

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

June 7, 2023

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

**RE: Lot 6 – 3151 Bridge St. SW
Grading and Drainage Plan
Engineer's Stamp Date: 05/16/23
Hydrology File: L11D067D**

Dear Mr. Clark:

Based upon the information provided in your submittal received 05/17/2023, the Grading and Drainage Plan is approved for Building Permit and Grading Permit. **Since this site has already been disturbed and graded, 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



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Lopez WEST Residential BP-2023-08724 L11/D0067
DRB#: **Building Permit #:** BP-2023-04561 **Hydrology File #:**
EPC#: **Work Order#:**

Legal Description: Lots 4,5 6, Plat of Lopez West /LOT 316A, UNIT 3, TOWN OF ATRISCO GRANT
City Address: 3141, 3151 Bridge St SW 87105

Applicant: CLARK CONSULTING ENGINEERS **Contact:** PHIL
Address:

Phone#: 281-2444 **Fax#:** xxxxx cell / txt 264.6042 **E-mail:** CCEalbq@aol.com

Other Contact: Francisco Lopez **Contact:**
Address:

Phone#: **Fax#:** **E-mail:**

TYPE OF DEVELOPMENT: PLAT X RESIDENCE DRB SITE ADMIN SITE

Check all that Apply:

DEPARTMENT:

 X HYDROLOGY/ DRAINAGE
 TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

 ENGINEER/ARCHITECT CERTIFICATION
 PAD CERTIFICATION
 CONCEPTUAL G & D PLAN
 GRADING PLAN
 DRAINAGE REPORT
 DRAINAGE MASTER PLAN
 FLOODPLAIN DEVELOPMENT PERMIT APPLIC
 ELEVATION CERTIFICATE
 CLOMR/LOMR
 TRAFFIC CIRCULATION LAYOUT (TCL)
 TRAFFIC IMPACT STUDY (TIS)
 STREET LIGHT LAYOUT
 OTHER (SPECIFY)
 PRE-DESIGN MEETING?

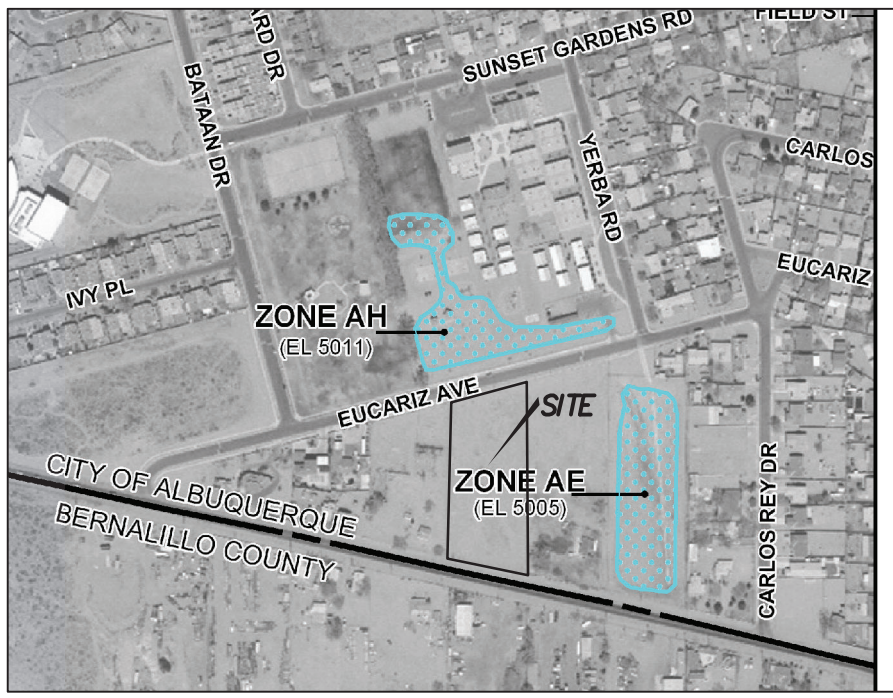
IS THIS A RESUBMITTAL?: Yes X No

DATE SUBMITTED: 5/16/23 **By:** THE engineer

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED:

FEE PAID:



FIRM MAP PANEL # 329

GRADING & DRAINAGE PLAN

THE 6-LOT RESIDENTIAL SUBDIVISION IS LOCATED IN THE SOUTHWEST AREA OF ALBUQUERQUE APPROXIMATELY 3 MILES SOUTHWEST OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88-46, AND THE CITY STORM DRAINAGE 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: 6-2600 SF TOTAL SUB-GRADE PAD AREA(S), NEW CONCRETE DRIVEPADS AND ON-SITE PARKING, NEW GRADE ELEVATIONS, WALLS, 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 EAST AND WEST BY RESIDENTIAL USE. BRIDGE AND EUCARIZ DR. ON THE SOUTH AND NORTH ARE PAVED. EUCARIZ AVE. ON THE NORTH, HAS EXISTING CURB, GUTTER AND SIDEWALK, WHILE BOTH EUCARIZ AND BRIDGE ARE MAINTAINED BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY DOES NOT DRAIN OR DISCHARGE RUNOFF.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE BOTH STREETS ARE IMPROVED ONLY MINIMAL GRADING (DRIVEPAD RECONSTR-N) IS PROPOSED WITHIN THE CITY R.O.W. THE "FIRST BLUSH" 1/2-INCH RAINSTORM IS RETAINED ON-SITE SINCE RUNOFF IS NOT DISCHARGED TO THE ADJACENT STREETS. ADDITIONALLY, RUNOFF IS ROUTED TO LANDSCAPING AND WATER HARVESTING IS RECOMMENDED. THE SITE IS NOT IMPACTED ADVERSELY BY ANY OFF-SITE DRAINAGE FLOWS.

CALCULATIONS

AS REVISED PER VALLEY GRADING SCHEME 6-5(D) (2020 DPM)

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO DISCHARGE RATE: $Q = Q_{PEAK} \times AREA$. "Peak Discharge Rates For Small Watersheds" VOLUMETRIC DISCHARGE: $VOLUME = E_{WEIGHTED} \times AREA$ $P100 = 2.20$ inches, Zone 1 Time of Concentration, TC = 10 Minutes DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES

EXISTING CONDITIONS

TOTAL AREA = 2.09 ACRES, WHERE EXCESS PRECIP. 'A' = 0.49 in. [0.08] PEAK DISCHARGE, $Q100 = 2.7$ CFS [0.51], WHERE UNIT PEAK DISCHARGE 'A' = 1.29 CFS/AC. [0.24] THEREFORE: $VOLUME 100 = 3717$ CF [607]

DEVELOPED CONDITIONS

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

	AREA	LAND TREATMENT	Q Peak	E
UNDEVEL./HARVEST Pond	0.84 Ac.(40%)	A	1.29[0.24]	0.49[0.08]
LANDSCAPING	0.42 Ac.(20%)	B	2.03[0.76]	0.67[0.22]
GRAVEL & COMPACTED SOIL	0.48 Ac.(23%)	C	2.87[1.49]	0.99[0.44]
ROOF - PAVEMENT	0.36 Ac.(17%)	D	4.40[2.90]	1.97[1.24]
	2.09 Ac.			

THEREFORE: $E_{WEIGHTED} = 0.89$ in.[0.38] & $Q100 = 4.89$ CFS $Q10 = 2.28$ CFS $VOLUME 100 = 6752$ CF $VOLUME 10 = 2883$ CF

RECOMMEND : ROUTE DEVELOPED RUNOFF THROUGH EXISTING/UPGRADED SOFT LANDSCAPING INCLUDING DEPRESSED LANDSCAPING IN THE NEW REAR YARDS AS SHOWN

PART 6-5(D) RESIDENTIAL SUBDIVISION 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: 4400 SF \times $0.5/12 = 183$ CF PER LOT

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)

✓ V-10DAYS = $V360 + AD \times (P10DAYS - P360) / 12$ in/ft $= 1125 + 0.10(1.31)/12 \times 43560 = 1600$ CF TYPICAL PER LOT

LOT(S) COMPLETELY WALLED IN ASSUME @/Or Above 10-yr. Approx. 0.1 Ac. LT. 'D' per Lot THEREFORE: LOT VOL. PROVIDED, 0.22 AC \times 2×0.7 (43560) = 3300 CF THIS IS EXCLUDING THE 600 CF HARVEST AREAS PREVIOUSLY BUILT (SEE 4.11.22 CERTIFIED)

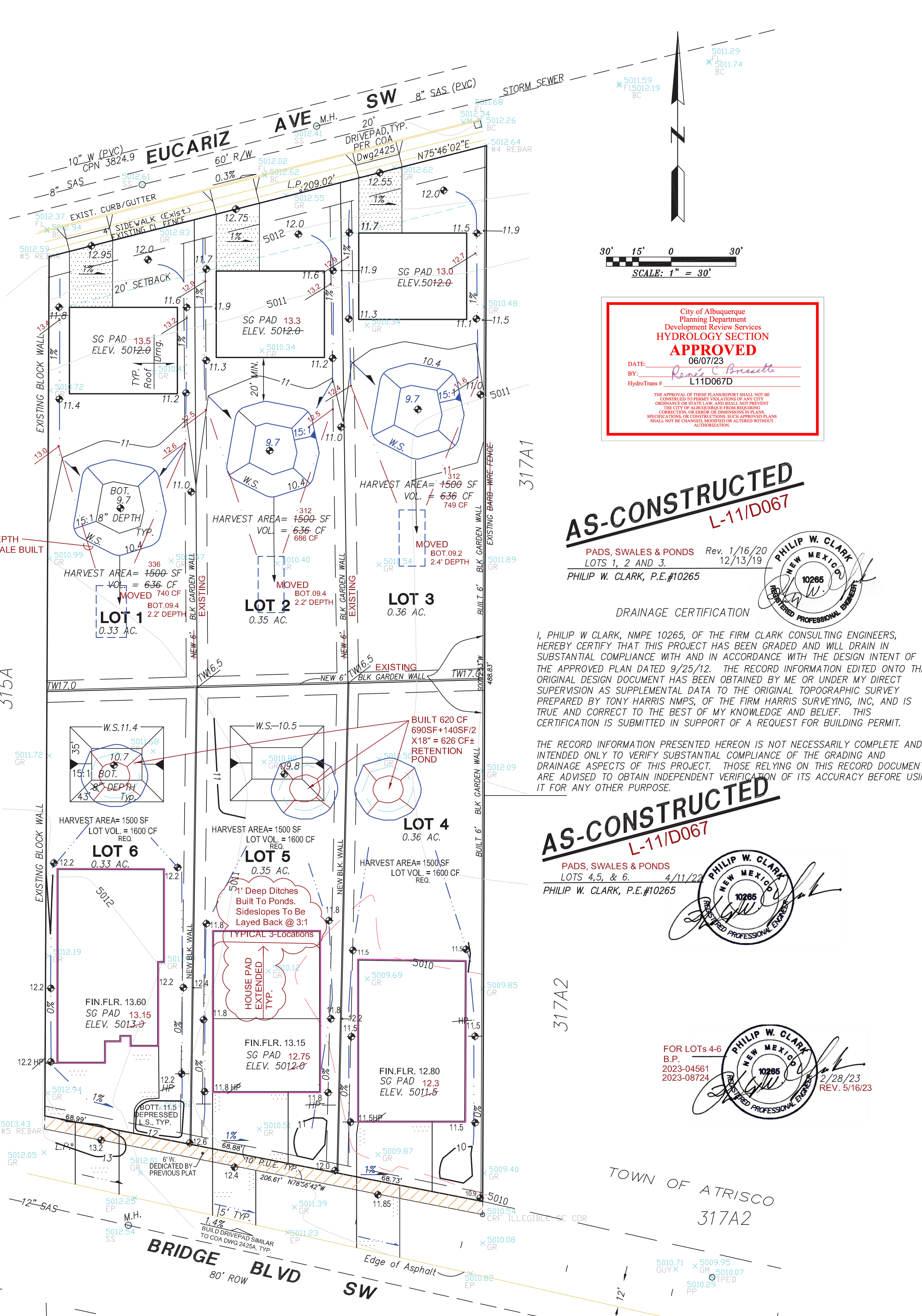
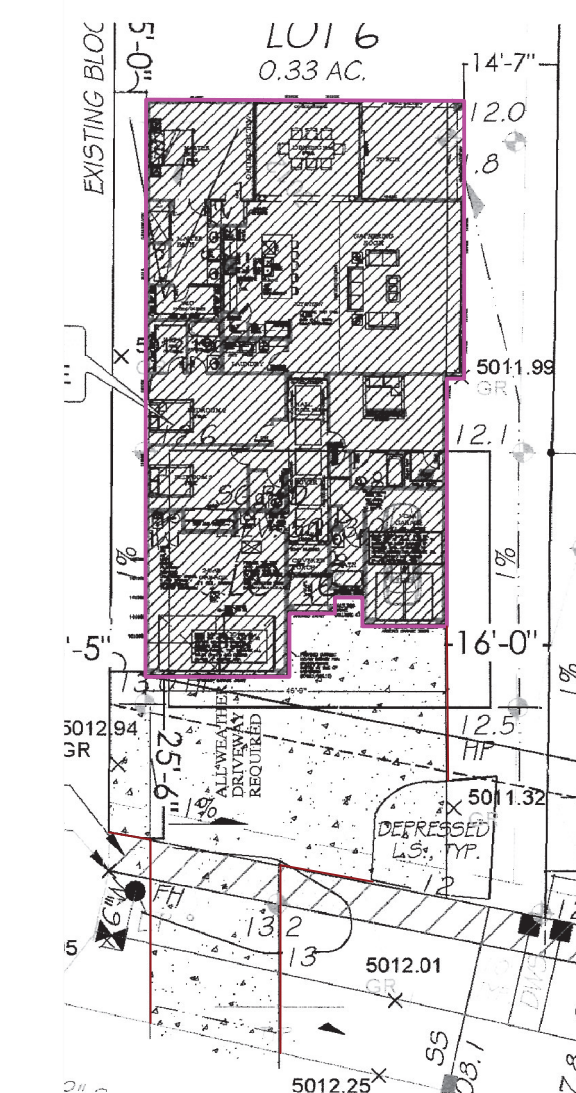
REARYARD-HARVEST-CALC. (TYP.)

ALL DEVELOPED RUNOFF IS DIRECTED TO THE REARYARD HARVESTING AREAS WITH THE EXCEPTION OF THE EAST SIDEYARD / SWALE ON LOT 4. THE REAR YARDS ARE CALLED AS FOLLOWS:

$(1500$ SF $+ 341$ SF) $/ 2 \times 0.68' = 626$ CF $(1495$ SF $+ 405$ SF) $/ 2 \times 0.67' = 636$ CF

CHECK 1st 1/2" RETAINED 2.09 AC \times 43560 SF $\times 0.04' = 3641$ CF PER LOT $3641/6 \sim 607$ CF, OK

LOT 6 PLOT PLAN



AS-CONSTRUCTED
L-11/D067

PADS, SWALES & PONDS Rev. 1/16/20
LOTS 1, 2 AND 3. 12/13/19
PHILIP W. CLARK, P.E.#10265

DRAINAGE CERTIFICATION

I, PHILIP W. CLARK, NMPE 10265, OF THE FIRM CLARK CONSULTING ENGINEERS, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 9/25/12. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AS SUPPLEMENTAL DATA TO THE ORIGINAL TOPOGRAPHIC SURVEY PREPARED BY TONY HARRIS NMPS, OF THE FIRM HARRIS SURVEYING, INC. AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR BUILDING PERMIT.

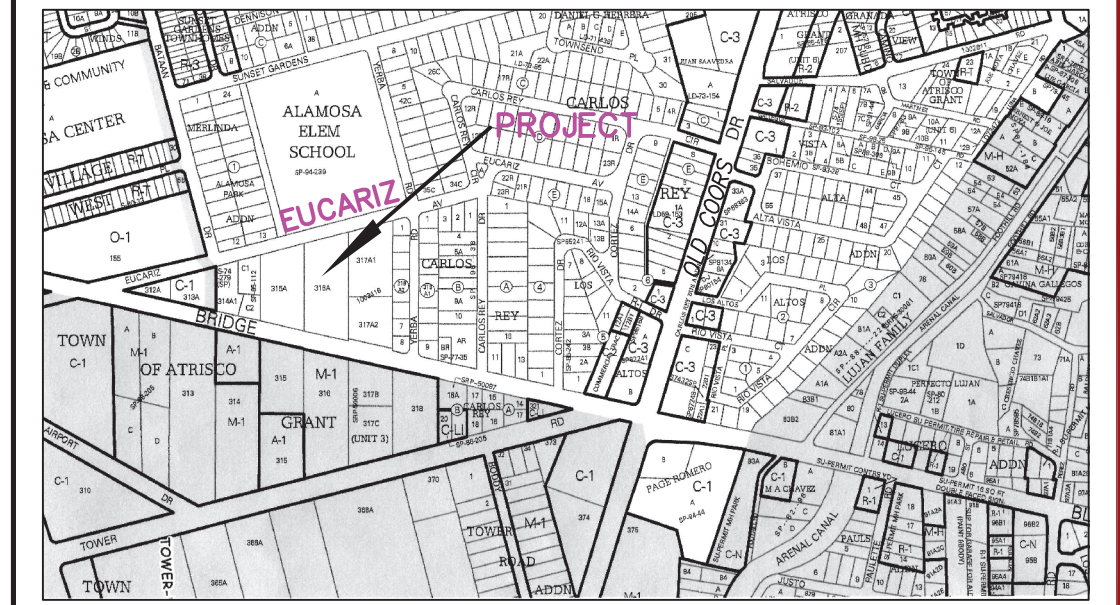
THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

AS-CONSTRUCTED
L-11/D067

PADS, SWALES & PONDS
LOTS 4, 5, & 6. 4/11/20
PHILIP W. CLARK, P.E.#10265

FOR LOTS 4-6
B.P.
2023-04561
2023-08724
REV. 5/18/23

TOWN OF ATRISCO
317A2



ZONE L-11

VICINITY MAP NOTES

1. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 8TH EDITION W/ UPDATES.
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: 3 HORIZONTAL TO 1 VERTICAL, 3:1. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

LEGEND

AS-BUILT SPOT ELEVATION	22.8
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	
TOP OF CURB, EXISTING	TC
FLOWLINE	FL
EXISTING POWER POLE	o
FACE OF CURB/FACE OF CURB	F-F
HIGH POINT	HP
WATER SURFACE	W.S.

PROJECT DATA

LEGAL DESCRIPTION (CONCURRENT PLATING)

LOTS 1-6, LOPEZ WEST SUBDIVISION
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

PROJECT BENCHMARK

TOP OF REBAR/CAP AT THE PROJECT SOUTHEAST CORNER MSL
ELEVATION = 5010.54, AS TIED FROM COA 3-1/4" DIAMETER ALUM DISK, 8-L10, NAVD 88, MSL ELEV. 5069.58, LOCATED AT THE NE INTERSECTION OF 75TH ST. AND BRIDGE BLVD.

TOPOGRAPHIC DESIGN SURVEY

PROVIDED BY THE SURVEY OFFICE UNDER THE DIRECTION OF ANTHONY HARRIS, N.M.P.S., DATED JULY 2012.

Clark Consulting Engineers
Edgewood, New Mexico 87015

Telex: (505) 281-2444	Cell: (505) 264-6042
DATE	REVISION
9.21.12	ADDR. COA
9.19.12	LET
1/16/20	AS-BUILT 1-3
4/7/22	AS-BUILT 4-6
2/28/23	LOT 6 FOR B.P.
DESIGNED BY: PWC	DRAWN BY: CCE
CHECKED BY: PWC	DATE 7/2012
JOB #: LOPEZ_F	FILE #: G/D
1 OF 1	

HYDROLOGY L-11/D067