CITY OF ALBUQUERO

Planning Department Alan Varela, Director



November 10, 2022

Mr. Ron Bohannan, P.E. Tierra West, LLC 5571 Midway Park Place NE Albuquerque, NM 87109

Central Take 5 RE: 5210 Central Ave SE Albuquerque, NM 87108 **Grading and Drainage Plan (K17D080)** Engineer's Stamp Date 10/11/2022

Dear Mr. Bohannan,

Based upon the information provided in your submittal received 10/11/2022, the Grading & Drainage Plan is 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 PRIOR TO CERTIFICATE OF OCCUPANCY:

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

Albuquerque

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, 505-924-3420) 14 days

prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3695 or tchen@cabq.gov.

Sincerely,

NM 87103

www.cabq.gov

Tiequan Chen, P.E.

Principal Engineer, Hydrology

Planning Department, Development Review Services

File: K17D080



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Central Take 5	Building Permit #:		Hydrology File #:		
DRB#:	EPC#:	Work Order#:			
Legal Description: Lt 16A EXCL PORT OUT	TO R/W PLAT OF LTS	3 16A BLK 36 V	ALLEY VIEW ADDN SEC 23 TION R35		
City AddressOr UPC: 5210 Central Ave SE	Albuquerque, NM 87108	3/ UPC: 101705	753016642912		
Applicant:Tierra West, LLC			Contact:		
Address: 5571 Midway Park Place NE Albuquero	ue NM 87109				
Phone#: _505-858-3100	Fax#: 505-858-1118	3	E-mail:		
Other Contact:			Contact:		
Address:					
Phone#:	Fax#:		E-mail:		
TYPE OF DEVELOPMENT:PLAT (of lots)RESID	DENCE	DRB SITE _X_ ADMIN SITE		
IS THIS A RESUBMITTAL? X Yes	No				
DEPARTMENT TRANSPORTATION	_X_ HYDROLOGY	//DRAINAGE			
TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATION PAD CERTIFICATION CONCEPTUAL G & D PLAN X GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERMIT A ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING?	PPLIC	BUILDING PER CERTIFICATE OF PRELIMINARY SITE PLAN FOR SITE PLAN FOR FINAL PLAT A SIA/ RELEASE FOUNDATION GRADING PER GRADING PER GRADING PER GRADING/ PAI WORK ORDER A CLOMR/LOMR FLOODPLAIN I	OF FINANCIAL GUARANTEE PERMIT APPROVAL MIT APPROVAL 'AL IT APPROVAL O CERTIFICATION		
DATE SUBMITTED: 10-11-22					
COA STAFF:	ELECTRONIC SUBMITTA				

5, BLOCK 36 IN EED 8014247)

DPM Weighted E Method CH 6

Precipitation Zone 2 **Central Take 5 Oil Change**

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed Volume = Weighted E * Total Area Flow = Qa*Aa + Qb*Ab + Qc*Ac + Qd*Ad

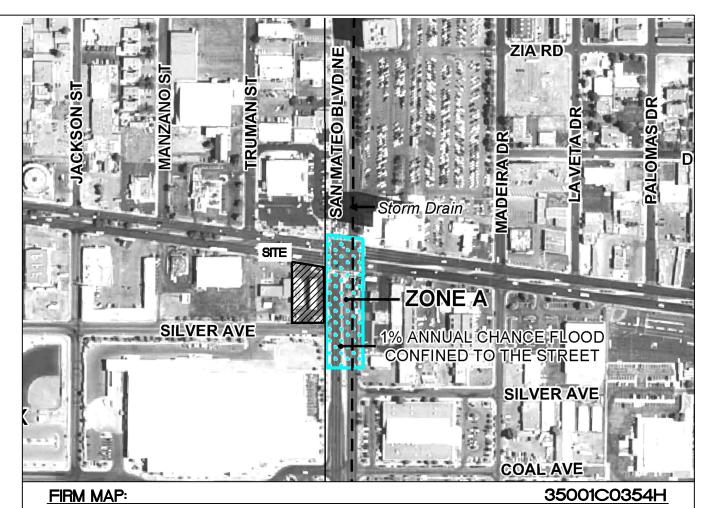
Existing Conditions

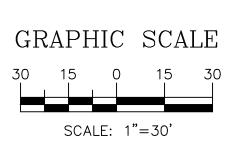
TWLLC

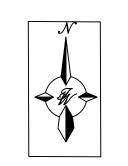
	Basin Descriptions										100	-Year, 6-H	r		
Basin Area Area Area					Treatmo	ent A	Treatment B Treatment C		Treatment D		Weighted E	Volume	Flow		
ID	Tract	(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(in)	(ac-ft)	cfs
H1	16A	10,595	0.24	0.00038	0%	0.000	0%	0.000	10%	0.024	90%	0.219	2.200	0.045	1.02
H2	16A	10,178	0.23	0.00037	0%	0.000	0%	0.000	10%	0.023	90%	0.210	2.200	0.043	1.02
Total		20,773	0.48	0.00075		0.000		0.000		0.047		0.429		0.087	2.042

Proposed Conditions

	Basin Descriptions									100	100-Year, 6-Hr				
Basin	Troot	Area	Area	Area	Treatm	ent A	Treat	ment B	Treatm	ent C	Treatme	ent D	Weighted E	Volume	Flow
ID	Tract	(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(in)	(ac-ft)	cfs
D1	А	6,586	0.15	0.00024	0%	0.000	5%	0.008	10%	0.015	85%	0.1285	2.124	0.027	0.62
D2	Α	14,187	0.33	0.00051	0%	0.000	5%	0.016	10%	0.033	85%	0.2768	2.124	0.058	1.34
Total		20,773	0.48	0.00075		0.000		0.024		0.048		0.405		0.084	1.961







SWQV-1 Pond Vo	olume Requirement		
Total Impervious Area =	ΣArea in "Treatmen	t D"	
Retainage depth = 0.42" Per DPM Pg. 272	0.035	foot	
Retention Volume =	=0.035 x Area D	CF	
Area D (0.1285 acres)	5598	SF	
Required Retention Volume	196	CF	
Pond Volume Provided	236	CF	

SWQV-2 Pond Volume Requirement

494

ΣArea in "Treatment D"

CF

Excess Precipitation, E (in.)							
Zone 2 100-Year 10-Year							
Ea	0.62	0.15					
Eb	0.8	0.3					
Ec	1.03	0.48					
Ed	2.33	1.51					

Peak Discharge (cfs/acre)								
Zone 2	100-Year	10-Year						
Qa	1.71	0.41						
Qb	2.36	0.95						
Qc	3.05	1.59						
Qd	4.34	2.71						

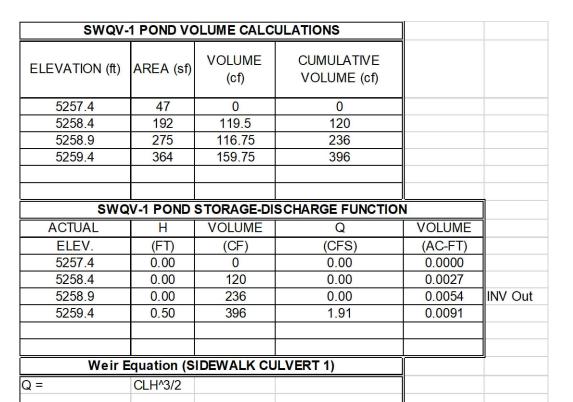
Retainage depth = 0.42" Per DPM Pg. 272 0.035 foot Retention Volume = =0.035 x Area D CF Area D (0.2768 acres) 12058 HISTORIC BASIN MAP 422 Required Retention Volume CF

Total Impervious Area =

Pond Volume Provided

SWQV-	1 POND VC	LUME CALC	JLATIONS		
ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)		
5257.4	47	0	0		
5258.4	192	119.5	120		
5258.9	275	116.75	236		
5259.4	364	159.75	396		
SWC	V-1 POND	STORAGE-DIS	SCHARGE FUNCTIO	<u> </u> N	1
ACTUAL	Н	VOLUME	Q	VOLUME	
ELEV.	(FT)	(CF)	(CFS)	(AC-FT)	
5257.4	0.00	0	0.00	0.0000	
5258.4	0.00	120	0.00	0.0027	
5258.9	0.00	236	0.00	0.0054	INV Out
5259.4	0.50	396	1.91	0.0091	
Weir E	quation (S	IDEWALK CU	LVERT 1)		
Q =	CLH^3/2				
C =	2.7				
L (ft)=	2				
H (Ft) =	Depth of wa	ater above cen	ter of orifice		
Q (CFS)=	Flow				

SWQV-	2 POND VO	LUME CALC	ULATIONS		
ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)		
5257.4	19	0	0		
5258.4	123	71	71		
5259.4	328	225.5	297		
5259.9	462	197.5	494		
5260.4	607	267.25	761		
SWC	V-2 POND	STORAGE-DI	SCHARGE FUNCTIO	N	
ACTUAL	Н	VOLUME	Q	VOLUME	
ELEV.	(FT)	(CF)	(CFS)	(AC-FT)	
5257.4	0.00	0	0.00	0.0000	
5258.4	0.00	71	0.00	0.0016	
5259.4	0.00	297	0.00	0.0068	
5259.9	0.00	494	0.00	0.0113	INV Out
5260.4	0.50	761	1.91	0.0175	
				<u> </u>	<u> </u>
Weir I	equation (S	IDEWALK CU	ILVERT 2)		
Q =	CLH^3/2				
C =	2.7				
L (ft)=	2				
H (Ft) =		ater above cer	nter of orifice		
Q (CFS)=	Flow				



RONALD R. BOHANNAN P.E. #7868

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION

APPROVED

11/10/2022

BY: Negree Cl. HydroTrans # K17D080

DRAWN BY CENTRAL TAKE 5 ALBUQUERQUE, NM 08/24/2022 **GRADING AND DRAINAGE BASIN MAP** 2022079_BASINS SHEET # TIERRA WEST, LLC C4.1 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 JOB #

www.tierrawestllc.com

2022079

PROPOSED BASIN MAP

