

Rolf Hechler
Mayor

Amanda Forrister
Mayor Pro-Tem

Merry Jo Fahl
Commissioner



Destiny Mitchell
Commissioner

Ingo Hoepfner
Commissioner

Angie Gonzales
City Manager

505 Sims St.
Truth or Consequences, New Mexico 87901
P: 575-894-6673 ♦ F: 575-894-7767
www.torcnm.org

REGULAR MEETING

THE REGULAR MEETING OF THE CITY COMMISSION OF THE CITY OF TRUTH OR CONSEQUENCES, NEW MEXICO, TO BE HELD IN THE COMMISSION CHAMBERS, 405 W. 3RD ST., ON WEDNESDAY, MARCH 27, 2024; TO START AT 9:00 A.M.

A. CALL TO ORDER

B. INTRODUCTION

1. ROLL CALL

Hon. Rolf Hechler, Mayor
Hon. Amanda Forrister, Mayor Pro-Tem
Hon. Destiny Mitchell, Commissioner
Hon. Merry Jo Fahl, Commissioner
Hon. Ingo Hoepfner, Commissioner

2. SILENT MEDITATION

3. PLEDGE OF ALLEGIANCE

4. APPROVAL OF AGENDA

C. PRESENTATIONS

1. Proclamation and Certificate of Appreciation to Chuck Wentworth for 24 years of service as our local news reporter. Mayor Hechler

D. PUBLIC COMMENT (3 Minute Rule Applies)

E. REPORTS

1. City Manager
2. City Commission
3. City Attorney

F. PUBLIC HEARINGS (5 Minute Rule Applies)

1. Public Hearing/Discussion/Action: Final Adoption of Ordinance No. 764 An Ordinance Amending the City of Truth or Consequences Municipal Code of Ordinances, by adding a new section 14-49 establishing Electric Connection Fees. Bo Easley, Electric Division Director

G. ORDINANCES/RESOLUTIONS/ZONING

1. Discussion/Action: Resolution No. 41 23/24 Establishing new Disc/Frisbee Golf fees at the T or C Municipal Golf Course. Alan Hansen Begg, Golf Course Superintendent

I. NEW BUSINESS

1. Discussion/Action: Approval of Purchase Requisitions over \$20,000. Kerin Salcedo, Interim Finance Director
2. Discussion/Update: PD Update. Chief of Police Tavizon
3. Discussion/Action: Variance at 401 Hwy. 181 to allow a mobile home that exceeds the age limit. Assistant City Manager Alvarez
4. Discussion/Action: Permitted Uses with Conditions - 401 Hwy 181 – Construction Yard and Storage units. Assistant City Manager Alvarez
5. Discussion/Action: Master Drainage Report Amendment 1 Fee Proposal. Assistant City Manager Alvarez
6. Discussion/Action: First Amendment to Lease Agreement with Lightning Bar A Hangars, LLC. Assistant City Manager Alvarez
7. Discussion/Update: Lease Extension to Lease Agreement with RBR, Inc. Assistant City Manager Alvarez
8. Discussion/Action: Approval of the 24/25 Sierra County Recreation and Tourism Advisory Board Annual Contract. City Manager Gonzales
9. Discussion/Action: Dam Maintenance pertaining to Cuchillo Negro Dam, Marie Street Dam, and St. Anne's Dam. City Manager Gonzales
10. Discussion/Update Sunny 505 FY 23/24 Advertising and Marketing Project. Joanie Griffin, Sunny 505
11. Discussion/Action: Approval of new Positive Pay Revolving Fund City Bank Account. City Clerk Torres
12. Discussion/Update: March 19, 2024, Special Referendum Election results. City Clerk Torres
13. Discussion/Action: Public restrooms in city parks. OJ Hechler, Community Services Director
14. Discussion/Action: 2022 GO Bond Grant Agreement – Library. Traci Alvarez Assistant City Manager

J. ADJOURNMENT

The meeting will be broadcast live through KCHS on 101.9 FM.

If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing or meeting please contact the City Clerk's Office, at 505 Sims Street, Truth or Consequences, New Mexico 87901, phone (575) 894-6673 at least one (1) week prior to the meeting or as soon as possible. Public documents, including the agenda and minutes, can be provided in various accessible formats. Please contact the City Clerk's Office if a summary or other type of accessible format is needed.

NEXT REGULAR CITY COMMISSION MEETING APRIL 10, 2024



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: C.1

SUBJECT: Proclamation and Certificate of Appreciation to Chuck Wentworth for 24 years of service as our local news reporter.

DEPARTMENT: City Clerk's Office

DATE SUBMITTED: March 21, 2024

SUBMITTED BY: Angela A. Torres, City Clerk-Treasurer

WHO WILL PRESENT THE ITEM: Mayor Hechler

Summary/Background:

Mayor Hechler will present a proclamation and certificate of appreciation to our local Sierra County Sentinel news reporter Chuck Wentworth.

Recommendation:

None. Presentation only

Attachments:

- -
-

Fiscal Impact (Finance): N/A

[Click here to enter text.](#)

Legal Review (City Attorney): N/A

[Click here to enter text.](#)

Approved For Submittal By: ☐ Department Director

Reviewed by: ☒ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☒ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. [Click here to enter text.](#) Ordinance No. [Click here to enter text.](#)

Continued To: [Click here to enter a date.](#) Referred To: [Click here to enter text.](#)

☐ Approved ☐ Denied ☐ Other: [Click here to enter text.](#)

File Name: CC Agendas 3/27/2024



City of Truth or Consequences

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: F.1

SUBJECT Public Hearing and Final Adoption of Ordinance No. 764 An Ordinance Amending the City of Truth or Consequences Municipal Code of Ordinances, by adding a new section 14-49 establishing Electric Connection Fees

DEPARTMENT: Electric Department

DATE SUBMITTED: March 21, 2024

SUBMITTED BY: Bo Easley, Electric Division Director

WHO WILL PRESENT THE ITEM: Bo Easley, Electric Division Director

Summary/Background:

Public hearing and final adoption of Ordinance No. 764 An Ordinance Amending the City of Truth or Consequences Municipal Code of Ordinances, by adding a new section 14-49 establishing Electric Connection Fees

Recommendation:

Public Hearing and final adoption of Ordinance No. 764

Attachments:

Proposed Ordinance

-

Fiscal Impact (Finance): N/A

-

Legal Review (City Attorney): Yes

-

Approved For Submittal By: ☒ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☒ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☒ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. - Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC agendas 3-27-24

CITY OF TRUTH OR CONSEQUENCES

ORDINANCE 764

AN ORDINANCE AMENDING THE CITY OF TRUTH OR CONSEQUENCES MUNICIPAL CODE OF ORDINANCES, BY ADDING A NEW SECTION 14-49 ESTABLISHING ELECTRIC CONNECTION SERVICES AND FEES

BE IT ORDAINED BY THE BOARD OF COMMISSIONERS, CITY COMMISSIONERS OF
THE CITY OF TRUTH OR CONSEQUENCES:

Section one. That section 14-49 of the Code of Ordinances of the City of Truth or
Consequences be added so that such section shall read as follows:

SEC. 14-49. – ELECTRIC CONNECTION SERVICES AND FEES

1. The following Electric Connection Services are available to new customers or current,
existing customers who desire to upgrade their system:

A. SERVICE UPGRADE:

100 AMP

200 AMP

320 AMP

400 AMP

B. FACILITIES PROVIDED IN UPGRADE:

1. Install Secondary Wire per service size;
2. Install Transformer per service size;
3. Provide and install 35-foot Lift Pole per service size.

C. PRIMARY LINE EXTENSION:

1. Install 40–50-foot Pole with Aluminum Wire per load;
2. Install Transformer per service size.

2. ADDITIONAL CHARGES AND FEES:

There will be additional charges and fees to Electric Service Upgrades under the following circumstances:

- A. Excavation of hole in excess of Seven (7) feet in depth;
- B. Soil or surface conditions that require the use of equipment other than our standard backhoe or;
- C. Removal and replacement of surface in paved streets or alleys.

Charges and fees will be based on actual costs of equipment, time, labor, and materials needed to install the City's Service as per a Resolution to be adopted by the City Commission.

No charge will be made for Distribution Transformers under 150 KVA, but a Transformer Installation Charge will be included in the cost of construction.

Section two. Effective date. The provisions of this Amended Ordinance shall become effective April 1, 2024.

PASSED, APPROVED, and ADOPTED by the GOVERNING BODY of the CITY OF TRUTH OR CONSEQUENCES this 27th day of March 2024.

Rolf Hechler, Mayor

ATTEST:

Angela A. Torres, City Clerk-Treasurer



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: G.1

SUBJECT: Discussion/Action: Resolution No. 41 23/24 establishing new fees for disc/ frisbee golf.

DEPARTMENT: Golf Course

DATE SUBMITTED: March 22, 2024

SUBMITTED BY: O.J. Hechler

WHO WILL PRESENT THE ITEM: Alan Hansen Begg, Golf Course Superintendent

Summary/Background:

The City's golf course would like to establish a new fee schedule for disc/ frisbee golf at the T or C Municipal Golf Course. These fees have been reviewed and recommended by the Recreation and Golf Advisory Board and are now being discussed and presented to the City Commission for final approval.

Recommendation:

Approve Resolution No. 41 23/24

Attachments:

- Resolution No. 41 23/24

[Click here to enter text.](#)

Fiscal Impact (Finance): N/A

\$0.00

Legal Review (City Attorney): N/A

[Click here to enter text.](#)

Approved For Submittal By: ☐ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. - Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC Agendas 3-27-24

RESOLUTION NO. 41 23/24

A RESOLUTION OF THE CITY OF TRUTH OR CONSEQUENCES CITY COMMISSION ESTABLISHING APPROPRIATE FEES FOR FRISBEE GOLF AT THE MUNICIPAL GOLF COURSE.

Whereas, the collection of fees is needed in order to recover some of the costs related to the provision of services by the City related to the management and maintenance of the Municipal Golf Course/ Frisbee golf course; and

Whereas, the Parks and Recreation Advisory Board recommends the adoption of the fees set forth in this resolution

NOW THEREFORE, be it resolved by the City Commission of the City of Truth or Consequences that the following fees are to be collected for the use of the Municipal Frisbee Golf Course:

T or C Disc/ Frisbee Golf Course Fees

Daily Green Fees

Standard Rate of \$3.00 per player, per round to include 9 or 18 holes, or \$5.00 per day

*Appropriate current tax is 8.375%

Applicable fees apply for debit and credit card transactions.

PASSED, APPROVED AND ADOPTED this 27th day of March, 2024.

CITY OF TRUTH OR CONSEQUENCES,
NEW MEXICO

Rolf Hechler, Mayor

Angela Torres, City Clerk



City of Truth or Consequences

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.1

SUBJECT: Approval of Purchase Requisitions Over \$20,000
DEPARTMENT: Finance
DATE SUBMITTED: March 21, 2024
SUBMITTED BY: Mindee Holguin, CPO
WHO WILL PRESENT THE ITEM: Traci Alvarez, Assistant City Manager

Summary/Background:

Per Resolution No 46 20/21 Execution of Contracts; Grant Agreements; Memoranda of Understanding; Joint Powers Agreements; Settlement Agreements; Purchases (Contract and Purchases More Than \$20,000)

Recommendation:

Approval Recommended by Finance Director

Attachments:

- Listing of Purchase Requisitions \$20,000 or More
- Purchase Requisitions, Procurement Documentation

Fiscal Impact (Finance): Yes

As Per Total on Listing of Purchase Requisitions

Legal Review (City Attorney): Choose an item.

[Click here to enter text.](#)

Approved For Submittal By: ☒ Department Director

Reviewed by: ☒ City Clerk ☒ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☒ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. [Click here to enter text.](#) Ordinance No. [Click here to enter text.](#)

Continued To: [Click here to enter a date.](#) Referred To: [Click here to enter text.](#)

☐ Approved ☐ Denied ☐ Other: [Click here to enter text.](#)

File Name: CC agendas 3-27-2024

2023-24 Fiscal Year

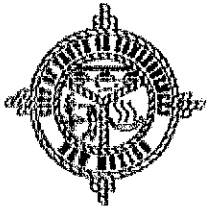
Number	Vendor Name	Description	Requested By	Department	Total Amount	Procurement Type
91823	Wilson & Company, Inc.	Engineering planning for multiple streets	Traci Alvarez	Streets/CD	\$ 54,827.00	
					\$ 54,827.00	

Angela Torres, Clerk-Treasurer

Date _____

Rolf Hechler, Major

Date _____



REQUISITION

Requisition #: 91823

Date: 03/19/2024

Vendor #: 7982

ISSUED TO: WILSON & COMPANY, INC. ENGINEER
4401 MASTHEAD ST NE SUITE 150
ALBUQUERQUE, NM 87109-

SHIP TO: City of Truth or Consequences
505 Sims St.
Truth or Consequences, NM 87901

ITEM	UNITS DESCRIPTION	PROJECT #	PRICE GL ACCOUNT NUMBER	AMOUNT
1	0 PROFESSIONAL ENG PLANNING SERVICE		0.00 216-7026-48598	54,827.00
PO Description: ENG PLANNING SERVICES MULTIPLE STREETS Detailed Description:				

Authorized By: _____

SUBTOTAL:	50,736.38
TOTAL TAX:	4,090.62
SHIPPING:	0.00
TOTAL	54,827.00



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.2

SUBJECT: PD Update
DEPARTMENT: City Manager's Office
DATE SUBMITTED: March 21, 2024
SUBMITTED BY: City Clerk Torres
WHO WILL PRESENT THE ITEM: Chief of Police Tavizon

Summary/Background:

PD Update

Recommendation:

Presentation only

Attachments:

- N/A
- [Click here to enter text.](#)

Fiscal Impact (Finance): N/A

[Click here to enter text.](#)

Legal Review (City Attorney): N/A

[Click here to enter text.](#)

Approved For Submittal By: ☒ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. [Click here to enter text.](#) Ordinance No. [Click here to enter text.](#)

Continued To: [Click here to enter a date.](#) Referred To: [Click here to enter text.](#)

☐ Approved ☐ Denied ☐ Other: [Click here to enter text.](#)

File Name: CC agendas 3-27-2024



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.3

SUBJECT: Discussion/Action - Variance at 401 Hwy. 181 to allow a mobile home that exceeds the age limit

DEPARTMENT: Community Development

DATE SUBMITTED: March 21, 2024

SUBMITTED BY: Traci Alvarez

WHO WILL PRESENT THE ITEM: Traci Alvarez Assistant City Manager

Summary/Background:

Refer to P & Z Packet attached

Recommendation:

P & Z Commission recommended approval – no opponents/proponents

Attachments:

- P & Z Packet
- Draft Minutes

Fiscal Impact (Finance): TBD

[Click here to enter text.](#)

Legal Review (City Attorney): Yes

Approved For Submittal By: ☐ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. [Click here to enter text.](#) Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC agendas 3-27-24



CITY OF TRUTH OR CONSEQUENCES
PLANNING AND ZONING COMMISSION ACTION FORM
DATE: 3-11-2024

ITEM: Public Hearing/Discussion/Action: Variance at 401 Hwy. 181 to allow a mobile home that exceeds the age limit

BACKGROUND:

Applicant is requesting a variance to allow a Mobile Home at 401 Hwy 181. This Variance is being requested because the mobile home exceeds the age limit per city code – must be less than 20 years old at time of installation. 401 Hwy 181 is located in the C-1 Zone and the mobile home meets required size standards per the Standards for District. All property owners within 300ft were notified and all required documents and fees paid. Mobile Home has been converted to an office and will be renovated and updated to continue to use as office space.

SUPPORT INFORMATION:

Public Hearing Notice

Photos

Findings of Facts Checklist

Name of Drafter: Traci Alvarez	: Assistant City Manager	Meeting date 3-11-2024
E-mail: talvarez@torcnm.org	Phone: 575-894-6673	

*Rolf Hechler
Mayor*



*Destiny Mitchell
Commissioner*

*Amanda Forrister
Mayor Pro-Tem*

*Ingo Hoepfner
Commissioner*

*Merry Jo Fahl
Commissioner*

*Angie Gonzales
City Manager*

*505 Sims St.
Truth or Consequences, New Mexico 87901
P: 575-894-6673 ♦ F: 575-894-7767
www.torcnm.org*

NOTICE OF PUBLIC HEARING

NOTICE is hereby given that the City of Truth or Consequences Planning & Zoning Commission will hold a Public Hearing during their regular scheduled meeting on Monday, March 11, 2024, to receive input regarding the following:

Public Hearing/Discussion/Action: Variance at 401 Highway 181, requesting permission for a mobile home that exceeds the age limit per city code.

The meeting will be held in the City Commission Chambers, 405 W. Third, Truth or Consequences, New Mexico starting at 4:00 p.m.

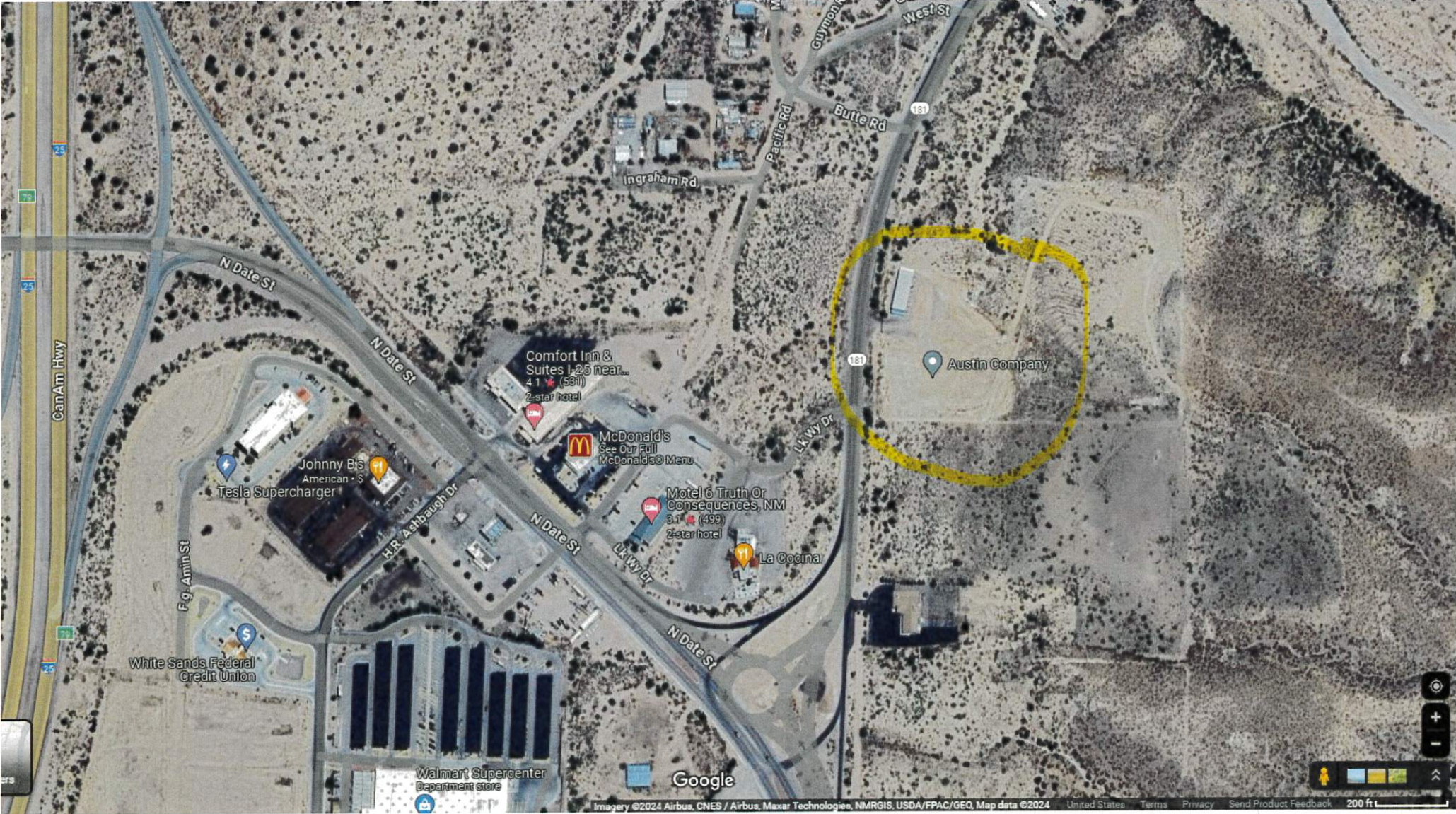
Should you have any questions regarding this Public Hearing, please contact Traci Alvarez at (575) 941-0565 or by email at talvarez@torcnm.org.

The agenda may be obtained on Friday, March 8, 2024 on the city website calendar at www.torcnm.org; by contacting the City Clerk's Office at 575-894-6673; or by email to: torcclerk@torcnm.org.

/s/ Angela A. Torres, CMC, City Clerk

Publish on the following date:

- Sentinel— Friday, February 9, 2024









**CITY OF TRUTH OR CONSEQUENCES
PLANNING & ZONING COMMISSION
MINUTES
MONDAY, MARCH 11, 2024**

REGULAR MEETING

Regular meeting of the Planning & Zoning Commission of the City of Truth or Consequences, New Mexico to be held in the City Commission Chambers, 405 W. Third, Truth or Consequences, New Mexico, on Monday, March 11, 2024 at 4:00 p.m.

INTRODUCTION:

ROLL CALL:

Chris Sisney, Chairman
Susan Buhler, Vice Chairman
Esther Luchini, Member
Lisa Kent, Member

ALSO PRESENT:

Traci Alvarez, Assistant City Manager
Angela A. Torres, City Clerk

1. APPROVAL OF AGENDA:

Chairman Sisney made a motion to approve the agenda. Member Luchini seconded the motion. Motion carried unanimously.

2. APPROVAL OF MINUTES:

a) February 12, 2024.

Member Luchini made a motion to approve the minutes. Vice Chairman Buhler seconded the motion. Motion carried unanimously.

3. COMMENTS FROM THE PUBLIC (3 Minute Rule Applies)

There were no comments from the public.

4. PUBLIC HEARINGS (5 Minute Rule Applies)

a) Public Hearing/Discussion/Action: Variance at 401 Hwy. 181 to allow a mobile home that exceeds the age limit.

City Clerk Torres swore in the participants for the public hearing.

Assistant City Manager Alvarez: This public hearing is for a variance request at 401 Hwy. 181 to allow a mobile home that exceeds the age limit. The mobile home in question is the mobile home that was located on the old Anderson Home property as an office for them. The applicant Jose Rios is from RY Construction, and he wants to continue to use that as an office and move it to the lot at 401 Hwy. 181. He relocated it there. He has just has not done any of the installation, pending this hearing, due to the film crew in town. They needed to move it from that lot. As a contractor he has every intent of bringing the exterior up to code on the mobile home and doing all of the work required to make it look nice. The public hearing is the request to be able to relocate that mobile home that is used as an office to this property and continue using it as an office.

Chairman Sisney opened the public hearing.

Vice Chairman Buhler: How old is that mobile home?

Applicant Jose Rios: We tried to look for a year on it, but there was nothing we could find on it. I think it is in the 90's.

Assistant City Manager Alvarez: We looked at the county and they didn't have anything on the file at the county either which was surprising.

Applicant Jose Rios: It is a modular unit vs. a mobile unit. The difference is that it was never a home. It was always an office. There weren't bedrooms, showers, or things of that nature. There is a restroom and 3 offices.

Assistant City Manager Alvarez: I was in there when Anderson Homes was there, and it was an office at that time.

Vice Chairman Buhler: What is the code for if you take an old mobile home off and you put it somewhere else in the city. Can you do that?

Assistant City Manager Alvarez: That's why we are here. It has to go through a public hearing.

Vice Chairman Buhler: So, no you're not supposed to. Is that correct?

Assistant City Manager Alvarez: In order to move a mobile home to a property that is older than 20 years, it has to go through this process. Due to the filming, he relocated the mobile home to

the property, because the film crew is taking over that lot for filming, but it is not unloaded or installed on the property. He had to wait until it came through here.

Applicant Jose Rios: I went through the purchase process with the state, but I do need a signature from Planning & Zoning for the variance and to sign off on my permit application so I can turn it in with the state, and then I will have to go through a process with the State of New Mexico.

Vice Chairman Buhler: So, you would ground set it and do all that, and nobody would be living there?

Applicant Jose Rios: No ma'am.

Vice Chairman Buhler: Would it have air conditioning and heating?

Applicant Jose Rios: Absolutely, and it's all going to get redone. It's actually immaculate inside. That's why I bought it.

Member Kent: You bought this from another business and you're moving onto your property? So, the movie didn't really have anything to do with it. You were moving it anyways?

Applicant Jose Rios: I was not going to move it until we got everything approved, but the film crew got here, and Andersons asked if I could move it.

Member Kent: So that rushed you along.

Applicant Jose Rios: I just put it on that lot in hopes to get it approved by you guys so I can get it set up. It will all go through the state process, and if it does get approved, I will be getting city electric and water. All of that will be moved onto that lot also, so there will be new services going in there from the city.

Vice Chairman Buhler: How long will it take for you to get it fixed up?

Applicant Jose Rios: No more than 90 days once it is approved. There is a process that we have to go through. Electric has to get moved on to it, and also water.

Assistant City Manager Alvarez: They will have to put in a tap request for utilities. None of that is there yet.

Applicant Jose Rios: If this gets approved, then Traci will be able to sign off on my application, and it will get sent into the state, so there is a process for the application that I have to go through after this is done, but I think I can get it done within 90 days.

Vice Chairman Buhler: You'll cut the tongues off too?

Applicant Jose Rios: Oh yeah. It is going to be ground set, and it will look like it is level to the ground. I will make it look pretty.

Member Luchini: What color are you going to paint it?

Applicant Jose Rios: I am going to keep it tan because all of the rest of the buildings that are already existing are tan.

Member Luchini: Is that city sewer also?

Applicant Jose Rios: I will have to look into it, but I'm pretty sure that we are going to have to install a septic.

Assistant City Manager Alvarez: I think so too. I don't this sewer goes out that far, and I think that it is probably going to be Sierra Electric Coop. It might be really close to the city electric.

Applicant Jose Rios: I am right on the border with you guys, but is considered city limits along there.

Assistant City Manager Alvarez: The property is located in the area where you turn to go out to Elephant Butte. It is right at the edge of the city limits and county limits.

Member Kent: So, will this be visible from the street? So, if the mobile home were to be approved and you left it there, would it be visible from the road?

Applicant Jose Rios: It will be yes. It will be kinda hard to see because that property is down there on the bottom, but if you look hard, you can see it. And again, nobody can live in it because it was never a home.

Member Luchini: So, I imagine that the electrical inside is up to date?

Applicant Jose Rios: Yes. Licensed electricians, plumbers, and HVAC specialists will be hired. I am a licensed general contractor.

Assistant City Manager Alvarez: I work with RY Construction on quite a bit of their projects and they are always very good at bringing in their plans and submitting for their permits through the state. I can go to the state website and look very easily to see who has a state permit, and never a doubt, when I look his up, they have always been permitted through the state.

Vice Chairman Buhler: What is the time limit on bringing it up to date?

Assistant City Manager Alvarez: So that can be designated by you guys. We don't have a time limit set in our Municipal Code.

Applicant Jose Rios: I have 120 days before I have to renew my permit through the state, so let's say it takes me longer than 120 days, I will then have to re-submit for renewal through the state. Once I submit the renewal, then they will renew it for another 120 days. That is a state standard.

Proponents:

There were no proponents.

Opponents:

There were no opponents.

Chairman Sisney closed the public hearing.

Chairman Sisney made a motion to recommend approval to the City Commission for a Variance at 401 Hwy. 181 to allow a mobile home that exceeds the age limit. Vice Chairman Buhler seconded the motion. Roll call vote was taken. Motion carried unanimously.

5. NEW BUSINESS:

a) Discussion/Action: Permitted Uses—With Conditions - 401 Hwy 181 – Construction Yard and Storage units.

Assistant City Manager Alvarez: This property is in the commercial district, and by right allowance in the commercial district with conditions is allowance for a construction yard, as well as for storage units. They are permitted in accordance with the state and conditions and upon approval by the Planning & Zoning Board. I included that section of the code in your packet. If you look at page 3 of 4, number 11: Construction or Contractor's yard shall be maintained in a neat and orderly fashion, enclosed by a fence (6) feet in height, except that the height shall be limited to (3) feet on the street curb with a clear site triangle as defined in this code. Number 19 under Storage Units says: Units shall not be for commercial sales of products, merchandise, service or repair. This does not preclude a business from using the storage unit solely for storage of commercial or business-related items provide that the actual commercial operation or business is conducted elsewhere, and there is no external evidence of the business at the storage unit. This will be a normal storage unit place. He will have some storage units for people to store stuff in. We are requesting approval from the Planning & Zoning Board for that property to be used for a construction yard, as well as for the storage units.

Member Kent: So, the storage units don't exist yet? That's part of what you want to do with the land?

Assistant City Manager Alvarez: No not yet, and yes.

Vice Chairman Buhler: And that would be for the general public?

Applicant Jose Rios: Yes. I will not be storing junk in there either. I plan on buying all enclosed storage units.

Vice Chairman Buhler: You'll keep it neat and nice?

Applicant Jose Rios: Yes ma'am.

Vice Chairman Buhler made a motion to recommend approval to the City Commission for Permitted Uses—With Conditions - 401 Hwy 181 – Construction Yard and Storage units. Member Luchini seconded the motion. Roll call vote was taken. Motion carried unanimously.

b) Discussion/Action: Revocation of Variance at 1306 Tin St.

Assistant City Manager Alvarez: As you know, you recommended, and the City Commission approved a variance request for an installation of a mobile home that exceeded the age limit on 1306 Tin Street. This one has been a little frustrating because they haven't met any of the development requirements. I know that you guys have been wanting to see this, and just know that we have a process that we have to go through. We have to give a person reasonable time, reach out to them. There are steps that we have to follow, so we have been following those steps. I've had a couple of conversations with that applicant, always with the promise to get going on it. Code Enforcement had to go through their process with the code violations. We still don't have any results. As per the Municipal Code, this board has the ability to revoke this. I know that our Municipal Code says that it should be automatically revoked if they haven't taken care of or constructed within 90 to 180 days after the building permits have been issued, but it is the attorney's recommendation that it come to this board first as a recommendation to proceed with the revocation. If you approve that, then we will issue an official letter from the attorney notifying the applicant that their variance will be heard at a public meeting in front of the City Commission with the intent to revoke, which means that they would have to remove the mobile home from that lot, or bring it to code. Those are the steps that the city attorney has recommended that I follow.

Vice Chairman Buhler: Would you want more time?

Assistant City Manager Alvarez: I think that the applicant has been given ample time. I've had conversations with them, and I feel like I was very clear, including mailing the section of the code that shows exactly what needs to be done. I know times are tight financially. I know that contractors are busy, but I've even requested some very simplified things, and I don't feel that those requests have been met.

Member Kent: Is the one that has been sitting on the property for quite some time before they even came asking for the variance?

"It was noted that was the same property Member Kent was referring to."

Vice Chairman Buhler: They have done a lot of work on it, and I think they have tried.

Member Kent: So, what you are saying today is, if we were to agree to the recommendation for the revocation, is that they would still have a chance to get it done.

Assistant City Manager Alvarez: Correct. They will be issued a letter that says that is will go in front of the Commission by public hearing, and that will give them some time, and then there will be a public hearing, and then the Commission has the opportunity to give them a deadline date at that point, so they have plenty of an opportunity.

Chairman Sisney: Were they invited to today's meeting?

Assistant City Manager Alvarez: No, not at this point in time. It was the attorney's recommendation to bring it to you first to see if this is the process that you wanted to follow. If this is the process you wanted to follow, then they will be notified that we are intending to revoke their variance request.

Member Luchini: What about the one on Simpson?

Assistant City Manager Alvarez: There is a process that we follow for all of these with deadlines and dates, and so I have to go through those processes and procedures. It has to do with the notification and getting a hold people, then the signing of certified letters because there are dates when they sign for things. I can say that I called somebody and left a message, but I don't necessarily have the proof so that's why we send certified letters, and if I don't get the signed certified mailing back, then there is no proof that they received it. We have to wait until we receive or serve them in another manner if the certified letter is not being signed for or picked up. There are other ways to serve them, so I have to get that documentation for deadline dates or hardcore dates to be able to take it to the attorney to where he feels comfortable enough going through this process.

Chairman Sisney: Why is this one timed out, but the one on Simpson hasn't?

Assistant City Manager Alvarez: Because I was able to get a hold of this person sooner, than I was able to get ahold of the other one.

Chairman Sisney: I'm curious of what the correspondence has been between the city and these people.

Assistant City Manager Alvarez: We have attempted phone calls, certified letters, and from there it goes to Code Enforcement. They attempt onsite visitation and issuance and violation letters. We've also had a turnover with our Code Enforcement Officer, so until we have signed certified letter, or until we have proof that the Code Enforcement Officer has made physical contact with somebody to speak to them, because they have the body cam, or serve in another manner other than a certified letter. Until we have those dates, the City Attorney is not comfortable going through this process until I can give him exact dates of when they received the notice.

Chairman Sisney: What is happening with the one on Simpson?

Assistant City Manager Alvarez: The same thing that is happening for this one here. We've attempted contact. We made some verbal contact with them over the phone, and Code Enforcement has also contacted them. Once we get enough information, and the Attorney feels that we have done our due diligence of contacting them, and he goes through the process of a revocation of a variance, then you will very well see that other one come to you. Hopefully it will be very soon.

Chairman Sisney: Can I see the interaction with you and the people on tin? I would like to see the contact, the letters that were mailed and what attempts were made to contact them.

Assistant City Manager: I can reach out to Code Enforcement and see if they have copies of the violation letters. I will have to ask if they sent a violation letter or if they met in person. I had conversations on the phone with them.

Chairman Sisney: Did they tell you that they just gave up and they don't want to get this thing done?

Assistant City Manager: No, they told me that they were going to get stuff done. That's what I'm saying. They haven't done what I requested them to do. That is why it is coming to you guys.

Member Kent: What have you requested that they are not acting on?

Assistant City Manager: it is supposed to be on a permanent foundation, or they need to go through CID for their mobile home permitting if it is not on permanent foundation. There is something with the state that allows that, but they haven't done anything. There is skirting that is required to be around the bottom of it. The wheels have to be out. The tongue can't be hanging out. There is a whole list of requirements that they have to meet for mobile home installation. That is for anybody who has a mobile home, not just someone who is putting one in that is less than 20 years old.

Member Kent: So, have they done any of it?

Assistant City Manager: No. Neither one has done anything that I've asked.

Chairman Sisney: In the future, I would like to ask that we see that stuff.

Assistant City Manager: I will have to check with the attorney to find out what is public record, and what isn't.

Chairman Sisney: I would like the information because I like to be as informed as possible while making a decision. I don't want to make any mistakes. Will this letter give them the opportunity to ask for an extension?

Assistant City Manager: Yes. Potentially. This is a new process. Our attorney hasn't even done it before. I had to do a lot of digging in our Municipal Code before I was able to tell him that we have the authority to do this. A public hearing will be held in front of the Commission, and anybody could come and speak for or against it, including this board. The Commission has the authority at that point in time to grant them more time if they wish. Again, this is a new process. It is not clear in our code.

Member Luchini: Should we create the process before we make a motion?

Assistant City Manager: You can. That is going to be a long process. You are looking at a good 60 to 90 plus days minimum. Probably even more than that because it would be an ordinance change. We would have to draft the ordinance, it would have to go the City Commission for publication, there is a publication timeline, and then it would go back to the Commission for a public hearing and final adoption. Then it takes how many days after they adopt an ordinance?

City Clerk Torres: This type of ordinance would be 5 days after adoption, but since it an ordinance, it could be petitioned within 30 days after adoption.

Assistant City Manager: You also have to take into consideration the time it will take for the Planning & Zoning Commission to draft the ordinance and procedures that they want.

City Clerk Torres: That is something you can keep in mind for the future.

Member Luchini: It's just that, unless we read every section of the code (and we should), we don't realize these things until it comes up here.

City Clerk Torres: Do you want me to provide you with the Planning & Zoning Ordinances again?

Member Kent: It's all online isn't it?

City Clerk Torres nodded yes.

Assistant City Manager: The municipal code is huge, and there are a lot of things that we are very familiar with, but then every once in a while, something odd comes up that we've never done before, so then we start reviewing it in the code, and the code sometimes doesn't give us a whole lot of guidance, and at that point in time, we reach out to the attorney for their recommendation. When this happens, we make note of that section that needs to be revised. We had an engineering firm that came in at one point and talked about working on revising the entire Municipal Code. That is something that has been put on the back burner because it will cost around \$26,000 to revise our entire Municipal Code, so we have been trying to do it little by little in-house.

Vice Chairman Buhler: I think it is a good recommendation, because it will put more pressure on those people to do what they are supposed to do, and what they agreed to do. I don't think anyone is living there.

Member Kent: The things you are asking for by the examples you have given are not huge or overly extensive things. They should be able to follow through with your request because that was part of the agreement when they were granted the variance. That is what you have to do if you want to have this on your property. It is written in the code. I've read it, so if we need to take action to encourage them along a little more, then I hope they come through.

Assistant City Manager: If I saw a little bit of progress, it would be ok. I know that skirting a trailer can be expensive, but if I saw even one panel or one section going up a month or a couple of things done here or there or a little bit at a time, then it would be different, but when you see no progress, that is when you have to learn to draw a line.

Vice Chairman Buhler: This request is not unreasonable.

Vice Chairman Buhler made a motion that city staff work with the City Attorney to draft a letter for the intent to revoke the Variance at 1306 Tin St. Member Kent seconded the motion. Roll call vote was taken. Motion carried unanimously.

6. REPORTS FROM THE BOARD:

There were no reports from the board.

7. REPORTS FROM STAFF:

There were no reports from city staff.

8. ADJOURNMENT:

Chairman Sisney adjourned the meeting at 4:37 p.m.

PASSED AND APPROVED ON THIS 8th DAY OF April, 2024.

**Chris Sisney, Chairman
Planning & Zoning Board**



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.4

SUBJECT: Discussion/Action: Permitted Uses—With Conditions - 401 Hwy 181 – Construction Yard and Storage units

DEPARTMENT: Community Development

DATE SUBMITTED: March 21, 2024

SUBMITTED BY: Traci Alvarez

WHO WILL PRESENT THE ITEM: Traci Alvarez Assistant City Manager

Summary/Background:

Refer to P & Z Packet attached

Recommendation:

P & Z Commission recommended approval – no opponents/proponents

Attachments:

- P & Z Packet
- Draft Minutes

Fiscal Impact (Finance): TBD

[Click here to enter text.](#)

Legal Review (City Attorney): Yes

Approved For Submittal By: ☐ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. [Click here to enter text.](#) Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC agendas 3-27-24



CITY OF TRUTH OR CONSEQUENCES
PLANNING AND ZONING COMMISSION ACTION FORM
DATE: 3-11-2024

ITEM: Discussion/Action - Permitted Uses—With Conditions - 401 Hwy 181 – Construction Yard and Storage units

BACKGROUND:

The following C-1 uses are permitted in accordance with stated conditions and upon approval by the Planning and Zoning Commission.

Construction or Contractor's Yard: Yard shall be maintained in a neat and orderly fashion and enclosed by a fence at least six (6) feet in height except that the height shall be limited to three (3) feet above street curb within a clear site triangle as defined in this Code.

Mini Storage Units: Units shall not be used for commercial sales of products, merchandise, service or repair. (This does not preclude a business from using storage units solely for storage of commercial or business related items provide that the actual commercial operation or business is conducted elsewhere, and there is no external evidence of the business at the storage unit.)

SUPPORT INFORMATION:

Code References

Name of Drafter: Traci Alvarez	: Assistant City Manager	Meeting date 3-11-2024
E-mail: talvarez@torcnm.org	Phone: 575-894-6673	

Sec. 11-9-7. C-1 General Commercial District.

- A. **PURPOSE.** The intent of the C-1 District is to provide for certain commercial/retail uses which serve both transient and local trade. The District is intended for areas surrounding major arterial or collector streets where a wide range of automobile-related service facilities, convenience goods and personal services are desirable and appropriate as a land use.
- B. **DEVELOPMENT STANDARDS.** Development standards and other requirements are provided in Articles X through XIV of this Code.
- C. **C-1 PERMITTED USES.**

• Accountant Office	• Arts and Crafts Studio
• Advertising Services	• Auditoriums
• Animal Hospital and Clinic	• Automobile Parking Lot
• Auto and Camper Sales, Service and Rental	• Gasoline Pumps
• Automotive Equipment	• Gasoline Stations
• Bakery	• Gift Shop
• Banking and Financial Institution	• Glass Cutting and Finishing
• Barber Shop and Beauty Parlor	• Golf Course
• Bathhouse or Spa	• Grocery Store
• Bicycle Sales and Service	• Gymnasium
• Boat and RV Storage	• Hardware Store
• Bookstores and Stationery Shops	• Heavy Equipment Sales
• Building and Other Construction-Contractor: office only	• Hobby Shop
• Business Service Establishment	• Hospital or Overnight Clinic
• Butcher Shop and Meat Sales	• Hotel and Motel
• Catering	• Household Appliance Sales and Service and Repair
• Cigarette and Cigar Shop	• Insurance Services
• Clinic	• Institutions, Public and Quasi-Public
• Clothing Store and Apparel Shop	• Jewelry Store
• Coffee Shop	• Kennel, Commercial
• Columbarium	• Laboratory (medical, dental or engineering)
• Community Center or Public Office Building	• Liquor Store - Taverns and Package Stores
• Convenience Store	• Pet Shop or Grooming Parlor
• Convention or Exhibition Hall	• Photographic Studio and Supply Store
• Country Club	• Plant Nursery
• Dance Hall or Music Academy	• Plumbing and Heating Shop
• Dentist Office	• Pool and Billiard Room
• Department Store	• Post Office
• Dressmaking Shop	• Private Club or Lounge
• Drugstore	• Public Park, Playground and Recreational
• Dry-cleaning and Steam cleaning Establishment	• Radio, Television Broadcasting Studios, Music Store
• Electrical Shop and Electricians	• Real Estate Services
• Farm Machinery	• Restaurant
• Farm and Ranch Products and Supplies	• Retail Sales
• Fast Food Sales including Drive-In Sales	• Roofing and Sheet Metal Shop

• Firewood Sales	• Shoe Repair
• Florist Shop	• Show and Sales Room for Business Products
• Food Store	• Skating Rink
• Frozen Food Locker	• Sporting Goods Store
• Funeral Home, Mortuary (including crematorium)	• Tailoring
• Furniture and Home Furnishings	• Taverns and Cocktail Lounges
• Taxicab Transportation	• Travel Agency
• Telephone Exchange Station	• Upholstery
• Telegraph and Messenger Service	• Variety Store
• Tire Sales and Service	• Warehousing and Storage
• Title and Abstracting Services	• Watch and Clock Sales and Service

D. **PERMITTED USES—WITH CONDITIONS.** The following C-1 uses are permitted in accordance with stated conditions and upon approval by the Planning and Zoning Commission.

1. **Adult Entertainment Uses:** Uses such as adult bookstores, adult movie theaters, and adult news racks, as defined in Article 8 of this Code, shall be permitted provided such use is located a minimum of three hundred (300) feet from a property line of any:

- a. School;
- b. Church;
- c. Public park or recreational facility;
- d. Residential District;
- e. Another adult entertainment facility.

There shall be no public display visible outside of the building. In addition, display of adult pictures of other materials within a grocery store, bookstore, or other retail or wholesale store shall be concealed from public view.

2. **Amusement Park or Enterprise:** Subject to any other provisions and requirements of the Municipal Code. Temporary amusement enterprises are prohibited within three hundred (300) feet of any residential zoning District. Permanent amusement enterprises are prohibited within five hundred (500) feet of any residential zoning District.
3. **Automobile Body and Repair Shop:** Not permitted with one hundred (100) feet of any residential District.
4. **Bank Drive-up Windows:** Stacking lane(s) of one hundred eighty (180) feet by ten (10) feet for each drive-up must be provided and designed to insure that no bank traffic backs onto the street giving access. Banks must be located on a collector or arterial streets as shown on the City Street Plan.
5. **Bowling Alley:** Subject to approval of site and related plans. Bowling alleys are prohibited within three hundred (300) feet of any residential zoning District.
6. **Bus or Motor Freight Terminal:** Only when located on an arterial street as designated on the City Street Plan.
7. **Car Washes:** There shall be no run-off onto neighboring properties or streets resulting from the use. Any discharge into public liquid waste disposal systems shall be approved by the administrator of the system prior to approval of the business. If the subject property is not served by a public waste disposal system, approval from the New Mexico Environmental Department shall be required.

-
8. Child Care Center, Nursery or Similar Use: Play areas shall be in accord with State licensing requirements and enclosed by a solid wall or fence five (5) feet in height.
 9. Christmas Tree Sales: Temporary, not prior to November 15, provided lots are cleaned and removed by December 31.
 10. Church: Only when located on an arterial or collector street as designated on the City Street Plan.
 11. Construction or Contractor's Yard: Yard shall be maintained in a neat and orderly fashion and enclosed by a fence at least six (6) feet in height except that the height shall be limited to three (3) feet above street curb within a clear site triangle as defined in this Code.
 12. Drive-In Theater: Subject to approval of site and related plans.
 13. Firewood Sales: No more than twenty (20) cords stored on site.
 14. Flea Market: Subject to any other requirements of the Municipal Code.
 15. Furniture Assembly (Accessory Use): Permitted only as an incidental or accessory use to retail sales. Maximum floor area for assembly shall not exceed three thousand (3,000) square feet, not exceed thirty percent (30%) of the total business floor area, and shall be within the same building.
 16. Gas Pressure Control Stations: (Public or Private Utility.)
 17. Heavy Equipment Repair (Accessory Use): Permitted only as an incidental or accessory use to heavy equipment sales. Floor area for repair shall not exceed three thousand (3,000) square feet and not exceed thirty percent (30%) of the total gross floor area. Welding is permitted only in conjunction with repair and shall not be used for the purpose of heavy equipment assembly.
 18. Miniature Golf Course: Subject to approval of site and related plans. Not permitted within one hundred (100) feet of any residential District.
 19. Mini Storage Units: Units shall not be used for commercial sales of products, merchandise, service or repair. (This does not preclude a business from using storage units solely for storage of commercial or business related items provide that the actual commercial operation or business is conducted elsewhere, and there is no external evidence of the business at the storage unit.)
 20. School, Public, Private or Trade: Sites shall be located on an arterial or collector street as shown on the City Street Plan.
 21. Shopping Center: Providing site, drainage, and related plans for the entire development are approved.
 22. Storage of Wrecked or Dismantled Vehicles and Parts (Accessory Use): The storage of wrecked and dismantled vehicles and parts thereof shall be permitted only as an incidental accessory use to a vehicle repair establishment or a body shop:
 - a. Storage shall be within an enclosed building or within a sight-obscuring fence at least six (6) feet in height;
 - b. Vehicles and parts stored at the exterior of the building shall be owned by customers of the business and such storage shall be only for the purpose of repair and return to customer;
 - c. Exterior storage of vehicles shall not remain on the premises for a period exceeding three (3) months;
 - d. A maximum of five (5) wrecked vehicles may be stored at the building exterior during any one time;
 - e. Exterior storage shall be a minimum of one hundred (100) feet from a residential District.

-
23. Swimming Pools: Permitted only when a protective fence four (4) feet in height is provided around the yard, lot or pool area. The pool shall be no closer than five (5) feet from any property line, and approval from all utilities is required to insure overhead safety.
 24. Television and Radio Towers and all Other Free Standing Towers (Public and Private Uses): Towers shall have manufacturer's specifications to withstand a 75 mph wind and shall be constructed to meet New Mexico Building Code standards.
 25. Welding (Accessory Use): Welding shall be permitted only as an incidental or accessory use necessary for the repair of vehicles or equipment permitted in the C-1 District. Welding uses shall be approved by the Fire Department and shall be in accord with any other provisions of the Municipal Code.
 26. Wrecker Service: In accord with storage of wrecked vehicle provisions of Item D.22 of this Section.
- E. *SPECIAL USES FOR C-1 DISTRICT.* The following uses require approval of the City Commission. Specific conditions and provisions for special use may be referred to in Article V.
1. Dwelling Unit: Special Use Permits are required for dwellings within the C-1 District upon lots or other parcels located directly adjacent to Broadway Avenue, Main Street or Date Street. Dwellings elsewhere within the C-1 District are permitted by right. Manufactured Homes (MH's) are permitted within the C-1 District subject to the provisions stated herein and in Articles 11 and 14.
 2. Apartments ten (10) unit minimum)
 3. Concrete Sales and Ready Mix
 4. Correctional Facilities and Institutions
 5. Heavy Equipment Repair and Service
 6. Kennel (Commercial)
 7. Manufactured Home Park or Subdivision: Subject to the provisions of Articles 11 and 14.
 8. Propane or Liquefied Petroleum Gas Distribution Point: Up to two thousand (2,000) gallons, not be located within three hundred thirty (330) feet of any residential zoning district, or within the area bounded by Date, Main and Austin Streets.
 9. Racetrack
 10. Residential Vehicle Park
 11. Recycle Purchase Center
 12. Stadium: Baseball, Football, Soccer or Track.
 13. Townhouses (R-2 Development Standards apply)
 14. Welding Shop

**CITY OF TRUTH OR CONSEQUENCES
PLANNING & ZONING COMMISSION
MINUTES
MONDAY, MARCH 11, 2024**

REGULAR MEETING

Regular meeting of the Planning & Zoning Commission of the City of Truth or Consequences, New Mexico to be held in the City Commission Chambers, 405 W. Third, Truth or Consequences, New Mexico, on Monday, March 11, 2024 at 4:00 p.m.

INTRODUCTION:

ROLL CALL:

Chris Sisney, Chairman
Susan Buhler, Vice Chairman
Esther Luchini, Member
Lisa Kent, Member

ALSO PRESENT:

Traci Alvarez, Assistant City Manager
Angela A. Torres, City Clerk

1. APPROVAL OF AGENDA:

Chairman Sisney made a motion to approve the agenda. Member Luchini seconded the motion. Motion carried unanimously.

2. APPROVAL OF MINUTES:

a) February 12, 2024.

Member Luchini made a motion to approve the minutes. Vice Chairman Buhler seconded the motion. Motion carried unanimously.

3. COMMENTS FROM THE PUBLIC (3 Minute Rule Applies)

There were no comments from the public.

4. PUBLIC HEARINGS (5 Minute Rule Applies)

a) Public Hearing/Discussion/Action: Variance at 401 Hwy. 181 to allow a mobile home that exceeds the age limit.

City Clerk Torres swore in the participants for the public hearing.

Assistant City Manager Alvarez: This public hearing is for a variance request at 401 Hwy. 181 to allow a mobile home that exceeds the age limit. The mobile home in question is the mobile home that was located on the old Anderson Home property as an office for them. The applicant Jose Rios is from RY Construction, and he wants to continue to use that as an office and move it to the lot at 401 Hwy. 181. He relocated it there. He has just has not done any of the installation, pending this hearing, due to the film crew in town. They needed to move it from that lot. As a contractor he has every intent of bringing the exterior up to code on the mobile home and doing all of the work required to make it look nice. The public hearing is the request to be able to relocate that mobile home that is used as an office to this property and continue using it as an office.

Chairman Sisney opened the public hearing.

Vice Chairman Buhler: How old is that mobile home?

Applicant Jose Rios: We tried to look for a year on it, but there was nothing we could find on it. I think it is in the 90's.

Assistant City Manager Alvarez: We looked at the county and they didn't have anything on the file at the county either which was surprising.

Applicant Jose Rios: It is a modular unit vs. a mobile unit. The difference is that it was never a home. It was always an office. There weren't bedrooms, showers, or things of that nature. There is a restroom and 3 offices.

Assistant City Manager Alvarez: I was in there when Anderson Homes was there, and it was an office at that time.

Vice Chairman Buhler: What is the code for if you take an old mobile home off and you put it somewhere else in the city. Can you do that?

Assistant City Manager Alvarez: That's why we are here. It has to go through a public hearing.

Vice Chairman Buhler: So, no you're not supposed to. Is that correct?

Assistant City Manager Alvarez: In order to move a mobile home to a property that is older than 20 years, it has to go through this process. Due to the filming, he relocated the mobile home to

the property, because the film crew is taking over that lot for filming, but it is not unloaded or installed on the property. He had to wait until it came through here.

Applicant Jose Rios: I went through the purchase process with the state, but I do need a signature from Planning & Zoning for the variance and to sign off on my permit application so I can turn it in with the state, and then I will have to go through a process with the State of New Mexico.

Vice Chairman Buhler: So, you would ground set it and do all that, and nobody would be living there?

Applicant Jose Rios: No ma'am.

Vice Chairman Buhler: Would it have air conditioning and heating?

Applicant Jose Rios: Absolutely, and it's all going to get redone. It's actually immaculate inside. That's why I bought it.

Member Kent: You bought this from another business and you're moving onto your property? So, the movie didn't really have anything to do with it. You were moving it anyways?

Applicant Jose Rios: I was not going to move it until we got everything approved, but the film crew got here, and Andersons asked if I could move it.

Member Kent: So that rushed you along.

Applicant Jose Rios: I just put it on that lot in hopes to get it approved by you guys so I can get it set up. It will all go through the state process, and if it does get approved, I will be getting city electric and water. All of that will be moved onto that lot also, so there will be new services going in there from the city.

Vice Chairman Buhler: How long will it take for you to get it fixed up?

Applicant Jose Rios: No more than 90 days once it is approved. There is a process that we have to go through. Electric has to get moved on to it, and also water.

Assistant City Manager Alvarez: They will have to put in a tap request for utilities. None of that is there yet.

Applicant Jose Rios: If this gets approved, then Traci will be able to sign off on my application, and it will get sent into the state, so there is a process for the application that I have to go through after this is done, but I think I can get it done within 90 days.

Vice Chairman Buhler: You'll cut the tongues off too?

Applicant Jose Rios: Oh yeah. It is going to be ground set, and it will look like it is level to the ground. I will make it look pretty.

Member Luchini: What color are you going to paint it?

Applicant Jose Rios: I am going to keep it tan because all of the rest of the buildings that are already existing are tan.

Member Luchini: Is that city sewer also?

Applicant Jose Rios: I will have to look into it, but I'm pretty sure that we are going to have to install a septic.

Assistant City Manager Alvarez: I think so too. I don't this sewer goes out that far, and I think that it is probably going to be Sierra Electric Coop. It might be really close to the city electric.

Applicant Jose Rios: I am right on the border with you guys, but is considered city limits along there.

Assistant City Manager Alvarez: The property is located in the area where you turn to go out to Elephant Butte. It is right at the edge of the city limits and county limits.

Member Kent: So, will this be visible from the street? So, if the mobile home were to be approved and you left it there, would it be visible from the road?

Applicant Jose Rios: It will be yes. It will be kinda hard to see because that property is down there on the bottom, but if you look hard, you can see it. And again, nobody can live in it because it was never a home.

Member Luchini: So, I imagine that the electrical inside is up to date?

Applicant Jose Rios: Yes. Licensed electricians, plumbers, and HVAC specialists will be hired. I am a licensed general contractor.

Assistant City Manager Alvarez: I work with RY Construction on quite a bit of their projects and they are always very good at bringing in their plans and submitting for their permits through the state. I can go to the state website and look very easily to see who has a state permit, and never a doubt, when I look his up, they have always been permitted through the state.

Vice Chairman Buhler: What is the time limit on bringing it up to date?

Assistant City Manager Alvarez: So that can be designated by you guys. We don't have a time limit set in our Municipal Code.

Applicant Jose Rios: I have 120 days before I have to renew my permit through the state, so let's say it takes me longer than 120 days, I will then have to re-submit for renewal through the state. Once I submit the renewal, then they will renew it for another 120 days. That is a state standard.

Proponents:

There were no proponents.

Opponents:

There were no opponents.

Chairman Sisney closed the public hearing.

Chairman Sisney made a motion to recommend approval to the City Commission for a Variance at 401 Hwy. 181 to allow a mobile home that exceeds the age limit. Vice Chairman Buhler seconded the motion. Roll call vote was taken. Motion carried unanimously.

5. NEW BUSINESS:

a) Discussion/Action: Permitted Uses—With Conditions - 401 Hwy 181 – Construction Yard and Storage units.

Assistant City Manager Alvarez: This property is in the commercial district, and by right allowance in the commercial district with conditions is allowance for a construction yard, as well as for storage units. They are permitted in accordance with the state and conditions and upon approval by the Planning & Zoning Board. I included that section of the code in your packet. If you look at page 3 of 4, number 11: Construction or Contractor's yard shall be maintained in a neat and orderly fashion, enclosed by a fence (6) feet in height, except that the height shall be limited to (3) feet on the street curb with a clear site triangle as defined in this code. Number 19 under Storage Units says: Units shall not be for commercial sales of products, merchandise, service or repair. This does not preclude a business from using the storage unit solely for storage of commercial or business-related items provide that the actual commercial operation or business is conducted elsewhere, and there is no external evidence of the business at the storage unit. This will be a normal storage unit place. He will have some storage units for people to store stuff in. We are requesting approval from the Planning & Zoning Board for that property to be used for a construction yard, as well as for the storage units.

Member Kent: So, the storage units don't exist yet? That's part of what you want to do with the land?

Assistant City Manager Alvarez: No not yet, and yes.

Vice Chairman Buhler: And that would be for the general public?

Applicant Jose Rios: Yes. I will not be storing junk in there either. I plan on buying all enclosed storage units.

Vice Chairman Buhler: You'll keep it neat and nice?

Applicant Jose Rios: Yes ma'am.

Vice Chairman Buhler made a motion to recommend approval to the City Commission for Permitted Uses—With Conditions - 401 Hwy 181 – Construction Yard and Storage units. Member Luchini seconded the motion. Roll call vote was taken. Motion carried unanimously.

b) Discussion/Action: Revocation of Variance at 1306 Tin St.

Assistant City Manager Alvarez: As you know, you recommended, and the City Commission approved a variance request for an installation of a mobile home that exceeded the age limit on 1306 Tin Street. This one has been a little frustrating because they haven't met any of the development requirements. I know that you guys have been wanting to see this, and just know that we have a process that we have to go through. We have to give a person reasonable time, reach out to them. There are steps that we have to follow, so we have been following those steps. I've had a couple of conversations with that applicant, always with the promise to get going on it. Code Enforcement had to go through their process with the code violations. We still don't have any results. As per the Municipal Code, this board has the ability to revoke this. I know that our Municipal Code says that it should be automatically revoked if they haven't taken care of or constructed within 90 to 180 days after the building permits have been issued, but it is the attorney's recommendation that it come to this board first as a recommendation to proceed with the revocation. If you approve that, then we will issue an official letter from the attorney notifying the applicant that their variance will be heard at a public meeting in front of the City Commission with the intent to revoke, which means that they would have to remove the mobile home from that lot, or bring it to code. Those are the steps that the city attorney has recommended that I follow.

Vice Chairman Buhler: Would you want more time?

Assistant City Manager Alvarez: I think that the applicant has been given ample time. I've had conversations with them, and I feel like I was very clear, including mailing the section of the code that shows exactly what needs to be done. I know times are tight financially. I know that contractors are busy, but I've even requested some very simplified things, and I don't feel that those requests have been met.

Member Kent: Is the one that has been sitting on the property for quite some time before they even came asking for the variance?

"It was noted that was the same property Member Kent was referring to."

Vice Chairman Buhler: They have done a lot of work on it, and I think they have tried.

Member Kent: So, what you are saying today is, if we were to agree to the recommendation for the revocation, is that they would still have a chance to get it done.

Assistant City Manager Alvarez: Correct. They will be issued a letter that says that is will go in front of the Commission by public hearing, and that will give them some time, and then there will be a public hearing, and then the Commission has the opportunity to give them a deadline date at that point, so they have plenty of an opportunity.

Chairman Sisney: Were they invited to today's meeting?

Assistant City Manager Alvarez: No, not at this point in time. It was the attorney's recommendation to bring it to you first to see if this is the process that you wanted to follow. If this is the process you wanted to follow, then they will be notified that we are intending to revoke their variance request.

Member Luchini: What about the one on Simpson?

Assistant City Manager Alvarez: There is a process that we follow for all of these with deadlines and dates, and so I have to go through those processes and procedures. It has to do with the notification and getting a hold people, then the signing of certified letters because there are dates when they sign for things. I can say that I called somebody and left a message, but I don't necessarily have the proof so that's why we send certified letters, and if I don't get the signed certified mailing back, then there is no proof that they received it. We have to wait until we receive or serve them in another manner if the certified letter is not being signed for or picked up. There are other ways to serve them, so I have to get that documentation for deadline dates or hardcore dates to be able to take it to the attorney to where he feels comfortable enough going through this process.

Chairman Sisney: Why is this one timed out, but the one on Simpson hasn't?

Assistant City Manager Alvarez: Because I was able to get a hold of this person sooner, than I was able to get ahold of the other one.

Chairman Sisney: I'm curious of what the correspondence has been between the city and these people.

Assistant City Manager Alvarez: We have attempted phone calls, certified letters, and from there it goes to Code Enforcement. They attempt onsite visitation and issuance and violation letters. We've also had a turnover with our Code Enforcement Officer, so until we have signed certified letter, or until we have proof that the Code Enforcement Officer has made physical contact with somebody to speak to them, because they have the body cam, or serve in another manner other than a certified letter. Until we have those dates, the City Attorney is not comfortable going through this process until I can give him exact dates of when they received the notice.

Chairman Sisney: What is happening with the one on Simpson?

Assistant City Manager Alvarez: The same thing that is happening for this one here. We've attempted contact. We made some verbal contact with them over the phone, and Code Enforcement has also contacted them. Once we get enough information, and the Attorney feels that we have done our due diligence of contacting them, and he goes through the process of a revocation of a variance, then you will very well see that other one come to you. Hopefully it will be very soon.

Chairman Sisney: Can I see the interaction with you and the people on tin? I would like to see the contact, the letters that were mailed and what attempts were made to contact them.

Assistant City Manager: I can reach out to Code Enforcement and see if they have copies of the violation letters. I will have to ask if they sent a violation letter or if they met in person. I had conversations on the phone with them.

Chairman Sisney: Did they tell you that they just gave up and they don't want to get this thing done?

Assistant City Manager: No, they told me that they were going to get stuff done. That's what I'm saying. They haven't done what I requested them to do. That is why it is coming to you guys.

Member Kent: What have you requested that they are not acting on?

Assistant City Manager: it is supposed to be on a permanent foundation, or they need to go through CID for their mobile home permitting if it is not on permanent foundation. There is something with the state that allows that, but they haven't done anything. There is skirting that is required to be around the bottom of it. The wheels have to be out. The tongue can't be hanging out. There is a whole list of requirements that they have to meet for mobile home installation. That is for anybody who has a mobile home, not just someone who is putting one in that is less than 20 years old.

Member Kent: So, have they done any of it?

Assistant City Manager: No. Neither one has done anything that I've asked.

Chairman Sisney: In the future, I would like to ask that we see that stuff.

Assistant City Manager: I will have to check with the attorney to find out what is public record, and what isn't.

Chairman Sisney: I would like the information because I like to be as informed as possible while making a decision. I don't want to make any mistakes. Will this letter give them the opportunity to ask for an extension?

Assistant City Manager: Yes. Potentially. This is a new process. Our attorney hasn't even done it before. I had to do a lot of digging in our Municipal Code before I was able to tell him that we have the authority to do this. A public hearing will be held in front of the Commission, and anybody could come and speak for or against it, including this board. The Commission has the authority at that point in time to grant them more time if they wish. Again, this is a new process. It is not clear in our code.

Member Luchini: Should we create the process before we make a motion?

Assistant City Manager: You can. That is going to be a long process. You are looking at a good 60 to 90 plus days minimum. Probably even more than that because it would be an ordinance change. We would have to draft the ordinance, it would have to go the City Commission for publication, there is a publication timeline, and then it would go back to the Commission for a public hearing and final adoption. Then it takes how many days after they adopt an ordinance?

City Clerk Torres: This type of ordinance would be 5 days after adoption, but since it an ordinance, it could be petitioned within 30 days after adoption.

Assistant City Manager: You also have to take into consideration the time it will take for the Planning & Zoning Commission to draft the ordinance and procedures that they want.

City Clerk Torres: That is something you can keep in mind for the future.

Member Luchini: It's just that, unless we read every section of the code (and we should), we don't realize these things until it comes up here.

City Clerk Torres: Do you want me to provide you with the Planning & Zoning Ordinances again?

Member Kent: It's all online isn't it?

City Clerk Torres nodded yes.

Assistant City Manager: The municipal code is huge, and there are a lot of things that we are very familiar with, but then every once in a while, something odd comes up that we've never done before, so then we start reviewing it in the code, and the code sometimes doesn't give us a whole lot of guidance, and at that point in time, we reach out to the attorney for their recommendation. When this happens, we make note of that section that needs to be revised. We had an engineering firm that came in at one point and talked about working on revising the entire Municipal Code. That is something that has been put on the back burner because it will cost around \$26,000 to revise our entire Municipal Code, so we have been trying to do it little by little in-house.

Vice Chairman Buhler: I think it is a good recommendation, because it will put more pressure on those people to do what they are supposed to do, and what they agreed to do. I don't think anyone is living there.

Member Kent: The things you are asking for by the examples you have given are not huge or overly extensive things. They should be able to follow through with your request because that was part of the agreement when they were granted the variance. That is what you have to do if you want to have this on your property. It is written in the code. I've read it, so if we need to take action to encourage them along a little more, then I hope they come through.

Assistant City Manager: If I saw a little bit of progress, it would be ok. I know that skirting a trailer can be expensive, but if I saw even one panel or one section going up a month or a couple of things done here or there or a little bit at a time, then it would be different, but when you see no progress, that is when you have to learn to draw a line.

Vice Chairman Buhler: This request is not unreasonable.

Vice Chairman Buhler made a motion that city staff work with the City Attorney to draft a letter for the intent to revoke the Variance at 1306 Tin St. Member Kent seconded the motion. Roll call vote was taken. Motion carried unanimously.

6. REPORTS FROM THE BOARD:

There were no reports from the board.

7. REPORTS FROM STAFF:

There were no reports from city staff.

8. ADJOURNMENT:

Chairman Sisney adjourned the meeting at 4:37 p.m.

PASSED AND APPROVED ON THIS 8th DAY OF April, 2024.

Chris Sisney, Chairman
Planning & Zoning Board



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.5

SUBJECT: Discussion/Action - Master Drainage Report Amendment 1 Fee Proposal

DEPARTMENT: Community Development

DATE SUBMITTED: March 21, 2024

SUBMITTED BY: Traci Alvarez

WHO WILL PRESENT THE ITEM: Traci Alvarez Assistant City Manager

Summary/Background:

WH Pacific held a public meeting on 10/11/2023. Meeting was advertised on social media, newspapers, posted flyer, and email notification to MainStreet for impacted businesses. Written comments were also solicited until 10-25-23. WH Pacific has been working on the plan and is approximately 95% complete with draft report. Drainage Plan is being paid for by Capital Appropriation Grant in the amount of \$100,000.00, Task Order for WH Pacific \$99,870.93 included 1 public meeting. As noted in the task order under assumptions and exclusions, additional public meetings/presentations will require additional fees. Commission have expressed interest in additional public meetings. Amendment 1 Fee proposal for up to 3 additional public meetings and updating the draft will incur a cost of \$35,898.35. Additional fees will require local government general funds, no grant funds are available to cover this cost.

Recommendation:

City Commission determination

Attachments:

- Task Order No.1_Downtown Drainage Master Plan_01-18-2022
- Master Drainage Report Amendment 1 Fee Proposal_02-21-2024

Fiscal Impact (Finance): TBD

[Click here to enter text.](#)

Legal Review (City Attorney): Yes

Approved For Submittal By: ☐ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. [Click here to enter text.](#) Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC agendas 3-27-24

January 18, 2022

Traci Alvarez
Assistant City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Task Order No. 1
Downtown Master Drainage Plan**

Dear Ms. Alvarez:

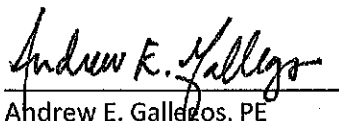
WHPacific is pleased to submit this fee proposal (Task Order No. 1) to provide Engineering Services to develop a Master Drainage Plan for the Downtown area in Truth or Consequences, NM. Included herein is our fee estimate of **\$99,870.93** (with NMGR). We are submitting the following items to your office for review.

1. Scope of Work
2. Fee Detail
3. Sub Consultant Fee Proposals

We look forward to working on this important project for the City of Truth or Consequences. If you have any questions regarding the fee proposal, please contact myself or Hal Byrd.

Sincerely,

WHPacific, Inc.



Andrew E. Gallegos, PE
Project Manager/Transportation Design Manager

cc: Hal Byrd, Director of Transportation
Arvind Patel, Director of Water Resources
File

Scope of Work

Downtown Drainage Master Plan

Task Order No. 1

Task 1: Drainage Master Plan

Stormwater reaching the downtown area originates from two watersheds extending northwest from Truth or Consequences. The study team proposes to analyze the two arroyos draining to the downtown area and develop and prioritize potential projects to mitigate the storm flow. The watersheds for the two arroyos would be delineated and the ditches through town would be modeled to understand where the existing facilities are inadequate and where flooding is now occurring.

The following will be performed with this task:

- Provide local survey control for aerial photography
- Provide accurate aerial mapping and topography due to the terrain and the fairly shallow ditches
- Perform two-dimensional drainage modeling
- Perform additional supplemental survey of the existing drainage features (channels and pipe) in order to provide the best modeling of the channel.
- Verify ownership and availability through Sierra County Assessors website
- Provide preliminary recommendations for improvements in Downtown Drainage Master Plan.
- Provide coordination with City on monthly basis to update schedule and project status
- Provide project status reports with monthly invoices to City

Deliverables:

- The Downtown Drainage Master Plan includes:
 - Planning and design level mapping with aerial photography (1' contours) and supplemental survey (CAD 2020 file)
 - Detailed existing condition analysis and modeling for the two arroyos draining to the downtown area
 - Conceptual solutions and construction costs for future improvements

Task 2 – Public Involvement

The Public Involvement task will include WHPacific preparing for one (1) Public Involvement Meeting and includes the following:

- Preparing an Advertisement in the local newspaper, city website, and on social media accounts (Facebook, Twitter, etc.)
- Produce a PowerPoint presentation that will provide an overview of the project study for a 20-minute presentation, followed by a question-and-answer session.
- Produce a Public Meeting Summary that captures the discussions, questions, and comments from the public.

Deliverables:

- The Public Involvement includes:
 - Advertisement for the newspaper and for city website or social media accounts
 - PowerPoint presentation and PDF
 - Public Meeting Summary with comments and questions

Assumptions and Exclusions:

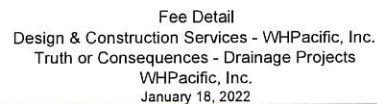
- One Public Meeting will be advertised and held virtually. If the meeting needs to be held in person or additional meetings or public outreach is required, additional fee will be needed.
- Project includes one review of the planning document, which will be held virtually.
- Aerial photography and supplemental survey assumes one trip to the field to collect data. Additional trips will result in additional fees.

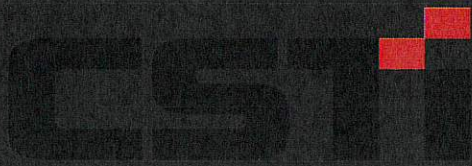
Project Schedule

The proposed project schedule is shown below. It assumes that an NTP will be issued with the Purchase Order on or by the listed date and may be shifted to account for the actual NTP date.

Downtown Master Plan Project Schedule

Submittal Item	Duration (Days)	Date
NTP		2/1/2022
Survey Control	7	2/8/2022
Aerial Photography & Processing Supplemental Survey	40	3/20/2022
Preliminary Evaluation	30	4/19/2022
Advertisement & Public Involvement Meeting	30	5/12/2022
Master Plan Write-up	21	6/2/2022
Internal Submittal for QC	7	6/9/2022
Preliminary Master Plan Submittal	7	6/16/2022
City Review Period	14	6/30/2022
Respond to Comments	7	7/7/2022
Final Master Plan Submittal	7	7/14/2022

[illegible]



ESTIMATE

CSTi
6501 Americas Parkway NE, Suite 400
Albuquerque 87110
U.S.A

TOTAL \$19,500.00

NV5

Andrew Gallegos
6501 Americas Parkway NE 4th Floor
Albuquerque
87110 New Mexico
USA

Estimate# EST-000191
Estimate Date 10 Dec 2021
Reference# T or C Supplemental Survey
Expiry Date 31 Dec 2022

#	ITEM & DESCRIPTION	AMOUNT
1	Design Survey East Area: Set 3D Aerial targets for Lidar Acquisition by others	\$3,700.00 2.00 x 1,850.00
2	Design Survey East Area: Collection all Drainage Structures within the Waters of the US and to include the following: 1. Culverts size and Type 2. All Drainage Structures to include Storm Inlets, Box Culverts, Culverts, Outflows. All structures will be documented and photographed in Fulcrum-PDF and Civil 3D format and provided to the design team.	\$5,550.00 3.00 x 1,850.00
3	Design Survey West Area: Set 3D Aerial targets for Lidar Acquisition by others 2 Days @ 1850/Day	\$3,700.00 2.00 x 1,850.00
4	Design Survey West Area: Collection all Drainage Structures within the Waters of the US and to include the following: 1. Culverts size and Type 2. All Drainage Structures to include Storm Inlets, Box Culverts, Culverts, Outflows. All structures will be documented and photographed in Fulcrum-PDF and Civil 3D format and provided to the design team.	\$5,550.00 3.00 x 1,850.00

#	ITEM & DESCRIPTION	AMOUNT
5	Mobilization Fee	\$500.00
	Mobilization Fee-East End	1.00 x 500.00
6	Mobilization Fee	\$500.00
	Mobilization Fee-West End	1.00 x 500.00
Sub Total		19,500.00
Total		\$19,500.00

Terms & Conditions

Please make all checks payable to:
 Construction Survey Technologies, INC
 PO Box 65395
 Albuquerque, NM 87193

Authorized Signature _____



6565 American Parkway NE
Suite 200
Albuquerque, New Mexico 87110
(520) 561-6537

January 17, 2022

Andrew Gallegos, PE
NV5
6501 Americas Parkway, NE, Suite 400
Albuquerque, NM 87110

Proposal: T or C Drainage

AeroTech Mapping, Inc., (ATM) is pleased to present the following cost proposal for aerial photography, aerial LiDAR, and photogrammetric services for the above mentioned project.

Photogrammetric Scope of Work

Our services will begin with the production of 1 foot topographical information and digital orthophoto on the 986 total acres located in Sierra County, New Mexico. The aerial mapping limits are indicated in green on the attached layout.

The photography will consist of 4 flight lines and 64 exposures utilizing 5cm digital imagery. Additionally, aerial LiDAR will be flown at 8 points per square meter (ppsm). Accuracies of plus or minus .33' can be expected as it relates to the topographical information generated from the Digital Terrain Modeling (DTM) Information. Accuracies of plus or minus 0.22' can be expected as it relates to the DTM information itself.

Project accuracy to conform to generally accepted photogrammetric standards established by the American Society of Photogrammetry and Remote Sensing (ASPRS).

Aerial Ground Control

We understand that **CFA** will be responsible for the establishment of aerial ground control for the aerial survey. A total of 18 aerial targets are needed for this project, and a layout showing their locations is attached. The aerial target sizes should be in the order of 6" wide and measure 6' in total length.

Deliverables

Deliverables will consist of a FTP sharefile link containing the DTM information used for the generation of topographical information, the contour information, the .tfw image limit file, orthophoto TIFF image and .dwg image limits file which will allow for bringing the image into its proper coordinate position. The classified bare-earth and raw .LAS files will be provided and no other classifications are provided in this fee.

Final delivery of the digital information will be supplied in AutoCAD, or as directed by **NV5**. The layering scheme will be standard ATM layering.



Estimated Project Schedule

ATM anticipates completing this project 25 consecutive working days after date of photography, or receipt of control, whichever is later. Please note certain delays may exist, i.e., weather and/or air flight restrictions, that are beyond our control.

Summary & Terms

Summary for Photogrammetric Services		
Service	Description	Schedule
Aerial Photography	5cm Digital Imagery	25 Working Days
Overlap	60%	
Aerial Ground Control	18 Aerial Targets (12"x12')	
Contour Interval	1 Foot (DTM & Breaklines)	
Mapping Scale	1" = 50'	
Stereo Model Count	60	
Planimetric	N/A	
Plot	N/A	
Format	AutoCAD / raw and bare-earth .LAS	
Layers	ATM	
Digital Orthophoto	Color, TIFF, 0.25' Pixel Resolution	
Total Fee		\$26,900.00

Payment Schedule Net 30 Days

This proposal will remain effective for 60 days after the date of this letter. If you have any questions, please do not hesitate to contact us at any time. ATM appreciates the opportunity of submitting this proposal and we look forward to working with NV5.

Your signature in the space provided below indicates your acceptance of the scope of work and terms of the proposal and serves as our Notice to Proceed.

Sincerely,

Tim Burrows
Account Manager

Accepted By: NV5

Andrew Gallegos

Client Project Number

Date

February 21, 2024

Traci Alvarez
Assistant City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Task Order No. 1
Amendment No. 1
Downtown Master Drainage Plan**

Dear Ms. Alvarez:

WHPacific is pleased to submit this fee proposal (Amendment No. 1) to provide updates to the Master Drainage Plan and to plan and host up to two additional public information meetings, in addition to updating the Downtown Master Drainage Plan document. Included herein is our fee estimate for a Lump Sum cost of **\$35,898.35** (with NMGRT). If Public Involvement Meeting No. 3 is not required, the City will not be billed for that task.

We are submitting the following items to your office for review.

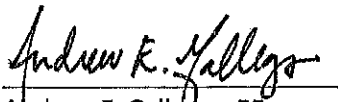
1. Scope of Work
2. Fee Detail

We look forward to continuing our work to complete this important document for the City of Truth or Consequences.

If you have any questions regarding the fee proposal, please contact me or Jon Pena.

Sincerely,

WHPacific, Inc.



Andrew E. Gallegos, PE

Project Manager/Director, Transportation Planning and Engineering

cc: Jon Pena, Principal in Charge/Office Manager
Arvind Patel, Director of Water Resources
File

Scope of Work

Downtown Drainage Master Plan

Task Order No. 1

Amendment No. 1

The City of Truth or Consequences has requested additional Public Involvement Meetings to address comments/questions from the City Commission and the general public. This Amendment will include up to 2 Public Involvement Meetings and any updates to the Downtown Master Drainage Report document that will be required to address those concerns and questions.

Amendment 1 Task 1: Additional Report and Analysis

The following will be performed with this task:

- Address comments and questions from the Public Involvement Meetings.
- Provide updated recommendations for improvements in Downtown Drainage Master Plan.
- Perform Quality Review of report document.
- Address QC comments and make Final Submit Final Drainage Report to the City.

Deliverables:

- The Downtown Drainage Master Plan includes:
 - Revised Downtown Drainage Master Plan Report incorporating Public Meeting Summary

Amendment 1 Task 2 – Additional Public Involvement Meeting No. 2

Task 2 will include WHPacific preparing for one (1) Public Involvement Meeting and includes the following:

- Preparing an Advertisement in the local newspaper, city website, and on social media accounts (Facebook, Twitter, etc.)
- Produce a PowerPoint presentation that will provide an overview of the project area with updates from previous Public Meeting Presentation. This presentation will be planned for 15-20-minute presentation, followed by a question-and-answer session.
- Produce a Public Meeting Summary that captures the discussions, questions, and comments from the public.

Deliverables:

- The Public Involvement includes:
 - Advertisement for the newspaper and for city website or social media accounts
 - PowerPoint presentation and PDF
 - Public Meeting Summary with comments and questions

Amendment 1 Task 3 – Additional Public Involvement Meeting No. 3

Task 3 will include WHPacific preparing for one (1) Public Involvement Meeting and includes the following:

- Preparing an Advertisement in the local newspaper, city website, and on social media accounts (Facebook, Twitter, etc.)
- Produce a PowerPoint presentation that will provide an overview of the project area with updates from previous Public Meeting Presentation. This presentation will be planned for 15-20-minute presentation, followed by a question-and-answer session.

- Produce a Public Meeting Summary that captures the discussions, questions, and comments from the public.

Deliverables:

- The Public Involvement includes:
 - Advertisement for the newspaper and for city website or social media accounts
 - Updated PowerPoint presentation and PDF (per request)
 - Public Meeting Summary with comments and questions in Master Drainage Plan document

Assumptions and Exclusions:

- The second Public Meeting will be advertised and held in-person at the City Commission Meeting.
- A third public meeting may be held at the request of the City. If a third public meeting is not required, then the City will not be billed for that task.
- Any further coordination efforts beyond the third public involvement meeting will require additional fee.

Project Schedule

The proposed project schedule will be determined by the number of public meetings and the advertisement period required in advance of the meeting. The time required to update the report will be approximately 4 weeks after the meeting is held to allow time for 2 weeks of public comment.

Fee Summary

Downtown Drainage Masterplan - Amendment 1

Truth or Consequences

Task No.	Task		Water Resources Labor Costs	Subs and Other Direct Costs
1	Additional Report and Analysis		\$18,196	\$0
2	Additional Public Involvement Meeting No. 2		\$8,492	\$850
3	Additional Public Involvement Meeting No. 3		\$7,511	\$850

Fee Detail
Design & Construction Services - WHPacific, Inc.
Truth or Consequences - Downtown Drainage Masterplan - Amendment 1
WHPacific, Inc.
February 21, 2024

WATER RESOURCES										Other Direct Costs						Total Estimated Cost (W/O NMGR)
Task No.	Task	P1	P6	P6	X4	x3	Total Labor Hrs	Total Labor Cost	Travel Expenses	Printing	*Subconsultant Costs	Communications	Misc Costs	Total ODC		
	Hourly Rate	\$78.00	\$130.20	\$130.20	\$191.25	\$165.00										
1.0	Additional Report and Analysis															
AS1.A	Update report based Public Meeting No. 2 Comments		48	32			80	\$10,416.00						\$0	\$10,416.00	
AS1.B	QC Review				4		4	\$765.00						\$0	\$765.00	
AS1.C	Update report based Public Meeting No. 3 Comments		32	16			48	\$6,249.60						\$0	\$6,249.60	
AS1.C	QC Review				4		4	\$765.00						\$0	\$765.00	
	Task 1 Subtotal Hours	0	80	48	8	0	136									
	Task 1 Subtotal Cost	\$0.00	\$10,416.00	\$6,249.60	\$1,530.00	\$0.00		\$18,195.60	\$0	\$0	\$0	\$0	\$0	\$0	\$18,195.60	
2.0	Additional Public Involvement Meeting No. 2															
AS2.A	Meeting No. 2 Presentation Preparation		24	2			26	\$3,385.20						\$0	\$3,385.20	
AS2.A	Meeting Advertisement and coordination		2				2	\$260.40					\$550	\$550	\$810.40	
AS2.A	Dry Run of meeting presentation w/City		2	2	2		6	\$903.30						\$0	\$903.30	
AS2.A	Attend One Public Involment Meeting		7	7	7		21	\$3,161.55	\$300					\$300	\$3,461.55	
AS2.A	Produce Meeting Summary for Report		4	2			6	\$781.20						\$0	\$781.20	
AS2.A	0							\$0.00						\$0	\$0.00	
	Task 2 Subtotal Hours	0	39	13	9	0	61									
	Task 2 Subtotal Cost	\$0	\$5,078	\$1,693	\$1,721	\$0		\$8,491.65	\$300	\$0	\$0	\$0	\$550	\$850	\$9,341.65	
3.0	Additional Public Involvement Meeting No. 3															
3.A	Meeting No. 3 Presentation Preparation		16	2				\$2,343.60						\$0	\$2,343.60	
3.B	Meeting Advertisement and coordination		2				2	\$260.40					\$550	\$550	\$810.40	
3.C	Dry Run of meeting presentation w/City		2	2	2		6	\$903.30						\$0	\$903.30	
3.D	Attend One Public Involment Meeting		7	7	7		21	\$3,161.55	\$300					\$300	\$3,461.55	
3.F	Produce Meeting Summary for Report		4	1	1			\$842.25						\$0	\$842.25	
3.G	0							\$0.00						\$0	\$0.00	
	Task 3 Subtotal Hours	0	31	12	10	0	0									
	Task 3 Subtotal Cost	\$0	\$4,036	\$1,562	\$1,913	\$0		\$7,511.10	\$300	\$0	\$0	\$0	\$550	\$850	\$8,361.10	
GRAND TOTALS								\$ 34,198.35							\$ 35,898.35	



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.6

SUBJECT: Discussion/Action – First Amendment to Lease Agreement with Lightning Bar A Hangars, LLC.

DEPARTMENT: Community Development

DATE SUBMITTED: March 21, 2024

SUBMITTED BY: Traci Alvarez

WHO WILL PRESENT THE ITEM: Traci Alvarez Assistant City Manager

Summary/Background:

In February 2004 City Commission approved a lease agreement with Lightning Bar A Hangars LLC for the purpose of constructing 13 T Hangars. Term of the lease was for 20 years \$1.00/Year with the right to extend the lease for two additional 10 year periods. Lessee would like to extend the lease for an additional 10 years with the offer of \$100.00 per month/\$1200.00 per year.

Recommendation:

Attachments:

- Lease Agreement
- First Amendment

Fiscal Impact (Finance): TBD

[Click here to enter text.](#)

Legal Review (City Attorney): Yes

Approved For Submittal By: ☐ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. [Click here to enter text.](#) Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC agendas 3-27-24

1-Original mailed to Auge
2-3-04 AA

LEASE AGREEMENT

This INDENTURE, made this 2nd day of February, 2004

BY AND BETWEEN

The City of Truth or Consequences, 505 Sims, Truth or Consequences, NM 87901 hereinafter referred to as the Lessor

AND

Lightening Bar A Hangars, LLC, a New Mexico Corporation, Hereinafter referred to as the Lessee

Both the City of Truth or Consequences and Lightening Bar A Hangars, LLC, together and separately hereinafter referred to as the Parties

WITNESSETH:

DEMISE OF PREMISES, Lessor for and in consideration of the covenants and agreements herein contained does hereby lease the following described premises to the Lessee:

A tract of land situate in Section 29, Township 12 South, Range 4 West, NMPM, located within the boundaries of the City of Truth or Consequences Municipal Airport, and more particularly described on the attached plat -- "Exhibit 1" attached hereto and hereby made a part of this Lease Agreement. Said Tract containing approximately 16,994.25 sq. ft.

TERM OF LEASE

The term of this lease shall continue for a period of twenty (20) years, beginning on the day of first execution and expiring twenty (20) years thereafter, unless otherwise terminated or extended as set forth herein. Lessee shall have the right to extend this lease for two additional periods of ten (10) years each on the same terms by giving written notice to the Lessor one hundred and eighty (180) days prior to the expiration of the original lease.

CONSIDERATION

Lessee for and in consideration of this Lease and the demise of said premises by Lessor, agrees to pay Lessor, as rent, the sum of one dollar per year as set forth hereinafter:

Lease, over the twenty (20) year term of this Agreement, in the total amount of twenty dollars (\$20.00) is due and payable upon execution of this Agreement.

USE OF PREMISES

Lessee agrees to occupy and use said premises for the express purpose of constructing thirteen (13) nested T Aircraft Hangars. Said hangars shall be constructed in a workmanlike manner as shown on the Construction Plans – "Exhibit 2" attached hereto and hereby made a part of this Lease Agreement. Lessee agrees not to operate any non-aviation-related business or activity in or on the premises without the express written consent of the Lessor. Non-Aviation business is defined as any business not typically associated with the operation of an airport, aircraft, or other support to pilots.

IMPROVEMENTS

Upon completion of the Lease, whether by fulfillment of the terms, extension of time, or termination, the City of Truth or Consequences will then become the sole owner of the building and all improvements, fixtures, and appurtenances therein and thereon, excluding however personal equipment and machinery belonging to Lightning Bar A Hangars, LLC, their heirs and assigns.

THE CITY OF TRUTH OR CONSEQUENCES AGREES:

1. To prepare a legal description and plat of survey describing said premises for filing of record with the Sierra County Clerk's Office.
2. Extend electric and water lines to subject premises.
3. Construct asphalt paved taxiway to and ramp around the aircraft hangar building.

LIGHTNING BAR A HANGARS, LLC AGREES:

1. To construct at their own expense, thirteen nested T Aircraft Hangars with concrete floor, as shown on "Exhibit 2". Said hangars include a metal building fifty and one-half (50 ½) feet wide by two hundred ninety and one-half (290 ½) feet long with a four (4) foot wide concrete apron along the north and south sides of the building.
2. To provide all equipment, machinery, and labor required to construct and operate the subject aircraft hangars.

THE PARTIES AGREE:

In addition to the demise and lease of the aforescribed parcel, containing 0.39 acres of land more or less, Lessor does hereby agree to grant a one hundred foot (100') wide access easement along and adjoining both the north and south sides of the proposed building, eighty feet (80') easement on the east side and sixty five feet (65') on the west side of the building.

UTILITIES

The City of Truth or Consequences owns a domestic water well, located at the Municipal Airport. The Office of the State Engineer (O.S.E.) has approved a water right permit which allows the City to appropriate and beneficially use three (3) acre feet of water each year from said well. This amounts to nine hundred seventy seven thousand, five hundred and fifty three (977,553) gallons of water each year.

The aforescribed water well is currently used for domestic and sanitary purposes at the Municipal Airport. However, the City agrees to extend existing water lines to the subject Premises and to allow Lessee the use of water from said water well, so long as said well is capable of producing an adequate amount of water, to supply existing Airport facilities and Municipal Trap Shooting Range and so long as the amount of water used each year by the Lessee does not cause Lessor to exceed the amount of water allowed under the water right permit issued by the O.S.E.

It is understood that:

There is no sanitary sewer or natural gas supply located on or near the premises. Lessee agrees, at Lessee's own expense, to secure all necessary permits and to install a septic system, approved by New Mexico Environment Department, for liquid waste disposal and propane gas storage required to service said premises if Lessee so desires.

Electric power is available from Sierra Electric Co-Op. The parties agree that Lesser will extend electric power to the subject premises and that Lessee will, at Lessee's own expense, secure required permits and agreements required to install electric power on subject premises.

FINANCING

Rights of Mortgagee. Any person, cooperation or institution ("Lender") that lends money to Lessee for construction of any hangar, structure, building or improvement shall, upon default of Lessee's obligation to said Lender, have the right to enter upon the Premises and operate or manage the hangar, structure, building or improvement according to the terms of this Lease. It is expressly understood and agreed that the Lender shall have no rights under this Lease greater than those granted to Lessee.

TAXES

Lessee shall be liable for all property taxes including ad valorem taxes assessed against any improvements owned by the Lessee. Lessor will not under any circumstances be liable for, or required to pay any tax or fee owed by the Lessee.

LIABILITY

Lessee agrees and covenants that Lessor shall not be liable for any damage to persons or property which may occur in or about said premises, except for damages caused by negligent or intentional acts of Lessor. Lessee agrees to indemnify and hold harmless Lessor from any and all claims and liability, which may arise as a result of Lessee's use of the premises pursuant to this Lease, except for those claims and liability arising from the negligent or intentional acts of Lessor.

INSURANCE

Lessee agrees to maintain liability, fire and extended coverage on the premises, buildings, appurtenances and building contents along with any activity which may occur on the premises, in an amount not less than One Million Dollars (\$1,000,000.00) and to include Lessor as named, additional insured on all insurance policies. Lessee further agrees that Lessor will be provided written proof of all said liability, fire and extended coverage insurance and that all required insurance policies will be kept current during the term of this lease. Failure on the part of the Lessee to maintain and provide proof of current insurance may be cause for termination of this lease or legal action to provide specific performance of this contract and agreement.

The amount of insurance to be maintained by the Lessee shall be examined from time to time throughout the term of this agreement, and if deemed necessary by the parties, shall be increased to ensure that all policies provide an adequate amount of casualty, property, fire and extended coverage and contents, and liability insurance coverage.

OPTIONS

Lessee shall be given the first option to renew this lease upon the expiration hereof on such terms and conditions as may be agreed upon by the Parties hereto.

Should Lessor decide to have additional hangars constructed for the airport, Lessee shall have first right of refusal to construct and operate such hangars pursuant to an agreement substantially similar to this Lease.

Lessor shall be given first option to purchase Lessee's improvement for the appraised value of such improvements at the time of purchase.

ASSIGNMENT AND SUBLETTING

Lessee, for and in consideration of this Lease and the demise of said premises, hereby agrees and covenants with Lessor that neither Lessee nor Lessee's heirs, executors, administrators, assigns, or successors in interest shall assign this Lease or sublet the said demised premises, in whole or in part, without first obtaining the written consent of Lessor. Lessee's heirs, executors, administrators, assigns and successors in interest shall remain liable for the full and complete performance of all the terms, conditions, covenants and agreements herein contained. Any written consent from Lessor to assign or sublet shall not operate as consent for further assignment or subletting or as a waiver of this covenant and agreement against assignment or subletting.

Assignees and/or sublettees shall be bound by all of the terms, conditions, covenants, and agreements herein contained including this covenant of assignment and subletting.

LESSOR'S RIGHT OF INGRESS AND EGRESS

Lessor reserves, and shall at all reasonable times, have the right to enter the premises and inspect the same. However, Lessor shall give Lessee five (5) days prior written notice of such inspections and such inspections shall not unnecessarily disrupt Lessee's operations. Lessor shall, at all reasonable times, have the right of ingress and egress through the premises to other properties own by Lessor.

TERMINATION

In consideration of the mutual covenants and promises contained in this Lease, neither party shall have the right to terminate this Lease without cause. Either party, however, may have the right to terminate upon a material breach by the other party of any of the provisions contained in this Lease. Either party desiring to terminate this lease, shall deliver, sixty (60) days prior to proposed termination date, a written notice to the other party, notifying them of the intent and cause for termination of the Lease. If the parties cannot agree as to whether or not there was just cause to terminate the Contract, either party shall have the right to file a complaint for declaratory judgement in Sierra County District Court.

It is agreed and covenanted that abandonment of this Lease for a period of more than sixty (60) days on the part of the Lessee will be cause for termination of the Lease, and upon such abandonment, Lessee shall give Lessee fifteen(15) days written notice of Lessor's intent to terminate the Lease. If Lessee does not respond within this fifteen (15) day period, all buildings, real property, and all other improvements, shall promptly be deemed to be owned by the Lessor in Fee Simple title. Abandonment, for the purposes of this Lease, shall mean the Premises has been vacant for more than sixty (60) consecutive days.

BRIBES, GRATUITIES AND KICKBACKS

The Parties understand that it is illegal in the State of New Mexico for any public employee to solicit or accept anything of value with regard to award of this Agreement or for any person to offer or pay anything of value to any such employee (Chapter 30-21-1 through Chapter 30-24-2 NMSA 1978).

EQUAL EMPLOYMENT OPPORTUNITY

Lessee will not discriminate against any employee or applicant for employment because of race, creed, sex, color or national origin.

INTEREST OF MEMBERS OF THE CITY

No member of the governing body of the City, and no other officer, employee or agent of the City who exercises any function or responsibility in carrying out this Agreement shall have any personal or financial interest, direct or indirect, in this Agreement. Lessee shall take appropriate steps to assure compliance with this requirement.

NOTICE

Any notice provided for herein shall be given by registered or certified United States mail, postage prepaid, addressed to the party affected. Such notice shall be deemed effective from the date of mailing. Any notice provided for herein shall be mailed to:

LESSOR: City of Truth or Consequences
Attn: City Manager
505 Sims Street
Truth or Consequences, NM 87901

LESSEE: Lightening Bar A Hangars, LLC
Attn: Ray Auge
PO Box 303
Belen, NM 87002-0303

A party may change its address for purposes of this Lease by notice to the other party.

THIS LEASE EMBODIES ALL AGREEMENTS BETWEEN THE PARTIES

It is hereby agreed by and between the parties hereto that this Lease embodies all of the agreements, covenants and understandings between the parties hereto concerning the subject matter hereof, and that all such covenants, agreements and understandings are included in this written lease.

No prior agreement or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this Lease.

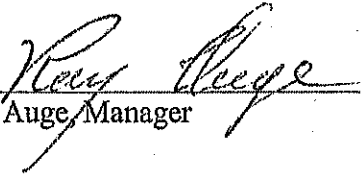
The terms and provisions of this Lease shall be binding on all heirs, successors and assignees of the parties.

AMENDMENTS

It is hereby agreed by and between the parties hereto that this Lease shall not be altered, changed, or amended except by instrument in writing, executed by the parties hereto.

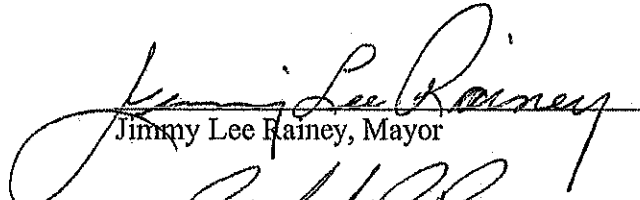
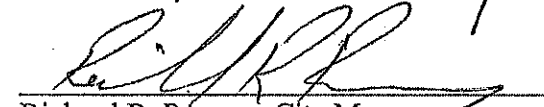
Lessee:

Lightening Bar A Hangars, LLC
A New Mexico limited liability company

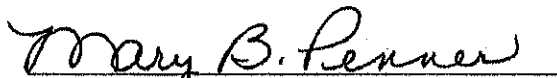

Ray Auge, Manager

Lessor:

City of Truth or Consequences


Jimmy Lee Rainey, Mayor

Richard R. Ramsey, City Manager

ATTEST:


Mary B. Penner, City Clerk

Reviewed for Legal Sufficiency


Jay F. Rubin, City Attorney

Senn & Associates

Professional Land Surveying

P.O. Box 629

Elephant Butte, New Mexico 87935

(505) 744-5773

February 23, 2004

LEGAL DESCRIPTION

(PROPOSED HANGAR SITE)

A tract of land situate in Section 29, Township 12 South, Range 4 West, N.M.P.M., located within the boundaries of the City of Truth or Consequences Municipal Airport, and more particularly described as follows, to-wit;

beginning at the southernmost corner of this tract, whence the SE corner of Section 29, Township 12 South, Range 4 West, bears S34°11'44"E, a distance of 4354.06 feet;

thence, N43°44'45"W, a distance of 58.38 feet to the westernmost corner of this tract;

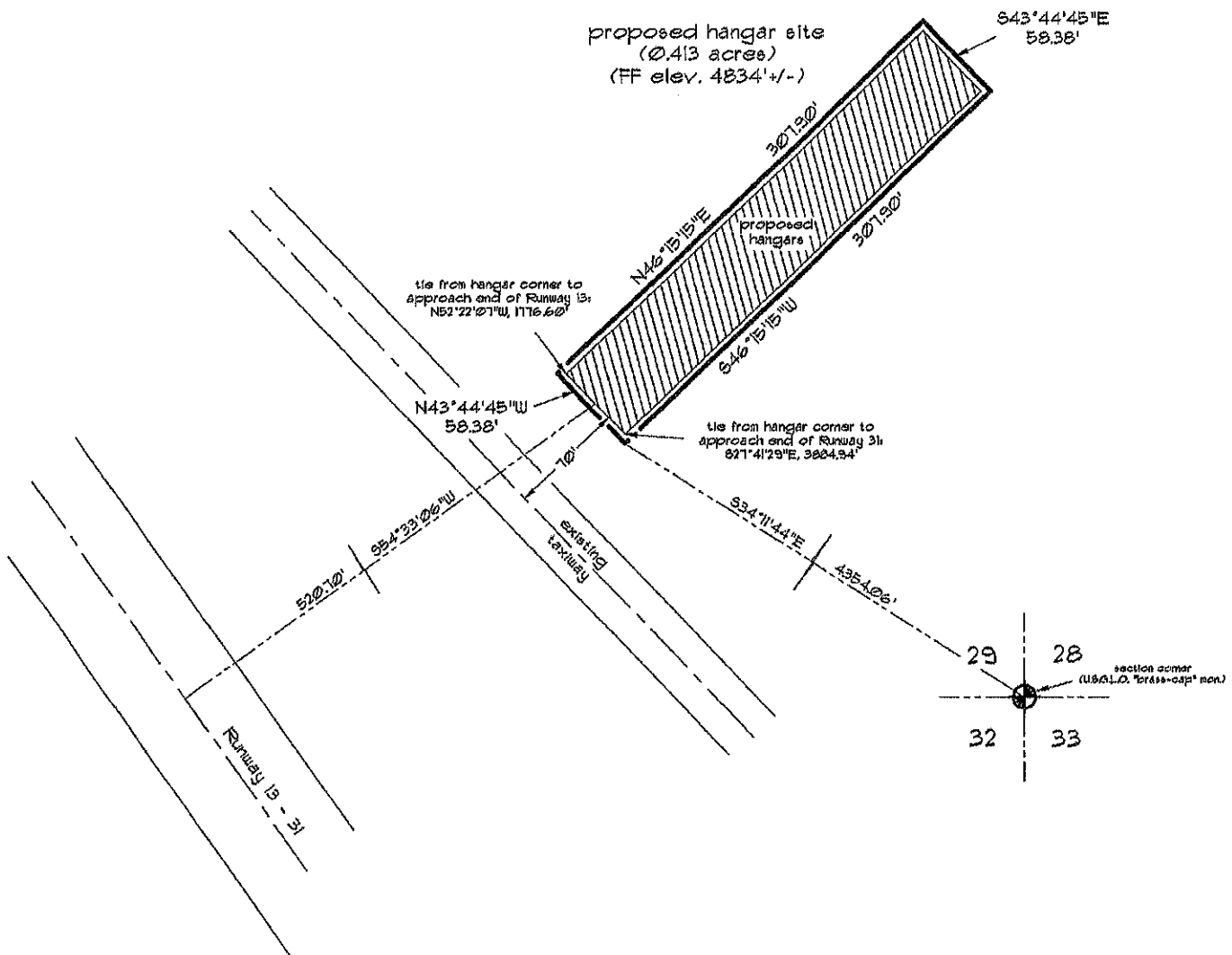
thence, N46°15'15"E, a distance of 307.90 feet to the northernmost corner of this tract;

thence, S43°44'45"E, a distance of 58.38 feet to the easternmost corner of this tract;

thence, S46°15'15"W, a distance of 307.90 feet to the place of beginning. Containing 0.413 acres, more or less.

PLAT OF

a proposed hangar site location
within the boundaries of the City of Truth or Consequences Municipal Airport,
in Section 29, Township 12 South, Range 4 West, N.M.P.M.,
Sierra County, New Mexico



February 23, 2004

Senn & Associates

Professional Land Surveying

P.O. Box 628 Elephant Butte, New Mexico 87935

CERTIFICATE

FIRST AMENDMENT TO LEASE AGREEMENT

This First Amendment to the Lease Agreement entered into by the City of Truth or Consequences ("Lessor") and Lightning Bar A Hangars, LLC ("Lessee") on February 2, 2004 ("Lease") is entered into this _____ day of March 2024.

RECITALS

WHEREAS, the Lessor and Lessee entered into the original Lease on February 2, 2004; and

WHEREAS, the Lease provided for two potential ten year extensions following the initial twenty year term of the Lease; and

WHEREAS, the initial twenty year term of the Lease is expiring; and

WHEREAS, the parties are desirous of extending the Lease for another ten year period commencing on April 1, 2024.

NOW THEREFORE, the Lessor and Lessee agree to the first ten year extension of the Lease, subject to the following modifications to the initial Lease:

1. CONSIDERATION

A. The land rent shall be \$ _____ per month commencing on April 1, 2024 and payable on the first day of each month successive month through March 1, 2025 for a total of \$ _____.

B. Subsequent years lease rate will be adjusted annually by the published Consumer Price Index (CPI), or its equivalent, should the CPI no longer be published by the Federal government in its present form, in coming years. Should the CPI be negative in any year or years, the rate will remain unchanged for the next annual period.

C. In the event the City is required to initiate collection of unpaid rent, then Lessor agrees to pay all costs of collection, including attorney's fees.

2. USE OF PREMISES

Pursuant to the terms of the Lease, Lessee has already constructed a unit consisting of thirteen (13) nested T Aircraft Hangars. Lessee agrees not to operate any non-aviation-related business or activity in or on the premises without the express written consent of the Lessor. Non-Aviation business is defined as any business not typically associated with the operation of an airport, aircraft, or other support to pilots.

3. NOTICE

Any notice to be provided for herein shall be given by certified United States mail, postage prepaid, addressed to the party affected. Such notice shall be deemed effective from the date of mailing. Any notice provided for herein shall be mailed to:

LESSOR: City of Truth or Consequences
ATTN: City Manager
505 Sims Street
Truth or Consequences, NM 87901

LESSEE: Lightning Bar A Hangars, LLC
ATTN: Christalee F. Auge, Manager
P.O. Box 1152
Elephant Butte, NM 87935

A party may change its address for the purposes of this Lease by notice to the other party.

This First Amendment to Lease may be executed in two counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one and the same instrument. Each party shall be entitled to rely upon executed copies of this First Amendment to Lease transmitted by facsimile or email or other electronic transmission to the same and full extent as the originals.

LESSEE:
Lightning Bar A Hangars, LLC
A New Mexico Limited Liability Company

LESSOR:
City of Truth or Consequences

CHRISTALEE F. AUGÉ, Manager

ROLF HECHLER, Mayor

ATTEST:

CITY CLERK



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.7

SUBJECT: Discussion/Update - Lease Extension to Lease Agreement with RBR, Inc.

DEPARTMENT: Community Development

DATE SUBMITTED: March 21, 2024

SUBMITTED BY: Traci Alvarez

WHO WILL PRESENT THE ITEM: Traci Alvarez Assistant City Manager

Summary/Background:

1998 City entered into a 25 year lease with RBR, Inc \$1.00/year for the purpose of erecting, constructing and utilizing a commercial metal hangar with the intent that the hangar revert back to the City after 20-25 years. In February 2020 a lease extension was authorized and signed to begin July 2023 for an additional 25 years for the sum of \$8,000.00 per year beginning July 2023 to be adjusted annually by the CPI. Lease extension was not presented nor approved by City Commission but is considered valid.

Recommendation:

None – update only

Attachments:

- Original Lease and meeting minutes
- Lease Extension

Fiscal Impact (Finance): TBD

[Click here to enter text.](#)

Legal Review (City Attorney): Yes

Approved For Submittal By: ☐ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. [Click here to enter text.](#) Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC agendas 3-27-24

LEASE

THIS INDENTURE, made this 17th day of August, 1998,

BY AND BETWEEN CITY OF TRUTH OR CONSEQUENCES

hereinafter, whether singular or plural, masculine, feminine, or neuter, designated as "Lessor," which expression shall include Lessor's heirs, executors, administrators, assigns, and successors in interest,

AND RBR, Inc., a New Mexico corporation

hereinafter, whether singular or plural, masculine, feminine, or neuter, designated as "Lessee," which expression shall include all Lessees, jointly and severally, and shall include Lessee's heirs, executors, administrators, assigns, and successors in interest,

W I T N E S S E T H :

DEMISE OF PREMISES

Lessor, for and in consideration of the covenants and agreements herein contained to be kept and performed by Lessee, Lessee's heirs, executors, administrators, assigns, and successors in interest, and upon the terms and conditions herein contained, does hereby let, lease, and demise to Lessee the following-described premises situate in Truth or Consequences, in the County of Sierra, State of New Mew Mexico described as follows:

A tract of land situate in Section 29, Township 12 South, Range 4 West, N.M.P.M., located within the boundaries of the City of Truth or Consequences Municipal Airport, and more particularly described as follows, to-wit:

beginning at the southernmost corner of this tract, whence the SE corner of Section 29, Township 12 South, Range 4 West, bears S32°42'35"E, a distance of 4057.76 feet;

thence, N44°10'00"W, a distance of 125.00 feet to the westernmost corner of this tract;

thence, N45°50'00"E, a distance of 125.00 feet to the northernmost corner of this tract;

thence, S44°10'00"E, a distance of 125.00 feet to the easternmost corner of this tract;

thence, S45°50'00"W, a distance of 125.00 feet to the place of beginning. Containing 0.3587 acres (15,625 sq.ft.), more or less.

TERM OF LEASE

The term of this lease shall be for a period of twenty-five (25) years, beginning on the 1st day of August, 1998 and ending on the 31st day of July, 2023, unless otherwise terminated as set forth herein.

RENT

Lessee, for and in consideration of this Lease and the demise of the said premises by Lessor to Lessee, hereby agrees and covenants with Lessor to pay as rent for the said premises, without notice or demand, the sum of TWENTY-FIVE (\$25.00), to be paid at the time of the execution of this lease.

USE OF PREMISES

Lessee, for and in consideration of this Lease and the demise of the said premises by Lessor to Lessee, hereby agrees and covenants with Lessor to use and occupy the said premises for the purpose of erecting, constructing and utilizing a commercial metal hangar. Lessee shall, at its own cost and expense, erect and construct a commercial metal hangar of dimensions of at least 120 feet wide, by 120 feet long, and 22 feet high. Such construction and erection of the commercial metal hangar is a condition of the Lease and must be substantially completed by no later than June 30, 1999. If such hangar is not completely constructed by that date the City, at its option, may terminate this Lease by the giving of 30 days notice.

LIABILITY OF LESSOR

Lessee, for and in consideration of this Lease and the demise of the said premises, hereby agrees and covenants with Lessor that Lessor shall not be liable for any damage to persons or property arising from any cause whatsoever, which shall occur in any manner in or about the said premises, and Lessee hereby agrees to indemnify and save harmless Lessor from any and all claims and liability for damage to persons or property arising from any cause whatsoever, which shall occur in any manner in or about the said

premises. Further, Lessee hereby agrees and covenants with Lessor that Lessor shall not be liable for any damage to the said demised premises, or to any part thereof, or to any property or effects therein or thereon, caused by leakage from the roof of said premises or by bursting, leakage, or overflowing of water from any source whatsoever, and Lessee hereby agrees and covenants to indemnify and save harmless Lessor from any and all claims and liability for any damage to the said demised premises, or to any part thereof, or to any property or effects therein or thereon. This provision, however, shall not apply to any negligent or intentional acts caused by the Lessor.

Further, Lessee agrees to maintain casualty insurance and liability insurance on the premises with minimum limits of \$1,000,000.00 with Lessor named as a loss payee and each policy will include the Lessor named as an additional insured on the policy.

IMPROVEMENTS

As noted above, it is contemplated that the Lessee shall construct a commercial metal hangar under the terms described above. If this Lease is terminated for cause or upon expiration of the Lease, the structure or structures erected, constructed or installed on the premises shall be deemed to be the property of the City.

ASSIGNMENT AND SUBLETTING

Lessee, for and in consideration of this Lease and the demise of the said premises, hereby agrees and covenants with Lessor that neither Lessee nor Lessee's heirs, executors, administrators, assigns, or successors in interest shall assign this Lease or sublet the said demised premises, in whole or in part, without first obtaining the written consent of Lessor therefor; that no assignment of this Lease or any subletting of the said demised premise, in whole or in part, shall be valid, except by and with the written consent of Lessor first obtained; that the Lessor to any such assignment or subletting shall not operate to discharge Lessee, or any one of them, or Lessee's heirs, executors, administrators, assigns, or successors in interest from their liability upon the agreements and covenants of this Lease, and Lessee, Lessee's heirs, executors, administrators, assigns, and successors in interest shall remain liable for the full and complete performance of all of the terms, conditions, covenants, and agreements herein contained; that any consent of Lessor to any such assignment or subletting shall not operate as a consent to

further assignment or subletting or as a waiver of this covenant and agreement against assignment and subletting; and that following any such assignment or subletting, the assignee and/or sublettee shall be bound by all of the terms, conditions, covenants, and agreements herein contained including the covenant against assignment and subletting.

LESSOR'S RIGHT OF INGRESS AND EGRESS

Lessor reserves, and shall at all reasonable times have, the right to enter the premises and inspect the same. Therefore, Lessee shall provide Lessor a key with which to unlock all doors, in, on and about the premises, excluding Tenant's vaults, safes, files and other personal property. Further, where it does not unnecessarily disrupt Lessee's operations, Lessor shall have the right of ingress and egress through the premises to other properties owned by Lessor.

LESSEE'S RESPONSIBILITY OF COSTS AND EXPENSES

The Lessee shall be responsible for all expenses in connection with the construction and operation of the commercial metal hangar. These shall include but not be limited to, the utilities and maintenance of the building.

TERMINATION

In consideration of the mutual covenants and promises contained in this Lease, neither party shall have the right to terminate this Lease without cause. Either party, however, may have the right to terminate this agreement upon a material breach by the other party of any of this Lease's provisions. In such event, the party desiring to terminate this Lease shall give thirty (30) days written notice to the other party of its intent to terminate the Lease. Either party shall have the right to terminate this Lease without cause by giving two (2) years written notice to the other party. In the event either party desires to terminate this Lease as a result of a breach by the other party, the party that wishes to terminate the Lease may do so by giving thirty (30) days written notice to the other party. Upon the termination or expiration of this Lease, Lessee shall restore the premises into good condition. If this Lease is terminated without cause, the Lessor shall compensate the Lessee for the appraised value of the structures on the premises.

**THIS LEASE EMBODIES ALL AGREEMENTS
BETWEEN THE PARTIES**

It is covenanted and agreed by between the parties hereto that this Lease incorporates all of the agreements, covenants and understandings between the parties hereto concerning the subject matter hereof, and that all such covenants, agreements, and understandings have been merged into this written Lease. No prior agreement or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this Lease.

The terms and provisions of this Lease shall be binding on all heirs, successors and assignees of the parties.

AMENDMENTS

It is covenanted and agreed by and between the parties hereto that this Lease shall not be altered, changed, or amended except by instrument in writing executed by the parties hereto.

NOTICES

Any notices to be given by either party to this Lease shall be given as follows:

City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901
ATTN: City Manager

RBR, Inc.
P.O. Box E
Elephant Butte, NM
87935

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands the day and year first above written.

CITY OF TRUTH OR CONSEQUENCES

BY: Everett Banister
Everett Banister, Mayor

RBR, INC

BY: Paul L. Jones
Sec. Treas

ATTEST:

Kathleen G. Leary
CITY CLERK

STATE OF NEW MEXICO]

:ss.

COUNTY OF SIERRA]

The foregoing instrument was acknowledged before me this 17th
day of August, 1998, by Gerald LaFont
Secretary/Treas. of RBR, Inc., a New Mexico corporation.

Sally Ann Briscoe
Notary Public

My Commission Expires:

(SEAL) 1/7/99



CITY OF TRUTH OR CONSEQUENCES

505 SIMS STREET

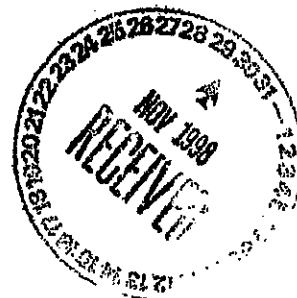
Truth or Consequences, New Mexico 87901

(505) 894-6673

FAX (505) 894-7767

November 25, 1998

Gene Hoskinson
505 Sims Street
T or C, NM 87901



RE: La Font Hanger Location

Dear Gene:

I enclose a copy of a letter I received from Gerald La Font. Please let me know whether his plan to move the location of his hanger causes you any concern with respect to the lease agreement.

Very sincerely,

Jay Rubin
City Attorney

JR:cp
Enclosure

cc: Gene
EBK
Orig file



INN at the BUTTE

Highway 195 - PO Box E.
Elephant Butte, New Mexico 87935
(505) 744-5431

November 25, 98

Jay Ruben
City Attorney
Truth or Consequences
New Mexico.

Dear Jay:

During our preliminary inspection of the New Hanger^{sight} at the Airport it was discovered the sight was about 10 ft. from where we wanted to locate the structure. The reason for the location was to insure the proper drainage.

My brother and I met with David Genn and Damas Glade your Airport engineers, they both agreed the change was no problem and a new description is attached. Sorry for the miss communication, however I wanted everything to go smooth.

Phil L. F.

Senn & Associates

Professional Land Surveying

P.O. Box 689

Elephant Butte, New Mexico 87935

(505) 744-5773

November 23, 1998

LEGAL DESCRIPTION
(PROPOSED HANGAR SITE)

A tract of land situate in Section 29, Township 12 South, Range 4 West, N.M.P.M., located within the boundaries of the City of Truth or Consequences Municipal Airport, and more particularly described as follows, to-wit;

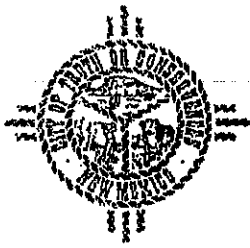
beginning at the southernmost corner of this tract, whence the SE corner of Section 29, Township 12 South, Range 4 West, bears S33°26'08"E, a distance of 4017.16 feet;

thence, N44°10'00"W, a distance of 125.00 feet to the westernmost corner of this tract;

thence, N45°50'00"E, a distance of 125.00 feet to the northernmost corner of this tract;

thence, S44°10'00"E, a distance of 125.00 feet to the easternmost corner of this tract;

thence, S45°50'00"W, a distance of 125.00 feet to the place of beginning. Containing 0.3587 acres, (15,625 sq.ft.), more or less.



City of Truth or Consequences

505 Sims Street

Truth or Consequences, New Mexico 87901
CITY (505) 894-6673 FAX (505) 894-7767

August 18, 1998

Evelyn B. Renfro
505 Sims Street
T or C, NM 87901

RE: RBR, Inc. Lease

Dear Evelyn:

I enclose the Lease that Mr. LaFont has signed. The Lease incorporated the changes I made a few weeks ago. I never heard any feedback from anyone at the City regarding these changes. If you would like any additional changes, please let me know immediately.

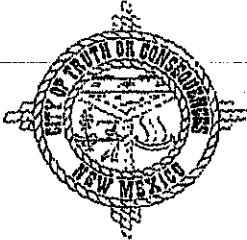
Very sincerely,

Jay Rubin
City Attorney

JR/cp
Enclosure



Approved by EC 8-28-98



City of Truth or Consequences

505 Sims Street

Truth or Consequences, New Mexico 87901

CITY (505) 894-6673

FAX (505) 894-7767

January 8, 1998

City Manager and City Commission
505 Sims Street
Truth or Consequences, New Mexico

Dear Ms. Renfro and City Commission:

The Airport Advisory Board at their regular meeting held January 7, 1998, voted unanimously to recommend the approval of the proposed steel building for a Corporate Hangar as submitted by Mr. Gerald LaFont.

We also would like to bring special attention to paragraph three of the proposal, suggesting a land lease of \$1.00/year to revert back to the City after 20-25 years.

HANGAR:

Gerald LaFont presented his proposal to the board. First, he mentioned how much he liked our airport and stated his brother from Albuquerque was interested in building a hangar at the T. or C. Airport, 120' x 120' building that could clear a 20' tail with the cost estimating to be somewhere of \$200,000 to \$250,000. The interest being that his brother wanted to build a hangar, and to bring in his 4 airplanes from International Airport in Albuquerque, to be stationed at our airport, stating that this would also bring money to our airport, purchasing fuel, now using 300 - 400 gallons a week, and looking for that to double with the additional of 4 aircraft. He would be interested in a long-term lease with the option of office space in the future. It is to be non-commercial, strictly private, to be used for his brother's aircraft, with the option of leasing any unused space, non-profit use. In considering sewer/water hangar, with restrooms in place, and with the understanding confirming by Cookie Johnson, that it would have to pass ADA with the option of a possible terminal in the future, with Mr. LaFont in agreement.

Mr. LaFont understood that a master plan had been in place of a 100' x 100' standard building, but was not initiated for lack of funds. Mr. LaFont has not seen the master plan that was presented to the city in the past. Dick Woodsum confirmed that the plan was what Mr. LaFont was looking for in his construction, through discussions

*To meet w/ City staff
& get back to CC
1-12-98*

with Mr. LaFont and John Richardson. David Senn recommended that Mr. LaFont look at the master plan and present some visuals to better emphasize his proposal to the City, suggesting a 1 month timetable.

Cookie Johnson, then suggested a land lease of \$1.00/year after about 20-25 years to revert back to the city, with Jay Rubin to review for lease approval.

"Dick Woodsum moved that this recommendation be followed and to look it over with the members of the board before presenting it to the City, presenting a proposal layout, pictures, design, and a pro-future terminal package."

Seconded by Cookie Johnson.
Motion carried unanimously.

Your favorable consideration will be appreciated.

Thank you,

Sincerely,


BOBBY MIDDLETON, CHAIRMAN
AIRPORT ADVISORY BOARD

BM/co
enclosures/visuals



City of Truth or Consequences

505 Sims Street

Truth or Consequences, New Mexico 87901

CITY (505) 894-6673

FAX (505) 894-7767

May 27, 1998

Gerald LaFont
Inn at the Butte
Highway 195
Elephant Butte, NM 87935

Dear Mr. LaFont:

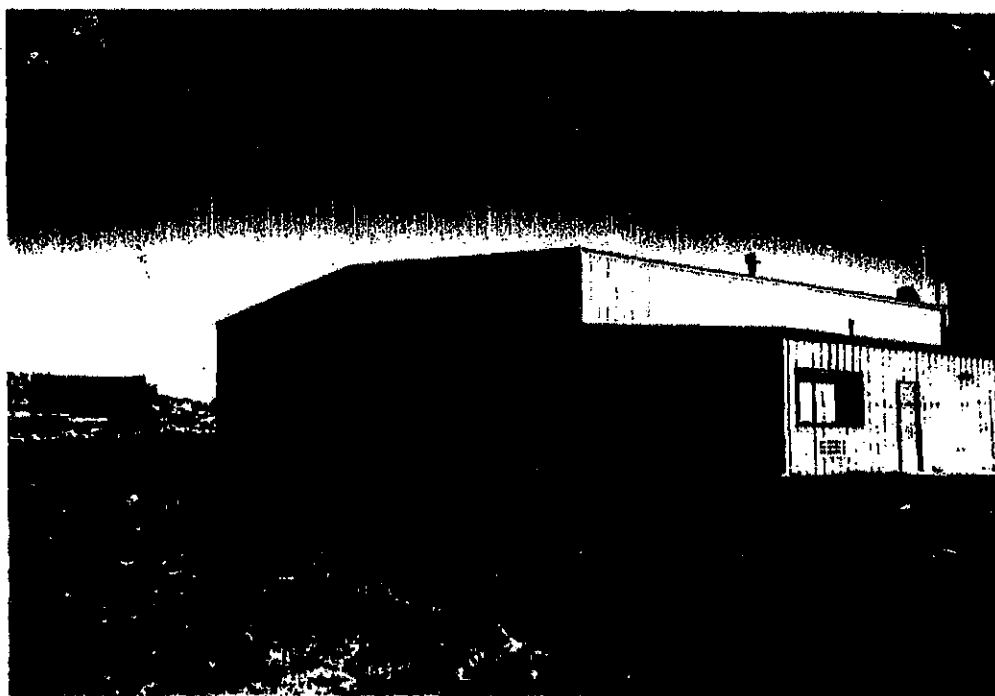
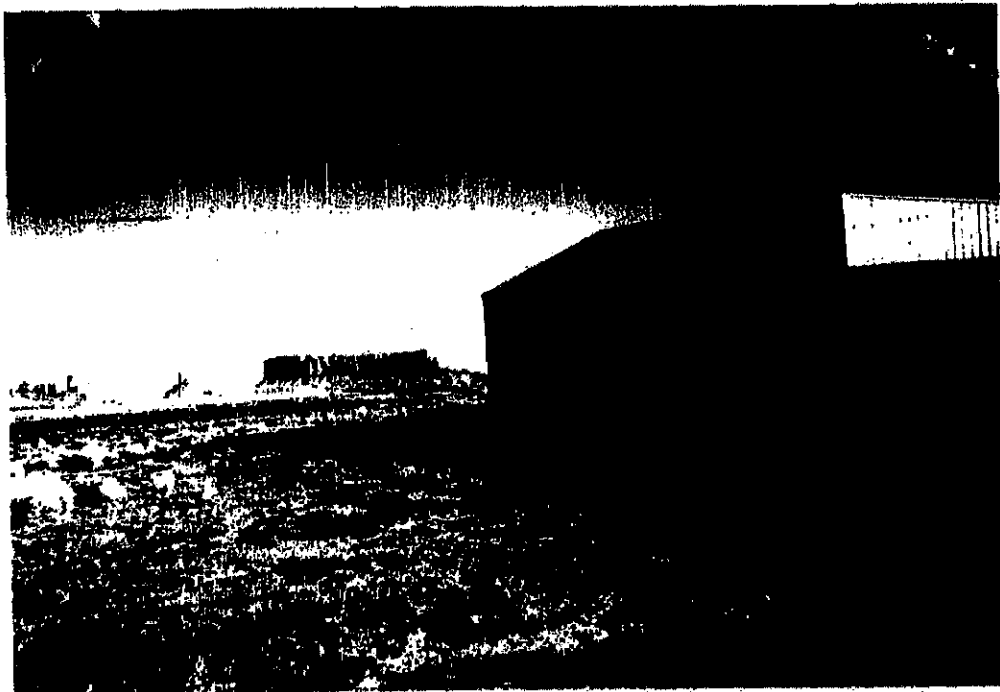
Please be advised that I am the City Attorney for the City of Truth or Consequences. I have been trying to reach you for the purpose that we can work together to prepare a Lease Agreement pertaining to a hangar at the T or C Airport. As I have been unable to reach you, I request that you call me for an appointment.

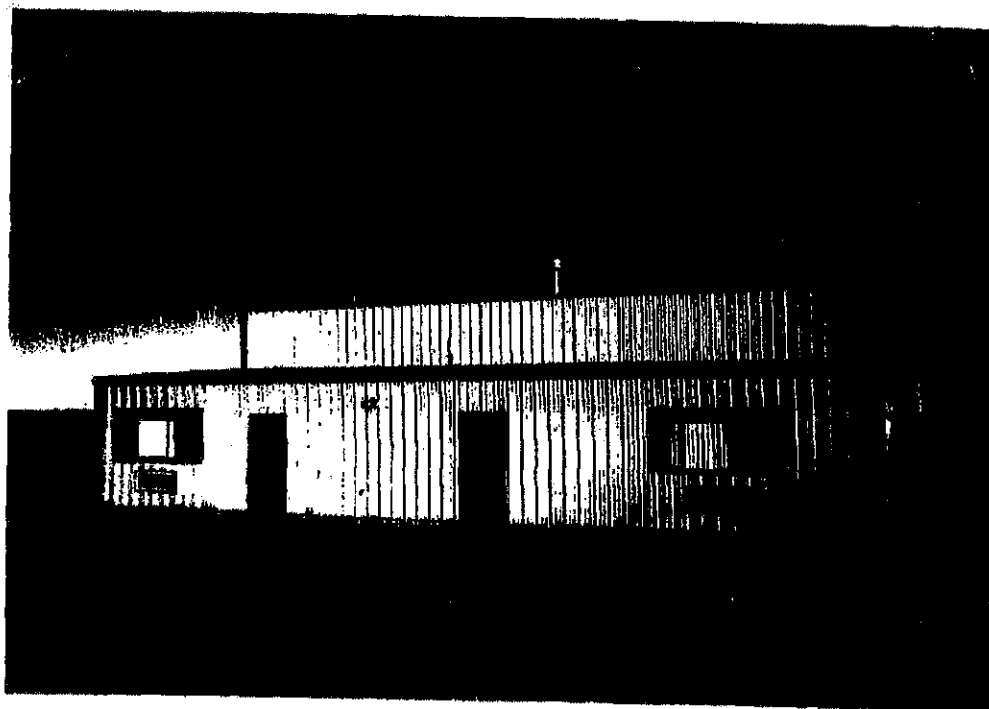
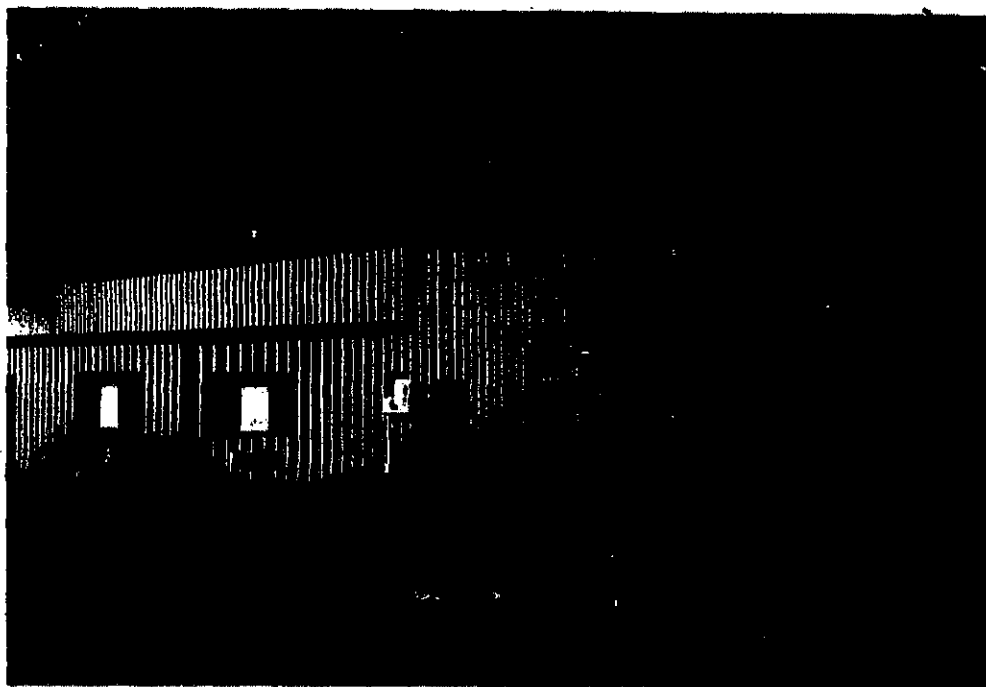
Very sincerely,

Jay Rubin

Jay Rubin
City Attorney

JR:cp
cc: Evelyn Renfro





LEASE EXTENSION

THIS INDENTURE, made this 18 day of February 2020,

BY AND BETWEEN CITY OF TRUTH OR CONSEQUENCES, hereinafter, whether singular or plural, masculine, feminine, or neuter, designated as "Lessor", which expression shall include Lessor's heirs, executors, administrators, assigns, and successors in interest,

AND RBR, Inc., a New Mexico corporation, its successors and assigns, hereinafter, whether singular or plural, masculine, feminine, or neuter, designated "Lessee", which expression shall include all Lessees, jointly and severally, and shall include Lessee's heirs, executors, administrators, affiliates, and successors in interest.

Lessor and Lessee entered into that certain lease agreement between them dated June 1, 1998. The current lease terminates on June 30, 2023. The parties desire to extend such Lease agreement and hereby replace it as follows:

WITNESSETH:

1. DEMISE OF PREMISES

Lessor, for and in consideration of the covenants and agreement herein contained to be kept and performed by Lessee, Lessee's heirs, executors, administrators, affiliates, assigns, and successors in interest, and upon the terms and conditions herein contained, does hereby let, lease and demise to Lessee the following described premises situated in Truth or Consequences, in the County of Sierra, State of New Mexico describes as follows:

A tract of land situate in Section 29, Township 12 South, Range 4 West, N.M.P.M., located within the boundaries of the City of Truth or Consequences Municipal Airport, and more particularly described as follows, to-wit:

beginning at the southernmost corner of this tract, whence the SE corner of Section 29, Township 12 South, Range 4 West, bears S32°42'35"E, a distance of 4057.76 feet;

thence, N44°10'00"W, a distance of 125.00 feet to the westernmost corner of this tract;

thence, N45°50'00"E, a distance of 125.00 feet to the northernmost corner of this tract;

thence, S44°10'00"E, a distance of 125.00 feet to the easternmost corner of this tract;

thence, S45°50'00"W, a distance of 125.00 feet to the place of beginning.
Containing 0.3587 acres (15,625 sq.ft.), more or less.

2. RENT

A. Lessee, for and in consideration of this Lease and the demise of the said premises by Lessor to Lessee, hereby agrees and covenants with Lessor to pay as rent for the said premises, without notice or demand, the sum of \$8,000 per year to be paid on the 1st day of July each year with the first payment due on July 1, 2023.

B. Subsequent years lease rate will be adjusted annually by the published Consumer Price Index (CPI), or its equivalent, should the CPI no longer be published by the Federal government in its present form, in coming years. Should the CPI be negative in any year or years, the rate will remain unchanged for the next annual period.

C. In the event the City is required to initiate collection of unpaid rent, then Lessor agrees to pay all costs of collection, including attorney's fees.

3. TERM OF LEASE EXTENTION

The term of this Lease Extension shall be for a period of 25 years, beginning on the 1st day of July 2023 and ending on the June 30, 2048 unless otherwise terminated. This Lease may be renewed upon the mutual consent of the parties for an additional 25 years. In order for the Lease to be renewed, each party must give their written notice at least sixty (60) days prior to the expiration of the original term.

4. USE OF PREMISES

Lessee, for and in consideration of this Lease and the demise of the said premises by Lessor to Lessee or its successors, affiliates and assigns, hereby agrees and covenants with Lessor to use and occupy the said premises for the purpose of maintaining and utilizing a commercial metal hangar. Lessee has, at its own cost and expense, erected and constructed a commercial metal hangar of dimensions of at least 120 feet wide, by 120 feet long, and 22 feet high on the lease property.

5. ACTIVITY

The property herein being leased is limited to personal plane storage, aircraft related items, and personal vehicle while flying, as well as warehousing of Lessee's personal and business property. No residential use shall be permitted of the hangar. Lessor shall not perform any aircraft repairs or maintenance on other than the stored personal aircraft. Lessor may use the premises for other commercial purposes as mutually agreed by the parties, and Lessor will not unreasonably withhold consent. In addition, the storage and accumulation of flammable or hazardous materials in or near the hangar is prohibited.

6. LIABILITY OF LESSOR

Lessee, for and in consideration of this Lease and the demise of the said premises, hereby agrees and covenants with Lessor that Lessor shall not be liable for any damage to persons or property arising from any cause whatsoever, which shall occur in any manner in or about the said premises, and Lessee hereby agrees to indemnify and save harmless Lessor from any and all claims and liability for damage to persons or property arising from any cause whatsoever, which shall occur in any manner in or about the said premises. Further, Lessee hereby agrees and covenants with Lessor that Lessor shall not be liable for any damage to the said demised premises, or to any part thereof, or to any property or effects therein or thereon, caused by leakage from the roof of said premises or by bursting, leakage, or overflowing of water from any source whatsoever, and Lessee hereby agrees and covenants to indemnify and save harmless Lessor from any and all claims and liability for any damage to the said demised premises, or to any part thereof, or to any property or effects therein or thereon.

Further, Lessee agrees to maintain casualty insurance and liability insurance on the premises with minimum limits of \$1,000,000.00 with Lessor named as a loss payee and each policy will include the Lessor named as an additional insured on the policy.

7. IMPROVEMENTS

As noted above, it is contemplated that the Lessee may enter into additional improvements to its existing commercial metal hangar. If this Lease is terminated for cause or upon expiration of the Lease, the structure or structures erected, constructed or installed on the premises shall be deemed to be the property of the City.

8. CONSTRUCTION

Prior to building any structures, modifications, or additions all plans must be approved by the City Building Inspector Division, and the FAA by way of Form 7640. Buildings will be constructed according to the City of Truth or Consequences codes as adopted at the time of construction, with any necessary building permits issued by the City prior to construction. To insure the viability of the structure, the City of Truth or Consequences will require that the hangar or approved additions to a present structure go through the City's Zoning approval process. The proposed hangar must meet all building codes for its intended use, modifications approved before implemented and all pertinent fees paid. The Building Inspector will conduct inspections of the facility during construction, and must be contacted per schedule of inspections as each schedule is made ready, before the next schedule of construction may proceed.

Any interior additions or modifications must be approved by the Airport, to insure compliance with intended hangar and other uses contemplated by this agreement.

9. ASSIGNMENT AND SUBLETTING

Lessee, for and in consideration of this Lease and the demise of the said premises, hereby agrees and covenants with Lessor that neither Lessee, its affiliates, assigns or successors in interest,

shall further assign this Lease or sublet the said demised premises, in whole or in part, without first obtaining the written consent of Lessor therefor; that no assignment of this Lease or any subletting of the said demised premises, in whole or in part, shall be valid, except by and with the written consent of Lessor first obtained; that the consent of Lessor to any such assignment or subletting shall not operate to discharge Lessee, or any one of them, or Lessee's heirs, executors, administrators, affiliates, assigns, or successors in interest from their liability upon the agreements and covenants of this Lease, and Lessee, Lessee's heirs, executors, administrators, affiliates, assigns, and successors in interest shall remain liable for the full and complete performance of all of the terms, conditions, covenants, and agreements herein contained; that any consent of Lessor to any such assignment or subletting shall not operate as a consent to further assignment or subletting or as a waiver of this covenant and agreement against assignment and subletting; and that following any such assignment or subletting, the assignee and/or sublettee shall be bound by all of the terms, conditions, covenants, and agreements herein contained including the covenant against assignment and subletting. Lessor will not unreasonably withhold its consent to such sublease or assignment.

10. LESSOR'S RIGHT OF INGRESS AND EGRESS

Lessee, for and in consideration of this Lease and the demise of the said premises, hereby agrees and covenants with Lessor that Lessor shall have the right at any time to enter upon the said premises including the right of ingress and egress through the property to other properties owned by Lessor.

11. LESSEE'S RESPONSIBILITY OF COSTS AND EXPENSES

The Lessee shall be responsible for all expenses in connection with the maintenance and operation of the commercial metal hangar. These shall include but not be limited to, the utilities and maintenance of the building.

12. TERMINATION

In consideration of the mutual covenants and promises contained in this Lease, neither party shall have the right to terminate this Lease without cause. Either party, however, may have the right to terminate this agreement upon a material breach by the other party of any of this Lease's provisions. In such event, the party desiring to terminate this Lease shall give thirty (30) days written notice to the other party of its intent to terminate the Lease. Either party shall have the right to terminate this Lease without cause by giving two (2) years written notice to the other party. In the event either party desires to terminate this Lease without cause, the other party is entitled to liquidated damages as a result of the early termination in an amount to be determined by an independent qualified appraiser that can value the present value of the remaining lease term. Upon the termination or expiration of the Lease, Lessee shall restore the premises into good condition.

13. ABANDONMENT

Should Lessor abandon the above premises and fail to use the same for a period of ninety (90)

consecutive days, then at the option of the City, this Lease Agreement may be terminated, and all parties released therefrom and all improvements on City's land shall then pass to and vest in City.

14. ENFORCEMENT

A delay by either party in enforcing provisions of this lease does not constitute a waiver thereof.

15. THIS LEASE EMBODIES ALL AGREEMENTS BETWEEN THE PARTIES

It is covenanted and agreed by and between the parties hereto that this Lease incorporates all of the agreements, covenants and understandings between the parties hereto concerning the subject matter hereof, and that all such covenants agreements and understandings have been merged into this written Lease. No prior agreement or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this Lease.

16. AMENDMENTS

It is covenanted and agreed by and between the parties hereto that this Lease shall not be altered, changed, or amended except by instrument in writing executed by the parties hereto.

17. NOTICES

Any notices to be given by either party to this Lease shall be given as follows:

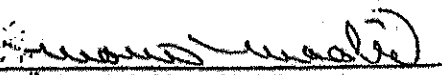
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901
Attn: City Manager

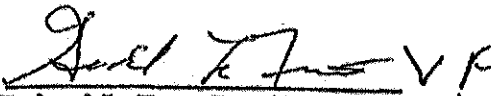
RBR, Inc.
c/o Pfarr & Rethore, PC
5070 N. 40th Street, Ste. 230
Phoenix, AZ 85018

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands the day and year first above written.

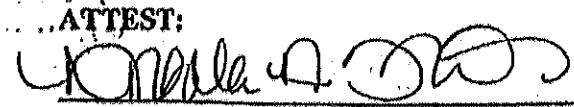
CITY OF TRUTH OR CONSEQUENCES

RBR, INC.

By: 
Morris Madrid, City Manager

By:  V.P.
Roland LaFont, President

ATTEST:


CITY CLERK



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.8

SUBJECT: 24/25 Sierra County Recreation and Tourism Advisory Board Annual Contract

DEPARTMENT: City Manager's Office

DATE SUBMITTED: March 20, 2024

SUBMITTED BY: Tammy Gardner

WHO WILL PRESENT THE ITEM: City Manager Gonzales

Summary/Background:

Annual service contract with Sierra County Recreation and Tourism Advisory Board.

Recommendation:

Approve

Attachments:

- Contract
- Supporting Documents

Fiscal Impact (Finance): Yes

\$17,000.00

Legal Review (City Attorney): Yes

[Click here to enter text.](#)

Approved For Submittal By: ☒ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. [Click here to enter text.](#) Ordinance No. [Click here to enter text.](#)

Continued To: [Click here to enter a date.](#) Referred To: [Click here to enter text.](#)

☐ Approved ☐ Denied ☐ Other: [Click here to enter text.](#)

File Name: CC agendas 3-27-2024



March 22, 2024

Angie Gonzales
City Manager, City of Truth or Consequences
505 Sims Street
City of Truth or Consequences, NM 87901

RE: FY 24/25 Proposal Tourism Industry Business, Events, Attractions Website,
Social Media, Brochure Delivery NM Statewide and "I" Brochure Update /Reprint

Honorable City Manager Angie Gonzales,

This is our annual Contract for Services Proposal from our Sierra County
Recreation and Tourism Advisory Board to provide the following services to the
City of Truth or Consequences for the Fiscal Year FY 24/25.

1. Tourism Website maintenance, updates, www.sierracounty.info,
Website, SEO, maintenance of the Facebook Page, Twitter Feed,
Pinterest site, Instagram, Blogs, Go Travel Sites/Go-New Mexico
website, Google DMO site maintenance, Banner Ads, Facebook Ads,
Google Ads, etc. Our www.sierracounty.info website also contains
current detailed information on all Lodging, Dining and Retail
Shopping located in Truth or Consequences and Sierra County.
Maintain Truth or Consequences website presence on the NM
Tourism Department website <https://www.newmexico.org/places-to-visit/regions/southwest/truth-or-consequences/>. Maintain and follow
all NMTD Guidelines regarding Truth or Consequences is New
Mexico "True". Maintain Free Local Tourism Events Website and
produce and eblast monthly Events Newsletter.
<https://www.sierracountynewmexico.info/gosierracounty/>
Facebook: [Sierra County New Mexico Tourism | Truth or
Consequences NM | Facebook](#)

Instagram: <https://www.instagram.com/sierracounty/>

Twitter: [Visit Sierra County \(@sierracountynm\) / Twitter](#)

Pinterest: <https://www.pinterest.com/sierracountynm/>

Blog: <https://www.sierracountynewmexico.info/blog/>

Pet Friendly: <https://www.sierracountynewmexico.info/pet-friendly-facilities/>

Lodging <https://www.sierracountynewmexico.info/hotels-and-accommodations/>

Dining, <https://www.sierracountynewmexico.info/restaurants/>

Retail/Shop, <https://www.sierracountynewmexico.info/shopping/>

HotSprings, <https://www.sierracountynewmexico.info/attractions/truth-or-consequences-hot-springs/>

Daytrips <https://www.sierracountynewmexico.info/recreation/tours-and-itineraries/>

Annual Cost: \$13,000.00

2. Maintain Contract for Statewide Distribution of Truth or Consequences

Tourism related Brochures with "Geronimo Trail Visitors Center. Brochures are delivered to, Albuquerque, Las Cruces, Silver City, Socorro, Ruidoso, Alamogordo, Roswell, Carlsbad, Farmington, Deming, El Paso, NM NM Public Lands Info Center, NM State Tourism Centers at Gallup, Glenrio, Lordsburg and Santa Fe.

Annual Cost: \$1,000.00

3. Update and Reprint of the "I" Brochure. This brochure is a small "rack size" New Mexico "true" publications that includes detailed information regarding Sierra Countywide Tourism Attractions, Signature Events, Lodging and Dining with NO advertisements. "I"

Brochure: <https://www.sierracountynewmexico.info/visitorsguide/>

Annual Cost: \$3,000

Our Website www.sierracounty.info Google Analytics shows 191,439 user visits in the last 12 months. Visitors from out of the USA were 4% (7,500 individual users). Visitors from the USA were 96%. 183,493 and visitors from Truth or Consequences were 4,600 (2.5%). Non local user visits to our website were 96%. Mobile/handheld devices are 73%. (10% increase from last year) Desktop users are 23.45% and 2.6% users visited from a tablet. Webmaster, Ruanna Waldrum, updates all the listings for lodging, dining, retail shopping, events, attractions, etc. on a weekly basis. Attached are the various annual Website, Maintenance Performed and Google Analytics Reports. Our Facebook reach was 399,400 increased 58%. Our Instagram reach grew 18%. See more details contained in the attached reports.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Kim Skinner". The signature is fluid and cursive, with the first name "Kim" and last name "Skinner" clearly distinguishable.

Kim Skinner, Chairman

Sierra County Recreation and Tourism Board

PO Box 1072

Truth or Consequences, NM 87901

Sierra County NM EIN# 85-600251

575-740-1777

WEBSITE

1) In February of 2024 we launched our new, fully rebuilt and updated website. This is a goal we've mentioned and worked toward for a few years. The old site was bloated and the pages were slow loads. Adding new content and grouping related listings was difficult. Now we have a more flexible site with faster page loads.

2) We no longer have access to Google's Universal Analytics reports. We must rely on GA4 reports going forward. There is less detailed info on individual users because of privacy laws. The reports are difficult to print and require more skill to decipher. That said...

Traffic

SOURCE: the Acquisition Overview report

In 2023, from January to December, users numbered 191,439. This is an 11.3% increase from 2022, when we had 171,601 total users. We were helped greatly by New Mexico Tourism buying ads for us on Meta and Google - those ads (shown as "Mbuy" on the report) bought us 38,000 visits lasting just under 30 seconds (average).

Focusing on "things we can control," our goal should continue to be attracting longer-staying visitors via organic traffic, meaning search-engine based visits. This is accomplished by keeping the site populated with useful, up-to-date, easy-to-find-and-comprehend content, which leads to search engines showing our pages (not via ads, but organically) near the top of search results, and visitors who click finding the content they seek. Visitor engagement can be measured by the length of time spent looking at the site.

In 2023 Google search brought us 80,500 visitors, with an average stay of 1:16. Bing search brought in 2880 visits, with stays averaging 1:54. 1384 DuckDuckGo.com visitors stayed 1:40.

Two sites stand out as delivering the most valuable referral traffic: newmexico.org (3200 visitors averaging 1:31), and wandernewmexico.com (2295 visitors staying 1:36). In third place, discoverruidoso.com referred 304 visits at 1:43.

Visits from the City of T or C website set the "length of stay" record at 3:21 (but only 466 visitors for the year).

Visitors

SOURCE: the Traffic by Location report

4% of all users (about 7,500 individual users) were from outside the US.

96% or 183,493 visits were from the US, and 4600 (or 2.5%) of those were visiting from "Truth or Consequences" IP addresses. IP geo-location data is unreliable but it is safe to say US visits (excluding T or C) were in the 93.51% range.

Devices

SOURCE: the Traffic by Device report

140,000 (or 73%) of our visitors were using mobile phones vs 44,800 (23.45%) on desktop and 5000 (2.6%) on tablet. But in terms of engagement, desktop won (66.83% engaged) followed by tablet (58.24% engaged) then mobile (53%). We can infer that the smaller the screen the less engaged the viewer is, but also that no screen size is unimportant.

SOCIAL MEDIA

State Tourism and MBuy continued supporting us via marketing campaigns. Paid tools used to manage social media remotely are Promo Republic, which posts to Twitter, LinkedIn and Google, and Later, which posts to Instagram. Facebook posting and responses (FB still brings the most interaction from users) are managed by our team of admins. Reports are attached and show the following:

SOURCE: the Social Media: Meta reach, visits & follows report

Facebook Reach - 399,400 - a 58% increase from the previous period.

Facebook Profile Visits - 8.4k - a 75.3% increase from the previous period.

Facebook follows - 480 - a 9.1% increase from the previous period.

Instagram Reach - 69,900 - an 18% increase from the previous period

Instagram Profile Visits - 1200 - a 25.4% increase from the previous period.

Instagram follows - 99 - equal to the previous period.

WEBSITE UPDATES IN THE PAST YEAR

A comprehensive list of all updates made to the site and other assets in the last year is attached. The list covers work done inside websites, on social media, on email (press requests, visitor inquiries), on various apps including mailchimp, by phone, and on the ground.

PLANS FOR THE COMING YEAR

1) **Website:** our rebuild included an all-new design and the copying over of all relevant content - meaning, all pages, blog posts, and listings including restaurants, hotels, attractions, tourist-friendly businesses, meeting venues, events, and the like.

But we weren't able to bring everything over. SEO is built into the site using a plugin, which handles a lot. But we are starting over with SEO customizations, including:

- a) SEO title tags - these should be examined and fine tuned
- b) metadescriptions should be checked and/or rewritten for all the listings and pages
- c) we set up schema for events, lodging and restaurants before launch, but will continue building to create more rich results

2) **Events:** the events-only website, SierraCountyEvents.com, was discontinued when the new site was launched, and the domain was redirected to the new site's events page, where people can create a user to log in and add their events. This should result in a lot less confusion going forward. This ends our need to duplicate what users enter into one site and input the info onto another site. Now, we can focus on adding events ourselves in one place, so that our event list is a more comprehensive view of the types of events that would be attractive to visitors.

We'll continue to identify and promote these events, including our signature annual events, which are now listed among other annual events that were not on the list before (Rock & Gem Show, Monticello Holiday Store, etc)

3) **Vacation Rentals:** since T or C short-term rentals are paying lodgers tax now (via AirBnB), we have invited any short-term rentals that are paying lodgers tax to enter their facilities on the site. These listings live among the hotels, and include no contact information aside from the link to AirBnB, which collects and pays the city lodgers tax. It is up to the rental owners to submit their listings along with a

business license so we know they are legit. We intend to reach out to those who are known to us but not yet on the website.

4) **Content:** content creation (new social media posts, reels, stories and photos and website content) goes without saying. We keep tabs on events and business news and reach out to event planners and business owners for updated info. We continue shooting / sorting / archiving / resizing / optimizing images, adding them to the website and sharing on social media. When a new business opens, we visit for photos, hours, and other details.

5) **Email campaigns:** we have resumed and will continue sending emails monthly to our subscribers so they know about the upcoming month's events.

Hosting, Maintenance

The cost of hosting and maintenance is \$35 per month for the next 12 months. Any time spent on updates is billed hourly.

As of March 2024, we are only billing for hosting of one website instead of two. The hosting & maintenance fee covers the server, backups, security, plugin updates, and troubleshooting of errors and outages.

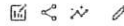
What are your methods for tracking your events: Google analytics. See attached reports.

Go NewMexico; requests for additional info are mailed weekly to the Tourism Board who then responds electronically & mails printed T or C/SC Tourism attraction and event information.

Tracking through increase or decrease in Lodgers Tax receipts and GT, along with visitation numbers to the museums, Visitor Center, events, Elephant Butte Lake and Caballo Lake State Parks, as well as tracking Chamber of Commerce walk-in, phone, email and snail mail requests for Visitor information.

Acquisition Overview Report

Acquisition overview

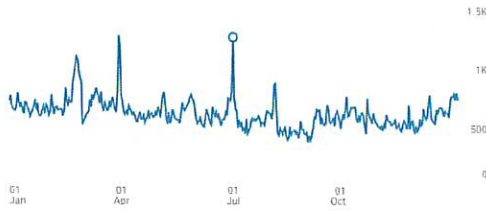


Users 191K

New users 189K

USERS IN LAST 30 MINUTES

7



USERS PER MINUTE



TOP COUNTRIES

United States

7

[View realtime →](#)

Now users by

First user primary

FIRST USER PRIMARY

NEW USERS

Organic Search	86K
Unassigned	30K
Direct	27K
Paid Search	16K
Referral	11K
Organic Social	10K
Display	6.1K

Sessions by

Session primary ch

SESSION PRIMARY

SESSIONS

Organic Search	117K
Unassigned	42K
Direct	32K
Paid Search	19K
Referral	14K
Organic Social	12K
Display	6.5K

Sessions by

Session Google Ad

SESSION GOOGLE

SESSIONS

Search Campaign - L	527
---------------------	-----

[View user acquisition →](#)[View traffic acquisition →](#)[View Google Ads campaigns →](#)

Lifetime value

Organic Google Search impressions by

Landing page + query string

LANDING PAGE + QUERY S ORGANIC GOOGLE S

/business/winston-general-s...	1.9K
/	618
/shopping/?_store_location=...	83
/attractions/percha-bank-m...	26
/restaurants/location/willia...	22
/shopping/?_store_location=...	16
/shopping/arrey-caballo/	11

Last 120 days ending Dec 31

[View Google organic traffic acquisition →](#)

Organic Google Search clicks by

Organic Google Search query

ORGANIC GOOGLE SEARCH QUERY

ORGANIC GOOGLE SEARCH

winston general store	105
winston store nm	10
winston store	7
kayaking near me	2
kayak rentals near me	1
monthly rentals in truth-or-consequ...	1
paddle board rentals	1

Sessions by Session manual source

SESSION MANUAL SOURCE

SESSION MANUAL SOURCE

SESSIONS

google	107K
MBuy	49K
m.facebook.com	6.2K
newmexico.org	4.1K
bing	3.7K
wandemexico.com	2.7K
l.facebook.com	2.5K

[View Google organic search queries →](#)[View Manual campaigns →](#)

To calculate the percentage increase from 171,600 to 191,000, you can use the following formula:

$$\text{Percentage Increase} = \left(\frac{\text{New Value} - \text{Old Value}}{\text{Old Value}} \right) \times 100$$

In this case:

Old Value (OV) = 171,600

New Value (NV) = 191,000

So,

$$\text{Percentage Increase} = \left(\frac{191,000 - 171,600}{171,600} \right) \times 100$$

$$\text{Percentage Increase} = \left(\frac{19,400}{171,600} \right) \times 100$$

$$\text{Percentage Increase} = 0.113 \times 100$$

$$\text{Percentage Increase} = 11.3\%$$

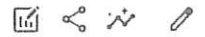
Therefore, the percentage increase from 171,600 to 191,000 is 11.3%.

Traffic source and length of stay



Manual: Session manual source

Custom Jan 1 - Dec 31, 2023



Search...

Rows per page: 25

Go to: 1

< 1-25 of 505 >

Session manual source

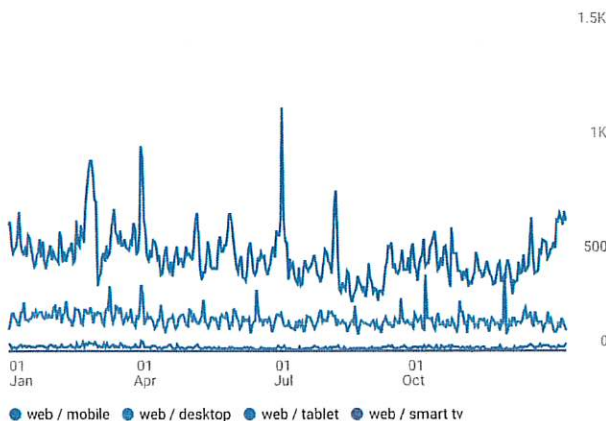
		Users	Sessions	Engaged sessions	Average engagement time per session	Engaged sessions per user	Event sessions
		147,756	193,517	110,274	1m 03s	0.75	5
		00% of total	00% of total	100% of total	Avg 0%	Avg 0%	Avg
1	google	80,589	106,689	72,306	1m 16s	0.90	5
2	MBuy	38,073	48,893	15,222	28s	0.40	4
3	m.facebook.com	5,652	6,192	2,731	31s	0.48	4
4	newmexico.org	3,200	4,106	2,558	1m 31s	0.80	6
5	bing	2,880	3,749	2,879	1m 54s	1.00	7
6	wandernewmexico.com	2,295	2,726	1,978	1m 36s	0.86	6
7	l.facebook.com	2,055	2,543	1,385	1m 04s	0.67	6
8	(not set)	2,065	2,488	1,438	1m 00s	0.70	5
9	yahoo	1,508	1,988	1,491	1m 36s	0.99	6
10	lm.facebook.com	1,701	1,937	932	48s	0.55	5
11	duckduckgo	1,384	1,821	1,295	1m 40s	0.94	6
12	torcnm.org	466	607	488	3m 21s	1.05	11
13	lascruces.com	381	471	299	41s	0.78	5
14	instagram.com	365	430	274	1m 10s	0.75	7
15	newmexicomagazine.org	343	428	298	1m 05s	0.87	5
16	mailchimp	188	369	221	1m 3/s	1.18	4
17	discoverruidoso.com	304	368	220	1m 43s	0.72	5
18	riverbendhotsprings.com	278	346	245	2m 28s	0.88	10
19	sierracountyevents.com	227	326	221	1m 24s	0.97	6
20	www-foxnews-com.cdn.ampproject.org	283	294	69	33s	0.24	3
21	facebook.com	230	231	69	2s	0.30	3
22	foxnews.com	198	218	104	49s	0.53	4
23	krqe.com	6	218	37	1s	6.17	2
24	tripadvisor.com	174	207	139	1m 24s	0.80	6
25	yahoo.com	166	175	101	57s	0.61	



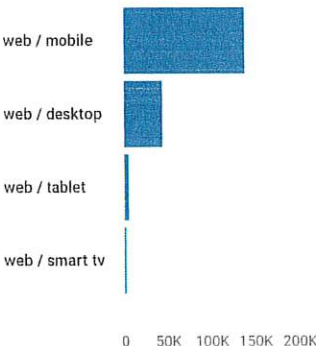
Traffic by device

Tech details: Platform / device category Custom Jan 1 - Dec 31, 2023

Users by Platform / device category over time



Users by Platform / device category



Search...

Rows per page: 10 1-4 of 4

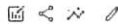
Platform / device category		↓ Users	New users	Engaged sessions	Engagement rate	Engaged sessions per user
		191,439	188,704	138,144	56.03%	0
		100% of total	100% of total	100% of total	Avg 0%	Avg
1	web / mobile	140,039	139,196	95,900	53.01%	0
2	web / desktop	44,806	44,513	38,465	66.83%	0
3	web / tablet	5,067	4,986	3,740	58.24%	0
4	web / smart tv	9	9	6	60%	0

Traffic by Location

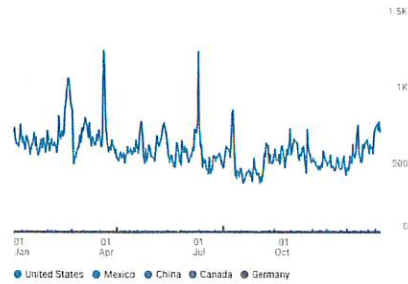
erracountyne...

Demographic details: Country

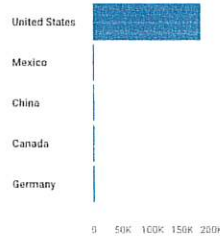
Custom Jan 1 - Dec 31, 2023



Users by Country over time



Users by Country



Search...

Rows per page: 10

Go to: 1

1-10 of 147

	Country	Users	New users	Engaged sessions	Engagement rate	Engaged sessions per user	Avg engagement
		191,439 100% of total	188,704 100% of total	138,144 100% of total	56.03% Avg 0%	0.72 Avg 0%	1r
1	United States	183,493	180,858	133,578	55.85%	0.73	1r
2	Mexico	1,169	1,143	708	49.34%	0.61	1r
3	China	1,061	1,052	422	39.92%	0.40	
4	Canada	1,002	978	777	62.16%	0.78	1r
5	Germany	533	494	273	49.91%	0.51	
6	India	451	452	265	56.5%	0.59	
7	United Kingdom	444	440	293	57.12%	0.66	1r
8	Indonesia	390	363	261	58%	0.67	1r
9	France	216	214	117	50.43%	0.54	1r
10	Ireland	195	159	89	44.95%	0.46	

Country

© 2024 Google | [Analytics home](#) | [Terms of Service](#) | [Privacy Policy](#) | [Send feedback](#)

erracountyne...

my generating trend or correlations from organic search



A

Demographic details: City

Custom Jan 1 - Dec 31, 2023



Albuquerque El Paso Phoenix Truth or Consequences Las Cruces

Search...

Rows per page: 10

Go to: 1

1-10 of 6150

	City	Users	New users	Engaged sessions	Engagement rate	Engaged sessions per user	Avg engagement
		191,439 100% of total	188,704 100% of total	138,144 100% of total	56.03% Avg 0%	0.72 Avg 0%	1r
1	Albuquerque	24,652	23,912	17,109	53.52%	0.69	1r
2	El Paso	21,287	20,649	13,188	48.8%	0.62	1r
3	Phoenix	18,511	16,778	13,952	59.28%	0.75	1r
4	(not set)	13,572	13,634	7,876	45.38%	0.51	
5	Las Cruces	5,348	5,091	4,010	60.71%	0.75	1r
6	Englewood	5,300	4,532	3,612	56.68%	0.68	1r
7	Dallas	4,764	4,373	3,277	55.19%	0.69	1r
8	Truth or Consequences	4,595	3,920	5,101	66.32%	1.11	2r
9	Denver	3,325	3,066	2,482	57.53%	0.75	1r
10	Los Angeles	2,849	2,614	2,010	55.33%	0.71	1r

City

© 2024 Google | [Analytics home](#) | [Terms of Service](#) | [Privacy Policy](#) | [Send feedback](#)

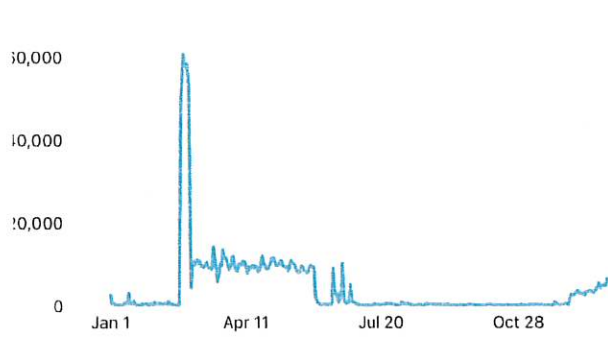
Social Media - Meta reach, visits & follows in 2023

Reach

Export

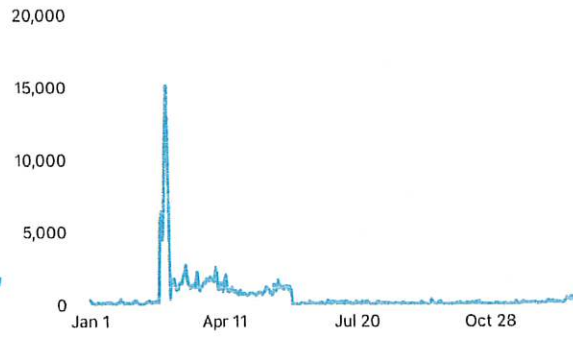
Facebook reach ⓘ

399.4K ↑ 58.1%



Instagram reach ⓘ

69.9K ↑ 18%

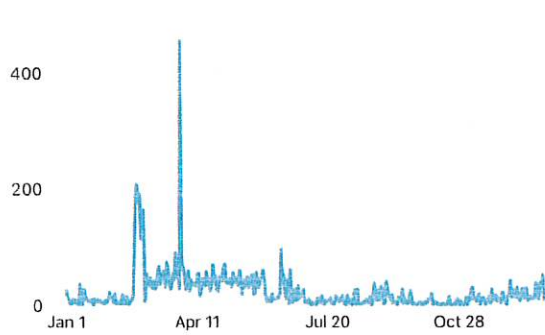


Visits

Export

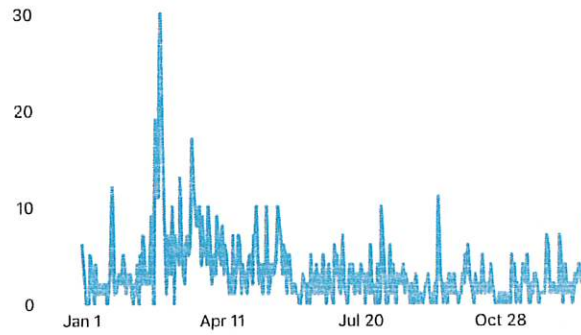
Facebook visits ⓘ

8.4K ↑ 75.3%



Instagram profile visits ⓘ

1.2K ↑ 25.4%

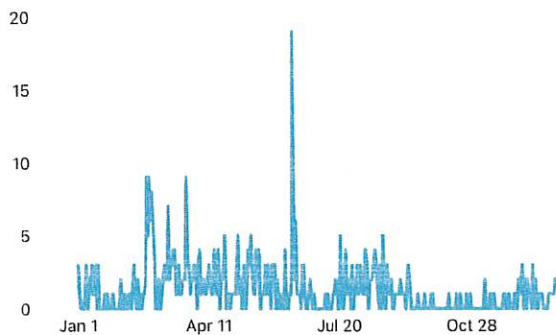


Follows

Export

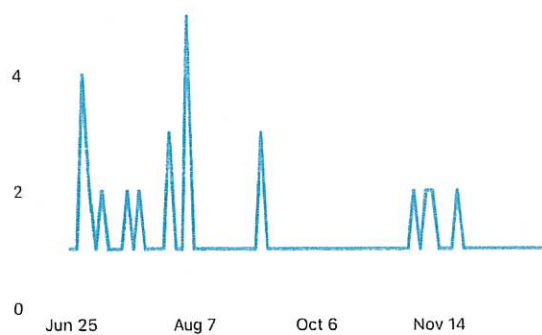
Facebook follows ⓘ

480 ↑ 9.1%



Instagram follows ⓘ

99 0%



MAINTENANCE PERFORMED MARCH 2023 THROUGH FEBRUARY 2024
SierraCounty.info and SierraCountyEvents.com
Ruanna Waldrum / ReadyWebService.com

=====

MARCH 2023

- posted an instagram story for ice cream at Limons
- updated T or C Fiesta Golf Tournament annual event and local event
- called about museums; disabled Kingston Schoolhouse and redirected to main museums page
- disabled Percha Bank Museum, it will be an air b&b and maybe gallery space
- posted insta stories for spaceport, Fiesta "taste of Sierra County" fundraiser
- set Art Hop events on Art Hop page, approved Bogs Art Hop event
- posted instagram stories for DJ Jah Karma, Birdie Affair, 7 stories for #arthoptorc
- added Fiesta Casino Night to events page
- compiled images and text to promote T or C Rock Show on instagram
- updated address of / reactivated Sierra Makers Market listing in order to include (with a link) as a ticket source for Fiesta Casino night
- posted insta stories for El Cortez, new menu item at Bigfoot
- posted insta stories for Sierra Grande soaks, Giddy Up
- posted insta stories for Charles, Doe Pops Coney Island hot dogs
- added Our Environmental Handprints event to events page
- approved Hank Snow & July 1 EB event entered by Gina
- posted stories for Sierra Grande restaurant, Fiesta, El Cortez, Serenity, Turtleback coworking
- created a section for short-term rentals based on hotels section, created a form to connect submissions to the post type and collect a copy of the short-term rental business license plus a link to AirBnB, added fields for required images and info, revised new layouts to include no phone number or email, just a link to AirBnB (so city will receive the Lodgers tax), duplicated all this on the sierracounty.info 2.0 website - sent form to first (beta tester) short term rental owner
- contacted a second - to be continued
- created and sent an April events list
- consulted with the designer Eric King re: tourism rebuild

APRIL 2023

- added Rio Bravo Art Hop event per Gina (using the quick link method)
- added Mos Gatos at Brewery for Art Hop
- added 5 more Art Hop listings per Gina, set layouts to show listings on the art hop page
- contacted Jessica Griffin at Percha Motel
- approved & readied The Outlaw Casita on the new Vacation Rentals page - revised layout to remove links from pet-friendly and hot springs

- moved Elephant Butte City 25th anni over to the events page, tourism site; added June Spaceport America Cup event to events page, tourism site; activated July 1 fireworks events on the events page, tourism site
- cleaned up leftover Art Hop remnants, reactivated Art Hop for May
- reactivated Black Cat Poets for May
- added two Horse's Mouth circus performances per Marianne Blaue
- re-revised visitor center hours per Gina
- proofread GoNewMexico letter and created new icons for the bottom of it, uploaded to AS3, linked to socials per Gina
- moved four events entered by Gina over to the events page
- set Fiesta schedule after Gina got a call re: website
- changed Visitor Center hours per Gina
- moved Turtleback Mountain Music Festival over to the tourism website
- entered the Star Party in Kingston per an email from Cwanek
- created a May events email

MAY 2023

- correspondence with Daniel re: Bent Rod's Fishing Guide service; added Bent Rod's to live tourism site and dev tourism site
- continued work on the new site - 1 hour for bowling, sidekixx, brewery adds, and creation of a Family Fun section / page
- created the "how to get here" page on the new site
- added a spaceport post to the old site regarding Unity 25 and Galactic 01
- copied the same post over to the new site
- added a link to MainStreet's art hop age on the Art Hop listing
- added Farmers Markets for May, removed Stone Soup from meeting planner, created a spaceport post re May and June launches
- how to get here page recreated on new site
- correspondence with Janice Richmond re: Hillsboro events, user registration, etc
- moved Janice Richmond's event over to Tourism
- added city pool hours as a graphic on old site and in a table on the new site
- new site - home page tweaks, added rock and gem show as an annaul, connected pages to directions sections, added css so that the section clicked is highlighted in a box and dropshadow
- added event re: opening of City Pool Memorial Day, added City Pool hours on old and new sites, revised Sierra Grande hours on old site, revised Bigfoot hours on old site, added Float from the Boat to the old site, added event re: river float starting on Thurs 5/18

NO WORK IN JUNE

JULY 2023

- embedded Sierra Grande's pdf of available ecotours
- go sierra county june
- pdf to Gina / visitor center
- revisions to Spacport Tours and Ralph Edwards Park meeting venue per

Gina

- switched from "paid for" credit in footer to t or c logo
- rolled farmers markets forward
- entered Bogs event for August 12 (Mikaela Davis)
- marked Sierra Grande as closed til July 27 - unchecked all days for SGL restaurant
- marked BigFoot as closed til August 10
- rolled forward Virgin Galactic August 10 commercial flight
- wrote back to Joshalynn with Holiday Inn Express
- input content from Joshalynn
- removed Sierra Grande closure from title
- visited the bowling alley for photos
- got photos of live music at Brewery
- created the August events email; made a PDF for the visitor center
- called Indian Springs to check status

AUGUST 2023

- fielded query from Gina re: why Arrey RV Park is missing
- marked Big Foot as open again, current site
- revised Sierra Grande hours, current site
- visited Taylor'D Esthetics for photos, added to the current site - 30 minus
- added Geronimo Tail Guest Ranch to the old site and the new - 40 minutes
- collected photos for Armendaris and Ladder Ranches
- entered Gina's World Cleanup day on tourism
- revised Turtleback Taphouse & Grill to show open
- revised the date of World Cleanup Day on tourism
- rolled Art Hop and Farmers Markets forward
- added hours to Turtleback Taphouse & Grill on old and new sites
- added menus to Turtleback Taphouse & Grill (both sites)
- corrected phone number for Sun or Shade (both sites)
- added Great-Full Grill to both sites
- added Mile Marker boutique info to the coffee shop listing on the new site
- spoke to Sun or Shade RV Park and removed their listing since it's all long-term
- revised hours of Sidekixx Bowling Alley and Sidekixx Restaurant (both sites)
- approved 3 vacation rentals entered by Molly Hammer, old site
- after conversation with Kim & Gina removed addresses from vacation rental layouts
- had to increase the site php from 7.4 to 8 in order to change that layout
- had to increase php ini settings to take the site to php 8
- found info on Wild Irish Fiddle show at Hillsboro Community Center, entered in tourism site
- saw info on Hillsboro Street Market on insta, entered in tourism site
- created the September events email

- created a pdf for the visitor center
- notified Cathy at MainStreet about date error on their art hop page
- replaced restaurant image on Sidekixx Restaurant
- created stories from others' posts on insta
- posted on insta, facebook, x, linkedin, google my business
- removed short-term rentals from hotel archive because the layout showed no address-comma-town
- added short term rental item to the bottom of the hotel sidebar
- added short term rental page to the mobile menu and the regular menu (old site)
- visited Sierra Grande gift shop and Mile Marker 7 Boutique for photos
- recreated 2 events entered by Gina on the tourism site - Jono Manson and Pint & A Half

SEPTEMBER 2023

- added T or C ultra to the events page - 20 mins
- contacted Jono Manson for permission to share a reel of a screen recording - Jono toffered to do a custom promo - custom promo came in and was used to create a reel tagging Manson, The Consoequences, El Cortez Theater (1 hours)
- added Kenny Rogers' photo tours and 2-5 day workshop retreats to new site (35 minutes)
- sent an email to Geronimo Trail Guest Ranch because they have not responded to web form or phone call or instagram message - 15 minutes
- called and left a message for Blue Sky RV Park
- visited Further Bistro for more photos
- added Kenny Rogers photo tours and workshops to the old site - checked with Kenny and made revisions - 1 hour -
- visited spaceport
- activated Story Lab on tourism after approving it on the events site, cropped and switched out image (20 minutes)
- added downtown delivery to Great-Full, 2 sites
- revised PPC hours, 2 sites (20 mins)
- activated chile challenge, county fair and trinity site tour on events page, created the october email, made a pdf for the visitor center, filled out the county fair schedule

OCTOBER 2023

- rolled county fair forward to 2024 in the Annual Events section
- rolled T or C Story Lab forward to November
- rolled Black Cats Poets forward to November
- deactivated Percha Motel (vacation rental), set a redirect
- forwarded an inquiry about parking at the Albert Lyon to Diana at NMSU extension
- added Galactic 06 to new site and live site
- added Rocktober to live site
- added Historic Home Town day to live site
- added Dia de los Muertos event to live site

- added Nick & Lindsay Monday karaoke to live site (1 hour for those 4 includes images)
- added Veterans Day Car show to current site - checked redirect to annual event
- re-sent email to Marianne Blaue about meeting planner
- sent the same email to John Masterson per his request
- revised 2023 and 2024 annual event PDFs to correct contact email on Chile Challenge.org and remove Kayla as contact
- revised dates on Chile Challenge 2024 pdf and website to be Wed through Saturday instead of incorrect (2023 dates)
- added Galactic 05 flight window to events page
- added Galactic 05 flight info to the blog post on the dev site
- rolled forward Farmers Market for November 18 (65 minutes for the tasks above)
- added 420-friendly screening to events page, got details on tickets and etc from Mo
- started the November events email, including the end of October because much is new (30 minutes for 2 tasks)
- finished and sent events email
- made a pdf for the visitor center
- updated Hoosier Hot Springs per request from new owner Erica (1 hour for 2 tasks)
- entered the recycled art show per Suzanne Carlstedt's info share (17 minutes)
- added Trees We See You show to events list, checked with an artist, and removed it again - venue too small

NOVEMBER 2023

- went to Art Hop (half hour)
- reactivated Black Cat Poetry Reading, Story Lab, Art Hop (events page)
- rolled Veterans Day Car show forward to 2024 on annual events page
- added Thanksgiving at SGL and Brewery to events page, called Turtleback Taphouse & Grill (45 mins)
- revised Thanksgiving SGL per Jocelyn Valdez email
- revised date of November 20 karaoke (15 mins)
- replaced graphic on Luminaria Beachwalk event, live site
- obtained optimized and switched out a photo of GreatFull Grill with service indoors (20 mins)
- revised GTSB hours and location on 2 sites
- revised SCRTAB meeting times on the contact us page, two sites
- switched Kate Hall for Cathy Mears-Martin on the board page
- revised Further Bistro hours
- added info to Hillsboro's Christmas in the Foothills - found on instagram pos (55 mins)
- added brunch to TT&G
- added Yuletide in Chloride to the events page
- added Christmas in the Orchard to the events page
- called & wrote to Will about Lighted Boat Parade, learned it iss

cancelled for the foreseeable future, removed from the various places we list it

- activated and revised First Day Hikes for 2024 (1.5 hours for all that)
- created the December events email, sent tests and final (:45)

DECEMBER 2023

- created Dam Site Day - per Gina it's 2/17 - on dev site
- created the events PDF for Gina, lil late
- visited Cuchillo for Christmas in the Orchard
- added Dam Site Day to live site
- added Dam Site History Class per flyer sent by Gina to live and dev
- rolled forward art hop, poetry, story lab
- revised Dam Site Day on dev
- revised events layout on dev
- deleted event plugin on 4.0, revised CPT name, broke the posts, reverted to correct slug
- moved a backup of 3.0 to a private account for reference
- rewrote Spaceport page and Spaceport blog post since flights are slowing for now
- added Christmas dinner per flyer from Gina -
- added Christmas brunch at Sierra Grande
- tracked down info and added Turtle Ascension and Sidekixx NYE party together -
- responded to Irma about NYEve
- revised info on the visitor center on the live site per Gina
- revised the same info, but better, on the dev site
- added 2 art talks to live site, added the same 2 to the new site
- added galactic 06 to the events page
- January events email

JANUARY 2024

- added a page for disc golf (40 mins)
- switched out photos of the Hoosier (20 mins)
- updated hours for sidekixx, both sites
- added Body & Soul to both sites
- centered footer on new site per Mo review
- added buttons on home page under post slider sections
- added Body & Sole exercise to live site and dev site (2 hours)
- reel for art hop
- checked mailchimp campaign settings in light of new guidelines (1.25 hours)
- received SSNM info from Jgriffin, copied and added dates to the spreadsheet, extracted images from the spreadsheet, shared with Gina in dropbox, shared spreadsheet with gina to discuss (50 minutes)
- caught up on a bunch of expired events on the live site (40 mins)
- noticed backups are now 2G, checked server for lingering copies (20 mins)
- found photos and created sample banners for review (1 hour)
- events email - half hour

FEBRUARY 2024

- moved EB Balloon Regatta to September on live site and new site - 20 minutes
- fixed error with Story Lab per Alice - 5 mins
- reel on snow day - 20 minutes
- reel for Dam Site Day - 1 hour --- TOTAL SO FAR 1:45
- tracked down info on Gila Wilderness centennial after seeing a google alert, saved links, created a March 3 event for a talk at HCCenter (40 mins)
- events email for March



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.9

SUBJECT: Discussion/Action – Dam Maintenance pertaining to Cuchillo Negro Dam, Marie Street Dam, and St. Anne's Dam

DEPARTMENT: City Manager

DATE SUBMITTED: March 21, 2024

SUBMITTED BY: Traci Alvarez

WHO WILL PRESENT THE ITEM: Angie Gonzales, City Manager

Summary/Background:

Review attached 2019 and 2022 reports from the Office of the State Engineer pertaining to Dam Maintenance

Recommendation:

Commission Direction

Attachments:

- Cuchillo Negro Dam Reports
- Marie Street Dam Reports
- St. Anne's Dam Reports

Fiscal Impact (Finance): TBD

[Click here to enter text.](#)

Legal Review (City Attorney): Yes

Approved For Submittal By: ☐ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. [Click here to enter text.](#) Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC agendas 3-27-24

JOHN R. D'ANTONIO, Jr., P.E.
STATE ENGINEER



DAM SAFETY BUREAU
CONCHA ORTIZ Y PINO BLDG
P.O. BOX 25102
SANTA FE, NEW MEXICO 87504
(505) 827-6122
(505) 476-0220 FAX
NM.DamSafety@state.nm.us

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe**

April 8th, 2019

Mr. Juan Fuentes, City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Inspections of Cuchillo-Negro Dam, OSE File No. D-541
St. Anne's Dam, OSE File No. D-581, and
Marie Street Dam, OSE File No. D-582
Sierra County**

On March 18, 2019, Mr. James Head, P.E., of the Office of the State Engineer (OSE) staff inspected Cuchillo-Negro, St. Anne's, and Marie Street Dams. Copies of Mr. Head's inspection memoranda and inspection checklists are enclosed for your information. A copy of the OSE Guidelines for Vegetation Management on Dams will be sent to you via email for your information and use. I concur with the required actions contained in the inspection memoranda.

Cuchillo-Negro Dam has been assessed in satisfactory condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 1 and 2 of the review memorandum.

St. Anne's Dam has been assessed as being in poor condition due to uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE to verify the design assumptions. Otherwise, a fair rating would have been appropriate due to the erosion gullies that are present on the left downstream groin of the dam, the diminished crest width of the dam created by the grading (back-dragging) of the slopes, the apparent lack of spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit.

Marie Street Dam has been assessed as being in poor condition as a result of the lack of design documentation for the sewer line passing through the dam, and uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE-DSB to verify the design assumptions. Otherwise a fair rating would have been appropriate due to inadequate spillway capacity.

Mr. Juan Fuentes
City of T or C Dams

April 8th, 2019
Page 2 of 2

The Operations and Maintenance (O&M) Manual on file for Cuchillo-Negro Dam has not been approved by the OSE-DSB, is outdated, and does not meet the requirements of Section 19.25.12.17 NMAC. There are no O&M Manuals on file for St. Anne's and Marie Street Dams. The New Mexico Watershed and Dam Owners Coalition has developed a template for O&M Manual preparation that could be useful. The template can be found on their website at: www.nmwsc.org. There are no Emergency Action Plans (EAP) on file with the OSE-DSB for these three dams. Subsections E and F of 19.25.12.21 NMAC require dams classified as High. Hazard Potential such as these to have an approved O&M Manual and EAP in place. Please be advised of the potential for added owner liability if a dam were to experience an incident while out of compliance with the OSE Dam Safety Bureau's rules and regulations for dams.

If further discussion would be helpful, please contact James Head at (505) 383-4138 or via email at james.head@state.nm.us or me at (505) 383-4134.

Sincerely,



Charles N. Thompson, P.E., Chief
Dam Safety Bureau

CNT/jdh

Enclosure

Email: Benny Fuentes, City of Truth or Consequences (bfuentes@torcnm.org)
Paul Tooley, Sierra County Emergency Manager (ptooley@sierraco.org)

MEMORANDUM
OFFICE OF THE STATE ENGINEER
Dam Safety Bureau

DATE: March 28, 2019

TO: Charles N. Thompson, P.E, Chief, Dam Safety Bureau *CNT*

FROM: James D. Head, P.E., Dam Safety Engineer

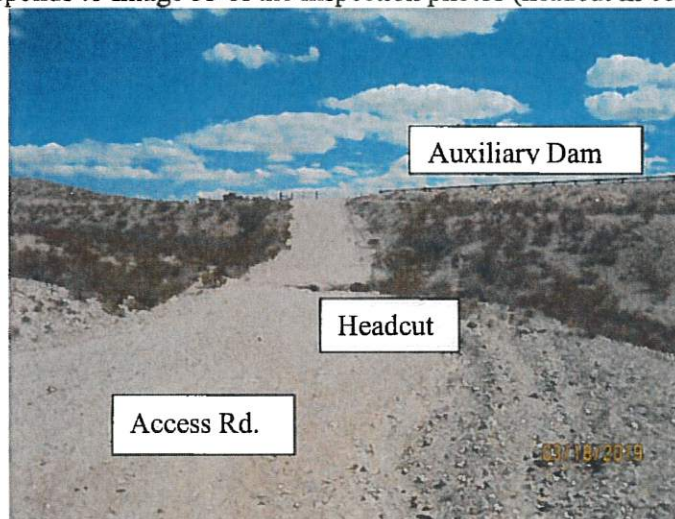
SUBJECT: Inspection of Cuchillo Negro Dam, Sierra County, OSE No. D-541

On March 18, 2019, I inspected Cuchillo Negro Dam. Observations made during the inspection are shown on the attached Inspection Checklist. Required actions for the dam owner are listed below.

Required Actions

Actions are listed in the order of importance.

1. Repair the large erosion gully at the south end of the auxiliary spillway and curtail future erosion by redirecting surface runoff. The gully is large and if left unaddressed could result in a potential failure mode at the left abutment of the auxiliary spillway.
2. Repair the large headcut and erosion gully that is present across the access road to the flood detention pool from the north end of the earthen auxiliary dam. See image below which corresponds to Image 53 of the inspection photos (headcut in center of image).



3. Periodic removal of woody vegetation from the main dam and auxiliary embankment section required. This includes removal of woody vegetation from the slopes, crests, and abutment contacts, and includes removal of rootballs and stumps in accordance with the Office of the State Engineer (OSE) Dam Safety Bureau's updated "*Vegetation Management on Dams*". The *Vegetation Management on Dams* guidelines document must be included in a forthcoming update to the Operation and Maintenance Manual.

Removal of woody vegetation, where applicable, is also required where vegetation is present on the primary and auxiliary spillways and the respective discharge channels.

4. Remove all debris from the ports and trash racks for the inlet structure to the lower outlet conduit and confirm that all ports below the sediment level are adequately sealed. Maintain outlet works trash racks free of debris and routinely remove all accumulated debris within 100 feet of the outlet works intakes to minimize potential plugging of the ports on the lower outlet conduit inlet structure.
5. Repair / patch deteriorated concrete where applicable to various sections of the dam and auxiliary spillway. Examples of deteriorated / damaged concrete are shown in the inspection photos.
6. Assure the access gate to the crest is closed and locked following maintenance activities to restrict unnecessary vehicular traffic from the crest of the dam.
7. Continue to implement proactive rodent abatement measures on the embankment section of the dam and collapse and backfill rodent burrows with suitable backfill material. The owner is also referred to FEMA 473 which is available for download from the OSE website listed below.
8. Make arrangements to have an interior inspection of the low level 60-inch diameter outlet works conduit performed. Also provide the OSE with a schedule for completion of the interior inspection and contract with a professional civil engineer licensed in New Mexico, or a qualified contractor, to assess the condition of the low level outlet works. Provide the OSE Dam Safety Bureau with an inspection report which documents observations and recommendations made as a result of the inspection. This continues to be a repeated item from prior OSE-DSB inspections that has not been addressed.
9. Provide a copy of survey results for horizontal/vertical survey monuments as requested in the OSE correspondence to the owner dated July 16, 2002, November 17, 2006, June 29, 2009, and if survey results are not available, make arrangements for a survey and submit the results with interpretative narrative to the OSE Dam Safety Bureau. Collected data must be compared to an original baseline survey. A well organized report with comprehensive narrative must be provided as part of the data submittal to the OSE-DSB. This continues to be a repeated item from prior OSE-DSB inspections that has not been addressed.
10. An Operation and Maintenance (O&M) Manual is required per Subsection E of 19.25.12.21 NMAC. The O&M Manual on file with the OSE for this dam is outdated and must be revised to reflect actual maintenance practices and experience and must comply with 19.25.12 NMAC. The owner is referred to the OSE website for information on preparing an O&M Manual. Changes to the OSE rules and regulations allow an owner to prepare the O&M Manual without hiring a professional engineer if the owner can submit a manual that meets the requirements of 19.25.12.17 NMAC. Provide the OSE Dam Safety Bureau with a schedule for completion of an updated Operations and

Maintenance (O&M) Manual. This continues to be a repeated item from prior OSE-DSB inspections that has not been addressed.

11. An Emergency Action Plan (EAP) is required per Subsection F of 19.25.12.21 NMAC. A document titled "Initial Reservoir Filling Plan/Flood Emergency Plan" is on file with the OSE for this dam. This document does not contain a current notification flowchart, and much of the contact information contained in the document can be presumed to be out of date. The owner is referred to the OSE website for information on preparing an EAP and for a copy of the EAP template. Engineering elements of the EAP must be prepared by a professional engineer licensed in New Mexico with experience in dam breach analysis, flood routing and failure mechanisms for dams. The owner can prepare the non-engineering elements of the EAP. Provide an update to the OSE Dam Safety Bureau on the status of preparing a revised EAP for Cuchillo Negro Dam. This continues to be a repeated item from prior OSE-DSB inspections that has not been addressed.
12. Prepare and submit a Hydrologic and Hydraulic (H&H) analysis to evaluate the spillway capacity. The results of the H&H analysis can be used to support a Dam Breach and Flood Routing Analysis for the EAP. This continues to be a repeated item from prior OSE-DSB inspections that has not been addressed.
13. Work with Sierra County to assure no additional residents are constructed within the maximum flood pool of the dam. Based on elevations in Google Earth there are a number of resident to the southeast of the Town of Cuchillo that are within the maximum flood pool. A number of these residents are shown in the flood pool on the original as-built set of plans. However, there has been at least one home constructed within the maximum flood pool of the dam since the dam was completed, approximately 1 mile to the northwest of the dam. In addition, consideration needs to be given to these residents in the forthcoming EAP.

Information from the OSE-DSB and the Federal Emergency Management Agency to assist dam owners on woody vegetation removal; impacts of animals on earthen dams; planning an O&M program; preparing an O&M Manual; preparing an EAP; and a model EAP are available on the OSE-DSB website at: <http://www.ose.state.nm.us/DS/dsIndex.php>

Compliance with Rules and Regulations

Operation and Maintenance Manual and Emergency Action Plan

OSE files include an Operation and Maintenance (O&M) Manual prepared by the Army Corps of Engineers dated June 1993. This document requires updating to reflect actual maintenance practices and experience and conformance with 19.25.12 NMAC. OSE files also include an "Initial Reservoir Filling Plan/Flood Emergency Plan" for this structure, prepared by USACE and dated September 1994. This document does not contain a current notification flowchart, and much of the contact information contained in the document can be presumed to be out of date. The aforementioned document does contain inundation mapping for a dam break occurring during a PMF event, and supporting hydrologic and hydraulic documentation is available from

Appendix B of the USACE document dated April 1988 and titled "General Design – Design Memorandum No. 1". At a minimum, the Initial Reservoir Filling Plan/Flood Emergency Plan (FEP) information must be transferred into the EAP template provided on the OSE website. From the above, the O&M Manual and FEP on file with the OSE Dam Safety Bureau are outdated for this structure. Section 19.25.12.21 NMAC establishes O&M and EAP requirements for existing dams. Subsections E and F of 19.25.12.21 require dams classified as High Hazard Potential such as this to have an approved O&M Manual and EAP. The owner was advised of this requirement in OSE correspondence for all inspection reports since 2005. A copy of the OSE rules and regulations for dams (19.25.12 NMAC) can be downloaded from the OSE website at: <http://www.ose.state.nm.us/DS/dsRegs.php>

Spillway Capacity

The OSE rules and regulations require high hazard dams such as this to have spillways capable of passing 100% of the PMF resulting from the governing Probable Maximum Precipitation (PMP) storm event. Calculations as described in the November 30, 2011 inspection memorandum indicate the spillway capacity is approximately 86% for the 24-hr PMP storm event based on HMR 55A based on a review of design documentation on file with the OSE-DSB. However, HMR 55A states that durations for the General Storm of less than 72-hours are not appropriate and are not a correct application of the data in the document. It will need to be demonstrated through an updated hydrologic and flood routing analysis that the combined spillway capacity may be greater than 70% of the 72-hour General Storm event based on HMR 55A.

Design and Construction Documentation

There is an Initial Reservoir Filling Plan/Flood Emergency Plan, Design Memorandums 1, 2 and 3, Supplemental Design Memorandum 2, Foundation Report, an Operation and Maintenance Manual, a periodic Inspection Report, as-built drawings, and construction specifications on file with the OSE for this dam. It is outside the scope of this inspection report to perform a detailed review of the design documentation for compliance with the OSE requirements outlined in the current rules and regulations for dams. The as-built drawings on file with the OSE appear to accurately represent the as-constructed condition.

Inspection Findings

Overall Dam Condition

Based on the cursory review of the documentation and the field inspection, Cuchillo Negro Dam is in "satisfactory" condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 1 and 2 of this memorandum.

Hazard Potential Classification

The hazard potential classification for Cuchillo Negro Dam is high. The classification is appropriate.

Outlet Works

There is no indication from a review of the OSE records that an interior inspection of the low-level outlet works conduit has been performed.

Instrumentation

As noted in prior inspection memoranda, survey monuments are present on the dam and the spillway to the west of the dam in the form of general horizontal/vertical movement monuments. No record of readings for these monuments could be located in OSE-DSB files even though the owner was requested to perform a survey of horizontal/vertical monuments and submit data to OSE in 2002. If a survey was not done in 2002 or if survey data cannot be located, a new survey is required.



James D. Head, P.E.
Dam Safety Bureau

jdh

Professional judgments and evaluations are represented in this memorandum. They are based partly on information gathered from visual observations and a limited review of the OSE Dam Safety Bureau files for the facility. The OSE does not guarantee the performance of this dam in any way. The OSE only provides that the work and judgments rendered were performed in a manner consistent with the level of care and skill ordinarily exercised by other engineers under similar circumstances. No other warrantee or guarantee is included or intended.

**New Mexico Office Of The State Engineer
Dam Safety Bureau
Inspection Checklist**

County: Sierra	Dam Name: Cuchillo Negro Dam	OSE No.: D-541	Fed ID No.: NM00541
Inspection Performed By: James Head		Inspection Date: 03-18-2019	Last Inspection Date: 03-04-2015
Owner Name: City of Truth or Consequences	Owner Address: 505 Sims Street Truth or Consequences, NM 87901	Owner Contact: Juan Fuentes Owner Phone No.: 575-894-6673 Inspection Contact: Benny Fuentes – Cell 575-740-2613	
Purpose of Dam: Flood Control		Hazard Class: High	Hazard Class Appropriate: Yes ☒ No ☐
Dam Location: From Hwy 181 (westside frontage rd. to I-25) take Hwy 52 west ~3.6 miles, turn south onto dirt road, continue ~3.3 miles to the dam.		Latitude: 33.219	Longitude: -107.3183
Weather: Clear, Calm, ~55 Degs F		Attendees: Benny Fuentes, City of Truth or Consequences	

1. General Conditions	Satisfactory	Needs Attention	N/A	Remarks:
a. Access for O & M	☒	☐	☐	Limited during wet weather
b. Unauthorized access restricted	☐	☒	☐	Some tracks in drainage areas
c. No unauthorized alterations	☒	☐	☐	

2. Upstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Periodic removal of woody vegetation required from embankment section.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	Displaced precast panel on left face of concrete section, no apparent change since last inspection.
e. Upstream wave protection	☒	☐	☐	

3. Dam Crest	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Periodic removal of woody vegetation required from the upstream and downstream shoulders of the embankment section required.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	

4. Downstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Periodic removal of woody vegetation required from embankment section.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage control	☒	☐	☐	

5. Downstream Area	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Periodic removal of woody vegetation required from the upstream and downstream shoulders of the embankment section required.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage or boils	☒	☐	☐	
f. Drains or Wells	☐	☐	☒	Est. gpm -

Dam Name: Cuchillo Negro Dam

Inspection Date: 03-18-2019

File No. D-541

6. Abutment Contacts	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion, cracks, or slides	☒	☐	☐	
b. Woody vegetation	☐	☒	☐	
c. Distortion or cracking	☒	☐	☐	
d. Seepage	☒	☐	☐	
e. Drains or Wells	☐	☐	☒	Est. gpm None

7. Reservoir	Satisfactory	Needs Attention	N/A	Remarks:
a. Developed/Encroachment	☒	☐	☐	
b. Banks and slopes stable	☒	☐	☐	
c. Obstruction or debris	☐	☒	☐	Periodic removal of accumulated debris required.
d. Sediment level	= ~4650 ft. (approx. 7 th set of ports from the top of low-level intake)			Dam Crest @ 4742.1 ft., S/W Crests @ 4721.1 ft.
e. Water level	=			Dry at time of inspection

8. Intake Structure	Type of Structure: Ported Riser (lower), Portal with Rack (upper)			Remarks:
	Satisfactory	Needs Attention	N/A	
a. Concrete condition	☒	☐	☐	
b. Reinforcement encasement	☒	☐	☐	
c. Coating adequacy	☒	☐	☐	
d. Leakage	☒	☐	☐	
e. Trash rack condition	☐	☒	☐	Maintain racks free of debris
f. Inlet unobstructed	☐	☒	☐	Clear debris from ports of low level intake
g. Gates operative	☐	☐	☒	
h. Woody vegetation	☒	☐	☐	
Number of intake ports	26	Number of ports open		14 above sediment level, some are partially plugged with flood debris

9. Outlet Conduit	Type of Conduit: 60" dia. RCP (lower) 7'-2" x 10' box culvert (upper)		Estimated Discharge: No flow during the inspection	
	Interior inspection: Yes ☐ Date No ☒			
	Satisfactory	Needs Attention	N/A	Remarks:
a. Overall Condition	☒	☐	☐	Inspection limited to partial interior inspection
b. Condition of surfaces	☒	☐	☐	Inspection limited to partial interior inspection
c. Reinforcement encasement	☒	☐	☐	Inspection limited to partial interior inspection
d. Clear of obstructions	☒	☐	☐	Inspection limited to partial interior inspection
e. Joint Condition	☒	☐	☐	Inspection limited to partial interior inspection
f. Leakage	☒	☐	☐	Inspection limited to partial interior inspection
g. Alignment	☒	☐	☐	Inspection limited to partial interior inspection

10. Outfall & Outlet Channel	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion	☒	☐	☐	
b. Obstructions or debris	☒	☐	☐	
c. Erosion protection	☒	☐	☐	
Woody vegetation control	☒	☐	☐	

Dam Name: Cuchillo Negro Dam

Inspection Date: 03-18-2019

File No. D-541

11. Primary Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☒	☐	☐	
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☒	☐	☐	
g. Energy dissipation	☐	☐	☒	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	
j. Erosion control	☒	☐	☐	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☒	☐	☐	
m. Capacity	☒	☐	☐	SDF: 235,000 cfs (PMP), see 2006 inspection memo. Combined spillway capacity is approximately 100 percent of the PMF determined from the USACE envelope curve per the 2006 OSE inspection report. However, updated hydrology and flood routing needed to confirm adequacy.

12. Auxiliary Spillway	Satisfactory	Needs Attention	N/A	Remarks:
n. Clear of obstructions	☒	☐	☐	
o. Condition of entrance	☒	☐	☐	
p. Condition of control section	☒	☐	☐	
q. Condition spillway floor	☒	☐	☐	
r. Condition of walls or slopes	☒	☐	☐	
s. Condition of joints	☒	☐	☐	
t. Energy dissipation	☒	☐	☐	
u. Condition of exit channel	☒	☐	☐	
v. Seepage control	☒	☐	☐	
w. Erosion control	☐	☒	☐	Large gully behind abutment contact at right (south) end of spillway.
x. Rodent control	☒	☐	☐	
y. Woody vegetation control	☐	☒	☐	Remove woody vegetation along upstream and downstream edge of concrete.
z. Capacity	☒	☐	☐	SDF: see 11.m above

Overall Remarks:	1) Repair the large erosion gully at the south end of the auxiliary spillway and curtail future erosion by redirecting surface runoff. 2) Periodic removal of woody vegetation from the main dam and auxiliary embankment section required. 3) Maintain outlet works trash racks free of debris. 4) Periodic removal of accumulated debris within 100 feet of the outlet works intakes required. 5) Repair / patch deteriorated concrete where applicable to various sections of the dam and auxiliary spillway. 6) Perform a survey of the settlement and horizontal movement points and provide results and analysis to the Office of the State Engineer Dam Safety Bureau. Collected data must be compared to an original baseline survey.
-------------------------	--

Date: 3/29/2019

Signature: Jana D. Head



Images 1 through 3: Aerial views of the dam courtesy of GoogleEarth (circa 2015).

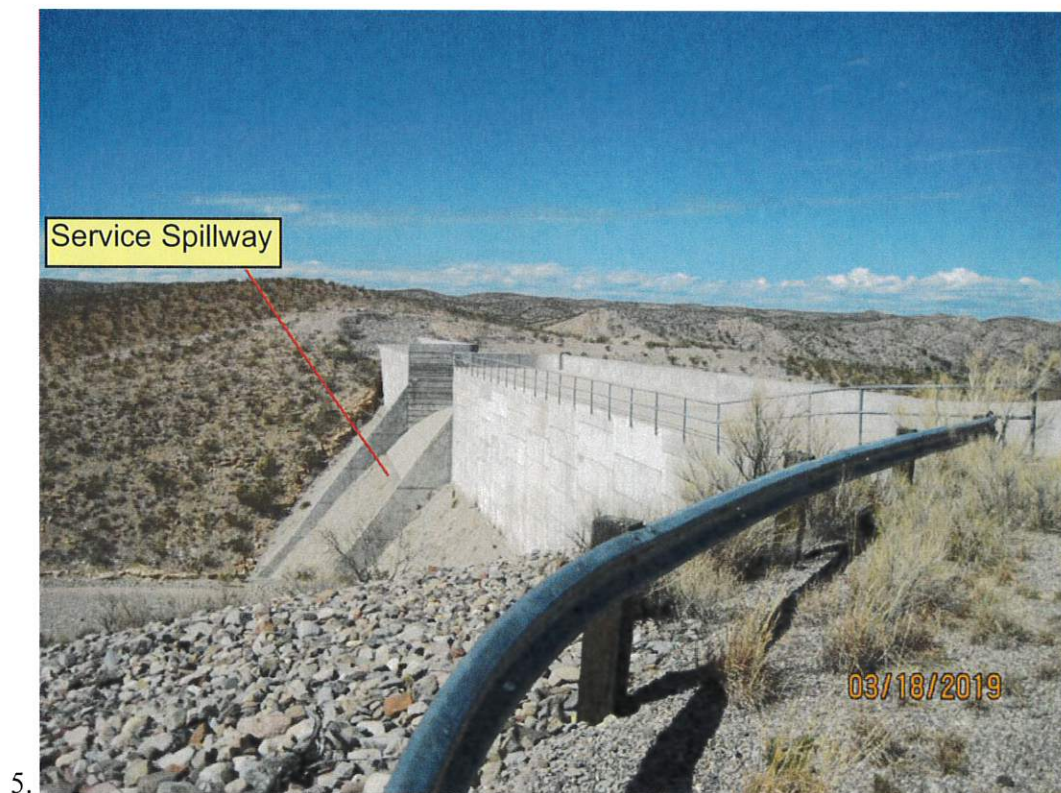


Image 4: Southwesterly views of the access road onto the auxiliary embankment adjoined to the left abutment of the main dam. **Image 5:** Southwesterly view of the downstream face of the RCC main dam.



6.

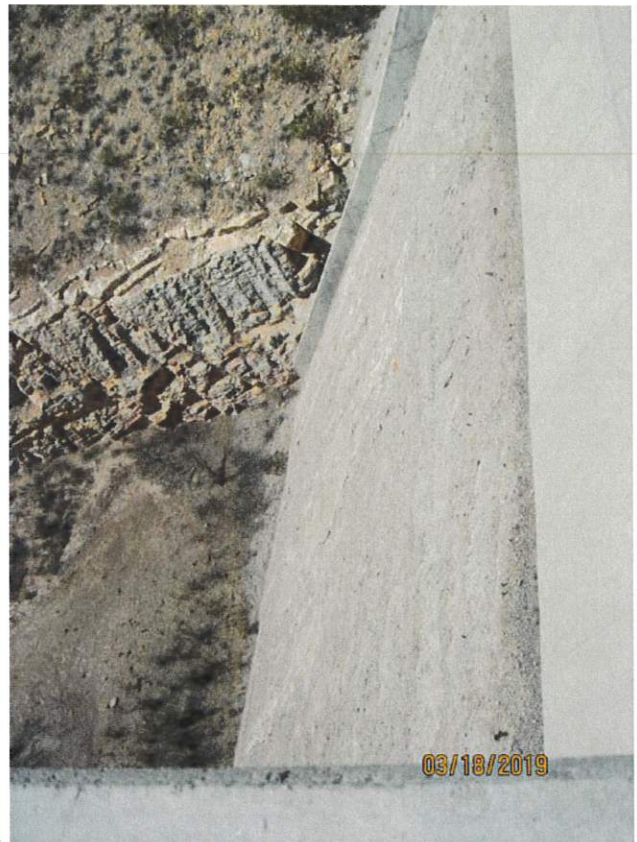


7.

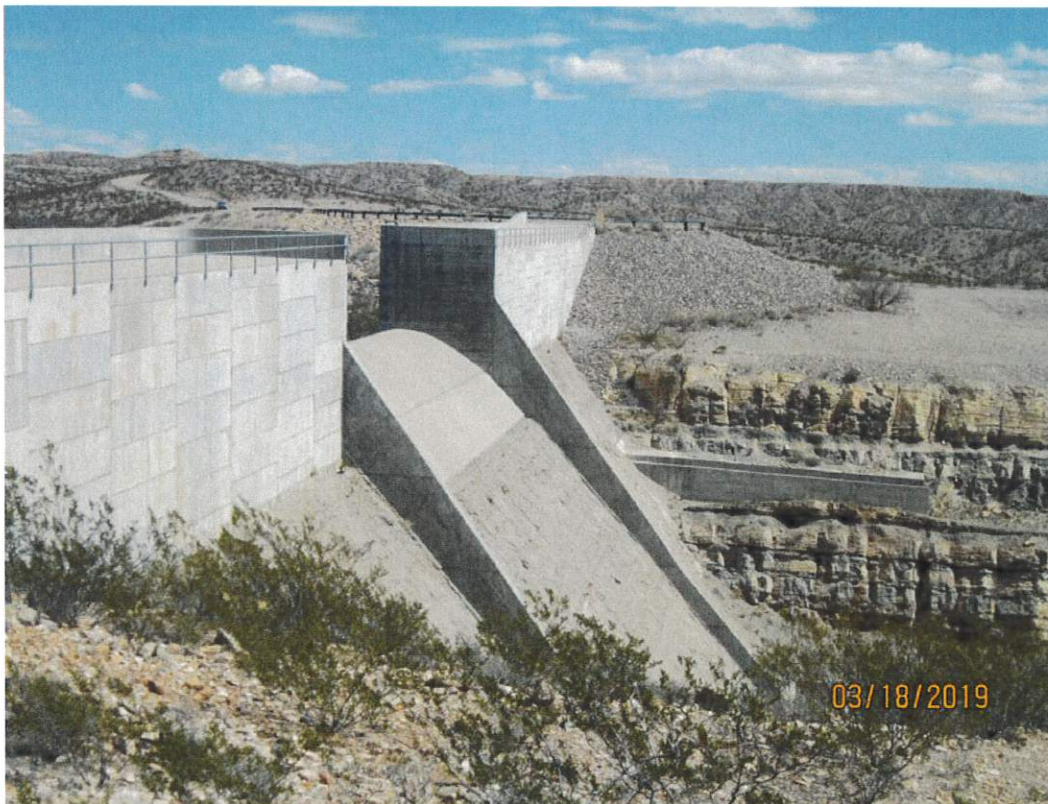
Images 6 and 7: Easterly and westerly views of the upstream and downstream faces of the main dam, respectively.



8.

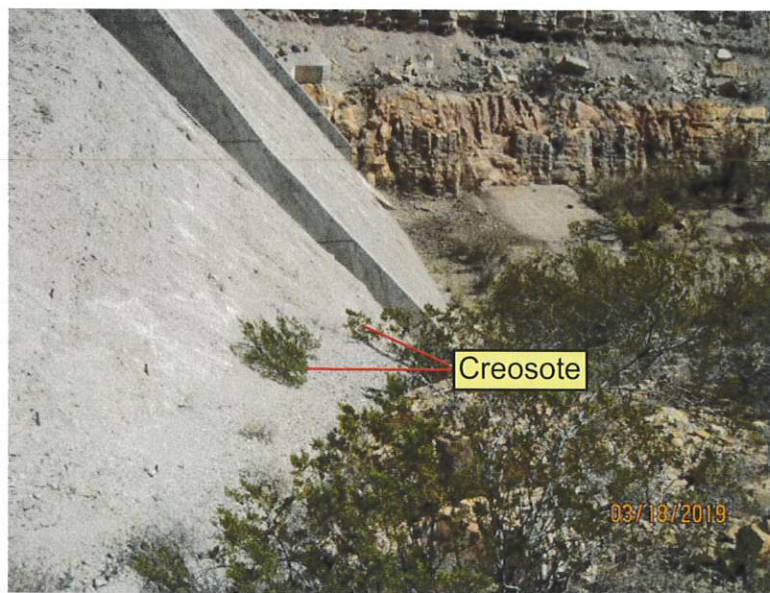


9.



10.

Images 8 through 10: Southwesterly view across the service spillway (Image 8), view of the service spillway discharge chute (Image 9), and northeasterly view of the main dam / service spillway (Image 10).

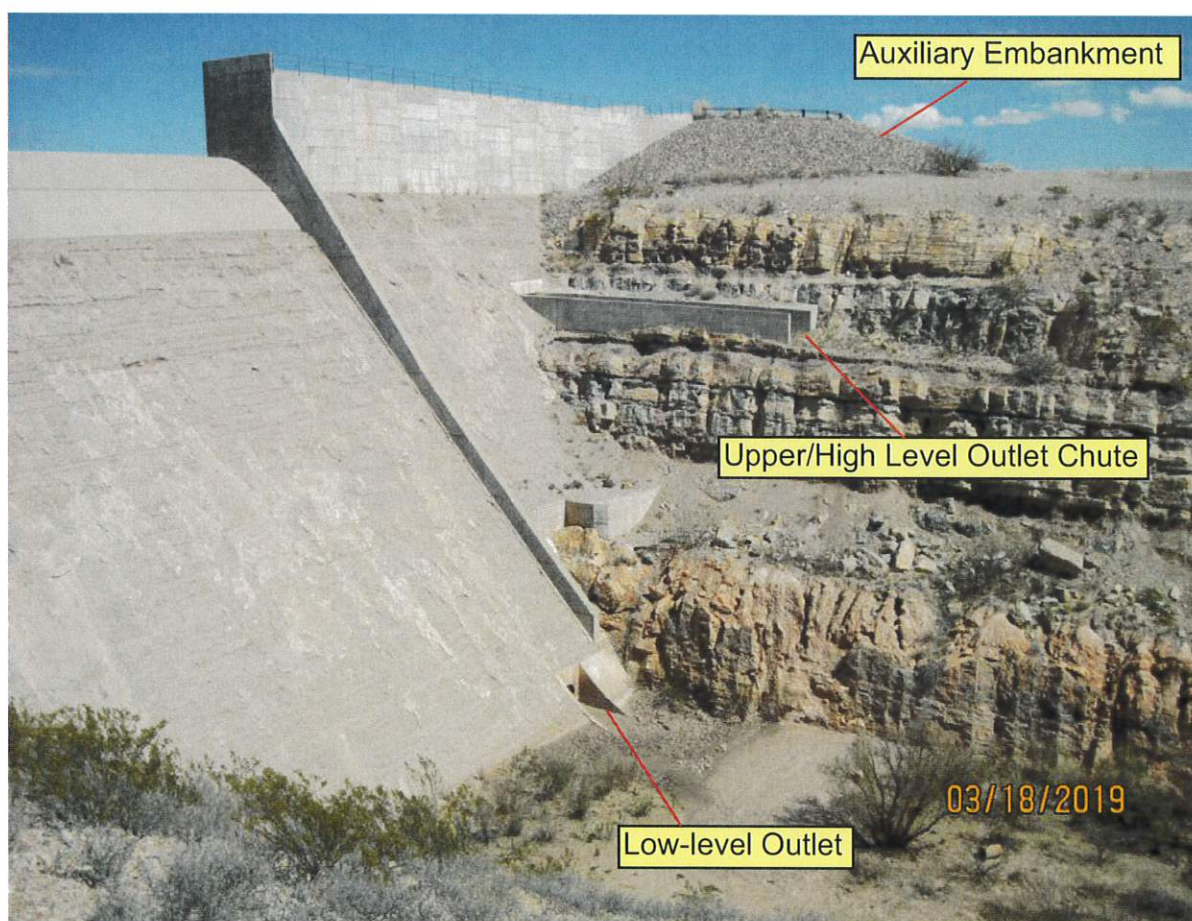


11.



12.

Images 11 and 12: Partial views of the right downstream groin of the main dam as seen from the vicinity of the right abutment contact.

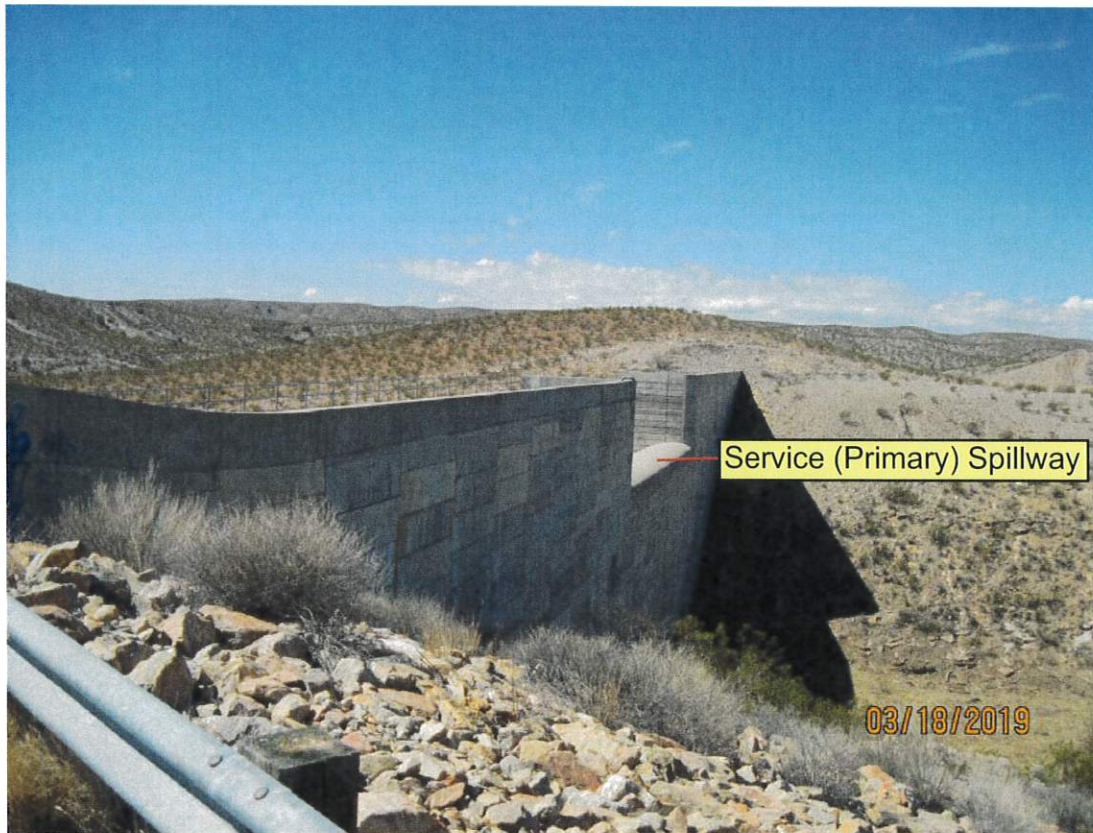


13.

Image 13: Easterly view of the left downstream groin with low-level and high-level outlet works features as indicated.



14.

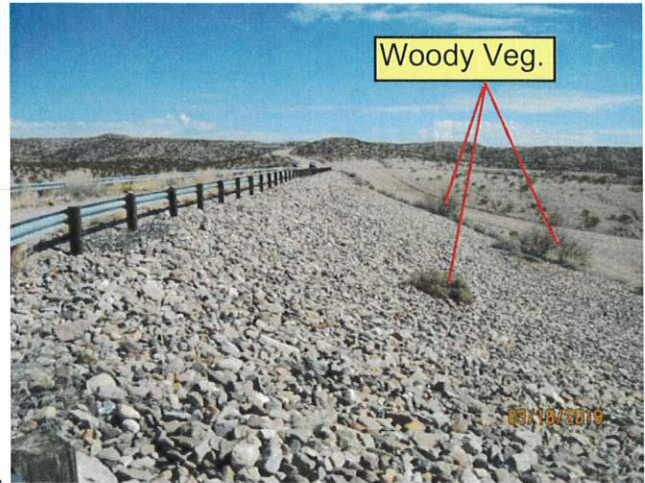


15.

Images 14 and 15: Northeasterly and southwesterly views, respectively, along the longitudinal axis of the main dam and the upstream face of the main dam with additional features as indicated.

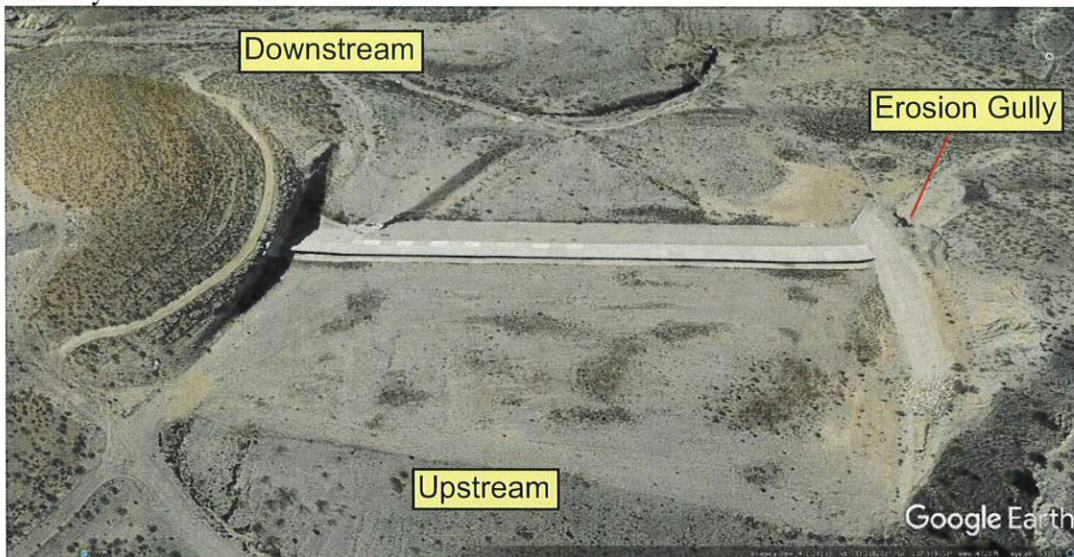


16.

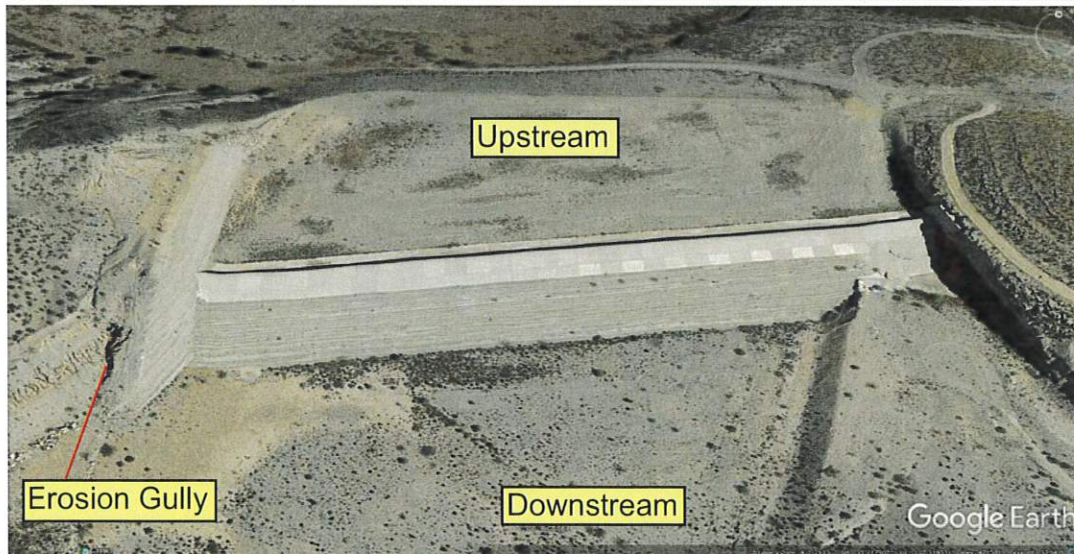


17.

Images 16 and 17: Easterly views along the upstream slope and crest, and downstream slope of the auxiliary embankment, respectively. Images captured from the vicinity of the right abutment contact of the main dam with the auxiliary embankment.

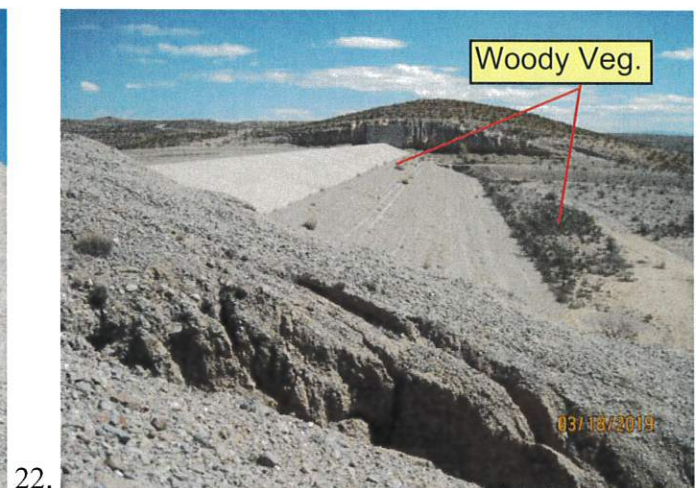


18.



19.

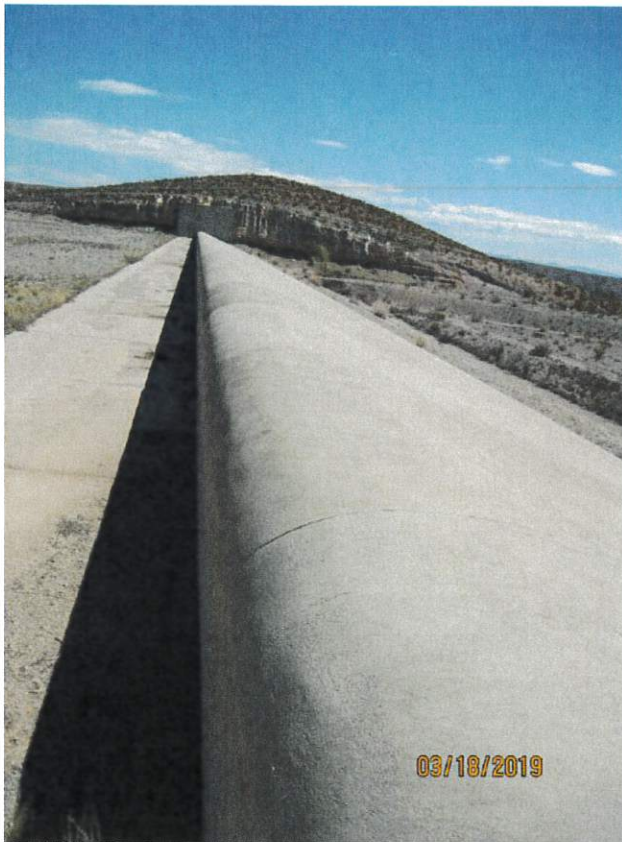
Images 18 and 19: GoogleEarth Imagery (circa 2018) of the auxiliary spillway located to the west of the main dam.



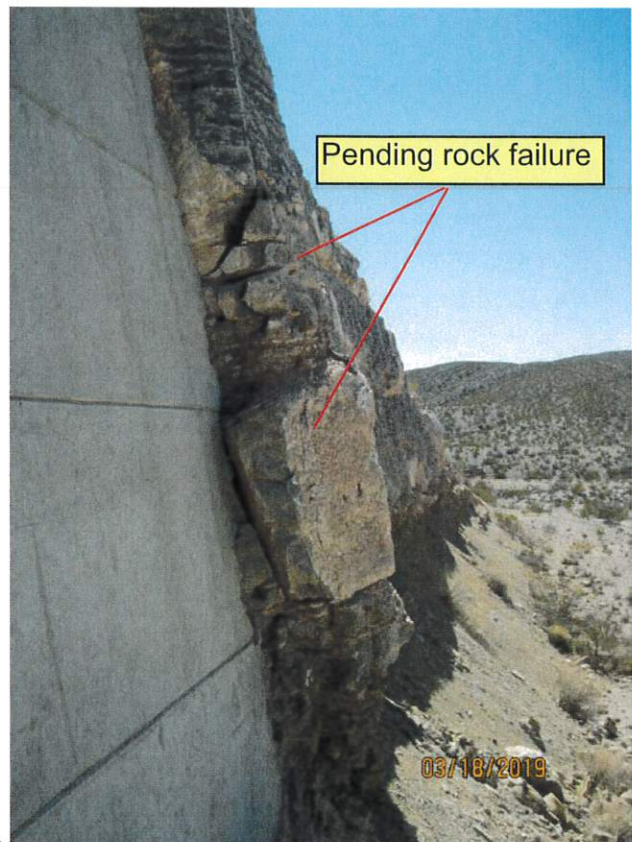
Images 20 through 22: Aerial view from GoogleEarth (Image 20) of large erosion gully located along the soil cement armored right abutment of the auxiliary spillway; additional views of the same erosion gully seen from ground level (Images 21 and 22).



Images 23 and 24: Easterly and westerly views along the ogee crest of the auxiliary spillway, respectively.



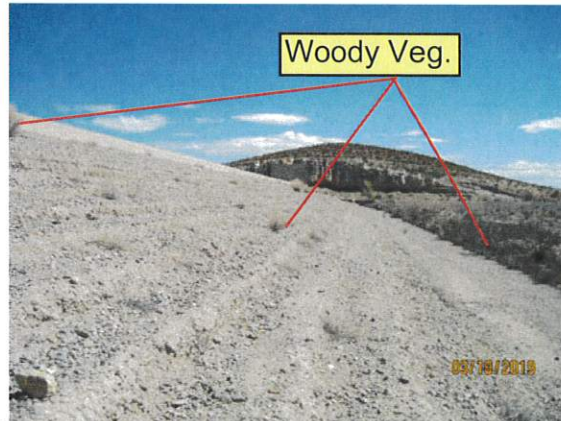
25.



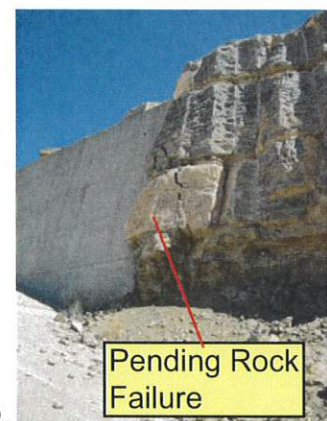
26.



27.



28.



29.

Images 25 through 29: Various views of the auxiliary spillway with defects as indicated.



30.



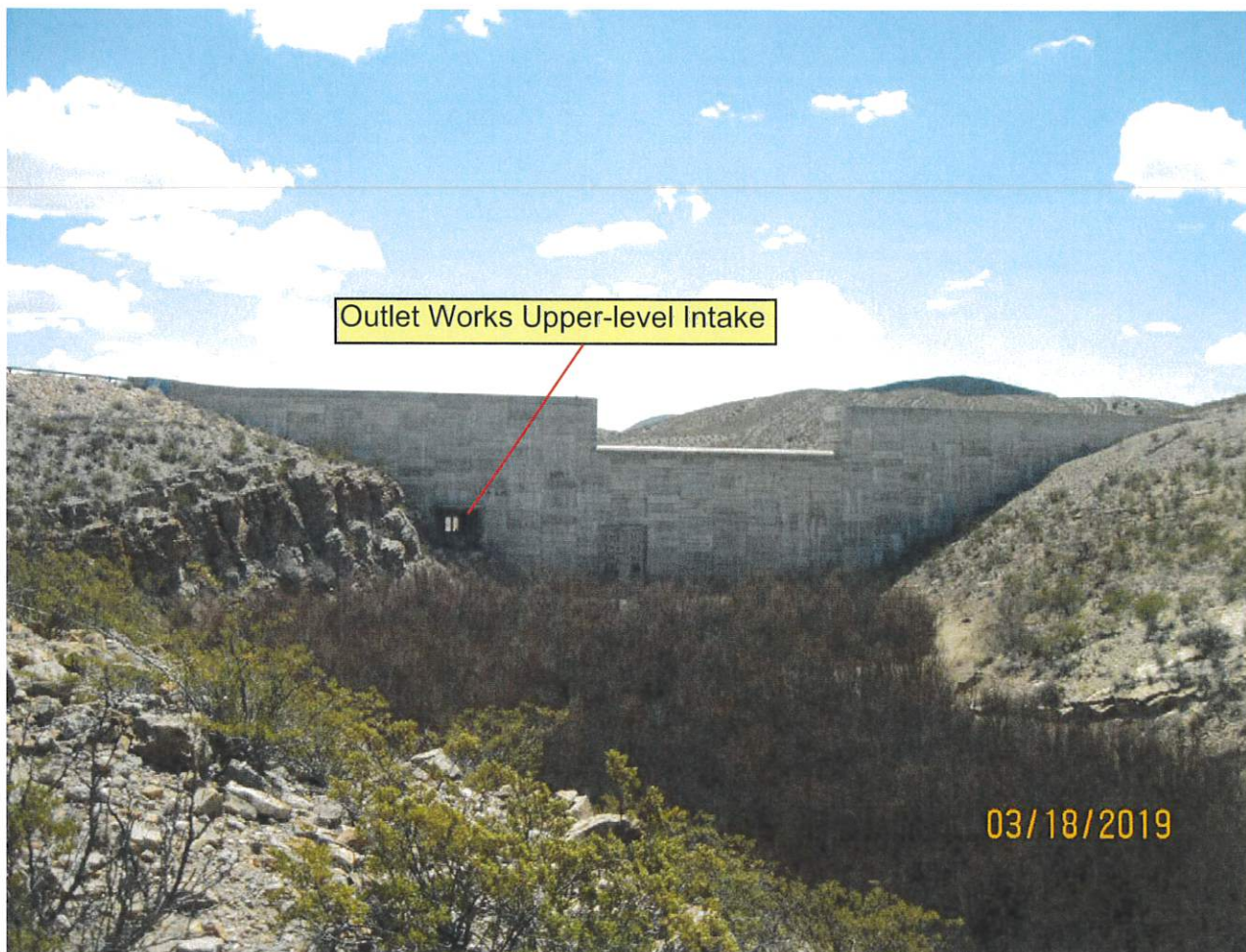
31.



32.

Images 30 through 32: Typical views of details pertaining to the auxiliary spillway; RCC degradation on the downstream stepped section of the spillway (Image 30), deterioration of one of several patched portions of upstream face of the ogee section (Image 31), one of several daylighted drain outfalls on the downstream face auxiliary spillway (Image 32).

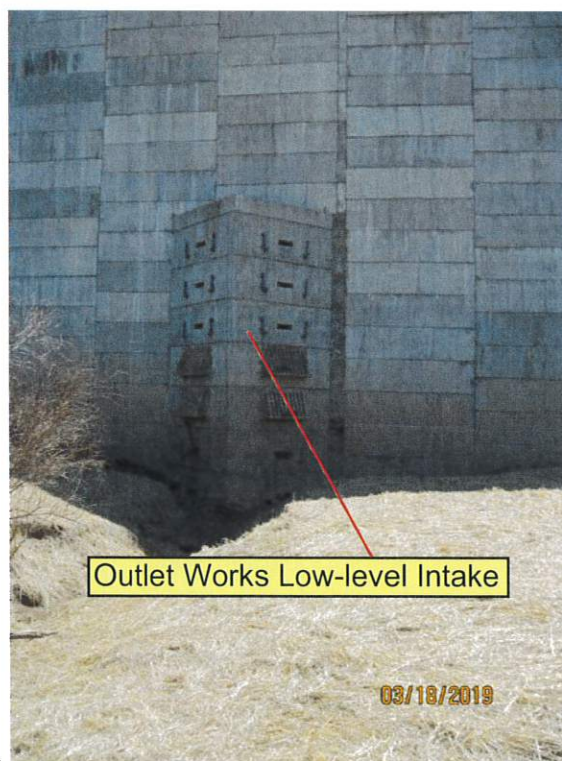
33.



34.



35.



Images 33 through 35: Views emphasizing the lower-level and upper-level outlet works intakes



36.



37.



38.

Images 36 through 38: Examples of several partially plugged ports on the outlet works lower-level intake.



39.



40.



41.

Images 39 through 41: Views of the outlet works upper-level intake, the upper-level outlet conduit, and the discharge end of the upper-level outlet conduit.



42.

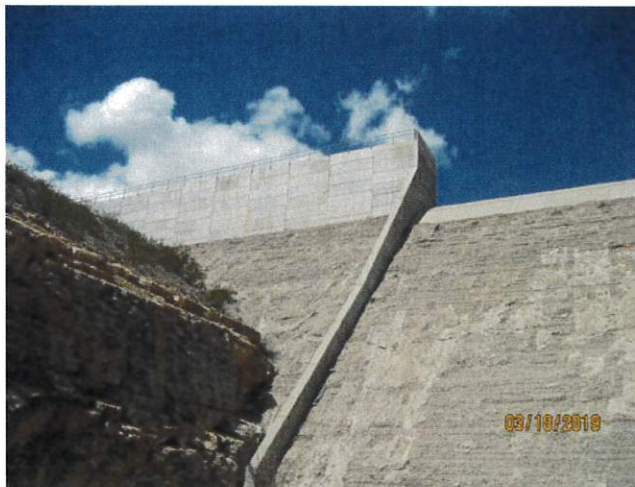


43.

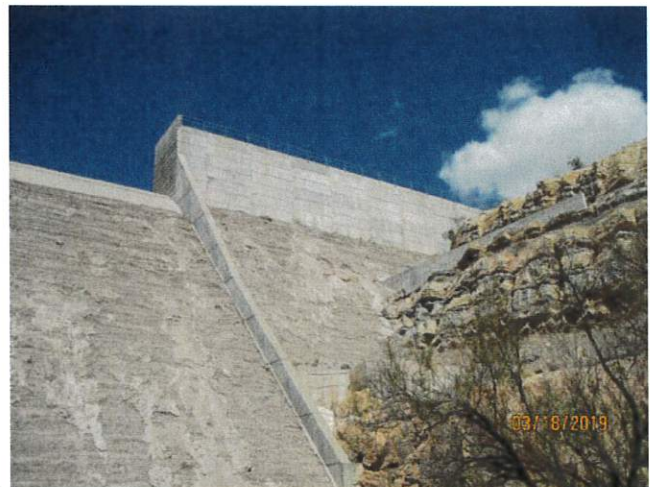


44.

Images 42 through 44: Views of the downstream (discharge) end of the outlet works low-level conduit.



45.



46.

Images 45 and 46: views of the right and left service spillway training walls on the downstream face of the main dam as seen from the vicinity of the downstream toe.



47.



48.



49.

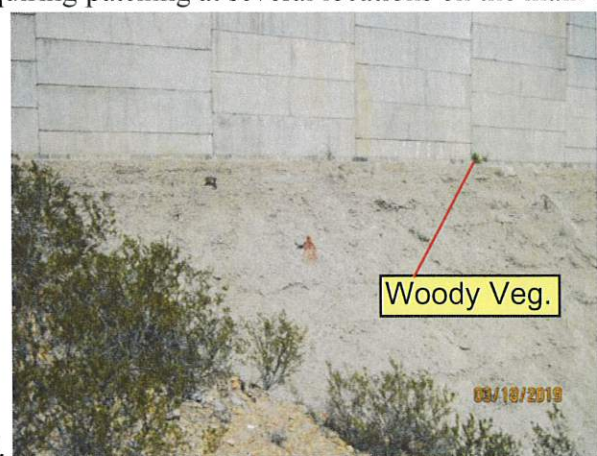


50.

Images 47 through 50: Examples of concrete defects requiring patching at several locations on the main dam.

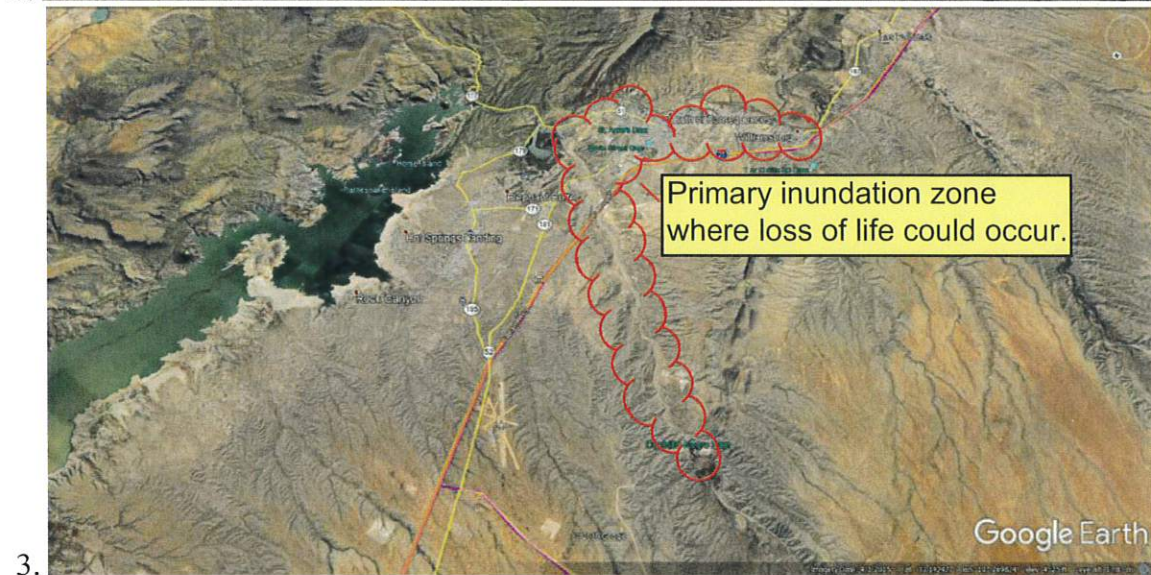
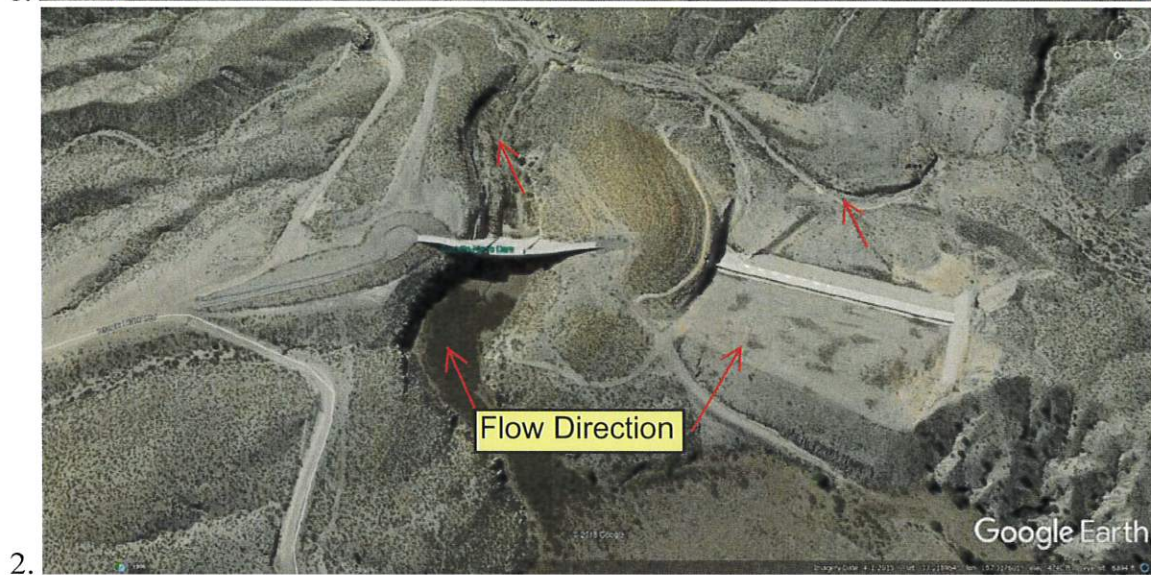
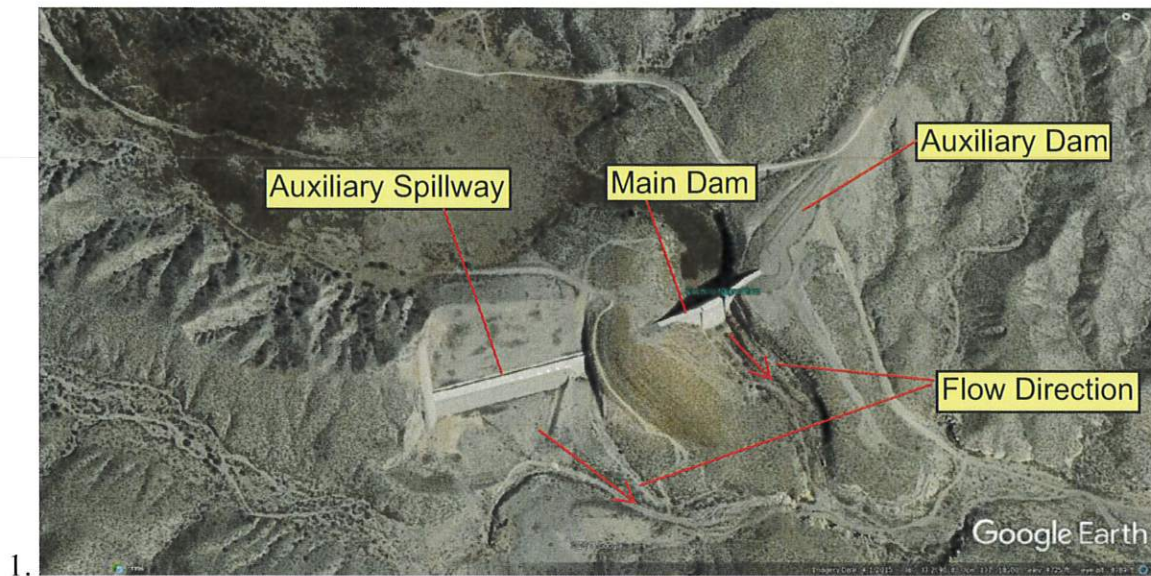


51.



52.

Image 51: Headcut and erosion across access road to the detention basin. **Image 52:** Emerging woody vegetation emerging on the downstream face of the dam.



Images 1 through 3: Aerial views of the dam courtesy of GoogleEarth (circa 2015).

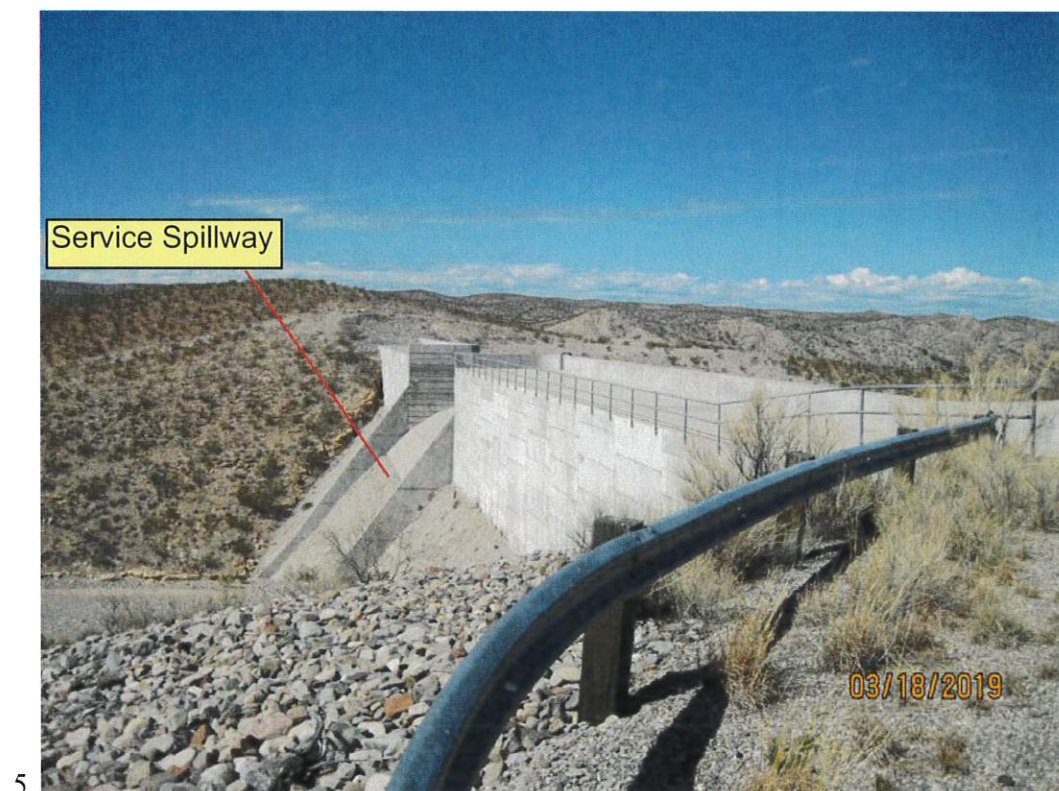


Image 4: Southwesterly views of the access road onto the auxiliary embankment adjoined to the left abutment of the main dam. **Image 5:** Southwesterly view of the downstream face of the RCC main dam.

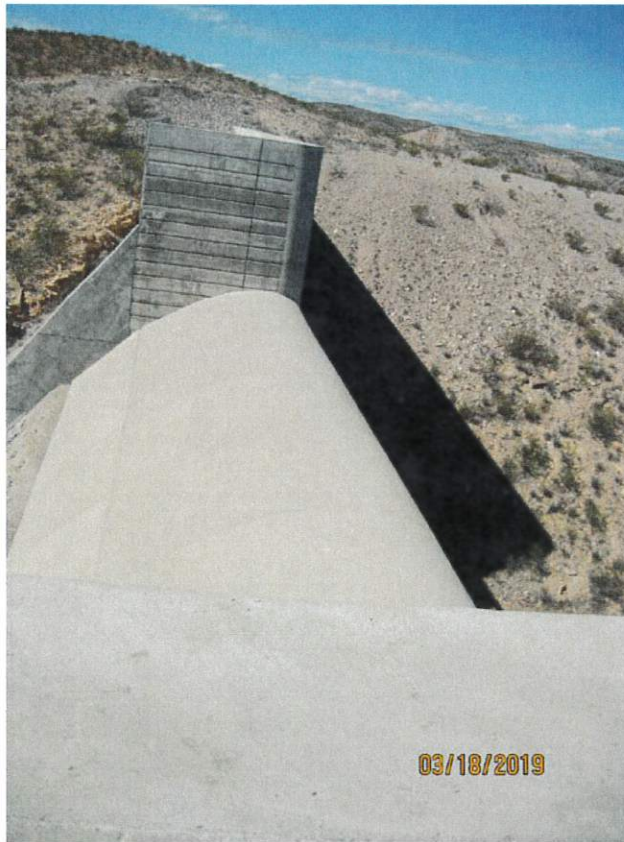


6.

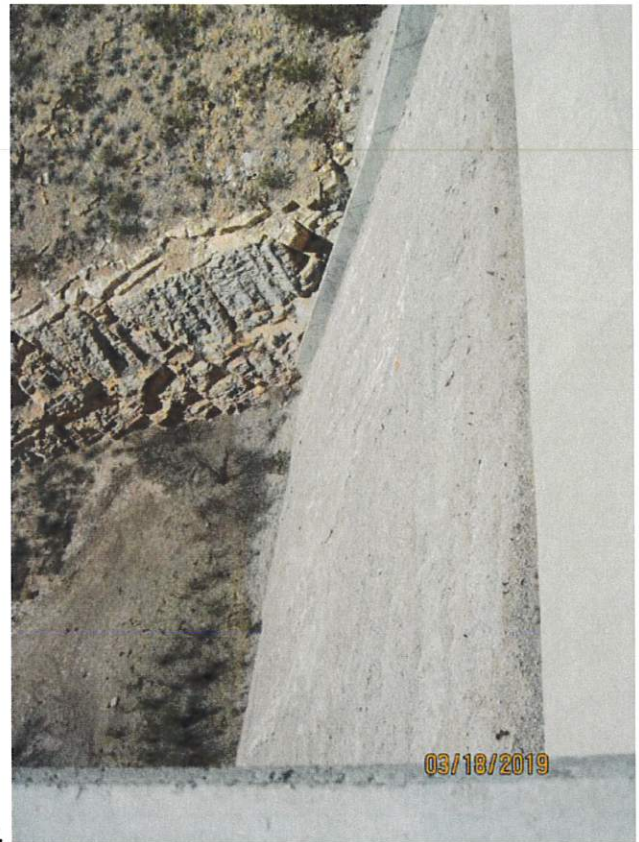


7.

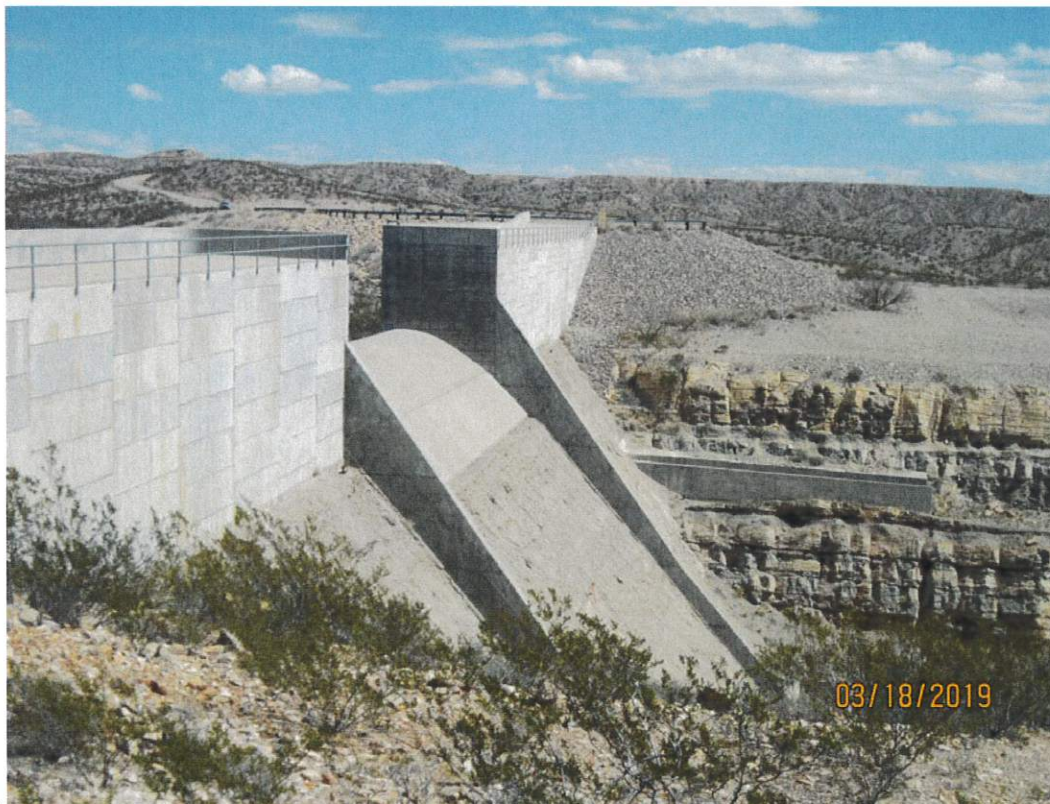
Images 6 and 7: Easterly and westerly views of the upstream and downstream faces of the main dam, respectively.



8.

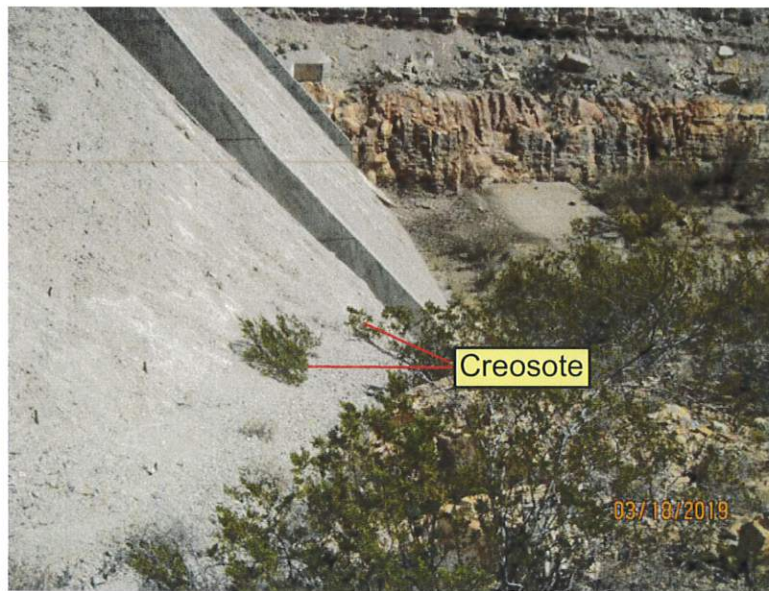


9.



10.

Images 8 through 10: Southwesterly view across the service spillway (Image 8), view of the service spillway discharge chute (Image 9), and northeasterly view of the main dam / service spillway (Image 10).

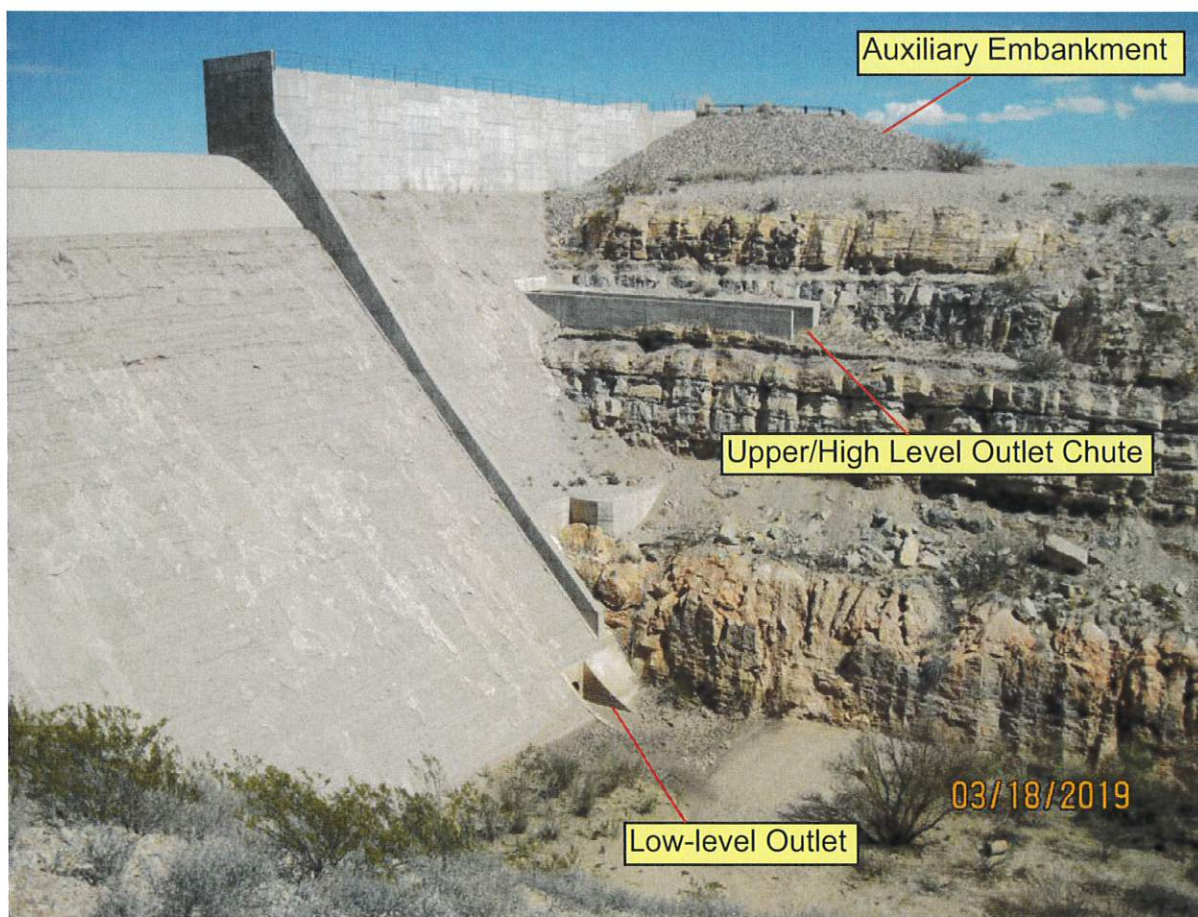


11.



12.

Images 11 and 12: Partial views of the right downstream groin of the main dam as seen from the vicinity of the right abutment contact.

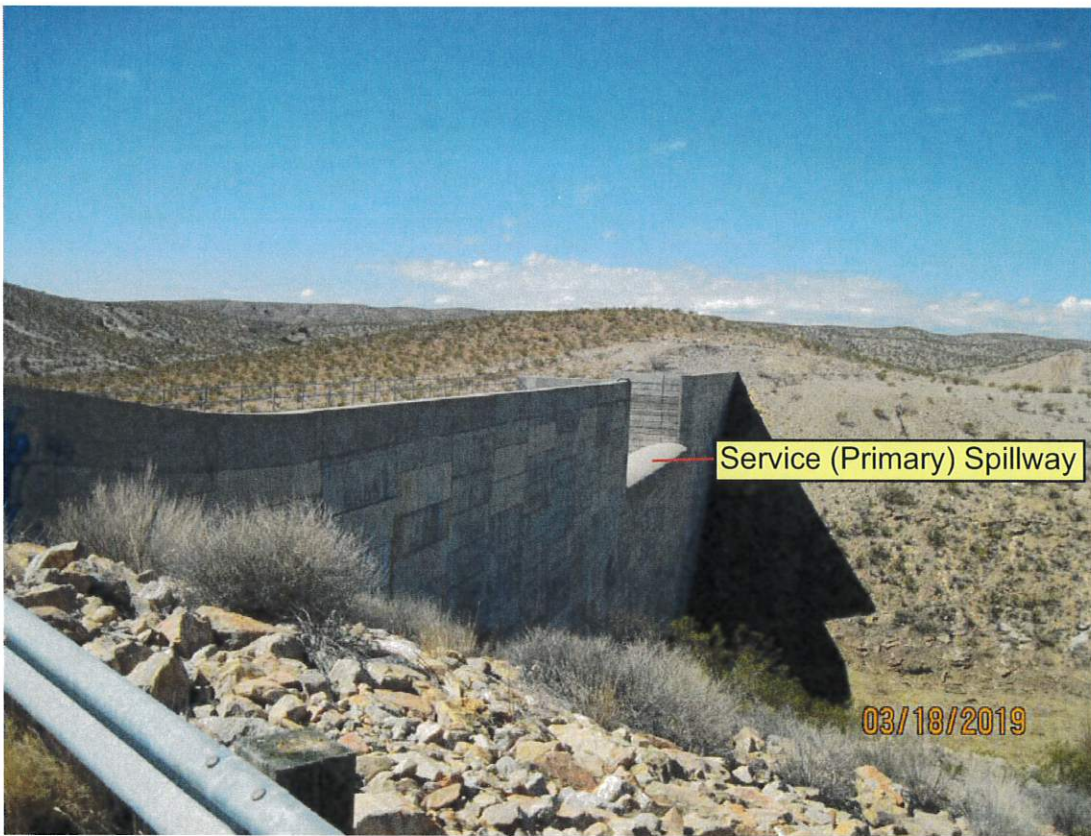


13.

Image 13: Easterly view of the left downstream groin with low-level and high-level outlet works features as indicated.

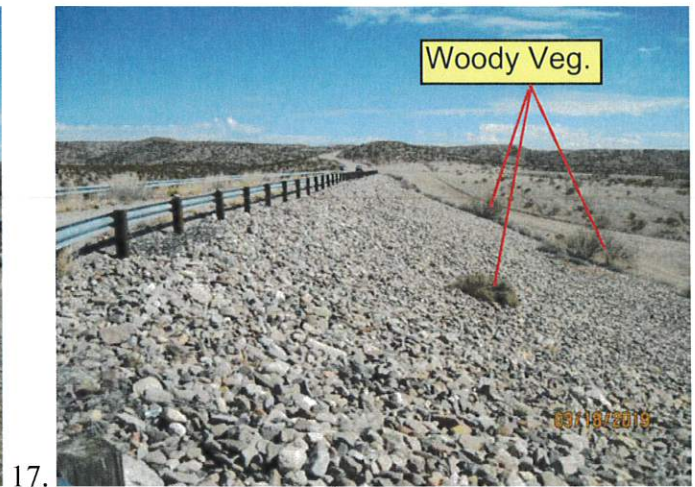


14.

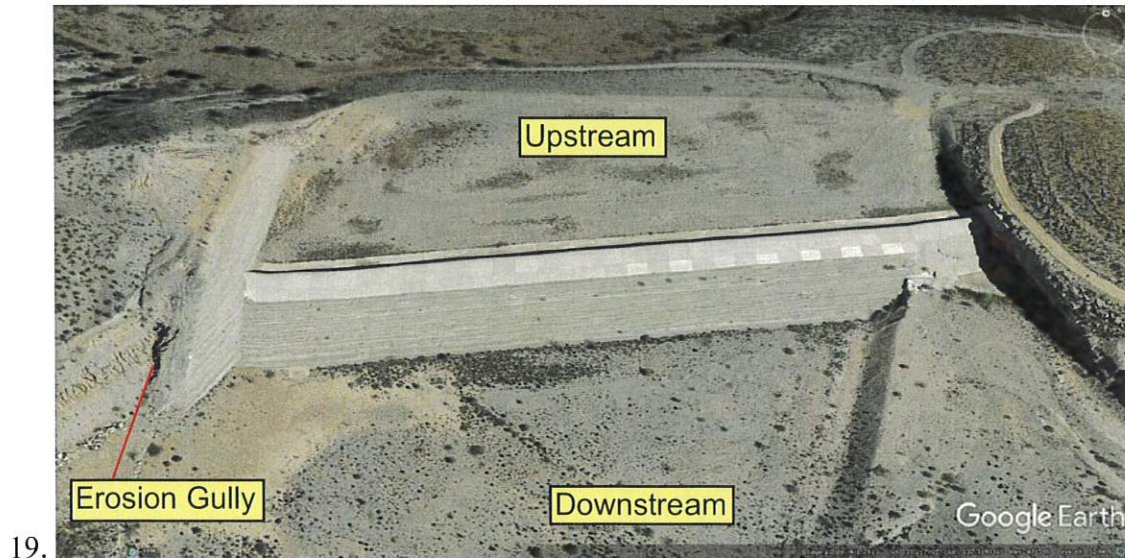
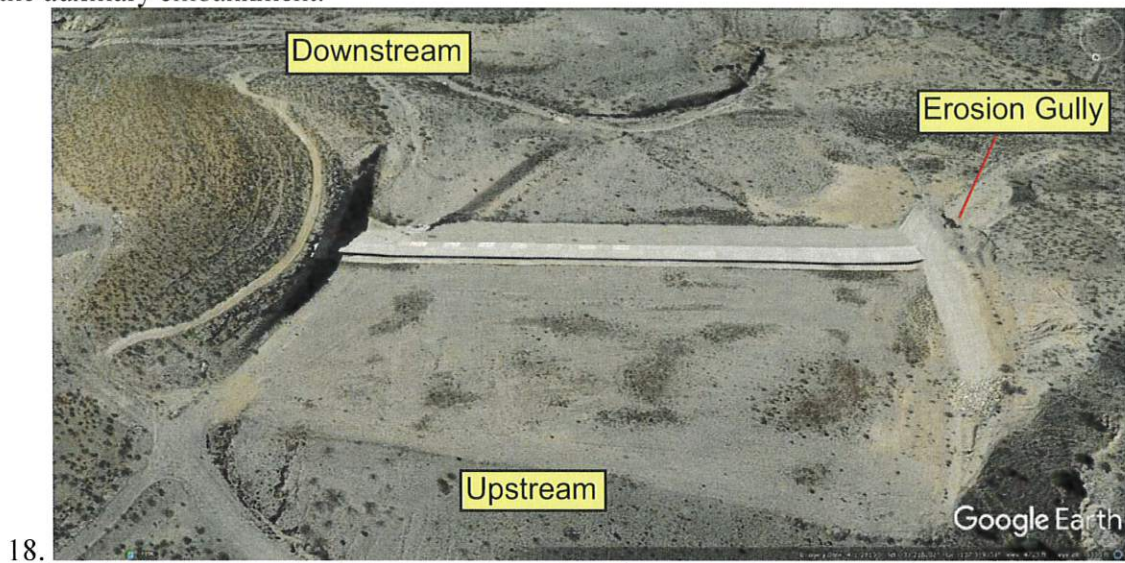


15.

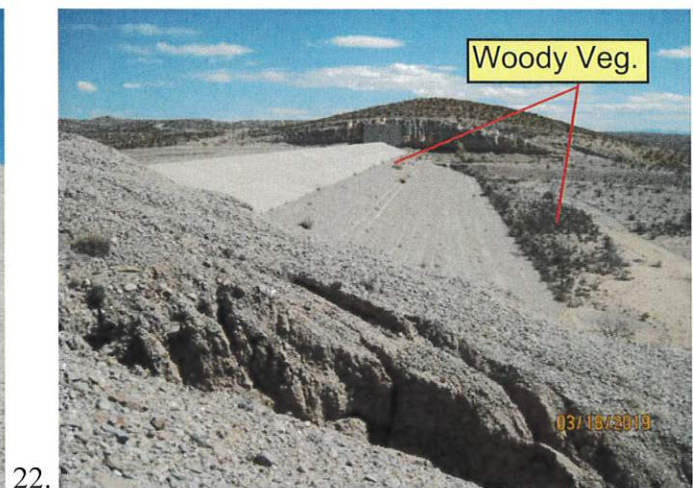
Images 14 and 15: Northeasterly and southwesterly views, respectively, along the longitudinal axis of the main dam and the upstream face of the main dam with additional features as indicated.



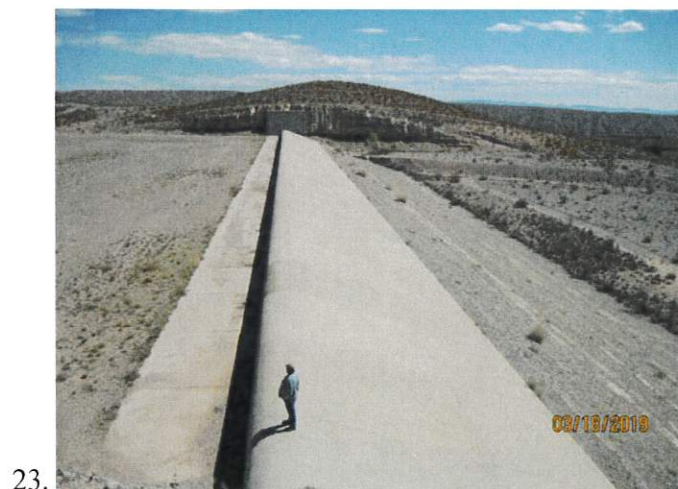
Images 16 and 17: Easterly views along the upstream slope and crest, and downstream slope of the auxiliary embankment, respectively. Images captured from the vicinity of the right abutment contact of the main dam with the auxiliary embankment.



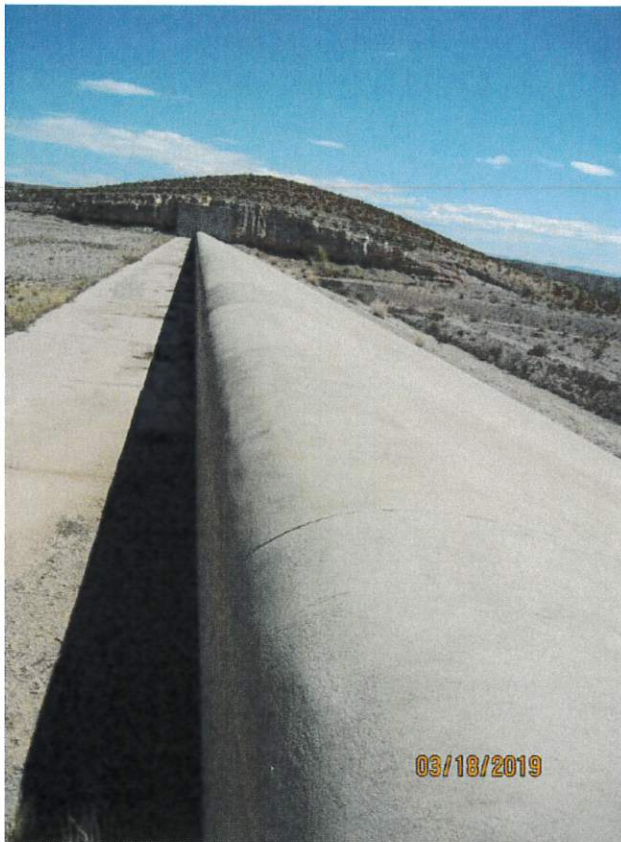
Images 18 and 19: GoogleEarth Imagery (circa 2018) of the auxiliary spillway located to the west of the main dam.



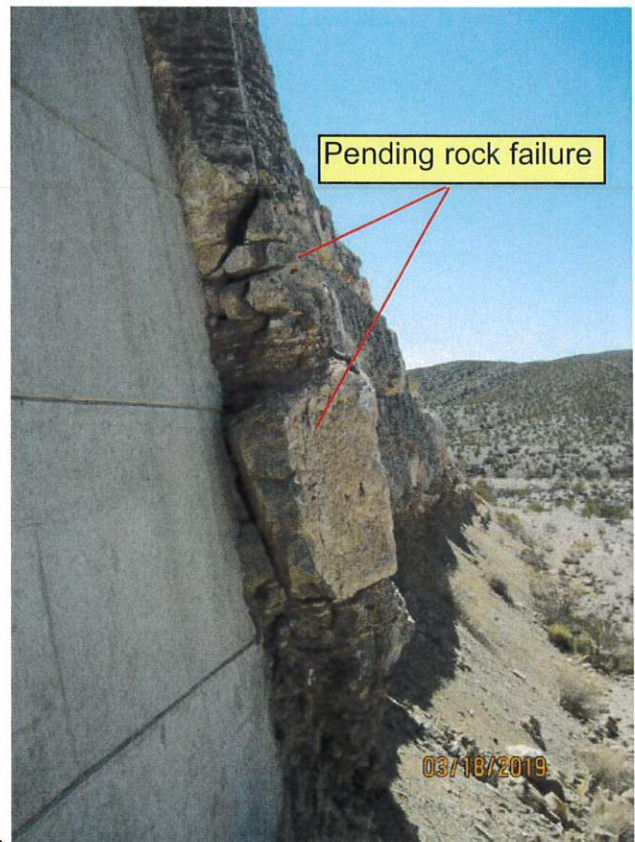
Images 20 through 22: Aerial view from GoogleEarth (Image 20) of large erosion gully located along the soil cement armored right abutment of the auxiliary spillway; additional views of the same erosion gully seen from ground level (Images 21 and 22).



Images 23 and 24: Easterly and westerly views along the ogee crest of the auxiliary spillway, respectively.



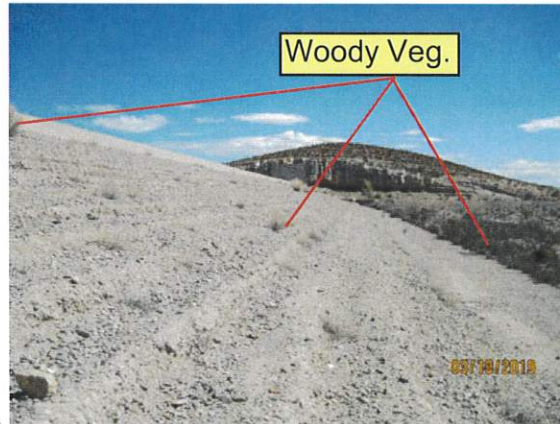
25.



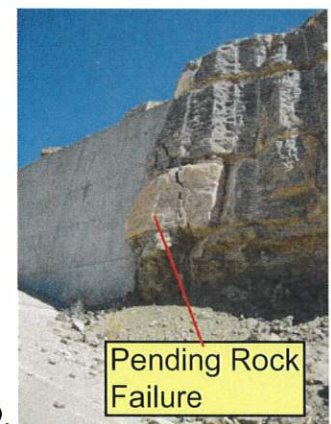
26.



27.



28.



29.

Images 25 through 29: Various views of the auxiliary spillway with defects as indicated.



30.

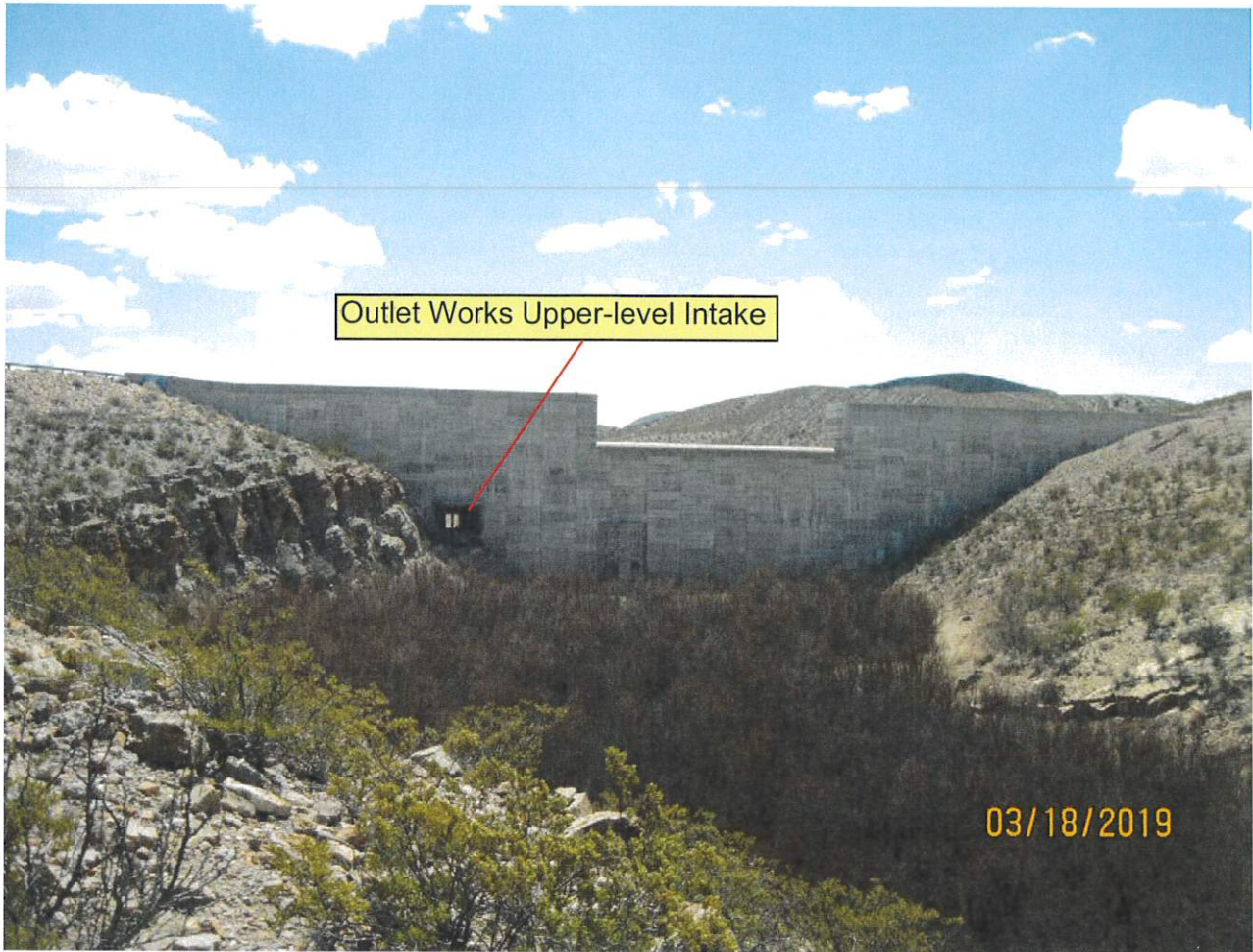


31.



32.

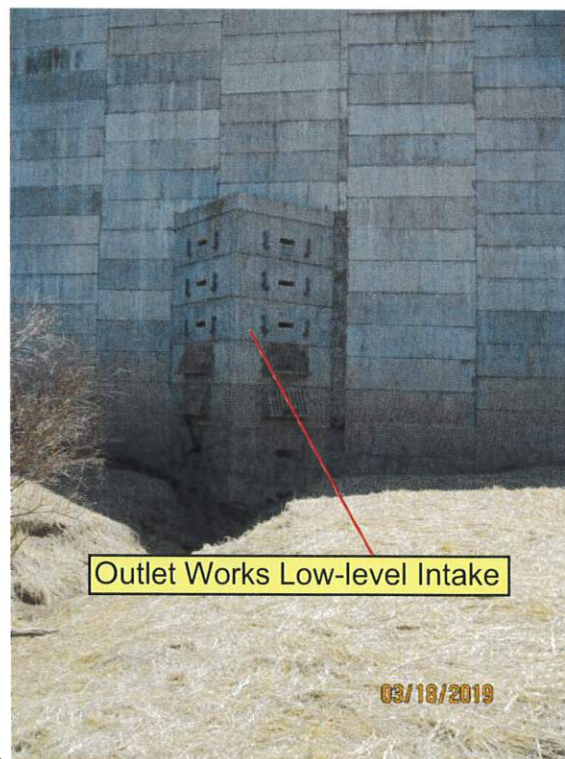
Images 30 through 32: Typical views of details pertaining to the auxiliary spillway; RCC degradation on the downstream stepped section of the spillway (Image 30), deterioration of one of several patched portions of upstream face of the ogee section (Image 31), one of several daylighted drain outfalls on the downstream face auxiliary spillway (Image 32).



33.



34.



35.

Images 33 through 35: Views emphasizing the lower-level and upper-level outlet works intakes



36.



37.

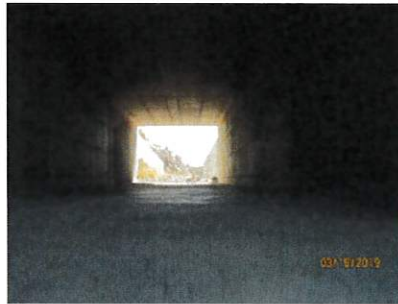


38.

Images 36 through 38: Examples of several partially plugged ports on the outlet works lower-level intake.



39.



40.



41.

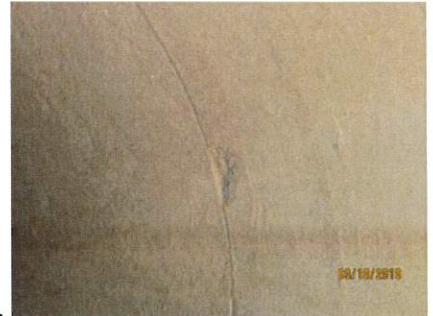
Images 39 through 41: Views of the outlet works upper-level intake, the upper-level outlet conduit, and the discharge end of the upper-level outlet conduit.



42.

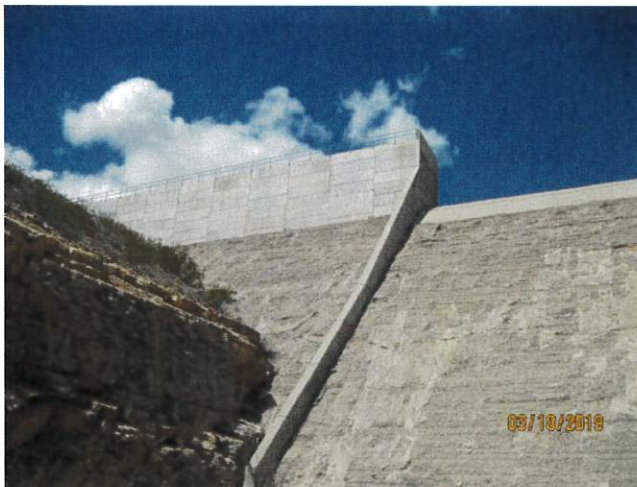


43.

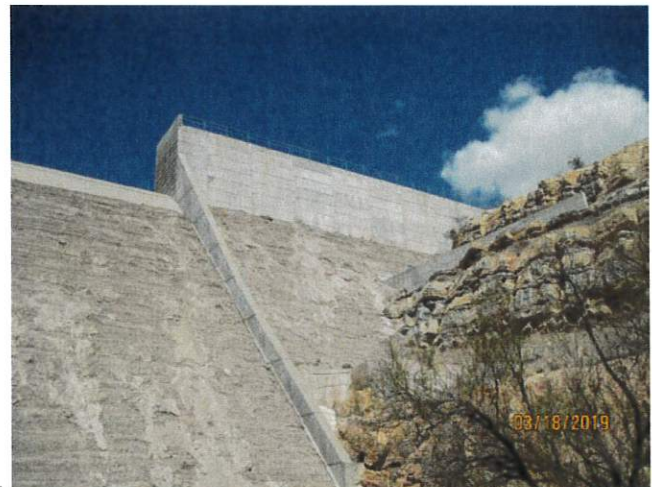


44.

Images 42 through 44: Views of the downstream (discharge) end of the outlet works low-level conduit.



45.



46.

Images 45 and 46: views of the right and left service spillway training walls on the downstream face of the main dam as seen from the vicinity of the downstream toe.



47.



48.



49.



50.

Images 47 through 50: Examples of concrete defects requiring patching at several locations on the main dam.



51.



52.

Image 51: Headcut and erosion across access road to the detention basin. **Image 52:** Emerging woody vegetation on the downstream face of the dam.

MIKE A. HAMMON, P.E.
STATE ENGINEER



DAM SAFETY BUREAU
5550 SAN ANTONIO DR., NE
ALBUQUERQUE, NM 87109
(505) 383-4113
(505) 383-4132 FAX
NM.DamSafety@state.nm.us

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe**

March 10, 2022

Mr. Bruce Swingle
City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Inspections of Cuchillo-Negro Dam, OSE File No. D-541
St. Anne's Dam, OSE File No. D-581, and
Marie Street Dam, OSE File No. D-582
Sierra County**

Dear Mr. Swingle:

On February 9, 2022, Mr. James Head, P.E., of the Office of the State Engineer (OSE) staff inspected Cuchillo-Negro, St. Anne's, and Marie Street Dams. Copies of Mr. Head's inspection checklist-reports are enclosed for your information. A copy of the NMOSE Guidelines for Vegetation Management on Dams will be sent to you via email for your information and use. I concur with the required actions contained in the respective inspection checklist-reports. Please review the required actions sections of the respective checklist reports and the inspection photographs and make arrangements to address the required actions accordingly.

Cuchillo-Negro Dam has been assessed in satisfactory condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 5 and 6 of the inspection checklist-report.

St. Anne's Dam has been assessed as being in poor condition because of uncertainties that arise from the lack of information about critical analysis parameters associated with design and construction of the dam. If information were to be assembled to reduce these uncertainties a condition rating of fair would have been appropriate due to the erosion gullies that are present on the left upstream and downstream groins of the dam, the diminished crest width of the dam created by past grading (back-dragging) of the slopes, questionable spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit and the alignment of the downstream end of the spillway channel relative to the downstream toe of the dam. Satisfactory progress needs to be made towards resolving issues pertaining to erosion, inspection of the outlet conduit, removal of the orifice plate at the outlet conduit entrance (to be replaced with a properly designed ported intake riser), and verification of spillway capacity.

Marie Street Dam has been assessed as being in poor condition because of uncertainty surrounding the sewer line passing through the dam and uncertainties with critical analysis parameters associated with design and construction of the dam. If these uncertainties were reduced a fair rating would otherwise be appropriate due to inadequate spillway capacity.

Subsections E and F of 19.25.12.21 NMAC require dams classified as High Hazard Potential such as these to have an approved Operations and Maintenance Manual (O&M) and Emergency Action Plan (EAP) in place. The O&M on file for Cuchillo-Negro Dam is outdated; has not been approved by the NMOSE-DSB, and it does not meet the requirements of Section 19.25.12.17 NMAC. There are no O&M manuals on file for St. Anne's and Marie Street Dams. The New Mexico Watershed and Dam Owners Coalition has developed a template for O&M manual preparation that could be useful. There are no EAPs on file with the NMOSE-DSB for these three dams. Please be advised of the potential for added owner liability if a dam were to experience an incident while out of compliance with the NMOSE Dam Safety Bureau's rules and regulations for dams.

Information pertaining to the preparation of Operation and Maintenance Manuals and Emergency Action Plans is available from the NMOSE Dam Safety Bureau website at:

<https://www.ose.state.nm.us/dams/>

If further discussion would be helpful, please contact James Head at (505) 383-4138 or via email at james.head@state.nm.us or me at (505) 383-4134.

Sincerely,



Charles N. Thompson, P.E., Chief
Dam Safety Bureau

CNT/jh

Enclosure

Email: Bruce Swingle, City Manager, City of Truth or Consequences (bswingle@torcnm.org)
Benny Fuentes, City of Truth or Consequences (bfuentes@torcnm.org)
~~Paul Tooley~~, Sierra County Emergency Manager (~~ptooley@sierraco.org~~)
Shelley Dragomir Ramos, P.E., USACE Abq. Dist., (Shelley.D.Ramos@usace.army.mil)

**New Mexico Office of the State Engineer
Dam Safety Bureau
Inspection Checklist and Report**

County: Sierra	Dam Name: Cuchillo Negro	OSE No.: D-541	Fed ID No.: NM00541
Inspection Performed By: James Head		Inspection Date: 2/9/2022	Last Inspection Date: 3/18/2019
Owner Name: City of Truth or Consequences	Owner Address: 505 Sims Street Truth or Consequences, NM 87901	Owner Contact: Benny Fuentes Owner Phone No.: 575-740-2613 Inspection Contact: Frank Aguirre Cell: 575-952-0083	
Purpose of Dam: Flood Control	Hazard Class: High	Hazard Class Appropriate: Yes ☒ No ☐	
Dam Location: From Hwy 181 (westside frontage rd. to I-25) take Hwy 52 west ~3.6 miles, turn south onto dirt road, continue ~3.3 miles to the dam.		Latitude: 33.219°	Longitude: -107.3183°
Weather: Clear, calm, ~50° F	Attendees: Frank Aguirre (City of T or C)		

1. General Conditions	Satisfactory	Needs Attention	N/A	Remarks:
a. Access for O & M	☒	☐	☐	May be limited during wet weather/flood events.
b. Unauthorized access restricted	☒	☐	☐	Not fenced, but no evidence of vandalism.
c. No unauthorized alterations	☒	☐	☐	
Notes:				

2. Upstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	Repair erosion gullies in excess of 3-inch depths as they occur.
b. Woody vegetation control	☒	☐	☐	Periodic removal of woody vegetation required from embankment section.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	Slightly displaced precast panels on left and right faces of concrete section, no apparent change since prior inspections.
e. Upstream wave protection	☒	☐	☐	
Notes:	Refer to remarks provided for specific items.			

3. Dam Crest	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	Periodically monitor for cracks and/or settlement. Shrinkage/thermal cracks on crest of concrete section similar to past inspections, no apparent structural cracks.
Notes:	Refer to remarks provided for specific items.			

4. Downstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Remove woody vegetation required from embankment section.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage control	☒	☐	☐	
Notes:	Refer to remarks provided for specific items.			

5. Downstream Area	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	Periodic removal of woody vegetation required.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage or boils	☒	☐	☐	
f. Drains or Wells	☐	☐	☒	No drains or wells.
Notes:	Refer to remarks provided for specific items.			

6. Abutment Contacts	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion, cracks, or slides	☒	☐	☐	
b. Woody vegetation	☐	☒	☐	Periodic removal of woody vegetation required.
c. Distortion or cracking	☒	☐	☐	
d. Seepage	☒	☐	☐	
e. Drains or Wells	☐	☐	☒	No drains or wells.
Notes:	Refer to remarks provided for specific items.			

7. Reservoir	Satisfactory	Needs Attention	N/A	Remarks:
a. Developed/Encroachment	☒	☐	☐	
b. Banks and slopes stable	☒	☐	☐	
c. Obstruction or debris	☐	☒	☐	Remove accumulated debris (logs, trash, etc.)
d. Sediment level	≈4650 ft. (approx. 7 th set of ports from the top of low-level intake, Dam Crest @ 4742.1 ft., S/W Crests @ 4721.1 ft.)			
e. Water level	= Dry at time of the inspection.			
Notes:	Refer to remarks provided for specific items.			

8. Intake Structure	Type of Structures: Ported Riser (lower); Large Portal with Rack (upper)			Remarks:
	Satisfactory	Needs Attention	N/A	
a. Concrete condition	☒	☐	☐	
b. Reinforcement encasement	☒	☐	☐	
c. Coating adequacy	☒	☐	☐	
d. Leakage	☐	☐	☒	Reservoir was dry.
e. Trash rack condition	☐	☒	☐	Maintain racks free of debris.
f. Inlet unobstructed	☐	☒	☐	Clear debris from ports of low-level intake.
g. Gates operative	☐	☐	☒	Not gated (passive system).
h. Woody vegetation	☒	☐	☐	
i. Number of intake ports	26	Number of ports open		14 above sediment level, some are partially plugged with flood debris.
Notes:	Refer to remarks provided for specific items.			

9. Outlet Conduit	Type of Conduit: 60" dia. RCP (lower) 7'-2" x 10' box culvert (upper)			Estimated Discharge: None
	Interior inspection: Yes ☐ Date: No ☒			
	Satisfactory	Needs Attention	N/A	Remarks:
a. Overall Condition	☐	☐	☐	Inspection limited to partial interior inspection.
b. Condition of surfaces	☐	☐	☐	Inspection limited to partial interior inspection.
c. Reinforcement encasement	☐	☐	☐	Inspection limited to partial interior inspection.
d. Clear of obstructions	☒	☐	☐	
e. Joint Condition	☐	☐	☐	Inspection limited to partial interior inspection.
f. Leakage	☐	☐	☐	Inspection limited to partial interior inspection.
g. Alignment	☐	☐	☐	Inspection limited to partial interior inspection.
Notes:		Refer to remarks provided for specific items.		

10. Outfall & Outlet Channel	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion	☒	☐	☐	Periodically monitor and mitigate as needed.
b. Obstructions or debris	☐	☒	☐	Remove rock and accumulated sand and gravel from the chute of the upper-level outlet works.
c. Erosion protection	☒	☐	☐	
d. Woody vegetation control	☐	☒	☐	Periodically monitor and remove vegetation as needed.
Notes:		Refer to remarks provided for specific items.		

11. Primary Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☒	☐	☐	
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☒	☐	☐	
g. Energy dissipation	☐	☐	☒	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	Flood Control Dam.
j. Erosion control	☒	☐	☐	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☒	☐	☐	
m. Capacity	☒	☐	☐	SDF: The SDF is 235,000 cfs as per the 2006 inspection memo notes. Per NMOSE regulations high hazard dams are required to have spillways capable of passing 100% of the runoff from the governing PMP storm event. From past NMOSE inspection reports, the combined spillway capacity of the primary and aux. spillways is about than 100% of the USACE Envelope Curve PMF. This percentage could be higher indicating more capacity if the flood discharge from the CO-NM REPS tool PMP is evaluated for reservoir routing. However, an updated H&H analysis to include the impacts of 2-hr, 6-hr, and 48-hr REPs PMPs and the AEP and precipitation distribution methodology from the MetPortal Tool would be required for verification of spillway capacity in accordance with the new NMOSE hydrologic guidance. See REPS tool and MetPortal tool results provided in the summary tables at the end of the checklist-report.
Notes:		Refer to remarks provided for specific items.		

12. Auxiliary Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☐	☒	☐	Monitor areas on the upstream face of the ogee section where efflorescent concrete is present and those areas where cracks have occurred. Repair spalled concrete and cracks in accordance with current state of the practice for concrete repairs (Refer to FEMA guidelines, ACI, and others).
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☒	☐	☐	
g. Energy dissipation	☐	☐	☒	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	Flood Control Dam.
j. Erosion control	☒	☐	☒	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☐	☒	☐	Remove woody vegetation along downstream edge of concrete (toe of the ogee weir).
m. Capacity	☒	☐	☐	SDF: see Item 11.m above.
Notes:	Refer to remarks provided for specific items.			

13. Compliance – Rules and Regulations	Required	In Place	Update needed	Remarks:
a. Emergency Action Plan	☒	☐	☐	
b. Operations and Maintenance Manual	☒	☐	☐	
c. Other required documents	☒	☐	☐	Hydrologic and flood routing analyses and a breach report for flood maps to be used in an EAP.
d. Status of State Engineer Order		☐		No Order on dam at this time.
Notes:	The dam is out of compliance with O&M Manual and EAP requirements as per Sections 19.25.12.17 and 19.25.12.18 NMAC.			

14. Design and Construction Documentation	There is an Initial Reservoir Filling Plan/Flood Emergency Plan, Design Memorandums 1, 2 and 3, Supplemental Design Memorandum 2, Foundation Report, an Operation and Maintenance Manual, a periodic Inspection Report, as-built drawings, and construction specifications on file with the NMOSE for this dam. It is outside the scope of this inspection report to perform a detailed review of the design documentation for compliance with the NMOSE requirements outlined in the current rules and regulations for dams. The as-built drawings on file with the NMOSE appear to accurately represent the as-constructed condition
---	--

Overall Remarks: Based on a cursory review of the documentation and the field inspection, Cuchillo Negro Dam is in "satisfactory" condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 5 and 6 of this inspection checklist-report.

Required Actions by the Owner (City of T or C):

1. Woody Vegetation removal is required for the embankment portion of the dam and the downstream edge of the ogee weir at the emergency spillway. Vegetation removal includes removal of rootballs and stumps in accordance with the New Mexico Office of the State Engineer (NMOSE) Dam Safety Bureau updated "*Vegetation Management on Dams*" which is available from the NMOSE website at: [Dam Safety Bureau \(state.nm.us\)](http://DamSafetyBureau.state.nm.us)
2. Make arrangements to have an overall inspection of the outlet works' conduits performed by a qualified contractor or professional civil engineer licensed in New Mexico with experience in dam engineering; this includes an interior inspections of the outlet works conduits. Once completed, provide the inspection documentation to the NMOSE-DSB. This item is reiterated from past NMOSE dam inspections and remains unaddressed.
3. Repair / patch deteriorated concrete where applicable to various sections of the dam and auxiliary spillway. Examples of deteriorated / damaged concrete are shown in the inspection photos.
4. Continue to implement proactive rodent abatement measures on the embankment section of the dam and collapse and backfill rodent burrows with suitable backfill material. The owner is also referred to FEMA 473 which is available for download from the NMOSE website listed below.
5. Remove all debris from the ports and trash racks for the inlet structure to the lower outlet conduit and confirm that all ports below the sediment level are adequately sealed. Maintain outlet works trash racks free of debris and routinely remove all accumulated debris within 100 feet of the outlet works intakes to minimize potential plugging of the ports on the lower outlet conduit inlet structure.
6. Provide a copy of survey results for horizontal/vertical survey monuments as requested in the NMOSE correspondence to the owner dated April 8, 2019, July 16, 2002, November 17, 2006, and June 29, 2009. If survey results are not available, make arrangements for a survey and submit the results with interpretative narrative to the NMOSE Dam Safety Bureau. Collected data must be compared to an original baseline survey. A well organized report with comprehensive narrative must be provided as part of the data submittal to the NMOSE-DSB. This continues to be a repeated item from prior NMOSE-DSB inspections that has not been addressed.
7. Prepare and submit a Hydrologic and Hydraulic (H&H) analysis to evaluate the spillway capacity. The results of the H&H analysis can be used to support a Dam Breach and Flood Routing Analysis for the EAP. This continues to be a repeated item from prior NMOSE-DSB inspections that has not been addressed.
8. Work with the Sierra County Zoning Department to assure no additional residents are constructed within the maximum flood pool of the dam. Based on elevations in Google Earth there are a number of residents to the southeast of the Town of Cuchillo that are within the maximum flood pool. A number of these residents are shown in the flood pool on the original as-built set of plans. However, there has been at least one home constructed within the maximum flood pool of the dam since the dam was completed, approximately 1 mile to the northwest of the dam. In addition, consideration needs to be given to these residents in the forthcoming EAP.
9. The dam is classified as high hazard potential, therefore, an Operation and Maintenance (O&M) Manual is required per Subsections E of 19.25.12.21 of the New Mexico Administrative Code (NMAC). The Owner is

referred to the NMOSE website for information on preparing an O&M Manual. Changes to NMOSE rules and regulations allow an owner to prepare the O&M Manual without the involvement of a professional engineer if the owner can submit a manual that meets the requirements of 19.25.12.17 NMAC.

10. The dam is classified as high hazard potential, therefore, an Emergency Action Plan (EAP) is required per Subsection F of 19.25.12.21 NMAC. There is no EAP on file with the NMOSE for this dam. The owner is referred to the NMOSE website for information on preparing an EAP and for a copy of the EAP template. Engineering elements of the EAP must be prepared by a professional engineer licensed in New Mexico with experience in dam breach analysis, flood routing, and failure mechanisms for dams. The owner can prepare the non-engineering elements of the EAP if the owner can meet the requirements of 19.25.12.18 NMAC.
11. Summary tables from the 2018 CO-NM REPs PMP tool and the updated MetPortal tool for Watershed Precipitation Frequency are shown below and also contain HMR 55A precipitation values for comparison. Based on a comparison of the rainfall intensities and the small watershed size, information from the tables suggest that the 2-hr Intraduration PMP event from CO-NM REPs PMP tool may be the governing rainfall event based on updated NMOSE hydrologic guidelines. However, updated hydrologic and reservoir routing analyses of the 2-hr, 6-hr, and 48-hr interdurations events from the REPs tool and MetPortal tool would be necessary to confirm which event is the governing event.

Cuchillo Negro Dam (Drainage Area ~329sq. mi)

CO-NM Reps PMP Tool (inches)										HMR 55A (inches)	
OBJECTID *	Storm Type	PMP_01	PMP_06	PMP_12	PMP_24	PMP_48	PMP_72			6-hr Local	72-hr Gen.
1	General	2.48	5.98	6.56	6.95	8.5	9.03				17.6
OBJECTID *	Storm Type	PMP_01	PMP_02	PMP_03	PMP_04	PMP_05	PMP_06	PMP_12	PMP_24		
1	Local	4.15	6.01	7.13	7.46	7.46	7.46	7.48	7.71	6.29	
OBJECTID *	Storm Type	PMP_01	PMP_06	PMP_12	PMP_24	PMP_48	PMP_72				
1	Tropical	1.85	4.98	6.81	8.25	9.47	10.58				17.6

Storm Intensity: 2-hr Intraduration PMP average intensity ~ 3.01 in./hr

6-hr PMP average intensity ~ 1.24 in./hr

48-hr Interduration PMP average intensity ~ 0.20 in./hr

MetPortal Watershed Precipitation Frequency, inches (24 and 72 hr durations not for design use)					
	ARF = .55	ARF = .69	ARF = .73	ARF = .73	ARF = .73
AEP	2 hr LS	6 hr MEC	24 hr MLC/TSR *	48 hr MLC/TSR	72 hr MLC/TSR *
10 ⁻²	1.37	1.81	2.36	2.94	3.25
10 ⁻³	1.87	2.46	3.37	4.21	4.64
10 ⁻⁴	2.38	3.16	4.50	5.63	6.21
10 ⁻⁵	2.92	3.91	5.79	7.23	7.97
10 ⁻⁶	3.47	4.71	7.24	9.03	9.96
10 ⁻⁷	4.05	5.57	8.88	11.08	12.22

Storm Intensities using 10⁻⁶ AEP:

2-hr LS average intensity ~ 1.74 in/hr; 6-hr LS average intensity ~ 0.79 in/hr

48-hr Interduration MetPortal Precipitation average intensity ~ 0.19 in./hr

A simplified flood inundation map (SIM) generated for a top of dam failure from DSS-Wise (2019) is shown below. Areas where rural and urban (higher density) housing and developments are present are booked marked. The lowest Flood Hazard Category included for the SIM below is HZ02 (see HCOM Analysis matrix below the SIM for details pertaining to Flood Depth x Velocity descriptions). The highest Flood Hazard Category for the SIM specific to Cuchillo Negro Dam is HZ09.



Flood Hazard Category for People Caught Outdoors	DVmax (ft ² /s)		Description
	From	To	
HZ01	0	4.3	Very Low Hazard: Shallow flow or deep standing water
HZ02	4.3	6.5	Low Hazard: Dangerous to Children
HZ03	6.5	8.6	Moderate Hazard: Dangerous to some adults
HZ04	8.6	13	Significant Hazard: Dangerous to most adults
HZ05	13	54	Extreme Hazard: Dangerous to all

Flood Hazard Category for People Caught Indoors	DVmax (ft ² /s)		Description
	From	To	
HZ06	54	108	Poorly constructed building
HZ07	108	161	Well-built timber building
HZ08	161	215	Well-built masonry building
HZ09	215	377	Concrete building
HZ10	377		Large concrete building

Date: 3/7/2022Signature: *[Signature]*

Disclaimer

Professional judgments and evaluations are represented in this document. These judgments are based partly on information gathered from visual observations and a limited review of the NMOSE Dam Safety Bureau files for the facility. The NMOSE does not guarantee the performance of this dam in any way and does not assume responsibility for safe operation of this dam. The sole responsibility for safe operation of this dam rests with the owner, operators and sponsors. The NMOSE only provides that the work and judgments rendered were performed in a manner consistent with the level of care and skill ordinarily exercised by other engineers under similar circumstances. No other warrantee or guarantee is included or intended.



1.

Image 1: 2017 Google Earth imagery with features of the dam as indicated.

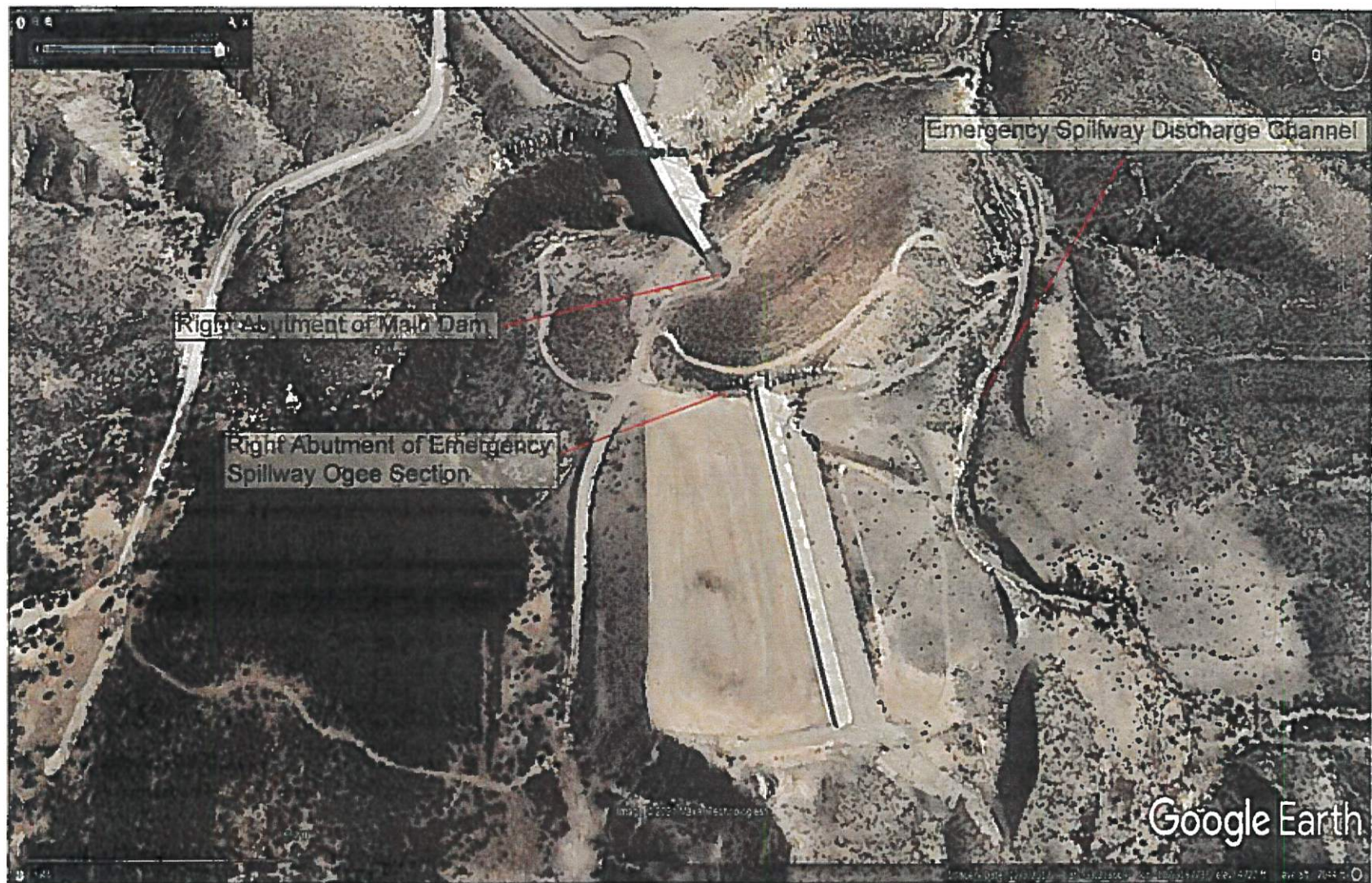


Image 2: Additional 2017 Google Earth imagery with features of the dam as indicated.



3.

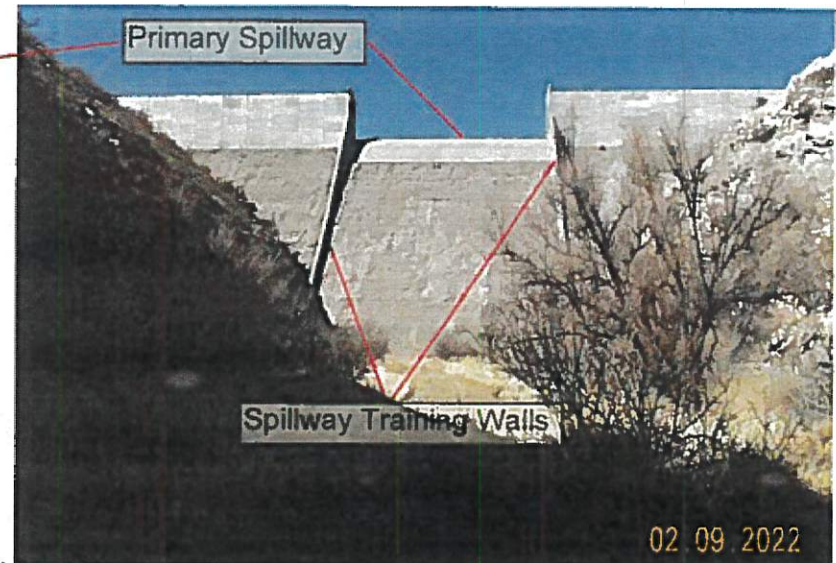


4.

Images 3 and 4: Westerly views of the east end of the dam crest (Embankment Section -Image 3 and Concrete Section – Image 4).



5.

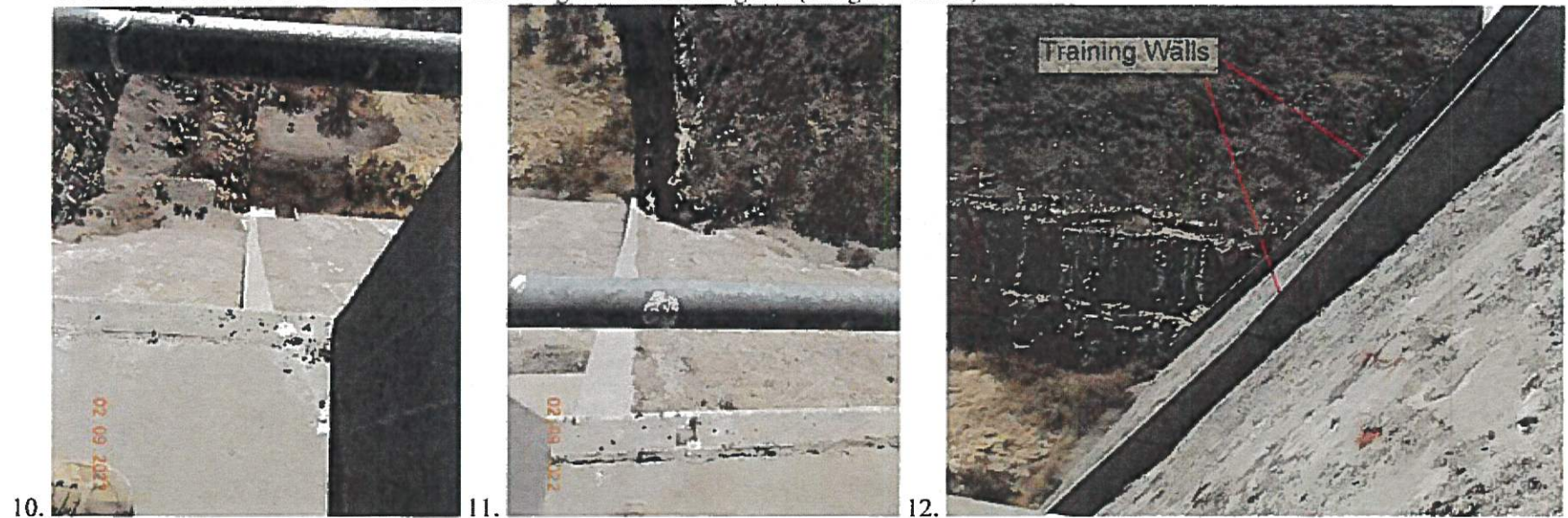


6.

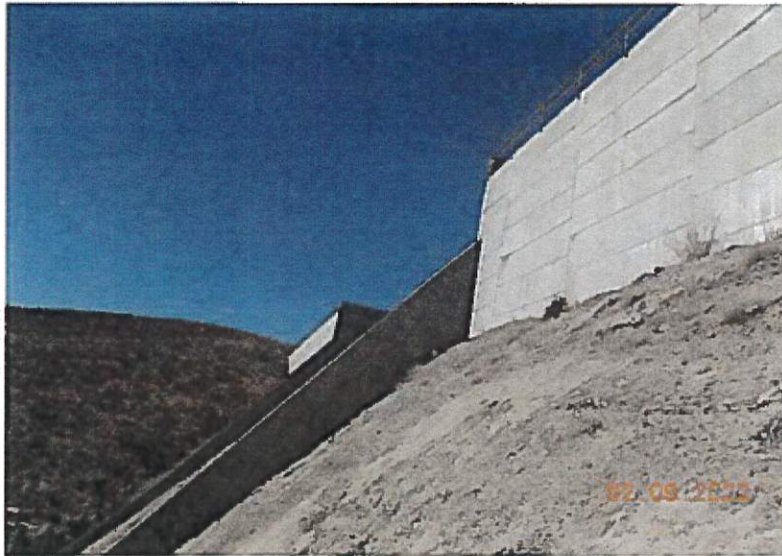
Images 5 and 6: Easterly view of the west end of the dam crest (Image 5) as seen from the vicinity of the right abutment and upstream (northerly) view (Image 6) of the downstream face of the main dam at the primary spillway overpour section.



Images 7 through 9: Westerly view of the downstream slope of the main dam (Image 7) and easterly views along the downstream shoulder of the dam crest and the lower section of the right downstream groin (Images 8 and 9).



Images 10 through 12: Views along the left and right primary spillway training walls (Images 10 and 11) and transverse to the training walls (Image 12).



13.



14.

Images 13 and 14: Westerly view of the top of the primary spillway training walls (Image 13) and westerly view of the downstream face of the main dam as seen from the west end of the embankment section at its transition zone with the concrete section of the dam.(Image 14).



15.

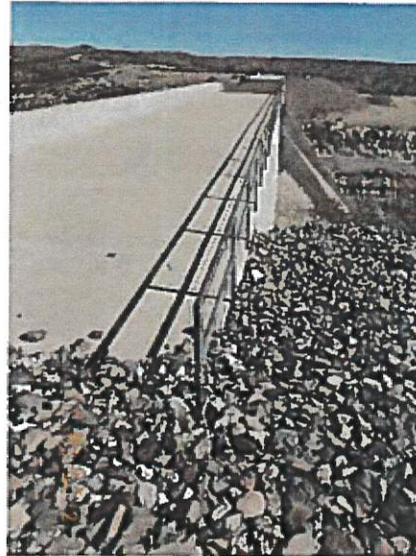


16.

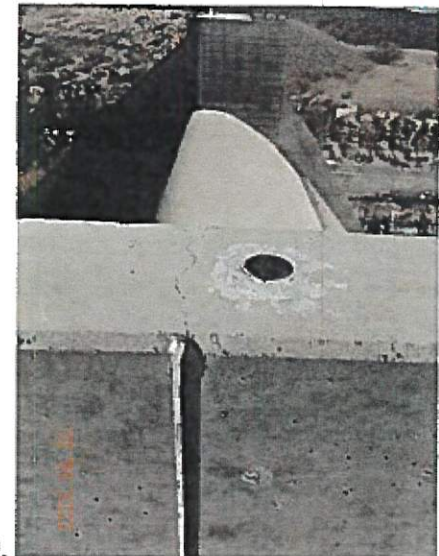
Images 15 and 16: Easterly views along the upstream and downstream slopes of the embankment section of the dam at the transition zone with the concrete section of the dam.



17.

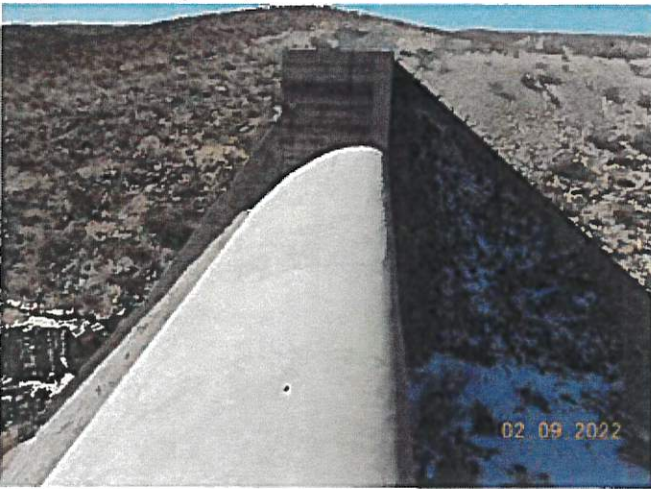


18.



19.

Images 17 through 19: Downstream (southwesterly) view of the upper left downstream groin of the main (concrete) dam (Image 17), downstream (northeasterly) view of the upper right downstream groin (Image 18), and easterly view of the right side primary spillway wall and spillway crest (Image 19).



20.

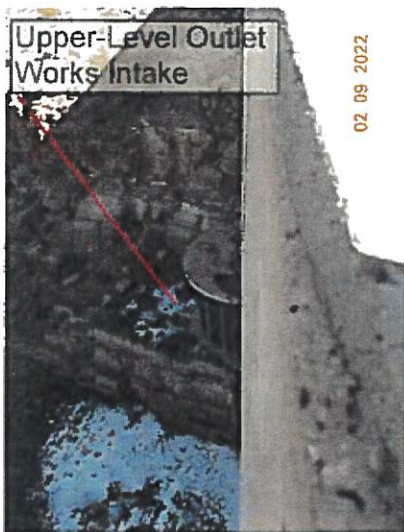


21.



22.

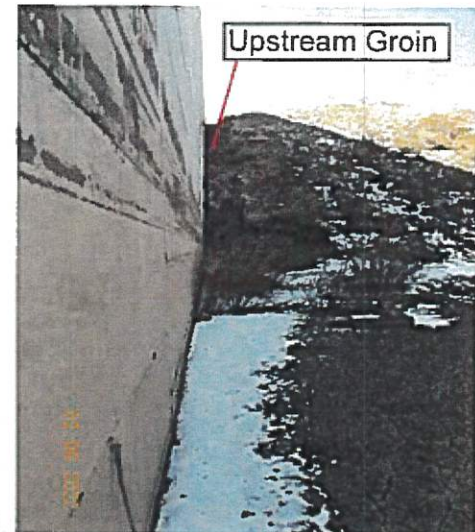
Images 20 through 22: Westerly view along the primary spillway crest (Image 20), southerly view along the left side primary spillway training wall (Image 21), and view of the lower portion of the left downstream groin of the main dam and spalled concrete at a contraction joint (Image 22).



23.

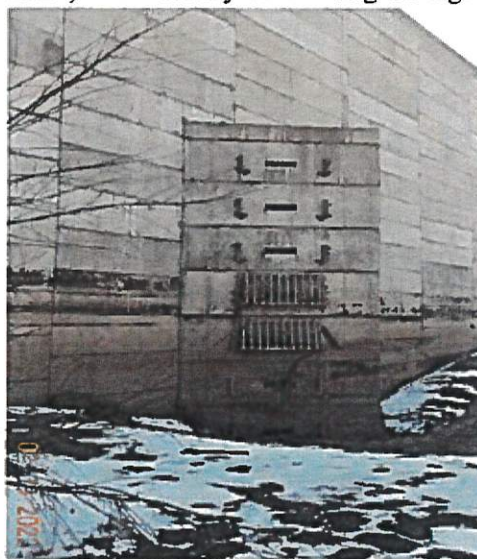


24.



25.

Images 23 through 25: Views of the upper and lower low-level outlet works intake structures located on the upstream face of the main dam (Images 23 and 24) and westerly view along the right upstream groin of the Main Dam (Image 25).



26.

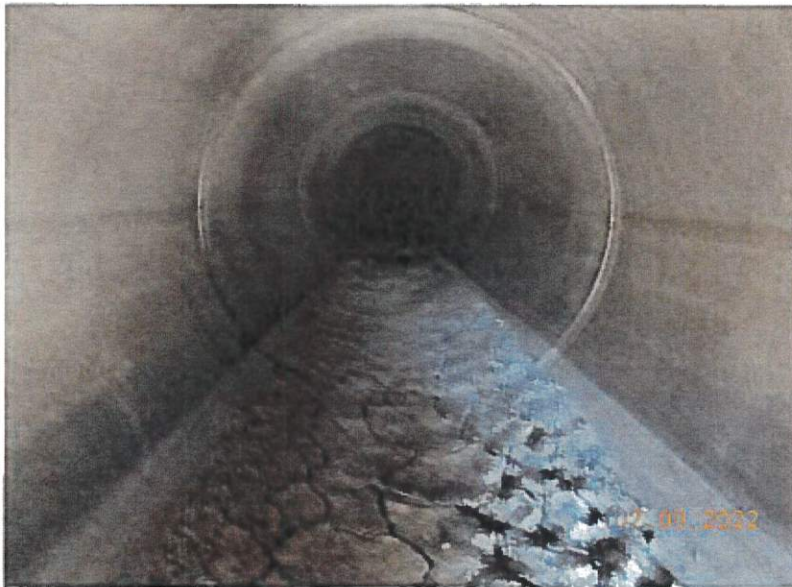


27.



28.

Images 26 through 28: Slightly distorted views of the low-level outlet works intake structure located at the base of the upstream face of the dam.



29.



30.

Images 29 and 30: Upstream interior views of the low-level outlet conduit as seen from the discharge end of the conduit. The upstream end of the conduit is located at the upstream face of the dam and within the outlet works structure shown in Images 26 through 28.



31.



32.

Images 31 and 32: Horizontally distorted views of the upper-level outlet works intake structure (Image 31) and concrete chute discharge channel (Image 32).

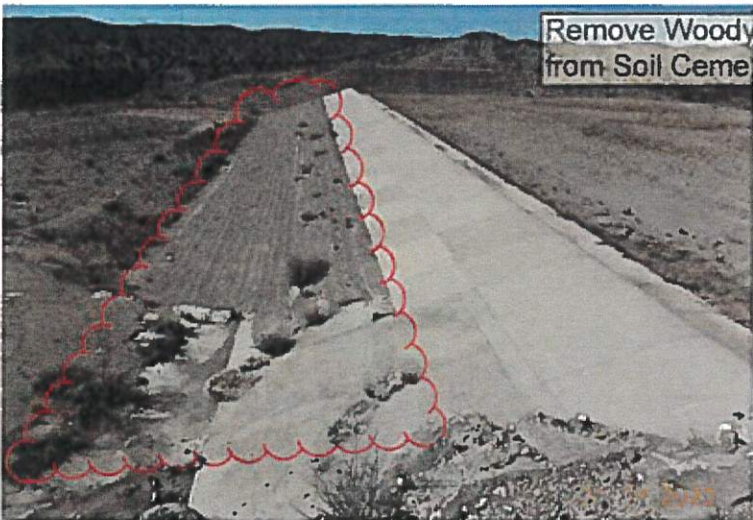


33.



34.

Images 33 and 34: Westerly views of the emergency spillway ogee weir located approximately 300 feet west of the right abutment of the Main Dam.

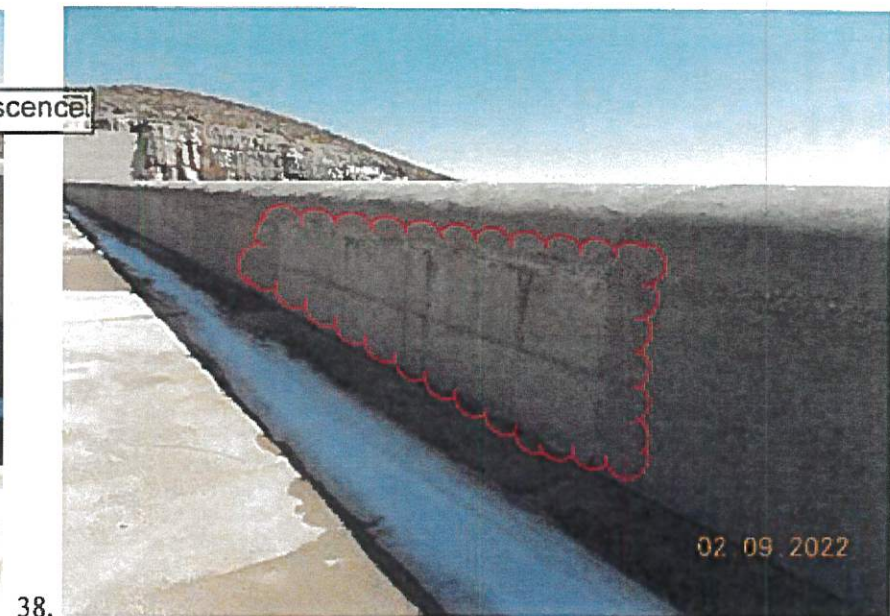


35.



36.

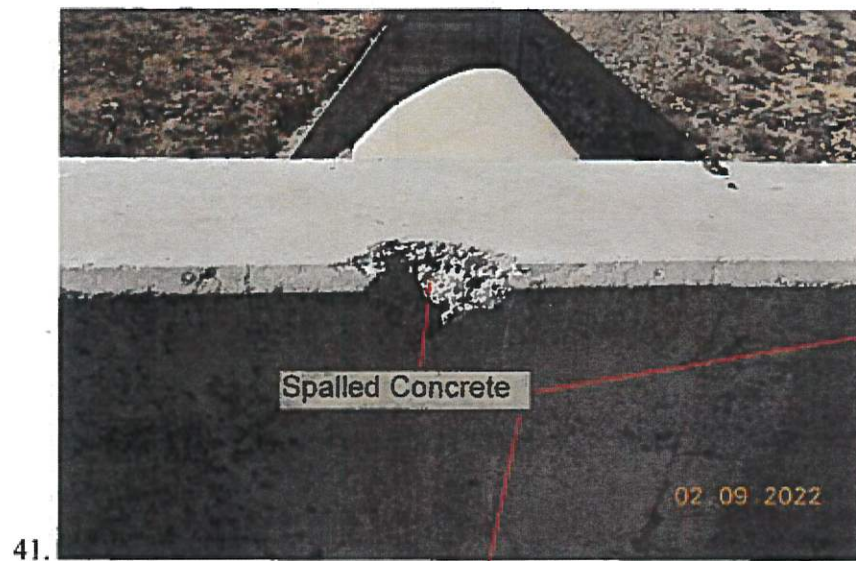
Images 35 and 36: Additional westerly view of the emergency spillway (Image 35) and a northerly view of the right downstream groin of the emergency spillway.



Images 37 and 38: Examples of concrete efflorescence and spalling on the upstream face of the emergency spillway ogee weir.



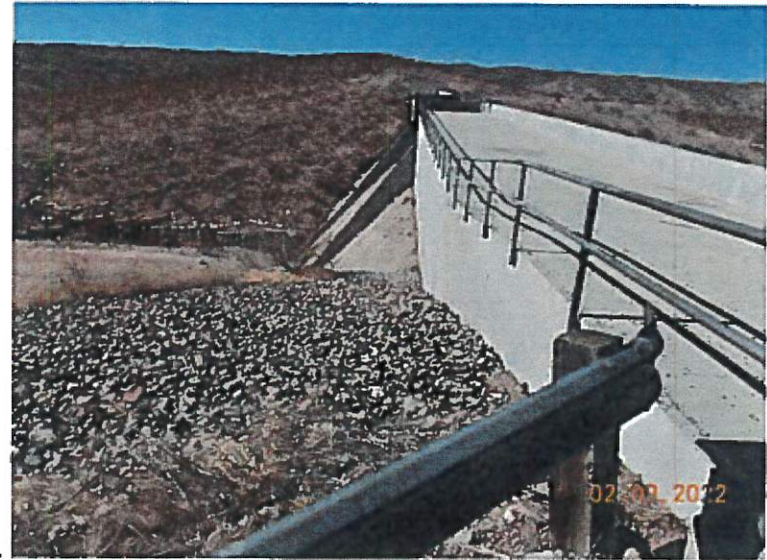
Images 39 and 40: Views of soil cement armoring on right side slope of emergency spillway approach channel (Image 39) and armoring on the downstream slope of the emergency spillway ogee section.



Images 41 through 44: Examples of damaged (spalled) concrete on the parapet walls of the main dam and shrinkage cracking on the crest of the main dam. Repair of the spalled concrete is required along with monitoring and documentation of the shrinkage cracks over time.



45.



46.

Images 45 and 46: Westerly views along the upstream and downstream faces of the main dam.



47.



48.



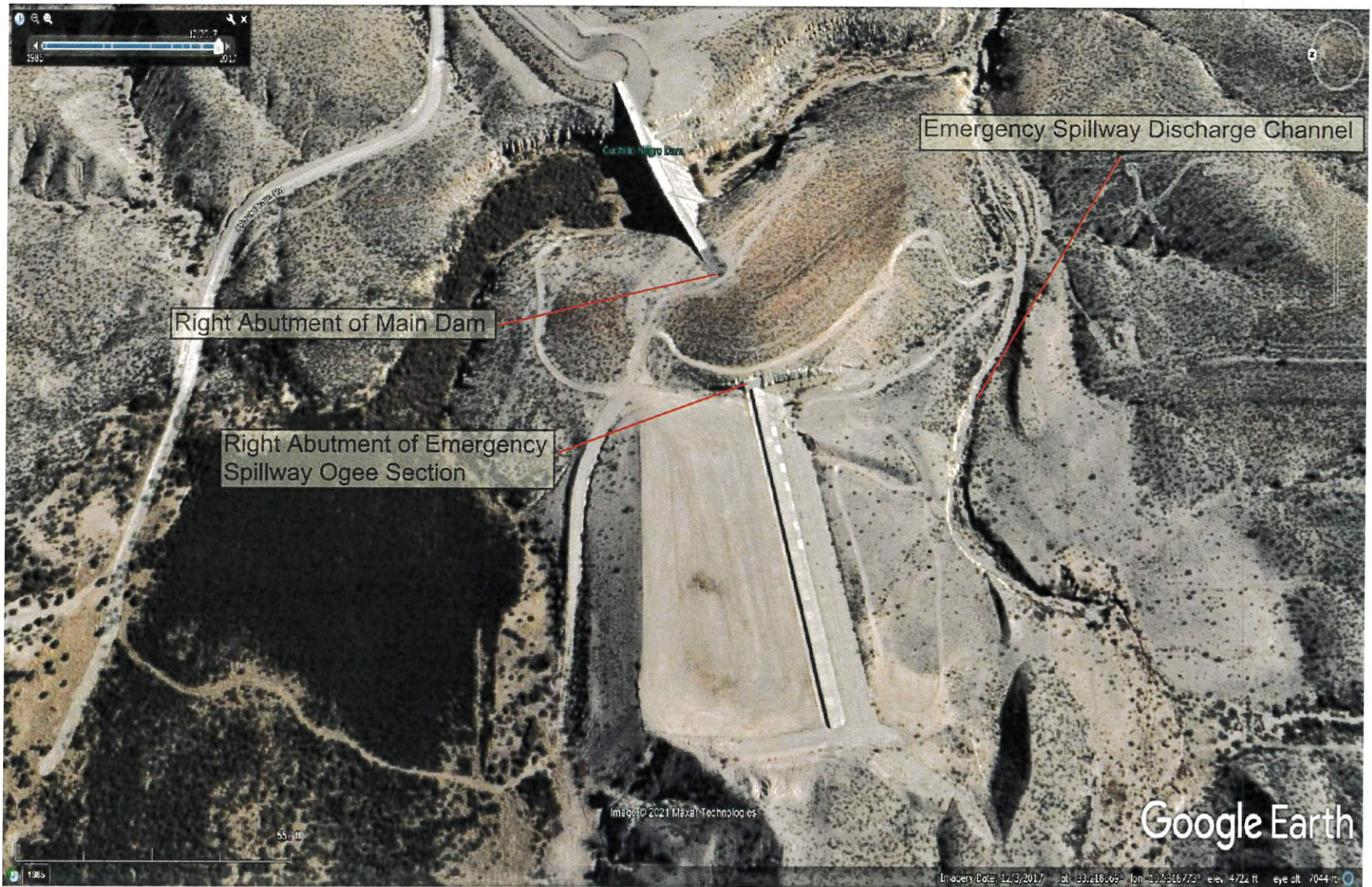
49.

Images 47 through 49: Examples of offset joints and cracks on the upstream face, crest of the main dam and upstream face of the emergency spillway ogee section that should be monitored over time.



1.

Image 1: 2017 Google Earth imagery with features of the dam as indicated.



2.

Image 2: Additional 2017 Google Earth imagery with features of the dam as indicated.



3.

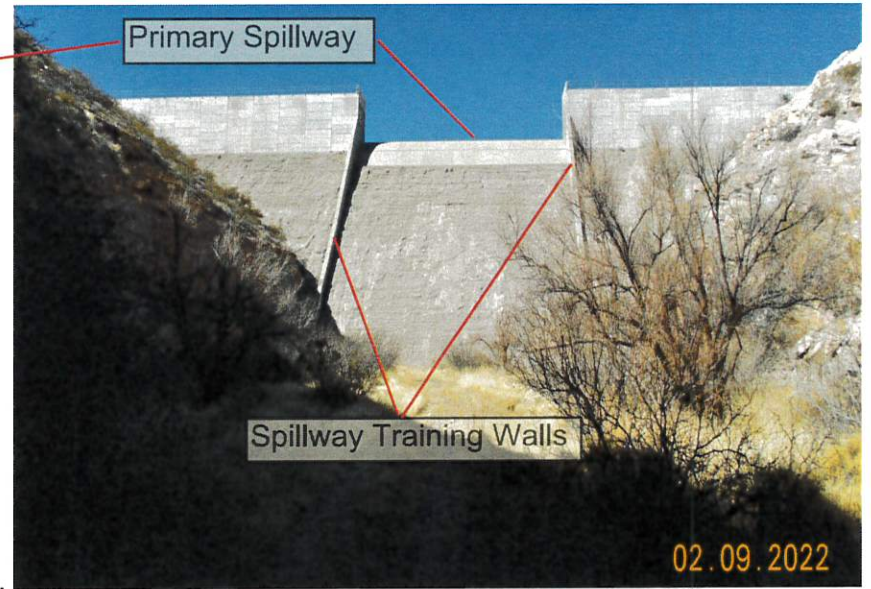


4.

Images 3 and 4: Westerly views of the east end of the dam crest (Embankment Section -Image 3 and Concrete Section – Image 4).

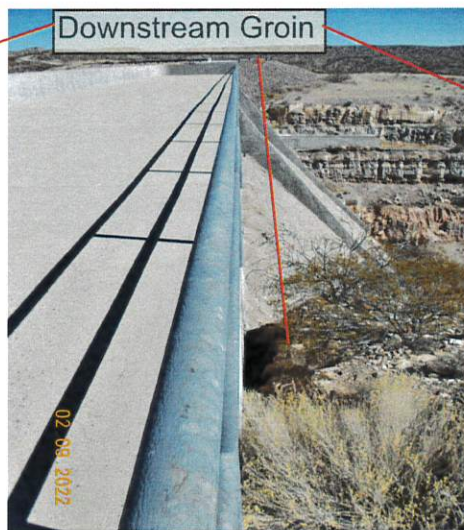


5.



6.

Images 5 and 6: Easterly view of the west end of the dam crest (Image 5) as seen from the vicinity of the right abutment and upstream (northerly) view (Image 6) of the downstream face of the main dam at the primary spillway overpour section.

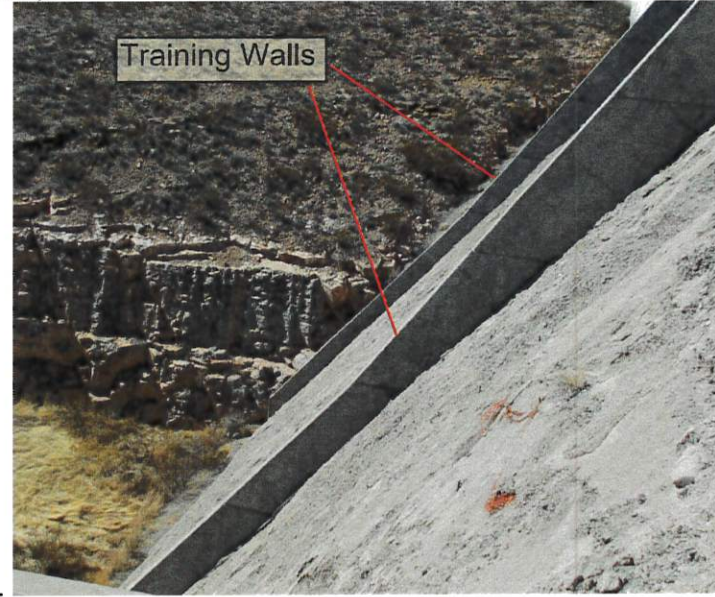


7.

8.

9.

Images 7 through 9: Westerly view of the downstream slope of the main dam (Image 7) and easterly views along the downstream shoulder of the dam crest and the lower section of the right downstream groin (Images 8 and 9).



10.

11.

12.

Images 10 through 12: Views along the left and right primary spillway training walls (Images 10 and 11) and transverse to the training walls (Image 12).

MEMORANDUM
OFFICE OF THE STATE ENGINEER
Dam Safety Bureau

DATE: March 28, 2019

TO: Charles N. Thompson, P.E., Chief, Dam Safety Bureau

FROM: James D. Head, P.E., Dam Safety Engineer

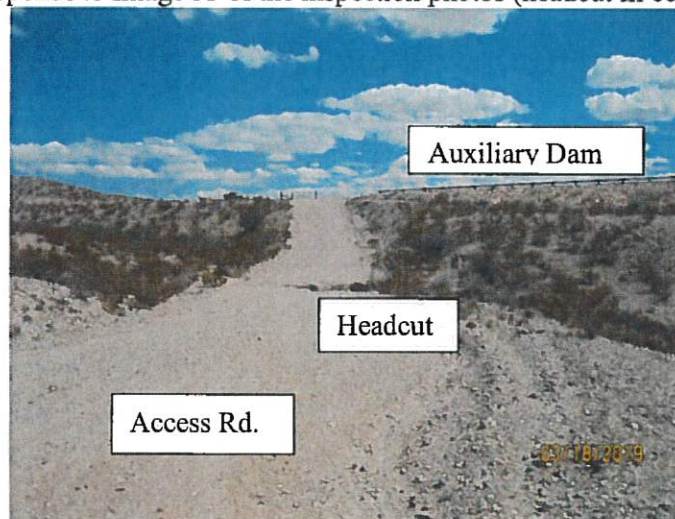
SUBJECT: Inspection of Cuchillo Negro Dam, Sierra County, OSE No. D-541

On March 18, 2019, I inspected Cuchillo Negro Dam. Observations made during the inspection are shown on the attached Inspection Checklist. Required actions for the dam owner are listed below.

Required Actions

Actions are listed in the order of importance.

1. Repair the large erosion gully at the south end of the auxiliary spillway and curtail future erosion by redirecting surface runoff. The gully is large and if left unaddressed could result in a potential failure mode at the left abutment of the auxiliary spillway.
2. Repair the large headcut and erosion gully that is present across the access road to the flood detention pool from the north end of the earthen auxiliary dam. See image below which corresponds to Image 53 of the inspection photos (headcut in center of image).



3. Periodic removal of woody vegetation from the main dam and auxiliary embankment section required. This includes removal of woody vegetation from the slopes, crests, and abutment contacts, and includes removal of rootballs and stumps in accordance with the Office of the State Engineer (OSE) Dam Safety Bureau's updated "*Vegetation Management on Dams*". The *Vegetation Management on Dams* guidelines document must be included in a forthcoming update to the Operation and Maintenance Manual.

Mr. Juan Fuentes
City of T or C Dams

April 8th, 2019
Page 2 of 2

The Operations and Maintenance (O&M) Manual on file for Cuchillo-Negro Dam has not been approved by the OSE-DSB, is outdated, and does not meet the requirements of Section 19.25.12.17 NMAC. There are no O&M Manuals on file for St. Anne's and Marie Street Dams. The New Mexico Watershed and Dam Owners Coalition has developed a template for O&M Manual preparation that could be useful. The template can be found on their website at: www.nmwsc.org. There are no Emergency Action Plans (EAP) on file with the OSE-DSB for these three dams. Subsections E and F of 19.25.12.21 NMAC require dams classified as High. Hazard Potential such as these to have an approved O&M Manual and EAP in place. Please be advised of the potential for added owner liability if a dam were to experience an incident while out of compliance with the OSE Dam Safety Bureau's rules and regulations for dams.

If further discussion would be helpful, please contact James Head at (505) 383-4138 or via email at james.head@state.nm.us or me at (505) 383-4134.

Sincerely,



Charles N. Thompson, P.E., Chief
Dam Safety Bureau

CNT/jdh

Enclosure

Email: Benny Fuentes, City of Truth or Consequences (bfuentes@torcnm.org)
Paul Tooley, Sierra County Emergency Manager (ptoolley@sierraco.org)

JOHN R. D'ANTONIO, Jr., P.E.
STATE ENGINEER



DAM SAFETY BUREAU
CONCHA ORTIZ Y PINO BLDG
P.O. BOX 26102
SANTA FE, NEW MEXICO 87504
(505) 827-6122
(505) 476-0220 FAX
NM.DamSafety@state.nm.us

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe**

April 8th, 2019

Mr. Juan Fuentes, City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Inspections of Cuchillo-Negro Dam, OSE File No. D-541
St. Anne's Dam, OSE File No. D-581, and
Marie Street Dam, OSE File No. D-582
Sierra County**

On March 18, 2019, Mr. James Head, P.E., of the Office of the State Engineer (OSE) staff inspected Cuchillo-Negro, St. Anne's, and Marie Street Dams. Copies of Mr. Head's inspection memoranda and inspection checklists are enclosed for your information. A copy of the OSE Guidelines for Vegetation Management on Dams will be sent to you via email for your information and use. I concur with the required actions contained in the inspection memoranda.

Cuchillo-Negro Dam has been assessed in satisfactory condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 1 and 2 of the review memorandum.

St. Anne's Dam has been assessed as being in poor condition due to uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE to verify the design assumptions. Otherwise, a fair rating would have been appropriate due to the erosion gullies that are present on the left downstream groin of the dam, the diminished crest width of the dam created by the grading (back-dragging) of the slopes, the apparent lack of spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit.

Marie Street Dam has been assessed as being in poor condition as a result of the lack of design documentation for the sewer line passing through the dam, and uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE-DSB to verify the design assumptions. Otherwise a fair rating would have been appropriate due to inadequate spillway capacity.

Removal of woody vegetation, where applicable, is also required where vegetation is present on the primary and auxiliary spillways and the respective discharge channels.

4. Remove all debris from the ports and trash racks for the inlet structure to the lower outlet conduit and confirm that all ports below the sediment level are adequately sealed. Maintain outlet works trash racks free of debris and routinely remove all accumulated debris within 100 feet of the outlet works intakes to minimize potential plugging of the ports on the lower outlet conduit inlet structure.
5. Repair / patch deteriorated concrete where applicable to various sections of the dam and auxiliary spillway. Examples of deteriorated / damaged concrete are shown in the inspection photos.
6. Assure the access gate to the crest is closed and locked following maintenance activities to restrict unnecessary vehicular traffic from the crest of the dam.
7. Continue to implement proactive rodent abatement measures on the embankment section of the dam and collapse and backfill rodent burrows with suitable backfill material. The owner is also referred to FEMA 473 which is available for download from the OSE website listed below.
8. Make arrangements to have an interior inspection of the low level 60-inch diameter outlet works conduit performed. Also provide the OSE with a schedule for completion of the interior inspection and contract with a professional civil engineer licensed in New Mexico, or a qualified contractor, to assess the condition of the low level outlet works. Provide the OSE Dam Safety Bureau with an inspection report which documents observations and recommendations made as a result of the inspection. This continues to be a repeated item from prior OSE-DSB inspections that has not been addressed.
9. Provide a copy of survey results for horizontal/vertical survey monuments as requested in the OSE correspondence to the owner dated July 16, 2002, November 17, 2006, June 29, 2009, and if survey results are not available, make arrangements for a survey and submit the results with interpretative narrative to the OSE Dam Safety Bureau. Collected data must be compared to an original baseline survey. A well organized report with comprehensive narrative must be provided as part of the data submittal to the OSE-DSB. This continues to be a repeated item from prior OSE-DSB inspections that has not been addressed.
10. An Operation and Maintenance (O&M) Manual is required per Subsection E of 19.25.12.21 NMAC. The O&M Manual on file with the OSE for this dam is outdated and must be revised to reflect actual maintenance practices and experience and must comply with 19.25.12 NMAC. The owner is referred to the OSE website for information on preparing an O&M Manual. Changes to the OSE rules and regulations allow an owner to prepare the O&M Manual without hiring a professional engineer if the owner can submit a manual that meets the requirements of 19.25.12.17 NMAC. Provide the OSE Dam Safety Bureau with a schedule for completion of an updated Operations and

Maintenance (O&M) Manual. This continues to be a repeated item from prior OSE-DSB inspections that has not been addressed.

11. An Emergency Action Plan (EAP) is required per Subsection F of 19.25.12.21 NMAC. A document titled "Initial Reservoir Filling Plan/Flood Emergency Plan" is on file with the OSE for this dam. This document does not contain a current notification flowchart, and much of the contact information contained in the document can be presumed to be out of date. The owner is referred to the OSE website for information on preparing an EAP and for a copy of the EAP template. Engineering elements of the EAP must be prepared by a professional engineer licensed in New Mexico with experience in dam breach analysis, flood routing and failure mechanisms for dams. The owner can prepare the non-engineering elements of the EAP. Provide an update to the OSE Dam Safety Bureau on the status of preparing a revised EAP for Cuchillo Negro Dam. This continues to be a repeated item from prior OSE-DSB inspections that has not been addressed.
12. Prepare and submit a Hydrologic and Hydraulic (H&H) analysis to evaluate the spillway capacity. The results of the H&H analysis can be used to support a Dam Breach and Flood Routing Analysis for the EAP. This continues to be a repeated item from prior OSE-DSB inspections that has not been addressed.
13. Work with Sierra County to assure no additional residents are constructed within the maximum flood pool of the dam. Based on elevations in Google Earth there are a number of resident to the southeast of the Town of Cuchillo that are within the maximum flood pool. A number of these residents are shown in the flood pool on the original as-built set of plans. However, there has been at least one home constructed within the maximum flood pool of the dam since the dam was completed, approximately 1 mile to the northwest of the dam. In addition, consideration needs to be given to these residents in the forthcoming EAP.

Information from the OSE-DSB and the Federal Emergency Management Agency to assist dam owners on woody vegetation removal; impacts of animals on earthen dams; planning an O&M program; preparing an O&M Manual; preparing an EAP; and a model EAP are available on the OSE-DSB website at: <http://www.ose.state.nm.us/DS/dsIndex.php>

Compliance with Rules and Regulations

Operation and Maintenance Manual and Emergency Action Plan

OSE files include an Operation and Maintenance (O&M) Manual prepared by the Army Corps of Engineers dated June 1993. This document requires updating to reflect actual maintenance practices and experience and conformance with 19.25.12 NMAC. OSE files also include an "Initial Reservoir Filling Plan/Flood Emergency Plan" for this structure, prepared by USACE and dated September 1994. This document does not contain a current notification flowchart, and much of the contact information contained in the document can be presumed to be out of date. The aforementioned document does contain inundation mapping for a dam break occurring during a PMF event, and supporting hydrologic and hydraulic documentation is available from

Appendix B of the USACE document dated April 1988 and titled "General Design – Design Memorandum No. 1". At a minimum, the Initial Reservoir Filling Plan/Flood Emergency Plan (FEP) information must be transferred into the EAP template provided on the OSE website. From the above, the O&M Manual and FEP on file with the OSE Dam Safety Bureau are outdated for this structure. Section 19.25.12.21 NMAC establishes O&M and EAP requirements for existing dams. Subsections E and F of 19.25.12.21 require dams classified as High Hazard Potential such as this to have an approved O&M Manual and EAP. The owner was advised of this requirement in OSE correspondence for all inspection reports since 2005. A copy of the OSE rules and regulations for dams (19.25.12 NMAC) can be downloaded from the OSE website at: <http://www.ose.state.nm.us/DS/dsRegs.php>

Spillway Capacity

The OSE rules and regulations require high hazard dams such as this to have spillways capable of passing 100% of the PMF resulting from the governing Probable Maximum Precipitation (PMP) storm event. Calculations as described in the November 30, 2011 inspection memorandum indicate the spillway capacity is approximately 86% for the 24-hr PMP storm event based on HMR 55A based on a review of design documentation on file with the OSE-DSB. However, HMR 55A states that durations for the General Storm of less than 72-hours are not appropriate and are not a correct application of the data in the document. It will need to be demonstrated through an updated hydrologic and flood routing analysis that the combined spillway capacity may be greater than 70% of the 72-hour General Storm event based on HMR 55A.

Design and Construction Documentation

There is an Initial Reservoir Filling Plan/Flood Emergency Plan, Design Memorandums 1, 2 and 3, Supplemental Design Memorandum 2, Foundation Report, an Operation and Maintenance Manual, a periodic Inspection Report, as-built drawings, and construction specifications on file with the OSE for this dam. It is outside the scope of this inspection report to perform a detailed review of the design documentation for compliance with the OSE requirements outlined in the current rules and regulations for dams. The as-built drawings on file with the OSE appear to accurately represent the as-constructed condition.

Inspection Findings

Overall Dam Condition

Based on the cursory review of the documentation and the field inspection, Cuchillo Negro Dam is in "satisfactory" condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 1 and 2 of this memorandum.

Hazard Potential Classification

The hazard potential classification for Cuchillo Negro Dam is high. The classification is appropriate.

Outlet Works

There is no indication from a review of the OSE records that an interior inspection of the low-level outlet works conduit has been performed.

Instrumentation

As noted in prior inspection memoranda, survey monuments are present on the dam and the spillway to the west of the dam in the form of general horizontal/vertical movement monuments. No record of readings for these monuments could be located in OSE-DSB files even though the owner was requested to perform a survey of horizontal/vertical monuments and submit data to OSE in 2002. If a survey was not done in 2002 or if survey data cannot be located, a new survey is required.



James D. Head, P.E.
Dam Safety Bureau

jdh

Professional judgments and evaluations are represented in this memorandum. They are based partly on information gathered from visual observations and a limited review of the OSE Dam Safety Bureau files for the facility. The OSE does not guarantee the performance of this dam in any way. The OSE only provides that the work and judgments rendered were performed in a manner consistent with the level of care and skill ordinarily exercised by other engineers under similar circumstances. No other warrantee or guarantee is included or intended.

**New Mexico Office Of The State Engineer
Dam Safety Bureau
Inspection Checklist**

County: Sierra	Dam Name: Cuchillo Negro Dam	OSE No.: D-541	Fed ID No.: NM00541
Inspection Performed By: James Head		Inspection Date: 03-18-2019	Last Inspection Date: 03-04-2015
Owner Name: City of Truth or Consequences	Owner Address: 505 Sims Street Truth or Consequences, NM 87901	Owner Contact: Juan Fuentes Owner Phone No.: 575-894-6673 Inspection Contact: Benny Fuentes – Cell 575-740-2613	
Purpose of Dam: Flood Control		Hazard Class: High	Hazard Class Appropriate: Yes ☒ No ☐
Dam Location: From Hwy 181 (westside frontage rd. to I-25) take Hwy 52 west ~3.6 miles, turn south onto dirt road, continue ~3.3 miles to the dam.		Latitude: 33.219	Longitude: -107.3183
Weather: Clear, Calm, ~55 Degs F		Attendees: Benny Fuentes, City of Truth or Consequences	

1. General Conditions	Satisfactory	Needs Attention	N/A	Remarks:
a. Access for O & M	☒	☐	☐	Limited during wet weather
b. Unauthorized access restricted	☐	☒	☐	Some tracks in drainage areas
c. No unauthorized alterations	☒	☐	☐	

2. Upstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Periodic removal of woody vegetation required from embankment section.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	Displaced precast panel on left face of concrete section, no apparent change since last inspection.
e. Upstream wave protection	☒	☐	☐	

3. Dam Crest	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Periodic removal of woody vegetation required from the upstream and downstream shoulders of the embankment section required.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	

4. Downstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Periodic removal of woody vegetation required from embankment section.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage control	☒	☐	☐	

5. Downstream Area	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Periodic removal of woody vegetation required from the upstream and downstream shoulders of the embankment section required.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage or boils	☒	☐	☐	
f. Drains or Wells	☐	☐	☒	Est. gpm -

Dam Name: Cuchillo Negro Dam

Inspection Date: 03-18-2019

File No. D-541

6. Abutment Contacts	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion, cracks, or slides	☒	☐	☐	
b. Woody vegetation	☐	☒	☐	
c. Distortion or cracking	☒	☐	☐	
d. Seepage	☒	☐	☐	
e. Drains or Wells	☐	☐	☒	Est. gpm None

7. Reservoir	Satisfactory	Needs Attention	N/A	Remarks:
a. Developed/Encroachment	☒	☐	☐	
b. Banks and slopes stable	☒	☐	☐	
c. Obstruction or debris	☐	☒	☐	Periodic removal of accumulated debris required.
d. Sediment level	= ~4650 ft. (approx. 7 th set of ports from the top of low-level intake)			Dam Crest @ 4742.1ft., S/W Crests @ 4721.1 ft.
e. Water level	=			Dry at time of inspection

8. Intake Structure	Type of Structure: Ported Riser (lower), Portal with Rack (upper)			Remarks:
	Satisfactory	Needs Attention	N/A	
a. Concrete condition	☒	☐	☐	
b. Reinforcement encasement	☒	☐	☐	
c. Coating adequacy	☒	☐	☐	
d. Leakage	☒	☐	☐	
e. Trash rack condition	☐	☒	☐	Maintain racks free of debris
f. Inlet unobstructed	☐	☒	☐	Clear debris from ports of low level intake
g. Gates operative	☐	☐	☒	
h. Woody vegetation	☒	☐	☐	
Number of intake ports	26	Number of ports open		14 above sediment level, some are partially plugged with flood debris

9. Outlet Conduit	Type of Conduit: 60" dia. RCP (lower) 7'-2" x 10' box culvert (upper)			Estimated Discharge: No flow during the inspection
	Interior inspection: Yes ☐ Date ☐ No ☒			
	Satisfactory	Needs Attention	N/A	Remarks:
a. Overall Condition	☒	☐	☐	Inspection limited to partial interior inspection
b. Condition of surfaces	☒	☐	☐	Inspection limited to partial interior inspection
c. Reinforcement encasement	☒	☐	☐	Inspection limited to partial interior inspection
d. Clear of obstructions	☒	☐	☐	Inspection limited to partial interior inspection
e. Joint Condition	☒	☐	☐	Inspection limited to partial interior inspection
f. Leakage	☒	☐	☐	Inspection limited to partial interior inspection
g. Alignment	☒	☐	☐	Inspection limited to partial interior inspection

10. Outfall & Outlet Channel	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion	☒	☐	☐	
b. Obstructions or debris	☒	☐	☐	
c. Erosion protection	☒	☐	☐	
Woody vegetation control	☒	☐	☐	

Dam Name: Cuchillo Negro Dam

Inspection Date: 03-18-2019

File No. D-541

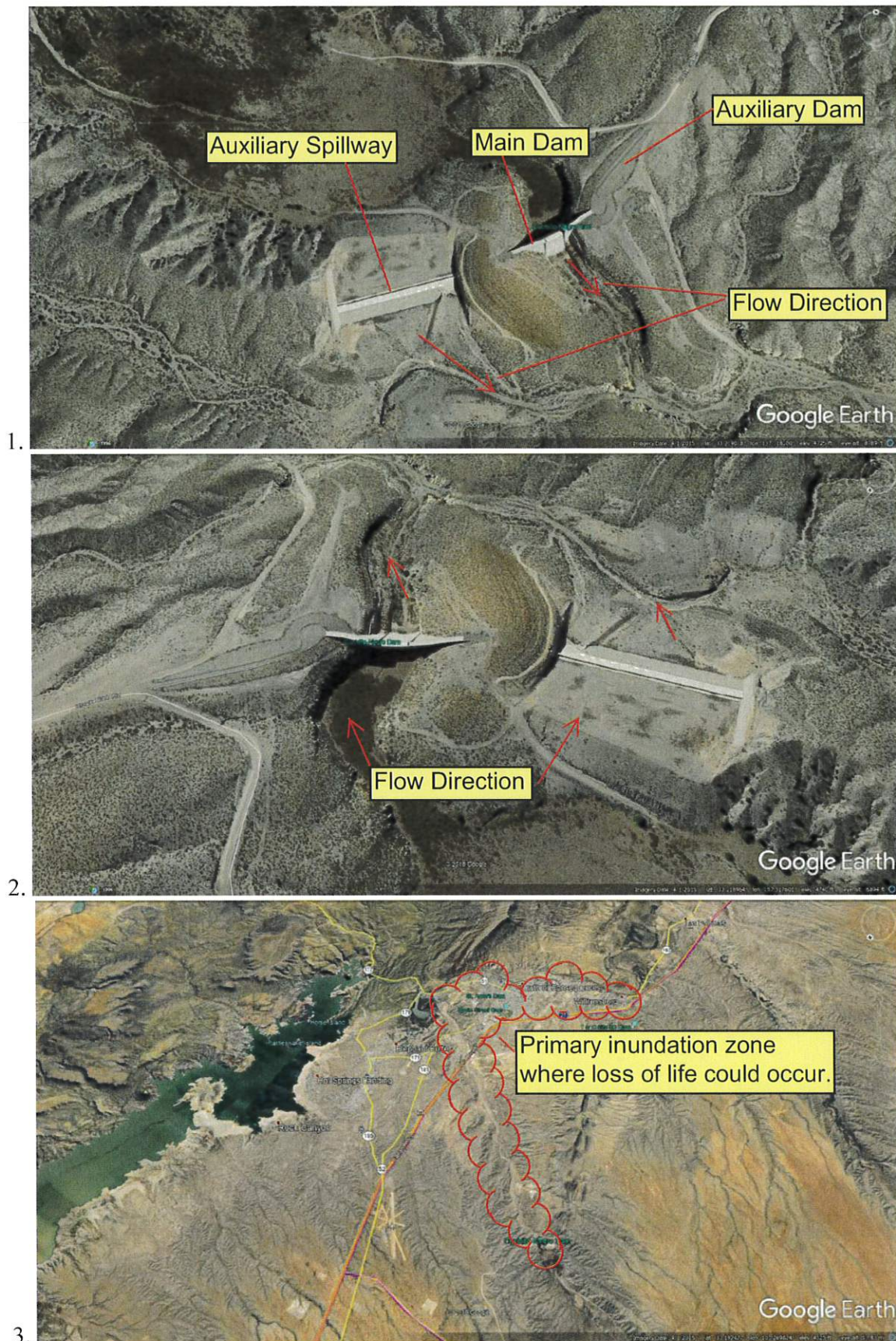
11. Primary Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☒	☐	☐	
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☒	☐	☐	
g. Energy dissipation	☐	☐	☒	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	
j. Erosion control	☒	☐	☐	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☒	☐	☐	
m. Capacity	☒	☐	☐	SDF: 235,000 cfs (PMP), see 2006 inspection memo. Combined spillway capacity is approximately 100 percent of the PMF determined from the USACE envelope curve per the 2006 OSE inspection report. However, updated hydrology and flood routing needed to confirm adequacy.

12. Auxiliary Spillway	Satisfactory	Needs Attention	N/A	Remarks:
n. Clear of obstructions	☒	☐	☐	
o. Condition of entrance	☒	☐	☐	
p. Condition of control section	☒	☐	☐	
q. Condition spillway floor	☒	☐	☐	
r. Condition of walls or slopes	☒	☐	☐	
s. Condition of joints	☒	☐	☐	
t. Energy dissipation	☒	☐	☐	
u. Condition of exit channel	☒	☐	☐	
v. Seepage control	☒	☐	☐	
w. Erosion control	☐	☒	☐	Large gully behind abutment contact at right (south) end of spillway.
x. Rodent control	☒	☐	☐	
y. Woody vegetation control	☐	☒	☐	Remove woody vegetation along upstream and downstream edge of concrete.
z. Capacity	☒	☐	☐	SDF: see 11.m above

Overall Remarks:	1) Repair the large erosion gully at the south end of the auxiliary spillway and curtail future erosion by redirecting surface runoff. 2) Periodic removal of woody vegetation from the main dam and auxiliary embankment section required. 3) Maintain outlet works trash racks free of debris. 4) Periodic removal of accumulated debris within 100 feet of the outlet works intakes required. 5) Repair / patch deteriorated concrete where applicable to various sections of the dam and auxiliary spillway. 6) Perform a survey of the settlement and horizontal movement points and provide results and analysis to the Office of the State Engineer Dam Safety Bureau. Collected data must be compared to an original baseline survey.
-------------------------	--

Date: 3/29/2019

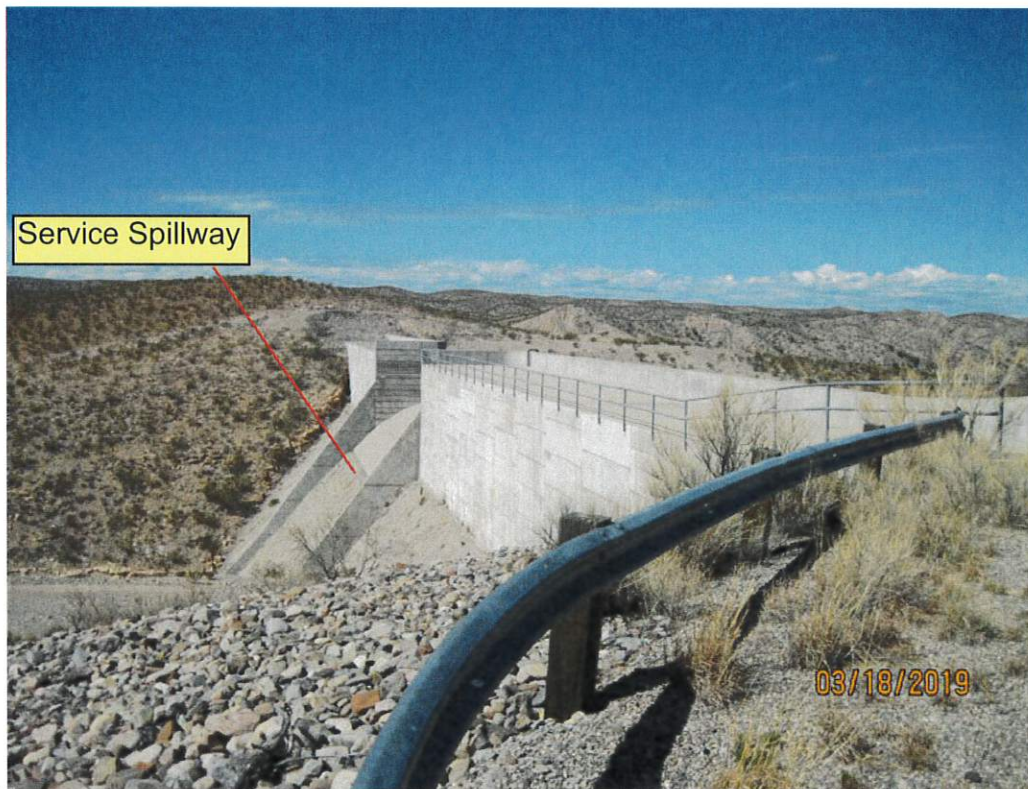
Signature: Jana D. Head



Images 1 through 3: Aerial views of the dam courtesy of GoogleEarth (circa 2015).



4.



5.

Image 4: Southwesterly views of the access road onto the auxiliary embankment adjoined to the left abutment of the main dam. **Image 5:** Southwesterly view of the downstream face of the RCC main dam.



6.

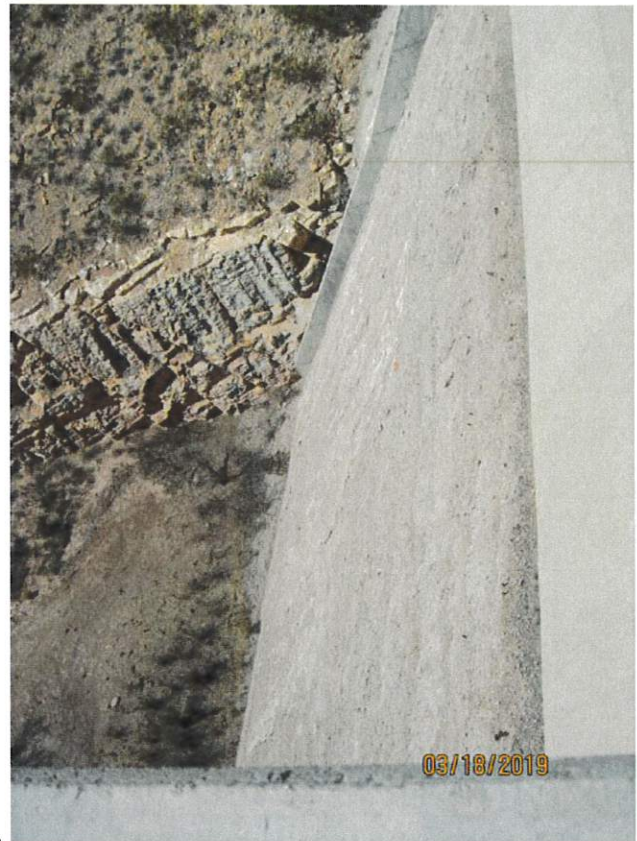


7.

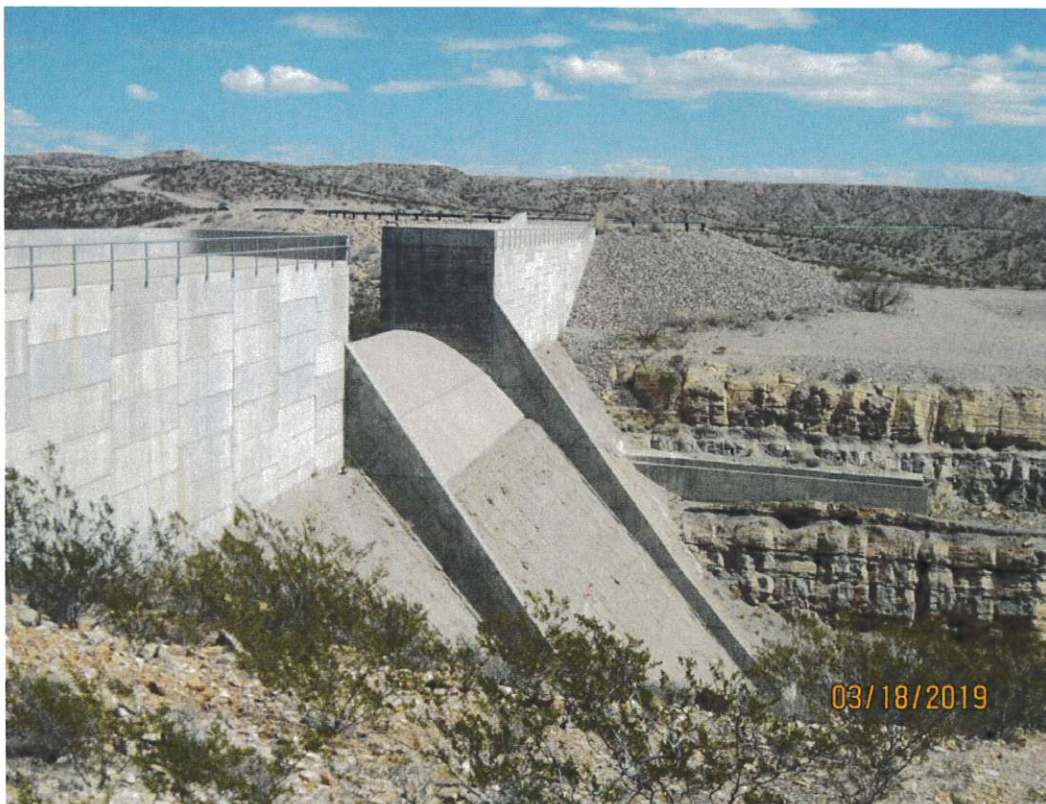
Images 6 and 7: Easterly and westerly views of the upstream and downstream faces of the main dam, respectively.



8.

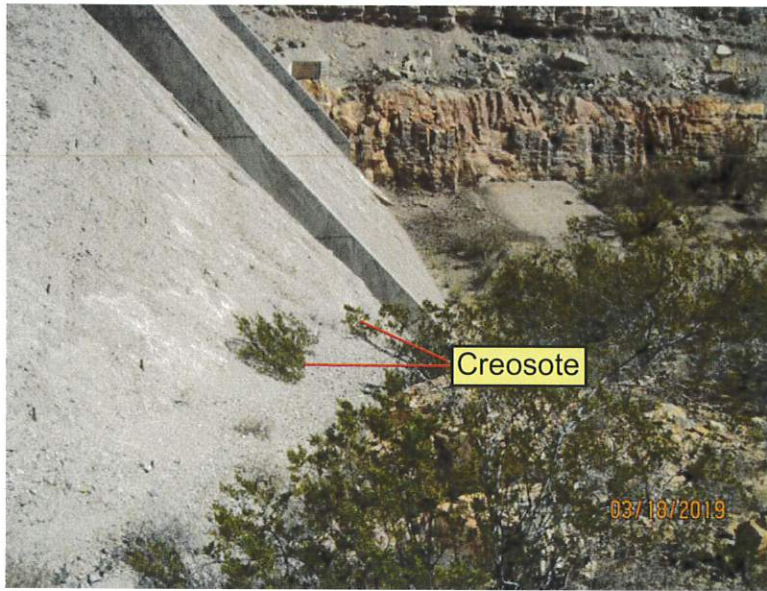


9.



10.

Images 8 through 10: Southwesterly view across the service spillway (Image 8), view of the service spillway discharge chute (Image 9), and northeasterly view of the main dam / service spillway (Image 10).

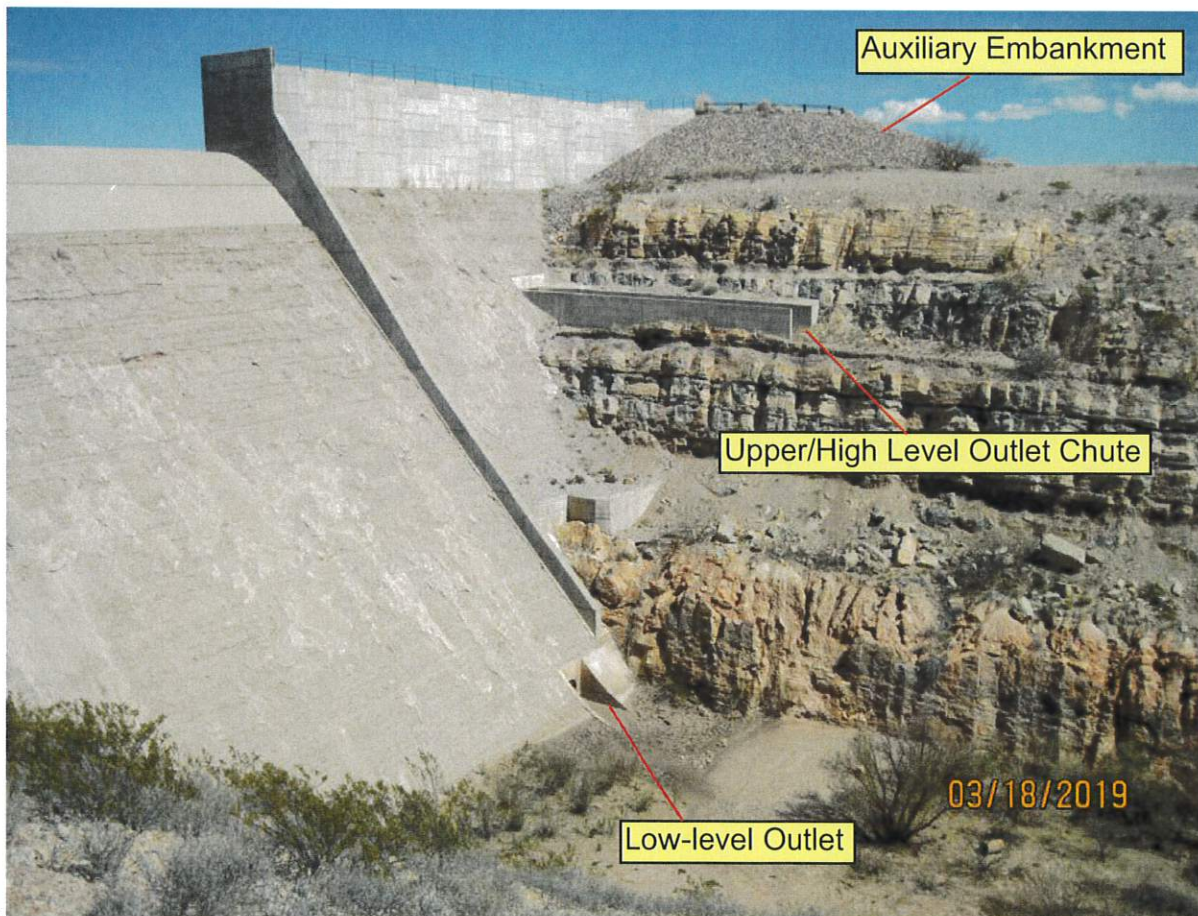


11.



12.

Images 11 and 12: Partial views of the right downstream groin of the main dam as seen from the vicinity of the right abutment contact.

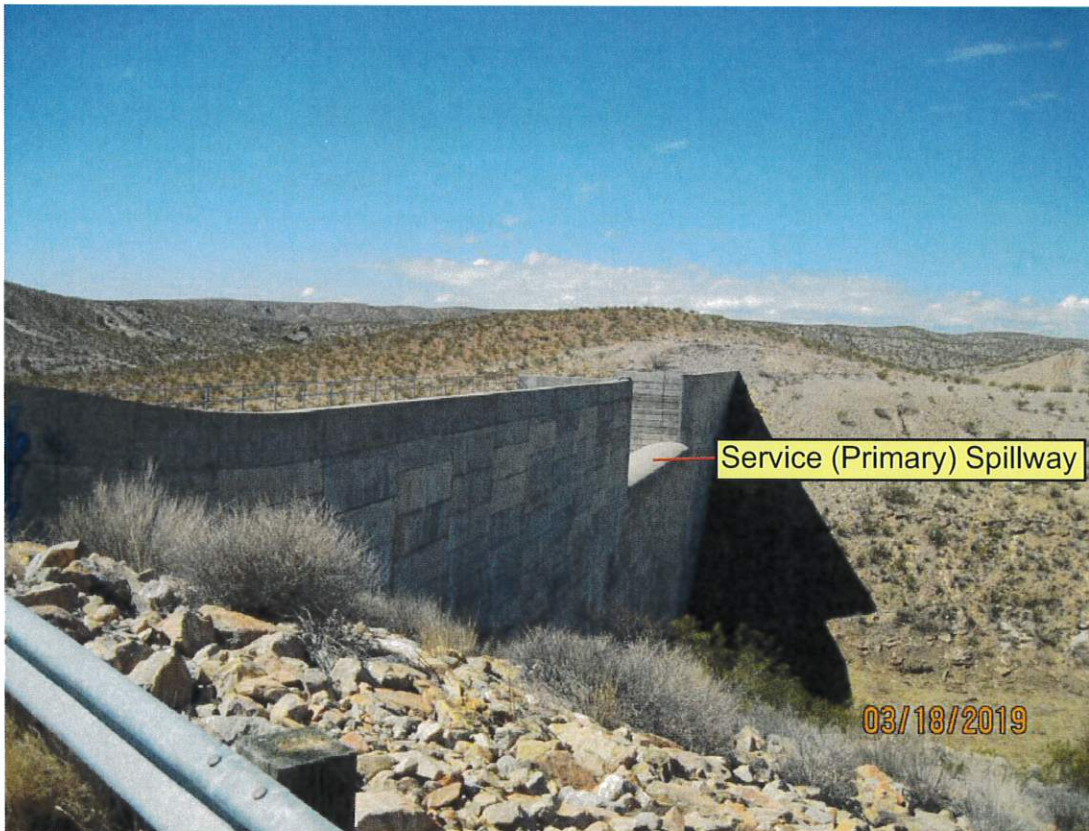


13.

Image 13: Easterly view of the left downstream groin with low-level and high-level outlet works features as indicated.

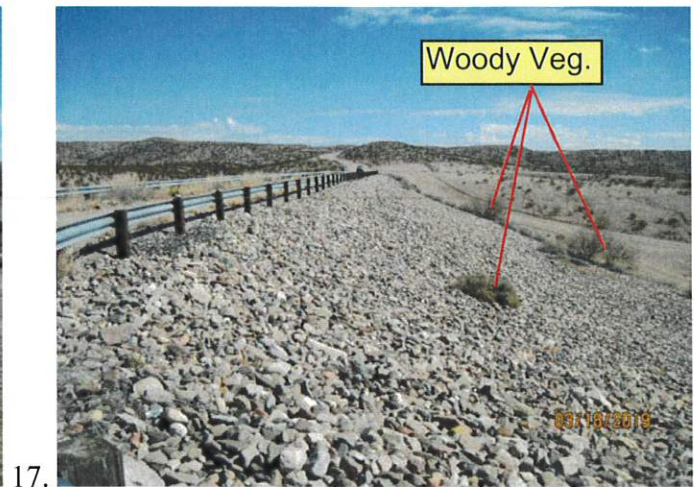
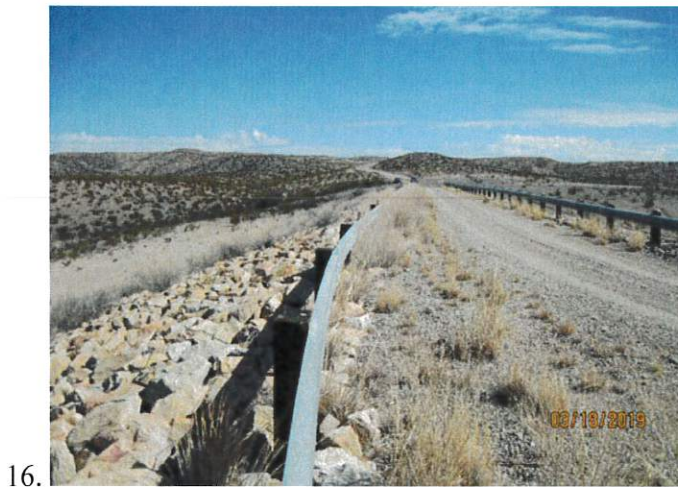


14.

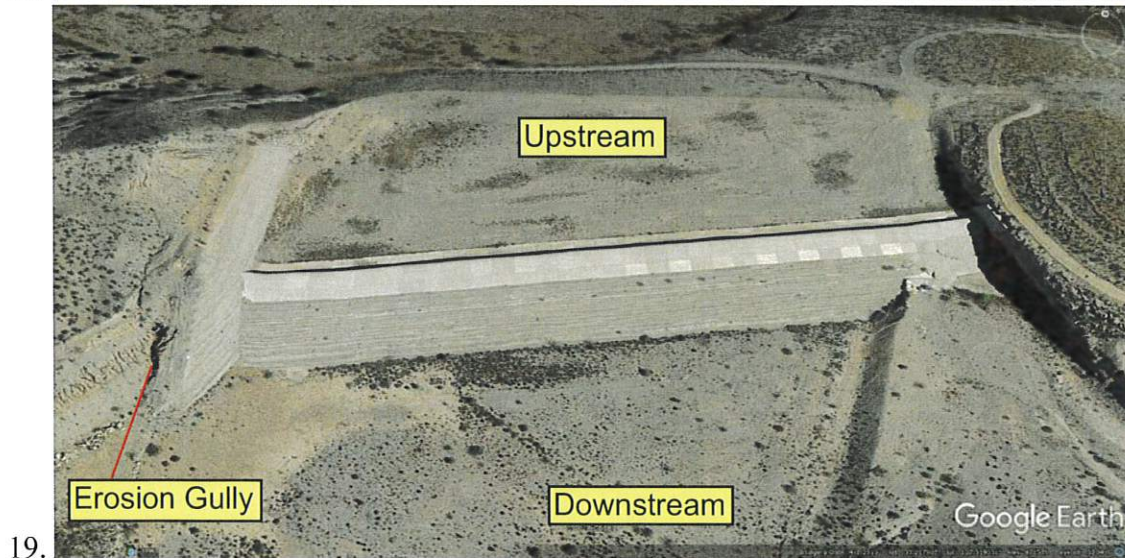
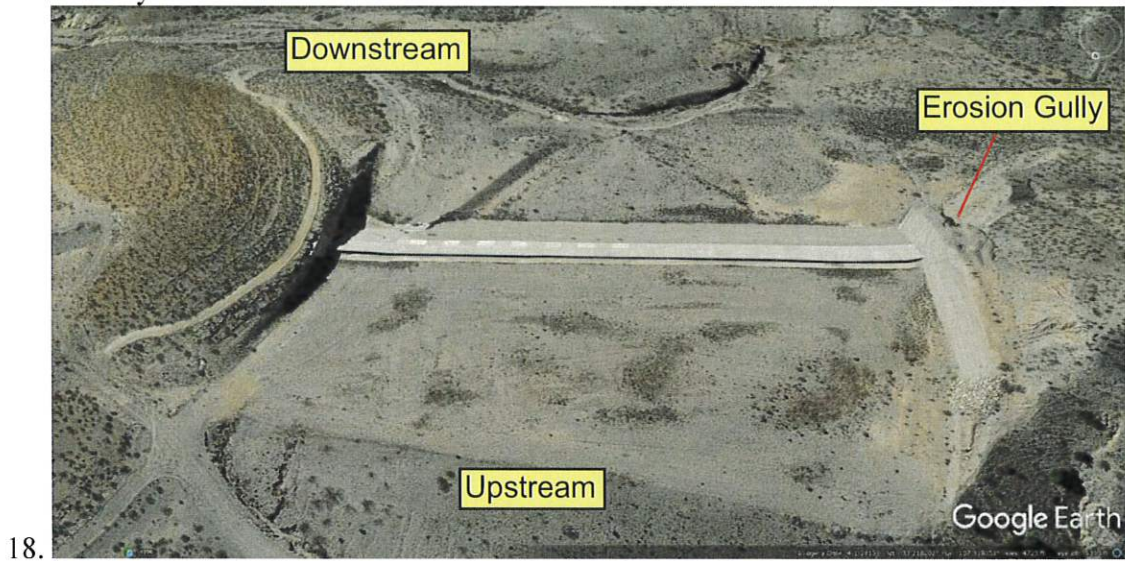


15.

Images 14 and 15: Northeasterly and southwesterly views, respectively, along the longitudinal axis of the main dam and the upstream face of the main dam with additional features as indicated.

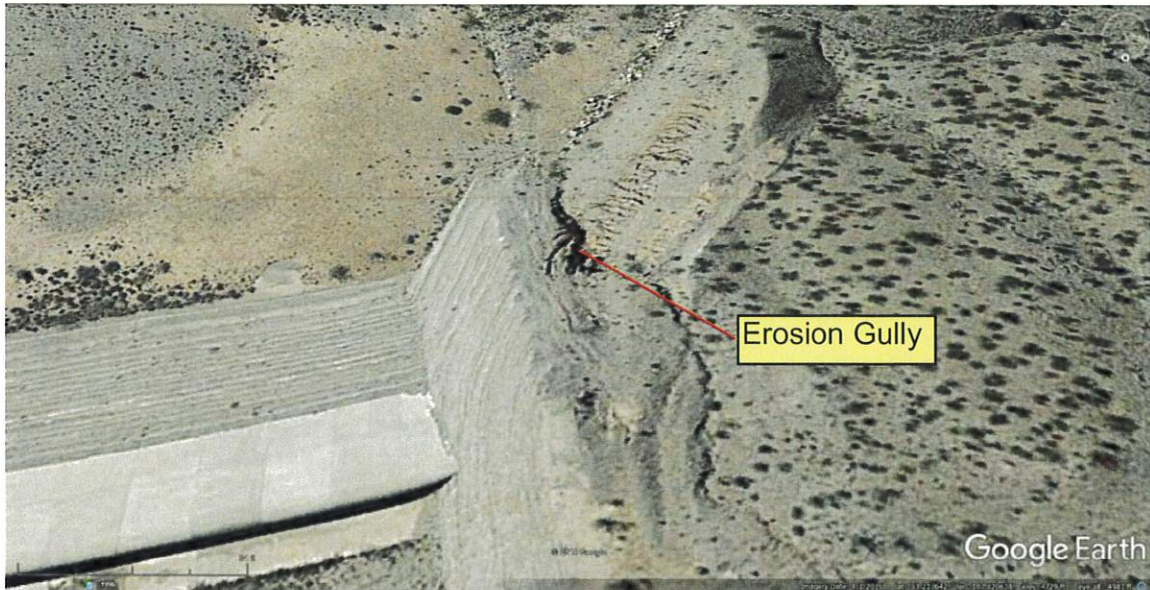


Images 16 and 17: Easterly views along the upstream slope and crest, and downstream slope of the auxiliary embankment, respectively. Images captured from the vicinity of the right abutment contact of the main dam with the auxiliary embankment.

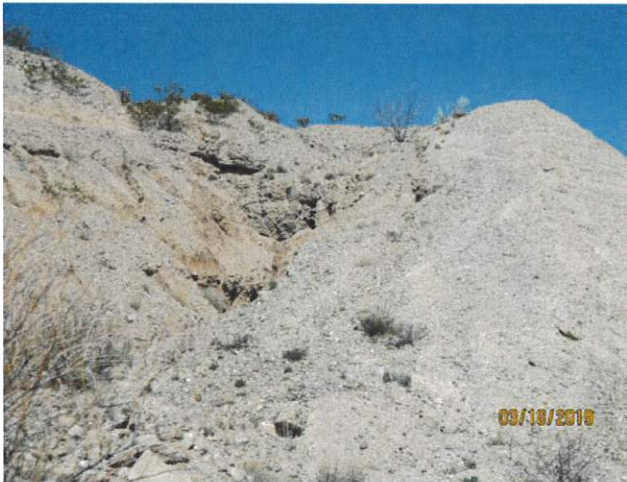


Images 18 and 19: GoogleEarth Imagery (circa 2018) of the auxiliary spillway located to the west of the main dam.

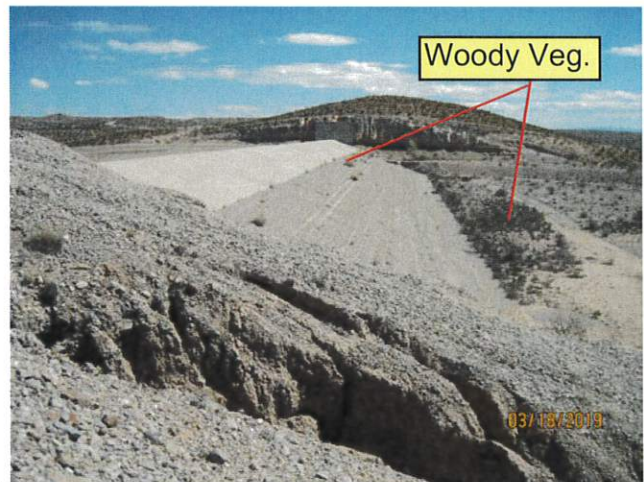
20.



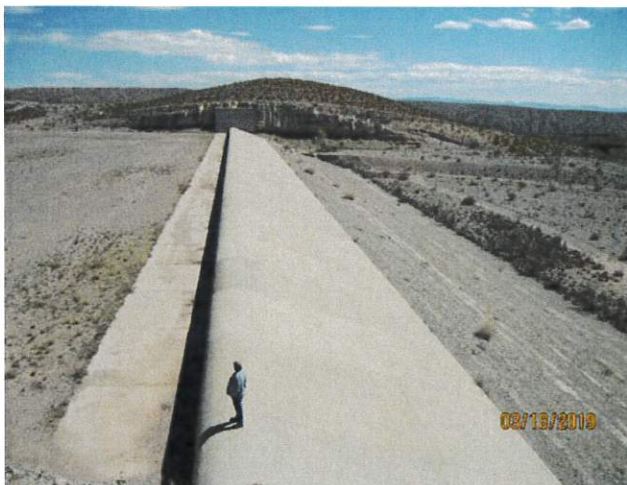
21.



22.



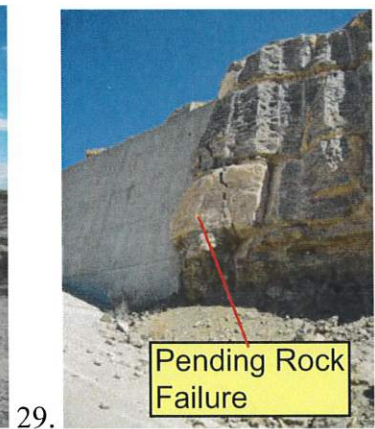
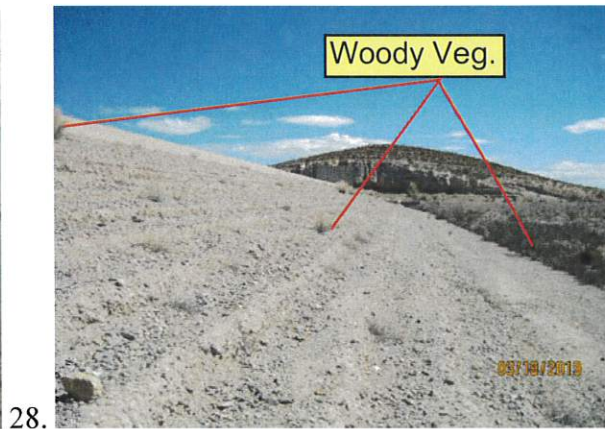
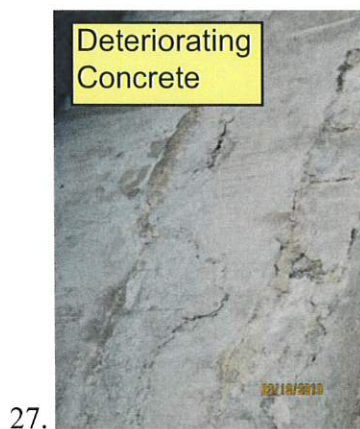
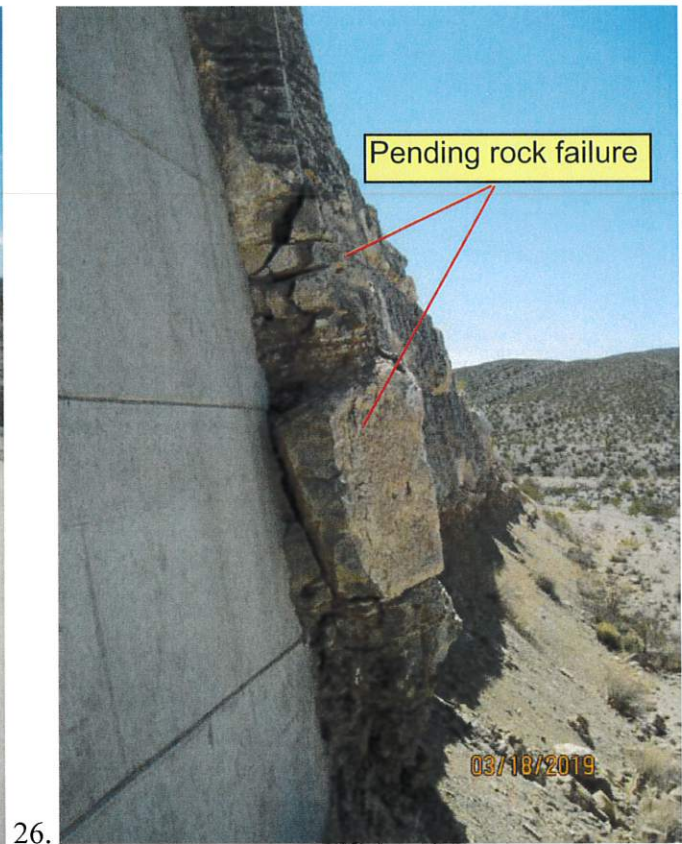
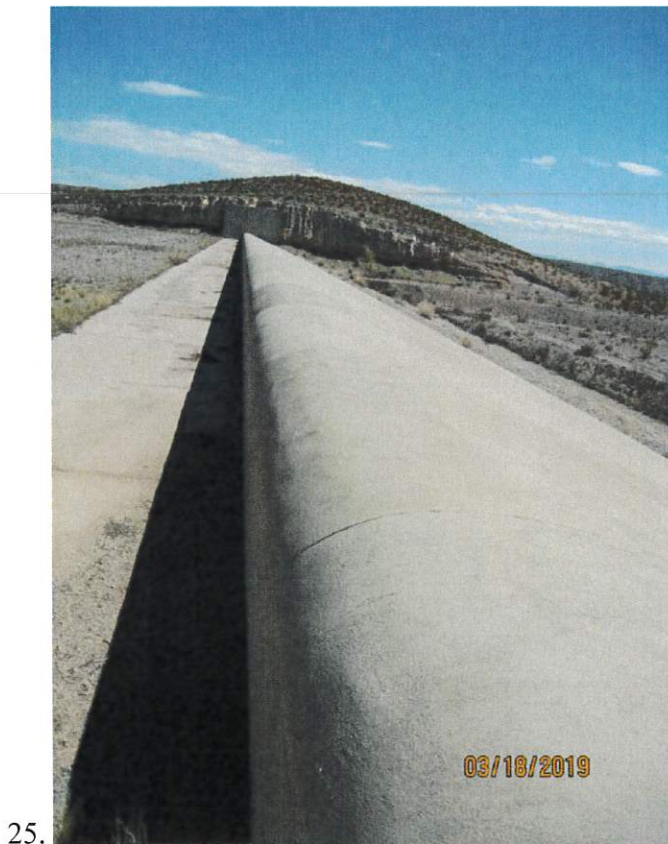
23.



24.



Images 23 and 24: Easterly and westerly views along the ogee crest of the auxiliary spillway, respectively.

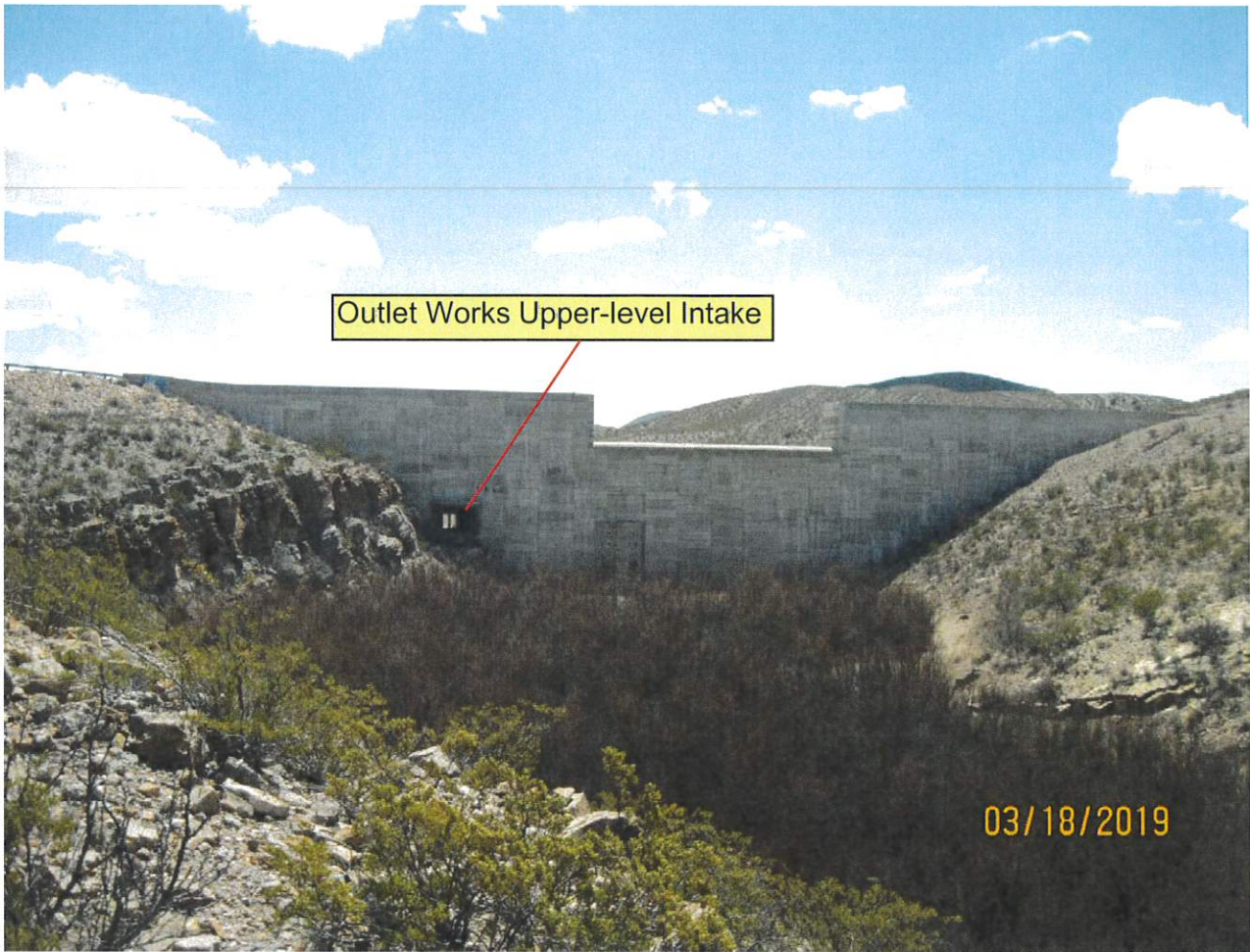


Images 25 through 29: Various views of the auxiliary spillway with defects as indicated.



Images 30 through 32: Typical views of details pertaining to the auxiliary spillway; RCC degradation on the downstream stepped section of the spillway (Image 30), deterioration of one of several patched portions of upstream face of the ogee section (Image 31), one of several daylighted drain outfalls on the downstream face auxiliary spillway (Image 32).

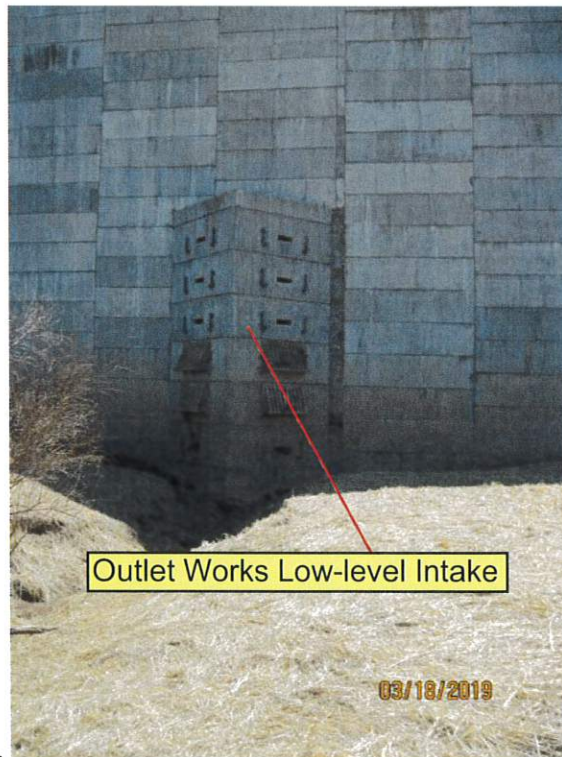
33.



34.



35.



Images 33 through 35: Views emphasizing the lower-level and upper-level outlet works intakes



36.



37.



38.

Images 36 through 38: Examples of several partially plugged ports on the outlet works lower-level intake.



39.



40.



41.

Images 39 through 41: Views of the outlet works upper-level intake, the upper-level outlet conduit, and the discharge end of the upper-level outlet conduit.



42.

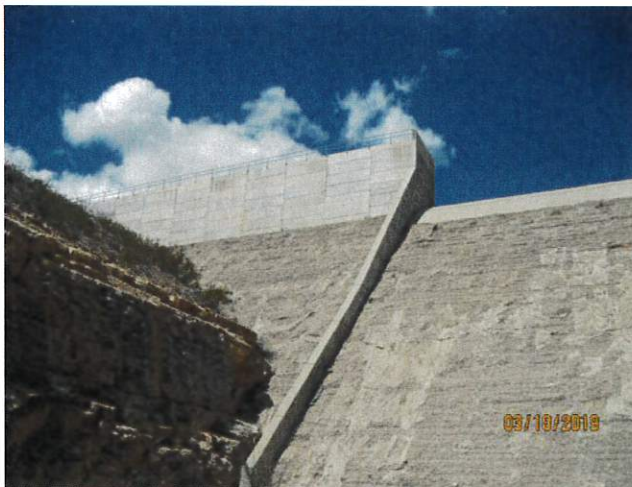


43.

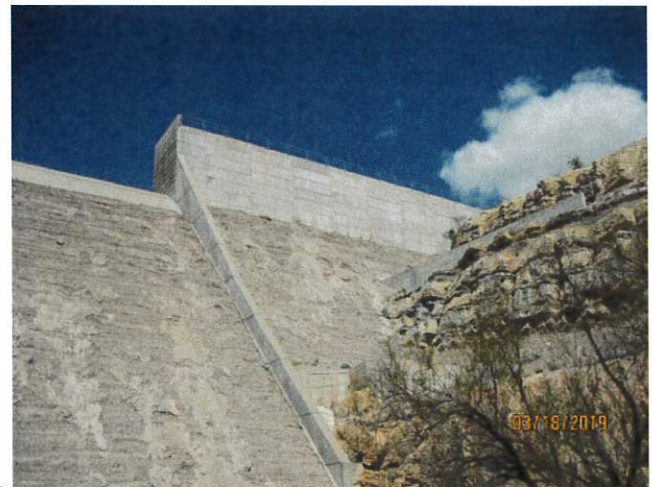


44.

Images 42 through 44: Views of the downstream (discharge) end of the outlet works low-level conduit.



45.



46.

Images 45 and 46: views of the right and left service spillway training walls on the downstream face of the main dam as seen from the vicinity of the downstream toe.



47.



48.



49.



50.

Images 47 through 50: Examples of concrete defects requiring patching at several locations on the main dam.

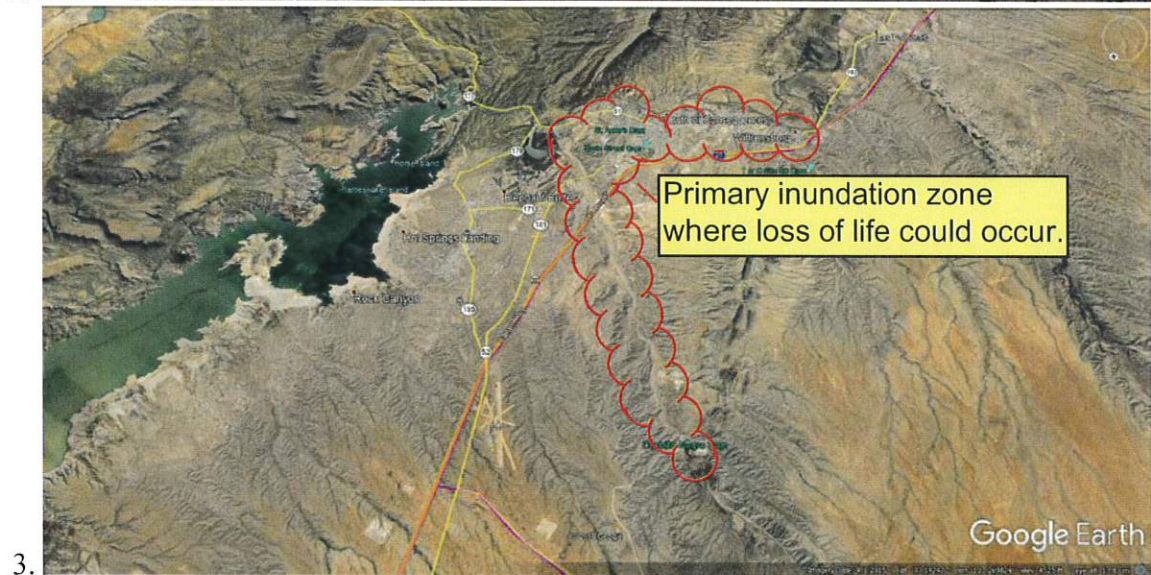
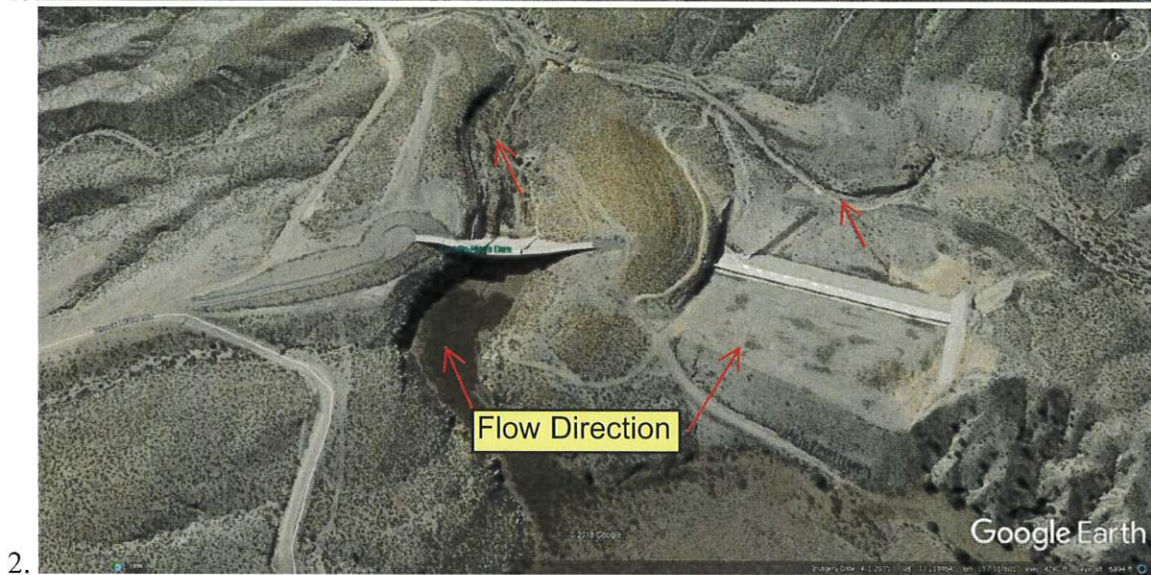
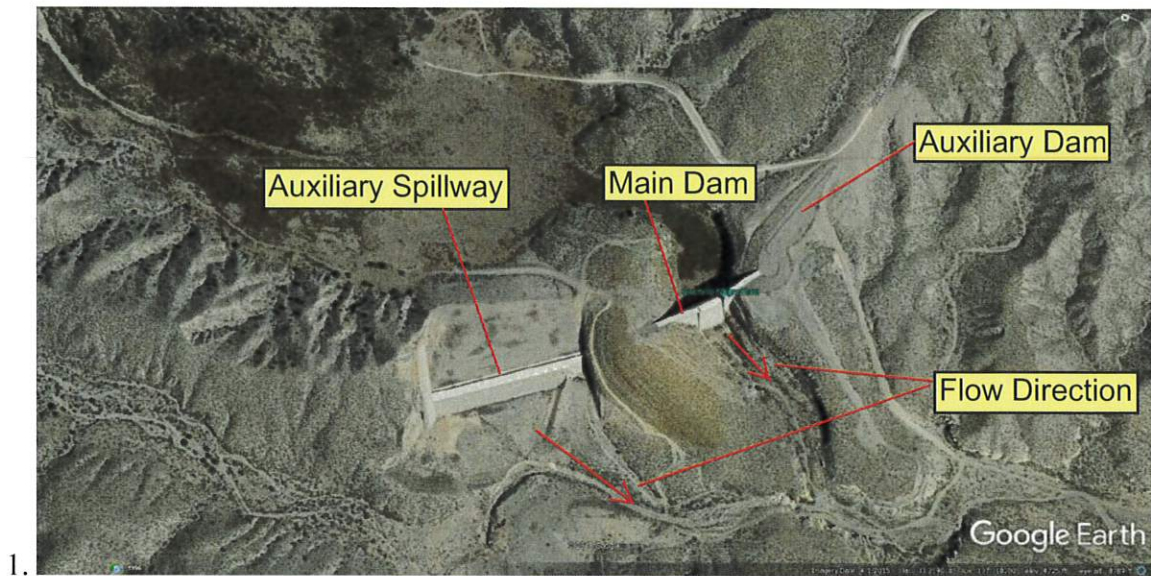


51.



52.

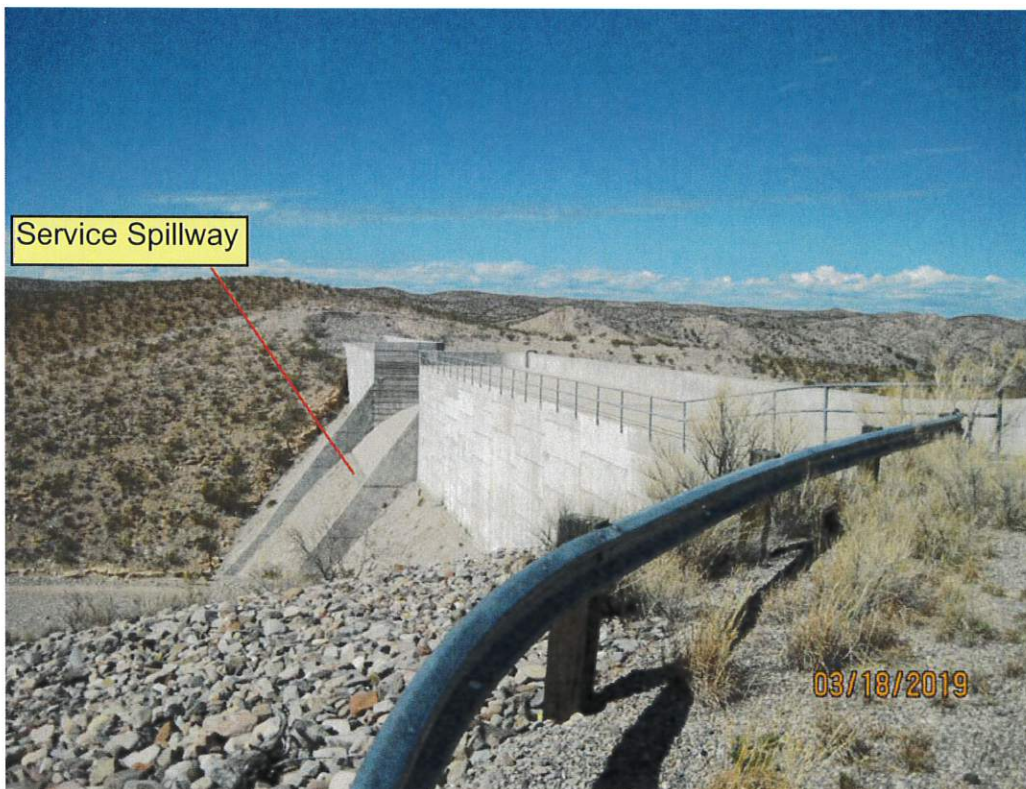
Image 51: Headcut and erosion across access road to the detention basin. **Image 52:** Emerging woody vegetation emerging on the downstream face of the dam.



Images 1 through 3: Aerial views of the dam courtesy of GoogleEarth (circa 2015).



4.



5.

Image 4: Southwesterly views of the access road onto the auxiliary embankment adjoined to the left abutment of the main dam. **Image 5:** Southwesterly view of the downstream face of the RCC main dam.



6.

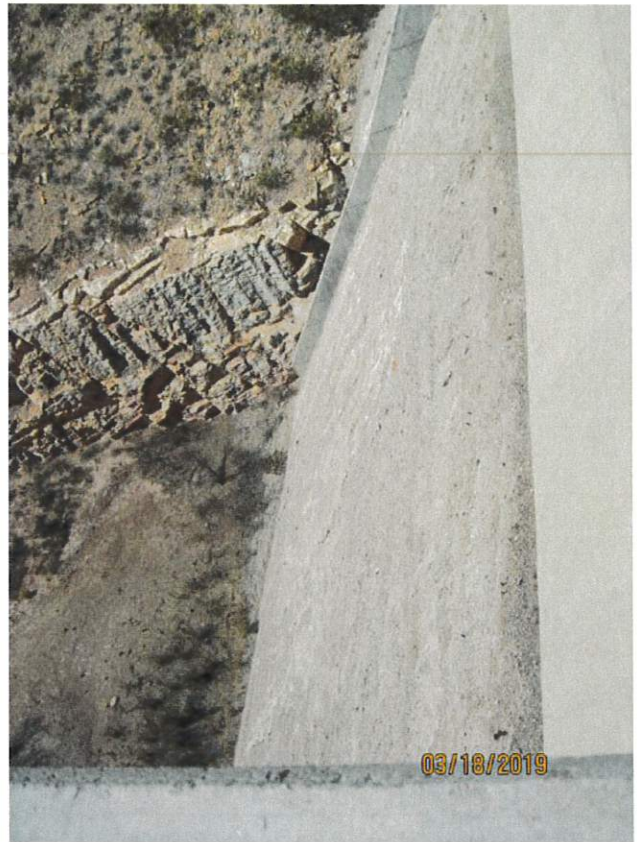


7.

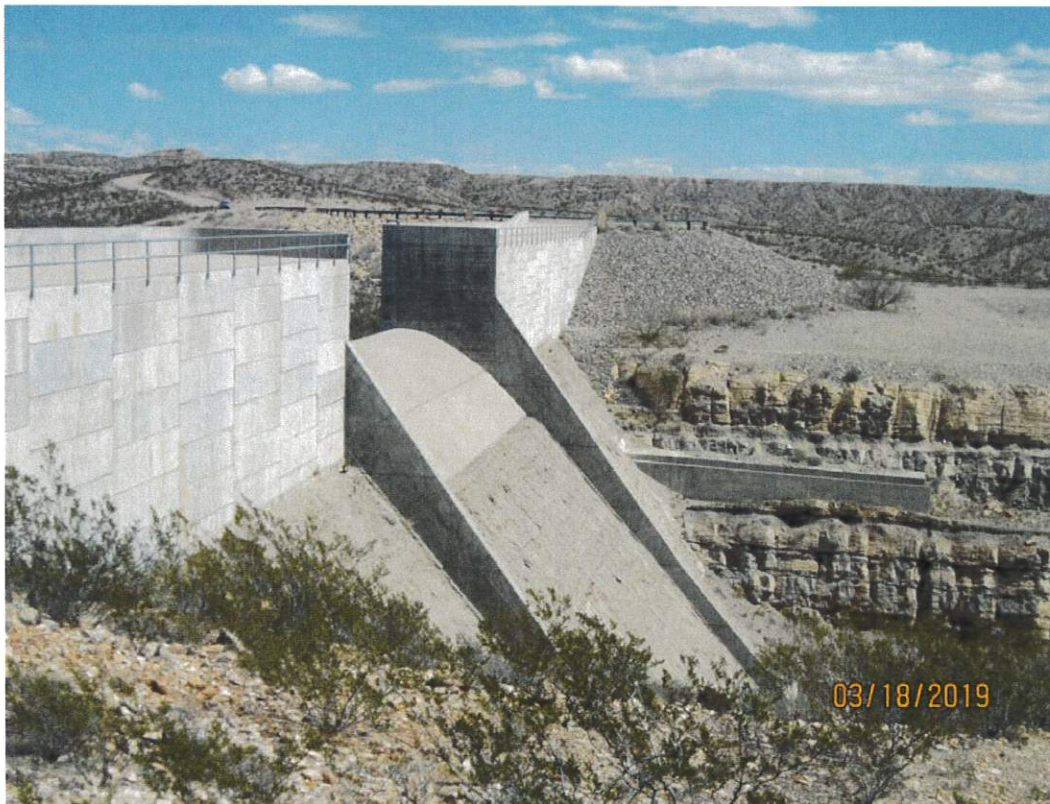
Images 6 and 7: Easterly and westerly views of the upstream and downstream faces of the main dam, respectively.



8.

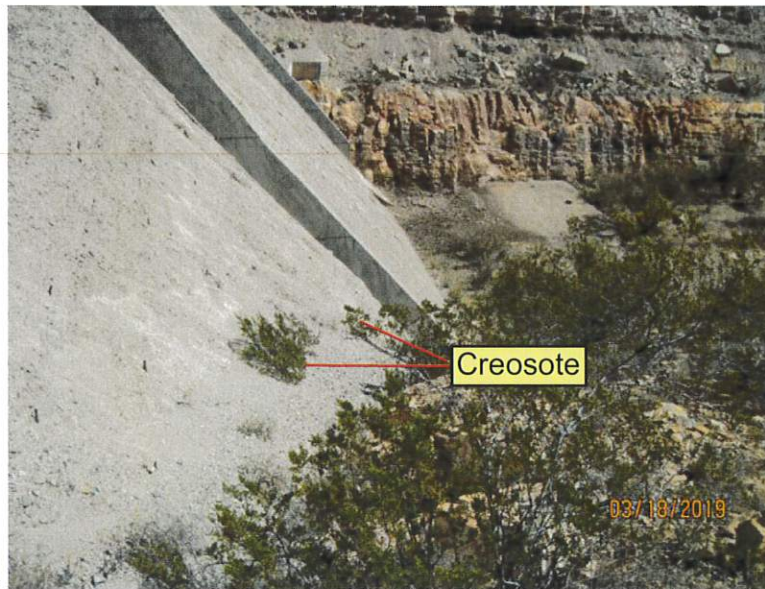


9.



10.

Images 8 through 10: Southwesterly view across the service spillway (Image 8), view of the service spillway discharge chute (Image 9), and northeasterly view of the main dam / service spillway (Image 10).

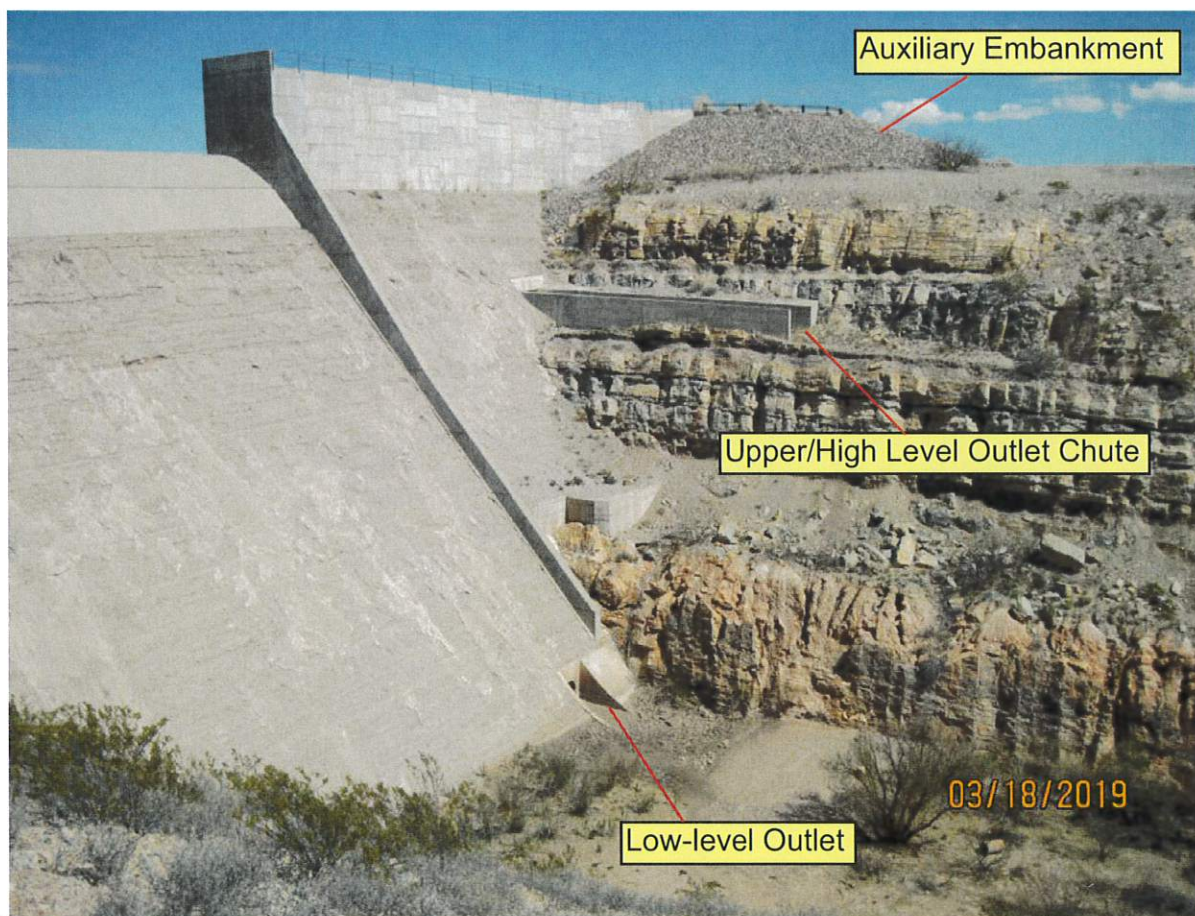


11.



12.

Images 11 and 12: Partial views of the right downstream groin of the main dam as seen from the vicinity of the right abutment contact.



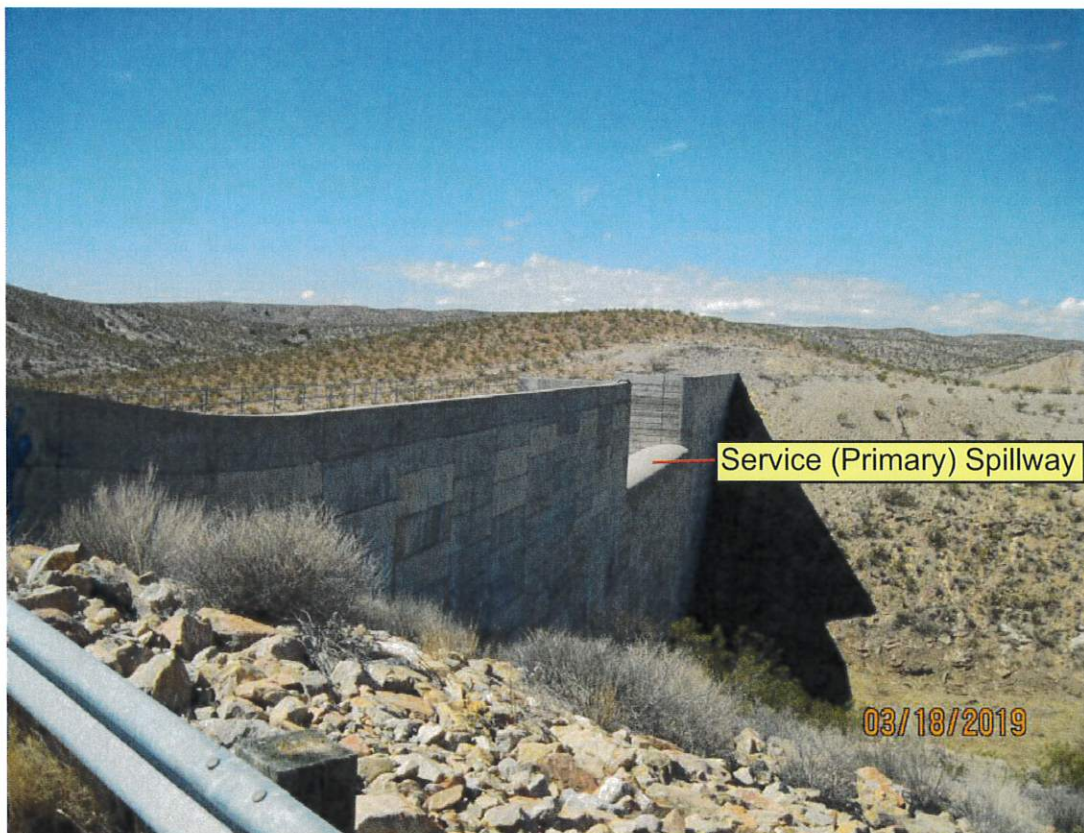
13.

Image 13: Easterly view of the left downstream groin with low-level and high-level outlet works features as indicated.

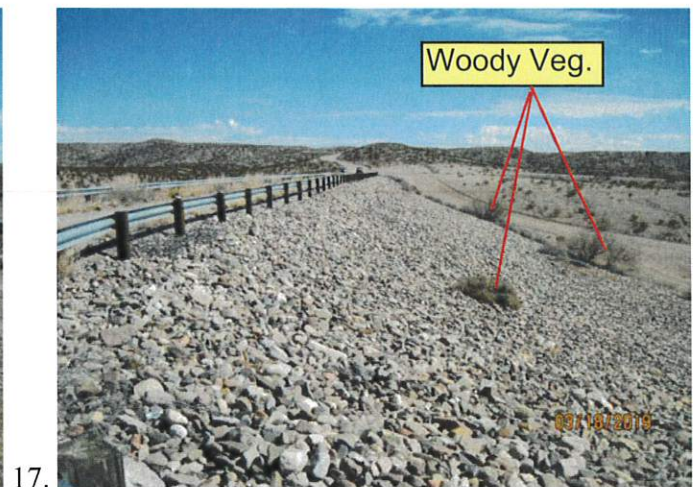
14.



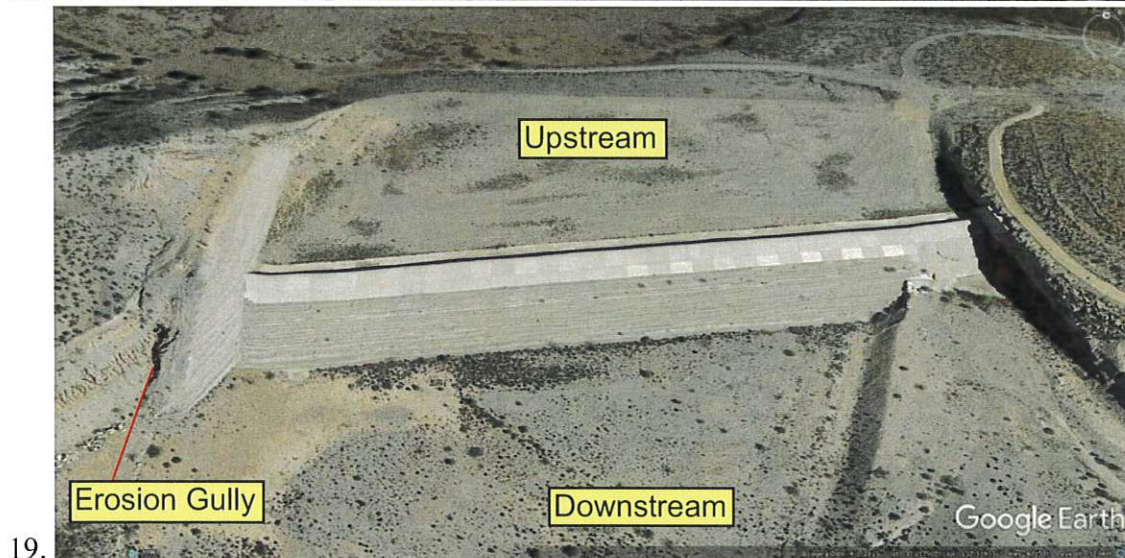
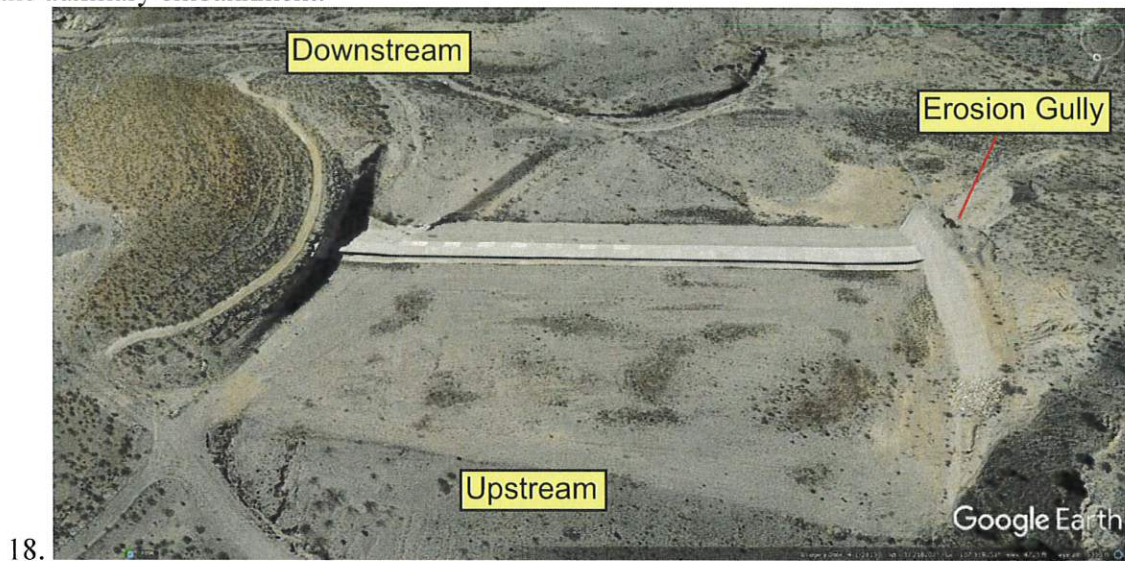
15.



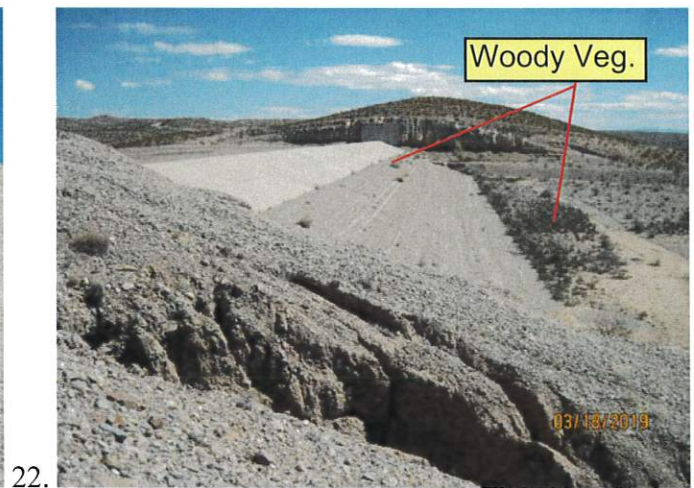
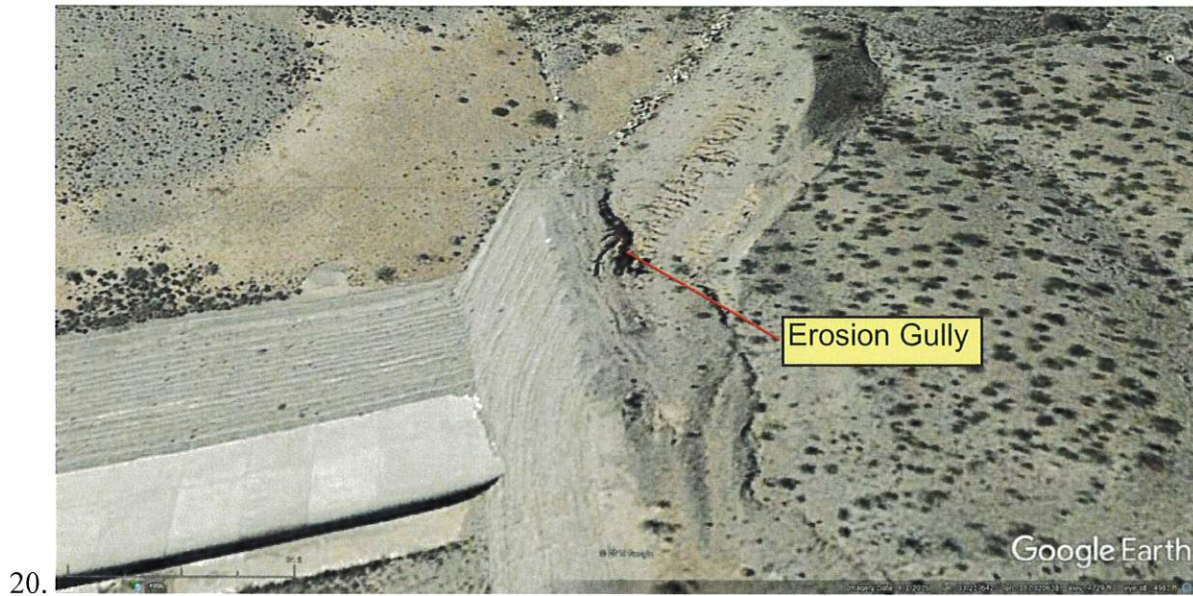
Images 14 and 15: Northeasterly and southwesterly views, respectively, along the longitudinal axis of the main dam and the upstream face of the main dam with additional features as indicated.



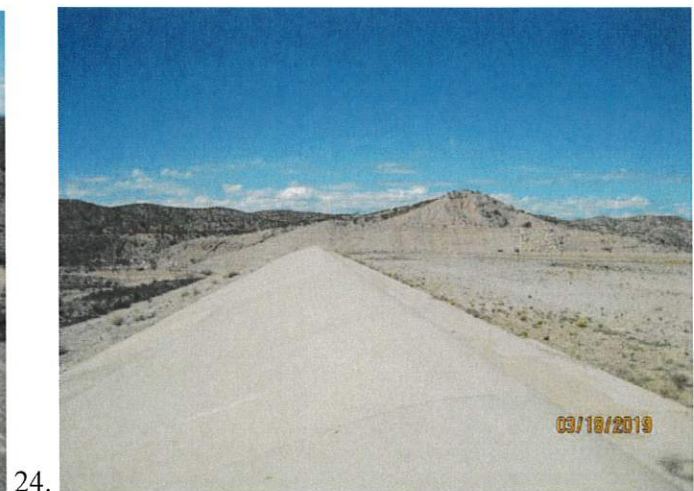
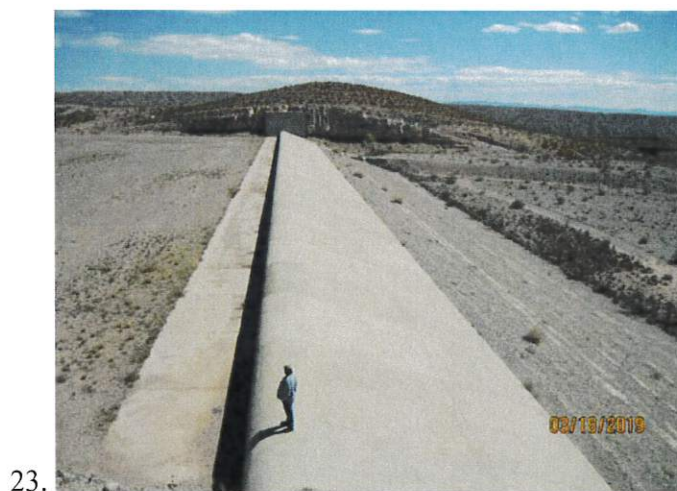
Images 16 and 17: Easterly views along the upstream slope and crest, and downstream slope of the auxiliary embankment, respectively. Images captured from the vicinity of the right abutment contact of the main dam with the auxiliary embankment.



Images 18 and 19: GoogleEarth Imagery (circa 2018) of the auxiliary spillway located to the west of the main dam.



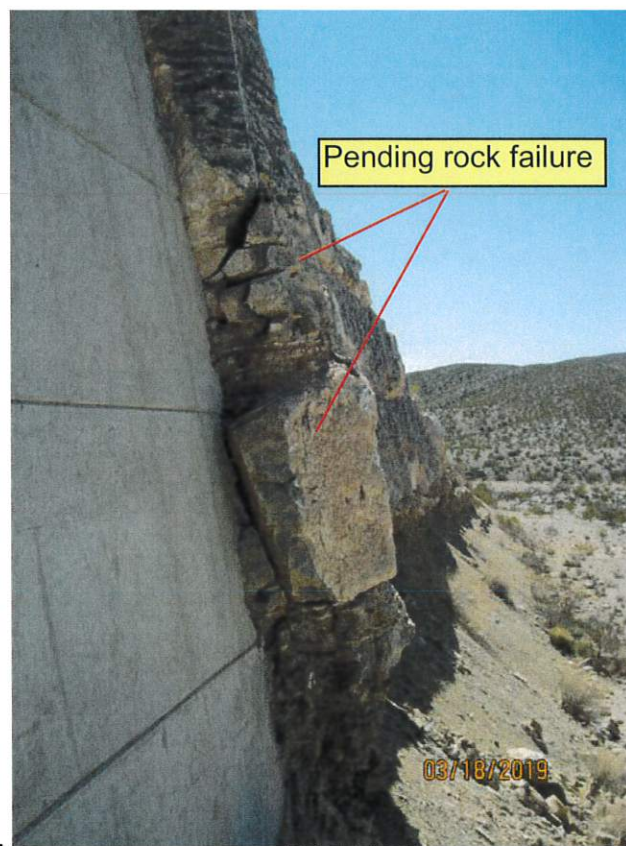
Images 20 through 22: Aerial view from GoogleEarth (Image 20) of large erosion gully located along the soil cement armored right abutment of the auxiliary spillway; additional views of the same erosion gully seen from ground level (Images 21 and 22).



Images 23 and 24: Easterly and westerly views along the ogee crest of the auxiliary spillway, respectively.



25.



26.



27.



28.



29.

Images 25 through 29: Various views of the auxiliary spillway with defects as indicated.



30.



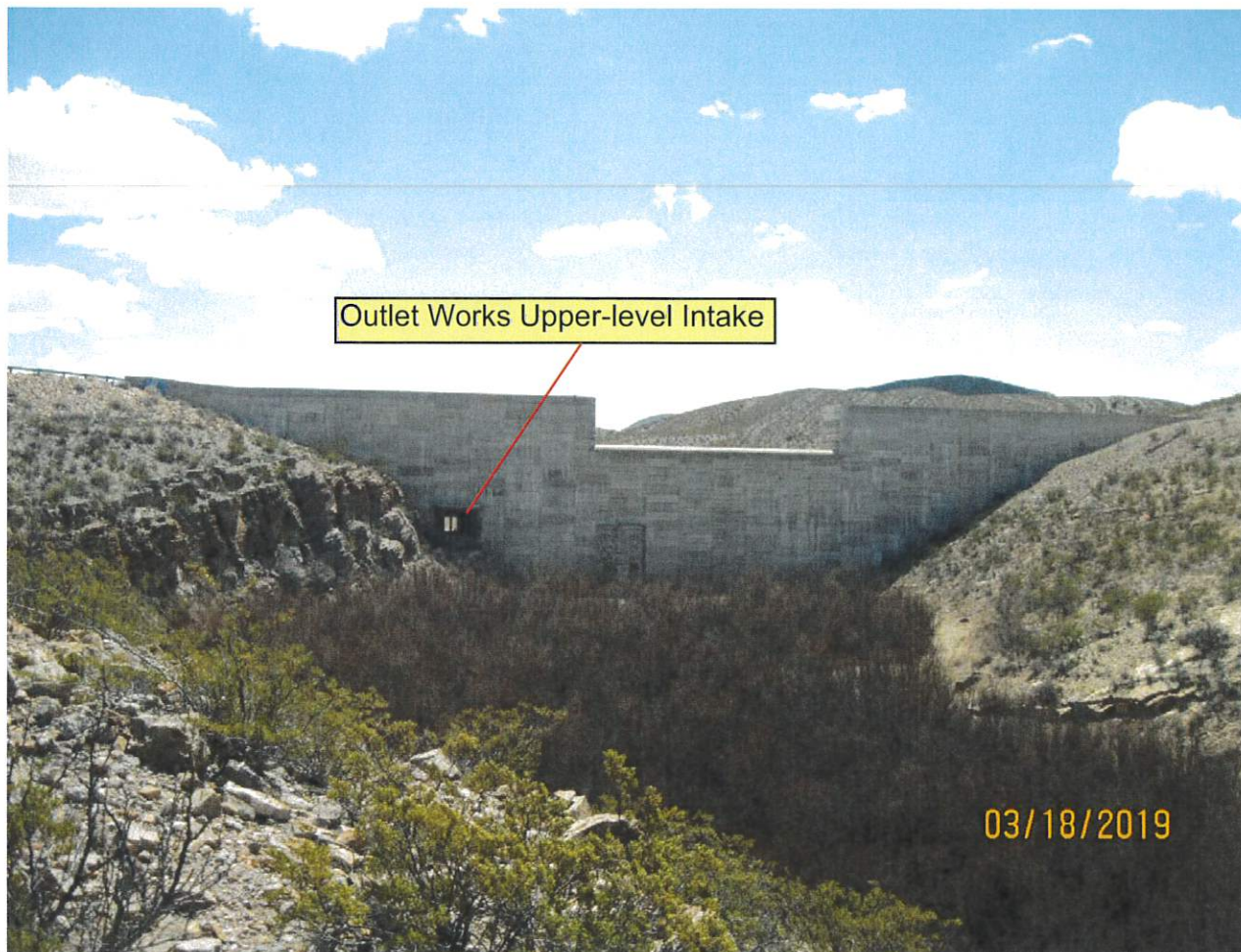
31.



32.

Images 30 through 32: Typical views of details pertaining to the auxiliary spillway; RCC degradation on the downstream stepped section of the spillway (Image 30), deterioration of one of several patched portions of upstream face of the ogee section (Image 31), one of several daylighted drain outfalls on the downstream face auxiliary spillway (Image 32).

33.



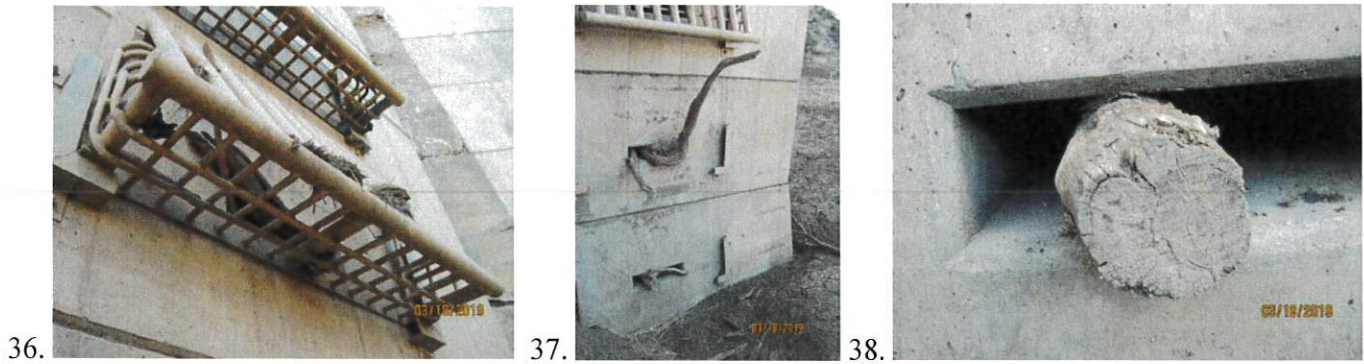
34.



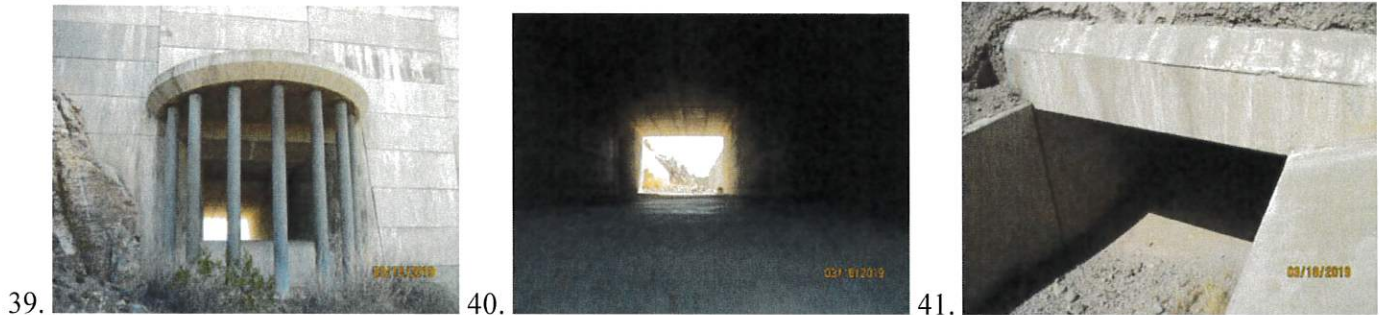
35.



Images 33 through 35: Views emphasizing the lower-level and upper-level outlet works intakes



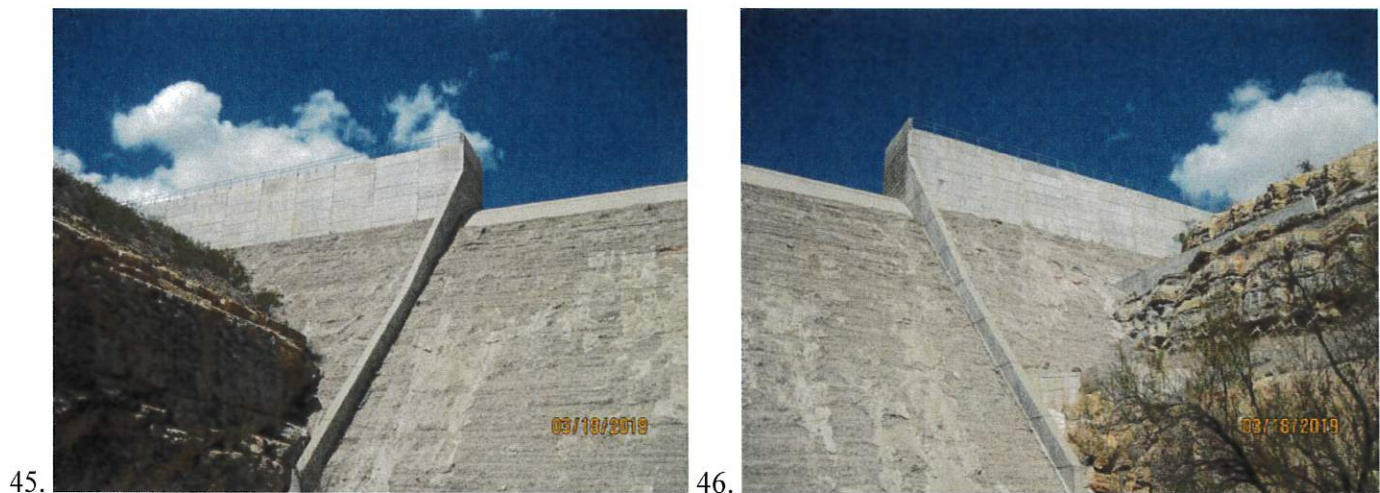
Images 36 through 38: Examples of several partially plugged ports on the outlet works lower-level intake.



Images 39 through 41: Views of the outlet works upper-level intake, the upper-level outlet conduit, and the discharge end of the upper-level outlet conduit.



Images 42 through 44: Views of the downstream (discharge) end of the outlet works low-level conduit.



Images 45 and 46: views of the right and left service spillway training walls on the downstream face of the main dam as seen from the vicinity of the downstream toe.



47.



48.



49.

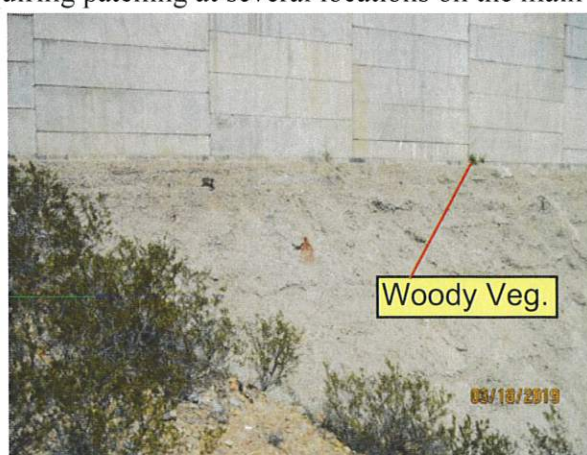


50.

Images 47 through 50: Examples of concrete defects requiring patching at several locations on the main dam.



51.



52.

Image 51: Headcut and erosion across access road to the detention basin. **Image 52:** Emerging woody vegetation emerging on the downstream face of the dam.

MIKE A. HAMMON, P.E.
STATE ENGINEER



DAM SAFETY BUREAU
5550 SAN ANTONIO DR., NE
ALBUQUERQUE, NM 87109
(505) 383-4113
(505) 383-4132 FAX
NM.DamSafety@state.nm.us

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe**

March 10, 2022

Mr. Bruce Swingle
City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Inspections of Cuchillo-Negro Dam, OSE File No. D-541
St. Anne's Dam, OSE File No. D-581, and
Marie Street Dam, OSE File No. D-582
Sierra County**

Dear Mr. Swingle:

On February 9, 2022, Mr. James Head, P.E., of the Office of the State Engineer (OSE) staff inspected Cuchillo-Negro, St. Anne's, and Marie Street Dams. Copies of Mr. Head's inspection checklist-reports are enclosed for your information. A copy of the NMOSE Guidelines for Vegetation Management on Dams will be sent to you via email for your information and use. I concur with the required actions contained in the respective inspection checklist-reports. Please review the required actions sections of the respective checklist reports and the inspection photographs and make arrangements to address the required actions accordingly.

Cuchillo-Negro Dam has been assessed in satisfactory condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 5 and 6 of the inspection checklist-report.

St. Anne's Dam has been assessed as being in poor condition because of uncertainties that arise from the lack of information about critical analysis parameters associated with design and construction of the dam. If information were to be assembled to reduce these uncertainties a condition rating of fair would have been appropriate due to the erosion gullies that are present on the left upstream and downstream groins of the dam, the diminished crest width of the dam created by past grading (back-dragging) of the slopes, questionable spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit and the alignment of the downstream end of the spillway channel relative to the downstream toe of the dam. Satisfactory progress needs to be made towards resolving issues pertaining to erosion, inspection of the outlet conduit, removal of the orifice plate at the outlet conduit entrance (to be replaced with a properly designed ported intake riser), and verification of spillway capacity.

Marie Street Dam has been assessed as being in poor condition because of uncertainty surrounding the sewer line passing through the dam and uncertainties with critical analysis parameters associated with design and construction of the dam. If these uncertainties were reduced a fair rating would otherwise be appropriate due to inadequate spillway capacity.

Subsections E and F of 19.25.12.21 NMAC require dams classified as High Hazard Potential such as these to have an approved Operations and Maintenance Manual (O&M) and Emergency Action Plan (EAP) in place. The O&M on file for Cuchillo-Negro Dam is outdated; has not been approved by the NMOSE-DSB, and it does not meet the requirements of Section 19.25.12.17 NMAC. There are no O&M manuals on file for St. Anne's and Marie Street Dams. The New Mexico Watershed and Dam Owners Coalition has developed a template for O&M manual preparation that could be useful. There are no EAPs on file with the NMOSE-DSB for these three dams. Please be advised of the potential for added owner liability if a dam were to experience an incident while out of compliance with the NMOSE Dam Safety Bureau's rules and regulations for dams.

Information pertaining to the preparation of Operation and Maintenance Manuals and Emergency Action Plans is available from the NMOSE Dam Safety Bureau website at:

<https://www.ose.state.nm.us/dams/>

If further discussion would be helpful, please contact James Head at (505) 383-4138 or via email at james.head@state.nm.us or me at (505) 383-4134.

Sincerely,



Charles N. Thompson, P.E., Chief
Dam Safety Bureau

CNT/jh

Enclosure

Email: Bruce Swingle, City Manager, City of Truth or Consequences (bswingle@torcnm.org)
Benny Fuentes, City of Truth or Consequences (bfuentes@torcnm.org)
~~Paul Tooley, Sierra County Emergency Manager (ptooley@sierraco.org)~~
Shelley Dragomir Ramos, P.E., USACE Abq. Dist., (Shelley.D.Ramos@usace.army.mil)

**New Mexico Office of the State Engineer
Dam Safety Bureau
Inspection Checklist and Report**

County: Sierra	Dam Name: Cuchillo Negro	OSE No.: D-541	Fed ID No.: NM00541
Inspection Performed By: James Head		Inspection Date: 2/9/2022	Last Inspection Date: 3/18/2019
Owner Name: City of Truth or Consequences	Owner Address: 505 Sims Street Truth or Consequences, NM 87901	Owner Contact: Benny Fuentes Owner Phone No.: 575-740-2613 Inspection Contact: Frank Aguirre Cell: 575-952-0083	
Purpose of Dam: Flood Control	Hazard Class: High	Hazard Class Appropriate: Yes ☒ No ☐	
Dam Location: From Hwy 181 (westside frontage rd. to I-25) take Hwy 52 west ~3.6 miles, turn south onto dirt road, continue ~3.3 miles to the dam.		Latitude: 33.219°	Longitude: -107.3183°
Weather: Clear, calm, ~50° F	Attendees: Frank Aguirre (City of T or C)		

1. General Conditions	Satisfactory	Needs Attention	N/A	Remarks:
a. Access for O & M	☒	☐	☐	May be limited during wet weather/flood events.
b. Unauthorized access restricted	☒	☐	☐	Not fenced, but no evidence of vandalism.
c. No unauthorized alterations	☒	☐	☐	
Notes:				

2. Upstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	Repair erosion gullies in excess of 3-inch depths as they occur.
b. Woody vegetation control	☒	☐	☐	Periodic removal of woody vegetation required from embankment section.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	Slightly displaced precast panels on left and right faces of concrete section, no apparent change since prior inspections.
e. Upstream wave protection	☒	☐	☐	
Notes:	Refer to remarks provided for specific items.			

3. Dam Crest	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	Periodically monitor for cracks and/or settlement. Shrinkage/thermal cracks on crest of concrete section similar to past inspections, no apparent structural cracks.
Notes:	Refer to remarks provided for specific items.			

4. Downstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Remove woody vegetation required from embankment section.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage control	☒	☐	☐	
Notes:	Refer to remarks provided for specific items.			

5. Downstream Area	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	Periodic removal of woody vegetation required.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage or boils	☒	☐	☐	
f. Drains or Wells	☐	☐	☒	No drains or wells.
Notes:	Refer to remarks provided for specific items.			

6. Abutment Contacts	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion, cracks, or slides	☒	☐	☐	
b. Woody vegetation	☐	☒	☐	Periodic removal of woody vegetation required.
c. Distortion or cracking	☒	☐	☐	
d. Seepage	☒	☐	☐	
e. Drains or Wells	☐	☐	☒	No drains or wells.
Notes:	Refer to remarks provided for specific items.			

7. Reservoir	Satisfactory	Needs Attention	N/A	Remarks:
a. Developed/Encroachment	☒	☐	☐	
b. Banks and slopes stable	☒	☐	☐	
c. Obstruction or debris	☐	☒	☐	Remove accumulated debris (logs, trash, etc.)
d. Sediment level	≈4650 ft. (approx. 7 th set of ports from the top of low-level intake, Dam Crest @ 4742.1 ft., S/W Crests @ 4721.1 ft.)			
e. Water level	= Dry at time of the inspection.			
Notes:	Refer to remarks provided for specific items.			

8. Intake Structure	Type of Structures: Ported Riser (lower); Large Portal with Rack (upper)			Remarks:
	Satisfactory	Needs Attention	N/A	
a. Concrete condition	☒	☐	☐	
b. Reinforcement encasement	☒	☐	☐	
c. Coating adequacy	☒	☐	☐	
d. Leakage	☐	☐	☒	Reservoir was dry.
e. Trash rack condition	☐	☒	☐	Maintain racks free of debris.
f. Inlet unobstructed	☐	☒	☐	Clear debris from ports of low-level intake.
g. Gates operative	☐	☐	☒	Not gated (passive system).
h. Woody vegetation	☒	☐	☐	
i. Number of intake ports	26	Number of ports open		14 above sediment level, some are partially plugged with flood debris.
Notes:	Refer to remarks provided for specific items.			

9. Outlet Conduit	Type of Conduit: 60" dia. RCP (lower) 7'-2" x 10' box culvert (upper)			Estimated Discharge: None
	Interior inspection: Yes ☐ Date: No ☒			
	Satisfactory	Needs Attention	N/A	Remarks:
a. Overall Condition	☐	☐	☐	Inspection limited to partial interior inspection.
b. Condition of surfaces	☐	☐	☐	Inspection limited to partial interior inspection.
c. Reinforcement encasement	☐	☐	☐	Inspection limited to partial interior inspection.
d. Clear of obstructions	☒	☐	☐	
e. Joint Condition	☐	☐	☐	Inspection limited to partial interior inspection.
f. Leakage	☐	☐	☐	Inspection limited to partial interior inspection.
g. Alignment	☐	☐	☐	Inspection limited to partial interior inspection.
Notes:		Refer to remarks provided for specific items.		

10. Outfall & Outlet Channel	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion	☒	☐	☐	Periodically monitor and mitigate as needed.
b. Obstructions or debris	☐	☒	☐	Remove rock and accumulated sand and gravel from the chute of the upper-level outlet works.
c. Erosion protection	☒	☐	☐	
d. Woody vegetation control	☐	☒	☐	Periodically monitor and remove vegetation as needed.
Notes:		Refer to remarks provided for specific items.		

11. Primary Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☒	☐	☐	
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☒	☐	☐	
g. Energy dissipation	☐	☐	☒	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	Flood Control Dam.
j. Erosion control	☒	☐	☐	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☒	☐	☐	
m. Capacity	☒	☐	☐	SDF: The SDF is 235,000 cfs as per the 2006 inspection memo notes. Per NMOSE regulations high hazard dams are required to have spillways capable of passing 100% of the runoff from the governing PMP storm event. From past NMOSE inspection reports, the combined spillway capacity of the primary and aux. spillways is about than 100% of the USACE Envelope Curve PMF. This percentage could be higher indicating more capacity if the flood discharge from the CO-NM REPS tool PMP is evaluated for reservoir routing. However, an updated H&H analysis to include the impacts of 2-hr, 6-hr, and 48-hr REPs PMPs and the AEP and precipitation distribution methodology from the MetPortal Tool would be required for verification of spillway capacity in accordance with the new NMOSE hydrologic guidance. See REPS tool and MetPortal tool results provided in the summary tables at the end of the checklist-report.
Notes:		Refer to remarks provided for specific items.		

12. Auxiliary Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☐	☒	☐	Monitor areas on the upstream face of the ogee section where efflorescent concrete is present and those areas where cracks have occurred. Repair spalled concrete and cracks in accordance with current state of the practice for concrete repairs (Refer to FEMA guidelines, ACI, and others).
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☒	☐	☐	
g. Energy dissipation	☐	☐	☒	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	Flood Control Dam.
j. Erosion control	☒	☐	☒	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☐	☒	☐	Remove woody vegetation along downstream edge of concrete (toe of the ogee weir).
m. Capacity	☒	☐	☐	SDF: see Item 11.m above.
Notes:	Refer to remarks provided for specific items.			

13. Compliance – Rules and Regulations	Required	In Place	Update needed	Remarks:
a. Emergency Action Plan	☒	☐	☐	
b. Operations and Maintenance Manual	☒	☐	☐	
c. Other required documents	☒	☐	☐	Hydrologic and flood routing analyses and a breach report for flood maps to be used in an EAP.
d. Status of State Engineer Order		☐		No Order on dam at this time.
Notes:	The dam is out of compliance with O&M Manual and EAP requirements as per Sections 19.25.12.17 and 19.25.12.18 NMAC.			

14. Design and Construction Documentation	There is an Initial Reservoir Filling Plan/Flood Emergency Plan, Design Memorandums 1, 2 and 3, Supplemental Design Memorandum 2, Foundation Report, an Operation and Maintenance Manual, a periodic Inspection Report, as-built drawings, and construction specifications on file with the NMOSE for this dam. It is outside the scope of this inspection report to perform a detailed review of the design documentation for compliance with the NMOSE requirements outlined in the current rules and regulations for dams. The as-built drawings on file with the NMOSE appear to accurately represent the as-constructed condition
---	--

Overall Remarks: Based on a cursory review of the documentation and the field inspection, Cuchillo Negro Dam is in "satisfactory" condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 5 and 6 of this inspection checklist-report.

Required Actions by the Owner (City of T or C):

1. Woody Vegetation removal is required for the embankment portion of the dam and the downstream edge of the ogee weir at the emergency spillway. Vegetation removal includes removal of rootballs and stumps in accordance with the New Mexico Office of the State Engineer (NMOSE) Dam Safety Bureau updated "*Vegetation Management on Dams*" which is available from the NMOSE website at: [Dam Safety Bureau \(state.nm.us\)](http://DamSafetyBureau.state.nm.us)
2. Make arrangements to have an overall inspection of the outlet works' conduits performed by a qualified contractor or professional civil engineer licensed in New Mexico with experience in dam engineering; this includes an interior inspections of the outlet works conduits. Once completed, provide the inspection documentation to the NMOSE-DSB. This item is reiterated from past NMOSE dam inspections and remains unaddressed.
3. Repair / patch deteriorated concrete where applicable to various sections of the dam and auxiliary spillway. Examples of deteriorated / damaged concrete are shown in the inspection photos.
4. Continue to implement proactive rodent abatement measures on the embankment section of the dam and collapse and backfill rodent burrows with suitable backfill material. The owner is also referred to FEMA 473 which is available for download from the NMOSE website listed below.
5. Remove all debris from the ports and trash racks for the inlet structure to the lower outlet conduit and confirm that all ports below the sediment level are adequately sealed. Maintain outlet works trash racks free of debris and routinely remove all accumulated debris within 100 feet of the outlet works intakes to minimize potential plugging of the ports on the lower outlet conduit inlet structure.
6. Provide a copy of survey results for horizontal/vertical survey monuments as requested in the NMOSE correspondence to the owner dated April 8, 2019, July 16, 2002, November 17, 2006, and June 29, 2009. If survey results are not available, make arrangements for a survey and submit the results with interpretative narrative to the NMOSE Dam Safety Bureau. Collected data must be compared to an original baseline survey. A well organized report with comprehensive narrative must be provided as part of the data submittal to the NMOSE-DSB. This continues to be a repeated item from prior NMOSE-DSB inspections that has not been addressed.
7. Prepare and submit a Hydrologic and Hydraulic (H&H) analysis to evaluate the spillway capacity. The results of the H&H analysis can be used to support a Dam Breach and Flood Routing Analysis for the EAP. This continues to be a repeated item from prior NMOSE-DSB inspections that has not been addressed.
8. Work with the Sierra County Zoning Department to assure no additional residents are constructed within the maximum flood pool of the dam. Based on elevations in Google Earth there are a number of residents to the southeast of the Town of Cuchillo that are within the maximum flood pool. A number of these residents are shown in the flood pool on the original as-built set of plans. However, there has been at least one home constructed within the maximum flood pool of the dam since the dam was completed, approximately 1 mile to the northwest of the dam. In addition, consideration needs to be given to these residents in the forthcoming EAP.
9. The dam is classified as high hazard potential, therefore, an Operation and Maintenance (O&M) Manual is required per Subsections E of 19.25.12.21 of the New Mexico Administrative Code (NMAC). The Owner is

referred to the NMOSE website for information on preparing an O&M Manual. Changes to NMOSE rules and regulations allow an owner to prepare the O&M Manual without the involvement of a professional engineer if the owner can submit a manual that meets the requirements of 19.25.12.17 NMAC.

10. The dam is classified as high hazard potential, therefore, an Emergency Action Plan (EAP) is required per Subsection F of 19.25.12.21 NMAC. There is no EAP on file with the NMOSE for this dam. The owner is referred to the NMOSE website for information on preparing an EAP and for a copy of the EAP template. Engineering elements of the EAP must be prepared by a professional engineer licensed in New Mexico with experience in dam breach analysis, flood routing, and failure mechanisms for dams. The owner can prepare the non-engineering elements of the EAP if the owner can meet the requirements of 19.25.12.18 NMAC.
11. Summary tables from the 2018 CO-NM REPs PMP tool and the updated MetPortal tool for Watershed Precipitation Frequency are shown below and also contain HMR 55A precipitation values for comparison. Based on a comparison of the rainfall intensities and the small watershed size, information from the tables suggest that the 2-hr Intraduration PMP event from CO-NM REPs PMP tool may be the governing rainfall event based on updated NMOSE hydrologic guidelines. However, updated hydrologic and reservoir routing analyses of the 2-hr, 6-hr, and 48-hr interduration events from the REPs tool and MetPortal tool would be necessary to confirm which event is the governing event.

Cuchillo Negro Dam (Drainage Area ~329sq. mi)

CO-NM Reps PMP Tool (inches)										HMR 55A (inches)	
OBJECTID *	Storm Type	PMP_01	PMP_06	PMP_12	PMP_24	PMP_48	PMP_72			6-hr Local	72-hr Gen.
1	General	2.48	5.98	6.56	6.95	8.5	9.03				17.6
OBJECTID *	Storm Type	PMP_01	PMP_02	PMP_03	PMP_04	PMP_05	PMP_06	PMP_12	PMP_24		
1	Local	4.15	6.01	7.13	7.46	7.46	7.46	7.48	7.71	6.29	
OBJECTID *	Storm Type	PMP_01	PMP_06	PMP_12	PMP_24	PMP_48	PMP_72				
1	Tropical	1.85	4.98	6.81	8.25	9.47	10.58				17.6

Storm Intensity: 2-hr Intraduration PMP average intensity ~ 3.01 in./hr

6-hr PMP average intensity ~ 1.24 in./hr

48-hr Interduration PMP average intensity ~ 0.20 in./hr

MetPortal Watershed Precipitation Frequency, inches (24 and 72 hr durations not for design use)					
	ARF = .55	ARF = .69	ARF = .73	ARF = .73	ARF = .73
AEP	2 hr LS	6 hr MEC	24 hr MLC/TSR *	48 hr MLC/TSR	72 hr MLC/TSR *
10 ⁻²	1.37	1.81	2.36	2.94	3.25
10 ⁻³	1.87	2.46	3.37	4.21	4.64
10 ⁻⁴	2.38	3.16	4.50	5.63	6.21
10 ⁻⁵	2.92	3.91	5.79	7.23	7.97
10 ⁻⁶	3.47	4.71	7.24	9.03	9.96
10 ⁻⁷	4.05	5.57	8.88	11.08	12.22

Storm Intensities using 10⁻⁶ AEP:

2-hr LS average intensity ~ 1.74 in/hr; 6-hr LS average intensity ~ 0.79 in/hr

48-hr Interduration MetPortal Precipitation average intensity ~ 0.19 in./hr

A simplified flood inundation map (SIM) generated for a top of dam failure from DSS-Wise (2019) is shown below. Areas where rural and urban (higher density) housing and developments are present are booked marked. The lowest Flood Hazard Category included for the SIM below is HZ02 (see HCOM Analysis matrix below the SIM for details pertaining to Flood Depth x Velocity descriptions). The highest Flood Hazard Category for the SIM specific to Cuchillo Negro Dam is HZ09.



Flood Hazard Category for People Caught Outdoors	DVmax (ft ² /s)		Description
	From	To	
HZ01	0	4.3	Very Low Hazard: Shallow flow or deep standing water
HZ02	4.3	6.5	Low Hazard: Dangerous to Children
HZ03	6.5	8.6	Moderate Hazard: Dangerous to some adults
HZ04	8.6	13	Significant Hazard: Dangerous to most adults
HZ05	13	54	Extreme Hazard: Dangerous to all

Flood Hazard Category for People Caught Indoors	DVmax (ft ² /s)		Description
	From	To	
HZ06	54	108	Poorly constructed building
HZ07	108	161	Well-built timber building
HZ08	161	215	Well-built masonry building
HZ09	215	377	Concrete building
HZ10	377		Large concrete building

Date: 3/7/2022Signature: *James H. [unclear]*

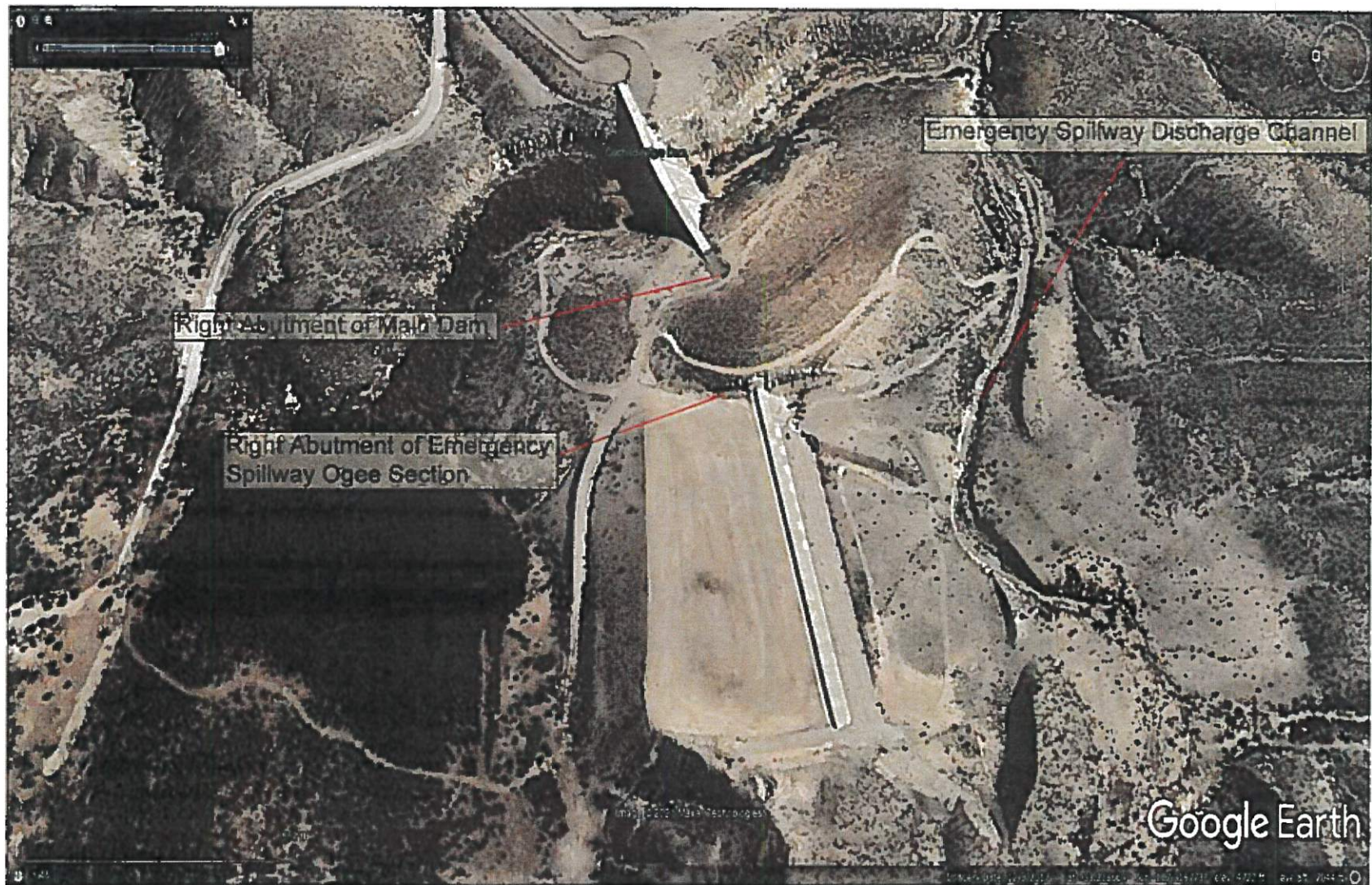
Disclaimer

Professional judgments and evaluations are represented in this document. These judgments are based partly on information gathered from visual observations and a limited review of the NMOSE Dam Safety Bureau files for the facility. The NMOSE does not guarantee the performance of this dam in any way and does not assume responsibility for safe operation of this dam. The sole responsibility for safe operation of this dam rests with the owner, operators and sponsors. The NMOSE only provides that the work and judgments rendered were performed in a manner consistent with the level of care and skill ordinarily exercised by other engineers under similar circumstances. No other warrantee or guarantee is included or intended.



1.

Image 1: 2017 Google Earth imagery with features of the dam as indicated.

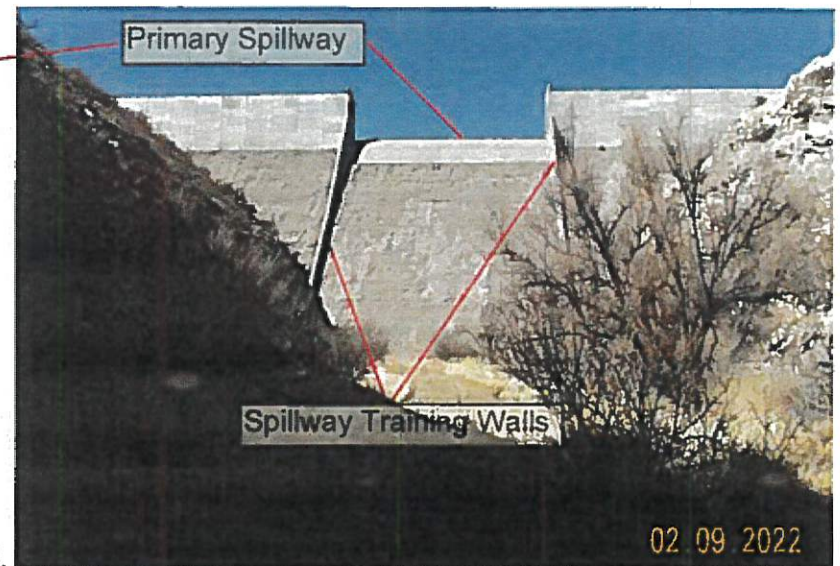


2.

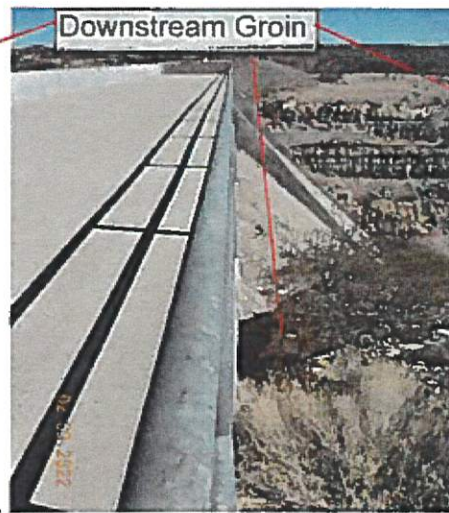
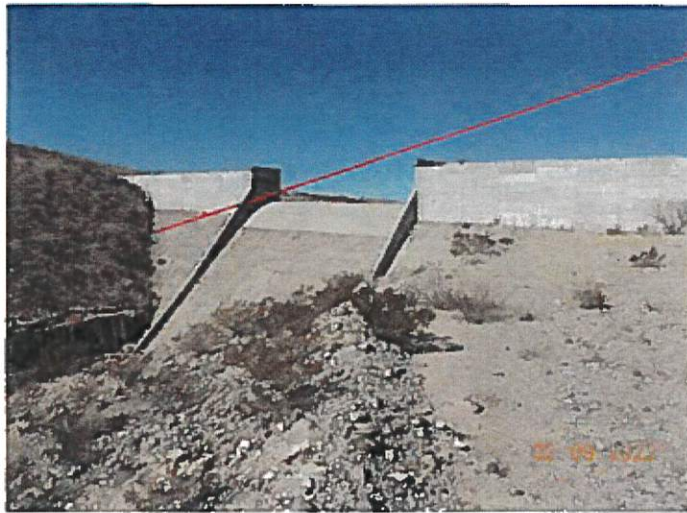
Image 2: Additional 2017 Google Earth imagery with features of the dam as indicated.



Images 3 and 4: Westerly views of the east end of the dam crest (Embankment Section -Image 3 and Concrete Section – Image 4).



Images 5 and 6: Easterly view of the west end of the dam crest (Image 5) as seen from the vicinity of the right abutment and upstream (northerly) view (Image 6) of the downstream face of the main dam at the primary spillway overpour section.

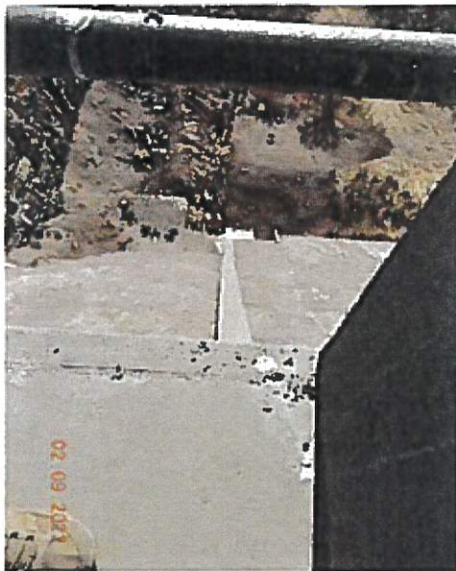


7.

8.

9.

Images 7 through 9: Westerly view of the downstream slope of the main dam (Image 7) and easterly views along the downstream shoulder of the dam crest and the lower section of the right downstream groin (Images 8 and 9).

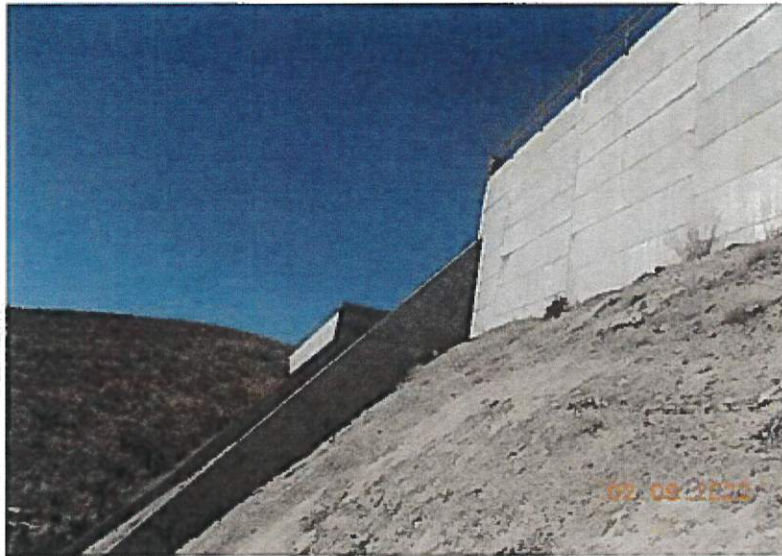


10.

11.

12.

Images 10 through 12: Views along the left and right primary spillway training walls (Images 10 and 11) and transverse to the training walls (Image 12).



13.



14.

Images 13 and 14: Westerly view of the top of the primary spillway training walls (Image 13) and westerly view of the downstream face of the main dam as seen from the west end of the embankment section at its transition zone with the concrete section of the dam.(Image 14).



15.

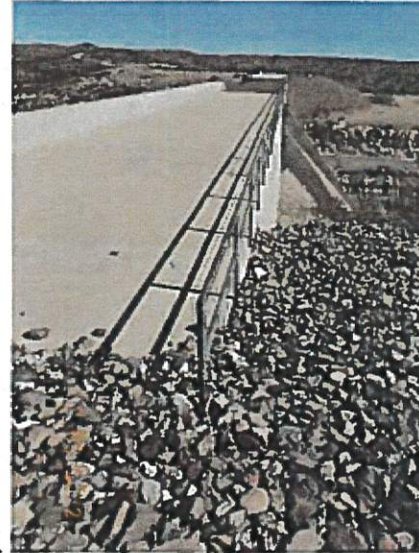


16.

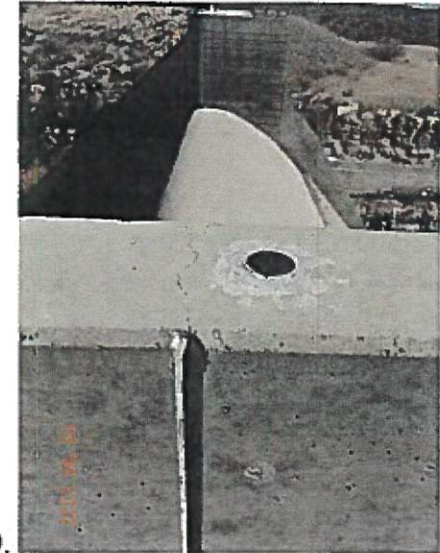
Images 15 and 16: Easterly views along the upstream and downstream slopes of the embankment section of the dam at the transition zone with the concrete section of the dam.



17.

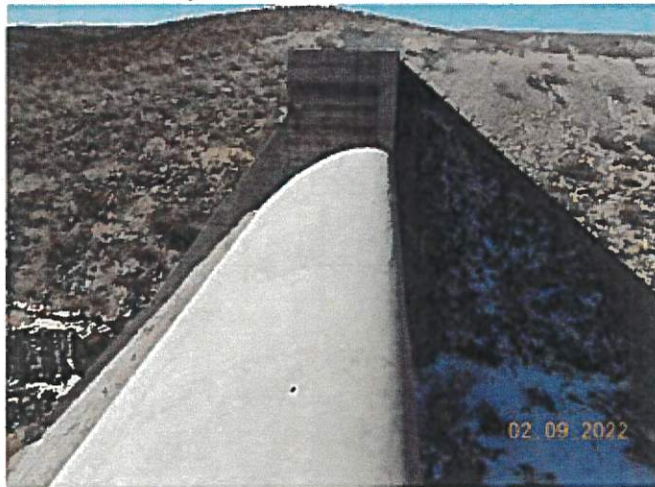


18.



19.

Images 17 through 19: Downstream (southwesterly) view of the upper left downstream groin of the main (concrete) dam (Image 17), downstream (northeasterly) view of the upper right downstream groin (Image 18), and easterly view of the right side primary spillway wall and spillway crest (Image 19).



20.

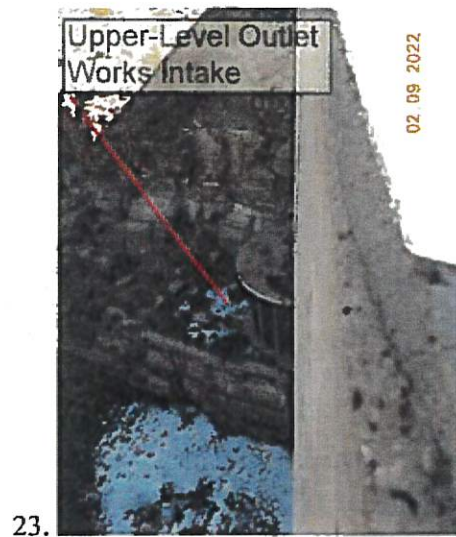


21.



22.

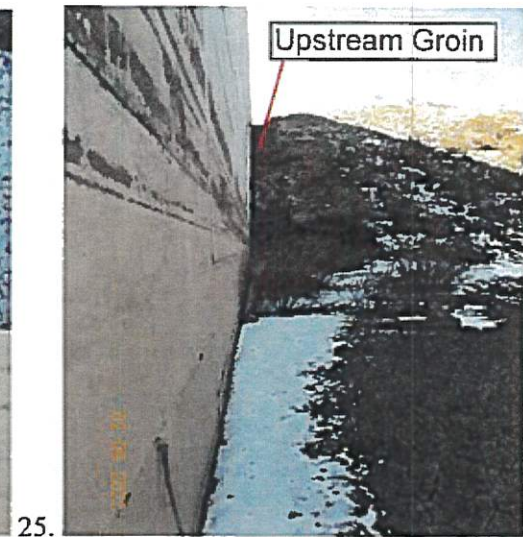
Images 20 through 22: Westerly view along the primary spillway crest (Image 20), southerly view along the left side primary spillway training wall (Image 21), and view of the lower portion of the left downstream groin of the main dam and spalled concrete at a contraction joint (Image 22).



23.



24.



25.

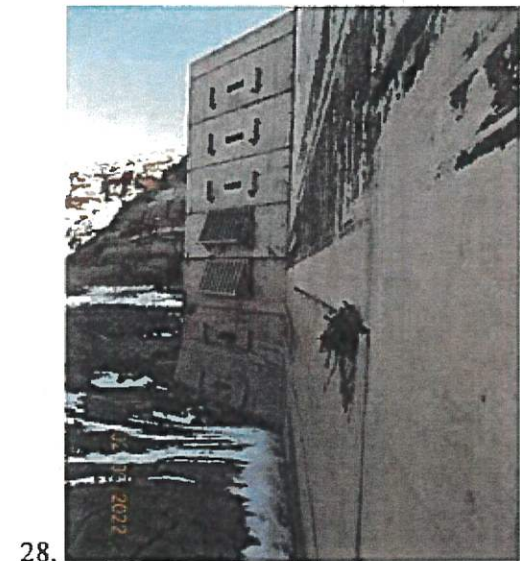
Images 23 through 25: Views of the upper and lower low-level outlet works intake structures located on the upstream face of the main dam (Images 23 and 24) and westerly view along the right upstream groin of the Main Dam (Image 25).



26.

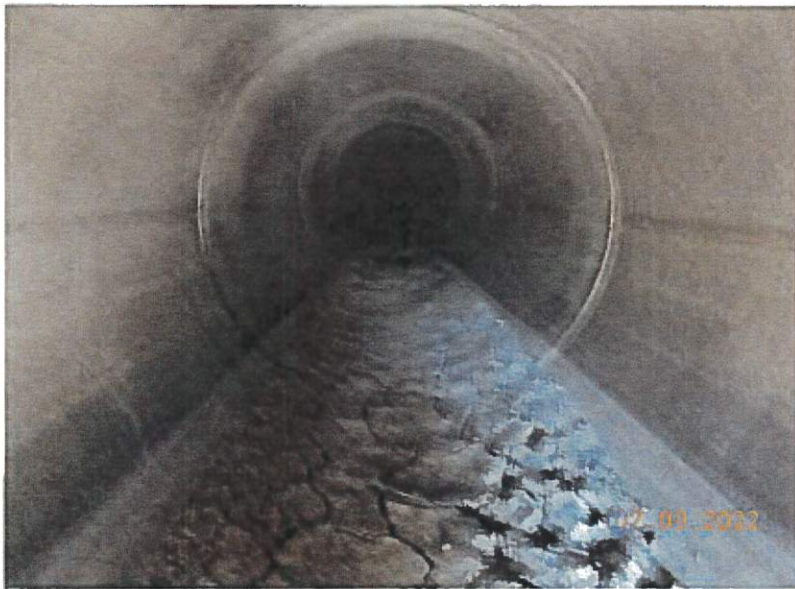


27.



28.

Images 26 through 28: Slightly distorted views of the low-level outlet works intake structure located at the base of the upstream face of the dam.



29.



30.

Images 29 and 30: Upstream interior views of the low-level outlet conduit as seen from the discharge end of the conduit. The upstream end of the conduit is located at the upstream face of the dam and within the outlet works structure shown in Images 26 through 28.



31.



32.

Images 31 and 32: Horizontally distorted views of the upper-level outlet works intake structure (Image 31) and concrete chute discharge channel (Image 32).

Cuchillo Negro
February 9, 2022 Inspection Photos

OSE File D-541
Page 8 of 12

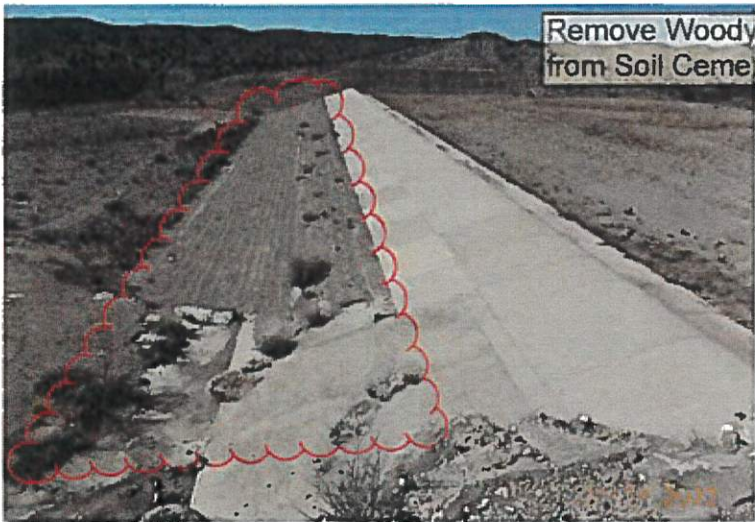


33.

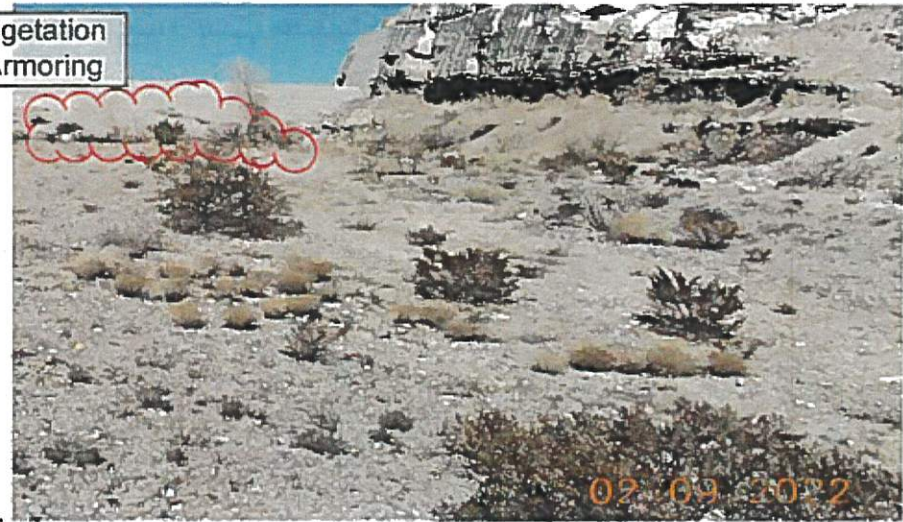


34.

Images 33 and 34: Westerly views of the emergency spillway ogee weir located approximately 300 feet west of the right abutment of the Main Dam.



35.

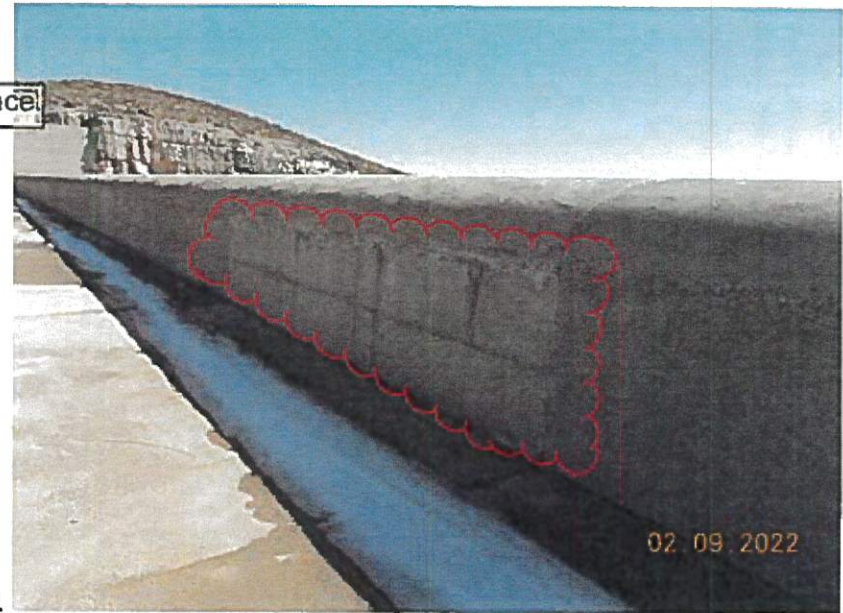


36.

Images 35 and 36: Additional westerly view of the emergency spillway (Image 35) and a northerly view of the right downstream groin of the emergency spillway.

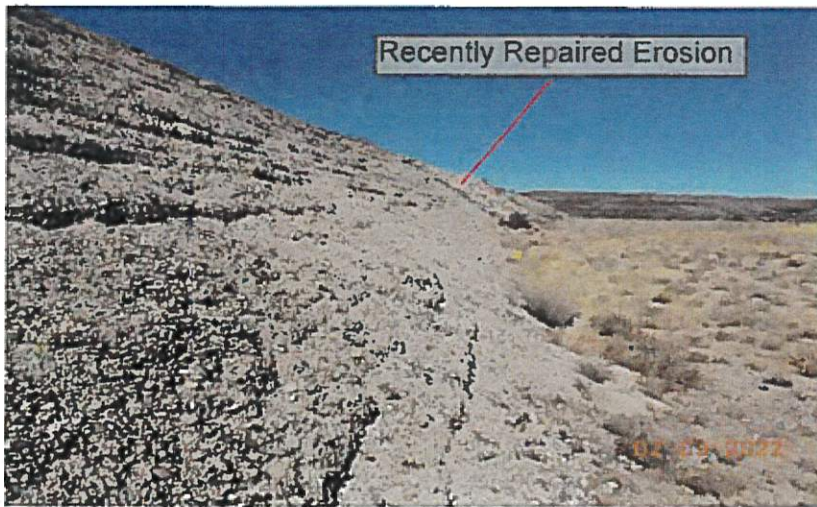


37.

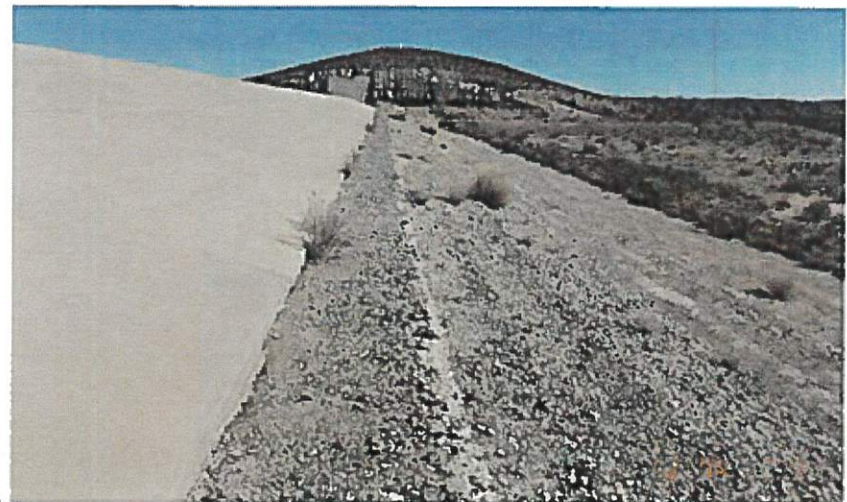


38.

Images 37 and 38: Examples of concrete efflorescence and spalling on the upstream face of the emergency spillway ogee weir.

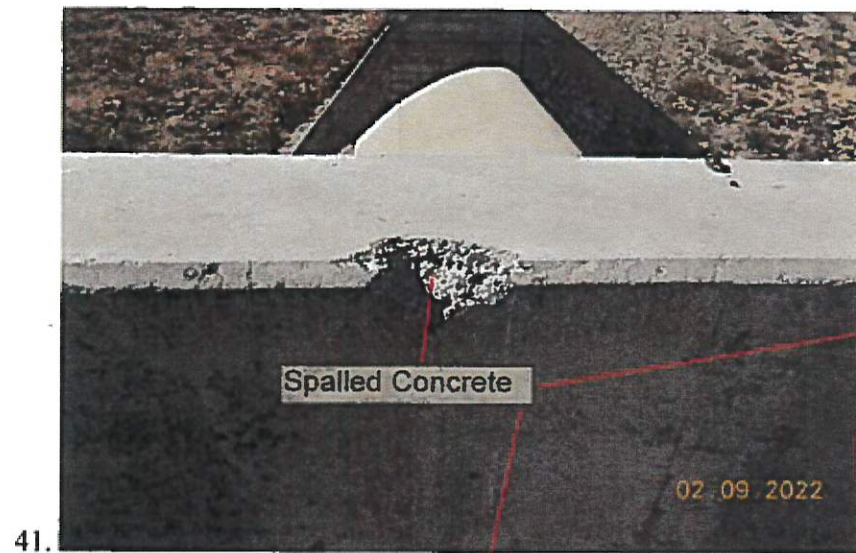


39.



40.

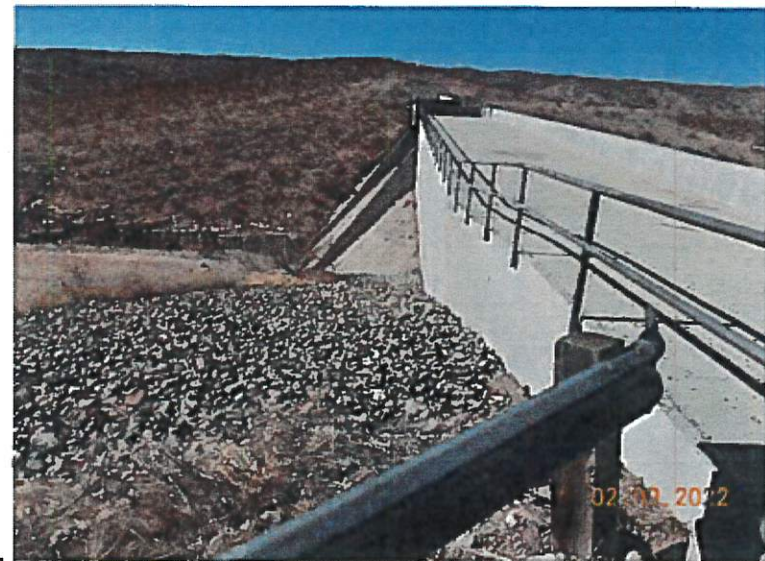
Images 39 and 40: Views of soil cement armoring on right side slope of emergency spillway approach channel (Image 39) and armoring on the downstream slope of the emergency spillway ogee section.



Images 41 through 44: Examples of damaged (spalled) concrete on the parapet walls of the main dam and shrinkage cracking on the crest of the main dam. Repair of the spalled concrete is required along with monitoring and documentation of the shrinkage cracks over time.



45.



46.

Images 45 and 46: Westerly views along the upstream and downstream faces of the main dam.



47.



48.



49.

Images 47 through 49: Examples of offset joints and cracks on the upstream face, crest of the main dam and upstream face of the emergency spillway ogee section that should be monitored over time.



1.

Image 1: 2017 Google Earth imagery with features of the dam as indicated.

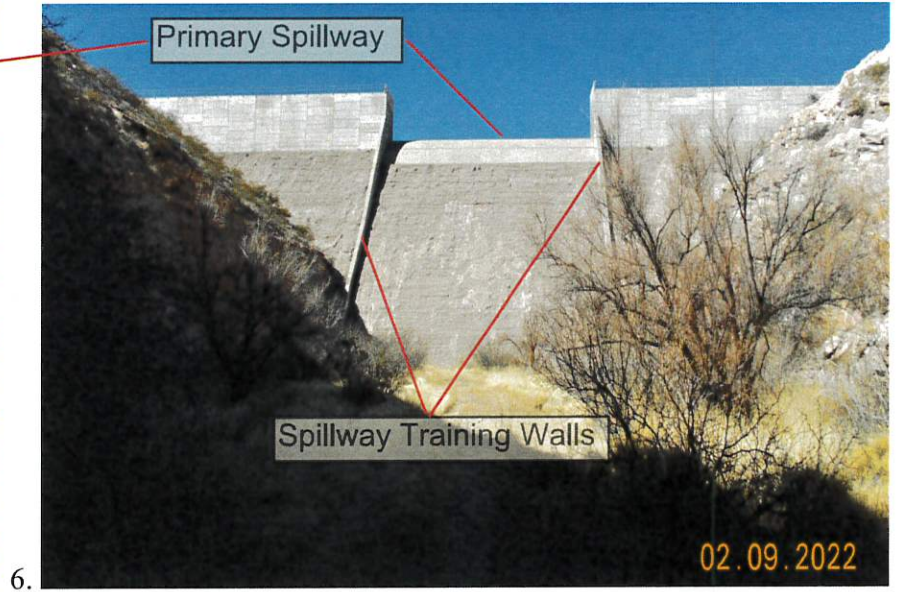


2.

Image 2: Additional 2017 Google Earth imagery with features of the dam as indicated.



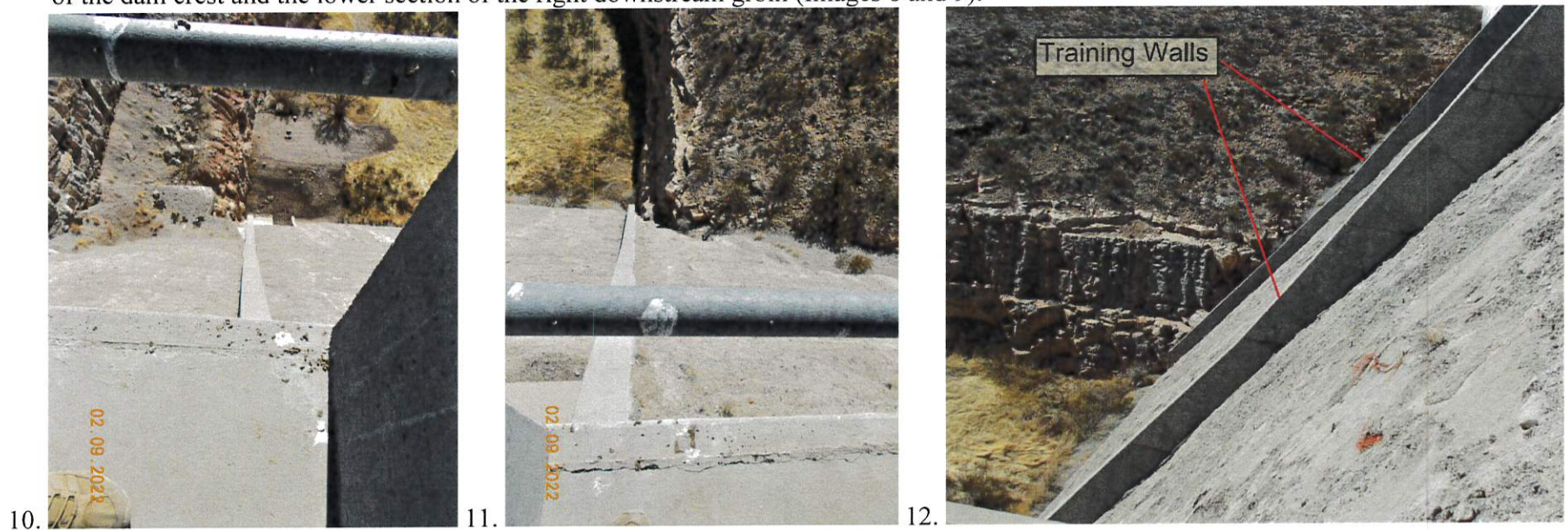
Images 3 and 4: Westerly views of the east end of the dam crest (Embankment Section -Image 3 and Concrete Section – Image 4).



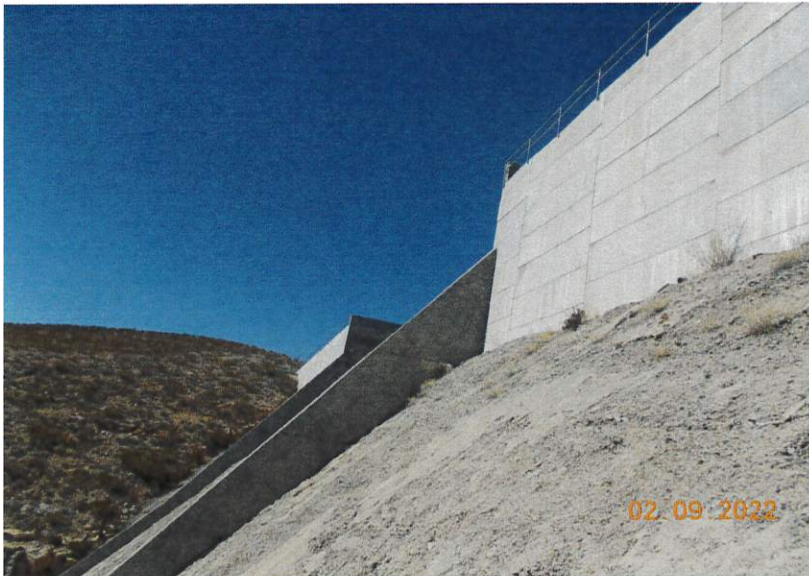
Images 5 and 6: Easterly view of the west end of the dam crest (Image 5) as seen from the vicinity of the right abutment and upstream (northerly) view (Image 6) of the downstream face of the main dam at the primary spillway overpour section.



Images 7 through 9: Westerly view of the downstream slope of the main dam (Image 7) and easterly views along the downstream shoulder of the dam crest and the lower section of the right downstream groin (Images 8 and 9).



Images 10 through 12: Views along the left and right primary spillway training walls (Images 10 and 11) and transverse to the training walls (Image 12).



13.



14.

Images 13 and 14: Westerly view of the top of the primary spillway training walls (Image 13) and westerly view of the downstream face of the main dam as seen from the west end of the embankment section at its transition zone with the concrete section of the dam.(Image 14).



15.



16.

Images 15 and 16: Easterly views along the upstream and downstream slopes of the embankment section of the dam at the transition zone with the concrete section of the dam.



17.



18.

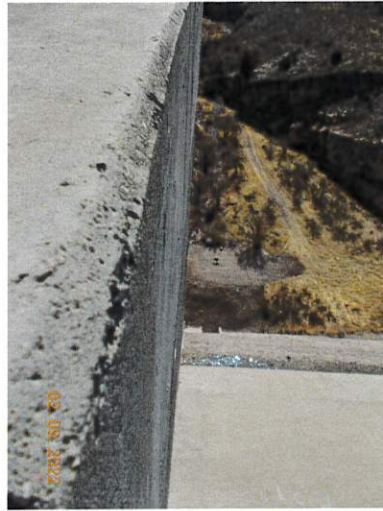


19.

Images 17 through 19: Downstream (southwesterly) view of the upper left downstream groin of the main (concrete) dam (Image 17), downstream (northeasterly) view of the upper right downstream groin (Image 18), and easterly view of the right side primary spillway wall and spillway crest (Image 19).



20.

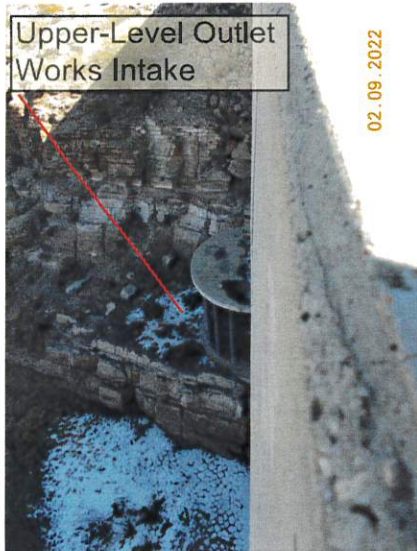


21.

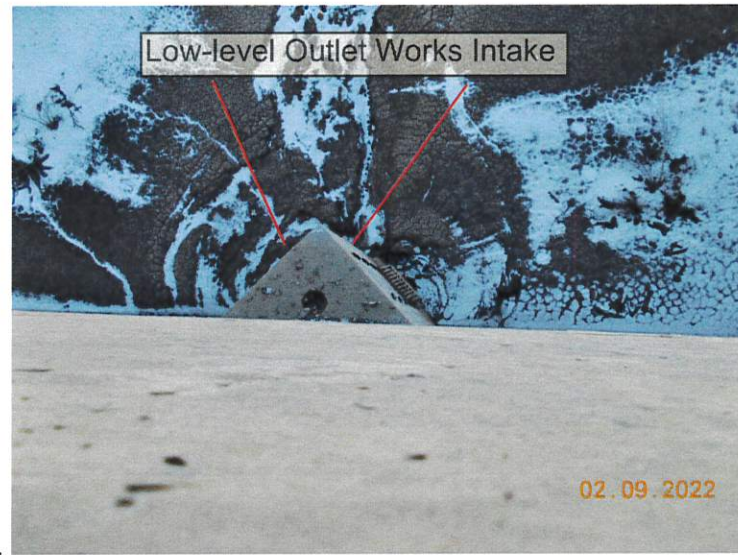


22.

Images 20 through 22: Westerly view along the primary spillway crest (Image 20), southerly view along the left side primary spillway training wall (Image 21), and view of the lower portion of the left downstream groin of the main dam and spalled concrete at a contraction joint (Image 22).



23.



24.



25.

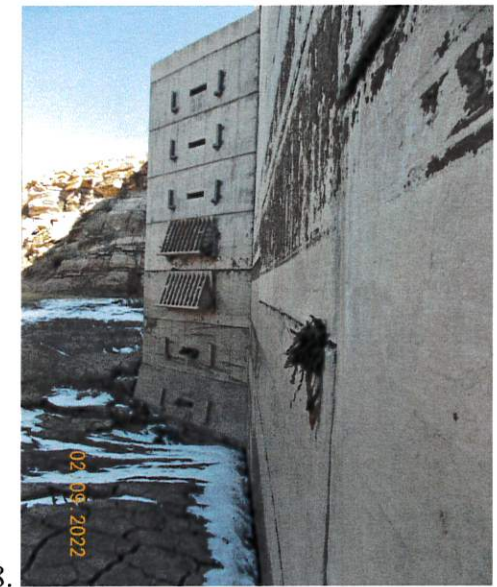
Images 23 through 25: Views of the upper and lower low-level outlet works intake structures located on the upstream face of the main dam (Images 23 and 24) and westerly view along the right upstream groin of the Main Dam (Image 25).



26.



27.



28.

Images 26 through 28: Slightly distorted views of the low-level outlet works intake structure located at the base of the upstream face of the dam.



Images 29 and 30: Upstream interior views of the low-level outlet conduit as seen from the discharge end of the conduit. The upstream end of the conduit is located at the upstream face of the dam and within the outlet works structure shown in Images 26 through 28.



Images 31 and 32: Horizontally distorted views of the upper-level outlet works intake structure (Image 31) and concrete chute discharge channel (Image 32).



33.

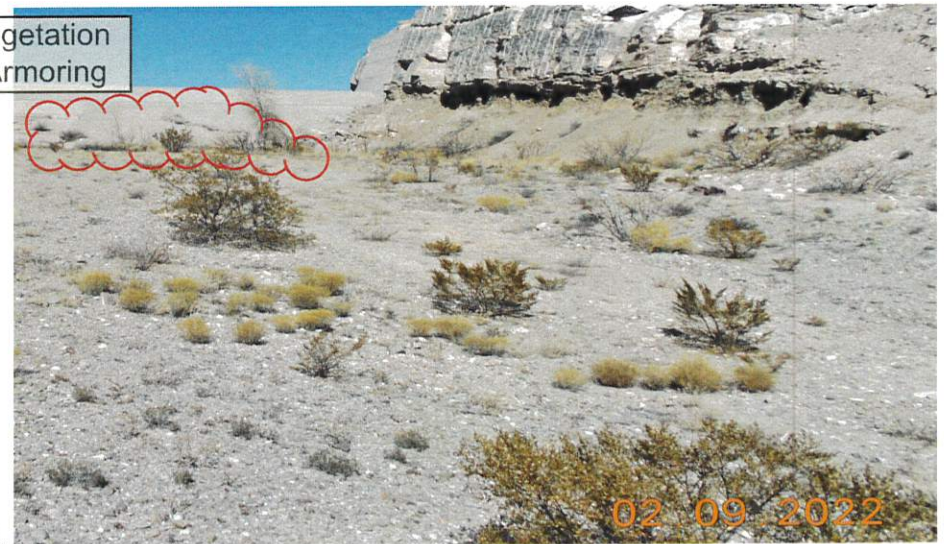


34.

Images 33 and 34: Westerly views of the emergency spillway ogee weir located approximately 300 feet west of the right abutment of the Main Dam.

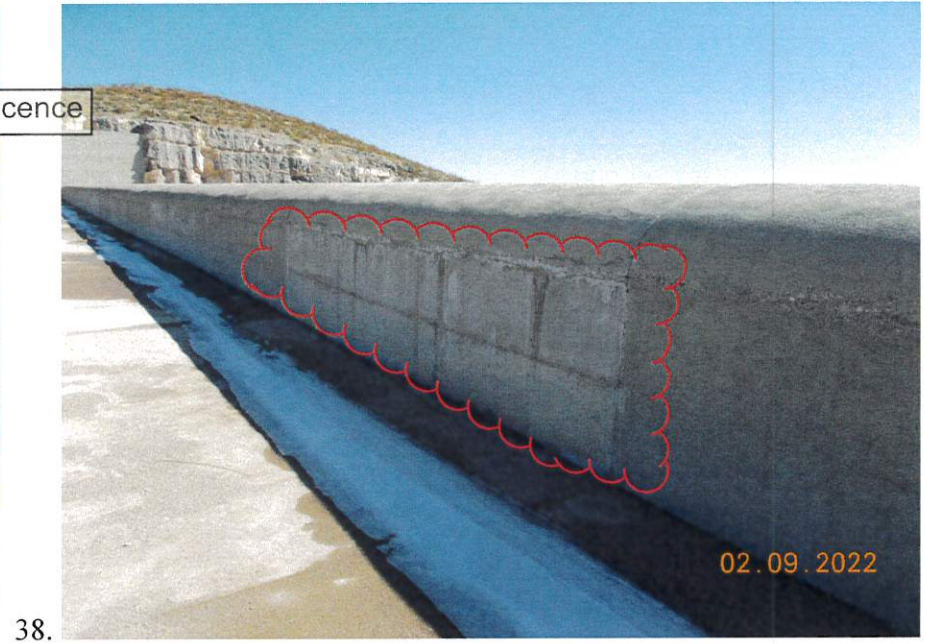


35.

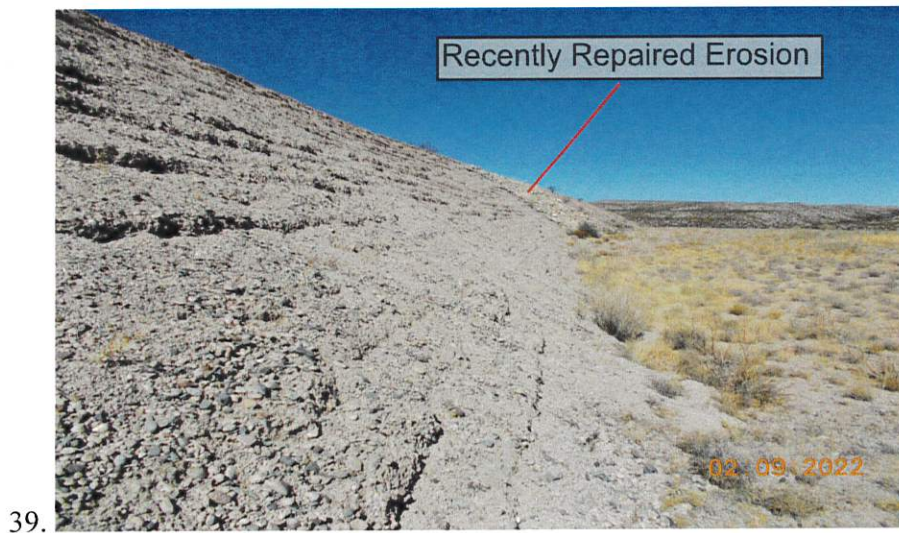


36.

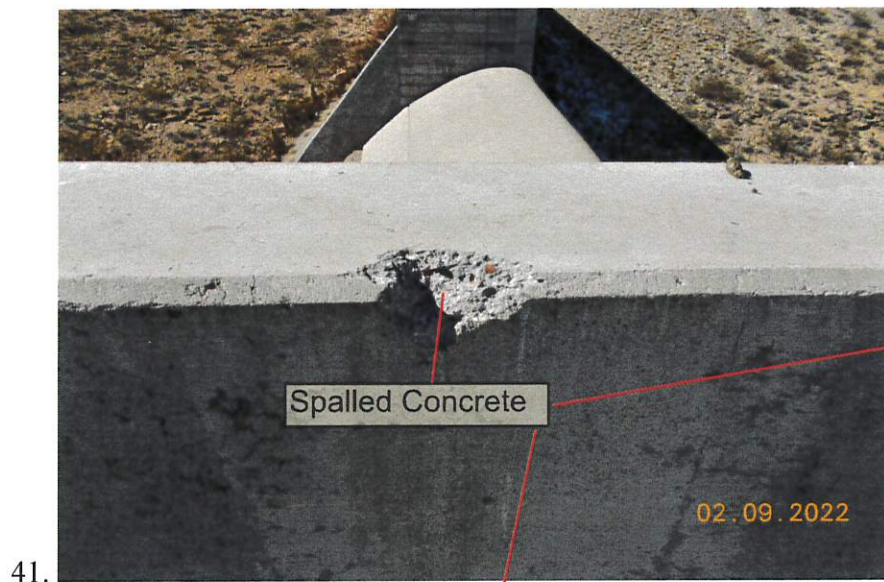
Images 35 and 36: Additional westerly view of the emergency spillway (Image 35) and a northerly view of the right downstream groin of the emergency spillway.



Images 37 and 38: Examples of concrete efflorescence and spalling on the upstream face of the emergency spillway ogee weir.



Images 39 and 40: Views of soil cement armoring on right side slope of emergency spillway approach channel (Image 39) and armoring on the downstream slope of the emergency spillway ogee section.



Images 41 through 44: Examples of damaged (spalled) concrete on the parapet walls of the main dam and shrinkage cracking on the crest of the main dam. Repair of the spalled concrete is required along with monitoring and documentation of the shrinkage cracks over time.



45. 46. **Images 45 and 46:** Westerly views along the upstream and downstream faces of the main dam.



47. 48. 49. **Images 47 through 49:** Examples of offset joints and cracks on the upstream face, crest of the main dam and upstream face of the emergency spillway ogee section that should be monitored over time.

JOHN R. D'ANTONIO, Jr., P.E.
STATE ENGINEER



DAM SAFETY BUREAU
CONCHA ORTIZ Y PINO BLDG
P.O. BOX 25102
SANTA FE, NEW MEXICO 87504
(505) 827-6122
(505) 476-0220 FAX
NM.DamSafety@state.nm.us

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe**

April 8th, 2019

Mr. Juan Fuentes, City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Inspections of Cuchillo-Negro Dam, OSE File No. D-541
St. Anne's Dam, OSE File No. D-581, and
Marie Street Dam, OSE File No. D-582
Sierra County**

On March 18, 2019, Mr. James Head, P.E., of the Office of the State Engineer (OSE) staff inspected Cuchillo-Negro, St. Anne's, and Marie Street Dams. Copies of Mr. Head's inspection memoranda and inspection checklists are enclosed for your information. A copy of the OSE Guidelines for Vegetation Management on Dams will be sent to you via email for your information and use. I concur with the required actions contained in the inspection memoranda.

Cuchillo-Negro Dam has been assessed in satisfactory condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 1 and 2 of the review memorandum.

St. Anne's Dam has been assessed as being in poor condition due to uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE to verify the design assumptions. Otherwise, a fair rating would have been appropriate due to the erosion gullies that are present on the left downstream groin of the dam, the diminished crest width of the dam created by the grading (back-dragging) of the slopes, the apparent lack of spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit.

Marie Street Dam has been assessed as being in poor condition as a result of the lack of design documentation for the sewer line passing through the dam, and uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE-DSB to verify the design assumptions. Otherwise a fair rating would have been appropriate due to inadequate spillway capacity.

Mr. Juan Fuentes
City of T or C Dams

April 8th, 2019
Page 2 of 2

The Operations and Maintenance (O&M) Manual on file for Cuchillo-Negro Dam has not been approved by the OSE-DSB, is outdated, and does not meet the requirements of Section 19.25.12.17 NMAC. There are no O&M Manuals on file for St. Anne's and Marie Street Dams. The New Mexico Watershed and Dam Owners Coalition has developed a template for O&M Manual preparation that could be useful. The template can be found on their website at: www.nmwsc.org. There are no Emergency Action Plans (EAP) on file with the OSE-DSB for these three dams. Subsections E and F of 19.25.12.21 NMAC require dams classified as High Hazard Potential such as these to have an approved O&M Manual and EAP in place. Please be advised of the potential for added owner liability if a dam were to experience an incident while out of compliance with the OSE Dam Safety Bureau's rules and regulations for dams.

If further discussion would be helpful, please contact James Head at (505) 383-4138 or via email at james.head@state.nm.us or me at (505) 383-4134.

Sincerely,



Charles N. Thompson, P.E., Chief
Dam Safety Bureau

CNT/jdh

Enclosure

Email: Benny Fuentes, City of Truth or Consequences (bfuentes@torcnm.org)
Paul Tooley, Sierra County Emergency Manager (ptoolley@sierraco.org)

MEMORANDUM
OFFICE OF THE STATE ENGINEER
Dam Safety Bureau

DATE: March 28, 2019

TO: Charles N. Thompson, P.E., Chief, Dam Safety Bureau *CT*

FROM: James D. Head, P.E., Dam Safety Engineer

SUBJECT: Inspection of Marie Street Dam, Sierra County, OSE No. D-582

On March 18, 2019, I inspected St. Anne's Dam. Observations made during the inspection are shown on the attached Inspection Checklist. Required actions for the dam owner are listed below.

Required Actions

Actions are listed in the order of importance.

1. Remove accumulated sediment at the intake riser to the low-level outlet conduit without encroaching into the upstream slope and toe of the dam. Excavation must not occur more than 6 inches below the lowest row of ports on the intake riser.
2. Address woody vegetation. In the past the upstream and downstream slopes had been back-dragged to remove the woody vegetation. This is not the preferred method of vegetation management as it indiscriminately destroys all vegetation on the slope, including the beneficial grass and small shrubs. In addition, it does not remove the rootballs so certain species, such as mesquite and creosote simply grow back. Woody vegetation needs to be removed per the OSE-DSB guidelines document *Vegetation Management on Dams*. Removal of woody vegetation includes maintaining a minimum 15-foot clear zone around the low-level outlet ported riser and the outlet conduit outfall located between the right downstream groin of the dam and the spillway apron near the west end of the dam.
3. Rodent burrows were observed on the upstream and downstream slopes of the dam. All rodent burrows need to be collapsed and backfilled with appropriate embankment material. Continuous or regularly scheduled rodent abatement measures need to be implemented.
4. Address all erosion, preferably by backfilling and compacting with a gravel much or suitable embankment fill material.
5. Erosion rills are forming at the toe of the rundown structure. Riprap needs be placed on the downstream slope from the toe of the rundown to the invert of the downstream channel to prevent further erosion of the embankment material. This is a repeated requirement from prior OSE-DSB inspections that has not been addressed.
6. Make arrangements to have interior inspections of the 36-inch diameter (upper level) and 8-inch diameter (lower level) outlet works conduits performed. Also provide the OSE with a schedule for completion of the interior inspections and contract with a professional civil engineer licensed in New Mexico, or a qualified contractor, to assess the condition of the outlet works. Provide the OSE Dam Safety Bureau with a properly formatted

inspection report that fully documents observations and recommendations made as a result of the inspection. The report must include either video footage or photographs documenting observations and conclusions reached as a result of the inspection. Narrative to the video footage and/or pertinent annotations to photographs must be included as part of the outlet conduit inspection report. Please send the OSE-DSB the qualifications of the contractor selected for the inspection and preparation of the report prior to performing the work. This is a repeated item dating back to the 2011 OSE-DSB inspection that has not been addressed.

7. Obtain the services of a professional engineer, licensed in New Mexico with experience in the design of dams to prepare an assessment of the dam to complete the record of missing critical analysis parameters. The missing critical data resulted in the dam being classified in poor condition in accordance with the National Inventory of Dams definitions. Missing critical data for Marie Street Dam primarily includes lack of an overall design report documenting hydrologic, hydraulic, and geotechnical analyses, and lack of construction record drawings filed with the OSE Dam Safety Bureau. This is a repeated requirement from prior OSE-DSB inspections that has not been addressed.
8. Provide As-built plans for the sewer line bored through the left side of the dam the OSE-DSB. The sewer line constitutes an unauthorized modification to the dam that was not reviewed and approved by the OSE-DSB prior to being implemented. A request for the plans has been made in every inspection report dating back to 2006.
9. Prepare and submit for review an Operation and Maintenance (O&M) Manual and an Emergency Action Plan (EAP) per Subsections E and F of 19.25.12.21 NMAC. There is no O&M Manual or EAP on file with the OSE for this dam. This is a repeated requirement from prior OSE-DSB inspections that has not been addressed.
10. Prepare and submit a Hydrologic and Hydraulic (H&H) analysis to evaluate the spillway capacity. The results of the H&H analysis can be used to support a Dam Breach and Flood Routing Analysis for the EAP. This is a repeated requirement from prior OSE-DSB inspections that has not been addressed.

Information from the OSE-DSB and the Federal Emergency Management Agency to assist dam owners on woody vegetation removal; impacts of animals on earthen dams; planning an O&M program; preparing an O&M Manual; preparing an EAP; and a model EAP are available on the OSE-DSB website at: <http://www.ose.state.nm.us/DS/dsIndex.php>

Compliance with Rules and Regulations

Operation and Maintenance Manual and Emergency Action Plan

There is currently no Operation and Maintenance Manual (O&M) nor Emergency Action Plan (EAP) on file with the OSE Dam Safety Bureau for this structure. Section 19.25.12.21 NMAC establishes O&M and EAP requirements for existing dams. Subsections E and F of 19.25.12.21 require dams classified as High Hazard Potential such as this to have an approved O&M Manual and EAP. The owner was advised of this requirement in every OSE inspection report since

2005. A copy of the OSE rules and regulations for dams (19.25.12 NMAC) can be downloaded from the OSE website at: <http://www.ose.state.nm.us/DS/dsRegs.php>

Spillway Capacity

The OSE rules and regulations require high hazard dams such as this to have spillways capable of passing 100% of the PMF resulting from the governing Probable Maximum Precipitation (PMP) storm event. A cursory level estimate of spillway capacity is documented in the 2006 OSE dam safety inspection memorandum. From the analysis, it was concluded that even when the dam's storage capacity is taken into account, the emergency spillway would likely be less than 50% of the flood discharge corresponding to the governing PMP event. A hydrologic and flood routing analysis is required and can be provided by the owner's designated engineer as part of the preparation of the forthcoming Emergency Action Plan for this dam.

Design and Construction Documentation

There is no design report, construction drawings, nor construction specifications on file with the OSE to support the overall design of for the dam. Items related to the overall design include, but are not limited to, comprehensive computations and analysis for hydrologic, hydraulic, and geotechnical analyses. The services of an engineer, licensed in New Mexico, with experience in the design of dams needs to be retained to prepare an assessment of the dam that addresses the items listed above. Because of the lack of design documentation, uncertainties exist as to critical analysis parameters for Marie Street Dam.

Inspection Findings

Overall Dam Condition

Based on a cursory review of the documentation and the field inspection, Marie Street Dam is in "Poor" condition. According to 2008 Federal Dam Safety Condition assessment terminology, Poor condition is used when:

"A dam safety deficiency is recognized for loading conditions which may realistically occur. Remedial action is necessary. A poor condition may also be used when uncertainties exists as to critical analysis parameters, which identify a potential dam safety deficiency. Further investigations and studies are necessary."

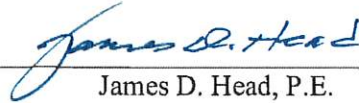
The rating of "poor" is a result of the lack of documented for the sewer line passing through the dam, and uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE-DSB to verify the design assumptions. Otherwise a fair rating would have been appropriate due to inadequate spillway capacity.

Hazard Potential Classification

The hazard potential classification for Marie Street Dam is high. The classification is appropriate.

Outlet Works

There is no indication from a review of the records that interior inspections of the outlet works conduits have been performed.



James D. Head, P.E.
Dam Safety Bureau

jdH

Professional judgments and evaluations are represented in this memorandum. They are based partly on information gathered from visual observations and a limited review of the OSE Dam Safety Bureau files for the facility. The OSE does not guarantee the performance of this dam in any way. The OSE only provides that the work and judgments rendered were performed in a manner consistent with the level of care and skill ordinarily exercised by other engineers under similar circumstances. No other warrantee or guarantee is included or intended.

**New Mexico Office of the State Engineer
Dam Safety Bureau
Inspection Checklist**

County: Sierra	Dam Name: Marie Street Dam	OSE No.: D-582	Fed ID No.: NM00585
Inspection Performed By: James Head, P.E.		Inspection Date: 03-18-2019	Last Inspection Date: 03-04-2015
Owner Name: City of Truth or Consequences	Owner Address: 505 Sims Street Truth or Consequences, NM 87901	Owner Contact: Juan Fuentes Owner Phone No.: 575-894-6673 Insp.: Benny Fuentes – 575-740-2613	
Purpose of Dam: Flood Control	Hazard Class: High	Hazard Class Appropriate: Yes ☒ No ☐	
Dam Location: West of Intersection of Marie Ave. and N Pershing St.		Latitude: 33.14181	Longitude: -107.25344
Weather: Clear, calm, 50 Degs F.		Attendees: Benny Fuentes, City of T or C	

1. General Conditions	Satisfactory	Needs Attention	N/A	Remarks:
a. Access for O & M	☒	☐	☐	
b. Unauthorized access restricted	☒	☐	☐	Crest is a public road (Marie Street), access is unrestricted
c. No unauthorized alterations	☒	☐	☐	Need as-built plans for sewer line through left side of dam

2. Upstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Remove woody vegetation in accordance with OSE-DSB guidelines document.
c. Rodent control	☐	☒	☐	Monitor and routinely abate rodents.
d. Distortion or cracking	☒	☐	☐	
e. Upstream wave protection	☐	☐	☒	

3. Dam Crest	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	

4. Downstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☐	☒	☐	Backfill and compact erosion rills and gullies with gravel mulch or suitable earthen material.
b. Woody vegetation control	☒	☐	☐	See 2.b.
c. Rodent control	☐	☒	☐	Collapse and backfill and compact rodent burrows, implement rodent abatement measures.
d. Distortion or cracking	☒	☐	☐	
e. Seepage control	☐	☐	☒	

5. Downstream Area	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	See 2.b.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage or boils	☒	☐	☐	
f. Drains or Wells	☐	☐	☒	Est. gpm

Dam Name: Marie Street Dam

Inspection Date: 03-18-2019

File No. D-582

6. Abutment Contacts	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion, cracks, or slides	☐	☒	☐	Monitor and repair as needed. See 4.a.
b. Woody vegetation	☐	☒	☐	Remove woody vegetation in accordance with OSE-DSB guidelines documents.
c. Distortion or cracking	☒	☐	☐	
d. Seepage	☒	☐	☐	
e. Drains or Wells	☐	☐	☒	Est. gpm

7. Reservoir	Satisfactory	Needs Attention	N/A	Remarks:
a. Developed/Encroachment	☒	☐	☐	
b. Banks and slopes stable	☒	☐	☐	
c. Obstruction or debris	☐	☒	☐	
d. Sediment level	= sediment accumulation appears to be about 1 foot above the crown of the outlet conduit within the intake riser.			
e. Water level	= dry			

8. Intake Structure	Type of Structure: Ported metal riser			Remarks:
	Satisfactory	Needs Attention	N/A	
a. Concrete condition	☐	☐	☒	
b. Reinforcement encasement	☐	☐	☒	
c. Coating adequacy	☐	☐	☒	
d. Leakage	☐	☐	☒	No water present
e. Trash rack condition	☒	☐	☐	
f. Inlet unobstructed	☒	☐	☐	
g. Gates operative	☐	☐	☒	Not gated
h. Woody vegetation	☒	☐	☐	
Number of intake ports	Possibly 20	Number of ports open	16	

9. Gates & Valves	Satisfactory	Needs Attention	N/A	Remarks:
a. Gates Operative	☐	☐	☒	Not gated
b. Gate Condition	☐	☐	☒	
c. Leakage	☐	☐	☒	
d. Access control	☐	☐	☒	

10. Outlet Conduits	Type of Conduit: 8" steel (lower); 36" RCP (upper)			Estimated Discharge: 0
	Interior Inspection: Yes ☐ Date No ☒			
	Satisfactory	Needs Attention	N/A	Remarks:
a. Overall Condition	☐	☐	☒	Buried, not viewable
b. Condition of surfaces	☐	☐	☒	Buried, not viewable
c. Reinforcement encasement	☐	☐	☒	Buried, not viewable
d. Clear of obstructions	☐	☐	☒	Buried, not viewable
e. Joint Condition	☐	☐	☒	Buried, not viewable
f. Leakage	☐	☐	☒	Buried, not viewable
g. Alignment	☐	☐	☒	Buried, not viewable

11. Outlet Energy Dissipator	Satisfactory	Needs Attention	N/A	Remarks:
a. Concrete condition	☒	☐	☐	
b. Reinforcement encasement	☐	☐	☒	
c. Joint Condition	☒	☐	☐	
d. Riprap condition	☐	☐	☒	No riprap
e. Clear of obstructions	☒	☐	☐	
f. Woody vegetation control	☒	☐	☐	

Dam Name: Marie Street Dam

Inspection Date: 03-18-2019

File No. D-582

12. Outfall & Outlet Channel	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion	☒	☐	☐	Fill rills forming at toe of rundown
b. Obstructions or debris	☒	☐	☐	
c. Erosion protection	☐	☒	☐	Needs riprap around toe of rundown
d. Woody vegetation control	☐	☒	☐	Dense woody vegetation at the low level outlet outfall.

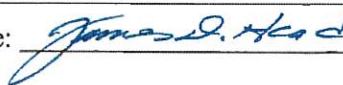
13. Primary Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☒	☐	☐	
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☐	☐	☒	Roadway
g. Energy dissipation	☒	☐	☐	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	
j. Erosion control	☒	☐	☐	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☒	☐	☐	
m. Capacity	☐	☒	☐	SDF: Per OSE regulations high hazard dams are required to have spillways capable of passing 100% of the runoff from the governing PMP storm event. Per the 2006 inspection report, the spillway capacity is less than 50% of the routed 72-hr PMP event based on HMR55A.

14. Instrumentation	Satisfactory	Needs Attention	N/A	Remarks:
a. Structure instrumented	☐	☐	☒	Structure not instrumented
b. Monitoring performed	☐	☐	☒	
c. Piezometers	☐	☐	☒	
d. Settlement monuments	☐	☐	☒	
e. Other	☐	☐	☒	

Overall Remarks:

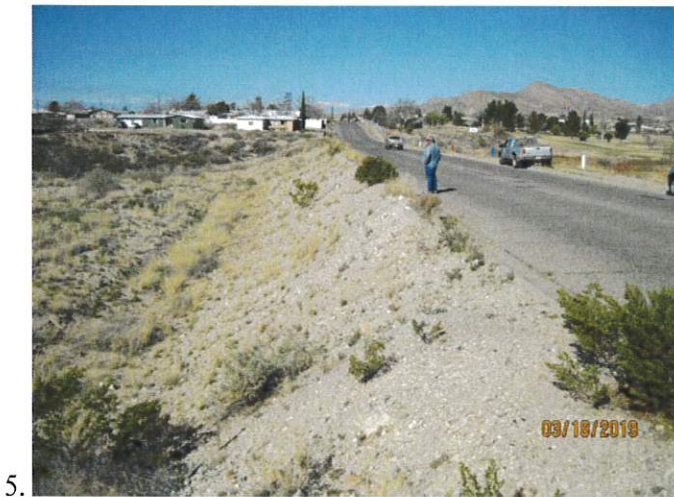
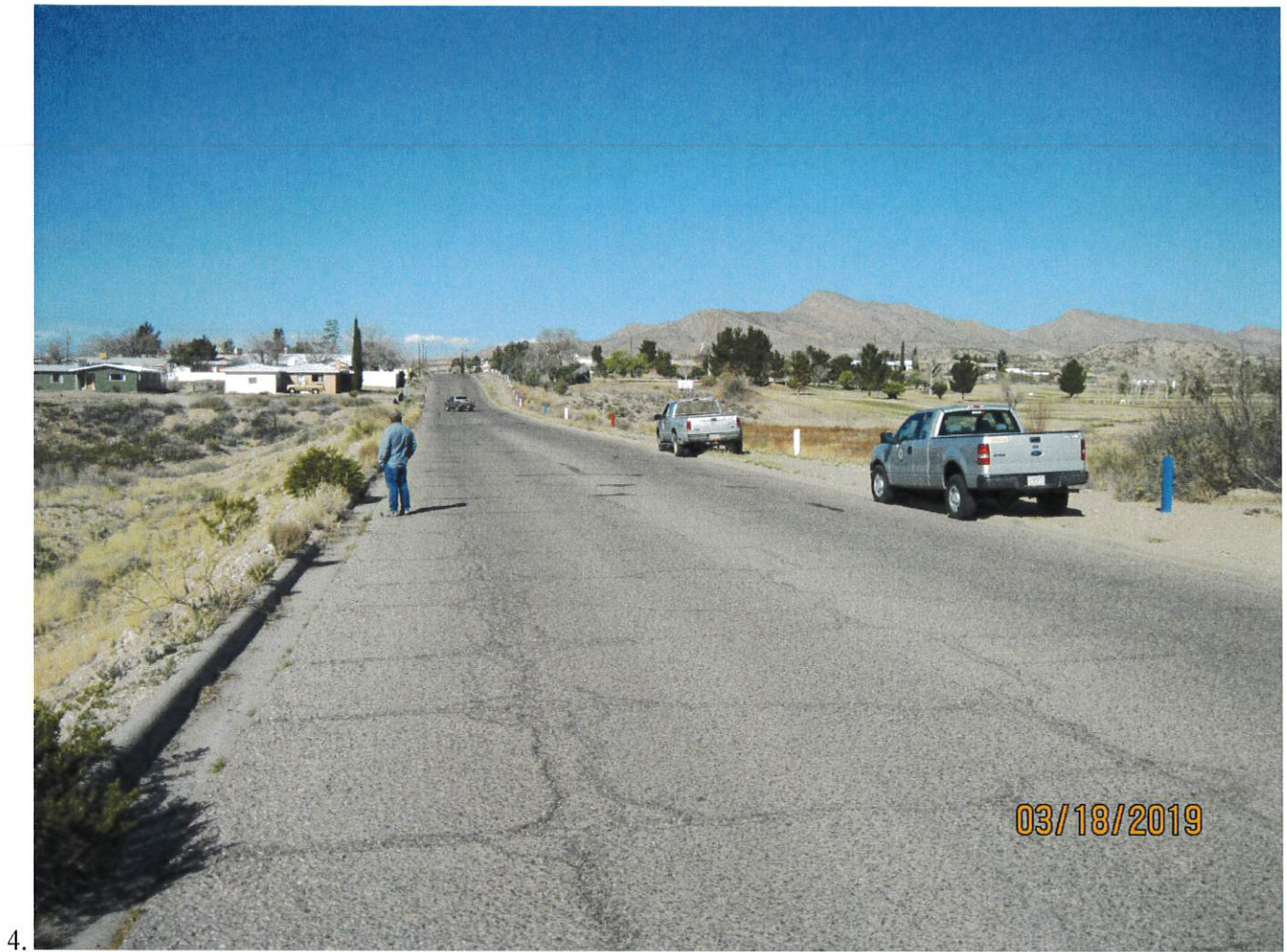
1. Remove accumulated sediment at the intake riser to the low-level outlet conduit without encroaching into the upstream slope and toe of the dam. Excavation must not occur more than 6 inches below the lowest row of ports on the intake riser.
2. Address woody vegetation. In the past the upstream and downstream slopes had been back-dragged to remove the woody vegetation. This is not the preferred method of vegetation management as it indiscriminately destroys all vegetation on the slope, including the beneficial grass. In addition, backdragging does not remove the rootballs so certain species, such as mesquite simply grow back. Woody vegetation needs to be removed per OSE-DSB guidelines document *Vegetation Management on Dams*.
3. Rodent burrows were observed on the downstream slope. All rodent burrows need to be collapsed and backfilled with appropriate embankment material. Continuous or regularly scheduled rodent abatement measures need to be implemented.
4. Address all erosion, preferably by backfilling and compacting with a gravel much or suitable embankment fill material.
5. Erosion rills are forming at the toe of the rundown structure. Riprap needs be placed on the downstream slope from the toe of the rundown to the invert of the downstream channel to prevent further erosion of the embankment material.

Date: 03-25-2019

Signature: 



Images 1 through 3: Aerial views of the dam courtesy of GoogleEarth (circa 2015).



Images 4 through 6: Westerly view along the dam crest / Marie Street and the downstream slope (Images 4 and 5), and easterly view of the downstream slope (Image 6).



7.



8.

Images 7 and 8: Easterly and westerly views, respectively, of the upstream slope.



9.



10.

Images 9 and 10: Northerly (upstream) views of erosion on the downstream slope.



11.



12.

Images 11 and 12: Typical views of rodent burrows on the downstream slope.



13.



14.

Images 13 and 14: Southerly views of erosion typical to the upstream slope and the area downstream of the dam, respectively.



14.



15.

Images 14 and 15: Southerly (downstream) and northerly (upstream) views of the 36-inch diameter upper level outlet conduit.



16.

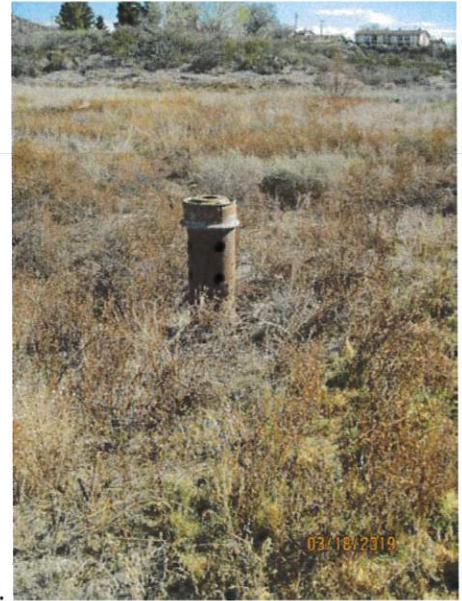


17.

Images 16 and 17: Views of the 8-inch diameter lower level outlet conduit outfall and interior view of the same outlet conduit, respectively.



18.

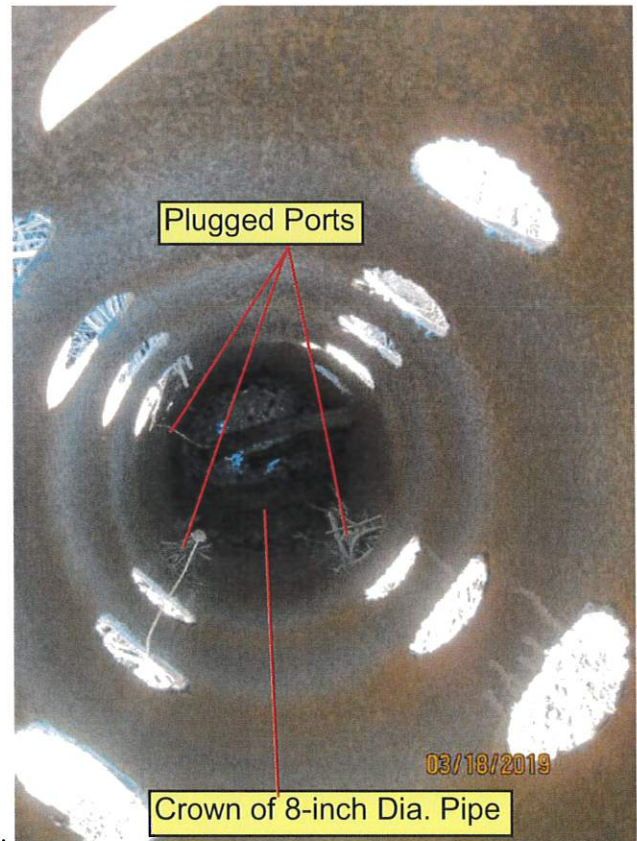


19.

Images 18 and 19: Vegetation immediately downstream of the lower level outlet conduit (Image 18) and easterly view of the outlet works metal riser located in the vicinity of the upstream toe of the dam.



20.



21.

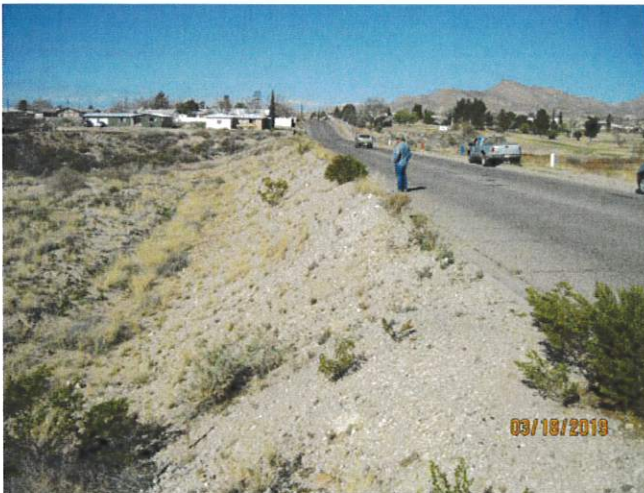
Images 20 and 21: Additional view of the low level outlet works riser (Image 20) and interior view of the riser (Image 21) with plugged ports as an approximate indication of the sediment level.



Images 1 through 3: Aerial views of the dam courtesy of GoogleEarth (circa 2015).



4.



5.



6.

Images 4 through 6: Westerly view along the dam crest / Marie Street and the downstream slope (Images 4 and 5), and easterly view of the downstream slope (Image 6).



Images 7 and 8: Easterly and westerly views, respectively, of the upstream slope.



Images 9 and 10: Northerly (upstream) views of erosion on the downstream slope.



Images 11 and 12: Typical views of rodent burrows on the downstream slope.



13.



14.

Images 13 and 14: Southerly views of erosion typical to the upstream slope and the area downstream of the dam, respectively.



14.



15.

Images 14 and 15: Southerly (downstream) and northerly (upstream) views of the 36-inch diameter upper level outlet conduit.



16.

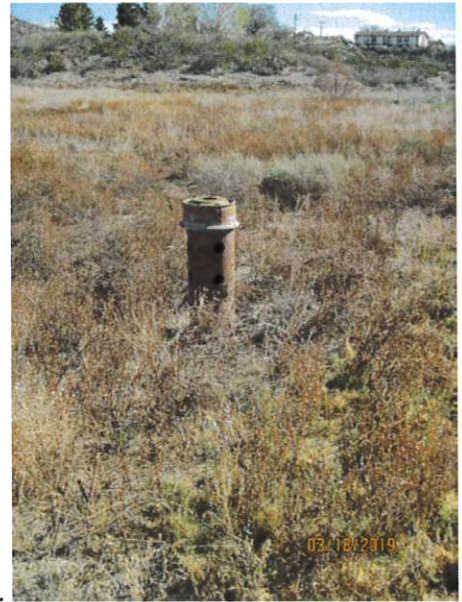


17.

Images 16 and 17: Views of the 8-inch diameter lower level outlet conduit outfall and interior view of the same outlet conduit, respectively.



18.

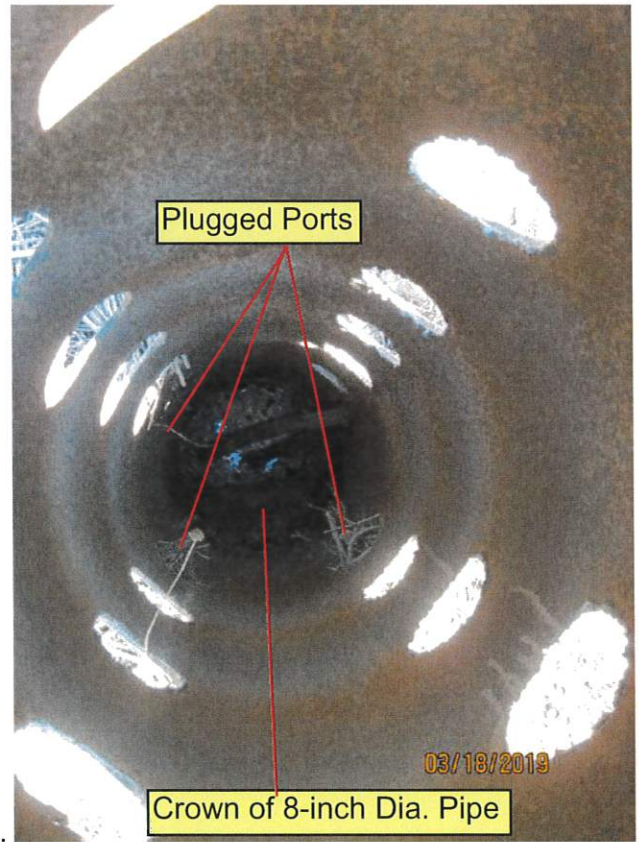


19.

Images 18 and 19: Vegetation immediately downstream of the lower level outlet conduit (Image 18) and easterly view of the outlet works metal riser located in the vicinity of the upstream toe of the dam.



20.



21.

Images 20 and 21: Additional view of the low level outlet works riser (Image 20) and interior view of the riser (Image 21) with plugged ports as an approximate indication of the sediment level.

MIKE A. HAMMON, P.E.
STATE ENGINEER



DAM SAFETY BUREAU
5550 SAN ANTONIO DR., NE
ALBUQUERQUE, NM 87109
(505) 383-4113
(505) 383-4132 FAX
NM.DamSafety@state.nm.us

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe**

March 10, 2022

Mr. Bruce Swingle
City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Inspections of Cuchillo-Negro Dam, OSE File No. D-541
St. Anne's Dam, OSE File No. D-581, and
Marie Street Dam, OSE File No. D-582
Sierra County**

Dear Mr. Swingle:

On February 9, 2022, Mr. James Head, P.E., of the Office of the State Engineer (OSE) staff inspected Cuchillo-Negro, St. Anne's, and Marie Street Dams. Copies of Mr. Head's inspection checklist-reports are enclosed for your information. A copy of the NMOSE Guidelines for Vegetation Management on Dams will be sent to you via email for your information and use. I concur with the required actions contained in the respective inspection checklist-reports. Please review the required actions sections of the respective checklist reports and the inspection photographs and make arrangements to address the required actions accordingly.

Cuchillo-Negro Dam has been assessed in satisfactory condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 5 and 6 of the inspection checklist-report.

St. Anne's Dam has been assessed as being in poor condition because of uncertainties that arise from the lack of information about critical analysis parameters associated with design and construction of the dam. If information were to be assembled to reduce these uncertainties a condition rating of fair would have been appropriate due to the erosion gullies that are present on the left upstream and downstream groins of the dam, the diminished crest width of the dam created by past grading (back-dragging) of the slopes, questionable spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit and the alignment of the downstream end of the spillway channel relative to the downstream toe of the dam. Satisfactory progress needs to be made towards resolving issues pertaining to erosion, inspection of the outlet conduit, removal of the orifice plate at the outlet conduit entrance (to be replaced with a properly designed ported intake riser), and verification of spillway capacity.

Marie Street Dam has been assessed as being in poor condition because of uncertainty surrounding the sewer line passing through the dam and uncertainties with critical analysis parameters associated with design and construction of the dam. If these uncertainties were reduced a fair rating would otherwise be appropriate due to inadequate spillway capacity.

Subsections E and F of 19.25.12.21 NMAC require dams classified as High Hazard Potential such as these to have an approved Operations and Maintenance Manual (O&M) and Emergency Action Plan (EAP) in place. The O&M on file for Cuchillo-Negro Dam is outdated; has not been approved by the NMOSE-DSB, and it does not meet the requirements of Section 19.25.12.17 NMAC. There are no O&M manuals on file for St. Anne's and Marie Street Dams. The New Mexico Watershed and Dam Owners Coalition has developed a template for O&M manual preparation that could be useful. There are no EAPs on file with the NMOSE-DSB for these three dams. Please be advised of the potential for added owner liability if a dam were to experience an incident while out of compliance with the NMOSE Dam Safety Bureau's rules and regulations for dams.

Information pertaining to the preparation of Operation and Maintenance Manuals and Emergency Action Plans is available from the NMOSE Dam Safety Bureau website at:

<https://www.ose.state.nm.us/dams/>

If further discussion would be helpful, please contact James Head at (505) 383-4138 or via email at james.head@state.nm.us or me at (505) 383-4134.

Sincerely,



Charles N. Thompson, P.E., Chief
Dam Safety Bureau

CNT/jh

Enclosure

Email: Bruce Swingle, City Manager, City of Truth or Consequences (bswingle@torcnm.org)
Benny Fuentes, City of Truth or Consequences (bfuentes@torcnm.org)
~~Paul Tooley, Sierra County Emergency Manager (ptooley@sierraco.org)~~
Shelley Dragomir Ramos, P.E., USACE Abq. Dist., (Shelley.D.Ramos@usace.army.mil)

**New Mexico Office of the State Engineer
Dam Safety Bureau
Inspection Checklist and Report**

County: Sierra	Dam Name: Marie Street	OSE No.: D-582	Fed ID No.: NM00582
Inspection Performed By: James Head <i>CNT</i>		Inspection Date: 2/9/2022	Last Inspection Date: 3/18/2019
Owner Name: City of Truth or Consequences	Owner Address: 505 Sims Street Truth or Consequences, NM 87901	Owner Contact: Benny Fuentes Owner Phone No.: 575-740-2613 Inspection Contact: Frank Aguirre Cell: 575-952-0083	
Purpose of Dam: Flood Control	Hazard Class: High	Hazard Class Appropriate: Yes ☒ No ☐	
Dam Location: West of Intersection of Marie Ave. and N Pershing Street.		Latitude: 33.14181°	Longitude: -107.25344°
Weather: Clear, calm, ~40 degs F		Attendees: Frank Aguirre (City of T or C)	

1. General Conditions	Satisfactory	Needs Attention	N/A	Remarks:
a. Access for O & M	☒	☐	☐	
b. Unauthorized access restricted	☒	☐	☐	
c. No unauthorized alterations	☒	☐	☐	
Notes:				

2. Upstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☐	☒	☐	Repair existing erosion and monitor and repair future erosion for erosion rill/gully depths greater than 3 inches. Backfill with suitable embankment material (preferably gravelly clay).
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	Collapse/backfill animal burrows as they occur.
d. Distortion or cracking	☒	☐	☐	
e. Upstream wave protection	☐	☐	☒	
Notes: Refer to remarks provided for specific items.				

3. Dam Crest	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	Periodically monitor for cracks and/or settlement.
Notes: Refer to remarks provided for specific items.				

4. Downstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☐	☒	☐	Repair existing erosion and monitor and repair future erosion for erosion rill/gully depths greater than 3 inches. Backfill with suitable embankment material (preferably gravelly clay). Place additional compacted fill and rock in holes or low areas along the concrete apron for the spillway overflow section of the dam (see photographs).
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	Collapse/backfill animal burrows as they occur; refill bait dispensers.
d. Distortion or cracking	☒	☐	☐	
e. Seepage control	☐	☐	☒	Normally dry dam.
Notes: Refer to remarks provided for specific items.				

5. Downstream Area	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	Monitor and abate rodents as needed.
d. Distortion or cracking	☒	☐	☐	
e. Seepage or boils	☒	☐	☐	Dry (flood control) dam.
f. Drains or Wells	☐	☐	☒	No drains or wells.
Notes:	Maintain free of excessive woody vegetation, rodents, and debris.			

6. Abutment Contacts	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion, cracks, or slides	☐	☒	☐	Repair existing erosion and monitor and repair future erosion for erosion rill/gully depths greater than 3 inches. Backfill with suitable embankment material (preferably gravelly clay).
b. Woody vegetation	☒	☐	☐	
c. Distortion or cracking	☒	☐	☐	
d. Seepage	☒	☐	☐	
e. Drains or Wells	☐	☐	☒	No drains or wells.
Notes:	Refer to remarks provided for specific items.			

7. Reservoir	Satisfactory	Needs Attention	N/A	Remarks:
a. Developed/Encroachment	☒	☐	☐	
b. Banks and slopes stable	☒	☐	☐	
c. Obstruction or debris	☒	☐	☐	
d. Sediment level	Sediment accumulation appears to be about 1 foot above the crown of the outlet conduit within the intake riser (similar to past inspection).			
e. Water level	= Dry			
Notes:	Maintain reservoir area free of weeds and other debris – potential to plug the outlet works intake structure ports; also, limited reservoir routing capacity to high sediment level, sediment removal is needed.			

8. Intake Structure	Type of Structure: Concrete tower with ports and anti-vortex baffle			Remarks:
	Satisfactory	Needs Attention	N/A	
a. Concrete condition	☐	☐	☒	
b. Reinforcement encasement	☐	☐	☒	
c. Coating adequacy	☐	☐	☒	
d. Leakage	☐	☐	☒	Reservoir was dry.
e. Trash rack condition	☒	☐	☐	
f. Inlet unobstructed	☒	☐	☐	Exposed ports are free of obstructions.
g. Gates operative	☐	☐	☒	Not gated (passive system).
h. Woody vegetation	☒	☐	☐	
i. Number of intake ports	Possibly 20	Number of ports open	16	
Notes:	Refer to remarks provided for specific items.			

9. Outlet Conduits	Type of Conduit: 8" steel (lower); 36" RCP (upper)			Estimated Discharge: None
	Interior inspection: Yes ☐ Date: No ☒			
	Satisfactory	Needs Attention	N/A	Remarks:
a. Overall Condition	☐	☐	☐	Buried conduit, not assessed; no external evidence of problems.
b. Condition of surfaces	☐	☐	☐	Buried, not assessed.
c. Reinforcement encasement	☐	☐	☐	Buried, not assessed.
d. Clear of obstructions	☐	☐	☐	May be clear, however, interior inspection is required for confirmation and overall assessment of the conduit.
e. Joint Condition	☐	☐	☐	Buried, not assessed.
f. Leakage	☐	☐	☐	Buried, not assessed.
g. Alignment	☐	☐	☐	Buried, not assessed.
Notes:	Interior inspections of both outlet conduits (8-inch and 36-inch) are required. The outfall (downstream end) of the 8-inch dia. Conduit was either buried or obscured by vegetation and not seen during this inspection (the 8-inch dia. outfall needs to be maintained as exposed). For reference, see the photographs below, the outfall is obscured in the 2022 image and exposed in the 2015 image.			



10. Outlet Energy Dissipator	Satisfactory	Needs Attention	N/A	Remarks:
a. Concrete condition	☒	☐	☐	
b. Reinforcement encasement	☐	☐	☒	
c. Joint Condition	☒	☐	☐	
d. Riprap condition	☐	☐	☒	No riprap
e. Clear of obstructions	☒	☐	☐	
f. Woody vegetation control	☒	☐	☐	

11. Outfall & Outlet Channel	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion	☒	☐	☐	Periodically monitor and mitigate as needed.
b. Obstructions or debris	☒	☐	☐	Periodically monitor and mitigate as needed.
c. Erosion protection	☐	☒	☐	Needs riprap around toe of rundown.
d. Woody vegetation control	☒	☐	☐	Periodically monitor and remove as needed.
Notes:	Refer to remarks provided for specific items.			

12. Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☒	☐	☐	
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☐	☐	☒	
g. Energy dissipation	☒	☐	☐	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	Flood Control Dam.
j. Erosion control	☒	☐	☐	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☐	☒	☐	
m. Capacity	☐	☒	☐	SDF: Per NMOSE regulations high hazard dams are required to have spillways capable of passing 100% of the runoff from the governing PMP storm event. From past NMOSE inspection reports, the spillway capacity is less than 50% of the routed 72-hr PMP event based on HMR55A. This percentage could be higher indicating more capacity if the flood discharge from the CO-NM REPS tool PMP is evaluated for reservoir routing. However, an updated H&H analysis to include the impacts of 2-hr, 6-hr, and 48-hr REPs PMPs and the AEP and precipitation distribution methodology from the MetPortal Tool would be required for verification of spillway capacity in accordance with the new NMOSE hydrologic guidance.
Notes:	Spillway capacity is judged inadequate based on lack of current hydrologic and flood routing analyses in combination with diminished reservoir routing due to partial loss of storage capacity from accumulated sediment since original construction. It is further noted that minor overtopping of the dam occurred during a summer 2020 rainfall event in the T or C and the surrounding area.			

13. Compliance – Rules and Regulations	Required	In Place	Update needed	Remarks:
a. Emergency Action Plan	☒	☐	☐	
b. Operations and Maintenance Manual	☒	☐	☐	
c. Other required documents	☐	☐	☒	Updated hydrologic and flood routing analyses and a breach report for flood maps to be used in an EAP.
d. Status of State Engineer Order		☐		No Order on dam at this time.
Notes:	The dam is out of compliance with O&M Manual and EAP requirements as per Sections 19.25.12.17 and 19.25.12.18 NMAC.			

14. Design and Construction Documentation	There is no design report, construction drawings, nor construction specifications on file with the NMOSE to support the overall design of for the dam. Items related to the overall design include, but are not limited to, comprehensive computations and analysis for hydrologic, hydraulic, and geotechnical analyses. The services of an engineer, licensed in New Mexico, with experience in the design of dams needs to be retained to prepare an assessment of the dam that addresses the items listed above. Because of the lack of design documentation, uncertainties exist as to critical analysis parameters for Marie Street Dam.
---	--

Overall Remarks: Based on a cursory review of the documentation and the field inspection, Marie Street Dam is in "Poor" condition. According to 2008 Federal Dam Safety Condition assessment terminology, Poor condition is used when:

"A dam safety deficiency is recognized for loading conditions which may realistically occur. Remedial action is necessary. A poor condition may also be used when uncertainties exists as to critical analysis parameters, which identify a potential dam safety deficiency. Further investigations and studies are necessary."

The rating of "poor" is a result of the lack of documentation for the sewer line passing through the dam, and uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE-DSB to verify the design assumptions. Otherwise, a fair rating would have been appropriate due to inadequate spillway capacity.

Required Actions by Owner:

1. As noted above, spillway capacity is judged inadequate based on lack of current hydrologic and flood routing analyses in combination with diminished reservoir routing due to partial loss of storage capacity from accumulated sediment since original construction. It is further noted that minor overtopping of the dam occurred during a summer 2020 rainfall event in the T or C and the surrounding area. Updated hydrologic and flood routing analyses and a breach report are needed for the preparation of flood maps to be used in an EAP.

2. Continue periodic woody vegetation removal. The dam is for the most part free of woody vegetation. Vegetation removal includes removal of rootballs and stumps in accordance with the New Mexico Office of the State Engineer (NMOSE) Dam Safety Bureau updated "*Vegetation Management on Dams*" which is available from the NMOSE website at: [Dam Safety Bureau \(state.nm.us\)](http://Dam%20Safety%20Bureau%20(state.nm.us))
3. Continue proactive rodent abatement measures. Rodent burrows need to be collapsed, backfilled with suitable embankment material, and compacted after rodent eradication has occurred from a specific burrow or colony of burrows.
4. Continue to maintain the area around the outlet works intake tower free of all vegetation and debris. All vegetation and debris within a 200 foot radius of the outlet tower is recommended to lessen the potential for clogging of the intake tower.
5. Make arrangements to have an overall inspection of the outlet works' conduits performed by a qualified contractor or professional civil engineer licensed in New Mexico with experience in dam engineering; this includes an interior inspections of the outlet works conduits. Once completed, provide the inspection documentation to the NMOSE-DSB. This item is reiterated from past NMOSE dam inspections.
6. The dam is classified as high hazard potential, therefore, an Operation and Maintenance (O&M) Manual is required per Subsections E of 19.25.12.21 of the New Mexico Administrative Code (NMAC). The Owner is referred to the NMOSE website for information on preparing an O&M Manual. Changes to NMOSE rules and regulations allow an owner to prepare the O&M Manual without the involvement of a professional engineer if the owner can submit a manual that meets the requirements of 19.25.12.17 NMAC.
7. The dam is classified as high hazard potential, therefore, an Emergency Action Plan (EAP) is required per Subsection F of 19.25.12.21 NMAC. There is no EAP on file with the NMOSE for this dam. The owner is referred to the NMOSE website for information on preparing an EAP and for a copy of the EAP template. Engineering elements of the EAP must be prepared by a professional engineer licensed in New Mexico with experience in dam breach analysis, flood routing, and failure mechanisms for dams. The owner can prepare the non-engineering elements of the EAP if the owner can meet the requirements of 19.25.12.18 NMAC.
8. Summary tables from the 2018 CO-NM REPs PMP tool and the updated MetPortal tool for Watershed Precipitation Frequency are shown below and also contain HMR 55A precipitation values for comparison. Based on a comparison of the rainfall intensities and the relatively small watershed size, information from the tables suggest that the 2-hr Intraduration PMP event from CO-NM REPs PMP tool may be the governing rainfall event based on updated NMOSE hydrologic guidelines . From the tables it is observed that the average rainfall intensities for both the 2-hr Interduration PMP and 6-hr PMP events from the REPs tool exceed the average intensities for the 10^{-6} AEP for the 2-hr LS and 6-hr MEC events from the MetPortal tool. Thus, given that the MetPortal rainfall distributions are used for the REPs tool and the MetPortal rainfall, the flood discharge corresponding to the governing intraduration precipitation from REPs would likely be used as the inflow design flood for the dam. Hydrologic and reservoir routing analyses of the REPs 2-hr and 6-hr events would be necessary to confirm which event is the governing event.

Marie Street Dam (Drainage Area ~0.83 sq. mi)

CO-NM Reps PMP Tool (Inches)										HMR 55A (Inches)	
OBJECTID *	Storm Type	PMP_01	PMP_06	PMP_12	PMP_24	PMP_48	PMP_72			6-hr Local	72-hr Gen.
1	General	2.7	6.46	8.8	10.26	13.06	13.36				23.1
OBJECTID *	Storm Type	PMP_01	PMP_02	PMP_03	PMP_04	PMP_05	PMP_06	PMP_12	PMP_24		
1	Local	7.7	9.7	11.5	12.04	12.04	12.04	12.5	12.64	15.93	
OBJECTID *	Storm Type	PMP_01	PMP_06	PMP_12	PMP_24	PMP_48	PMP_72				
1	Tropical	2.1	5.6	7.8	10	12.3	12.3				23.1

Local Storm: * 2-hr Intraduration PMP average intensity ~ 4.85 in./hr

** 6-hr PMP average intensity ~ 2.01 in./hr

MetPortal Watershed Precipitation Frequency, inches (ARF = 1) (24 and 72 hr durations not for design use)					
AEP	2 hr LS	6 hr MEC	24 hr MLC/TSR *	48 hr MLC/TSR	72 hr MLC/TSR *
10 ⁻²	2.46	2.61	3.16	3.88	4.21
10 ⁻³	3.44	3.61	4.87	5.97	6.48
10 ⁻⁴	4.52	4.69	7.01	8.60	9.33
10 ⁻⁵	5.68	5.87	9.69	11.89	12.92
10 ⁻⁶	6.95	7.15	13.07	16.03	17.41
10 ⁻⁷	8.33	8.55	17.31	21.24	23.07

Local Storm using 10⁻⁶ AEP:

2-hr LS average intensity ~ 3.48 in/hr; 6-hr LS average intensity ~ 1.19 in/hr

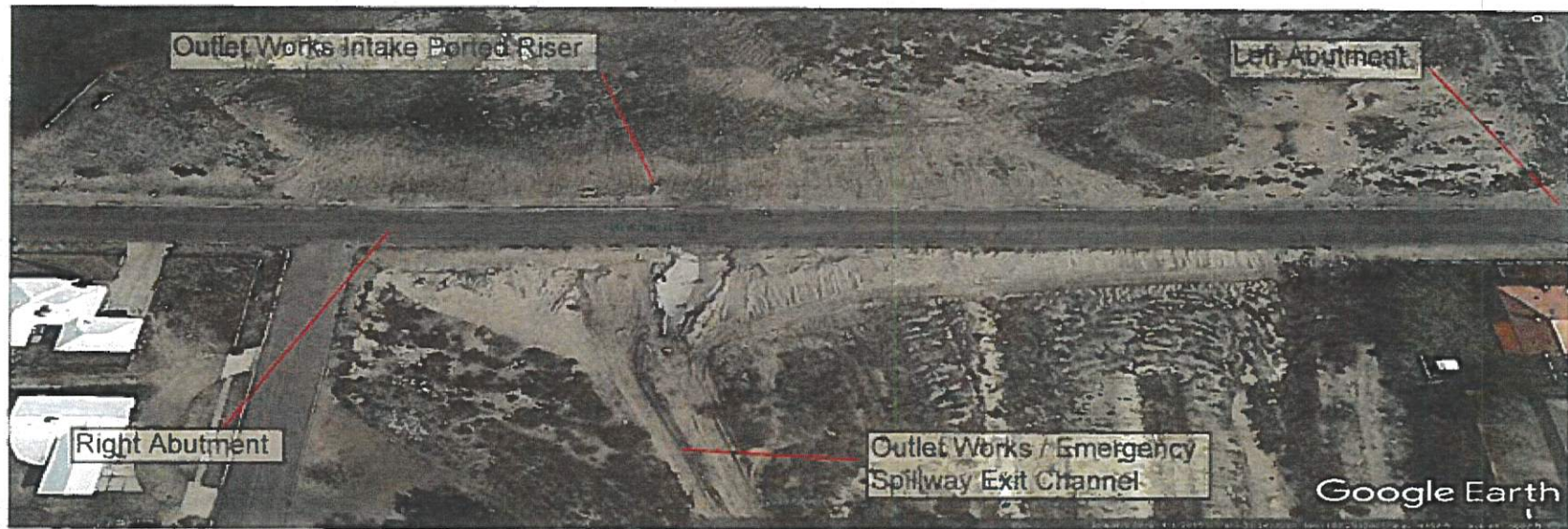
Date: 2/21/2022

Signature: **Disclaimer**

Professional judgments and evaluations are represented in this document. These judgments are based partly on information gathered from visual observations and a limited review of the NMOSE Dam Safety Bureau files for the facility. The NMOSE does not guarantee the performance of this dam in any way and does not assume responsibility for safe operation of this dam. The sole responsibility for safe operation of this dam rests with the owner, operators and sponsors. The NMOSE only provides that the work and judgments rendered were performed in a manner consistent with the level of care and skill ordinarily exercised by other engineers under similar circumstances. No other warrantee or guarantee is included or intended.



1.



2.

Images 1 and 2: Slightly distorted aerial views of the dam courtesy of Google Earth imagery (circa 2015) with features of the dam as indicated.



3. **Image 3:** Google Earth areal overview of the dam with drainage area from USGS Stream Stats as indicated. The drainage area for the dam as per Stream Stats is on the order 0.83 square mile.



4.

Image 4: Westerly view along the dam crest and downstream slope.



5.



6.

Images 5 and 6: Westerly and easterly views, respectively, of the downstream slope of the dam.



7.

Image 7: Easterly view of the upstream slope as seen from the vicinity of the right abutment with the location of the lower level outlet works intake as indicated.

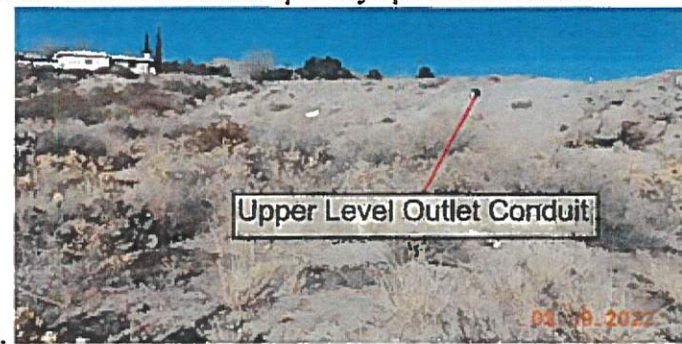


8.

Image 8: Northerly view of the downstream slope with areas of erosion and spillway apron as indicated.

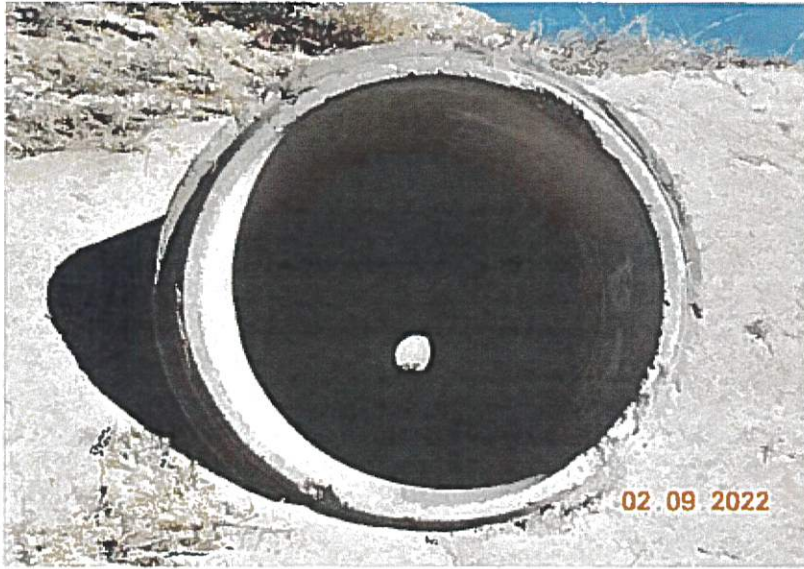


9.



10.

Images 9 and 10: Northerly views of the downstream slope at the right abutment with the location of the upper level outlet conduit as indicated.



11.



12.

Images 11 and 12: Upstream and downstream views of the upper level outlet conduit beneath Marie Street (aka the dam crest).

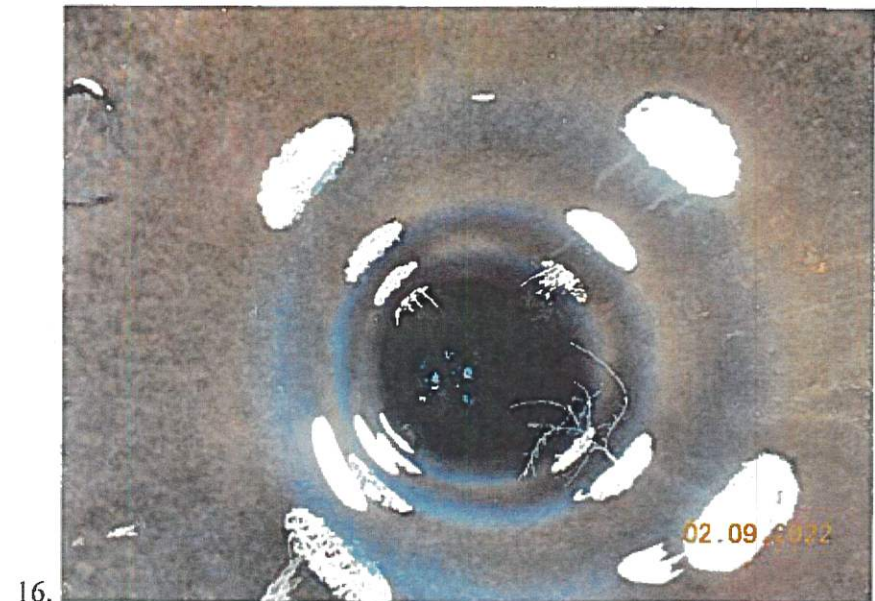


13.



14.

Images 13 and 14: Upstream views of the lower level outlet outfall in 2022 and 2015, respectively. The outfall is currently obscured and needs to be maintained in an exposed condition.



Images 15 and 16: Distant northerly view of the outlet works intake riser (Image 15) and interior view of the riser (Image 16).

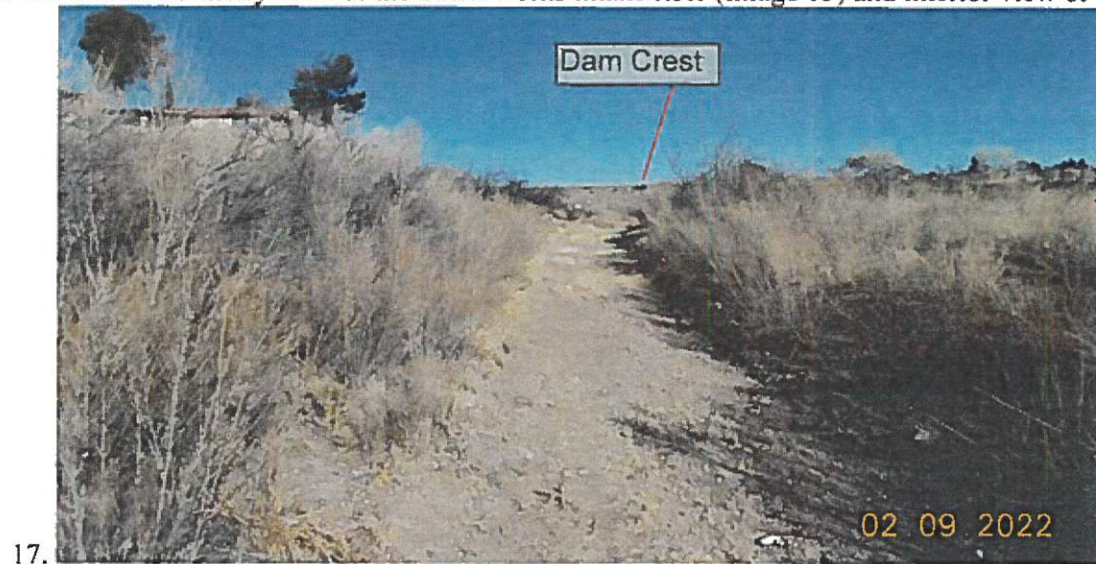


Image 17: Northerly (upstream) view of the combination outlet works / spillway exit channel with the dam crest as indicated.



18.



19.

Images 18 and 19: Northwesterly view of the spillway apron on the downstream slope of the dam (Image 18) and erosion along the east side of the apron (Image 19). The flood discharge that occurred as a result of heavy rains in July 2020 overtopped the dam at the spillway and eroded the east side of the spillway apron. This area was apparently backfilled to some degree, but additional erosion or not enough backfill was placed to fill the eroded area that occurred in July 2020.



20.

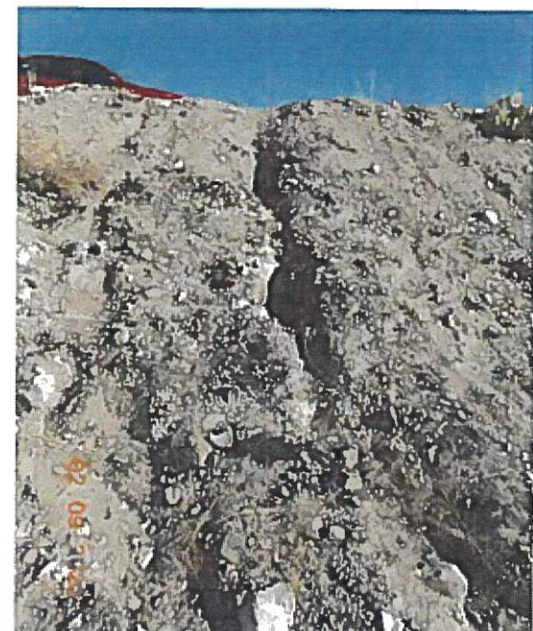
Image 20: Overview of the overflow spillway (across Marie Street) with spillway apron as indicated.



21.



22.

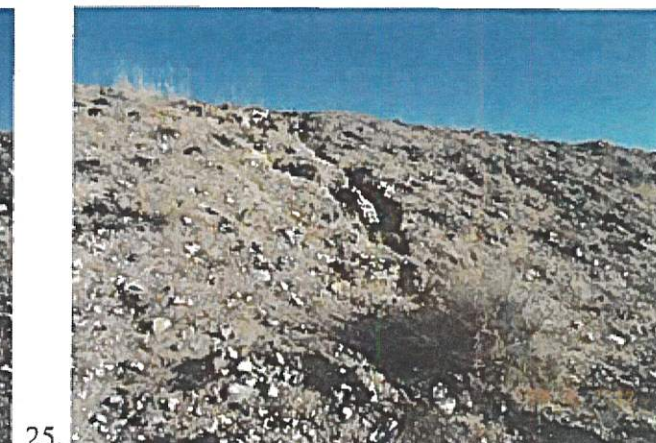


23.

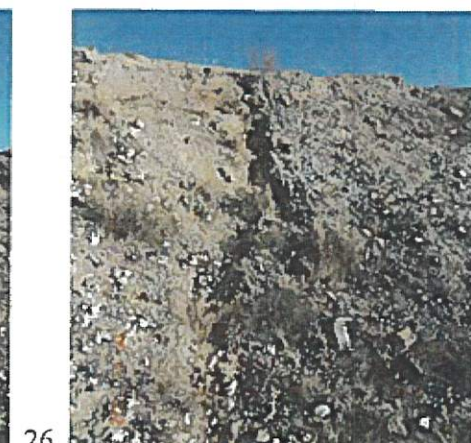
Images 21 through 23: Erosion gullies in need of repair on the upstream slope (Images 21 and 22) and more of the same on the downstream slope (Image 23).



24.

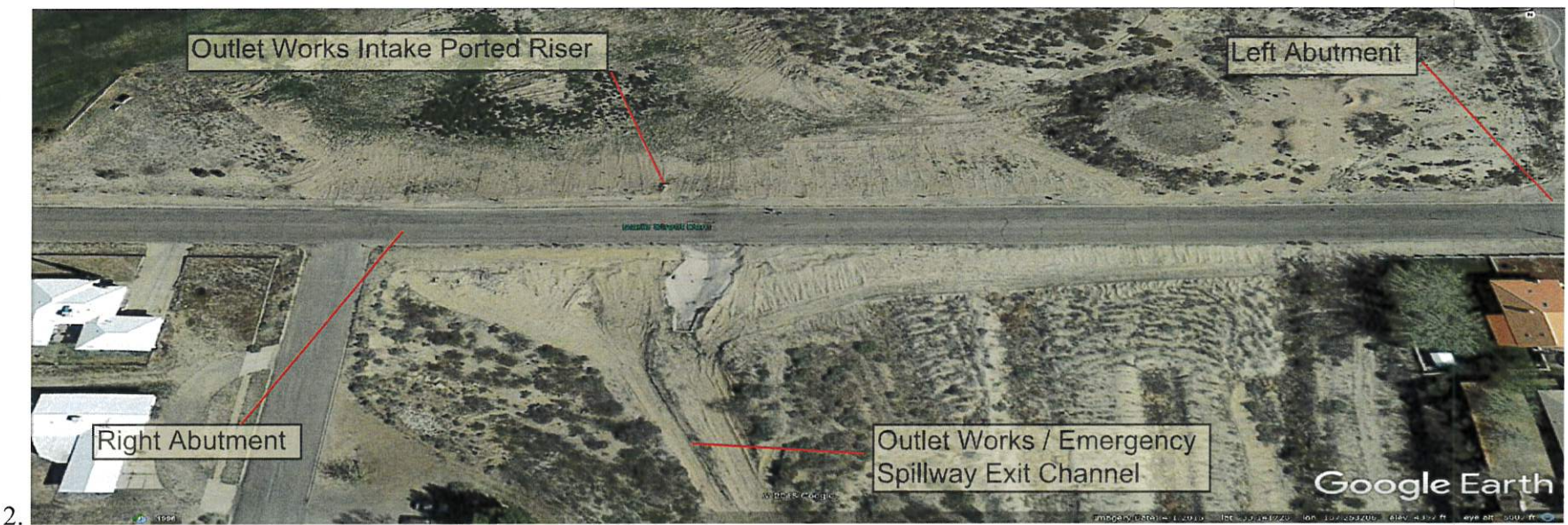


25.



26.

Images 24 through 26: Additional views of erosion on the downstream slope. A gravel/cobble mulch placed on the embankment slopes and abutment contacts at the upstream and downstream groins of the dam would serve well towards diminishing erosion.



Images 1 and 2: Slightly distorted aerial views of the dam courtesy of Google Earth imagery (circa 2015) with features of the dam as indicated.



3. **Image 3:** Google Earth areal overview of the dam with drainage area from USGS Stream Stats as indicated. The drainage area for the dam as per Stream Stats is on the order 0.83 square mile.



4.

Image 4: Westerly view along the dam crest and downstream slope.



5.



6.

Images 5 and 6: Westerly and easterly views, respectively, of the downstream slope of the dam.



7.

Image 7: Easterly view of the upstream slope as seen from the vicinity of the right abutment with the location of the lower level outlet works intake as indicated.

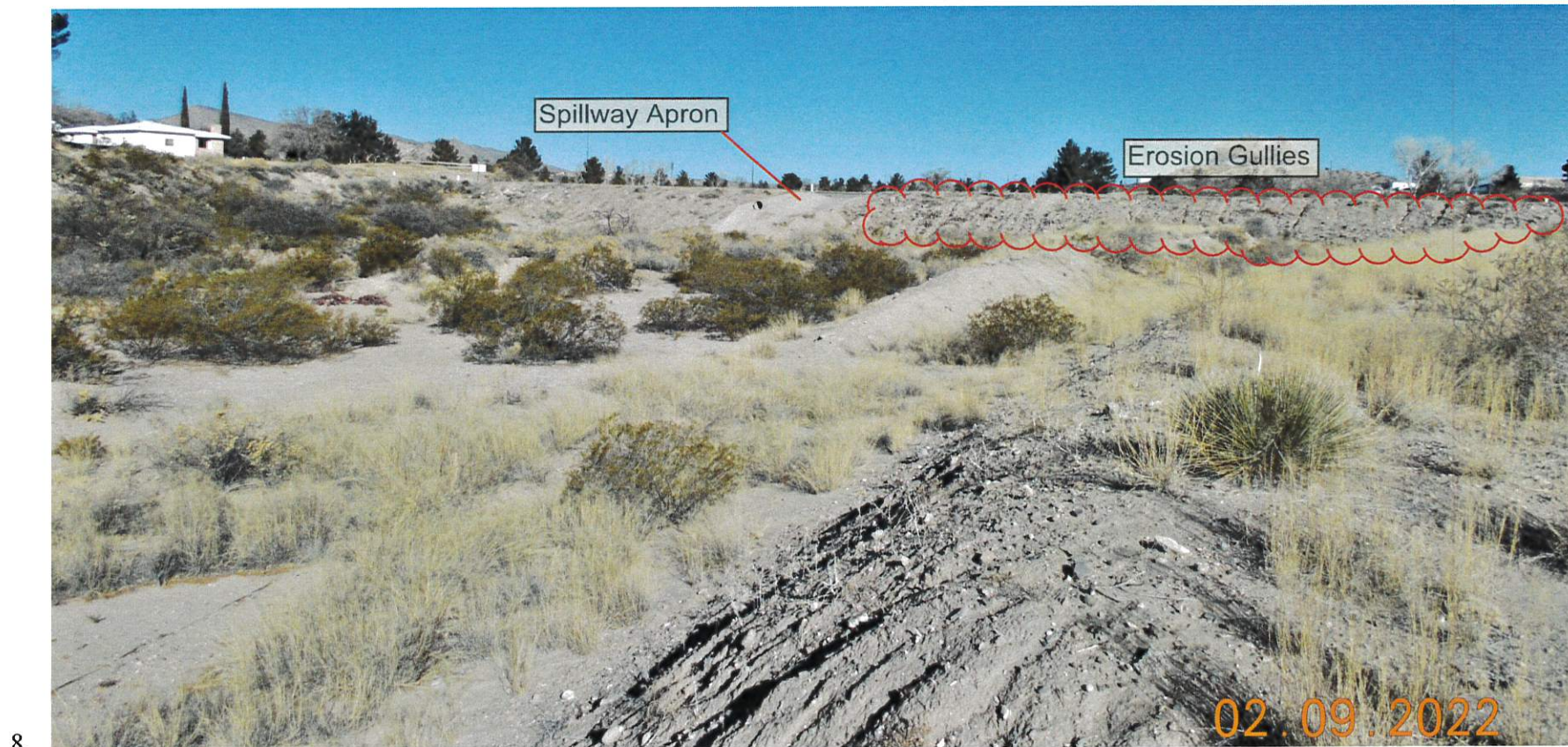
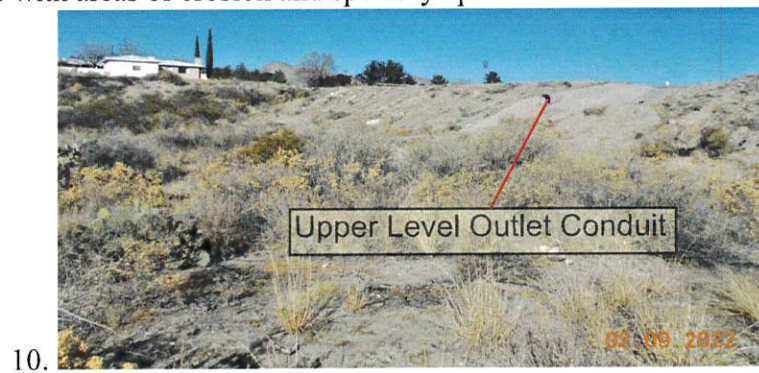


Image 8: Northerly view of the downstream slope with areas of erosion and spillway apron as indicated.



Images 9 and 10: Northerly views of the downstream slope at the right abutment with the location of the upper level outlet conduit as indicated.



11.



12.

Images 11 and 12: Upstream and downstream views of the upper level outlet conduit beneath Marie Street (aka the dam crest).

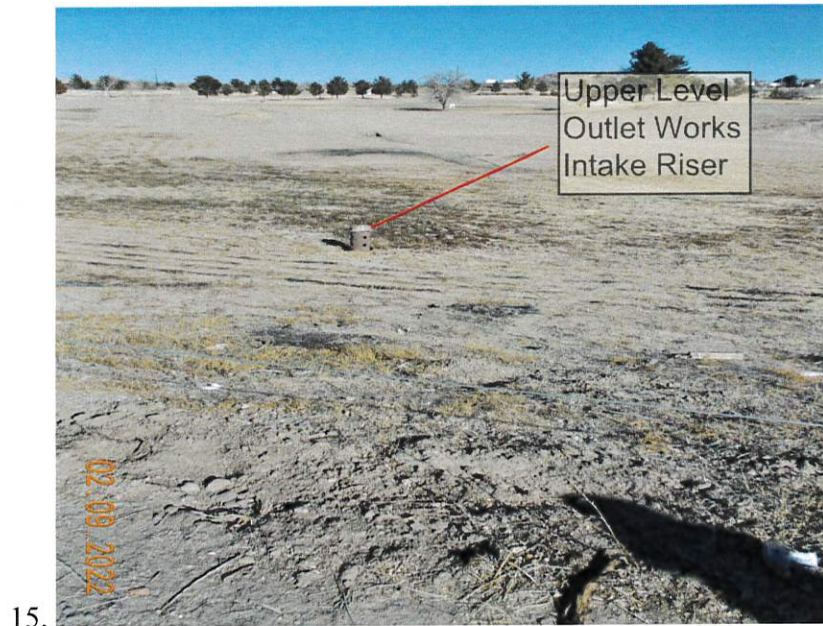


13.



14.

Images 13 and 14: Upstream views of the lower level outlet outfall in 2022 and 2015, respectively. The outfall is currently obscured and needs to be maintained in an exposed condition.



Images 15 and 16: Distant northerly view of the outlet works intake riser (Image 15) and interior view of the riser (Image 16).

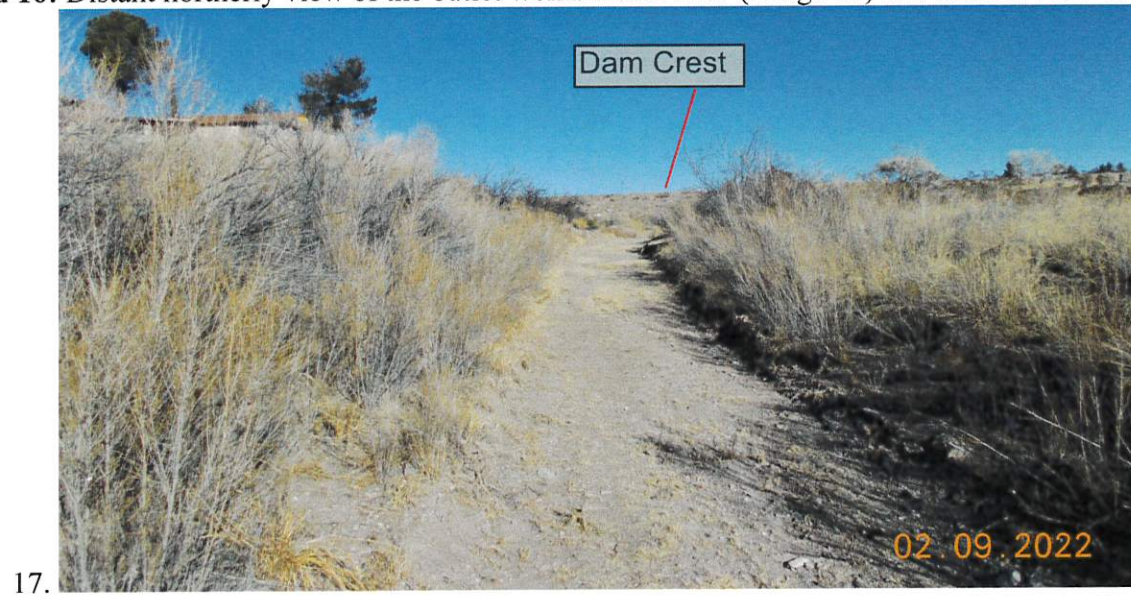
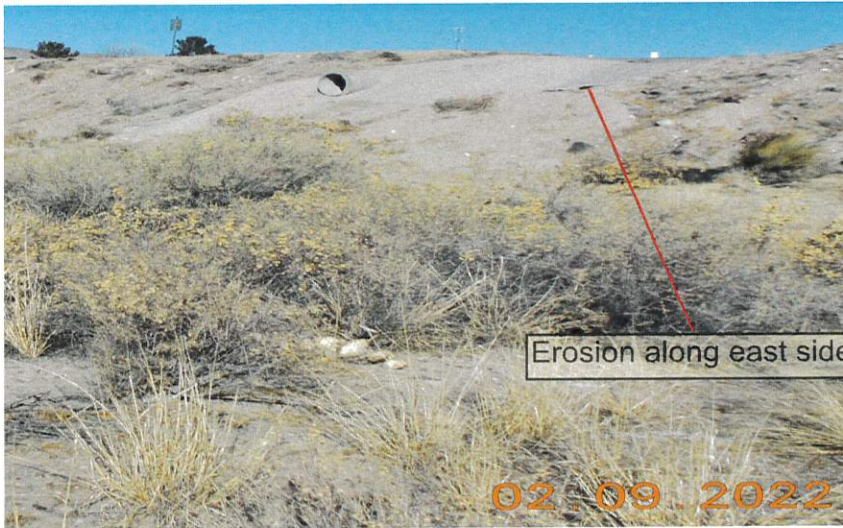


Image 17: Northerly (upstream) view of the combination outlet works / spillway exit channel with the dam crest as indicated.



18.

19.

Images 18 and 19: Northwesterly view of the spillway apron on the downstream slope of the dam (Image 18) and erosion along the east side of the apron (Image 19). The flood discharge that occurred as a result of heavy rains in July 2020 overtopped the dam at the spillway and eroded the east side of the spillway apron. This area was apparently backfilled to some degree, but additional erosion or not enough backfill was placed to fill the eroded area that occurred in July 2020.



20.

Image 20: Overview of the overflow spillway (across Marie Street) with spillway apron as indicated.

JOHN R. D'ANTONIO, Jr., P.E.
STATE ENGINEER



DAM SAFETY BUREAU
CONCHA ORTIZ Y PINO BLDG
P.O. BOX 25102
SANTA FE, NEW MEXICO 87504
(505) 827-6122
(505) 476-0220 FAX
NM.DamSafety@state.nm.us

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe**

April 8th, 2019

Mr. Juan Fuentes, City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Inspections of Cuchillo-Negro Dam, OSE File No. D-541
St. Anne's Dam, OSE File No. D-581, and
Marie Street Dam, OSE File No. D-582
Sierra County**

On March 18, 2019, Mr. James Head, P.E., of the Office of the State Engineer (OSE) staff inspected Cuchillo-Negro, St. Anne's, and Marie Street Dams. Copies of Mr. Head's inspection memoranda and inspection checklists are enclosed for your information. A copy of the OSE Guidelines for Vegetation Management on Dams will be sent to you via email for your information and use. I concur with the required actions contained in the inspection memoranda.

Cuchillo-Negro Dam has been assessed in satisfactory condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 1 and 2 of the review memorandum.

St. Anne's Dam has been assessed as being in poor condition due to uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE to verify the design assumptions. Otherwise, a fair rating would have been appropriate due to the erosion gullies that are present on the left downstream groin of the dam, the diminished crest width of the dam created by the grading (back-dragging) of the slopes, the apparent lack of spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit.

Marie Street Dam has been assessed as being in poor condition as a result of the lack of design documentation for the sewer line passing through the dam, and uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE-DSB to verify the design assumptions. Otherwise a fair rating would have been appropriate due to inadequate spillway capacity.

Mr. Juan Fuentes
City of T or C Dams

April 8th, 2019
Page 2 of 2

The Operations and Maintenance (O&M) Manual on file for Cuchillo-Negro Dam has not been approved by the OSE-DSB, is outdated, and does not meet the requirements of Section 19.25.12.17 NMAC. There are no O&M Manuals on file for St. Anne's and Marie Street Dams. The New Mexico Watershed and Dam Owners Coalition has developed a template for O&M Manual preparation that could be useful. The template can be found on their website at: www.nmwsc.org. There are no Emergency Action Plans (EAP) on file with the OSE-DSB for these three dams. Subsections E and F of 19.25.12.21 NMAC require dams classified as High Hazard Potential such as these to have an approved O&M Manual and EAP in place. Please be advised of the potential for added owner liability if a dam were to experience an incident while out of compliance with the OSE Dam Safety Bureau's rules and regulations for dams.

If further discussion would be helpful, please contact James Head at (505) 383-4138 or via email at james.head@state.nm.us or me at (505) 383-4134.

Sincerely,



Charles N. Thompson, P.E., Chief
Dam Safety Bureau

CNT/jdh

Enclosure

Email: Benny Fuentes, City of Truth or Consequences (bfuentes@torcnm.org)
Paul Tooley, Sierra County Emergency Manager (ptoolley@sierraco.org)

MEMORANDUM
OFFICE OF THE STATE ENGINEER
Dam Safety Bureau

DATE: March 28, 2019
TO: Charles N. Thompson, P.E., Chief, Dam Safety Bureau *CT*
FROM: James D. Head, P.E., Dam Safety Engineer
SUBJECT: Inspection of Marie Street Dam, Sierra County, OSE No. D-582

On March 18, 2019, I inspected St. Anne's Dam. Observations made during the inspection are shown on the attached Inspection Checklist. Required actions for the dam owner are listed below.

Required Actions

Actions are listed in the order of importance.

1. Remove accumulated sediment at the intake riser to the low-level outlet conduit without encroaching into the upstream slope and toe of the dam. Excavation must not occur more than 6 inches below the lowest row of ports on the intake riser.
2. Address woody vegetation. In the past the upstream and downstream slopes had been back-dragged to remove the woody vegetation. This is not the preferred method of vegetation management as it indiscriminately destroys all vegetation on the slope, including the beneficial grass and small shrubs. In addition, it does not remove the rootballs so certain species, such as mesquite and creosote simply grow back. Woody vegetation needs to be removed per the OSE-DSB guidelines document *Vegetation Management on Dams*. Removal of woody vegetation includes maintaining a minimum 15-foot clear zone around the low-level outlet ported riser and the outlet conduit outfall located between the right downstream groin of the dam and the spillway apron near the west end of the dam.
3. Rodent burrows were observed on the upstream and downstream slopes of the dam. All rodent burrows need to be collapsed and backfilled with appropriate embankment material. Continuous or regularly scheduled rodent abatement measures need to be implemented.
4. Address all erosion, preferably by backfilling and compacting with a gravel much or suitable embankment fill material.
5. Erosion rills are forming at the toe of the rundown structure. Riprap needs be placed on the downstream slope from the toe of the rundown to the invert of the downstream channel to prevent further erosion of the embankment material. This is a repeated requirement from prior OSE-DSB inspections that has not been addressed.
6. Make arrangements to have interior inspections of the 36-inch diameter (upper level) and 8-inch diameter (lower level) outlet works conduits performed. Also provide the OSE with a schedule for completion of the interior inspections and contract with a professional civil engineer licensed in New Mexico, or a qualified contractor, to assess the condition of the outlet works. Provide the OSE Dam Safety Bureau with a properly formatted

inspection report that fully documents observations and recommendations made as a result of the inspection. The report must include either video footage or photographs documenting observations and conclusions reached as a result of the inspection. Narrative to the video footage and/or pertinent annotations to photographs must be included as part of the outlet conduit inspection report. Please send the OSE-DSB the qualifications of the contractor selected for the inspection and preparation of the report prior to performing the work. This is a repeated item dating back to the 2011 OSE-DSB inspection that has not been addressed.

7. Obtain the services of a professional engineer, licensed in New Mexico with experience in the design of dams to prepare an assessment of the dam to complete the record of missing critical analysis parameters. The missing critical data resulted in the dam being classified in poor condition in accordance with the National Inventory of Dams definitions. Missing critical data for Marie Street Dam primarily includes lack of an overall design report documenting hydrologic, hydraulic, and geotechnical analyses, and lack of construction record drawings filed with the OSE Dam Safety Bureau. This is a repeated requirement from prior OSE-DSB inspections that has not been addressed.
8. Provide As-built plans for the sewer line bored through the left side of the dam the OSE-DSB. The sewer line constitutes an unauthorized modification to the dam that was not reviewed and approved by the OSE-DSB prior to being implemented. A request for the plans has been made in every inspection report dating back to 2006.
9. Prepare and submit for review an Operation and Maintenance (O&M) Manual and an Emergency Action Plan (EAP) per Subsections E and F of 19.25.12.21 NMAC. There is no O&M Manual or EAP on file with the OSE for this dam. This is a repeated requirement from prior OSE-DSB inspections that has not been addressed.
10. Prepare and submit a Hydrologic and Hydraulic (H&H) analysis to evaluate the spillway capacity. The results of the H&H analysis can be used to support a Dam Breach and Flood Routing Analysis for the EAP. This is a repeated requirement from prior OSE-DSB inspections that has not been addressed.

Information from the OSE-DSB and the Federal Emergency Management Agency to assist dam owners on woody vegetation removal; impacts of animals on earthen dams; planning an O&M program; preparing an O&M Manual; preparing an EAP; and a model EAP are available on the OSE-DSB website at: <http://www.ose.state.nm.us/DS/dsIndex.php>

Compliance with Rules and Regulations

Operation and Maintenance Manual and Emergency Action Plan

There is currently no Operation and Maintenance Manual (O&M) nor Emergency Action Plan (EAP) on file with the OSE Dam Safety Bureau for this structure. Section 19.25.12.21 NMAC establishes O&M and EAP requirements for existing dams. Subsections E and F of 19.25.12.21 require dams classified as High Hazard Potential such as this to have an approved O&M Manual and EAP. The owner was advised of this requirement in every OSE inspection report since

2005. A copy of the OSE rules and regulations for dams (19.25.12 NMAC) can be downloaded from the OSE website at: <http://www.ose.state.nm.us/DS/dsRegs.php>

Spillway Capacity

The OSE rules and regulations require high hazard dams such as this to have spillways capable of passing 100% of the PMF resulting from the governing Probable Maximum Precipitation (PMP) storm event. A cursory level estimate of spillway capacity is documented in the 2006 OSE dam safety inspection memorandum. From the analysis, it was concluded that even when the dam's storage capacity is taken into account, the emergency spillway would likely be less than 50% of the flood discharge corresponding to the governing PMP event. A hydrologic and flood routing analysis is required and can be provided by the owner's designated engineer as part of the preparation of the forthcoming Emergency Action Plan for this dam.

Design and Construction Documentation

There is no design report, construction drawings, nor construction specifications on file with the OSE to support the overall design of for the dam. Items related to the overall design include, but are not limited to, comprehensive computations and analysis for hydrologic, hydraulic, and geotechnical analyses. The services of an engineer, licensed in New Mexico, with experience in the design of dams needs to be retained to prepare an assessment of the dam that addresses the items listed above. Because of the lack of design documentation, uncertainties exist as to critical analysis parameters for Marie Street Dam.

Inspection Findings

Overall Dam Condition

Based on a cursory review of the documentation and the field inspection, Marie Street Dam is in "Poor" condition. According to 2008 Federal Dam Safety Condition assessment terminology, Poor condition is used when:

"A dam safety deficiency is recognized for loading conditions which may realistically occur. Remedial action is necessary. A poor condition may also be used when uncertainties exists as to critical analysis parameters, which identify a potential dam safety deficiency. Further investigations and studies are necessary."

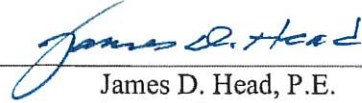
The rating of "poor" is a result of the lack of documented for the sewer line passing through the dam, and uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE-DSB to verify the design assumptions. Otherwise a fair rating would have been appropriate due to inadequate spillway capacity.

Hazard Potential Classification

The hazard potential classification for Marie Street Dam is high. The classification is appropriate.

Outlet Works

There is no indication from a review of the records that interior inspections of the outlet works conduits have been performed.



James D. Head, P.E.
Dam Safety Bureau

jdh

Professional judgments and evaluations are represented in this memorandum. They are based partly on information gathered from visual observations and a limited review of the OSE Dam Safety Bureau files for the facility. The OSE does not guarantee the performance of this dam in any way. The OSE only provides that the work and judgments rendered were performed in a manner consistent with the level of care and skill ordinarily exercised by other engineers under similar circumstances. No other warrantee or guarantee is included or intended.

**New Mexico Office of the State Engineer
Dam Safety Bureau
Inspection Checklist**

County: Sierra	Dam Name: Marie Street Dam	OSE No.: D-582	Fed ID No.: NM00585
Inspection Performed By: James Head, P.E.		Inspection Date: 03-18-2019	Last Inspection Date: 03-04-2015
Owner Name: City of Truth or Consequences	Owner Address: 505 Sims Street Truth or Consequences, NM 87901	Owner Contact: Juan Fuentes Owner Phone No.: 575-894-6673 Insp.: Benny Fuentes - 575-740-2613	
Purpose of Dam: Flood Control	Hazard Class: High	Hazard Class Appropriate: Yes ☒ No ☐	
Dam Location: West of Intersection of Marie Ave. and N Pershing St.		Latitude: 33.14181	Longitude: -107.25344
Weather: Clear, calm, 50 Degs F.		Attendees: Benny Fuentes, City of T or C	

1. General Conditions	Satisfactory	Needs Attention	N/A	Remarks:
a. Access for O & M	☒	☐	☐	
b. Unauthorized access restricted	☒	☐	☐	Crest is a public road (Marie Street), access is unrestricted
c. No unauthorized alterations	☒	☐	☐	Need as-built plans for sewer line through left side of dam

2. Upstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Remove woody vegetation in accordance with OSE-DSB guidelines document.
c. Rodent control	☐	☒	☐	Monitor and routinely abate rodents.
d. Distortion or cracking	☒	☐	☐	
e. Upstream wave protection	☐	☐	☒	

3. Dam Crest	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	

4. Downstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☐	☒	☐	Backfill and compact erosion rills and gullies with gravel mulch or suitable earthen material.
b. Woody vegetation control	☒	☐	☐	See 2.b.
c. Rodent control	☐	☒	☐	Collapse and backfill and compact rodent burrows, implement rodent abatement measures.
d. Distortion or cracking	☒	☐	☐	
e. Seepage control	☐	☐	☒	

5. Downstream Area	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	See 2.b.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage or boils	☒	☐	☐	
f. Drains or Wells	☐	☐	☒	Est. gpm

Dam Name: Marie Street Dam

Inspection Date: 03-18-2019

File No. D-582

6. Abutment Contacts	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion, cracks, or slides	☐	☒	☐	Monitor and repair as needed. See 4.a.
b. Woody vegetation	☐	☒	☐	Remove woody vegetation in accordance with OSE-DSB guidelines documents.
c. Distortion or cracking	☒	☐	☐	
d. Seepage	☒	☐	☐	
e. Drains or Wells	☐	☐	☒	Est. gpm

7. Reservoir	Satisfactory	Needs Attention	N/A	Remarks:
a. Developed/Encroachment	☒	☐	☐	
b. Banks and slopes stable	☒	☐	☐	
c. Obstruction or debris	☐	☒	☐	
d. Sediment level	= sediment accumulation appears to be about 1 foot above the crown of the outlet conduit within the intake riser.			
e. Water level	= dry			

8. Intake Structure	Type of Structure: Ported metal riser			Remarks:
	Satisfactory	Needs Attention	N/A	
a. Concrete condition	☐	☐	☒	
b. Reinforcement encasement	☐	☐	☒	
c. Coating adequacy	☐	☐	☒	
d. Leakage	☐	☐	☒	No water present
e. Trash rack condition	☒	☐	☐	
f. Inlet unobstructed	☒	☐	☐	
g. Gates operative	☐	☐	☒	Not gated
h. Woody vegetation	☒	☐	☐	
Number of intake ports	Possibly 20	Number of ports open	16	

9. Gates & Valves	Satisfactory	Needs Attention	N/A	Remarks:
a. Gates Operative	☐	☐	☒	Not gated
b. Gate Condition	☐	☐	☒	
c. Leakage	☐	☐	☒	
d. Access control	☐	☐	☒	

10. Outlet Conduits	Type of Conduit: 8" steel (lower); 36" RCP (upper)			Estimated Discharge: 0
	Interior inspection: Yes ☐ Date No ☒			
	Satisfactory	Needs Attention	N/A	Remarks:
a. Overall Condition	☐	☐	☒	Buried, not viewable
b. Condition of surfaces	☐	☐	☒	Buried, not viewable
c. Reinforcement encasement	☐	☐	☒	Buried, not viewable
d. Clear of obstructions	☐	☐	☒	Buried, not viewable
e. Joint Condition	☐	☐	☒	Buried, not viewable
f. Leakage	☐	☐	☒	Buried, not viewable
g. Alignment	☐	☐	☒	Buried, not viewable

11. Outlet Energy Dissipator	Satisfactory	Needs Attention	N/A	Remarks:
a. Concrete condition	☒	☐	☐	
b. Reinforcement encasement	☐	☐	☒	
c. Joint Condition	☒	☐	☐	
d. Riprap condition	☐	☐	☒	No riprap
e. Clear of obstructions	☒	☐	☐	
f. Woody vegetation control	☒	☐	☐	

Dam Name: Marie Street Dam

Inspection Date: 03-18-2019

File No. D-582

12. Outfall & Outlet Channel	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion	☒	☐	☐	Fill rills forming at toe of rundown
b. Obstructions or debris	☒	☐	☐	
c. Erosion protection	☐	☒	☐	Needs riprap around toe of rundown
d. Woody vegetation control	☐	☒	☐	Dense woody vegetation at the low level outlet outfall.

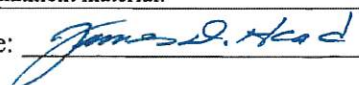
13. Primary Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☒	☐	☐	
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☐	☐	☒	Roadway
g. Energy dissipation	☒	☐	☐	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	
j. Erosion control	☒	☐	☐	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☒	☐	☐	
m. Capacity	☐	☒	☐	SDF: Per OSE regulations high hazard dams are required to have spillways capable of passing 100% of the runoff from the governing PMP storm event. Per the 2006 inspection report, the spillway capacity is less than 50% of the routed 72-hr PMP event based on HMR55A.

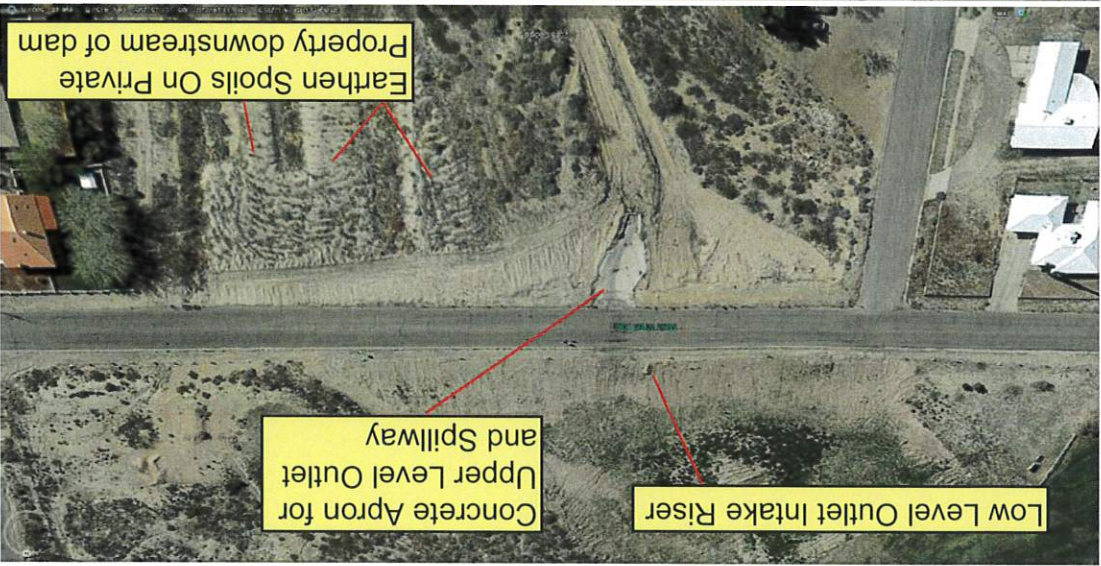
14. Instrumentation	Satisfactory	Needs Attention	N/A	Remarks:
a. Structure instrumented	☐	☐	☒	Structure not instrumented
b. Monitoring performed	☐	☐	☒	
c. Piezometers	☐	☐	☒	
d. Settlement monuments	☐	☐	☒	
e. Other	☐	☐	☒	

Overall Remarks:

1. Remove accumulated sediment at the intake riser to the low-level outlet conduit without encroaching into the upstream slope and toe of the dam. Excavation must not occur more than 6 inches below the lowest row of ports on the intake riser.
2. Address woody vegetation. In the past the upstream and downstream slopes had been back-dragged to remove the woody vegetation. This is not the preferred method of vegetation management as it indiscriminately destroys all vegetation on the slope, including the beneficial grass. In addition, backdragging does not remove the rootballs so certain species, such as mesquite simply grow back. Woody vegetation needs to be removed per OSE-DSB guidelines document *Vegetation Management on Dams*.
3. Rodent burrows were observed on the downstream slope. All rodent burrows need to be collapsed and backfilled with appropriate embankment material. Continuous or regularly scheduled rodent abatement measures need to be implemented.
4. Address all erosion, preferably by backfilling and compacting with a gravel much or suitable embankment fill material.
5. Erosion rills are forming at the toe of the rundown structure. Riprap needs be placed on the downstream slope from the toe of the rundown to the invert of the downstream channel to prevent further erosion of the embankment material.

Date: 03-25-2019

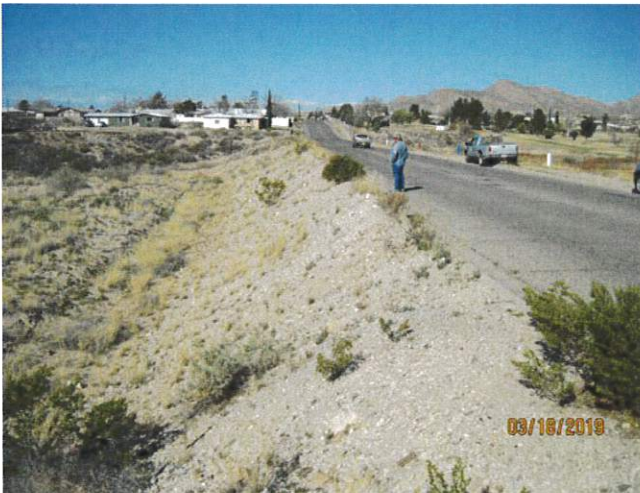
Signature: 



Images 1 through 3: Aerial views of the dam courtesy of GoogleEarth (circa 2015).



4.



5.



6.

Images 4 through 6: Westerly view along the dam crest / Marie Street and the downstream slope (Images 4 and 5), and easterly view of the downstream slope (Image 6).



Images 7 and 8: Easterly and westerly views, respectively, of the upstream slope.



Images 9 and 10: Northerly (upstream) views of erosion on the downstream slope.



Images 11 and 12: Typical views of rodent burrows on the downstream slope.



13.



14.

Images 13 and 14: Southerly views of erosion typical to the upstream slope and the area downstream of the dam, respectively.



14.



15.

Images 14 and 15: Southerly (downstream) and northerly (upstream) views of the 36-inch diameter upper level outlet conduit.



16.

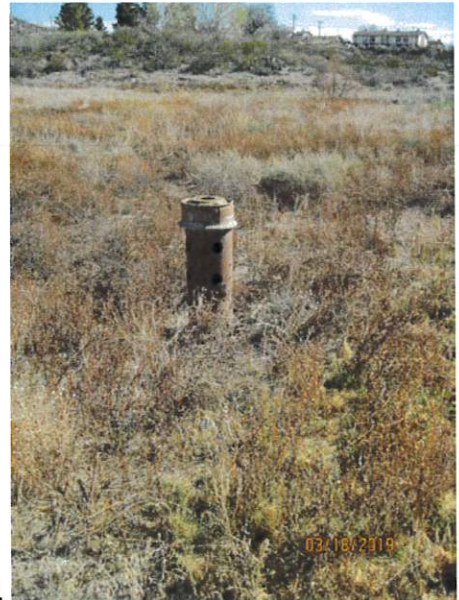


17.

Images 16 and 17: Views of the 8-inch diameter lower level outlet conduit outfall and interior view of the same outlet conduit, respectively.



18.

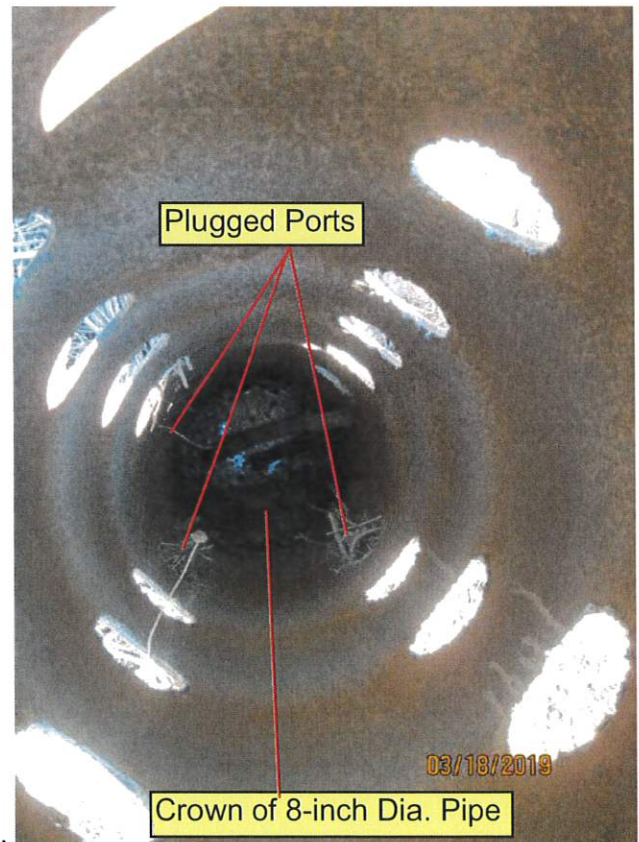


19.

Images 18 and 19: Vegetation immediately downstream of the lower level outlet conduit (Image 18) and easterly view of the outlet works metal riser located in the vicinity of the upstream toe of the dam.



20.



21.

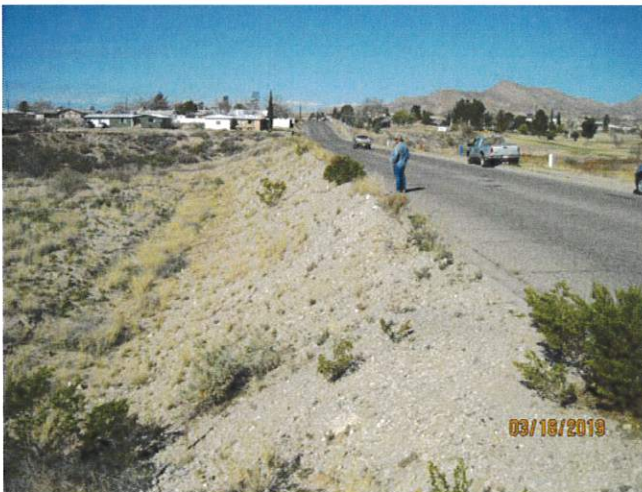
Images 20 and 21: Additional view of the low level outlet works riser (Image 20) and interior view of the riser (Image 21) with plugged ports as an approximate indication of the sediment level.



Images 1 through 3: Aerial views of the dam courtesy of GoogleEarth (circa 2015).



4.



5.

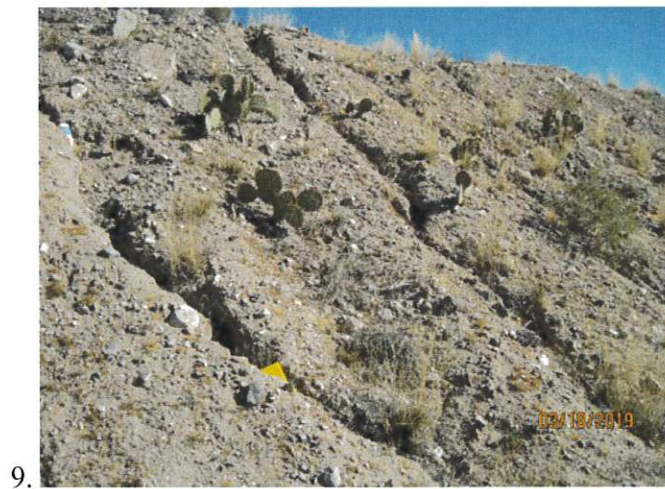


6.

Images 4 through 6: Westerly view along the dam crest / Marie Street and the downstream slope (Images 4 and 5), and easterly view of the downstream slope (Image 6).



Images 7 and 8: Easterly and westerly views, respectively, of the upstream slope.



Images 9 and 10: Northerly (upstream) views of erosion on the downstream slope.



Images 11 and 12: Typical views of rodent burrows on the downstream slope.



13.



14.

Images 13 and 14: Southerly views of erosion typical to the upstream slope and the area downstream of the dam, respectively.



14.



15.

Images 14 and 15: Southerly (downstream) and northerly (upstream) views of the 36-inch diameter upper level outlet conduit.



16.

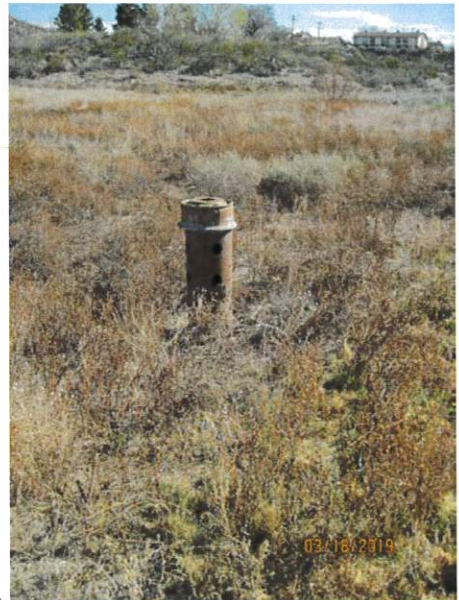


17.

Images 16 and 17: Views of the 8-inch diameter lower level outlet conduit outfall and interior view of the same outlet conduit, respectively.

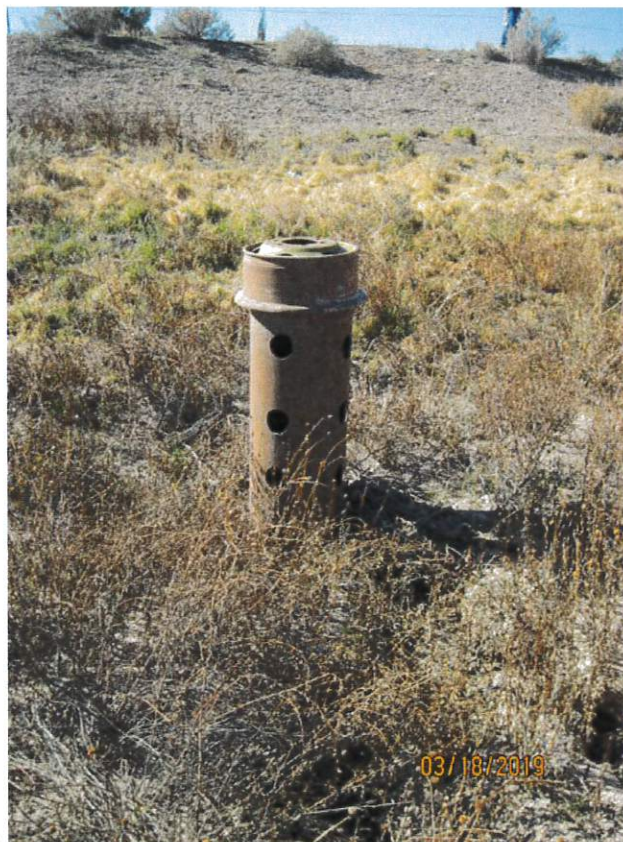


18.

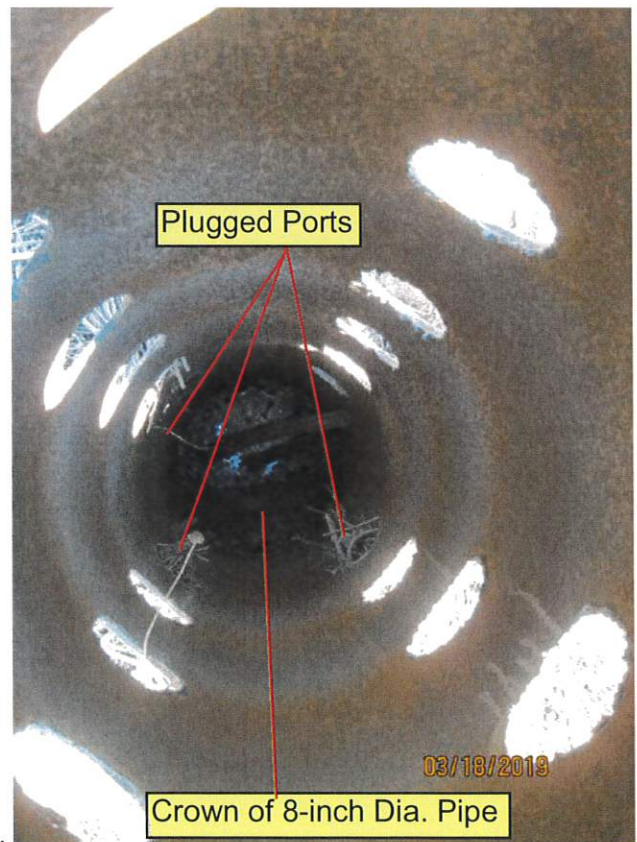


19.

Images 18 and 19: Vegetation immediately downstream of the lower level outlet conduit (Image 18) and easterly view of the outlet works metal riser located in the vicinity of the upstream toe of the dam.



20.



21.

Images 20 and 21: Additional view of the low level outlet works riser (Image 20) and interior view of the riser (Image 21) with plugged ports as an approximate indication of the sediment level.

MIKE A. HAMMON, P.E.
STATE ENGINEER



DAM SAFETY BUREAU
5550 SAN ANTONIO DR., NE
ALBUQUERQUE, NM 87109
(505) 383-4113
(505) 383-4132 FAX
NM.DamSafety@state.nm.us

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe**

March 10, 2022

Mr. Bruce Swingle
City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Inspections of Cuchillo-Negro Dam, OSE File No. D-541
St. Anne's Dam, OSE File No. D-581, and
Marie Street Dam, OSE File No. D-582
Sierra County**

Dear Mr. Swingle:

On February 9, 2022, Mr. James Head, P.E., of the Office of the State Engineer (OSE) staff inspected Cuchillo-Negro, St. Anne's, and Marie Street Dams. Copies of Mr. Head's inspection checklist-reports are enclosed for your information. A copy of the NMOSE Guidelines for Vegetation Management on Dams will be sent to you via email for your information and use. I concur with the required actions contained in the respective inspection checklist-reports. Please review the required actions sections of the respective checklist reports and the inspection photographs and make arrangements to address the required actions accordingly.

Cuchillo-Negro Dam has been assessed in satisfactory condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 5 and 6 of the inspection checklist-report.

St. Anne's Dam has been assessed as being in poor condition because of uncertainties that arise from the lack of information about critical analysis parameters associated with design and construction of the dam. If information were to be assembled to reduce these uncertainties a condition rating of fair would have been appropriate due to the erosion gullies that are present on the left upstream and downstream groins of the dam, the diminished crest width of the dam created by past grading (back-dragging) of the slopes, questionable spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit and the alignment of the downstream end of the spillway channel relative to the downstream toe of the dam. Satisfactory progress needs to be made towards resolving issues pertaining to erosion, inspection of the outlet conduit, removal of the orifice plate at the outlet conduit entrance (to be replaced with a properly designed ported intake riser), and verification of spillway capacity.

Marie Street Dam has been assessed as being in poor condition because of uncertainty surrounding the sewer line passing through the dam and uncertainties with critical analysis parameters associated with design and construction of the dam. If these uncertainties were reduced a fair rating would otherwise be appropriate due to inadequate spillway capacity.

Subsections E and F of 19.25.12.21 NMAC require dams classified as High Hazard Potential such as these to have an approved Operations and Maintenance Manual (O&M) and Emergency Action Plan (EAP) in place. The O&M on file for Cuchillo-Negro Dam is outdated; has not been approved by the NMOSE-DSB, and it does not meet the requirements of Section 19.25.12.17 NMAC. There are no O&M manuals on file for St. Anne's and Marie Street Dams. The New Mexico Watershed and Dam Owners Coalition has developed a template for O&M manual preparation that could be useful. There are no EAPs on file with the NMOSE-DSB for these three dams. Please be advised of the potential for added owner liability if a dam were to experience an incident while out of compliance with the NMOSE Dam Safety Bureau's rules and regulations for dams.

Information pertaining to the preparation of Operation and Maintenance Manuals and Emergency Action Plans is available from the NMOSE Dam Safety Bureau website at:

<https://www.ose.state.nm.us/dams/>

If further discussion would be helpful, please contact James Head at (505) 383-4138 or via email at james.head@state.nm.us or me at (505) 383-4134.

Sincerely,



Charles N. Thompson, P.E., Chief
Dam Safety Bureau

CNT/jh

Enclosure

Email: Bruce Swingle, City Manager, City of Truth or Consequences (bswingle@torcnm.org)
Benny Fuentes, City of Truth or Consequences (bfuentes@torcnm.org)
~~Paul Tooley, Sierra County Emergency Manager (ptooley@sierraco.org)~~
Shelley Dragomir Ramos, P.E., USACE Abq. Dist., (Shelley.D.Ramos@usace.army.mil)

**New Mexico Office of the State Engineer
Dam Safety Bureau
Inspection Checklist and Report**

County: Sierra	Dam Name: Marie Street	OSE No.: D-582	Fed ID No.: NM00582
Inspection Performed By: James Head <i>CMT</i>		Inspection Date: 2/9/2022	Last Inspection Date: 3/18/2019
Owner Name: City of Truth or Consequences	Owner Address: 505 Sims Street Truth or Consequences, NM 87901	Owner Contact: Benny Fuentes Owner Phone No.: 575-740-2613 Inspection Contact: Frank Aguirre Cell: 575-952-0083	
Purpose of Dam: Flood Control		Hazard Class: High	Hazard Class Appropriate: Yes ☒ No ☐
Dam Location: West of Intersection of Marie Ave. and N Pershing Street.		Latitude: 33.14181°	Longitude: -107.25344°
Weather: Clear, calm, ~40 degs F		Attendees: Frank Aguirre (City of T or C)	

1. General Conditions	Satisfactory	Needs Attention	N/A	Remarks:
a. Access for O & M	☒	☐	☐	
b. Unauthorized access restricted	☒	☐	☐	
c. No unauthorized alterations	☒	☐	☐	
Notes:				

2. Upstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☐	☒	☐	Repair existing erosion and monitor and repair future erosion for erosion rill/gully depths greater than 3 inches. Backfill with suitable embankment material (preferably gravelly clay).
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	Collapse/backfill animal burrows as they occur.
d. Distortion or cracking	☒	☐	☐	
e. Upstream wave protection	☐	☐	☒	
Notes:	Refer to remarks provided for specific items.			

3. Dam Crest	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	Periodically monitor for cracks and/or settlement.
Notes:	Refer to remarks provided for specific items.			

4. Downstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☐	☒	☐	Repair existing erosion and monitor and repair future erosion for erosion rill/gully depths greater than 3 inches. Backfill with suitable embankment material (preferably gravelly clay). Place additional compacted fill and rock in holes or low areas along the concrete apron for the spillway overflow section of the dam (see photographs).
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	Collapse/backfill animal burrows as they occur; refill bait dispensers.
d. Distortion or cracking	☒	☐	☐	
e. Seepage control	☐	☐	☒	Normally dry dam.
Notes:	Refer to remarks provided for specific items.			

5. Downstream Area	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	Monitor and abate rodents as needed.
d. Distortion or cracking	☒	☐	☐	
e. Seepage or boils	☒	☐	☐	Dry (flood control) dam.
f. Drains or Wells	☐	☐	☒	No drains or wells.
Notes:	Maintain free of excessive woody vegetation, rodents, and debris.			

6. Abutment Contacts	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion, cracks, or slides	☐	☒	☐	Repair existing erosion and monitor and repair future erosion for erosion rill/gully depths greater than 3 inches. Backfill with suitable embankment material (preferably gravelly clay).
b. Woody vegetation	☒	☐	☐	
c. Distortion or cracking	☒	☐	☐	
d. Seepage	☒	☐	☐	
e. Drains or Wells	☐	☐	☒	No drains or wells.
Notes:	Refer to remarks provided for specific items.			

7. Reservoir	Satisfactory	Needs Attention	N/A	Remarks:
a. Developed/Encroachment	☒	☐	☐	
b. Banks and slopes stable	☒	☐	☐	
c. Obstruction or debris	☒	☐	☐	
d. Sediment level	Sediment accumulation appears to be about 1 foot above the crown of the outlet conduit within the intake riser (similar to past inspection).			
e. Water level	= Dry			
Notes:	Maintain reservoir area free of weeds and other debris -- potential to plug the outlet works intake structure ports; also, limited reservoir routing capacity to high sediment level, sediment removal is needed.			

8. Intake Structure	Type of Structure: Concrete tower with ports and anti-vortex baffle			Remarks:
	Satisfactory	Needs Attention	N/A	
a. Concrete condition	☐	☐	☒	
b. Reinforcement encasement	☐	☐	☒	
c. Coating adequacy	☐	☐	☒	
d. Leakage	☐	☐	☒	Reservoir was dry.
e. Trash rack condition	☒	☐	☐	
f. Inlet unobstructed	☒	☐	☐	Exposed ports are free of obstructions.
g. Gates operative	☐	☐	☒	Not gated (passive system).
h. Woody vegetation	☒	☐	☐	
i. Number of intake ports	Possibly 20	Number of ports open	16	
Notes:	Refer to remarks provided for specific items.			

9. Outlet Conduits	Type of Conduit: 8" steel (lower); 36" RCP (upper)			Estimated Discharge: None
	Interior inspection: Yes ☐ Date: No ☒			
	Satisfactory	Needs Attention	N/A	Remarks:
a. Overall Condition	☐	☐	☐	Buried conduit, not assessed; no external evidence of problems.
b. Condition of surfaces	☐	☐	☐	Buried, not assessed.
c. Reinforcement encasement	☐	☐	☐	Buried, not assessed.
d. Clear of obstructions	☐	☐	☐	May be clear, however, interior inspection is required for confirmation and overall assessment of the conduit.
e. Joint Condition	☐	☐	☐	Buried, not assessed.
f. Leakage	☐	☐	☐	Buried, not assessed.
g. Alignment	☐	☐	☐	Buried, not assessed.
Notes:	Interior inspections of both outlet conduits (8-inch and 36-inch) are required. The outfall (downstream end) of the 8-inch dia. Conduit was either buried or obscured by vegetation and not seen during this inspection (the 8-inch dia. outfall needs to be maintained as exposed). For reference, see the photographs below, the outfall is obscured in the 2022 image and exposed in the 2015 image.			



10. Outlet Energy Dissipator	Satisfactory	Needs Attention	N/A	Remarks:
a. Concrete condition	☒	☐	☐	
b. Reinforcement encasement	☐	☐	☒	
c. Joint Condition	☒	☐	☐	
d. Riprap condition	☐	☐	☒	No riprap
e. Clear of obstructions	☒	☐	☐	
f. Woody vegetation control	☒	☐	☐	

11. Outfall & Outlet Channel	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion	☒	☐	☐	Periodically monitor and mitigate as needed.
b. Obstructions or debris	☒	☐	☐	Periodically monitor and mitigate as needed.
c. Erosion protection	☐	☒	☐	Needs riprap around toe of rundown.
d. Woody vegetation control	☒	☐	☐	Periodically monitor and remove as needed.
Notes:	Refer to remarks provided for specific items.			

12. Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☒	☐	☐	
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☐	☐	☒	
g. Energy dissipation	☒	☐	☐	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	Flood Control Dam.
j. Erosion control	☒	☐	☐	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☐	☒	☐	
m. Capacity	☐	☒	☐	SDF: Per NMOSE regulations high hazard dams are required to have spillways capable of passing 100% of the runoff from the governing PMP storm event. From past NMOSE inspection reports, the spillway capacity is less than 50% of the routed 72-hr PMP event based on HMR55A. This percentage could be higher indicating more capacity if the flood discharge from the CO-NM REPS tool PMP is evaluated for reservoir routing. However, an updated H&H analysis to include the impacts of 2-hr, 6-hr, and 48-hr REPs PMPs and the AEP and precipitation distribution methodology from the MetPortal Tool would be required for verification of spillway capacity in accordance with the new NMOSE hydrologic guidance.
Notes:	Spillway capacity is judged inadequate based on lack of current hydrologic and flood routing analyses in combination with diminished reservoir routing due to partial loss of storage capacity from accumulated sediment since original construction. It is further noted that minor overtopping of the dam occurred during a summer 2020 rainfall event in the T or C and the surrounding area.			

13. Compliance – Rules and Regulations	Required	In Place	Update needed	Remarks:
a. Emergency Action Plan	☒	☐	☐	
b. Operations and Maintenance Manual	☒	☐	☐	
c. Other required documents	☐	☐	☒	Updated hydrologic and flood routing analyses and a breach report for flood maps to be used in an EAP.
d. Status of State Engineer Order		☐		No Order on dam at this time.
Notes:	The dam is out of compliance with O&M Manual and EAP requirements as per Sections 19.25.12.17 and 19.25.12.18 NMAC.			

14. Design and Construction Documentation	There is no design report, construction drawings, nor construction specifications on file with the NMOSE to support the overall design of for the dam. Items related to the overall design include, but are not limited to, comprehensive computations and analysis for hydrologic, hydraulic, and geotechnical analyses. The services of an engineer, licensed in New Mexico, with experience in the design of dams needs to be retained to prepare an assessment of the dam that addresses the items listed above. Because of the lack of design documentation, uncertainties exist as to critical analysis parameters for Marie Street Dam.
---	--

Overall Remarks: Based on a cursory review of the documentation and the field inspection, Marie Street Dam is in "Poor" condition. According to 2008 Federal Dam Safety Condition assessment terminology, Poor condition is used when:

"A dam safety deficiency is recognized for loading conditions which may realistically occur. Remedial action is necessary. A poor condition may also be used when uncertainties exists as to critical analysis parameters, which identify a potential dam safety deficiency. Further investigations and studies are necessary."

The rating of "poor" is a result of the lack of documentation for the sewer line passing through the dam, and uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE-DSB to verify the design assumptions. Otherwise, a fair rating would have been appropriate due to inadequate spillway capacity.

Required Actions by Owner:

1. As noted above, spillway capacity is judged inadequate based on lack of current hydrologic and flood routing analyses in combination with diminished reservoir routing due to partial loss of storage capacity from accumulated sediment since original construction. It is further noted that minor overtopping of the dam occurred during a summer 2020 rainfall event in the T or C and the surrounding area. Updated hydrologic and flood routing analyses and a breach report are needed for the preparation of flood maps to be used in an EAP.

2. Continue periodic woody vegetation removal. The dam is for the most part free of woody vegetation. Vegetation removal includes removal of rootballs and stumps in accordance with the New Mexico Office of the State Engineer (NMOSE) Dam Safety Bureau updated "*Vegetation Management on Dams*" which is available from the NMOSE website at: [Dam Safety Bureau \(state.nm.us\)](http://DamSafetyBureau.state.nm.us)
3. Continue proactive rodent abatement measures. Rodent burrows need to be collapsed, backfilled with suitable embankment material, and compacted after rodent eradication has occurred from a specific burrow or colony of burrows.
4. Continue to maintain the area around the outlet works intake tower free of all vegetation and debris. All vegetation and debris within a 200 foot radius of the outlet tower is recommended to lessen the potential for clogging of the intake tower.
5. Make arrangements to have an overall inspection of the outlet works' conduits performed by a qualified contractor or professional civil engineer licensed in New Mexico with experience in dam engineering; this includes an interior inspections of the outlet works conduits. Once completed, provide the inspection documentation to the NMOSE-DSB. This item is reiterated from past NMOSE dam inspections.
6. The dam is classified as high hazard potential, therefore, an Operation and Maintenance (O&M) Manual is required per Subsections E of 19.25.12.21 of the New Mexico Administrative Code (NMAC). The Owner is referred to the NMOSE website for information on preparing an O&M Manual. Changes to NMOSE rules and regulations allow an owner to prepare the O&M Manual without the involvement of a professional engineer if the owner can submit a manual that meets the requirements of 19.25.12.17 NMAC.
7. The dam is classified as high hazard potential, therefore, an Emergency Action Plan (EAP) is required per Subsection F of 19.25.12.21 NMAC. There is no EAP on file with the NMOSE for this dam. The owner is referred to the NMOSE website for information on preparing an EAP and for a copy of the EAP template. Engineering elements of the EAP must be prepared by a professional engineer licensed in New Mexico with experience in dam breach analysis, flood routing, and failure mechanisms for dams. The owner can prepare the non-engineering elements of the EAP if the owner can meet the requirements of 19.25.12.18 NMAC.
8. Summary tables from the 2018 CO-NM REPs PMP tool and the updated MetPortal tool for Watershed Precipitation Frequency are shown below and also contain HMR 55A precipitation values for comparison. Based on a comparison of the rainfall intensities and the relatively small watershed size, information from the tables suggest that the 2-hr Intraduration PMP event from CO-NM REPs PMP tool may be the governing rainfall event based on updated NMOSE hydrologic guidelines. From the tables it is observed that the average rainfall intensities for both the 2-hr Interduration PMP and 6-hr PMP events from the REPs tool exceed the average intensities for the 10^{-6} AEP for the 2-hr LS and 6-hr MEC events from the MetPortal tool. Thus, given that the MetPortal rainfall distributions are used for the REPs tool and the MetPortal rainfall, the flood discharge corresponding to the governing intraduration precipitation from REPs would likely be used as the inflow design flood for the dam. Hydrologic and reservoir routing analyses of the REPs 2-hr and 6-hr events would be necessary to confirm which event is the governing event.

Marie Street Dam (Drainage Area ~0.83 sq. mi)

CO-NM Reps PMP Tool (inches)										HMR 55A (inches)	
OBJECTID *	Storm Type	PMP_01	PMP_06	PMP_12	PMP_24	PMP_48	PMP_72			6-hr Local	72-hr Gen.
1	General	2.7	6.46	8.8	10.26	13.06	13.36				23.1
OBJECTID *	Storm Type	PMP_01	PMP_02	PMP_03	PMP_04	PMP_05	PMP_06	PMP_12	PMP_24		
1	Local	7.7	9.7	11.5	12.04	12.04	12.04	12.5	12.64	15.93	
OBJECTID *	Storm Type	PMP_01	PMP_06	PMP_12	PMP_24	PMP_48	PMP_72				
1	Tropical	2.1	5.6	7.8	10	12.3	12.3				23.1

Local Storm: * 2-hr Intraduration PMP average intensity ~ 4.85 in./hr

** 6-hr PMP average intensity ~ 2.01 in./hr

MetPortal Watershed Precipitation Frequency, inches (ARF = 1) (24 and 72 hr durations not for design use)					
AEP	2 hr LS	6 hr MEC	24 hr MLC/TSR *	48 hr MLC/TSR	72 hr MLC/TSR *
10^{-2}	2.46	2.61	3.16	3.88	4.21
10^{-3}	3.44	3.61	4.87	5.97	6.48
10^{-4}	4.52	4.69	7.01	8.60	9.33
10^{-5}	5.68	5.87	9.69	11.89	12.92
10^{-6}	6.95	7.15	13.07	16.03	17.41
10^{-7}	8.33	8.55	17.31	21.24	23.07

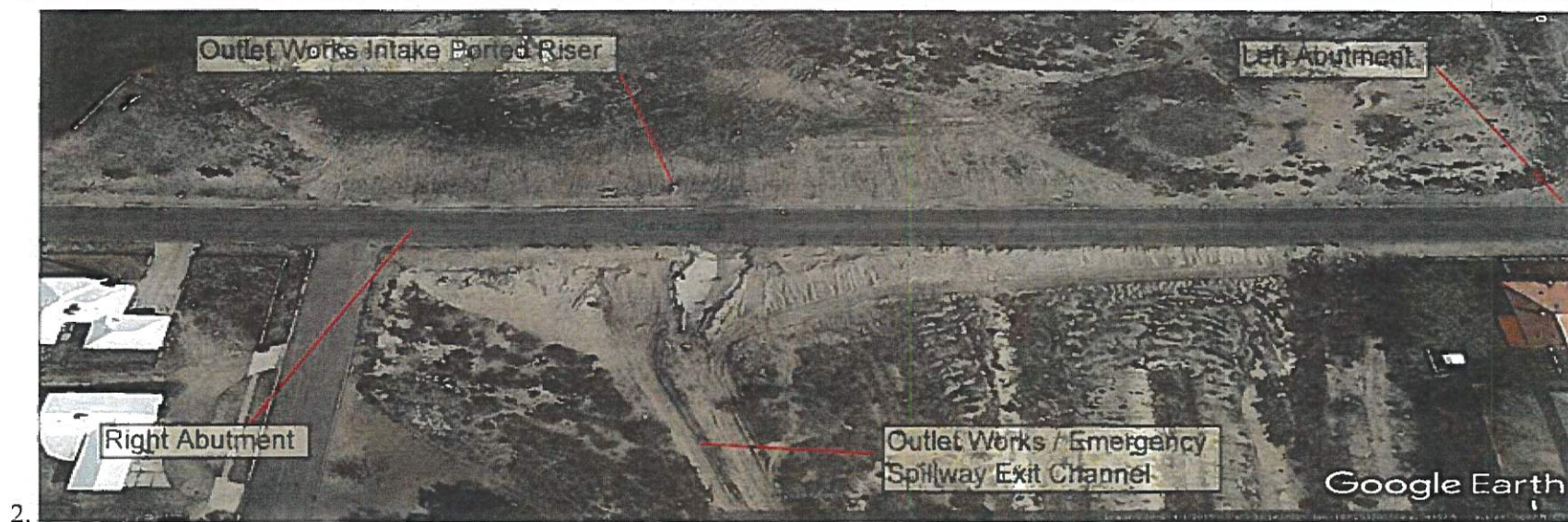
Local Storm using 10^{-6} AEP:

2-hr LS average intensity ~ 3.48 in/hr; 6-hr LS average intensity ~ 1.19 in/hr

Date: 2/21/2022

Signature: **Disclaimer**

Professional judgments and evaluations are represented in this document. These judgments are based partly on information gathered from visual observations and a limited review of the NMOSE Dam Safety Bureau files for the facility. The NMOSE does not guarantee the performance of this dam in any way and does not assume responsibility for safe operation of this dam. The sole responsibility for safe operation of this dam rests with the owner, operators and sponsors. The NMOSE only provides that the work and judgments rendered were performed in a manner consistent with the level of care and skill ordinarily exercised by other engineers under similar circumstances. No other warrantee or guarantee is included or intended.



Images 1 and 2: Slightly distorted aerial views of the dam courtesy of Google Earth imagery (circa 2015) with features of the dam as indicated.



3. **Image 3:** Google Earth areal overview of the dam with drainage area from USGS Stream Stats as indicated. The drainage area for the dam as per Stream Stats is on the order 0.83 square mile.



4.

Image 4: Westerly view along the dam crest and downstream slope.



5.



6.

Images 5 and 6: Westerly and easterly views, respectively, of the downstream slope of the dam.



7.

Image 7: Easterly view of the upstream slope as seen from the vicinity of the right abutment with the location of the lower level outlet works intake as indicated.



8.

Image 8: Northerly view of the downstream slope with areas of erosion and spillway apron as indicated.

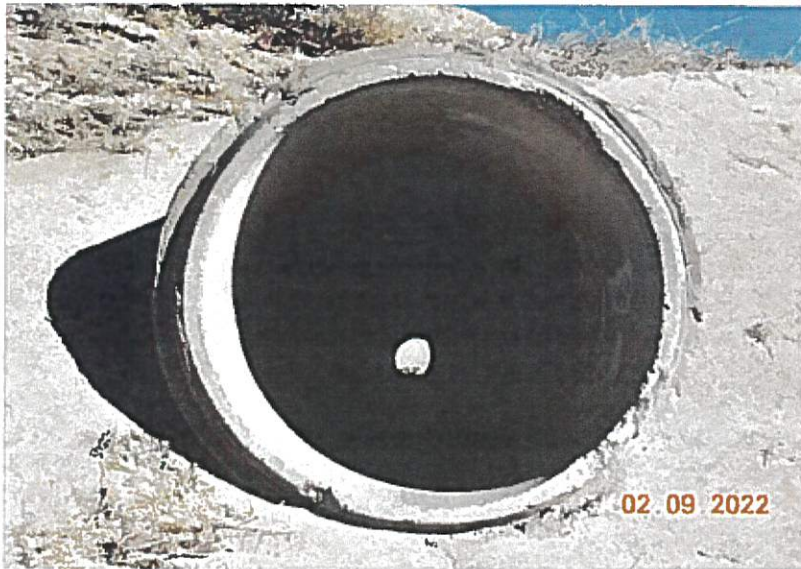


9.



10.

Images 9 and 10: Northerly views of the downstream slope at the right abutment with the location of the upper level outlet conduit as indicated.

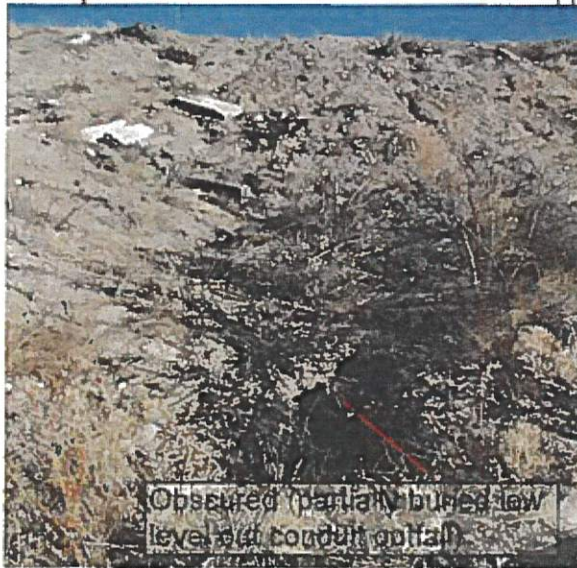


11.



12.

Images 11 and 12: Upstream and downstream views of the upper level outlet conduit beneath Marie Street (aka the dam crest).

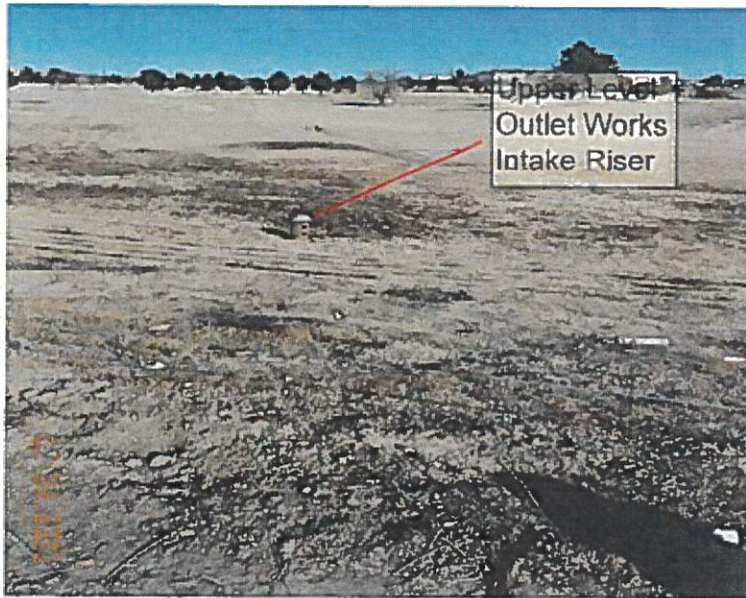


13.

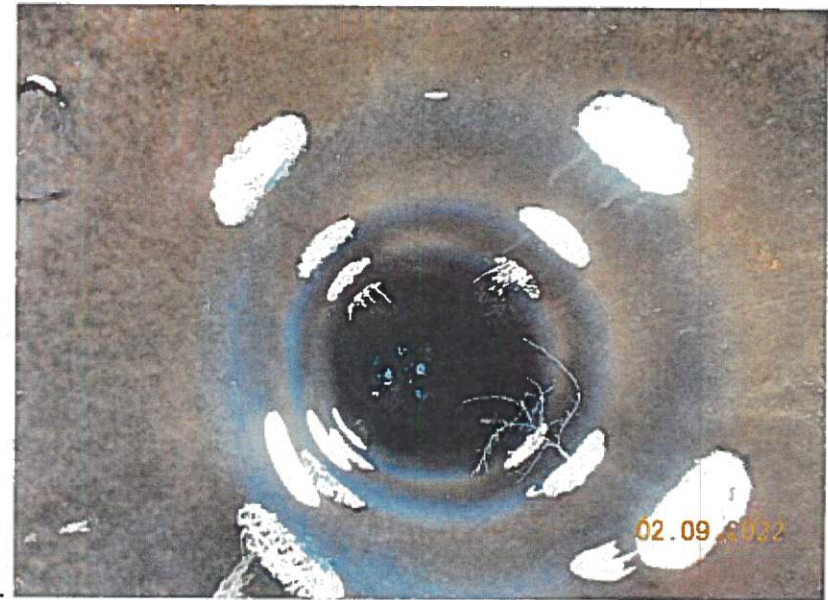


14.

Images 13 and 14: Upstream views of the lower level outlet outfall in 2022 and 2015, respectively. The outfall is currently obscured and needs to be maintained in an exposed condition.

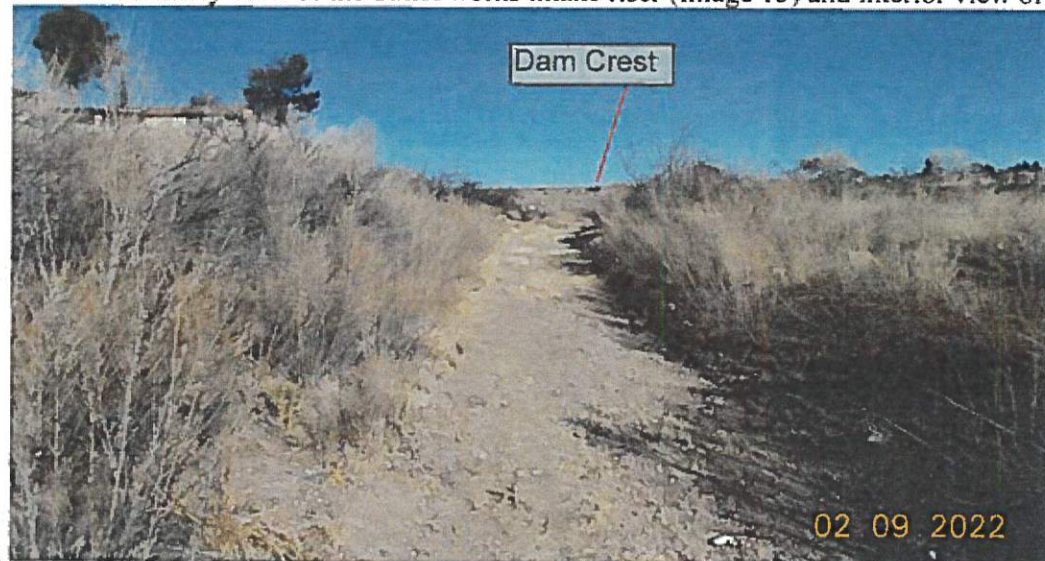


15.



16.

Images 15 and 16: Distant northerly view of the outlet works intake riser (Image 15) and interior view of the riser (Image 16).



17.

Image 17: Northerly (upstream) view of the combination outlet works / spillway exit channel with the dam crest as indicated.



18.

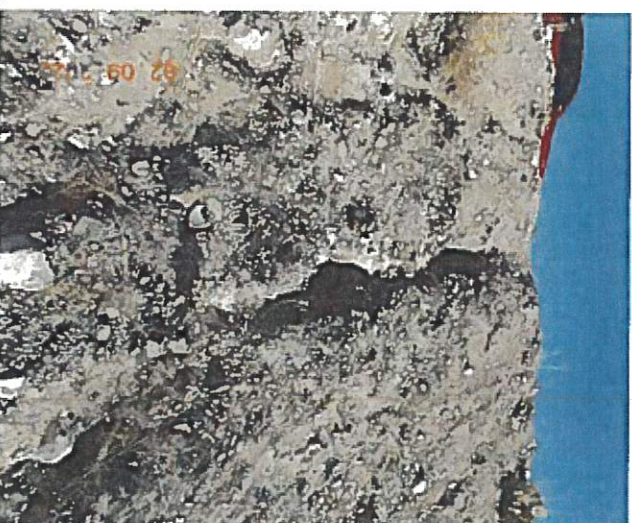
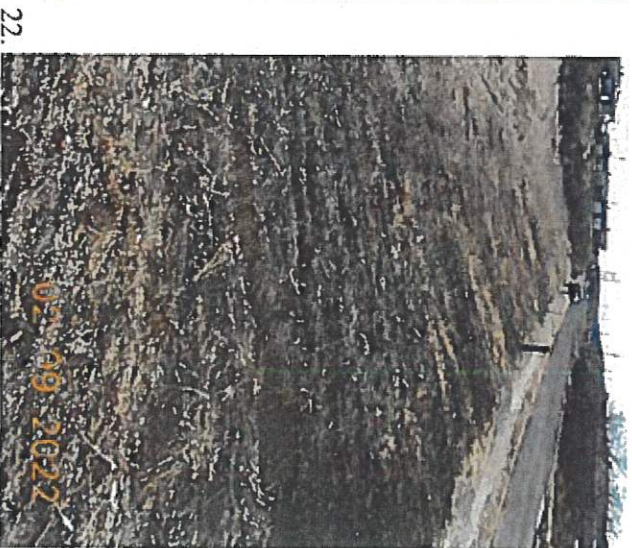
19.

Images 18 and 19: Northwesterly view of the spillway apron on the downstream slope of the dam (Image 18) and erosion along the east side of the apron (Image 19). The flood discharge that occurred as a result of heavy rains in July 2020 overtopped the dam at the spillway and eroded the east side of the spillway apron. This area was apparently backfilled to some degree, but additional erosion or not enough backfill was placed to fill the eroded area that occurred in July 2020.



20.

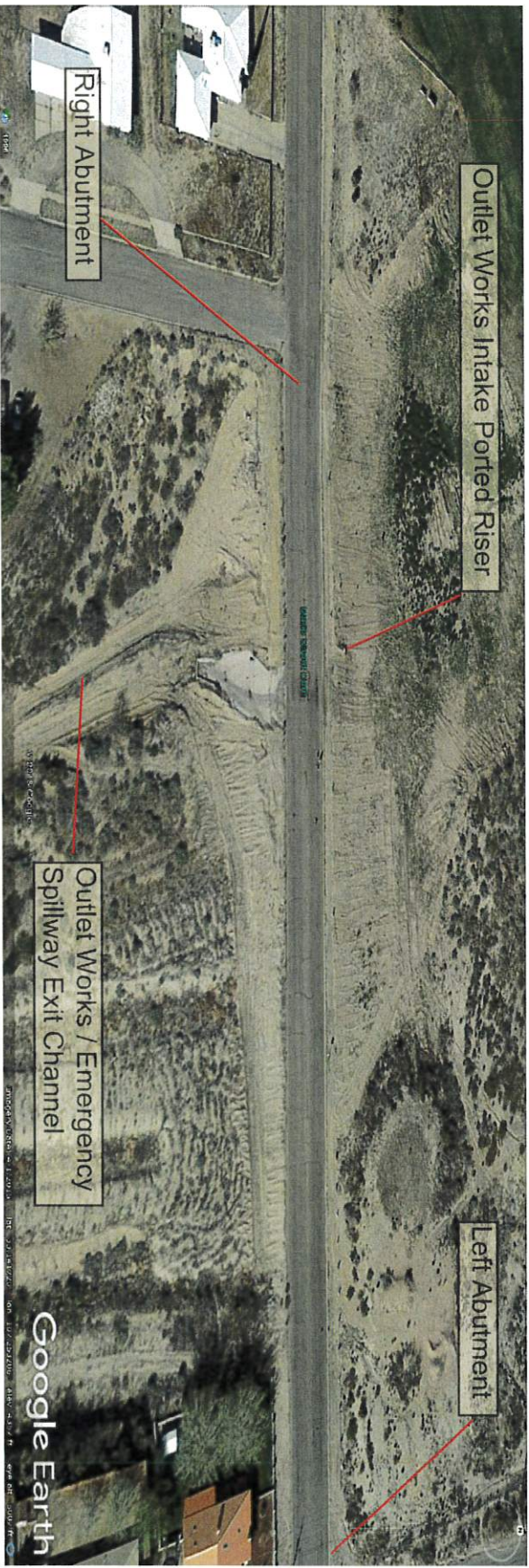
Image 20: Overview of the overflow spillway (across Marie Street) with spillway apron as indicated.



21. Images 21 through 23: Erosion gullies in need of repair on the upstream slope (Images 21 and 22) and more of the same on the downstream slope (Image 23).



24. Images 24 through 26: Additional views of erosion on the downstream slope. A gravel/cobble mulch placed on the embankment slopes and abutment contacts at the upstream and downstream groins of the dam would serve well towards diminishing erosion.



2. **Images 1 and 2:** Slightly distorted aerial views of the dam courtesy of Google Earth imagery (circa 2015) with features of the dam as indicated.



3. **Image 3:** Google Earth areal overview of the dam with drainage area from USGS Stream Stats as indicated. The drainage area for the dam as per Stream Stats is on the order 0.83 square mile.



4.

Image 4: Westerly view along the dam crest and downstream slope.

5.



6.



Images 5 and 6: Westerly and easterly views, respectively, of the downstream slope of the dam.

7.



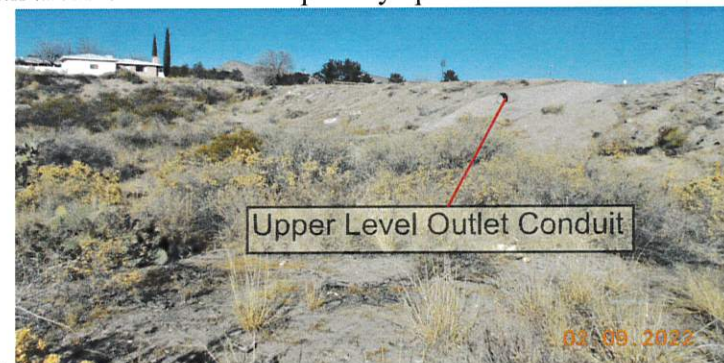
Image 7: Easterly view of the upstream slope as seen from the vicinity of the right abutment with the location of the lower level outlet works intake as indicated.



8. **Image 8:** Northerly view of the downstream slope with areas of erosion and spillway apron as indicated.



9.



10.

Images 9 and 10: Northerly views of the downstream slope at the right abutment with the location of the upper level outlet conduit as indicated.

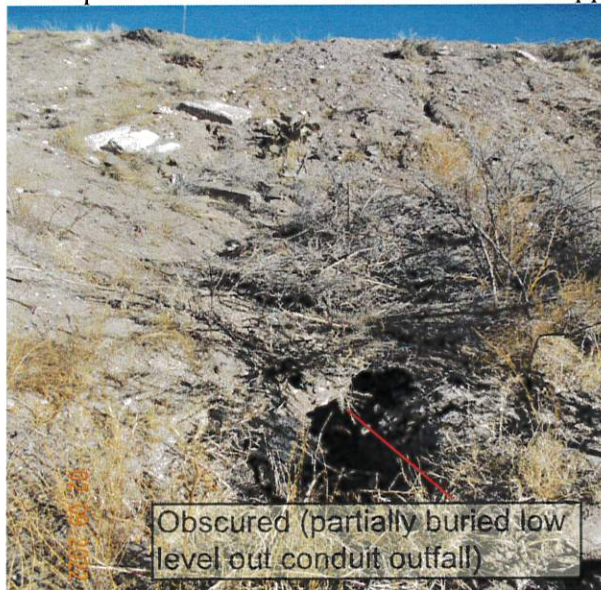


11.



12.

Images 11 and 12: Upstream and downstream views of the upper level outlet conduit beneath Marie Street (aka the dam crest).



13.



14.

Images 13 and 14: Upstream views of the lower level outlet outfall in 2022 and 2015, respectively. The outfall is currently obscured and needs to be maintained in an exposed condition.



Images 15 and 16: Distant northerly view of the outlet works intake riser (Image 15) and interior view of the riser (Image 16).

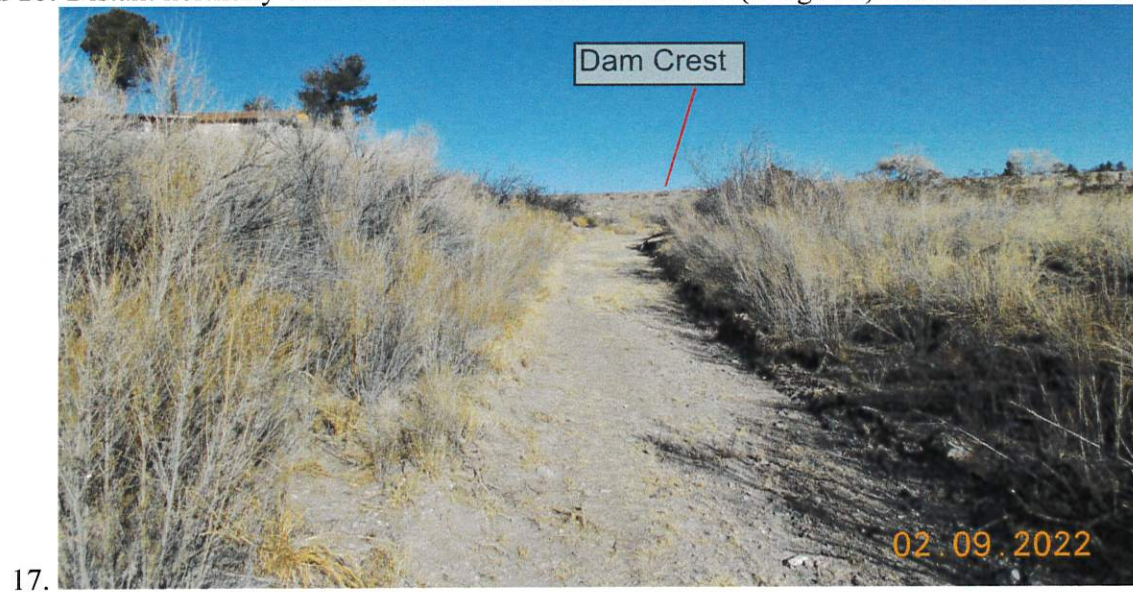
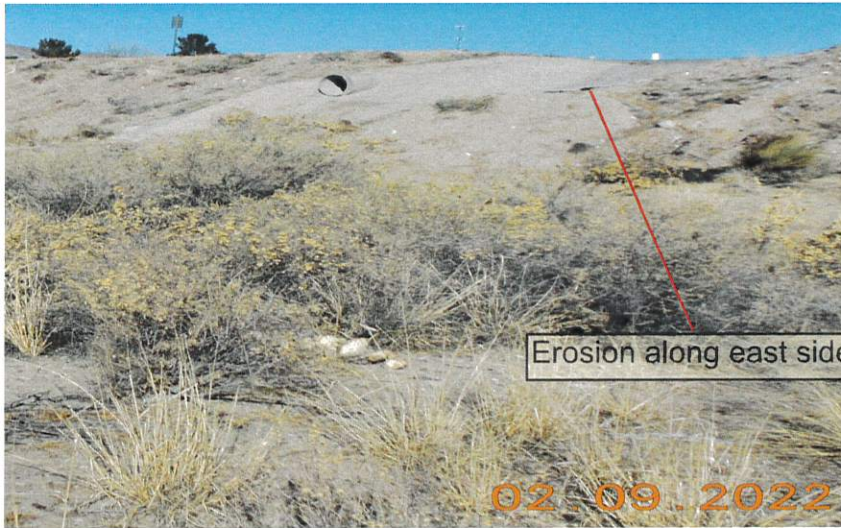


Image 17: Northerly (upstream) view of the combination outlet works / spillway exit channel with the dam crest as indicated.



18.

19.

Images 18 and 19: Northwesterly view of the spillway apron on the downstream slope of the dam (Image 18) and erosion along the east side of the apron (Image 19). The flood discharge that occurred as a result of heavy rains in July 2020 overtopped the dam at the spillway and eroded the east side of the spillway apron. This area was apparently backfilled to some degree, but additional erosion or not enough backfill was placed to fill the eroded area that occurred in July 2020.



20.

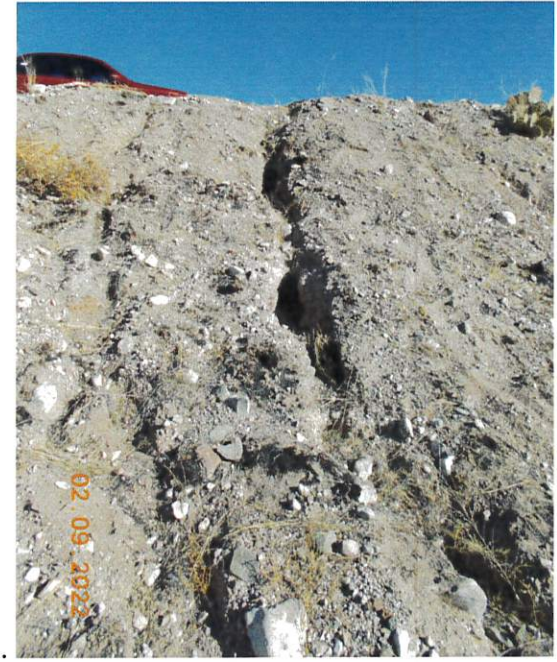
Image 20: Overview of the overflow spillway (across Marie Street) with spillway apron as indicated.



21.



22.



23.

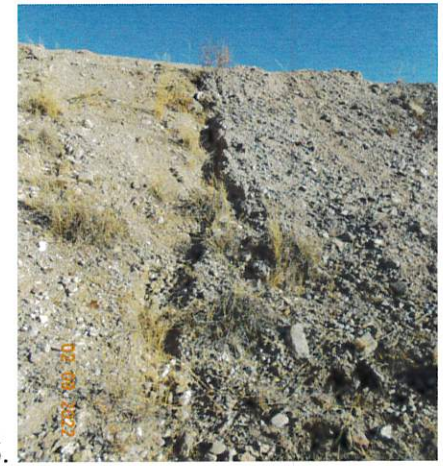
Images 21 through 23: Erosion gullies in need of repair on the upstream slope (Images 21 and 22) and more of the same on the downstream slope (Image 23).



24.



25.



26.

Images 24 through 26: Additional views of erosion on the downstream slope. A gravel/cobble mulch placed on the embankment slopes and abutment contacts at the upstream and downstream groins of the dam would serve well towards diminishing erosion.

JOHN R. D'ANTONIO, Jr., P.E.
STATE ENGINEER



DAM SAFETY BUREAU
CONCHA ORTIZ Y PINO BLDG
P.O. BOX 25102
SANTA FE, NEW MEXICO 87504
(505) 827-6122
(505) 476-0220 FAX
NM.DamSafety@state.nm.us

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe**

April 8th, 2019

Mr. Juan Fuentes, City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Inspections of Cuchillo-Negro Dam, OSE File No. D-541
St. Anne's Dam, OSE File No. D-581, and
Marie Street Dam, OSE File No. D-582
Sierra County**

On March 18, 2019, Mr. James Head, P.E., of the Office of the State Engineer (OSE) staff inspected Cuchillo-Negro, St. Anne's, and Marie Street Dams. Copies of Mr. Head's inspection memoranda and inspection checklists are enclosed for your information. A copy of the OSE Guidelines for Vegetation Management on Dams will be sent to you via email for your information and use. I concur with the required actions contained in the inspection memoranda.

Cuchillo-Negro Dam has been assessed in satisfactory condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 1 and 2 of the review memorandum.

St. Anne's Dam has been assessed as being in poor condition due to uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE to verify the design assumptions. Otherwise, a fair rating would have been appropriate due to the erosion gullies that are present on the left downstream groin of the dam, the diminished crest width of the dam created by the grading (back-dragging) of the slopes, the apparent lack of spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit.

Marie Street Dam has been assessed as being in poor condition as a result of the lack of design documentation for the sewer line passing through the dam, and uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE-DSB to verify the design assumptions. Otherwise a fair rating would have been appropriate due to inadequate spillway capacity.

Mr. Juan Fuentes
City of T or C Dams

April 8th, 2019
Page 2 of 2

The Operations and Maintenance (O&M) Manual on file for Cuchillo-Negro Dam has not been approved by the OSE-DSB, is outdated, and does not meet the requirements of Section 19.25.12.17 NMAC. There are no O&M Manuals on file for St. Anne's and Marie Street Dams. The New Mexico Watershed and Dam Owners Coalition has developed a template for O&M Manual preparation that could be useful. The template can be found on their website at: www.nmwsc.org. There are no Emergency Action Plans (EAP) on file with the OSE-DSB for these three dams. Subsections E and F of 19.25.12.21 NMAC require dams classified as High. Hazard Potential such as these to have an approved O&M Manual and EAP in place. Please be advised of the potential for added owner liability if a dam were to experience an incident while out of compliance with the OSE Dam Safety Bureau's rules and regulations for dams.

If further discussion would be helpful, please contact James Head at (505) 383-4138 or via email at james.head@state.nm.us or me at (505) 383-4134.

Sincerely,



Charles N. Thompson, P.E., Chief
Dam Safety Bureau

CNT/jdh

Enclosure

Email: Benny Fuentes, City of Truth or Consequences (bfuentes@torcnm.org)
Paul Tooley, Sierra County Emergency Manager (ptooley@sierraco.org)

MEMORANDUM
OFFICE OF THE STATE ENGINEER
Dam Safety Bureau

DATE: March 28, 2019

TO: Charles N. Thompson, P.E., Chief, Dam Safety Bureau *CNT*

FROM: James D. Head, P.E., Dam Safety Engineer

SUBJECT: Inspection of St. Anne's Dam, Sierra County, OSE No. D-581

On March 18, 2019, I inspected St. Anne's Dam. Observations made during the inspection are shown on the attached Inspection Checklist. Required actions for the dam owner are listed below.

Required Actions

Actions are listed in the order of importance.

1. Repair the gully erosion that is occurring at the left downstream groin of the dam, that is, the erosion at the east end of the dam, below the hospital parking lot. This issue could potentially result in failure of the dam and the hospitable parking lot if left unaddressed.
2. Backfill the hole which appears to be an animal burrow that is present approximately 1 to 2 feet left of the outlet conduit intake at the upstream toe of the dam. The depth and extent of the burrow needs to be determined and properly backfilled to alleviate the potential for a piping failure along the outlet conduit. See Image 14 from the March 18, 2019 dam safety inspection. Backfill the hole in accordance with the following:
 - Insert one foot of metal stove or vent pipe into the entrance of the burrow and provide a minimum of 3 feet of pipe above the ground surface. Ensure pipe is properly sealed to prevent the slurry from leaking around the edges of the pipe.
 - Prepare a slurry mixture of 90% earth and 10% cement by weight, ensure enough water is added to make the slurry flowable.
 - Pour the slurry into the pipe until the burrow and pipe are filled with the slurry and backfill the last six-inches of the burrow with compacted native soil to support grass growth.
3. A trash rack is required over the inlet of the outlet conduit to assure the orifice does not become clogged by debris or trash washed down from the watershed during a rain event. This is a repeat item noted in several prior OSE-DSB inspection memoranda that has not been addressed by the City of Truth or Consequences.
4. The 24-inch diameter CMP outlet conduit is corroding and has scour along the invert. The full extent of the corrosion and scour needs to be determined by having the interior of the entire length of the outlet conduit inspected. The issue will need to be addressed before the pipe collapses. The interior inspection of the conduit will need to be performed by a professional engineer licensed in New Mexico or a qualified contractor. A properly formatted comprehensive report with either video footage or photographs documenting

observations and conclusions reached from the inspection will need to be submitted to the OSE-DSB. Narrative to the video footage and/or pertinent annotations to photographs must be included as part of the outlet conduit inspection report. Please send the OSE-DSB the qualifications of the contractor selected for the inspection and preparation of the report prior to performing the work. This is a repeat item dating back to the 2011 OSE-DSB inspection that has not been addressed.

5. The downstream end of the spillway channel appears to be aligned such that potential scouring of the downstream slope of the dam could occur during severe precipitation events. The City of Truth or Consequences needs to ensure that flood discharge is directed away from the downstream toe of the dam by realigning the downstream end of the spillway channel.
6. The effective width of the dam crest is diminished due to the practice of back-dragging the embankment slopes for woody vegetation removal. The crest needs to be monitored and if conditions worsen then a plan to reverse these effects will need to be formulated and submitted to the OSE-DSB for review and approval prior to implementation.
7. The upstream and downstream slopes, the downstream area, and the outlet channel had been back-dragged to remove the woody vegetation. This method of vegetation management indiscriminately destroys all vegetation, including the beneficial grass and does not remove the rootballs so certain woody plant species, such as mesquite and creosote which simply grow back. Woody vegetation needs to be removed per OSE-DSB guidelines as stated in the document *Vegetation Management on Dams*.
8. Stop the practice of back-dragging the upstream and downstream slopes. Besides being an ineffective method at removing woody vegetation and their rootballs, it is having the unintended consequence of narrowing the effective width of the dam crest and steepening the side slopes near the crest. This further results in an increased rate of erosion of the crest and can lead to slope stability issues for the steepened sections.
9. Replace the masonry rock that is missing from the end of the right wingwall of the outlet conduit outfall structure. Although they are not affecting the overall integrity of the structure, they should be replaced sometime in the near future alleviate further degradation of the wingwall. This is a repeat item from the 2015 OSE-DSB inspection that has not been addressed.
10. An Operation and Maintenance (O&M) Manual is required per Subsection E of 19.25.12.21 NMAC. There is no O&M Manual on file with the OSE for this dam. The owner is referred to the OSE-DSB website for information on preparing an O&M Manual. Changes to the OSE rules and regulations allow an owner to prepare the O&M Manual without hiring a professional engineer if the owner can submit a manual that meets the requirements of 19.25.12.17 NMAC. This is a repeat item from the past OSE-DSB inspections that has not been addressed.

11. An Emergency Action Plan (EAP) is required per Subsection F of 19.25.12.21 NMAC. There is no EAP on file with the OSE for this dam. The owner is referred to the OSE-DSB website for information on preparing an EAP and for a copy of the EAP template. Engineering elements of the EAP must be prepared by a professional engineer licensed in New Mexico with experience in dam breach analysis, flood routing and failure mechanisms for dams. The owner can prepare the non-engineering elements of the EAP. Provide an update to the OSE Dam Safety Bureau on the status of preparing an EAP. This is a repeat item from the past OSE-DSB inspections that has not been addressed.
12. Prepare and submit an updated Hydrologic and Hydraulic (H&H) analysis to evaluate the spillway capacity. The results of the H&H analysis can be used to support a Dam Breach and Flood Routing Analysis for the EAP. This is a repeat item from the past OSE-DSB inspections that has not been addressed.

Information from the OSE-DSB and the Federal Emergency Management Agency to assist dam owners on woody vegetation removal; impacts of animals on earthen dams; planning an O&M program; preparing an O&M Manual; preparing an EAP; and a model EAP are available on the OSE-DSB website at: <http://www.ose.state.nm.us/DS/dsIndex.php>

Compliance with Rules and Regulations

Operation and Maintenance Manual and Emergency Action Plan

There is currently no Operation and Maintenance Manual (O&M) nor Emergency Action Plan (EAP) on file with the OSE Dam Safety Bureau for this structure. Section 19.25.12.21 NMAC establishes O&M and EAP requirements for existing dams. Subsections E and F of 19.25.12.21 require dams classified as High Hazard Potential such as this to have an approved O&M Manual and EAP. The owner was advised of this requirement in every OSE inspection report since 2005. A copy of the OSE rules and regulations for dams (19.25.12 NMAC) can be downloaded from the OSE website at: <http://www.ose.state.nm.us/DS/dsRegs.php>

Spillway Capacity

The OSE rules and regulations require high hazard dams such as this to have spillways capable of passing 100% of the PMF resulting from the governing Probable Maximum Precipitation (PMP) storm event. cursory level calculations as described in the 2006 inspection memorandum estimate the spillway capacity is approximately 70% for the PMF resulting from the 72-hr PMP storm event based on HMR 55A. An updated hydrologic and flood routing analysis is required to evaluate the spillway capacity and may be performed by the owner as part of the preparation of the forthcoming Emergency Action Plan for this dam.

Design and Construction Documentation

There are no design reports, design plans, as-built plans, or construction documents on file with the OSE-DSB for this dam that provide analysis and computations to support the overall design of the dam. Items related to the overall design include, but are not limited to, comprehensive

computations and analysis for hydrologic, hydraulic, geotechnical including embankment stability and seepage, and structural aspects of the dam and appurtenant structures. The services of an engineer, licensed in New Mexico, with experience in the design of dams needs to be retained to prepare an assessment of the dam that addresses the items listed above. Because of the lack of design documentation, uncertainties exist as to critical analysis parameters for St. Anne's Dam.

Inspection Findings

Overall Dam Condition

Based on a review of the documentation and the field inspection, St. Anne's Dam is in "Poor" condition. According to 2008 Federal Dam Safety Condition assessment terminology, Poor condition is used when "*A dam safety deficiency is recognized for loading conditions which may realistically occur. Remedial action is necessary. A poor condition may also be used when uncertainties exists as to critical analysis parameters, which identify a potential dam safety deficiency. Further investigations and studies are necessary.*" The rating of "poor" is a result of uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE to verify the design assumptions. Otherwise a fair rating would have been appropriate due to the erosion gullies that are present on the left downstream groin of the dam, the diminished crest width of the dam created by the grading (back-dragging) of the slopes, apparent lack of spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit and the alignment of the downstream end of the spillway channel relative to the downstream toe of the dam. However, the conditional rating of *Fair* is subject to being downgraded to *Poor* if satisfactory progress is not made towards resolving issues pertaining to erosion, inspection of the outlet conduit, and verification of spillway capacity.

Hazard Potential Classification

The hazard potential classification for St. Anne's Dam is high. The classification is appropriate.

Outlet Works

There is no indication from a review of the records that an interior inspection of the outlet conduit has been performed. It was also noted that an 8-inch diameter orifice plate is connected to the intake of the 24-inch diameter CMP outlet conduit. The outlet capacity is significantly diminished in its current configuration, the orifice plate needs to be replaced with a properly designed trash rack or ported riser.



James D. Head, P.E.
Dam Safety Bureau

jdh

Professional judgments and evaluations are represented in this memorandum. They are based partly on information gathered from visual observations and a limited review of the OSE Dam Safety Bureau files for the facility. The OSE does not guarantee the performance of this dam in any way. The OSE only provides that the work and judgments rendered were performed in a manner consistent with the level of care and skill ordinarily exercised by other engineers under similar circumstances. No other warrantee or guarantee is included or intended.

**New Mexico Office of the State Engineer
Dam Safety Bureau
Inspection Checklist**

County: Sierra	Dam Name: St. Anne's Dam	OSE No.: D-581	Fed ID No.: NM00581
Inspection Performed By: James Head, P.E.		Inspection Date: 3-18-2019	Last Inspection Date: 03-04-2015
Owner Name: City of Truth or Consequences	Owner Address: 505 Sims Street Truth or Consequences, NM 87901	Owner Contact: Juan Fuentes Owner Phone No.: 575-894-6673 Insp.: Benny Fuentes – 575-740-2613	
Purpose of Dam: Flood Control	Hazard Class: High	Hazard Class Appropriate: Yes ☒ No ☐	
Dam Location: ~0.1 mile north of the junction of North Elm and East 9 th Streets in T or C		Latitude: 33.14059	Longitude: -107.24337
Weather: Clear, calm, 45 Degs. F		Attendees: Benny Fuentes, City of T or C	

1. General Conditions	Satisfactory	Needs Attention	N/A	Remarks:
a. Access for O & M	☒	☐	☐	
b. Unauthorized access restricted	☒	☐	☐	Not fenced, but no evidence of vandalism
c. No unauthorized alterations	☐	☒	☐	Slopes have been graded (back-dragged), which is starting to reduce the crest width and is steepening up the side slopes near the crest.

2. Upstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	Remove reemerging woody vegetation in accordance with OSE-DSB guidelines.
c. Rodent control	☐	☒	☐	Large burrow observed to the left side of the outlet conduit intake.
d. Distortion or cracking	☒	☐	☐	
e. Upstream wave protection	☐	☐	☒	

3. Dam Crest	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☐	☒	☐	The back-dragging is reducing the crest width and steepening the side slopes near the crest
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	

4. Downstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	See 2.b.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage control	☐	☐	☒	

5. Downstream Area	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☐	☒	☐	See 2.b.
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	
e. Seepage or boils	☒	☐	☐	
f. Drains or Wells	☐	☐	☒	Est. gpm

Dam Name: St. Anne's Dam

Inspection Date: 3-18-2019

File No. D-581

6. Abutment Contacts	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion, cracks, or slides	☐	☒	☐	Moderate to severe erosion gullies along the left downstream groin.
b. Woody vegetation	☒	☐	☐	
c. Distortion or cracking	☒	☐	☐	
d. Seepage	☒	☐	☐	
e. Drains or Wells	☐	☐	☒	Est. gpm

7. Reservoir	Satisfactory	Needs Attention	N/A	Remarks:
a. Developed/Encroachment	☒	☐	☐	
b. Banks and slopes stable	☒	☐	☐	
c. Obstruction or debris	☒	☐	☐	
d. Sediment level	= at invert of inlet to outlet conduit			
e. Water level	= dry			

8. Intake Structure	Type of Structure: 8" Orifice plate on end of 24" cmp			Remarks:
	Satisfactory	Needs Attention	N/A	
a. Concrete condition	☐	☐	☒	
b. Reinforcement encasement	☐	☐	☒	
c. Coating adequacy	☐	☐	☒	
d. Leakage	☐	☐	☒	No water present
e. Trash rack condition	☐	☒	☐	Trash rack needed to assure orifice does not become clogged by debris during a storm event
f. Inlet unobstructed	☐	☒	☐	Remove weeds from intake.
g. Gates operative	☐	☐	☒	Not gated
h. Woody vegetation	☐	☒	☐	See 2.b.
Number of intake ports	1	Number of ports open	1	

9. Gates & Valves	Satisfactory	Needs Attention	N/A	Remarks:
a. Gates Operative	☐	☐	☒	Not gated
b. Gate Condition	☐	☐	☒	
c. Leakage	☐	☐	☒	
d. Access control	☐	☐	☒	

10. Outlet Conduit	Type of Conduit: 24" CMP			Estimated Discharge: 0
	Interior inspection: Yes ☐ Date No ☒			
	Satisfactory	Needs Attention	N/A	Remarks:
a. Overall Condition	☐	☒	☐	The CMP is corroding and has scour at the invert.
b. Condition of surfaces	☐	☐	☒	Buried, not viewable
c. Reinforcement encasement	☐	☐	☒	Buried, not viewable
d. Clear of obstructions	☐	☐	☒	Buried, not viewable
e. Joint Condition	☐	☐	☒	Buried, not viewable
f. Leakage	☐	☐	☒	Buried, not viewable
g. Alignment	☐	☐	☒	Buried, not viewable

Dam Name: St. Anne's Dam

Inspection Date: 3-18-2019

File No. D-581

11. Outlet Energy Dissipator	Satisfactory	Needs Attention	N/A	Remarks:
a. Concrete condition	☒	☐	☐	
b. Reinforcement encasement	☐	☐	☒	
c. Joint Condition	☐	☒	☐	Is missing a few stones at the end of the right wingwall. Although they are not affecting the overall integrity of the structure, they should be replaced sometime in the near future
d. Riprap condition	☐	☐	☒	
e. Clear of obstructions	☒	☐	☐	
f. Woody vegetation control	☒	☐	☐	

12. Outfall & Outlet Channel	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion	☒	☐	☐	
b. Obstructions or debris	☒	☐	☐	
c. Erosion protection	☒	☐	☐	
d. Woody vegetation control	☐	☒	☐	See 2.b.

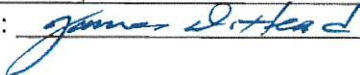
13. Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☒	☐	☐	Not well defined
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☐	☐	☒	Earthen channel
g. Energy dissipation	☐	☐	☒	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	
j. Erosion control	☐	☐	☒	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☒	☐	☐	
m. Capacity	☐	☒	☐	SDF: Per OSE regulations high hazard dams are required to have spillways capable of passing 100% of the runoff from the governing PMP storm event. Per the 2006 inspection report, the spillway has capacity for approximately 70% of the routed 72-hr PMP event based on HMR55A.

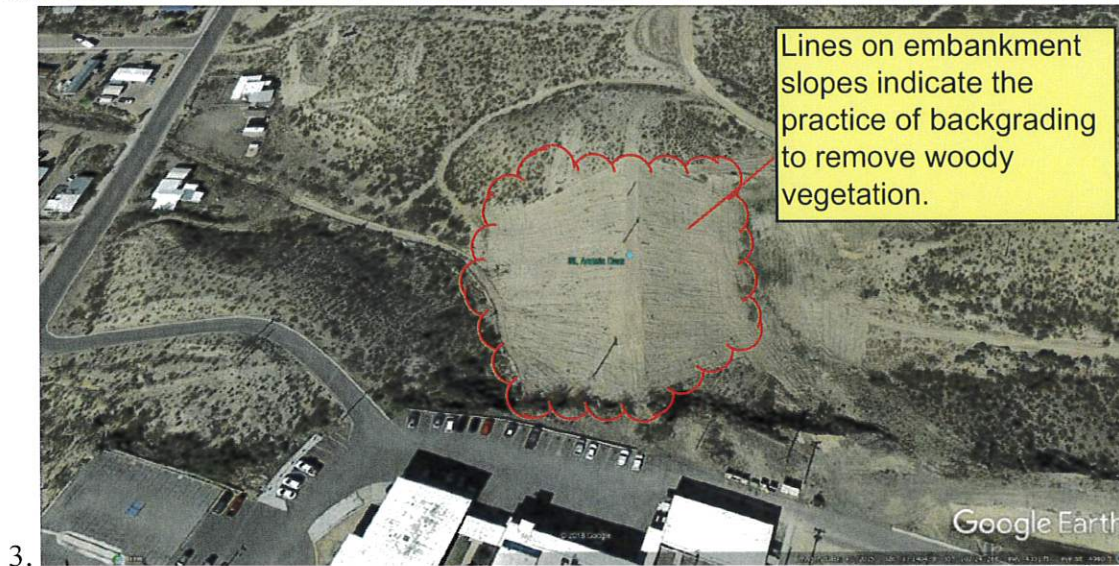
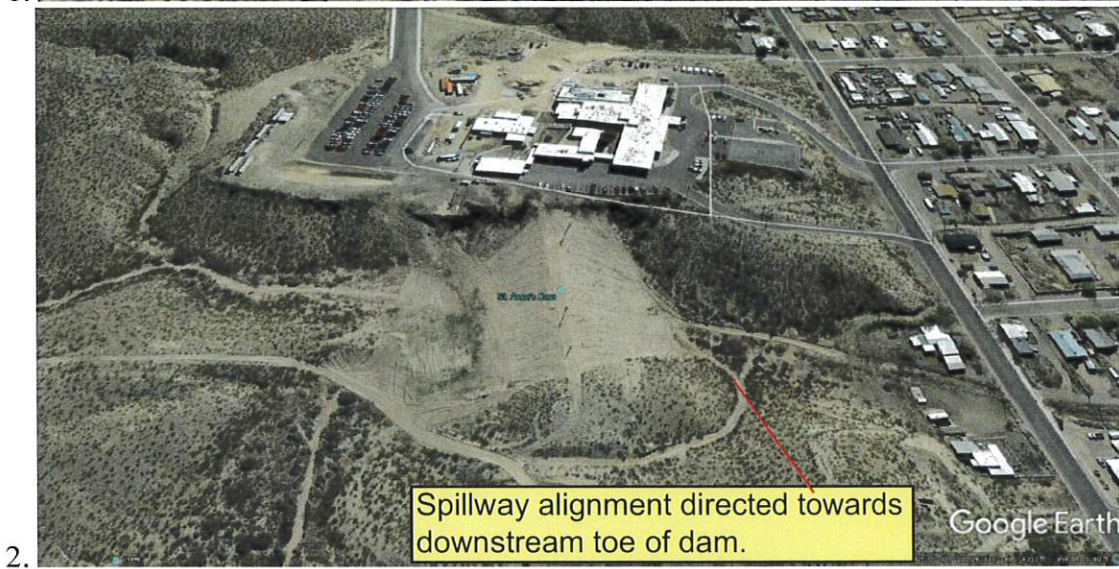
14. Instrumentation	Satisfactory	Needs Attention	N/A	Remarks:
a. Structure instrumented	☐	☐	☒	Structure not instrumented
b. Monitoring performed	☐	☐	☒	
c. Piezometers	☐	☐	☒	
d. Settlement monuments	☐	☐	☒	
e. Other	☐	☐	☒	

Overall Remarks:

In order of importance-

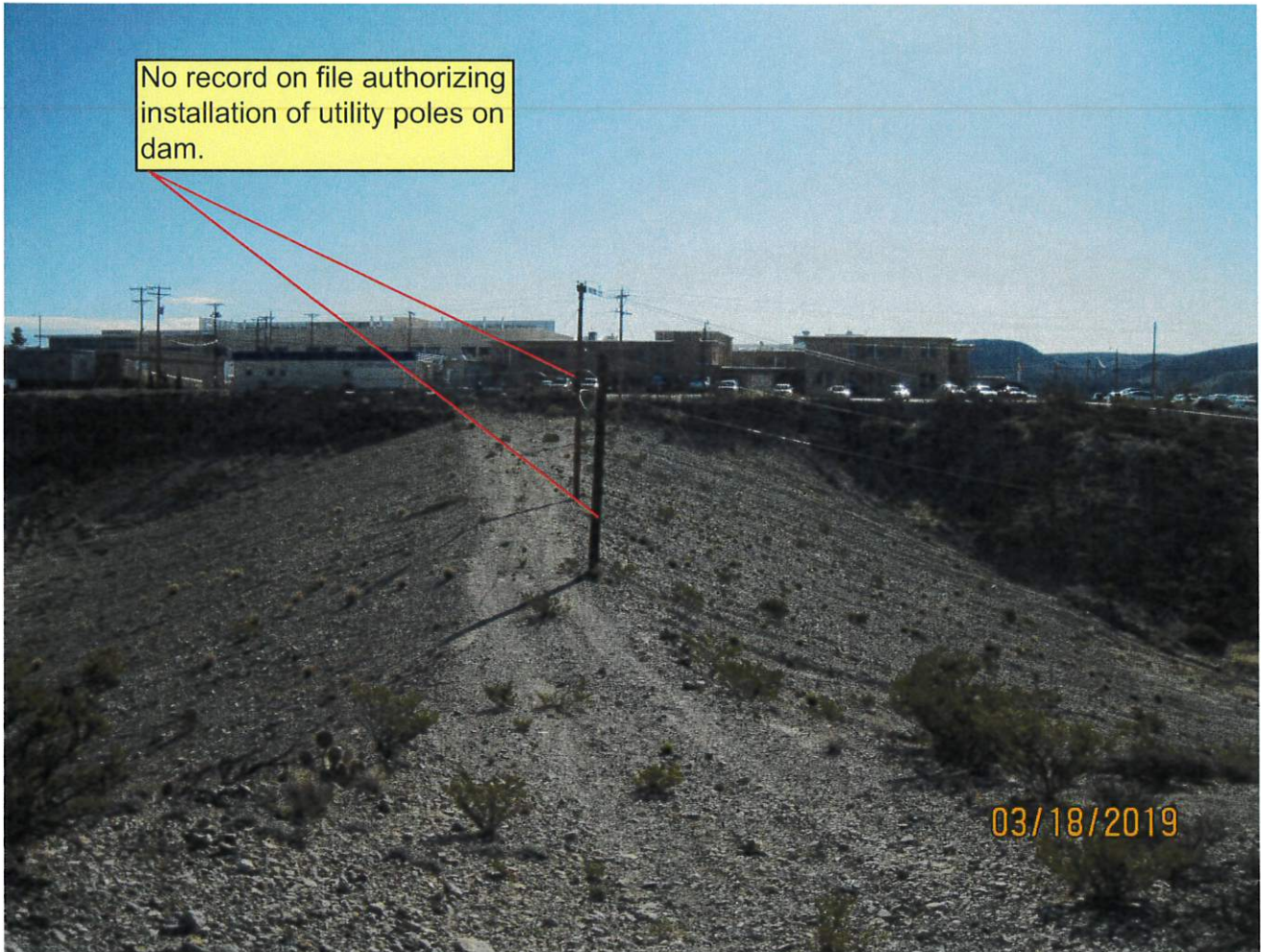
1. Address the erosion that is occurring at the left downstream groin at the east end of the dam.
2. What appears to be an animal burrow is present approximately 1 to 2 feet left of the outlet conduit intake at the upstream toe of the dam. The depth and extent of the burrow needs to be determined and properly backfilled to alleviate the potential for a piping failure along the outlet conduit.
3. A trash rack needs to be placed over the inlet of the outlet conduit to assure the orifice does not become clogged by debris or trash washed down from the watershed during a rain event.
4. The outlet conduit 24-inch diameter CMP is corroding and has scour along the invert. The full extent of the corrosion and scour needs to be determined by having the interior of the entire length of the outlet conduit inspected. The issue will need to be addressed before the pipe collapses.
5. The effective width of the dam crest is diminished due to the practice of back-dragging the embankment slopes for woody vegetation removal. The crest needs to be monitored and if conditions worsen then a plan to reverse these effects will need to be formulated and submitted to the OSE-DSB for review and approval prior to implementation.
6. The downstream end of the spillway channel is aligned such that potential scouring of the downstream slope of the dam could occur during severe precipitation events. The City of Truth or Consequences needs to ensure that flood discharge is directed away from the downstream toe of the dam by realigning the downstream end of the spillway channel.
7. The upstream and downstream slopes, the downstream area, and the outlet channel had been back-dragged to remove the woody vegetation. This is not the preferred method of vegetation management as it indiscriminately destroys all vegetation, including the beneficial grass and small shrubs. In addition, it does not remove the rootballs so certain species, such as mesquite and creoste, simply grow back. Woody vegetation needs to be removed per OSE-DSB guidelines as stated in the document *Vegetation Management on Dams*.
8. Stop the practice of back-dragging the upstream and downstream slopes. Besides being an ineffective method at removing woody vegetation and their rootballs, it is having the unintended consequence of narrowing the effective width of the dam crest and steepening the side slopes near the crest. This further results in an increased rate of erosion of the crest and can lead to slope stability issues for the steepened sections. The practice of back-dragging the slopes must be stopped.
9. There is missing rock from the end of the right wingwall of the outlet conduit outfall structure. Although they are not affecting the overall integrity of the structure, they should be replaced sometime in the near future to alleviate further degradation of the wingwall.

Date: March 25, 2019Signature: 



Images 1 through 3: Aerial views of the dam courtesy of GoogleEarth (circa 2015).

No record on file authorizing installation of utility poles on dam.



4.



5.



6.

Images 4 through 6: Easterly view along the dam crest and downstream slope (Images 4 & 5), and westerly view along the crest and upstream slope (Image 6).



7.



8.

Images 7 and 8: Easterly and westerly views, respectively, of the upstream and downstream slopes.



9.

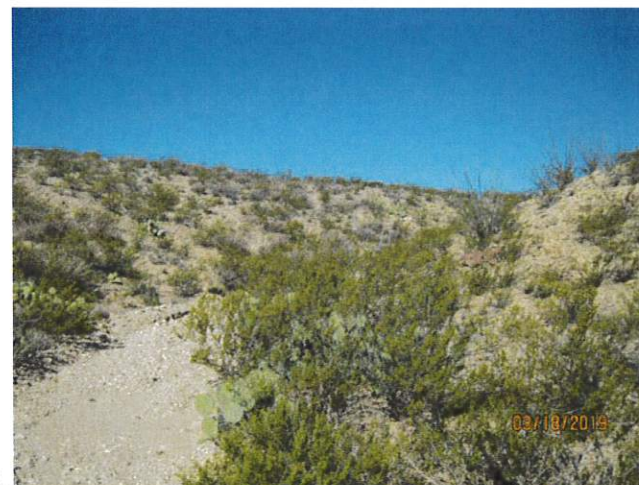


10.

Images 9 and 10: Southerly (downstream) views of the spillway control section and discharge channel, respectively.



11.



12.

Images 11 and 12: Northwestern and westerly (upstream) views, respectively, of the spillway discharge channel.



13.



14.

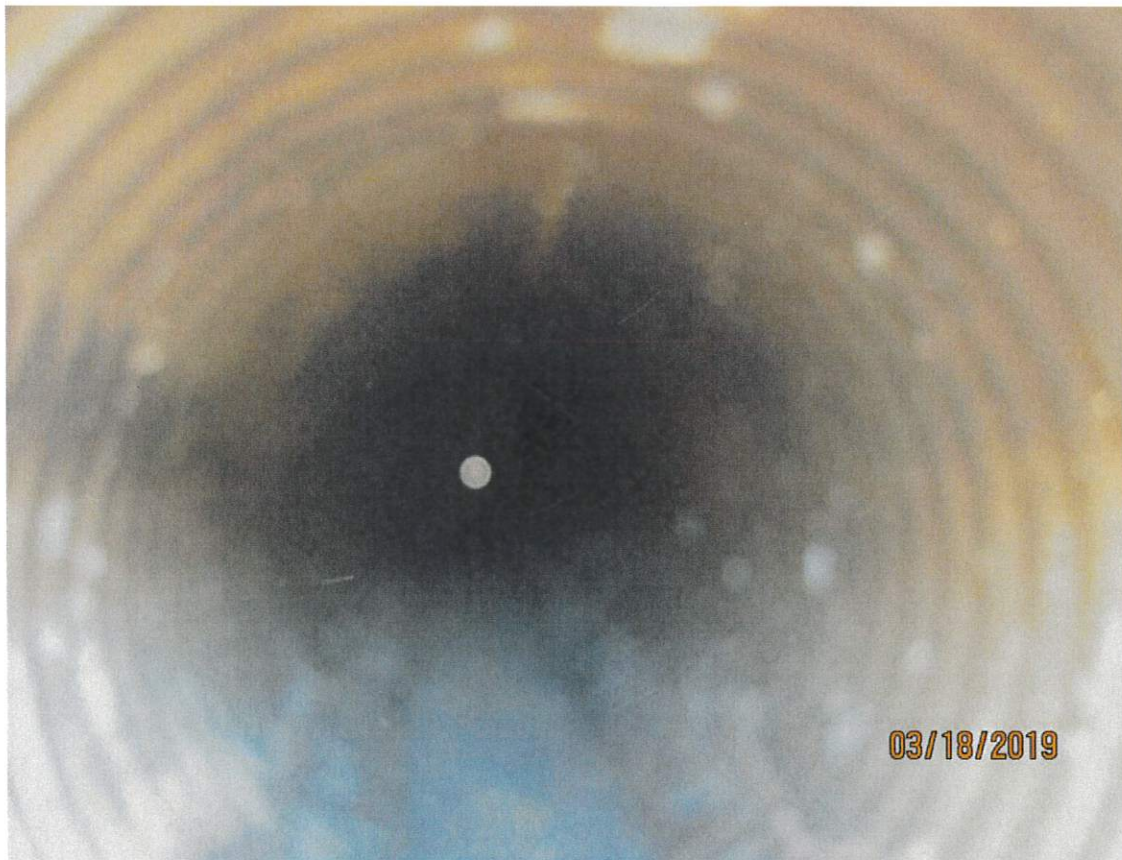


15.

Images 13 through 15: Southerly (downstream) view of the outlet conduit intake (Image 13), close-up view of the outlet intake (Image 14), and northerly (upstream) view of the outlet conduit outfall (Image 15).



16.

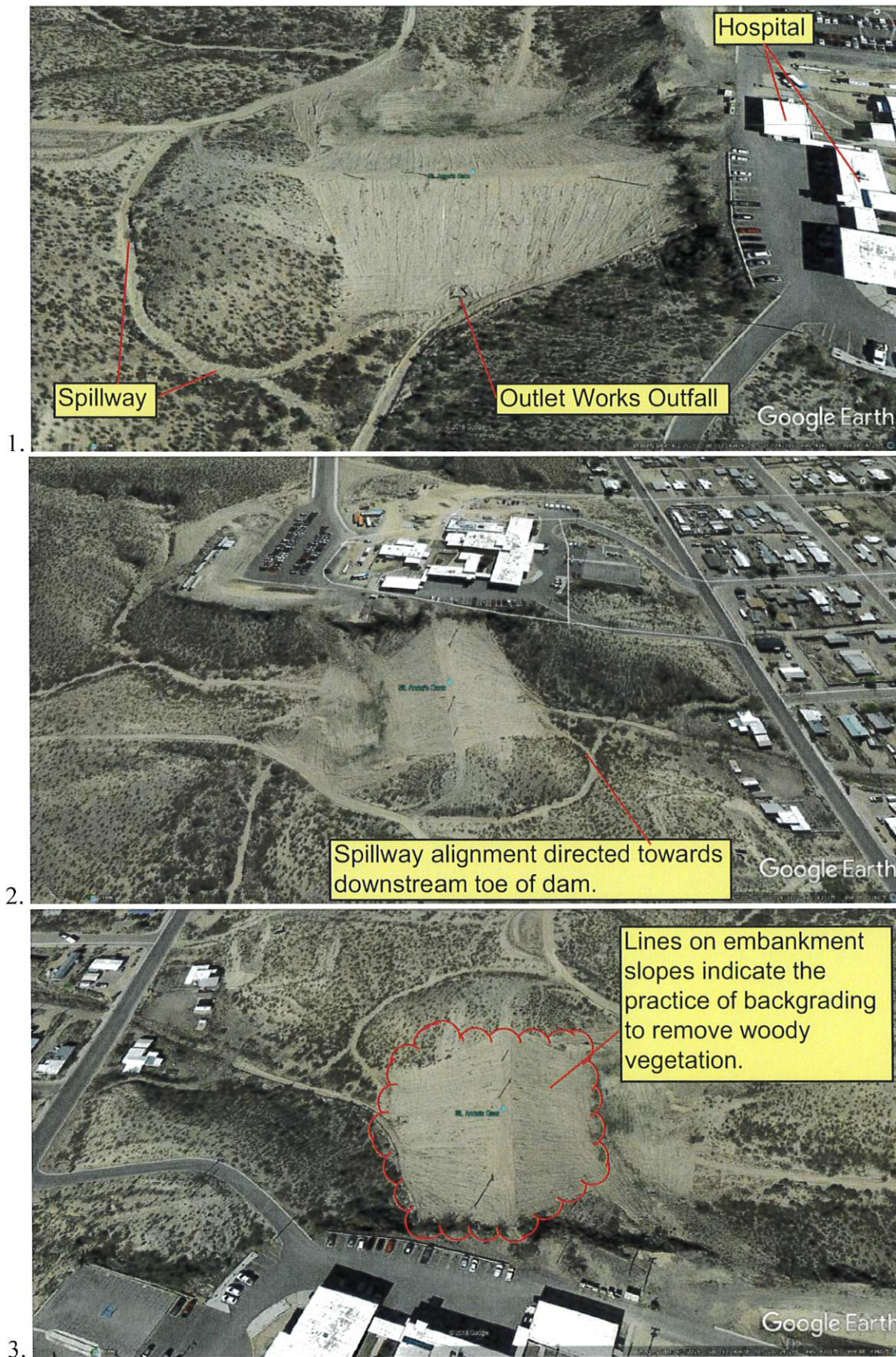


17.

Images 16 and 17: Interior views of the outlet conduit, downstream and upstream, respectively.

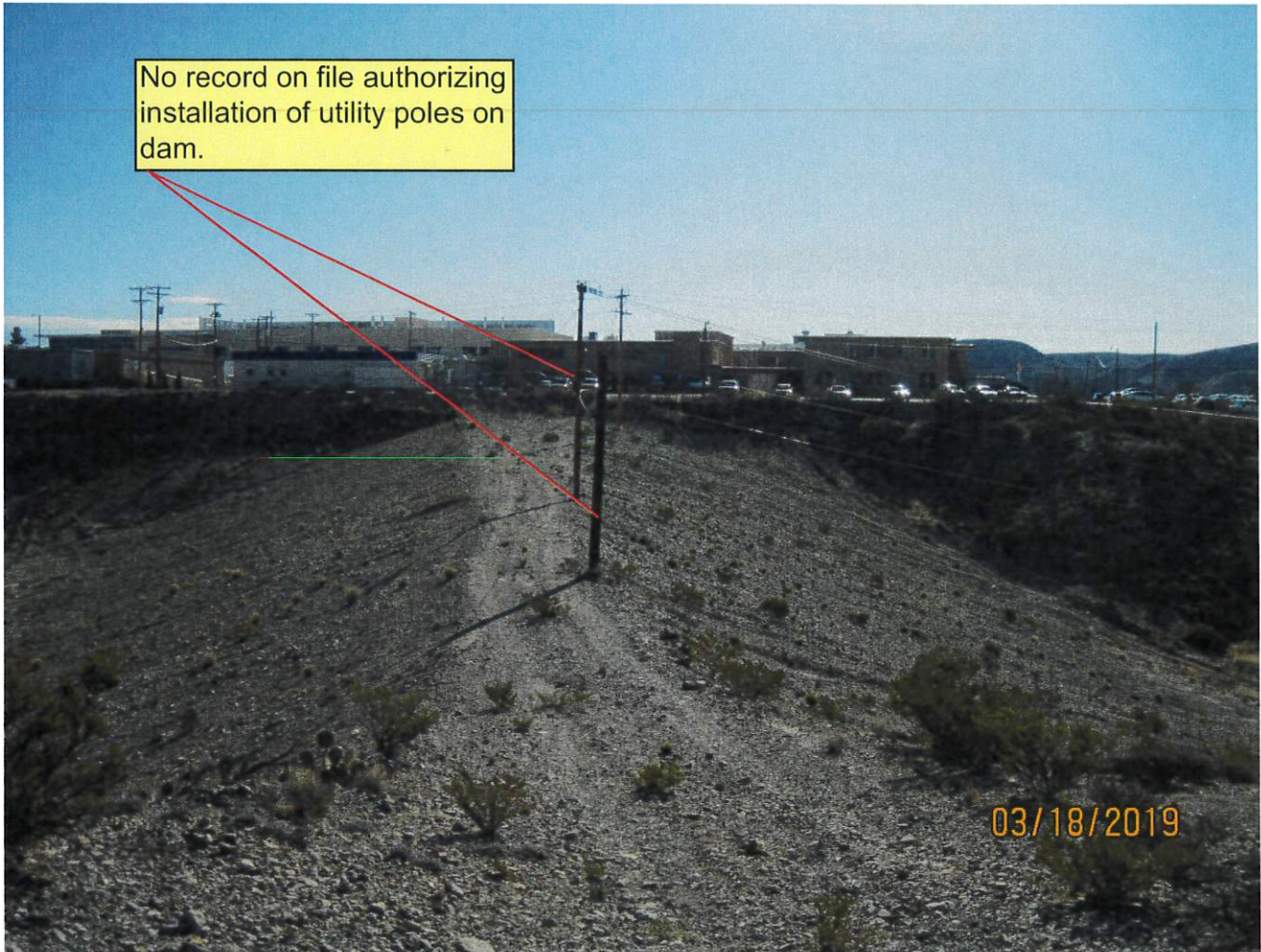


Images 18 through 20: Distant (easterly) view of erosion along the left downstream groin (Image 18), and close-up views of the same set of erosion gullies (Images 19 and 20).



Images 1 through 3: Aerial views of the dam courtesy of GoogleEarth (circa 2015).

No record on file authorizing installation of utility poles on dam.



4.



5.



6.

Images 4 through 6: Easterly view along the dam crest and downstream slope (Images 4 & 5), and westerly view along the crest and upstream slope (Image 6).



7.



8.

Images 7 and 8: Easterly and westerly views, respectively, of the upstream and downstream slopes.



9.



10.

Images 9 and 10: Southerly (downstream) views of the spillway control section and discharge channel, respectively.



11.

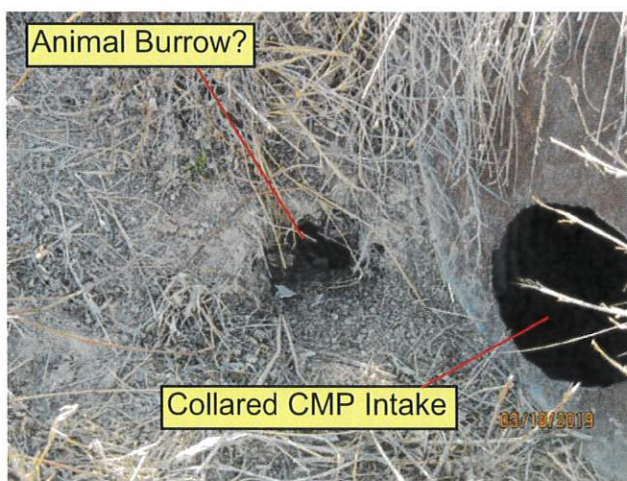


12.

Images 11 and 12: Northwesterly and westerly (upstream) views, respectively, of the spillway discharge channel.



13.



14.

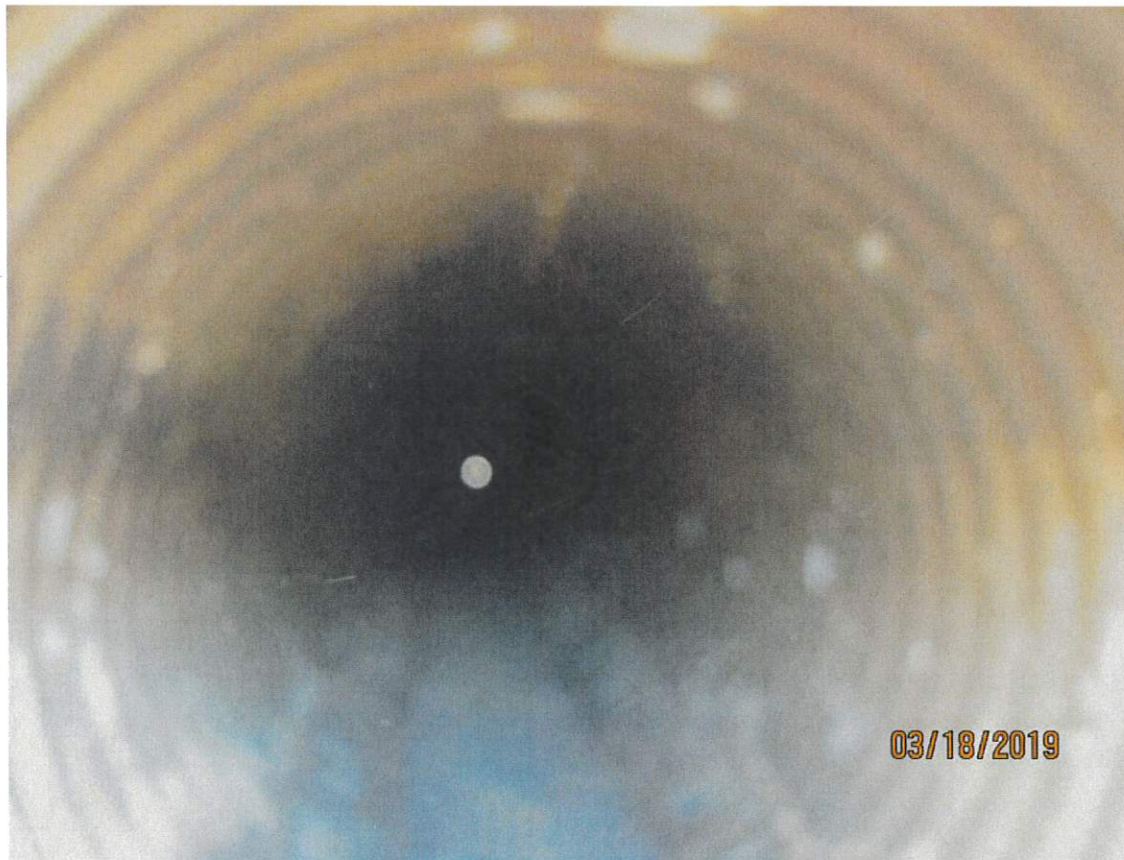


15.

Images 13 through 15: Southerly (downstream) view of the outlet conduit intake (Image 13), close-up view of the outlet intake (Image 14), and northerly (upstream) view of the outlet conduit outfall (Image 15).



16.



17.

Images 16 and 17: Interior views of the outlet conduit, downstream and upstream, respectively.



18.



19.



20.

Images 18 through 20: Distant (easterly) view of erosion along the left downstream groin (Image 18), and close-up views of the same set of erosion gullies (Images 19 and 20).

MIKE A. HAMMON, P.E.
STATE ENGINEER



DAM SAFETY BUREAU
5550 SAN ANTONIO DR., NE
ALBUQUERQUE, NM 87109
(505) 383-4113
(505) 383-4132 FAX
NM.DamSafety@state.nm.us

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe**

March 10, 2022

Mr. Bruce Swingle
City Manager
City of Truth or Consequences
505 Sims Street
Truth or Consequences, NM 87901

**RE: Inspections of Cuchillo-Negro Dam, OSE File No. D-541
St. Anne's Dam, OSE File No. D-581, and
Marie Street Dam, OSE File No. D-582
Sierra County**

Dear Mr. Swingle:

On February 9, 2022, Mr. James Head, P.E., of the Office of the State Engineer (OSE) staff inspected Cuchillo-Negro, St. Anne's, and Marie Street Dams. Copies of Mr. Head's inspection checklist-reports are enclosed for your information. A copy of the NMOSE Guidelines for Vegetation Management on Dams will be sent to you via email for your information and use. I concur with the required actions contained in the respective inspection checklist-reports. Please review the required actions sections of the respective checklist reports and the inspection photographs and make arrangements to address the required actions accordingly.

Cuchillo-Negro Dam has been assessed in satisfactory condition. However, the rating of satisfactory is subject to being downgraded if no progress is shown towards the completion of the items noted under "required actions" on Pages 5 and 6 of the inspection checklist-report.

St. Anne's Dam has been assessed as being in poor condition because of uncertainties that arise from the lack of information about critical analysis parameters associated with design and construction of the dam. If information were to be assembled to reduce these uncertainties a condition rating of fair would have been appropriate due to the erosion gullies that are present on the left upstream and downstream groins of the dam, the diminished crest width of the dam created by past grading (back-dragging) of the slopes, questionable spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit and the alignment of the downstream end of the spillway channel relative to the downstream toe of the dam. Satisfactory progress needs to be made towards resolving issues pertaining to erosion, inspection of the outlet conduit, removal of the orifice plate at the outlet conduit entrance (to be replaced with a properly designed ported intake riser), and verification of spillway capacity.

Marie Street Dam has been assessed as being in poor condition because of uncertainty surrounding the sewer line passing through the dam and uncertainties with critical analysis parameters associated with design and construction of the dam. If these uncertainties were reduced a fair rating would otherwise be appropriate due to inadequate spillway capacity.

Subsections E and F of 19.25.12.21 NMAC require dams classified as High Hazard Potential such as these to have an approved Operations and Maintenance Manual (O&M) and Emergency Action Plan (EAP) in place. The O&M on file for Cuchillo-Negro Dam is outdated; has not been approved by the NMOSE-DSB, and it does not meet the requirements of Section 19.25.12.17 NMAC. There are no O&M manuals on file for St. Anne's and Marie Street Dams. The New Mexico Watershed and Dam Owners Coalition has developed a template for O&M manual preparation that could be useful. There are no EAPs on file with the NMOSE-DSB for these three dams. Please be advised of the potential for added owner liability if a dam were to experience an incident while out of compliance with the NMOSE Dam Safety Bureau's rules and regulations for dams.

Information pertaining to the preparation of Operation and Maintenance Manuals and Emergency Action Plans is available from the NMOSE Dam Safety Bureau website at:

<https://www.ose.state.nm.us/dams/>

If further discussion would be helpful, please contact James Head at (505) 383-4138 or via email at james.head@state.nm.us or me at (505) 383-4134.

Sincerely,



Charles N. Thompson, P.E., Chief
Dam Safety Bureau

CNT/jh

Enclosure

Email: Bruce Swingle, City Manager, City of Truth or Consequences (bswingle@torcnm.org)
Benny Fuentes, City of Truth or Consequences (bfuentes@torcnm.org)
~~Paul Tooley, Sierra County Emergency Manager (ptoolley@sierraco.org)~~
Shelley Dragomir Ramos, P.E., USACE Abq. Dist., (Shelley.D.Ramos@usace.army.mil)

**New Mexico Office of the State Engineer
Dam Safety Bureau
Inspection Checklist and Report**

County: Sierra	Dam Name: St. Anne's	OSE No.: D-581	Fed ID No.: NM00581
Inspection Performed By: James Head <i>CNT</i>		Inspection Date: 2/9/2022	Last Inspection Date: 3/18/2019
Owner Name: City of Truth or Consequences		Owner Address: 505 Sims Street Truth or Consequences, NM 87901	Owner Contact: Benny Fuentes Owner Phone No.: 575-740-2613 Inspection Contact: Frank Aguirre Cell: 575-952-0083
Purpose of Dam: Flood Control		Hazard Class: High	Hazard Class Appropriate: Yes ☒ No ☐
Dam Location: ~0.1 mile north of the junction of North Elm and East 9 th Streets in T or C		Latitude: 33.14059°	Longitude: -107.24337°
Weather: Clear, calm, ~45 degs F		Attendees: Frank Aguirre (City of T or C)	

1. General Conditions	Satisfactory	Needs Attention	N/A	Remarks:
a. Access for O & M	☒	☐	☐	
b. Unauthorized access restricted	☒	☐	☐	Not fenced, but no evidence of vandalism.
c. No unauthorized alterations	☒	☐	☐	
Notes:				

2. Upstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	Repair erosion gullies in excess of 3-inch depths as they occur.
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	Collapse/backfill animal burrows as they occur.
d. Distortion or cracking	☒	☐	☐	
e. Upstream wave protection	☐	☐	☒	
Notes:	Refer to remarks provided for specific items.			

3. Dam Crest	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	
d. Distortion or cracking	☒	☐	☐	Periodically monitor for cracks and/or settlement.
Notes:	Refer to remarks provided for specific items.			

4. Downstream Slope	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☐	☒	☐	Repair existing erosion and monitor and repair future erosion for erosion rill/gully depths greater than 3 inches. Backfill with suitable embankment material (preferably gravelly clay). Place additional compacted fill and rock in holes or low areas along the concrete apron for the spillway overflow section of the dam (see photographs).
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	Collapse/backfill animal burrows as they occur; refill bait dispensers.
d. Distortion or cracking	☒	☐	☐	
e. Seepage control	☐	☐	☒	Normally dry dam.
Notes:	Refer to remarks provided for specific items.			

5. Downstream Area	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion control	☒	☐	☐	
b. Woody vegetation control	☒	☐	☐	
c. Rodent control	☒	☐	☐	Monitor and abate rodents as needed.
d. Distortion or cracking	☒	☐	☐	
e. Seepage or boils	☒	☐	☐	Dry (flood control) dam.
f. Drains or Wells	☐	☐	☒	No drains or wells.
Notes:	Maintain free of excessive woody vegetation, rodents, and debris.			

6. Abutment Contacts	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion, cracks, or slides	☐	☒	☐	Repair existing erosion and monitor and repair future erosion for erosion rill/gully depths greater than 3 inches. Backfill with suitable embankment material (preferably gravelly clay).
b. Woody vegetation	☒	☐	☐	
c. Distortion or cracking	☒	☐	☐	
d. Seepage	☒	☐	☐	
e. Drains or Wells	☐	☐	☒	No drains or wells.
Notes:	Refer to remarks provided for specific items.			

7. Reservoir	Satisfactory	Needs Attention	N/A	Remarks:
a. Developed/Encroachment	☒	☐	☐	
b. Banks and slopes stable	☒	☐	☐	
c. Obstruction or debris	☒	☐	☐	
d. Sediment level	=at invert of inlet to outlet conduit			
e. Water level	= Dry			
Notes:	Maintain reservoir area free of weeds and other debris – potential to plug the outlet works intake structure port (aka, the orifice plate).			

8. Intake Structure	Type of Structure: There is no intake structure per se, but rather, an orifice plate.			Remarks:
	Satisfactory	Needs Attention	N/A	
a. Concrete condition	☐	☐	☒	
b. Reinforcement encasement	☐	☐	☒	
c. Coating adequacy	☐	☐	☒	
d. Leakage	☐	☐	☒	Reservoir was dry.
e. Trash rack condition	☐	☒	☐	
f. Inlet unobstructed	☐	☒	☐	Inlet highly susceptible to clogging.
g. Gates operative	☐	☐	☒	Not gated (passive system).
h. Woody vegetation	☒	☐	☐	
i. Number of intake ports	1	Number of ports open	1	
Notes:	The orifice plate welded to the upstream (entrance) end of the outlet conduit diminishes the outlet conduit capacity and makes it more likely that the reservoir attains higher (more dangerous) flood stages as a result of significant, high intensity rainfall events. The orifice plate needs to be removed and replaced with a ported intake riser similar to what is used for the majority of the NRCS (formerly SCS) designed dams.			

9. Outlet Conduit	Type of Conduit: 24-inch CMP			Estimated Discharge: None
	Interior inspection: Yes ☐ Date: ☐ No ☒			
	Satisfactory	Needs Attention	N/A	Remarks:
a. Overall Condition	☐	☐	☐	The CMP is corroding and has scour at the invert.
b. Condition of surfaces	☐	☐	☐	Buried, not assessed.
c. Reinforcement encasement	☐	☐	☐	Buried, not assessed.
d. Clear of obstructions	☒	☐	☐	
e. Joint Condition	☐	☐	☐	Buried, not assessed.
f. Leakage	☐	☐	☐	Buried, not assessed.
g. Alignment	☐	☐	☐	Buried, not assessed.
Notes:		Refer to remarks provided for specific items.		

10. Outlet Energy Dissipator	Satisfactory	Needs Attention	N/A	Remarks:
a. Concrete condition	☒	☐	☐	
b. Reinforcement encasement	☐	☐	☒	
c. Joint Condition	☐	☒	☐	Monitor and replace and repair masonry (stones) at the end of the right wingwall as the need arises.
d. Riprap condition	☐	☐	☒	No riprap
e. Clear of obstructions	☒	☐	☐	
f. Woody vegetation control	☒	☐	☐	
Notes:		Refer to remarks provided for specific items.		

11. Outfall & Outlet Channel	Satisfactory	Needs Attention	N/A	Remarks:
a. Erosion	☒	☐	☐	Periodically monitor and mitigate as needed.
b. Obstructions or debris	☒	☐	☐	Periodically monitor and mitigate as needed.
c. Erosion protection	☒	☐	☐	
d. Woody vegetation control	☐	☒	☐	Periodically monitor and remove vegetation as needed.
Notes:		Refer to remarks provided for specific items.		

12. Spillway	Satisfactory	Needs Attention	N/A	Remarks:
a. Clear of obstructions	☒	☐	☐	
b. Condition of entrance	☒	☐	☐	
c. Condition of control section	☐	☒	☐	No concrete control sill, not well defined.
d. Condition spillway floor	☒	☐	☐	
e. Condition of walls or slopes	☒	☐	☐	
f. Condition of joints	☐	☐	☒	Earthen Channel – no joints
g. Energy dissipation	☐	☐	☒	
h. Condition of exit channel	☒	☐	☐	
i. Seepage control	☐	☐	☒	Flood Control Dam.
j. Erosion control	☐	☐	☒	
k. Rodent control	☒	☐	☐	
l. Woody vegetation control	☒	☐	☐	

m. Capacity	☐	☒	☐	SDF: Per NMOSE regulations high hazard dams are required to have spillways capable of passing 100% of the runoff from the governing PMP storm event. From past NMOSE inspection reports, the spillway capacity is about 70% of the routed 72-hr PMP event based on HMR55A. This percentage could be higher indicating more capacity if the flood discharge from the CO-NM REPS tool PMP is evaluated for reservoir routing. However, an updated H&H analysis to include the impacts of 2-hr, 6-hr, and 48-hr REPs PMPs and the AEP and precipitation distribution methodology from the MetPortal Tool would be required for verification of spillway capacity in accordance with the new NMOSE hydrologic guidance.
Notes:	Spillway capacity is judged marginally adequate based on cursory level spillway capacity estimates. The discharge end of the spillway needs to be realigned such that flood discharge is directed away from the dam.			

13. Compliance – Rules and Regulations	Required	In Place	Update needed	Remarks:
a. Emergency Action Plan	☒	☐	☐	
b. Operations and Maintenance Manual	☒	☐	☐	
c. Other required documents	☐	☐	☒	Current hydrologic and flood routing analyses and a breach report for flood maps to be used in an EAP.
d. Status of State Engineer Order		☐		No Order on dam at this time.
Notes:	The dam is out of compliance with O&M Manual and EAP requirements as per Sections 19.25.12.17 and 19.25.12.18 NMAC.			

14. Design and Construction Documentation	There is no design report, construction drawings, nor construction specifications on file with the NMOSE to support the overall design of for the dam. Items related to the overall design include, but are not limited to, comprehensive computations and analysis for hydrologic, hydraulic, and geotechnical analyses. The services of an engineer, licensed in New Mexico, with experience in the design of dams needs to be retained to prepare an assessment of the dam that addresses the items listed above. Because of the lack of design documentation, uncertainties exist as to critical analysis parameters for St. Anne's Dam.
---	--

Overall Remarks: Based on a cursory review of the documentation and the field inspection, St. Anne's Dam is in "Poor" condition. According to 2008 Federal Dam Safety Condition assessment terminology, Poor condition is used when:

"A dam safety deficiency is recognized for loading conditions which may realistically occur. Remedial action is necessary. A poor condition may also be used when uncertainties exists as to critical analysis parameters, which identify a potential dam safety deficiency. Further investigations and studies are necessary."

The rating of "poor" is a result of uncertainties with critical analysis parameters due to the lack of a design report on file with the NMOSE to verify the design assumptions. Otherwise, a fair rating would have been appropriate due to the erosion gullies that are present on the left upstream and downstream groins of the dam, the diminished crest width of the dam created by the grading (back-dragging) of the slopes, questionable spillway capacity to convey the inflow design flood, and uncertainties with the condition of the outlet conduit and the alignment of the downstream end of the spillway channel relative to the downstream toe of the dam. However, the conditional rating of *Fair* is subject to being downgraded to *Poor* if satisfactory progress is not made towards resolving issues pertaining to erosion, inspection of the outlet conduit, removal of the orifice plate at the outlet conduit entrance (to be replaced with a properly designed (NRCS type) ported intake riser, and verification of spillway capacity.

Required Actions by the Owner (City of T or C):

1. Address the erosion that is occurring at the left downstream groin at the east end of the dam.
2. A trash rack needs to be placed over the inlet of the outlet conduit to assure the orifice does not become clogged by debris or trash washed down from the watershed during a rain event.
3. The outlet conduit 24-inch diameter CMP is corroding and has scour along the invert. The full extent of the corrosion and scour needs to be determined by having the interior of the entire length of the outlet conduit inspected. The issue will need to be addressed before the pipe collapses.
4. Monitor the effective width of the dam crest to ensure that the practice of back-dragging the embankment slopes for woody vegetation removal and erosion backfilling is not reducing the cross-sectional area of the dam as originally designed.
5. The downstream end of the spillway channel is aligned such that potential scouring of the downstream slope of the dam could occur during severe precipitation events. The City of Truth or Consequences needs to ensure that flood discharge is directed away from the downstream toe of the dam by realigning the downstream end of the spillway channel.
6. The upstream and downstream slopes, the downstream area, and the outlet channel have been back-dragged to remove the woody vegetation. This is not the preferred method of vegetation management as it indiscriminately destroys all vegetation, including the beneficial grass and small shrubs. In addition, it does not remove the rootballs so certain species, such as mesquite and creoste, simply grow back. Woody vegetation needs to be removed per the NMOSE-DSB guidelines as stated in the document *Vegetation Management on Dams*.
7. Continue periodic woody vegetation removal. The dam is for the most part free of woody vegetation. Vegetation removal includes removal of rootballs and stumps in accordance with the New Mexico Office of the State Engineer (NMOSE) Dam Safety Bureau updated "*Vegetation Management on Dams*" which is available from the NMOSE website at: <https://www.ose.state.nm.us/dams/operations.php>
8. Continue proactive rodent abatement measures. Rodent burrows need to be collapsed, backfilled with suitable embankment material, and compacted after rodent eradication has occurred from a specific burrow or colony of burrows.

9. Make arrangements to have an overall inspection of the outlet works conduits performed by a qualified contractor or professional civil engineer licensed in New Mexico with experience in dam engineering; this includes an interior inspections of the outlet works conduits. Once completed, provide the inspection documentation to the NMOSE-DSB. This item is reiterated from past NMOSE dam inspections.
10. The dam is classified as high hazard potential, therefore, an Operation and Maintenance (O&M) Manual is required per Subsections E of 19.25.12.21 of the New Mexico Administrative Code (NMAC). The Owner is referred to the NMOSE website for information on preparing an O&M Manual. Changes to NMOSE rules and regulations allow an owner to prepare the O&M Manual without the involvement of a professional engineer if the owner can submit a manual that meets the requirements of 19.25.12.17 NMAC.
11. The dam is classified as high hazard potential, therefore, an Emergency Action Plan (EAP) is required per Subsection F of 19.25.12.21 NMAC. There is no EAP on file with the NMOSE for this dam. The owner is referred to the NMOSE website for information on preparing an EAP and for a copy of the EAP template. Engineering elements of the EAP must be prepared by a professional engineer licensed in New Mexico with experience in dam breach analysis, flood routing, and failure mechanisms for dams. The owner can prepare the non-engineering elements of the EAP if the owner can meet the requirements of 19.25.12.18 NMAC.
12. Summary tables from the 2018 CO-NM REPs PMP tool and the updated MetPortal tool for Watershed Precipitation Frequency are shown below and also contain HMR 55A precipitation values for comparison. Based on a comparison of the rainfall intensities and the small watershed size, information from the tables suggest that the 2-hr Intraduration PMP event from CO-NM REPs PMP tool may be the governing rainfall event based on updated NMOSE hydrologic guidelines. From the tables it is observed that the average rainfall intensities for both the 2-hr Interduration PMP and 6-hr PMP events from the REPs tool exceed the average intensities for the 10^{-6} AEP for the 2-hr LS and 6-hr MEC events from the MetPortal tool. Thus, given that the MetPortal rainfall distributions are used for the REPs tool and the MetPortal rainfall, the flood discharge corresponding to the governing intraduration precipitation from REPs would likely be used as the inflow design flood for the dam. Hydrologic and reservoir routing analyses of the REPs 2-hr and 6-hr events would be necessary to confirm which event is the governing event. A screen capture of the drainage as taken from USGS Stream Stats is also included for reference.

St. Anne's Dam (Drainage Area ~0.33 sq. mi)

CO-NM Reps PMP Tool (inches)										HMR 55A (inches)	
OBJECTID *	Storm Type	PMP_01	PMP_06	PMP_12	PMP_24	PMP_48	PMP_72			6-hr Local	72-hr Gen.
1	General	2.7	6.5	8.9	10.4	13.2	13.5				23.1
OBJECTID *	Storm Type	PMP_01	PMP_02	PMP_03	PMP_04	PMP_05	PMP_06	PMP_12	PMP_24		
1	Local	7.7	9.7	11.5	12.1	12.1	12.1	12.6	12.7	15.93	
OBJECTID *	Storm Type	PMP_01	PMP_06	PMP_12	PMP_24	PMP_48	PMP_72				
1	Tropical	2.1	5.6	7.9	10.1	12.3	12.4				23.1

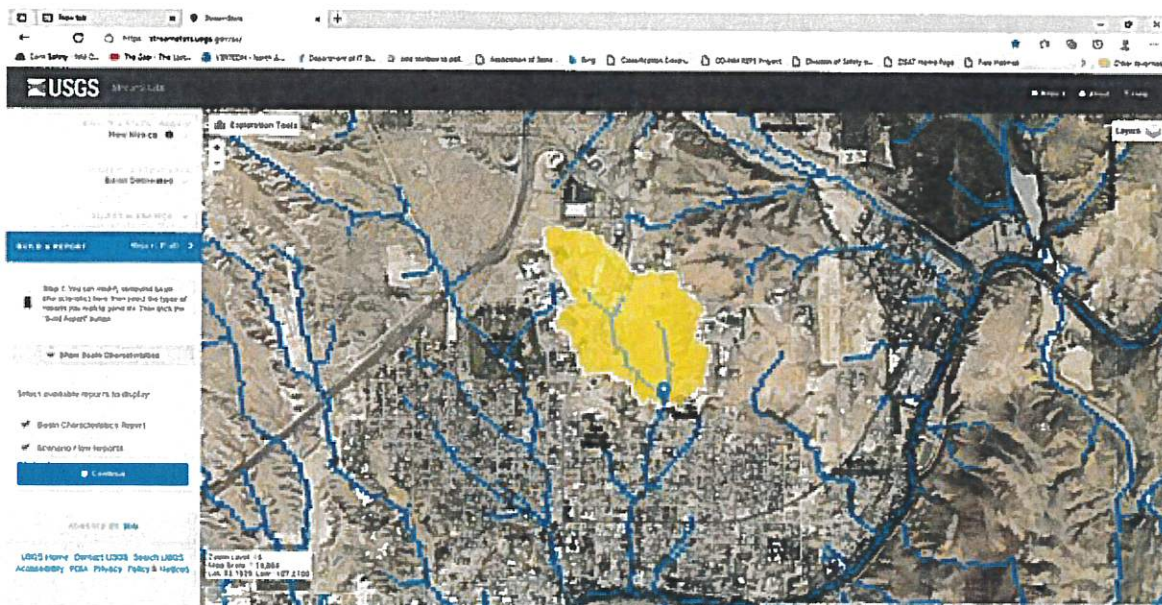
Local Storm: * 2-hr Intraduration PMP average intensity ~ 4.85 in./hr

** 6-hr PMP average intensity ~ 2.02 in./hr

MetPortal Watershed Precipitation Frequency, inches (ARF = 1) (24 and 72 hr durations not for design use)						
AEP	2 hr LS	6 hr MEC	24 hr MLC/TSR *	48 hr MLC/TSR	72 hr MLC/TSR *	
10 ⁻²	2.46	2.60	3.19	3.92	4.26	
10 ⁻³	3.45	3.60	4.92	6.04	6.57	
10 ⁻⁴	4.52	4.70	7.09	8.70	9.46	
10 ⁻⁵	5.68	5.93	9.82	12.05	13.1	
10 ⁻⁶	6.94	7.28	13.25	16.27	17.68	
10 ⁻⁷	8.30	8.77	17.56	21.57	23.44	

Local Storm using 10⁻⁶ AEP:

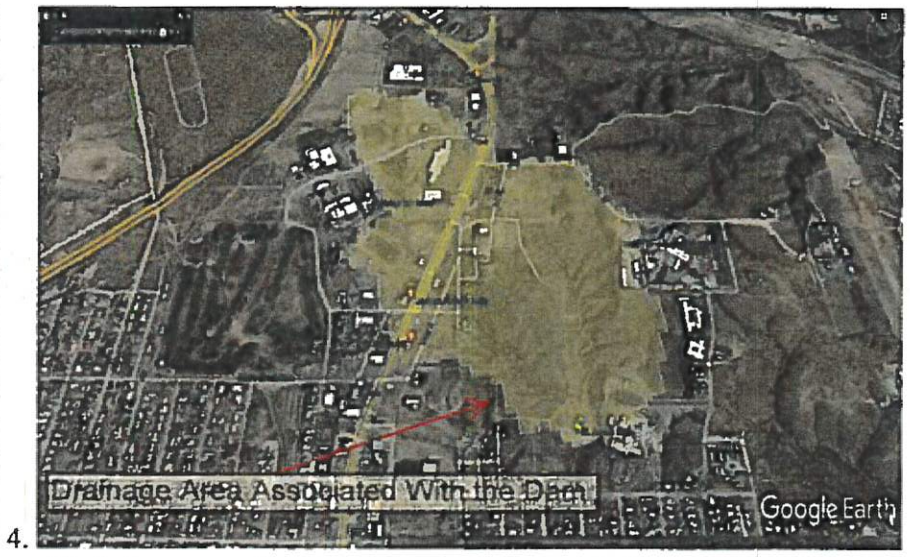
2-hr LS average intensity ~ 3.47 in/hr; 6-hr LS average intensity ~ 1.21 in/hr



Date: 2/24/2022

Signature: *[Handwritten Signature]***Disclaimer**

Professional judgments and evaluations are represented in this document. These judgments are based partly on information gathered from visual observations and a limited review of the NMOSE Dam Safety Bureau files for the facility. The NMOSE does not guarantee the performance of this dam in any way and does not assume responsibility for safe operation of this dam. The sole responsibility for safe operation of this dam rests with the owner, operators and sponsors. The NMOSE only provides that the work and judgments rendered were performed in a manner consistent with the level of care and skill ordinarily exercised by other engineers under similar circumstances. No other warrantee or guarantee is included or intended.

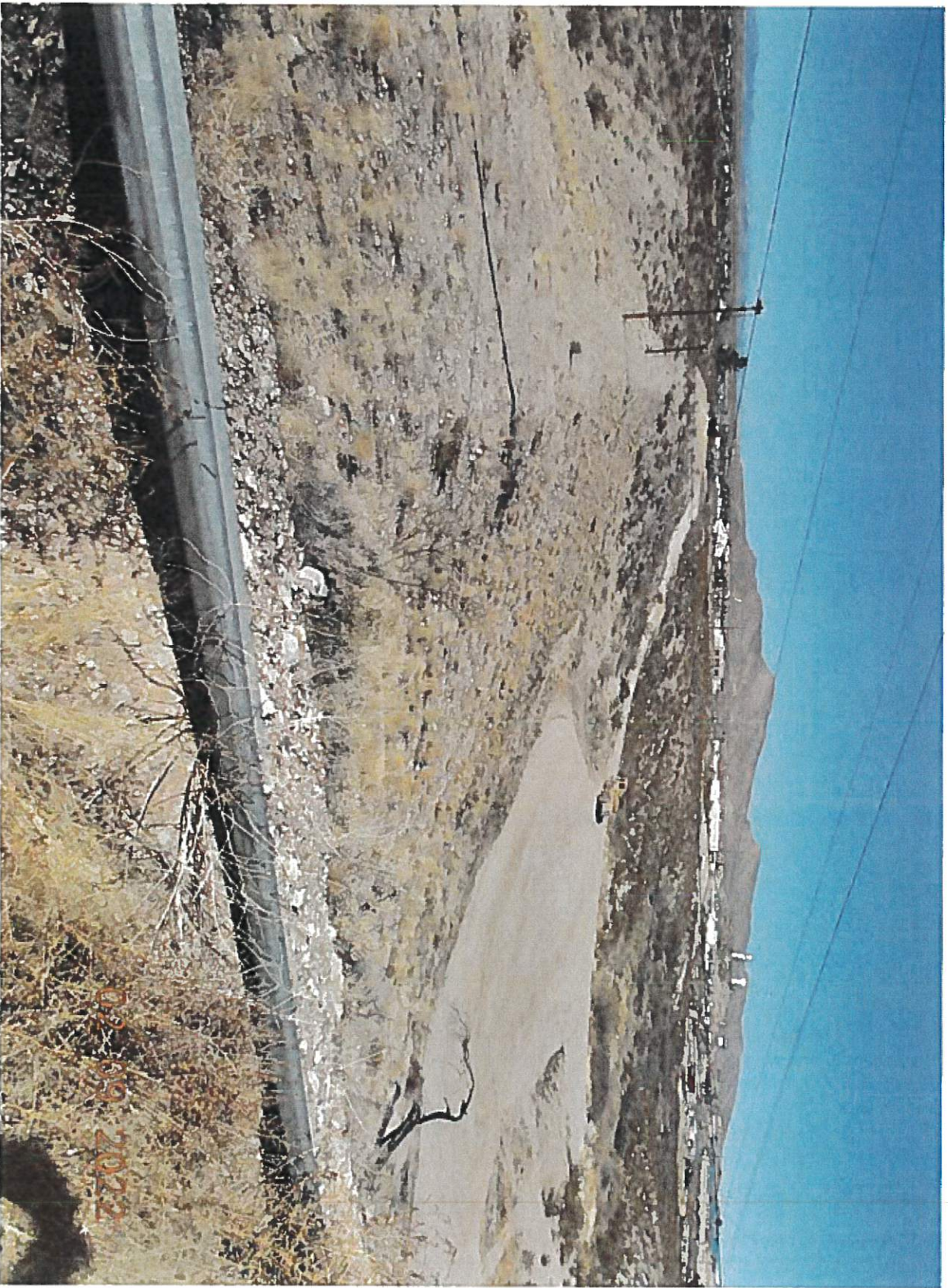


Images 1 through 4 3: Google Earth aerial overviews of the dam with drainage area from USGS Stream Stats as indicated. The drainage area for the dam as per USGS Stream Stats (Image 4) is on the order 0.33 square mile.



5.

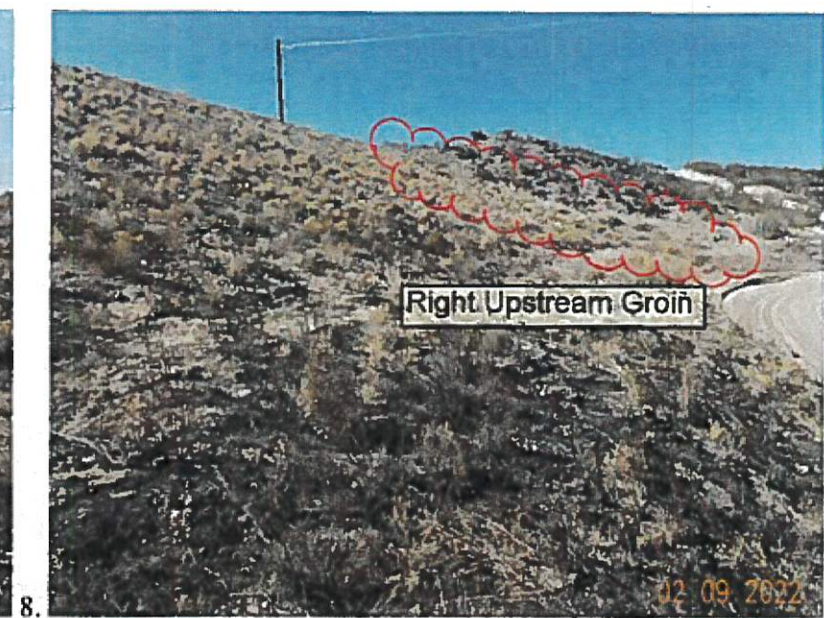
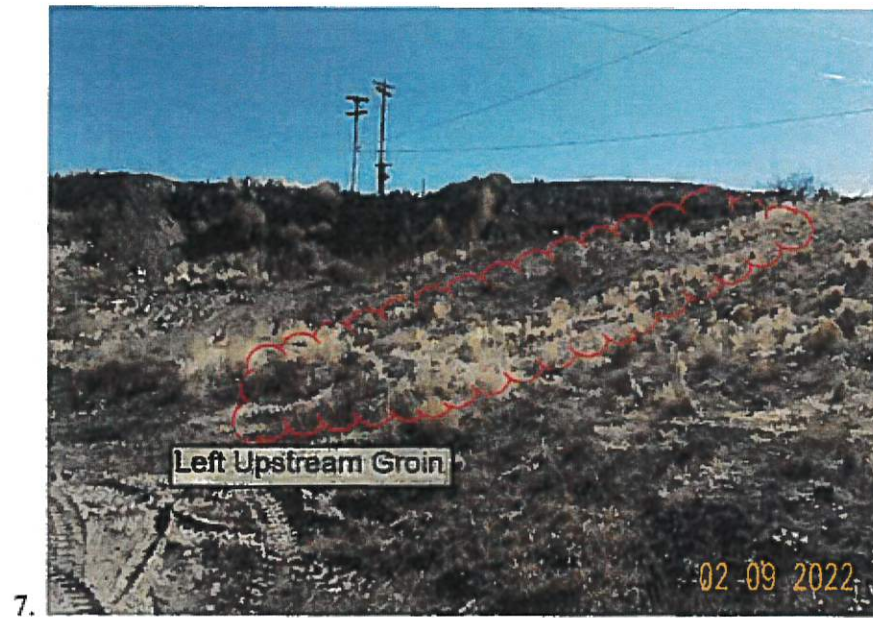
Image 5: Easterly view of the dam as seen from the vicinity of the right abutment.



6.

Image 6: Westerly view of the dam as seen from the vicinity of the left abutment.

St. Anne's Dam
February 9, 2022 Inspection Photos



Images 7 & 8: Easterly and westerly views of the left and right upstream groins of the dam, respectively.



Images 9 and 10: Easterly and westerly views of the upstream views of the upstream slope.



11.

Image 11: Northerly view of the downstream slope with features as indicated.



12.



13.

Images 12 and 13: Northerly views of the left and right downstream groins of the dam as seen from the downstream toe.



14.

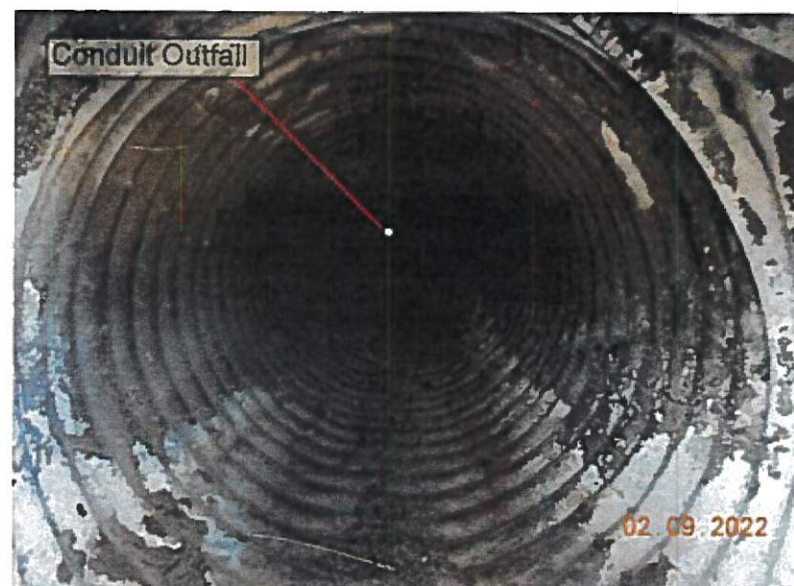


15.

Images 14 and 15: Upstream views of the 24-inch diameter CMP outlet conduit outfall with light visible at the upstream end as indicated.



16.

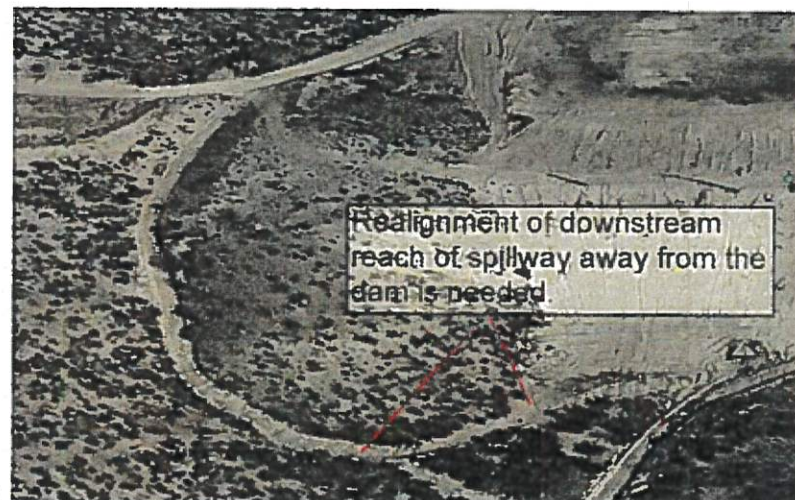


17.

Images 16 and 17: Downstream (southerly) views of the outlet works intake. The steel orifice plate significantly limits the capacity of the outlet conduit and is highly susceptible to clogging during a flood event. The orifice plate needs to be removed and replaced with a properly designed NRCS type ported riser. The CMP asphalt liner is deteriorated, an interior inspection of the conduit is required to verify the overall condition of the conduit.



18.



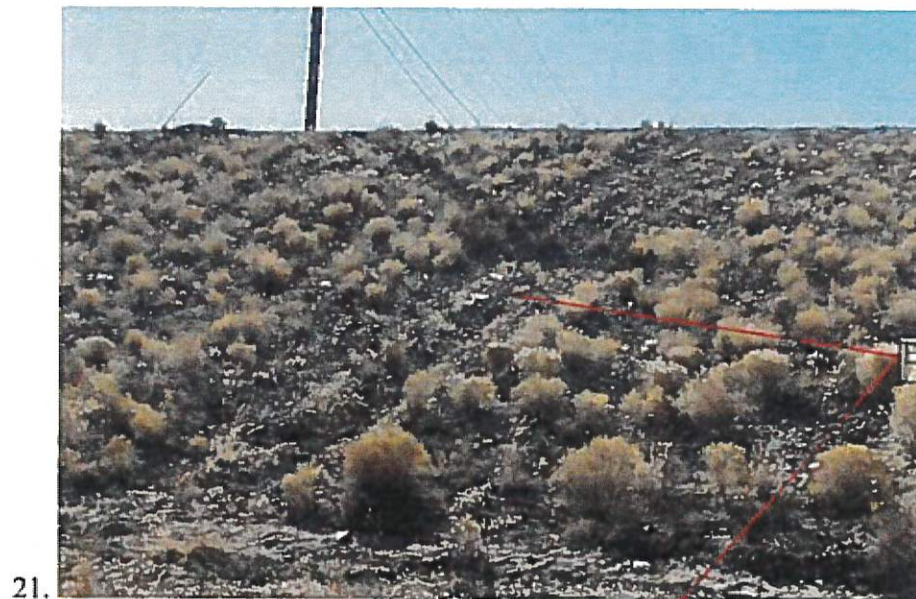
19.

Images 18 and 19: Downstream view of the spillway entrance and aerial view of the spillway channel alignment from Google Earth.

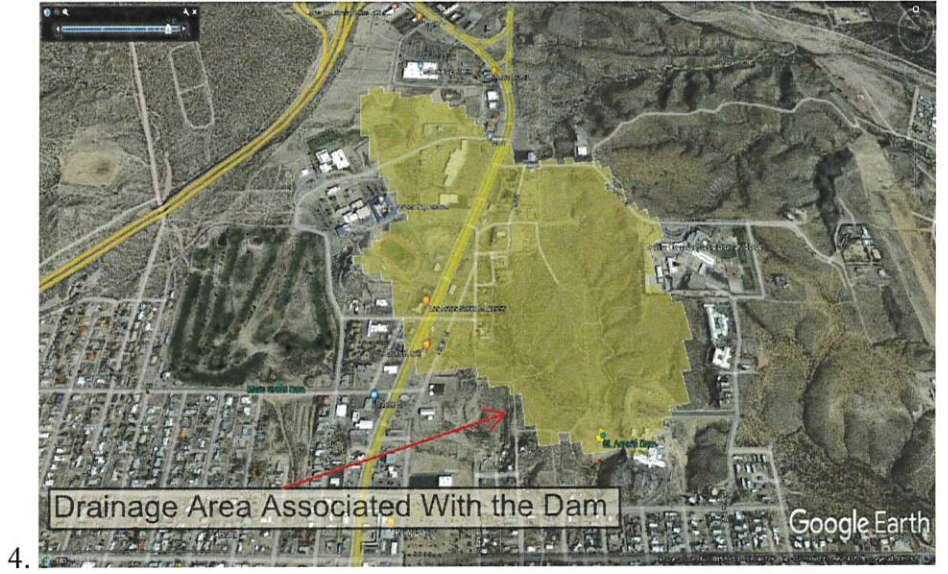
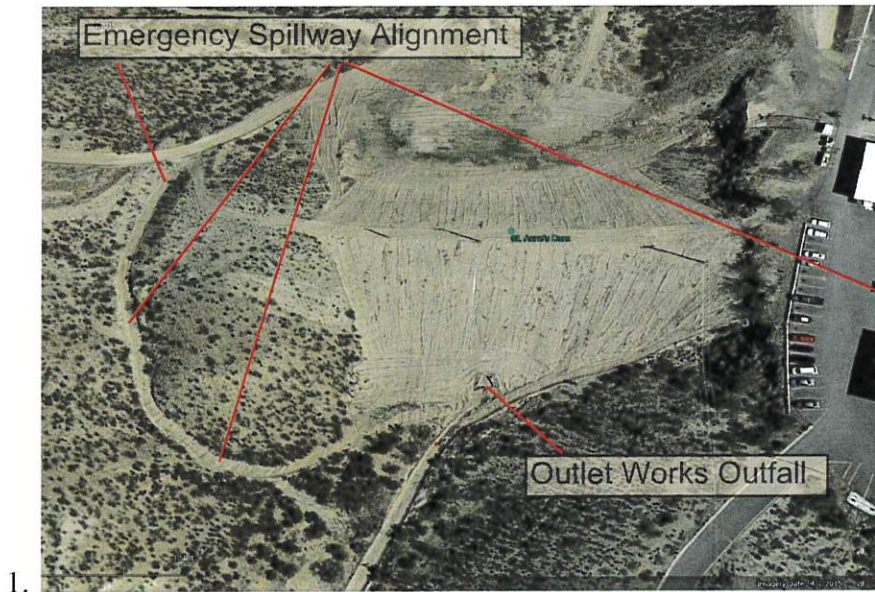


20.

Image 20: Easterly view of the dam and the spillway (in the foreground).



Images 21 through 24: Views of past off-road vehicle (ORV) traffic on the upstream slope (Images 21 and 22) and erosion gullies on the downstream slope (Images 23 and 24).



Images 1 through 4 3: Google Earth aerial overviews of the dam with drainage area from USGS Stream Stats as indicated. The drainage area for the dam as per USGS Stream Stats (Image 4) is on the order 0.33 square mile.



5.

Image 5: Easterly view of the dam as seen from the vicinity of the right abutment.

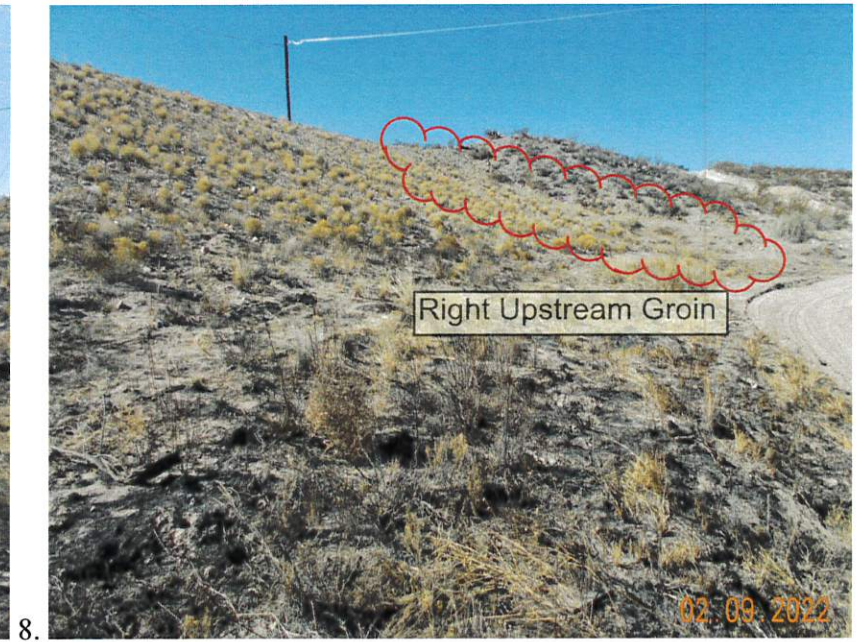
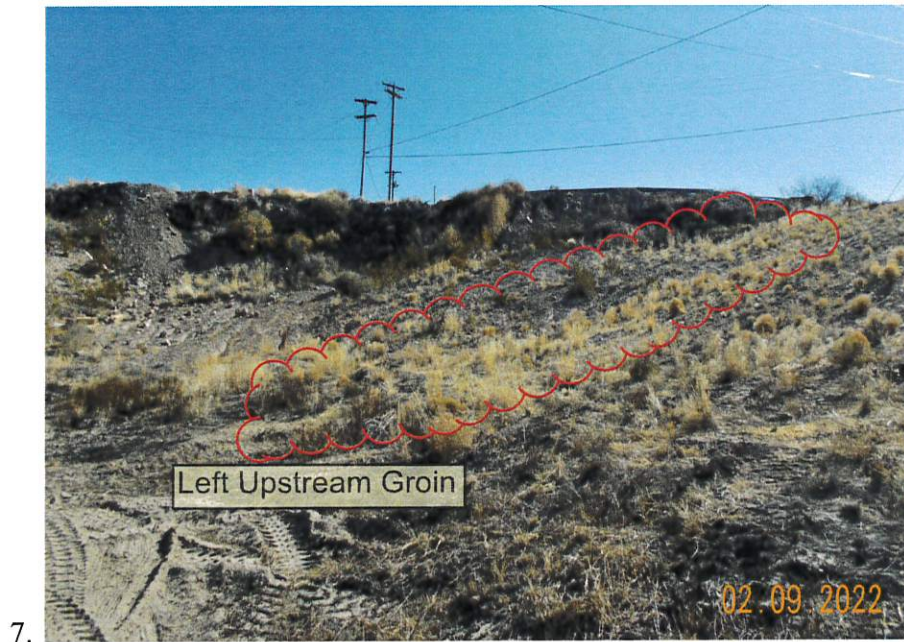


6.

Image 6: Westerly view of the dam as seen from the vicinity of the left abutment.

St. Anne's Dam
February 9, 2022 Inspection Photos

OSE File D-581
Page 3 of 9



Images 7 & 8: Easterly and westerly views of the left and right upstream groins of the dam, respectively.

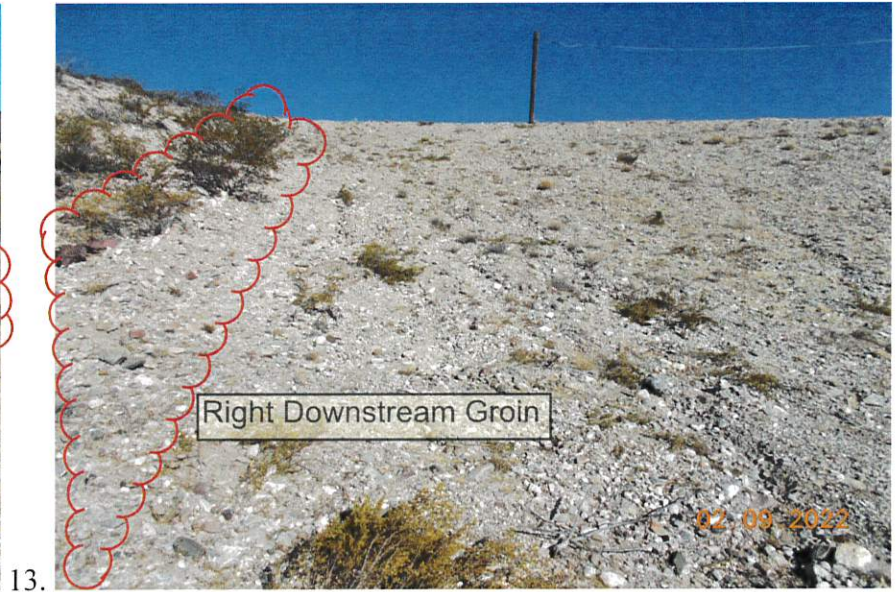


Images 9 and 10: Easterly and westerly views of the upstream views of the upstream slope.

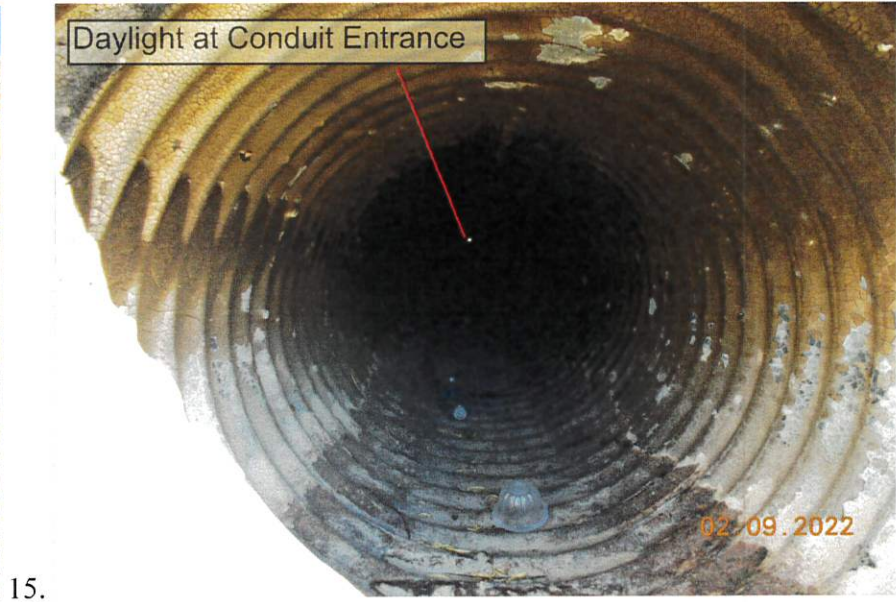


11.

Image 11: Northerly view of the downstream slope with features as indicated.



Images 12 and 13: Northerly views of the left and right downstream groins of the dam as seen from the downstream toe.



Images 14 and 15: Upstream views of the 24-inch diameter CMP outlet conduit outfall with light visible at the upstream end as indicated.



16.

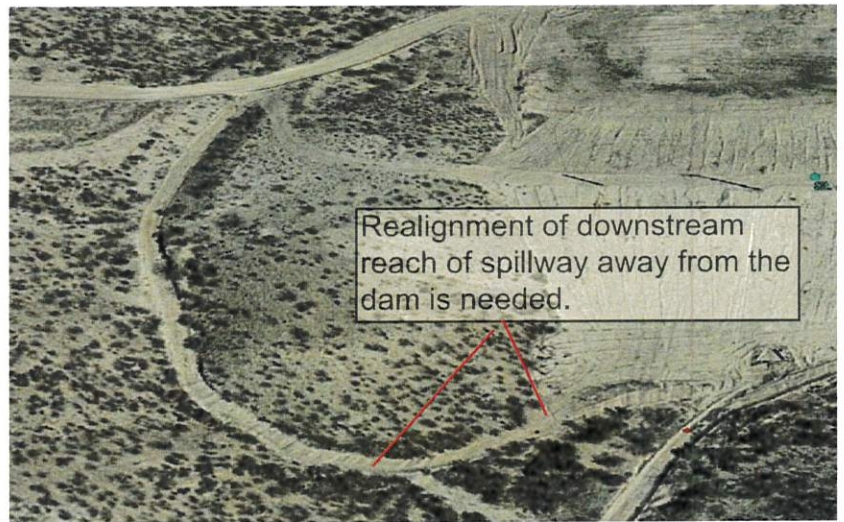


17.

Images 16 and 17: Downstream (southerly) views of the outlet works intake. The steel orifice plate significantly limits the capacity of the outlet conduit and is highly susceptible to clogging during a flood event. The orifice plate needs to be removed and replaced with a properly designed NRCS type ported riser. The CMP asphalt liner is deteriorated, an interior inspection of the conduit is required to verify the overall condition of the conduit.



18.



19.

Images 18 and 19: Downstream view of the spillway entrance and aerial view of the spillway channel alignment from Google Earth.



20.

Image 20: Easterly view of the dam and the spillway (in the foreground).



Images 21 through 24: Views of past off-road vehicle (ORV) traffic on the upstream slope (Images 21 and 22) and erosion gullies on the downstream slope (Images 23 and 24).



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.10

SUBJECT: Discussion/Update Sunny 505 FY 23/24 Advertising and Marketing Project
DEPARTMENT: City Manager's Office
DATE SUBMITTED: March 20, 2024
SUBMITTED BY: Tammy Gardner
WHO WILL PRESENT THE ITEM: Joanie Griffin

Summary/Background:

Joanie will present statistics on this year's advertising and marketing project.

Recommendation:

Click here to enter text.

Attachments:

- Click here to enter text.
- Click here to enter text.

Fiscal Impact (Finance): No

Click here to enter text.

Legal Review (City Attorney): N/A

Click here to enter text.

Approved For Submittal By: ☒ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: Click here to enter text.

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. Click here to enter text. Ordinance No. Click here to enter text.

Continued To: Click here to enter a date. Referred To: Click here to enter text.

☐ Approved ☐ Denied ☐ Other: Click here to enter text.

File Name: CC agendas 3/27/24



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.11

SUBJECT: Approval of new Positive Pay Revolving Fund City Bank Account.
DEPARTMENT: City Clerk's Office
DATE SUBMITTED: March 20, 2024
SUBMITTED BY: Angela A. Torres, Clerk-Treasurer
WHO WILL PRESENT THE ITEM: City Clerk Torres

Summary/Background:

The city has upgraded the revolving fund bank account to a Positive Pay account which ensures added security to the account. The revolving fund is the account used for the Accounts Payable and Payroll checks.

Recommendation:

Commission approval.

Attachments:

• -
-

Fiscal Impact (Finance): N/A

-

Legal Review (City Attorney): Yes

Yes

Approved For Submittal By: ☐ Department Director

Reviewed by: ☒ City Clerk ☒ Finance ☒ Legal ☐ Other: Click here to enter text.

Final Approval: ☒ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. - Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC Agendas 3-27-24



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.12

SUBJECT: March 19, 2024, Special Referendum Election results.
DEPARTMENT: City Clerk's Office
DATE SUBMITTED: March 20, 2024
SUBMITTED BY: Angela A. Torres, Clerk-Treasurer
WHO WILL PRESENT THE ITEM: City Clerk Torres

Summary/Background:

A Special Referendum Election was held on Tuesday, March 19, 2024 for the petition that was submitted against Ordinance No. 756. This item is being presented to update the citizens and governing body of the election results and to also make them part of the permanent record.

For: 447
Against: 583
Total: 1,030 Votes

Recommendation:

None. Update Only.

Attachments:

• -

-

Fiscal Impact (Finance): Choose an item.

-

Legal Review (City Attorney): N/A

-

Approved For Submittal By: ☐ Department Director

Reviewed by: ☒ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☒ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. - Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC Agendas 03/27/2024



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.13

SUBJECT: Discussion/Action: Public restrooms in City parks

DEPARTMENT: Parks

DATE SUBMITTED: March 22, 2024

SUBMITTED BY: O.J. Hechler

WHO WILL PRESENT THE ITEM: O.J. Hechler, Community Services Director

Summary/Background:

Due to vandalism in public restrooms these facilities have remained closed and only opened for events, such as Farmer's Market and for rental agreements. The restrooms at Ralph Edwards Park were recently renovated and have since been vandalized repeatedly. The commercial toilets in the Family Park restrooms at the Louis Armijo Sports Complex were shattered with large rocks and plumbing filled with gravel.

Recommendation:

City Commission determination

Attachments:

[Click here to enter text.](#)

Fiscal Impact (Finance): N/A

\$0.00

Legal Review (City Attorney): N/A

[Click here to enter text.](#)

Approved For Submittal By: ☐ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. - Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC Agendas 3-27-2024



CITY OF TRUTH OR CONSEQUENCES

AGENDA REQUEST FORM

MEETING DATE: March 27, 2024

Agenda Item #: I.14

SUBJECT: Discussion/Action – 2022 GO Bond Grant Agreement - Library

DEPARTMENT: Community Development

DATE SUBMITTED: March 21, 2024

SUBMITTED BY: Traci Alvarez

WHO WILL PRESENT THE ITEM: Traci Alvarez Assistant City Manager

Summary/Background:

2022 GO Bond Grant Agreements are being distributed for signatures. Agreements are required to be executed via DocuSign and Municipality will receive a copy of the agreement once fully executed.

2022 Allocation is \$37,025.21 – this is twice the amount received in 2020.

Recommendation:

Approve Mayor to execute GO Bond Grant Agreement via DocuSign

Attachments:

- Email from NM State Library Development Bureau
- NM Library Funding Allocation

-

Fiscal Impact (Finance): Yes

\$37,025.21

Legal Review (City Attorney): Yes

.

Approved For Submittal By: ☐ Department Director

Reviewed by: ☐ City Clerk ☐ Finance ☐ Legal ☐ Other: [Click here to enter text.](#)

Final Approval: ☐ City Manager

CITY CLERK'S USE ONLY - COMMISSION ACTION TAKEN

Resolution No. [Click here to enter text.](#) Ordinance No. -

Continued To: - Referred To: -

☐ Approved ☐ Denied ☐ Other: -

File Name: CC agendas 3-27-24

From: nmlibs-bounces@lists.zianet.com <nmlibs-bounces@lists.zianet.com> on behalf of Moore, Patricia, DCA <Patricia.Moore@dca.nm.gov>

Sent: Wednesday, March 20, 2024 1:34 PM

To: List Serve for Libraries <nmlibs@lists.zianet.com>; NM Tribal LibraryDirectors <nmtriblibs@lists.zianet.com>

Subject: [Nmlibs] 2022 GO Bond Grant Agreements are coming today!

Directors,

The good news is that your 2022 GO Bond Grant Agreements will start going out today. The Agreements will be sent directly to you via DocuSign. I send a ***BIG THANK YOU*** to Carmelita Aragon who provided the needed expertise w/DocuSign.

These Agreements are set up for electronic signatures. Once you receive the Agreement, if you are not the authorized agent to electronically sign, please use the ASSIGN TO SOMEONE ELSE feature within DocuSign. This can be found under OTHER ACTIONS once you click REVIEW DOCUMENT. An authorized agent is generally a mayor, or the head of City Council or perhaps the Finance Director of the City/Town Hall. It needs to be someone authorized to sign an Agreement w/the State of New Mexico.

Once the authorized person electronically signs the Agreement, it will automatically be forwarded to the next person in line – in this case, that will be the State Librarian, Eli Guinnee. Once all signatures are obtained, DocuSign will send you, the director, a fully executed Grant Agreement and you can send copies on to whomever may need them.

I've attached the public libraries spreadsheet and the tribal public libraries spreadsheet denoting your 2022 GOB allocations. For both public and tribal public libraries, your allocations are approximately twice that of your 2020 GOBs. The Legislators and voters approved the 2022 GO Bonds at twice the amount of the 2020 GO Bonds.

Patricia

Patricia Moore

NEW EMAIL ADDRESS: patricia.moore@dca.nm.gov

GO Bond / Public Library Consultant

New Mexico State Library / Development Bureau

1209 Camino Carlos Rey / Santa Fe, NM 87507

505-476-9724 / 800-340-3890

FINAL Allocation
New Mexico Public Libraries
2022 General Obligation Bonds: \$6,000,000
Allocations by Library

	A	B	C	D	E	F
1	Library	County	Legal Service Area - FY23 Forward	Per Capita Allocation	Library System Allocation	Total 2022 GO Bond Allocation
2	Alamogordo Public Library	Otero	30,403	\$ 157,905.85	\$ 7,692.31	\$ 165,598.16
3	Albert W. Thompson Memorial Library	Union	2,980	\$ 10,473.80	\$ 7,692.31	\$ 18,166.11
4	Albuquerque/Bernalillo County Library System	Bernalillo	662,564	\$ 1,719,865.70	\$ 7,692.31	\$ 1,727,558.01
5	Anthony Public Library	Dona Ana	9,360	\$ 38,737.36	\$ 7,692.31	\$ 46,429.67
6	Artesia Public Library	Eddy	11,301	\$ 44,332.55	\$ 7,692.31	\$ 52,024.86
7	Arthur Johnson Memorial Library	Colfax	6,885	\$ 22,474.03	\$ 7,692.31	\$ 30,166.34
8	Aztec Public Library	San Juan	6,763	\$ 32,158.35	\$ 7,692.31	\$ 39,850.66
9	Bayard Public Library	Grant	2,328	\$ 12,402.98	\$ 7,692.31	\$ 20,095.29
10	Belen Public Library	Valencia	7,269	\$ 55,018.68	\$ 7,692.31	\$ 62,710.99
11	Bloomfield Public Library	San Juan	8,112	\$ 38,485.27	\$ 7,692.31	\$ 46,177.58
12	Bosque Farms Public Library	Valencia	3,904	\$ 29,549.17	\$ 7,692.31	\$ 37,241.48
13	Capitan Public Library	Lincoln	1,489	\$ 6,890.45	\$ 7,692.31	\$ 14,582.76
14	Carlsbad Public Library	Eddy	26,138	\$ 111,005.25	\$ 7,692.31	\$ 118,697.56
15	Carnegie Public Library	San Miguel	13,753	\$ 68,167.35	\$ 7,692.31	\$ 75,859.66
16	Carrizozo Community Public Library	Lincoln	996	\$ 4,814.90	\$ 7,692.31	\$ 12,507.21
17	Clovis Carver Public Library	Curry	37,775	\$ 122,409.10	\$ 7,692.31	\$ 130,101.41
18	Columbus Village Library	Luna	1,664	\$ 5,795.84	\$ 7,692.31	\$ 13,488.15
19	Corrales Community Library	Sandoval	8,329	\$ 29,457.78	\$ 7,692.31	\$ 37,150.09
20	Cuba Public Library	Sandoval	731	\$ 2,178.20	\$ 7,692.31	\$ 9,870.51
21	David F. Cargo El Valle de Anton Chico Library	Guadalupe	188	\$ 702.12	\$ 7,692.31	\$ 8,394.43
22	Villanueva David Cargo Library	San Miguel	229	\$ 1,071.75	\$ 7,692.31	\$ 8,764.06
23	Eagle Nest Public Library	Colfax	290	\$ 1,171.88	\$ 7,692.31	\$ 8,864.19
24	Edgewood Community Library	Santa Fe	3,735	\$ 23,712.98	\$ 7,692.31	\$ 31,405.29
25	El Rito Public Library	Rio Arriba	808	\$ 7,184.72	\$ 7,692.31	\$ 14,877.03
26	Eleanor Daggett Memorial Library	Rio Arriba	1,022	\$ 8,796.25	\$ 7,692.31	\$ 16,488.56
27	Embudo Valley Library & Community Center	Rio Arriba	926	\$ 8,882.58	\$ 7,692.31	\$ 16,574.89

FINAL Allocation
New Mexico Public Libraries
2022 General Obligation Bonds: \$6,000,000
Allocations by Library

	A	B	C	D	E	F
1	Library	County	Legal Service Area - FY23 Forward	Per Capita Allocation	Library System Allocation	Total 2022 GO Bond Allocation
28	Espanola Public Library	Rio Arriba/ Santa Fe	10,526	\$ 81,598.27	\$ 7,692.31	\$ 89,290.58
29	Estancia Public Library	Torrance	1,655	\$ 11,906.55	\$ 7,692.31	\$ 19,598.86
30	Eunice Public Library	Lea	2,922	\$ 9,786.03	\$ 7,692.31	\$ 17,478.34
31	Farmington Public Library	San Juan	45,877	\$ 237,917.88	\$ 7,692.31	\$ 245,610.19
32	Fort Sumner Public Library	De Baca	1,031	\$ 4,284.40	\$ 7,692.31	\$ 11,976.71
33	Fred Macaron Public Library	Colfax	1,047	\$ 3,463.55	\$ 7,692.31	\$ 11,155.86
34	Gila Valley Library	Grant	314	\$ 1,840.52	\$ 7,692.31	\$ 9,532.83
35	Glenwood Community Library	Catron	143	\$ 2,648.26	\$ 7,692.31	\$ 10,340.57
36	Harding (2021 Census Est. Pop.)	Harding	639	\$ 1,629.60	\$ -	\$ 1,629.60
37	Hatch Public Library	Dona Ana	1,644	\$ 6,803.87	\$ 7,692.31	\$ 14,496.18
38	Hobbs Public Library	Lea	34,122	\$ 129,716.11	\$ 7,692.31	\$ 137,408.42
39	Irene S. Sweetkind Public Library	Sandoval	569	\$ 1,519.19	\$ 7,692.31	\$ 9,211.50
40	Jemez Springs Public Library	Sandoval	250	\$ 686.76	\$ 7,692.31	\$ 8,379.07
41	Lordsburg-Hidalgo Library	Hidalgo	2,797	\$ 10,389.70	\$ 7,692.31	\$ 18,082.01
42	Los Alamos County Library System	Los Alamos	17,950	\$ 49,296.20	\$ 7,692.31	\$ 56,988.51
43	Los Lunas Public Library	Valencia	14,835	\$ 112,285.34	\$ 7,692.31	\$ 119,977.65
44	Lovington Public Library	Lea	11,009	\$ 37,363.67	\$ 7,692.31	\$ 45,055.98
45	Magdalena Public Library	Socorro	938	\$ 3,373.30	\$ 7,692.31	\$ 11,065.61
46	Marshall Memorial Library	Luna	14,855	\$ 59,316.96	\$ 7,692.31	\$ 67,009.27
47	Michael Nivison Public Library	Otero	674	\$ 3,832.91	\$ 7,692.31	\$ 11,525.22
48	Moise Memorial Library	Guadalupe	2,848	\$ 10,643.88	\$ 7,692.31	\$ 18,336.19
49	Moriarty Community Library	Torrance	1,910	\$ 18,655.51	\$ 7,692.31	\$ 26,347.82
50	Grants Public Library	Cibola	9,182	\$ 69,325.80	\$ 7,692.31	\$ 77,018.11
51	Mountainair Public Library	Torrance	928	\$ 8,474.55	\$ 7,692.31	\$ 16,166.86
52	Mora County (2021 Census Est. Pop.)	Mora	4,196	\$ 10,700.80	\$ -	\$ 10,700.80
53	Octavia Fellin Public Library	McKinley	21,678	\$ 183,056.40	\$ 7,692.31	\$ 190,748.71
54	Placitas Community Library	Sandoval	4,977	\$ 17,484.60	\$ 7,692.31	\$ 25,176.91
55	Portales Public Library	Roosevelt	12,280	\$ 48,503.10	\$ 7,692.31	\$ 56,195.41

FINAL Allocation
New Mexico Public Libraries
2022 General Obligation Bonds: \$6,000,000
Allocations by Library

	A	B	C	D	E	F
1	Library	County	Legal Service Area - FY23 Forward	Per Capita Allocation	Library System Allocation	Total 2022 GO Bond Allocation
56	Pueblo de Abiquiu Library	Rio Arriba	231	\$ 2,215.85	\$ 7,692.31	\$ 9,908.16
57	Questa Public Library	Taos	1,770	\$ 15,827.70	\$ 7,692.31	\$ 23,520.01
58	Red River Public Library	Taos	477	\$ 4,924.58	\$ 7,692.31	\$ 12,616.89
59	Reserve Public Library	Catron	289	\$ 6,866.74	\$ 7,692.31	\$ 14,559.05
60	Rio Abajo Community Library	Socorro	82	\$ 343.19	\$ 7,692.31	\$ 8,035.50
61	Rio Rancho Public Library	Sandoval	87,521	\$ 303,564.64	\$ 7,692.31	\$ 311,256.95
62	Roswell Public Library	Chaves	48,366	\$ 164,819.60	\$ 7,692.31	\$ 172,511.91
63	Ruidoso Public Library	Lincoln	8,029	\$ 39,772.43	\$ 7,692.31	\$ 47,464.74
64	Santa Fe Public Library	Santa Fe	67,947	\$ 336,087.57	\$ 7,692.31	\$ 343,779.88
65	Shuter Library of Angel Fire	Colfax	1,216	\$ 4,434.54	\$ 7,692.31	\$ 12,126.85
66	Sunland Park Community Library	Dona Ana	14,106	\$ 58,379.19	\$ 7,692.31	\$ 66,071.50
67	Socorro Public Library	Socorro	9,051	\$ 37,880.52	\$ 7,692.31	\$ 45,572.83
68	Talpa Community Center Library	Taos	778	\$ 8,722.50	\$ 7,692.31	\$ 16,414.81
69	Taos Public Library	Taos	5,716	\$ 58,822.33	\$ 7,692.31	\$ 66,514.64
70	Tatum Community Library	Lea	798	\$ 2,260.78	\$ 7,692.31	\$ 9,953.09
71	Silver City Public Library	Grant	10,315	\$ 56,880.20	\$ 7,692.31	\$ 64,572.51
72	Thomas Branigan Memorial Library	Dona Ana	97,618	\$ 460,978.77	\$ 7,692.31	\$ 468,671.08
73	Town of Bernalillo Public Library	Sandoval	8,320	\$ 31,136.52	\$ 7,692.31	\$ 38,828.83
74	Truchas Community Library	Rio Arriba	560	\$ 5,371.75	\$ 7,692.31	\$ 13,064.06
75	Truth or Consequences Public Library	Sierra	6,475	\$ 29,332.90	\$ 7,692.31	\$ 37,025.21
76	Tucumcari Public Library	Quay	5,363	\$ 22,074.90	\$ 7,692.31	\$ 29,767.21
77	Tularosa Public Library	Otero	2,842	\$ 13,047.24	\$ 7,692.31	\$ 20,739.55
78	Vallecitos Community Center and Library	Rio Arriba	141	\$ 1,352.53	\$ 7,692.31	\$ 9,044.84
79	Village of Corona Public Library	Lincoln	172	\$ 639.01	\$ 7,692.31	\$ 8,331.32
80	Vista Grande Public Library	Santa Fe	6,130	\$ 23,063.89	\$ 7,692.31	\$ 30,756.20
81	Woolworth Community Library	Lea	2,047	\$ 7,051.32	\$ 7,692.31	\$ 14,743.63
82	Subtotal		1,458,098	\$ 5,395,999.79	\$ 600,000.18	\$ 5,995,999.97
83	NMSL Rural Services	N/A	N/A			\$4,000.03
84	Total			\$5,395,999.79	\$600,000.18	\$6,000,000.00

FINAL Allocation
New Mexico Public Libraries
2022 General Obligation Bonds: \$6,000,000
Allocations by Library

	A	B	C	D	E	F
1	Library	County	Legal Service Area - FY23 Forward	Per Capita Allocation	Library System Allocation	Total 2022 GO Bond Allocation
85						\$ 6,000,000.00
86						
87						
88	*Mora and Harding Counties currently do not have eligible public libraries. These funds are used to support Bookmobile Service by NMSL in those counties. Allocations are determined using 2021 US Census Estimated County Information and library eligibility, based on current 4.5.8. NMAC.					
89						
90						