CITY OF ALBUQUERQUE

January 20, 2017

Richard J. Berry, Mayor

Ron Hensley, P.E.
GND Engineering
11032 Dreamy Way Dr. NW
Albuquerque, NM, 87114

RE: **Coors Pavilion Subdivision**
9154 Coors Blvd
Grading Plan
Engineer's Stamp Date 01-04-2017 (File: G11D069)

Dear Mr. Hensley:

Based upon the information provided in your submittal received 01/13/2017, the Grading Plan is not approved for Grading Permit. The following comments need to be addressed for approval of the above referenced project:

1. The AHYMO model routes discharge from Lot 7 into Lot 6, and along the alley to the north, then into the pond. However the drainage narrative and the drawing show Lot 7 as draining into Lot 8, then to the pond. The AHYMO model needs to reflect the drawing and narrative or visa-versa.

2. If discharge from Lot 7 is to be drained into Lot 8, a curb cut and dip section will need to be provided to take water out of the alley and into Lot 8.

3. Waterblocks will be required where the alley joins Coors and St. Josephs to prevent excess flows from entering and contributing to the drainage area. These may be present already but are difficult to see; provide spot elevations and callouts to clarify.

4. Clarify contributions from adjoining lot X-1-A1. The AHYMO model appears to refer to this as "Church" with a contribution of 10.68 cfs and 0% impervious area. The drawing shows a contribution of 29.26 cfs. Is the existing pond being merged with the new one?

5. Proposed contours need to be added to the legend and to the lots. On this sheet no regrading appears to be taking place across the new lots.

6. The proposed water surface elevation of 5011.50 will back up into the alley and across a large portion of Lot 1. Is this desired?

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

7. First flush volume needs to be calculated and shown on this sheet, as well as how it will be retained in the pond beneath the invert of the outlet structure.

8. Additional detail is required on the outlet structure and its downstream effects. This includes inverts, velocities, grades, and HGL's.

9. Provide the input and output files for the AHYMO model.

Work within the City Right-of-Way will require a city work order. The two similar submittals for Lots 3 & 4, and Lot 4, submitted on 1/3/2017 are on hold until this master grading plan is approved. Please let me know if you need to revise those based on changes to the master plan. If you have any questions, contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

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

Orig: Drainage file

GND, LLC
CONSULTING ENGINEERS
10224 Green River Place NW Albuquerque, New Mexico 87114
Phone: 505-264-0472
Email: segreer@swcp.com

January 12, 2016

Hydrology Development
City of Albuquerque
PO Box 1293
Albuquerque, NM 87103

Re: Coors Pavilion Subdivision –Grading Plan for Grading Permit

We are requesting a review of the attached plan in support of the Grading Permit of TRACT X-1-A2 UNIVERSITY OFALBUQUERQUE URBAN CENTER AND the Coors Pavilion Subdivision. The subdivision is located at the corner of Coors Blvd. and St. Josephs Dr. NW. The plan covers the rough grading and drainage features of the subdivision. We are requesting a review for compliance with City requirements.

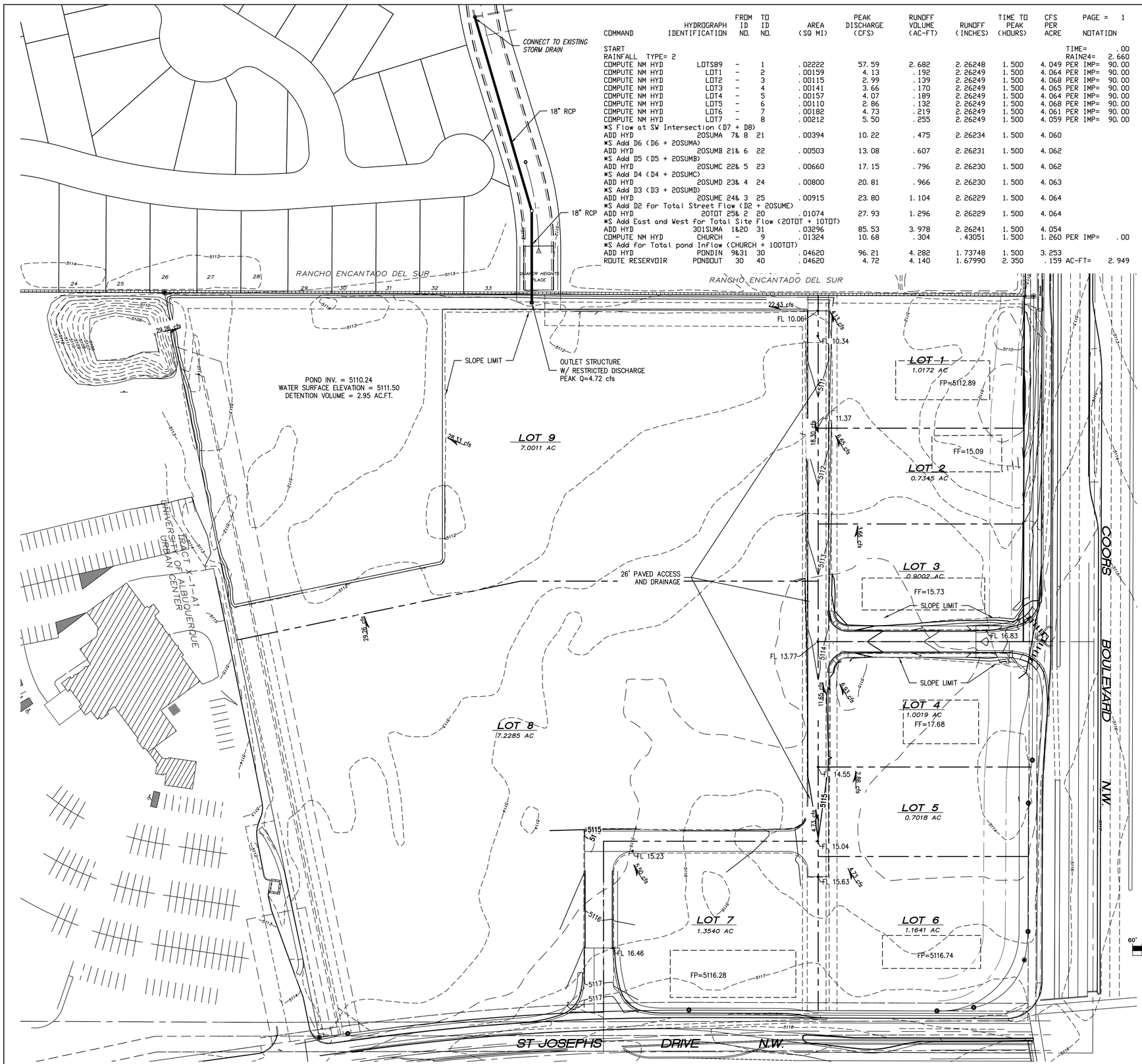
Please contact me at 410-1622 or via email if you have any questions or comments.

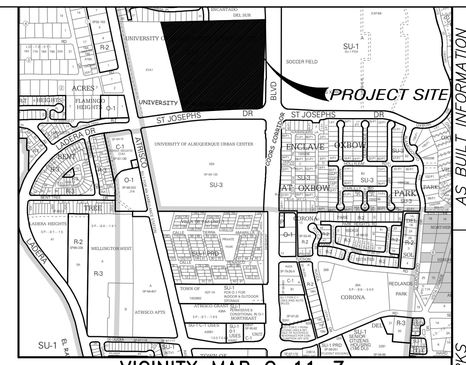
Sincerely,

Ron E. Hensley

Ron E. Hensley P.E.
ron@thegroup.cc

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION
START										TIME= .00
RAINFALL TYPE= 2										RAIN24= 2.660
COMPUTE NM HYD	LOTS89	-	1	.02222	57.59	2.682	2.26248	1.500	4.049	PER IMP= 90.00
COMPUTE NM HYD	LOT1	-	2	.00159	4.13	.192	2.26249	1.500	4.064	PER IMP= 90.00
COMPUTE NM HYD	LOT2	-	3	.00115	2.99	.139	2.26249	1.500	4.068	PER IMP= 90.00
COMPUTE NM HYD	LOT3	-	4	.00141	3.66	.170	2.26249	1.500	4.065	PER IMP= 90.00
COMPUTE NM HYD	LOT4	-	5	.00157	4.07	.189	2.26249	1.500	4.064	PER IMP= 90.00
COMPUTE NM HYD	LOT5	-	6	.00110	2.86	.132	2.26249	1.500	4.068	PER IMP= 90.00
COMPUTE NM HYD	LOT6	-	7	.00182	4.73	.219	2.26249	1.500	4.061	PER IMP= 90.00
COMPUTE NM HYD	LOT7	-	8	.00212	5.50	.255	2.26249	1.500	4.059	PER IMP= 90.00
*S Flow at SW Intersection (D7 + D8)										
ADD HYD	20SUMA	7&	8 21	.00394	10.22	.475	2.26234	1.500	4.060	
*S Add D6 (D6 + 20SUMA)										
ADD HYD	20SUMB	21&	6 22	.00503	13.08	.607	2.26231	1.500	4.062	
*S Add D5 (D5 + 20SUMB)										
ADD HYD	20SUMC	22&	5 23	.00660	17.15	.796	2.26230	1.500	4.062	
*S Add D4 (D4 + 20SUMC)										
ADD HYD	20SUMD	23&	4 24	.00800	20.81	.966	2.26230	1.500	4.063	
*S Add D3 (D3 + 20SUMD)										
ADD HYD	20SUME	24&	3 25	.00915	23.80	1.104	2.26229	1.500	4.064	
*S Add D2 for Total Street Flow (D2 + 20SUME)										
ADD HYD	20TOT	25&	2 20	.01074	27.93	1.296	2.26229	1.500	4.064	
*S Add East and West for Total Site Flow (20TOT + 10TOT)										
ADD HYD	30SUMA	1&20	31	.03296	85.53	3.978	2.26241	1.500	4.054	
COMPUTE NM HYD	CHURCH	-	9	.01324	10.68	.304	.43051	1.500	1.260	PER IMP= .00
*S Add for Total pond Inflow (CHURCH + 10OTOT)										
ADD HYD	PONDIN	9&31	30	.04620	96.21	4.282	1.73748	1.500	3.253	
ROUTE RESERVOIR	PONDOUT	30	40	.04620	4.72	4.140	1.67990	2.350	.159	AC-FT= 2.949





VICINITY MAP G-11-Z

DRAINAGE INFORMATION

LOCATION & DESCRIPTION

AS SEEN ON THE VICINITY MAP, THE PROPOSED SITE IS 21.22 ACRES LOCATED ON THE SOUTH SIDE OF ST JOSEPH'S DRIVE AND WEST OF COORS BLVD.. THE SITE IS UNDEVELOPED. THE ADJACENT PROPERTY TO THE WEST IS A CHURCH AND TO THE NORTHE IS A RESIDENTIAL SUBDIVISION. THE PROPOSED DEVELOPMENT WILL BE EIGHT (8) OFFICE AND COMMERCIAL LOTS WITH PRIVATE DRAINAGE FEATURES AND PUBLIC STORM DRAIN TO CONVEY FLOWS TO THE LADERA POND.

FLOODPLAIN STATUS

THIS PROJECT WITHIN FEMA'S FLOOD INSURANCE RATE MAP 35001C0142H, DATED APRIL 2, 2002 IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING AHYMO SOFTWARE.

PRECIPITATION

THE 100-YR 24-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 1 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

EXISTING DRAINAGE

THE EXISTING FLOW CONDITIONS FROM THE SITE DISCHARGE ARE DETAINED ONSITE WITH OVERFLOW TO THE NORTH OF THE SITE.

DEVELOPED CONDITION

THIS SITE WILL BE DEVELOPED WITH AN ACCESS AND DRAINAGE EASEMENT TO INTERCEPT FLOW FROM LOT 1 THROUGH LOT 6. THE ASPHALT DRIVE SURFACE WILL CONVEY FLOW TO THE ONSITE DETENTION POND. LOT 7 THROUGH LOT 9 WILL DISCHARGE TO THE POND VIA SURFACE SHEET FLOW. THE RESTRICTED DISCHARGE FROM THE POND WILL HAVE MINIMAL IMPACT ON DOWNSTREAM FACILITIES.

EACH LOT WILL MAKE ACCOMMODATION FOR THE "FIRST FLUSH" WHICH WILL BE PRIMARILY RETAINED WITHIN THE VOLUME OF THE SUBDIVISION POND.

CONCLUSION

THE RUNOFF FROM THE SITE IS WITHIN THE DESIGN CAPACITY OF THE DOWNSTREAM FACILITIES AND IN COMPLIANCE WITH CITY REQUIREMENTS.

LEGEND

- FLOW ARROW
- SLOPE ARROW
- EL=11.28 PROPOSED ELEVATION
- 66.33 EXISTING ELEVATION
- GRADE BREAK
- EXISTING CONTOUR
- EXISTING CONTOUR
- PROPOSED EASEMENT
- 4.00% PROPOSED GRADE
- EXISTING WALL
- BASIN BOUNDARY

60' 0 30' 60' 120
(IN FEET)

GND, LLC
CONSULTING ENGINEERS
Albuquerque, NM 87114
Phone: (505)-264-0472

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY
STAKED BY
INSPECTOR'S
CERTIFICATE BY
FIELD
VERIFICATION BY
MARKED BY
CORRECTED BY
DATE

MICRO-FILM INFORMATION
RECORDED BY
DATE
NO.

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
RON E. HENSLEY
NEW MEXICO
21680
REGISTERED PROFESSIONAL ENGINEER
1/4/17

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
	DATE DEC 2016	DESIGNED BY	REH
	DATE JAN 2017	DRAWN BY	REH
	DATE JAN 2017	CHECKED BY	REH

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

COORS PAVILION
MASTER DRAINAGE PLAN
SITE GRADING & DRAINAGE

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	Mo./DAY/YR.	Mo./DAY/YR.

CITY PROJECT No.
ZONE MAP NO. K-09-Z
SHEET 1 OF 1