

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

October 7, 2019

Matt Satches, PE
Bohannon Huston, Inc.
7500 Jefferson St NE
Albuquerque, NM 87109

RE: **2440 Louisiana NE**
Grading and Drainage Plan
Engineer's Stamp Date: 9/25/19
Hydrology File: H19D084

Dear Mr. Satches:

Based on the submittal received on 9/25/19 the above-referenced Grading and Drainage Plan cannot be approved for Grading or Paving Permit until the following corrections are made:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

1. The orifice plates on inlets 2 and 3 in the NW parking lot (outfall for proposed basin C) are missing and need to be replaced in order for the parking lot detention pond to function as proposed. Include this repair/replacement work on the plan. The orifice plates for the SW parking lot (outfall for basin B) were recently replaced and the pond near the parking garage entrance is still in place, so those outfalls are acceptable.
2. Payment in Lieu (Amount = $482\text{CF} \times \$8/\text{CF} = \3856 , per sheet C-001) of onsite management of the SWQV must be made. Take three copies of the treasury deposit slip to the Treasury and then include one copy of the paid deposit slip when resubmitting.
3. Because these corrections are minor, the administrative resubmittal fee of \$40 may be used. Please include a copy of this letter when resubmitting in order to receive the reduced fee.

Prior to Certificate of Occupancy (For Information):

4. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required and needs to include photographs of the replaced orifice plates.

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

Sincerely,

A handwritten signature in dark ink, appearing to read 'D. Peterson', is written over a light gray circular background.

Dana M. Peterson
Senior Engineer, Planning Dept.
Development Review Services

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



TREASURY DIVISION DAILY DEPOSIT

Transmittals for:
PROJECTS Only

Payment In-Lieu for Storm Water Quality
Volume Requirement

CASH COUNT	AMOUNT	ACCOUNT NUMBER	FUND NUMBER	BUSINESS UNIT	PROJECT ID	ACTIVITY ID	AMOUNT
TOTAL CHECKS	\$ 3856.00	461615	305	PCDMD	24_MS4	7547210	\$ 3856.00
TOTAL AMOUNT						TOTAL DEPOSIT	\$3856.00

Hydrology#: H19D084 Name: 2440 Louisiana, 22,227sf imp.
Payment In-Lieu For Storm Water Quality
Volume Requirement

Address/Legal Description: 2440 Louisiana NE
TR 5-A-2 BLK C PLAT FOR LOTS 5-A-1, 5-A-2, 6-A-1-C-1-A AND 6-A-1-C-1-B BLOCK "C",
LOUISIANA SUBDIVISION

DEPARTMENT NAME: Planning Department/Development Review Services, Hydrology

PREPARED BY Dana Peterson PHONE 924-3695

BUSINESS DATE 10/4/19

DUAL VERIFICATION OF DEPOSIT 
EMPLOYEE SIGNATURE

AND BY _____
EMPLOYEE SIGNATURE

REMITTER: _____

AMOUNT: _____

BANK: _____

CHECK #: _____ DATE ON CHECK: _____

The Payment-in-Lieu can be paid at the Plaza del Sol Treasury, 600 2nd St. NW. **Bring three copies of this invoice to the Treasury** and provide a copy of the receipt to Hydrology, Suite 201, 600 2nd St. NW, or e-mail with the Hydrology submittal to PLNDRS@cabq.gov.



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

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

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

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

Owner: _____ **Contact:** _____

Address: _____

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

TYPE OF SUBMITTAL: _____ PLAT (____# OF LOTS) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes _____ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION _____ HYDROLOGY/ DRAINAGE

Check all that Apply:

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: _____

September 25, 2019

Mr. Dana Peterson, PE
Senior Engineer
Planning Department
City of Albuquerque
600 2nd Street NW
Albuquerque, NM 87103

Re: 2440 Louisiana - Hydrology File: H19D084
COA Hydrology Building Permit Approval Re-Submittal

Dear Mr. Peterson:

Enclosed for your review is a copy of the 2440 Louisiana Drainage Management Plan and Grading Plan. Below is a brief description of how the comments from your response letter (dated 06/06/19) were addressed:

1. Onsite detention is required. The capacity of the storm drain in Louisiana has been exceeded; therefore discharge is limited to 0.1cfs/ac. No increased runoff to overcapacity systems can be authorized per § 14-5-2-12 (G) of the Albuquerque Code of Ordinances.

***Response:** The existing detention pond locations throughout this area are restricted by various orifice plates. These orifice plates will restrict the additional runoff associated with the developments. Runoff volume associated with the additional impervious area is provided. Below is a brief summary of how the additional runoff is handled for the three proposed basins.*

- *Basin A: An existing pond is located to the east of the underground parking area south of the site. Per "The 24's Uptown – Louisiana Condo Project Drainage Report (Hydro File H19D001)" this pond is sized for 122% of the required 100 Yr – 6 Hr storm event. The required volume is 1,642 CF, but 2,007 CF is provided, a 365 CF difference. The additional runoff volume from Basin A due to this development is 325 CF, less than the 365 CF difference. The additional runoff volume from Basin A is mitigated entirely by the additional volume provided previously. See Exhibit A for more information.*
- *Basin B: The parking lot located west of the 24's Condos acts as a detention pond. This pond utilizes orifice plates to restrict runoff flow rates. Per "The Shops @ the 24's Grading & Drainage Plan (Hydro File H19D001)" this pond has approximately 0.1829 Ac-Ft of storage (~7967 CF). The maximum storage is 0.0336 Ac-Ft (~1463 CF). The difference between the existing runoff volume and proposed runoff volume due to the development is 257 CF. This volume falls within the remaining storage volume in this pond. This pond has a maximum water surface elevation of 5222.91 FT, the top of pond is 5223.50 FT. The additional volume will negligibly increase the maximum water surface elevation of this pond. See Exhibit B for more information.*

Engineering 

Spatial Data 

Advanced Technologies 

- *Basin C: The parking lot located west of the 2440 Office Building acts as a detention pond. This pond utilizes orifice plates to restrict runoff flow rates. Per "The American Financial Center Drainage Plan (Hydro File H19D001)" this ponding area has a maximum water surface elevation approximately 15" above the top of inlet grate, this equals approximately 11,700 CF of storage. An additional 926 CF is now contributing to this area. The spread of the ponding area based on the survey is approximately 24,800 SF. This additional volume spread over the parking lot is approximated to add .037 FT (.44") to the maximum water surface elevation. This amount is negligible, and the existing ponding area mitigates the additional runoff from the development.*

2. Provide two detailed and scaled exhibits of the land treatments; one for existing and one for proposed. Delineate between areas of impervious and pervious cover on both and provide the area take-offs.

Response: Two viewports are now provided for both the existing conditions and proposed conditions. Associated drainage tables are now provided for both conditions as well. Associated runoff flow rates and volumes are shown.

3. Storm water quality calculations are missing. This site qualifies as redevelopment and is only required to retain runoff from the 80th percentile storm ($\text{Vol.} = 0.26'' \times \text{Imp. Area}$).

Response: First Flush is now quantified and will be paid Cash-In-Lieu

4. A Bernalillo County Recorded Drainage Covenant (No Public Easement) is required for the storm water quality pond. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to Bernalillo County) 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.

Response: First Flush is to be paid Cash-In-Lieu.

5. Show the contours and grades for the adjacent underground parking structure entrance. Special care must be taken to ensure no additional runoff is directed toward it. New survey data is required.

Response: New survey has data has been collected for the entire site.

6. Provide written and signed permission from the adjoining property to the south for any new discharge to their property.

Response: See Exhibit D, the ALTA for the site, reflecting a cross lot drainage easement allowing runoff onto the adjacent property.

7. Include project benchmark and datum.

Response: This is now included.

Mr. Dana Peterson, PE
Senior Engineer
City of Albuquerque
September 25, 2019
Page 3

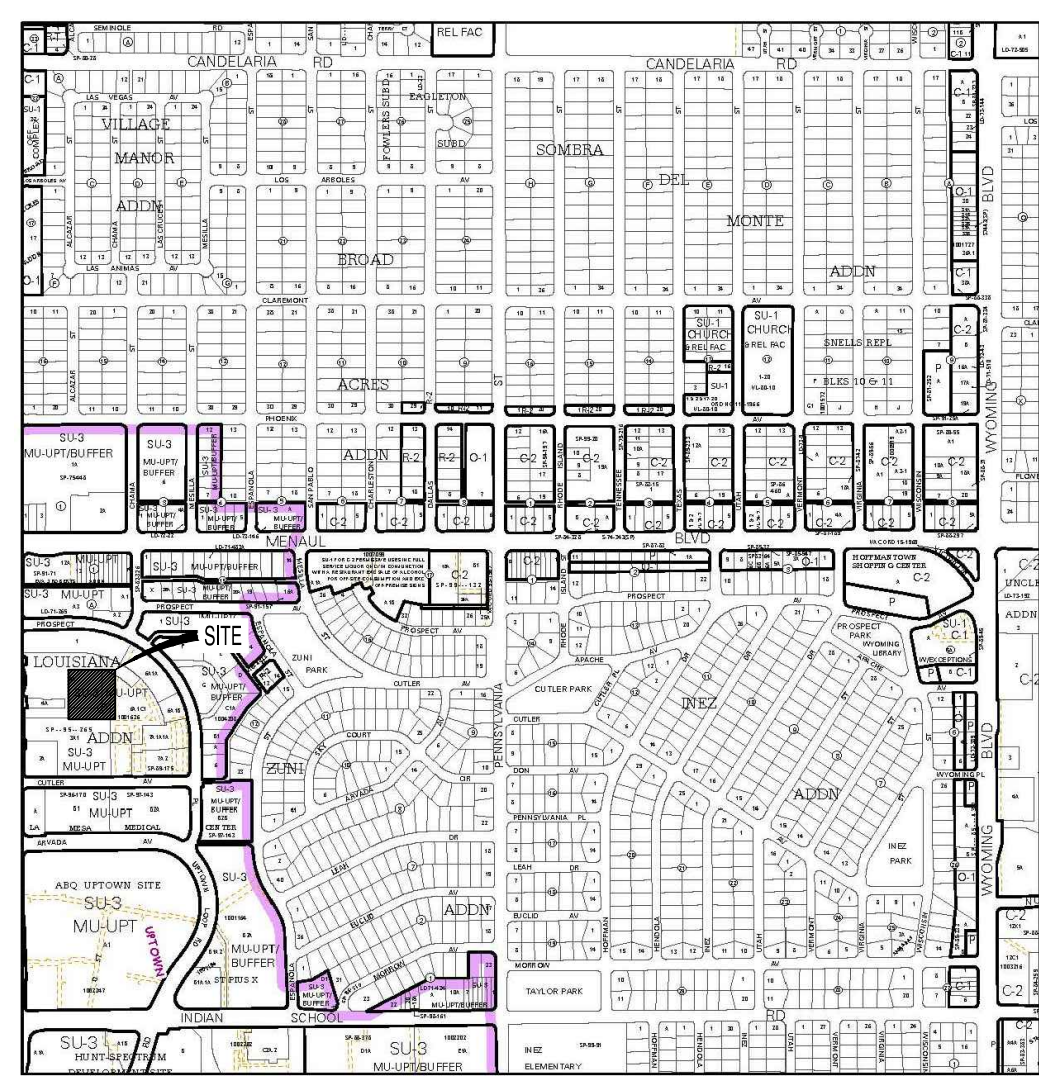
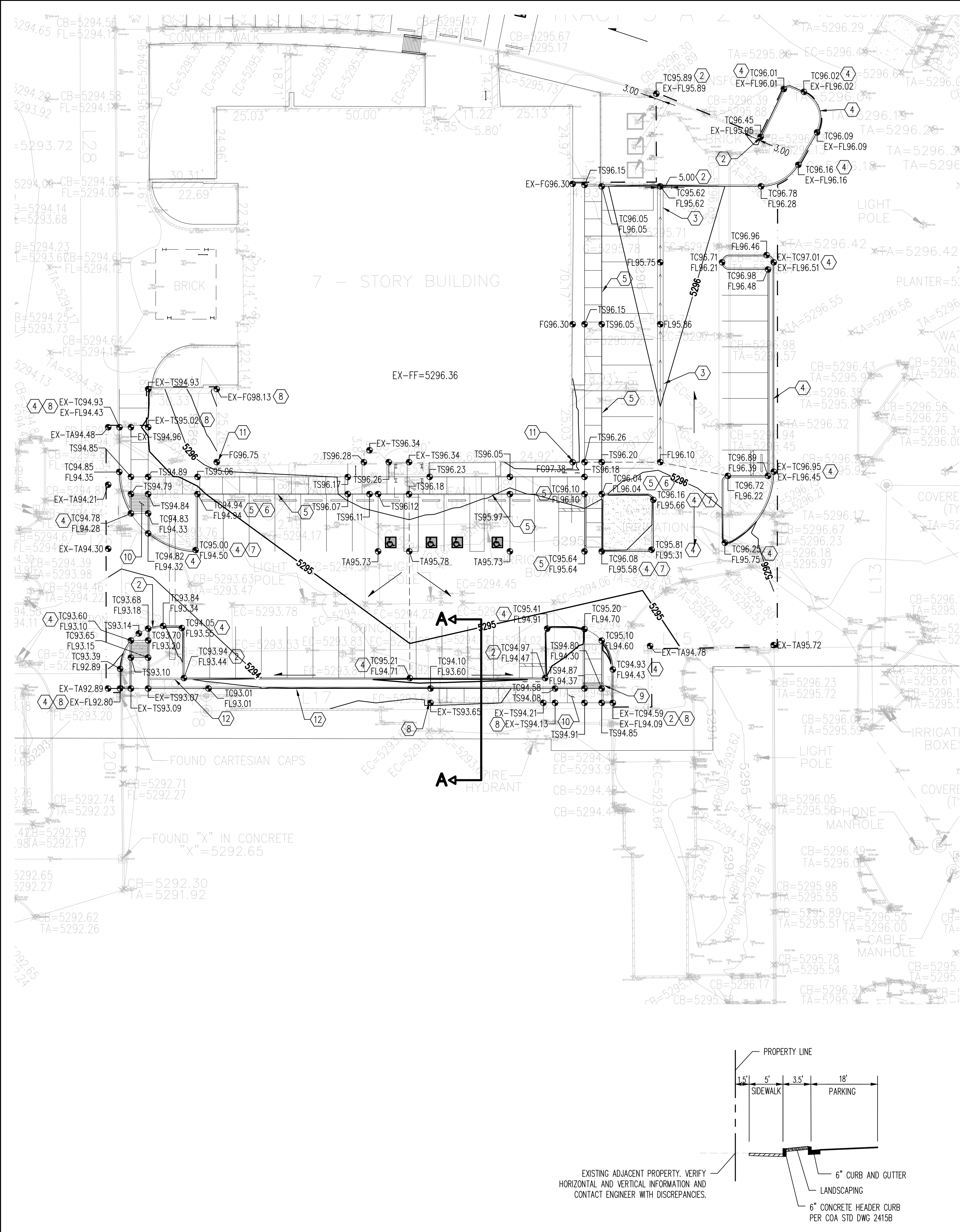
With this submittal, we are requesting City of Albuquerque Hydrology Paving & Grading Permit Approval. If you have any questions or require further information, please feel free to contact me.

Sincerely,



Matt Satches, PE
Engineer
Community Development and Planning

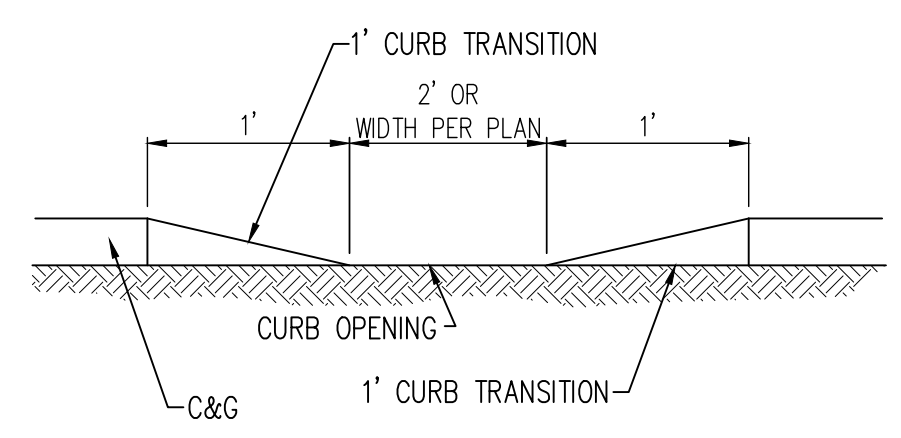
MHS
Enclosures



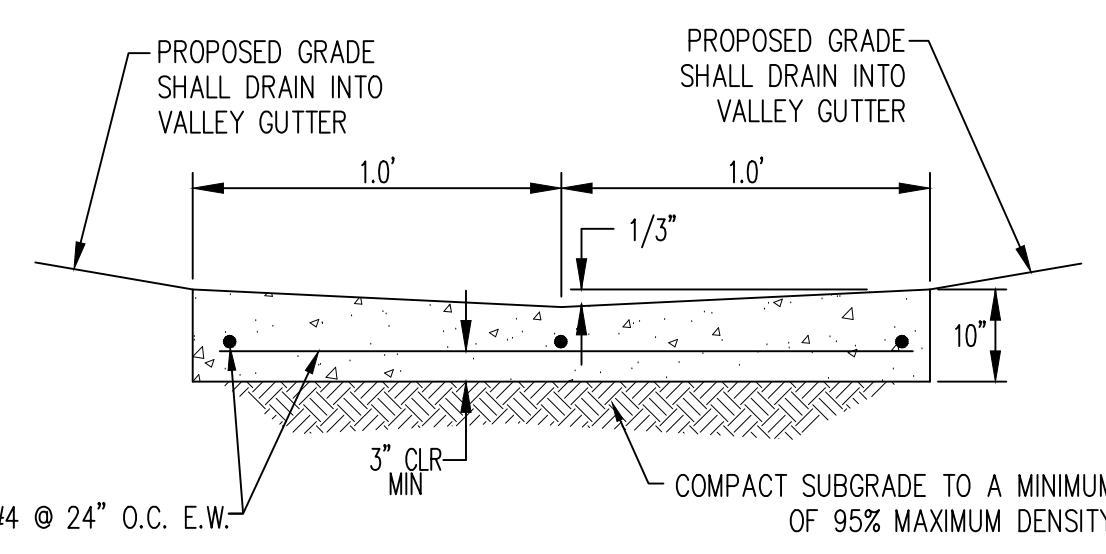
ZONE ATLAS PAGE H-19-Z



FEMA FIRM MAP # 35001C0352H



TYPICAL CURB OPENING
NOT TO SCALE



CONCRETE VALLEY GUTTER
NOT TO SCALE

CROSS SECTION A-A
NOT TO SCALE

GRADING KEYED NOTES

- NOT USED.
- INSTALL CURB OPENING PER DETAIL "A" THIS SHEET.
- INSTALL CONCRETE VALLEY GUTTER PER DETAIL "B" THIS SHEET.
- INSTALL 6" CURB AND GUTTER.
- INSTALL FLUSH CURB.
- BEGIN TRANSITION FROM FLUSH CURB TO 6" CURB AND GUTTER.
- END TRANSITION FROM FLUSH CURB TO 6" CURB AND GUTTER.
- MATCH EXISTING ELEVATIONS.
- INSTALL 24" SIDEWALK CULVERT PER COA STD DWG 2236.
- INSTALL ADA RAMP. SEE ARCHITECTURE SITE PLAN FOR DETAILS.
- RETAIN ON BUILDING.
- INSTALL 6" CONCRETE HEADER CURB PER COA STD DWG 2415B.

PROJECT BENCHMARK

MONUMENT 15_H18 NAD 1983 CENTRAL ZONE
X = 1545019.848
Y = 1495111.771
Z = 5303.391 (NAVD 1988)
G-G = 0.999660624

NOTE

IMPROVEMENTS HAVE BEEN MADE SINCE ORIGINAL SURVEY WAS COMPLETED. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL EXISTING TOPOGRAPHIC INFORMATION AND INFORM ENGINEER WITH ANY DISCREPANCIES.

NOTE

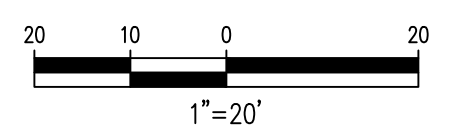
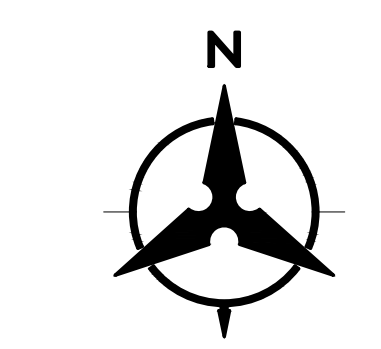
CONTRACTOR SHALL ADJUST ALL EXISTING & PROPOSED VALVES, MANHOLES, ETC. TO FINISHED GRADE.

NOTE

SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0% AND A MAXIMUM OF 2.0%.

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- LIMITS OF GRADING
- PROPOSED SPOT ELEVATION
- PROPOSED DIRECTION OF FLOW
- WATER BLOCK / RIDGE OR HIGH POINT
- PROPOSED RETAINING WALL
- PROPOSED INDEX CONTOURS
- PROPOSED INTER CONTOURS
- PROPOSED CURB & GUTTER
- EASEMENT
- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLET



GENERAL SHEET NOTES

- ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS SHALL APPLY.
- THE CONTRACTOR 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.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS INCLUDING ALL UNDERGROUND UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER OR ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
- ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION, SHALL BE COORDINATED WITH THAT UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE CONSTRUCTION OBSERVER.
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADEING, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, EPA STORM WATER PERMITS, ETC.).
- ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.
- THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE BERNALILLO COUNTY, TRAFFIC ENGINEERING DEPARTMENT, PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
- ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), US DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
- THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADEING AT THE END AND BEGINNING OF EACH DAY.
- THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING COMPLIANCE WITH NPDES PHASE 2 REQUIREMENTS.
- THE CONTRACTOR SHALL PROVIDE 1 HARD COPY AND 1 ELECTRONIC COPY OF THE EPA STORM WATER POLLUTION PREVENTION PLAN ALONG WITH THE APPROPRIATE SUBMITTAL FEE TO CITY OF ALBUQUERQUE TWO WEEKS PRIOR TO THE START OF SITE DISTURBANCE.

GRADING GENERAL 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." ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS (FIRST PRIORITY), AND/OR THE ALBUQUERQUE 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.
- 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.
- PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
- VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.

Bohannon & Huston
www.bhinc.com 800.877.5332

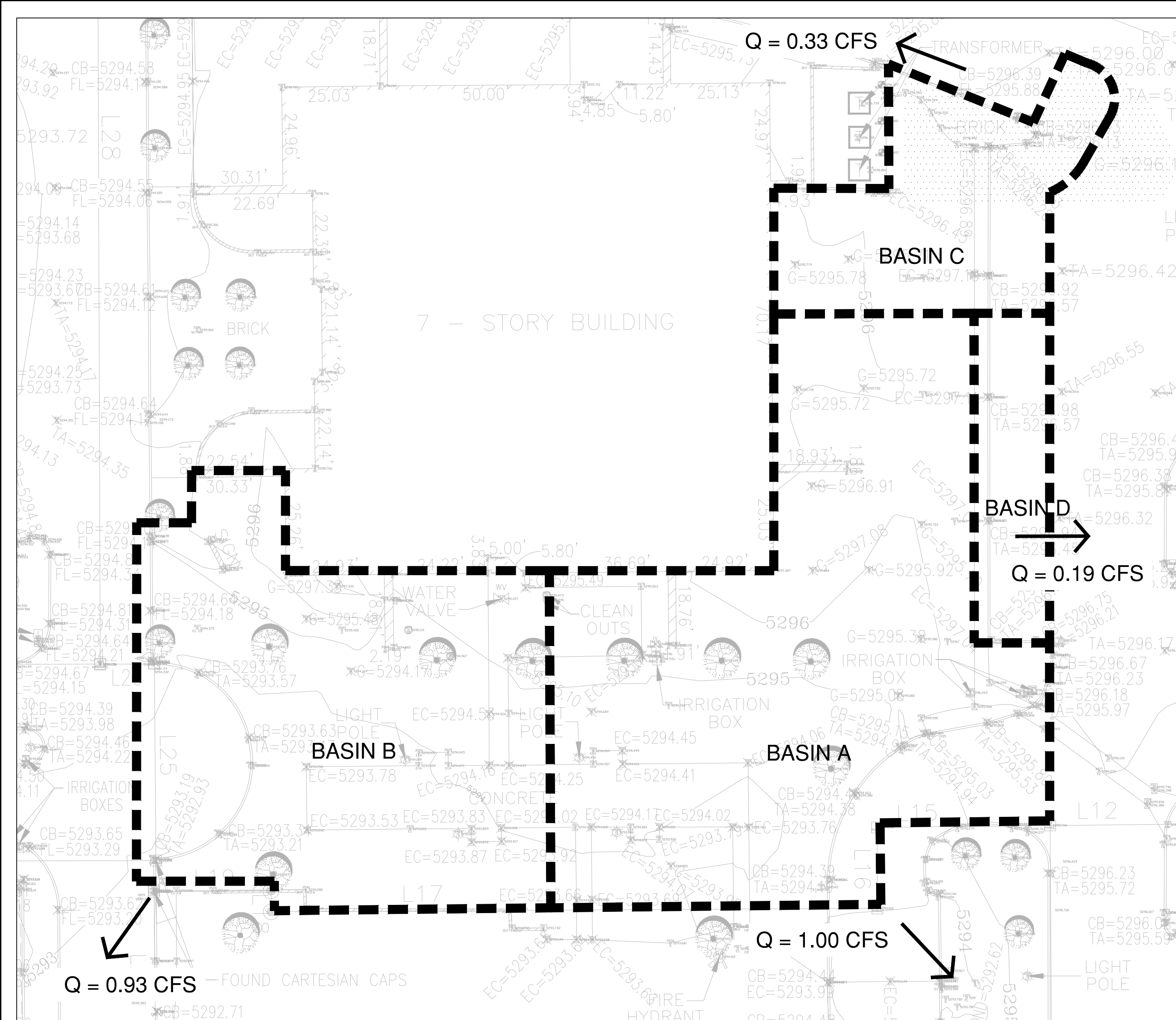
2440 LOUISIANA
GRADING PLAN

CALL BEFORE YOU DIG
FOR UTILITY LOCATES
DIAL 811 OR
1-800-321-ALERT

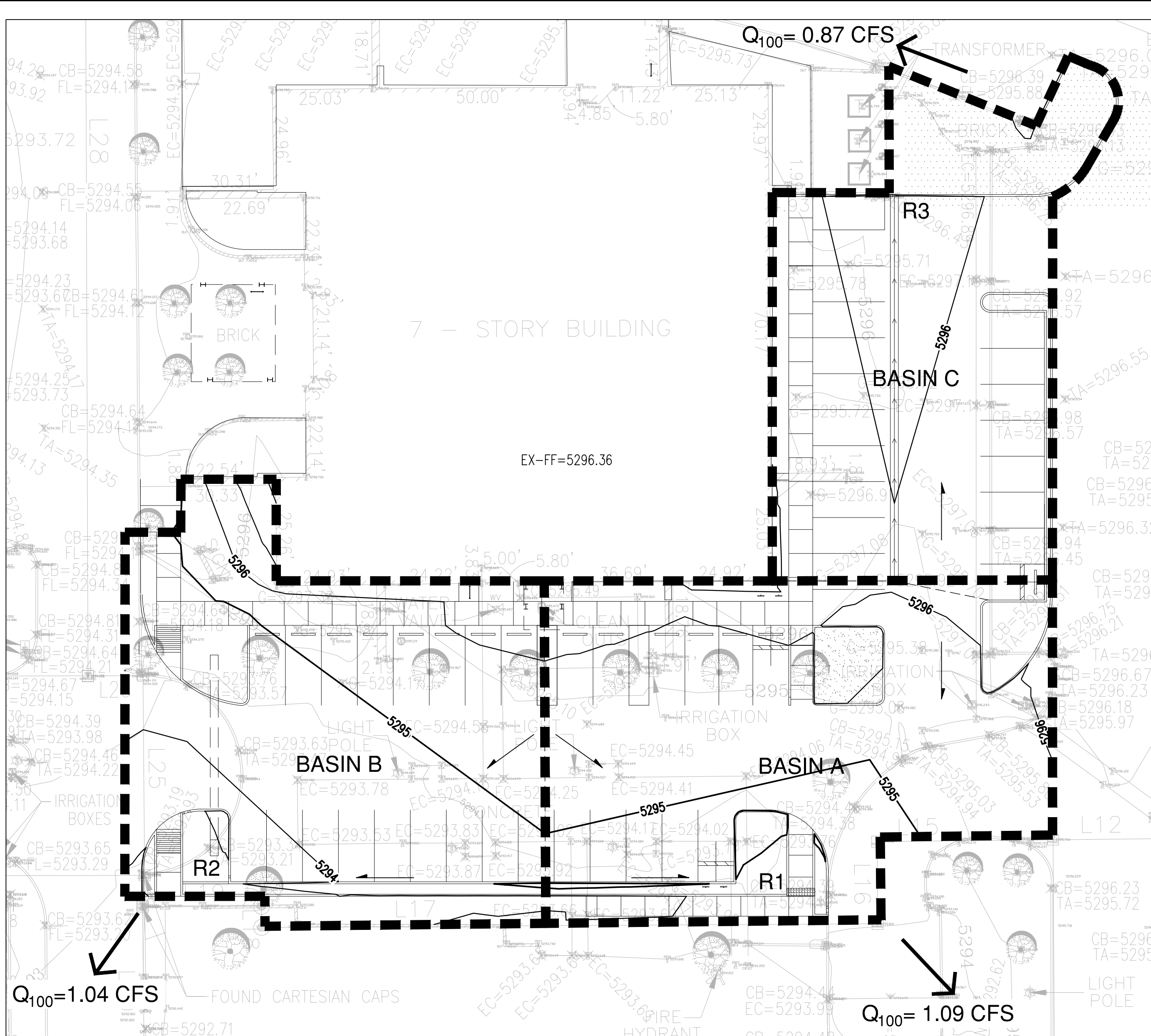
ENGINEER'S SEAL



AS-BUILT INFORMATION		BENCH MARKS		REVISIONS		DESIGN	
CONTRACTOR	DATE	CONTRACTOR	DATE	NO.	DATE	DESIGNED BY	DATE
						DESIGNED BY	DATE
						CHECKED BY	DATE
						DRAWN BY	DATE



EXISTING CONDITIONS



PROPOSED CONDITIONS

DRAINAGE NARRATIVE

EXISTING CONDITIONS:

THE SITE IS LOCATED NEAR THE INTERSECTION OF LOUISIANA BLVD AND CUTLER AVE. EAST OF CORONADO MALL. SOUTH OF THE LEWIS UNIVERSITY BUILDING. THE SITE CONSISTS OF EXISTING PARKING LOTS AND COVERED PARKING AREAS BUILT AROUND AN EXISTING 7 STORY BUILDING. THE CURRENT CONDITIONS OF THE SITE ARE FAIRLY FLAT. THE DISTURBED AREA IS APPROXIMATELY 0.64 ACRES, AND CONSISTS OF AN EXISTING PARKING AREA AND COURTYARD.

REVIEW OF THE CITY HYDROLOGY FILES (COA HYDROLOGY FILE #H19D084) AND THE EXISTING TOPOGRAPHIC SURVEY SHOWS THERE ARE SEVERAL EXISTING INLETS LOCATED AROUND THE SITE WHICH DISCHARGE INTO THE PUBLIC RIGHT OF WAY. ALL THE DRAINAGE FROM THE SITE AND SURROUNDING AREA APPEARS TO ENTER THE EXISTING 60" STORM DRAIN LOCATED WITHIN LOUISIANA BLVD VIA A DIRECT STORM DRAIN CONNECTION (NORTHWEST AND SOUTHWEST OF SITE) OR VIA SURFACE FLOW WHICH IS PICKED UP IN CURB INLETS AT THE INTERSECTION OF CUTLER AND LOUISIANA (SOUTHEAST OF SITE). THIS IS CONSISTENT WITH THE APPROVED DRAINAGE REPORT FOR AMERICAN FINANCIAL CENTER (HYDROLOGY FILE H19-D1) DATED JANUARY 17, 1984. ACCORDING TO THIS REPORT, THE ALLOWABLE DISCHARGE FROM THE SITE IS DETAINED ON SITE PLATES ON ALL OUTFLOW PIPES. EXISTING SURFACE PARKING PONDS HELP TO MITIGATE THESE FLOWS AS NECESSARY.

A MORE RECENT GRADING AND DRAINAGE PLAN PREPARED BY LARRY READ AND APPROVED ON JANUARY 11, 2002 FOR PAVING PERMIT AND SITE PLAN FOR BUILDING PERMIT, CONSTRUCTED ADDITIONAL ONSITE PARKING. ACCORDING TO THIS PLAN, THE SITE UTILIZES THE PARKING LOTS AS DETENTION PONDS DURING LARGER STORM EVENTS. THESE PONDS AND OTHER ONSITE DRAINAGE IMPROVEMENTS WERE VERIFIED BY THE TOPOGRAPHIC SURVEY.

PER FEMA MAP PANEL #35001C0352H, THE SITE IS NOT LOCATED WITHIN A KNOWN FLOOD ZONE.

PROPOSED CONDITIONS:

A NEW DRIVE AISLE AND ASSOCIATED PARKING IS PROPOSED SOUTH OF THE LEWIS UNIVERSITY BUILDING. THIS DRIVE AISLE WILL CONNECT THE EXISTING PARKING LOT ON THE EAST TO THE EXISTING PARKING LOT TO THE WEST. HISTORIC OUTFALL LOCATIONS WILL BE MAINTAINED WITH THIS DEVELOPMENT AND ADDITIONAL RUNOFF WILL BE NEGLIGIBLE.

THE SOUTHEASTERN PORTION OF THE SITE (BASIN A) WILL CONTINUE TO DISCHARGE TO THE SOUTHEAST. AN EXISTING POND IS LOCATED TO THE EAST OF THE UNDERGROUND PARKING AREA SOUTH OF THE SITE. PER "THE 24'S UPTOWN - LOUISIANA CONDO PROJECT DRAINAGE REPORT (HYDRO FILE H19D001)" THIS POND IS SIZED FOR 122% OF THE REQUIRED 100 YR - 6 HR STORM EVENT. THE REQUIRED VOLUME IS 1,642 CF, BUT 2,007 CF IS PROVIDED, A 365 CF DIFFERENCE. THE ADDITIONAL RUNOFF VOLUME FROM BASIN A DUE TO THIS DEVELOPMENT IS 325 CF, LESS THAN THE 365 CF DIFFERENCE. THE ADDITIONAL RUNOFF VOLUME FROM BASIN A IS MITIGATED ENTIRELY BY THE ADDITIONAL VOLUME PROVIDED PREVIOUSLY. SEE EXHIBIT A FOR MORE INFORMATION. THE TOTAL DISCHARGE RATE IS 1.09 CFS.

THE WESTERN PORTION OF THE SITE (BASIN B) WILL CONTINUE TO DISCHARGE TO THE PARKING LOT SOUTHWEST OF THE SITE. THE PARKING LOT LOCATED WEST OF THE 24'S CONDOS ACTS AS A DETENTION POND. THIS POND UTILIZES ORIFICE PLATES TO RESTRICT RUNOFF FLOW RATES. PER "THE SHOPS @ THE 24'S GRADING & DRAINAGE PLAN (HYDRO FILE H19D001)" THIS POND HAS APPROXIMATELY 0.1829 AC-FT OF STORAGE (~7967 CF). THE MAXIMUM STORAGE IS 0.0336 AC-FT (~1463 CF). THE DIFFERENCE BETWEEN THE EXISTING RUNOFF VOLUME AND PROPOSED RUNOFF VOLUME DUE TO THE DEVELOPMENT IS 257 CF. THIS VOLUME FALLS WITHIN THE REMAINING STORAGE VOLUME IN THIS POND. THIS POND HAS A MAXIMUM WATER SURFACE ELEVATION OF 5222.91 FT. THE TOP OF POND IS 5223.50 FT. THE ADDITIONAL VOLUME WILL NEGLIGIBLY INCREASE THE MAXIMUM WATER SURFACE ELEVATION OF THIS POND. SEE EXHIBIT B FOR MORE INFORMATION. THE TOTAL DISCHARGE RATE IS 1.04 CFS.

THE EASTERN PORTION OF THE SITE (BASIN C), DISCHARGES TO THE NORTH THEN WEST. THE PARKING LOT LOCATED WEST OF THE 2440 OFFICE BUILDING ACTS AS A DETENTION POND. THIS POND UTILIZES ORIFICE PLATES TO RESTRICT RUNOFF FLOW RATES. PER THE AMERICAN FINANCIAL CENTER DRAINAGE PLAN (HYDRO FILE H19D001) THIS PONDING AREA HAS A MAXIMUM WATER SURFACE ELEVATION APPROXIMATELY 15 IN. ABOVE THE TOP OF INLET GRATE. THIS EQUALS APPROXIMATELY 11,700 CF OF STORAGE. AN ADDITIONAL 926 CF IS NOW CONTRIBUTING TO THIS AREA. THE SPREAD OF THE PONDING AREA BASED ON THE SURVEY IS APPROXIMATELY 24,800 SF. THIS ADDITIONAL VOLUME SPREAD OVER THE PARKING LOT IS APPROXIMATED TO ADD .037 FT (.44 IN.) TO THE MAXIMUM WATER SURFACE ELEVATION. THIS AMOUNT IS NEGLIGIBLE, AND THE EXISTING PONDING AREA MITIGATES THE ADDITIONAL RUNOFF FROM THE DEVELOPMENT. SEE EXHIBIT C FOR MORE INFORMATION. THE TOTAL DISCHARGE RATE IS 0.87 CFS.

AN ADDITIONAL 0.55 CFS IS DISCHARGED FROM THE PROPOSED DRIVE

ASILE. THE ADJACENT DETENTION PONDS, AS DESCRIBED ABOVE, MITIGATE THE ADDITIONAL RUNOFF FLOW RATE AND VOLUME. THE ENTIRETY OF THE 2440 LOUISIANA PROPERTY DISCHARGES INTO THE 60" EXISTING STORM DRAIN WITHIN LOUISIANA.

MINIMAL WATER QUALITY HARVESTING AREAS ARE WITHIN THE DISTURBED AREA. ANY WATER QUALITY HARVESTING VOLUME WILL BE PAID CASH-IN-LIEU. SEE DRAINAGE TABLE FOR QUANTITY.

CONCLUSION:

THE ADDITIONAL RUNOFF VOLUME IS MITIGATED BY VARIOUS DETENTION PONDS ONSITE AND OFFSITE. THESE PONDS MAKE THE ADDITIONAL RUNOFF FLOW RATE NEGLIGIBLE GIVEN THE CAPACITY OF THE EXISTING PONDS IN THE AREA. THE PROPOSED BASINS DISCHARGE TO THEIR HISTORIC OUTFALL LOCATIONS. THE GRADING AND DRAINAGE PLAN AS PRESENTED IS IN CONFORMANCE WITH CITY HYDROLOGY REQUIREMENTS. WITH THIS SUBMITTAL WE ARE REQUESTING CITY OF ALBUQUERQUE HYDROLOGY PAVING & GRADING PERMIT APPROVAL.

2440 LOUISIANA EXISTING CONDITIONS Basin Data Table										
This table is based on the DPM Section 22.2, Zone: 3										
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr)	Q(100yr)	V(100yr)	V(100yr)
			A	B	C	D	(cfs/ac.)	(CFS)	(inches)	(CF)
BASIN A	12887	0.30	35.0%	0.0%	35.0%	30.0%	3.37	1.00	1.39	1493
BASIN B	9582	0.22	0.0%	0.0%	50.0%	50.0%	4.24	0.93	1.83	1457
BASIN C	3596	0.08	0.0%	0.0%	65.0%	35.0%	4.00	0.33	1.66	499
BASIN D	1609	0.04	0.0%	0.0%	100.0%	100.0%	5.02	0.19	2.36	316
TOTAL	27674	0.64	-	-	-	-	-	2.44	-	3766

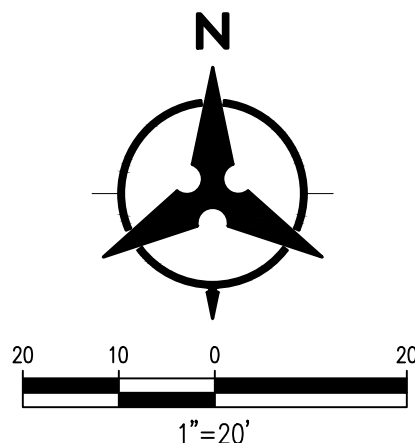
2440 LOUISIANA PROPOSED CONDITIONS Basin Data Table											
This table is based on the DPM Section 22.2, Zone: 3											
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr)	Q(100yr)	V(100yr)	V(100yr)	FIRST FLUSH
			A	B	C	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)
BASIN A	9920	0.23	0.0%	0.0%	15.0%	85.0%	4.78	1.09	2.20	1818	183
BASIN B	9582	0.22	0.0%	0.0%	20.0%	80.0%	4.71	1.04	2.15	1714	166
BASIN C	8172	0.19	0.0%	0.0%	25.0%	75.0%	4.63	0.87	2.09	1425	133
TOTAL	27674	0.64	-	-	-	-	-	2.99	-	4957	482

Concrete Rundown							
Rundown #	Basin ID	Rundown Type	Actual Flow (Q100)	Min Weir** Length ft	Weir Opening Width ft	Weir Opening Height ft	Capacity* CFS
R1	A	Rectang	1.09	2	2	0.5	1.87
R2	B	Rectang	1.04	2	2	0.5	1.87
R3	C	Rectang	0.87	1	5	0.5	4.69
Weir Eq: Q=2.65L(h ^{1.5}) - **							

LEGEND

- PROPOSED DRAINAGE BASIN
- PROPOSED DRAINAGE SUB-BASIN
- PROPERTY LINE
- EXISTING CONTOURS
- PROPOSED SPOT ELEVATION
- TO=TOP OF CURB, FL=FLOW LINE
- TS=TOP OF SIDEWALK, TA=TOP OF ASPHALT
- EX=EXISTING, FG=FINISHED GRADE
- TO=TOP OF GRATE, INV=INVERT
- WATER BLOCK / RIDGE OR HIGH POINT
- PROPOSED INDEX CONTOURS
- PROPOSED INTER CONTOURS
- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLET

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CIVIL ENGINEER
STATE OF NEW MEXICO

AS-BUILT INFORMATION		BENCH MARKS		REVISIONS		NO. DATE	
CONTRACTOR	DATE	CONTRACTOR	DATE	NO.	DATE	NO.	DATE
WORK STAGED BY	DATE	CONTRACTOR	DATE	1	09/25/2019	1	09/25/2019
INSPECTOR'S ACCEPTANCE BY	DATE	CONTRACTOR	DATE	2	09/25/2019	2	09/25/2019
FIELD VERIFICATION BY	DATE	CONTRACTOR	DATE	3	09/25/2019	3	09/25/2019
DRAWINGS CORRECTED BY	DATE	CONTRACTOR	DATE	4	09/25/2019	4	09/25/2019

DESIGNED BY MHS
CHECKED BY MHS
DRAWN BY CLK

REMARKS
REVISIONS
DESIGN

2440 LOUISIANA
DRAINAGE MANAGEMENT PLAN

BHI PROJECT NO. DWG NO. SHEET **C-001** OF

I. PROJECT DESCRIPTION

The 24's @ Uptown Project involves the renovation of an existing building, converting the upper level to six condominium units as well as the construction of an underground parking structure. The existing surface parking area will be modified to allow for a drive thru ATM machine and a ramp to the underground parking area. Refer to the google map for existing conditions view. The construction area will cover approximately .72 acres. The existing building-project site is roughly bounded by Louisiana Blvd. to the west, Prospect Place to the north and east and Cutler Avenue to the south.

II. DESIGN CRITERIA AND PREVIOUS DEVELOPMENT

The design criteria used in this report was in accordance with Section 22.2 Hydrology of the Development Process Manual, Volume 2, Design Criteria, January 1993 edition. The 100-year 6-hour storm event was analyzed to determine street capacities and sizing of the storm drain outfall using $P(1\text{-hr})=2.05"$, $P(6\text{-hr})=2.42"$ and $P(24\text{-hr})=2.85"$. The onsite Land Treatment values used were determined by measuring the total impervious area.

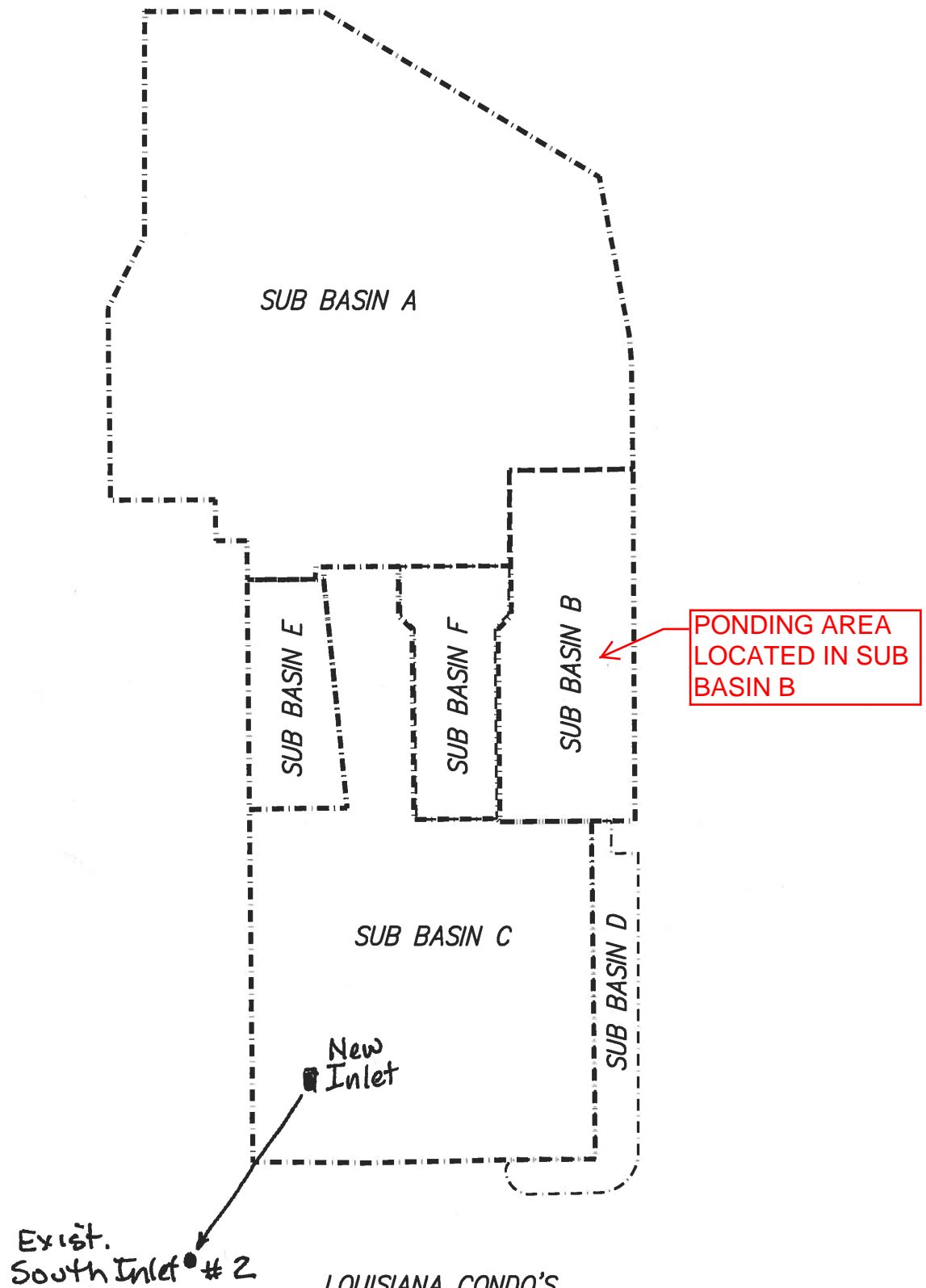
III. EXISTING DRAINAGE CONDITIONS

Under existing drainage conditions, the existing east parking lot runoff flows to an existing sump inlet near the entrance door on the east side of the building. This inlet drains to another connecting inlet on the south side of the building which connects to a series of inlets and underground storm pipe to the west. Runoff from the parking area and the landscape area generally flows south and west.

IV. DEVELOPED DRAINAGE CONDITIONS

Under developed conditions, the modified parking area and landscape area will continue to flow in a general southerly direction and end up in the same existing inlet located on the south side of the building. Referring to the "Sub Basin Boundary Exhibit", Sub Basin A will flow into a depressed landscape area in Sub Basin B. This ponding area will have capacity to contain 122% of the 100 year 6 hour storm event. Sub Basins E and D will have depressed landscaped areas that will contain the 100 year runoff. Sub Basin D will spill into the parking area (Sub Basin C) and Sub Basin E will spill into the driveway through an opening in the curb as shown on the plan that will also end up in Sub Basin C. All runoff in Sub Basin C will be intercepted by a new inlet at the southwest corner of the parking lot. This inlet will connect to the existing underground storm pipe that ultimately connects to the existing inlet #2.

The only runoff in the underground parking garage will be the small amount that falls on the ramp or is on the cars when they drive down after a rain or snowfall. This runoff will be directed to the SW corner of the parking garage and then pumped to the surface through a 3" diameter pipe to a point near the existing southern inlet.



LOUISIANA CONDO'S
SUBBASIN BOUNDARY EXHIBIT

TABLE 1

The 24's @ Uptown
Summary of Hydrology Parameters

Sub Basin	Area	Area	Area	Land Treatment Values				100 YEAR-6 HOUR		
								Discharge	Volume	Volume
ID	sq.ft	acre	sq.mi.	A	B	C	D	cfs	Acre-Feet	Cu.Ft.
A	11,395.0	0.26	0.000409	0.0	55.0	0.0	45.0	1.01	0.033	1,446
B	2,259.0	0.05	0.000081	0.0	80.0	20.0	0.0	0.17	0.005	196
C	6,761.0	0.16	0.000243	0.0	0.0	0.0	100.0	0.78	0.028	1,224
D	901.0	0.02	0.000032	0.0	100.0	0.0	0.0	0.07	0.002	74
E	983.0	0.02	0.000035	0.0	50.0	0.0	50.0	0.10	0.003	131
								100 YEAR-24 HOUR		
F	1,087.0	0.02	0.000039	0.0	0.0	0.0	100.0	0.13	0.005	235

			DESIGN	100 YEAR
LANDSCAPE AREAS		DEPTH	VOLUME	VOLUME
DEPRESSED AREA	B	24"	2007 CF	1642
DEPRESSED AREA	D	6"	270.5 CF	74
DEPRESSED AREA	E	6"	150.7 CF	131

PRECIP VALUES

P(60)	2.05"
P(6)	2.42"
P(24)	2.85"

REVISED 8-30-16 DLH

The Shops @ The 24s Supplemental Information

I. Project Description:

The Shops @ the 24s involves the construction of a new building in an existing parking lot. The building footprint is over an existing storm drain. The storm drain is to be reconstructed to the north and west of the building. The proposed impervious area to the existing is essentially the same. The area of construction is approximately 20085 SF (0.46 AC).

II. Design Criteria:

The design criteria used in this report is in accordance with Section 22.2, Hydrology of the Development Process Manual, Volume 2. The 100 year 6-hour storm event is analyzed with AHYMO to determine discharge into an existing storm drain system.

III. Drainage conditions:

Existing site runoff is not changed significantly from existing conditions to proposed. Discharge is reduced by the new inlets equipped with 6" orifice plates and detention of the 100 yr storm. The roof Basin 101 drains into parking lot Basin 100 to the new inlets for the combined flow to be limited to less than undeveloped discharge congruent with the intent of the original approved construction from the 1970's. The orifice plates are set at elevation 5222.13 and a discharge rating curve was assembled from elevation 5222.35 to 5223.50 with discharge points evaluated as the lesser value from the orifice equation and the weir equation. The discharge is limited for two inlets as the orifice plates are set at the same elevation. This is an approximation. The north inlet chamber will fill to a higher elevation before the south orifice basin discharges at a higher rate than the south orifice before the peak of the 100 yr discharge. The 100 yr storm fills the retention ponds before formation of the detention pond. Due to this reason, rain fall was reduced by the volume of first flush spread onto the total area contributing to the detention pond (area of basin 100 and 101).

PARKING LOT
POND
RESTRICTED BY
ORIFICE PLATES

IV. First flush

The new grades will capture first flush runoff from the new construction area and existing offsite paved area. First flush ponds 1+2 will capture from the east side of basin 100, first flush pond 3 will capture from a downspout from the building roof, and first flush pond 4 will capture from the south downspout from the roof. The required first flush volume generated by the new construction area is calculated at 362 cf (0.26" first flush depth). Collecting first flush from offsite areas is not required, however, because the offsite basins are available from existing elevations, offsite basin discharge is collected and credited towards the construction area required first flush volume. The first flush ponds #1 and #2 collect flow thru curb openings at upstream sides and release volume in excess of first flush thru downstream curb openings that are lower in elevation. First flush ponds #3 and #4 collect from sidewalk culvert inverts and release excess volume to the parking lot through curb openings.

BULKING FACTOR APPLIED TO HYDROGRAPH. FACTOR = 1.06000 AT PEAK FLOW.

PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 101.00

RUNOFF VOLUME = 2.15739 INCHES = 0.0230 ACRE-FEET
PEAK DISCHARGE RATE = 0.59 CFS AT 1.520 HOURS BASIN AREA = 0.0002 SQ. MI.

ADD HYD ID=3 HYD=201 I=1 I=2
PRINT HYD ID=3 CODE=1

PARTIAL HYDROGRAPH 201.00

RUNOFF VOLUME = 2.07479 INCHES = 0.1416 ACRE-FEET
PEAK DISCHARGE RATE = 3.63 CFS AT 1.530 HOURS BASIN AREA = 0.0013 SQ. MI.

*SPARKING LOT POND DESIGN WITH 100-YR DEVELOPED FLOWS TO DISCHARGE ORFICES AT EL
ROUTE RESERVOIR ID=5 HYD NO=POND.OT INFLOW=3 CODE=24

OUTFLOW (CFS)	STORAGE (AF)	ELEV (FT)
0.84	0.0001	5222.35
1.23	0.0019	5222.55
1.55	0.0159	5222.80
1.76	0.0470	5223.00
2.00	0.1101	5223.25
2.21	0.1829	5223.5

* * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
0.00	0.00	5221.92	-0.004	0.00
0.24	0.00	5222.35	0.000	0.84
0.48	0.00	5222.35	0.000	0.84
0.72	0.04	5222.35	0.000	0.84
0.96	0.22	5222.35	0.000	0.84
1.20	0.51	5222.35	0.000	0.84
1.44	2.36	5222.58	0.004	1.27
1.68	2.01	5222.91	0.033	1.67
1.92	0.74	5222.86	0.025	1.61
2.16	0.34	5222.61	0.005	1.30
2.40	0.20	5222.35	0.000	0.84
2.64	0.07	5222.35	0.000	0.84

TOTAL STORAGE
PROVIDED

36.96	0.00	5222.35	0.000	0.84
37.20	0.00	5222.35	0.000	0.84
37.44	0.00	5222.35	0.000	0.84
37.68	0.00	5222.35	0.000	0.84
37.92	0.00	5222.35	0.000	0.84
38.16	0.00	5222.35	0.000	0.84
38.40	0.00	5222.35	0.000	0.84
38.64	0.00	5222.35	0.000	0.84
38.88	0.00	5222.35	0.000	0.84
39.12	0.00	5222.35	0.000	0.84
39.36	0.00	5222.35	0.000	0.84
39.60	0.00	5222.35	0.000	0.84
39.84	0.00	5222.35	0.000	0.84

PEAK DISCHARGE = 1.669 CFS - PEAK OCCURS AT HOUR 1.72
 MAXIMUM WATER SURFACE ELEVATION = 5222.914
 MAXIMUM STORAGE = 0.0336 AC-FT INCREMENTAL TIME= 0.010000HRS

PRINT HYD

ID=5 CODE 1

HYDROGRAPH FROM AREA POND.OT

MWSEL &
STORAGE

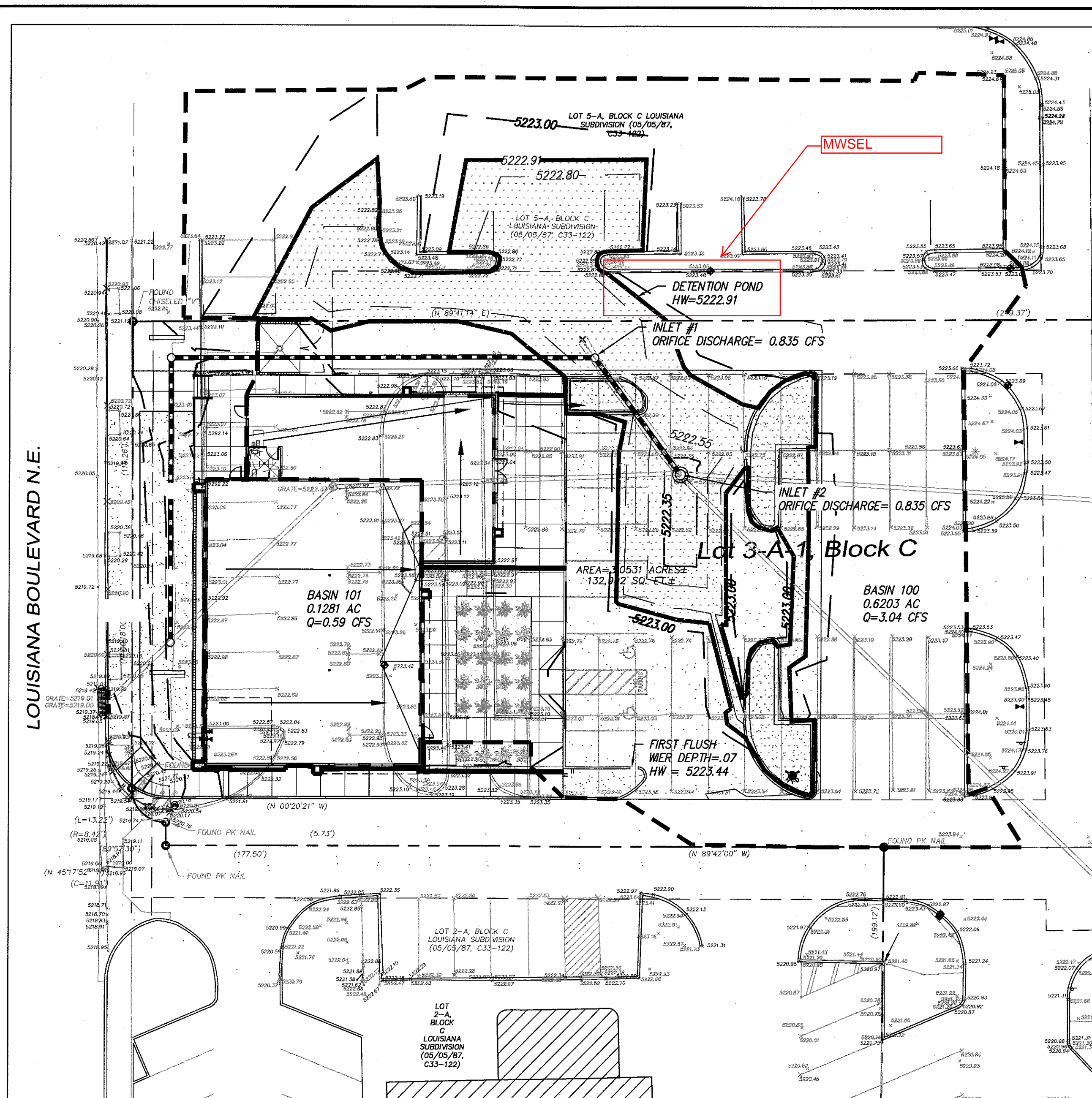
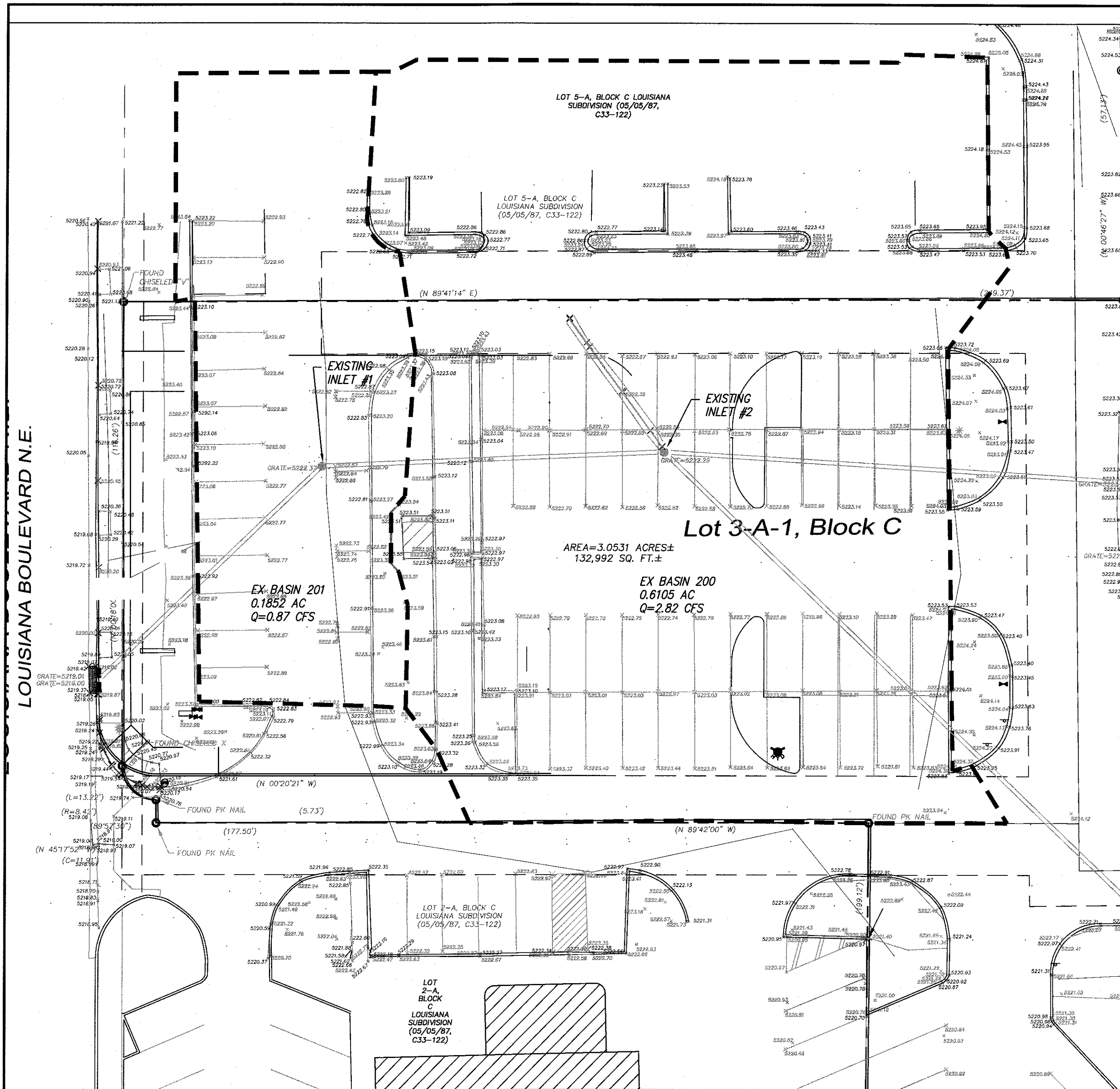
RUNOFF VOLUME = 41.35085 INCHES = 2.8229 ACRE-FEET
 PEAK DISCHARGE RATE = 1.67 CFS AT 1.720 HOURS BASIN AREA = 0.0013 SQ. MI.

RAINFALL TYPE=1 0.0 1.84 2.38 2.77 DT=0.01

6-HOUR RAINFALL DIST. - BASED ON NOAA ATLAS 14 FOR CONVECTIVE AREAS (NM & AZ) - D1

DT = 0.010000 HOURS END TIME = 6.000000 HOURS

0.0000	0.0007	0.0014	0.0022	0.0029	0.0036	0.0043
0.0050	0.0057	0.0065	0.0073	0.0081	0.0089	0.0097
0.0105	0.0113	0.0121	0.0129	0.0138	0.0147	0.0155
0.0164	0.0173	0.0182	0.0191	0.0200	0.0210	0.0220
0.0230	0.0240	0.0250	0.0260	0.0270	0.0280	0.0298
0.0321	0.0343	0.0366	0.0388	0.0410	0.0433	0.0455
0.0479	0.0504	0.0529	0.0553	0.0578	0.0603	0.0628
0.0653	0.0678	0.0705	0.0733	0.0760	0.0787	0.0814
0.0841	0.0868	0.0895	0.0923	0.0951	0.0980	0.1008
0.1036	0.1065	0.1093	0.1121	0.1150	0.1180	0.1209
0.1239	0.1269	0.1298	0.1328	0.1358	0.1387	0.1420
0.1453	0.1486	0.1519	0.1552	0.1585	0.1617	0.1650
0.1686	0.1723	0.1760	0.1797	0.1834	0.1871	0.1908
0.1945	0.1987	0.2040	0.2093	0.2147	0.2200	0.2253
0.2306	0.2359	0.2413	0.2484	0.2555	0.2627	0.2698
0.2769	0.2841	0.2912	0.2983	0.3073	0.3173	0.3273
0.3373	0.3473	0.3572	0.3672	0.3772	0.3888	0.4038
0.4188	0.4338	0.4488	0.4637	0.4787	0.4937	0.5087
0.5346	0.5604	0.5863	0.6121	0.6380	0.6639	0.6897



EXISTING BASINS TO EXISTING INLETS #1 AND #2
Q = 3.69 CFS (EXISTING BASINS)

PROPOSED BASINS TO NEW INLETS #1 AND #2
Q = 3.63 CFS (PROPOSED BASINS)
Q = 1.67 CFS (DETENTION POND)
PROPOSED BASINS TO NEW INLETS #1 AND #2
Q = 1.87 CFS (PROPOSED BASINS, ASSUMED UNDEVELOPED CONDITIONS 50%A, 50%B)

HYDROLOGY NOTES

OVERALL HYDROLOGY PLAN:

THE PROJECT IS THE RECONSTRUCTION AND REGRADING OF A 0.46 AC PORTION WITHIN AN EXISTING 3.05 AC PROPERTY. IN REGARDS TO HYDROLOGY, THE PROPOSED CONSTRUCTION COMPARED TO THE EXISTING IS NOT SIGNIFICANT. AS THE IMPERVIOUS AREA IS NOT CHANGED SIGNIFICANTLY, THE AREA OF CONSTRUCTION WOULD SHED DISCHARGE SIMILAR TO EXISTING CONDITIONS, WITHOUT CONSIDERATION OF THE ROUTING AFFECTS FROM FIRST FLUSH CAPTURE OR A DETENTION POND. THE PROPOSED INLETS ARE EQUIPPED WITH ORIFICE PLATES TO REDUCE THE STORM WATER DISCHARGE RATE FROM EXISTING SIMILAR TO THE INTENT OF THE ORIGINAL CONSTRUCTION.

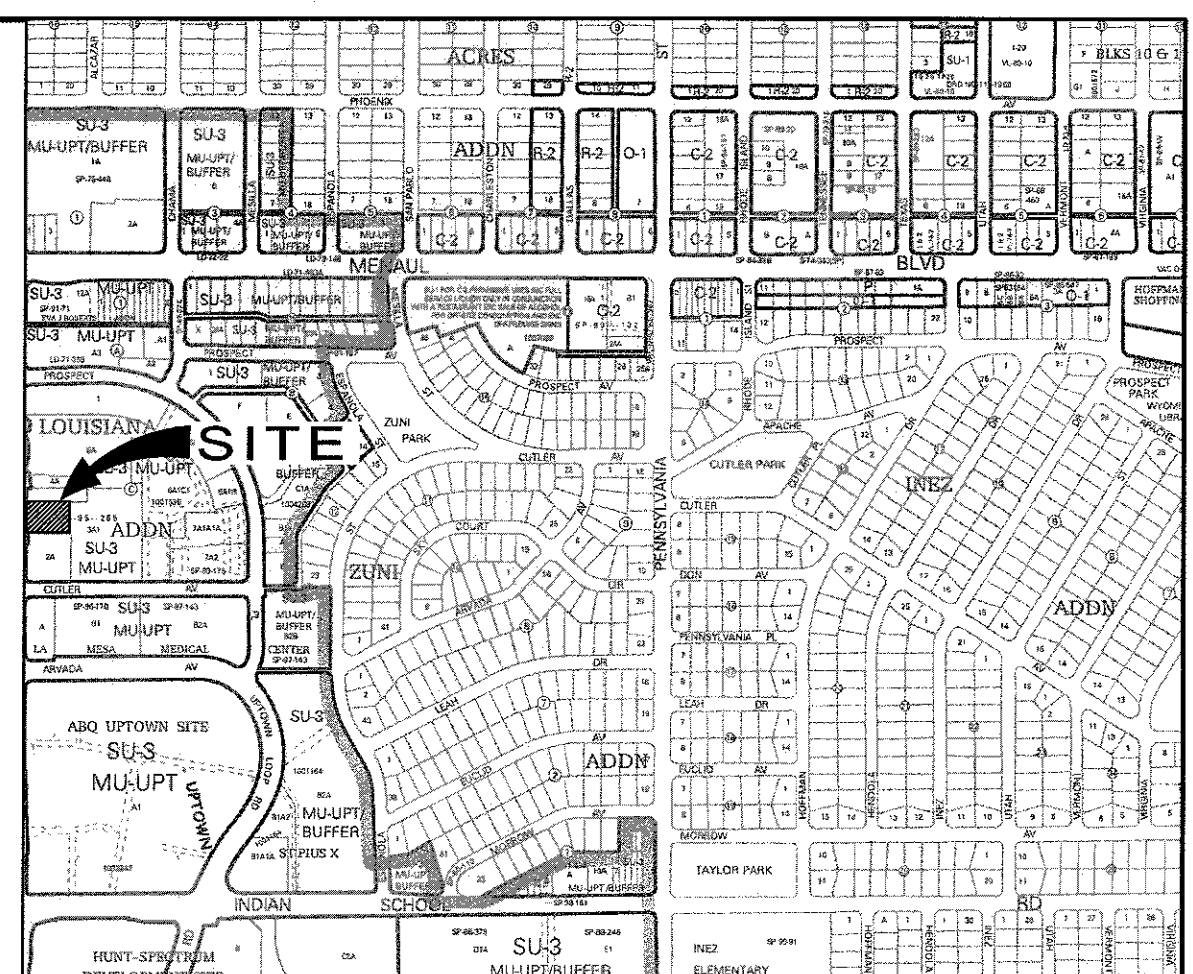
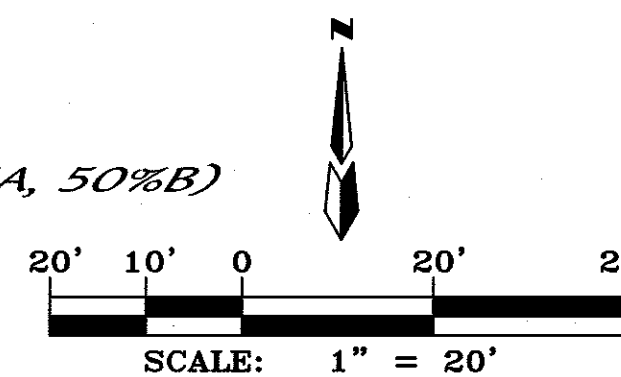
THE EXISTING 3.05 AC PROPERTY WAS APPROVED IN ABOUT 1978 FOR ONE BUILDING WITH RUNOFF DETAINED ON THE ROOF, AND ASPHALT PARKING LOTS ON THE WEST, SOUTH, AND EAST SIDES OF THE BUILDING ALSO USED TO DETAIN RUNOFF. RECENTLY THE PARKING LOT ON THE EAST SIDE OF THE EXISTING BUILDING WAS CONVERTED INTO AN UNDERGROUND PARKING LOT AND THE DETENTION THERE WAS REPLACED BY RETENTION. TWO EXISTING PARKING LOT PONDS ON THE SOUTH SIDE OF THE EXISTING BUILDING DRAIN TO SUMP INLETS WITH 6" DIAMETER ORIFICE PLATES LOCATED 2" BELOW THE SURFACE OF THE GRATES. THE EXISTING PARKING LOT PONDS ON THE WEST SIDE OF THE BUILDING HAVE FALLEN INTO A STATE OF DISREPAIR; THE FAR WEST INLET ORIFICE PLATE HAS RUSTED THROUGH AND THE NEXT INLET TO THE EAST HAS BEEN MODIFIED AND THE ORIFICE PLATE IS MISSING. THE EXISTING DRAINAGE SYSTEM WAS CONSTRUCTED IN PHASES FOR WHICH DIFFERENT DRAINAGE CRITERIA WAS IN PLACE BETWEEN THE FIRST TWO PHASES AND LAST TWO PHASES.

THE NEW CONSTRUCTION REPLACES THE WEST INLET AND THE NEXT INLET TO THE EAST WITH NEW INLETS EQUIPPED WITH NEW ORIFICE PLATES. ADDITIONALLY, THE NEW CONSTRUCTION REMOVES THE MODIFICATIONS TO THE NEXT INLET TO THE EAST. THE TWO RECONSTRUCTED INLETS WILL BE SIMILAR TO THE EXISTING INLETS SOUTH OF THE EXISTING BUILDING AND WILL RESTORE THE ORIGINAL INTENT OF THE DESIGN. THE NEW INLETS WITH ORIFICE PLATES MITIGATE DISCHARGE FROM THE CONTRIBUTING BASINS TO LESS THAN AN ASSUMED UNDEVELOPED Q WITH 50% A, 50% B LAND TREATMENTS. THIS MAY BE CONSERVATIVE AS THE ORIGINAL C VALUE (RATIONAL METHOD) FOR THE LATTER PHASES OF UNDEVELOPED LAND OF THE EXISTING STORM DRAIN WAS ESTIMATED TO BE 0.50. ALSO, THE CONSTRUCTION MITIGATES THE DISCHARGE TO LESS THAN THE EXISTING INLETS IN THERE EXISTING CONFIGURATION.

THE NORTH AND SOUTH DOWNSPOUTS FROM THE BUILDING WILL FLOW TO FIRST FLUSH PONDS #3 AND #4, AND THE MIDDLE DOWNSPOUT DISCHARGES TO THE PARKING LOT DETENTION POND. THE FIRST FLUSH PONDS #1, #2, #3, AND #4 FILL AND THEN DRAIN INTO THE PARKING LOT DETENTION POND CREATED BY NEW SUMP INLETS EQUIPPED WITH 6" ORIFICE PLATES TO LIMIT FLOW FROM 3.63 CFS TO 1.67 CFS FROM BASINS 101 AND 100 COMBINED. THIS WILL DETAIN APPROXIMATELY 7" OF STORM WATER PONDING OVER INLET #2 (100 YR) IN THE NEWLY CONSTRUCTED PARKING LOT EAST OF THE NEW BUILDING. THIS DETENTION IS REQUIRED TO RESTORE LIMITED STORM WATER DISCHARGE FROM THE AFFECTED PORTION OF THE EXISTING STORM DRAIN AS ORIGINALLY APPROVED.

THE RESULTS ARE SUMMARIZED IN THE ATTACHED SUPPLEMENTAL INFORMATION:

THE STORM DRAIN SYSTEM IS EXISTING AND WILL BE RECONSTRUCTED FROM INLET #2 AROUND THE BUILDING ON THE NORTH AND WEST SIDES. IT WILL JUNCTION BACK INTO THE EXISTING STORM DRAIN AT A LOCATION WEST OF THE PROPOSED BUILDING AND BE CONVEYED TO THE LOUISIANA STORM DRAIN. THE JUNCTION LOCATION AND THE EXISTING STORM DRAIN SYSTEM ARE TO BE VERIFIED ONCE UNCOVERED DURING CONSTRUCTION.



VICINITY MAP

LEGAL DESCRIPTION

LOT NUMBERED THREE-A-ONE (3-A-1) IN BLOCK LETTERED "C" OF LOUISIANA SUBDIVISION, CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE SECOND CORRECTION PLAT OF LOT 3-A-1, BLOCK "C" OF SAID SUBDIVISION, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON JULY 1, 1996, IN PLAT BOOK 96C, PAGE 290.

SHOPS @ THE 24s

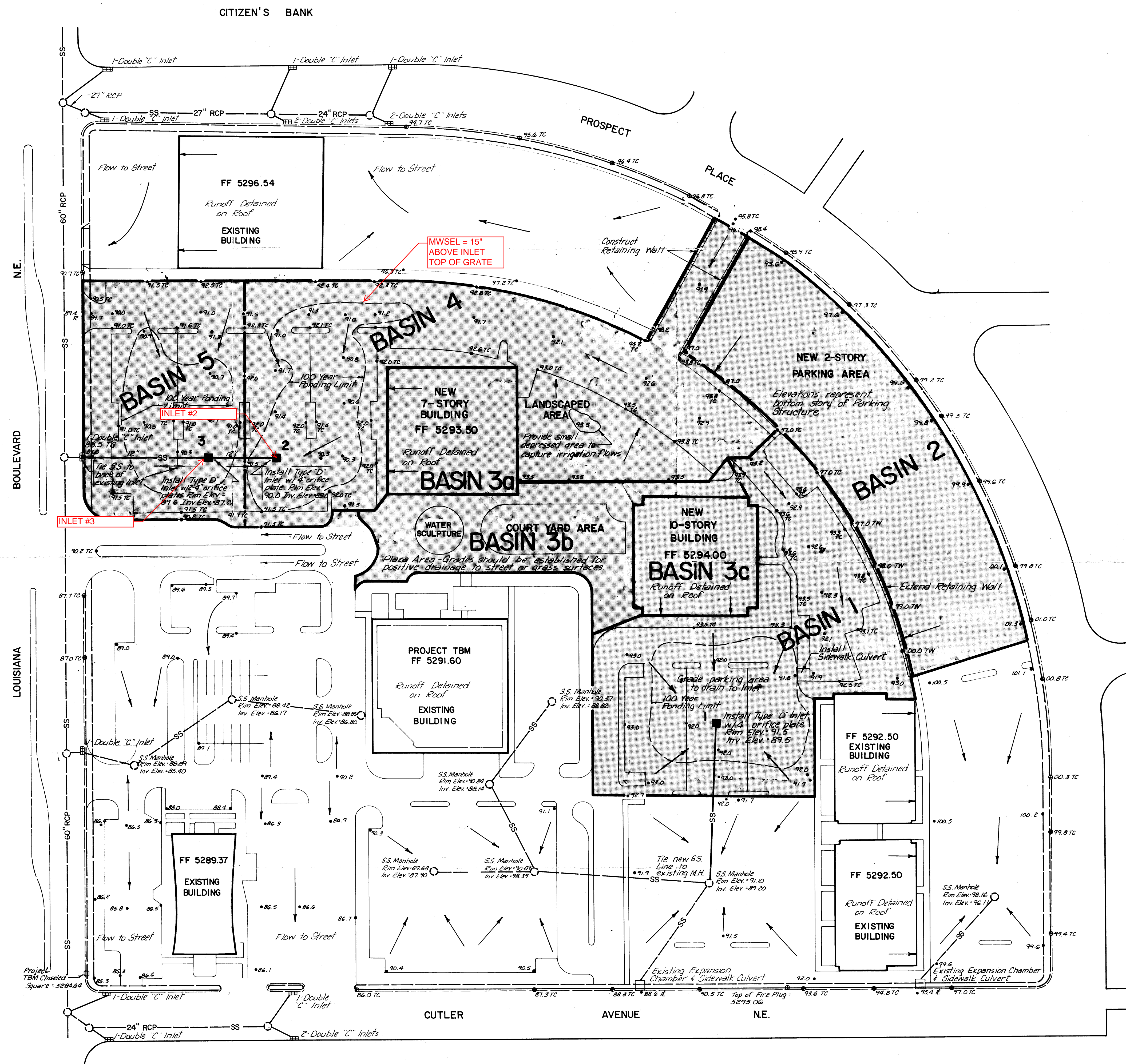
SUB BASIN BOUNDARY EXHIBIT



MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS

P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505)828-2200, FAX (505)797-9539

Designed: CP/DH	Drawn: DER, CP	Checked: DMG	Sheet C2 of 4
Scale: AS SHOWN	Date: 9/7/2018	Job: A18018	



LEGEND

- 92.5 SPOT ELEVATION
- SS — STORM DRAIN LINE
- STORM INLET
- RETAINING WALL
- NEW DEVELOPMENT
- BASIN BOUNDARY

PLATE 4 PROPOSED CONDITIONS

AMERICAN FINANCIAL CENTER
DRAINAGE PLAN

Job No. 32140 Sheet 1 of 2
 Drawn By P.E. Date JAN. 84
 Checked By B.G.B. Scale 1" = 50'



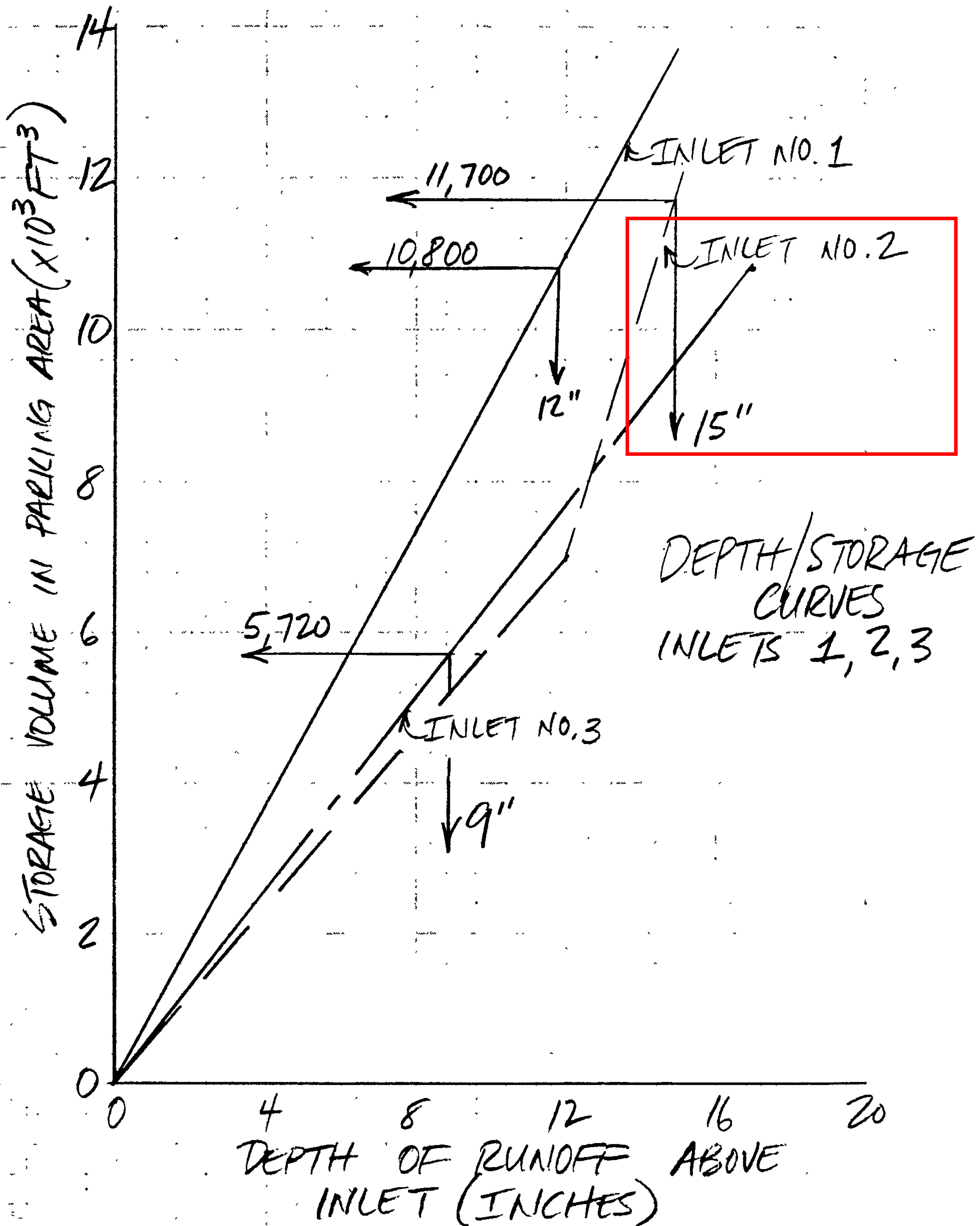
A with
 double
 gate.

FLOWS TO INLETS

INLET NO.	CONTRIBUTING BASINS	TOTAL Q
1	1 - 6.7 cfs 3B - 0 cfs 1/2 of 2 - 0.2 cfs	6.9 cfs
2	3A - 0.4 cfs 4 - 7.7 cfs 1/2 of 2 - 0.2 cfs	8.3 cfs
3	5 - 4.2 cfs	4.2 cfs



PROJECT NAME AMERICAN FINANCIAL CENTER SHEET _____ OF _____
 PROJECT NO. 32140 BY BB DATE 1-84
 SUBJECT FLOWS TO INLETS CH'D _____ DATE _____



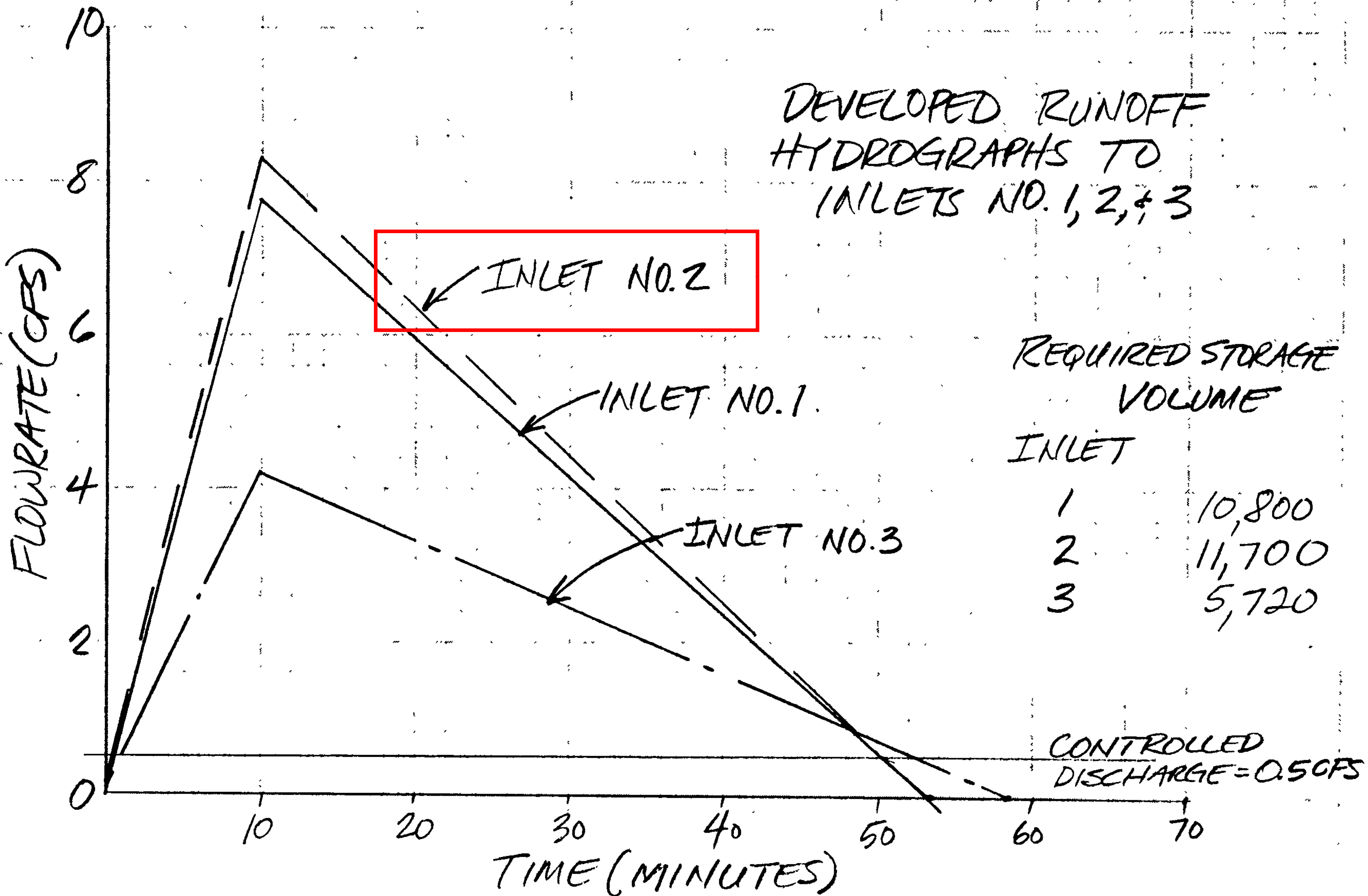
PROJECT NAME AMERICAN FINANCIAL CENTER SHEET _____ OF _____

PROJECT NO. 32140 BY BB DATE 1-84

SUBJECT DEPTH/STORAGE CURVES CH'D _____ DATE _____



PROJECT NAME AMERICAN FINANCIAL CENTER
PROJECT NO. 32140 BY BB OF
SUBJECT RUNOFF HYDROGRAPHS CH'D DATE 1-84



Section 7, Township 10 North, Range 4 East, N.M.P.M.
 Subdivision: Louisiana Subdivision
 Owner: ATC 5 LLC (Tracts 5-A-1 and 5-A-2)
 CHL LLC and Solano Science Center (Tract 4-A)
 UPC #: 101905590447230904 (Tract 5-A-1)
 101905601715030903 (Tract 5-A-1)
 10190590191817330908 (Tract 4-A)

17 UNDERGROUND ESSEMENT GRANTED TO PUBLIC SERVICE COMPANY OF NEW MEXICO, A NEW MEXICO CORPORATION AND THE MOUNTAIN STATES TELEPHONE AND TELEGRAPH COMPANY, COLORADO CORPORATION BY INSTRUMENT RECORDED IN BOOK MISC. 2454, PAGE 930 AS DOCUMENT NO. B5 53922 AND WAIVER AND RELEASE OF ESSEMENT THEREIN RECORDED IN BOOK MISC. 2454, PAGE 918 AS DOCUMENT NO. 08710554, RECORDS OF BERNALILLO COUNTY, NEW MEXICO.

13 UNDERGROUND EASEMENT GRANTED TO PUBLIC SERVICE COMPANY OF NEW MEXICO, A NEW MEXICO CORPORATION AND THE MOUNTAIN STATES TELEPHONE AND TELEGRAPH COMPANY, COLORADO CORPORATION BY INSTRUMENT RECORDED IN BOOK MISC. 4474, PAGE B20 AS DOCUMENT NO. 08710536, RECORDS OF BERNALILLO COUNTY, NEW MEXICO. DOES NOT AFFECT SUBJECT PROPERTY.

21. RIGHT-OF-WAY EASEMENT GRANTED TO THE MOUNTAIN STATES TELEPHONE AND TELEGRAPH COMPANY, A COLORADO CORPORATION, BY INSTRUMENT RECORDED IN BOOK HISC. 4494, P. 988 AS DOCUMENT NO. 08713220, RECORDS OF BERNALILLO COUNTY, NEW MEXICO. DOES NOT AFFECT SUBJECT PROPERTY

BOOK MISC.21A, PAGE 790 AS DOCUMENT NO. 08175964 AND QUILTLAND DEED RECORDED IN BOOK D311A, PAGE 456 AS DOCUMENT NUMBER 1987053829, RECORDS OF BERNALLIAH COUNTY, NEW MEXICO.

DOES NOT AFFECT SUBJECT PROPERTY--EASEMENT HAS BEEN RELEASED BY BOTH PARTIES

23 UNDERGROUND EASEMENT GRANTED TO PUBLIC SERVICE COMPANY OF NEW MEXICO, A NEW MEXICO CORPORATION AND THE MOUNTAIN STATES TELEPHONE AND TELEGRAPH COMPANY, COLORADO CORPORATION BY INSTRUMENT RECORDED IN BOOK MISC. 4994, PAGE 925 AS

24. UNDERGROUND EASTMENT GRANTED TO PUBLIC SERVICE COMPANY OF NEW MEXICO, A NEW MEXICO CORPORATION, AND THE MOUNTAIN STATES TELEPHONE AND TELEGRAPH COMPANY, CIO-PAO CO CORPORATION BY INSTRUMENT RECORDED IN BOOK MISC. 5124, PAGE 793 AS DOCUMENT NO. 9873563. RECORDS OF BERNALILLO COUNTY, NEW MEXICO. AFFECTS SUBJECT PROPERTY-SHOWN HEREON AS 17

25. UNDERGROUND EASTMENT GRANTED TO PUBLIC SERVICE COMPANY OF NEW JERSEY, A NEW JERSEY CORPORATION, TO BURLINGTON TRUST COMPANY, NEW YORK, NEW YORK. AFFECTS

27 RESTATED AGREEMENT FOR INGRESS AND EGRESS AND FOR MAINTENANCE OF REAL PROPE
28 GRANT OF EASEMENT FOR SANITARY SEWER, WATERMAIN SYSTEMS AND FIRE PROTECTION
29 SYSTEMS RECORDED IN BOOK MISC. 555A, PAGE 319 AS DOCUMENT NO. 87114950, RECOR
30 OF BERNALILLO COUNTY, NEW MEXICO.
31 AFFECTS SUBJECT PROPERTY--SHOWN HEREON AS [1]

28 UTILITIES AGREEMENT RECORDED IN BOOK MISC. 555A, PAGE 327 AS DOCUMENT NO. 87114922, RECORDS OF BERNALILLO COUNTY, NEW MEXICO.
AFFECTS SUBJECT PROPERTY-BLANKET IN NATURE.

Table 1 Demographic characteristics of study population

ALTA/NSPS Land Title Survey
for
Tracts 5-A-1, 5-A-2 and 4-A

Louisiana Subdivision
City of Albuquerque
Bernalillo County, New Mexico
January 2019

COMPRISED FLOTS 5-A AND 6-A-1-C-1, BLOCK "C", LOUISIANA SUBDIVISION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, A SHOWN AND DESIGNATED ON THE PLAT THEREOF FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON NOVEMBER 2015 IN MAP BOOK 2016C, FOLIO 137.

For: Uplown Tower LLC, a New Mexico limited liability company, BOXF NA dba Bank of Albuquerque, AFC 5, LLC, a New Mexico limited liability company, Fidelity National title insurance Company, Fidelity National Title of New Mexico Inc.

This is to certify that this map or plot and the survey on which it is based were made in accordance with the 2015 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1-4 and 7(c) of Table A thereof. The Field Work was completed on January 22, 2019.

Will Plotner Jr.
N.M.R.P.S. No. 14271
Date 1/29/19

Revisions: 1/29/19 -- Original

I will phrase it, "New Mexico Professional Surveyor No. 1322, I do hereby certify that the boundary survey plot and the actual survey on the ground are in accordance with the standards of the Surveyor General of New Mexico that I am responsible for this survey; that this survey meets the minimum standards for surveying in New Mexico; and that it is true and correct to the best of my knowledge and belief; I further certify that this survey is not a land division or subdivision as defined in the New Mexico subdivision act and that this instrument is a boundary survey plot of an existing tract or prairie."

WILL Ploner Jr.
N.M.R.P.S. No. 14271

CSI-CARLESIAN SURVEYS INC

P.O. BOX 44414 RIO RANCHO, N.M. 871
Phone (505) 896-3050 Fax (505) 891-022
wplotnecjfr@gmail.com

Exceptions 30-34

30 UNDERGROUND EASEMENT GRANTED TO PUBLIC SERVICE COMPANY OF NEW MEXICO, A NEW MEXICO CORPORATION, BY WEST COMMUNICATIONS, INC., A COLORADO CORPORATION BY INSTRUMENT RECORDED IN PLAT BOOK 21, PAGE 7445 AS DOCUMENT NO. 95090930, RECORDS OF BERNALILLO COUNTY, NEW MEXICO DOES NOT AFFECT SUBJECT PROPERTY

31 EASEMENTS, RESTRICTIONS, NOTES AND OTHER MATTERS AS SHOWN AND/OR PROVIDED FOR ON THE PLATS OF LOUISIANA SUBDIVISION RECORDED IN PLAT BOOK D3, PAGE 40; IN PLAT BOOK C23, PAGE 46; IN PLAT BOOK C33, PAGE 122; IN PLAT BOOK C33, PAGE 140; IN PLAT BOOK 95C, PAGE 48; IN PLAT BOOK 95C, PAGE 444; IN PLAT BOOK 2002C, PAGE 92 AND IN PLAT BOOK 2006C, PAGE 137, RECORDS OF BERNALILLO COUNTY, NEW MEXICO AFFECTS SUBJECT PROPERTY—SHOWN HEREON AS **31(1) 19 20 24 AND 29**

32 RIGHTS OF TENANTS OR OCCUPANTS UNDER LEASES, SUBLEASES OR RENTAL AGREEMENTS, NOT SURVEY RELATED

33 TAXES OR ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS BY THE PUBLIC RECORDS, NOT SURVEY RELATED

34 IN COMPLIANCE WITH SUBSECTION D OF 13.14.18.10 NMAC, THE COMPANY HEREBY WAIVES ITS RIGHT TO DEMAND ARBITRATION PURSUANT TO THE TITLE INSURANCE ARBITRATION RULES OF THE NATIONAL TITLE INSURANCE ASSOCIATION. THE COMPANY HEREBY AGREES TO WAIVE THE COMPANY'S RIGHT TO DEMAND ARBITRATION OF ALL ARBITRABLE MATTERS WHEN AGREED TO BY BOTH THE COMPANY AND THE INSURED.

NOT SURVEY RELATED

Documents

1. TITLE COMMITMENT PROVIDED BY FIDELITY NATIONAL TITLE, HAWING FILE NO. SP00040164 AND AN EFFECTIVE DATE OF JANUARY 8, 2019.
2. PLAT OF RECORD FILED IN THE BERNALILLO COUNTY CLERK'S OFFICE ON NOVEMBER 3, 2016, IN MAP BOOK 2016C, FOLIO 137.
3. PLAT OF LOUISIANA SUBDIVISION FILED IN THE BERNALILLO COUNTY CLERK'S OFFICE ON MAY 5, 1987 IN MAP C33, FOLIO 122.

Flood Notes

BASED UPON SCALING, THIS PROPERTY LIES WITHIN FLOOD ZONE X WHICH IS DEFINED AS AN AREA OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS DETERMINED BY FEMA, AND SHOWN ON THE FLOOD INSURANCE RATE MAP DATED AUGUST 16, 2012, MAP NO. 35001C0352H.

Legend

MEASURED BEARINGS AND DISTANCES	ELECTRIC CABINET
FOUND MONUMENT AS INDICATED	FOUND MONUMENT AS INDICATED
FOUND PK NAIL WITH CAP "LS 1427"	FLOOD LIGHT
FOUND 5/8" REBAR	A/C UNIT
FOUND CHESLED "X"	SIGNAL BOX
SET BATHY MARKER "LS 1427"	TRAFFIC MAST
SET PK NAIL "LS 1427"	GAS METER
SET CHESLED "X"	TELEPHONE MANHOLE
COVERED AREA	TELEPHONE CABINET
CONCRETE	CABLE MANHOLE
BRICK	WATER VALVE
HAND RAIL	WATER METER
BLACK WALL	FIRE HYDRANT
ELECTRIC MANHOLE	FLAPPOLE
BOLLARD	SANITARY SEWER MANHOLE
TRANSFORMER	SAS CLEAMOUT
PULL BOX	IRRIGATION BOX
LIGHT POLE	STORM DRAIN INLET
ELECTRIC METER	STORM DRAIN MANHOLE
FIRE DEPARTMENT CONNECTION	STORM DRAIN INLET
SIGN	CURB CUT/INDICATION OF ACCESS TO ROADWAY

Easement Notes

- 26(1) EXISTING 25' SANITARY SEWER, WATER MAIN & FIRE PROTECTION SYSTEMS EASEMENT (11/9/1987, MISC. BK. 555A, PG. 319, DOC. 87114960)
- 2 INTENTIONALLY OMITTED
- 31(3) EXISTING 5' P.U.E. (7/13/1982, D3--40)
- 4 EXISTING 10' NM GAS CO. OF NM EASEMENT (11/2/1982, BK. MISC. 969, PG. 65, DOC. NO. 8257409)
- 5 EXISTING PRIVATE INGRESS EGRESS EASEMENT (3/18/2002, 2002C--92), WDHS SHOWN HEREON, SHOWN HEREON AS **5(1) 19 20 24 AND 29**
- 6 EXISTING 10' UNDERGROUND UTILITY EASEMENT FOR MSTR (7/3/1985, BK. MISC. 245A, PG. 930, DOC. NO. 8553922) RELEASED BY PNM (2/2/1987, BK. MISC. 447A, PG. 818, DOC. NO. 8710554)
- 7 INTENTIONALLY OMITTED
- 8 INTENTIONALLY OMITTED
- 9 INTENTIONALLY OMITTED
- 10 EXISTING 10' UNDERGROUND PNM & MSTR EASEMENT (7/3/1985, BK. MISC. 245A--929, DOC. NO. 8553921) SHOWN HEREON AS **10(1) 19 20 24 AND 29**
- 11 EXISTING INGRESS EGRESS EASEMENT (12/13/1995, 95C--444) (3/3/1987, C33--122) SHOWN HEREON AS **11(1) 19 20 24 AND 29**
- 12 INTENTIONALLY OMITTED
- 13 REMAINING PORTION OF AN EXISTING 10' PNM AND MSTR UNDERGROUND EASEMENT (3/28/1979, BK. MISC. 678, PG. 119, DOC. NO. 7921330) RETAINED BY PNM AFTER RELEASE (2/2/1987, BK. MISC. 447--A, PG. 819, DOC. NO. 8710555) SHOWN HEREON AS **13(1) 19 20 24 AND 29**
- 13A EXISTING 10' PNM AND MSTR UNDERGROUND EASEMENT (3/28/1979, BK. MISC. 678, PG. 119, DOC. NO. 7921330)
- 14 INTENTIONALLY OMITTED
- 15 EXISTING 10' UNDERGROUND EASEMENT FOR PNM AND MSTR (2/2/1987, BK. MISC. 447A, PG. 820, DOC. NO. 8710556)
- 16 INTENTIONALLY OMITTED
- 17 EXISTING 3.30' X 31.30' UNDERGROUND EASEMENT FOR PNM AND MSTR (7/21/1987, BK. MISC. 512A, PG. 793, DOC. NO. 8775987)
- 18 EXISTING 31.30' X 15.30' UNDERGROUND EASEMENT FOR PNM AND MSTR (7/21/1987, BK. MISC. 512A, PG. 794, DOC. NO. 8775988)
- 19 INTENTIONALLY OMITTED
- 20 EXISTING PRIVATE DRAINAGE EASEMENT (2/9/1984, C23--46) BLANKET IN NATURE
- 21 INTENTIONALLY OMITTED
- 22 COVERING ALL OF LOT 4-A, A PERPETUAL INGRESS/EGRESS EASEMENT BENEFITING LOTS 3-A AND 5-A (11/9/1987, BK. MISC. 555--A, PG. 322, DOC. NO. 87114961)
- 23 EXISTING PNM & MSTR UNDERGROUND EASEMENT (2/12/1980, BK. MISC. 752, PG. 527, DOC. NO. 8014310) SHOWN HEREON AS **23(1) 19 20 24 AND 29**
- 24 27' PRIVATE INGRESS EGRESS EASEMENT (11/3/2016, 2016C--137) INTENTIONALLY OMITTED
- 25 CROSS LOT DRAINAGE EASEMENT ACROSS TRACT 5-A-1, 5-A-2, 6-A-1--C-1-A AND 6-A-1--C-1-B, EXCLUDING BUILDING ENVELOPES AND CONCRETE CURBED AREAS (11/3/2016, 2016C--137)

Notes

1. FIELD SURVEY PERFORMED IN APRIL, MAY 2019 AND SUPPLEMENTAL DATA IN JANUARY 2019.
2. ALL DISTANCES ARE GROUND DISTANCES.
3. THE BASIS OF BEARINGS REFERENCES NEW MEXICO STATE PLANE COORDINATES (NAD 83-GRID).
4. THE BEARINGS AND DISTANCES MATCH THE PLAT OF RECORD AS SHOWN HEREON (11/23/2016, 2016C--137)

Line #	Direction	Length (ft)
L1	S 00°35'51" W	56.33'
L2	S 89°25'13" W	82.58'
L3	S 00°16'47" E	20.58'
L4	N 00°14'57" W	5.58'
L5	S 89°45'03" W	28.93'
L6	S 00°30'40" E	57.13'
L7	N 00°02'13" W	38.21'
L8	N 04°28'33" W	57.96'
L9	N 04°28'33" W	57.96'
L10	N 04°28'33" W	60.09'
L11	N 00°29'45" W	50.27'
L12	S 89°50'09" W	13.75'
L13	N 89°47'53" E	81.28'
L14	N 04°28'33" W	6.25'
L15	N 33°58'18" E	13.85'
L16	N 00°11'24" W	95.90'
L17	N 02°09'04" W	35.44'
L18	N 10°22'27" W	575.83'

Curve Table

Curve #	Length	Radius	Delta	Chord Length	Chord Direction
C1	382.76'	449.89'	44°45'57"	373.09'	N 67°46'22" W
C2	112.68'	489.89'	13°10'44"	112.43'	N 30°53'44" W
C3	36.78'	33.44'	89°58'36"	33.11'	S 44°57'05" W
C4	16.11'	32.94'	28°00'41"	15.95'	S 76°09'31" E
C5	17.56'	35.88'	28°02'22"	17.35'	N 76°10'22" W
C6	11.22'	13.58'	47°19'49"	10.81'	N 28°45'40" W
C7	10.54'	22.53'	26°47'27"	10.44'	S 39°54'45" E
C8	8.65'	8.50'	55°41'06"	8.46'	S 03°55'45" W
C9	5.11'	8.60'	34°00'42"	5.03'	N 18°48'57" E
C10	8.69'	8.60'	44°32'19"	6.52'	N 22°27'34" W
C11	13.86'	50.04'	15°52'26"	13.82'	S 30°47'30" E
C12	4.86'	6.15'	45°18'28"	4.74'	S 06°17'03" E
C13	14.18'	12.43'	65°22'24"	13.43'	S 48°41'39" W
C14	10.79'	7.50'	82°24'45"	9.88'	N 35°58'18" E
C15	25.90'	18.42'	80°34'26"	23.82'	S 53°39'31" E

Boundary Survey and ALTA/NSPS Land Title Survey

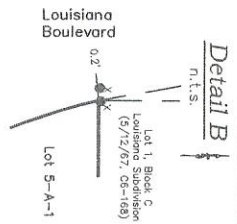
for
Tracts 5-A-1, 5-A-2 and 4-A
Block "C"
Louisiana Subdivision
City of Albuquerque
Bernalillo County, New Mexico
January 2019

CSI-CARTESIAN SURVEYS INC.

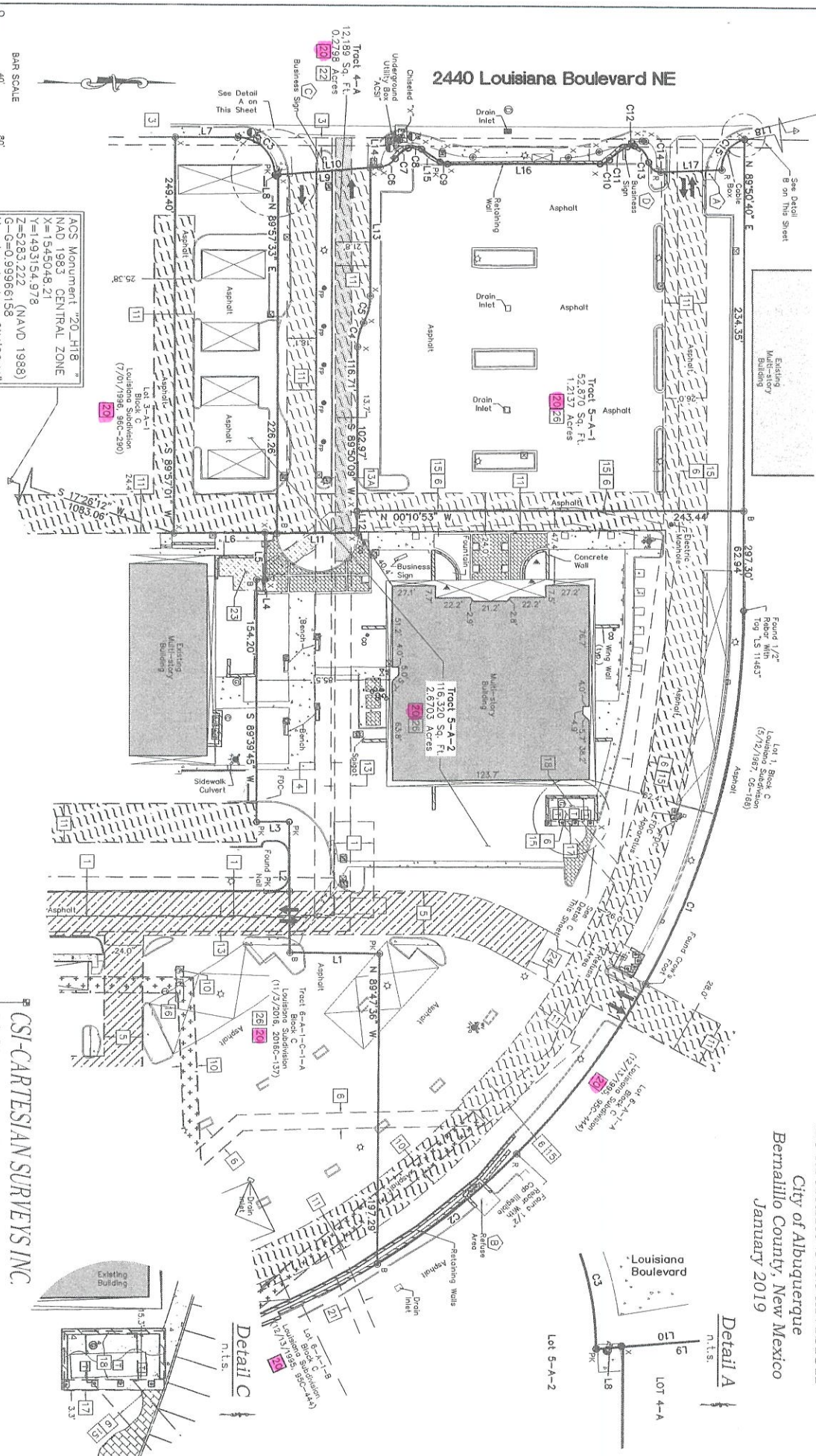
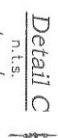
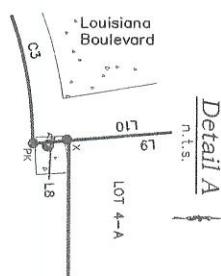
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wplcmnt@gmail.com

ACS Monument "15_H18"
 NAD 1983 CENTRAL ZONE
 X=1545019.848
 Y=1495111.771
 Z=5303.391 (NAVD 1988)
 G-G=0.999660624
 Mapping Angle=-011°00.43"

- Apparent Encroachments**
- (A) SIDEWALK INTO SUBJECT PROPERTY BY AS MUCH AS 5.97 FEET. OWNERSHIP UNKNOWN.
 - (B) REFUSE AREA AND WALL INTO SUBJECT PROPERTY BY AS MUCH AS 3.8 FEET. OWNERSHIP APPEARS TO BE THE OWNERS OF LOT 6-A-1-A.
 - (C) BUSINESS SIGN INTO RIGHT-OF-WAY BY AS MUCH AS 8.88 FEET.
 - (D) BUSINESS SIGN AND WALL INTO RIGHT-OF-WAY BY AS MUCH AS 2.21 FEET.



Boundary Survey
 and
ALTA/NSPS Land Title Survey
 for
Tracts 5-A-1, 5-A-2 and 4-A
Block "C"
 Louisiana Subdivision
 City of Albuquerque
 Bernalillo County, New Mexico
 January 2019



BAR SCALE
 40' 80'

ACS Monument "20_H18"
 NAD 1983 CENTRAL ZONE
 X=1545048.21
 Y=1493154.978
 Z=5283.222 (NAVD 1988)
 G-G=0.99966158
 Mapping Angle=-011°00.11"

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