

CITY OF ALBUQUERQUE



March 12, 2018

Scott M. McGee, P.E.
SMMPE, LLC
9700 Tanoan Dr. NE
Albuquerque, NM 87111

RE: **Montessori on the Rio Grande Charter School**
1650 Gabaldon Dr NW
Grading and Drainage Plan
Engineer's Stamp Date 3/6/18
Hydrology File: H12D008B

Dear Mr. McGee:

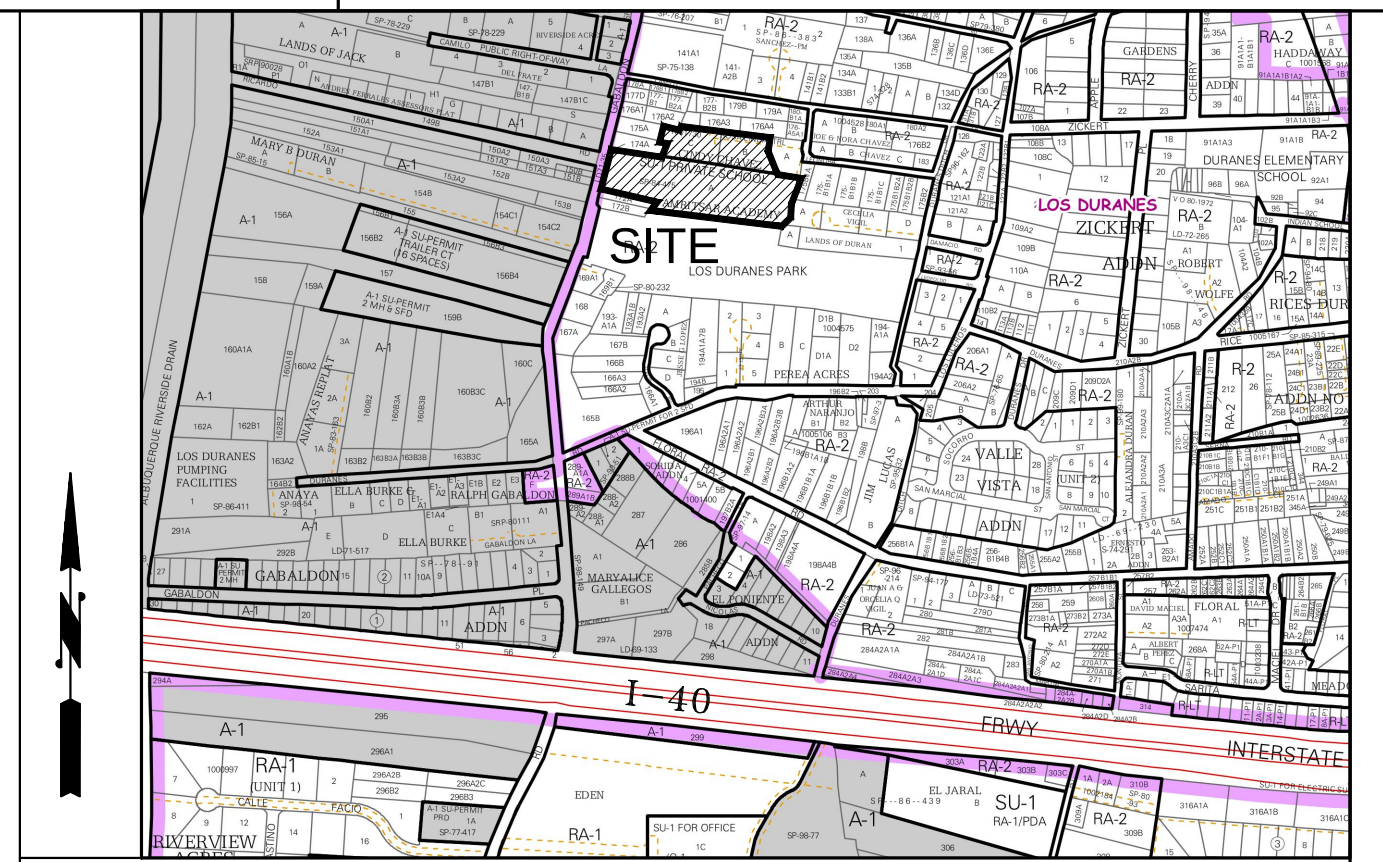
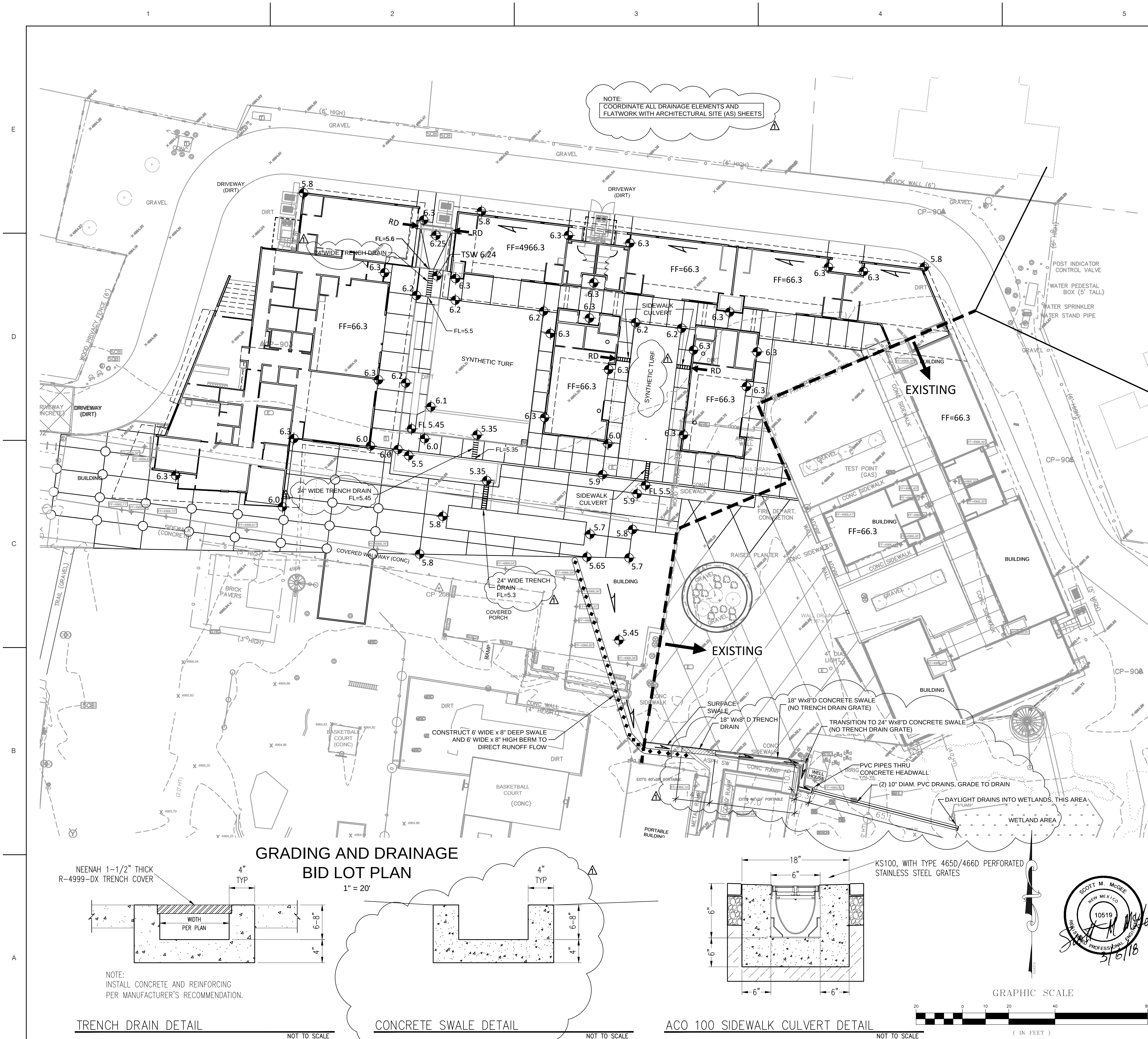
Based on the information provided in your submittal received 3/9/18, the above referenced plan cannot be approved for Building Permit until the following are addressed:

- PO Box 1293
- Albuquerque
- NM 87103
- www.cabq.gov
1. Onsite retention of the increased runoff needs to be substantiated. The increase appears to be ~2200CF (100-yr, 10day volume increase), yet only 1200CF of new storage is provided.
 - o If the existing wetland has additional storage capacity, please provide the supporting pond volumes and hydrology for it.
 - o If pond routing is being used to shave the peak flow, please provide that analysis.
 2. A Private Facility Drainage Covenant is required for the stormwater ponds. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to City of Albuquerque) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants.

Prior to Hydrology approval for C.O., the drainage covenant will need to be recorded. If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services



VICINITY MAP H-12-Z NOT TO SCALE

LEGEND

-
- EXISTING CONTOUR
 — 65 — NEW CONTOUR
 FF=4966.3 FINISH FLOOR ELEV
 5.9 NEW SPOT ELEVATION
 ← RD ROOF DRAIN
 FLOW DIRECTION

DRAINAGE NARRATIVE

LEGAL: Tract A, Lands of Amristar Academy and Tracts B & C Lands of Cindy Chavez

AREA: 4.605 acres (200,586 SF)

BM: COA Station '7-H13' being a brass cap with
ELEV= 4967.437 (NAVD 1988)

SURVEYOR: Wilson & Company dated January, 2017

FLOOD HAZARD: From FEMA Panel 331 (09/26/2008), the site is shown to be within Zone 'X' which are areas of 0.2% annual chance flood, areas of 1% annual chance flood with average depths < 1' or with drainage areas < 1 sq. mile, and areas protected by levees from 1% annual chance flood.

EXISTING CONDITIONS: The site is an existing school facility which includes four existing school buildings, playground areas, an asphalt parking area, and two portable buildings. The site is very flat with an existing wetlands area in the SE corner. Two existing buildings will be demolished to make room for the new buildings. The parking area to the west, which drains to the west, remains unchanged.

First Flush: $Q = (0.44 - 0.10) / (37,900) / 12 = 1.0 / 4$ CF
This volume will be stored in the various detention ponds located throughout the site which provide 1,200 CF storage volume.

OFFSITE FLOWS: A residential area NE of the site discharges through the east edge of the site within an existing concrete-lined channel as shown. The historic offsite flow rate of 15.2 CFS will be unchanged.

PROPOSED IMPROVEMENTS: The proposed single-story buildings total 22,320 SF and are proposed to be located where the existing buildings were previously on the site. All roof runoff is collected and discharges to the south.

DRAINAGE APPROACH: The proposed drainage plan will follow historic flow paths and the approved Grading Plan. Site runoff is routed through drainage channels to depressed landscaped areas. Overflow will be carried on the surface to the southeast. An existing wetland pond, located in the southeast of the site, will receive the developed runoff after it flows through the courtyard area.

MANINGG CAPACITY: 24" CULVERT Q=3.9 CFS
10" DIA. PVC PIPE: Q = 2.2 CFS (USE 2 - OK)

HYDROLOGY: For precipitation Zone 2: 30% B, 32% C & 38% D land treatment
Existing $Q = (1.38)(2.28) + (1.47)(3.14) + (1.75)(4.7) = 16.0$ CFS

The proposed building, impervious areas, and walks are 43% of the area with the balance of the site considered as land treatment type 'B' and 'C'.
Proposed Q= (1.33)(2.28)+(1.27)(3.14)+(2.00)(4.7)= 16.4 CFS

This minor runoff increase (0.4 CFS) will be captured onsite in depressed landscape areas and the existing wetlands. The proposed discharge rate will be held to the historic rate.

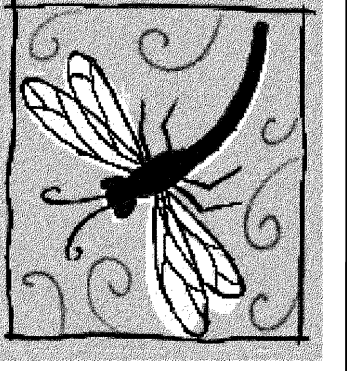
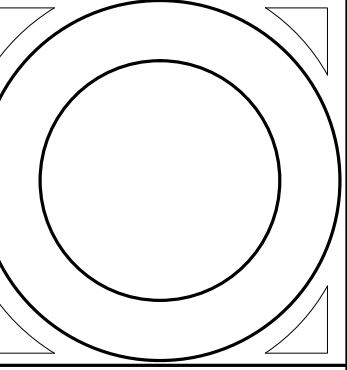
G. DONALD DUDLEY AIA

ARCHITECT

ARCHITECTURE INTERIORS PLANNING
AND CONSTRUCTION

SIMMS TOWER STUDIO #50
400 GOLD AVENUE SW
ALBUQUERQUE, NEW MEXICO
87102

TEL 505 243 8101
FAX 505 243 8101



new classrooms and administrative areas for

**MONTESSORI OF THE
RIO GRANDE CHARTER SCHOOL**

1650 Gabaldon Drive, NW
Albuquerque, NM 87104

[illegible]

ODA PROJECT NO:

DATE: 3.6.2018

RAWN BY: _____

CHECKED BY: _____

ET NO:	
SHEET TITLE:	

GRADING AND DRAINAGE

BID LOT PLAN

C102