

# CITY OF ALBUQUERQUE

*Planning Department*  
Brennon Williams, Director



*Mayor Timothy M. Keller*

April 29, 2021

David Soule, PE  
Rio Grande Engineering  
1606 Central SE Suite 201  
Albuquerque, NM 87106

**Re: Lot 3 Block 9 Unser Cliffs Unit 5 SAD 227**  
**8009 Shiprock Ct. NW**  
**Engineer's Stamp dated: 8-10-2020 (E10D082)**  
**Pad Certification dated: 10-23-2020**  
**CO dated: 4-29-2021**

Dear Mr. Soule,

PO Box 1293

Based on the Certification received 8/6/2020, the site is acceptable for release of Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, you can contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

NM 87103

[www.cabq.gov](http://www.cabq.gov)

Ernest Armijo, P.E.  
Principal Engineer, Planning Dept.  
Development Review Services



Weighted E Method

Basin	Area (sf)	Area (acres)	Treatment A (sf)	Treatment B (sf)	Treatment C (sf)	Treatment D (sf)	Weighted E (ac-ft)	Volume (ac-ft)	Flow (cfs)	24 hour Volume (ac-ft)
ALLOWED	18104.00	0.416	0%	0%	24%	0.100	40%	0.1682	36%	0.160
PROPOSED	18104.00	0.416	0%	0%	24%	0.100	42%	0.1746	34%	0.141
COMPARISON								1.246	0.043	1.321
									1.321	0.043
										-0.001

Equations:

Weighted E =  $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$  / (Total Area)

Volume = Weighted D \* Total Area

Flow =  $Q_a + A_a + Q_b + A_b + Q_c + A_c + Q_d + A_d$

Where for 100-year, 6-hour storm- zone 1

$E_a = 0.44$   
 $E_b = 0.66$   
 $E_c = 0.88$   
 $E_d = 1.87$

$Q_a = 1.29$   
 $Q_b = 2.03$   
 $Q_c = 2.45$   
 $Q_d = 4.37$

ONSITE Conditions

FIRST FLUSH WATER QUALITY VOLUME

WATER QUALITY

FLOOD CONTROL

Narrative

This site is within the SAD 227 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the adjacent roadway to the east per the master drainage plan. The site does not exceed the SAD 227 developed conditions assumptions, there ponding is not required. Due to height restrictions we have incorporated ponding to minimize the pad height as much as possible, and added drain to inlet to allow for pad to remain low. We are ponding the water harvest volume generated by the site there is no measurable upland flow. This plan is in conformance to the master drainage plan

ORIFICE CALCULATIONS

ACTUAL	DEPTH	Q
ELEV.	(FD)	(CFS)
17.00	2.29	1.330

Water equation

$Q = CA \cdot \sqrt{H(2gH)}$

$C = 0.6$   
Diameter (in) = 6  
Area (ft<sup>2</sup>) = 0.19634954  
 $g = 32.2$   
 $H (ft) =$   
 $Q (CFS) =$   
Depth of water above center of orifice  
Flow

Private Drainage Facilities within City Right-of-Way

Notice to Contractor  
(Special Order 19 ~ "SO-19")

1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact New Mexico One Call, dial "811" for (505) 280-1990 for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets may be required on a 24-hour basis.
8. Contractor must contact Angie Armijo at (505) 857-8607 and Construction Coordination at 924-3416 to schedule an inspection.

CAUTION:

EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.

I, DAVID SOULE HAVE PERSONALLY INSPECTED THE SITE. I HEREBY CERTIFY THE PAD HAS BEEN CONSTRUCTED SUCH THAT IT IS IN SUBSTANTIAL CONFORMANCE TO THE APPROVED GRADING PLAN DATED 8/10/20 BASED UPON APPROVAL FROM DESIGN ENGINEER THE PAD HAS BEEN CONSTRUCTED 12" LOWER. THE DRAINAGE CONCEPT HAS NOT CHANGED. I CERTIFY THE PAD IS AT A GRADE THAT CONFORMS TO THE APPROVED PLAN AND ACCEPTABLE FOR RELEASE OF BUILDING PERMIT



10/23/20

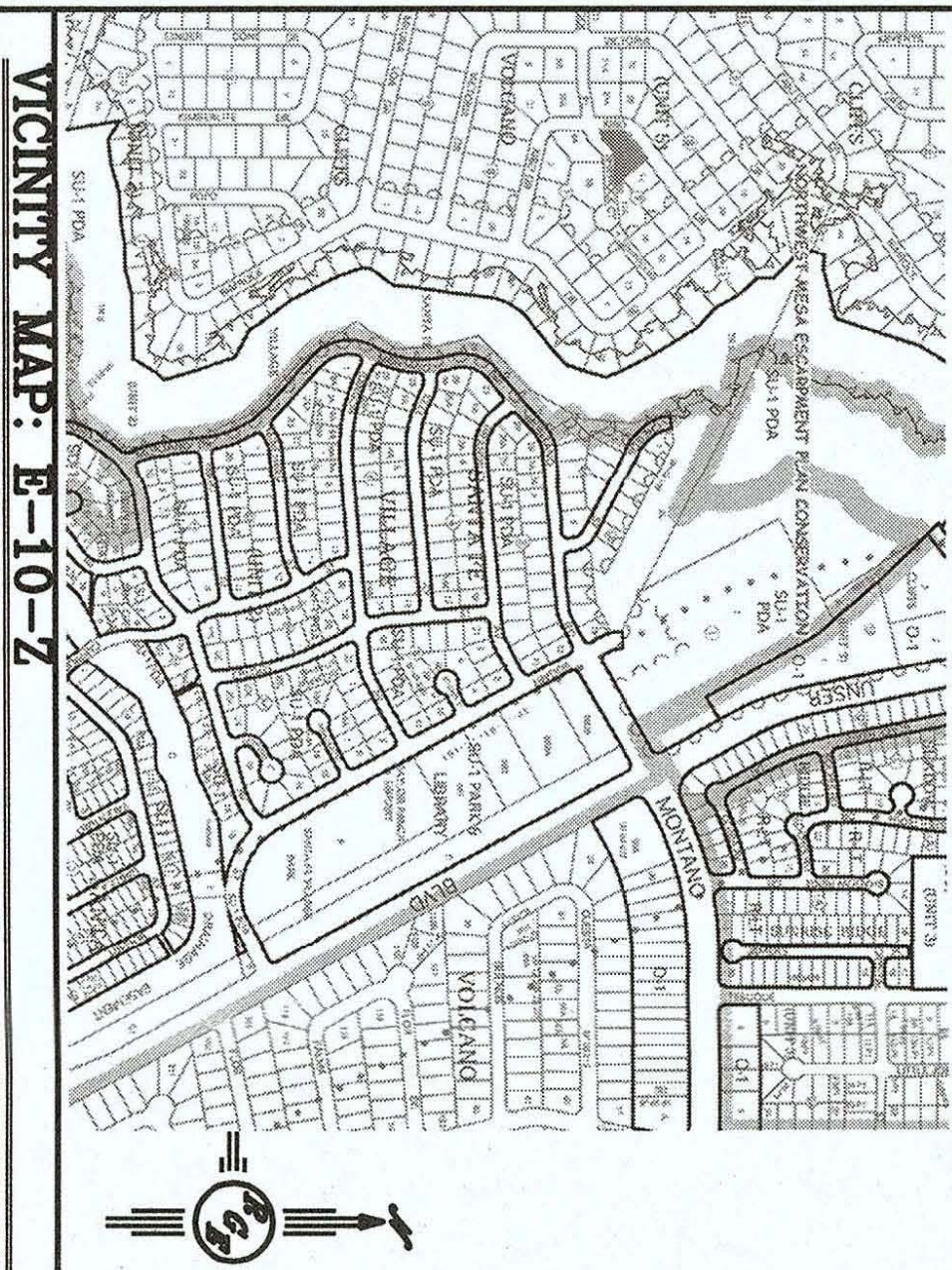
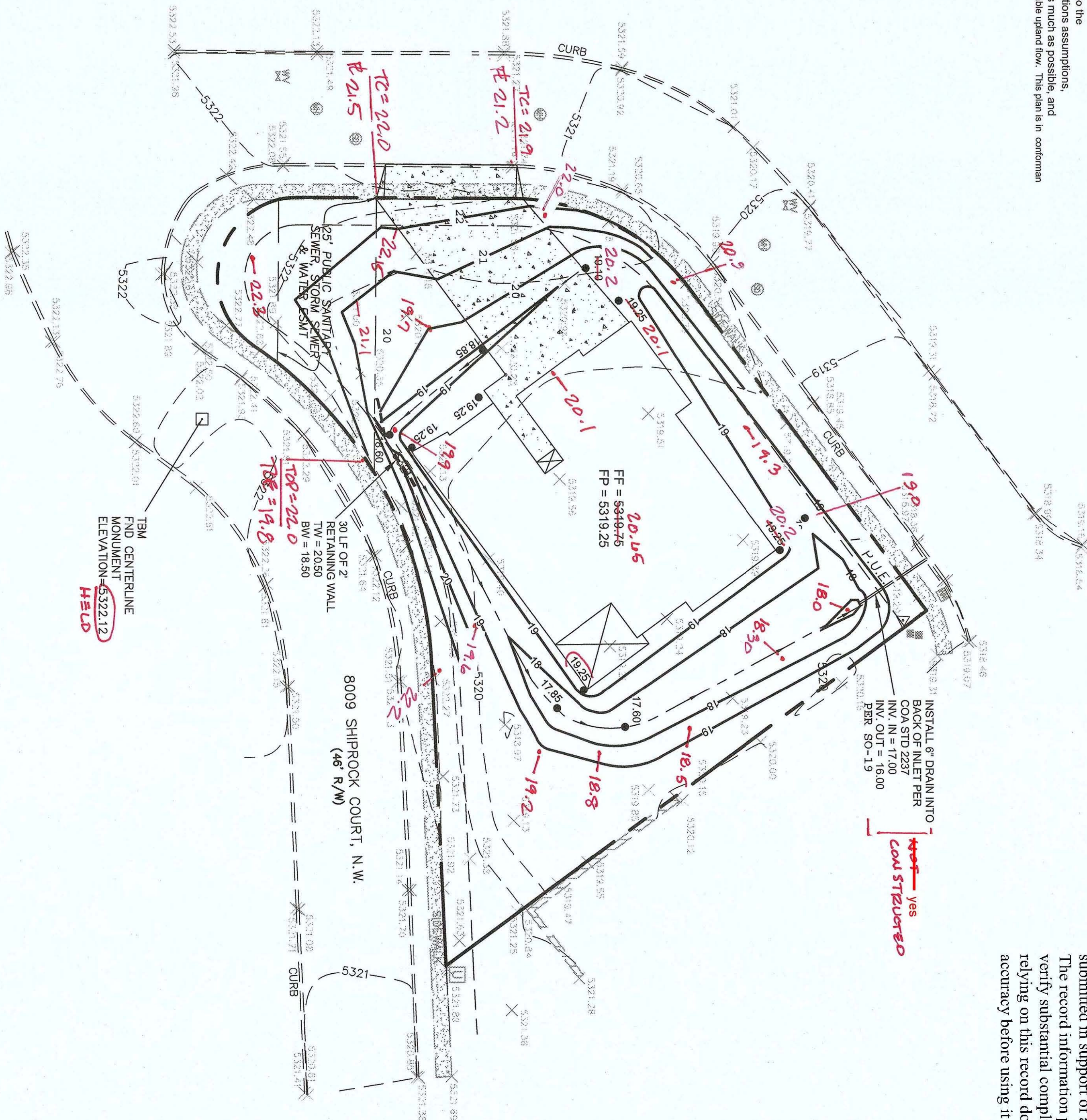
EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

I David Soule, NMPE 14522, of the firm Rio Grande Engineering, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intend of the approved plan dated 8/10/20. The record information edited on the original design document has performed by me or under my direct supervision and is true and correct to the best of my knowledge and belief. The as-built survey was provided by THOMAS PATRICK NMPS 12651. The certification is submitted in support of a request for PERMANENT CERTIFICATE OF OCCUPANCY. The record information presented herein is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose



4/29/21



VICINITY MAP: E-10-Z



FIRM MAP:

LEGAL DESCRIPTION:

LOT 10-A BLOCK 7 UNIT 5 VOLCANO CLIFFS CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
3. ANY PERMETER WALLS MUST BE PERMITTED SEPARATELY.
4. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
5. A SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
6. A PAD ELEVATION CERTIFICATION SHALL BE REQUIRED PRIOR TO RELEASE OF BUILDING PERMIT.

LEGEND

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED INDEX CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- BOUNDARY
- PROPOSED EARTHEN SWALE
- ADJACENT BOUNDARY
- EXISTING CURB AND GUTTER
- PROPOSED GRAVEL DRIVEWAY
- PROPOSED CONCRETE DRIVEWAY

ENGINEERS SEAL

LOT 10-A BLK 7 U 5 VC  
8009 SHIPROCK COURT, N.W.

GRADING AND DRAINAGE PLAN

DAVID SOULE  
REGISTERED PROFESSIONAL ENGINEER  
NEW MEXICO  
14522

8/10/20

**Rio Grande Engineering**

1606 CENTRAL AVENUE SE  
SUITE 201  
ALBUQUERQUE, NM 87106  
(505) 922-8889

SHEET #  
**C1**

JOB #



## David Soule

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**From:** Armijo, Augustine [augustinearmijo@cabq.gov]  
**Sent:** Thursday, April 29, 2021 10:28 AM  
**To:** Armijo, Ernest M.; Brissette, Renee C.; david@riograndeengineering.com  
**Cc:** Harmon Rita T.  
**Subject:** 8009 Kibo / dmd-so19 inspection  
To Whom It May Concern,

The SO-19 inlet penetration at 8009 Kibo passed inspection. Hydrology # E10-D082.

Thank You

 cid:image001.jpg@01D42001.CC

**Augustine Armijo**  
construction inspector  
[augustinearmijo@cabq.gov](mailto:augustinearmijo@cabq.gov)  
o 505.857.8607  
c 505.235-8016  
[cabq.gov/dmd](http://cabq.gov/dmd)