

# CITY OF ALBUQUERQUE

*Planning Department*  
Alan Varela, Director



*Mayor Timothy M. Keller*

March 4, 2024

Phillip W. Clark, PE  
Clark Consulting Engineers  
19 Ryan Rd  
Edgewood, NM 87015

**RE: 1998 Cherokee Rd NW**  
**Permanent C.O. – Accepted**  
**Engineer's Certification Date: 02/23/24**  
**Engineer's Stamp Date: 04/26/23**  
**Hydrology File: F13D034**

Dear Mr. Clark:

PO Box 1293  
Based on the Certification received 02/28/2024 and site visit on 03/01/2024, this letter serves as a “green tag” from Hydrology Section for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

Albuquerque  
If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

Sincerely,

NM 87103

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

Project Title: 1998 Cherokee Rd NW Resid Building Permit # \_\_\_\_\_ Hydrology File # F13/ D034  
DRB# \_\_\_\_\_ EPC# \_\_\_\_\_  
Legal Description: LOT 2A1, LAND OF BETTY SKOGEN City Address OR Parcel 1998 Cherokee NW

Applicant/Agent: Clark Consulting Engineers Contact: Phil  
Address: 19 Ryan Rd, Edgewood, NM 87015 Phone: (505) 281-2444  
Email: CCEal bq@aol.com

Applicant/Owner: \_\_\_\_\_ Contact: \_\_\_\_\_  
Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
Email: \_\_\_\_\_

TYPE OF DEVELOPMENT: ☐ PLAT (#of lots) ☒ RESIDENCE ☐ DRB SITE ☐ ADMIN SITE: \_\_\_\_\_  
RE-SUBMITTAL: ☐ YES ☒ NO

SECTION \_\_\_\_\_: ☐ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE  
Check all that apply:

### TYPE OF SUBMITTAL:

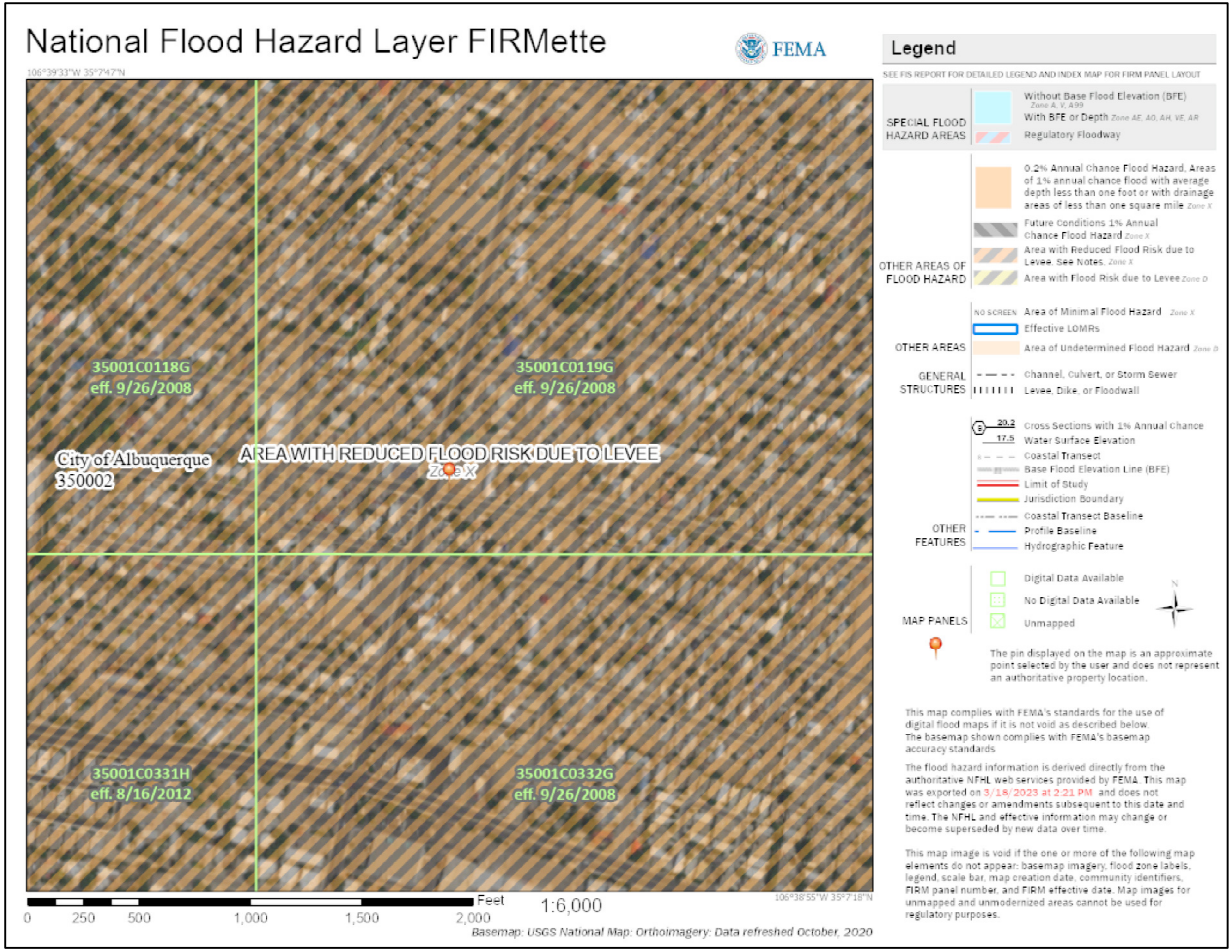
- ☒ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G&D PLAN
- ☐ GRADING PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOOD PLAN DEVELOPMENT PERMIT APP.
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL) ADMINISTRATIVE
- ☐ TRAFFIC CIRCULATION LAYOUT FOR DRB APPROVAL
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY) \_\_\_\_\_
- ☐ PRE-DESIGN MEETING?

### TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
- ☒ CERTIFICATE OF OCCUPANCY
- ☐ CONCEPTUAL TCL DRB APPROVAL
- ☐ 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
- ☐ FLOOD PLAN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) \_\_\_\_\_

DATE SUBMITTED: 2/23/24





PROJECT IS LOCATED IN ZONE X, NOT WITHIN A SPECIAL FLOOD HAZARD AREA

## FIRM MAP REF: PANEL # C0118 G

DATED 9/26/08

## GRADING & DRAINAGE PLAN

THE SINGLE LOT R-A PROJECT IS LOCATED IN THE GRIEGOS SECTION OF ALBUQUERQUE'S NORTH VALLEY APPROXIMATELY 3 MILES NORTH OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE CITY OF ALBUQ. DEVELOPMENT PROCESS MANUAL (DPM), CH. 6, ORIGINALLY SIGNED 6/8/20 - DRAINAGE, FLOOD, AND EROSION CONTROL. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND EXISTING IMPROVEMENTS: INCLUDING 1 RESIDENCE AND EXISTING FLATWORK.
2. PROPOSED IMPROVEMENTS: SINGLE-FAMILY RESIDENCE, NEW CONCRETE PAD / GRADE ELEVATIONS, BERMS OR BARRIERS AND SWALES.
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS.

THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE SOUTH, EAST AND THE WEST BY RESIDENCES. THE ACCESS ROAD, A PRIVATE STREET IS PRIVATELY MAINTAINED AND CONSISTS OF GRAVEL SURFACING. THE SITE CURRENTLY HAS SLOPES AT 0 TO 1% BUT IS GENERALLY FLAT.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE CHEROKEE RD AND PRIVATE WAY ARE IMPROVED ONLY MINIMAL GRADING IS PROPOSED WITHIN THE EASEMENT. FREE DISCHARGE OF DEVELOPED FLOW IS ACCEPTABLE, HOWEVER THE SITE IS FLAT THEREFORE A FLAT NW VALLEY GRADING SCHEME IS EMPLOYED. THIS PLAN ROUTES DEVELOPED RUNOFF THROUGH/TO THE PROPOSED LANDSCAPE AREAS. THE SITE IS NOT IMPACTED ADVERSELY BY ANY OFF-SITE DRAINAGE FLOWS.

## "Valley Drainage Criteria"

PER SECTION 6-5 (A), OF THE DPM - SINGLE-LOT DEVELOPMENT

## CALCULATIONS

### DESIGN CRITERIA

HYDROLOGIC METHODS PER CHAPTER 6, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) 2020 EDITION FOR CITY OF ALBUQUERQUE.  
DISCHARGE RATE:  $Q = Q_{PEAK} \times AREA$ , "Peak Discharge Rates For Small Watersheds"  
VOLUMETRIC DISCHARGE:  $VOLUME = E_{Weighted} \times AREA$   
 $P100-6 Hr = 2.29 In.$ , Zone 2,  $P100-24 Hr = 2.59 In.$ ,  $P100-10 Day = 3.6 In.$ ,  $TC = 12 Min.$   
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [ ] = 10 YEAR VALUES

### EXISTING CONDITIONS

TOTAL AREA = 0.25 ACRES, WHERE EXCESS PRECIP. 'W' = 1.01 In.  
PEAK DISCHARGE,  $Q100 = 0.75 CFS$ , WHERE UNIT PEAK DISCHARGE = 3.0 CFS/AC.  
THEREFORE: VOLUME 100 = 916 CF

### DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

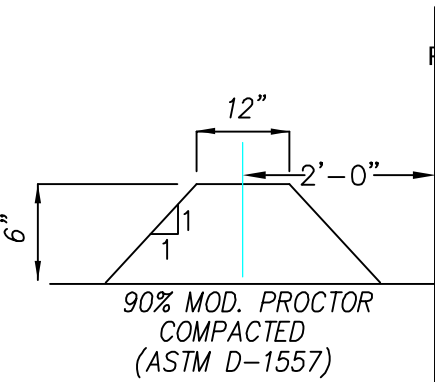
	AREA	LAND TREATMENT	$Q_{Peak}$	E
UNDEVELOPED	0.00 Ac (0%)	A	1.71 [0.41]	0.62 [0.15]
LANDSCAPING, Native, <10%	0.08 Ac (33%)	B	2.36 [0.95]	0.80 [0.30]
GRAVEL & COMPACTED SOIL	0.08 Ac (33%)	C	3.05 [1.59]	1.03 [0.48]
ROOF - PAVEMENT	0.09 Ac (34%)	D	4.34 [2.71]	2.33 [1.51]
	0.25 Ac			

THEREFORE: E Weighted = 1.40 In. & VOLUME 100 = 1271 CF  
 $Q100 \approx 0.82 CFS$   
 $\checkmark V100 DAYS = V360 + AD * (P10 DAYS - P360) / 12 in/in$   
 $= 1271 + 0.085(1.31)12 \times 43560 = 1675 CF$

### PART 6-5(A) SINGLE-LOT RESIDENTIAL DEVELOPMENT AND ADDITIONS

FOR LOTS LESS THAN 1 ACRE, WATER HARVESTING ON THE LOT IS REQUIRED, THE WATER HARVESTING VOLUME GOAL IS TO CAPTURE 1/2 INCH OF RUNOFF FROM IMPERVIOUS AREAS ON THE SITE. THEREFORE:  $3726 SF \times 0.5/12 = 155 CF$

1. ROOF FLOWS SHOULD BE DIRECTED TO THE WATER HARVESTING AREA(S).
2. RUNOFF SHOULD NOT ADVERSELY IMPACT ADJACENT PROPERTIES.
3. THE FINISHED PAD ELEVATION IS RECOMMENDED TO BE A MINIMUM OF 12 INCHES ABOVE THE EDGE OF PAVEMENT OR ROADWAY.
4. STORMWATER MUST BE ALLOWED TO EQUALIZE TO SAME LEVEL BETWEEN FRONT AND BACK YARDS (NO DAMS, BARRIERS, ETC. AND FREE FROM DEBRIS)

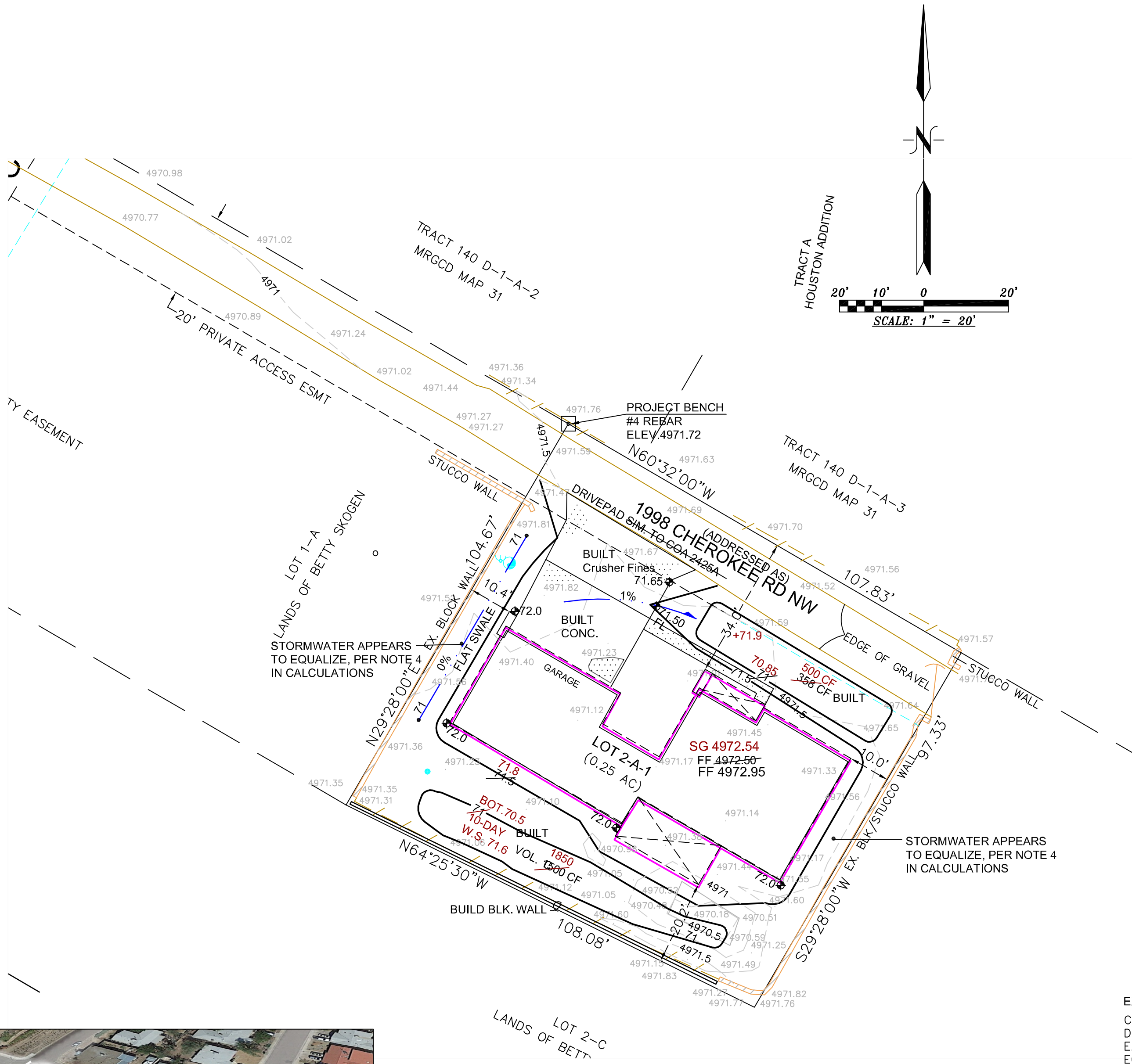


## BERM SECTION

NTS OPTION, IN-LIEU OF 56" TALL BLK WALL



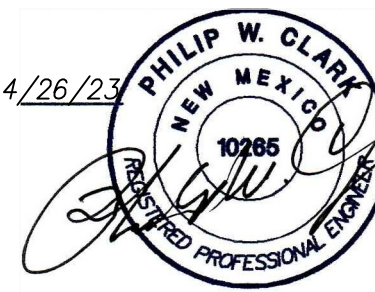
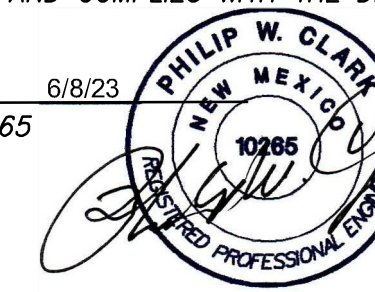
LOOKING NORTHWEST



**AS-CONSTRUCTED**  
FOR CERTIFICATE OF OCCUPANCY, FEB.'24

I, PHILIP W. CLARK, PROFESSIONAL ENGINEER, REGISTERED IN ACCORDANCE WITH THE LAWS IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE GRADING AND DRAINAGE IMPROVEMENTS INDICATED ON THE PLAN WERE CONSTRUCTED AS SHOWN, AND COMPLIES WITH THE DESIGN INTENT OF THE APPROVED PLAN.

6/8/23 PHILIP W. CLARK, P.E. #10265  
REV. 2/23/24



LEGEND	
EXIST. SPOT ELEVATION	X4924.0
EXIST. CONTOUR	10
NEW SPOT ELEVATION (FINISH)	24.0
NEW CONTOUR	12
NEW SWALE	
DRAINAGE DIRECTION, EXISTING	
NEW CONCRETE CURB (0.5' HEIGHT)	
NEW P.C.C., CONCRETE	
TOP OF CURB, EXISTING	TC
TOP OF ASPHALT	TA
FLOWLINE	FL
EXISTING POWER POLE	o P.P.

## PROJECT DATA

### LEGAL DESCRIPTION

LOT 2-A-1, LAND OF BETTY SKOGEN  
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

### PROJECT BENCHMARK

TOP OF 1/2-INCH REBAR AT THE NW CORNER  
MSL ELEVATION = 4971.72, AS TIED FROM COA 3-1/4" DIAMETER ALUM DISK, "23\_G14, NAVD 88, 4969.30.

### TOPOGRAPHIC DESIGN SURVEY

COMPILED BY CCE PROVIDED BY 2018 AGIS ORTHOPHOTOGRAPHY, AND COMMUNITY SCIENCES TOPO SURVEY, DATED 4/17/23.

Clark Consulting Engineers			
Edgewood, New Mexico 87015			
Tel: (505) 281-2444		CELL: (505) 264-6042	
DATE	REVISION	LOT 2-A-1, LAND OF BETTY SKOGEN ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	
		1998 CHEROKEE RD, NW	
		GRADING & DRAINAGE PLAN	
DESIGNED BY: PWC	DRAWN BY: CCE	JOB #: 1998 Cherokee	GD-1
CHECKED BY: PWC	DATE: APR. '23	FILE #: G/D	