

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

July 10, 2024

Verlyn Miller, P.E.
Miller Engineering Consultants, Inc
3500 Comanche NE Bldg. F
Albuquerque, NM 87107

**RE: AFD Fire Station 12
11714 Linn Ave. NE
Conceptual Grading and Drainage Plan
Engineer's Stamp Date: no stamp
Hydrology File: L21D036**

Dear Mr. Miller:

PO Box 1293

Based upon the information provided in your submittal received 06/28/2024, the Conceptual Grading Plan **is preliminary approved** for action by the Development Facilitation Team (DFT).

Albuquerque

PRIOR TO BUILDING PERMIT / WORK ORDER:

NM 87103

1. Please submit the Grading Plan to Hydrology for review and approval. This digital (.pdf) is emailed to PLNDRS@cabq.gov along with the Drainage Transportation Information Sheet.

www.cabq.gov

SHEET CG-101

2. Verify the Zone 3 calculations for Ew, V(100-6), V(100-24), and Q(100).

SHEET C-101

3. Please use 1" = 20' for the scale.
4. Please number the ponds and include a label on each with the SWQV and elevation, the 100-year volume and elevation, the peak 100 year inflow and outflow, the spillway crest elevation, the spillway flow depth, and the dam top elevation.
5. Please provide the SWQV calculations for each basin draining to each pond. The stormwater quality ponds need to be sized for the areas draining to them.

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

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.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Anthony Montoya, Jr.', is positioned above the typed name.

Anthony Montoya, Jr., P.E.
Senior 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: _____ Hydrology File # _____

Legal Description: _____

City Address, UPC, OR Parcel: _____

Applicant/Agent: _____ Contact: _____

Address: _____ Phone: _____

Email: _____

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) _____

DATE SUBMITTED: _____

DRAINAGE REPORT

SITE LOCATION

The existing site is an approximate 3.21-acre piece of land located at the corner of Linn Avenue and Shirley Street, North of Central in Albuquerque, New Mexico. The site can be accessed via Central Ave. (see vicinity map this sheet).

EXISTING CONDITIONS

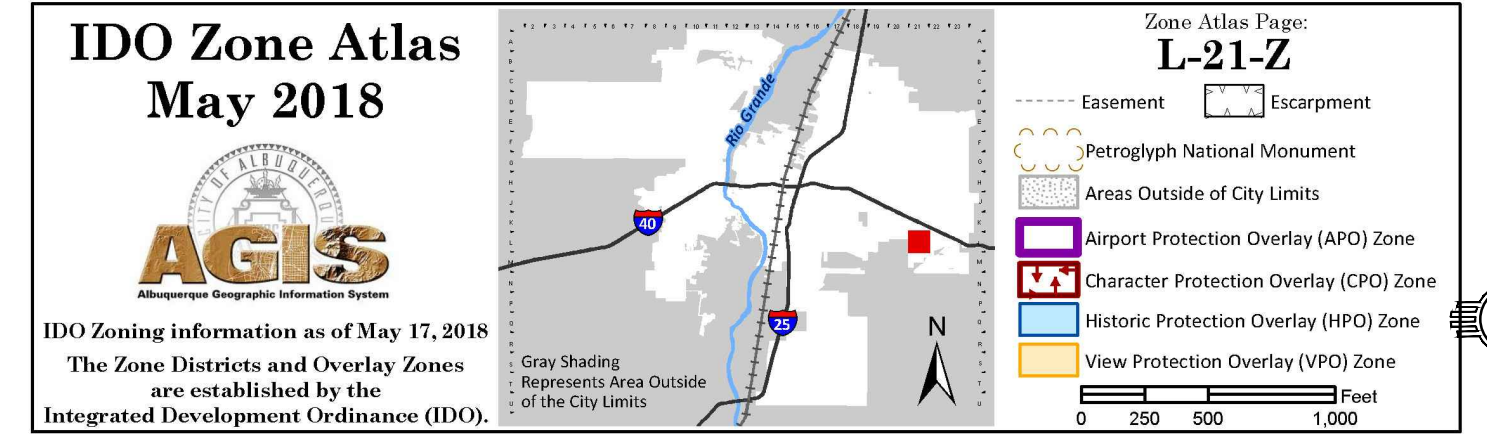
The existing site is estimated at 3.21 acres and is currently an undeveloped parcel of land. It is relatively flat with a mild slope from east to west and does not lie within a 100-year FEMA floodplain.

PROPOSED CONDITIONS

The proposed project will consist of a new fire station building, a new driveway entrance from Linn Ave and Shirley Street, and parking lot areas on the southwest and east side of the site. The site will also have several landscape areas and a water harvesting feature on the west side of the property. Runoff from the building will be routed to the water harvest area via a new storm drain system. Flows from other areas that are not able to be captured by the water harvest pond will discharge to Linn Ave on the North and Shirley Street on the west side.

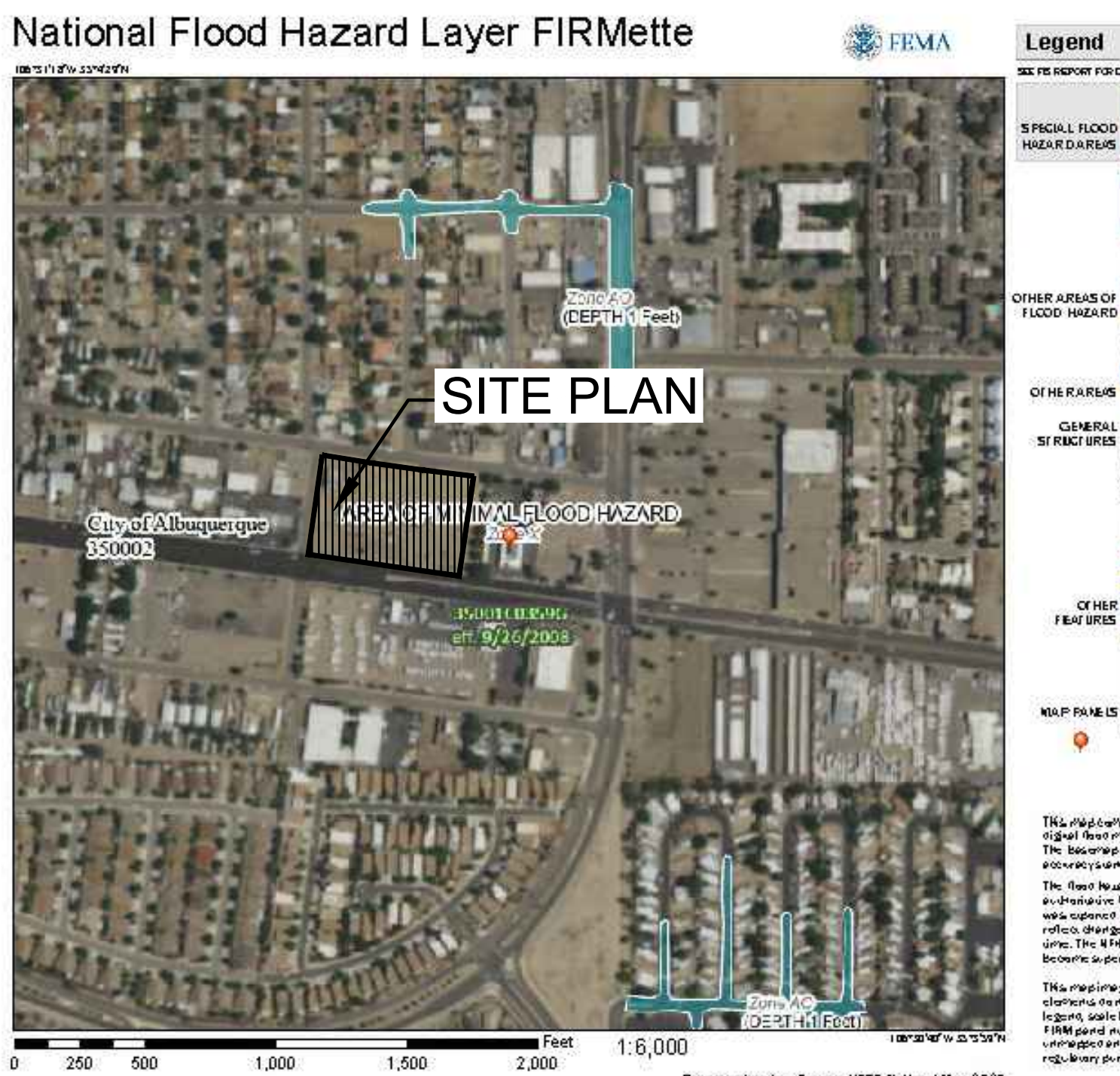
CONCLUSIONS

When fully developed as indicated on the grading and drainage plan, runoff from the site will discharge to a water harvest feature on the west side of the site. Other areas will discharge north to Linn Avenue and west to Shirley Street.



VICINITY MAP

ZONE ATLAS MAP L-21-Z



FLOOD ZONE MAP

FLOOD ZONE MAP: 35001C0359G

HYDROLOGY CALCULATIONS

Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(100-6) (af)	V(100-24) (af)	Q(100) (cfs)
		A	B	C	D				
Existing Conditions									
Site	3.21	2.88	0.00	0.00	0.33	0.99	0.265	0.285	8.07
Total	3.21								8.07
Proposed Conditions									
Site	3.21	0.00	0.00	1.87	1.34	1.95	0.522	0.606	14.01
Total	3.21								14.01

WATER HARVEST AREA

WHA #1					WHA #2				
Pond Rating Table					Pond Rating Table				
Side Slope					Side Slope				
Elev. (ft)	Area (sq ft)	Volume (cf)	Cum Volume (cf)		Elev. (ft)	Area (sq ft)	Volume (cf)	Cum Volume (cf)	
23	2593	0	0		25	795	0	0	
24	4870	3731.500	3731.500		26	1310	1052.482	1052.482	
25	6303	5586.500	9318.000		27	1865	1587.482	2639.963	

STORM WATER QUALITY CALCULATIONS

SWQV = (0.42"/12 * 58,370 SF) = 2043 CUBIC FEET

City of Albuquerque
 Planning Department
 Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
 DATE: 07/10/2024
 BY: [Signature]
 HydroTrans # L21D036

THESE PLANS AND/OR REPORT ARE CONCEPTUAL ONLY. MORE INFORMATION MAY BE NEEDED IN THEM AND SUBMITTED TO HYDROLOGY FOR BUILDING PERMIT APPROVAL.

City of Albuquerque Electronic Stamp

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		FIELD NOTES		SEAL	
CONTRACTOR	DATE	WORKED BY	DATE	NO.	BY	DATE	NO.	BY	DATE

GENERAL NOTES:

- EXISTING TOPOGRAPHIC SURVEY PERFORMED AND COMPILED BY PRECISION SURVEYS, INC., ALBUQUERQUE, NEW MEXICO JANUARY, 2024. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
- PROJECT BENCHMARK ACS 4-L22 IS A CITY OF ALBUQUERQUE SURVEY CONTROL 3 1/4 ALUMINUM DISC SET FLUSH WITH THE TOP OF THE CURB AND IS STAMPED "4-L22 1986/92" ELEVATION = 5,586.425 FEET (NAVD 1988 VERTICAL DATUM).
- THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
- CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WETTED AND COMPACTED TO 95% OPTIMUM DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
- THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE STORM DRAINAGE REGULATIONS. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE "GRADING AND DRAINAGE DESIGN REQUIREMENTS AND POLICIES FOR LAND DEVELOPMENT."
- THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE AND REASONABLE MEASURES TO PREVENT SEDIMENT OR POLLUTANT LADEN STORM WATER FROM EXITING THE SITE DURING CONSTRUCTION. STORMWATER MAY BE DISCHARGED IN A MANNER, WHICH COMPLIES WITH THE APPROVED GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PREVENT THE MOVEMENT OF CONSTRUCTION RELATED SEDIMENT, DUST, MUD, POLLUTANTS, DEBRIS, WASTE, ETC FROM THE SITE BY WIND, STORM FLOW OR ANY OTHER METHOD EXCLUDING THE INTENTIONAL, LEGAL TRANSPORTATION OF SAME IN A MANNER ACCEPTABLE BY THE CITY.
- THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
- SEE ARCHITECTURAL DRAWINGS FOR SIDEWALK AND HANDICAPPED RAMPS, DETAILS AROUND THE BUILDING.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY SPOT ELEVATIONS ON THE GRADING AND DRAINAGE PLAN WHICH APPEAR TO BE AMBIGUOUS OR DO NOT MEET THE INTENT OF THE GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DOES NOT MEET ADA ACCESSIBILITY REQUIREMENTS. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0%. ALL SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0%, AND ALL RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 15:1.
- ALL SIDEWALKS AND CONCRETE FLATWORK SHALL HAVE A MINIMUM OF 0.5% SLOPE. CONTRACTOR SHALL CONTACT PROJECT ENGINEER IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DO NOT MEET THIS REQUIREMENT.
- THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2019 EDITION OF THE NEW MEXICO STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (GRAY BOOK). ALL UTILITY WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN PUBLIC WORKS ASSOCIATION, NEW MEXICO CHAPTER, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.
- THE CONTRACTOR SHALL SUBMIT A SEED MIX DESIGN TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO STARTING THE SEEDING ON THE PROJECT. THE SEED MIX DESIGN SHALL BE A SEED MIX RECOMMENDED BY NRCS FIELD OFFICE REPRESENTATIVE APPROPRIATE FOR PROJECT LOCATION.

50% CDs NOT FOR CONSTRUCTION

VIGIL & ASSOCIATES
 ARCHITECTURAL GROUP P.C.
 4477 Irving NW, Suite A
 Albuquerque, New Mexico 87114
 Ph: 505.890.5030 - Fax: 505.890.5031
 www.vigilarchitects.com



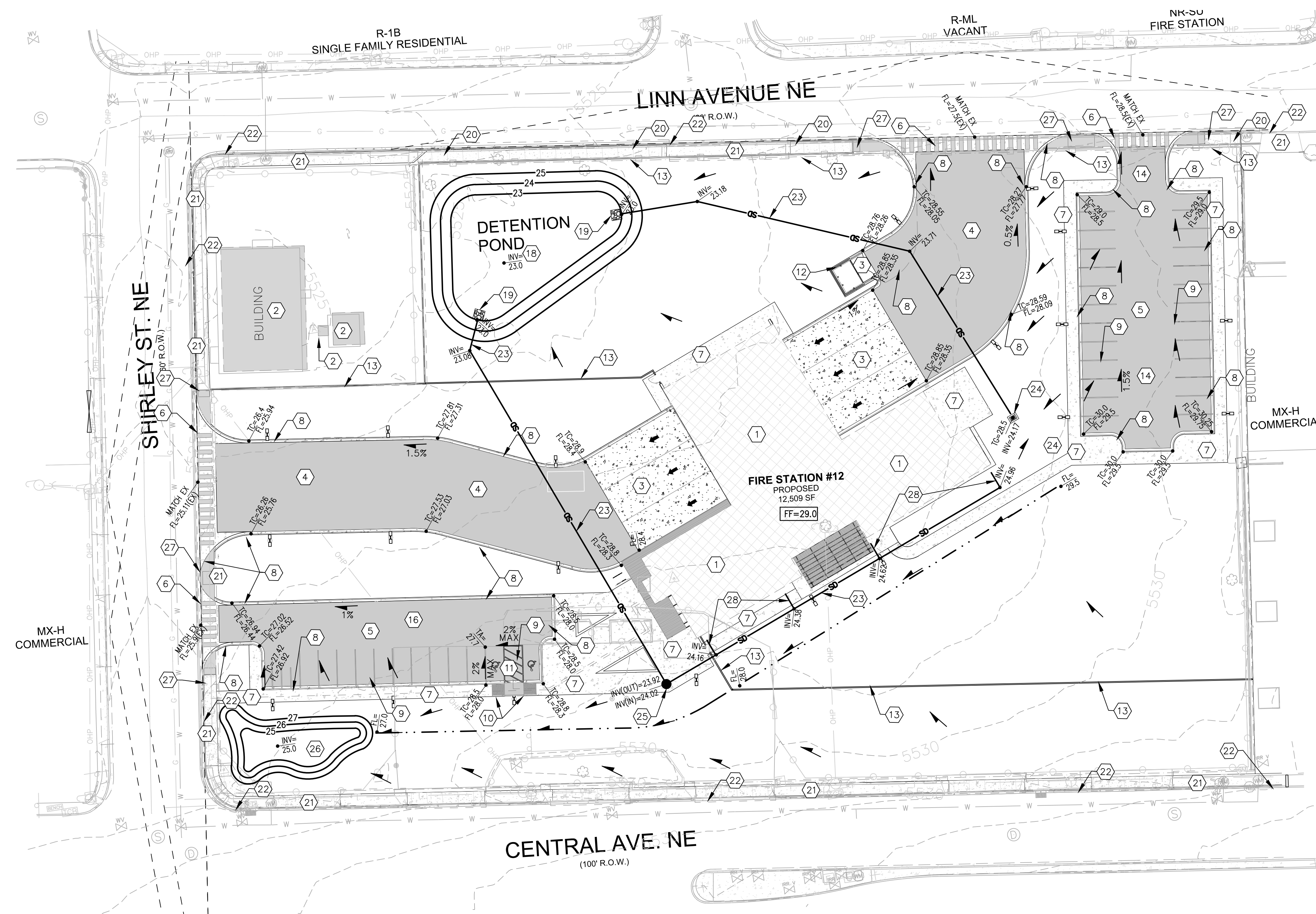
CITY OF ALBUQUERQUE CAPITAL IMPLEMENTATION PROGRAM

AFD FIRE STATION 12

1474 LINN AVE. N.E. ALBUQUERQUE, NM 87123

Drawing Title		HYDROLOGY PLAN	
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
		7/10/18	
Issue Date:	City Project No.	Sheet	
JUNE, 2024	.	CG-101	

ME MILLER ENGINEERING CONSULTANTS
 Engineers • Planners
 3500 DOMINIQUE NE BUILDING # ALBUQUERQUE, NM 87107 (505)888-7500 (505)888-3800 (FAX) WWW.MECONM.COM



City of Albuquerque
 Planning Department
 Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
 DATE: 07/10/2024
 BY: *[Signature]*
 HydroTrans # L21D036

THESE PLANS AND/OR REPORT ARE
 CONCEPTUAL ONLY. MORE INFORMATION MAY
 BE NEEDED IN THEM AND SUBMITTED TO
 HYDROLOGY FOR BUILDING PERMIT APPROVAL.

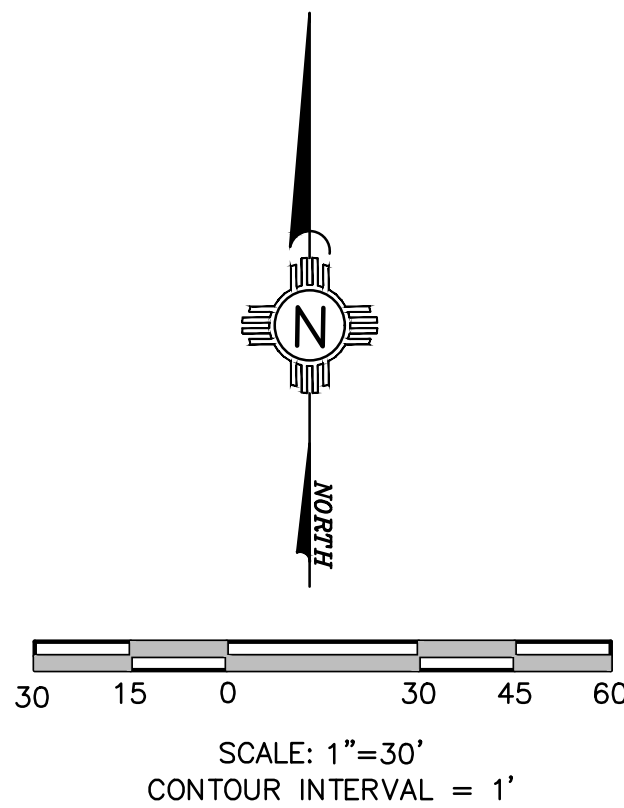
City of Albuquerque Electronic Stamp

AS-BUILT INFORMATION	
CONTRACTOR	DATE
WORKED BY	DATE
INSPECTED BY	DATE
FIELD ACCEPTANCE BY	DATE
FINANCE BY	DATE
RECORDED BY	DATE
MICRO-FILM INFORMATION	
NO.	DATE

LEGEND:

• 38.00 FL	PROPOSED SPOT ELEVATIONS (FLOW LINE)
• MATCH (95.19)	MATCH EXISTING ELEVATIONS
TOC	TOP OF CONCRETE
FL	FLOW LINE, CURB
INV	INVERT
FG	FINISH GRADE
TBC	TOP OF BASE COURSE
TC	TOP OF CURB
TG	TOP OF GRATE
TA	TOP OF ASPHALT
FV	FIELD VERIFY
→	FLOW ARROW
~	GRADE BREAK-HIGH POINT
●	PROPOSED STORM DRAIN MANHOLE
—	SWALE
SD	STORM DRAIN LINE
— 5895 —	PROPOSED MAJOR CONTOUR
— 5895 —	PROPOSED MINOR CONTOUR
— 5895 —	EXISTING MAJOR CONTOUR
— 5895 —	EXISTING MINOR CONTOUR
▲	TOP OF CUT SLOPE
[Shaded Box]	PROPOSED BUILDING
[Patterned Box]	HEAVY DUTY CONCRETE PAVING
[Patterned Box]	HEAVY DUTY ASPHALT PAVING
[Patterned Box]	PROPOSED CONCRETE FLATWORK/SIDEWALK

SURVEY INFORMATION	
FIELD NOTES	DATE



KEYED NOTES:

- | | |
|--|--|
| 1 NEW BUILDING SEE ARCHITECTURAL PLANS. | 16 NEW VISITOR PARKING, (12 SPACES - 2 ADA)(4 MOTORCYCLE) 18-TOTAL |
| 2 EXISTING BUILDING TO REMAIN. | 17 NOT USED. |
| 3 NEW HEAVY DUTY CONCRETE PAVING. SEE DETAIL SHEET C-501. | 18 NEW WATER HARVEST AREA #1 INV=23.0, SEE DETAIL SHEET C-501. |
| 4 NEW HEAVY DUTY ASPHALT PAVING. SEE DETAIL SHEET C-501. | 19 NEW 5'x5' RIP RAP PAD, SEE DETAIL SHEET C-503. |
| 5 NEW LIGHT DUTY ASPHALT PARKING. SEE DETAIL SHEET C-501. | 20 NEW SIDEWALK PER COA STD DWG #2430. |
| 6 NEW CONCRETE VALLEY GUTTER WITH FILLETS, PER COA STD DWG #2420. | 21 EXISTING SIDEWALK TO REMAIN. |
| 7 NEW CONCRETE FLAT WORK, SEE ARCHITECTURAL PLANS FOR DETAILS. | 22 EXISTING CURB AND GUTTER TO REMAIN. |
| 8 NEW CONCRETE CURB AND GUTTER. PER COA STD DWG #2415A. | 23 NEW 12" STORM DRAIN LINE @ 0.5% SLOPE. |
| 9 NEW PARKING STRIPES AND ADA MARKINGS, SEE ARCHITECTURAL PLANS FOR DETAILS. | 24 NEW TYPE D INLET. PER COA STD DWG #2206. INV=24.17, TG=28.5 |
| 10 NEW ADA RAMPS, SEE ARCHITECTURAL PLANS FOR DETAILS. | 25 NEW STORM DRAIN MANHOLE, RIM=28.4. |
| 11 NEW ADA PARKING SIGN, SEE ARCHITECTURAL PLANS FOR DETAILS. | 26 NEW WATER HARVEST AREA #2, PER DETAIL SHEET C-501. INV=25.0 |
| 12 NEW TRASH INCLOSURE, SEE ARCHITECTURAL PLANS FOR DETAILS. | 27 NEW ADA RAMP PER COA STD DWG #2443. |
| 13 NEW SITE WALL, SEE ARCHITECTURAL PLANS FOR DETAILS. | 28 NEW 6" STORM DRAIN LINE @ 2% SLOPE. |
| 14 NEW FIRE FIGHTER PARKING, (26 SPACES) | |

ME MILLER ENGINEERING CONSULTANTS
 Engineers • Planners
 3500 COMANCHE, NE
 BUILDING #
 ALBUQUERQUE, NM 87107
 (505)888-7500
 (505)888-3800 (FAX)
 WWW.MECNM.COM

50% CDs
 NOT FOR
 CONSTRUCTION

 4477 Irving NW, Suite A Albuquerque, New Mexico 87114 Ph: 505.890.5030 - Fax: 505.890.5031 www.va-architects.com		
CITY OF ALBUQUERQUE CAPITAL IMPLEMENTATION PROGRAM AFD FIRE STATION 12 11714 LINN AVE. N.E. ALBUQUERQUE, NM 87123		
Drawing Title		
CONCEPTUAL GRADING AND DRAINAGE PLAN		
Design Review Committee	City Engineer Approval	Mo./Day/Yr.
		7/10/18
Issue Date:	City Project No.	Sheet
JUNE, 2024		C-101

T:\Clients\VIGIL & ASSOCIATES\CABQ FIRE STATION #12\CAD\Sheets\C-101 GRADING & DRAINAGE PLAN.dwg, C-101_G & D PLAN, 6/13/2024, 10:43:44 AM