



NATIONAL FLOOD INSURANCE PROGRAM

FEMA PRODUCTION AND TECHNICAL SERVICES CONTRACTOR

April 8, 2015

Ms. Genevieve L. Donart, P.E.
Isaacson & Arfman, P.A.
Consulting Engineering Associates
128 Monroe Street Northeast
Albuquerque, NM 87108

IN REPLY REFER TO:
Case No.: 15-06-0805R
Community: City of Albuquerque, NM

Community No.: 350002

316-AD

Dear Ms. Donart:

This responds to your recent submittal received on March 10, 2015, in response to our letter dated January 7, 2015, concerning your request received dated December 3, 2014, that the Department of Homeland Security's Federal Emergency Management Agency (FEMA) issue a conditional revision to the Flood Insurance Rate Map (FIRM) for Bernalillo County, New Mexico, and Incorporated Areas. Pertinent information about the request is listed below.

Identifier:	The Foothills
Flooding Sources:	Pino Arroyo (aka Arroyo del Pino or South Pino Arroyo) and Tributary 1 Pino Arroyo
FIRM Panels Affected:	35001C0161G and 35001C0142H

The data required to complete our review, which must be submitted within 90 days of the date of this letter, are listed on the attached summary.

If we do not receive the required data within 90 days, we will suspend our processing of your request. Any data submitted after 90 days will be treated as an original submittal and will be subject to all submittal/payment procedures.

FEMA receives a very large volume of requests and cannot maintain inactive requests for an indefinite period of time. Therefore, we are unable to grant extensions for the submission of required data/fees for revision requests. If a requester is informed by letter that additional data are required to complete our review of a request, the data **must** be submitted within 90 days of the date of the letter. Any fees already paid will be forfeited if the requested data are not received within 90 days.

If you have general questions about your request, FEMA policy, or the National Flood Insurance Program, please contact the FEMA Map Information eXchange (FMIX), toll free, at 1-877-FEMA MAP (1-877-336-2627). If you have specific questions concerning your request, please contact your case reviewer, Mr. Tariq Makhdoom, Ph.D., CFM, by e-mail at tmakhdoom@dewberry.com or by telephone at (703) 849-0568, or me by email at benjamin.kaiser@aecom.com or by telephone at (301) 820-3230.

Sincerely,

A handwritten signature in black ink, appearing to read "Benjamin Kaiser", enclosed within an oval-shaped scribble.

Benjamin Kaiser, P.E., CFM
Revisions Manager
RAMPP - Risk Assessment, Mapping,
and Planning Partners

Attachment:

Summary of Additional Data

cc: Mr. Curtis Cherne, P.E.
Floodplain Manager
City of Albuquerque

Mr. John Mechenbier
Americus, LLC



NATIONAL FLOOD INSURANCE PROGRAM

FEMA PRODUCTION AND TECHNICAL SERVICES CONTRACTOR

Summary of Additional Data Required to Support a Conditional Letter of Map Revision (CLOMR)

Case No.: 15-06-0805R

Requester: Ms. Genevieve L. Donart, P.E.

Community: City of Albuquerque, NM

Community No.: 350002

The issues listed below must be addressed before we can continue the review of your request.

1. Your recent submittal includes a copy of your letter dated January 7, 2013, addressed to U.S. Fish and Wildlife Service (the Services,) New Mexico Ecological Services Field Office. However, it is not clear if the above-referenced submittal included a copy of the biological assessment report prepared by Marron and Associates dated January 2013, determining the impacts that the proposed project will have on each threatened or endangered species present in the area affected by the project. Please ensure that all of the required information is submitted to the Services. Once a response is received from the Services, please submit to us, a copy of your assessment (including all background information), and all correspondence with the Services.
2. Please submit an as-built survey for the Box Culverts under Tramway Boulevard. Please also submit construction plans for the proposed Pino Arroyo Box Culvert, as previously requested in our letter dated January 7, 2015. Please highlight the dimension of the structures and all elevations necessary for verification of the hydraulic modeling. Please ensure that the drawings are certified (sealed, signed, and dated) by a registered Professional Engineer and reference the vertical datum.
3. According to the submittal, improvements were made to Tramway Boulevard in 1993 that were never addressed with a CLOMR request and a Letter of Map Change (LOMC). This issue was raised in our letter dated January 7, 2015, but no concrete response was provided. Please provide details of all the construction already completed at the site, including dates when these changes occurred. Please also provide a detailed explanation of the circumstances for not submitting a Letter of Map Revision (LOMR) request for all the completed work so far.
4. Our review revealed that the 1-percent-annual-chance Base Flood Elevations (BFEs) are higher than the end points of Cross-Sections 1873.47, 1086, and 1054.4 in the submitted existing conditions HEC-RAS hydraulic computer model and Cross-Sections 1086 and 1054.4 in the submitted proposed conditions HEC-RAS model along Pino Arroyo. The use of vertically extended cross-sections might both overestimate the BFEs and underestimate the width of the base floodplain. This issue was raised in our letter of January 7, 2015; however, no concrete justification was provided in this regard. Please revise the cross-section geometry coordinates so that the end points of all cross-sections are equal to or extend higher than the corresponding BFEs, or provide documentation that quantifies the amount of split flow that would occur if the cross-sections were not extended, and the extent of all flow breakouts.

LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605 / PH: 1-877-FEMA MAP / FX: 1-800-358-9620

5. Our review revealed that the submitted existing and proposed conditions hydraulic models were run using the mixed flow regime. FEMA accepts base floodplain boundary delineations based on supercritical flow depths only for concrete-lined engineered channels. Because the existing and proposed channel is not concrete lined, critical depth is the minimum depth permissible to map the base floodplain boundary delineations along this reach. This issue was raised in our letter of January 7, 2015; however, no concrete justification was provided in this regard. Please revise the hydraulic analysis for this portion of the channel using subcritical modeling, or provide an explanation along with a concrete justification for not using subcritical modeling.
6. Our review revealed that Appendix A of the submitted report entitled “Request for CLOMR for Pino Arroyo at the Foothills,” prepared by Isaacson & Arfman, P.A. Consulting Engineering Associates, revised dated February 27, 2015, did not include any topographic work map, as listed under the table of contents of the above report. Please submit a topographic work map, certified by a registered Professional Engineer that shows all applicable items listed in Section C of Application/Certification Form 2, entitled “Riverine Hydrology and Hydraulics Form”. Moreover, a quick review of the digital Computer-Aided Design (CAD) copy, included with the recent submittal, indicates the following issues that should also be resolved.
 - a. Please ensure that the submitted work map shows clearly boundary delineations of the proposed conditions and currently effective base floodplain on the same map. Please continue to show a legend to all the proposed and effective flood hazard information shown.
 - b. Please ensure that logical tie-in is provided between the proposed and effective flood hazard boundary delineations. Please ensure to provide BFE tie-in at both ends.
 - c. Please continue to show topographic contour information used in the hydraulic model and for the boundary delineations of the base floodplain.
 - d. Cross-Sections 2183.63 and 2200 are intersecting each other. Similarly, Cross-Sections 1942.35 and 1948.66 are also intersecting. Cross-Section 1948.66 is shown on the work map but not included in the hydraulic analysis. Please ensure that all cross-sections used in the hydraulic model are shown on the work map and do not intersect each other.
 - e. Certification by a registered Professional Engineer.
 - f. Reference to a datum, such as the National Geodetic Vertical Datum of 1929.
 - g. Please ensure that the topwidth of the base floodplain computed in the proposed conditions hydraulic model match, at all cross-sections, the base floodplain topwidth shown on the topographic work map. The geometry of the cross-sections in the proposed conditions hydraulic model should reflect the topography shown on the work map.
 - h. Please ensure that the channel distances computed in the proposed conditions hydraulic analysis at all cross-sections match the approximate channel distance shown on the above-referenced topographic work map.
 - i. Please continue to provide digital Computer-Aided Design (CAD) or Geographic Information System (GIS) data that reflect the revised topographic work map. Please ensure that the digital data are spatially referenced and cite what projection (coordinate system, example: UTM/State Plane) was used, so that the data may be used for accurate mapping. The important data to show on the digital work map are the contour information, the profile baseline, the cross-section lines, the road crossings and hydraulic structures, the effective and proposed conditions flood hazard delineations, and the tie-in locations. All data should be clearly labeled, and all information should be contained within the drawing and not externally referenced.

7. Please submit an updated annotated FIRM, if needed, at the scale of the effective FIRM, that clearly shows the effective boundary delineation and revised boundary delineation as shown on the submitted work map of the base floodplain and how the revised boundary delineation ties-in to the boundary delineation shown on the effective FIRM at the downstream and upstream ends of the revised reach.
8. Our review indicates that the proposed project causes an increase of more than 1.0 foot in BFEs, the elevation of the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood) at Cross-Sections 1370.42, 1310.72, 1251.03 and 1239.93, where there is an increase of 1.08, 2.64, 2.81, and 2.86 feet, respectively when compared to existing BFEs. Please provide evidence that the proposed project satisfies the requirements of Section 65.12 of the National Flood Insurance Program (NFIP) regulations, including the items stated below.
 - a. Evaluation of alternatives that would not result in an increase in BFE of more than 1.0 foot and an explanation why these alternatives are not feasible.
 - b. Documentation that individual legal notices have been sent to all property owners affected by the increases in BFEs due to the proposed project. Documentation of legal notice may take the form of a copy of the letter sent and either a mailing list or certified mailing receipts. The template attached with our letter dated January 7, 2015, may be used to prepare the legal notice. **Prior to distribution, please submit a draft copy of the notice for verification of content.** Copies of the draft letter included with your recent submittal were not legible. Please submit legible copies of the draft notifications.
 - c. Certification by a Professional Engineer that no structures are located in areas that would be impacted by the increased BFEs due to the project.
9. Please submit a copy of the newspaper notice stating an intent to revise or establish the flood hazard information (i.e., base flood elevations/base flood depths, and base flood floodplain) along Pino Arroyo and Tributary 1 Pino Arroyo, or submit documentation that individual legal notices were sent to all the property owners affected by any increases in or establishment of flood hazard information. Documentation of legal notice may take the form of a copy of the letter sent along with certified mailing receipts or a mailing list. The newspaper notice or individual legal notices must include contact information for any interested parties. **Please submit draft copies of the sample letter prior to distribution. Please also note that a newspaper notice may not be used to fulfill the notification requirement of NFIP Regulation 65.12.**

Please send the required data to:

FEMA LOMC Clearinghouse
Attention: LOMR Manager
847 South Pickett Street
Alexandria, VA 22304-4605

For identification purposes, please include the case number referenced above on all correspondence.