CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

March 18, 2024

Olin M. Brown, P.E., Vice President Community Development and Planning
Bohannan Huston, Inc.
7500 Jefferson St NE
Albuquerque, NM 87109

RE: ABQ Studios Expansion WO #3 (CPN: 393587)
Grading & Drainage Plan
Engineer's Stamp Date: 3/8/2023
Engineer's As-builts Certification Date: 3/11/2024
Hydrology File: R16DA3006AA

Dear Mr. Brown:

Based on the submittal received on 3/13/2024 and site visit on 3/13/2024, this certification is approved for Release of Financial Guarantee by Hydrology.

If you have any questions, please contact me at 505-924-3695 or tchen@cabq.gov.

Sincerely,

Tiequan Chen, P.E.
Principal Engineer, Hydrology
Planning Department, Development Review Services

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title: ABQ Studios Expansion WO #3 Hydrology File # R16DA3006AA
Legal Description: Tracts P-1, P-2, and 1 Mesa del Sol Innovation Park II; Tract OS-6 Mesa Del Sol Innovation Park II
City Address, UPC, OR Parcel: 5650 University Blvd SE

Applicant/Agent: Bohannan Huston Inc. Contact: Olin Brown, PE
Address: 7500 Jefferson St. NE, Albuquerque, NM 87109 Phone: (505) 923-3331
Email: obrown@bhinc.com

Applicant/Owner: _____ Contact: _____
Address: _____ Phone: _____
Email: _____

(Please note that a DFT SITE is one that needs Site Plan Approval & ADMIN SITE is one that does not need it.)

TYPE OF DEVELOPMENT: ☐ PLAT (#of lots) _____ ☐ RESIDENCE
☑ DFT SITE ☐ ADMIN SITE

RE-SUBMITTAL: ☐ YES ☑ NO

DEPARTMENT: ☐ TRANSPORTATION ☑ HYDROLOGY/DRAINAGE

Check all that apply under Both the Type of Submittal and the Type of Approval Sought:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☑ PAD CERTIFICATION
- ☐ CONCEPTUAL G&D PLAN
- ☑ GRADING & DRAINAGE PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL) ADMINISTRATIVE
- ☐ TRAFFIC CIRCULATION LAYOUT FOR DFT APPROVAL
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY) _____

TYPE OF APPROVAL SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ CONCEPTUAL TCL DFT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SITE PLAN FOR BLDG PERMIT DFT 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
- ☑ OTHER (SPECIFY) POND CERTIFICATION

DATE SUBMITTED: 03/11/2024

REV. 09/13/23

Bohannan Huston

Courtyard I
7500 Jefferson St. NE
Albuquerque, NM
87109-4335

www.bhinc.com

voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

March 11, 2024

Mr. Tiequan Chen, P.E.
Hydrology Section
City of Albuquerque
600 2nd Street NW
Albuquerque, NM 87102

Re: Pond Certification for Netflix PWO #3 (CPN 393587); Hydrology File R16DA3006

Dear Tiequan,

We are submitting a pond certification for Netflix Public Work Order #3 (CPN 393587) regional retention pond (OS-6). Enclosed for your reference is the approved grading and drainage plan (approval letter dated 3/17/2023) as well as as-built elevation data that I have reviewed against the approved plans.

After reviewing these as-built elevations and visiting the site on 12/5/2023 it is my belief that the above pond has been graded in substantial compliance with the approved grading and drainage plan, and meets the 100-year, 10-day retention volume requirements identified in the approved drainage management plan.

I appreciate your time and consideration. If you have questions or require additional information, please contact me at 823-1000.

Sincerely,

Olin Brown, P.E.
Vice President
Community Development & Planning

Enclosure

MEDIAN FL CURVE TABLE				
ID	ARC	RADIUS	DELTA	TANGENT
C1	132.11'	3786.32'	01°59'57"	66.06'
C2	7.85'	5.00'	89°55'10"	4.99'
C3	7.38'	4.99'	84°45'54"	4.55'
C4	64.3B'	3326.54'	01°06'32"	32.19'
C5	2B.27'	9.00'	180°00'00"	—
C6	344.44'	3786.32'	05°12'44"	172.34'
C7	167.52'	3026.21'	03°10'1B"	B3.78'
C8	10.23'	3.04'	192°3B'01"	—

Crossings				
DES	SD	WL	UNKNOWN	Clearance
1	1B" TP 83.16		30" TP 86.95	**00.B7
	18" BP 81.25		30" BP 84.03	
2	1B" TP B2.94	16" TP B7.87		03.36
	18" BP 81.02	16" BP 86.30		
3	1B" TP 83.22	12" TP 88.71		04.44
	18" BP B1.31	12" BP 87.67		

**CROSSINGS LESS THAN 18" REQUIRE FLOW FILL BETWEEN CROSSINGS.

(A) FLOWLINE DATA FOR CURB RETURN

PC	97.57
1	97.38
2	97.19
3	96.99
PT	96.B0
PI	96.98

D = 89°12'01"
R = 30.00'
T = 29.5B'
L = 46.71'
C = 42.13'

PC STA. 2B+96.07, 74.70' LT
PT STA. 2B+66.65, 45.00' LT
PI STA. 28+95.89, 45.10' LT
RAD STA. 28+66.65, 75.00' LT

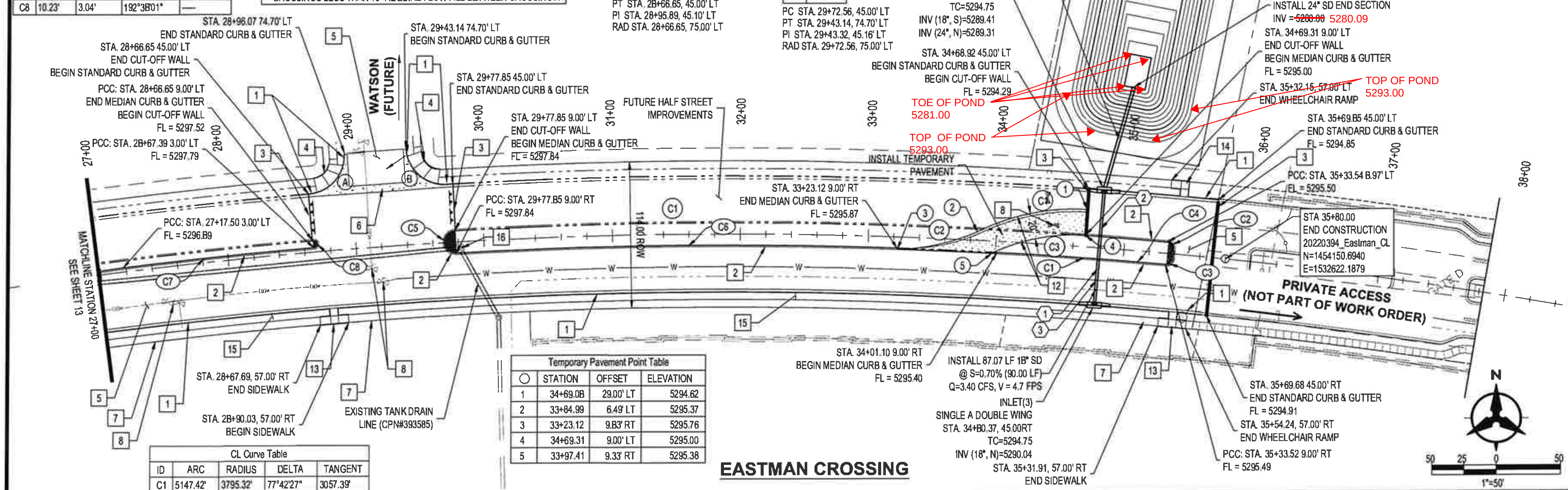
(B) FLOWLINE DATA FOR CURB RETURN

PC	97.14
1	97.29
2	97.44
3	97.59
PT	97.74
PI	97.16

D = B9°12'01"
R = 30.00'
T = 29.5B'
L = 46.71'
C = 42.13'

PC STA. 29+72.56, 45.00' LT
PT STA. 29+43.14, 74.70' LT
PI STA. 29+43.32, 45.16' LT
RAD STA. 29+72.56, 75.00' LT

Temporary Pavement Curve Table				
ID	ARC	RADIUS	DELTA	TANGENT
C1	88.43'	169.92'	29°48'58"	45.24'
C2	64.34'	170.B7'	21°34'30"	32.56'
C3	74.95'	152.23'	28°12'35"	38.25'

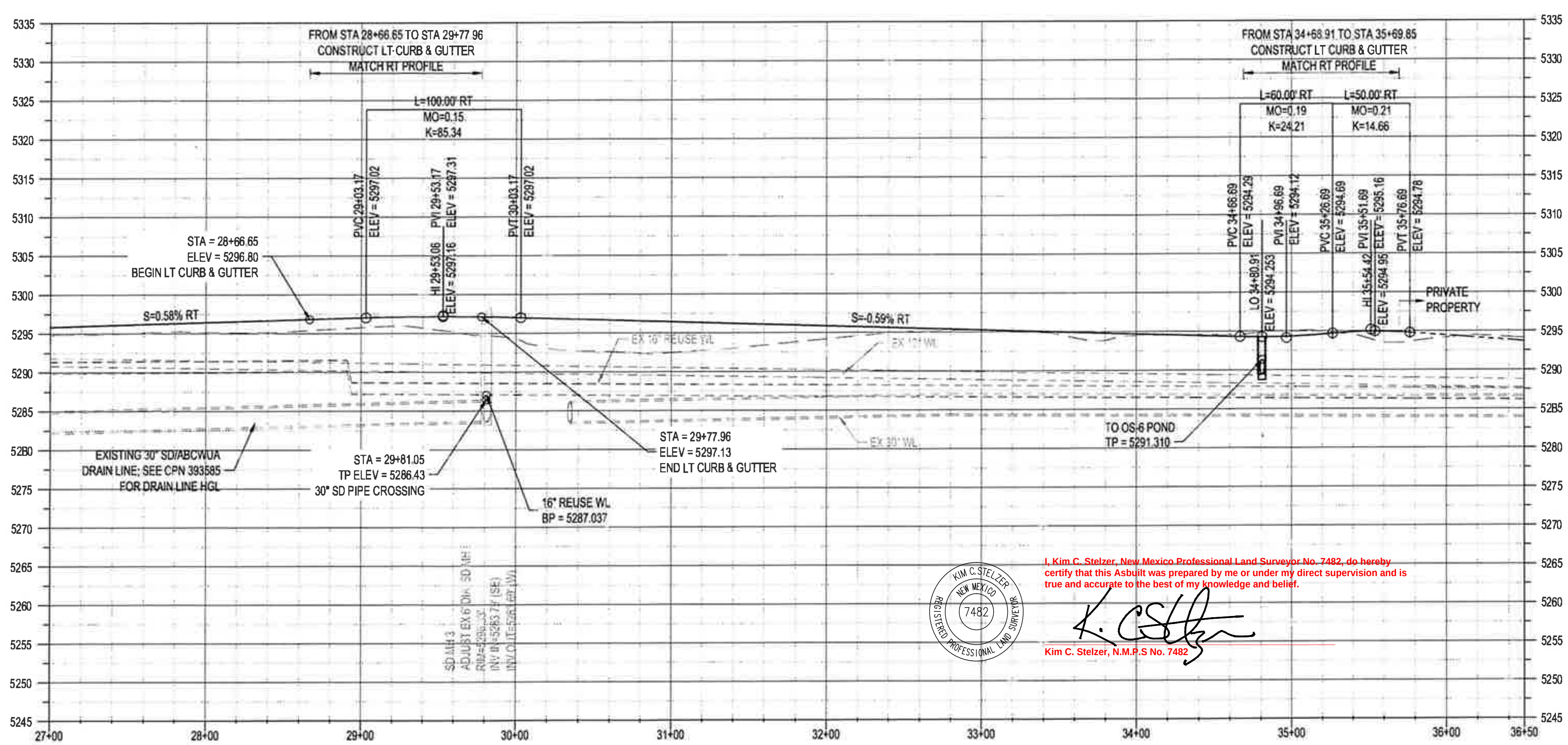


CL Curve Table				
ID	ARC	RADIUS	DELTA	TANGENT
C1	5147.42'	3795.32'	77°42'27"	3057.39'

Temporary Pavement Point Table			
○	STATION	OFFSET	ELEVATION
1	34+69.0B	29.00' LT	5294.62
2	33+84.99	6.49' LT	5295.37
3	33+23.12	9.B3' RT	5295.76
4	34+69.31	9.00' LT	5295.00
5	33+97.41	9.33' RT	5295.38

EASTMAN CROSSING

HORIZONTAL SCALE: 1" = 50' VERTICAL SCALE: 1"=10'



I, Kim C. Stelzer, New Mexico Professional Land Surveyor No. 7482, do hereby certify that this Asbuilt was prepared by me or under my direct supervision and is true and accurate to the best of my knowledge and belief.

Kim C. Stelzer, N.M.P.S No. 7482

811

CALL NM ONE-CALL SYSTEM SEVEN (7) DAYS PRIOR TO ANY EXCAVATION

BHI JOB NO. 20220394

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
2. ALL CURB RETURN RADII SHALL BE 25' UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
4. GRADE ELEVATIONS, WHERE NOTED, ARE FOR FLOWLINE OF CURB UNLESS OTHERWISE SPECIFIED.
5. CONTRACTOR IS TO INSTALL A 4"x 4"x 5' POST AND E.M.S. AT THE END OF EACH SANITARY SEWER SERVICE.
6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
11. REMOVAL OF THE EXISTING CURB & GUTTER TO NEAREST JOINT.
12. CURB RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.
13. RCP SHALL BE INSTALLED SO THAT THE JOINT GAP AT THE HOME POSITION SHALL CONFORM TO THE APPROVED MANUFACTURER'S RECOMMENDATIONS. MANUFACTURER'S RECOMMENDED JOINT GAP TOLERANCES FOR EACH PIPE SIZE AND TYPE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF PIPE. RCP JOINTS SHALL NOT BE GROUTED UNLESS DIRECTED BY THE ENGINEER AFTER CITY APPROVAL.
14. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.
15. PAVEMENT THICKNESS TO MATCH EXISTING PAVEMENT THICKNESS IF EXISTING IS THICKER THAN PROPOSED SECTION.

KEYED NOTES

1. INSTALL STANDARD 8" CURB & GUTTER PER COA STD. DWG. 2415A.
2. INSTALL MEDIAN CURB & GUTTER PER COA STD. DWG. 2415B.
3. INSTALL CONCRETE CUT-OFF WALL PER COA STD. DWG. 2415C.
4. INSTALL WHEELCHAIR CURB RAMP PER COA STD DWG. 2441. DETECTABLE WARNING STRIPS SHALL BE RED, PER MESA DEL SOL DESIGN STANDARDS.
5. INSTALL (2) 2 INCH LIFTS OF SPIII ASPHALT PAVEMENT PER COA STD. DWG 2408.
6. INSTALL CONCRETE VALLEY GUTTER PER COA STD. DWG. 2420.
7. INSTALL 6' SIDEWALK PER COA STD. DWG. 2430.
B. ADJUST EXISTING CONCRETE COLLAR TO GRADE.
9. TIE TO EXISTING CURB AND GUTTER AND MATCH EXISTING ELEVATION.
10. TIE TO EXISTING ASPHALT PAVEMENT AND MATCH EXISTING ELEVATION.
11. TIE TO EXISTING SIDEWALK AND MATCH EXISTING ELEVATION.
12. INSTALL EXTRUDED ASPHALT CURB PER COA STD. DWG 2415C.
13. INSTALL WHEELCHAIR CURB RAMP PER COA STD DWG. 2444 DETAIL B. DETECTABLE WARNING STRIPS SHALL BE RED, PER MESA DEL SOL DESIGN STANDARDS.
14. INSTALL WHEELCHAIR CURB RAMP PER COA STD DWG. 2444 DETAIL C. DETECTABLE WARNING STRIPS SHALL BE RED, PER MESA DEL SOL DESIGN STANDARDS.
15. INSTALL BUFFER SWALE PER COA STD DWG. 2414
16. ADJUST MANHOLE RIM TO GRADE AND REBUILD COLLAR.
17. INSTALL WHEELCHAIR CURB RAMP PER COA STD DWG. 2442 DETAIL D. DETACHABLE WARNING STRIPS SHALL BE RED, PER MESA DEL SOL DESIGN STANDARDS.
1B. INSTALL WHEELCHAIR CURB RAMP PER COA STD DWG. 2442 DETAIL A. DETACHABLE WARNING STRIPS SHALL BE RED, PER MESA DEL SOL DESIGN STANDARDS.
19. CONTRACTOR SHALL POUR CUB AROUND VALVE, ADJUST VALVE CAN AND EXISTING COLLAR TO GRADE.

LEGEND

ASPHALT PAVEMENT PER COA STD. DWG 2405B
EXISTING ASPHALT PAVEMENT
TEMPORARY PAVEMENT PER COA STD. DWG 2415B
MEDIAN NOSE PAVEMENT PER COA STD. DWG 2408

Bohannan Huston
www.bhinc.com
800.877.5332

CONSULTANTS

BENCH MARKS

SEE SHEET 4 FOR CONTROL SURVEY BENCHMARKS

SEAL

NO. | DATE | DESCRIPTION | BY

AS-BUILT INFORMATION
CONTRACTOR: | DATE:
WORK STAKED BY: | DATE:
INSPECTOR'S ACCEPTANCE BY: | DATE:
FIELD VERIFICATION BY: | DATE:
DRAWINGS CORRECTED BY: | DATE:

DESIGNED BY: AO
DRAWN BY: KH
CHECKED BY: OB
DATE 1/10/2023

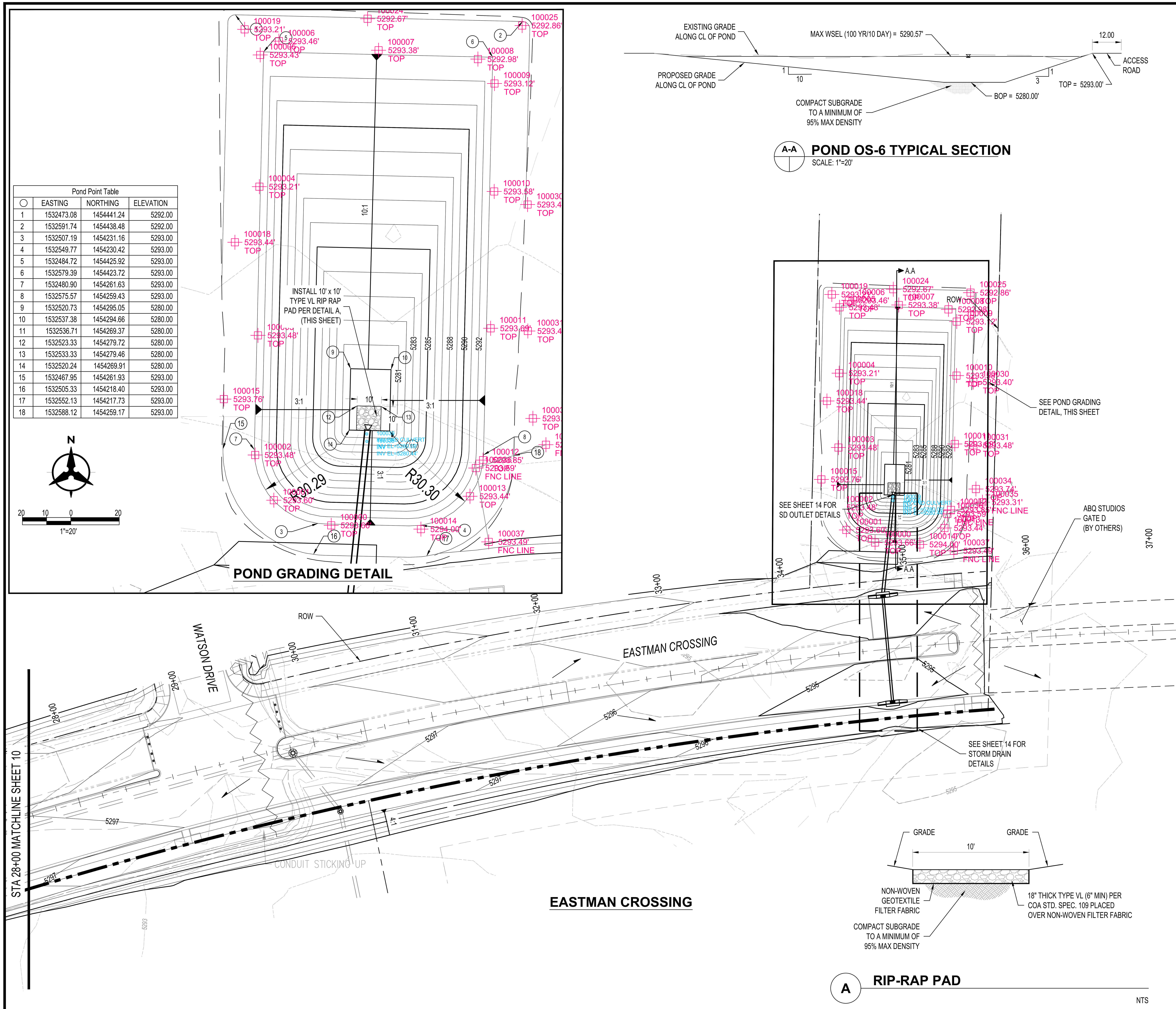
CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

ABQ STUDIOS EXPANSION
WORK ORDER PACKAGE 3

PLAN AND PROFILE EASTMAN CROSSING

DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL

ZONE MAP NO. R-16-Z
CITY PROJECT NO. 393587
SHEET NO. 14 OF 17



Pond Point Table			
◯	EASTING	NORTHING	ELEVATION
1	1532473.08	1454441.24	5292.00
2	1532591.74	1454438.48	5292.00
3	1532507.19	1454231.16	5293.00
4	1532549.77	1454230.42	5293.00
5	1532484.72	1454425.92	5293.00
6	1532579.39	1454423.72	5293.00
7	1532480.90	1454261.63	5293.00
8	1532575.57	1454259.43	5293.00
9	1532520.73	1454295.05	5280.00
10	1532537.38	1454294.66	5280.00
11	1532536.71	1454269.37	5280.00
12	1532523.33	1454279.72	5280.00
13	1532533.33	1454279.46	5280.00
14	1532520.24	1454269.91	5280.00
15	1532467.95	1454261.93	5293.00
16	1532505.33	1454218.40	5293.00
17	1532552.13	1454217.73	5293.00
18	1532588.12	1454259.17	5293.00

NOTES

1. EXCEPT AS PROVIDED HERIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
2. CONTRACTOR SHALL OBTAIN AND ABIDE BY A TOPSOIL DISTURBANCE PERMIT FROM THE CITY OF ALBUQUERQUE ENVIRONMENTAL HEALTH DIVISION, PRIOR TO CONSTRUCTION. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SOILS REPORT. ALL OTHER WORK, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS (FIRST PRIORITY), AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY)
4. TWO WORKING DAYS PRIOR TO EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
5. PRIOR TO GRADING, ALL VEGETATION DEBRIS, AND NEAR SURFACE ORGANICALLY CONTAMINATED SOIL SHALL BE STRIPPED FROM ALL AREAS TO BE GRADED. VEGETATION AND DEBRIS SHALL BE DISPOSED OF OFF-SITE OR STOCK-PILED FOR USE IN PLANTERS AND NON-STRUCTURAL FILLS.
6. EARTH SLOPES SHALL NOT EXCEED 4 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
7. 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.
8. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
9. A DISPOSAL SITE FOR ALL EXCESS EXCAVATION AND UNSUITABLE 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 SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT, AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
10. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATIONS.
11. ALL SPOT ELEVATIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED. VALLEY GUTTER ELEVATIONS ARE SHOWN AT FLOWLINE ELEVATION.
12. GRADING SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

CALL NM ONE-CALL SYSTEM SEVEN (7) DAYS PRIOR TO ANY EXCAVATION

CONSULTANTS: Bohannan Huston — www.bhinc.com 800.877.5332

BENCH MARKS: SEE SHEET 4 FOR CONTROL SURVEY BENCHMARKS

SEAL

NO. | DATE | DESCRIPTION | BY

AS-BUILT INFORMATION
CONTRACTOR:
WORK STAKED BY: DATE:
INSPECTOR'S ACCEPTANCE BY: DATE:
FIELD VERIFICATION BY: DATE:
DRAWINGS CORRECTED BY: DATE:

DESIGNED BY: AO
DRAWN BY: KH
CHECKED BY: OB
DATE 1/10/2023

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

ABQ STUDIOS EXPANSION
WORK ORDER PACKAGE 3

GRADING PLAN 3

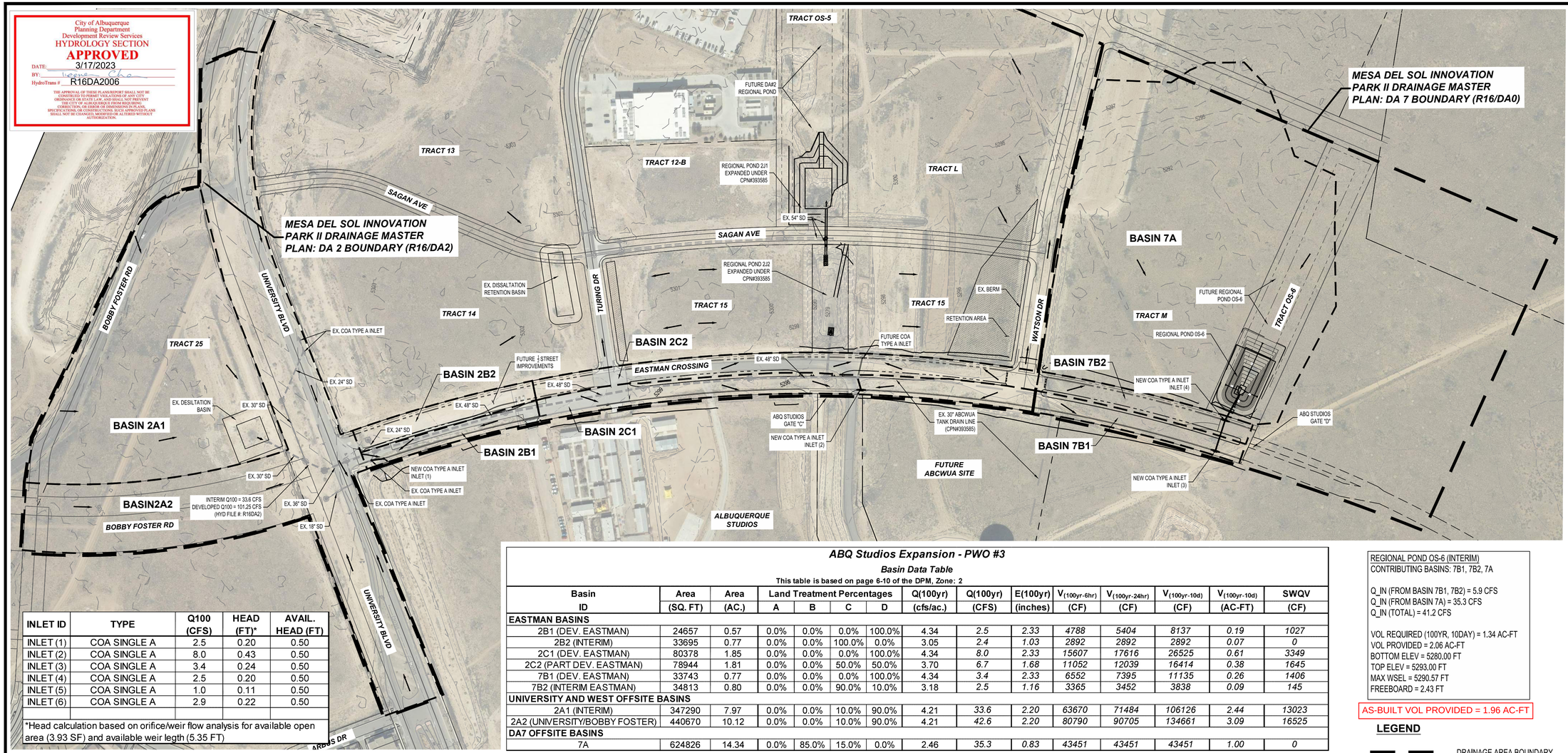
DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL

ZONE MAP NO. R-16-Z
CITY PROJECT NO. 393587
SHEET NO. 11 OF 17

Mon, 11-Mar-2024 - 1:28:pm, Plotted by: DHUSTON

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 3/17/2023
BY:
HydroTrans #: R16DA2006

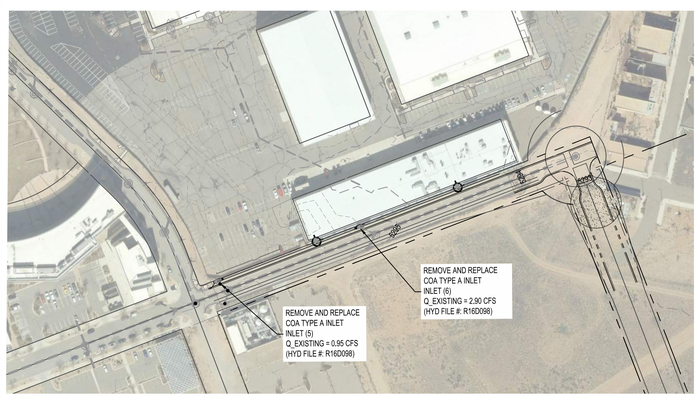
THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATION OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OF ERROR OR OMISSION IN PLANS. SPECIFICATIONS OR CONSTRUCTION. THESE PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.



INLET ID	TYPE	Q100 (CFS)	HEAD (FT)*	AVAIL. HEAD (FT)
INLET (1)	COA SINGLE A	2.5	0.20	0.50
INLET (2)	COA SINGLE A	8.0	0.43	0.50
INLET (3)	COA SINGLE A	3.4	0.24	0.50
INLET (4)	COA SINGLE A	2.5	0.20	0.50
INLET (5)	COA SINGLE A	1.0	0.11	0.50
INLET (6)	COA SINGLE A	2.9	0.22	0.50

*Head calculation based on orifice/weir flow analysis for available open area (3.93 SF) and available weir legth (5.35 FT)

EASTMAN CROSSING



STRYKER ROAD

ABQ Studios Expansion - PWO #3

Basin Data Table

This table is based on page 6-10 of the DPM, Zone: 2

Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages A	B	C	D	Q(100yr) (cfs/ac.)	Q(100yr) (CFS)	E(100yr) (inches)	$V_{(100yr-6hr)}$ (CF)	$V_{(100yr-24hr)}$ (CF)	$V_{(100yr-10d)}$ (CF)	$V_{(100yr-10d)}$ (AC-FT)	SWQV (CF)
EASTMAN BASINS														
2B1 (DEV. EASTMAN)	24657	0.57	0.0%	0.0%	0.0%	100.0%	4.34	2.5	2.33	4788	5404	8137	0.19	1027
2B2 (INTERIM)	33695	0.77	0.0%	0.0%	100.0%	0.0%	3.05	2.4	1.03	2892	2892	2892	0.07	0
2C1 (DEV. EASTMAN)	80378	1.85	0.0%	0.0%	0.0%	100.0%	4.34	8.0	2.33	15607	17616	26525	0.61	3349
2C2 (PART DEV. EASTMAN)	78944	1.81	0.0%	0.0%	50.0%	50.0%	3.70	6.7	1.68	11052	12039	16414	0.38	1645
7B1 (DEV. EASTMAN)	33743	0.77	0.0%	0.0%	0.0%	100.0%	4.34	3.4	2.33	6552	7395	11135	0.26	1406
7B2 (INTERIM EASTMAN)	34813	0.80	0.0%	0.0%	90.0%	10.0%	3.18	2.5	1.16	3365	3452	3838	0.09	145
UNIVERSITY AND WEST OFFSITE BASINS														
2A1 (INTERIM)	347290	7.97	0.0%	0.0%	10.0%	90.0%	4.21	33.6	2.20	63670	71484	106126	2.44	13023
2A2 (UNIVERSITY/BOBBY FOSTER)	440670	10.12	0.0%	0.0%	10.0%	90.0%	4.21	42.6	2.20	80790	90705	134661	3.09	16525
DA7 OFFSITE BASINS														
7A	624826	14.34	0.0%	85.0%	15.0%	0.0%	2.46	35.3	0.83	43451	43451	43451	1.00	0

DRAINAGE NARRATIVE

INTRODUCTION

THIS PUBLIC WORK ORDER (CPN 393587) INCLUDE PUBLIC INFRASTRUCTURE IMPROVEMENTS IN SUPPORT OF THE ON-GOING ALBUQUERQUE STUDIOS EXPANSION PROJECT, LOCATED WITHIN THE EMPLOYMENT DISTRICT OF THE MESA DEL SOL MASTER PLANNED COMMUNITY. THE PROJECT INCLUDES THE CONSTRUCTION OF HALF-STREET IMPROVEMENTS FOR EASTMAN CROSSING, EAST OF UNIVERSITY BOULEVARD, AND MODIFICATIONS TO THE NORTHERN CURB LINE OF STRYKER ROAD, EAST OF UNIVERSITY BOULEVARD. THE DRAINAGE IMPROVEMENTS ASSOCIATED WITH THESE ROADWAY MODIFICATIONS ARE CONSISTENT WITH THE DRAINAGE MASTER PLAN(S) PREVIOUSLY APPROVED FOR THESE AREAS AND MAINTAIN FIDELITY TO THE LEVEL B MASTER PLAN. THE MESA DEL SOL EMPLOYMENT CENTER WAS ORIGINALLY CONSIDERED UNDER A MASTER DRAINAGE MANAGEMENT PLAN (INNOVATION PARK II DRAINAGE MASTER PLAN, COA HYDRO FILE R16/D097, STAMP DATE 4-4-2008), WHICH IDENTIFIED (7) DISCRETE DRAINAGE AREAS (DA's). THIS SPECIFIC PROJECT ENCOMPASSES IMPACTS TO TWO OF THOSE DA's–DA 2 (BOUNDED BY UNIVERSITY BLVD/BOBBY FOSTER RD, FRITTS AVE, WATSON DR, AND EASTMAN CROSSING) AND DA 7 (BOUNDED BY FRITTS AVE, WATSON AVE, EASTMAN CROSSING, AND HAWKING DR). THE DA 2 DMP (COA HYDRO FILE #R16/DA2, STAMP DATE 11-4-2008) WAS PROVIDED IN SUPPORT OF DEVELOPMENTS WITHIN THOSE BOUNDARIES. AS NO DEVELOPMENTS WERE PURSUED WITHIN DA7, NO DMP HAS BEEN PREPARED FOR THE DA 7 FULLY DEVELOPED CONDITIONS BEYOND THE OVERALL INNOVATION PARK II DMP, REFERENCED PREVIOUSLY.

EXISTING CONDITIONS

EASTMAN CROSSING CURRENTLY FEATURES PORTIONS OF HALF STREET ROADWAY IMPROVEMENTS, AS WELL AS UNDERLYING UTILITIES, INCLUDING WATER, REUSE WATER, SANITARY SEWER, AND STORM DRAIN TRUNK LINE. THE STORM DRAIN TRUNKLINE WAS CONSTRUCTED AS PART OF CITY OF ALBUQUERQUE PROJECT 7754.82 (COA HYDRO FILE R16/DA3) AND CURRENTLY SERVES INLETS ON UNIVERSITY BOULEVARD AND A SINGLE INLET (SINGLE TYPE A INLET IN A SUMP CONDITION) ON EASTMAN NEAR THE SOUTHEAST CORNER OF ITS INTERSECTION WITH UNIVERSITY BOULEVARD. THE STORM DRAIN ALSO SERVES THE OFFSITE BASIN NORTHWEST OF THE INTERSECTION (SEE BASIN 2A1). THIS STORM DRAIN WAS SIZED FOR FULLY DEVELOPED CONDITIONS (101.25 CFS, UPSTREAM OF THE EASTMAN/UNIVERSITY INTERSECTION). THE STORM DRAIN IS INTENDED TO ACCEPT THESE FLOWS, AS WELL AS THE FULLY DEVELOPED FLOWS WITHIN THE EASTMAN ROADWAY ITSELF. THE STORM DRAIN CARRIES STORMWATER EAST TO AN EXISTING MANHOLE THAT DISCHARGES TO THE NORTH INTO A REGIONAL RETENTION POND WITHIN THE DA2 LIMITS. THIS POND WAS RECENTLY EXPANDED AS PART OF CPN 393585 TO ACCOMMODATE THE RELOCATED ABCWUA ELEVATED TANK DRAINLINE. AS OUTLINED IN THE RESPECTIVE DRAINAGE AREA MASTER PLANS, THE OFFSITE AREAS ADJACENT TO THE ROADWAYS ARE NOT INTENDED TO DRAIN TO THE ROADWAY AND INSTEAD BE CONTAINED WITHIN THOSE TRACTS UNTIL THEY ARE DEVELOPED, AT WHICH POINT THE LOCAL DRAINAGE WITHIN THE TRACT WILL BE ROUTED TO THE ADJACENT REGIONAL POND SYSTEMS WHERE THEY WILL BE RETAINED.

THE EXISTING DRAINAGE INFRASTRUCTURE WITHIN STRYKER ROAD IS CURRENTLY SIZED FOR THE FULLY BUILT CONDITION AND DRAINAGE AREAS. THIS ROADWAY WAS STUDIED AS PART OF THE ORIGINAL UNIVERSITY BOULEVARD DRAINAGE ANALYSIS (COA HYDRO FILE #R16/D098). THE TRUNKLINE IS DESIGNED TO CARRY FULLY DEVELOPED FLOWS TO THE REGIONAL RETENTION POND LOCATED TO THE SOUTH, AS REVISED AS PART OF MDS OS-7, CPN #775684, HYDROLOGY FILE: R16D097A.

PROPOSED CONDITIONS

THE PROPOSED IMPROVEMENTS TO EASTMAN CROSSING WILL FEATURE THE HALF-STREET ROADWAY SECTION ALONG THE SOUTHERN HALF OF THE ROADWAY FROM UNIVERSITY BOULEVARD TO THE NEW ALBUQUERQUE STUDIOS EXPANSION'S GATE "D", LOCATED AT THE EASTERN TERMINUS OF EASTMAN CROSSING. DRAINAGE IMPROVEMENTS WITHIN THE ROADWAY IS LIMITED TO THE PLACEMENT OF (4) NEW STORM DRAIN INLETS AND LATERALS. THE WESTERNMOST INLET (INLET 1) WILL CONNECT DIRECTLY TO THE EXISTING STORM DRAIN AT THE SAG VERTICAL CURVE, AS DEFINED BY THE NEW ROADWAY PROFILE. THE EXISTING INLET IS CURRENTLY AT THE LOW POINT, BUT ROADWAY AND INTERSECTION GEOMETRY REQUIRED A NEW INLET APPROXIMATLEY 34 FEET TO THE EAST. THIS INLET WILL NOT CHANGE THE OVERALL FLOW TO THE TRUNKLINE. A NEW INLET (INLET 2) WILL BE LOCATED FURTHER EAST, NEAR THE NEW ALBUQUERQUE STUDIOS EXPANSION GATE "C", AT ANOTHER ROADWAY SAG VERTICAL CURVE. THIS INLET WILL DRAIN TO THE NEWLY CONSTRUCTED ABCWUA DRAIN LINE/STORM DRAIN AND CONNECT TO AN EXISTING STUB THAT WAS CONSTRUCTED WITH CPN #393585. A FUTURE LATERAL AND INLET WILL BE REQUIRED WHEN THE SECOND HALF-STREET IMPROVEMENTS ON THE NORTH IS CONSTRUCTED. FINALLY, TWO NEW INLETS WILL BE CONSTRUCTED AT A THIRD SAG VERTICAL CURVE WEST OF THE ALBUQUERQUE STUDIOS EXPANSION GATE "D". THIS ROADWAY LOW POINT WAS ALIGNED WITH THE FUTURE REGIONAL POND OS-6, LOCATED WITHIN DA7. AS NO IMPROVEMENTS TO DA7 HAVE BEEN MADE TO DATE, THESE INLETS REQUIRE THE FIRST PHASE OF CONSTRUCTION FOR THIS REGIONAL RETENTION FACILITY WITHIN TRACT OS-6. THE RETENTION POND IS SIZED TO ACCEPT FLOWS FROM THE ROADWAY IMPROVEMENTS, AS WELL AS THE UNDEVELOPED OFFSITE AREA (BASIN 7A) THAT IS CURRENTLY DRAINING TO THIS LOCATION.

THE PROPOSED DRAINAGE IMPROVEMENTS FOR STRYKER ROAD WILL BE LIMITED TO RELOCATING THE EXISTING INLETS (RELOCATED INLETS WILL BE NEWLY CONSTRUCTED) TO THE RE-ALIGNED NORTHERN CURBLINE ON STRYKER. THESE INLETS WILL CONTINUE TO SERVE THE SAME DRAINAGE AREAS AND WILL NOT CHANGE THE OVERALL FLOW IN THIS STORM DRAIN THAT DISCHARGES TO REGIONAL POND LOCATED TO THE SOUTHEAST.

REGIONAL POND OS-6 (INTERIM)
CONTRIBUTING BASINS: 7B1, 7B2, 7A

Q_IN (FROM BASIN 7B1, 7B2) = 5.9 CFS
Q_IN (FROM BASIN 7A) = 35.3 CFS
Q_IN (TOTAL) = 41.2 CFS

VOL REQUIRED (100YR, 10DAY) = 1.34 AC-FT
VOL PROVIDED = 2.06 AC-FT
BOTTOM ELEV = 5280.00 FT
TOP ELEV = 5293.00 FT
MAX WSEL = 5290.57 FT
FREEBOARD = 2.43 FT

AS-BUILT VOL PROVIDED = 1.96 AC-FT

LEGEND

DRAINAGE AREA BOUNDARY
DRAINAGE BASIN BOUNDARY
FLOW DIRECTION

N

150 75 0 150
1" = 150'

811
CALL NM ONE-CALL SYSTEM SEVEN (7) DAYS PRIOR TO ANY EXCAVATION

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

ABQ STUDIOS EXPANSION
WORK ORDER PACKAGE 3

DRAINAGE MANAGEMENT PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL

ZONE MAP NO. R-16-Z
CITY PROJECT NO. 393587
SHEET NO. 1 OF 2

Bohannan Huston
CONSULTANTS
www.bhinc.com
800.877.5332

BENCH MARKS

1_R16	5291.45	1453939.35	1533242.66	ALUMINUM CAP
5_R15	5306.67	1452649.49	1529579.45	ALUMINUM CAP

SEAL
OLIN MICHAEL BROWN
NEW MEXICO
23696
PROFESSIONAL ENGINEER
1/10/2023

NO.	DATE	DESCRIPTION	BY
		AS-BUILT INFORMATION	
		CONTRACTOR:	
		WORK STAKED BY: DATE:	
		INSPECTOR'S ACCEPTANCE BY: DATE:	
		FIELD VERIFICATION BY: DATE:	
		DRAWINGS CORRECTED BY: DATE:	

DESIGNED BY: AO
DRAWN BY: KH
CHECKED BY: OB
DATE 1/10/2023