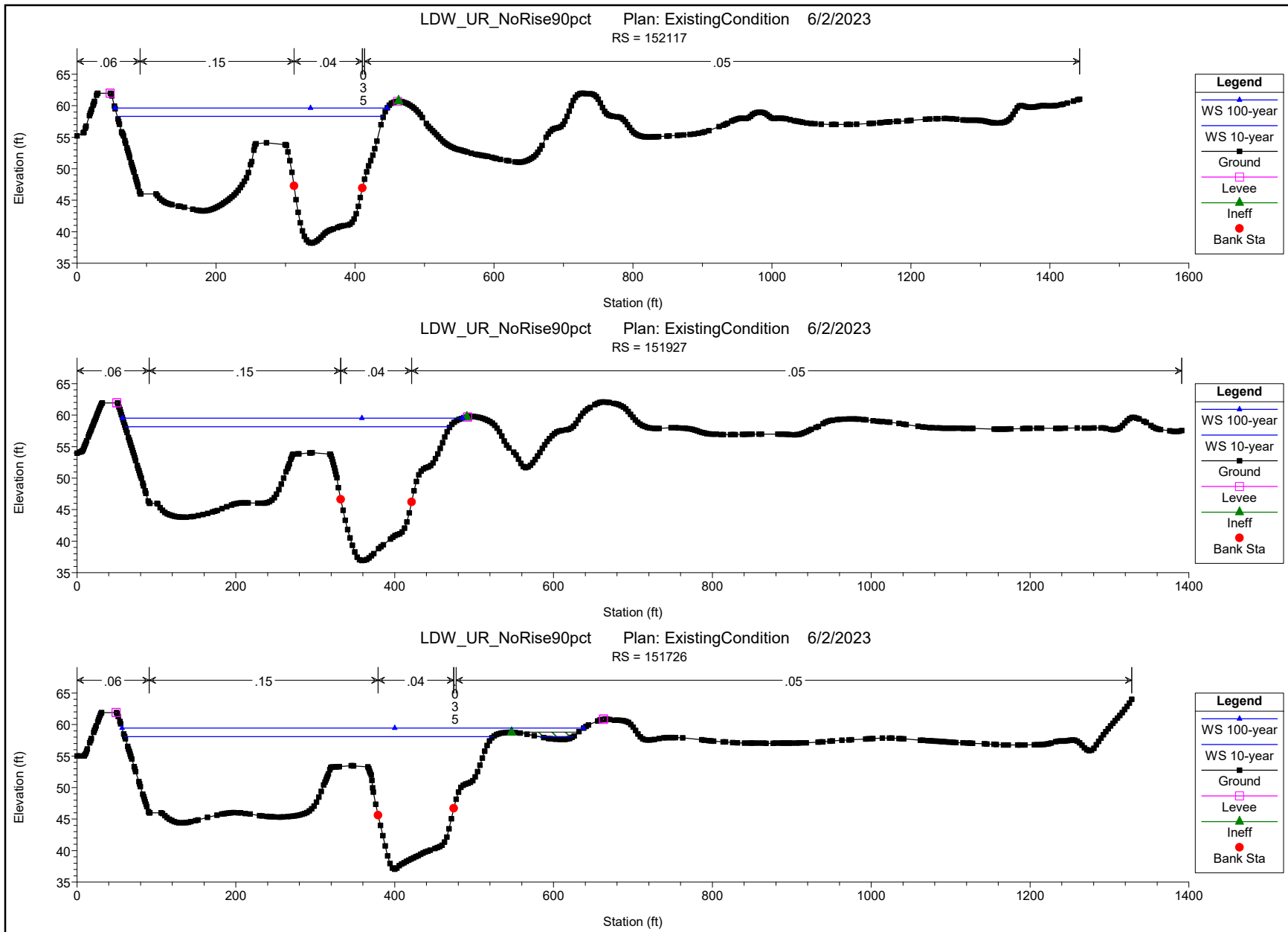


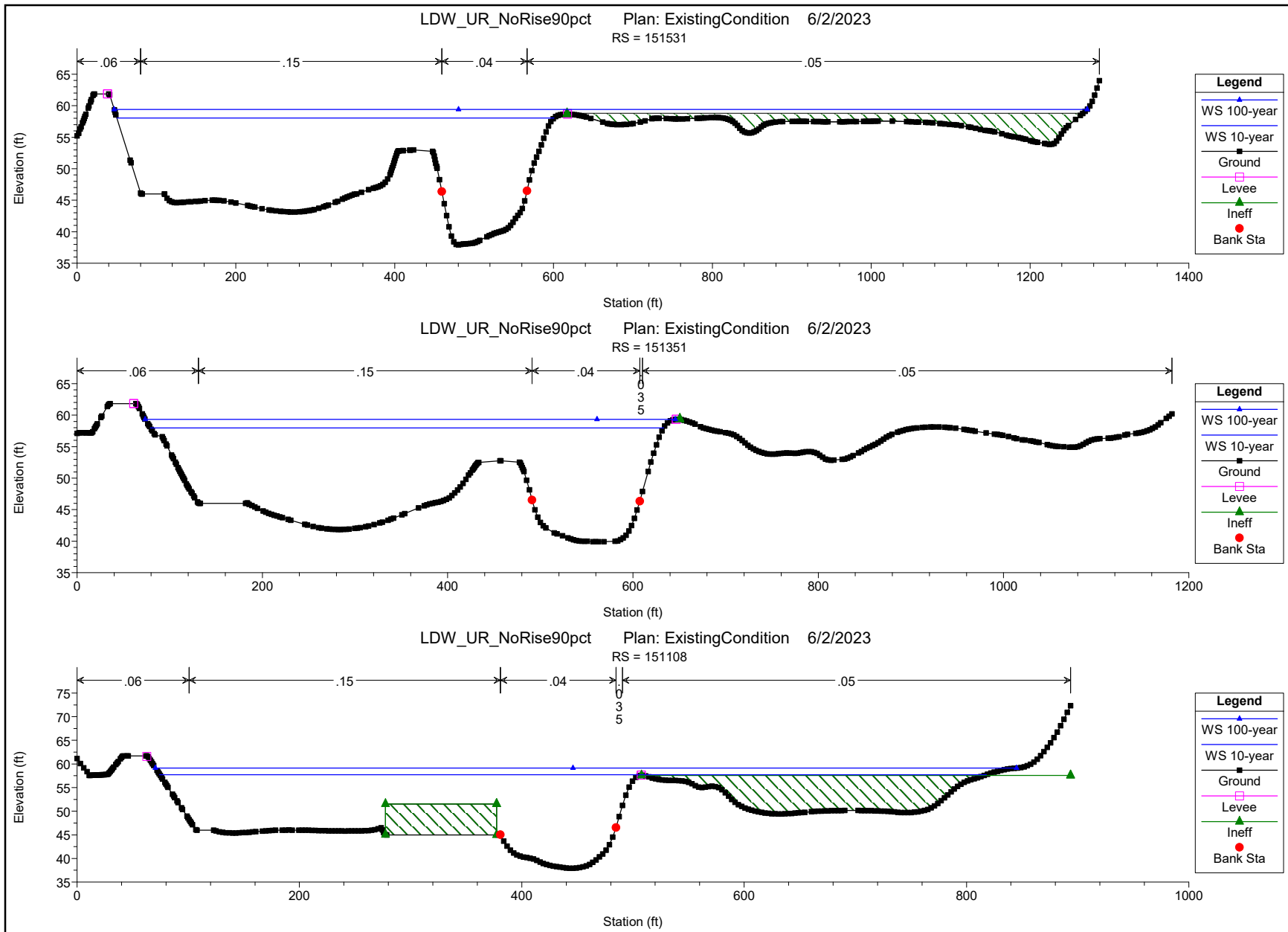


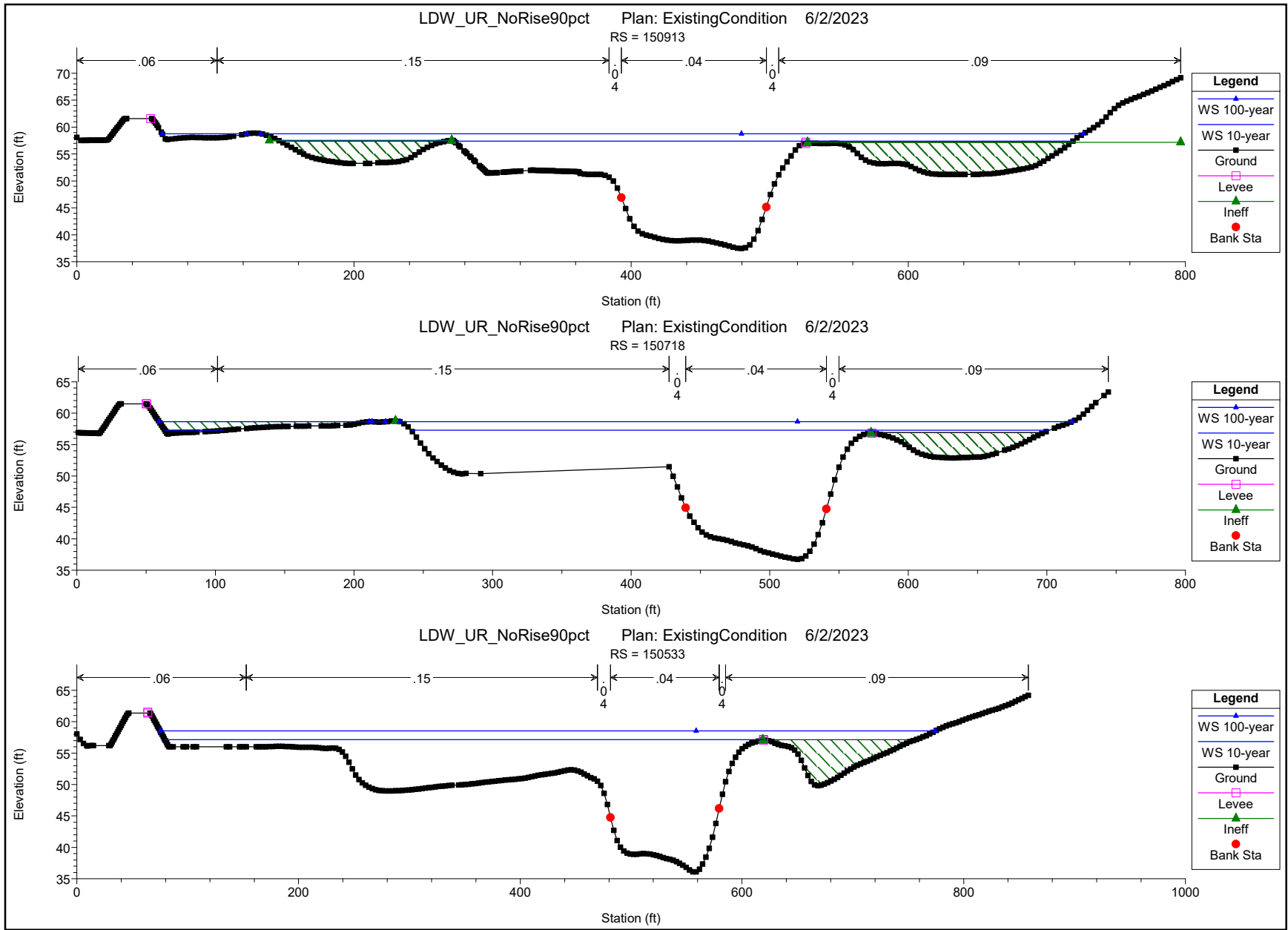


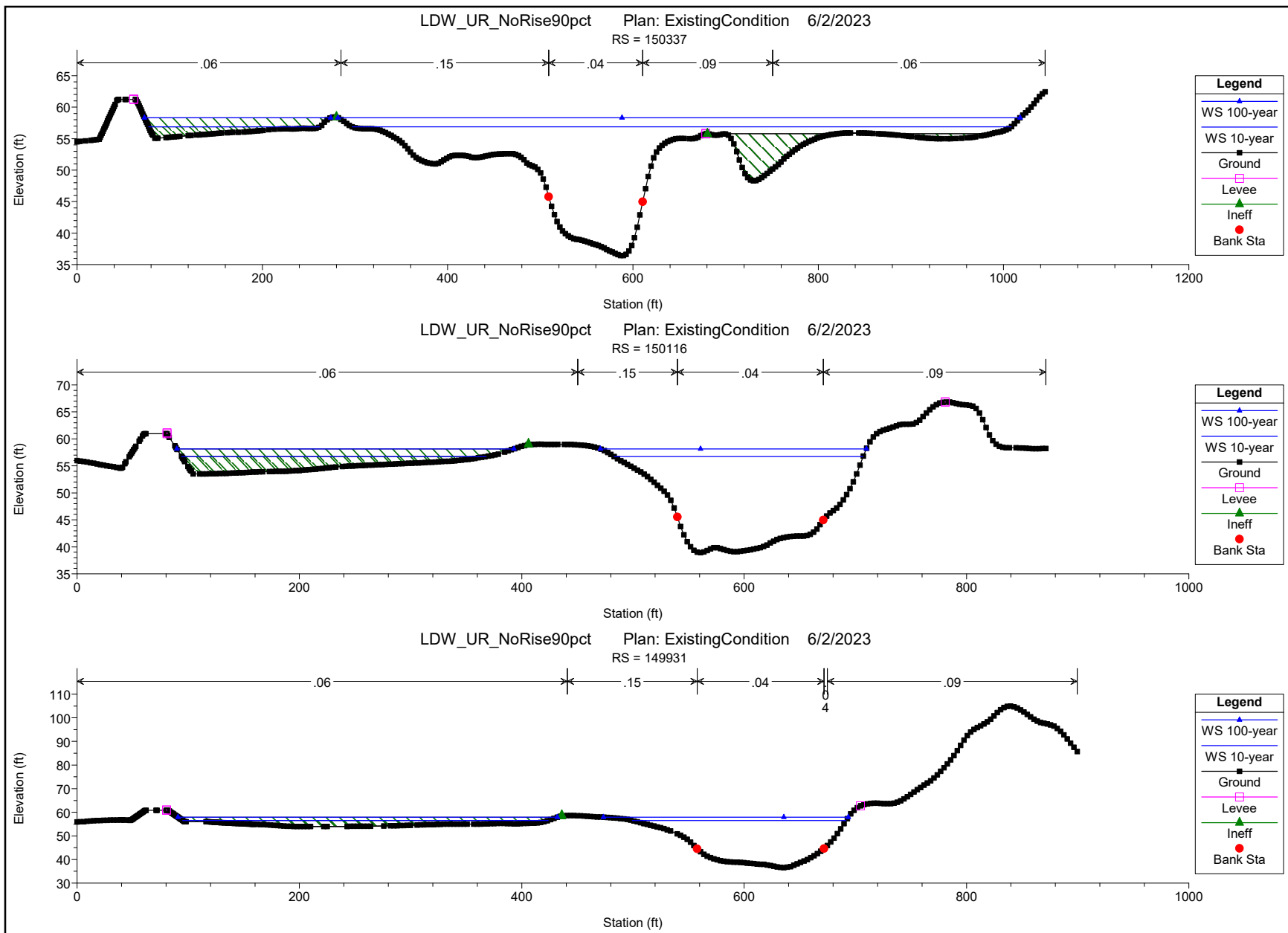


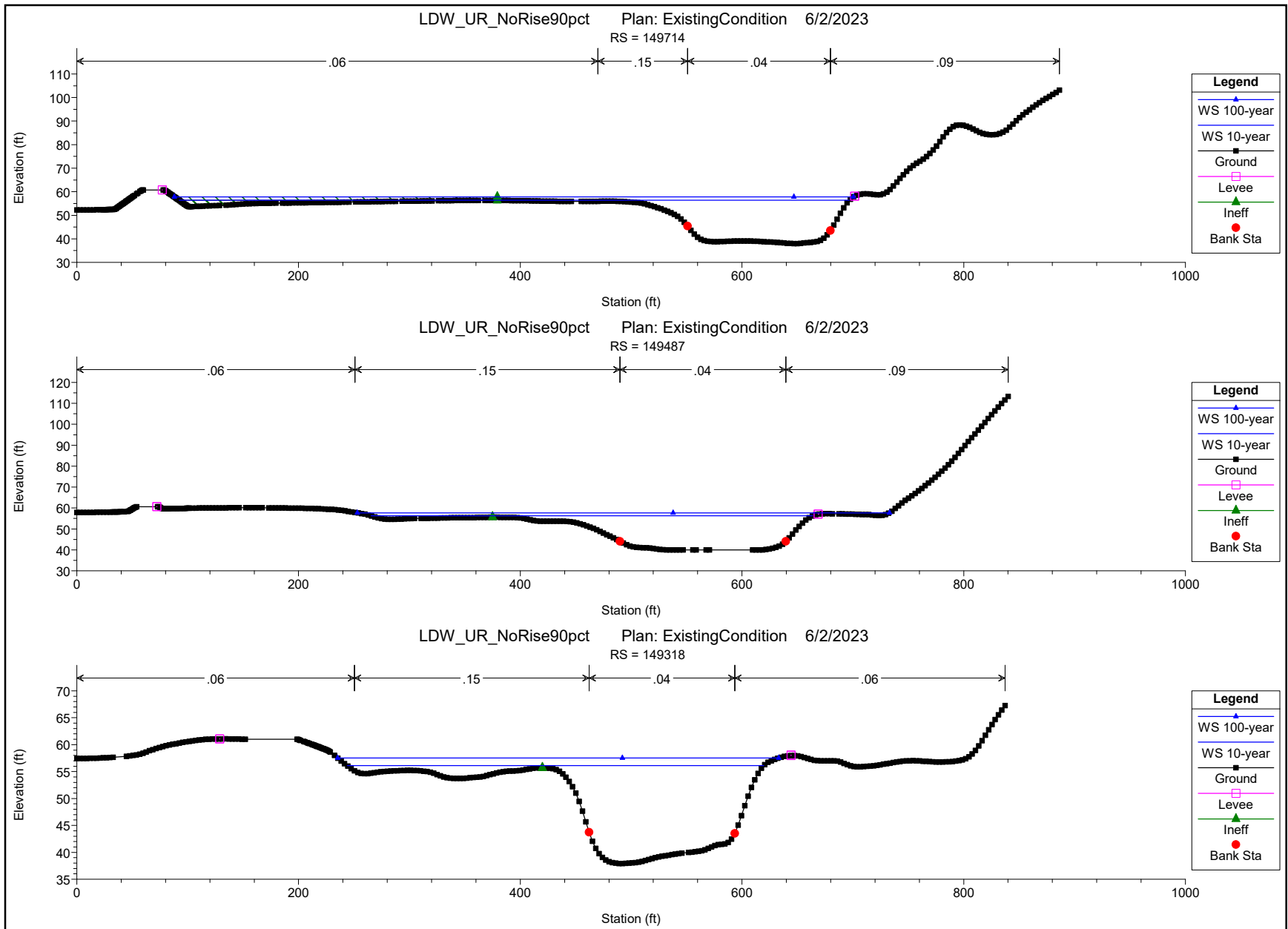


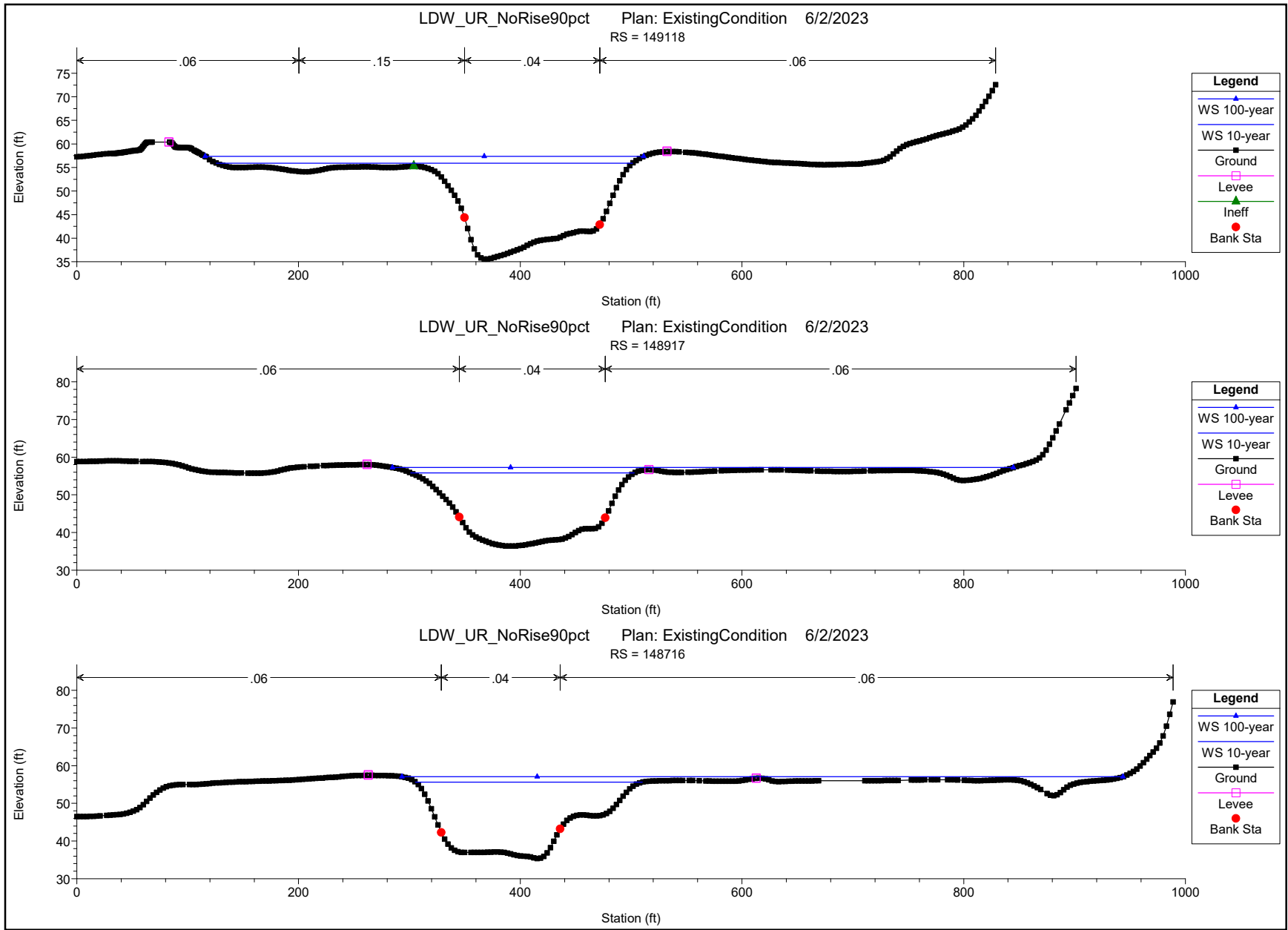


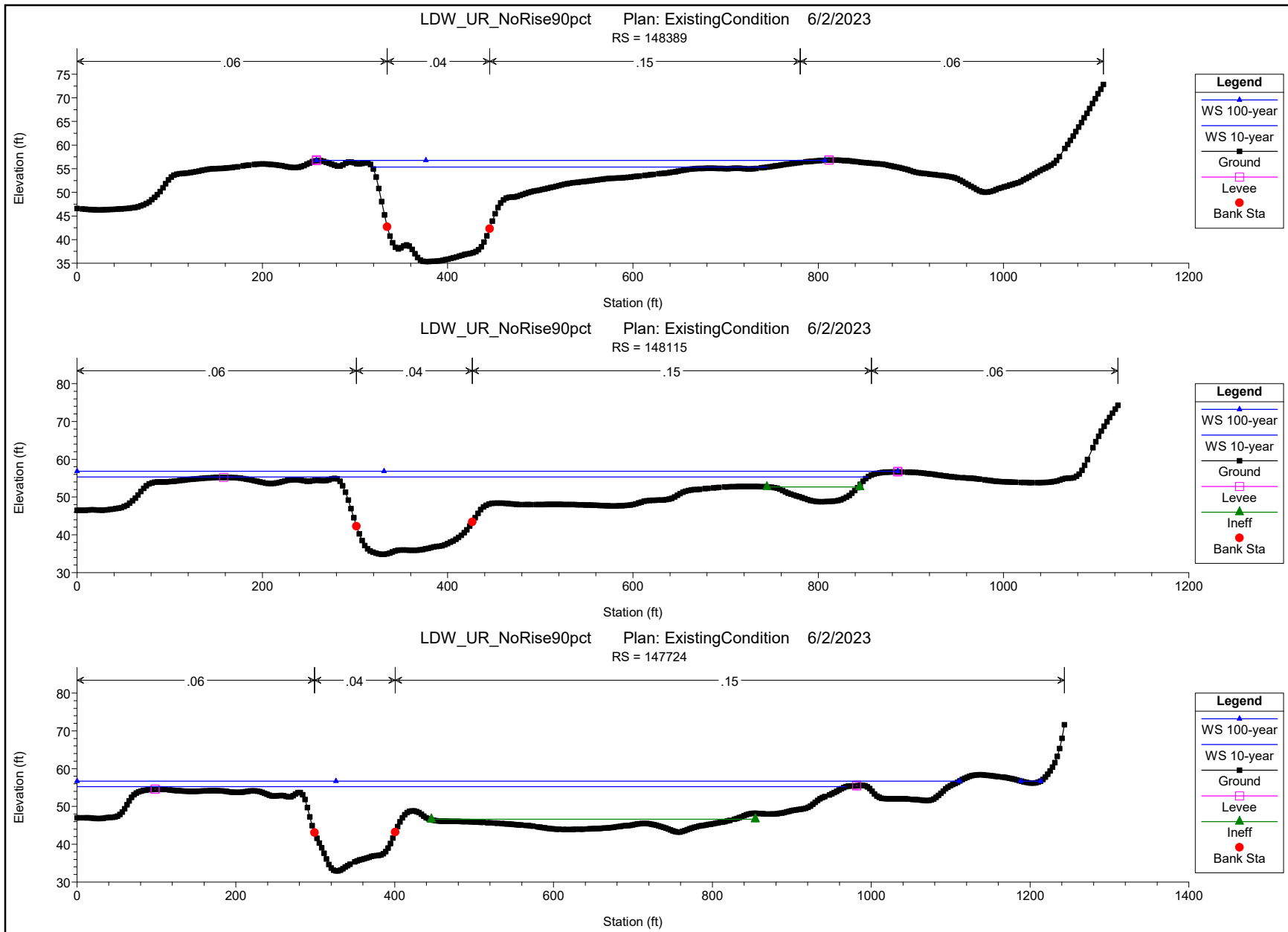


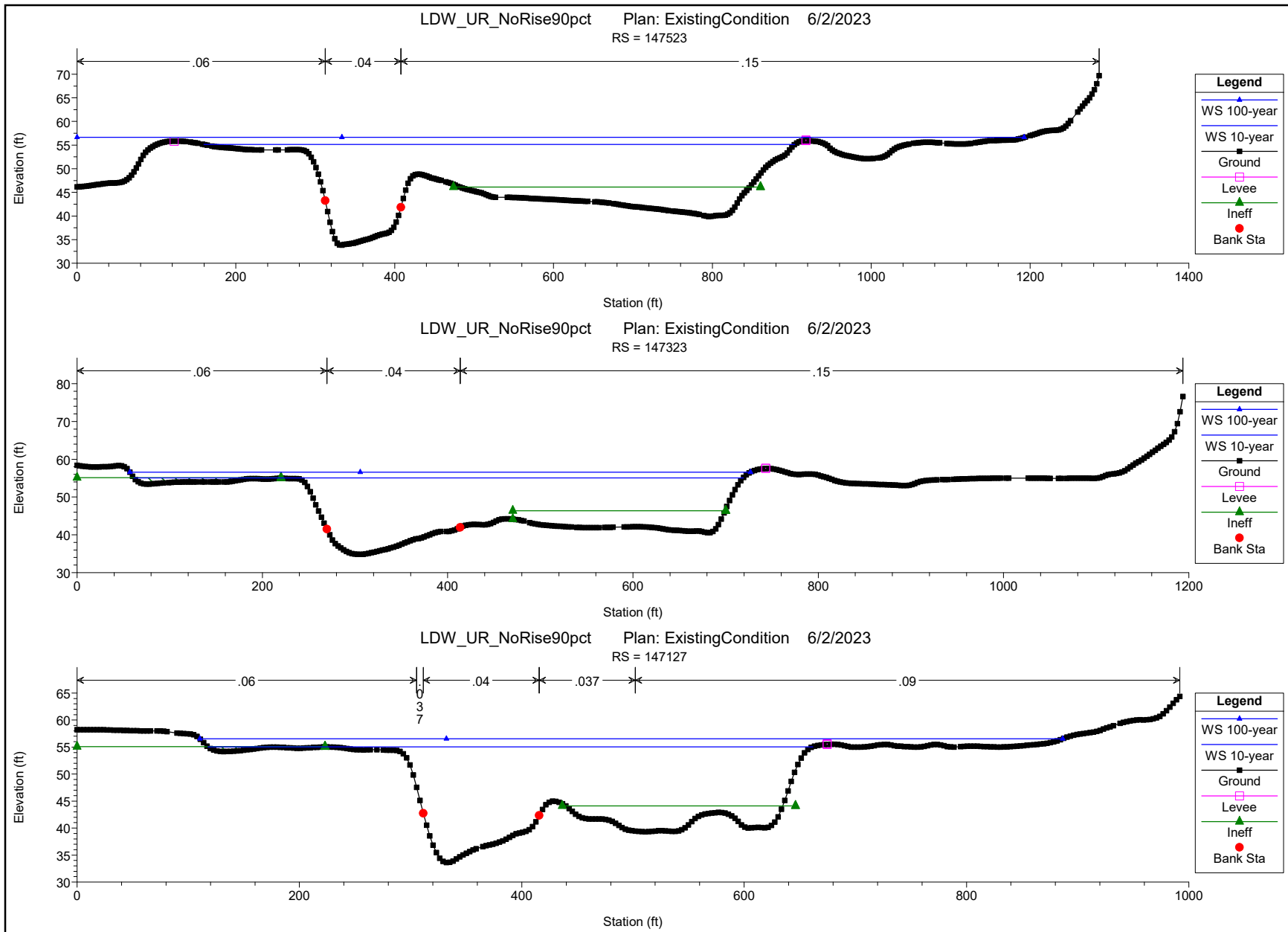


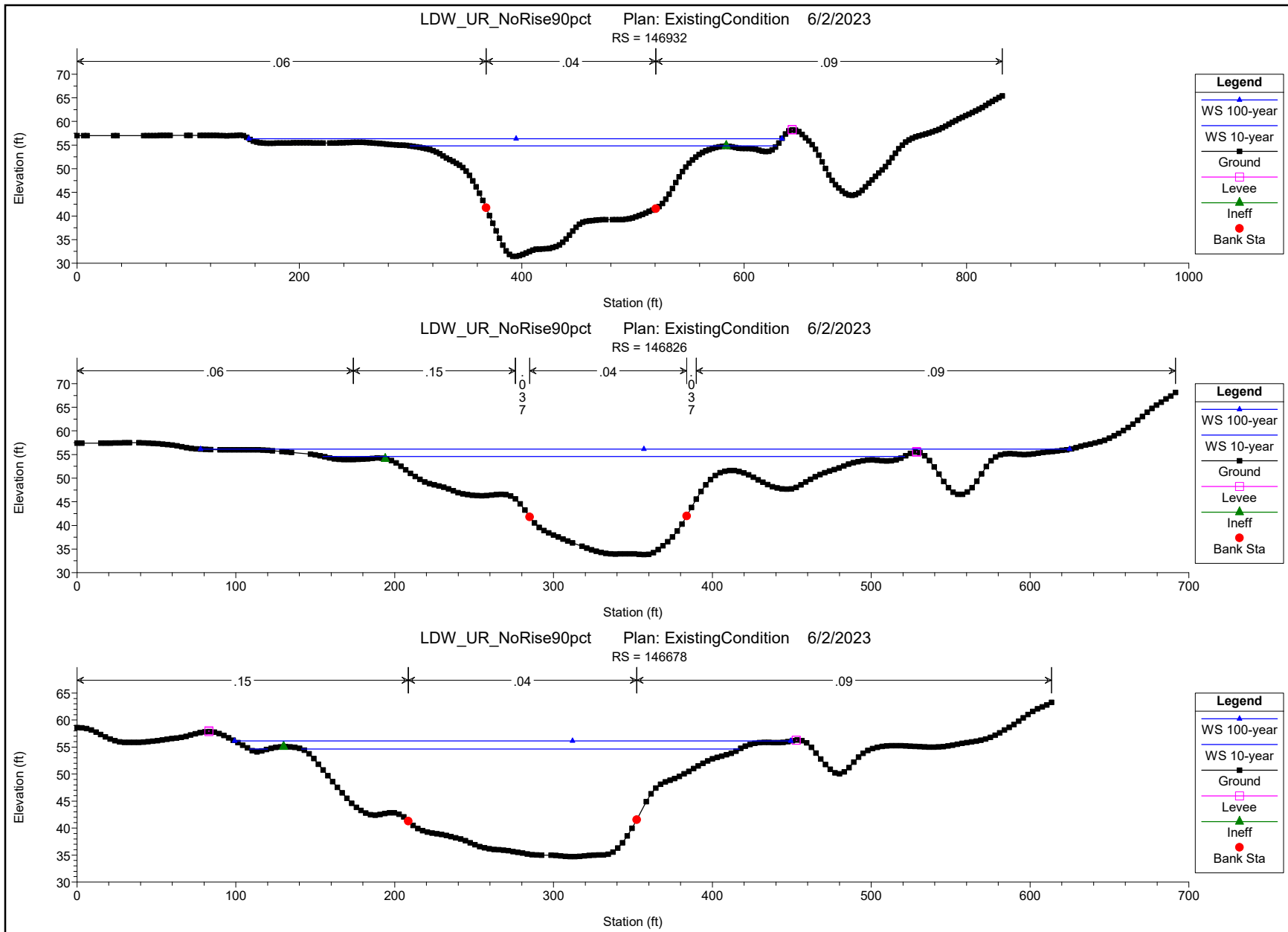








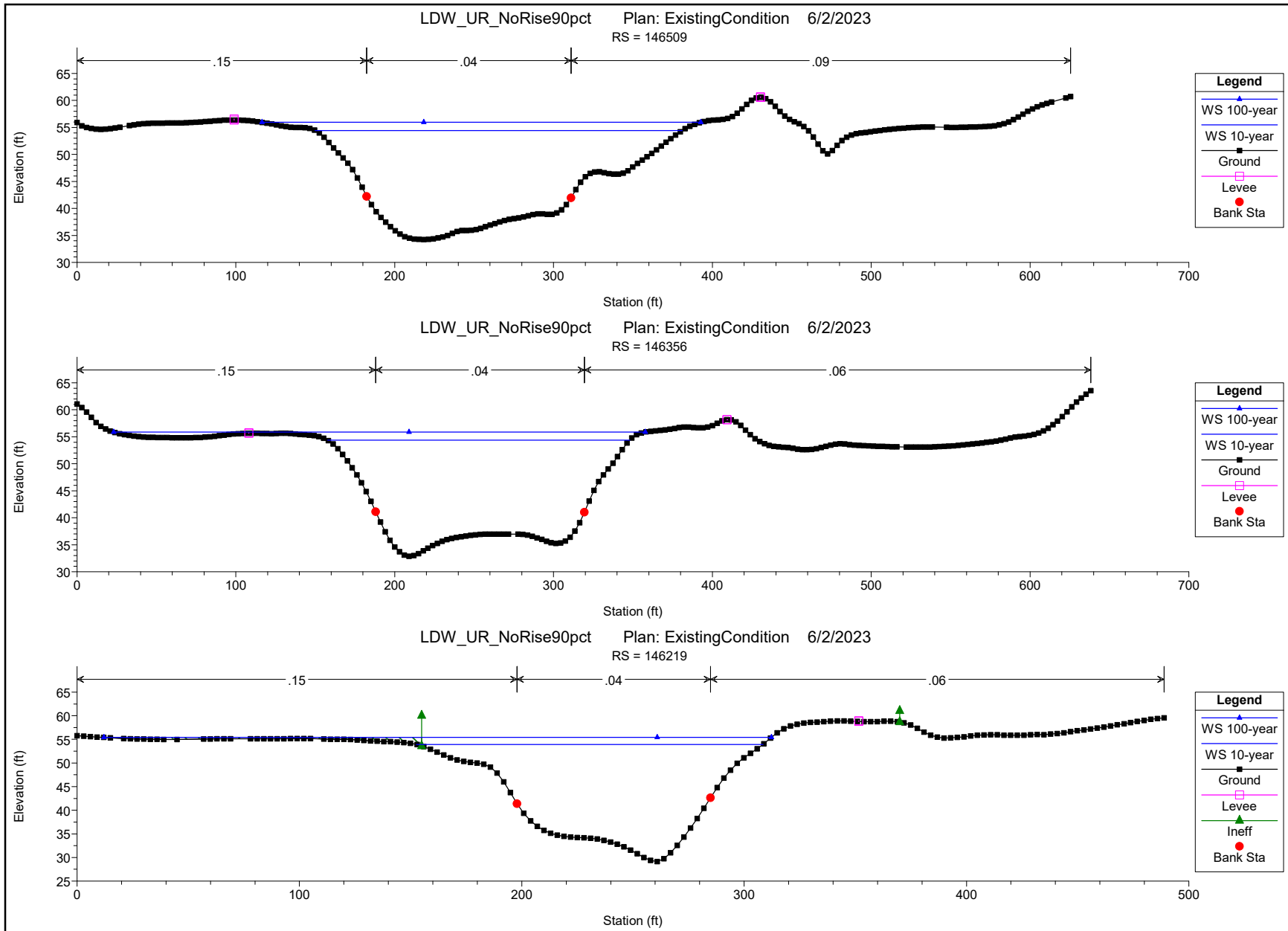


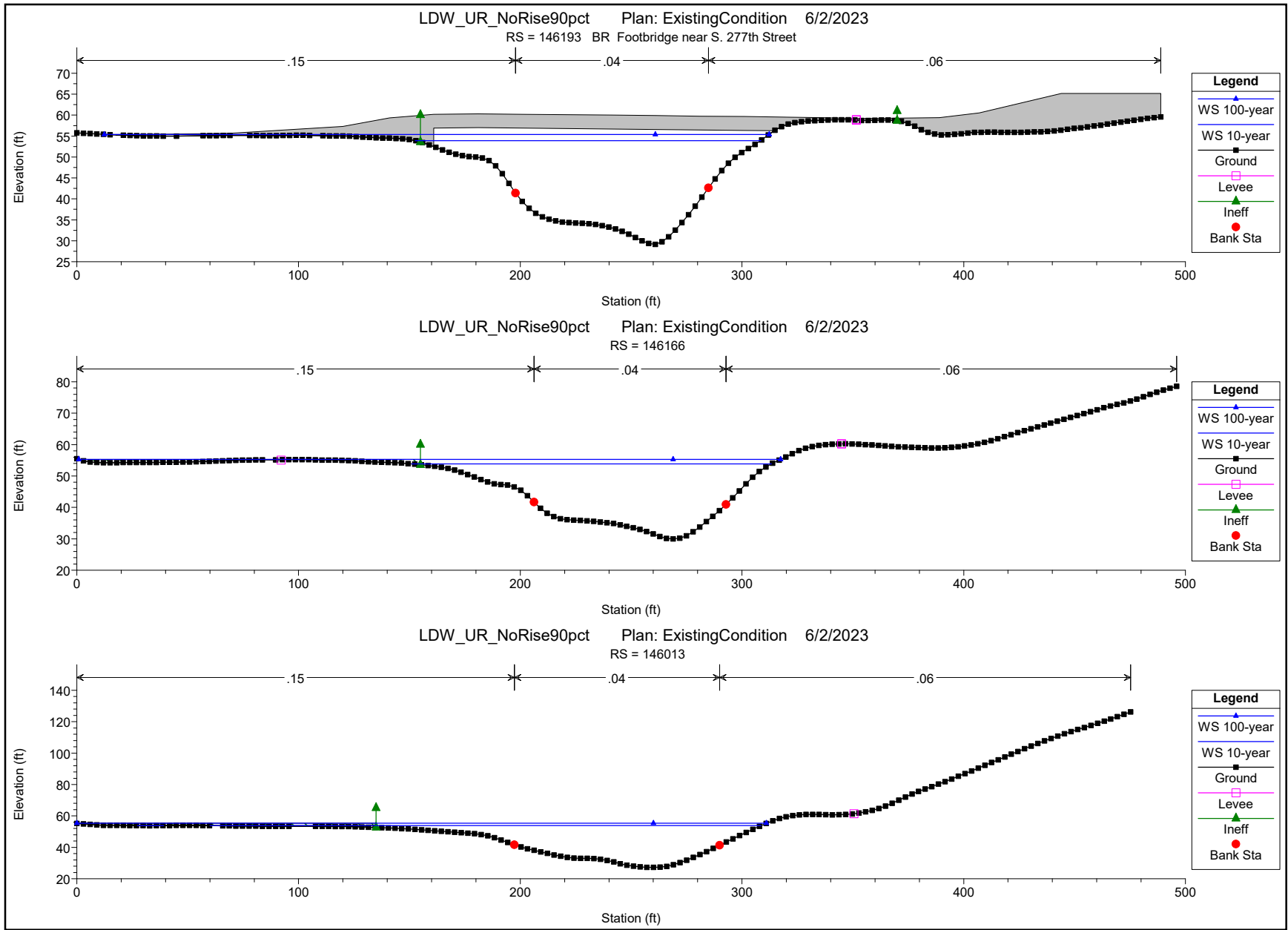


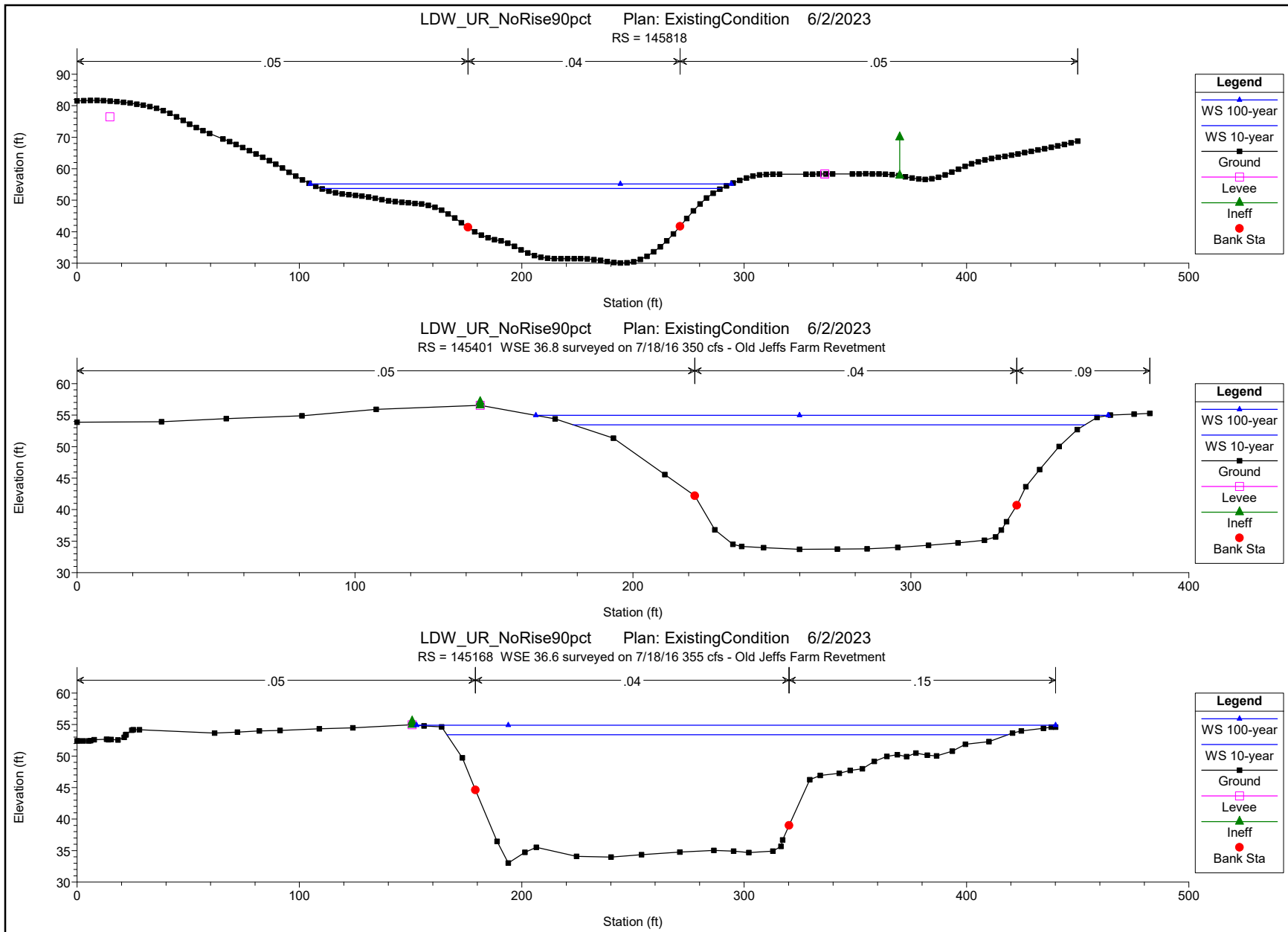
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 146932

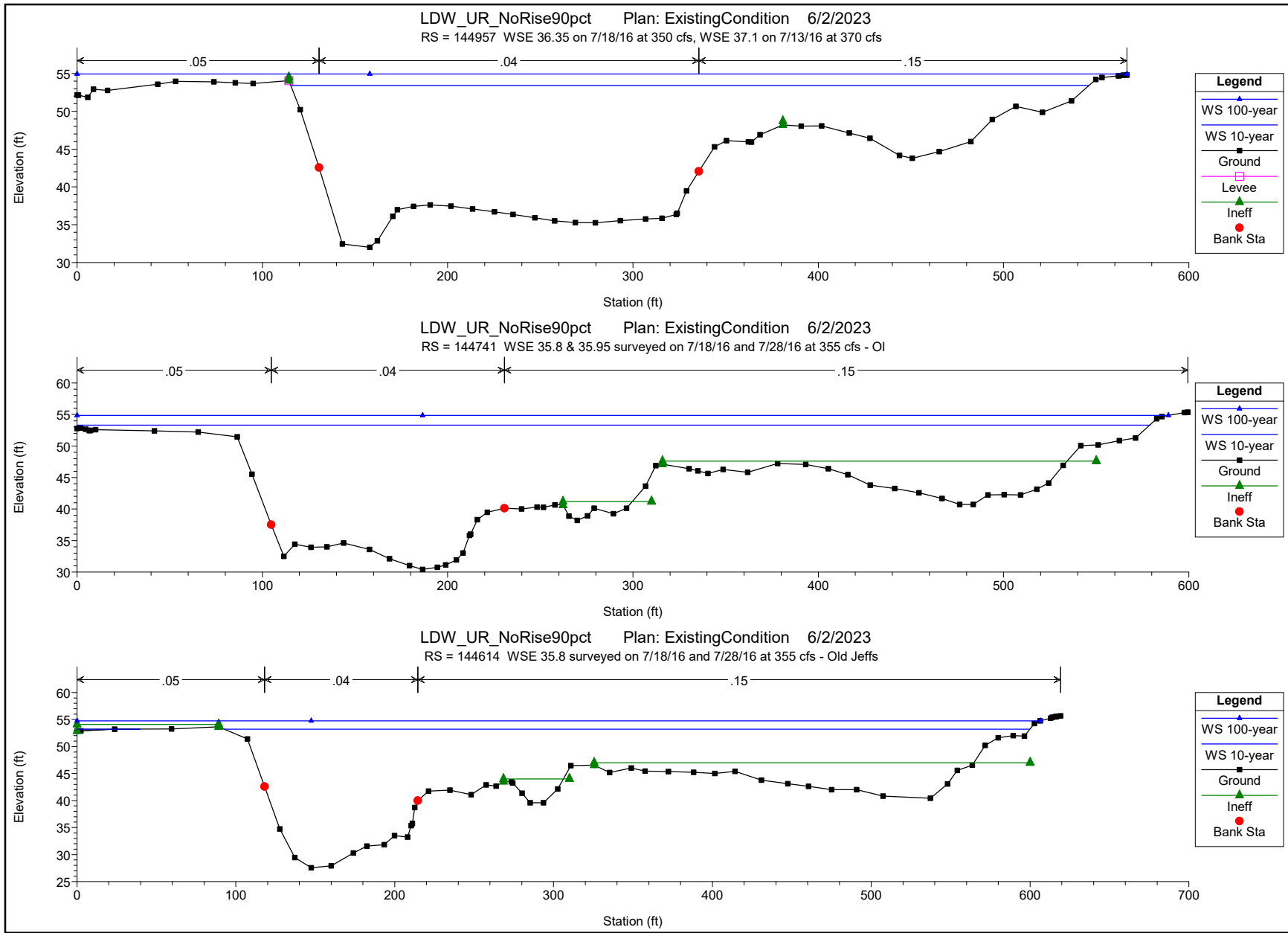
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 146826

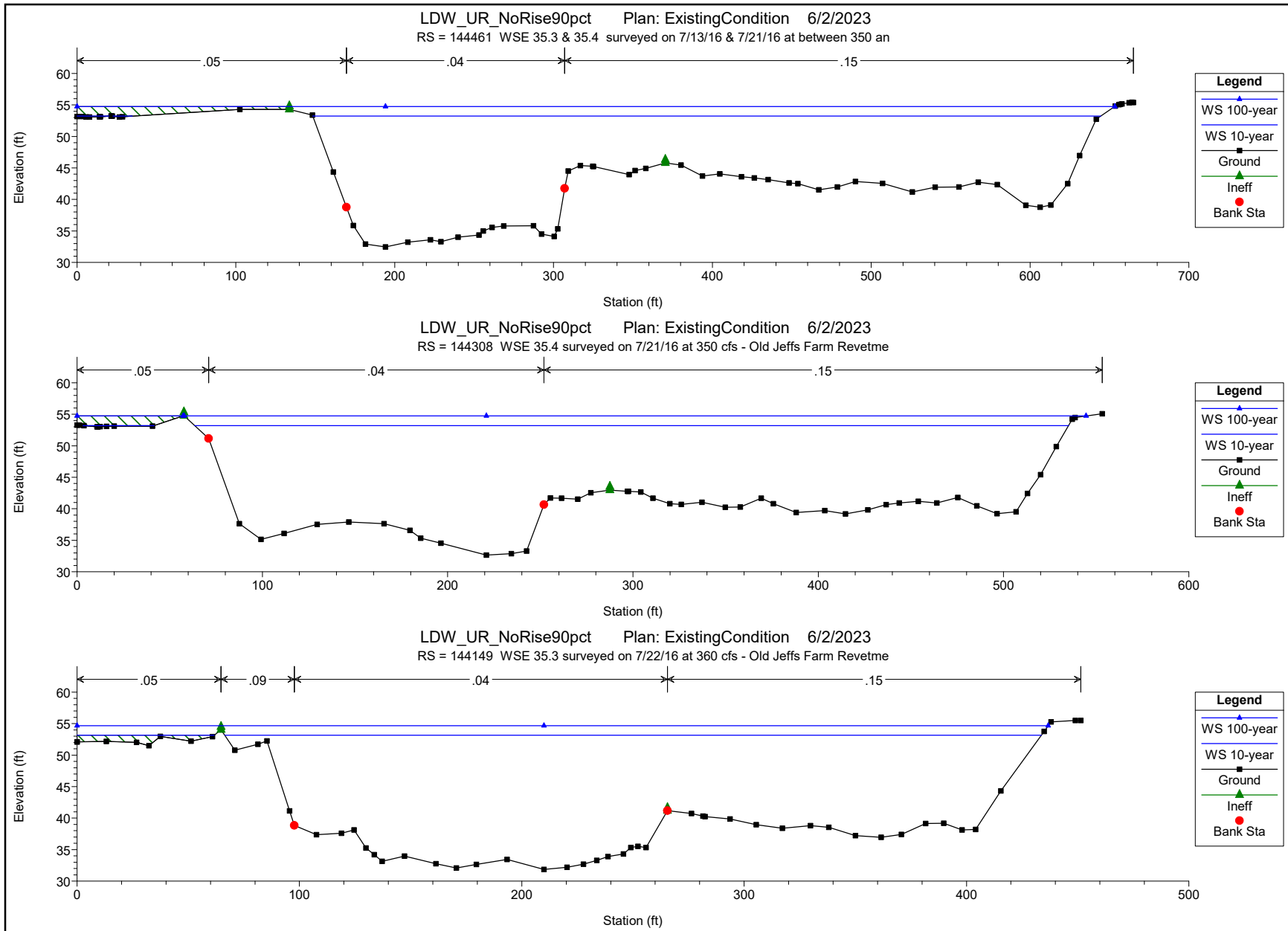
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 146678

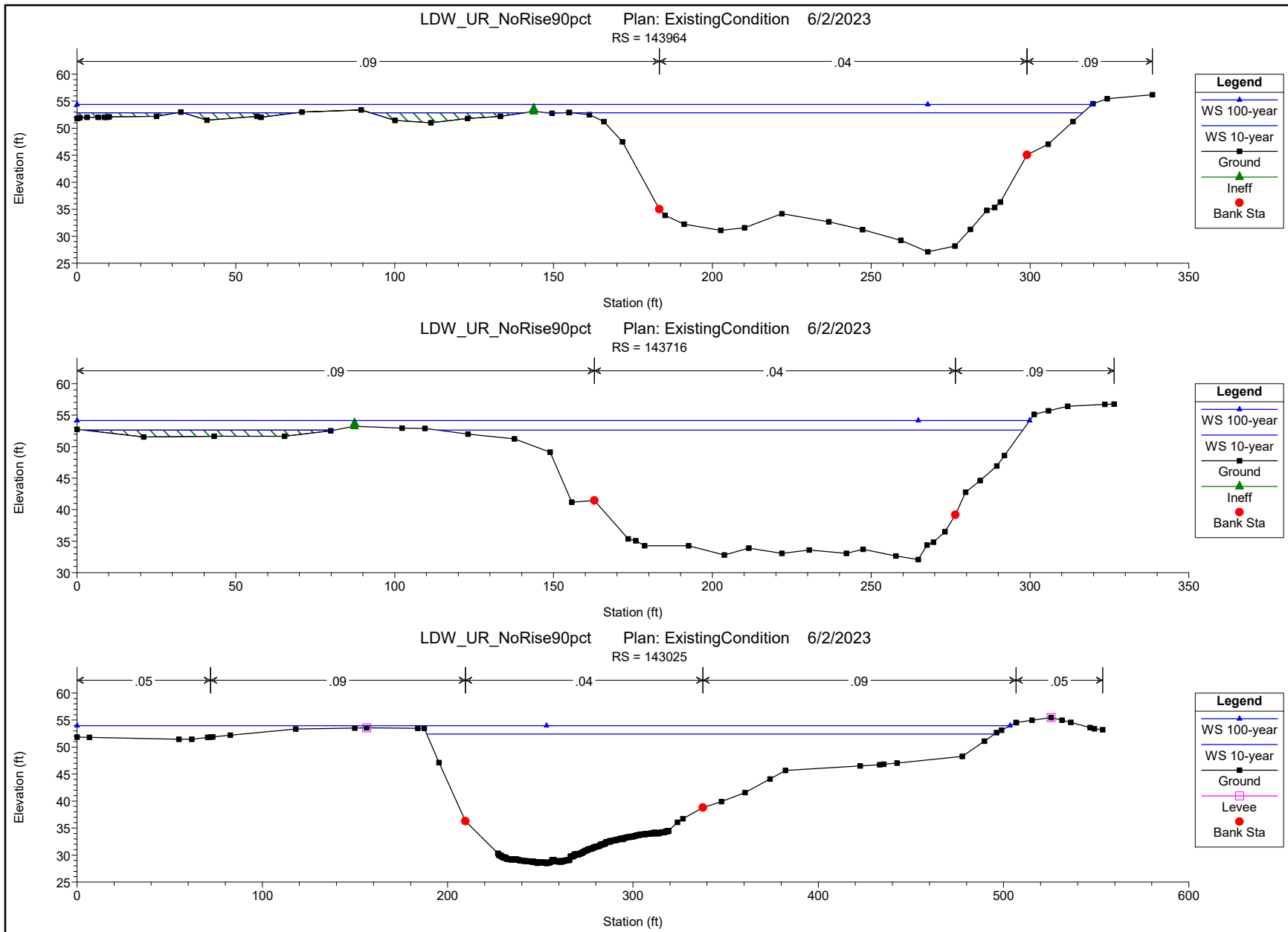


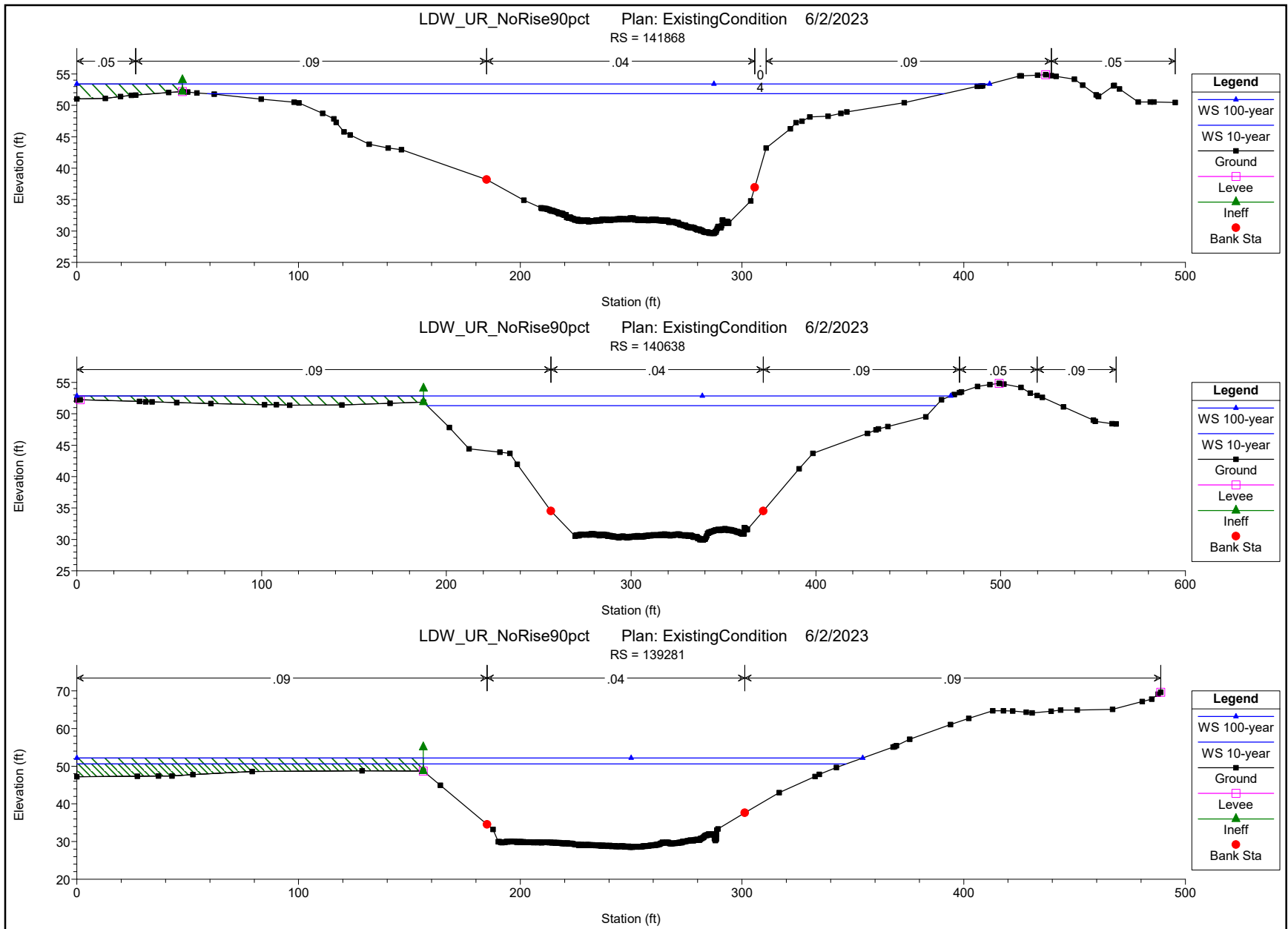


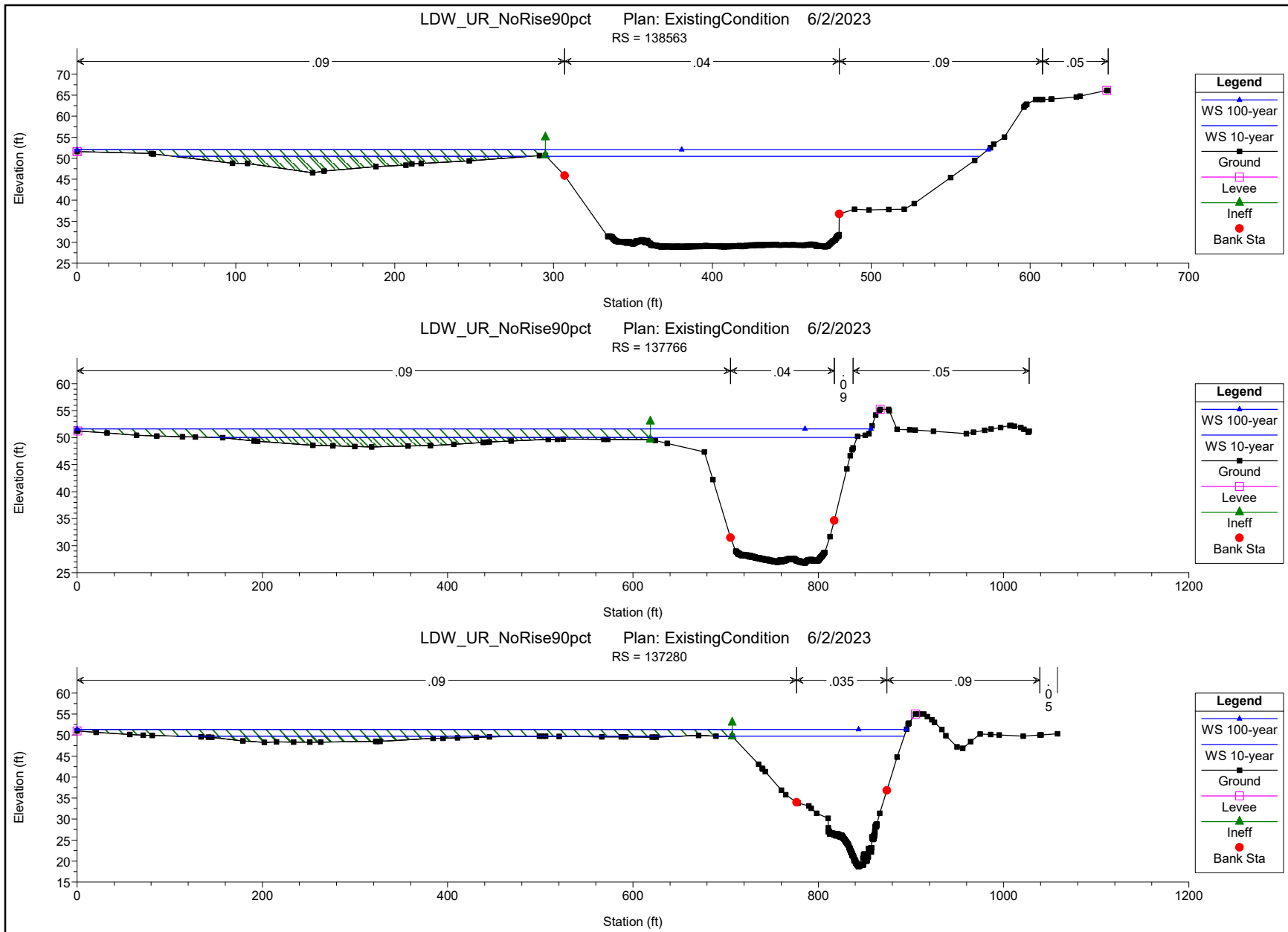


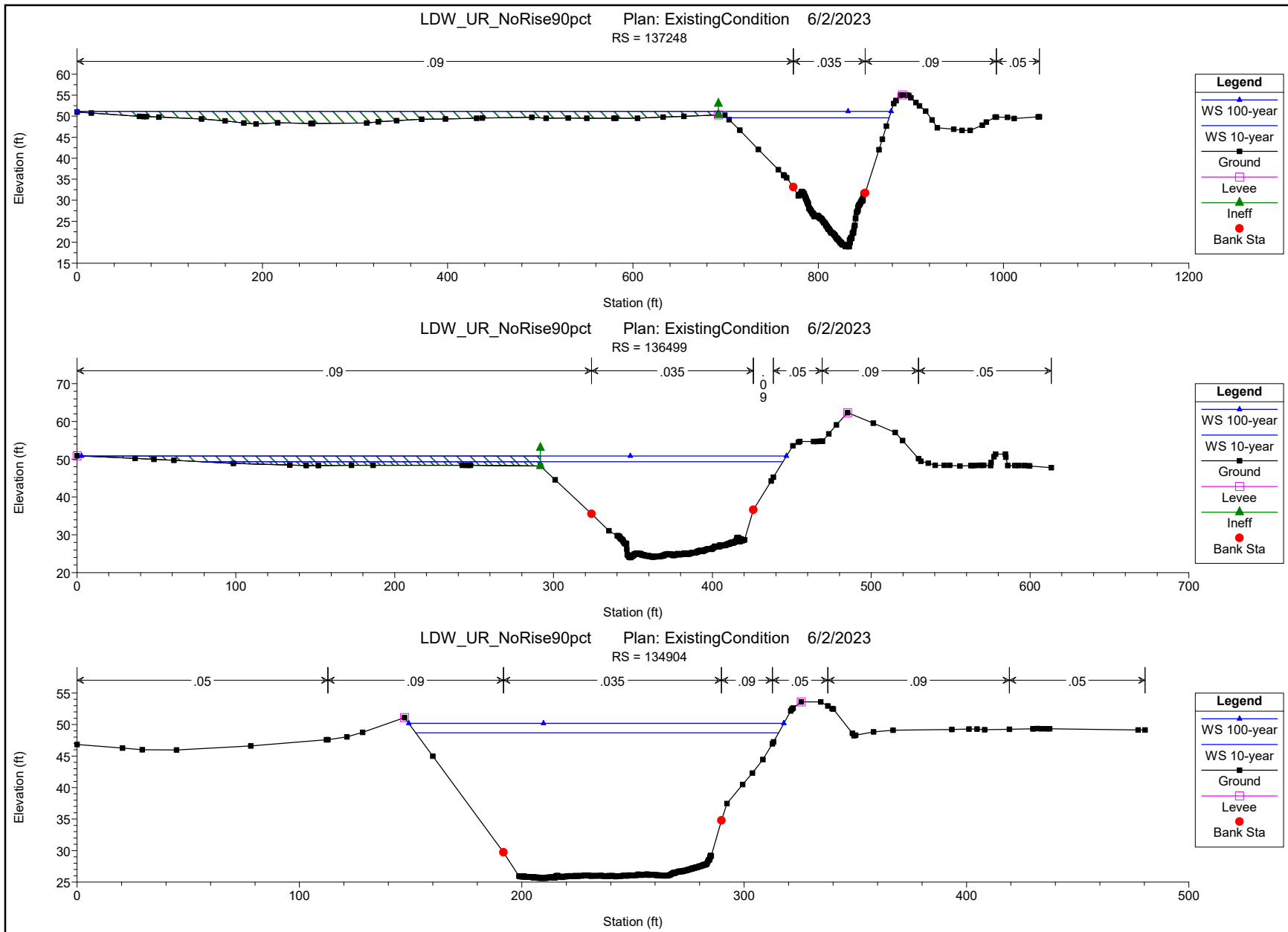


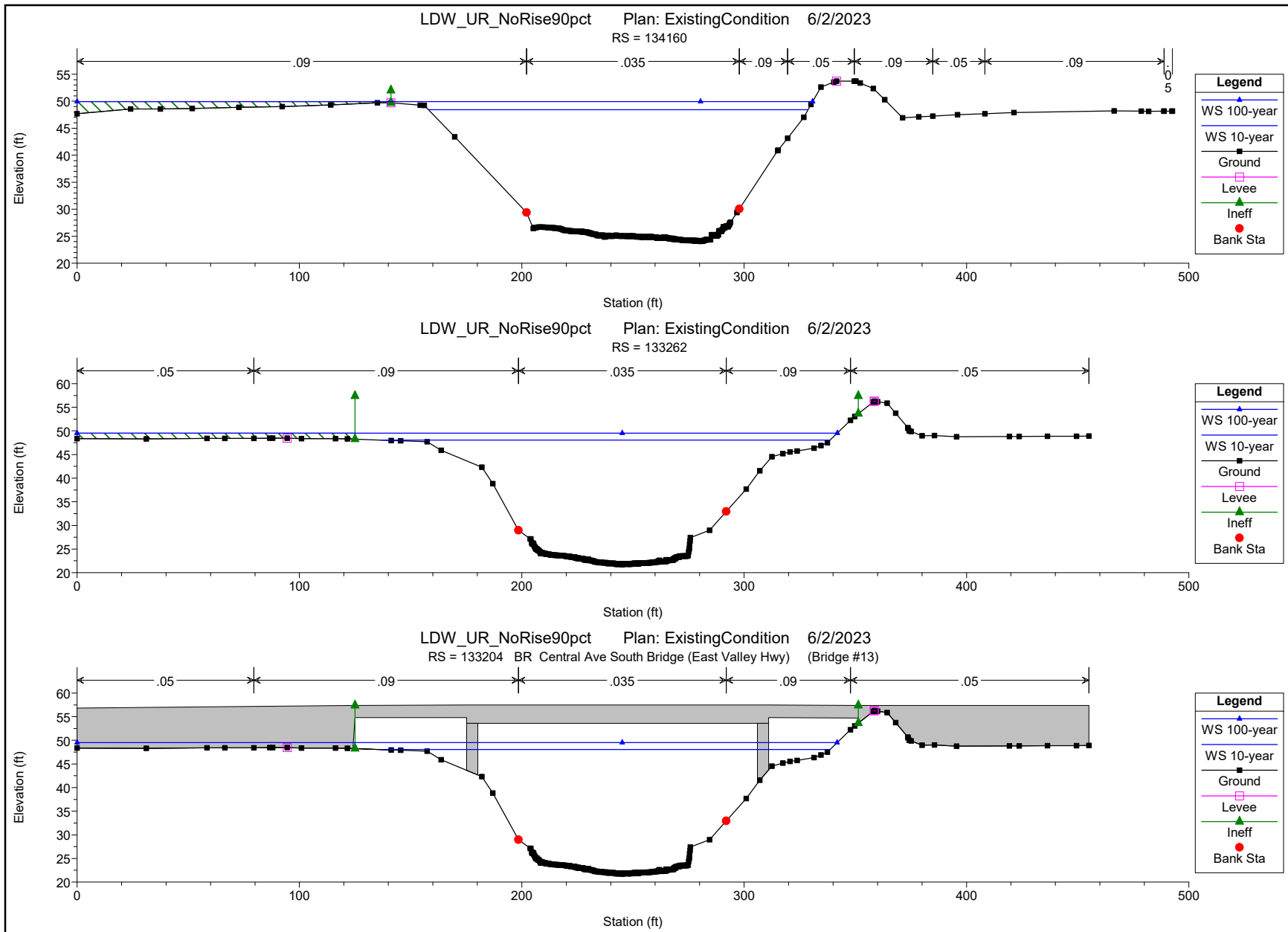


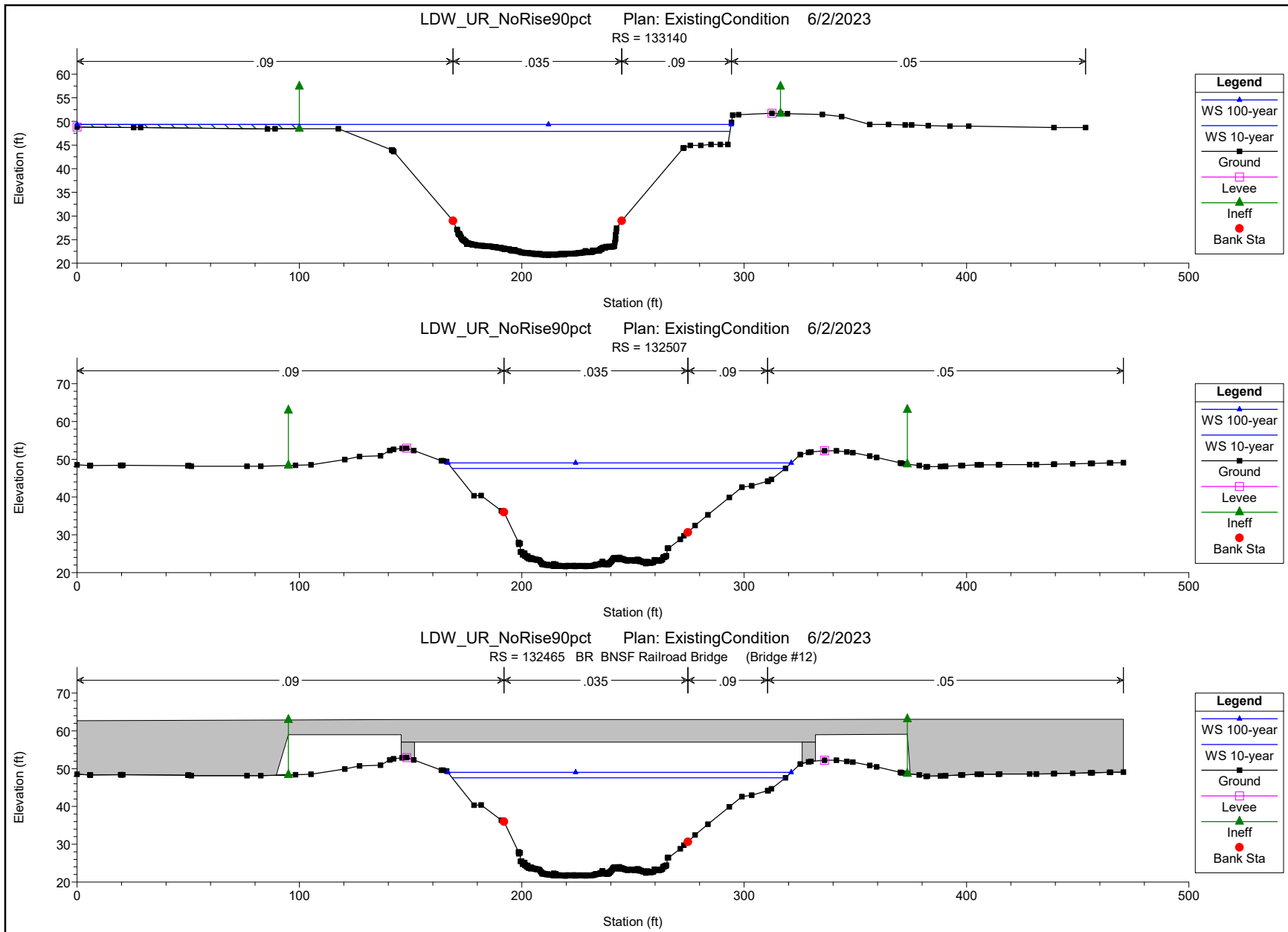


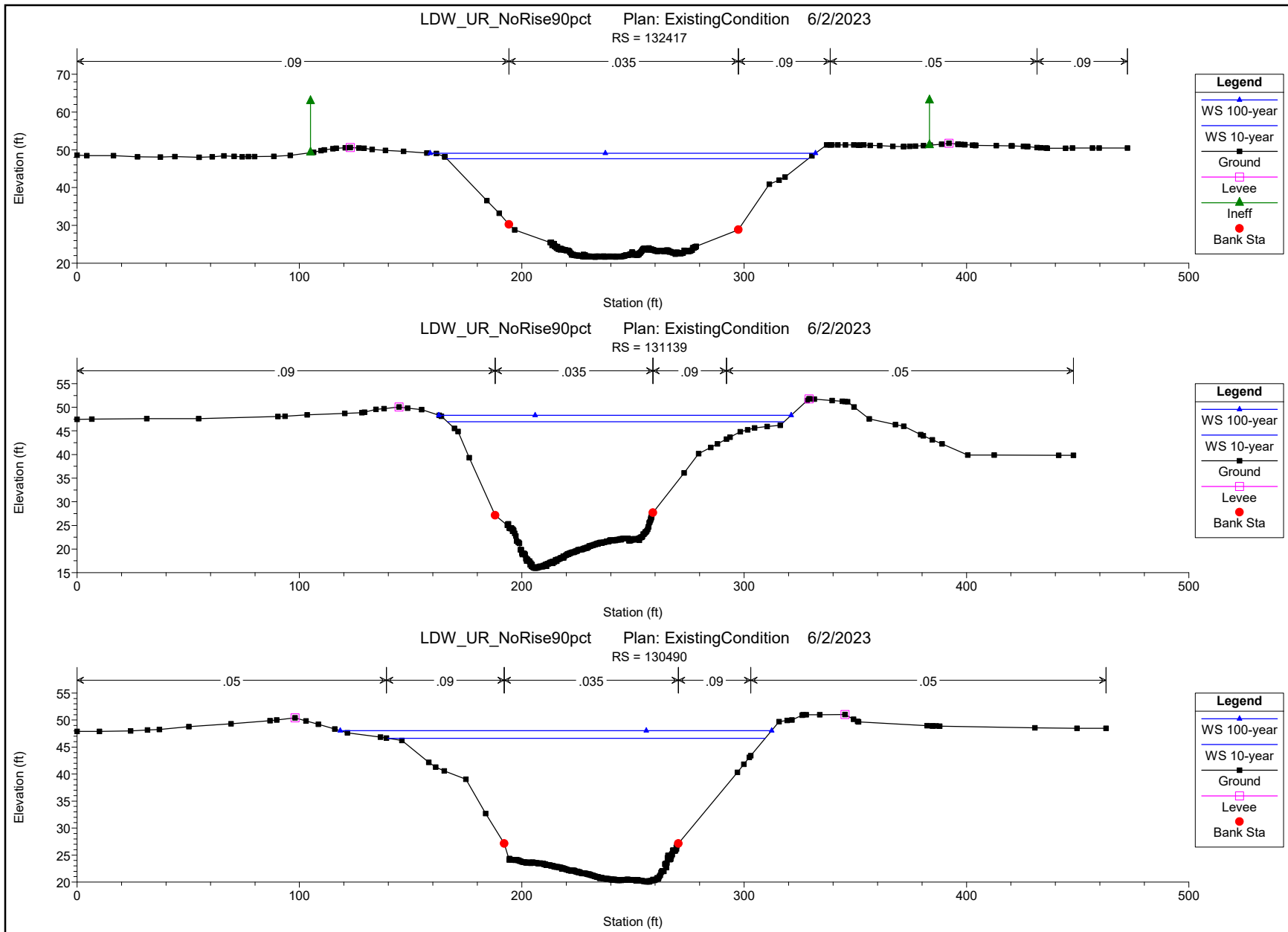


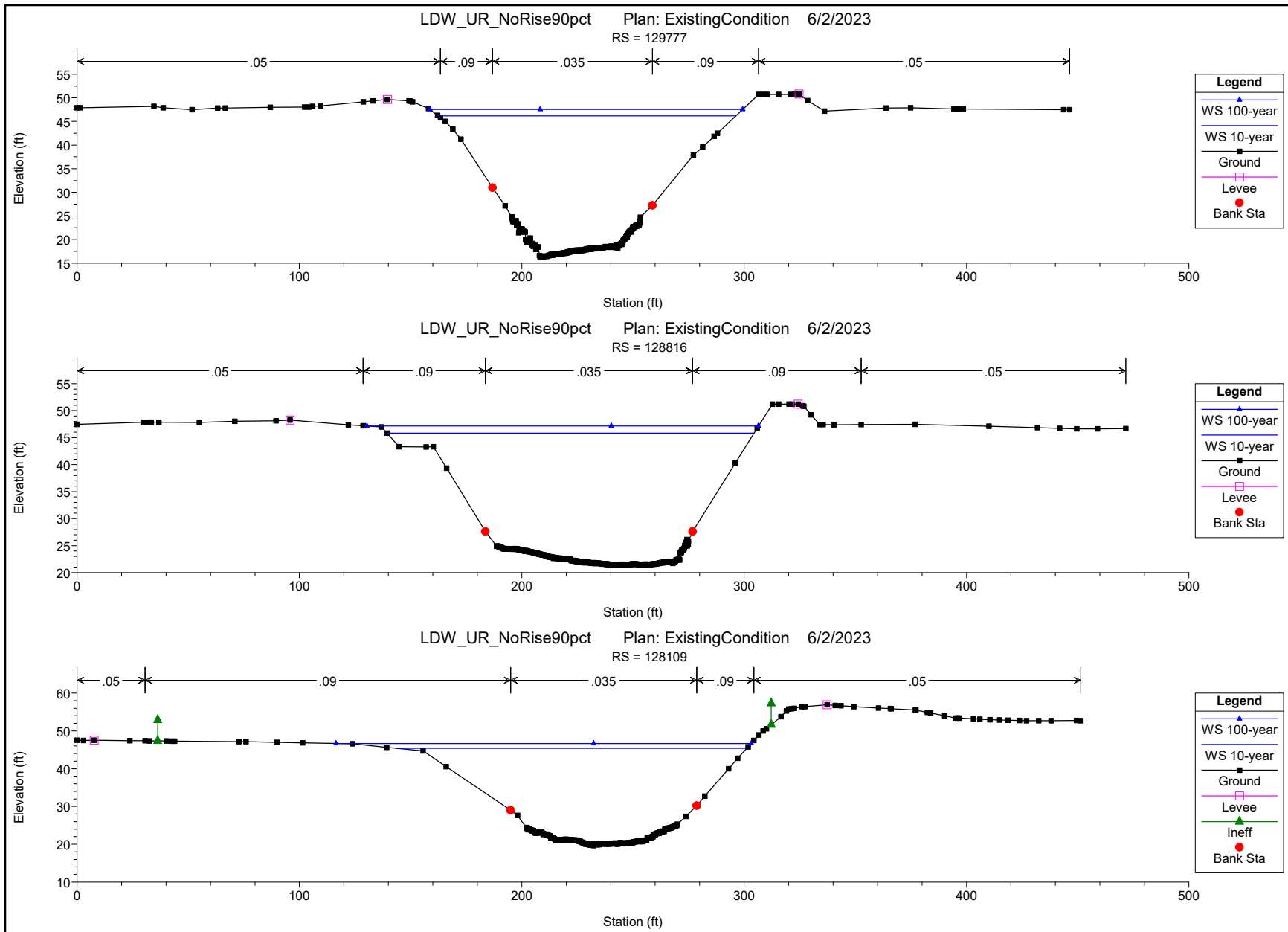


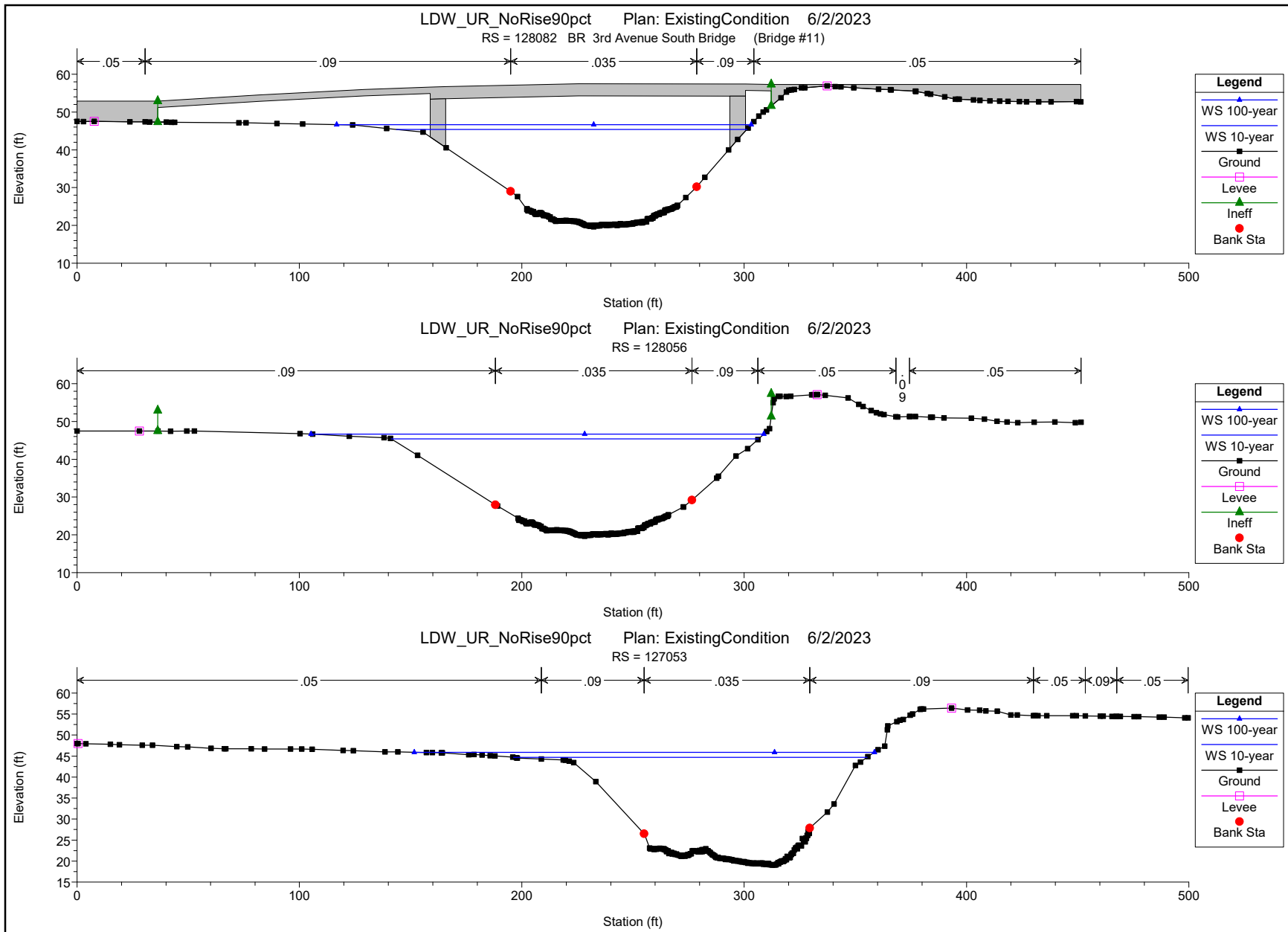


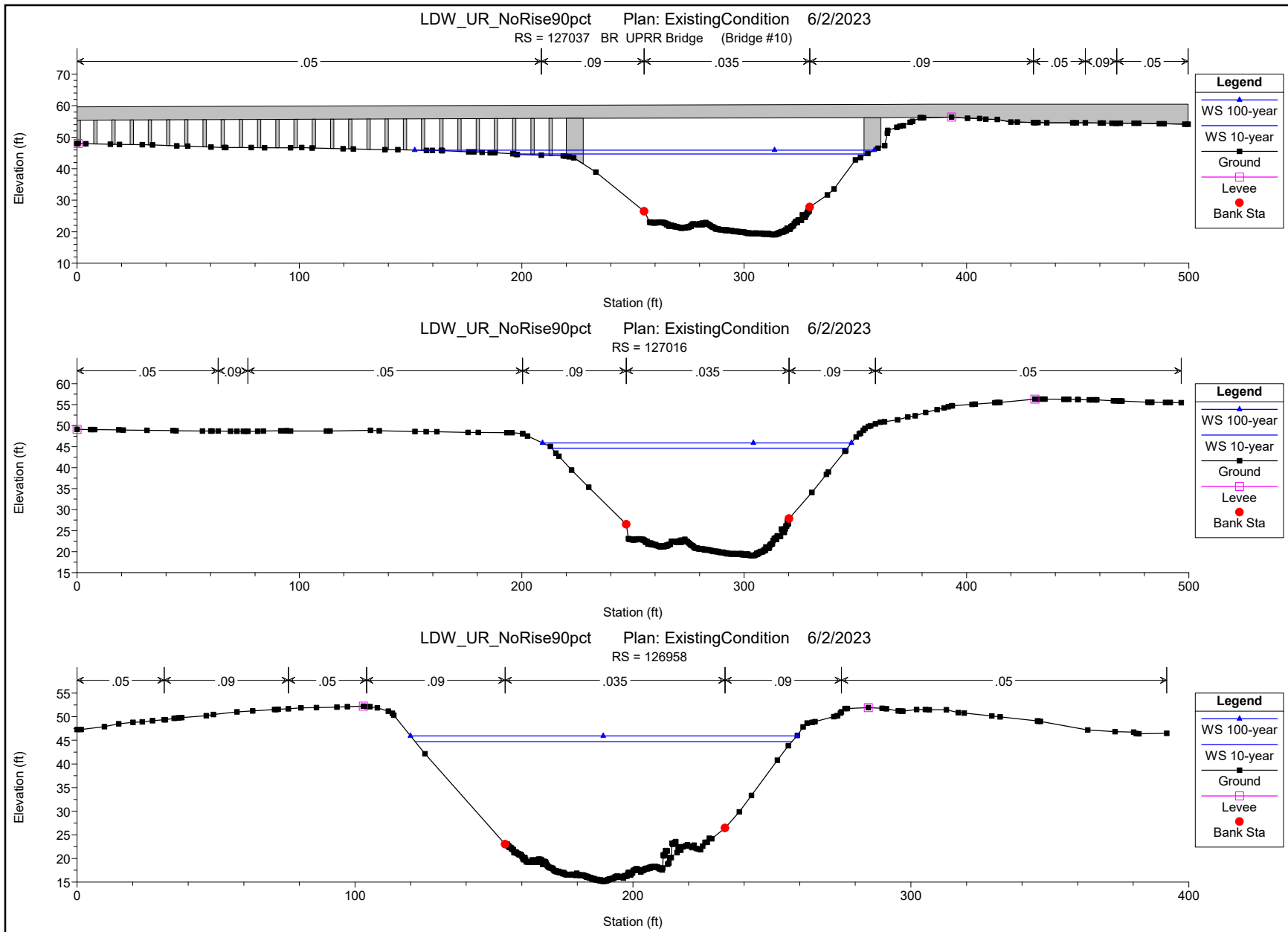


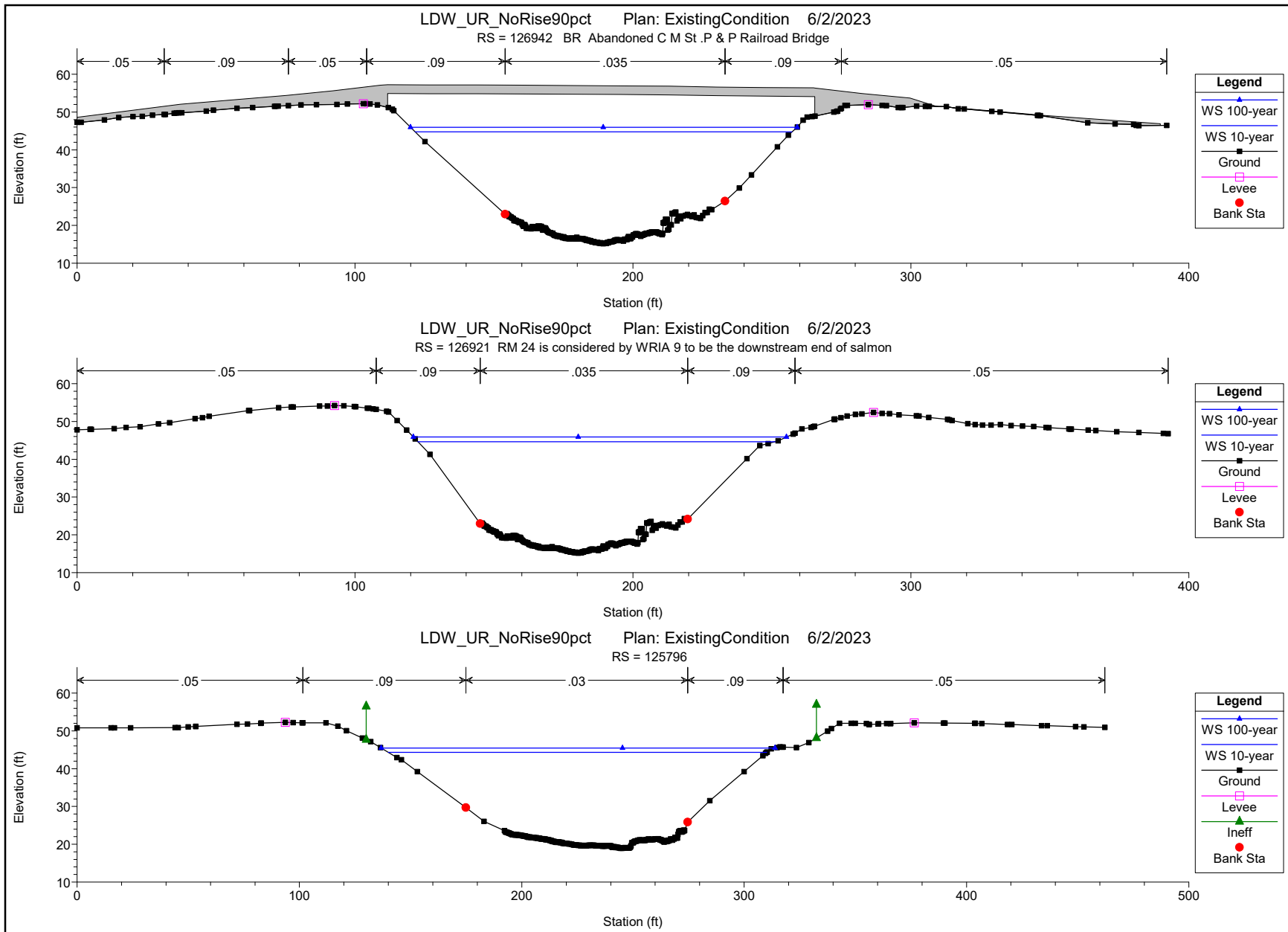


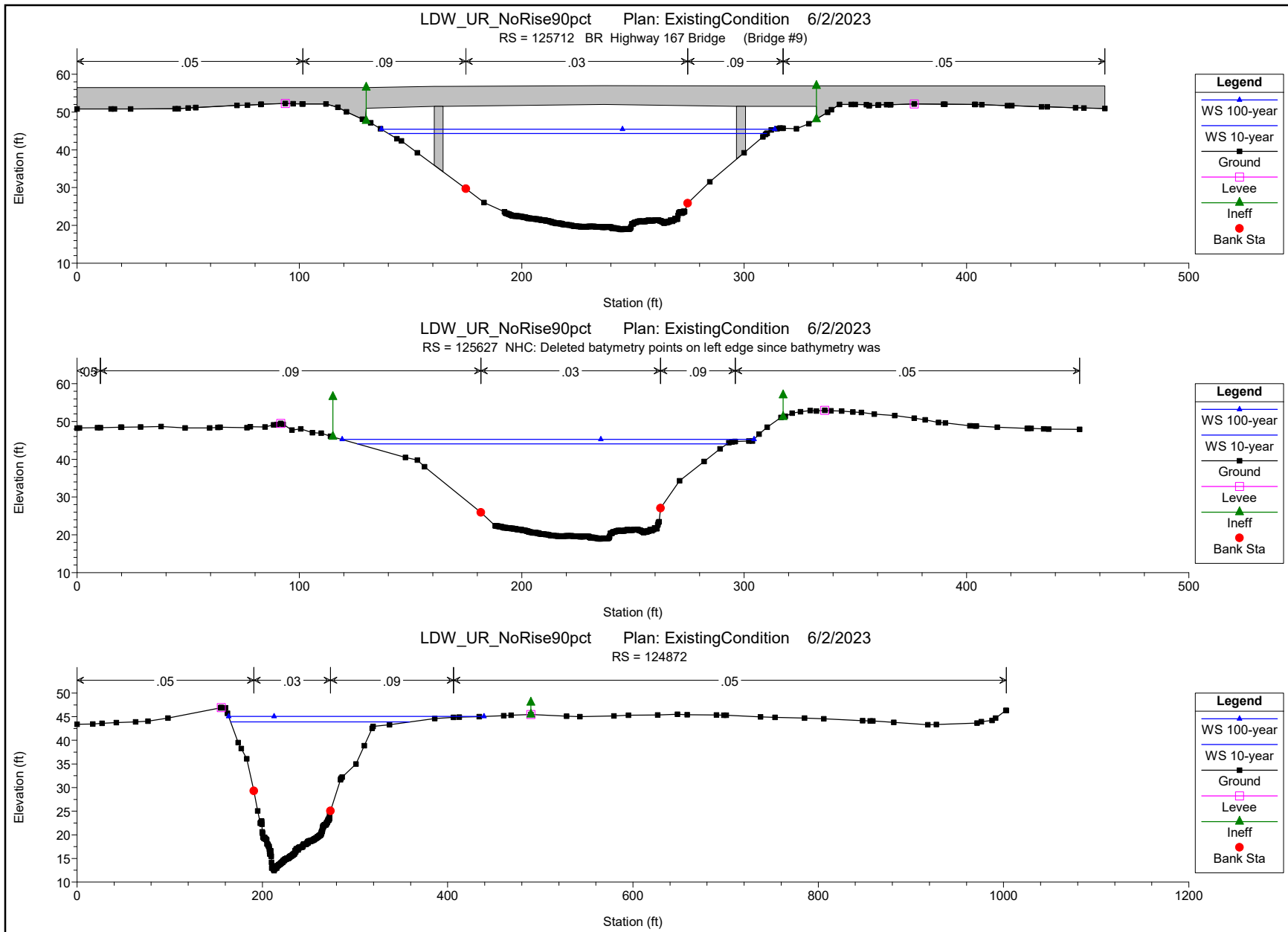


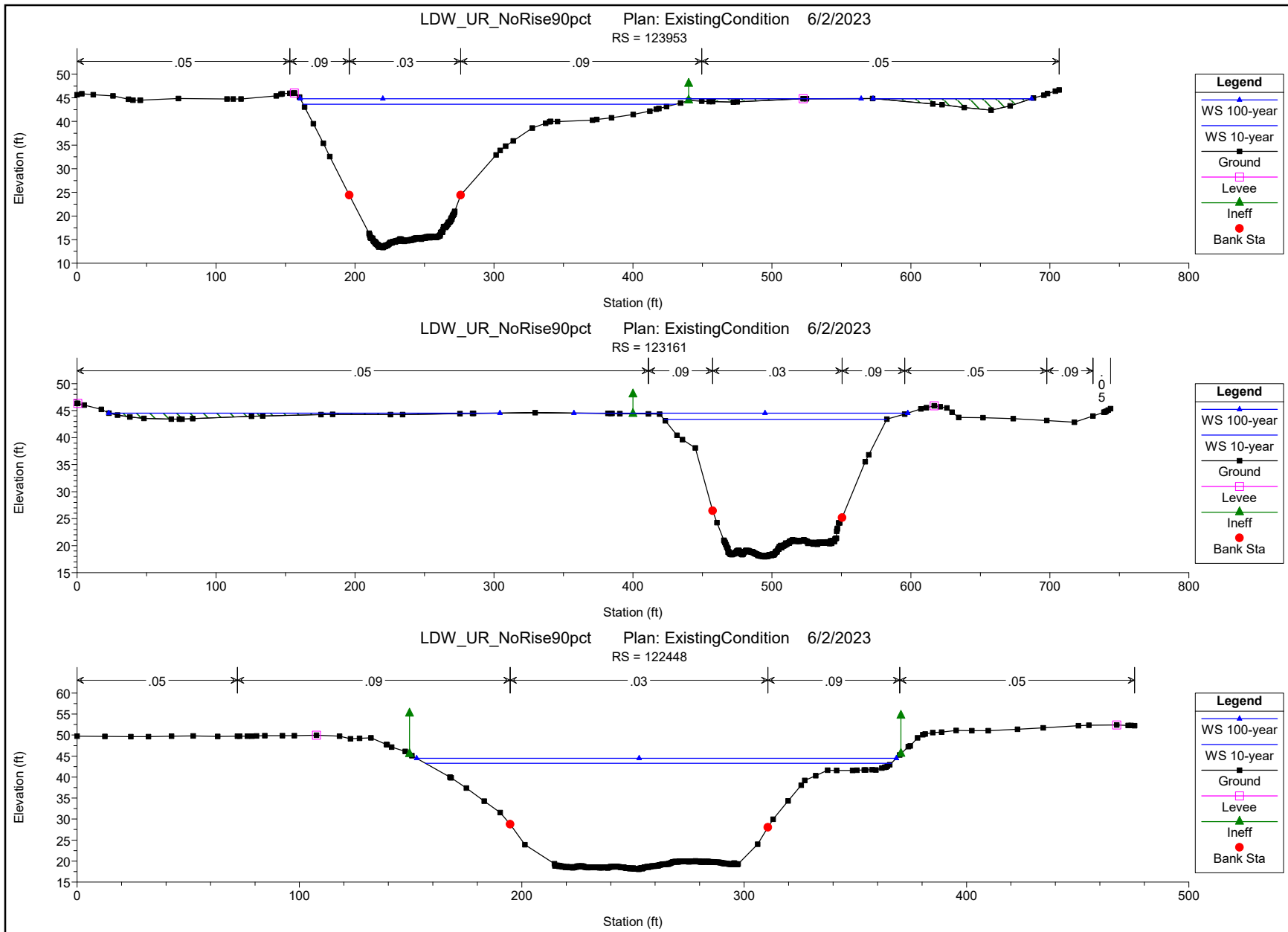


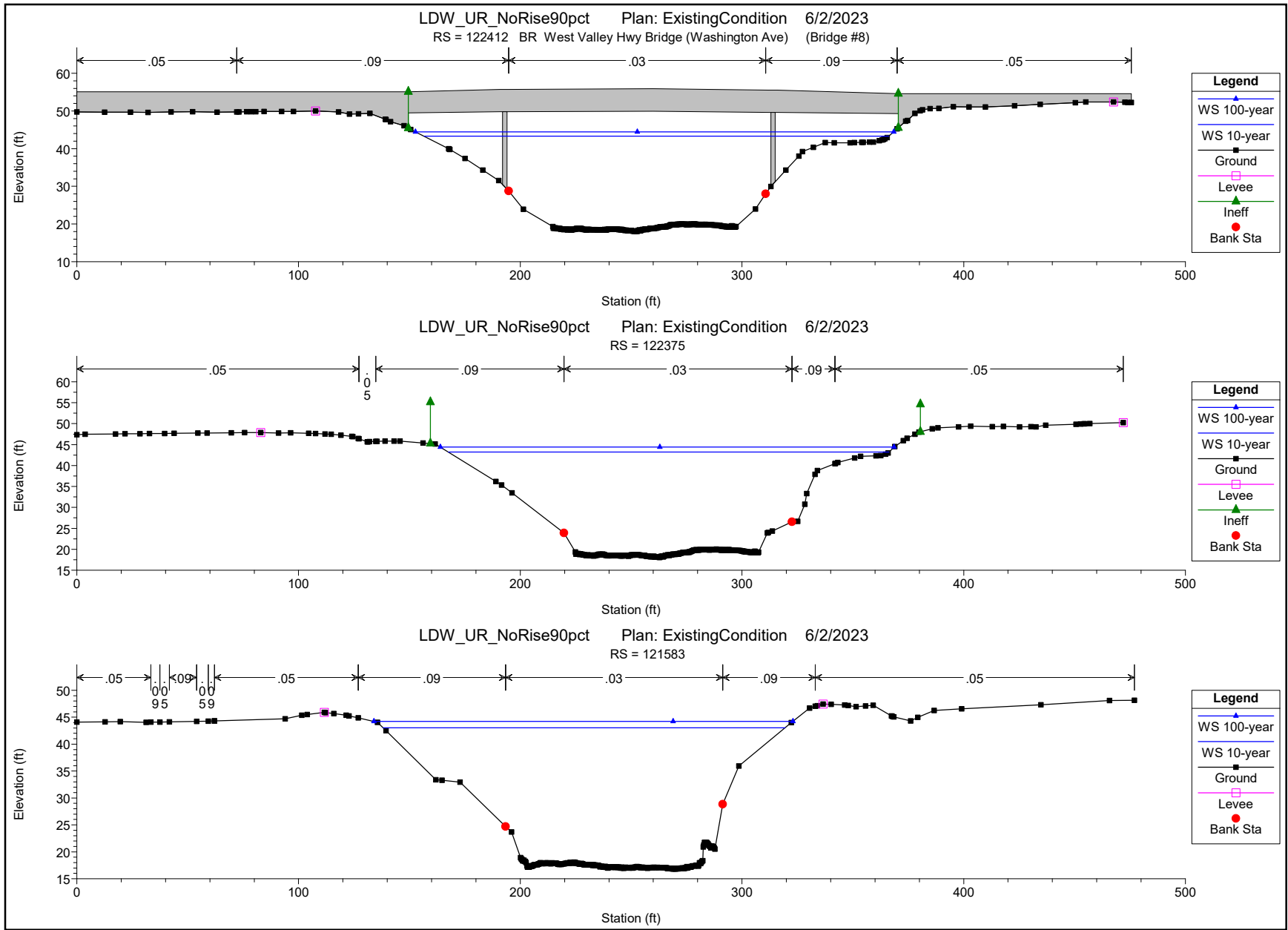


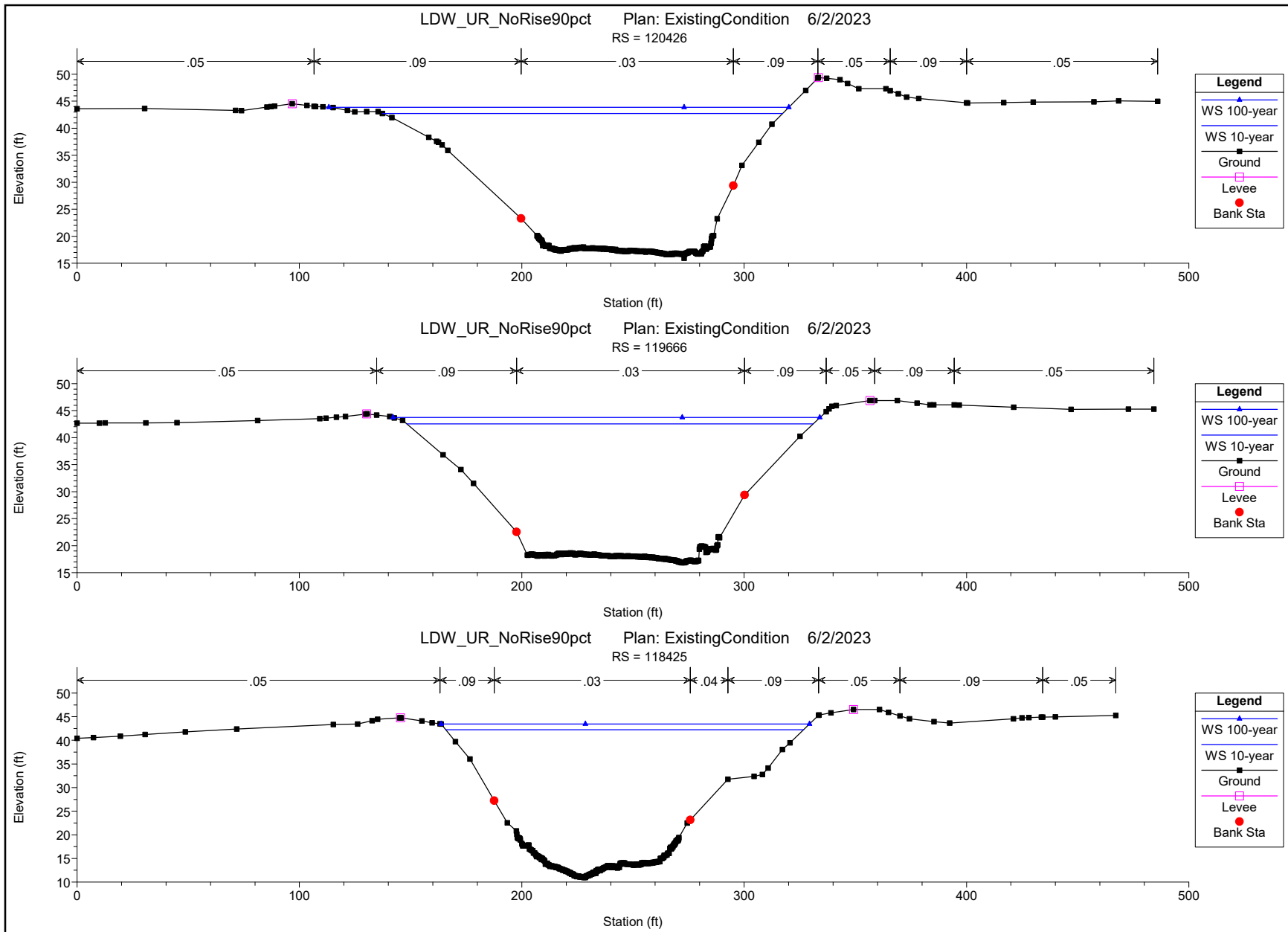


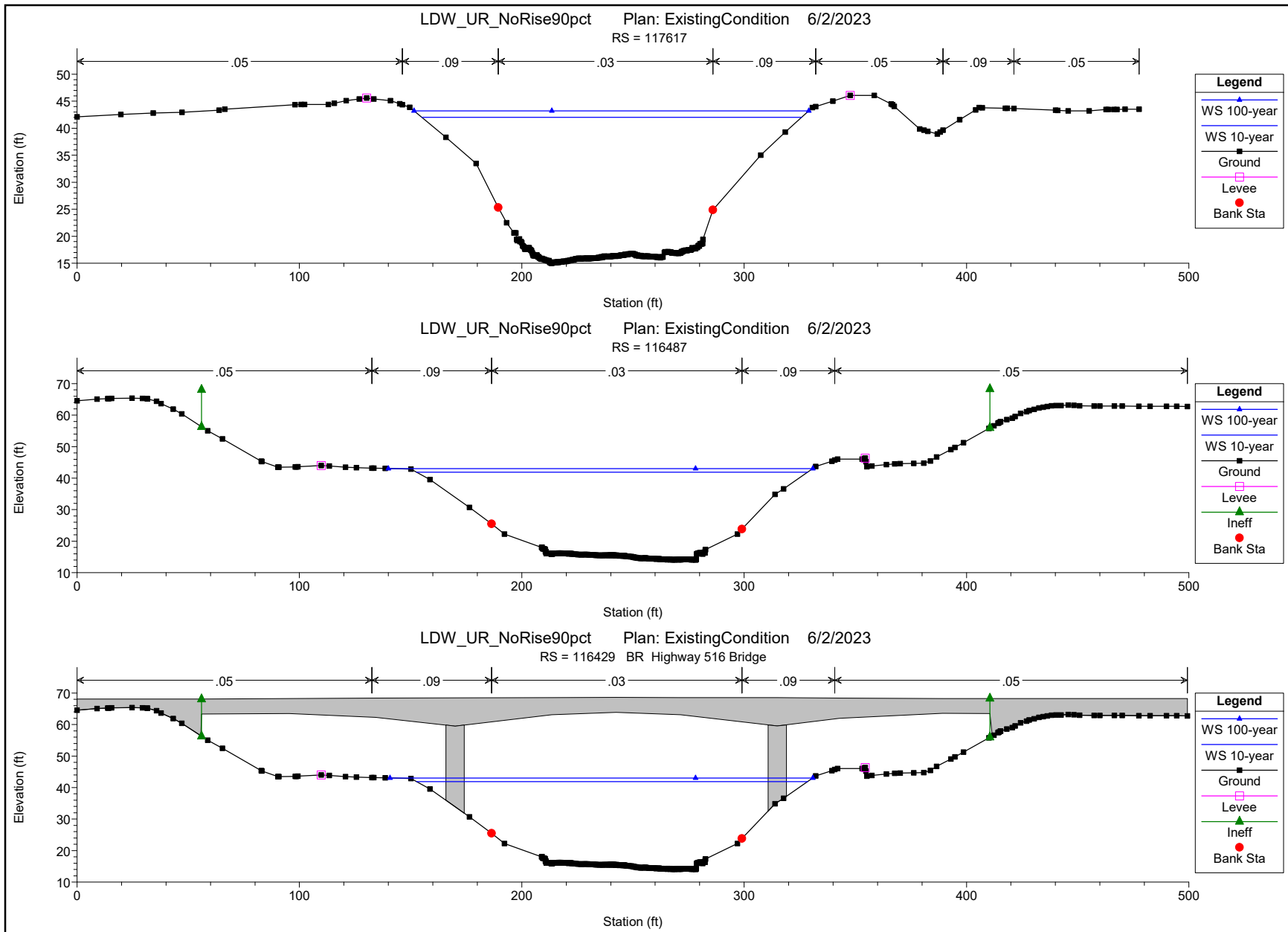


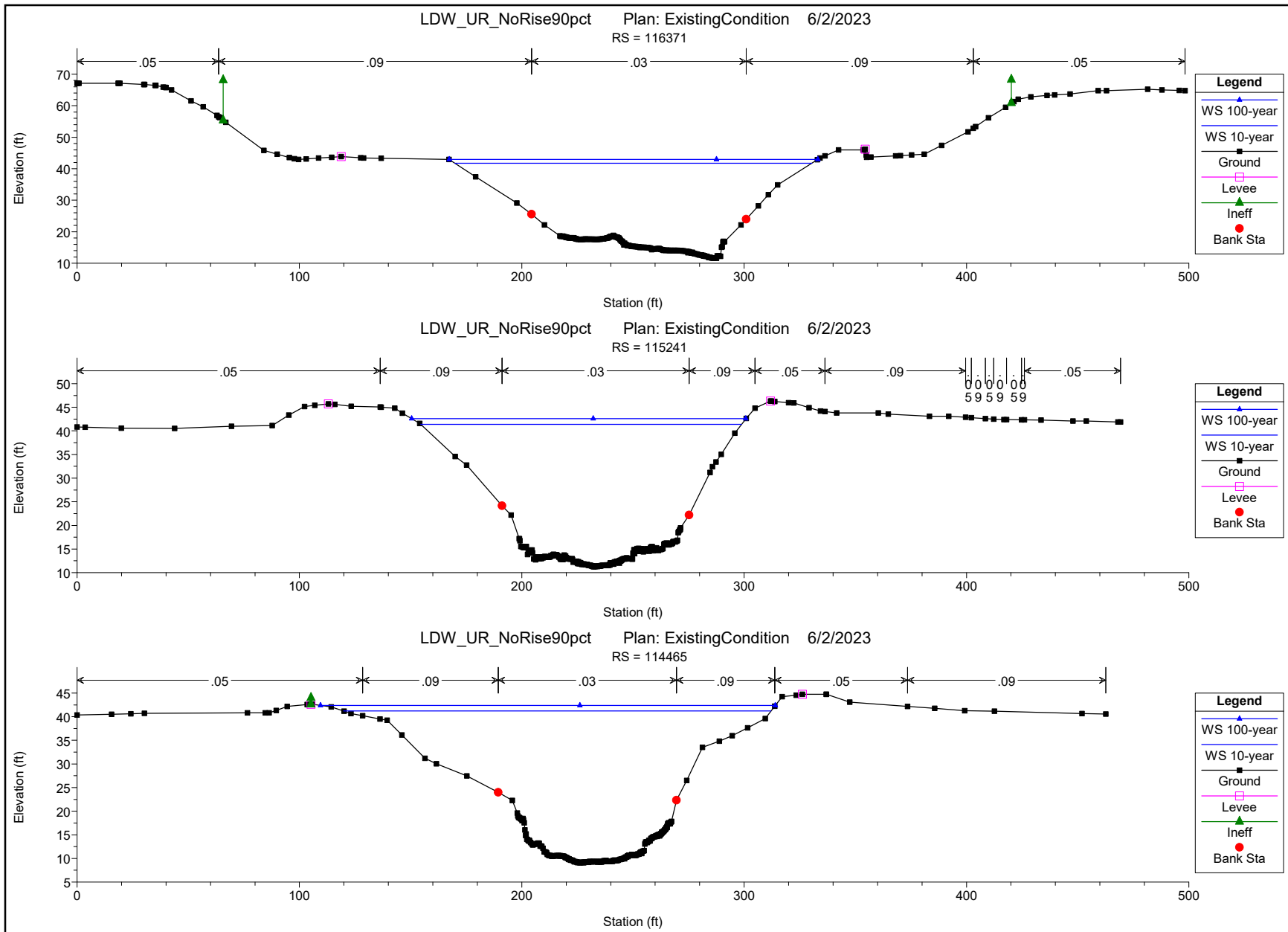


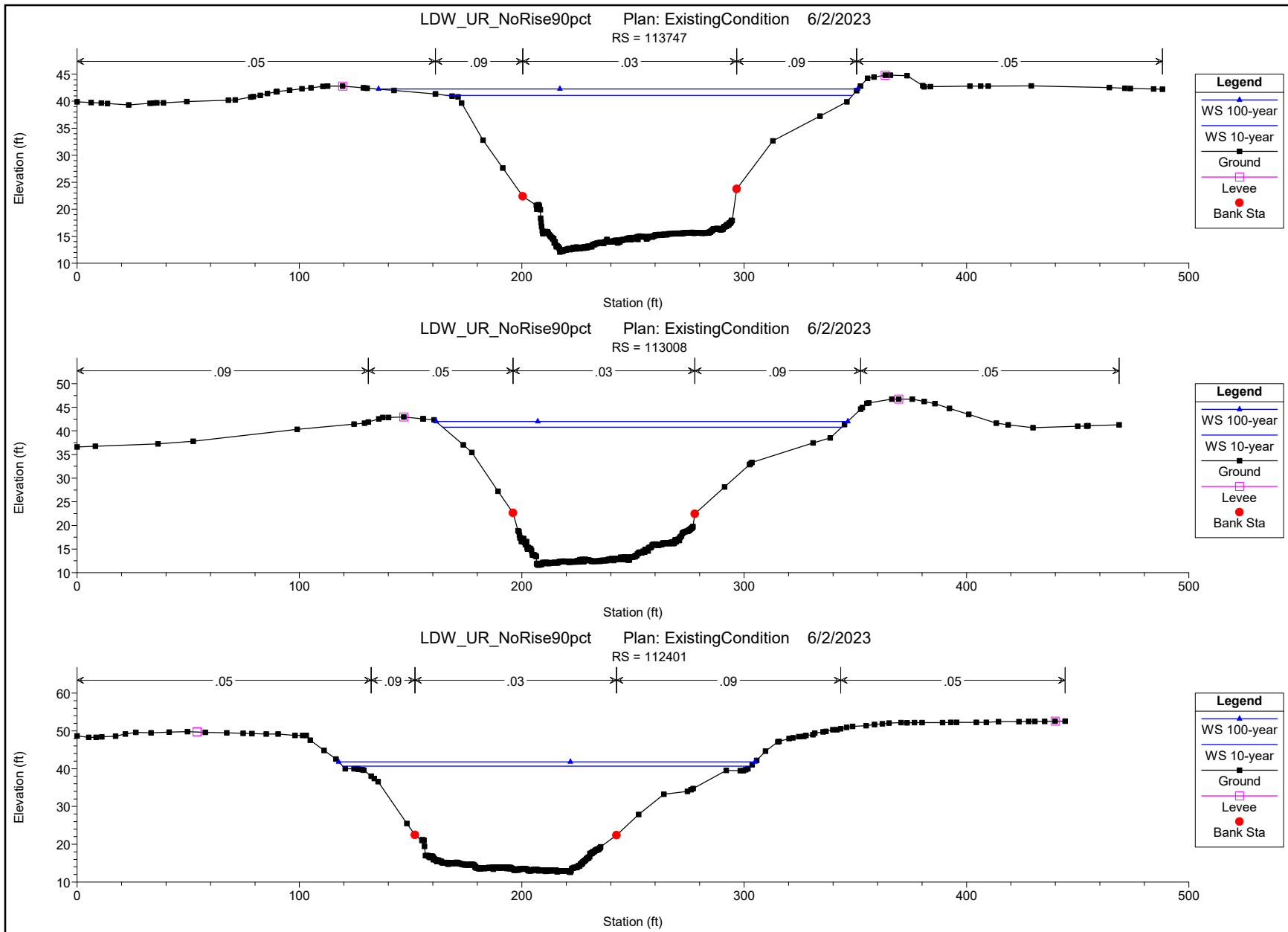


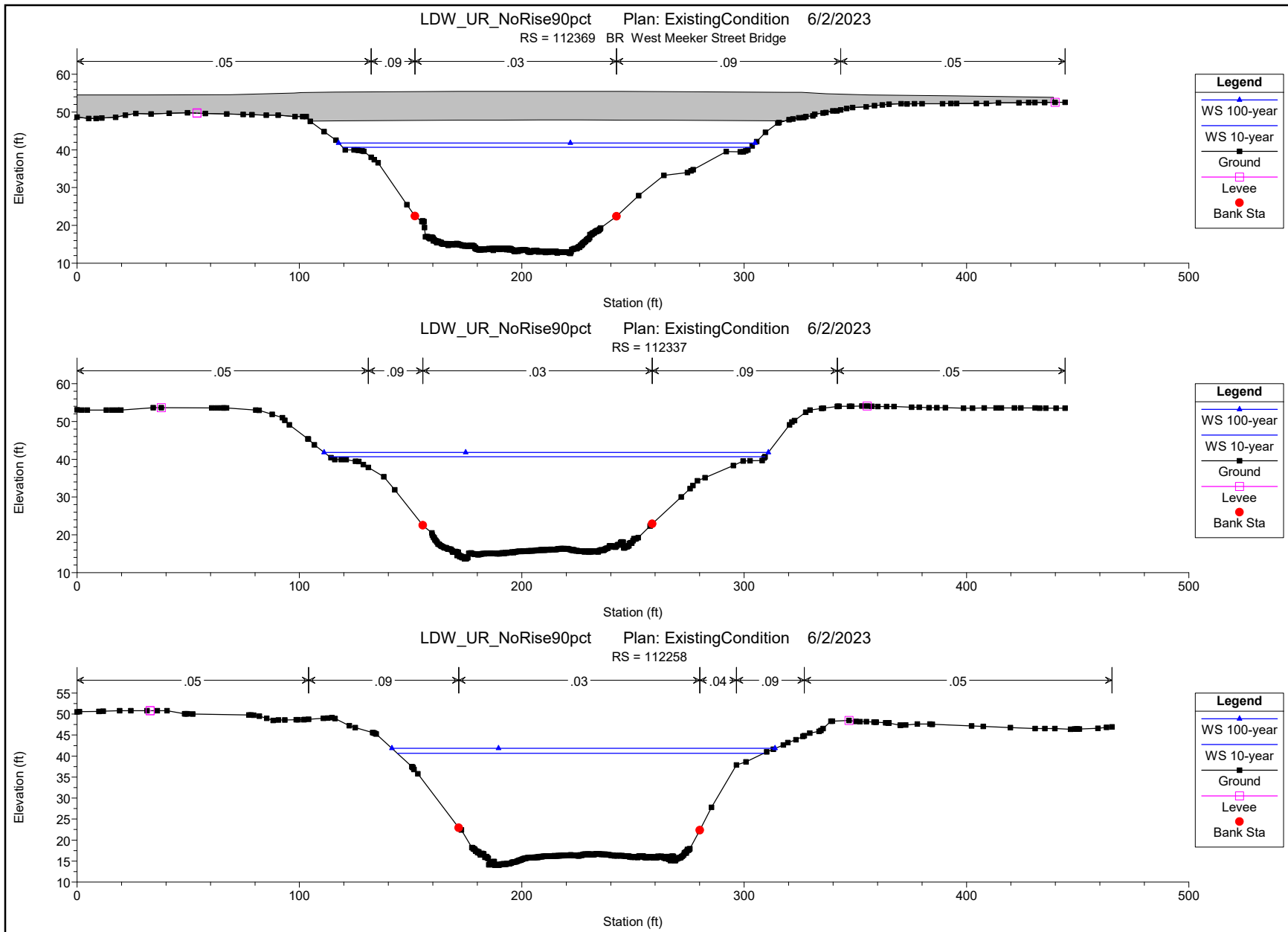


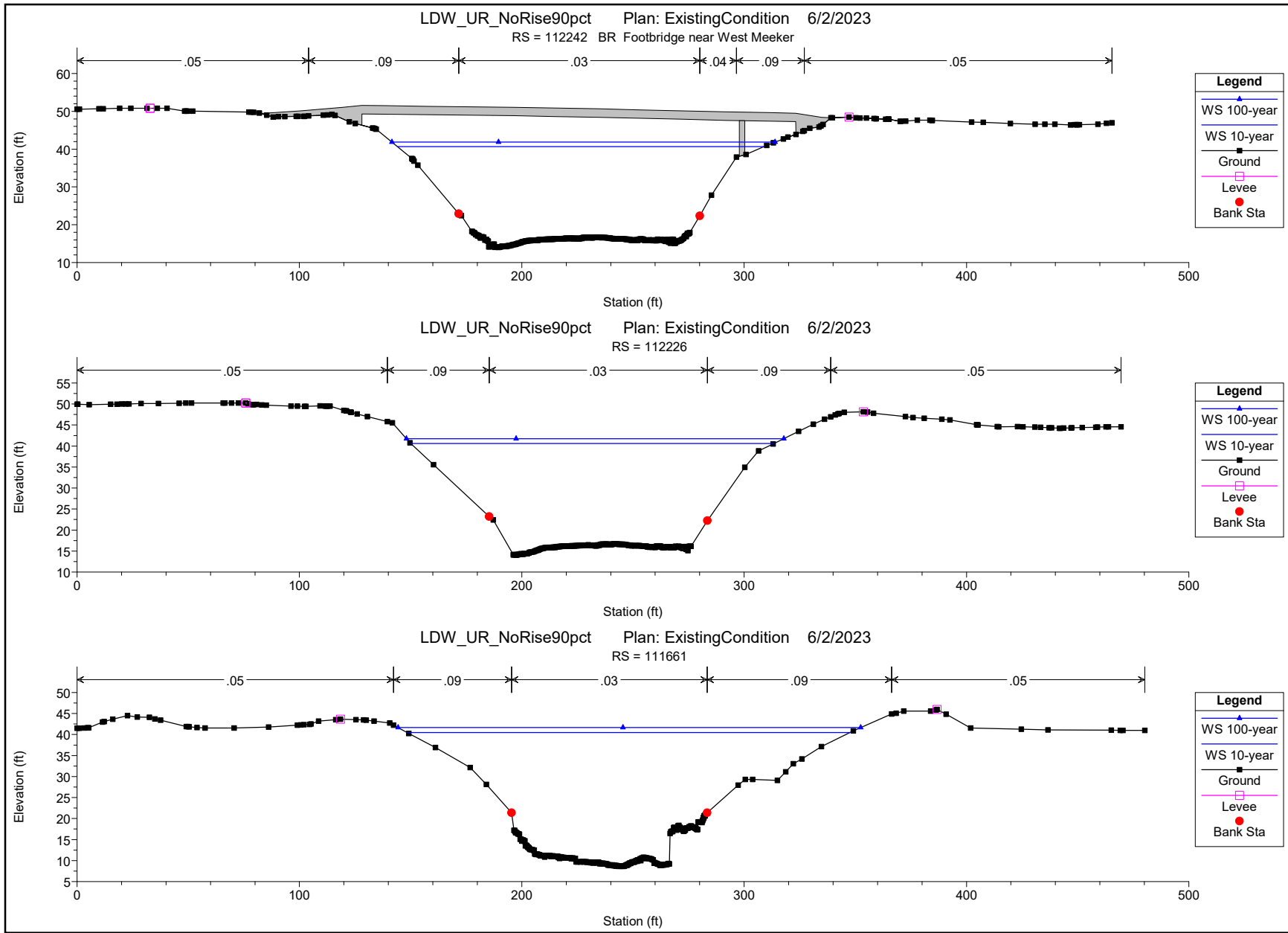


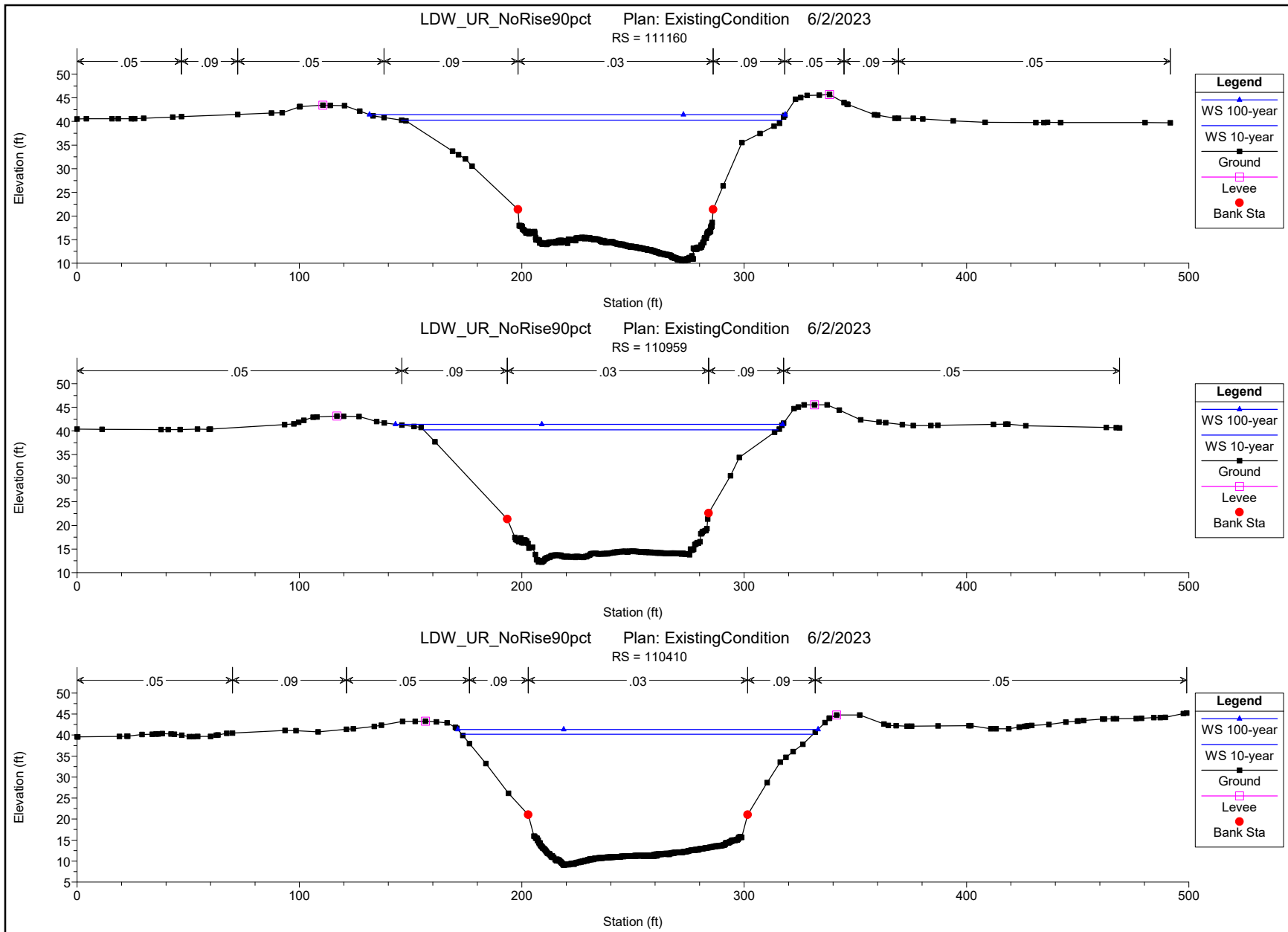


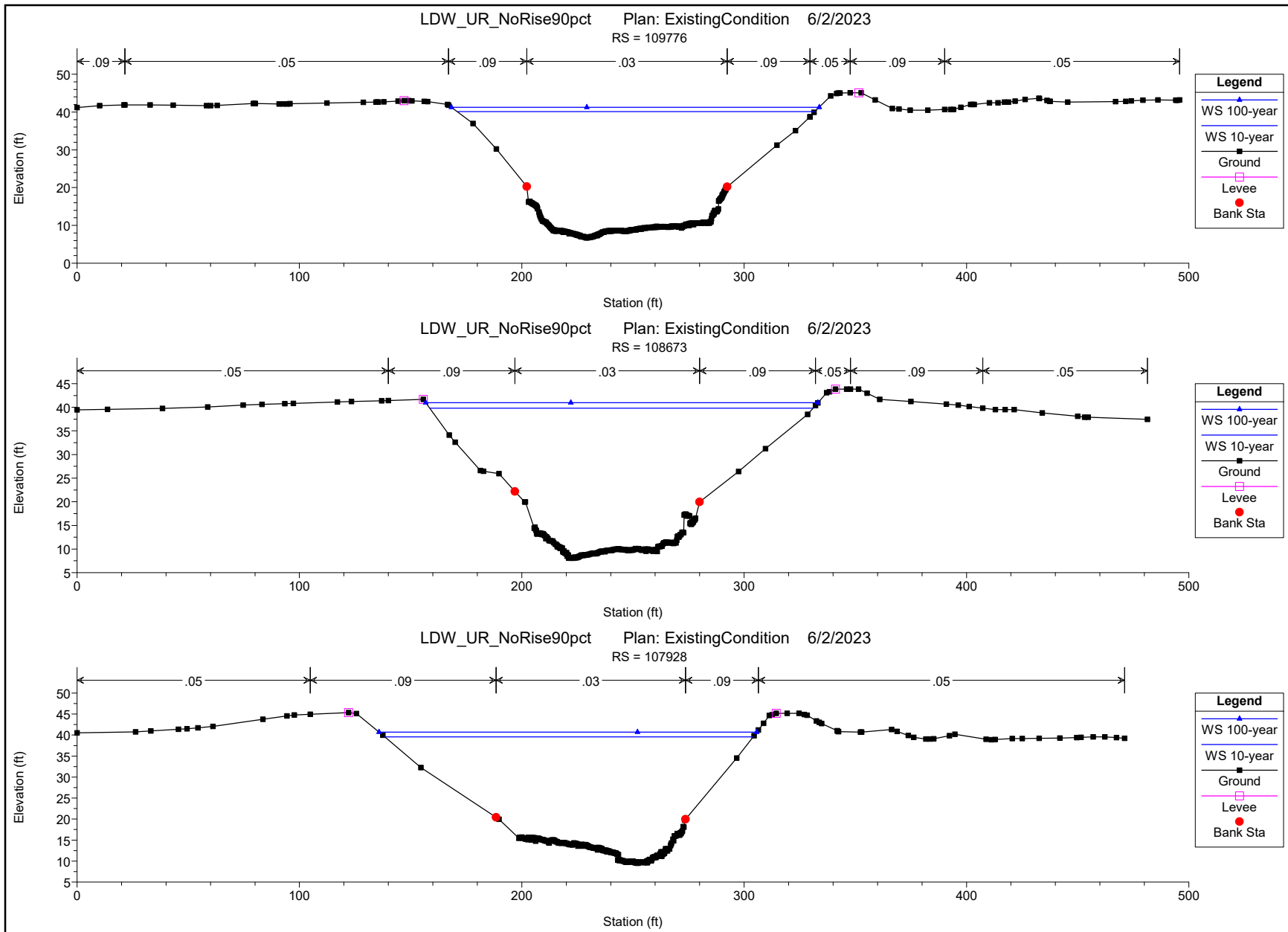


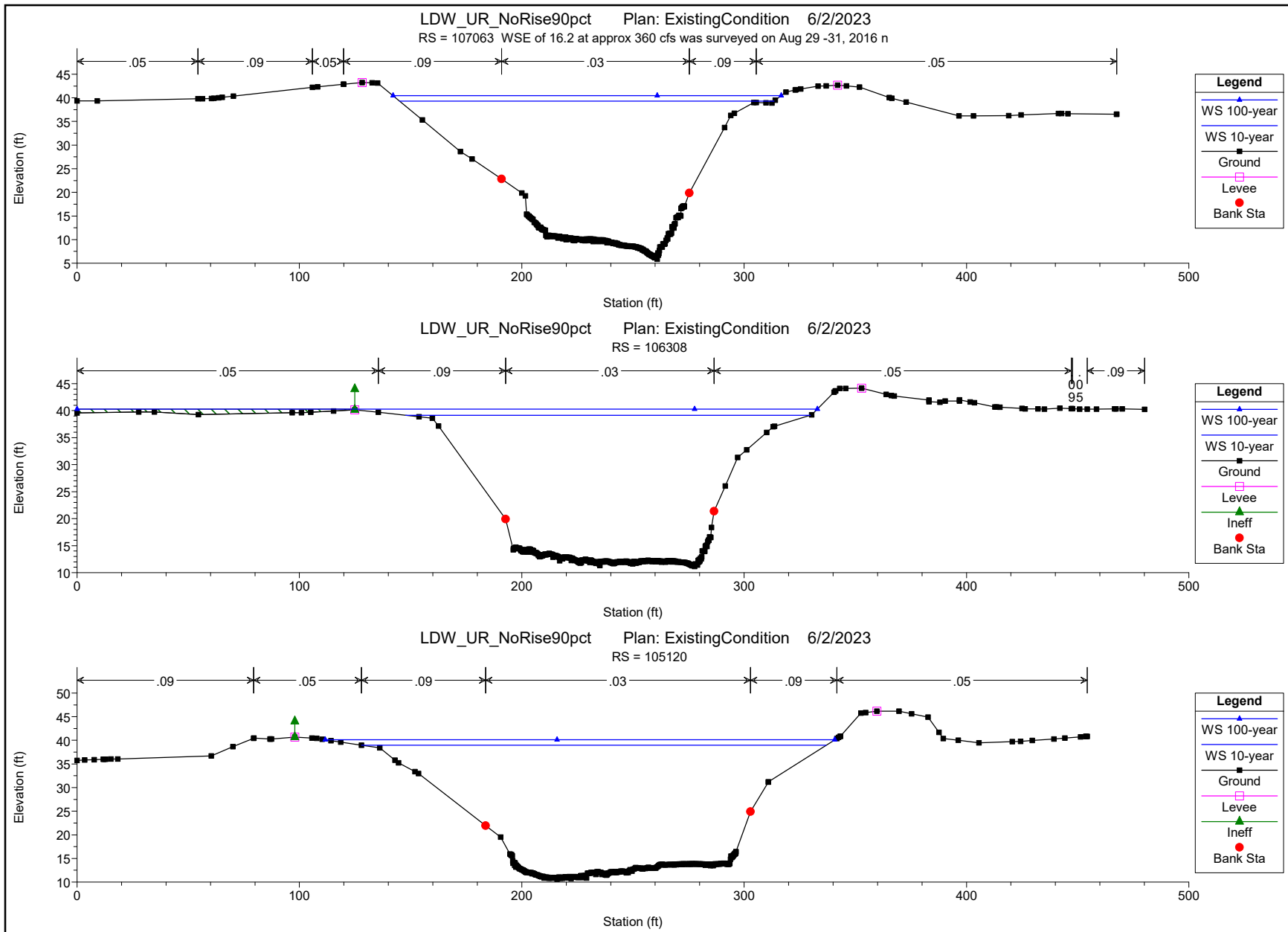


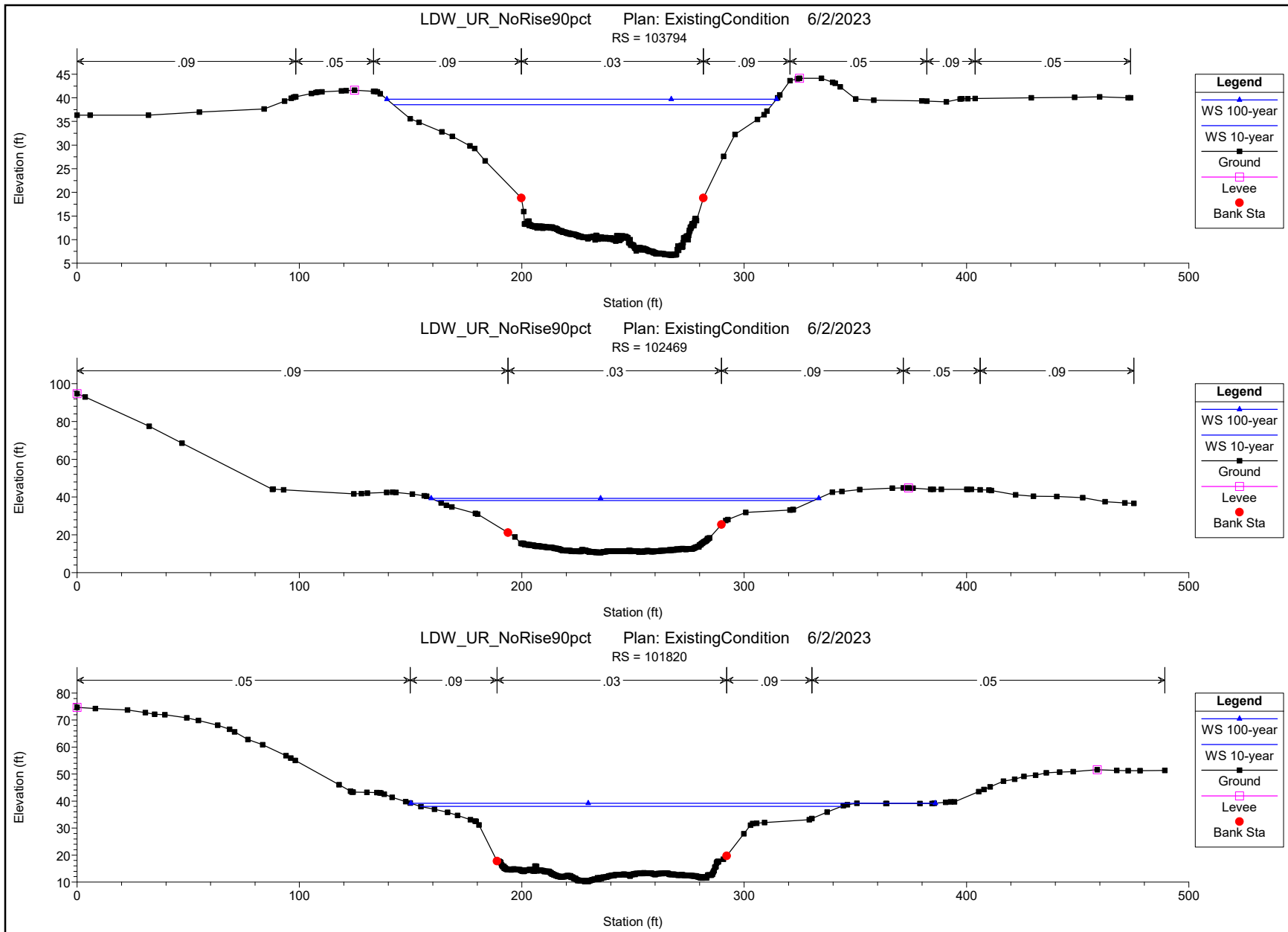


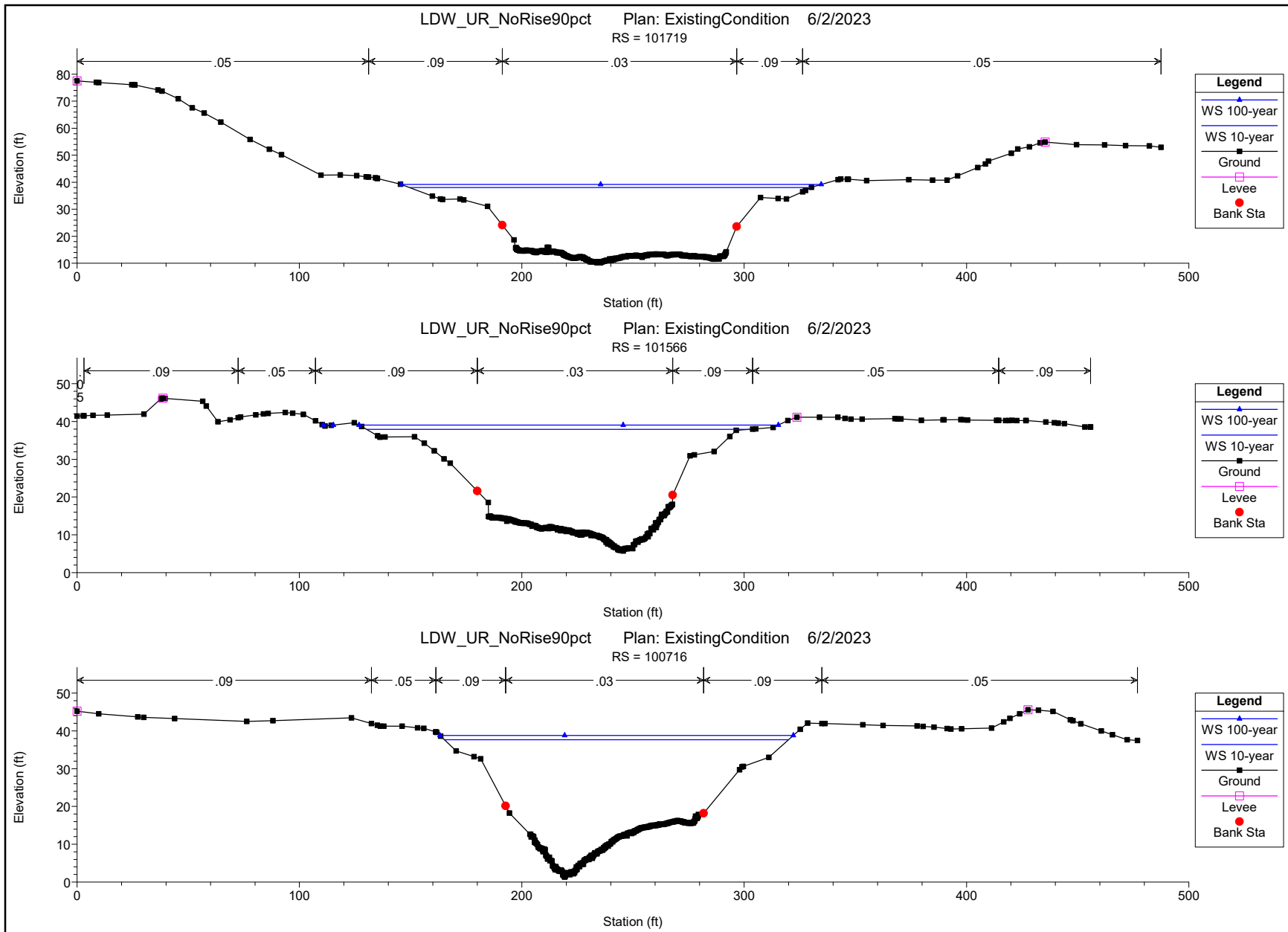












LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 101719

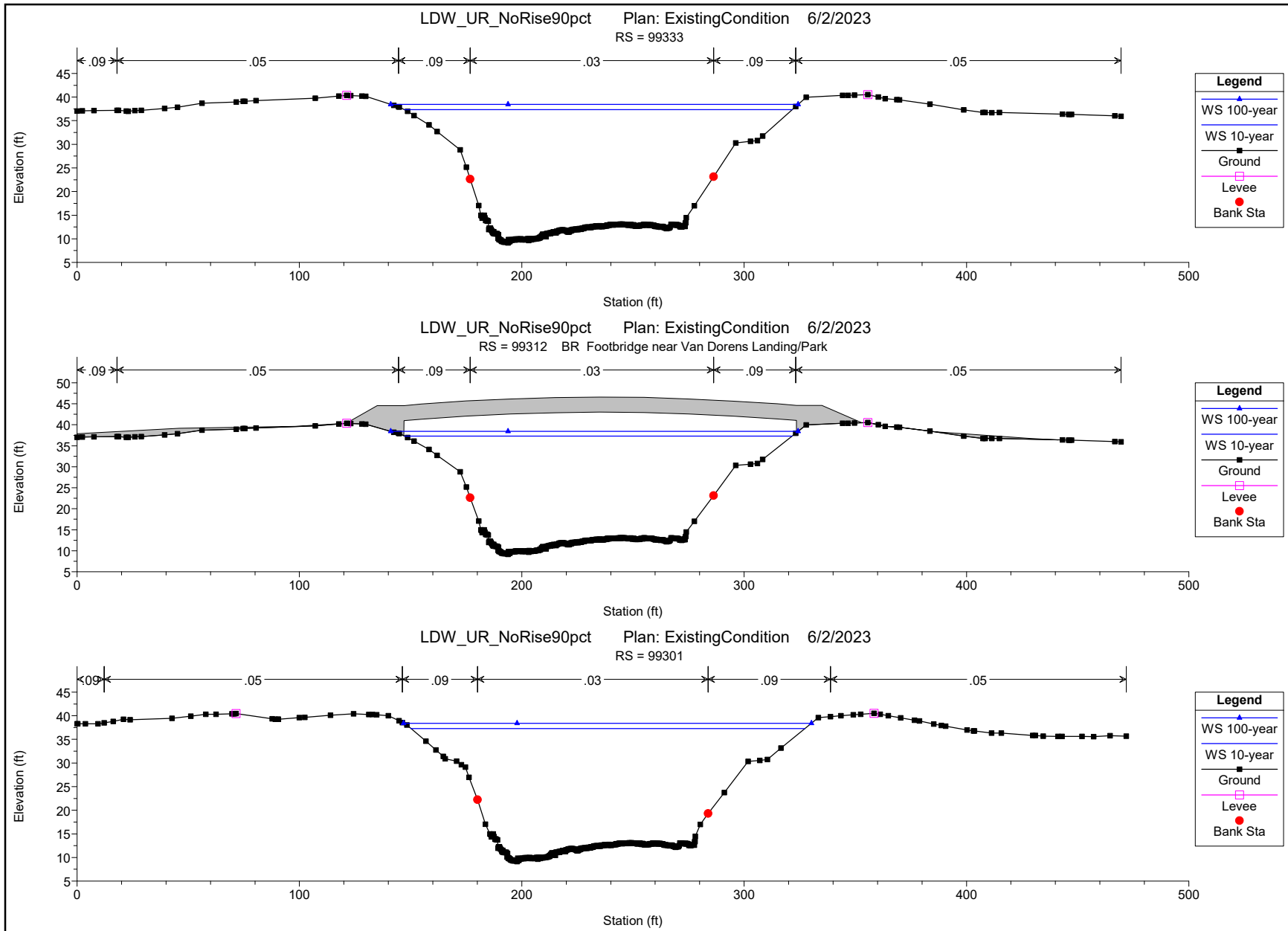
- Legend**
- WS 100-year
 - WS 10-year
 - Ground
 - Levee
 - Bank Sta

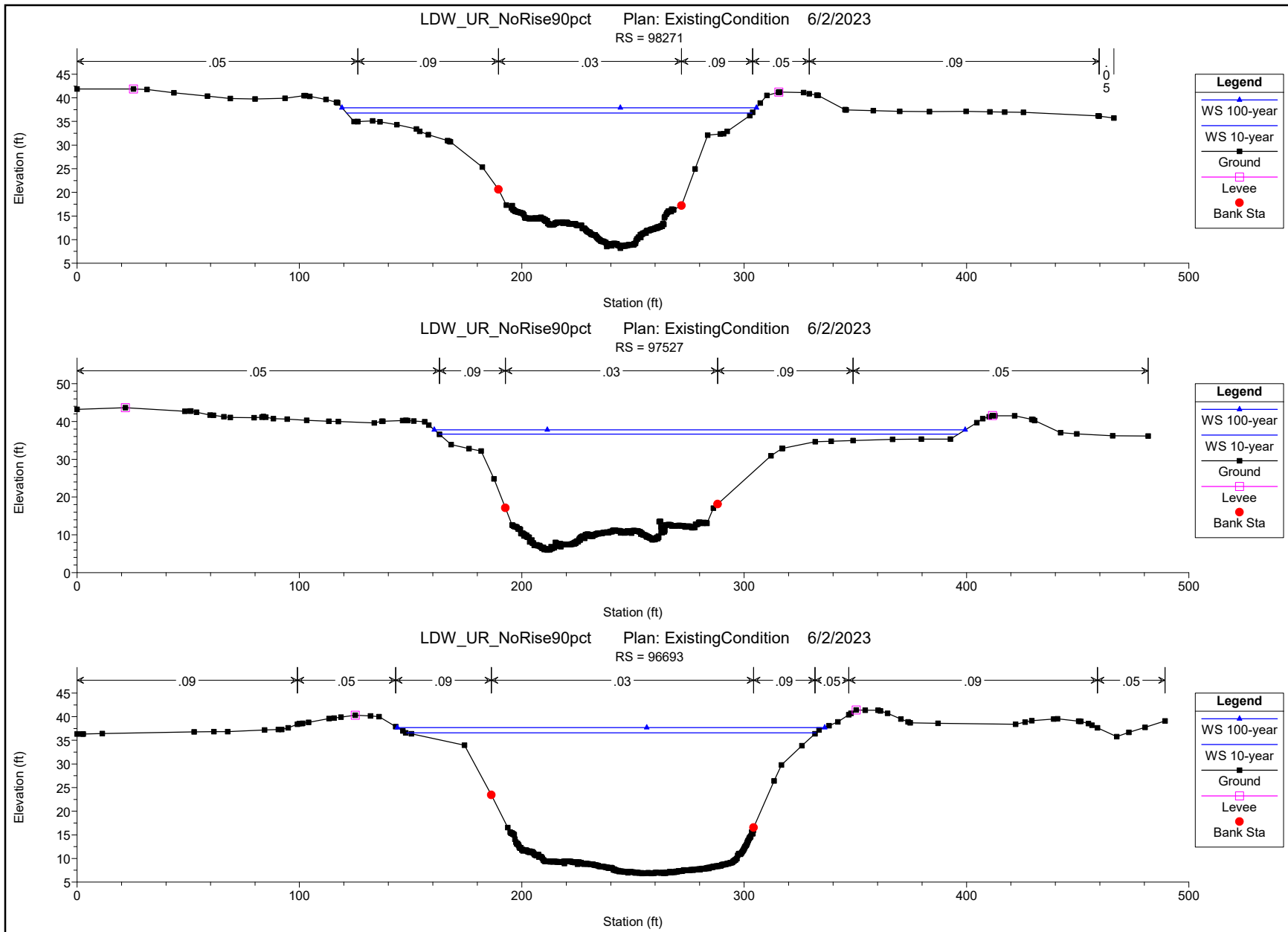
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 101566

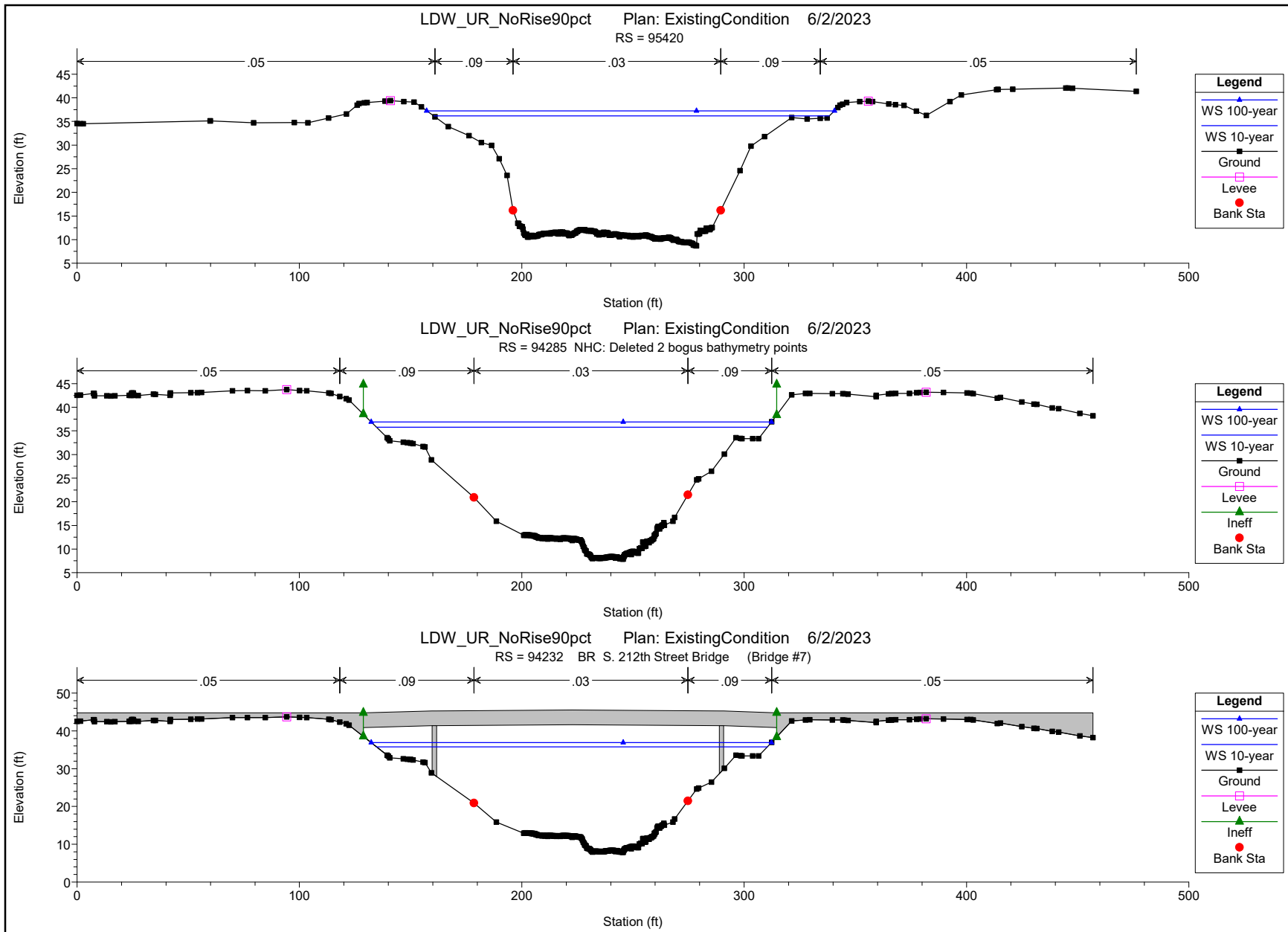
- Legend**
- WS 100-year
 - WS 10-year
 - Ground
 - Levee
 - Bank Sta

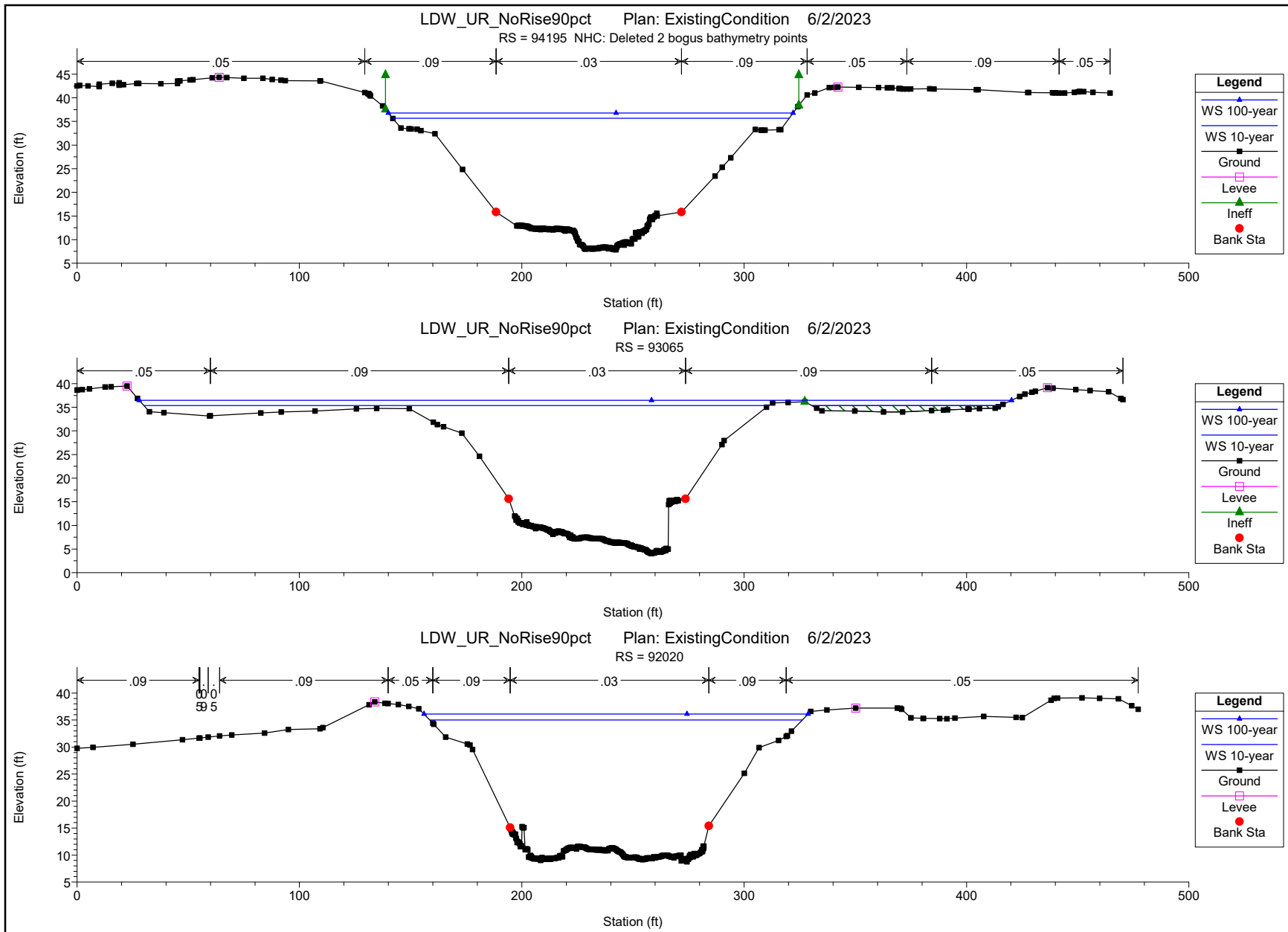
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
RS = 100716

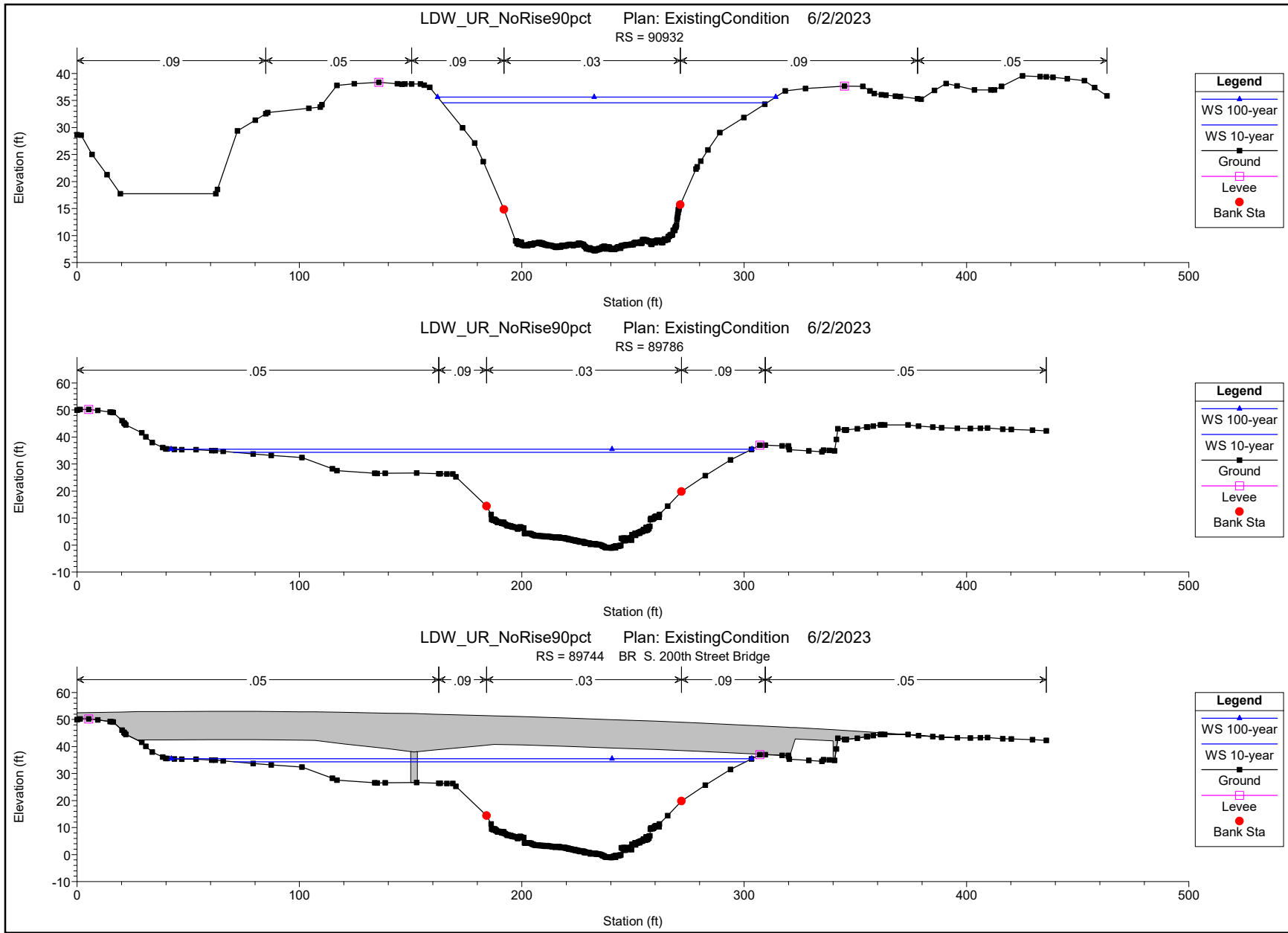
- Legend**
- WS 100-year
 - WS 10-year
 - Ground
 - Levee
 - Bank Sta

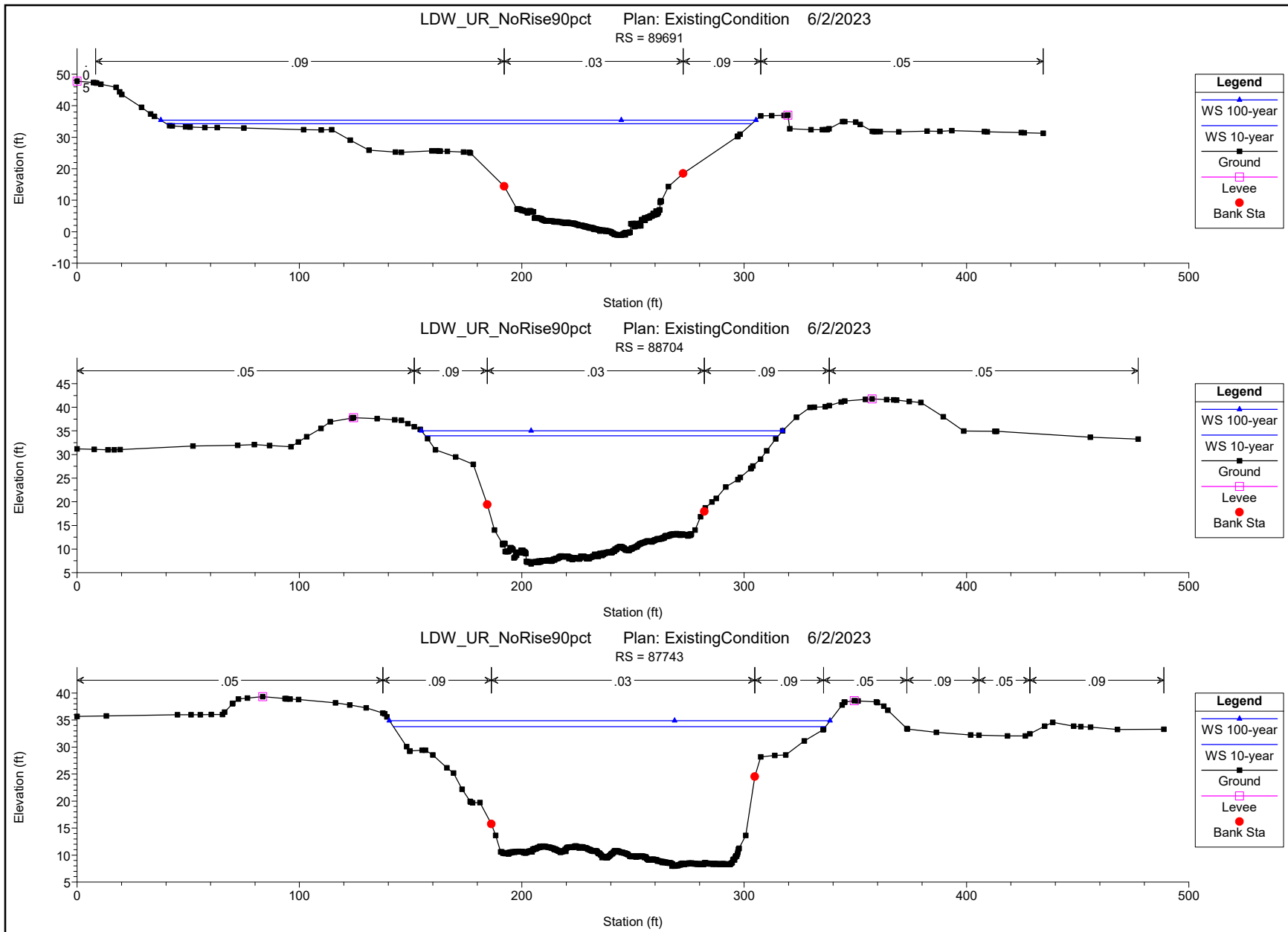


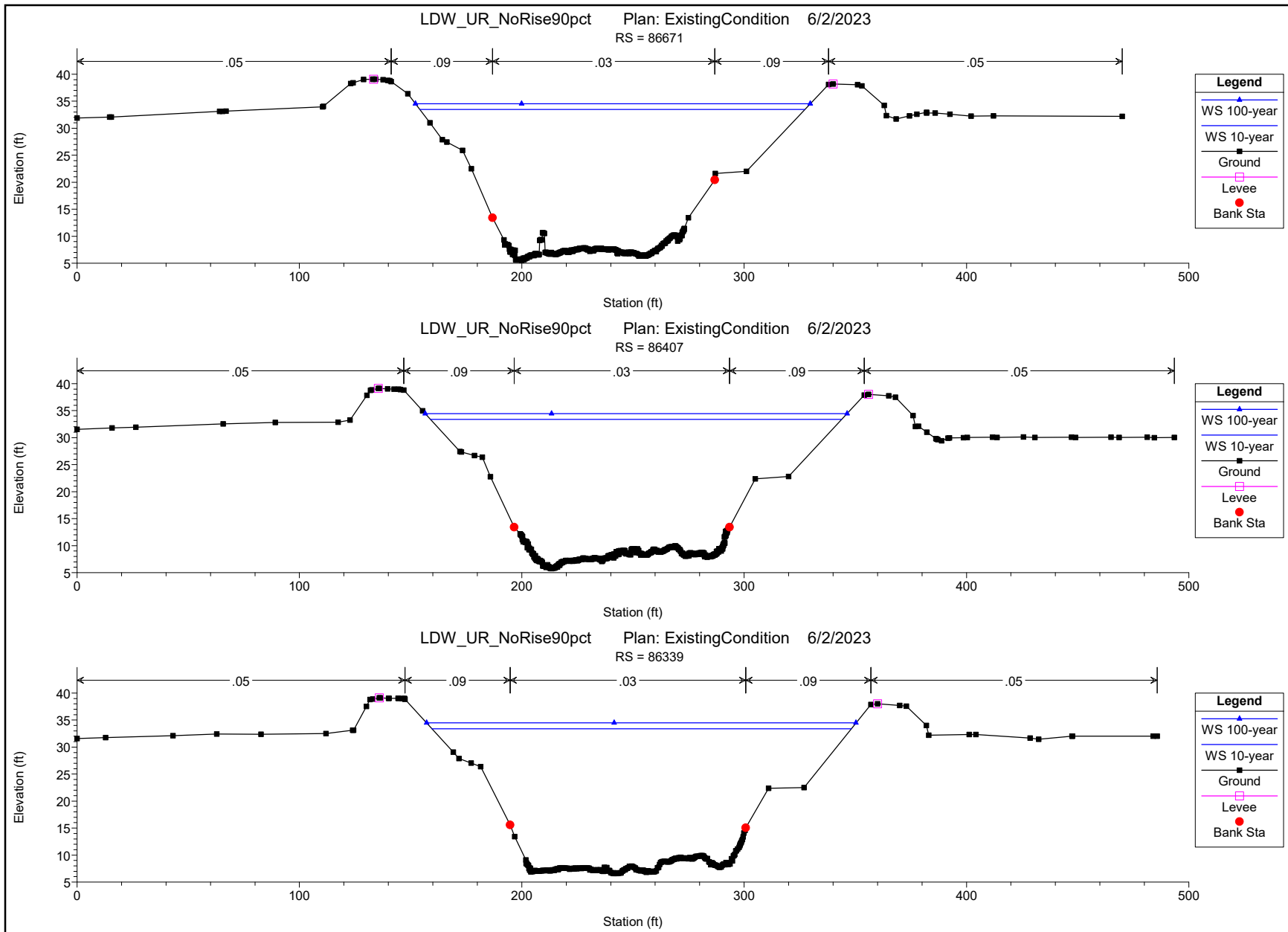


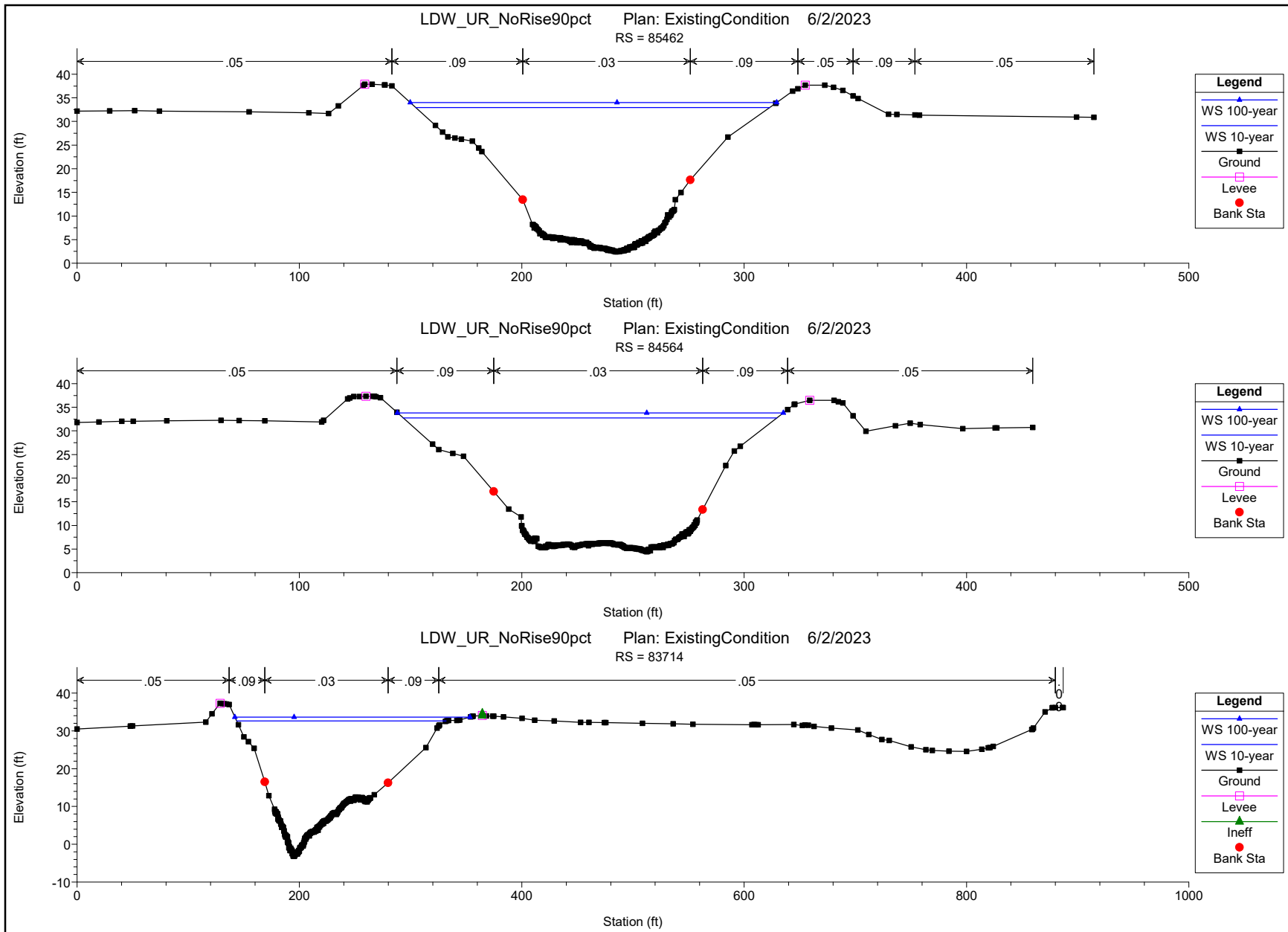


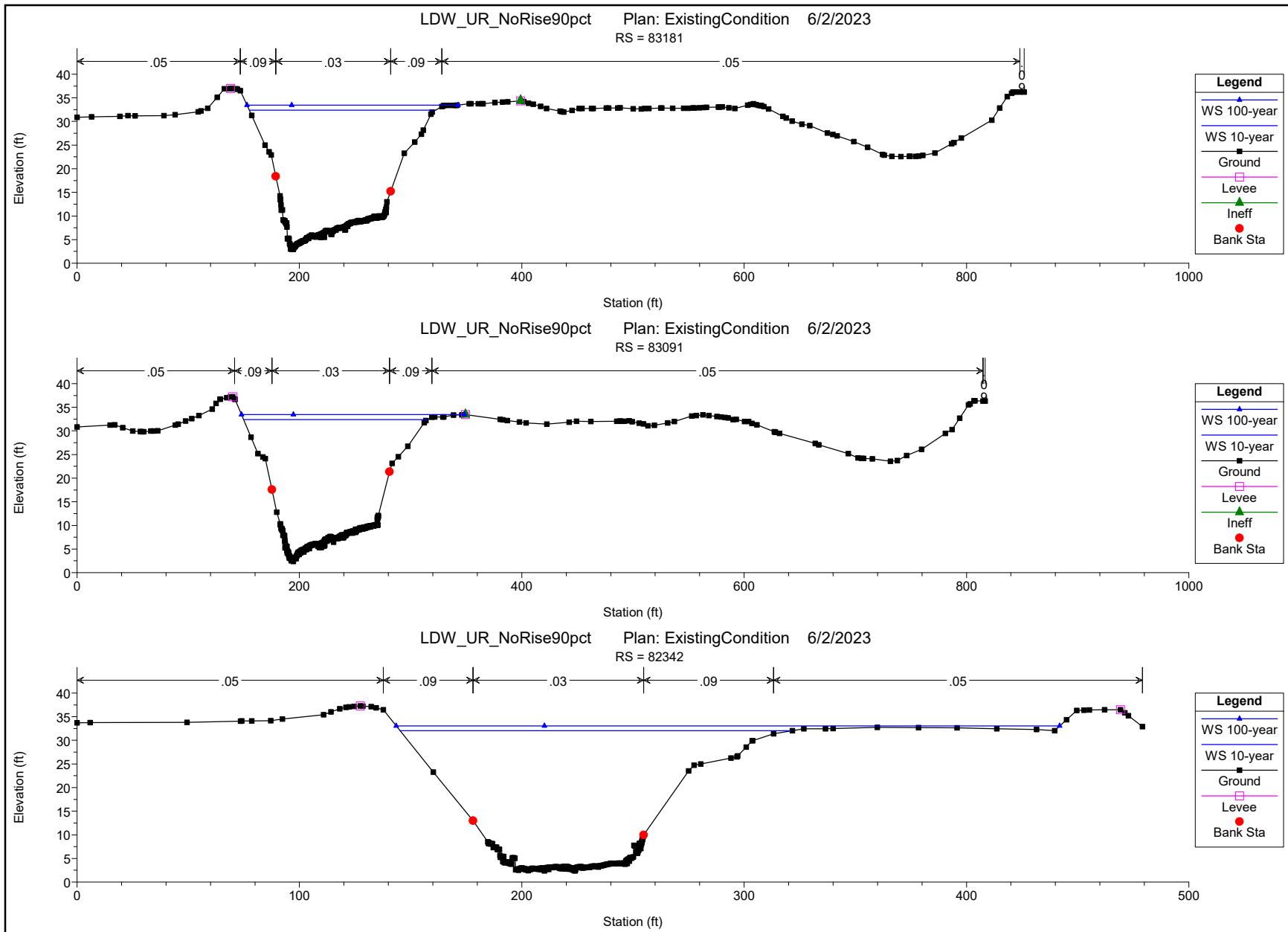


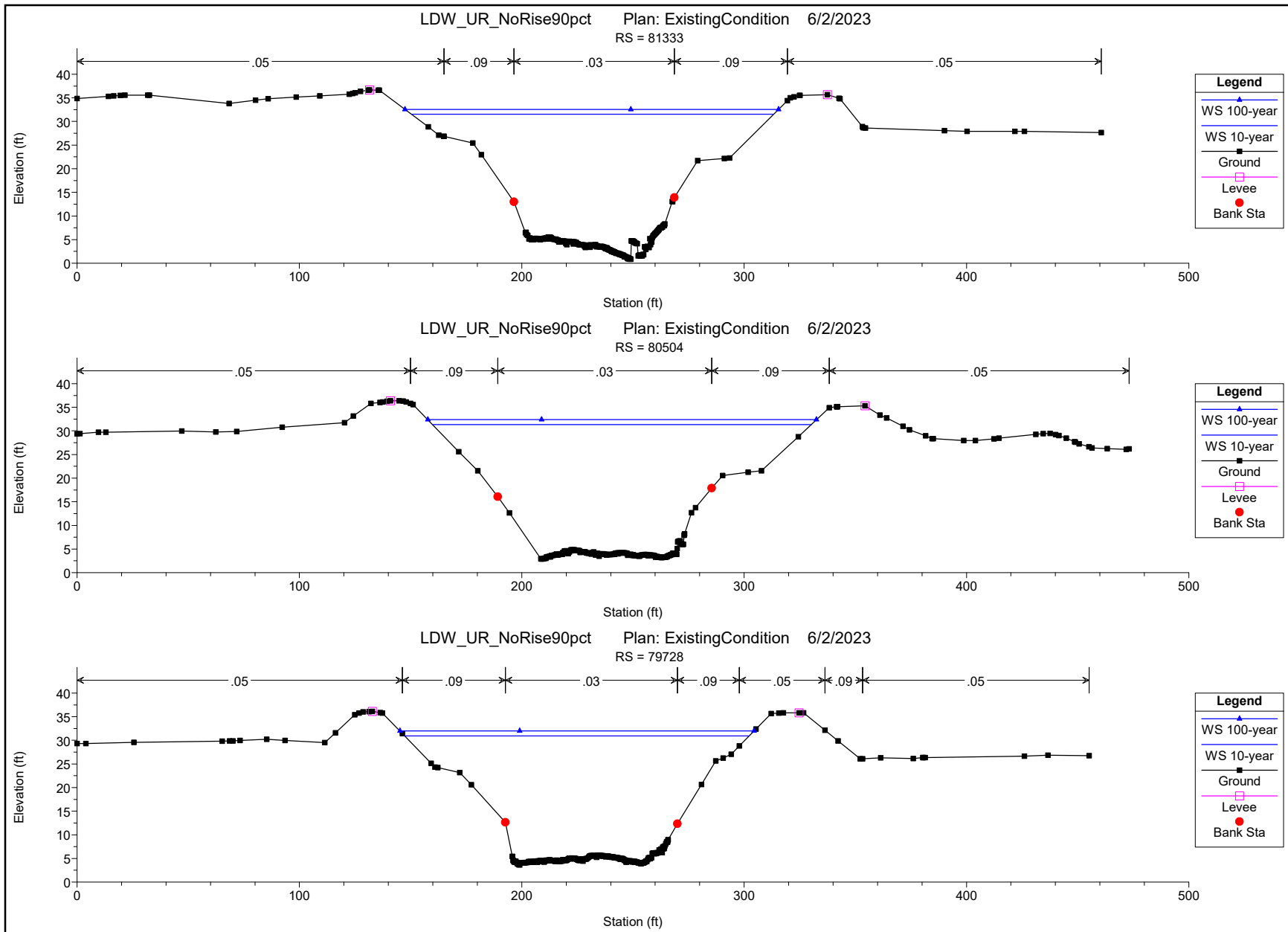


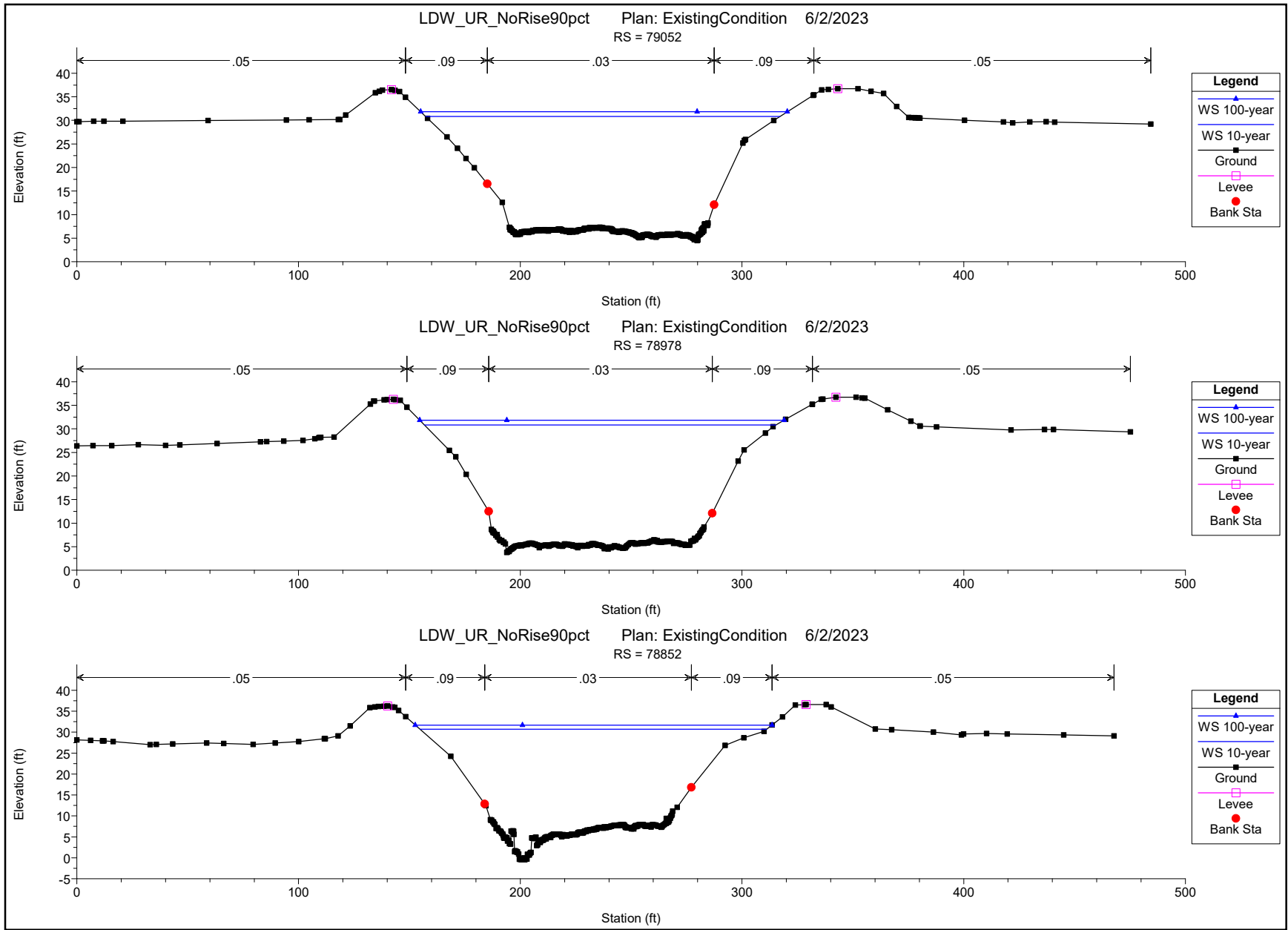


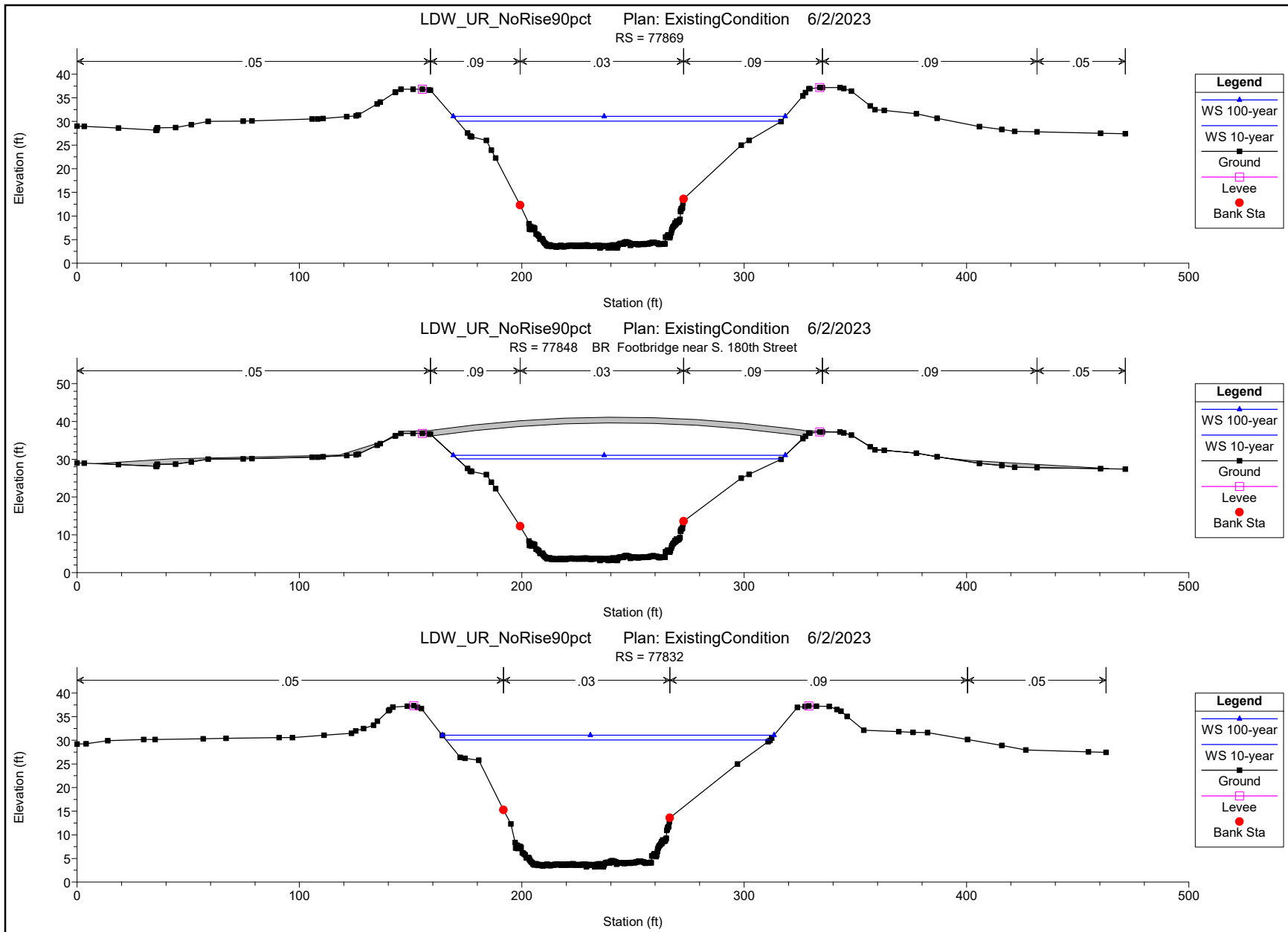


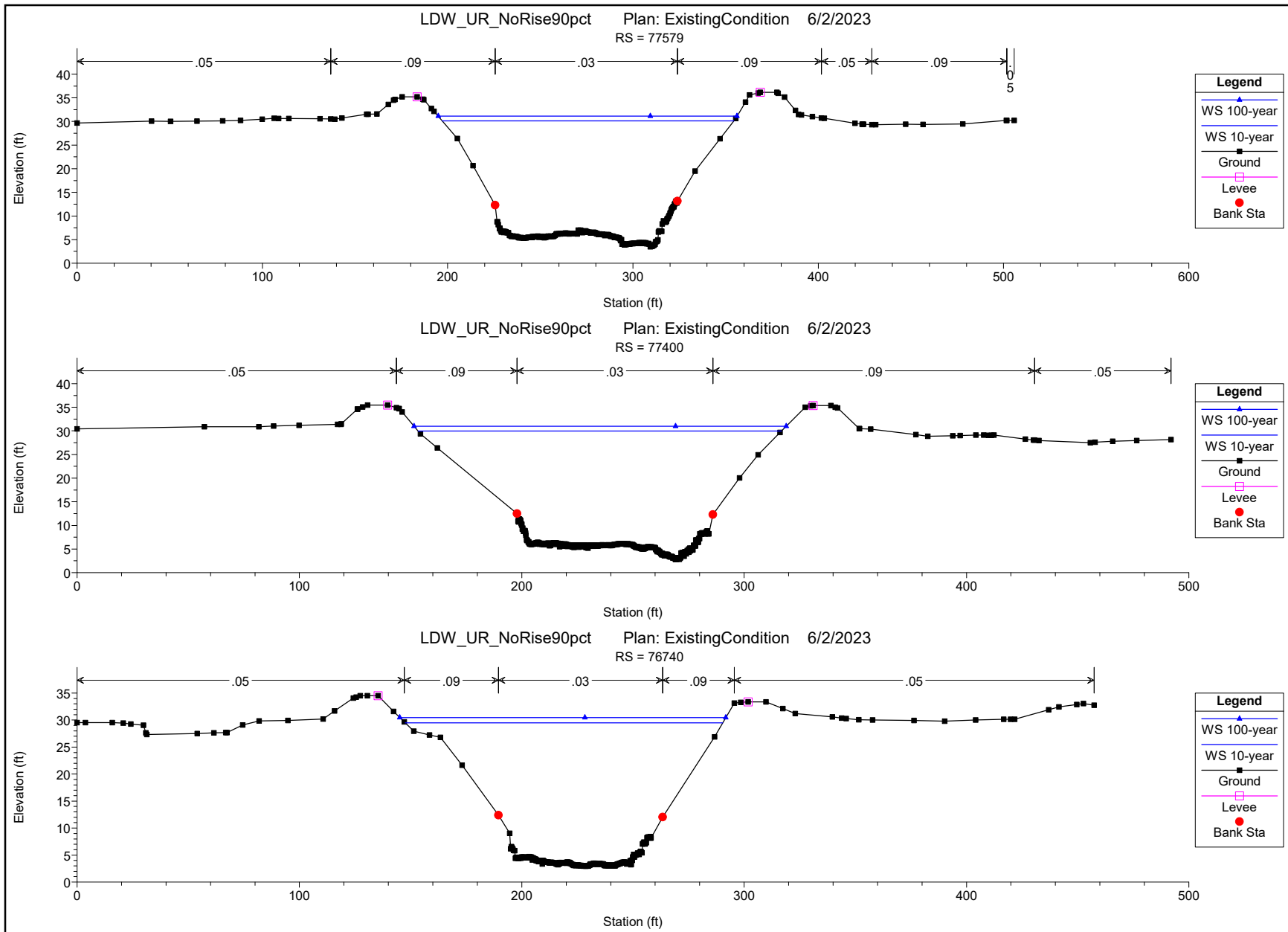


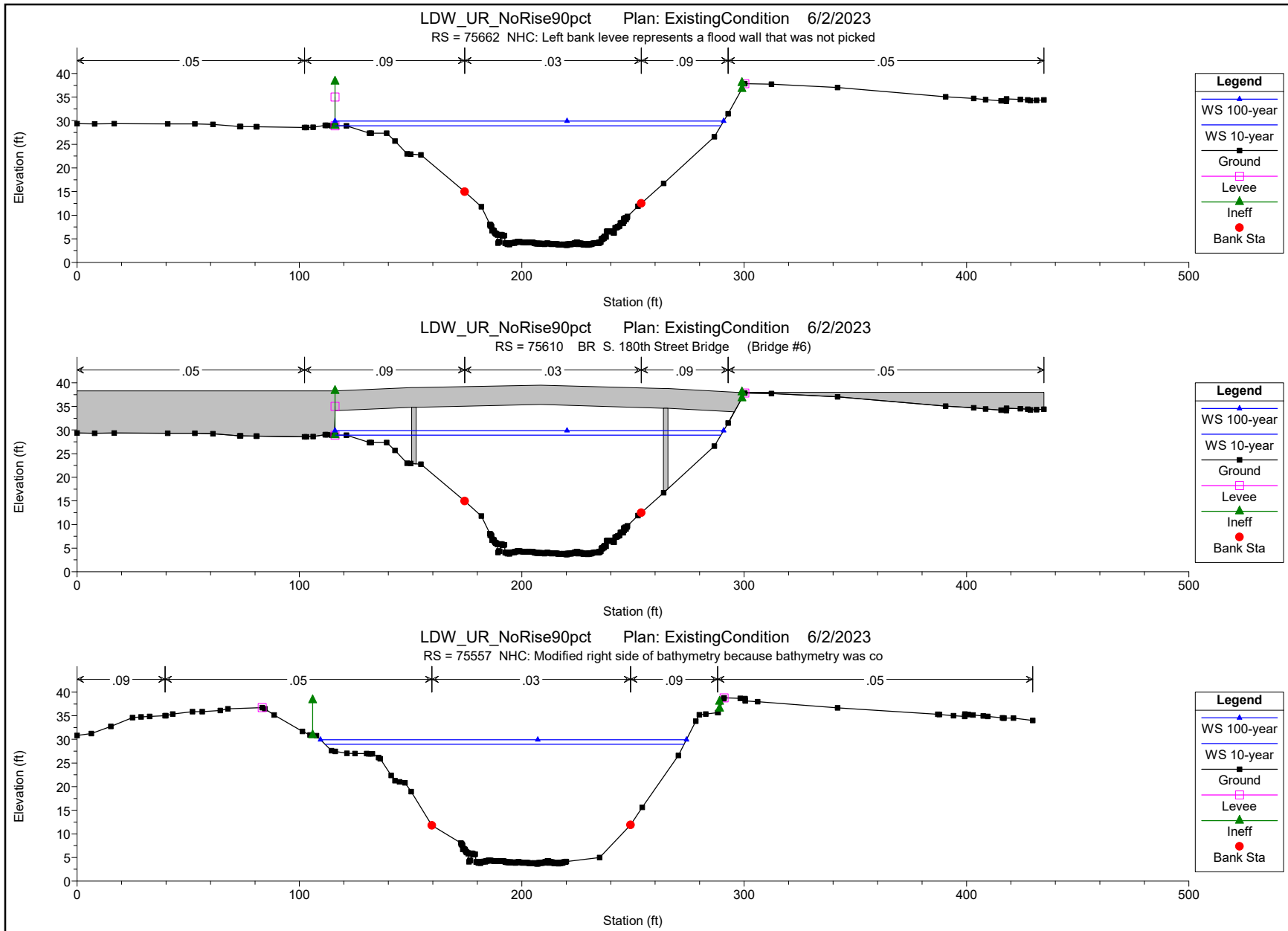


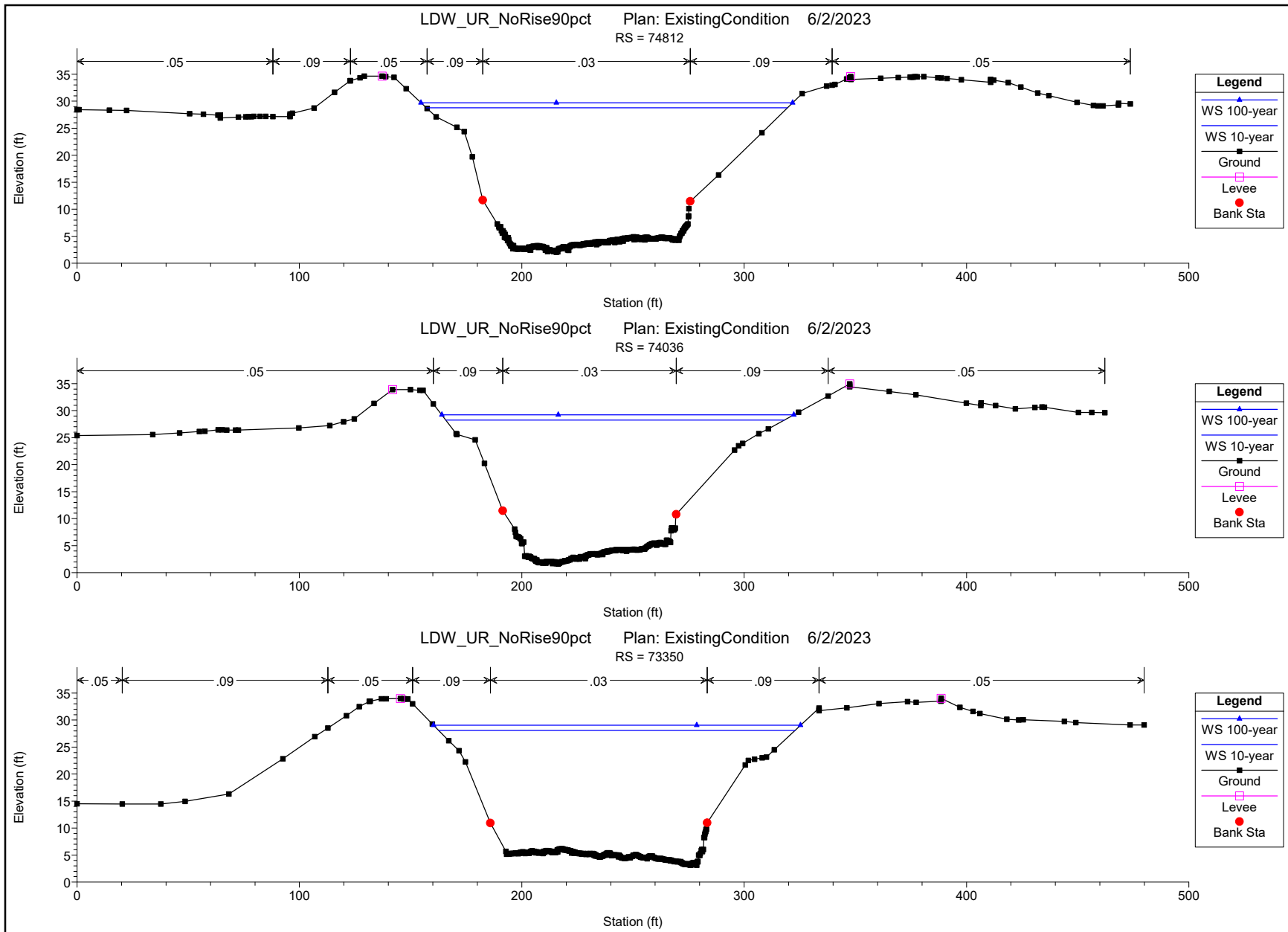


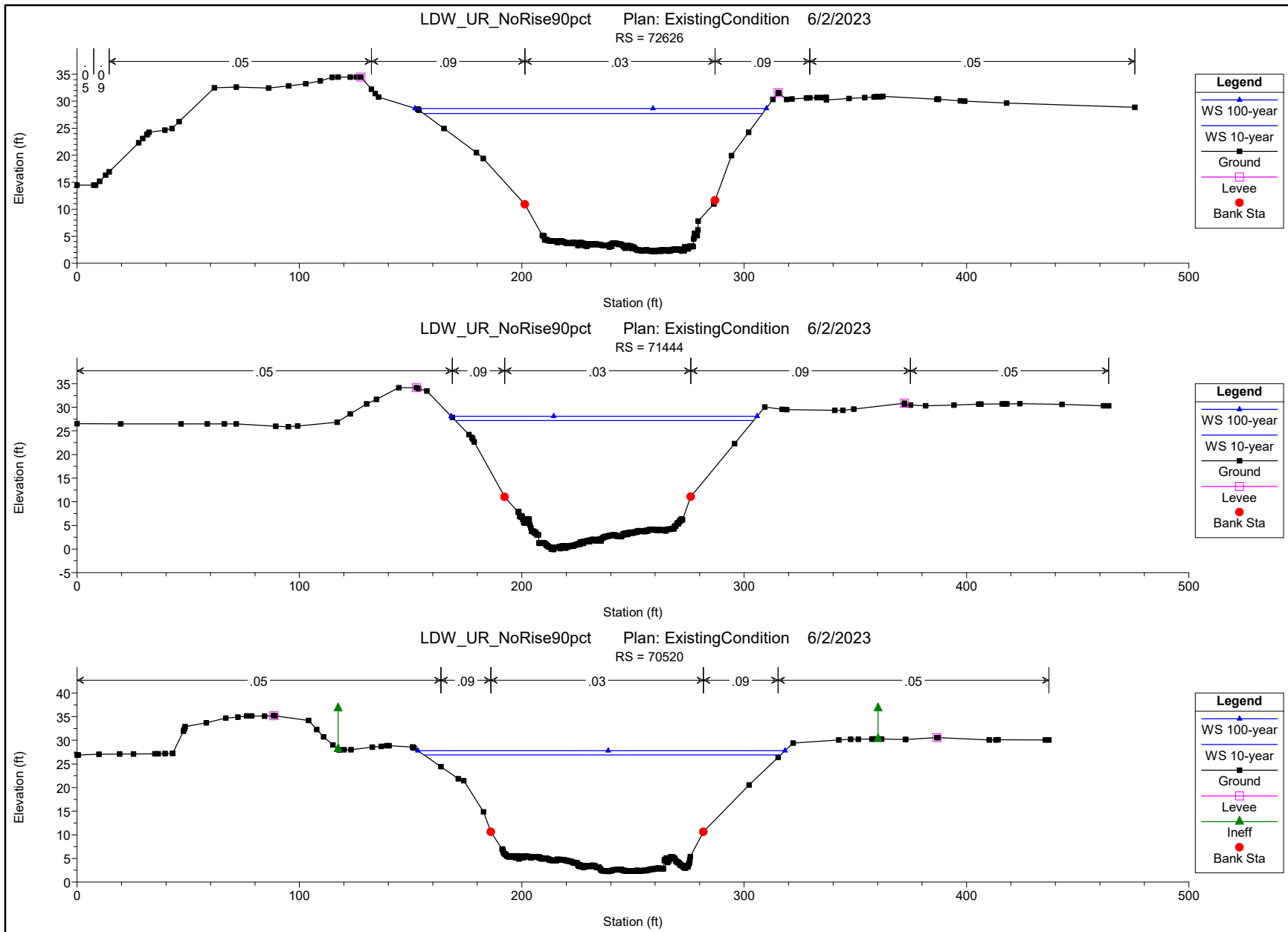


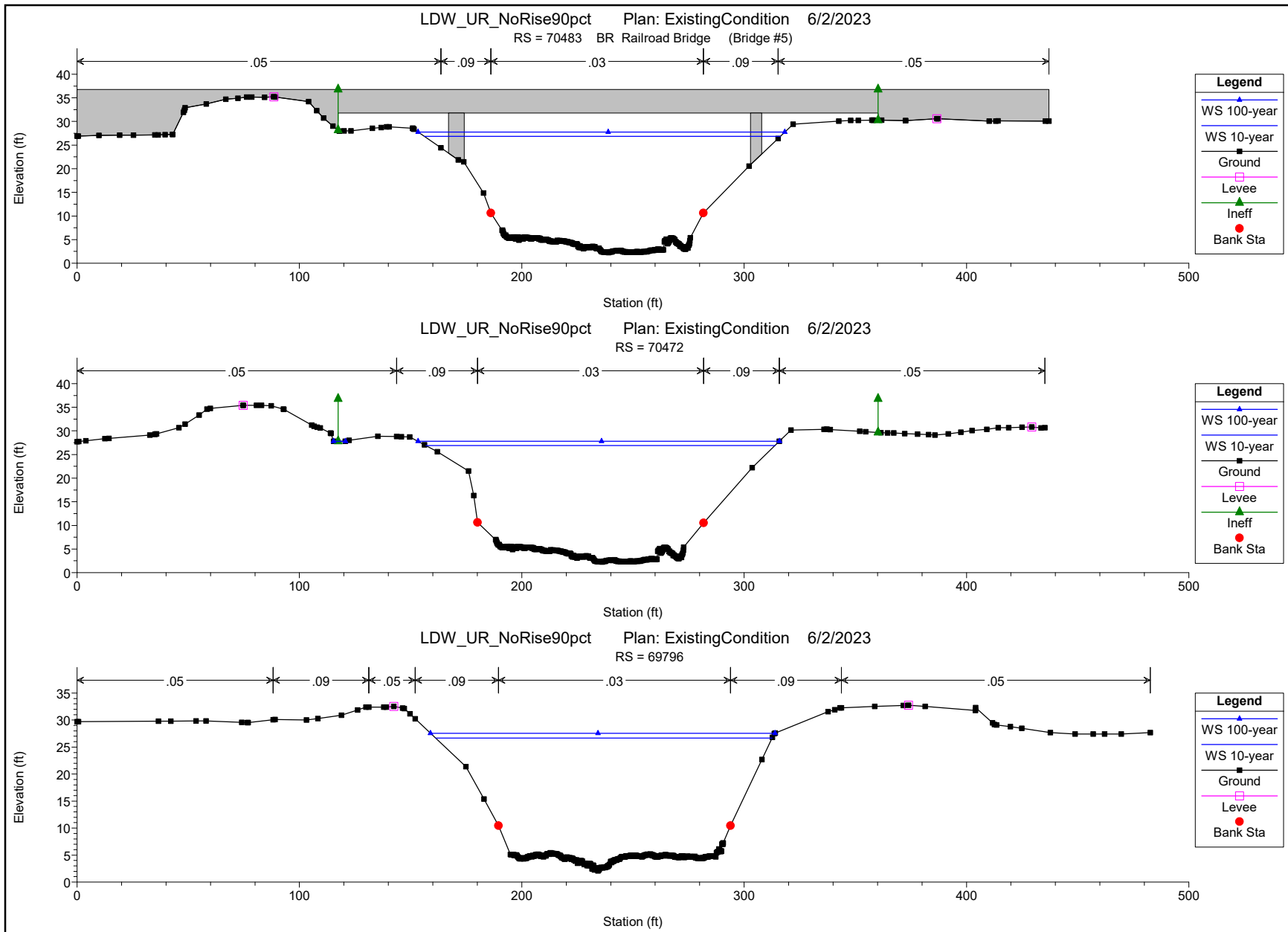


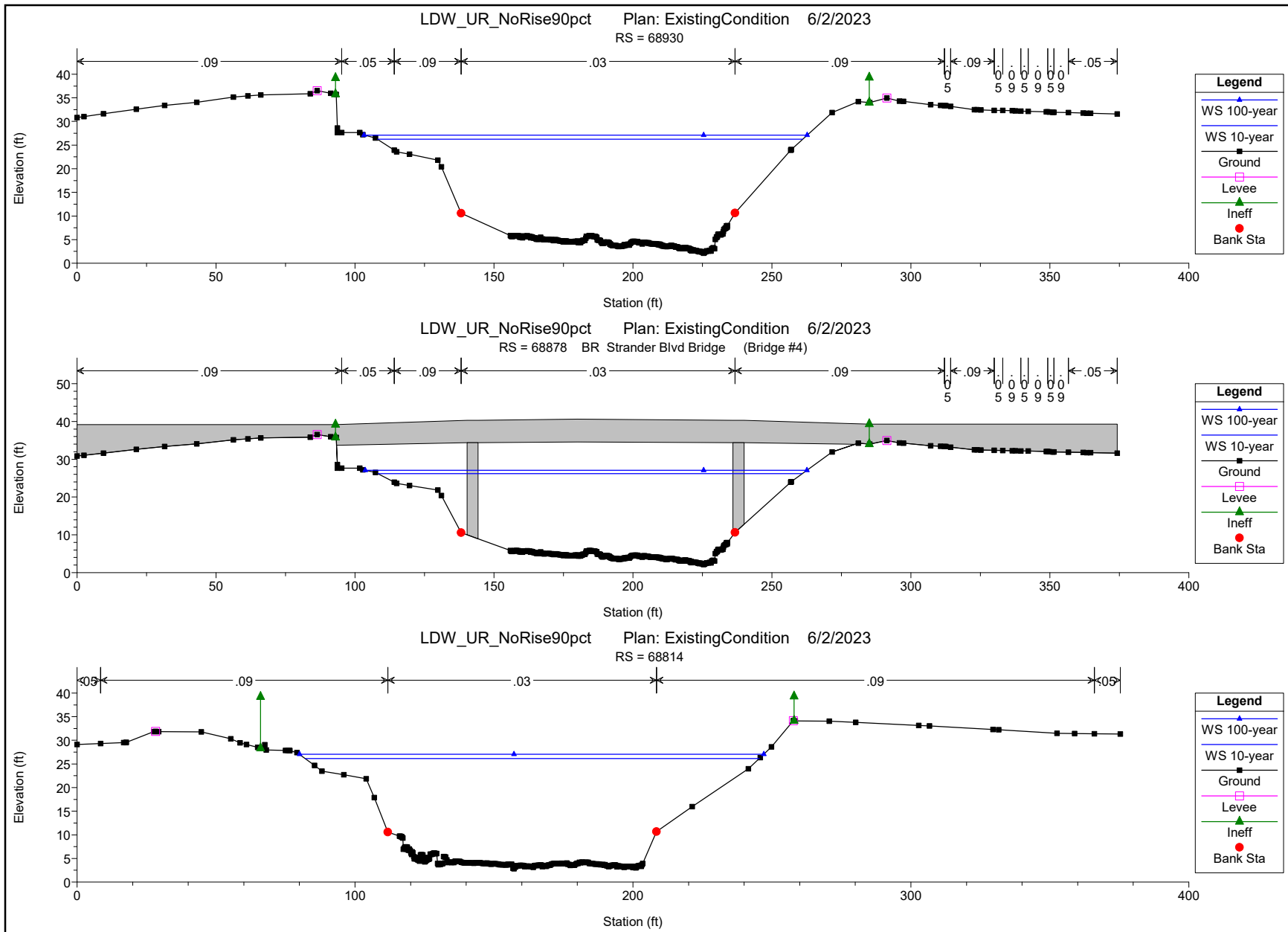


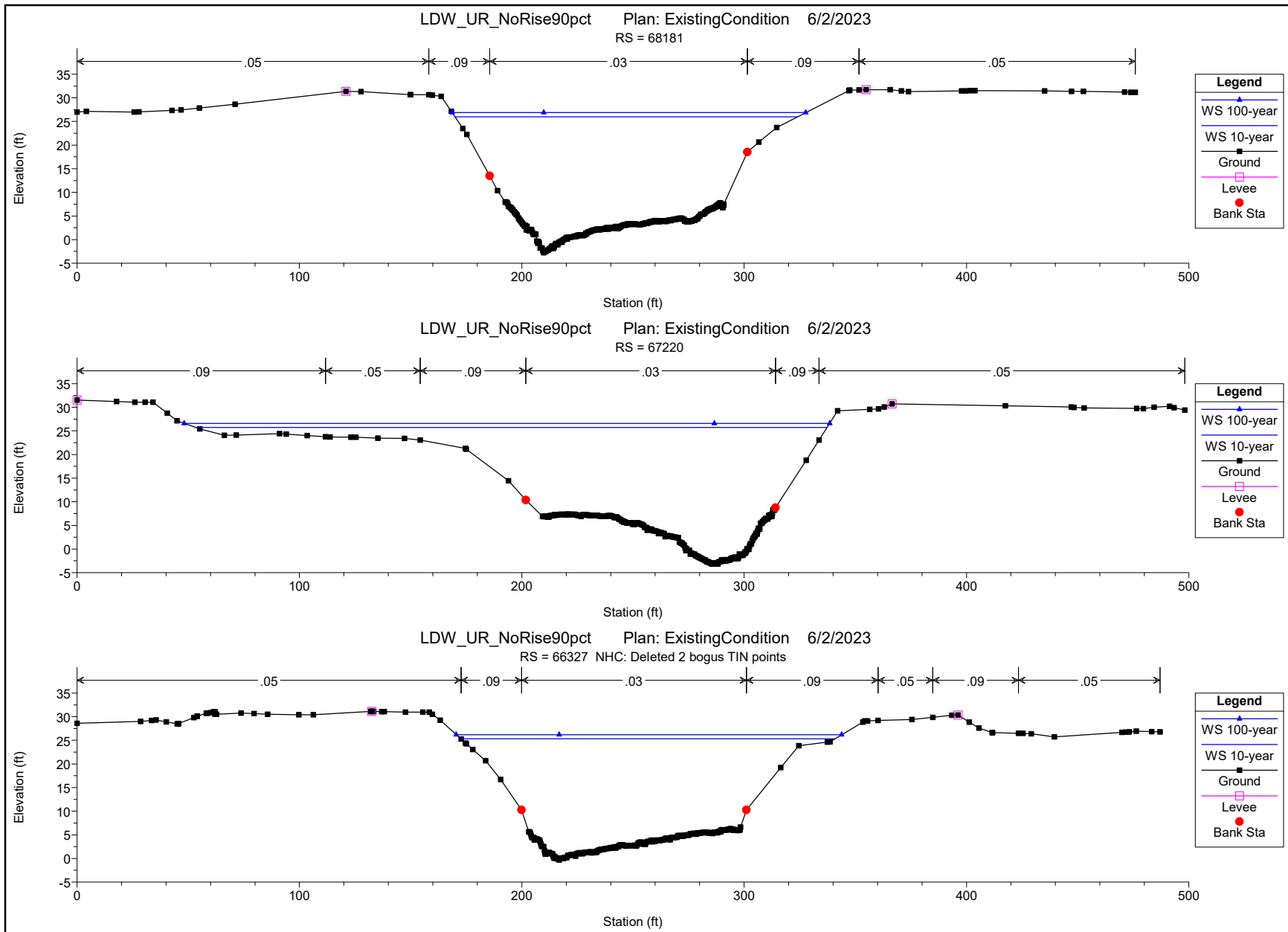


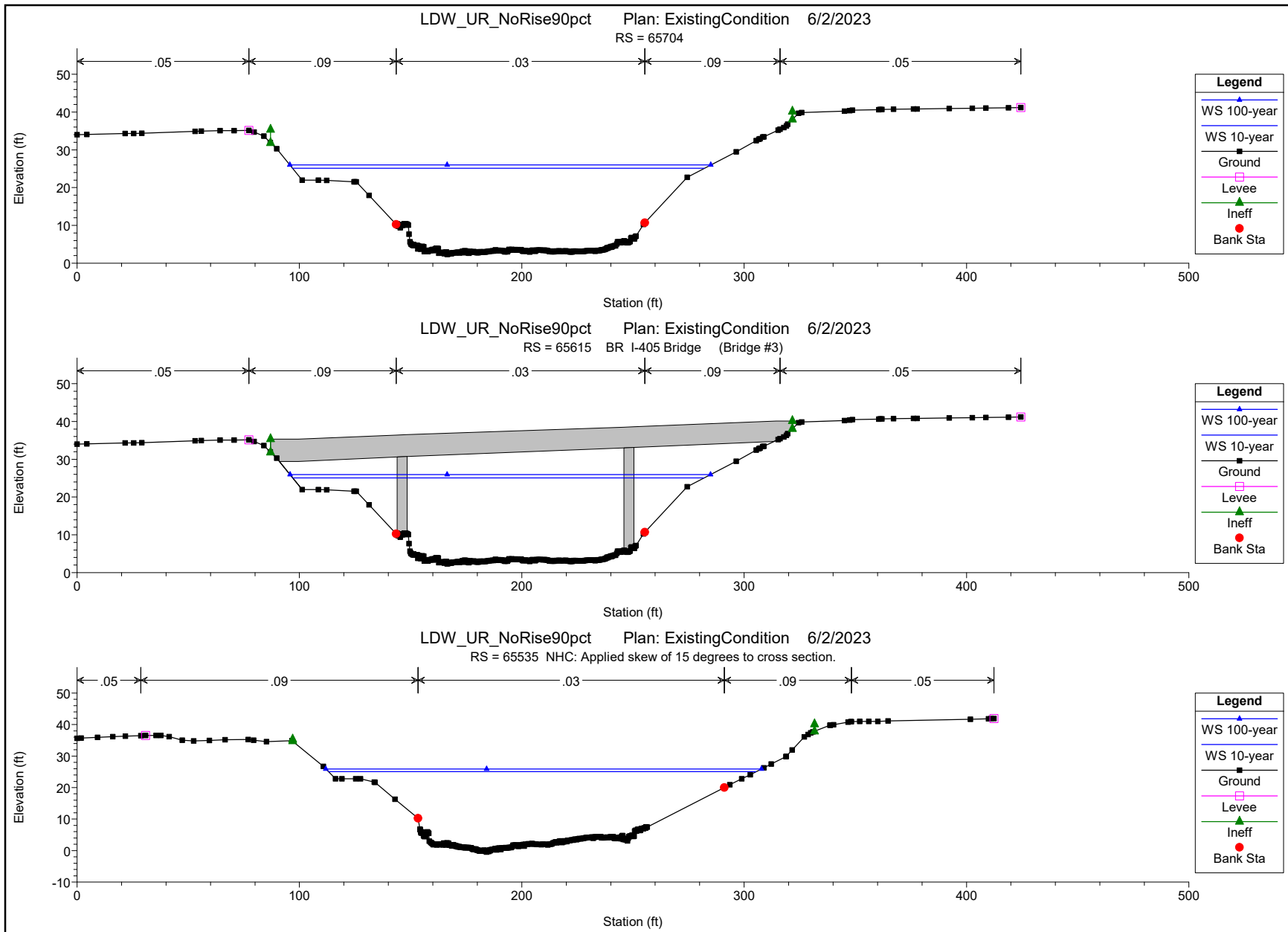


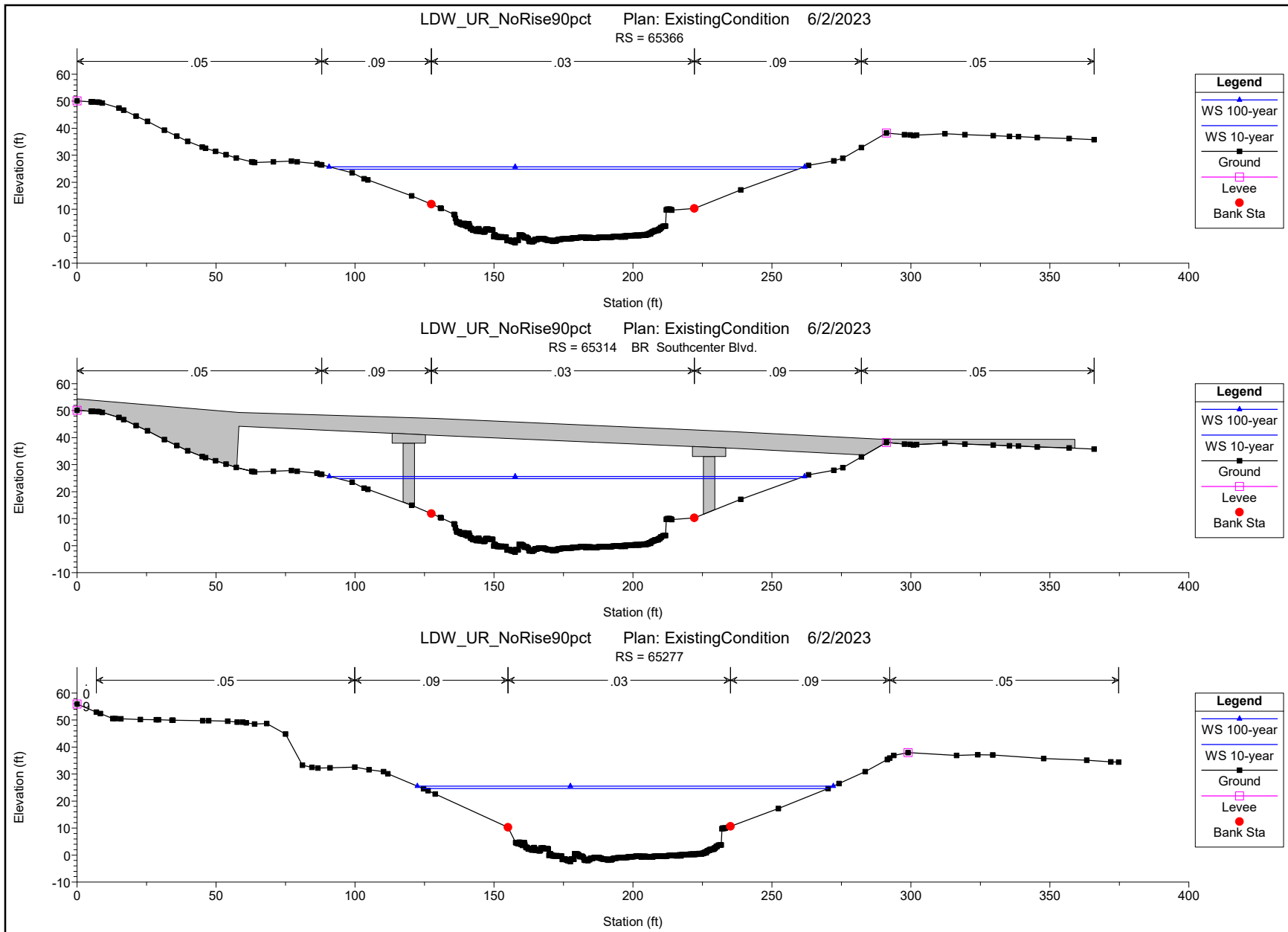


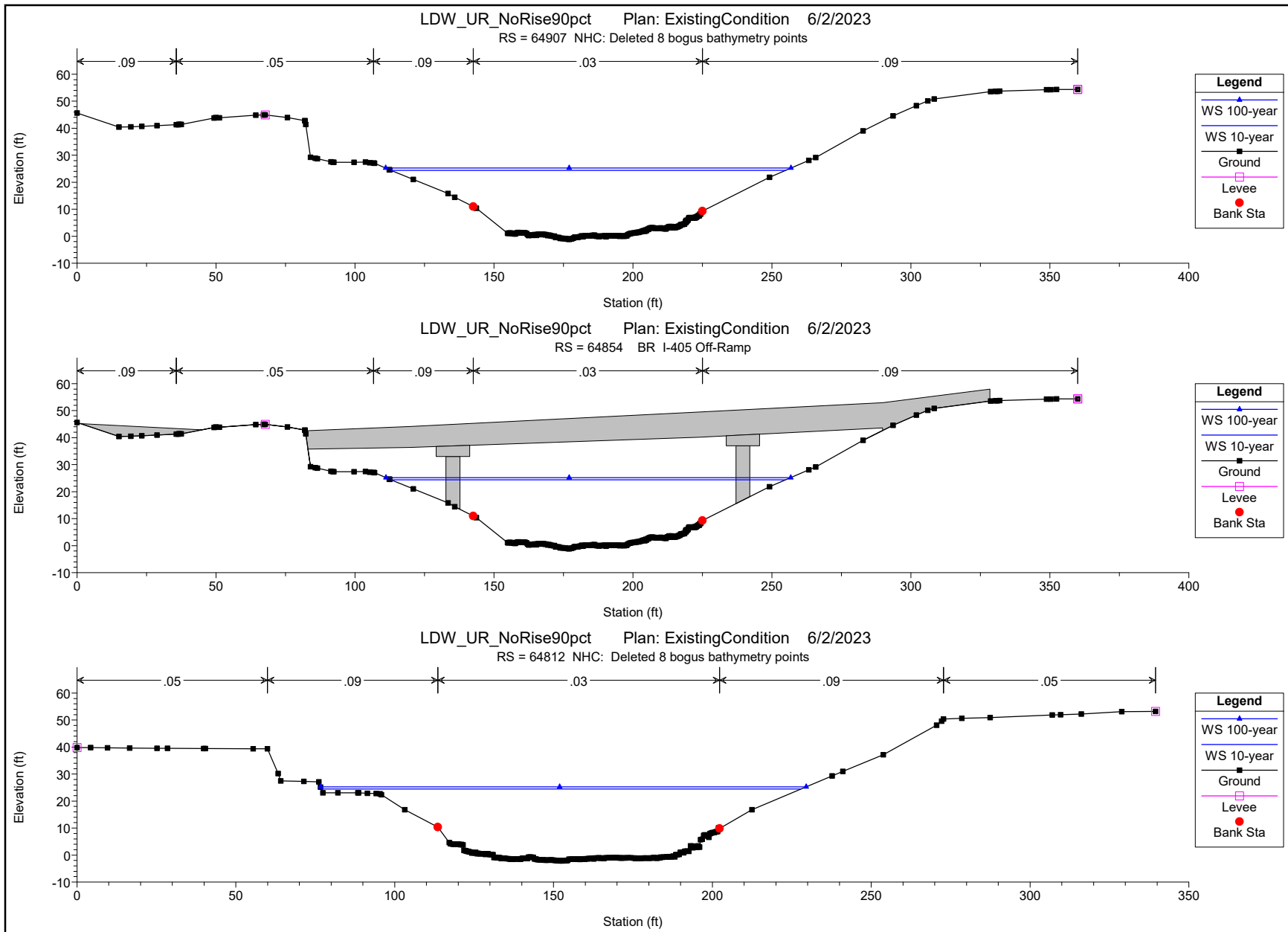


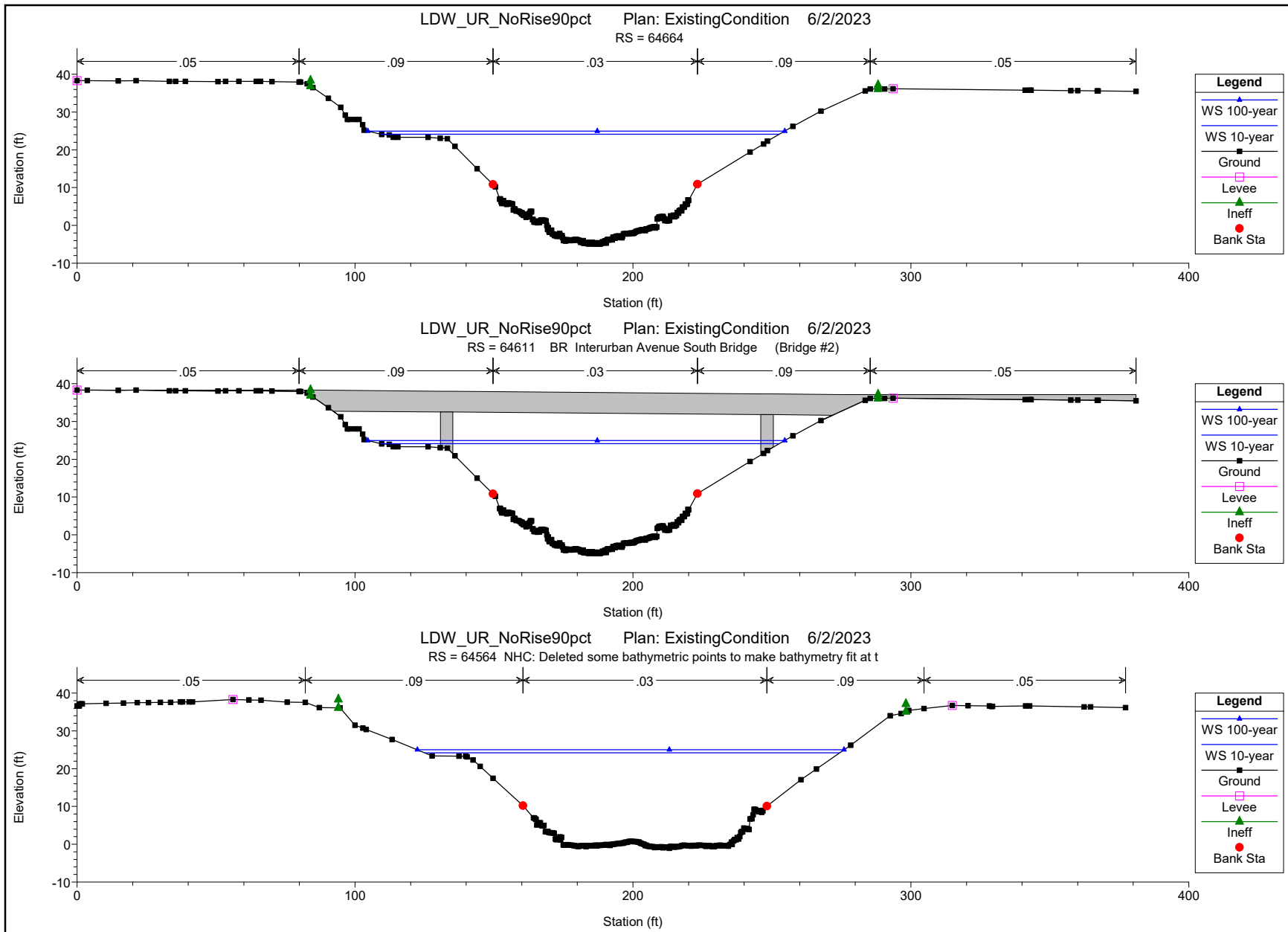


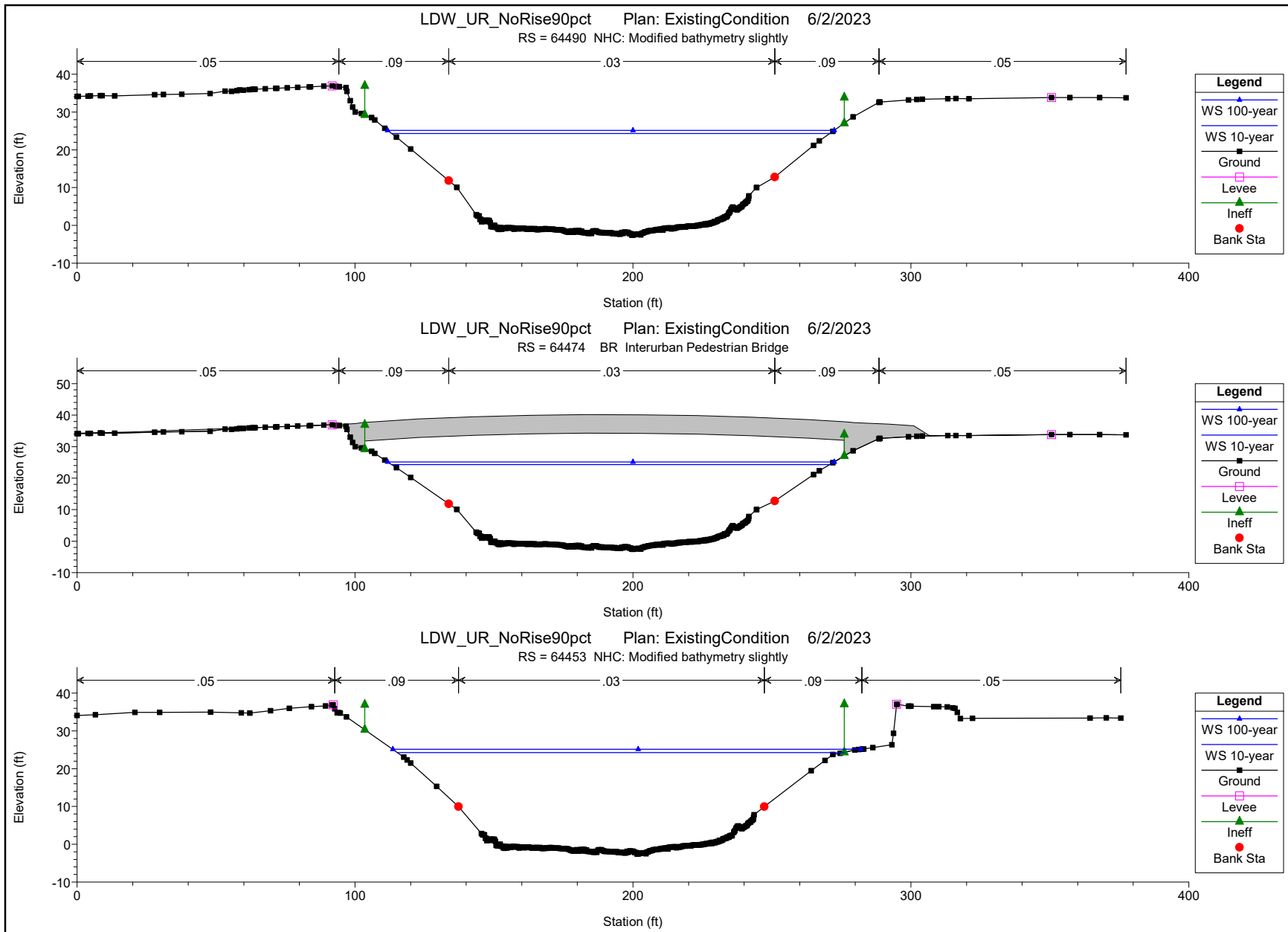


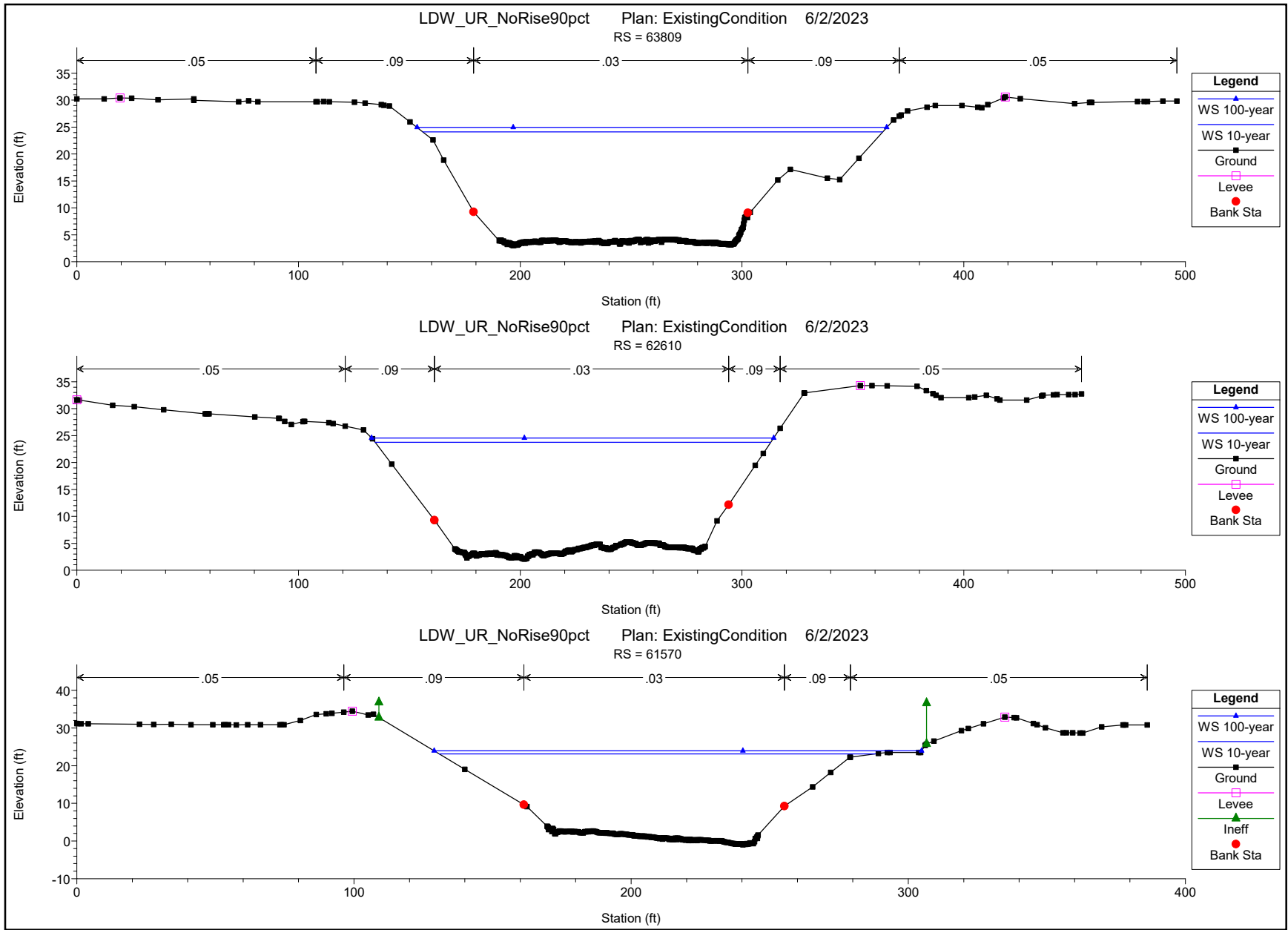


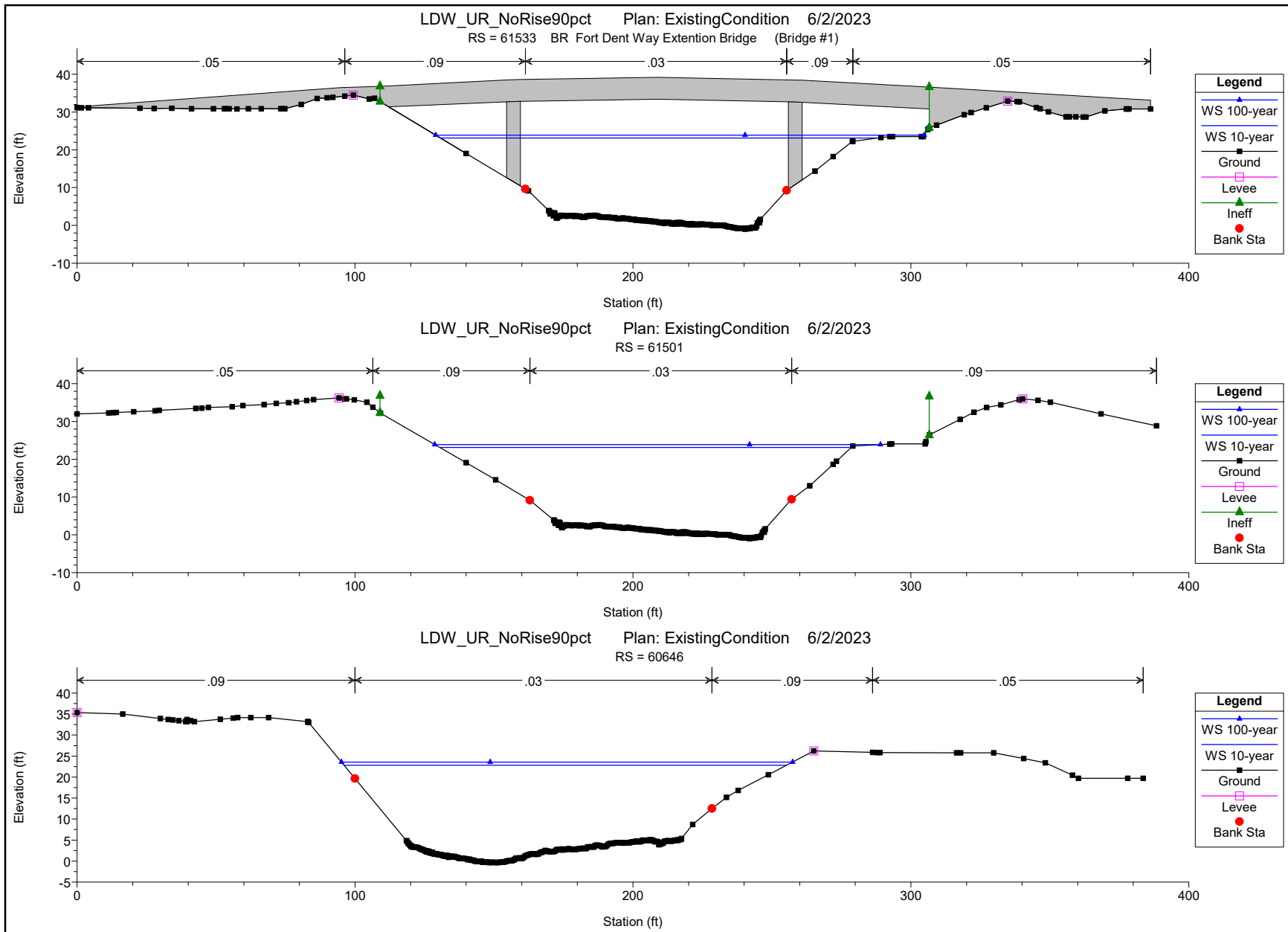


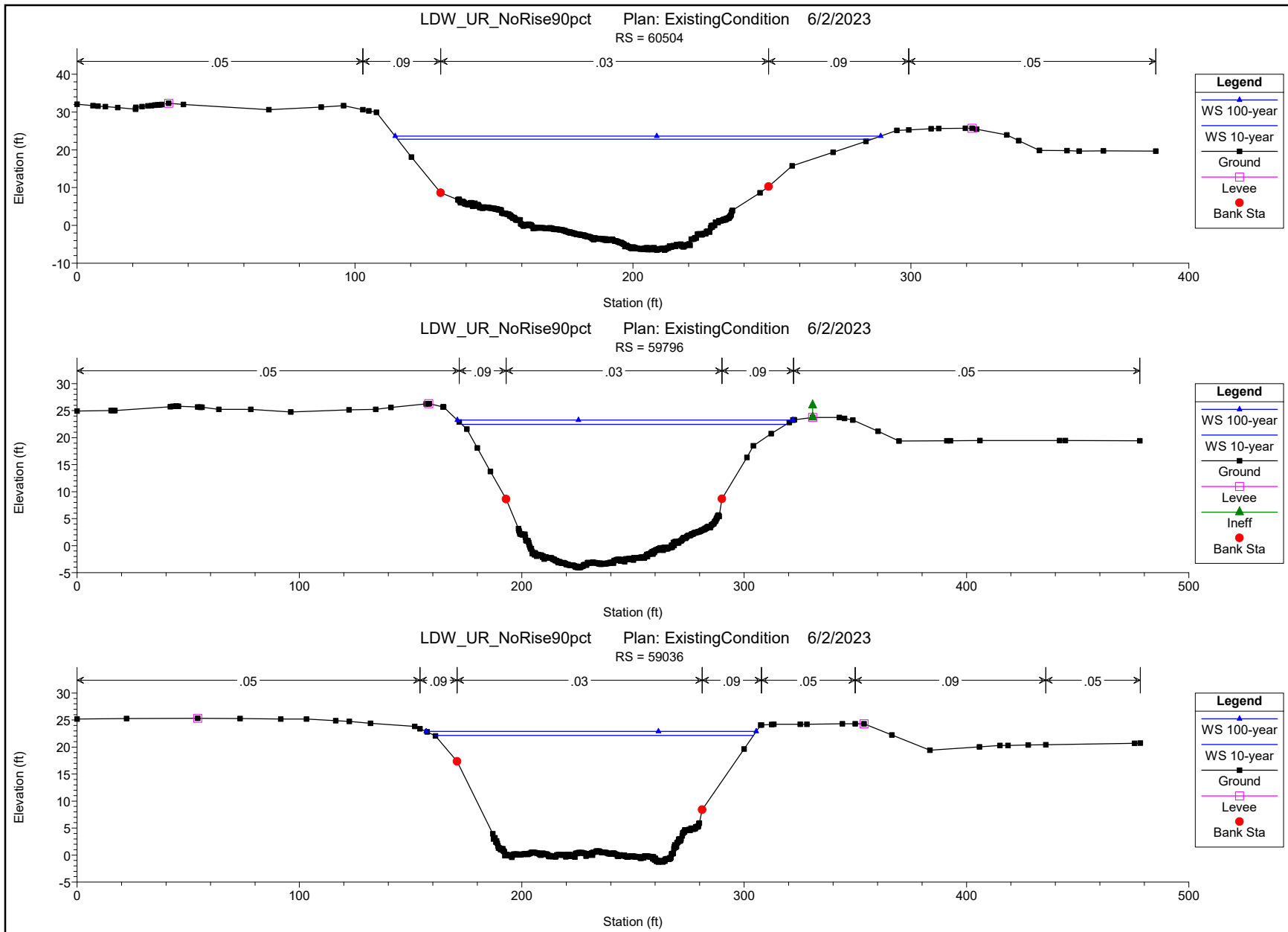


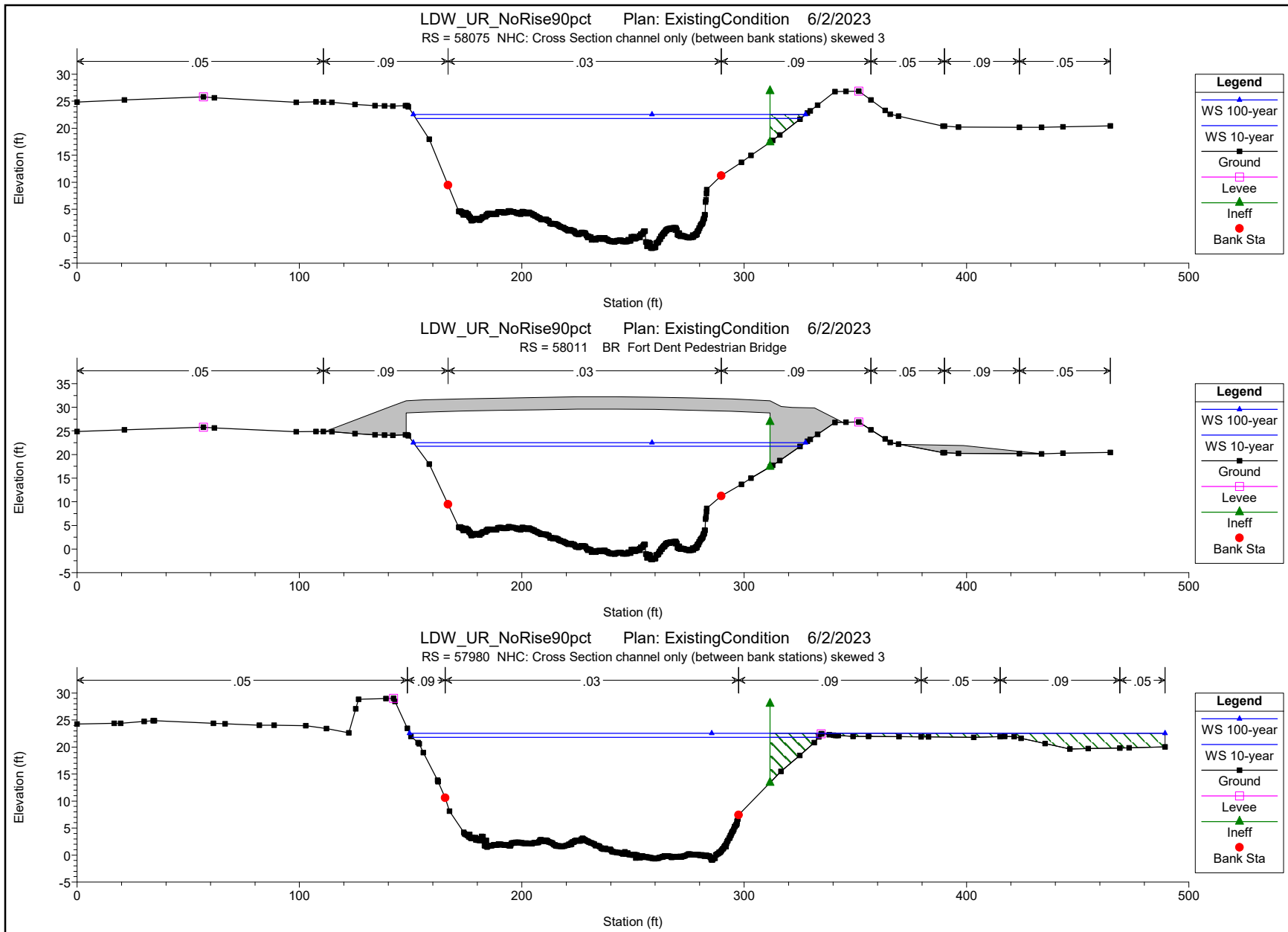


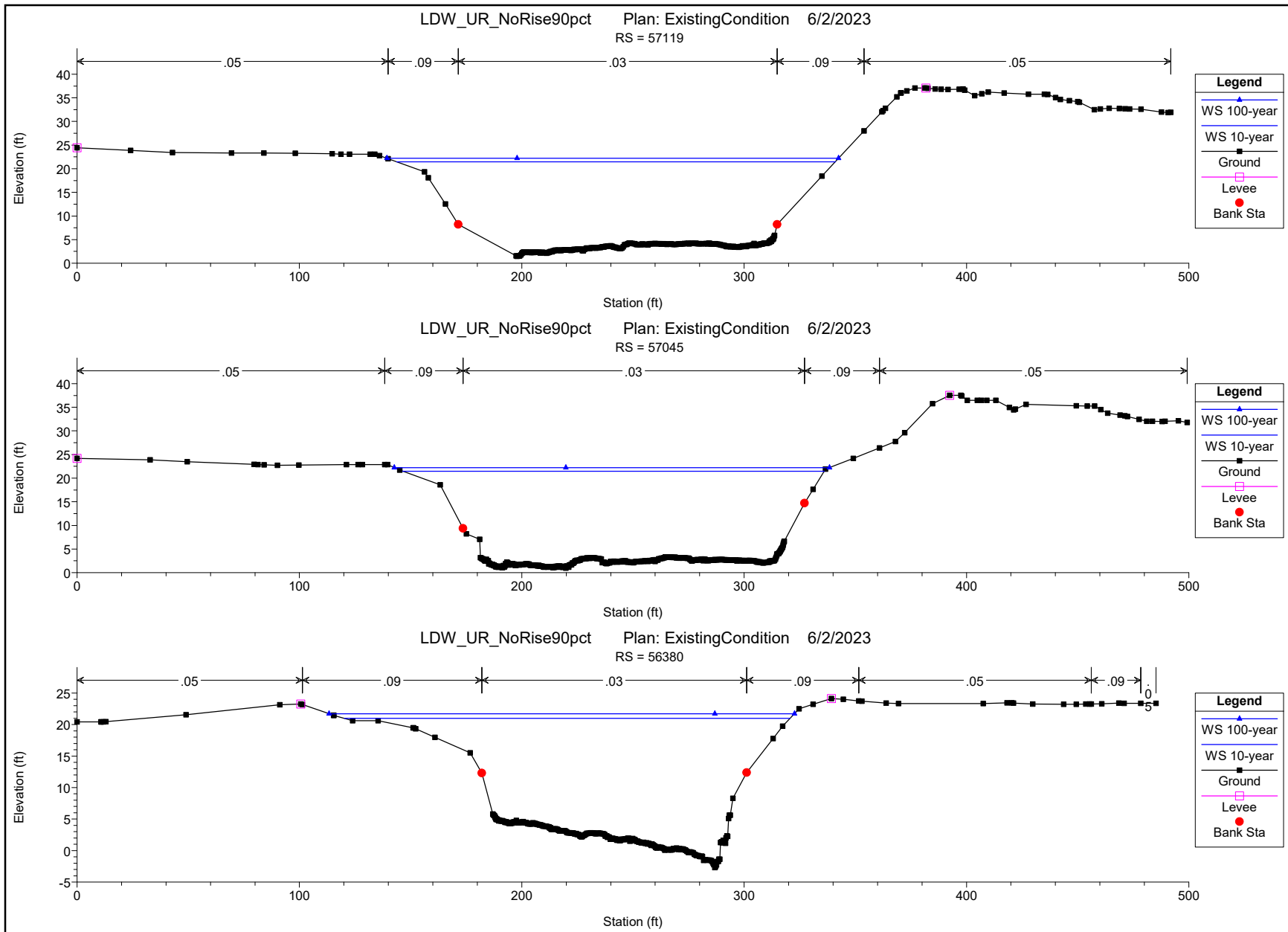


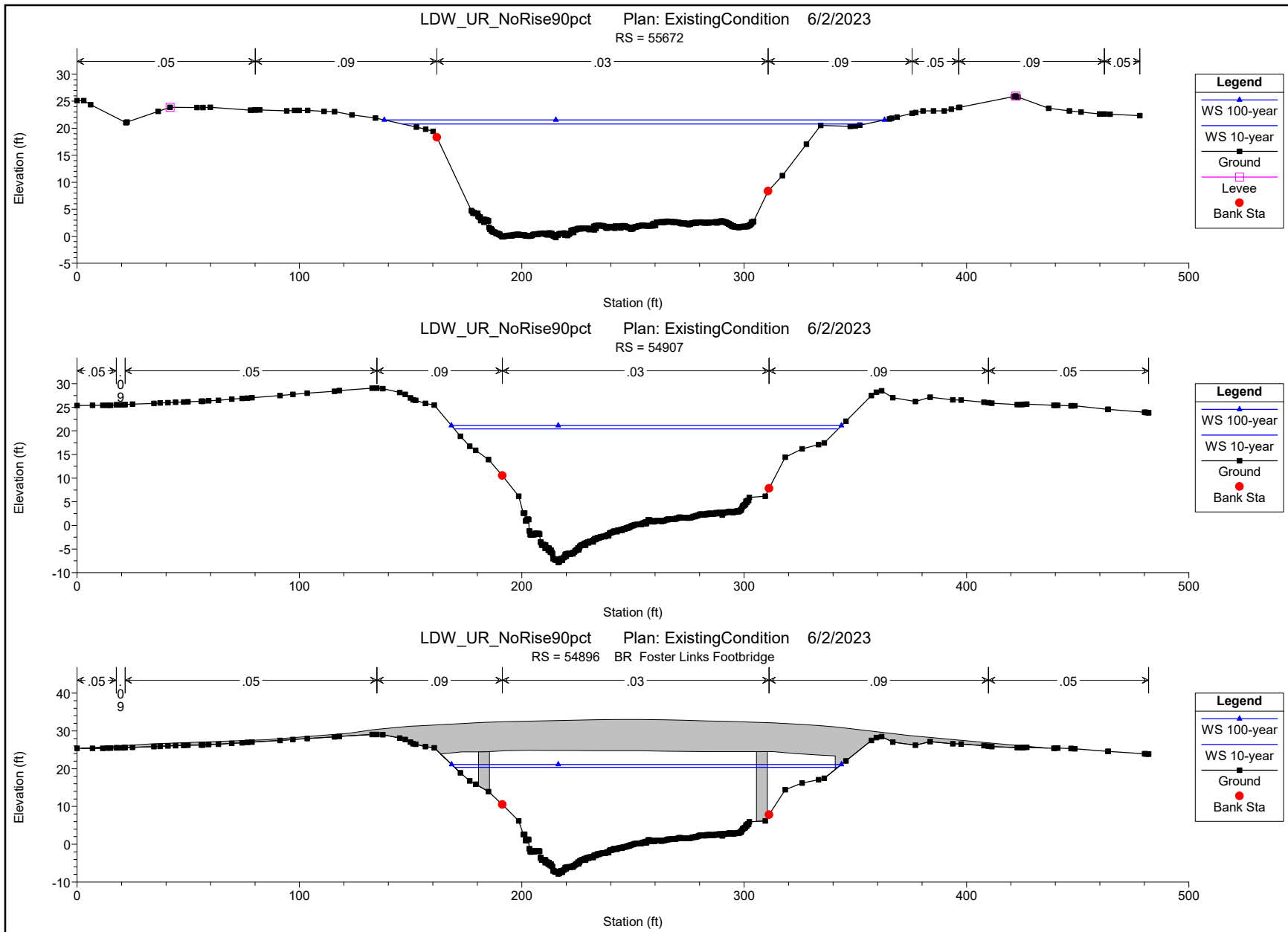


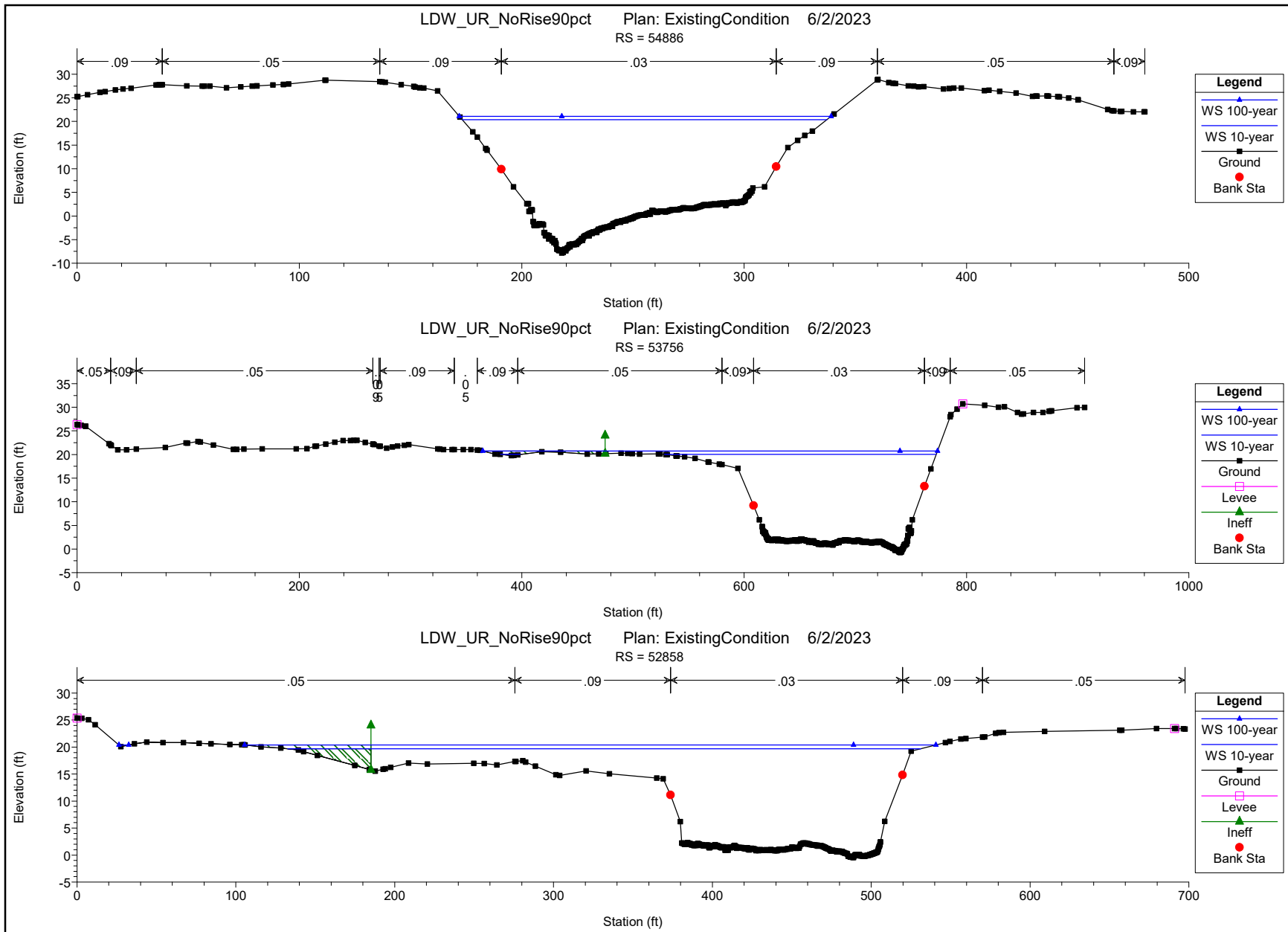


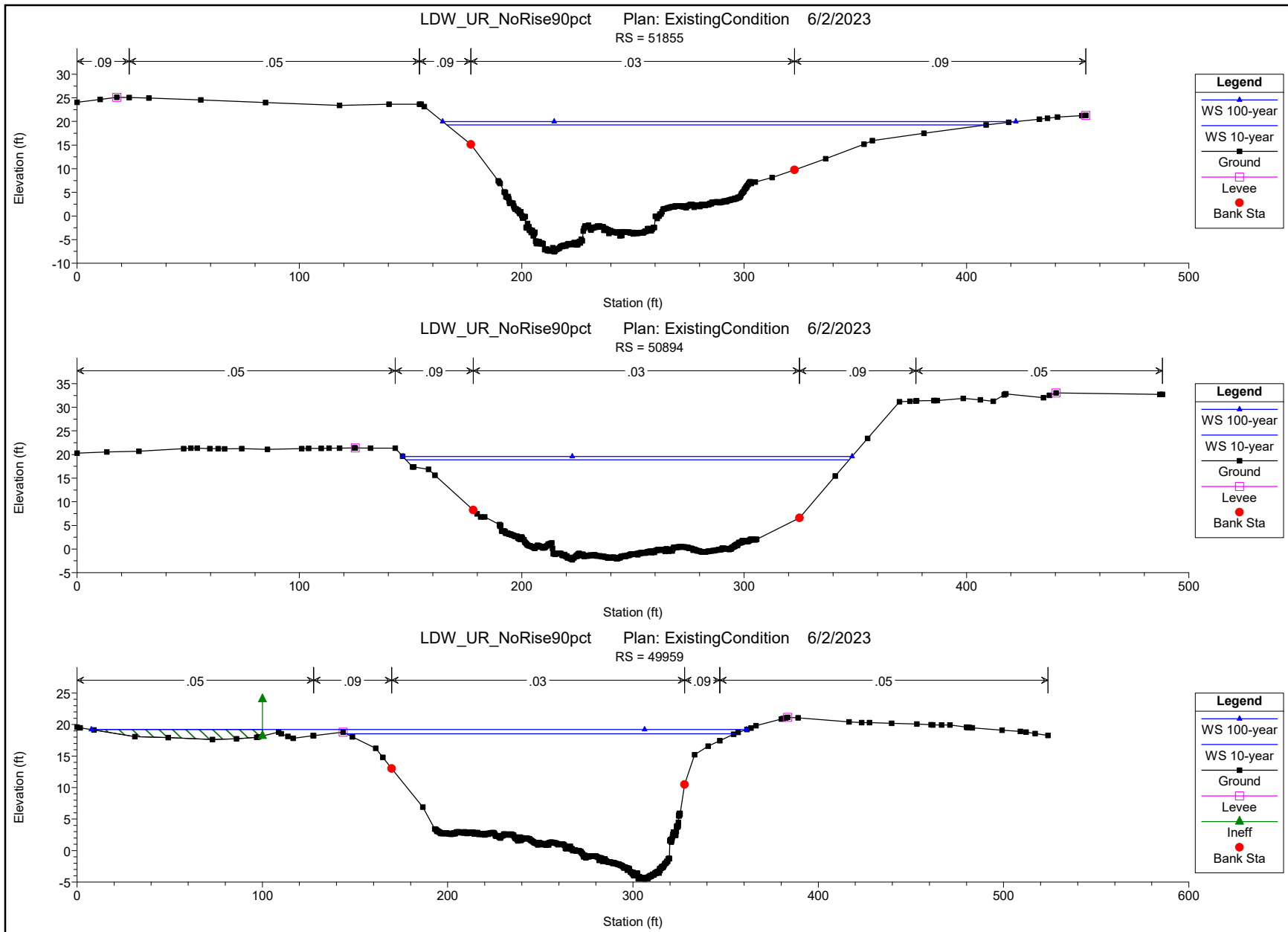


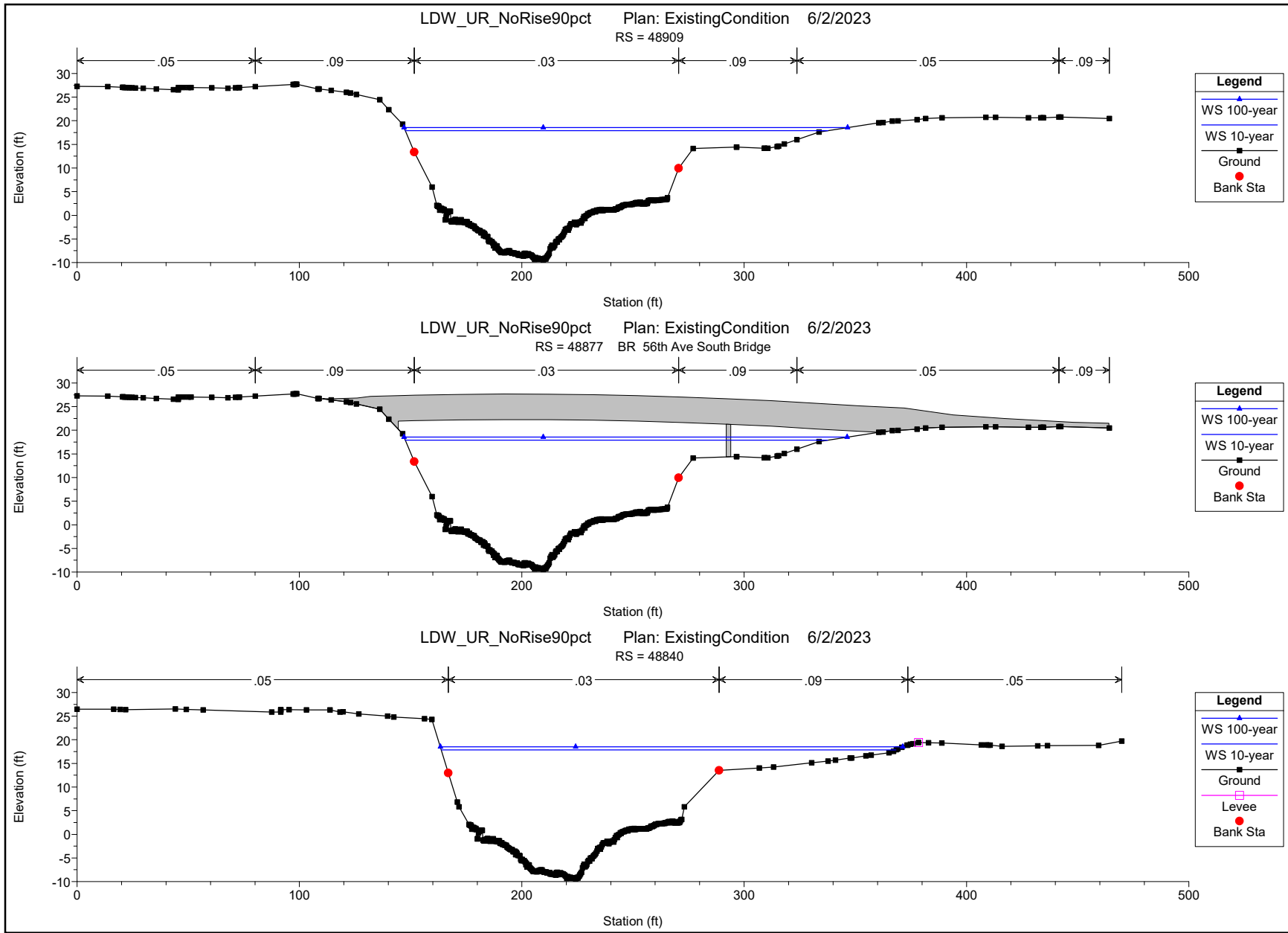


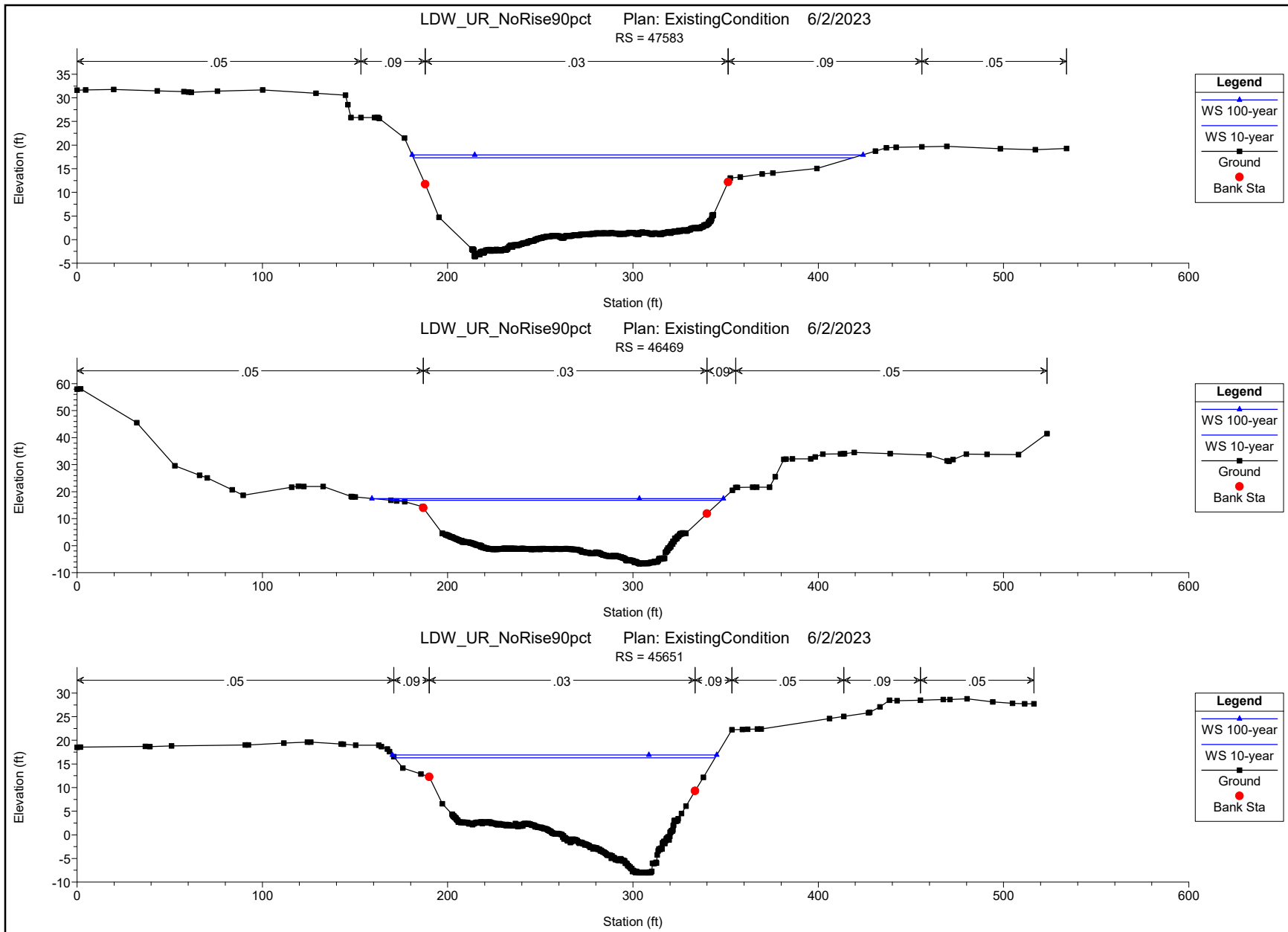


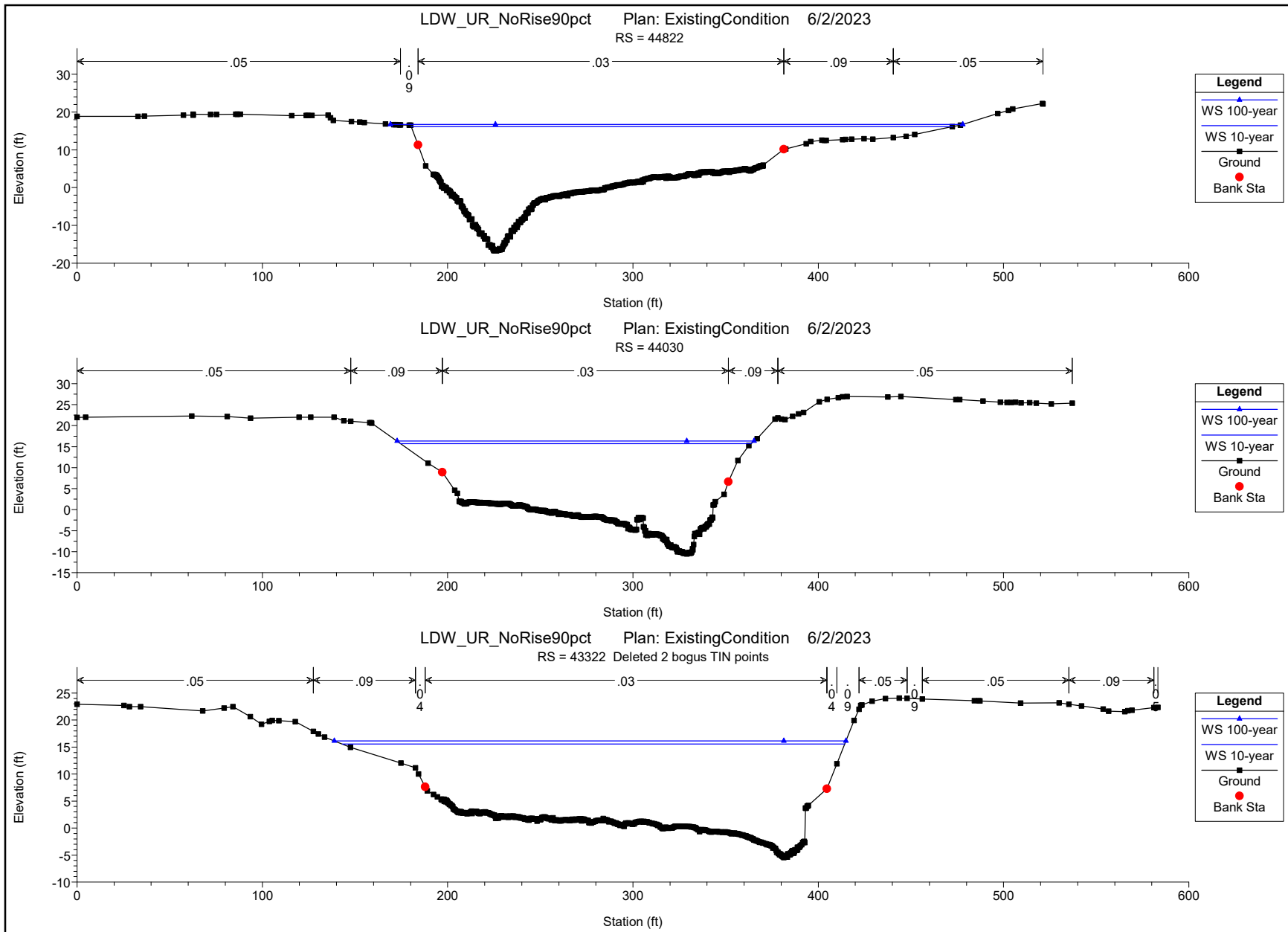


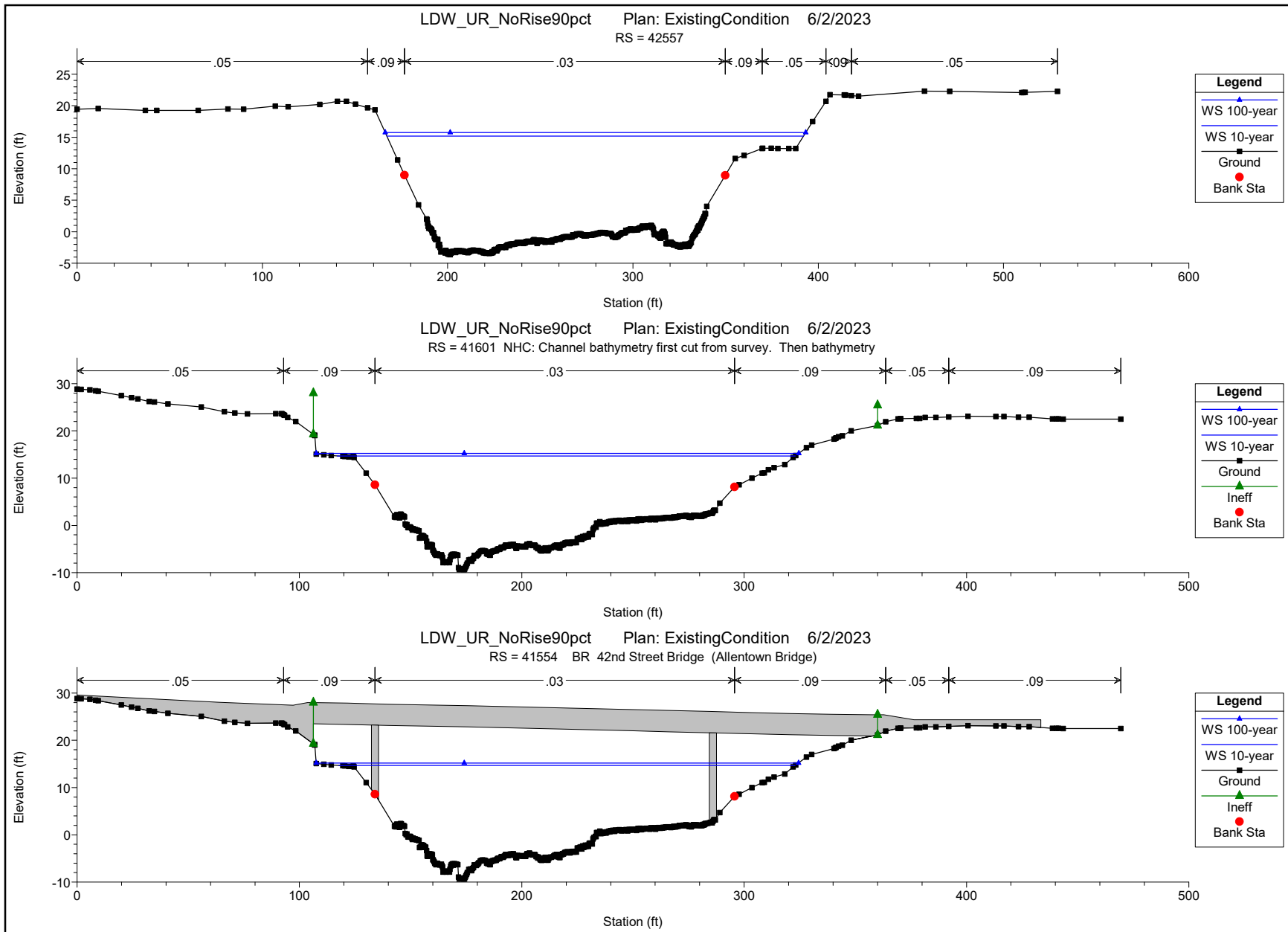


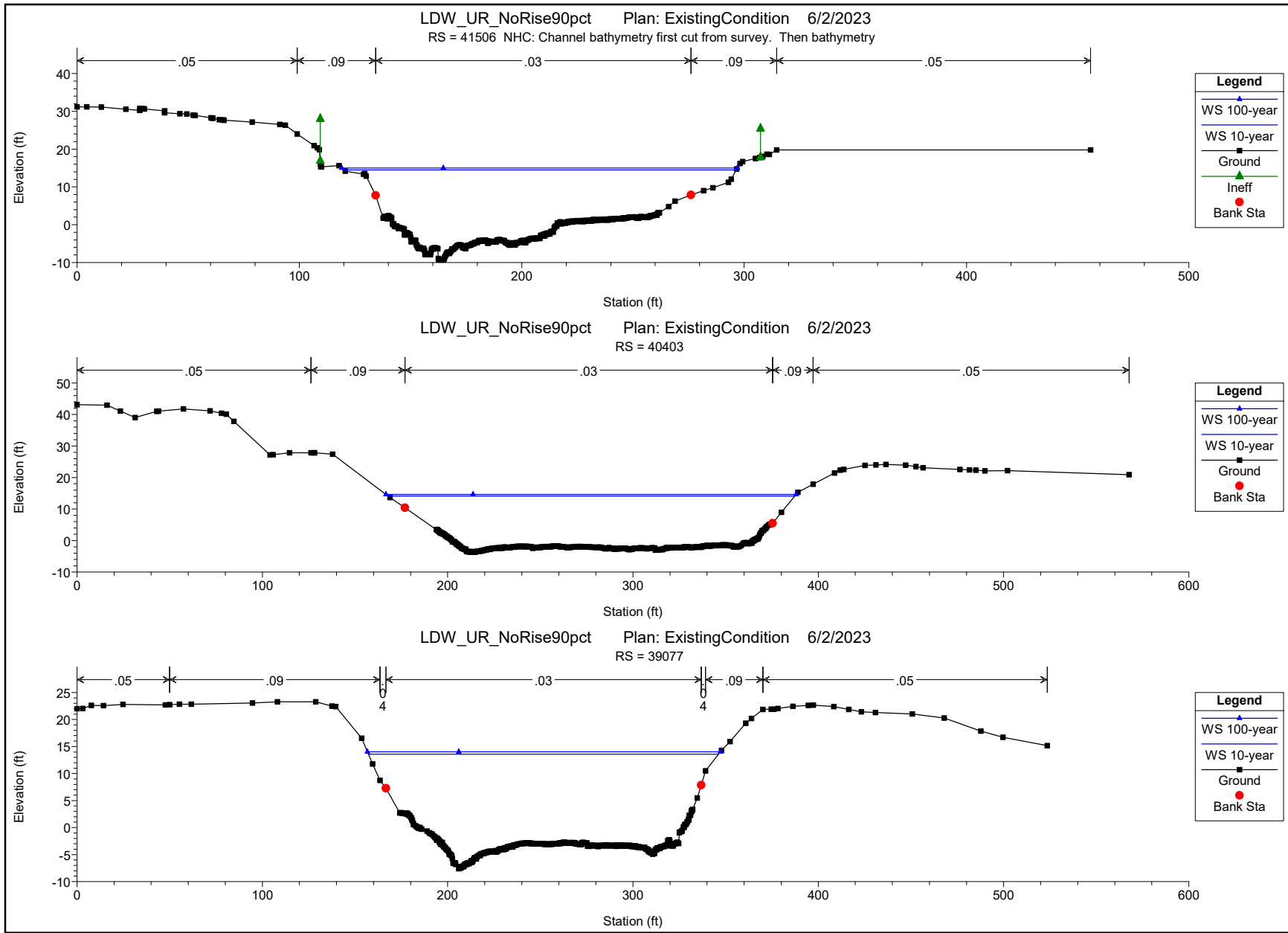


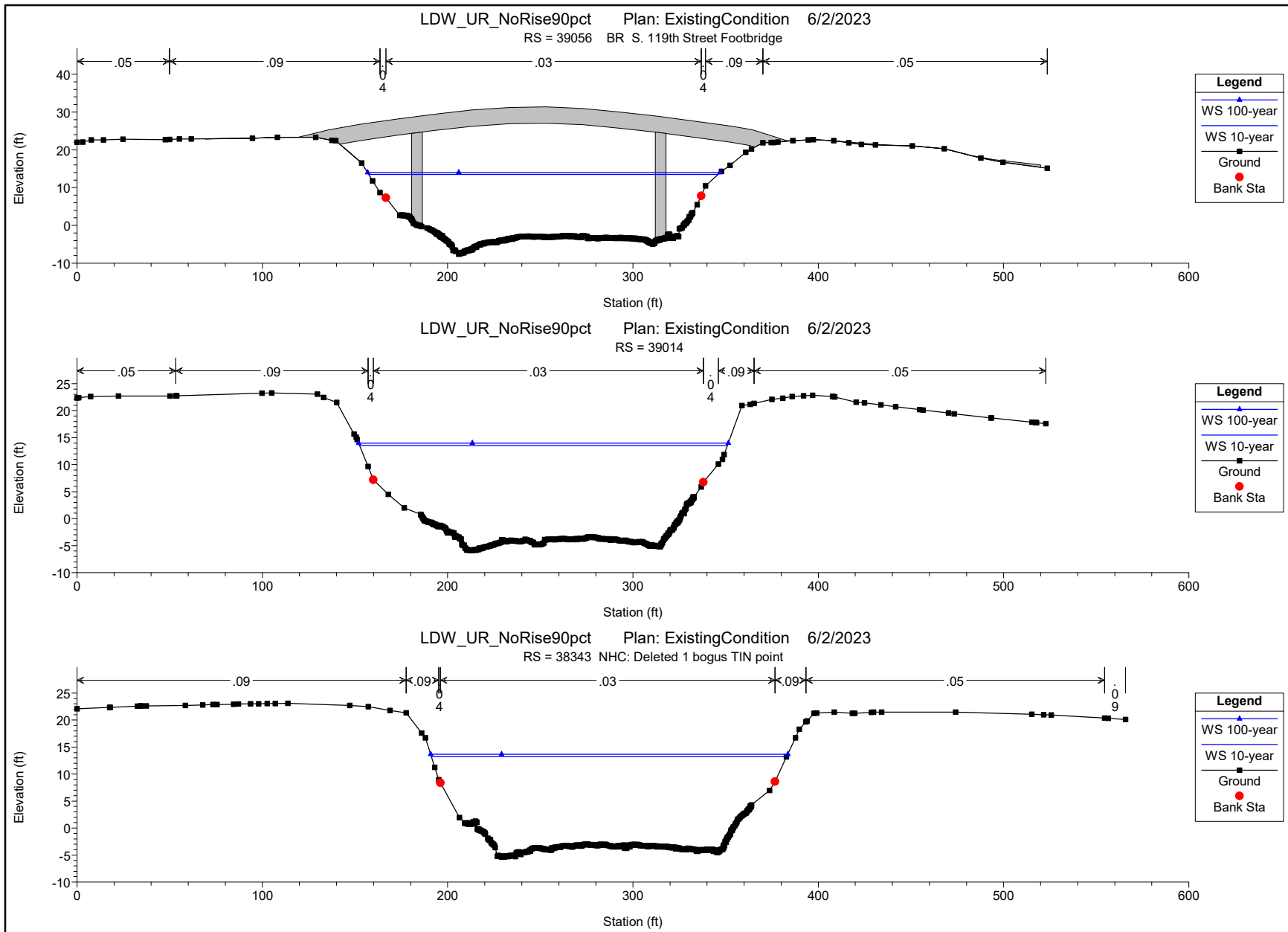


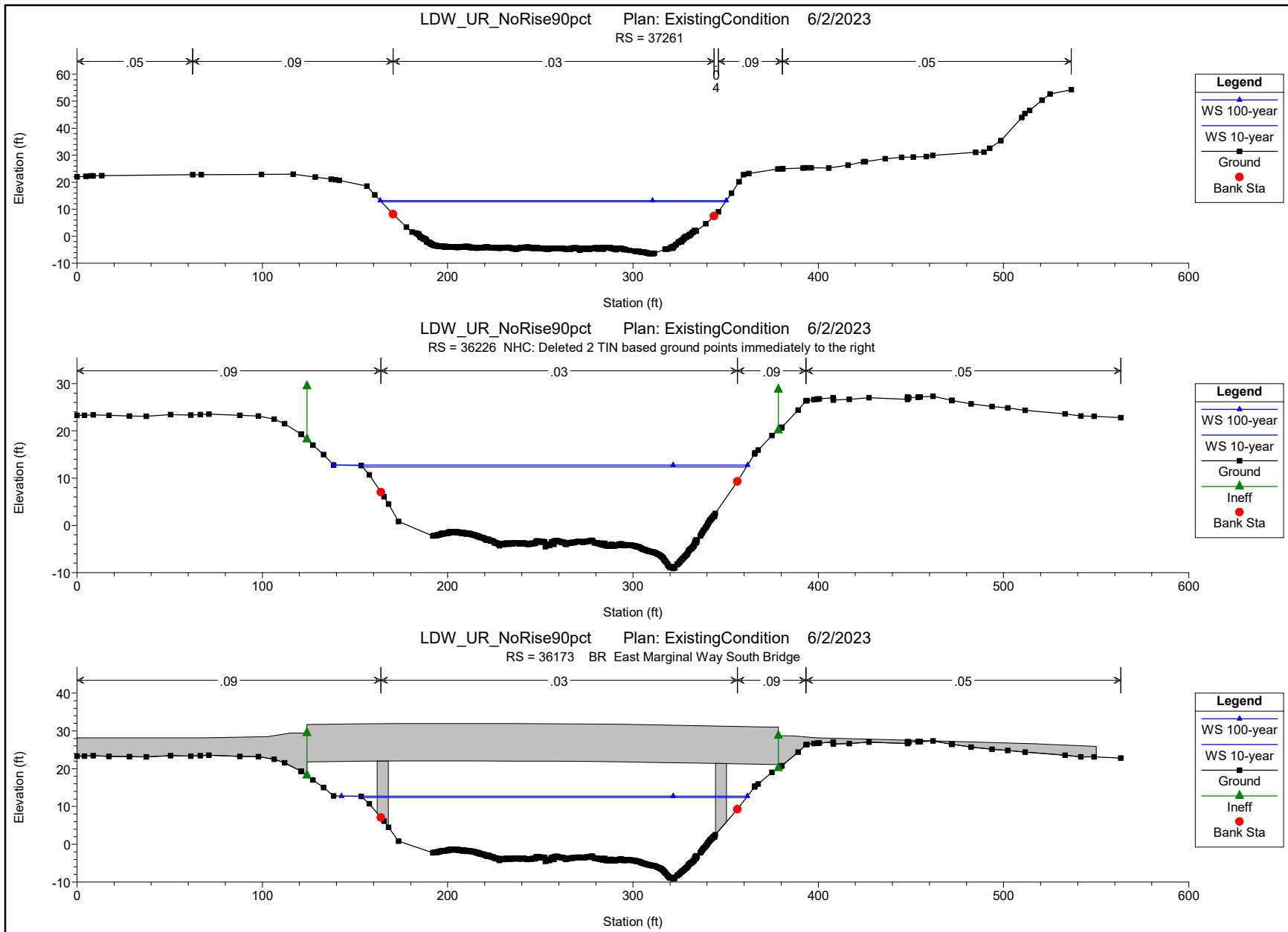


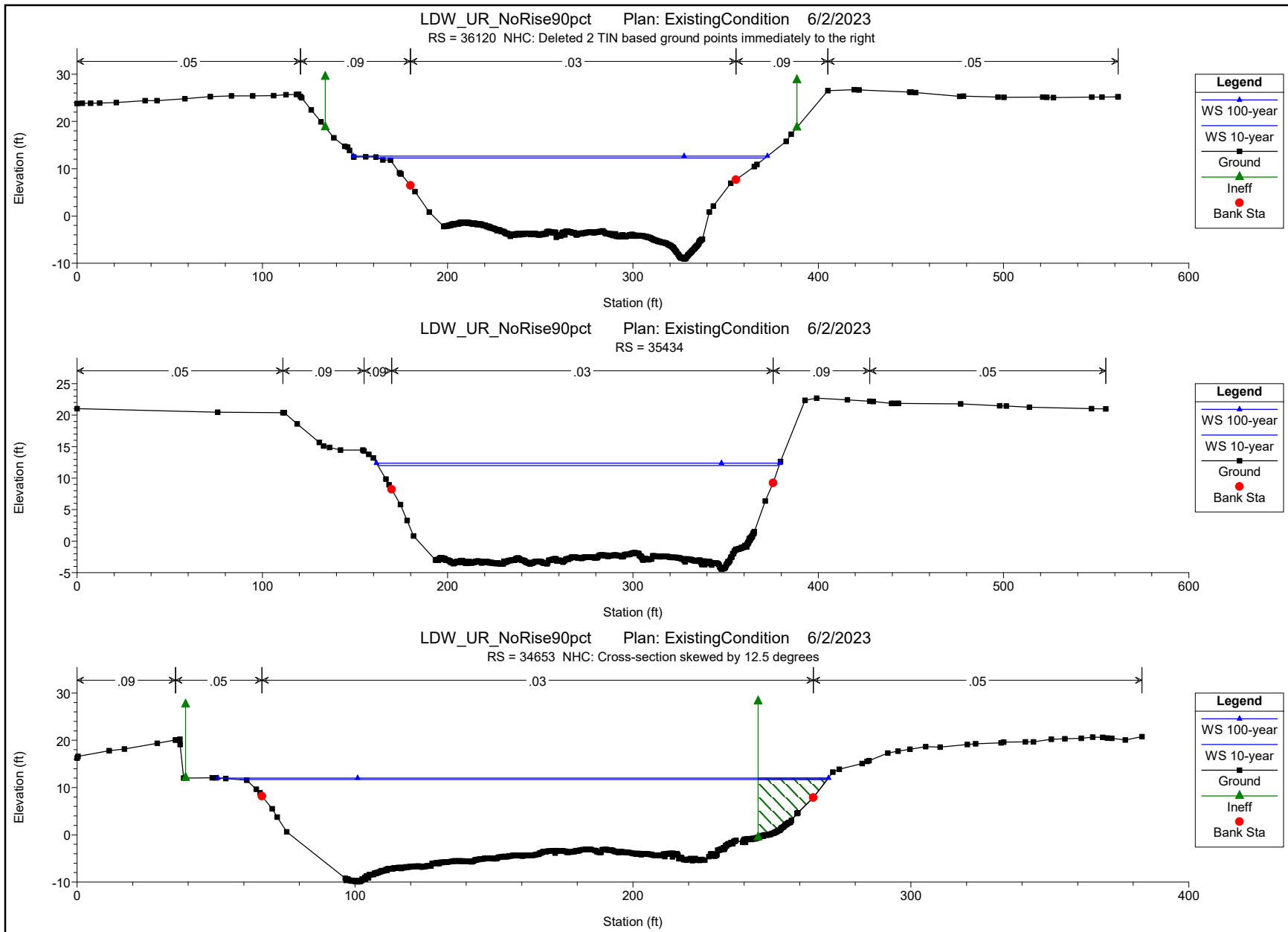




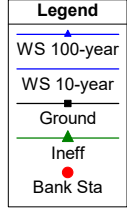
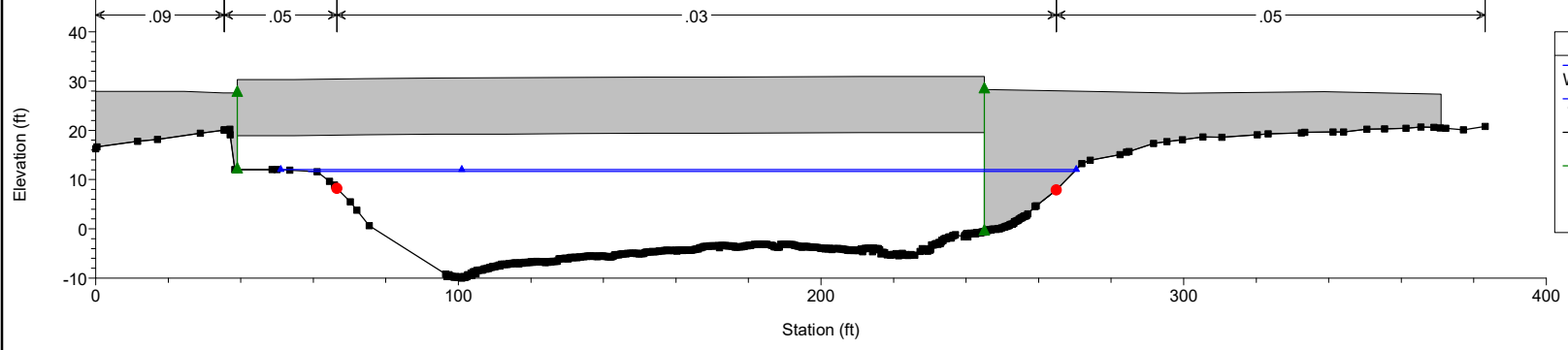




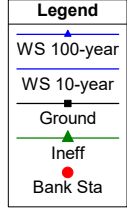
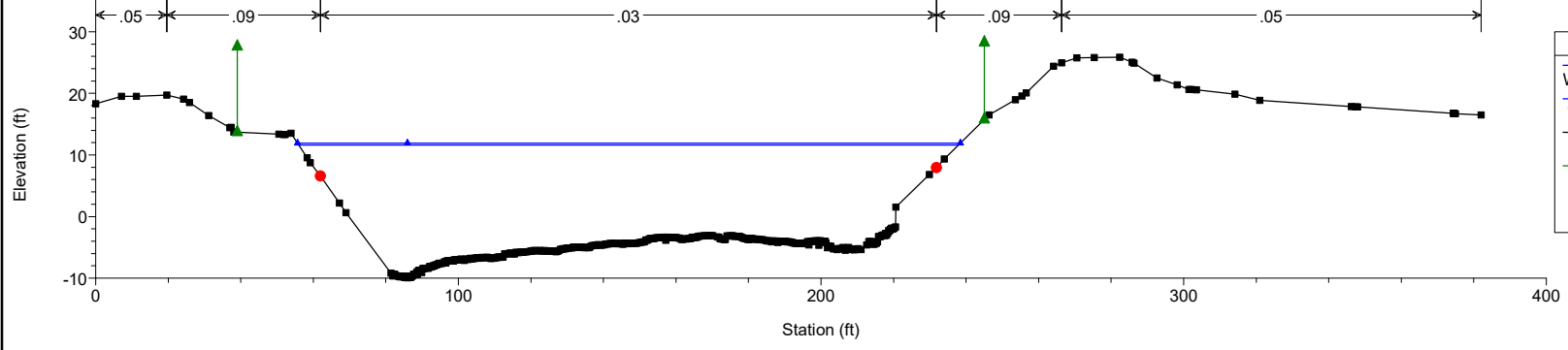




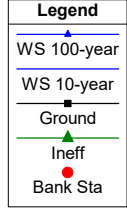
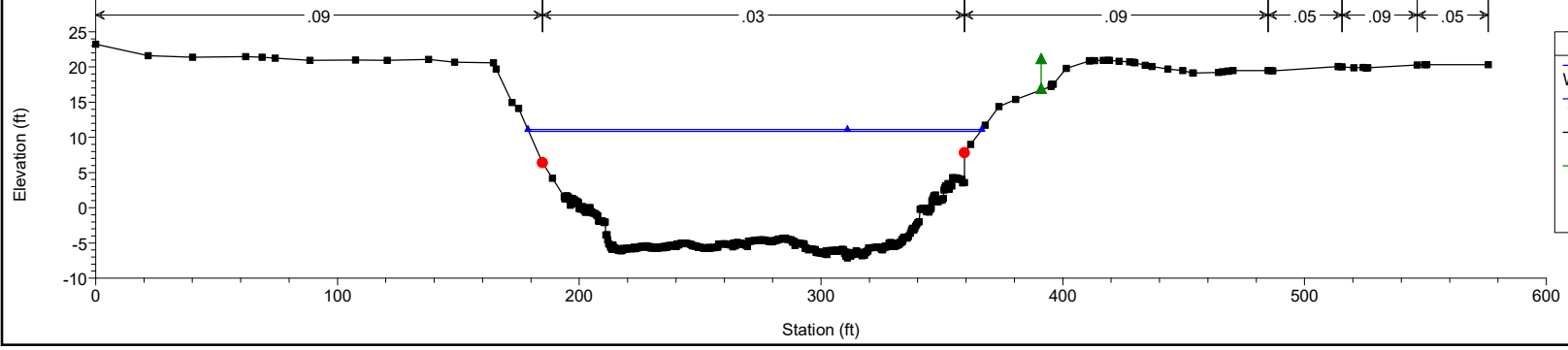
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
 RS = 34579 BR Pacific Highway South Bridge

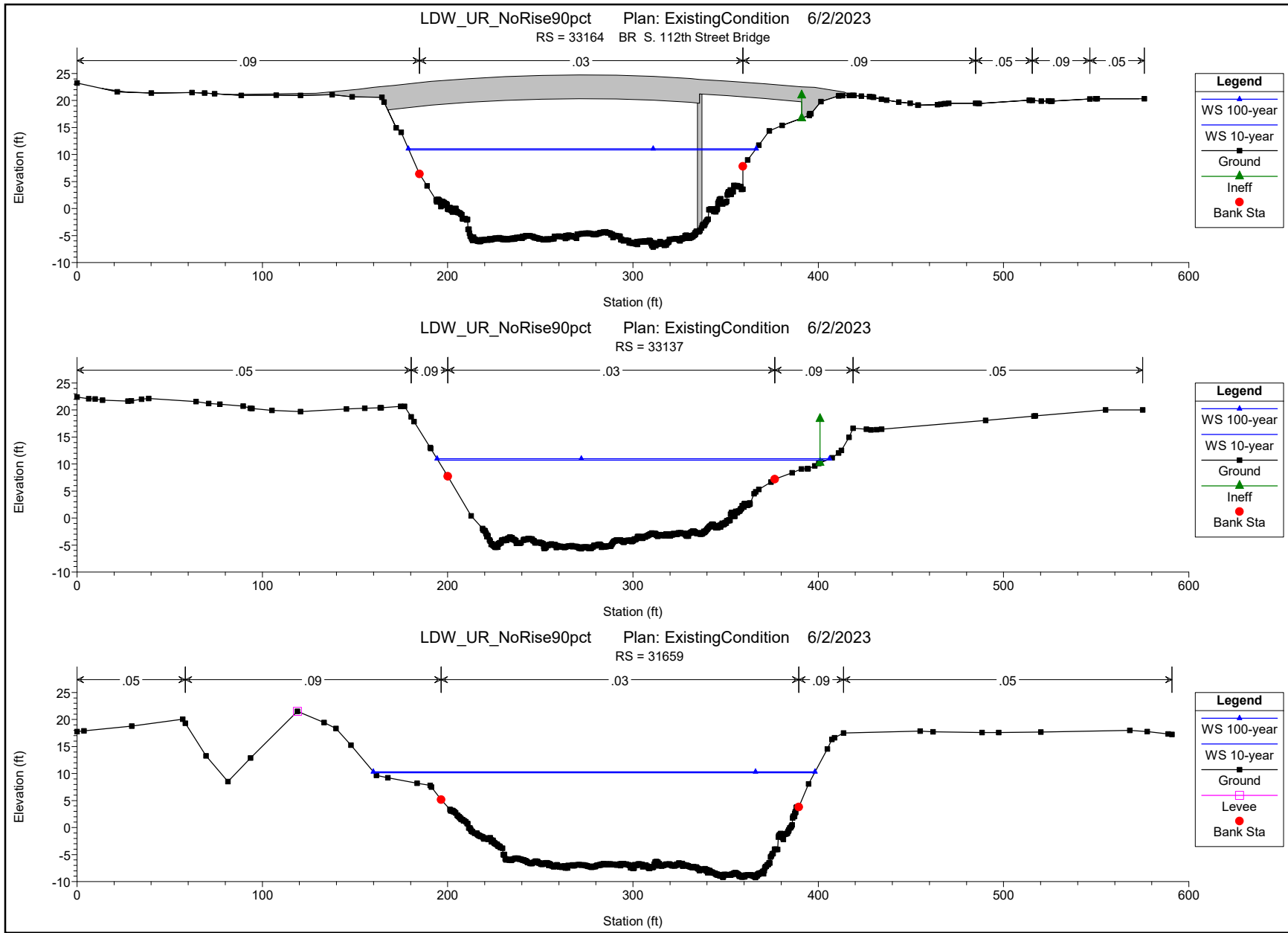


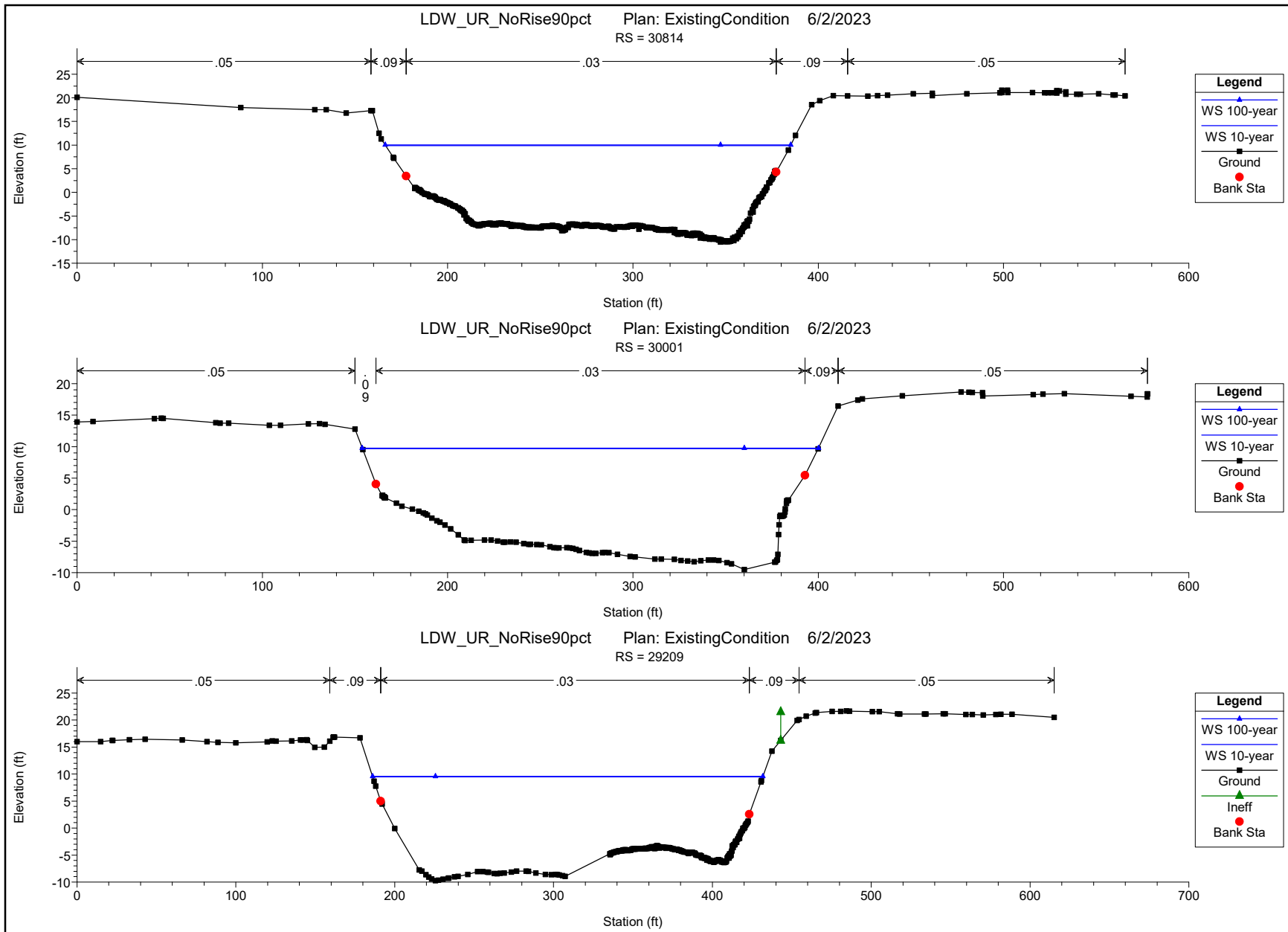
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
 RS = 34510 NHC: Cross-section skewed by 12.5 degrees.

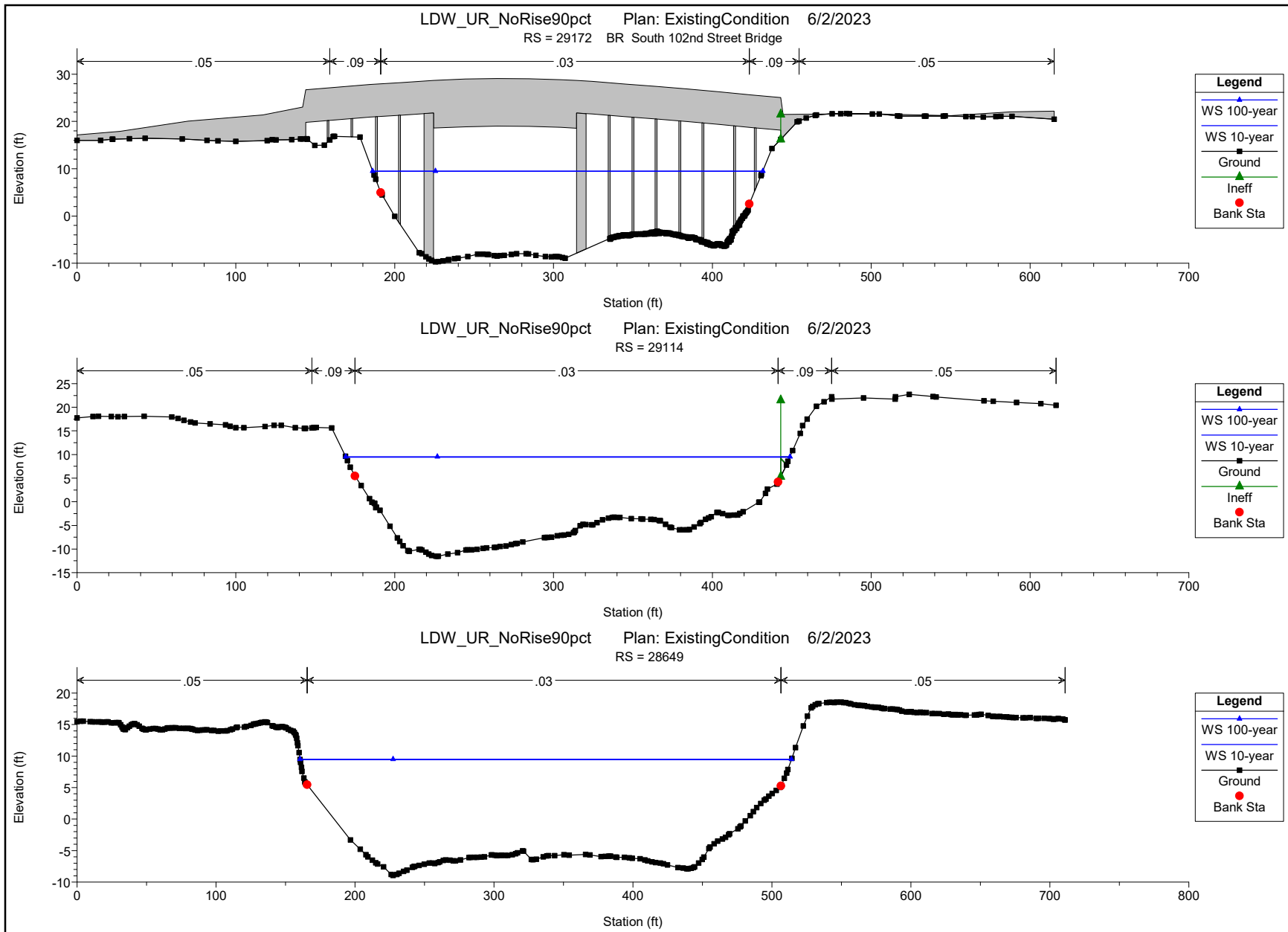


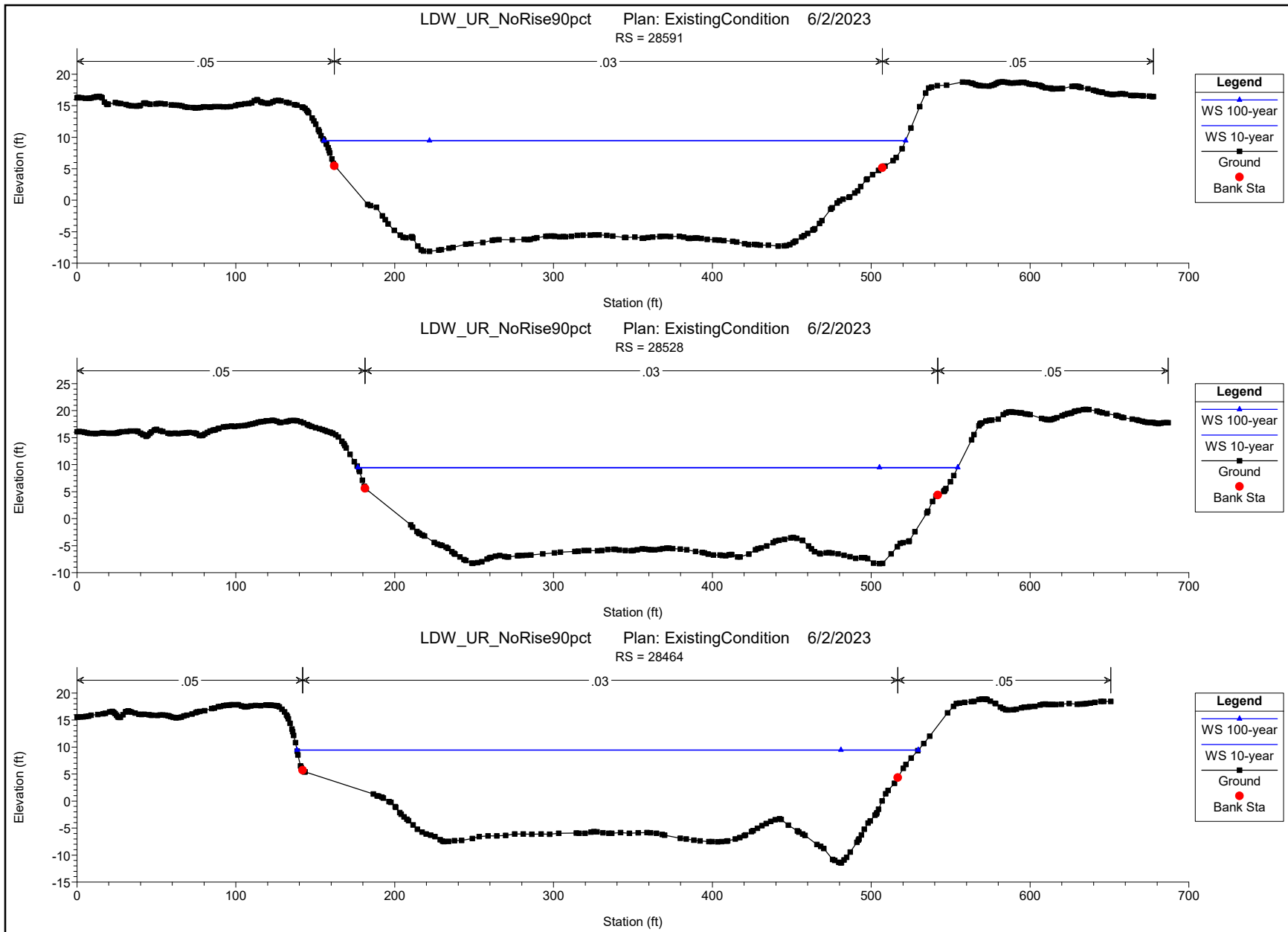
LDW_UR_NoRise90pct Plan: ExistingCondition 6/2/2023
 RS = 33180

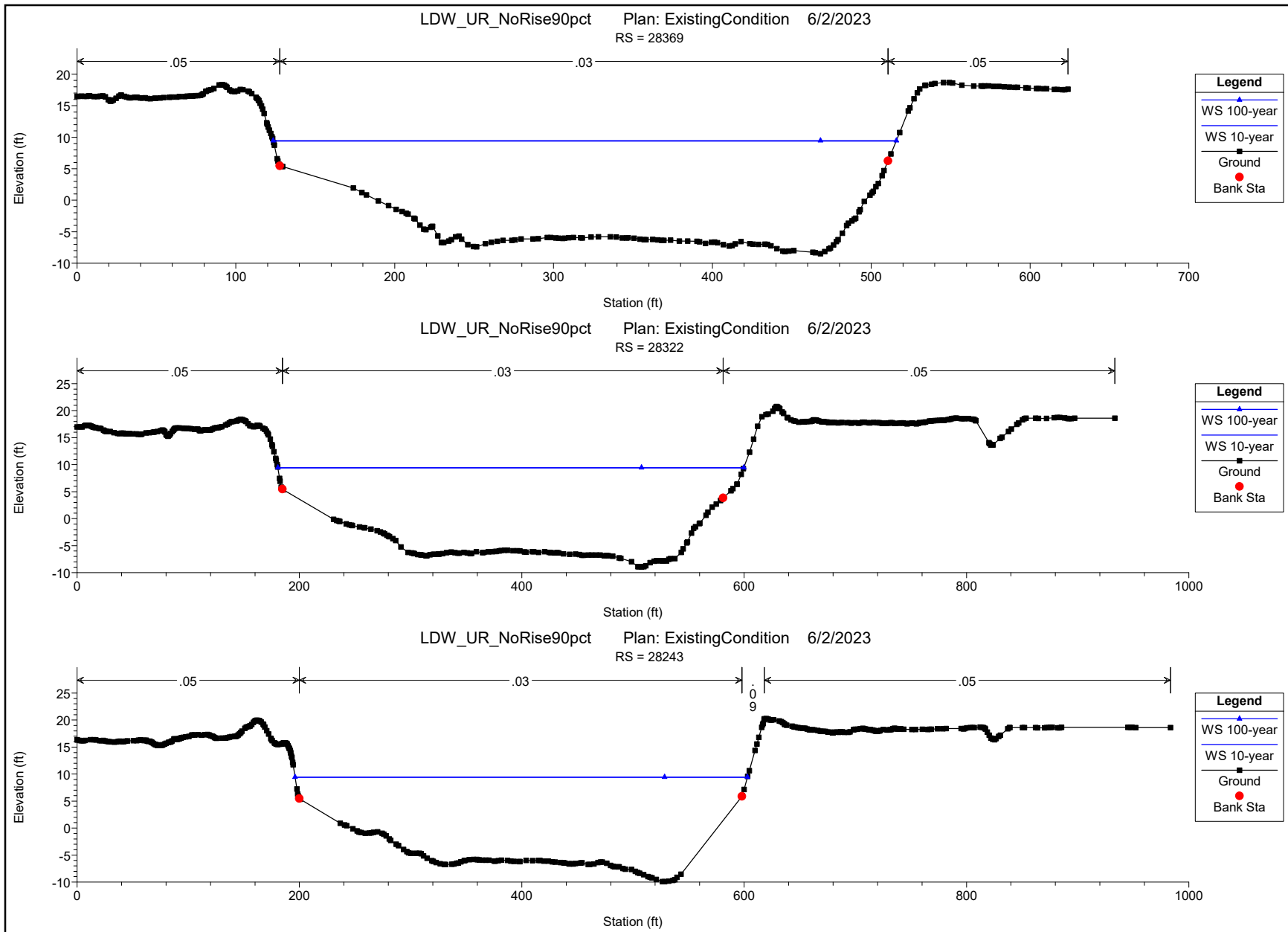


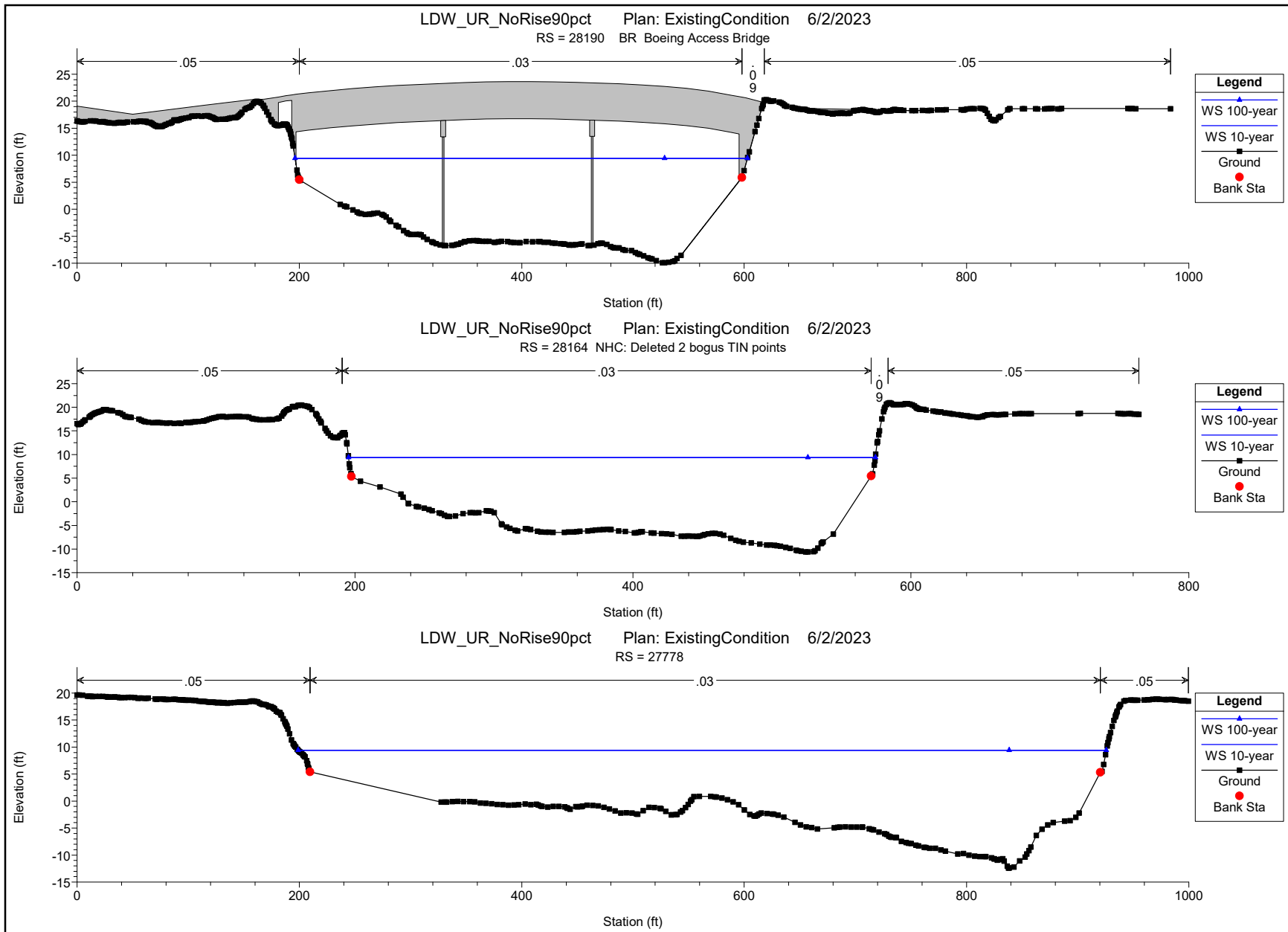


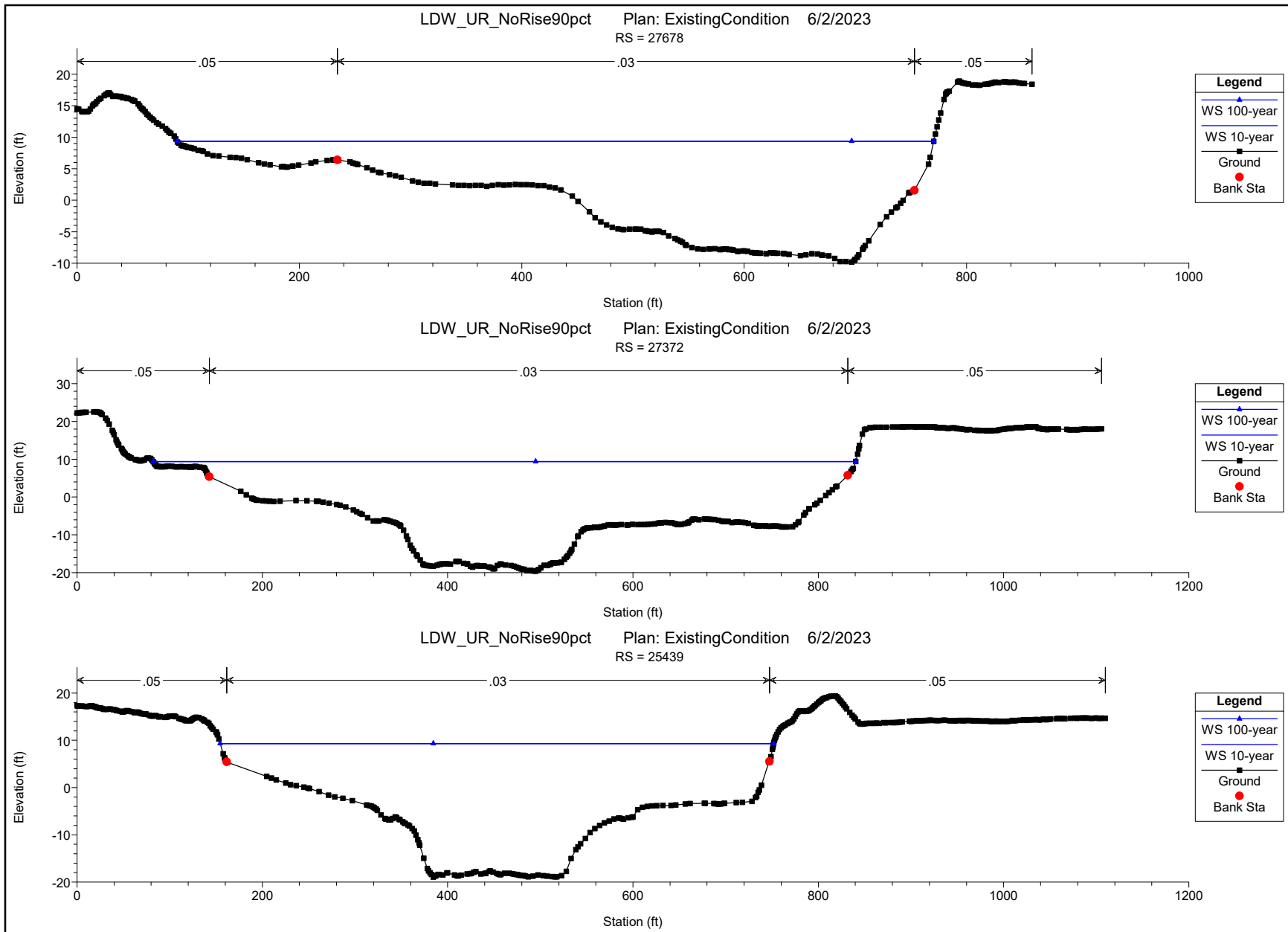


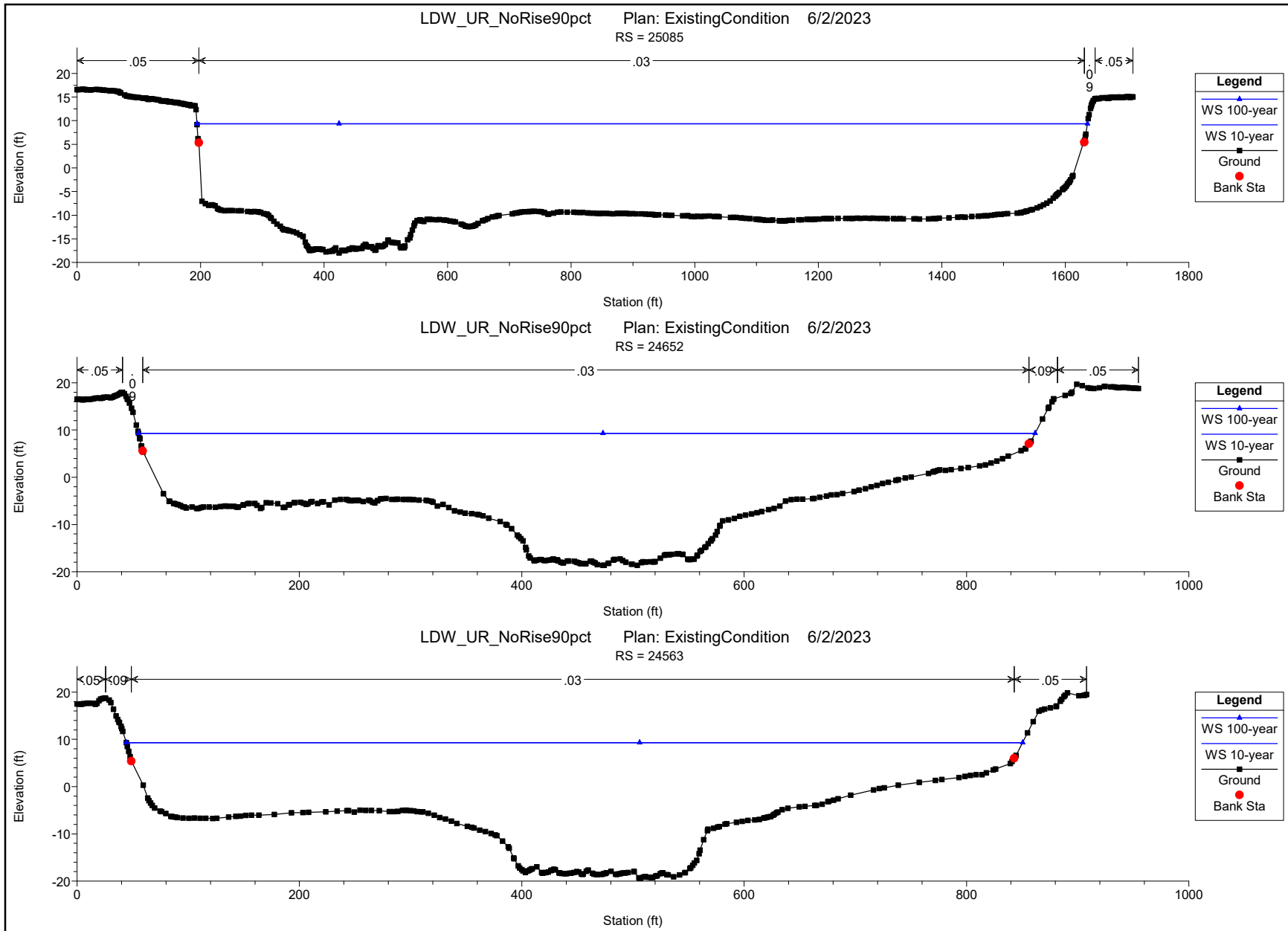


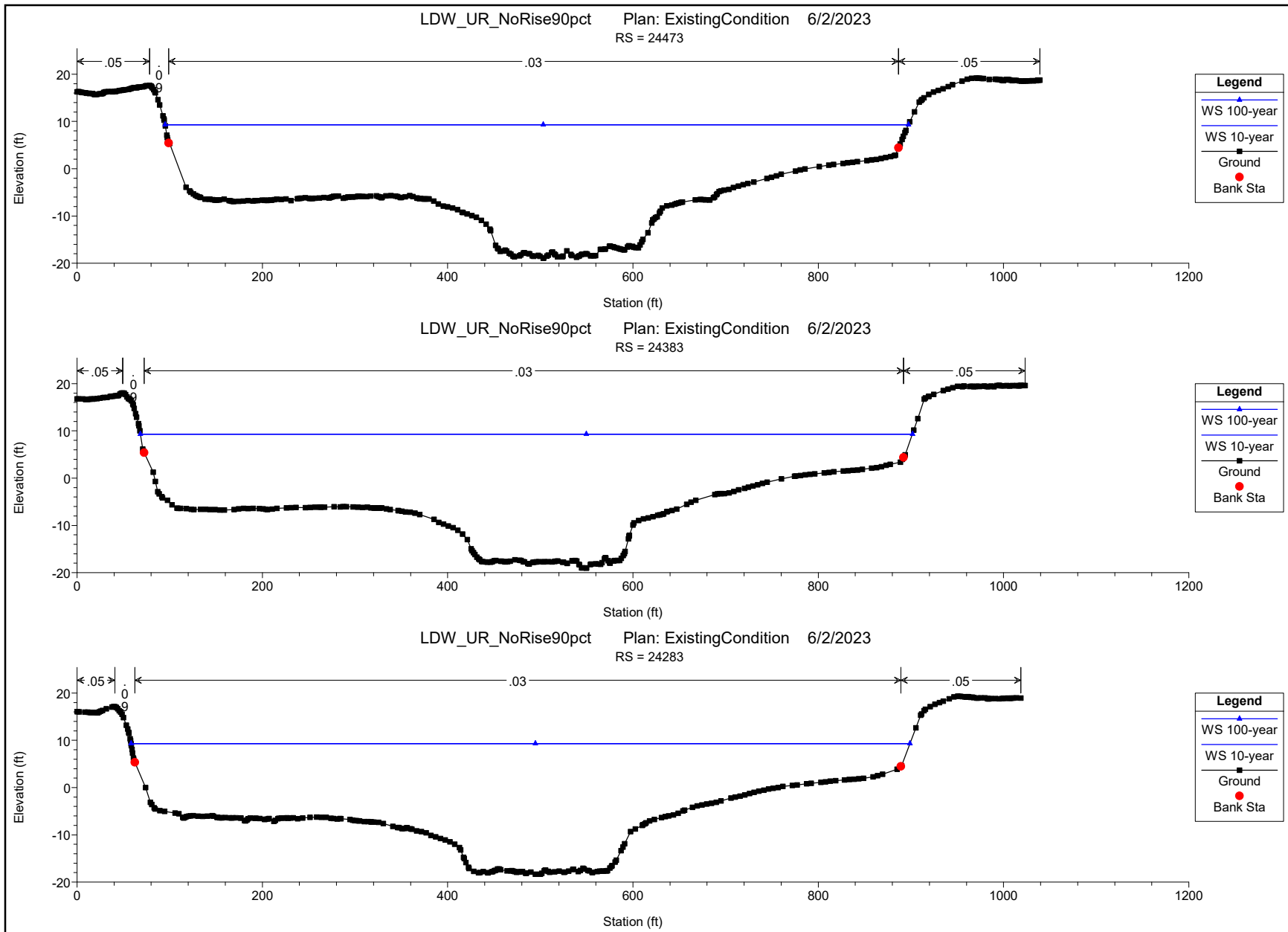


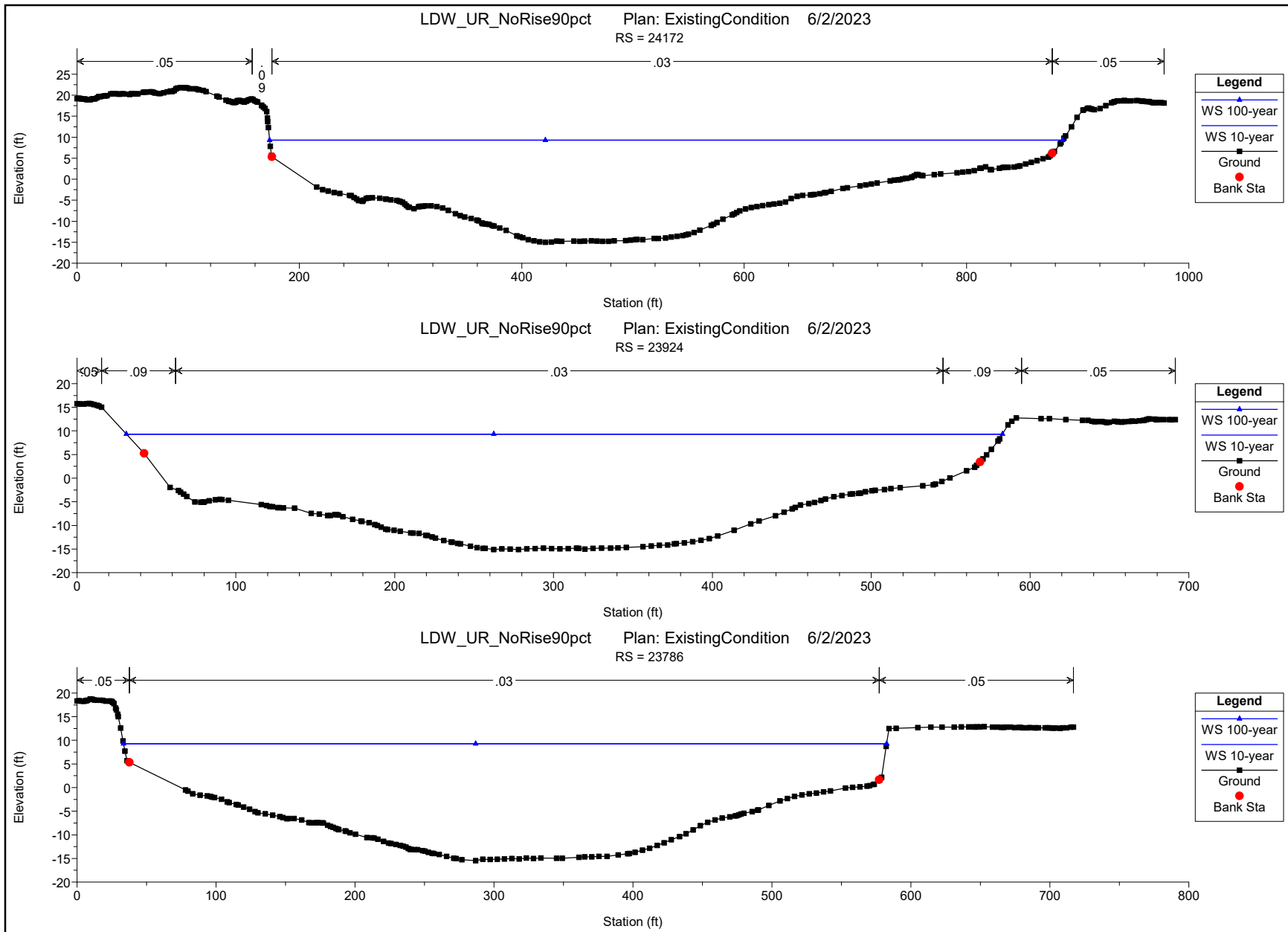


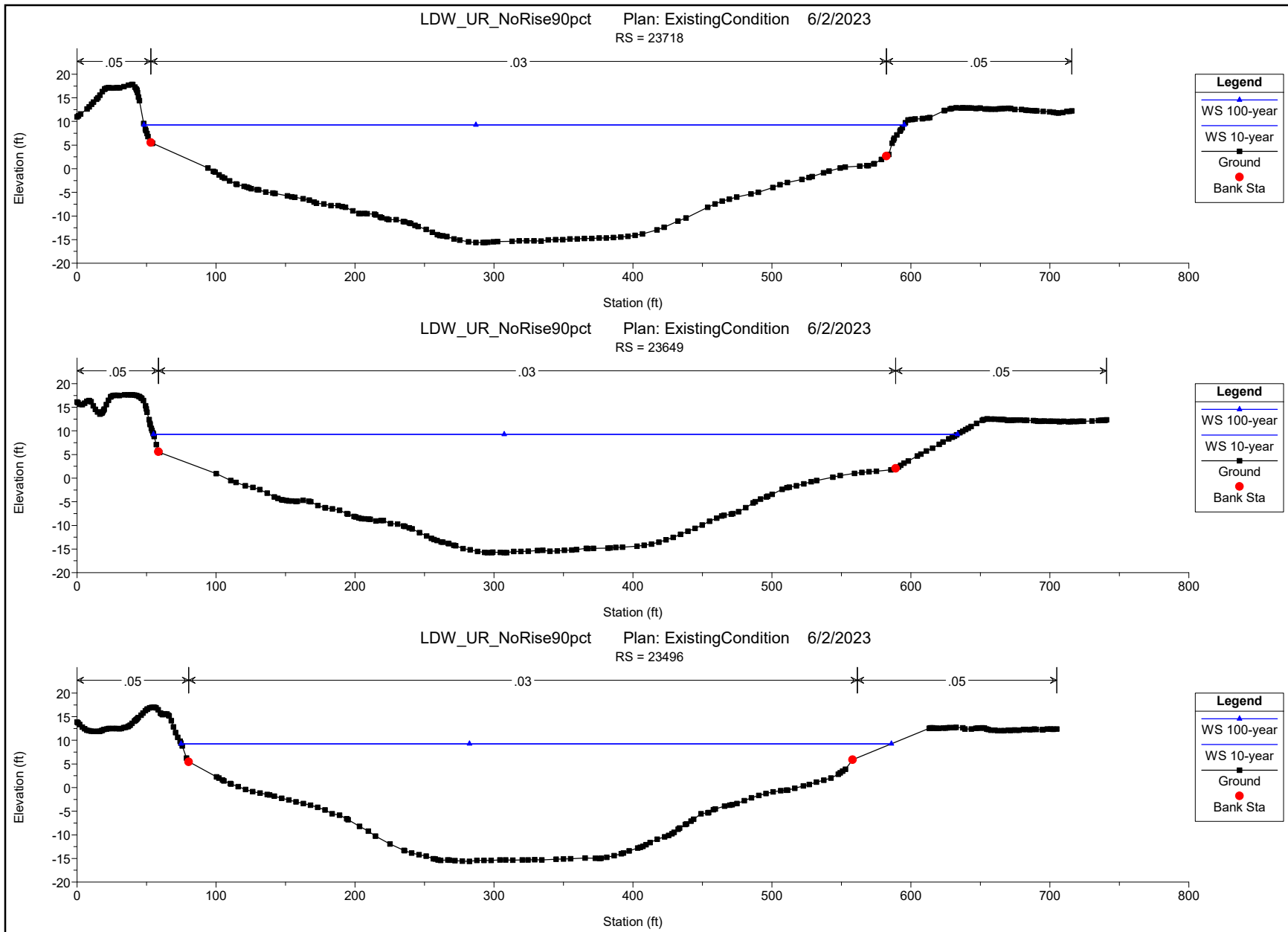


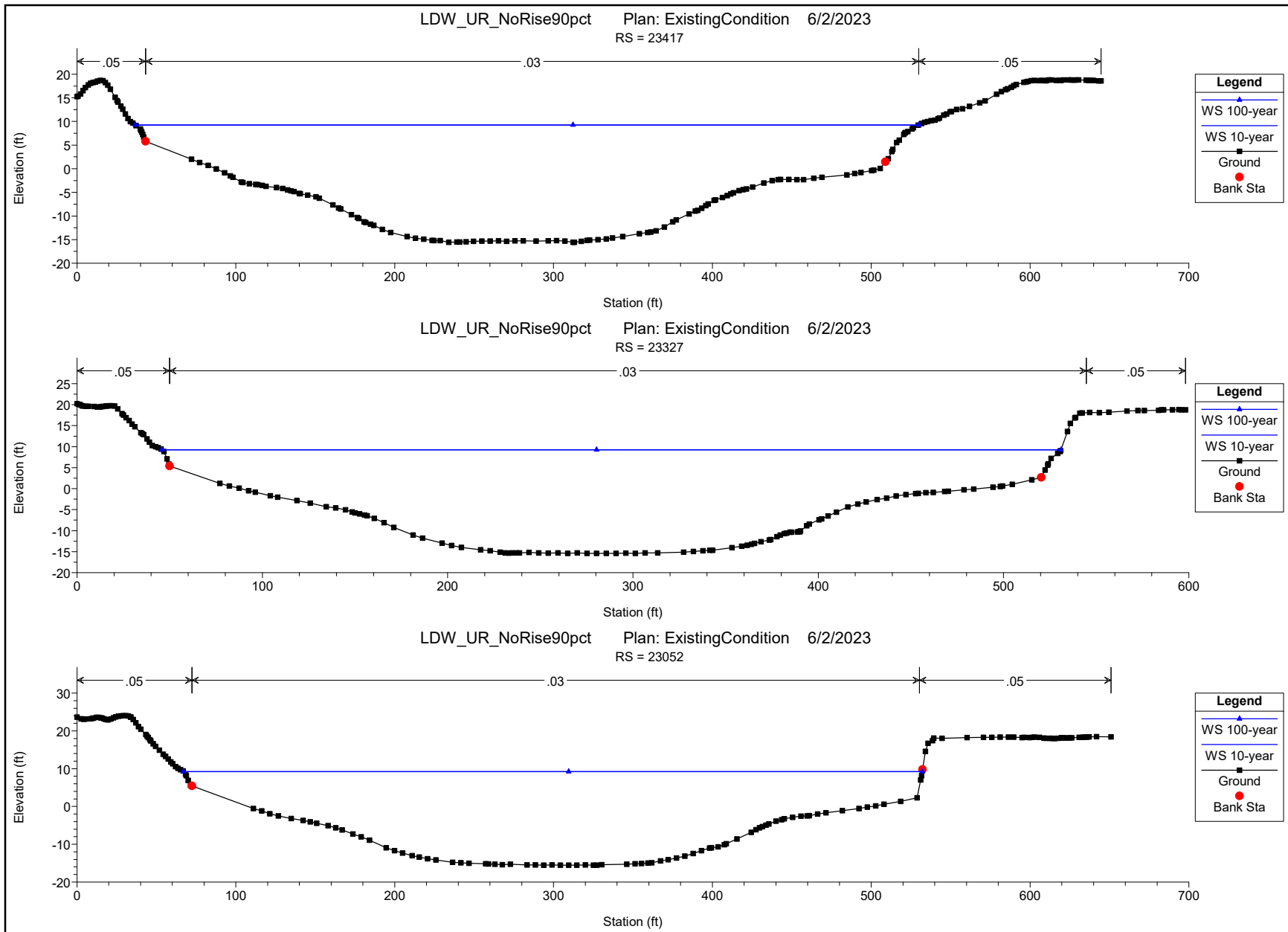


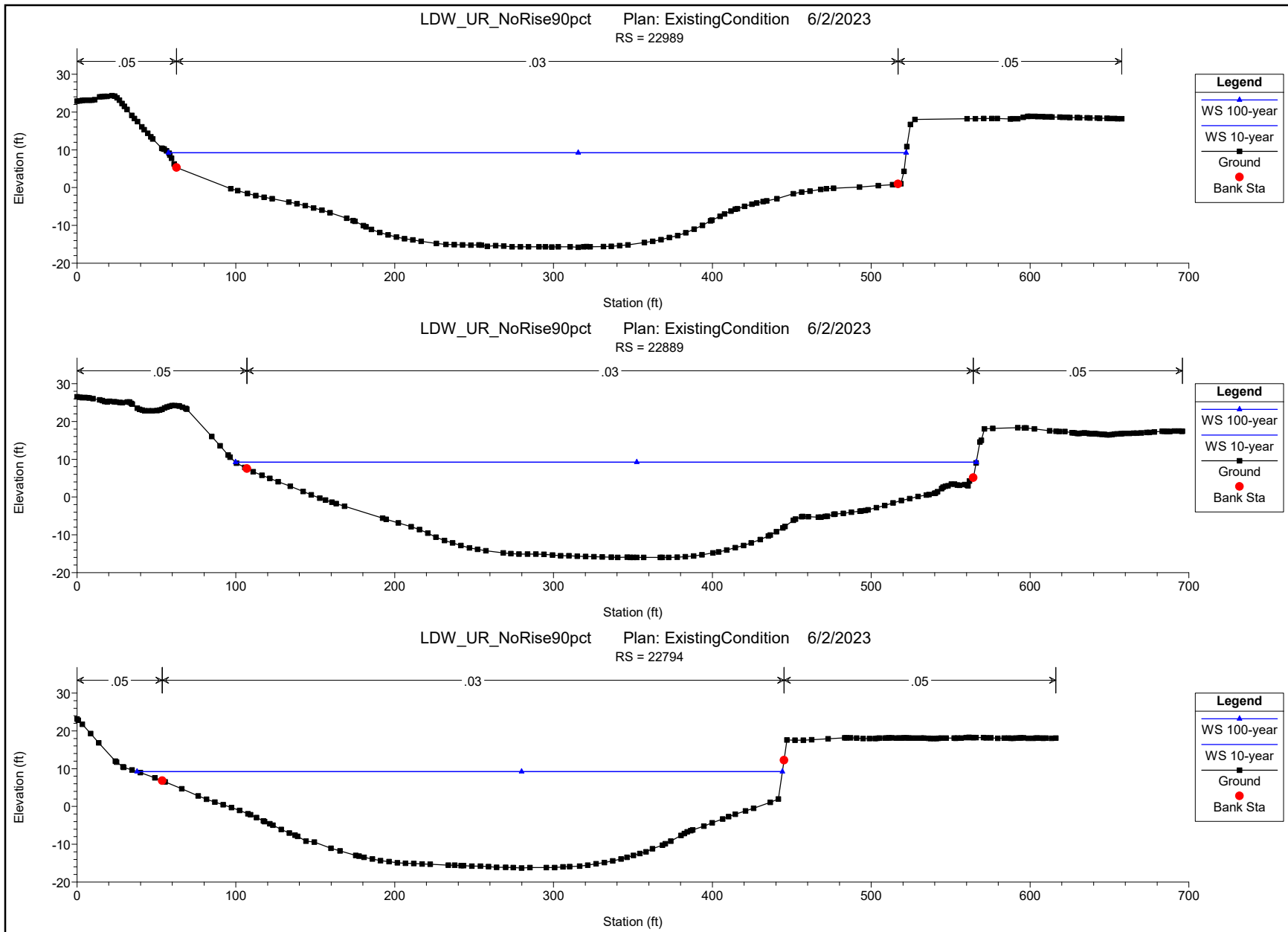


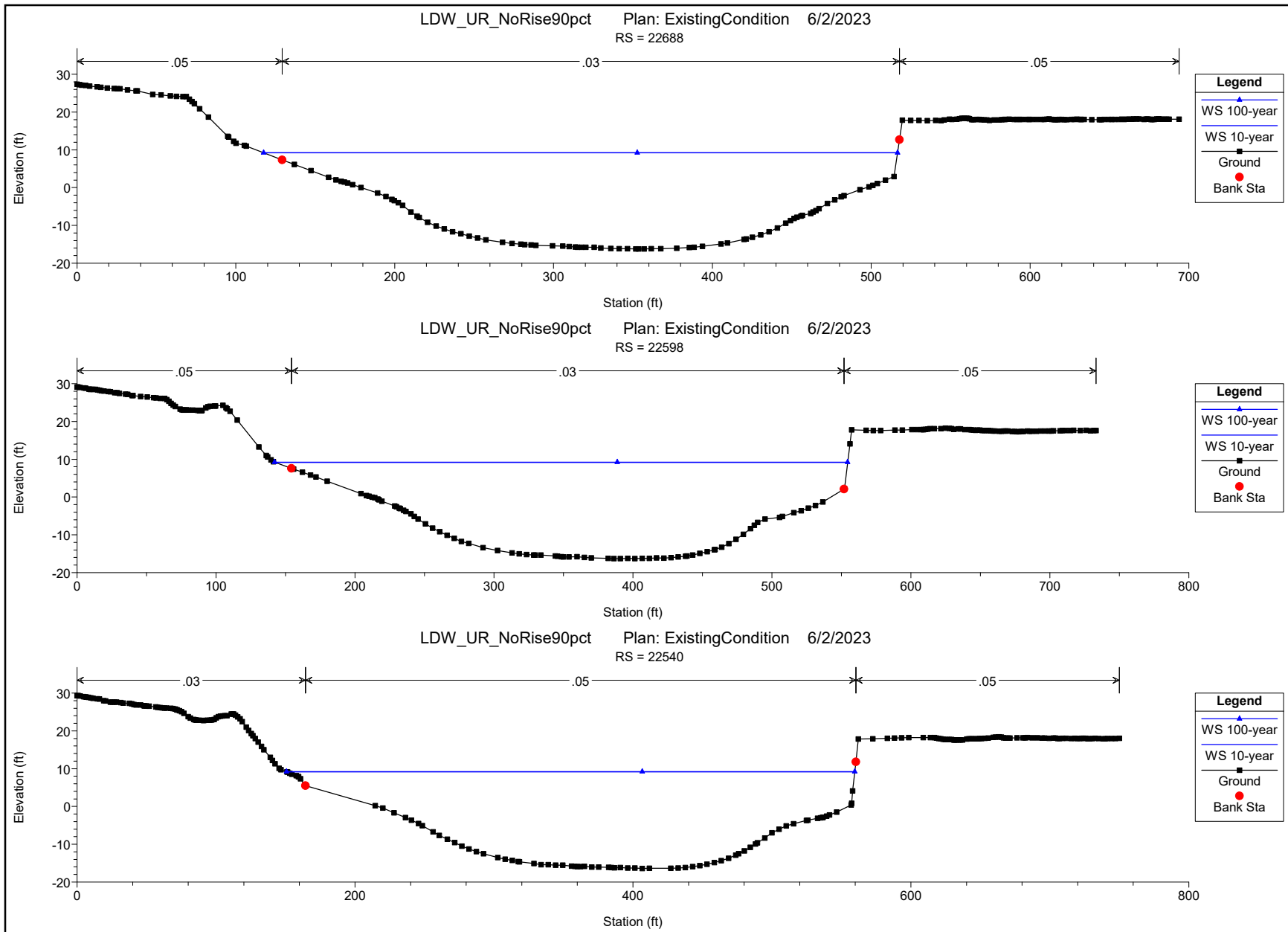


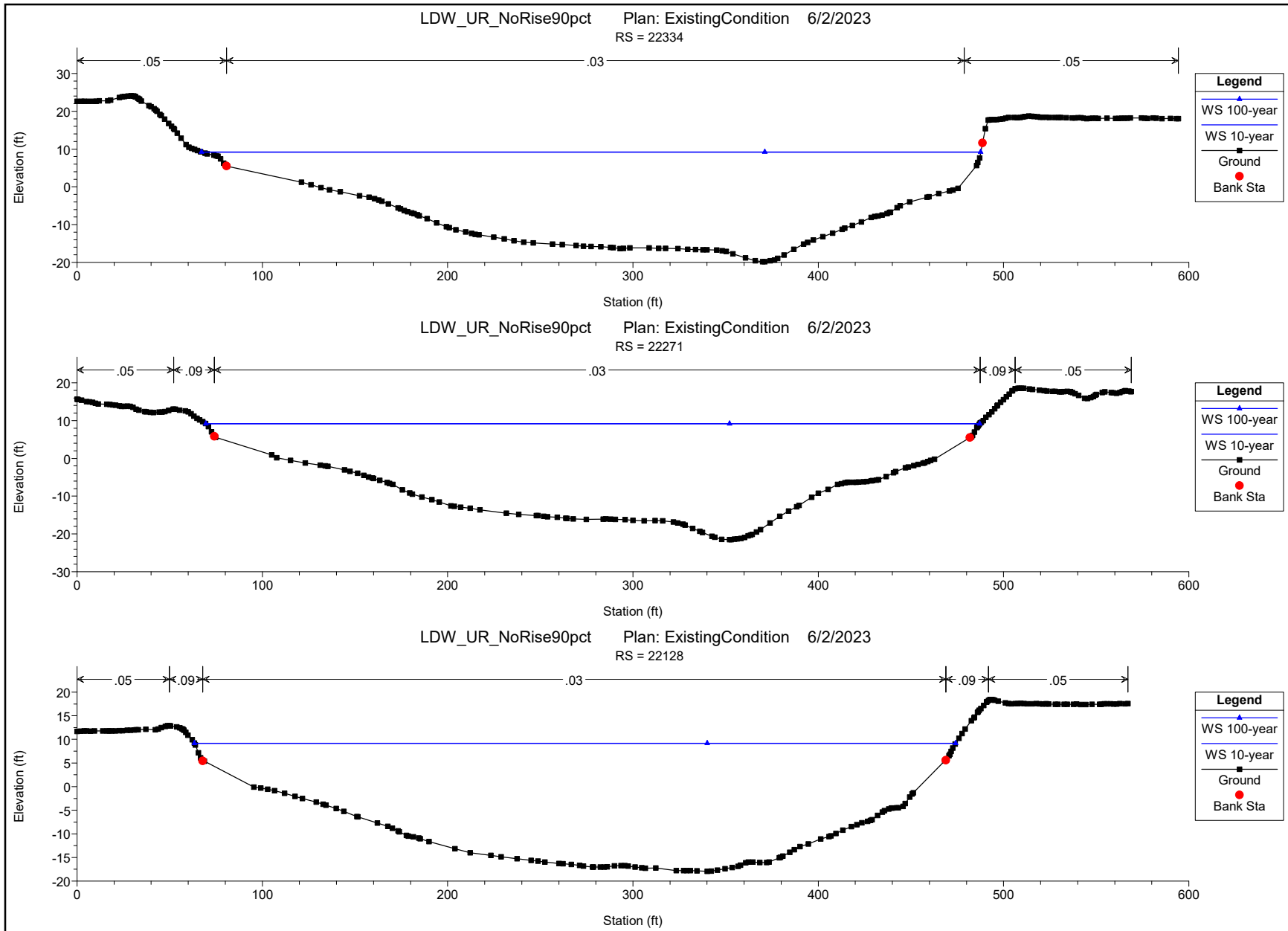


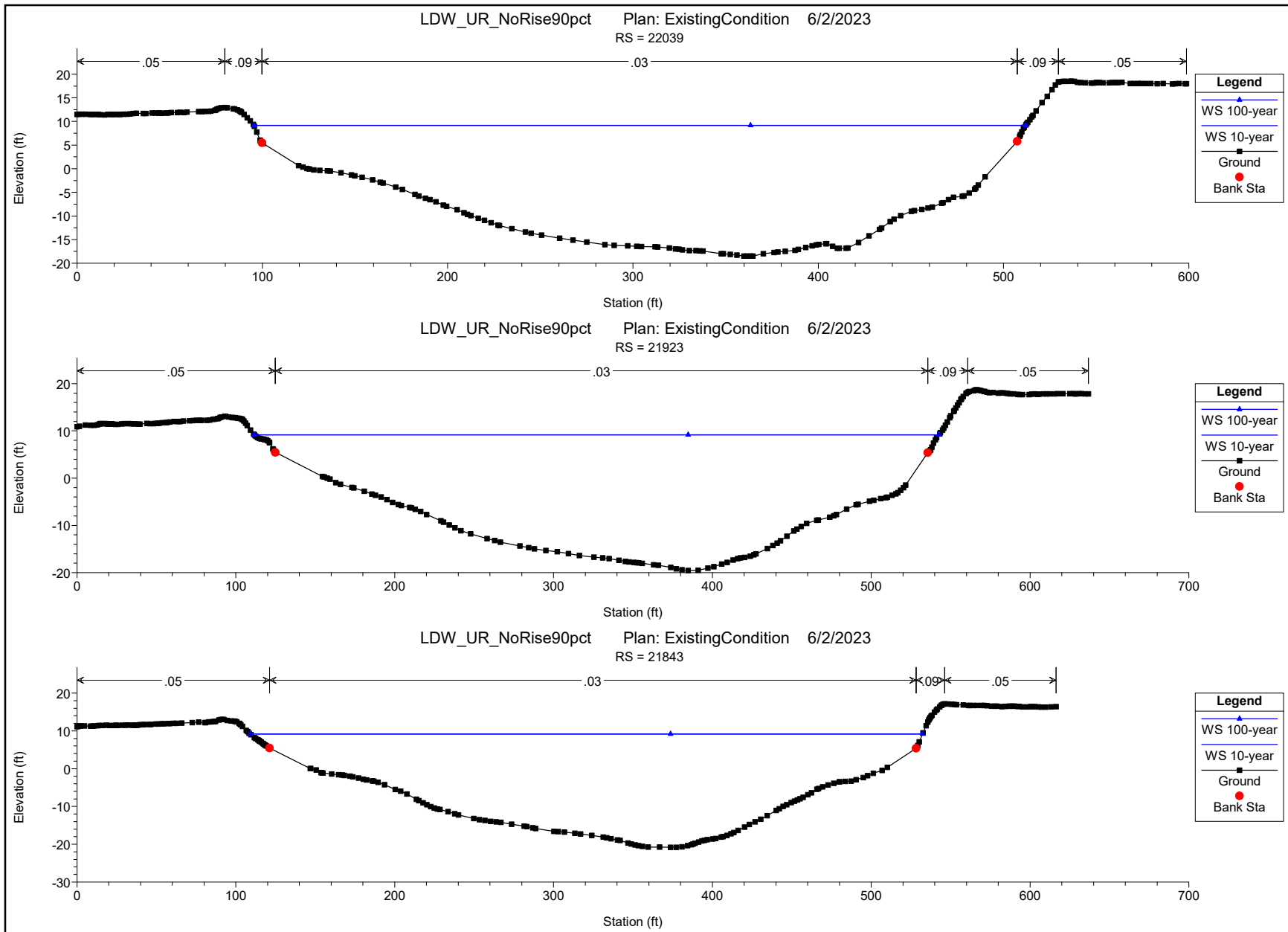


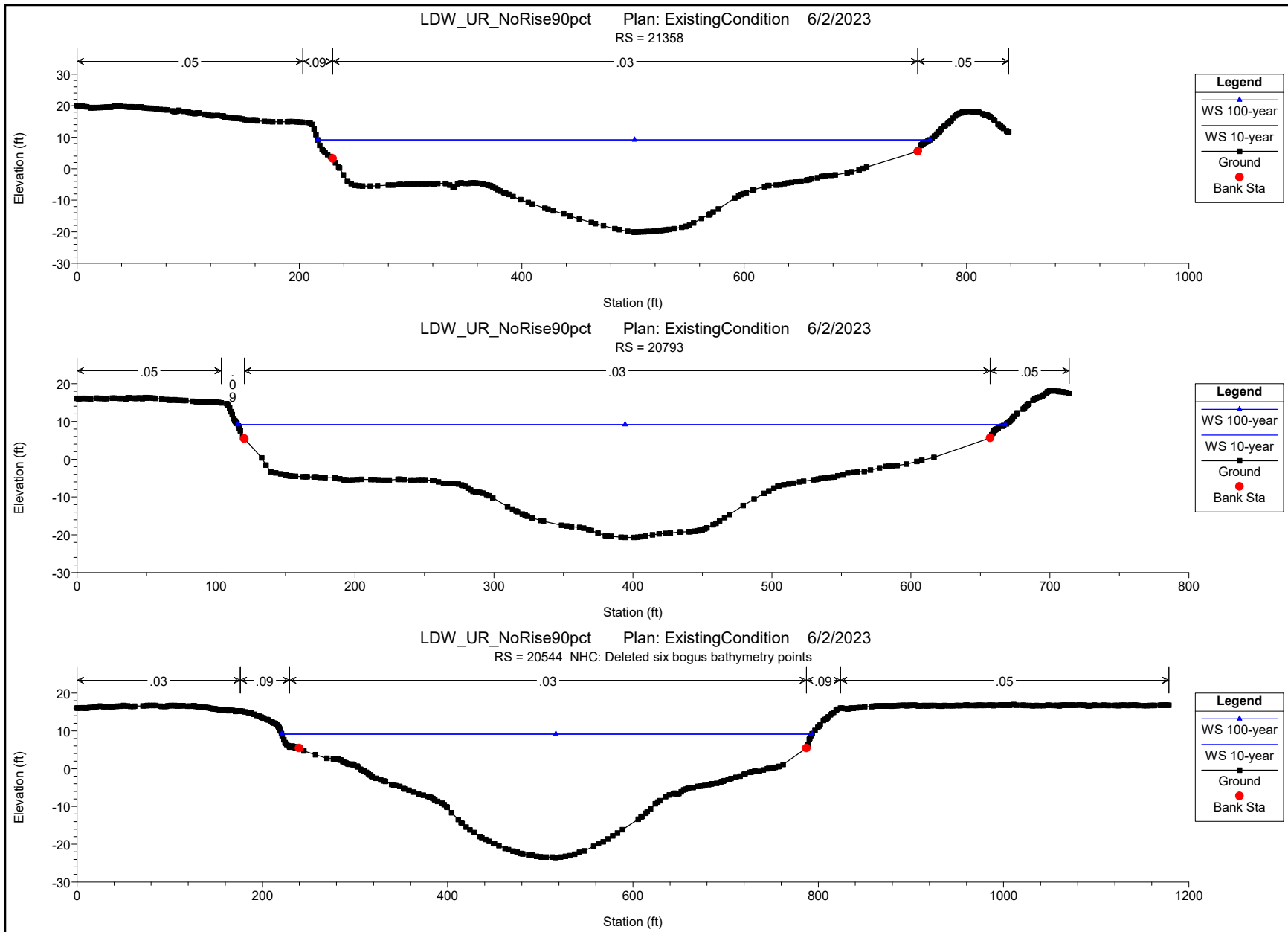


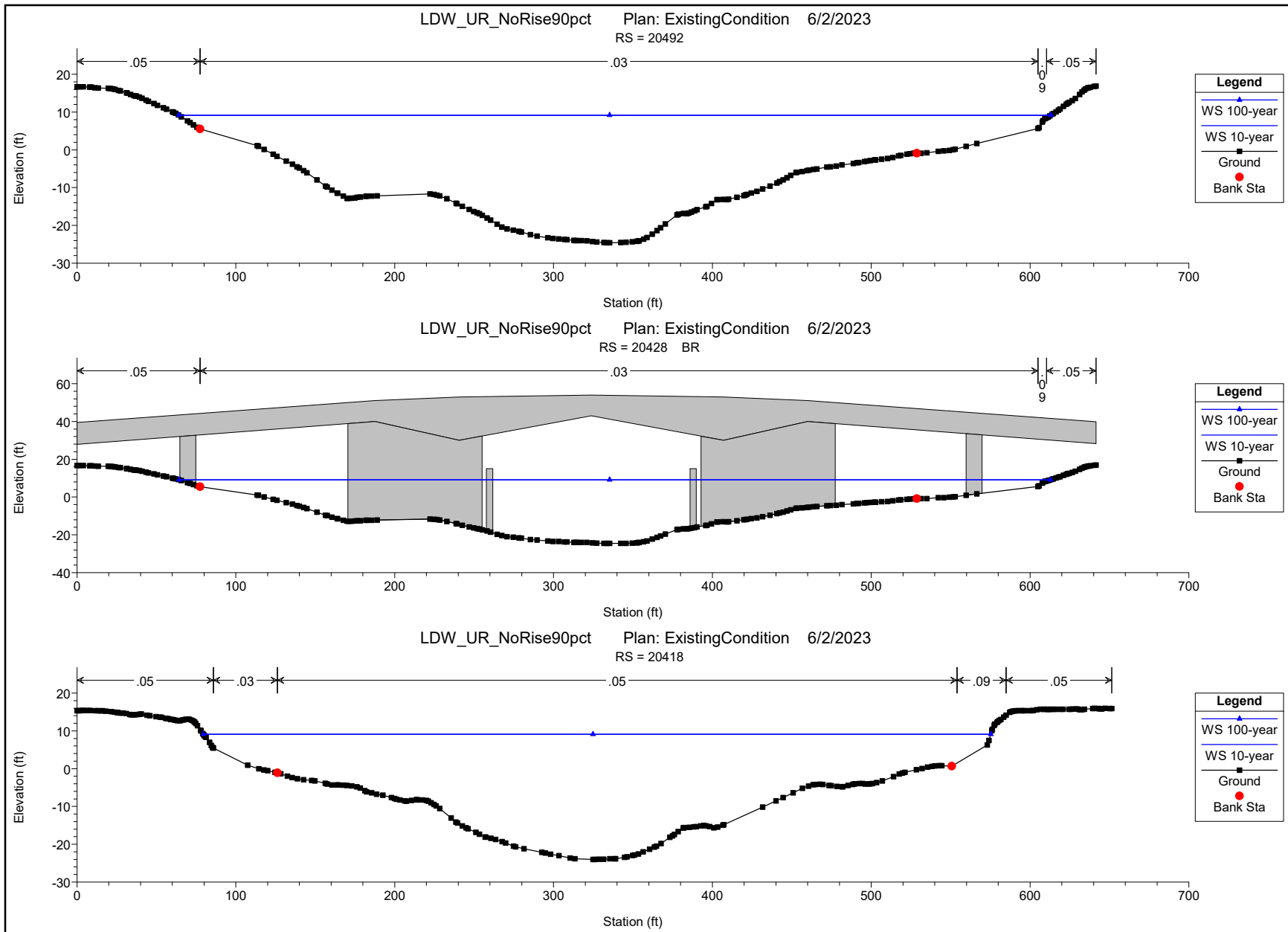


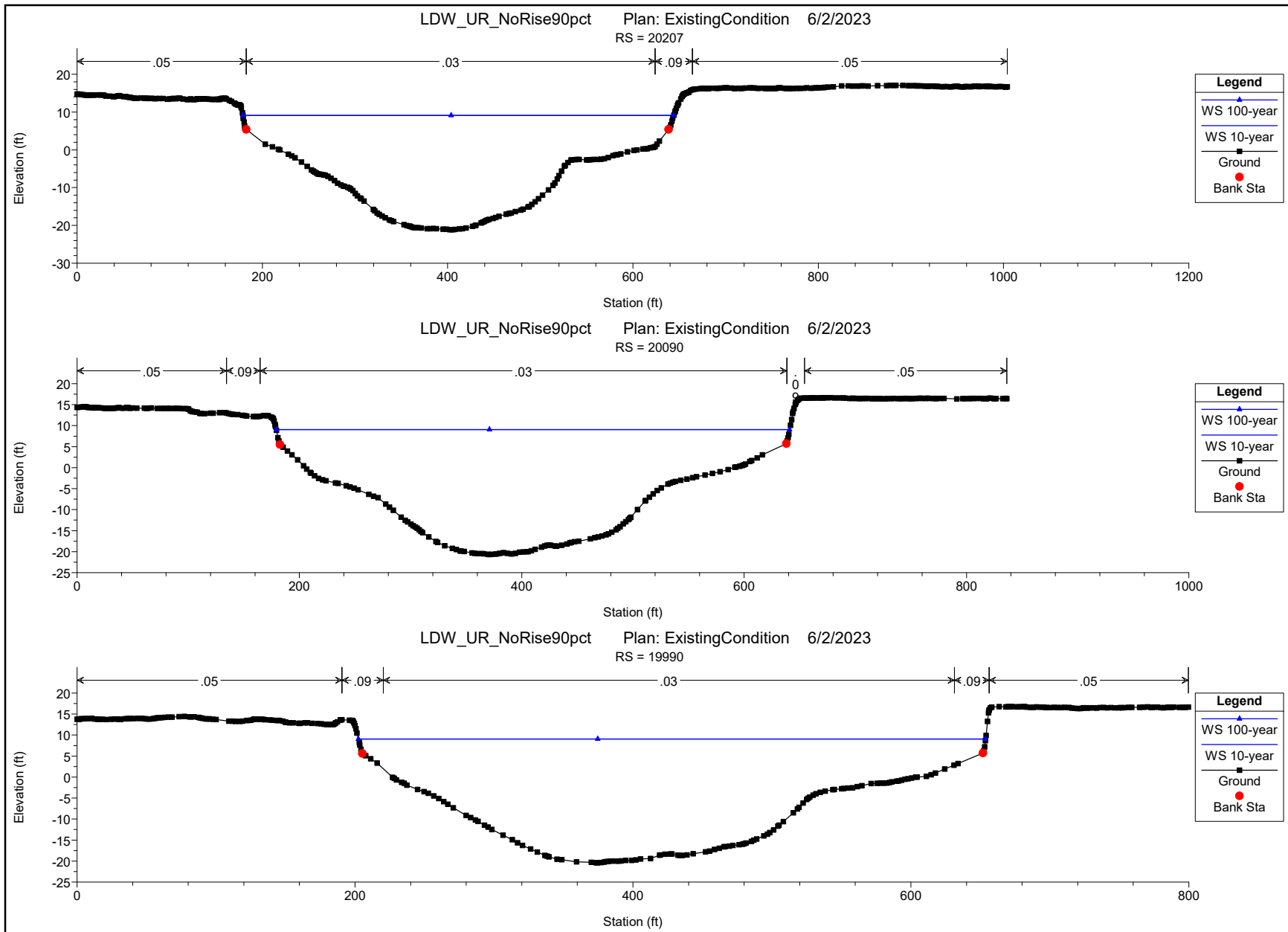


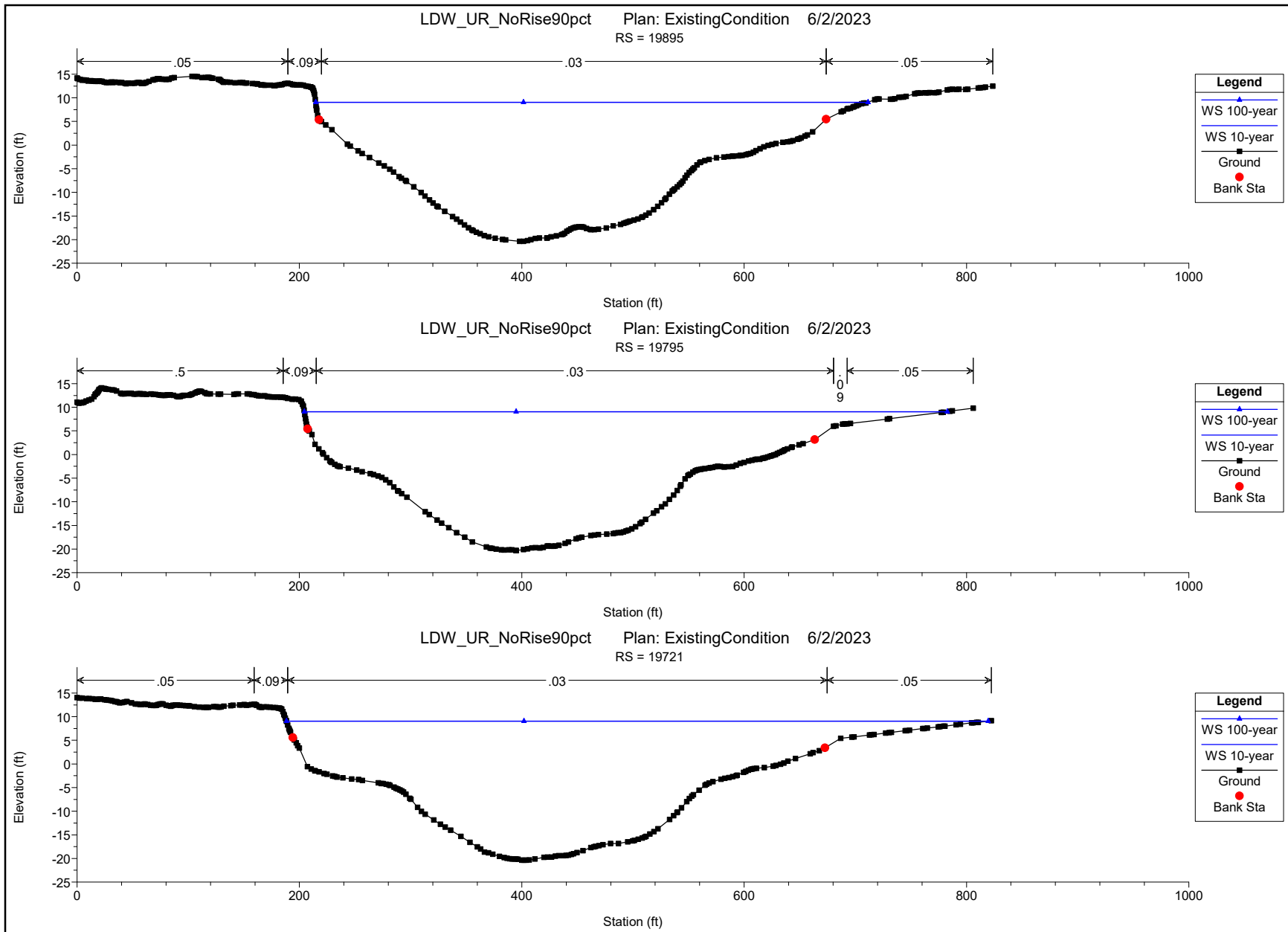


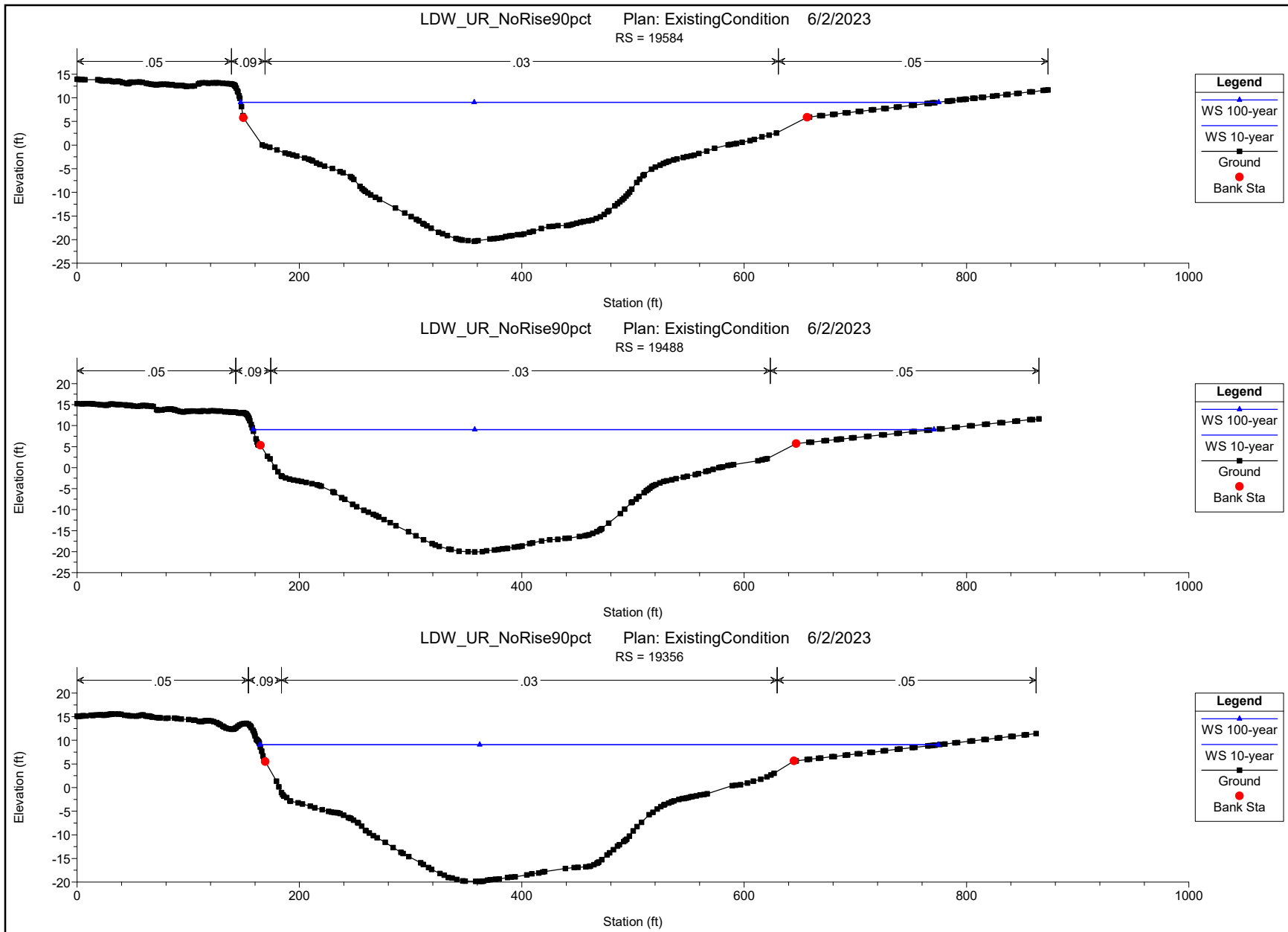


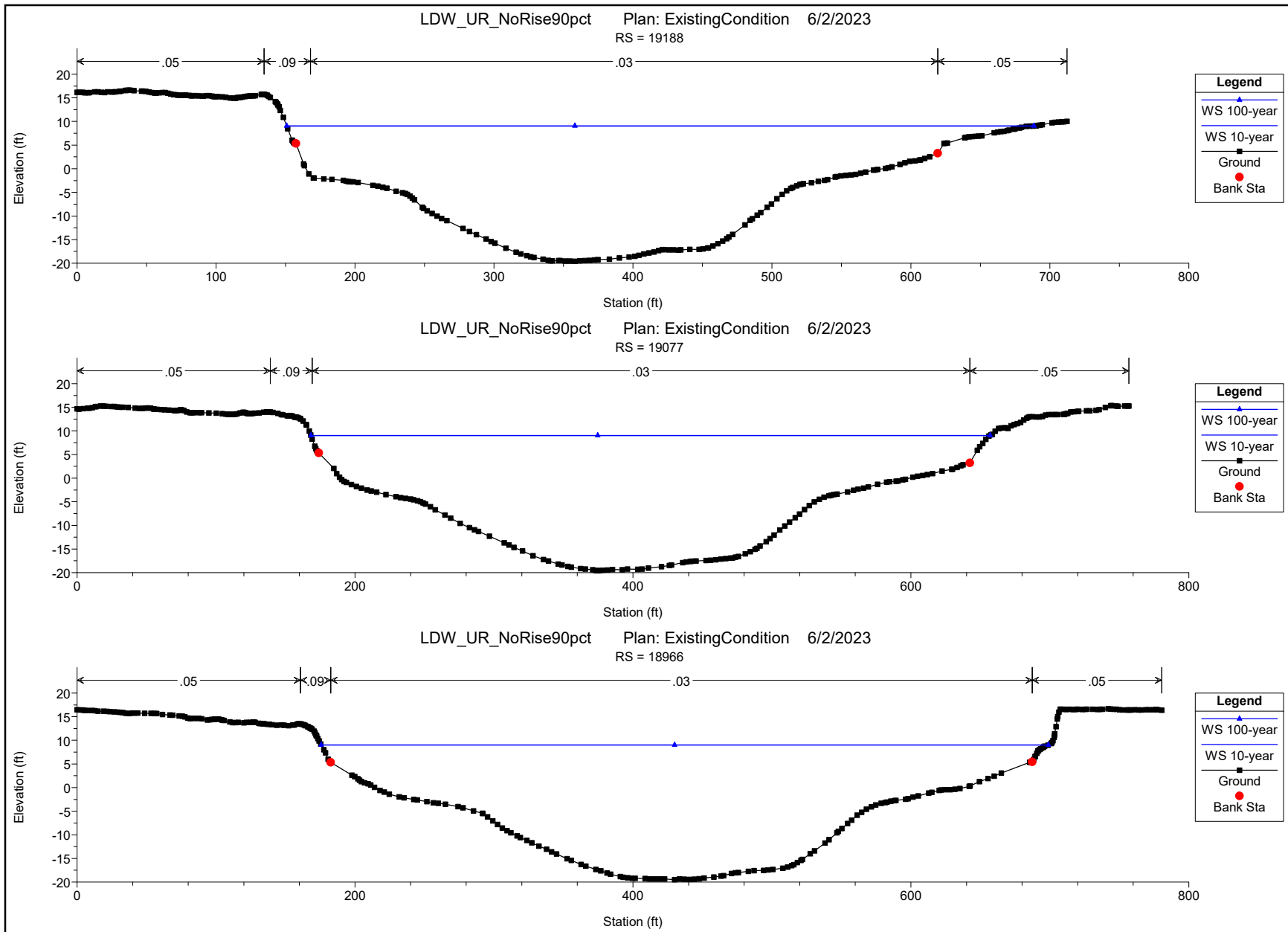


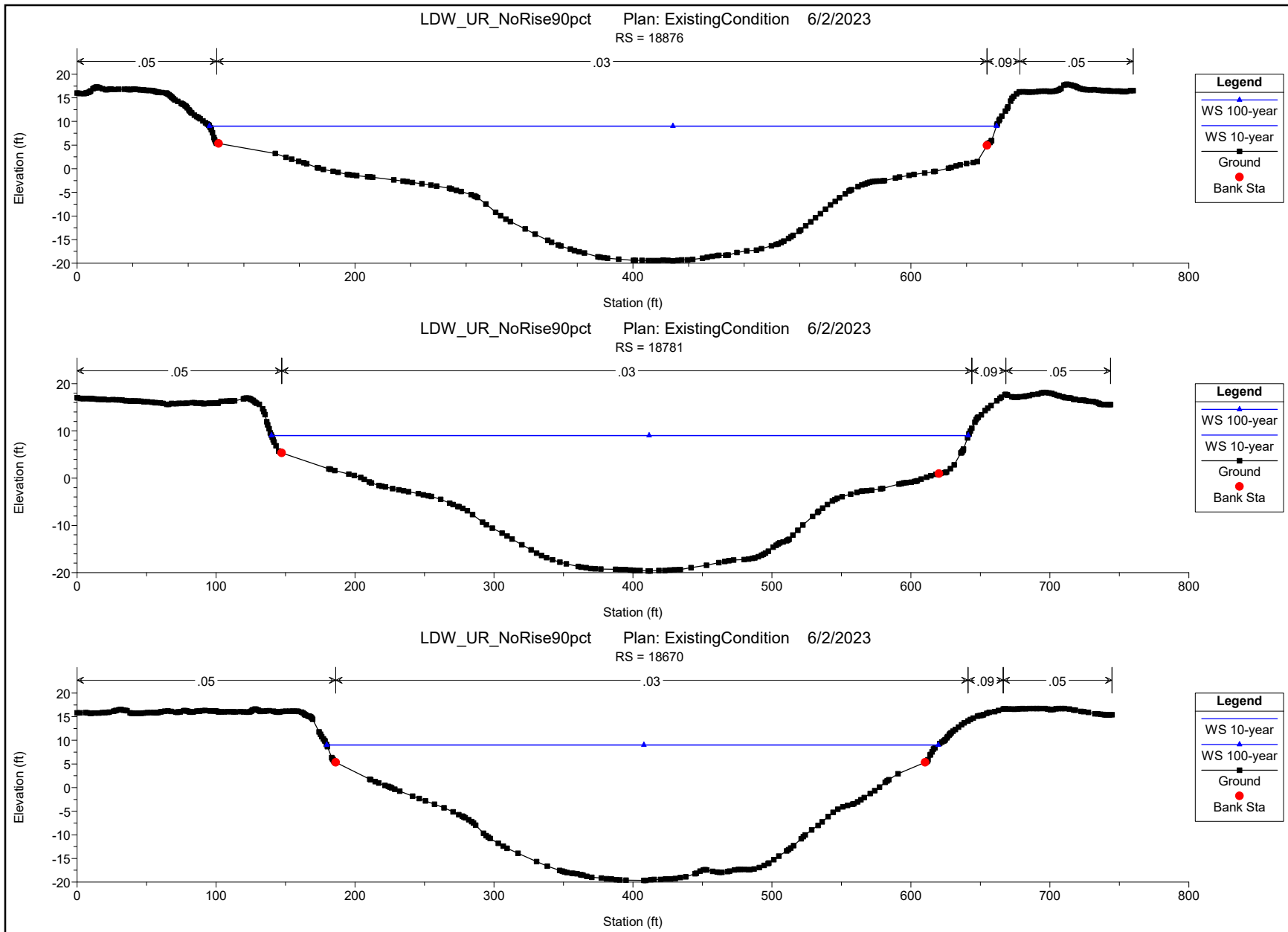












HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 10-year

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	339478	10-year	11060.00	1008.02	1024.91		1025.64	0.002852	6.85	1643.12	121.05	0.32
Mainstem	338369	10-year	11060.00	1005.35	1018.65		1020.36	0.009015	10.83	1144.39	127.35	0.57
Mainstem	337904	10-year	11060.00	1001.43	1014.20		1015.86	0.010294	10.83	1192.89	155.86	0.60
Mainstem	337482	10-year	11060.00	997.51	1009.06		1010.95	0.013129	11.14	1041.83	133.11	0.65
Mainstem	336700	10-year	11060.00	987.32	1001.48		1003.05	0.007890	10.24	1193.54	144.06	0.53
Mainstem	335935	10-year	11060.00	979.60	995.17		996.96	0.007895	11.07	1140.97	123.32	0.54
Mainstem	335127	10-year	11060.00	976.75	990.49		991.58	0.005294	8.50	1398.74	147.09	0.44
Mainstem	334335	10-year	11060.00	973.99	986.32		987.35	0.005378	8.22	1408.45	148.29	0.44
Mainstem	333485	10-year	11060.00	970.06	981.75		982.72	0.005437	8.06	1488.63	176.92	0.44
Mainstem	332814	10-year	11060.00	964.25	976.62		978.08	0.008926	10.11	1238.50	148.11	0.55
Mainstem	331901	10-year	11060.00	953.70	970.54		971.82	0.005371	9.18	1287.35	122.98	0.44
Mainstem	331251	10-year	11060.00	949.66	960.63	960.63	964.77	0.028597	16.58	715.97	95.44	0.97
Mainstem	330787	10-year	11060.00	936.35	952.47		954.49	0.008975	12.00	1116.50	123.95	0.57
Mainstem	330211	10-year	11060.00	928.46	949.34		950.71	0.004556	9.57	1262.32	97.44	0.41
Mainstem	329667	10-year	11060.00	928.53	946.78		948.08	0.005084	9.37	1290.88	107.07	0.43
Mainstem	328965	10-year	11060.00	927.65	942.49	938.39	943.96	0.006711	10.15	1293.03	155.46	0.50
Mainstem	328041	10-year	11060.00	921.69	933.57		935.80	0.011943	12.10	961.44	100.88	0.65
Mainstem	327027	10-year	11060.00	915.20	929.05		929.76	0.003160	6.86	1728.63	161.16	0.34
Mainstem	326288	10-year	11060.00	910.27	925.64		926.83	0.004947	8.89	1358.70	131.60	0.43
Mainstem	325755	10-year	11060.00	910.43	923.62		924.41	0.003791	7.19	1617.51	159.28	0.36
Mainstem	325206	10-year	11060.00	908.22	921.53		922.30	0.003880	7.31	1683.98	168.24	0.38
Mainstem	324789	10-year	11060.00	904.40	919.33		920.44	0.004929	8.75	1444.98	148.33	0.43
Mainstem	324519	10-year	11060.00	902.89	918.78		919.37	0.002478	6.31	1950.64	190.54	0.31
Mainstem	324255	10-year	11060.00	903.12	917.57		918.50	0.004148	7.88	1531.14	157.33	0.39
Mainstem	324060	10-year	11060.00	902.25	916.96		917.74	0.003345	7.20	1664.05	163.92	0.35
Mainstem	323706	10-year	11060.00	902.21	915.49		916.34	0.004861	7.96	1647.84	180.62	0.42
Mainstem	323226	10-year	11060.00	898.35	913.37		914.21	0.004033	7.90	1684.47	173.52	0.38
Mainstem	322877	10-year	11060.00	893.32	912.61		913.07	0.002237	5.65	2206.81	216.83	0.28
Mainstem	322692	10-year	11060.00	893.60	911.92		912.56	0.003397	6.69	1951.28	242.39	0.35
Mainstem	322539	10-year	11060.00	888.22	911.88	898.59	912.18	0.001097	4.54	2758.13	255.19	0.20
Mainstem	322360	10-year	11060.00	886.23	911.56	900.36	911.94	0.001529	5.15	2430.59	209.82	0.23
Mainstem	322323	10-year	11060.00	892.27	911.51	902.85	911.89	0.001543	5.08	2404.17	205.62	0.24
Mainstem	322106	10-year	11060.00	887.92	911.07	900.95	911.53	0.001590	5.51	2139.91	181.40	0.25
Mainstem	321990		Inl Struct									
Mainstem	321964	10-year	11060.00	879.22	893.86		894.53	0.003052	6.60	1723.62	153.54	0.33
Mainstem	321383	10-year	11060.00	874.07	890.90		892.22	0.005069	9.52	1315.15	119.08	0.44
Mainstem	320913	10-year	11060.00	871.33	889.11		890.12	0.003600	8.26	1466.48	116.71	0.37
Mainstem	320401	10-year	11060.00	869.76	883.54		886.59	0.015010	14.35	846.46	86.40	0.72
Mainstem	319910	10-year	11060.00	865.30	882.46		883.23	0.002803	7.21	1691.55	139.59	0.32
Mainstem	319419	10-year	11060.00	865.84	881.02		881.78	0.003085	7.10	1637.63	137.55	0.34
Mainstem	318690	10-year	11060.00	865.63	878.83		879.43	0.003257	6.37	1893.31	206.63	0.34
Mainstem	318664	10-year	11060.00	867.31	878.36		879.29	0.005721	7.88	1516.09	188.21	0.44
Mainstem	318109	10-year	11060.00	863.84	874.22		875.43	0.008540	9.24	1414.59	219.56	0.54
Mainstem	316832	10-year	11060.00	855.39	867.14		867.78	0.004247	6.45	1743.44	205.57	0.38
Mainstem	315623	10-year	11060.00	851.29	858.76	857.12	859.78	0.011804	8.51	1397.67	253.21	0.60
Mainstem	314635	10-year	11060.00	838.67	851.05		852.01	0.005590	8.20	1516.99	173.54	0.44
Mainstem	313801	10-year	11060.00	834.96	846.84		847.67	0.004736	7.38	1556.13	169.02	0.41
Mainstem	312903	10-year	11060.00	830.55	839.72		841.23	0.011922	9.97	1163.48	162.99	0.62
Mainstem	311853	10-year	11060.00	808.34	835.75		836.36	0.002245	6.46	1881.68	146.01	0.28
Mainstem	311340	10-year	11060.00	819.10	833.84		834.75	0.004592	7.67	1474.32	141.22	0.40
Mainstem	310533	10-year	11060.00	821.22	830.27	826.82	830.81	0.004834	6.16	2144.21	526.70	0.39
Mainstem	309830	10-year	11060.00	818.09	826.63		827.23	0.005418	6.26	1837.07	393.74	0.41
Mainstem	309107	10-year	11060.00	811.55	822.52	820.04	823.16	0.006045	7.47	1887.77	769.12	0.45
Mainstem	308368	10-year	11060.00	810.28	817.64	815.62	818.33	0.008772	7.50	1786.16	516.15	0.51
Mainstem	307956	10-year	11060.00	806.24	816.67		816.89	0.001717	3.96	2989.27	412.25	0.24
Mainstem	307708	10-year	11060.00	804.90	815.38		816.17	0.005171	7.17	1605.04	197.81	0.42
Mainstem	307660	10-year	11060.00	804.98	814.97		815.89	0.006719	8.00	1532.90	205.14	0.47
Mainstem	307402	10-year	11060.00	803.24	812.36		813.64	0.011022	9.60	1383.45	244.65	0.60
Mainstem	306984	10-year	11060.00	797.51	809.79		810.65	0.004743	7.73	1682.21	243.54	0.41
Mainstem	306816	10-year	11060.00	797.67	808.03		809.48	0.009276	9.90	1229.20	172.89	0.57
Mainstem	306324	10-year	11060.00	788.89	805.78		806.55	0.003560	7.17	1680.06	172.11	0.36
Mainstem	305628	10-year	11060.00	790.83	803.41		804.05	0.003475	6.44	1741.56	172.99	0.35
Mainstem	305538	10-year	11060.00	791.32	799.56	799.56	803.08	0.031006	15.23	760.10	113.46	0.99
Mainstem	304925	10-year	11060.00	783.64	795.34		796.13	0.004437	7.21	1620.35	178.57	0.39
Mainstem	304366	10-year	11060.00	782.00	792.93		793.68	0.004332	7.02	1674.10	187.28	0.39
Mainstem	303706	10-year	11060.00	776.97	790.56		791.23	0.003120	6.61	1737.55	168.05	0.34
Mainstem	303637	10-year	11060.00	777.26	788.98		790.77	0.010352	11.07	1117.12	135.63	0.60
Mainstem	303405	10-year	11060.00	775.70	789.58		789.78	0.000927	3.70	3204.24	293.77	0.19
Mainstem	302639	10-year	11060.00	773.65	788.03		788.64	0.002569	6.32	1882.03	183.21	0.31
Mainstem	301942	10-year	11060.00	772.59	781.42	780.69	784.34	0.023670	13.73	821.44	113.77	0.86
Mainstem	301509	10-year	11060.00	769.66	781.00		781.33	0.002187	4.87	2607.11	349.43	0.27
Mainstem	301066	10-year	11060.00	769.67	779.40		779.98	0.004169	6.32	1939.54	255.92	0.37
Mainstem	300464	10-year	11060.00	765.34	777.68	773.71	778.01	0.002504	5.52	2940.68	540.61	0.30
Mainstem	299856	10-year	11060.00	762.99	774.56		775.69	0.006076	8.66	1378.96	162.86	0.46
Mainstem	298758	10-year	11060.00	757.10	767.72		768.71	0.006563	8.18	1458.14	184.62	0.47

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 10-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/s)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	297428	10-year	11060.00	746.98	757.73		758.97	0.008195	9.18	1357.06	196.29	0.53
Mainstem	296831	10-year	11060.00	743.96	752.58		753.73	0.009352	8.74	1345.72	199.07	0.55
Mainstem	296245	10-year	11060.00	738.96	748.40	745.24	749.16	0.006362	6.99	1619.04	237.93	0.45
Mainstem	295786	10-year	11060.00	731.50	741.36	741.07	744.01	0.022184	14.07	1023.63	206.57	0.85
Mainstem	295136	10-year	11060.00	723.88	735.69		736.67	0.006113	8.07	1451.41	173.75	0.46
Mainstem	294624	10-year	11060.00	720.59	729.07	728.59	731.29	0.021095	12.39	1030.75	202.05	0.81
Mainstem	293890	10-year	11060.00	710.60	721.40		722.46	0.007238	8.30	1375.36	176.25	0.49
Mainstem	293679	10-year	11060.00	709.17	721.35		721.62	0.001526	4.20	2670.74	273.84	0.23
Mainstem	293161	10-year	11060.00	709.91	717.97		719.65	0.015107	10.45	1077.67	156.37	0.68
Mainstem	292459	10-year	11060.00	700.61	710.47	707.65	711.64	0.008706	8.74	1307.04	174.28	0.53
Mainstem	291699	10-year	11060.00	688.49	698.95	698.57	701.57	0.021453	13.38	955.51	184.39	0.83
Mainstem	290949	10-year	11060.00	680.04	692.97		694.00	0.005321	8.21	1403.52	145.73	0.43
Mainstem	290426	10-year	11060.00	679.06	687.18		689.21	0.018185	11.53	992.47	148.93	0.75
Mainstem	289597	10-year	11060.00	665.63	674.40	672.77	675.99	0.013744	10.38	1153.68	173.71	0.66
Mainstem	288827	10-year	11060.00	649.56	658.32	658.32	661.16	0.028088	14.05	909.52	180.39	0.93
Mainstem	287887	10-year	11060.00	641.14	653.27		653.81	0.003092	6.00	1981.65	228.73	0.33
Mainstem	287000	10-year	11060.00	636.25	648.02		649.48	0.008327	9.90	1241.15	164.82	0.54
Mainstem	286229	10-year	11060.00	629.18	636.14	635.91	638.62	0.028037	12.78	911.45	170.69	0.91
Mainstem	285532	10-year	11060.00	615.47	627.62		628.98	0.007790	9.42	1208.88	130.81	0.52
Mainstem	284719	10-year	11060.00	609.66	621.60	618.08	622.87	0.007255	9.28	1325.51	163.30	0.50
Mainstem	284053	10-year	11060.00	602.27	611.00	611.00	614.08	0.029127	14.42	842.74	147.83	0.95
Mainstem	283589	10-year	11060.00	597.58	607.63		608.30	0.005267	6.76	1788.25	254.07	0.41
Mainstem	282818	10-year	11060.00	591.35	600.80		602.30	0.012297	9.95	1171.18	171.99	0.63
Mainstem	282353	10-year	11060.00	586.31	594.47		596.01	0.014921	10.16	1162.22	190.06	0.68
Mainstem	281593	10-year	11060.00	569.44	580.49	579.30	583.27	0.018485	13.52	869.43	111.71	0.77
Mainstem	280949	10-year	11060.00	560.42	569.61		571.71	0.017068	11.68	974.72	138.59	0.74
Mainstem	280125	10-year	11060.00	552.35	565.20		565.88	0.003422	6.61	1702.23	162.78	0.35
Mainstem	279386	10-year	11060.00	549.44	558.92	557.45	561.07	0.015509	11.98	1008.81	148.59	0.72
Mainstem	278583	10-year	11060.00	540.98	550.90		552.09	0.007978	8.81	1306.51	160.17	0.52
Mainstem	278161	10-year	11060.00	536.98	547.12		548.49	0.008923	9.56	1242.92	160.30	0.55
Mainstem	277707	10-year	11060.00	530.49	541.26		543.40	0.014026	12.26	1051.24	147.66	0.69
Mainstem	277105	10-year	11060.00	524.29	536.02	532.95	537.17	0.007271	9.14	1429.65	178.91	0.50
Mainstem	276619	10-year	11060.00	518.92	528.04	528.04	530.92	0.026080	14.28	913.55	166.51	0.90
Mainstem	275943	10-year	11060.00	510.39	524.62		525.13	0.002278	5.76	1974.24	176.42	0.29
Mainstem	275458	10-year	11060.00	510.10	518.96	518.75	522.21	0.026869	14.78	813.10	124.21	0.93
Mainstem	274565	10-year	11060.00	498.10	510.57		511.62	0.006058	8.34	1414.84	167.03	0.46
Mainstem	273800	10-year	11060.00	494.39	504.41		505.80	0.009706	9.53	1202.39	151.34	0.57
Mainstem	272923	10-year	11060.00	485.76	497.65		498.79	0.006547	8.63	1320.86	143.85	0.48
Mainstem	272342	10-year	11060.00	482.77	494.31		495.29	0.005480	7.99	1431.89	150.08	0.44
Mainstem	271909	10-year	11060.00	477.04	487.26	487.26	490.42	0.029091	14.70	835.23	141.36	0.95
Mainstem	271535	10-year	11060.00	471.21	482.73		484.13	0.008735	9.65	1245.25	160.74	0.55
Mainstem	271038	10-year	11060.00	468.32	478.81		479.80	0.008162	8.01	1401.13	189.57	0.51
Mainstem	270579	10-year	11060.00	465.53	474.51		475.71	0.009860	8.89	1290.22	174.48	0.56
Mainstem	270114	10-year	11060.00	458.56	470.12		471.48	0.008332	9.45	1222.57	144.20	0.53
Mainstem	269729	10-year	11060.00	456.27	467.17	463.75	468.38	0.007493	8.95	1300.85	151.08	0.51
Mainstem	269264	10-year	11060.00	453.51	459.95	459.56	462.23	0.027567	12.18	930.44	173.10	0.89
Mainstem	268752	10-year	11060.00	442.46	457.35	452.57	457.93	0.003338	7.03	1876.87	210.57	0.34
Mainstem	268388	10-year	11060.00	433.14	455.79		456.78	0.002708	8.11	1463.67	92.01	0.33
Mainstem	268182	10-year	11060.00	432.18	455.70		456.24	0.001498	6.13	2074.67	139.12	0.24
Mainstem	267854	10-year	11060.00	431.80	447.90	447.97	453.46	0.026440	19.28	641.65	65.99	0.95
Mainstem	267516	10-year	11060.00	431.01	442.47		443.84	0.009132	9.68	1182.05	138.63	0.56
Mainstem	267115	10-year	11060.00	427.61	438.94	435.64	440.36	0.008378	9.65	1199.27	137.02	0.54
Mainstem	266561	10-year	11060.00	422.26	432.16		434.23	0.014059	11.69	1001.42	128.87	0.69
Mainstem	266133	10-year	11060.00	413.45	429.88		430.87	0.003819	8.09	1456.65	121.70	0.38
Mainstem	265668	10-year	11060.00	409.35	425.26		427.84	0.011756	12.94	881.06	75.64	0.63
Mainstem	265362	10-year	11060.00	407.68	423.88		425.17	0.005022	9.22	1265.05	105.27	0.43
Mainstem	265014	10-year	11060.00	408.22	419.73	417.92	422.22	0.015663	12.71	894.96	102.09	0.72
Mainstem	264370	10-year	11060.00	402.08	413.82		415.14	0.007439	9.25	1222.69	128.12	0.50
Mainstem	263657	10-year	11060.00	396.62	409.33		410.63	0.005501	9.21	1250.78	124.63	0.49
Mainstem	262743	10-year	11060.00	393.90	405.03		405.95	0.004545	7.75	1493.58	170.36	0.44
Mainstem	262221	10-year	11060.00	390.55	400.55		402.35	0.010980	11.27	1204.42	213.95	0.67
Mainstem	261645	10-year	11060.00	385.29	398.66		399.30	0.002575	6.46	1783.74	173.16	0.34
Mainstem	261318	10-year	11060.00	386.42	397.08		398.10	0.005344	8.22	1446.17	175.34	0.47
Mainstem	260996	10-year	11060.00	384.64	393.00	391.95	395.18	0.016147	11.88	948.67	144.61	0.78
Mainstem	260478	10-year	11060.00	379.66	388.17		389.23	0.007864	8.60	1486.16	250.22	0.55
Mainstem	260040	10-year	11060.00	375.12	386.12		386.80	0.003785	6.70	1758.63	222.43	0.40
Mainstem	259570	10-year	11060.00	371.15	384.41		385.09	0.003451	6.83	1819.69	237.27	0.38
Mainstem	259259	10-year	11060.00	371.04	382.81		383.77	0.005270	8.12	1530.58	202.51	0.47
Mainstem	258884	10-year	11060.00	367.97	381.10		381.90	0.004481	7.84	1835.31	265.17	0.43
Mainstem	258224	10-year	11060.00	363.49	376.41	374.46	377.89	0.008404	10.56	1388.82	388.05	0.59
Mainstem	257574	10-year	11060.00	360.44	373.11		373.89	0.004271	7.16	1613.19	196.17	0.42
Mainstem	256824	10-year	11060.00	356.90	366.88	365.88	368.70	0.012433	11.38	1191.11	217.87	0.70
Mainstem	256312	10-year	11060.00	353.50	362.47		363.66	0.007447	8.93	1346.73	189.99	0.55
Mainstem	255895	10-year	11060.00	348.37	360.14		361.11	0.004935	8.09	1548.55	210.72	0.45
Mainstem	255272	10-year	11060.00	345.52	357.46	354.30	358.16	0.004331	7.61	1976.45	278.46	0.43

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 10-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	254850	10-year	11060.00	341.44	354.79		356.05	0.005712	9.17	1380.68	228.85	0.50
Mainstem	254464	10-year	11060.00	341.93	353.18		354.06	0.004214	7.59	1562.52	209.44	0.42
Mainstem	253778	10-year	11060.00	338.75	348.25		349.74	0.009933	10.23	1277.50	211.45	0.63
Mainstem	253398	10-year	11060.00	336.30	345.83		346.72	0.005848	7.62	1483.49	205.43	0.48
Mainstem	253039	10-year	11060.00	333.97	342.64		343.93	0.010430	9.29	1277.44	211.45	0.63
Mainstem	252732	10-year	11060.00	328.80	340.59		341.68	0.005154	8.50	1393.21	160.82	0.47
Mainstem	252004	10-year	11060.00	322.69	332.58	331.86	335.20	0.017727	13.10	894.66	140.27	0.83
Mainstem	251497	10-year	11060.00	320.14	328.89		329.77	0.006122	7.60	1509.04	221.74	0.49
Mainstem	251133	10-year	11060.00	317.25	325.43		326.82	0.010524	9.54	1212.78	200.99	0.63
Mainstem	250726	10-year	11060.00	313.97	321.57		322.70	0.009497	8.57	1336.39	226.44	0.59
Mainstem	250261	10-year	11060.00	307.64	317.64		318.85	0.007305	8.93	1290.67	168.73	0.54
Mainstem	249607	10-year	11060.00	304.74	314.31		315.03	0.004428	6.91	1706.91	225.23	0.42
Mainstem	248873	10-year	11060.00	297.75	310.58		311.64	0.004712	8.31	1384.33	143.46	0.45
Mainstem	248382	10-year	11060.00	297.88	307.60		308.81	0.007271	9.09	1354.14	185.29	0.54
Mainstem	247870	10-year	11060.00	294.56	304.75		305.62	0.005042	8.02	1787.25	303.03	0.46
Mainstem	247099	10-year	11060.00	285.52	297.80	296.25	299.85	0.011728	11.77	1051.21	146.68	0.68
Mainstem	246402	10-year	11060.00	282.89	292.91		293.97	0.005772	8.42	1432.31	182.93	0.49
Mainstem	245573	10-year	11060.00	275.96	288.76		289.75	0.004502	8.28	1519.59	176.55	0.44
Mainstem	244897	10-year	11060.00	275.58	284.47		285.74	0.008099	9.27	1321.73	191.32	0.57
Mainstem	244163	10-year	11060.00	269.05	280.33		281.23	0.004620	7.75	1509.42	175.23	0.44
Mainstem	243661	10-year	11060.00	266.28	276.41		278.01	0.009091	10.27	1135.71	143.85	0.61
Mainstem	242875	10-year	11060.00	260.71	272.78		273.56	0.003521	7.11	1617.79	173.42	0.39
Mainstem	242072	10-year	11060.00	256.43	269.54		270.50	0.004044	8.03	1511.52	173.44	0.42
Mainstem	241597	10-year	11060.00	256.23	266.86		268.09	0.006409	9.12	1343.36	169.47	0.52
Mainstem	240963	10-year	11060.00	253.60	263.49		264.39	0.005068	7.65	1466.64	174.02	0.45
Mainstem	240108	10-year	11060.00	249.71	258.35		259.29	0.007125	7.89	1487.77	238.27	0.52
Mainstem	239649	10-year	11060.00	246.12	256.20		256.80	0.003986	6.40	1934.49	312.77	0.40
Mainstem	239010	10-year	11060.00	243.44	253.29		254.05	0.004597	7.16	1670.12	229.59	0.43
Mainstem	238123	10-year	11060.00	240.02	249.77		250.44	0.003583	6.67	1752.88	207.85	0.39
Mainstem	237109	10-year	11060.00	232.64	244.89		246.00	0.005427	8.97	1526.58	205.32	0.49
Mainstem	236227	10-year	11060.00	228.82	240.16	236.44	241.26	0.005359	8.48	1366.19	212.52	0.48
Mainstem	235129	10-year	11060.00	224.81	233.77		234.72	0.006578	7.92	1490.26	234.38	0.51
Mainstem	234105	10-year	11060.00	220.18	230.08	226.15	230.41	0.002690	5.33	2861.82	478.04	0.33
Mainstem	232663	10-year	11060.00	217.31	225.88	223.81	226.21	0.003663	5.80	3639.74	1342.15	0.38
Mainstem	231739	10-year	11060.00	211.41	222.84	220.72	223.18	0.003095	6.05	3152.76	841.95	0.35
Mainstem	230303	10-year	11060.00	205.60	217.85	216.38	218.41	0.004140	7.18	2915.35	1232.16	0.41
Mainstem	229141	10-year	11060.00	201.84	213.70	209.41	214.30	0.003113	6.65	2176.65	990.13	0.37
Mainstem	227869	10-year	11060.00	198.88	209.07	205.93	209.74	0.004141	7.08	2046.50	912.38	0.41
Mainstem	226549	10-year	11060.00	194.48	205.19	200.65	205.59	0.002348	5.41	2679.11	655.89	0.31
Mainstem	225329	10-year	11060.00	181.71	202.09	195.38	202.69	0.002376	6.46	1997.55	439.53	0.32
Mainstem	224659	10-year	11060.00	188.52	200.43	195.57	200.96	0.002722	5.90	1933.89	599.85	0.34
Mainstem	224622		Bridge									
Mainstem	224574	10-year	11060.00	188.52	200.18	195.59	200.73	0.002919	6.01	1918.22	772.43	0.35
Mainstem	223545	10-year	11060.00	186.59	197.16	193.38	197.66	0.003005	6.13	2373.90	1367.86	0.35
Mainstem	222367	10-year	11060.00	181.37	192.37	188.35	193.31	0.004615	7.91	1515.91	191.91	0.44
Mainstem	221290	10-year	11060.00	177.50	188.01	183.89	188.72	0.003850	6.82	1740.85	241.80	0.40
Mainstem	219891	10-year	11060.00	168.42	181.06		182.24	0.005608	8.90	1411.12	178.00	0.49
Mainstem	218555	10-year	11060.00	163.48	176.26		176.86	0.002860	6.30	1972.10	343.73	0.34
Mainstem	217599	10-year	11060.00	161.68	172.92	168.73	173.62	0.004047	6.84	1712.62	213.96	0.40
Mainstem	217557		Bridge									
Mainstem	217504	10-year	11060.00	161.36	172.32	168.65	173.07	0.004808	7.06	1653.37	232.24	0.42
Mainstem	216549	10-year	11060.00	157.38	169.34	164.68	169.69	0.002554	5.68	2606.04	414.04	0.31
Mainstem	215223	10-year	11060.00	152.39	164.59	161.08	165.27	0.004589	7.33	2004.35	641.28	0.41
Mainstem	213972	10-year	11060.00	147.03	160.16	155.20	160.71	0.002930	6.19	2088.63	991.13	0.34
Mainstem	213418	10-year	11250.00	145.69	158.02	154.57	158.70	0.004428	7.34	2298.59	860.07	0.41
Mainstem	212061	10-year	11250.00	141.43	153.03	148.57	153.57	0.003221	5.94	2076.05	673.76	0.35
Mainstem	211121	10-year	11250.00	137.00	149.11	144.72	149.98	0.004518	7.77	1799.76	710.45	0.42
Mainstem	210762	10-year	11250.00	136.98	147.53	144.25	148.23	0.004887	7.26	2087.33	578.46	0.43
Mainstem	209679	10-year	11250.00	134.77	144.59	142.01	144.76	0.002149	4.45	4623.71	1904.06	0.28
Mainstem	208391	10-year	10835.00	132.45	139.73	138.31	140.08	0.007236	6.33	2549.72	1729.37	0.49
Mainstem	207092	10-year	10835.00	127.81	134.90	133.50	135.01	0.004369	4.47	4467.08	2688.46	0.37
Mainstem	205667	10-year	10835.00	127.16	134.06	132.00	134.09	0.000891	1.96	8454.24	3045.31	0.17
Mainstem	203988	10-year	10835.00	121.47	131.12	129.66	131.70	0.005726	7.45	2452.42	1438.63	0.46
Mainstem	202884	10-year	10835.00	116.15	127.57	124.13	127.79	0.002209	4.39	4151.24	2067.83	0.29
Mainstem	201332	10-year	10835.00	112.29	122.93	120.99	123.28	0.004218	6.03	2653.05	1802.70	0.40
Mainstem	200508	10-year	10835.00	111.53	121.12	118.56	121.25	0.002204	3.99	4047.83	1815.72	0.28
Mainstem	198924	10-year	11250.00	107.24	118.73	115.17	118.90	0.001404	4.23	4647.10	1340.09	0.24
Mainstem	198063	10-year	11250.00	100.65	116.39	113.13	117.04	0.004103	7.50	2760.47	879.43	0.40
Mainstem	196976	10-year	11250.00	104.00	115.02	110.72	115.11	0.000853	3.27	6821.13	1717.91	0.18
Mainstem	196242	10-year	11250.00	95.52	113.62	108.70	114.08	0.002570	6.21	2863.67	1408.21	0.32
Mainstem	195101	10-year	11250.00	100.46	110.71	108.55	111.02	0.002787	5.46	3592.61	1655.42	0.33
Mainstem	193966	10-year	11250.00	95.52	108.73	104.91	108.84	0.001319	2.87	5181.52	2312.66	0.20
Mainstem	192952	10-year	11250.00	97.96	107.54	104.63	107.64	0.001097	3.49	6176.25	2879.53	0.21
Mainstem	192134	10-year	11250.00	89.06	106.64	102.27	106.81	0.001250	4.22	4869.07	2631.77	0.22
Mainstem	191358	10-year	11250.00	93.92	104.65	100.39	105.26	0.003395	6.47	2068.53	1830.18	0.37

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 10-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	190143	10-year	11250.00	89.64	101.73	98.12	102.04	0.002007	5.45	3197.96	1665.10	0.29
Mainstem	188966	10-year	11250.00	86.96	99.38	95.45	99.67	0.002073	5.48	3777.61	1668.54	0.32
Mainstem	188448	10-year	11250.00	86.65	98.40	94.39	98.57	0.001333	4.36	4361.30	1949.09	0.25
Mainstem	188031	10-year	11250.00	82.88	97.62	95.00	97.85	0.001645	5.05	4435.94	2348.28	0.29
Mainstem	186759	10-year	11250.00	83.18	95.65	90.54	96.00	0.001567	5.35	3469.96	2487.93	0.29
Mainstem	185302	10-year	11250.00	80.45	93.28	89.68	93.57	0.001750	5.60	3661.09	1878.68	0.30
Mainstem	184214	10-year	11250.00	80.91	91.49	87.50	91.76	0.001578	4.98	3633.84	910.32	0.28
Mainstem	182831	10-year	11250.00	78.48	89.19	85.62	89.47	0.001782	5.18	3686.48	1464.41	0.30
Mainstem	182783		Bridge									
Mainstem	182730	10-year	11250.00	78.48	88.76	85.93	89.28	0.003059	6.53	2479.28	858.93	0.39
Mainstem	181817	10-year	11250.00	73.04	87.61	83.27	87.74	0.000907	3.94	5687.92	2929.41	0.22
Mainstem	181104	10-year	11250.00	75.65	84.14	84.14	85.92	0.015414	10.94	1259.99	2630.51	0.81
Mainstem	180264	10-year	11250.00	73.64	83.72	83.44	86.16	0.018484	12.55	928.79	2198.91	0.89
Mainstem	178865	10-year	11250.00	72.01	82.75	79.80	82.81	0.000612	2.85	7009.71	2456.50	0.17
Mainstem	177545	10-year	11250.00	68.87	82.53	78.22	82.54	0.000082	1.13	17780.14	3104.57	0.06
Mainstem	176268	10-year	11250.00	66.87	81.57	75.19	82.19	0.001898	6.47	1914.56	228.97	0.32
Mainstem	176225		Bridge									
Mainstem	176178	10-year	11250.00	66.87	81.38	75.34	82.00	0.002002	6.49	1929.12	969.33	0.33
Mainstem	176056	10-year	11250.00	66.87	80.90		81.70	0.002575	7.20	1780.06	1006.31	0.37
Mainstem	175940	10-year	11230.00	67.00	81.09	73.40	81.38	0.000884	4.37	2712.74	284.29	0.22
Mainstem	175919		Bridge									
Mainstem	175893	10-year	11230.00	65.37	80.97	73.19	81.31	0.001007	4.74	2575.60	421.32	0.24
Mainstem	175708	10-year	11230.00	66.02	80.60	73.51	81.07	0.001461	5.67	2167.78	204.69	0.28
Mainstem	175660		Bridge									
Mainstem	175555	10-year	11230.00	67.32	80.27	74.26	80.78	0.001764	5.81	2068.22	219.23	0.31
Mainstem	174462	10-year	11230.00	67.00	78.34	74.30	78.67	0.002003	5.35	3921.72	1551.46	0.31
Mainstem	173353	10-year	11230.00	65.06	76.35	73.15	76.59	0.001702	5.01	4746.38	1421.69	0.29
Mainstem	172540	10-year	11230.00	57.34	75.43	70.83	75.62	0.001313	4.47	5452.93	1816.32	0.25
Mainstem	171743	10-year	11230.00	64.05	75.00	68.65	75.06	0.000347	2.52	7983.73	1914.58	0.14
Mainstem	171209	10-year	11230.00	53.16	74.67	64.01	74.85	0.000496	3.92	5580.95	1448.53	0.17
Mainstem	170877	10-year	11230.00	49.99	74.50	62.42	74.69	0.000476	3.92	3960.61	1107.45	0.16
Mainstem	170697	10-year	11230.00	54.70	74.27	63.34	74.58	0.000635	4.57	3043.87	1098.29	0.20
Mainstem	170280	10-year	11230.00	51.75	74.09	62.14	74.31	0.000559	4.33	5773.08	1257.00	0.18
Mainstem	169351	10-year	11230.00	52.66	73.92	62.08	73.98	0.000201	2.60	10829.10	1790.89	0.11
Mainstem	168448	10-year	11230.00	46.54	73.48	60.70	73.69	0.000515	4.19	5576.55	1027.07	0.17
Mainstem	167556	10-year	11230.00	51.17	73.01	61.26	73.24	0.000501	4.07	3969.09	614.70	0.17
Mainstem	166774	10-year	11230.00	51.93	72.48		72.78	0.000648	4.49	2912.50	337.61	0.19
Mainstem	166008	10-year	11230.00	53.48	71.95	61.48	72.27	0.000694	4.61	2896.64	348.00	0.20
Mainstem	165195	10-year	11230.00	50.67	71.11		71.56	0.001067	5.62	2634.69	329.90	0.24
Mainstem	165137	10-year	11230.00	52.01	71.10		71.49	0.000869	5.15	2707.92	350.98	0.22
Mainstem	164150	10-year	11230.00	48.79	70.31	58.46	70.71	0.000720	5.06	2242.69	238.59	0.21
Mainstem	164108		Bridge									
Mainstem	164060	10-year	11230.00	48.79	70.10	58.40	70.47	0.000669	4.91	2286.17	178.51	0.20
Mainstem	163506	10-year	11230.00	53.45	69.49	61.05	69.97	0.001250	5.66	2264.43	218.54	0.26
Mainstem	162645	10-year	11230.00	50.09	68.83	60.72	69.08	0.000762	4.52	3491.20	532.23	0.21
Mainstem	161505	10-year	11230.00	45.86	67.80	57.66	68.15	0.000878	5.19	3877.97	631.13	0.22
Mainstem	160391	10-year	11230.00	44.32	66.42	56.17	66.96	0.001267	6.07	2110.80	201.22	0.25
Mainstem	159509	10-year	11230.00	51.51	65.62	57.50	65.95	0.000928	4.63	2537.19	225.20	0.23
Mainstem	158822	10-year	11230.00	48.13	65.27	55.94	65.44	0.000496	3.48	4291.44	492.61	0.17
Mainstem	158078	10-year	11230.00	41.74	64.33	53.50	64.87	0.001153	6.02	2158.91	189.21	0.25
Mainstem	157777	10-year	11230.00	49.91	63.97	56.86	64.48	0.001396	5.90	3041.25	584.17	0.29
Mainstem	157576	10-year	11230.00	49.71	63.69	57.34	64.18	0.001512	5.95	2509.10	513.71	0.30
Mainstem	157386	10-year	11230.00	50.16	63.34	57.22	63.87	0.001656	6.19	2166.59	244.35	0.31
Mainstem	157180	10-year	11230.00	46.75	63.02	54.77	63.57	0.001270	6.06	2384.59	493.93	0.28
Mainstem	156953	10-year	11230.00	43.06	62.78	52.99	63.30	0.001043	5.91	2624.43	669.84	0.26
Mainstem	156895	10-year	11230.00	41.91	62.77	52.25	63.23	0.000977	5.58	2429.32	322.33	0.24
Mainstem	156879		Bridge									
Mainstem	156869	10-year	11230.00	41.91	62.71	52.27	63.14	0.000915	5.34	2515.89	325.53	0.23
Mainstem	156768	10-year	11230.00	41.40	62.50	52.74	63.03	0.001074	6.03	2837.59	559.94	0.26
Mainstem	156610	10-year	11230.00	37.02	62.43	50.90	62.85	0.000791	5.41	3149.27	515.11	0.22
Mainstem	156362	10-year	11230.00	45.47	61.96	54.18	62.57	0.001453	6.38	2252.81	453.40	0.30
Mainstem	156161	10-year	11230.00	45.41	61.76	53.50	62.28	0.001212	5.81	2343.69	408.25	0.27
Mainstem	155992	10-year	11230.00	45.99	61.57	53.38	62.07	0.001189	5.75	2205.68	218.97	0.27
Mainstem	155771	10-year	11230.00	46.02	61.27	53.59	61.80	0.001308	5.90	2103.61	208.20	0.28
Mainstem	155570	10-year	11230.00	46.20	61.07	53.34	61.53	0.001176	5.59	2402.40	1401.69	0.27
Mainstem	155390	10-year	11230.00	43.58	60.83	52.76	61.32	0.001173	5.88	2531.92	1363.70	0.27
Mainstem	155184	10-year	11230.00	43.89	60.65	52.07	61.07	0.000999	5.64	2758.78	1463.40	0.25
Mainstem	154947	10-year	11230.00	39.79	60.46	49.93	60.86	0.000788	5.29	3065.49	1384.05	0.22
Mainstem	154746	10-year	11230.00	41.84	60.44	49.42	60.69	0.000505	4.14	3651.91	1446.84	0.18
Mainstem	154577	10-year	11230.00	41.92	60.28	50.15	60.58	0.000667	4.68	3503.26	1288.67	0.20
Mainstem	154350	10-year	11230.00	40.01	60.17	50.82	60.42	0.000641	4.43	4196.59	1438.19	0.20
Mainstem	154155	10-year	11230.00	39.19	59.93	50.38	60.27	0.000798	5.27	3826.59	1542.44	0.22
Mainstem	153954	10-year	11230.00	42.67	59.85	50.93	60.09	0.000655	4.44	4192.31	1523.03	0.20
Mainstem	153743	10-year	11230.00	42.59	59.64	50.74	59.94	0.000765	4.83	3623.63	1478.09	0.22
Mainstem	153548	10-year	11230.00	43.96	59.53	50.26	59.79	0.000643	4.37	4051.32	1448.62	0.20

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 10-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	153347	10-year	11230.00	41.96	59.24	49.70	59.63	0.000849	5.28	3752.06	590.51	0.23
Mainstem	153136	10-year	11230.00	36.92	59.05	47.88	59.46	0.000772	5.42	3871.56	569.83	0.22
Mainstem	152972	10-year	11230.00	32.11	58.92	46.86	59.34	0.000761	5.44	3496.17	397.06	0.22
Mainstem	152740	10-year	11230.00	40.47	58.75	48.80	59.15	0.000847	5.40	3626.02	451.48	0.23
Mainstem	152587	10-year	11230.00	41.27	58.69	48.63	59.00	0.000672	4.65	2980.35	434.08	0.21
Mainstem	152328	10-year	11230.00	38.77	58.35	48.10	58.79	0.000886	5.72	3162.27	349.97	0.24
Mainstem	152117	10-year	11230.00	38.21	58.31	48.06	58.58	0.000649	4.79	4534.04	383.15	0.20
Mainstem	151927	10-year	11230.00	36.91	58.17	48.13	58.45	0.000677	4.99	4606.59	409.23	0.21
Mainstem	151726	10-year	11230.00	37.04	58.09	47.91	58.31	0.000549	4.50	5308.47	506.99	0.19
Mainstem	151531	10-year	11230.00	37.91	58.05	47.21	58.20	0.000392	3.79	6796.12	550.32	0.16
Mainstem	151351	10-year	11230.00	39.90	57.98	47.31	58.12	0.000396	3.69	6735.71	553.97	0.16
Mainstem	151108	10-year	11230.00	37.92	57.74	47.50	58.00	0.000587	4.64	4869.52	743.39	0.19
Mainstem	150913	10-year	11230.00	37.45	57.40	46.69	57.84	0.000849	5.55	2691.54	566.66	0.23
Mainstem	150718	10-year	11230.00	36.75	57.28	46.56	57.67	0.000780	5.38	3225.00	503.16	0.22
Mainstem	150533	10-year	11230.00	36.08	57.13	46.35	57.52	0.000789	5.40	3699.76	540.13	0.22
Mainstem	150337	10-year	11230.00	36.43	56.87	46.34	57.35	0.000914	5.76	3220.76	895.47	0.24
Mainstem	150116	10-year	11230.00	38.91	56.74	46.86	57.13	0.000812	5.12	2590.49	497.97	0.23
Mainstem	149931	10-year	11230.00	36.59	56.52	45.99	56.97	0.000853	5.52	2349.14	520.89	0.23
Mainstem	149714	10-year	11230.00	37.99	56.40	45.39	56.78	0.000701	4.98	2575.67	604.68	0.21
Mainstem	149487	10-year	11230.00	39.95	56.29	46.13	56.61	0.000669	4.63	3039.01	398.45	0.21
Mainstem	149318	10-year	11230.00	37.91	56.10	45.80	56.48	0.000759	5.05	2685.92	375.71	0.22
Mainstem	149118	10-year	11230.00	35.55	55.91	45.45	56.33	0.000804	5.25	2580.83	375.33	0.23
Mainstem	148917	10-year	11230.00	36.41	55.82	44.77	56.16	0.000646	4.79	2585.13	201.58	0.20
Mainstem	148716	10-year	11230.00	35.37	55.65	44.29	56.02	0.000694	5.15	2608.62	204.72	0.21
Mainstem	148389	10-year	11230.00	35.33	55.34	44.13	55.77	0.000774	5.40	2878.14	426.53	0.22
Mainstem	148115	10-year	11230.00	34.85	55.34	43.40	55.56	0.000439	4.09	5553.13	853.89	0.17
Mainstem	147724	10-year	11230.00	32.96	55.22	43.82	55.38	0.000384	3.85	7852.05	967.80	0.16
Mainstem	147523	10-year	11230.00	33.85	55.14	43.56	55.30	0.000390	3.94	7430.23	743.88	0.16
Mainstem	147323	10-year	11230.00	34.82	55.09	43.67	55.22	0.000321	3.39	6388.76	657.71	0.14
Mainstem	147127	10-year	11230.00	33.61	55.06	44.09	55.16	0.000265	3.13	5119.80	544.01	0.13
Mainstem	146932	10-year	11230.00	31.45	54.85	42.17	55.08	0.000398	3.89	3371.02	329.80	0.16
Mainstem	146826	10-year	11230.00	33.81	54.60	43.57	55.01	0.000760	5.42	2988.68	366.28	0.22
Mainstem	146678	10-year	11230.00	34.71	54.63	42.38	54.87	0.000446	4.11	3454.90	287.01	0.17
Mainstem	146509	10-year	11230.00	34.24	54.44	43.25	54.78	0.000634	4.78	2832.37	231.14	0.20
Mainstem	146356	10-year	11230.00	32.88	54.37	42.22	54.68	0.000546	4.55	2732.53	190.31	0.19
Mainstem	146219	10-year	11230.00	29.15	53.93	42.15	54.55	0.001016	6.37	2013.58	155.93	0.25
Mainstem	146193		Bridge									
Mainstem	146166	10-year	11230.00	29.97	53.85	42.74	54.49	0.001089	6.53	2014.63	162.20	0.26
Mainstem	146013	10-year	11230.00	27.23	53.83	40.57	54.31	0.000736	5.64	2323.24	260.45	0.22
Mainstem	145818	10-year	11230.00	30.10	53.70	41.24	54.15	0.000742	5.55	2294.66	179.68	0.22
Mainstem	145401	10-year	11230.00	33.69	53.47	41.43	53.84	0.000643	4.99	2502.41	184.19	0.20
Mainstem	145168	10-year	11230.00	33.03	53.41	40.78	53.68	0.000484	4.25	3052.33	252.36	0.18
Mainstem	144957	10-year	11230.00	32.01	53.43	40.57	53.57	0.000254	2.99	4922.34	430.77	0.13
Mainstem	144741	10-year	11230.00	30.43	53.32	40.13	53.50	0.000342	3.74	5819.64	578.88	0.15
Mainstem	144614	10-year	11230.00	27.56	53.23	38.90	53.45	0.000403	4.21	5726.58	546.95	0.16
Mainstem	144461	10-year	11230.00	32.44	53.23	40.31	53.38	0.000308	3.46	6131.91	528.45	0.14
Mainstem	144308	10-year	11230.00	32.63	53.21	41.03	53.32	0.000276	3.00	6367.35	510.07	0.13
Mainstem	144149	10-year	11230.00	31.85	53.15	39.45	53.28	0.000239	3.08	5492.28	428.84	0.13
Mainstem	143964	10-year	11230.00	27.10	52.87	38.54	53.20	0.000500	4.61	2631.85	283.13	0.18
Mainstem	143716	10-year	11230.00	32.09	52.63	40.88	53.04	0.000721	5.22	2410.93	262.97	0.21
Mainstem	143025	10-year	11230.00	28.42	52.42	38.39	52.64	0.000366	3.94	3803.56	306.39	0.15
Mainstem	141868	10-year	11230.00	29.60	51.86	39.11	52.14	0.000499	4.42	3363.47	332.57	0.18
Mainstem	140638	10-year	11230.00	29.91	51.28	37.84	51.55	0.000455	4.39	3423.55	275.37	0.17
Mainstem	139281	10-year	11230.00	28.53	50.59	36.94	50.89	0.000511	4.54	2880.39	347.05	0.18
Mainstem	138563	10-year	11230.00	28.86	50.46	35.11	50.60	0.000246	3.10	4246.95	496.94	0.12
Mainstem	137766	10-year	11230.00	26.76	50.05	34.85	50.34	0.000407	4.39	3027.47	697.02	0.16
Mainstem	137280	10-year	11230.00	18.66	49.76	35.00	50.10	0.000573	4.84	2849.46	748.15	0.18
Mainstem	137248	10-year	11230.00	18.94	49.63	34.32	50.07	0.000524	5.54	2665.81	174.69	0.20
Mainstem	136499	10-year	11230.00	24.02	49.34	34.41	49.69	0.000421	4.85	2602.33	365.83	0.18
Mainstem	134904	10-year	11230.00	25.62	48.68	34.02	49.04	0.000396	4.94	2709.82	163.12	0.19
Mainstem	134160	10-year	11230.00	24.07	48.42	33.10	48.76	0.000359	4.80	2885.89	170.77	0.18
Mainstem	133262	10-year	11230.00	21.73	48.06	31.88	48.42	0.000377	4.91	2748.80	202.34	0.18
Mainstem	133204		Bridge									
Mainstem	133140	10-year	11230.00	21.73	47.90	32.03	48.36	0.000477	5.61	2600.55	173.21	0.20
Mainstem	132507	10-year	11230.00	21.64	47.58	32.26	48.03	0.000565	5.52	2417.49	149.81	0.20
Mainstem	132465		Bridge									
Mainstem	132417	10-year	11230.00	21.64	47.64	31.50	47.94	0.000328	4.50	2889.02	162.54	0.16
Mainstem	131139	10-year	11230.00	15.96	46.93	30.04	47.41	0.000520	5.71	2417.18	151.38	0.20
Mainstem	130490	10-year	11230.00	20.03	46.65	30.85	47.07	0.000463	5.42	2669.07	169.78	0.19
Mainstem	129777	10-year	11230.00	16.31	46.20	29.60	46.70	0.000572	5.78	2342.91	134.00	0.20
Mainstem	128816	10-year	11230.00	21.35	45.83	30.57	46.20	0.000408	5.02	2678.26	164.97	0.18
Mainstem	128109	10-year	11230.00	19.64	45.39	30.86	45.86	0.000531	5.64	2412.66	157.71	0.21
Mainstem	128082		Bridge									
Mainstem	128056	10-year	11230.00	19.64	45.41	30.72	45.82	0.000451	5.27	2649.11	165.26	0.20
Mainstem	127053	10-year	11230.00	19.06	44.70	30.34	45.25	0.000683	6.13	2262.65	159.03	0.22

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 10-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	127037		Bridge									
Mainstem	127016	10-year	11230.00	19.06	44.66	30.46	45.22	0.000703	6.17	2241.63	133.04	0.23
Mainstem	126958	10-year	11230.00	15.14	44.74	27.72	45.13	0.000499	5.22	2601.17	135.57	0.18
Mainstem	126942		Bridge									
Mainstem	126921	10-year	11230.00	15.14	44.66	27.75	45.11	0.000558	5.51	2445.29	128.52	0.19
Mainstem	125796	10-year	11230.00	18.94	44.30	29.08	44.65	0.000279	4.81	2806.60	170.13	0.18
Mainstem	125712		Bridge									
Mainstem	125627	10-year	11230.00	18.94	44.10	29.36	44.58	0.000390	5.71	2477.79	166.40	0.21
Mainstem	124872	10-year	11580.00	12.43	43.88	26.70	44.29	0.000325	5.24	2725.21	193.07	0.18
Mainstem	123953	10-year	11580.00	13.32	43.65	25.39	44.02	0.000249	5.00	3338.02	268.11	0.17
Mainstem	123161	10-year	11580.00	17.94	43.38	28.05	43.79	0.000320	5.19	2643.51	160.04	0.19
Mainstem	122448	10-year	11580.00	18.06	43.29	26.84	43.57	0.000205	4.24	3150.95	209.60	0.16
Mainstem	122412		Bridge									
Mainstem	122375	10-year	11580.00	18.06	43.22	27.28	43.54	0.000240	4.62	3065.38	198.75	0.17
Mainstem	121583	10-year	11580.00	16.81	43.04	25.75	43.35	0.000238	4.55	3096.75	181.36	0.16
Mainstem	120426	10-year	11580.00	15.94	42.72	26.08	43.06	0.000262	4.80	2958.66	180.02	0.17
Mainstem	119666	10-year	11580.00	16.84	42.54	26.24	42.86	0.000248	4.59	3067.72	182.72	0.17
Mainstem	118425	10-year	11580.00	10.95	42.26	23.48	42.56	0.000226	4.57	2988.51	160.97	0.16
Mainstem	117617	10-year	11580.00	15.01	42.04	24.90	42.37	0.000239	4.68	2946.09	170.88	0.17
Mainstem	116487	10-year	11580.00	14.03	41.87	23.91	42.11	0.000174	4.05	3287.80	175.82	0.14
Mainstem	116429		Bridge									
Mainstem	116371	10-year	11580.00	11.57	41.75	24.42	42.08	0.000242	4.67	2906.55	160.60	0.16
Mainstem	115241	10-year	11580.00	11.25	41.40	22.97	41.77	0.000301	4.97	2753.23	144.33	0.17
Mainstem	114465	10-year	11580.00	9.06	41.21	21.33	41.56	0.000244	4.84	3117.41	192.24	0.16
Mainstem	113747	10-year	11580.00	12.07	41.07	23.05	41.37	0.000231	4.50	3129.45	182.53	0.16
Mainstem	113008	10-year	11700.00	11.60	40.80	22.96	41.17	0.000299	5.05	2923.39	179.61	0.17
Mainstem	112401	10-year	11700.00	12.60	40.64	23.28	41.00	0.000273	4.88	2932.72	183.34	0.17
Mainstem	112369		Bridge									
Mainstem	112337	10-year	11700.00	13.63	40.66	23.90	40.97	0.000237	4.54	3076.35	195.71	0.16
Mainstem	112258	10-year	11700.00	14.03	40.66	23.55	40.94	0.000211	4.29	3045.20	164.75	0.15
Mainstem	112242		Bridge									
Mainstem	112226	10-year	11700.00	14.03	40.58	24.15	40.92	0.000257	4.78	2897.87	163.26	0.17
Mainstem	111661	10-year	11700.00	8.64	40.49	20.21	40.77	0.000217	4.40	3449.23	199.23	0.15
Mainstem	111160	10-year	11700.00	10.54	40.29	22.25	40.64	0.000287	4.86	2938.82	171.01	0.17
Mainstem	110959	10-year	11700.00	12.22	40.23	22.67	40.59	0.000258	4.85	2890.37	159.47	0.17
Mainstem	110410	10-year	11700.00	9.05	40.19	19.72	40.44	0.000165	4.11	3294.25	157.93	0.14
Mainstem	109776	10-year	11700.00	6.72	40.08	18.00	40.34	0.000165	4.15	3390.56	160.79	0.13
Mainstem	108673	10-year	11700.00	8.06	39.80	20.12	40.12	0.000241	4.70	3227.31	172.44	0.16
Mainstem	107928	10-year	11700.00	9.49	39.55	22.16	39.91	0.000310	4.97	3004.50	165.56	0.17
Mainstem	107063	10-year	11700.00	5.88	39.31	19.83	39.66	0.000271	4.84	2941.87	168.45	0.16
Mainstem	106308	10-year	11700.00	11.13	39.14	20.70	39.45	0.000241	4.56	3023.79	181.92	0.16
Mainstem	105120	10-year	11700.00	10.61	38.98	20.15	39.19	0.000159	3.78	3607.40	209.04	0.13
Mainstem	103794	10-year	11700.00	6.68	38.56	19.18	38.90	0.000290	4.84	3023.49	170.35	0.16
Mainstem	102469	10-year	11740.00	10.64	38.19	20.84	38.53	0.000270	4.77	2872.63	169.99	0.17
Mainstem	101820	10-year	11740.00	10.16	38.06	20.56	38.36	0.000231	4.45	3073.66	189.43	0.16
Mainstem	101719	10-year	11740.00	10.16	38.03	20.60	38.33	0.000252	4.46	2957.33	180.54	0.16
Mainstem	101566	10-year	11740.00	5.75	37.91	19.85	38.28	0.000329	4.97	2769.80	172.31	0.17
Mainstem	100716	10-year	11740.00	1.31	37.65	19.58	38.00	0.000310	4.86	2832.91	154.78	0.17
Mainstem	99333	10-year	11740.00	9.13	37.33	19.85	37.61	0.000232	4.32	3039.59	174.34	0.15
Mainstem	99312		Bridge									
Mainstem	99301	10-year	11740.00	9.13	37.31	19.84	37.60	0.000237	4.43	3083.47	177.23	0.16
Mainstem	98271	10-year	11740.00	8.17	36.77	21.59	37.27	0.000412	5.78	2525.13	182.36	0.21
Mainstem	97527	10-year	11740.00	5.97	36.65	18.32	36.96	0.000274	4.54	3130.28	233.49	0.16
Mainstem	96693	10-year	11740.00	6.79	36.57	16.03	36.78	0.000132	3.65	3520.11	184.07	0.12
Mainstem	95420	10-year	11740.00	8.70	36.16	19.10	36.53	0.000269	4.92	2781.26	177.81	0.17
Mainstem	94285	10-year	11740.00	7.88	35.78	20.52	36.18	0.000341	5.15	2704.84	175.88	0.19
Mainstem	94232		Bridge									
Mainstem	94195	10-year	11740.00	7.88	35.69	20.41	36.15	0.000371	5.55	2755.94	178.34	0.20
Mainstem	93065	10-year	11740.00	4.02	35.34	17.08	35.75	0.000313	5.22	2966.26	365.72	0.18
Mainstem	92020	10-year	11740.00	8.76	35.02	18.62	35.40	0.000339	5.10	2814.41	167.61	0.18
Mainstem	90932	10-year	11740.00	7.20	34.56	17.57	35.02	0.000347	5.54	2540.72	145.97	0.19
Mainstem	89786	10-year	11740.00	-1.09	34.38	12.89	34.65	0.000219	4.29	3465.65	230.49	0.14
Mainstem	89744		Bridge									
Mainstem	89691	10-year	11740.00	-1.09	34.31	12.96	34.62	0.000253	4.67	3444.79	263.38	0.15
Mainstem	88704	10-year	11740.00	6.87	33.96	18.08	34.34	0.000322	4.97	2719.16	158.79	0.18
Mainstem	87743	10-year	11740.00	7.95	33.80	16.97	34.06	0.000210	4.12	3262.16	194.40	0.15
Mainstem	86671	10-year	11930.00	5.51	33.46	16.18	33.79	0.000284	4.67	3044.06	173.19	0.17
Mainstem	86407	10-year	11930.00	5.77	33.39	16.29	33.71	0.000305	4.67	3180.24	184.97	0.16
Mainstem	86339	10-year	11930.00	6.58	33.40	15.73	33.68	0.000206	4.31	3350.99	188.69	0.15
Mainstem	85462	10-year	11930.00	2.43	32.95	15.34	33.42	0.000367	5.64	2666.93	159.20	0.19
Mainstem	84564	10-year	11930.00	4.42	32.75	15.22	33.11	0.000273	4.84	2932.19	168.12	0.17
Mainstem	83714	10-year	11930.00	-3.23	32.61	14.70	32.87	0.000222	4.17	3374.75	188.43	0.15
Mainstem	83181	10-year	11930.00	2.90	32.42	15.27	32.74	0.000260	4.59	2976.11	167.69	0.16
Mainstem	83091	10-year	11930.00	2.35	32.38	15.41	32.71	0.000364	4.62	2871.78	165.43	0.17
Mainstem	82342	10-year	11930.00	2.38	32.02	13.73	32.43	0.000353	5.31	2910.35	175.88	0.18

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 10-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	81333	10-year	11930.00	0.84	31.53	14.43	32.03	0.000440	5.83	2624.69	162.86	0.20
Mainstem	80504	10-year	11930.00	2.88	31.35	13.71	31.70	0.000269	4.79	2963.25	170.39	0.17
Mainstem	79728	10-year	11930.00	3.61	30.96	14.47	31.44	0.000384	5.72	2623.37	155.06	0.20
Mainstem	79052	10-year	11930.00	4.50	30.82	14.44	31.17	0.000298	4.79	2821.53	159.80	0.17
Mainstem	78978	10-year	11930.00	3.79	30.82	13.44	31.14	0.000234	4.62	2960.32	158.54	0.16
Mainstem	78852	10-year	11930.00	-0.49	30.68	14.74	31.10	0.000414	5.22	2620.72	156.34	0.19
Mainstem	77869	10-year	11930.00	3.20	30.08	14.27	30.64	0.000475	6.17	2378.40	145.75	0.22
Mainstem	77848	Bridge										
Mainstem	77832	10-year	11930.00	3.20	30.07	14.35	30.62	0.000478	6.07	2381.64	145.74	0.21
Mainstem	77579	10-year	11930.00	3.50	30.11	13.81	30.47	0.000281	4.89	2837.49	157.38	0.18
Mainstem	77400	10-year	11930.00	2.77	29.99	14.22	30.41	0.000430	5.30	2771.85	163.50	0.19
Mainstem	76740	10-year	11930.00	2.96	29.49	14.31	30.08	0.000499	6.30	2334.85	142.82	0.22
Mainstem	75662	10-year	11930.00	3.63	28.93	15.29	29.52	0.000551	6.32	2395.13	173.59	0.23
Mainstem	75610	Bridge										
Mainstem	75557	10-year	11930.00	3.63	28.97	14.05	29.42	0.000364	5.51	2548.92	161.47	0.20
Mainstem	74812	10-year	11930.00	2.01	28.76	12.37	29.15	0.000331	5.06	2783.43	162.25	0.18
Mainstem	74036	10-year	11930.00	1.60	28.27	13.28	28.82	0.000469	6.11	2393.18	152.33	0.22
Mainstem	73350	10-year	11930.00	3.13	28.10	12.99	28.51	0.000343	5.19	2674.68	160.28	0.19
Mainstem	72626	10-year	11930.00	2.18	27.74	12.72	28.23	0.000410	5.72	2497.99	152.49	0.21
Mainstem	71444	10-year	11930.00	-0.11	27.20	12.20	27.72	0.000444	5.86	2361.47	134.10	0.21
Mainstem	70520	10-year	11930.00	2.26	26.89	12.25	27.32	0.000375	5.36	2602.94	160.27	0.20
Mainstem	70483	Bridge										
Mainstem	70472	10-year	11930.00	2.26	26.88	12.17	27.29	0.000344	5.15	2608.44	156.96	0.19
Mainstem	69796	10-year	11930.00	2.09	26.65	12.22	27.05	0.000351	5.12	2624.30	151.31	0.19
Mainstem	68930	10-year	11930.00	2.12	26.22	12.95	26.71	0.000439	5.64	2395.63	152.89	0.22
Mainstem	68878	Bridge										
Mainstem	68814	10-year	11930.00	2.84	26.14	12.36	26.60	0.000449	5.53	2519.99	163.32	0.21
Mainstem	68181	10-year	11930.00	-2.79	25.99	10.71	26.33	0.000314	4.71	2680.37	154.04	0.18
Mainstem	67220	10-year	11930.00	-3.21	25.71	10.92	26.04	0.000292	4.66	3152.51	283.69	0.18
Mainstem	66327	10-year	11930.00	-0.29	25.30	11.16	25.73	0.000376	5.30	2585.54	168.19	0.20
Mainstem	65704	10-year	11930.00	2.34	25.12	11.18	25.49	0.000354	4.95	2770.81	185.25	0.19
Mainstem	65615	Bridge										
Mainstem	65535	10-year	11930.00	-0.46	25.05	10.27	25.34	0.000313	4.37	2952.53	192.27	0.17
Mainstem	65366	10-year	11930.00	-2.38	24.83	9.59	25.26	0.000445	5.38	2611.94	165.56	0.20
Mainstem	65314	Bridge										
Mainstem	65277	10-year	11930.00	-2.38	24.66	9.52	25.20	0.000548	6.00	2376.32	145.87	0.22
Mainstem	64907	10-year	11930.00	-1.17	24.39	10.90	24.99	0.000542	6.31	2237.40	142.11	0.24
Mainstem	64854	Bridge										
Mainstem	64812	10-year	11930.00	-2.16	24.44	8.62	24.89	0.000394	5.49	2475.06	150.96	0.20
Mainstem	64664	10-year	11930.00	-4.94	24.13	9.57	24.79	0.000759	6.63	2082.05	143.51	0.24
Mainstem	64611	Bridge										
Mainstem	64564	10-year	11930.00	-1.06	24.17	9.70	24.69	0.000478	5.84	2332.37	149.22	0.22
Mainstem	64490	10-year	11930.00	-2.57	24.31	7.35	24.60	0.000239	4.35	2951.25	157.61	0.16
Mainstem	64474	Bridge										
Mainstem	64453	10-year	11930.00	-2.57	24.28	7.34	24.59	0.000241	4.47	2959.28	160.74	0.16
Mainstem	63809	10-year	11930.00	3.01	24.10	10.69	24.41	0.000298	4.61	3104.93	207.42	0.18
Mainstem	62610	10-year	11930.00	2.08	23.74	10.59	24.06	0.000297	4.55	2877.70	178.38	0.18
Mainstem	61570	10-year	11930.00	-0.98	23.14	10.01	23.65	0.000471	5.83	2372.30	157.39	0.22
Mainstem	61533	Bridge										
Mainstem	61501	10-year	11930.00	-0.98	23.09	9.98	23.61	0.000471	5.84	2357.94	147.97	0.22
Mainstem	60646	10-year	11930.00	-0.37	22.80	10.16	23.19	0.000409	5.03	2487.38	159.08	0.21
Mainstem	60504	10-year	11930.00	-6.53	22.82	6.44	23.12	0.000259	4.39	2976.21	170.76	0.16
Mainstem	59796	10-year	11930.00	-4.05	22.47	7.13	22.89	0.000358	5.25	2523.12	145.91	0.19
Mainstem	59036	10-year	11930.00	-1.28	22.15	8.61	22.59	0.000449	5.34	2390.73	143.49	0.21
Mainstem	58075	10-year	11930.00	-2.23	21.79	8.71	22.16	0.000397	4.89	2643.20	173.06	0.20
Mainstem	58011	Bridge										
Mainstem	57980	10-year	11930.00	-0.91	21.81	8.00	22.11	0.000287	4.43	2883.66	182.79	0.17
Mainstem	57119	10-year	12410.00	1.48	21.47	9.95	21.82	0.000363	4.81	2839.31	197.30	0.20
Mainstem	57045	10-year	12410.00	0.97	21.48	8.79	21.78	0.000312	4.38	2948.55	189.62	0.18
Mainstem	56380	10-year	12410.00	-2.70	21.00	9.56	21.49	0.000552	5.66	2395.30	200.51	0.23
Mainstem	55672	10-year	12410.00	-0.24	20.80	8.31	21.13	0.000363	4.61	2849.23	208.78	0.19
Mainstem	54907	10-year	12410.00	-7.84	20.41	7.30	20.82	0.000431	5.13	2639.99	172.63	0.20
Mainstem	54896	Bridge										
Mainstem	54886	10-year	12410.00	-7.84	20.40		20.79	0.000418	5.05	2618.80	164.05	0.20
Mainstem	53756	10-year	12410.00	-0.71	20.02	7.99	20.34	0.000348	4.54	2925.73	262.23	0.19
Mainstem	52858	10-year	12410.00	-0.45	19.69	7.91	20.01	0.000378	4.67	3265.22	398.52	0.20
Mainstem	51855	10-year	12410.00	-7.58	19.27	6.27	19.61	0.000424	4.70	2933.16	242.46	0.20
Mainstem	50894	10-year	12410.00	-2.28	18.90	7.07	19.23	0.000357	4.67	2898.27	199.44	0.19
Mainstem	49959	10-year	12410.00	-4.51	18.54	6.93	18.87	0.000411	4.65	2771.47	209.60	0.20
Mainstem	48909	10-year	12410.00	-9.47	17.90	5.39	18.36	0.000555	5.47	2461.54	190.05	0.22
Mainstem	48877	Bridge										
Mainstem	48840	10-year	12410.00	-9.47	17.85	5.37	18.32	0.000594	5.54	2436.85	204.46	0.23
Mainstem	47583	10-year	12410.00	-3.57	17.30		17.65	0.000434	4.74	2794.19	237.14	0.21
Mainstem	46469	10-year	12410.00	-6.77	16.81		17.17	0.000429	4.78	2631.21	179.06	0.20
Mainstem	45651	10-year	12410.00	-8.06	16.30		16.75	0.000599	5.39	2380.05	172.94	0.24

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 10-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	44822	10-year	12410.00	-16.74	16.13		16.35	0.000281	3.73	3571.45	292.19	0.16
Mainstem	44030	10-year	12410.00	-10.52	15.74		16.07	0.000412	4.63	2792.63	189.27	0.20
Mainstem	43322	10-year	12410.00	-5.44	15.55		15.78	0.000326	3.89	3315.61	271.07	0.18
Mainstem	42557	10-year	12410.00	-3.65	15.16		15.49	0.000423	4.58	2824.72	224.85	0.21
Mainstem	41601	10-year	12410.00	-9.33	14.70	4.03	15.05	0.000489	4.77	2713.29	205.80	0.21
Mainstem	41554											
Mainstem	41506	10-year	12410.00	-9.33	14.49	4.70	14.96	0.000717	5.55	2335.40	176.48	0.25
Mainstem	40403	10-year	12410.00	-3.69	14.11		14.37	0.000343	4.14	3055.04	219.45	0.19
Mainstem	39077	10-year	12410.00	-7.62	13.55	2.70	13.87	0.000408	4.54	2776.13	188.79	0.20
Mainstem	39056											
Mainstem	39014	10-year	12410.00	-5.87	13.52		13.82	0.000368	4.40	2876.67	198.49	0.20
Mainstem	38343	10-year	12410.00	-5.39	13.22		13.54	0.000441	4.58	2733.94	191.70	0.21
Mainstem	37261	10-year	12410.00	-6.47	12.77		13.09	0.000402	4.54	2758.54	185.79	0.20
Mainstem	36226	10-year	12410.00	-9.10	12.37	2.07	12.67	0.000397	4.34	2886.08	207.21	0.20
Mainstem	36173											
Mainstem	36120	10-year	12410.00	-9.10	12.26	2.22	12.61	0.000468	4.73	2692.09	208.73	0.22
Mainstem	35434	10-year	12410.00	-4.42	11.99		12.29	0.000428	4.35	2866.47	216.51	0.21
Mainstem	34653	10-year	12410.00	-9.97	11.68	0.74	11.98	0.000370	4.35	2861.06	211.13	0.19
Mainstem	34579											
Mainstem	34510	10-year	12410.00	-9.97	11.57	0.91	11.91	0.000456	4.68	2674.62	181.83	0.21
Mainstem	33180	10-year	12410.00	-7.14	10.84	1.31	11.22	0.000604	4.92	2542.63	186.81	0.23
Mainstem	33164											
Mainstem	33137	10-year	12410.00	-5.66	10.71	2.61	11.17	0.000777	5.45	2327.16	209.59	0.27
Mainstem	31659	10-year	12410.00	-9.25	10.11	-1.04	10.37	0.000345	4.11	3098.96	237.57	0.18
Mainstem	30814	10-year	12410.00	-10.52	9.86		10.09	0.000307	3.89	3240.11	218.44	0.17
Mainstem	30001	10-year	12410.00	-9.50	9.65		9.85	0.000263	3.62	3455.73	245.87	0.17
Mainstem	29209	10-year	12410.00	-9.72	9.46	-1.83	9.65	0.000234	3.47	3612.26	245.53	0.16
Mainstem	29172											
Mainstem	29114	10-year	12410.00	-11.54	9.43	-2.16	9.58	0.000186	3.11	4012.50	279.45	0.14
Mainstem	28649	10-year	12410.00	-8.94	9.39		9.49	0.000134	2.57	4854.36	353.37	0.12
Mainstem	28591	10-year	12410.00	-8.12	9.38		9.48	0.000132	2.54	4921.94	365.92	0.12
Mainstem	28528	10-year	12410.00	-8.34	9.38		9.47	0.000113	2.38	5253.55	377.37	0.11
Mainstem	28464	10-year	12410.00	-11.43	9.38		9.46	0.000117	2.36	5287.70	390.87	0.11
Mainstem	28369	10-year	12410.00	-8.48	9.36		9.45	0.000124	2.39	5206.73	392.08	0.11
Mainstem	28322	10-year	12410.00	-8.95	9.36		9.44	0.000110	2.28	5494.41	418.97	0.11
Mainstem	28243	10-year	12410.00	-9.92	9.35	-2.60	9.43	0.000112	2.29	5435.23	406.73	0.11
Mainstem	28190											
Mainstem	28164	10-year	12410.00	-10.62	9.32		9.41	0.000114	2.35	5280.88	379.00	0.11
Mainstem	27778	10-year	12410.00	-12.40	9.33		9.36	0.000055	1.46	8499.68	726.57	0.07
Mainstem	27678	10-year	12410.00	-9.82	9.30		9.36	0.000118	1.92	6522.36	680.19	0.11
Mainstem	27372	10-year	12410.00	-19.62	9.31		9.33	0.000018	1.06	11845.89	758.01	0.05
Mainstem	25439	10-year	12410.00	-18.93	9.26		9.29	0.000027	1.28	9746.80	597.24	0.06
Mainstem	25085	10-year	12410.00	-18.00	9.28		9.28	0.000002	0.43	28933.22	1441.72	0.02
Mainstem	24652	10-year	12410.00	-18.66	9.26		9.28	0.000016	0.96	12914.93	808.15	0.04
Mainstem	24563	10-year	12410.00	-19.46	9.26		9.28	0.000015	0.95	13098.77	808.78	0.04
Mainstem	24473	10-year	12410.00	-18.92	9.26		9.27	0.000015	0.94	13199.53	806.35	0.04
Mainstem	24383	10-year	12410.00	-19.03	9.26		9.27	0.000014	0.92	13509.85	837.04	0.04
Mainstem	24283	10-year	12410.00	-18.35	9.26		9.27	0.000014	0.91	13618.57	843.28	0.04
Mainstem	24172	10-year	12410.00	-15.01	9.25		9.27	0.000026	1.18	10565.64	713.50	0.05
Mainstem	23924	10-year	12410.00	-15.13	9.23		9.26	0.000026	1.37	9394.96	551.31	0.06
Mainstem	23786	10-year	12410.00	-15.45	9.23		9.26	0.000028	1.34	9292.62	549.05	0.06
Mainstem	23718	10-year	12410.00	-15.64	9.23		9.26	0.000031	1.36	9105.44	546.77	0.06
Mainstem	23649	10-year	12410.00	-15.78	9.22		9.25	0.000032	1.40	9015.77	578.26	0.06
Mainstem	23496	10-year	12410.00	-15.62	9.21		9.25	0.000038	1.54	8158.61	516.98	0.07
Mainstem	23417	10-year	12410.00	-17.65	9.21		9.24	0.000035	1.48	8400.49	492.71	0.06
Mainstem	23327	10-year	12410.00	-17.63	9.20		9.24	0.000040	1.55	7992.52	485.04	0.07
Mainstem	23052	10-year	12410.00	-15.55	9.19		9.23	0.000039	1.57	7903.81	465.05	0.07
Mainstem	22989	10-year	12410.00	-15.75	9.19		9.23	0.000039	1.58	7893.94	464.21	0.07
Mainstem	22889	10-year	12410.00	-15.99	9.18		9.22	0.000040	1.59	7814.40	466.26	0.07
Mainstem	22794	10-year	12410.00	-16.26	9.17		9.22	0.000043	1.74	7158.83	405.87	0.07
Mainstem	22688	10-year	12410.00	-16.25	9.16		9.21	0.000045	1.78	6999.02	398.75	0.07
Mainstem	22598	10-year	12410.00	-16.28	9.16		9.21	0.000045	1.75	7124.36	411.98	0.07
Mainstem	22540	10-year	12410.00	-16.40	9.16		9.20	0.000121	1.72	7210.41	408.59	0.07
Mainstem	22334	10-year	12410.00	-20.53	9.15		9.19	0.000038	1.64	7571.33	420.22	0.07
Mainstem	22271	10-year	12410.00	-22.51	9.15		9.19	0.000038	1.63	7627.90	417.44	0.07
Mainstem	22128	10-year	12410.00	-21.34	9.14		9.18	0.000033	1.57	7916.21	410.70	0.06
Mainstem	22039	10-year	12410.00	-21.34	9.14		9.18	0.000029	1.51	8235.66	416.29	0.06
Mainstem	21923	10-year	12410.00	-21.34	9.14		9.17	0.000024	1.42	8794.06	430.93	0.05
Mainstem	21843	10-year	12410.00	-21.34	9.14		9.17	0.000027	1.47	8467.27	423.30	0.06
Mainstem	21358	10-year	12410.00	-20.14	9.13		9.16	0.000027	1.33	9382.73	550.69	0.06
Mainstem	20793	10-year	12410.00	-20.69	9.11		9.14	0.000026	1.31	9491.21	552.20	0.05
Mainstem	20544	10-year	12410.00	-25.49	9.11		9.13	0.000022	1.23	10113.00	572.23	0.05
Mainstem	20492	10-year	12410.00	-26.57	9.11	-16.30	9.13	0.000021	1.24	10042.70	548.71	0.05
Mainstem	20428											
Mainstem	20418	10-year	12410.00	-26.04	9.07		9.10	0.000062	1.34	9344.16	495.73	0.05

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 10-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	20207	10-year	12410.00	-24.34	9.06		9.09	0.000024	1.38	9066.74	464.96	0.05
Mainstem	20090	10-year	12410.00	-24.34	9.06		9.09	0.000025	1.38	8982.29	461.67	0.05
Mainstem	19990	10-year	12410.00	-24.34	9.06		9.09	0.000025	1.44	8812.50	451.34	0.06
Mainstem	19895	10-year	12410.00	-24.34	9.06		9.09	0.000025	1.39	9018.21	496.66	0.06
Mainstem	19795	10-year	12410.00	-22.84	9.05		9.08	0.000026	1.38	9162.39	577.62	0.06
Mainstem	19721	10-year	12410.00	-23.67	9.05		9.08	0.000021	1.29	9925.00	630.56	0.05
Mainstem	19584	10-year	12410.00	-24.84	9.05		9.08	0.000021	1.29	9994.97	627.42	0.05
Mainstem	19488	10-year	12410.00	-25.68	9.05		9.07	0.000020	1.29	9999.55	612.11	0.05
Mainstem	19356	10-year	12410.00	-23.77	9.04		9.07	0.000022	1.35	9556.41	609.85	0.05
Mainstem	19188	10-year	12410.00	-24.28	9.04		9.07	0.000023	1.35	9394.10	537.27	0.05
Mainstem	19077	10-year	12410.00	-25.71	9.04		9.06	0.000021	1.29	9643.24	488.63	0.05
Mainstem	18966	10-year	12410.00	-25.27	9.04		9.06	0.000022	1.28	9728.13	523.19	0.05
Mainstem	18876	10-year	12410.00	-25.28	9.04		9.06	0.000022	1.24	10110.89	566.39	0.05
Mainstem	18781	10-year	12410.00	-24.65	9.03		9.06	0.000023	1.30	9529.59	501.50	0.05
Mainstem	18670	10-year	12410.00	-23.84	9.02	-14.90	9.05	0.000028	1.47	8446.40	439.97	0.06

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 100-year

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	339478	100-year	12070.00	1008.02	1025.61		1026.39	0.002922	7.12	1727.57	122.26	0.32
Mainstem	338369	100-year	12070.00	1005.35	1019.16		1021.00	0.009158	11.24	1209.93	129.38	0.58
Mainstem	337904	100-year	12070.00	1001.43	1014.70		1016.45	0.010289	11.18	1270.88	158.77	0.60
Mainstem	337482	100-year	12070.00	997.51	1009.55		1011.55	0.013027	11.49	1107.53	135.40	0.66
Mainstem	336700	100-year	12070.00	987.32	1002.09		1003.73	0.007767	10.52	1283.17	147.36	0.53
Mainstem	335935	100-year	12070.00	979.60	995.76		997.66	0.007980	11.46	1214.12	125.59	0.54
Mainstem	335127	100-year	12070.00	976.75	991.06		992.22	0.005329	8.80	1483.86	150.22	0.44
Mainstem	334335	100-year	12070.00	973.99	986.86		987.97	0.005424	8.52	1489.53	150.74	0.44
Mainstem	333485	100-year	12070.00	970.06	982.29		983.32	0.005416	8.32	1585.39	180.34	0.44
Mainstem	332814	100-year	12070.00	964.25	977.23		978.75	0.008659	10.35	1329.55	151.16	0.55
Mainstem	331901	100-year	12070.00	953.70	971.18		972.54	0.005426	9.51	1366.29	126.29	0.45
Mainstem	331251	100-year	12070.00	949.66	961.18	961.18	965.49	0.027679	16.97	769.12	97.68	0.97
Mainstem	330787	100-year	12070.00	936.35	953.22		955.29	0.008666	12.22	1210.63	127.09	0.57
Mainstem	330211	100-year	12070.00	928.46	950.04		951.52	0.004693	9.98	1330.85	99.60	0.42
Mainstem	329667	100-year	12070.00	928.53	947.40		948.82	0.005221	9.77	1358.25	108.62	0.44
Mainstem	328965	100-year	12070.00	927.65	943.12	938.90	944.66	0.006663	10.43	1391.73	160.98	0.50
Mainstem	328041	100-year	12070.00	921.69	934.13		936.51	0.011949	12.51	1018.72	102.44	0.65
Mainstem	327027	100-year	12070.00	915.20	929.73		930.48	0.003125	7.07	1838.83	162.70	0.34
Mainstem	326288	100-year	12070.00	910.27	926.25		927.53	0.005054	9.26	1441.93	141.65	0.44
Mainstem	325755	100-year	12070.00	910.43	924.24		925.08	0.003798	7.43	1716.44	162.32	0.37
Mainstem	325206	100-year	12070.00	908.22	922.15		922.97	0.003841	7.54	1790.32	169.62	0.38
Mainstem	324789	100-year	12070.00	904.40	919.94		921.11	0.004964	9.05	1535.61	151.20	0.43
Mainstem	324519	100-year	12070.00	902.89	919.40		920.03	0.002510	6.55	2069.70	196.55	0.31
Mainstem	324255	100-year	12070.00	903.12	918.15		919.14	0.004208	8.17	1623.09	161.30	0.40
Mainstem	324060	100-year	12070.00	902.25	917.53		918.36	0.003418	7.49	1757.93	166.21	0.36
Mainstem	323706	100-year	12070.00	902.21	916.06		916.96	0.004833	8.20	1751.25	182.32	0.42
Mainstem	323226	100-year	12070.00	898.35	913.91		914.81	0.004115	8.19	1779.16	175.41	0.39
Mainstem	322877	100-year	12070.00	893.32	913.15		913.64	0.002293	5.88	2323.27	218.37	0.28
Mainstem	322692	100-year	12070.00	893.60	912.45		913.12	0.003403	6.90	2080.47	244.44	0.35
Mainstem	322539	100-year	12070.00	888.22	912.40	899.09	912.73	0.001153	4.76	2892.99	257.56	0.21
Mainstem	322360	100-year	12070.00	886.23	912.06	900.89	912.48	0.001616	5.40	2536.61	211.73	0.24
Mainstem	322323	100-year	12070.00	892.27	912.02	903.37	912.43	0.001618	5.33	2507.45	206.63	0.25
Mainstem	322106	100-year	12070.00	887.92	911.53	901.44	912.05	0.001706	5.82	2224.59	184.72	0.26
Mainstem	321990		Inl Struct									
Mainstem	321964	100-year	12070.00	879.22	894.61		895.31	0.002965	6.77	1839.73	155.49	0.33
Mainstem	321383	100-year	12070.00	874.07	891.65		893.05	0.005031	9.80	1405.97	121.76	0.44
Mainstem	320913	100-year	12070.00	871.33	889.87		890.95	0.003617	8.56	1556.05	120.14	0.38
Mainstem	320401	100-year	12070.00	869.76	884.11		887.38	0.015181	14.88	896.56	87.60	0.73
Mainstem	319910	100-year	12070.00	865.30	883.06		883.90	0.002907	7.53	1775.61	141.15	0.33
Mainstem	319419	100-year	12070.00	865.84	881.55		882.39	0.003216	7.44	1711.32	138.51	0.35
Mainstem	318690	100-year	12070.00	865.63	879.30		879.95	0.003335	6.64	1991.79	208.09	0.35
Mainstem	318664	100-year	12070.00	867.31	878.80		879.80	0.005817	8.19	1601.08	191.23	0.45
Mainstem	318109	100-year	12070.00	863.84	874.69		875.95	0.008365	9.45	1519.80	221.63	0.54
Mainstem	316832	100-year	12070.00	855.39	867.54		868.24	0.004381	6.73	1826.02	209.93	0.38
Mainstem	315623	100-year	12070.00	851.29	859.17	857.37	860.22	0.011273	8.67	1501.40	254.55	0.59
Mainstem	314635	100-year	12070.00	838.67	851.57		852.60	0.005601	8.47	1608.65	175.83	0.45
Mainstem	313801	100-year	12070.00	834.96	847.30		848.20	0.004862	7.70	1633.49	170.68	0.41
Mainstem	312903	100-year	12070.00	830.55	840.36		841.88	0.010926	10.04	1267.71	165.38	0.60
Mainstem	311853	100-year	12070.00	808.34	836.28		836.96	0.002383	6.79	1960.39	147.31	0.29
Mainstem	311340	100-year	12070.00	819.10	834.24		835.25	0.004863	8.08	1531.28	142.07	0.41
Mainstem	310533	100-year	12070.00	821.22	830.64	827.11	831.20	0.004776	6.32	2325.74	589.24	0.39
Mainstem	309830	100-year	12070.00	818.09	826.98		827.63	0.005478	6.50	1954.26	456.04	0.42
Mainstem	309107	100-year	12070.00	811.55	822.81	820.29	823.49	0.006191	7.73	2014.80	827.83	0.45
Mainstem	308368	100-year	12070.00	810.28	818.08	815.87	818.77	0.008112	7.53	1971.51	543.48	0.50
Mainstem	307956	100-year	12070.00	806.24	817.14		817.37	0.001700	4.08	3185.93	426.19	0.24
Mainstem	307708	100-year	12070.00	804.90	815.79		816.64	0.005297	7.47	1686.20	199.08	0.43
Mainstem	307660	100-year	12070.00	804.98	815.37		816.36	0.006843	8.31	1614.92	206.63	0.48
Mainstem	307402	100-year	12070.00	803.24	812.86		814.15	0.010402	9.71	1505.23	247.43	0.59
Mainstem	306984	100-year	12070.00	797.51	810.34		811.24	0.004720	7.97	1817.18	249.14	0.41
Mainstem	306816	100-year	12070.00	797.67	808.59		810.09	0.009364	10.10	1330.11	185.64	0.57
Mainstem	306324	100-year	12070.00	788.89	806.37		807.19	0.003596	7.43	1781.67	175.90	0.36
Mainstem	305628	100-year	12070.00	790.83	804.00		804.69	0.003448	6.65	1843.67	174.01	0.35
Mainstem	305538	100-year	12070.00	791.32	800.01	800.01	803.71	0.030118	15.61	811.87	114.53	0.98
Mainstem	304925	100-year	12070.00	783.64	795.90		796.73	0.004404	7.44	1720.98	180.21	0.40
Mainstem	304366	100-year	12070.00	782.00	793.55		794.33	0.004208	7.20	1789.83	189.34	0.39
Mainstem	303706	100-year	12070.00	776.97	791.21		791.93	0.003096	6.82	1848.12	171.10	0.34
Mainstem	303637	100-year	12070.00	777.26	789.60		791.46	0.010072	11.34	1202.43	141.80	0.60
Mainstem	303405	100-year	12070.00	775.70	790.25		790.46	0.000920	3.82	3402.15	297.66	0.19
Mainstem	302639	100-year	12070.00	773.65	788.68		789.32	0.002577	6.54	2001.40	187.92	0.31
Mainstem	301942	100-year	12070.00	772.59	781.72	781.16	784.93	0.024915	14.43	854.87	115.01	0.89
Mainstem	301509	100-year	12070.00	769.66	781.44		781.80	0.002210	5.04	2763.68	357.04	0.28
Mainstem	301066	100-year	12070.00	769.67	779.80		780.42	0.004251	6.57	2042.05	258.21	0.38
Mainstem	300464	100-year	12070.00	765.34	778.20	773.78	778.51	0.002308	5.47	3359.82	544.25	0.29
Mainstem	299856	100-year	12070.00	762.99	775.07		776.27	0.006154	8.98	1466.87	202.61	0.47
Mainstem	298758	100-year	12070.00	757.10	768.21		769.27	0.006533	8.44	1549.13	187.36	0.48

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 100-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	297428	100-year	12070.00	746.98	758.17		759.49	0.008292	9.51	1443.72	203.37	0.53
Mainstem	296831	100-year	12070.00	743.96	752.98		754.21	0.009358	9.04	1427.86	208.29	0.55
Mainstem	296245	100-year	12070.00	738.96	748.76	745.53	749.58	0.006497	7.28	1705.89	243.63	0.45
Mainstem	295786	100-year	12070.00	731.50	741.82	741.72	744.47	0.021026	14.20	1121.09	210.58	0.84
Mainstem	295136	100-year	12070.00	723.88	736.13		737.19	0.006248	8.40	1528.13	176.55	0.46
Mainstem	294624	100-year	12070.00	720.59	729.45	728.97	731.76	0.020782	12.71	1107.79	211.44	0.81
Mainstem	293890	100-year	12070.00	710.60	721.89		723.02	0.007170	8.56	1462.54	178.78	0.49
Mainstem	293679	100-year	12070.00	709.17	721.87		722.16	0.001539	4.36	2813.52	275.24	0.23
Mainstem	293161	100-year	12070.00	709.91	718.41		720.18	0.014784	10.75	1146.15	157.43	0.68
Mainstem	292459	100-year	12070.00	700.61	710.82	707.99	712.10	0.008993	9.13	1369.19	175.45	0.54
Mainstem	291699	100-year	12070.00	688.49	699.46	699.01	702.09	0.020128	13.50	1051.27	189.19	0.81
Mainstem	290949	100-year	12070.00	680.04	693.47		694.59	0.005449	8.55	1476.88	148.13	0.44
Mainstem	290426	100-year	12070.00	679.06	687.58		689.74	0.018004	11.89	1052.98	150.01	0.76
Mainstem	289597	100-year	12070.00	665.63	674.76	673.12	676.47	0.013969	10.78	1215.26	174.77	0.67
Mainstem	288827	100-year	12070.00	649.56	658.72	658.72	661.67	0.027330	14.38	982.86	187.74	0.92
Mainstem	287887	100-year	12070.00	641.14	653.81		654.38	0.003075	6.20	2106.10	231.41	0.33
Mainstem	287000	100-year	12070.00	636.25	648.43		650.01	0.008608	10.32	1308.83	166.55	0.55
Mainstem	286229	100-year	12070.00	629.18	636.55	636.23	639.11	0.026696	13.02	981.31	172.54	0.90
Mainstem	285532	100-year	12070.00	615.47	628.14		629.61	0.007825	9.76	1278.19	132.47	0.52
Mainstem	284719	100-year	12070.00	609.66	622.06	618.48	623.42	0.007374	9.63	1402.28	165.23	0.51
Mainstem	284053	100-year	12070.00	602.27	611.42	611.42	614.62	0.028345	14.77	903.96	149.58	0.95
Mainstem	283589	100-year	12070.00	597.58	608.09		608.80	0.005189	6.95	1904.61	256.53	0.41
Mainstem	282818	100-year	12070.00	591.35	601.14		602.77	0.012665	10.38	1229.02	173.52	0.64
Mainstem	282353	100-year	12070.00	586.31	594.94		596.53	0.014180	10.34	1251.52	192.36	0.67
Mainstem	281593	100-year	12070.00	569.44	580.87	579.82	583.89	0.019202	14.14	911.50	112.62	0.79
Mainstem	280949	100-year	12070.00	560.42	570.11		572.30	0.016435	11.95	1045.85	143.15	0.73
Mainstem	280125	100-year	12070.00	552.35	565.76		566.48	0.003463	6.86	1792.78	164.22	0.35
Mainstem	279386	100-year	12070.00	549.44	559.35	557.82	561.63	0.015518	12.37	1072.76	149.59	0.72
Mainstem	278583	100-year	12070.00	540.98	551.38		552.65	0.007952	9.11	1383.90	161.45	0.52
Mainstem	278161	100-year	12070.00	536.98	547.61		549.07	0.008869	9.86	1322.60	162.32	0.55
Mainstem	277707	100-year	12070.00	530.49	541.72		543.98	0.014068	12.66	1119.27	150.24	0.70
Mainstem	277105	100-year	12070.00	524.29	536.52	533.35	537.73	0.007253	9.42	1519.31	180.48	0.50
Mainstem	276619	100-year	12070.00	518.92	528.36	528.36	531.43	0.026599	14.81	967.09	168.81	0.92
Mainstem	275943	100-year	12070.00	510.39	525.22		525.77	0.002309	5.99	2080.70	178.73	0.29
Mainstem	275458	100-year	12070.00	510.10	519.39	519.22	522.81	0.026460	15.20	867.61	125.94	0.93
Mainstem	274565	100-year	12070.00	498.10	511.07		512.19	0.006108	8.65	1499.12	170.53	0.46
Mainstem	273800	100-year	12070.00	494.39	504.91		506.38	0.009582	9.82	1277.78	153.29	0.57
Mainstem	272923	100-year	12070.00	485.76	498.18		499.41	0.006555	8.93	1398.22	146.11	0.48
Mainstem	272342	100-year	12070.00	482.77	494.83		495.88	0.005524	8.29	1510.44	151.21	0.44
Mainstem	271909	100-year	12070.00	477.04	487.65	487.65	490.99	0.028906	15.16	890.14	144.34	0.96
Mainstem	271535	100-year	12070.00	471.21	483.16		484.67	0.008917	10.04	1314.84	163.62	0.56
Mainstem	271038	100-year	12070.00	468.32	479.23		480.29	0.008151	8.28	1480.24	190.74	0.51
Mainstem	270579	100-year	12070.00	465.53	475.00		476.26	0.009565	9.12	1375.28	175.21	0.56
Mainstem	270114	100-year	12070.00	458.56	470.59		472.06	0.008450	9.82	1290.38	146.48	0.54
Mainstem	269729	100-year	12070.00	456.27	467.51	464.17	468.85	0.007928	9.41	1352.20	152.08	0.52
Mainstem	269264	100-year	12070.00	453.51	460.46	459.90	462.73	0.024554	12.17	1020.19	175.19	0.86
Mainstem	268752	100-year	12070.00	442.46	458.33	452.87	458.89	0.002922	6.90	2085.43	214.03	0.33
Mainstem	268388	100-year	12070.00	433.14	456.73		457.80	0.002724	8.40	1551.40	93.66	0.33
Mainstem	268182	100-year	12070.00	432.18	456.67		457.24	0.001494	6.32	2211.40	142.19	0.25
Mainstem	267854	100-year	12070.00	431.80	448.75	448.75	454.43	0.025458	19.67	694.09	68.17	0.94
Mainstem	267516	100-year	12070.00	431.01	442.91		444.44	0.009096	10.00	1252.82	140.22	0.56
Mainstem	267115	100-year	12070.00	427.61	439.38	436.05	440.93	0.008610	10.07	1260.38	140.32	0.55
Mainstem	266561	100-year	12070.00	422.26	432.85		434.95	0.012960	11.79	1090.98	130.83	0.67
Mainstem	266133	100-year	12070.00	413.45	430.65		431.70	0.003773	8.33	1551.61	123.69	0.38
Mainstem	265668	100-year	12070.00	409.35	425.87		428.66	0.011994	13.47	927.15	76.76	0.64
Mainstem	265362	100-year	12070.00	407.68	424.50		425.91	0.005156	9.62	1331.12	107.67	0.44
Mainstem	265014	100-year	12070.00	408.22	420.23	418.43	422.89	0.015715	13.17	945.80	103.14	0.73
Mainstem	264370	100-year	12070.00	402.08	414.39		415.80	0.007401	9.56	1295.96	129.84	0.51
Mainstem	263657	100-year	12070.00	396.62	409.85		411.25	0.005610	9.58	1315.88	126.24	0.49
Mainstem	262743	100-year	12070.00	393.90	405.46		406.45	0.004672	8.09	1566.27	171.16	0.45
Mainstem	262221	100-year	12070.00	390.55	401.09		402.89	0.010315	11.37	1320.28	215.55	0.66
Mainstem	261645	100-year	12070.00	385.29	399.18		399.87	0.002636	6.73	1873.58	174.26	0.34
Mainstem	261318	100-year	12070.00	386.42	397.57		398.65	0.005340	8.50	1531.86	176.58	0.48
Mainstem	260996	100-year	12070.00	384.64	393.28	392.31	395.68	0.016836	12.45	990.21	146.20	0.81
Mainstem	260478	100-year	12070.00	379.66	388.62		389.71	0.007560	8.77	1598.88	251.26	0.55
Mainstem	260040	100-year	12070.00	375.12	386.63		387.34	0.003731	6.90	1870.71	224.31	0.40
Mainstem	259570	100-year	12070.00	371.15	384.93		385.65	0.003417	7.03	1945.48	242.50	0.38
Mainstem	259259	100-year	12070.00	371.04	383.25		384.31	0.005436	8.51	1624.95	226.38	0.48
Mainstem	258884	100-year	12070.00	367.97	381.56		382.40	0.004446	8.05	1960.19	267.38	0.44
Mainstem	258224	100-year	12070.00	363.49	376.87	374.87	378.41	0.008369	10.87	1495.34	398.32	0.60
Mainstem	257574	100-year	12070.00	360.44	373.55		374.39	0.004329	7.44	1699.53	197.83	0.43
Mainstem	256824	100-year	12070.00	356.90	367.28	366.22	369.17	0.012293	11.68	1278.47	221.03	0.71
Mainstem	256312	100-year	12070.00	353.50	362.92		364.18	0.007377	9.21	1432.28	192.17	0.55
Mainstem	255895	100-year	12070.00	348.37	360.60		361.62	0.004984	8.38	1644.12	212.40	0.46
Mainstem	255272	100-year	12070.00	345.52	357.96	354.57	358.69	0.004232	7.78	2116.12	280.47	0.43

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 100-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	254850	100-year	12070.00	341.44	355.26		356.59	0.005743	9.46	1489.67	231.91	0.50
Mainstem	254464	100-year	12070.00	341.93	353.63		354.58	0.004281	7.88	1658.78	213.65	0.43
Mainstem	253778	100-year	12070.00	338.75	348.65		350.22	0.009926	10.55	1361.34	214.55	0.64
Mainstem	253398	100-year	12070.00	336.30	346.22		347.18	0.005912	7.91	1563.32	207.09	0.49
Mainstem	253039	100-year	12070.00	333.97	343.14		344.45	0.009721	9.40	1383.60	213.61	0.61
Mainstem	252732	100-year	12070.00	328.80	341.13		342.29	0.005129	8.77	1480.36	162.90	0.47
Mainstem	252004	100-year	12070.00	322.69	332.91	332.29	335.75	0.018233	13.66	941.34	141.68	0.85
Mainstem	251497	100-year	12070.00	320.14	329.28		330.23	0.006114	7.86	1597.22	222.87	0.49
Mainstem	251133	100-year	12070.00	317.25	325.76		327.26	0.010703	9.92	1278.99	202.34	0.64
Mainstem	250726	100-year	12070.00	313.97	321.99		323.16	0.009133	8.76	1431.44	228.49	0.59
Mainstem	250261	100-year	12070.00	307.64	318.06		319.37	0.007351	9.26	1363.07	170.31	0.55
Mainstem	249607	100-year	12070.00	304.74	314.83		315.58	0.004285	7.08	1823.79	226.43	0.42
Mainstem	248873	100-year	12070.00	297.75	311.04		312.19	0.004853	8.67	1450.37	144.27	0.46
Mainstem	248382	100-year	12070.00	297.88	308.00		309.30	0.007374	9.44	1429.03	186.55	0.55
Mainstem	247870	100-year	12070.00	294.56	305.23		306.12	0.004905	8.18	1933.41	305.78	0.46
Mainstem	247099	100-year	12070.00	285.52	298.23	296.66	300.41	0.011834	12.19	1114.29	147.82	0.69
Mainstem	246402	100-year	12070.00	282.89	293.42		294.53	0.005697	8.67	1525.03	184.45	0.49
Mainstem	245573	100-year	12070.00	275.96	289.23		290.30	0.004600	8.61	1603.05	178.32	0.45
Mainstem	244897	100-year	12070.00	275.58	284.94		286.27	0.007951	9.53	1411.11	194.22	0.57
Mainstem	244163	100-year	12070.00	269.05	280.84		281.81	0.004602	8.01	1599.65	177.06	0.44
Mainstem	243661	100-year	12070.00	266.28	276.90		278.60	0.008977	10.59	1207.21	145.21	0.61
Mainstem	242875	100-year	12070.00	260.71	273.33		274.16	0.003512	7.35	1714.09	175.66	0.39
Mainstem	242072	100-year	12070.00	256.43	270.05		271.09	0.004108	8.33	1601.50	177.37	0.43
Mainstem	241597	100-year	12070.00	256.23	267.34		268.64	0.006434	9.44	1424.46	172.02	0.53
Mainstem	240963	100-year	12070.00	253.60	263.90		264.89	0.005206	7.98	1539.88	176.99	0.46
Mainstem	240108	100-year	12070.00	249.71	258.73		259.73	0.007066	8.14	1579.73	239.82	0.52
Mainstem	239649	100-year	12070.00	246.12	256.64		257.27	0.003901	6.56	2073.54	314.40	0.40
Mainstem	239010	100-year	12070.00	243.44	253.76		254.56	0.004540	7.37	1777.53	230.63	0.43
Mainstem	238123	100-year	12070.00	240.02	250.27		250.98	0.003568	6.89	1856.06	209.21	0.39
Mainstem	237109	100-year	12070.00	232.64	245.41		246.57	0.005373	9.21	1633.27	206.56	0.49
Mainstem	236227	100-year	12070.00	228.82	240.60	236.80	241.79	0.005478	8.83	1438.13	216.49	0.49
Mainstem	235129	100-year	12070.00	224.81	234.14		235.16	0.006602	8.20	1579.62	237.24	0.51
Mainstem	234105	100-year	12070.00	220.18	230.34	226.37	230.69	0.002839	5.59	2985.78	481.01	0.34
Mainstem	232663	100-year	12070.00	217.31	226.12	224.04	226.44	0.003552	5.83	3965.96	1349.89	0.37
Mainstem	231739	100-year	12070.00	211.41	223.06	221.22	223.42	0.003171	6.23	3347.43	853.02	0.36
Mainstem	230303	100-year	12070.00	205.60	218.10	216.90	218.65	0.004088	7.26	3198.28	1257.86	0.41
Mainstem	229141	100-year	12070.00	201.84	214.05	209.93	214.63	0.003032	6.71	2517.87	1003.63	0.36
Mainstem	227869	100-year	12070.00	198.88	209.42	206.24	210.12	0.004173	7.28	2222.18	1124.27	0.42
Mainstem	226549	100-year	12070.00	194.48	205.62	200.96	206.02	0.002273	5.49	2981.61	746.45	0.31
Mainstem	225329	100-year	12070.00	181.71	202.31	195.81	203.00	0.002667	6.92	2051.48	550.12	0.34
Mainstem	224659	100-year	12070.00	188.52	200.33	195.85	200.97	0.003366	6.51	1910.49	578.36	0.37
Mainstem	224622		Bridge									
Mainstem	224574	100-year	12070.00	188.52	200.00	195.88	200.68	0.003722	6.70	1877.17	727.25	0.39
Mainstem	223545	100-year	12070.00	186.59	197.27	193.67	197.59	0.002318	5.43	4240.18	1370.21	0.31
Mainstem	222367	100-year	12070.00	181.37	192.85	188.73	193.85	0.004651	8.19	1608.39	194.04	0.45
Mainstem	221290	100-year	12070.00	177.50	188.52	184.18	189.27	0.003799	7.03	1868.20	255.49	0.40
Mainstem	219891	100-year	12070.00	168.42	181.53		182.79	0.005696	9.24	1494.61	180.24	0.50
Mainstem	218555	100-year	12070.00	163.48	176.78		177.40	0.002820	6.46	2154.68	356.79	0.34
Mainstem	217599	100-year	12070.00	161.68	173.55	169.05	174.27	0.003827	6.95	1849.02	217.33	0.39
Mainstem	217557		Bridge									
Mainstem	217504	100-year	12070.00	161.36	172.72	168.95	173.54	0.004869	7.33	1746.18	237.66	0.43
Mainstem	216549	100-year	12070.00	157.38	169.60	165.02	169.99	0.002746	5.99	2710.73	452.66	0.32
Mainstem	215223	100-year	12070.00	152.39	164.96	161.44	165.58	0.004204	7.19	2459.82	685.50	0.39
Mainstem	213972	100-year	12070.00	147.03	160.47	155.56	161.07	0.003112	6.50	2176.28	1048.73	0.35
Mainstem	213418	100-year	12250.00	145.69	158.38	154.95	159.04	0.004287	7.39	2580.59	876.60	0.40
Mainstem	212061	100-year	12250.00	141.43	153.48	148.84	154.04	0.003185	6.10	2245.59	711.35	0.35
Mainstem	211121	100-year	12250.00	137.00	149.46	145.12	150.39	0.004729	8.12	1925.96	839.73	0.43
Mainstem	210762	100-year	12250.00	136.98	147.84	144.59	148.58	0.004969	7.49	2222.22	583.62	0.44
Mainstem	209679	100-year	12250.00	134.77	144.76	142.12	144.96	0.002292	4.66	4796.83	1961.26	0.29
Mainstem	208391	100-year	11745.00	132.45	139.83	138.46	140.16	0.007120	6.35	2972.61	1747.00	0.49
Mainstem	207092	100-year	11745.00	127.81	135.05	133.50	135.17	0.004285	4.53	4779.31	2721.54	0.36
Mainstem	205667	100-year	11745.00	127.16	134.25	132.00	134.28	0.000866	1.99	9026.69	3135.33	0.17
Mainstem	203988	100-year	11745.00	121.47	131.35	130.01	131.94	0.005772	7.62	2622.79	1609.28	0.47
Mainstem	202884	100-year	11745.00	116.15	127.77	124.35	128.00	0.002219	4.48	4448.79	2172.64	0.29
Mainstem	201332	100-year	11745.00	112.29	123.12	121.13	123.48	0.004235	6.14	2907.61	1807.59	0.40
Mainstem	200508	100-year	11745.00	111.53	121.37	118.95	121.50	0.002104	4.01	4419.78	1945.55	0.28
Mainstem	198924	100-year	12250.00	107.24	119.02	115.42	119.20	0.001417	4.33	4926.20	1359.44	0.24
Mainstem	198063	100-year	12250.00	100.65	116.66	113.53	117.32	0.004169	7.68	2979.00	902.62	0.40
Mainstem	196976	100-year	12250.00	104.00	115.34	111.07	115.43	0.000818	3.27	7375.39	1729.20	0.18
Mainstem	196242	100-year	12250.00	95.52	113.93	109.74	114.41	0.002655	6.43	3034.64	1463.12	0.33
Mainstem	195101	100-year	12250.00	100.46	110.96	108.75	111.28	0.002830	5.61	3814.01	1660.58	0.33
Mainstem	193966	100-year	12250.00	95.52	108.90	105.06	109.01	0.001392	3.00	5402.45	2313.85	0.20
Mainstem	192952	100-year	12250.00	97.96	107.59	105.00	107.70	0.001259	3.75	6251.00	2880.03	0.22
Mainstem	192134	100-year	12250.00	89.06	107.03	102.55	107.10	0.000628	3.06	8648.37	2646.91	0.16
Mainstem	191358	100-year	12250.00	93.92	105.01	100.68	105.66	0.003520	6.75	2184.30	1901.48	0.38

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 100-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	190143	100-year	12250.00	89.64	102.02	98.47	102.34	0.002054	5.61	3410.13	1688.88	0.30
Mainstem	188966	100-year	12250.00	86.96	99.66	96.40	99.95	0.002050	5.56	4084.92	1708.87	0.32
Mainstem	188448	100-year	12250.00	86.65	98.68	94.67	98.85	0.001354	4.48	4662.24	2056.36	0.26
Mainstem	188031	100-year	12250.00	82.88	97.91	95.48	98.14	0.001592	5.06	4823.32	2419.64	0.28
Mainstem	186759	100-year	12250.00	83.18	95.96	90.88	96.32	0.001593	5.50	3748.11	2524.03	0.29
Mainstem	185302	100-year	12250.00	80.45	93.57	90.28	93.86	0.001757	5.71	3921.46	1913.77	0.30
Mainstem	184214	100-year	12250.00	80.91	91.75	87.84	92.03	0.001608	5.12	3873.37	2167.26	0.29
Mainstem	182831	100-year	12250.00	78.48	89.39	85.97	89.68	0.001846	5.35	3887.89	1466.85	0.31
Mainstem	182783	Bridge										
Mainstem	182730	100-year	12250.00	78.48	88.89	86.34	89.48	0.003379	6.94	2560.23	882.98	0.41
Mainstem	181817	100-year	12250.00	73.04	87.28	83.76	87.47	0.001343	4.68	5214.98	2926.81	0.26
Mainstem	181104	100-year	12250.00	75.65	87.17	84.43	87.19	0.000140	1.38	15476.67	3094.33	0.08
Mainstem	180264	100-year	12250.00	73.64	83.82	83.82	86.61	0.020804	13.45	947.38	2228.44	0.95
Mainstem	178865	100-year	12250.00	72.01	83.44	80.83	83.49	0.000484	2.67	8012.23	2477.95	0.15
Mainstem	177545	100-year	12250.00	68.87	83.26	78.43	83.27	0.000065	1.07	20064.81	3110.85	0.06
Mainstem	176268	100-year	12250.00	66.87	82.34	75.55	82.97	0.001797	6.55	2083.57	477.96	0.32
Mainstem	176225	Bridge										
Mainstem	176178	100-year	12250.00	66.87	82.16	75.70	82.79	0.001872	6.55	2107.52	1033.37	0.32
Mainstem	176056	100-year	12250.00	66.87	81.66	81.66	82.50	0.002463	7.35	1928.72	1029.86	0.37
Mainstem	175940	100-year	12810.00	67.00	81.86	73.84	82.18	0.000928	4.67	2919.37	334.32	0.23
Mainstem	175919	Bridge										
Mainstem	175893	100-year	12810.00	65.37	81.64	73.69	82.03	0.001090	5.10	2755.88	474.60	0.25
Mainstem	175708	100-year	12810.00	66.02	81.22	74.16	81.77	0.001606	6.14	2295.56	207.44	0.30
Mainstem	175660	Bridge										
Mainstem	175555	100-year	12810.00	67.32	80.85	74.75	81.45	0.001923	6.28	2198.09	223.19	0.32
Mainstem	174462	100-year	12810.00	67.00	78.94	74.68	79.27	0.001915	5.46	4650.60	1590.64	0.31
Mainstem	173353	100-year	12810.00	65.06	77.13	74.00	77.35	0.001505	4.98	5484.51	1547.82	0.28
Mainstem	172540	100-year	12810.00	57.34	76.38	71.48	76.54	0.001062	4.27	6616.89	1987.88	0.22
Mainstem	171743	100-year	12810.00	64.05	76.00	69.04	76.06	0.000312	2.54	9129.88	1957.65	0.13
Mainstem	171209	100-year	12810.00	53.16	75.69	64.58	75.87	0.000481	4.02	6466.02	1505.46	0.17
Mainstem	170877	100-year	12810.00	49.99	75.50	63.07	75.71	0.000493	4.13	4361.05	1299.14	0.17
Mainstem	170697	100-year	12810.00	54.70	75.24	63.91	75.59	0.000669	4.87	3446.24	1160.38	0.20
Mainstem	170280	100-year	12810.00	51.75	75.11	62.84	75.31	0.000514	4.30	6951.90	1316.34	0.17
Mainstem	169351	100-year	12810.00	52.66	74.95	62.61	75.01	0.000181	2.56	12687.41	1793.97	0.11
Mainstem	168448	100-year	12810.00	46.54	74.55	61.44	74.75	0.000477	4.18	6679.62	1028.11	0.16
Mainstem	167556	100-year	12810.00	51.17	74.07	61.84	74.31	0.000500	4.23	4626.25	623.30	0.17
Mainstem	166774	100-year	12810.00	51.93	73.51		73.85	0.000671	4.75	3267.40	353.71	0.20
Mainstem	166008	100-year	12810.00	53.48	72.97	62.02	73.32	0.000711	4.87	3252.69	351.64	0.21
Mainstem	165195	100-year	12810.00	50.67	72.10		72.59	0.001089	5.90	2965.47	337.29	0.25
Mainstem	165137	100-year	12810.00	52.01	72.09		72.52	0.000891	5.42	3063.58	360.75	0.23
Mainstem	164150	100-year	12810.00	48.79	71.22	59.11	71.68	0.000796	5.50	2356.26	434.04	0.22
Mainstem	164108	Bridge										
Mainstem	164060	100-year	12810.00	48.79	70.97	58.97	71.41	0.000743	5.34	2397.29	236.14	0.22
Mainstem	163506	100-year	12810.00	53.45	70.32	61.62	70.86	0.001339	6.08	2454.67	245.67	0.27
Mainstem	162645	100-year	12810.00	50.09	69.69	61.35	69.94	0.000742	4.63	3947.47	532.23	0.20
Mainstem	161505	100-year	12810.00	45.86	68.66	58.36	69.01	0.000890	5.40	4432.59	655.12	0.22
Mainstem	160391	100-year	12810.00	44.32	67.35	56.88	67.86	0.001190	6.09	2821.67	415.92	0.25
Mainstem	159509	100-year	12810.00	51.51	66.58	57.94	66.91	0.000881	4.73	3159.70	436.15	0.22
Mainstem	158822	100-year	12810.00	48.13	66.27	56.44	66.43	0.000454	3.50	5256.71	679.93	0.16
Mainstem	158078	100-year	12810.00	41.74	65.34	54.25	65.89	0.001140	6.20	2780.64	472.27	0.25
Mainstem	157777	100-year	12810.00	49.91	65.00	57.42	65.51	0.001323	6.04	3684.54	629.83	0.28
Mainstem	157576	100-year	12810.00	49.71	64.74	57.84	65.22	0.001413	6.07	3244.83	681.37	0.29
Mainstem	157386	100-year	12810.00	50.16	64.39	57.72	64.94	0.001569	6.36	2988.04	738.80	0.31
Mainstem	157180	100-year	12810.00	46.75	64.07	55.38	64.64	0.001242	6.27	2910.17	506.49	0.28
Mainstem	156953	100-year	12810.00	43.06	63.85	53.62	64.38	0.001017	6.08	3456.07	819.54	0.25
Mainstem	156895	100-year	12810.00	41.91	63.82	52.91	64.31	0.000988	5.84	2770.95	329.38	0.24
Mainstem	156879	Bridge										
Mainstem	156869	100-year	12810.00	41.91	63.76	52.92	64.21	0.000916	5.57	2859.03	330.41	0.23
Mainstem	156768	100-year	12810.00	41.40	63.59	53.43	64.11	0.001028	6.14	3693.86	793.91	0.25
Mainstem	156610	100-year	12810.00	37.02	63.51	51.75	63.94	0.000787	5.60	3704.07	517.71	0.22
Mainstem	156362	100-year	12810.00	45.47	63.04	54.78	63.67	0.001395	6.56	2743.96	458.42	0.29
Mainstem	156161	100-year	12810.00	45.41	62.84	54.07	63.38	0.001184	6.03	2803.53	436.20	0.27
Mainstem	155992	100-year	12810.00	45.99	62.65	53.93	63.18	0.001156	5.96	2773.35	386.97	0.27
Mainstem	155771	100-year	12810.00	46.02	62.41	54.14	62.92	0.001183	5.92	3299.51	1408.75	0.27
Mainstem	155570	100-year	12810.00	46.20	62.16	53.87	62.68	0.001202	5.95	2847.51	1494.70	0.27
Mainstem	155390	100-year	12810.00	43.58	61.99	53.36	62.46	0.001071	5.91	2971.74	1436.92	0.26
Mainstem	155184	100-year	12810.00	43.89	61.82	52.74	62.23	0.000921	5.67	3212.93	1533.53	0.24
Mainstem	154947	100-year	12810.00	39.79	61.64	50.59	62.03	0.000742	5.37	3711.92	1518.44	0.22
Mainstem	154746	100-year	12810.00	41.84	61.62	49.93	61.87	0.000489	4.27	4282.64	1625.11	0.18
Mainstem	154577	100-year	12810.00	41.92	61.46	50.72	61.77	0.000636	4.79	4082.69	1375.39	0.20
Mainstem	154350	100-year	12810.00	40.01	61.38	51.40	61.61	0.000575	4.41	4985.80	1582.03	0.19
Mainstem	154155	100-year	12810.00	39.19	61.16	51.09	61.48	0.000730	5.27	4645.04	1585.81	0.22
Mainstem	153954	100-year	12810.00	42.67	61.09	51.51	61.32	0.000590	4.44	4892.86	1609.99	0.19
Mainstem	153743	100-year	12810.00	42.59	60.94	51.32	61.19	0.000626	4.61	5394.68	1505.21	0.20
Mainstem	153548	100-year	12810.00	43.96	60.88	50.76	61.07	0.000471	3.96	6034.58	1476.17	0.17

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 100-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	153347	100-year	12810.00	41.96	60.62	50.30	60.94	0.000690	5.03	5645.14	1450.72	0.21
Mainstem	153136	100-year	12810.00	36.92	60.37	48.56	60.78	0.000737	5.55	4634.33	587.76	0.22
Mainstem	152972	100-year	12810.00	32.11	60.26	47.70	60.67	0.000721	5.54	5157.58	1643.25	0.21
Mainstem	152740	100-year	12810.00	40.47	60.07	49.44	60.49	0.000820	5.59	4269.66	499.59	0.23
Mainstem	152587	100-year	12810.00	41.27	60.01	49.16	60.35	0.000654	4.84	3562.84	445.73	0.21
Mainstem	152328	100-year	12810.00	38.77	59.68	48.90	60.14	0.000866	5.93	3644.75	385.64	0.24
Mainstem	152117	100-year	12810.00	38.21	59.65	48.63	59.93	0.000629	4.96	5052.10	391.74	0.20
Mainstem	151927	100-year	12810.00	36.91	59.51	48.73	59.81	0.000657	5.16	5165.87	428.03	0.21
Mainstem	151726	100-year	12810.00	37.04	59.43	48.48	59.67	0.000543	4.70	6008.84	581.18	0.19
Mainstem	151531	100-year	12810.00	37.91	59.40	47.72	59.55	0.000381	3.92	7952.80	1225.15	0.16
Mainstem	151351	100-year	12810.00	39.90	59.34	47.74	59.48	0.000381	3.81	7494.50	572.19	0.16
Mainstem	151108	100-year	12810.00	37.92	59.12	48.11	59.36	0.000533	4.65	5912.87	774.57	0.19
Mainstem	150913	100-year	12810.00	37.45	58.75	47.35	59.22	0.000826	5.75	3503.35	654.67	0.23
Mainstem	150718	100-year	12810.00	36.75	58.64	47.25	59.05	0.000747	5.53	3869.52	646.20	0.22
Mainstem	150533	100-year	12810.00	36.08	58.53	47.06	58.90	0.000723	5.43	4658.37	699.21	0.22
Mainstem	150337	100-year	12810.00	36.43	58.32	47.01	58.75	0.000792	5.65	4268.77	937.41	0.23
Mainstem	150116	100-year	12810.00	38.91	58.15	47.44	58.57	0.000786	5.33	2915.72	542.44	0.23
Mainstem	149931	100-year	12810.00	36.59	57.91	46.61	58.41	0.000849	5.79	2632.44	561.24	0.24
Mainstem	149714	100-year	12810.00	37.99	57.81	45.97	58.22	0.000689	5.20	3025.11	612.52	0.21
Mainstem	149487	100-year	12810.00	39.95	57.71	46.65	58.05	0.000636	4.78	3663.17	480.10	0.20
Mainstem	149318	100-year	12810.00	37.91	57.52	46.37	57.93	0.000726	5.22	3235.03	397.86	0.22
Mainstem	149118	100-year	12810.00	35.55	57.35	46.04	57.78	0.000762	5.39	3135.19	395.55	0.22
Mainstem	148917	100-year	12810.00	36.41	57.26	45.33	57.62	0.000620	4.95	3283.31	560.25	0.20
Mainstem	148716	100-year	12810.00	35.37	57.06	44.95	57.48	0.000707	5.46	3439.02	650.46	0.22
Mainstem	148389	100-year	12810.00	35.33	56.78	44.76	57.24	0.000750	5.59	3568.26	548.65	0.22
Mainstem	148115	100-year	12810.00	34.85	56.82	43.99	57.02	0.000379	4.01	6836.37	885.77	0.16
Mainstem	147724	100-year	12810.00	32.96	56.73	44.50	56.86	0.000332	3.77	9793.62	1136.44	0.15
Mainstem	147523	100-year	12810.00	33.85	56.65	44.27	56.79	0.000347	3.90	9954.15	1192.70	0.15
Mainstem	147323	100-year	12810.00	34.82	56.59	44.18	56.73	0.000297	3.45	7530.91	669.88	0.14
Mainstem	147127	100-year	12810.00	33.61	56.55	44.19	56.67	0.000277	3.38	6266.38	776.28	0.14
Mainstem	146932	100-year	12810.00	31.45	56.35	42.68	56.59	0.000386	4.04	4000.59	479.32	0.16
Mainstem	146826	100-year	12810.00	33.81	56.14	44.27	56.52	0.000684	5.42	3905.98	547.29	0.21
Mainstem	146678	100-year	12810.00	34.71	56.13	42.94	56.41	0.000443	4.32	3937.14	350.11	0.17
Mainstem	146509	100-year	12810.00	34.24	55.95	43.83	56.31	0.000617	4.98	3212.28	276.21	0.20
Mainstem	146356	100-year	12810.00	32.88	55.87	42.77	56.22	0.000545	4.79	3108.69	334.69	0.19
Mainstem	146219	100-year	12810.00	29.15	55.41	42.92	56.08	0.001020	6.70	2242.68	300.24	0.26
Mainstem	146193		Bridge									
Mainstem	146166	100-year	12810.00	29.97	55.32	43.49	56.02	0.001087	6.86	2251.02	316.63	0.27
Mainstem	146013	100-year	12810.00	27.23	55.30	41.37	55.84	0.000749	5.95	2581.92	311.04	0.22
Mainstem	145818	100-year	12810.00	30.10	55.19	41.97	55.68	0.000730	5.78	2570.44	189.33	0.22
Mainstem	145401	100-year	12810.00	33.69	54.96	42.06	55.37	0.000636	5.22	2791.06	205.95	0.21
Mainstem	145168	100-year	12810.00	33.03	54.91	41.34	55.21	0.000479	4.46	3451.40	287.30	0.18
Mainstem	144957	100-year	12810.00	32.01	54.95	41.01	55.09	0.000243	3.10	5754.83	566.60	0.13
Mainstem	144741	100-year	12810.00	30.43	54.85	40.77	55.03	0.000321	3.81	6709.22	588.99	0.15
Mainstem	144614	100-year	12810.00	27.56	54.76	39.68	54.98	0.000387	4.32	6643.95	606.66	0.16
Mainstem	144461	100-year	12810.00	32.44	54.75	40.86	54.91	0.000298	3.58	6909.21	653.43	0.14
Mainstem	144308	100-year	12810.00	32.63	54.73	41.50	54.86	0.000263	3.11	7095.62	543.85	0.13
Mainstem	144149	100-year	12810.00	31.85	54.68	39.95	54.82	0.000233	3.21	6208.35	436.80	0.13
Mainstem	143964	100-year	12810.00	27.10	54.38	39.19	54.73	0.000501	4.84	3206.21	319.50	0.18
Mainstem	143716	100-year	12810.00	32.09	54.14	41.54	54.58	0.000699	5.42	2914.09	299.86	0.21
Mainstem	143025	100-year	12810.00	28.42	53.95	38.99	54.18	0.000356	4.08	4541.92	503.58	0.15
Mainstem	141868	100-year	12810.00	29.60	53.41	39.72	53.70	0.000478	4.55	3910.42	411.66	0.18
Mainstem	140638	100-year	12810.00	29.91	52.85	38.45	53.14	0.000444	4.55	3862.20	472.93	0.17
Mainstem	139281	100-year	12810.00	28.53	52.15	37.59	52.48	0.000510	4.77	3184.06	354.43	0.18
Mainstem	138563	100-year	12810.00	28.86	52.03	35.64	52.19	0.000243	3.25	4681.71	573.68	0.12
Mainstem	137766	100-year	12810.00	26.76	51.61	35.47	51.92	0.000409	4.60	3392.34	856.77	0.17
Mainstem	137280	100-year	12810.00	18.66	51.31	35.76	51.68	0.000578	5.08	3139.96	895.22	0.18
Mainstem	137248	100-year	12810.00	18.94	51.16	35.15	51.65	0.000543	5.88	2944.43	878.79	0.21
Mainstem	136499	100-year	12810.00	24.02	50.87	35.15	51.26	0.000432	5.14	2837.20	443.84	0.19
Mainstem	134904	100-year	12810.00	25.62	50.19	34.72	50.59	0.000408	5.24	2959.75	168.62	0.19
Mainstem	134160	100-year	12810.00	24.07	49.91	33.80	50.29	0.000376	5.12	3151.16	330.80	0.18
Mainstem	133262	100-year	12810.00	21.73	49.54	32.63	49.95	0.000391	5.21	3067.27	341.91	0.18
Mainstem	133204		Bridge									
Mainstem	133140	100-year	12810.00	21.73	49.36	32.85	49.88	0.000504	5.99	2873.35	294.19	0.21
Mainstem	132507	100-year	12810.00	21.64	49.03	33.08	49.53	0.000591	5.88	2637.81	154.47	0.21
Mainstem	132465		Bridge									
Mainstem	132417	100-year	12810.00	21.64	49.09	32.17	49.44	0.000347	4.82	3130.82	173.25	0.17
Mainstem	131139	100-year	12810.00	15.96	48.32	30.90	48.87	0.000557	6.12	2633.21	158.50	0.21
Mainstem	130490	100-year	12810.00	20.03	48.03	31.64	48.51	0.000489	5.78	2923.16	194.00	0.20
Mainstem	129777	100-year	12810.00	16.31	47.54	30.51	48.11	0.000619	6.22	2526.60	140.68	0.21
Mainstem	128816	100-year	12810.00	21.35	47.14	31.29	47.57	0.000437	5.39	2899.15	176.05	0.19
Mainstem	128109	100-year	12810.00	19.64	46.66	31.64	47.20	0.000575	6.08	2627.57	186.76	0.22
Mainstem	128082		Bridge									
Mainstem	128056	100-year	12810.00	19.64	46.68	31.47	47.16	0.000492	5.70	2881.14	203.72	0.21
Mainstem	127053	100-year	12810.00	19.06	45.91	31.17	46.54	0.000735	6.58	2479.51	206.98	0.23

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 100-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	127037		Bridge									
Mainstem	127016	100-year	12810.00	19.06	45.87	31.29	46.51	0.000766	6.67	2404.72	138.85	0.24
Mainstem	126958	100-year	12810.00	15.14	45.95	28.51	46.42	0.000552	5.66	2767.86	139.07	0.19
Mainstem	126942		Bridge									
Mainstem	126921	100-year	12810.00	15.14	45.86	28.57	46.39	0.000619	5.99	2603.15	134.21	0.20
Mainstem	125796	100-year	12810.00	18.94	45.48	29.79	45.88	0.000305	5.19	3009.66	177.12	0.19
Mainstem	125712		Bridge									
Mainstem	125627	100-year	12810.00	18.94	45.24	30.13	45.80	0.000427	6.17	2678.49	185.24	0.22
Mainstem	124872	100-year	12530.00	12.43	45.05	27.18	45.48	0.000324	5.40	2983.61	275.48	0.18
Mainstem	123953	100-year	12530.00	13.32	44.83	25.86	45.21	0.000246	5.11	3662.75	517.46	0.17
Mainstem	123161	100-year	12530.00	17.94	44.55	28.48	44.98	0.000318	5.34	2844.31	521.67	0.19
Mainstem	122448	100-year	12530.00	18.06	44.47	27.23	44.76	0.000201	4.34	3401.72	215.79	0.16
Mainstem	122412		Bridge									
Mainstem	122375	100-year	12530.00	18.06	44.40	27.68	44.73	0.000236	4.73	3302.74	204.65	0.17
Mainstem	121583	100-year	12530.00	16.81	44.22	26.17	44.54	0.000236	4.68	3314.06	188.97	0.16
Mainstem	120426	100-year	12530.00	15.94	43.89	26.53	44.25	0.000262	4.95	3186.13	206.85	0.17
Mainstem	119666	100-year	12530.00	16.84	43.72	26.66	44.05	0.000245	4.71	3287.32	191.95	0.17
Mainstem	118425	100-year	12530.00	10.95	43.43	23.96	43.75	0.000226	4.70	3180.94	165.61	0.16
Mainstem	117617	100-year	12530.00	15.01	43.22	25.33	43.56	0.000238	4.81	3151.23	177.49	0.17
Mainstem	116487	100-year	12530.00	14.03	43.05	24.30	43.31	0.000174	4.18	3499.20	190.93	0.14
Mainstem	116429		Bridge									
Mainstem	116371	100-year	12530.00	11.57	42.93	24.86	43.28	0.000241	4.80	3098.44	165.76	0.17
Mainstem	115241	100-year	12530.00	11.25	42.57	23.47	42.97	0.000303	5.13	2925.45	150.29	0.17
Mainstem	114465	100-year	12530.00	9.06	42.39	21.85	42.75	0.000244	4.98	3348.86	204.53	0.16
Mainstem	113747	100-year	12530.00	12.07	42.25	23.48	42.56	0.000231	4.63	3361.98	215.59	0.16
Mainstem	113008	100-year	12690.00	11.60	41.97	23.45	42.36	0.000299	5.20	3137.03	185.16	0.17
Mainstem	112401	100-year	12690.00	12.60	41.81	23.74	42.19	0.000272	5.02	3149.84	187.30	0.17
Mainstem	112369		Bridge									
Mainstem	112337	100-year	12690.00	13.63	41.83	24.31	42.15	0.000235	4.66	3308.59	199.82	0.16
Mainstem	112258	100-year	12690.00	14.03	41.84	23.96	42.13	0.000210	4.42	3242.98	172.34	0.15
Mainstem	112242		Bridge									
Mainstem	112226	100-year	12690.00	14.03	41.75	24.58	42.11	0.000256	4.93	3092.56	169.71	0.17
Mainstem	111661	100-year	12690.00	8.64	41.66	20.69	41.96	0.000221	4.55	3687.41	208.10	0.15
Mainstem	111160	100-year	12690.00	10.54	41.45	22.72	41.83	0.000289	5.02	3148.12	186.99	0.17
Mainstem	110959	100-year	12690.00	12.22	41.39	23.12	41.77	0.000261	5.03	3081.54	174.12	0.17
Mainstem	110410	100-year	12690.00	9.05	41.35	20.15	41.63	0.000168	4.26	3480.32	162.01	0.14
Mainstem	109776	100-year	12690.00	6.72	41.24	18.47	41.52	0.000170	4.31	3579.67	165.40	0.14
Mainstem	108673	100-year	12690.00	8.06	40.95	20.65	41.29	0.000244	4.86	3428.52	176.40	0.16
Mainstem	107928	100-year	12690.00	9.49	40.70	22.63	41.08	0.000312	5.13	3197.34	169.86	0.17
Mainstem	107063	100-year	12690.00	5.88	40.45	20.41	40.83	0.000275	5.01	3138.58	174.61	0.17
Mainstem	106308	100-year	12690.00	11.13	40.29	21.14	40.62	0.000242	4.71	3249.09	332.93	0.16
Mainstem	105120	100-year	12690.00	10.61	40.13	20.58	40.36	0.000159	3.90	3859.63	229.21	0.13
Mainstem	103794	100-year	12690.00	6.68	39.69	19.65	40.06	0.000295	5.02	3219.97	175.22	0.16
Mainstem	102469	100-year	12750.00	10.64	39.32	21.31	39.69	0.000272	4.93	3067.71	174.26	0.17
Mainstem	101820	100-year	12750.00	10.16	39.19	20.97	39.51	0.000232	4.60	3296.73	235.91	0.16
Mainstem	101719	100-year	12750.00	10.16	39.16	21.04	39.48	0.000253	4.61	3166.77	188.88	0.16
Mainstem	101566	100-year	12750.00	5.75	39.04	20.35	39.43	0.000332	5.14	2976.93	193.15	0.17
Mainstem	100716	100-year	12750.00	1.31	38.77	20.06	39.15	0.000315	5.04	3009.24	158.92	0.17
Mainstem	99333	100-year	12750.00	9.13	38.45	20.29	38.76	0.000234	4.47	3240.18	183.27	0.16
Mainstem	99312		Bridge									
Mainstem	99301	100-year	12750.00	9.13	38.43	20.27	38.74	0.000240	4.59	3284.95	183.42	0.16
Mainstem	98271	100-year	12750.00	8.17	37.88	22.08	38.40	0.000410	5.94	2730.38	186.41	0.21
Mainstem	97527	100-year	12750.00	5.97	37.77	18.76	38.10	0.000275	4.68	3394.54	238.75	0.16
Mainstem	96693	100-year	12750.00	6.79	37.69	16.44	37.91	0.000135	3.80	3729.91	192.22	0.13
Mainstem	95420	100-year	12750.00	8.70	37.27	19.54	37.66	0.000272	5.09	2980.80	183.47	0.18
Mainstem	94285	100-year	12750.00	7.88	36.89	21.00	37.31	0.000340	5.31	2901.38	180.07	0.19
Mainstem	94232		Bridge									
Mainstem	94195	100-year	12750.00	7.88	36.79	20.89	37.27	0.000371	5.72	2954.10	182.00	0.20
Mainstem	93065	100-year	12750.00	4.02	36.45	17.59	36.87	0.000313	5.36	3468.77	392.26	0.18
Mainstem	92020	100-year	12750.00	8.76	36.11	19.09	36.52	0.000341	5.26	3001.55	172.80	0.18
Mainstem	90932	100-year	12750.00	7.20	35.64	18.06	36.14	0.000354	5.75	2702.09	152.12	0.20
Mainstem	89786	100-year	12750.00	-1.09	35.47	13.42	35.76	0.000224	4.45	3728.34	261.19	0.14
Mainstem	89744		Bridge									
Mainstem	89691	100-year	12750.00	-1.09	35.39	13.53	35.73	0.000257	4.82	3733.16	267.64	0.15
Mainstem	88704	100-year	12750.00	6.87	35.04	18.52	35.44	0.000325	5.14	2891.72	162.52	0.18
Mainstem	87743	100-year	12750.00	7.95	34.88	17.36	35.15	0.000211	4.26	3473.76	198.16	0.15
Mainstem	86671	100-year	12930.00	5.51	34.53	16.65	34.88	0.000287	4.83	3231.89	177.62	0.17
Mainstem	86407	100-year	12930.00	5.77	34.46	16.73	34.80	0.000308	4.83	3380.89	189.77	0.17
Mainstem	86339	100-year	12930.00	6.58	34.47	16.13	34.77	0.000208	4.46	3555.66	193.15	0.15
Mainstem	85462	100-year	12930.00	2.43	34.01	15.91	34.51	0.000374	5.85	2837.54	164.81	0.20
Mainstem	84564	100-year	12930.00	4.42	33.81	15.70	34.18	0.000278	5.01	3112.12	173.52	0.17
Mainstem	83714	100-year	12930.00	-3.23	33.67	15.16	33.94	0.000224	4.31	3589.13	211.43	0.15
Mainstem	83181	100-year	12930.00	2.90	33.46	15.70	33.81	0.000264	4.76	3157.88	189.85	0.17
Mainstem	83091	100-year	12930.00	2.35	33.43	15.85	33.78	0.000368	4.78	3057.59	200.56	0.17
Mainstem	82342	100-year	12930.00	2.38	33.06	14.24	33.50	0.000360	5.49	3159.82	298.36	0.18

HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 100-year (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	81333	100-year	12930.00	0.84	32.56	14.96	33.08	0.000448	6.03	2794.40	167.99	0.20
Mainstem	80504	100-year	12930.00	2.88	32.38	14.23	32.75	0.000274	4.97	3140.32	174.83	0.17
Mainstem	79728	100-year	12930.00	3.61	31.97	14.99	32.48	0.000391	5.92	2782.51	159.25	0.20
Mainstem	79052	100-year	12930.00	4.50	31.84	14.89	32.21	0.000303	4.97	2986.36	165.41	0.18
Mainstem	78978	100-year	12930.00	3.79	31.83	13.86	32.18	0.000240	4.80	3123.91	164.35	0.17
Mainstem	78852	100-year	12930.00	-0.49	31.69	15.22	32.13	0.000420	5.41	2780.76	160.92	0.19
Mainstem	77869	100-year	12930.00	3.20	31.07	14.79	31.67	0.000485	6.40	2524.21	149.35	0.22
Mainstem	77848		Bridge									
Mainstem	77832	100-year	12930.00	3.20	31.07	14.90	31.65	0.000486	6.29	2527.72	149.16	0.22
Mainstem	77579	100-year	12930.00	3.50	31.11	14.25	31.50	0.000287	5.08	2996.13	161.28	0.18
Mainstem	77400	100-year	12930.00	2.77	30.99	14.68	31.43	0.000437	5.49	2936.07	167.37	0.19
Mainstem	76740	100-year	12930.00	2.96	30.47	14.84	31.10	0.000510	6.53	2475.69	146.64	0.23
Mainstem	75662	100-year	12930.00	3.63	29.90	15.79	30.52	0.000554	6.51	2564.35	174.82	0.24
Mainstem	75610		Bridge									
Mainstem	75557	100-year	12930.00	3.63	29.94	14.51	30.42	0.000368	5.69	2707.39	164.62	0.20
Mainstem	74812	100-year	12930.00	2.01	29.73	12.81	30.14	0.000339	5.25	2942.67	167.15	0.18
Mainstem	74036	100-year	12930.00	1.60	29.22	13.78	29.81	0.000480	6.34	2540.15	158.30	0.22
Mainstem	73350	100-year	12930.00	3.13	29.05	13.42	29.48	0.000349	5.39	2828.90	165.03	0.19
Mainstem	72626	100-year	12930.00	2.18	28.67	13.19	29.20	0.000420	5.94	2642.73	157.99	0.21
Mainstem	71444	100-year	12930.00	-0.11	28.12	12.68	28.68	0.000456	6.10	2485.98	137.60	0.22
Mainstem	70520	100-year	12930.00	2.26	27.80	12.69	28.26	0.000382	5.56	2751.83	165.10	0.20
Mainstem	70483		Bridge									
Mainstem	70472	100-year	12930.00	2.26	27.80	12.59	28.23	0.000352	5.35	2754.32	167.86	0.20
Mainstem	69796	100-year	12930.00	2.09	27.56	12.64	27.99	0.000358	5.31	2763.24	154.99	0.20
Mainstem	68930	100-year	12930.00	2.12	27.12	13.37	27.64	0.000446	5.84	2535.49	159.45	0.22
Mainstem	68878		Bridge									
Mainstem	68814	100-year	12930.00	2.84	27.04	12.79	27.53	0.000458	5.73	2667.85	167.00	0.21
Mainstem	68181	100-year	12930.00	-2.79	26.88	11.13	27.25	0.000321	4.89	2820.36	159.05	0.18
Mainstem	67220	100-year	12930.00	-3.21	26.61	11.31	26.95	0.000295	4.80	3409.85	290.31	0.18
Mainstem	66327	100-year	12930.00	-0.29	26.18	11.58	26.64	0.000384	5.50	2735.35	173.37	0.20
Mainstem	65704	100-year	12930.00	2.34	25.99	11.57	26.39	0.000360	5.13	2934.91	189.34	0.19
Mainstem	65615		Bridge									
Mainstem	65535	100-year	12930.00	-0.46	25.92	10.69	26.23	0.000316	4.52	3122.66	195.94	0.18
Mainstem	65366	100-year	12930.00	-2.38	25.69	10.45	26.16	0.000458	5.59	2756.71	171.17	0.20
Mainstem	65314		Bridge									
Mainstem	65277	100-year	12930.00	-2.38	25.51	10.10	26.09	0.000568	6.25	2501.15	149.63	0.22
Mainstem	64907	100-year	12930.00	-1.17	25.23	11.39	25.87	0.000559	6.56	2357.45	145.79	0.24
Mainstem	64854		Bridge									
Mainstem	64812	100-year	12930.00	-2.16	25.27	9.12	25.77	0.000410	5.73	2602.06	152.91	0.20
Mainstem	64664	100-year	12930.00	-4.94	24.94	10.13	25.66	0.000790	6.92	2201.60	149.96	0.25
Mainstem	64611		Bridge									
Mainstem	64564	100-year	12930.00	-1.06	25.00	10.19	25.56	0.000496	6.09	2456.64	153.53	0.22
Mainstem	64490	100-year	12930.00	-2.57	25.14	7.77	25.46	0.000249	4.54	3083.68	160.70	0.16
Mainstem	64474		Bridge									
Mainstem	64453	100-year	12930.00	-2.57	25.11	7.78	25.45	0.000252	4.67	3093.48	168.37	0.17
Mainstem	63809	100-year	12930.00	3.01	24.93	11.06	25.27	0.000304	4.78	3278.87	211.85	0.18
Mainstem	62610	100-year	12930.00	2.08	24.56	10.96	24.90	0.000303	4.72	3025.53	181.35	0.19
Mainstem	61570	100-year	12930.00	-0.98	23.94	10.45	24.49	0.000485	6.07	2506.02	175.88	0.23
Mainstem	61533		Bridge									
Mainstem	61501	100-year	12930.00	-0.98	23.88	10.43	24.44	0.000489	6.10	2477.29	160.32	0.23
Mainstem	60646	100-year	12930.00	-0.37	23.59	10.58	24.01	0.000417	5.22	2613.86	162.33	0.21
Mainstem	60504	100-year	12930.00	-6.53	23.61	6.90	23.93	0.000270	4.59	3112.22	174.65	0.17
Mainstem	59796	100-year	12930.00	-4.05	23.24	7.60	23.70	0.000375	5.49	2636.42	150.84	0.20
Mainstem	59036	100-year	12930.00	-1.28	22.90	9.05	23.38	0.000466	5.57	2500.51	148.48	0.22
Mainstem	58075	100-year	12930.00	-2.23	22.54	9.13	22.93	0.000410	5.09	2762.01	176.40	0.20
Mainstem	58011		Bridge									
Mainstem	57980	100-year	12930.00	-0.91	22.55	8.36	22.88	0.000298	4.62	3004.08	339.75	0.18
Mainstem	57119	100-year	13410.00	1.48	22.21	10.27	22.59	0.000368	4.98	2987.31	203.12	0.20
Mainstem	57045	100-year	13410.00	0.97	22.22	9.13	22.54	0.000319	4.55	3090.98	195.68	0.18
Mainstem	56380	100-year	13410.00	-2.70	21.72	9.97	22.25	0.000562	5.87	2543.27	209.25	0.24
Mainstem	55672	100-year	13410.00	-0.24	21.52	8.64	21.87	0.000370	4.78	3005.95	224.95	0.19
Mainstem	54907	100-year	13410.00	-7.84	21.12	7.63	21.56	0.000446	5.35	2762.61	175.38	0.21
Mainstem	54896		Bridge									
Mainstem	54886	100-year	13410.00	-7.84	21.10		21.52	0.000433	5.26	2735.25	167.24	0.21
Mainstem	53756	100-year	13410.00	-0.71	20.72	8.32	21.06	0.000354	4.70	3126.04	408.87	0.19
Mainstem	52858	100-year	13410.00	-0.45	20.39	8.27	20.73	0.000378	4.79	3512.74	441.25	0.20
Mainstem	51855	100-year	13410.00	-7.58	19.96	6.67	20.32	0.000434	4.87	3105.29	257.69	0.20
Mainstem	50894	100-year	13410.00	-2.28	19.58	7.41	19.94	0.000367	4.85	3034.38	202.04	0.20
Mainstem	49959	100-year	13410.00	-4.51	19.21	7.28	19.57	0.000419	4.82	2952.94	353.52	0.20
Mainstem	48909	100-year	13410.00	-9.47	18.55	5.80	19.04	0.000576	5.69	2586.81	199.46	0.23
Mainstem	48877		Bridge									
Mainstem	48840	100-year	13410.00	-9.47	18.49	5.81	19.00	0.000614	5.76	2569.20	207.98	0.23
Mainstem	47583	100-year	13410.00	-3.57	17.94		18.31	0.000443	4.91	2946.49	243.31	0.21
Mainstem	46469	100-year	13410.00	-6.77	17.43		17.81	0.000444	4.98	2744.62	189.59	0.21
Mainstem	45651	100-year	13410.00	-8.06	16.89		17.38	0.000618	5.61	2483.36	175.06	0.24

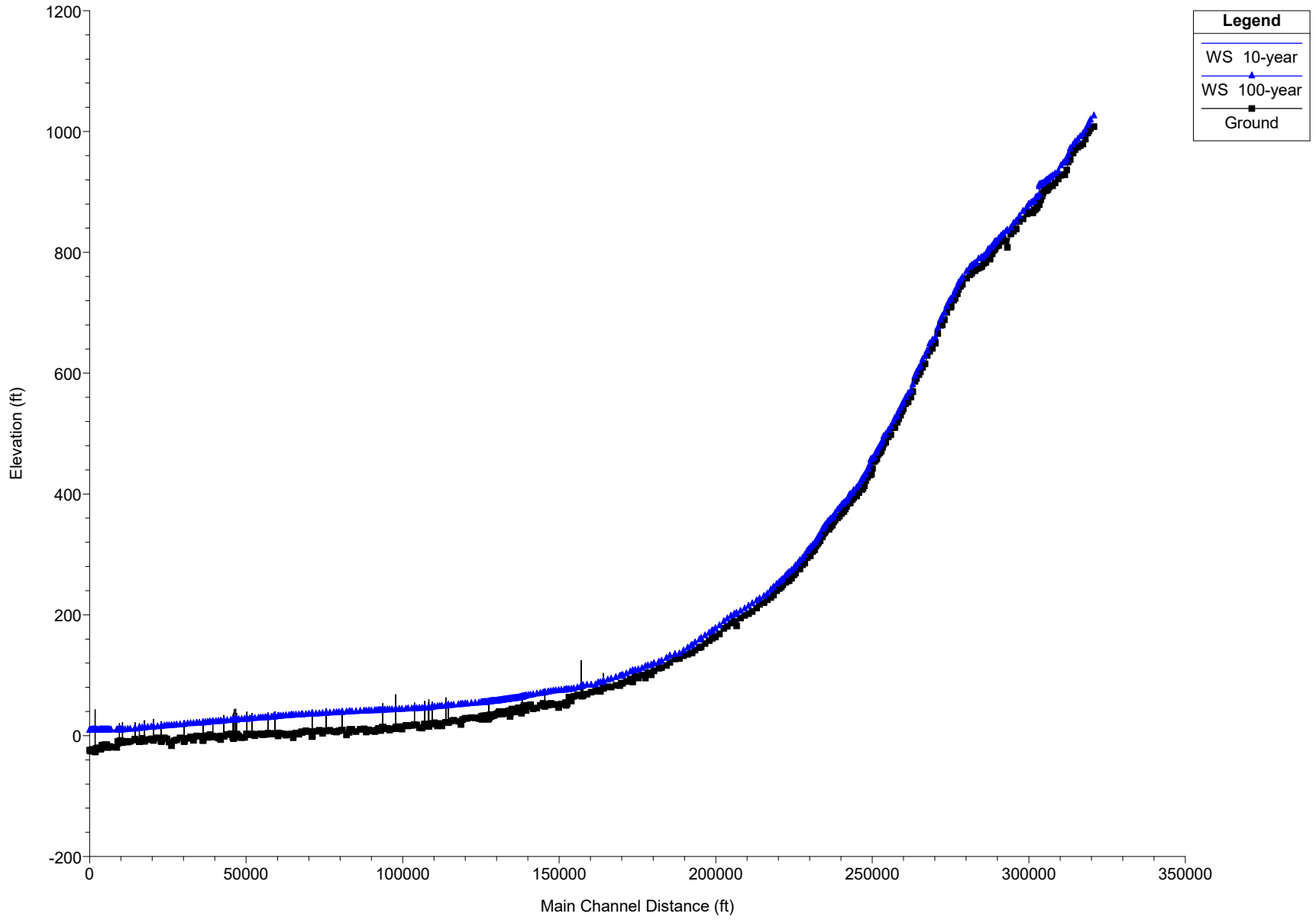
HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 100-year (Continued)

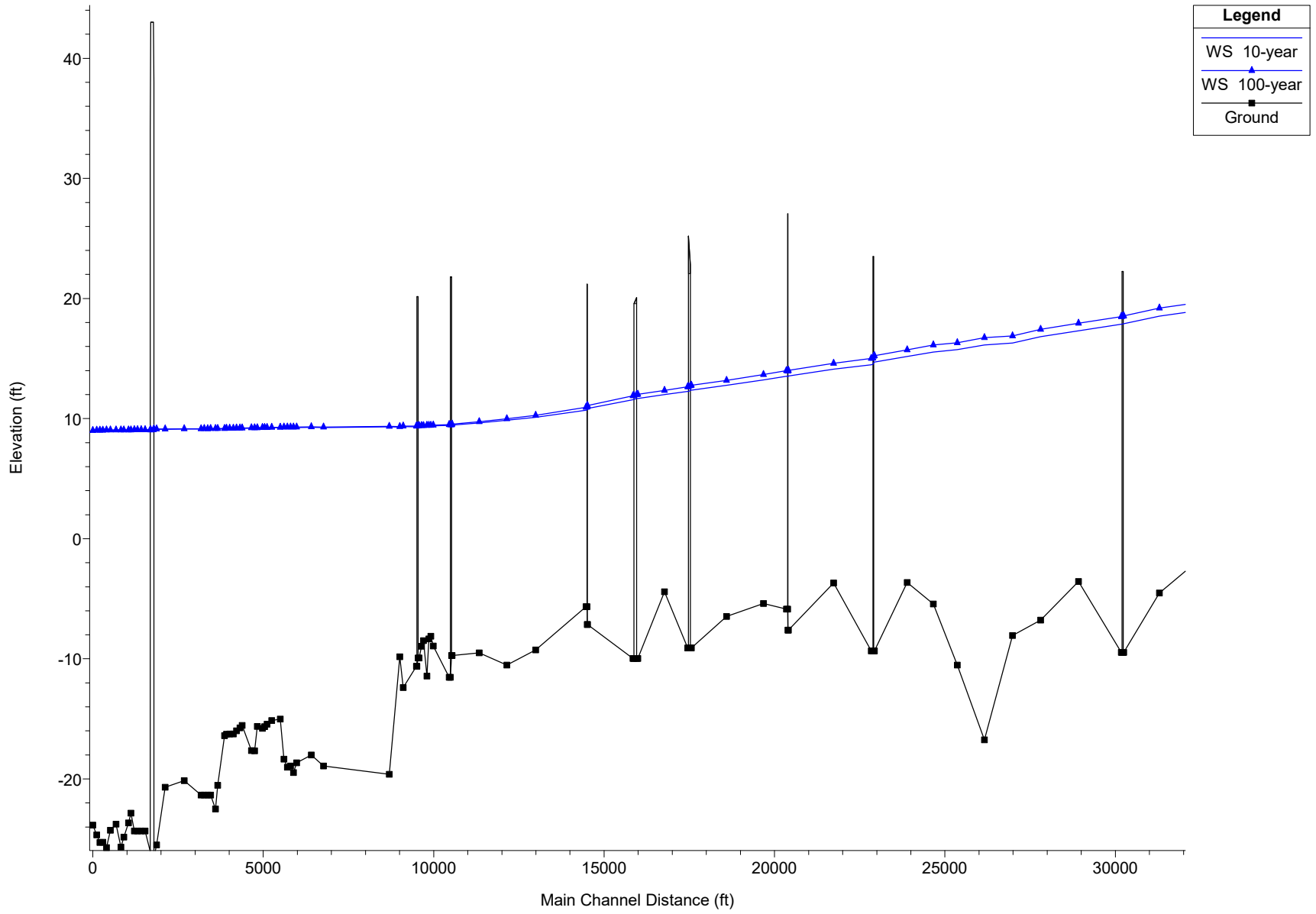
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	44822	100-year	13410.00	-16.74	16.73		16.96	0.000290	3.88	3749.31	308.60	0.16
Mainstem	44030	100-year	13410.00	-10.52	16.31		16.67	0.000431	4.84	2901.95	192.62	0.20
Mainstem	43322	100-year	13410.00	-5.44	16.12		16.37	0.000333	4.04	3472.23	275.99	0.18
Mainstem	42557	100-year	13410.00	-3.65	15.72		16.07	0.000438	4.77	2949.92	226.89	0.21
Mainstem	41601	100-year	13410.00	-9.33	15.23	4.36	15.62	0.000511	4.98	2826.45	216.97	0.22
Mainstem	41554											
Mainstem	41506	100-year	13410.00	-9.33	15.00	5.06	15.52	0.000750	5.80	2426.60	177.97	0.25
Mainstem	40403	100-year	13410.00	-3.69	14.61		14.90	0.000359	4.33	3165.99	221.29	0.19
Mainstem	39077	100-year	13410.00	-7.62	14.02	3.02	14.37	0.000432	4.76	2865.16	190.43	0.21
Mainstem	39056											
Mainstem	39014	100-year	13410.00	-5.87	13.98		14.31	0.000389	4.61	2969.67	199.53	0.20
Mainstem	38343	100-year	13410.00	-5.39	13.67		14.02	0.000466	4.80	2820.12	192.73	0.22
Mainstem	37261	100-year	13410.00	-6.47	13.18		13.54	0.000430	4.78	2836.45	186.80	0.21
Mainstem	36226	100-year	13410.00	-9.10	12.76	2.37	13.09	0.000425	4.57	2967.91	222.34	0.21
Mainstem	36173											
Mainstem	36120	100-year	13410.00	-9.10	12.64	2.55	13.03	0.000502	4.98	2773.81	223.48	0.22
Mainstem	35434	100-year	13410.00	-4.42	12.36		12.68	0.000458	4.58	2945.13	217.65	0.21
Mainstem	34653	100-year	13410.00	-9.97	12.02	1.03	12.35	0.000403	4.60	2924.51	219.24	0.20
Mainstem	34579											
Mainstem	34510	100-year	13410.00	-9.97	11.90	1.23	12.28	0.000497	4.96	2733.37	182.74	0.22
Mainstem	33180	100-year	13410.00	-7.14	11.09	1.66	11.51	0.000667	5.23	2588.97	187.68	0.24
Mainstem	33164											
Mainstem	33137	100-year	13410.00	-5.66	10.94	2.95	11.46	0.000853	5.79	2375.30	211.59	0.28
Mainstem	31659	100-year	13410.00	-9.25	10.27	-0.73	10.57	0.000389	4.40	3137.55	238.22	0.20
Mainstem	30814	100-year	13410.00	-10.52	9.98		10.25	0.000349	4.17	3268.01	218.81	0.18
Mainstem	30001	100-year	13410.00	-9.50	9.75		9.98	0.000301	3.89	3479.87	246.16	0.18
Mainstem	29209	100-year	13410.00	-9.72	9.53	-1.57	9.75	0.000269	3.73	3629.61	245.69	0.17
Mainstem	29172											
Mainstem	29114	100-year	13410.00	-11.54	9.49	-1.91	9.67	0.000214	3.34	4030.37	279.63	0.15
Mainstem	28649	100-year	13410.00	-8.94	9.45		9.57	0.000155	2.77	4875.36	353.51	0.13
Mainstem	28591	100-year	13410.00	-8.12	9.44		9.56	0.000152	2.73	4943.26	366.20	0.13
Mainstem	28528	100-year	13410.00	-8.34	9.44		9.54	0.000130	2.56	5275.67	377.57	0.12
Mainstem	28464	100-year	13410.00	-11.43	9.43		9.53	0.000134	2.54	5310.25	391.07	0.12
Mainstem	28369	100-year	13410.00	-8.48	9.42		9.52	0.000143	2.57	5228.47	392.23	0.12
Mainstem	28322	100-year	13410.00	-8.95	9.42		9.51	0.000127	2.46	5517.62	419.12	0.12
Mainstem	28243	100-year	13410.00	-9.92	9.41	-2.38	9.50	0.000129	2.46	5457.19	406.85	0.12
Mainstem	28190											
Mainstem	28164	100-year	13410.00	-10.62	9.37		9.47	0.000132	2.54	5299.60	379.05	0.12
Mainstem	27778	100-year	13410.00	-12.40	9.38		9.42	0.000063	1.58	8536.62	726.83	0.08
Mainstem	27678	100-year	13410.00	-9.82	9.34		9.41	0.000136	2.07	6553.35	680.38	0.11
Mainstem	27372	100-year	13410.00	-19.62	9.36		9.38	0.000021	1.14	11882.39	758.21	0.05
Mainstem	25439	100-year	13410.00	-18.93	9.30		9.33	0.000031	1.38	9770.77	597.35	0.06
Mainstem	25085	100-year	13410.00	-18.00	9.32		9.32	0.000003	0.46	28994.27	1441.80	0.02
Mainstem	24652	100-year	13410.00	-18.66	9.30		9.32	0.000018	1.04	12947.23	808.31	0.05
Mainstem	24563	100-year	13410.00	-19.46	9.30		9.32	0.000017	1.02	13130.94	808.93	0.04
Mainstem	24473	100-year	13410.00	-18.92	9.30		9.32	0.000017	1.02	13231.45	806.50	0.04
Mainstem	24383	100-year	13410.00	-19.03	9.30		9.31	0.000016	0.99	13542.88	837.16	0.04
Mainstem	24283	100-year	13410.00	-18.35	9.30		9.31	0.000016	0.98	13651.67	843.41	0.04
Mainstem	24172	100-year	13410.00	-15.01	9.28		9.31	0.000030	1.27	10592.34	713.62	0.06
Mainstem	23924	100-year	13410.00	-15.13	9.27		9.30	0.000031	1.48	9414.27	551.46	0.06
Mainstem	23786	100-year	13410.00	-15.45	9.26		9.30	0.000033	1.44	9311.61	549.09	0.06
Mainstem	23718	100-year	13410.00	-15.64	9.26		9.29	0.000036	1.47	9124.05	546.87	0.06
Mainstem	23649	100-year	13410.00	-15.78	9.26		9.29	0.000037	1.51	9035.14	578.47	0.06
Mainstem	23496	100-year	13410.00	-15.62	9.24		9.28	0.000044	1.66	8174.88	517.23	0.07
Mainstem	23417	100-year	13410.00	-17.65	9.24		9.28	0.000040	1.59	8415.92	493.00	0.07
Mainstem	23327	100-year	13410.00	-17.63	9.23		9.28	0.000046	1.68	8007.14	485.16	0.07
Mainstem	23052	100-year	13410.00	-15.55	9.22		9.26	0.000045	1.70	7916.93	465.11	0.07
Mainstem	22989	100-year	13410.00	-15.75	9.22		9.26	0.000045	1.70	7906.84	464.29	0.07
Mainstem	22889	100-year	13410.00	-15.99	9.21		9.26	0.000047	1.71	7827.01	466.34	0.07
Mainstem	22794	100-year	13410.00	-16.26	9.20		9.25	0.000050	1.88	7168.95	406.08	0.08
Mainstem	22688	100-year	13410.00	-16.25	9.19		9.24	0.000053	1.92	7008.50	398.90	0.08
Mainstem	22598	100-year	13410.00	-16.28	9.18		9.24	0.000053	1.88	7133.97	412.16	0.08
Mainstem	22540	100-year	13410.00	-16.40	9.18		9.23	0.000140	1.86	7219.74	408.76	0.08
Mainstem	22334	100-year	13410.00	-20.53	9.17		9.22	0.000045	1.77	7580.24	420.36	0.07
Mainstem	22271	100-year	13410.00	-22.51	9.17		9.21	0.000044	1.76	7636.62	417.52	0.07
Mainstem	22128	100-year	13410.00	-21.34	9.16		9.21	0.000038	1.70	7924.59	410.76	0.07
Mainstem	22039	100-year	13410.00	-21.34	9.16		9.20	0.000034	1.63	8244.11	416.35	0.06
Mainstem	21923	100-year	13410.00	-21.34	9.16		9.20	0.000028	1.53	8802.83	431.02	0.06
Mainstem	21843	100-year	13410.00	-21.34	9.16		9.20	0.000031	1.59	8475.54	423.37	0.06
Mainstem	21358	100-year	13410.00	-20.14	9.15		9.18	0.000031	1.44	9392.68	550.78	0.06
Mainstem	20793	100-year	13410.00	-20.69	9.13		9.16	0.000030	1.41	9499.89	552.29	0.06
Mainstem	20544	100-year	13410.00	-25.49	9.13		9.15	0.000026	1.33	10121.64	572.28	0.06
Mainstem	20492	100-year	13410.00	-26.57	9.12	-15.94	9.15	0.000025	1.34	10050.78	548.81	0.05
Mainstem	20428											
Mainstem	20418	100-year	13410.00	-26.04	9.08		9.11	0.000072	1.45	9348.44	495.75	0.06

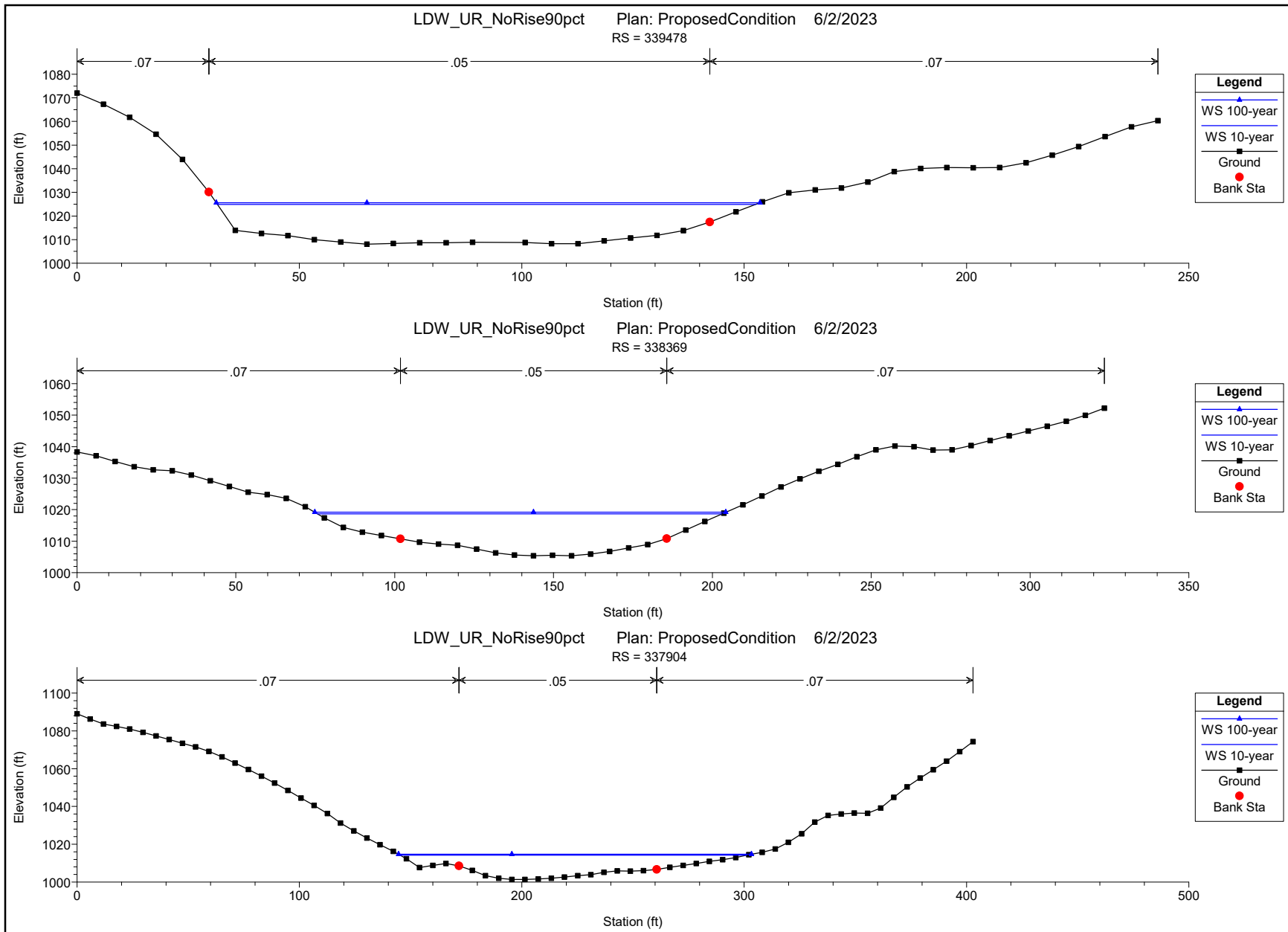
HEC-RAS Plan: Prop River: Green River Reach: Mainstem Profile: 100-year (Continued)

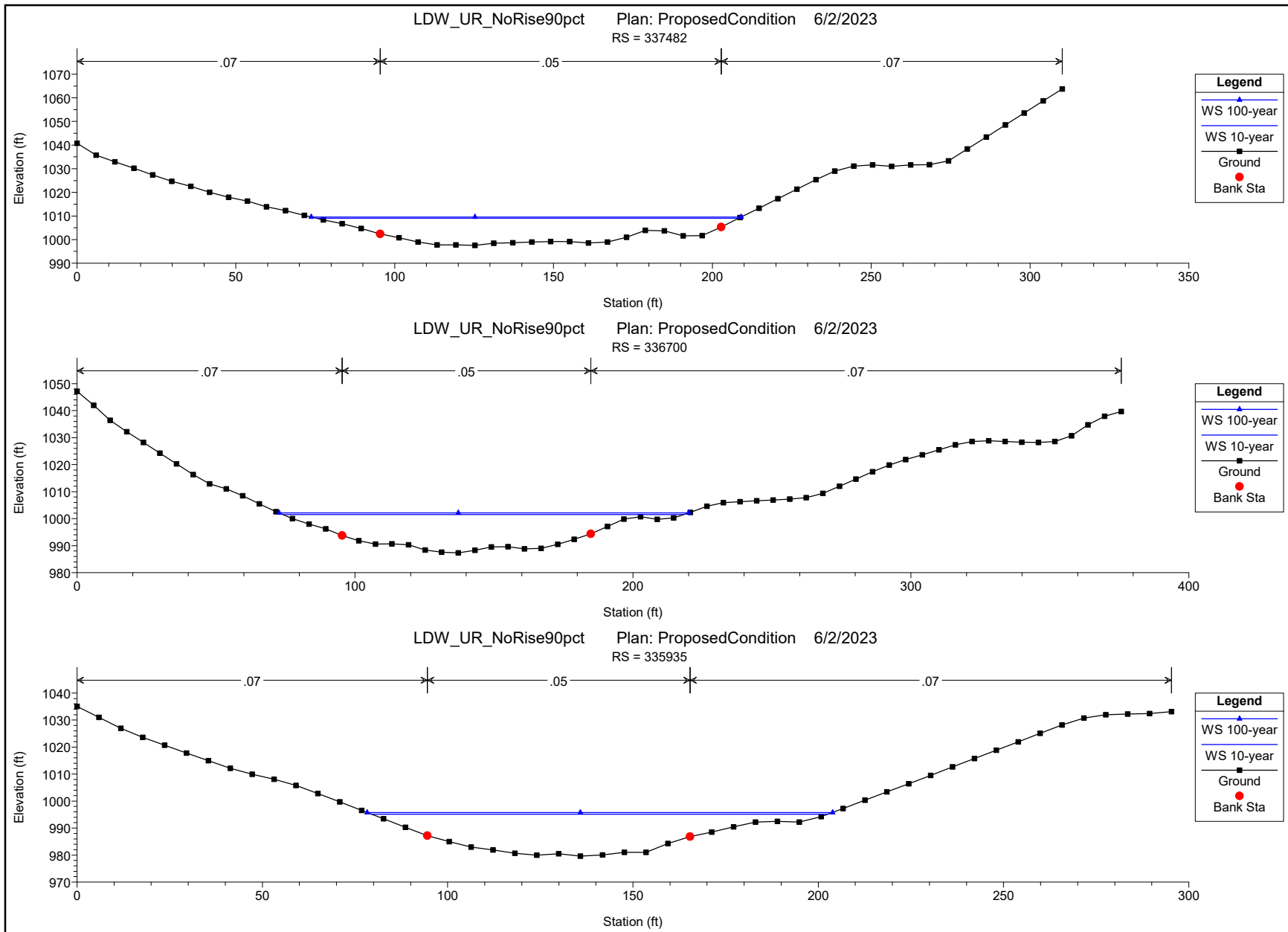
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Mainstem	20207	100-year	13410.00	-24.34	9.07		9.11	0.000028	1.49	9070.18	464.98	0.06
Mainstem	20090	100-year	13410.00	-24.34	9.07		9.10	0.000029	1.49	8985.48	461.68	0.06
Mainstem	19990	100-year	13410.00	-24.34	9.06		9.10	0.000029	1.56	8815.22	451.35	0.06
Mainstem	19895	100-year	13410.00	-24.34	9.06		9.10	0.000030	1.50	9021.13	496.73	0.06
Mainstem	19795	100-year	13410.00	-22.84	9.06		9.09	0.000031	1.49	9165.57	577.82	0.06
Mainstem	19721	100-year	13410.00	-23.67	9.06		9.09	0.000025	1.39	9928.58	630.77	0.05
Mainstem	19584	100-year	13410.00	-24.84	9.06		9.09	0.000024	1.39	9998.23	627.60	0.05
Mainstem	19488	100-year	13410.00	-25.68	9.05		9.08	0.000023	1.39	10002.56	612.28	0.05
Mainstem	19356	100-year	13410.00	-23.77	9.05		9.08	0.000026	1.46	9558.82	609.99	0.06
Mainstem	19188	100-year	13410.00	-24.28	9.04		9.08	0.000027	1.46	9395.87	537.43	0.06
Mainstem	19077	100-year	13410.00	-25.71	9.04		9.07	0.000025	1.40	9644.78	488.66	0.05
Mainstem	18966	100-year	13410.00	-25.27	9.04		9.07	0.000026	1.38	9729.60	523.21	0.06
Mainstem	18876	100-year	13410.00	-25.28	9.04		9.07	0.000026	1.33	10112.41	566.40	0.05
Mainstem	18781	100-year	13410.00	-24.65	9.03		9.06	0.000027	1.41	9530.50	501.50	0.06
Mainstem	18670	100-year	13410.00	-23.84	9.02	-14.60	9.06	0.000033	1.59	8446.40	439.97	0.06

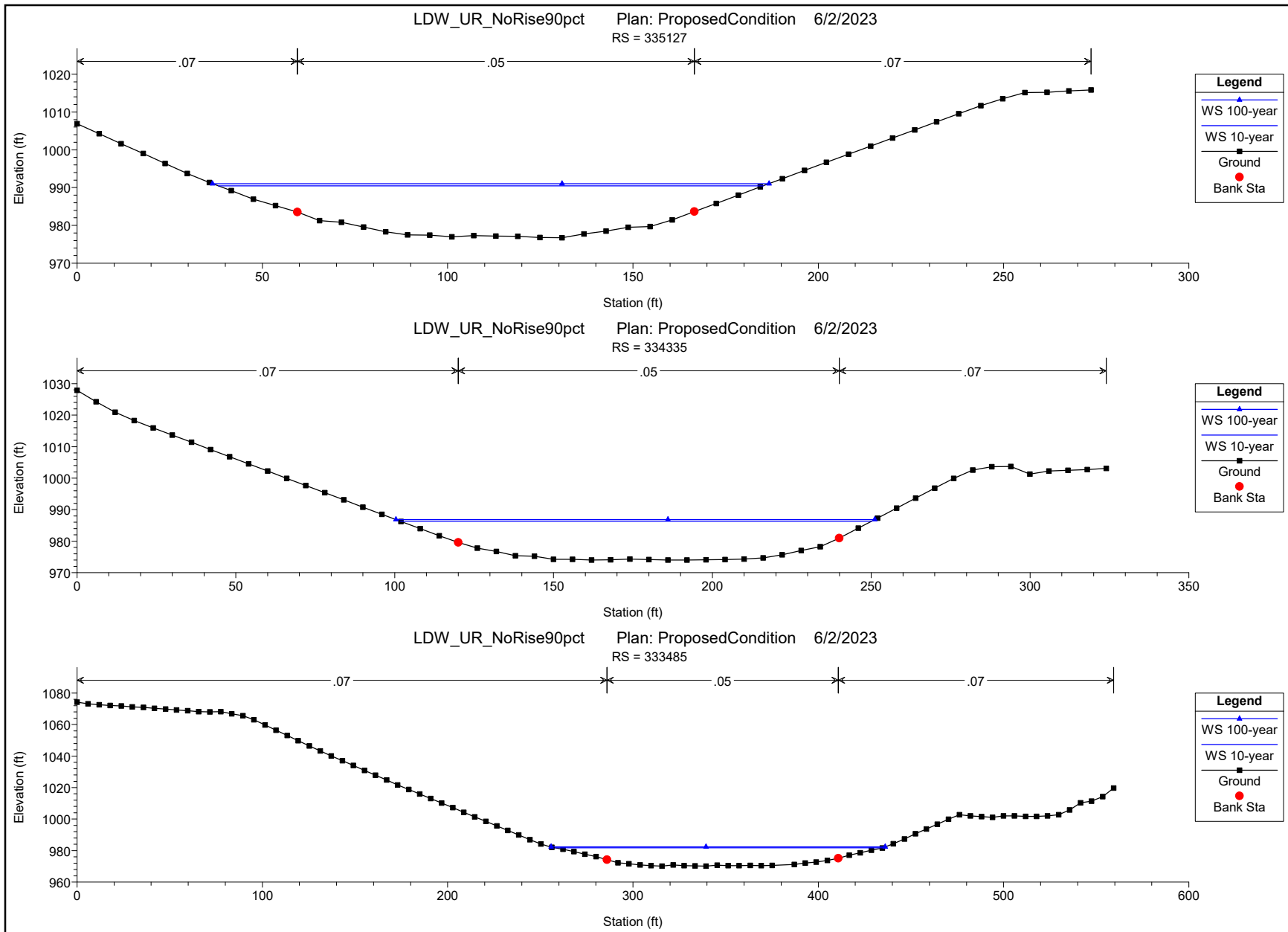
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023

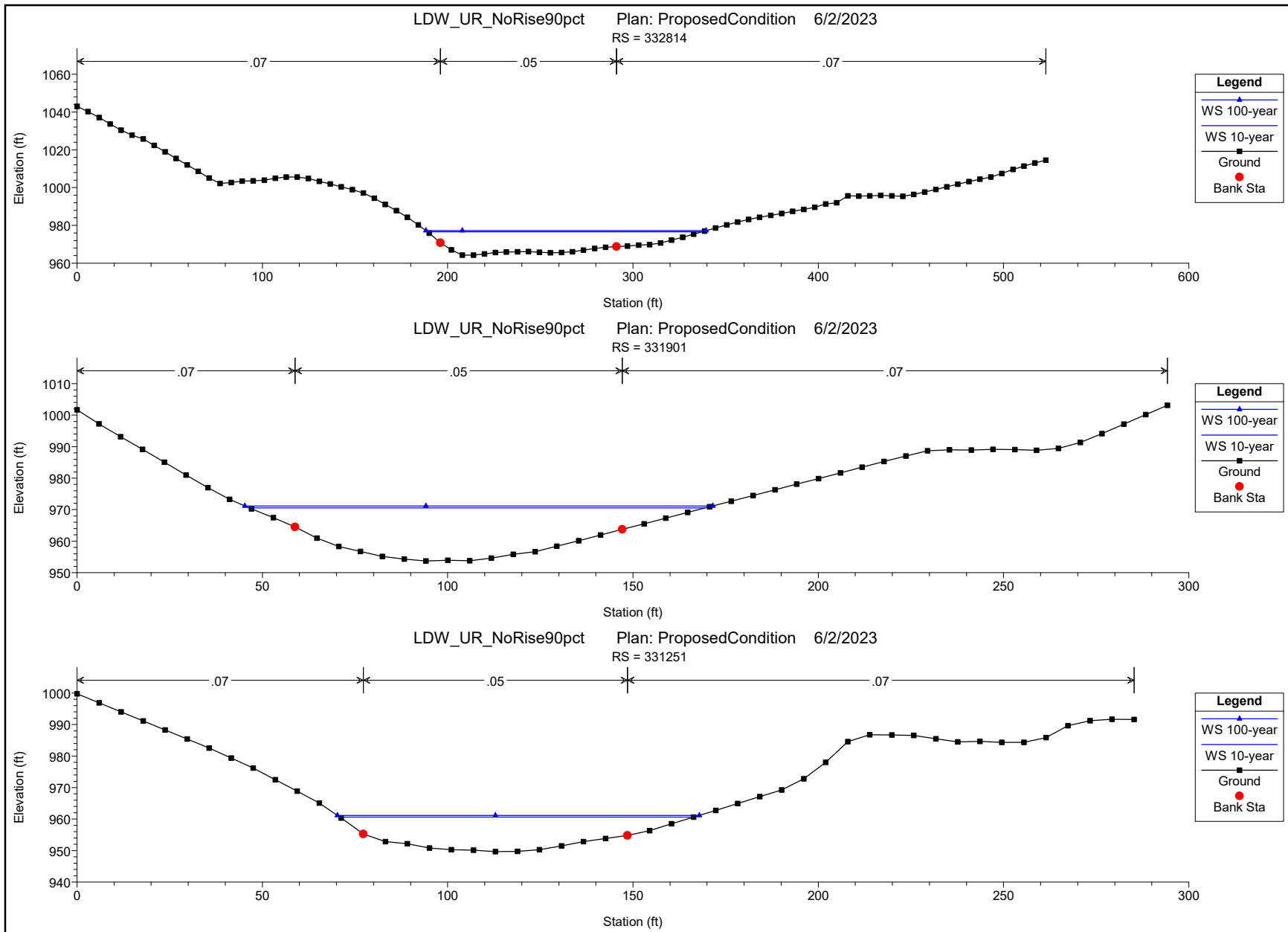


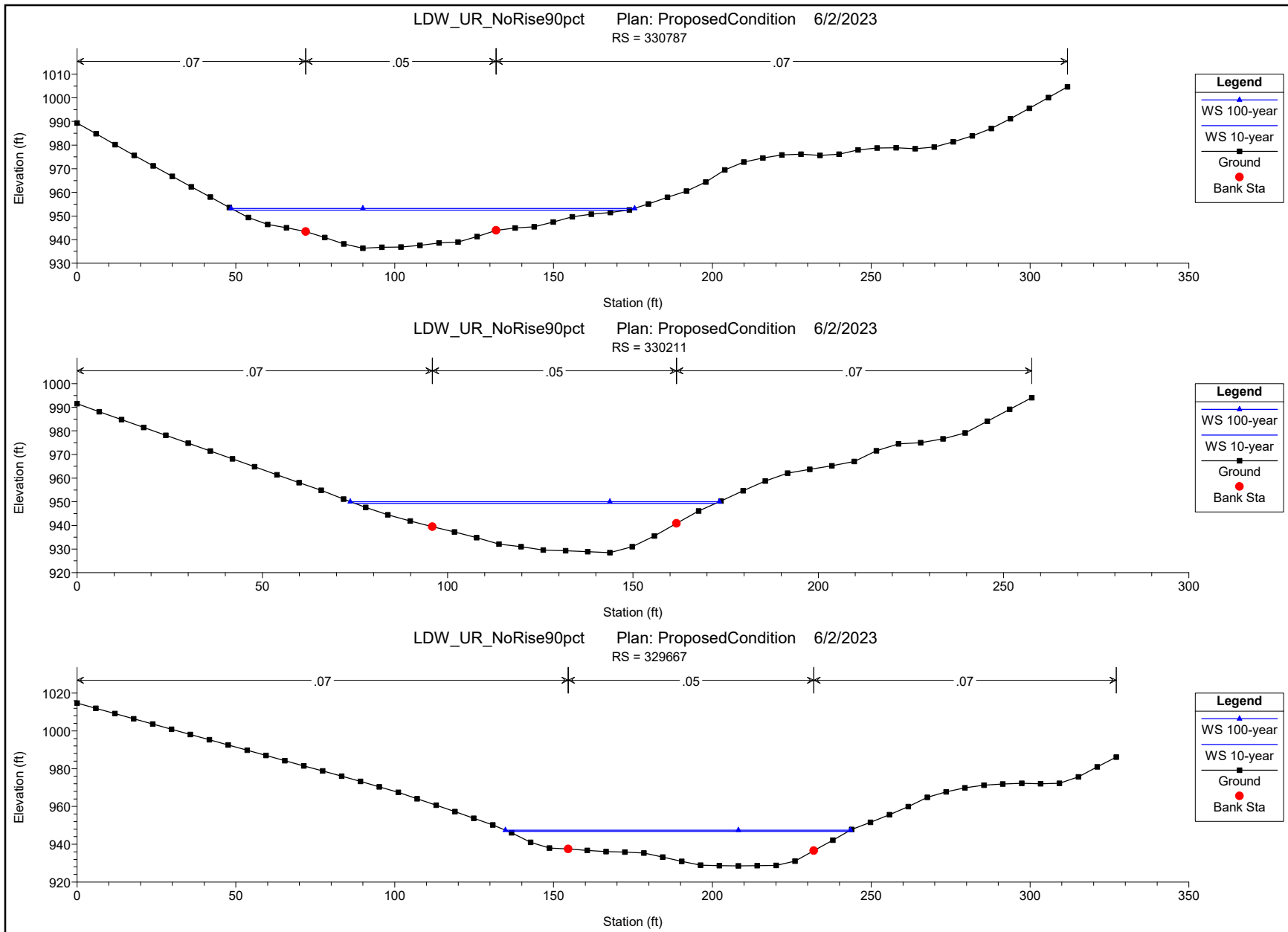


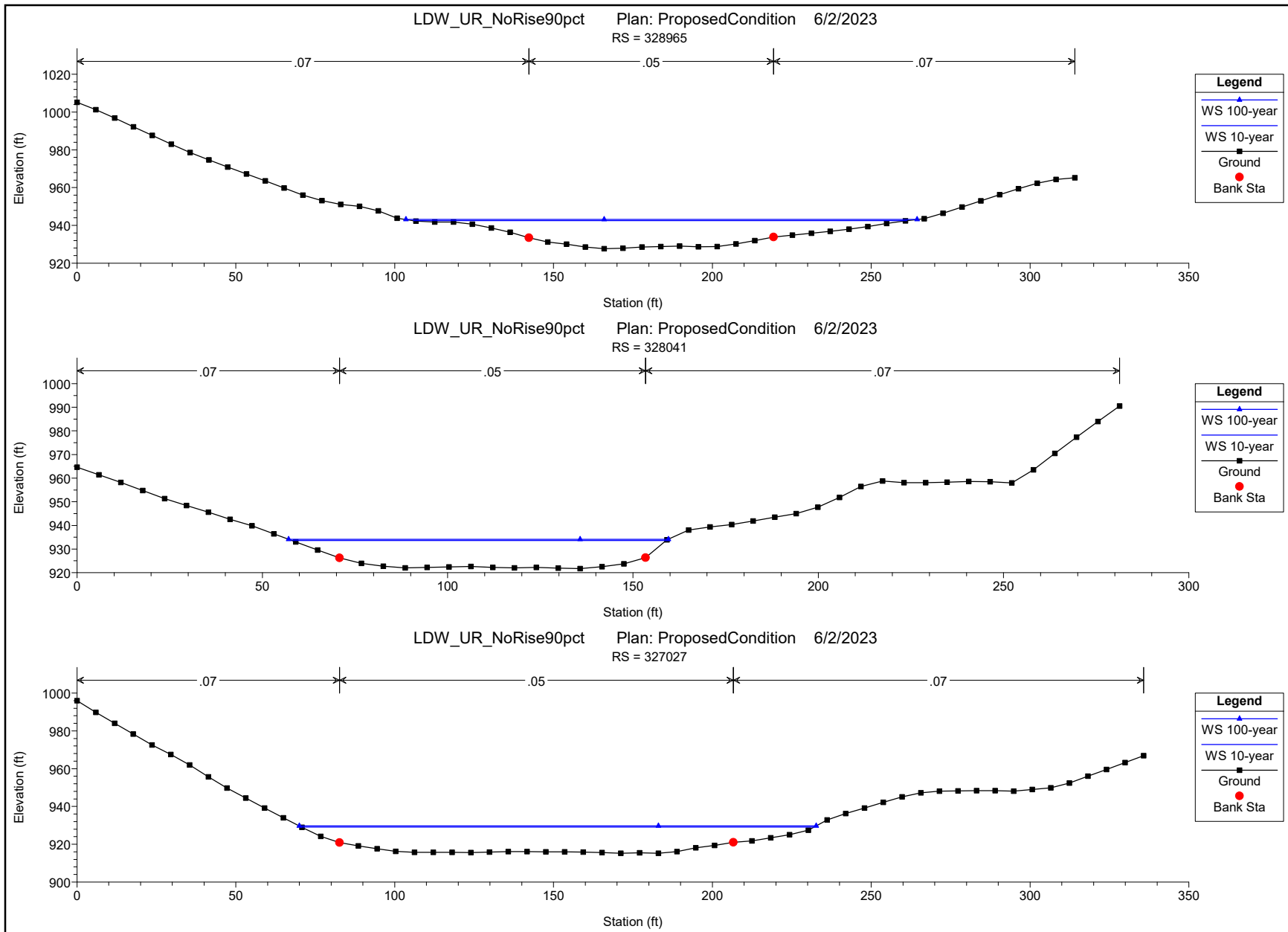


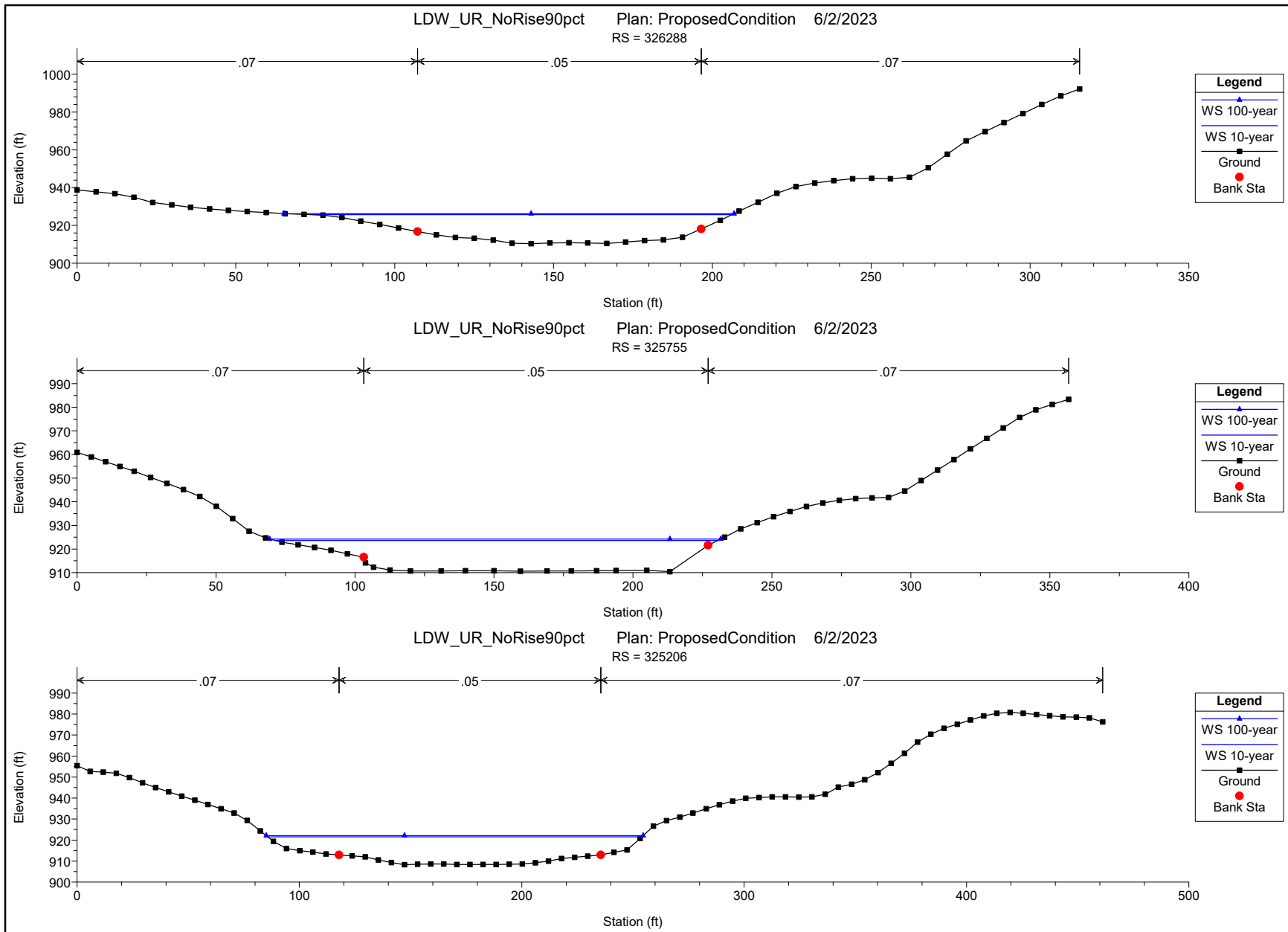


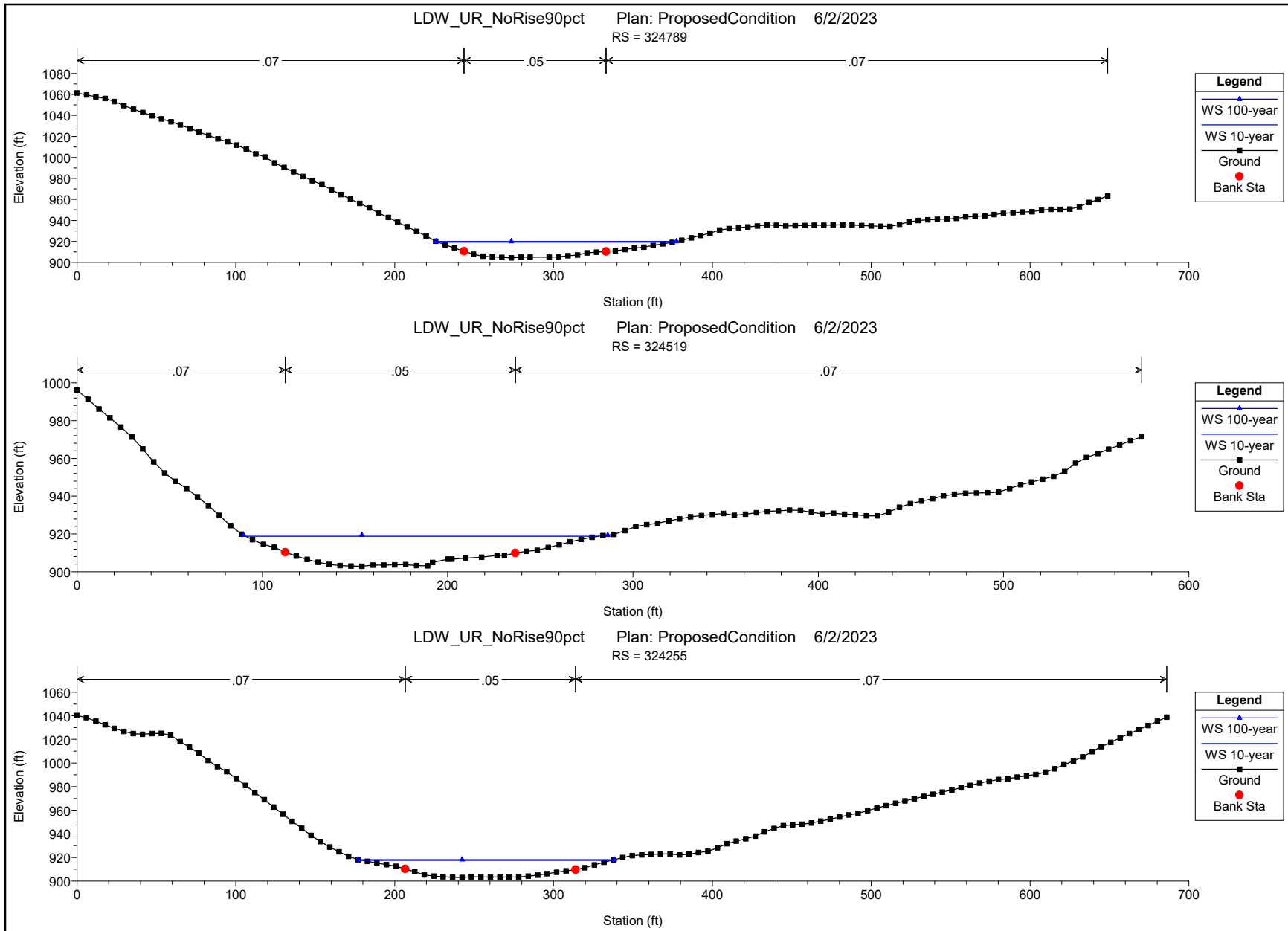


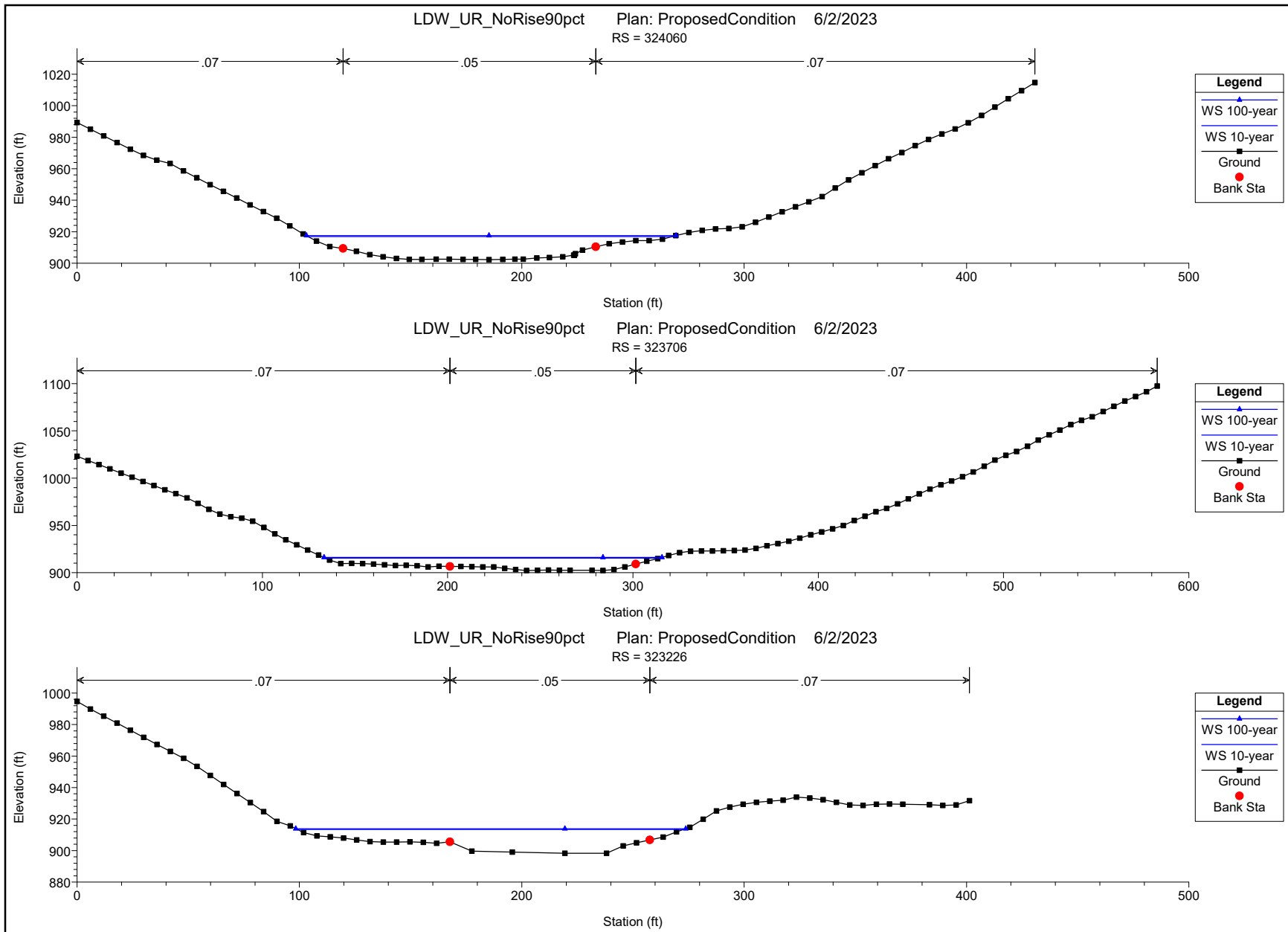


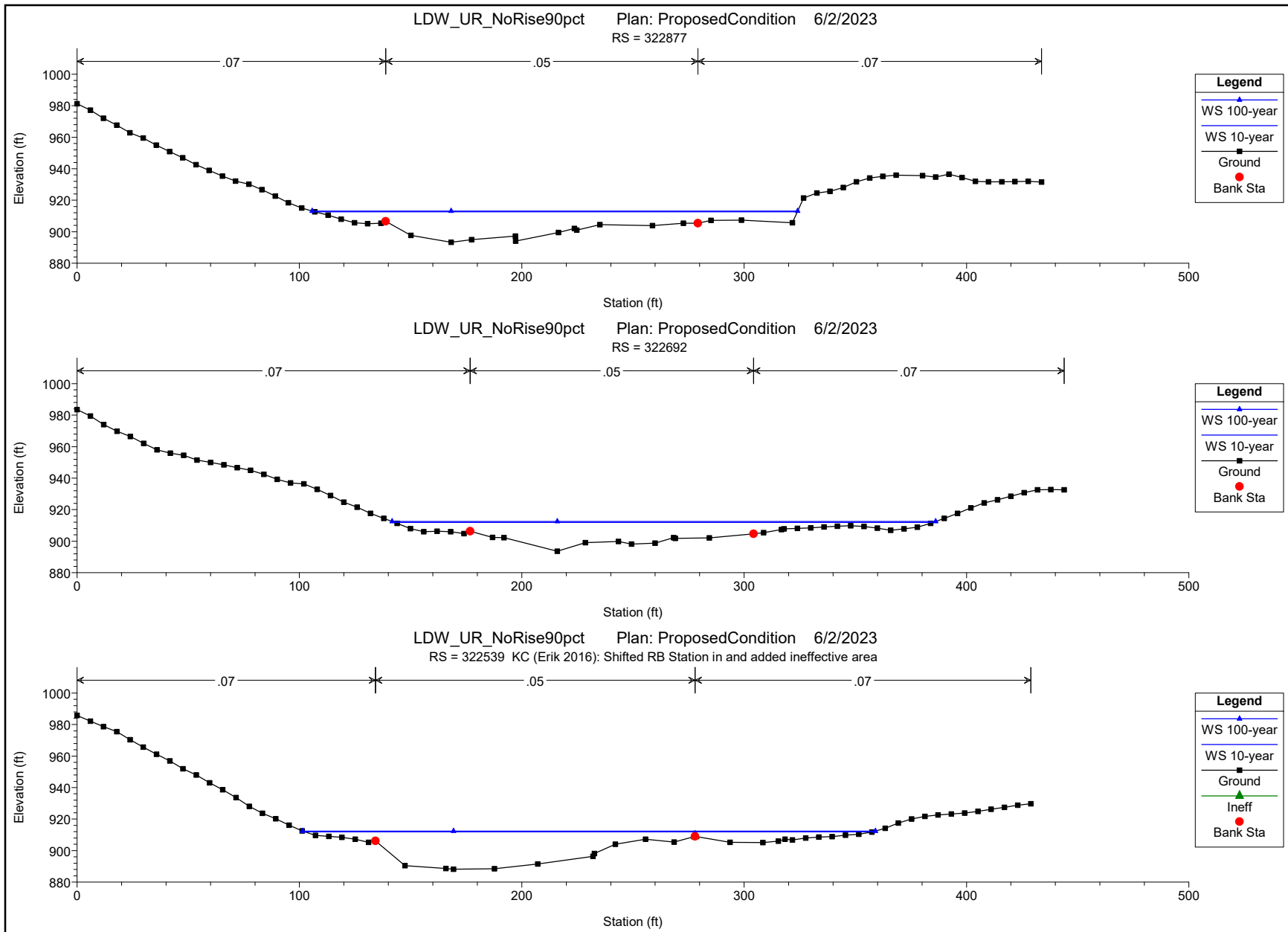


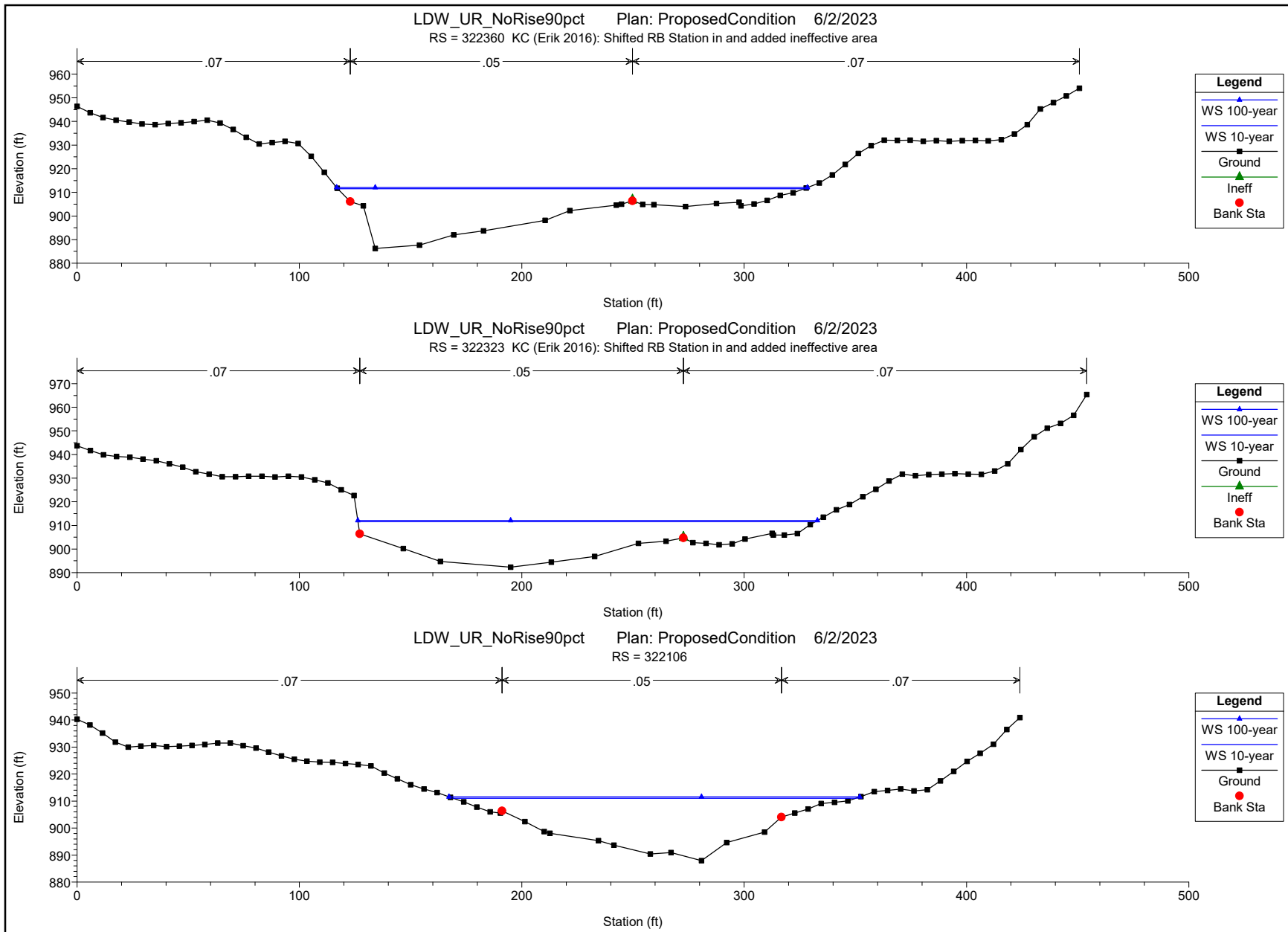


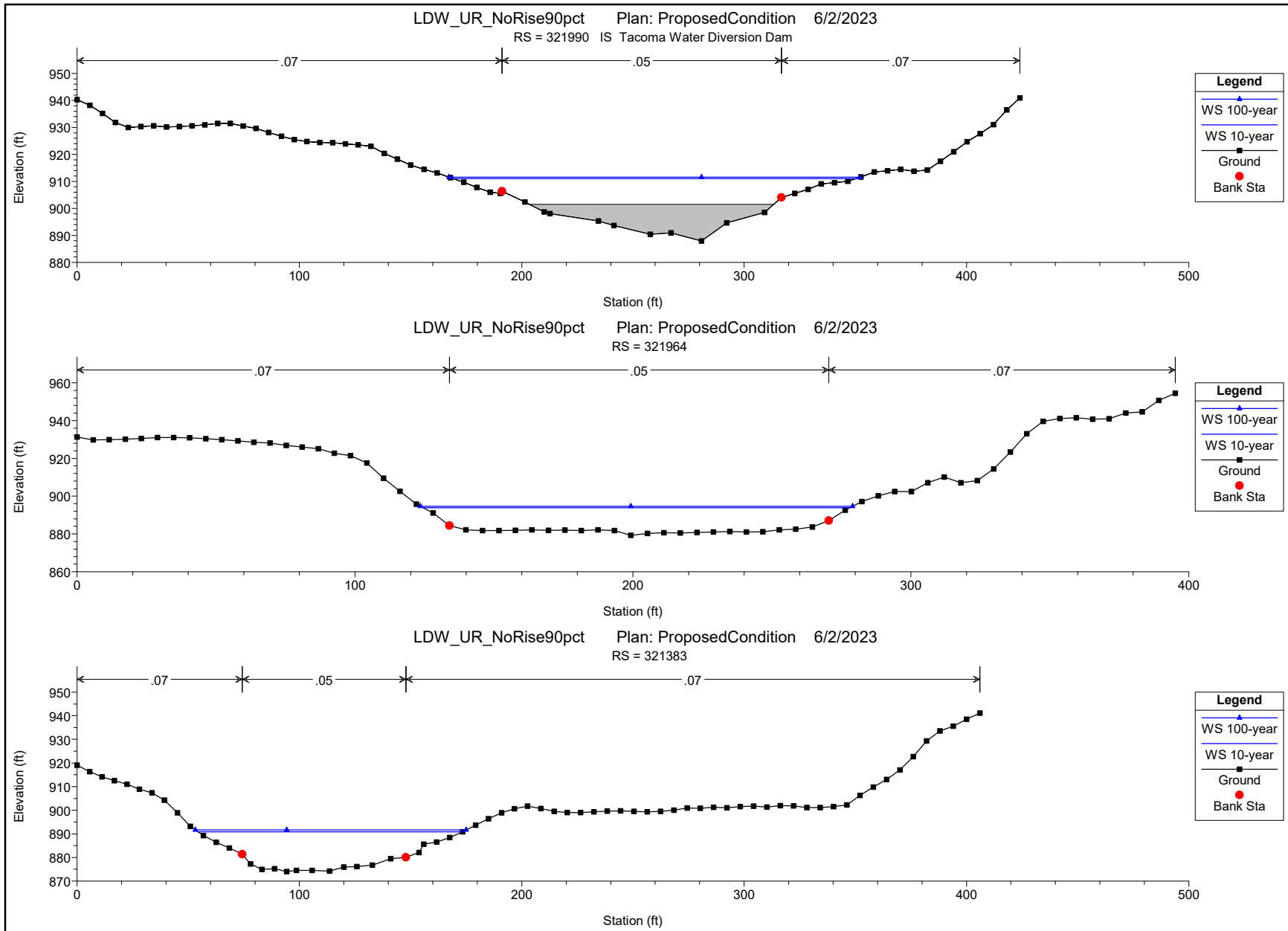


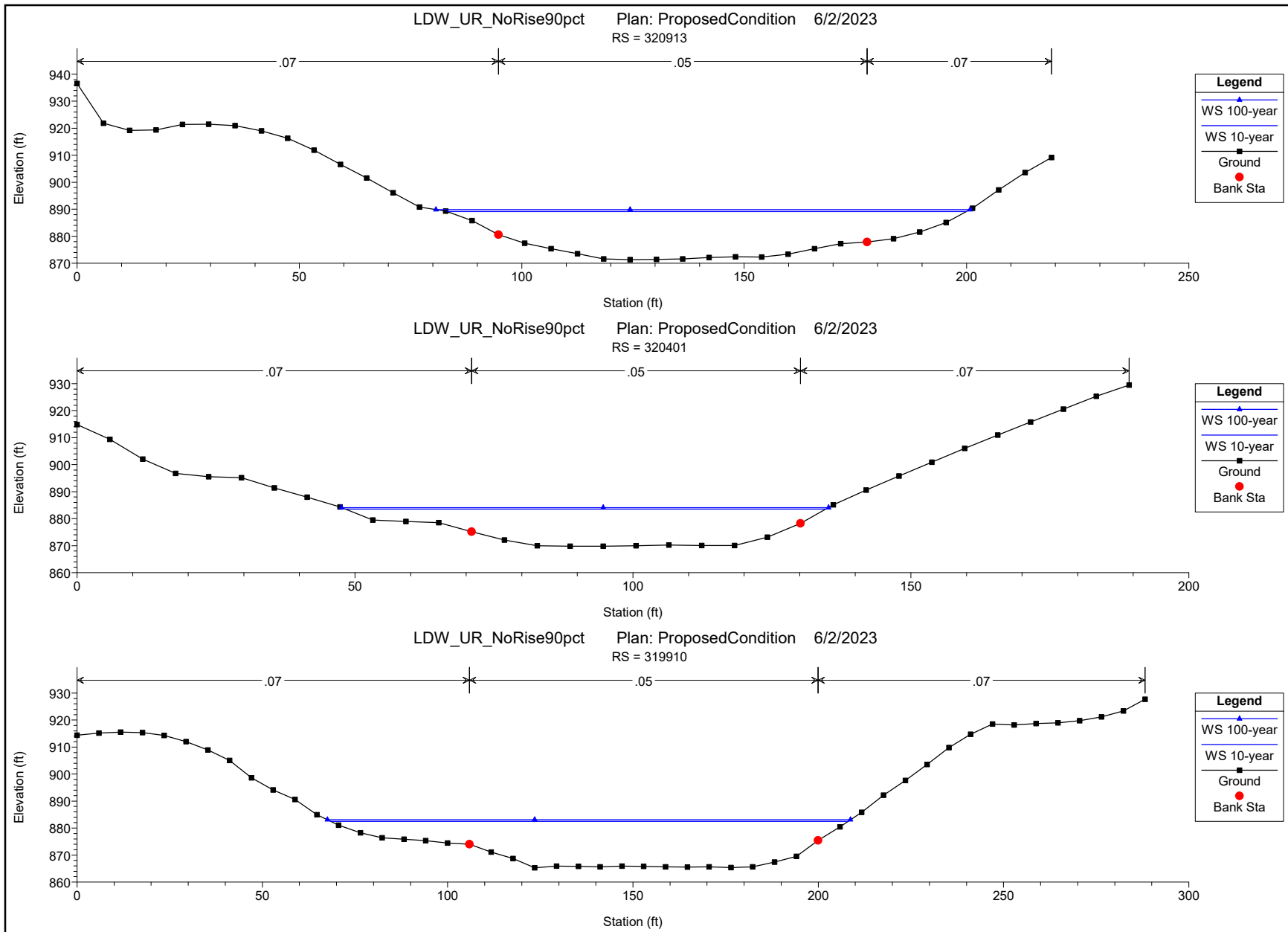


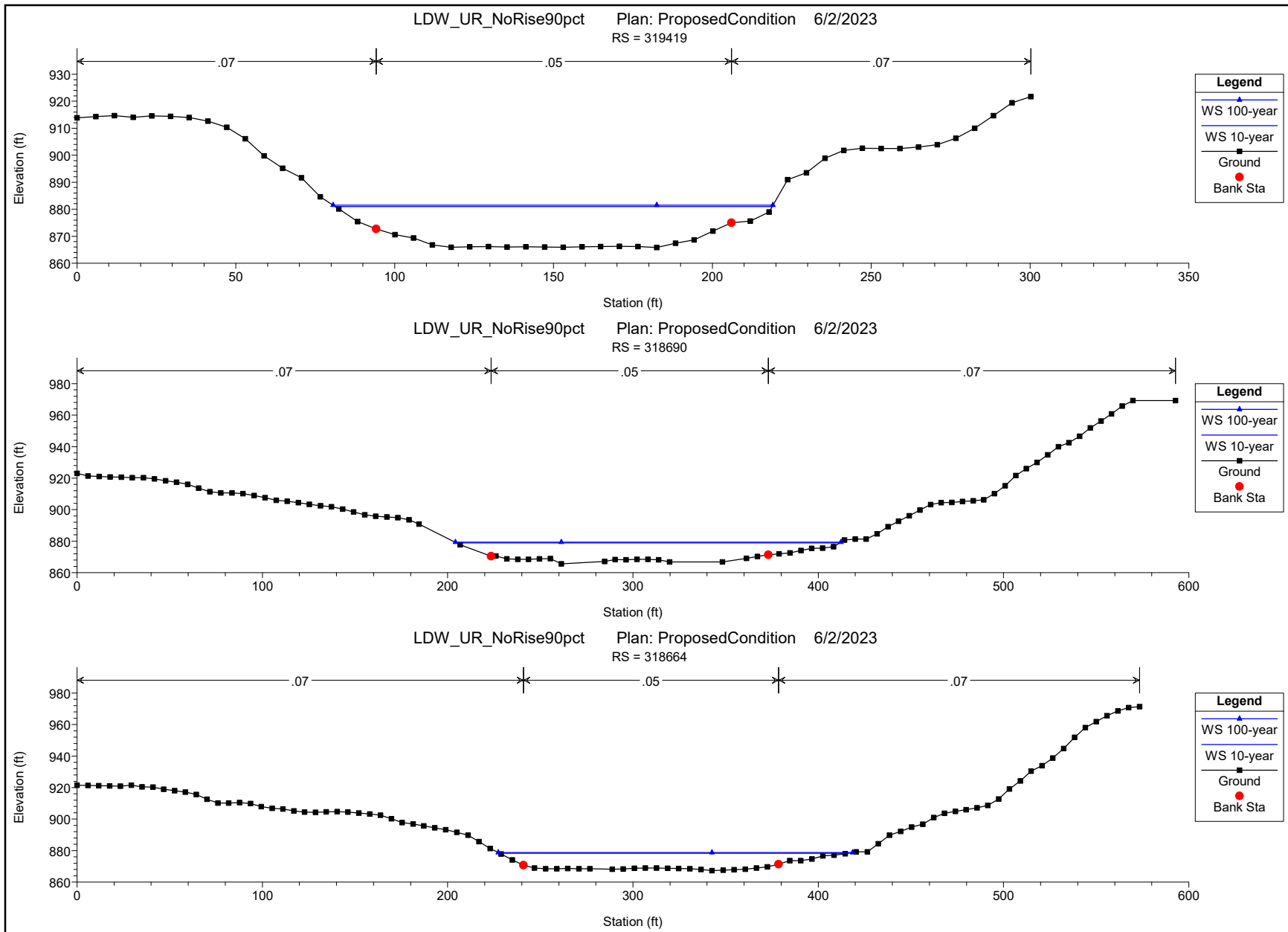


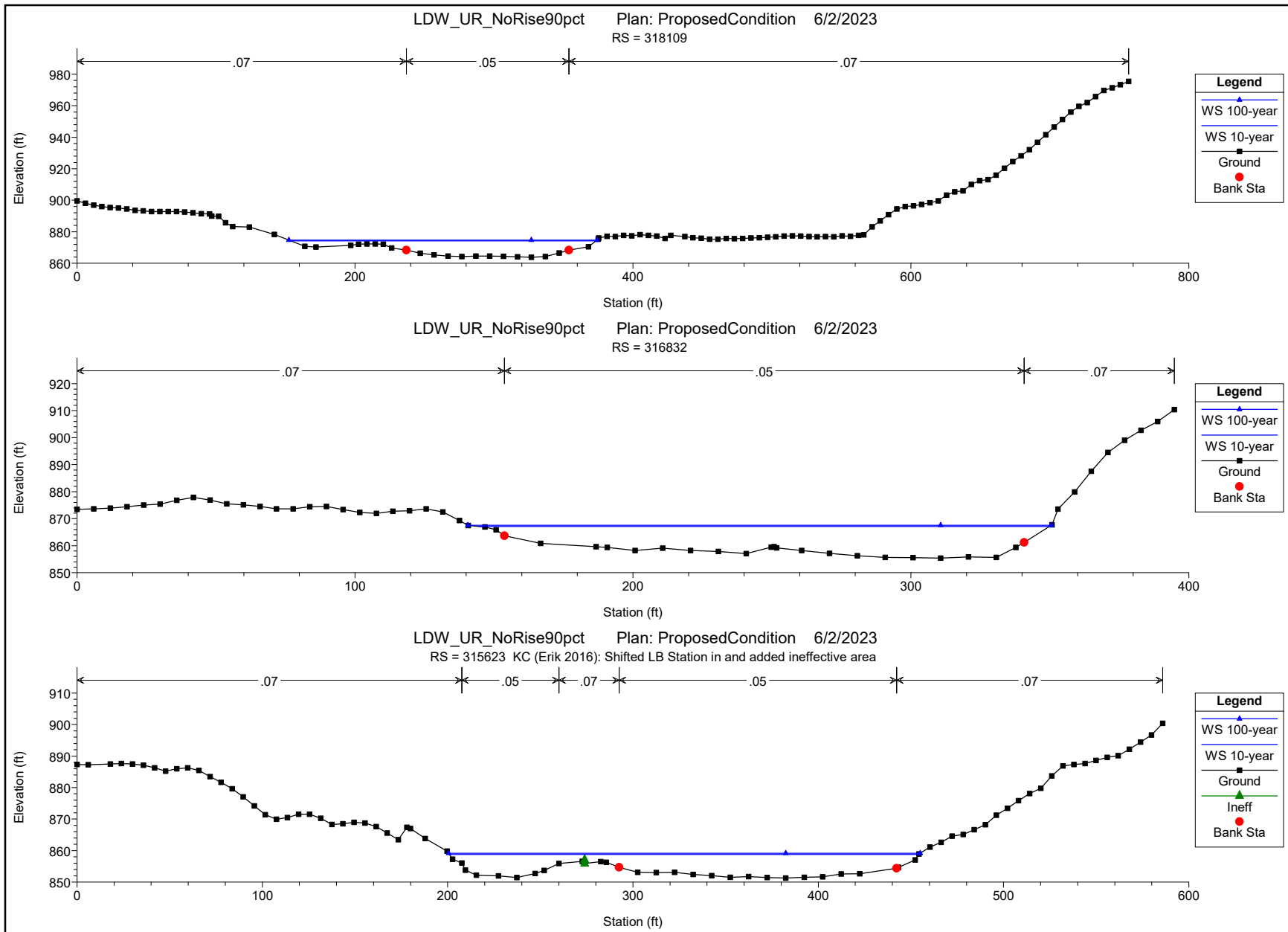


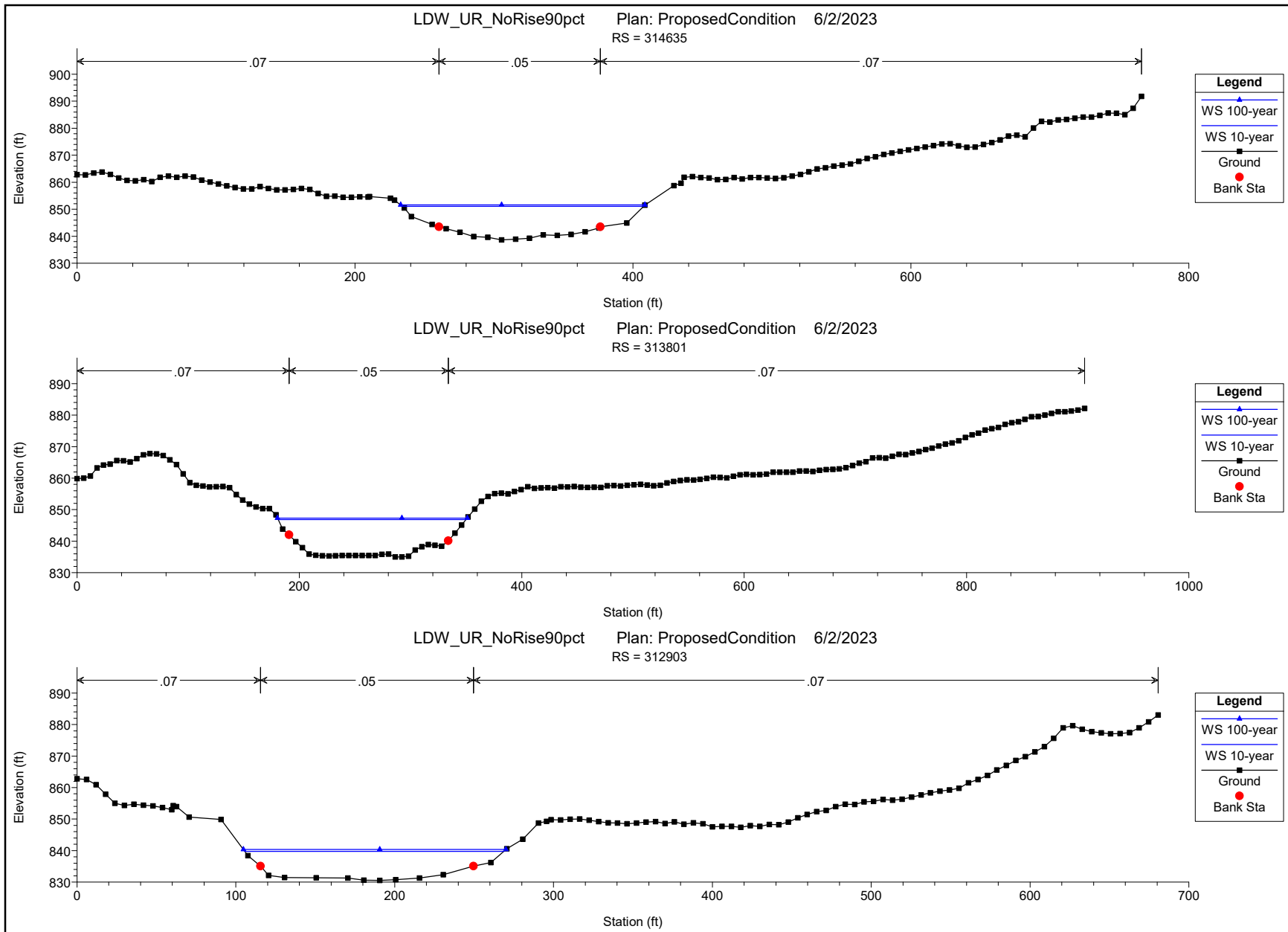


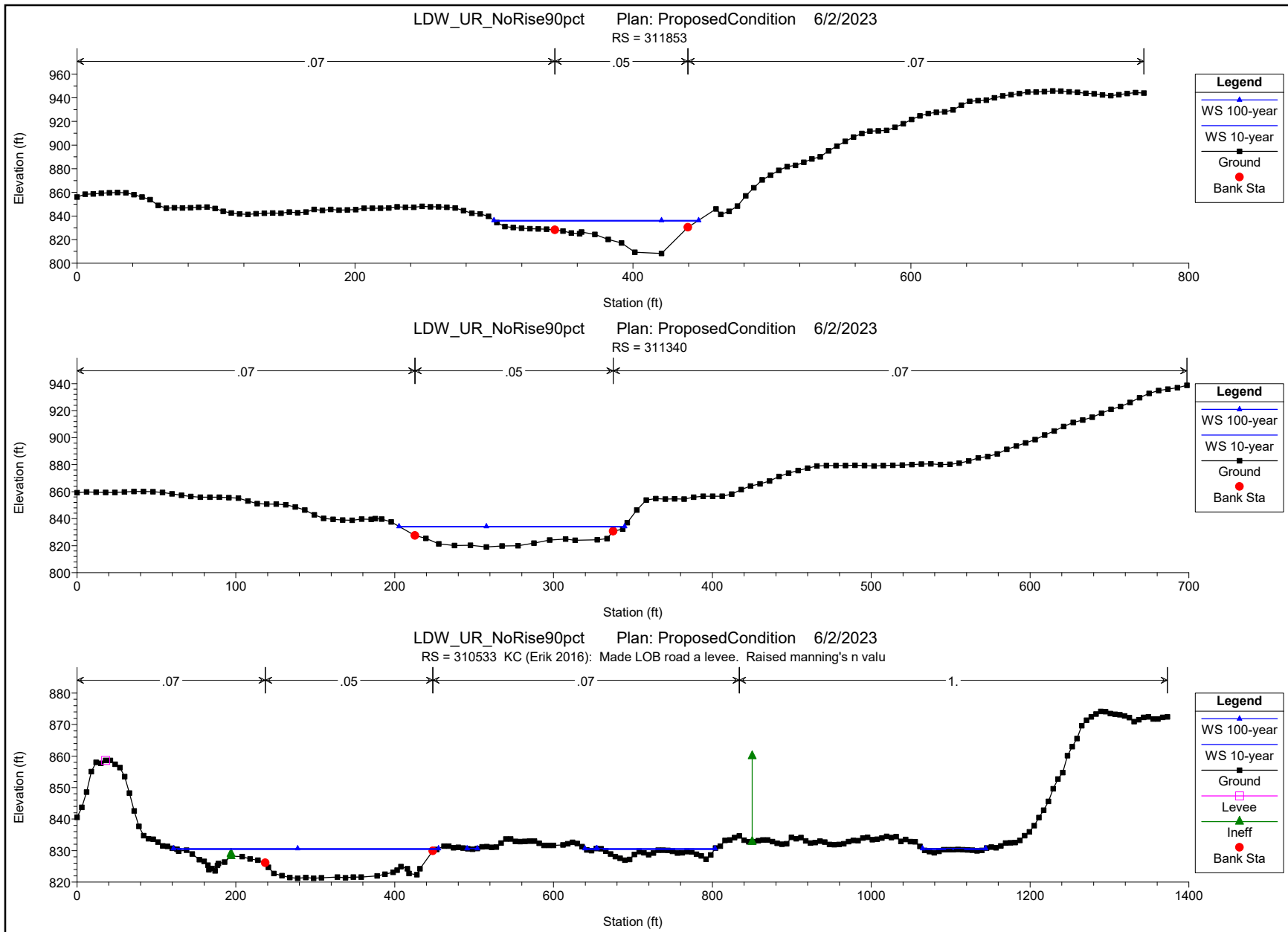


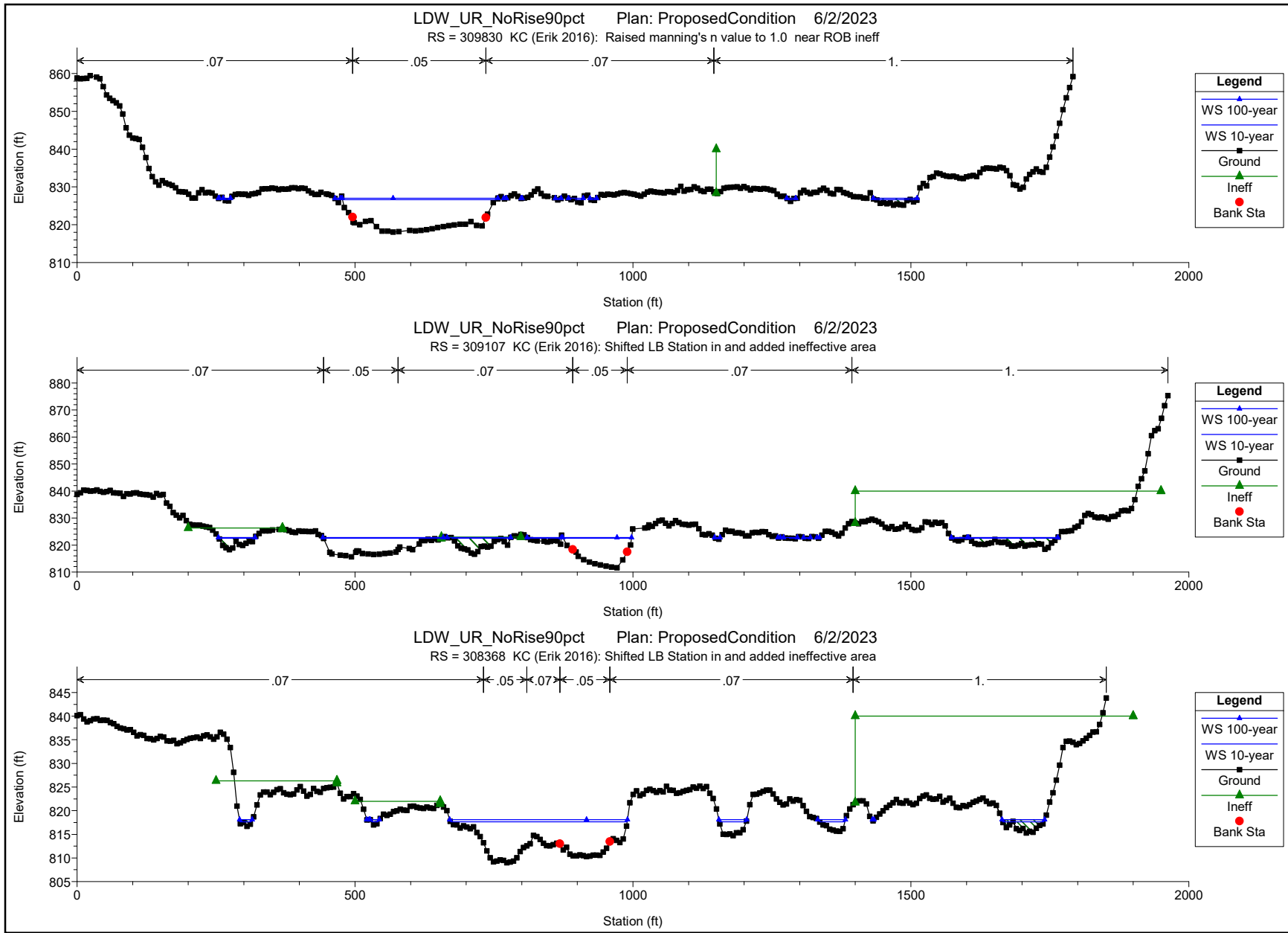


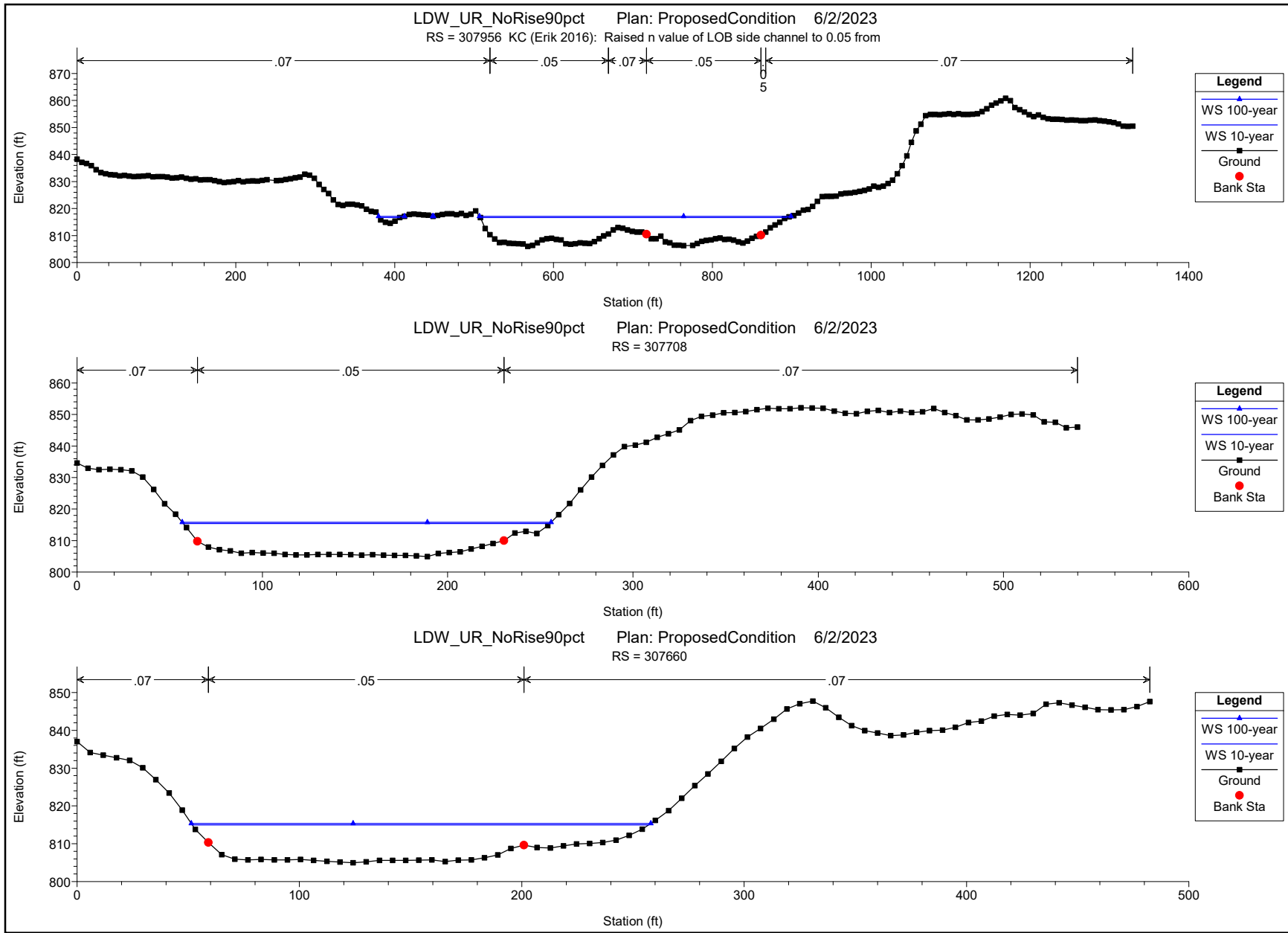












LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 307956 KC (Erik 2016): Raised n value of LOB side channel to 0.05 from

Legend

- WS 100-year
- WS 10-year
- Ground
- Bank Sta

LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 307708

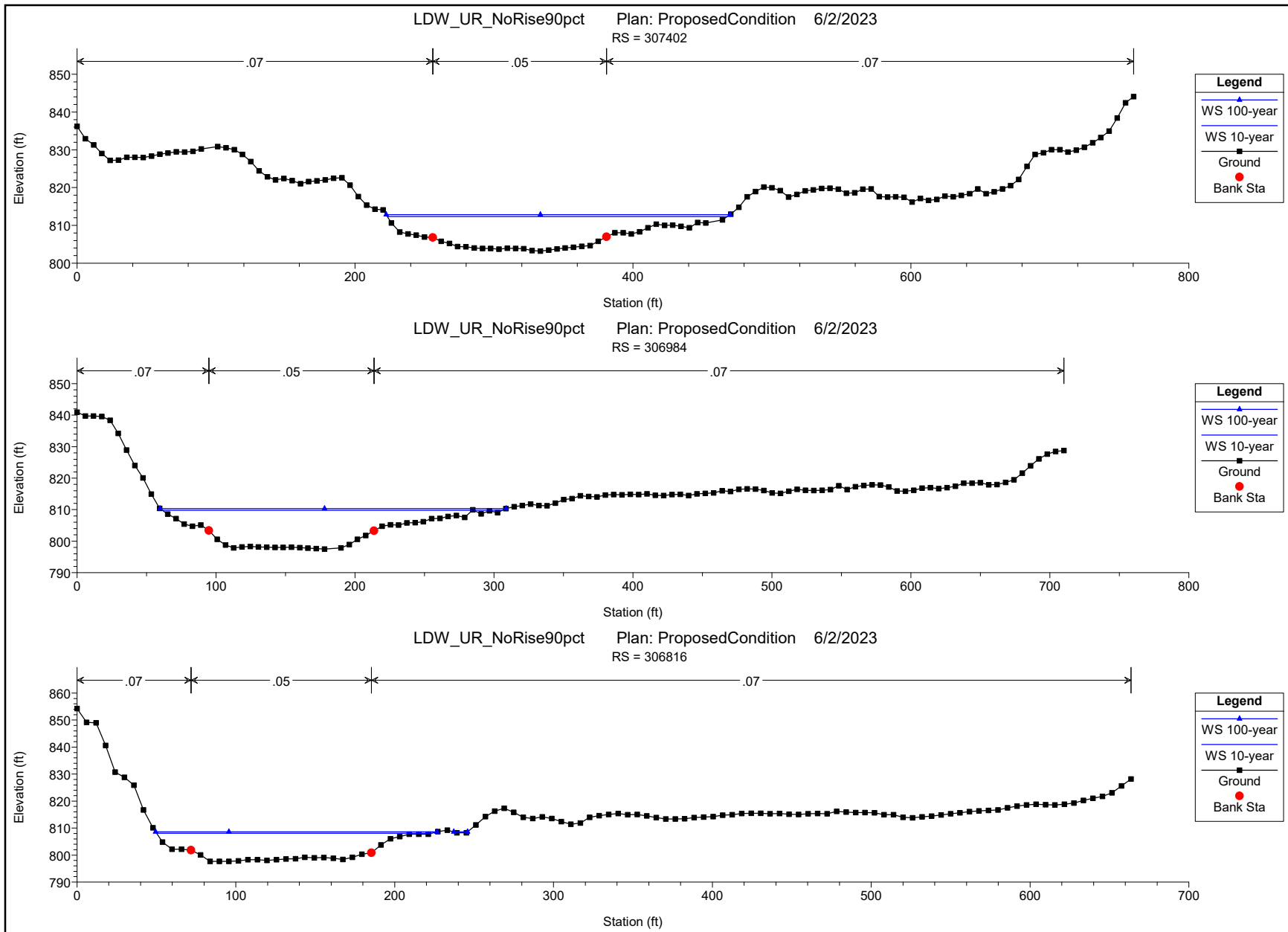
Legend

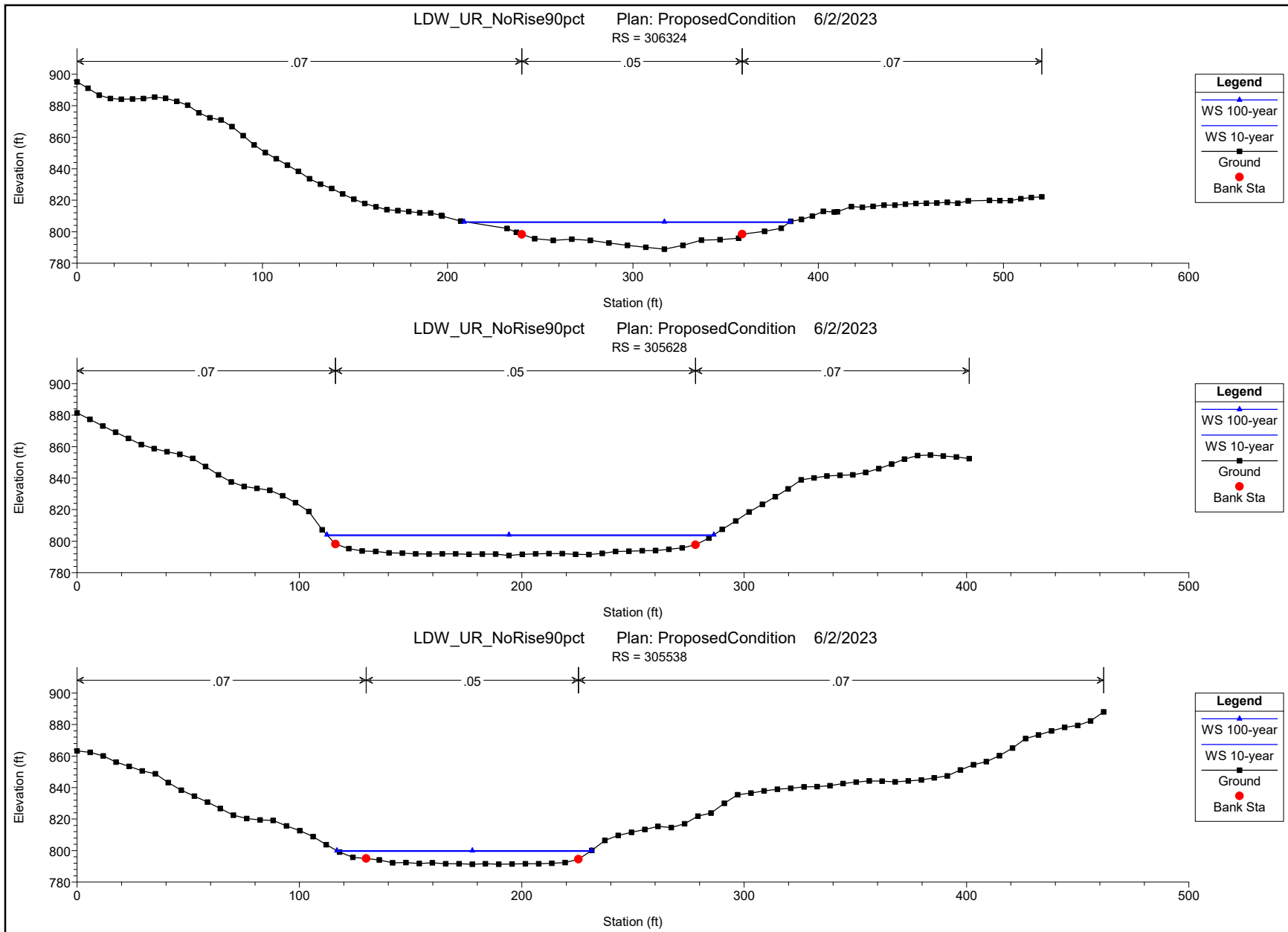
- WS 100-year
- WS 10-year
- Ground
- Bank Sta

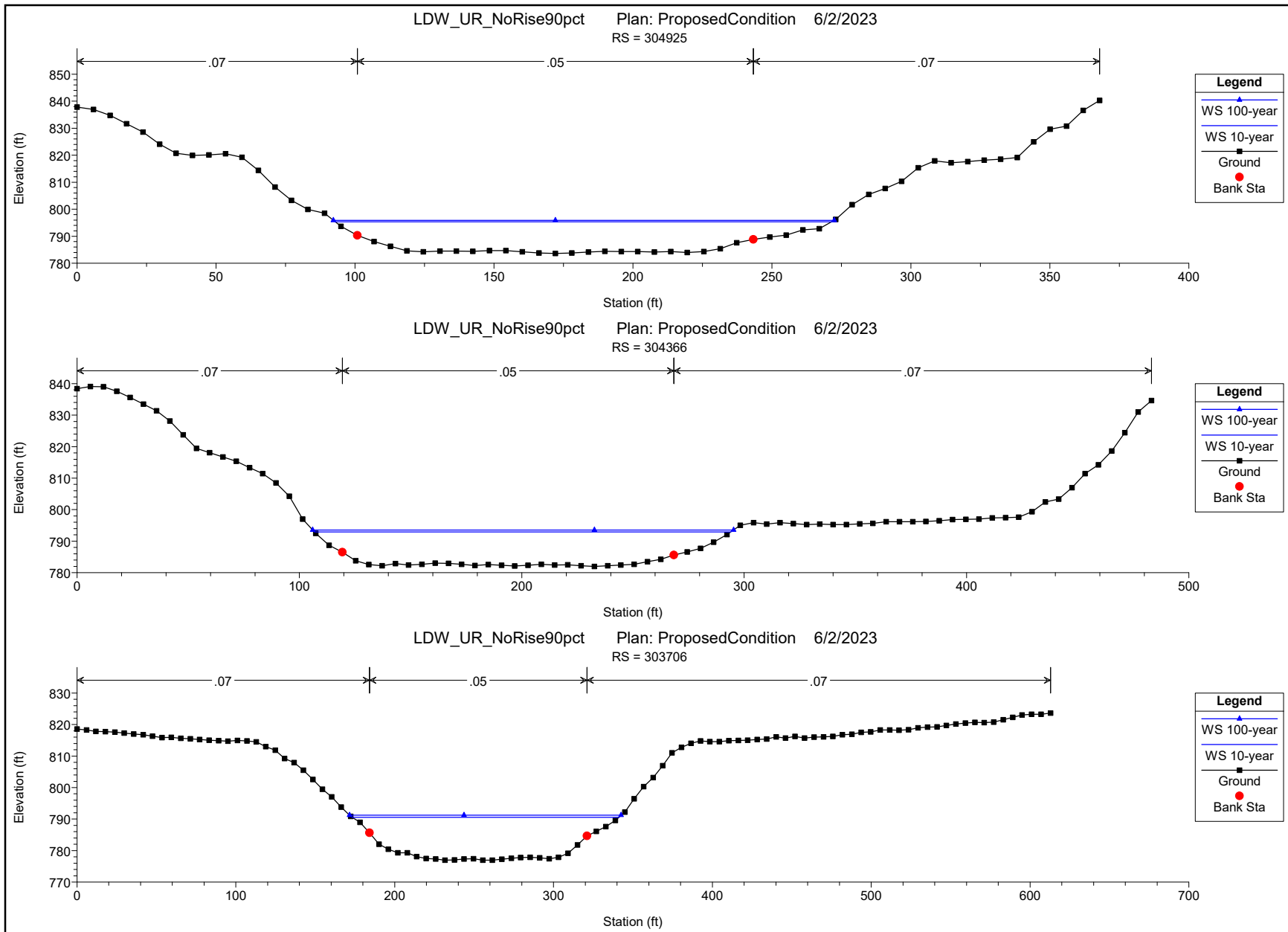
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 307660

Legend

- WS 100-year
- WS 10-year
- Ground
- Bank Sta







LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
RS = 304925

Legend

- WS 100-year
- WS 10-year
- Ground
- Bank Sta

LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
RS = 304366

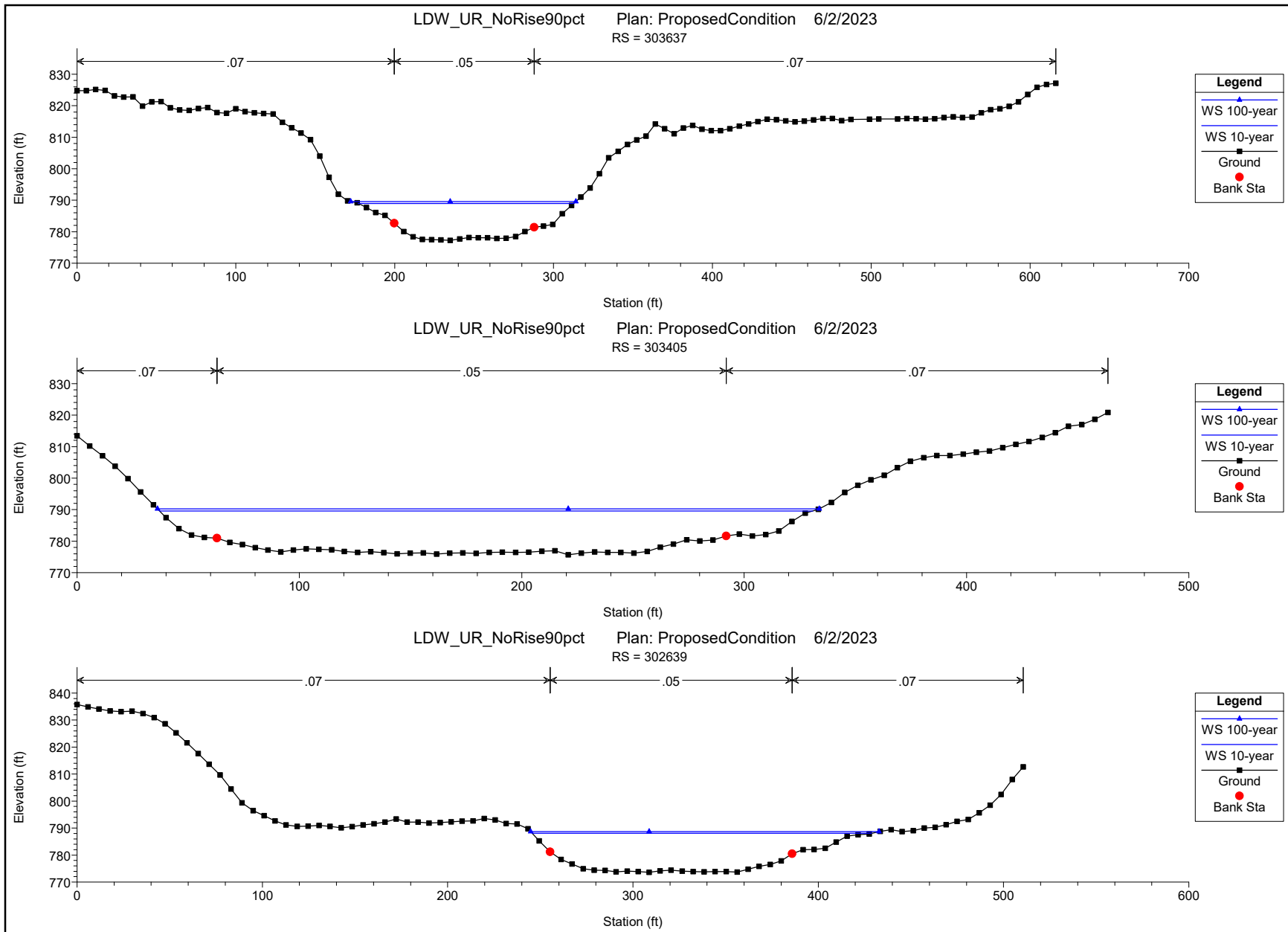
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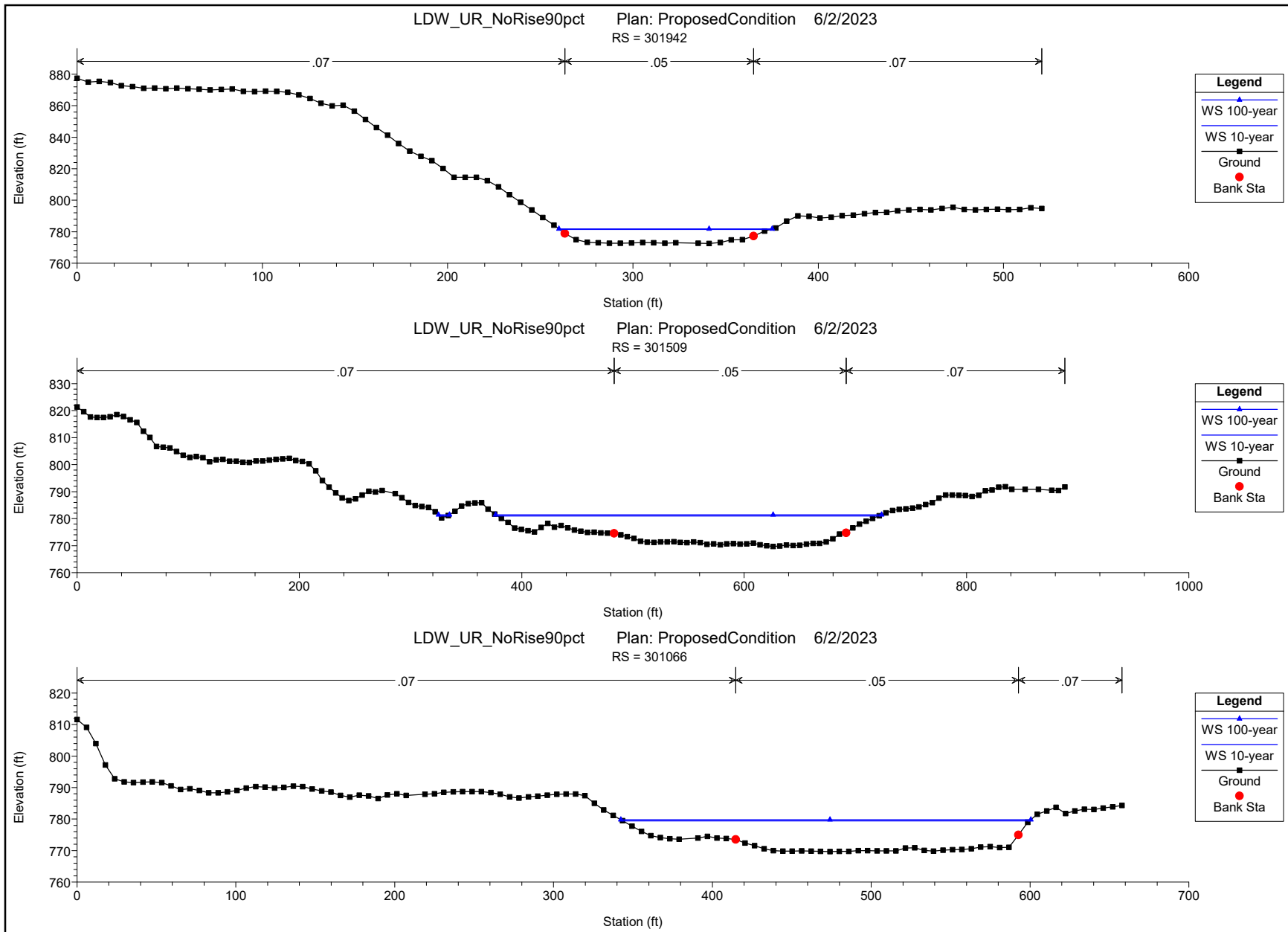
- WS 100-year
- WS 10-year
- Ground
- Bank Sta

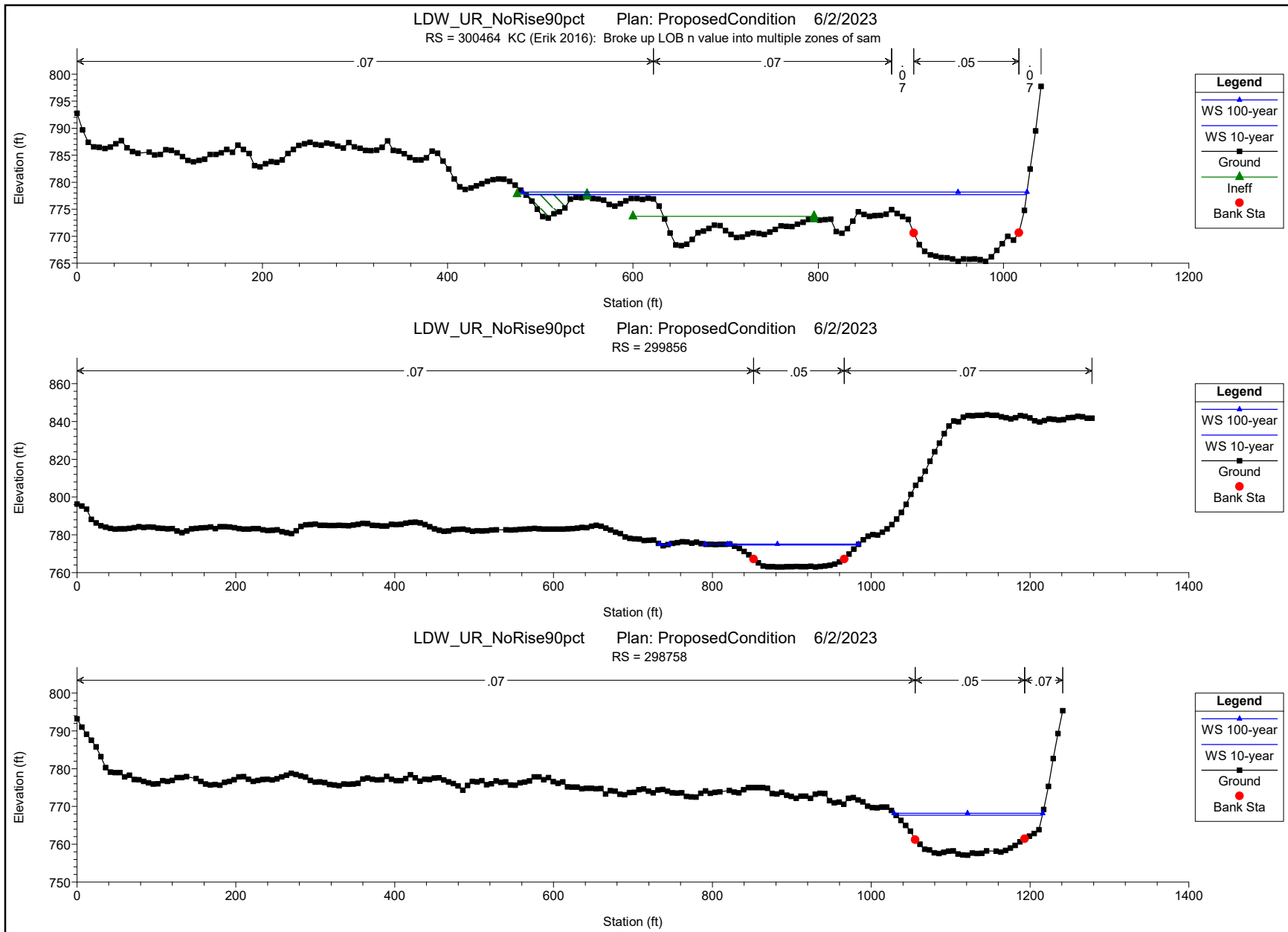
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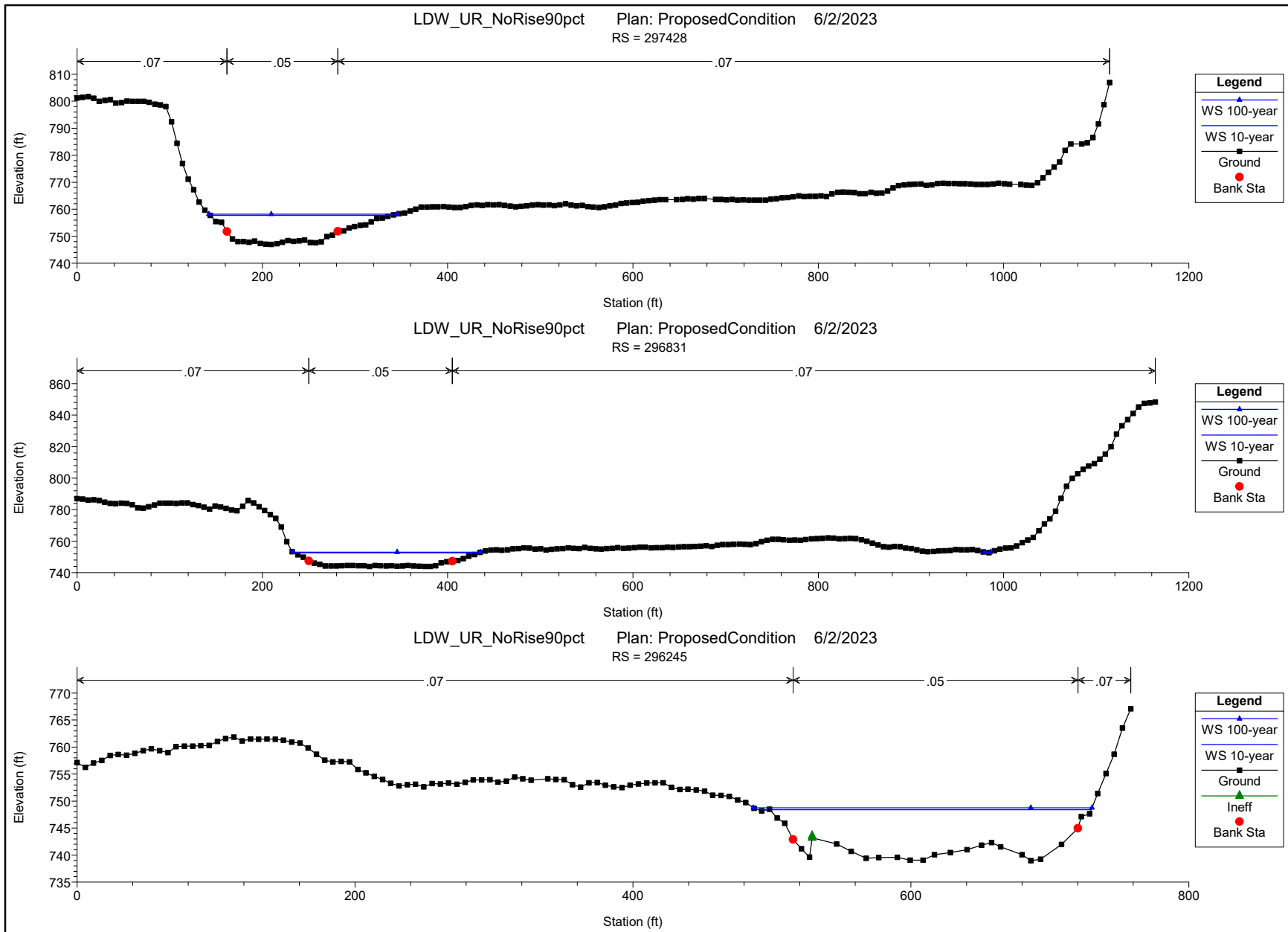
Legend

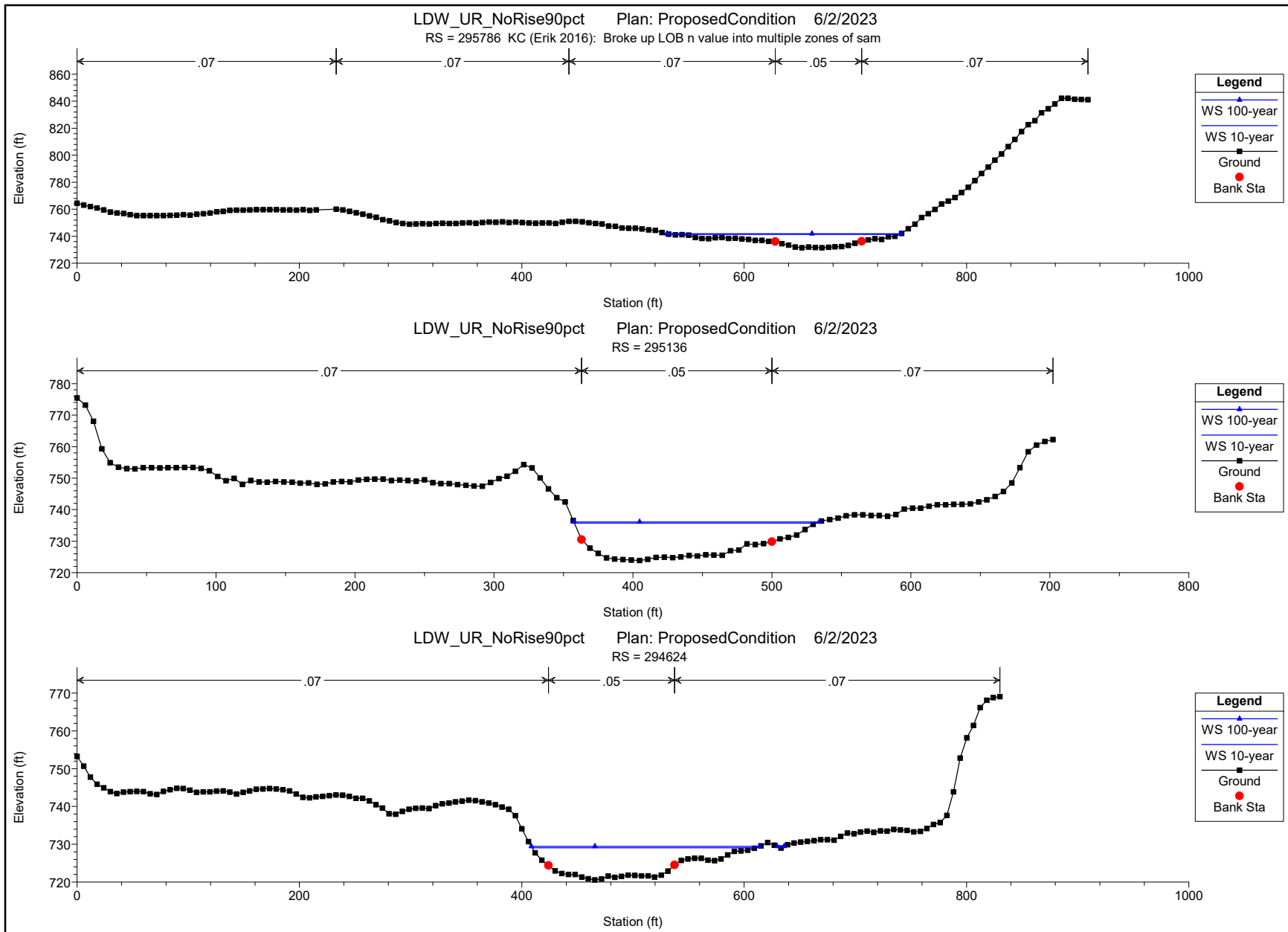
- WS 100-year
- WS 10-year
- Ground
- Bank Sta

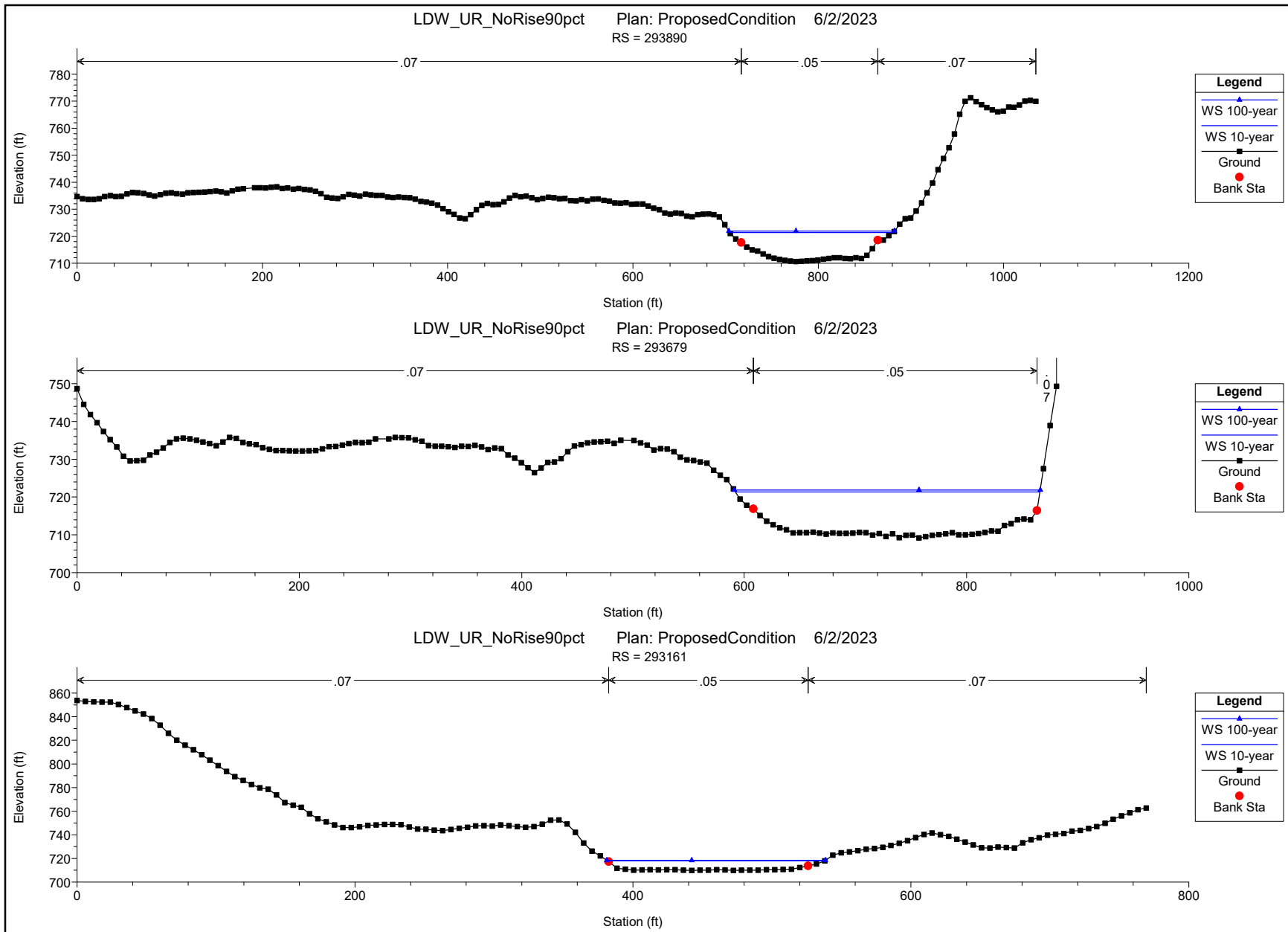


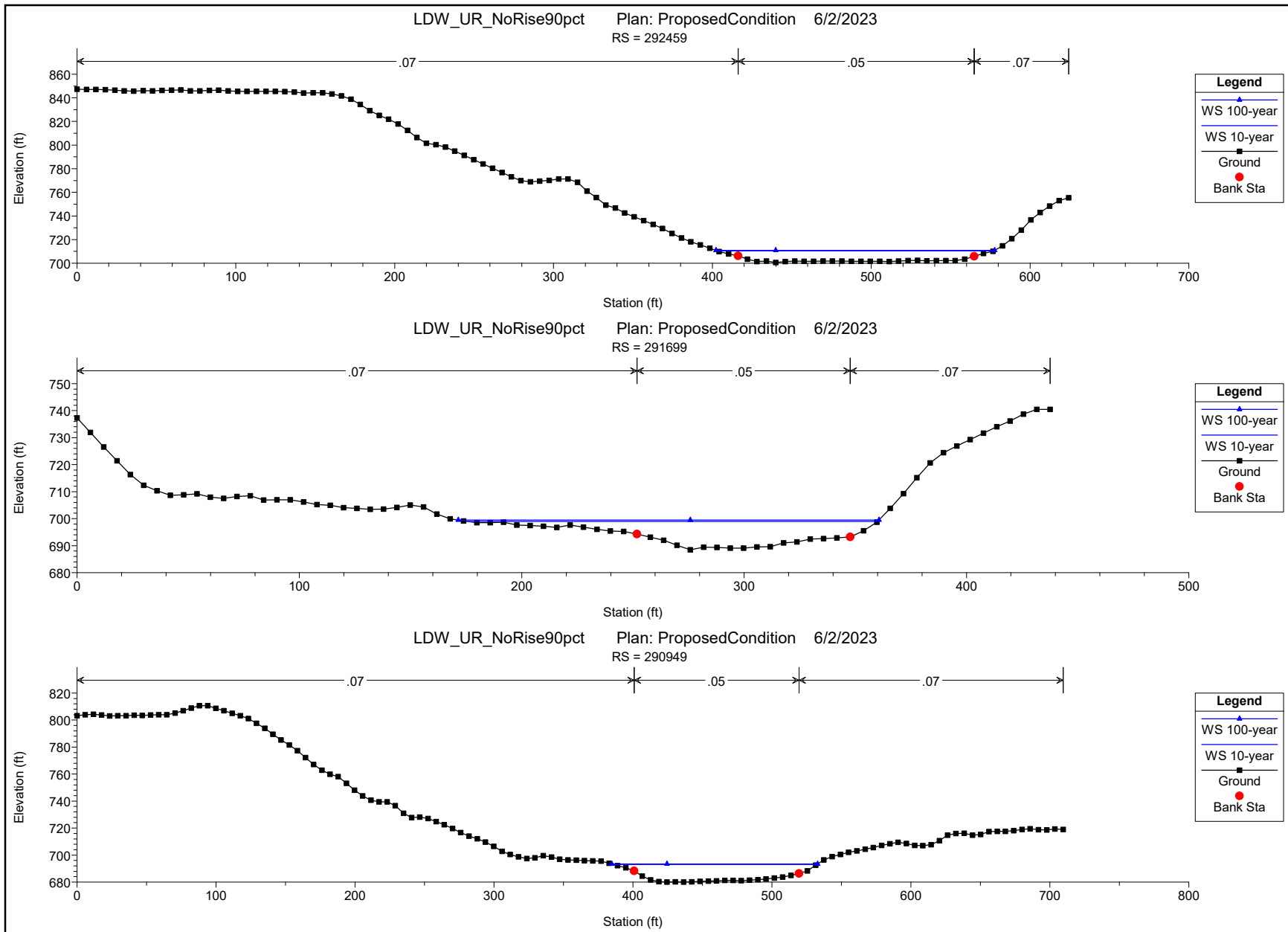


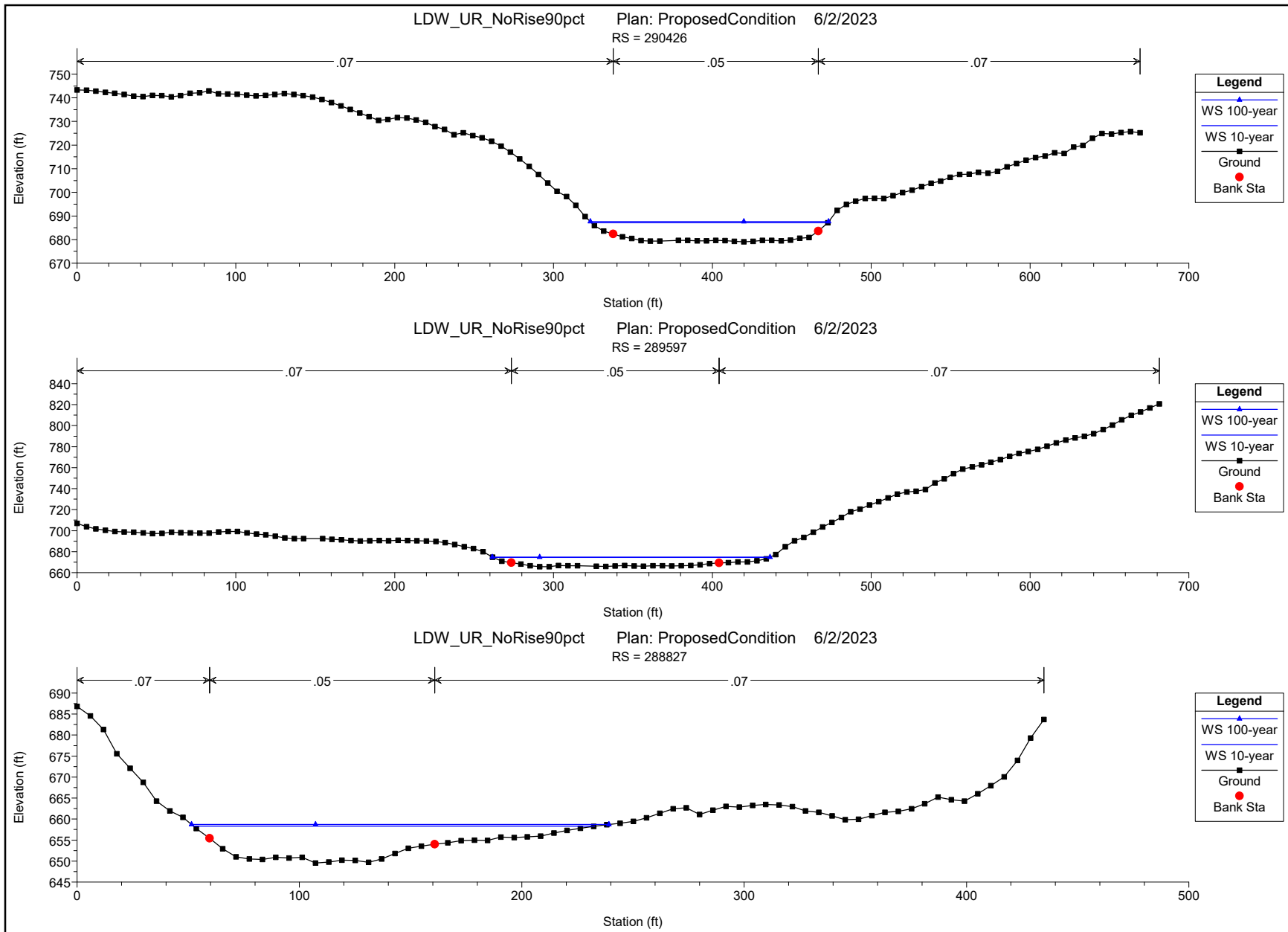


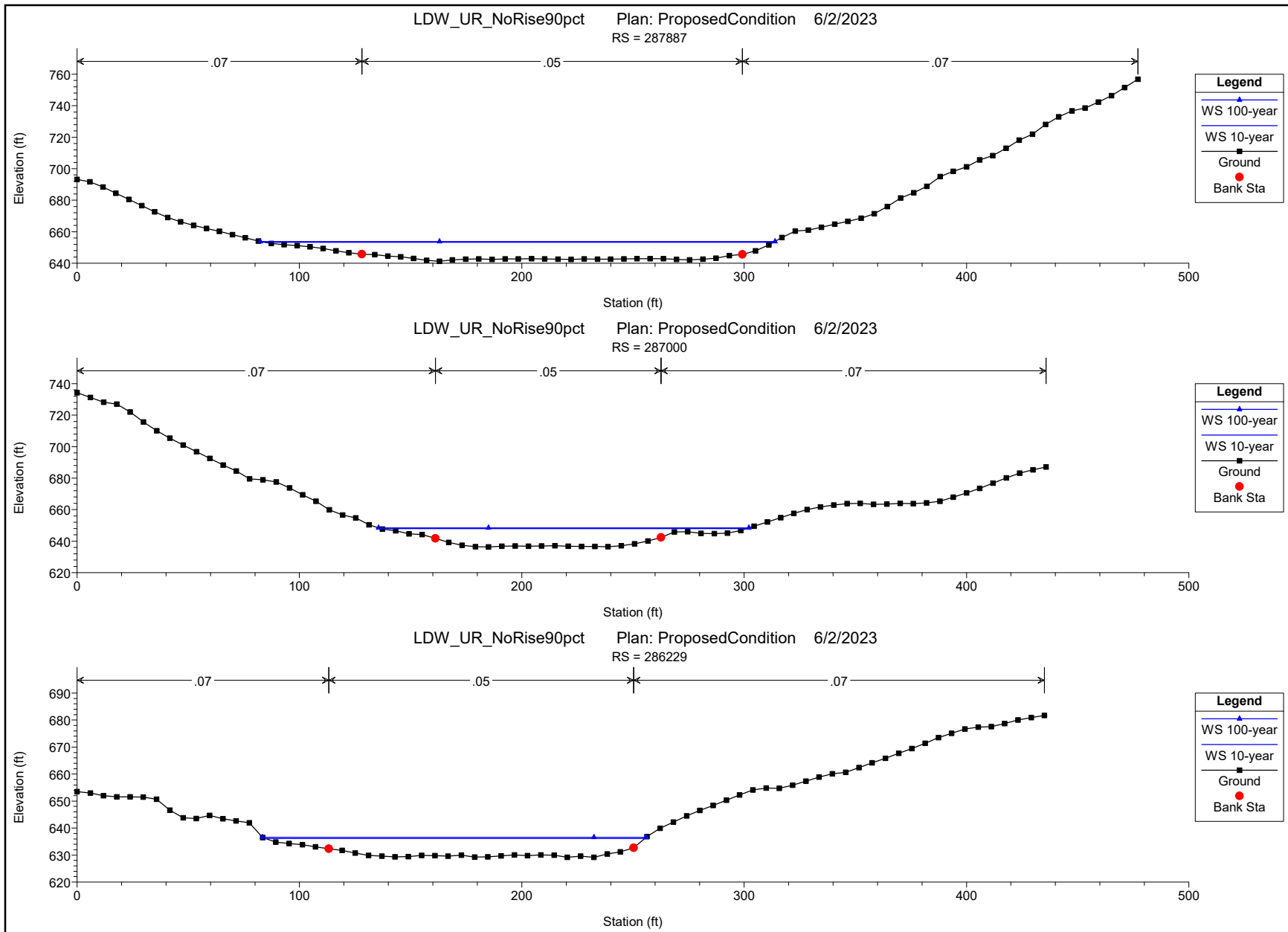


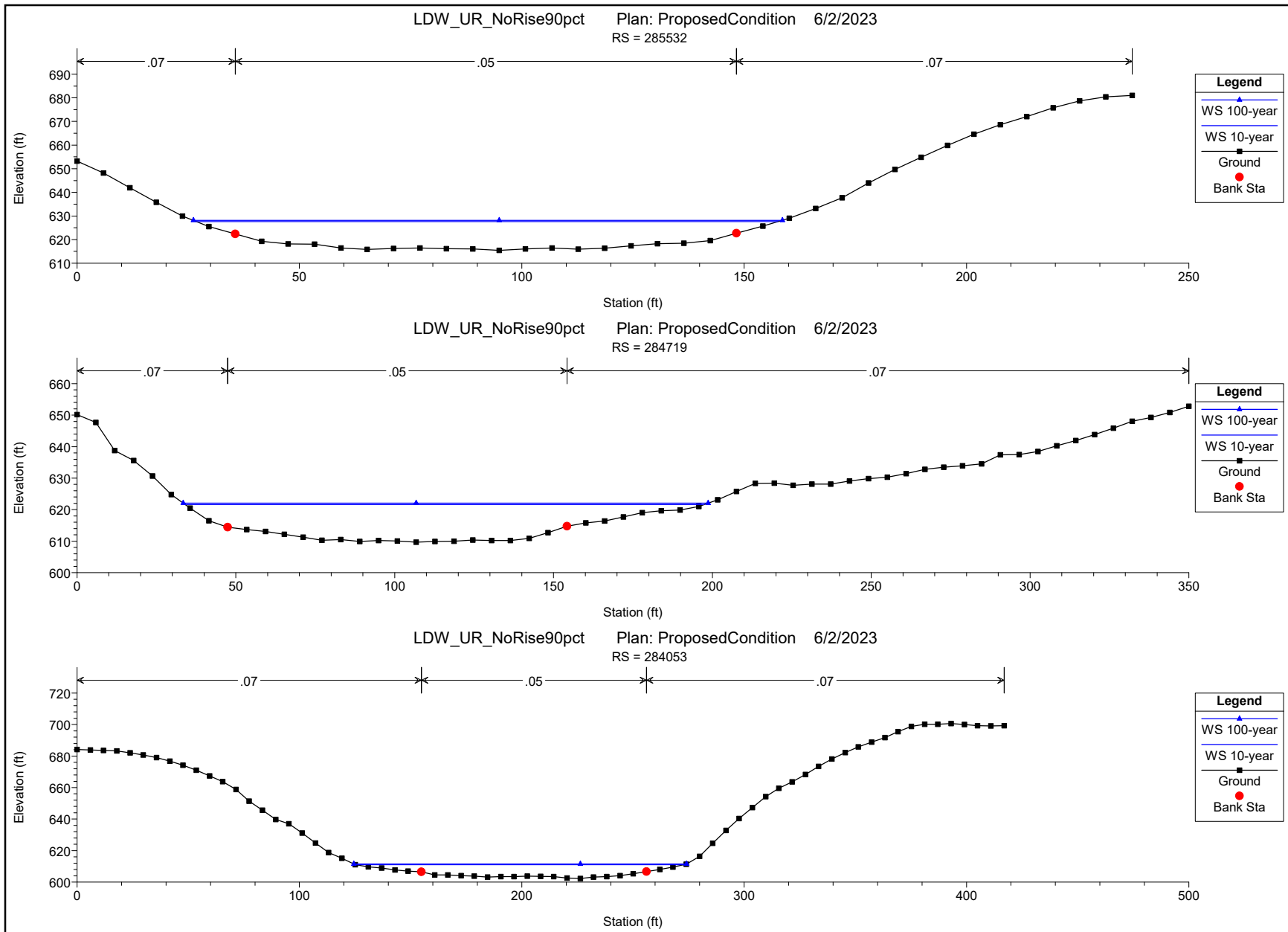


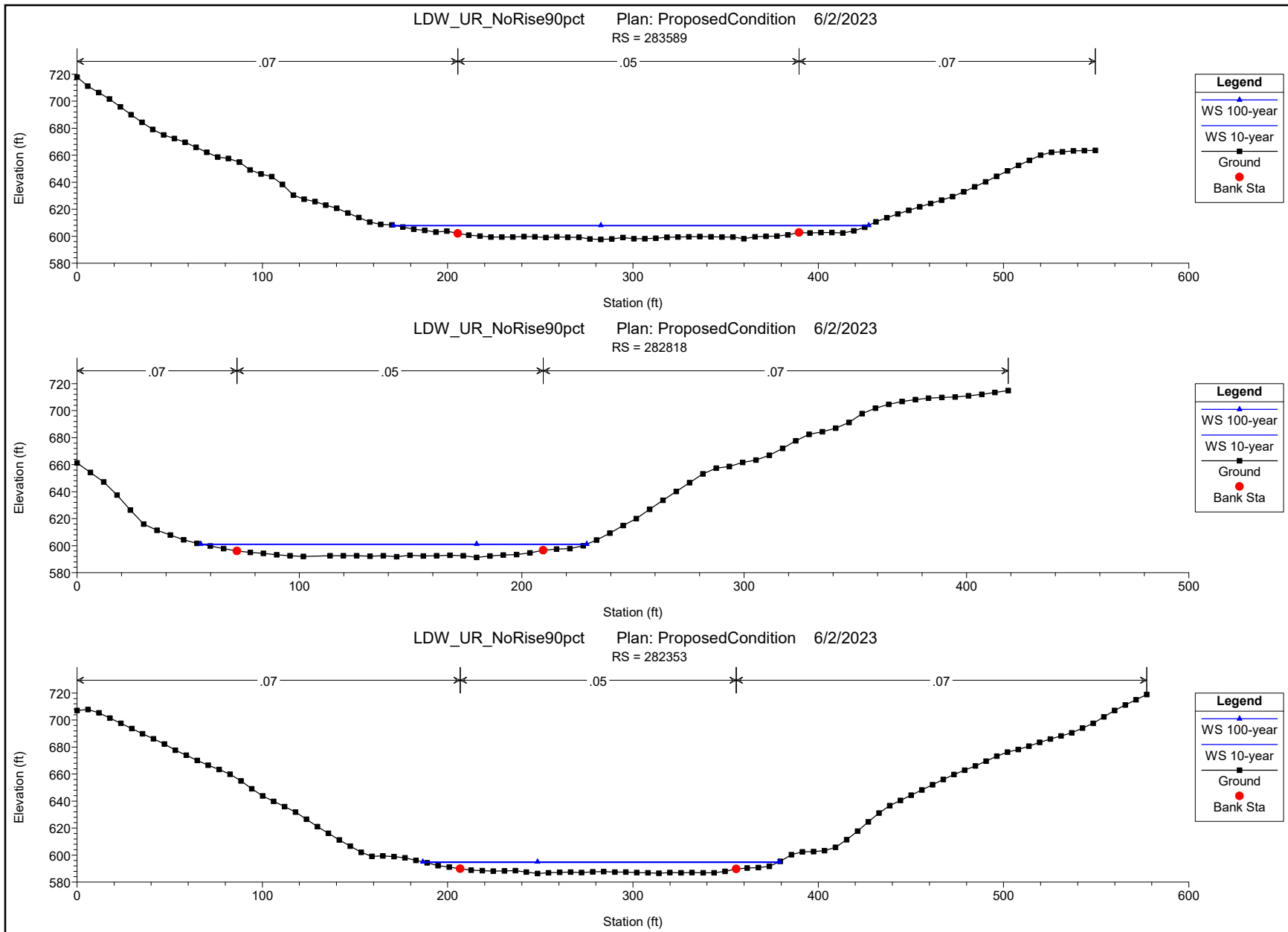


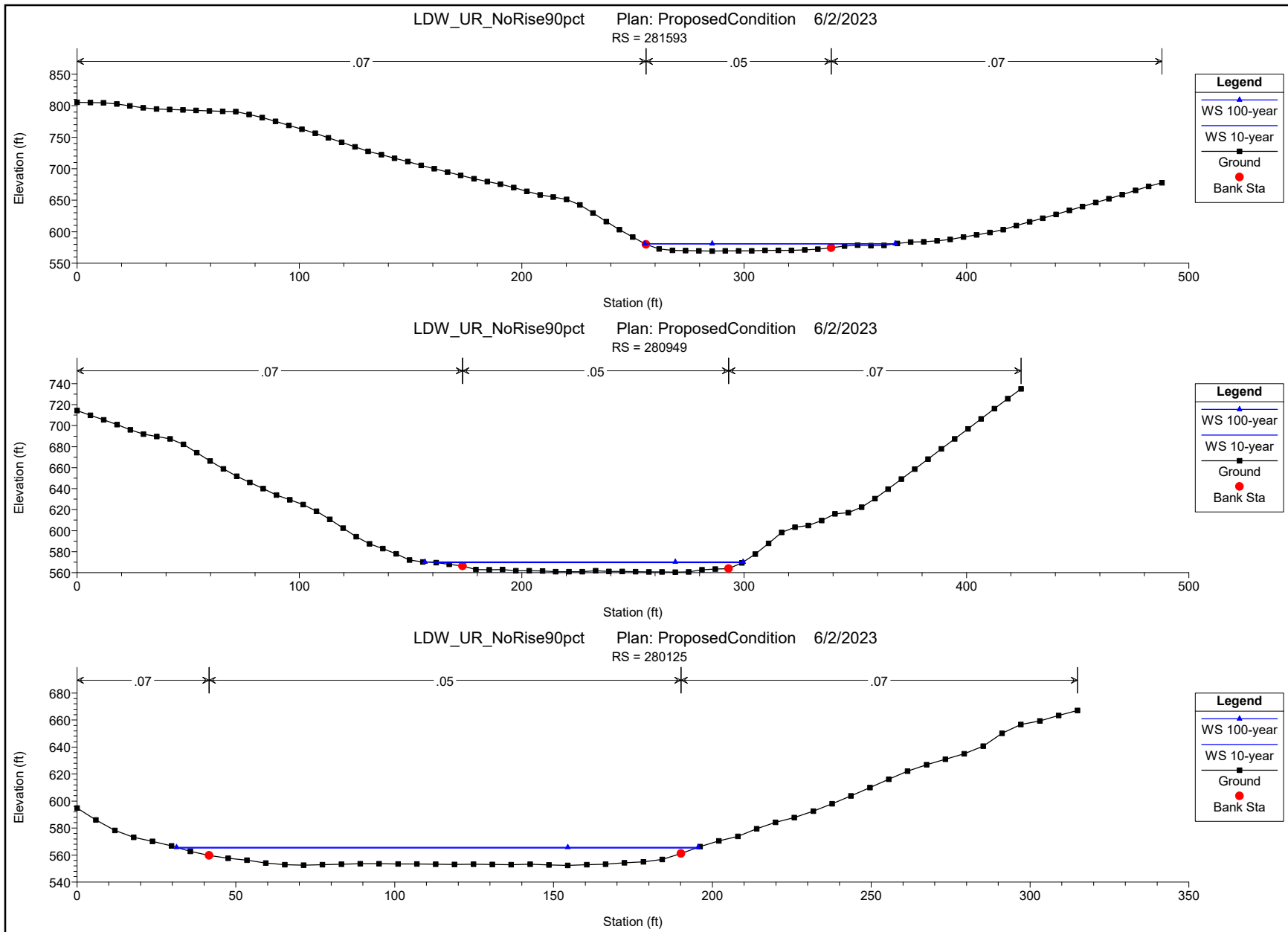


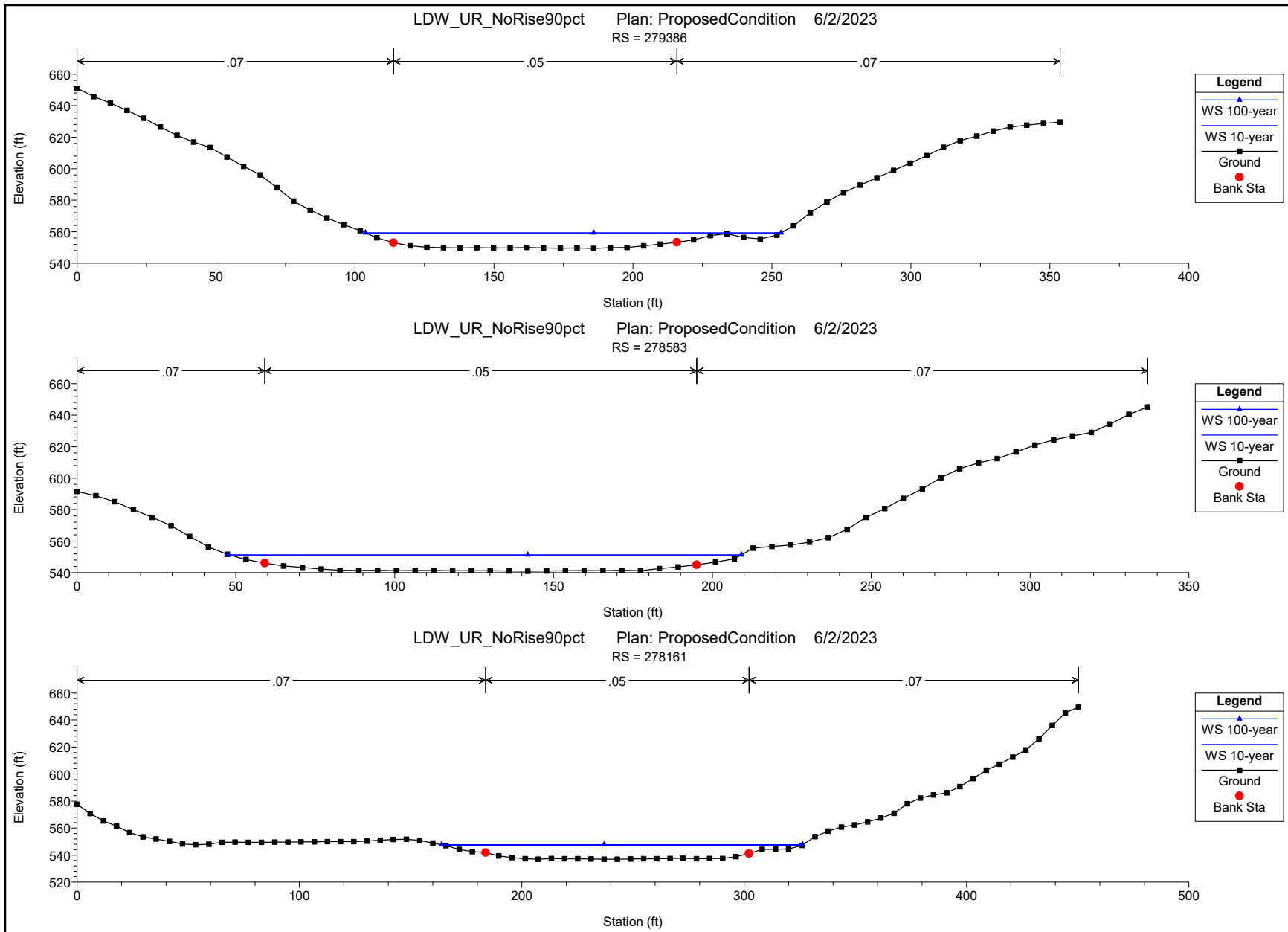


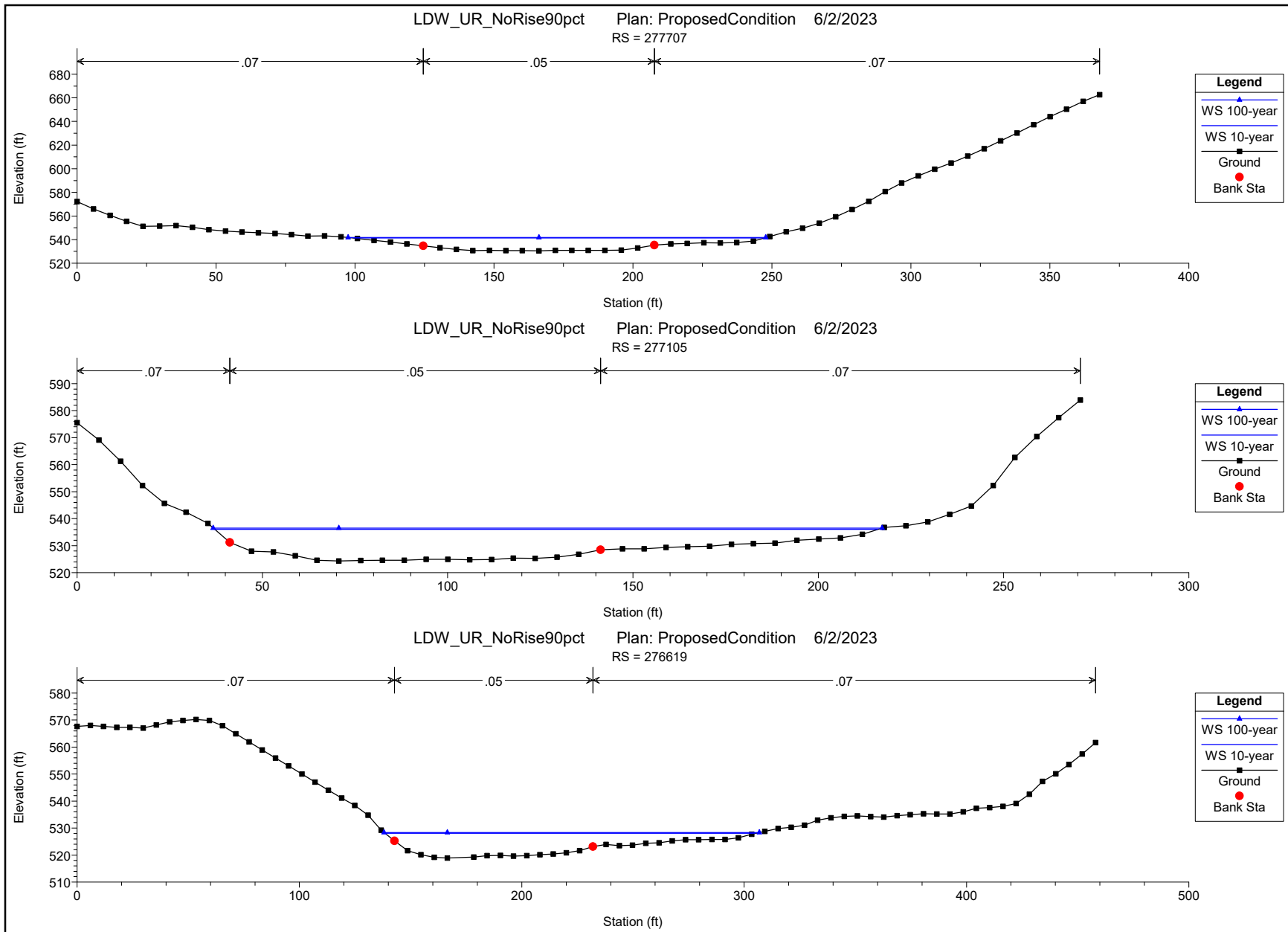


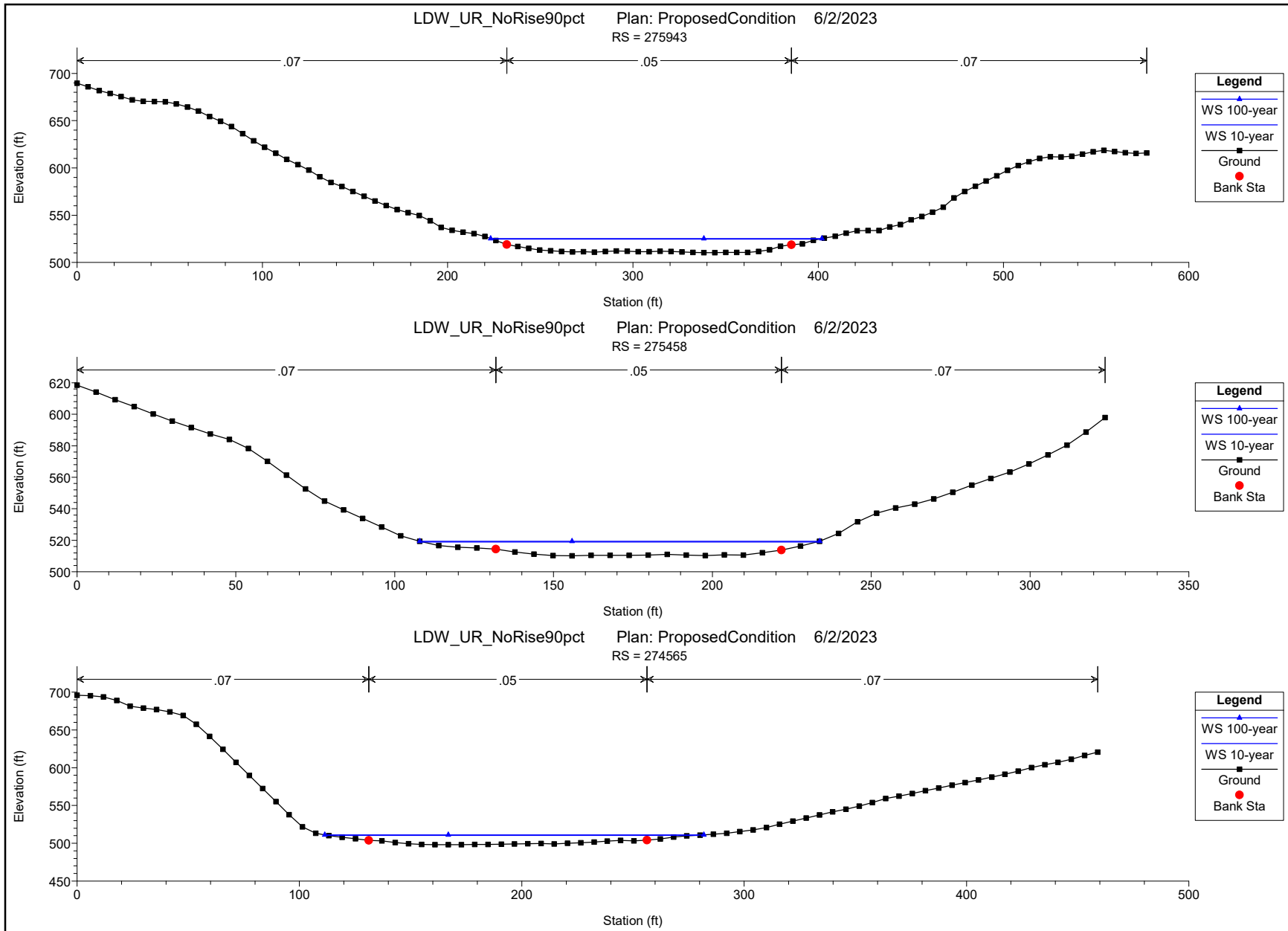


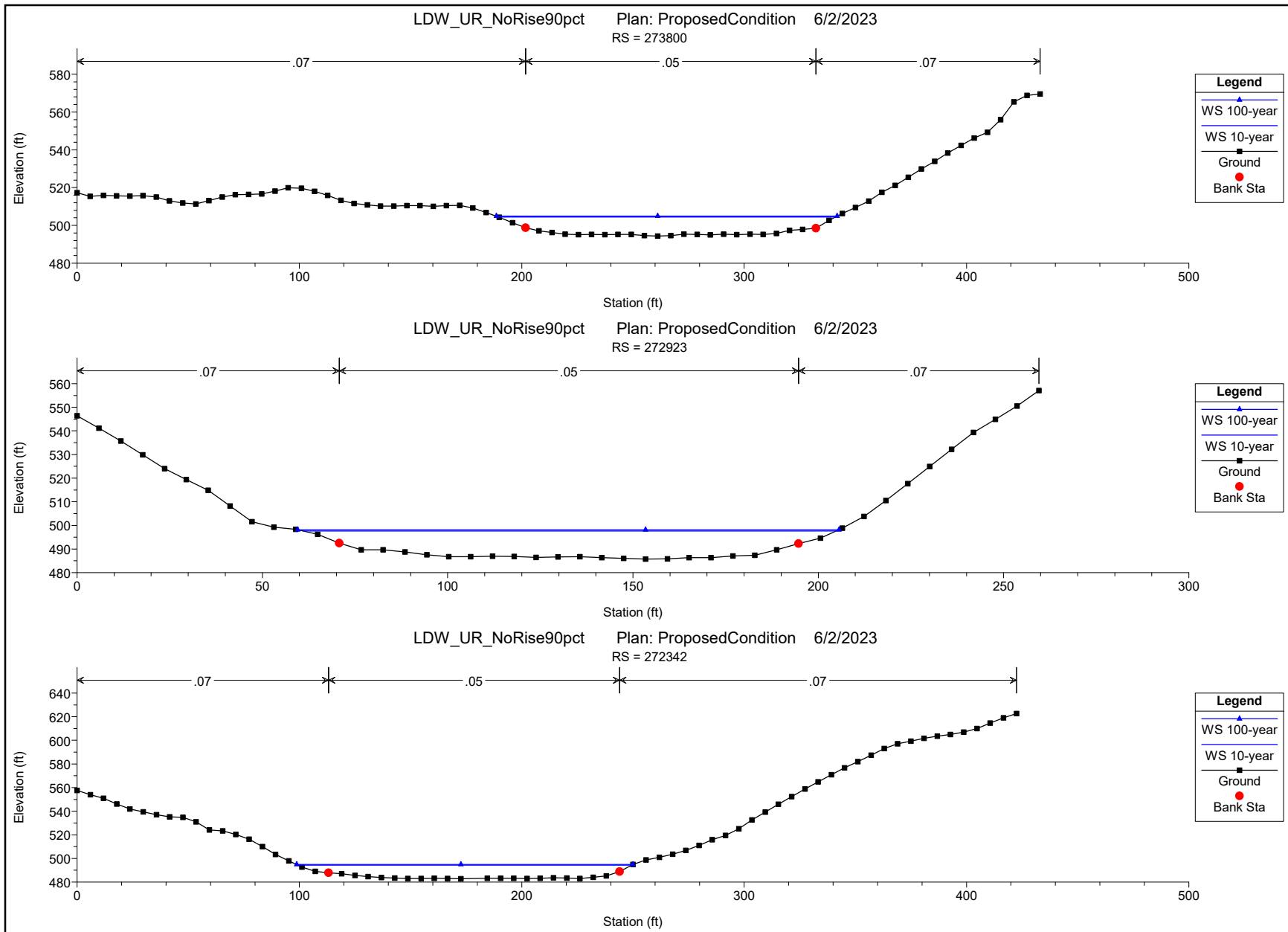


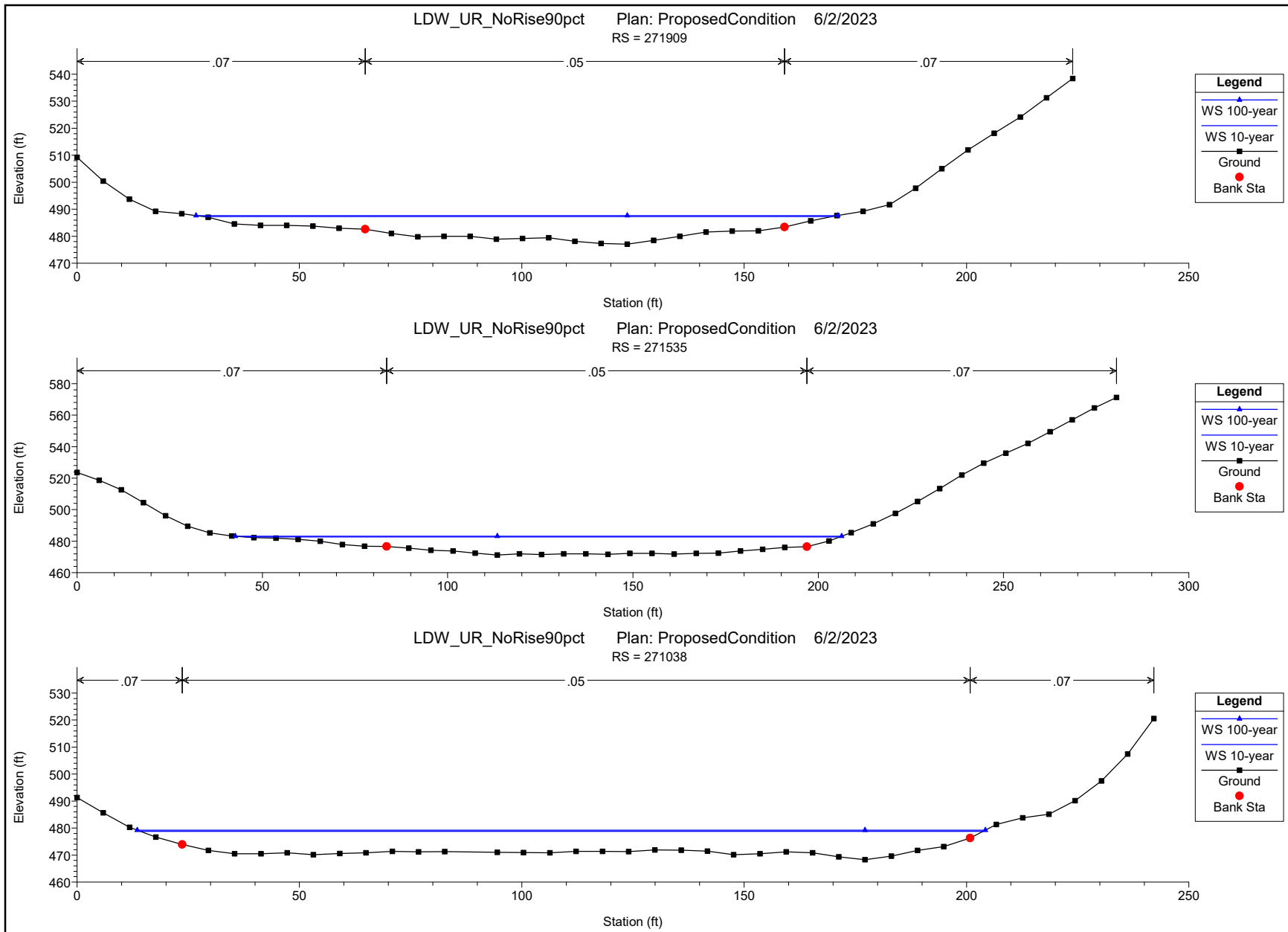


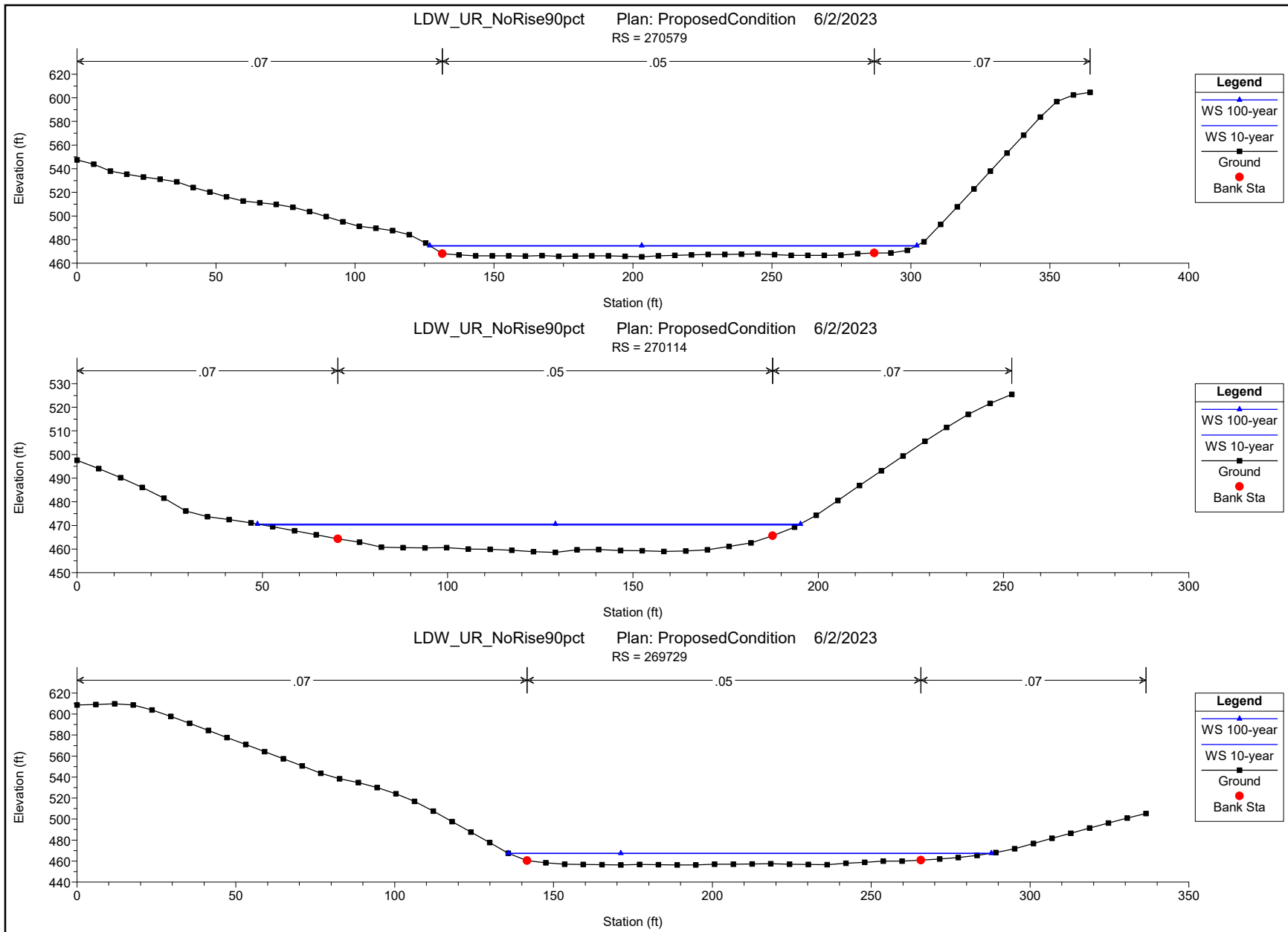




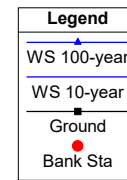
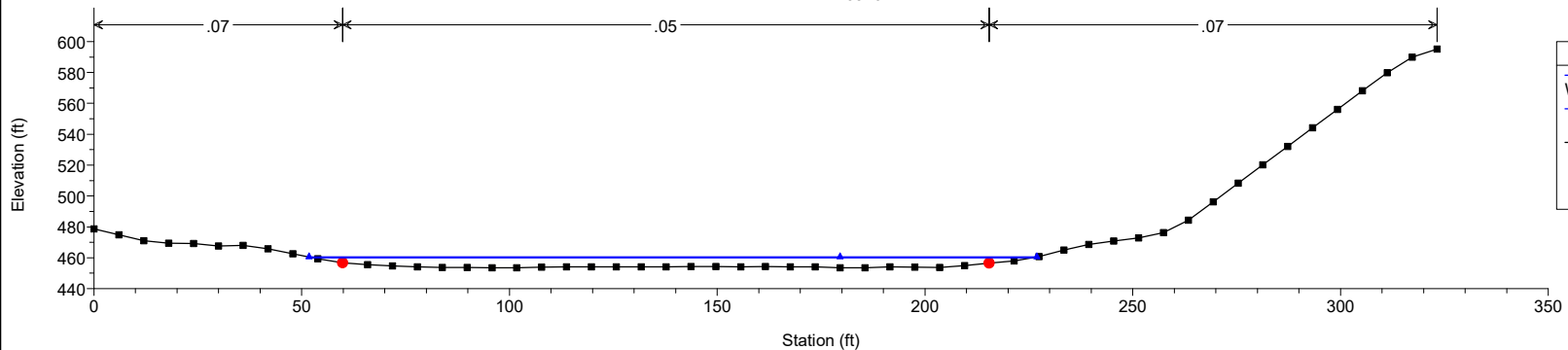




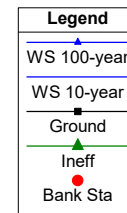
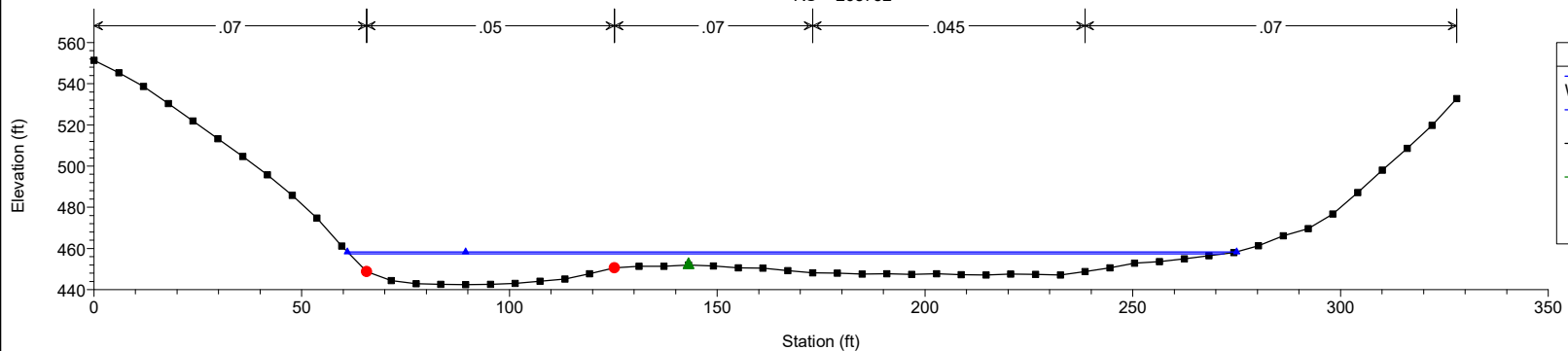




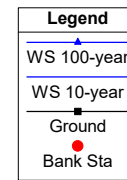
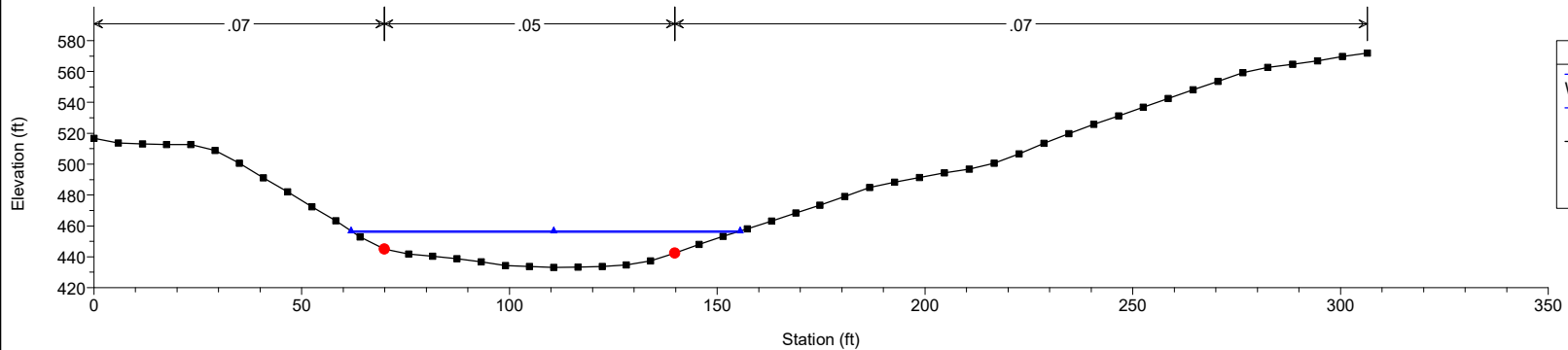
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
RS = 269264

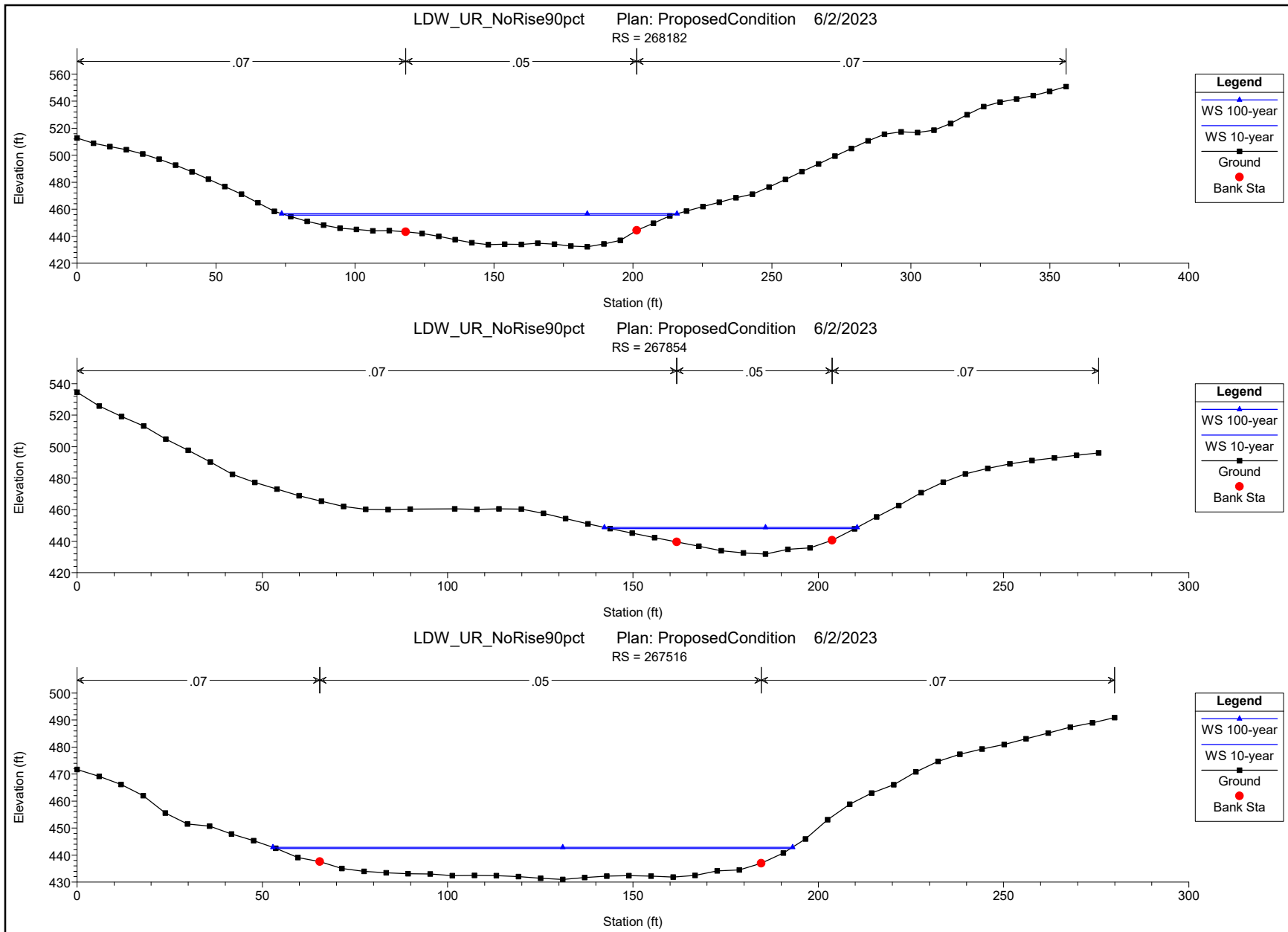


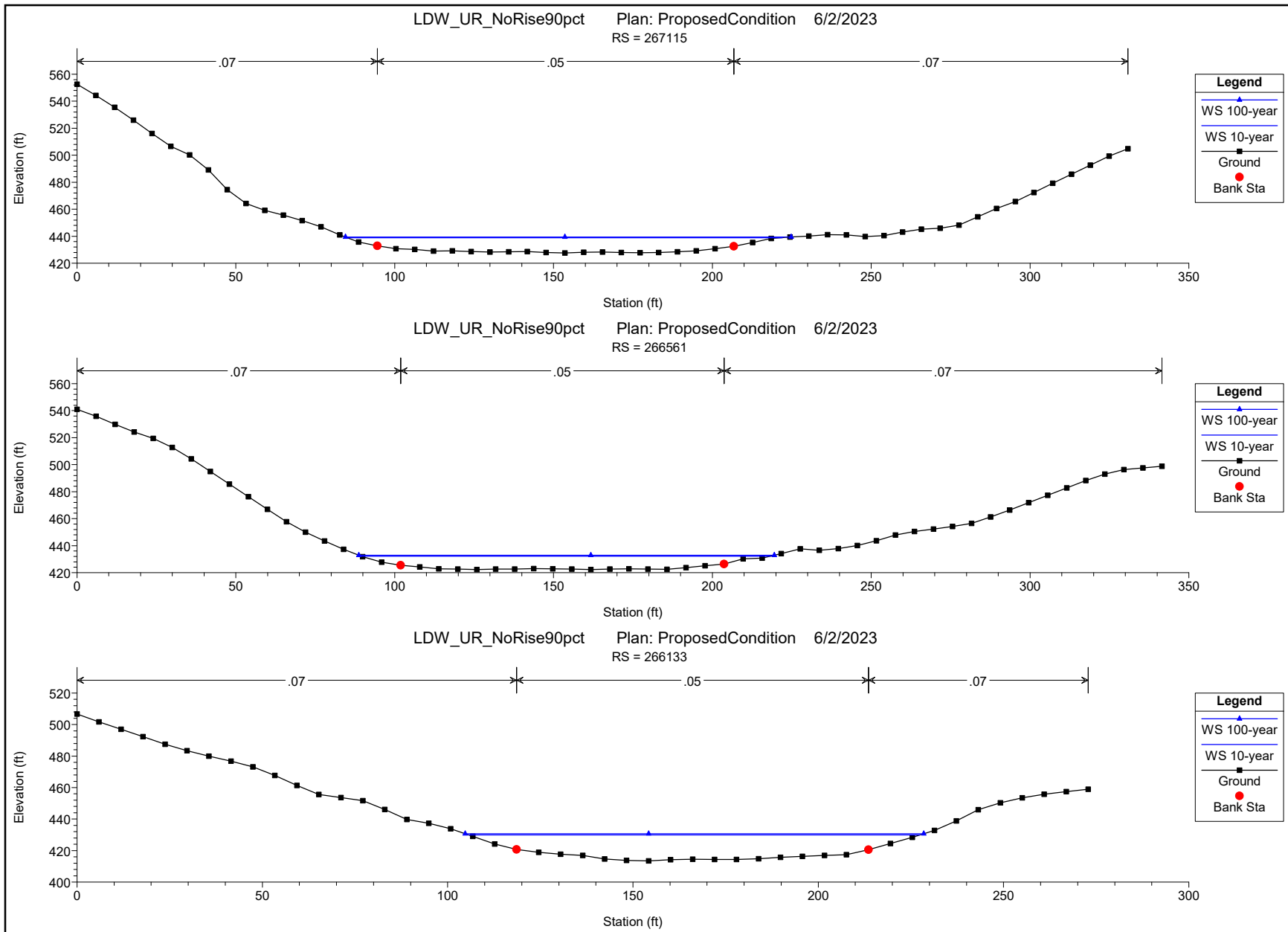
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
RS = 268752

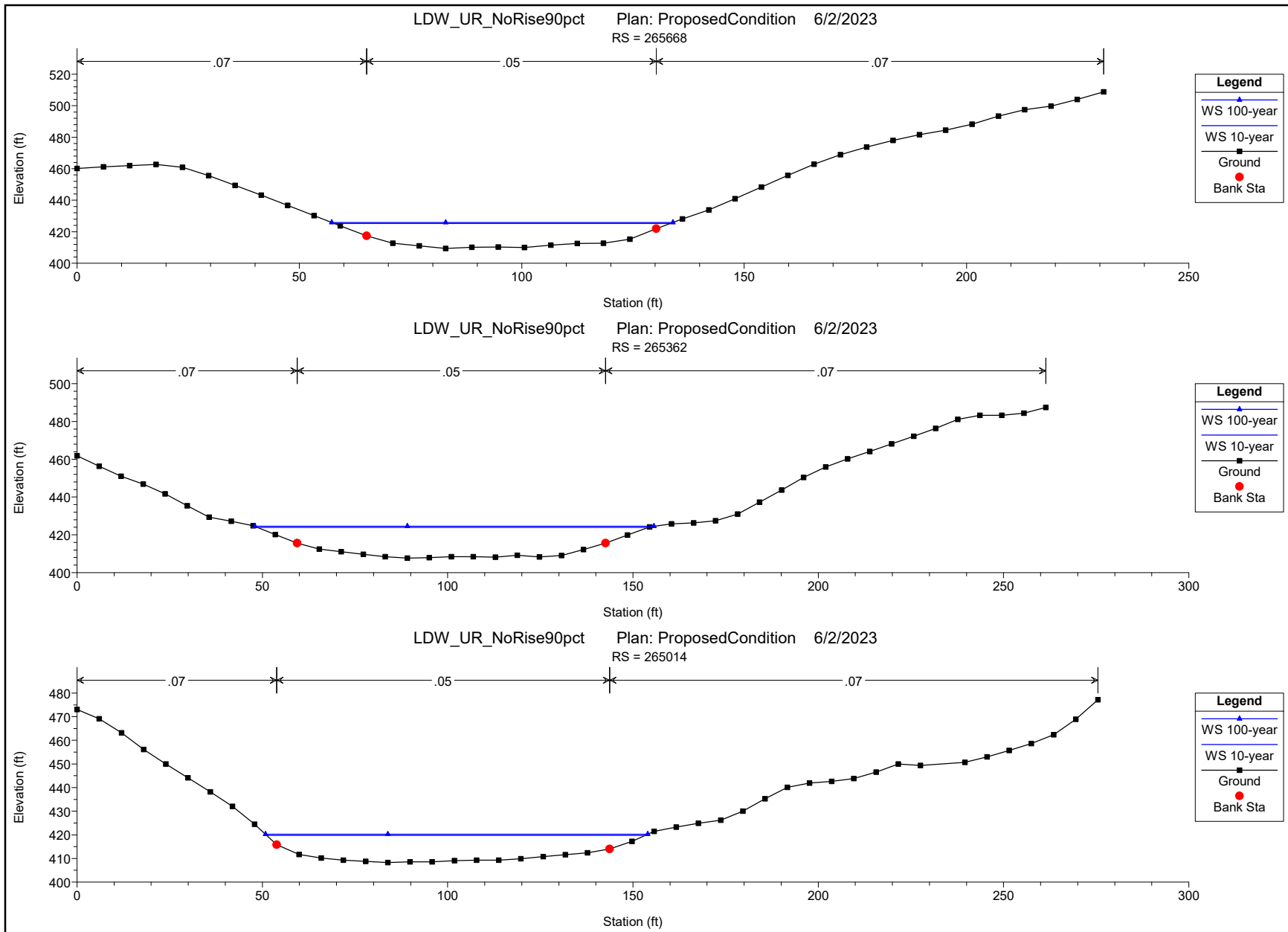


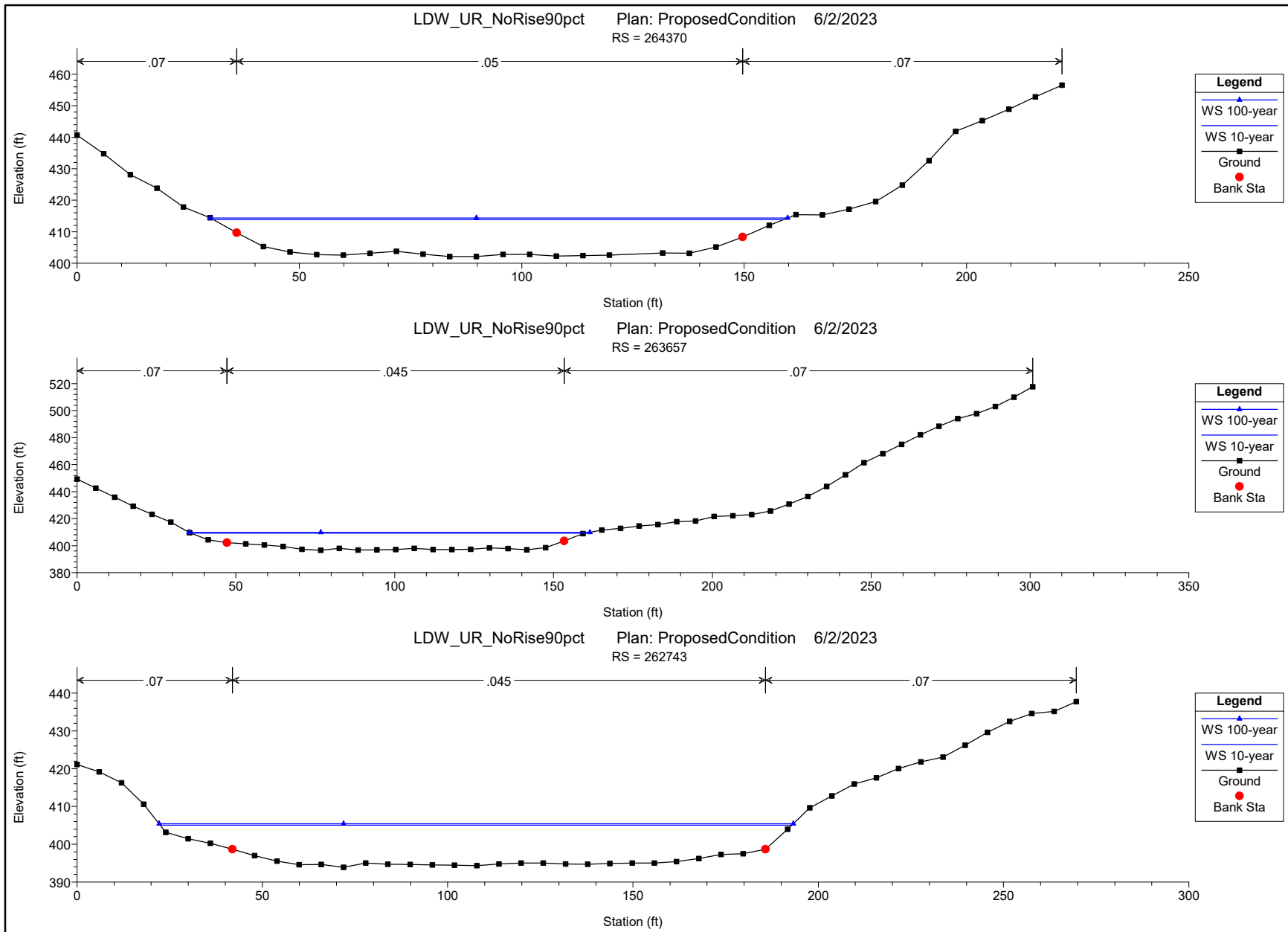
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
RS = 268388

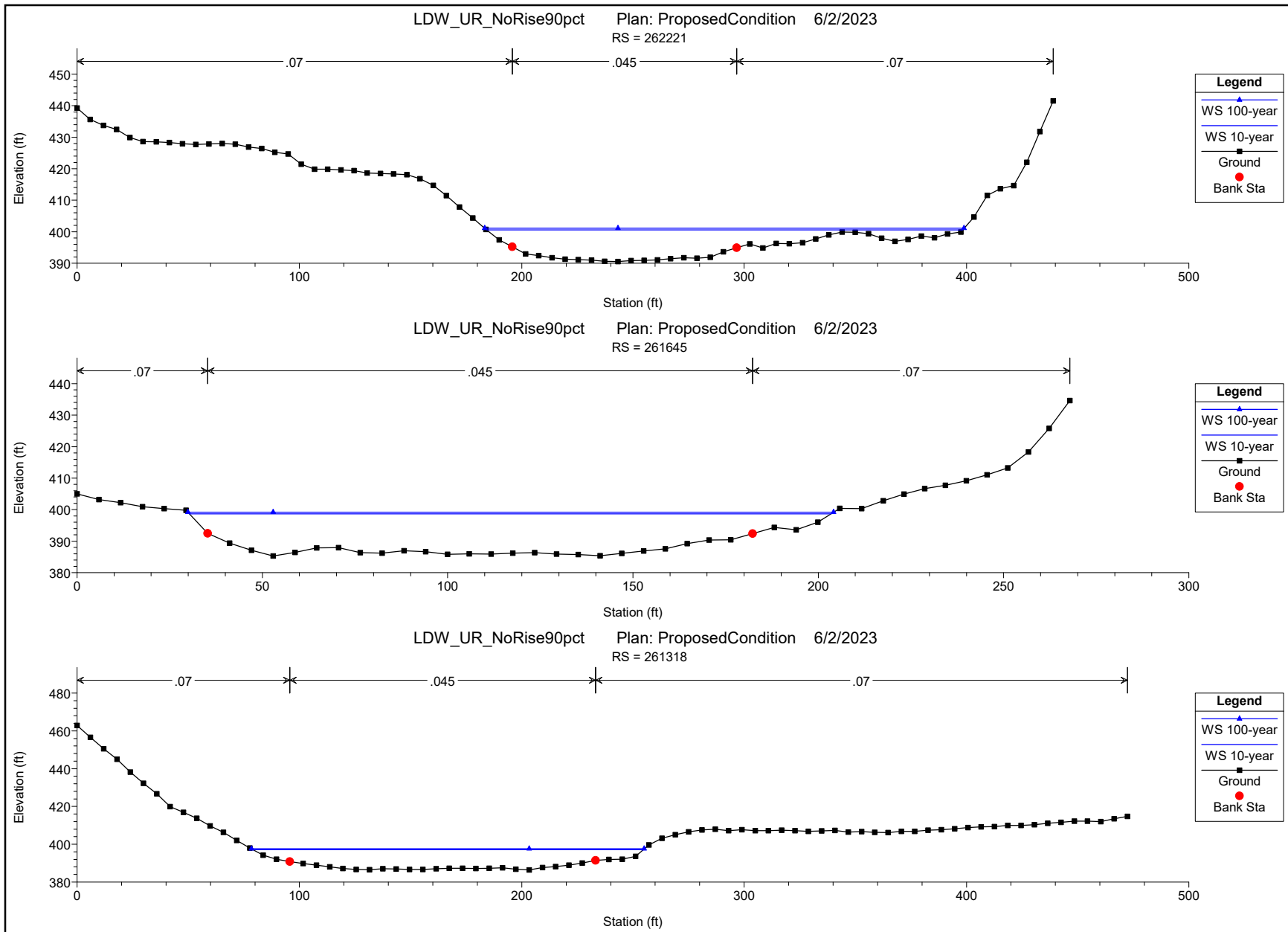


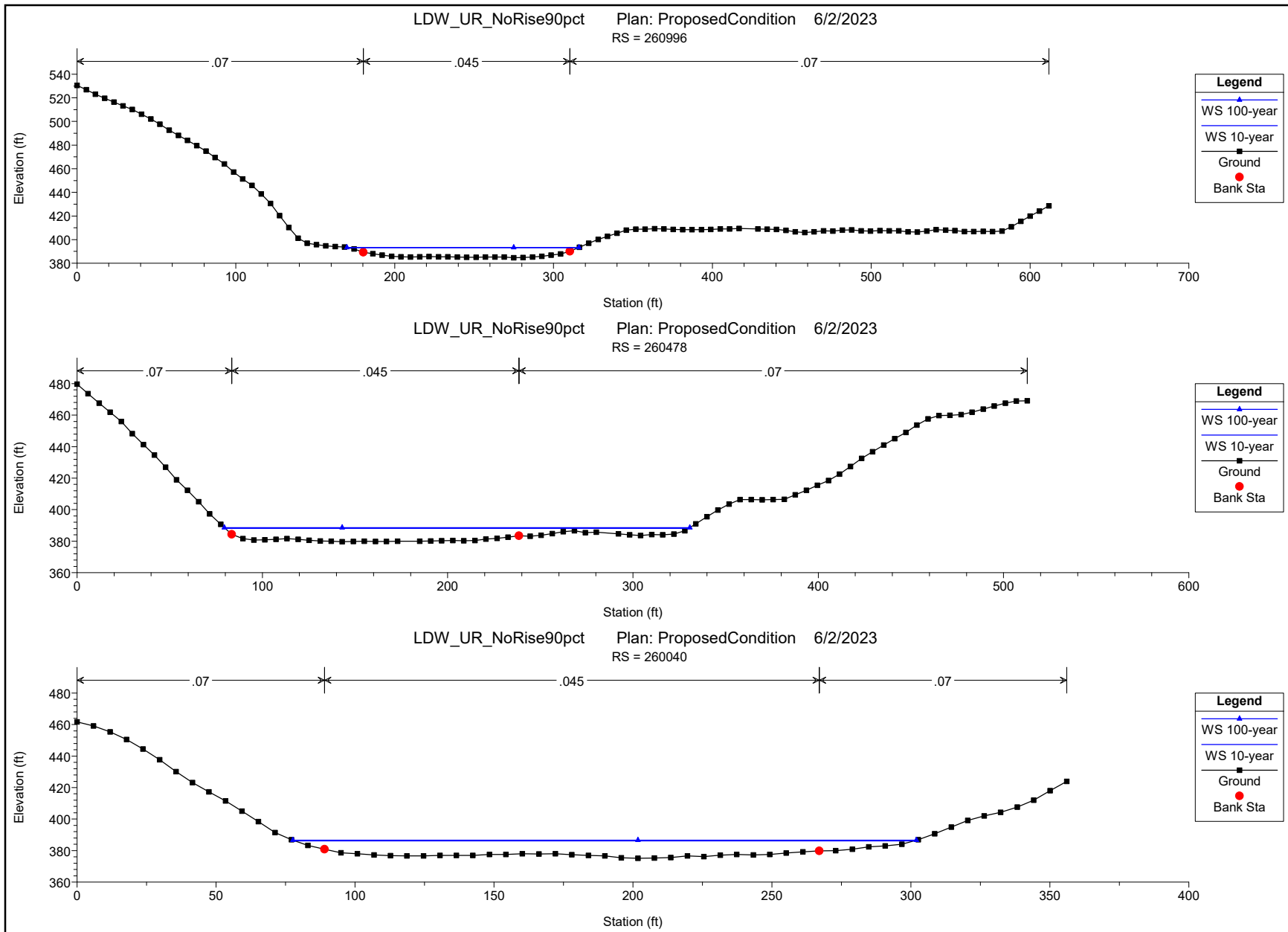


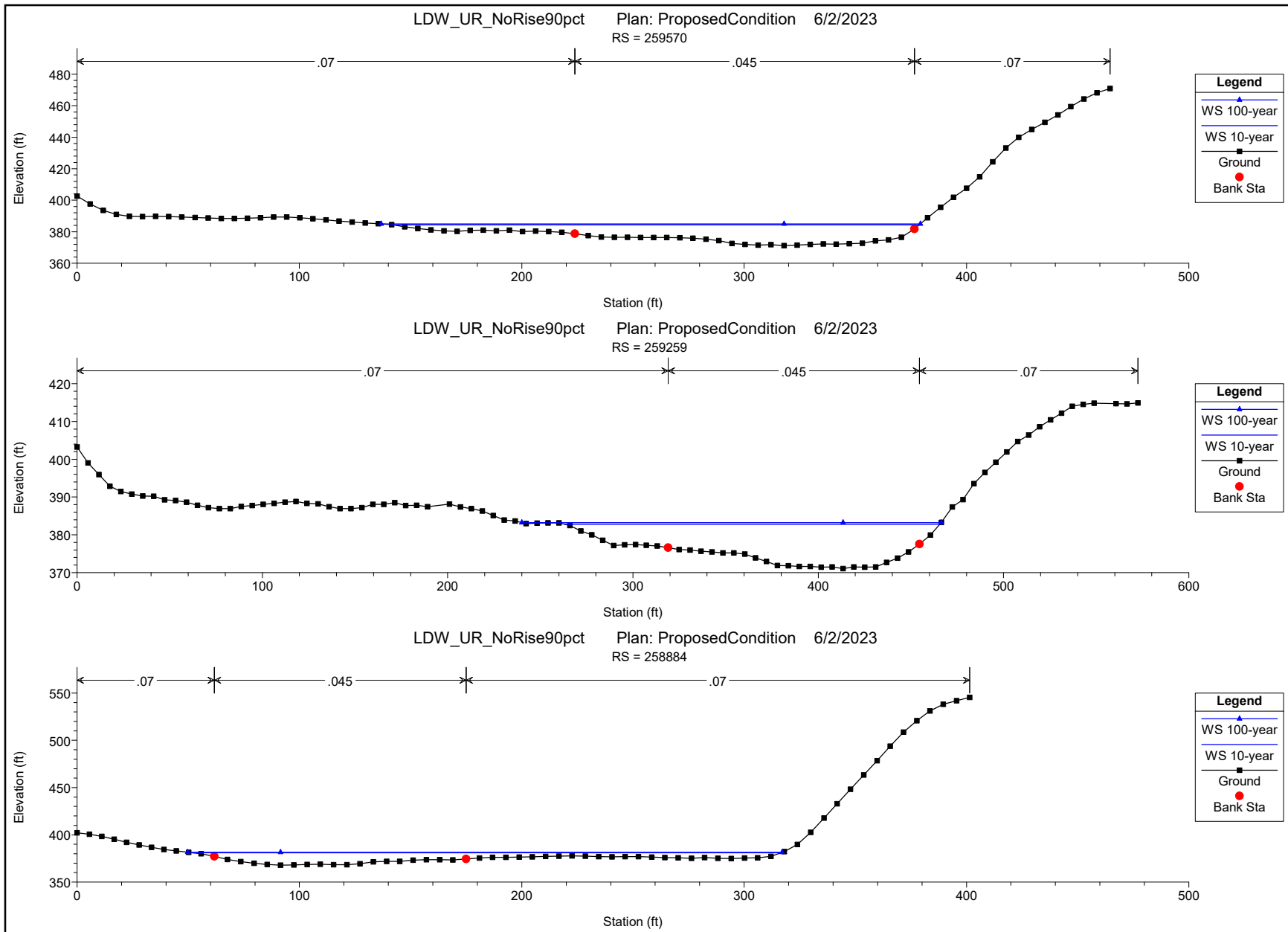


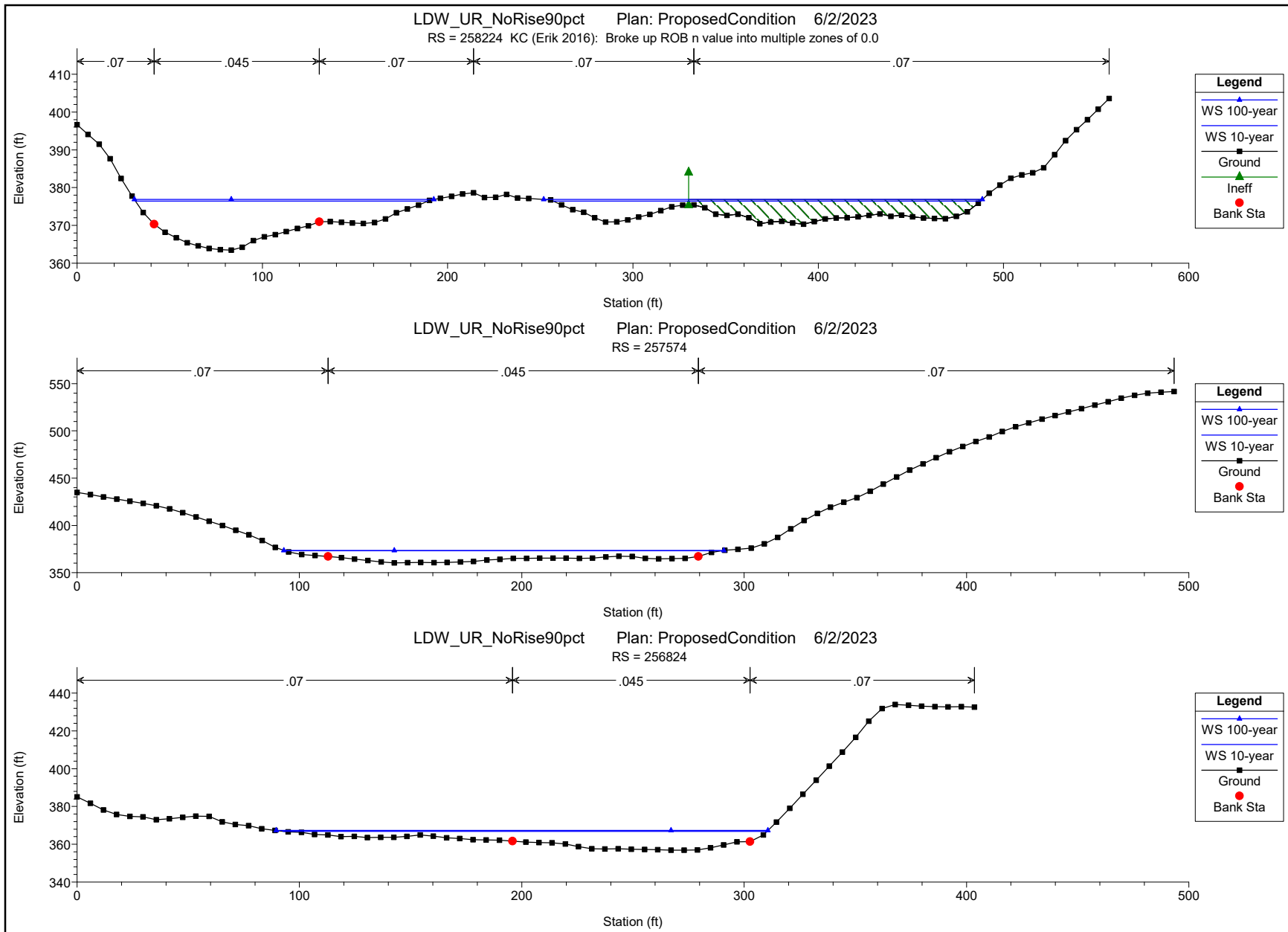


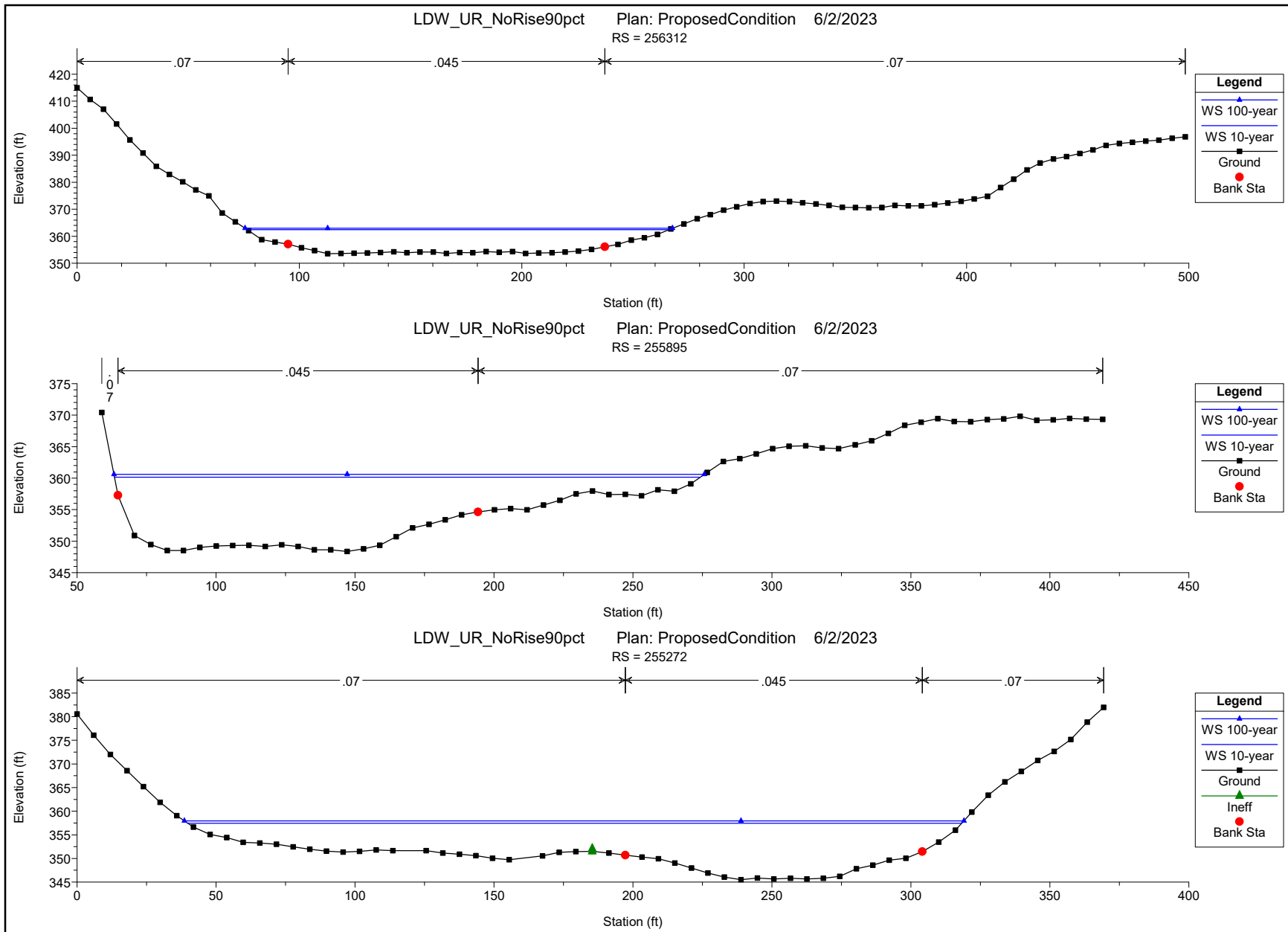


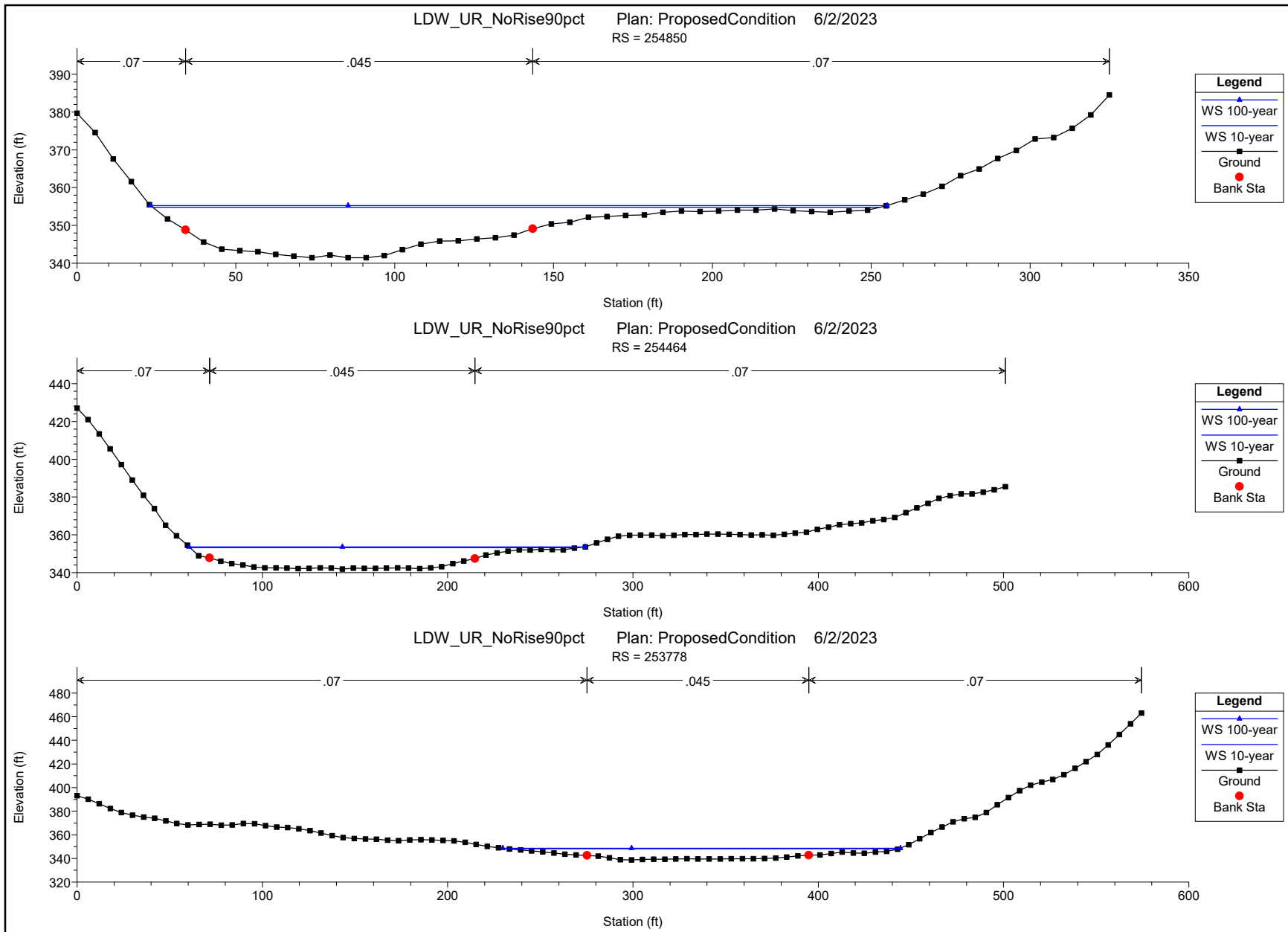


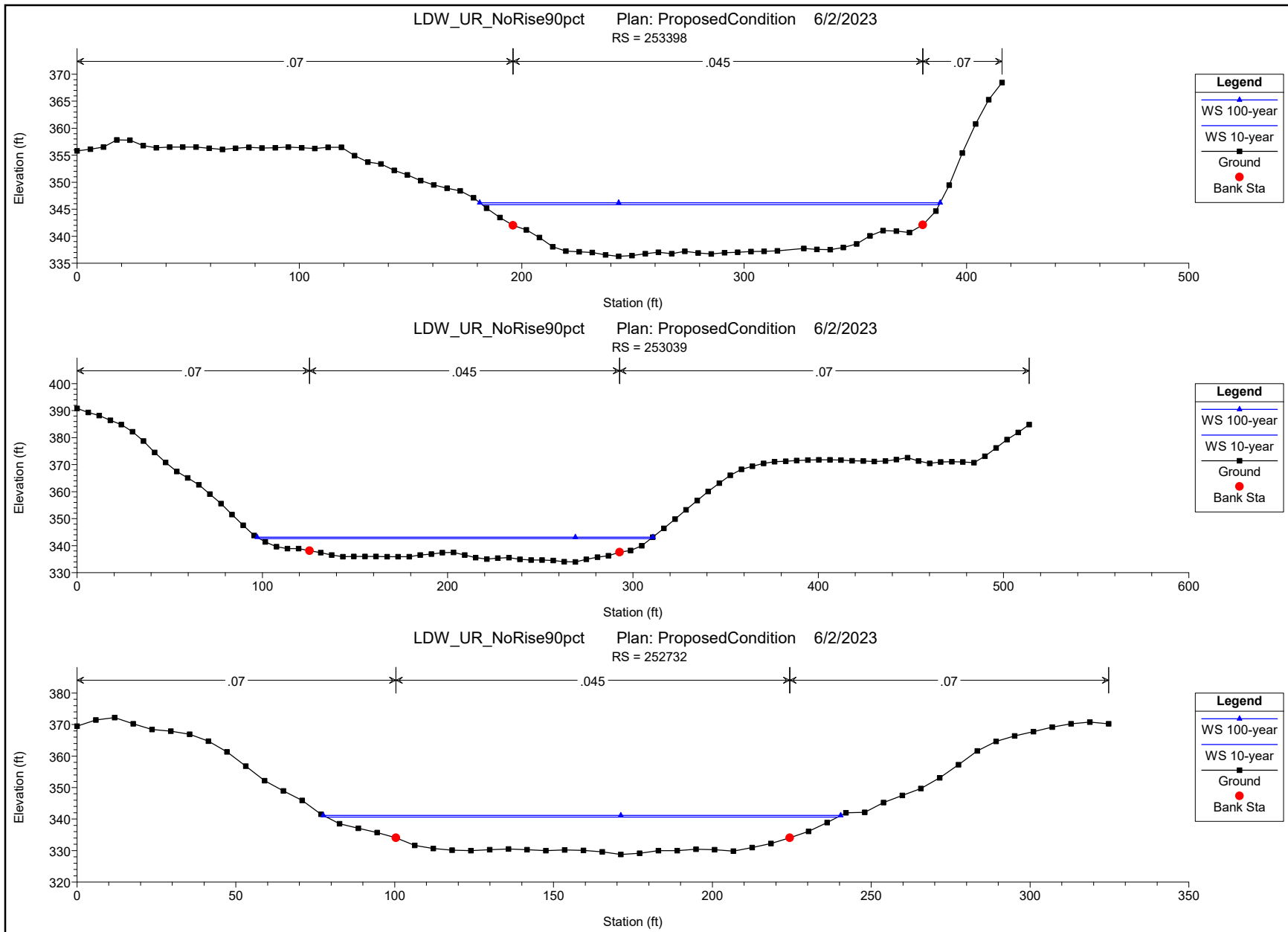


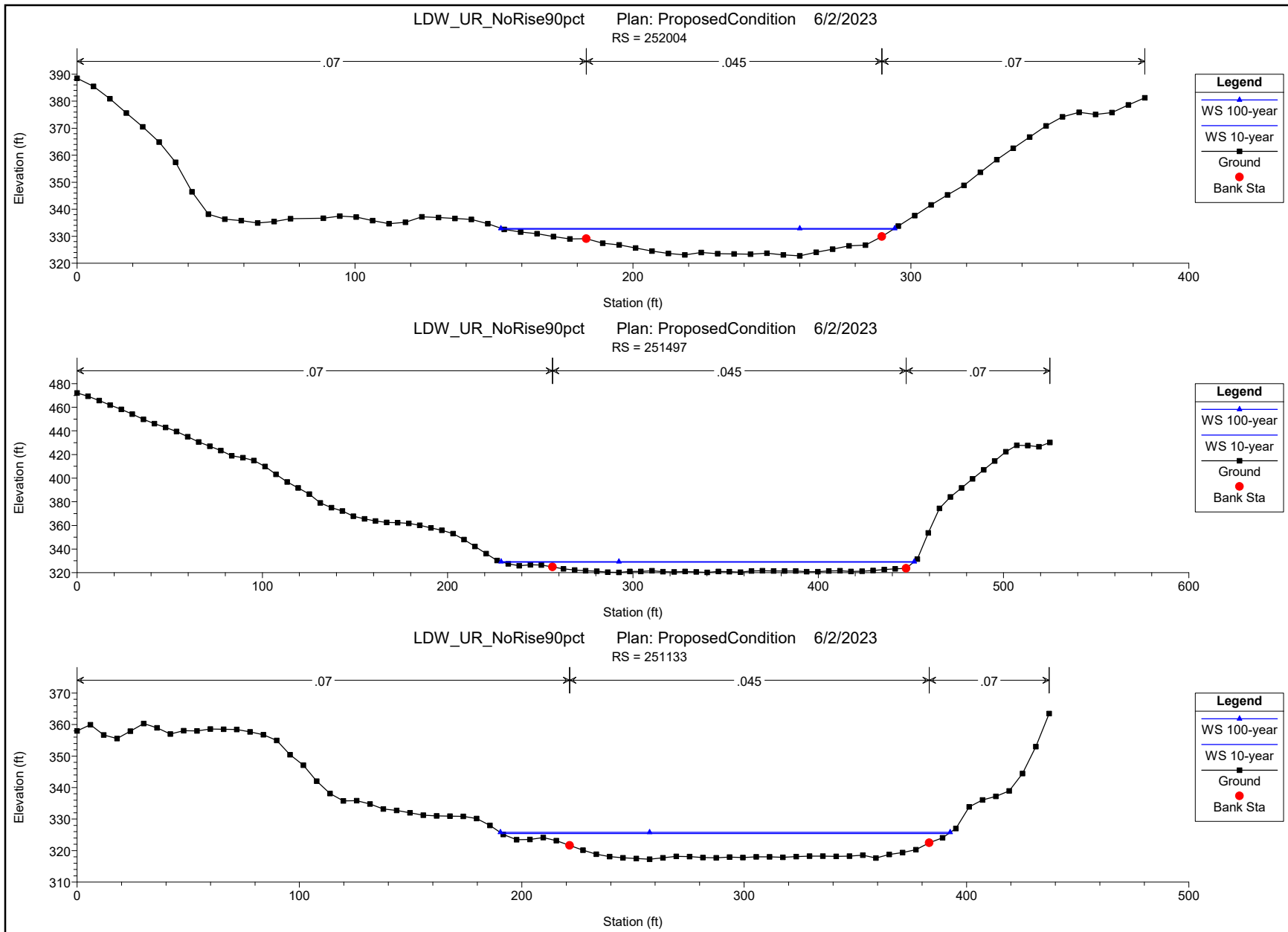


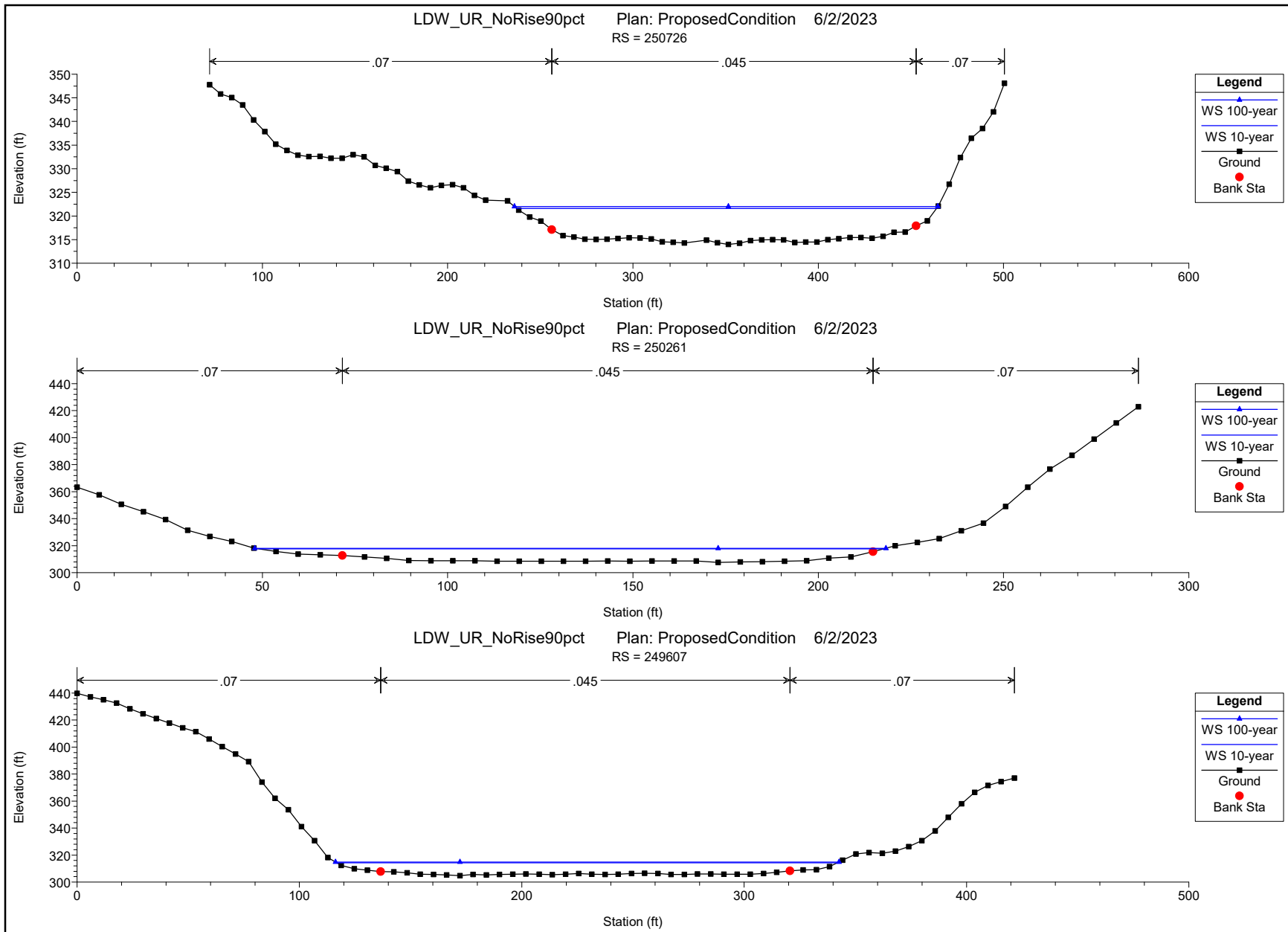


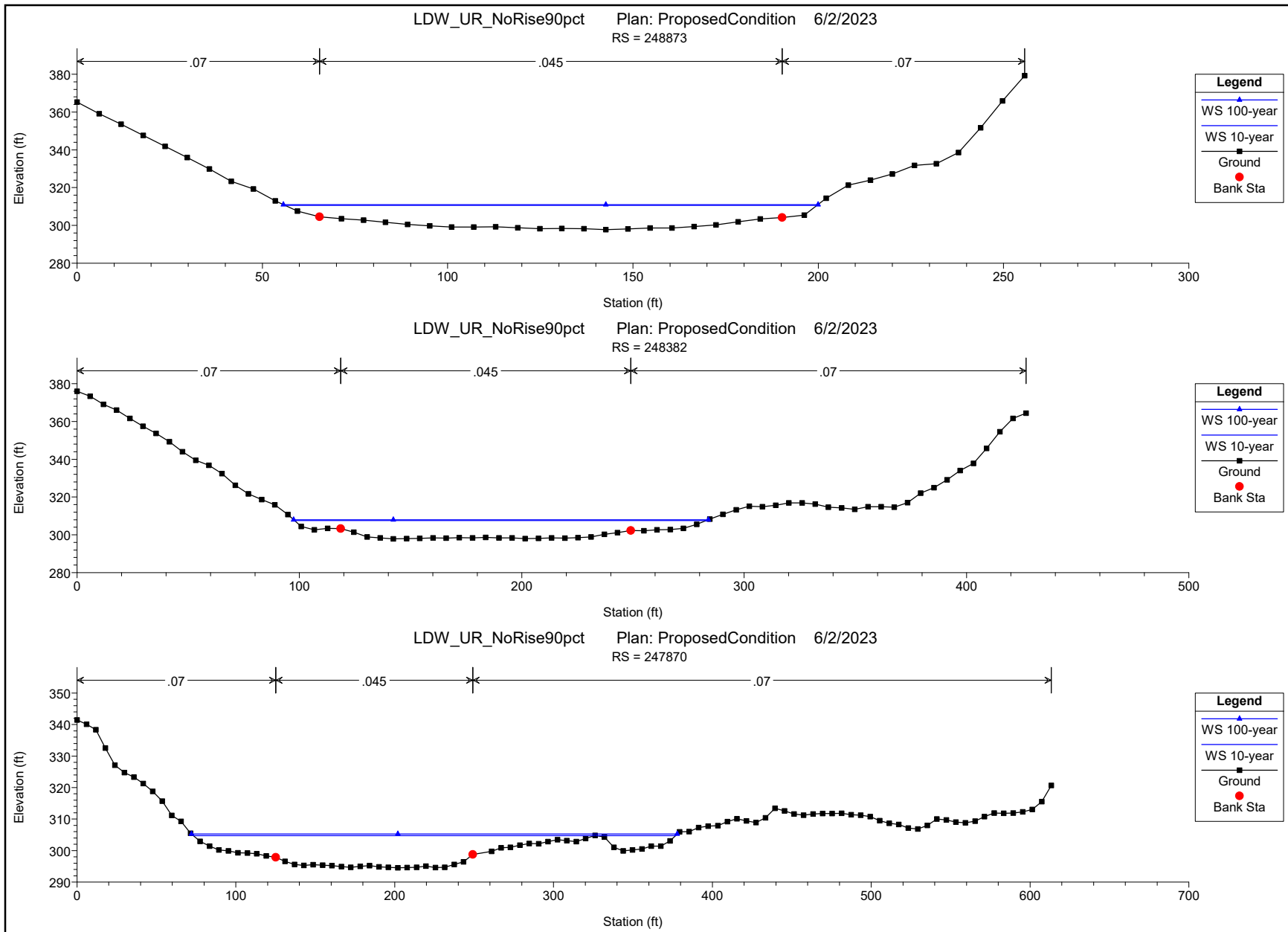


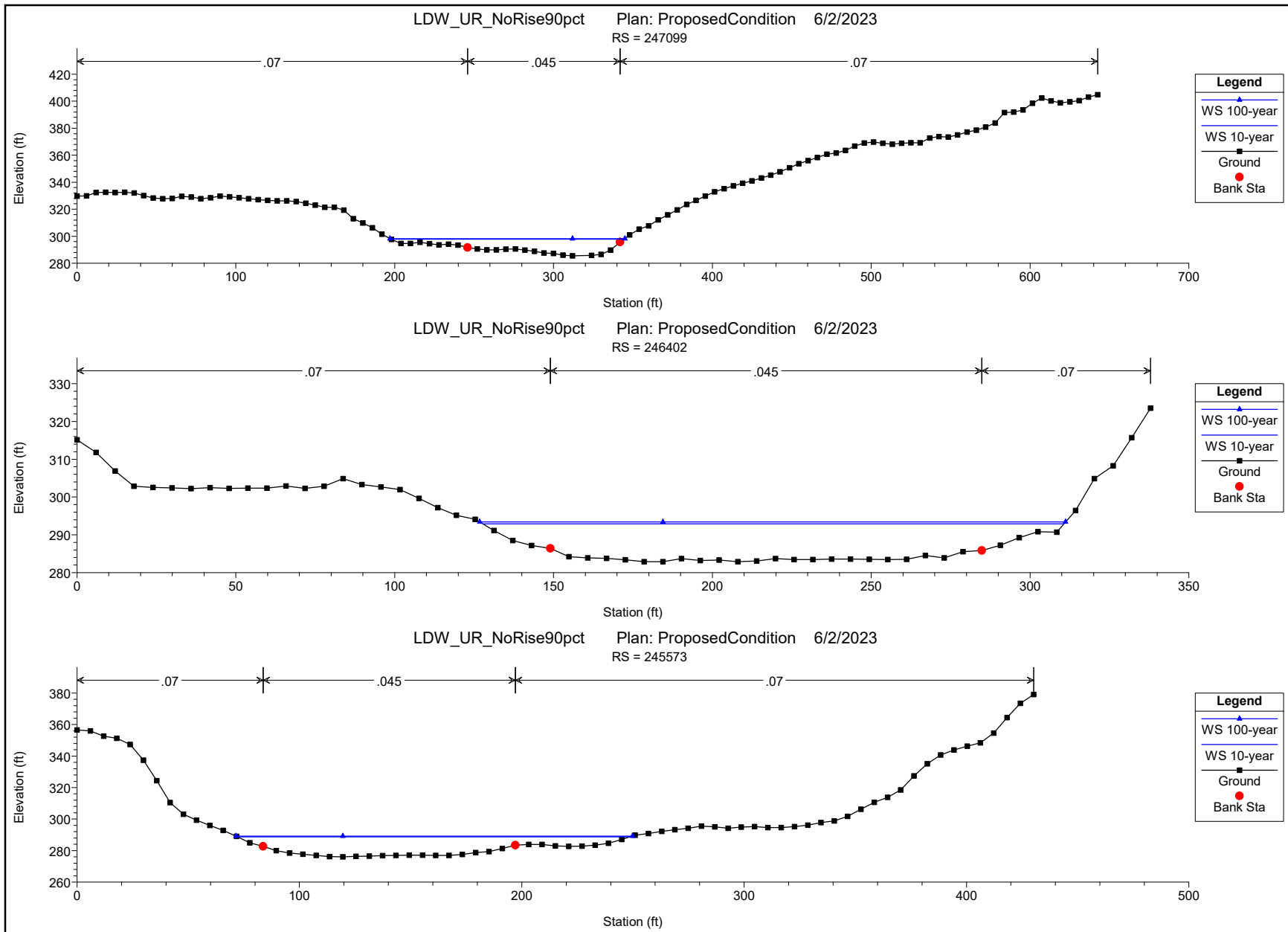


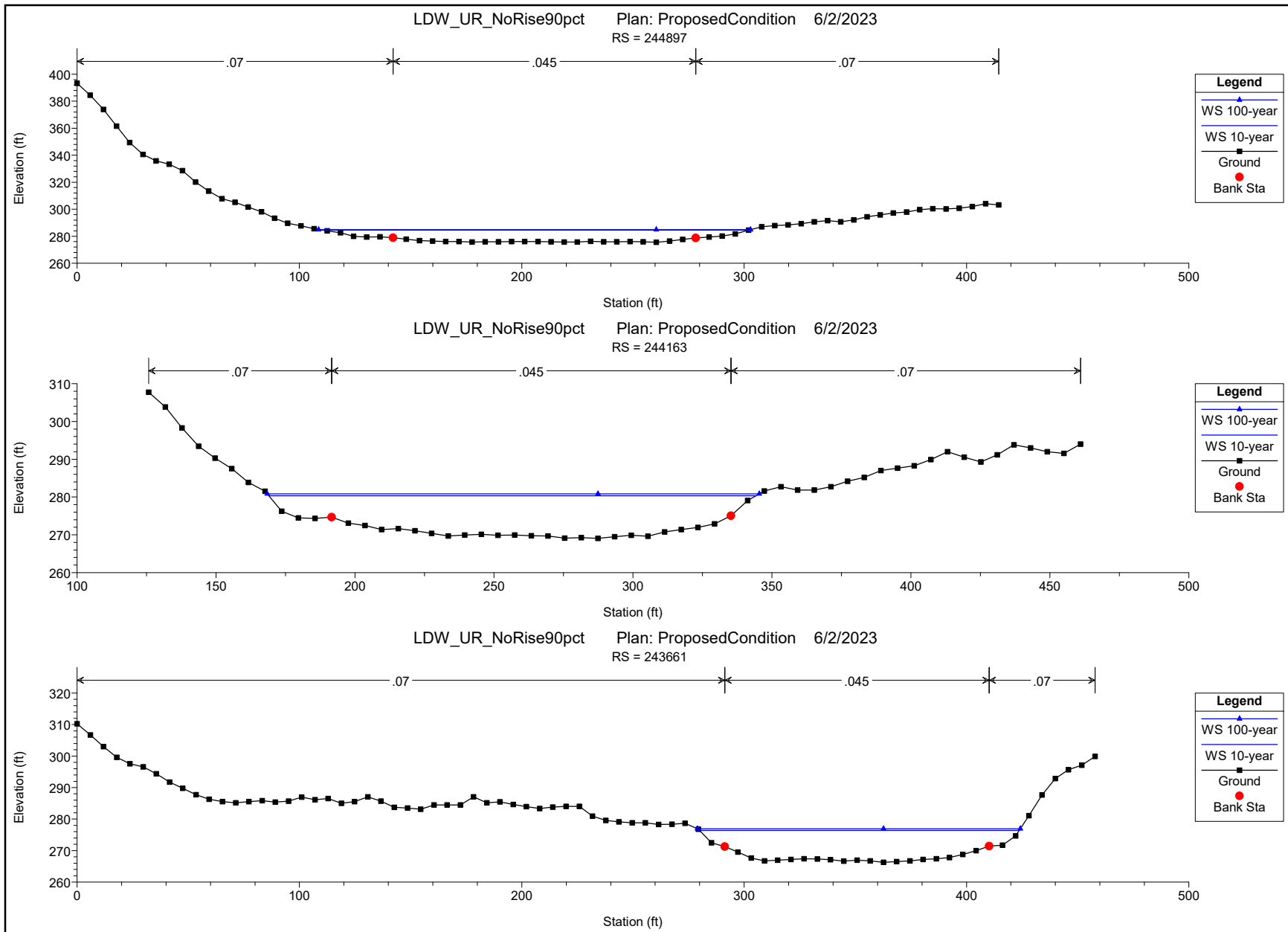


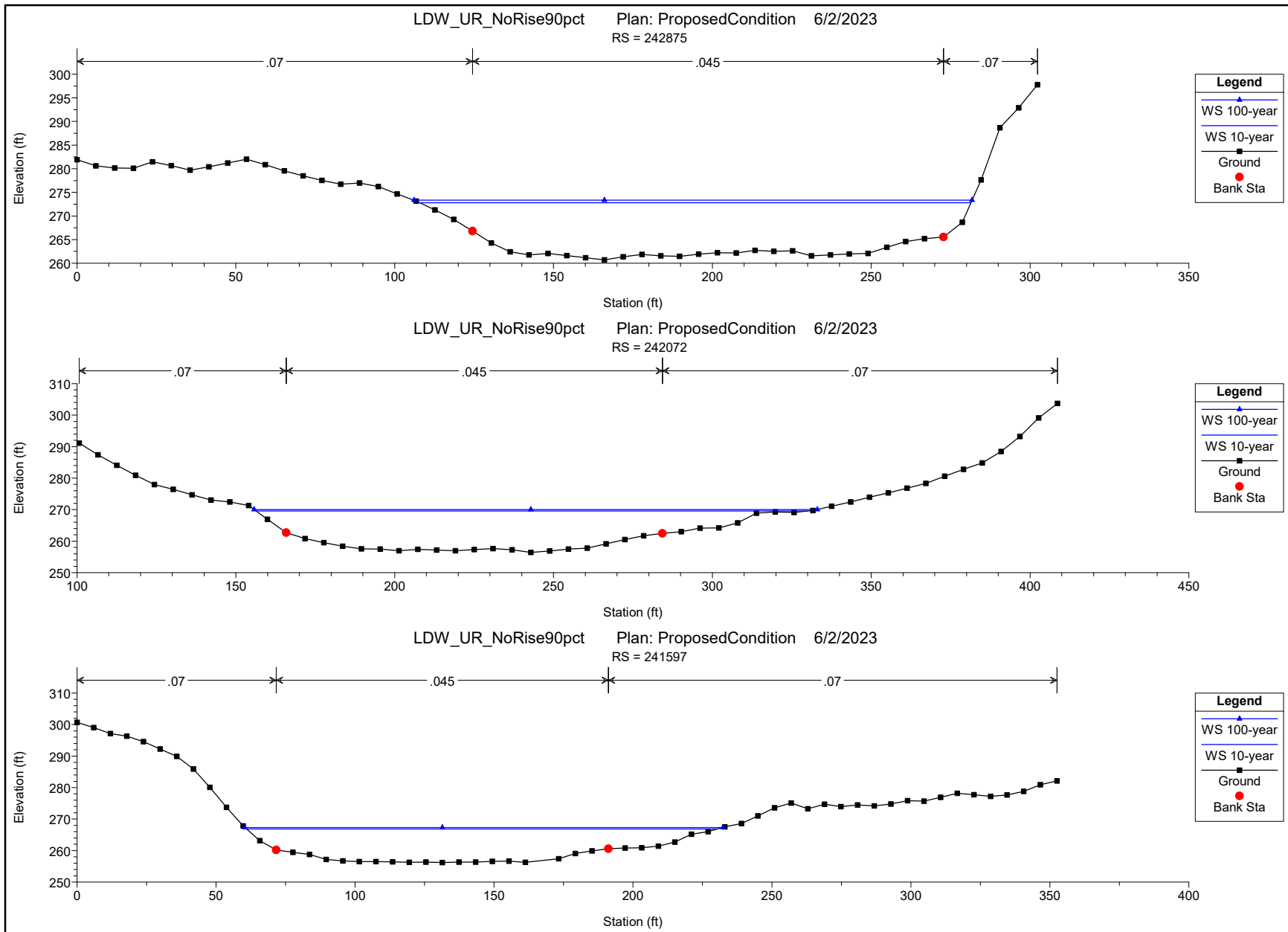


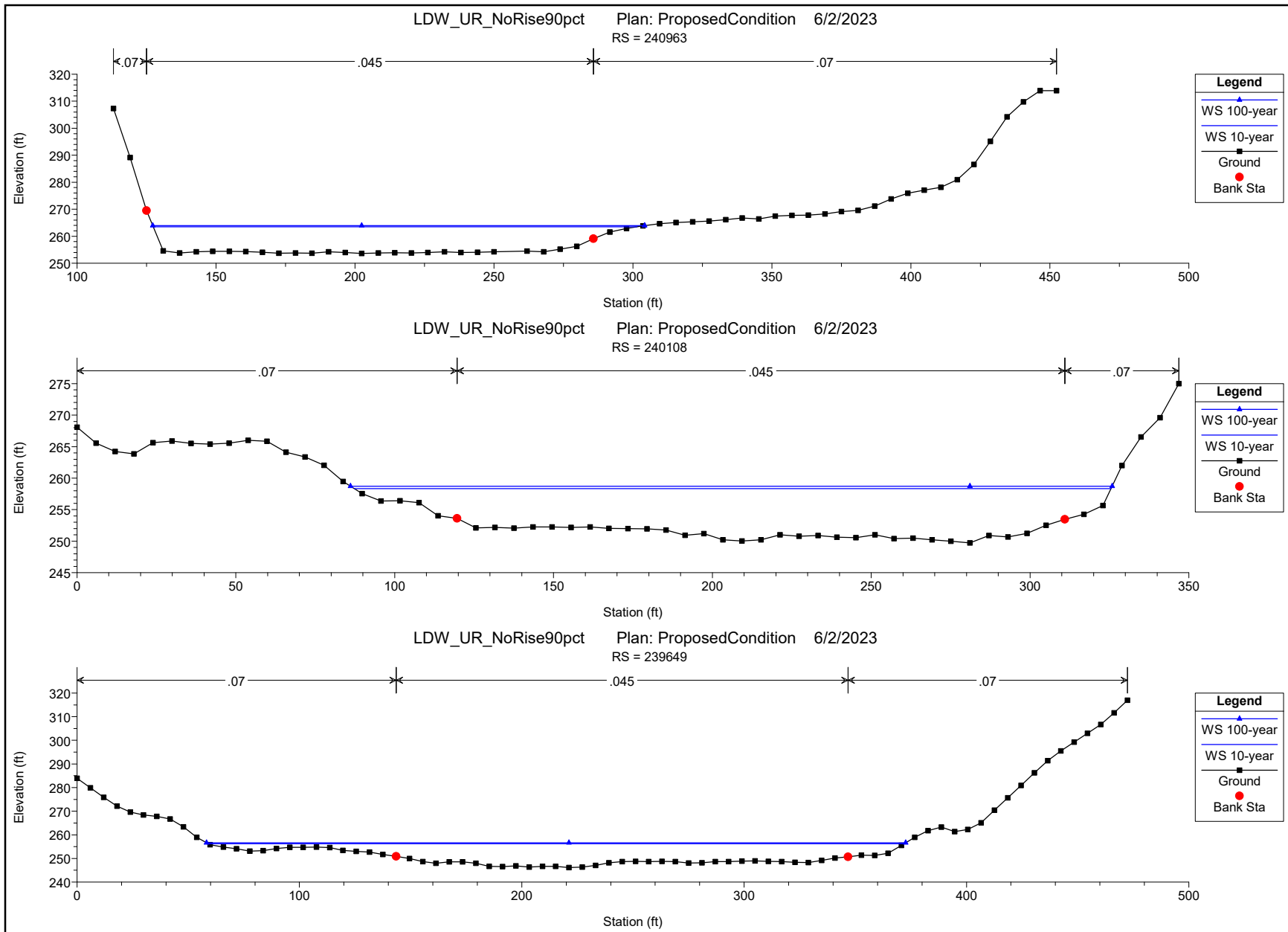


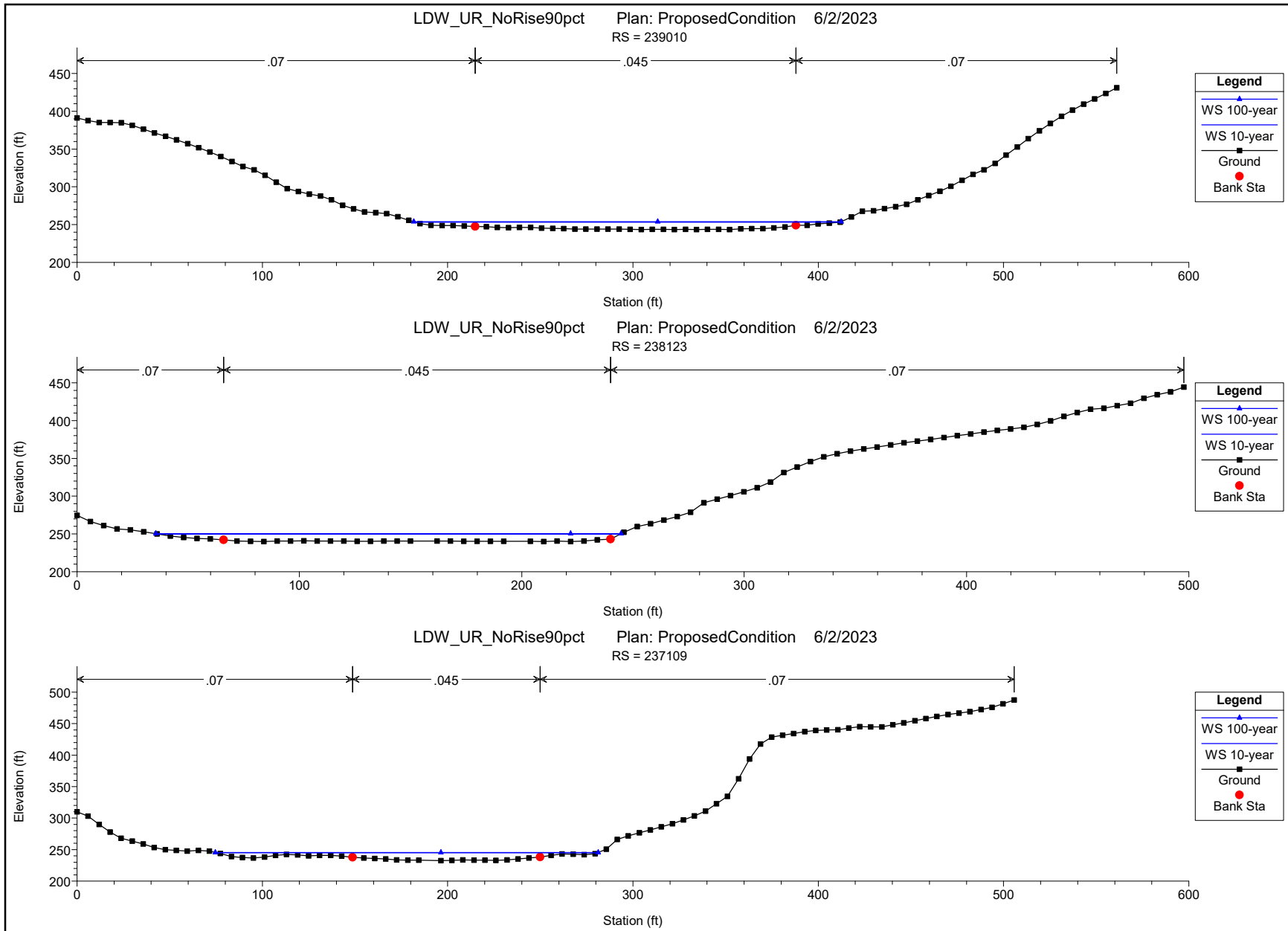


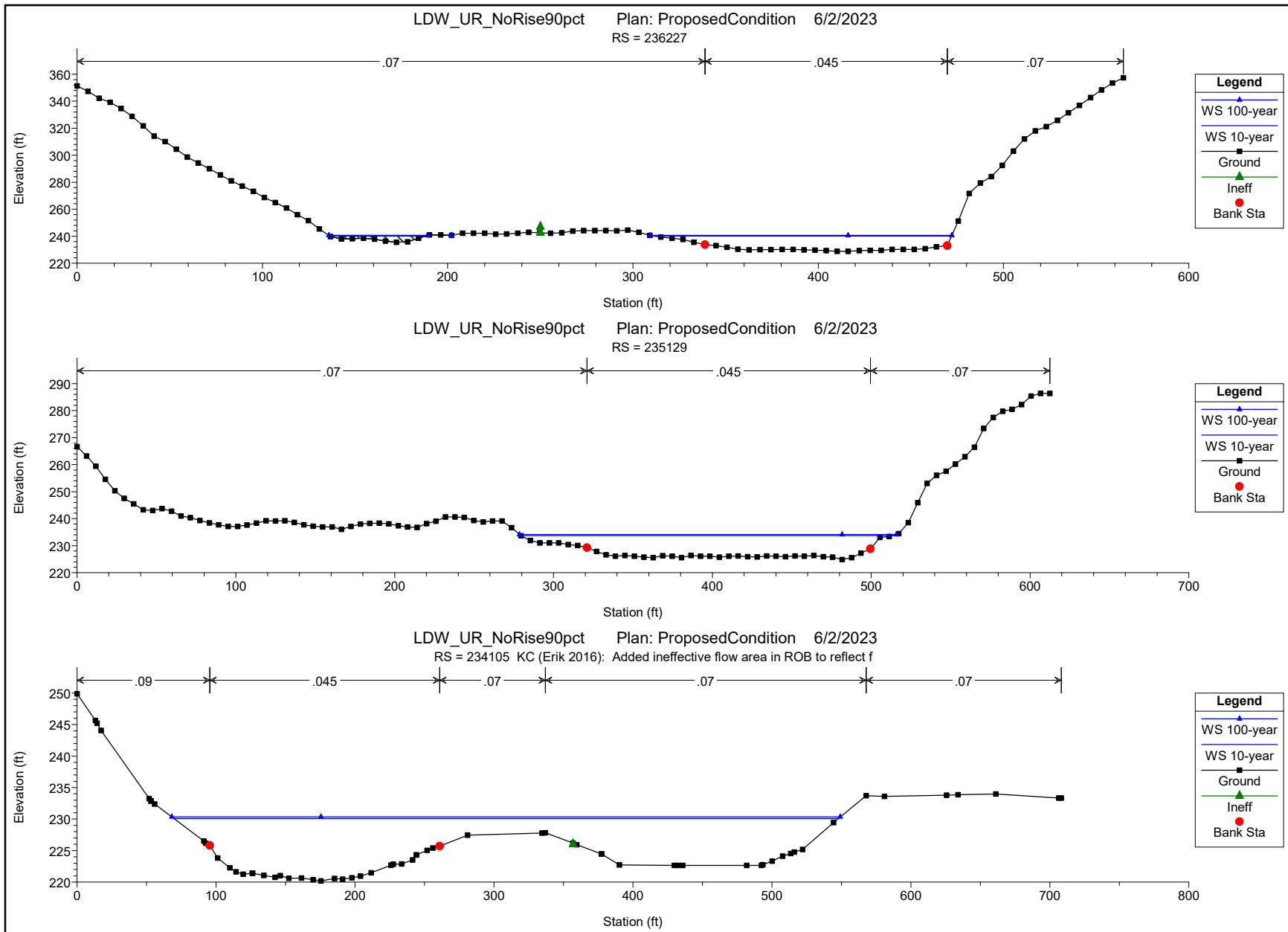


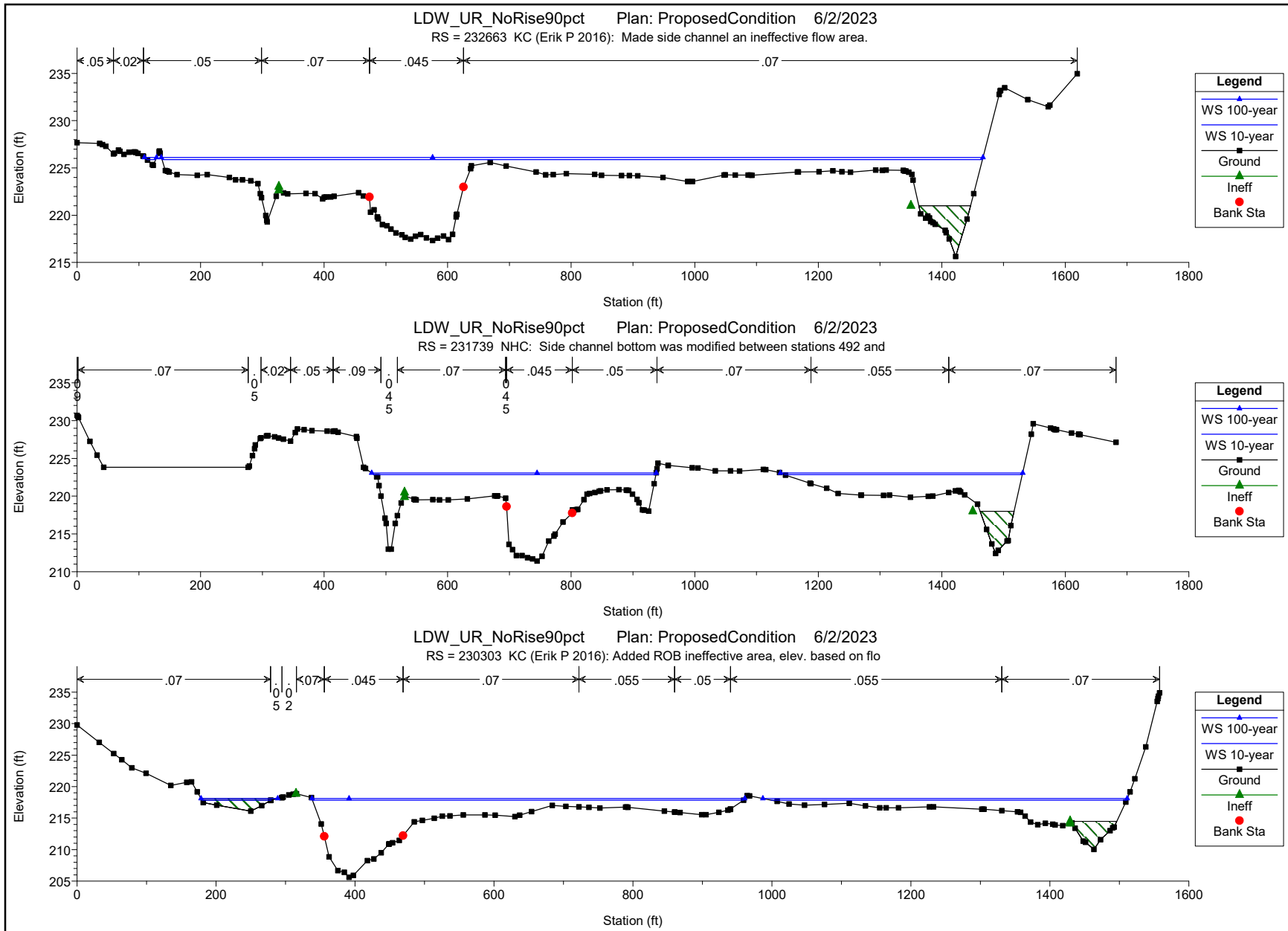


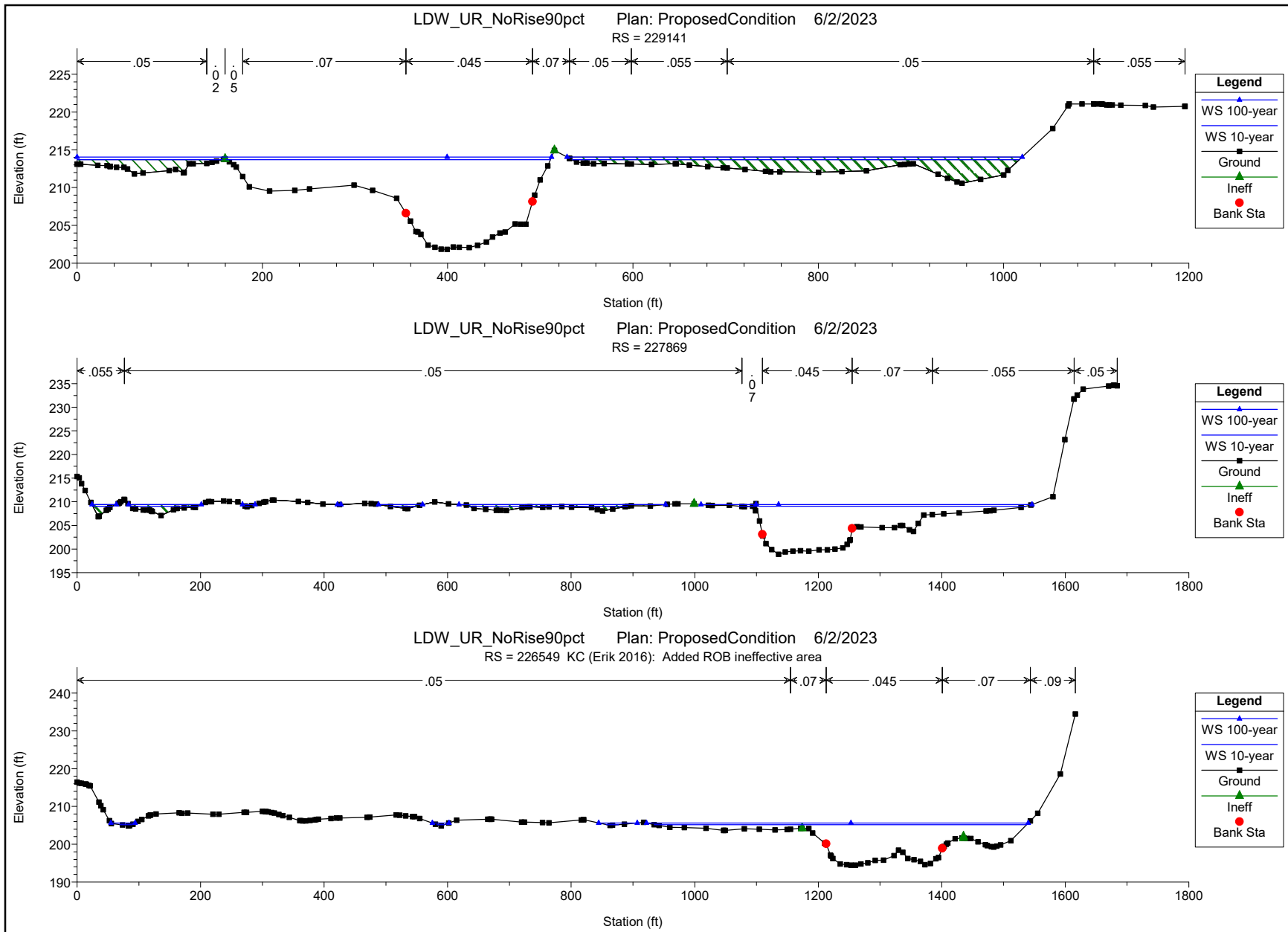


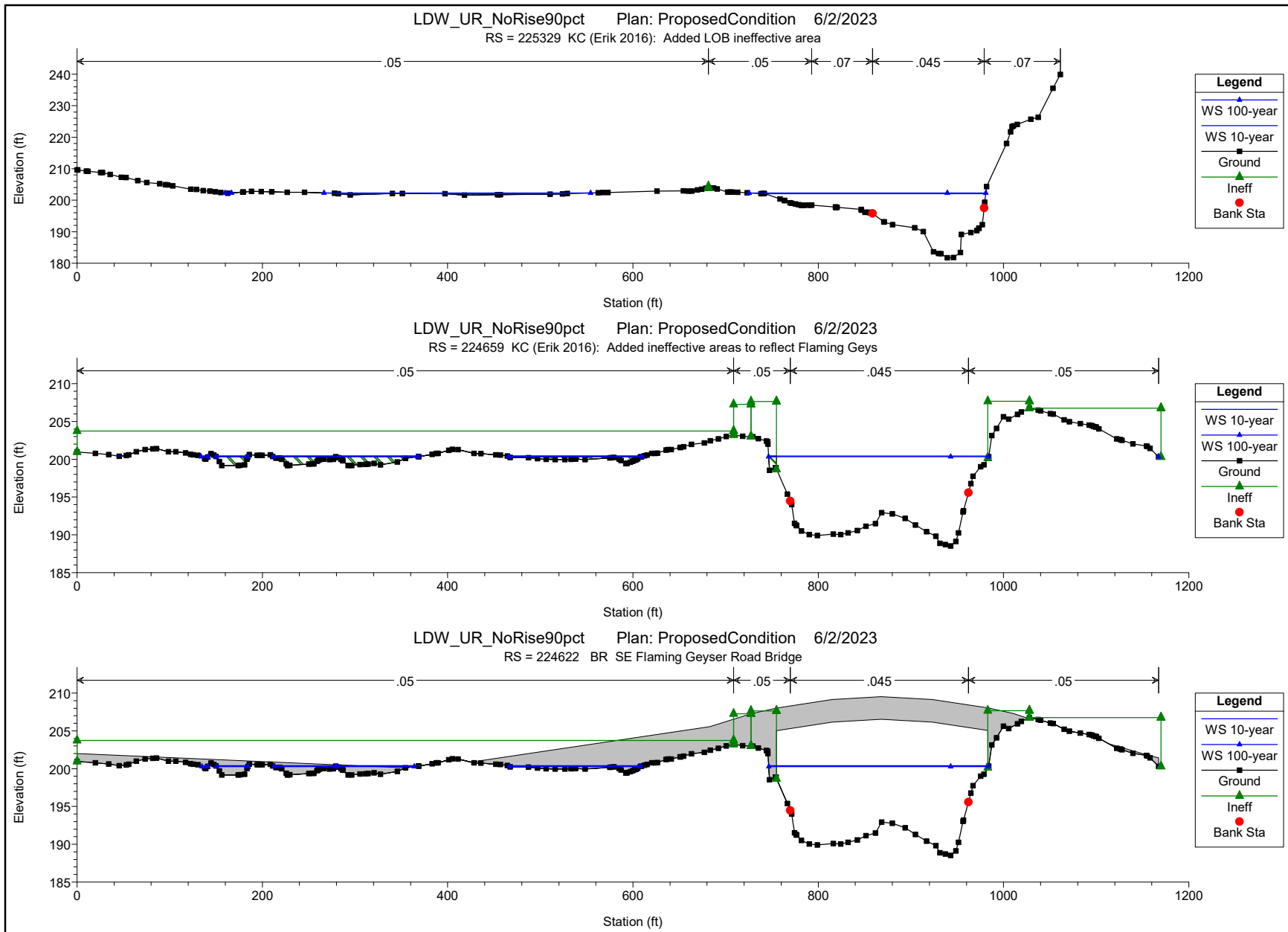


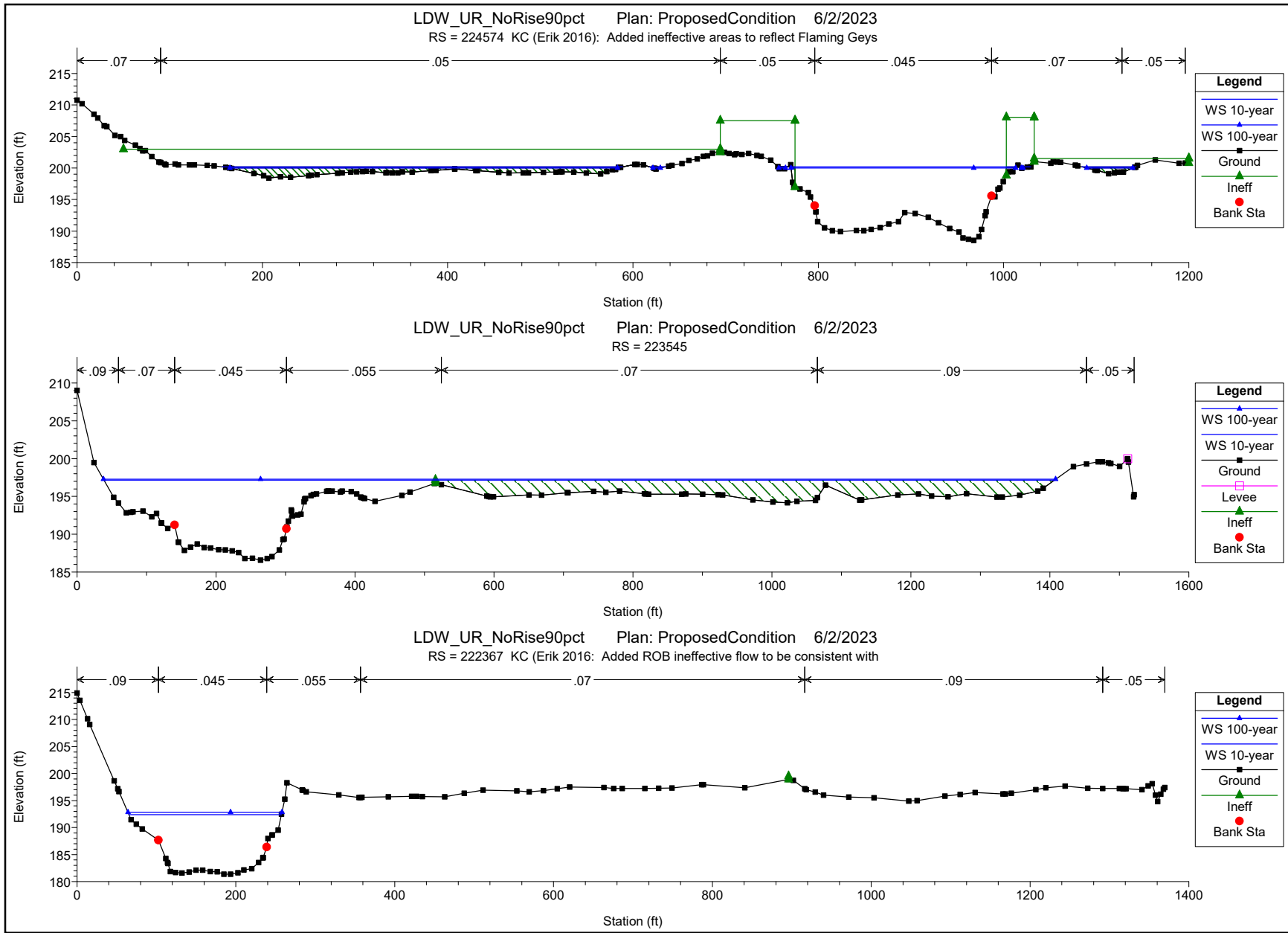


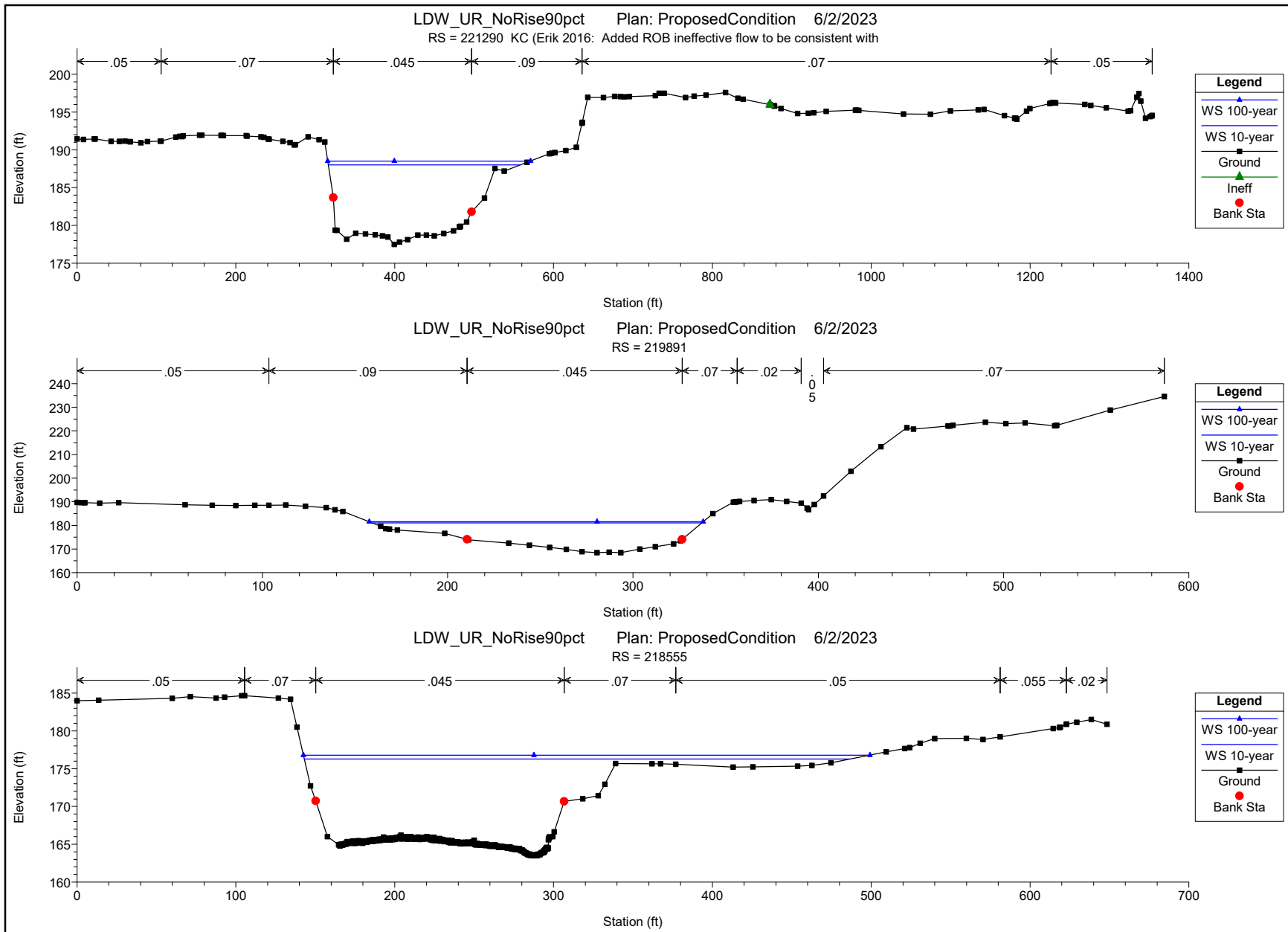


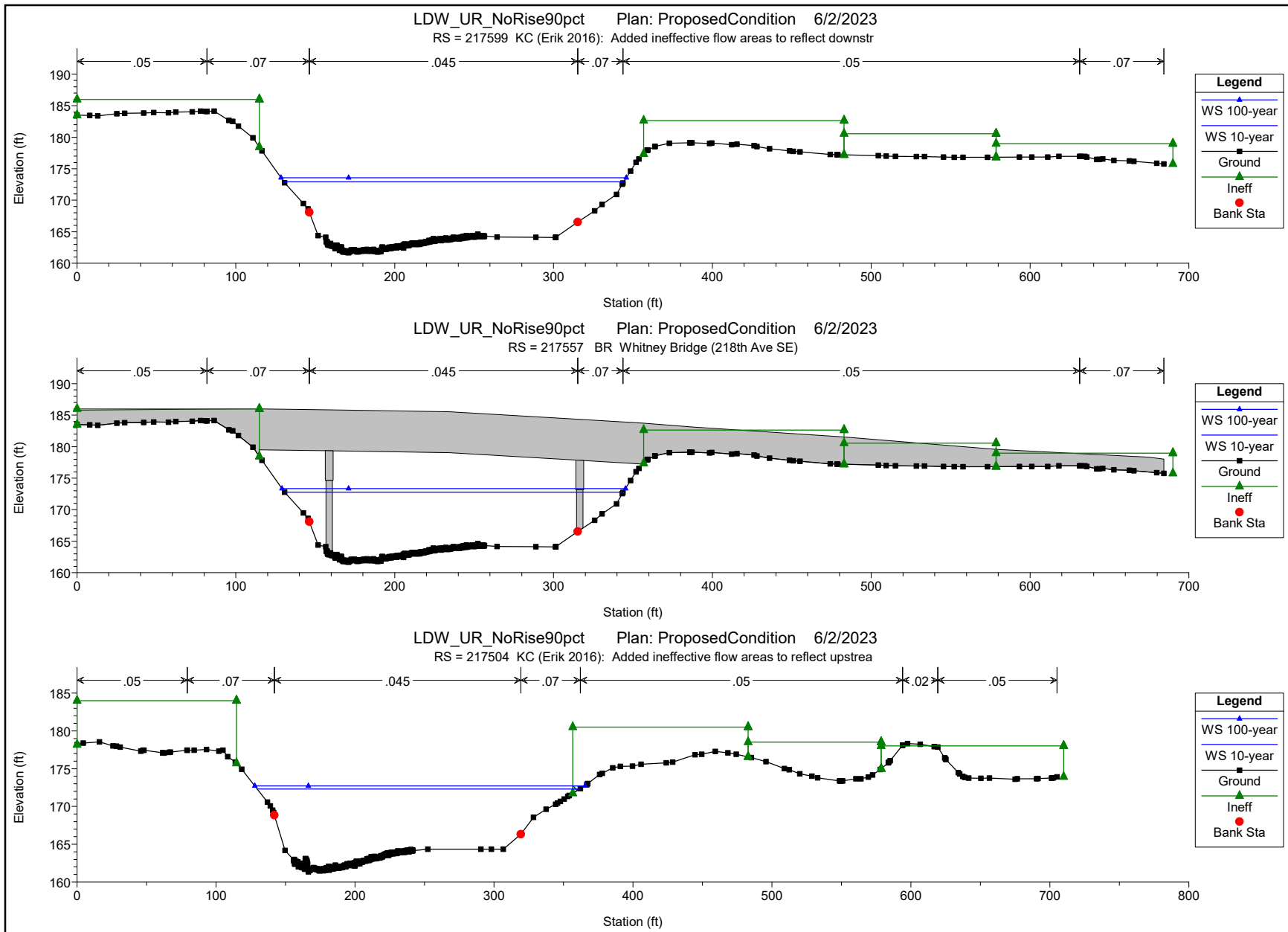


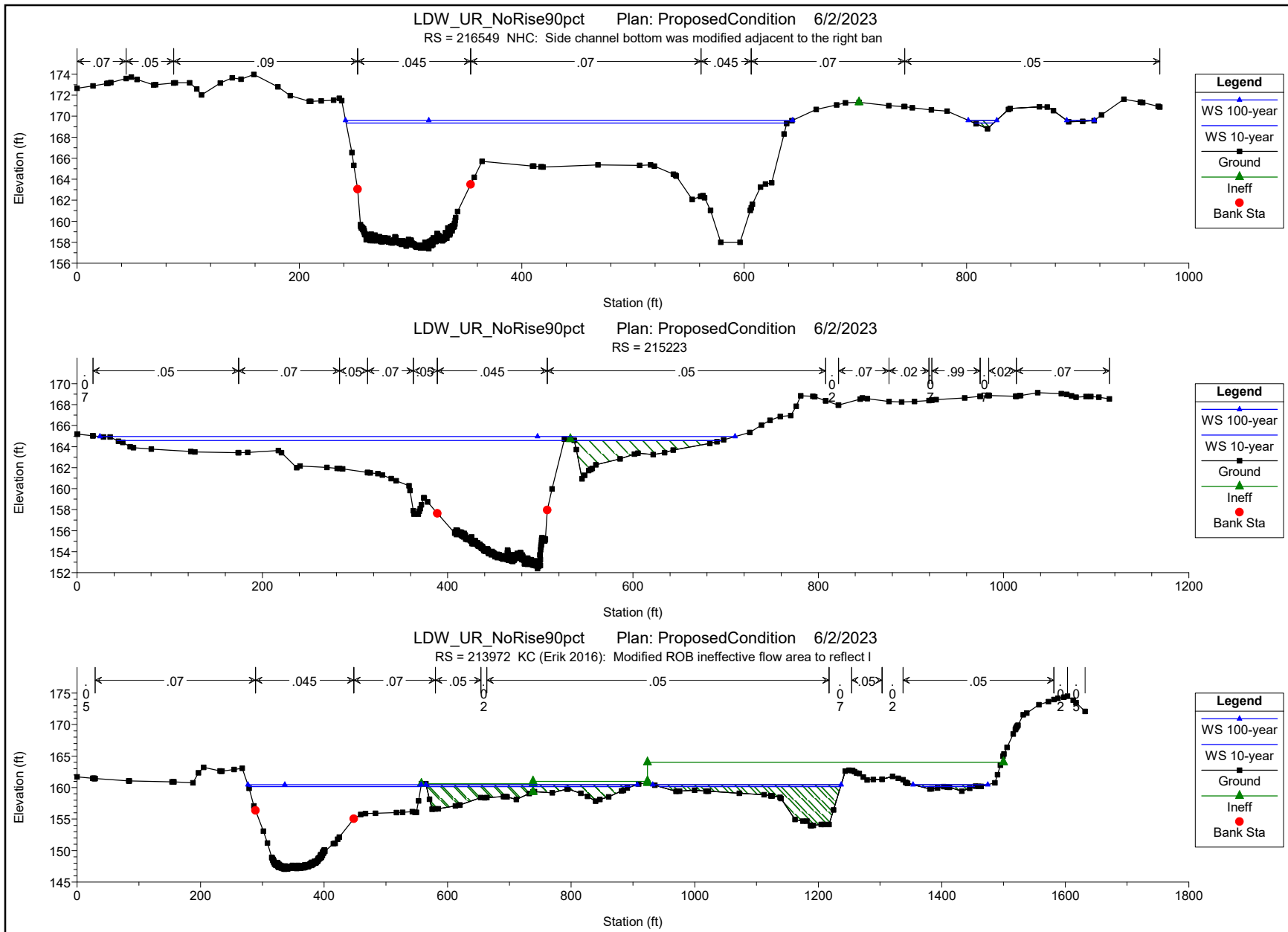


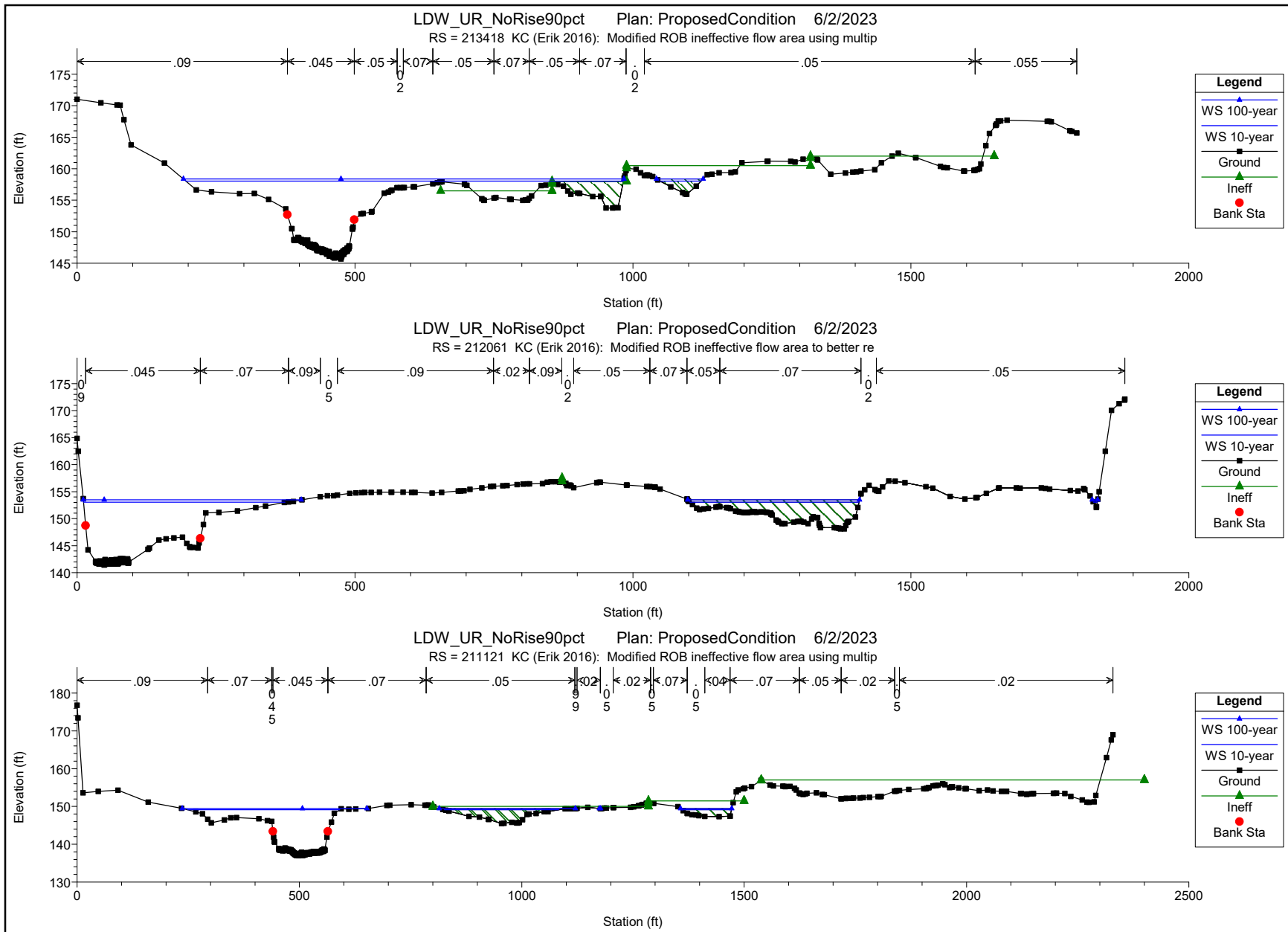


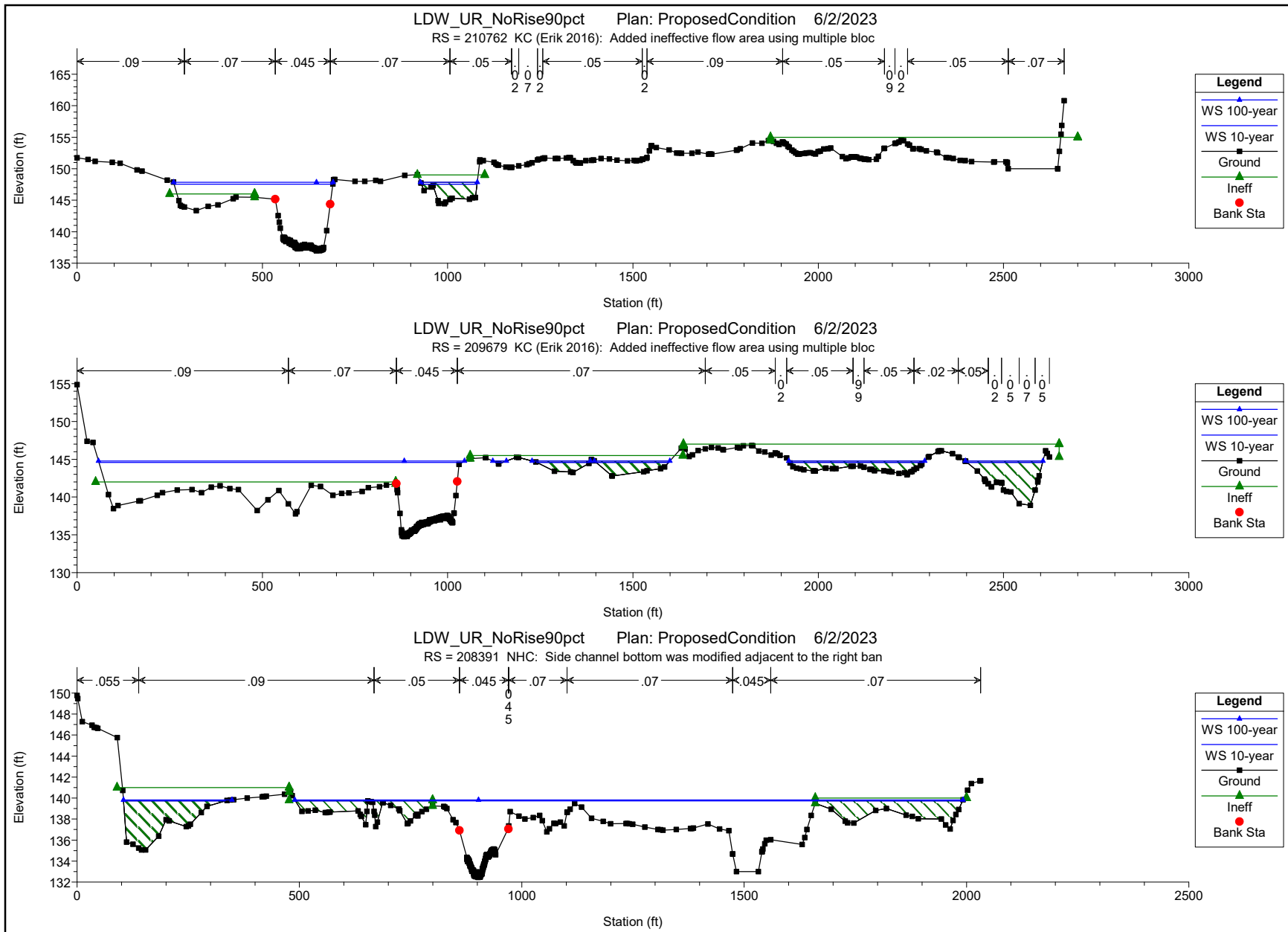


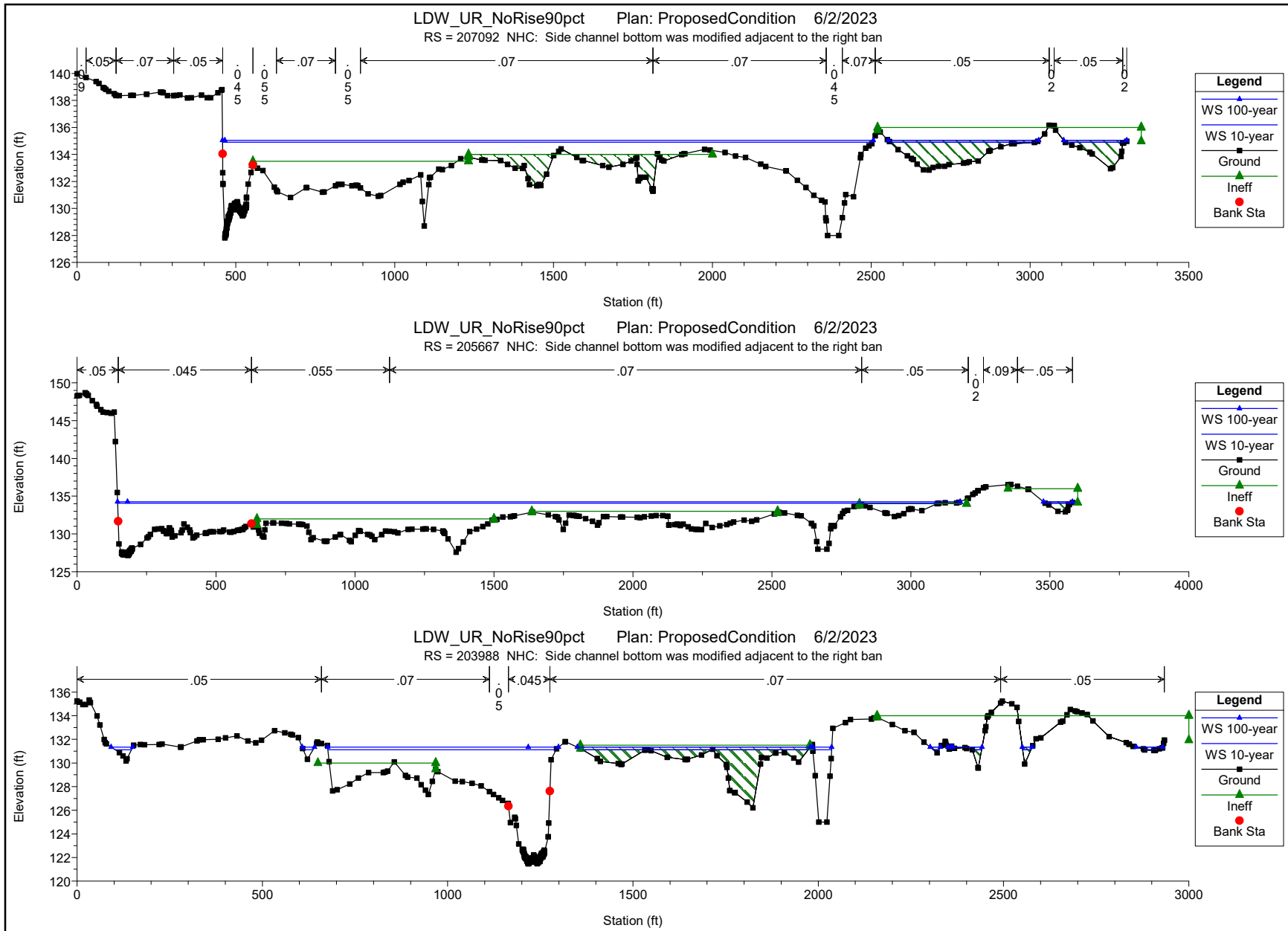


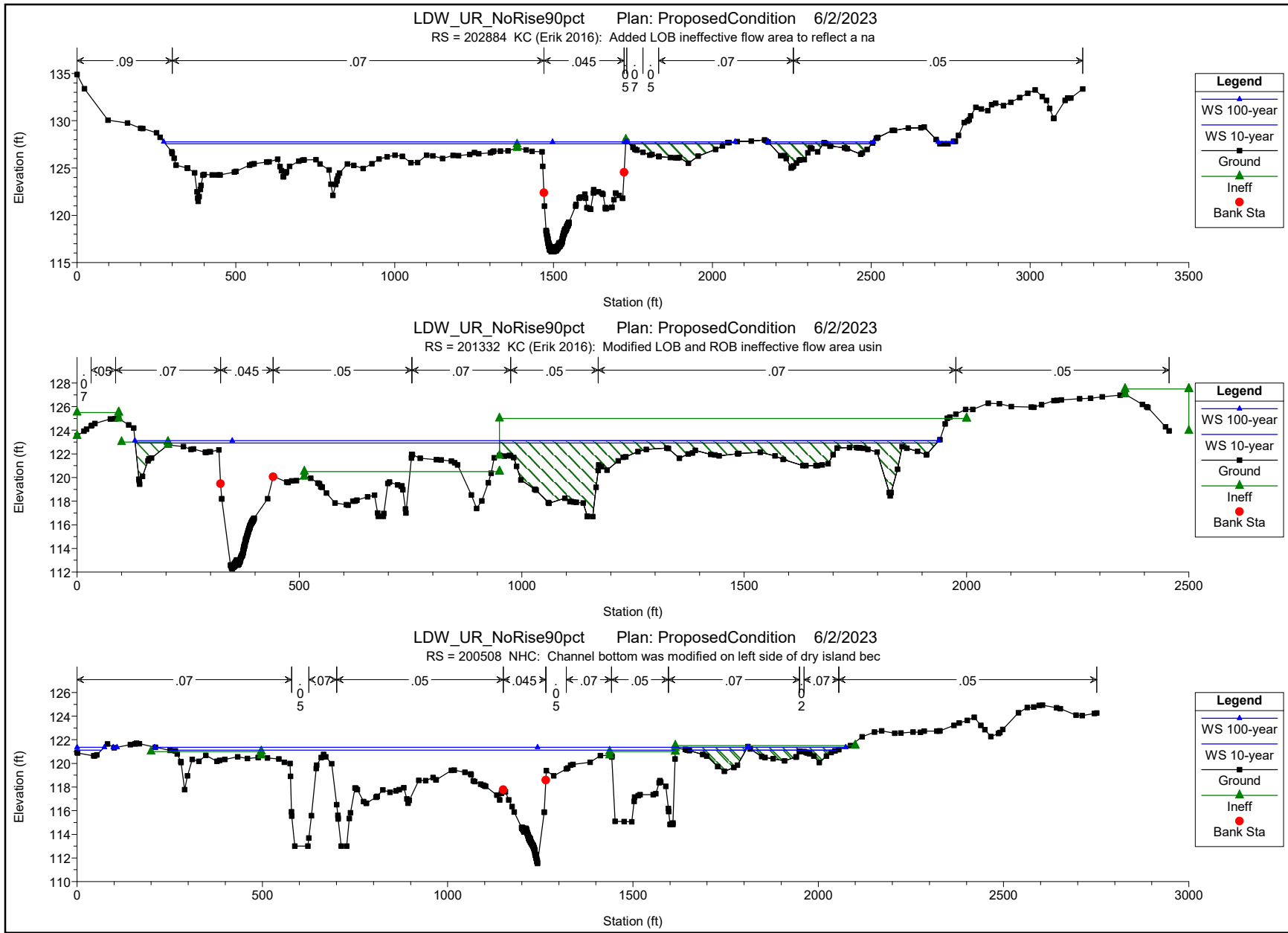


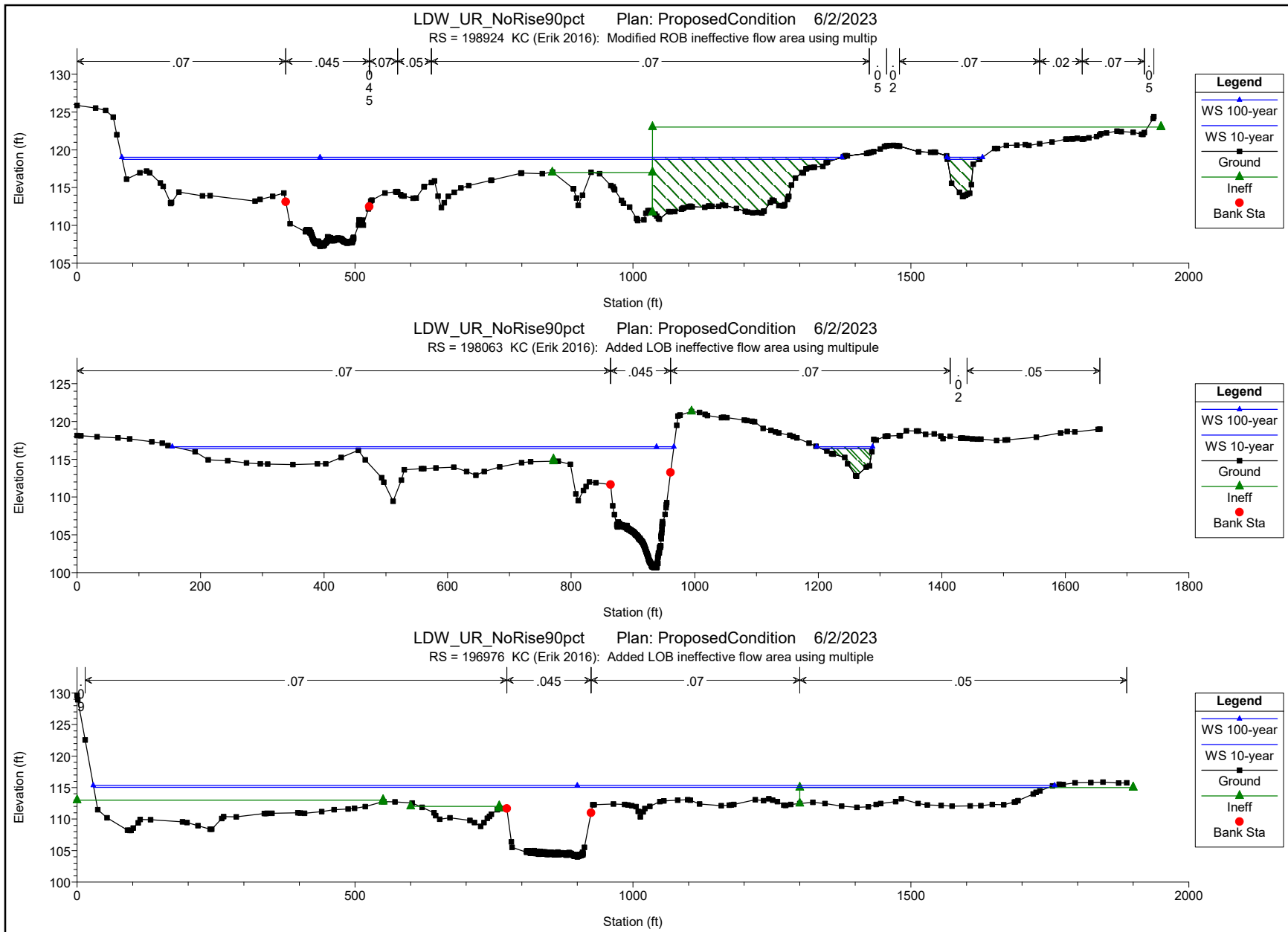


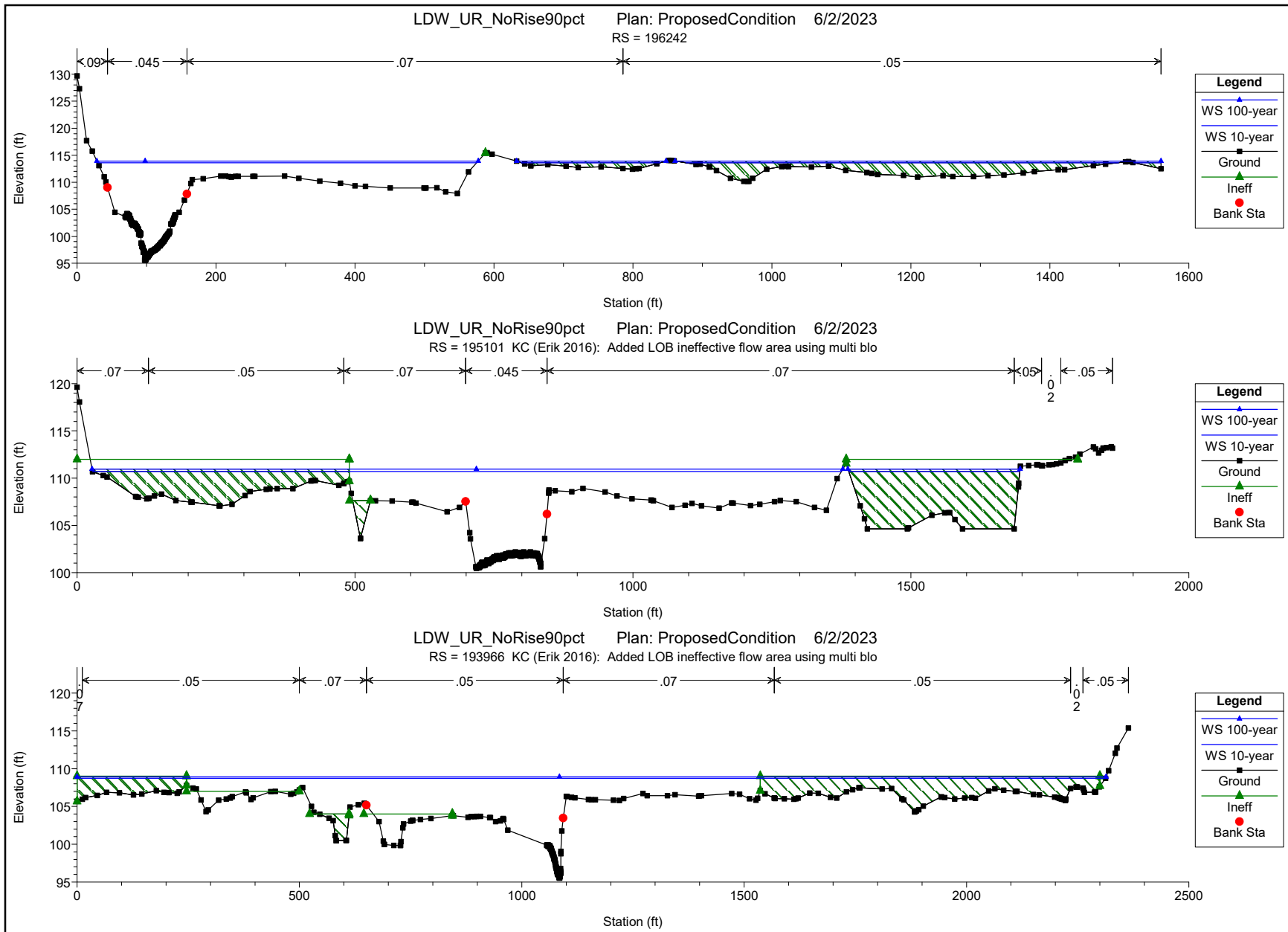


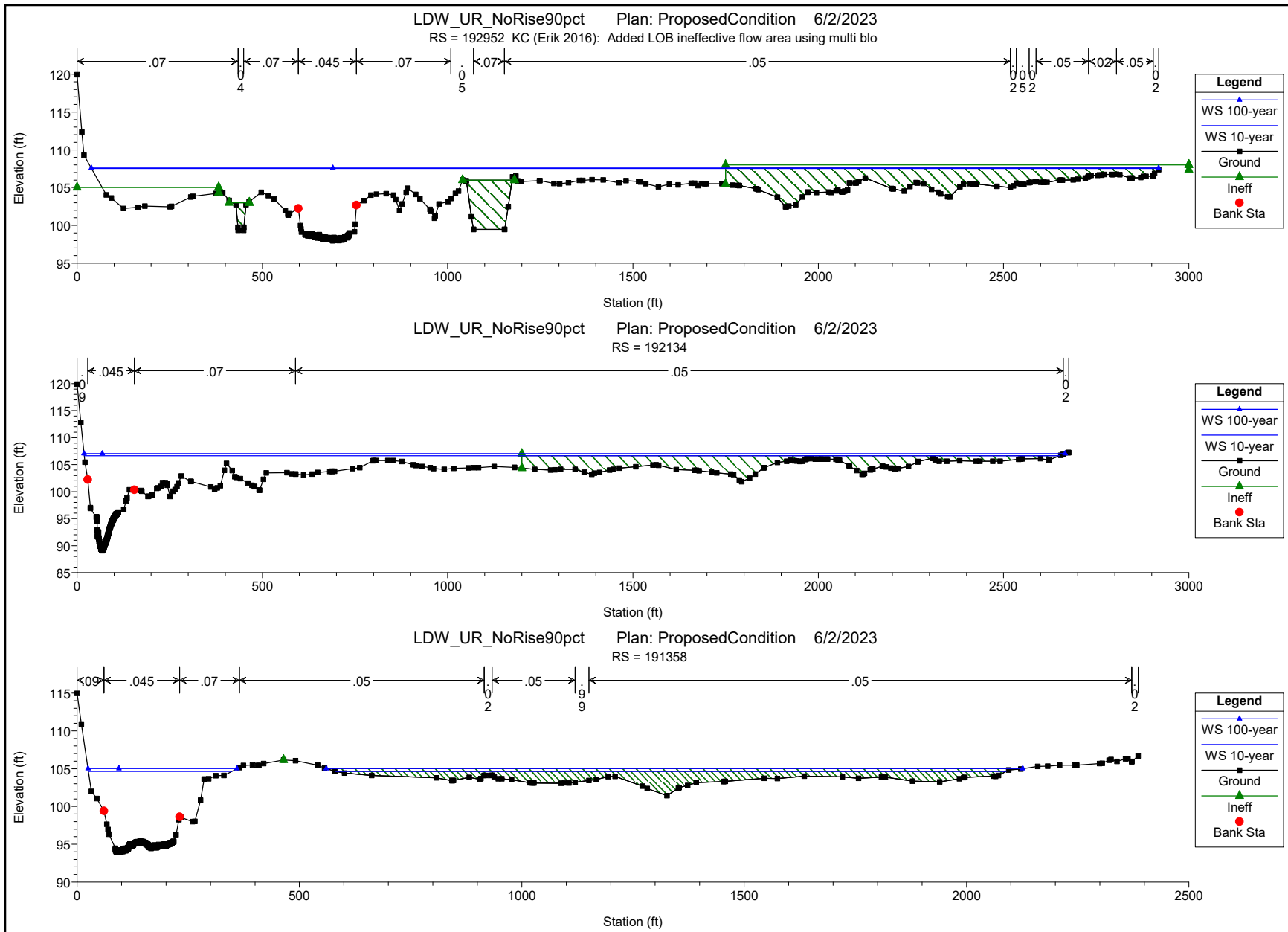


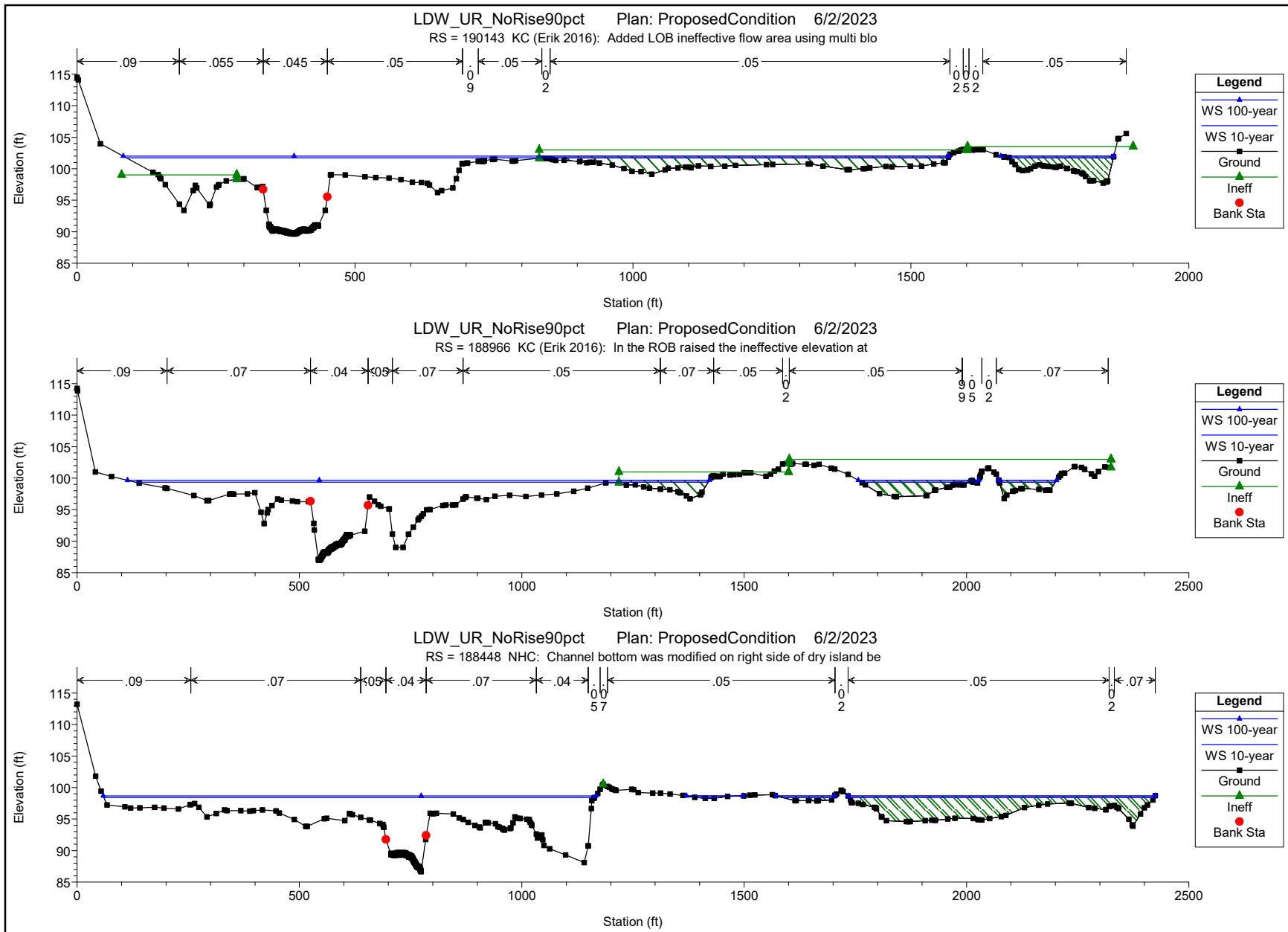


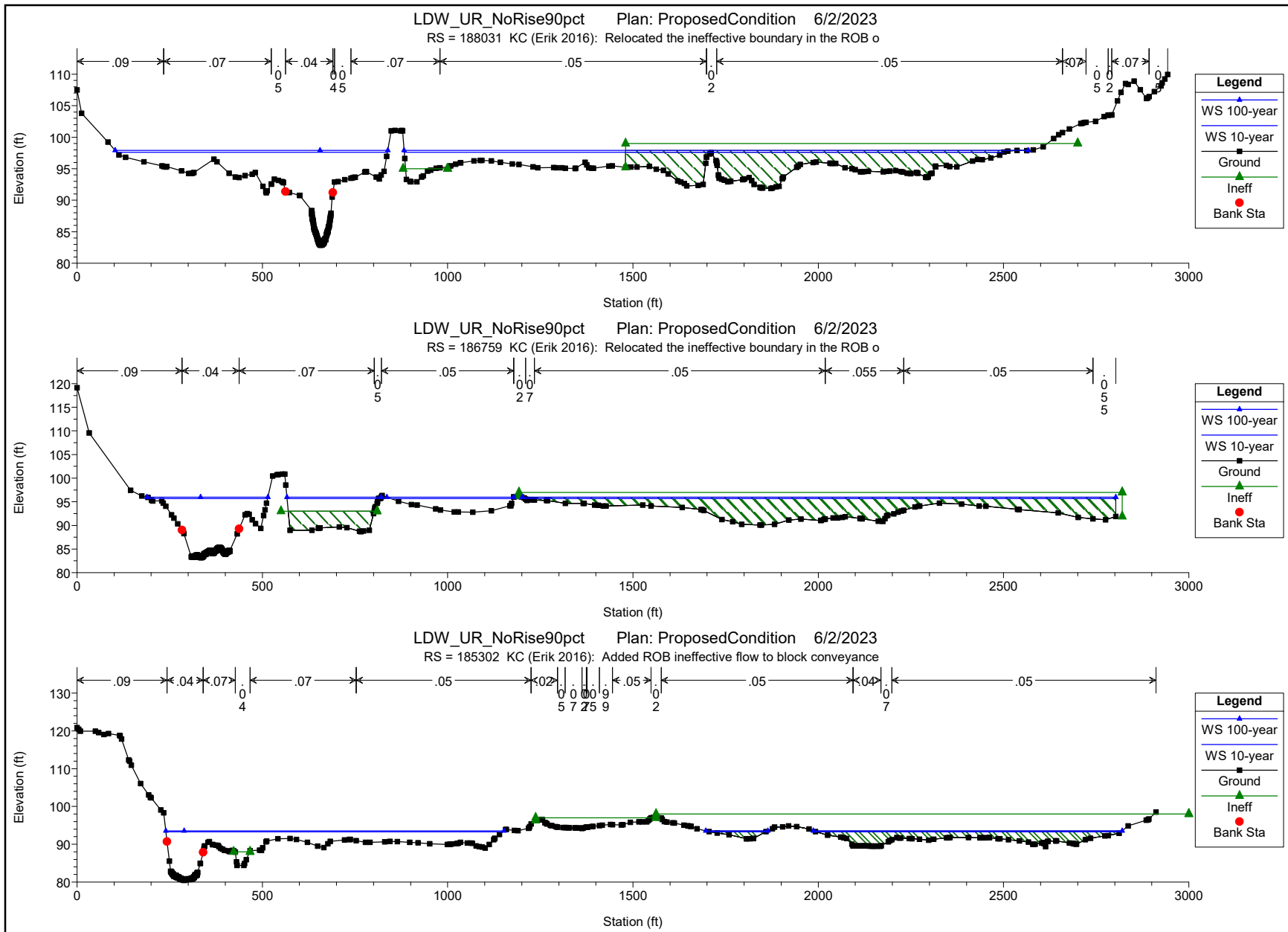


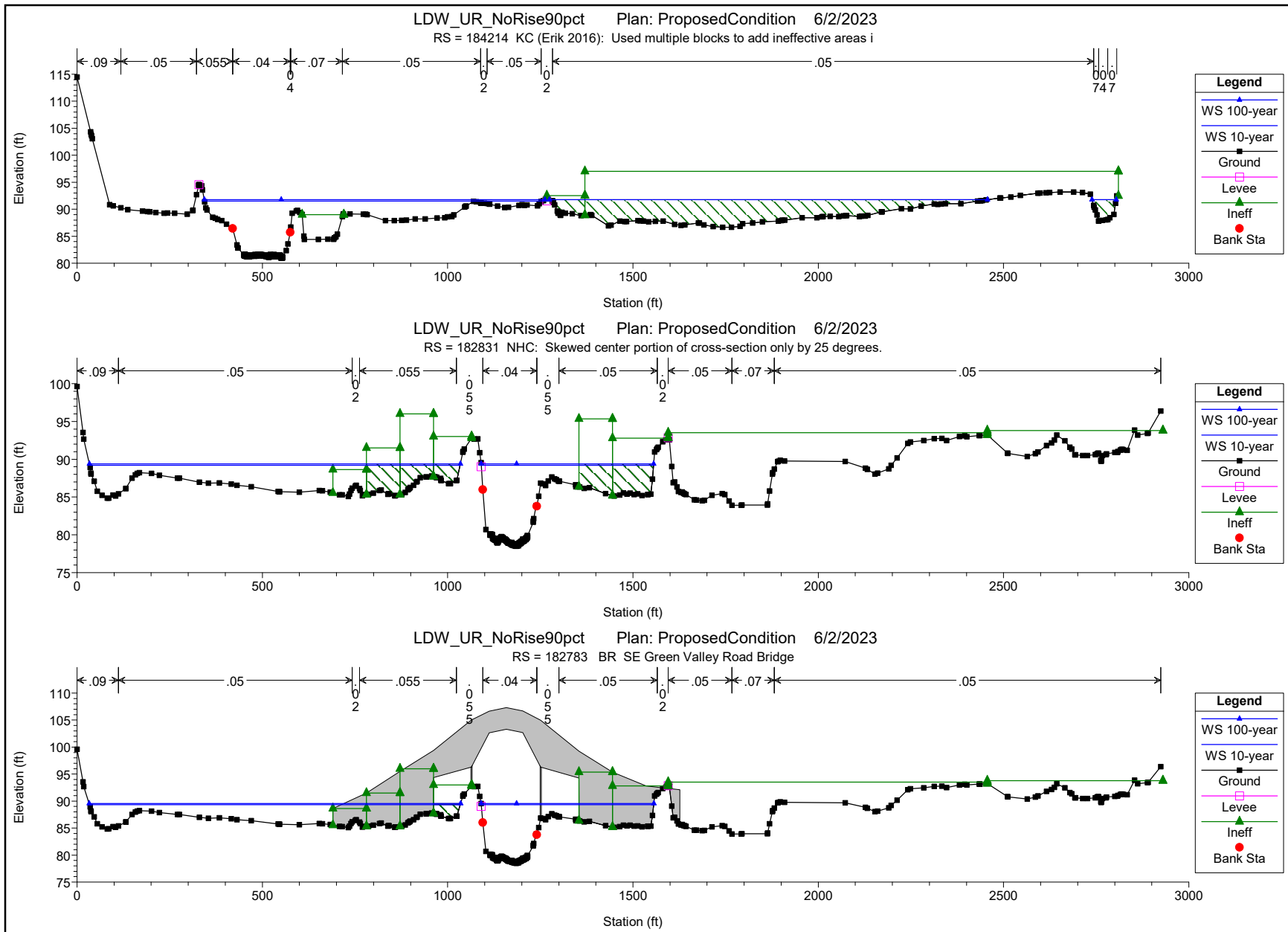


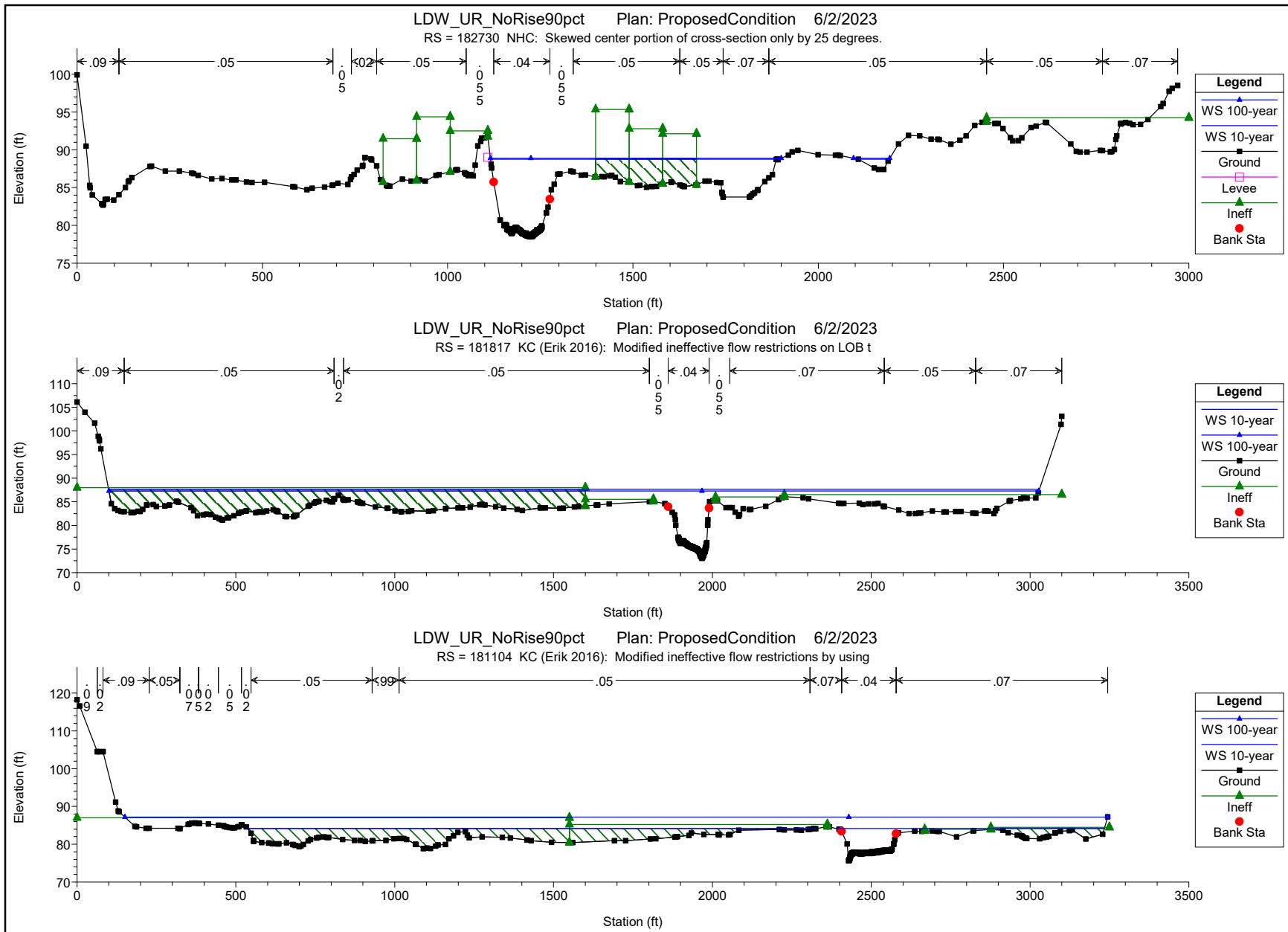




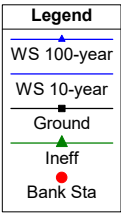
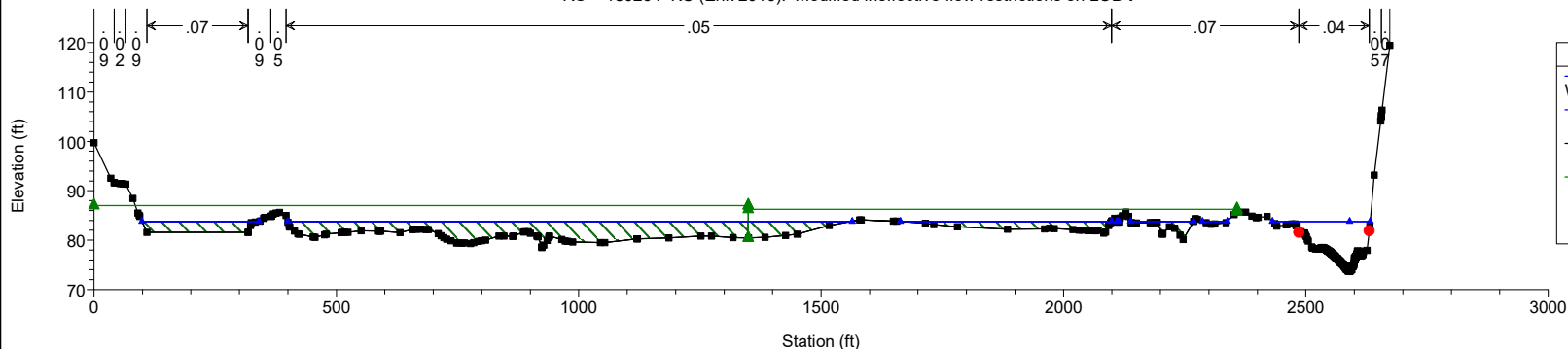




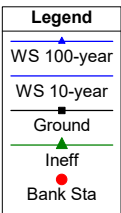
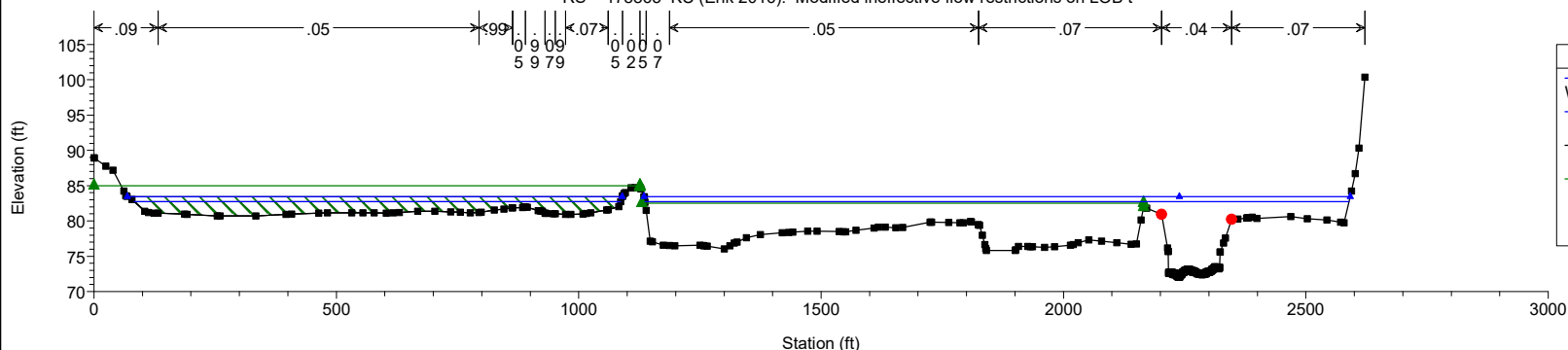




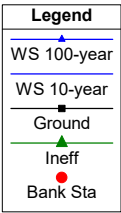
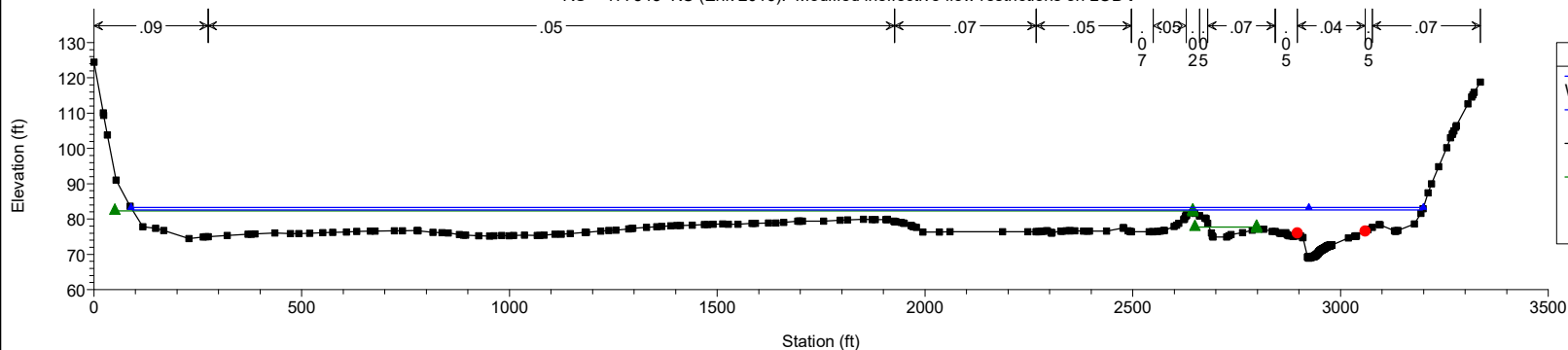
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 180264 KC (Erik 2016): Modified ineffective flow restrictions on LOB t

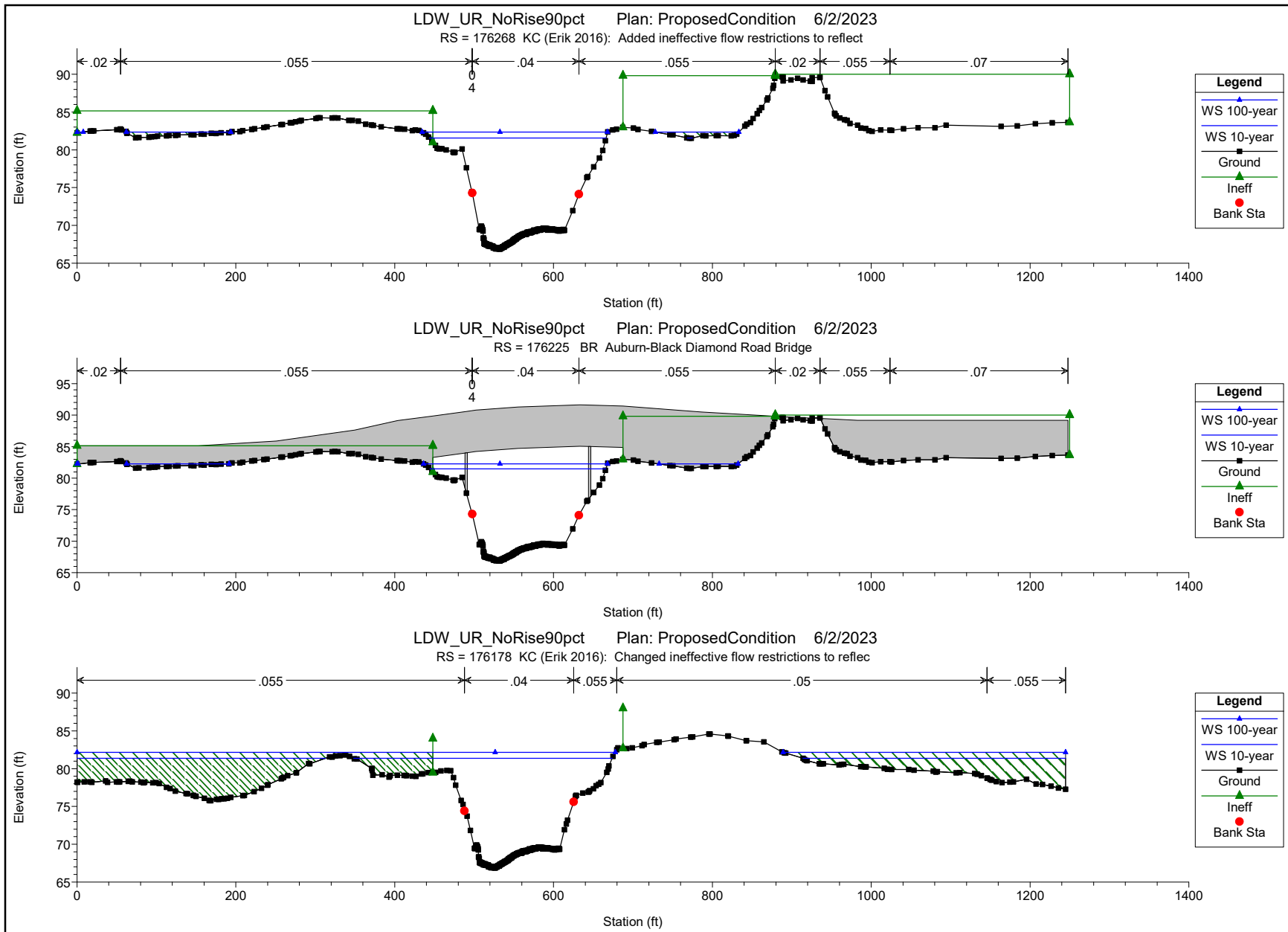


LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 178865 KC (Erik 2016): Modified ineffective flow restrictions on LOB t

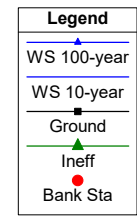
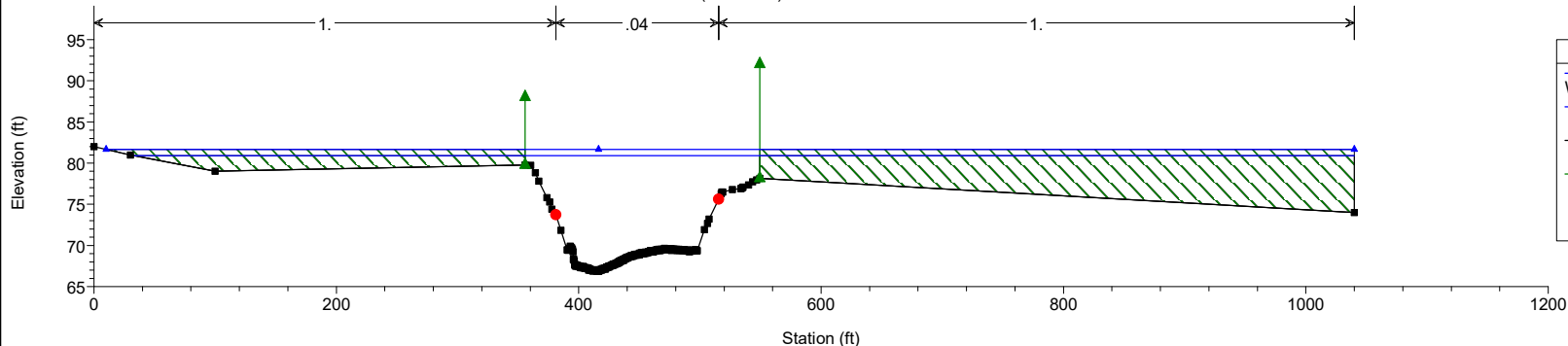


LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 177545 KC (Erik 2016): Modified ineffective flow restrictions on LOB t

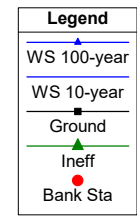
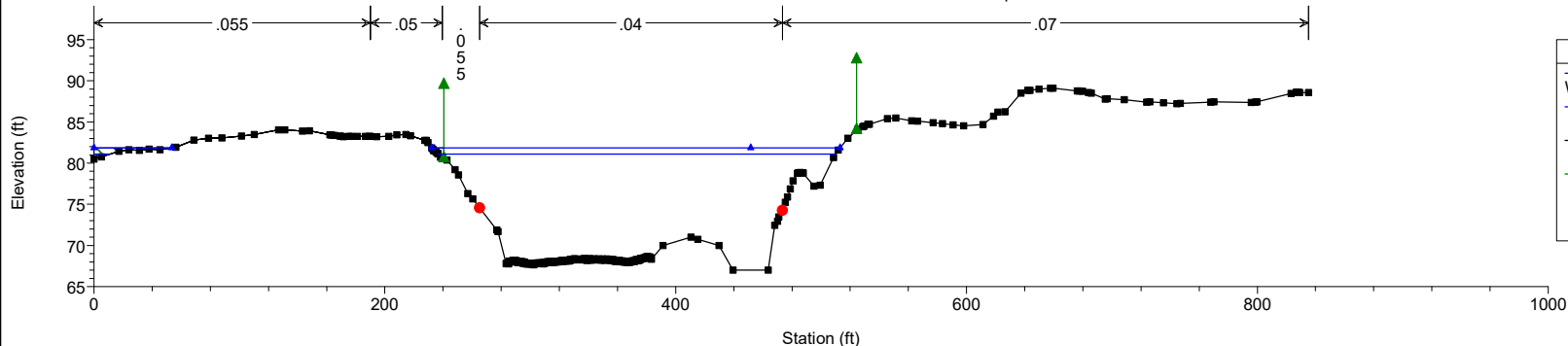




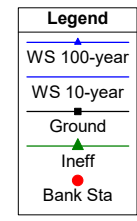
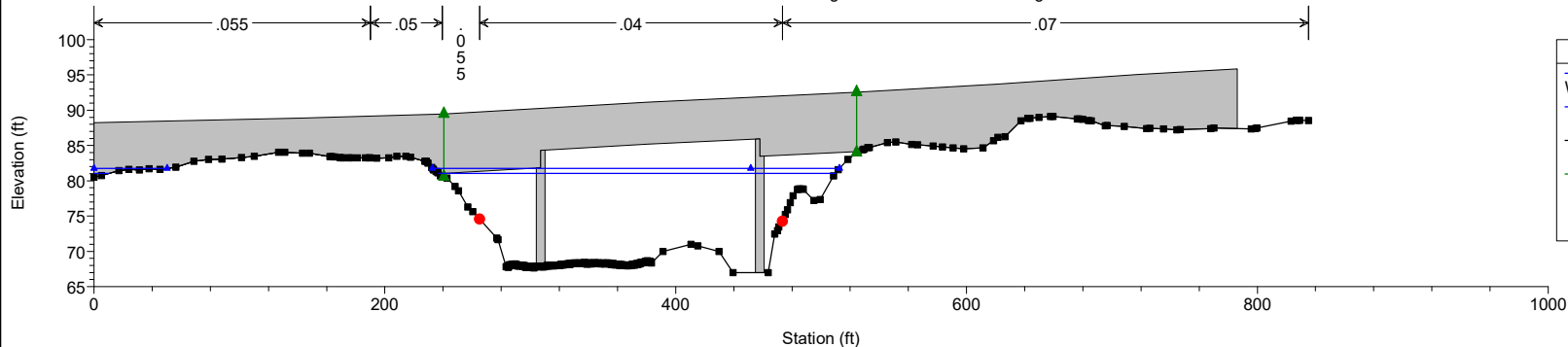
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 176056 KC (Erik 2016): Added XS in order to shift Soos Cr lateral infl

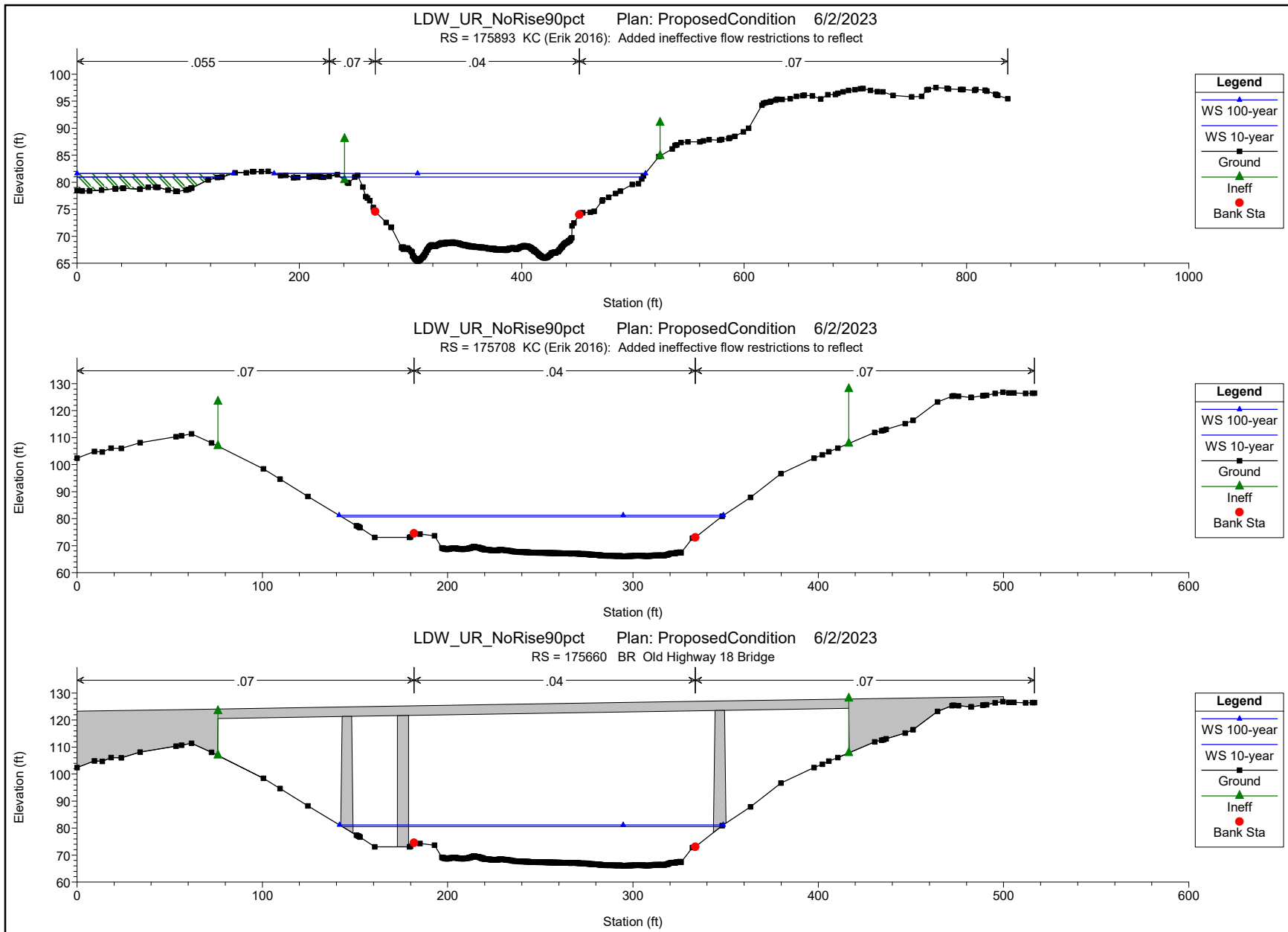


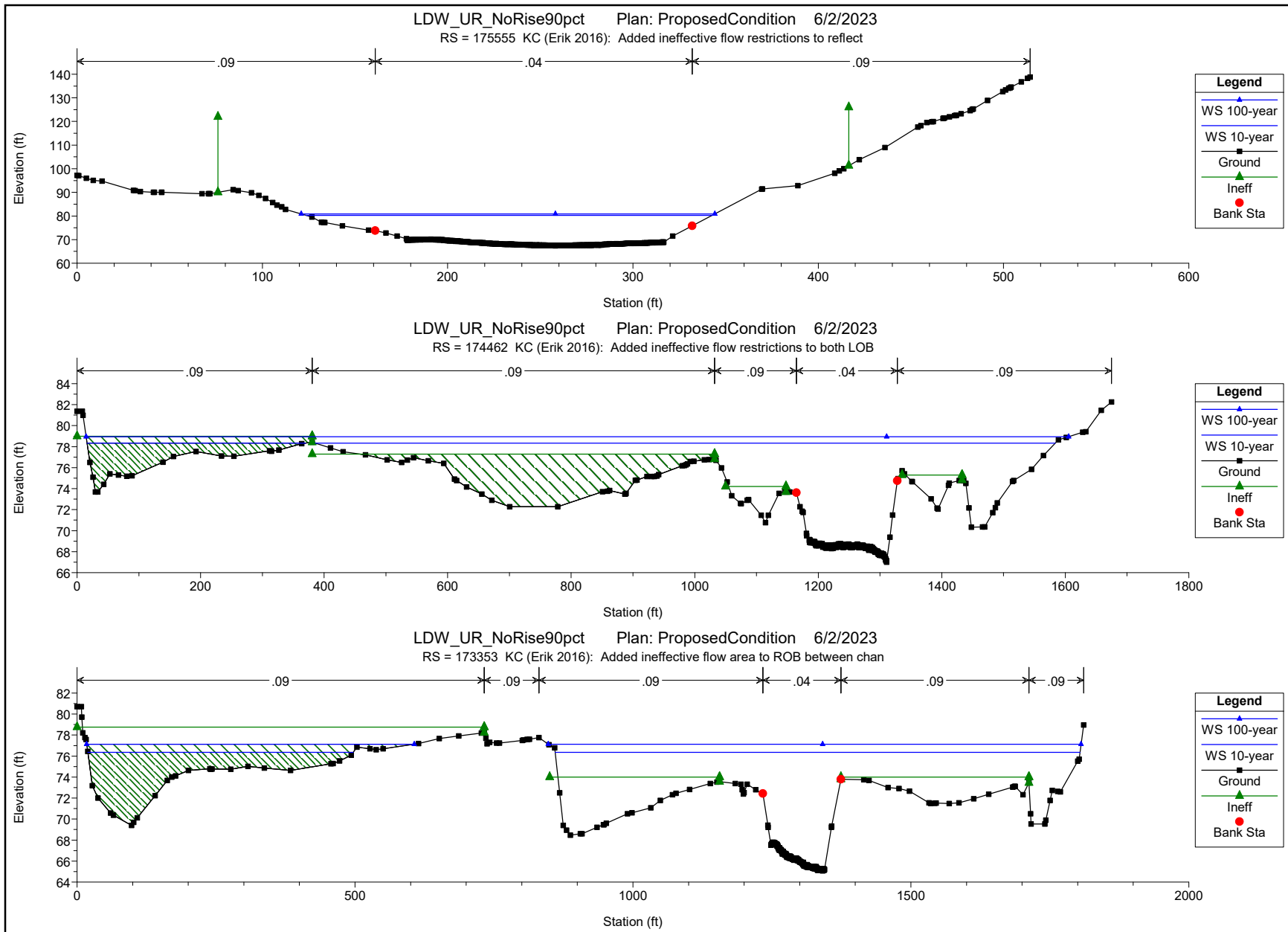
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 175940 NHC: Cross Section modified to account for separation between G

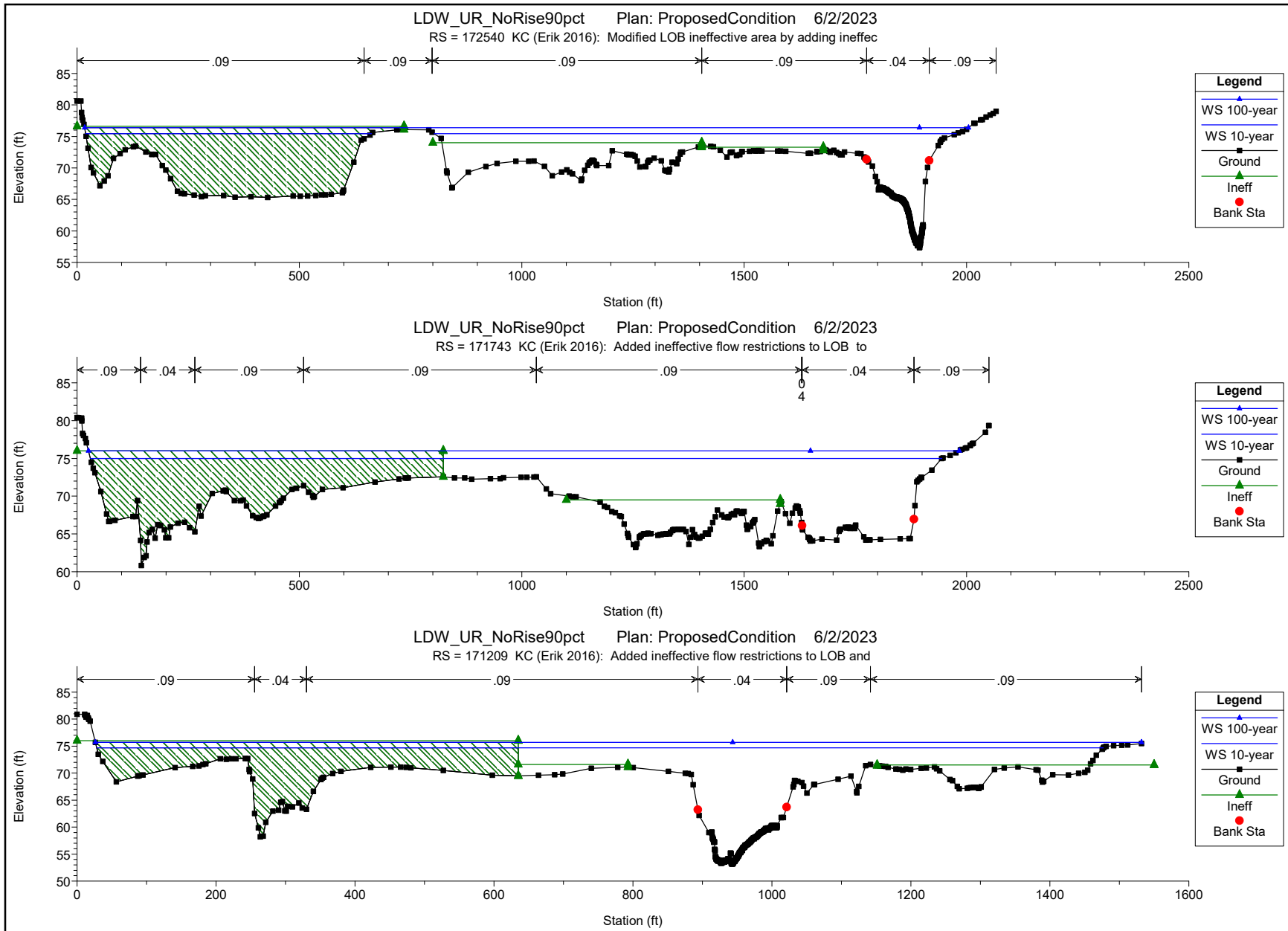


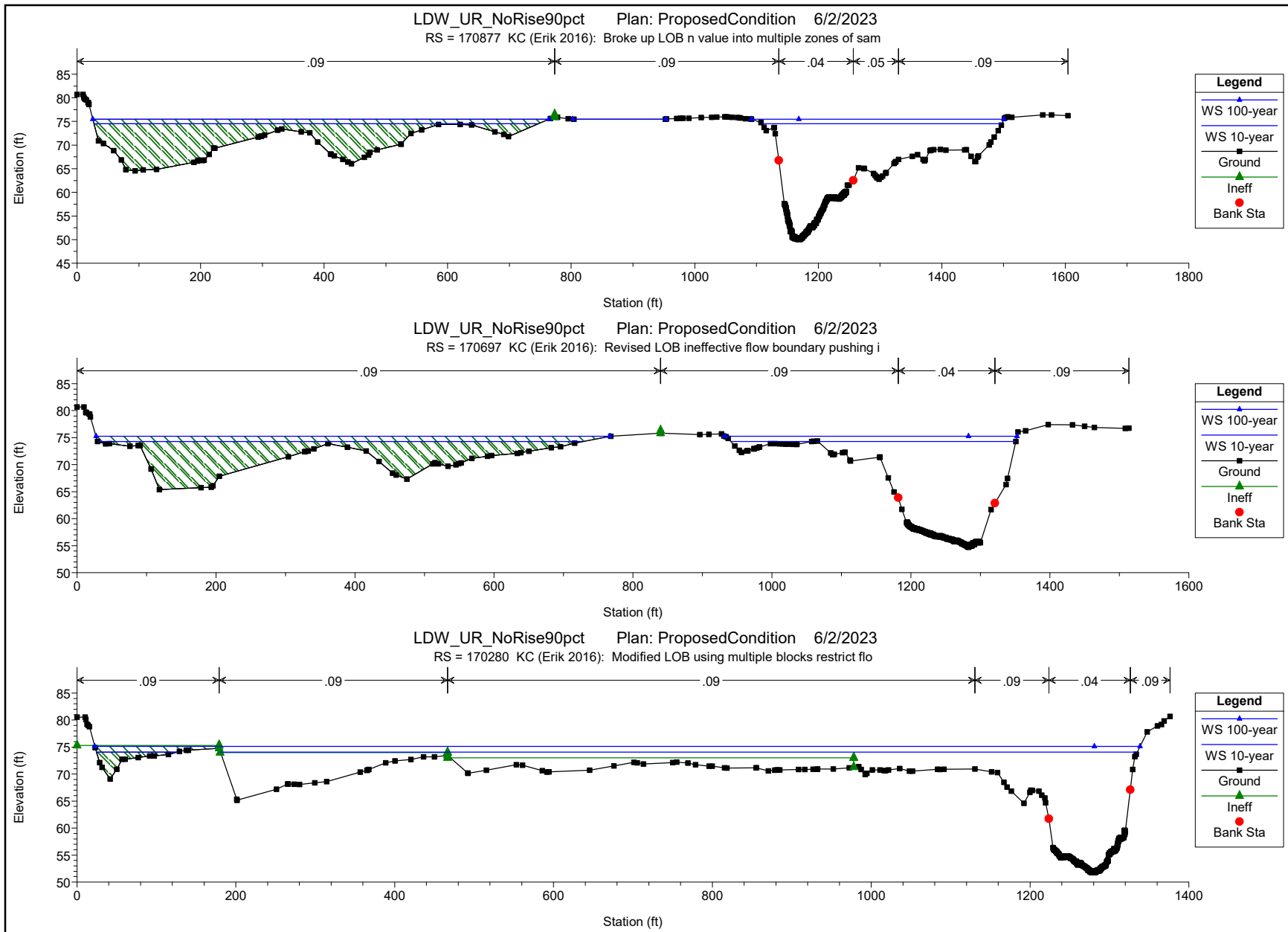
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 175919 BR Burlington Northern Railroad Bridge



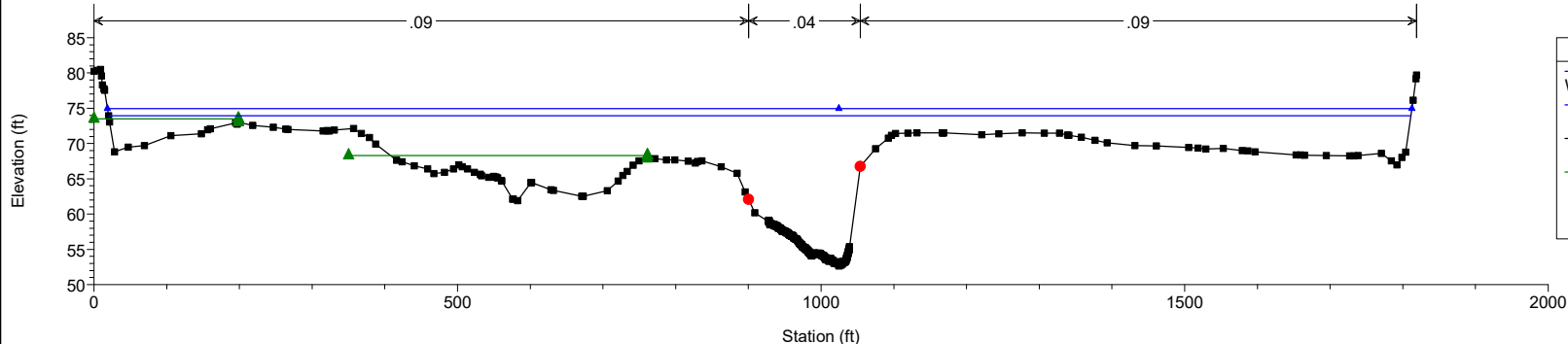




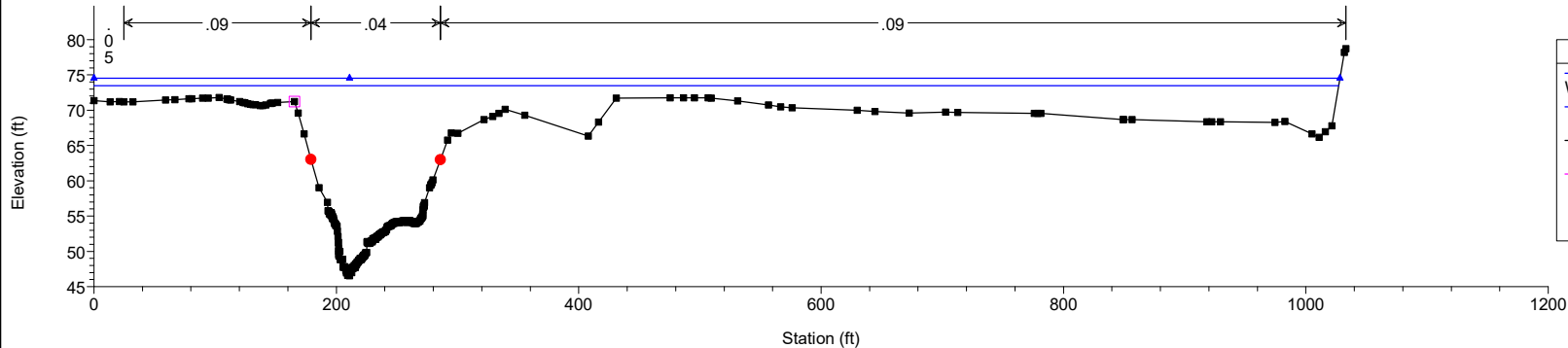




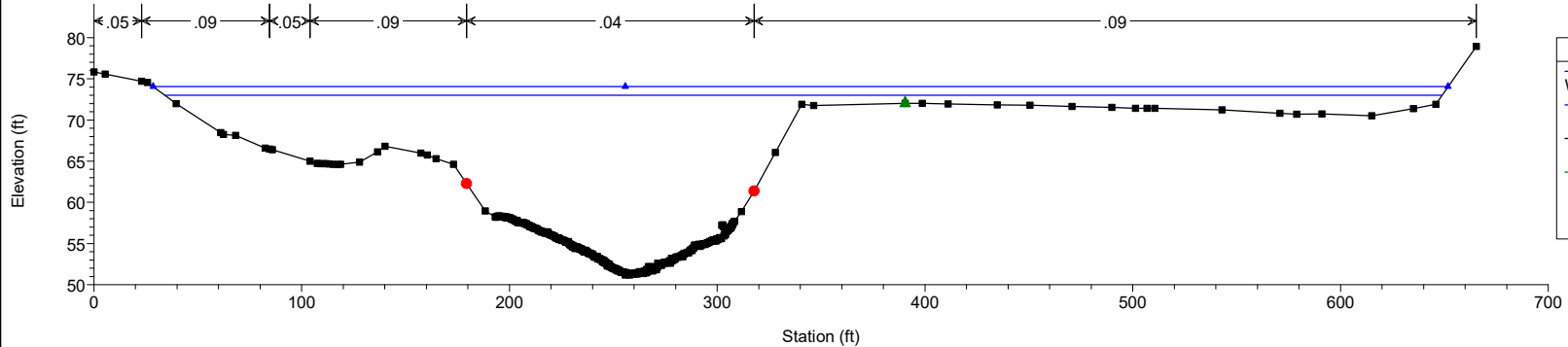
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
RS = 169351 KC (Erik 2016): Added LOB ineffective area using multiple block

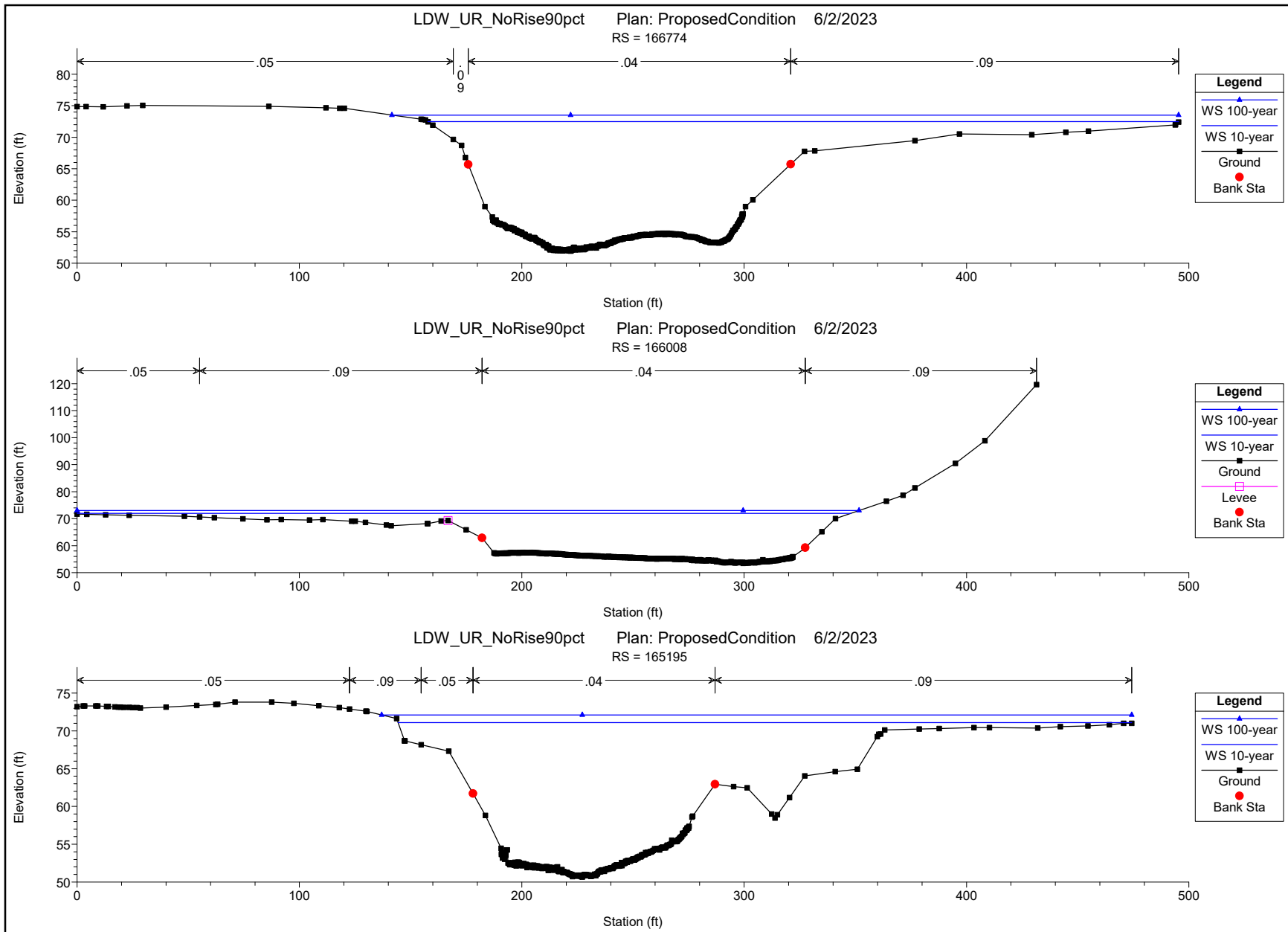


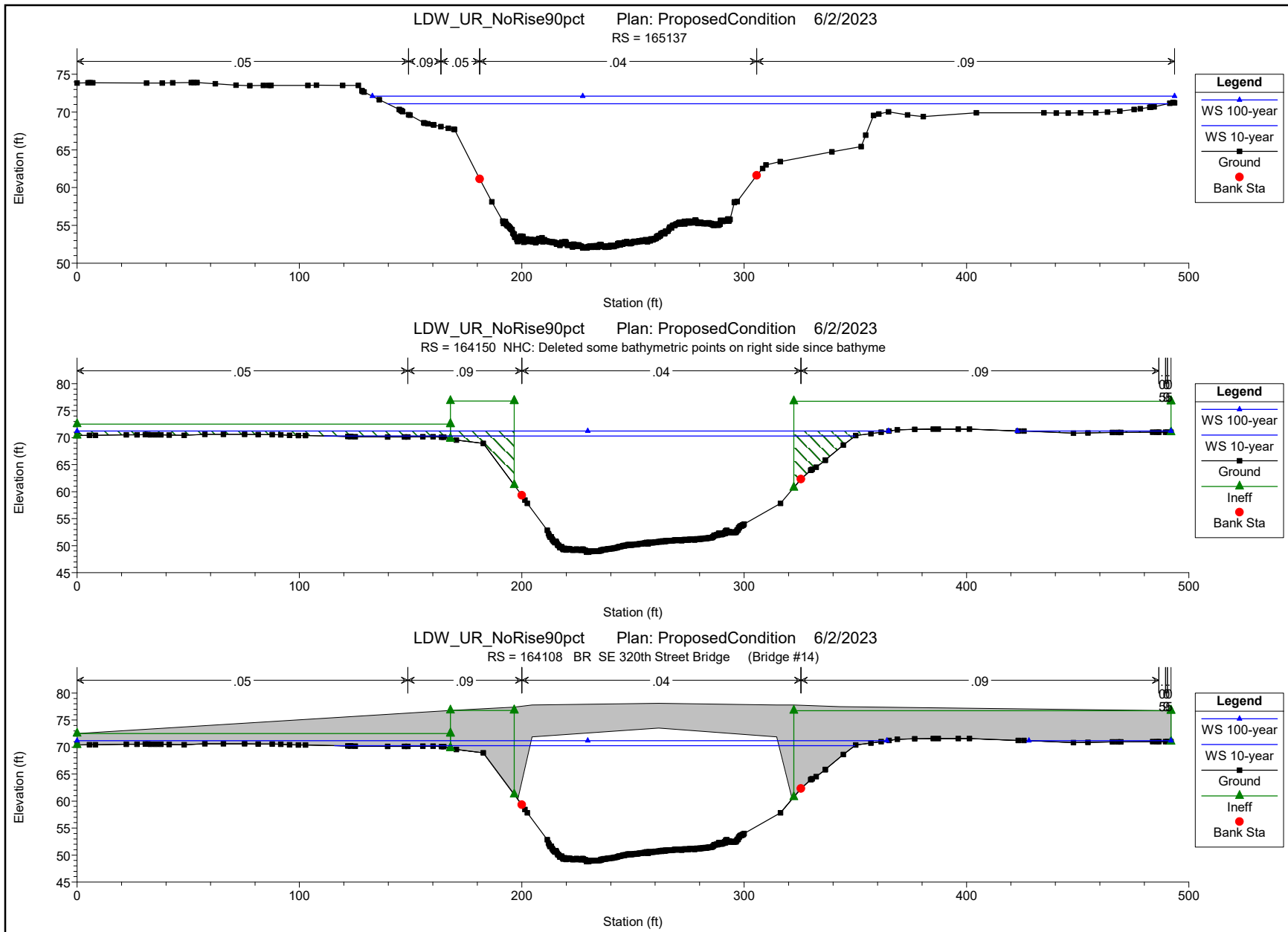
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
RS = 168448

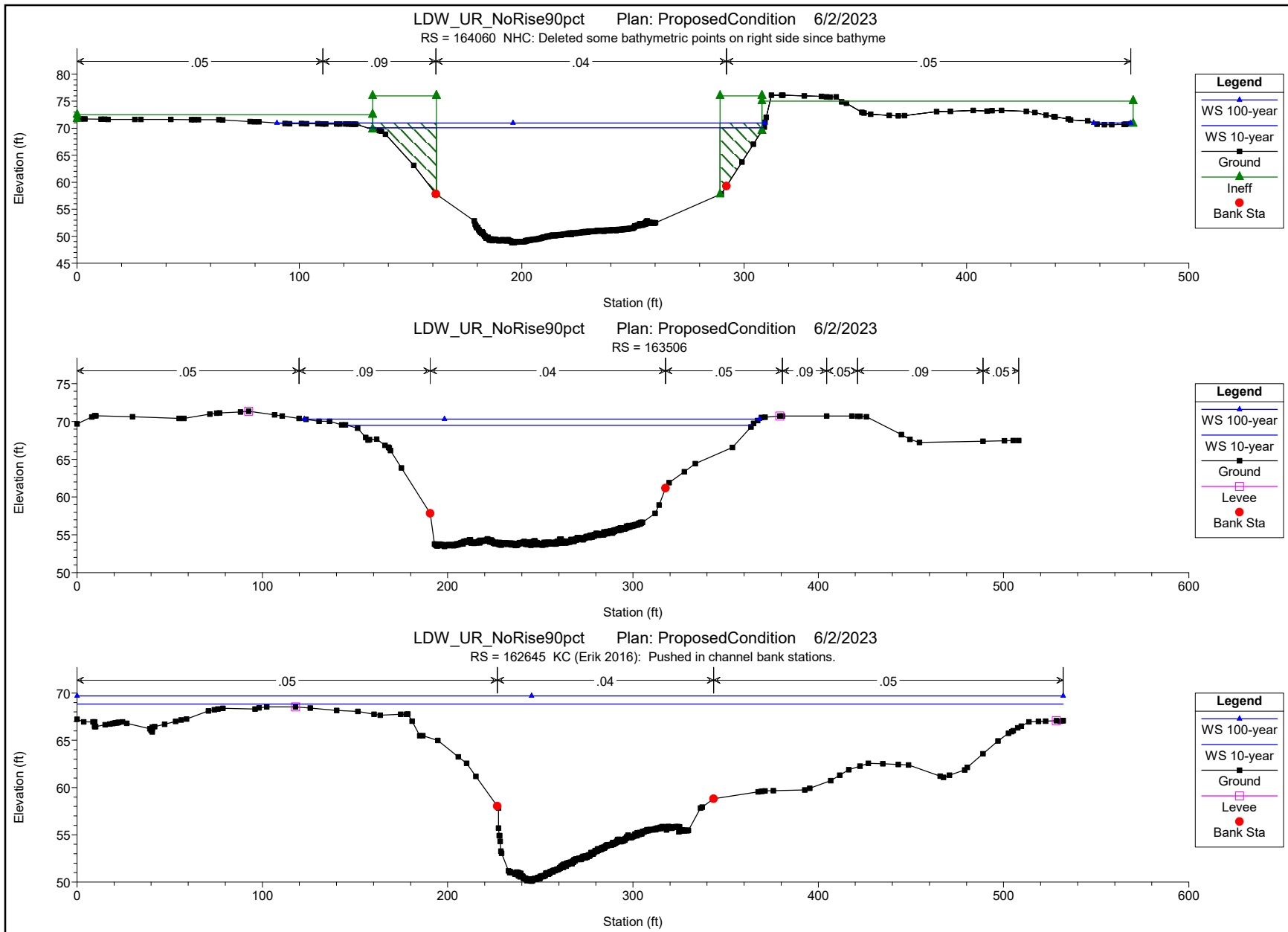


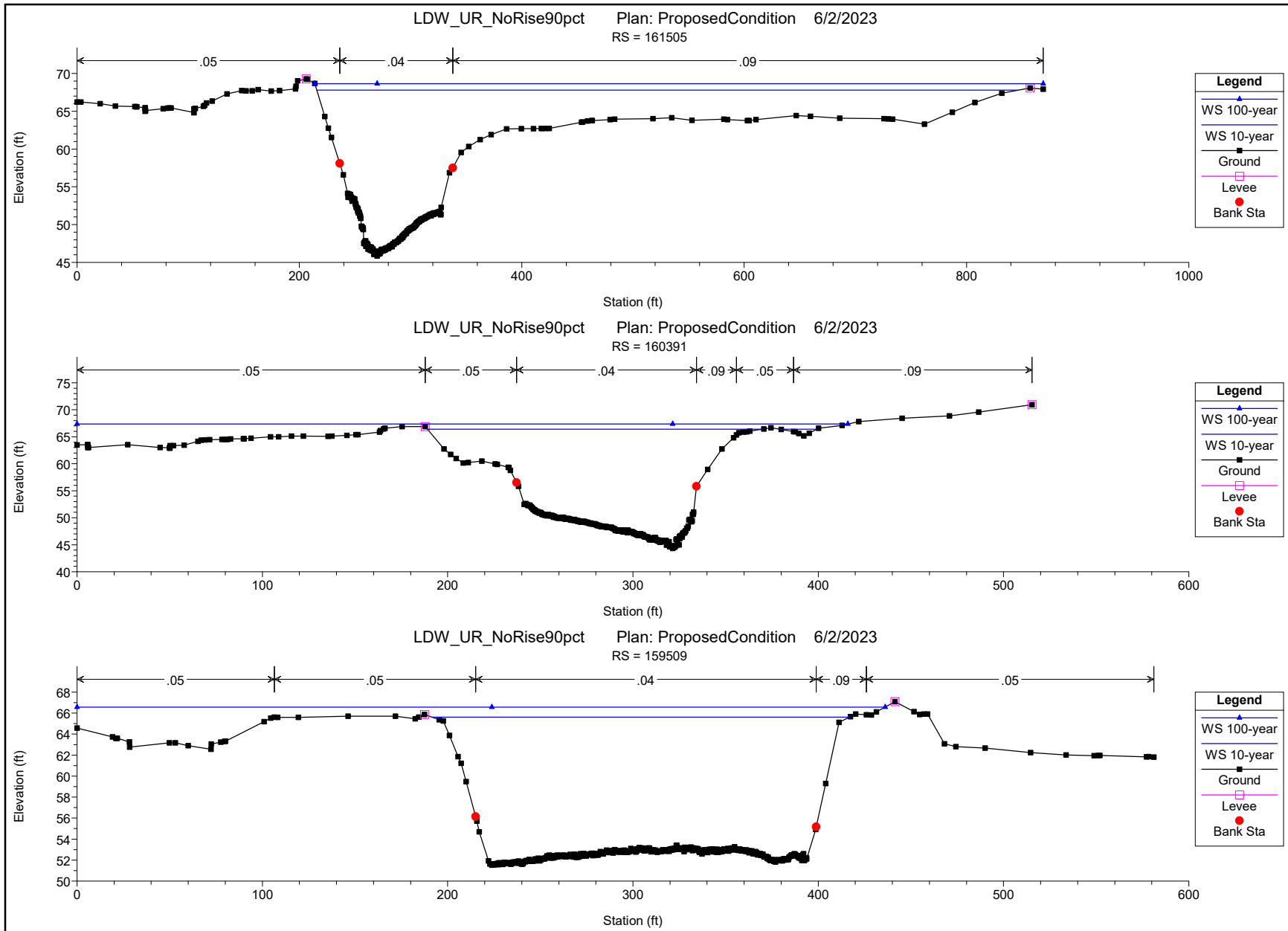
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
RS = 167556

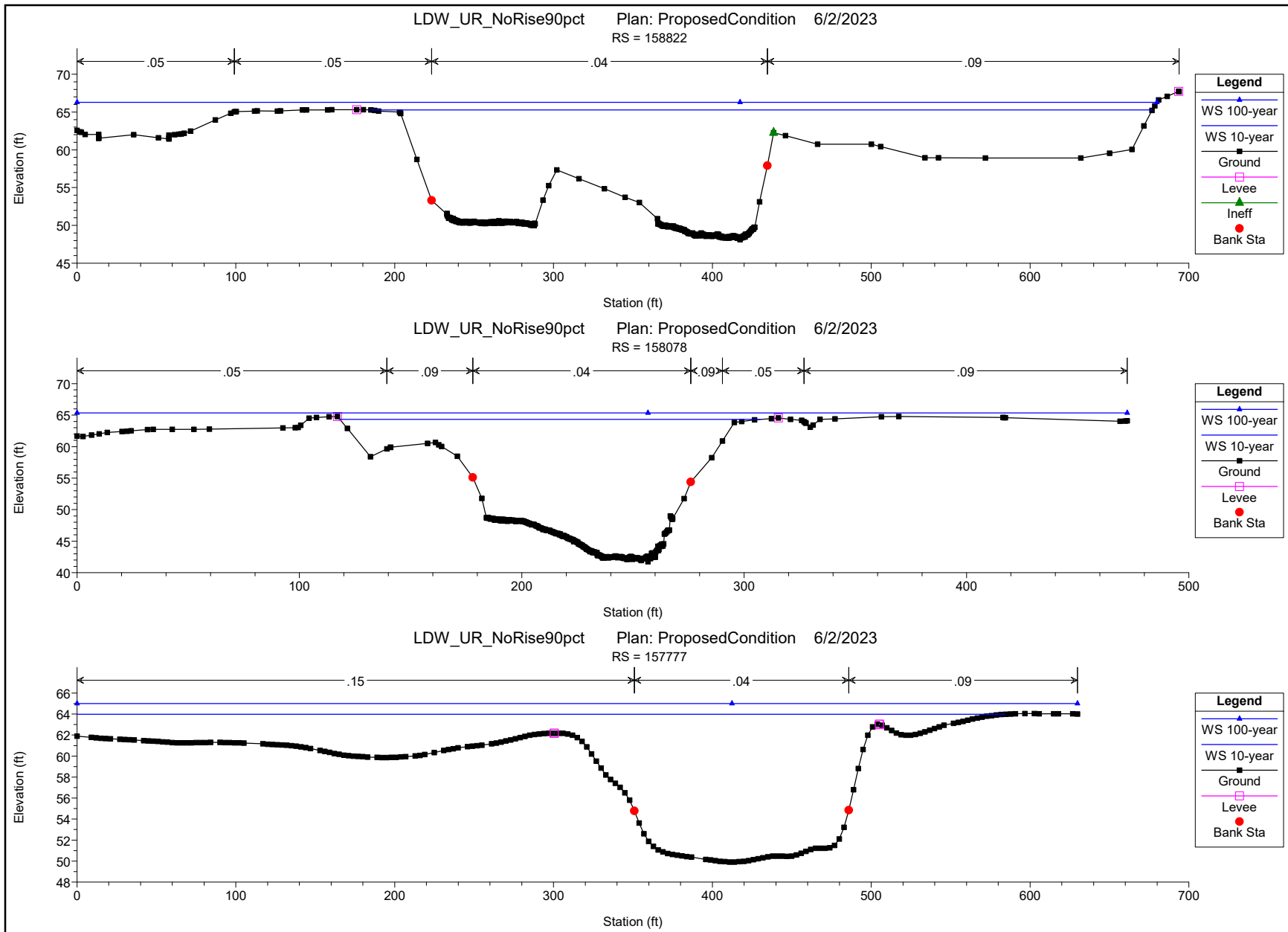


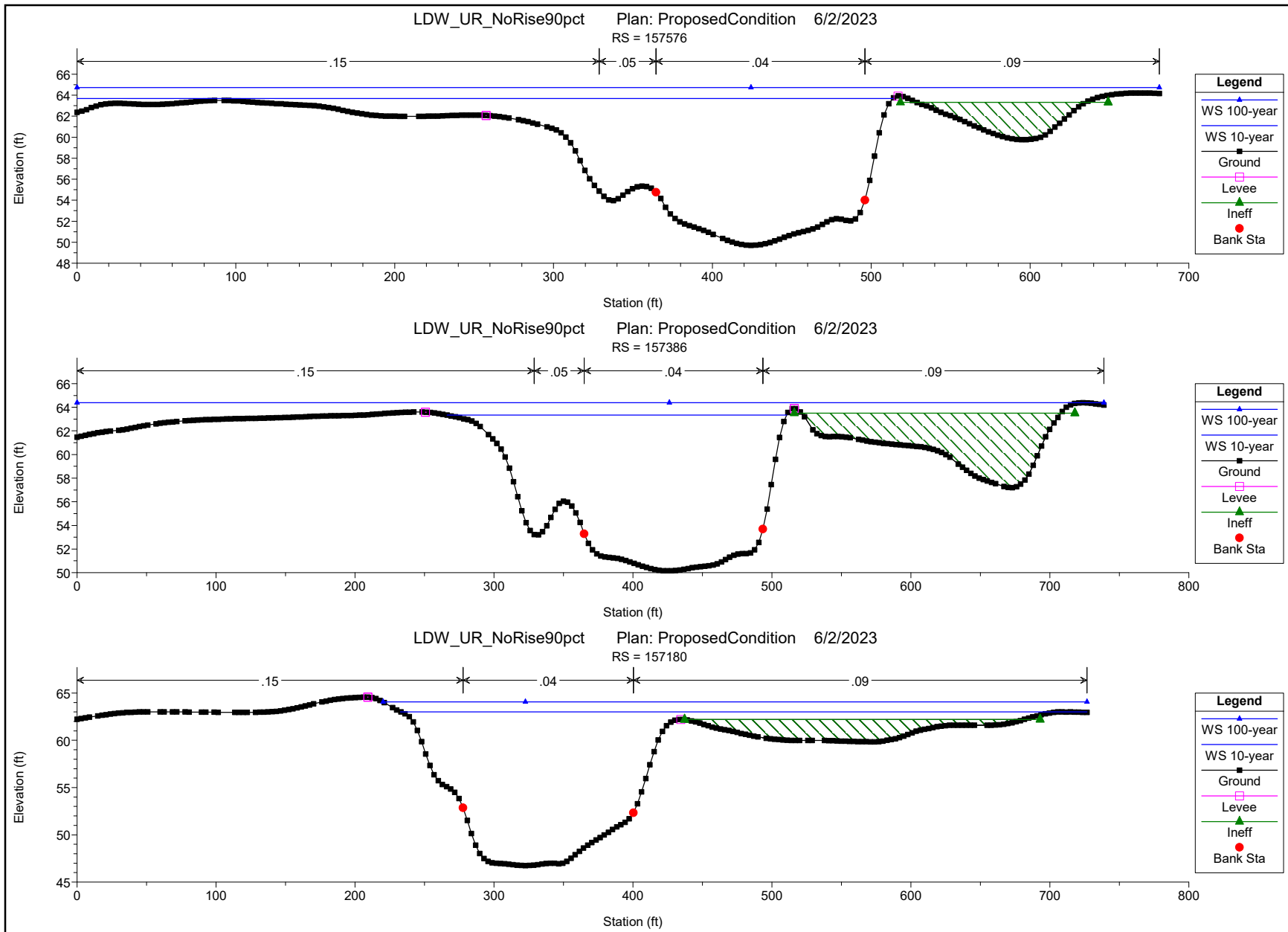


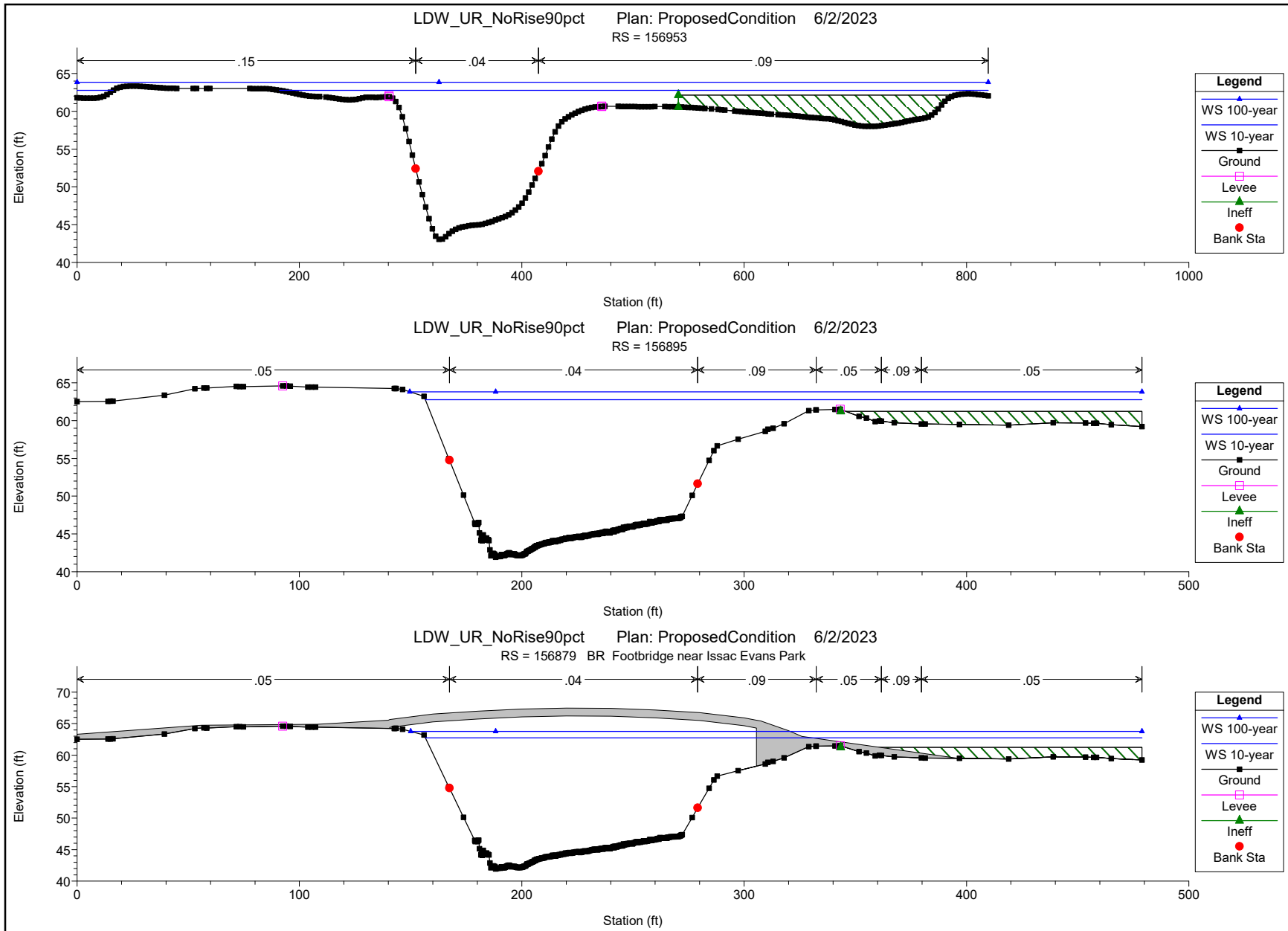


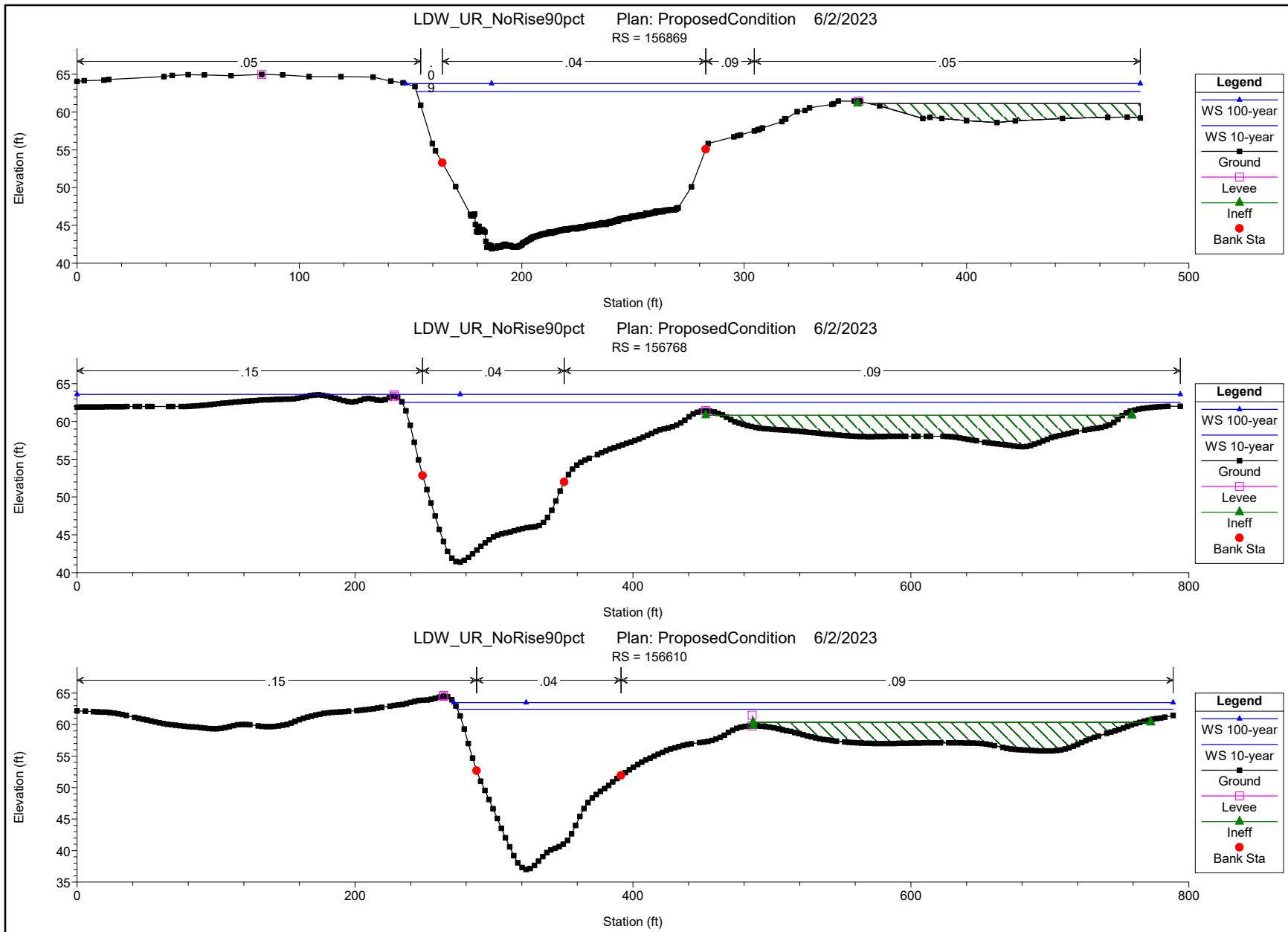


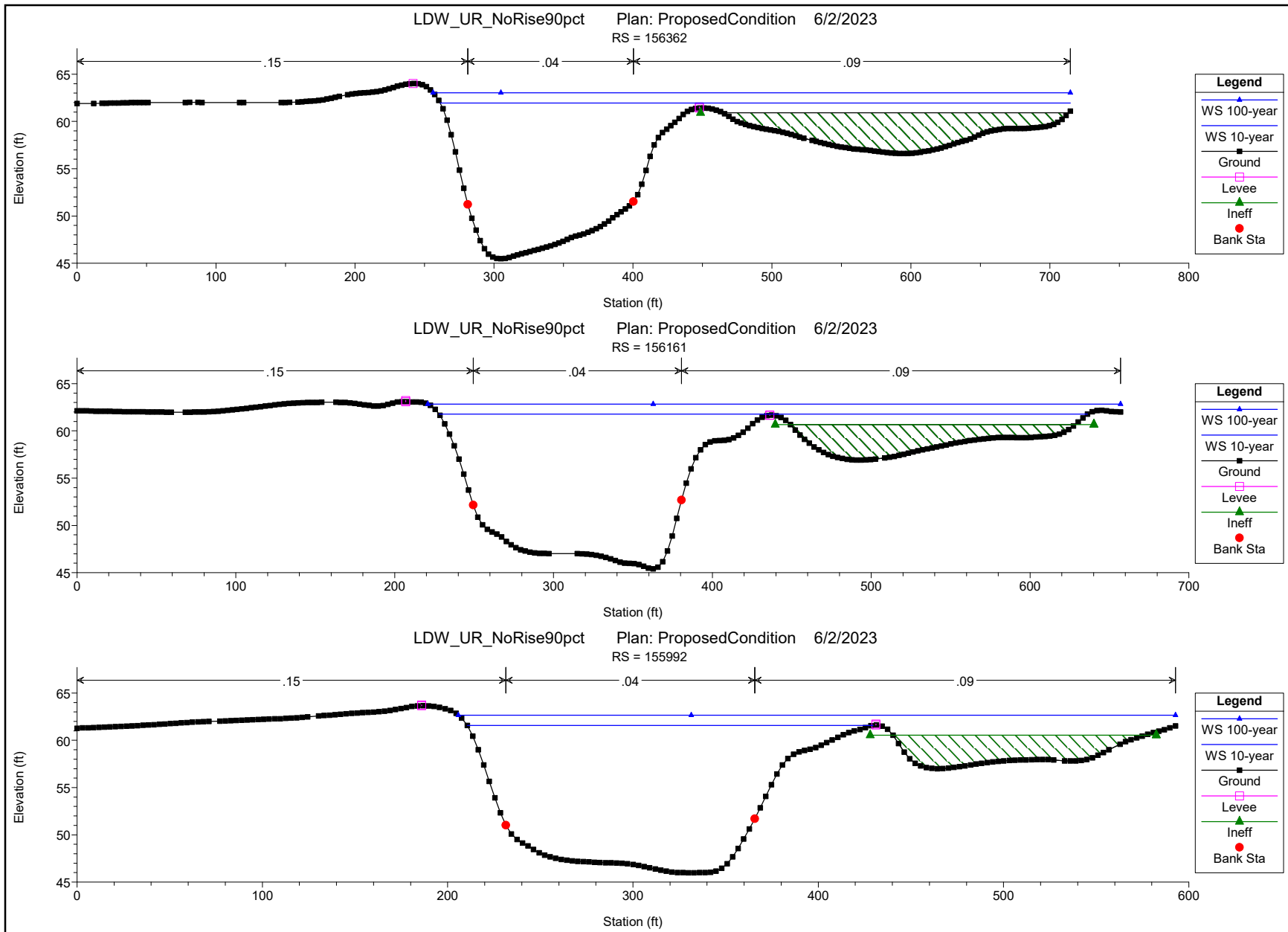


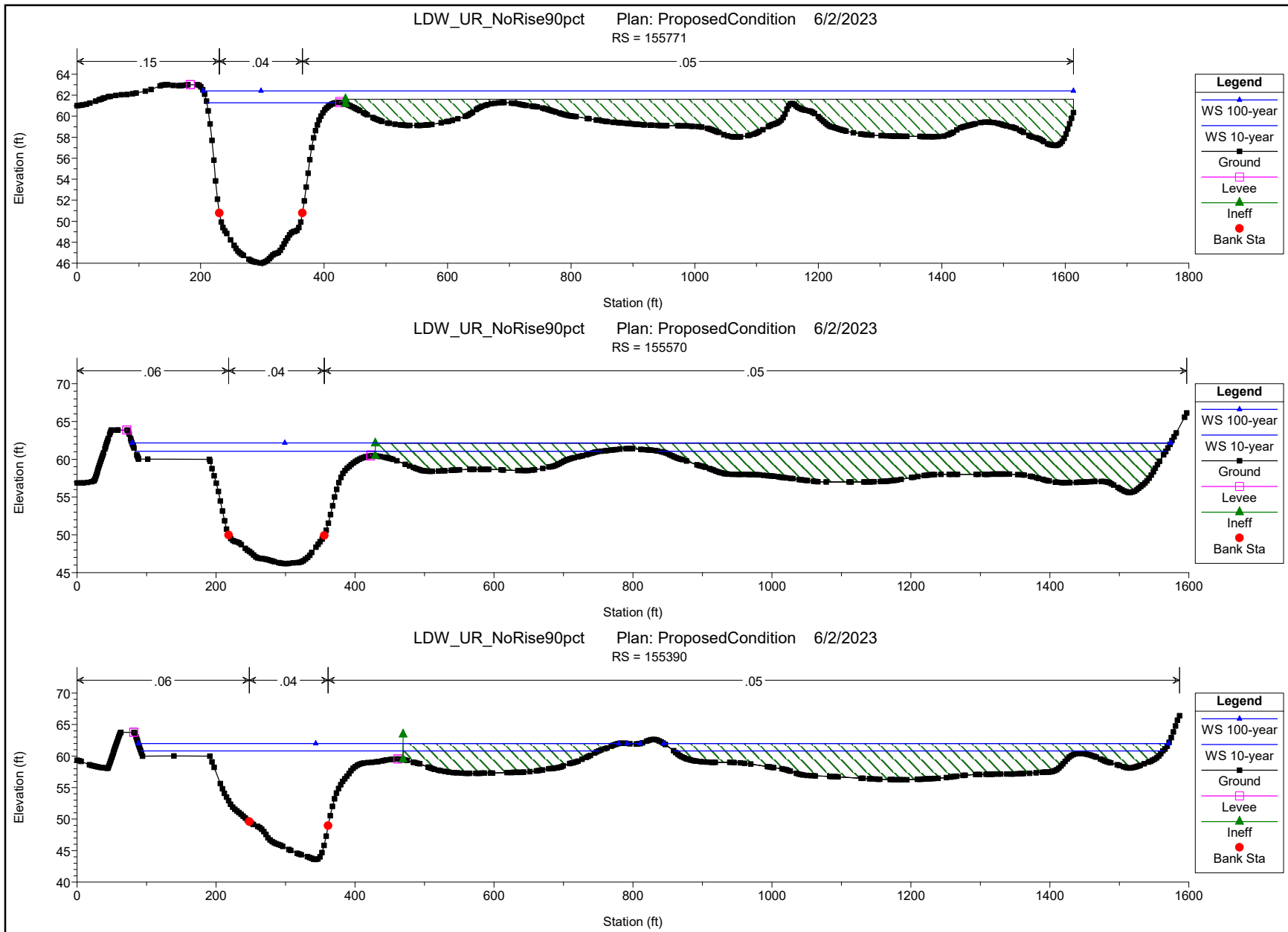


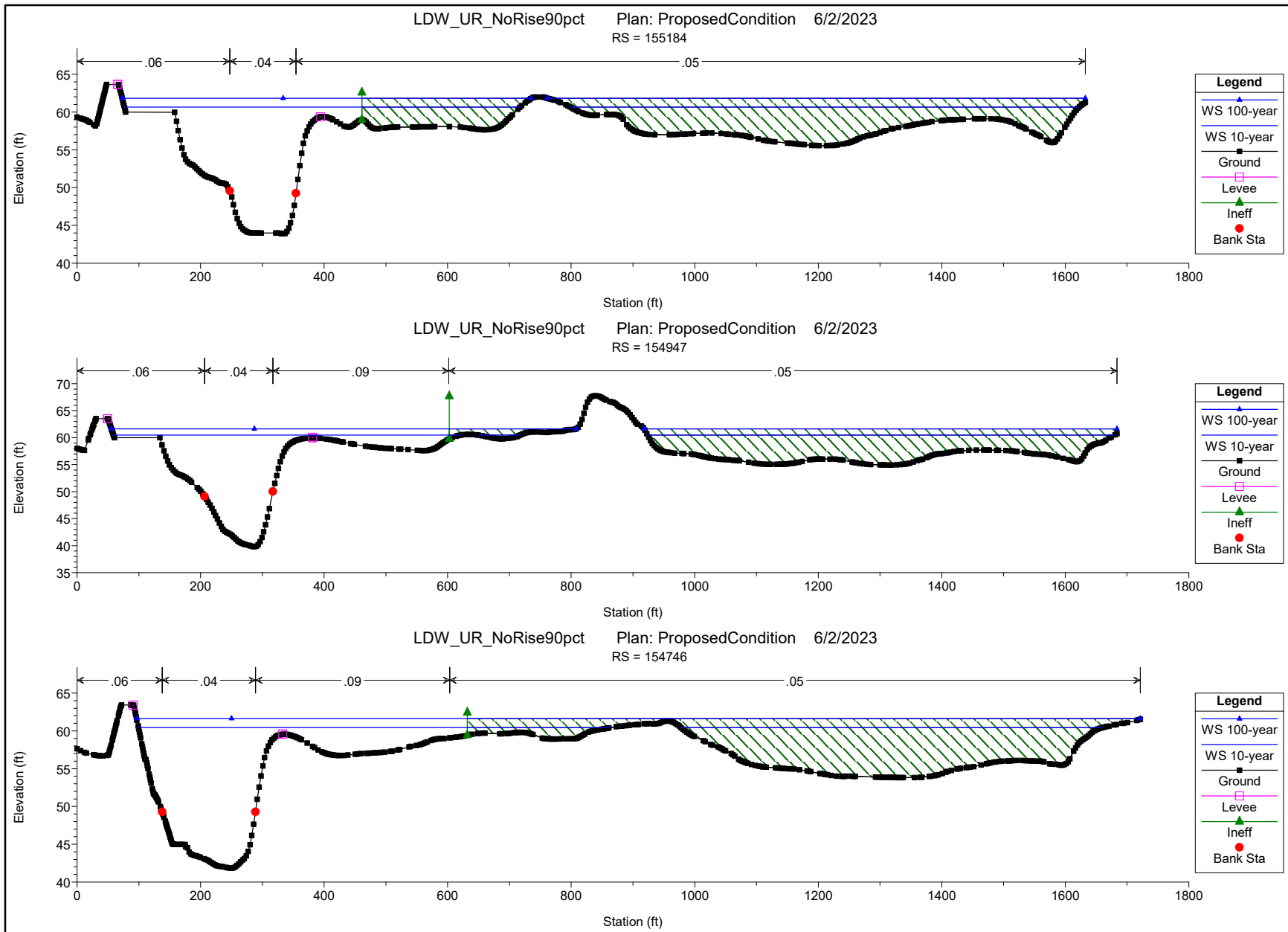


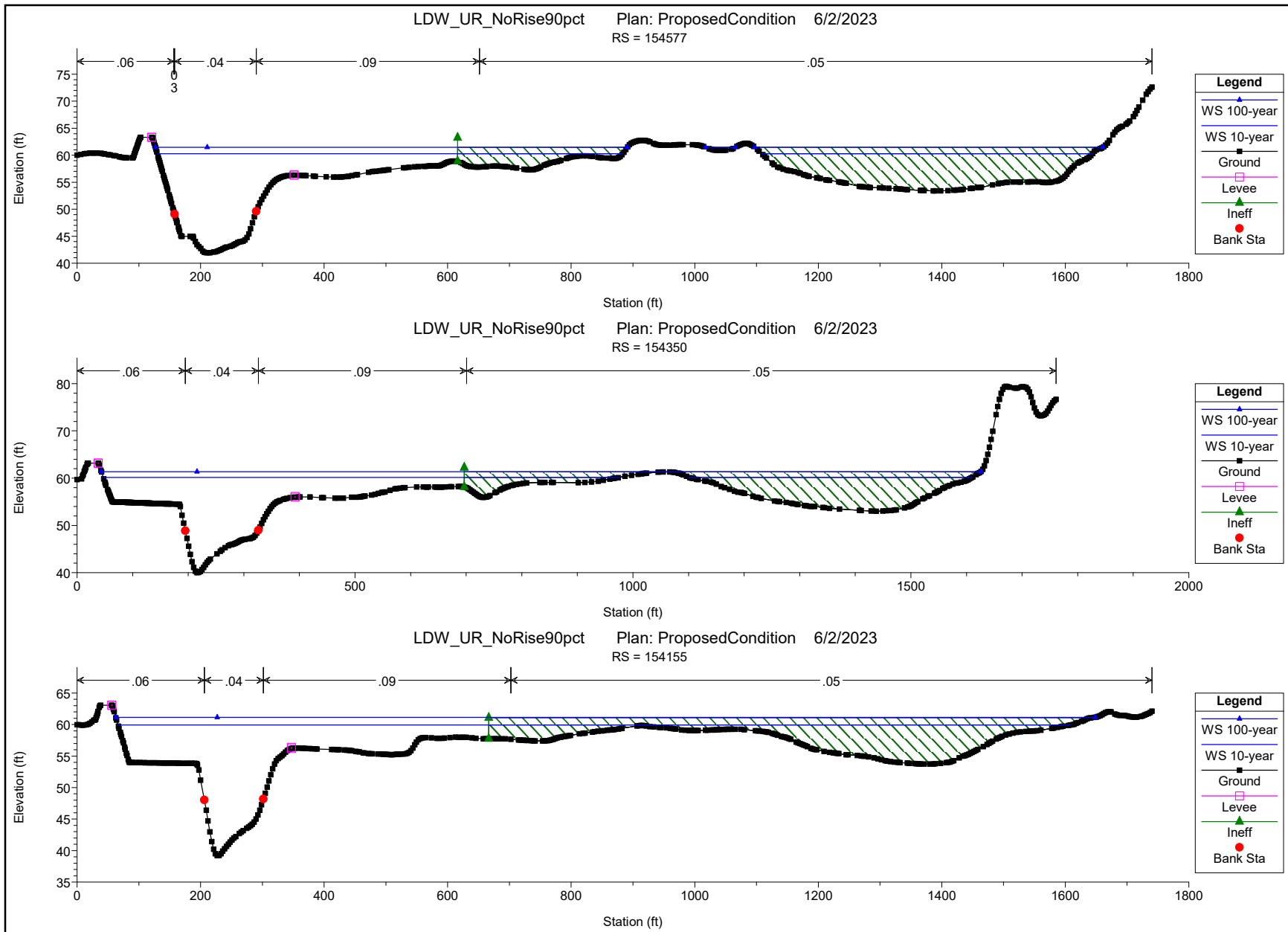


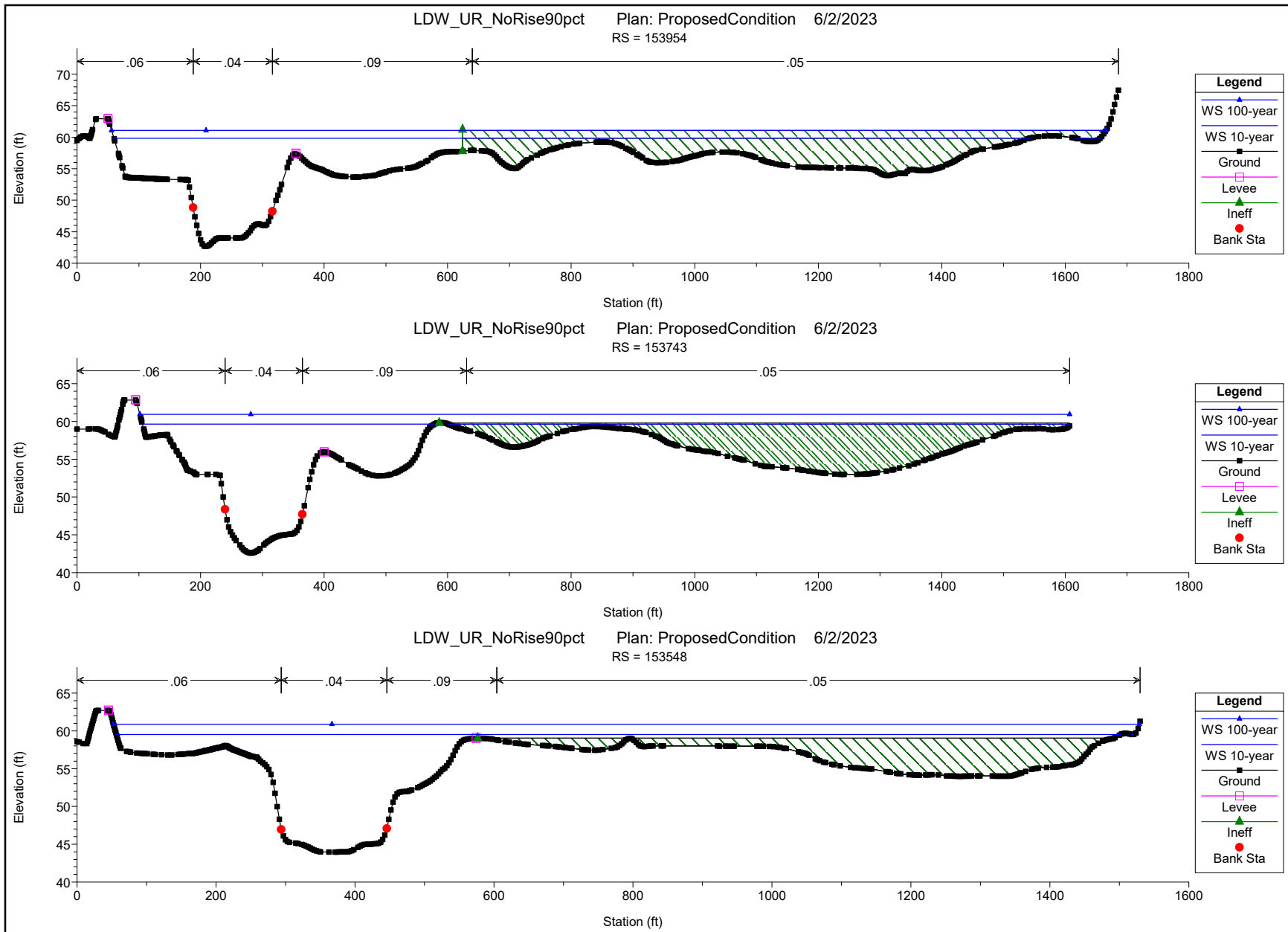


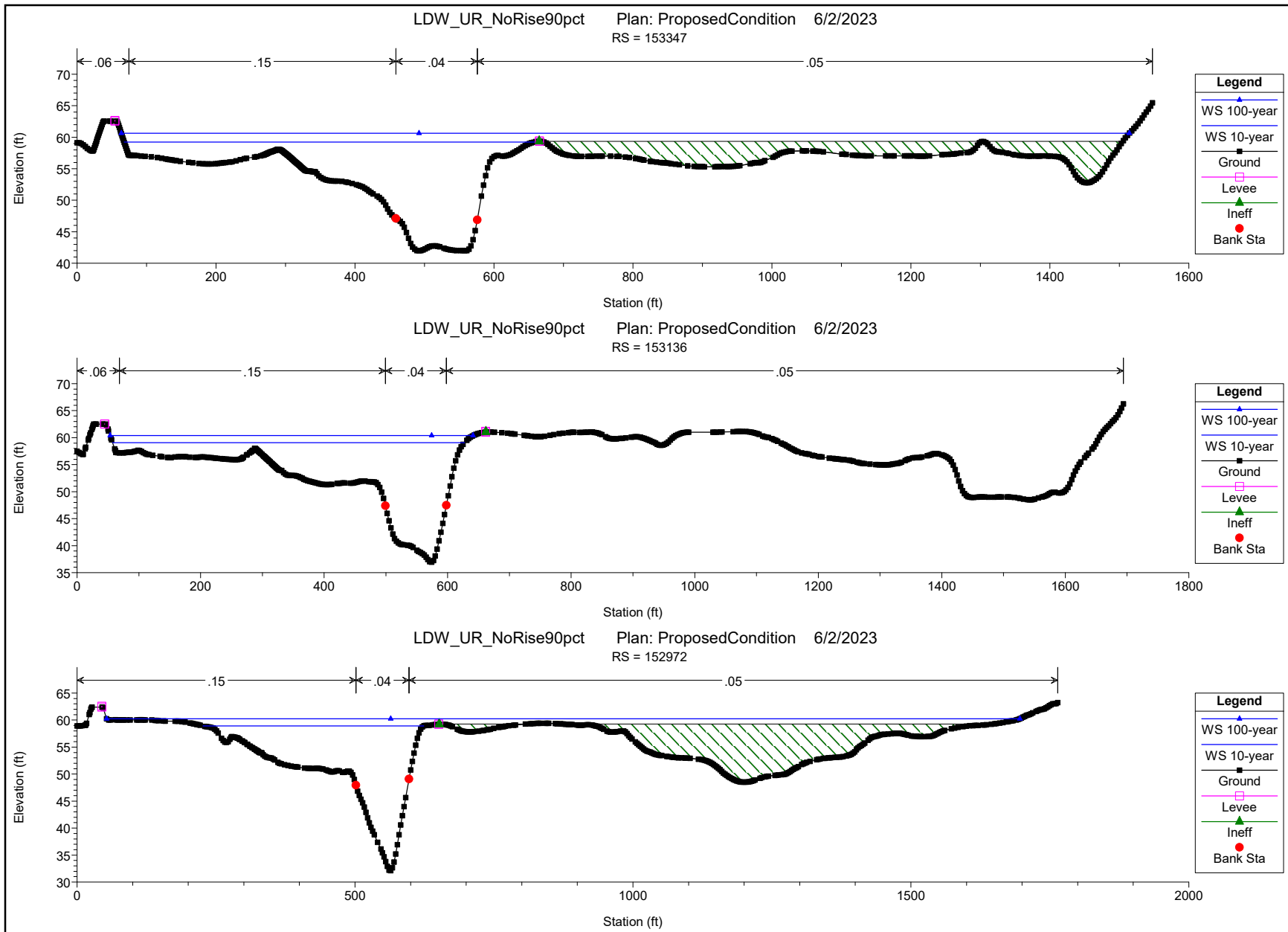


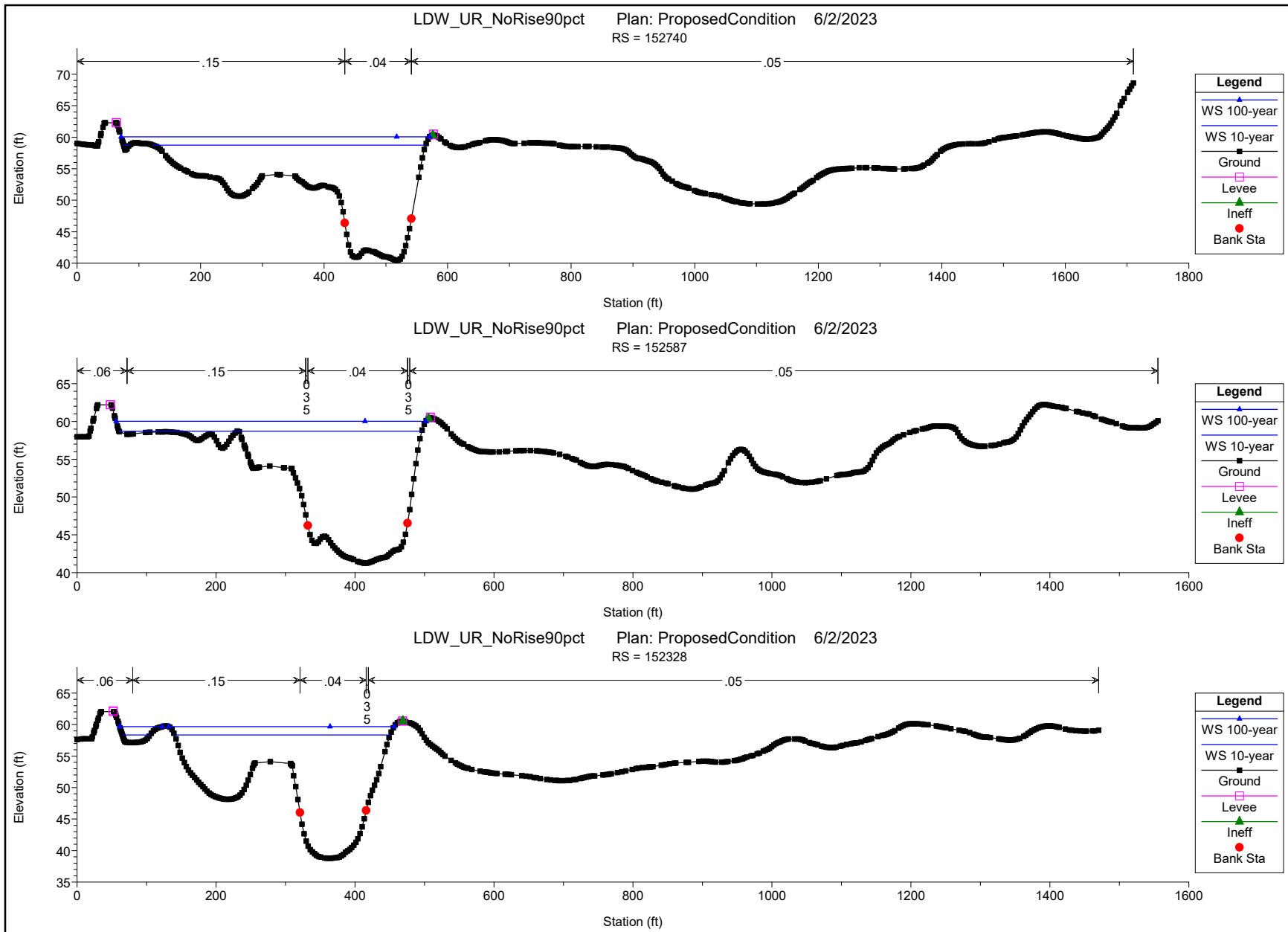


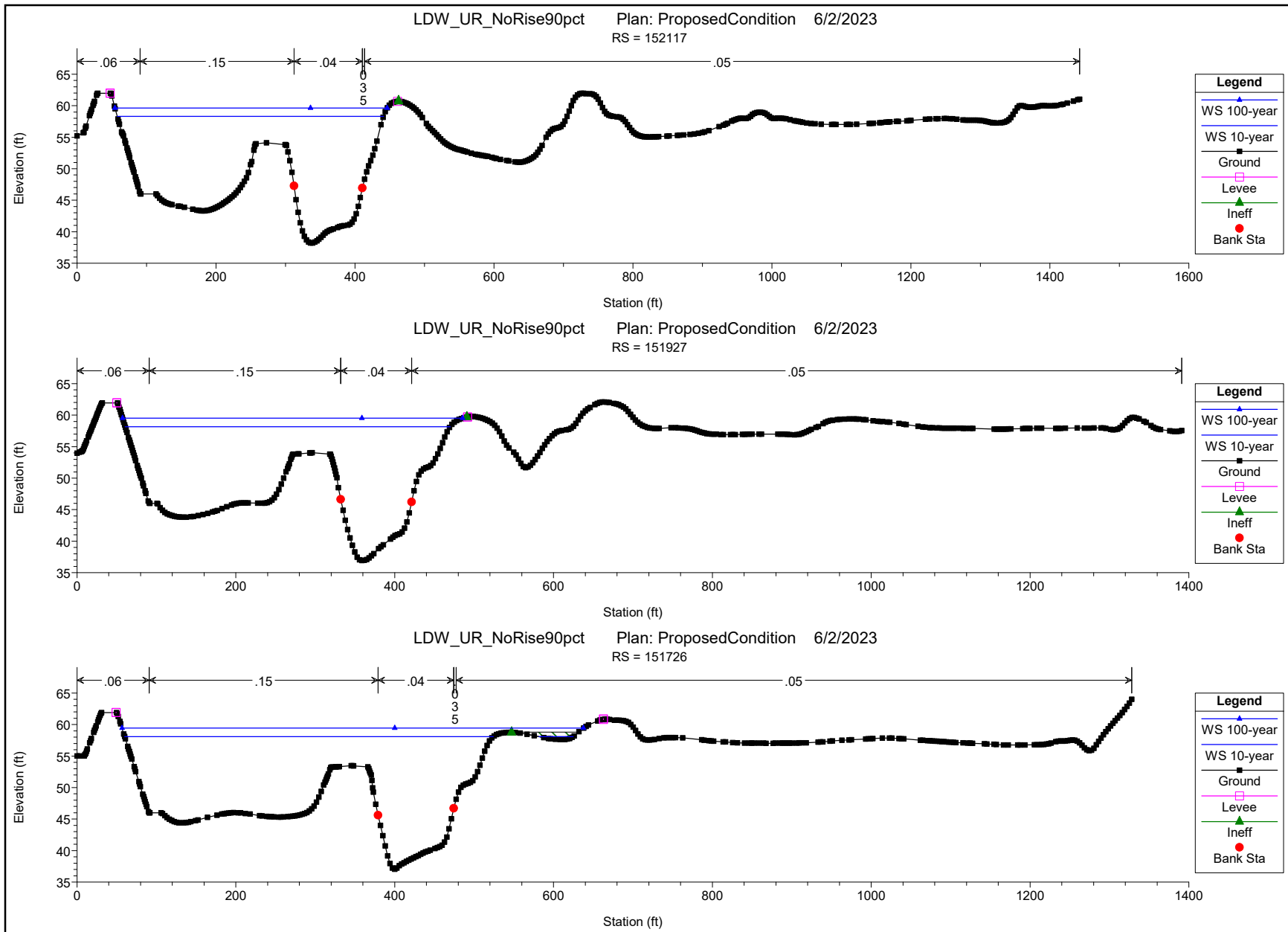


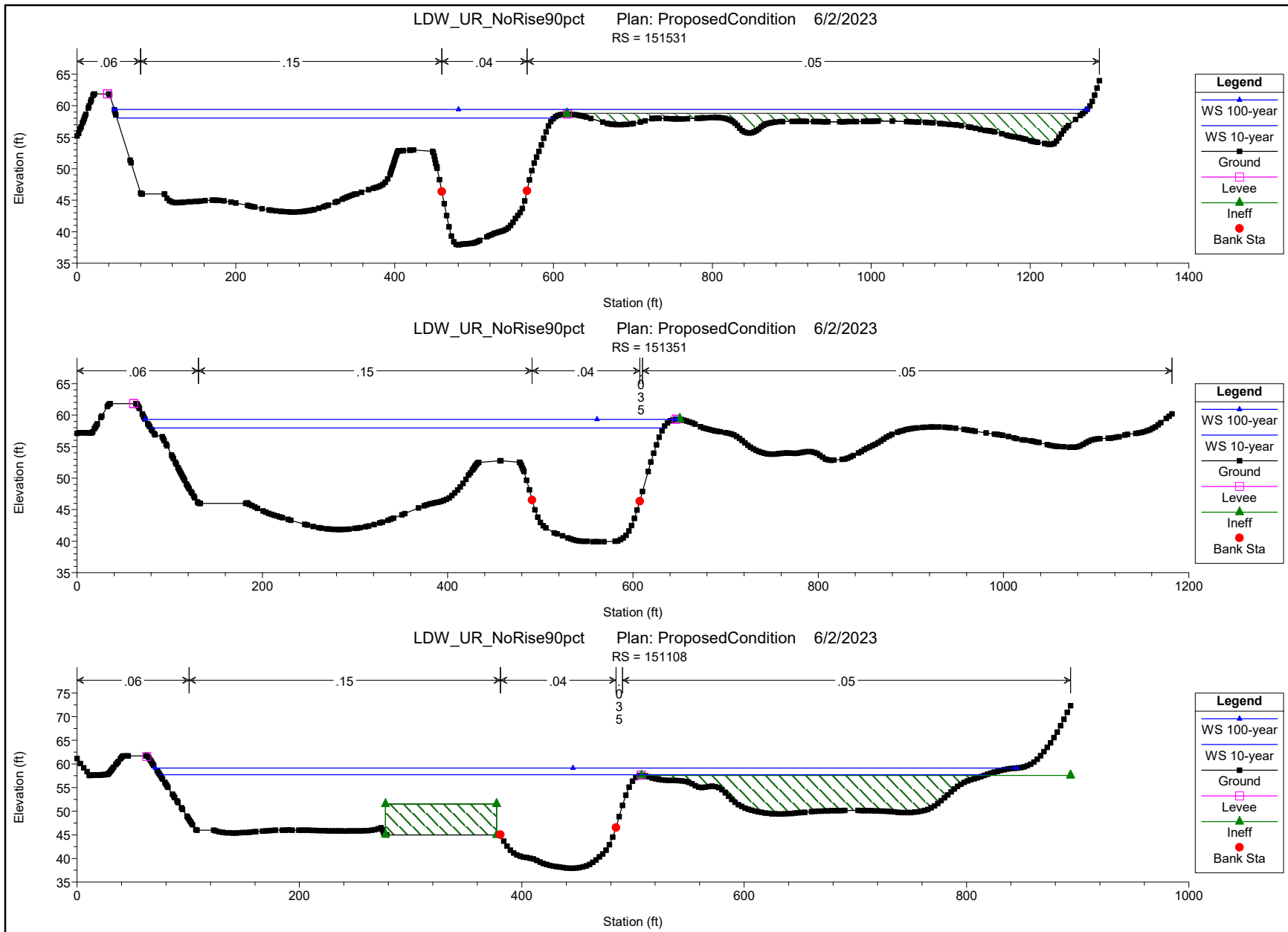


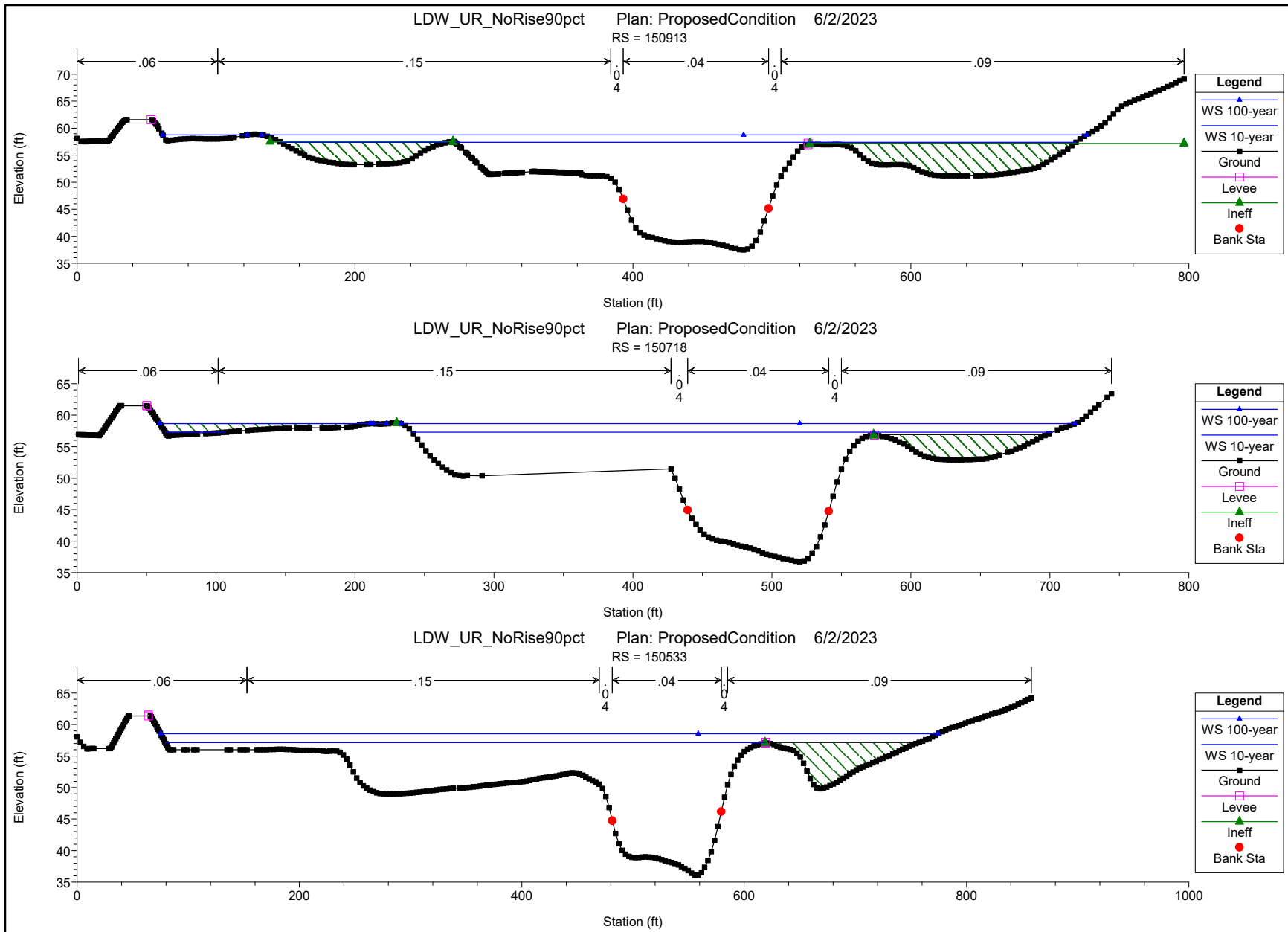


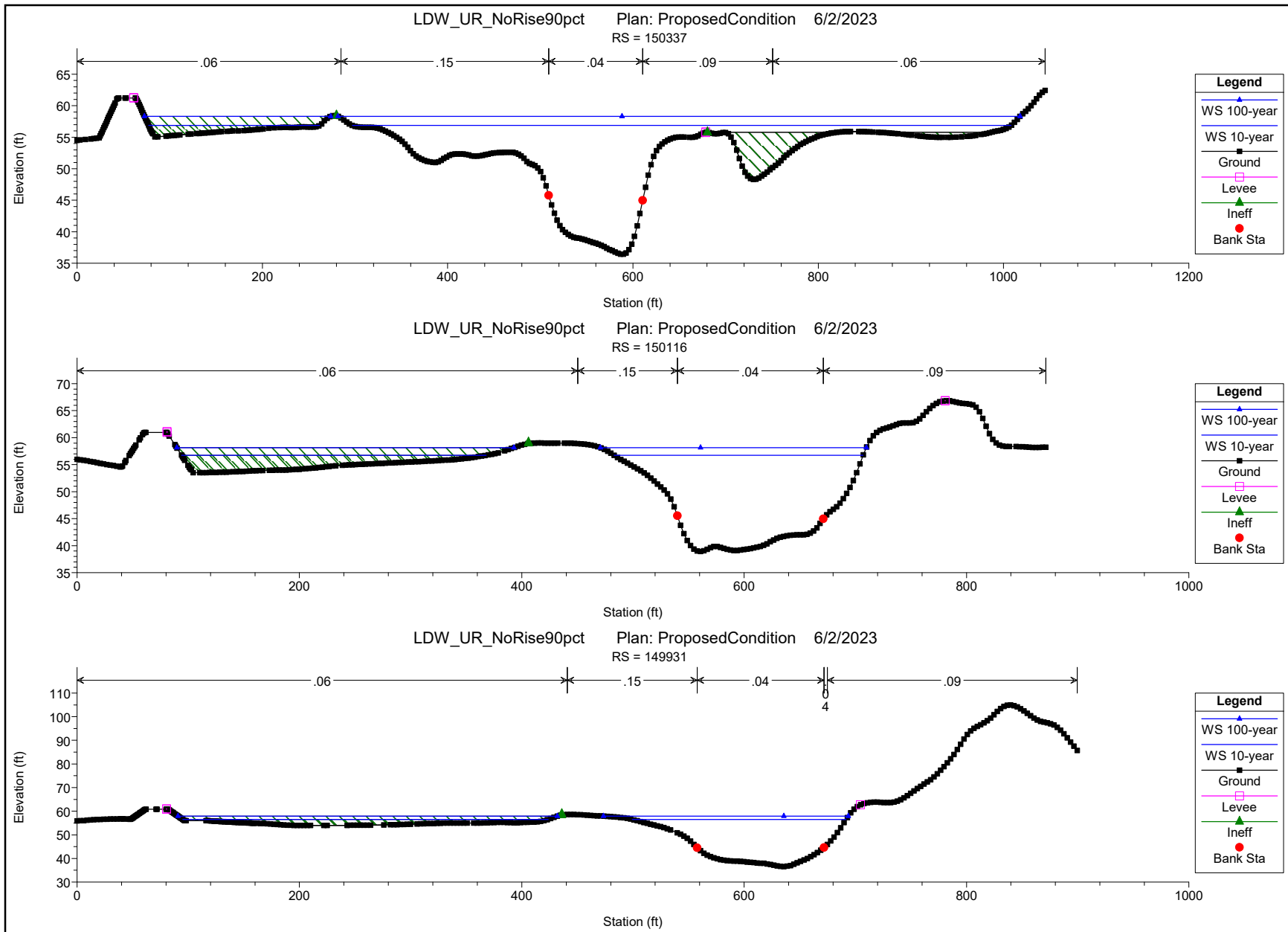


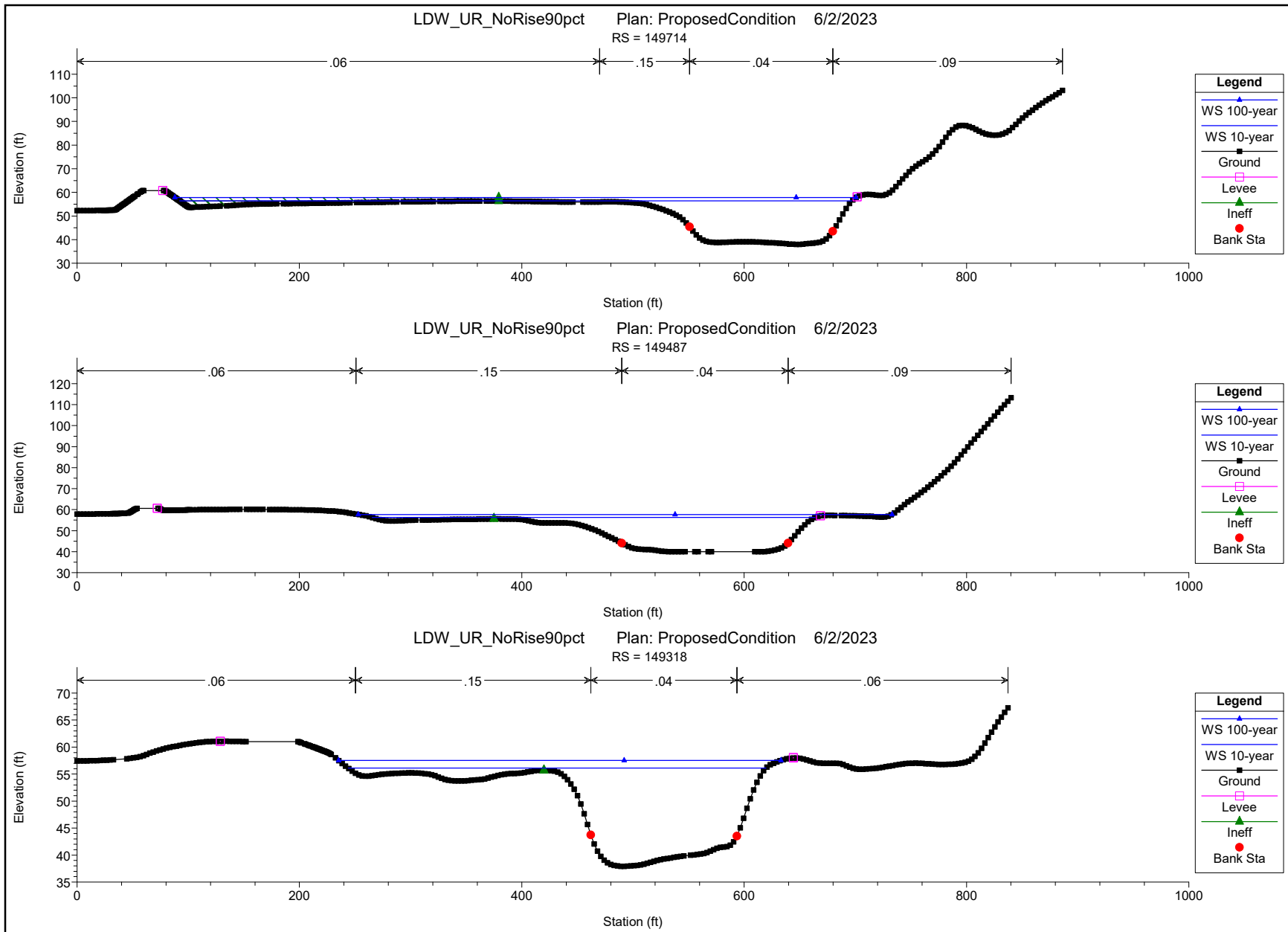


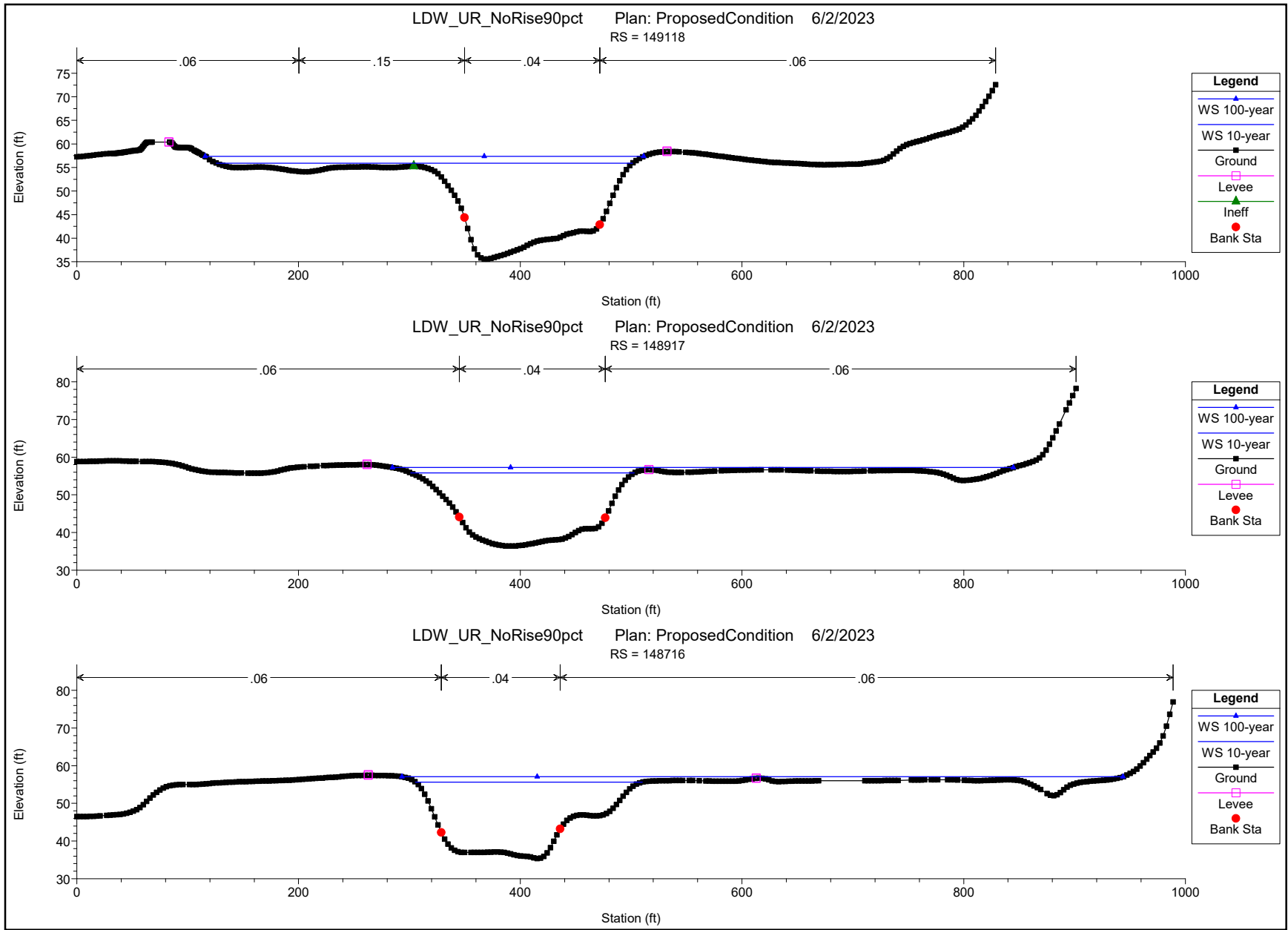


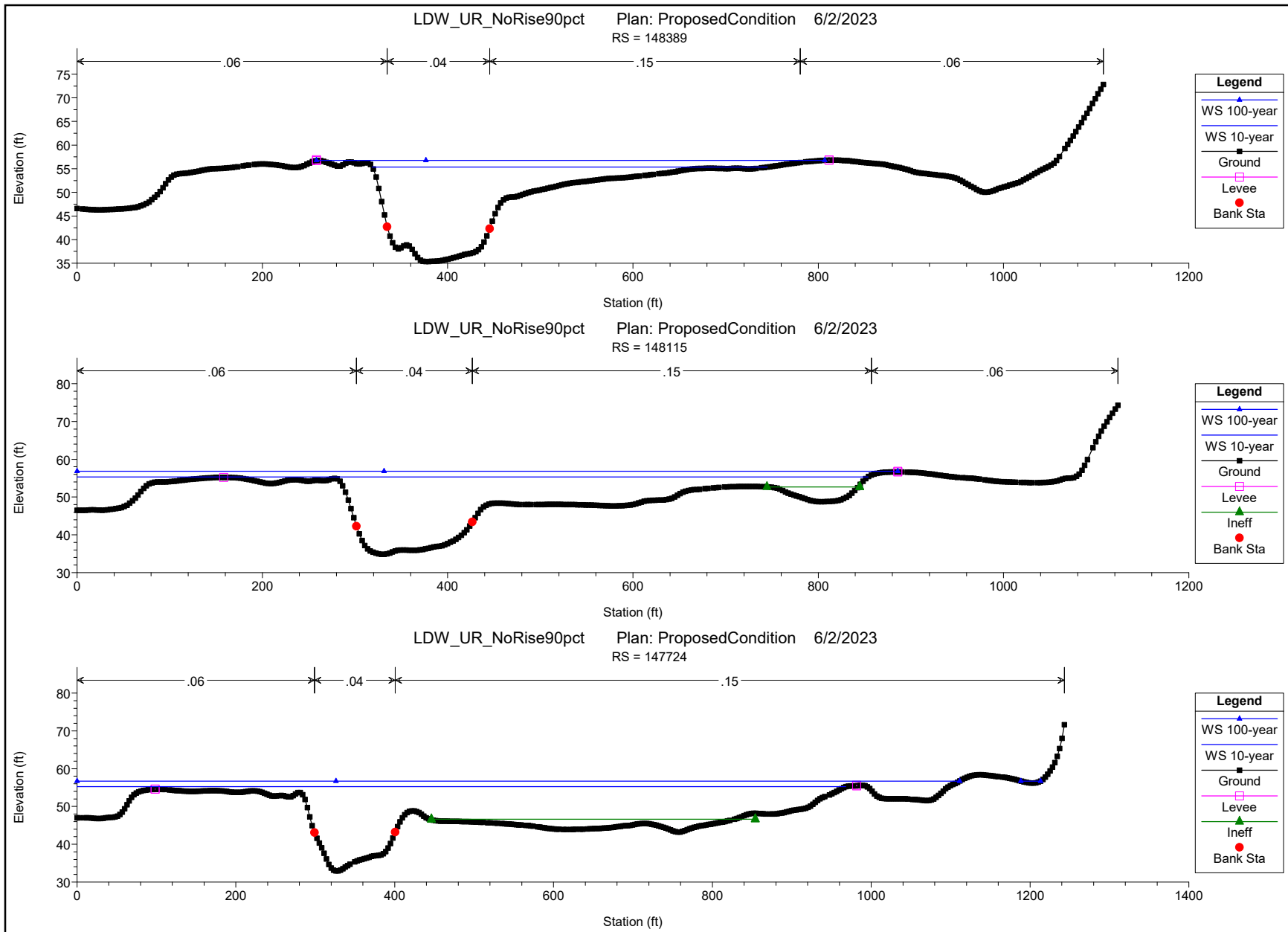


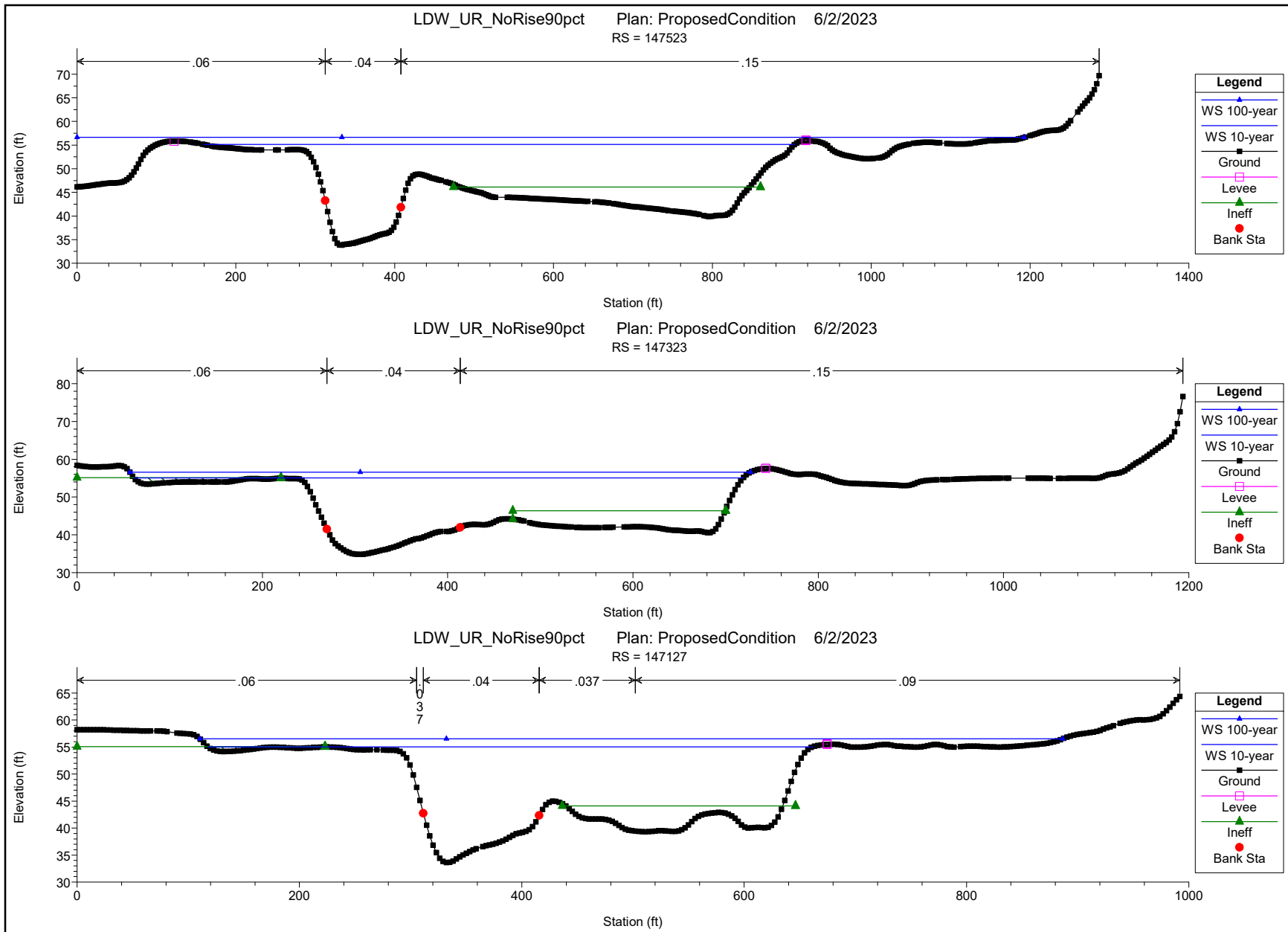


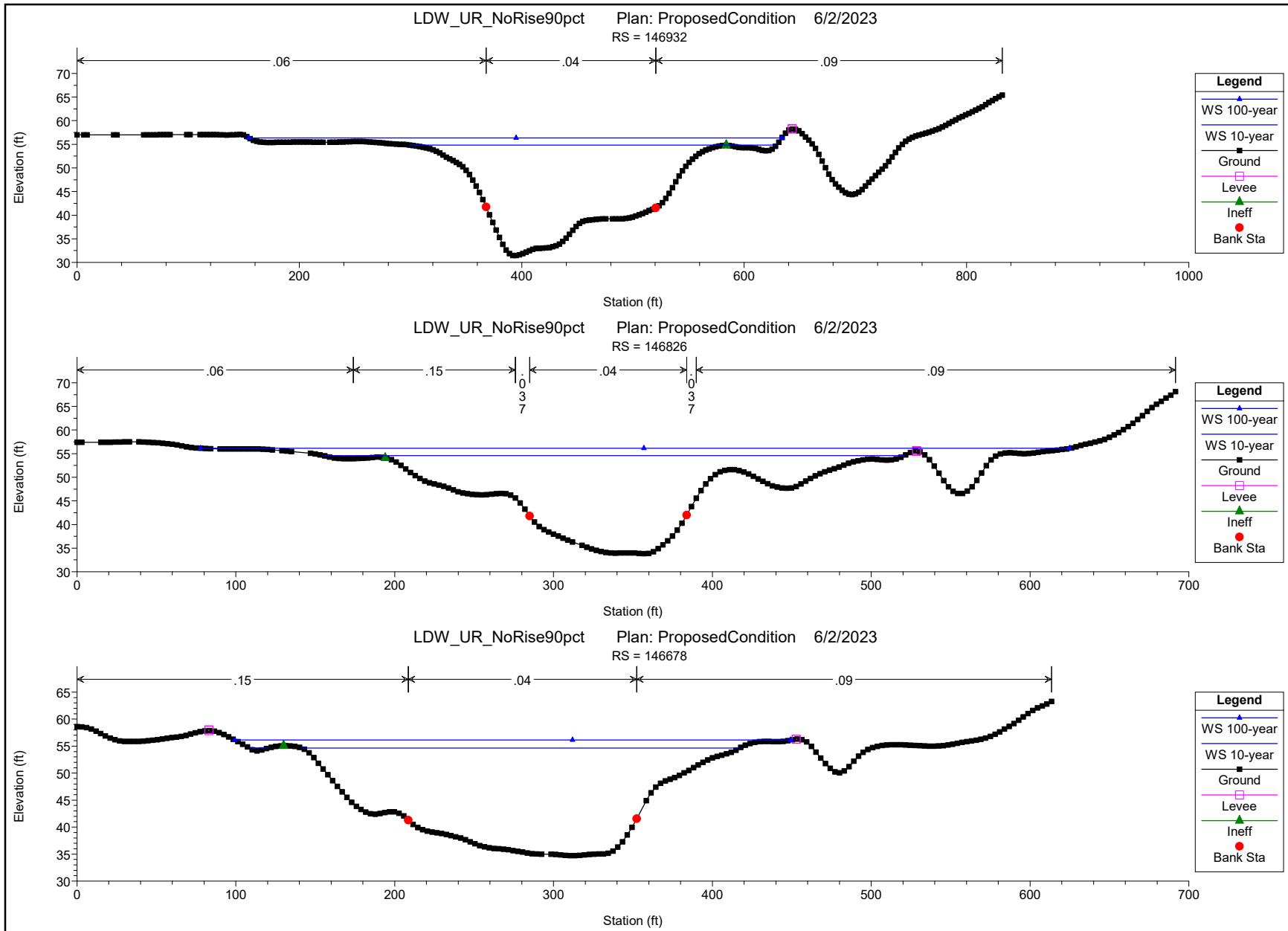


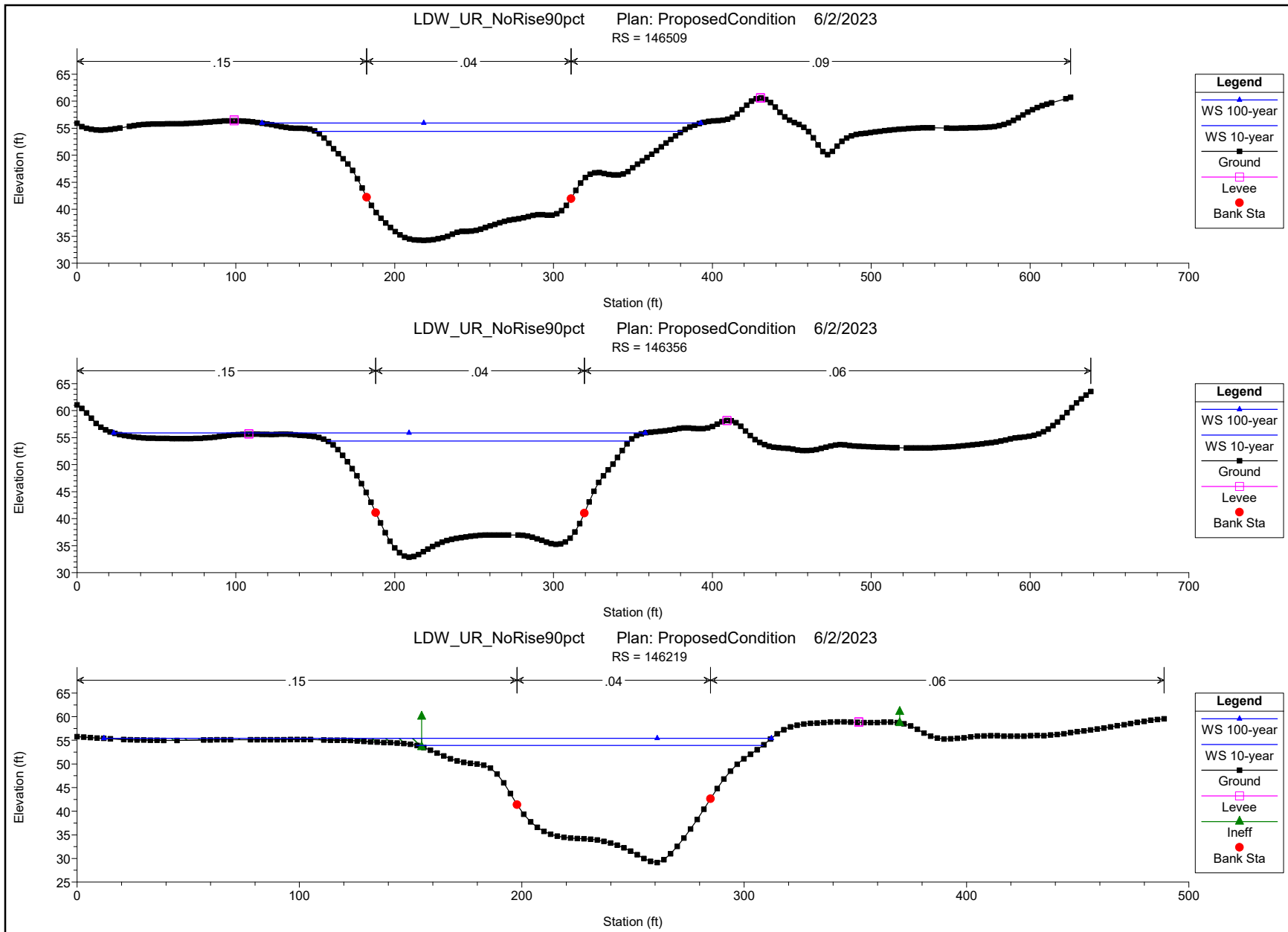


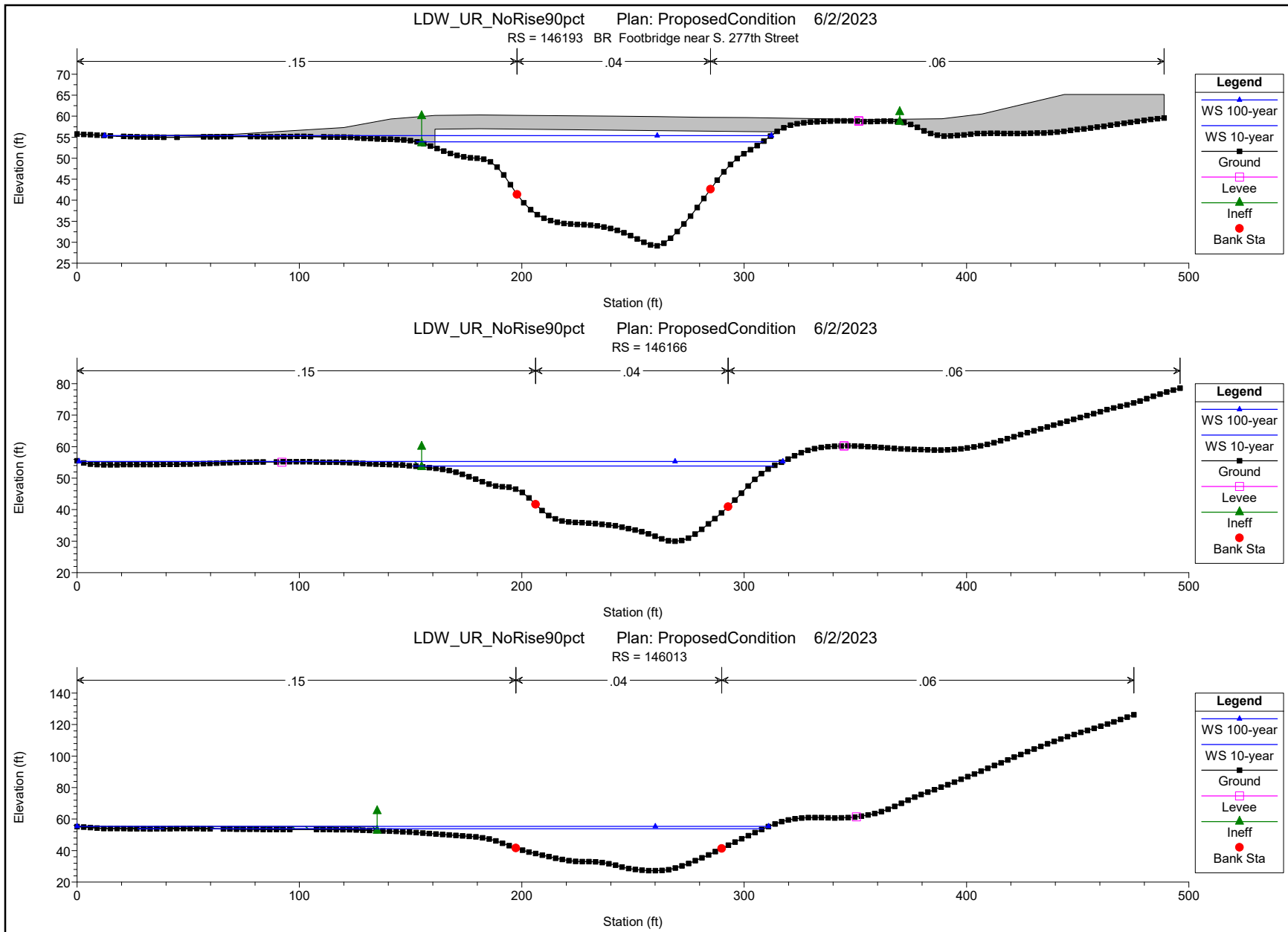


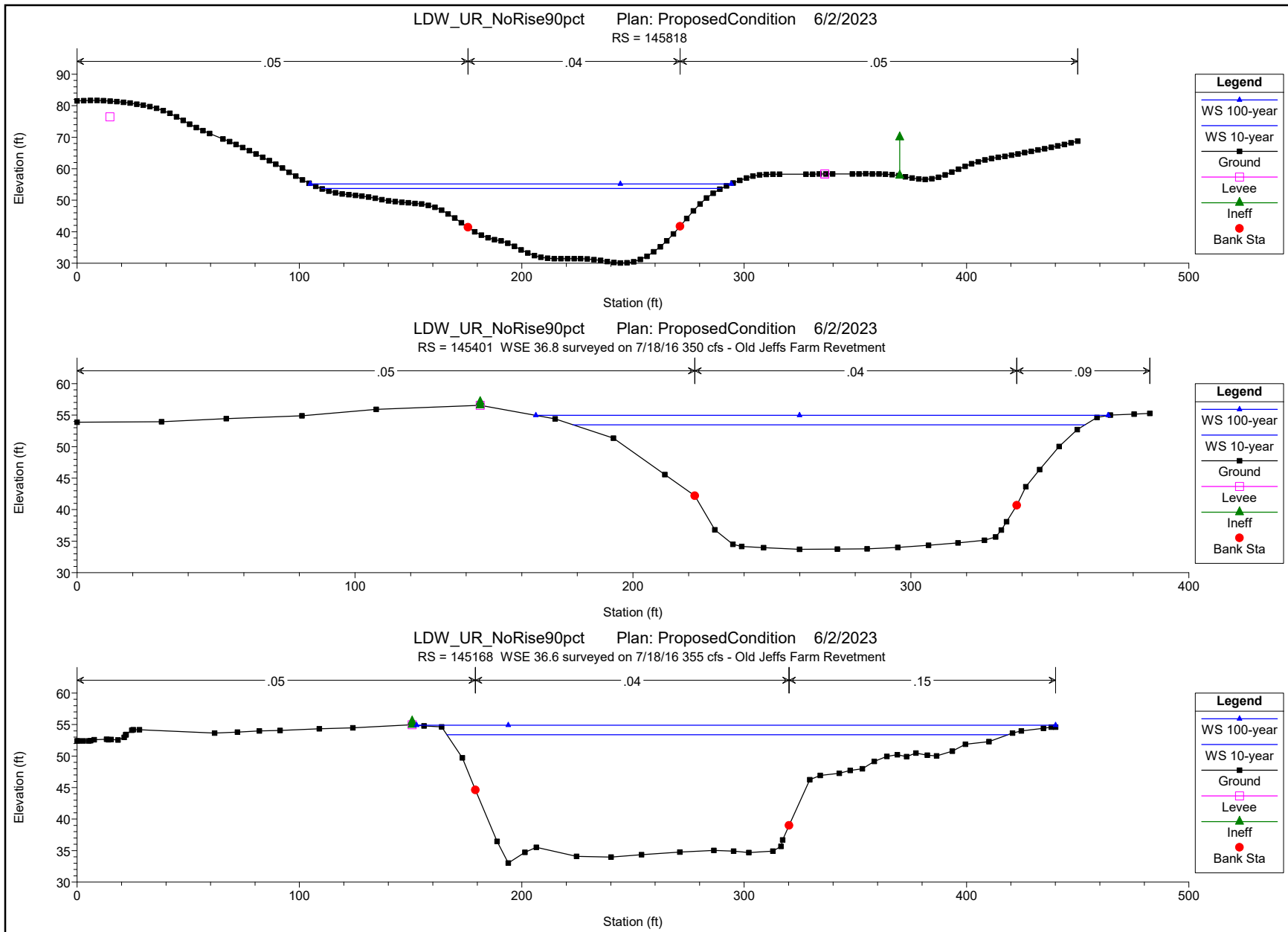


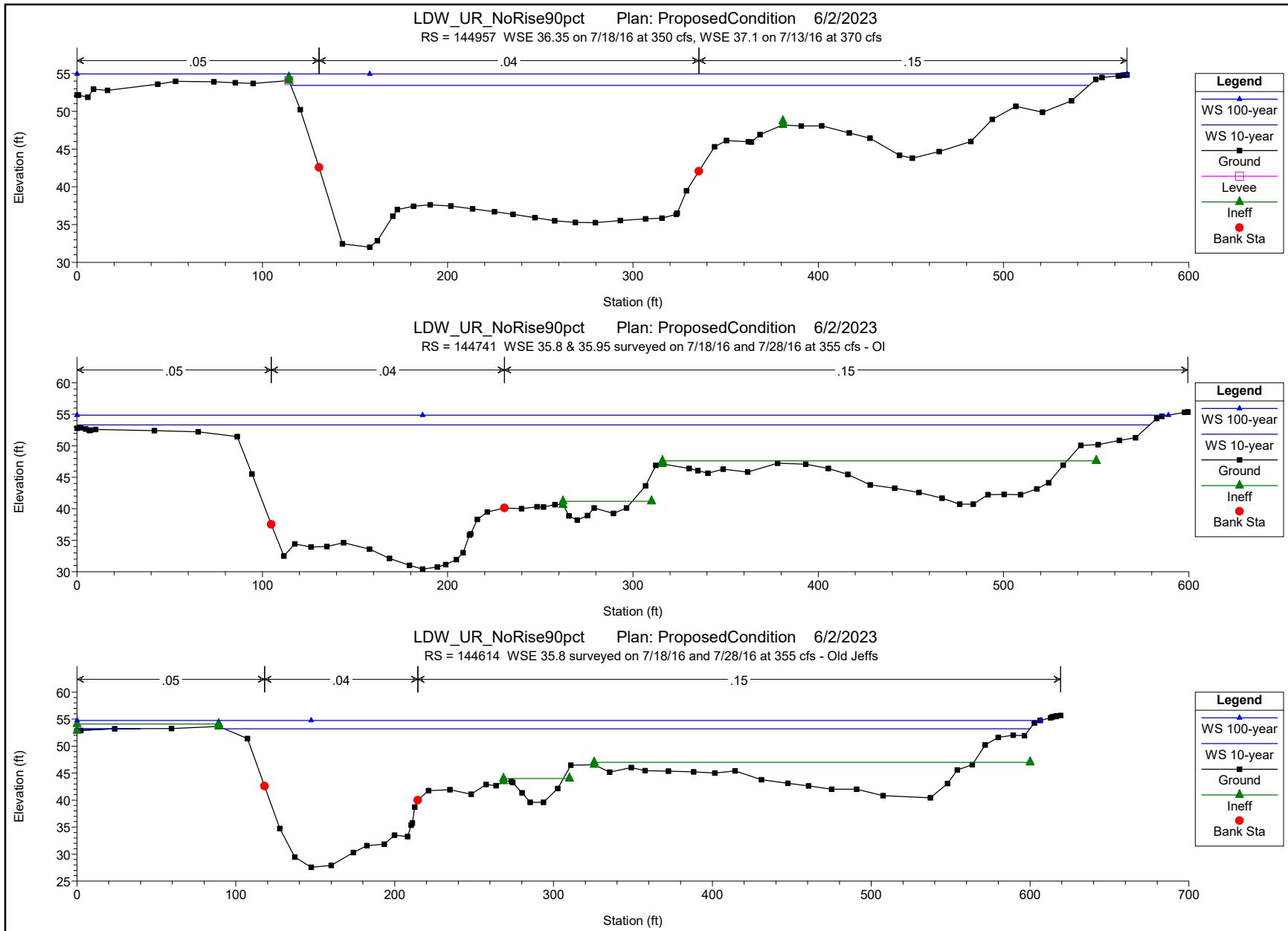




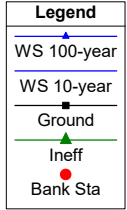
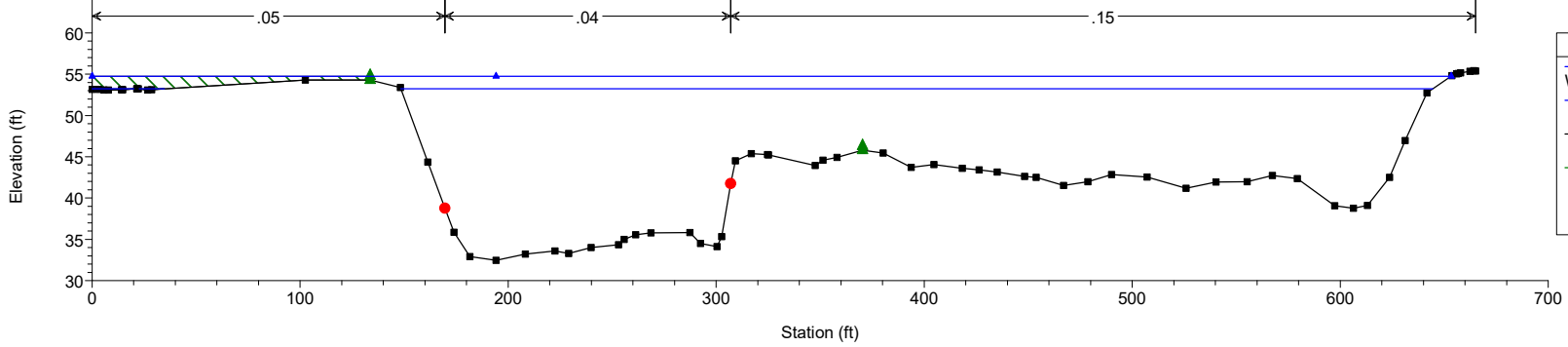




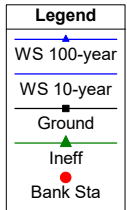
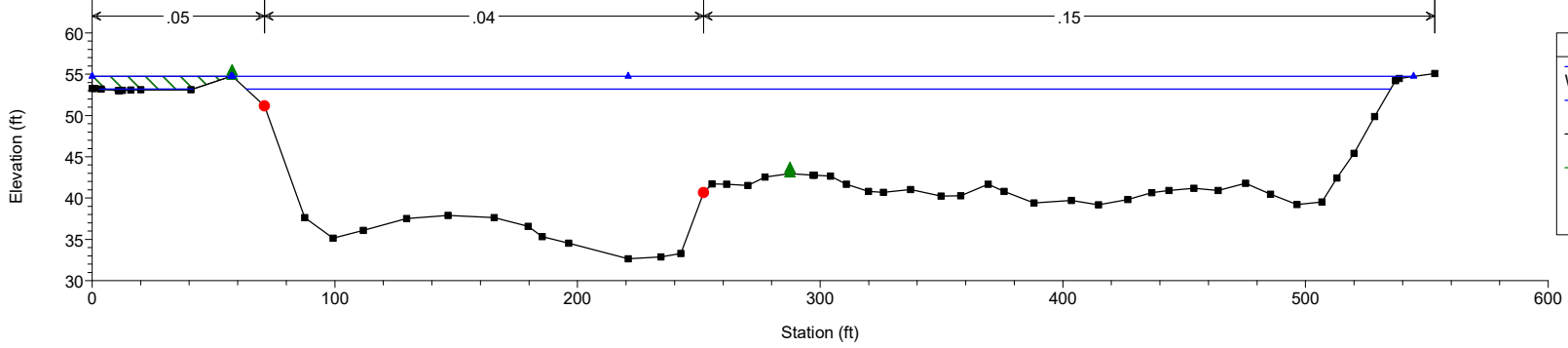




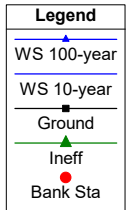
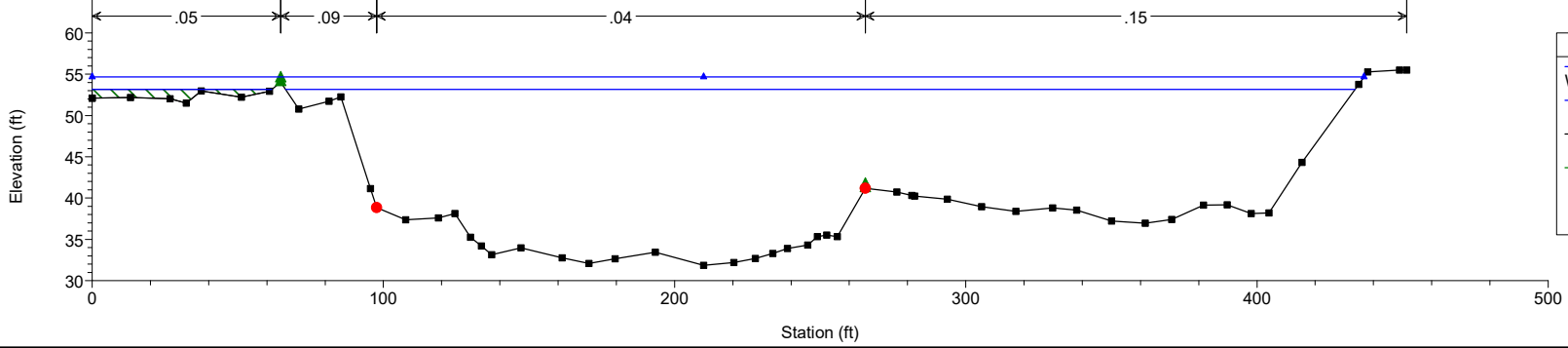
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 144461 WSE 35.3 & 35.4 surveyed on 7/13/16 & 7/21/16 at between 350 an



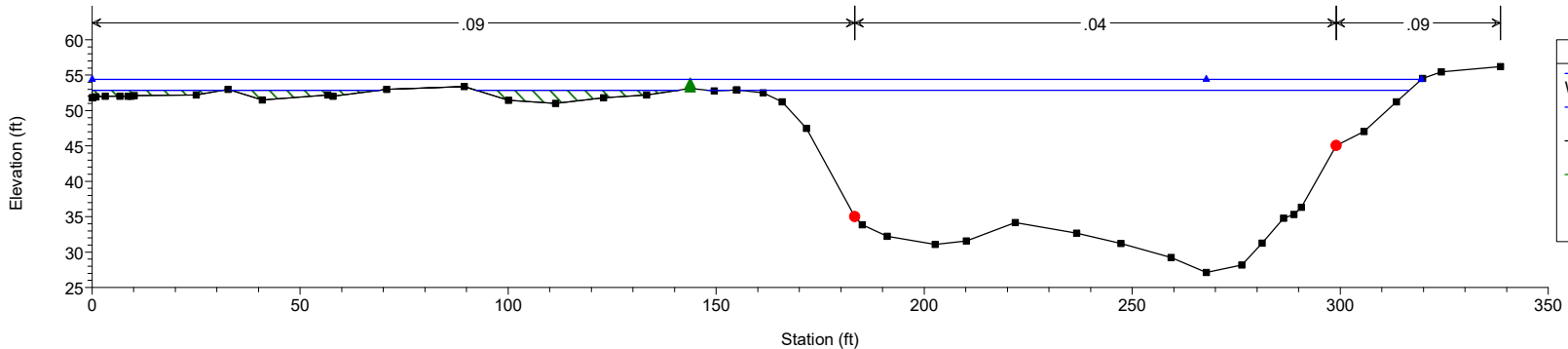
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 144308 WSE 35.4 surveyed on 7/21/16 at 350 cfs - Old Jeffs Farm Revetme



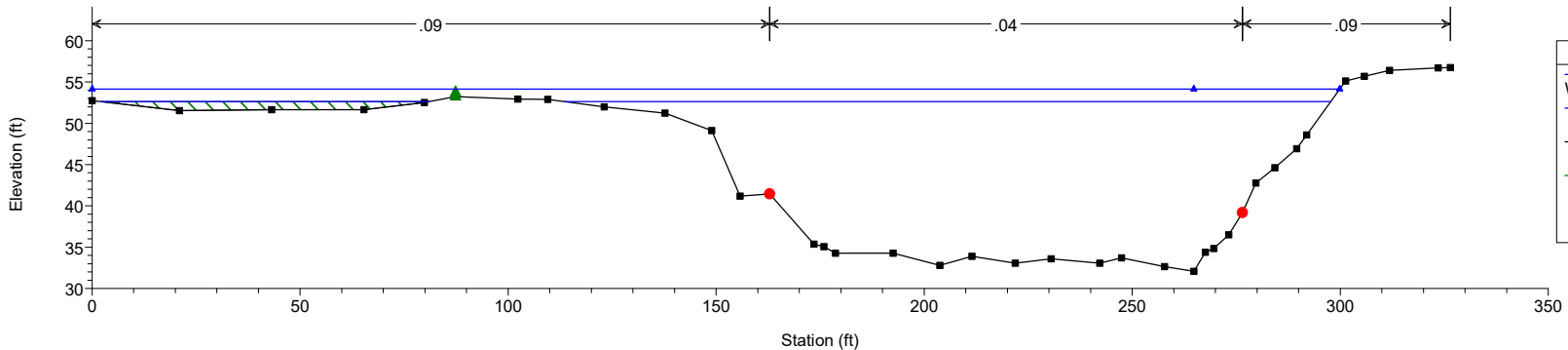
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 144149 WSE 35.3 surveyed on 7/22/16 at 360 cfs - Old Jeffs Farm Revetme



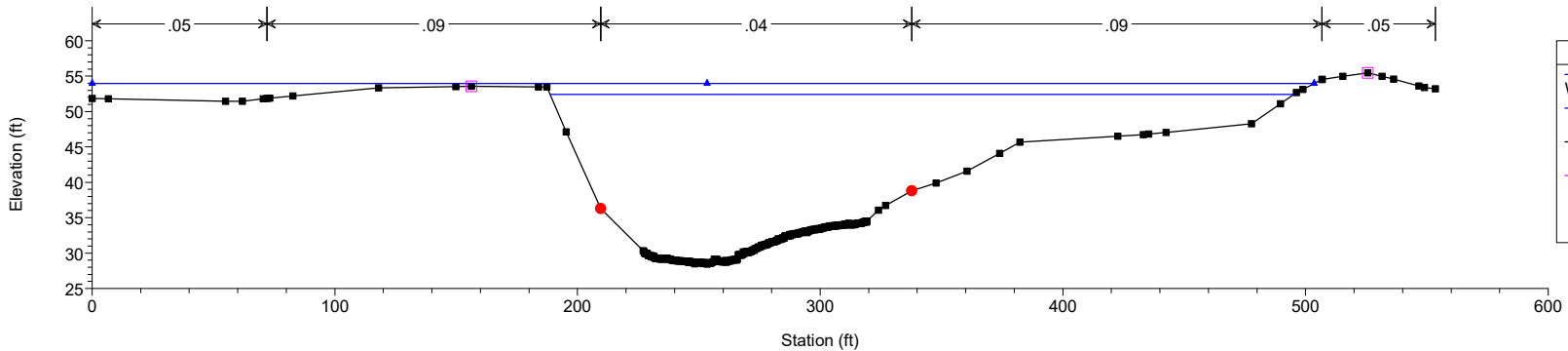
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
RS = 143964

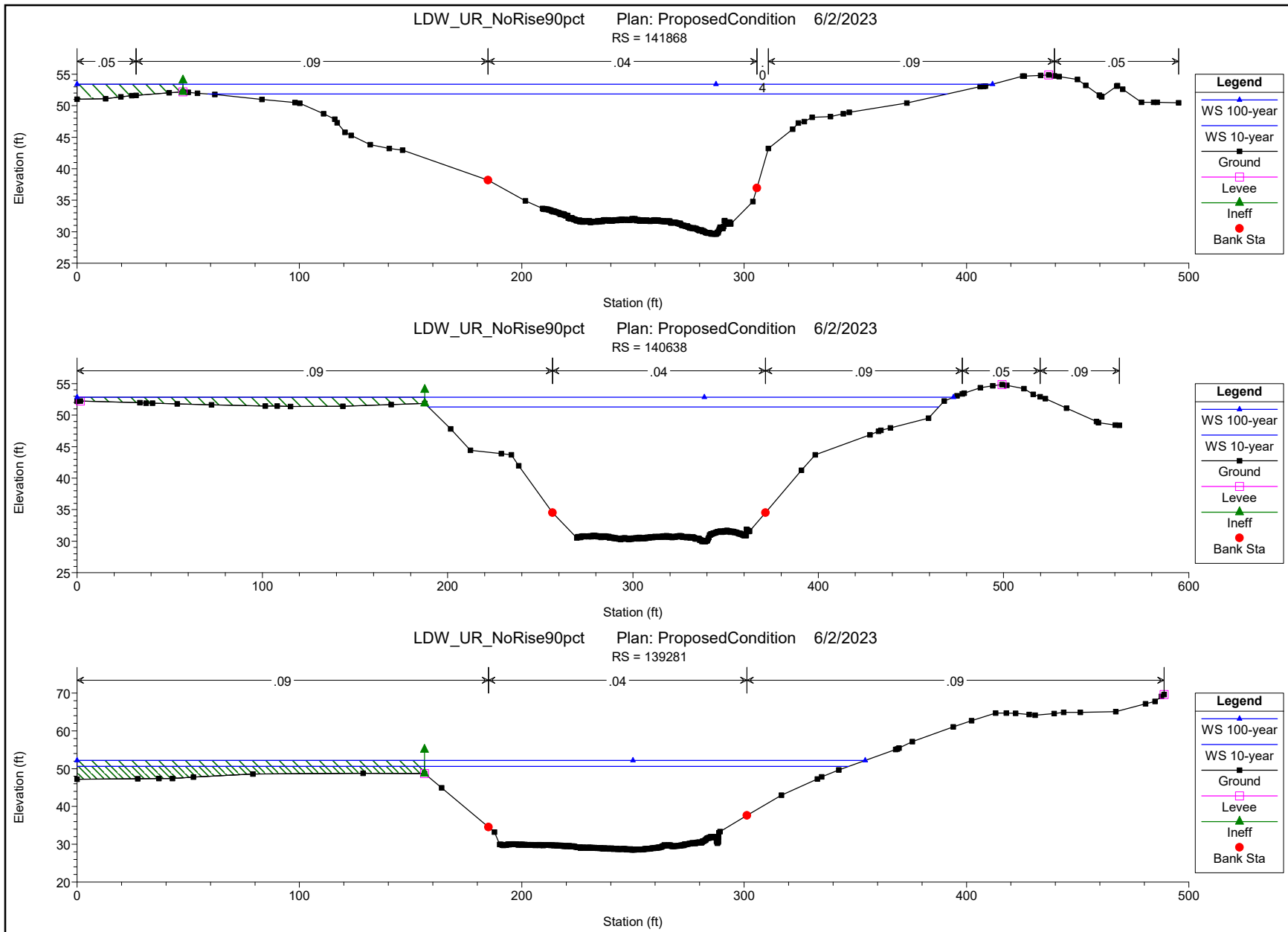


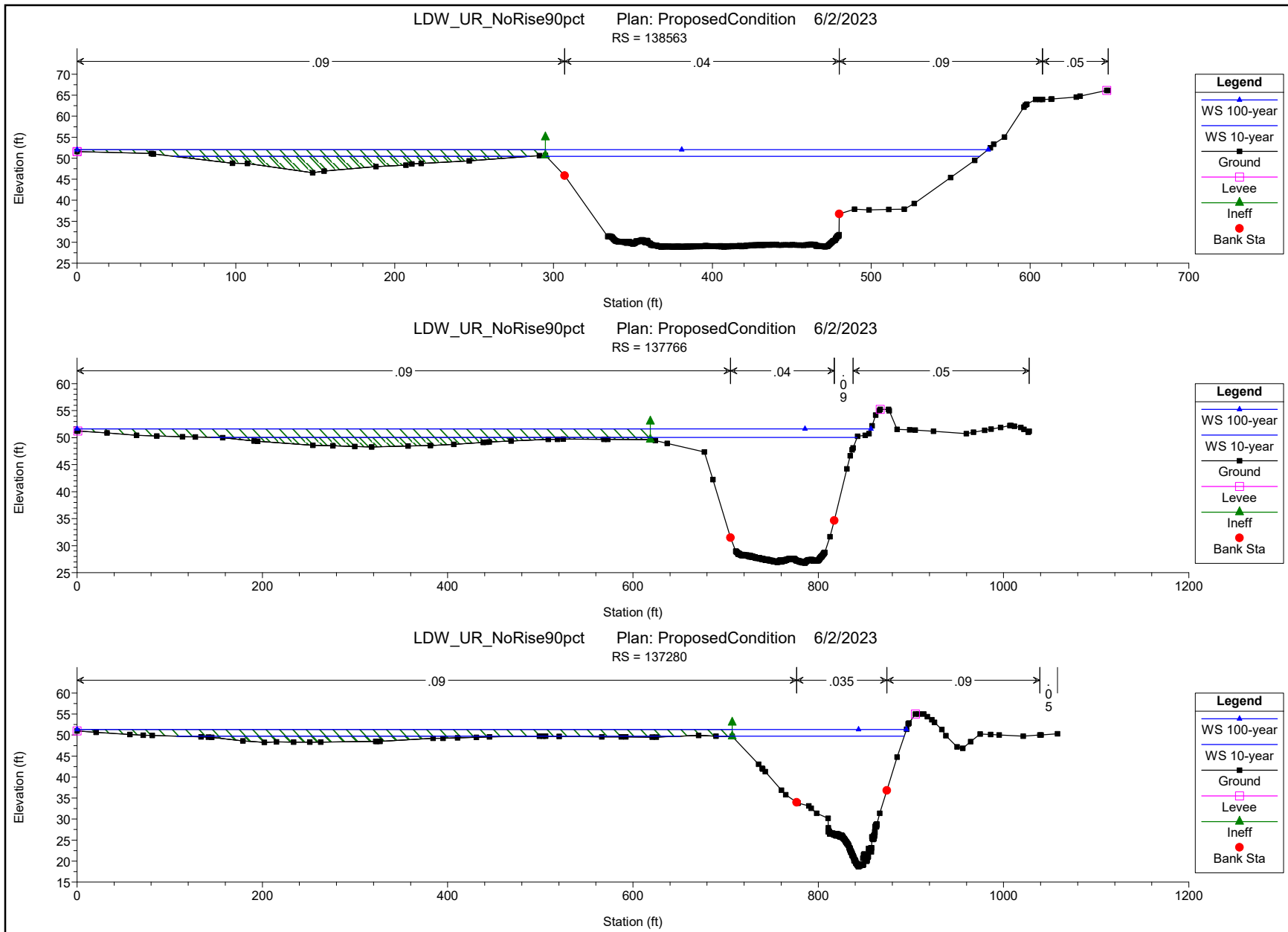
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
RS = 143716

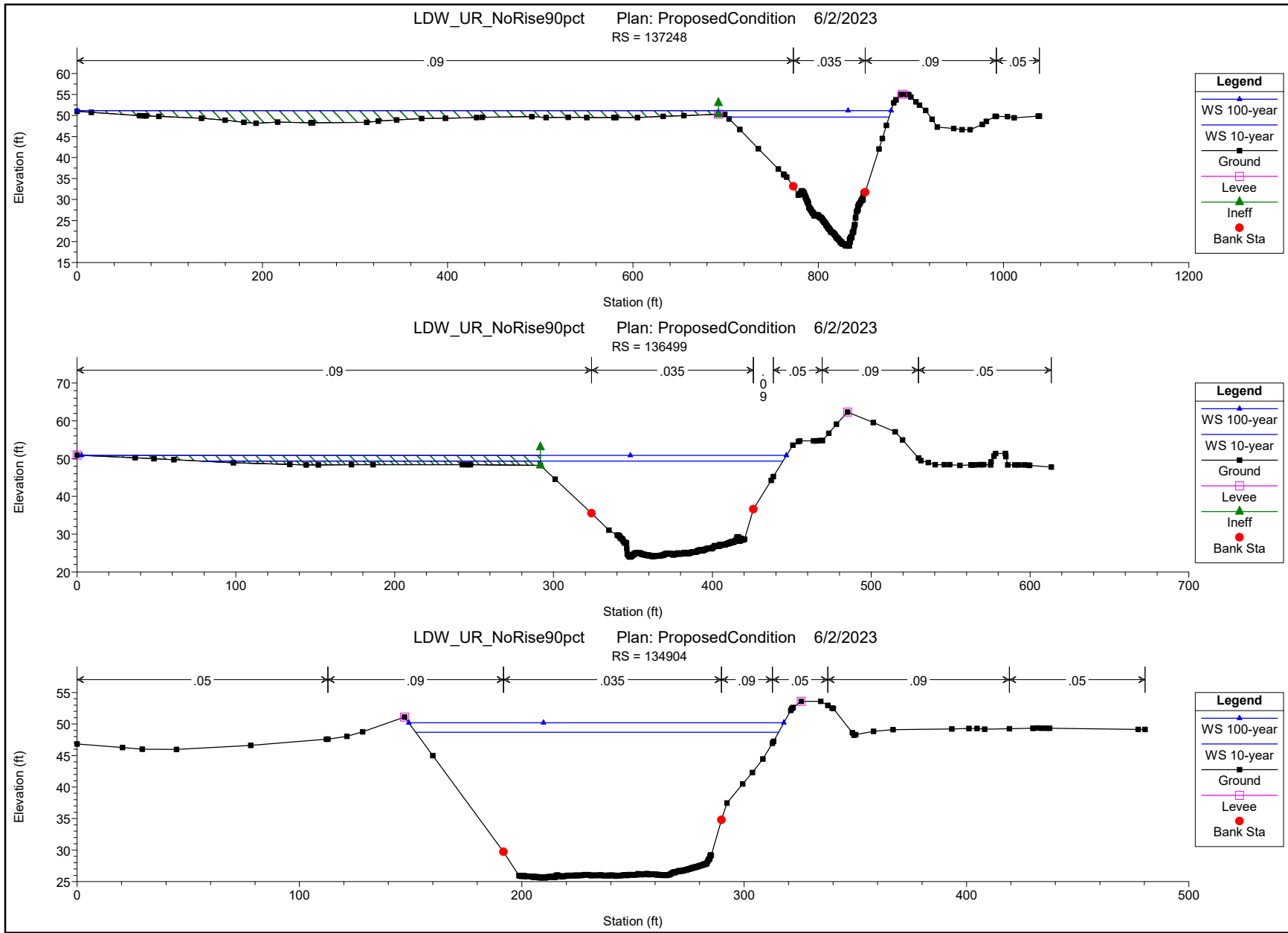


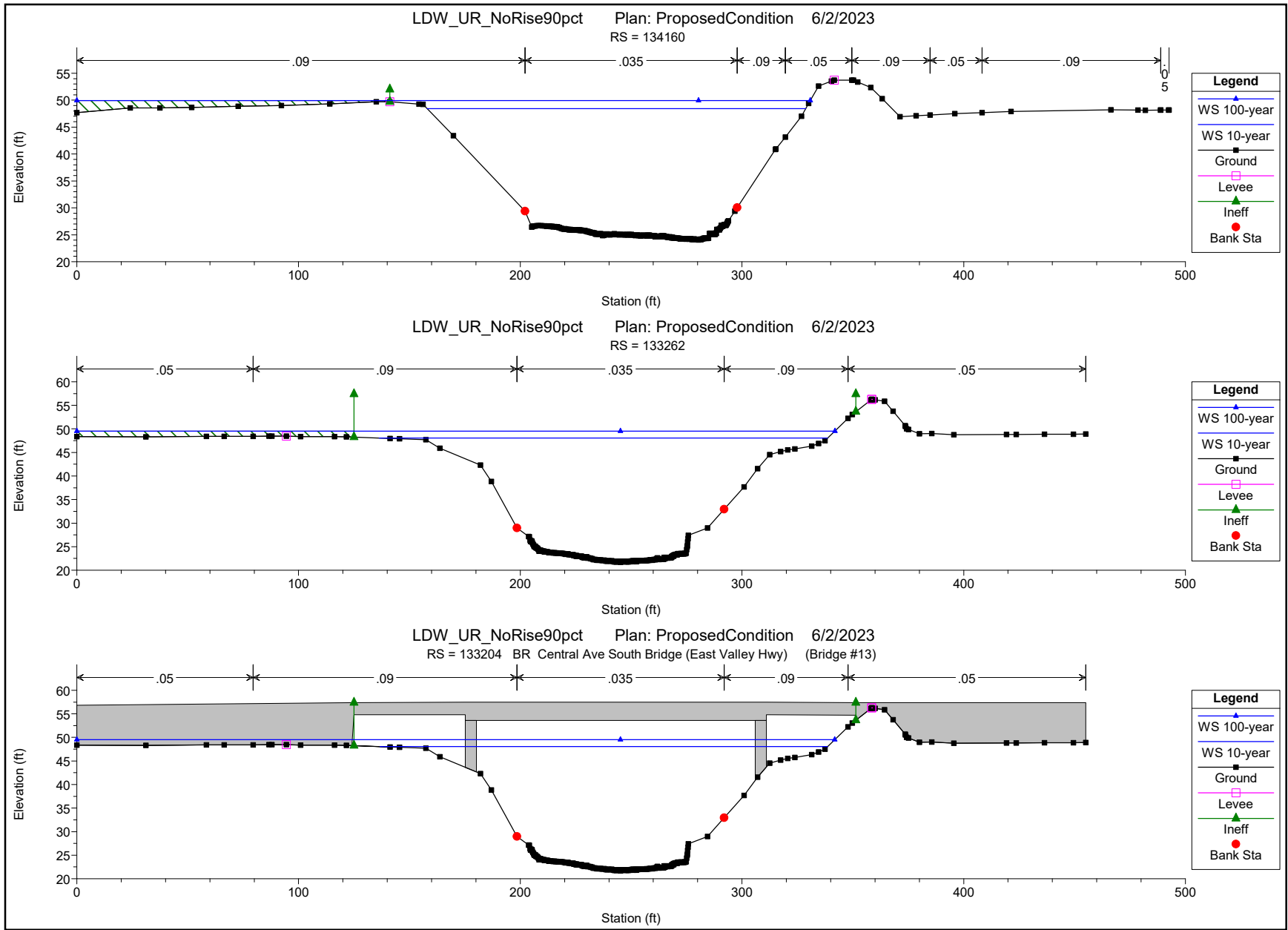
LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
RS = 143025

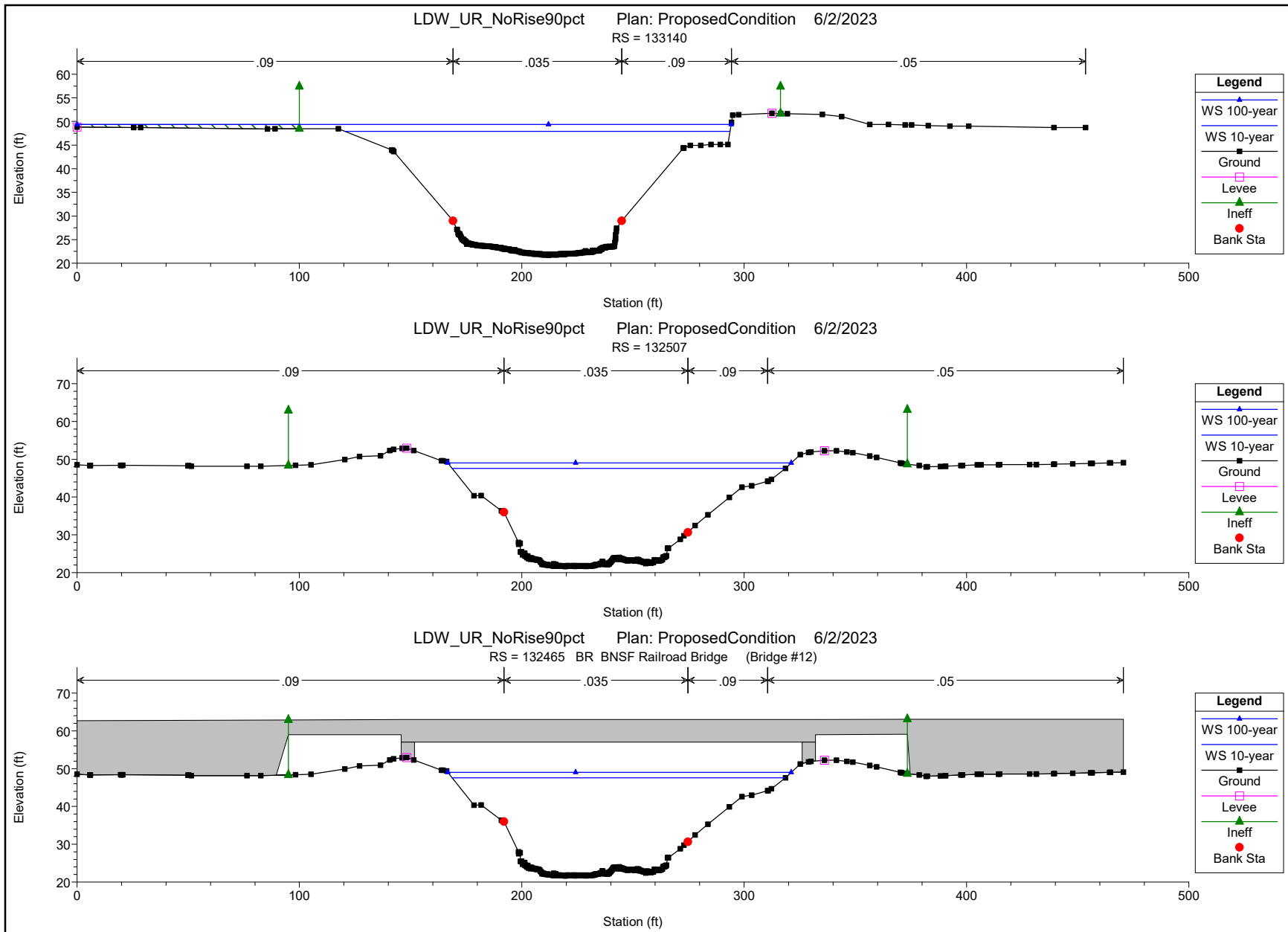


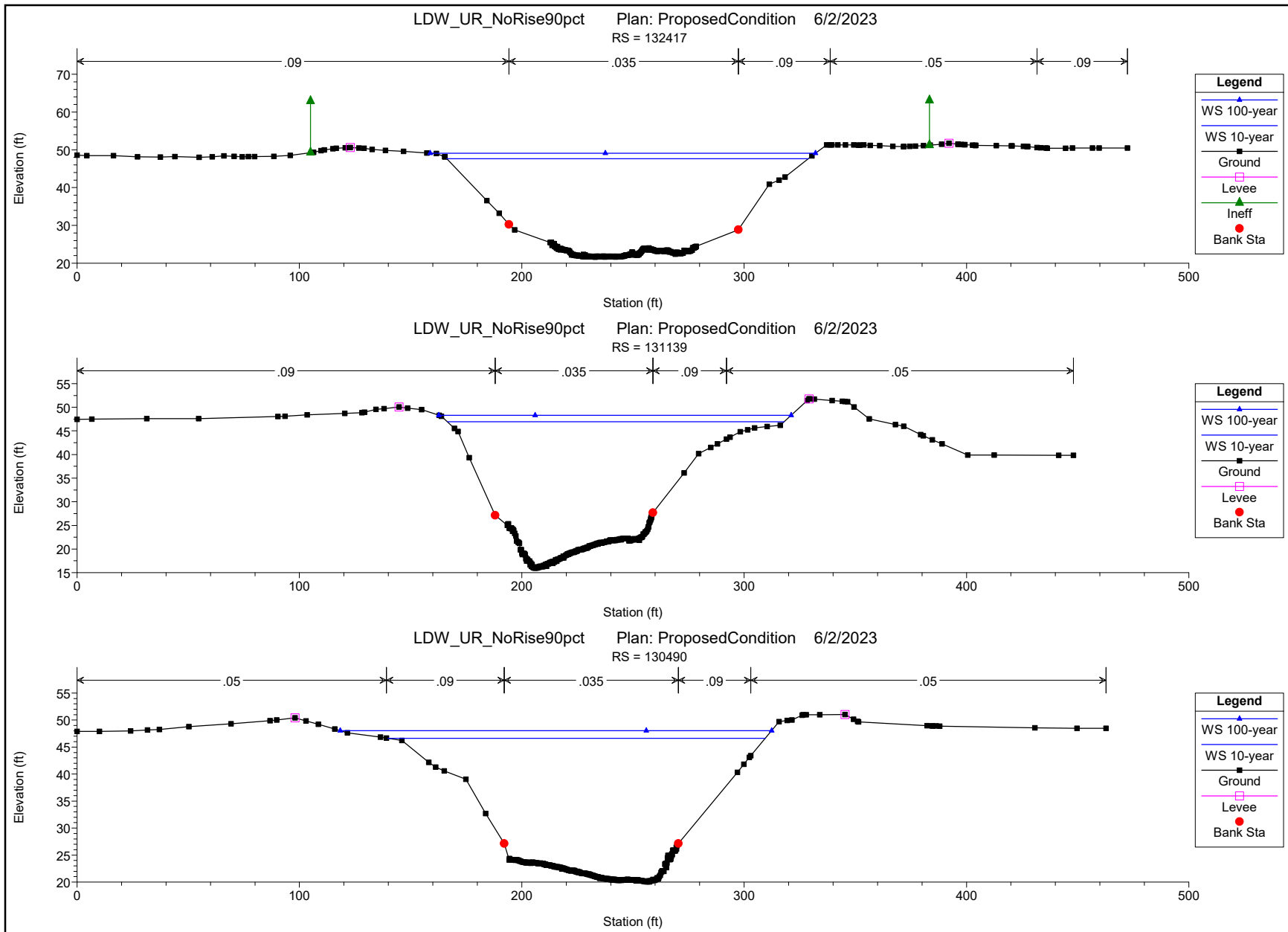


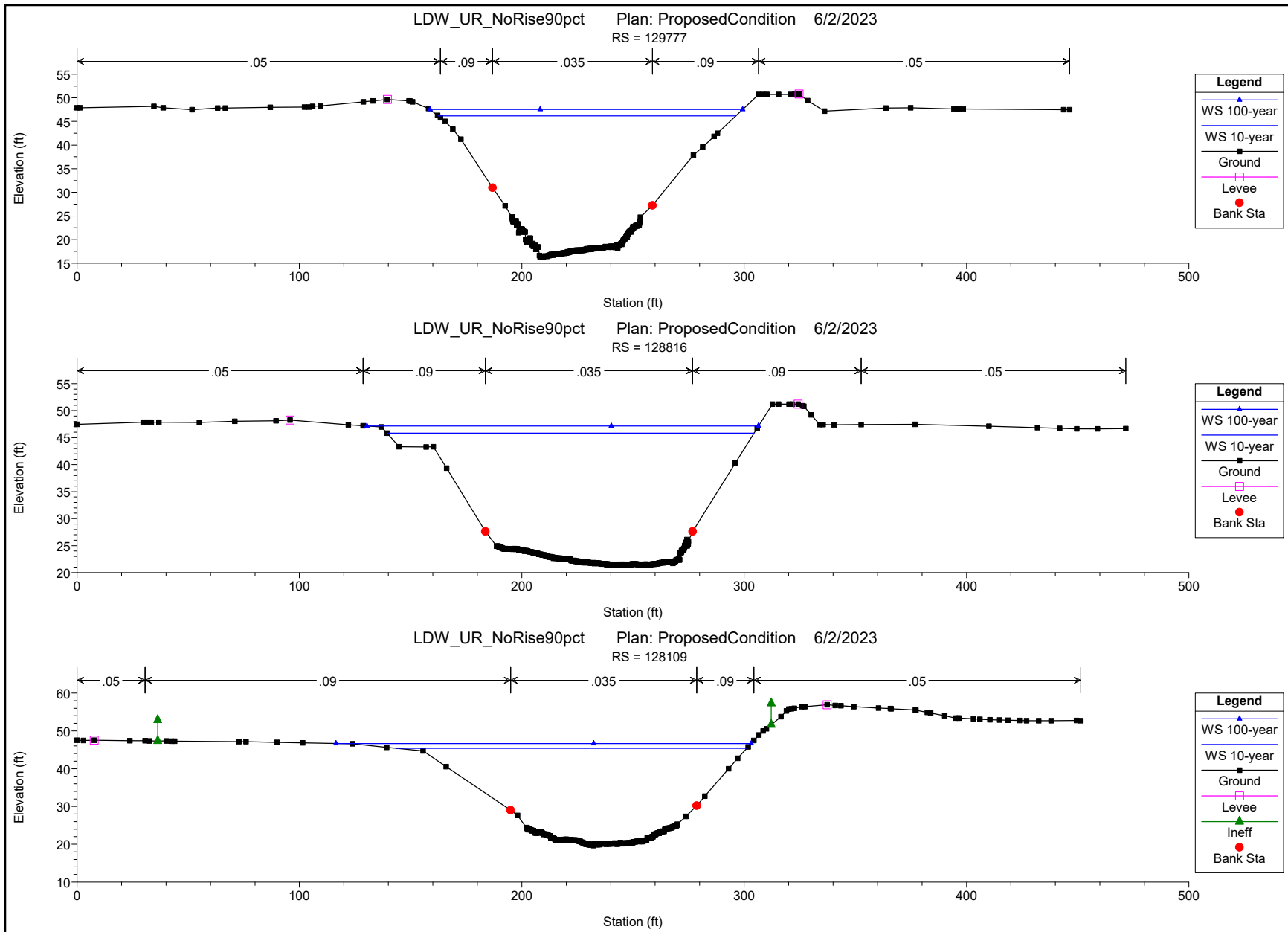


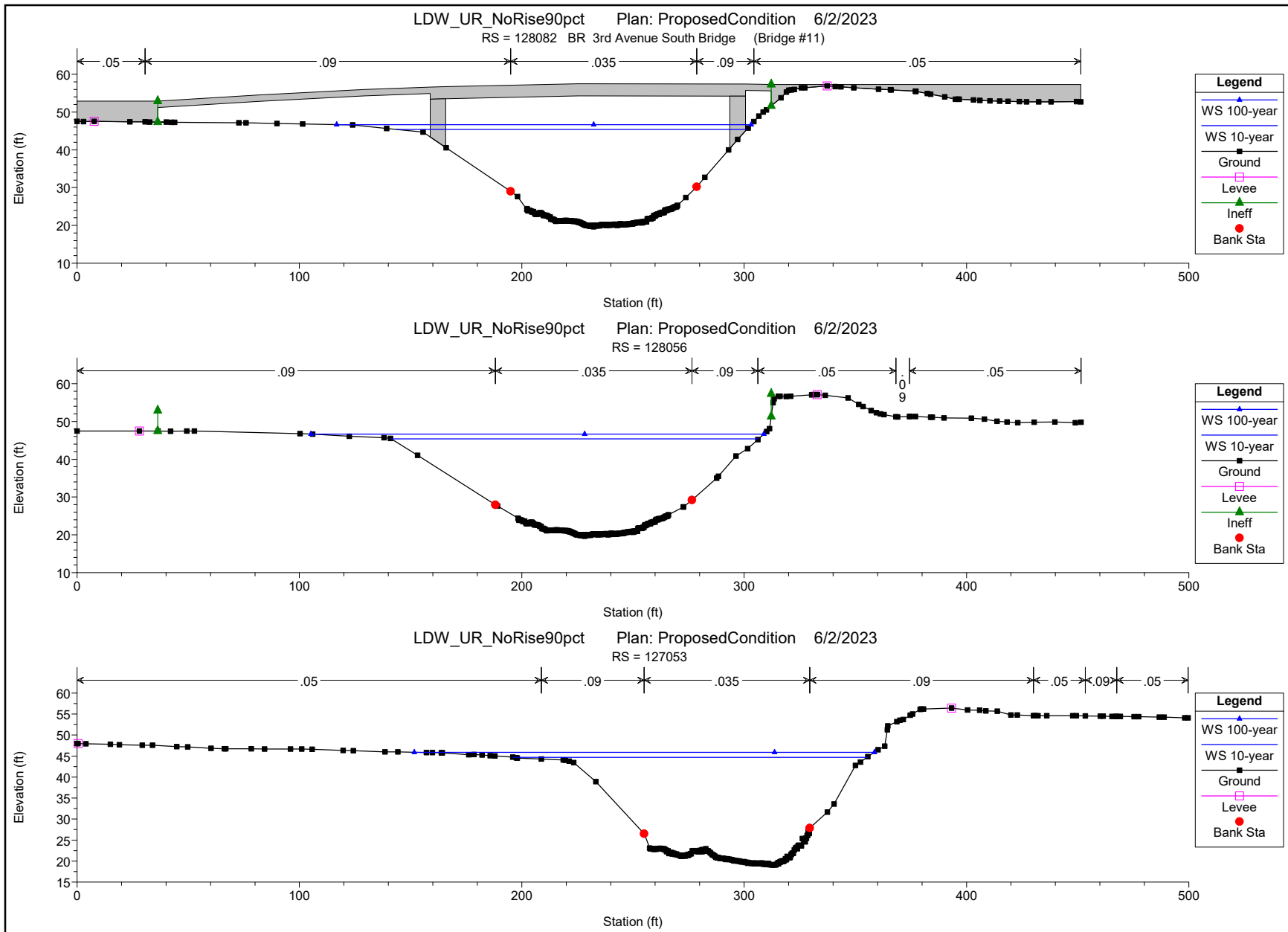


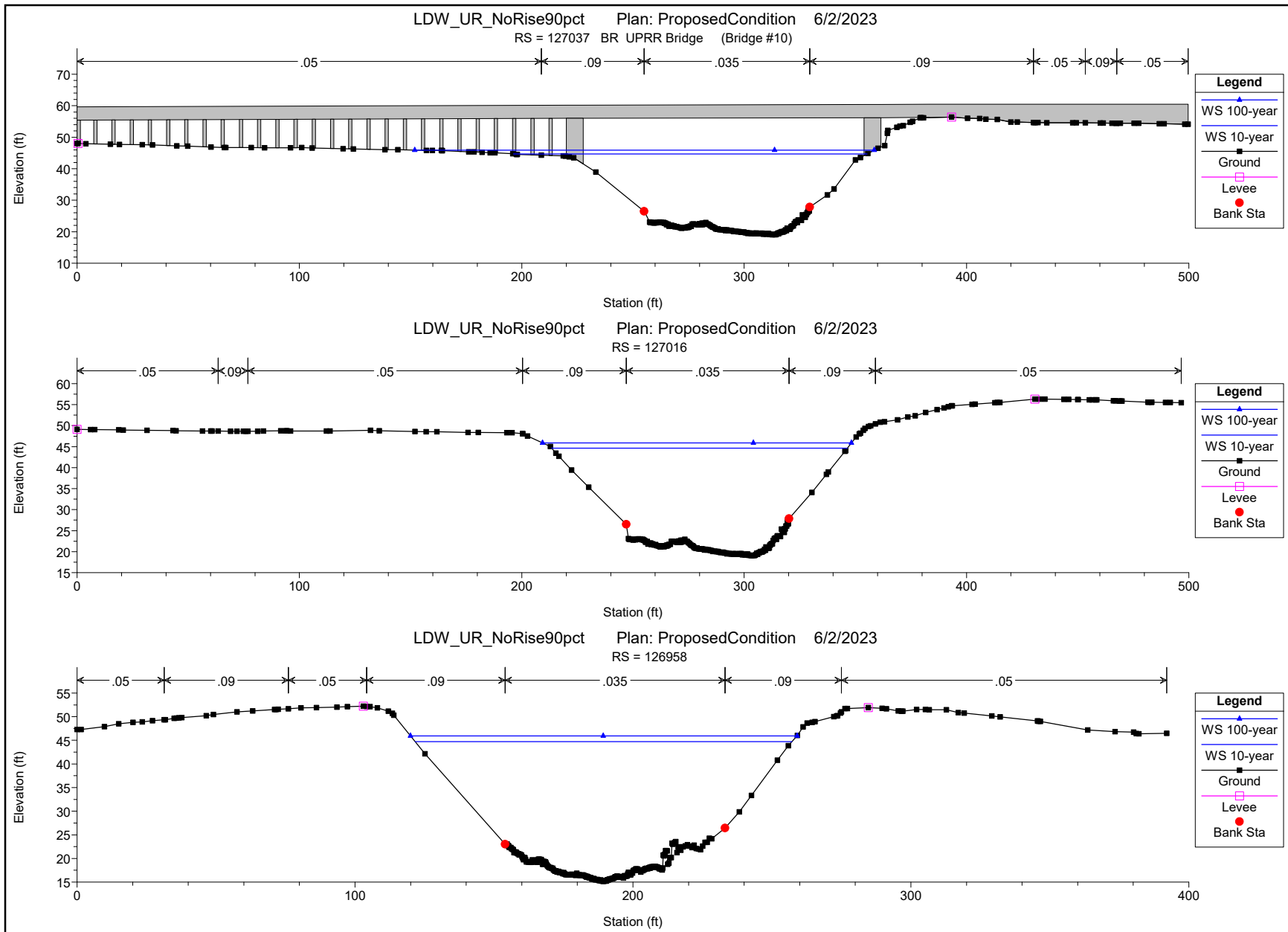


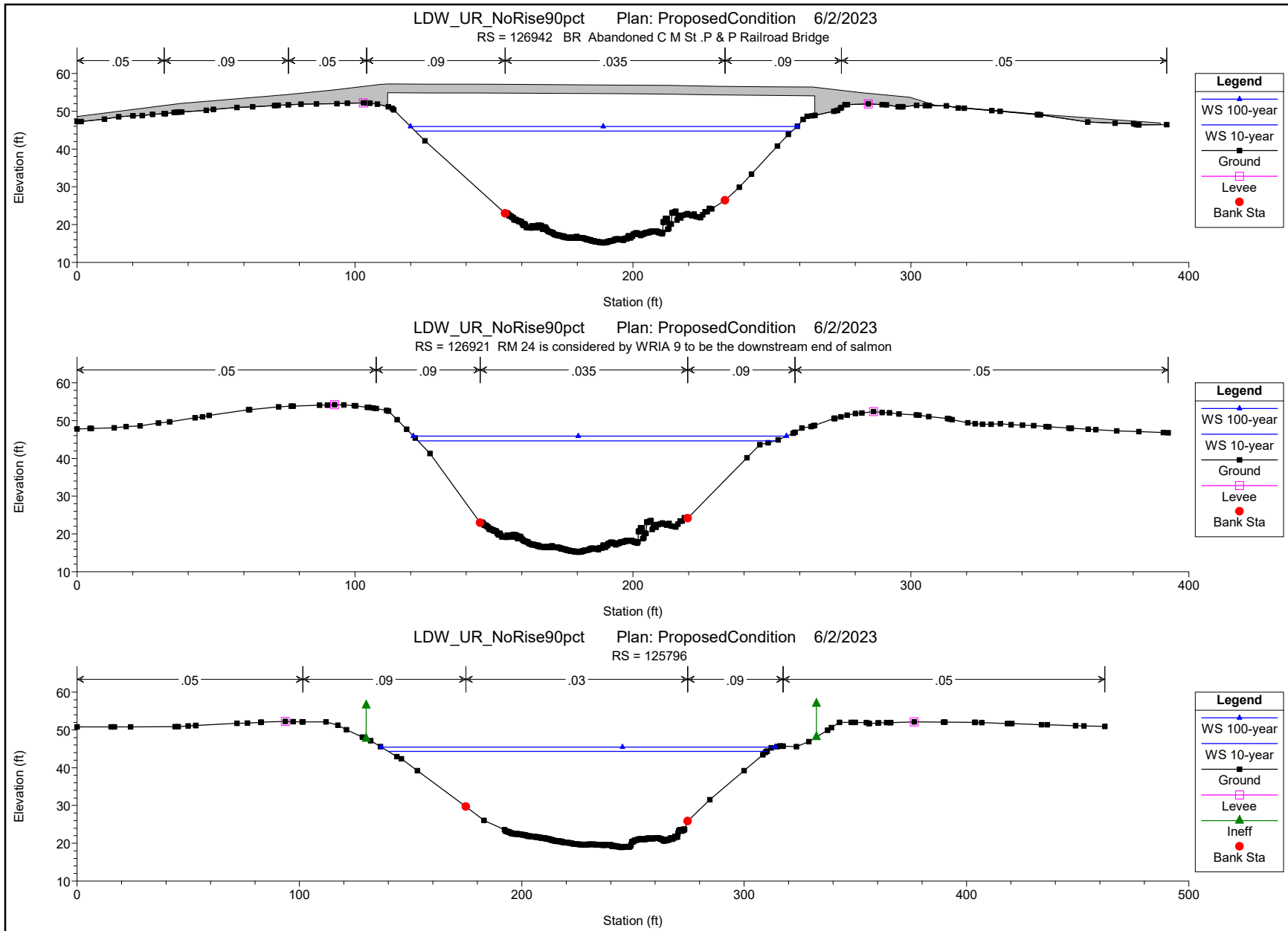


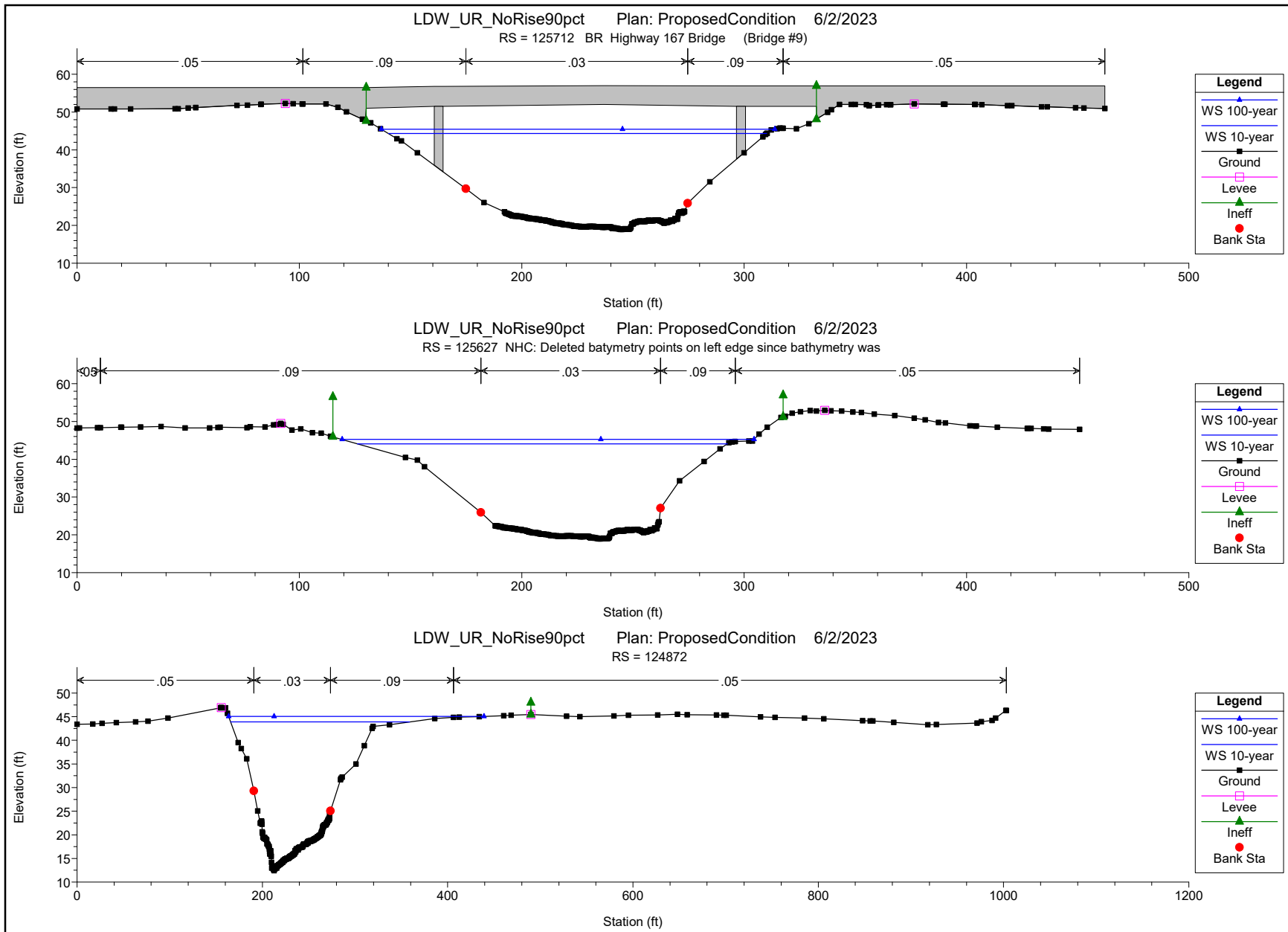


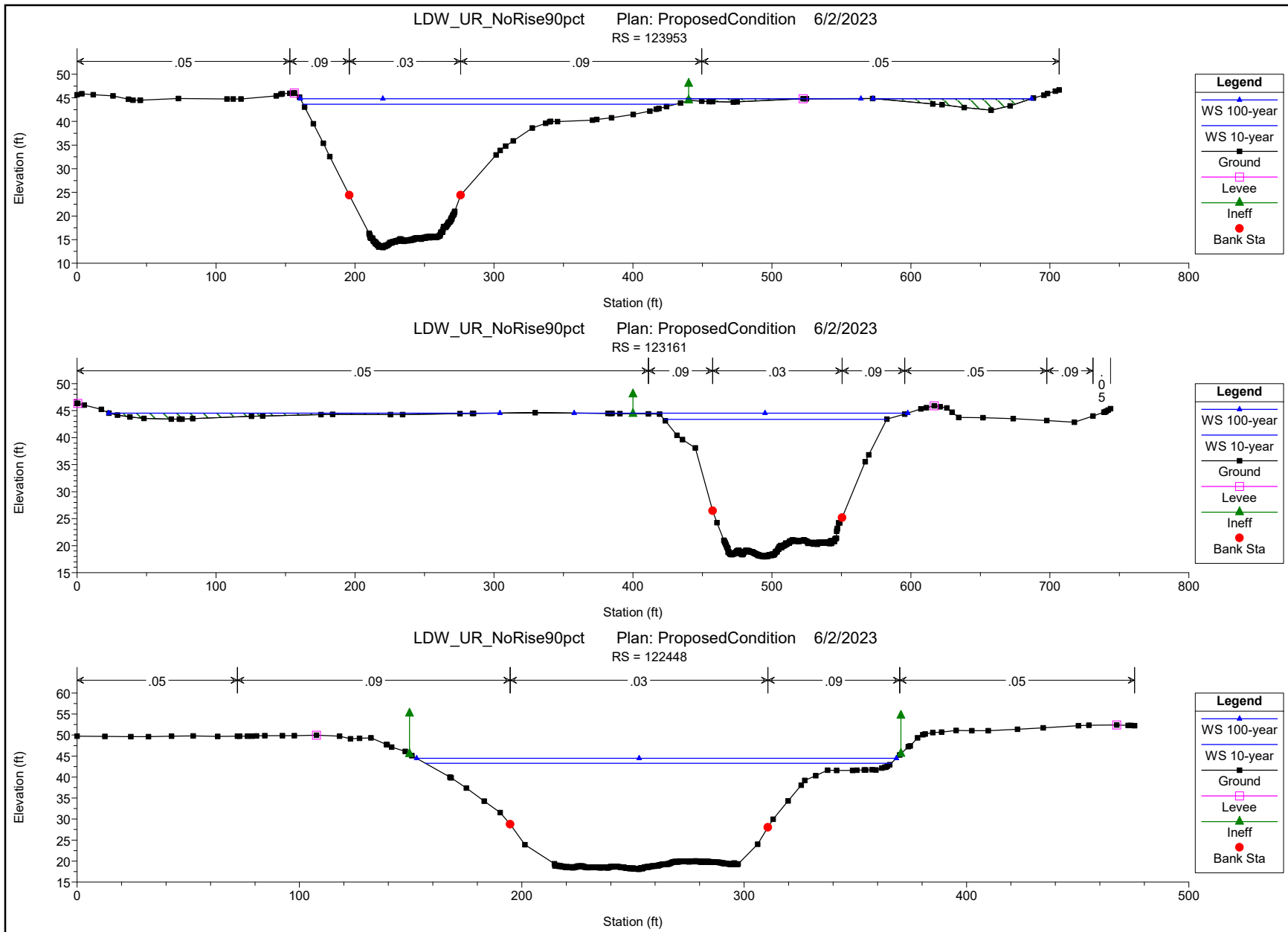


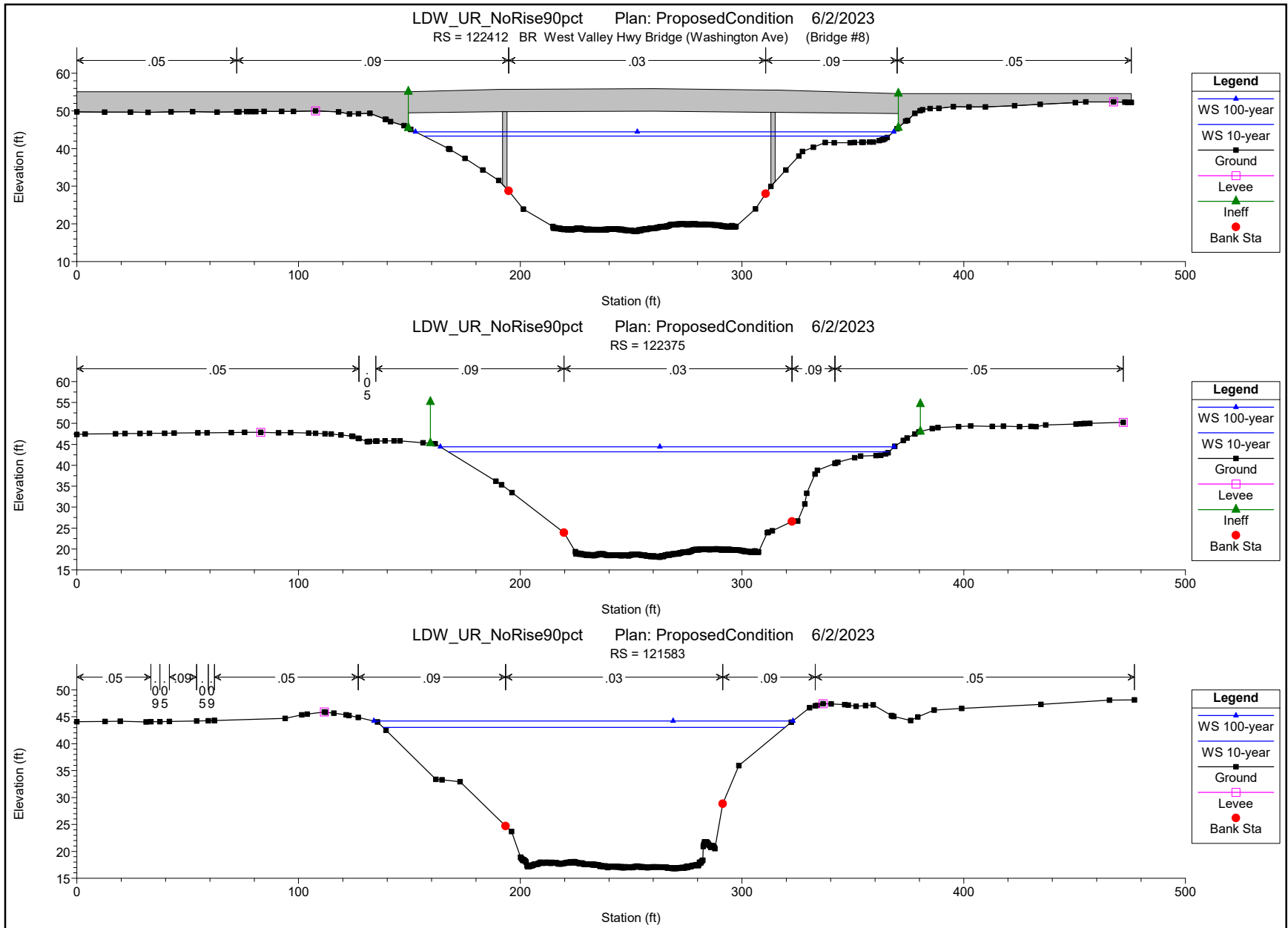


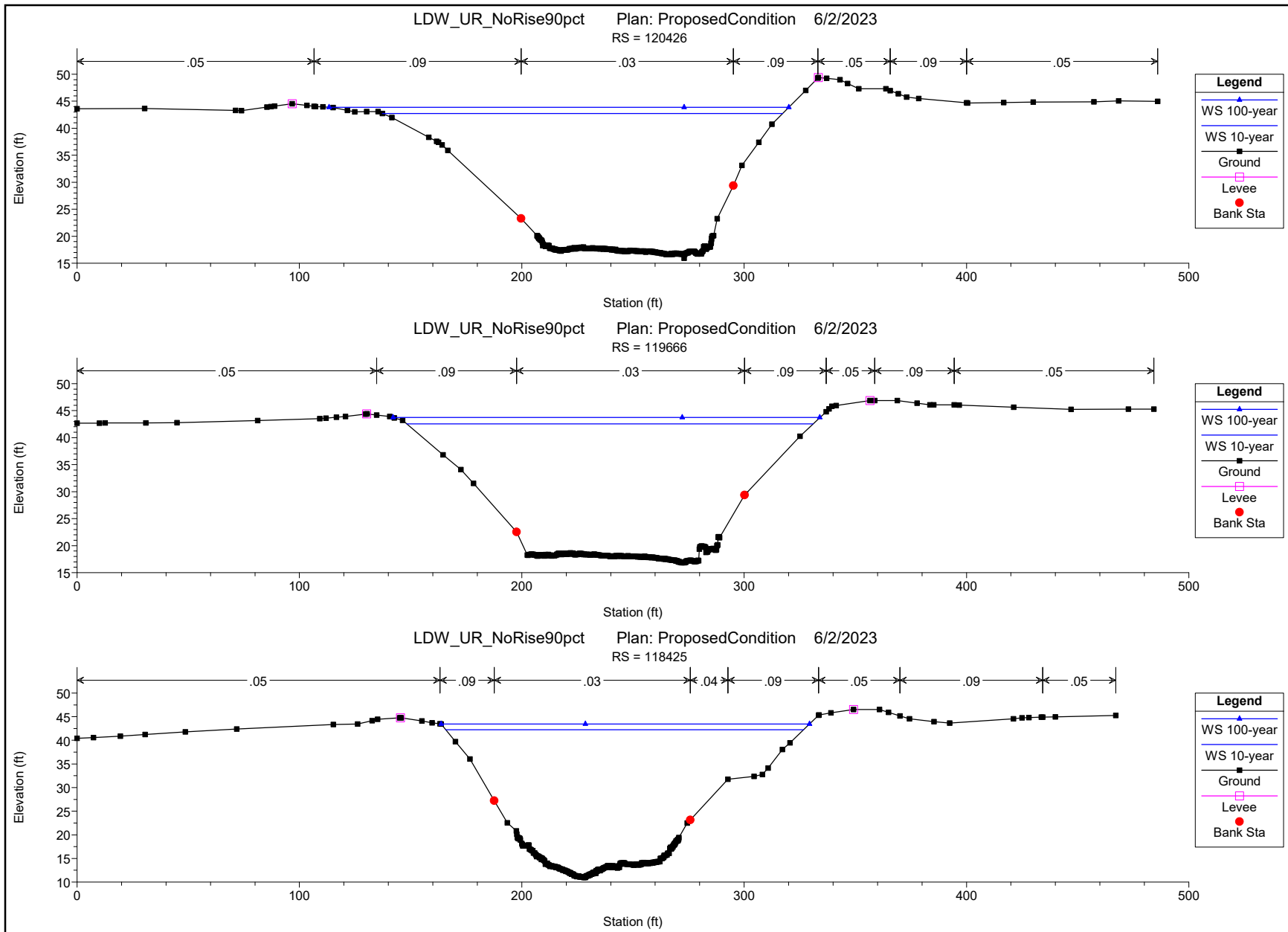


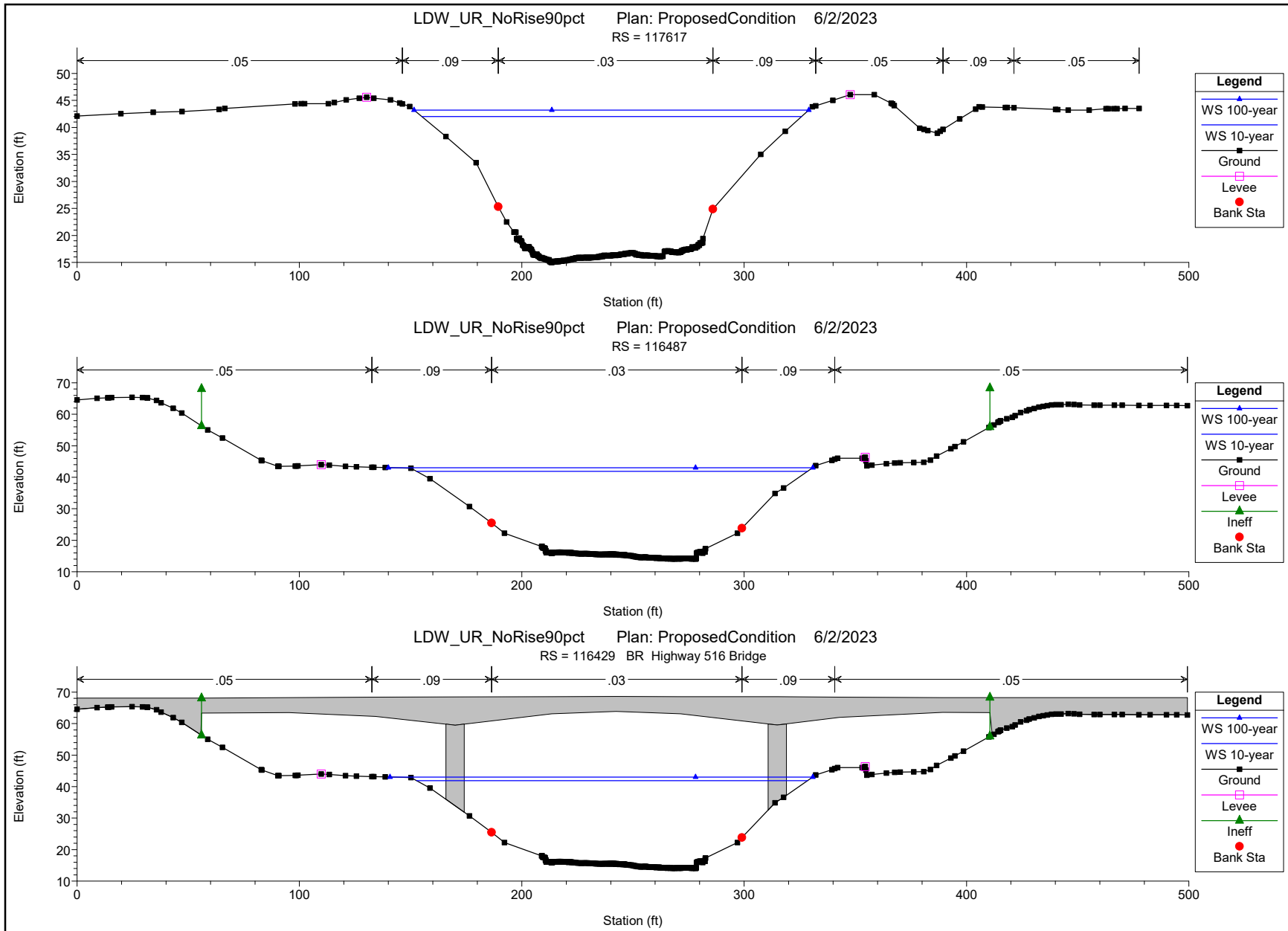


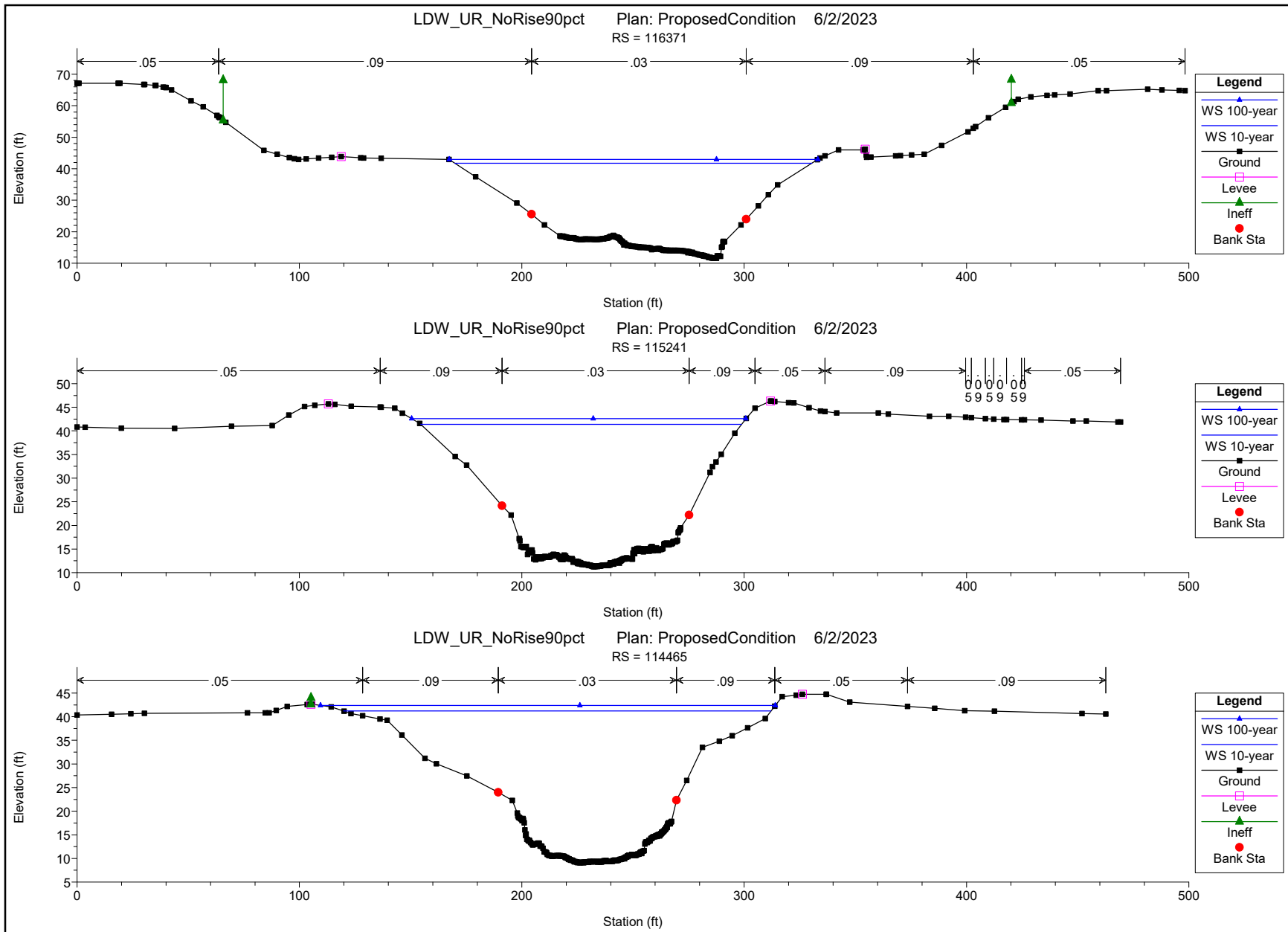


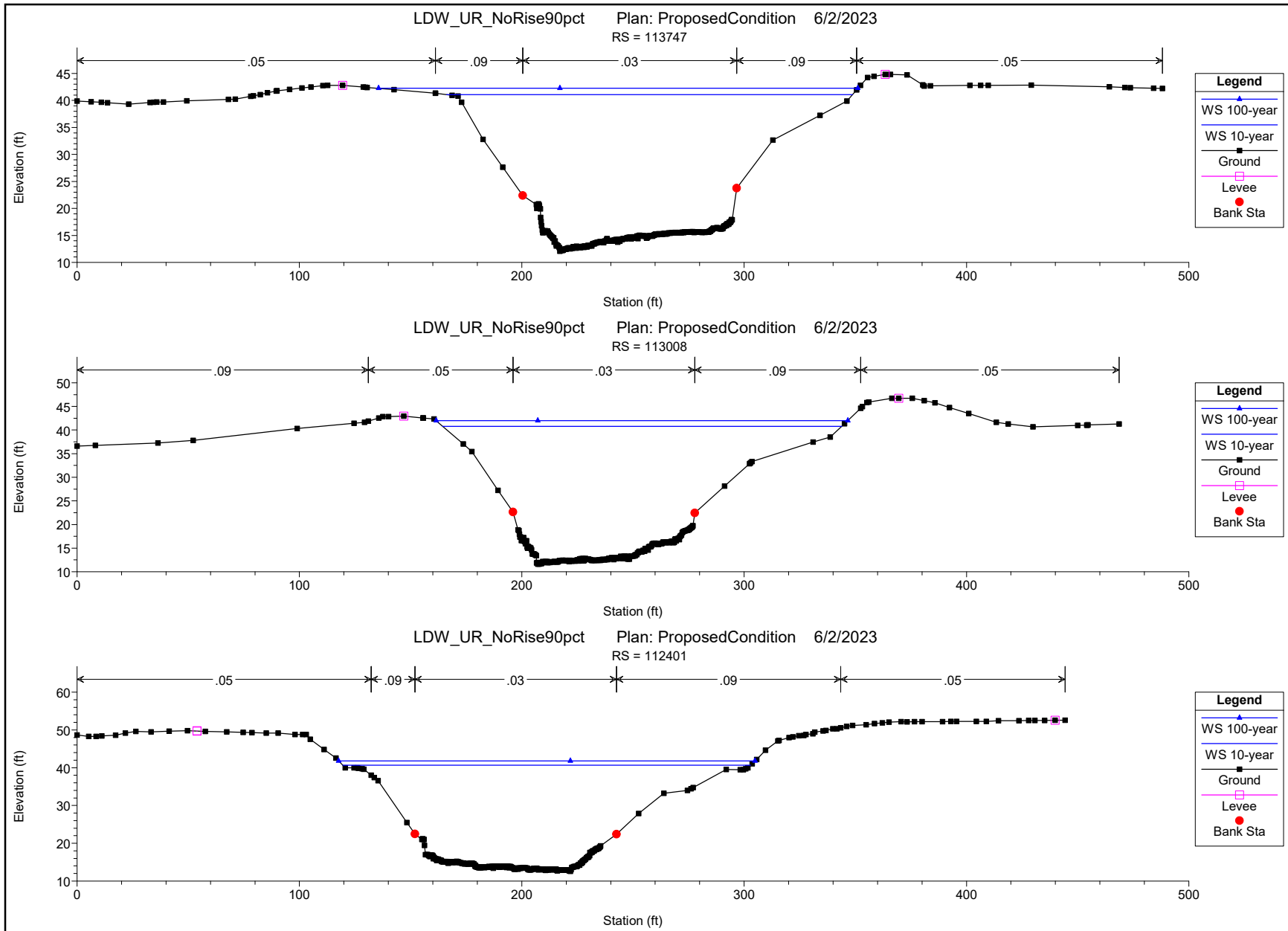


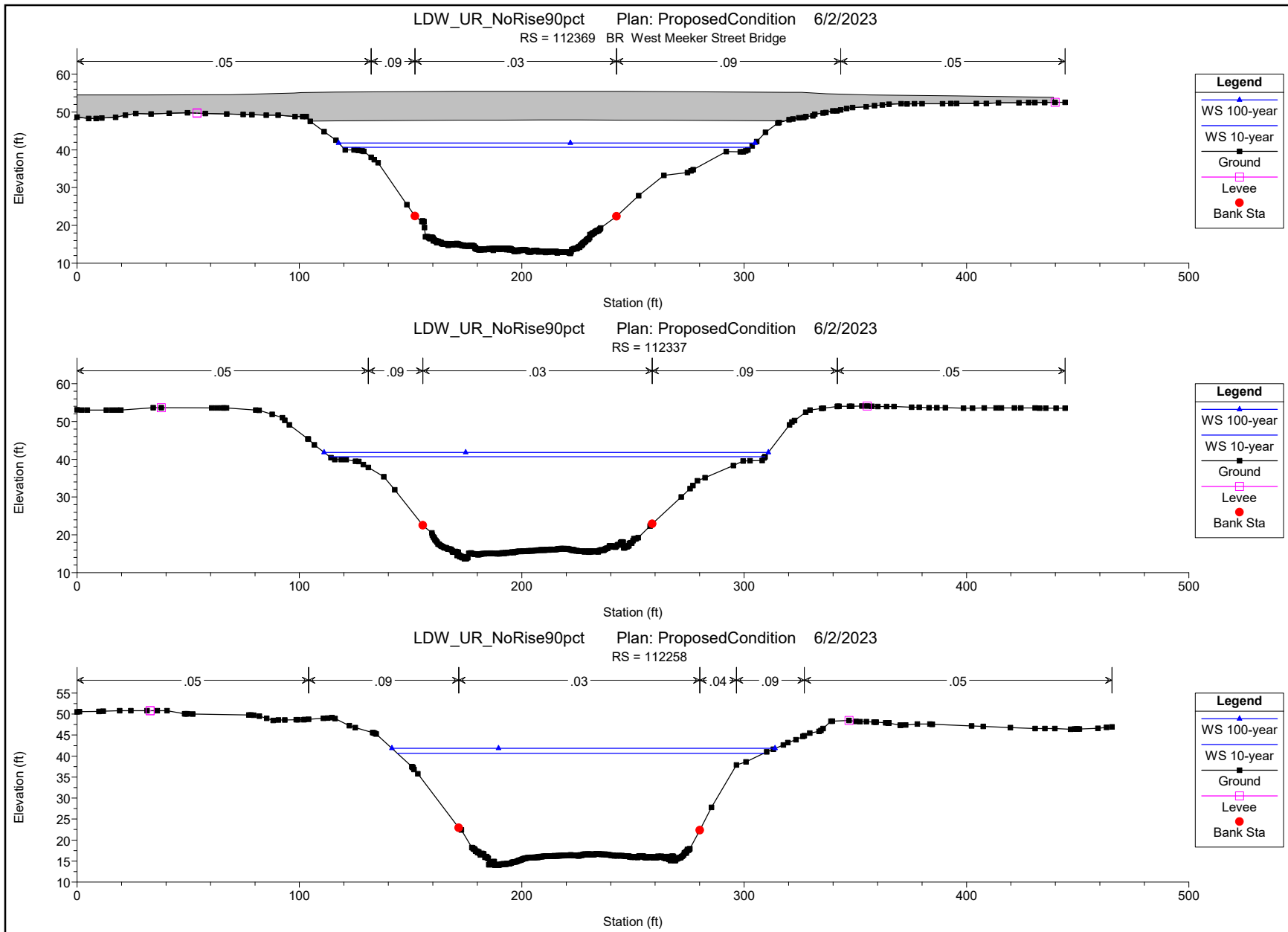


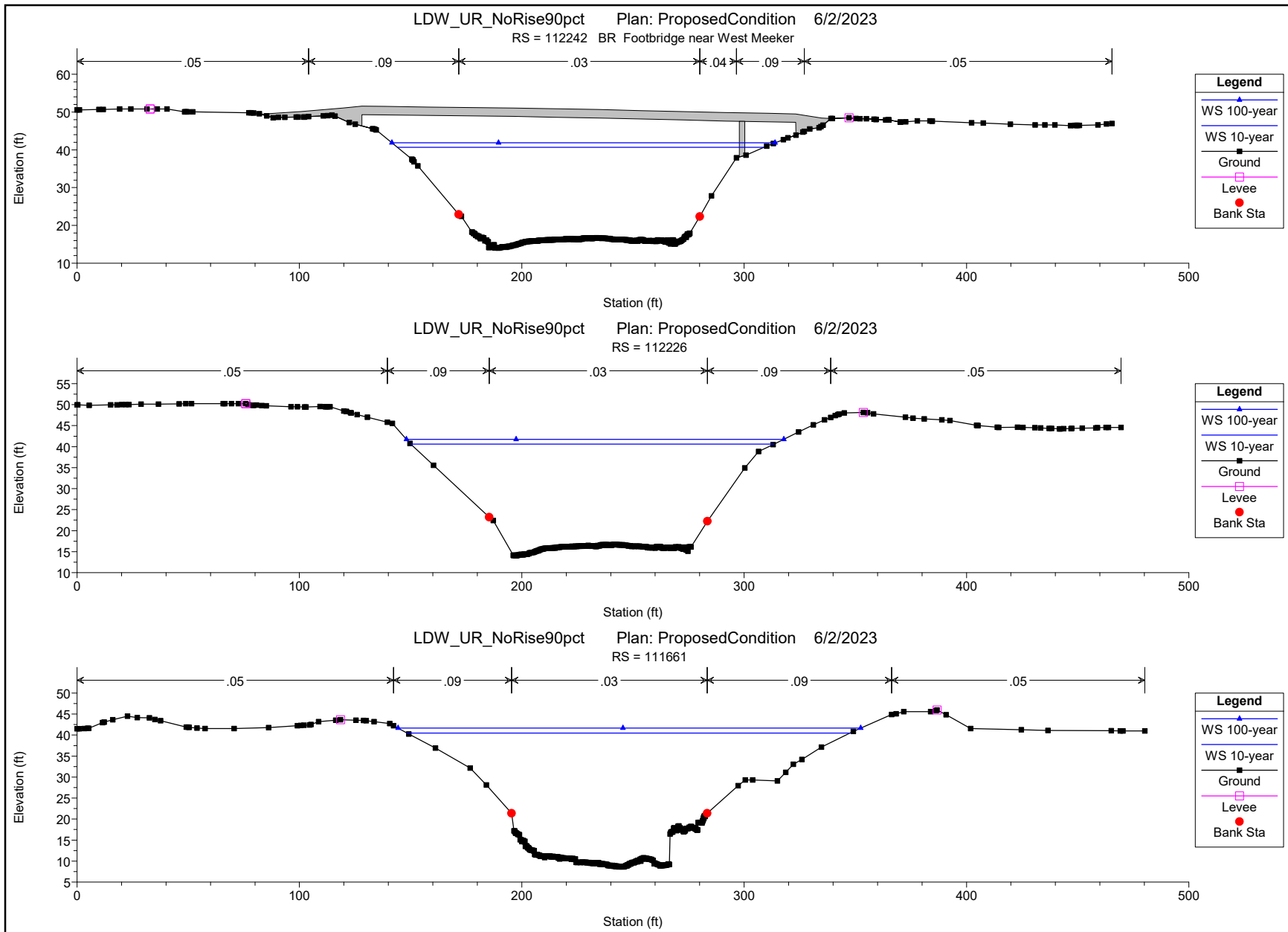


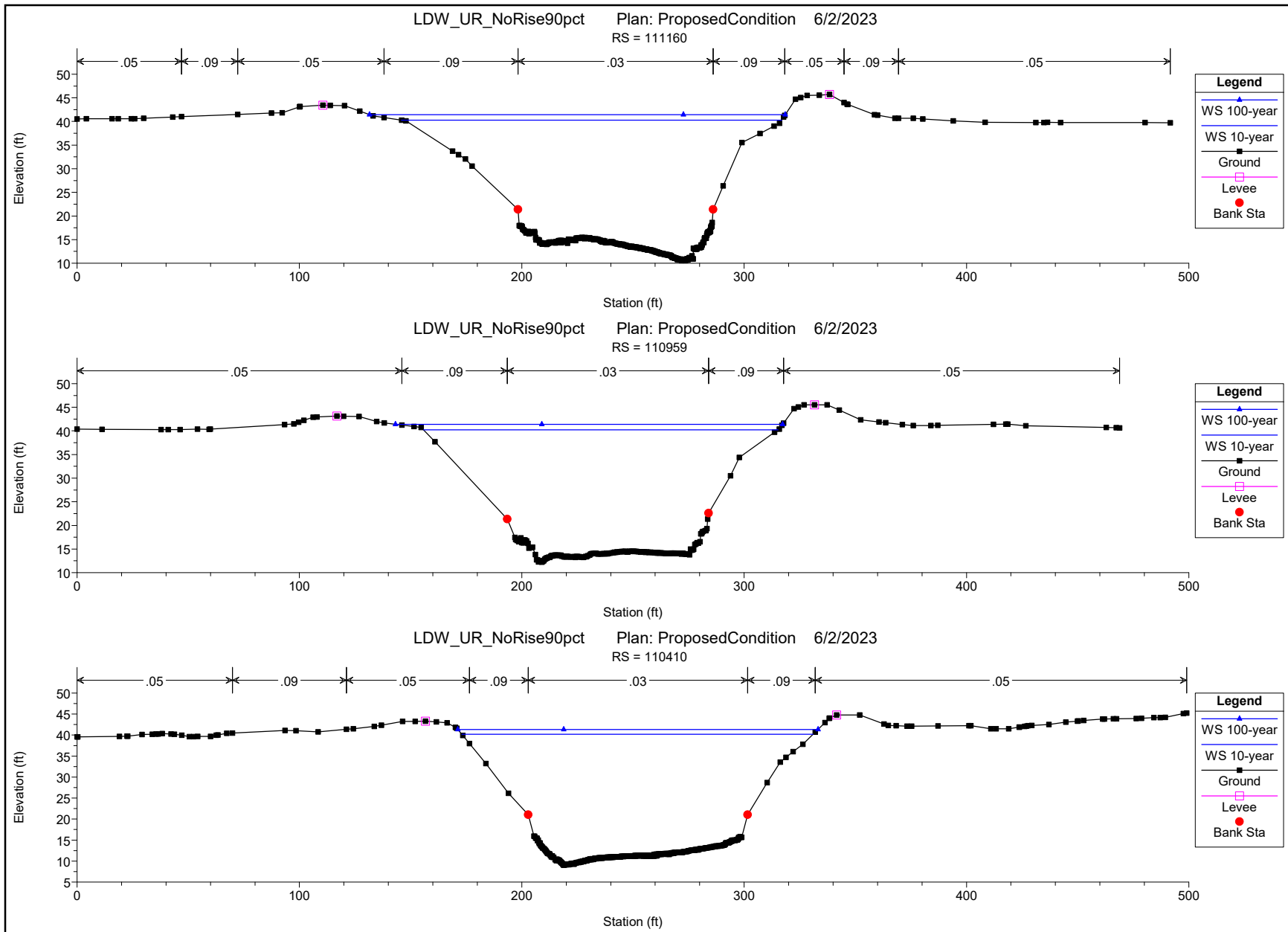


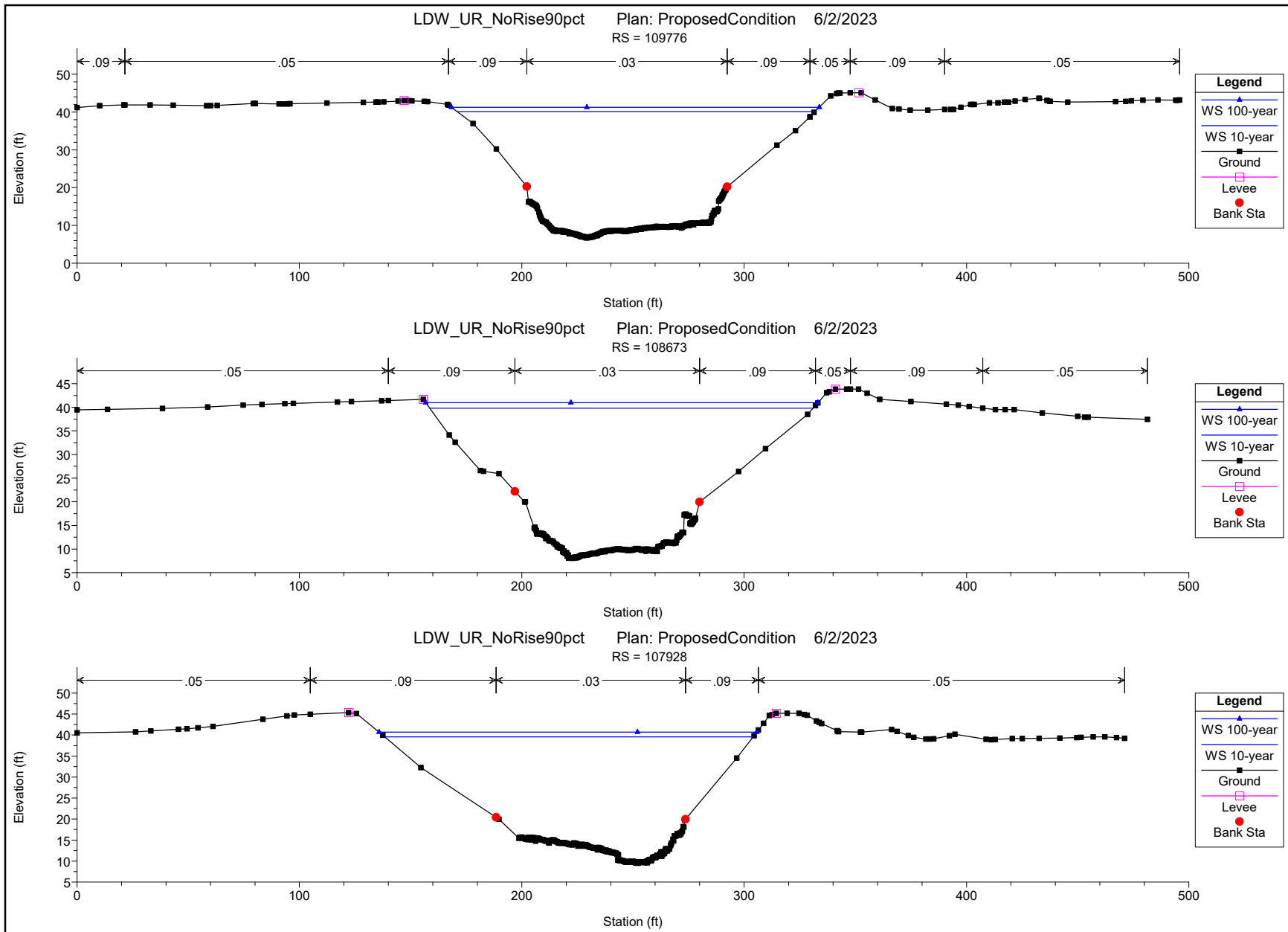


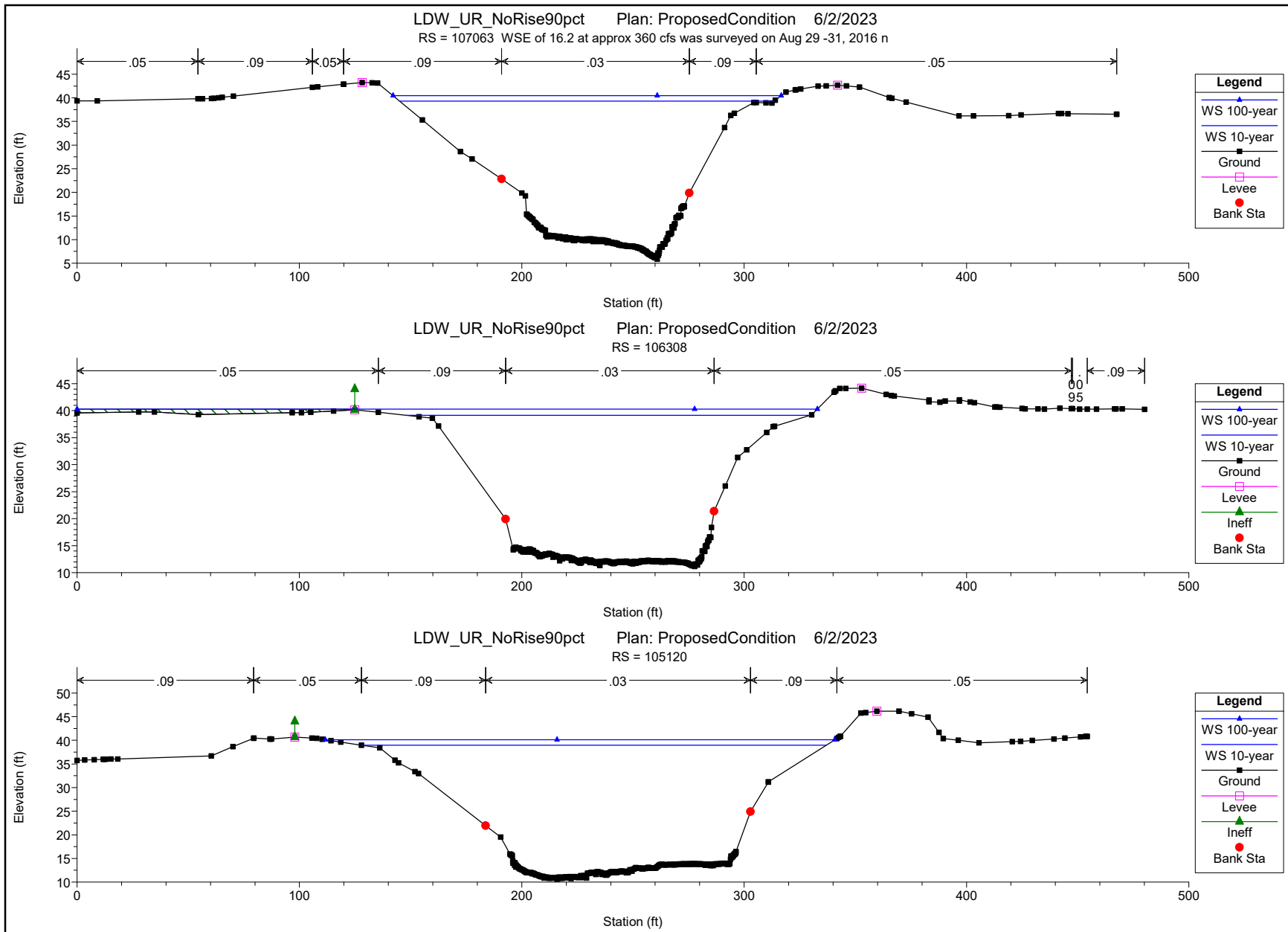


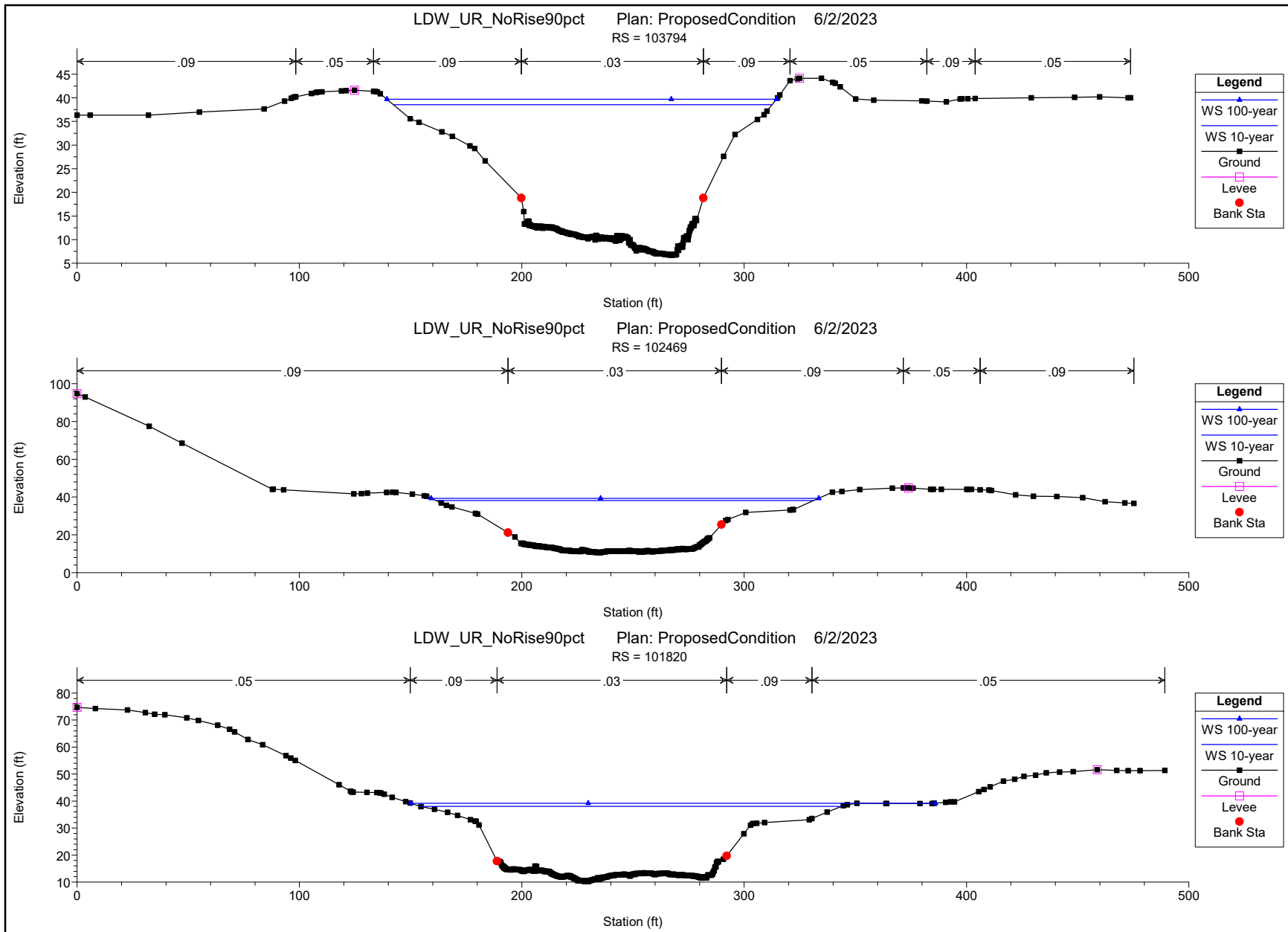


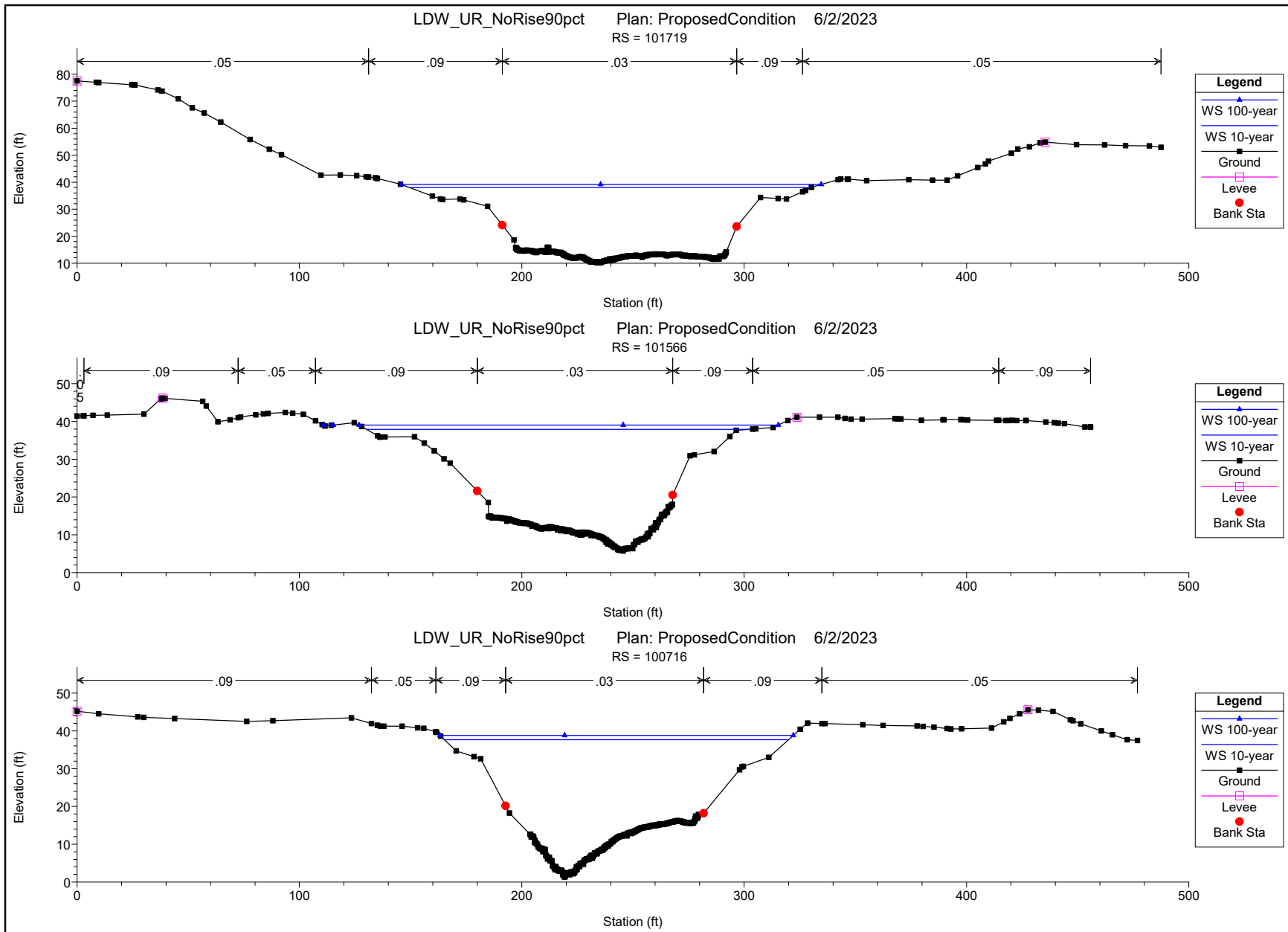


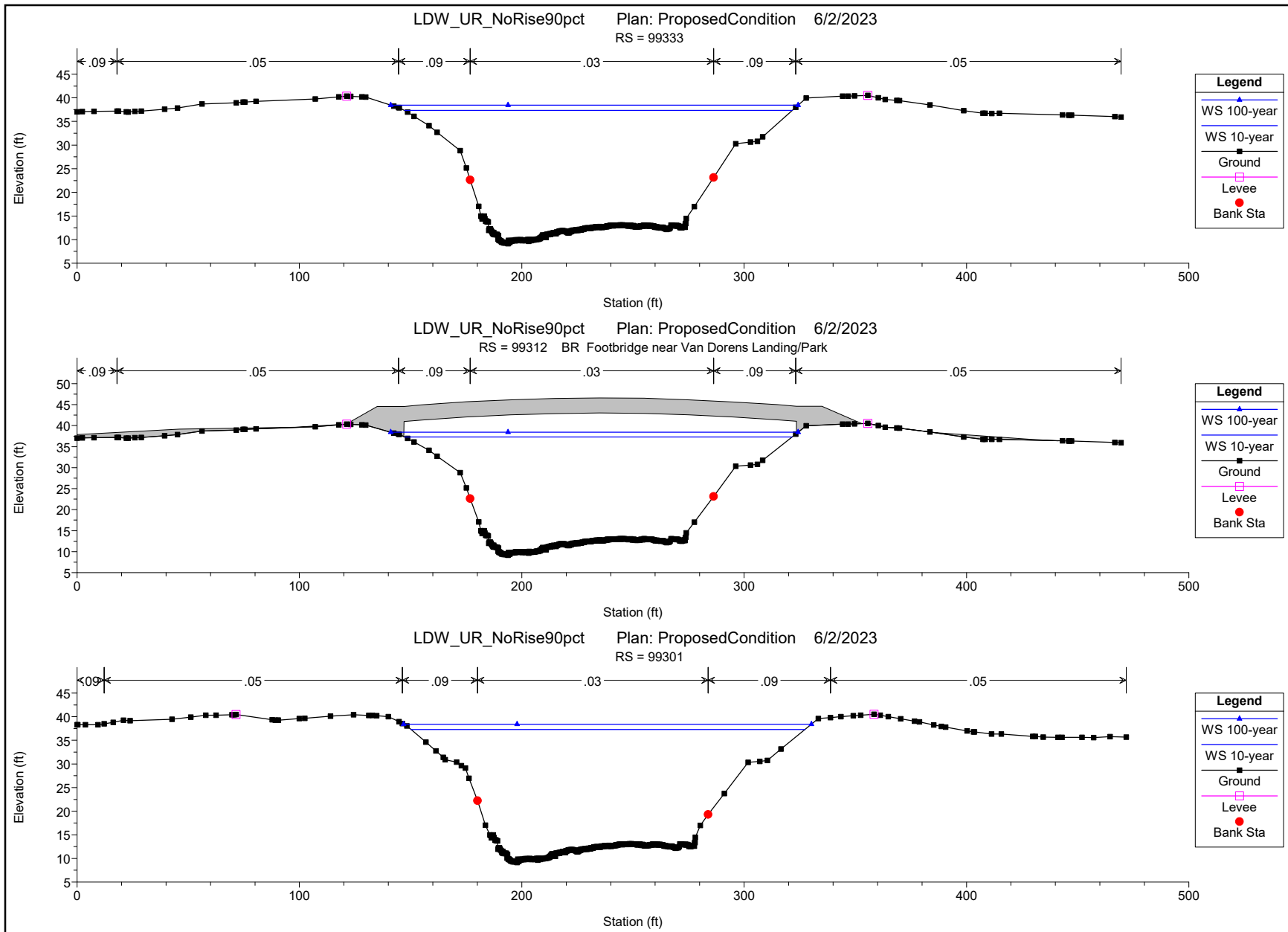


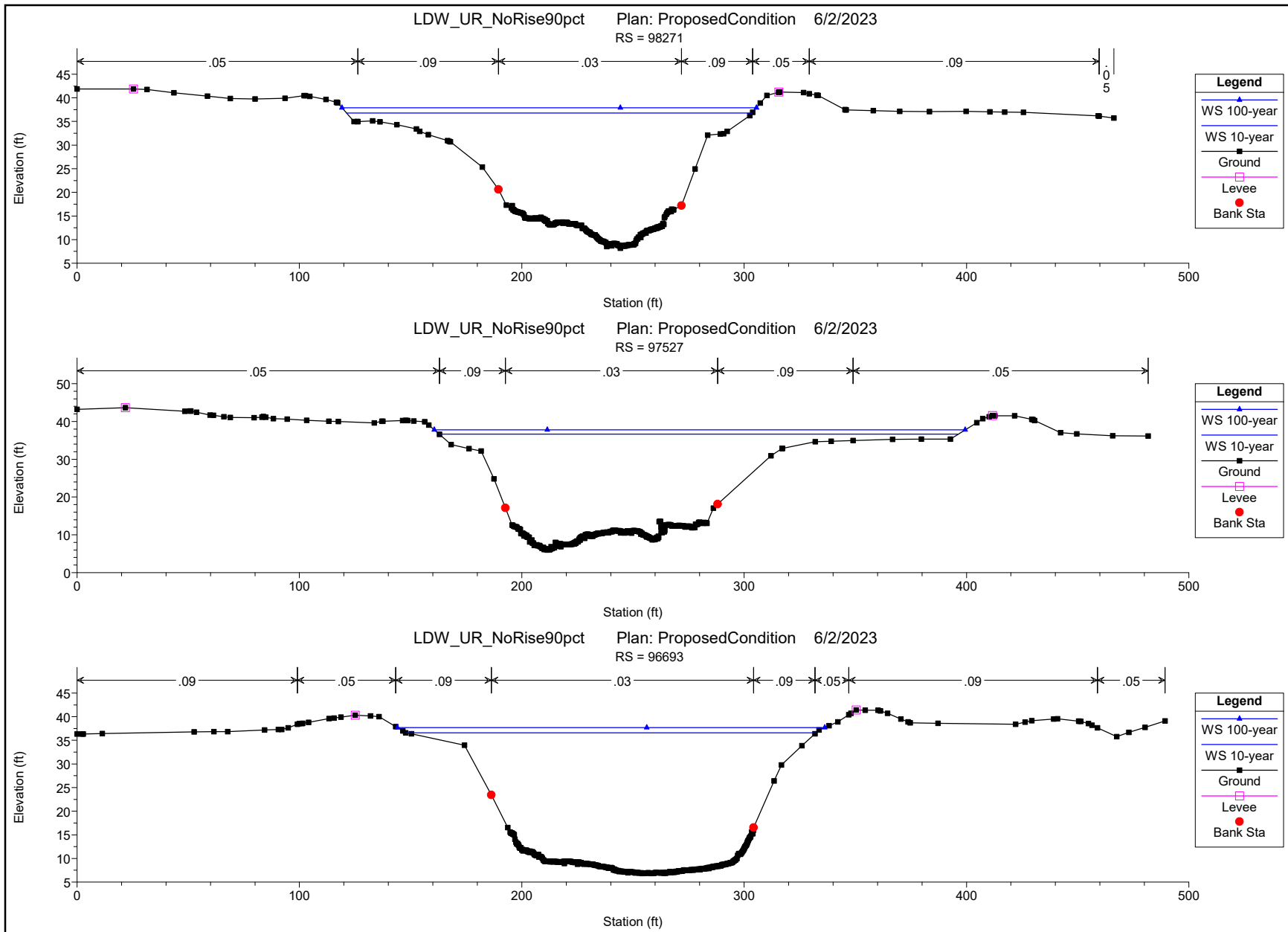


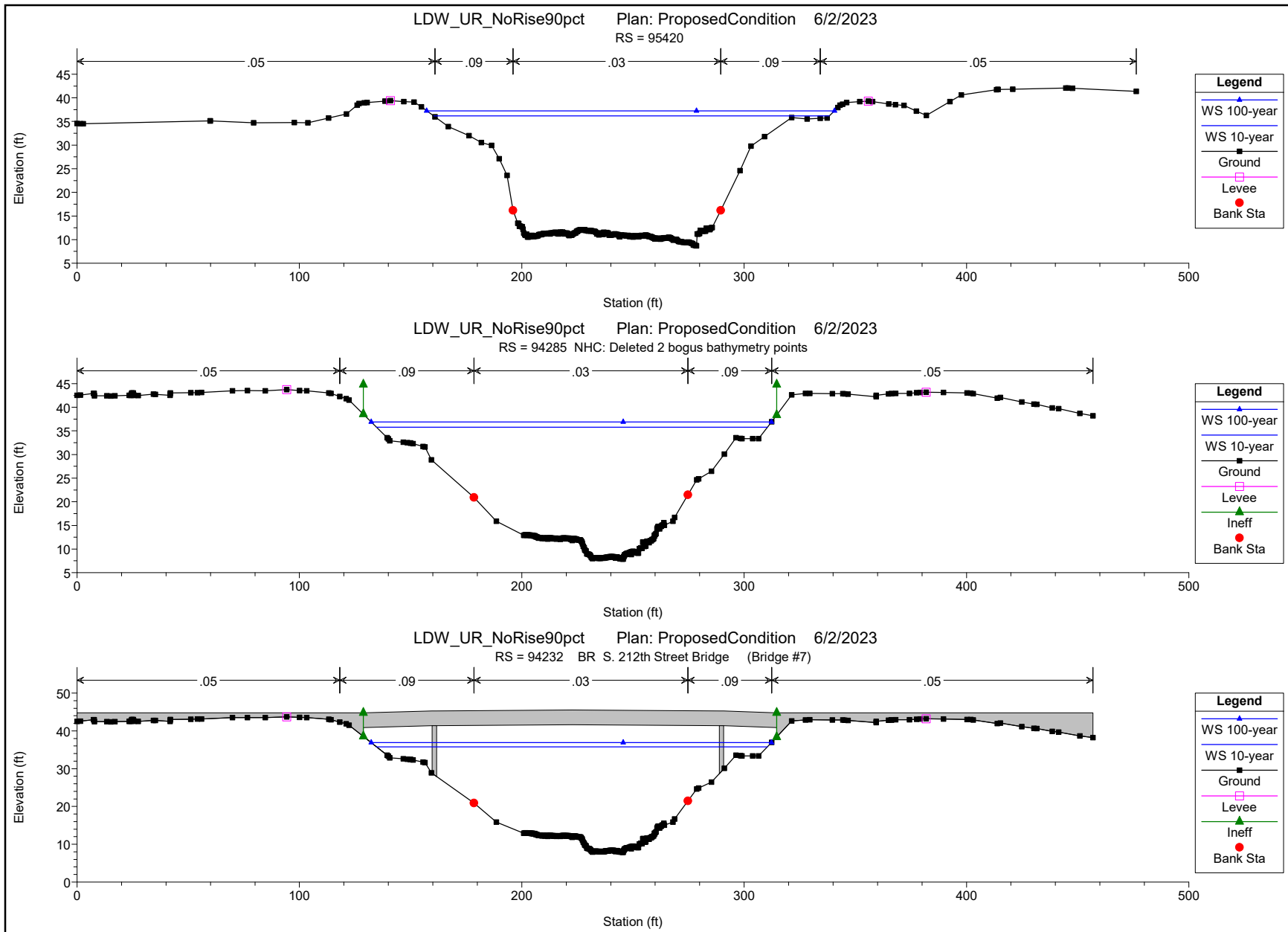


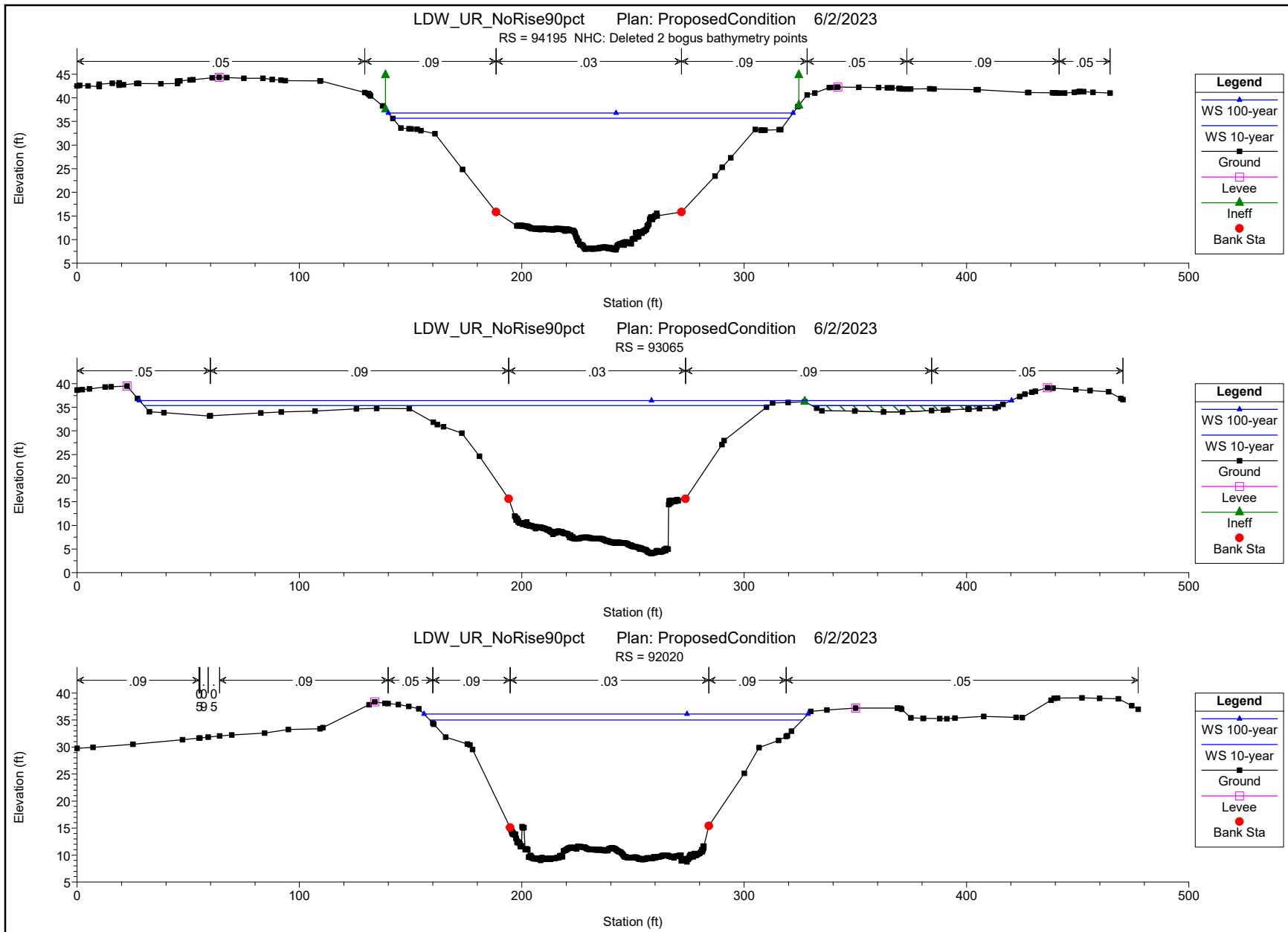


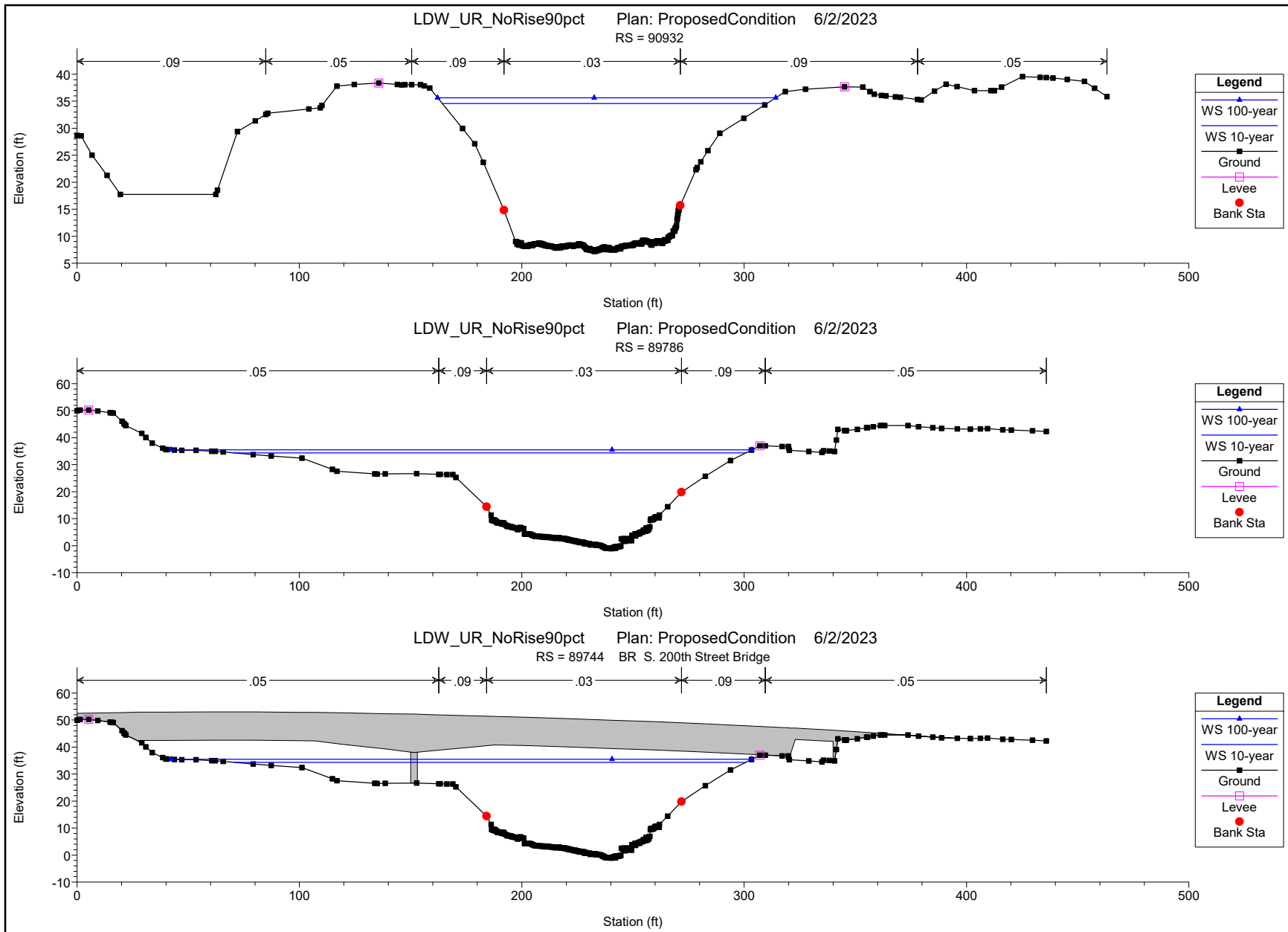


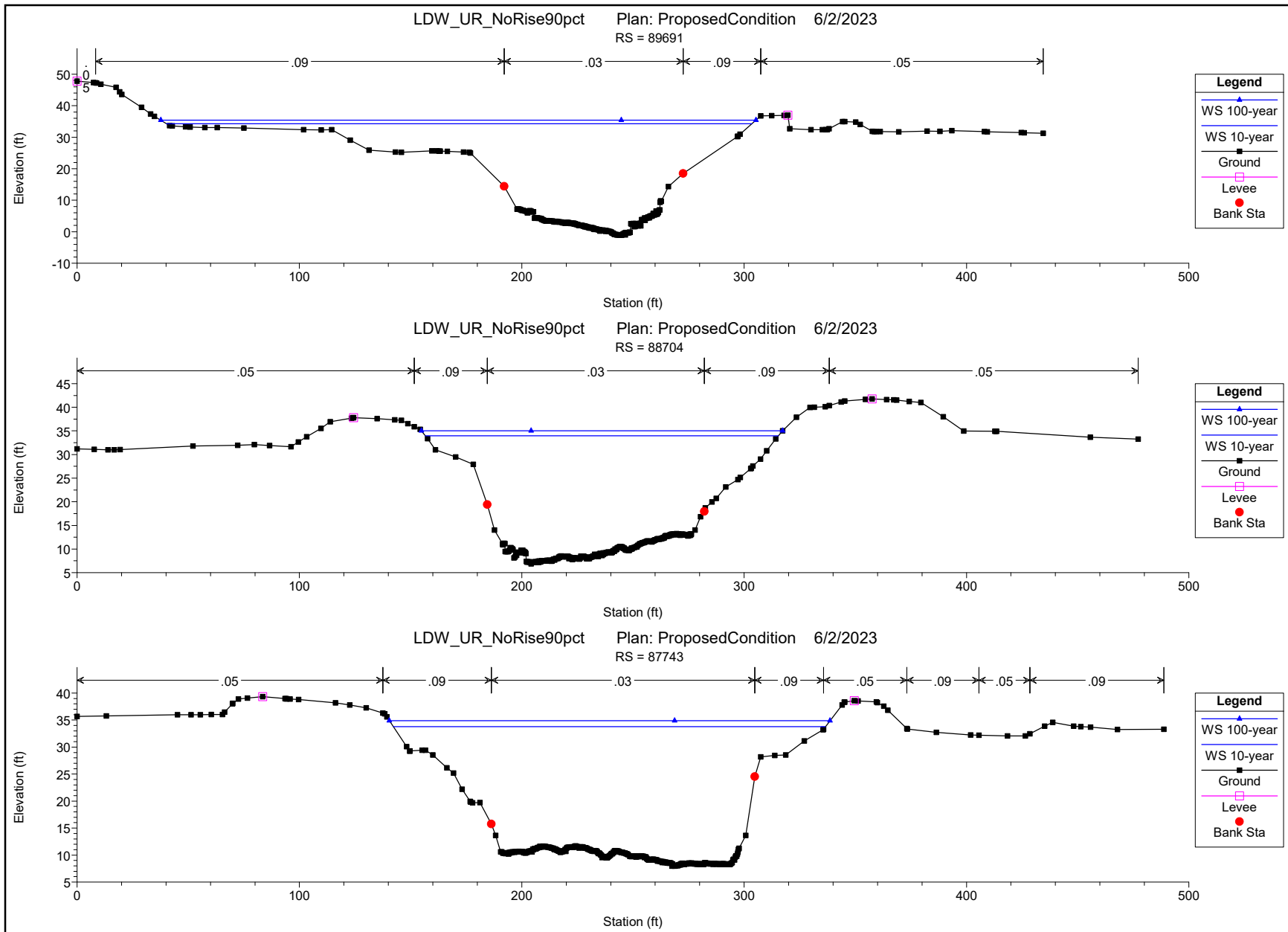


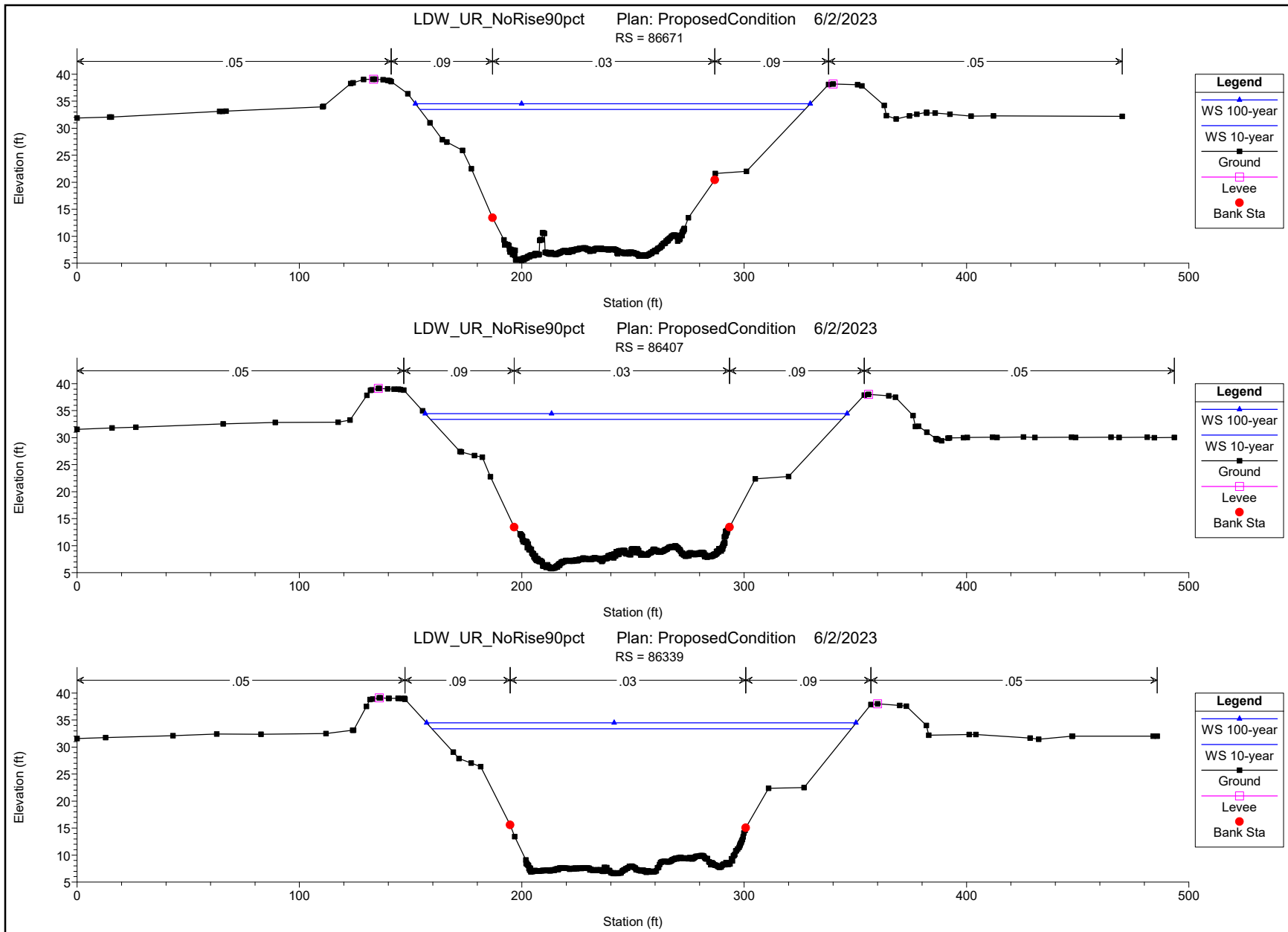


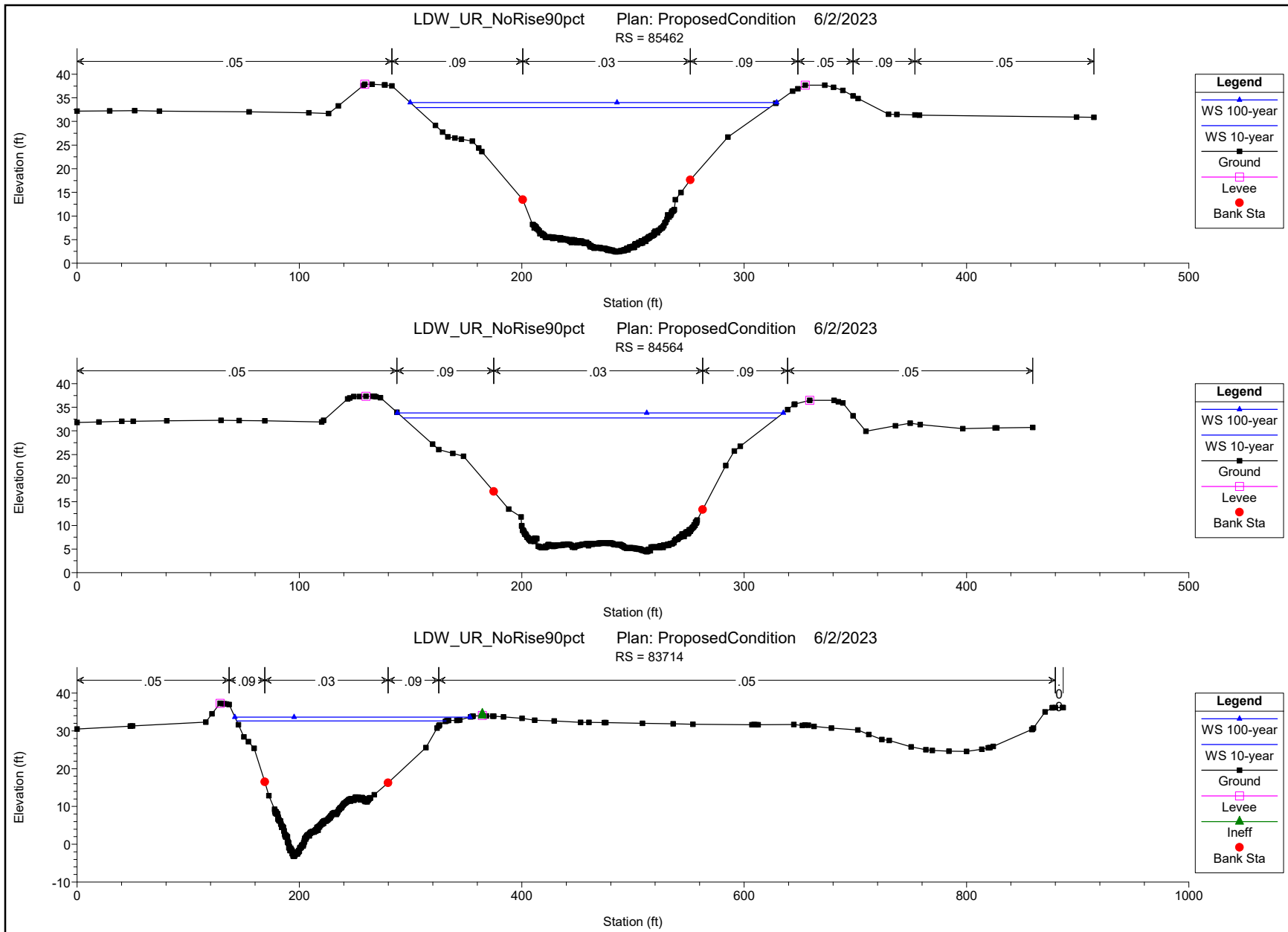


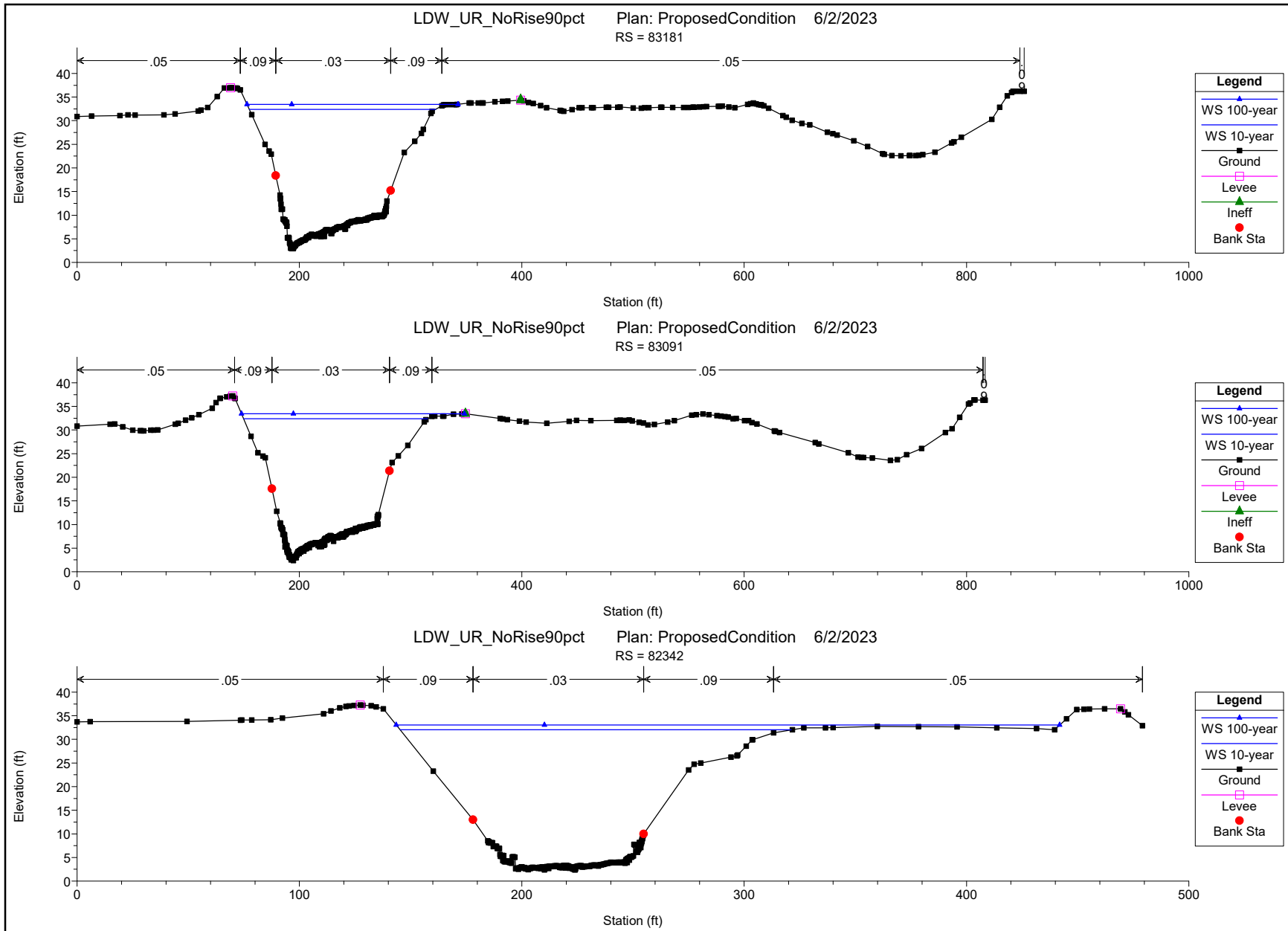


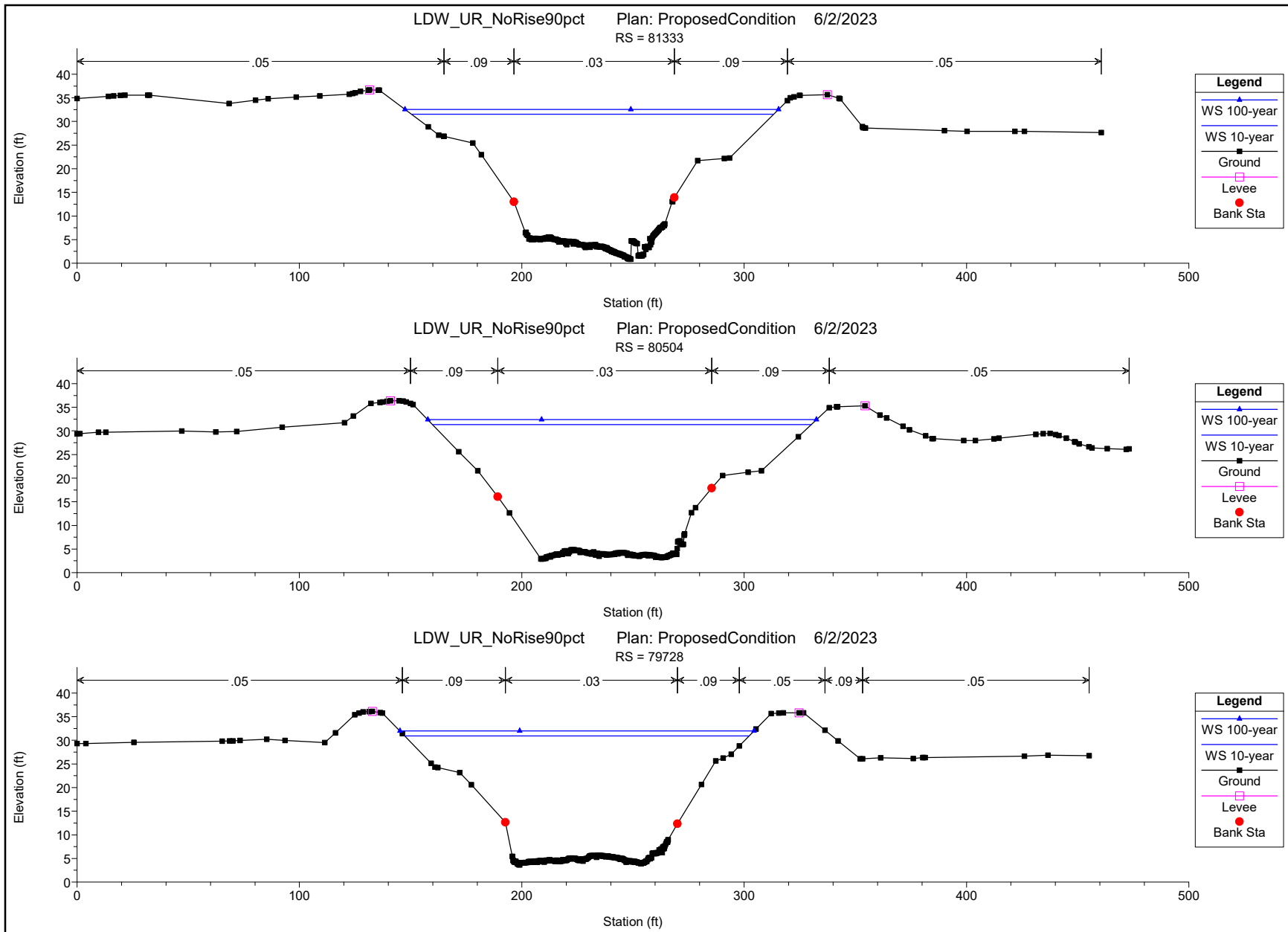


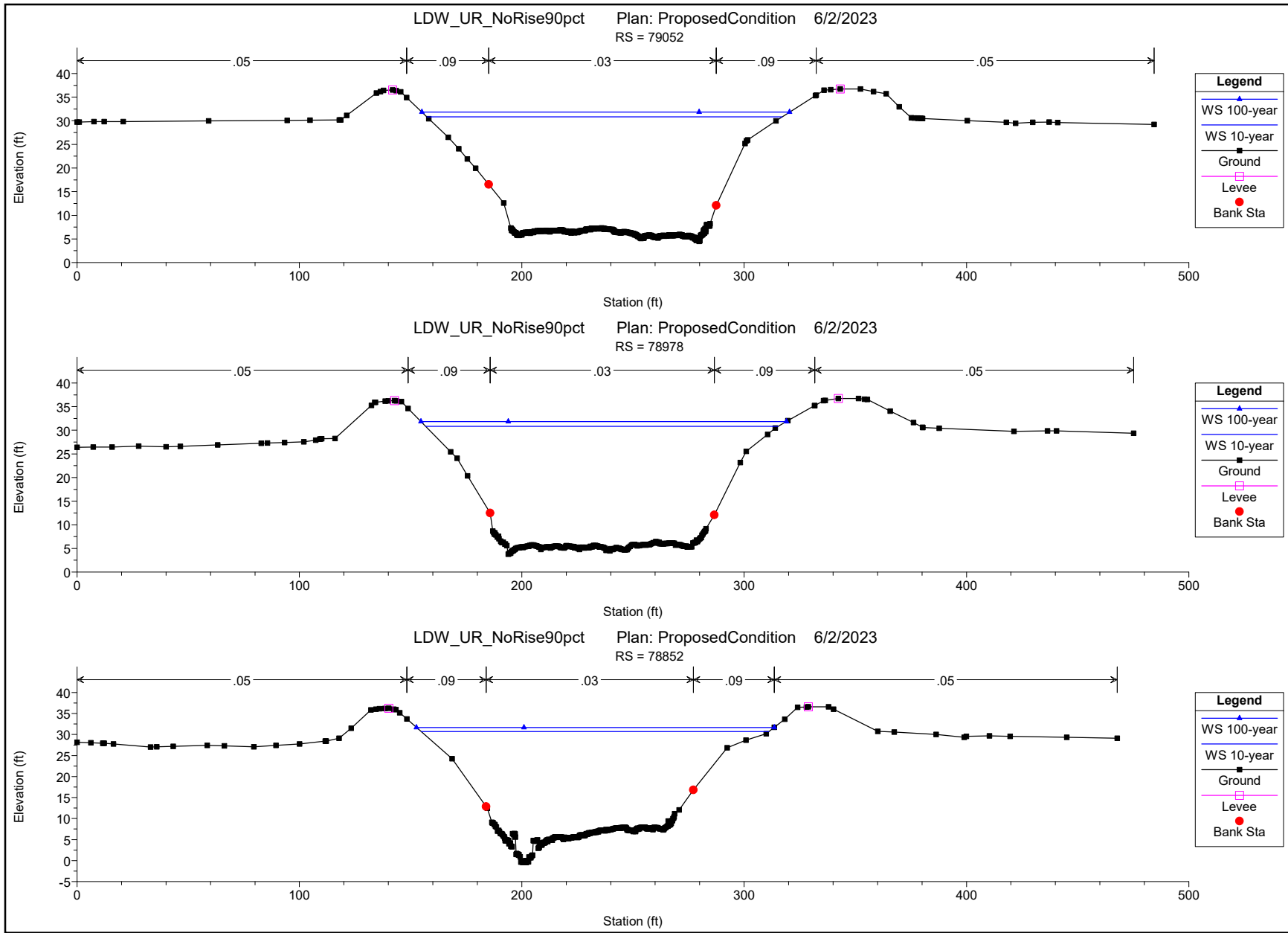


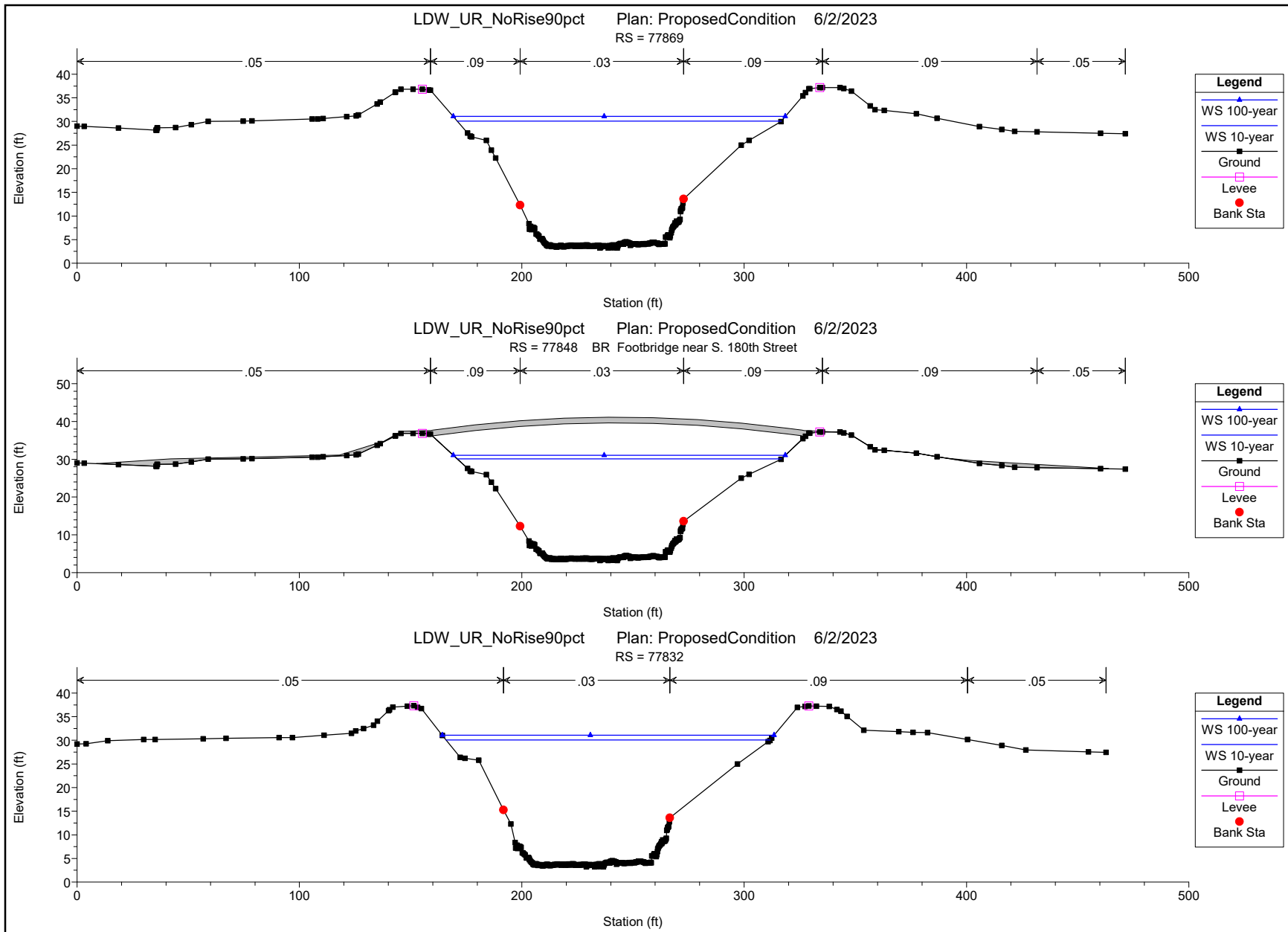


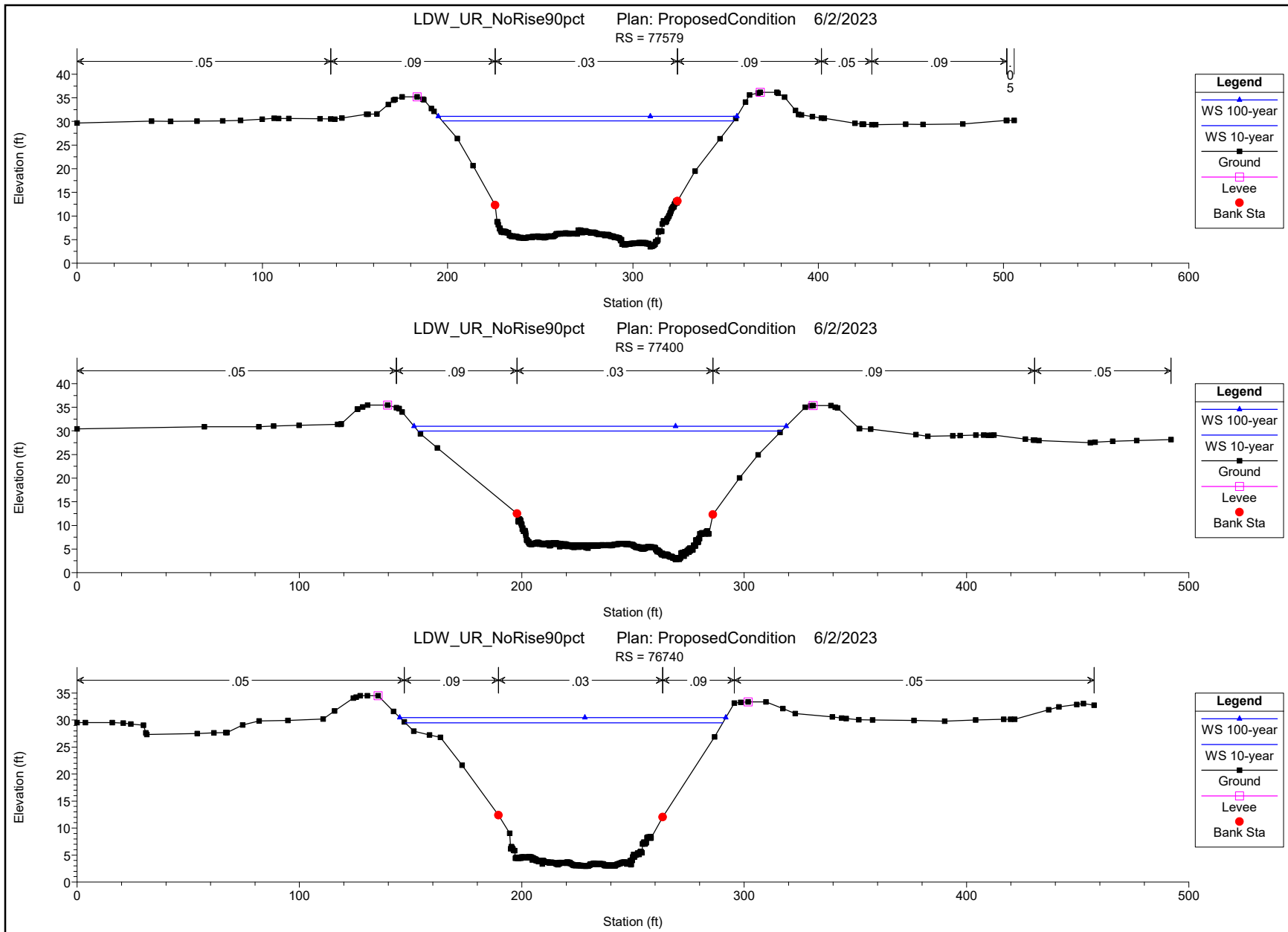


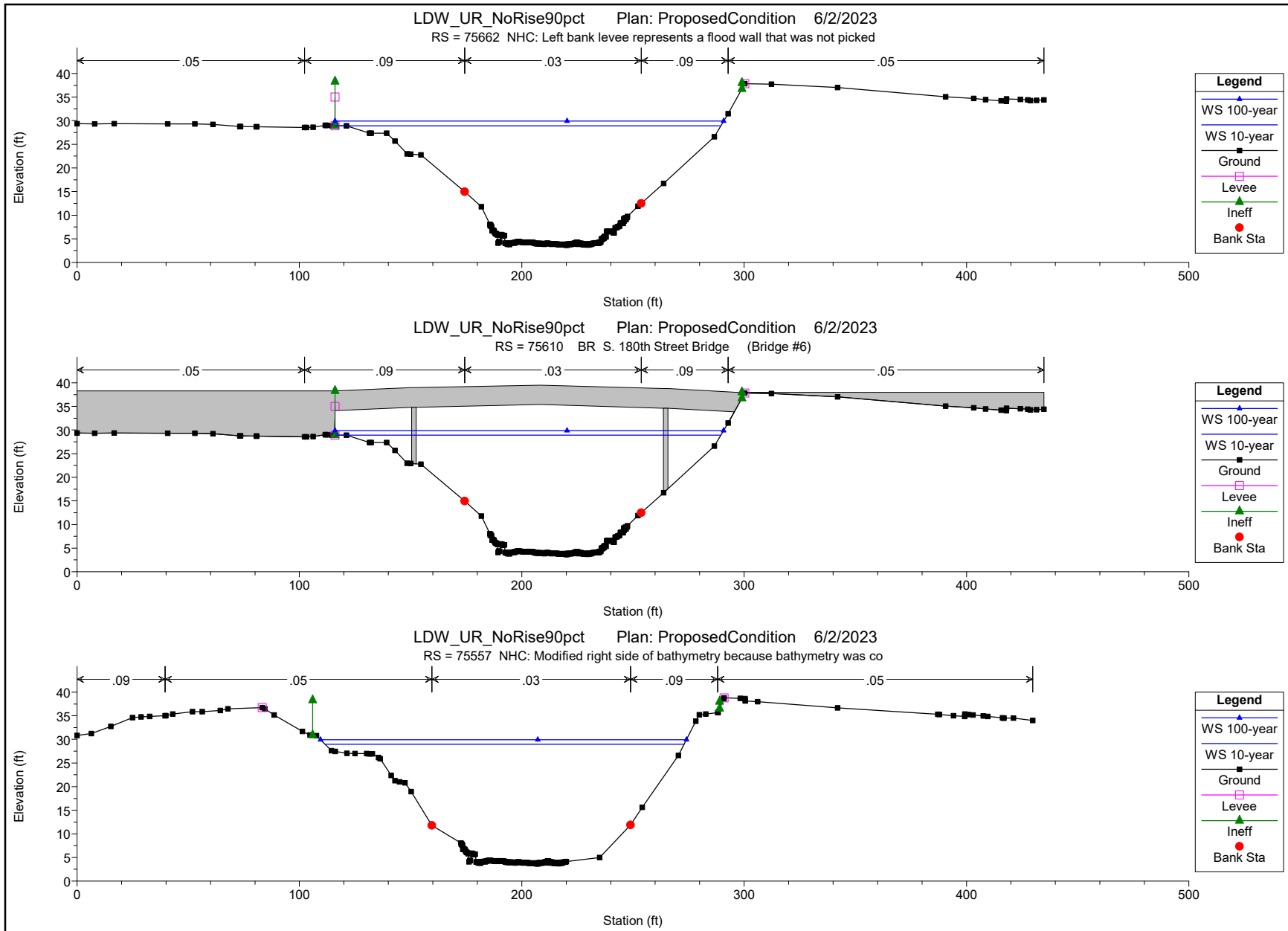


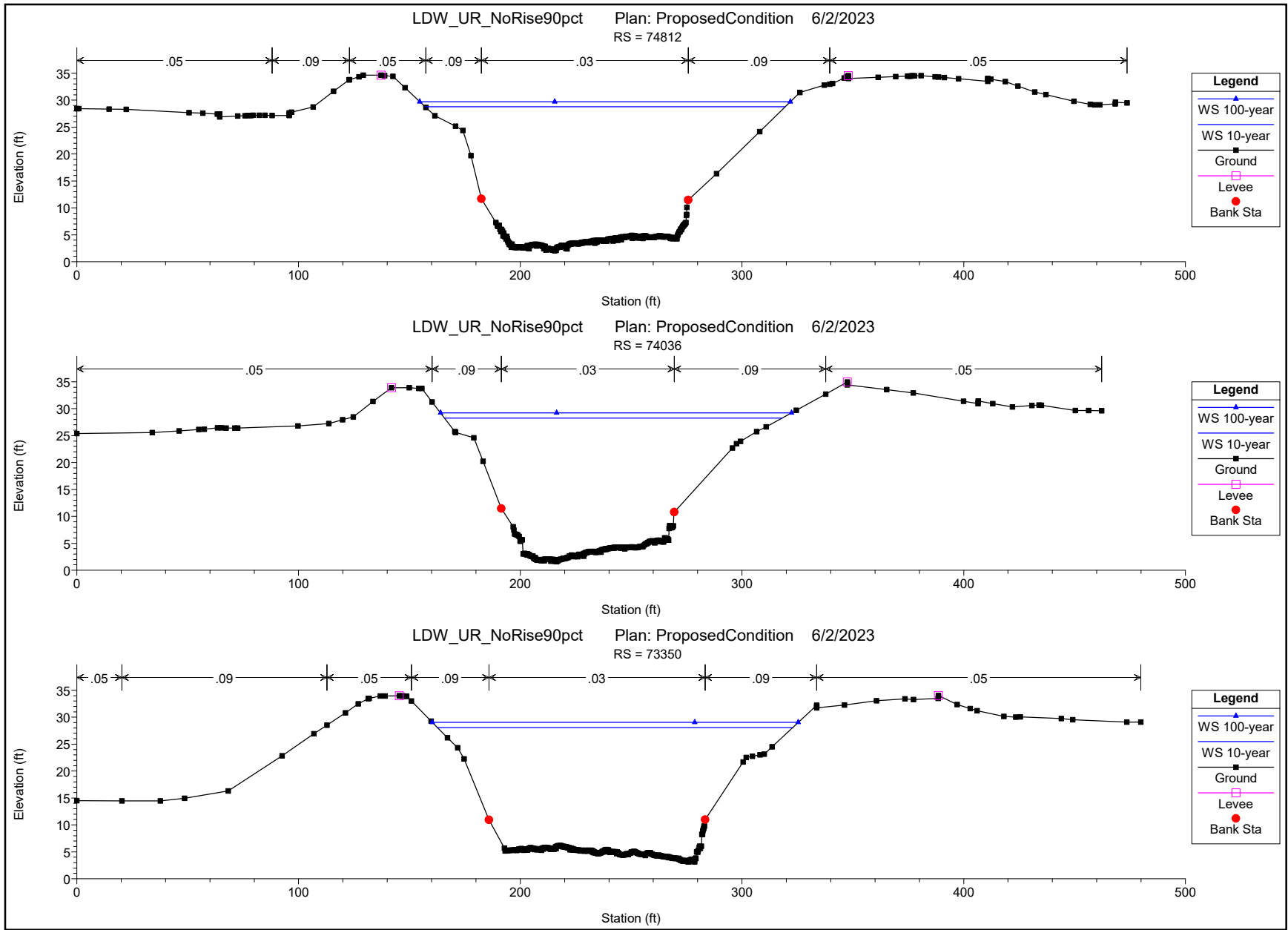


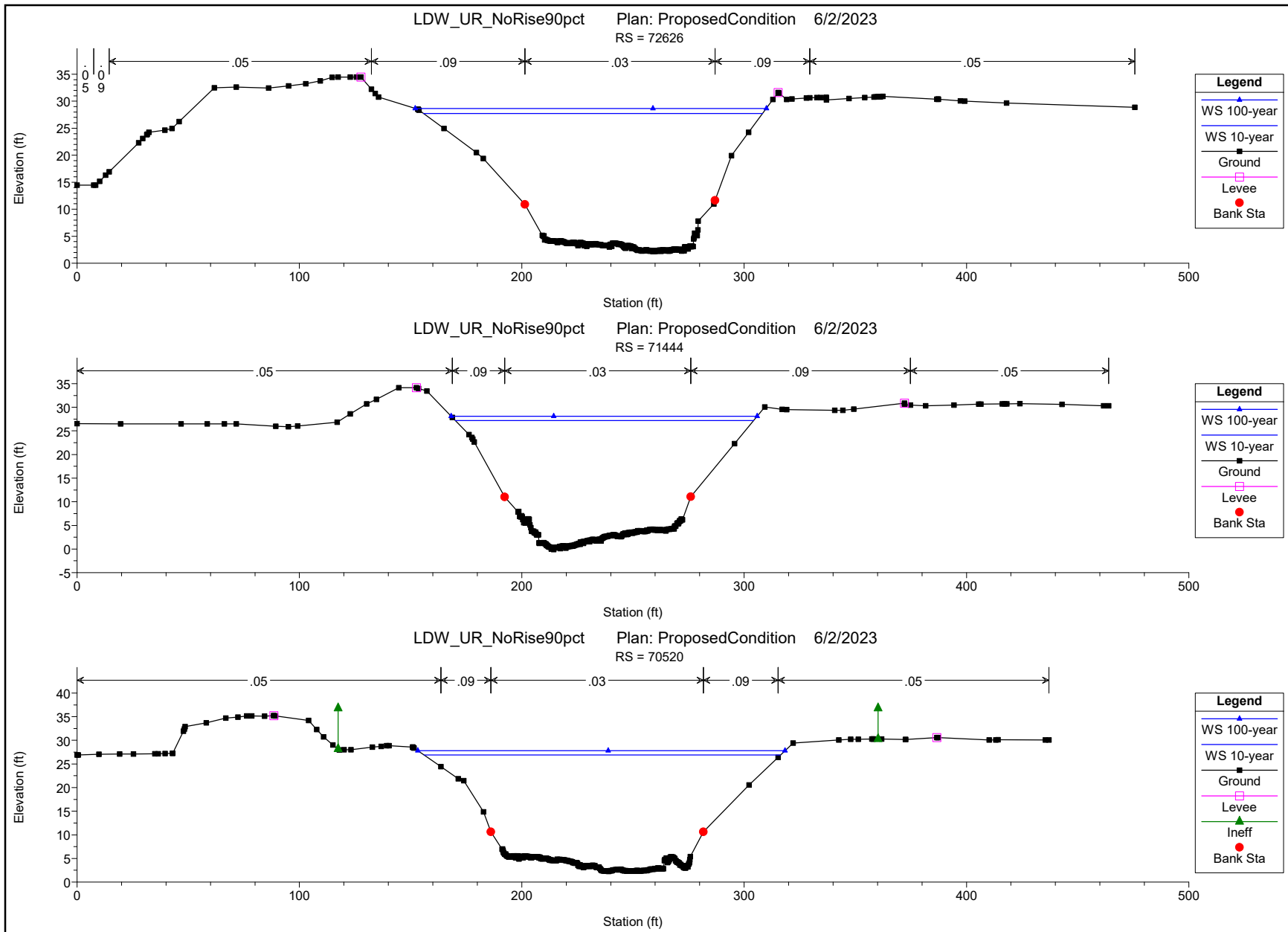


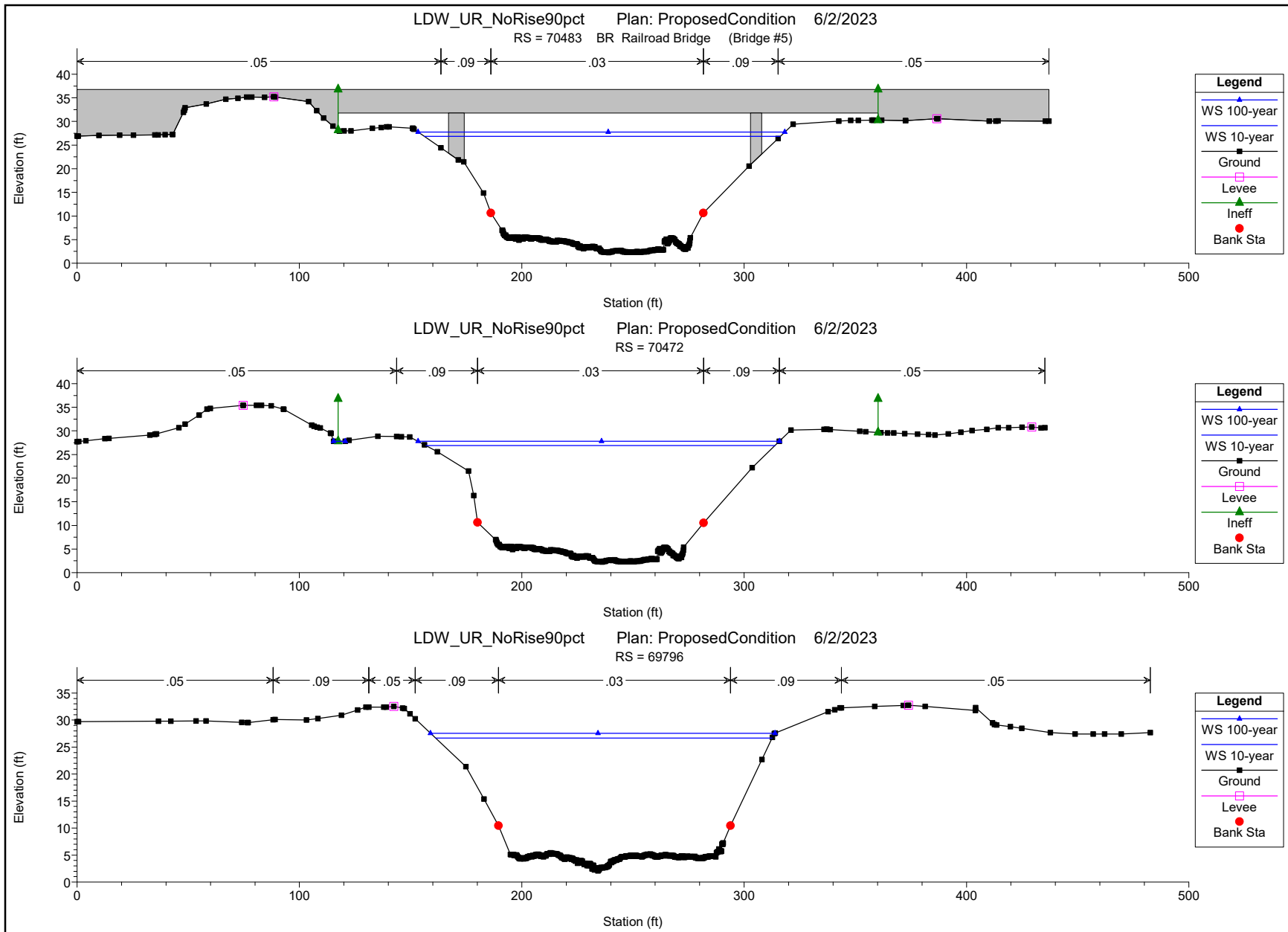


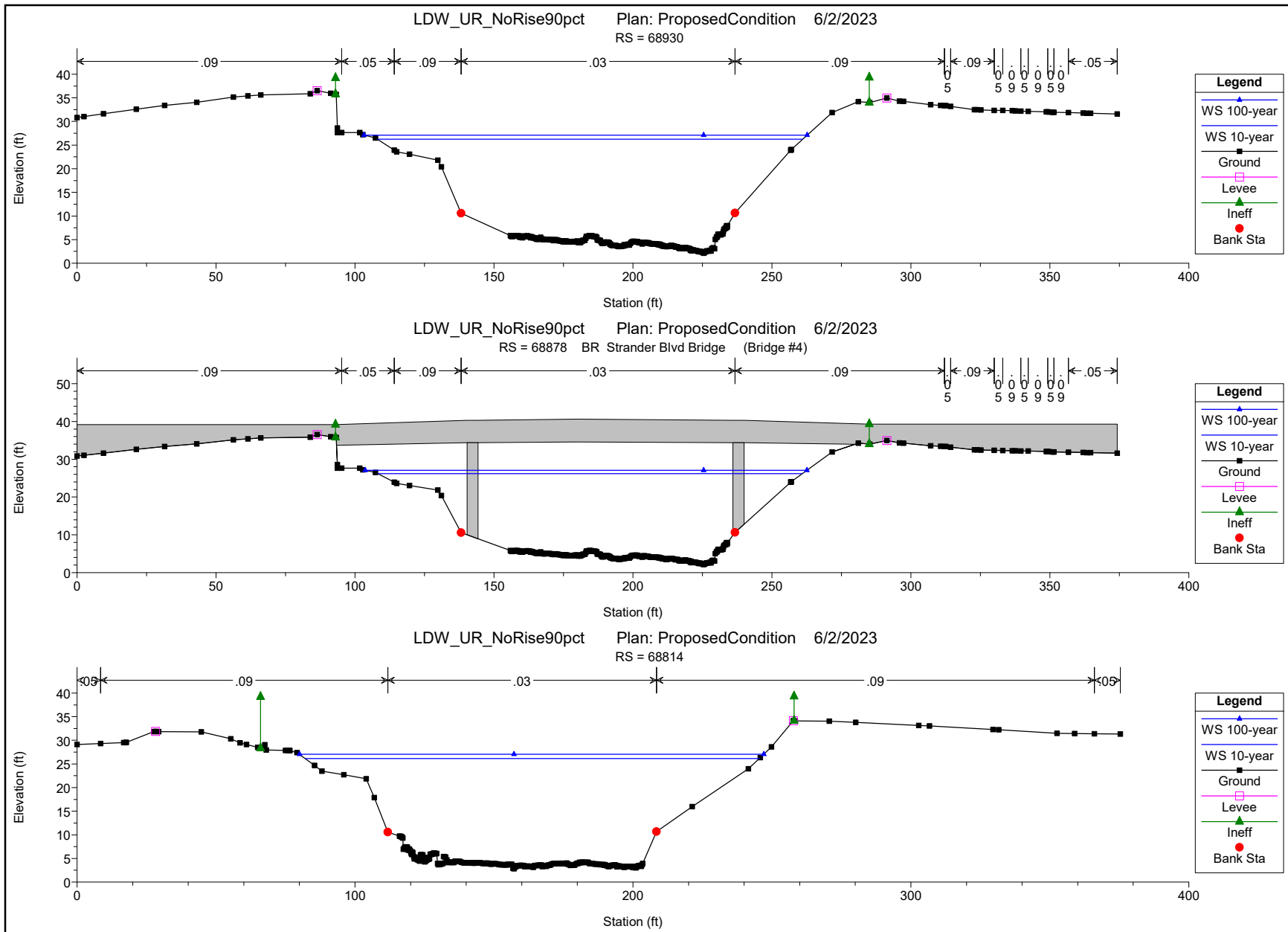


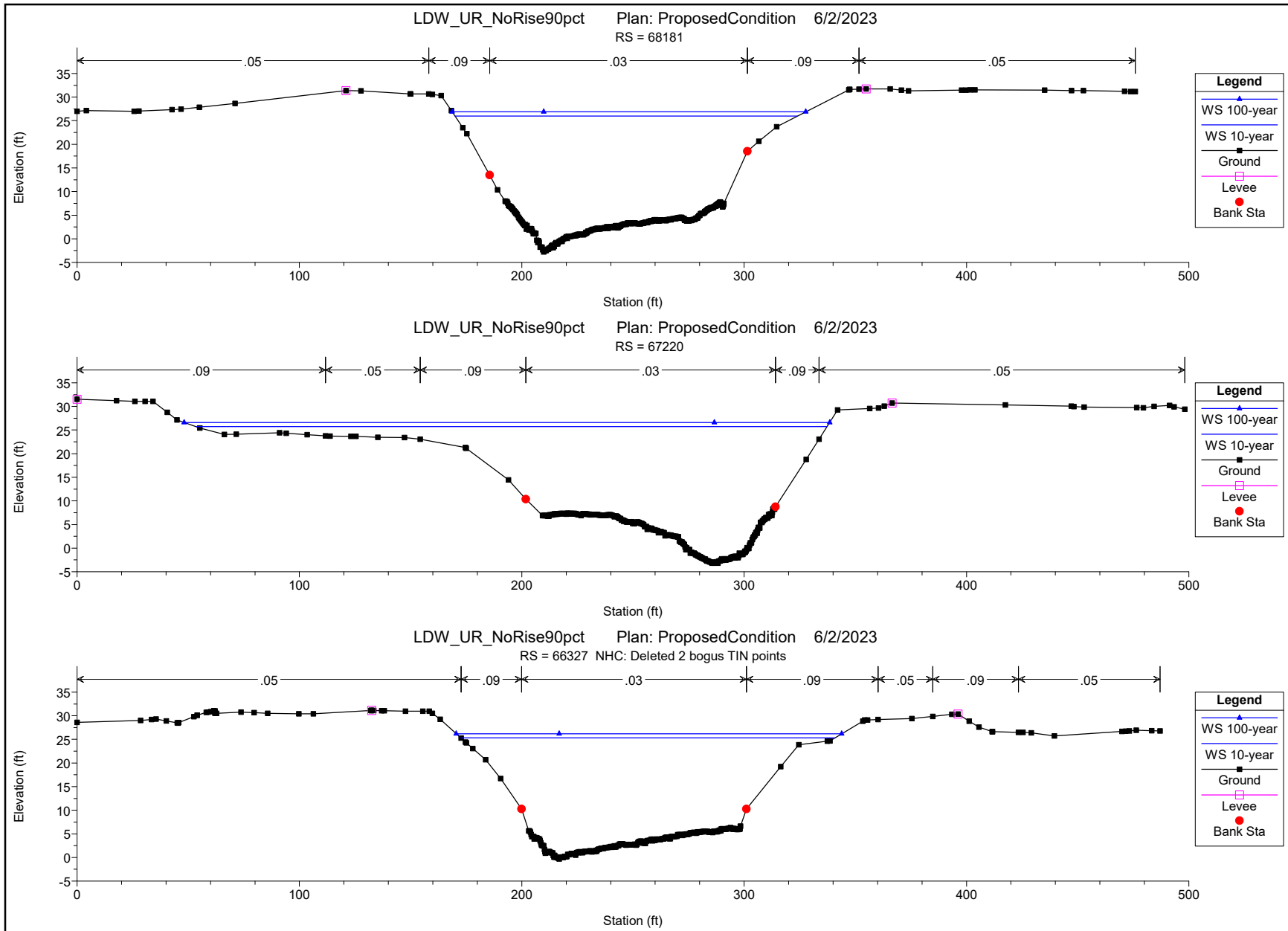


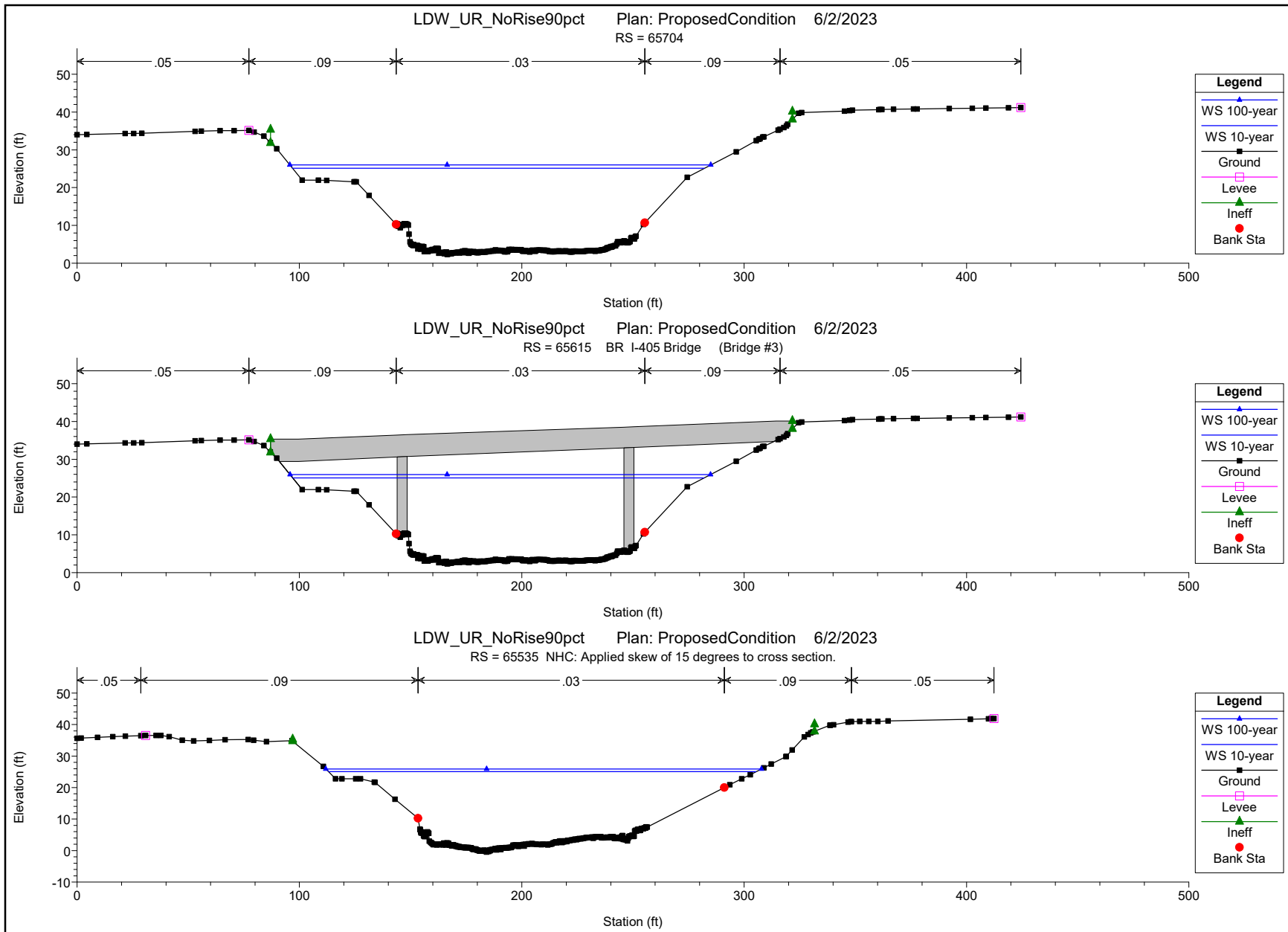


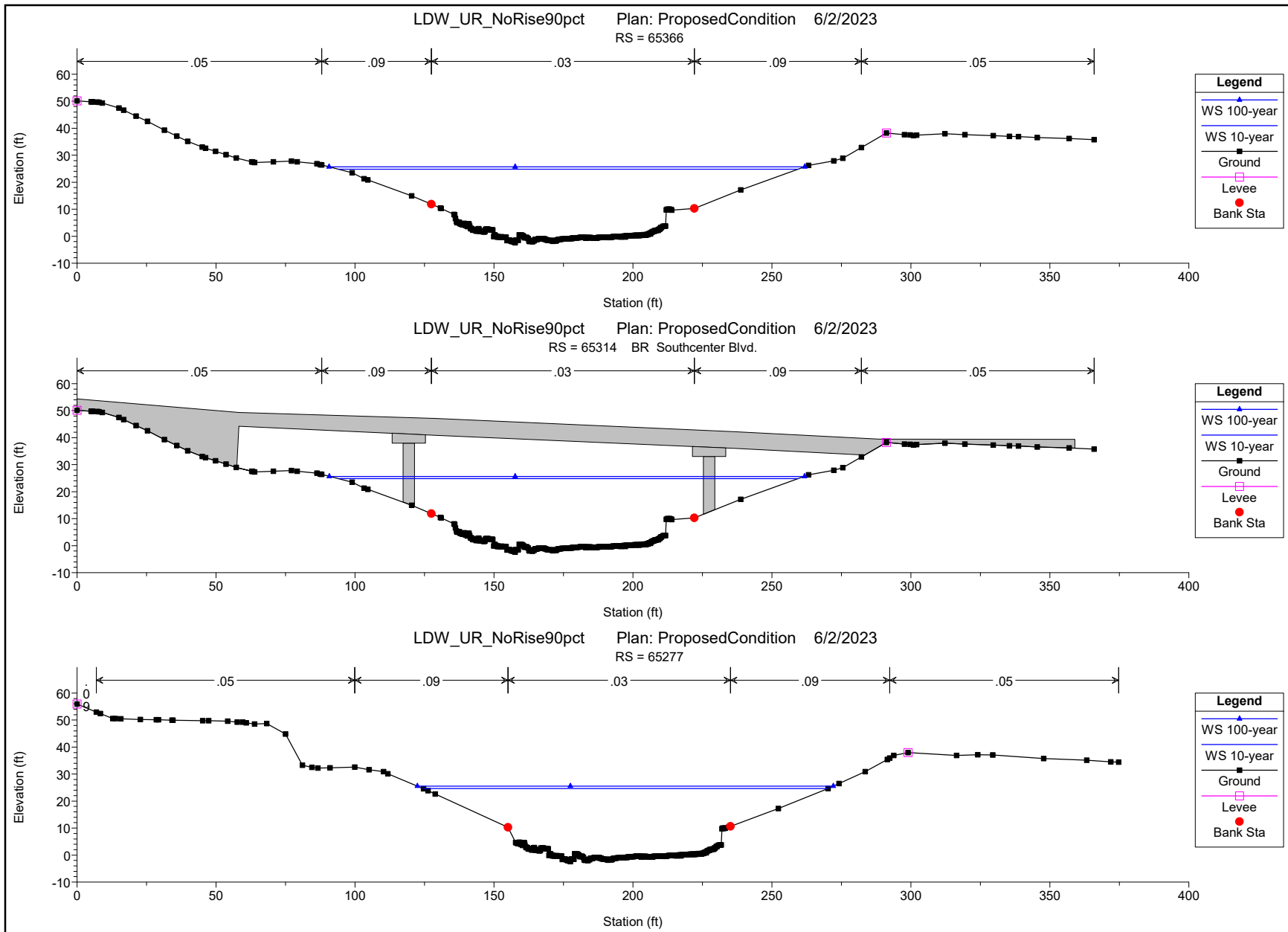


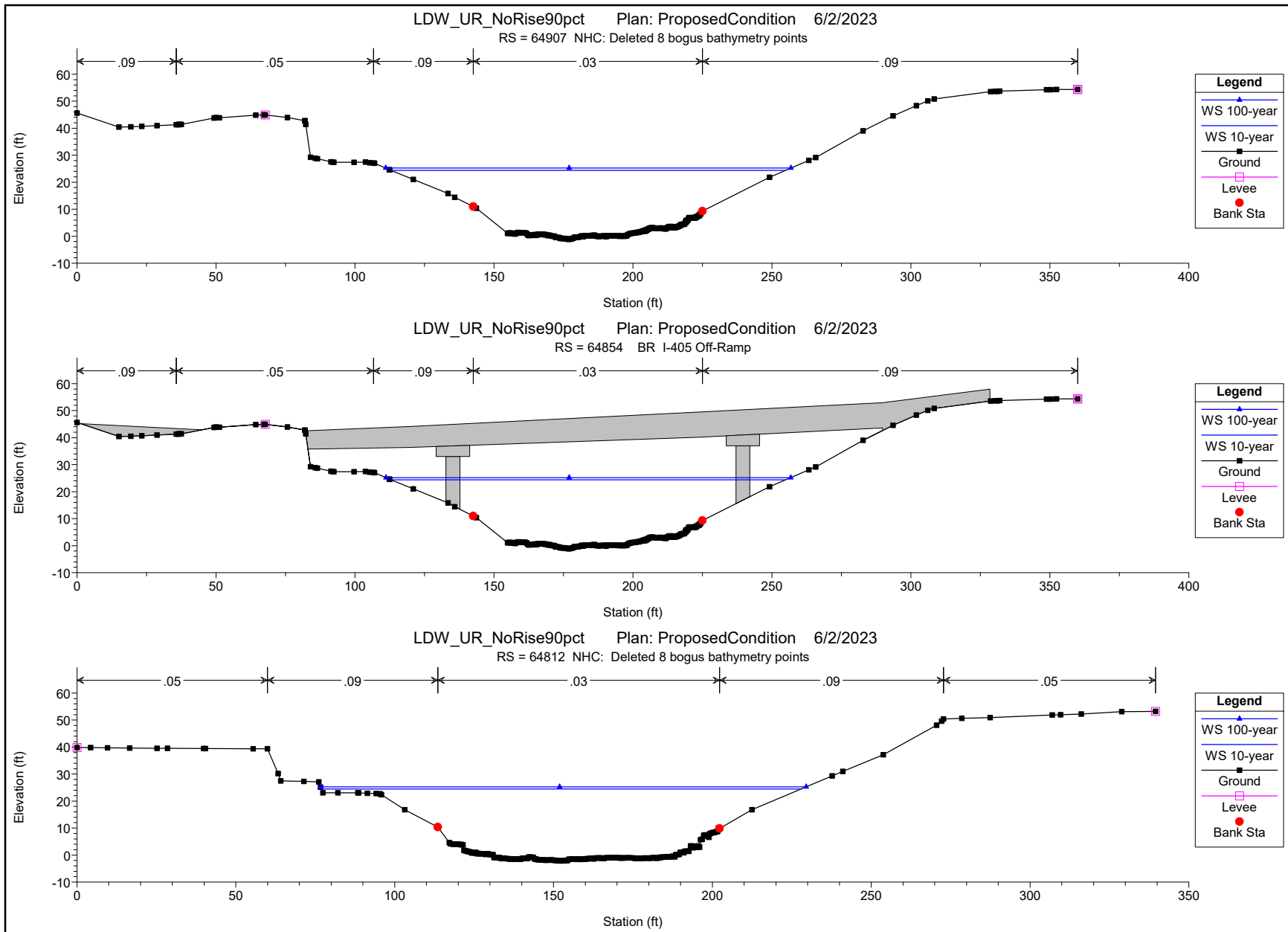


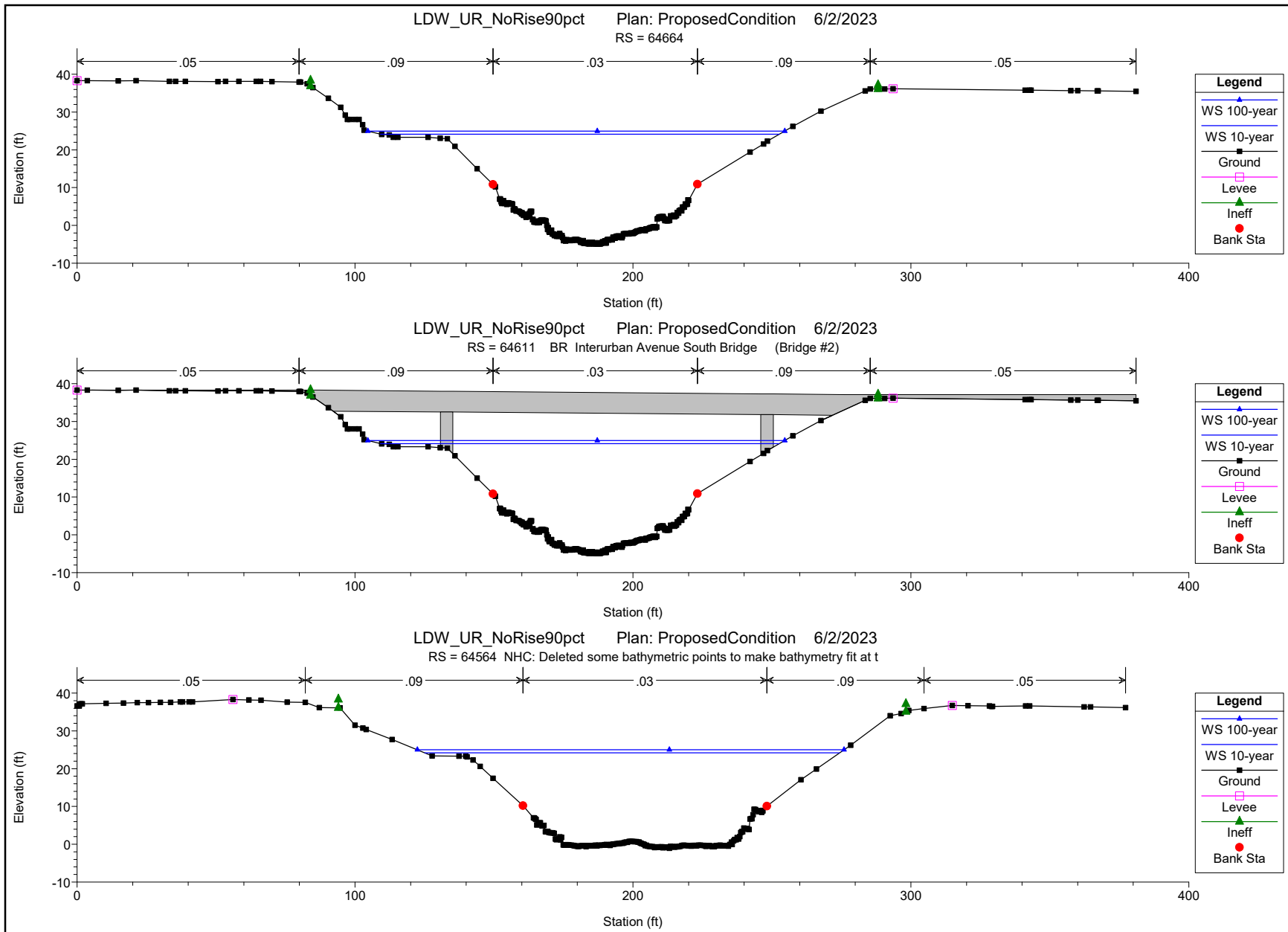


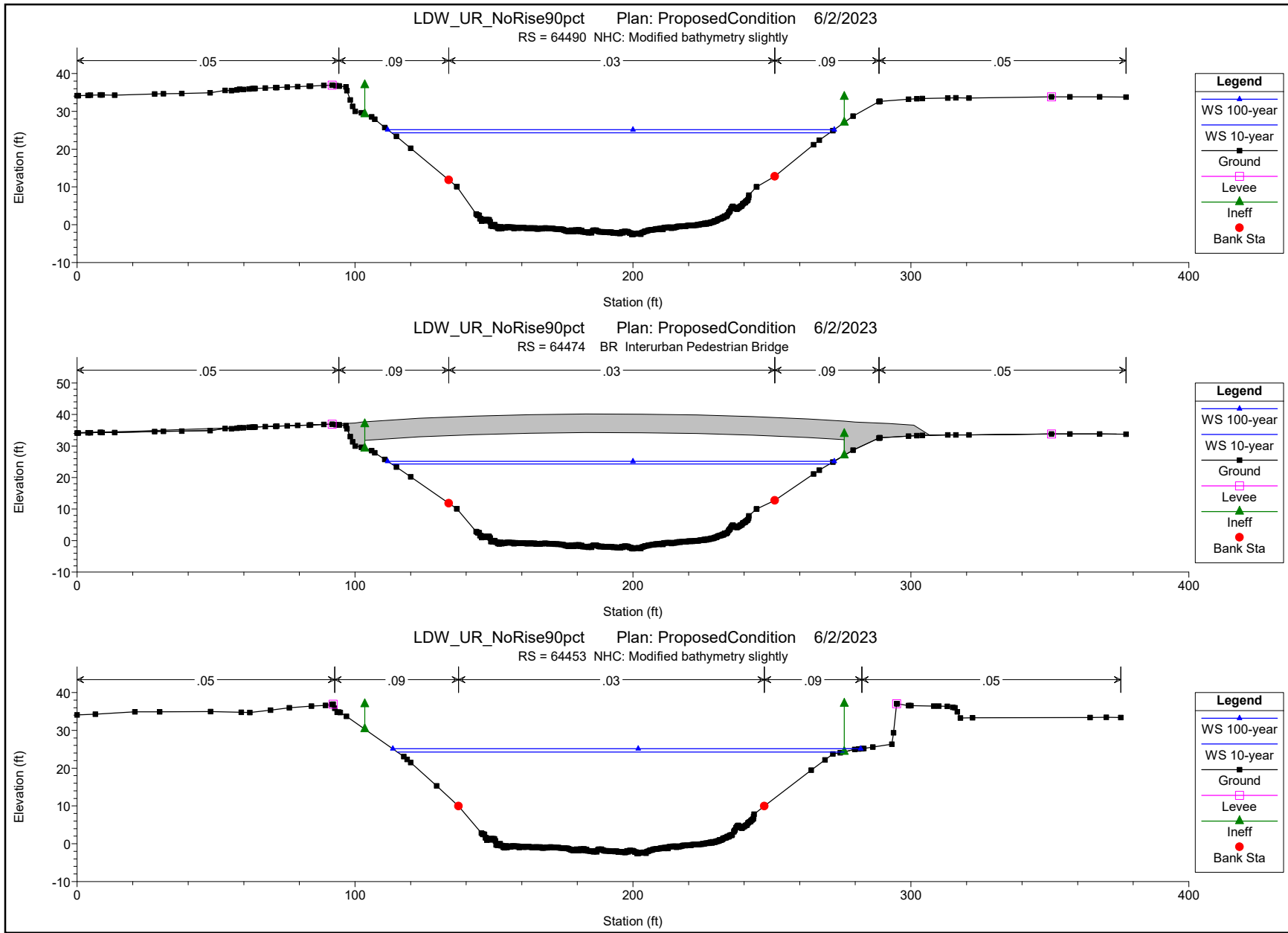


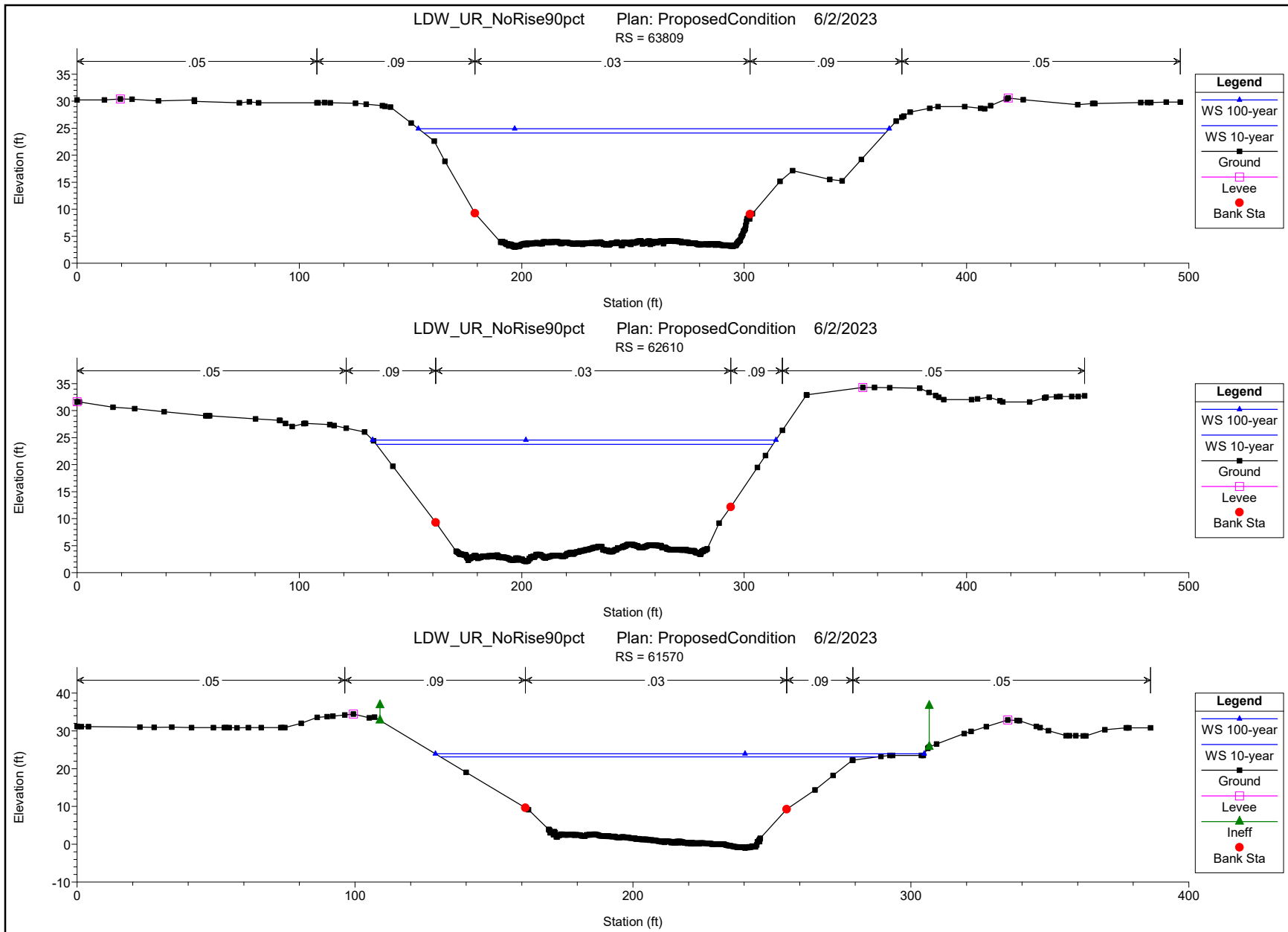


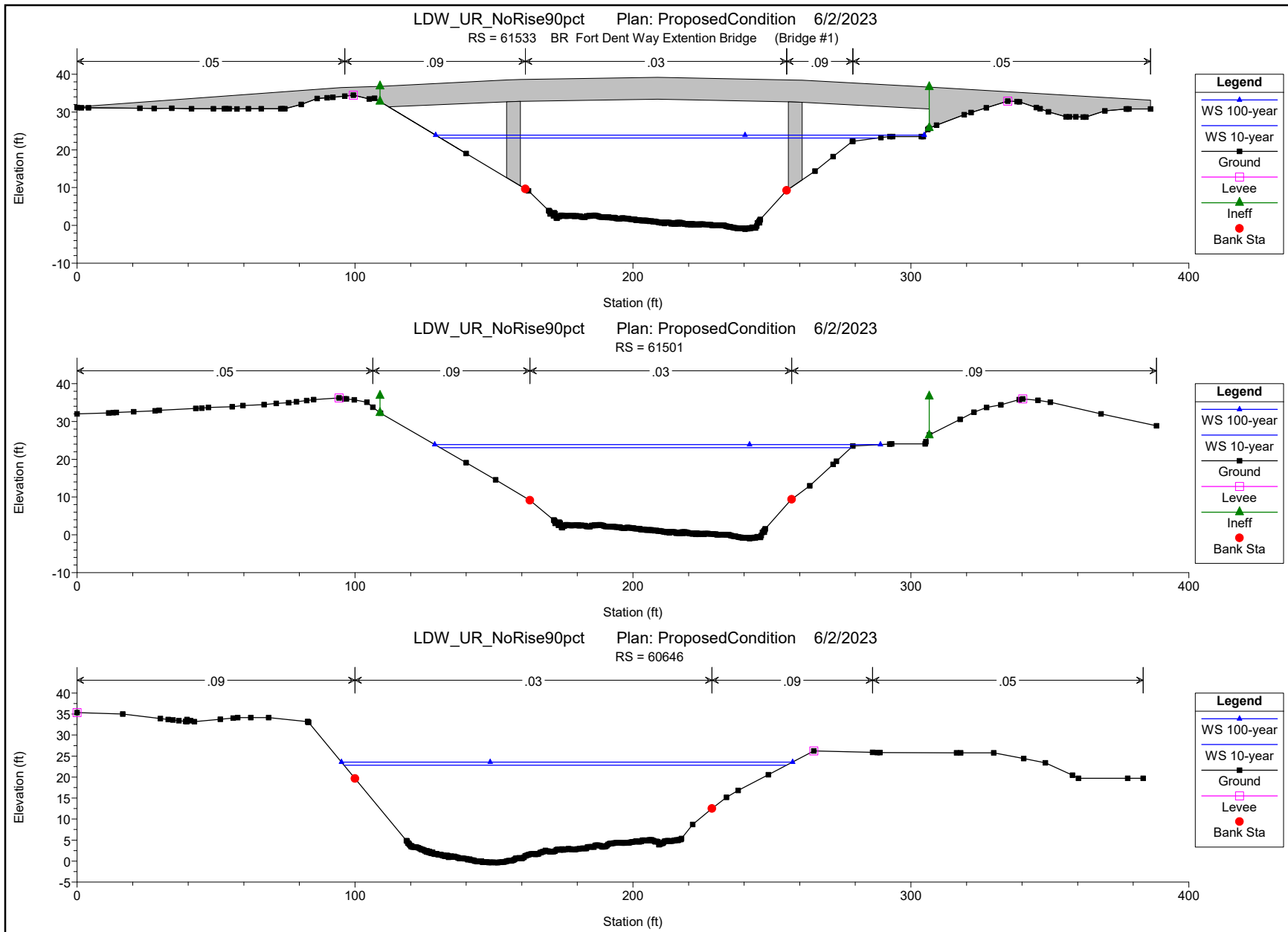


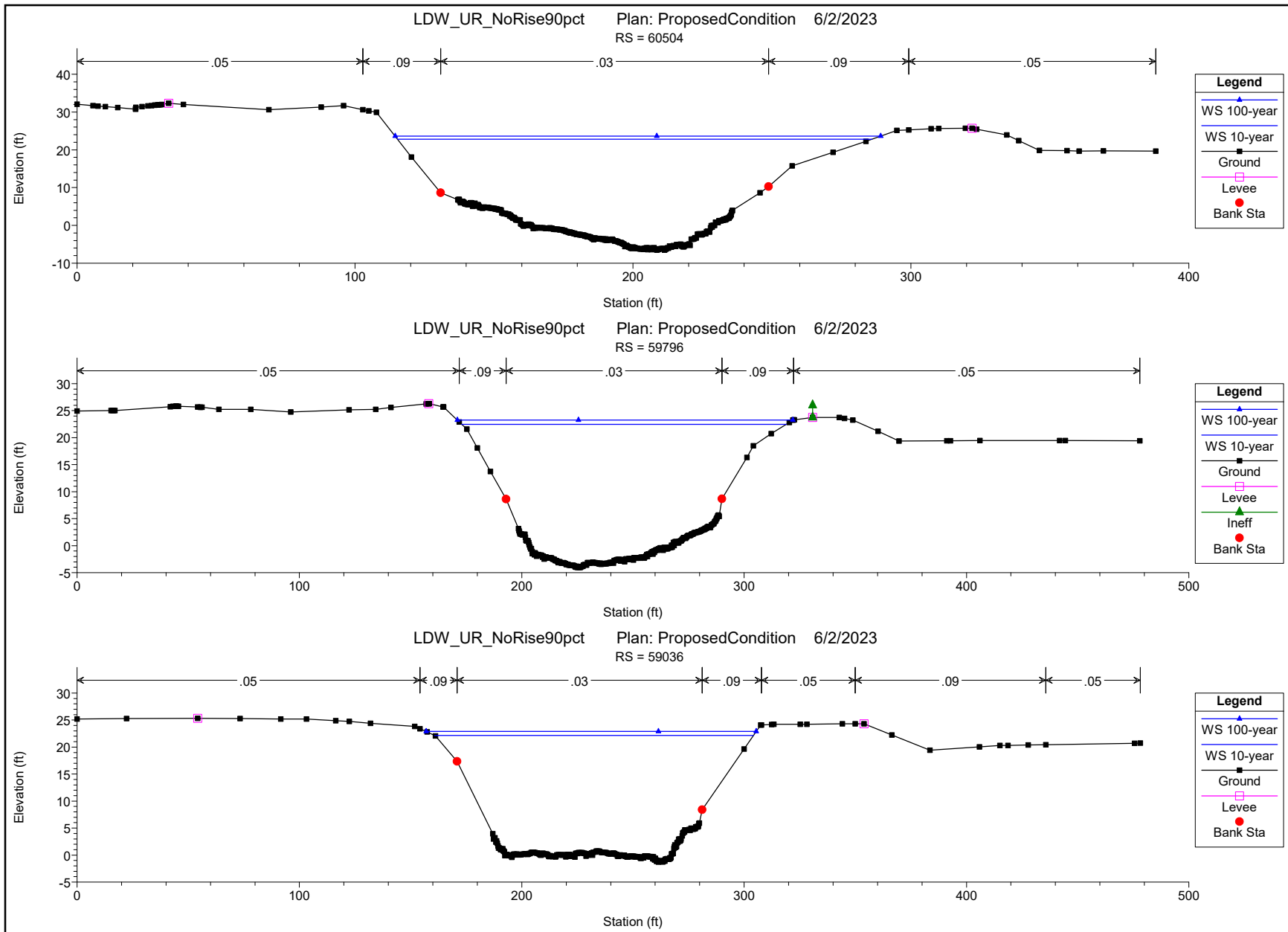


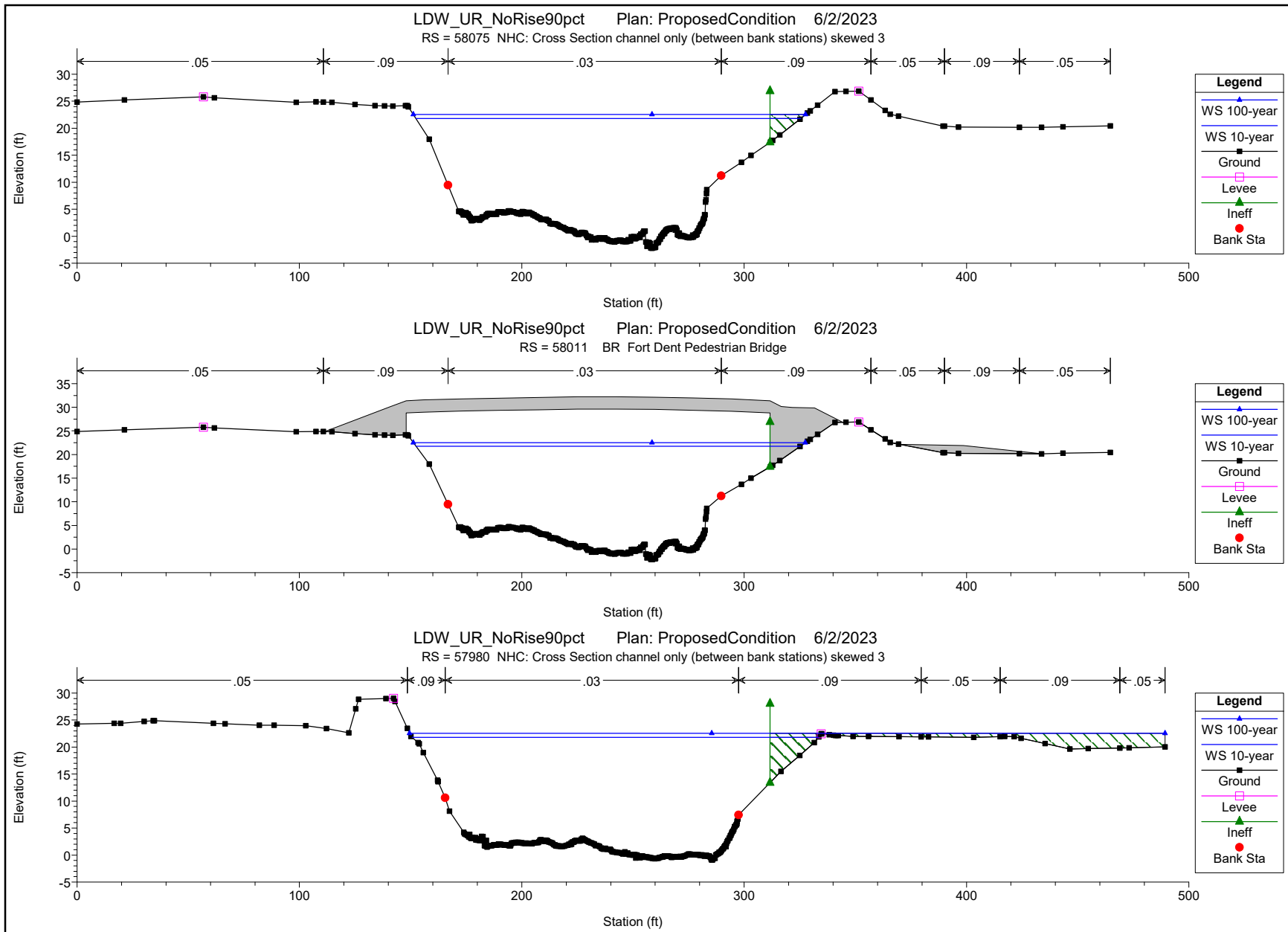


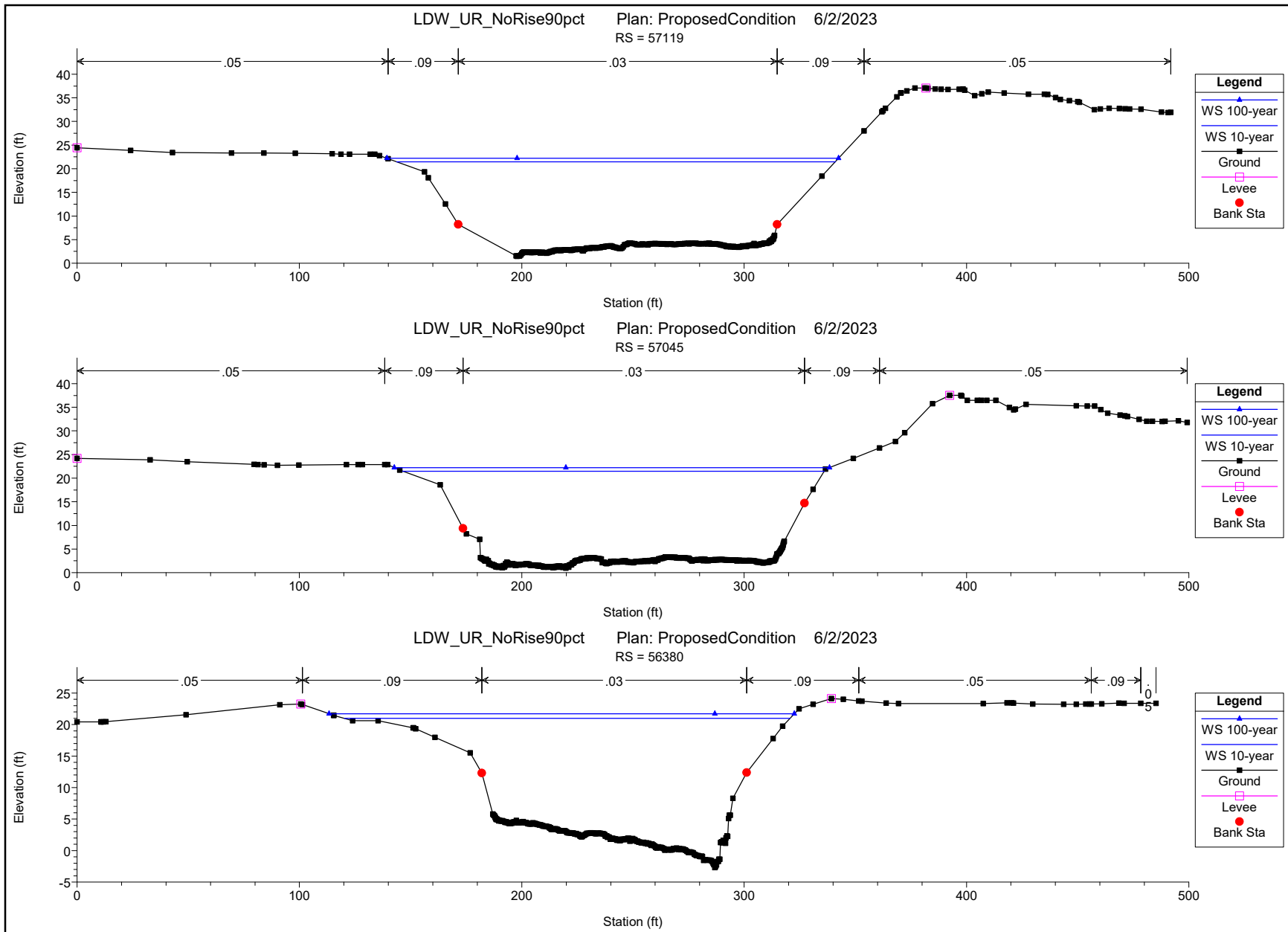


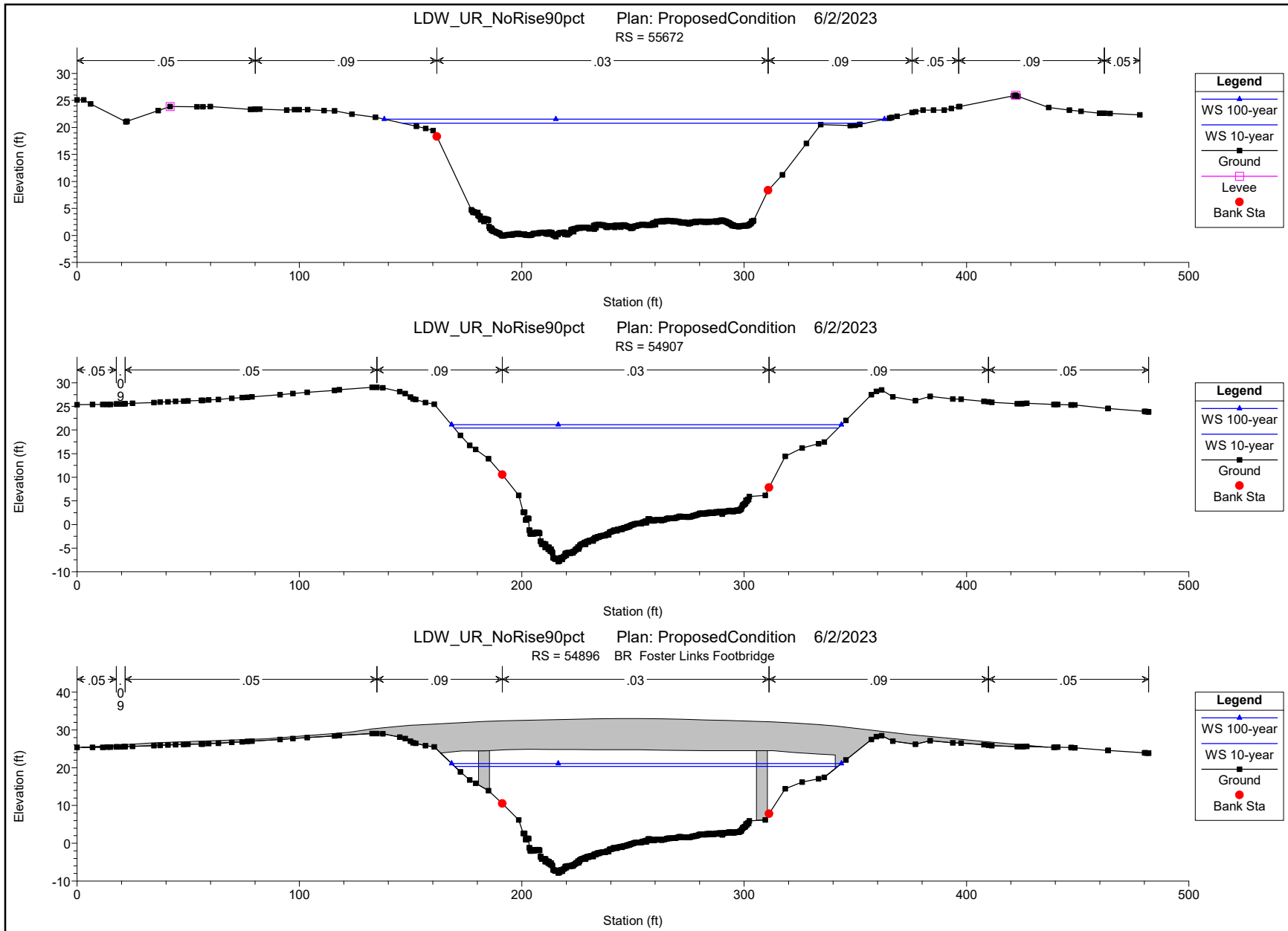


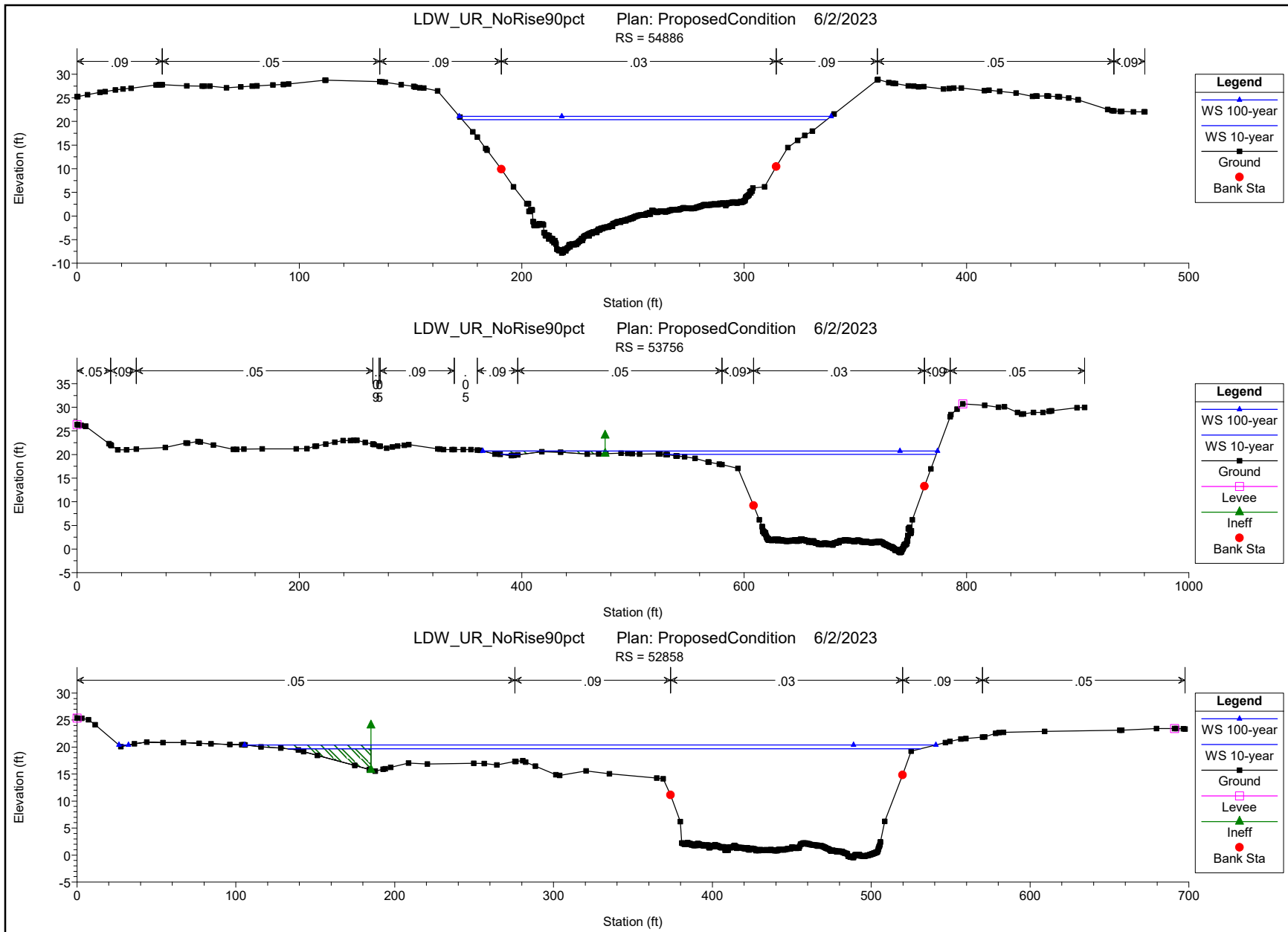


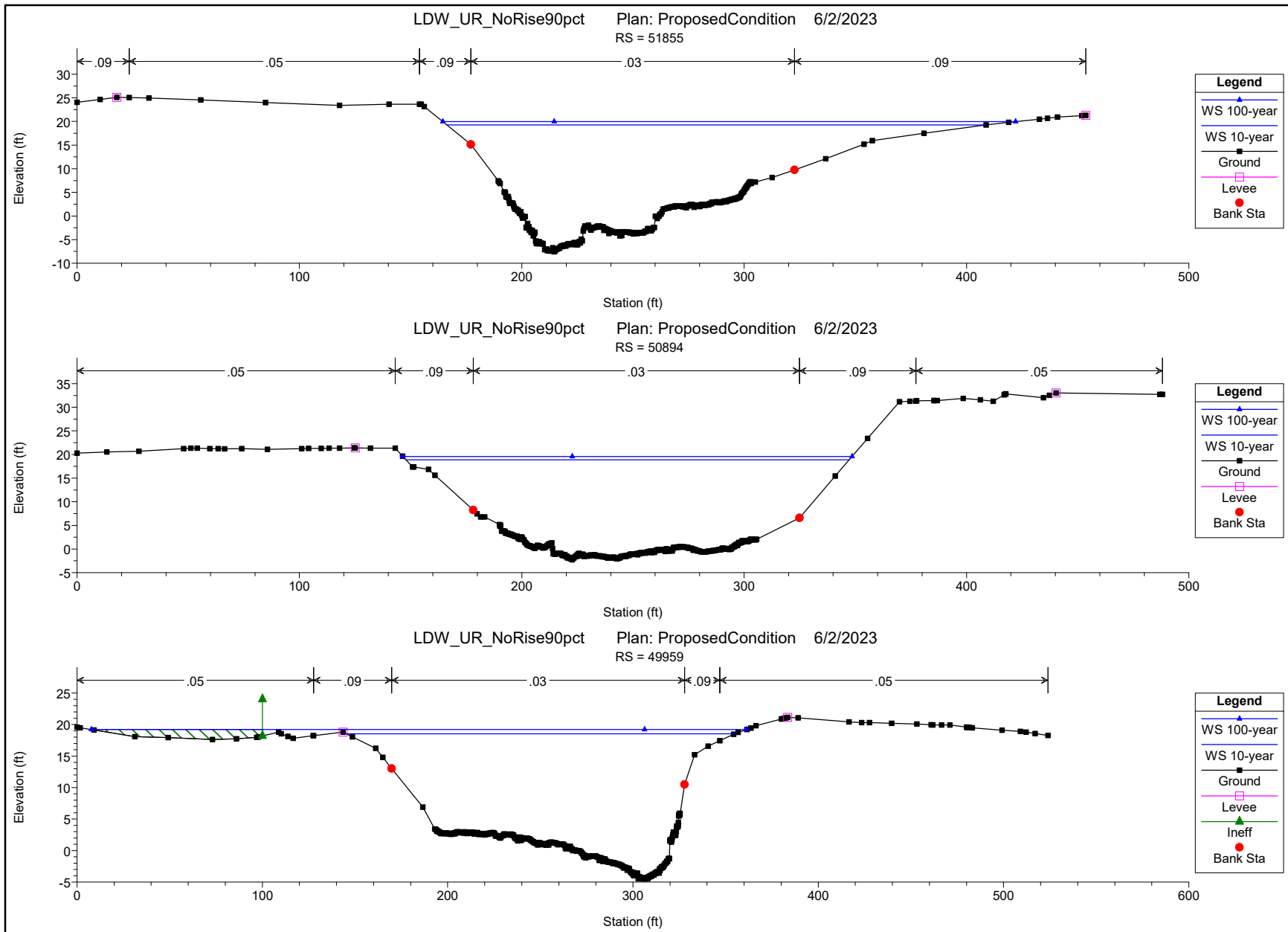


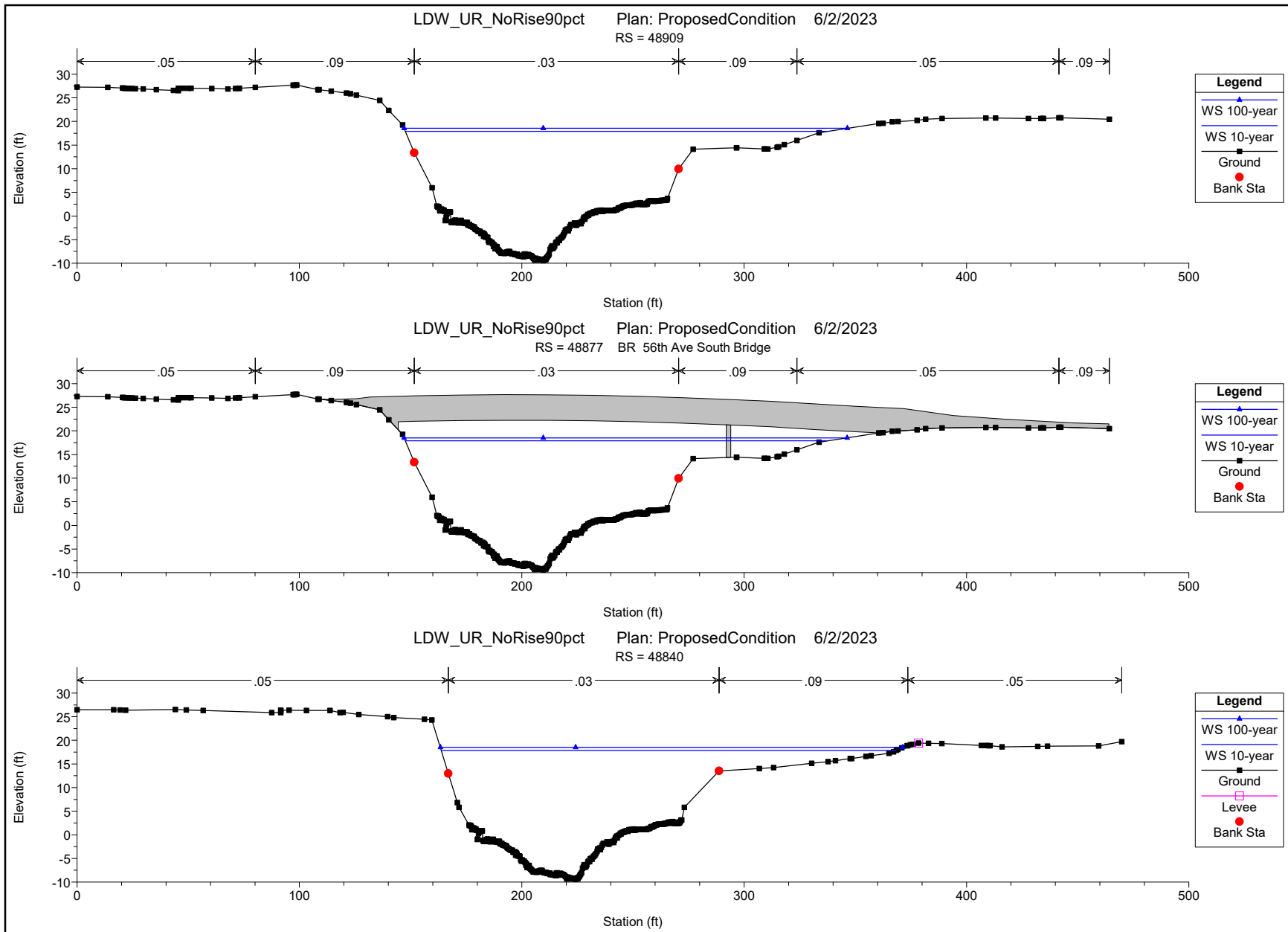


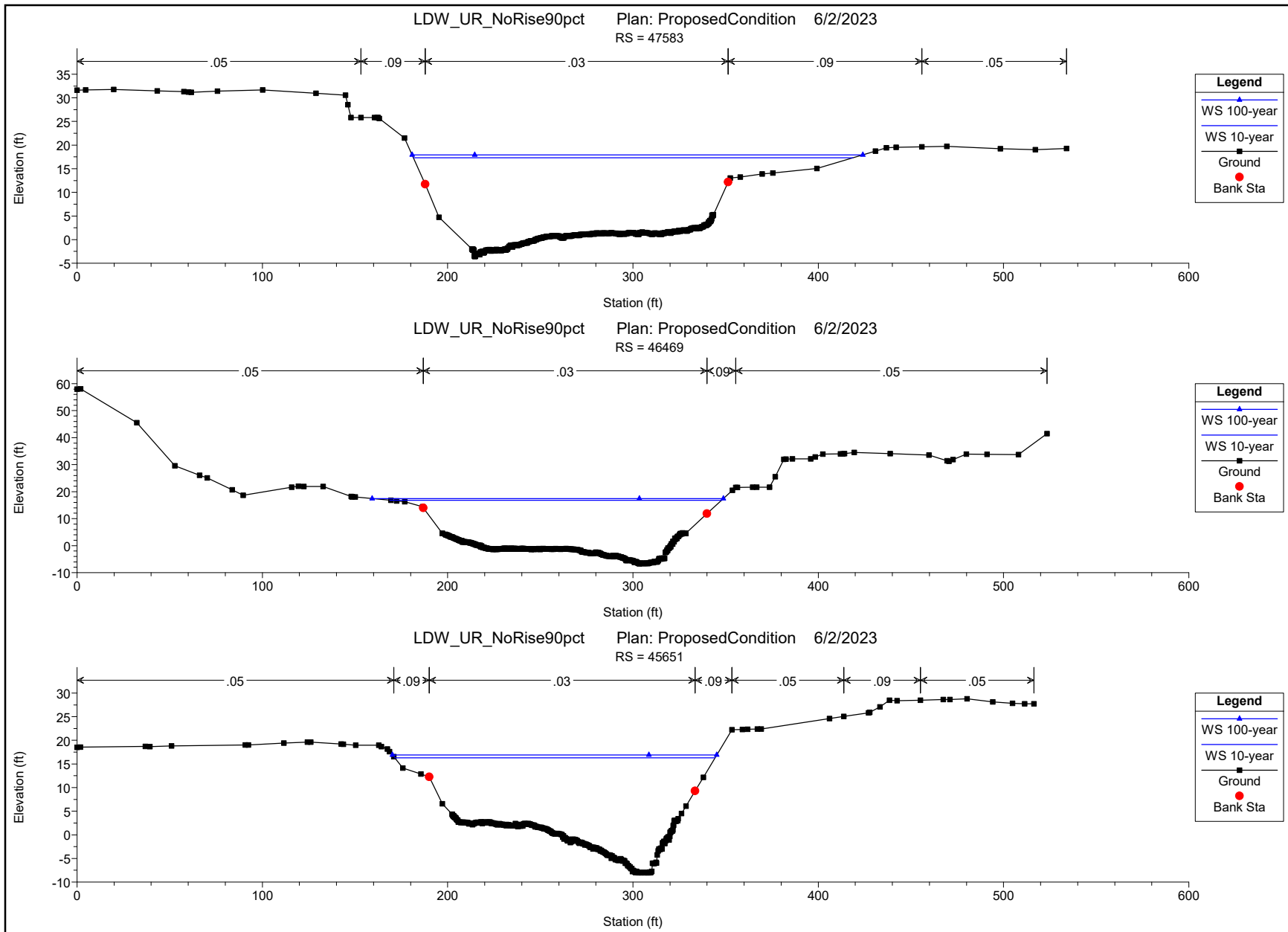


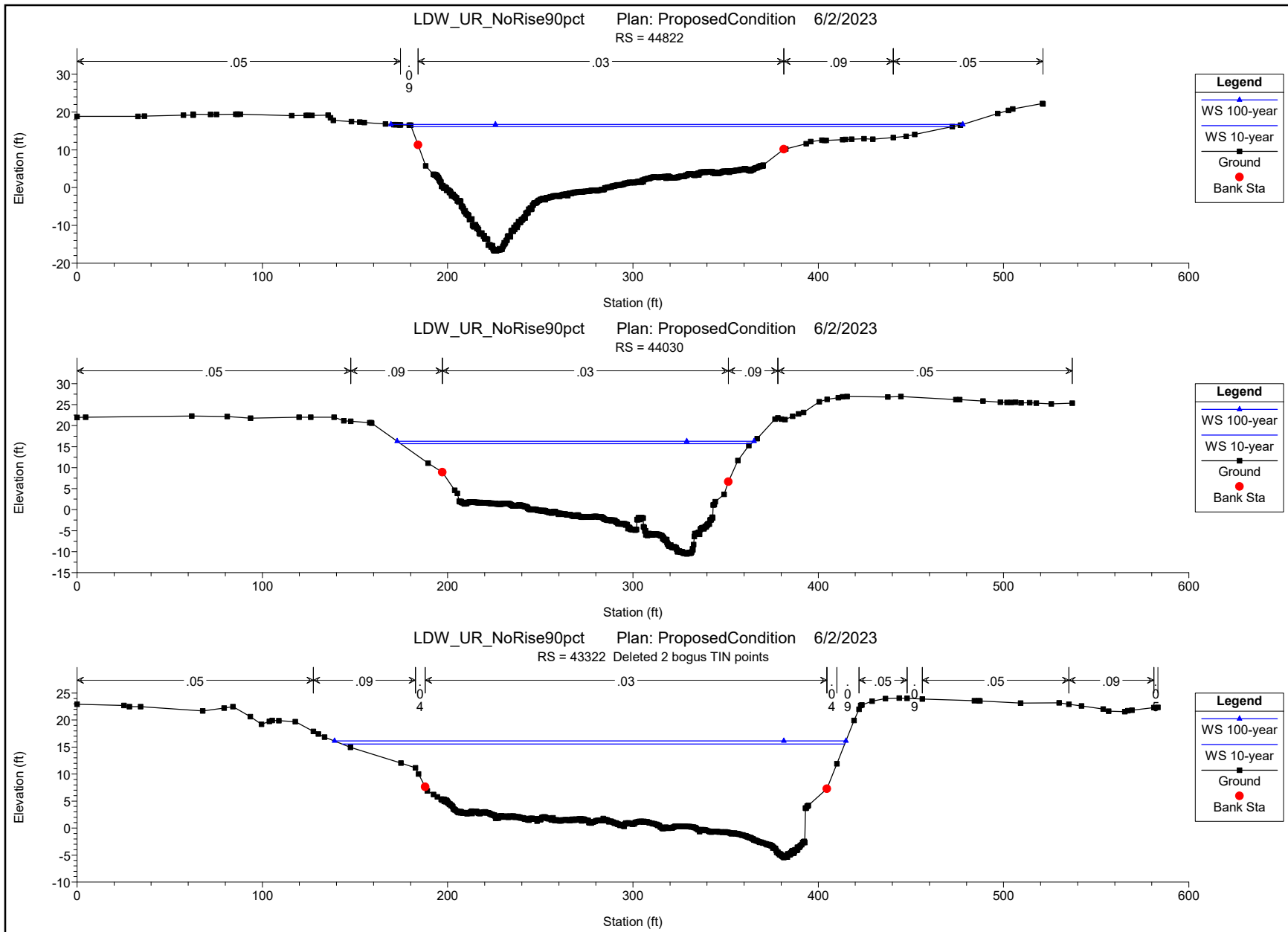


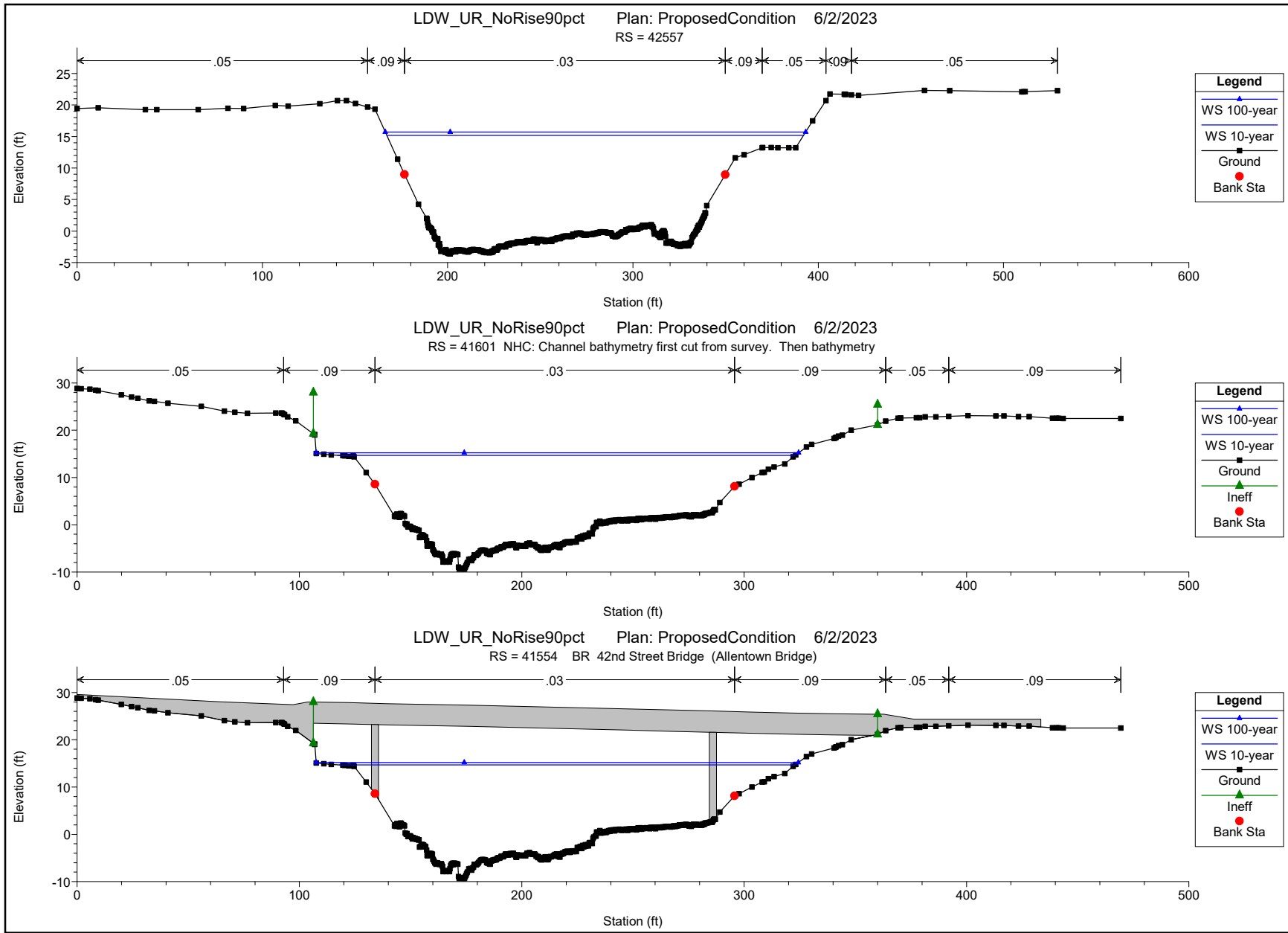


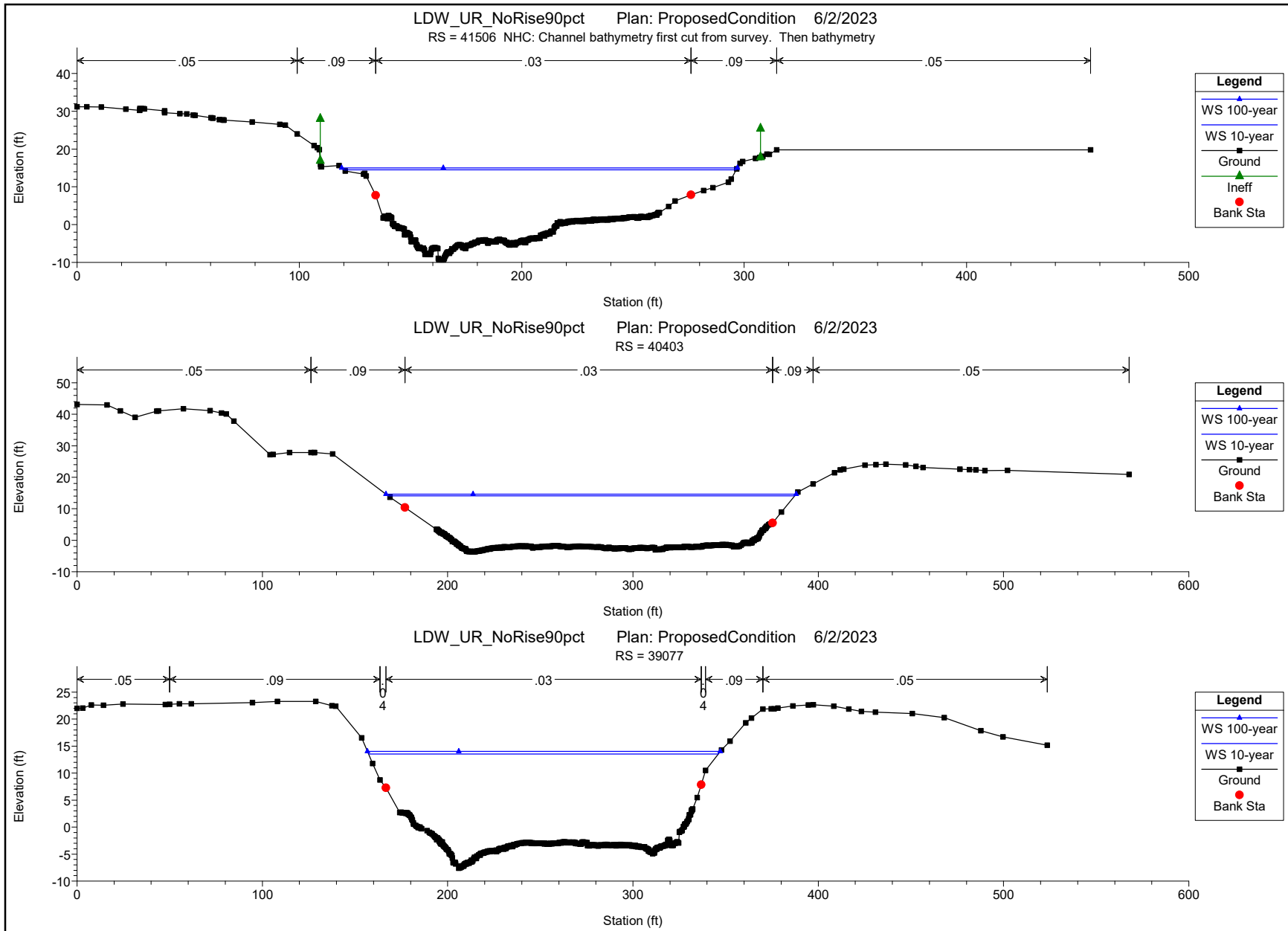


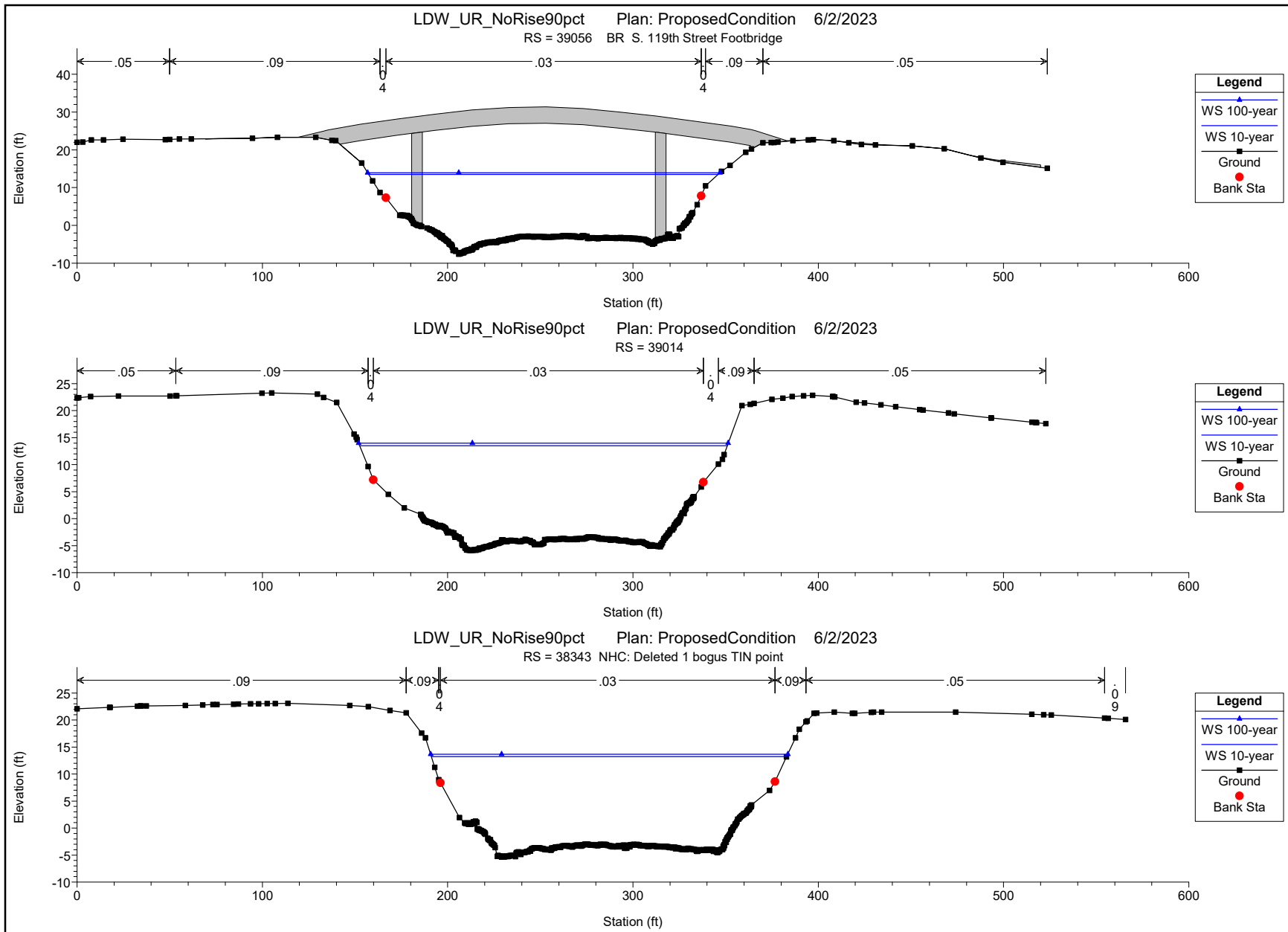


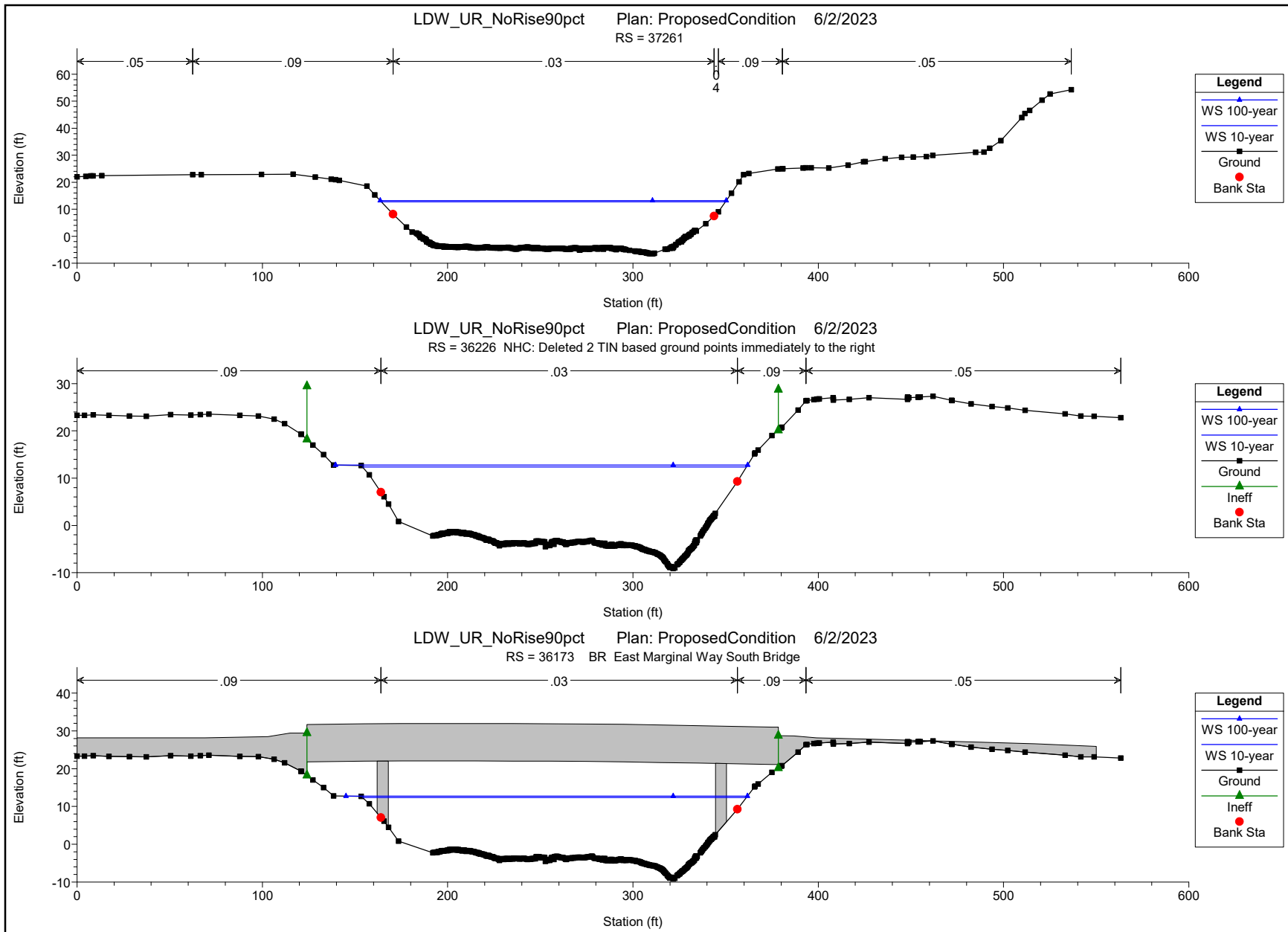


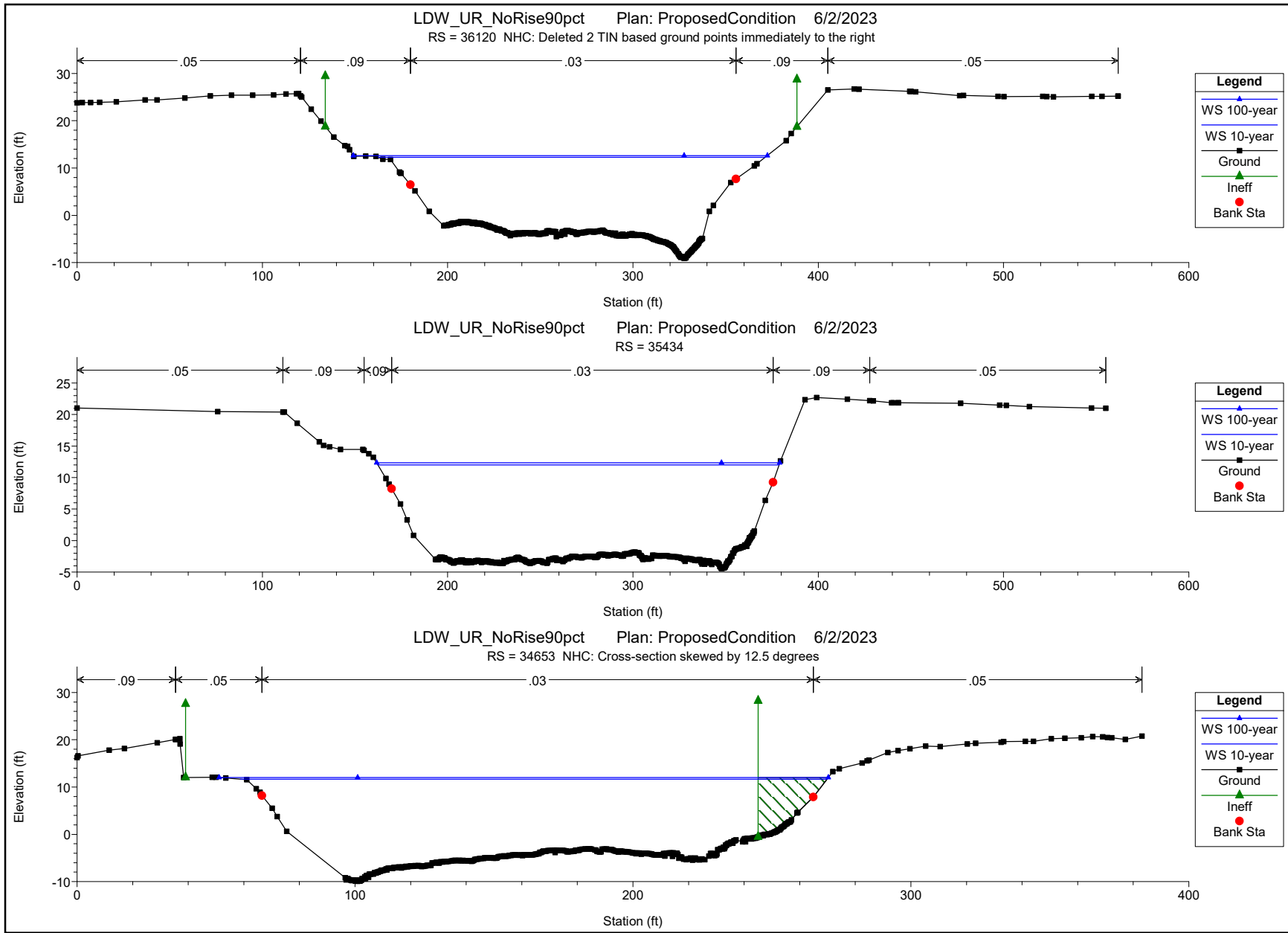




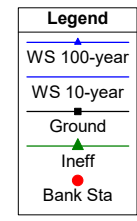
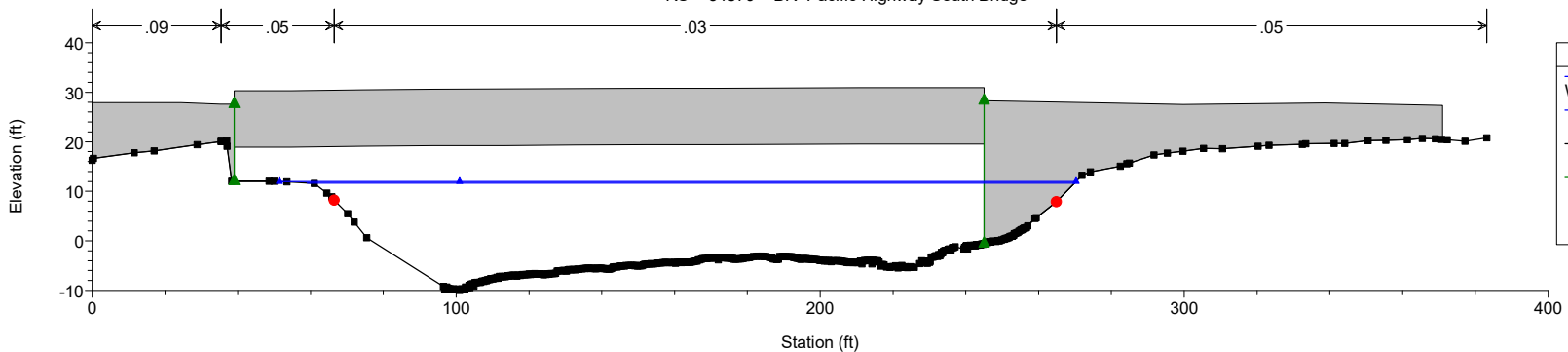




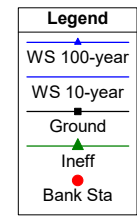
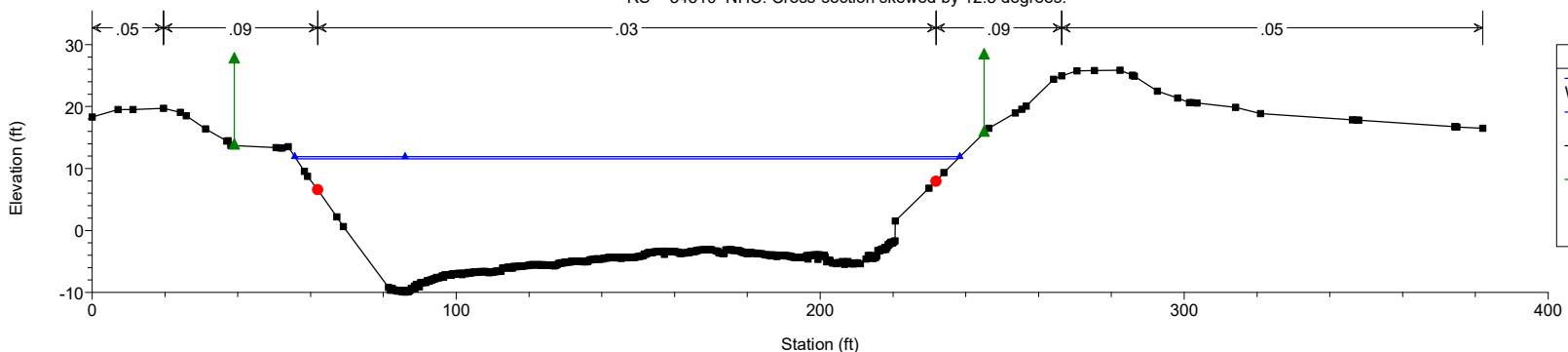




LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 34579 BR Pacific Highway South Bridge



LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 34510 NHC: Cross-section skewed by 12.5 degrees.



LDW_UR_NoRise90pct Plan: ProposedCondition 6/2/2023
 RS = 33180

