

I-3807 Project Synopsis **DRAFT**

TIP Project I-3807 is located in Henderson City Limits in Vance County. The project limits begin just south of the I-85 bridge at SR 1218, Graham Avenue, and extend north on SR 1128, Ruin Creek Road to north of the US 158 Bypass. The project length is approximately 1.04 miles.

Planning studies have been completed. The Categorical Exclusion was signed February 28, 2001 and a combined public hearing was held July 19, 2001. There are no environmental commitments and no permits required for this project. Copies of the document and of the hearing map will be made available to the short-listed teams.

The general scope of work consists of widening SR 1128, Ruin Creek Road from the existing two lane road to a five lane curb and gutter facility. The proposed design consists of two through lanes in each direction with a continuous center left turn lane. The existing bridge across I-85 will be widened from two lanes to six lanes with sidewalk on the west side. The interchange ramps will be widened to accommodate future traffic.

The right of way required will typically be 100'. The current right of way width is 60', 30' on each side of the existing centerline. Full control of access will be maintained within the interchange area and will extend from Graham Avenue to North Cooper Drive.

Public Involvement Work:

- The Design/Build (D/B) team will coordinate with the TAC and officials from Maria Parham Hospital to locate and provide an additional drive for the hospital onto Ruin Creek Road. This drive will be full access and will be located north of the North Cooper Drive intersection.
- The D/B team will need to work with the Division 5 Office and the Construction Unit during the construction of the project to keep the public informed of lane closures, construction progress, etc.

Roadway Design Work:

- Resurface and widen SR 1128, Ruin Creek Road to a five-lane curb and gutter facility from SR 1218, Graham Avenue to north of the US 158 Bypass. The design speed will be 50 mph.
- Resurface, widen and provide turn lanes on the ramps at the I-85 interchange to provide an acceptable level of service.
- Relocate SR 1129, Zeb Robinson Road to intersect Ruin Creek Road across from North Cooper Drive.
- The D/B team will develop right of way and construction plans using Microstation and Geopak software.

Structure Design Work:

- Bridge #29 over I-85 will be widened to six lanes with sidewalk on the west side. It has a sufficiency rating of 97 out of 100.

Hydraulics Work:

- All of the drainage design work will be completed for the entire project.
- There are no permits required under the current scope of work; therefore, no permit drawings are needed.

Pavement Design Work:

- All final pavement designs will be provided.
- Temporary pavement designs for detours or temporary widening will be the responsibility of the D/B team.

Location Surveys Work:

- Full electronic surveys are completed and will be available to the selected D/B team. The surveys are metric; therefore, all designs will be in metric units.
- Existing utilities are located by X and Y dimensions and are included with the survey data. Any additional SUE work will be the responsibility of the D/B team.
- Any structure surveys will be the responsibility of the D/B team.
- All right of way staking and right of way recordation will be the responsibility of the D/B team.

Geotechnical Investigations:

- A complete geotechnical investigation package will be provided to the short-listed teams. The package will include borings at or near all proposed bent locations and will include soil test data along the outside shoulders of Ruin Creek Road.
- Any additional geotechnical work will be the responsibility of the D/B team.

Erosion Control Work:

- All erosion control designs will be the responsibility of the D/B team.
- The Erosion Control Plan will be prepared using NCDOT standards and will be reviewed and approved by the Roadside Environmental Unit.
- The D/B team must have a full time erosion control inspector on the project.

Signal Design Work:

- New signals are required at both ramp intersections.
- Existing signals to be upgraded are at the North Cooper Drive/Relocated Zeb Robinson Road intersection and the US 158 intersection.
- Any temporary signals due to traffic control issues will be the responsibility of the D/B team.

Signing Work:

- Signing will be required at the Zeb Robinson Road, Charles Rolling Road, and North Cooper Drive intersection areas.
- Additional signing may be required along I-85, Ruin Creek Road and on the US 158 Bypass.

Traffic Control and Pavement Marking Work:

- A list of parameters such as lane closures, time restrictions, pavement marking and general TCP guidelines will be developed for the short-listed teams.
- Traffic Control Plans will be developed by the D/B team and will have Division 5 approval.

R/W Acquisition:

- All right of way and easements required for this project will be the responsibility of the D/B team.
- Land required for the project will be acquired from approximately 18 parcels.
- No relocatees are anticipated.
- No UST's have been located; however, if any are discovered within the proposed right of way it will be the responsibility D/B team to contact the Geotechnical Unit and arrange for their removal.

R/W Utilities, Conflicts and or Construction Work:

- The D/B team will be responsible for all utility conflicts and utility construction plans.
- Any additional SUE work will be the responsibility of the D/B team.
- The D/B team will coordinate with utility owners in handling the utility conflicts.

Construction Work:

- Coordination may be required on the southern end of this project where it ties to TIP project U-2527.

CEI Work:**RIGHT OF WAY AND CONSTRUCTION COSTS:**

The latest estimated total cost for the project is \$8,140,000. The right of way cost is \$640,000 and the construction cost is \$7,500,000.

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