



# Interagency Project Field Meeting

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## MEETING MINUTES FINAL

**Date:** December 2, 2014  
8:00 a.m. – 2:00 p.m.  
NCDOT Greenfield Parkway Offices

**Project:** STIP R-2721, R-2828, and R-2929 – Complete 540 - Triangle Expressway Southeast Extension (Raleigh Outer Loop)

**Attendees:**

Eric Alsmeyer, USACE  
Cynthia Van Der Wiele, USEPA  
Gary Jordan, USFWS  
Rob Ridings, NCDWR  
Travis Wilson, NCWRC  
Charles Smith, NCDOT – Hydraulics

Ray Lovinggood, NCDOT – Hydraulics  
Roy Bruce, Lochner  
Brian Eason, Lochner  
Wendee Smith, Mulkey  
Jonathan Scarce, Mulkey  
Brian Dustin, Mulkey

**Presentation Materials:**

- Field Handout of Maps and Table for the four sites to be visited.

**Purpose:**

This field review meeting is adjunct to the Interagency Meeting for the project held on November 13, 2014. During that meeting to review bridging suggestions to be used in evaluating Detailed Study Alternatives (DSAs), four hydraulic crossing locations were identified for field review prior to making final determinations about bridging at these sites.

**General Discussion:**

The following information was discussed during the field review:

- **Site 24 (Tributary to Swift Creek, Orange Corridor):** At the Interagency Meeting in November, USFWS and NCWRC indicated that Site 24 should be visited in the field in order to consider this site from the perspective of aquatic and terrestrial habitat connectivity. Depending on the size, stability and condition of this stream, placing the mainline and the ramps on the north side of the site on bridges could be a preferred modification. However, after visiting Site 24, all agreed to keep the bridging at this site as it was suggested at the Interagency Meeting in November. Should the Orange Corridor be the Preferred Alternative, floodplain culverts should be added under the mainline and the ramps on the north side of Site 24.
- **Site 21 (Tributary to Swift Creek, Orange Corridor):** Habitat connectivity was raised by NCWRC and NCDWR as a consideration for this site during the Interagency Meeting in November. There was discussion about ways to maintain habitat connectivity while possibly shortening the bridge to reduce costs. At this site, NCDWR indicated that maintaining stream integrity would have a higher priority than minimizing the total wetland impact. During the field visit, possible reductions in the suggested bridge lengths were discussed. It was agreed that the bridges should be shortened on both ends while maintaining the streams and associated buffers. On the west end, the bridge should be shortened to the extent practicable and still maintain streams and buffers. This will increase wetland impacts. On the east end, the bridge also should

be shortened to the extent possible and still maintain streams and buffers. There was discussion concerning possible alignment adjustments and shifts to improve the stream and wetland crossings at this site. The proximity of the NC 50 interchange, the Turner Farms subdivision, and hydraulic crossing Sites 20 and 21 make it difficult to adjust the alignment at Site 21.

- **Site 34 (Swift Creek, Red Corridor):** During the Interagency Meeting in November, the USFWS asked if it would be feasible to lengthen the suggested bridge further or to shift the service road proposed in this location in order to minimize the encroachment into the floodplain with the service road. The project team agreed to investigate possible minimization of the impact of the service road and agreed to estimate the property value of the adjacent undeveloped residential parcel. During the field visit, a revised plan for the service road was presented. The plan shifts the service road from one side of 540 to the other. This would require a bridge over 540 to access the undeveloped residential parcel. The estimated cost of the revised service road is approximately \$4.5 million. An estimate of the value of the land south of 540 that would be landlocked without the service road is around \$3.1 million. All agreed that the revised service road or buying the land was preferable to what was proposed previously for the service road. This concept will be presented to NCDOT Roadway Design and if they approve the design revision, the modified service road concept will be used. Next the group discussed the previously suggested bridge extension on the west end. All agreed during the field visit to drop the roughly 700 feet of bridge extension at this location. If the Red Corridor is the Preferred Alternative, floodplain culverts should be provided in the western area of the floodplain for equalization of flood flow.
- **Site 1 (Middle Creek, Orange Corridor):** This site, currently proposed to have a culvert, was identified as a site for field review, particularly the existing crossing of Middle Creek at Sunset Lake Road. During the field review meeting, there was a desire expressed to have the existing pipes under Sunset Lake Road be replaced with a bridge instead of the planned triple box culvert. There are several streams at the mainline crossing location. It was decided to provide a bridge at the mainline crossing of Middle Creek (main channel) with buffers. This can likely be accomplished with a roughly 90 foot long single span bridge. To minimize stream impacts, other streams in the area can be routed to the main channel. Additional design analysis will be needed to determine the bridge length that best accommodates the main stream and buffers. At the Sunset Lake Road crossing of Middle Creek, it was decided that a single-span cored-slab bridge should be provided instead of the triple box culverts suggested.

#### **Previous Action Items:**

- NCDOT will arrange a field review meeting on December 2, 2014. At this meeting, agency representatives will view Sites 1, 21, 24, and 34. Final determinations about bridging at these sites will be made during the field review meeting. (*Completed*)
- Lochner will investigate possible minimization and modifications at Site 76 as noted in the November Interagency Meeting notes. (*Completed*)

#### **New Action Items:**

- Lochner will coordinate with NCDOT Roadway Design on the planned changes to the functional design plans, particularly the service road shift at Site 34.
- Functional design plan revisions will be made at the above sites as indicated in the summary notes.
- Update the Hydraulics Study Report to include design analysis for Site 1A – Middle Creek at Sunset Lake Road.

#### **Next Steps:**

- Complete technical study reports – January 2015
- Prepare Draft Environmental Impact Statement – Spring 2015