CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director

Mayor Timothy M. Keller

April 12, 2021

Fred C. Arfman, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E
Albuquerque, NM 87108

RE: 2818 Campell Rd NW Subdivision
Master Drainage Plan
Engineer's Stamp Date: 03/31/21
Hydrology File: G12D038

Dear Mr. Arfman:

Based upon the information provided in your submittal received 03/31/2021, the Master Drainage Plan is approved for action by the DRB on Preliminary Plat/Final Plat.

A Grading & Drainage Plan will be required to be submitted to Hydrology for approval prior to the Building Permit for any of the lots. Also, if any grading of more than 500 cubic feet of earthwork is to be done on the Northern lot or for any work order, than a Grading & Drainage Plan will also be require an approval from Hydrology. The Grading & Drainage Plan must follow this approved Master Drainage Plan.

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 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
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 11/2018)

Project Title: 2818 Campbell Road NW Building Permit #: _____ Hydrology File #: _____

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

Legal Description: Lot 14, Alvarado Gardens Unit 2, Albuquerque, New Mexico

City Address: 2818 Campbell Road NW

Applicant: Isaacson & Arfman, Inc. Contact: Fred C. Arfman, Bryan J. Bobrick

Address: 128 Monroe Street NE - Albuquerque, NM 87108

Phone#: (505) 268-8828 Fax#: _____ E-mail: freda@iacivil.com, bryanb@iacivil.com

Owner: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL: X PLAT (3 # OF LOTS) ____ RESIDENCE ____ DRB SITE ____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes X No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION X HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
____ GRADING PLAN
X 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
X 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) _____

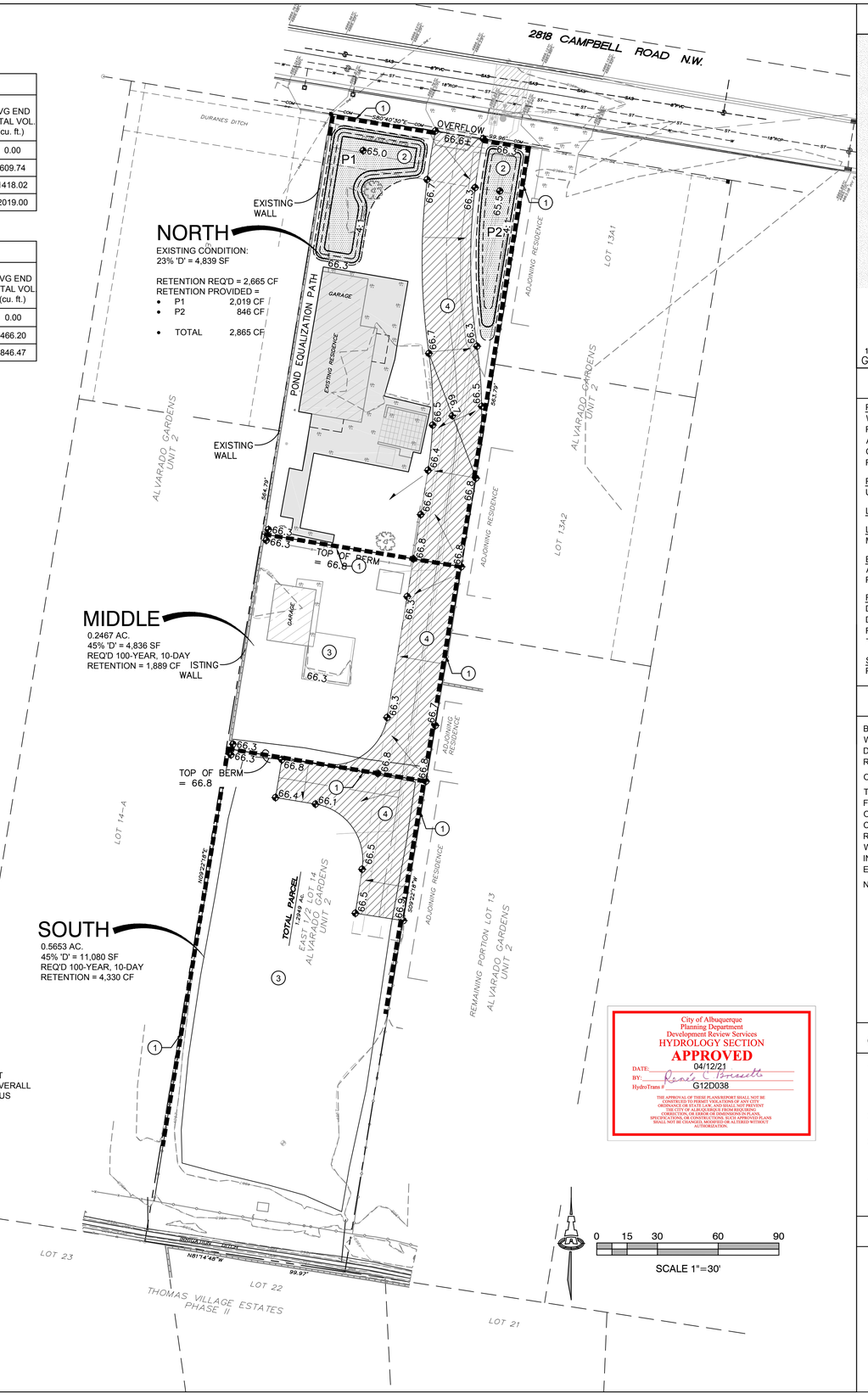
DATE SUBMITTED: Mar. 31, 2021 By: Fred C. Arfman

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

NORTH LOT POND P1				
ELEV	AREA (sq. ft.)	DEPTH (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)
4,965.00	1,026.82	N/A	N/A	0.00
4,965.50	1,412.16	0.50	609.74	609.74
4,966.00	1,820.94	0.50	808.28	1418.02
4,966.30	2,185.60	0.30	600.98	2019.00

NORTH LOT POND P2				
ELEV	AREA (sq. ft.)	DEPTH (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)
4,965.50	734.66	N/A	N/A	0.00
4,966.00	1,130.12	0.50	466.20	466.20
4,966.30	1,405.07	0.30	380.28	846.47



V10day = V360 + (AD * (P10day - P360)/12" per foot)

REQUIRED POND VOLUME SHOWN IN THE TABLE BELOW IS BASED ON A DEVELOPED PROPERTY WITH MAXIMUM IMPERVIOUS AREA (45% OF THE TOTAL LOT AREA). FINAL POND VOLUMES WILL BE BASED ON IMPERVIOUS AREA TO BE CONSTRUCTED.

	Area (SF)	Area (Ac)	45% 'D'	Req'd Retention Vol (CF)
North	21037	0.4829	9467	3699
Middle	10746	0.2467	4836	1889
South	24623	0.5653	11080	4330

BASIN NO. NORTH — DESCRIPTION: Add description here

Area of basin flows = 21037 SF = 0.48 Ac.

The following calculations are based on Treatment %'s as shown in table to the right

LAND TREATMENT: A = 0% B = 45% C = 10% D = 45%

Sub-basin Weighted Excess Precipitation: Weighted E = 1.51 in.

Sub-basin Volume of Runoff: V_{360} = 2650 CF

Sub-basin Peak Discharge Rate: Q_P = 1.6 cfs

Stormwater Quality Volume: 205 CF

BASIN NO. MIDDLE — DESCRIPTION

Area of basin flows = 10746 SF = 0.2 Ac.

The following calculations are based on Treatment %'s as shown in table to the right

LAND TREATMENT: A = 0% B = 45% C = 10% D = 45%

Sub-basin Weighted Excess Precipitation: Weighted E = 1.51 in.

Sub-basin Volume of Runoff: V_{360} = 1354 CF

Sub-basin Peak Discharge Rate: Q_P = 0.8 cfs

FIRST FLUSH VOL.: 105 CF

BASIN NO. SOUTH — DESCRIPTION

Area of basin flows = 24623 SF = 0.6 Ac.

The following calculations are based on Treatment %'s as shown in table to the right

LAND TREATMENT: A = 0% B = 45% C = 10% D = 45%

Sub-basin Weighted Excess Precipitation: Weighted E = 1.51 in.

Sub-basin Volume of Runoff: V_{360} = 3101 CF

Sub-basin Peak Discharge Rate: Q_P = 1.9 cfs

FIRST FLUSH VOL.: 240 CF

CALCULATIONS PROVIDED AT LEFT REPRESENT MAXIMUM STORMWATER GENERATED IF THE OVERALL PROPERTY IS DEVELOPED WITH 45% IMPERVIOUS AREA (LAND TREATMENT 'D').

BASIN NO. NORTH — DESCRIPTION: AS-CONSTRUCTED

Area of basin flows = 21037 SF = 0.5 Ac.

The following calculations are based on Treatment %'s as shown in table to the right

LAND TREATMENT: A = 0% B = 50% C = 27% D = 23%

Sub-basin Weighted Excess Precipitation: Weighted E = 1.21 in.

Sub-basin Volume of Runoff: V_{360} = 2128 CF

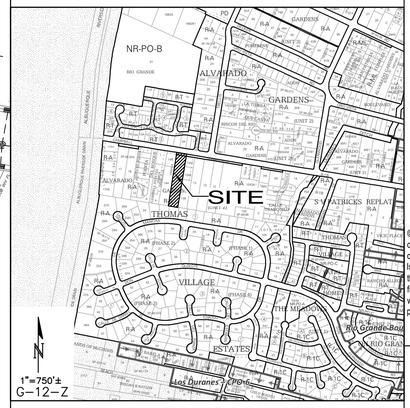
Sub-basin Peak Discharge Rate: Q_P = 1.4 cfs

FIRST FLUSH VOL.: 105 CF

NORTH LOT EXISTING CONDITION

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 04/12/21
BY: Ronald R. Bohannetto
HydroTrans #: G12D038
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 SUCH ADDITIONS, CORRECTIONS, OR DESIGN OF SUBSEQUENT PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

C.O.A. VICINITY MAP G-12



PROJECT INFORMATION

PROPERTY: THE PROPERTY IS A DEVELOPED RESIDENTIAL PROPERTY WHICH WILL BE SUBDIVIDED INTO A THREE-LOT SINGLE FAMILY RESIDENTIAL PROPERTY. THE SITE IS LOCATED WITH CITY OF ALBUQUERQUE VICINITY MAP G-12. THE SITE IS BOUND TO THE NORTH BY CAMPBELL RD. NW, AND TO THE EAST, SOUTH AND WEST BY DEVELOPED RESIDENTIAL PROPERTIES.

PROPOSED IMPROVEMENTS: FUTURE DEVELOPMENT OF THE TWO UNDEVELOPED PROPERTIES.

LOT SIZE: 1.27 ACRES

LEGAL: LOT 14 , ALVARADO GARDENS UNIT NO. 2, ALBUQUERQUE, NEW MEXICO.

BENCHMARK: VERTICAL DATUM SHOWN HEREON WAS BASED UPON ALBUQUERQUE CONTROL SURVEY MONUMENT "10-G13A" HAVING A PUBLISHED ELEVATION OF 4970.87 FEET ((NAVD 88).

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP #35001C0331H, DATED AUGUST 16, 2012, THE SITE IS LOCATED WITHIN ZONE X SHADED, DEFINED AS AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. OVERTOPPING OR FAILURE OF THE STRUCTURE PROTECTING THIS AREA IS POSSIBLE.

SURVEYOR: RUSS P. HUGG, SURV-TEK INC., CONSULTING SURVEYORS P.O. BOX 66885, ALBUQUERQUE, NEW MEXICO 87114.

DRAINAGE CONCEPT

BASED ON THE FLAT AREA AND LACK OF DRAINAGE OUTFALLS, THE SITE WILL CONFORM TO A FLAT DRAINAGE SCHEME. THE STORMWATER DISCHARGE FROM EACH RESIDENTIAL LOT AND ADJACENT PRIVATE ROADWAY WILL BE RETAINED ON-SITE.

OFF-SITE FLOW: NO OFF-SITE FLOW AFFECTS THIS PROPERTY.

THE PROPOSED IMPROVEMENTS CONSIST OF A THREE (3) LOT SINGLE FAMILY RESIDENTIAL SUBDIVISION WITH APPROXIMATELY 400 LINEAL FEET OF 26' WIDE PRIVATE GRAVEL ROADS. THE ONSITE GRADING SHALL CONSIST OF A BUILDING PAD WITH ONSITE RETENTION PONDS LOCATED AS REQUIRED. THE 100-YEAR 10-DAY STORM EVENT WILL BE CONTAINED WITHIN EACH LOT. THESE PONDING AREAS WILL BE MAINTAINED BY THE INDIVIDUAL LOT OWNER. DRAINAGE COVENANTS WILL BE PROVIDED AS EACH LOT DEVELOPS.

NOTE THE FOLLOWING:

- FLAT GRADING SCHEMES ARE REQUIRED TO LIMIT IMPERMEABLE AREA TO 45% OR LESS OF THE TOTAL LOT AND ROADWAY FRONTAGE COMBINED.
- FINISHED PAD ELEVATION SHALL BE MIN. 1' ABOVE THE 100-YEAR, 10-DAY STORMWATER SURFACE ELEVATION.
- PONDS WITHIN EACH PROPERTY MUST BE INTERCONNECTED AND CAPABLE OF CONTAINING THE 100-YEAR 10-DAY VOLUME ON-SITE.
- BERMS/WALLS MAY BE CONSTRUCTED ON THE PROPERTY LINES TO CONTAIN RETENTION VOLUME.

KEYED NOTES

1. AS EACH LOT DEVELOPS, BERMS OR WALLS SHALL BE CONSTRUCTED TO GRADES SHOWN TO CONTAIN ALL PONDED STORMWATER (BASED ON THE 100-YEAR 10-DAY STORM EVENT) WITHIN THE RESPECTIVE PROPERY.
2. CONSTRUCT PONDS AS SHOWN - SIZED FOR THE 100-YEAR 10-DAY STORM EVENT WITHIN THE PROPOSED PROPERTY BOUNDARY.
3. AS MIDDLE AND SOUTH LOT DEVELOP, A GRADING & DRAINAGE PLAN WILL BE REQUIRED ADHERING TO THE REQUIREMENTS DETAILED ON THIS MASTER DRAINAGE PLAN.
4. ACCESS ROAD TO BE COMPACTED BASE COURSE GRADED TO DRAIN AS SHOWN.

LEGEND

- PROPOSED SPOT ELEVATION
- COMPACTED BASE COURSE ACCESS ROAD
- PROPOSED RETENTION POND
- PROPOSED 1' CONTOUR
- PROPOSED INCREMENTAL CONTOUR
- PROPOSED BERM / WALL

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FRED C. ARFMAN NEW MEXICO 7322 LICENSED PROFESSIONAL ENGINEER 04.12.21

Engineer

2818 CAMPBELL ROAD NW
Three Lot Subdivision
Albuquerque, New Mexico
McAlerney Sanchez

ISSUE: DESIGN DEVELOPMENT	PROJECT NUMBER: IA 2406	FILE: -	DRAWN BY: BJB	CHECKED BY: FCA	DATE: 2021 03-31

No	Date	Description

SHEET TITLE

Master Drainage Plan

SHEET NUMBER

CG-101

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