CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

October 24, 2022

Thomas D. Johnston, PE
George T Rodriguez-Development Consultant
12800 San Juan Rd. SE
Albuquerque, NM 87123

RE: Harvard Apartments
214 Harvard Dr. SE
Grading & Drainage Plan
Engineer's Stamp Date: 10/18/22
Hydrology File: K16D091

Dear Mr. Johnston:

Based upon the information provided in your submittal received 10/24/2022, the Grading & Drainage Plans are approved for Building Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please pay the Payment-in-Lieu of **$ 1,010.40** by emailing the attached approved Waiver Application from Stormwater Quality Volume Management On-site to PLNDRS@cabg.gov. Once this is received, a receipt will then produce and email back with instructions on how to pay online. Once paid, please email me proof of payment.

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

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6 2018)

Project Title: HARVARD APARTMENTS Building Permit #:_____ Hydrology File #: K16D095

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

Legal Description: LOT 7, BLOCK 7, UNIVERSITY HEIGHTS ADDITION

City Address: 214 HARVARD DRIVE S.E.

Applicant: RBA ARCHITECTURE, PC Contact: RICK BENNETT

Address: 1104 PARK AVENUE S.W., ALBUQUERQUE, N.M. 87102

Phone#: 505-242-1859 Fax#: _____ E-mail: rick@rba81.com

Other Contact: THOMAS D. JOHNSTON, N.M.P.E. NO. 17158 GEORGE T. RODRIGUEZ - DEVELOPMENT CONSULTANT Contact: GEORGE RODRIGUEZ

Address: 12800 SAN JUAN N.E., ALBUQ., N.M. 87123

Phone#: 505-610-0593 Fax#: _____ E-mail: pawrod@hotmail.com

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE _____ DRB SITE ✓ ADMIN SITE

IS THIS A RESUBMITTAL? ✓ Yes _____ No

DEPARTMENT _____ TRANSPORTATION ✓ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

___ ENGINEER/ARCHITECT CERTIFICATION
___ PAD CERTIFICATION
___ CONCEPTUAL G & D PLAN
✓ GRADING PLAN
✓ 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?

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: 10-19-2022 ~~05-25-2022~~ By: GEORGE T. RODRIGUEZ

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:_____

FEE PAID:_____

CITY OF ALBUQUERQUE
PLANNING DEPARTMENT
HYDROLOGY DEVELOPMENT SECTION

WAIVER APPLICATION FROM STORMWATER QUALITY VOLUME MANAGEMENT ON-SITE

GENERAL INFORMATION

APPLICANT: THOMAS D. JOHNSTON, P.E. DATE: 10-18-2022

DEVELOPMENT: HARVARD APARTMENTS

LOCATION: 214 HARVARD S.E., ALBUQUERQUE, N.M.

STORMWATER QUALITY POND VOLUME

Per the DPM Article 6-12 - Stormwater Quality and Low-Impact Development, the calculated sizing for required Stormwater Quality Pond volume is equal to the impervious area draining to the BMP multiplied by 0.42 inches for new development sites and by 0.26 inches for redevelopment sites.

The required volume is 126.3 cubic feet

The provided volume is -0- cubic feet

The deficient volume is 126.3 cubic feet

WAIVER JUSTIFICATION

Per the DPM Article 6-12(C), private off-site mitigation and payment-in-lieu may only be considered if management on-site is waived in accordance with the following criteria and procedures.

1. Management on-site shall be waived by the City Engineer if the following conditions are met:

a. Stormwater quality can be effectively controlled through private off-site mitigation or through an arrangement (approved by the City) to use a cooperator's existing regional stormwater management infrastructure or facilities that are available to control stormwater quality.
b. Any of the following conditions apply:
    i. The lot is too small to accommodate management on site while also accommodating the full plan of development.
    ii. The soil is not stable as demonstrated by a geotechnical report certified by a professional engineer licensed in the State of New Mexico.
    iii. The site use is inconsistent with the capture and reuse of stormwater.
    iv. Other physical conditions exist where compliance with on-site stormwater quality control leaves insufficient area.
    v. Public or private off-site facilities provide an opportunity to effectively accomplish the mitigation requirements of the Drainage Ordinance (Part 14-5-2 ROA 1994) as demonstrated on as-built construction drawings and an approved drainage report.
    vi. The developer constructs a project to replenish regional groundwater supplies at an off-site location.
    vii. A waiver to State water law or acquisition of water rights would be required in order to implement management on site.

2. The basis for requesting payment-in-lieu or private off-site mitigation is to be clearly demonstrated on the drainage plan.

This project's justification: THE LOT IS TOO SMALL TO ACCOMMODATE MANAGEMENT ON SITE WHILE ALSO ACCOMMODATING THE FULL PLAN OF DEVELOPMENT.

Professional Engineer or Architect

THOMAS D. JOHNSTON
NEW MEXICO
17158
LICENSED PROFESSIONAL ENGINEER

10.13.2022

PAYMENT-IN-LIEU

Per the DPM Article 6-12(C)(1), the amount of payment-in-lieu is deficient volume (cubic feet) times $6 per cubic feet for detached single-family residential projects or $8 per cubic feet for all other projects.

AMOUNT OF PAYMENT-IN-LIEU = $ 1,010.40

THIS SECTION IS FOR CITY USE ONLY

[X] Waiver is approved. The amount of payment-in-lieu from above must be paid prior to Certificate of Occupancy.

[ ] Waiver is DENIED.

Renée C. Brissette

City of Albuquerque
Hydrology Section

10/24/22

GENERAL NOTES:

1) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.

2) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN HEREON.

GENERAL NOTES:

1: CONTOUR INTERVAL IS ONE (1) FOOT.

2: ELEVATIONS ARE BASED ON READINGS TAKEN WITH A STONEX S10A GPS UNIT ELEVATIONS SHOWN ARE NAVD 1988

3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.

4: THIS IS **NOT** A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA SHOWN IS FROM PREVIOUS SURVEY REFERENCE HEREON

LEGAL DESCRIPTION : LOT SEVEN (7) IN BLOCK SEVEN (7), UNIVERSITY HEIGHTS ADDITION, ALBUQUERQUE, NEW MEXICO.

Section 6-2(A)(2) Land Treatments

All land areas are described by one of four basic land treatments or by a combination of the four land treatments. Land treatments are provided in *TABLE 6.2.9*

TABLE 6.2.9 Land Treatments

Treatment	Land Condition
A (CN=77)	Soil uncompacted by human activity with 0 to 10% slopes. Native grasses, weeds, and shrubs in typical densities with minimal disturbance to grading, ground cover, and infiltration capacity.
B (CN=79)	Irrigated lawns, parks and golf courses with 0 to 10% slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10% and less than 20%.
C (CN=86)	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Moist vacant lots. Gravel or rock (desert landscaping). Irrigated lawns and parks with slopes greater than 10%. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20%or greater. Native grass, weed and shrub areas with clay or clay loam soils, and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D (CN=98)	Impervious areas, pavement, and roofs. Ponds, channels, and wetlands, even if seasonally dry.

The 6-hour excess precipitation, E, by zone and treatment is summarized in *TABLE 6.2.13*

TABLE 6.2.13 6-hour Excess Precipitation, E

Zone	Land Treatment			
	A	B	C	D
100-YEAR EXCESS PARTICIPATION, E (IN)				
1	0.55	0.73	0.95	2.24
(2)	0.62	0.80	1.03	2.33
3	0.67	0.86	1.09	2.58
4	0.76	0.95	1.20	3.34

Section 6-2(A)(5) Peak Discharge Rate for Small Watersheds

The peak discharge rate is given in *TABLE 6.2.14* for small watersheds, less than or equal to 40 acres, where the time of concentration is assumed to be 12 minutes.

TABLE 6.2.14 Peak Discharge

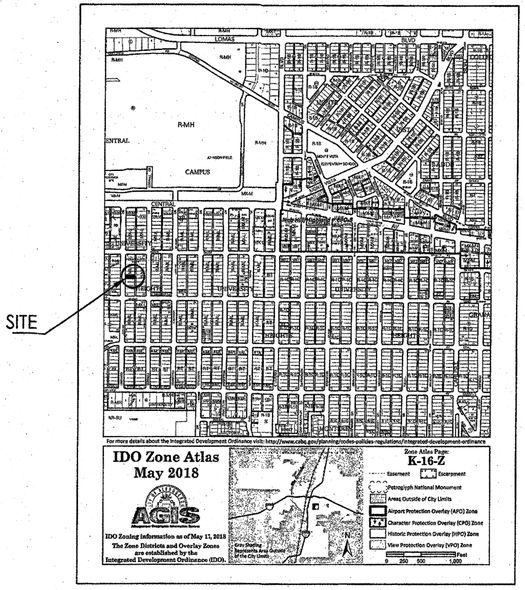
Zone	Land Treatment			
	A	B	C	D
100-YEAR PEAK DISCHARGE (CSF/ACRE)				
1	1.54	2.16	2.87	4.12
(2)	1.71	2.36	3.05	4.34
3	1.84	2.49	3.17	4.49
4	2.09	2.73	3.41	4.78

TABLE 6.2.7 Precipitation Zones

Zone	Location
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40 and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40 and East of the East boundary of Range 4 East, South of Interstate 40 Not including the Cibola National Forest

GEORGE T. RODRIGUEZ
LAND USE, DEVELOPMENT AND
REDEVELOPMENT CONSULTANT

12800 SAN JUAN, N.E.
ALBUQUERQUE, NEW MEXICO 87123
(505)610-0593



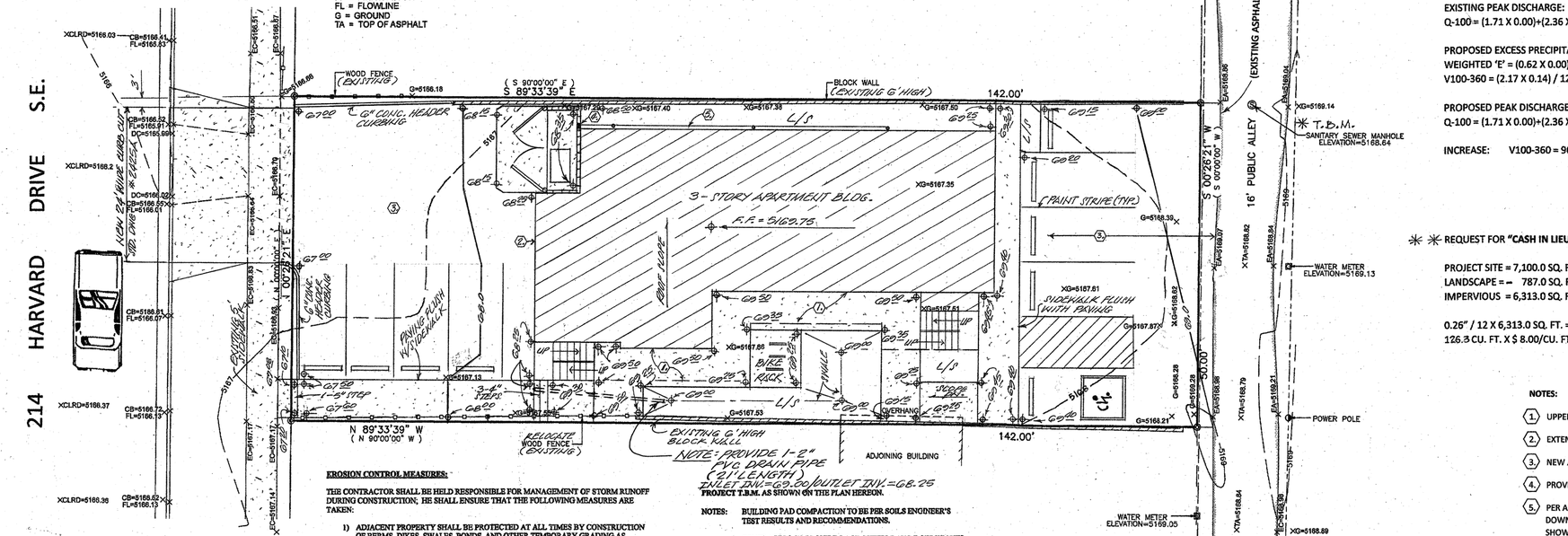
NOTES:

1.) PROVIDE NEW CURB AND GUTTER PER C.O.A. STD. DWG. NO. 2415-A.

2.) PROVIDE NEW CURB CUT – DRIVEPAD PER C.O.A. STD. DWG. NO. 2425-A.

3.) REMOVE EXISTING SIDEWALK, DRIIVEPAD, CURB AND GUTTER AND PROVIDE NEW AS SHOWN HEREON.

LEGEND
CLRD = CENTERLINE OF ROAD
EA = EDGE OF ASPHALT
EC = EDGE OF CONCRETE
FF = FINISH FLOOR
FL = FLOWLINE
G = GROUND
TA = TOP OF ASPHALT



EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL ENSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

1) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.

2) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.

3) THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

CONSTRUCTION NOTES:

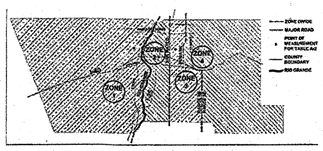
1) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OF SUB-SURFACE UTILITIES.

2) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS; SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.

3) ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

4) ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

FIGURE 6.2.3 Precipitation Zones



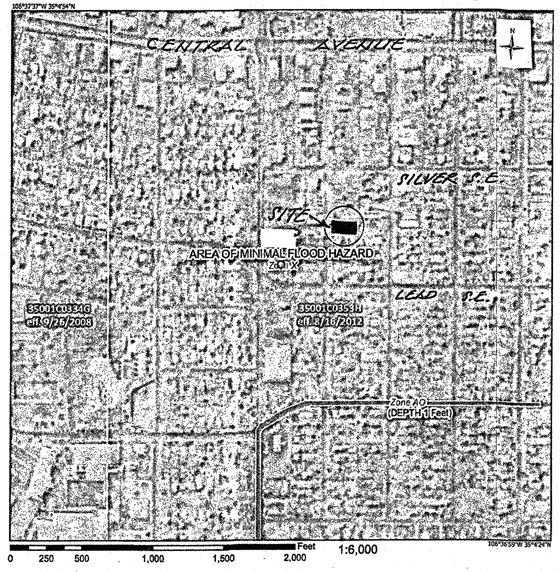
NOTE :

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
10/24/22
DATE:
BY: Ronald C Bohannetti
HydroTrans # K16D091
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 THE CORRECTION OF CORRECTIONS, OR ERROR OF OMISSIONS IN PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED, OR ALTERED WITHOUT AUTHORIZATION.

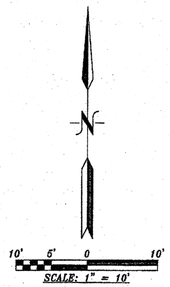
THOMAS D. JOHNSTON NEW MEXICO 17158 REGISTERED PROFESSIONAL ENGINEER
5-25-2022
10-18-2022
ENGINEER'S SEAL

GRADING AND DRAINAGE PLAN

National Flood Hazard Layer FIRMette



FEMA PANEL NO. 35001C0353H, (EFFECTIVE: 08-16-2012)



DRAINAGE COMMENTS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED ON THE EAST SIDE OF HARVARD DRIVE S.E. BETWEEN SILVER AVENUE S.E. AND LEAD AVENUE S.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, (IDO ZONE ATLAS PAGE 'K-16-Z').

THE SUBJECT SITE, 1.) IS NOT LOCATED WITHIN A DESIGNATED FLOODPLAIN (DESIGNATED ZONE 'X', REFERENCE F.E.M.A. PANEL 35001C0353H, EFFECTIVE AUGUST 16, 2012), 2.) DOES NOT CONTRIBUTE OFFSITE FLOWS TO ADJACENT PROPERTIES, 3). DOES NOT ACCEPT OFFSITE FLOWS FROM ADJACENT PROPERTIES, 4.) IS TO HAVE AN APARTMENT BUILDING AND ASSOCIATED IMPROVEMENTS CONSTRUCTED THEREON, 5.) IS REQUESTING FOR A "CASH IN LIEU" PAYMENT FOR REQUIRED RETENTION POND VOLUME.

PER THE DEVELOPMENT PROCESS MANUAL FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, HYDROLOGY, CHAPTER 6, ARTICLE 6-2(a.), EFFECTIVE DATE: JUNE 8, 2020.

DRAINAGE CALCULATIONS:

SITE AREA = 0.16 ACRE

PRECIPITATION ZONE: TWO (2)
'LAND TREATMENT METHOD" FOR CALCULATION OF "Qp"

PRECIPITATION: 100-YR./6HR. = 2.29 IN.

EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A = 0.62 IN.	1.71 CFS/AC.
TREATMENT B = 0.80 IN.	2.36 CFS/AC.
TREATMENT C = 1.03 IN.	3.05 CFS/AC.
TREATMENT D = 2.33 IN.	4.34 CFS/AC.

EXISTING CONDITIONS:	PROPOSED CONDITIONS:
AREA	AREA
TREATMENT A = 0.00 AC.	0.00 AC.
TREATMENT B = 0.00 AC.	0.00 AC.
TREATMENT C = 0.13 AC.	0.02 AC.
TREATMENT D = 0.03 AC.	0.14 AC.

EXISTING EXCESS PRECIPITATION:
WEIGHTED 'E' = (0.62 X 0.00)+(0.80 X 0.00)+(1.03 X 0.13)+(2.33 X 0.03) / 0.16 = 1.27 IN.
V100-360 = (1.27 X 0.03) / 12 = 0.00318 AC. FT. = 138.5 CU. FT.

EXISTING PEAK DISCHARGE:
Q-100 = (1.71 X 0.00)+(2.36 X 0.00)+(3.05 X 0.13)+(4.34 X 0.03) = 0.53 CFS

PROPOSED EXCESS PRECIPITATION:
WEIGHTED 'E' = (0.62 X 0.00)+(0.80 X 0.00)+(1.03 X 0.02)+(2.33 X 0.14) / 0.16 = 2.17 IN.
V100-360 = (2.17 X 0.14) / 12 = 0.02532 AC. FT. = 1,102.8 CU. FT.

PROPOSED PEAK DISCHARGE:
Q-100 = (1.71 X 0.00)+(2.36 X 0.00)+(3.05 X 0.02)+(4.34 X 0.14) = 0.67 CFS

INCREASE: V100-360 = 964.3 CU. FT. Q-100 = 0.14 CFS

✳ ✳ REQUEST FOR **"CASH IN LIEU"** FOR REQUIRED RETENTION POND VOLUME :

PROJECT SITE = 7,100.0 SQ. FT. = 0.16 AC.
LANDSCAPE = - 787.0 SQ. FT. = 0.02 AC.
IMPERVIOUS = 6,313.0 SQ. FT. = 0.14 AC.

0.26" / 12 X 6,313.0 SQ. FT. = 126.3 CU. FT.
126.3 CU. FT. X $ 8.00/CU. FT. = $1,010.40 (CASH IN LIEU AMOUNT) ✳

NOTES:

1. UPPER LEVEL WALKWAYS
2. EXTEND MONO FOOTING EXTRA 12" THIS SIDE ONLY
3. NEW ASPHALT PAVING
4. PROVIDE 4" PVC DRAINPIPE THRU REFUSE BIN WALL @ ELEVATION 68.35
5. PER ARCHITECTS PLAN GALVINIZED SCUPPERS WITH COLLECTION BOX AND DOWNSPOUTS TO TIE INTO STORM DRAIN PIPE SYSTEM WITH OUTLET AS SHOWN ON THE PLAN HEREON.

A PROPOSED PLAN
FOR
HARVARD APARTMENTS
214 HARVARD DRIVE S.E.
ALBUQUERQUE, NEW MEXICO