

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

March 4, 2022

Fred Arfman, P.E.
Isaacson & Arfman, Inc.
128 Monroe St. NE
Albuquerque, NM 87108

RE: Kidz Academy
SE corner Unser Blvd. and Sage Rd. SW
Permanent C.O. - Approved
Engineer's Certification Date: 3/11/22
Engineer's Stamp Date: 11/13/20
Hydrology File: M10D020

Dear Mr. Arfman:

PO Box 1293

Based on the certification received 3/11/22 and a site visit on 3/11/22, this certification is approved for Permanent Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, please contact me at 924-3986 or earmijo@cabq.gov.

NM 87103

Sincerely,

www.cabq.gov

Ernest Armijo, P.E.
Principal Engineer, Planning Dept.
Development Review Services



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

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

Owner: _____ **Contact:** _____

Address: _____

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

TYPE OF SUBMITTAL: _____ PLAT (___# 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: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DRAINAGE ANALYSIS

The referenced PROPERTY (Tract A-4 of Unser and Sage Marketplace) is an undeveloped commercial property located within City of Albuquerque (C.O.A.) Vicinity Map M-10-Z. The 1.10 acre site is bound to the south and west by undeveloped commercial property, to the east by developed commercial property, and to the north by Sage Road SW.

Proposed improvements include a commercial building with associated site walks, parking and landscaping and playground areas.

The approved Drainage Master Plan (DMP) for Unser and Sage Marketplace, prepared by Isaacson & Arfman (dated 10/18/2010) identified the overall basins, drainage patterns and allowable discharge rates from each of the five tracts.

An amended Drainage Master Plan (DMP) is submitted with this Grading and Drainage Plan to redistribute the allowable discharge from Tract 3 and Tract 4 (same owner):

Original DMP approved discharge rates:

- Tract A-3 1.37 acre @ Maximum Discharge = 5.5 cfs
 - 5.5 cfs to Basin 1 (Sage Road / Storm Drain system)
 - 0.0 cfs to Basin 2 (South to the existing Drainage R.O.W)
- Tract A-4 1.10 acre @ Maximum Discharge = 4.4 cfs
 - 2.7 cfs to Basin 1 (Sage Road / Storm Drain system)
 - 1.7 cfs to Basin 2 (South to the existing Drainage R.O.W)

Amended DMP discharge rates:

- Tract A-3 1.37 acre @ Maximum Discharge = 5.3 cfs
 - 5.0 cfs to Basin 1 (Sage Road / Storm Drain system)
 - 0.3 cfs to Basin 2 (South to the existing Drainage R.O.W)
- Tract A-4 1.10 acre @ Maximum Discharge = 4.7 cfs
 - 3.2 cfs to Basin 1 (Sage Road / Storm Drain system)
 - 1.4 cfs to Basin 2 (South to the existing Drainage R.O.W)

Total Tract 3 + Tract 4 discharge to Basin 1 = 5.0 cfs (Tract 3) + 3.2 cfs (Tract 4) = 8.2 cfs (no change to DMP total)

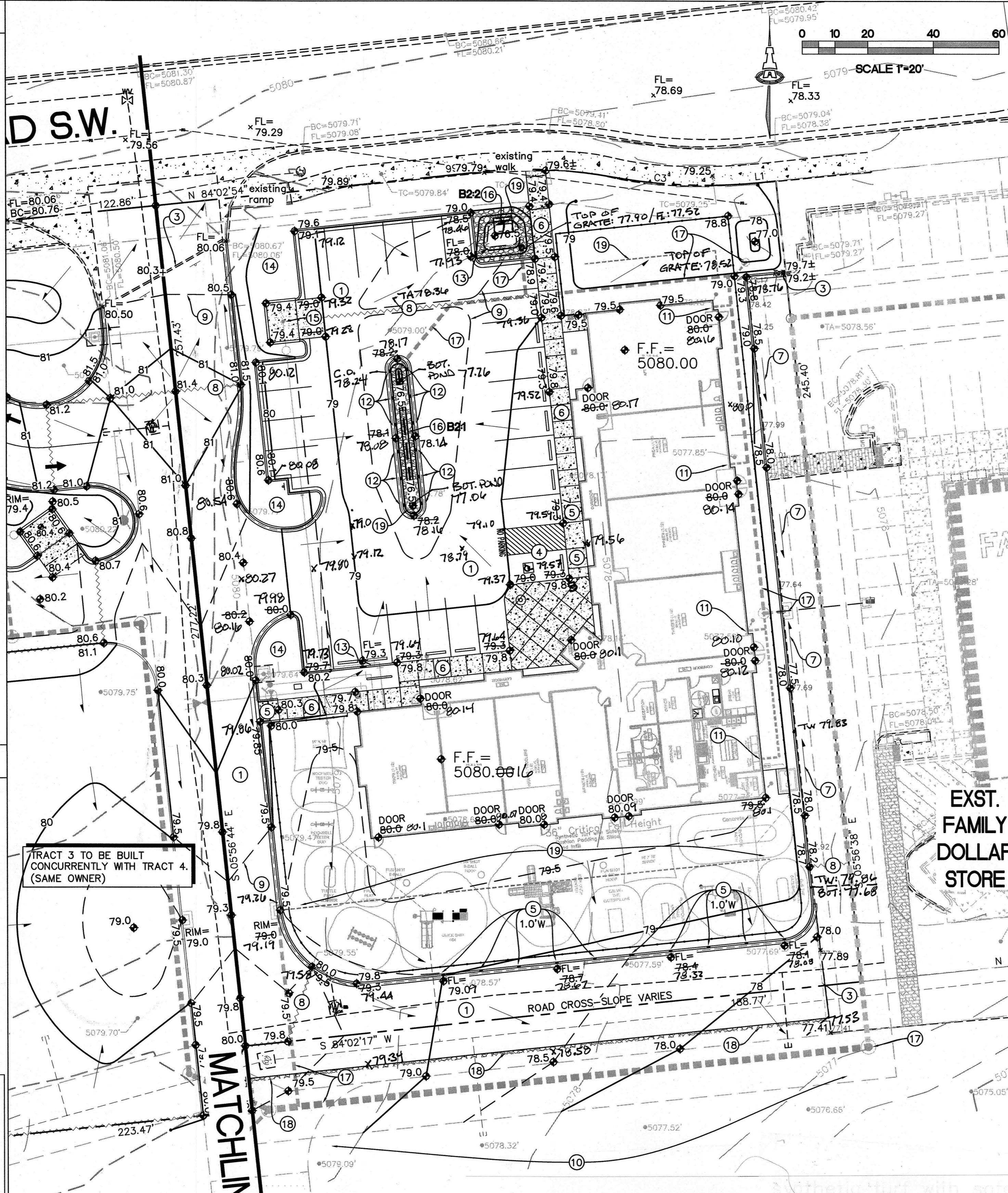
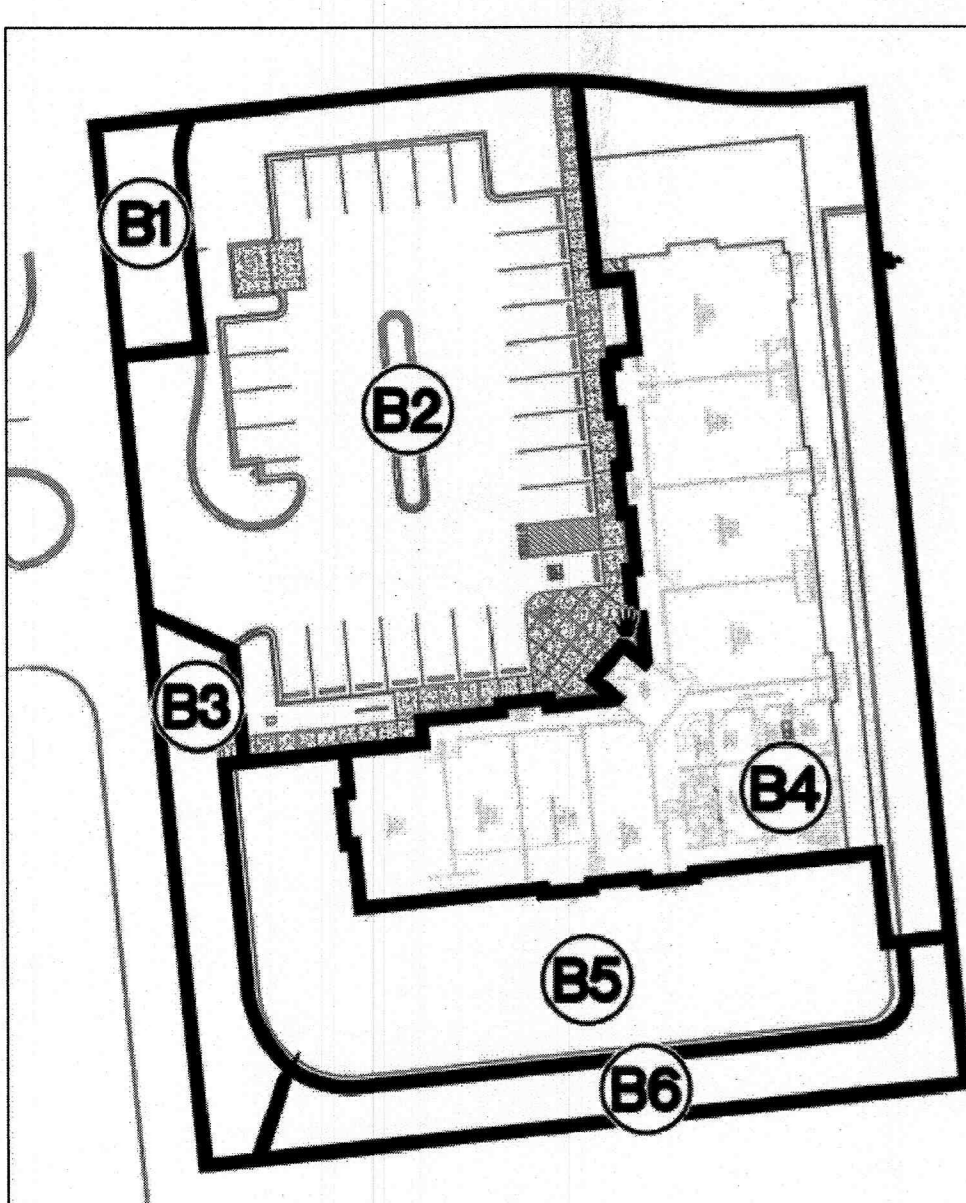
Total Tract 3 + Tract 4 discharge to Basin 2 = 0.3 cfs (Tract 3) + 1.4 cfs (Tract 4) = 1.7 cfs (no change to DMP total)

DRAINAGE BASINS

SEE SUPPLEMENTAL INFORMATION PACKET FOR ADDITIONAL INFORMATION.

BASIN SUMMARY

Basin No.	Discharge (Q)	SWQ Volume (CF)
B1	0.1	33
B2	1.5	409
B3	0.2	64
B4	1.5	427
B5	0.5	90
B6	0.3	82
TOTAL	4.1	1106



KEYED NOTES

THESE NOTES ARE USED ON SHEETS CG-101 (HUMAN BEAN COFFEE: TRACT A-3) AND CG-102 (KIDZ ACADEMY: TRACT A-4). NOT ALL NOTES ARE USED ON EACH SHEET.

- NEW PAVING AT ELEVATIONS SHOWN. SEE PAVING PLAN FOR MATERIAL, EXTENTS, JOINTS AND PAVING SECTIONS. NOTE: TO ENSURE READABILITY, NOT ALL PAVEMENT SPOT ELEVATIONS SHOW ADJACENT TOP OF CURB / TOP OF WALK ELEVATIONS. TEXT SHOWN WITHIN FLOWLINE INDICATES FLOWLINE ELEVATION. ADD 0.5' TYPICAL FOR TOP OF CURB / TOP OF ADJACENT WALK ELEVATIONS.
- TRACT A-3 AND TRACT A-4 SITE IMPROVEMENTS WILL BE CONSTRUCTED CONCURRENTLY. SEPARATE GRADING AND DRAINAGE PLANS ARE PROVIDED FOR COA HYDROLOGY ROUTING. SEE SHEETS CG-101 AND CG-102.
- PROVIDE SMOOTH TRANSITION TO EXISTING PAVEMENT.
- ADA COMPLIANT PARKING SPACE AND ACCESS AISLE. MAXIMUM SLOPE = 2% IN ANY DIRECTION.
- ADA COMPLIANT SLOPE ACCESS RAMP.
- ADA COMPLIANT PEDESTRIAN ACCESS WALK AT ELEVATIONS SHOWN. MAX. 5% SLOPE, MAX. 2% CROSS-SLOPE.
- CONTRACTOR TO FIELD VERIFY AND CORRECT EXISTING PAVEMENT TO ENSURE POSITIVE DRAINAGE TO PROPOSED STORM DRAIN INLET (TRACT 4 ONLY).
- HIGH POINT / GRADE BREAK LOCATION.
- 0.5' DESIGN CONTOURS ARE SHOWN DASHED WHERE NECESSARY TO CLARIFY GRADING CONCEPT.
- 5:1 MAXIMUM GRADE TRANSITION TO EXISTING GRADES.
- SEE ARCHITECTURAL AND PLUMBING PLANS FOR SPECIFIC DOWNSPOUT LOCATIONS. OWNER'S OPTION: SURFACE DISCHARGE TO PAVEMENT VIA CONCRETE RUNDOWN. PIPE DISCHARGE THROUGH FACE OF CURB OR PIPE DOWNSPOUT DIRECTLY INTO ADJACENT STORM DRAIN LINE.
- PROVIDE 12" WIDE OPENING IN CURB TO PASS FLOW.
- PROVIDE 24" WIDE OPENING IN CURB TO PASS FLOW.
- DEPRESS LANDSCAPING 18" MAX. DEPTH FOR WATER HARVESTING THIS AREA. NO WATER HARVESTING SHALL OCCUR WITHIN 10' OF ANY BUILDING.
- CONSTRUCT SLOPED CONCRETE DUMPSTER PAD TO DIRECT LOCALIZED STORMWATER TO PROPOSED SANITARY SEWER DRAINAGE INLET. SEE UTILITY PLAN.
- CONSTRUCT 18" MAX. DEPTH STORMWATER QUALITY RETENTION POND AT ELEVATIONS SHOWN. ALL STORMWATER QUALITY PONDING VOLUMES WILL BE VERIFIED AS PART OF AS-BUILT CERTIFICATION. PONDS WHICH DO NOT PROVIDE THE REQUIRED VOLUME WILL BE CORRECTED AT CONTRACTOR'S EXPENSE.
- CONSTRUCT PRIVATE STORM DRAIN SYSTEM. SEE SHEET CG-501 FOR SIZES / SLOPES / INLET INFORMATION / MATERIALS.
- INSTALL 4" AVG. DIA. X 8" DEEP ANGULAR ROCK EROSION PROTECTION TO LIMITS HATCHED. ALL EROSION PROTECTION TO BE INSTALLED OVER GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.).
- INSTALL 4" Ø WRAPPED ADS PERFORATED DRAIN PIPE WITH FILTER SOCK IN 18"x18"x12" GRAVEL BED WITHIN PLAY AREA. COORDINATE ALIGNMENT WITH OWNER TO MISS PLAYGROUND EQUIPMENT. CONNECT TO MAIN USING INSERTA-TEE. (TRACT A-4 ONLY).

LEGEND

- 76 — PROPOSED CONTOUR - 1' INCREMENT
- 74.5 - - - PROPOSED CONTOUR - 0.5' INCREMENT
- 78.3 — PROPOSED SPOT ELEVATION
- 78.3 — PUBLIC WORK ORDER SPOT ELEVATION
- FLOW ARROW
- FF= FINISH FLOOR ELEVATION
- PROPOSED STORM DRAIN
- ***** ROCK EROSION PROTECTION

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION

APPROVED

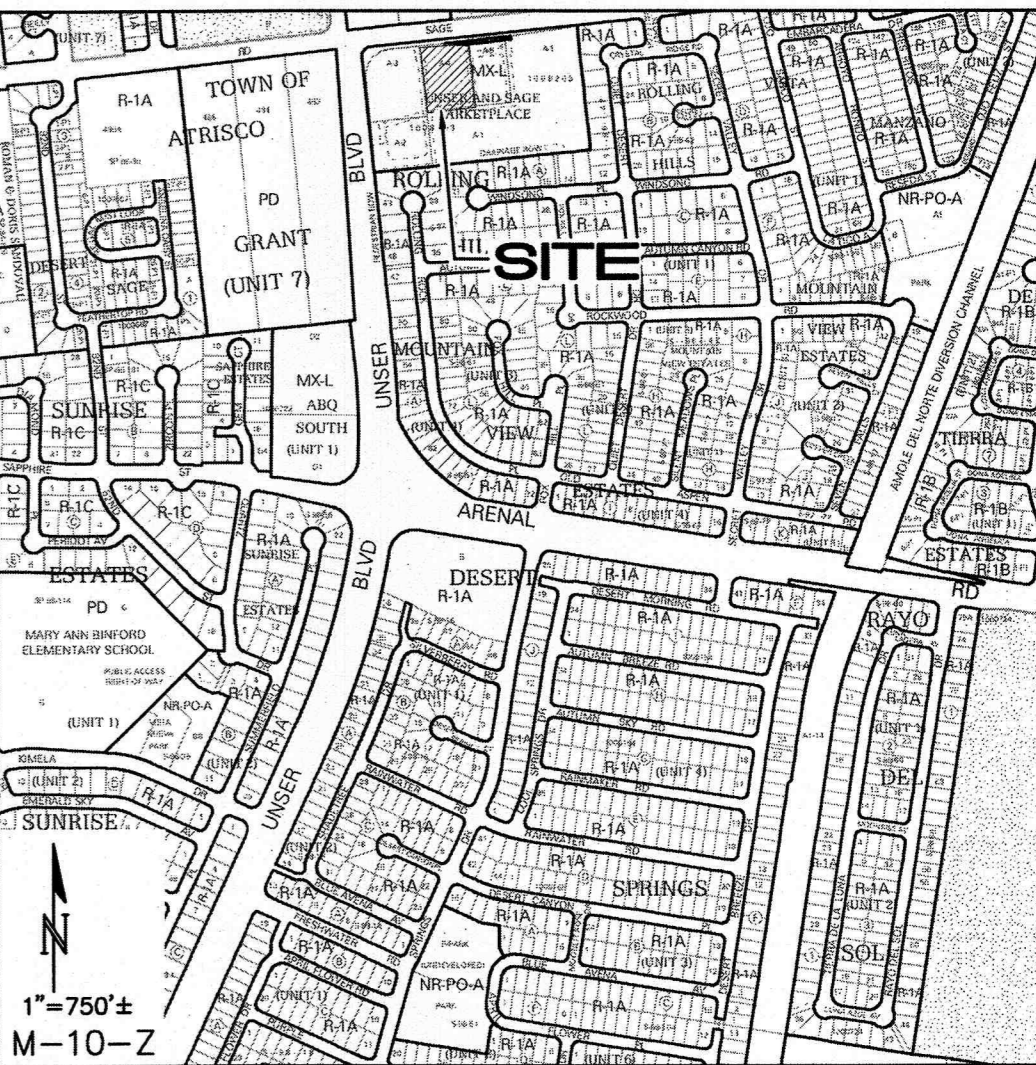
DATE: 12/01/20
BY: *Fred C. Arfman*
HydroTrans # M10D020

THE APPROVAL OF THESE PLANS REPORT SHALL NOT BE CONSIDERED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OR CHANGE OR DISCONTINUANCE OF PLANS, SPECIFICATIONS, OR CONSTRUCTIONS, SUCH APPROVED PLANS SHALL NOT BE CHANGED, REPRODUCED, OR ALTERED WITHOUT AUTHORIZATION.

ADA COMPLIANCE

- SIDEWALK(S) AND RAMP(S): TARGET CROSS SLOPE = 1% TO 1.5%. CROSS SLOPE SHALL NOT EXCEED 2%
- ACCESSIBLE RAMP(S): TARGET LONGITUDINAL SLOPE = 7% LONGITUDINAL SLOPE SHALL NOT EXCEED 12:1 (8.3%).
- ACCESSIBLE PARKING: TARGET SLOPE = 1% TO 1.5%. SLOPE SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

VICINITY MAP



PROJECT DATA

LEGAL DESCRIPTION: TRACT "A-4" OF UNSER AND SAGE MARKETPLACE, ALBUQUERQUE, NEW MEXICO

SITE AREA: 1.1023 ACRES

FLOOD ZONE: THE SUBJECT PROPERTY APPEARS TO LIE WITHIN "ZONE X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN) AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE MAP: 35001C0336H, MAP REVISION DATE: AUGUST 16, 2012.

ENGINEER: ISAACSON & ARFMAN, P.A.
128 MONROE ST NE, ABO, NM 87108
PHONE: (505) 268-8828

SURVEYOR: CSI-CARTESIAN SURVEYS INC.
P.O. BOX 44414, RIO RANCHO, N.M. 87174
PHONE (505) 896-3050

OFFSITE FLOW: NO OFFSITE FLOW AFFECTS THIS PROPERTY OTHER THAN WHAT IS TO BE PASSED WITHIN THE SHARED STORM DRAIN SYSTEM / EASEMENT.

BENCHMARK: VERTICAL DATUM IS BASED UPON THE ALBUQUERQUE CONTROL STATION NUMBER "1-1M10", ELEVATION = 5082.757 FEET (NAVD 1988).

STORMWATER QUALITY REQ'S

ALL NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS SHALL APPLY BEST MANAGEMENT PRACTICES (BMPs) TO MANAGE THE STORMWATER QUALITY VOLUME (SWQV) BY MANAGEMENT ON-SITE, OR PAYMENT-IN-LIEU, OR PRIVATE OFF-SITE MITIGATION.

FOR NEW DEVELOPMENT SITES, THE CABQ STORMWATER QUALITY VOLUME (SWQV) IS BASED ON THE 90TH PERCENTILE STORM EVENT OR 0.42".

THE IMPERVIOUS AREA FOR THIS PROPERTY IS CALCULATED AS APPROXIMATELY 82% OF TOTAL AREA: (0.82 * 1.10 AC) = 39,290 SF. THE TOTAL REQUIRED S.Q. RETENTION VOLUME = 1,375 CF (SEE BASIN SUMMARY THIS SHEET).

TWO SWQV RETENTION PONDS WILL BE CONSTRUCTED AS SHOWN (DRAINAGE BASIN PONDS B2:1 AND B2:2).

POND B2:1		
Contour	Area	Volume
5078	215	
5076.5	10	169 CF
1.5:1 SIDE SLOPES		
POND VOLUME = 169 CF		

POND B2:2		
Contour	Area	Volume
5078	175	
5076.5	25	150 CF
2:1 SIDE SLOPES		
POND VOLUME = 150 CF		

PER BASIN CALCS: BASIN B2 REQUIRES 409 CF OF SWQV.

TOTAL SWQV PROVIDED = 319 CF.

A "PAYMENT IN-LIEU FOR S.Q. VOLUME REQUIREMENT" TREASURY DEPOSIT SLIP WILL BE PROVIDED BY C.O.A. HYDROLOGY BASED ON THE PORTION OF S.Q. VOLUME THAT IS NOT RETAINED ON-SITE (1375 - 319 = 1056 CF) @ \$8.00 / CF FOR COMMERCIAL.

A DRAINAGE COVENANT WILL BE REQUIRED FOR THE SWQV PONDS PRIOR TO RELEASE OF CERTIFICATE OF OCCUPANCY. THE ORIGINAL NOTARIZED FORM AND EXHIBIT 'A' ALONG WITH THE RECORDING FEE (PAYABLE TO CITY OF ALBUQUERQUE) WILL BE SUBMITTED BY THE OWNER.

DRAINAGE CERTIFICATION

I, Fred C. Arfman, NMPE 7322, of the firm Isaacson & Arfman, Inc., 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 (M10D021 dated 11/13/2020). The record information edited onto the original design document has been obtained by Jonathan N. Vigil, NMLS 15511, of the firm Breakline Engineering, Inc. I further certify that I have personally visited the project site on 02-01-2022 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Permanent Certificate of Occupancy.

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.

Fred C. Arfman
Fred C. Arfman, PE
Date: 03.11.2022

FRED C. ARFMAN
NEW MEXICO
7322
REGISTERED PROFESSIONAL ENGINEER

Isaacson & Arfman, Inc.
Civil Engineering Consultants

128 Monroe Street NE
Albuquerque, NM 87108
505-268-8828 | www.isa.com

© 2020 Isaacson & Arfman, Inc. This design, calculations, and concepts are owned by and remain the property of Isaacson & Arfman, Inc. and no part thereof shall be utilized by any person, firm or corporation for any purpose whatsoever except with the written permission of Isaacson & Arfman, Inc.

2389 CG-101 Issg 1 December 2020

FRED C. ARFMAN
NEW MEXICO
7322
REGISTERED PROFESSIONAL ENGINEER

Engineer

KIDZ ACADEMY
HUMAN BEAN COFFEE SHOP

Albuquerque, New Mexico

Unser & Sage Marketplace

ISSUE: CONSTRUCTION DOCUMENTS	
PROJECT NUMBER: IA 2380	FILE: BJB
DRAWN BY: BJB	CHECKED BY: FCA
DATE: 11-13-2020	

GRADING AND DRAINAGE PLAN

CG-101