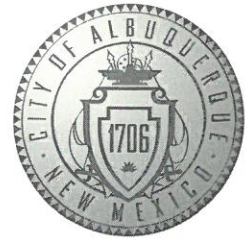


CITY OF ALBUQUERQUE

Planning Department
Brennon Williams Director



Mayor Timothy M. Keller

January 13, 2020

Jackie McDowell, PE
McDowell Engineering, Inc.
7820 Beverly Hills Ave NE
Albuquerque, NM 87121

RE: **Lot 21-A Block 2 Unit 18, S.A.D. 228**
7704 Compass Dr. NW
Grading and Drainage Plan
Engineers Stamp Date 1-10-20 (D10D003G21A)

Dear Ms. McDowell,

Based upon the information provided in your submittal received 1/9/20, this plan cannot be approved for Grading Permit until the following comments are addressed

- Show the 24" Storm Sewer pipe in the west property line.
- Provide a statement that if a wall is built above the 24" SS line and if repairs should need to take place the wall will be removed and not replaced. Replacement will be at the cost of the owners.

Prior to Building permit approval a Pad Certification will be required, provided by the Engineer signed and dated or a registered Land Surveyor with as-build elevations.

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

Sincerely,

Ernest Armijo, P.E.
Principal Engineer, Hydrology
Planning Department

RR/EA
File: D10D003G21A



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

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

IS THIS A RESUBMITTAL? _____ Yes _____ No

DEPARTMENT _____ TRANSPORTATION _____ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

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

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

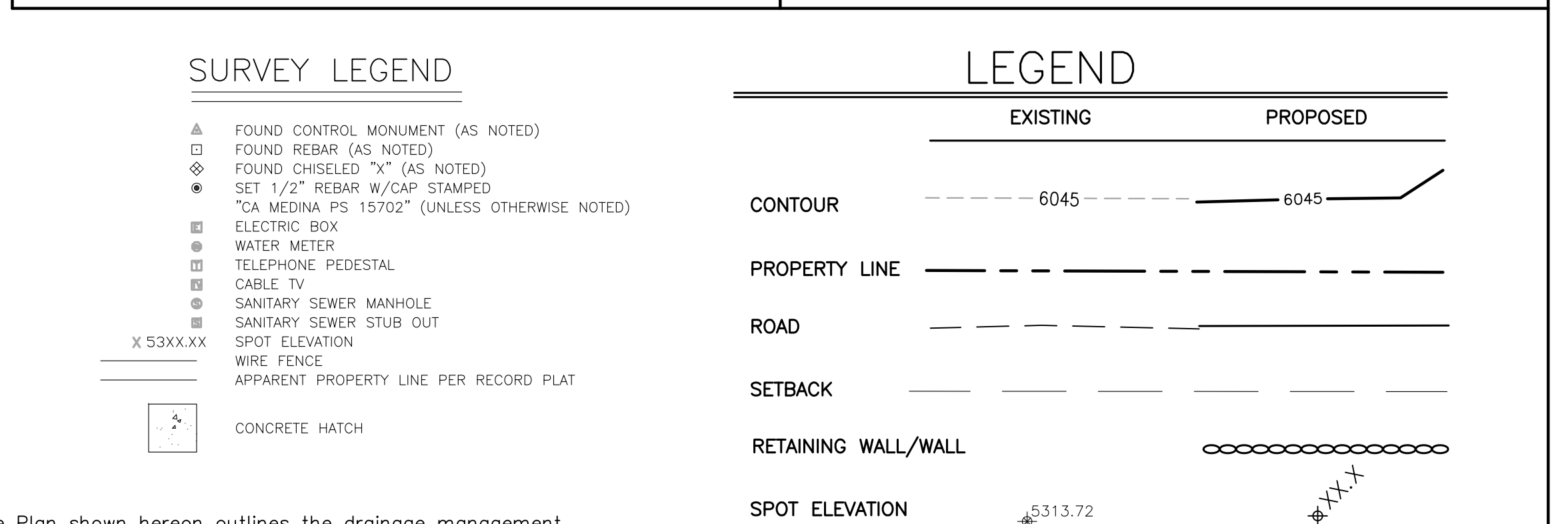
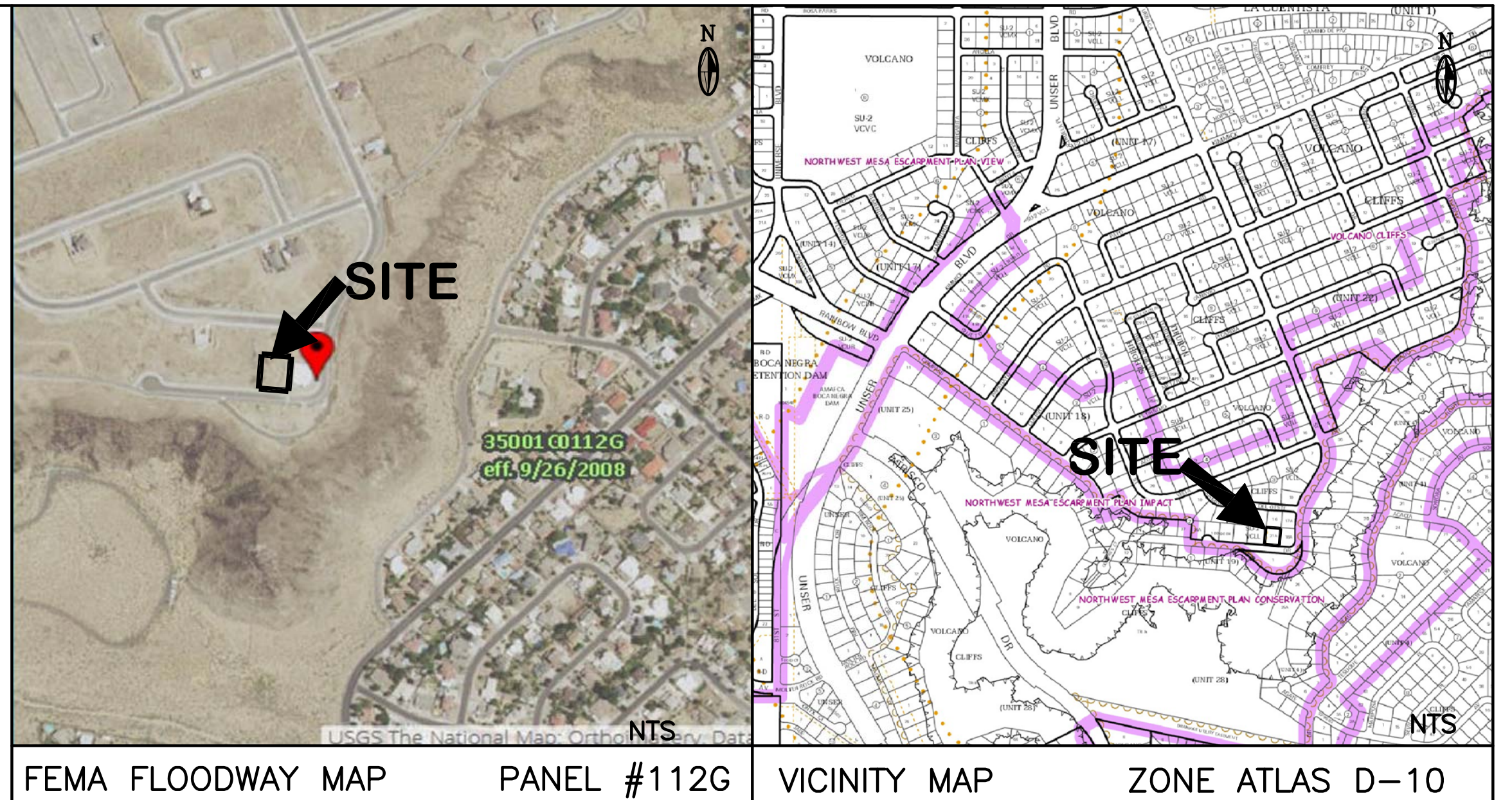
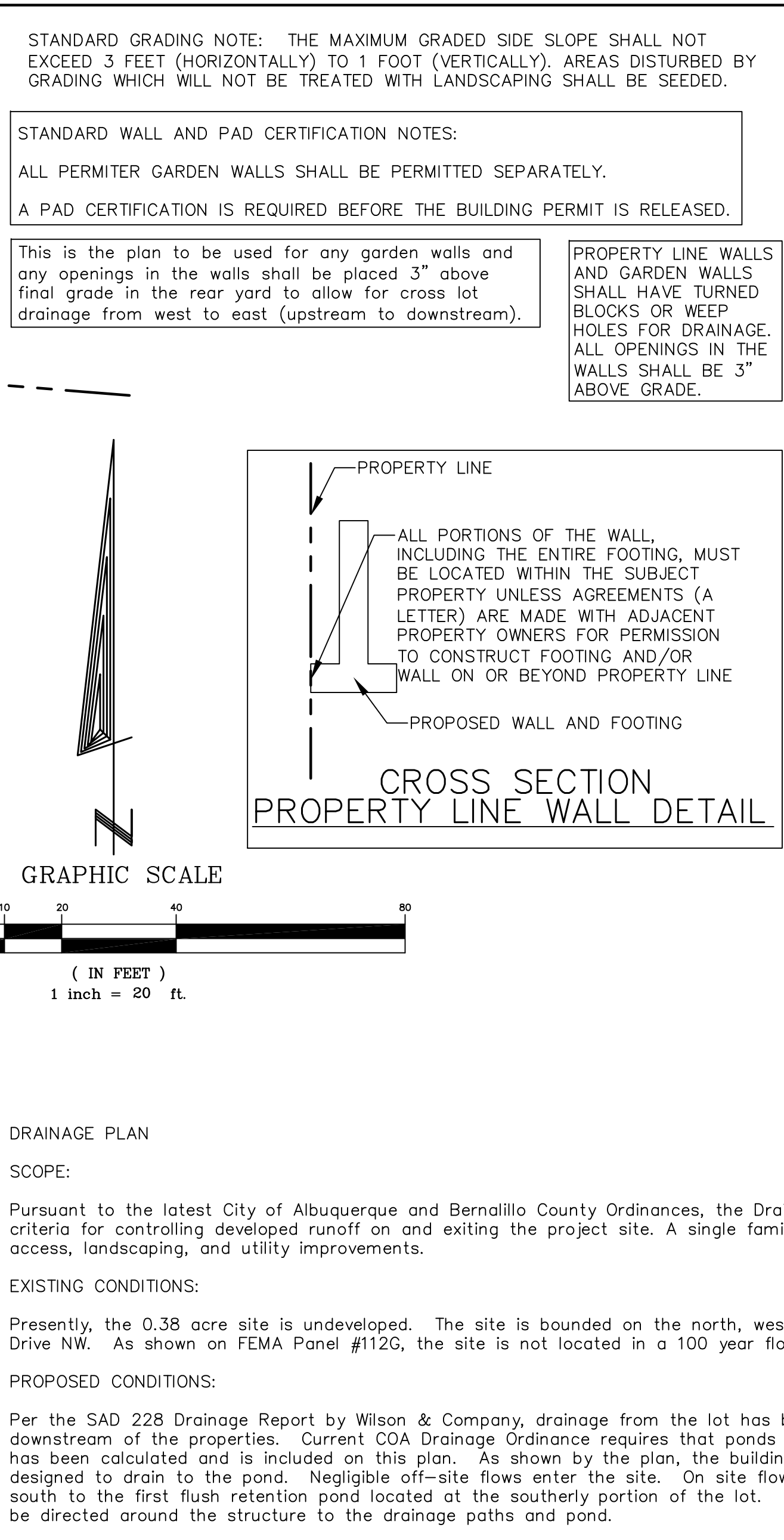
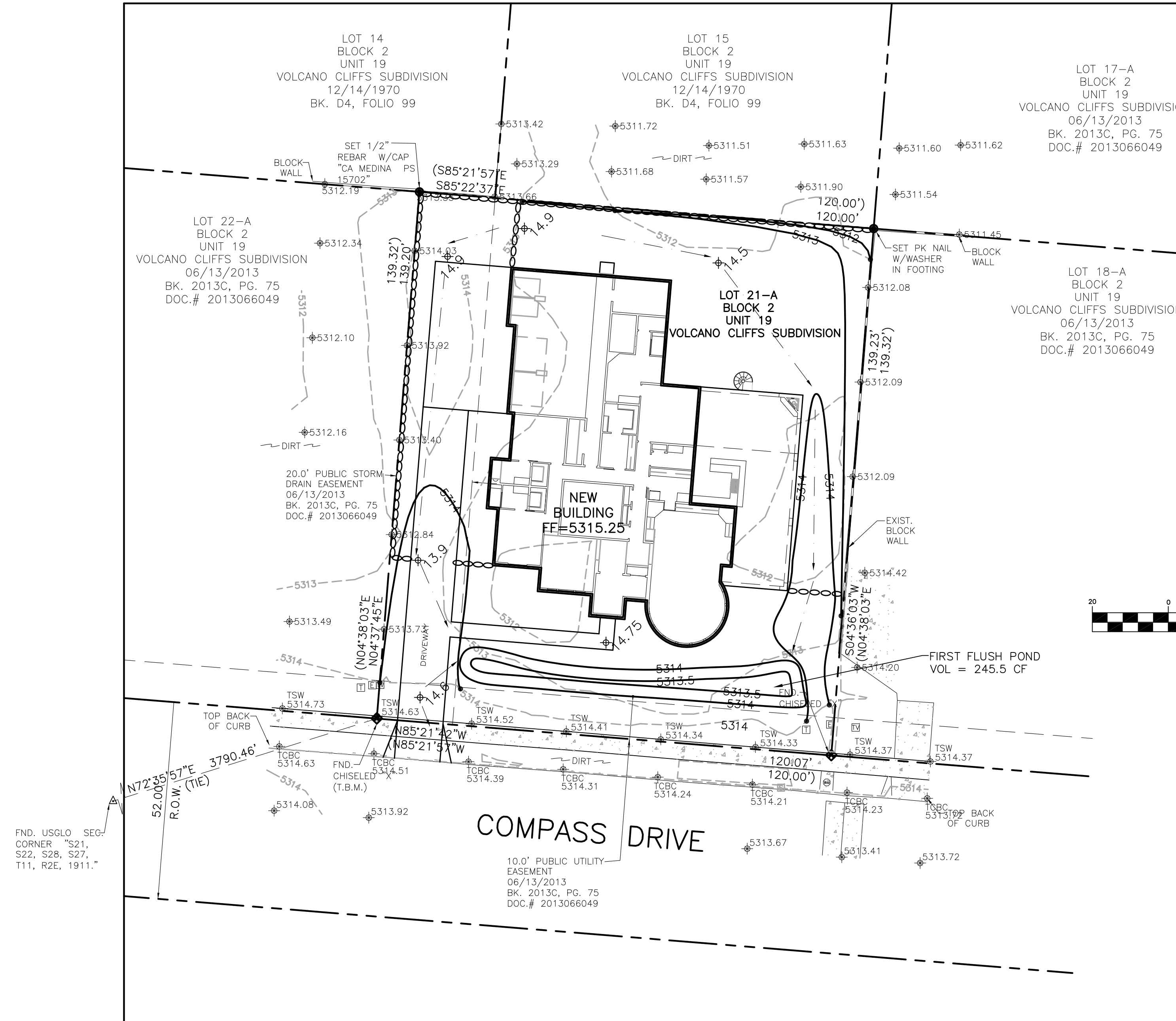
- _____ BUILDING PERMIT APPROVAL
- _____ CERTIFICATE OF OCCUPANCY
- _____ PRELIMINARY PLAT APPROVAL
- _____ SITE PLAN FOR SUB'D APPROVAL
- _____ SITE PLAN FOR BLDG. PERMIT APPROVAL
- _____ FINAL PLAT APPROVAL
- _____ SIA/ RELEASE OF FINANCIAL GUARANTEE
- _____ FOUNDATION PERMIT APPROVAL
- _____ GRADING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

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



SURVEY NOTES:

LEGAL DESCRIPTION

LOT 21-A, BLOCK 2, UNIT 19, VOLCANO CLIFFS SUBDIVISION

PROJECT LOCATION

7704 COMPASS DRIVE, ALBUQUERQUE, NEW MEXICO

SURVEY INFORMATION

TOPOGRAPHIC SURVEY PERFORMED AND COMPILED BY TERRA LAND SURVEYS, LLC. CORRALES, NEW MEXICO DECEMBER 2019.

PROJECT BENCHMARK

PROJECT BENCHMARK IS A USGLO SECTION CORNER DISC SET IN A 12 INCH CONCRETE POST POURED AROUND THE ORIGINAL IRON PIPE 1 FOOT ABOVE GROUND STAMPED, "S21, S22, S28, S27, T11, R2E, 1911." TO REACH THE STATION BENCHMARK FROM THE INTERSECTION OF MONTANO ROAD AND UNSER BOULEVARD NORTHWEST, TRAVEL NORTHWEST ON UNSER BOULEVARD 0.78 MILES TO MOLTEN ROCK ROAD NORTHWEST, TURN LEFT AND TRAVEL 320 FEET TO B1ST STREET NORTHWEST AND THE STATION IS LOCATED ON THE SOUTHEAST QUADRANT OF THE INTERSECTION. ELEVATION = 5,330.151 FEET.

TEMPORARY BENCHMARK

TEMPORARY BENCHMARK IS THE SOUTHWEST PROPERTY CORNER BEING A FOUND CHISELED "X" IN THE BACK OF THE SIDEWALK. ELEVATION=5,314.55 FEET (NAVD 1988 VERTICAL DATUM).

NOTES

- FIELD SURVEY PERFORMED IN DECEMBER 2019.
- TOPOGRAPHIC SURVEY WAS COMPILED UTILIZING GROUND COORDINATES REFERENCED TO THE NAD 83 NEW MEXICO CENTRAL ZONE COORDINATE SYSTEM. PRIMARY HORIZONTAL AND VERTICAL CONTROL WAS ESTABLISHED UTILIZING GPS RTK METHODS (COMBINED GROUND TO GRID FACTOR = 0.999670836 SCALED AROUND 0.0).
- ELEVATIONS SHOWN FOR PIPES ARE INVERT ELEVATIONS UNLESS OTHERWISE SPECIFIED.
- CONTOURS SHOWN HEREON ARE AT A ONE FOOT INTERVAL REFERENCED TO THE NAVD 88 VERTICAL DATUM.

GENERAL DRAINAGE PLAN NOTES:

- It is recommended that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- This plan recommends positive drainage away from all structures to prohibit ponding of runoff adjacent to the structure. Future alterations of the grades next to the structures are not recommended.
- Irrigation within 10 feet of any proposed structure is not recommended. Irrigation water adjacent to the structures could cause settlement.
- This plan establishes on-site drainage and assumes no responsibility for subsurface analysis, foundation or structural design, or utility design.
- Local codes may require all footings to be placed in natural undisturbed soil. If the contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer is recommended.
- It is recommended that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- The property boundary shown on this plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey.
- All work shall be constructed in accordance with the City of Albuquerque Standard Specifications for Public Works Construction with updates.
- 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.
- Contacto shall ensure that no site soils/sediment or silt enters the right-of-ways during construction.
- Areas disturbed due to construction shall be restored per City of Albuquerque Spec. 1012 native seed mix.

DRAINAGE PLAN

SCOPE:

Pursuant to the latest City of Albuquerque and Bernalillo County Ordinances, the Drainage Plan shown hereon outlines the drainage management criteria for controlling developed runoff on and exiting the project site. A single family home is proposed for the site with associated parking, access, landscaping, and utility improvements.

EXISTING CONDITIONS:

Presently, the 0.38 acre site is undeveloped. The site is bounded on the north, west, and east by private property, on the south by Compass Drive NW. As shown on FEMA Panel #112G, the site is not located in a 100 year flood plain.

PROPOSED CONDITIONS:

Per the SAD 228 Drainage Report by Wilson & Company, drainage from the lot has been master planned to be intercepted by drainage features downstream of the properties. Current COA Drainage Ordinance requires that ponds must be provided to handle the First Flush volume which has been calculated and is included on this plan. As shown by the plan, the building is located in the center of the lot and the lot has been designed to drain to the pond. Negligible off-site flows enter the site. On site flows will drain around the structure via swales, and flow to the south to the first flush retention pond located at the southerly portion of the lot. All roof drainage will discharge from the roof to the lot and be directed around the structure to the drainage paths and pond.

Supplemental calculations are shown as part of this Grading and Drainage plan.

CALCULATIONS:

The calculations shown hereon define the 100 year-6 hour design storm falling within the project area under existing and developed conditions. The Hydrology is per "Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque, New Mexico in cooperation with Bernalillo County, New Mexico and the Albuquerque Metropolitan Arroyo Flood Control Authority.

PROPERTY ADDRESS:

7704 Compass Drive NW

TOPOGRAPHY:

Topographic information provided by Christopher Medina, Terra Land Surveys, LLC. dated December, 2019.

ZONE 1		Percent Impervious = 0.18/0.38 = 47%		
Areas: (acres)	Existing	Proposed		
Treatment A	0.38	0.00		
Treatment B	0.00	0.15		
Treatment C	0.00	0.05		
Treatment D	0.00	0.18		
Total (acres) =	0.38	0.38		

POND VOLUME PROVIDED:		
ELEV.	AREA	VOL. (CF)
5314	772	245.5
5313.5	210	
TOTAL POIND VOL PROVIDED =		245.5

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.014	0.042	0.003	0.023	0.000	0.011
Volume (cubic feet) =	607	1,832	110	1,010	0	498

FIRST FLUSH REQUIRED POND VOL = 0.34"/(12"/FT)*(0.18 AC * 43560 SF/AC) = 222 CF

Total Q(p), cfs:	100 year Existing Q(p)*A	100 year Proposed Q(p)*A	10 year Existing Q(p)*A	10 year Proposed Q(p)*A	2 year Existing Q(p)*A	2 year Proposed Q(p)*A
Treatment A	0.49	0.00	0.09	0.00	0.00	0.00
Treatment B	0.00	0.30	0.00	0.11	0.00	0.00
Treatment C	0.00	0.14	0.00	0.07	0.00	0.02
Treatment D	0.00	0.79	0.00	0.52	0.00	0.30
Total Q (cfs) =	0.49	1.23	0.09	0.71	0.00	0.33

Jackie S. McDowell
Professional Engineer
1-10-20

ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on December 22, 2019 and as of that date it appeared that no filling, grading, or excavation had occurred thereon since completion of the topographic survey used to prepare this plan.

7704 COMPASS DR. NW, ALBUQUERQUE, NM 87120

CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 21-A, BLOCK 2, UNIT 19
VOLCANO CLIFFS SUBDIVISION

RAMOS, MANUEL (M. SANCHEZ) - GRADING & DRAINAGE PLAN

McDowell Engineering, Inc.

7820 BEVERLY HILLS AVE. NE ALBUQUERQUE, NM 87122
TELE: 505-828-2430 FAX: 505-821-4857

Designed JSM Drawn STAFF Checked JSM Sheet of
File RAM0119L Date DECEMBER,2019 1 1

GRADING
12-27-19
1=20
RAM0119L