



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: Mojave Ridge Subdivision **Building Permit #:** _____ **Hydrology File #:** E10D024
DRB#: 2020-003484 **EPC#:** _____ **Work Order#:** _____
Legal Description: LOTS 2 AND 3 BLOCK 12, VOLCANO CLIFFS SUBDV.
City Address: 6341 MOJAVE RD NW

Applicant: THE Group **Contact:** Ron Hensley
Address: 300 Branding Iron Rd. SE, Rio Rancho, NM 87124
Phone#: 505-410-1622 **Fax#:** _____ **E-mail:** ron@thegroup.cc
Owner: Clearbrook **Contact:** Scott Henry
Address: 8801 Jefferson NE Bldg. A, ALBUQUERQUE, NM 87113
Phone#: 505-858-1800 **Fax#:** _____ **E-mail:** scotth@stillbrooke.com

TYPE OF SUBMITTAL: ☒ PLAT (18# OF LOTS) ☐ RESIDENCE ☐ DRB SITE ☐ ADMIN SITE

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

DEPARTMENT: ☐ TRAFFIC/ TRANSPORTATION ☒ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

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

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

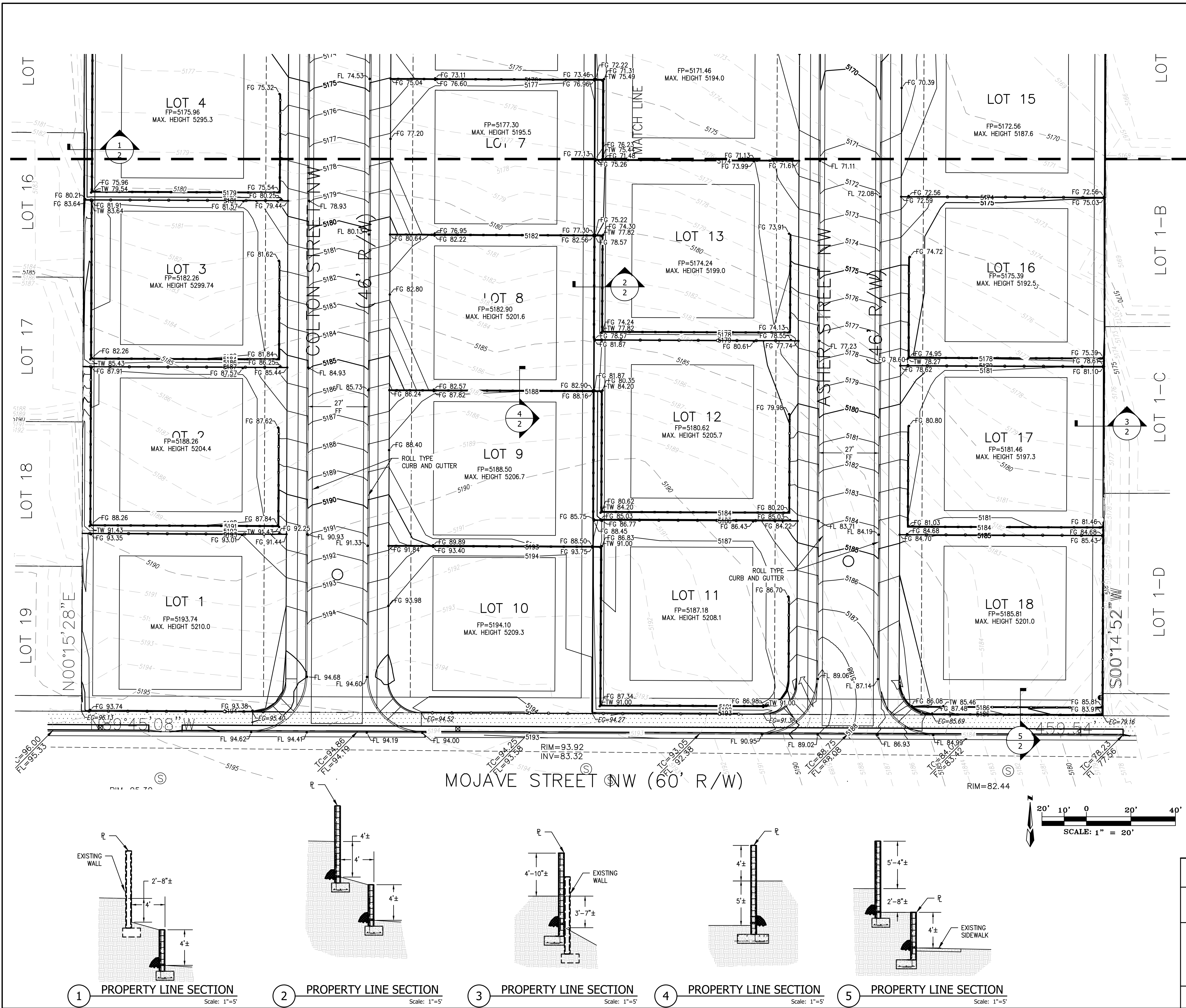
- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☒ PRELIMINARY PLAT APPROVAL
- ☐ SITE PLAN FOR SUB'D APPROVAL
- ☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ GRADING PERMIT APPROVAL
- ☐ SO-19 APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ GRADING/ PAD CERTIFICATION
- ☐ WORK ORDER APPROVAL
- ☐ CLOMR/LOMR
- ☐ FLOODPLAIN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: 11/14/22 **By:** THE Group / Ron Hensley

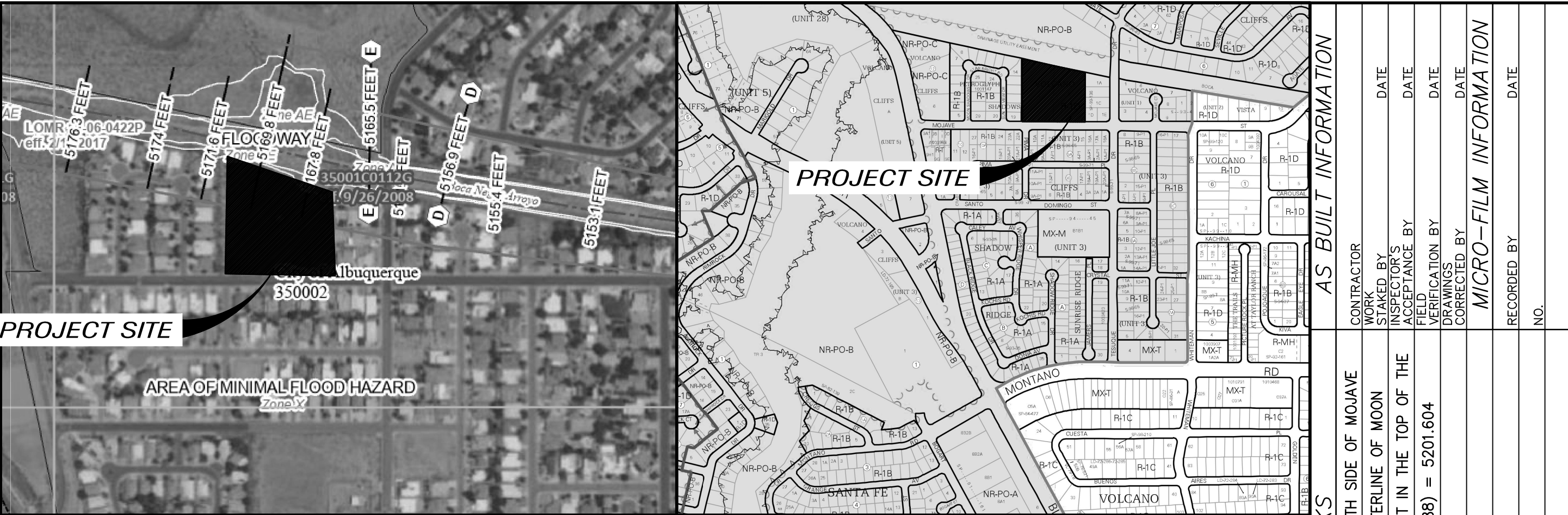
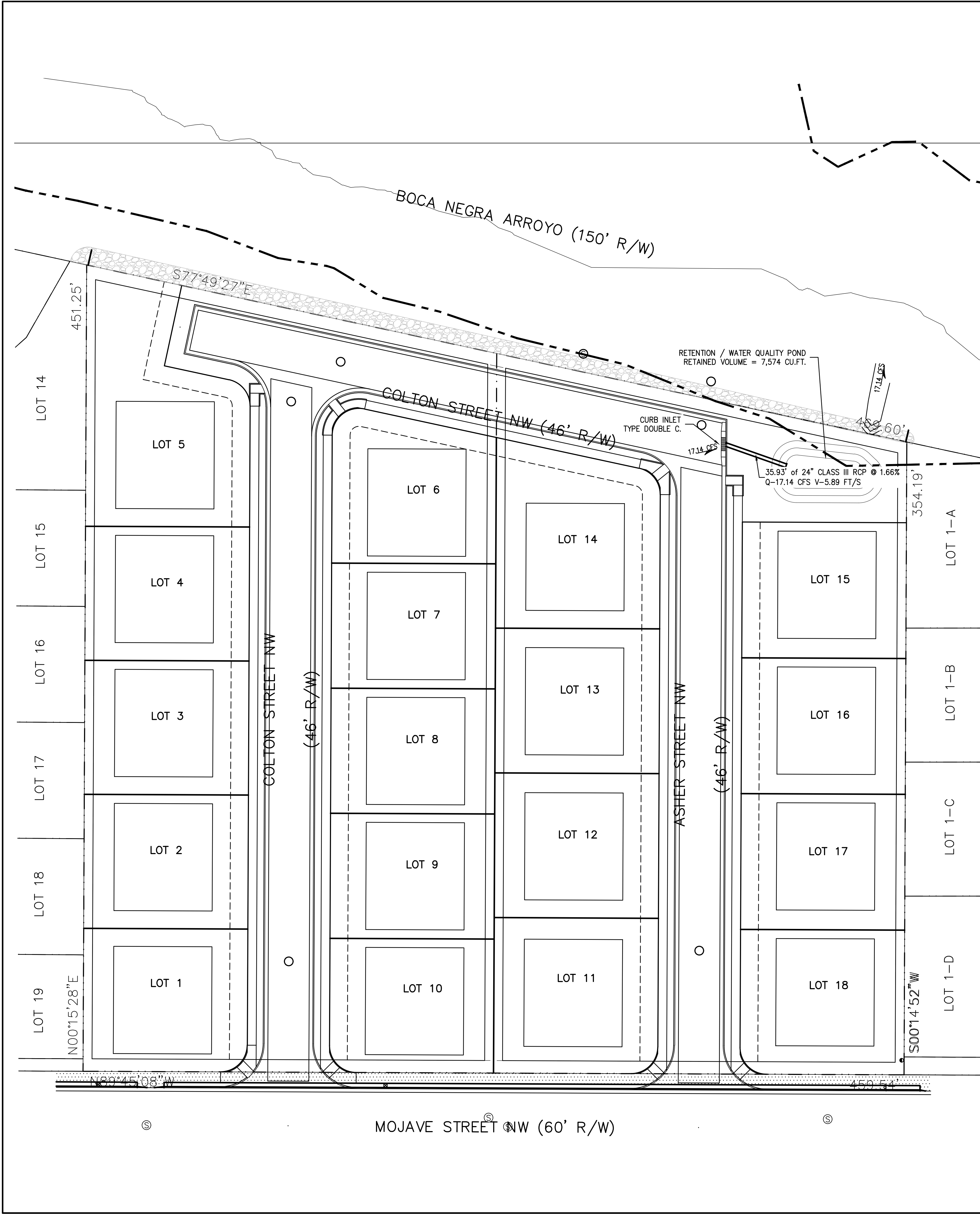
COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



ENGINEER'S SEAL				SURVEY INFORMATION				BENCH MARKS				AS BUILT INFORMATION			
				FIELD NOTES				*ACS BM 27-10" LOCATED ON THE NORTH SIDE OF MOJAVE STREET NW, 12" FEET WEST OF THE CENTERLINE OF MOON SHADOWS DRIVE NW. THE STATION IS SET IN THE TOP OF THE CONCRETE CURB. ELEVATION (NAVD 1988) = 5201.604				CONTRACTOR DATE INSPECTOR'S DATE FIELD DATE VERIFICATION BY DATE CORRECTED BY DATE MICRO-FILM INFORMATION NO. DATE			
REVISIONS				NO.				DATE				BY			
DESIGN															
REH															
REH															
REH															
DATE 4-12-16															
DATE 4-12-16															
DATE 4-12-16															
CITY PROJECT No.				ZONE MAP NO.				SHEET				OF			
				E-10				2				3			



FIRM MAP NO. 35001C0112G VICINITY MAP E-10-Z

LOCATION & DESCRIPTION
THE PROPOSED SITE IS 0.32 ACRES LOCATED ON THE NORTH SIDE OF MOJAVE ROAD AS SEEN ON THE VICINITY MAP.

FLOODPLAIN STATUS
THE CONSTRUCTION OF THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0112G, DATED SEPTEMBER 26, 2008 IS NOT WITHIN FLOODPLAIN ZONE X WITH MINIMAL FLOOD HAZARD. AN EXHIBIT WITH THE SITE SHOWN ON THE FIRM PANEL IS INCLUDED ON THIS SHEET. THE SITE IS NOT WITHIN A FLOOD ZONE.

METHODOLOGY
EQUATIONS:
WEIGHTED E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)
FLOW = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad
WHERE FOR 100-YEAR, 6-HOUR STORM(ZONE1)
Ea= 0.44 Qa= 1.29
Eb= 0.67 Qb= 2.03
Ec= 0.99 Qc= 2.87
Ed= 1.97 Qd= 4.37

BASIN	AREA (sf)	TREATMENT A % sf	TREATMENT B % sf	TREATMENT C % sf	TREATMENT D % sf	WEIGHTED E	VOLUME (cu.-ft.)	FLOW (cfs)
EXISTING	185051	100%	185051	0%	0	0%	0	8.88
PROPOSED	185051	0%	0	0%	54%	100738	46%	84313

PRECIPITATION
THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 1 AS IDENTIFIED IN THE DEVELOPMENT PROCESS MANUAL, SECTION 6.

EXISTING DRAINAGE
THE SITE IS WITHIN THE NORTHWEST MESA AREA OF ALBUQUERQUE. THE SITE IS TO MAINTAIN HISTORIC DRAINAGE PATTERNS TO THE BOCA NEGRA ARROYO. THERE ARE NO FLOWS THAT ENTER THE SITE. THE HISTORIC DRAINAGE IS TO THE NE CORNER.

DEVELOPED CONDITION
THIS SITE WILL BE DEVELOPED AS A 18 SINGLE FAMILY HOMES WITH DEVELOPED RUNOFF ROUTED TO A RETENTION / OVERFLOW POND. THE CONDITIONS OF THE BOCA NEGRA ARROYO PER FEMA LOMR 16-06-0422P-350002 EFFECTIVE FEBRUARY 16, 2016.

BOCA NEGRA CONDITIONS
PER FEMA LOMR 16-06-0422P-350002

SECTION E - WSEL=5165.50 Q=1151 cfs
A = 147 sq.ft.
V = 7.8 fps
SECTION E+200' - WSEL=5167.8 Q=1151 cfs
A = 169 sq.ft.
V = Q/A = 6.5 fps
SECTION E+400' - WSEL 5169.8 Q=1151 cfs
A = 137 sq.ft.
V = Q/A = 8.4 fps
SECTION E+600' - WSEL 5171.6 Q=1151 cfs
A = 146 sq.ft.
V = Q/A = 7.9 fps

SCOUR WALL CALCULATION
PER AMAFCA SEDIMENT AND EROSION DESIGN GUIDE

SCOUR DEPTH
 $y_s = y * (0.73 + 0.14 * n * Fr^2) \quad Fr = v/(gy)^{1/2}$
SECTION 1
v = 7.9 fps
y = 3.5 ft.
 $y_s = 3.5 * (0.73 + 0.14 * n * 0.53^2) = 3.38 \text{ ft.}$
SECTION 2
v = 8.4 fps
y = 2.1 ft.
 $y_s = 2.1 * (0.73 + 0.14 * n * 0.55^2) = 2.50 \text{ ft.}$
SECTION 3
v = 7.8 fps
y = 2.1 ft.
 $y_s = 2.1 * (0.73 + 0.14 * n * 0.75^2) = 2.39 \text{ ft.}$

STREET CAPACITY
 $Q = (1.49/n) * A * R^{2/3} * S^{1/2}$

Slope (ft/ft)	Depth (ft)	Q (cfs)	Area (sqft)	Veloc (ft/s)	Wp (ft)	Yc (ft)	TopWidth (ft)	Energy (ft)
0.075	0.28	8.5	2.01	4.24	19.59	0.37	19.17	0.58
0.02	0.34	8.5	3.33	2.65	25.71	0.37	25.17	0.44
0.005	0.5	17.14	8.24	2.08	33.05	0.46	32.25	0.57

INLET CAPACITY
PER DPM FIGURE 6.9.11
CAPACITY - DEPTH=0.75 ft. = 11.5 cfs/grate = 2 * 11.5 23.0 cfs
Q=17.14/2 cfs PER GRATE = 8.57 cfs/grate - DEPTH=0.65 ft.

PIPE FLOW
 $A = Q/V = 17.14 \text{ cfs} / 5.89 \text{ fps} = 2.91 \text{ sq.ft.}$
 $PIPE \text{ AREA} = n * r^2 = n * 1^2 = 3.14 \text{ sq.ft.}$
DEPTH = 1.74 ft.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

MOJAVE SUBDIVISION
GRADING AND DRAINAGE
DRAINAGE PLAN

DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL

CITY PROJECT No.
ZONE MAP NO.
D-21

LAST DESIGN UPDATE
Mo./DAY/YR.
Mo./DAY/YR.

REMARKS
REVISIONS
DESIGN
DATE 4-12-16
DATE 4-12-16
DATE 4-12-16

DESIGNED BY
DRAWN BY
CHECKED BY
REH
REH
REH

NO. OF SHEETS
3 OF 3