

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

August 25, 2020

Jeffrey T. Wooten, P.E.
Wooten Engineering
1005 21st Street SE, Suite 13
Rio Rancho, NM 87124

**RE: Academy Dental Center
6421 Holly Ave NE
Revised Grading and Drainage Plan
Engineer's Stamp Date: 08/18/20
Hydrology File: C18D038A**

Dear Mr. Wooten:

PO Box 1293

Based upon the information provided in your submittal received 08/18/2020, the Revised Grading and Drainage Plan is approved for Building Permit.

Albuquerque

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 approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

NM 87103

www.cabq.gov

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.

Please provide Drainage Covenant per Chapter 17 of the DPM prior to Permanent Release of Occupancy for the stormwater quality ponds. Please submit these to the 4th floor of Plaza de Sol. A \$25 fee for each will be required.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

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 (REV 11-2018)

Project Title: Academy Dental Center **Building Permit #:** _____ **Hydrology File #:** C18/D038A
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: Tract C-1, Paseo Nuevo 2
City Address: 6421 Holly Ave NE

Applicant: Wooten Engineering **Contact:** Jeffrey T. Wooten, P.E.
Address: 1005 21st Street SE, Suite 13, Rio Rancho, NM 87124
Phone#: 505-980-3560 **Fax#:** N/A **E-mail:** jeffwooten.pe@gmail.com
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: August 19, 2020 **By:** Jeffrey T. Wooten, P.E.

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

EXISTING CROSS LOT DRAINAGE EASEMENT FOR THE JOINT BENEFIT AND USE OF TRACTS A, B AND C, PASEO NUEVO 2. SAID EASEMENT TO BE MAINTAINED BY THE OWNER OF EACH TRACT FOR THE BENEFIT OF ALL TRACTS. (02/15/2007, 2007C-41)

TRACT B-1

Install 2' Wide Conc Rundown per Detail this Sheet

Install 10 SY 3"± Cobble Over Landscape Fabric

FL52.60
Ex FL52.10

Q=3.52cfs

Install 2' Wide Conc Rundown per Detail this Sheet

Remove/Replace Landscaping to Match Existing.

WATER QUALITY POND
Bot=5251.00
Top=5253.60
1,116 CF

3" Max Slope along Sideslope
2% Max Cross Slope

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Bot=5251.00
Top=5253.60
1,116 CF

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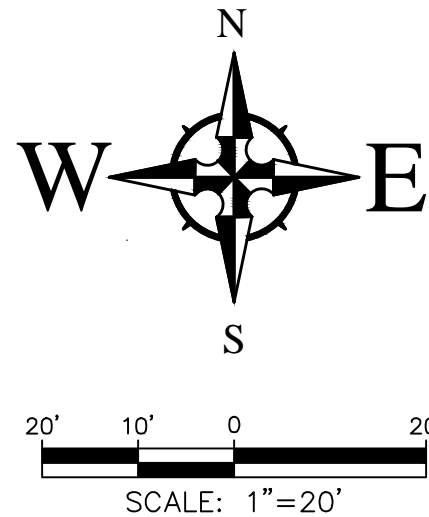
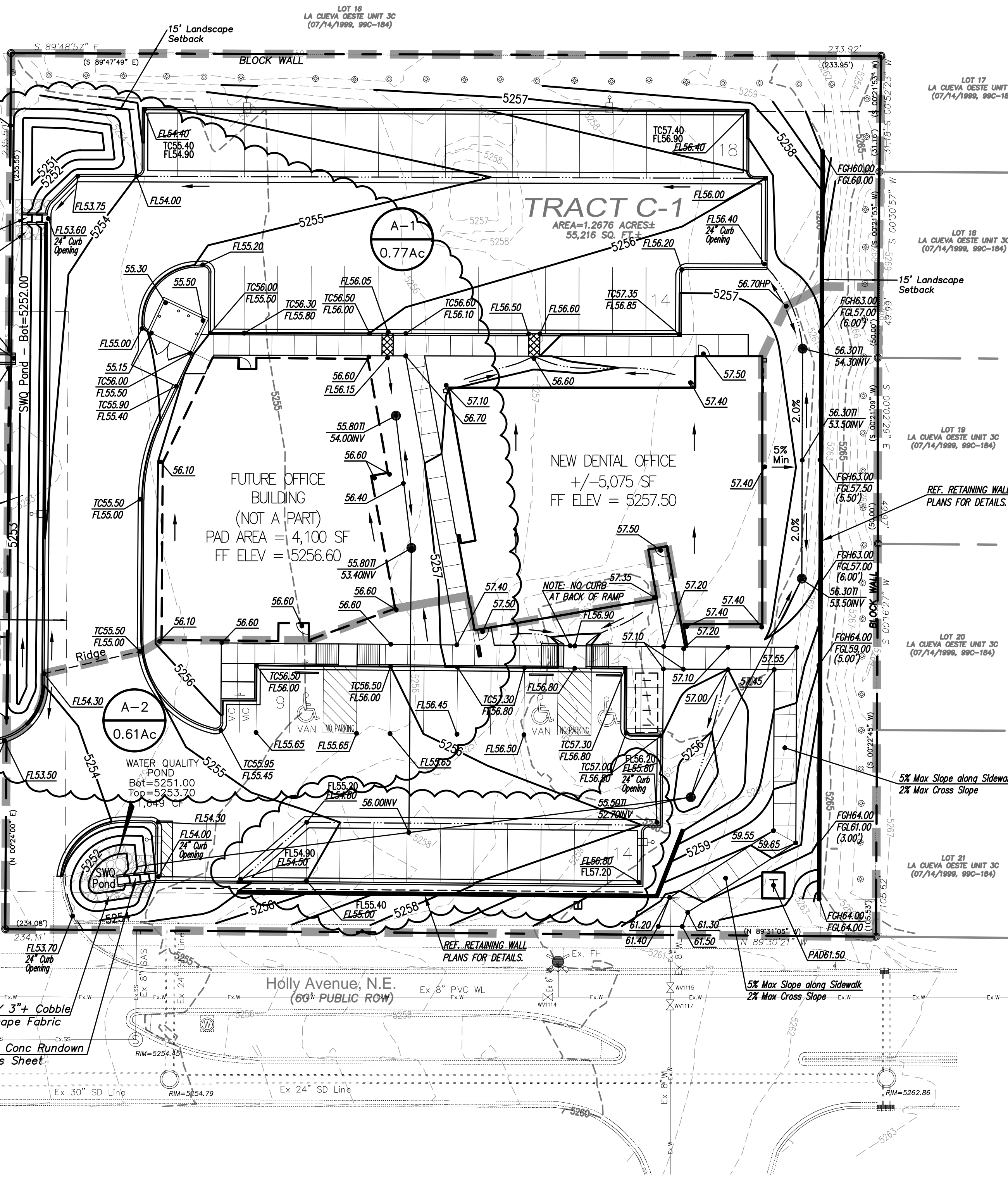
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2% Max Cross Slope

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1,116 CF

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WATER QUALITY POND
Bot=5251.00
Top=5253.60
1,116 CF

3" Max Slope along Sideslope
2% Max Cross Slope



- LEGEND**
- FLOW ARROW
 - PROPOSED TOP OF GRADE/PVMT ELEVATIONS
 - PROPOSED FLOW LINE/GUTTER ELEVATIONS
 - PROPOSED TOP OF CURB ELEVATIONS
 - PROPOSED TOP OF SIDEWALK ELEVATION
 - FINISHED GRADE AT TOP OF WALL
 - FINISHED GRADE AT BOTTOM OF WALL
 - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - EXISTING STORM DRAIN
- CAUTION - NOTICE TO CONTRACTOR**
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

STORMWATER QUALITY POND CALCULATIONS

BASIN A-1
TOTAL NEW IMPERVIOUS AREA = 24,089 SF
SWQ VOLUME REQ'D = $24,089 \times 0.42 / 12 = 843$ CF
TOTAL VOLUME PROVIDED = **979 CF**

BASIN A-2
TOTAL NEW IMPERVIOUS AREA = 16,074 SF
SWQ VOLUME REQ'D = $16,074 \times 0.42 / 12 = 563$ CF
TOTAL VOLUME PROVIDED = **678 CF**

24" CURB OPENING/RUNDOWN WEIR CALCULATION

WEIR EQUATION
 $Q = C \cdot L \cdot (H^{\frac{3}{2}})$
Given:
C = 2.87 (Weir Coefficient)
L = 2 feet (Width of Flow)
H = 0.50 feet (Depth of Flow)
 $Q = 2.87 \times 2 \times (0.50^{\frac{3}{2}}) = 3.62$ cfs

Stormwater Quality Pond Volume Calculations

Elevation (ft)	Area (sq.ft)	Volume (cu-ft)	Volume Sum (cu-ft)
BASIN A-1			
5251.0	152	0.0	0.0
5252.0	686	419.0	419.0
5252.6	1180	560.0	979.0
BASIN A-2			
5251.0	84	0.0	0.0
5252.0	188	136.0	136.0
5253.0	330	259.0	395.0
5253.7	478	283.0	678.0

DRAINAGE MANAGEMENT PLAN

INTRODUCTION
The purpose of this submittal is to provide a final grading plan and drainage management plan for the subject Building Permit for a new Dental office located at 6421 Holly Ave NE. The overall development contains approximately 1.37 acres and is located approximately 800 feet east of the NEC of San Pedro and Holly in Albuquerque, NM.

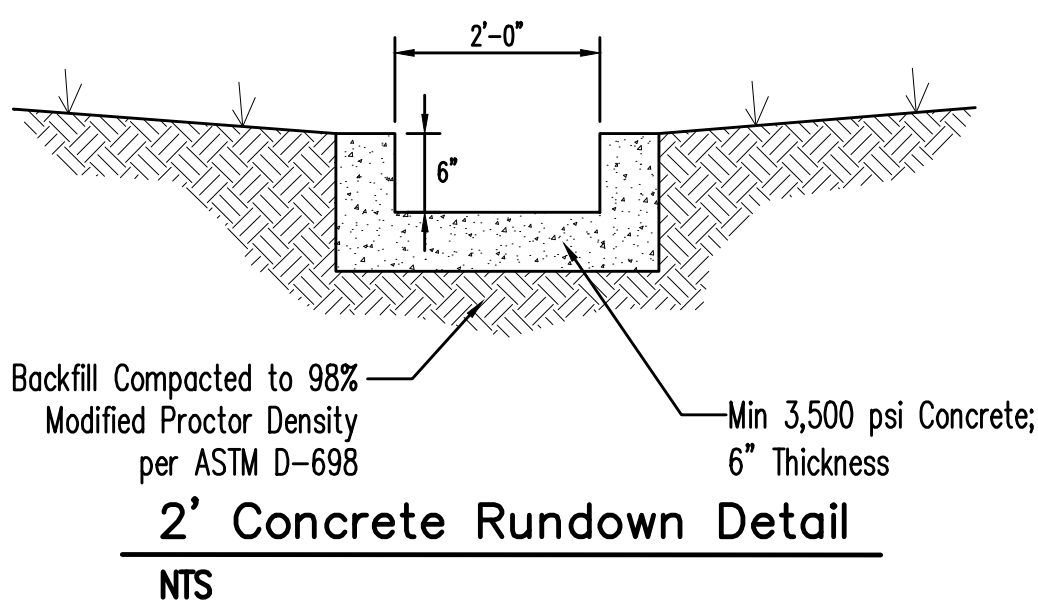
EXISTING HYDROLOGIC CONDITIONS
The site is currently undeveloped and drains from east to west onto the existing TLC Laser Eye Care Center site. Per the prior approved Grading Plan by Wooten Engineering for the TLC Laser Eye Care facility (File Number C018D038 dated 5/28/2008), the subject site was to surface drain directly onto Holly Ave.

PROPOSED HYDROLOGIC CONDITIONS
The proposed grading plan directs Basin A-1 into a SWQ Pond which will then overflow onto Tract B-1 to the west via a 2' Wide Concrete Rundown. The rundown acts as a weir and has a capacity of 3.62 cfs per calculations this sheet. We have recalculated the drainage flows draining to the concrete flume on Tract B-1 which total 5.92 cfs including Basin A-1 from this site. The capacity of the existing flume on Tract B-1 is 5.95 cfs using a Mannings 'n' value of 0.011 (concrete).

Basin A-2 will be redirected to Holly Ave per the prior approved plan. Reference the Drainage Calculations table this sheet.

Both basins will be routed through new stormwater quality ponds to capture the required water quality volume. Reference the Stormwater Quality Pond Calculations table and the Stormwater Quality Pond Volumes Calculations tables this sheet. Basin A-1 is required to capture 843 CF and the volume provided is 979 CF. Basin A-2 is required to capture 563 CF and the volume provided is 678 CF.

CONCLUSION
This drainage management plan provides for grading and drainage elements which are capable of safely passing the 100 year storm and meet city requirements. The proposed improvements for the site should not have any negative impacts to facilities downstream. With this submittal, we are requesting approval of the Building Permit for this project.



Existing Academy Dental Drainage Calculations											
This table is based on the COA DPM Section 22.2, Zone: 3											
BASIN	Area (SQ. FT)	Area (AC)	Land Treatment Percentages				Q(100) (cfs/ac)	Q(100) (CFS)	WT E (inches)	V(100)360 (CF)	V(100)1440 (CF)
			A	B	C	D					
A-1	33389	0.77	0.0%	0.0%	100.0%	0.0%	3.45	2.64	1.29	3589	3589
A-2	26439	0.61	0.0%	0.0%	100.0%	0.0%	3.45	2.09	1.29	2842	2842
TOTAL	59828	1.37						4.74		6432	6432

Proposed Academy Dental Drainage Calculations											
Ultimate Development Conditions Basin Data Table											
This table is based on the COA DPM Section 22.2, Zone: 3											
BASIN	Area (SQ. FT)	Area (AC)	Land Treatment Percentages				Q(100) (cfs/ac)	Q(100) (CFS)	WT E (inches)	V(100)360 (CF)	V(100)1440 (CF)
			A	B	C	D					
A-1	33389	0.77	0.0%	0.0%	27.0%	73.0%	4.60	3.52	2.07	5763	6575
A-2	26439	0.61	0.0%	0.0%	39.0%	61.0%	4.41	2.68	1.94	4280	4818
TOTAL	59828	1.37						6.20		10043	11393

Wooten Engineering
1005 21st St SE, Suite 13
Rio Rancho, N.M. 87124
Phone: (505) 980-3560

BENCH MARKS	
A.C.S. MONUMENT "9-c18"	
MONUMENT "HEAVEN"	
NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983)	
N=1,521,497.624	
E=1,542,501.428	
PUB. EL=5232.47 NAVD 1988	
GROUND TO GRID FACTOR=0.999664563	
DELTA ALPHA ANGLE = -0°11'19.69"	

JOE ARCHITECT
1432 delaney street, suite 121 denver co | 720.944.3228

Academy Dental Center

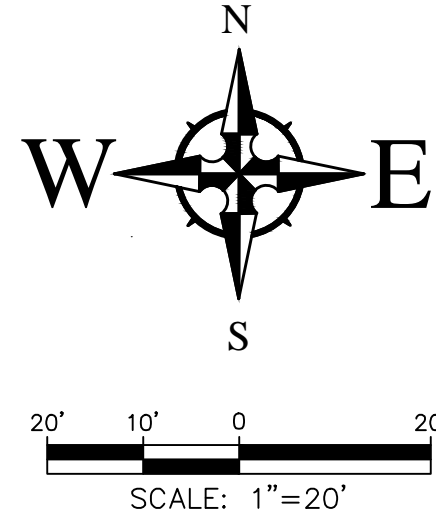
6421 Holly Ave. NE
Albuquerque, NM

Grading Plan

C2.0

CAUTION - NOTICE TO CONTRACTOR

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EXISTING CROSS LOT DRAINAGE EASEMENT FOR THE JOINT BENEFIT AND USE OF TRACTS A, B AND C, PASEO NUEVO 2. SAID EASEMENT TO BE MAINTAINED BY THE OWNER OF EACH TRACT FOR THE BENEFIT OF ALL TRACTS. (02/15/2007, 2007C-41)

TRACT B-1

TRACT C-1

AREA=1.2678 ACRES±
53,216 SQ. FT.±

FUTURE OFFICE BUILDING
(NOT A PART)
PAD AREA = 4,100 SF
FF ELEV = 5256.60

NEW DENTAL OFFICE
+/-5,075 SF
FF ELEV = 5257.53

Install 24" Nyloplast Drain
Basin w/ 24" Dome Grate.
Top Inlet=5255.80
Top Dome=5256.47
Inv=5254.00

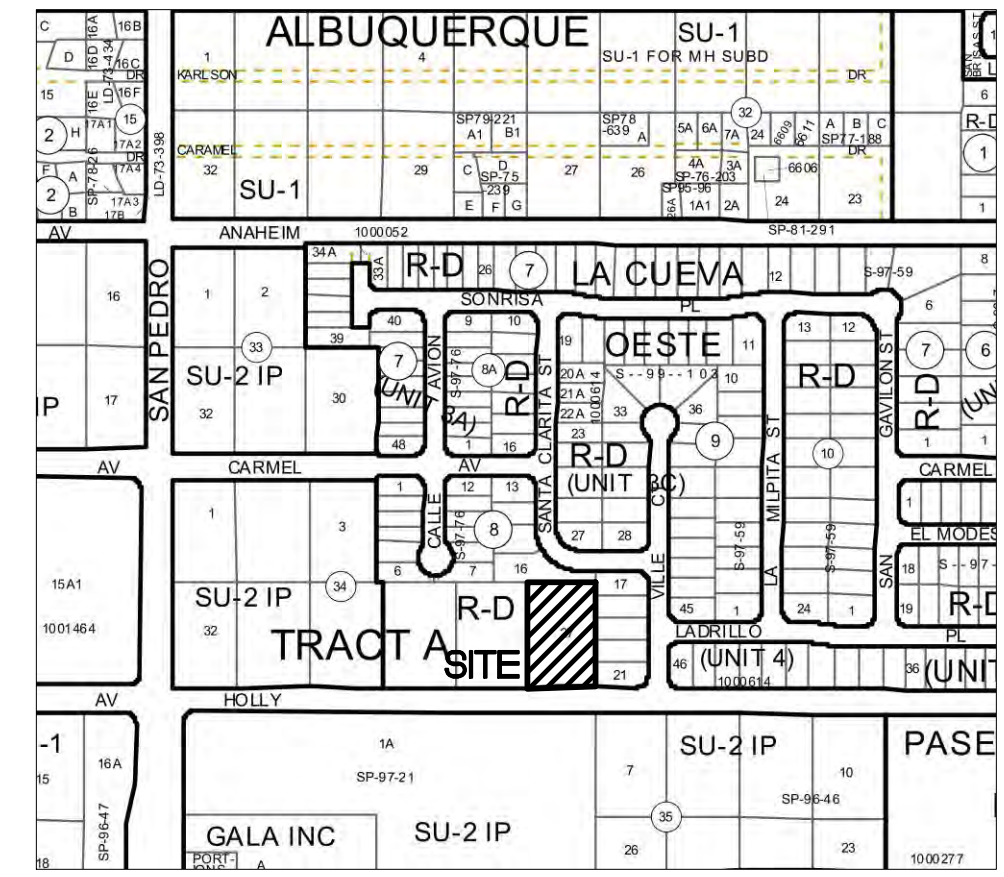
Begin 12" HDPE Storm Drain
Inv=5252.00

Install 12"x12" Wye
Inv=5252.62

Install 24" Nyloplast Drain
Basin w/ 24" Dome Grate.
Top Inlet=5255.50
Top Dome=5256.17
Inv=5253.27

LEGEND

- FLOW ARROW
- 27.8 PROPOSED TOP OF GRADE/PVMT ELEVATIONS
- FL27.8 PROPOSED FLOW LINE/GUTTER ELEVATIONS
- TC27.8 PROPOSED TOP OF CURB ELEVATIONS
- TS27.8 PROPOSED TOP OF SIDEWALK ELEVATION
- FGH83.40 FINISHED GRADE AT TOP OF WALL
- FGL83.40 FINISHED GRADE AT BOTTOM OF WALL
- 515 EXISTING CONTOUR
- 515 PROPOSED CONTOUR
- EXISTING STORM DRAIN



VICINITY MAP - Zone Map C-18-Z

LEGAL DESCRIPTION:

Tract C-1, Paseo Nuevo 2, Albuquerque, Bernalillo County, 1.268 Acres.

GRADING NOTES

- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
- THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
- ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
- EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
- IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
- THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS OR SILT FENCE AT THE PROPERTY LINES AND WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
- A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
- PAVING AND ROADWAY GRADES SHALL BE +/- 0.05' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
- ALL PROPOSED CONTOURS AND SPOT ELEVATIONS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR PAVEMENT, MEDIANS, AND ISLANDS.
- VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION (IF APPLICABLE) PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE THE SWPPP DOCUMENT (IF NECESSARY) AND SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.

BENCH MARKS

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MONUMENT "HEAVEN"
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(CENTRAL ZONE-N.A.D. 1983)
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Rio Rancho, N.M. 87124
Phone: (505) 980-3560

JOE
ARCHITECT
1433 delaney street, suite 111 denver co | 720.944.3228

Academy Dental Center

6421 Holly Ave. NE
Albuquerque, NM



REVISIONS		
#	Date	Description

DATE:	AUGUST 22, 2019
PROJECT NO:	2018038
DRAWN BY:	OG
ISSUED FOR:	SD

Storm Drain Plan

C2.1