

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

March 19, 2025

John Stapleton, PE
Community Design Solutions
9384 Valley View Dr. NW
Albuquerque, NM 87114

RE: Bridge and 86th Subdivision (at SE Corner)
Grading and Drainage Plans
Engineer's Stamp Date: 1/27/2025
Hydrology File: L09D046
Case # HYDR-2025-00004

Dear Mr. Stapleton:

Based upon the information provided in your submittal received 01/28/2025, the Grading & Drainage Plans **are approved** for action by the Development Facilitation Team (DFT), Development Hearing Officer (DHO) for Preliminary/Final Plat approval, and Grading Permit.

PO Box 1293

PRIOR TO BUILDING PERMIT:

Albuquerque

Please submit a more detailed Grading & Drainage Plan to Hydrology for review and approval.

NM 87103

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.

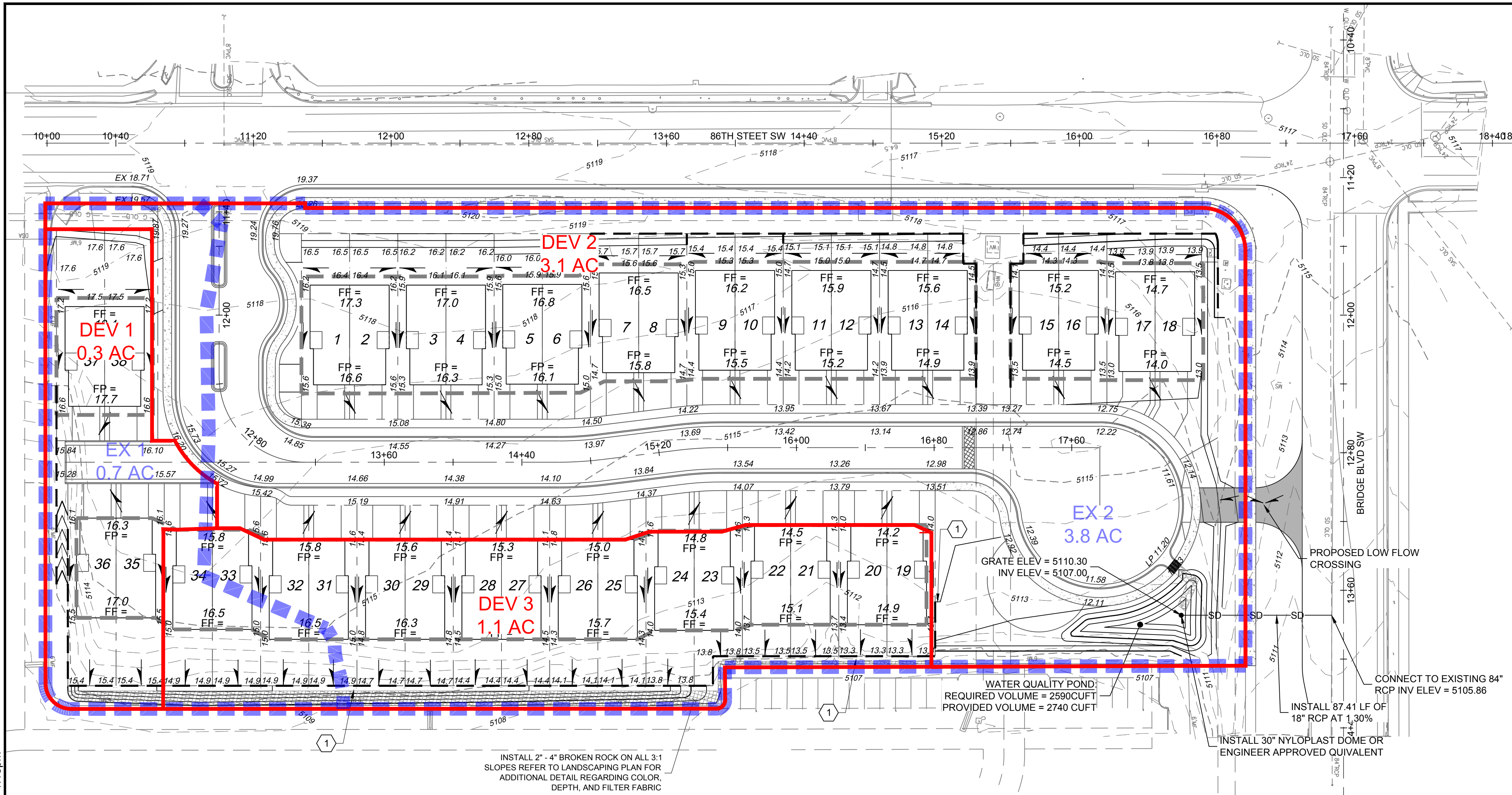
www.cabq.gov

If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

Sincerely,

Anthony Montoya, Jr., P.E.
Senior Engineer, Hydrology
Planning Department, Development Review Services

NAME: P:\246101 Ashland Bridge and 86th\3. DWG\3.4 Exhibits\Proposed Drainage Exhibit.dwg PLOT DATE: Jan 28, 2025 1:18pm



INPUT: HISTORIC CONDITIONS									
Subbasin	Area (ac)	Treatment Type Area (ac)				Treatment Type Area (%)			
		A	B	C	D	A	B	C	D
EX1	0.7	0.0	0.7	0.0	0.0	0%	100%	0%	0%
EX2	3.8	0.0	3.8	0.0	0.0	0%	100%	0%	0%

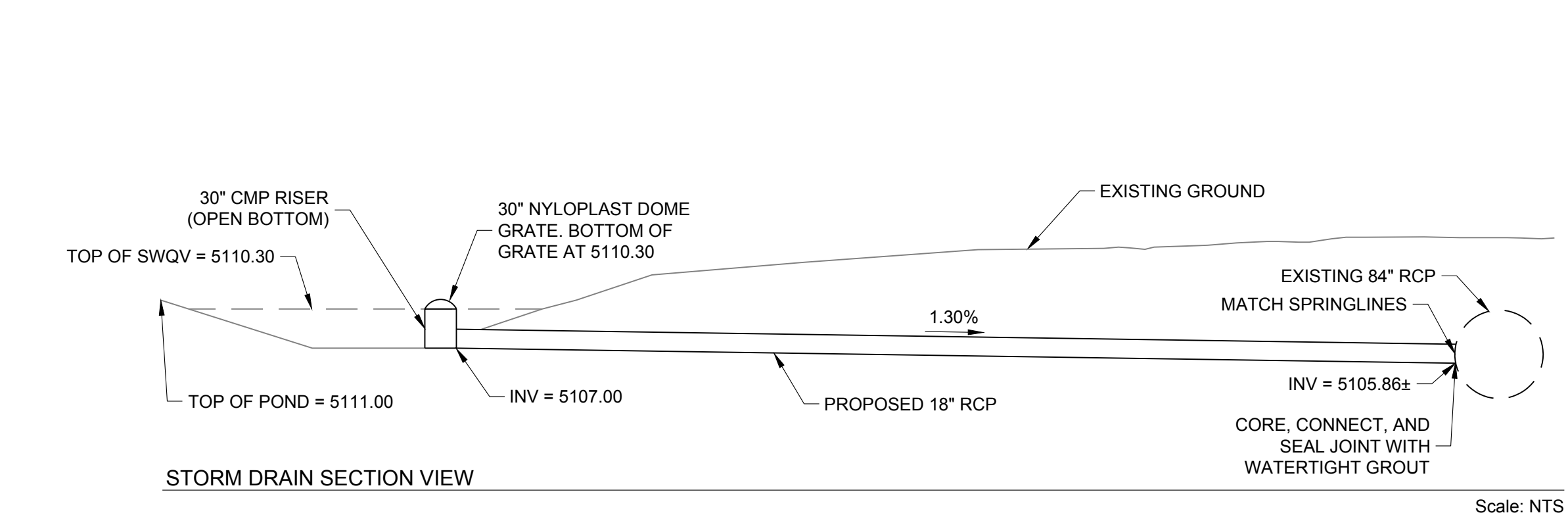
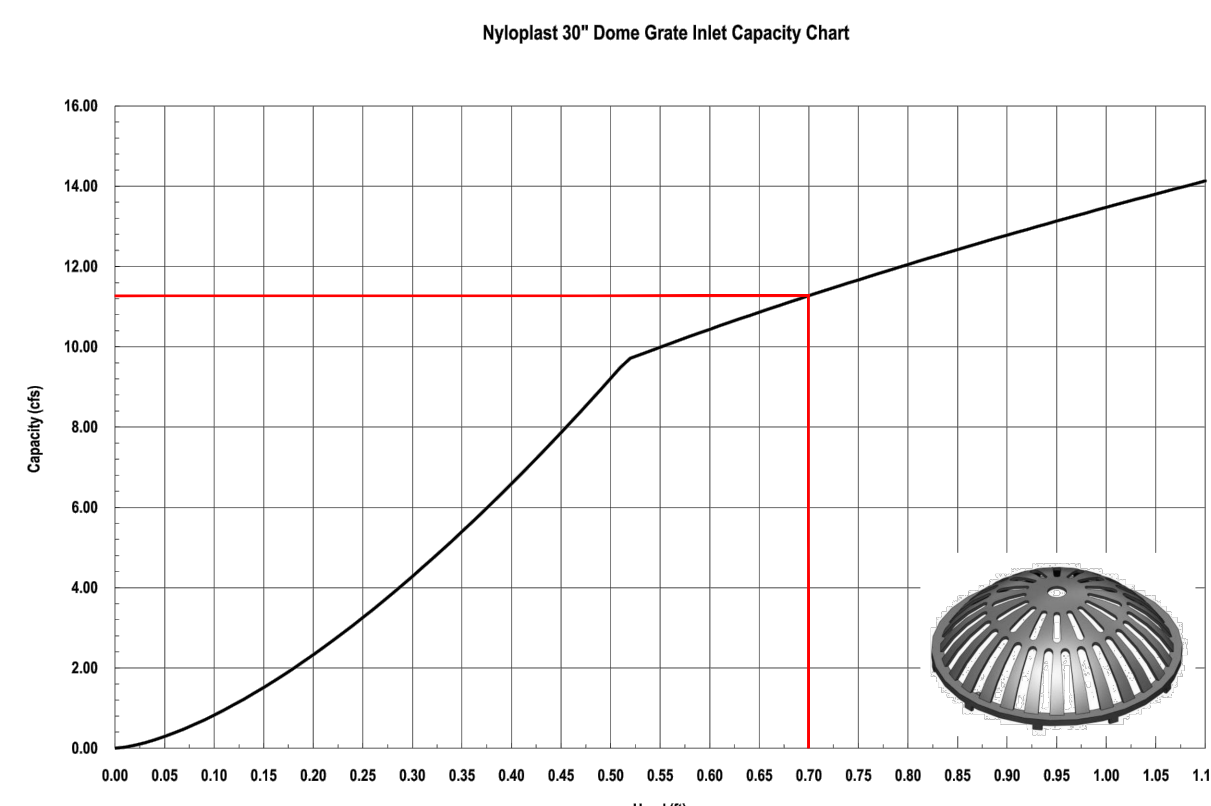
PROPOSED LAND TREATMENT CONDITIONS									
Subbasin	Area (ac)	Treatment Type Area (ac)				Treatment Type Area (%)			
		A	B	C	D	A	B	C	D
DEV1	0.3	0.0	0.1	0.1	0.1	0%	27%	27%	46%
DEV2	3.1	0.0	0.7	0.7	1.7	0%	22%	22%	55%
DEV3	1.1	0.0	0.3	0.3	0.5	0%	26%	26%	48%

HISTORIC CONDITIONS				ZONE 1 100-YEAR PEAK DISCHARGE (CFS/ACRE)			
Subbasin	A (ac)	Q (cfs)	Q/A (cfs/ac)	Land Treatment			
EX1	0.7	1.6	2.2	A	B	C	D
EX2	3.8	8.1	2.2	1.54	2.16	2.87	4.12

PROPOSED CONDITIONS			
Subbasin	A (ac)	Q (cfs)	Q/A (cfs/ac)
DEV1	0.3	1.0	3.3
DEV2	3.1	10.5	3.4
DEV3	1.1	3.7	3.3
TOTAL	4.5	15.1	3.4

STORM WATER QUALITY VOLUME (SWQV)						
Subbasin	Impervious A (ac)	WQ Depth (in)	Required SWQV (cuft)	Fee in Lieu of Pounding (\$/cuft)	Pounded SWQV (cuft)	Provided SWQV (cuft)
DEV1	0.1	0.42	214	8	1716	0
DEV2	1.7	0.42	2589	8	0	2736
DEV3	0.5	0.42	814	8	6508	0

Pond				
Pond Elev	Area (Sq. Ft.)	Vol (Cu. Ft.)	Cum. (Cu. Ft.)	Cum. (Ac. Ft.)
5107.0	165	0	0	0.000
5108.0	464	315	315	0.007
5109.0	949	707	1021	0.023
5110.0	1516	1233	2254	0.052
5110.3	1698	482	2736	0.063
5111.0	2159	1350	4086	0.094



- LEGEND

PROPOSED BASIN

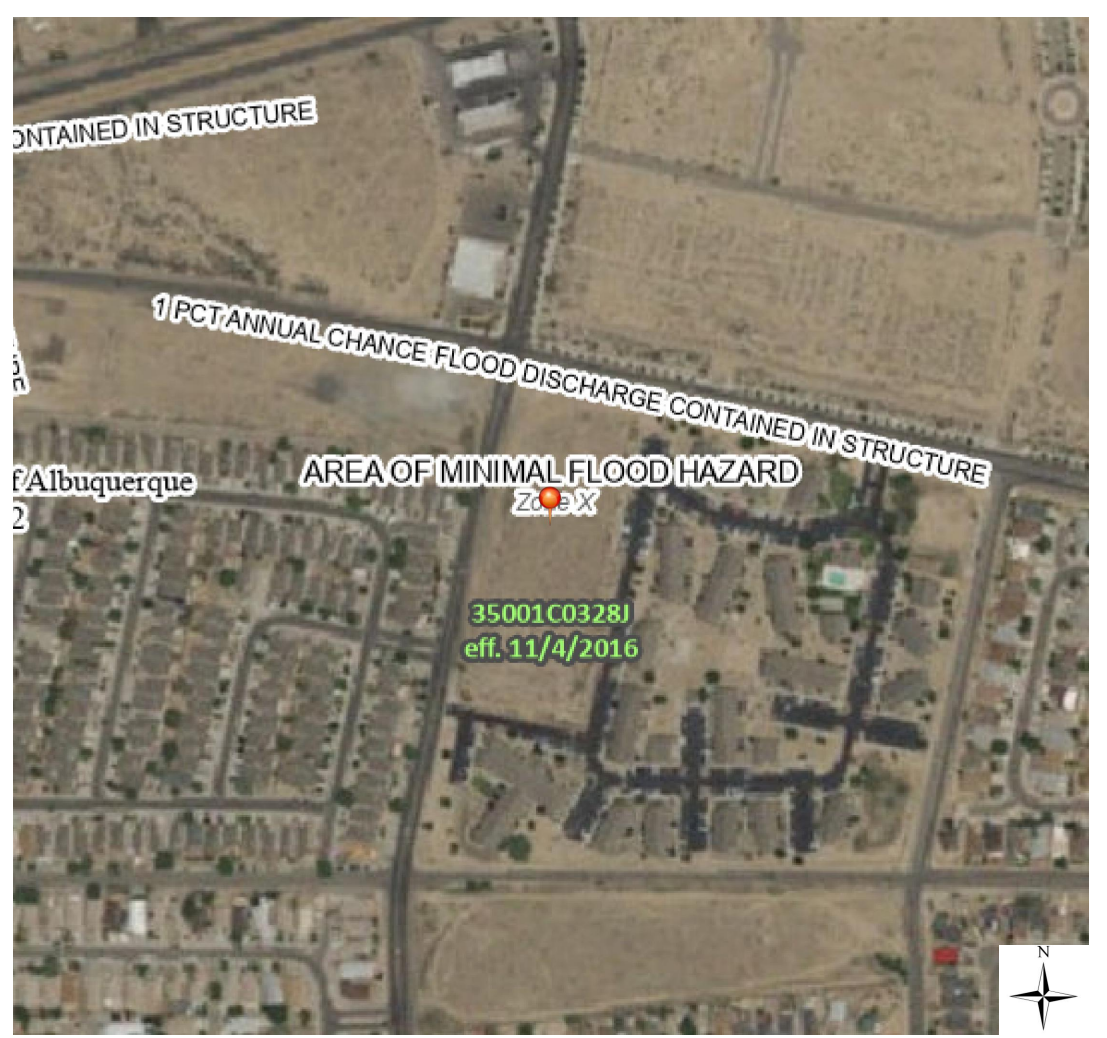
EXISTING BASIN
- KEYED NOTES

EXTENT OF BROKEN ROCK

EXTENTS OF BASE COURSE

PROPOSED & EXISTING DRAINAGE EXHIBIT

January 28, 2025



FEMA FIRM
MAP NUMBER 35001C0328J

BACKGROUND
THE DEVELOPMENT IS LOCATED AT THE SOUTHEAST CORNER OF 86TH STREET SW AND BRIDGE BOULEVARD SW AND CONTAINS 4.5 ACRES. THE SITE WILL BE SUBDIVIDED INTO 38 LOTS.

THE SITE IS GOVERNED BY THE 2013 AMOLE-HUBBELL DRAINAGE MASTER PLAN.

METHODOLOGY
HYDROLOGY CALCULATIONS FOR THE SITE ARE PERFORMED IN ACCORDANCE WITH THE ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) ARTICLE 6.2 USING THE RATIONAL METHOD TO CALCULATE PEAK FLOW RATES TO ENSURE ALL FLOW PATHS ARE SUFFICIENT TO CARRY FLOWS. THE REQUIRED WATER QUALITY VOLUME WAS CALCULATED BY MULTIPLYING THE IMPERVIOUS AREA BY THE FIRST FLUSH RUNOFF VALUE OF 0.42". ALL HYDROLOGIC AND HYDRAULIC CALCULATIONS CAN BE FOUND ON THIS SHEET.

EXISTING CONDITIONS
UNDER THE EXISTING CONDITIONS, THE MAJORITY OF THE SITE (EX 2) SLOPES FROM SOUTHWEST TO NORTHEAST. A SMALL PORTION OF THE SITE (EX 1) SLOPES TO THE SOUTH. STORMWATER RUNOFF FROM THE SITE IS CONVEYED VIA SURFACE FLOW ACROSS THE LOT AND FREELY DISCHARGES INTO THE PARKING LOT OF THE ADJACENT PROPERTY TO THE EAST. RUNOFF FROM THE EXISTING BASINS EACH ARE DIRECTED TO DIFFERENT PONDS WITHIN THE ADJACENT PROPERTY. HOWEVER, THE RUNOFF FROM BOTH EXISTING SUBBASINS IS ULTIMATELY CONVEYED ALONG WITH RUNOFF FROM THE ADJACENT PROPERTY INTO THE DRAINAGE CHANNEL AT THE SOUTHEAST CORNER OF UNSER BLVD AND BRIDGE BLVD.

DEVELOPED CONDITIONS
SUBBASIN DEV2 CONTAINS 3.1 ACRES AND DRAINS VIA ROADWAY GUTTER FLOW TO A WATER QUALITY RETENTION POND BY THE CUL-DE-SAC. THE POND DISCHARGES VOLUME IN EXCESS OF THE WATER QUALITY TREATMENT VOLUME INTO AN EXISTING 84" RCP LOCATED IN BRIDGE BOULEVARD AT A RATE OF 11.2 CFS (3.61 CFS/AC) WHICH IS LESS THEN THE ALLOWABLE DISCHARGE RATE OF 12.5 CFS (4.0 CFS/AC) ACCORDING TO THE 2013 DRAINAGE MASTER PLAN BY AMOLE-HUBBELL.

SUBBASINS DEV1 AND DEV 3 CONTAIN A COMBINED TOTAL OF 1.4 ACRES AND DRAIN TO THE ADJACENT PROPERTY TO THE EAST VIA SHEET FLOW AT A RATE OF 4.7 CFS (3.4 CFS/AC) WHICH IS LESS THE ALLOWABLE DISCHARGE RATE OF 5.6 CFS (4.0 CFS/AC) ACCORDING TO THE 2013 AMOLE-HUBBELL DRAINAGE MASTER PLAN.

SUBBASINS DEV 1 AND DEV 3 DISCHARGE LESS RUNOFF TO THE AJACENT PROPERTY THAN IN THE EXISTING CONDITION (SUBBASINS EX1 AND EX2, RESPECTIVELY). SUBBASINS DEV1 AND DEV3 MEET THEIR WATER QUALITY REQUIREMENTS VIA FEE IN LIEU.

CALCULATIONS OF WATER QUALITY VOLUME AND THE FEE IN LIEU AMOUNT ARE SHOWN IN THE TABLES ON THIS SHEET.

JOHN M. STAPLETON

30170

1/27/2025

PROFESSIONAL ENGINEER

CDS

COMMUNITY DESIGN SOLUTIONS, LLC

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ALBUQUERQUE, NEW MEXICO 87114

PHONE: (505)366-4187

SHEET FOR INFORMATION

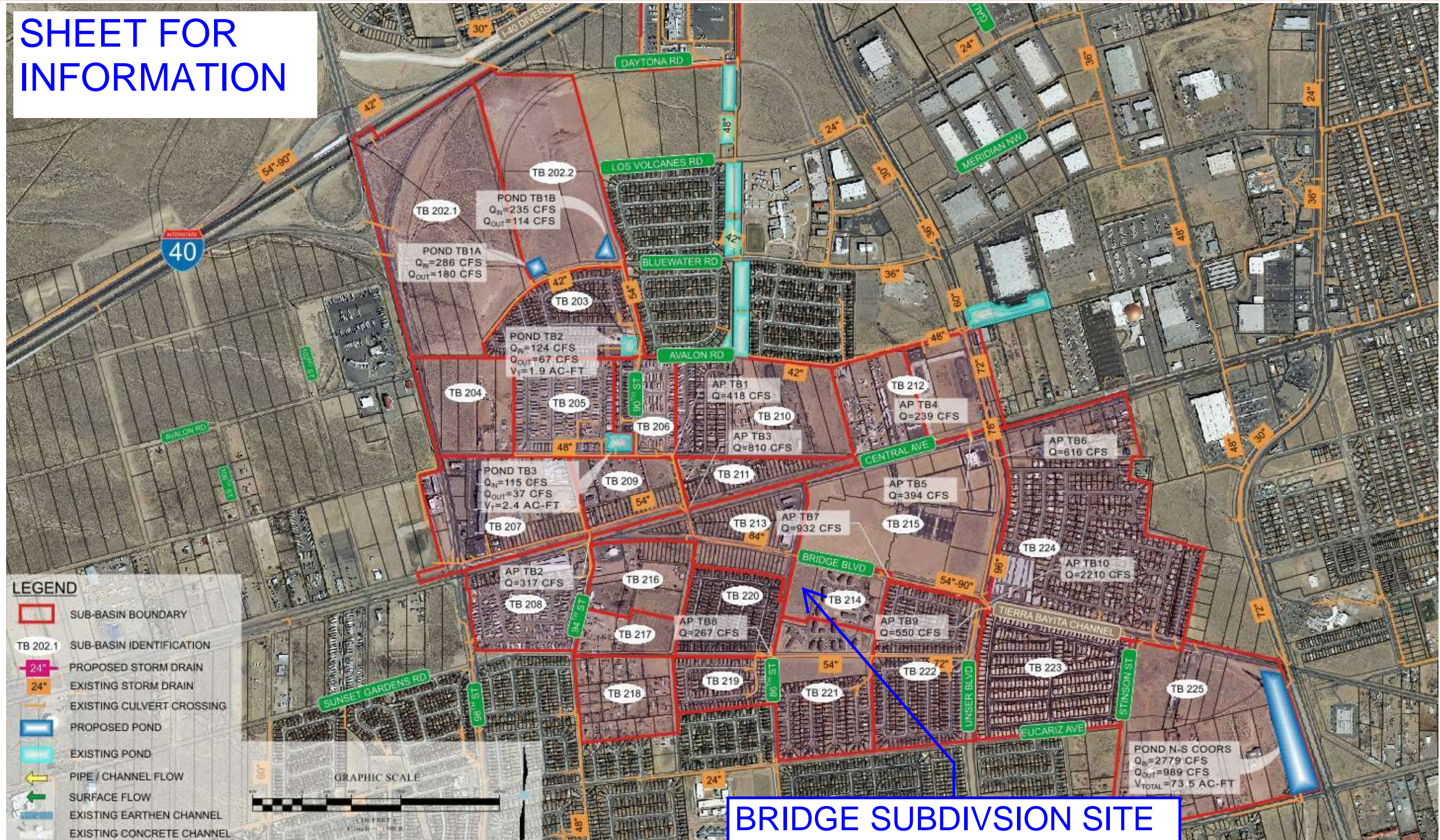


Figure 3-13: Tierra Bayita Area - Proposed Basin Map