

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

January 25, 2022

Verlyn Miller, P.E.
Miller Engineering Consultants, Inc
3500 Comanche NE Bldg. F
Albuquerque, NM 87107

RE: Cottonwood Classical Academy – Gym
7801 Jefferson St. NE
Grading and Drainage Plans
Engineer's Stamp Date: 09/16/21
Hydrology File: D17D003A

Dear Mr. Miller:

PO Box 1293

Based upon the information provided in your submittal received 12/09/2021, the Grading & Drainage Plans are approved for Building Permit and Grading Permit. 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 stormwater quality pond 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 Marion G. Velasquez (mgvelasquez@cabq.gov) on the 4th floor of Plaza de Sol. Please note that Hydrology will need a pdf copy of the recorded Drainage Covenant prior to Hydrology's approval of Permanent Release of Occupancy.

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.

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If you have any questions, please contact me at 924-3995 or 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



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Cottowood Classical Gym Building Permit #: _____ Hydrology File #: _____
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: TR 5-B-1-A-2-A PLAT OF TRACTS 5-B-1-A-1-A, 5-B-1-A-2-A & 5-B-1-B-1 JOURNAL CENTER CONT 6.2374 AC
City Address: 7801 Jefferson St NE, Albuquerque, NM 87109

Applicant: Cottonwood Classical Preparatory School Contact: Jeremy Trumble
Address: 7801 Jefferson St NE, Albuquerque, NM 87109
Phone#: 505-998-1021 Fax#: _____ E-mail: jtt@fbtarch.com

Other Contact: Miller Engineering Consultants, Inc. Contact: Verlyn Miller
Address: 3500 Comanche NE, Bldg. F
Phone#: 505-888-7500 Fax#: _____ E-mail: vmiller@mecnm.com

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE _____ DRB SITE X ADMIN SITE

IS THIS A RESUBMITTAL? _____ Yes X No

DEPARTMENT _____ TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
X GRADING PLAN
____ DRAINAGE REPORT
____ DRAINAGE MASTER PLAN
____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
____ ELEVATION CERTIFICATE
____ CLOMR/LOMR
____ TRAFFIC CIRCULATION LAYOUT (TCL)
____ TRAFFIC IMPACT STUDY (TIS)
____ STREET LIGHT LAYOUT
____ 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
X GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 12-9-2021 By: Verlyn Miller

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DRAINAGE REPORT

SITE LOCATION

The proposed project is located on approximately a 12-acre site on the campus of Cottonwood Classical Academy School and can be accessed from Headline Road via Jefferson Boulevard NE.

EXISTING CONDITIONS

The overall existing site is estimated at 12 acres. The site is partially developed with a school and parking lot areas. There are two existing retention ponds on the site that collects runoff from a recent parking lot addition to the east side of the existing parking lot and a more recent portable building project.

Per the FMEA Panel on Sheet C-100 the site does not lie within a 100-year FEMA floodplain and is not impacted by offsite flows.

PROPOSED CONDITIONS

The proposed project would consist of a new gymnasium addition to be constructed on the south side of the existing school building. The gym addition will be constructed at the same finish floor as the existing school building with a swale along the east side of the gym and a new retention pond located south of the gym. A new cul-de-sac drop off road will also be constructed south and west of the gym addition. Runoff from the cul-de-sac will discharge into a new retention pond located west of the cul-de-sac roadway. These areas will be graded as indicated on Sheet C-101.

CONCLUSIONS

When developed as indicated on the grading and drainage plan, the increased runoff from the site is estimated at 1.93 cfs, and 0.14 acre-feet during the 100-year, 24-hour event. The first flush pond volume for the increase of 1.24 acre increase in impervious area has been estimated at 1890 cf. A new water harvest feature (retention pond) has been added to the site to address the first flush volume requirement. The retention pond is located west of the cul-de-sac area and will have a volume of 10,639 cubic feet, which is well above the first flush volume requirement. This retention pond has been enlarged to also account for a small 400 cf retention pond that was recently constructed for the portable building project, which will be displaced by the construction of this new gymnasium addition.

HYDROLOGY CALCULATIONS

Precipitation Zone 2 - 100-year Storm		P(360) = 2.33 in		P(1440) 2.75 in					
Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(100-6) (af)	V(100-24) (af)	Q(100) (cfs)
		A	B (Acres)	C	D				
Existing Conditions									
Site	12.310	0.000	0.000	5.960	6.350	1.641	1.683	1.89	48.56
Total	12.310							1.89	48.56
Proposed Conditions									
Site	12.310	0.000	0.000	4.720	7.590	1.74	1.785	2.04	50.49
Total	12.310							2.04	50.49

RETENTION POND RATING CURVE

WEST WATER HARVEST AREA					
Pond Rating Table					
Side Slope		3:1			
Elev. (ft)	Area (sq ft)	Volume (ac-ft)	Cum Volume (ac-ft)	Cum Volume (CF)	
5134	2139	0.049	0	0	
5135	2982	0.068	0.059	0.059	
5136	4045	0.093	0.081	0.139	
5137	5085	0.117	0.105	0.244	10639

FIRST FLUSH CALCULATIONS

$$VFF = (54,014 \text{ SF} \times 0.42" / 12)$$

$$VFF = 1890 \text{ CF}$$

GENERAL NOTES:

- EXISTING TOPOGRAPHIC SURVEY PERFORMED AND COMPILED BY PRECISION SURVEYS INC., ALBUQUERQUE, NEW MEXICO FIELD SURVEY PERFORMED IN MAY, 2021. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
- CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 286-1990 FOR LOCATION OF EXISTING UTILITIES.
- ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WETTED AND COMPACTED TO 95% OPTIMUM DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
- THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE STORM DRAINAGE REGULATIONS. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE "GRADING AND DRAINAGE DESIGN REQUIREMENTS AND POLICIES FOR LAND DEVELOPMENT."
- THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE AND REASONABLE MEASURES TO PREVENT SEDIMENT OR POLLUTANT LADEN STORM WATER FROM EXITING THE SITE DURING CONSTRUCTION. STORMWATER MAY BE DISCHARGED IN A MANNER, WHICH COMPLIES WITH THE APPROVED GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PREVENT THE MOVEMENT OF CONSTRUCTION RELATED SEDIMENT, DUST, MUD, POLLUTANTS, DEBRIS, WASTE, ETC FROM THE SITE BY WIND, STORM FLOW OR ANY OTHER METHOD EXCLUDING THE INTENTIONAL, LEGAL TRANSPORTATION OF SAME IN A MANNER ACCEPTABLE BY THE CITY.
- THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
- SEE ARCHITECTURAL DRAWINGS FOR SIDEWALK AND HANDICAPPED RAMPS, DETAILS AROUND THE BUILDING.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY SPOT ELEVATIONS ON THE GRADING AND DRAINAGE PLAN WHICH APPEAR TO BE AMBIGUOUS OR DO NOT MEET THE INTENT OF THE GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DOES NOT MEET ADA ACCESSIBILITY REQUIREMENTS. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0%, ALL SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0%, AND ALL RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 15:1.
- ALL SIDEWALKS AND CONCRETE FLATWORK SHALL HAVE A MINIMUM OF 0.5% SLOPE. CONTRACTOR SHALL CONTACT PROJECT ENGINEER IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DO NOT MEET THIS REQUIREMENT.
- THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2014 EDITION OF THE NEW MEXICO STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (GREY BOOK).
- ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.
- THE CONTRACTOR SHALL SUBMIT A SEED MIX DESIGN TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO STARTING THE SEEDING ON THE PROJECT. THE SEED MIX DESIGN SHALL BE A SEED MIX RECOMMENDED BY NRCS FIELD OFFICE REPRESENTATIVE APPROPRIATE FOR PROJECT LOCATION.
- ALL DISTURBED AREAS, NOT ADDRESSED BY ARCHITECTURAL LANDSCAPE PLAN WITH SLOPES OF LESS THAN 3:1 SHALL RECEIVE CLASS "A" SEEDING. ANY SLOPES THAT ARE 3:1 OR STEEPER SLOPES SHALL RECEIVE STEEP SLOPE SEEDING. THE STEEP SLOPE SEEDING SHALL CONSIST OF SEEDING IN CONJUNCTION WITH A 100% COCONUT FIBER BLEND EROSION BLANKET (NORTH AMERICAN GREEN C125) OR APPROVED EQUAL.

CONSULTANT

CIVIL
Miller Engineering Consultants, Inc.
3500 Comanche NE., Bldg. F
Albuquerque, New Mexico 87107
p_505.888.7500 f_505.888.3800



Cottonwood Classical Preparatory School Gym Expansion

Design Documents

7801 Jefferson St. NE
87109

SEPTEMBER 2021

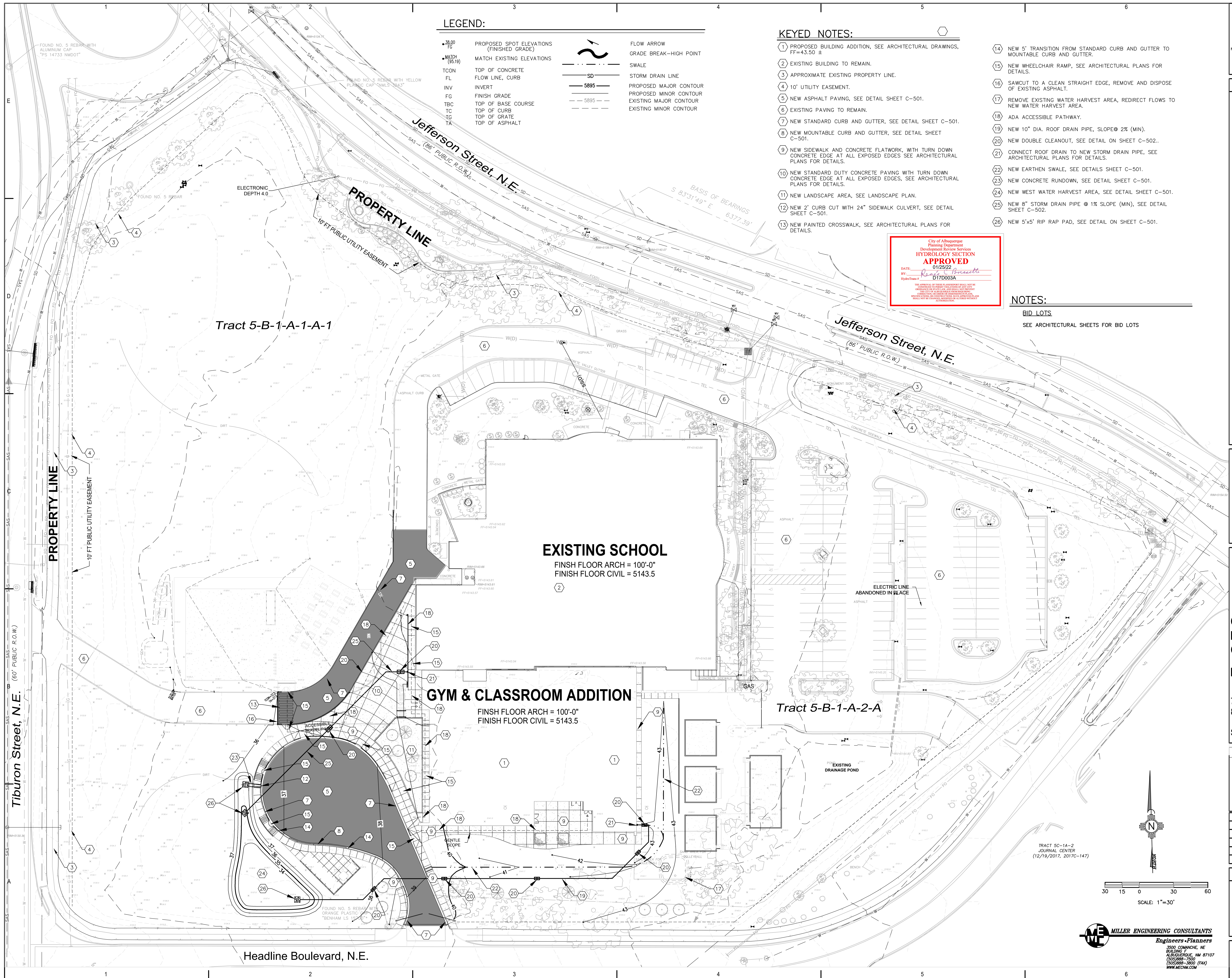
MARK	DATE	DESCRIPTION
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ISSUE:	
DATE:	
PROJECT NO:	Project Number
CAD DWG FILE:	
DRAWN BY:	Author
CHECKED BY:	Checker

SHEET TITLE

HYDROLOGY
DATA

C-100



fbt | architects
MAIL: 6501 Americas Pkwy NE, Ste. 300
Albuquerque, NM 87110
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Cottonwood Classical Preparatory School Gym Expansion
Design Documents
7801 Jefferson St. NE
87109
SEPTEMBER 2021

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ISSUE:		
DATE:		Project Number
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CAD DWG FILE:		
DRAWN BY:		Author
CHECKED BY:		Checker

SHEET TITLE

GRADING AND DRAINAGE
PLAN - OVERALL

C-101

MILLER ENGINEERING CONSULTANTS
Engineers • Planners
3500 COMANCHE, NE
ALBUQUERQUE, NM 87107
505.888-7500 (FAX)
505.888-3800 (FAX)
WWW.MECNM.COM

LEGEND:

- PROPOSED SPOT ELEVATIONS (FINISHED GRADE)
MATCH EXISTING ELEVATIONS
TOP OF CONCRETE
FLOW LINE, CURB
INVERT
FINISH GRADE
TOP OF BASE COURSE
TOP OF CURB
TOP OF GRATE
TOP OF ASPHALT
- FLOW ARROW
GRADE BREAK-HIGH POINT
SWALE
STORM DRAIN LINE
PROPOSED MAJOR CONTOUR
PROPOSED MINOR CONTOUR
EXISTING MAJOR CONTOUR
EXISTING MINOR CONTOUR

NOTES:

- BID LOTS
SEE ARCHITECTURAL SHEETS FOR BID LOTS

KEYED NOTES:

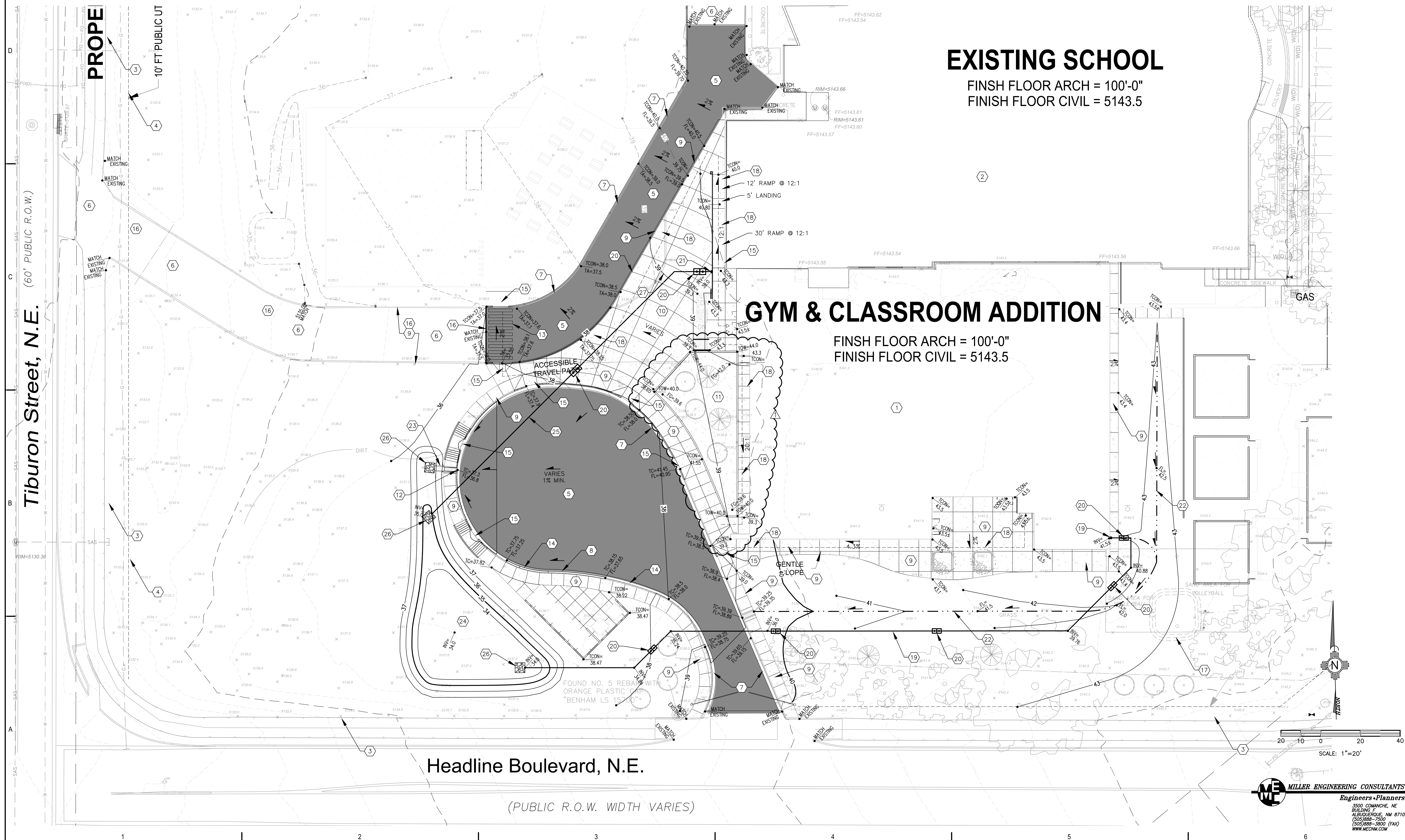
- 1 PROPOSED BUILDING ADDITION, SEE ARCHITECTURAL DRAWINGS, FF=43.50 ±
2 EXISTING BUILDING TO REMAIN.
3 APPROXIMATE EXISTING PROPERTY LINE.
4 10' UTILITY EASEMENT.
5 NEW HEAVY DUTY ASPHALT PAVING, SEE DETAIL SHEET C-501.
6 EXISTING PAVING TO REMAIN.
7 NEW STANDARD CURB AND GUTTER, SEE DETAIL SHEET C-501.
8 NEW MOUNTABLE CURB AND GUTTER, SEE DETAIL SHEET C-501.
9 NEW SIDEWALK AND CONCRETE FLATWORK, WITH TURN DOWN CONCRETE EDGE AT ALL EXPOSED EDGES SEE ARCHITECTURAL PLANS FOR DETAILS.
10 NEW STANDARD DUTY CONCRETE PAVING WITH TURN DOWN CONCRETE EDGE AT ALL EXPOSED EDGES, SEE ARCHITECTURAL PLANS FOR DETAILS.
11 NEW LANDSCAPE AREA, AMEND SOIL FILL PER LANDSCAPE DRAWINGS AND SPECS. SEE LANDSCAPE PLAN.
12 NEW 2' CURB CUT WITH 24" SIDEWALK CULVERT, SEE DETAIL SHEET C-501.
13 NEW PAINTED CROSSWALK, SEE ARCHITECTURAL PLANS FOR DETAILS.
14 NEW 5' TRANSITION FROM STANDARD CURB AND GUTTER TO MOUNTABLE CURB AND GUTTER.
15 NEW WHEELCHAIR RAMP, SEE ARCHITECTURAL PLANS FOR DETAILS.
16 SAWCUT TO A CLEAN STRAIGHT EDGE, REMOVE AND DISPOSE OF EXISTING ASPHALT.
17 REMOVE EXISTING WATER HARVEST AREA, REDIRECT FLOWS TO NEW WATER HARVEST AREA.
18 ADA ACCESSIBLE PATHWAY.
19 NEW 10" DIA. STORM DRAIN PIPE, SLOPE @ 2% (MIN).
20 NEW DOUBLE CLEANOUT, SEE DETAIL ON SHEET C-502.
21 CONNECT ROOF DRAIN TO NEW STORM DRAIN PIPE, SEE ARCHITECTURAL PLANS FOR DETAILS.
22 NEW EARTHEN SWALE, SEE DETAILS SHEET C-501.
23 NEW CONCRETE RUNDOWN, SEE DETAIL ON SHEET C-501.
24 NEW WEST WATER HARVEST AREA, SEE DETAIL SHEET C-501.
25 NEW 8" STORM DRAIN PIPE @ 1.5% SLOPE (MIN), SEE DETAIL ON SHEET C-502.
26 NEW 5'X5' RIP RAP PAD, SEE DETAIL ON SHEET C-501.

EXISTING SCHOOL

FINISH FLOOR ARCH = 100'-0"
FINISH FLOOR CIVIL = 5143.5

GYM & CLASSROOM ADDITION

FINISH FLOOR ARCH = 100'-0"
FINISH FLOOR CIVIL = 5143.5



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Preparatory School
Gym Expansion

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87109

SEPTEMBER 2021

MARK	DATE	DESCRIPTION
1	10/14/21	ADDENDUM #3

ISSUE:	
DATE:	
PROJECT NO:	Project Number
CAD DWG FILE:	
DRAWN BY:	MEC Author
CHECKED BY:	VAM Checker

SHEET TITLE
GRADING AND DRAINAGE
PLAN