CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

April 10, 2024

Ted L. Barber, P.E. Incline Engineering 236 Tano Road Santa Fe, NM 887506

RE: 2731 Vassar Place NW Grading and Drainage Plan Engineer's Stamp Date: 03/26/24 Hydrology File: G16D082B4

Dear Mr. Barber:

PO Box 1293

Based upon the information provided in your submittal received 03/28/2024, the Grading & Drainage Plan is approved for Building Permit, Grading Permit and SO-19 Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

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
 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 stormwater quality 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

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 #
Legal Description:	
City Address, UPC, OR Parcel:	
Applicant/Agent:	Contact:
Address:	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	C (#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:	TYPE OF APPROVAL SOUGHT:
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	OR DFT GRADING PERMIT APPROVAL
TRAFFIC IMPACT STUDY (TIS)	SO-19 APPROVAL
STREET LIGHT I AVOUT	PAVING PERMIT APPROVAL
OTHER (SPECIEV)	GRADING PAD CERTIFICATION
omer(billen i)	WORK ORDER APPROVAL
	CLOMR/LOMR
	OTHER (SPECIFY)

DATE SUBMITTED: ____



Hydrology (COA DPM Part 6-2(A) Procedure for 40-Acre and Smaller Basins) Precipatation Zone (as per COA DPM Chapter 6 FIGURE 6.2.3 Precipitation Zones) = Zone 2

Precipatation Depth (in) (as per COA DPM Chapter 6 TABLE 6.2.8) 100 yr storm						P ₁₀₀₋₆ =	2.29	P ₁₀₀₋₂₄ =	2.59
Peak Disc	charge (as per COA DPM Chapter 6 6.2.14) 1	00 yr storm			(Q _{PA} (cfs/ac) Tre	atment A =	1.71	
					(Q _{PB} (cfs/ac) Trea	atment B =	2.36	
					(Q _{PC} (cfs/ac) Trea	atment C =	3.05	
					(Q _{PD} (cfs/ac) Tre	atment D =	4.34	
6-HOUR	Excess Precipitation, E (in.) (as per COA DPM	A Chapter 6 T	ABLE 6.2.13	3)					
	Land Treatment						В	C	D
6.19			Excess	Precipitat	ion(in) E	0.62	0.8	1.03	2.33
Existing (Conditions								
		Land Treatment Area (arce) A				E lin)	11 1 (1)	11 1 61	
Basin	Basin Area (acre)	Land Treatm	ient Area (aice A		E _w (III)	V 360 (acrt)	V ₁₄₄₀ (acft)	Q ₃₆₀ (cfs)
Basin	Basin Area (acre)	Land Treatm A _A	A _B	A _c	Ap	E _w (m)	V 360 (acrt)	V ₁₄₄₀ (actt)	Q ₃₆₀ (cfs)
Basin Site	Basin Area (acre) 0.9711	Land Treatm A _A 0	A _B	A _C 0.9711	A _D	1.03	V ₃₆₀ (астт) 0.083	V ₁₄₄₀ (actt) 0.083	Q ₃₆₀ (cfs) 2.96
Basin Site Full Deve	Basin Area (acre) 0.9711 clopment Conditions	Land Treatm A _A 0	A _B	A _C 0.9711	A _D 0	1.03	V ₃₆₀ (acrt) 0.083	V ₁₄₄₀ (actt) 0.083	Q ₃₆₀ (cfs) 2.96

Weighted $E_W = \frac{E_AA_A + E_BA_B + E_CA_C + E_DA_D}{A_A + A_B + A_C + A_D}$ $V_{360} = E_W * A / 12 in/ft$

 $V_{1440} = V_{360} + A_D * (P_{1440} - P_{360}) / 12 in/ft$ $Q_P = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

First Flush Calculations (as per COA DPM 6-12) Required Water Quality Retention Pond Volume= 0.85 x 0.42 =

Elev	Mean End Area	Cum Volume					
(ft)	(sqft)	(acre)					
5075.08							
5076.08	663	663.0000					
5077.08	663	1326.0000	>	1298			
5075.08 5076.08 5077.08	663 663	663.0000 1326.0000	>	1298			
Design Flov	w for Pond Outlet	c		L (crest length ft)	H ^{3/2} (Ht. of flow = 5")	1	
						-	

LEGAL DESCRIPTION

TRACT B-1-E-1 PLAT OF TRACTS B-1-A-1 THROUGH B-1-K-1, COMANCHE BUSINESS PARK, ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE REPLAT OF SAID SUBDIVISION, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON SEPTEMBER 15, 1997, IN PLAT BOOK 97C, FOLIO 277.

1298 cuft

BENCHMARK

ACS MONUMENT "CANDELARIA" HAVING AN ELEVATION OF 5090.846 FEET.

SITE LOCATION

The existing site is an approximate 0.9711-acre site located at 2731 Vassar Court NE, bounded on the south side by Vassar Ct., north side by private road, and west and east sides by existing development. This site can be accessed by going I-25 south, taking the Comanche exit, and then turning right to go under I-25, left onto Pan American, right on Vassar Drive, and left on Vassar Place. (see vicinity map this sheet).

EXISTING CONDITIONS

The existing site is 0.9711 acres and is an undeveloped commercial lot. The site does not appear to have any offsite flows. The runoff from this site is 2.96 cfs for the 100-yr, 6-hour storm under existing conditions.

The site does not lie within a 100 year FEMA floodplain (sec FEMA panel on this sheet). The site currently slopes from southeast to northwest.

FULLY DEVELOPED CONDITIONS

The proposed project consist of grading, construction of a 10,000 sqft commerical building, and a paved parking lot. The site's impervious area under proposed conditions will be 0.85 acre ft. The new parking lot will be graded to drain south and west and to storm drain inlets. The drainage calculations for proposed conditions are indicated on this sheet above. When fully developed as indicated on the grading and drainage plan, the increased runoff from the site is estimated at 4.06 cfs during the 100-year, 6-hour storm. The first flush pond SWQ volume for the new impervious area is 1326 cf. A new retention pond has been provided on the southwest corner of the site to retain the first flush storm event which is 1298 cf. Two 10" storm drain lines tie into the retention pond delivering on site runoff. A triple 24" side walk culvert serves as the outlet to the retention pond and will convey 4.09 cfs flow.

PROJECT HYDROLOGY

Private Drainage Facilities within City Right-of-Way Notice to Contractor

(Special Order 19 ~ "SO-19")

<u>LEGEND</u>

CONCRETE

BLOCK WALL

BOLLARD

SIGN

LIGHT POLE

(N 90°00'00" E)

{N 90°00'00" E

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EC

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---- OR -----

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------ SD ------

5075.50

BC 5075.50

FL 5075.50

TA 5075.50

TC 5075.50

Tract A-2A-1 1. Build sidewalk culvert per COA STD DWG 2236. Work is Luecking Park Complex permitted and inspected by DMD Construction Services No. 2 and No. 3 (12/10/2002, 2002C-392) 6 Division. 2. An excavation permit will be required before beginning any work within City Right-Of-Way. 3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations (N 89°54'54" E) (191.67') concerning construction safety and health. 191.88' N 80°5 4. Prior to any excavation, the contractor must contact New 24" JRAFFIC DROP INLETS WITH 10"Ø STORMOVARAIN PIPE TYP. RUN ALL PIPE AT CONSTANT GRADE TO INV AT POND TYP Mexico One Call, dial "811" [or (505) 260-1990] for the Rebar Wit location of existing utilities. Cap illegible GRADE BEHIND BACK TOP OF CURP AT 2 TO 1 TO DAYLIGHT TYP 5080.25' Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay. <u>Fr 5</u>080. 6. Backfill compaction shall be 95%. -FL 5080.34' 6" BASE COURSE 'C&G AS PER 7. Maintenance of the facility shall be the responsibility of the COA STANDARD TYP 5080.52 T NORTH END PARKING owner of the property being served. 8. Work on arterial streets may be required on a 24-hour basis. 9. For excavation and barricading inspections, contact DMD <u>-0.41%</u> _TA 5080.75' Construction Services Division. - 24" TRAFFIC DROP INLET, POSITION AT ROOF SCUPPER DRAINS TYP OF (4) N 90°00'00" E MEASURED BEARINGS AND DISTANCES RECORD BEARINGS AND DISTANCES PER PLAT (9/15/1997, 97C-277) 24" TRAFFIC DROP INLET WITH 10"0 -RECORD BEARINGS AND DISTANCES PEE STORM DRAIN PIPE TYP. RUN ALL PIPE AT CONSTANT GRADE TO INV AT POND TYP PLAT (9/14/2000, 2000C-241) - PROPOSED FACILITY FOUND MONUMENT AS INDICATED FINISHED SLAB SET CHISELED "X" UNLESS OTHERWISE Tract B-1-D-1 ELEVATION = 5080.83'Comanche Business Park (9/15/1997, 97C-277) -0.85% CHAINLINK FENCE METAL FENCE ELECTRIC CABINET BUILD ~ 201' RETAINING WALL AS PER -AVOID EXISTING FENCING FOR CONSTRUCTABILITY WATER VALVE WATER METER FIRE HYDRANT -TA 5080.75'//**** -TA 5080.75 SANITARY SEWER MANHOLE <u>-1.5,3% []</u> тс/5980.69' STORM DRAIN MANHOLE المراجع والمحالية المحالية المحالية A ... A 5080.17 -TA /50/80.1 UNDERGROUND GAS UTILITY LINE UNDERGROUND WATER UTILITY LINE UNDERGROUND SANITARY SEWER LINE N<u>o parkin</u>g TA 5079.97'-UNDERGROUND ELECTRIC UTILITY LINE -TA 5079.97 PROPOSED STORM DRAIN OR EXISTING STORM WATER QUALITY POND -/----- 6" C&G AS YPER -SPOT ELEVATION IN HATCHED AREA 5079 COA STANDARD WITH RETAINING WALL SE 5078.67 FL 5078.67 DETAIL B THIS SHEET BACK OF CURB ELEVATION FLOW LINE ELEVATION TOP OF ASPHALT ELEVATION 2' POND INLET WIER THRU C&G AND -TOP OF CONCRETE ELEVATION 50178964 RETAINING WALL FL 5079:01' PROPOSED 6' SIDEWALK GRADE TO MATCH EXIST TBC AT CULDESAC 2" PE 5/8" Rebar Gas Line Disturbed 0" PVC < 10" PVC TRIPLE 24" (B=5") SIDEWALK CULVER COA STANDARD 2236 2731 Vassar 8" PVC s-s-sas-Rim:5074.1' Place NE Inv:±5065.7' Chiseled "X CL Moi Rebar With N:1502063.48 Cap "LS 11184" E:1532443.38' N:1502093.94' Elev:5079.15' E:1532383.42' Elev:5077.59' ______ Tract B-1-G-1 Comanche Business Park Tract B-1-H-1 (9/15/1997, 97C-277) Comanche Business Park (9/15/1997, 97C-277) MORTAR CAP TYP -----8" MIN ABOVE FLOW LINE TYP OR AS OTHERWISE NOTED #4 REBAR CONT FLOW LINE GRADES SEE 4' METAL FENCING CONT ON SWQ POND -WITH 18" LAPS TYP THIS SHEET WITH (1) - 4' GATE MAX VERT SPACING 24" PROPOSED AC #4 "L" BARS 6' INLET WIER PAVING TYP BASE COURSE TYP -24" OC INVERT = $5078.5\beta'$ PROPOSED AC PAVING -3" CLR TO SOIL TYP - SWQV ELEV ¹/₂" CLEAN GRAVEL FRENCH DRAIN 6" WIDTH =5077.08' 8X8X16 GROUTED MASONRY TO MATCH BUILDING STYLE ABOVE GRADE 2" PVC DRAIN @ 10' OC TYP POND SWQV=1326 CUFT (NO DRAINS IN SWQ POND WALL) BOTTOM OF FOOTING MIN 10"ø STORM DRAIN PIPES 16" BELOW GRADE WITH TYP INVERT AT COMPACTED IMPORT EMBANKMENT ----POND OF 5075.58' EXISTING GROUND 36"X8" 3000 PSI CONC FOOTING TYP 8" MASONRY RETAINING WALL SEE DETAIL B THIS SHEET - POND BOTTOM (3) #4 REBAR CONT ELEV =5075.08 WITH 18" LAPS TYP TYP RETAINING WALL SECTION SWQ RETENTION POND SECTION B C-100 C-109 SCALE: 1" = 10' SCALE: 1" = 5' NOTE: INTERIOR CMU SURFACE OF THE POND RETAINING WALL SHALL BE WATER PROOFED AS PER COA SPECIFICATION GRADING AND DRAINAGE PLAN

