



# Federal Emergency Management Agency

Washington, D.C. 20472

**SEP 15 2006**

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:  
Case No.: 06-08-B054R

The Honorable Jim Shaw  
Mayor, City of Rapid City  
300 Sixth Street  
Rapid City, SD 57701

Community: City of Rapid City, SD  
Community No.: 465420

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Dear Mayor Shaw:

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), Flood Boundary and Floodway Map (FBFM), 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 December 14, 2005, Mr. J. Robert Knecht, RLTL, requested that FEMA evaluate the effects along Rapid Creek that updated topographic information, an updated bridge analysis at Idlehurst Lane, and proposed channel modifications, associated with the Lot 1 Knecht Park Subdivision, from approximately 1,650 feet downstream to approximately 100 feet downstream of Rimrock Highway would have on the flood hazard information shown on the effective FIRM, FBFM, and FIS report. The proposed channel modifications will include placement of fill and site grading from approximately 1,000 feet downstream to approximately 450 feet downstream of Rimrock Highway.

All data required to complete our review of this request for a Conditional Letter of Map Revision (CLOMR) were submitted with letters from Mr. Steven O. Thingelstad, P.E., L.S., President, and Mr. Mike Towey, both with Britton Engineering & Land Surveying, Inc., and Mr. Knecht.

We reviewed the submitted data and the data used to prepare the effective FIRM and FBFM 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 3, 2006, based on updated topographic information and updated bridge modeling at Idlehurst Lane, 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 topographic work maps entitled "Proposed 100 and 500-Year Floodplain and Floodway, Flood Study – Rapid Creek," prepared by Britton Engineering & Land Surveying, Inc., dated August 4, 2006, and the data listed below are received, a revision to the FIRM and FBFM would be warranted.

Our comparison of existing conditions to the effective flood hazard information revealed that as a result of the updated topographic information and updated bridge modeling at Idlehurst Lane, the elevations of the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood) for Rapid Creek increased in some areas and decreased in other areas compared to the effective Base Flood Elevations (BFEs). The maximum increase in BFE, 1.2 feet, occurred approximately 1,000 feet

downstream of Rimrock Highway. The maximum decrease in BFE, 0.2 foot, occurred approximately 1,050 feet downstream of Rimrock Highway.

The proposed conditions model incorporated the effects of the proposed project into the existing conditions model. As a result of the proposed project, the BFEs for Rapid Creek will increase in some areas and decrease in other areas compared to the existing conditions BFEs. The maximum increase in BFE, 0.2 foot, will occur approximately 900 feet upstream of Rimrock Highway. The maximum decrease in BFE, 1.1 feet, will occur approximately 650 feet upstream of Rimrock Highway.

As a result of the proposed project, updated topographic information, and updated bridge modeling at Idlehurst Lane, the BFEs for Rapid Creek will increase in some areas and decrease in other areas compared to the effective BFEs. The maximum increase in BFE, 1.2 feet, will occur approximately 1,000 feet upstream of Rimrock Highway. The maximum decrease in BFE, 0.5 foot, will occur approximately 650 feet upstream of Rimrock Highway. The width of the Special Flood Hazard Area (SFHA), the area that would be inundated by the base flood, will decrease compared to the effective SFHA width. The maximum decrease in SFHA width, approximately 210 feet, will occur approximately 900 feet upstream of Rimrock Highway.

As a result of the proposed project, updated bridge modeling at Idlehurst Lane, and updated topographic information, the width of the regulatory floodway will increase in some areas and decrease in other areas compared to the effective floodway width along Rapid Creek. The maximum increase in floodway width, approximately 20 feet, will occur approximately 1,150 feet downstream of Rimrock Highway. The maximum decrease in floodway width, approximately 170 feet, will occur approximately 900 feet downstream of Rimrock Highway.

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, FBFM, 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, entitled "Overview & Concurrence Form," must be included. (A copy of this form is enclosed.)
- 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 (copies of which are enclosed) or annotated copies of the previously submitted forms showing the revised information.

Form 2, entitled "Riverine Hydrology & Hydraulics Form"

Form 3, entitled "Riverine Structures Form"

Hydraulic analyses, for as-built conditions, of the base flood; the floods having a 10-, 2-, and 0.2-percent chance of being equaled or exceeded in any given year; and the regulatory floodway, together with a topographic work map showing the revised floodplain and floodway boundaries, must be submitted with Form 2.

- Effective October 30, 2005, 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 \$4,000 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. The payment must be forwarded to the following address:

Federal Emergency Management Agency  
 Fee-Charge System Administrator  
 P.O. Box 22787  
 Alexandria, VA 22304

- As-built plans, certified by a registered professional engineer, of all proposed project elements
- Community acknowledgment of the map revision request
- 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
- Evidence of notification of all property owners who will be affected by any increases in width and/or shifting of the base floodplain

After receiving appropriate documentation to show that the project has been completed, FEMA will initiate a revision to the FIRM, FBFM, and FIS report. 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 channel-modification 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 modified channel 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 Denver, Colorado, at (303) 235-4830. If you have any questions regarding this CLOMR, please call our Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627).

Sincerely,



Kevin C. Long, CFM, Project Engineer  
Engineering Management Section  
Mitigation Division

For: William R. Blanton Jr., CFM, Chief  
Engineering Management Section  
Mitigation Division

Enclosures

cc: Mr. Dion Lowe  
Floodplain Administrator  
Public Works Department  
City of Rapid City

Mr. Dan Jennissen  
Planning Director  
Pennington County

Mr. Steven O. Thingelstad, P.E., L.S.  
President  
Britton Engineering & Land Surveying, Inc.

Mr. J. Robert Knecht, RL/T