

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

April 3, 2024

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

**RE: 6421 Dennison Rd SW
Grading & Drainage Plan
Engineer's Stamp Date: 03/14/24
Hydrology File: K11D096**

Dear Mr. Clark:

Based upon the information provided in your submittal received 03/28/2024, the Grading and Drainage Plan is approved for Building Permit and Grading Permit. **Since this site is relatively flat and grades to the road, a pad certification is not needed for this project.** 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.

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

SITE / PROJECT DOES NOT LIE WITHIN A FEDERAL
SPECIAL FLOOD HAZARD AREA PER REF: PANEL
IT IS WITHIN ZONE 'X'

DATED 8/16/2012

PANEL # 329H

GRADING & DRAINAGE PLAN

THE RESIDENTIAL PROJECT IS LOCATED IN THE SOUTHWEST AREA OF ALBUQUERQUE APPROXIMATELY 3 MILES WEST OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE CITY OF ALBUQUERQUE SUBDIVISION ORDINANCE. 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 VACANT LOT.
2. PROPOSED IMPROVEMENTS: 2740 SF STRUCTURE, NEW CONCRETE DRIVEPAD AND ON-SITE PARKING, NEW GRADE ELEVATIONS, FLATWORK AND LANDSCAPING.
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 WEST BY UNDEVELOPED PROPERTY, AND FRONTS ON DENNISON ROAD. LAND TO THE NORTH & EAST IS DEVELOPED. DENNISON HAS CURB AND SIDEWALKS AND MAINTAINED BY CITY OF ALBUQUERQUE. THE SITE DRAINS TO THE NORTHWEST, AND WILL CONTINUE IN REDEVELOPMENT.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE DENNISON IS IMPROVED NO GRADING IS PROPOSED WITHIN THE CNTY R.O.W. THE "FIRST FLUSH" 0.42-INCH RAINSTORM IS RETAINED ON-SITE WITHIN THE PVIOUS LANDSCAPING. ADDITIONALLY, RUNOFF IS ROUTED TO LANDSCAPING AND WATER HARVESTING IS RECOMMENDED. THE SITE IS NOT IMPACTED ADVERSELY BY ANY OFF-SITE DRAINAGE FLOWS.

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: $VOLUME = E_{WEIGHTED} \times AREA$
 $P100-6 \text{ Hr} = 2.17 \text{ in.}$, Zone 1, TC = 12 Min.
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES

DEVELOPED CONDITIONS

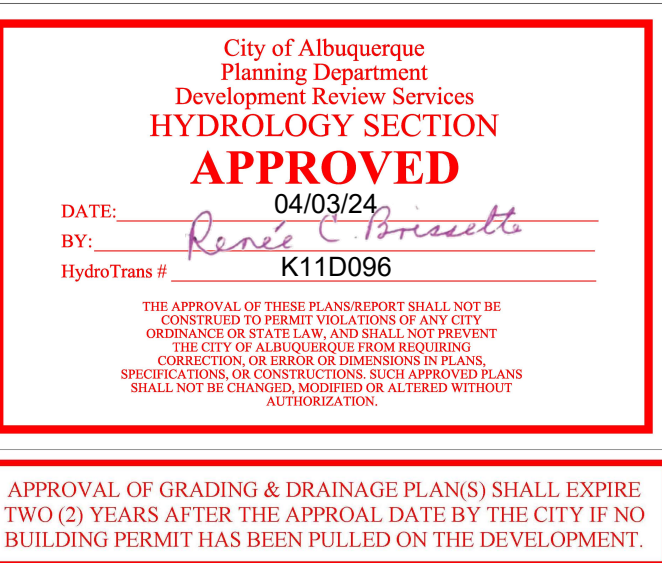
DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

AREA	LAND TREATMENT	Q_{Peak}	E_w
UNDEVELOPED	0.00 Ac. (~%) A	1.54[0.30]	0.55[0.11]
LANDSCAPING, Native, <10%	0.04 Ac. (29%) B	2.16[0.81]	0.73[0.26]
GRAVEL & COMPACTED SOIL	0.04 Ac. (28%) C	2.87[1.46]	0.95[0.43]
ROOF - PAVEMENT	0.06 Ac. (43%) D	4.12[2.57]	2.24[1.43]
	0.14 Ac.		

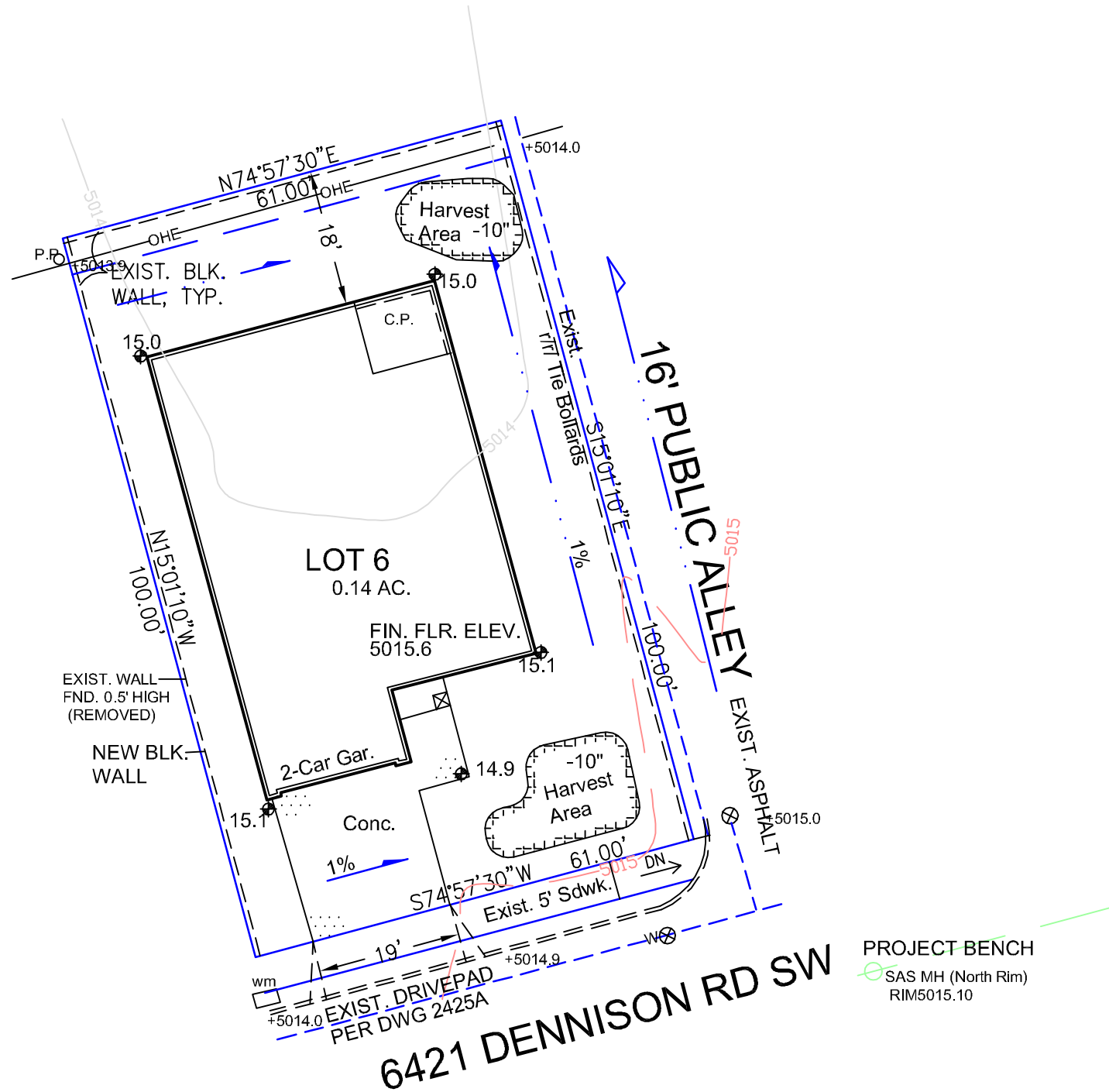
$E = 1.44 \text{ IN.} \implies \text{VOL.100} = 732 \text{ CF}$ $Q100 = 0.45 \text{ CFS}$
WEIGHTED

CHECK 1ST FLUSH, AKA EPA SWQ & 2020 DPM - USE 0.42"
THEN: $0.42/12 \times 0.06 \times 43560 = 92 \text{ CF}$

RECOMMEND: POND POINT RAINFALL RUNOFF WITHIN PROPOSED/UPGRADED SOFT LANDSCAPING AND ROUTE TO HARVEST AREAS



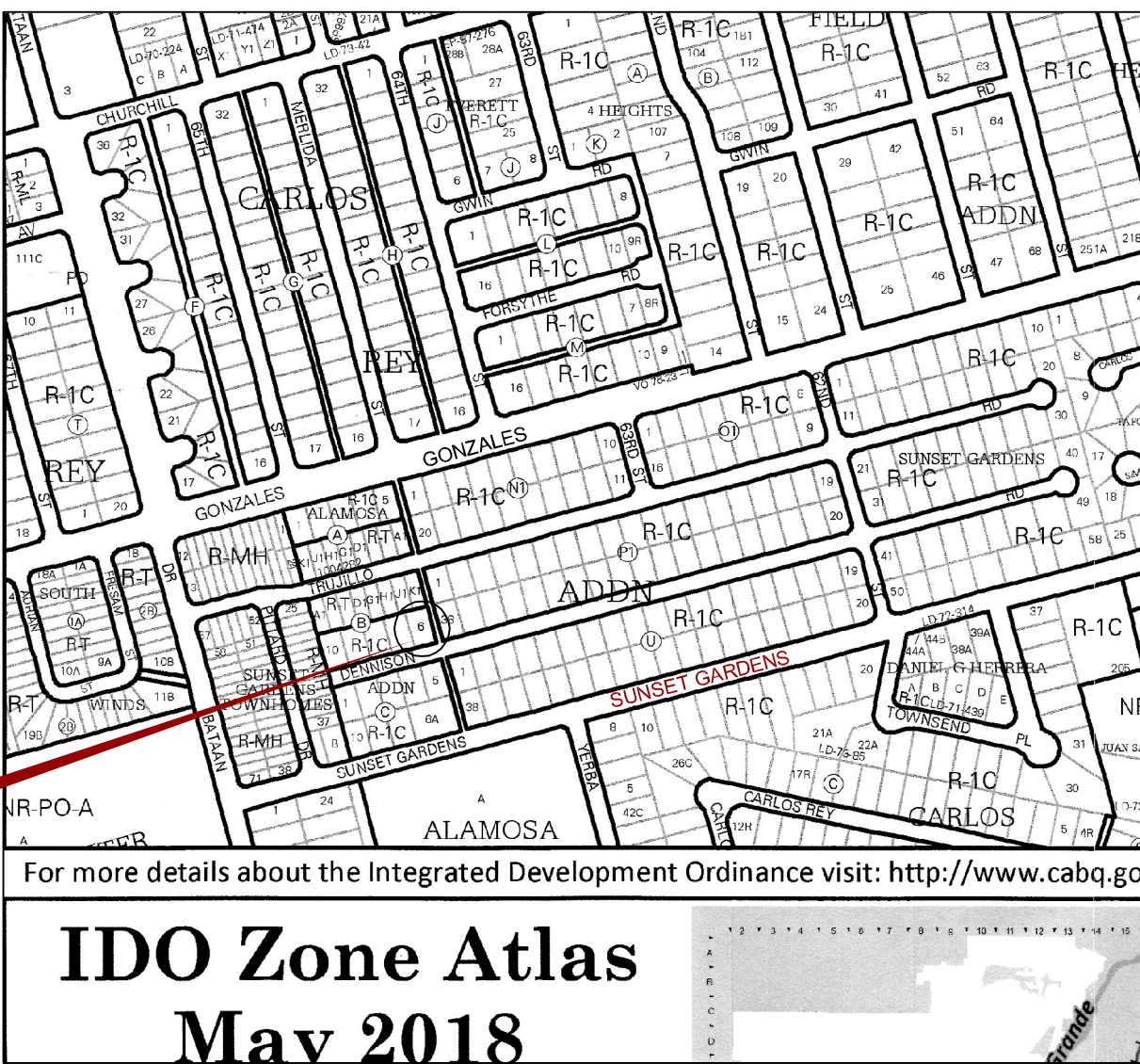
SCALE: 1" = 20'



STREET VIEW - LOOKING NW

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO SIGNIFICANT EARTHWORK NOR MAJOR DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

PROJECT



VICINITY MAP NOTES

K-11

1. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 2020 EDITION.
2. AN EXCAVATION/ACCESS PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN COUNTY R.O.W. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.
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. ALL LANDSCAPING AREA SHALL BE SOFT-LINED WITH NATIVE VEGETATION AND/OR GRAVEL.
5. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
6. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1012, NATIVE SEED MIX.
7. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 2 HORIZONTAL TO 1 VERTICAL, 2:1. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

LEGEND

EXIST. SPOT ELEVATION	+24.0
EXIST. CONTOUR	10
NEW SPOT ELEVATION	24.0
NEW CONTOUR	12
NEW SWALE	
DRAINAGE DIRECTION, EXISTING	
NEW P.C.C., CONCRETE	TC
TOP OF CURB, EXISTING	FL
FLOWLINE	O.P.P.
EXISTING POWER POLE	

PROJECT DATA

LEGAL DESCRIPTION

LOT 6, BLOCK 'B', ALAMOSA ADDITION
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO


PROJECT BENCHMARK

TOP OF NORTH RIM OF EXISTING SANITARY MANHOLE
ELEV. 5015.10 LOCATED AT THE INTERSECTION OF DENNISON RD.
& PUBLIC ALLEY, AS TIED TO COA ACS 2.1.10 (5035.95) NAVD 88.

TOPOGRAPHIC DESIGN SURVEY

COMPILED BY CLARK CONSULTING ENGINEERS FROM VLADIMIR JIRIK SURVEY



 Clark Consulting Engineers Edgewood, New Mexico 87015		Tele: (505) 281-2444	Cell: (505) 264-6042
DATE	REVISION	LOT 6, BLOCK 'B', ALAMOSA ADDITION ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO 6421 DENNISON RD, SW MUNOZ RESIDENCE Grading & Drainage Plan	
DESIGNED BY: PWC	DRAWN BY: COE	JOB #: Rafael_Dennison	1 OF 1
CHECKED BY: PWC	DATE: 3/20/24	FILE #: G/D	