

Project Commitments

US 74 Shelby Bypass

Federal-Aid No. NHF-74(14)
State Project No. 8.1801001
WBS Number 34497.1.2
TIP Project No. R-2707
Cleveland County, North Carolina

In addition to the Section 404 Conditions, Regional Conditions, State Consistency, NCDOT's guidance for *Best Management Practices for the Protection of Surface Waters*, General Certification Conditions, and Section 401 Conditions of Certification, NCDOT has agreed to the following special commitments:

Project Development and Environmental Analysis Branch

1. Stream Relocations and Modifications. Stream relocations or modifications will be coordinated with the US Fish and Wildlife Service (USFWS), US Army Corps of Engineers (COE), the North Carolina Department of Environment and Natural Resources, Division of Water Quality (DWQ) and the North Carolina Wildlife Resources Commission (WRC) in accordance with the Fish and Wildlife Coordination Act [72 Stat. 563, as amended; 16 USC 661 et seq. (1976)]. An on-site stream mitigation review will be held with the COE, the USFWS, the WRC, and the DWQ. The assessment will determine where on-site stream mitigation is possible. Bioengineering techniques will be applied to relocated streams. These techniques will result in meandering streams with riffles and pools. Native vegetation will be used to stabilize banks and root wads will be used instead of rip-rap as appropriate. A 2:1 off-site compensatory mitigation ratio will be required unless an on-site stream is being relocated via natural stream design techniques; the latter will be at a 1:1 stream mitigation ratio. Stream mitigation (i.e., enhancement, preservation) adjacent to the project must still be completed at a 2:1 mitigation ratio if the mitigation is not an on-site natural stream design relocation. Based on the preliminary design for this project, two stream relocations will be required:
 - A stream relocation will be required for the tributary of Buffalo Creek between SR 2063 and the Light Oak community. An approximately 950-foot segment of this stream will require relocation, most likely to the east of its existing location.
 - A stream relocation will be required just to the west of Lithia Springs Road for a tributary of the First Broad River. This relocation is approximately 1,100 feet in length, and will be to the north of the existing stream bed.

2. Stream and Wetland Mitigation Plans. A plan to mitigate impacts to jurisdictional streams and a conceptual wetland mitigation plan will be developed in consultation with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, North Carolina Department of Environment and Natural Resources, Division of Water Quality, and North Carolina Wildlife Resources Commission.
3. Sensitive Waters. Sedimentation Pollution Control Act Design Standards in Sensitive Waters will be employed on WS-III stream crossings upstream of Moss Lake and on WS-IV First Broad River and its upstream tributaries crossed by the Preferred Alternative.
4. Future Air Quality. Any future air quality analysis for this project will include a review of vehicle-mix percentages, given the industrial nature of portions of the project area.
5. Transplant of Dwarf-Flowered Heartleaf Plants. The North Carolina Plant Conservation Program (NCPCP) will be notified if or when dwarf-flowered heartleaf (DFHL) plants will be lost to construction. A qualified botanist from that organization or a designated representative will be allowed to transplant, if desired, any of the plants that would be lost to a different area of protection.
6. Dwarf-Flowered Heartleaf Monitoring. The dwarf-flowered heartleaf sites in the right-of-way will be monitored annually for five years to determine their stability and to detect any construction effects (positive or negative) which have not been anticipated (increased light, hydrology changes, etc.) and efforts will be made to control exotics.
7. Dwarf-Flowered Heartleaf Report. A written report on dwarf-flowered heartleaf monitoring and management efforts will be provided yearly until the project is completed.
8. Dwarf-Flowered Heartleaf Conservation Easements. Written documentation will be provided to the US Fish and Wildlife Service and to the North Carolina Natural Heritage Program regarding any successful efforts to obtain conservation easements on dwarf-flowered heartleaf sites 8, 9, 12, 13, 24, 25, 26, 30, 32, 33, 34, 35, and 43.

**Project Development and Environmental Analysis Branch, Highway Design Branch,
Division 12**

1. Brushy Creek. The following measures will be implemented at the Brushy Creek crossing to minimize both short-term construction impacts and long-term impacts:

- Trees will be cut at the base to create root wads to help stabilize the banks.
 - During final design, the bridges will be designed with sufficient length to allow for wildlife passage. This will be coordinated with USFWS.
 - Deck drainage will not be released directly into the waterway.
2. First Broad River. The following measures will be implemented at the First Broad River crossing to minimize both short-term construction impacts and long-term impacts:
 - A temporary causeway or work bridge will be constructed.
 - A drainage system will be utilized on the bridge for stormwater runoff.
 - Coordination will be conducted with the local water supply administrator.
 - Hazardous spill basins will be utilized.
 - Vegetation will be left in place as much as is practicable.
 - Deck drainage will not be released directly into the waterway.
 3. Stream 4-13 and DFHL Sites 10, 11 and 12. During culvert design and construction, consideration will be given to minimizing disturbance of Stream 4-13 and dwarf-flowered heartleaf sites #10, 11, and 12 - including minimizing clearing, minimizing rip rap on the stream banks, and using native vegetation to revegetate the stream banks.
 4. Cemeteries. Impacts to cemeteries will be avoided and/or minimized to the extent practicable during the final design phase of the project. If required, graves will be relocated according to state guidelines.
 5. Hamilton-McBrayer Farm. Along the existing section of US 74 at the Hamilton-McBrayer Farm, widening will be to the north (away from the property). A service road will be added, extending from Broadway Road, all within existing right-of-way, to service the trailers in the mobile home park to the north and west of the Hamilton-McBrayer Farm. This will comply with the conditions set forth in the NC State Historic Preservation Office effects concurrence form for this historic property, and will ensure that the effect to the Hamilton-McBrayer Farm will not be adverse.
 6. Wildlife Passage. During final design, the bridges over Brushy Creek will be designed with sufficient length to allow for wildlife passage. This will be coordinated with USFWS during design.
 7. Geodetic Markers. The North Carolina Geodetic Survey will be notified prior to construction to allow ample time for relocation of any affected geodetic markers.

Project Development and Environmental Analysis Branch, Division 12, Right-of-Way Branch

1. Dwarf-Flowered Heartleaf Mitigation Plan. A plan to mitigate impacts to the dwarf-flowered heartleaf will be developed in consultation with USFWS and WRC. Mitigation efforts will be performed by qualified persons and could include transplanting the vegetative portions of plants from existing sites to preselected, approved alternate sites, dispersing seed, and/or acquiring existing sites for preservation.

Project Development and Environmental Analysis Branch, Division 12

1. Street Closings. Any street closings will be coordinated with fire, police, and EMS personnel.

Project Development and Environmental Analysis Branch, Highway Design Branch

1. Noise Barriers. In areas of impacted noise receptors where abatement measures have been considered and found not to be reasonable, a vegetative barrier will be considered for psychological and aesthetic screening.
2. Farmland. Efforts will be made to minimize impacts to farmlands during final design, including crossing of farm fields along property boundaries wherever possible to avoid bisecting farm operations.
3. Lithia Springs. Impacts to Lithia Springs will be avoided and/or minimized to the extent practicable during the final design phase of the project. A study of the impacts to the underground water table due to road grading operations at Lithia Springs will be undertaken during final design.

Project Development and Environmental Analysis Branch, Highway Design Branch, Right-of-Way Branch

1. Hazardous Materials Sites. Should the Preferred Alternative impact any hazardous material site or UST, a Preliminary Site Assessment will be performed prior to right-of-way acquisition to determine the existence and/or extent of any contamination. These assessments will also be used by NCDOT to estimate the associated clean-up costs.

**Project Development and Environmental Analysis Branch, Highway Design Branch,
Division 12, Right-of-Way Branch**

1. Protection of Dwarf-Flowered Heartleaf Sites. Dwarf-flowered heartleaf sites outside of the construction limits of the project in areas where NCDOT owns the property or has a construction easement will be protected and will not be disturbed during construction. Those sites will be left forested and will be protected in perpetuity. The sites will remain on the design plans and will be labeled as sensitive areas.