

Interagency Merger Process Team Meeting Concurrence Point 2A Revisited: Bridging Decisions and Alignment Review

**Kinston Bypass Project
Lenoir, Craven and Jones Counties, North Carolina
STIP Project No. R-2553
WBS Element No. 34460**

Purpose of the Meeting

The purpose of this meeting is to revisit bridging decisions made during the April 17, 2014, Concurrence Point (CP) 2A: Bridging Decisions and Alignment Review Interagency Merger Process Team (Merger Team) meeting and associated information meetings.

In 2008, the North Carolina Interagency Leadership Team (ILT) established the Kinston Bypass project as a GIS pilot project as a means to test and evaluate streamlining the project development process by utilizing GIS data for alternative development, alternative analysis, and selection of the Least Environmentally Damaging Practicable Alternative (LEDPA)/Preferred Alternative. The minutes from the November 21, 2013, Merger Informational Meeting (attached), requested NCDOT be “open to reevaluating bridge lengths after the LEDPA/Preferred Alternative has been selected and more detailed information will be available.” and, “For CP2A, known areas requiring bridging will have approximate lengths; however, following the selection of the LEDPA/Preferred Alternative, specific bridge lengths will be reevaluated.”

On February 19, 2020, at CP3, Alternative 1SB was identified as the LEDPA/Preferred Alternative (Figure 1). Following the selection of the LEDPA/Preferred Alternative, stream and wetland delineations were performed, and preliminary designs were completed. The preliminary designs are a refined version of the design presented in the June 2019 State Draft Environmental Impact Statement (EIS) and at the associated August 2019 Public Hearing. Due to design refinements, on October 14, 2021, a revised Hydraulics Aspect Report was also developed for the LEDPA/Preferred Alternative. Below (and attached) are the findings of the revised report:

Table 1 lists the drainage area identification number and size for the 23 crossings that were evaluated for Alternative 1SB. This evaluation resulted with:

- 13 drainage areas requiring a box culvert (2 of which require a triple box culvert – crossing #s 12-4 and 48)
- 3 drainage areas requiring a bridge (crossing #s 004, 305, 110)

Figures 2 and 3 show the locations of the drainage areas which correspond to locations requiring box culverts and locations requiring bridge crossings, respectively.

Bridge Maps have been created for the 3 drainage areas requiring a bridge and 2 drainage areas requiring triple box culverts, which show the preliminary designs plan and profile view. Information also shown includes the floodway boundary, 100-Year Flood Fringe, 500-Year Flood Fringe, and delineated streams and wetlands. Copies of the bridge and culvert maps

are included in the Appendix. **This new information is being provided to you to review and provide comments.**

NCDOT-Proposed Approach to CP2A for the Kinston Pilot Project

To facilitate your understanding of this information request, the following is a high-level summary of the approach agreed upon at CP2A. Per coordination with the Merger Team at the Merger Informational Meeting on November 21, 2013, and at the “CP2 Revisited” Merger Meeting on January 16, 2014, a conceptual approach for information to be presented and used for the facilitation of the CP2A Merger Meeting was agreed upon. This approach, which is presented in Exhibit 1 below, included reviews of natural system crossings based on proposed structure size and natural system connectivity and quality. The goal of this approach was to make the “easy” and most of the “medium” CP2A decisions with the data available at that time and to make preliminary recommendations for the “hard” decisions which would be revisited once detailed field studies and designs were prepared for the LEDPA/Preferred Alternative. The matrix shown in Exhibit 1 details that bridge lengths and triple box culvert lengths would be determined following selection of the LEDPA/Preferred Alternative.

Exhibit 1: GIS Pilot Project Approach for CP2A

Hydraulic Recommendation	Low Quality Low Connectivity	Low Quality High Connectivity	High Quality Low Connectivity	High Quality High Connectivity
Pipes less than 72"	Pre-LEDPA	Pre-LEDPA	Pre-LEDPA	Pre-LEDPA
Single Barrel Box Culvert	Pre-LEDPA	Pre-LEDPA	Pre-LEDPA	Pre-LEDPA
Double Barrel Box Culvert	Pre-LEDPA	Decide Pre-LEDPA on Individual basis	Decide Pre-LEDPA on Individual basis	Decide Pre-LEDPA on Individual basis
Triple Barrel Box Culvert	Pre-LEDPA	Decide Pre-LEDPA on Individual basis	Decide Pre-LEDPA on Individual basis	Post-LEDPA
Bridge Length	Pre-LEDPA	Post-LEDPA	Post-LEDPA	Post-LEDPA

At the time the decision matrix was developed (Exhibit 1), team members requested clarification so that decisions could be made in context of a proposed approach. The outline shown below details the proposed approach to CP2A, and how it fits into the merger milestone process. Pieces of the approach that have been completed to date are shown in *italics*.

From the CP2A Merger Packet:

Kinston is one of three projects identified for the use of GIS during the scoping and planning process. With CP2A approaching, the intent of the outline below is to clarify how CP2A decisions will “fit” into the merger milestone process for this pilot initiative.

An Interagency Letter of Intent (LOI) signed in December 2012, states:

“The scope of the initiative includes determining the practicality of using GIS to identify issues of significance and eliminating detailed alternatives for selection of preferred alternative/LEDPA for agreed-upon pilot projects.”

In the spirit of the LOI, below is listed an outline approach to CP2A decisions in the context of overall merger milestones (starting after CP2):

1. *Generate GIS-based data and subsequent analysis of natural systems.*
2. *Develop minimum hydraulic recommendations based on engineering considerations.*
3. *First CP2A meeting: Office review of all crossings of remaining Detailed Study Alternatives*
 - a. *Make the “easy” decisions on pipes and culverts.*
 - i. *Pipes under 72”*
 - ii. *Culverts*
 - b. *Establish any sites of interest that the team would like to see in the field before any preliminary decision is made.*
4. *Second CP2A meeting: Field visit to look at sites of interest.*
5. *Make decisions on any remaining bridge lengths and culvert sizes & extensions.*
 - a. *Possibly a third CP2A meeting if necessary.*
6. *Sign a CP2A Concurrence Form which indicates that these decisions are PRELIMINARY and can be revisited post-LEDPA - after a preliminary design and field delineations are completed, and updated impacts are quantified.*
7. *Based on preliminary CP2A decisions, generate cost and natural resource impacts for each crossing site.*
8. *Include relevant site cost and impact data into the summation for each remaining Detailed Study Alternative, so that the SDEIS (and eventual LEDPA decision) reflects a reasonably-accurate cost and impacts assessment for each alternative.*
9. *Publish a SDEIS, hold public hearing(s), and accept comments on the document.*
10. *Merger Team makes a CP3 LEDPA decision based on the inter-agency agreement to make this decision based on GIS-level data, as well as a developed range of alternatives.*
11. *Complete stream and wetland delineations in the field (for the LEDPA design).*
12. *Complete a Best-Fit preliminary design on the LEDPA alternative, continuing to avoid and minimize impacts as practicable.*
13. *Based on the Best-Fit preliminary design (which may change previous crossing locations and/or highway elevations depicted at CP2A) and the updated stream and wetland locations and boundaries: Establish whether it is appropriate to “Revisit the CP2A decision” for any sites.*
14. *As part of the normal CP4A Minimization approach, revisit any CP2A decisions as applicable. Update design and impacts.*
15. *Publish a SFEIS which describes the project and the preferred alternative (LEDPA). Receive comments.*
16. *Select the recommended alternative and publish the ROD.*

All previous (prior to CP3) Merger Packets, concurrence forms, and presentations are available in the Agency Coordination Plan ([https://xfer.services.ncdot.gov/PDEA/Web/R-2553/draft-eis/R-2553 Kinston Bypass Agency Coordination Plan.pdf](https://xfer.services.ncdot.gov/PDEA/Web/R-2553/draft-eis/R-2553%20Kinston%20Bypass%20Agency%20Coordination%20Plan.pdf)).

CURRENT PROJECT SCHEDULE

Distribute State Final EIS	2022
State Record of Decision	2023
Right of Way Acquisition Begins (C Section)	2025/2026
Construction Begins	2029

APPENDIX

Figure 1:
Applicant's Preferred Alternative

Legend

-  Study Area
-  Alternative 1 - Upgrade Existing with Shallow Southern Bypass
-  Railroad
-  US Highway
-  NC Highway
-  Secondary Road
-  Global TransPark (GTP)
-  Municipal Boundary
-  County Boundary



This map is for reference only.
Sources: AECOM, CGIA, City of Kinston, Craven County, ESRI, HPO, Jones County Lenoir County, NCDOT, NCEM, NCONemap, NRCS, USFWS

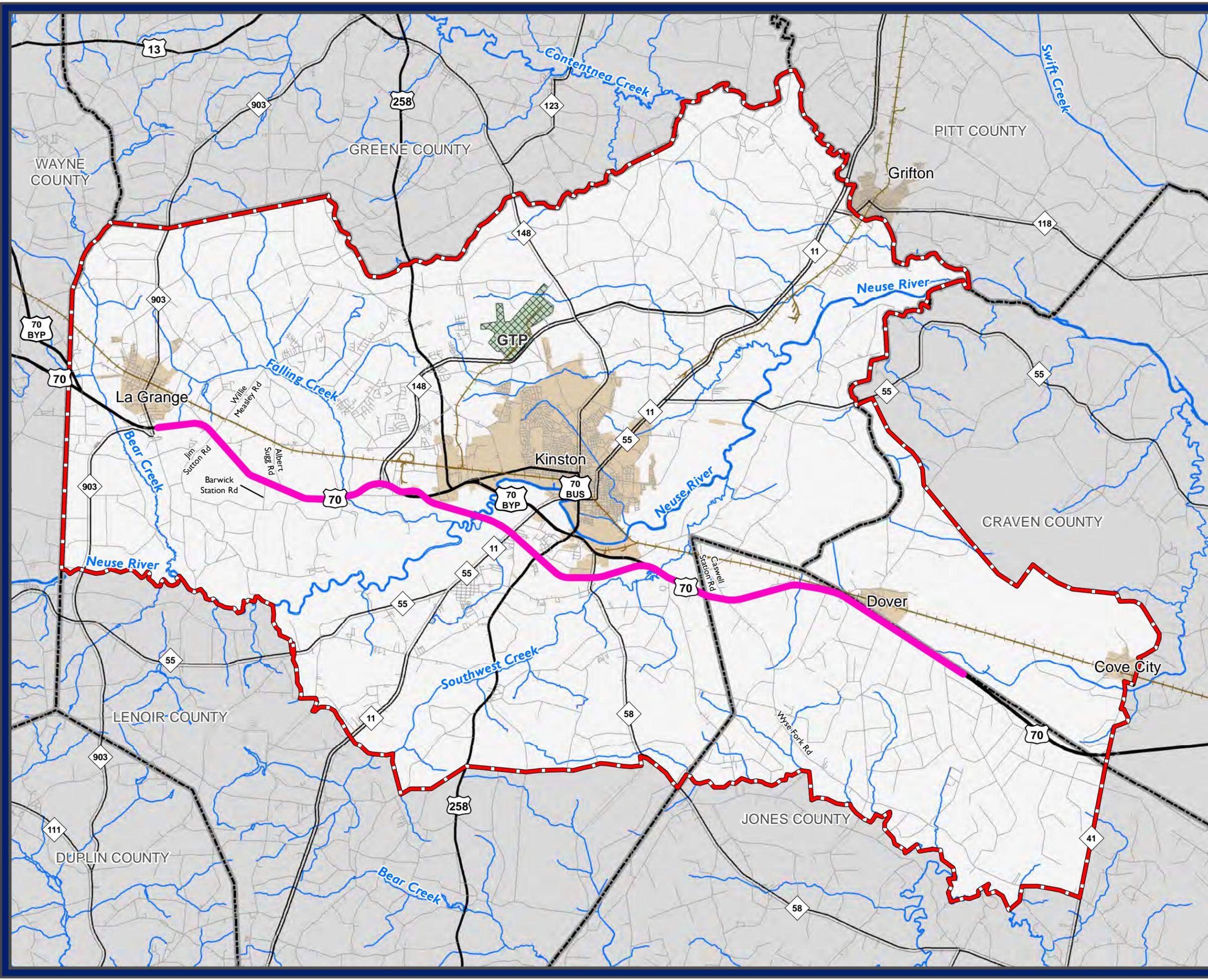


Figure 2: Culvert Locations

Legend

- Proposed Box Culvert Crossing
- Retain Existing Culvert (Extend as Needed)
- Study Area
- Alternative 1 SB
- Stream
- Railroad
- County
- US Highway
- NC Highway
- Secondary Road
- Waterbody
- Global TransPark (GTP)
- Floodplain
- Floodway
- Municipal Area

0 12,000 Feet



This map is for reference only.
Sources: CGIA, NCDOT, NCDENR, NCFPM, Craven County, NCDOT, NCEM, Lenoir County, Pitt County, Kinston Planning Department, NCOneMap, NCWRC, NCSHPO, EPA, USFWS, USDA, NRCS, DWQ, ESRI and URS.

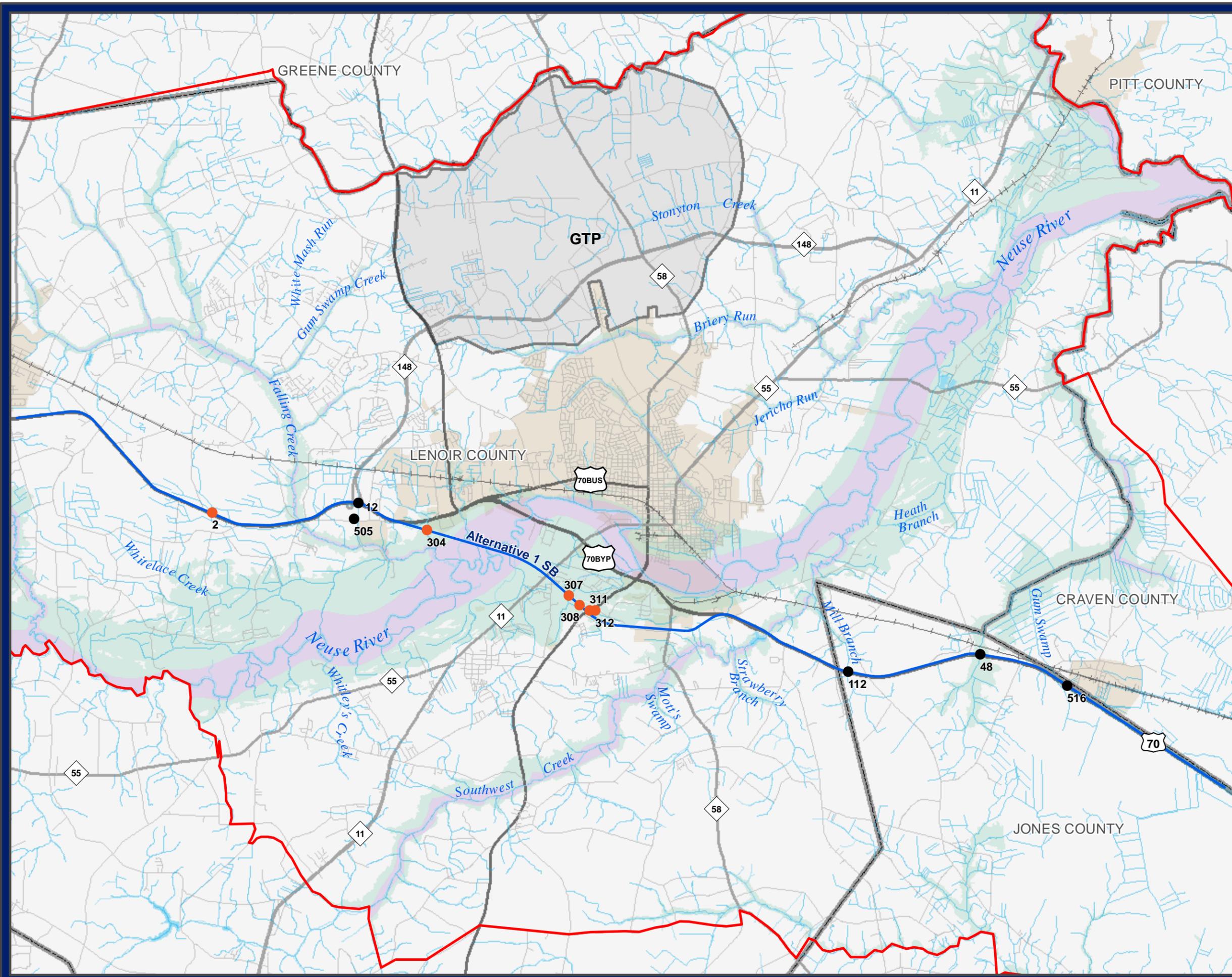


Figure 3: Bridge Locations

Legend

- Proposed Bridge Crossing
- Maintain Existing Bridge (No Modification Anticipated)
- Maintain Existing Bridge (with Potential Widening and/or Proposed Ramp/Service Rd. Bridge)
- Study Area
- Alternative 1-SB
- Stream
- Railroad
- US Highway
- NC Highway
- Secondary Road
- Global TransPark (GTP)
- County
- Waterbody
- Floodplain
- Floodway
- Municipal Area

0 12,000 Feet



This map is for reference only.
Sources: CGIA, NCDOT, NCDENR, NCFPM Craven County, NCDCM, NCEM, Lenoir County, Pitt County, Kinston Planning Department, NCOneMap, NCWRC, NCSHPO, EPA, USFWS, USDA, NRCS, DWQ, ESRI and URS.

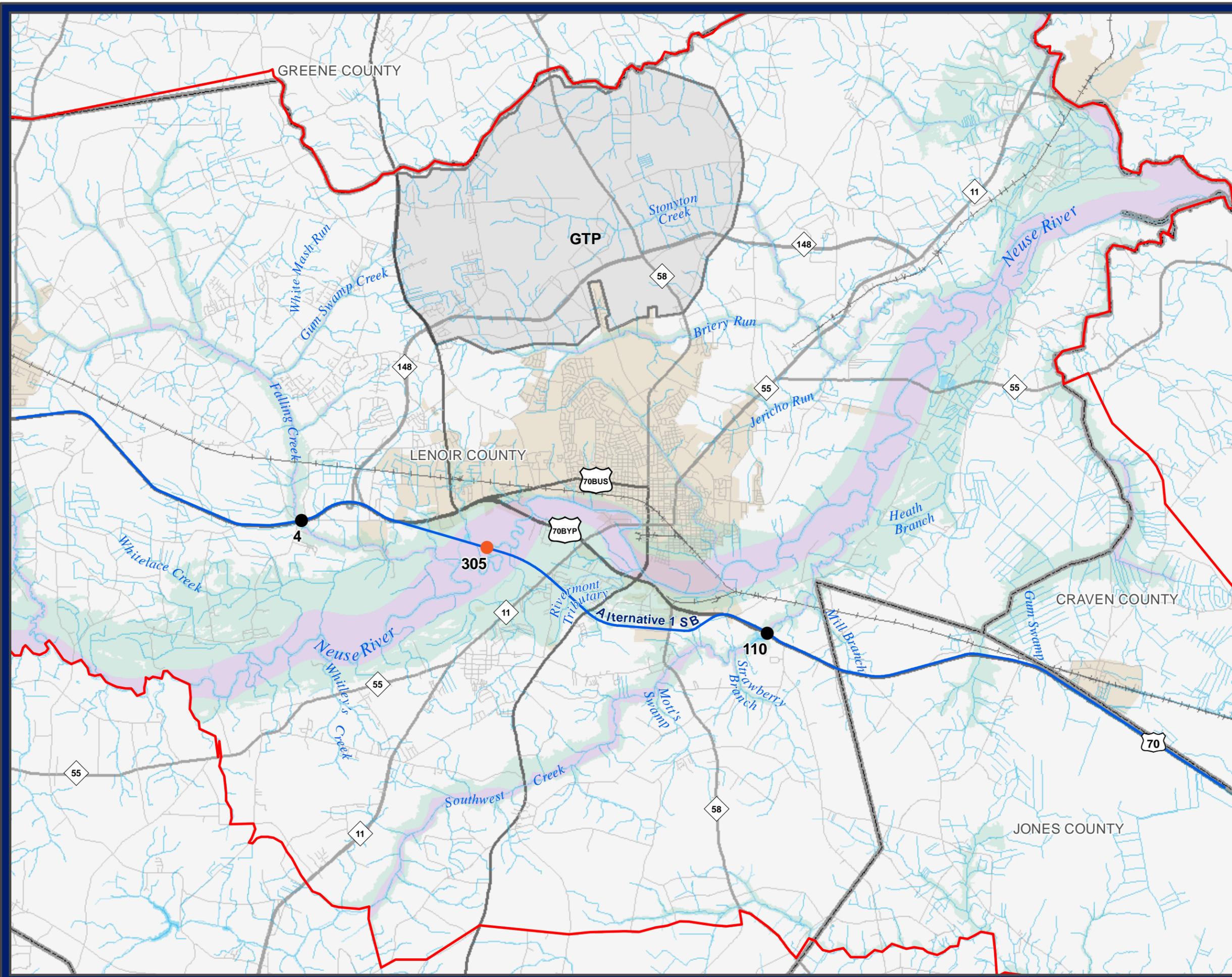


TABLE 1: PRELIMINARY HYDRAULIC RECOMMENDATIONS FOR MAJOR⁽¹⁾ CROSSINGS

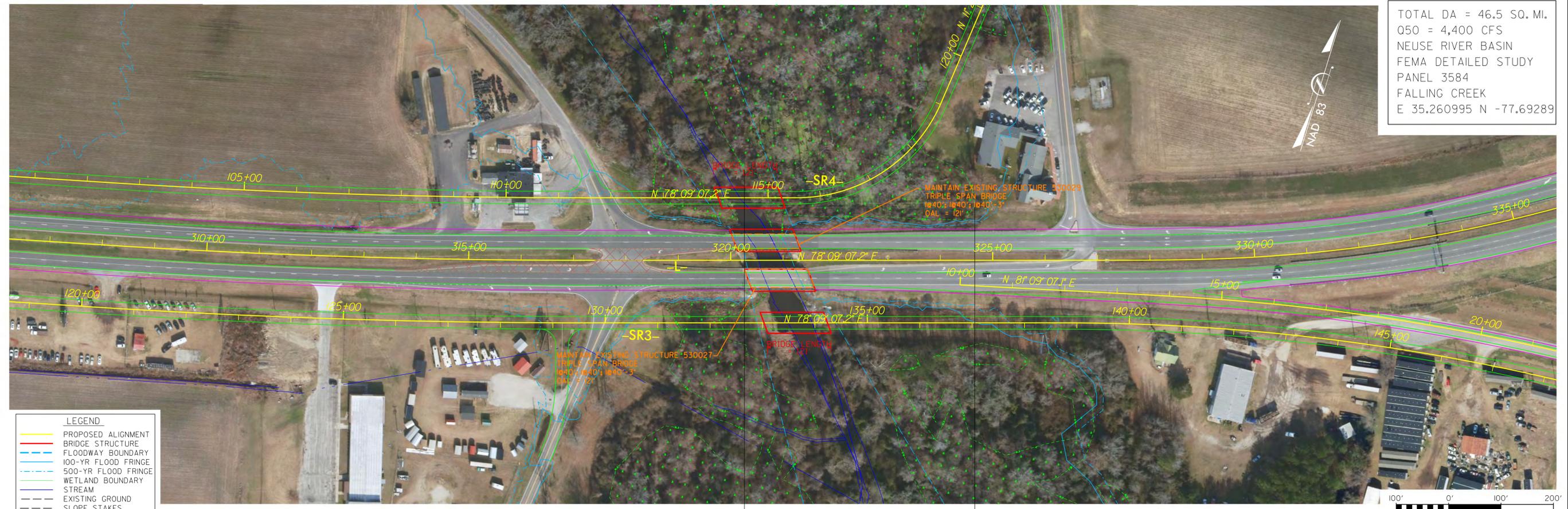
DATE: 10/14/2021
 PROJECT NUMBER: R-2553 Kinston Bypass
 WBS ELEMENT #:
 PROJECT DESCRIPTION:
 NAME: Kinston Bypass

ALT ID ⁽²⁾	ROUTE	STATION	LAT	LONG	STREAM/WETLAND ID	STREAM NAME	FEMA STUDY TYPE	DRAINAGE AREA (MI ²)	EXISTING STRUCTURE	MINIMUM RECOMMENDED STRUCTURE	Notes
									Number, Size, Structure Type	Number, Size, Structure Type	
2	L	233+00	35.26694	-77.73161	Stream SA	Unnamed	None	1.72	6.5x4 box culvert	9'x8' RCBC with wingwalls	Replace existing, 1' to be buried.
4	L	320+75	35.260997	-77.692803	Falling Creek	Falling Creek	Detailed	46.5	2-3@40' bridges	retain existing, add 2 bridges 3@40'-4"	Retain existing bridges, add two for aux. lanes
505	L2	N/A	35.260788	-77.674406	Stream SJ	Unnamed	None	2.98	12'x6' RCBC	12'x8' RCBC	Replace existing, 1' to be buried.
12-4	L2 Ramp A	N/A	35.266537	-77.674177	Stream SJ	Unnamed	None	2.24	None	3@12'x11' RCBC	Minimum structure size by Q is 7.5'x7.5'; match up and downstream structure sizes. 1' to be buried.
509	Y3	68+00	35.260801	-77.651981	Stream SO	Unnamed	None	1.41	1@6'x4' RCBC	1@8'x8' RCBC	Replace existing, 1' to be buried
304	L	454+50	35.258242	-77.651854	Stream SO	Unnamed	None	1.69	None	1@9'x8' RCBC	New location, 1' to be buried.
307	L	607+00	35.240655	-77.606443	Stream SU	Unnamed	None	2.08	None	1@10' x 8' RCBC	New location, 1' to be buried.
308	L	620+50	35.238034	-77.603833	Stream SV	Unnamed	None	1.48	None	1@10'x7' RCBC	New location, 1' to be buried.
311	Y5	28+00	35.236385	-77.600422	Stream SV	Unnamed	None	1.43	1 24" RCP	1@8'x8' RCBC	Replace existing 24" pipe, 1' to be buried.
313-3	L	641+50	35.23453	-77.59836	Stream SX	Unnamed	None	1.09	None	1@8'x8' RCBC	New location, 1' to be buried.
312-1	A1C1Y5_RPA	26+50	35.236094	-77.598271	Stream SV	Unnamed	None	1.41	None	1@8'x8' RCBC	New location, 1' to be buried.
312-2	A1C1Y5_RPA	23+25	35.235373	-77.59791	Stream SV	Unnamed	None	1.41	None	1@8'x8' RCBC	New location, 1' to be buried.
110	L	818+50	35.229658	-77.543182	Southwest Creek	Southwest Creek	Detailed	56.1	2 bridges, Upstream bridge 1@56', 1@55', 1@56'; Downstream bridge 3@ 52'6"	retain existing, add 1 bridge, 1@56', 1@55', 1@56'	Retain existing, add additional bridge for service road
112	L	905+00	35.21913	-77.517401	Mill Branch	Mill Branch	None	2.3	2 barrel 7'x6' RCBC	retain and extend 2@7'x6'	Retain and extend existing (sized for 50 year currently)
48	L	1035+00	35.223119	-77.474747	Tracey Swamp	Tracey Swamp	Limited	5.02	3@7'x7' RCBC	retain and extend 3@7'x7' RCBC	Retain and extend existing (sized for 50 year currently)
516-2	L	1097+00	35.2187335	-77.454464	Stream SAN	Unnamed	None	0.79	1@5' RCP	Replace with 7'x7' RCBC	Replace existing pipe, 1' to be buried.
516-3	Y10 Ramp B	N/A	35.219674	-77.4538	Stream SAN	Unnamed	None	0.82	None	Install new 7'x7' RCBC	New location, 1' to be buried.
516-4	Y10	67+75	35.219246	-77.452178	Gum Swamp	Gum Swamp	None	2.37	CM Ellipse 12'x7'	1@11'x8' RCBC	Relace existing pipe, 1' to be buried.
516-5	Y10 Ramp A	N/A	35.218281	-77.451525	Gum Swamp	Gum Swamp	None	2.34	None	1@11'x8' RCBC	New location, 1' to be buried.
516-6	L	1111+50	35.216818	-77.450859	Gum Swamp	Gum Swamp	None	1.87	2@5'x7'	Retain as-is	Retain existing pipe. No need to extend.
516-8	Y10 Ramp D	N/A	35.215787	-77.449953	Gum Swamp	Gum Swamp	None	1.85	None	1@10'x8' RCBC	New location, 1' to be buried.
516-9	Y10 Ramp C	N/A	35.217319	-77.454361	Stream SAM	Unnamed	None	0.61	None	1@6'x7' RCBC	New location, 1' to be buried.
305	L	480+00	35.254052	-77.63601	Neuse River	Neuse River	Detailed	2700	None	7115' bridge	New Location

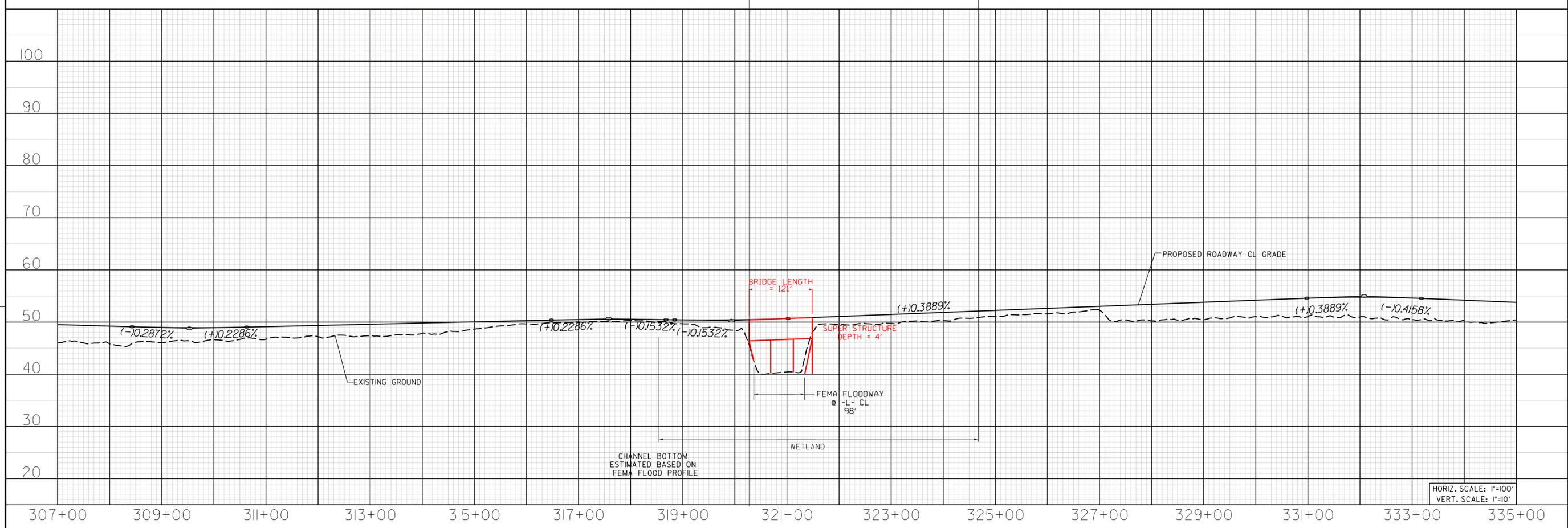
NOTES:
 (1) Major Crossings - conveyance greater than 72" pipe (This table should be used for Merger CP2A concurrence.)
 (2) Provided in planning document

CROSSING 004 FALLING CREEK

TOTAL DA = 46.5 SQ. MI.
 Q50 = 4,400 CFS
 NEUSE RIVER BASIN
 FEMA DETAILED STUDY
 PANEL 3584
 FALLING CREEK
 E 35.260995 N -77.69289

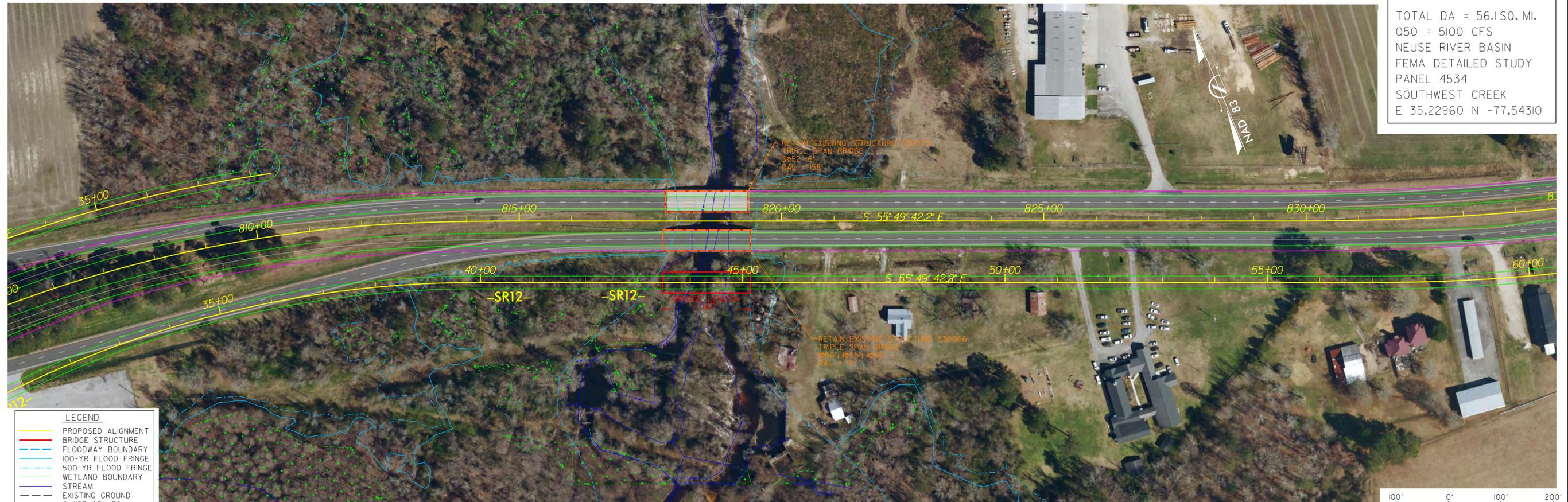


REVISIONS



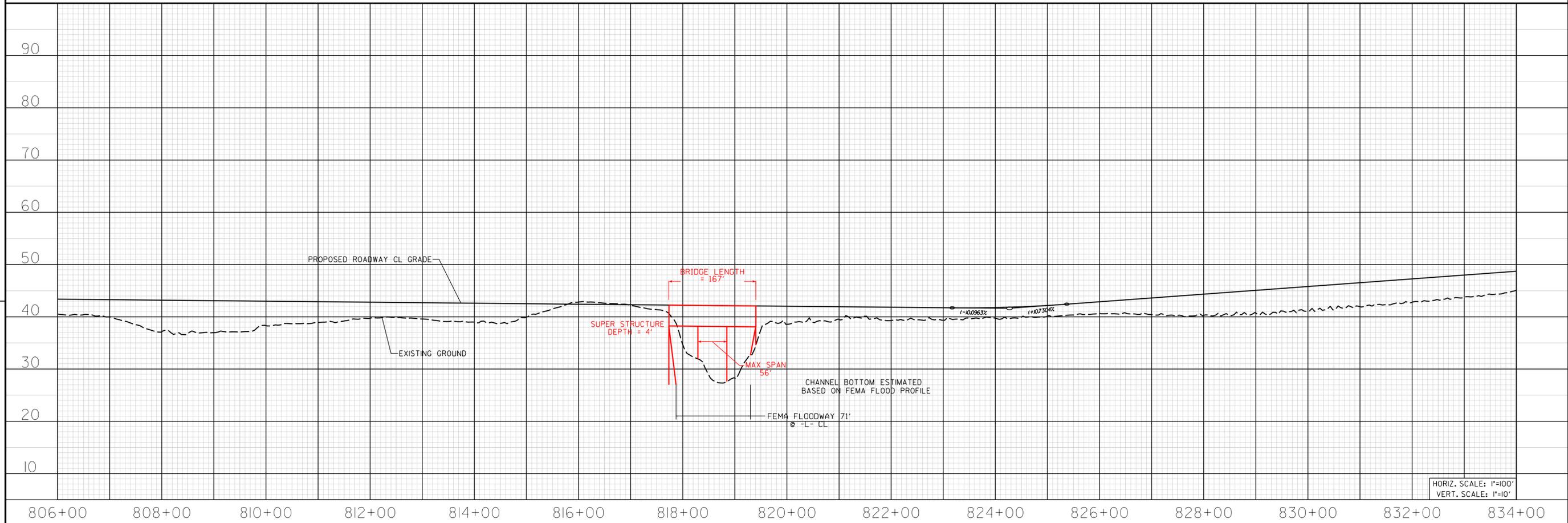
CROSSING I10 SOUTHWEST CREEK

TOTAL DA = 56.1 SQ. MI.
Q50 = 5100 CFS
NEUSE RIVER BASIN
FEMA DETAILED STUDY
PANEL 4534
SOUTHWEST CREEK
E 35.22960 N -77.54310



- LEGEND**
- PROPOSED ALIGNMENT
 - BRIDGE STRUCTURE
 - FLOODWAY BOUNDARY
 - 100-YR FLOOD FRINGE
 - 500-YR FLOOD FRINGE
 - WETLAND BOUNDARY
 - STREAM
 - EXISTING GROUND
 - SLOPE STAKES

REVISIONS

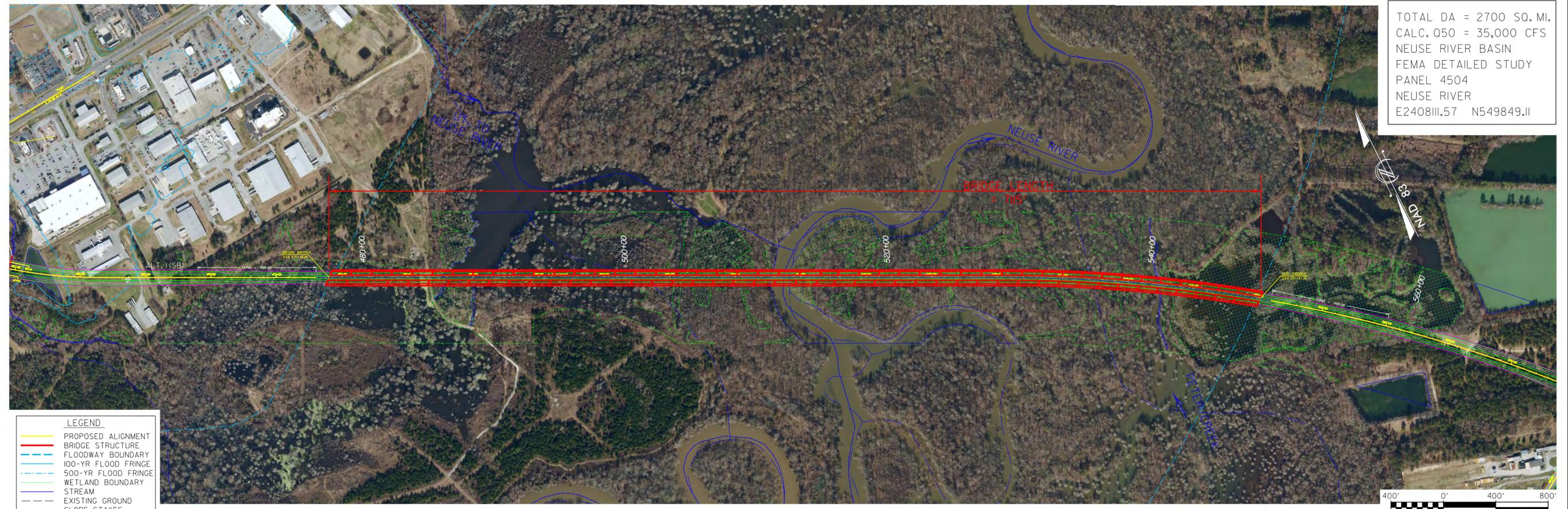


HORIZ. SCALE: 1"=100'
VERT. SCALE: 1"=10'

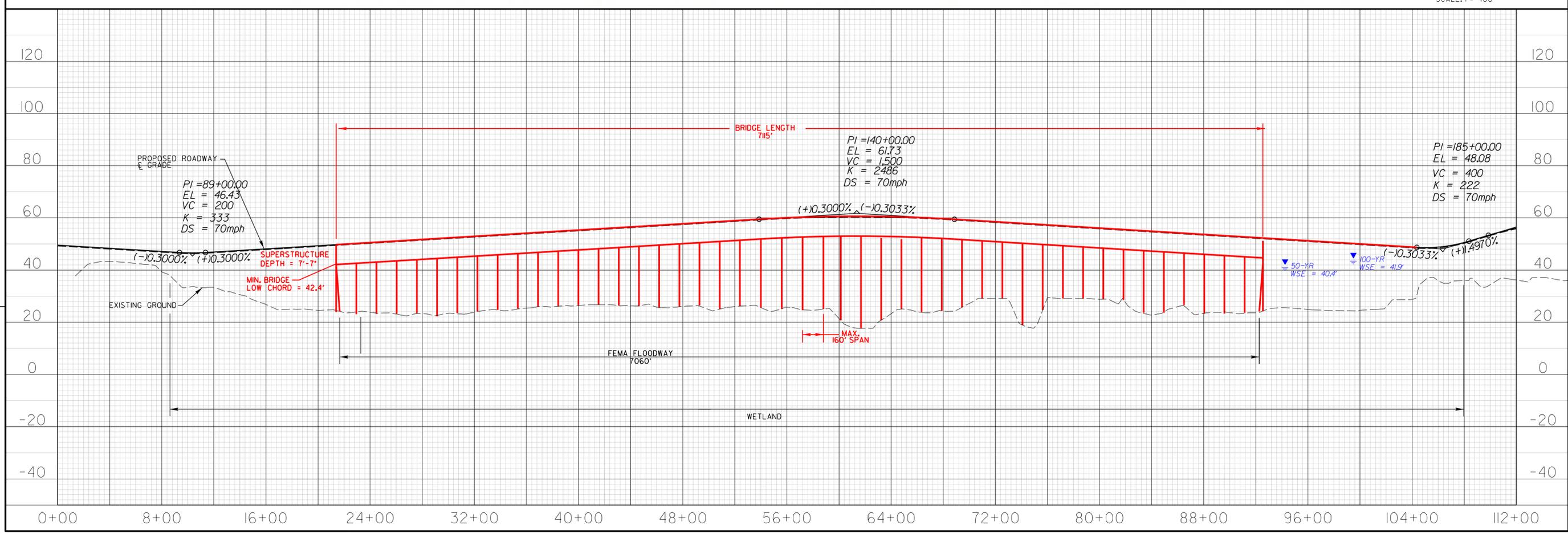
CROSSING 305 (NEUSE RIVER)

PROJECT REFERENCE NO.	SHEET NO.
R-2553	
DATE: JUNE 2021	

TOTAL DA = 2700 SQ. MI.
 CALC. Q50 = 35,000 CFS
 NEUSE RIVER BASIN
 FEMA DETAILED STUDY
 PANEL 4504
 NEUSE RIVER
 E2408III.57 N549849.II

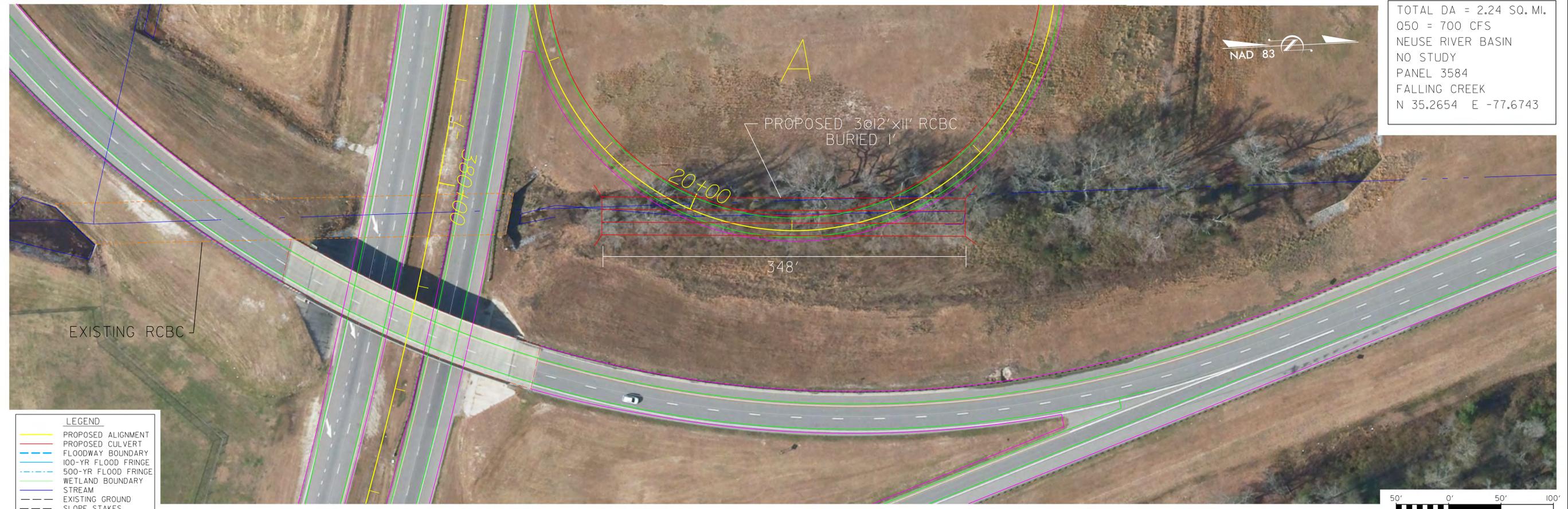


REVISIONS



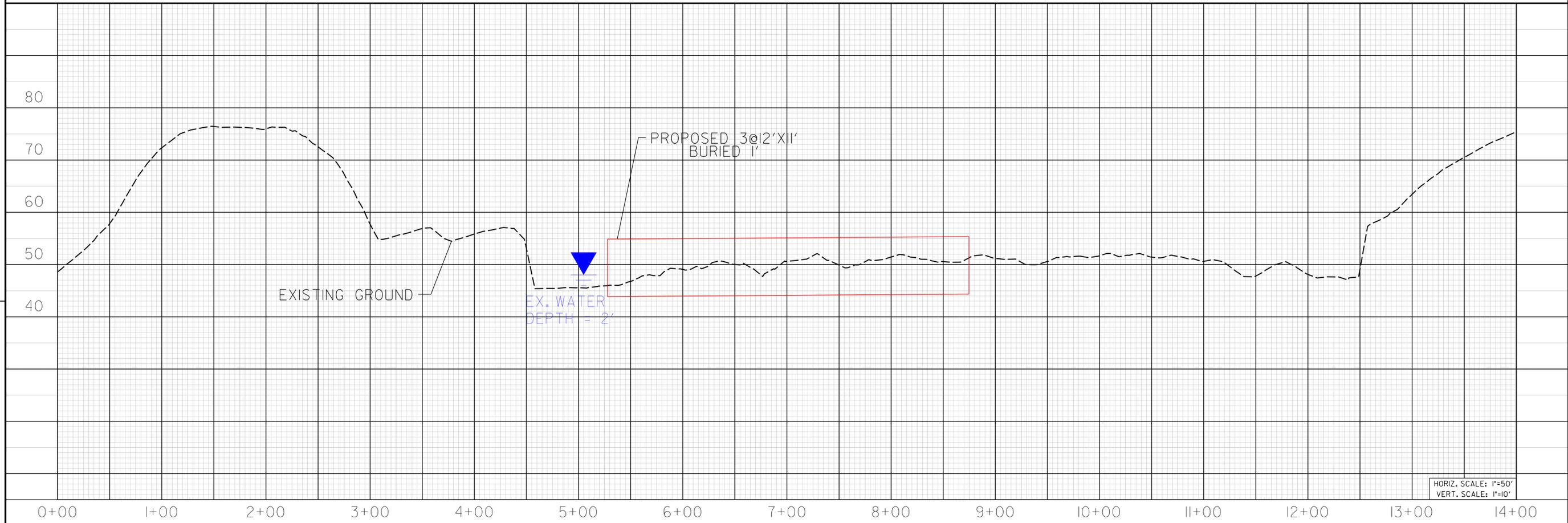
CROSSING 12-4

TOTAL DA = 2.24 SQ. MI.
 Q50 = 700 CFS
 NEUSE RIVER BASIN
 NO STUDY
 PANEL 3584
 FALLING CREEK
 N 35.2654 E -77.6743



- LEGEND**
- PROPOSED ALIGNMENT
 - PROPOSED CULVERT
 - FLOODWAY BOUNDARY
 - 100-YR FLOOD FRINGE
 - 500-YR FLOOD FRINGE
 - WETLAND BOUNDARY
 - STREAM
 - EXISTING GROUND
 - SLOPE STAKES

REVISIONS



CROSSING 048

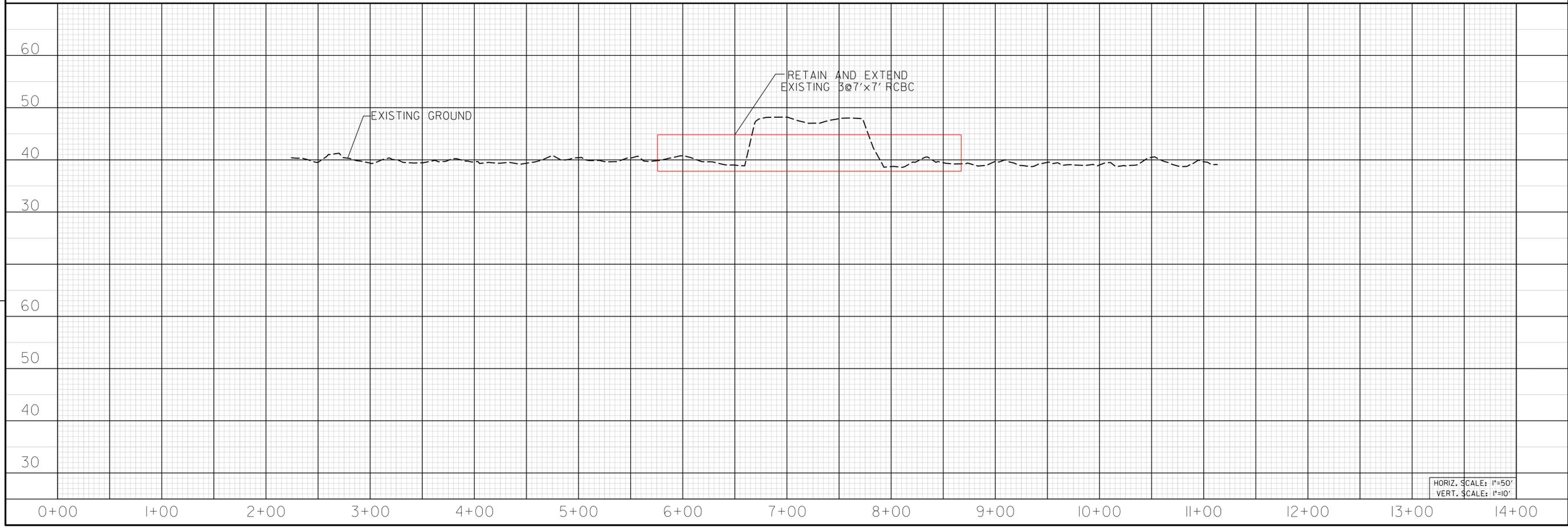
TOTAL DA = 5.02 SQ. MI.
 Q50 = 1000 CFS
 NEUSE RIVER BASIN
 FEMA DETAILED STUDY
 PANEL 4542
 TRACEY SWAMP
 N 35.22312 E -77.47475



LEGEND

- PROPOSED ALIGNMENT
- PROPOSED CULVERT
- FLOODWAY BOUNDARY
- - - 100-YR FLOOD FRINGE
- - - 500-YR FLOOD FRINGE
- WETLAND BOUNDARY
- STREAM
- - - EXISTING GROUND
- SLOPE STAKES

REVISIONS



HORIZ. SCALE: 1"=50'
 VERT. SCALE: 1"=10'



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

**MINUTES FROM THE MERGER INFORMATIONAL MEETING ON
NOVEMBER 21, 2013**

To: Project File
From: Ted Devens, PE 
Date: February 5, 2014
Subject: STIP Number R-2553, Kinston Bypass, Lenoir County, North Carolina

A Section 404/NEPA Interagency Merger Process Team (Merger Team) Informational Meeting was held at 10:30 AM, Thursday, November 21, 2013 in the NCDOT Century Center Complex Structure Design Conference Room. Those in attendance are shown on the attached sign-in sheet.

Purposes of Meeting

The purpose of the meeting is to provide a project update to the Merger Team including the identification of a new alternative, review the new 2012 Kinston Travel Demand Model and 2012 Traffic Forecast, and to discuss the next steps in the Merger Process.

Merger Meeting Summary

Tom Steffens initiated the meeting with introductions. Ted Devens then reviewed the agenda and corresponding meeting presentation. Major discussion points are shown below.

- With regard to the new alternative (Upgrade Existing US 70 with Shallow Bypass), it was noted that NCDOT has spoken to the local officials and business community about this new alternative and to date all feedback has been supportive.
- When discussing the new 2012 Kinston Travel Demand Model, it was requested that additional information be provided at the upcoming CP2 Revisited meeting including general breakout of the type of traffic (local, through, freight, etc.). Additionally for this meeting, it was requested that when discussing amount of traffic being “drawn” from existing US 70, clarification be provided to better elaborate on what is “significant” and how it is relevant when discussing meeting the Purpose and Need for the project.
- With regard to potentially eliminating alternatives at the upcoming CP2 Revisited meeting, the following was suggested:

- The same level of information will need to be prepared and presented for existing Detailed Study Alternatives (DSAs) and the new alternative (Upgrade Existing US 70 with Shallow Bypass).
- Impact information presented at the November 2011 CP2 meeting should be provided for the 17 DSAs and for the new alternative (Upgrade Existing US 70 with Shallow Bypass).
- Applicability of the travel demand model and traffic forecast to the DSAs should be discussed as well as a review of the model assumptions included in the previous and 2012 travel demand models. This information should also be included in the Merger Packet.
- Given the recent coordination with FEMA regarding impacting Hazard Mitigation Grant Program (HMGP) properties, if any preliminary corridors were eliminated at CP2 due to impacting a HMGP property, they should be reconsidered as a Detailed Study Alternative.
- If alternatives were eliminated at CP2 using the results of the 2009 Traffic Forecast they should be reevaluated per the 2012 Traffic Forecast and reconsidered as a Detailed Study Alternative.

- A discussion was then held on CP2A and how the Merger Team wanted to address the fact that since this is a GIS Pilot project, certain information that is typically available at CP2A will not be available.
 - Given bridge lengths are directly related to impacts and overall cost, which will ultimately be used to select the LEDPA/Preferred Alternative, it was suggested the project should have a CP2A meeting rather than having a combined CP2A/4A meeting. This recommendation was based upon the Merger Team suggesting that initial bridge limits could be set now with the data available as long as NCDOT would be open to reevaluating bridge lengths after the LEDPA/Preferred Alternative has been selected and more detailed information will be available. It was noted, given this is a pilot project; NCDOT will be flexible and consider additional stewardship efforts following the selection of the LEDPA/Preferred Alternative.
 - For the purposes of evaluating DSAs within the State Draft Environmental Impact Statement (EIS) NCDOT will continue to work with members of the Merger Team to develop specific methodologies and approach for holding CP2A. This will include a matrix depicting areas where straight-forward decisions can be made now and specific areas where decisions need to be made regarding culvert versus bridge (which may require site visits at CP2A). For CP2A, known areas requiring bridging will have approximate lengths; however, following the selection of the LEDPA/Preferred Alternative, specific bridge lengths will be reevaluated. Notes taken on the screen during the meeting are attached.
 - Given it was determined a CP2A meeting will be held and concurrence will be requested, the Concurrence Form will be prepared to document the methodology used to make the decisions which will be adequate for evaluating the DSAs in the State DEIS.

Next Steps

- NCDOT will continue to work with members of the Merger Team to develop specific methodologies and approach for holding CP2A.

Action Items

- NCDOT will schedule the CP2 Merger Meeting and prepare/distribute the Merger Packet.
- After CP2, NCDOT intends to move directly to a series of CP2A Merger Meetings.

Minutes Prepared by Kory Wilmot, URS. If there are any questions or edits, please contact Chris Werner, URS Project Manager, at (919) 461-1470 or christopher.werner@urs.com. Participant comments or edits on these draft minutes are welcome until February 20, 2014, at which time final minutes will be prepared and distributed.