## CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

March 29, 2024

Genny Donart, P.E. Isaacson & Arfman, P.A. 128 Monroe St. N.E Albuquerque, NM 87108

RE: 5500 Escondina Lane NW Permanent C.O. – Accepted Engineer's Certification Date: 03/26/24 Engineer's Stamp Date: 04/24/23 Hydrology File: F14D076F

Dear Ms. Donart:

PO Box 1293 Based on the Certification received 03/26/2024 and site visit on 03/29/2024, this letter serves as a "green tag" from Hydrology Section for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

Albuquerque If you have any questions, please contact me at 924-3995 or <u>rbrissette@cabq.gov</u>.

Sincerely,

NM 87103

Renée C. Brissette

www.cabq.gov

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



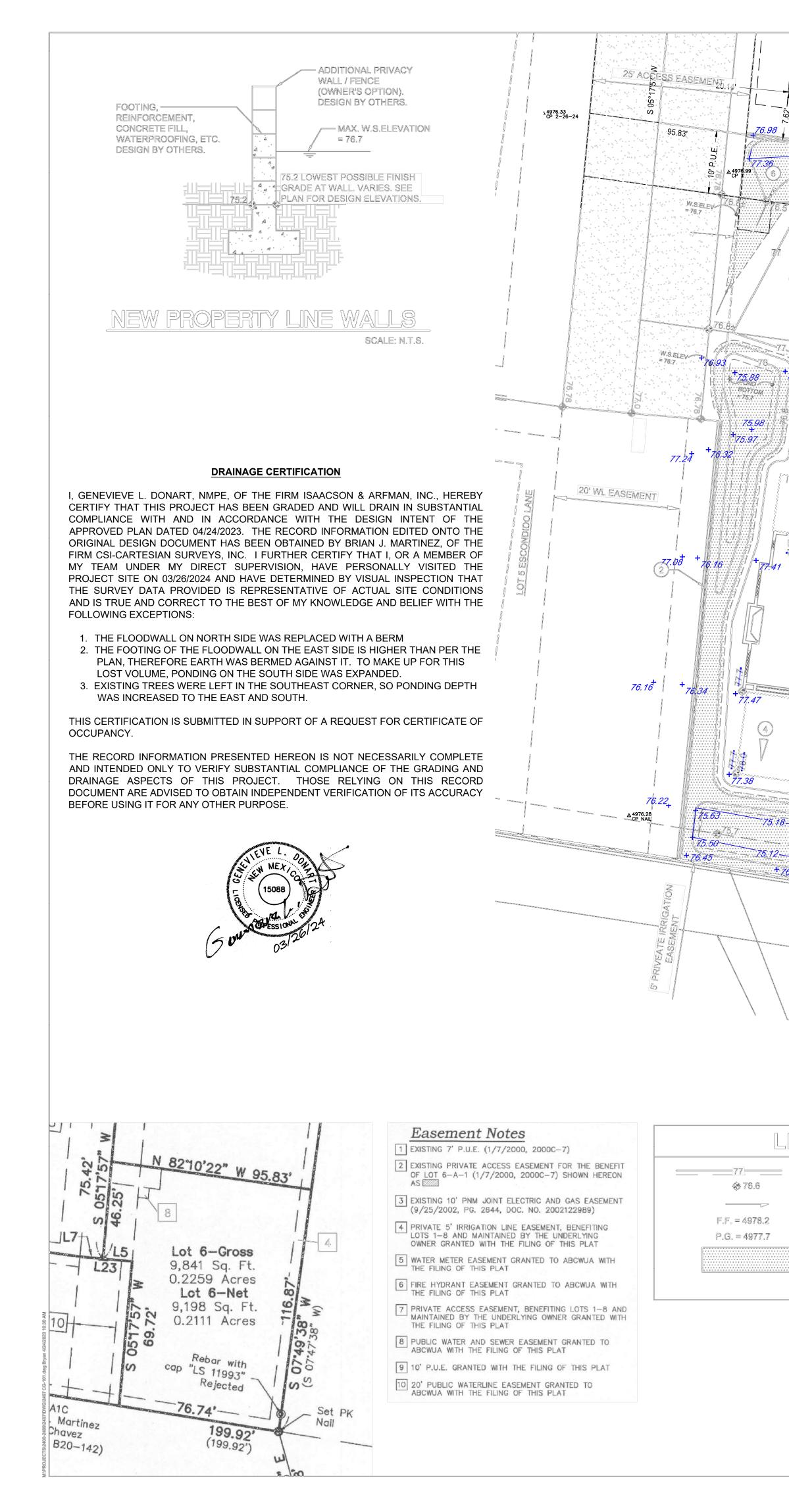
### **City of Albuquerque**

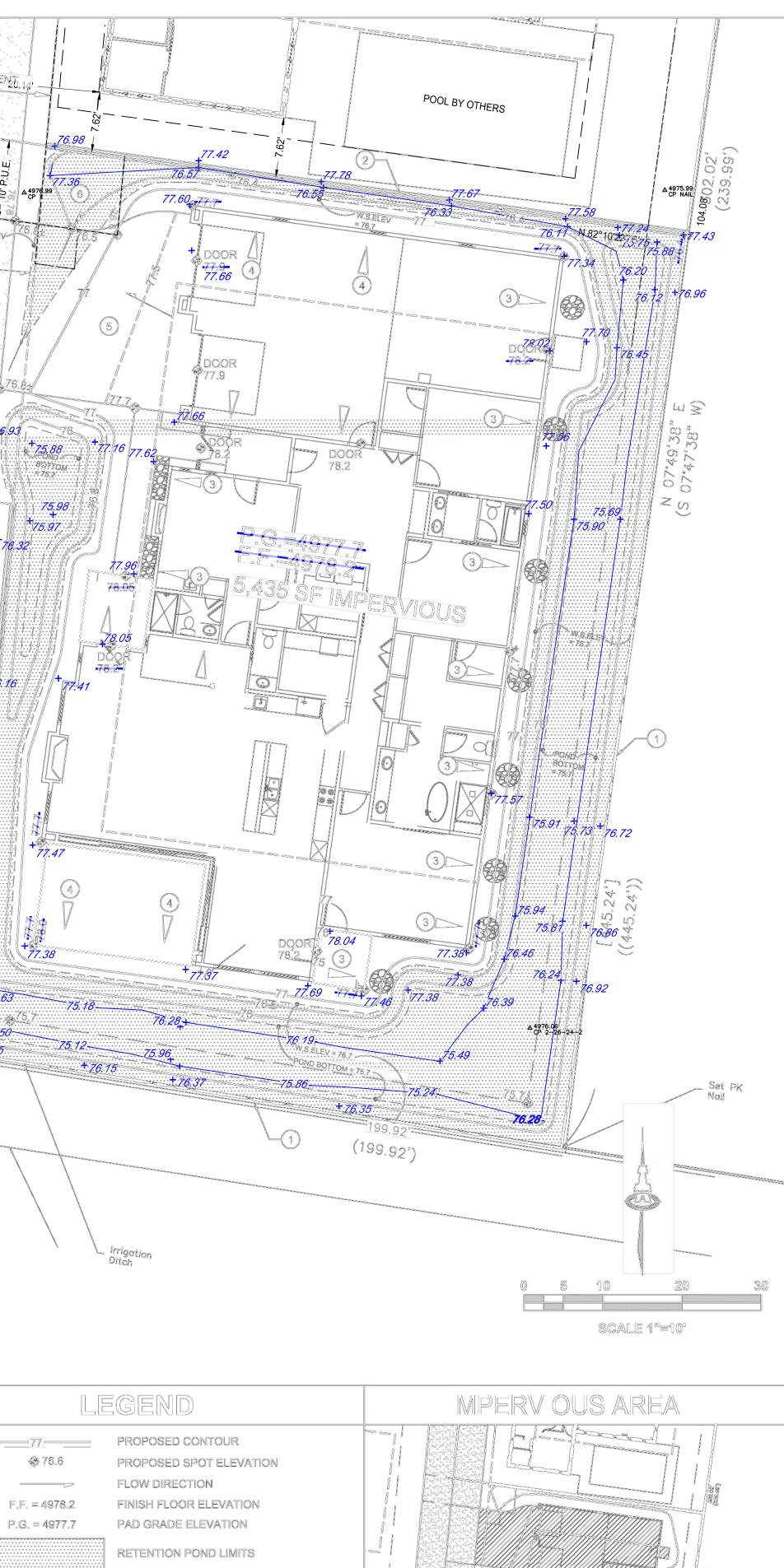
Planning Department Development & Building Services Division

#### DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title:	Hydrology File #
City Address, UPC, OR Parcel:	
Applicant/Agent:	Contact:
	Phone:
Email:	
Applicant/Owner:	Contact:
Address:	Phone:
Email:	
(Please note that a DFT SITE is one that need	ds Site Plan Approval & ADMIN SITE is one that does not need it.)
TYPE OF DEVELOPMENT: PLAT	(#of lots) RESIDENCE
DFT	SITE ADMIN SITE
RE-SUBMITTAL: YES NO	
DEPARTMENT: TRANSPORTA	TION HYDROLOGY/DRAINAGE
Check all that apply under Both the Type	of Submittal and the Type of Approval Sought:
TYPE OF SUBMITTAL:	<b>TYPE OF APPROVAL SOUGHT:</b>
ENGINEER/ARCHITECT CERTIFICA	TION BUILDING PERMIT APPROVAL
PAD CERTIFICATION	CERTIFICATE OF OCCUPANCY
CONCEPTUAL G&D PLAN	CONCEPTUAL TCL DFT APPROVAL
GRADING & DRAINAGE PLAN	PRELIMINARY PLAT APPROVAL
DRAINAGE REPORT	FINAL PLAT APPROVAL
DRAINAGE MASTER PLAN	SITE PLAN FOR BLDG PERMIT DFT
CLOMR/LOMR	APPROVAL
TRAFFIC CIRCULATION LAYOUT (7	SIA/RELEASE OF FINANCIAL GUARANTEE
ADMINISTRATIVE	FOUNDATION PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT F APPROVAL	OR DFT GRADING PERMIT APPROVAL
TRAFFIC IMPACT STUDY (TIS)	SO-19 APPROVAL
STREET LIGHT LAYOUT	PAVING PERMIT APPROVAL
OTHER (SPECIFY)	GRADING PAD CERTIFICATION
omer(billen i)	WORK ORDER APPROVAL
	CLOMR/LOMR
	OTHER (SPECIFY)

DATE SUBMITTED: \_\_\_\_





#### GENER

- PROPOSED SPOT AND CONTOUR E OF FINISH MATERIAL (I.E. TOP OF PA CONTRACTOR SHALL GRADE AND C
- ELEVATIONS SHOWN MINUS FINISH
   POND DESIGN PARAMETERS AND ST SHOWN ON THIS PLAN SHALL BE ST CERTIFICATION PURPOSES.
- POST-CONSTRUCTION MAINTENANG FACILITIES WILL BE THE RESPONSI-ENGINEER RECOMMENDS THAT OW AFTER EACH RAINFALL TO IDENTIFY EROSION PROTECTION AS NEEDED
- PER THE SUBDIVISION GRADING AN RESIDENCE <u>SHALL</u> POND STORMW/ OWNER SHALL COORDINATE WITH REGARDS TO THE BUILDING & FOUI THE ADJACENT PONDING.
- FOR ENGINEER'S CERTIFICATION O CONTRACTOR SHALL PROVIDE AN / PREPARED BY A LICENSED SURVEY AS-BUILT INFORMATION:
- FINISH FLOOR ELEVATION
   SPOT ELEVATIONS AT EACH SP
- APPROVED PLAN TOP AND TOE LIMITS AND ELEV REQUIRED CAPACITY IS PROVI PROVIDED ON THIS PLAN ARE

# A KEYEI

- 1. EXISTING RETAINING/PRIVACY WA CONSTRUCTION,
- NEW PRIVACY WALL. FINAL GRADE REQUIRED TO PROVIDE THE NECE ON-SITE PONDING TO EQUALIZE.
- 3. ROOF DRAIN DISCHARGE: INSTALL SPLASHPAD, PRECAST CONCRETE CONCENTRATED ROOF DRAIN LOO RECOMMENDS INSTALLING 3/4" MI EROSION CONTROL MATERIAL TO POND BOTTOM.
- SLOPE ROOF SHEETFLOW DISCHARECOMMENDS INSTALLING 3/4" MI EROSION CONTROL MATERIAL TO
- 5. GRADE DRIVEWAY TO DRAIN TO O
- 6. PROTECT EXISTING PNM TRANSFO

#### BUILDING DE THE BUILDING PAD AREA SHALL BE PE GEOTECHNICAL REPORT. THE BUILDING DESIGN SHALL ADDRES TEN FEET OF BUILDING.

POND VOLUME (

.(	ON-SIT
Contour	Area
76.7	3020
76.5	2700
76.0	1785
75.7	1260

MPERV OUS AREA		nïuru							
	CALCULATIONS: Lot 6, Bosque Escondida								
	Based on City of Albuquerque DMP, Article 6-2 Hydrology								
	100-YEAR, 6-HOUR CALCULATIO								
	AREA OF SITE:	9841 SF							
		100-year, 6-hour							
The second se		<b>DEVELOPED FLOWS:</b>							
		Treatu							
		Area A							
		Area B = 22							
		Area C = 19							
		Area D = $54$							
		Total Area = 98							
	On-Site Weighted Excess Precipitation (10								
	Weighted $E =$	$\underline{E_AA_A} + \underline{E_BA_B} + \underline{E_CA_C} + \underline{E_DA_D}$							
		$A_A + A_B + A_C + A_D$							
		Developed E =							
	and the second sec								
	On-Site Volume of Runoff: V360 =	E*A / 12							
		Developed V <sub>360</sub> =							
	On-Site Peak Discharge Rate: $Qp = Q_{pA}$	$A_A + Q_{pB}A_B + Q_{pC}A_C + Q_{pD}A_D / 43,300$							
	For Precipitation Zone 2	0							
	$Q_{pA} = 1.71$	$Q_{\rm PC} = 3.05$							
	$Q_{pB} = 2.36$	$Q_{pD} = 4.34$							
THE PROPOSED IMPERVIOUS AREA (SHOWN SHADED) = 5,435 SF		Developed $Q_p =$							

RAL NOTES	VICINITY MAP F-14	(	IIIC.	itants		et NE 17108	l.com
ELEVATIONS SHOWN REPRESENT TOP PAVEMENT, TOP OF LANDSCAPING, ETC.). COMPACT SUBGRADE BASED ON H MATERIAL THICKNESSES. STORMWATER CONTROL MEASURES STRICTLY ADHERED TO FOR NCE FOR PRIVATE STORMWATER		1980	IIIdil.	ii Engineering Consultants		128 Monroe Street NE Albuquerque, NM 87108	505-268-8828   www.iacivi
SIBILITY OF THE FACILITIES OWNER. WINER INSPECT THE SITE YEARLY AND IFY AREAS OF EROSION. ADD ADDITIONAL 2D. AND DRAINAGE PLAN, THE PROPOSED WATER WITHIN 10° OF THE RESIDENCE.		acson	V.	CIVIL			505-26
H STRUCTURAL DESIGNER WITH UNDATION REQUIREMENTS RELATING TO OF SUBSTANTIAL COMPLIANCE, N AUTOCAD FORMAT AS-BUILT SURVEY EYOR WHICH INCLUDES THE FOLLOWING		© 2020 This de concepti remain t	osign, s are he pri	cak e ov operty	:ulatio med / of Is	ms, e by e saacso	and and m &
SPOT ELEVATION SHOWN ON THE EVATIONS FOR PONDS TO ENSURE VIDED. NOTE: PONDS ELEVATIONS E BASED ON FINISHED CONDITION.	$\frac{1}{12} = 750^{\circ} \pm \frac{1}{12} = 750^{\circ} \pm \frac{1}{12} = \frac{1}{12} = 750^{\circ} \pm \frac{1}{12} = \frac$	Arfman, shall be firm or purpose the w Isaacsor	) utiliz r col whai mitten	ted b rporat tsoev pe	ay an tion er ex armiss	y pen for i icept i	son, any
D NOTES	PROJECT INFORMATION:	NEW NEW	(10)				
ALL. CONTRACTOR TO PROTECT DURING	PROPERTY: THE SITE IS AN UNDEVELOPED RESIDENTIAL LOT AND IS BOUNDED TO THE WEST AND NORTH BY UNDEVELOPED RESIDENTIAL LOTS, AND TO THE EAST AND SOUTH BY AGRICULTURE FIELDS.			10 201 65 201 65 201 65	\$  -202	3	
CESSARY POND VOLUME AND TO PERMIT SEE SECTION THIS SHEET. LL EROSION PROTECTION (3' DIA ROCK TE SPLASHPAD, OR EQUAL) AT ALL DCATIONS. (OWNER'S OPTION) ENGINEER MIN. ROCK MULCH OVER PERMANENT O PASS FLOW FROM SPLASHPADS TO	PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE A SINGLE FAMILY RESIDENCE WITH ACCESS DRIVE AND ASSOCIATED LANDSCAPING AND PONDING. LEGAL: LOT 6 OF BOSQUE ESCONDIDO, BERNALILLO COUNTY, NM AREA: 0.2259 ACRES	Engine	199				
ARGE. (OWNER'S OPTION) ENGINEER MIN. ROCK MULCH OVER PERMANENT O PASS FLOW FROM TO POND BOTTOM. ON-SITE PONDING AS SHOWN.	BENCHMARK: ACS MONUMENT "DOUGLAS". ELEVATION = 4975.078' (NAVD 1988)         OFF-SITE: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY.         FLOOD HAZARD: PER FEMA FIRM MAP #35001C0119G, EFFECTIVE DATE 09/26/2008, THE SITE IS LOCATED WITHIN FLOODZONE 'X' SHADED WHICH IS DEFINED AS AREAS WITH REDUCED FLOOD RISK DUE TO LEVEE.         DRAINAGE PLAN CONCEPT:         THE SITE IS PART OF THE BOSQUE ESCONDIDO SUBDIVISION APPROVED BY HYDROLOGY WITH A FLAT GRADING SCHEME AS FOLLOWS:         • PAD GRADE = 4977.7 (MIN). OVERFLOW ELEVATION 4976.57.         • EACH LOT IS REQURIED TO STORE THE 100-YEAR 10-DAY VOLUME.         • ALL ROOF FLOW WILL BE DIRECTED TO THE STORMWATER RETENTION PONDS.         • WALLS WILL BE CONSTRUCTED ON THE PROPERTY LINES TO CONTAIN THE 100-YEAR 10-DAY MAXIMUM RETENTION VOLUME.         • SINCE ALL STORMWATER IS RETAINED ON THE PROPERTY, NO SEPARATE STORM WATER QUALITY VOLUME IS REQUIRED.			Lame 87107			
FORMER WITHIN EASEMENT THIS AREA. ESIGN NOTE PREPARED AND COMPACTED PER THE ESS PONDED STORM WATER WITHIN				scondida I erque NMI,			
CALCULAT ONS	PROPOSED MPERV OUS AREA						
E PONDING Volume 572 CF 1121 CF	THE PROPOSED IMPERVIOUS AREA (SHOWN SHADED) = 5,413± SF INCLUDING PATIOS, WALKS, AND DRIVEWAY. THE STREET IS PERVIOUS WITH AGGREGATE BASE COURSE PAVING. THE DRIVEWAY MAY BE CONSTRUCTED WITH PAVERS WHICH WOULD REDUCE THE IMPERVIOUS AREA. THE PROPOSED IMPERVIOUS AREA IS APPROXIMATELY 55% OF THE TOTAL AREA. MASTER DRAINAGE PLAN CALCULATED 100-YEAR 10-DAY VOLUME FOR	100%		ECT NUMBER: IA 2497	N BV. B.IR/ANW		04-2023
457 CF = 2150 CF	THIS LOT = 1,749 CF (BASED ON IMPERVIOUS AREA OF 4,428 SF). ACTUAL 100-YEAR DAY DAY VOLUME BASED ON PROPOSED IMPERVIOUS = 1,984 CF. ON-SITE PONDING PROVIDED AT A MAX. DEPTH OF 1' = 2,150 CF.				PILE:		DATE:
HYDROLOGY CA ot 6, Bosque Escondida : May 5, 2022		Description					
OMP, Article 6-2 Hydrology dated June 26, 2020         6-HOUR CALCULATIONS         841       SF         r, 6-hour         OPED FLOWS:	CIP: V360 (from previous calculation) 1384	Date					
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	2Area Treatment D (SF)541352Zone233For 100-year 10 Day Stoms:	2 SHEE					<u>.                                    </u>
$\begin{array}{rcl} \text{Fotal Area} &=& 9841 & 100\% \\ \text{Iour Storm)} \\ \hline E_BA_B + E_CA_C + E_DA_D \\ \hline A_A + A_B + A_C + A_D \\ \hline \text{bed } E &=& 1.69 \text{ in.} \\ \hline 2 \\ \hline \text{bed } V_{360} &=& 1384   \text{ CF} \\ \end{array}$	$V_{10day} = V_{360} + (A_D * (P_{10day} - P_{360})/12" \text{ per foot})$ $\boxed{V_{360}} = 1384$ $\boxed{A_D} (SF) = 5413$ $\boxed{Zone} = 2$ $\boxed{P_{10day}} = 3.62$ $\boxed{P_{360}} = 2.29$ $\boxed{V_{360}} = 1384$		ina	din	lg		1
$Q_{pc}A_{c}+Q_{pD}A_{D}/43,560$ Total Volume (V10 day) = 1984		SHEET NUMBER					
$Q_{pC} = 0.3.05$ $Q_{pD} = 4.34$ $ped Q_{p} = 0.8 \text{ CFS}$		C	}@	)- )-	10	)1	
							]