



APPENDIX R: FLOODPLAINS

Prepared for:



Prepared by:



**South Carolina Department of Transportation
Location and Hydraulic Design of Encroachments on Floodplains Checklist**

23 CFR 650, this regulation shall apply to all encroachments and to all actions which affect base floodplains, except for repairs made with emergency funds. Note: These studies shall be summarized in the environmental review documents prepared pursuant to 23 CFR 771.

I. PROJECT DESCRIPTION

The South Carolina Department of Transportation (SCDOT) proposes to construct a new partial interchange and/or modify an existing interchange at Long Point Road in Charleston County in order to improve interchange operation and safety. The study area will extend approximately 4500 feet west and 3000 feet east of I-526 along S-97 Long Point Road and approximately one mile north and south of S-97 Long Point Road along I-526.

A. Narrative Describing Purpose and Need for Project

- a. Relevant Project History:
- b. General Project Description and Nature of Work (attach Location and Project Map):
- c. Major Issues and Concerns:

Refer to the environmental assessment for project details.

B. Are there any floodplain(s) regulated by FEMA located in the project area?

Yes No

C. Will the placing of fill occur within a 100-year floodplain?

Yes No

D. Will the existing profile grade be raised within the floodplain?

Yes, the profile will be raised; however, there will be very minimal impacts to Hobcaw Creek as the goal is to tie the profile down before reaching the creek.

- E. If applicable, please discuss the practicability of alternatives to any longitudinal encroachments.

The profile will be raised, but there will be no significant encroachments that have impacts to Hobcaw Creek or the baseflood elevations. Therefore, no alternatives to any longitudinal encroachments was determined necessary.

- F. Please include a discussion of the following: commensurate with the significance of the risk or environmental impact for all alternatives containing encroachments and those actions which would support base floodplain development:

- a. What are the risks associated with implementation of the action?

No baseflood impacts anticipated. No significant encroachments proposed.

- b. What are the impacts on the natural and beneficial floodplain values?

No significant impacts are anticipated as the proposed profile will tie down before reaching the main floodplain crossing. Very minor impacts are expected due to the fill from the mainline on I-526 right before the end of the project.

- c. What measures were used to minimize floodplain impacts associated with the action?

Utilizing the existing alignment as much as possible and attempting to tie down before reaching the floodplain.

- d. Were any measures used to restore and preserve the natural and beneficial floodplain values impacted by the action?

NPDES requirements will include sediment and erosion control BMPs on the construction plans for water quality.

- G. Please discuss the practicability of alternatives to any significant encroachments or any support of incompatible floodplain development.

NA, no significant encroachment anticipated.

- H. Were local, state, and federal water resources and floodplain management agencies consulted to determine if the proposed highway action is consistent with existing watershed and floodplain management programs and to obtain current information on development and proposed actions in the affected? Please include agency documentation.

Refer to the Environmental Assessment for project details. A copy of the complete Hydraulic Design and Risk Assessment will be provided to the Charleston County Floodplain Manager.



SCDOT Hydraulic Engineer



Date