

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Director



Mayor Timothy M. Keller

September 27, 2022

David Thompson, PE  
Thompson Engineering Consultants, Inc.  
PO Box 65760  
Albuquerque, NM 87193

**RE: Cactus Patch Plaza  
7801 La Morada Place NW  
Grading and Drainage Plan  
Engineer's Stamp Date: 07/18/22  
Hydrology File: H10D034**

Dear Mr. Thompson:

PO Box 1293

Based upon the information provided in your submittal received 07/19/2022, the Grading & Drainage Plans are approved for Building Permit, SO-19 Permit, and action by the DRB for platting. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

Albuquerque

**PRIOR TO CERTIFICATE OF OCCUPANCY:**

NM 87103

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please provide the Drainage Covenant with Exhibit A for the detention ponds per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. Please submit the original copies along with the **\$ 25.00** recording fee check made payable to Bernalillo County to Carrie Compton ([cacompton@cabq.gov](mailto:cacompton@cabq.gov)) on the 4th floor of Plaza de Sol.

[www.cabq.gov](http://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 (Dough Hughes, PE, [jhughes@cabq.gov](mailto:jhughes@cabq.gov), 924-3420) 14 days prior to any earth disturbance.

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If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

Sincerely,

*Renée C. Brissette*

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

PO Box 1293

Albuquerque

NM 87103

[www.cabq.gov](http://www.cabq.gov)



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

**Project Title:** \_\_\_\_\_ **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** \_\_\_\_\_

**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_

**Legal Description:** \_\_\_\_\_

**City Address:** \_\_\_\_\_

**Applicant:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Owner:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**TYPE OF SUBMITTAL:** \_\_\_\_\_ PLAT (\_\_\_\_# OF LOTS) \_\_\_\_\_ RESIDENCE \_\_\_\_\_ DRB SITE \_\_\_\_\_ ADMIN SITE

**IS THIS A RESUBMITTAL?:** \_\_\_\_\_ Yes \_\_\_\_\_ No

**DEPARTMENT:** \_\_\_\_\_ TRAFFIC/ TRANSPORTATION \_\_\_\_\_ HYDROLOGY/ DRAINAGE

Check all that Apply:

### TYPE OF SUBMITTAL:

- \_\_\_\_\_ ENGINEER/ARCHITECT CERTIFICATION
- \_\_\_\_\_ PAD CERTIFICATION
- \_\_\_\_\_ CONCEPTUAL G & D PLAN
- \_\_\_\_\_ GRADING PLAN
- \_\_\_\_\_ DRAINAGE MASTER PLAN
- \_\_\_\_\_ DRAINAGE REPORT
- \_\_\_\_\_ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- \_\_\_\_\_ ELEVATION CERTIFICATE
- \_\_\_\_\_ CLOMR/LOMR
- \_\_\_\_\_ TRAFFIC CIRCULATION LAYOUT (TCL)
- \_\_\_\_\_ TRAFFIC IMPACT STUDY (TIS)
- \_\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_
- \_\_\_\_\_ PRE-DESIGN MEETING?

### TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- \_\_\_\_\_ BUILDING PERMIT APPROVAL
- \_\_\_\_\_ CERTIFICATE OF OCCUPANCY
- \_\_\_\_\_ PRELIMINARY PLAT APPROVAL
- \_\_\_\_\_ SITE PLAN FOR SUB'D APPROVAL
- \_\_\_\_\_ SITE PLAN FOR BLDG. PERMIT APPROVAL
- \_\_\_\_\_ FINAL PLAT APPROVAL
- \_\_\_\_\_ SIA/ RELEASE OF FINANCIAL GUARANTEE
- \_\_\_\_\_ FOUNDATION PERMIT APPROVAL
- \_\_\_\_\_ GRADING PERMIT APPROVAL
- \_\_\_\_\_ SO-19 APPROVAL
- \_\_\_\_\_ PAVING PERMIT APPROVAL
- \_\_\_\_\_ GRADING/ PAD CERTIFICATION
- \_\_\_\_\_ WORK ORDER APPROVAL
- \_\_\_\_\_ CLOMR/LOMR
- \_\_\_\_\_ FLOODPLAIN DEVELOPMENT PERMIT
- \_\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_

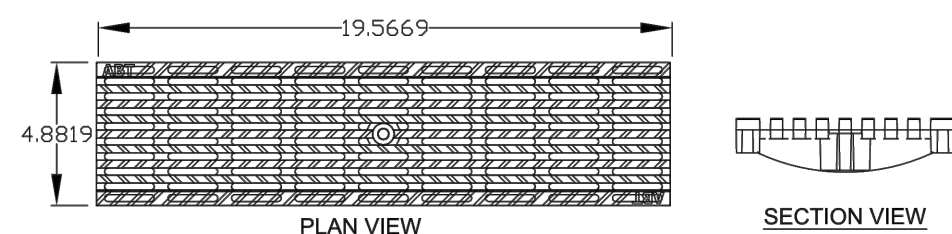
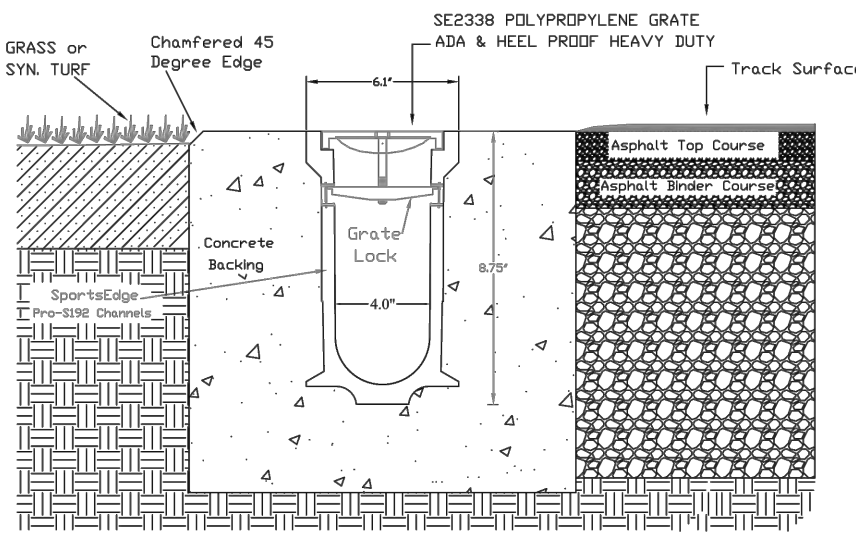
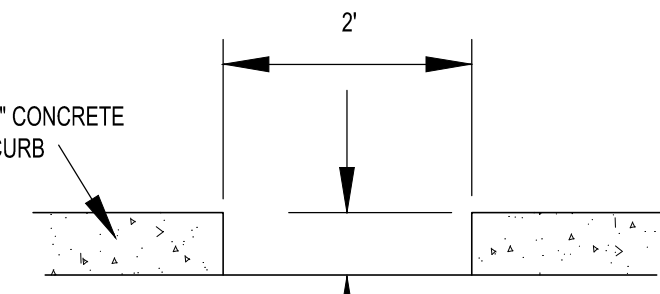
**DATE SUBMITTED:** \_\_\_\_\_ **By:** \_\_\_\_\_

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_





ZONE ATLAS :

## TRENCH DRAIN DETAIL

DRAINAGE PLAN:

LEGAL DESCRIPTION: TRACT 24, LADERA BUSINESS PARK UNIT 1

SITE AREA: 2.72 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED NOVEMBER 14, 2016 (PANEL NO. 35001C0326J) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH CHAPTER 6, ARTICLE 6-2, SECTION 6-2(A), ENTITLED "PROCEDURE FOR 100-ACRE AND SMALLER BASINS." THE DESIGN STORM USED FOR BOTH UNDEVELOPED AND DEVELOPED CONDITIONS IS THE 100-YEAR, 6-HOUR STORM EVENT FOR RUNOFF. THE SITE IS LOCATED IN ZONE 1 SO THE 100-YEAR, 6-HOUR STORM EVENT IS 2.17 INCHES. UNDER EXISTING CONDITIONS, THE PROPERTY IS PARTIALLY DEVELOPED WITH SOME PAVING AND BASE COURSE.

THE PROPERTY IS LOCATED ON LA MORADA EAST OF UNSER BLVD. THE TRACT IS CURRENTLY VACANT. THE SITE IS PART OF THE EXISTING DRAINAGE MASTER PLAN, LADERA BUSINESS PARK, BY MARK GOODWIN DATED 11/12/02. THIS SITE DOES HAVE FREE DISCHARGE INTO LA MORADA PLACE. THE SITE GENERALLY DRAINS FROM NORTHWEST TO SOUTHEAST TO LA MORADA PLACE. THERE IS A STORM DRAIN AND STORM INLETS IN LA MORADA DRIVE. THE PROPERTY TO THE WEST DISCHARGES A TOTAL OF 8 CFS IN TWO LOCATIONS ONTO THE PROPERTY. THESE OFFSITE FLOWS ARE CONVEYED IN AN ASPHALT-LINED SWALE ALONG THE WEST PROPERTY LINE TO AN EXISTING STORM INLET LOCATED AT THE SOUTHWEST CORNER OF THE PROPERTY. THE ASPHALT-LINED SWALE IS LOCATED WITHIN A 25-FOOT-WIDE PRIVATE DRAINAGE EASEMENT. THIS PROPERTY IS LOCATED IN ZONE 2. THE PEAK RUNOFF UNDER EXISTING CONDITIONS IS 4.19 CFS DURING A 100-YEAR, 6-HOUR STORM.

DEVELOPED DRAINAGE CONDITIONS:

THIS PROPERTY WILL BE DEVELOPED INTO AN OFFICE AND LIGHT INDUSTRIAL PARK. THIS TRACT IS PART OF THE LADERA BUSINESS PARK MASTER DRAINAGE PLAN. RUNOFF FROM THIS TRACT DRAINS TO LA MORADA PLACE. THE RUNOFF THAT REACHES LA MORADA IS COLLECTED IN A STORM DRAIN SYSTEM AND EVENTUALLY DISCHARGES TO THE MIREHAVEN CHANNEL. ACCORDING TO THE LADERA BUSINESS PARK MASTER DRAINAGE PLAN, THE TRACT IS ALLOWED A PEAK DISCHARGE OF 12 CFS. THE PEAK DISCHARGE FROM THE SITE UNDER DEVELOPED CONDITIONS DURING A 100-YEAR, 6-HOUR STORM IS 9.97 CFS, WHICH IS LESS THAN THE 12 CFS ALLOWED. RUNOFF FROM THE SITE WILL ENTER LA MORADA THROUGH THE EASTERN DRIVEWAY AND THROUGH A SIDEWALK CULVERT. THERE ARE FOUR WATER QUALITY PONDS THAT ARE LOCATED ON SITE WITH A TOTAL VOLUME OF 2,980 CUBIC-FEET. THREE OF THE PONDS ARE LOCATED ALONG THE EAST PROPERTY LINE. THERE ARE 2-2-FOOT CURB CUTS ALONG THE CURB AND GUTTER FOR EACH POND FOR THE RUNOFF TO ENTER AND EXIT THE POND. ONE OF THE WATER QUALITY PONDS WILL DISCHARGE TO LA MORADA THROUGH A 24-INCH SIDEWALK CULVERT.

WATER QUALITY VOLUME =  $(0.42\text{IN}/12\text{IN}/\text{FT}) \times ((2.72 \times .717)) \times 43,560\text{SF}/\text{AC}$  = 2,973 CF REQUIRED. WATER QUALITY VOLUME PROVIDED = 2,980 CF.

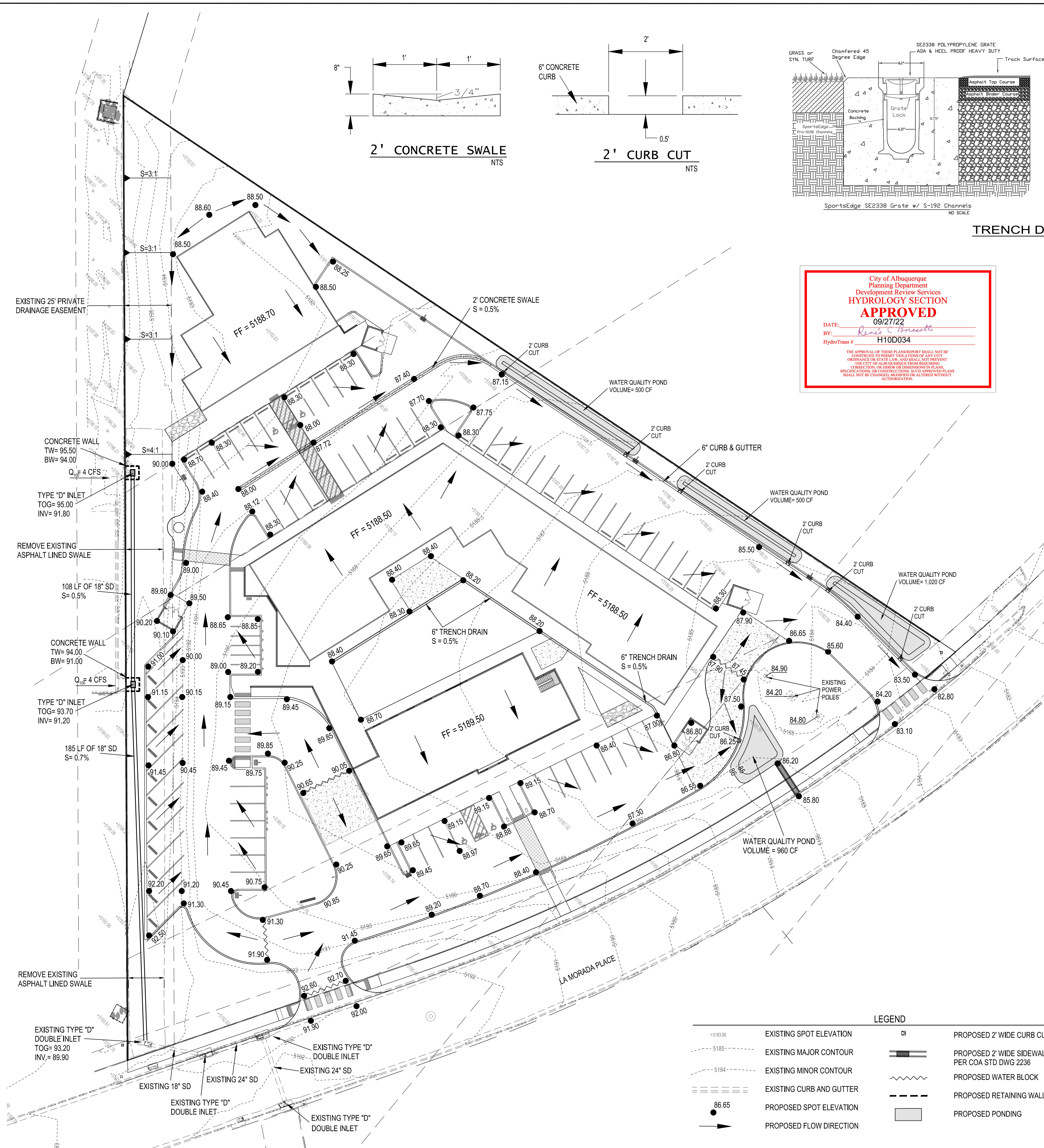
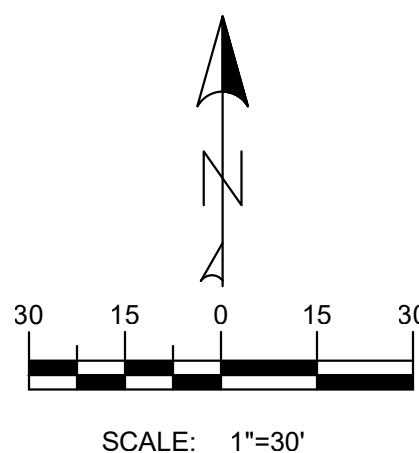
SIDEWALK CULVERT CAPACITY, WEIR EQUATION =  $(2.7) \times (2\text{FT}) \times (7\text{IN}/12\text{IN}/\text{FT})^{1.5} = 2.4 \text{ CFS}$

BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	100-YEAR PRECIPITATION				
		A (%)	B (%)	C (%)	D (%)		V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
SITE	2.7200	100.00	0.00	0.00	0.00	0.55	0.12	5,430	0.12	5,430	4.19
TOTAL RUNOFF	2.7200						0.12	5,430	0.12	5,430	4.19
FULL DEVELOPMENT CONDITIONS											
SITE	2.7200	0.00	14.10	14.20	71.70	1.84	0.42	18,206	0.47	20,471	9.97
TOTAL RUNOFF	2.7200						0.42	18,206	0.47	20,471	9.97
EXCESS PRECIP.		0.55	0.73	0.95	2.24	E <sub>i</sub> (in)					
PEAK DISCHARGE		1.54	2.16	2.87	4.12	Q <sub>pn</sub> (cfs)					
WEIGHTED E (in) = (E <sub>A</sub> )(%A) + (E <sub>B</sub> )(%B) + (E <sub>C</sub> )(%C) + (E <sub>D</sub> )(%D) V <sub>6HR</sub> (acre-ft) = (WEIGHTED E)(AREA)/12 V <sub>1DAY</sub> (acre-ft) = V <sub>6HR</sub> + (A <sub>U</sub> )(P <sub>1DAY</sub> - P <sub>6HR</sub> )/12 Q (cfs) = (Q <sub>PA</sub> )(A <sub>A</sub> ) + (Q <sub>PB</sub> )(A <sub>B</sub> ) + (Q <sub>PC</sub> )(A <sub>C</sub> ) + (Q <sub>PD</sub> )(A <sub>D</sub> )							ZONE = 1 P <sub>6HR</sub> (in.) = 2.17 P <sub>24HR</sub> (in.) = 2.49 P <sub>1DAY</sub> (in.) = 3.90				

REV. 01/22/21

Private Drainage Facilities within City Right-of-Way  
Notice to Contractor  
(Special Order 19 ~ "SO-19")

1. Build sidewalk culvert per COA STD DWG 2236. Work is permitted and inspected by DMD Construction Services 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 concerning construction safety and health.
4. Prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
5. 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.
6. Backfill compaction shall be 95%.
7. Maintenance of the facility shall be the responsibility of the 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 Construction Services Division.




City of Albuquerque  
Planning Department  
Development Review Services  
CONSTRUCTION SECTION

**APPROVED**

DATE: 09/27/22  
BY: *Renee A. Brancetti*  
Hydrotec # H10D034

THE APPROVAL OF THESE PLANS/PERMIT SHALL BE LIMITED TO THE SPECIFIC PROJECT, LOCATION, JURISDICTION, OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM CHALLENGING, CORRECTING, OR REFUSING OR DIMINISHING IN PLANS, SPECIFICATIONS, OR CONDITIONS, OR CONSTRUCTION, SUCH APPROVALS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.



**T**hompson  
**E**ngineering  
**C**onsultants, Inc.

**PHONE: (505) 271-2199**  
**FAX: (505) 830-9248**  
**PHONE: (505) 271-2199**  
**FAX: (505) 830-9248**

[illegible]

CACTUS PATCH PLAZA  
7801 LA MORADA PL. NW

## GRADING AND DRAINAGE PLAN

CITY/COUNTY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MGMT. DIV.		
WATER SERVICES		
SUBDIVISION ENG.		
STREETS		
TRAFFIC		
FOR CITY/COUNTY USE ONLY		

SHEET No.

C-1