

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

July 19, 2024

David Soule, P.E.
Rio Grande Engineering
P.O. Box 93924
Albuquerque, NM 87199

**RE: Kingdom Muay Thai
4471 Irving Blvd. NE
Grading and Drainage Plan
Engineer's Stamp Date: 6/7/24
Hydrology File: B13D035**

Dear Mr. Soule:

Based upon the information provided in your submittal received 06/07/2024, the Grading & Drainage Plan is approved for Building Permit and Grading 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

PRIOR TO CERTIFICATE OF OCCUPANCY:

Albuquerque

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.

NM 87103

www.cabq.gov

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 924-3314 or amontoya@cabq.gov.

Sincerely,

Anthony Montoya, Jr., P.E.
Senior Engineer, Hydrology
Planning Department, Development Review Services

Weighted E Method

Existing Developed Basins										100-Year, 6-hr.			
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
			%	(acres)	%	(acres)	%	(acres)	%	(acres)			
EXISTING	50915	1.169	0%	0	67.0%	0.783	10.0%	0.11688	23%	0.269	1.099	0.107	3.13
ALLOWED PER MASTERPLAN*	50915	1.169	0%	0	15.0%	0.175	0.0%	0	85%	0.994	2.014	0.196	4.47
PROPOSED A	25105	0.576	0%	0	20.0%	0.115	0.0%	0	80%	0.461	1.238	0.093	2.15
PROPOSED B	25810	0.593	0%	0	11.0%	0.065	0.0%	0	89%	0.527	2.074	0.102	2.31
PROPOSED C	9740	0.224	84%	0.18782	10.0%	0.022	6.0%	0.01342	0%	0.000	0.582	0.011	0.38
COMPARISON*											-0.088	-1.327	

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

* flow within public drainage easement does not drain to outfall therefore basin C is not included in allowed and proposed

Volume = Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm (zone1)

Ea= 0.55
Eb= 0.73
Ec= 0.95
Ed= 2.24

Qa= 1.54
Qb= 2.16
Qc= 2.87
Qd= 4.12

WATER QUALITY CALCULATION
EXISTING IMPERVIOUS 11317 SF
PROPOSED IMPERVIOUS 43037 SF
NEW IMPERVIOUS 31720 SF

WATER QUALITY=31720X0.42/12=1110 CF
REQUEST FEE IN LIEU

ALLOWED PEAK FLOW TO OUTFALL
PROPOSED PEAK FLOW TO OUTFALL
WATER QUALITY VOLUME REQUIRED

0.00 cf
1110 cf

Narrative

The subject property is located within the boundaries of the master grading plan developed 1/14/02 for the Rasta development. The development created an outfall and storm drain. The contributing basin assumed land treatment of 15%B and 85%D. This site is allowed to utilize the existing storm drain and historical patterns. During grading activity, the storm drain was damaged and this plans incorporates the replacement of damaged section. This site is not able to capture the water quality first flush requirement on site therefor request to pay the fee in lieu.

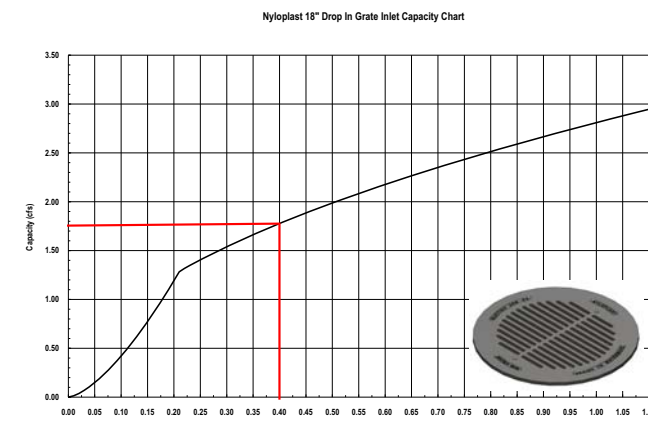
Pipe Capacity

Pipe	D (in)	Slope (%)	Area (ft²)	R	Q Provided (cfs)	Q Required (cfs)	Velocity (ft/s)
WEST REACH	12	1	0.79	0.25	3.57	2.15	2.74

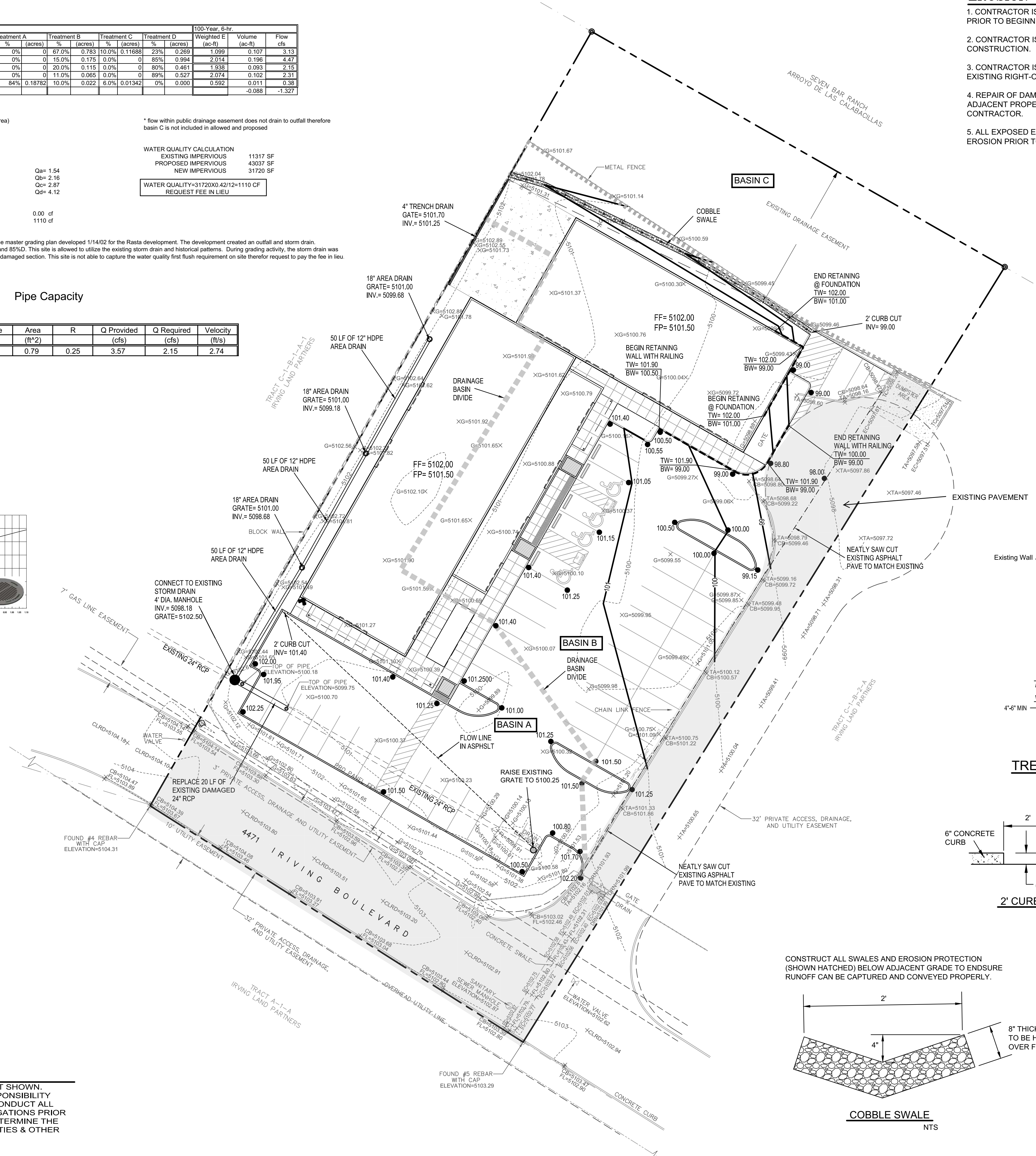
Manning's Equation:

$Q = 1.49/n * A * R^{2/3} * S^{1/2}$

A = Area
R = D/4
S = Slope
n = 0.013

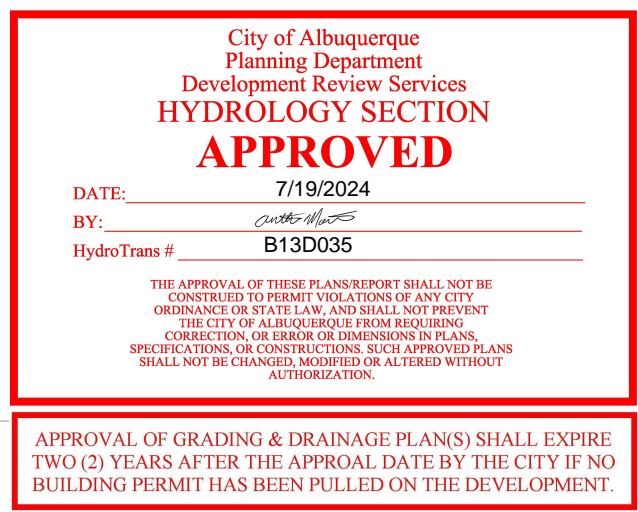


Syloplast
SLOPE-STEEL POLYETHYLENE PIPE
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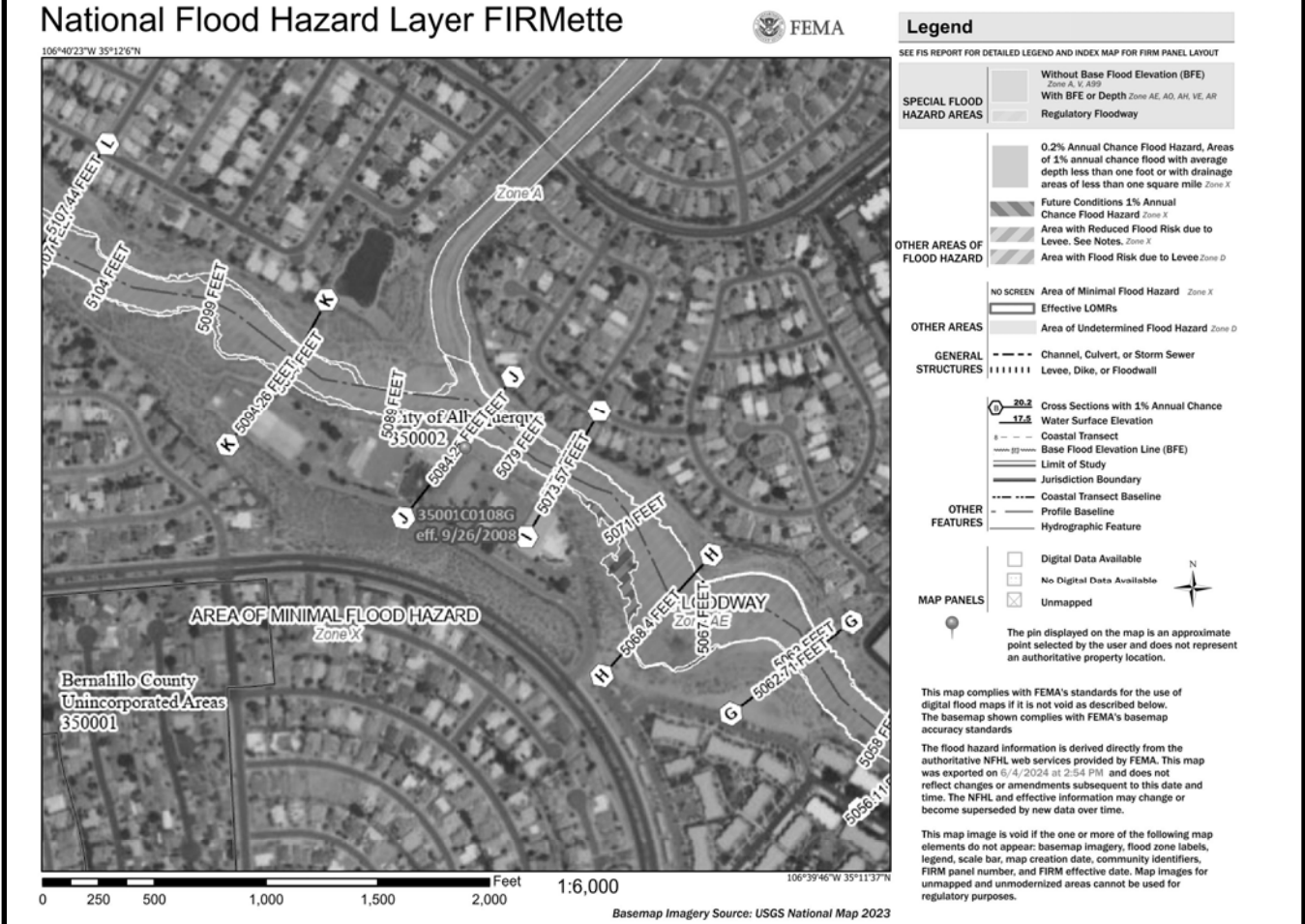


EROSION CONTROL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
- REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



VICINITY MAP: B-13-Z



FIRM MAP:

LEGAL DESCRIPTION:

TRACT C-1-B-1-A-2 IRVING LAND PARTNERS
CITY OF ALBUQUERQUE, BERNILLO COUNTY, NEW MEXICO

NOTES:

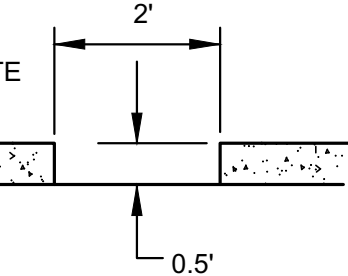
- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
- ANY PERIMETER WALLS MUST BE PERMITTED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
- SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
- LONG TERM MAINTAINANCE OF ALL PONDS, SWALES AND OVERFLOWS IS REQUIRED

LEGEND

- XXXX ----- EXISTING CONTOUR
- XXXX ----- EXISTING INDEX CONTOUR
- XXXX ----- PROPOSED CONTOUR
- XXXX ----- PROPOSED INDEX CONTOUR
- XXXX EXISTING SPOT ELEVATION
- XXXX PROPOSED SPOT ELEVATION
- BOUNDARY
- ADJACENT BOUNDARY
- ===== EXISTING CURB AND GUTTER
- ===== BASIN BOUNDARY
- PROPOSED RETAINING WALL
- PROPOSED CONCRETE
- PROPOSED 2' WIDE COBBLE SWALE

TRENCH DRAIN DETAIL

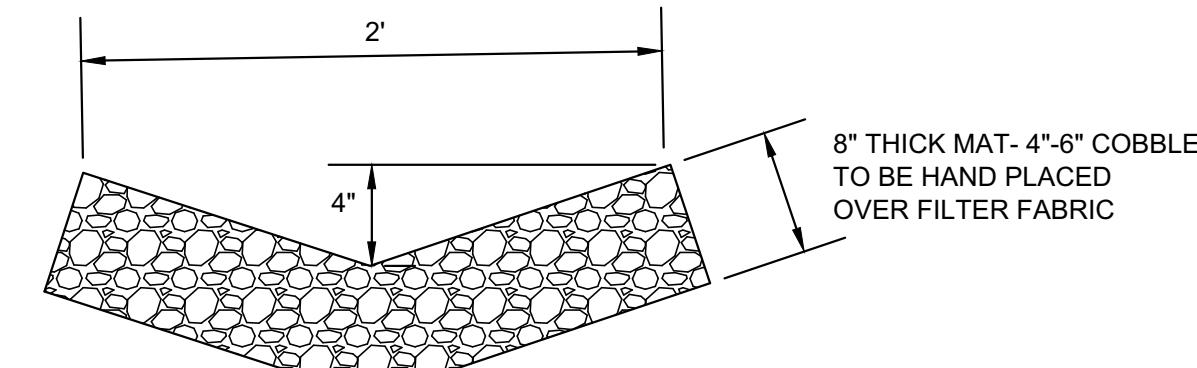
NTS



2' CURB CUT

NTS

CONSTRUCT ALL SWALES AND EROSION PROTECTION (SHOWN HATCHED) BELOW ADJACENT GRADE TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY.



COBBLE SWALE

NTS

CAUTION:

EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.

ENGINEER'S SEAL DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER	TRACT C-1-B-1-A-2 IRVING LAND PARTNERS 4471 IRVING BLVD		DRAWN BY DEM
	GRADING AND DRAINAGE PLAN		DATE 6-6-24
DAVID SOULE P.E. #14522	Rio Grande Engineering		4471 Irving Blvd.dwg
	P.O. BOX 53924 ALBUQUERQUE, NM 87199 (505) 321-9099		SHEET # C1
		JOB #	

CITY OF ALBUQUERQUE
PLANNING DEPARTMENT
HYDROLOGY DEVELOPMENT SECTION

**WAIVER APPLICATION FROM STORMWATER
QUALITY VOLUME MANAGEMENT ON-SITE**

GENERAL INFORMATION

APPLICANT: MAD KINGDOM SUPPLY COMPANY DATE: 7/1/2024

DEVELOPMENT: KINGDOM MUEY THAI

LOCATION: 4471 Irving Blvd. NE, Alb. NM 87199

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 1,110 cubic feet

The provided volume is 0 cubic feet

The deficient volume is 1,110 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 subject property is located within the boundaries of the master grading plan developed 1/14/02 for the Rasta development. The development created an outfall and storm drain. The contributing basin assumed land treatment of 15%B and 85%D. This site is allowed to utilize the existing storm drain and historical patterns. Due to the existing drainage infrastructure it is not feasible to pond the volume on site. Since the site is not able to capture the water quality first flush requirement on site the owner requests to pay the fee in lieu.

David Soule, P.E.
Professional Engineer or Architect

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 = \$ 8,880.00

THIS SECTION IS FOR CITY USE ONLY

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

☐ Waiver is DENIED.



7/12/2024

City of Albuquerque
Hydrology Section