CITY OF ALBUQUERQUE

Planning Department Brennon Williams, Director



Mayor Timothy M. Keller

April 14, 2021

John Arthur Blessen, P.E. J Arthur Blessen Engineering 2429 Zena Lona NE Albuquerque New Mexico 87112

RE: 7200 Bluewater Rd. NW Revised Grading and Drainage Plan Engineer's Stamp Date: 04/05/21 Hydrology File: K10D060

Dear Mr. Blessen:

PO Box 1293	Based upon the information provided in your submittal received 04/06/2021, the Revised Grading and Drainage Plan is approved for Building Permit.
Albuquerque	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.
NM 87103 www.cabq.gov	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.
	Also, please provide the Drainage Covenant for the proposed stormwater quality ponds per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. There is a recording fee (\$25, payable to Bernalillo County). Please contact Charlotte LaBadie (<u>clabadie@cabq.gov</u> , 924-3996). Due to COVID-19, please follow the instructions:
	Either email a pdf copy of the executed drainage covenant and the exhibit to <u>clabadie@cabq.gov</u> or either mail or drop off the originals. Please mail the \$25.00 recording fee check made payable to Bernalillo County to:
	Planning Dept./DRC Attn: Charlotte LaBadie 600 2nd St. NW, Ste. 400 ABQ, NM, 87102

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If you drop off the originals, there is a drop box outside the building labeled DRC. Once approved and recorded, Charlotte will email you a copy.

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

Sincerely,

Renée C. Brissette

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

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



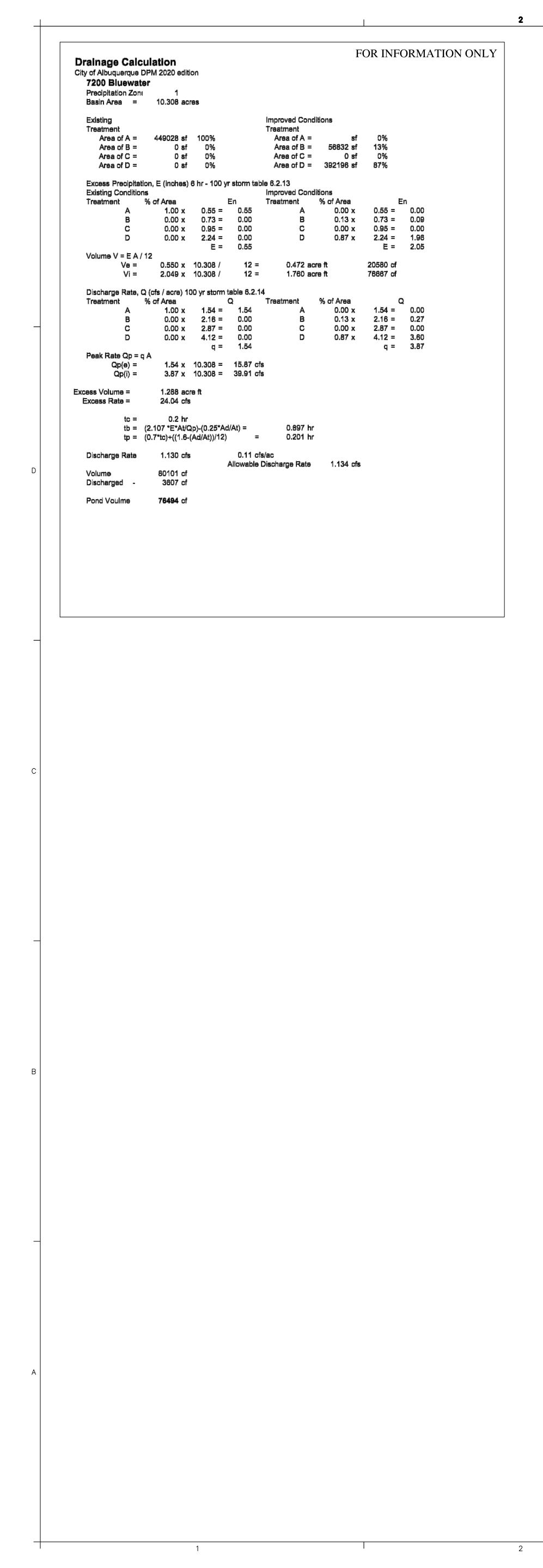
City of Albuquerque

Planning Department Development & Building Services Division DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2018)

Project Title: 7200 Bluewater	_Building	Permit #: <u>BP-2020-40165</u>	Hydrology File #: K100D060		
DRB#: PR-2018-001681 (ST-2018-00200)					
Legal Description: Parcel C-3 Atrisco Business					
City Address: 7200 Bluewater NW					
Applicant: J Arthur Blessen Engineering			Contact: Arthur Blessen		
Address: 2429 Zena Lona, Albuquerque New Mexi	co 87112				
Phone#:			E-mail: jab-engineering@hotmail.com		
Other Contact: Brunacini Developement			Contact: Angelo Burnacini		
Address: 7550 Meridian Place NW, Albuquerque N					
Phone#: 505-833-2928			_E-mail:		
TYPE OF DEVELOPMENT: PLAT (#	of lots)	RESIDENCE DR	B SITE ADMIN SITE		
IS THIS A RESUBMITTAL? <u>×</u> Yes	No				
			NACE		
DEPARTMENT:TRAFFIC/TRANSPORT	IATION	HIDROLOGI/DRAI	NAGE		
Check all that Apply:		TYPE OF APPROV	AL/ACCEPTANCE SOUGHT:		
	× BUILDING PERMIT APPROVAL				
TYPE OF SUBMITTAL:	NT	CERTIFICATE	OF OCCUPANCY		
ENGINEER/ARCHITECT CERTIFICATIO	IN	PRELIMINAR	Y PLAT APPROVAL		
PAD CERTIFICATION		SITE PLAN FO	OR SUB'D APPROVAL		
CONCEPTUAL G & D PLAN		× SITE PLAN FC	OR BLDG. PERMIT APPROVAL		
× GRADING PLAN		FINAL PLAT	APPROVAL		
DRAINAGE MASTER PLAN		SIA/ RELEASE	E OF FINANCIAL GUARANTEE		
× DRAINAGE REPORT		× FOUNDATION	PERMIT APPROVAL		
FLOODPLAIN DEVELOPMENT PERMIT	APPLIC	× GRADING PE	RMIT APPROVAL		
ELEVATION CERTIFICATE		SO-19 APPRO	VAL		
CLOMR/LOMR		PAVING PERM	MIT APPROVAL		
TRAFFIC CIRCULATION LAYOUT (TCL	.)	GRADING/ PA	D CERTIFICATION		
TRAFFIC IMPACT STUDY (TIS)		WORK ORDER			
OTHER (SPECIFY)	_	CLOMR/LOM			
PRE-DESIGN MEETING?			DEVELOPMENT PERMIT		
			CIFY)		
DATE SUBMITTED: 4-6-2021	Bur J	Arthur Blessen			
	Dy. <u>-</u>				

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED:



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		L	AND TR	EATMEN	IT	WEIGHTED		·	1		
BASIN	AREA	A	В	С	D	E	V (6-hr)	V (6-hr)	V(10 day)	V(10 day)	Q
#	(acre)	(%)	(%)	(%)	(%)	(in)	(acre-ft)	(cu-ft)	(acre-ft)	(cu-ft)	(cfs)
					EXISTI	NG CONDITI	ONS				
BASIN A-1	3.30	100.00	0.00	0.00	0.00	0.44	0.12	5,271	0.12	5,271	4.26
BASIN A-2	7.03	100.00	0.00	0.00	0.00	0.44	0.26	11,228	0.26	11,228	9.07
					PROPO	SED CONDIT	TONS				
BASIN A-1	3.30	0.00	0.00	7.80	92.20	1.89	0.52	22,683	0.89	38,919	14.03
BASIN A-2	7.03	0.00	0.00	9.10	90.90	1.88	1.10	47,996	1.88	82,096	29.76
EXCESS F		0.44	0.67	0.99	1.97	Ei (in)					
PEAK DISC	CHARGE	1.29	2.03	2.87	4.37	QPi (cfs)					
%A) + (EB)(%B) + (EC)(%C) + (ED)(%D) = (WEIGHTED E)(AREA)/12 %-HR + (AD)(P10DAY - P6-HR)/12 QPB)(AB) + (QPC)(AC) + (QPD)(AD)							F	ZONE = P6-HR (in.) 224-HR (in.) 10DAY (in.)	2.66		

Basin A-1 discharges through 5 - 2' wide sidewalk culverts

0.44

WATER QUALITY PONDING

POND ID BASIN ID CONTRIBUTING REQUIRED PONDING PONDING VOLUME PONDING VOLUME

(IN)

THE SITE IS WITHIN ZONE X AS SHOWN ON THE FIRM PANEL NO. 35001C0329 H. PROPOSED DEVELOPMENT WILL CONSIST OF A SINGLE STORY OFFICE/WAREHOUSE BUILDING ENCLOSING ABOUT 150,000 SF WITH PAVED PARKING AND DOCKS ON THE SOUTH.

METHODOLOGY THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATIONS OF THE JUNE 1997 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. PRECIPITATION

PEAK DISCHARGE. EXISTING DRAINAGE

THE SITE IS PREVIOUSLY DEVELOPED BUT CURRENTLY ONLY REMNANTS REMAIN. THE PARCEL DRAINS TOWARD THE CENTER OF THE SITE THEN NORTH INTO BLUEWATER WHERE IT IS COLLECTED IN THE LARGE DIAMETER (48" MOSTLY) AND CONVEYED SOUTH. THE DEVELOPED PARCEL WEST OF THIS SITE DRAINS WEST AWAY FROM THIS SITE. LIKEWISE THE DEVELOPED PARCEL TO THE SOUTH DRAINS SOUTH AWAY FROM THE SITE. ON THE NORTH, THE SITE IS PROTECTED BY THE STORM DRAIN IN BLUEWATER.

FIRST FLUSH POND POND

POND

TRUCK COURT

4

Sidewalk Culvert Discharge Weir Flow Equation = CA(2gh)^1/2

TOTAL

3

L(ft) h (ft) Q(cfs) 2.6 0.10 0.25 3 0.20 2.6 0.70 3 1.28 2.6 0.30 3 0.40 1.97 2.6 0.50 2.76 2.6 3

AREA

44997

449975

(SQ-FT)

Weir Flow Equation = CLH^3/2

3

PREVIOUS APPROVED SUBMITTAL "FIRST FLUSH" POND VOLUME REQUIRED 16,499 cf

16499

PROVIDED

(CU-FT)

1820

(0.44/12*AREA)

(CU-FT)

APPROXIMATE LIMITS 100-YEAR PONDING WSEL 101.95 PONDING REQUIRED 70,747 CF

LOT 7 DRAINAGE REPORT

LOCATION & DESCRIPTION

THE PROPOSED SITE IS 10.33 ACRES LOCATED SOUTH OF BLUEWATER AND EAST OF UNSER AT THE POINT AIRPORT NORTH OF BLUEWATER OFFSETS TO THE EAST, AS SHOWN ON THE VICINITY MAP ON THIS SHEET. IT IS CURRENTLY UNDEVELOPED, BUT HAS BEEN PREVIOUSLY GRADED AND DEVELOPED NOTED BY THE REMNANTS.

THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 1 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. TABLES WITHIN THIS SECTION WERE USED TO ESTABLISH THE 6-HOUR PRECIPITATION, EXCESS PRECIPITATION, AND

DEVELOPED CONDITION

THE PROPOSED GRADING PLAN WILL DIRECT RUNOFF GENERATED ONSITE TOWARD A NEW DETENTION POND THAT INCLUDES ALMOST ALL OF THE SOUTH PARKING APRONS

IN ORDER TO PROVIDE THE REQUIRED WATER QUALITY PONDING, THE AREA INLET HAS RAISED ABOVE THE POND BOTTOM THE DISTANCE REQUIRED TO PROVIDE THE REQUIRED VOLUME.

THE DISCHARGE FROM THIS SITE IS CONTROLLED BY THE ATRISCO BUSINESS PARK MASTER DRAINAGE PLAN, BY EASTERLING 10-20-1993. THIS PLAN LIMITS DISCHARGE FROM THE SITE TO 0.11 CFS/ACRE. PER THE PROPOSED DRAINAGE PLAN, THE DISCHARGE FRÓM THIS SITE IS CONTROLLED BY ORIFICE PLATE IN THE INLET AND IS LIMITED TO 1.13 CFS. THE ALLOWABLE DISCHARGE IS 1.136 CFS.

WATER QUALITY POND (ARTICAL 6–12 PAGE 6–109) FF POND VOLUME = (IMPERVIOUS AREA) (0.44 IN) FOR REDEVELOPED SITES IMPERVIOUS AREA = 449975 SF

REQUIRED POND VOLUME = (449975 SF) (0.44 IN) (1 / 12 IN/FT) = 16499 CF

OND		
ELEVATION 99.8 99.0 98.0 97.0 96.0	AREA 7639 SF 6129 SF 4872 SF 3719 SF 2282 SF	VOL = $(7639+6129)(0.5)(0.8 \text{ FT}) = 5,507.2 \text{ CF}$ VOL = $(6129+4872)(0.5)(1.0 \text{ FT}) = 5,500.5 \text{ CF}$ VOL = $(4872+3719)(0.5)(1.0 \text{ FT}) = 4,295.5 \text{ CF}$ VOL = $(3719+2282)(0.5)(1.0 \text{ FT}) = 3,000.5 \text{ CF}$
		18,303.7 CF
ELEVATION	AREA	
101.8 101.0 100.0 99.0 98.0 97.0 96.0	10433 SF 9957 SF 7976 SF 6129 SF 4872 SF 3719 SF 2282 SF	VOL = (10433+9957)(0.5)(0.8 FT) = 8,156.0 CF $VOL = (9957+7676)(0.5)(1.0 FT) = 8,966.5 CF$ $VOL = (7676+6129)(0.5)(1.0 FT) = 7,052.5 CF$ $VOL = (6129+4872)(0.5)(1.0 FT) = 5,500.5 CF$ $VOL = (4872+3719)(0.5)(1.0 FT) = 4,295.5 CF$ $VOL = (3719+2282)(0.5)(1.0 FT) = 3,000.5 CF$ $36,971.5 CF$
ELEVATION 101.8 101.6 101.2 101.0 100.4	AREA 108717 SF 80099 SF 29766 SF 3773 SF 0 SF	VOL = (108717+80099)(0.5)(0.2 FT) = 18,881.6 CF VOL = (80099+29766)(0.5)(0.4 FT) = 21,973.0 CF VOL = (29766+3773)(0.5)(0.2 FT) = 3,353.9 CF VOL = (3773+0)(0.5)(0.6 FT) = 1,131.9 CF
		45,340.4 CF
TOTAL POND	VOLUME	36,971.5 + 45,340.4 = 82,311.9 CF

DISCHARGE: CONTROL ORIFICE Q = 0.6 A $\sqrt{2 \text{ gh}}$ g = 32.2 ft/s² A = ORIFICE AREA (SF)

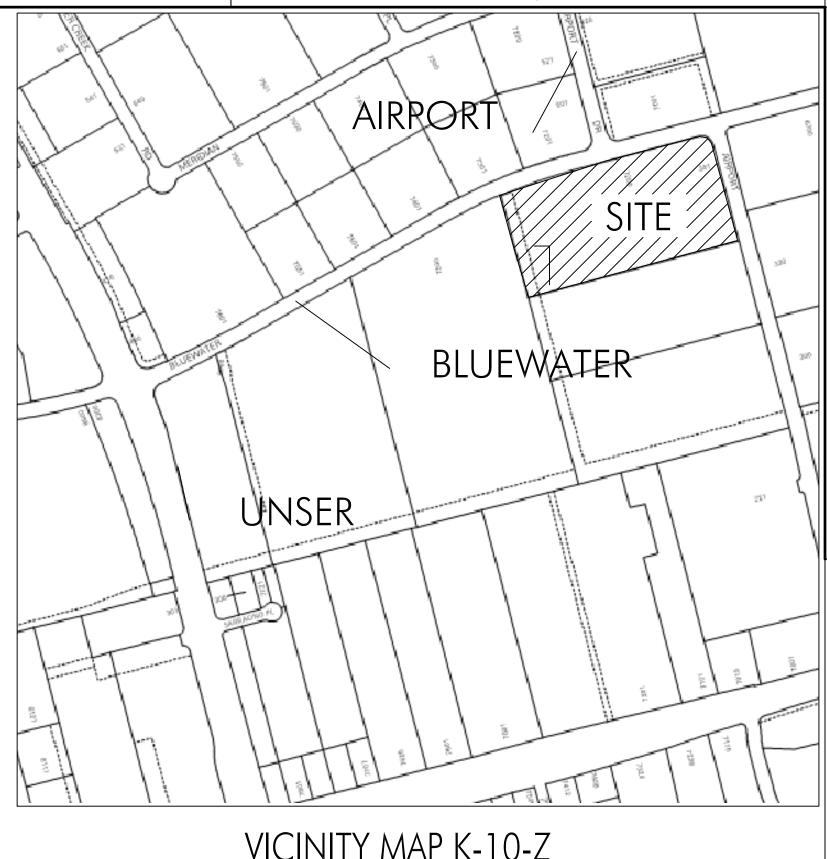
h = DISTANCE FROM WATER SURFACE ELEVATION TO CENTER OF ORIFICEORIFICE 4¹/₂" DIA WATER SURFACE ELEV 101.8 DISCHARGE INV 97.1

5

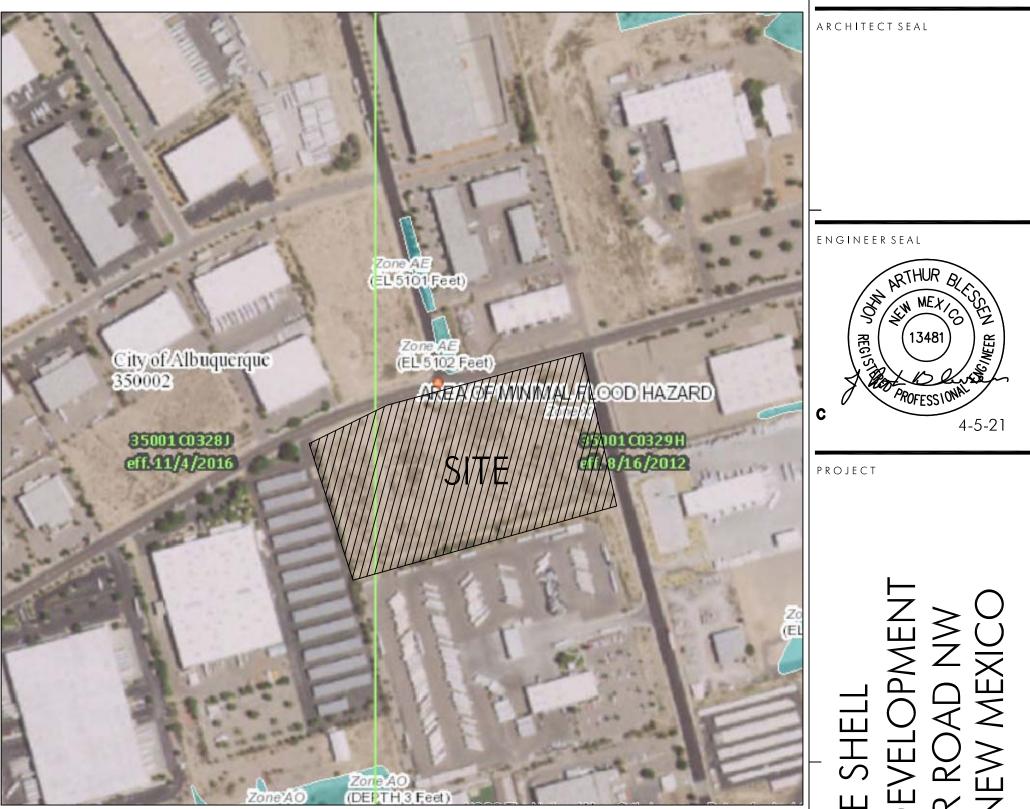
 $A = (4.5/12)^{2}(3.14) (0.25) = 0.11 \text{ SF}$

h = 101.8 - (97.1 + 0.1875) = 4.51 ft

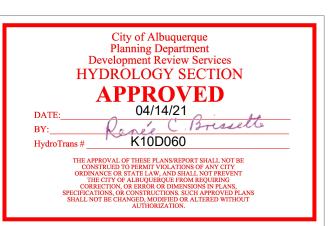
 $Q = 0.6 (0.11) [2 (32.2) (4.51)]^{1/2} = 1.13 CFS$

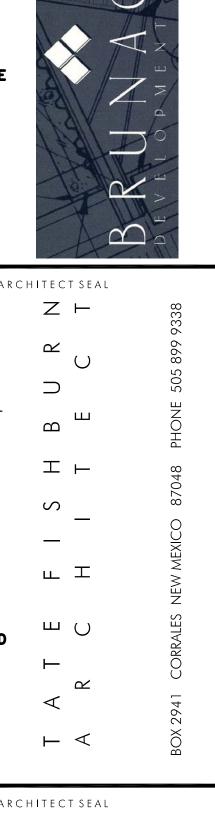


VICINITY MAP K-10-Z



FEMA PANEL 35001C0329H 11/4/2016



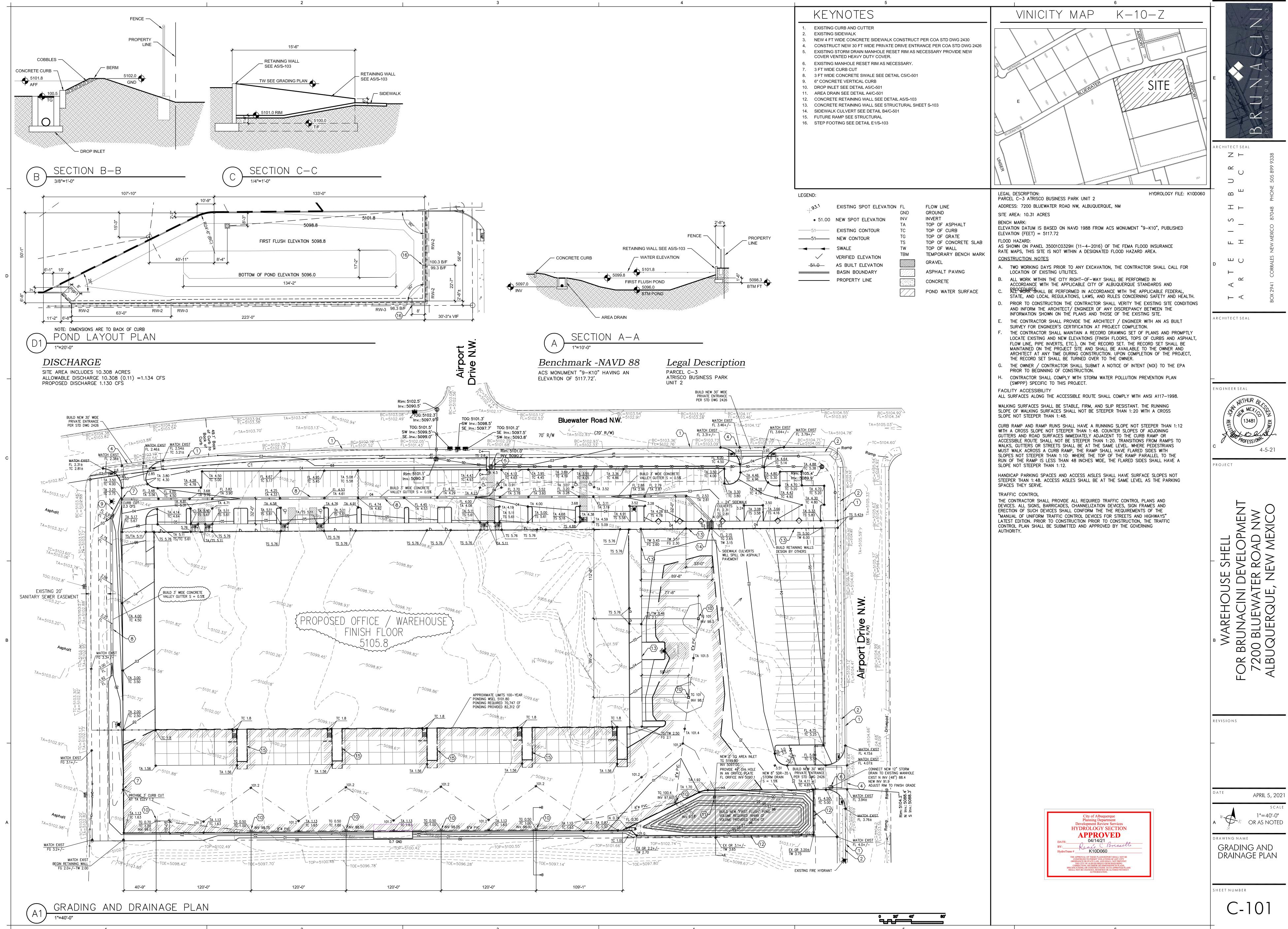


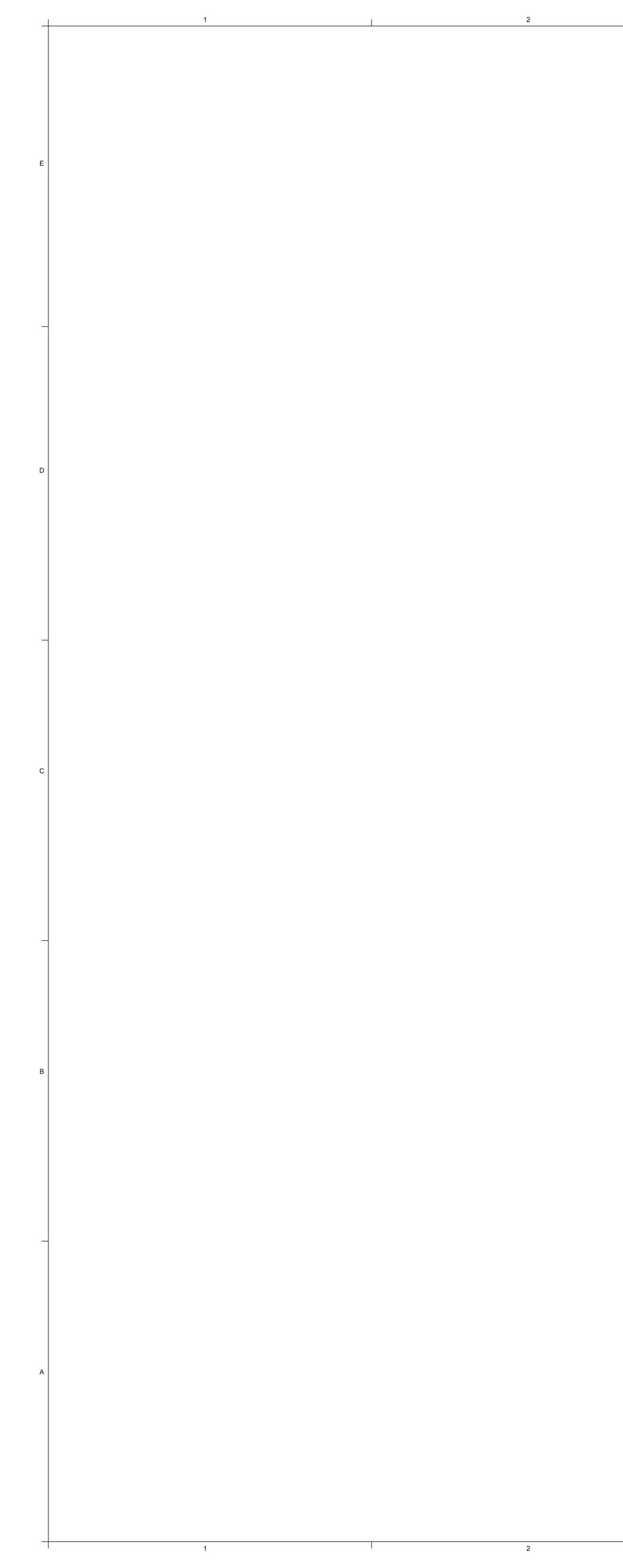
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REVISIONS







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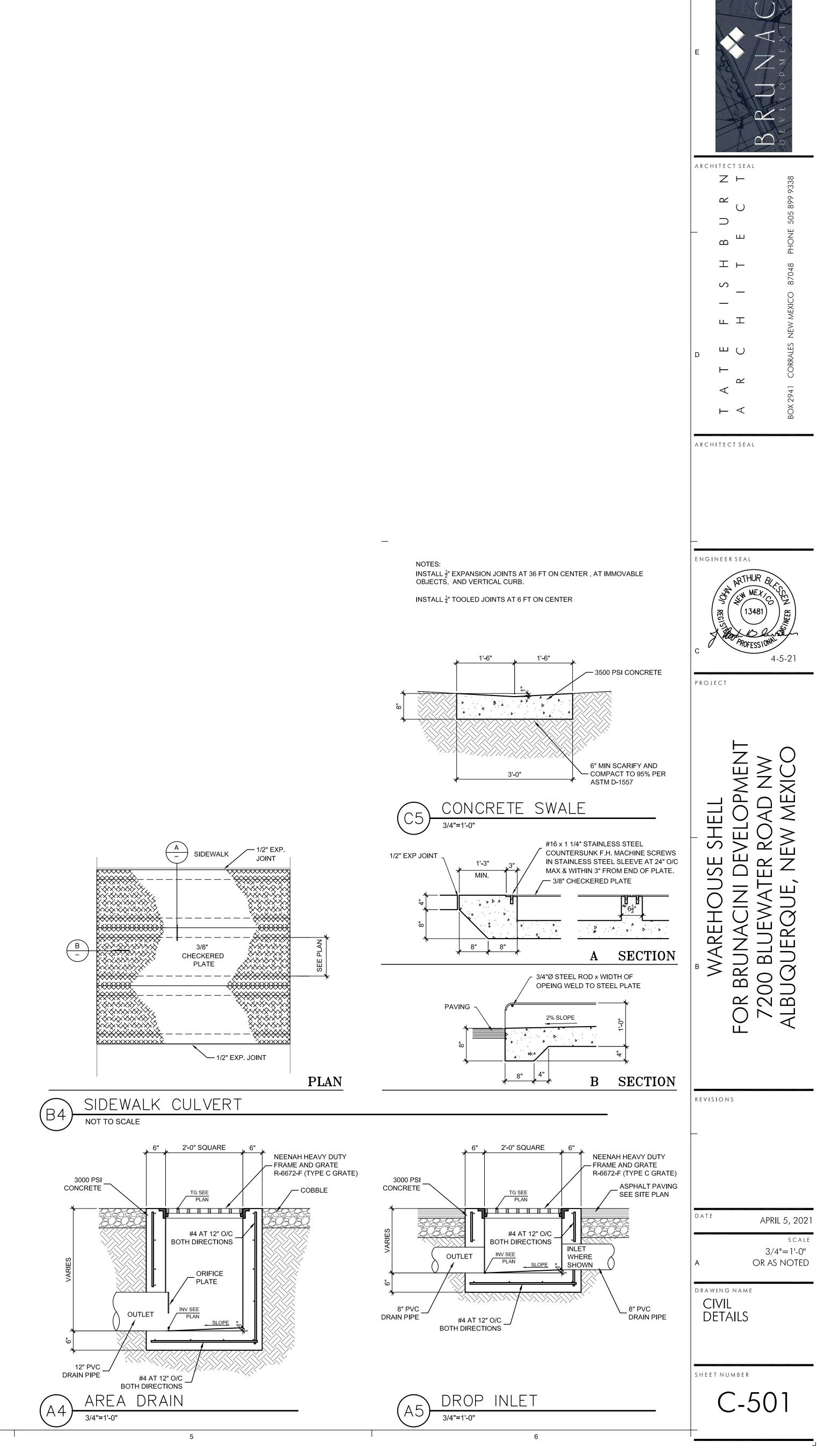
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4

4

5



6