



Federal Emergency Management Agency

Washington, D.C. 20472

November 4, 2008

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 08-04-2307R

Mr. David I. Smith
Manager, Alamance County
Alamance County Office Building
124 W. Elm Street
Graham, NC 27253

Community: Unincorporated Areas of
Alamance County, NC
Community No.: 370001

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Dear Mr. Smith:

This responds to a request that the Department of Homeland Security's Federal Emergency Management Agency (FEMA) comment on the effects that a proposed project would have on the effective Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) report for your community in accordance with Part 65 of the National Flood Insurance Program (NFIP) regulations. In a letter dated February 4, 2008, Mr. Marshall Clawson, P.E., of the North Carolina Department of Transportation, requested that FEMA evaluate the effects that updated topographic information, the addition of an existing access road, and a proposed bridge replacement project (B-4402) on State Route (SR) 1504 (Elon-Ossippee Road) would have on the flood hazard information along Tickle Creek shown on the effective FIRM and FIS report. The proposed bridge will be 100' long with a 39" girder deck on a 90 degree skew. The proposed project will impact flood hazards along Tickle Creek from approximately 400 feet downstream of SR 1504 to approximately 1,250 feet upstream of SR 1504. The area of the proposed project is shown on North Carolina FIRM numbers 3710884600K and 3710884700K, both dated June 18, 2007.

All data required to complete our review of this request for a Conditional Letter of Map Revision (CLOMR) were submitted with letters from Mr. Clawson.

To determine the changes in flood hazards that will be caused by the proposed project, we compare the hydraulic modeling reflecting the proposed project (referred to as the proposed conditions model) to the hydraulic modeling used to prepare the FIS (referred to as the effective model). If the effective model does not provide enough detail to evaluate the effects of the proposed project, an existing conditions model must be developed to provide this detail. This existing conditions model is then compared to the effective model and the proposed conditions model to differentiate increases or decreases in flood hazards caused by more detailed modeling from increases or decreases in flood hazards that will be caused by the proposed project.

We reviewed the submitted data and the data used to prepare the effective FIRM for your community and determined that the proposed project meets the minimum floodplain management criteria of the NFIP. The submitted existing conditions HEC-RAS hydraulic computer model, dated August 12, 2008, was used as the base conditions model in our review of the proposed conditions model for this CLOMR request. We believe that, if the proposed project is constructed as shown on the provided construction drawings titled "Bridge Survey and Hydraulic Design Report, NCDOT, Raleigh, NC" dated September 19, 2007, and the data listed below are received, the floodplain boundaries of the base (1-percent annual chance) flood and the 0.2-percent annual chance flood will be delineated as shown on the submitted annotated FIRM.

The submitted existing conditions model included new surveyed cross sections. In addition, an existing access road bridge that was not included in the effective model has been added to the existing conditions model. This bridge is located approximately 480 feet upstream of SR 1504. When compared to the effective model, the existing conditions model reflects increase and decreases in the Base (1-percent annual chance) Flood Elevations (BFEs) along Tickle Creek, with a maximum increase of 2.7 feet at a point approximately 600 feet upstream of SR 1504 and a maximum decrease of 0.1 foot at a point approximately 40 feet downstream of SR 1504.

The proposed conditions model incorporates the proposed project into the existing conditions model. When we compared the existing conditions model to the proposed conditions model, we determined that the proposed project reflects decreases in BFEs along Tickle Creek, with a maximum decrease of 1.1 feet at a point approximately 60 feet upstream of SR 1504.

The updated existing conditions and proposed project will have the following impacts:

Base Flood Elevations

When compared to the effective data the BFEs will increase and decrease along Tickle Creek, with a maximum increase of 2.6 feet at a point approximately 600 feet upstream of SR 1504 and a maximum decrease of 0.1 foot at a point approximately 40 feet downstream of SR 1504.

1-Percent Annual Chance Floodplain

When compared to the effective data, the width of the Special Flood Hazard Area (SFHA), the area that would be inundated by the base flood, will increase. The maximum increase of approximately 70 feet will occur approximately 60 feet upstream of SR 1504.

1-Percent Annual Chance Floodway

When compared to the effective data, the width of the floodway along Tickle Creek will increase. The maximum increase of approximately 70 feet will occur approximately 60 feet upstream of SR 1504.

Upon completion of the project, your community may submit the data listed below and request that we make a final determination on revising the effective FIRM and FIS report.

- Detailed application and certification forms, which were used in processing this request, must be used for requesting final revisions to the maps. Therefore, when the map revision request for the area covered by this letter is submitted, Form 1, titled "Overview & Concurrence Form," must be included.
- The detailed application and certification forms listed below may be required if as-built conditions differ from the preliminary plans. If required, please submit new forms or annotated copies of the previously submitted forms showing the revised information.

Form 2, titled "Riverine Hydrology & Hydraulics Form"

Form 3, titled "Riverine Structures Form"

Hydraulic analyses, for as-built conditions, of the base flood; the 10-percent-, 2-percent-, and 0.2-percent-annual-chance floods; and the regulatory floodway, together with a certified topographic work map showing the revised floodplain and floodway boundaries, must be submitted with Form 2.

- Effective October 1, 2007, FEMA revised the fee schedule for reviewing and processing requests for conditional and final modifications to published flood information and maps. In accordance with this schedule, the current fee for this map revision request is \$4,800 and must be received before we can begin processing the request. Please note, however, that the fee schedule is subject to change, and requesters are required to submit the fee in effect at the time of the submittal. Payment of this fee shall be made in the form of a check or money order, made payable in U.S. funds to the National Flood Insurance Program, or by credit card (Visa or MasterCard only). The payment, along with the revision application, must be forwarded to the following address:

Using U.S. Postal Service:

North Carolina MT-2 LOMC Depot
P.O. Box 300025
Raleigh, North Carolina 27622-0025

Using Overnight Service:

NC MT-2 LOMC- Collection System Administrator
c/o Dewberry & Davis, Inc.
2301 Rexwoods Drive, Suite 200
Raleigh, North Carolina 27607

- As-built plans, certified by a registered professional engineer, of all proposed project elements
- Community acknowledgment of the map revision request
- Evidence of notification of the property owners impacted by increases in BFEs and widening of the SFHA and floodway boundaries along Tickle Creek. The property owners' written acceptance of the increases is required for the LOMR to become effective on the date of issuance.
- A copy of the public notice distributed by your community stating its intent to revise the regulatory floodway, or a statement by your community that it has notified all affected property owners and affected adjacent jurisdictions

After receiving appropriate documentation to show that the project has been completed, FEMA will initiate a revision to the FIRM and FIS report. The North Carolina Floodplain Mapping Program (NCFMP) will review all revision requests in accordance with an agreement signed with FEMA under the FEMA Cooperating Technical Partners initiative. For more information on this initiative, we encourage you to visit the dedicated portion of the FEMA Flood Hazard Mapping website at http://www.fema.gov/plan/prevent/fhm/ctp_main.shtm or visit the NCFMP website at <http://www.ncfloodmaps.com>. Because the BFEs would change as a result of the project, a 90-day appeal period would be initiated, during which community officials and interested persons may appeal the revised BFEs based on scientific or technical data.

The basis of this CLOMR is, in whole or in part, a bridge replacement project. NFIP regulations, as cited in Paragraph 60.3(b)(7), require that communities assure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management regulations. Consequently, the ultimate responsibility for maintenance of the culvert rests with your community.

This CLOMR is based on minimum floodplain management criteria established under the NFIP. Your community is responsible for approving all floodplain development and for ensuring all necessary permits required by Federal or State law have been received. State, county, and community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction in the

SFHA. If the State, county, or community has adopted more restrictive or comprehensive floodplain management criteria, these criteria take precedence over the minimum NFIP criteria.

If you have any questions regarding floodplain management regulations for your community or the NFIP in general, please contact the Consultation Coordination Officer (CCO) for your community. Information on the CCO for your community may be obtained by calling the Director, Federal Insurance and Mitigation Division of FEMA in Atlanta, Georgia, at (770) 220-5400. If you have any technical questions regarding this CLOMR, please contact the NCFMP at (919) 715-5711 ext. 118, or the FEMA Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627).

Sincerely,



Beth A. Norton, CFM, Program Specialist
Engineering Management Branch
Mitigation Directorate

For: William R. Blanton Jr., CFM, Chief
Engineering Management Branch
Mitigation Directorate