

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

January 28, 2020

Mike Balaskovits, PE
Bohannon Huston, Inc.
7500 Jefferson St NE
Albuquerque, NM 87109

**RE: Broadstone Highlands Mid Block- Parking Lot & Ped. Bridge
Central and Cedar NE
Grading and Drainage Plan
Engineer's Stamp Date: 12/19/19 & 10/11/19
Hydrology File: K15D034D**

Dear Mr. Balaskovits:

PO Box 1293

Based on the submittal received on 1/21/20 the above-referenced Grading and Drainage Plan is approved for Grading & Building Permit.

Albuquerque

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.

NM 87103

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

www.cabq.gov

Sincerely,

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



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: _____



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	\$ 15864.00	461615	305	PCDMD	24_MS4	7547210	\$ 15864.00
TOTAL AMOUNT						TOTAL DEPOSIT	\$15864.00

Hydrology#: K15D034D Name: Broadstone Highlands Mid Block- Parking Lot & Ped. Bridge, 69988 sf imp.
Payment In-Lieu For Storm Water Quality
Volume Requirement

Address/Legal Description: Central and Cedar NE
Tr 3A & 4, The Highlands

DEPARTMENT NAME: Planning Department/Development Review Services, Hydrology

PREPARED BY Dana Peterson PHONE 924-3695

BUSINESS DATE 12/13/19

DUAL VERIFICATION OF DEPOSIT


EMPLOYEE SIGNATURE

AND BY

EMPLOYEE SIGNATURE

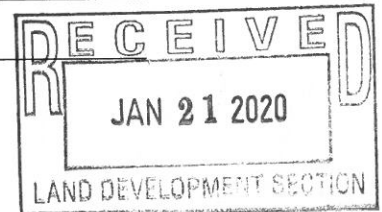
REMITTER: _____

AMOUNT: _____

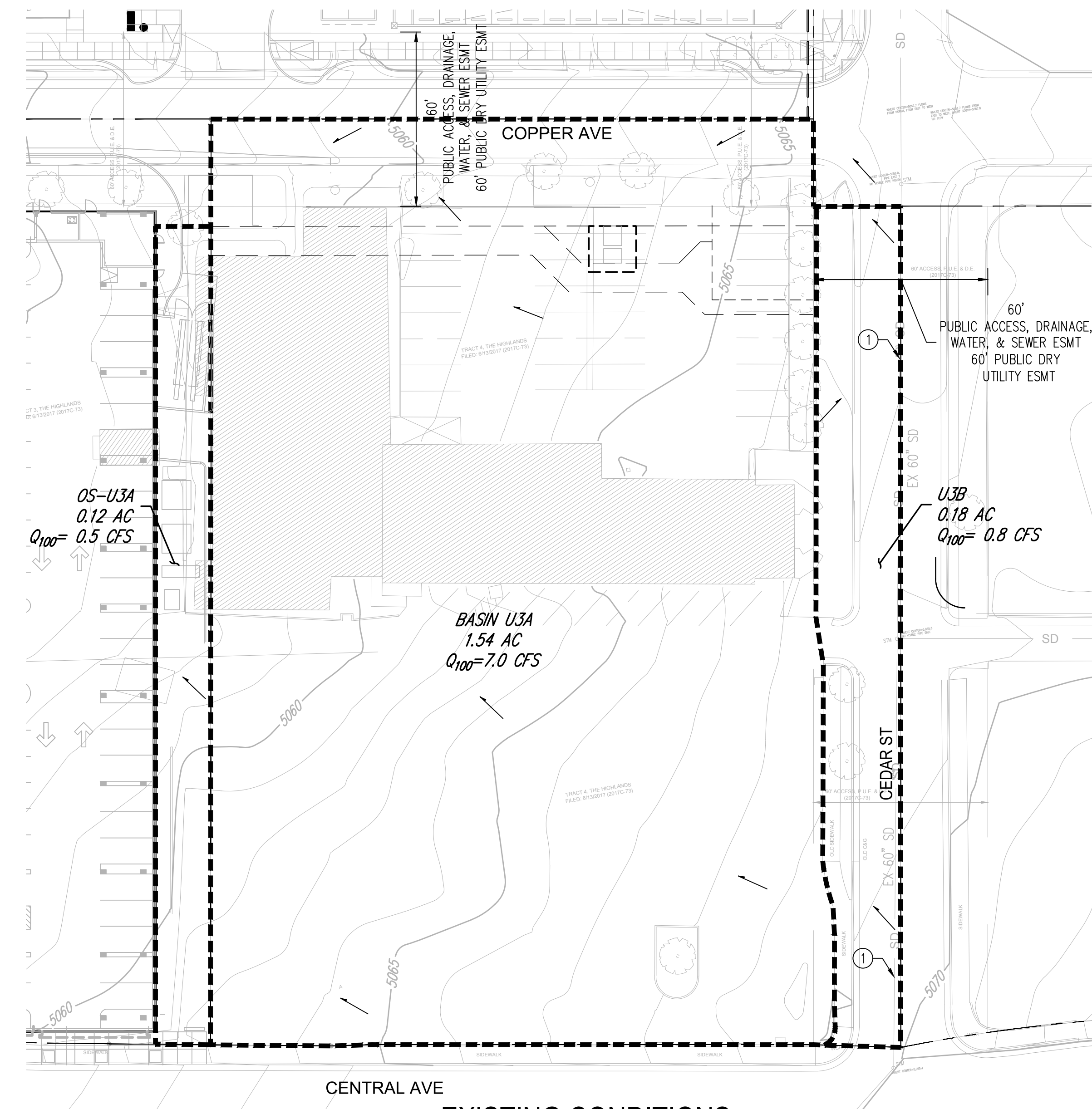
BANK: _____

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 Treasury
J-24 Deposit
Date: 1/21/2020
Station ID: 11024
Batch: 305
Fund: 461615
Account: 461615
Dept ID: 7547210
Project ID: 24_MS4
Buss Unit: PCDMD
Alloc Amt: \$15,864.00
Trans Amt: \$15,864.00
Check Tendered: \$15,864.00
DUPLICATE
ANNEX 643322
TRF: 30
ACTIVITY ID 7547210
PROJECT ID 24_MS4
Buss Unit: PCDMD



EXISTING CONDITIONS

Highlands Midblock Development											
Existing Developed Conditions Basin Data Table											
This table is based on the DPM Section 22.2, Zone: 2											
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr) (cfs/ac.)	Q(100yr) (CFS)	V(100yr) (inches)	V(100yr-6hr) (CF)	V(100yr-24hr) (CF)
			A	B	C	D					
CURRENT ONSITE BASINS											
U3A	66940	1.54	0.0%	0.0%	9.0%	91.0%	4.56	7.01	2.03	11329	13360
U3B	7865	0.18	0.0%	0.0%	4.0%	96.0%	4.64	0.84	2.08	1364	1615
TOTAL	74805	1.72	-	-	-	-	-	7.84	-	12693	14975
CURRENT TRACT 3A BASINS											
OS-U3A	5353	0.12	0.0%	0.0%	18.9%	81.1%	4.41	0.54	1.93	862	1007
TOTAL	5353	0.12	-	-	-	-	-	0.54	-	862	1007
TOTAL	80158	1.84	-	-	-	-	-	8.39	-	13555	15982

Highlands Midblock Development												
Proposed Developed Conditions Basin Data Table												
This table is based on the DPM Section 22.2, Zone: 2												
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr) (cfs/ac.)	Q(100yr) (CFS)	V(100yr) (inches)	V(100yr-6hr) (CF)	V(100yr-24hr) (CF)	V(100yr-10day) (CF)
			A	B	C	D						
PROPOSED ONSITE BASINS												
D3A-S-1	6640	0.15	0.0%	0.0%	23.1%	76.9%	4.34	0.66	1.89	1046	1216	1727
D3A-S-2	27655	0.63	0.0%	0.0%	25.3%	74.7%	4.30	2.73	1.87	4307	4996	7060
D3A-S-3	2219	0.05	0.0%	0.0%	10.8%	89.2%	4.53	0.23	2.01	372	438	636
D3A-P-1	31808	0.73	0.0%	0.0%	0.0%	100.0%	4.70	3.43	2.12	5619	6680	9860
D3B	11836	0.27	0.0%	0.0%	11.8%	88.2%	4.52	1.23	2.00	1975	2323	3367
TOTAL	80158	1.84	-	-	-	-	-	8.28	-	13321	15653	22651
												1983

STORM DRAIN PIPE TABLE

PIPE #	INLET/SD/BASIN	Size in.	Slope	Capacity* cfs	ACTUAL FLOW cfs
SD1	D3A-P-1	18	3.50%	19.65	3.43
SD2	D3A-P-1	18	1.00%	10.50	3.43
SD3	D3A-P-1, D3A-S-2	18	3.17%	18.70	5.90

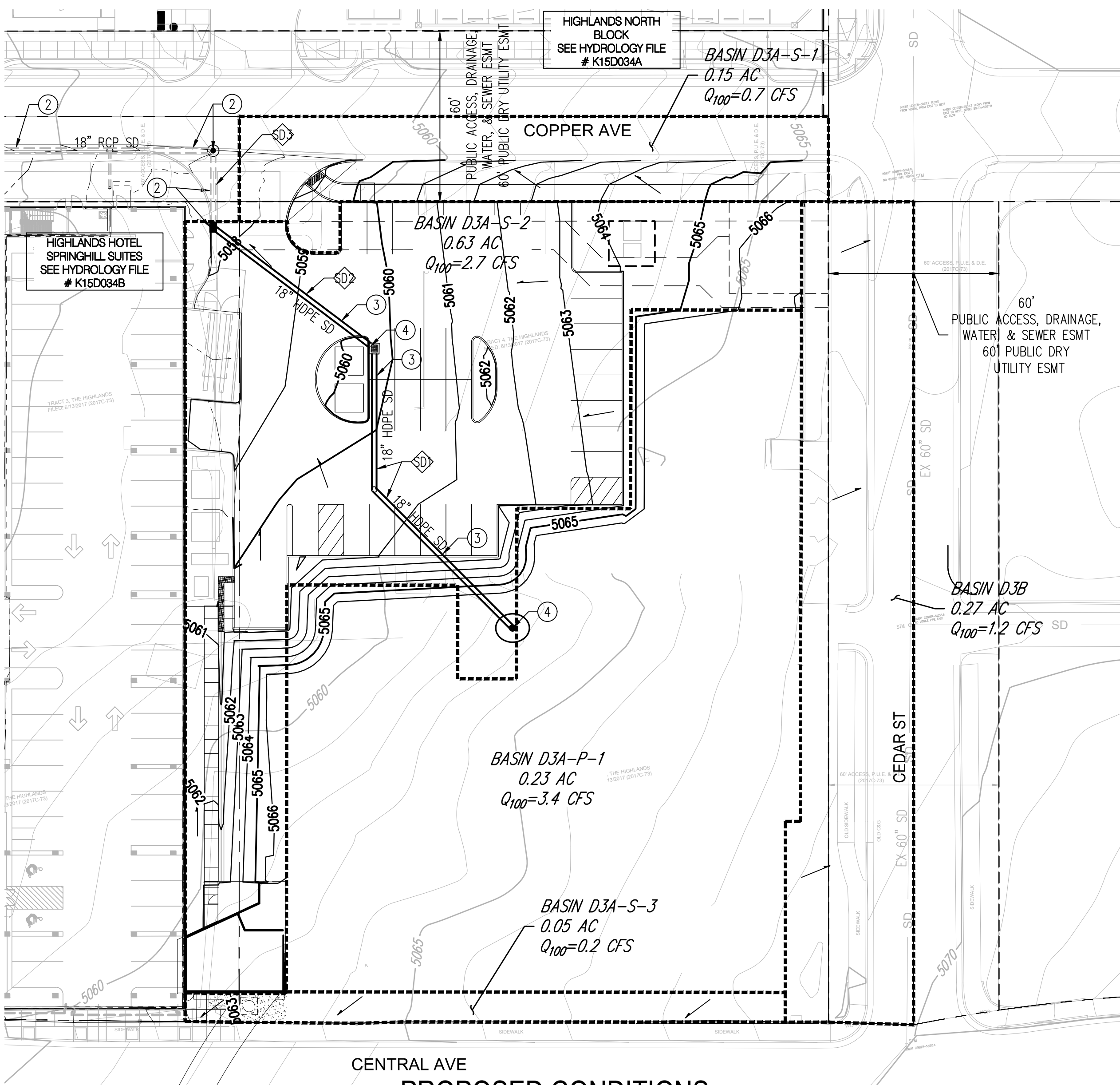
*Capacity Based on Manning's Eq w/ N=0.013

INLET TABLE

Inlet #	Inlet Type	Basin	Actual Flow (cfs)	Slope (ft)	Depth (ft)	Capacity* (cfs)	Bypass Flow (cfs)
IN1	2'X3' Curb Inlet High Flow	D3A-S-2	2.73	5.00%	0.23	2.47	0.26

NOTE: The inlet calculations were based on the NYLOPLAST DYNAMIC INLET CAPACITY TABLE

*The capacity is calculated based on the depth for the Q₁₀₀ based on the assumed contributing basin area.



PROPOSED CONDITIONS

DRAINAGE NARRATIVE

EXISTING CONDITIONS

THIS SITE IS LOCATED AT THE NORTHWEST CORNER OF CEDAR ST NE AND CENTRAL AVE NE. IT IS CURRENTLY DEVELOPED AND SLOPES FROM SOUTHEAST TO NORTHWEST. THE DRAINAGE ULTIMATELY OUTFALLS TO COPPER AVE AND THEN TO THE EXISTING PUBLIC STORM DRAIN SYSTEM LOCATED WEST OF THE SITE, UNDER I-25. THIS SITE HAS HISTORICALLY BEEN FULLY DEVELOPED AS COMMERCIAL DEVELOPMENT.

THE SITE LIES WITHIN EXISTING ONSITE BASIN U3. BASIN U3 IS A PART OF A LARGER BASIN THAT SURFACE DRAINS TO AN EXISTING STORM DRAIN SYSTEM LOCATED WITHIN MULBERRY ST. A LARGE PORTION OF THIS BASIN SURFACE DRAINS TO THE NORTH INTO AN EXISTING TYPE 'A' INLET IN COPPER AVENUE.

THE ONSITE BASINS HAVE BEEN DELINEATED WITHIN THE PROPERTY LINE WITH TRACT 4 BASINS BEING THE ONSITE BASINS AND THE TRACT 3A BASINS ARE PROPOSED IMPROVEMENTS OUTSIDE OF THE PROPERTY LINE, BUT ARE ULTIMATELY A PART OF THE SPRINGHILL SUITES IMPROVEMENTS AND REFLECTED IN THIS DMP.

THE SPRINGHILL SUITES HOTEL (HYDRO FILE K15D034B) IS UNDER CONSTRUCTION CURRENTLY AND HAS BEEN USED AS PART OF THE DELINEATION OF THE PROPOSED BASINS.

THE TOTAL ONSITE EXISTING FLOW RATE FROM THE CURRENT DEVELOPMENT IS APPROXIMATELY 7.8 CFS. THE TOTAL OFFSITE EXISTING FLOW RATE FROM THE CURRENT DEVELOPMENT IS APPROXIMATELY 0.5 CFS. THE TOTAL EXISTING FLOW RATE IS APPROXIMATELY 8.4 CFS

PROPOSED CONDITIONS

THE DEVELOPMENT WILL INCLUDE A PEDESTRIAN BRIDGE TOWER AND PARKING LOT ALONG WITH A FUTURE CENTRAL MARKET, PLAZA AND MULTI-USE BUILDING (HEREON KNOWN AS "FUTURE DEVELOPMENT") THAT SITS AT THE INTERSECTION OF CENTRAL AVE AND CEDAR ST. NEW ONSITE STORM DRAIN WILL BE PROVIDED TO ACCOUNT FOR THE FUTURE DEVELOPED DISCHARGE FOR THE "FUTURE DEVELOPMENT". THE REMAINDER OF THE SITE WILL SHEET FLOW TO THE ONSITE STORM DRAIN OR ULTIMATELY INTO COPPER AVE. THIS IMPERVIOUS AREA OF THE SITE WILL REMAIN THE SAME AS THE HISTORIC CONDITIONS TO 90% D AND 10% C FOR DEVELOPED FLOWS. LANDSCAPED AREAS THROUGHOUT THE SITE WILL BE DEPRESSED WHERE APPLICABLE TO CAPTURE DRAINAGE IN AN ATTEMPT TO MEET THE FIRST FLUSH REQUIREMENTS, HOWEVER, THE CLIENT HAS DECIDED TO PAY CASH-IN-LIEU FOR THE FIRST FLUSH REQUIREMENTS ASSOCIATED WITH THIS SITE.

A SUBSEQUENT GRADING AND DRAINAGE PLAN WILL BE SUBMITTED IN THE FUTURE FOR THE "FUTURE DEVELOPMENT".

DEVELOPED BASINS

THE DEVELOPED BASINS WILL ADHERE TO THE HISTORIC FLOW WITH FEW EXCEPTIONS. THE FOLLOWING IS A DESCRIPTION OF HOW EACH DEVELOPED BASIN WILL DRAIN. PLEASE REFER TO THE "PROPOSED DEVELOPED CONDITIONS BASIN

DATA TABLE" FOR THE PROPOSED BASIN FLOWS.

BASIN D3A-S-1 INCLUDES THE LANDSCAPING, SIDEWALK, AND THE ENTRANCE TO THE SITE ADJACENT TO COPPER AVE. THIS AREA WILL CONTINUE TO SHEET FLOW TO COPPER AVE HEADING WEST INTO THE INLETS AT THE INTERSECTION OF COPPER AVE & MULBERRY ST AND BYPASS FLOW WILL CONTINUE TO OAK ST.

BASIN D3A-S-2 INCLUDES THE PROPOSED PARKING LOT, THE PEDESTRIAN BRIDGE TOWER, AND THE ALLEY THAT SITS BETWEEN THE "FUTURE DEVELOPMENT" AND SPRINGHILL SUITES. THE ROOF DRAINAGE FROM THE PEDESTRIAN BRIDGE TOWER WILL BE CONVEYED VIA SWALE TO THE PARKING LOT AND THIS AREA WILL CONTINUE TO SHEET FLOW TO THE ONSITE INLET (CONSTRUCTED WITH THE SPRINGHILL SUITES) AND BYPASS FLOW WILL CONTINUE TO SHEET FLOW TO COPPER AVE HEADING WEST INTO THE INLETS AT THE INTERSECTION OF COPPER AVE & MULBERRY ST AND BYPASS FLOW WILL CONTINUE TO OAK ST.

BASIN D3A-S-3 INCLUDES THE PROPOSED HARDSCAPE OFF OF THE CENTRAL SIDEWALK AND WILL DRAIN TOWARDS CENTRAL AVE WHICH ULTIMATELY DISCHARGES INTO MULBERRY ST AND INTO THE EXISTING TYPE 'D' INLET.

BASIN D3A-P-1 INCLUDES THE DEVELOPED DRAINAGE FROM THE "FUTURE DEVELOPMENT". THIS FLOW WILL DISCHARGE TO A NEW 18" STORM DRAIN ONSITE VIA ROOF DRAINS AND INLETS. A SUBSEQUENT GRADING AND DRAINAGE PLAN WILL BE SUBMITTED IN THE FUTURE FOR THE "FUTURE DEVELOPMENT".

BASIN D3B INCLUDES FUTURE ON-STREET PARKING FOR THE CENTRAL MARKET AND SIDEWALK ALONG CEDAR ST. THESE IMPROVEMENTS WILL BE DETAILED ON A SUBSEQUENT GRADING AND DRAINAGE PLAN SUBMITTAL FOR THE "FUTURE DEVELOPMENT".

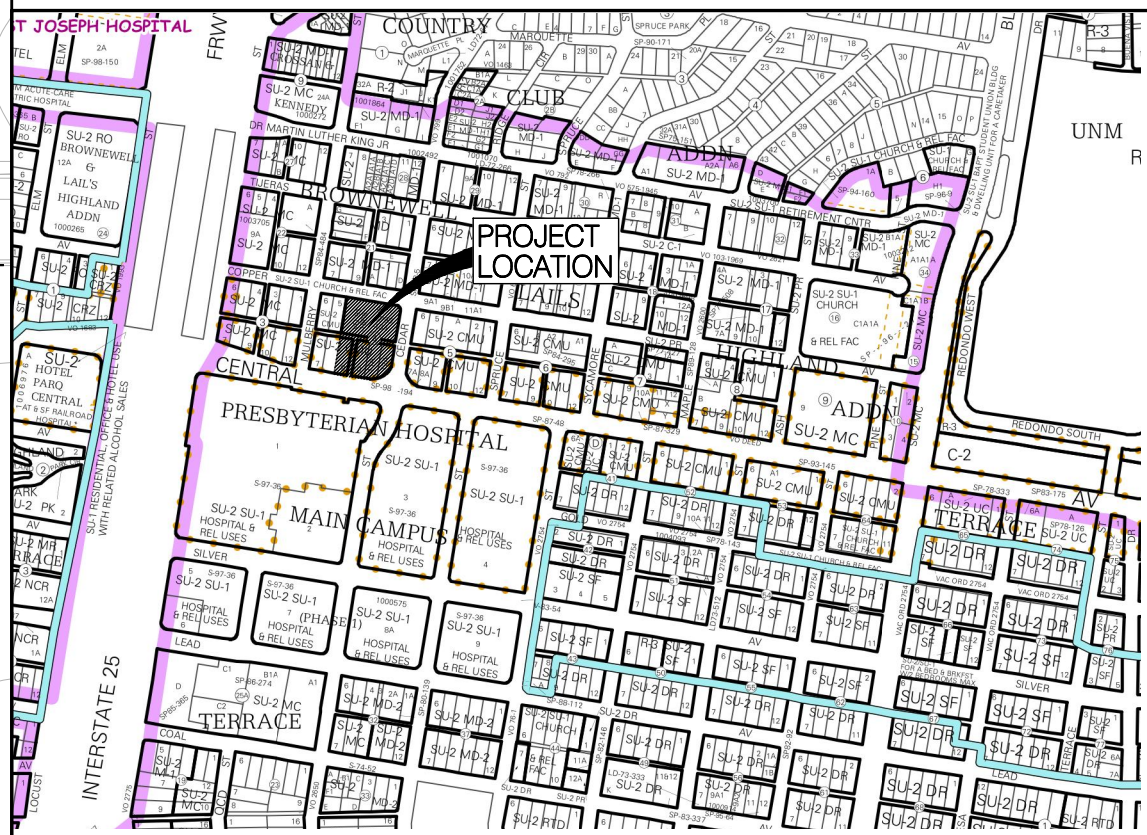
THE TOTAL ONSITE PROPOSED FLOW RATE IS APPROXIMATELY 8.3 CFS. COMPARISON OF THE FLOW BETWEEN EXISTING AND PROPOSED CONDITIONS WAS FOUND TO HAVE AN OVERALL DECREASE OF 0.1 CFS, INDICATING THAT THE DEVELOPED FLOWS NO DETENTION WOULD BE REQUIRED.

CONCLUSION

THE DEVELOPED FLOWS FOR THIS SITE GENERALLY REMAINS UNCHANGED FROM THE EXISTING CONDITIONS, HOWEVER THIS PLAN DIVERTS FLOWS DIRECTLY INTO THE STORM DRAIN SYSTEM VIA ROOF DRAIN CONNECTIONS. THESE ADJUSTMENTS ARE NOTED ON THE "STORM DRAIN ANALYSIS POINT COMPARISON" TABLE WHICH DEMONSTRATE THAT THE DRAINAGE ELEMENTS PROPOSED WITH THE PROJECT ARE CAPABLE OF SAFELY CONVEYING THE 100 YR, 6 HR STORM EVENT IN ACCORDANCE WITH THE DEVELOPMENT PROCESS MANUAL. WITH THIS SUBMITTAL, WE ARE REQUESTING COA HYDROLOGY APPROVAL IN SUPPORT OF BUILDING PERMIT APPROVAL FOR THE HIGHLANDS PEDESTRIAN BRIDGE TOWER AND PARKING LOT PAVING PERMIT APPROVAL.

VICINITY MAP

ZONE MAP K-15-Z



FEMA FIRM

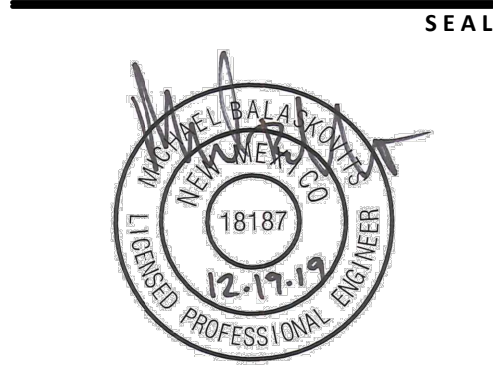
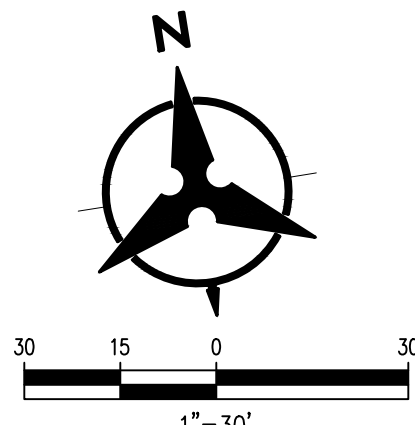
MAP #: 35001C0334G

KEYNOTES

- EXISTING STORM DRAIN TO REMAIN.
- STORM DRAIN INFRASTRUCTURE CONSTRUCTED W/ PROJECT HYD # D15D034B / CPN # 764783.
- PROPOSED NEW STORM DRAIN.
- PROPOSED NEW STORM DRAIN INLET.

GRADING LEGEND

---	PROPERTY LINE	=====	PROPOSED CURB & GUTTER
---	PROJECT LIMITS OF GRADING	S=2.0%	DIRECTION OF FLOW
5025	EXISTING INDEX CONTOUR	+	WATER BLOCK/GRADE BREAK
5024	EXISTING INTERMEDIATE CONTOUR	+	PROPOSED STORM DRAIN LINE
5025.25	EXISTING GROUND SPOT ELEVATION	+	PROPOSED STORM DRAIN MANHOLE
5025	PROPOSED INDEX CONTOUR	+	PROPOSED STORM DRAIN INLETS
5024	PROPOSED INTERMEDIATE CONTOUR	+	PROPOSED RETAINING WALL
26.75	PROPOSED FINISHED GRADE SPOT ELEVATION	+	EASEMENT
TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK, TG=TOP OF GRATE, FGH=FINISH GROUND HIGH, FGL=FINISH GROUND LOW		+	EXISTING BASIN BOUNDARY
		+	PROPOSED BASIN BOUNDARY
BASIN DXX-S	PROPOSED BASIN ID-SHEET FLOW	+	EXISTING BASIN ID
		+	BASIN UXX
		+	BASIN DXX-P



NOT FOR CONSTRUCTION

SPRINGHILL SUITES[®]
MARRIOTT
ALBUQUERQUE

PROJECT ADDRESS
CENTRAL AVE. & MULBERRY ST.
ALBUQUERQUE, NM 87106

REV.	DATE	ISSUE

IMM012
PROJECT NUMBER

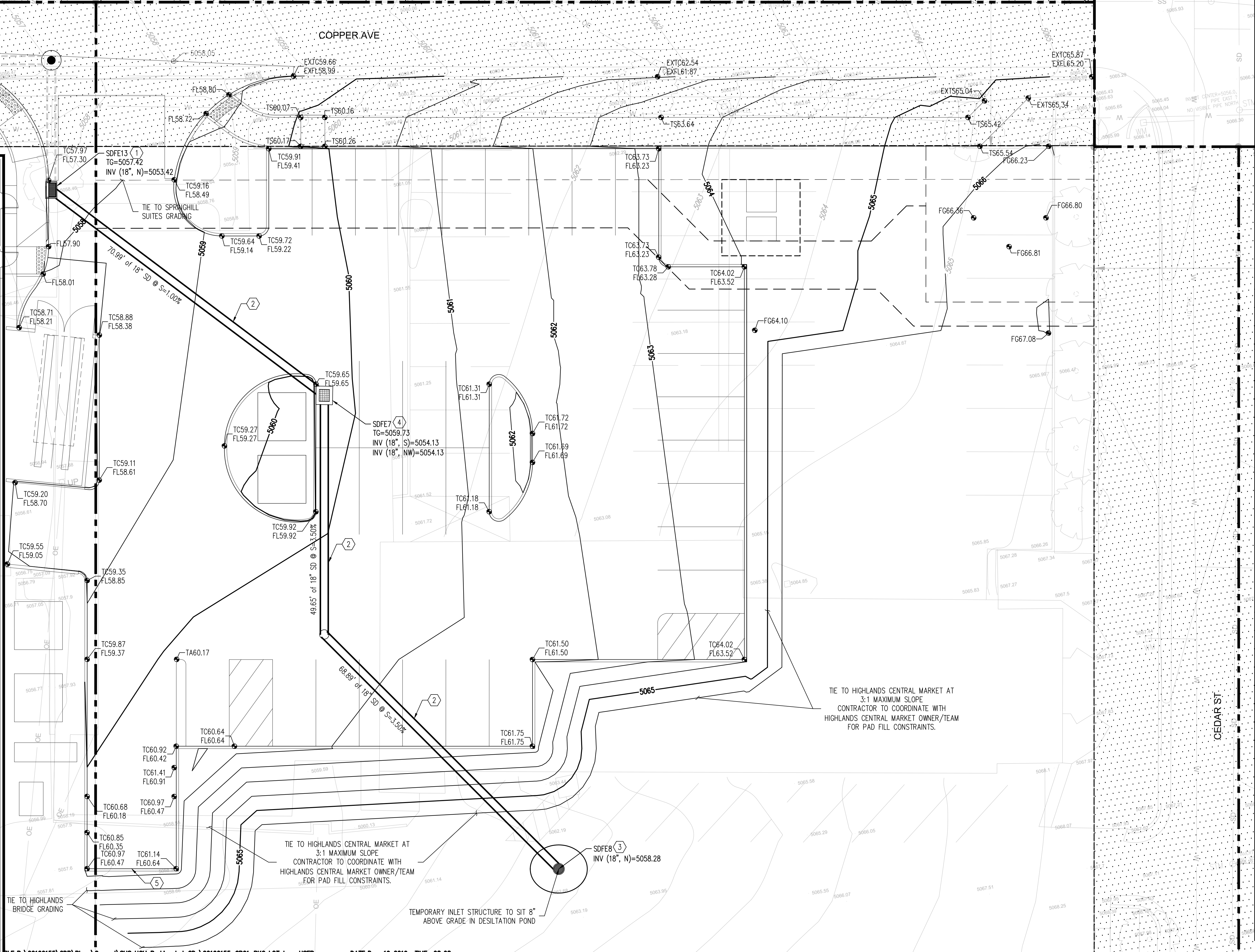
DRAINAGE
MANAGEMENT PLAN

C-001
SHEET NUMBER

GENERAL SHEET NOTES

1. 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, COA PUBLIC WORKS STANDARDS SHALL APPLY.
2. 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.
3. 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.
4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
5. 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.
6. 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.

7. 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.
8. 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.
9. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADING, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, DRIVEWAY PERMITS, ETC.).
10. 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.
11. THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE TRAFFIC ENGINEERING DEPARTMENT PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
12. 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.
13. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.
14. THE PROJECT MUST CONFORM WITH THE EROSION AND SEDIMENT REQUIREMENTS OF THE 2003 EPA CONSTRUCTION GENERAL PERMIT OR LOCAL STANDARDS & CODES WHICHEVER IS MORE STRINGENT.



- GRADING KEYNOTES**
- CONNECT TO EXISTING INLET. CONTRACTOR TO VERIFY INVERT ELEVATIONS AND NOTIFY ENGINEER IMMEDIATELY IF DISCREPANCIES ARE FOUND.
 - INSTALL HDPE (N12WT, OR APPROVED EQUAL) STORM DRAIN PIPE (SIZE & SLOPE PER PLAN).
 - INSTALL 18" NYLOPLAST STORM DRAIN INLET OR APPROVED EQUAL PER MANUFACTURER'S SPECIFICATIONS.
 - INSTALL COA TYPE 'D' INLET PER COA STD. DWG. 2206.
 - INSTALL HEADER CURB & GUTTER PER COA STD. DWG. 2415B.
- GRADING SHEET 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," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE COA STANDARD SPECIFICATIONS FOR PUBLIC WORKS.
 - EARTH SLOPES SHALL NOT EXCEED 5 HORIZONTAL TO 1 VERTICAL PER THE GEOTECHNICAL REPORT UNLESS SHOWN OTHERWISE.
 - IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK/DISTURBANCE 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.
 - PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
 - ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR MEDIANS AND ISLANDS.
 - VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.
 - SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0% AND A MAXIMUM OF 2.0%.
 - HDPE PIPE AND FITTINGS SHALL BE INSTALLED AND BACKFILLED PER MANUFACTURER SPECIFICATIONS. CONNECTIONS TO CONCRETE MANHOLES AND CONCRETE DROP INLETS SHALL USE WATER STOP GASKETS AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS

GRADING LEGEND

---	PROPERTY LINE	---	PROPOSED CURB & GUTTER
---	PROJECT LIMITS OF GRADING	---	DIRECTION OF FLOW
---	EXISTING INDEX CONTOUR	---	WATER BLOCK/GRADE BREAK
---	EXISTING INTERMEDIATE CONTOUR	---	PROPOSED STORM DRAIN LINE
---	EXISTING GROUND SPOT ELEVATION	---	PROPOSED STORM DRAIN MANHOLE
---	PROPOSED INDEX CONTOUR	---	PROPOSED STORM DRAIN INLETS
---	PROPOSED INTERMEDIATE CONTOUR	---	PROPOSED RETAINING WALL
---	PROPOSED FINISHED GRADE SPOT ELEVATION	---	EASEMENT
---	TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK, TG=TOP OF GRATE, FGH=FINISH GROUND HIGH, FGL=FINISH GROUND LOW	---	60' PUBLIC ACCESS, DRAINAGE, WATER, & SEWER EASEMENT & 60' PUBLIC DRY UTILITY EASEMENT

ARCHITECT

5G

5G STUDIO COLLABORATIVE
800 JACKSON STREET | SUITE 500
DALLAS, TEXAS 75202
214.670.0050
CONTACT: CHRISTINE ROBBINS-ELROD

DRAWINGS AND SPECIFICATIONS AS INSTRUMENTS OF SERVICE ARE THE PROPERTY OF THE ARCHITECT. THEY SHALL NOT BE USED, TRANSFERRED, OR SOLD FOR USE EXCEPT BY AN AGREEMENT IN WRITING FROM THE ARCHITECT.

SEAL

OWNER / DEVELOPER

TITAN DEVELOPMENT
6300 RIVERSIDE PLAZA LANE NW, STE 200
ALBUQUERQUE, NEW MEXICO 87120
505.998.0163
CONTACT: JOSH ROGERS

OWNER'S CONSULTANT / OPERATOR

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2390 TOWER DRIVE
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318.812.7126
CONTACT: DAVE RAYMOND

CIVIL ENGINEER

BOHANNAN HUSTON
7500 JEFFERSON STREET NE
ALBUQUERQUE, NEW MEXICO 87109
505.823.1000
CONTACT: MIKE BALASKOVITS

PLANNER

CONSENSUS PLANNING, INC.
302 EIGHTH STREET NW
ALBUQUERQUE, NEW MEXICO 87102
505.764.9801
CONTACT: SALVATOR PERDOMO

PROJECT

**SPRINGHILL SUITES®
MARRIOTT
ALBUQUERQUE**

PROJECT ADDRESS

**CENTRAL AVE. & MULBERRY ST.
ALBUQUERQUE, NM 87106**

**IMM012
PROJECT NUMBER**

**GRADING &
DRAINAGE PLAN**

**C1.01
SHEET NUMBER**



OVERALL GRADING & DRAINAGE PLAN

GENERAL NOTES

- A. 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.
- B. 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.
- C. 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.
- D. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
- E. 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.
- F. 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.
- G. 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.
- H. 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.
- I. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADING, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, EPA STORM WATER PERMITS, ETC.).
- J. 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.
- K. 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.
- L. 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.
- M. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.
- N. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING COMPLIANCE WITH NPDES PHASE 2 REQUIREMENTS.
- O. 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.

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



**ARCHITECTURE
DESIGN
INSPIRATION**

SEAL



PROJECT

**HIGHLANDS DEVELOPMENT
PEDESTRIAN BRIDGE**
CENTRAL AVE. & CEDAR AVE. SE
ALBUQUERQUE, NM 87106

100%
CONSTRUCTION
DOCUMENTS

REVISIONS



DRAWN BY	EGN
REVIEWED BY	MJB
DATE	10/11/2019
PROJECT NO:	18-0031

DRAWING NAME

OVERALL GRADING
& DRAINAGE PLAN

SHEET NO.

C-100



1. INSTALL CONCRETE VALLEY GUTTER PER COA STD. DWG. 2415A.
2. INSTALL 24" SIDEWALK CULVERT PER COA STD. DWG. 2236.
3. INSTALL CONCRETE RETAINING WALL PER ARCHITECTURAL/STRUCTURAL DETAIL;
SEE ARCHITECTURAL/STRUCTURAL PLANS FOR FURTHER INFORMATION.

ARCHITECTURE
DESIGN
INSPIRATION

SEAL



PROJECT

**HIGHLANDS DEVELOPMENT
PEDESTRIAN BRIDGE**
CENTRAL AVE. & CEDAR AVE. SE
ALBUQUERQUE, NM 87106

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DOCUMENTS

REVISIONS



DRAWN BY EGN

REVIEWED BY MJB

DATE 10/11/2019

PROJECT NO: 18-0031

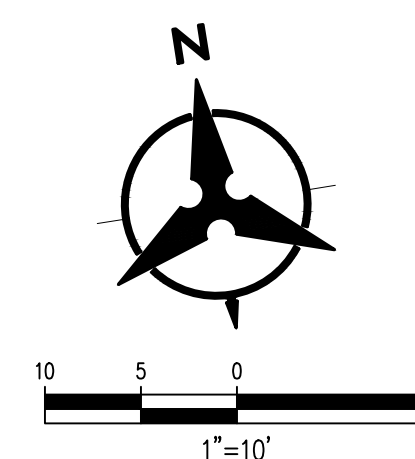
DRAWING NAME

GRADING & DRAINAGE PLAN

SHEET NO _____

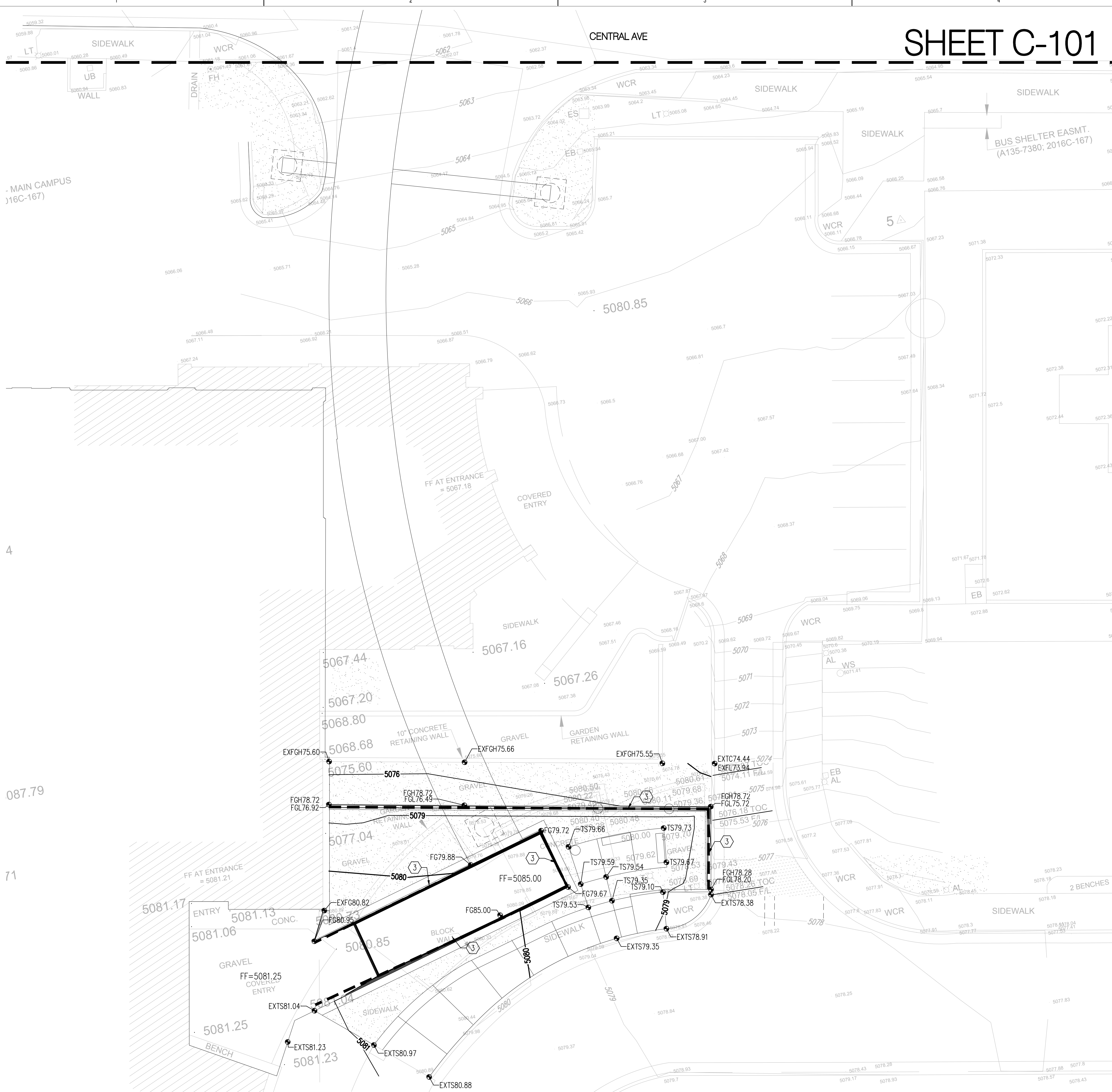
C-101

	PROPERTY LINE
	EXISTING CONTOURS
	PROPOSED SPOT ELEVATION TC=TOP OF CURB, FL=FLOW LINE TS=TOP OF SIDEWALK, TA=TOP OF ASPHALT EX=EXISTING, FG=FINISHED GRADE, TG=TOP OF GRATE, INV=INVERT
	PROPOSED DIRECTION OF FLOW
	WATER BULK / RIDGE OR HIGH POINT
	PROPOSED INDEX CONTOURS
	PROPOSED INTER CONTOURS
	PROPOSED STORM DRAIN LINE
	PROPOSED STORM DRAIN MANHOLE
	PROPOSED STORM DRAIN INLET
	PROPOSED RETAINING WALL



Bohannon  **Huston**
www.bhinc.com 800.877.5332

Thu, 19-Dec-2019 - 1:38pm, Plotted by: ENEMAN
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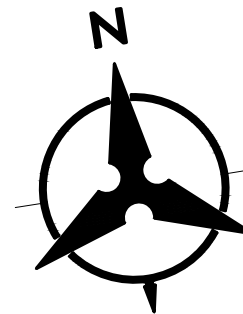
GRADING & DRAINAGE PLAN

GRADING KEYED NOTES

1. INSTALL CONCRETE VALLEY GUTTER PER COA STD. DWG. 2415A.
2. INSTALL 24" SIDEWALK CULVERT PER COA STD. DWG. 2236.
3. INSTALL CONCRETE RETAINING WALL PER ARCHITECTURAL/STRUCTURAL DETAIL; SEE ARCHITECTURAL/STRUCTURAL PLANS FOR FURTHER INFORMATION.

LEGEND

- PROPERTY LINE
- - - - - EXISTING CONTOURS
- 65.23 PROPOSED SPOT ELEVATION
TC=TOP OF CURB, FL=FLOW LINE
TS=TOP OF SIDEWALK, TA=TOP OF ASPHALT
EX=EXISTING, FG=FINISHED GRADE
TG=TOP OF GRATE, INV=INVERT
- S=2.0% PROPOSED DIRECTION OF FLOW
- ~~~~~ WATER BLOCK / RIDGE OR HIGH POINT
- - - - - PROPOSED INDEX CONTOURS
- - - - - PROPOSED INTER CONTOURS
- SD PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLET
- ▬ PROPOSED RETAINING WALL



10 5 0 10
1"=10'

Bohannon & Huston
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**DEKKER
PERICH
SABATINI**

ARCHITECTURE
DESIGN
INSPIRATION

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ALBUQUERQUE, NM 87106

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DRAWING NAME
**GRADING &
DRAINAGE PLAN**

SHEET NO

C-102