CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

January 22, 2024

Ted L. Barber, P.E.
Incline Engineering
236 Tano Road
Santa Fe, NM 887506

RE: 9101 Central Ave NW
Grading and Drainage Plans
Engineer's Stamp Date: 01/10/24
Hydrology File: K09D002

Dear Mr. Barber:

Based upon the information provided in your submittal received 01/12/2024, the Grading & Drainage Plans **are not** approved for Building Permit and Grading Permit. The following comments need to be addressed for approval of the above referenced project:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

1. 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 the Benchmark information (location, description and elevation) for the survey contour information provided.
    b. Please provide a legal Description of the property.
2. 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.
3. Please follow the DPM Article 6-12 Stormwater Quality and Low-Impact Development for the sizing calculations. To calculate the required SWQV, multiply the impervious area (Square feet) draining to the BMP by 0.42 inches for new development sites divided by 12 to get the required volume in cubic feet. The calculations of both the required and the provided volume of each BMP must be shown on the Grading and Drainage Plan. Each BMP should be labeled on the Grading and Drainage Plan with the required SWQV and associated water surface elevation and the 100-year water surface elevation. Landscaping of surface BMPs is also required to be noted on the Grading and Drainage Plan.
4. Please provide a section of the SWQ Pond showing the water surface elevation (the SWQ volume), the retaining wall with footer, distance from the wall to the property line, label the Central Rd R.O.W., please show the spillway of the SWQ pond to the existing

roadside ditch in the Central Rd. R.O.W. and make a note that the retaining wall below the water surface elevation shall be water proofed per City specifications.

5. I have seen the spillway as a gap in the wall, so if you do this, please show the detail of that section and provide the weir calculation for it. (see below)

6. 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 $Q = CLH^{2/3}$.

7. If this applies, please note for trash enclosures serving food service developments, trash enclosures must demonstrate control of liquids from dumpster areas per DPM by containing runoff from the dumpster area, preventing outside drainage from entering the dumpster area, and discharging to the sanitary sewer. Please show an inlet in the middle and label. "Inlet to be connected to the sanitary sewer. See Utility Plan."

8. Under the Existing Conditions, please state that this site is within the Amole-Hubbell Master Drainage Plan by Wilson (2013) and has a discharge rate of 4.11 cfs/ac.

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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

City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title: Building Permit #22-03953 Hydrology File # _____
Legal Description: Lot A8 of Lands of Cosma
City Address, UPC, OR Parcel: 9101 Central Ave NW

Applicant/Agent: Ted L. Barber, PE Contact: _____
Address: 236 Tano Road, Santa Fe, NM 87506 Phone: 505-577-6747
Email: inclineengineering@gmail.com

Applicant/Owner: _____ Contact: _____
Address: _____ Phone: _____
Email: _____

(Please note that a DFT SITE is one that needs Site Plan Approval & ADMIN SITE is one that does not need it.)

TYPE OF DEVELOPMENT: ☐ PLAT (#of lots) _____ ☐ RESIDENCE
☐ DFT SITE ☑ ADMIN SITE

RE-SUBMITTAL: ☐ YES ☑ NO

DEPARTMENT: ☐ TRANSPORTATION ☐ HYDROLOGY/DRAINAGE

Check all that apply under Both the Type of Submittal and the Type of Approval Sought:

TYPE OF SUBMITTAL:

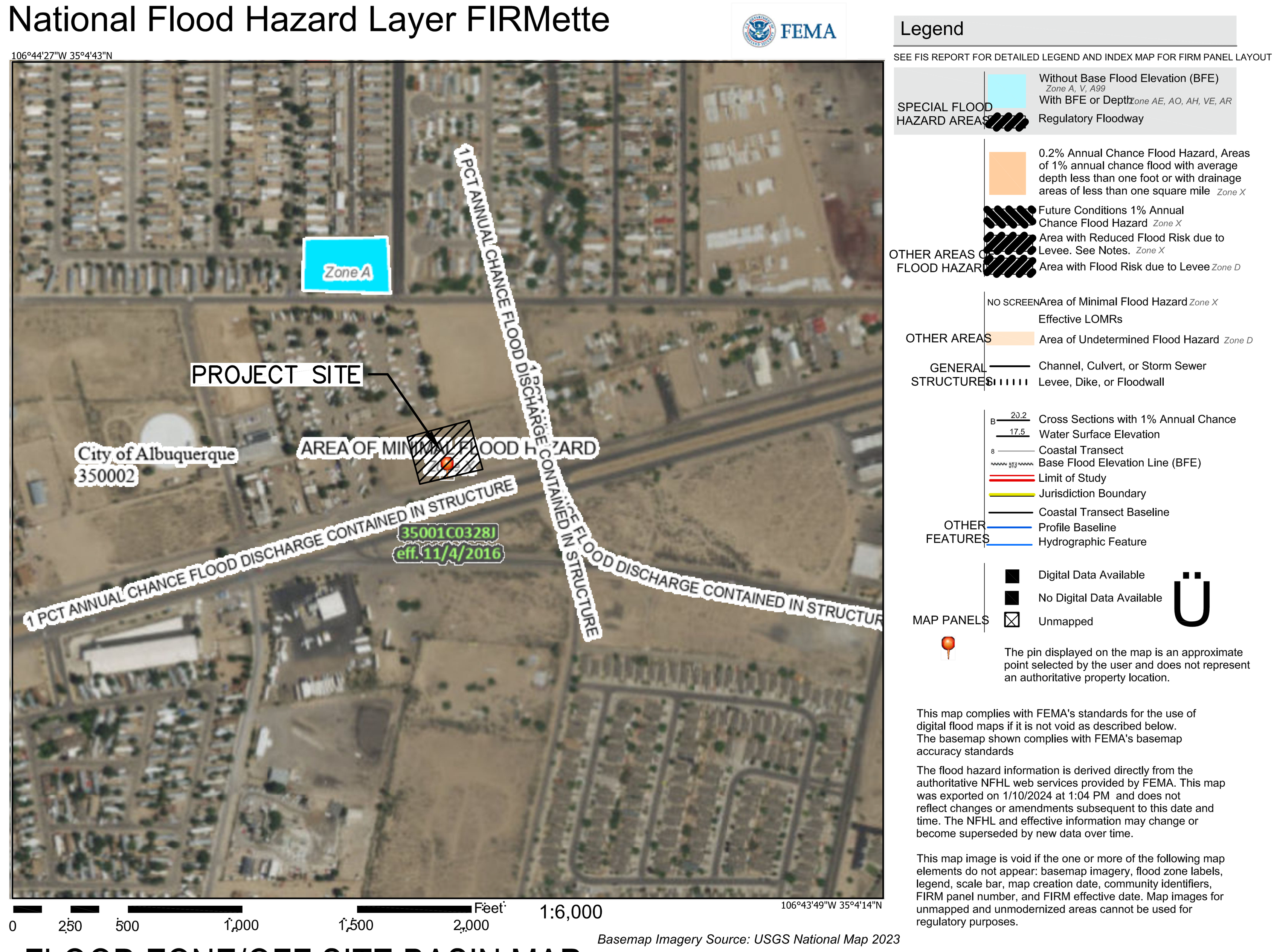
- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G&D PLAN
- ☑ GRADING & DRAINAGE PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL) ADMINISTRATIVE
- ☐ TRAFFIC CIRCULATION LAYOUT FOR DFT APPROVAL
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY)_____

TYPE OF APPROVAL SOUGHT:

- ☑ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ CONCEPTUAL TCL DFT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SITE PLAN FOR BLDG PERMIT DFT 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
- ☐ OTHER (SPECIFY)_____

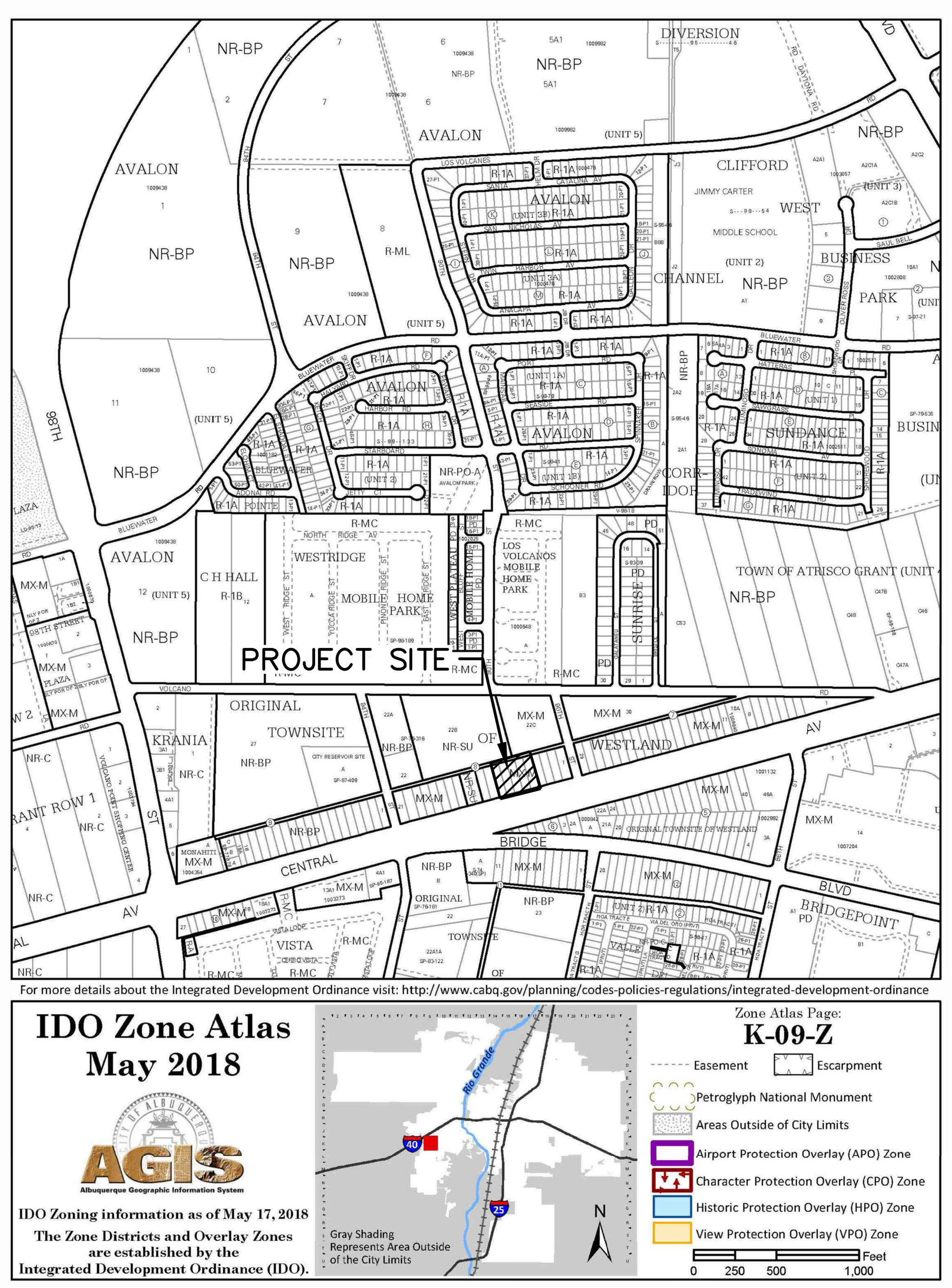
DATE SUBMITTED: 11/11/24

REV. 09/13/23



D4 FLOOD ZONE/OFF SITE BASIN MAP #35001C03281

SCALE: NOT TO SCALE



D4 VICINITY MAP

SCALE: NOT TO SCALE

GENERAL NOTES:

1. EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS WAS PROVIDED BY THE OWNERS. ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
3. CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
4. TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OF EXISTING UTILITIES.
5. ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WETTED AND COMPACTED TO 95% OPTIMUM BULK DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
6. THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
7. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE STORM DRAINAGE REGULATIONS. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE "GRADING AND DRAINAGE DESIGN REQUIREMENTS AND POLICIES FOR LAND DEVELOPMENT."
8. THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
9. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE AND REASONABLE MEASURES TO PREVENT SEDIMENT OR POLLUTANT LADEN STORM WATER FROM EXITING THE SITE DURING CONSTRUCTION. STORM WATER MAY BE DISCHARGED IN A MANNER, WHICH COMPLIES WITH THE APPROVED GRADING AND DRAINAGE PLAN.
10. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PREVENT THE MOVEMENT OF CONSTRUCTION RELATED SEDIMENT, DUST, MUD, POLLUTANTS, DEBRIS, WASTE, ETC FROM THE SITE BY WIND, STORM FLOW OR ANY OTHER METHOD EXCLUDING THE INTENTIONAL, LEGAL TRANSPORTATION OF SAME IN A MANNER ACCEPTABLE BY THE CITY.
11. THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
12. SEE ARCHITECTURAL DRAWINGS FOR SIDEWALK AND HANDICAPPED RAMPS, DETAILS AROUND THE BUILDING.
13. THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY SPOT ELEVATIONS ON THE GRADING AND DRAINAGE PLAN WHICH APPEAR TO BE AMBIGUOUS OR DO NOT MEET THE INTENT OF THE GRADING AND DRAINAGE PLAN.
14. THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DOES NOT MEET ADA ACCESSIBILITY REQUIREMENTS. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0%, ALL SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0%, AND ALL RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 15:1.
15. ALL SIDEWALKS AND CONCRETE FLATWORK SHALL HAVE A MINIMUM OF 0.5% SLOPE. CONTRACTOR SHALL CONTACT PROJECT ENGINEER IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DO NOT MEET THIS REQUIREMENT.
16. THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
17. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS (UPDATE 8, AMENDMENT 1).
18. ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.

Hydrology

Prcipatation Zone (as per COA Chapter 22 Figure A-1) = Zone 1									
Prcipatation Depth (as per COA Chapter 22 table A-2) 100 yr storm						P100-6 =	2.17 P100-24 =		2.49
Peak Discharg (as per COA Chapter 22 table A-9) 100 yr storm						Q/acre (100 yr) Treatment A =	1.54		
						Q/acre (100 yr) Treatment B =	2.16		
						Q/acre (100 yr) Treatment C =	2.87		
						Q/acre (100 yr) Treatment D =	4.12		
Basin	Basin Area (acre)	Land Treatment Area (arce) (as per COA Chapter 22 Table A-4)				Ew (in)	Vol(100-6) (acft)	Vol(100-24) (acft)	Q (100) (cfs)
		A	B	C	D				
Existing Conditions									
Site	1.15	1.15				0.55	0.053	0.083	1.771
Total									
Proposed Conditions									
Site	1.15			0.20	0.95	2.02	0.194	0.219	4.49
Total									

First Flush Calculations

Required Retention Pond Volume= 0.95 x 0.44 = 1525 cuft = 0.0350 acft
(as per COA Chapter 22 Section L)

Area Pond = 388 sqft
Depth needed = 3.9 ft

Pond Rating Table

Elev	Area		Volume	Cum Volume	Cum Volume
(ft)	(sqft)	(acre)	(acre-ft)	(acre-ft)	(cf)
5145.5	388	0.0089	0.0000	0	
5146.5	388	0.0089	0.0089	0.0089	
5147.5	388	0.0089	0.0089	0.0178	
5148.5	388	0.0089	0.0089	0.0267	
5149.5	388	0.0089	0.0089	0.0356	1552

N NORTH

HYDROLOGY

SITE LOCATION

The existing site is an approximate 1.15-aere site located at 9101 Central Ave. NW. The site is bounded on the south side by Central Ave, the north and west side by existing developmentt, and the east side by a vacant lot. This site can be accessed by going I-40 west, taking the Coors exit south, and then turning right on Central Ave. (see vicinity map this sheet).

EXISTING CONDITIONS

The existing site is estimated at 1.15 acres and is developed with the natural vegetation of the land. There is currently no development on the site. The runoff from this site is 1.771 cfs under existing conditions.

The site docs not lie within a 100 year FEMA floodplain (sec FEMA panel on this sheet). The site is not adversely impacted by offsite flows. The site currently slopes from east to west.

PROPOSED CONDITIONS

The proposed project will consist of a new building and parking lot. The site impervious area under proposed conditions will be 41579 sf. The new parking lot will be graded to drain south and east toward a new drainage pond located on the southeast corner of the site. The drainage calculations for proposed conditions are indicated on this sheet.

CONCLUSIONS

When fully developed as indicated on the grading and drainage plan, the increased runoff from the site is estimated al 2.72 cfs and 0.136-acrc feet during the 100-ycar, 24-hour event. The first flush pond volume for the new impervious area is 1525 cf. A new retention pond has been provided on the southeast comer of the site to retain the first flush storm event which is 1552 cf.

No.	Date	Issue / Description

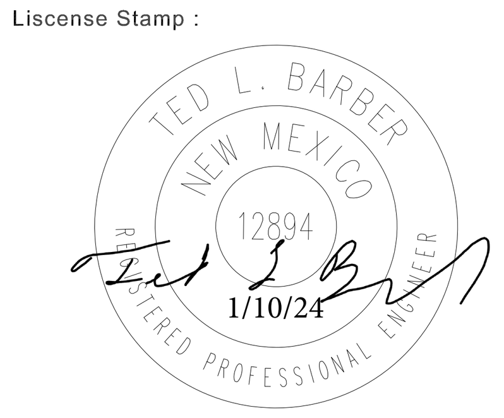
Project :

NEW CONSTRUCTION FOR

9101 CENTRAL AVENUE NW

ALBUQUERQUE NEW MEXICO

License Stamp :



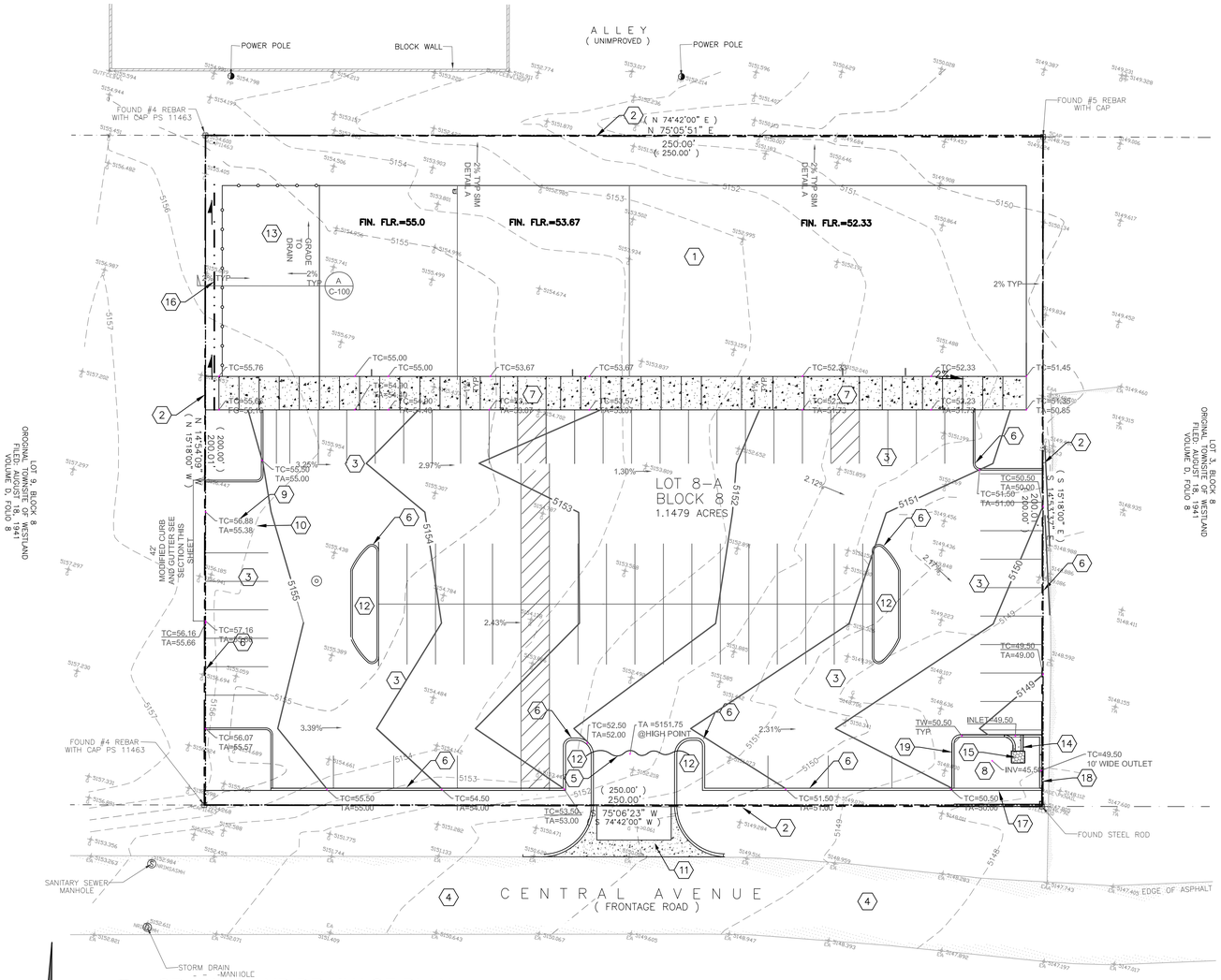
TED L. BARBER, PE
INCLINE ENGINEERING
236 TANO ROAD
SANTA FE, NM
505-577-6747

Sheet Title :

HYDROLOGY PLAN

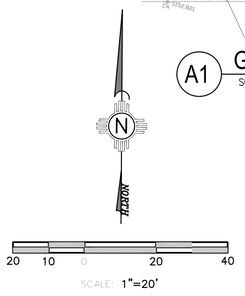
Sheet No. :

C-100



A1 GRADING AND DRAINAGE PLAN

SCALE: 1"=20'

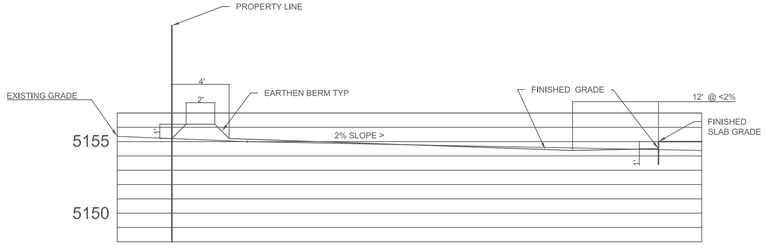


LEGEND:

XX=XX.XX	PROPOSED SPOT ELEVATIONS (FINISHED GRADE)	
TCON	TOP OF CONCRETE	
FL	FLOW LINE, CURB	
INV	INVERT	
FG	FINISH GRADE	
TBC	TOP OF BASE COURSE	
TC	TOP OF CURB	
TG	TOP OF GRATE	
TA	TOP OF ASPHALT	
TW	TOP OF WALL	
—2%—		FLOW ARROW
		GRADE BREAK–HIGH POINT
		SWALE
—SD—		STORM DRAIN LINE
5895		PROPOSED MAJOR CONTOUR
		PROPOSED MINOR CONTOUR
5895		EXISTING MAJOR CONTOUR
		EXISTING MINOR CONTOUR

KEYED NOTES:

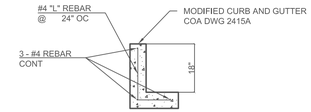
1. PROPOSED BUILDING, SEE ARCHITECTURAL DRAWINGS, SUITE A–FF=55.0, SUITE B–FF=53.67, AND SUITE C–FF=52.23.
2. APPROXIMATE PROPERTY LINE.
3. NEW HOT MIX ASPHALT PAVING (HMA), SEE DETAIL SHEET C–501.
4. EXISTING PAVING TO REMAIN.
5. GRADE BREAK–HIGH POINT.
6. NEW STANDARD CURB AND GUTTER, PER C.O.A. STD. DWG 2415A.
7. NEW SIDEWALK WITH TURNDOWN EDGE AND CONCRETE FLATWORK, AS PER C.O.A. STD. DWG 2430.
8. NEW WATER HARVEST AREA SEE DETAIL SHEET C–501. INV.(IN)=45.5 INV.(OUT)=43.5
9. NEW HEAVY DUTY CONCRETE PAVING FOR TRASH ENCLOSURE SEE DETAIL SHEET C–501.
10. NEW TRASH ENCLOSURE SEE ARCHITECTURAL DRAWINGS.
11. CONCRETE VALLEY GUTTER AND FILLETS PER C.O.A. DWG 2420.
12. LANDSCAPED AREA SEE ARCHITECTURAL DRAWINGS.
13. PLAYGROUND AREA SEE ARCHITECTURAL DRAWINGS.
14. NEW CONCRETE RUNDOWN SEE DETAIL SHEET C–501.
15. NEW RIP RAP PAD SEE DETAIL SHEET C–501.
16. NEW EARTHEN BERM SEE DETAIL A THIS SHEET.
17. NEW RETAINING WALL FOR PONDING, SEE STRUCTURAL FOR DETAILS.
18. NEW 10' WIDE SPILLWAY, CREST=48.0
19. NEW 4' FALL PROTECTIVE STEEL RAILING MOUNTED TO TOP OF CONCRETE WALL. CONSTRUCT TO PROTECT ENTIRE NORTH AND WEST POND RETAINING WALL.



SECTION @ PLAYGROUND/EAST BUILDING WALL

SCALE 1" = 5' VERT AND HORZ

A C-100



MODIFIED CURB AND GUTTER SECTION

SCALE NTS

No.	Date	Issue / Description

IT IS THE CLIENTS RESPONSIBILITY PRIOR TO OR DURING CONSTRUCTION TO NOTIFY THE ARCHITECT IN WRITING OF ANY PERCEIVED ERRORS OR OMISSIONS IN THE PLANS AND SPECIFICATIONS OF WHICH A CONTRACTOR THOROUGHLY KNOWLEDGEABLE WITH THE BUILDING CODES AND METHODS OF CONSTRUCTION SHOULD REASONABLY BE AWARE. WRITTEN INSTRUCTIONS REGARDING SUCH PERCEIVED ERRORS OR OMISSIONS SHALL BE RECEIVED FROM THE ARCHITECT PRIOR TO THE CLIENT OR CLIENTS SUBCONTRACTORS PROCEEDING WITH THE WORK. THE CLIENT WILL BE RESPONSIBLE FOR ANY DEFECTS IN CONSTRUCTION IF THESE PROCEDURES ARE NOT FOLLOWED

Project :

NEW CONSTRUCTION FOR

9101 CENTRAL AVENUE NW

ALBUQUERQUE NEW MEXICO

Liscense Stamp :

TED L. BARBER NEW MEXICO 12894 REGISTERED PROFESSIONAL ENGINEER 1/10/24

TED L. BARBER, PE
INCLINE ENGINEERING
236 TANO ROAD
SANTA FE, NM
505-577-6747

Sheet Title :

GRADING AND DRAINAGE PLAN

Sheet No. :

C-101

1/10/24