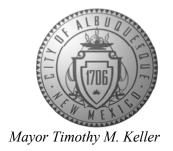
CITY OF ALBUQUERQUE

Planning Department Brennon Williams, Director



November 19, 2020

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

RE: Legacy 2 Multifamily 7800 Headline Blvd NE Grading and Drainage Plan Engineer's Stamp Date: 09/17/20

Hydrology File: D17D107

Dear Mr. Satches:

Albuquerque

NM 87103

www.cabq.gov

PO Box 1293 Based upon the information provided in your submittal received 09/24/2020, the Grading and Drainage Plan is approved for Building Permit.

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

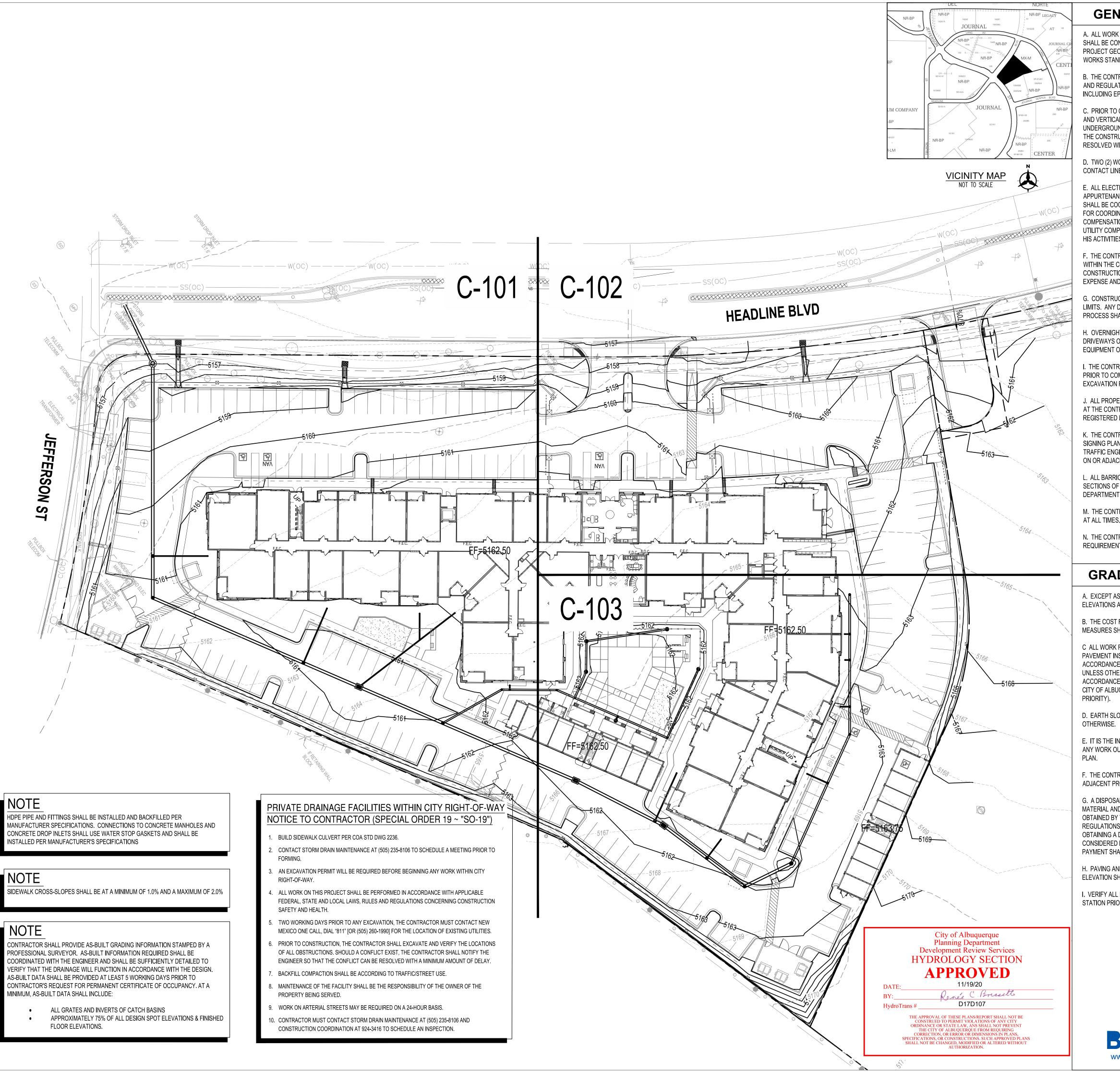
As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

The Payment in Lieu payment of \$36,464.00 must be paid prior to Permanent Release of Occupancy approval. Please use the attached City of Albuquerque Treasury Deposit form. Once the Owner paid the fee, please provide Hydrology with a copy of the receipt.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Renée C. Brissette

Renée C. Brissette, P.E. CFM Senior Engineer, Hydrology Planning Department



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 PUBLIC WORKS STANDARDS 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.

N. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING COMPLIANCE WITH NPDES PHASE 2 REQUIREMENTS.

GRADING NOTES

A. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.

B. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.

C 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, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY)

D. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN

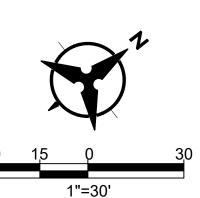
E. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN

F. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY.

G. 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.

H. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.

I. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.





ALLASO JOURNAL CENTER

7800 HEADLINE BOULEVARD N.E.
ALBUQUERQUE, NEW MEXICO, 87109



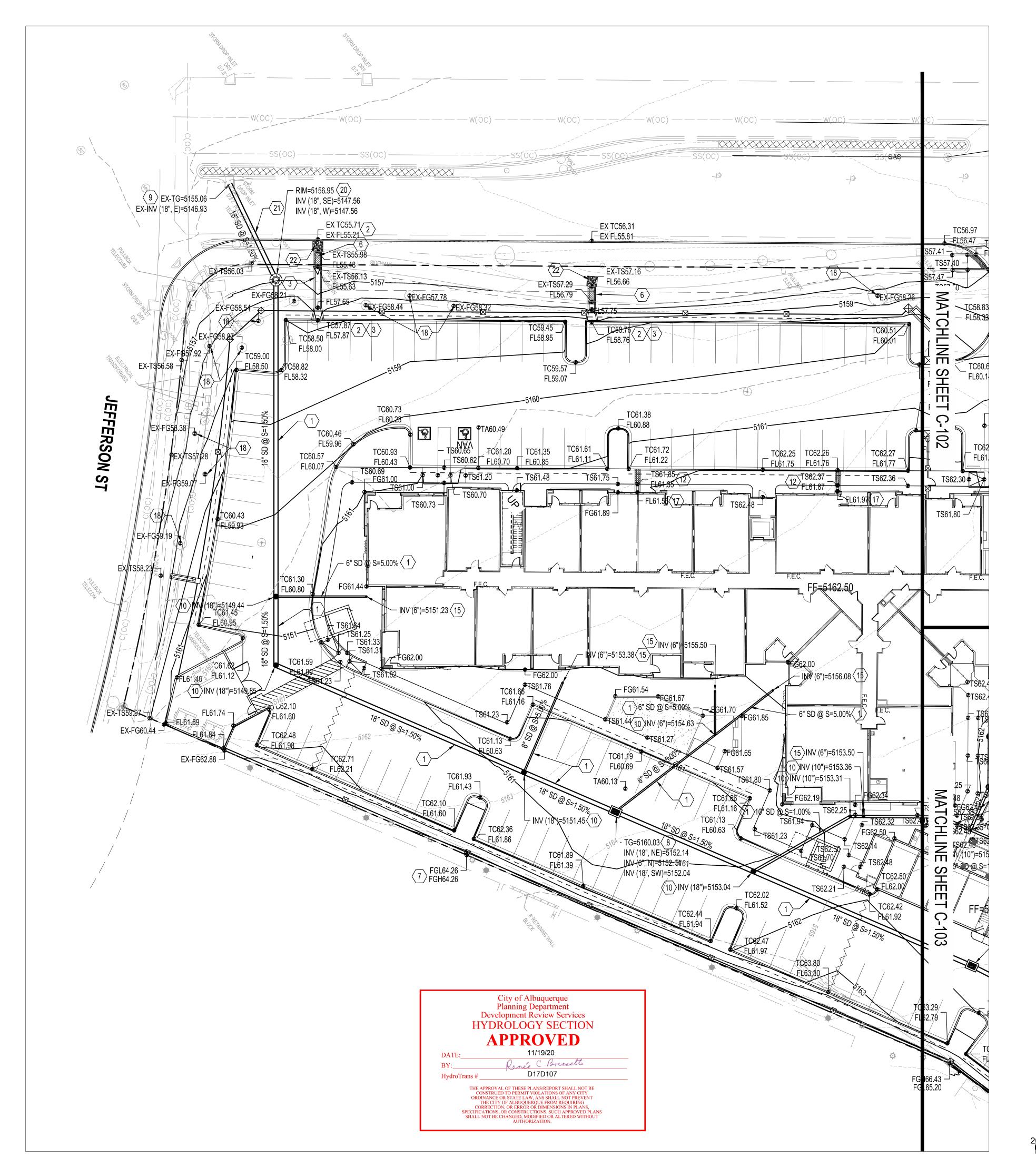
WorldHQ@ORBArch.com



DATE: SEPTEMBER,17, 2020 ORB #: **18-236**

C-100

OVERALL GRADING PLAN



□ GRADING KEYNOTES

- INSTALL HDPE (N12WT, OR APPROVED EQUAL) STORM DRAIN PIPE. SEE PLAN FOR SIZE.
- 2. INSTALL CONCRETE CURB OPENING PER DETAIL B, SHEET C-102.
- 3. INSTALL CONCRETE RIBBON CHANNEL PER DETAIL A, SHEET C-102.
- 4. WATER HARVESTING. LANDSCAPE DEPRESSION. ENSURE 6" MINIMUM DEPRESSION BELOW FLOWLINE.
- 5. MATCH EXISTING ELEVATION.
- 6. INSTALL 1 24" SIDEWALK CULVERT PER COA STD DWG 2236. EXTEND STEEL PLATE 12" OFFSET FROM BOTH SIDES OF SIDEWALK.
- 7. INSTALL RETAINING WALL. SEE STRUCTURAL PLAN FOR DETAILS.
- 8. INSTALL TYPE "D" INLET PER COA STD DWG 2206 (OR APPROVED EQUAL).
- 9. CONNECT TO EXISTING STORM DRAIN INLET.
- 10. INSTALL PRE-FABRICATED STORM DRAIN FITTING. SEE PLAN FOR SIZE.
- 11. REGRADE, INSTALL EARTHEN SWALE.
- 12. INSTALL 1-12" SIDEWALK CULVERT PER COA STD DWG 2236.
- 13. INSTALL 12" NYLOPLAST INLET (OR APPROVED EQUAL) WITH PEDESTRIAN RATED GRATE
- 14. INSTALL 12" NYLOPLAST INLET (OR APPROVED EQUAL) WITH DOME GRATE.
- 15. INSTALL STORM DRAIN TO WITHIN 5' OF BUILDING. CONNECT TO ROOF DRAIN OUTLET BELOW GRADE. PROVIDE FITTINGS AS NECESSARY. SEE PLUMBING PLAN FOR CONTINUATION. CONFIRM INVERTS, AND CONTACT ENGINEER WITH ANY DISCREPANCIES.
- 16. INSTALL STORM DRAIN TO WITHIN 5' OF BUILDING. CONNECT TO PATIO DRAINS BELOW GRADE. SEE PLUMBING PLAN FOR CONTINUATION. CONFIRM INVERTS, AND CONTACT ENGINEER WITH ANY DISCREPANCIES.
- 17. INSTALL 1' WIDE CONCRETE RIBBON CHANNEL. CENTER ON ROOF DRAIN OUTLET.
- 18. EXISTING TREE TO REMAIN. PROTECT IN PLACE.
- 19. INSTALL 24" NYLOPLAST INLET (OR APPROVED EQUAL) WITH DOME RATED GRATE.
- 20. INSTALL TYPE "E" STORM DRAIN MANHOLE PER COA STD DWG 2209.
- 21. INSTALL RCP STORM DRAIN PIPE. SEE PLAN FOR SIZE AND SLOPE.
- 22. INSTALL RIP RAP PAD PER DETAIL C, SHEET C-102.
- 23. INSTALL 2 24" SIDEWALK CULVERTS PER COA STD DWG 2236.

LEGEND

	PROPERTY LINE
	PROJECT LIMITS OF GRADING
	EXISTING INDEX CONTOUR
	EXISTING INTERMEDIATE CONTOUR
Ð	EXISTING GROUND SPOT ELEVATION
	PROPOSED INDEX CONTOUR
4924	PROPOSED INTERMEDIATE CONTOUR
•	PROPOSED GRADE SPOT ELEVATION FL=FLOW LINE TC=TOP OF CURB TS=TOP OF SIDEWALK
	DIRECTION OF FLOW

PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY NOTICE TO CONTRACTOR (SPECIAL ORDER 19 ~ "SO-19")

WATER BLOCK/GRADE BREAK

- BUILD SIDEWALK CULVERT PER COA STD DWG 2236.
- CONTACT STORM DRAIN MAINTENANCE AT (505) 235-8106 TO SCHEDULE A MEETING PRIOR TO
- 3. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- 4. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 5. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL, DIAL "811" [OR (505) 260-1990] FOR THE LOCATION OF EXISTING UTILITIES.
- 6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- 8. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
- 9. WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24-HOUR BASIS.
- 10. CONTRACTOR MUST CONTACT STORM DRAIN MAINTENANCE AT (505) 235-8106 AND CONSTRUCTION COORDINATION AT 924-3416 TO SCHEDULE AN INSPECTION.

C-101

GRADING PLAN

DATE: SEPTEMBER,17, 2020 ORB #: **18-236**

ALLASO

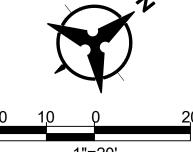
JOURNAL CENTER

7800 HEADLINE BOULEVARD N.E.

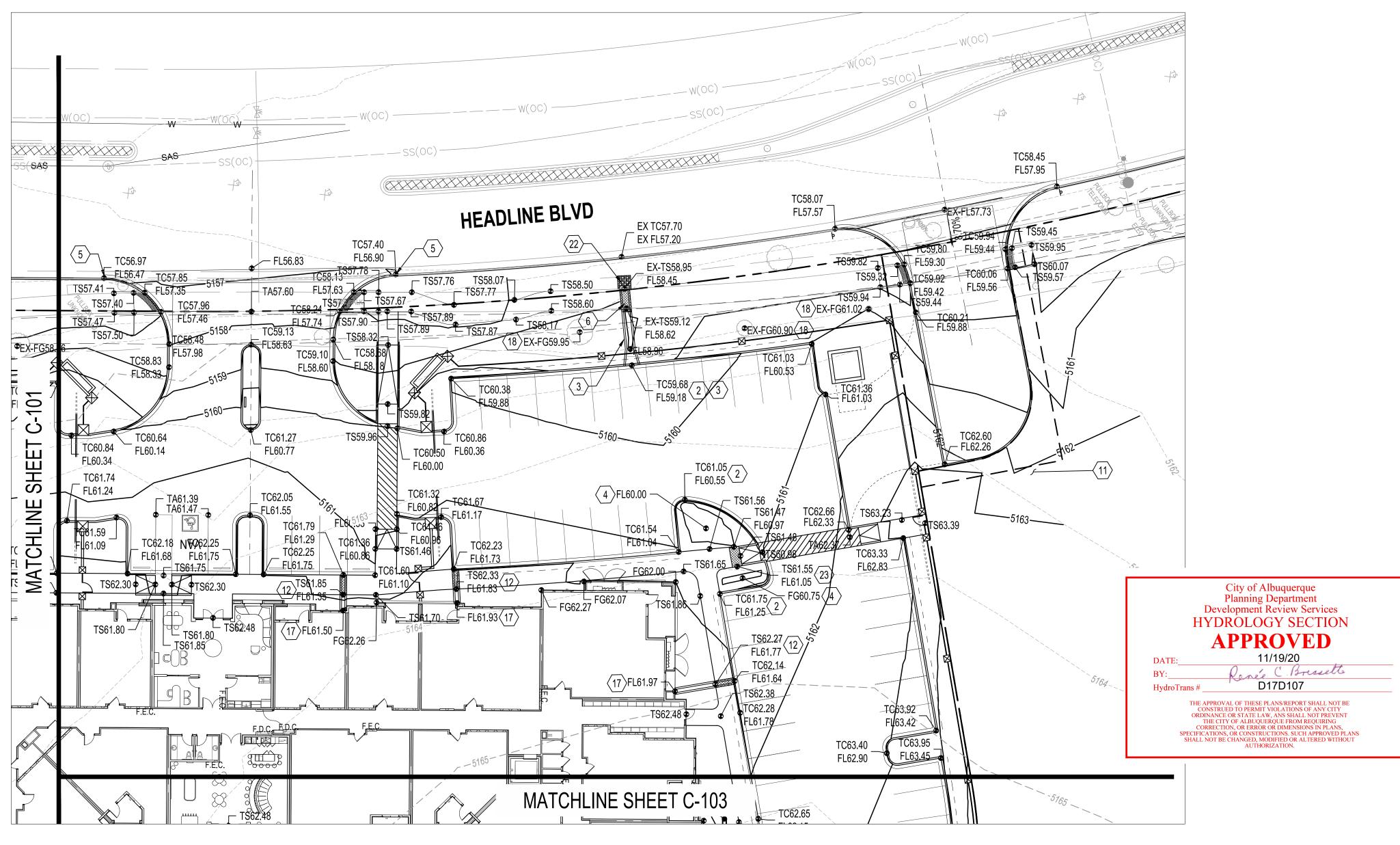
ALBUQUERQUE, NEW MEXICO, 87109

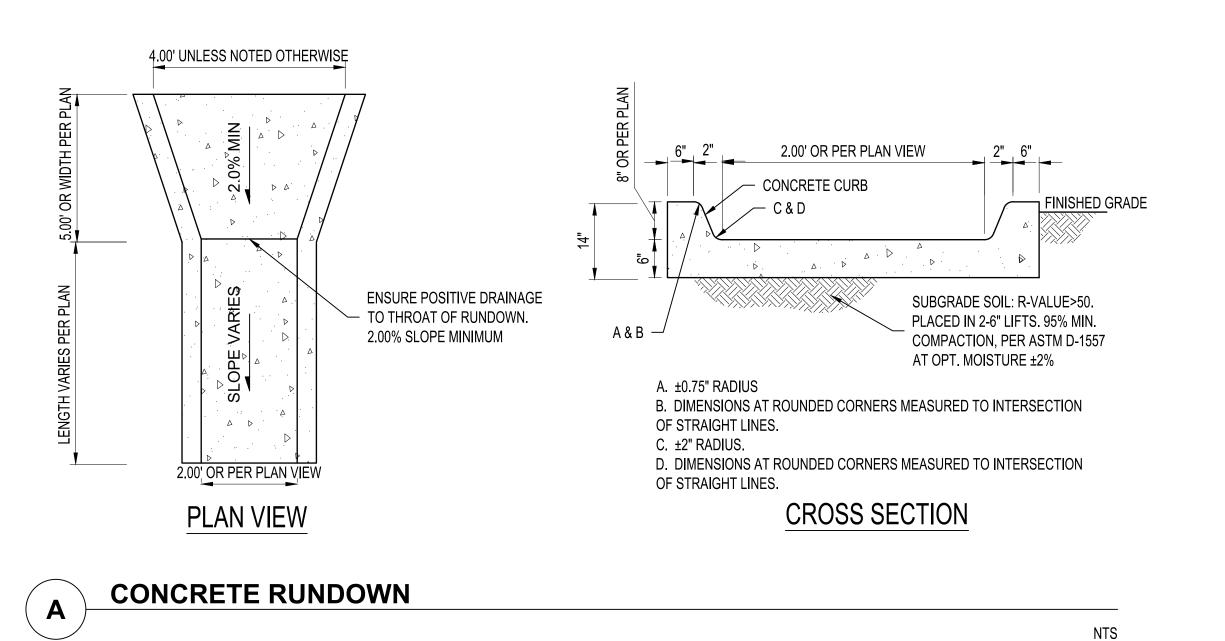
of Rich

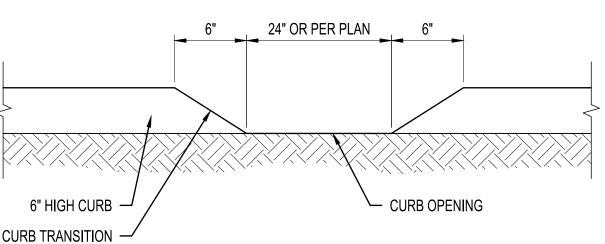
WorldHQ@ORBArch.com



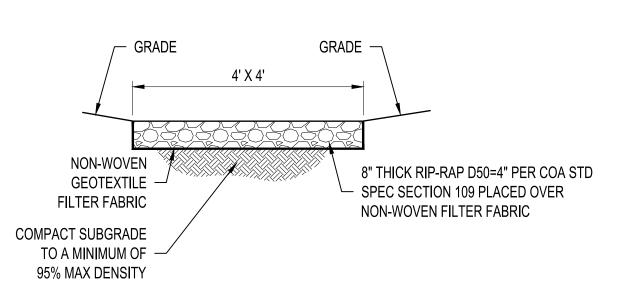




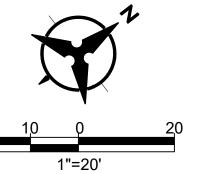












- INSTALL HDPE (N12WT, OR APPROVED EQUAL) STORM DRAIN PIPE. SEE PLAN FOR SIZE.
- 2. INSTALL CONCRETE CURB OPENING PER DETAIL B, SHEET C-102.
- 3. INSTALL CONCRETE RIBBON CHANNEL PER DETAIL A, SHEET C-102.
- 4. WATER HARVESTING. LANDSCAPE DEPRESSION. ENSURE 6" MINIMUM DEPRESSION BELOW FLOWLINE.
- 5. MATCH EXISTING ELEVATION.
- 6. INSTALL 1 24" SIDEWALK CULVERT PER COA STD DWG 2236. EXTEND STEEL PLATE 12" OFFSET FROM BOTH SIDES OF SIDEWALK.
- 7. INSTALL RETAINING WALL. SEE STRUCTURAL PLAN FOR DETAILS.
- 8. INSTALL TYPE "D" INLET PER COA STD DWG 2206 (OR APPROVED EQUAL).
- 9. CONNECT TO EXISTING STORM DRAIN INLET.
- 10. INSTALL PRE-FABRICATED STORM DRAIN FITTING. SEE PLAN FOR SIZE.
- 11. REGRADE, INSTALL EARTHEN SWALE.
- 12. INSTALL 1-12" SIDEWALK CULVERT PER COA STD DWG 2236.
- 13. INSTALL 12" NYLOPLAST INLET (OR APPROVED EQUAL) WITH PEDESTRIAN RATED GRATE
- 14. INSTALL 12" NYLOPLAST INLET (OR APPROVED EQUAL) WITH DOME GRATE.
- 15. INSTALL STORM DRAIN TO WITHIN 5' OF BUILDING. CONNECT TO ROOF DRAIN OUTLET BELOW GRADE. PROVIDE FITTINGS AS NECESSARY. SEE PLUMBING PLAN FOR CONTINUATION. CONFIRM INVERTS, AND CONTACT ENGINEER WITH ANY DISCREPANCIES.
- 16. INSTALL STORM DRAIN TO WITHIN 5' OF BUILDING. CONNECT TO PATIO DRAINS BELOW GRADE. SEE PLUMBING PLAN FOR CONTINUATION. CONFIRM INVERTS, AND CONTACT ENGINEER WITH ANY DISCREPANCIES.
- 17. INSTALL 1' WIDE CONCRETE RIBBON CHANNEL. CENTER ON ROOF DRAIN OUTLET.
- 18. EXISTING TREE TO REMAIN. PROTECT IN PLACE.
- 19. INSTALL 24" NYLOPLAST INLET (OR APPROVED EQUAL) WITH DOME RATED GRATE.
- 20. INSTALL TYPE "E" STORM DRAIN MANHOLE PER COA STD DWG 2209.
- 21. INSTALL RCP STORM DRAIN PIPE. SEE PLAN FOR SIZE AND SLOPE.
- 22. INSTALL RIP RAP PAD PER DETAIL C, SHEET C-102.
- 23. INSTALL 2 24" SIDEWALK CULVERTS PER COA STD DWG 2236.

LEGEND

	PROPERTY LINE
	PROJECT LIMITS OF GRADING
	EXISTING INDEX CONTOUR
	EXISTING INTERMEDIATE CONTOUR
#	EXISTING GROUND SPOT ELEVATION
4925	PROPOSED INDEX CONTOUR
4924	PROPOSED INTERMEDIATE CONTOUR
•	PROPOSED GRADE SPOT ELEVATION FL=FLOW LINE TC=TOP OF CURB TS=TOP OF SIDEWALK
	DIRECTION OF FLOW
─	WATER BLOCK/GRADE BREAK

PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY NOTICE TO CONTRACTOR (SPECIAL ORDER 19 ~ "SO-19")

- BUILD SIDEWALK CULVERT PER COA STD DWG 2236.
- CONTACT STORM DRAIN MAINTENANCE AT (505) 235-8106 TO SCHEDULE A MEETING PRIOR TO
- AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL, DIAL "811" [OR (505) 260-1990] FOR THE LOCATION OF EXISTING UTILITIES.
- 6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- 8. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
- 9. WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24-HOUR BASIS.
- 10. CONTRACTOR MUST CONTACT STORM DRAIN MAINTENANCE AT (505) 235-8106 AND CONSTRUCTION COORDINATION AT 924-3416 TO SCHEDULE AN INSPECTION.

DATE: SEPTEMBER,17, 2020 ORB #: **18-236**

ALLASO

7800 HEADLINE BOULEVARD N.E.

ALBUQUERQUE, NEW MEXICO, 87109

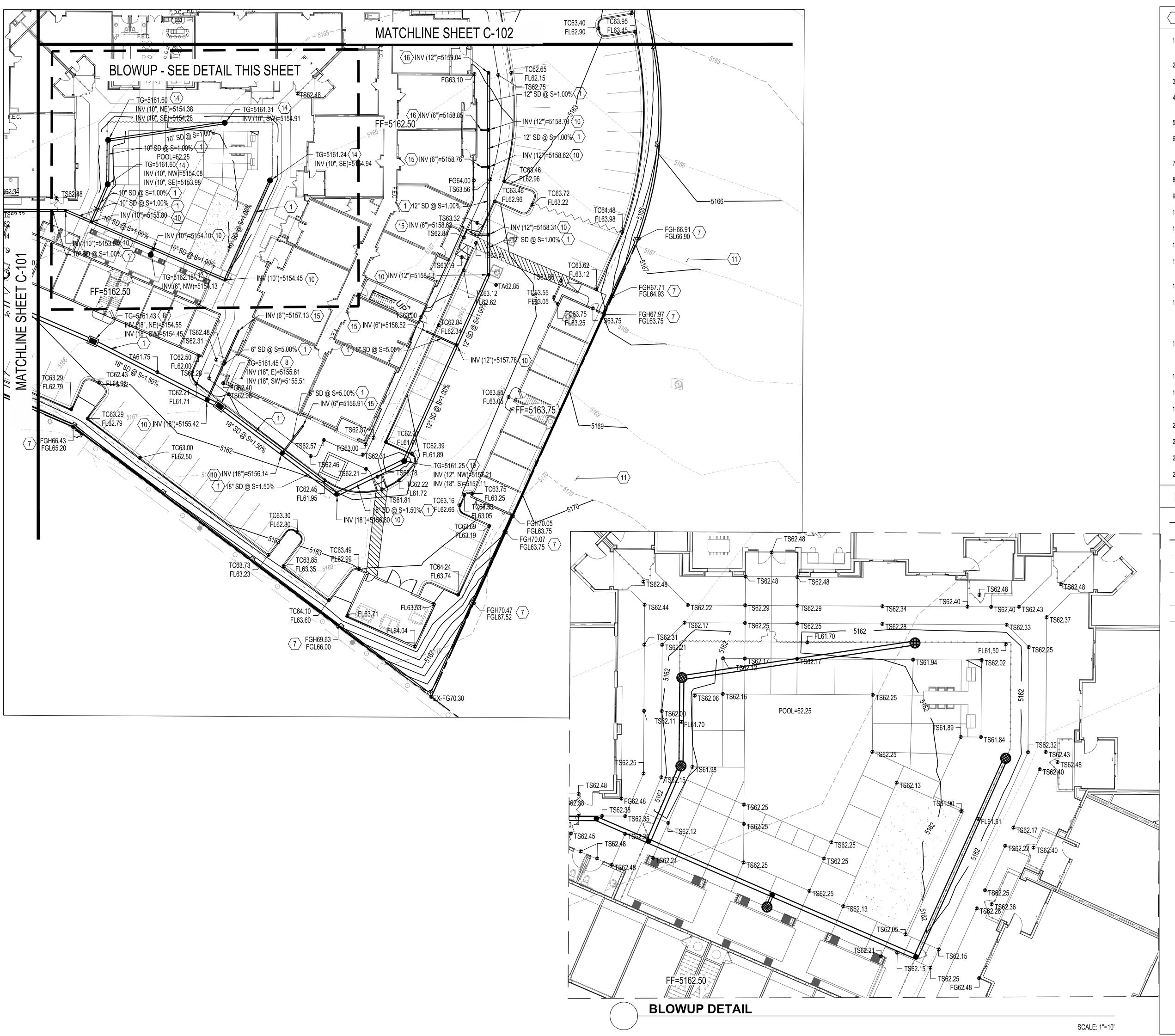
of Rich

WorldHQ@ORBArch.com

C-102

GRADING PLAN



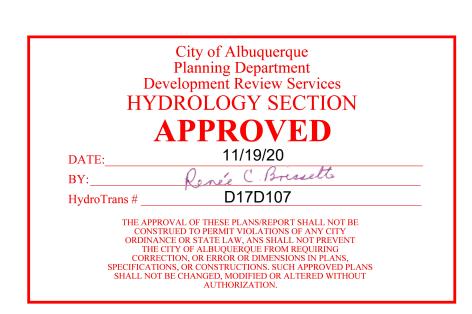


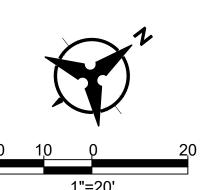
│ ○ GRADING KEYNOTES

- 1. INSTALL HDPE (N12WT, OR APPROVED EQUAL) STORM DRAIN PIPE. SEE PLAN FOR SIZE.
- 2. INSTALL CONCRETE CURB OPENING PER DETAIL B, SHEET C-102.
- 3. INSTALL CONCRETE RIBBON CHANNEL PER DETAIL A, SHEET C-102.
- 4. WATER HARVESTING. LANDSCAPE DEPRESSION. ENSURE 6" MINIMUM DEPRESSION BELOW FLOWLINE.
- 5. MATCH EXISTING ELEVATION.
- 6. INSTALL 1 24" SIDEWALK CULVERT PER COA STD DWG 2236. EXTEND STEEL PLATE 12" OFFSET FROM BOTH SIDES OF SIDEWALK.
- 7. INSTALL RETAINING WALL. SEE STRUCTURAL PLAN FOR DETAILS.
- 8. INSTALL TYPE "D" INLET PER COA STD DWG 2206 (OR APPROVED EQUAL).
- 9. CONNECT TO EXISTING STORM DRAIN INLET.
- 10. INSTALL PRE-FABRICATED STORM DRAIN FITTING. SEE PLAN FOR SIZE.
- 11. REGRADE, INSTALL EARTHEN SWALE.
- 12. INSTALL 1-12" SIDEWALK CULVERT PER COA STD DWG 2236.
- 13. INSTALL 12" NYLOPLAST INLET (OR APPROVED EQUAL) WITH PEDESTRIAN RATED GRATE
- 14. INSTALL 12" NYLOPLAST INLET (OR APPROVED EQUAL) WITH DOME GRATE.
- 15. INSTALL STORM DRAIN TO WITHIN 5' OF BUILDING. CONNECT TO ROOF DRAIN OUTLET BELOW GRADE. PROVIDE FITTINGS AS NECESSARY. SEE PLUMBING PLAN FOR CONTINUATION. CONFIRM INVERTS, AND CONTACT ENGINEER WITH ANY DISCREPANCIES.
- 16. INSTALL STORM DRAIN TO WITHIN 5' OF BUILDING. CONNECT TO PATIO DRAINS BELOW GRADE. SEE PLUMBING PLAN FOR CONTINUATION. CONFIRM INVERTS, AND CONTACT ENGINEER WITH ANY DISCREPANCIES.
- 17. INSTALL 1' WIDE CONCRETE RIBBON CHANNEL. CENTER ON ROOF DRAIN OUTLET.
- 18. EXISTING TREE TO REMAIN. PROTECT IN PLACE.
- 19. INSTALL 24" NYLOPLAST INLET (OR APPROVED EQUAL) WITH DOME RATED GRATE.
- 20. INSTALL TYPE "E" STORM DRAIN MANHOLE PER COA STD DWG 2209.
- 21. INSTALL RCP STORM DRAIN PIPE. SEE PLAN FOR SIZE AND SLOPE.
- 22. INSTALL RIP RAP PAD PER DETAIL C, SHEET C-102.
- 23. INSTALL 2 24" SIDEWALK CULVERTS PER COA STD DWG 2236.

LEGEND

		PROPERTY LINE
\exists		PROJECT LIMITS OF GRADING
		EXISTING INDEX CONTOUR
		EXISTING INTERMEDIATE CONTOUR
	\oplus	EXISTING GROUND SPOT ELEVATION
	4925	PROPOSED INDEX CONTOUR
	4924	PROPOSED INTERMEDIATE CONTOUR
	•	PROPOSED GRADE SPOT ELEVATION FL=FLOW LINE TC=TOP OF CURB TS=TOP OF SIDEWALK
		DIRECTION OF FLOW
	→	WATER BLOCK/GRADE BREAK



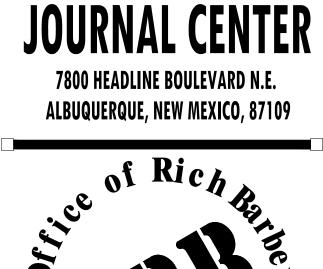


Bohannan A Huston
www.bhinc.com 800.877.5332

DATE: SEPTEMBER,17, 2020 ORB #: **18-236**

C-103

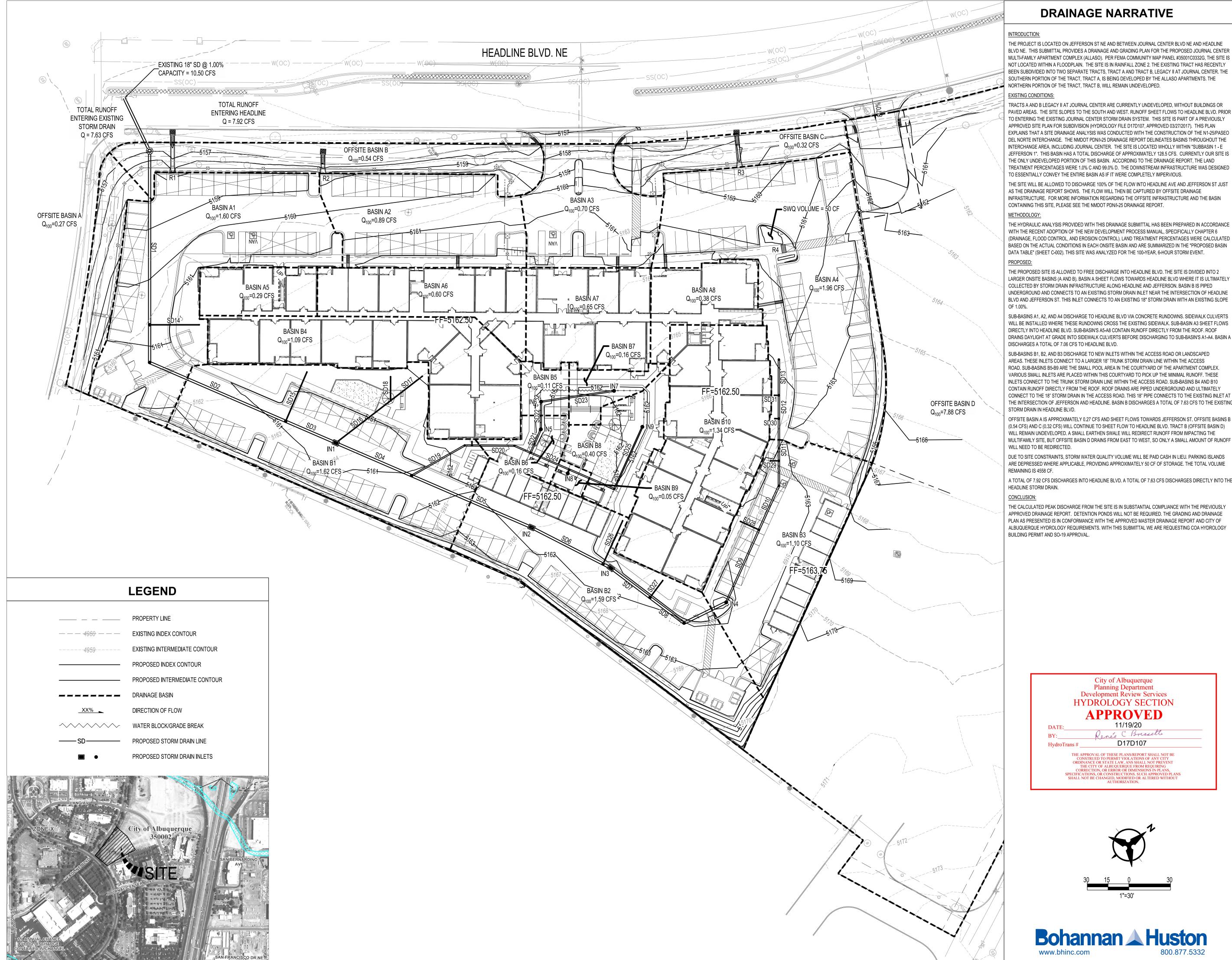
GRADING PLAN



ALLASO

WorldHQ@ORBArch.com





DRAINAGE NARRATIVE

INTRODUCTION:

THE PROJECT IS LOCATED ON JEFFERSON ST NE AND BETWEEN JOURNAL CENTER BLVD NE AND HEADLINE BLVD NE. THIS SUBMITTAL PROVIDES A DRAINAGE AND GRADING PLAN FOR THE PROPOSED JOURNAL CENTER MULTI-FAMILY APARTMENT COMPLEX (ALLASO). PER FEMA COMMUNITY MAP PANEL #35001C0332G, THE SITE IS NOT LOCATED WITHIN A FLOODPLAIN. THE SITE IS IN RAINFALL ZONE 2. THE EXISTING TRACT HAS RECENTLY BEEN SUBDIVIDED INTO TWO SEPARATE TRACTS, TRACT A AND TRACT B, LEGACY II AT JOURNAL CENTER. THE SOUTHERN PORTION OF THE TRACT, TRACT A, IS BEING DEVELOPED BY THE ALLASO APARTMENTS. THE NORTHERN PORTION OF THE TRACT, TRACT B, WILL REMAIN UNDEVELOPED.

TRACTS A AND B LEGACY II AT JOURNAL CENTER ARE CURRENTLY UNDEVELOPED, WITHOUT BUILDINGS OR PAVED AREAS. THE SITE SLOPES TO THE SOUTH AND WEST. RUNOFF SHEET FLOWS TO HEADLINE BLVD. PRIOR TO ENTERING THE EXISTING JOURNAL CENTER STORM DRAIN SYSTEM. THIS SITE IS PART OF A PREVIOUSLY APPROVED SITE PLAN FOR SUBDIVISION (HYDROLOGY FILE D17D107, APPROVED 03/27/2017). THIS PLAN EXPLAINS THAT A SITE DRAINAGE ANALYSIS WAS CONDUCTED WITH THE CONSTRUCTION OF THE N1-25/PASEO INTERCHANGE AREA, INCLUDING JOURNAL CENTER. THE SITE IS LOCATED WHOLLY WITHIN "SUBBASIN 1 - E JEFFERSON 1". THIS BASIN HAS A TOTAL DISCHARGE OF APPROXIMATELY 128.5 CFS. CURRENTLY OUR SITE IS THE ONLY UNDEVELOPED PORTION OF THIS BASIN. ACCORDING TO THE DRAINAGE REPORT, THE LAND TREATMENT PERCENTAGES WERE 1.0% C AND 99.0% D. THE DOWNSTREAM INFRASTRUCTURE WAS DESIGNED TO ESSENTIALLY CONVEY THE ENTIRE BASIN AS IF IT WERE COMPLETELY IMPERVIOUS.

THE SITE WILL BE ALLOWED TO DISCHARGE 100% OF THE FLOW INTO HEADLINE AVE AND JEFFERSON ST JUST AS THE DRAINAGE REPORT SHOWS. THE FLOW WILL THEN BE CAPTURED BY OFFSITE DRAINAGE INFRASTRUCTURE. FOR MORE INFORMATION REGARDING THE OFFSITE INFRASTRUCTURE AND THE BASIN CONTAINING THIS SITE, PLEASE SEE THE NMDOT PDN/I-25 DRAINAGE REPORT.

THE HYDRAULIC ANALYSIS PROVIDED WITH THIS DRAINAGE SUBMITTAL HAS BEEN PREPARED IN ACCORDANCE WITH THE RECENT ADOPTION OF THE NEW DEVELOPMENT PROCESS MANUAL, SPECIFICALLY CHAPTER 6 (DRAINAGE, FLOOD CONTROL, AND EROSION CONTROL). LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE ACTUAL CONDITIONS IN EACH ONSITE BASIN AND ARE SUMMARIZED IN THE "PROPOSED BASIN DATA TABLE" (SHEET C-002). THIS SITE WAS ANALYZED FOR THE 100-YEAR, 6-HOUR STORM EVENT.

THE PROPOSED SITE IS ALLOWED TO FREE DISCHARGE INTO HEADLINE BLVD. THE SITE IS DIVIDED INTO 2 LARGER ONSITE BASINS (A AND B). BASIN A SHEET FLOWS TOWARDS HEADLINE BLVD WHERE IT IS ULTIMATELY COLLECTED BY STORM DRAIN INFRASTRUCTURE ALONG HEADLINE AND JEFFERSON. BASIN B IS PIPED UNDERGROUND AND CONNECTS TO AN EXISTING STORM DRAIN INLET NEAR THE INTERSECTION OF HEADLINE BLVD AND JEFFERSON ST. THIS INLET CONNECTS TO AN EXISTING 18" STORM DRAIN WITH AN EXISTING SLOPE

SUB-BASINS A1, A2, AND A4 DISCHARGE TO HEADLINE BLVD VIA CONCRETE RUNDOWNS. SIDEWALK CULVERTS WILL BE INSTALLED WHERE THESE RUNDOWNS CROSS THE EXISTING SIDEWALK. SUB-BASIN A3 SHEET FLOWS DIRECTLY INTO HEADLINE BLVD. SUB-BASIN'S A5-A8 CONTAIN RUNOFF DIRECTLY FROM THE ROOF. ROOF DRAINS DAYLIGHT AT GRADE INTO SIDEWALK CULVERTS BEFORE DISCHARGING TO SUB-BASIN'S A1-A4. BASIN A DISCHARGES A TOTAL OF 7.06 CFS TO HEADLINE BLVD.

SUB-BASINS B1, B2, AND B3 DISCHARGE TO NEW INLETS WITHIN THE ACCESS ROAD OR LANDSCAPED INLETS CONNECT TO THE TRUNK STORM DRAIN LINE WITHIN THE ACCESS ROAD, SUB-BASINS B4 AND B10 CONTAIN RUNOFF DIRECTLY FROM THE ROOF. ROOF DRAINS ARE PIPED UNDERGROUND AND ULTIMATELY CONNECT TO THE 18" STORM DRAIN IN THE ACCESS ROAD. THIS 18" PIPE CONNECTS TO THE EXISTING INLET AT THE INTERSECTION OF JEFFERSON AND HEADLINE. BASIN B DISCHARGES A TOTAL OF 7.63 CFS TO THE EXISTING STORM DRAIN IN HEADLINE BLVD.

(0.54 CFS) AND C (0.32 CFS) WILL CONTINUE TO SHEET FLOW TO HEADLINE BLVD. TRACT B (OFFSITE BASIN D) WILL REMAIN UNDEVELOPED. A SMALL EARTHEN SWALE WILL REDIRECT RUNOFF FROM IMPACTING THE MULTIFAMILY SITE, BUT OFFSITE BASIN D DRAINS FROM EAST TO WEST, SO ONLY A SMALL AMOUNT OF RUNOFF WILL NEED TO BE REDIRECTED.

DUE TO SITE CONSTRAINTS, STORM WATER QUALITY VOLUME WILL BE PAID CASH IN LIEU. PARKING ISLANDS ARE DEPRESSED WHERE APPLICABLE, PROVIDING APPROXIMATELY 50 CF OF STORAGE. THE TOTAL VOLUME REMAINING IS 4558 CF.

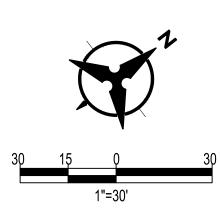
A TOTAL OF 7.92 CFS DISCHARGES INTO HEADLINE BLVD. A TOTAL OF 7.63 CFS DISCHARGES DIRECTLY INTO THE HEADLINE STORM DRAIN.

CONCLUSION:

THE CALCULATED PEAK DISCHARGE FROM THE SITE IS IN SUBSTANTIAL COMPLIANCE WITH THE PREVIOUSLY APPROVED DRAINAGE REPORT. DETENTION PONDS WILL NOT BE REQUIRED. THE GRADING AND DRAINAGE PLAN AS PRESENTED IS IN CONFORMANCE WITH THE APPROVED MASTER DRAINAGE REPORT AND CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS. WITH THIS SUBMITTAL WE ARE REQUESTING COA HYDROLOGY BUILDING PERMIT AND SO-19 APPROVAL.

> City of Albuquerque Planning Department Development Review Services HYDROLOGY SECTION **APPROVED** 11/19/20 Renée C Brissette D17D107 HydroTrans #

ORDINANCE OR STATE LAW, ANS SHALL NOT PREVENT
THE CITY OF ALBUQUERQUE FROM REQUIRING
CORRECTION, OR ERROR OR DIMENSIONS IN PLANS,
SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS
SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT
AUTHORIZATION.





ALLASO JOURNAL CENTER 7800 HEADLINE BOULEVARD N.E.

ALBUQUERQUE, NEW MEXICO, 87109

WorldHQ@ORBArch.com



DATE: SEPTEMBER,17, 2020 ORB #: **18-236**

DRAINAGE MANAGEMENT PLAN

						JOUR	NAL CENT	ER LOFTS			-		
					Propo	sed Devel	oped Conditi	ons Basin Da	ıta Table				
			•	This table is	s based on t	ne DPM Sec	tion 22.2, Zone:	2					
Basin	Area	Area	Land	Land Treatment P		Percentages		Q(100yr)	V(100yr)	V _(100yr-6hr)	V _(100yr-24hr)	Weighted	FIRST FLUSH
ID	(SQ. FT)	(AC.)	Α	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)	Curve#	(CF)
ONS	ITE BASINS												
BASIN A1	16759	0.38	0.0%	0.0%	15.0%	85.0%	4.15	1.60	2.14	2982	3338	96	499
BASIN A2	9105	0.21	0.0%	0.0%	5.0%	95.0%	4.28	0.89	2.27	1719	1935	97	303
BASIN A3	7095	0.16	0.0%	0.0%	5.0%	95.0%	4.28	0.70	2.27	1339	1508	97	236
BASIN A4	21250	0.49	0.0%	0.0%	25.0%	75.0%	4.02	1.96	2.01	3551	3949	95	558
BASIN A5	2952	0.07	0.0%	0.0%	0.0%	100.0%	4.34	0.29	2.33	573	647	98	103
BASIN A6	5981	0.14	0.0%	0.0%	0.0%	100.0%	4.34	0.60	2.33	1161	1311	98	209
BASIN A7	6489	0.15	0.0%	0.0%	0.0%	100.0%	4.34	0.65	2.33	1260	1422	98	227
BASIN A8	3828	0.09	0.0%	0.0%	0.0%	100.0%	4.34	0.38	2.33	743	839	98	134
BASIN B1	18201	0.42	0.0%	0.0%	35.0%	65.0%	3.89	1.62	1.88	2844	3140	94	414
BASIN B2	16998	0.39	0.0%	0.0%	20.0%	80.0%	4.08	1.59	2.07	2932	3272	96	476
BASIN B3	11447	0.26	0.0%	0.0%	12.0%	88.0%	4.19	1.10	2.17	2074	2326	97	353
BASIN B4	10990	0.25	0.0%	0.0%	0.0%	100.0%	4.34	1.09	2.33	2134	2409	98	385
BASIN B5	1259	0.03	0.0%	0.0%	40.0%	60.0%	3.82	0.11	1.81	190	209	93	26
BASIN B6	1864	0.04	0.0%	0.0%	40.0%	60.0%	3.82	0.16	1.81	281	309	93	39
BASIN B7	1727	0.04	0.0%	0.0%	25.0%	75.0%	4.02	0.16	2.01	289	321	95	45
BASIN B8	4332	0.10	0.0%	0.0%	25.0%	75.0%	4.02	0.40	2.01	724	805	95	114
BASIN B9	467	0.01	0.0%	0.0%	0.0%	100.0%	4.34	0.05	2.33	91	102	98	16
BASIN B10	13468	0.31	0.0%	0.0%	0.0%	100.0%	4.34	1.34	2.33	2615	2952	98	471
TOTAL	154212	3.54	=	-	-	-	-	14.70	-	27501	30792		4608
OFFS	ITE BASINS	3											
BASIN A	3638	0.08	0.0%	0.0%	90.0%	10.0%	3.18	0.27	1.16	352	361	87	N/A
BASIN B	7351	0.17	0.0%	0.0%	90.0%	10.0%	3.18	0.54	1.16	711	729	87	N/A
BASIN C	4426	0.10	0.0%	0.0%	90.0%	10.0%	3.18	0.32	1.16	428	439	87	N/A
BASIN D	112593	2.58	0.0%	0.0%	100.0%	0.0%	3.05	7.88	1.03	9664	9664	86	N/A

9.01

INLET TABLE									
Inlet	1 1 1 - 2	Basin	Actual	Avail	Capacity ³				
#	Inlet Type ²		Flow (cfs)	Head (ft)	(cfs)				
IN1	1-SGL COA TYPE D	B1	1.62	1.25	10.58				
IN2	1-SGL COA TYPE D	1/2 -B2	0.80	0.30	1.85				
IN3	1-SGL COA TYPE D	1/2 -B2	0.80	0.30	1.85				
IN4	1 - 24" NYLOPLAST (DOME GRT)	В3	1.10	0.50	3.10				
IN5	1 - 12" NYLOPLAST (DOME GRT)	B6	0.16	0.40	0.75				
IN6	1 - 12" NYLOPLAST (DOME GRT)	B5	0.11	0.40	0.75				
IN7	1 - 12" NYLOPLAST (DOME GRT)	B7	0.16	0.50	0.80				
IN8	1 - 12" NYLOPLAST (PED GRT)	B9	0.05	0.10	0.20				
IN9	1 - 12" NYLOPLAST (DOME GRT)	B8	0.40	0.50	0.80				

TOTAL 128008 2.94

2. INLETS PLACED IN SUMP CONDITION AND CAPACITIES BASED ON LESSER OF ORIFICE AND WIER EQUA 3. INLETS INCLUDE 50% CLOGGING FACTOR

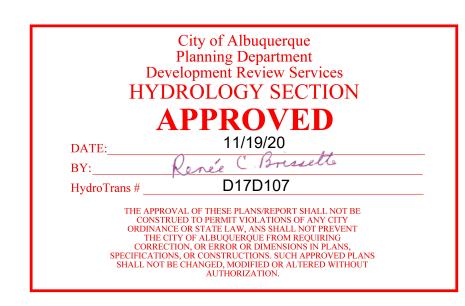
STORM DRAIN PIPE TABLE									
INLET/SD/BASIN	Size	Slope	Capacity*	ACTUAL FLOW cfs					
SD2, SD14		1.50%		7.83					
				7.61					
<u> </u>				7.39					
	<u> </u>			5.32					
				4.23					
	+			3.43					
				2.44					
<u></u>	18	1.50%	12.87	2.25					
SD10, SD28	12	1.00%	3.56	1.15					
· · · · · · · · · · · · · · · · · · ·	12	1.00%	3.56	0.96					
	12	1.00%	3.56	0.58					
	12		3.56	0.38					
1/7 - B10	12	1.00%	3.56	0.19					
1/5 - B4	6	5.00%	1.25	0.22					
				0.22					
				0.44					
			ļ	0.22					
	6			0.22					
	10		2.19	1.10					
	10	1.00%	2.19	0.88					
	10	1.00%	2.19	0.43					
	10	1.00%	2.19	0.27					
IN7	10	1.00%	2.19	0.16					
SD25, IN8	10	1.00%	2.19	0.45					
IN9	10	1.00%	2.19	0.40					
1/7 - B10	6	5.00%	1.25	0.19					
1/7 - B10	6	5.00%	1.25	0.19					
1/7 - B10	6	5.00%	1.25	0.19					
1/7 - B10	6	5.00%	1.25	0.19					
1/7 - B10	6	5.00%	1.25	0.19					
1/7 - B10	6	5.00%	1.25	0.19					
	SD2, SD14 SD3, SD15 SD4, SD16, IN1 SD5, SD19 SD6, IN2 SD7, SD26, IN3 SD8, SD27 SD9, IN4 SD10, SD28 SD11, SD29 SD12, SD30 SD13, SD31 1/7 - B10 1/5 - B4 SD17, SD18 1/5 - B4 SD20, 1/5 - B4 SD20, 1/5 - B4 SD21, SD24 SD22, IN5 SD23, IN6 IN7 SD25, IN8 IN9 1/7 - B10	INLET/SD/BASIN Size in.	SIZE SIOPE In. SD2, SD14 18 1.50% SD3, SD15 18 1.50% SD4, SD16, IN1 18 1.50% SD5, SD19 18 1.50% SD6, IN2 18 1.50% SD7, SD26, IN3 18 1.50% SD8, SD27 18 1.50% SD8, SD27 18 1.50% SD9, IN4 18 1.50% SD10, SD28 12 1.00% SD11, SD29 12 1.00% SD12, SD30 12 1.00% SD13, SD31 12 1.00% SD13, SD31 12 1.00% 1/7 - B10 12 1.00% SD17, SD18 6 5.00% SD17, SD18 6 5.00% SD21, SD24 10 1.00% SD20, 1/5 - B4 6 5.00% SD21, SD24 10 1.00% SD22, IN5 10 1.00% SD23, IN6 10 1.00% SD25, IN8 10 1.00% SD25, IN8 10 1.00% SD25, IN8 10 1.00% SD25, IN8 10 1.00% 1/7 - B10 6 5.00% 1/7 - B10 1/7 - B10 6 5.00% 1/7 - B10 1/7 - B10 1/7 - B10 1/7 - B10	INLET/SD/BASIN Size in. Capacity* cfs					

11154 11193

	CONCRETE RUNDOWN TABLE											
Rundown		Rundown	Actual	Capacity	Weir	Channel	Channel	Minimum	Capacity			
#	Basin ID	Туре	Flow	Weir (CFS)	Width ft	Width ft	Height ft	Slope	Mannings (CFS)			
R1	A1, A5	Rectang	1.89	3.75	4.00	2.00	0.50	2.00%	7.77			
R2	A2, A6	Rectang	1.49	3.75	4.00	2.00	0.50	2.00%	7.77			
R3	A4, A8	Rectang	2.34	3.75	4.00	2.00	0.50	2.00%	7.77			
R4	1/2 - A4, 1/2 - A8	Rectang	1.17	3.75	4.00	4.00	0.50	2.00%	17.55			

Weir Eq: Q=2.65L(h^1.5) - **

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





JOURNAL CENTER
7800 HEADLINE BOULEVARD N.E.

ALBUQUERQUE, NEW MEXICO, 87109

Sing of Rich Received

WorldHQ@ORBArch.com



N/A

DATE: SEPTEMBER,17, 2020 ORB #: **18-236**

C-002

DRAINAGE MANAGEMENT PLAN