

CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

March 3, 2017

Fred Arfman, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E
Albuquerque, NM, 87108

RE: **Galles Chevrolet Grading Plan- For Foundation Permit Only**
University and Candelaria
Engineer's Stamp Date 1/27/2017
Hydrology File: H15D065

Dear Mr. Arfman:

Based upon the information provided in the submittal received on 1/27/2017 the above-referenced Grading Plan is approved for Foundation Permit only. Mass grading of the site, paving, vertical construction, and retaining wall construction are not permitted as part of this approval. In order to approve the plan for Grading Permit and Building Permit the following comments will need to be addressed prior to Hydrology's approval:

1. Public Storm Drain and Easement.

- a. Provide a detail of the proposed wall over the public storm drain easement at the south end of the lot. An encroachment agreement may be required by NMDOT for this work, as they are the owning agency for that storm drain section.
- b. Provide details to show the existing storm drain manholes will be protected including rim and surrounding spot elevations. Add note to protect in place and warp sloping if necessary to prevent them from being buried. Modifications to raise/lower rims may be made through SO-19 permit or mini-work order if this is necessary. Future access to Manholes must be provided and coordinated through Storm Drain Maintenance.

2. South Pond.

- a. Add dimensions to include pond volume, bottom of pond, maximum water surface elevation, and side slopes.



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- b. Side slopes greater than 3:1 will require a fence or barricade. This appears to be an issue along the west side of the pond adjacent to the frontage road.
- c. Provide an outfall for the pond. It is Hydrology's understanding the pond will outfall to the NMDOT swale along the frontage road. Permission to discharge to this location must be obtained from NMDOT and may require discharge to be restricted to the pre-development condition.

3. Coordination.

- a. Provide proof of coordination with NMDOT-District 3 Drainage Engineer for work in their ROW and easement. It appears that there is grading and a retaining wall in their ROW at the northwest corner of the site. Also they will need to approve any pond outfalls to their roadside swale.
- b. Provide proof of correspondence with PNM for grading around the utility pole. PNM may want a buffer left around the base of the pole.

4. General.

- a. Update the drainage calculations to reflect Precipitation Zone 2, not Zone 4.
 - b. For the building permit set, remove all references to foundation permit only.
 - c. If an SO-19 permit is requested, the standard SO-19 language will need to be added to the sheet and two grading plansets will need to be submitted.
 - d. Is there still a first flush ponding area in the northwest corner? In not, remove the reference to it.
 - e. Additional detail is needed for the retaining walls. Provide section cuts and details for all retaining wall cases. Clarify labeling or add a legend to make it clear what's a retaining wall and what's a header curb or garden wall/fence.
5. Public ROW items. The following items in the city's ROW will need to be addressed for Building Permit, if using SO-19, or Work Order approval, if using a mini-work order.
- a. Provide quarter points for the entrances.

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- b. Call-out a 5:1 depressed swale between back of curb and sidewalk. This may already be present per the contours, but should be explicitly called out.
- c. Provide Top-of-Sidewalk elevations and contours along University, north of the entrance.

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

PO Box 1293

Albuquerque

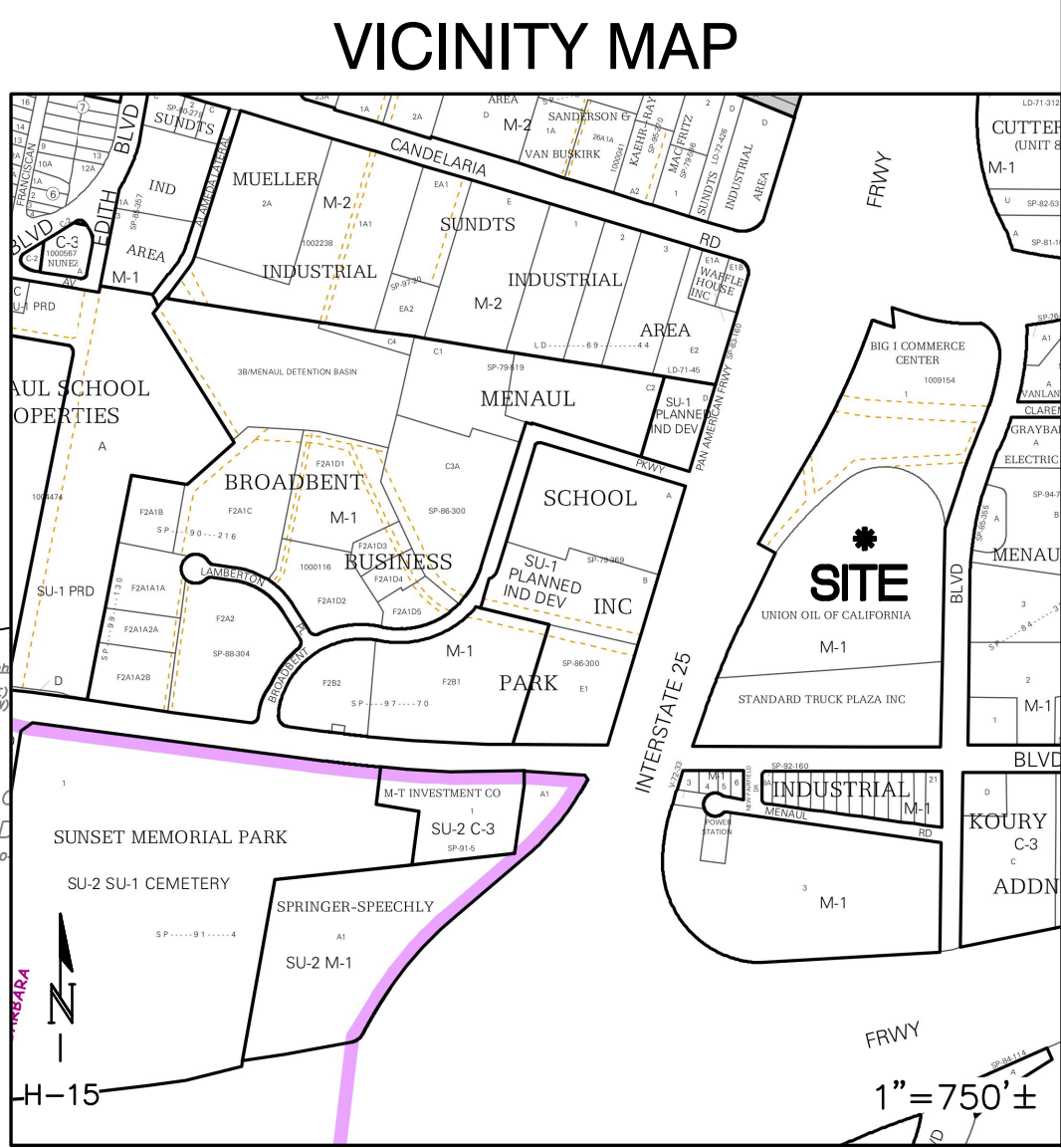
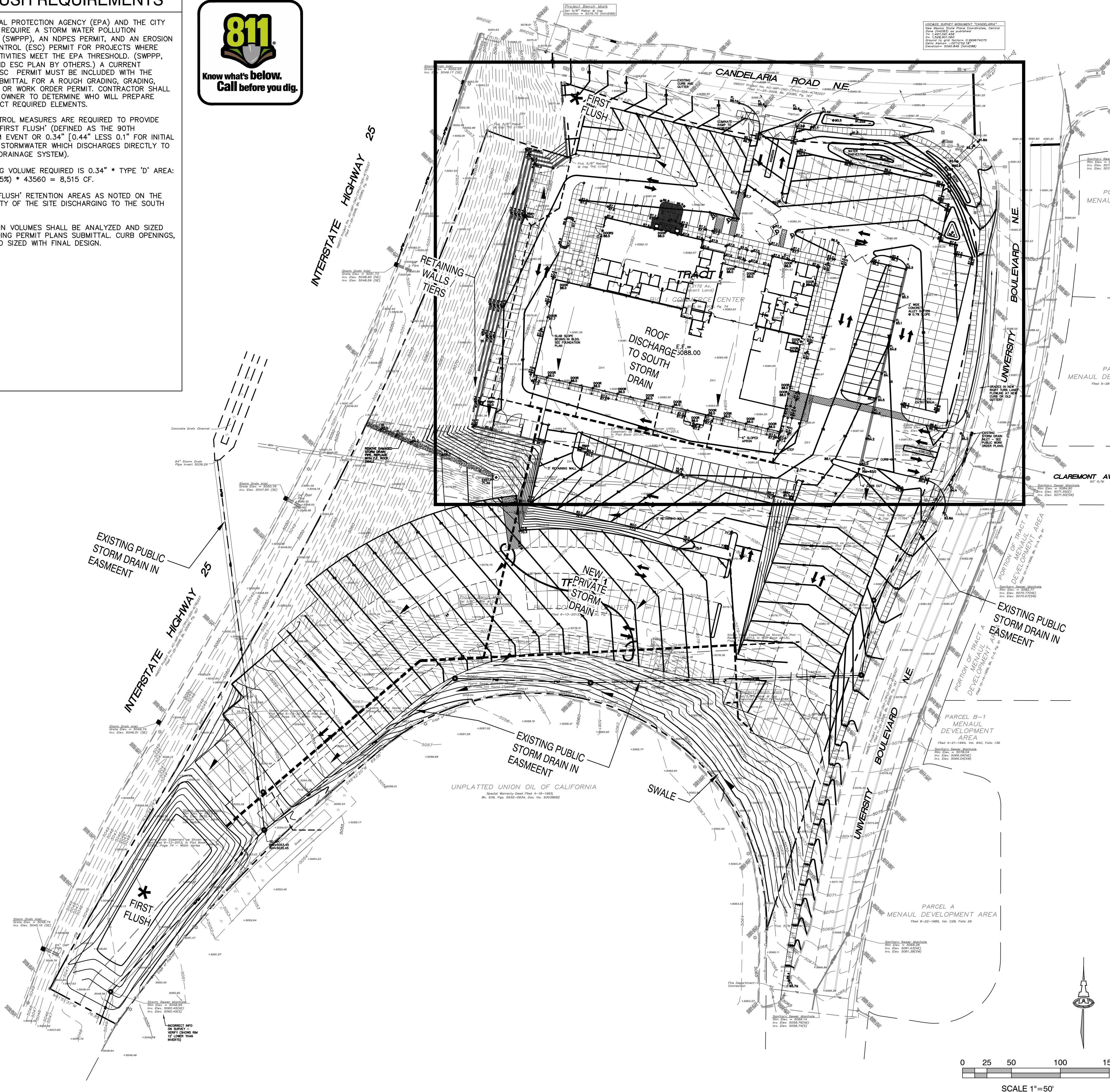
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CALCULATIONS: 2142 GALLES CHEVROLET : September 16, 2016			
Based on Drainage Design Criteria for City of Albuquerque			
Section 22.2, DPM, Vol 2, dated Jan., 1993			
ON-SITE CALCULATIONS: 100-YEAR, 6-HOUR STORM			
AREA OF SITE:	401501.232	SF	= 9.2
HISTORIC FLOWS:			
	Treatment SI	%	
Area A	=	0	0%
Area B	=	40150.1232	10%
Area C	=	341276.047	85%
Area D	=	20075.0616	5%
total Area	=	401501.232	100%
DEVELOPED FLOWS:			
	Treatment SI	%	EXCESS PRECIP:
Area A	=	0	0%
Area B	=	40150	10%
Area C	=	60225	15%
Area D	=	301126	75%
total Area	=	401501.232	100%
On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)			
Weighted E = $\frac{E_a A_a + E_b A_b + E_c A_c + E_d A_d}{A_a + A_b + A_c + A_d}$			
Historic	=	1.48 in.	Developed E = 2.31 in.
On-Site Volume of Runoff: $V_{360} = E^* A / 12$			
Historic V	=	49552 CF	Developed V_{360} = 77189 CF
On-Site Peak Discharge Rate: $Q_p = Q_b A A_a + Q_b A A_b + Q_b A A_c + Q_b A A_d / 43.56$			
For Precipitation $Z_o 4$			
$Q_b A$	=	2.20	$Q_b C$ = 3.73
$Q_b B$	=	2.92	$Q_b D$ = 5.25
Historic C	=	34.3 CFS	Developed Q_p = 44.1 CFS

FIRST FLUSH REQUIREMENTS

- A. THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE CITY OF ALBUQUERQUE REQUIRE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), AN NPDES PERMIT, AND AN EROSION AND SEDIMENT CONTROL (ESC) PERMIT FOR PROJECTS WHERE CONSTRUCTION ACTIVITIES MEET THE EPA THRESHOLD. (SWPPP, NPDES PERMIT, AND ESC PLAN BY OTHERS.) A CURRENT CITY-APPROVED ESC PERMIT MUST BE INCLUDED WITH THE CONTRACTOR'S SUBMITTAL FOR A ROUGH GRADING, GRADING, PAVING, BUILDING, OR WORK ORDER PERMIT. CONTRACTOR SHALL COORDINATE WITH OWNER TO DETERMINE WHO WILL PREPARE SWPPP AND INSPECT REQUIRED ELEMENTS.
- B. STORMWATER CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH' (DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION] OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM).
- THE ESTIMATED PONDING VOLUME REQUIRED IS 0.34" * TYPE 'D' AREA: $0.34/12 * (9.2 \text{ AC} * 75\%) * 43560 = 8,515 \text{ CF}$.
- THERE WILL BE 'FIRST FLUSH' RETENTION AREAS AS NOTED ON THE PLAN WITH THE MAJORITY OF THE SITE DISCHARGING TO THE SOUTH POND.
- THE 'FIRST FLUSH' BASIN VOLUMES SHALL BE ANALYZED AND SIZED AS PART OF THE BUILDING PERMIT PLANS SUBMITTAL. CURB OPENINGS, SHALL BE LOCATED AND SIZED WITH FINAL DESIGN.



PROJECT DATA

PROPERTY: THE SITE IS AN GRADED BUT UNDEVELOPED PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP H-15. THE SITE IS BOUND TO THE EAST BY UNIVERSITY BLVD. NE, TO THE WEST BY THE I-25 FRONTAGE ROAD, TO THE NORTH BY CANDELARIA RD. NE AND TO THE SOUTH BY DEVELOPED COMMERCIAL PROPERTY.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE A 42,000± SF CAR DEALERSHIP WITH ASSOCIATED ASPHALT PAVED ACCESS, PARKING, DISPLAY PARKING AND LANDSCAPING.

LEGAL: TRACT 1, BIG I COMMERCE CENTER, ALBUQUERQUE, NM
SITE AREA: 9.2172 ACRES

BENCHMARK: VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC SURVEY CONTROL MONUMENT "CANDELARIA" HAVING A PUBLISHED ELEVATION OF 5090.846' (NAVD88).

OFF-SITE: NO OFF-SITE SURFACE DRAINAGE AFFECTS THIS PROPERTY. A PUBLIC STORM DRAIN CROSSES THE SOUTH PORTION OF THE PROPERTY WITHIN A PUBLIC EASEMENT.

FLOOD HAZARD: IN ACCORDANCE WITH THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAP NO. 35001C0332 G, EFFECTIVE DATE 9-26-2008 AND MAP NO. 35001C0351 H, EFFECTIVE DATE 8-16-2012, THE SITE IS LOCATED WITHIN FLOODZONE 'X' DESIGNATED AS AREAS OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN.

ENGINEER: FRED C. ARFMAN: NMPE 7322
ISAACSON & ARFMAN, P.A.
128 MONROE N.E., ALBUQUERQUE, NM 87108
505-268-8828

SURVEYOR: RUSS P. HUGG: NMPS NO. 9750
SURV-TEK, INC
9384 VALLEY VIEW DRIVE, NW, ALBUQUERQUE NM 87114
505-897-3366

DRAINAGE CONCEPT

PERMANENT STORMWATER RETENTION PONDS WILL BE SIZED TO RETAIN THE FIRST FLUSH.

ALL STORMWATER FROM IMPERVIOUS AREAS WILL BE DIRECTED TO FIRST FLUSH RETENTION PONDS AS NOTED ON PLAN. ONCE THESE FILL WITH THE REQUIRED VOLUME, THE PROPERTY WILL FREE DISCHARGE TO THE I-25 R.O.W. AND ENTER THE EXISTING STORM DRAIN SYSTEM. EROSION PROTECTION WILL BE PROVIDED AT FOR ALL CONCENTRATED DISCHARGE. ISAACSON & ARFMAN WILL COORDINATE WITH NMDOT REGARDING STORM DRAINAGE.

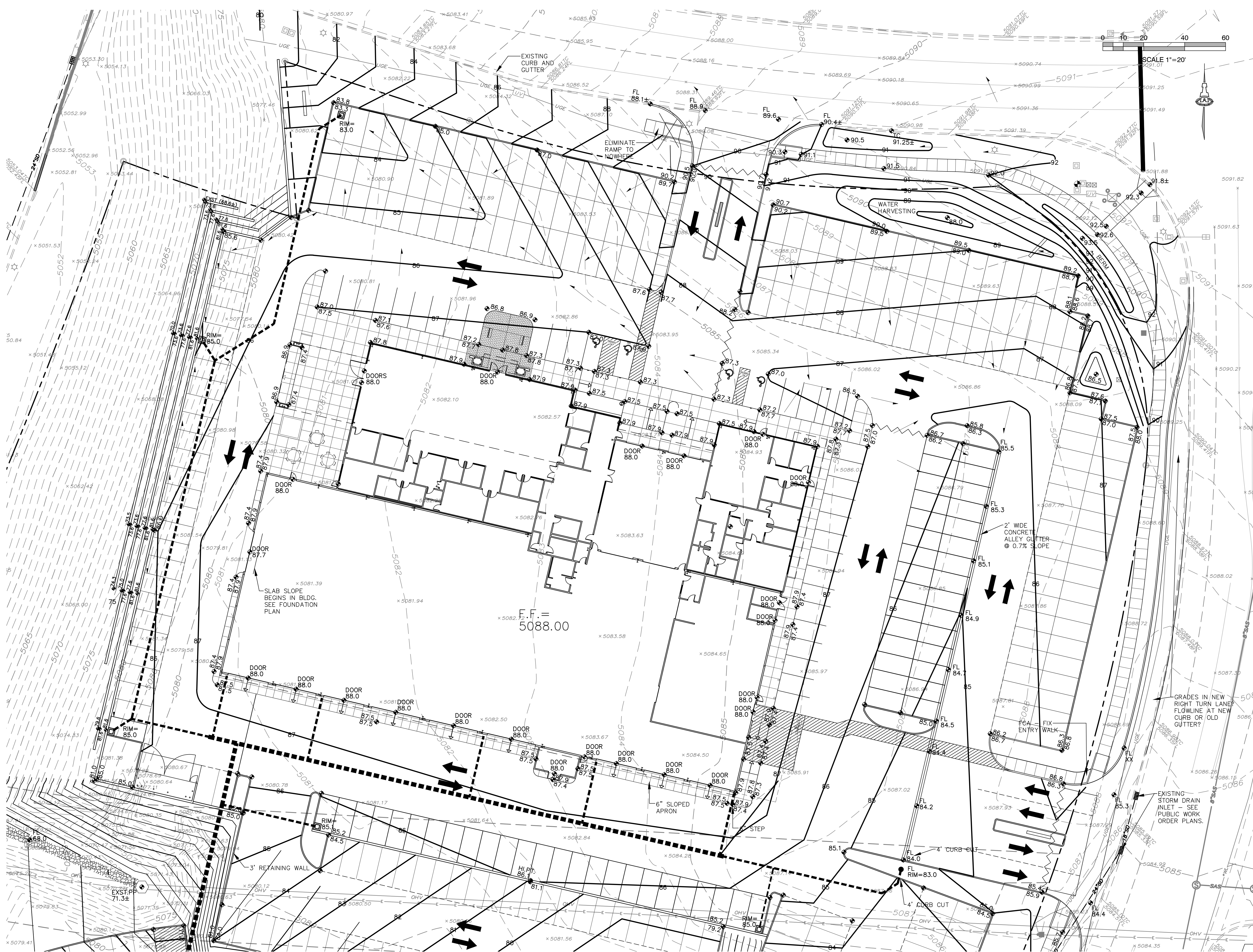
GALLES CHEVROLET
ALBUQUERQUE, NEW MEXICO
JAYNES CORPORATION

FOR FOUNDATION
PERMIT ONLY

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
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Ph. 505-268-8828 www.iacivil.com
2142 CG-101 FOUNDATION ONLY.dwg Jan 27, 2017

date:	AUGUST, 2016
drawn by:	V&A
checked by:	RRV
revisions:	
JAN 27-2017	

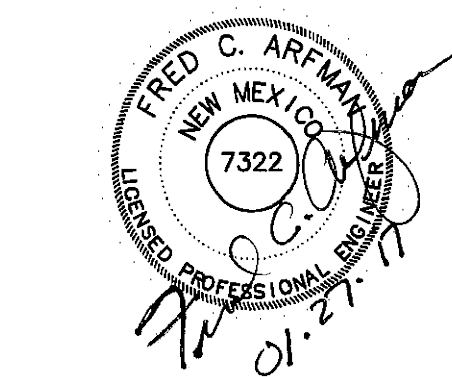
OVERALL
GRADING PLAN
(FOUNDATION ONLY)
CG-F 100



KEYED NOTES

GALLES CHEVROLET
ALBUQUERQUE, NEW MEXICO
JAYNES CORPORATION

VIGIL & ASSOCIATES
ARCHITECTURAL GROUP, P.C.
WWW.VA-ARCHITECTS.COM



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GRADING &
DRAINAGE PLAN
(FOUNDATION ONLY)
CG-F 101