

CITY OF ALBUQUERQUE

Planning Department

David Campbell, Director



Mayor Timothy M. Keller

July 20, 2018

Christopher Perea, P.E.
Wilson & CO
4401 Masthead St NE Suite 150
Albuquerque, New Mexico 87109

**RE: Lot 29 Block 8 Unit 5 Volcano Cliffs SAD 227
6212 Marigold NW
Grading and Drainage Plan
Engineers Stamp Date; 7/9/18 (E10D047)
Pad Certification Date; 7/19/18**

Dear Mr. Perea,

PO Box 1293

Based upon the information provided in your submittal received 7/19/18, this plan is approved for Building Permit.

Albuquerque

Please inform the builder/owner to attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

NM 87103

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan dated 7/9/18.

www.cabq.gov

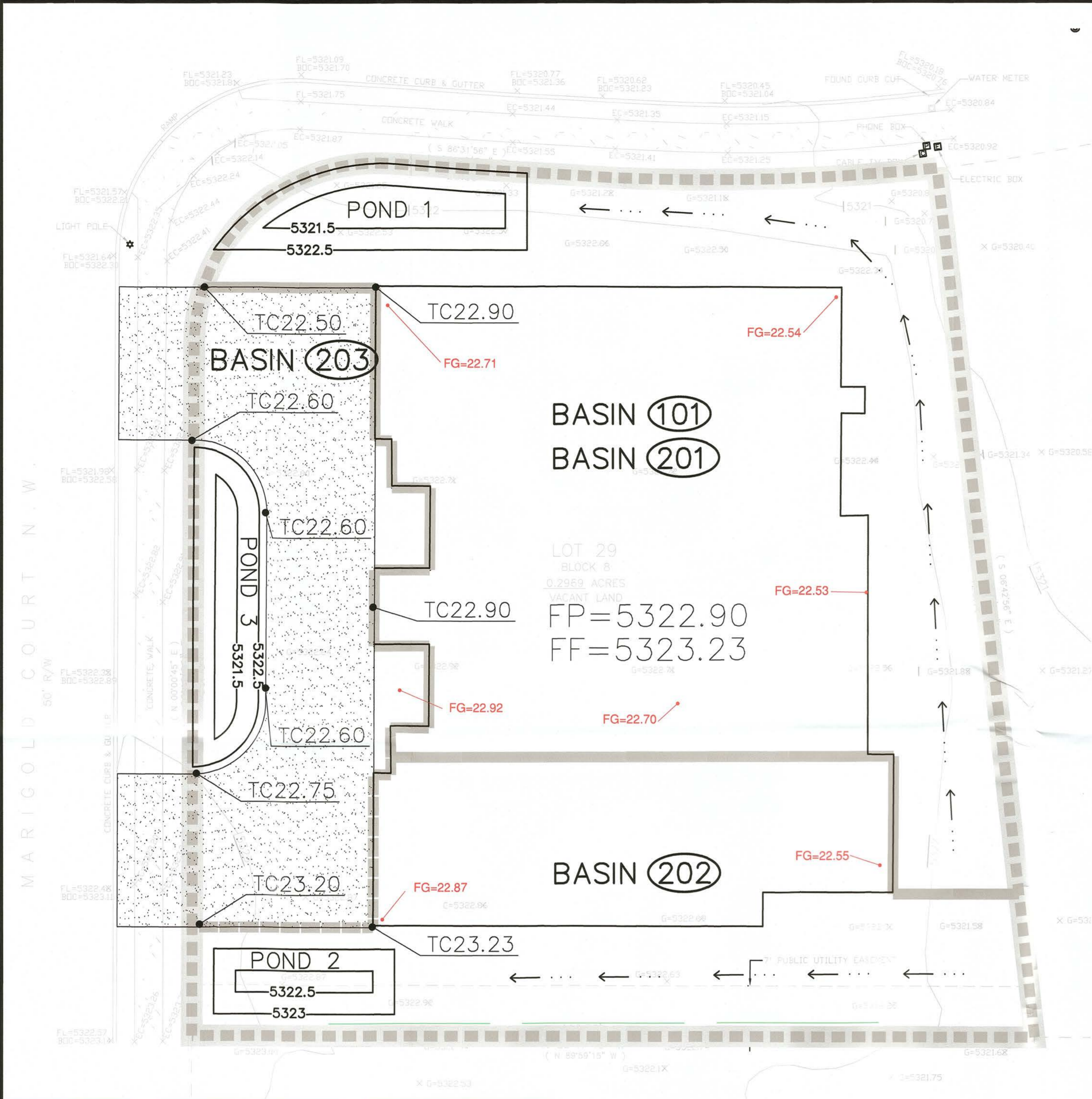
Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist of this plan will be required.

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Hydrology
Planning Department

RR/JDH
C: File, E10D047



Drainage Report

Introduction
 Lot 29 shown hereon is a residential lot located on 6212 Marigold Court Albuquerque, NM. The drainage report has been prepared in accordance with the latest revision to Volume 2 Section 22.2 of the City of Albuquerque Process Manual.

Existing Conditions
 The site is an undeveloped 0.2969 acre lot. The site is bounded by Marigold Court to the west, Marigold Drive to the North, and undeveloped residential lots to the south and east. The lot was graded when the lot was subdivided and has minimal vegetation. The runoff on this lot runs from the west to east side of the lot and continues to flow to the undeveloped areas to the west. The site is not located in a flood plain (see firm map #35001C0113G Revised September 26, 2008). No offsite runoff contributes to the lot. Based on NRCS soil survey data, the Madurez-Wink association gently sloping soil at the site are deep and well-drained, which will increase infiltration and reduce ponding time.

Proposed Conditions
 Improvements to Lot 29 includes a new residence being built within a 5070 square foot building envelope. The building envelope, driveway, and sidewalk have a total land treatment D area of 6860 square feet. The majority of onsite runoff will now flow from east to west. The lot will have a series of small retention ponds as well as a new CMU block wall which will prevent flow from discharging to the adjacent properties without going through a destination pond. Pond 1 on the north side of the house will capture a majority of the runoff from the house and will collect the flows from the north and east of the lot. Pond 2 will be placed on the south to collect the flows on the southern portion of the house and the south portion of the lot. Ponds 1 & 2 will have small spillways that will discharge to the street in large storm events. The runoff leaving these ponds will not exceed the existing discharge leaving the site. Pond 3 is a retention pond and will be placed on the west side between the driveway and sidewalk on Marigold Ct. and will capture the runoff from the driveways and entrance of the house. In accordance with the MS4 permitting the ponds will have the combined capacity to retain the first 0.44" of rainfall.

Calculations
 The Calculations shown below represent the flows for a 100-year 6-hour design event. The hydrology is per the "Section 22.2 of the Development Process Manual for the City of Albuquerque, New Mexico, latest revision."
 Basin Data: COA Zone: 1
 Precip. in: 2.2

Existing Conditions

Basin	Total Area (Ac)	% A	% B	% C	% D	Peak Discharge, Q	Excess Precip. (Weighted)	Volume (6hr, acre-ft)	Volume (24hr, acre-ft)	Volume (10day, acre-ft)
101	0.310	0	0	100	0.31	0	0.99	0.0256	0.0256	0.0256

Proposed Conditions

Basin	Total Area (Ac)	% A	% B	% C	% D	Peak Discharge, Q	Excess Precip. (Weighted)	Volume (6hr, acre-ft)	Volume (24hr, acre-ft)	Volume (10day, acre-ft)
201	0.172	0	0.00	45	0.08	65	0.09	0.6	1.53	0.0219
202	0.080	0	0.00	25	0.02	75	0.06	0.3	1.73	0.0115
203	0.045	0	0.00	35	0.02	65	0.03	0.2	1.63	0.0061

POND 1

Elevation (ft)	Depth (ft)	Area (sq ft)	Area (ac)	ΔVolume (ac-ft)	Total Volume (ac-ft)
5321.5	0	42	0.001	0	0.000
5322.5	1	255	0.006	0.003	0.003

POND 2

Elevation (ft)	Depth (ft)	Area (sq ft)	Area (ac)	ΔVolume (ac-ft)	Total Volume (ac-ft)
5322.5	0	50	0.001	0	0.000
5323	0.5	247	0.006	0.002	0.002

POND 3

Elevation (ft)	Depth (ft)	Area (sq ft)	Area (ac)	ΔVolume (ac-ft)	Total Volume (ac-ft)
5321.5	0	142	0.003	0	0.000
5322.5	1	435	0.010	0.007	0.007

DRAINAGE CERTIFICATION
 I, JAMES E. LOPEZ, NMPE 24897, OF THE FIRM WILSON & COMPANY, 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 7/19/18. 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 ANTHONY I. HARRIS, NMPS 11463, 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 PAD CERTIFICATION.

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.

James E. Lopez, P.E. NM 24897
 Date: 7/19/18



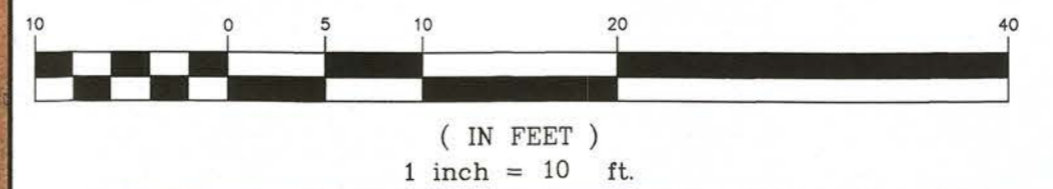
BENCH MARK
 LOT 6-A, BLOCK 12
 ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION "3-E10" HAVING AN ELEVATION OF 5318.88', NAVD 1988

LEGAL DESCRIPTION
 LOT NUMBERED TWENTY NINE (29), IN BLOCK NUMBERED EIGHT (8), OF VOLCANO CLIFFS UNIT 5, A SUBDIVISION OF A TRACT OF LAND SITUATE IN SECTION 27, TOWNSHIP 11 NORTH, RANGE 2 EAST, N.M.P.M., BERNALILLO COUNTY, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON NOVEMBER 1, 1967, IN VOLUME D3, FOLIO 175.

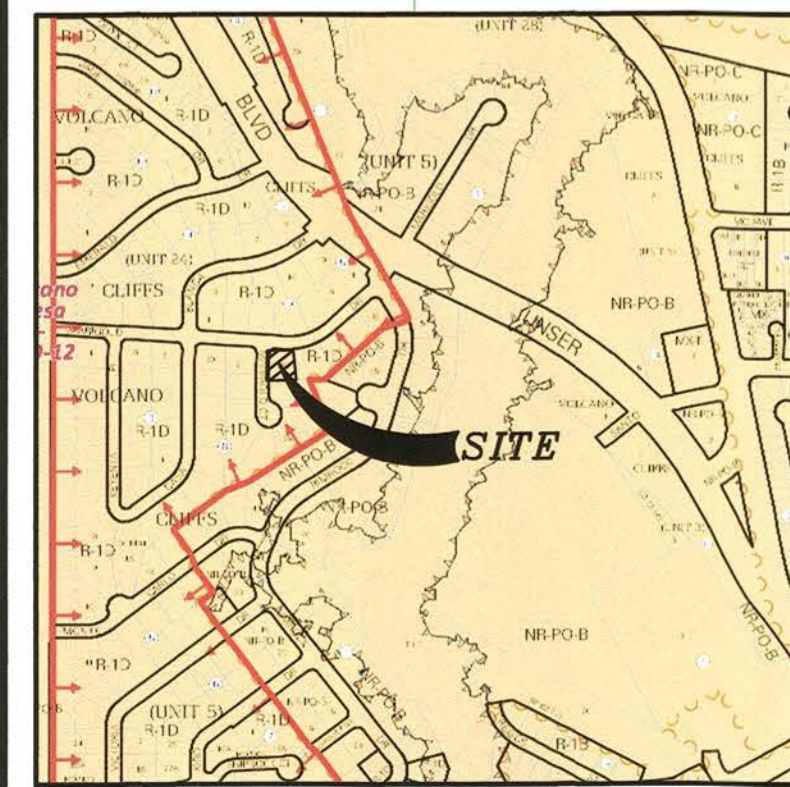
LEGEND

- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING PROPERTY LINE
- FINISHED FLOOR
- FINISHED PAD
- TOP OF SIDEWALK
- EXISTING BASIN
- PROPOSED BASIN
- DIRECTION OF FLOW
- PROPOSED CMU BLOCK WALL

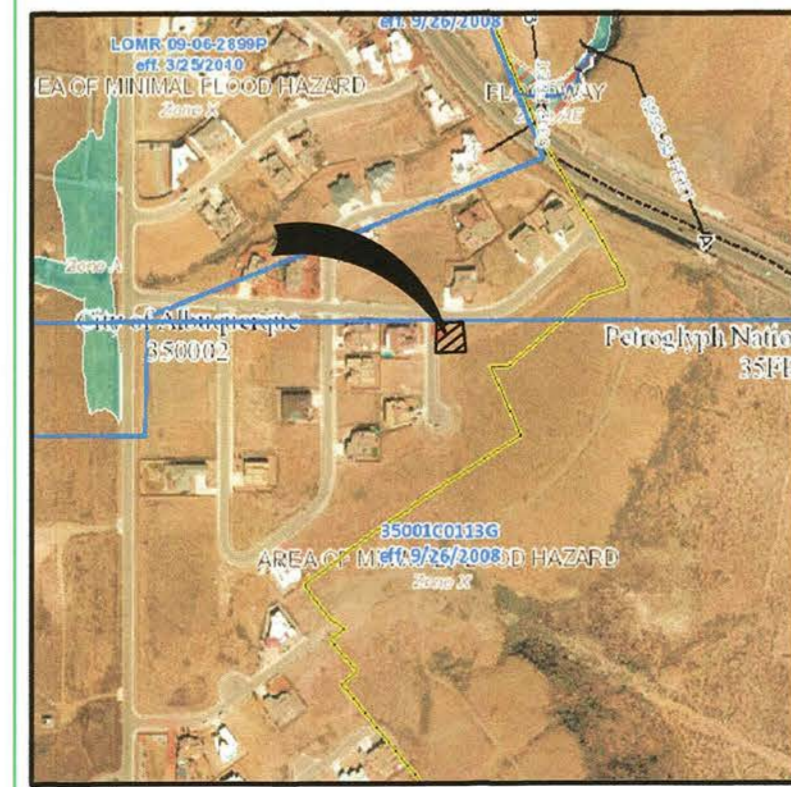
GRAPHIC SCALE



- NOTES:**
- GRADING ACTIVITIES ON ADJACENT PROPERTIES OR RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION FROM THE OWNER IS NOT PERMITTED.
 - UNPROTECTED SLOPES SHALL BE NO STEEPER THAN 4H:1V PER CORR CODE. IF THERE IS SUFFICIENT SLOPE PROTECTION (I.E. PLANTINGS, ROCK COVER, SHOTCRETE/CONCRETE) SLOPES MAY BE NO STEEPER THAN 3H:1V.
 - A SEPARATE WALL PERMIT MUST BE OBTAINED FROM CORR BUILDING DEPARTMENT.
 - POND SLOPES SHALL BE TREATED FOR SLOPE PROTECTION, USE XERISCAPE TREATMENT.



VICINITY MAP
 ZONE ATLAS MAP NO. E-10



FEMA FLOODPLAIN
 FIRM #35001C0113G



SOILS MAP
 NRCS WEB SOIL SURVEY, BERNALILLO COUNTY

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NO.	BY	NO.	DATE	NO.	DATE
WORK STAKED BY	DATE	NO.	BY	NO.	DATE	NO.	DATE
INSPECTOR'S FIELD CHECKED BY	DATE	NO.	BY	NO.	DATE	NO.	DATE
FIELD VERIFICATION BY	DATE	NO.	BY	NO.	DATE	NO.	DATE
DRAWINGS CORRECTED BY	DATE	NO.	BY	NO.	DATE	NO.	DATE
MICRO-FILM INFORMATION	DATE	NO.	BY	NO.	DATE	NO.	DATE
RECORDED BY	DATE	NO.	BY	NO.	DATE	NO.	DATE

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DEVELOPMENT DIVISION

TITLE: **6212 MARIGOLD COURT NW GRADING & DRAINAGE PLAN**

Design Review Committee: _____ City Engineer Approval: _____

City Project No. _____ Zone Map No. **D10/E10** Sheet **1** Of **1**