

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

July 13, 2022

Mark Goodwin, P.E.
Mark Goodwin & Associates
PO Box 90606
Albuquerque, NM 87199

RE: Juan Tabo Hills Estates
LOMR Request Engineer's Stamp Date: 06/07/2022
Hydrology File: M21D018

Dear Mr. Goodwin:

Based on the information provided in the LOMR Request received on 06/10/2021, the above-referenced application can be submitted to FEMA with the City's concurrence (see attached Community Acknowledgement, MT-2 Form 1). Bernalillo County is the secondary approval for the LOMR Request, so the County will need to sign a separate Community Acknowledgement, MT-2 Form 1.

You will need to submit the entire package to FEMA and pay FEMA's review fee. Please be sure to copy me with all FEMA correspondence.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
OVERVIEW & CONCURRENCE FORM

OMB Control Number: 1660-0016
Expiration: 1/31/2024

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 1 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless it displays a valid OMB control number. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 20472 , Paperwork Reduction Project (1660-0016). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

PRIVACY ACT STATEMENT

AUTHORITY: The National Flood Insurance Act of 1968, Public Law 90-448, as amended by the Flood Disaster Protection Act of 1973, Public Law 93-234.

PRINCIPAL PURPOSE(S): This information is being collected for the purpose of determining an applicant's eligibility to request changes to National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRM).

ROUTINE USE(S): The information on this form may be disclosed as generally permitted under 5 U.S.C § 552a(b) of the Privacy Act of 1974, as amended. This includes using this information as necessary and authorized by the routine uses published in DHS/FEMA/NFIP/LOMA-1 National Flood Insurance Program (NFIP); Letter of Map Amendment (LOMA) February 15, 2006, 71 FR 7990.

DISCLOSURE: The disclosure of information on this form is voluntary; however, failure to provide the information requested may delay or prevent FEMA from processing a determination regarding a requested change to a (NFIP) Flood Insurance Rate Maps (FIRM).

A. REQUESTED RESPONSE FROM DHS-FEMA

This request is for a (check one):

☐ CLOMR: A letter from DHS-FEMA commenting on whether a proposed project, if built as proposed, would justify a map revision or proposed hydrology changes (See 44 CFR Ch. 1, Parts 60, 65 & 72). All CLOMRs require documentation of compliance with the Endangered Species Act. Refer to the Instructions for details.

☒ LOMR: A letter from DHS-FEMA officially revising the current NFIP map to show the changes to floodplains, regulatory floodway or flood elevations. (See 44 CFR Ch. 1, Parts 60, 65 & 72).

B. OVERVIEW

1. The NFIP map panel(s) affected for all impacted communities is (are):

Community No.	Community Name	State	Map No.	Panel No.	Effective Date
350002	City of Albuquerque	NM	35001C	0367H	08/16/12

2. a. Flooding Source: Tijeras Arroyo

b. Types of Flooding: ☒ Riverine ☐ Coastal ☐ Shallow Flooding (e.g., Zones AO and AH)
☐ Alluvial Fan ☐ Lakes ☐ Other (Attach Description)

3. Project Name/Identifier: Juan Tabo Hills

4. FEMA zone designations (choices: A, AH, AO, A1-A30, A99, AE, AR, V, V1-V30, VE, B, C, D, X)

a. Effective: AE, X

b. Revised: AE, X

5. Basis for Request and Type of Revision:

a. The basis for this revision request is (check all that apply)

- | | | | |
|--|--|--|---|
| <input checked="" type="checkbox"/> Physical Change | <input type="checkbox"/> Improved Methodology/Data | <input checked="" type="checkbox"/> Regulatory Floodway Revision | <input type="checkbox"/> Base Map Changes |
| <input type="checkbox"/> Coastal Analysis | <input checked="" type="checkbox"/> Hydraulic Analysis | <input type="checkbox"/> Hydrologic Analysis | <input type="checkbox"/> Corrections |
| <input type="checkbox"/> Weir-Dam Changes | <input type="checkbox"/> Levee Certification | <input type="checkbox"/> Alluvial Fan Analysis | <input type="checkbox"/> Natural Changes |
| <input checked="" type="checkbox"/> New Topographic Data | <input type="checkbox"/> Other (Attach Description) | | |

Note: A photograph and narrative description of the area of concern is not required, but is very helpful during review.

b. The area of revision encompasses the following structures (check all that apply)

- Structures:
- | | | |
|---|--|---|
| <input type="checkbox"/> Channelization | <input type="checkbox"/> Levee/Floodwall | <input type="checkbox"/> Bridge/Culvert |
| <input type="checkbox"/> Dam | <input checked="" type="checkbox"/> Fill | <input type="checkbox"/> Other (Attach Description) |

6. ☐ Documentation of ESA compliance is submitted (required to initiate CLOMR review). Please refer to the instructions for more information.

C. REVIEW FEE

Has the review fee for the appropriate request category been included?

- ☒ Yes Fee amount: \$ 8,250
- ☐ No, Attach Explanation

- Please see the DHS-FEMA Web site at <http://www.fema.gov/forms-documents-and-software/flood-map-related-fees> for Fee Amounts and Exemptions.

D. SIGNATURES

1. REQUESTOR'S SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: Christopher Hittle	Company: Goodwin and Marshall, Inc.	
Mailing Address: 2405 Mustang Drive Grapevine, TX 76051	Daytime Telephone: 817-329-4373	Fax No.:
	E-mail Address: chittle@gmcivil.com	
	Date: 06/07/2022	

Signature of Requestor (required): 

2. COMMUNITY CONCURRENCE

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirements for when fill is placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. For Conditional LOMR requests, the applicant has documented Endangered Species Act (ESA) compliance to FEMA prior to FEMA's review of the Conditional LOMR application. For LOMR requests, I acknowledge that compliance with Sections 9 and 10 of the ESA has been achieved independently of FEMA's process. For actions authorized, funded, or being carried out by Federal or State agencies, documentation from the agency showing its compliance with Section 7(a)(2) of the ESA will be submitted. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.


Community Official's Name and Title: Renee Brissette, PE, CFM - Senior Hydrologist

Mailing Address: 600 2nd Street NW Albuquerque, NM	Community Name: City of Albuquerque	
	Daytime Telephone: 505-924-3995	Fax No.:
	E-mail Address: rbrissette@cabq.gov	

Community Official's Signature (required):  Date: 07/13/2022

3. CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information data, hydrologic and hydraulic analysis, and any other supporting information as per NFIP regulations paragraph 65.2(b) and as described in the MT-2 Forms Instructions. All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: Christopher Hittle		License No.: 25459	Expiration Date: 12/31/2023
Company Name: Goodwin and Marshall, Inc.		Mailing Address: 2405 Mustang Drive Grapevine, TX 76051	
Telephone No.: 817-329-4373	Fax No.:		
E-mail Address: chittle@gmcivil.com			
Signature: 			Date: 06/07/2022

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)**Required if ...**

- | | |
|---|---|
| <input checked="" type="checkbox"/> Riverine Hydrology and Hydraulics Form (Form 2) | New or revised discharges or water-surface elevations |
| <input type="checkbox"/> Riverine Structures Form (Form 3) | Channel is modified, addition/revision of bridge/culverts, addition/revision of levee/floodwall, addition/revision of dam |
| <input type="checkbox"/> Coastal Analysis Form (Form 4) | New or revised coastal elevations |
| <input type="checkbox"/> Coastal Structures Form (Form 5) | Addition/revision of coastal structure |
| <input type="checkbox"/> Alluvial Fan Flooding Form (Form 6) | Flood control measures on alluvial fans |

Seal (Optional)



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Juan Tabo Hills Estates Building Permit #: _____ Hydrology File #: M-21/D018

DRB#: PR-2018-01388 (1005278) EPC#: _____ Work Order#: _____

Legal Description: TRACT A JUAN TABO HILLS WEST

City Address: Juan Tabo and Tijeras Arroyo

Applicant: Eastside Development, Inc. Contact: Rex Wilson

Address: PO BOX 9470, Albuquerque, NM 87119

Phone#: 899-6768 Fax#: _____ E-mail: rwr2d2@aol.com

Other Contact: Mark Goodwin & Associates, PA Contact: Diane Hoelzer, PE

Address: PO BOX 90606, Albuquerque, NM 87199

Phone#: 828.2200 Fax#: _____ E-mail: diane@goodwinengineers.com

TYPE OF DEVELOPMENT: 330 PLAT (# of lots) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? X Yes _____ No

DEPARTMENT _____ TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☐ GRADING PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☒ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ SITE PLAN FOR SUB'D APPROVAL
- ☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ SO-19 APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ GRADING/ PAD CERTIFICATION
- ☐ WORK ORDER APPROVAL
- ☒ CLOMR/LOMR
- ☐ FLOODPLAIN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: June 10, 2022 By: Diane Hoelzer, PE

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Juan Tabo Hills Estates

Request for LOMR



Prepared By:

Mark Goodwin & Associates, PA

PO BOX 90606

Albuquerque, NM 87199

(505) 828-2200

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Purpose and Scope

Juan Tabo Hills West, LLC, the owner of Tract 'A' of the Juan Tabo Hills West Plat wishes to proceed with construction of Juan Tabo Hills Estates, a planned 350 lot, single family residential, 85.1059 acre development including construction of bank protection along the south side of the Tijeras Arroyo between Kirtland Air force Base and the South Eubank Landfill. To that end JTHW, LLC hired Mark Goodwin and Associates, PA, MGA, to provide drainage engineering design and analysis for the proposed subdivision and this report is being prepared for that purpose. This LOMR also includes upstream analysis and floodplain revisions for another subdivision called Juan Tabo Hills Unit 3B which has already been constructed.

This *Juan Tabo Hills Estates Request for Letter of Map Revision, LOMR*, contains detailed hydraulic analysis of the Tijeras Arroyo, an annotated Flood Insurance Rate Map, FIRM, and a topo work map. It also includes applicable Federal Emergency Management Administration, FEMA, MT-2 application Forms. A copy of the Juan Tabo Hills Estates Bank Protection Profile is included as well.

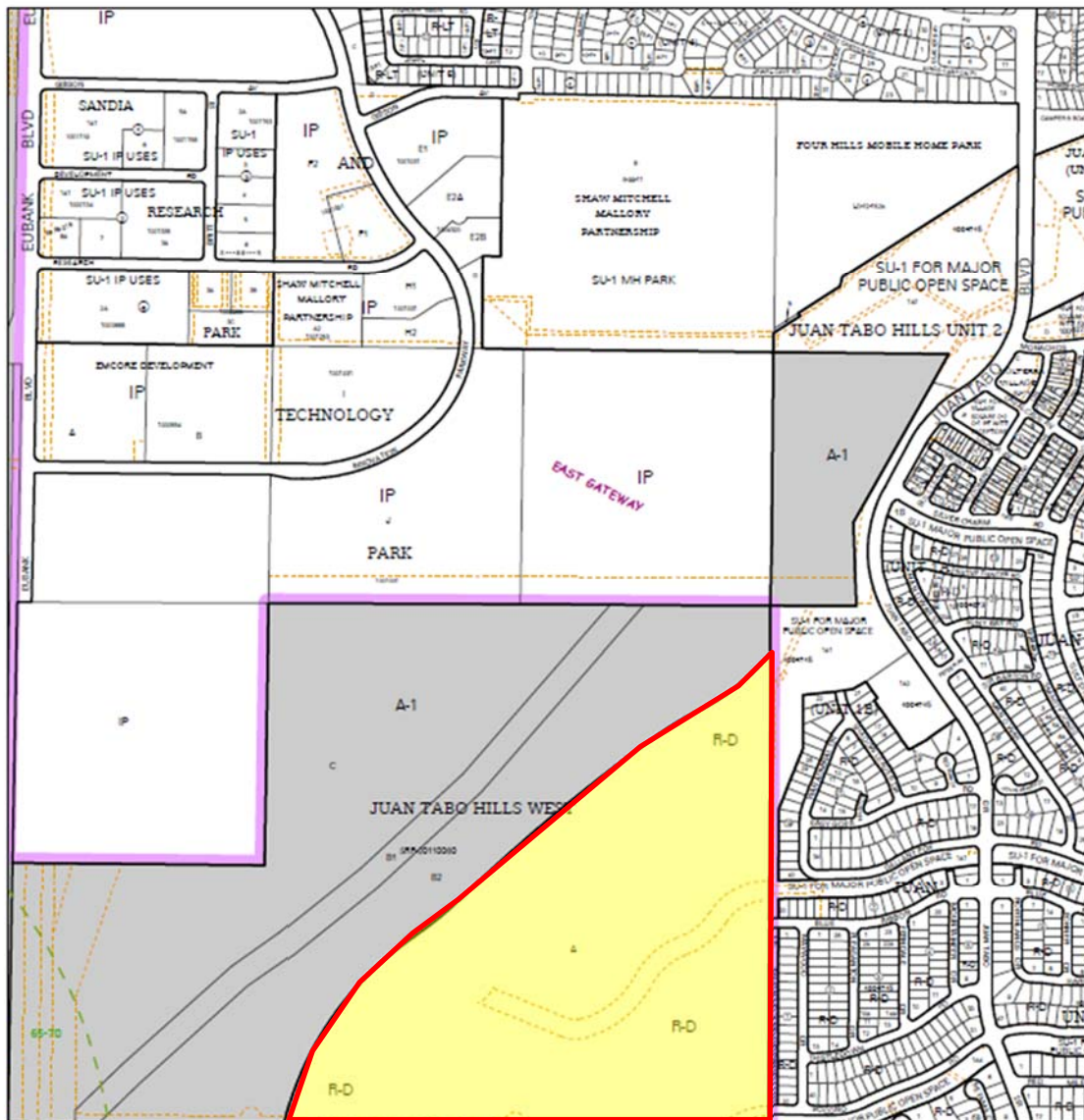
The *As-built Grading and Drainage Plan for Juan Tabo Hills Unit 3B* (MGA, As-built Grading and Drainage Plan for Juan Tabo Hills Unit 3B , 2015) shows the newly constructed shotcrete bank protection and finished grades of that project.

Project Location

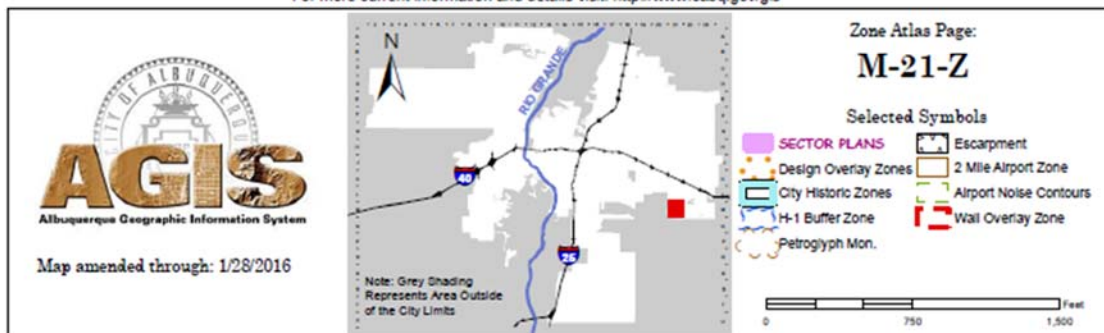
Both the Juan Tabo Hills Estates Subdivision and the existing Juan Tabo Hills Unit 3B Subdivision are located on the Tijeras arroyo downstream and upstream, respectively, of the Juan Tabo Hills Blvd bridge. Both are on FIRM Map Number 35001C0367H. The Estates is on Zone atlas page M-21 and Unit 3B is on M-22. The Estates is located in southeast Albuquerque New Mexico one half (1/2) mile west of Juan Tabo Hills Blvd. and two (2) miles south of Central Ave (lat 35.046° North, long 106.522° West). Legal description is Tract 'A' of Juan Tabo Hills West, an 85.1059 acre tract located in the southwest quarter of section 33 Township 10

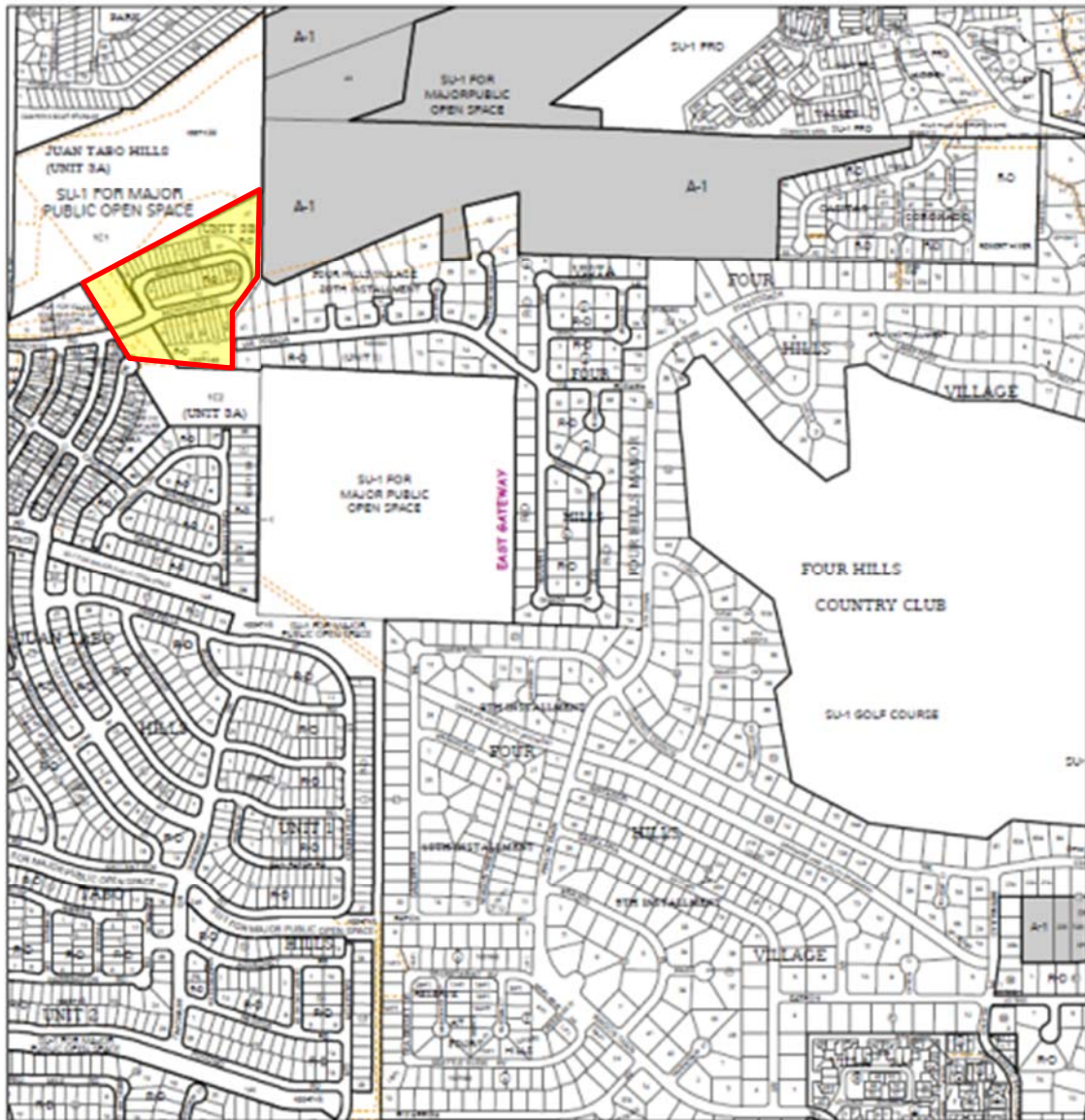


North, Range 4 East NMPM and is bounded on the south by Kirtland Air Force Base, on the west and north by the Tijeras Arroyo, and on the East by Juan Tabo Hills Subdivision Units 1 and 2. Unit 3B is located about 500' east of Juan Tabo Hills Blvd. on the south side of the Tijeras Arroyo , north of Units 1, 2, and 3B.

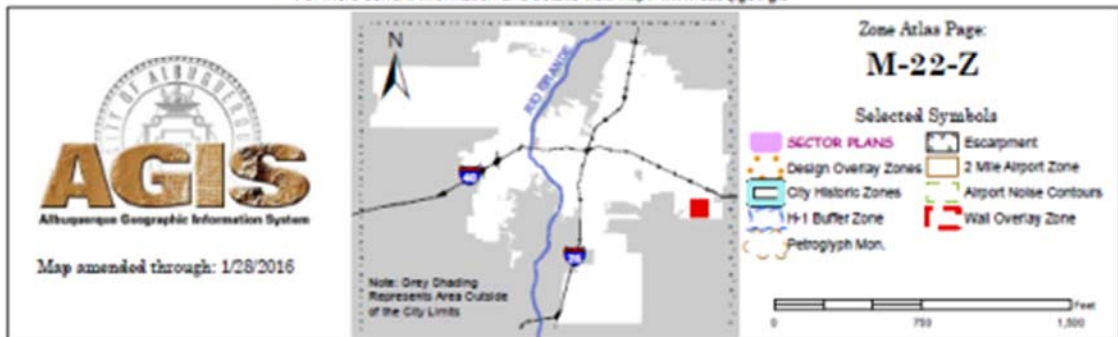


For more current information and details visit: <http://www.cabq.gov/gis>





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Duplicate Effective HEC-RAS

The Duplicate Effective HEC-RAS model was taken from the records of Mark Goodwin and Associates as it was supplied to FEMA for LOMR Case No: 13-06-1053P (FEMA, LOMR Case No: 13-06-1053P, 2013). The model and topo work map for that LOMR were on NGVD '29. The elevations were converted to NAVD '88 in the revised FIRM, profiles, and Floodway Data Table that were issued by FEMA after adding 2.7' to convert them to NAVD '88. That LOMR revised the Tijeras Arroyo Floodplain by adding the Juan Tabo Blvd. Bridge.

The *As-built Grading and Drainage Plan for Unit 3B* is also on the NGVD '29 datum, but the Topo Work Map for this LOMR has been converted to NAVD '88 and all of the plans for the Estates are on that newer datum.



Corrected Effective HEC-RAS

Two corrections were made to the “Duplicate Effective” HEC-RAS model. First the ground elevations in all of the cross sections were raised 2.7’ to convert from NGVD ’29 to NAVD ’88. Second, the model was georeferenced to the NAD83 State Plane Coordinate system on the New Mexico Central (us-ft) horizontal datum. As part of this revision, the floodway encroachment stations were updated to more accurately reflect the effective floodway based on GIS linework obtained from the FEMA National Flood Hazard Layer (NFHL) database. Both the Duplicate Effective and the Corrected Effective HEC-RAS models boundary conditions start with known water surface elevations at the downstream end.

Approved CLOMR HEC-RAS

Condition Case No. 16-06-2447R was prepared by Mark Goodwin and Associates in 2016 to represent the proposed grading improvements as part of the Juan Tabo Hills Estates project. Also included in the CLOMR was the fills placed of the open space area west of Unit 3B. These fills were placed to remove the ineffective flow area behind the shotcrete bank protection constructed with Unit 3B at cross section 46. CLOMR Case No. 16-06-2447R was approved by FEMA on November 14, 2016. The HEC-RAS model from the approved CLOMR is included as part of this report.

As-Built HEC-RAS

Unit 3B widened the thalweg of the Arroyo moving the south bank about 20’ farther south and hard lining it with shotcrete. The shotcrete tied into the shotcrete guide banks on the upstream side of the Juan Tabo Blvd Bridge as previously documented in LOMR Case No: 13-06-1053P.







The Open Space west of Unit 3B was also filled to remove an ineffective flow area at Section 46 behind the newly constructed shotcrete bank protection.





At the Juan Tabo Hills Estates Subdivision the bank protection was constructed to be located as close to the arroyo as possible without placing any fill in the newly defined floodway per LOMR Case No. 13-06-1053P, effective June 17, 2013 (see Annotated FIRM and previous LOMR). The project filled in a shallow overbank area currently mapped as Zones AO, Shaded Zone X, and a small portion of Zone AE. The main channel was also widened and channelized.

The “As-Built HEC-RAS” model includes the analysis of the four flow rates as established by FEMA (10yr, 50yr, 100yr, and 500yr) as well as a floodway run. The top of the fill was set above the future 500-yr design elevation. The top of fill is above:

1. The future 500 year water surface elevation,
2. The existing 500 year water surface elevation, and
3. The 100 year water surface elevation plus 2’ freeboard plus superelevation per City of Albuquerque Development Process Manual.

Bibliography

FEMA. (2013). *LOMR Case No: 13-06-1053P*.

FEMA. (2016). *CLOMR Case No. 16-06-2447R*.

MGA. (2015). *As-built Grading and Drainage Plan for Juan Tabo Hills Unit 3B* .

MGA. (2018). *As-Built Juan Tabo Hills Estates Bank Protection Plans*.