CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

January 11, 2024

Joshua Lutz, P.E.
Bohannan Huston Inc.
7500 Jefferson St. NE Courtyard I
Albuquerque, NM 87109

RE: Golden Eagle, 99999 University Blvd. UPC: 101605026829920101
A portion of Tract 18 Artiste, Mesa del Sol
Conceptual Grading and Drainage Plan
Engineer's Stamp Date: 1/10/2024
Hydrology File: S17D001

Dear Mr. Lutz:

Based upon the information provided in your submittal received 1/11/2024, the Conceptual Grading & Drainage Plan is preliminary approved for Grading Permit and for action by the DHO/DFT for Platting and Site Plan actions.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

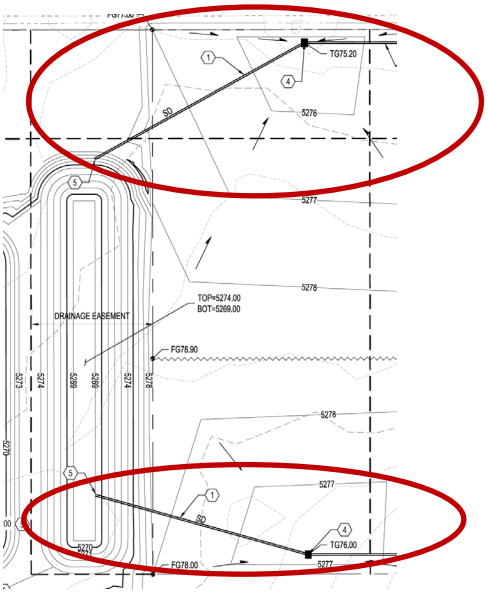
PRIOR TO BUILDING PERMIT:

1. Please submit detailed Grading & Drainage Plan to Hydrology for review and approval.
2. Verify the provided volume for pond 5. It's smaller than the required volume.

Pond 5	Basin 5	0.9	0.4

3. Add proposed SD pipe size on sheets C-00-G10-03 to C-00-G10-05.

C-00-G10-03:



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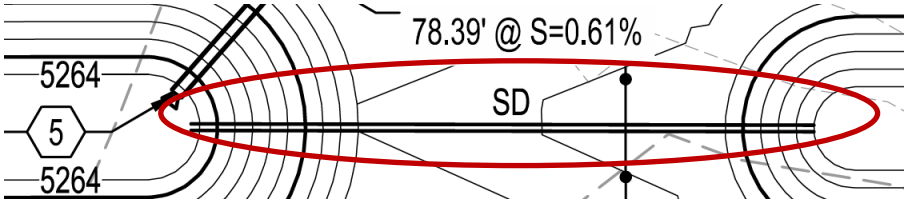

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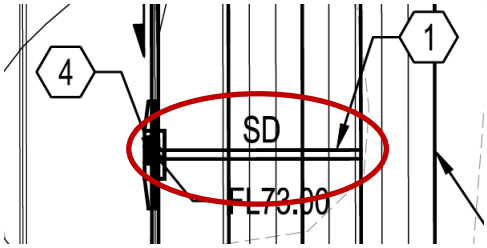

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As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Dough Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

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

City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title: Golden Eagle Hydrology File # _____
Legal Description: A portion of Tract 18 Artiste. The Golden Eagle tract will be platted in the near future. (See zone atlas map).
City Address, UPC, OR Parcel: Address: 99999 University Blvd. UPC: 101605026829920101

Applicant/Agent: Bohannan Huston Inc. Contact: Josh Lutz, PE
Address: 7500 Jefferson St. NE Albuquerque, NM 87109 Phone: (505)823-1000
Email: jlutz@bhinc.com

Applicant/Owner: Maxeon Contact: Don Foldenaur
Address: 5700 University Blvd SE Suite 200 Phone: +1 419-918-9741
Email: donald.foldenauer@maxeon.com

(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)_____

DATE SUBMITTED: January 10, 2024

REV. 09/13/23

Bohannan Huston
great people supporting great communities

New Mexico:
Albuquerque | Las Cruces
Colorado:
Denver | Grand Junction
800.877.5332
bhinc.com

January 10, 2024

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

RE: Golden Eagle, 99999 University Blvd. UPC: 101605026829920101
A portion of Tract 18 Artiste, Mesa del Sol
Conceptual Grading and Drainage Plan Engineer's
Stamp Date: 12/15/2023
Hydrology File: S17D001

Dear Mr. Chen:

Please see our responses below along with the attached revised grading and drainage plans.

1. Please insert vicinity map and FEMA FIRM map. This has been added to the overall sheet.

2. Provide the Benchmark information (location, description and elevation) for the survey contour information provided. Due to the size of the project and the method in which the survey was obtained, we have added a sheet that shows all control data for the area. A reference to this sheet was added to the overall sheet.

3. Please verify the 100yr-24hr and 100yr-10day ponding volume calculations for basins 3, 4, 5 and 6 in the basin data table on sheet 7 (Drawing No. C-00-S-10-05). I applied the equations and tables from section 6-2(A) in the DMP, I got the same weighted E values, but my 100yr-24hr and 100yr-10day volume numbers are slightly different than Jocobs. We have updated the required 10-day volume numbers and are in line with what you have listed below.

Basin ID	Area (AC)	V 100yr, 24hr (CF)	Jacobs	V 100-yr, 10-day (CF)	Jacobs	V 100-yr, 10-d (AC-FT)	Jacobs
1A	11.7	72681	72968	90180	96252	2.1	2.2
1B	19.9	141187	141317	182601	196257	4.2	4.5
2	7.8	52381	52570	66651	71553	1.5	1.6
3	40	331521	37397	446414	189723	10.2	4.4
4	34.9	290937	32981	392299	167320	9.0	3.8
5	3.8	30761	3351	41189	17001	0.9	0.4
6	7.5	65419	7702	89123	39071	2.0	0.9
7	6.9	52714	53086	69567	75579	1.6	1.7

4. Add proposed SD pipe size on the plan. SD sizes have been added.

If you have any questions, please contact me at 505-923-3306

Sincerely,

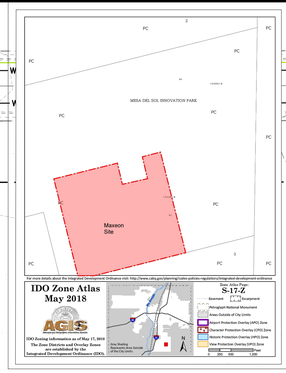
Josh Lutz, P.E.
Senior Project Manager
Community Development & Planning

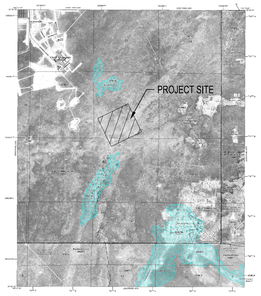
C-00-G-10-02

C-00-G-10-03

C-00-G-10-04

C-00-G-10-05





FEMA FIRM MAP #35001C0555H

GENERAL NOTES

1. 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.

2. 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.

3. 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.

4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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.).

10. 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.

11. THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE CITY OF ALBUQUERQUE, TRAFFIC ENGINEERING DEPARTMENT, PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.

12. 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.

13. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES.

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

ROUGH GRADING NOTES

1. GRADES SHOWN ON THE ROUGH GRADING PLAN REPRESENT FINISHED GRADES. FINISHED GRADES SHALL BE ADJUSTED TO ACCOUNT FOR PAVEMENT SECTION AND BUILDING FLOOR SLAB.

2. PRIOR TO SUBSTANTIAL COMPLETION OF ROUGH GRADING, CONTRACTOR SHALL PROVIDE CERTIFIED FINISHED GRADE, INCLUDING STOCKPILES (HARD COPY AND ELECTRONIC FORMAT - AUTOCAD PREFERRED) FROM A LICENSED SURVEYOR. TOPOGRAPHIC ACCURACY SHALL BE AS REQUIRED TO PROVIDE 1' CONTOUR INTERVAL.

3. FOR THE BUILDING AREA, OVER EXCAVATION AND BACKFILL SHALL OCCUR PER GEOTECHNICAL REPORT.

4. CONTRACTOR IS RESPONSIBLE FOR SWPPP PREPARATION AND IMPLEMENTATION.

5. FINISHED GRADE FOR PAVEMENT AREAS SHALL BE LEFT AS FOLLOWS:
   A. SIDEWALKS: 4" BELOW PAVEMENT SURFACE ELEVATIONS SHOWN ON GRADING PLAN.
   B. AUTOMOBILE PARKING AND DRIVE LANES: PER LIGHT DUTY PAVEMENT SECTION.
   C. HEAVY TRUCK TRAFFIC (INCLUDING DELIVERY & TRASH TRUCKS): PER HEAVY DUTY PAVEMENT SECTION.
   D. FLOOR SLAB: BELOW FINISHED FLOOR PER STRUCTURAL PLANS.

LEGEND

- PROPERTY LINE
- 5320 PROPOSED INDEX CONTOUR
- 5319 PROPOSED INTERMEDIATE CONTOUR
- 5320 EXISTING INDEX CONTOUR
- 5319 EXISTING INTERMEDIATE CONTOUR
- PROPOSED DRAINAGE SWALE
- DIRECTION OF FLOW
- WATER BLOCK/GRADE BREAK
- PROPOSED STORM DRAIN PIPE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLETS
- PROPOSED STORM DRAIN CAP
- PROPOSED EASEMENT
- RETAINING WALL
- PROPOSED BUILDING
- 1 BUILDING NUMBER

SURVEY CONTROL

SEE ATTACHED SHEET "3523" FOR SURVEY CONTROL FOR THE MESA DEL SOL AREA.

100 50 0 100
1"=100'

Bohannan Huston
www.bhinc.com
800.877.5332

Jacobs

Project North / True North

KEYPLAN

JOSHUA J. LUTZ
NEW MEXICO
25526
01-10-2024
PROFESSIONAL ENGINEER

JOSHUA LUTZ
CIVIL ENGINEER
REGISTRATION #25526

NO.	DATE	REVISION	CHK	APVD
A	2023/11/17	PRELIMINARY MIDPOINT REVIEW	BY	APVD
			XXX	SMS

SEAL/NAME

maxeon

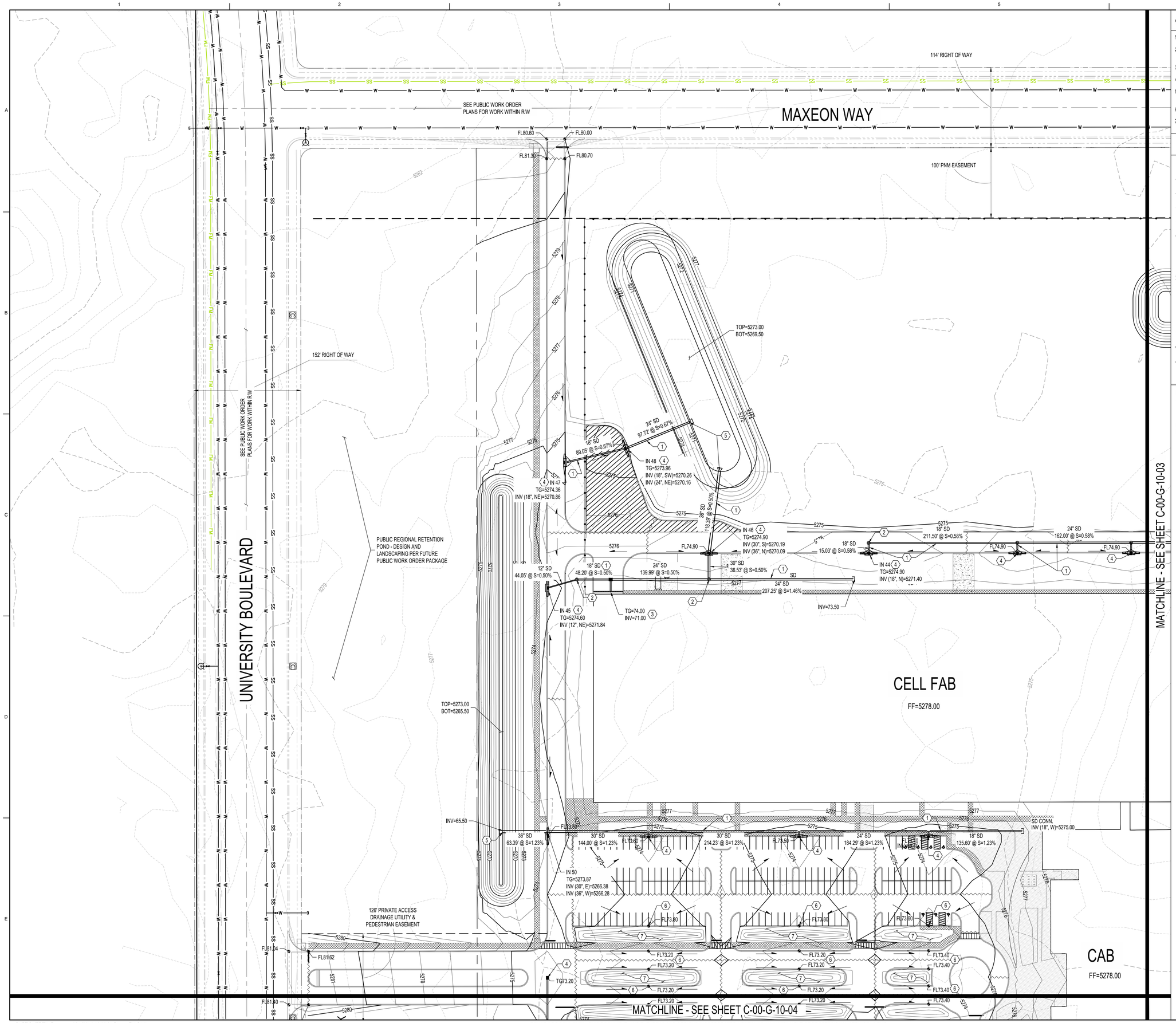
Project Title: GOLDEN EAGLE

Drawing Title: OVERALL GRADING PLAN

Proj. Address:
MESA DEL SOL, ALBUQUERQUE, NEW MEXICO

Proj. No.:	D3794500
Date:	2024/01/05
Scale:	1" = 100'
Drawing No.:	C-00-G-10-01

PLOT DATE/TIME: 9/14/2015 10:05:01 PM File Path



GRADING KEYED NOTES

1. INSTALL HDPE STORM DRAIN PIPE.
2. CONSTRUCT STORM DRAIN MANHOLE PER COA STD DWG 2101.
3. INSTALL TREMCH DRAIN AT DOCKS.
4. CONSTRUCT STORM DRAIN INLET .
5. INSTALL STORM DRAIN FLARED END SECTION, WITH RIP RAP PAD.
6. INSTALL 12" CONCRETE CURB OPENING.
7. INSTALL WATER HARVESTING POND

LEGEND

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- PROPOSED EASEMENT
- RETAINING WALL
- PROPOSED BUILDING
- 1 BUILDING NUMBER

NOTE: THIS SUBMITTAL IS FOR ROUGH GRADING ONLY. INLET AND STORM DRAIN SIZING WILL BE A PART OF A FUTURE SUBMITTAL.

NOTE: ROOF DRAINS ARE ASSUMED TO BE GUTTERS AND DOWNSPOUTS THAT WILL CONNECT UNDERGROUND TO ADJACENT STORM DRAIN SYSTEM.

Jacobs

Project North / True North

KEYPLAN

NEW MEXICO PROFESSIONAL ENGINEER 25526 01-10-2025

JOSHUA LUTZ
CIVIL ENGINEER
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maxeon

50 25 0 50
1"=50'

Bohannan Huston
www.bhinc.com
800.877.5332

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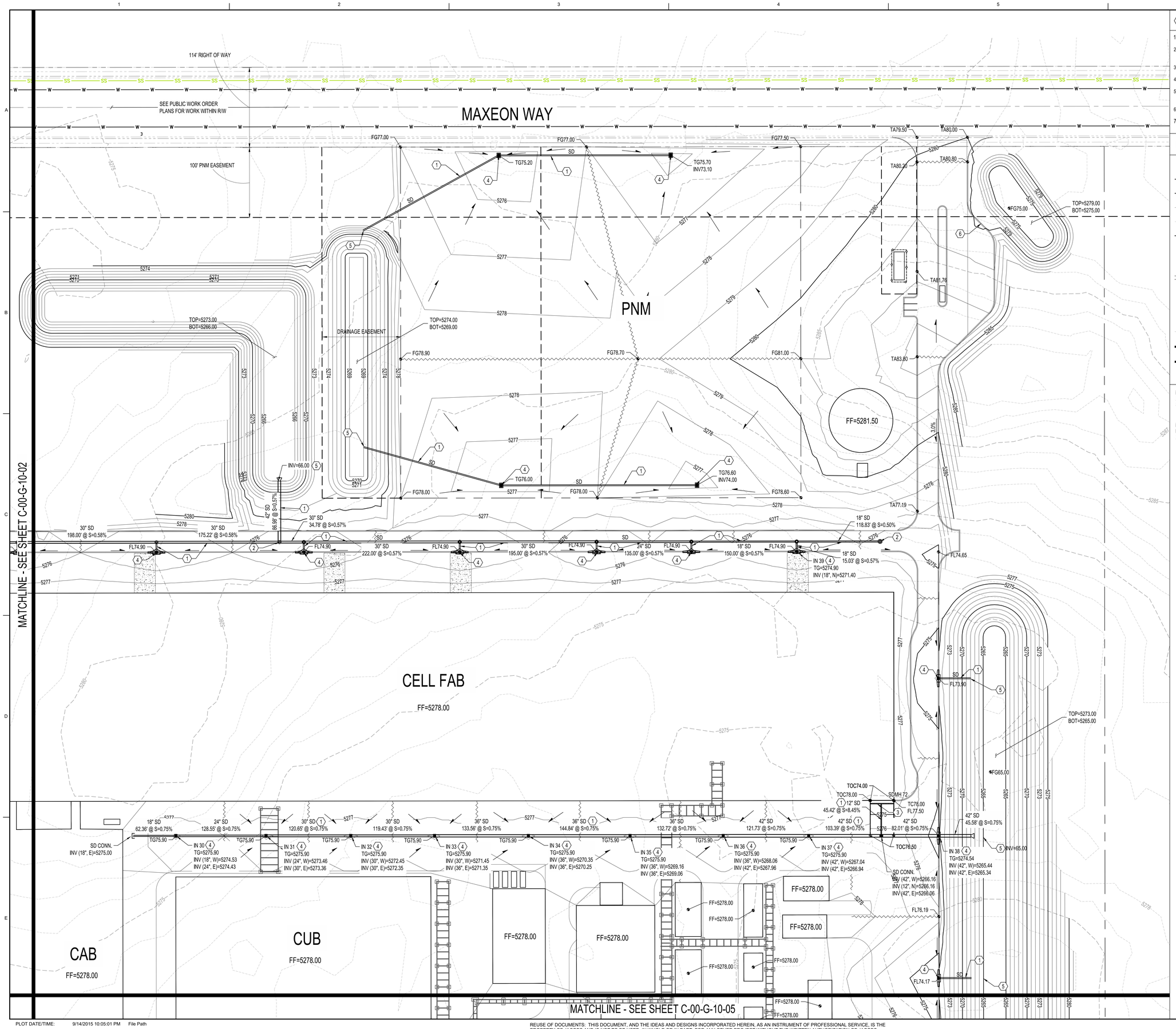

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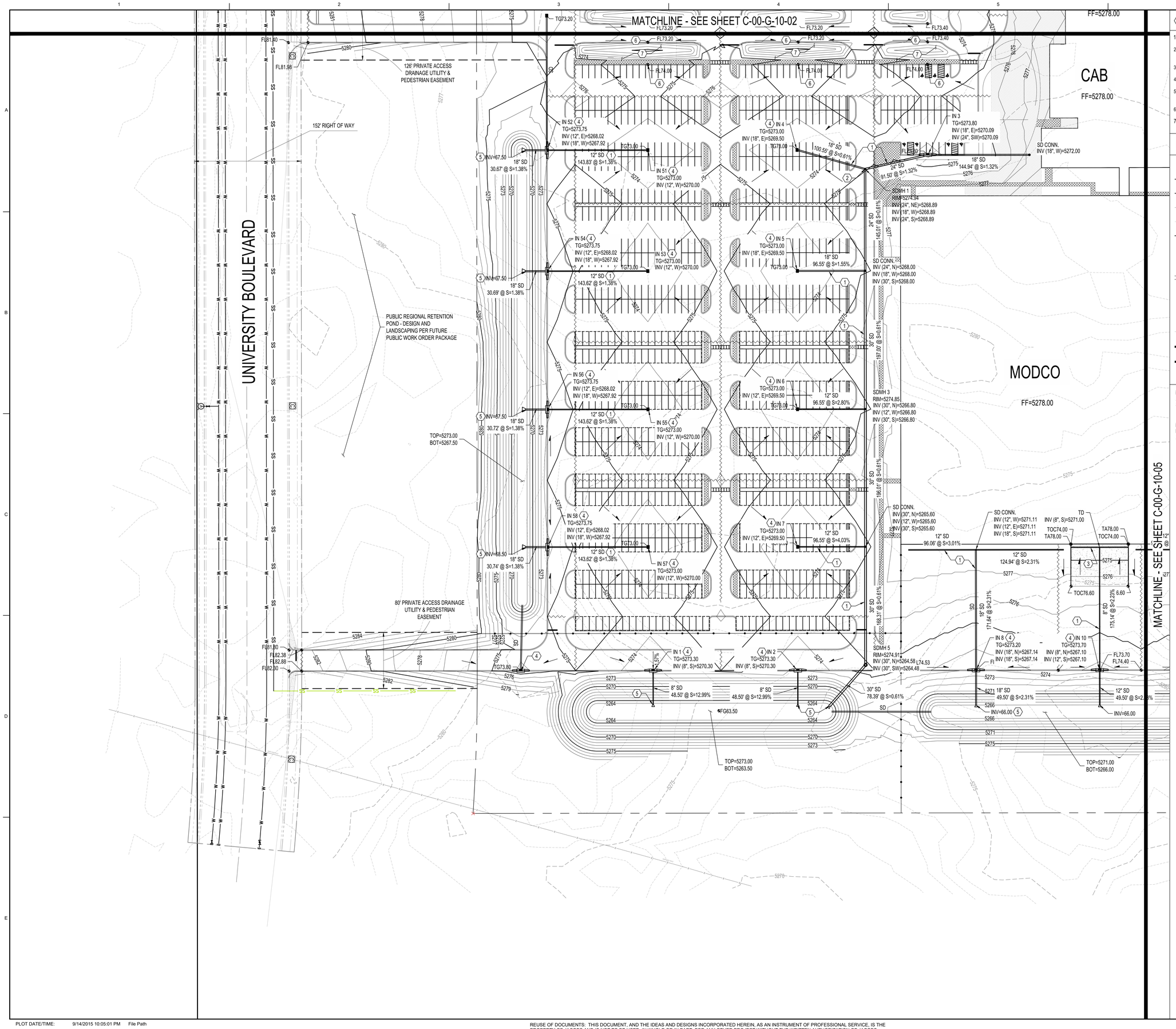

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JOSHUA J. LUTZ NEW MEXICO 25526 01-10-2024 PROFESSIONAL ENGINEER

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DRAINAGE MANAGEMENT PLAN/WATER HARVESTING PLAN

I. INTRODUCTION

THE PURPOSE OF THIS SUBMITTAL IS TO PRESENT A GRADING AND DRAINAGE PLAN IN CONJUNCTION WITH THE WATER HARVESTING PLAN FOR THE PROPOSED GOLDEN EAGLE DEVELOPMENT SITE. GOLDEN EAGLE SITS ON A FUTURE TRACT L OF THE FUTURE BULK PLAT TO BE SUBMITTED, APPROXIMATELY 130 ACRES, AND CONSISTS OF MULTIPLE INDUSTRIAL BUILDINGS, SUPPORT FACILITIES, ASSOCIATED PARKING AND A SEPARATE PNM TRACT. IT IS EXPECTED THAT THE SITE WILL GO THROUGH THE PERMITTING PROCESS AS ONE PHASE BUT COULD REQUEST SEPERATE CERTIFICATES OF OCCUPANCY WHICH WILL BE DETAILED AT SUBSEQUENT HYDROLOGY BUILDING PERMIT APPROVALS. THIS GRADING AND DRAINAGE PLAN AND DRAINAGE MANAGEMENT/WATER HARVESTING PLAN HAS BEEN PREPARED IN SUPPORT OF CITY OF ALBUQUERQUE DFT APPROVAL, AND ROUGH GRADING PERMIT APPROVAL.

II. EXISTING HYDROLOGIC CONDITIONS

THE SITE IS APPROXIMATELY 130 ACRES (INCLUDE A 6 ACRE PNM TRACT) AND IS CURRENTLY UNDEVELOPED. THE LAND IS RELATIVELY FLAT THROUGHOUT, WITH SLOPES RANGING FROM 0.3% TO 5% WITH A GENERAL TREND SLOPING FROM THE NORTH TO THE SOUTH. SPARSE VEGETATION COVER CAN BE SEEN ONSITE. ACCORDING TO FEMA COMMUNITY MAP PANEL #35001C0555H THE SITE IS NOT LOCATED WITHIN A FLOOD PLAIN HOWEVER IS IN CLOSE PROXIMITY TO FLOOD ZONES LABELED MESA DEL SOL PLAYA 1 AND MESA DEL SOL PLAYA 3 RESPECTIVELY. THESE ZONES HAVE BEEN IDENTIFIED AND PRECAUTIONARY MEASURES WILL BE UTILIZED TO ENSURE THEY HAVE NO IMPACT ON OUR SITE.

III. PROPOSED HYDROLOGIC CONDITIONS

THE 100 YR. 10 DAY DEVELOPED FLOWS FROM THE ENTIRE 130 ACRE SITE ARE RETAINED ONSITE WITHIN RETENTION/WATER HARVESTING PONDS THAT HAVE BEEN PLACED STRATEGICALLY THROUGHOUT. THE SITE WAS DIVIDED INTO MULTIPLE BASINS AND DRAINS BOTH OVERLAND OR THROUGH A SYSTEM OF STORM DRAINS TO RETENTION PONDS. EACH BASIN HAS A PONDING LOCATION WHICH IS DESIGNED TO RETAIN THE VOLUME OF THE 100 YR. 10 DAY STORM. THE STORM WATER QUALITY VOLUME IS CALCULATED USING 0.5" EVENT.

IV. OFFSITE FLOWS

IN EXISTING CONDITIONS, THE SITE IS IMPACTED BY SIGNIFICANT OFFSITE FLOWS COMING FROM THE WEST, NORTH, AND EAST DIRECTIONS. THESE FLOWS SHALL BE DIVERTED AROUND OUR SITE BY WAY OF REGIONAL INFRASTRUCTURE DEVELOPED THROUGH OTHER PROJECTS AND SHALL NOT IMPACT THE SITE.

V. CONCLUSION

THE TOTAL FLOW GENERATED ON SITE WILL BE RETAINED ON SITE. THESE FLOWS WERE COMPUTED IN ACCORDANCE WITH SECTION 6-10 OF THE DEVELOPMENT PROCESS MANUAL. THIS DRAINAGE MANAGEMENT PLAN/WATER HARVESTING PLAN IS CAPABLE OF SAFELY MITIGATING THE 100 YEAR 10 DAY STORM AND MEETS CITY REQUIREMENTS AND MEETS MESA DEL SOL LEVEL B REQUIREMENTS FOR STORM WATER HARVESTING.

LEGEND

BASIN 1	BASIN ID
POND 1	POND ID
	BASIN BOUNDARY
	MANHOLE
	CURB INLET
	GRATE INLET
	STORM DRAIN PIPE
	EMERGENCY OVERFLOW

Retention Pond ID	Contributing Basins	Req'd Volume (V100, 10day) (acre-feet)	Provided Volume (acre-feet)
Pond 1A	Basin 1A	*2.1*	**2.6**
Pond 1B	Basin 1B	*4.2*	**7.1**
Pond 2	Basin 2	*1.5*	**2.1**
Pond 3A	Basin 3	*0.6*	**0.7**
Pond 3B	Basin 3	*9.6*	**18.7**
Pond 4A*	Basin 4	*6.9*	**9.4**
Pond 4B*	Basin 4	*2.1*	**9.4**
Pond 5	Basin 5	*0.9*	**0.4**
Pond 6	Basin 6	*2.0*	**2.8**
Pond 7	Basin 7	*1.6*	**3.1**
	TOTAL	*31.65*	**46.8**

*Combined Volume of 4A and 4B

Golden Eagle

Basin Data Table

This table is based on page 6-10 of the DPM, Zone: 3

Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages A	B	C	D	Q(100yr) (cfs/ac.)	Q(100yr) (CFS)	E(100yr) (inches)	$V_{(100yr\text{-}6hr)}$ (CF)	$V_{(100yr\text{-}24hr)}$ (CF)	$V_{(100yr\text{-}10d)}$ (CF)	$V_{(100yr\text{-}10d)}$ (AC-FT)	SWQV (CF)
SITE														
Basin 1A - Northwest Basin	511664	11.7	0.0%	0.0%	67.3%	32.7%	3.6	*42.3*	*1.6*	*67251*	*72968*	*90536*	*2.1*	*6971*
Basin 1B - Northeast Basin	867643	19.9	0.0%	0.0%	54.5%	45.5%	3.8	*75.1*	*1.8*	*127829*	*141317*	*182769*	*4.2*	*16449*
Basin 2 - PNM	340997	7.8	0.0%	0.0%	60.0%	40.0%	3.7	*28.9*	*1.7*	*47910*	*52570*	*66892*	*1.5*	*5683*
Basin 3 - East Basin	1742919	40.0	0.0%	0.0%	37.2%	62.8%	4.0	*160.0*	*2.0*	*294222*	*331619*	*446547*	*10.3*	*45606*
Basin 4 - South Basin	1520173	34.9	0.0%	0.0%	36.5%	63.5%	4.0	*139.9*	*2.0*	*257942*	*290923*	*392281*	*9.0*	*40221*
Basin 5 - West Island Basin	163473	3.8	0.0%	0.0%	40.0%	60.0%	4.0	*14.9*	*2.0*	*27028*	*30379*	*40678*	*0.9*	*4087*
Basin 6 - Southwest Parking Basin	326210	7.5	0.0%	0.0%	30.9%	69.1%	4.1	*30.6*	*2.1*	*57619*	*65321*	*88989*	*2.0*	*9392*
Basin 7 - Northwest Basin	302683	6.9	0.0%	0.0%	46.6%	53.4%	3.9	*26.9*	*1.9*	*47563*	*53086*	*70057*	*1.6*	*6735*

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
DATE: 1/11/2024
BY:
HydroTrans # S17D001
THESE PLANS AND/OR REPORT ARE CONCEPTUAL ONLY. MORE INFORMATION MAY BE NEEDED IN THEM AND SUBMITTED TO HYDROLOGY FOR BUILDING PERMIT APPROVAL.

Project North / True North

KEYPLAN

JOSHUA J. LUTZ
NEW MEXICO
25526
01-10-2025
PROFESSIONAL ENGINEER

JOSHUA LUTZ
CIVIL ENGINEER
REGISTRATION #25526

NO	DATE	DSGN	DR	CHK	APVD	SEAL/NAME
A	2025/11/17	XXX	SMS	BY	APVD	

PRELIMINARY MIDPOINT REVIEW

maxeon

Project Title: GOLDEN EAGLE

Drawing Title: DRAINAGE MANAGEMENT PLAN/ WATER HARVESTING PLAN

Proj. Address: MESA DEL SOL, ALBUQUERQUE, NEW MEXICO

Proj. No.: D3794500

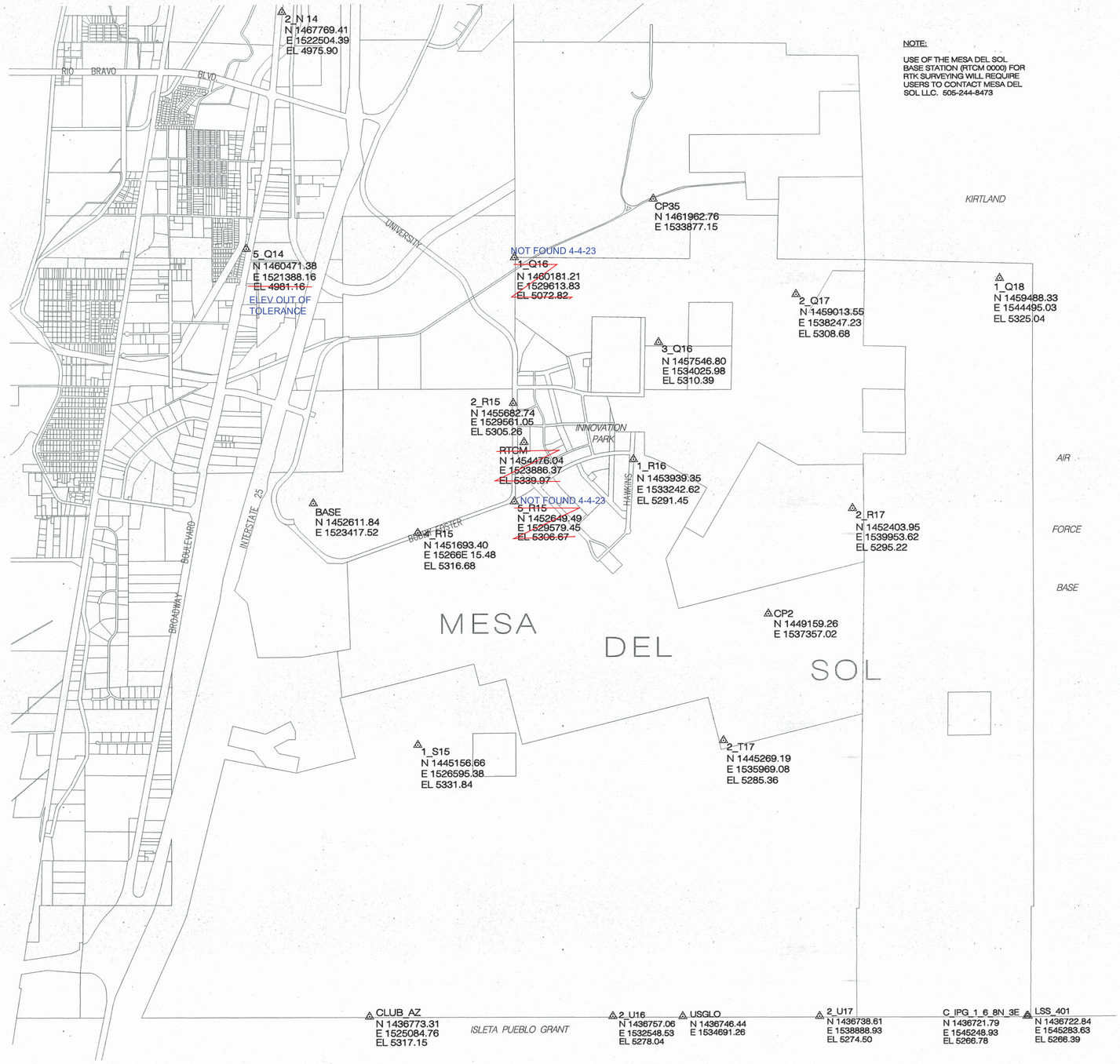
Date: 2024/01/05

Scale: 1"=100'

Drawing No.: C-00-S-10-05

Bohannan Huston
www.bhinc.com
800.877.5332

ALL COORDINATES SHOWN BELOW ARE GROUND MODIFIED PROJECT COORDINATES



NOTE:

USE OF THE MESA DEL SOL BASE STATION (RTCM 0000) FOR RTK SURVEYING WILL REQUIRE USERS TO CONTACT MESA DEL SOL LLC. 505-244-8473

INTRODUCTION:

THE PURPOSE OF THE CONTROL LISTED BELOW IS TO SERVE AS A SPATIAL REFERENCE FOR THE MESA DEL SOL DEVELOPMENT. THE INTENDED ACCURACY IS 0.10' HORIZONTAL AND 0.10' VERTICAL.

PROJECT CONTROL STATISTICS:

UNITS:	US SURVEY FOOT
HORIZONTAL DATUM:	NAD83
VERTICAL DATUM:	NAVD88
PROJECTION:	TRANSVERSE MERCATOR
STATE PLANE AND/OR UTM ZONE:	NEW MEXICO CENTRAL ZONE (3002)
BASIS OF BEARING:	GRID BEARINGS
PROJECT COMBINED FACTOR:	0.99965077
MODIFICATION METHOD USED:	TRANSLATE NAD 83 GRID NORTHINGS AND EASTINGS BY +0.367' AND -0.391, SCALE ABOUT 0,0 BY 1.00034404132
FIELD METHODOLOGY:	RTK OBSERVATIONS, TRIMBLE SITE CALIBRATION TO PRIMARY CONTROL POINTS, MESA DEL SOL BASE STATION IS POINT "RTCM0000" VALUES ARE TO L1 ANTENNAE PHASE CENTER
EQUIPMENT USED:	TRIMBLE GPS EQUIPMENT (5800 DUAL FREQUENCY RECEIVERS) AND TOPCON RECEIVER (MESA DEL SOL BASE STATION
CONTROL SET DATE:	2003-2007
OBSERVATION DATE:	DECEMBER 2007 AND APRIL 2008
ADJUSTMENT/PUBLICATION DATE:	JUNE 10, 2008

DO NOT USE: SEE P:\20180398\SURVEY\03_GEODESIGN\05_DB_SETUP\MDS_MOD_SETUP_CSF

UPDATED 4-4-2023

PRIMARY CONTROL USED (GRID):(CITY OF ALBUQUERQUE PUBLISHED VALUES)

POINT	LATITUDE	LONGITUDE	ELLIPSOID	ELEVATION	NORTHING	EASTING	DESCRIPTION
3_Q16	35° 00' 15. 44018"N	106° 36' 25. 34383"W	5240. 68	5310. 39	1457045. 09	1533498. 78	BRASS CAP
LSS_401	34° 56' 49. 90801"N	106° 34' 09. 25686"W	5197. 41	5266. 39	1436228. 52	1544752. 49	BRASS CAP
2_N14	35° 01' 56. 09165"N	106° 38' 44. 28991"W	4905. 63	4975. 90	1467264. 09	1521981. 18	ALUMINUM CAP
~~1_Q16~~	~~35° 00' 41. 32082"N~~	~~106° 37' 18. 48460"W~~	~~5002. 05~~	~~5072. 82~~	~~1459878. 13~~	~~1529988. 13~~	~~BRASS CAP~~
2_Q17	35° 00' 30. 08952"N	106° 35' 34. 67700"W	5239. 23	5308. 68	1458511. 31	1537718. 47	ALUMINUM CAP
2_R15	34° 59' 56. 84697"N	106° 37' 18. 91749"W	5235. 33	5305. 26	1455181. 67	1529035. 38	ALUMINUM CAP
4_R15	34° 59' 17. 29034"N	106° 37' 54. 12983"W	5246. 58	5316. 68	1451193. 72	1526090. 86	ALUMINUM CAP
1_Q18	35° 00' 34. 98951"N	106° 34' 19. 60967"W	5256. 03	5325. 04	1458985. 88	1543964. 06	BRASS CAP
2_R17	34° 59' 24. 79094"N	106° 35' 13. 90138"W	5225. 88	5295. 22	1451904. 04	1539424. 27	ALUMINUM CAP
2_U17	34° 56' 49. 85530"N	106° 35' 26. 05157"W	5205. 05	5274. 50	1436244. 27	1538360. 05	ALUMINUM CAP
2_T17	34° 58' 14. 10612"N	106° 36' 01. 47608"W	5215. 78	5285. 36	1444771. 77	1535441. 15	ALUMINUM CAP
2_U16	34° 56' 49. 81731"N	106° 36' 42. 19455"W	5208. 20	5278. 04	1436262. 68	1532021. 86	ALUMINUM CAP
1_S15	34° 58' 12. 65388"N	106° 37' 54. 07114"W	5261. 74	5331. 84	1444659. 27	1526070. 79	BRASS CAP
~~5_R15~~	~~34° 59' 26. 85457"N~~	~~106° 37' 18. 56115"W~~	~~5236. 74~~	~~5306. 67~~	~~1452149. 46~~	~~1529053. 74~~	~~ALUMINUM CAP~~
1_R16	34° 59' 39. 74165"N	106° 36' 34. 60201"W	5221. 72	5291. 45	1453438. 90	1532715. 67	BRASS CAP
5_Q14	35° 00' 43. 88560"N	106° 38' 57. 35784"W	4910. 78	~~4981. 16~~	1459968. 68	1520865. 33	ALUMINUM CAP
CC_IPG_1_6_8N_3E_4E	34° 56' 49. 89634"N	106° 34' 09. 67374"W	5197. 77	5266. 78	1436227. 45	1544717. 79	BRASS CAP
CLUB AZ(ABANDONED)	34° 56' 49. 70103"N	106° 38' 11. 82843"W	5246. 95	5317. 15	1436278. 84	1524560. 65	BRASS CAP
RTCM0000	**34° 59' 44. 92698"N**	**106° 37' 14. 95426"W**	**5270. 093**				L1 ANTENNAE PHASE CENTER COORDINATE VALUES ARE BASED ON BROADCAST INFORMATION

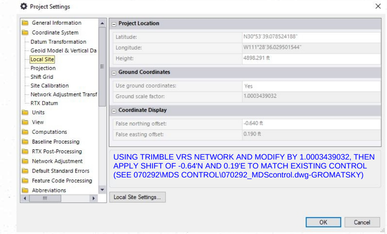
RTCM0000 MESA DEL SOL BASE POINT LOCATED ON TOP OF ADVENT SOLAR BUILDING, OWNED BY MESA DEL SOL

ADJUSTED COORDINATE LISTING:

POINT	ELEVATION	NORTHING	EASTING	DESCRIPTION
CP2		1449159. 26	1537357. 02	ALUMINUM CAP ON 5/8" REBAR
USGL0		1436746. 44	1534691. 26	USGLO BRASS CAP
CP35		1461962. 76	1533877. 15	ALUMINUM CAP ON 5/8" REBAR
BASE		1452611. 84	1523417. 52	ALUMINUM CAP ON 5/8" REBAR
3_Q16	5310. 39	1457546. 80	1534025. 98	BRASS CAP
LSS_401	5266. 39	1436722. 84	1545283. 63	BRASS CAP
2_N14	4975. 90	1467769. 41	1522504. 39	ALUMINUM CAP
~~1_Q16~~	~~5072. 82~~	~~1460181. 21~~	~~1529613. 83~~	~~BRASS CAP~~
2_Q17	5308. 68	1459013. 55	1538247. 23	ALUMINUM CAP
2_R15	5305. 26	1455682. 74	1529561. 05	ALUMINUM CAP
4_R15	5316. 68	1451693. 40	1526615. 48	ALUMINUM CAP
1_Q18	5325. 04	1459488. 33	1544495. 03	BRASS CAP
2_R17	5295. 22	1452403. 95	1539953. 62	ALUMINUM CAP
2_U17	5274. 50	1436738. 61	1538888. 93	ALUMINUM CAP
2_T17	5285. 36	1445269. 19	1535969. 08	ALUMINUM CAP
2_U16	5278. 04	1436757. 06	1532548. 53	ALUMINUM CAP
1_S15	5331. 84	1445156. 66	1526595. 38	BRASS CAP
~~5_R15~~	~~5306. 67~~	~~1452649. 49~~	~~1529579. 45~~	~~ALUMINUM CAP~~
1_R16	5291. 45	1453939. 35	1533242. 66	ALUMINUM CAP
5_Q14	~~4981. 16~~	1460471. 38	1521388. 16	ALUMINUM CAP
CC_IPG_1_6_8N_3E_4E	5266. 78	1436721. 79	1545248. 93	BRASS CAP
CLUB AZ	5317. 15	1436773. 31	1525084. 76	BRASS CAP
RTCM0000	5339. 97	1454476. 04	1523886. 37	L1 ANTENNAE PHASE CENTER

GEOSPATIAL POSITIONAL ACCURACY REPORT:

POINT	HORIZONTAL POSITIONAL ACCURACY	VERTICAL POSITIONAL ACCURACY
3_Q16	0. 059	0. 037
LSS_401	0. 184	0. 006
2_N14	0. 155	0. 002
~~1_Q16~~	~~0. 105~~	~~0. 022~~
2_Q17	0. 141	0. 018
2_R15	0. 061	0. 050
4_R15	0. 050	0. 024
1_Q18	0. 218	0. 022
2_R17	0. 119	0. 010
2_U17	0. 155	0. 049
2_T17	0. 069	0. 005
2_U16	0. 122	0. 043
1_S15	0. 050	0. 011
~~5_R15~~	~~0. 077~~	~~0. 023~~
1_R16	0. 046	0. 013
5_Q14	0. 047	~~0. 043~~
CC_IPG_1_6_8N_3E_4E	0. 171	0. 002
CLUB AZ	0. 038	0. 064
CP2	0. 062	0. 064
USGL0	0. 062	0. 060
CP35	0. 064	0. 069
BASE	0. 063	0. 062
RTCM0000	0. 058	0. 050
ESTIMATED NETWORK ACCURACY	0. 095	0. 041



USING TRIMBLE VRS NETWORK AND MODIFY BY 1.0003439032, THEN APPLY SHIFT OF -0.64'N AND 0.19'E TO MATCH EXISTING CONTROL (SEE 070292\MDS CONTROL\070292_MDScontrol.dwg-GROMATSKY)

NOTE: THE METHOD FOR ESTABLISHING HORIZONTAL POSITIONS FOR ESTABLISHED CONTROL POINTS DOES NOT MEET THE CRITERIA FOR HORIZONTAL POSITIONAL ACCURACY CLASSIFICATION ACCORDING TO THE GEOMETRIC GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES, AUGUST 1, 1988. THE ESTIMATED NETWORK HORIZONTAL RMS IS 0.10 SURVEY FEET.

THE METHOD FOR ESTABLISHING VERTICAL POSITIONS FOR ESTABLISHED CONTROL POINTS DOES NOT MEET THE CRITERIA FOR VERTICAL POSITIONAL ACCURACY CLASSIFICATION ACCORDING TO THE STANDARDS AND SPECIFICATIONS FOR GEODETIC CONTROL NETWORK, SEPTEMBER 1984. THE ESTIMATED NETWORK VERTICAL RMS IS 0.10 SURVEY FEET.

THE ESTIMATED NETWORK ACCURACY OF CONTROL MONUMENTS INCLUDED IN THE PRIMARY CONTROL, USED TO CONSTRAIN THE POSITION OF ESTABLISHED CONTROL POINTS HAS A PUBLISHED ORDER OF ACCURACY OF 1ST ORDER HORIZONTAL, 2ND CLASS 1 ORDER VERTICAL AS PUBLISHED BY THE CITY OF ALBUQUERQUE.

I, ROBERT GROMATZKY, NEW MEXICO PROFESSIONAL SURVEYOR NO. 16469, DO HEREBY CERTIFY THAT THIS CONTROL SURVEY REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION BASED ON AN ACTUAL SURVEY ON THE GROUND AS DESCRIBED HEREIN; THAT I AM RESPONSIBLE FOR THIS SURVEY; AND THAT THE SURVEY AND REPORT MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

DATE 03-04-08

BARRY S. PHILLIPS NEW MEXICO 15517 LICENSED PROFESSIONAL SURVEYOR

Bohannan ▲ Huston INC

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

ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

MESA DEL SOL
CONTROL

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF

BHI JOB NO. _070292

P:\070292\survey\MDS CONTROL\070292_MDScontrol.dwg
Thu, 4-Sep-2008 - 3:16:pm, Plotted by: DMEDINA

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

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

SURVEYOR'S SEAL
ROBERT S. GROMATZKY NEW MEXICO 16469 PROFESSIONAL SURVEYOR

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	DATE08/2008
			DESIGNED BY RG
			DRAWN BY DLM DATE08/2008
			CHECKED BY RG DATE08/2008

3523