## CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



March 22, 2023

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

RE: Veterans Integration Center – Phase 1 2701 Mulberry St. SE Grading & Drainage Plans Engineer's Stamp Date: 03/17/23 Hydrology File: M15D054

Dear Mr. Johnston:

Based upon the information provided in your submittal received 02/03/2023, the Grading & Drainage Plans are 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

2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for \$25.00 made out to "Bernalillo County" for the retention pond per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

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 924-3995 or <u>rbrissette@cabq.gov</u>.

Sincerely,

Renée C. Brissette, P.E. CFM Senior Engineer, Hydrology Planning Department

Renée C. Brissette



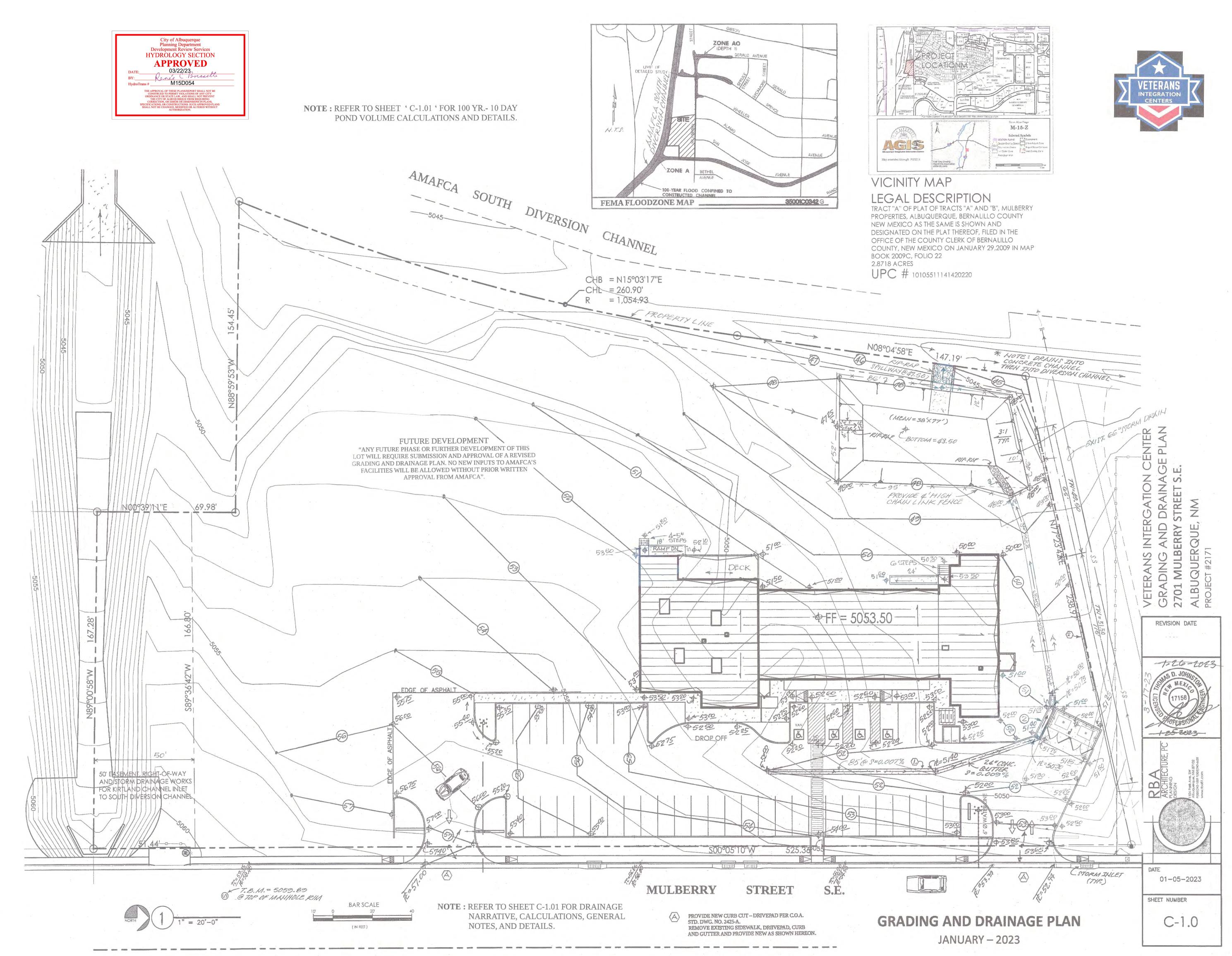
# City of Albuquerque

## Planning Department

Development & Building Services Division

### DRAINAGE AND TRANSPORTATION INFORMATION SHEET

VET Project Title:	ERSAS INTER CESITER	<i>Rollding</i> Permit #	Hydrology File #
-		EPC#	
DRB#	RACT'A' MUL		ress OR Parcel SEE DESCRIPTION
	PROFERIC	<u> </u>	
Applicant/Agent: 💆	RBA ARCHITE	CTURE Contact:	RICK BENNETT 505-242-1859
Address: //04/7	ARKAVEO S.	W- Phone	505-242-1859
Email: ricke	Prba81·co	om ·	
		, <u>,</u>	
Applicant/Owner:	GEORGE T. RO	DRIGUEZ Contacts	GENGE RODRIGUEL
Address: /2800	SAN JUAN 1	V.E. Phone	505-610-0593
Email: pawra	de hotmai	1-COM	
•	:	•	
TYPE OF DEVELO	PMENT:PLAT	(#of lots)RESIDENCE _	_DRB SITE ADMIN SITE:
RE-SUBMITTAL:	YESN	Ю	
DEPARTMENT:	TRANSPORT	TATION HYDROLO	GY/DRAINAGE
Check all that apply:		•	
		MATERIAL AND A DESIGNATION OF THE PARTY OF T	NATIA COMPANION CONCUER.
TYPE OF SUBMIT		. /	OVAL/ACCEPTANCE SOUGHT:
<del></del>	HITECT CERTIFICA		NG PERMIT APPROVAL
PAD CERTIFICA'	:	· <del></del>	ICATE OF OCCUPANCY PTUAL TCL DRB APPROVAL
CONCEPTUAL G	· ·		MNARY PLAT APPROVAL
GRADING PLAN	·		AN FOR SUB'D APPROVAL
DRAINAGE REPO			AN FOR BLDG PERMIT APPROVAL
	EVELOPMENT PER		PLAT APPROVAL
ELEVATION CEI			LEASE OF FINANCIAL GUARANTEE
CLOMR/LOMR		FOUND	ATION PERMIT APPROVAL
	LATION LAYOUT	(TCL) GRADI	NG PERMIT APPROVAL
ADMINISTRATIV			APPROVAL
TRAFFIC CIRCU	LATION LAYOUT	FOR DRB PAVING	G PERMIT APPROVAL
APPROVAL		GRADI	NG PAD CERTIFICATION
TRAFFIC IMPAC	T STUDY (TIS)	WORK	ORDER APPROVAL
STREET LIGHT I	LAYOUT		R/LOMR
OTHER (SPECIF)	Y)		PLAN DEVELOPMENT PERMIT
PRE-DESIGN ME	ETING?		(SPECIFY)
	03-17-		•



GEORGE T. RODRIGUEZ
LAND USE, DEVELOPMENT AND
REDEVELOPMENT CONSULTANT
ALBUQUERQUE, NEW MEXICO
(505)610-0593

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

- 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
- 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.

### LEGEND:

TOP OF CURB ELEVATION = 7C = 57.65

CURB FLOWLINE ELEVATION = 1 = 57.00

EXISTING SPOT ELEVATION = 5055

EXISTING CONTOUR ELEVATION = 5055 PROPOSED SPOT ELEVATION = \$5540

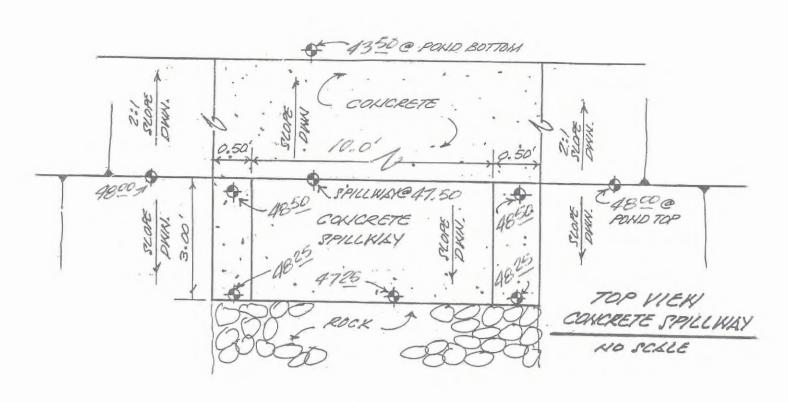
PROPOSED CONTOUR ELEVATION = \* PROPOSED OR EXISTING CONCRETE SURFACE =

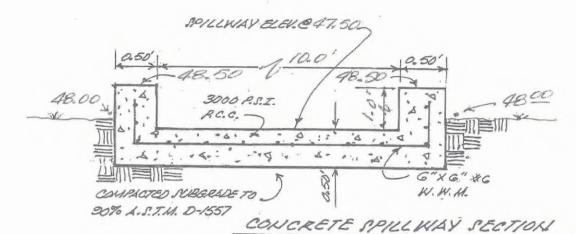
EXISTING FENCE LINE =

### **GENERAL NOTES:**

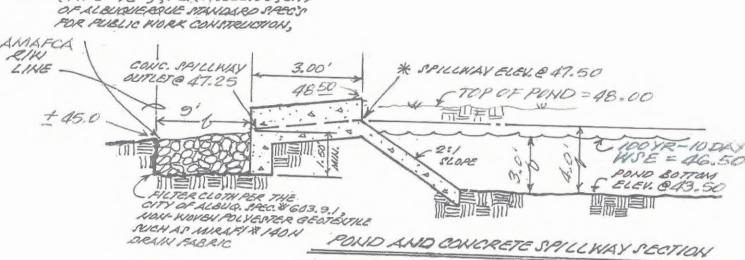
1) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.

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

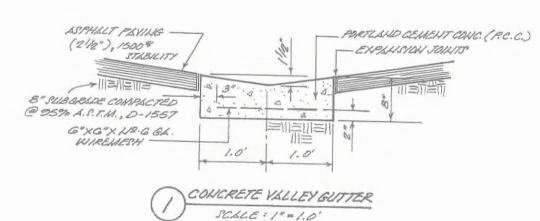


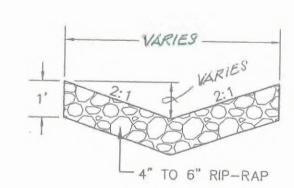


\* NOTE; PROVIDE FROM PPILLWAY RIGHT IF-WAY ROCK (G"MIN.) RIP-RAP TYPE "VL"), PERTABLE 109, CITY OF ALBUQUERQUE STANDARD SPEC'S FOR PUBLIC WORK CONSTRUCTION,

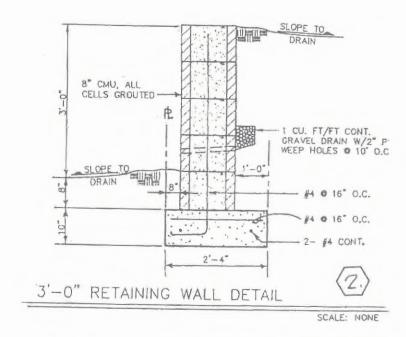


NOT TO SCALE





RIP-RAP SWALE SECTION A-A



### GENERAL NOTES:

- 1. ALL WALLS ARE TO HAVE 12" CMU PILASTERS @ 12'-0" O.C. PLACE NO. 4's IN EACH CELL FILL ALL CELLS WITH CONCRETE.
- 2. ALL CONCRETE IS TO BE 3000 PSI.
- 3. MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM D 1557 FOR A DEPTH OF 12". MOISTURE CONTENT IS
- 4. BACK FILL AGAINST WALLS IS TO BE HAND-PLACED AND
- 5. ALL BARS ARE TO BE GRADE 60, ASTM 615.

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

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

TABLE	6.2.14 Peak Dis	charge ( )	Aber Food	A Maria
Zone	the first of the first	Land Tr	eatment	
100-YE	AR PEAK DISCH	B ARGE (CSF/ACRE)	<u> </u>	D
1	7.54	216	2.87	4,12
(2)	7.71	2.36	3.05	4.34
3	1.84	2.49	3.17	4.49
4	2.09	2.73	3.41	4.78

### The 6-hour excess precipitation, E, by zone and treatment is summarized in

Zone	Control of the Contro				
	Mark A street	A STATE OF STATE OF	Charles Charles	D	
100-Y	EAR EXCESS PAR	TICIPATION, E (IN)	Maring Property	and the state of t	
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	

### NOTES:

BUILDING PAD COMPACTION TO BE PER SOILS ENGINEER'S TEST RESULTS AND RECOMMENDATIONS.

CONTRACTOR TO PROVIDE ROOF GUTTERS AND DOWNSPOUTS (AS SHOWN) WITH SPLASH BOXES TO DISSIPATE DRAIN FLOW

CONTRACTOR TO PROVIDE POSITIVE DRAINAGE ( 2% MIN.) AWAY FROM STRUCTURE.

PROJECT T.B.M.: AS SHOWN ON THE PLAN HEREON.

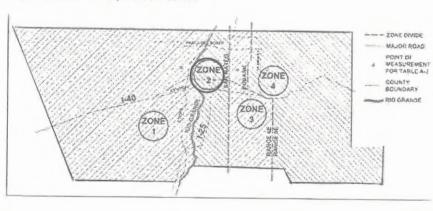
\*\*\* PAD CERTIFICATION IS REQUIRED PRIOR TO BUILDING

\*\*\* ENGINEER'S CERTIFICATION IS REQUIRED FOR "CERTIFICATE OF OCCUPANCY" RELEASE.

### TABLE 6.2.7 Precipitation Zones Zone Location West of the Rio Grande Between the Rio Grande and San Mateo 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 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

N.T.S.

### FIGURE 6.2.3 Precipitation Zones



#### DRAINAGE COMMENTS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED ON THE WEST SIDE OF MULBERRY STREET S.E. EAST OF INTERSTATE HIGHWAY 25 AND SOUTH OF GIBSON BOULEVARD S.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, ( ZONE ATLAS 'M-15-Z' ).

THE SUBJECT SITE, 1.) IS TO HAVE A VETERANS INTEGRATION CENTER BUILDING AND ASSOCIATED IMPROVEMENTS CONSTRUCTED THEREON, (THIS GRADING AND DRAINAGE PLAN WAS PREPARED TO SUPPORT A BUILDING PERMIT APPLICATION FOR SAID PROPOSED DEVELOPMENT, 2.) DOES NOT ACCEPT OFFSITE FLOWS FROM ADJACENT PROPERTIES, 3.) DOES NOT CONTRIBUTE TO THE OFFSITE FLOWS OF ADJACENT PROPERTIES, 4.) IS NOT LOCATED WITHIN A DESIGNATED FLOODPLAIN (DESIGNATED ZONE 'X', REFERENCE FEMA PANEL NO. 35001CO342G, EFFECTIVE 09-26-2008), 5.) IS ADJACENT TO THE ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY SOUTH DIVERSION CHANNEL, 6.) IS TO PROVIDE A RETENTION POND FOR THE DEVELOPED 100 YR. - 10 DAY STORM 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.

#### SITE AREA = 2.90 ACRES (TOTAL)

NOTE: CALCULATIONS SHOWN HEREON ARE FOR "PHASE ONE (1) DEVELOPMENT", BEING A 1.23 ACRE PORTION OF THE 2.90 ACRE SITE.

PRECIPITATION ZONE: TWO (2)

"LAND TREATMENT METHOD" FOR CALCULATION OF "Qp"

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

EXCESS PRECIPI	TATION:	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	1.23 AC.	0.00 AC.
TREATMENT B	0.00 AC.	0.00 AC.
TREATMENT C	0.00 AC.	0.48 AC.
TREATMENT D	0.00 AC.	0.75 AC.

#### EXISTING EXCESS PRECIPITATION:

WEIGHTED 'E' =  $(0.62 \times 1.23) + (0.80 \times 0.00) + (1.03 \times 0.00) + (2.33 \times 0.00) / 1.23 = 0.62 IN.$ V100-360 = (0.62 X 0.00) / 12 = 0.05167 AC. FT. = 2,251.0 CU. FT.

#### **EXISTING PEAK DISCHARGE:**

 $Q-100 = (1.71 \times 1.23) + (2.36 \times 0.00) + (3.05 \times 0.00) + (4.34 \times 0.00) = 2.10 CFS$ 

### PROPOSED EXCESS PRECIPITATION:

WEIGHTED 'E' =  $(0.62 \times 0.00) + (0.80 \times 0.00) + (1.03 \times 0.48) + (2.33 \times 0.75) / 1.23 = 1.82 \text{ IN}.$ V100-360 = (1.82 X 0.75) / 12 = 0.11375 AC. FT. = 4,955.0 CU. FT.

### PROPOSED PEAK DISCHARGE:

 $Q-100 = (1.71 \times 0.00) + (2.36 \times 0.00) + (3.05 \times 0.48) + (4.34 \times 0.75) = 4.72 CFS$ 

### INCREASE: V100-360 = 2,704.0 CU. FT. Q-100 = 2.62

\*\*\* 100-YR./10-DAY STORM VOLUME CALCULATION :

V10-DAYS = V360 + AD X (P-10 DAYS - P 360) / 12 IN. FT. V10-DAYS = 0.11375 + 0.75 X (3.62 - 2.29) / 12 IN. FT. = 0.19687 AC. FT. = 8,575.7 CU. FT.

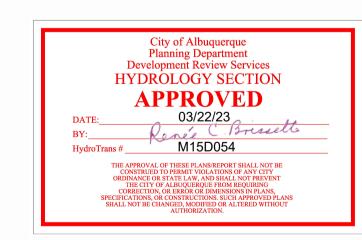
SECTION 5, BRATER & KING, 6th EDITION, 1976).

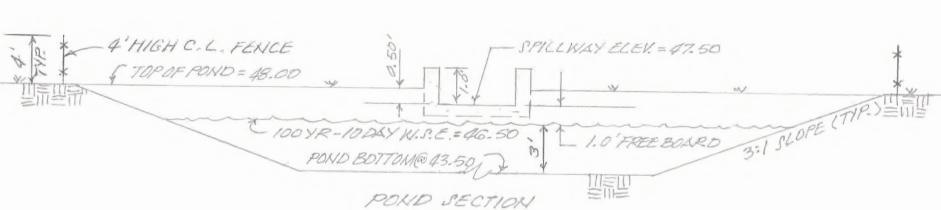
## POND SPILLWAY - WEIR SIZE CALCULATION:

Q = 4.72 CFS BREADTH = 3.0' VALUE OF "C" = 2.63 "H" = 0.50' VALUE OF "C" = 2.63 (INTERPOLATED FROM TABLE 5.3, BOOK OF HYDRAULICS,

$$L = \frac{0}{(2.63)(8^{1.5})} = \frac{4.72}{(2.63)(0.50^{1.5})} = \frac{5.09'(0.50^{1.5})}{(0.50^{1.5})} = \frac{5.09'(0.50^{1.5})}{(0.50^{1.5})}$$

NOTE: PROVIDED LENGTH "L" = 10.0'

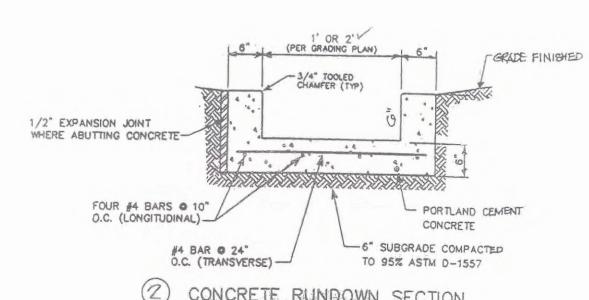




(MEAN) 38'X77' = 2,926.0# (PROVIDED) 2,930.0 % X 3.00'DEPTH = 8,790.0 CU. FT. (REQUIRED = 8,575.7 CU.FT.)

N.T.S.

NOTE: PROVIDE MINIMUM 4.0' HIGH CHAIN LINK FENCE ( OR EQUAL ) AROUND POND PERIMETER WITH LOCKED GATE ACCESS FOR MAINTENANCE.



NOTE, STEEL REINFORCING IS TO BE CONTINUOUS.

CENTERS

1-26-2023 1-25-2023 RB RG HG DATE 01-05-2023

SHEET NUMBER

REVISION DATE