CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

July 20, 2023

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

RE: Lot 4 – 3131 Bridge St. SW
Grading and Drainage Plan
Engineer's Stamp Date: 05/16/23
Hydrology File: L11D067F

Dear Mr. Clark:

Based upon the information provided in your submittal received 7/6/2023, 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.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

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.
2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for $25 made out to "Bernalillo County" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review. Once the review is done, Hydrology will send back an email stating our approval/comments.

If you have any questions, please contact me at 924-3695 or tchen@cabq.gov.

Sincerely,

Tiequan Chen, P.E.
Principal Engineer, Hydrology
Planning Department, Development Review Services

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Lopez WEST Residential Building Permit #: BP-2023-08724 BP-2023-04561 Hydrology File #: L11/D0067

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: Lot 4 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#: 220-8309 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?: X Yes ___ No

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X BUILDING PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY

___ 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

X GRADING PERMIT APPROVAL

___ SO-19 APPROVAL

___ PAVING PERMIT APPROVAL

___ GRADING/ PAD CERTIFICATION

___ WORK ORDER APPROVAL

___ CLOMR/LOMR

___ FLOODPLAIN DEVELOPMENT PERMIT

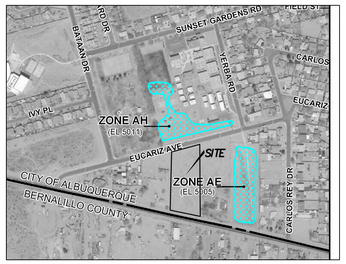
___ OTHER (SPECIFY) _____

DATE SUBMITTED: 7/3/23 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 BERN-ALILLO 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 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 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.

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 7/20/2023
BY: [signature]
HydroTrans # L11D067E/F

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY FROM REQUIRING THE CORRECTION OF ERRORS IN CORRECTION, OR OMISSION ON DRAWINGS/PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

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=QPEAK x AREA.."Peak Discharge Rates For Small Watersheds"
VOLUMETRIC DISCHARGE: VOLUME = EWeighted x 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 TREATM'T	Q Peak	E
UNDEVEL./HARVESTPond	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 VOLUME 100 = 6752 CF
Q10 = 2.28 CFS VOLUME 10 = 2883 CF

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

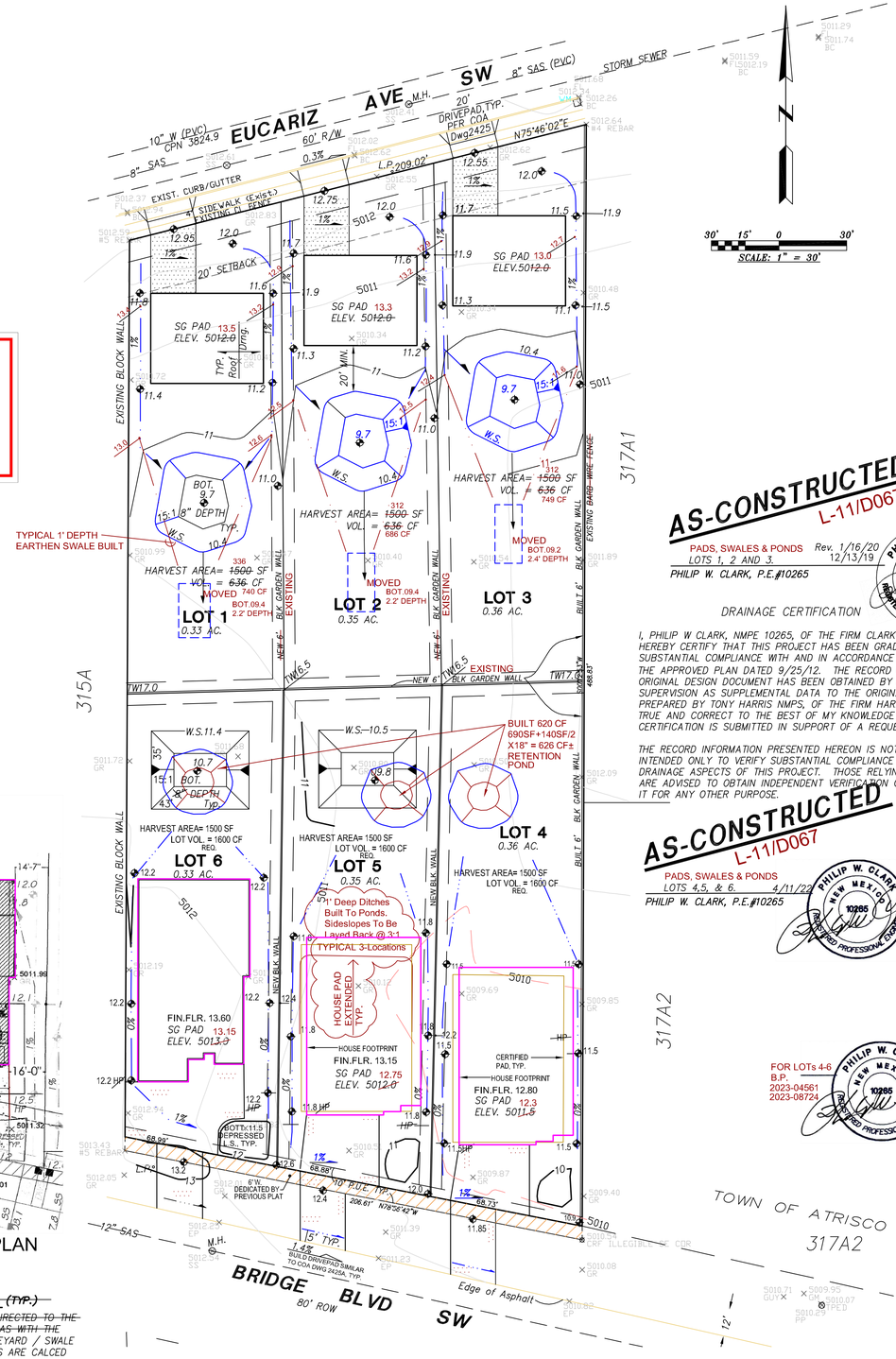
PART 6-5(D) RESIDENTIAL SUBDIVISION DEVELOPMENT AND ADDITIONS

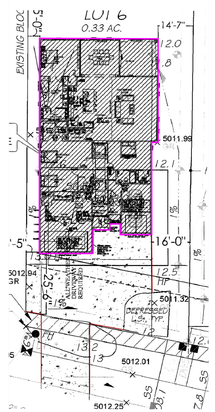
FOR LOTS LESS THAN 1 ACRE, WATER HARVESTING ON THE LOT IS REQUIRED. THE WATER HARVESTING VOLUME GOAL IS TO CAPTURE ½ INCH OF RUNOFF FROM IMPERVIOUS AREAS ON THE SITE. THEREFORE: 4400 SF X 0.5/12 = 183 CF PER LOT

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 * (P10DAYS - P360) / 12 in/ft = 1125 + 0.10(1.31)/12 x 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./2 X 0.7' (43560) = 3300 CF
THIS IS EXCLUDING THE 600 CF HARVEST AREAS PREVIOUSLY BUILT (SEE 4.11.22 CERTIFIED)





LOT 6 PLOT PLAN

REARYARD HARVEST CALC. (TYP.)

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

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

CHECK 1st 1/2" RETAINED
2.09 AC x 43560 SF x 0.04' = 3641 CF
PER LOT 3641/6 ~ 607 CF, OK

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 MINOR EARTHWORK (BUT NO MAJOR DISTURBANCE) OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE THAT WOULD ADVERSELY AFFECT THE DRAINAGE CONCEPTS APPROVED OR DETERMINED.

PHILIP W. CLARK NMPE #10265

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

PHILIP W. CLARK NEW MEXICO 10265 REGISTERED PROFESSIONAL ENGINEER

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. 4/11/23
PHILIP W. CLARK, P.E.#10265

PHILIP W. CLARK NEW MEXICO 10265 REGISTERED PROFESSIONAL ENGINEER

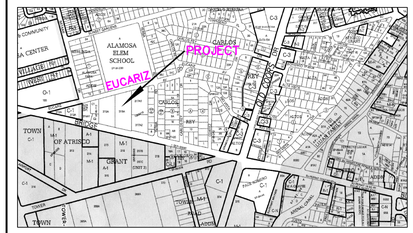
FOR LOTs 4-6 B.P. 2023-04561 2023-08724

PHILIP W. CLARK NEW MEXICO 10265 REGISTERED PROFESSIONAL ENGINEER

2/28/23 REV. 5/16/23

PHILIP W. CLARK NEW MEXICO 10265 REGISTERED PROFESSIONAL ENGINEER

9/25/12 REV. 4/28/23



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	22.0
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 PLATTING)

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
Tele: (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.

LOT 316A, UNIT 3, TOWN OF ATRISCO GRANT
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO
BRIDGE BLVD / EUACARIZ
LOPEZ WEST
Grading & Drainage Plan

DESIGNED BY: PWC DRAWN BY: CCE JOB #: LOPEZ_F
CHECKED BY: PWC DATE 7/2012 FILE #: G/D
1 OF 1

* ADDED SIDE TO BNK WALLS & 10-DAY STORM VOLUMES, LOTS 4, 5, 6 4/28/23 RECALC PER CURRENT DPM

HYDROLOGY L-11 / D067