



amec
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September 7, 2016

Ms. Courtney M. Stevens
Watershed Manager
U.S. Army Corps of Engineers
69-A Hagood Avenue
Charleston, SC 29403

South Carolina Department of Health and Environmental Control
Bureau of Water – Water Quality Division
Attn: Mr. Charles Hightower
2600 Bull Street
Columbia, South Carolina 29201

**Subject: Request for Permit Modification
Project Soter (Volvo Cars) – SAC-2015-0476-SIR
Berkeley County, South Carolina
Amec Foster Wheeler Project No. 6250150096**

Dear Ms. Stevens and Mr. Hightower:

Amec Foster Wheeler Environment and Infrastructure, Inc. (Amec Foster Wheeler), on behalf of the Permittee, Berkeley County, is pleased to present this permit modification request for Project Soter (Volvo Cars), located near Ridgeville, Berkeley County, South Carolina.

A permit application was submitted on April 16, 2015 by Berkeley County for the Project Soter development within Camp Hall in Ridgeville, Berkeley County, South Carolina. Department of the Army Permit No. SAC-2015-0476-SIR was issued to the applicant authorizing fill in waters of the U.S. on July 9, 2015. Within this permit, 192.88 acres of jurisdictional wetlands, 23.14 acres of non-jurisdictional isolated wetlands, and 1.85 acres of jurisdictional relatively permanent waters (RPWs) were originally authorized for impact. A permit modification request was submitted to the USACE on February 18, 2016 which increased the impacts to jurisdictional waters of the U.S. by 2.00 acres. The request for permit modification was granted in a letter from the USACE dated March 16, 2016 (SAC-2015-0476-SIR, Modification #2). Two additional modifications have been approved (Modification #1 & Modification #3), both extending the requirement for submittal of evidence that conservation easements for the mitigation plan have been executed and recorded to 240 days and 270 days, respectively.

Following submittal of the February 18, 2016 permit modification request, the South Carolina Department of Transportation (SCDOT) has requested additional design changes to the Interstate Interchange access to the Camp Hall development. The permit modification request resulting from the interstate interchange revisions is detailed hereafter:

REQUESTED MODIFICATIONS

The I-26 interchange design, created as a part of the initial Project Soter wetlands permit, was prepared prior to the Interchange Justification Report Draft completion. The conceptual design was based on the existing interchange serving the BMW facility located in Spartanburg, SC. As the Interchange Justification Report continued to evolve and comments were received from SCDOT and the Federal Highway Administration (FHWA), some changes required to the conceptual design in order to accommodate the recommendations concluded in the draft Interchange Justification Report. The biggest change involved the number of lanes required for the entrance ramp heading to Charleston and the exit ramp coming from Charleston heading towards the site. Each of these ramps was assumed to be a single lane in the conceptual design; however, in the draft Interchange Justification Report they were required to be two lanes each. The additional lane extended the project approximately 2,165 feet east and 1,765 feet west along I-26 which increased the overall project area by 55.71 acres.

The conceptual interchange design also minimized the angle between the proposed interchange ramps on the south side of I-26 and the eastbound travel lanes. This approach met the required design criteria for minimum curve radius corresponding to the design speed of 45 mph; however, as the Basis of Design plans were developed for SCDOT's Design-Build project it was determined this minimum radius curve restricted the line of sight (due to inside traffic rail on bridges) required to provide a safe stopping sight distance. The flat angle of the ramps also resulted in longer spans over the interstate that would preclude the use of traditional precast concrete beams and require longer, more costly steel beams. In the coastal area, concrete beams are preferred for these types of structures due to the long-term maintenance issues associated with steel. In order to accommodate the concrete beams and provide safe stopping sight distance, the ramp angles had to be adjusted which shifted the impacts for the ramps further south.

Also, during the Basis of Design plan development and preparation of the Interchange Justification Report Draft, the future widening of I-26 was discussed. During this discussion, it was decided by SCDOT that the widening for I-26 would occur towards the existing median. This caused the vertical profile for the roadway to be raised to accommodate the clearances required for the additional future lanes and the new interchange bridge. The profile had to be raised from what was assumed in the initial permit application which also increased the wetland impacts in the interchange area.

The outcome of the I-26 interchange redesign, as described above, results in a permit modification request requesting an **additional 4.93 acres** of wetland impact above those approved in SAC-2015-0476-SIR, Modification #2. Changes in wetland impacts are presented on the enclosed revised permit drawings and on the Wetland Impact:

WETLAND IMPACT MINIMIZATION STRATEGY

The I-26 interchange design was modified to incorporate the issues identified by the SCDOT and FHWA during the Interchange Justification Reporting process, as well as issues discovered during development of the Basis of Design plans. Due to the presence of extensive wetlands in the area of the proposed interchange, elimination of wetland impacts was not feasible. To reduce wetland impacts to the greatest practicable extent materials storage and laydown areas were moved further from the build area and into uplands on the Camp Hall site.

In addition to logistical changes to minimize impacts, a portion of the SCDOT right-of-way, which was defined as wetlands under a preliminary approximate wetland delineation, were re-evaluated. Upon detailed field investigation, these areas were defined as uplands, and subsequently removed from the permit drawings. A jurisdictional determination request is included with this documentation, in Appendix A.

ADDITIONAL SITE INVESTIGATIONS

Due to the required changes to the I-26 Interchange design, the Project Soter study area was expanded by approximately 55.71 acres (Figure 1) to ensure that wetlands and other important environmental features were being avoided to the greatest practicable extent. This additional study area is located within SCDOT controlled properties. As part of this permit modification request, a wetland delineation (Appendix A), protected species assessment (Appendix B), and cultural resources survey (Appendix C) have been conducted within the additional study area and are included with this request. Results of the wetland delineation are presented in the jurisdictional determination request package, and are shown on the revised permit drawings. No protected species or cultural resources issues were identified within the expanded study area.

PROPOSED ADDITIONAL MITIGATION

The Project Soter – Landscape Mitigation Plan, submitted with the original permit application, was designed to be a compelling mitigation plan conducted on a landscape scale. The plan includes a mixture of high quality bottomland hardwood forest preservation and large scale pine flatwoods/pine savanna restoration across 2,489 acres within the Dean Swamp and Walnut Branch watersheds, tributaries of Four Hole Swamp.

The applicant understands that the additional 4.93 acres of proposed wetland impacts, detailed in this permit modification request, may not be fully mitigated by the existing Mitigation Plan. In order to provide satisfactory compensatory mitigation for the increased disturbance to jurisdictional waters of the U.S., the applicant reached out to Audubon South Carolina to identify tracts of land with the potential to protect high value resources within the Four Hole Swamp watershed. Audubon South Carolina, in conjunction with the Palustrine Group, identified private in-holdings within Four Holes Watershed and Francis Beidler Forest which have not currently been protected. This comprehensive effort identified the Bass Drive Tract, an 88-acre parcel of land, located on

Four Hole Swamp in Orangeburg County, South Carolina as the preferred candidate for inclusion into the Project Soter – Landscape Mitigation Plan. An addendum to the Project Soter – Landscape Mitigation Plan which details the preservation of the Bass Drive Tract has been prepared and is submitted with this permit modification request.

In addition, the preliminary Project Soter – Landscape Mitigation Plan was approved, with initial mitigation estimates, following an approximate wetland determination on the project tracts. After approval of the preliminary mitigation plan, a final mitigation plan was prepared. The delineation and subsequent modification of the mitigation work plan, indicated an additional 264 acres of wetland enhancement will occur under the original work plan. The applicant suggests that this additional acreage of enhancement more than satisfies the 50% non-preservation (enhancement/restoration) requirement for the request impacts of this modification request.


CLOSING

Please note that the proposed interchange will be built under a design-build process. It is possible that existing design could be changed during the design build process. The project area has been extended further to maximize flexibility for the design-build contractor of the interchange. Should design changes be necessary, no additional impacts are not expected to occur, however impact locations may change. Any impacts will be minimized and proposed changes will be addressed with your agencies as soon as they are vetted in the design-build process.

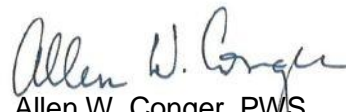
We appreciate your consideration of this request to modify the Department of the Army Section 404 wetlands impact permit for this important project. If you have any questions concerning this request or require any additional information, please contact us.

Sincerely,

AMEC FOSTER WHEELER ENVIRONMENT AND INFRASTRUCTURE, INC.



Brendon P. Kelly
Staff Environmental Scientist



Allen W. Conger, PWS
Principal Scientist

Attachments:

Revised Permit Drawings
Revised Tables 36 and 37 (from Joint Federal and State Application)
Figure 1: Volvo Interchange Properties – Additional Study Area

Appendix:

Appendix A: Request for Jurisdictional Determination – Volvo Interchange Properties

Appendix B: Protected Species Biological Assessment – Volvo Interchange Properties
Appendix C: Volvo Interchange and Infrastructure Easements – Phase 1 Archaeological
Survey

cc: Berkeley County
Thomas and Hutton
South Carolina Department of Commerce
Volvo Cars
Audubon South Carolina
Lord Berkeley Land Trust
Lowcountry Land Trust