

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

September 8, 2023

Ege E. Richardson, PE
CDM Smith
6001 Indian School NW
Albuquerque, NM 87110

**RE: Volcano Cliffs Arsenic Treatment Facility
Grading Plan and Drainage Report
Engineer's Stamp Date: 08/18/23
Hydrology File: E09D001**

Dear Mr. Richardson:

Based upon the information provided in your submittal received 08/21/2023, the Grading Plan and Drainage Report are approved for Building Permit and Grading Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

PRIOR TO CERTIFICATE OF OCCUPANCY:

Albuquerque

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.

NM 87103

2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for **\$25.00** made out to "**Bernalillo County**" for the detention pond per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

www.cabq.gov

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Dough Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

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

Sincerely,

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



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: Volcano Cliffs Arsenic Treatment Facility **Building Permit #:** _____ **Hydrology File #:** _____

DRB#: _____ **EPC#:** PR-2023-008617, SI-2023-00866 **Work Order#:** _____

Legal Description: Water Facilities at Volcano Cliffs 81st Street and Vista Vieja Well No.1 (T11N R2E SEC 28)

City Address: 6641 81st Street NW, Albuquerque, NM 87120

Applicant: CDM Smith **Contact:** Evan Babcock

Address: 6001 Indian School NW, Albuquerque, NM 87110

Phone#: 505-353-3712 **Fax#:** 505-243-2700 **E-mail:** babcocke@cdmsmith.com

Owner: Albuquerque Bernalillo County Water Utility Authority **Contact:** Jane Rael

Address: 505 Marquette Ave NW, Albuquerque, NM 87102

Phone#: 505-289-3254 **Fax#:** _____ **E-mail:** jrael@abcwua.org

TYPE OF SUBMITTAL: _____ PLAT (_____ # OF LOTS) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes ☒ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION ☒ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

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

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

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

DATE SUBMITTED: 8/21/2023 **By:** Evan Babcock

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



6001 Indian School Road NE, Suite 310
Albuquerque, NM 87110
tel: 505 243-3200

VOLCANO CLIFFS RESERVOIR SITE IMPROVEMENTS DRAINAGE ANALYSIS

This technical material and data contained in the drainage analysis report were prepared under the supervision and direction of the undersigned, whose seal as Professional Engineer, licensed to practice in the State of New Mexico, are affixed below.



Ege Richardson, PE
License No. 16219
CDM Smith Inc.
(575) 639-6770

City of Albuquerque Planning Department Development Review Services HYDROLOGY SECTION APPROVED	
DATE:	09/08/23
BY:	<i>Renée C. Brissette</i>
HydroTrans #	E09D001
THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION, OR ERROR OR DIMENSIONS IN PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.	



Technical Memorandum

To: City of Albuquerque, Hydrology

From: CDM Smith

Date: August 18, 2023

Subject: Volcano Cliffs Reservoir Site Improvements Drainage Analysis

Project Background

The Volcano Cliffs Pump Station and Reservoir Site is operated by the Albuquerque Bernalillo County Water Utility Authority (Water Authority) for storage and distribution of groundwater from the Volcano Cliffs wells, Zamora wells, and surface water from the San Juan Chama Water Treatment Plant. The site is located at the intersection of the 81st Street NW and Vista Vieja Avenue NW on a 4.7-acre easement from the City of Albuquerque.

The Volcano Cliffs site was originally constructed in 1970 with Reservoir 1 and its associated underground piping. Since then, the following improvements have been completed:

- Chemical storage vault was added in 1992.
- On-site hypochlorite generation system was installed in 2007.
- Volcano Cliffs Pump Station was constructed in 2003.
- Reservoir 2 was added in 2004.
- San Juan Chama pipeline and flow control vault were added in 2008.

The proposed Volcano Cliffs Arsenic Treatment Facility (VCATF) project consists of the following facilities:

- A new building to house the new arsenic treatment system
- Carbon dioxide tank storage enclosure and injection building
- Upgrades to the existing on-site hypochlorite building and generation system
- Site yard piping, valves, and underground vault improvements
- New driveway
- Crusher fines for driveways within the site

As part of development planning, drainage calculations were performed using methods outlined in the Development Process Manual (DPM) Part 6-2(A) Procedure for 40-acre and smaller basins. Total drainage volume and peak discharge were calculated for the 100-year, 6-hour storm event

for the VCATF site. The required stormwater quality volume (SWQV) was calculated as specified in the DPM Part 6-12 Stormwater Quality and Low-Impact Development. These calculations were performed for the VCATF site using its current development and grading, then repeated using the proposed design.

With existing conditions, runoff drains west to east, primarily along the south side of the property. **Figure 1** depicts the existing subbasins and current conditions. The proposed grading will redirect this flow north through a shallow drainage swale (**Figure 2**).

Three subbasins were delineated to cover the VCATF site for both existing and proposed conditions. The drainage area, impervious area, and hydrologic soil group were determined for each subbasin based on site topographic contours, aerial imagery, and NRCS online Web Soil Survey Data. These subbasins extend approximately 800 feet west covering approximately 16.27 acres of Type B and D hydrologic soil groups. **Figure 3** shows the subbasin characteristics for existing and proposed conditions.

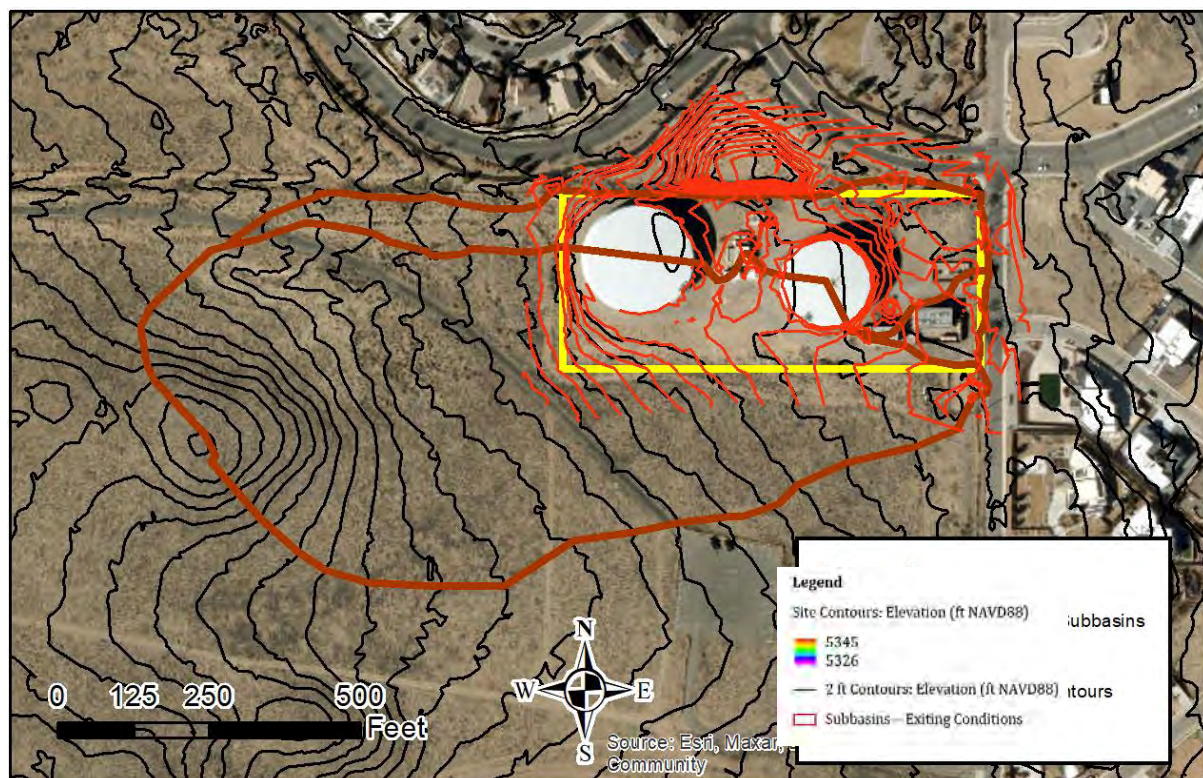


Figure 1: Subbasins with Current Conditions

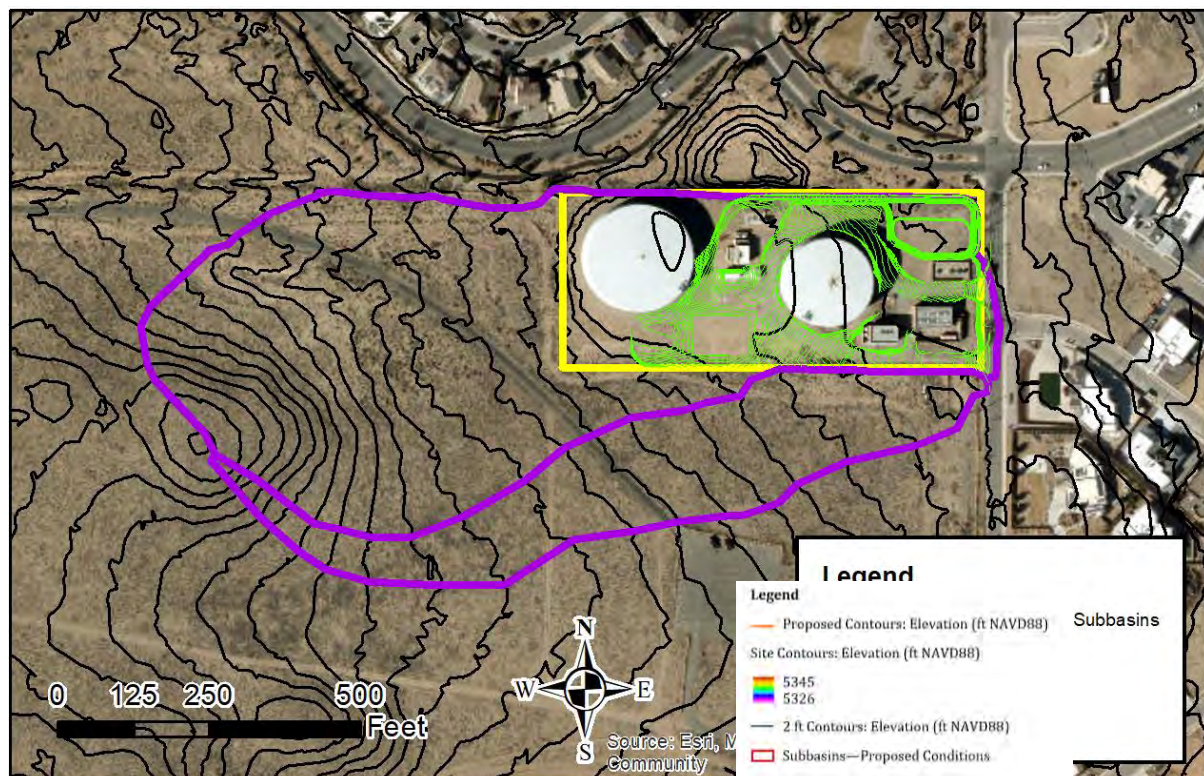


Figure 2: Subbasins with Proposed Development and Grading

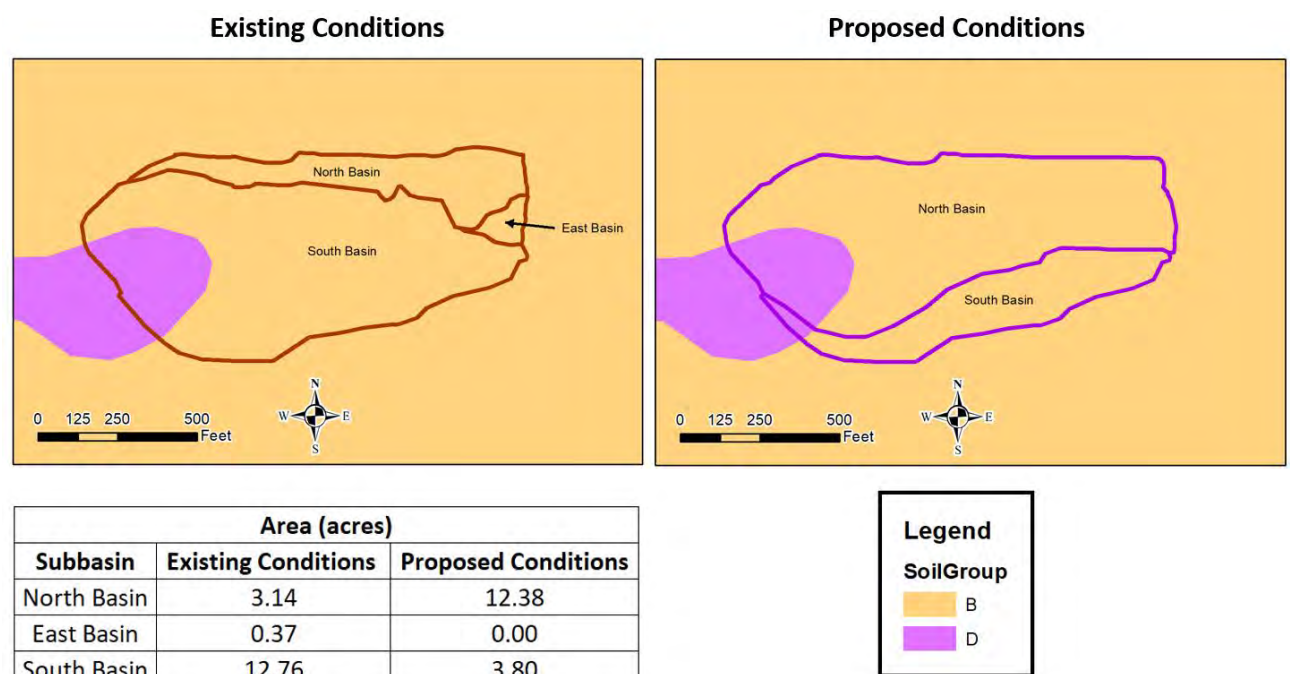


Figure 3: Subbasin Characteristics for Existing and Proposed Conditions

Runoff Volume Calculations

The existing and proposed runoff for the site was calculated using two different methods based on information provided in the DPM. For the SCS Runoff Method, the DPM provided initial abstraction and curve numbers for each hydrologic soil group (**Table 1**). The DPM Table 6.2.8

provided the precipitation depth for the Zone 1, 6-hour, 100-year event as well as an array of intensities for each duration, as VCATF is located west of the Rio Grande, placing it in Zone 1 of the DPM's precipitation zones. These values were used to calculate the excess water with initial abstraction and infiltration removed, then weighted by area.

Table 1: Infiltration and Abstraction Values from the DPM Part 6-2(A) Tables 6.2.9 and 6.2.11

Hydrologic Soil Group	Curve Number	Initial Abstraction (in)
A	77	0.65
B	79	0.5
C	86	0.35
D	98	0.1

Runoff was also calculated with excess precipitation values. The DPM's excess precipitation for the Zone 1, 6-hour, 100-year event is shown in **Table 2**. The excess precipitation listed for hydrologic Soil Group D was greater than the DPM's total precipitation for the event (2.24 inches versus 2.17 inches). For this calculation, the excess precipitation for Soil Group D was assumed to be 2.17 inches to not exceed the total precipitation of the storm event. The excess precipitation was multiplied by area to produce the runoff volume for each subbasin (**Table 4**).

Table 2: Excess Precipitation Values from The DPM Part 6-2(A) Table 6.2.13

Zone 1, 6-hour, 100-year Excess Precipitation (in)			
A	B	C	D
0.55	0.73	0.95	2.24

Peak Discharge Calculations

The peak discharge for the existing and proposed site was calculated using two different methods for small watersheds, less than or equal to 40 acres, where the time of concentration is assumed to be 12 minutes. These calculations also used the Zone 1, 6-hour, 100-year storm event. Peak discharge rates were provided by hydrologic soil group in Table 6.2.14 of the DPM (**Table 3**). These values were weighted by land area, to produce a peak discharge for each subbasin.

Table 3: Peak Discharge Values from The DPM Part 6-2(A) Table 6.2.14

Zone 1, 100-year Excess Precipitation (CFS/acre)			
A	B	C	D
1.54	2.16	2.87	4.12

The Rational Method was also used to calculate this value. The method used the 12-minute peak intensity provided in the DPM Table 6.2.8 (4.58 inches for 12-minute, 100-year storm) and Coefficient C values by hydrologic soil group/land treatment in the DPM Table 6.2.15. The precipitation intensity, Rational Coefficient, and area were multiplied to produce peak discharge for each unique land treatment/hydrologic soil group within each basin.

SWQV Calculations

Redevelopment projects are required to manage the stormwater runoff of the site's artificial surfaces for the 80th percentile storm. The DPM Part 6-12 stipulates this storm produces a runoff value of 0.26 inches. This was multiplied by the impervious area of the VCATF for both existing conditions and proposed conditions for runoff emanating on the site.

Results

Calculations were conducted to show the difference in impervious, basin area distribution, total volume runoff, peak discharge, and SWQV for existing conditions and proposed conditions at the Volcano Cliffs project site. The main drainage changes between the existing and proposed conditions on-site include an increase in imperviousness of approximately 0.55 acres and the drainage pattern diverted more to the north basin for proposed conditions via several proposed swales into a proposed detention pond. Proposed conditions has a slightly smaller total drainage area by the installation of a berm around the proposed retention area on the northeast part of the site. **Table 4** shows exiting, proposed, and proposed minus existing conditions for drainage area, imperviousness, and calculated peak flows for the two simplified methods. **Table 5** presents the total volume runoff and calculated SWQV volume between existing conditions with drainage area and impervious area again to show the effects of the proposed conditions. The same results were conducted for on-site drainage areas only shown in **Table 6** and **7**.

The Rational and Peak Discharge methods used to estimate peak flow resulted in nearly identical peak flow for both the entire drainage area and only on-site drainage with an increase of peak flow of approximately 0.9 cfs relative to existing conditions. The Excess Precipitation Method resulted in the highest calculated total runoff volume for the 100-year storm showing an increase of approximately 2,680 cubic feet of runoff for proposed conditions relative to existing conditions for on-site drainage. The total excess precipitation volume for proposed conditions is approximately 24,600 cubic feet. The proposed grading for the detention pond in the northeast portion of the site was designed to contain this full on-site runoff volume with a maximum storage volume of approximately 29,300 cubic feet up to an elevation of 5331.8 -ft (NAVD88), which also will retain the full, proposed conditions SWQV of approximately 2,300 cubic feet.

Additional runoff volume emanating off-site for proposed conditions will be directed to the northeast detention basin, attenuated, and released east of the site via a riprap spillway with an approximate 50-ft wide crest length. A HEC-HMS model was constructed along with a simplified hydrograph to route the 100-year, 6-hour storm through the detention pond. The hydrograph placed the peak flow rate of 35.6 cfs (**Table 4**), linearly interpolated values from time 0:00 and 6:00, and then applied a constant reduction factor to each interpolated value until the total runoff volume equated to total North Basin runoff of 56,429 cubic feet. The synthetically developed detention pond inflow hydrograph is presented in **Figure 4**.

Table 4: Total Drainage Area calculated areas, imperviousness, and peak discharges for existing and proposed conditions.

Basins	Area (acres)			Impervious Area (acres)			Peak Flow (cfs)					
							Rational Method			Peak Dis. Table		
	Existing	Proposed	Δ (Prop - Ex)	Existing	Proposed	Δ (Prop - Ex)	Existing	Proposed	Δ (Prop - Ex)	Existing	Proposed	Δ (Prop - Ex)
North Basin	3.14	12.38	9.24	0.92	2.74	1.82	8.6	35.5	27.0	8.6	35.6	27.0
East Basin	0.37	0.00	-0.37	0.17	0.00	-0.17	1.1	0.0	-1.1	1.1	0.0	-1.1
South Basin	12.76	3.80	-8.96	1.11	0.08	-1.03	33.5	8.7	-24.8	33.6	8.7	-24.9
Condition Total	16.27	16.18	-0.09	2.21	2.82	0.61	43.2	44.2	1.0	43.3	44.3	1.0

Table 5: Total drainage area, imperviousness, and total volume runoff, and SWQV for existing and proposed conditions.

Basins	Area (acres)		Impervious Area (acres)		Volume (ft^3)						SWQV (ft^3)		
					Excess Precip Method			SCS Runoff					
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Δ (Prop - Ex)	Existing	Proposed	Δ (Prop - Ex)	Existing	Proposed	Δ (Prop - Ex)
North Basin	3.14	12.38	0.92	2.74	13,145	56,429	43,284	11,498	49,297	37,799	873	2,588	1,716
East Basin	0.37	0.00	0.17	0.00	1,871	0	-1,871	1,632	0	-1,632	162	0	-162
South Basin	12.76	3.80	1.11	0.08	49,786	11,330	-38,456	43,599	9,973	-33,626	1,049	73	-975
Total	16.27	16.18	2.21	2.82	64,802	67,759	2,957	56,730	59,270	2,541	1,774	2,287	1553*

* Re-grading resulted in negative SWQV volumes. Only the North Basin was considered in calculating the on-site SWQV.

Table 6: On-site subbasin calculated areas, imperviousness, and peak discharges for existing and proposed conditions.

Basins	Area (acres)			Impervious Area (acres)			Peak Flow (cfs)					
	Existing	Proposed	Δ (Prop - Ex)	Existing	Proposed	Δ (Prop - Ex)	Rational Method			Peak Dis. Table		
							Existing	Proposed	Δ (Prop - Ex)	Existing	Proposed	Δ (Prop - Ex)
North Basin	2.24	4.50	2.26	0.91	2.42	1.51	6.6	14.5	7.8	6.6	14.5	7.8
East Basin	0.35	0.00	-0.35	0.17	0.00	-0.17	1.1	0.0	-1.1	1.1	0.0	-1.1
South Basin	1.98	0.00	-1.98	0.80	0.00	-0.80	5.8	0.0	-5.8	5.8	0.0	-5.8
Condition Total	4.57	4.50	-0.07	1.87	2.42	0.55	13.5	14.5	0.9	13.5	14.5	0.9

Table 7: On-site subbasin calculated areas, imperviousness, and total volume runoff, and SWQV for existing and proposed conditions.

Basins	Area (acres)		Impervious Area (acres)		Volume (ft ³)						SWQV (ft ³)		
	Existing	Proposed	Existing	Proposed	Excess Precip Method			SCS Runoff			Existing	Proposed	Δ (Prop - Ex)
					Existing	Proposed	Δ (Prop - Ex)	Existing	Proposed	Δ (Prop - Ex)			
North Basin	2.24	4.50	0.91	2.42	10,692	24,569	13,876	9,335	21,412	12,078	859	2,281	1,422
East Basin	0.35	0.00	0.17	0.00	1,788	0	-1,788	1,559	0	-1,559	156	0	-156
South Basin	1.98	0.00	0.80	0.00	9,413	0	-9,413	8,218	0	-8,218	752	0	-752
Total	4.57	4.50	1.87	2.42	21,893	24,569	2,676	19,113	21,412	2,300	1,767	2,281	1422*

* Re-grading resulted in negative SWQV volumes. Only the North Basin was considered in calculating the on-site SWQV.

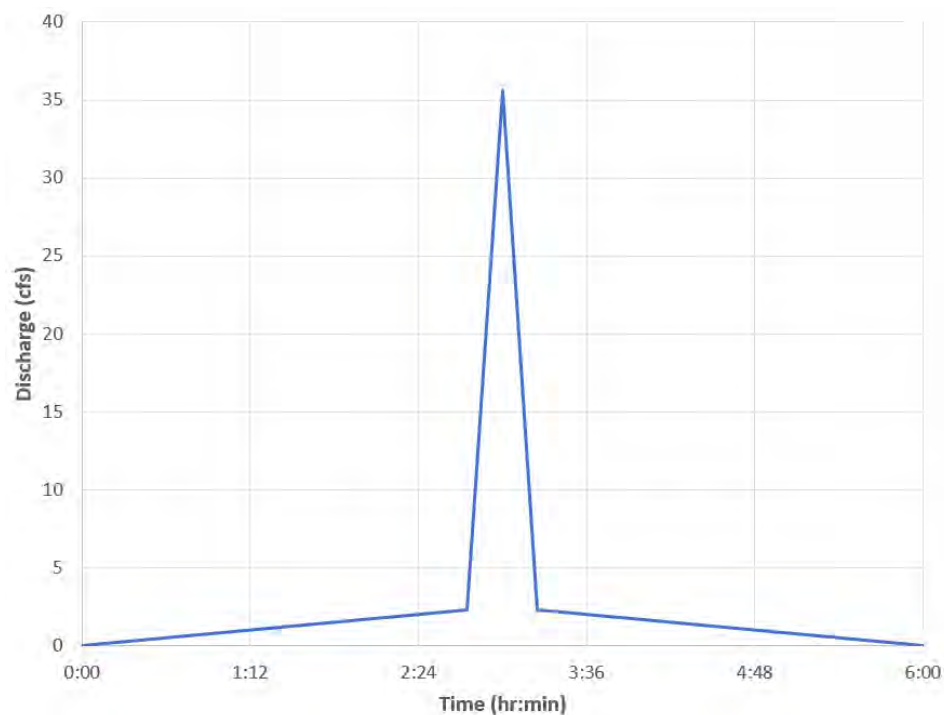


Figure 4: Proposed conditions, synthetic North Basin detention pond inflow hydrograph.

The HEC-HMS model utilized the stage-elevation relationship from the grading plans (**Table 8**). The spillway was modeled as a broad crested spillway with a length of 50-ft and a estimated weir coefficient of 2.6 as the crest nearly meets existing grade as flow spills out to the east.

Table 8: Proposed detention pond elevation-area-storage table.

Elevation (FT)	Pond Area (SQ.FT)	Cumulative Volume (CF)
5327.4	3,745	0
5328	4,228	2,391
5329	5,078	7,047
5330	5,984	12,555
5331	10,100	20,871
5331.8	11,271	29,376

The hydrograph was entered into the HEC-HMS model as a time-series with 15-minute increments and results were calculated on 5-minute increments. The model was run for a total of 10-hours to ensure all flow was either retained or discharged through the spillway. **Figure 5** shows the inflow and outflow hydrographs along with the pond storage over time. The model shows a resulting peak elevation 5332.1 during the 100-year, 6-hour storm. The peak inflow of 35.6 cfs was shown to be attenuated to 26.5 cfs (an approximately 26% reduction in peak flow).

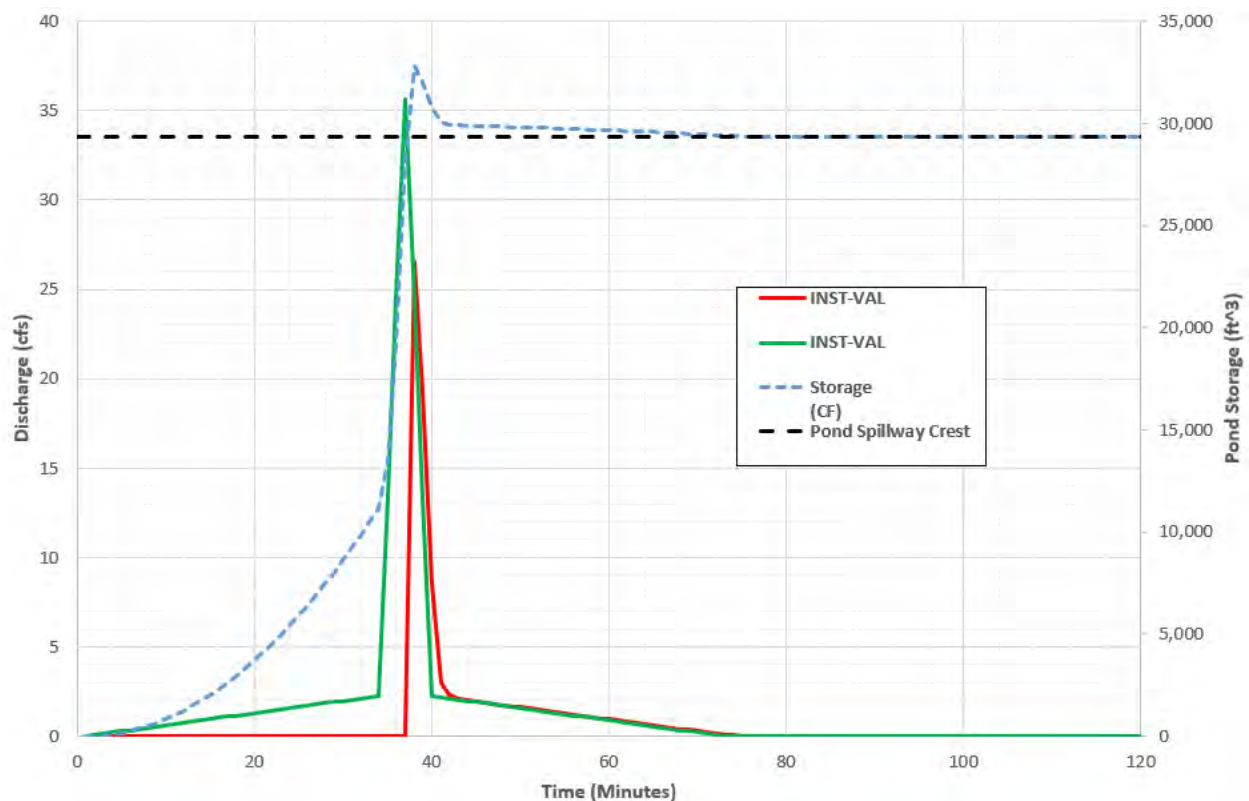


Figure 5: Proposed conditions, detention pond routing results of the 100-year, 6-hour storm.

Table 9 presents the final drainage analysis results including the incorporation of the proposed detention pond routing results for proposed conditions. Total peak flow off the site was shown to be reduced by approximately 8 cfs (26 percent decrease in peak flow relative to the proposed inflow into the detention pond) with a slight increase of total runoff volume of approximately 3,000 cubic feet for proposed conditions relative to existing conditions. Considering on-site drainage only, all on-site drainage is retained as the south basin does not contribute to the on-site drainage with the proposed grading changes.

Table 9: Existing conditions vs Proposed Conditions comparison of total flow discharged off-site.

Basins	On-Site Only				Total Drainage			
	Existing Conditions		Proposed Conditions*		Existing Conditions		Proposed Conditions*	
	Peak Flow (CFS)	Runoff Volume (CF)	Peak Flow (CFS)	Runoff Volume (CF)	Peak Flow (CFS)	Runoff Volume (CF)	Peak Flow (CFS)	Runoff Volume (CF)
North Basin	6.6	10,692	0.0	0	8.6	13,145	26.5	27,106
East Basin	1.1	1,788	0.0	0	1.1	1,871	0.0	0
South Basin	5.8	9,413	0.0	0	33.6	49,786	8.7	11,330
Condition Total	13.5	21,893	0.0	0	43.3	64,802	35.2	67,759

*Proposed Conditions includes retention of volume and attenuation of peak flow modeling results.

PLANNING DEPARTMENT
URBAN DESIGN & DEVELOPMENT DIVISION
600 2nd Street NW, 3rd Floor, Albuquerque, NM 87102
P.O. Box 1293, Albuquerque, NM 87103
Office (505) 924-3860 Fax (505) 924-3339



OFFICIAL NOTIFICATION OF DECISION

June 15, 2023

ABCWUA
PO BOX 568
Albuquerque, NM 87103

Project # PR-2023-008617
SI-2023-00866 - Site Plan - EPC, Major Amendment

LEGAL DESCRIPTION:

Consensus Planning, agent for the Albuquerque-Bernalillo County Water Utility Authority (ABCWUA), requests the above action for an approximately 4.8 acre portion of the following: All of Section 28, Township 11 North, Range 2 East, zoned NR-PO-B, located at 6641 81st St. NW, west of Unser Blvd. NW and comprising the southwestern corner of the intersection of Molten Rock Rd. NW and 81st St. NW, approximately 640 acres (D-09-Z)
Staff Planner: Silvia Bolivar

On June 15, 2023 the Environmental Planning Commission (EPC) voted to Approve Project # PR-2023-008617, SI-2023-00866 - Site Plan – EPC, Major Amendment) based on the following Findings and subject to the following Conditions of Approval:

1. The request is for a Major Amendment to a Prior Approved Site Development Plan for a water treatment facility located within a Major Public Open Space. The subject site is legally described as Section 28, Township 11 North, Range 2 East, and located at 6641 81st Street NW between Molten Rock Road and 81st Street NW (“the subject site”).
2. The subject site is part of a larger, approximately 640-acre site located within a Major Public Open Space. In February 2003, the EPC approved a Site Development Plan for Building Permit (Project 1002197; 02 EPC 1955) for the water pump station and above-ground storage reservoir to serve the Double-Eagle II Airport and adjacent facilities.
3. The applicant proposes to amend the controlling site development plan to develop 4.8 acres at the northeast corner of a 640-acre site as the new, on-site Volcano Cliffs Arsenic Treatment Facility (VCATF).
4. The VCATF will treat groundwater from the ABCWUA Volcano Cliffs and Zamora Wells with a total production capacity of 16.8 Million Gallons per Day (MGD) and an average arsenic concentration of 14 parts per billion (ppb). The wells provide water to the Volcano Cliffs and Corrales Trunk Systems.
5. The EPC is hearing the case pursuant to the Integrated Development Ordinance (IDO) Section 14-16-6-4(Z), Amendments of Pre-IDO Approvals. IDO Section 14-16-6-5(Z)(1)(b)1, states that Major Amendments shall be reviewed and decided by the decision-making body that issued the permit or approval

being amendment. In this case, the EPC approved the Site Development Plan in February 2003, prior to the effective date of the IDO. In addition, the request is being heard because any Extraordinary Facility must be reviewed and decided pursuant to Subsection 14-16-6-6(J) - Site Plan – EPC.

6. The subject site is zoned NR-PO-B [Park and Open Space Zone District-Sub-zone B: Major Public Open Space], IDO 14-16-2-5(F)(3)(b).
7. The subject site is located in an Area of Consistency as designated by the Comprehensive Plan and is within the boundaries of the West Mesa Community Planning Area (CPA).
8. The subject site is within the boundaries of the Northwest Escarpment View Protection Overlay Zone, VPO-2 (14-16-3-6(E)).
9. The City of Albuquerque granted the ABCWUA permanent exclusive easement (recorded in August 2018) for a public water and sanitary sewer system facility including underground pipelines, wells, pump stations, reservoirs and all improvements, facilities, equipment, and appurtenances necessary for the operation of the water and sanitary sewer system. Permanent Easement – Water Facilities – Volcano Cliffs 81st Street and Vista Vieja Well #1 (Document #2018069239).
10. The Albuquerque/Bernalillo County Comprehensive Plan, the Major Public Open Space Facility Plan, and the Integrated Development Ordinance (IDO) are incorporated herein by reference and made part of the record for all purposes.
11. The request is consistent with the following Comprehensive Plan Goals and Policies from Chapter 5: Land Use pertaining to Areas of Consistency.
 - A. Goal 5.6 – City Development Areas: Encourage and direct growth to Areas of Change where it is expected and desired and ensure that development in and near Areas of Consistency reinforces the character and intensity of surrounding areas.

The request will encourage and direct growth to an Area of Change so the development made possible by the request will ensure that the development reinforces the character and intensity of the surrounding areas that are most single-family neighborhoods.

- B. Policy 5.6.3 – Areas of Consistency: Protect and enhance the character of existing single-family, neighborhoods, areas outside of Centers and Corridors, parks, and Major Public Open Space.

The subject site is located in an Area of Consistency, and the development made possible by the request will protect and enhance the character of existing single-family neighborhoods because it will allow the applicant to comply with regulatory requirements while meeting community needs. In addition, the major amendment will help maximize the existing water treatment facility while confining development to the northeast quadrant of the site. Furthermore, the grading at this location is between 0-5%, and water treatment facilities should be relatively flat with a change in elevation of no more than 2-8% slope, further protecting the existing neighborhoods.

- C. Subpolicy 5.6.3(b): Ensure the development reinforces the scale, intensity, and setbacks of the immediately surrounding area. .

The request is consistent with this subpolicy because the development made possible by the request will reinforce the scale, intensity, and setbacks of the immediately surrounding area by allowing for the existing facility to be expanded within the area covered by the Permanent Easement and by providing buffer spaces of several hundred feet between the site and the neighborhoods nearby. The scale of the proposed buildings will be similar to buildings on site, new facilities will be located to the site's interior, and setbacks will be unaltered.

12. The request is consistent with the following Comprehensive Plan Policies from Chapter 7: Urban Design.

A. Policy 7.5.2 – Landscape Design: Incorporate local climate conditions into site design.

The request is consistent with this policy because the request will allow for the natural and existing vegetation to remain with planned extensive revegetation seeding along the eastern portion of the site. The soils in the area support various native plant communities that will be undisturbed by the development. Incorporating the local climatic conditions into the site sign design will require less maintenance while providing buffering and screening to adjacent neighborhoods.

B. Policy 7.6.3 – Utility Infrastructure: Encourage design of visible infrastructure (surface and overhead) that respects the character of neighborhoods and communities and protects significant natural and cultural features.

The request is consistent with this policy because the new treatment facility will match the exterior of buildings already on-site as much as possible. The new buildings will be of similar materials and architectural styles to the existing buildings, and the layout offsets and separates the buildings limiting their appearance as an industrial facility. As a result, the new facility will have minimal impact on its surroundings.

C. Subpolicy 7.6.3(a): Work with ABCWUA to design facilities that blend into the natural landscape and include native and naturalized vegetation. Encourage more productive use of vacant lots and underutilized lots, including surface parking.

The request is consistent with this policy because ABCWUA is collaborating with local design firms that are designing the facility so that it will blend into the natural landscape. Native and natural vegetation is proposed to protect the surrounding environment while allowing the underutilized water treatment facility to expand, encouraging more productive use of the site.

13. The request is consistent with the following Comprehensive Plan Goal and Policies from Chapter 10: Parks and Open Space.

A. Goal 10.3 – Open Space: Protect the integrity and quality of the region's natural features and environmental assets and provide opportunities for outdoor recreation and education.

The request is consistent with this policy because the facility has been designed to minimize its environmental and public impact. In addition, several hundred feet of buffer spaces between the facility and the nearest residences will help protect the area. Furthermore, the site development will occur within 4.8 acres of a 640-acre site, providing outdoor recreation and education outside the northeast quadrant.

B. Policy 10.3.5 – Petroglyph National Monument: Preserve the volcanoes, key portions of the basalt flow, and the Northwest Mesa Escarpment as part of the Open Space Network.

The request is consistent with this policy because the major amendment will help preserve the volcanoes, basalt flow, and the Northwest Mesa Escarpment because it will allow for the existing water treatment facility to be confined to the northeast quadrant of the major public open space within the

Open Space Network. Furthermore, the grading at this location is between 0-5%, and water treatment facilities should be relatively flat with a change in elevation of no more than 2-8% slope, further protecting the Northwest Mesa Escarpment.

- C. Subpolicy 10.3.5(e): Limit utilities and roads to areas that are least sensitive to disturbance, avoiding the following areas: Piedras Marcadas Canyon, the point where the mid-branch of the San Antonio crosses the Escarpment, the Marsh peninsula, Rinconada Canyon, and the escarpment immediately south of the Rinconada Canyon.

The request is consistent with this Subpolicy because the access road will be located in the northeast quadrant of the site and will occur on a 0-5% slope. The major amendment will avoid the Piedras Marcadas Canyon, the point where the mid-branch of the San Antonio crosses the Escarpment, the Marsh peninsula, Rinconada Canyon, and the escarpment immediately south of Rinconada Canyon.

14. The request is consistent with the following Comprehensive Plan Policy from Chapter 11: Heritage Conservation.

- A. Policy 11.3.1 – Natural and Cultural Features: Preserve and enhance the natural and cultural characteristics and features that contribute to the distinct identity of communities, neighborhoods, and cultural landscapes.

The request is consistent with this policy because the development will be confined to the northeast quadrant of the site while preserving the major public open space that includes the Petroglyph National Monument. Native and naturalized vegetation will be used that will enhance the natural characteristics thereby contributing to the distinct identity of the community, neighborhood, and cultural landscape.

15. The request is consistent with the following Comprehensive Plan Goal and Policy from Chapter 12: Infrastructure, Community Facilities & Services.

- A. Goal 12.1 - Infrastructure: Plan, coordinate, and provide for efficient, equitable, and environmentally sound infrastructure to support existing communities and the Comp Plan's vision for future growth.

The request is consistent with this Goal because the major amendment will allow for the facility to be expanded in order to treat the groundwater from the Volcano Cliffs and Zamora Wells which furthers the Comp Plan's vision for future growth. The major amendment will also allow for ABCWUA to meet the EPAs guidelines while helping to ensure the environmental and social health of the community.

- B. Policy 12.1.2 – Water and Wastewater Utility: Ensure consistency between Comp Plan and ABCWUA policies by coordinating infrastructure planning and programming.

The request is consistent with this Goal because the major amendment helps meet regulatory requirements while addressing utility and community goals. Furthermore, the request helps align ABCWUA management policies and strategies with planning goals contained within the Comp Plan.

16. The request is consistent with the following Comprehensive Plan Goals from Chapter 13: Resiliency and Sustainability.

- A. Goal 13.2.3 – Water Quality: Coordinate with the ABCWUA, state, and other agencies to maintain the quality of our groundwater and surface waters.

Sustainable water infrastructure is critical to providing clean and safe water while helping to ensure the social and environmental sustainability of the communities that water utilities serve. ABCWUA has

worked in conjunction with state and other agencies to help ensure the long-term sustainability of water infrastructure.

B. Subpolicy 13.2.3(b): Minimize the potential of contaminants to enter the community's water supply.

The request will facilitate the development of the new Volcano Cliffs Arsenic Treatment Facility (VCATF) and will allow for the arsenic treatment system to treat the total water production from the Volcano Cliffs and Zamora Wells. The new arsenic treatment system will utilize absorptive media, similar to several other arsenic removal systems at other arsenic treatment facilities on the West side.

C. Goal 13.5.3 – Public Infrastructure Systems and Services: Coordinate with providers to ensure that systems and services do not compromise the health, safety, and welfare of the community.

The new Volcano Cliffs Arsenic Treatment Facility will help the applicant coordinate with providers thereby ensuring that systems and services do not compromise the health, safety, and welfare of the community.

17. The City's 1999 Major Public Open Space (MPOS) Rank II Facility Plan identifies the types of Major Public Open Space, including the West Side Open Space. Albuquerque's West Side MPOS defines the western edge of the urban area. Most of the developed facilities located in the West Side are considered special use areas and are managed by several departments including the City Open Space Division. Applicable land use policies from the MPOS Rank II Facility Plan include:

A. Policy C.3.: Facility development adjacent to the escarpment shall be consistent with the requirements of the Northwest Mesa Escarpment or its successor.

The expansion of the VCATF is consistent with the requirements contained in the Integrated Development Ordinance as the Northwest Mesa Escarpment Sector Development Plan was rescinded upon the adoption of the IDO.

B. Policy C.5: Existing special use facilities located within Major Public Open Space may accommodate uses which are not appropriate to conservation and resource protection.

The request will facilitate the development of the Volcano Cliffs Arsenic Treatment Facility (VCATF), a facility whose use, while not contributing to conservation and resource protection, will help meet regulatory requirements while addressing utility and community goals.

18. The request meets the Site Plan-EPC Review & Decision Criteria in IDO Section 14-16-6-6(J)(3) as follows:

- A. 14-16-6-6(I)(3)(a) As demonstrated by the policy analysis of the site plan, the request is consistent with applicable Comprehensive Goals and Policies.
- B. 14-16-6-6(I)(3)(b) The subject site is zoned NR-PO-B therefore, this criterion does not apply.
- C. 14-16-6-6(I)(3)(c) With the application of conditions of approval, the site plan would comply with all applicable provisions of the IDO.
- D. 14-16-6-6(I)(3)(d) The City's existing infrastructure has adequate capacity for the proposed development.
- E. 14-16-6-6(I)(3)(e) The future, proposed development would be required to comply with the decisions made by the EPC. The EPCs' conditions of approval would improve compliance with the IDO, which contains regulations to mitigate site plan impacts to surrounding areas.

- F. 14-16-6-6(I)(3)(f) The subject property is not within an approved Master Development Plan; therefore, this criterion does not apply.
 - G. 14-16-6-6(I)(3)(g) The subject property is not within a Railroad and Spur Area and a cumulative impact analysis is not required, therefore this criterion does not apply.
19. The affected neighborhood organizations are the Molten Rock NA and the Westside Coalition of Neighborhoods, which were notified as required. In addition, property owners within 100 feet of the subject site were notified as required. A pre-application meeting was not requested.
20. As of this writing, Staff has not received any comments in support or opposition to the request.

CONDITIONS OF APPROVAL – SI-2023-00866

1. The EPC delegates final sign-off authority of this site development plan to the Development Facilitation Team (DFT) to ensure all technical issues are resolved. The DFT is responsible for ensuring that technical EPC Conditions have been satisfied and that other applicable City requirements have been met.
2. The applicant shall meet with the Staff planner prior to applying to the DFT to ensure that all conditions of approval are addressed and met. Upon receiving sign-off from the DFT, the applicant shall submit a finalized version of the site plan for filing at the Planning Department.
3. A letter shall accompany the submittal, specifying all modifications that have been made to the site plan since the EPC hearing, including how the site plan has been modified to meet each of the EPC conditions. Unauthorized changes to this site plan, including before or after DFT final sign-off, may result in forfeiture of approvals.
4. The applicant shall ensure that new shrubs are watered sufficiently as per the General Landscape Notes found in the Landscape Plan (LS 100).
5. Details shall be provided for the Evaporative Cooler, CO2 Tank and Surge Tank enclosure/screen walls.

APPEAL: If you wish to appeal this decision, you must do so within 15 days of the EPC’s decision or by **June 30, 2023**. The date of the EPC’s decision is not included in the 15-day period for filing an appeal, and if the 15th day falls on a Saturday, Sunday or Holiday, the next working day is considered as the deadline for filing the appeal.

For more information regarding the appeal process, please refer to Section 14-16-6-4(V) of the Integrated Development Ordinance (IDO), Administration and Enforcement. A Non-Refundable filing fee will be calculated at the Land Development Coordination Counter and is required at the time the appeal is filed. It is not possible to appeal an EPC Recommendation to the City Council since this is not a final decision.

You will receive notification if any person files an appeal. If there is no appeal, you can receive Building Permits at any time after the appeal deadline quoted above, provided all conditions imposed at the time of approval have been met. Successful applicants are reminded that other regulations of the IDO must be complied with, even after approval of the referenced application(s).

Sincerely,

Catalina Lehner

for Alan M. Varela,
Planning Director

AV/CL/SB

cc: ABCWUA, rstone@abcwua.com
Consensus Planning, Jackie Fishman, fishman@consensusplanning.com
Molten Rock NA Jill Yeagley jillyeagley@swcp.com
Molten Rock NA Mary Ann Wolf-Lyerla maryann@hlsnm.org
Westside Coalition of Neighborhood Associations Elizabeth Haley elizabethkayhaley@gmail.com
Westside Coalition of Neighborhood Associations Rene Horvath aboard111@gmail.com
Legal, dking@cabq.gov
EPC File



PERMANENT EASEMENT
(Water Facilities- Volcano Cliffs 81 St & Vista Vieja Well #1)

Grant of Permanent Easement by the **City of Albuquerque** as grantor ("City"), a New Mexico municipal corporation, whose address is P.O. Box 1293, Albuquerque, New Mexico, 87103, to the **Albuquerque Bernalillo County Water Utility Authority** as grantee ("Water Authority") a New Mexico political subdivision, whose address is P.O. Box 568, Albuquerque, New Mexico, 87103.

1. Grant of Easement. The City grants to the Water Authority a permanent exclusive easement ("Easement") in, over, upon and across the real property described on **Exhibit A** attached hereto ("Property") subject only to existing easements for public roads, public utilities, patent reservations, restrictions and easements of record and all other matters of record for the construction, installation, maintenance, repair, modification, replacement and operation of the following:

Public water and sanitary sewer system facilities including underground pipelines, wells, pump stations, reservoirs and all improvements, facilities, equipment, and appurtenances necessary for the operation of the Water Authority's water and sanitary sewer system ("Facility") together with the right, to remove trees, bushes, undergrowth and any other obstacles upon the Property if the Water Authority determines they interfere with the appropriate use of this Easement.

2. City Improvements. The City shall not grant any new easements or construct or place any improvements or encroachments (collectively, "Improvements") within or upon the Property.

3. Location, Installation, and Maintenance. At its own expense, the Water Authority shall locate, install, construct, and maintain the Facility of such material, and in a manner that will not at any time unreasonably interfere with the use of Property by any utility presently franchised by the City except to the extent such use encroaches or is otherwise inconsistent with the granted Easement.

The Facility shall comply with all relevant ordinances and regulations of the City, including, but not limited to, the City's Extra Ordinary Facilities Ordinance § 14-13-3-2(A)(5) R.O.A. 1994, as amended, which provides for the approval of construction of extraordinary facilities within parks and open space lands of the City. Before performing any construction, the Water Authority's contractors shall obtain all permits and insurance required by the City for work within the City's property and will pay all fees and reimburse the City for all reasonable and necessary costs incurred in inspecting and supervising the work performed.

If, in the judgment of the City, the Water Authority at any time fails to perform its obligations under this Easement, the City shall give the Water Authority written notice that the Water Authority is in default under this Easement. The written notice shall specify each instance of default and the action the Water Authority must take to cure the default. If the Water Authority has not cured the default within thirty (30) business days after the Water Authority received the written notice of default, or if the nature of the default is such that more than thirty (30) business

days are reasonably required for its cure and the Water Authority has not commenced to cure the default within the thirty (30) day cure period and fails to diligently pursue the cure to completion, then the City, at the City's option may perform whatever work the City deems necessary for the public safety, health and welfare, and the Water Authority shall reimburse the City within thirty (30) days after the City submits a bill to the Water Authority for the costs of performing such work. However, the City is not required to perform such work, and any failure by the City to perform the Water Authority's obligations shall not release the Water Authority from liability for any loss or damage caused by the Water Authority's failure to perform its obligations.

The Water Authority shall provide reasonable access to the portions of the Property occupied by both the Water Authority Facility and the City and other Easement holders whenever requested to do so by either the City or any franchised utility.

If the Facility or any part thereof is the cause of an emergency condition, and the City determines that the situation makes it unreasonable to notify the Water Authority or await action by the Water Authority, the City may take over whatever actions it deems necessary to remedy the emergency situation at the sole expense of the Water Authority, which will reimburse the City within thirty (30) days after the City submits a bill to the Authority for the costs of such actions.

4. As-Builts. To the extent available, the Water Authority shall within thirty (30) days provide the City with one set of the most current reproducible as-built, record drawings, reflecting construction and installation as actually accomplished.

5. Termination. This Easement shall terminate upon the express abandonment of the Facility by the Water Authority or the non-use of the Facility for period of twelve (12) consecutive months. Upon termination of this Easement, the Water Authority shall abandon the Facility and shall, upon agreement of the Water Authority and the City, remove or plug the Facility and otherwise repair and restore the Property at the expense of the Water Authority. Upon termination of this Easement the Water Authority shall execute, record and deliver to the City a Termination and Release of Easement.

Termination of this Easement for any reason shall not release the Water Authority from any liability or obligation relating to the construction, operation, maintenance, or removal of the Facility or any other term of this Easement that arose prior to the date this Easement was terminated.

6. Liability. Each party will be solely responsible for liability arising from personal injury or damage to persons or property proximately caused by its employees, agents, contractors and subcontractors in the use of the Easement. The liability of the City and the Water Authority shall be subject in all cases to the immunities and limitation of the New Mexico Tort Claims Act § 41-4-1 et seq. NMSA 1978 as amended. By entering into this Easement agreement, the parties, individually, do not intend to modify or waive their rights, defenses, and remedies under the New Mexico Tort Claims Act.

During any location, installation, construction and maintenance activities on or adjacent to the Property, each party shall require that agents, contractors and subcontractors performing the

work indemnify, defend and hold harmless the City and the Water Authority, their directors, officers, employees, independent contractors and agents from and against any liabilities, actions, claims, damages, costs and expenses (including reasonable attorney fees and court costs) arising from the work and each party shall cause its agents, contractors and subcontractors to maintain a Commercial General Liability insurance policy in the amount of at least one million dollars per occurrence from an insurance company licensed in good standing to issue insurance in the State of New Mexico. The required insurance shall list both parties as an additional insured for the scope of the work at no cost to either party. The required insurance policy shall state the project name and project number.

7. Changes. Changes to this Easement are not binding unless made in writing, and signed by both parties.

8. Captions. The captions to the sections or paragraphs of this Easement are not part of this Easement and will not affect the meaning or construction of any of its provisions.

9. Applicable Law, Venue and Waiver of Jury Trial. This Easement is governed by and shall be construed and enforced in accordance with the laws of the State of New Mexico. The parties agree that venue for any suit, action, or proceeding arising out of this Agreement shall be in Bernalillo County, New Mexico. The parties irrevocably admit themselves to, and consent to, the jurisdiction of said court. In any litigation between City and the Water Authority, the matter shall be decided by a judge sitting without a jury, and accordingly each party hereby waives its right to a jury trial. The parties further acknowledge that they have fully and fairly bargained for the terms of this Section 9. The provisions of this Section 9 shall survive the expiration or earlier termination of this Easement.

10. Construction and Severability. If any part of this Easement is held to be invalid or unenforceable, and if it cannot be so amended, without material altering the intention of the parties, it shall be stricken. The remainder of this Easement will remain valid and enforceable if the remainder of the Easement is reasonably capable of completion without materially prejudicing either the City or the Water Authority in its respective rights and obligations contained in the remainder of the Easement.

11. Assignment. The Water Authority may assign any interest in this Easement and may transfer any interest in this Easement (whether by assignment or novation), without the prior written consent of the City. The Water Authority may issue temporary construction easements for location, installation, rehabilitation, construction and maintenance activities if the temporary easement otherwise comports with the terms of this Easement.

12. No Third Party Beneficiary. This Easement shall inure to the benefit only of the parties hereto and their designated successors and assigns and no other person or entity shall have any claim hereunder as third party beneficiary or otherwise.

13. Approval Required. This Easement Agreement shall not become effective or binding until approved by the City's Chief Administrative Officer.

14. Runs with the Land. The grant and other provisions of this Easement constitute covenants running with the title to the City Property for the benefit of Water Authority and its successors and assigns until terminated.

[Remainder of Page Intentionally Left Blank]

Grantor:
CITY OF ALBUQUERQUE,
A New Mexico municipal corporation

By: *SN*
Sarita Nair
Chief Administrative Officer

Date: 8/2/18

Recommended:

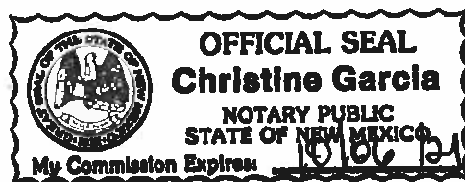
David J. Simon
David J. Simon, Director
Parks & Recreation Department 

Date: 7.10.18

City Acknowledgment

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on this 2 day of August, 2018, by Sarita Nair, Chief Administrative Officer of the City of Albuquerque, a New Mexico municipal corporation, on behalf of the corporation.



Christine Garcia
Notary Public
My Commission Expires: 10/06/21

Accepted: Grantee:

Albuquerque Bernalillo County
Water Utility Authority

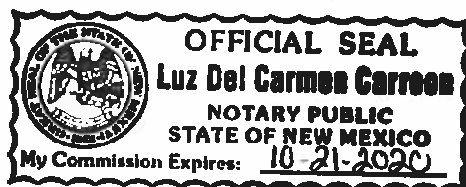
By: 
Mark S. Sanchez
Executive Director

Date: 8/7/18

Water Authority Acknowledgment

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on this 7th day of August, 2018, by Mark S. Sanchez, Executive Director of the Albuquerque Bernalillo County Water Utility Authority, on behalf of the Authority.




Notary Public
My Commission Expires: October 21, 2020

Exhibit "A"

Sketch and Description of an Easement to construct and maintain utilities and structures of any nature and kind, upon, under and over the parcels of land being described as follows:

Easements situated within Township 11 North, Range 2 East, Section 28, New Mexico Principal Meridian, Bernalillo County, New Mexico.

The boundary of easement "A" being more particularly described as follows:

Commencing at the found Northeast (NE) section corner of Section 28 being a standard ACS brass disk, S 21 22 28 27 11N 2E; thence N 89°55'01" W a distance of 80.00 feet to the point of beginning at the Northeast (NE) corner of said easement "A" being on the west right-of-way line of 81st Street.

Thence, S 00°18'00" W along the west right-of-way line of 81st Street a distance of 383.84 feet to a point;

Thence, N 89°30'10" W a distance of 49.88 feet to a point;

Thence, N 00°07'00" W a distance of 75.84 feet to a point;

Thence, N 89°55'54" W a distance of 641.97 feet to a point;

Thence, N 89°17'24" E a distance of 288.71 feet to a point on the section line common to section 21 and 28 of T11N, R2E;

Thence, S 89°55'01" E along the section line common to section 21 and 28 of T11N, R2E a distance of 682.25 feet to a point to the point of beginning.

Said easement "A" contains 4.8727 acres, more or less.

The boundary of easement "B" being more particularly described as follows:

Commencing at the found Northeast (NE) section corner of Section 28 being a standard ACS brass disk, S 21 22 28 27 11N 2E; thence S 89°31'58" W a distance of 2424.35 feet to the point of beginning at the Northeast (NE) corner of said easement "B";

Thence, S 00°09'38" E a distance of 33.38 feet to a point;

Thence, N 89°36'15" E a distance of 161.32 feet to a point on the west right-of-way line of 81st Street;

Thence, S 00°18'00" W along the west right-of-way line of 81st Street a distance of 20.00 feet to a point;

Thence, S 89°36'15" W a distance of 181.16 feet to a point;

Thence, N 00°09'38" W a distance of 3.42 feet to a point;

Thence, S 88°39'45" W a distance of 90.32 feet to a point;

Thence, N 00°44'40" W a distance of 50.15 feet to a point;

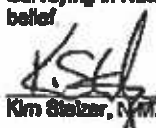
Thence, N 88°42'14" E a distance of 90.82 feet to a point to the point of beginning;

Said easement "B" contains 0.1781 acres, more or less.

Attached hereto is a sketch labeled Exhibit "B" and by this reference made a part hereof.

Surveyor's Certificate:

I, Kim Stalzer, New Mexico Professional Surveyor Number 7482, do hereby certify that this Easement Description and Sketch and the actual survey on the ground upon which it is based were performed by me or under my direct supervision; that I am responsible for this survey; that this survey meets the minimum standards of section 12-6-2.12 for Surveying in New Mexico; and that it is true and correct to the best of my knowledge and belief.


Kim Stalzer, N.M.P.S. # 7482


Date



City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION

APPROVED

DATE: 09/08/23
BY: *Rene C. Brissett*
HydroTrans # E09D001

THE APPROVAL OF THESE PLANS REPORT SHALL NOT BE
CONSIDERED TO BE A GUARANTEE OF ANY CITY
ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT
CONSTRUCTION OR EXISTING OR PROPOSED
SPECIFICATIONS, OR CONSTRUCTION, SUCH APPROVED PLANS
SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT
AUTHORIZATION.

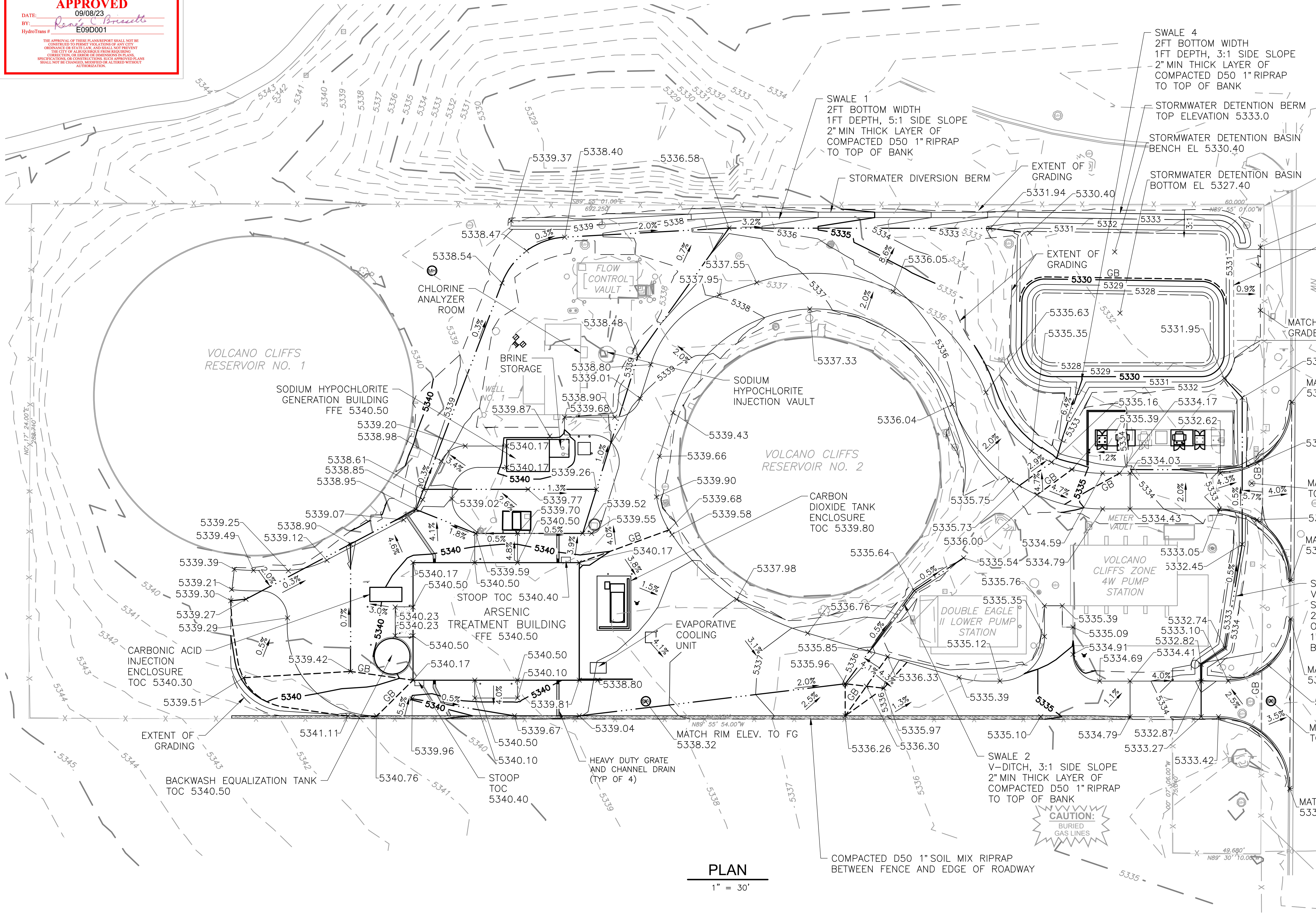
CUT/FILL SUMMARY				
NAME	2D AREA	CUT	FILL	NET
CUT AND FILL VOLUME	93,788 SQ FT	2798 CU YD	642 CU YD	2156 CU YD<CUT>

NOTES:

1. CUT/FILL ESTIMATED VALUES DO NOT INCLUDE SOIL SWELL OR EXCAVATION VOLUMES FOR THE FOUNDATIONS BEYOND THE HORIZONTAL LIMITS OF STRUCTURES. THE VALUES DO HOWEVER INCLUDE OVER EXCAVATION OF 3 VERTICAL FEET BELOW THE FOUNDATIONS.
2. ADD 2" MIN THICK LAYER OF COMPACTED D50 1" RIPRAP TO TOP OF BANK AND 2FT BEYOND SPILLWAY IN RETENTION BASIN.

STORMWATER SUMMARY:

EXISTING GRADE WITHIN THE IMPROVEMENT AREA CONSISTS OF GENTLE SLOPES BETWEEN 0% AND 10%. 80% OF THE SITE IS BELOW 5% SLOPE. THE AREA WEST AND SOUTHWEST OF THE SITE BOUNDRY SLOPES 2% AND 7% TOWARD THE SITE. THERE IS A STEEP TO MODERATE SLOPE DOWN FROM THE NORTH BOUNDARY. SOME SURFACE FLOW IS DIRECTED OFF SITE TO THE NORTH AND INTO AN EXISTING DETENTION BASIN. MOST OF THE SURFACE FLOW PASSES SOUTH OF THE EXISTING TANKS TOWARD THE EAST PROPERTY LINE AND EVENTUALLY OFF THE SOUTH BOUNDARY ABOUT 130' WEST OF 81ST ST NW. THE PROPOSED SITE LAYOUT PLACES A NEW ARSENIC TREATMENT BUILDING WHERE SURFACE FLOW CURRENTLY PASSES THROUGH THE SOUTHERN PART OF THE SITE. THE PROPOSED GRADING PLAN EXTENDS THE DRIVEWAY AREA WEST OF THE NEW STRUCTURE, WHERE MOST OF THE OFF-SITE FLOW IS COLLECTED BY A SHALLOW DRAINAGE SWALE AND DIRECTED TO THE NORTH ON THE EAST SIDE OF RESERVOIR NO. 1. THE SWALE ENDS BY DISCHARGING TO A NEW DETENTION BASIN LOCATED IN THE NORTHEAST CORNER OF THE SITE. ALL STORM DRAINAGE EMINATING ONSITE CAN BE FULLY RETAINED WITHIN THE BASIN UP TO A 100-YEAR 6 HOUR STORM EVENT. ADDITIONAL OFFSITE FLOW AND LARGER STORM EVENTS WILL BE DISCHARGED VIA A SPILLWAY TO THE EAST AND OFFSITE TO THE 81ST STREET NW ROW. SOME SURFACE WATER EAST OF RESERVOIR NO. 1 WILL BE DIRECTED TO THE NEW BASIN ON THE NE CORNER OF THE SITE. SURFACE WATER SOUTH OF THE NEW ARSENIC TREATMENT BUILDING AND SOUTH OF RESERVOIR NO. 2 WILL FLOW TO A NEW SWALE LOCATED BETWEEN RESERVOIR NO. 2 AND THE DOUBLE EAGLE LOWER PUMP STATION. FLOW THEN ENTERS AN EXISTING DEPRESSION AND STORM PIPE DISCHARGING INTO THE NEW DETENTION BASIN. RESIDUAL DRAINAGE AREA EAST OF RESERVOIR NO. 2 WILL BE CAPTURED VIA A NEW SWALE FLOWING NORTH ALONG THE PROPERTY BOUNDARY ULTIMATELY DISCHARGING TO THE NEW DETENTION BASIN. PROPOSED GRADES AROUND THE SITE ARE MOSTLY 5% OR LESS, EXCEPT FOR DRAINAGE SWALES AND CUT/FILL SLOPES, WHICH ARE STEEPER THAN 3:1.



PLAN

1" = 30'

THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT.

				SCALE:		DESIGN TRACKING				SUBMITTED BY:				AS BUILT INFORMATION				ENGINEER'S SEAL		ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY TITLE: VOLCANO CLIFFS ARSENIC TREATMENT FACILITY AND PUMP STATION UPGRADES GRADING PLAN WATER AUTHORITY CONSTRUCTION PROJECT NO. 2822.0 ZONE MAP NO. D-09-Z SHEET C-8					
				1"= 30'		DESIGNED BY: M. WAINWRIGHT		DATE: 8/31/2023		 6001 Indian School Road, N.E. Suite 310 Albuquerque, New Mexico 87110 Tel: (505) 243-3200		CONTRACTOR		COMPANY NAME											
				ATTENTION		DRAWN BY: M. WAINWRIGHT		DATE: 8/31/2023				CONSTRUCTION		BEGIN DATE				MMM. YYYY							
				0 1/2" 1"		CHECKED BY: P. TAURASI		DATE: 8/31/2023				INSPECTOR'S		COMPANY NAME				DATE		MMM. YYYY					
						CROSS CHK'D BY: J. YOSHIMURA		DATE: 8/31/2023				INSPECTOR'S		NAME				NAME							
				GRAPHIC SCALE		APPROVED BY: E. RICHARDSON		DATE: 8/31/2023				SUBSTANTIAL		COMPLETION DATE				MMM. YYYY							
				THIS BAR MEASURES 1" AT FULL SCALE (ANSI D)		MAPS/RECORDS INFO.								DRAWINGS		CORRECTED BY		COMPANY NAME		DATE		MMM. YYYY			
NO.	DATE	REVISION NO. & DESCRIPTION			BY																				

FOR PERMITTING ONLY

consulted for possible updated or additional flood information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only to landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was New Mexico State Plane, Central Zone. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NGS512
National Geodetic Survey, SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was provided in digital format by Bernalillo County produced at a scale of 1:12,000 from photography dated 1999 or later.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for the Flood Insurance Study report may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

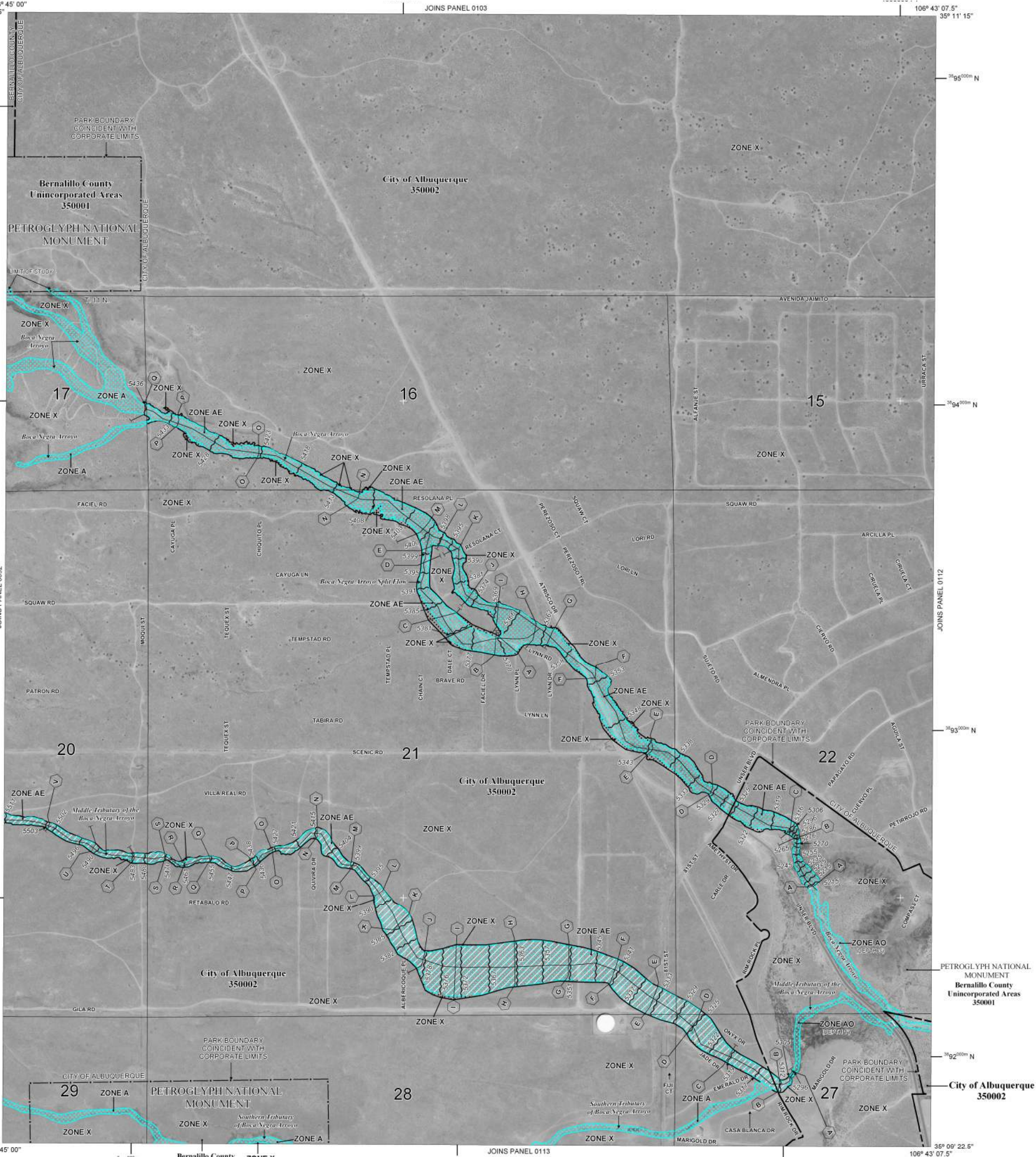
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and their website at <http://www.msc.fema.gov>.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/nfp>.

Bernalillo County
Unincorporated Areas
350001



ZONE A No Base Flood Elevations determined.
ZONE AE Base Flood Elevations determined.
ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS
ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS
ZONE X Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
0.2% annual chance floodplain boundary
Floodway boundary
Zone D Boundary
CBRS and OPA Boundary
Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
Base Flood Elevation line and value; elevation in feet*
Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

A Cross section line
23 Transsect line
97° 07' 30", 32° 22' 30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
76° 00' E 1000-meter Universal Transverse Mercator grid values, zone 13
600000 FT 5000-foot grid ticks: New Mexico State Plane coordinate system, Central zone (FIPSZONE 3003), Transverse Mercator
DK5510 Bench mark (see explanation in Notes to Users section of this FIRM panel)
ML5 River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index.

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP PANEL
SEPTEMBER 20, 1996

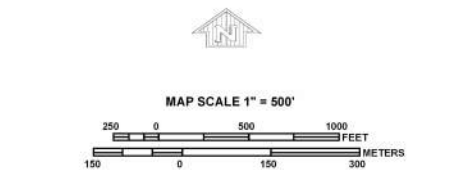
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
April 2, 2002 - to update corporate limits, to change Base Flood Elevations and Special Flood Hazard Areas, to add roads and road names, to reflect updated topographic information, and to incorporate previously issued Letters of Map Revision.

November 19, 2003 - to update corporate limits and to incorporate previously issued Letters of Map Revision.

September 26, 2008 - to update corporate limits, to change Special Flood Hazard Areas, to add roads and road names, to incorporate previously issued Letters of Map Revision, to reflect updated topographic information, to change Base Flood Elevations, to add Base Flood Elevations.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



NFIP
PANEL 0111G
FIRM
FLOOD INSURANCE RATE MAP
BERNALILLO COUNTY, NEW MEXICO
AND INCORPORATED AREAS
PANEL 111 OF 825
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:	COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE CITY OF	350002	0111	G	
BERNALILLO COUNTY UNINCORPORATED AREAS	350001	0111	G	

Notice to User: The **Map Number** shown below should be used when placing map orders. The **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
35001C0111G
MAP REVISION

STRUCTURE	SQUARE FOOTAGE	DESCRIPTION
NEW ARSENIC TREATMENT BUILDING	5900	HOUSES ARSENIC TREATMENT SYSTEM
NEW SODIUM HYPOCHLORITE (SHC) BUILDING AND BRINE TANK STORAGE ROOM	520	HOUSES SODIUM HYPOCHLORITE GENERATION SYSTEM AND CHEMICAL STORAGE TANKS
CARBONIC ACID INJECTION BUILDING	130	HOUSES CARBONIC ACID INJECTION SYSYEM
CHLORINE ANALYZER ROOM	150	HOUSES CHLORINE ANALYZERS
VOLCANO CLIFFS RESERVOIR NO.1	N/A	32' HIGH ENCLOSED WATER TANK
VOLCANO CLIFFS RESERVOIR NO.2	N/A	32' HIGH ENCLOSED WATER TANK

ENCLOSURE/ SCREEN WALLS	HEIGHT	LENGTH	MATERIAL	COLOR
(A) EXISTING ELECTRIC YARD EXTENSION	6'	60'	8" CMU BLOCK WALL	RED/BROWN (MATCH EXISTING COLOR)
(B) EVAPORATIVE COOLER	8'-10"	29'-8 1/2"	12" CMU BLOCK WALL	RED/BROWN (MATCH EXISTING COLOR)
(C) CO2 TANK	9'-4"	44'-8"	12" CMU BLOCK WALL	RED/BROWN (MATCH EXISTING COLOR)
(D) EXISTING SURGE TANK (SEE PHOTO)	10'	140'	8" CMU BLOCK WALL	RED/BROWN

SITE DATA:

-SITE AREA AND LEGAL DESCRIPTION: 4.67-ACRE PORTION OF SECTION 28, TOWNSHIP 11 NORTH, RANGE 2 EAST

-ZONING OVERLAY: NORTHWEST MESA ESCARPMENT VPO-2

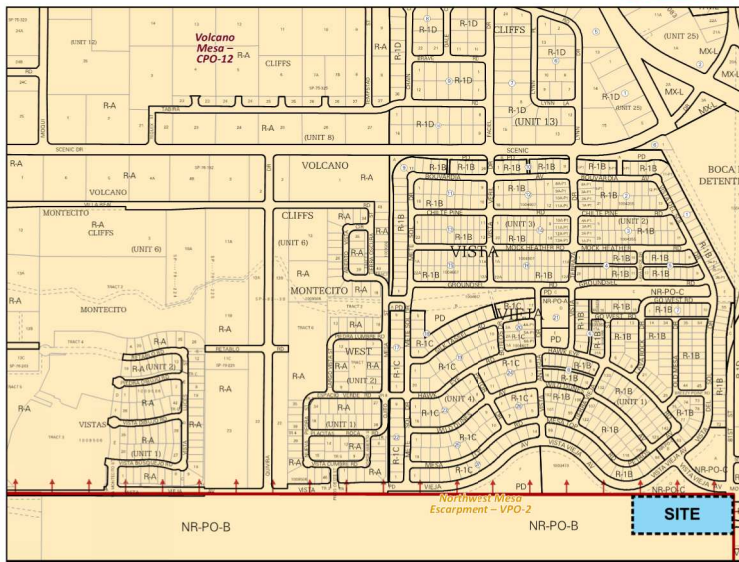
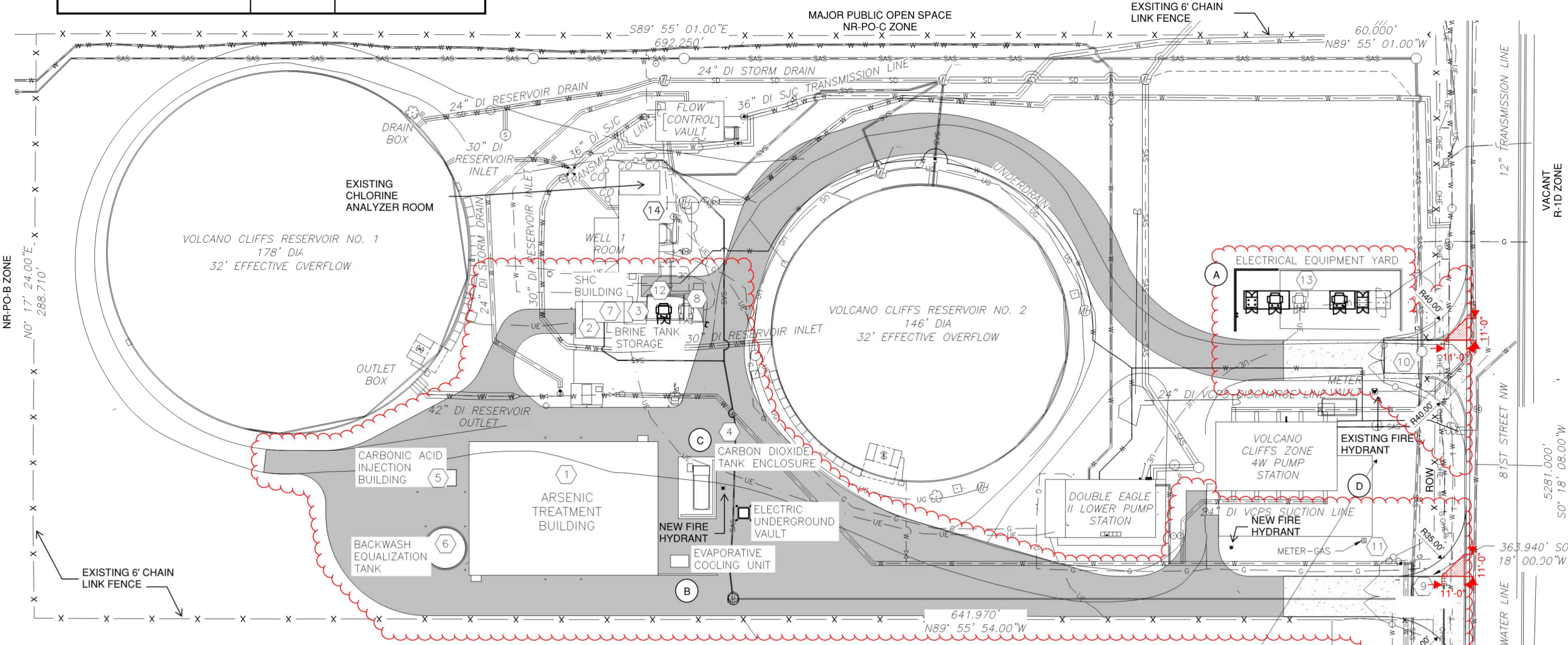
-EXISTING/PROPOSED LAND USE: UTILITY INFRASTRUCTURE INCLUDING WATER RESERVOIR, ARSENIC TREATMENT BUILDING, PUMP STATION, AND RELATED USES

NOTES:

- 1 NEW ARSENIC TREATMENT BUILDING
- 2 NEW FRP SODIUM HYPOCHLORITE (SHC)
- 3 NEW BRINE TANK STORAGE ROOM WITH BRINE TANK
- 4 NEW CARBON DIOXIDE STORAGE TANK AND WALL ENCLOSURE
- 5 NEW CARBONIC ACID INJECTION BUILDING.
- 6 NEW BACKWASH EQUALIZATION TANK
- 7 EXISTING SHC GENERATION BUILDING TO BE DEMOLISHED.
- 8 EXISTING SHC STORAGE VAULT TO BE DEMOLISHED.
- 9 CONSTRUCTION OF NEW CONCRETE DRIVEWAY AND ENTRANCE WITH NEW MANUAL ENTRANCE GATE.
- 10 RECONSTRUCTION OF EXISTING CONCRETE DRIVEWAY, RELOCATION OF EXISTING GATE AND FENCE.
- 11 RELOCATION OF GAS METER AND PIPING.
- 12 NEW PRIMARY TRANSFORMER.
- 13 NEW TRANSFORMERS AND PRIMARY FUSED SWITCHES.
- 14 NEW CHLORINE ANALYZERS AND BOOSTER PUMPS IN THE EXISTING ROOM.

GENERAL NOTES

- 1) THIS SITE PLAN IS A MAJOR AMENDMENT TO THE SITE PLAN FOR BUILDING PERMIT (PROJECT #1002197; APPLICATION 03DRB-01648).
- 2) THE INTEGRATED DEVELOPMENT ORDINANCE (IDO) REQUIRES DEVELOPMENT WITHIN MAJOR PUBLIC OPEN SPACE ZONED PROPERTIES TO BE REVIEWED AND APPROVED BY THE ENVIRONMENTAL PLANNING COMMISSION (EPC).
- 3) THIS SITE PLAN IS IN ACCORDANCE WITH THE PERMANENT EASEMENT GRANTED BY THE CITY OF ALBUQUERQUE TO THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY FOR VOLCANO CLIFFS 81 & VISTA VIEJA WELL #1 SITE FOR THE "...CONSTRUCTION, INSTALLATION, MAINTENANCE, REPAIR, MODIFICATION, REPLACEMENT, AND OPERATION OF PUBLIC WATER AND SANITARY SEWER SYSTEM FACILITIES INCLUDING UNDERGROUND PIPELINES, WELLS, PUMP STATIONS, RESERVOIRS, AND ALL IMPROVEMENTS, FACILITIES, EQUIPMENT, AND APPURTENANCES NECESSARY FOR THE OPERATION OF THE WATER AUTHORITY'S WATER AND SANITARY SEWER SYSTEM ("FACILITY") TOGETHER WITH THE RIGHT TO REMOVE TREES, BUSHES, UNDERGROWTH AND ANY OTHER OBSTACLES UPON THE PROPERTY IF THE WATER AUTHORITY DETERMINES THEY INTERFERE WITH THE APPROPRIATE USE OF THIS EASEMENT." (DOC # 2018069239 08/07/2018)
- 4) THE SUBJECT PROPERTY WILL REMAIN FENCED, LOCKED, AND NOT OPEN TO THE PUBLIC.
- 5) LANDSCAPING, SIGNAGE, WALLS, FENCES, TREES, AND SHRUBBERY BETWEEN THREE (3) AND EIGHT FEET (8) TALL (AS MEASURED FROM GUTTER PLAN) ARE NOT ALLOWED WITHIN THE CLEAR SIGHT TRIANGLE
- 6) THE WATER AUTHORITY MUST MEET SECURITY REQUIREMENTS WITH THE PURPOSE OF PROTECTING CRITICAL DRINKING WATER SUPPLY, TREATMENT AND DISTRIBUTION SYSTEMS, INCLUDING RESERVOIR, PUMP STATION, WELL SITE, AND PLANT FACILITIES FROM SECURITY THREATS. ENSURING SECURE FACILITIES INCLUDES HAVING INTACT SECURITY FENCES, CLEAR LINE-OF-SITE THROUGH FENCES FOR OUR WATER AUTHORITY PERSONNEL, PROPER LIGHTING, AND MINIMAL LANDSCAPING THAT DOES NOT INTERFERE WITH OUR ABILITY TO OPERATE, MAINTAIN, AND SECURE OUR EQUIPMENT AND PIPING INSIDE (AND OUTSIDE) OUR FACILITIES.



PROJECT NUMBER:	PR-2023-008617
Application Number:	SI-2023-00866
This plan is consistent with the specific Site Development Plan approved by the Environmental Planning Commission (EPC), dated <u>June 15, 2023</u> , and the Findings and Conditions in the Official Notification of Decision are satisfied.	
Is an Infrastructure List required? () Yes () No If yes, then a set of approved DRC plans with a work order is required for any construction within Public Right-of-Way or for construction of public improvements.	
DFT SITE DEVELOPMENT PLAN APPROVAL:	
Traffic Engineering, Transportation Division	Date
ABCWUA	Date
Parks and Recreation Department	Date
Hydrology	Date
Code Enforcement	Date
Not Applicable	Date
* Environmental Health Department (conditional)	Date
Not Applicable	Date
Solid Waste Management	Date
Planning Department	Date

MAJOR PUBLIC OPEN SPACE & PARKING LOT NR-PO-B ZONE



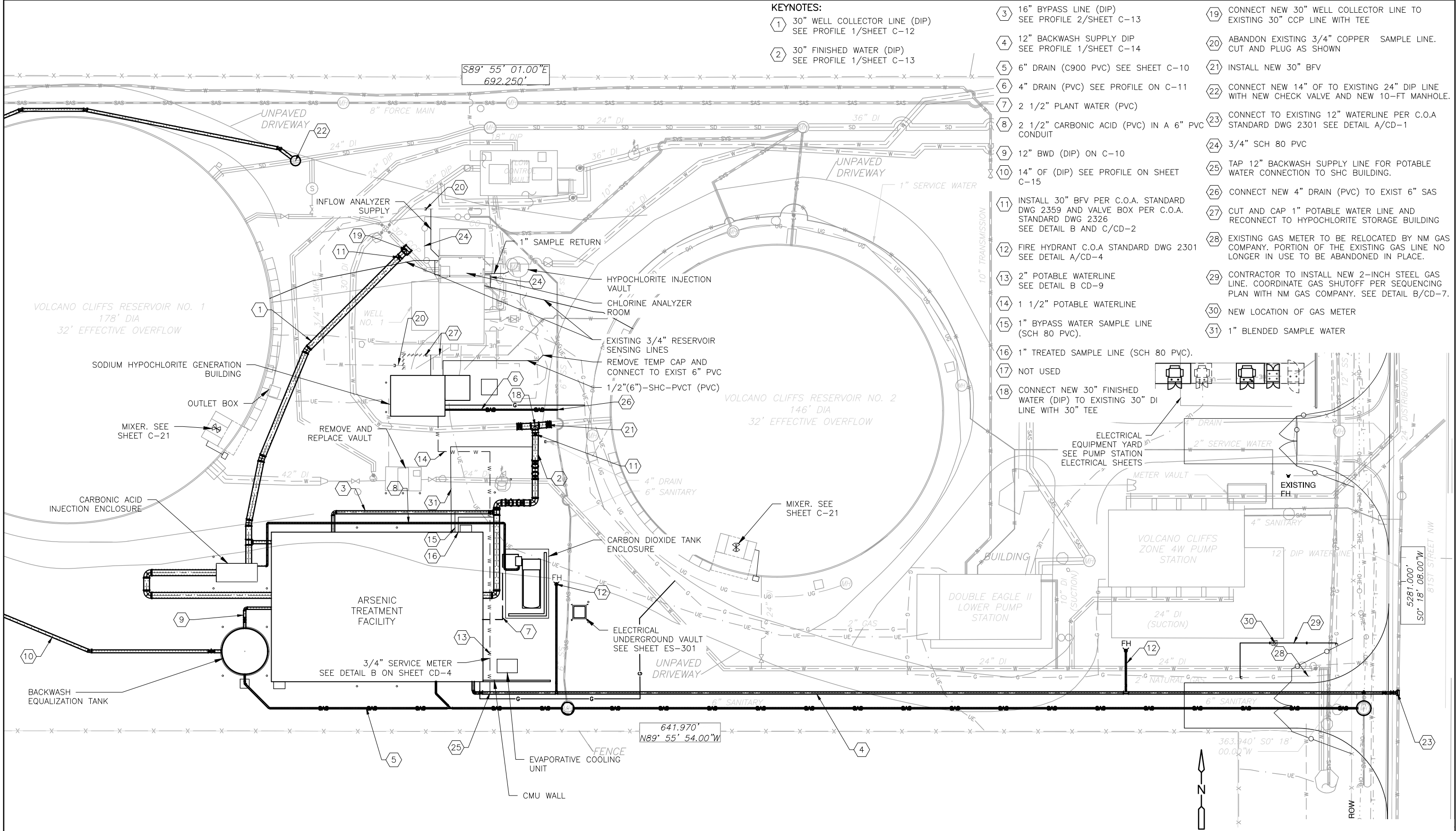
D. EXISTING SURGE TANK ENCLOSURE WALL BEHIND THE PROPERTY SIGN

EXISTING PROPERTY SIGN 7'x8' BROWN STUCCO FINISH

SCALE: 1" = 30' ATTENTION 0 1/2" 1" GRAPHIC SCALE THIS BAR MEASURES 1" AT FULL SCALE (ANSI D)	SUBMITTED BY: CDM Smith 6001 Indian School Road, N.E. Suite 310 Albuquerque, New Mexico 87110 Tel: (505) 243-3200	ENGINEER'S SEAL 	TITLE: ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY VOLCANO CLIFFS ARSENIC TREATMENT FACILITY AND PUMP STATION UPGRADES PROJECT OVERVIEW	WATER AUTHORITY CONSTRUCTION PROJECT NO. 2822.0	ZONE MAP NO. D-09-Z	SHEET 1 of 8
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NOT FOR CONSTRUCTION - FOR PERMIT ONLY

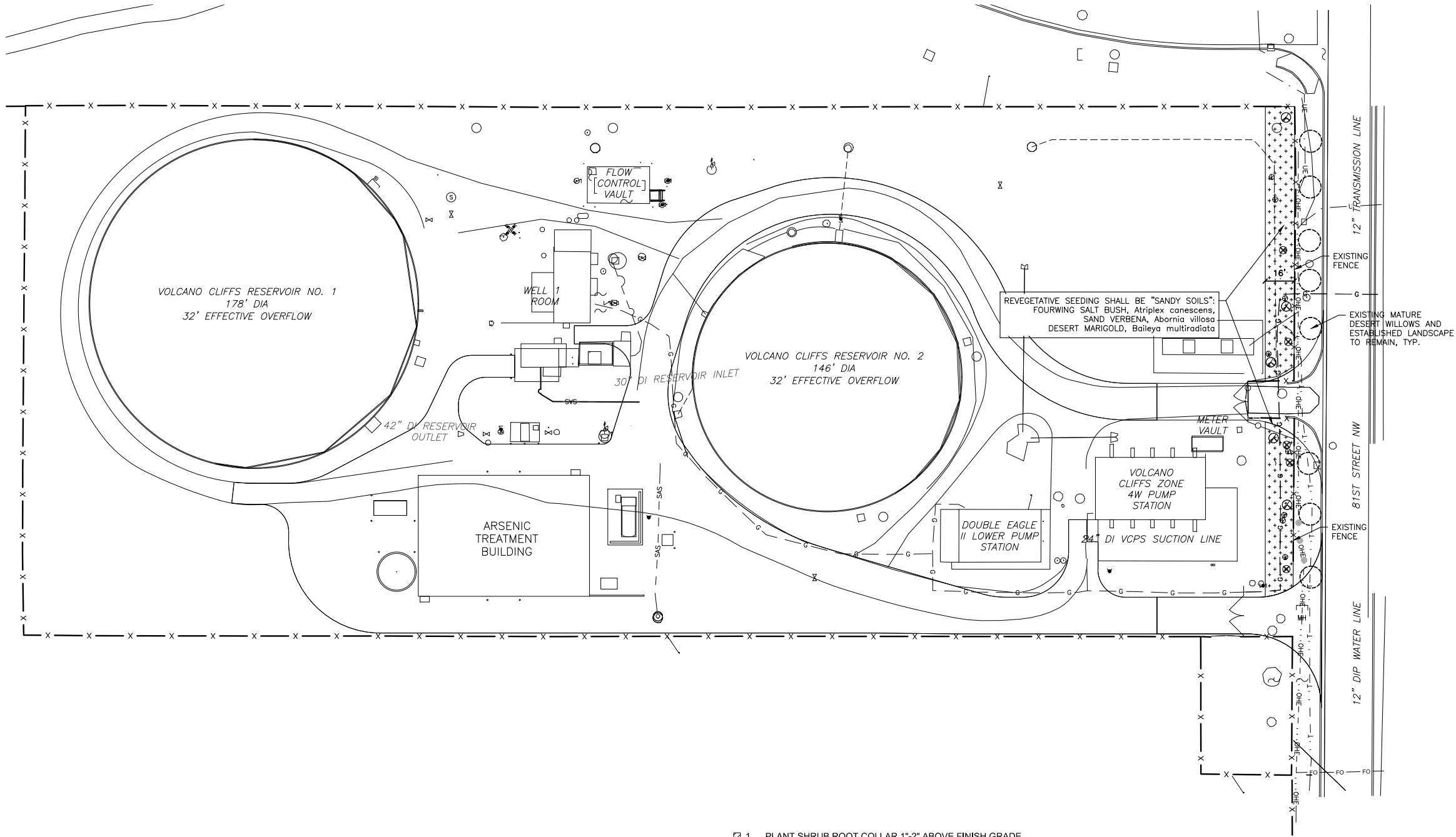
XREFs: [2002-09-04_Topo, Volcano Cliffs, Boundary, CEP000ST, ABCWUA, 22x34, CWP001ST, 2308.003-M-11, XX-Elec Site Plan - For CDM, PLVZ000FL] Images: []
Last saved by: SDANALESS Time: 3/15/2023 8:20:17 PM
C:\Users\sidaanless\ACCDocs\CDM Smith Inc\33280-253877 - Volcano Cliffs Arsenic TF\Project Files\02 Civil (C)\10 CADD\009YPL.dwg



PLAN
1" = 20'

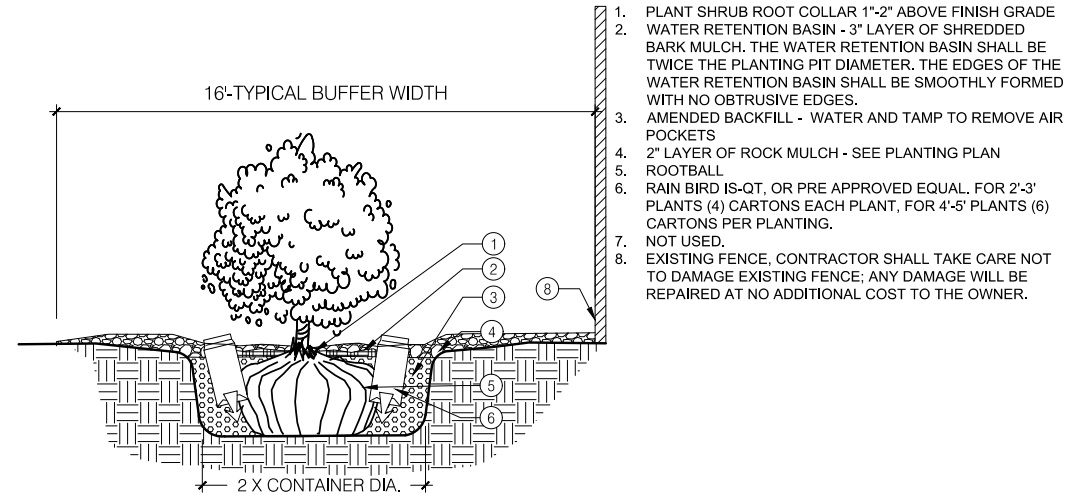
SCALE:	SUBMITTED BY:	ENGINEER'S SEAL	 ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY				
	 6001 Indian School Road, N.E., Suite 310 Albuquerque, New Mexico 87110 Tel: (505) 243-3200		TITLE: VOLCANO CLIFFS ARSENIC TREATMENT FACILITY AND PUMP STATION UPGRADES UTILITY PLAN				
			WATER AUTHORITY CONSTRUCTION PROJECT NO.		2822.0	ZONE MAP NO. D-09-Z	SHEET 3 of 8

NOT FOR CONSTRUCTION - FOR PERMIT ONLY



GENERAL LANDSCAPE NOTES:

- NEW SHRUBS SHALL BE HAND WATERED UNTIL ESTABLISHED (APPROXIMATELY ONE GROWING SEASON) MINIMUM OF 5 GALLONS PER LARGE SHRUB AND 2 GALLONS PER MEDIUM SHRUB.
 - ONCE A WEEK IN MARCH
 - TWICE A WEEK IN APRIL AND MAY
 - THREE TIMES A WEEK IN JUNE, JULY AND AUGUST
 - TWICE A WEEK IN SEPTEMBER AND OCTOBER
 - ONCE A WEEK IN NOVEMBER



A NATIVE SHRUB PLANTING W/ IRRG SUPPLEMENTATION

SCALE: N.T.S.

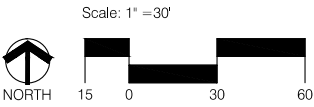
PLANT LEGEND

QTY.	SYMBOL	SCIENTIFIC NAME COMMON NAME	SIZE	MATURE SIZE	WATER USE
SHRUBS:					
5		ARTEMISA FILIFOLIA SAND SAGE	5-GAL	4' HT. X 4' SPR.	LOW
5		ERICAMERIA NAUSEOSA CHAMISA	5-GAL	4' HT. X 5' SPR.	LOW
8		FALLUGIA PARADOXA APACHE PLUME	5-GAL	3' HT. X 3' SPR.	LOW

SEEDING

3,725 REVEGETATIVE SEEDING: 'SANDY SOILS' SEED MIX, (SEE NOTE ON PLANTING PLAN). PREP SEEDING AREA BY TILLING 4" DEEP, SPREAD SEED AND TOP WITH 2" DEPTH 3/4"-1" 'BROWN' GRAVEL MULCH.

ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES TO BE DRILL SEEDED AND HYDRO-MULCHED TO THE EXTENTS OF DISTURBANCE.



CONSENSUS
Planning / Landscape Architecture
302 Eighth Street NW
Albuquerque, NM 87102
(505) 764-9801 Fax 842-5495
e-mail: cp@consensusplanning.com

CONSULTANTS

WATER TREATMENT PLANT
ALBUQUERQUE, NM

MAY 4, 2023

SUBMITTAL: MAY 4, 2023

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT NO: X

CAD DWG FILE:

DESIGNED BY: AM DATE: 5/4/23

DRAWN BY: AM DATE: 5/4/23

CHECKED BY: KR DATE: 5/4/23

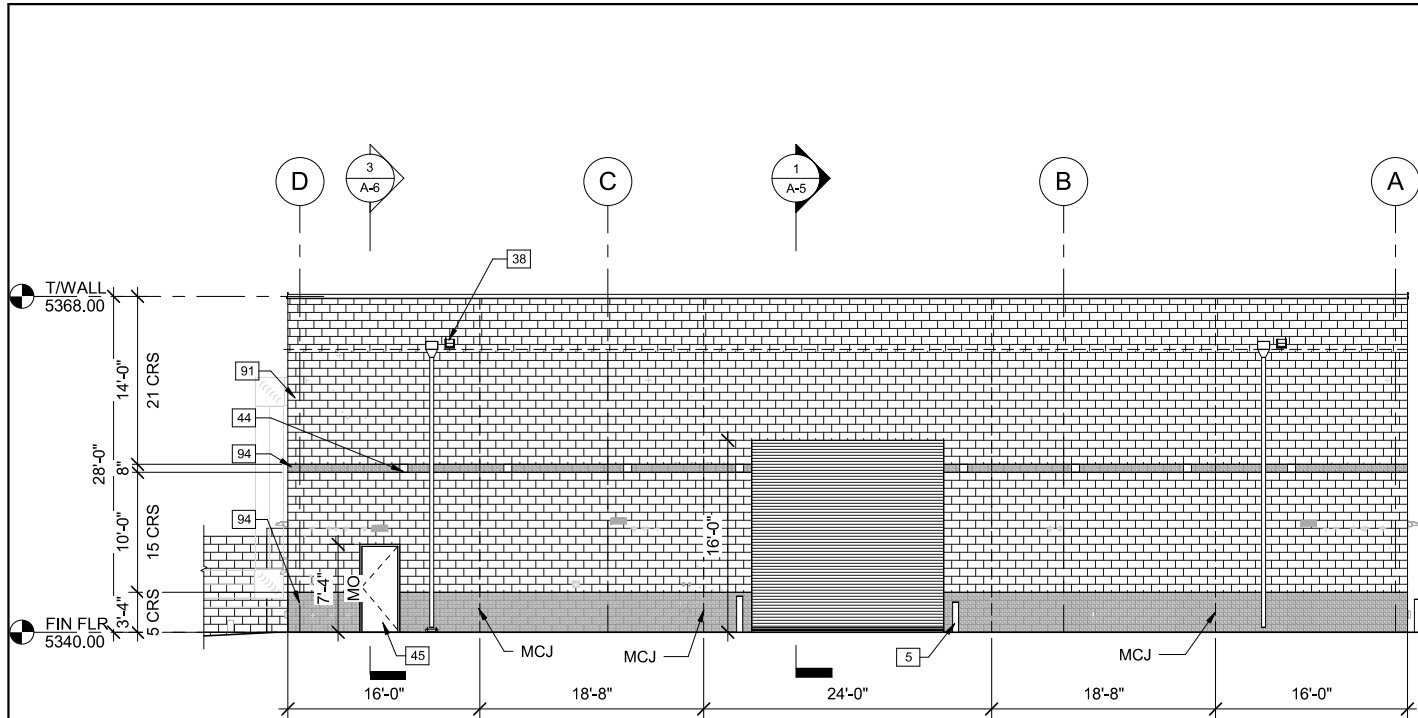
SHEET TITLE

LANDSCAPE
PLAN

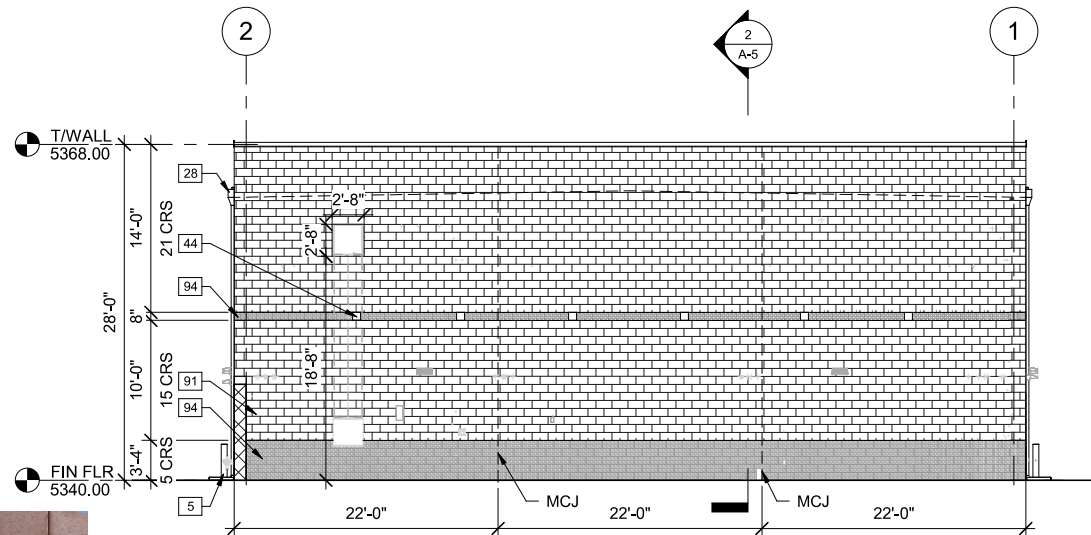
DRAWING SHEET

4 of 8

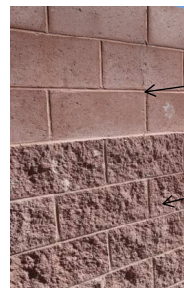
LS100



1 NORTH ELEVATION
A-3 1/8" = 1'-0"



2 EAST ELEVATION
A-3 1/8" = 1'-0"



SMOOTH FACE CMU
RED/BROWN

SPLIT FACE CMU
RED/BROWN

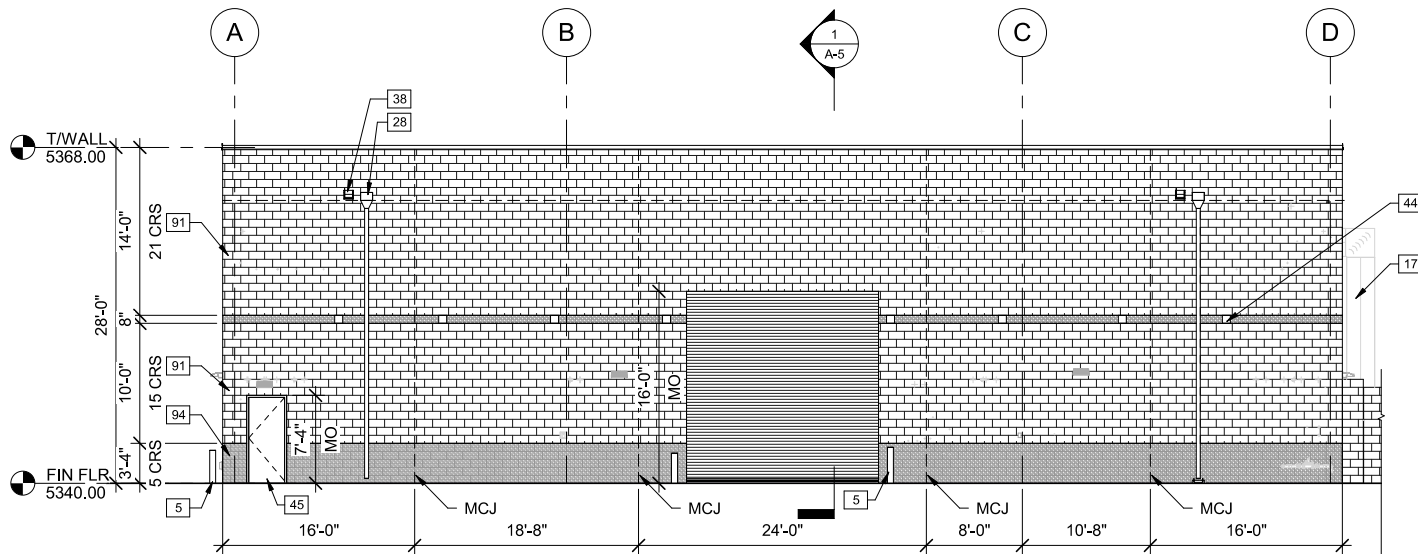
KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
5	BOLLARD, TYP, SEE "C" DWGS
17	HVAC EQUIPMENT, CHAMPION, 14/21 SD L: 62-IN, W: 62-IN, H: 60-IN SEE "H" DWGS
19	LIGHT FIXTURE, HOLOPHANE LIGHTING, HLWPC2P20 L: 16-IN, W: 12-IN, H: 5-IN SEE "E" DWGS
28	ALUMINUM CONDUCTOR HEAD, DOWNSPOUT AND SCUPPER, TYP
38	OVERFLOW SCUPPER, BOTTOM OF OVERFLOW SCUPPER TO BE 2-IN ABOVE BOTTOM OF PRIMARY SCUPPER, TYP
44	8" SMOOTH FACE CMU TYPE 3
45	HOLLOW METAL DOOR AND FRAME, SEE SCHD
91	12" SPLIT FACE CMU TYPE 2
94	12" SPLIT FACE CMU TYPE 1

CMU LEGEND	
	CMU- TYPE 1 : SMOOTH FACE CMU
	CMU- TYPE 2 : SPLIT FACE CMU
	CMU- TYPE 3 : 8"X8" SMOOTH FACE CMU

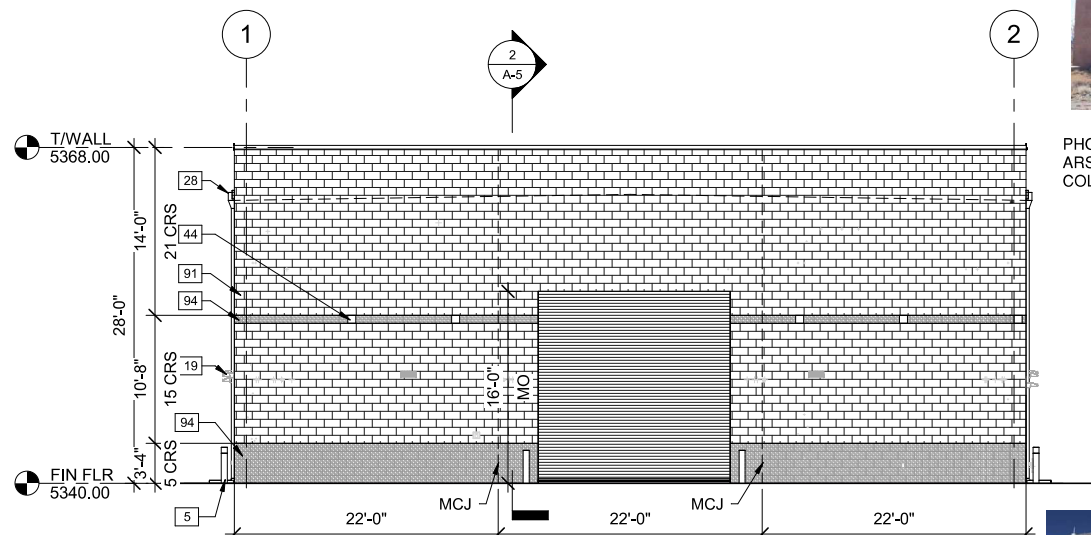
- GENERAL NOTES:
1. CMU COLOR TO MATCH EXISTING VOLCANO CLIFFS PUMP STATION. LIGHT REFLECTIVE VALUE (LRV) OF CMU BLOCKS SHALL RANGE FROM 20-50%
 2. REMOVE HIGH POINTS ON THE SPLIT FACE CMU TO OBTAIN A LEVEL SURFACE FOR THE MOUNTING OF EXTERIOR LIGHTS AND RECEPTACLES.
 3. REFER TO "H" SHEETS FOR DUCT PENETRATION DETAILS.
 4. CMU OPENINGS SHALL BE COORDINATED WITH APPROVED EQUIPMENT SYSTEMS.



PHOTO OF EXISTING PUMP STATION. THE NEW ARSENIC TREATMENT FACILITY WILL MATCH THE CMU COLORS AND ROLL UP DOORS.



3 SOUTH ELEVATION
A-3 1/8" = 1'-0"



4 WEST ELEVATION
A-3 1/8" = 1'-0"



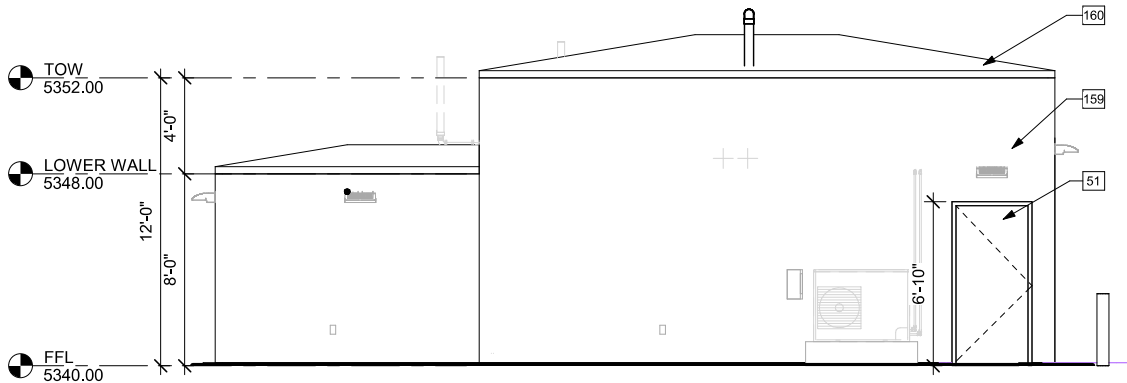
SUBMITTED BY:		ARCHITECT'S SEAL		ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY	
				TITLE: VOLCANO CLIFFS ARSENIC TREATMENT FACILITY AND PUMP STATION UPGRADES	
6001 Indian School Road, N.E., Suite 310 Albuquerque, New Mexico 87110 Tel: (505) 243-3200				ARSenic TREATMENT BUILDING ELEVATIONS	
				WATER AUTHORITY CONSTRUCTION PROJECT NO.	2822.0
				ZONE MAP NO.	D-09-Z
				SHEET 5 of 8	

NOT FOR CONSTRUCTION - FOR PERMIT ONLY

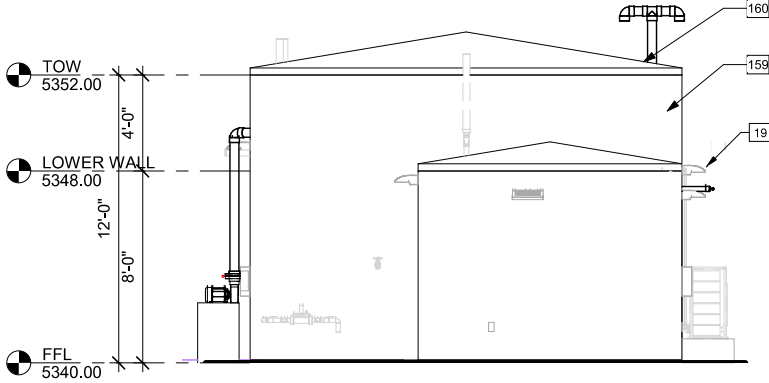
GENERAL NOTES:
1. COORDINATE WALL AND ROOF PENETRATIONS WITH APPROVED EQUIPMENT

2. BUILDING WILL BE DESERT SAND COLOR WITH LRV RANGING FROM 20-50%

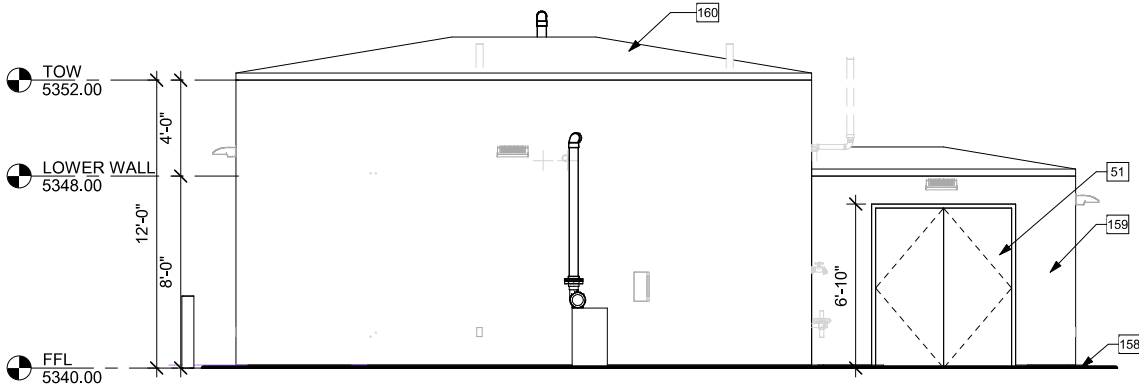
KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
5	BOLLARD, TYP, SEE "C" DWGS
19	LIGHT FIXTURE, HOLOPHANE LIGHTING, HLWPC2P20 L: 16-IN, W:12-IN, H: 5-IN SEE "E" DWGS
51	FRP DOOR AND FRAME, SEE SCHD
54	OVERHEAD COILING DOOR, SEE SCHD
158	CONCRETE CONTAINMENT WALL, SEE "S" SHEETS
159	FRP WALL WITH R-20 (MIN.) CONTINOUS RIGID INSULATION
160	FRP ROOF WITH R-38 (MIN.)



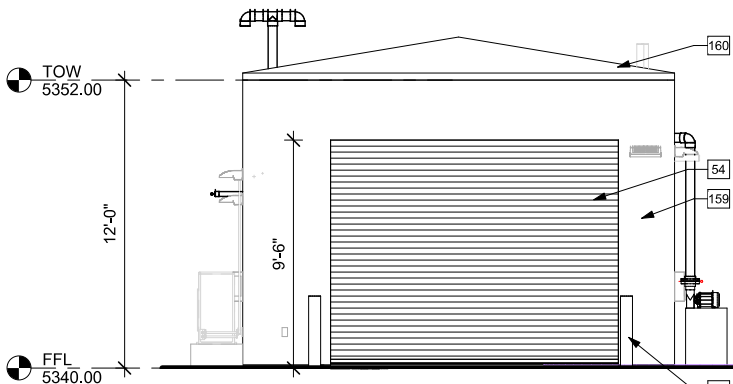
1 NORTH ELEVATION
A-8 1/4" = 1'-0"
0 4 8



2 EAST ELEVATION
A-8 1/4" = 1'-0"
0 4 8



3 SOUTH ELEVATION
A-8 1/4" = 1'-0"
0 4 8



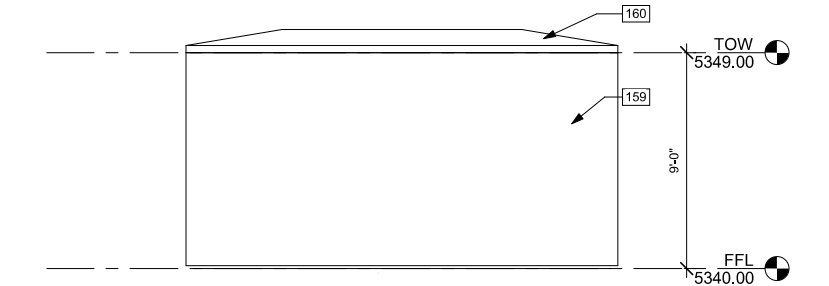
4 WEST ELEVATION
A-8 1/4" = 1'-0"
0 4 8

SUBMITTED BY:		ARCHITECT'S SEAL		ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY		
CDM Smith 6001 Indian School Road, N.E., Suite 310 Albuquerque, New Mexico 87110 Tel: (505) 243-3200		STATE OF NEW MEXICO CHARLOTTE THROOP No. 005052 REGISTERED ARCHITECT		TITLE: VOLCANO CLIFFS ARSENIC TREATMENT FACILITY AND PUMP STATION UPGRADES SODIUM HYPOCHLORITE GENERATION BUILDING ELEVATIONS		
				WATER AUTHORITY CONSTRUCTION PROJECT NO.	2822.0	ZONE MAP No. D-09-Z
				SHEET 6 of 8		

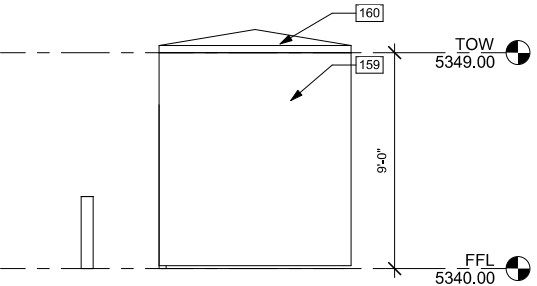
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GENERAL NOTES:
1. BUILDING WILL BE DESERT SAND COLOR
WITH LRV RANGING FROM 20-50%

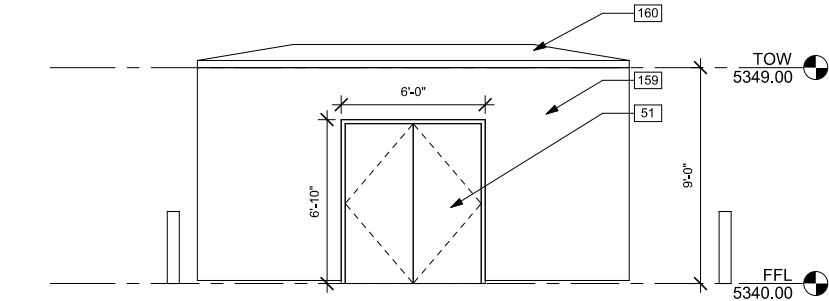
KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
51	FRP DOOR AND FRAME, SEE SCHD
159	FRP WALL WITH R-20 (MIN.) CONTINUOUS RIGID INSULATION
160	FRP ROOF WITH R-38 (MIN.)



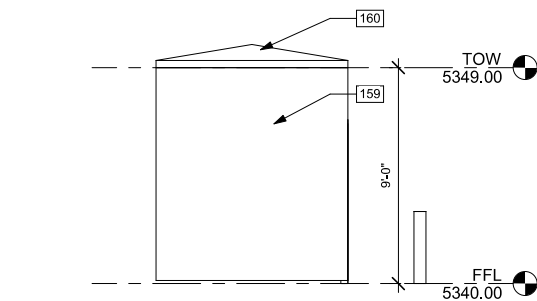
1 NORTH ELEVATION
A-14 1/4" = 1'-0"



2 EAST ELEVATION
A-14 1/4" = 1'-0"

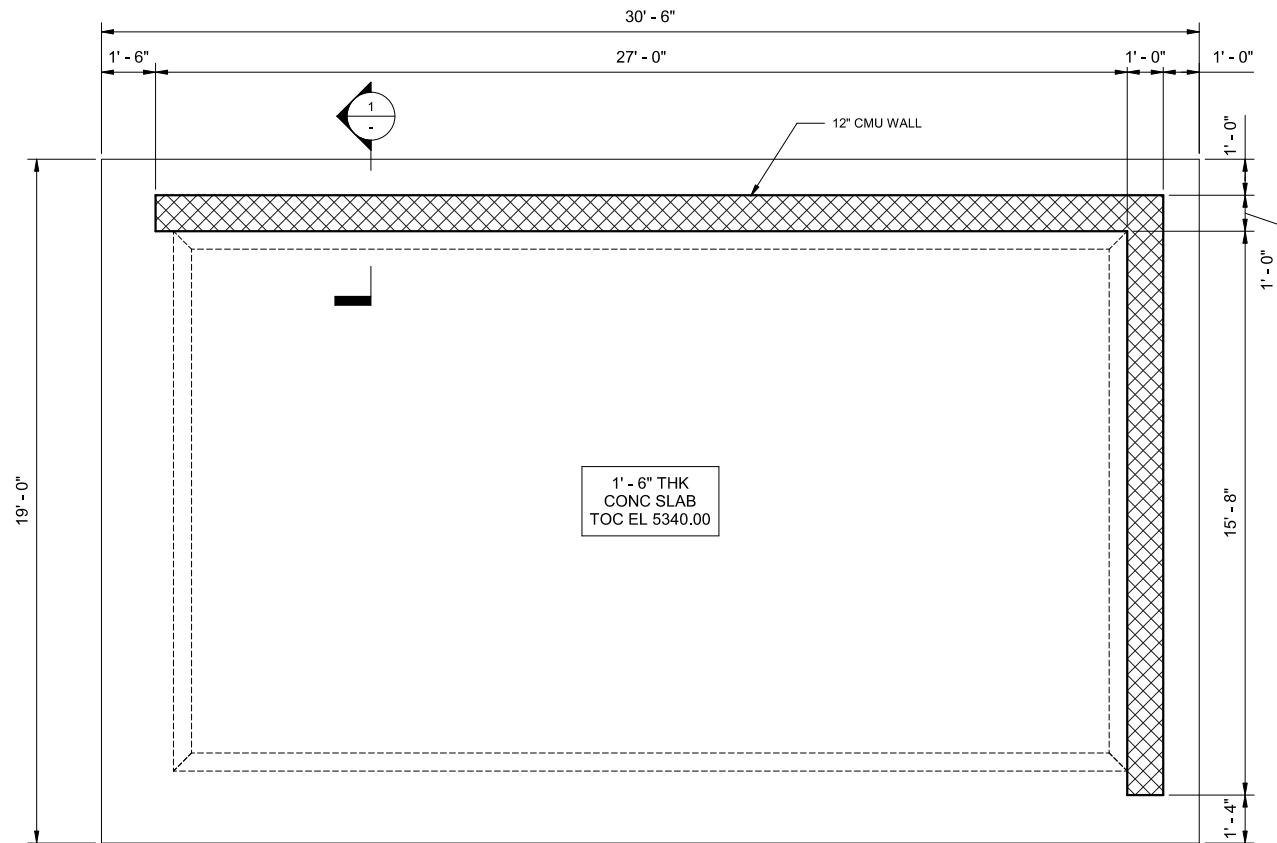


3 SOUTH ELEVATION
A-14 1/4" = 1'-0"



4 WEST ELEVATION
A-14 1/4" = 1'-0"

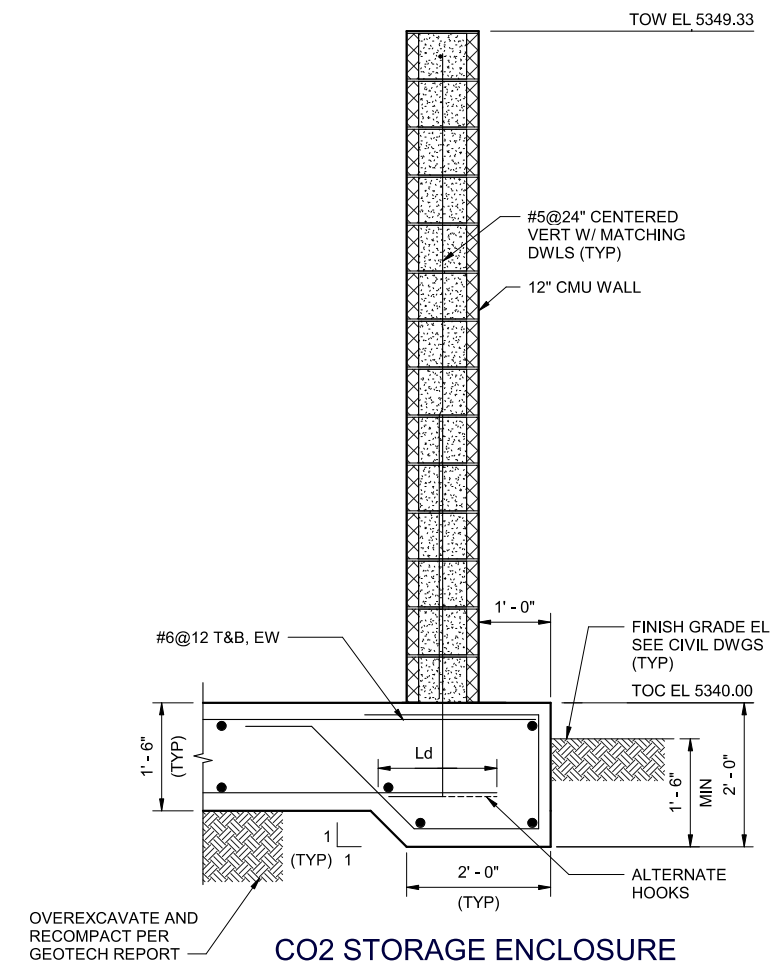
SUBMITTED BY:		ARCHITECT'S SEAL		ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY	
CDM Smith 6001 Indian School Road, N.E., Suite 310 Albuquerque, New Mexico 87110 Tel: (505) 243-3200		STATE OF NEW MEXICO CHARLOTTE THROOP No. 009052 REGISTERED ARCHITECT 06-30-2023		TITLE: VOLCANO CLIFFS ARSENIC TREATMENT FACILITY AND PUMP STATION UPGRADES CARBONIC ACID INJECTION BUILDING ELEVATIONS	
WATER AUTHORITY CONSTRUCTION PROJECT NO.		2822.0		ZONE MAP NO. D-09-Z	SHEET 7 of 8



CO2 STORAGE ENCLOSURE

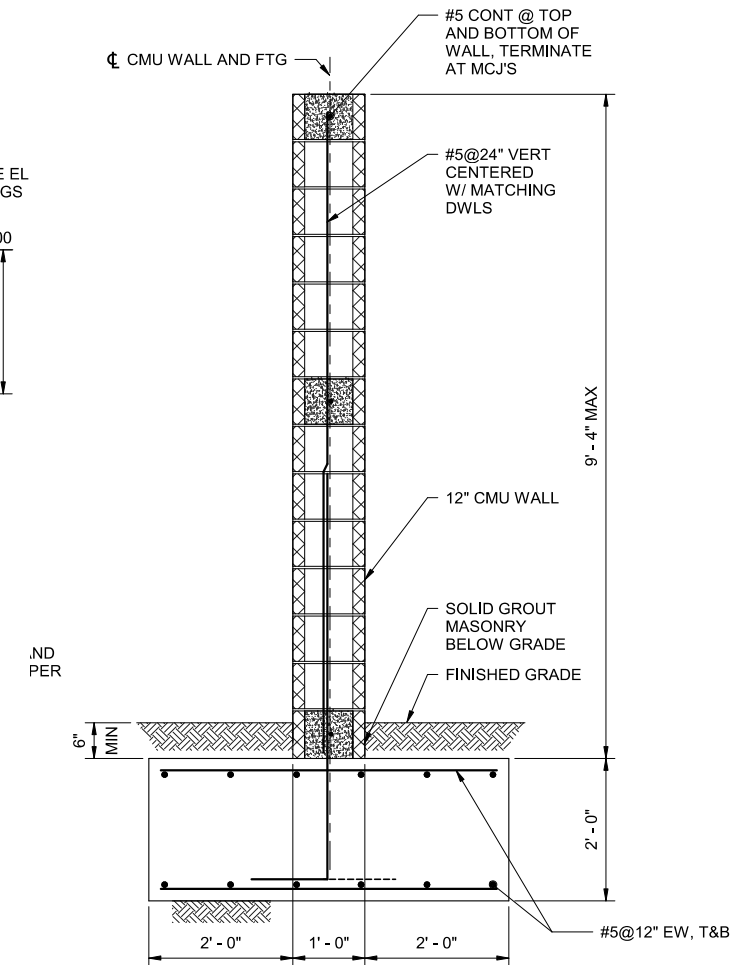
FOUNDATION PLAN

3/8" = 1'-0"



CO2 STORAGE ENCLOSURE

1 SECTION
3/4" = 1'-0"



EVAPORATIVE COOLER ENCLOSURE WALL

D DETAIL
NTS

SUBMITTED BY:	ENGINEER'S SEAL	ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY		
 6001 Indian School Road, N.E., Suite 310 Albuquerque, New Mexico 87110 Tel: (505) 243-3200		TITLE: VOLCANO CLIFFS ARSENIC TREATMENT FACILITY AND PUMP STATION UPGRADES ENCLOSURE WALL DETAILS		
		WATER AUTHORITY CONSTRUCTION PROJECT NO. 2822.0	ZONE MAP NO. D-09-Z	SHEET 8 of 8

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Legend

- ▲ Well Locations
- VC Reservoirs Site

