CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

February 16, 2023

Atef A. Hanna, P.E.
Beacon Civil Engineering
8345 Gunn Highway
Tampa, FL 33626

RE: Take 5 Car Wash
9601 Sage Rd. SW
Grading and Drainage Plans
Engineer's Stamp Date: 02/09/23
Hydrology File: M09D035

Dear Mr. Hanna:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 02/10/2023, the Grading & Drainage Plan is approved for Building Permit, Grading Permit and SO-19 Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
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 retention pond per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

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 (Doug 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

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

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2018)

Project Title: TAKE 5 CAR WASH Building Permit #: _____ Hydrology File #: M09D035

DRB#: NA EPC#: NA Work Order#: _____

Legal Description: _____

City Address: 9601 Sage Road SW

Applicant: M3 Design/Beacon Civil Contact: Jesse Macias/Atef Hanna

Address: 2645 N 7th Avenue, Phoenix AZ 85007

Phone#: 480-528-3136 Fax#: _____ E-mail: jmacias@m3designllc.com

Other Contact: Beacon Civil Contact: Atef Hanna

Address: 8345 Gunn Hwy Tampa FL 33626

Phone#: 813-699-3277 ext 113 Fax#: _____ E-mail: ahanna@beaconcivil.com

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

IS THIS A RESUBMITTAL? X Yes _____ No

DEPARTMENT: _____ TRAFFIC/TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
X 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
X GRADING PERMIT APPROVAL
X SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 2/9/2023 By: Atef Hanna, P.E.

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Beacon
CIVIL ENGINEERING

8345 Gunn Highway
Tampa, Florida 33626

February 9, 2023

Renee C. Brissette, P.E., CFM
City of Albuquerque Planning Department
PO Box 87103
Albuquerque, NM 87103

RE: Take 5 Car Wash
9601 Sage Rd. SW
Grading Plan
Engineer's Stamp Date: 2/9/2023
Hydrology File: M09D035

Dear Mr. Brissette:

Based upon the review letter issued on 02/01/2023, the following comments have been addressed for the above referenced project:

1. This private project is not a City of Albuquerque Department of Municipal Development project. Therefore, their Title Block is not needed and you can use your companies instead. The City does not care which one you use but private development typically uses their own. **Response: Title block has been replaced with Beacon Civil title block.**

2. Per the DPM, the following must be on the Grading Plan. Please note the Grading Plan must be a stand-alone construction document.

    a. Please provide an engineer's stamp **with a signature and date. (Provided)**
    b. Please provide a Vicinity Map. Typically, this is the Zone Atlas. This can be downloaded in pdf format from the City of Albuquerque's website. **(Provided)**
    c. Please provide the Benchmark information (location, description and elevation) for the survey contour information provided. This is a City Benchmark that the surveyor should have pulled from. **(Provided)**
    d. Please provide a legal Description of the property. **(Provided)**

3. This site is within the Amole-Hubbell Drainage Master Plan. Specifically, it is in Drainage Area TS206. This site was to go into the existing detention pond TS2. However, after reviewing the design of this pond, there is no capacity for this development and connecting to the existing storm drain along 98th Street is not allowed. No increased runoff to overcapacity systems can be authorized per § 14-5-2-12 (G) of the Albuquerque Code of Ordinances. Therefore, this development will have to provide a retention pond (100 year -

10 day volume) as outlined in Section 6-11(A)(2) Retention Ponds in the DPM. Please note that the required SWQ requirement is within this retention pond volume.

Response: Retention pond calculation is now provided on sheet C-4.0

4. Please provide an emergency spillway for the retention pond. This spillway can be a sidewalk culvert at the retention pond water surface elevation at the pond and the existing gutter elevation on Sage Road.
   Response: Spillway has been added to sheet C-4.0

5. Please provide a cross section for the retention pond showing the top of pond, bottom of pond, and the required retention water surface elevation. Please make sure that there is a one-foot freeboard. Add a note, "Side slopes need to be stabilized with Native Grass Seed (per City Spec 1012) with Aggregate Mulch or equal (Must satisfy the "Final Stabilization criteria" CGP 2.2.14.b.)".
   Response: A side slopes note and Cross section A-A have been added to sheet C-4.0.

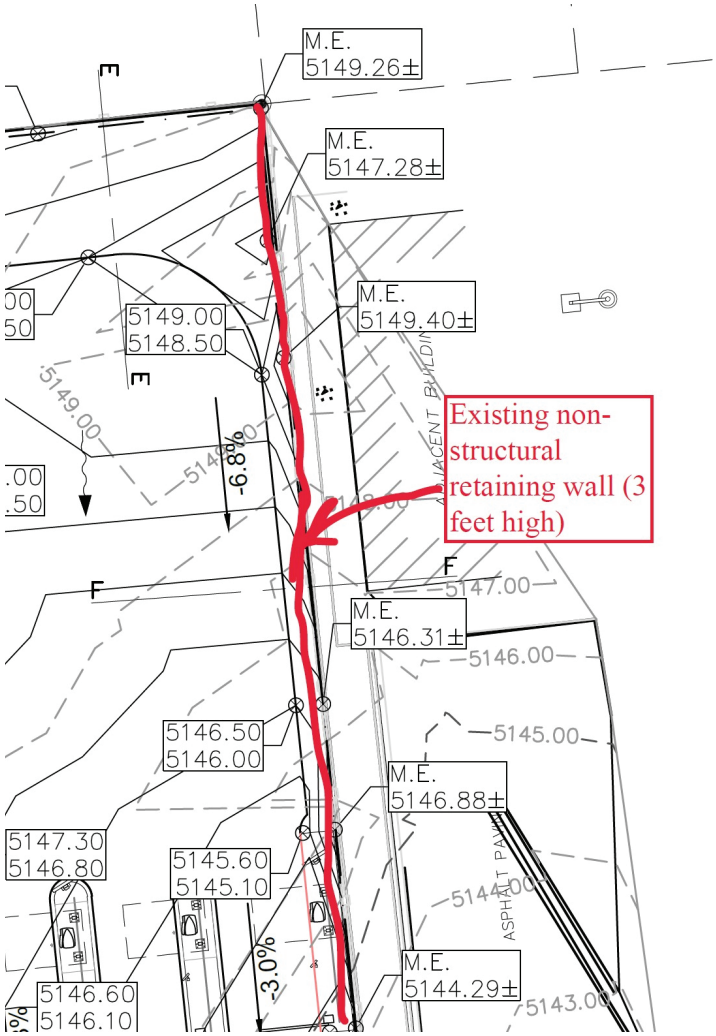
6. Please add the volume provided under the Stormwater Quality Calculations.
   Response: Stormwater Quality Calculations include volume provided of 1,202 CF.

7. Please reference City of Albuquerque standard detail No. 2236 – Sidewalk Culvert with Steel Plate Top at the sidewalk culvert. Also, please provide the weir calculations, per DPM Article 6-16(A), for the curb cuts and sidewalk culverts. A coefficient of 2.7 is typically used for the weir equation $Q = CLH^{2/3}$.
   Response: A standard detail 2236 reference has been added to sheet C-4.0, calculations are also included on the sheet.

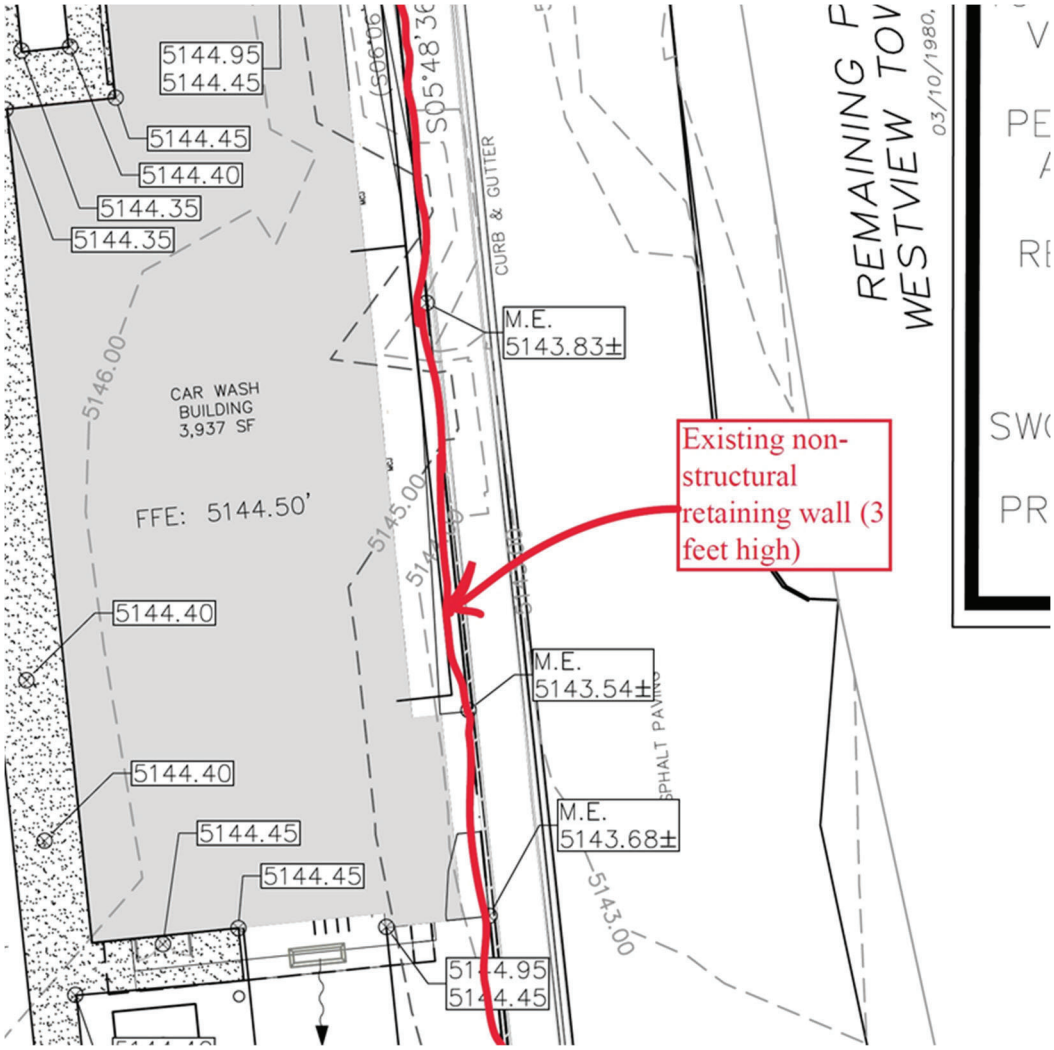
8. A SO-19 Permit will be required for the sidewalk culvert. Please include the standard SO-19 notes on the grading plan.
Response: Notes are included on Sheet C-4.0

9. Please use the procedure for 40 acre and smaller basins as outlined in Development Process Manual (DPM) Article 6-2(a). Please provide both the existing conditions and proposed conditions for the 100 year-6 hour storm event. These calculations should be on the Drainage Plan.
Response: Calculations are now provided on sheet C-4.0

10. It appears that the proposed asphalt for the car wash and the proposed building is only about three feet from the existing three feet retaining wall (not structurally designed). Is there any proposed safety here such as adding a garden block wall so that vehicles do not drive over this onto the adjacent property which is below?
Response: Additional grades have been added along the east property line and a guard rail has been added.



Beacon
CIVIL ENGINEERING

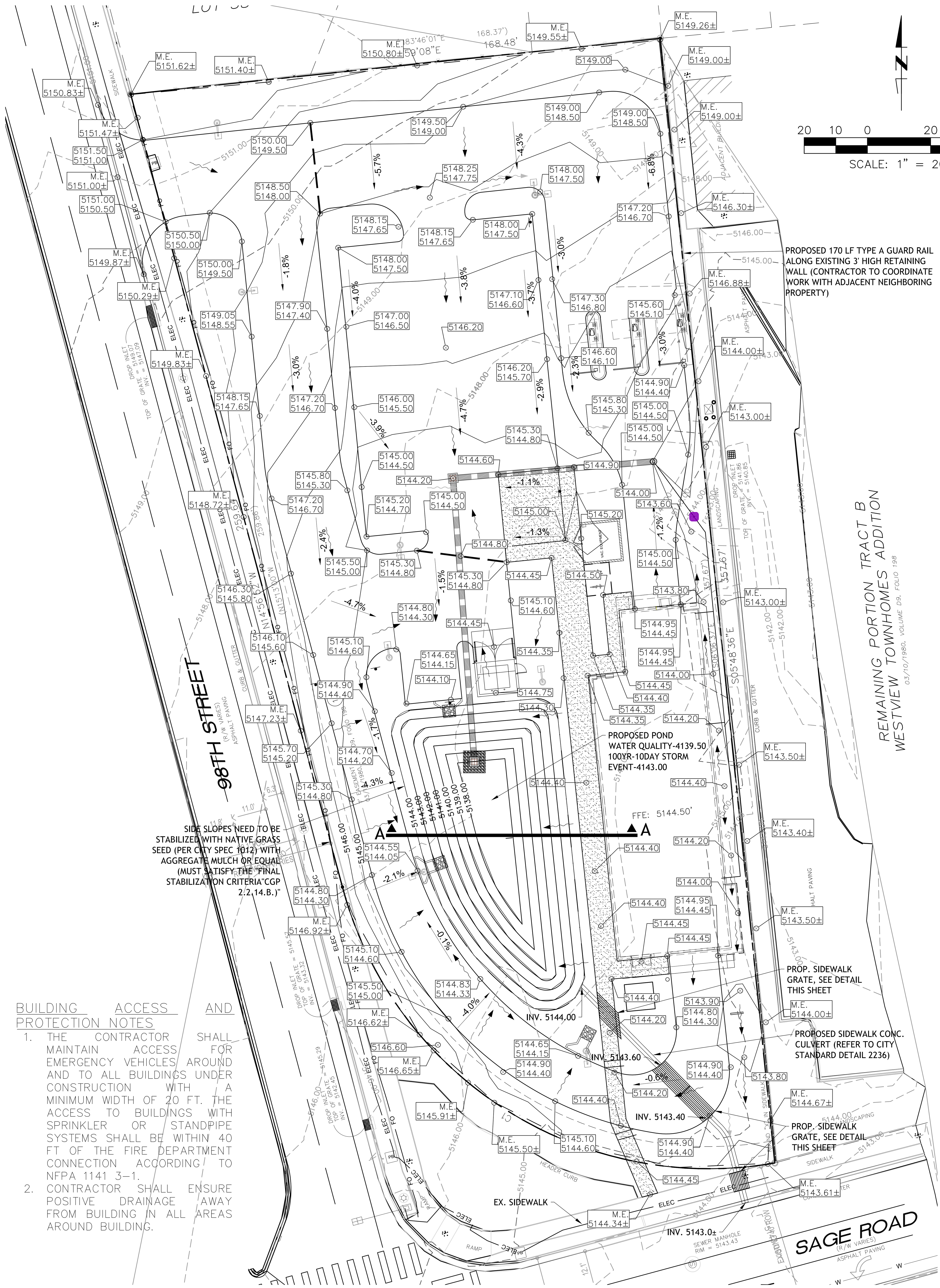


Beacon
CIVIL ENGINEERING

11. 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 (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.
Response: Acknowledged.

Sincerely,
Beacon Civil Engineering, LLC.

Atef Hanna, P.E.



BUILDING ACCESS AND PROTECTION NOTES

1. THE CONTRACTOR SHALL MAINTAIN ACCESS FOR EMERGENCY VEHICLES AROUND AND TO ALL BUILDINGS UNDER CONSTRUCTION WITH A MINIMUM WIDTH OF 20 FT. THE ACCESS TO BUILDINGS WITH SPRINKLER OR STANDPIPE SYSTEMS SHALL BE WITHIN 40 FT OF THE FIRE DEPARTMENT CONNECTION ACCORDING TO NFPA 1141 3-1.
2. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDING IN ALL AREAS AROUND BUILDING.

SITE BENCHMARK

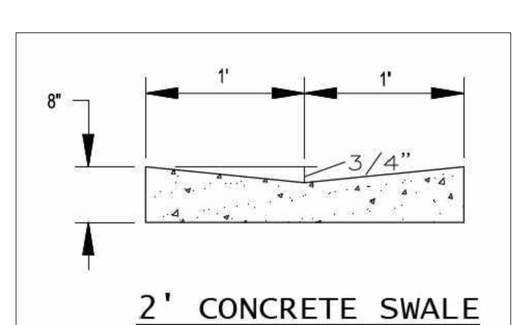
ALBUQUERQUE CONTROL SURVEY MONUMENT
"22-L9 2002"
NEW MEXICO STATE PLANE COORDINATES
(CENTRAL ZONE – NAD 1983)
NORTH = 1,477,194.085 FEET
EAST = 1,493,349.447 FEET
ELEV.= 5165.791 (NAVD 88)
GROUND TO GRID FACTOR = 0.999681620

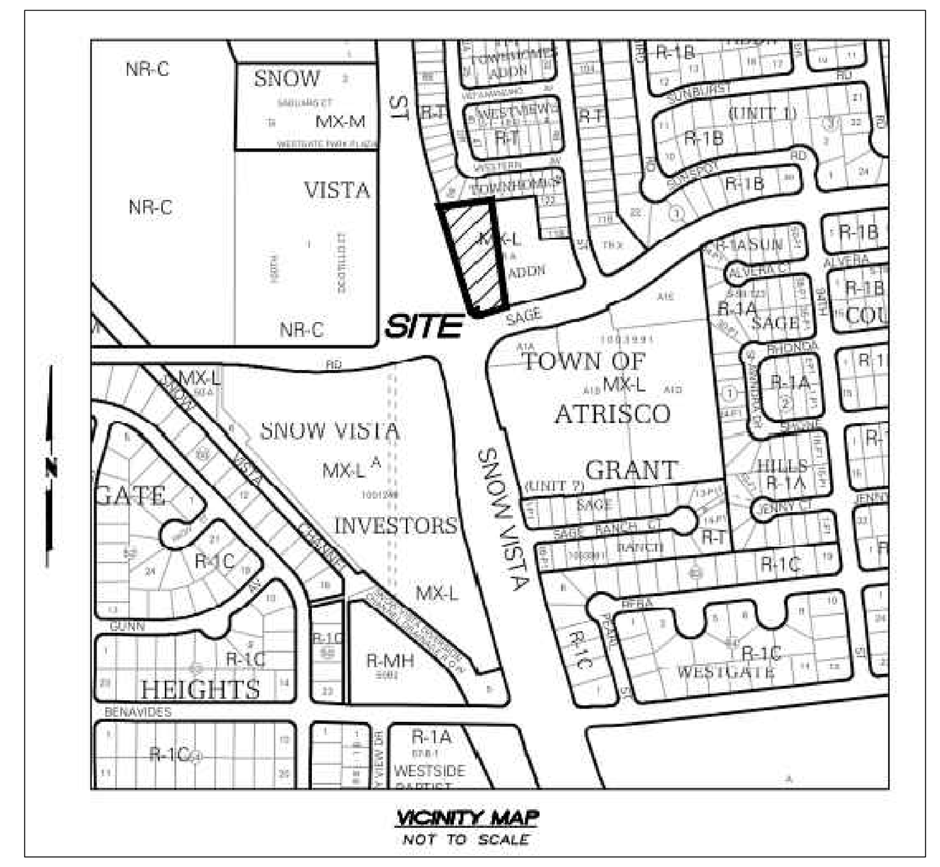
FLOOD PLAIN

THE SITE IS LOCATED IN FLOOD ZONE "X" PER FEMA FLOOD MAP NO.35001C0336H, DATED 8/16/2012

WEIR CAPACITY

Sidewalk Culvert Capacity, Weir Equation = (1.1)x(2ft)x(7in/12in/ft)^1.5 =0.98 CFS





EXISTING PERVIOUS/IMPERVIOUS

PERVIOUS
OPEN SPACE: 47,916 SF/ 1.10 AC/ 100%
TOTAL PERVIOUS AREA: 47,916 SF/ 1.10 AC/ 100%

IMPERVIOUS
BUILDING AREA: 0 SF/ 0 AC/ 0%
ASPHALT PAVEMENT AREA: 0 SF/ 0 AC/ 0%
CONCRETE PAVEMENT AREA: 0 SF/ 0 AC/ 0%
SIDEWALK AREA: 0 SF/ 0 AC/ 0%
TOTAL IMPERVIOUS AREA: 0 SF/ 0 AC/ 0%

PROPOSED PERVIOUS/IMPERVIOUS

PERVIOUS
OPEN SPACE AREA: 13,800 SF/ 0.32 AC/ 29%
TOTAL PERVIOUS AREA: 13,800 SF/ 0.32 AC/ 29%

IMPERVIOUS
BUILDING AREA: 5,358 SF/ 0.12 AC/ 11%
ASPHALT PAVEMENT AREA: 26,516 SF/ 0.61 AC/ 55%
CONCRETE/SIDEWALK AREA: 2,242 SF/ 0.05 AC/ 5%
TOTAL IMPERVIOUS AREA: 34,116 SF/ 0.78 AC/ 71%

LEGAL DESCRIPTION

As listed in the Title Commitment prepared for this property by Fidelity National Title Insurance Company, Commitment No. SP000111723, commitment date June 17, 2021.

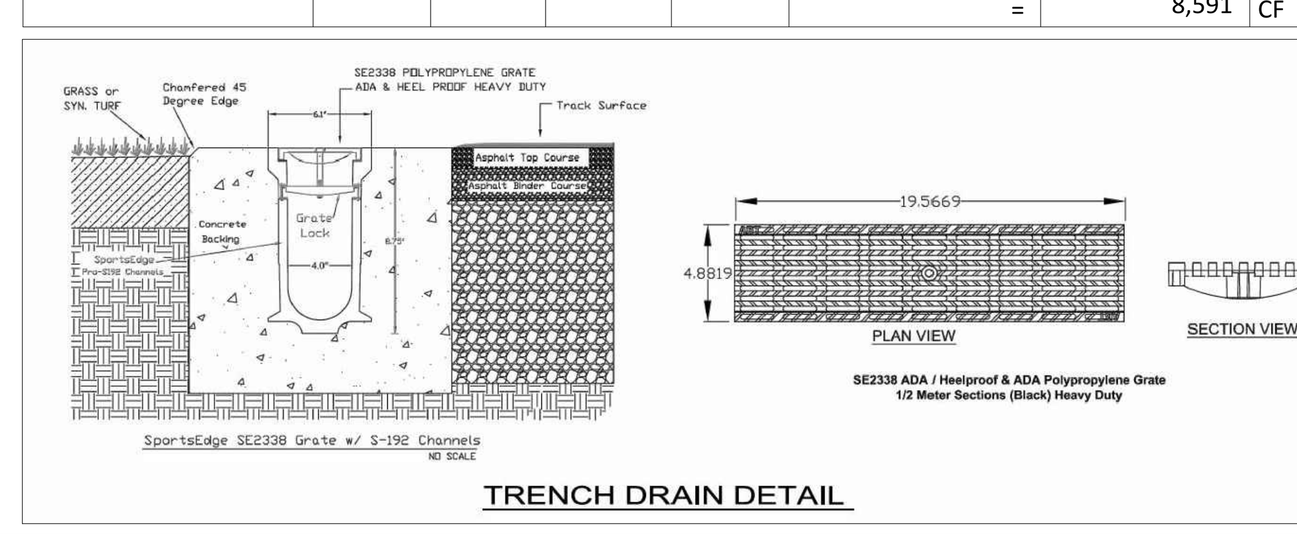
A certain Tract of Land lying within the Northwest One–Quarter (N1/4) of Section 33, T.10., R.2E.. N.M.P.M., Bernalillo County, New Mexico, and being a portion of Tract "B" of Westview Townhome Addition, filed in the office of the County Clerk of Bernalillo County, New Mexico, on March 10, 1980, and being more particularly described as follows:

FOR A TIE COMMENCE at the Northwest Corner of said Section 33. T.10N., R.2E., THENCE. N. 89 deg. 27' 22" E.,1392.96 feet along the North line of said Section 33, T.10N., R.2E., to a point; THENCE. S. 06 deg. 06' 37" E., 581.12 feet to the Point of Beginning and the Northeast Corner of the Tract herein described; THENCE, S. 06 deg. 06' 37" E., 358.11feet to the Southeast Corner of the Tract herein described, being a point on the Northerly right–of–way line of Sage Rd. SW; THENCE, S. 74 deg. 47' 25" W., 84.63 feet to the point of a curve to the right, having a radius of 25.00 feet; THENCE, 39.27 feet along the arc of said curve to the right to a point of tangent on the Easterly right–of–way line of Snow Vista Blvd. SW; THENCE, N. 15 deg. 13' 00" W., 354.87 feet along the new Easterly right–of–way line of Snow Vista Blvd, SW to the Northwest Corner of the Tract herein described; THENCE, N. 83 deg. 46' 01" E., 168.37 feet to the Point of Beginning.

LESS & EXCEPTING that certain portion conveyed to the City of Albuquerque, a New Mexico municipal corporation by Warranty Deed filed September 4, 1996, in Book 96–24, page 2699, as Document No. 1996098275, records of Bernalillo County, New Mexico.

100-YEAR HYDROLOGIC CALCULATIONS

BASIN	AREA (acre)	LAND TREATMENT A (%)	B(CN=79) (%)	C (%)	D(CN=98) (%)	WEIGHTED E (IN)	100-YEAR PRECIPITATION V(6-hr)* (acre-ft)	V(6-hr) (cu-ft)	V(24-hr)* (acre-ft)	V(24-hr) (cu-ft)	Q** (CFS)
EXISTING CONDITIONS											
SITE	1.1	0	1.1	0	0	0.79	0.07	3,154	0.07	3,154	2.38
TOTAL RUNOFF	1.1						0.07	3,154	0.07	3,154	2.38
DEVELOPED CONDITIONS											
SITE	1.1	0	0.32	0	0.78	0.92	0.08	3,692	0.08	3,692	3.90
TOTAL RUNOFF	1.1						0.08	3,692	0.08	3,692	3.90
EXCESS PRECIP. (Ei, in)		0.55	0.73	0.95	2.24		ZONE 1				
PEAK DISCHARGE (Qpi, cfs)		1.54	2.16	2.87	4.12		P6-hr (in)		2.17		
* V6-hr (acre-ft) = (Weighted E)(Area)/12							P24-hr (in)		2.49		
** Q = (Qpb)*Ab + (Qpd)*Ad							P10day (in)		3.90		
Water Quality Volume					=	1,202	CF				
Sidewalk Culvert Capacity, Weir Equation = (2.7)x(2ft)x(7in/12in/ft)^1.5					=	2.41	CFS				
V10DAY (acre-ft) = V6-hr + (Ad)((P10DAY)-(P6-hr))/12					=	0.197	ac-ft				
					=	8,591	CF				



City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 02/16/23
BY: [signature]
HydroTrans # M09D035
THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATION OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OR ERRORS OR OMISSIONS IN PLANS, SPECIFICATIONS, OR CONSTRUCTION. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

LEGEND

- ADA PARKING STALLS. 2% MAX SLOPES IN ALL DIRECTIONS
- 1.00 — PROPOSED SPOT ELEVATION
- 1.50 / 1.00 — PROPOSED TOP OF CURB/BOTTOM OF CURB SPOT ELEVATION
- M.E. ±1.00 — MATCH EXISTING ELEVATION
- #% — PROPOSED SLOPE INDICATOR
- DIRECTIONAL DRAINAGE FLOW ARROW
- EXISTING DIRECTIONAL DRAINAGE FLOW ARROW
- PROPOSED RIDGE LINE
- X.XX — PROPOSED MAJOR CONTOUR
- X.XX — PROPOSED MINOR CONTOUR

GRADING & DRAINAGE NOTES

1. JURISDICTIONAL LAND DISTURBANCE PERMIT SHALL BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND BE VISIBLE TO THE PUBLIC.
2. TWO PERMANENT BENCHMARKS ON-SITE SHALL BE ESTABLISHED BY CONTRACTOR PRIOR TO STARTING CONSTRUCTION.
3. PROPOSED SPOT ELEVATIONS ARE TO THE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
4. ALL REQUIRED FILL SHALL BE CLEAN, SUITABLE MATERIAL.
5. ALL AREAS DISTURBED OUTSIDE LIMITS OF GRADING SHOWN ON THE PLANS SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER BY THE CONTRACTOR.
6. CONTRACTOR SHALL MEET AND MATCH EXISTING (M.E.) PAVEMENT ALONG SAW-CUT LIMITS.
7. LENGTH OF PROPOSED RIP-RAP PADS AT PIPE OUTLET STRUCTURES SHALL BE A MINIMUM LENGTH OF SIX TIMES THE DIAMETER OF THE PIPE, IF APPLICABLE.
8. ALL FILL SHOULD BE PLACED IN THIN, HORIZONTAL LOOSE LIFTS, MAXIMUM 6 INCHES, AND COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). A FLORIDA REGISTERED PROFESSIONAL SOILS ENGINEER SHALL CERTIFY THE SOIL COMPACTION PRIOR TO THE INSTALLATION OF PAVEMENTS, CURBS, SIDEWALKS OR FOOTINGS OF ANY TYPE. COMPACTION OF THE UPPER 8 INCHES OF SOIL BENEATH PAVEMENTS AND SLAB-ON-GRADE SHOULD BE COMPACTED TO AT LEAST 98%.
9. STORMWATER PONDS AND OUTLET STRUCTURES SHALL BE FULLY CONSTRUCTED AND OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
10. REFER TO LANDSCAPE PLAN FOR REQUIRED TREE AND GROUND COVER PLANTINGS.
11. SURFACE GRADE SLOPES SHALL BE A MINIMUM OF 1.00%
12. 4:1 MAXIMUM CUT AND FILL SLOPES
13. ADA ACCESSIBLE AREAS SHALL NOT HAVE A MAXIMUM CROSS-SLOPE THAT EXCEEDS 2.00% AND MAX LONGITUDINAL SLOPE OF 5.00% UNLESS A RAMP IS SPECIFIED. IF DISCREPANCIES OCCUR CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD IMMEDIATELY TO CONFIRM DESIGN TO ENSURE ADA ACCESSIBLE STANDARDS ARE MET.
14. ALL TRENCHING AND BACKFILL OPERATIONS SHALL COMPLY WITH GOVERNING JURISDICTIONAL STANDARDS. SEE SHEET C4-2 FOR PIPE TRENCHING DETAILS.
15. SEE SHEET C4.1-C4.3 FOR DETAILS.
16. ALL INLET GRATES SUBJECTED TO VEHICLE LOADING SHALL MEET H-20 TRAFFIC LOADING STANDARDS.

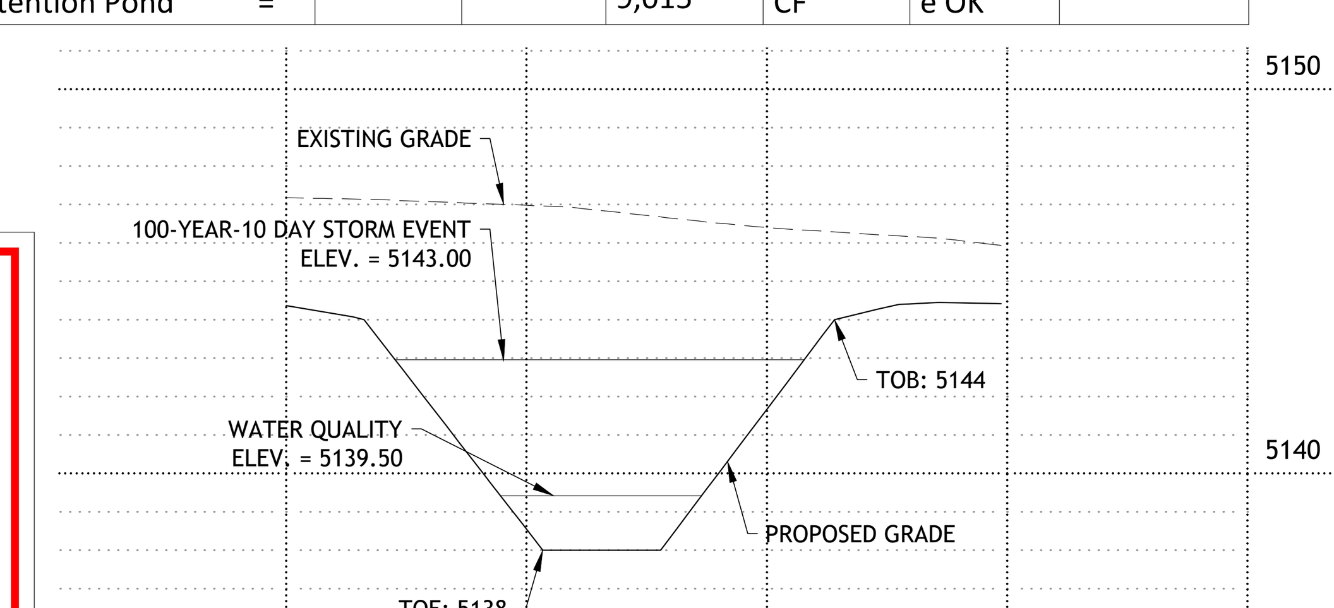
Private Drainage Facilities within City Right-of-Way

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

1. Build sidewalk culvert per COA STD DWG 2236. Work is permitted and inspected by DMD Construction Services Division.
2. An excavation permit will be required before beginning any work within City Right-Of-Way.
3. 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.
4. Prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
5. 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.
6. Backfill compaction shall be 95%.
7. Maintenance of the facility shall be the responsibility of the owner of the property being served.
8. Work on arterial streets may be required on a 24-hour basis.
9. For excavation and barricading inspections, contact DMD Construction Services Division.

Pond Volume

	Elev. (feet)	Surface Area (square ft.)	Surface Area (acres)	Incr. Volume (acre ft.)	Total Volume (acre ft.)	Total Volume (cubic ft.)
				0.00	**0.00**	**0**
	4143.00	3,401	0.08	0.07	0.21	9,015
	4142.00	2,674	0.06	0.05	0.14	5,985
	4141.00	2,033	0.05	0.04	0.08	3,639
	4140.00	1,449	0.03	0.03	0.04	1,906
	4139.00	940	0.02	0.02	0.02	721
Pond Bottom = >	4138.00	522	0.01			
Available voulume in Retention Pond =			9,015	CF	> 8,591, therefor e OK	



SECTION A–A

ISSUED FOR PERMITTING

DESIGNED BY: CB	DRAWN BY: CB	ISSUE DATE: 04/2022
CHECKED BY: AH	APPROVED BY: AH	JOB NO.: 21507
NO.	BY	DATE	REVISION DESCRIPTION

Know what's **below.** **Call** before you dig.

ATEF A. HANNA NEW MEXICO 27436 PROFESSIONAL ENGINEER

ATEF A. HANNA, PE #27436

BEACON CIVIL ENGINEERING
LAND DEVELOPMENT ENGINEERS
8345 GUNN HIGHWAY
TAMPA, FL 33626

TAKE 5 CAR WASH

OF NEW MEXICO SNOW VISTA

98TH STREET ALBUQUERQUE, NM

SHEET NAME: GRADING PLAN

SHEET NUMBER: C-4.0

B:\Projects\2021\21507 ICWG CO Snow Vista, NM\DWG\Civil\21507_GRADING.dwg 2/9/2023 12:57 PM