CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

April 25, 2022

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

RE: Gillani on Modesto
8800 Modesto Ave., NE (Lot 10, Block 1, Tract 3, NAA)
Grading and Drainage Plan
Engineer's Stamp Date: 03/16/2022
Hydrology File: C20D068

Dear Mr. Clark:

Based upon the information provided in your submittal received 03/28/2022, the Grading & Drainage Plan **is not** approved for Grading Permit. The following comments need to be addressed for approval of the above referenced project:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

General Notes

1. Please clearly show he adjacent downstream property's location where drainage will enter into their site and what is in place to protect against erosion (how will this tie to that as well).
2. Please clearly note what existing flow goes to that site and ensure it does not exceed that existing flow so that it does not overwhelm existing conditions for the adjacent property owner.
3. Is there a cross lot drainage easement to drain into the adjacent lot?
4. The site will need to go through DRB for platting to dedicate right-of-way and an infrastructure list generated with appropriate infrastructure requirements for the site that will include the entire frontage of the property to include curb, gutter, and sidewalk.
5. Please provide a section of the "trap ditch" that you called out to evaluate flow going through it.
6. Create a basin delineation to clearly identify flows and where they are going (Pre and post development).
7. Please only show proposed infrastructure for this permit. Future plans will still need to meet this G&D purpose or please propose it now and construct accordingly. This will/may cause confusion. When looking at it, the graphic clearly shows a proposed wall. With elevations that will require as-built info. Please simply show a faded line stating future wall and clearly note it is potentially for future construction.

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As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

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

Sincerely,

David G. Gutierrez, P.E.
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Gillani on Modesto Building Permit #: _____ Hydrology File #: C20/D0068

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

Legal Description: Lot 10, Block 1, Tr 3, Unit 3, N.A.A.

City Address: Modesto Ave, NE

Applicant: Clark Consulting Engineers Contact: Phil

Address: 19 Ryan Rd, Edgewood, NM 87015

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

Other Contact: _____ 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

__X__ GRADING PLAN

__X__ 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:

___ 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

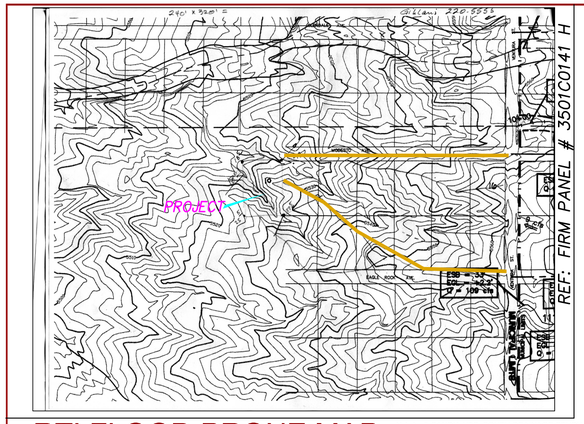
___ FLOODPLAIN DEVELOPMENT PERMIT

___ OTHER (SPECIFY) _____

DATE SUBMITTED: 3/28/22 By: PHILIP W. CLARK

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



RTI FLOOD PRONE MAP

N.A.A. & SANDIA HTS. SOUTH DRAINAGE STUDY, 1999

GRADING & DRAINAGE PLAN

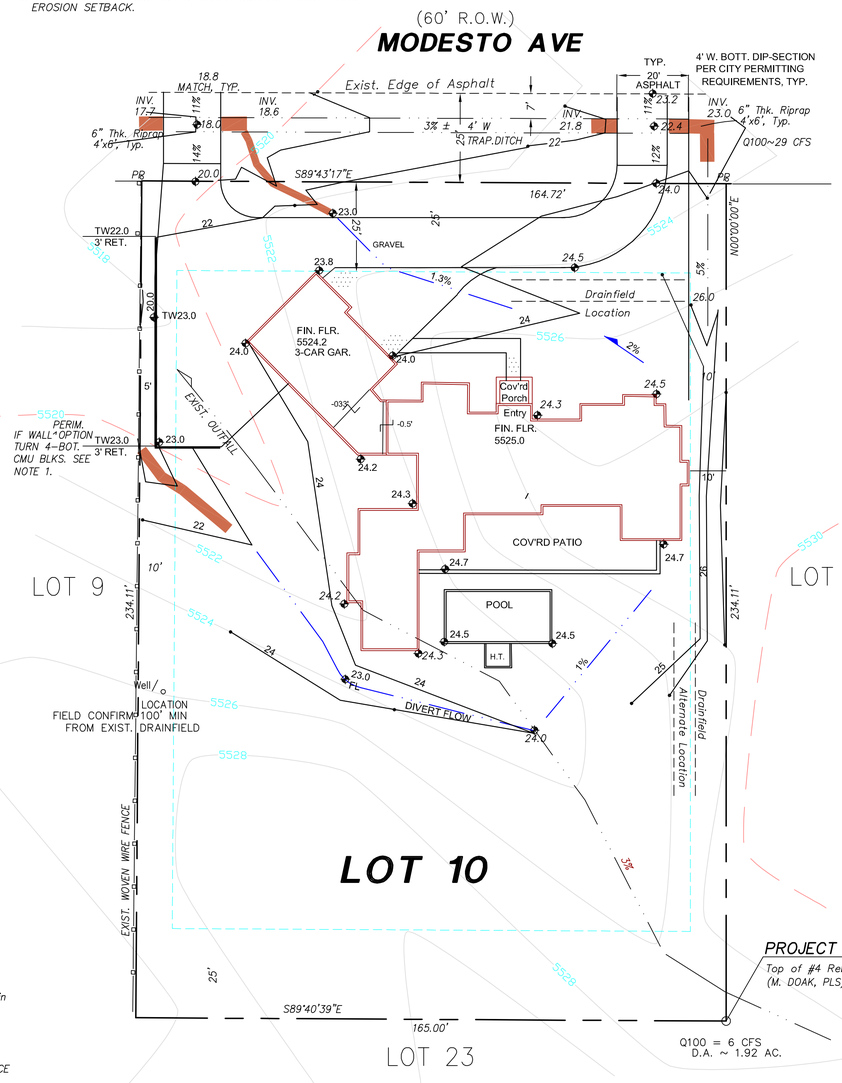
THE RESIDENTIAL HOME PROJECT IS LOCATED IN UNIT 3 OF NORTH ALBUQUERQUE ACRES APPROXIMATELY 9 MILES NE FROM THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERN-ALILLO COUNTY FLOOD HAZARD ORDINANCE, AND CITY STORM DRAINAGE ORD. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

1. EXISITNG CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS & DRAINAGE EASEMENTS (IF KNOWN)
2. PROPOSED IMPROVEMENTS: RESIDENCE, WELL AND SEPTIC SYSTEM, GRAVEL/CONCRETE DRIVEWAY, FLATWORK AND NEW GRADE ELEVATIONS
3. CONTINUITY BETWEEN EXSTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS.
5. UPSTREAM ANALYSIS AS TO WATER SURFACE MODEL AND EROSION SETBACK.

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 AND EAST BY DEVELOPED PROPERTY. PROPERTY ADJACENT ON THE SOUTH IS UNDEVELOPED. MODESTO AVE ON THE NORTH IS AN IMPROVED 26' WIDE CITY MAINTAINED ASPHALT ROADWAY. THE SITE GENERALLY SLOPES FROM EAST TO WEST AT 4%+. A 2-ACRE MINOR DRAINAGE BASIN ENTERS ON THE SOUTHEAST AND CONVEYS WEST THRU THE SITE. ALL OFF-SITE FLOWS ARE QUANTIFIED ON THE PLAN/CALCULATIONS.

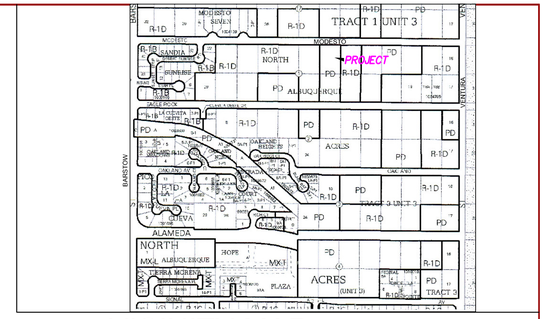
THE SITE IS NOT ENCUMBERED BY A DESIGNATED FEMA FLOODPLAIN.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE THE STREET IS IMPROVED ONLY MINIMAL GRADING IS PROPOSED WITHIN THE PUBLIC R.O.W. FREE DISCHARGE OF DEVELOPED FLOWS IS ACCEPTABLE SINCE THE PROJECT IS WITHIN THE ALLOWABLE RUNOFF ESTABLISHED FOR NORTH ALBUQUERQUE ACRES...see RTI STUDY.



Scale: 1" = 20'

2' CONTOURS



VICINITY MAP

ZONE C-20

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) JUNE 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 = 2.43 Inches, Zone 3 Time of Concentration, TC = 12 Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [ ] = 10 YEAR VALUES

EXISTING CONDITIONS

LOT AREA = 0.88 ACRES, WHERE EXCESS PRECIP. 'A' =0.67 In. [0.18]
PEAK DISCHARGE, Q100 = 1.4 CFS [0.4], WHERE UNIT PEAK DISCHARGE 'A' = 1.8 CFS/AC. [0.5]
THEREFORE: VOLUME 100 = 2140 CF [575]

DEVELOPED CONDITIONS (ALLOWABLE)

FOR STUDY AREA (USE 20% FOR TREATMENT B & C Each, 43% FOR A, AND 17% FOR D)
THEREFORE: $E_{Weighted}$ = 1.12 In.[0.53] &
Q100 = 2.36 CFS VOLUME 100 = 3578 CF

DEVELOPED CONDITIONS -

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE

	AREA	LAND TREATM'T	Q Peak	E
UNDEVELOPED	0.35 Ac.(41%)	A	1.84[0.51]	0.67[0.18]
LANDSCAPING	0.20 Ac.(22%)	B	2.49[1.07]	0.86[0.34]
GRAVEL & COMPACTED SOIL	0.19 Ac.(21%)	C	3.17[1.69]	1.09[0.52]
ROOF - PAVEMENT	0.14 Ac.(16%)	D	4.49[2.81]	2.58[1.64]
	0.88 Ac.			

THEREFORE: $E_{Weighted}$ = 1.10 In.[0.xx] &
Q100 = 2.37 CFS VOLUME 100 = 3514 CF

QUANTIFY UPSTREAM RUNOFF IMPACTING THE PROPERTY

Using Similar Unit Discharge Obtained Above
2.9 CFS / Ac.
See Plan @ EAST BDRY & RTI STUDY - 500' x 150'

CHECK/SIZE OPENINGS USING ORIFACE EQ. - IF WALL

$Q = CA(2gH)^{1/2}$ g = 32.2 FT PER S^2
=0.7(0.35)8 H = 1' (ASSUME)
= 2 CFS / BLK C = 0.7
1-5" X 10"/144 = 0.35 SF (1-STD CMU BLK W/ 2 OPENINGS)

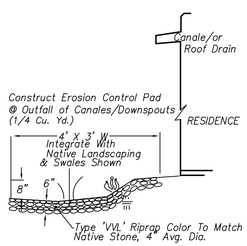
BAR DITCH FLOW
CHANNEL CALCULATOR

GIVEN INPUT DATA:

SHAPE	TRAPEZOIDAL
SOLVING FOR	FLOWRATE
SLOPE	0.0300 FT/FT
MANNING'S N	0.0400
DEPTH	0.8000 FT
HEIGHT	1.0000 FT
BOTTOM WIDTH	4.0000 FT
LEFT SLOPE	0.1250 FT/FT (V/H)
RIGHT SLOPE	0.1100 FT/FT (V/H)

COMPUTED RESULTS:

FLOWRATE	34.5734 CFS
VELOCITY	3.9881 FPS
FULL FLOWRATE	56.8849 CFS
FLOW AREA	8.6691 FT2
FLOW PERIMETER	17.7664 FT
HYDRAULIC RADIUS	0.4879 FT
TOP WIDTH	17.6727 FT
AREA	12.5455 FT2
PERIMETER	21.2080 FT
PERCENT FULL	80.0000 %



EROSION CONTROL PAD

NO SCALE

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 DETERMINED.

PHILIP W. CLARK NMPE #10265

3/16/22

NOTES

1. PERIMETER FENCING AROUND THE PROPERTY IS NOT PROPOSED. CONSTRUCTION OF FUTURE FENCING SHALL PERMIT THE PASSING OF DRAINAGE TO AND FROM HISTORIC OUTFALL AND ENTRANCE LOCATIONS. OWNER SHALL MAINTAIN FENCING AND KEEP FREE OF ALL DEBRIS, WEEDS, AND/OR OBSTRUCTIONS.
2. THIS PLAN SHOWS A FIXED PERCENTAGE OF LAND TREATMENT A REMAINING IN AN UNDISTURBED CONDITION. IF A GREATER AREA IS DISTURBED A REVISED PLAN MAY BE REQUIRED PER COUNTY PUBLIC WORKS DEPARTMENT (UNLESS THE COMPOSITE TREATMENT IS < ALLOWABLE).
3. CONTACT THE CITY OF ALBUQUERQUE PLANNING FOR ACCESS PERMIT @ PLAZA DEL SOL . 924-3991
4. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
5. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1.
6. RIPRAP STONE SHOWN ON THIS PLAN IS SMOOTH RIVER-RUN COBBLES, TYPE VVL IN COMPLIANCE WITH AMAFCA GUIDELINES, 4" AVERAGE DIA. NATIVE STONE, AND BURIED TO 6" DEPTH. SEE EROSION CONTROL PAD, THIS SHEET. SEE ROOF PLAN FOR CANALE LOCATIONS.

LEGEND

Exist. Spot Elevation	+24.0
Exist. Contour	10
New Spot Elevation	24.0
New Contour	12
Exist. Edge of Road	
New Swale	
Drainage Direction	
Edge of Gravel	EG
Edge of Asphalt	EA
Existing Power Pole	PP
New Concrete	
New Structure	
NEW RIPRAP, 2-8" WELL GRADED TYPE VVL 6' DEPTH	

PROJECT DATA

LEGAL DESCRIPTION

Lot 10, Block 1, Tract 3, Unit 3 North Albuq. Acres
Bernalillo County, New Mexico

PROJECT BENCHMARK

Top of Rebar and Cap at Lot 10 SouthEast Corner
MSL Elevation = 5526.88 (NAVD88)

TOPOGRAPHIC SURVEY

Compiled From GIS, and Field SUPPLEMENTED By /Confirmed by Clark Consulting Engineers.

REF: APPROVED PLAN, HYDRO. C20/D068

Clark Consulting Engineers
Edgewood, New Mexico 87015
Tele: (505) 281-2444 Cell: (505) 264-6042

DATE	REVISION
3/15/22	REVISED FOOTPRINT (F.PLAN)
11.1.13	ADDR. COA

LOT 10, BLOCK 1, TRACT 3, UNIT 3
NORTH ALBUQUERQUE ACRES
A TAJDIN GILLANI HOME

Grading & Drainage Plan

DESIGNED BY: PWC	DRAWN BY: CCE	JOB #: Gillani_T	1 OF 1
CHECKED BY: PWC	DATE: JUNE 2013/ MAR22	FILE #: G/D2	