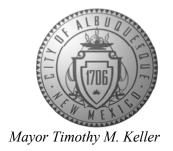
### CITY OF ALBUQUERQUE

Planning Department Brennon Williams, Director



February 11, 2021

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

RE: 2454 Rose Ave. NW

**Grading & Drainage Plan** 

Engineer's Stamp Date: 01/26/21

**Hydrology File: H13D116** 

Dear Mr. Clark:

PO Box 1293

Albuquerque

NM 87103

Based upon the information provided in your resubmittal received 01/29/2021, the Grading and Drainage Plan is approved for Grading Permit (earthwork can get started for the earth pad on the house) and for action by the DRP for Proliminary Plat/Final Plat

house) and for action by the DRB for Preliminary Plat/Final Plat.

Once the grading is complete, a pad certification (meaning that the earthwork is complete) will be required prior to release from Hydrology during the Building Permit process. Also, at the time of pad certification approval, Hydrology will concurrently approve the Grading & Drainage

Plan for Building Permit.

Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer

Certification per the DPM checklist will be required.

www.cabq.gov If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

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

Renée C. Brissette

Planning Department



# City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: I GALLEGOS	Building Permit #:	Hydrology File #: H13/D
DRB#: <b>2019-002609</b>	EPC#:	Work Order#:
Legal Description: LOT 14, FLO	ORAL GARDENS	
City Address: 2454 ROSE AVE	E NW	
Applicant: CLARK CONSULTING	BENGINEERS	Contact: PHIL
Address:	жжж cell / txt 264.6042	E-mail: CCEalbq@aol.com
Other Contact:		Contact:
Address:		
Phone#:		E-mail:
TYPE OF DEVELOPMENT:PL	LAT X RESIDENCE X	DRB SITE ADMIN SITE
Check all that Apply:		
DEPARTMENT:  HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION  TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICA PAD CERTIFICATION CONCEPTUAL G & D PLAN GRADING PLAN	X BUILDING CERTIFIC  X PRELIMIN SITE PLAY SITE PLAY	ROVAL/ACCEPTANCE SOUGHT:  B PERMIT APPROVAL  ATE OF OCCUPANCY  MARY PLAT APPROVAL  N FOR SUB'D APPROVAL  N FOR BLDG. PERMIT APPROVAL  AT APPROVAL
DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERM ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT ( TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING?	MIT APPLICFOUNDAT GRADING SO-19 API (TCL)PAVING I GRADING WORK OR CLOMR/L	PERMIT APPROVAL / PAD CERTIFICATION DER APPROVAL
A series of the		PECIFY)
DATE SUBMITTED: 1/29/21	By: PHILIP W. C	LARK

FEE PAID:

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

## FIRM MAP REF: PANEL # C0331 H

# GRADING & DRAINAGE PLAN

THE 2-LOT R-1 PROJECT IS LOCATED IN LOS DURANES SECTION OF ALBUQUERQUE'S NORTH VALLEY APPROXIMATELY 2 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, 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: 2 NEWLY CONFIGURED LOTS, NEW PAD / GRADE ELEVATIONS, BERMS OR BARRIERS AND
- 3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS. 4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GEN-ERATED BY THE IMPROVEMENTS.

THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CON-TROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE SOUTH, NORTH AND THE WEST BY RESIDENCES. ROSE AVENUE NW, A LOCAL STREET PER THE LRMSP IS PAVED WITH CURB, GUTTER AND 4' SIDEWALK, AND IS MAINTAINED BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY HAS SLOPES AT 0 TO 1% BUT IS GENERALLY FLAT.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED SINCE ROSE AVE. IS IMPROVED NO GRADING IS PROPOSED WITHIN THE CITY R.O.W. 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.

### "Flat North Valley Grading Scheme" PER SECTION 6-5 (D), OF THE DPM

### CALCULATIONS

#### **DESIGN CRITERIA**

HYDROLOGIC METHODS PER CHAPTER 6, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) 2020 EDITION FOR CITY OF ALBUQUERQUE. DISCHARGE RATE: Q=QPEAK x AREA.."Peak Discharge Rates For Small Watersheds"

VOLUMETRIC DISCHARGE: VOLUME = EWeighted x 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

10% D, 45% C, 45% B&A TOTAL AREA = 0.40 ACRES, WHERE EXCESS PRECIP. 'W' = 1.01 In. PEAK DISCHARGE, Q100 = 1.1 CFS, WHERE UNIT PEAK DISCHARGE = 2.7 CFS/AC. THEREFORE: VOLUME 100 = 1466 CF

#### <u>DEVELOPED CONDITIONS - LOT 14-A</u>

Q100 = 0.65 CFS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE <u>DEVELOPED CONDITIONS - LOT 14-B</u> FOR STUDY AREA AREA LAND TREATM'T Q Peak E

AREA LAND TREATM'T Q Peak E 0.06 Ac.(25%) A 1.71[0.41] 0.62[0.15] 0.07 Ac.(28%) B 2.36[0.95] 0.80[0.30] 0.07 Ac.(29%) C 3.05[1.59] 1.03[0.48] UNDEVELOPED LANDSCAPING, Native, <10% 0.07 Ac.(28%) B GRAVEL & COMPACTED SOIL 0.07 Ac.(29%) C 0.04 Ac.(18%) D 0.24 Ac. 4.34[2.71] 2.33[1.51] ROOF - PAVEMENT

THEREFORE: E Weighted = 1.09 In. & VOLUME 100 = 950 CF

 $= 950 + 0.04 (1.31)/12 \times 43560 = 1140 CF$ 

V 10DAYS = V360 + AD \* (P10DAYS - P360) / 12 in/ft

THEREFORE: E Weighted = 1.22 In. & VOLUME 100 = 708 CF

0.05 Ac.(29%) D 0.16 Ac.

0.03 Ac.(20%) A 1.71[0.41] 0.62[0.15]

0.04 Ac.(26%) B 2.36[0.95] 0.80[0.30] 0.04 Ac.(25%) C 3.05[1.59] 1.03[0.48] 0.05 Ac.(29%) D 4.34[2.71] 2.33[1.51]

V 10DAYS = V360 + AD \* (P10DAYS - P360) / 12 in/ft = 708 + 0.05 (1.31)/12 x 43560 = 945 CF VOL. PROV.: AREA BETWEEN 10-DAY W.S. AND 3500 SF PAD / 2 x Depth

LOT 40-P1

RECOMMEND: ROUTE DEVELOPED RUNOFF THROUGH SOFT LANDSCAPING

VOL. PROV.: AREA BETWEEN 10-DAY W.S. AND 3500 SF PAD / 2 x Depth

LOT 14-A = 8712 CF - 1900 /2 X 0.33' = 1140 CF (138 CF STORED IN WALLED AREA)

- 1. SET SG HOUSE PAD 12-INCHES ABOVE 10-DAY DURATION STORM VOLUME
  - 2. CONSTRUCT 12" COMPACTED DIRT BERM AROUND PROPERTY IF PERIMETER GARDEN WALL, OR BARRIER NOT CONSTRUCTED
  - 3. STORMWATER MUST BE ALLOWED TO EQUALIZE TO SAME LEVEL BETWEEN FRONT AND BACK YARDS (NO DAMS, BARRIERS, ETC. AND FREE FROM DEBRIS)

Development Review Services **HYDROLOGY SECTION APPROVED** 02/11/21 Renée Brisselle H13D116 LOT 14-B = 6970 CF - 2000 /2 X 0.38' = 945 CF

G=4960.44'

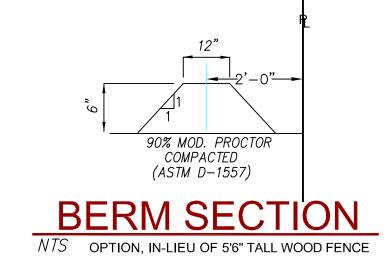
N 86°08'08" W\

∠G=4961.76′

×G=4961.70′ G=4959.90′∑

CAP PS11463

LOT 38-P1



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 EARTHWORK OF ANY

KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE



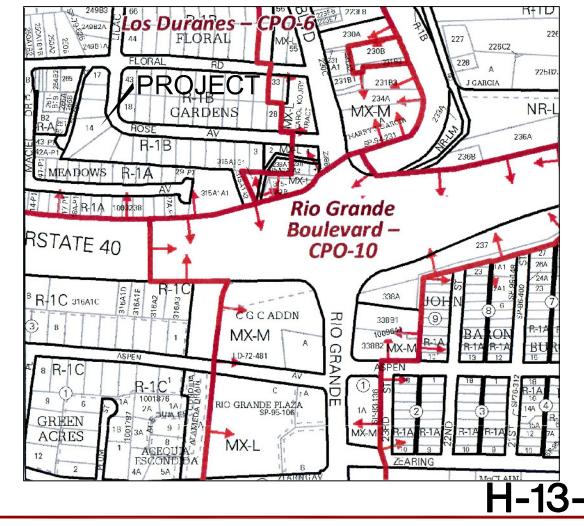
FF - FINISH FLOOR FL - FLOW LINE

SASMH - SAS MAN HOLE

TA - TOP OF ASPHALT TC - TOP OF CONCRETE

WM - WATER METER

G - GROUND



# **VICINITY MAP**

### **NOTES**

SCALE: 1" = 20

- 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/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY 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. 1011, NATIVE SEED MIX.
- 7. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 2 HORIZONTAL TO 1 VERTICAL, 2:1, <3' TALL. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

# **LEGEND**

EXIST. SPOT ELEVATION	X4924.0
EXIST. CONTOUR	10
NEW SPOT ELEVATION (FINISH)	<b>2</b> 4.0
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.
FACE OF CURB/FACE OF CURB	F-F
WATER BLOCK	~~~

# PROJECT DATA

#### LEGAL DESCRIPTION.

LOTS 14-A AND 14-B, FLORAL GARDENS ADDITION ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

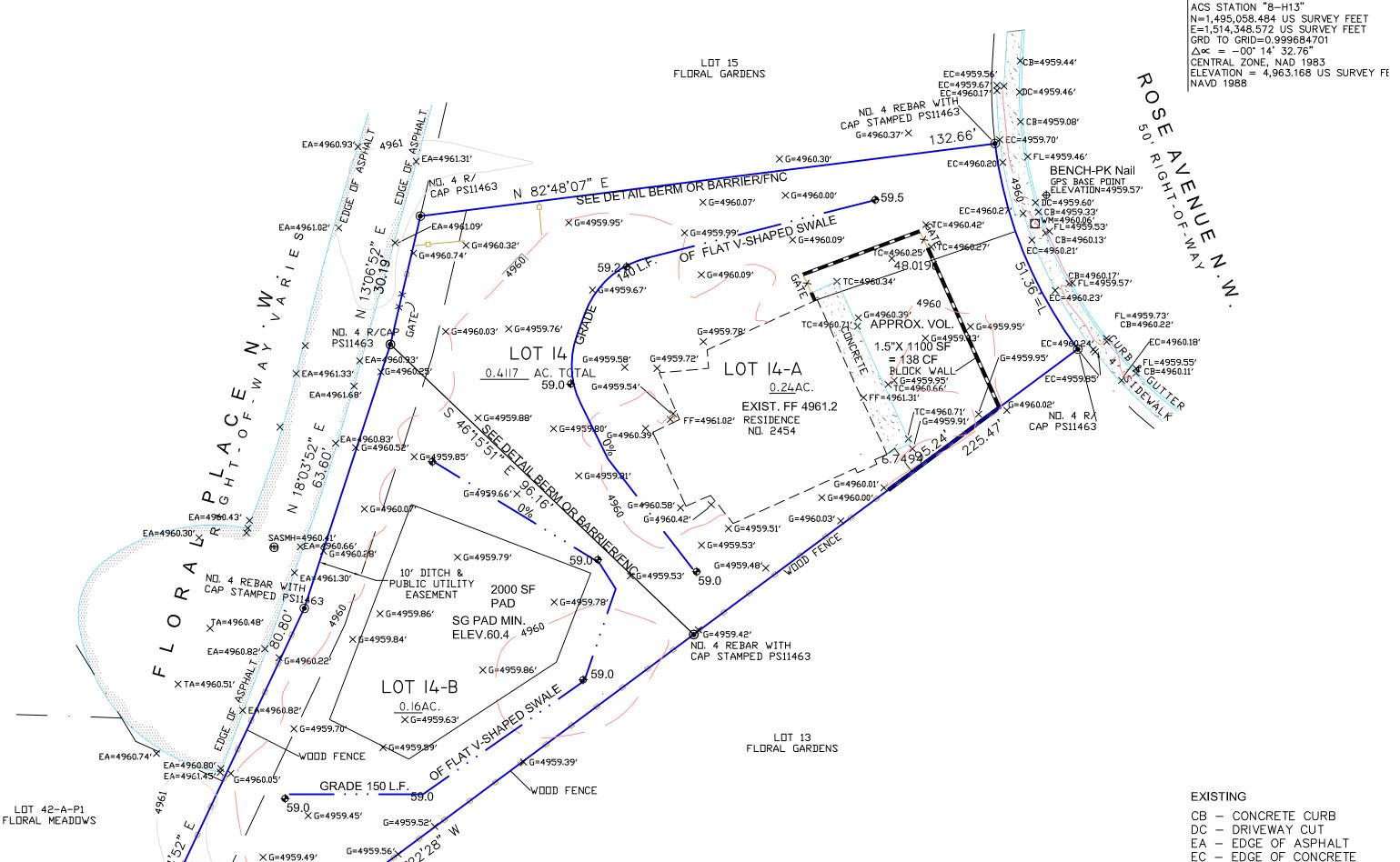
#### PROJECT BENCHMARK

TOP OF PK NAIL LOCATED IN ROSE AVE. MSL ELEVATION = 4959.57, AS TIED FROM COA 3-1/4" DIAMETER ALUM DISK, "7-H13, NAVD 88, 4964.36.

#### TOPOGRAPHIC DESIGN SURVEY

PROVIDED BY THE SURVEY OFFICE, LLC, FEBRUARY 2020 TONY HARRIS, PLS 11463.





DETERMINED.