

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

June 7, 2018

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

**RE: 21st Century Academy
4300 Cutler Ave NE
Grading Plan
Engineer's Stamp Date: 04/10/18
Hydrology File: H17D115**

Dear Mr. Wooten:

PO Box 1293

Based upon the information provided in your submittal received 06/07/2018, the Grading Plan is approved for Building Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

NM 87103

www.cabq.gov

Please provide a Private Facility Drainage Covenant per Chapter 17 of the DPM for first flush ponds prior to Certificate of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A \$25 fee 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 3/2018)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

IS THIS A RESUBMITTAL?: ____ Yes ____ No

DEPARTMENT:

- ____ HYDROLOGY/ DRAINAGE
____ TRAFFIC/ TRANSPORTATION

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

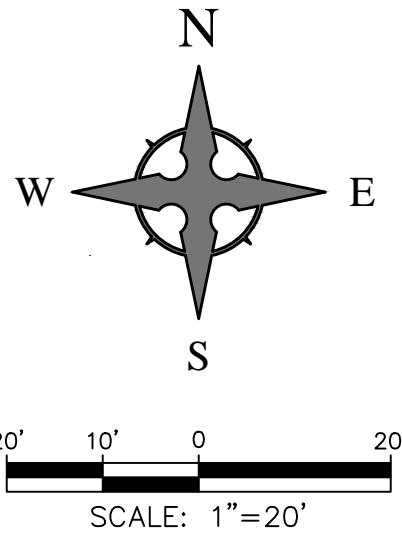
____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
____ GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

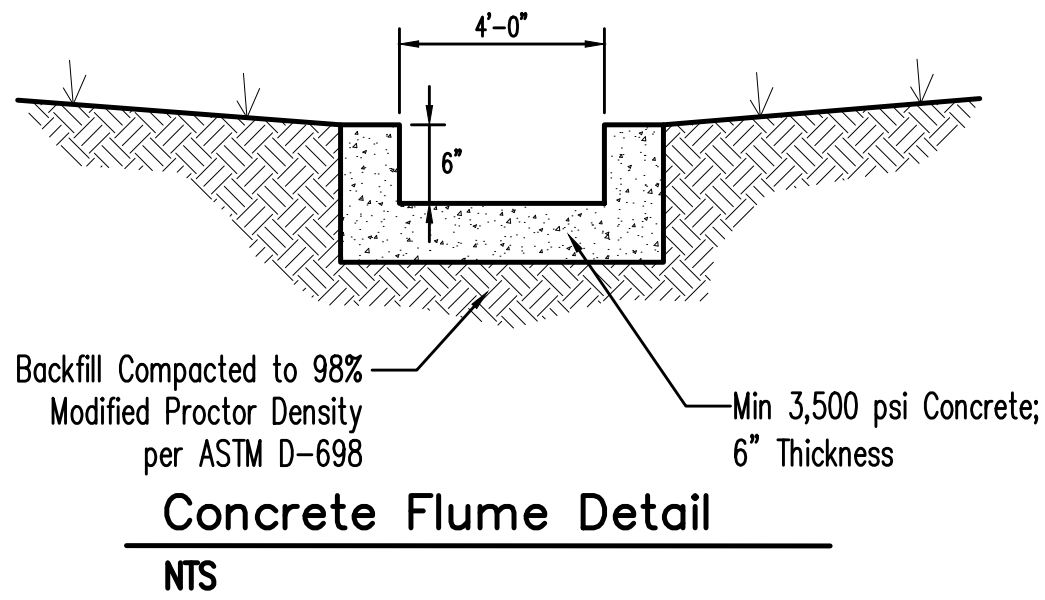
ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

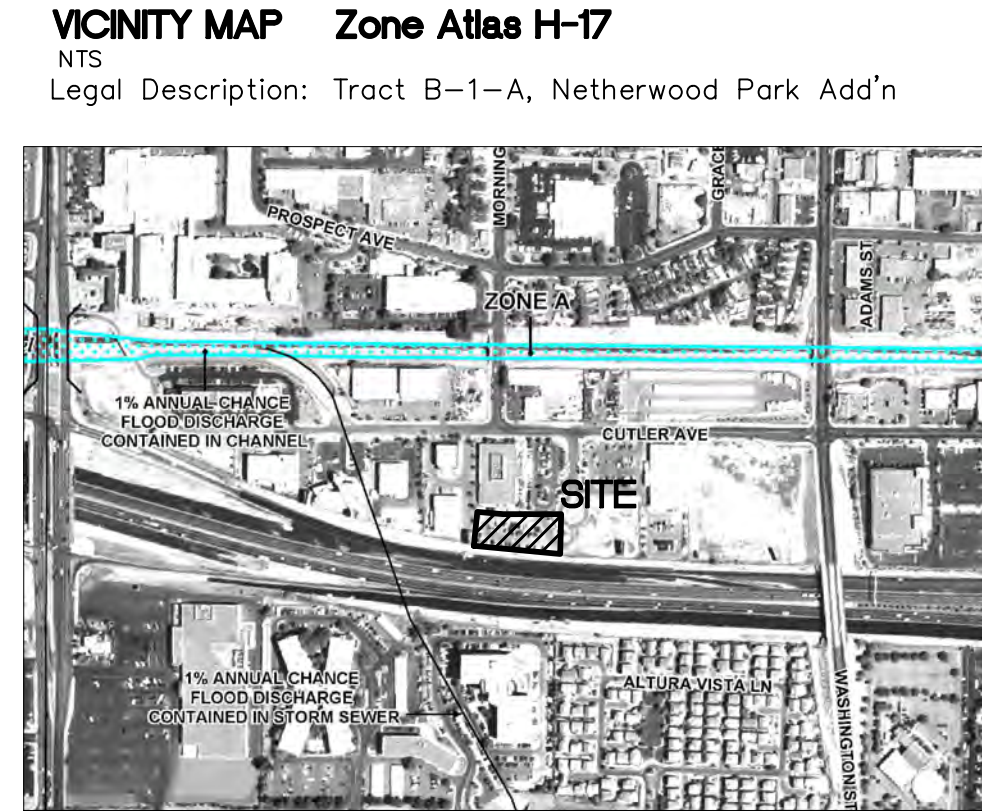
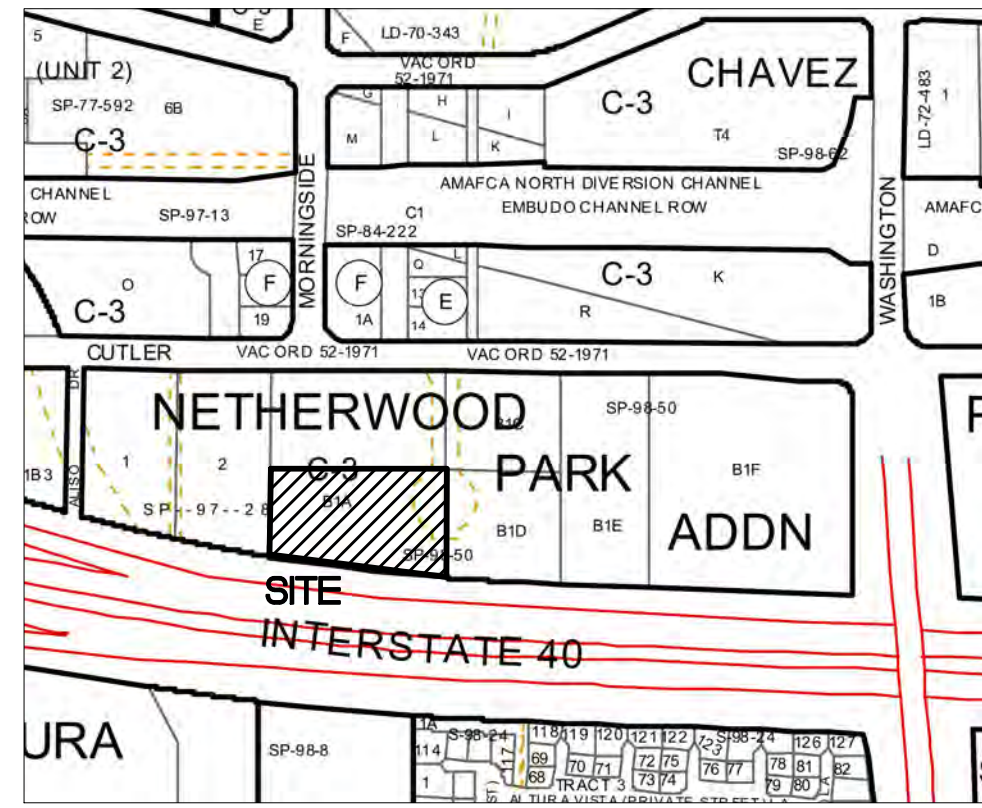


CAUTION - NOTICE TO CONTRACTOR

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 NEW MEXICO ONE CALL (811) 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.



- 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
 - TW27.8 PROPOSED TOP OF WALL ELEVATION
 - FGH27.8 PROPOSED GRADE AT TOP OF WALL
 - FGL27.8 PROPOSED GRADE AT BOTTOM OF WALL
 - 515 EXISTING CONTOUR
 - 515 PROPOSED CONTOUR
 - EXISTING STORM DRAIN
 - FLOW LINE
 - RIDGE LINE

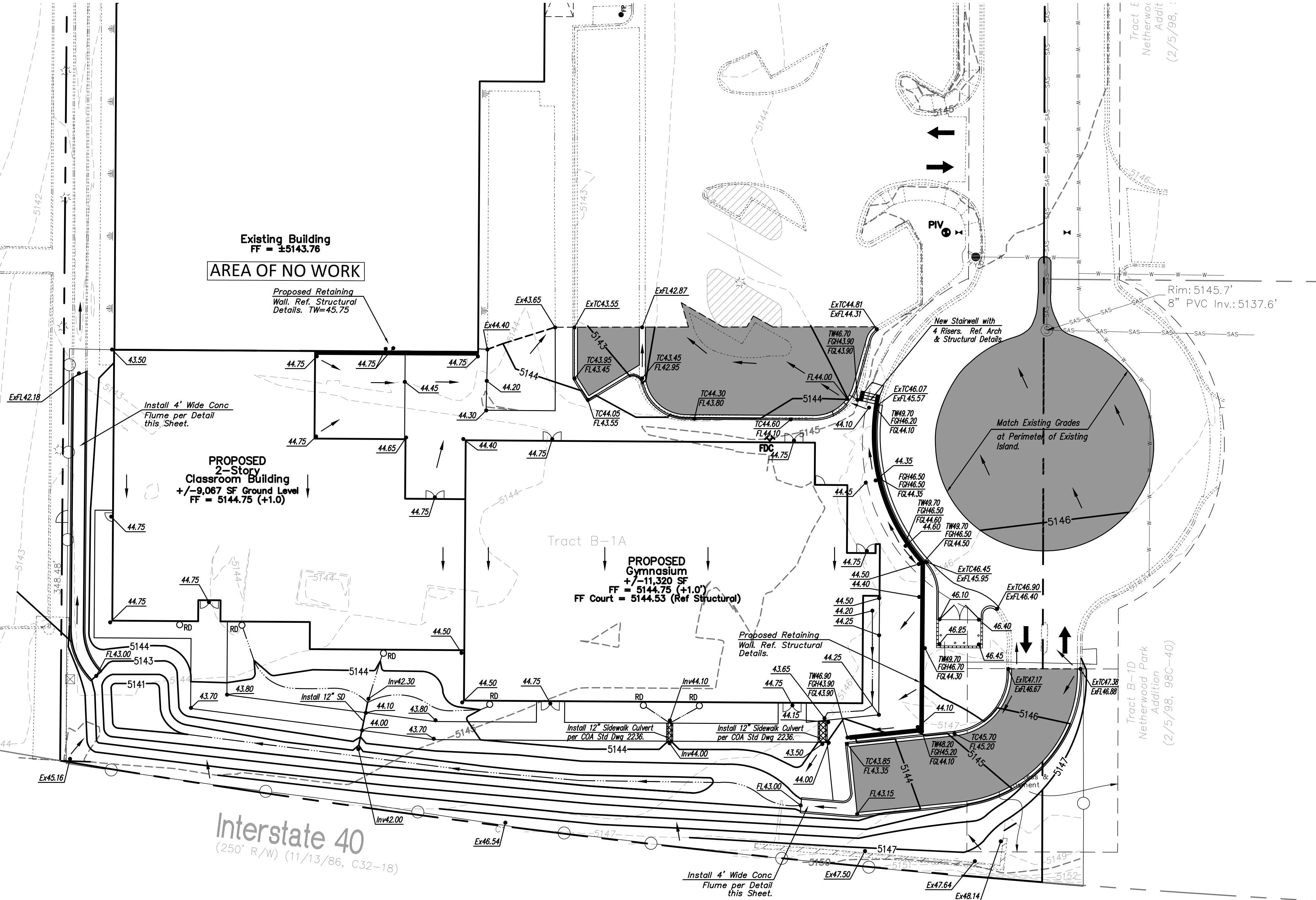


FIRM MAP 35001C0351H

Per FIRM Map 35001C0351H, dated August 16, 2012, the site is not located in the Zone X Floodplain and determined to be within the 0.2% chance Annual Floodplain area with depths of less than 1 foot.

- 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.

Lot 2, Block 12-A
Netherwood Park
Addition
(2/6/97, 97C-42)



Curve Table					
Curve #	Length	Radius	Delta	Chord Length	Chord Direction
C1	328.18'	3819.72'	4°55'21"	328.07'	N 82°56'56" W

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



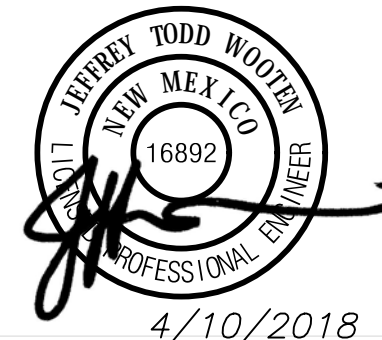
STUDIO CONSULTANTS, INC
PO BOX 1515
CEDAR CREST NM, 87008
DANIEL@ARIASCINC.COM
(505) 506-2314



Classroom and Gymnasium
Addition for:
21st Century
Public Academy

4300 CUTLER AVE. NE
ALBUQUERQUE, NM 87110

Architect/Engineer



DePonte Investments, Inc.

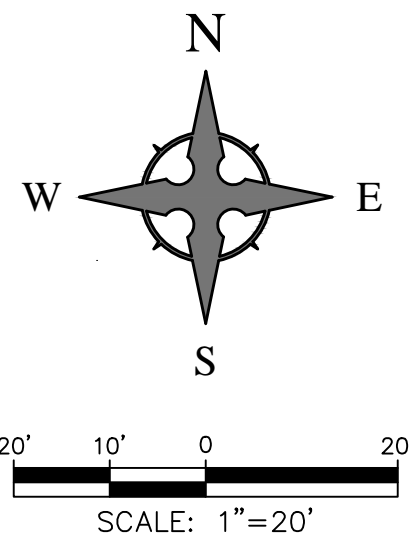


WILLIAM
CERVANTES
enterprises, inc.

MARK	DATE	DESCRIPTION
REVISIONS		
ISSUE	100% Plans	
PROJECT NO	2017031	
CAD DWG FILE		
DRAWN BY	RMG	
CHECKED BY	JTW	
DATE	4/10/2018	

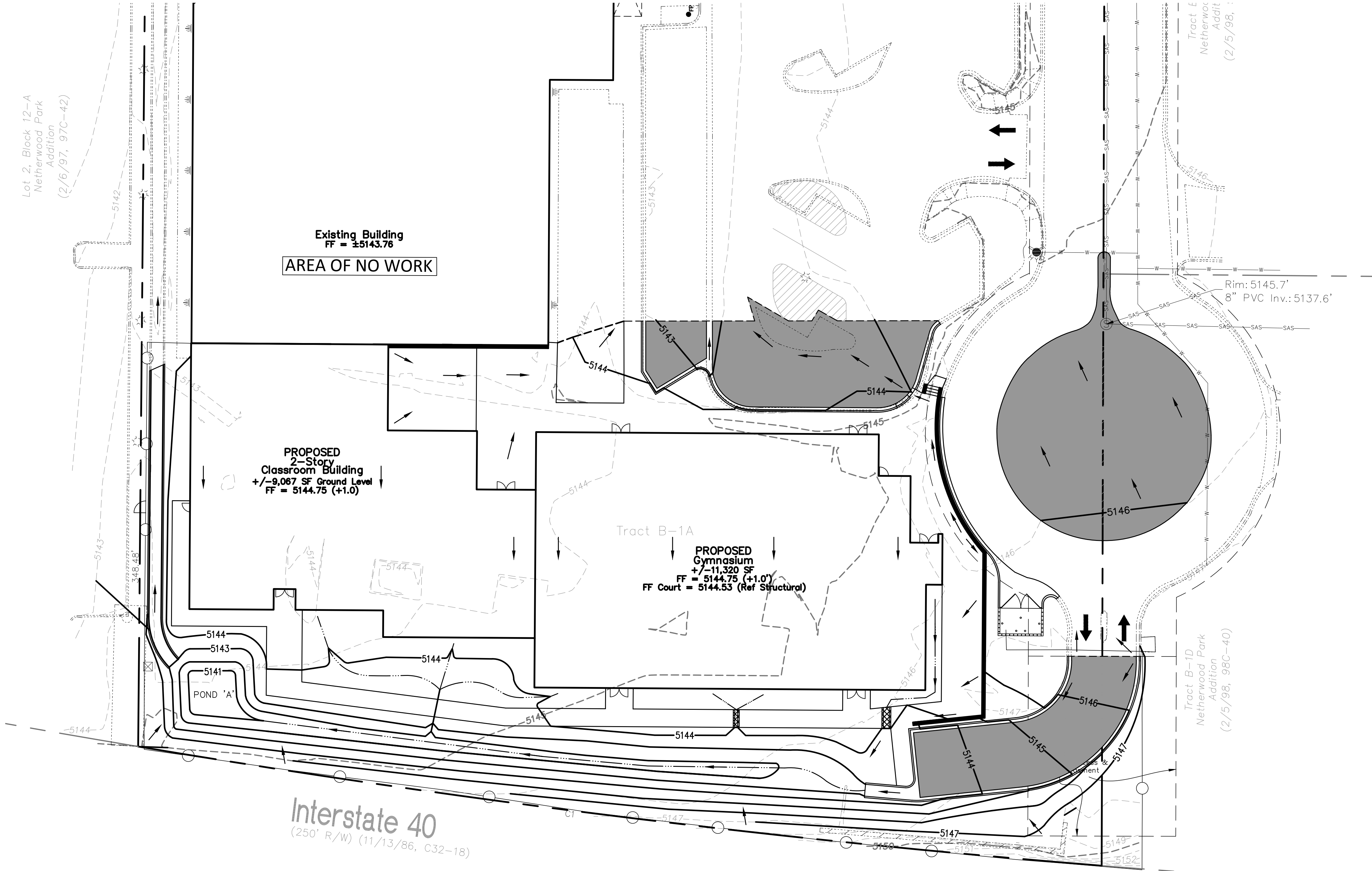
GRADING PLAN

C101



CAUTION - NOTICE TO CONTRACTOR

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IMPERVIOUS AREA CALCULATIONS

EXISTING SITE CONDITIONS

PERVIOUS AREA: 18,831 SF
IMPERVIOUS AREA: 101,163 SF
TOTAL SITE AREA: 119,994 SF
% IMPERVIOUS = 84.3%

PROPOSED SITE CONDITIONS

PERVIOUS AREA: 24,402 SF
IMPERVIOUS AREA: 95,592 SF
TOTAL SITE AREA: 119,994 SF
% IMPERVIOUS = 79.7%

PROPOSED PROJECT AREA CONDITIONS

PERVIOUS AREA: 15,800 SF
IMPERVIOUS AREA: 37,141 SF
TOTAL PROJECT AREA: 52,941 SF
% IMPERVIOUS = 70.2%

WATER QUALITY VOLUME CALCULATION

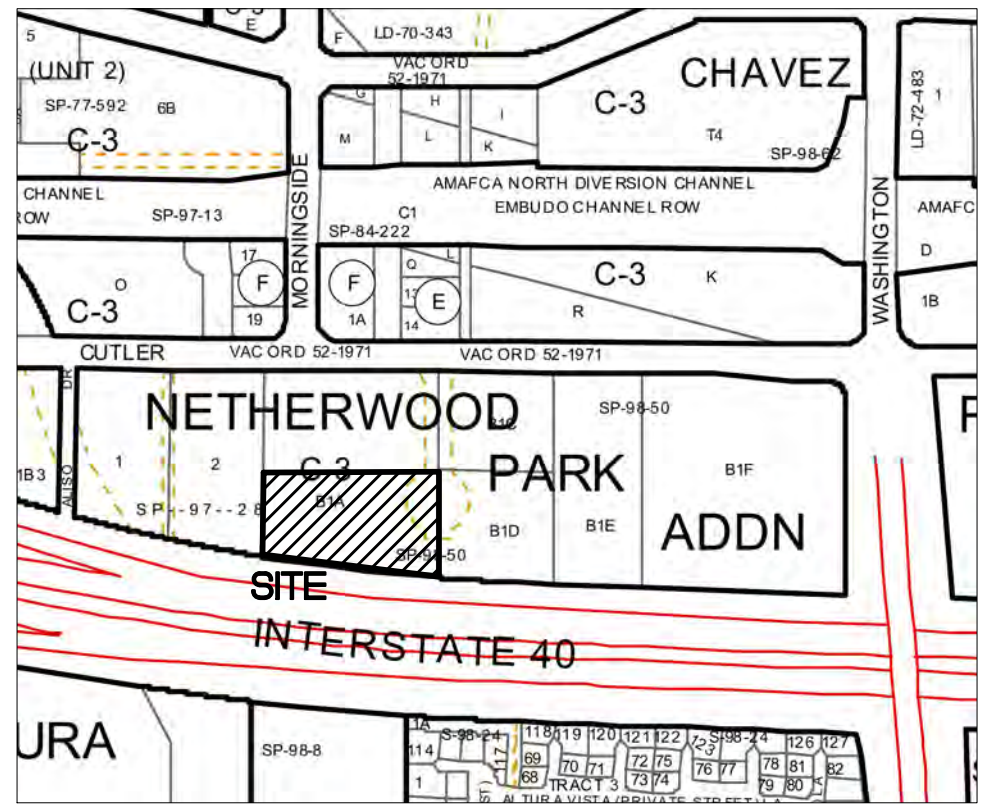
TOTAL PROJECT IMPERVIOUS AREA = 37,141 SF
FIRST FLUSH = $37,141 \cdot 0.34'' / 12 = 1,052 \text{ CF}$

WATER QUALITY POND VOLUME CALCULATIONS

CONTOUR ELEVATION	AREA (SF)	VOLUME (CF)
POND 'A' 5141.00	260.0 SF	753 CF
5142.00	1246.0 SF	2159 CF
5143.00	3072.0 SF	
TOTAL		2912 CF

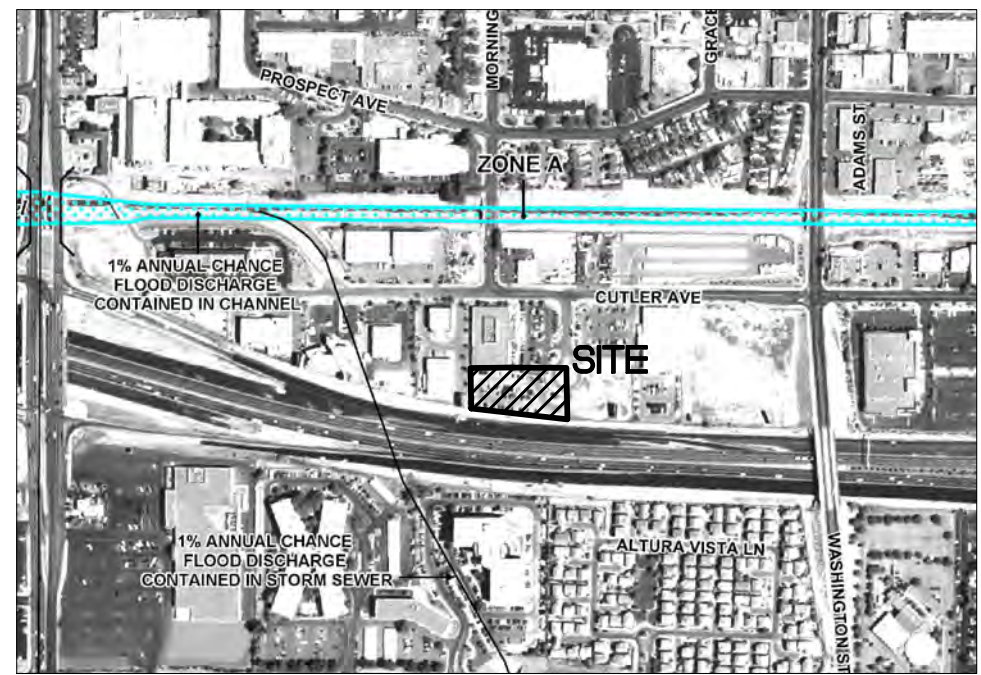
Existing 21st Century Academy Drainage Calculations											
This table is based on the COA DPM Section 22.2, Zone:2											
BASIN	Area (SQ. FT.)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (CFS)	WTE (inches)	V(100) ₃₆₀ (CF)	V(100) ₁₄₄₀ (CF)
Site Area	119994	2.75	0.0%	0.0%	15.7%	84.3%	4.46	12.27	1.96	19645	23017
TOTAL	119994	2.75						12.27		19645	23017

Proposed 21st Century Academy Drainage Calculations											
Ultimate Development Conditions Basin Data Table											
This table is based on the COA DPM Section 22.2, Zone:2											
BASIN	Area (SQ. FT.)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (CFS)	WTE (inches)	V(100) ₃₆₀ (CF)	V(100) ₁₄₄₀ (CF)
Site Area	119994	2.75	0.0%	0.0%	20.3%	79.7%	4.38	12.07	1.92	19189	22377
TOTAL	119994	2.75						12.07		19189	22377



VICINITY MAP Zone Atlas H-17

NTS
Legal Description: Tract B-1-A, Netherwood Park Add'n



FIRM MAP 35001C0351H

Per FIRM Map 35001C0351H, dated August 16, 2012, the site is not located in the 'Zone X Floodplain' and determined to be within the 0.2% chance Annual Floodplain area with depths of less than 1 foot.

DRAINAGE MANAGEMENT PLAN

INTRODUCTION

The purpose of this submittal is to provide a final drainage management plan for the Redevelopment of Tract B-1-A, Netherwood Park Addition, located at 4300 Cutler Ave NE per the Vicinity Map this sheet. The site area is approximately 2.75 acres; however, the project area is approximately 1.52 acres and consists of the southern portion of the site. The site is located in COA Hydrologic Zone 2.

EXISTING HYDROLOGIC CONDITIONS

The site currently consists of a ±25,309 SF Commercial Building with associated parking and landscaping. The site currently drains from south to north and onto Cutler Ave NE at two separate discharge points. Per the Calculations table this sheet, the total existing flow discharging from the site is 12.27 cfs (19,645 CF) during the 100-Yr, 6-Hr Storm Event.

PROPOSED HYDROLOGIC CONDITIONS

The project consists of removing the existing parking lot on the south side of the existing building to allow for the construction of a new 2-Story Classroom Building and a new Gymnasium. The proposed site will continue to drain from south to north and onto Cutler Ave NE using the two existing discharge points. Due to the reduction in impervious areas, there is a decrease in runoff from the site. Per the Calculations table this sheet, the total proposed runoff discharging from the site is 12.07 cfs (19,189 CF) during the 100-Yr, 6-Hr Storm Event. In addition, the runoff volume discharging from the site will be reduced by an additional 2,912 CF due to the new Water Quality Pond described below. The total reduction of runoff volume is 3,368 CF.

WATER QUALITY VOLUME CALCULATIONS

Per the Water Quality Volume Calculations this sheet, the total Water Quality Pond Volume required to be collected for the site is 1,052 CF. Per the Water Harvesting Pond Calculations table this sheet, we are actually retaining 2,912 CF of volume from the site which provides 1,860 CF of additional storage than required.

CONCLUSION

This drainage management plan provides for grading and drainage elements which reduce the impact to downstream systems; are capable of safely passing the 100 year storm, do not burden downstream systems, and meet city requirements. With this submittal, we are requesting Building Permit approval.

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



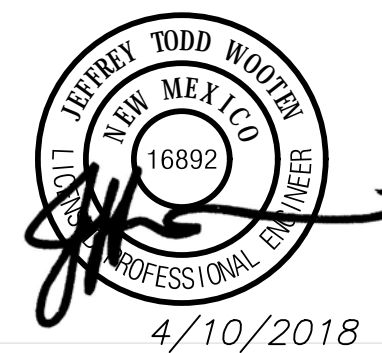
STUDIO CONSULTANTS, INC
PO BOX 1515
CEDAR CREST NM, 87008
DANIEL@ARIASCINC.COM
(505) 506-2314



Classroom and Gymnasium
Addition for:
21st Century
Public Academy

4300 CUTLER AVE. NE
ALBUQUERQUE, NM 87110

Architect/Engineer



DePONTE INVESTMENTS, INC.



WILLIAM
CERVANTES
enterprises, inc.

MARK	DATE	DESCRIPTION
REVISIONS		
ISSUE		100% Plans
PROJECT NO		2017031
CAD DWG FILE		
DRAWN BY		RMG
CHECKED BY		JTW
DATE		4/10/2018

DRAINAGE MANAGEMENT PLAN

C102