

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

December 18, 2018

Larry Read, P.E.
Larry Read & Associates
8100 Wyoming Blvd NE, Suite M-4 Box 107
Albuquerque, NM, 87113

**RE: 7200 Bluewater
Grading and Drainage Plan
Engineer's Stamp Date: 12/06/18
Hydrology File: K10D060**

Dear Mr. Read:

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

Based upon the information provided in your resubmittal received 12/11/2018, the Grading and Drainage Plan is approved for Building Permit and Grading Permit. The Grading and Drainage Plan is also approved for action by the DRB on Site Plan for Building Permit.

Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required and a formal Elevation Certificate needs to be submitted to Hydrology.

Please provide a Drainage Covenant per Chapter 17 of the DPM for all detention pond and stormwater quality pond prior to Permanent Release of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A \$25 fee 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 (Curtis Cherne, PE, ccherne@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

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

Sincerely,

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



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 7200 BLUEWATER **Building Permit #:** _____ **Hydrology File #:** K10D060
DRB#: PR-2018-001681 (SI-2018-002000) **EPC#:** _____ **Work Order#:** _____
Legal Description: PARCEL C-3, ATRISCO BUSINESS PARK, UNIT 2
City Address: 7200 BLUEWATER SW

Applicant: LARRY READ & ASSOCIATES (AGENT) **Contact:** LARRY READ
Address: 8100 WYOMING BLVD NE, SUITE M-4 BOX 107, 87113
Phone#: 239-7692 **Fax#:** _____ **E-mail:** LREAD@READENGINEERING.CO

Other Contact: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE ☒ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? ☒ Yes _____ No

DEPARTMENT _____ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ 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: 12/08/2018 **By:** LARRY D. READ, PE

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DISCHARGE:

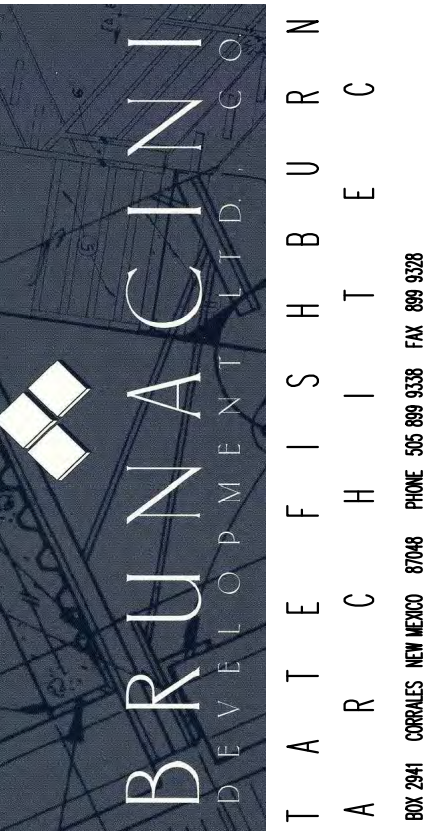
THIS SITE INCLUDES 10.33 ACRES
THE ALLOWABLE DISCHARGE IS 1.136 CFS
THE PROPOSED DISCHARGE IS 1.06 CFS

Benchmark -NAVD 88

ACS MONUMENT "9-K10" HAVING AN
ELEVATION OF 5117.72'.

Legal Description

PARCEL C-3
ATRISCO BUSINESS PARK
UNIT 2



ARCHITECT SEAL

ENGINEER SEAL



PROJECT

SITE DEVELOPMENT PLAN
FOR BUILDING PERMIT
7200 BLUEWATER ROAD NW
ALBUQUERQUE, NEW MEXICO

REVISIONS

0

DATE Dec 8, 2018

NORTH 1"=40'

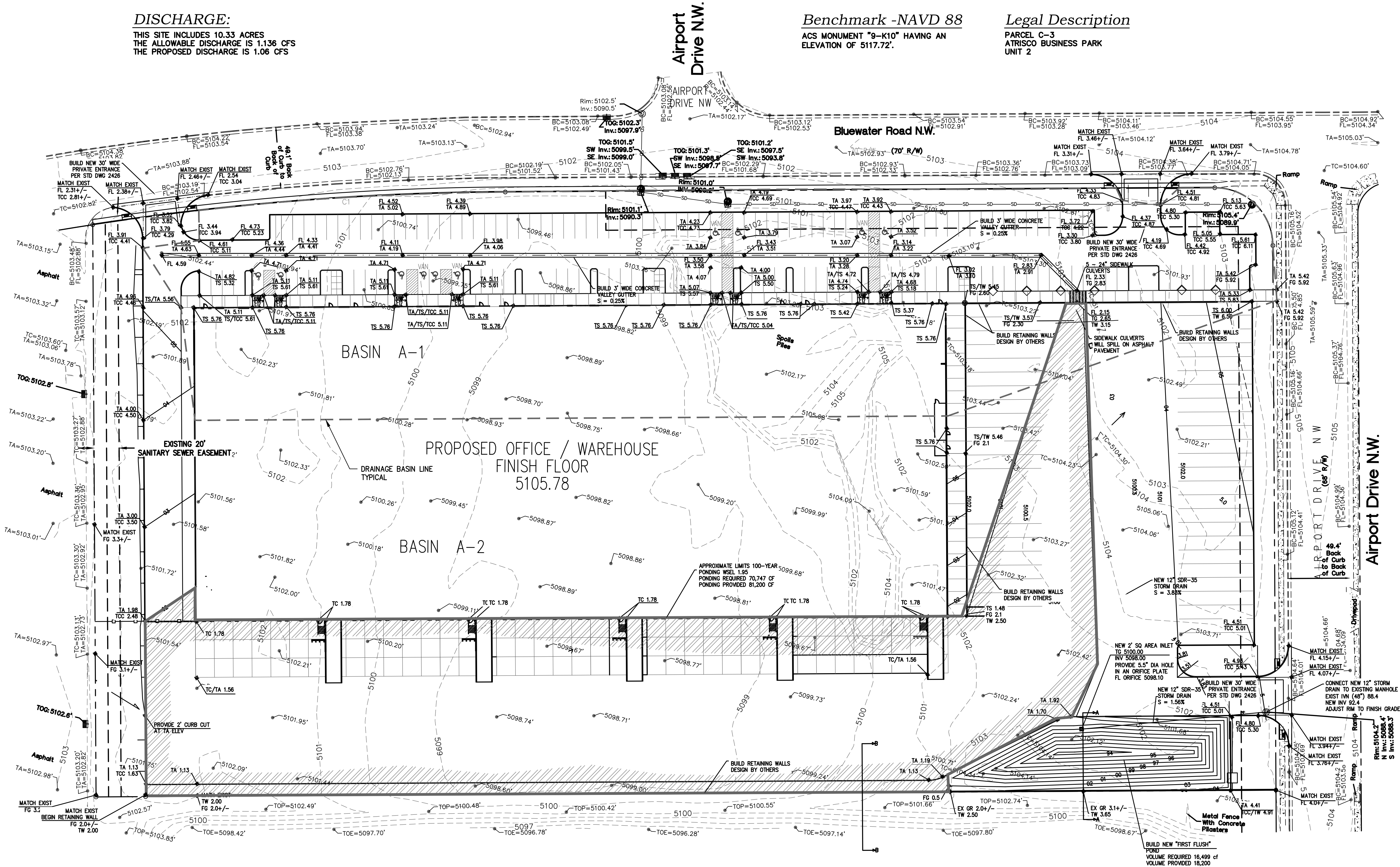
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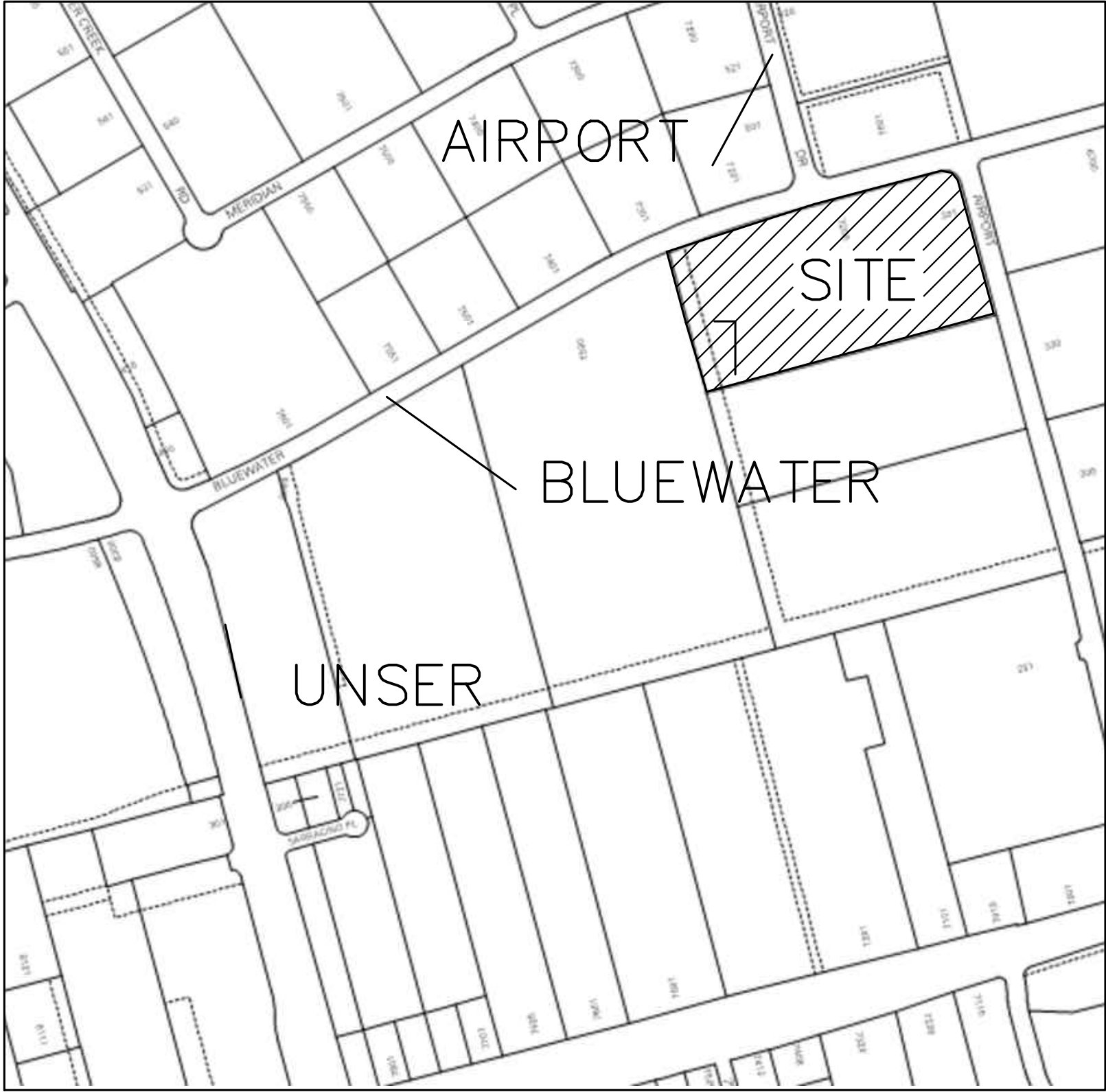
GRADING PLAN

SHEET NUMBER

C-1

1 GRADING AND DRAINAGE PLAN
1"=20'





VICINITY MAP K-10-Z



FEMA PANEL 35001C0329H 11/4/2016

BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED					
		A (%)	B (%)	C (%)	D (%)	E (in)	V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(10 day) (acre-ft)	V(10 day) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
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
PROPOSED CONDITIONS											
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 PRECIP.		0.44	0.67	0.99	1.97	Ei (in)					
PEAK DISCHARGE		1.29	2.03	2.87	4.37	QPi (cfs)					
								ZONE =	1		
%A) + (EB)(%B) + (EC)(%C) + (ED)(%D)								P6-HR (in.):	2.20		
= (WEIGHTED E)(AREA)/12								P24-HR (in.):	2.66		
/6-HR + (AD)(P10DAY - P6-HR)/12								P10DAY (in.):	3.67		
QPB)(AB) + (QPC)(AC) + (QPD)(AD)											

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

WATER QUALITY PONDING					
POND ID	BASIN ID	CONTRIBUTING AREA (SQ-FT)	REQUIRED PONDING (IN)	PONDING VOLUME (0.44/12*AREA) (CU-FT)	PONDING VOLUME PROVIDED (CU-FT)
SITE	A	449975	0.44	16499	18200
TOTAL		449975		16499	18200

Discharge Control in Area Inlet
Orifice Flow Equation = $CA(2gh)^{1/2}$

C	D(in)	A (sf)	h (ft)	Q(cfs)
0.6	5.5	0.16	2.00	1.06
0.6	5.5	0.16	2.00	1.06
0.6	5.5	0.16	2.00	1.06
0.6	5.5	0.16	2.00	1.06
0.6	5.5	0.16	2.00	1.06
0.6	5.5	0.16	2.00	1.06
0.6	5.5	0.16	2.00	1.06
0.6	5.5	0.16	2.00	1.06

Area = $(\pi \cdot D^2)/4$ for pipe

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

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

Weir Flow Equation = $CLH^{3/2}$

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 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

THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 3 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 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.

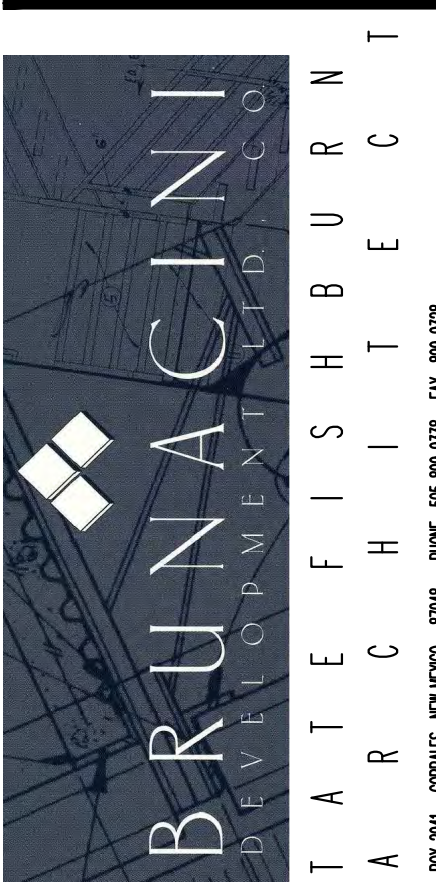
DEVELOPED CONDITION

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 FROM THIS SITE IS CONTROLLED BY ORIFICE PLATE IN THE INLET AND IS LIMITED TO 1.06 CFS. THE ALLOWABLE DISCHARGE IS 1.136 CFS.

LEGEND			
FG 100.00 TCC 100.50	PROPOSED SPOT ELEVATION	CONCRETE	WM WATER METER
5101.82'	EXISTING SPOT ELEVATION	o FH FIRE HYDRANT	o GM GAS METER
TCC	TOP CONCRETE CURB ELEVATION	o WV WATER VALVE	o TP TELEPHONE RISER
TA	TOP ASPHALT PAVEMENT	□ SIGN	▷ ▷ PLANTER
TC	TOP CONCRETE PAVEMENT ELEVATION	UG UNDERGROUND	⊖ TREE (DECIDUOUS)
FG	FNISH GRADE DIRT ELEVATION	o MH MANHOLE	★ ⊖ TREE (EVERGREEN)
TS	TOP SIDEWALK ELEVATION	o FP FLAG POLE	
— 100 —	EXISTING CONTOUR	o V VENT	
— 100 —	PROPOSED CONTOUR	c/c CORNER TO CORNER DIMENS.	FIBER OPTIC COMMUNICATION 4" CONDUIT
□	BOUNDARY 100-YR POND WSEL	CLEAN OUT	— W — S — G — E — UTILITY (WATER, SEWER, ELEC., GAS, ETC.)
— — —	PROPERTY LINE	o LP LIGHT POLE	
— — —	EASEMENT LINE	↗ SLOPE TICK	



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7200 BLUEWATER ROAD NW
ALBUQUERQUE, NEW MEXICO

REVISIONS

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DATE Dec 8, 2018

NORTH SCALE

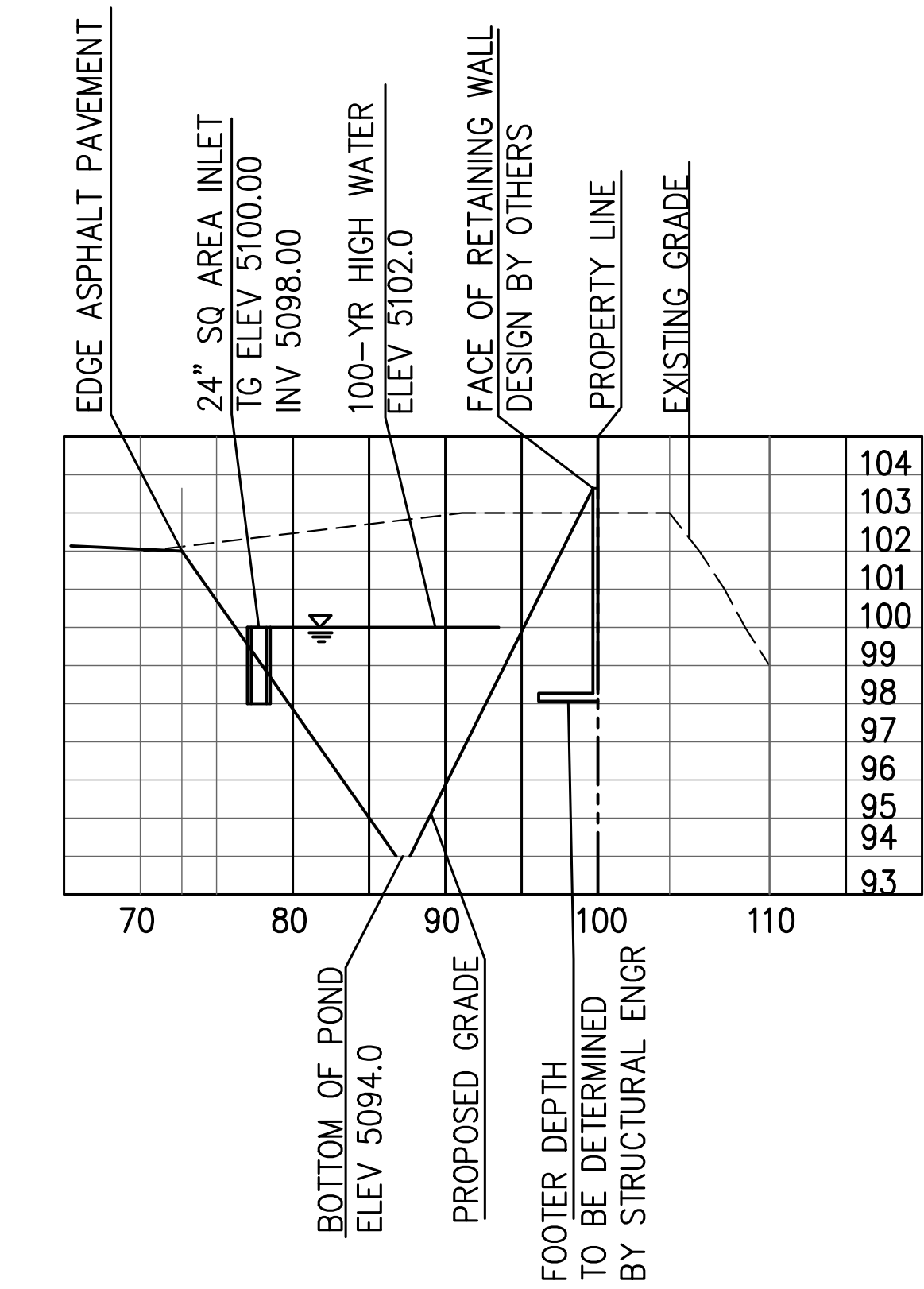
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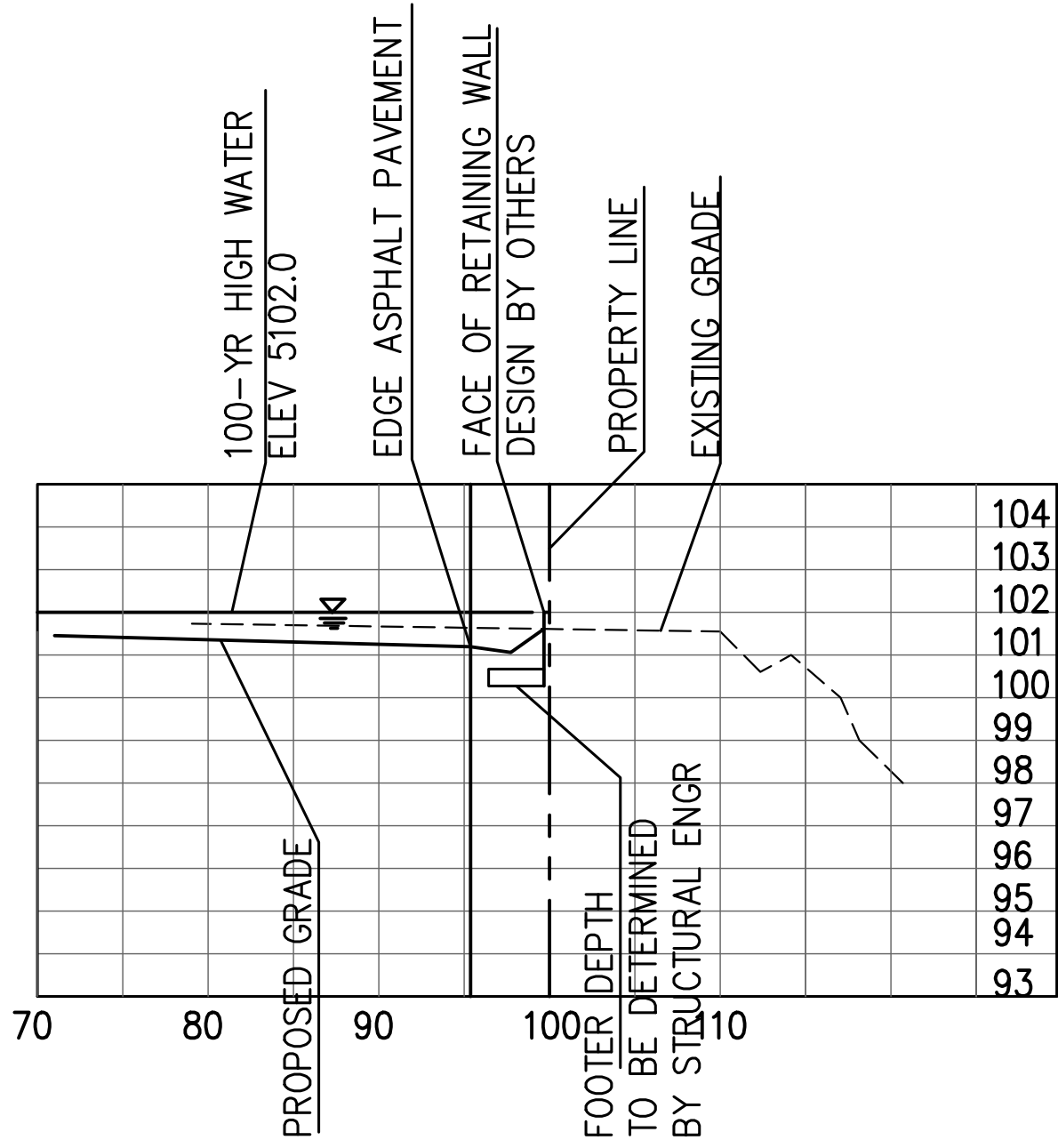
HYDROLOGY

SHEET NUMBER

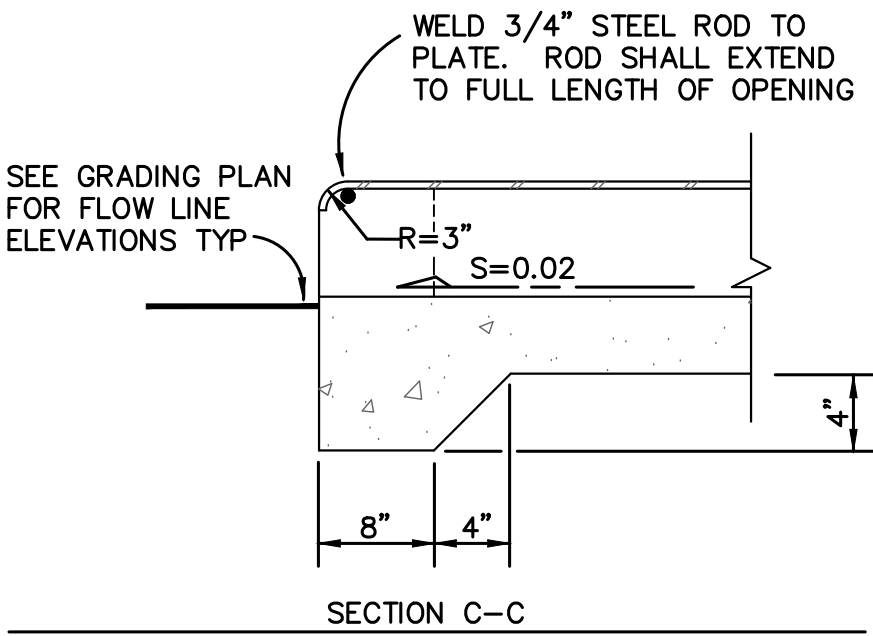
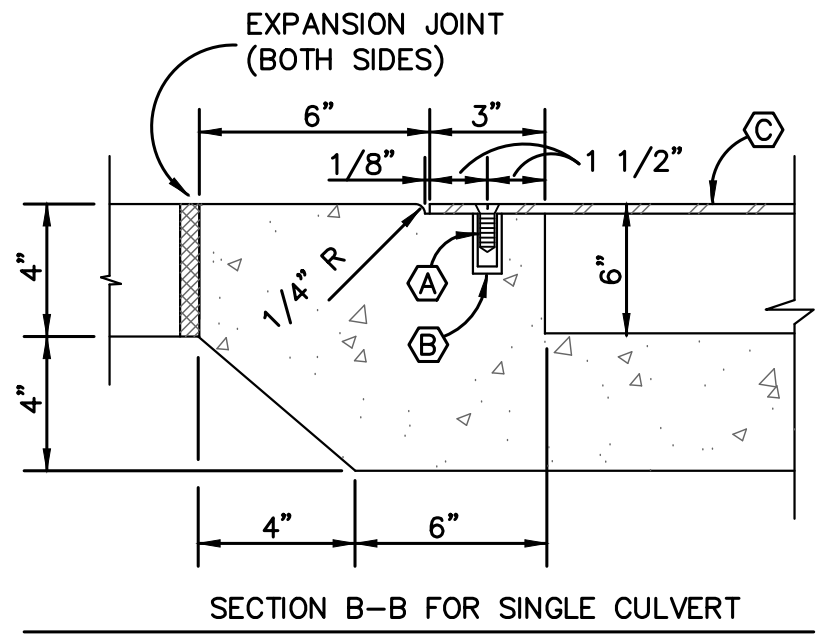
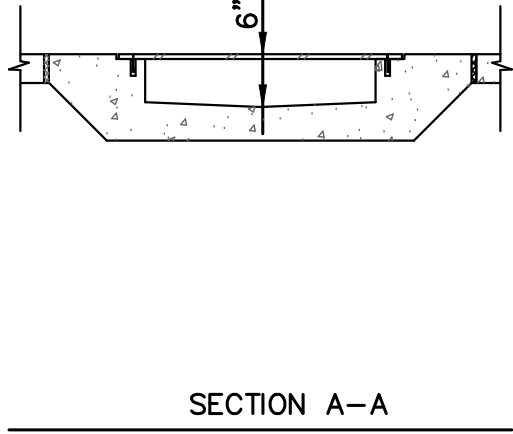
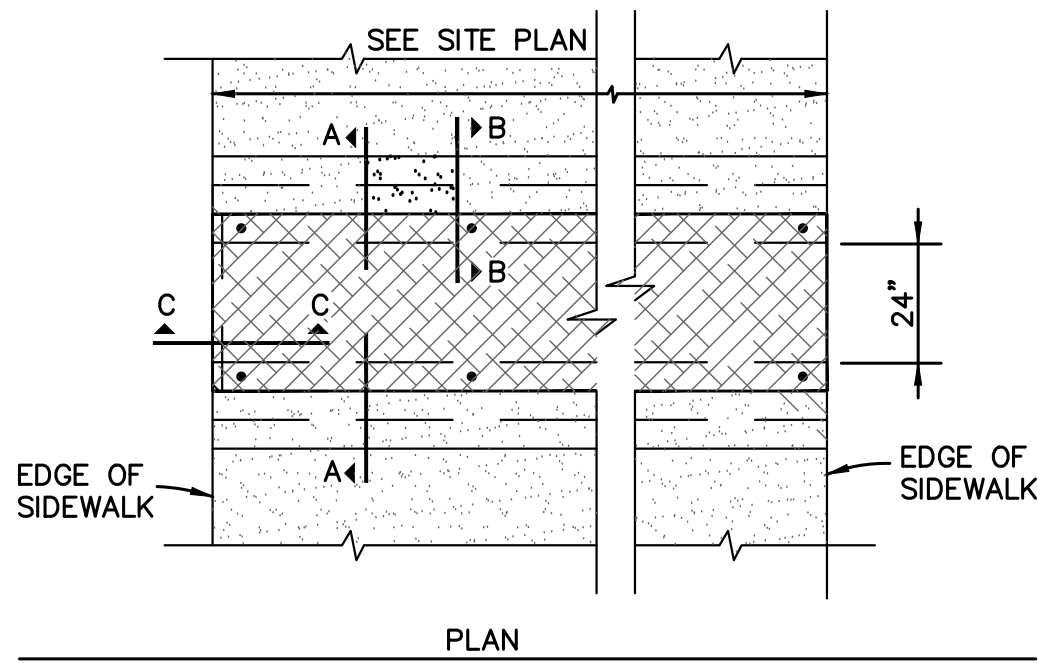
C-3



SECTION A-A

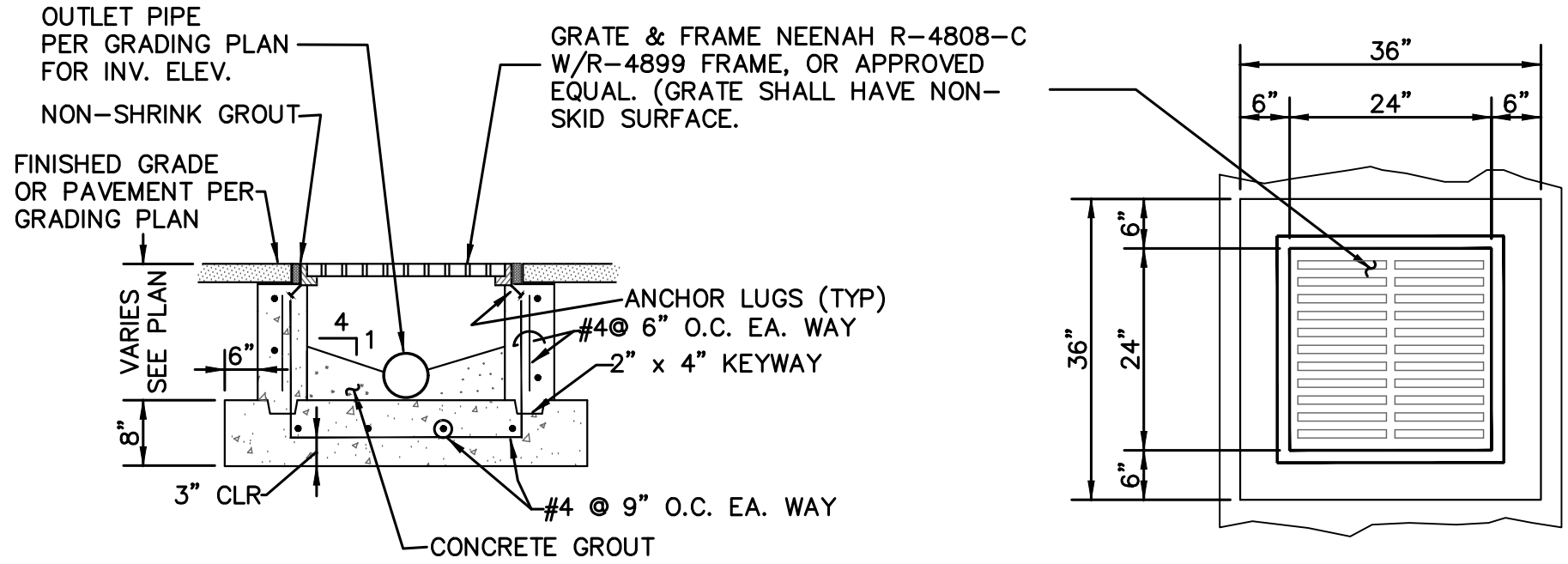


SECTION B-B

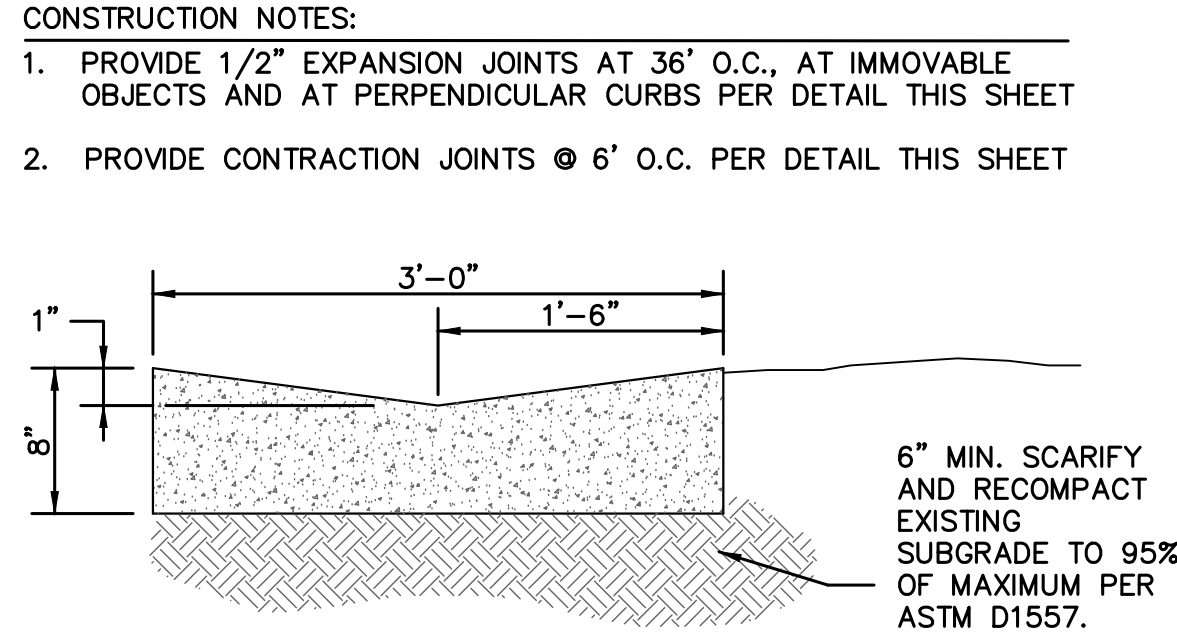


- CONSTRUCTION NOTES:
- CULVERT SHALL BE POURED MONOLITHICALLY.
 - THE INVERT SHALL BE TROWELED TO PRODUCE A HARD POLISHED SURFACE.
 - ALL EXPOSED CONCRETE SURFACES SHALL MATCH GRADE, COLOR, FINISH AND SCORING OF ADJACENT CURB AND SIDEWALK.
 - PLATES SHALL NOT EXCEED 300 POUNDS AND SHALL BE STRESS RELIEVED AFTER FABRICATION. CLEAN SURFACE OF PLATE AND FRAMING MEMBERS AND PAINT WITH ONE COAT OF RED OXIDE AND TWO FINISH COATS OF ALUMINUM PAINT (AASHTO A-69).
- KEYED NOTES:
- A 3/8" - 16 X 1 1/4" COUNTERSUNK, F.H., STAINLESS STEEL MACHINE SCREW.
 - B 1" X 5" S.S. ROD ANCHORS. INSTALL PER MANUFACTURE'S INSTRUCTIONS AT A MAXIMUM OF 24" O.C. (ON EACH SIDE) AND WITHIN 3" OF EACH END.
 - C 1/2" CHECKERED STEEL PLATE.

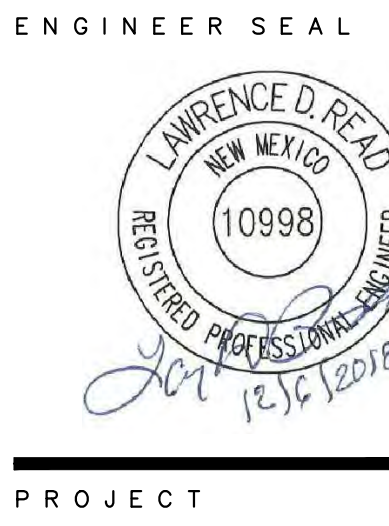
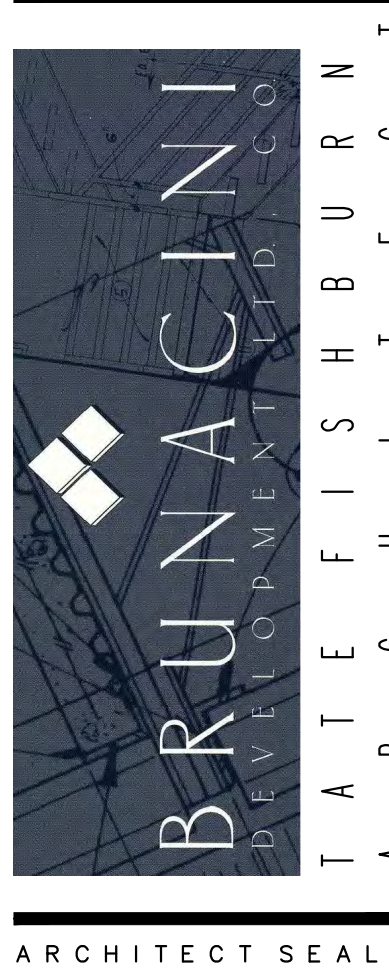
1 SIDEWALK DRAIN
N. T. S.



2 AREA DRAIN
N. T. S.



3 CONCRETE VALLEY GUTTER
N. T. S.



SITE DEVELOPMENT PLAN
FOR BUILDING PERMIT
7200 BLUEWATER ROAD NW
ALBUQUERQUE, NEW MEXICO

REVISIONS	
0	
DATE	
Dec 8, 2018	
NORTH	
N/A	
DRAWING NAME	
DETAILS	
SHEET NUMBER	
C-5	