

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

February 1, 2021

Robert Fierro, P.E.
Fierro & Company
6300 Montano Rd. NW
Albuquerque, NM 87120

**RE: Meineke
5901 Carmel Ave. NW
Grading and Drainage Plan
Engineer's Stamp Date: 01/07/21
Hydrology File: C18D049**

Dear Mr. Fierro:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 01/07/2021, the Grading & Drainage Plan is approved for Grading Permit. As per our phone conversation on January 28, 2021, once the pond is removed from the R.O.W. and a Type A inlet installed with an 18" storm pipe to the existing MH and the waterblock is installed at the driveway, then please submit the drawings for Building Permit.

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 924-3995 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 11/2018)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Owner: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

TYPE OF SUBMITTAL: _____ PLAT (___# OF LOTS) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes _____ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION _____ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- _____ ENGINEER/ARCHITECT CERTIFICATION
- _____ PAD CERTIFICATION
- _____ CONCEPTUAL G & D PLAN
- _____ GRADING PLAN
- _____ DRAINAGE MASTER PLAN
- _____ DRAINAGE REPORT
- _____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- _____ ELEVATION CERTIFICATE
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT (TCL)
- _____ TRAFFIC IMPACT STUDY (TIS)
- _____ OTHER (SPECIFY) _____
- _____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

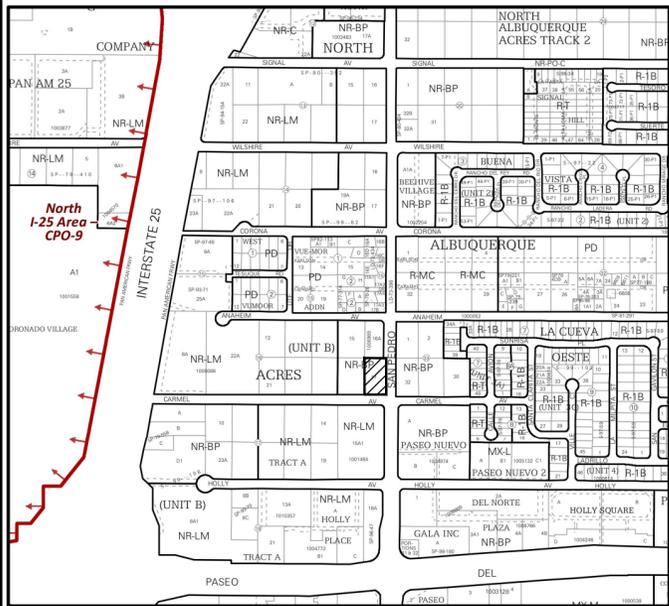
- _____ BUILDING PERMIT APPROVAL
- _____ CERTIFICATE OF OCCUPANCY
- _____ PRELIMINARY PLAT APPROVAL
- _____ SITE PLAN FOR SUB'D APPROVAL
- _____ SITE PLAN FOR BLDG. PERMIT APPROVAL
- _____ FINAL PLAT APPROVAL
- _____ SIA/ RELEASE OF FINANCIAL GUARANTEE
- _____ FOUNDATION PERMIT APPROVAL
- _____ GRADING PERMIT APPROVAL
- _____ SO-19 APPROVAL
- _____ PAVING PERMIT APPROVAL
- _____ GRADING/ PAD CERTIFICATION
- _____ WORK ORDER APPROVAL
- _____ CLOMR/LOMR
- _____ FLOODPLAIN DEVELOPMENT PERMIT
- _____ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



VICINITY MAP
FROM ZONE ATLAS PAGE B-11-Z
N.T.S.



NTS

SUBDIVISION DATA

1. ZONE ATLAS MAP NO. B-11; ZONING: MX-L & MX-T.
2. GROSS SUBDIVISION ACREAGE: 0.630 ACRES.
3. TOTAL NUMBER OF LOTS/TRACTS CREATED: ONE (1) LOT.
4. DATE OF SURVEY: AUGUST 2020
5. PLAT IS LOCATED WITHIN BERNALILLO COUNTY, NEW MEXICO.

PURPOSE OF PLAT

THE PURPOSE OF THIS PLAT IS TO DEDICATE PUBLIC RIGHT-OF-WAY AS SHOWN HEREON AND GRANT EASEMENTS AS SHOWN HEREON.

NOTES

1. BEARINGS SHOWN ON THIS PLAT ARE NEW MEXICO STATE PLANE GRID BEARINGS, CENTRAL ZONE, NAD 1983.
2. DISTANCES ARE GROUND DISTANCES (U.S. FOOT).
3. GRID TO GROUND SCALE FACTOR USED IS 0.999664563.

NOTES

1. BEARINGS SHOWN ON THIS PLAT ARE NEW MEXICO STATE PLANE GRID BEARINGS, CENTRAL ZONE, NAD 1983.
2. DISTANCES ARE GROUND DISTANCES (U.S. FOOT).
3. THIS SURVEY IS BASED UPON THE PLAT OF NORTH ALBUQUERQUE ACRES, TRACT A, UNIT B RECORDED IN DOCUMENT NO. 1936042436 OF THE RECORDS OF BERNALILLO COUNTY CLERKS OFFICE RECORDED ON APRIL 24, 1936, RECORD BEARING AND DISTANCES ARE SHOWN ON THIS PLAT.
4. SOLAR NOTE - PURSUANT TO SECTION 14-14-4-7 OF THE CITY OF ALBUQUERQUE CODE OF ORDINANCE, "NO PROPERTY WITHIN THE AREA OF THIS PLAT SHALL AT ANY TIME BE SUBJECT TO A DEED RESTRICTION, COVENANT, OR BINDING AGREEMENT PROHIBITING SOLAR COLLECTORS FROM BEING INSTALLED ON BUILDINGS OR ERECTED ON THE LOTS OR TRACTS WITHIN THE AREA OF PROPOSED PLAT.
5. GRID TO GROUND SCALE FACTOR USED IS 0.999664563 AS PUBLISHED BY ACS MONUMENT "9-C18".
6. DATA IN PARENTHESIS IS RECORD OBTAINED FROM THE PLAT OF NORTH ALBUQUERQUE ACRES, TRACT A, UNIT B, RECORDED APRIL 24, 1936, IN DOCUMENT NO. 1936042436.

DESCRIPTION

LOT NUMBERED SEVENTEEN (17) IN BLOCK NUMBERED SIXTEEN (16), TRACT A, UNIT B, OF THE NORTH ALBUQUERQUE ACRES, AN ADDITION TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE MAP OF SAID ADDITION FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON APRIL 24, 1936 IN PLAT BOOK D, FOLIO 130.

THIS TRACT CONTAINS 0.630 ACRES (27,438 SQ. FT.) MORE OR LESS.

FREE CONSENT

SURVEYED AND SUB-DIVIDED AND NOW COMPRISING,
"PLAT OF LOT 17-A, BLOCK 16, NORTH ALBUQUERQUE ACRES, TRACT A, UNIT B, WITH THE FREE CONSENT OF AND IN ACCORDANCE WITH THE WISHES AND DESIRES OF THE UNDERSIGNED OWNER(S) AND PROPRIETOR(S), THE EXECUTION OF THIS PLAT IS THEIR FREE ACT AND DEED.

SAID OWNER(S) AND PROPRIETOR(S) DO HEREBY WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE IN FEE SIMPLE TO THE LAND SUB-DIVIDED.

SAID OWNER(S) AND PROPRIETOR(S) DO HEREBY CONSENT TO ALL OF THE FORGOING AND DO HEREBY REPRESENT THAT THEY ARE SO AUTHORIZED TO ACT.

BY: _____
SHARIF A. RABADI, PROPERTY OWNER

BY: _____
SAMIA S. RABADI, PROPERTY OWNER

ACKNOWLEDGEMENT:

STATE OF _____)
)SS.
COUNTY OF _____)

ON THIS ____ DAY OF _____, 2020, BEFORE ME

PERSONALLY APPEARED _____ KNOWN TO ME TO BE THE PERSON(S) DESCRIBED IN AND WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THAT THEY EXECUTED THE SAME AS THEIR FREE ACT AND DEED.
WITNESS MY HAND AND OFFICIAL SEAL THE DAY AND YEAR LAST ABOVE WRITTEN.

MY COMMISSION
EXPIRES: _____

NOTARY PUBLIC

SURVEYOR'S CERTIFICATION

I, ROBERT J. FIERRO, NEW MEXICO PROFESSIONAL SURVEYOR NO. 22909, DO HEREBY CERTIFY THAT THIS PLAT OF SURVEY WAS PREPARED FROM FIELD NOTES OF AN ACTUAL GROUND SURVEY PERFORMED BY ME OR UNDER MY SUPERVISION; THAT IT ACCURATELY MEETS THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND PROFESSIONAL SURVEYORS; MEETS THE MINIMUM REQUIREMENTS FOR MONUMENTS AND SURVEYS OF THE ALBUQUERQUE SUBDIVISION ORDINANCE, AND IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

ROBERT J. FIERRO, N.M.P.S. No. 22909 _____ Date



PLAT OF
LOT 17-A, BLOCK 16
NORTH ALBUQUERQUE ACRES
TRACT A, UNIT B
PROJECTED SECTION 13 TOWNSHIP 11 NORTH, RANGE 3 EAST, N.M.P.M.
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
DECEMBER 2020

UTILITY APPROVALS:

PNM ELECTRIC SERVICES _____ DATE
NEW MEXICO GAS COMPANY _____ DATE
CENTURY LINK _____ DATE
COMCAST _____ DATE

CITY APPROVALS:

CITY SURVEYOR _____ DATE
REAL PROPERTY DIVISION _____ DATE
ENVIRONMENTAL HEALTH DEPARTMENT _____ DATE
TRAFFIC ENGINEERING, TRANSPORTATION DIVISION _____ DATE
A.B.C.W.U.A. _____ DATE
PARKS & RECREATION DEPARTMENT _____ DATE
A.M.A.F.C.A. _____ DATE
CITY ENGINEER/HYDROLOGY _____ DATE
CODE ENFORCEMENT _____ DATE
DRB CHAIRPERSON, PLANNING DEPARTMENT _____ DATE

TREASURER'S OFFICE CERTIFICATION

THIS IS TO CERTIFY THAT THE TAXES ARE CURRENT AND
PAID ON UPC #: _____
PROPERTY OWNER OF RECORD _____
BERNALILLO COUNTY
TREASURER'S OFFICE _____ DATE



Fierro & Company

ENGINEERING | SURVEYING

6300 MONTANO RD. NW, STE. C ALBUQUERQUE, NM 87120
PH 505.352.8930
www.fierrocompany.com

PLAT OF
 LOT 17-A, BLOCK 16
 NORTH ALBUQUERQUE ACRES
 TRACT A, UNIT B

PROJECTED SECTION 13 TOWNSHIP 11 NORTH, RANGE 3 EAST, N.M.P.M.
 CITY OF ALBUQUERQUE
 BERNALILLO COUNTY, NEW MEXICO
 DECEMBER 2020

LOT 15, BLOCK 16
 NORTH ALBUQUERQUE ACRES
 TRACT A, UNIT B
 (D-130, 04/24/1936)

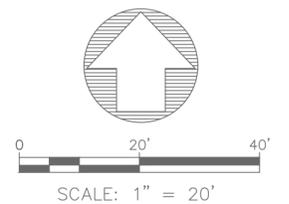
ACS MONUMENT "9-C18"
 NM STATE PLANE COORDINATES (CENTRAL ZONE)
 PUBLISHED DATA IN NAD 1983
 Y=1521497.624 U.S. SURVEY FEET
 X=1542501.428 U.S. SURVEY FEET
 DELTA ALPHA= -0°11'19.69"
 GROUND TO GRID FACTOR= 0.999664563
 PUBLISHED DATA IN NAVD 1988
 ELEVATION= 5232.47 U.S. SURVEY FEET

LOT 16-A, BLOCK 16
 NORTH ALBUQUERQUE ACRES
 TRACT A, UNIT B
 (2008C-101, 05/01/2008)

(S90°00'00"E, 135.00')
 S89°42'29"E, 134.79'

LOT 17-A, BLOCK 16
 (27,438 SQ.FT.)
 0.630 ACRES ±

DEDICATED TO THE
 CITY OF ALBUQUERQUE
 IN FEE SIMPLE WITH
 WARRANTY COVENANTS
 4,114 SQ.FT.
 0.094



LOT 18, BLOCK 16
 NORTH ALBUQUERQUE ACRES
 TRACT A, UNIT B
 (D-130, 04/24/1936)

(N00°00'00"E, 234.00')
 N00°21'20"E, 234.03'

10' PUBLIC UTILITY
 EASEMENT TO BE
 GRANTED WITH THE
 FILING OF THIS PLAT

SAN PEDRO DRIVE N.E. (60' R/W)

S00°21'20"W, 209.13'

S00°21'20"W, 234.13'
 (S00°00'00"W, 234.00')

Δ=89°58'52"
 R=25.00'
 L=39.26'
 ChB=N45°20'46"E
 ChL=35.35'

92.80'

41.99'

N89°39'48"W, 134.79'
 (N90°00'00"W, 135.00')

CARMEL AVENUE N.E. (60' R/W)

LEGEND

- FOUND MONUMENT AS NOTED
- SET 18"x1/2" REBAR WITH BLUE PLASTIC CAP MARKED "F&C PS 22909"
- ⊗ CALCULATED CORNER NOT SET

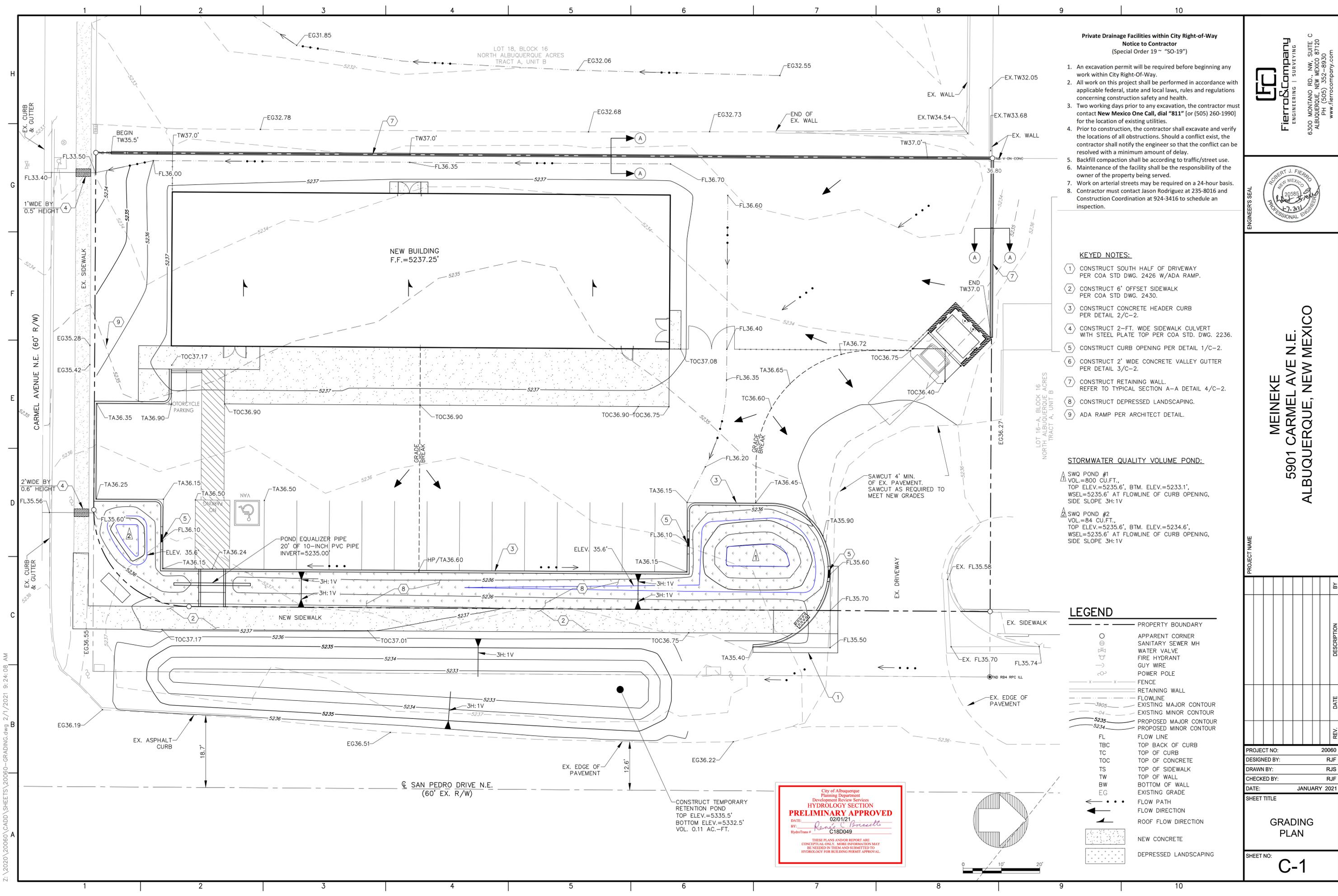


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SHEET 2 OF 2



**Private Drainage Facilities within City Right-of-Way
Notice to Contractor
(Special Order 19 ~ "50-19")**

1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact **New Mexico One Call, dial "811"** (or (505) 260-1990) for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets may be required on a 24-hour basis.
8. Contractor must contact Jason Rodriguez at 235-8016 and Construction Coordination at 924-3416 to schedule an inspection.

KEYED NOTES:

- 1 CONSTRUCT SOUTH HALF OF DRIVEWAY PER COA STD DWG. 2426 W/ADA RAMP.
- 2 CONSTRUCT 6' OFFSET SIDEWALK PER COA STD DWG. 2430.
- 3 CONSTRUCT CONCRETE HEADER CURB PER DETAIL 2/C-2.
- 4 CONSTRUCT 2'-FT. WIDE SIDEWALK CULVERT WITH STEEL PLATE TOP PER COA STD. DWG. 2236.
- 5 CONSTRUCT CURB OPENING PER DETAIL 1/C-2.
- 6 CONSTRUCT 2' WIDE CONCRETE VALLEY GUTTER PER DETAIL 3/C-2.
- 7 CONSTRUCT RETAINING WALL. REFER TO TYPICAL SECTION A-A DETAIL 4/C-2.
- 8 CONSTRUCT DEPRESSED LANDSCAPING.
- 9 ADA RAMP PER ARCHITECT DETAIL.

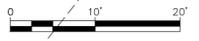
STORMWATER QUALITY VOLUME POND:

- ▲ SWQ POND #1
VOL.=800 CU.FT.,
TOP ELEV.=5235.6', BTM. ELEV.=5233.1',
WSEL=5235.6' AT FLOWLINE OF CURB OPENING,
SIDE SLOPE 3H:1V
- ▲ SWQ POND #2
VOL.=84 CU.FT.,
TOP ELEV.=5235.6', BTM. ELEV.=5234.6',
WSEL=5235.6' AT FLOWLINE OF CURB OPENING,
SIDE SLOPE 3H:1V

LEGEND

- PROPERTY BOUNDARY
- APPARENT CORNER
- SANITARY SEWER MH
- WATER VALVE
- FIRE HYDRANT
- GUY WIRE
- POWER POLE
- FENCE
- RETAINING WALL
- FLOWLINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- FL FLOW LINE
- TBC TOP BACK OF CURB
- TC TOP OF CURB
- TOC TOP OF CONCRETE
- TS TOP OF SIDEWALK
- TW TOP OF WALL
- BW BOTTOM OF WALL
- EG EXISTING GRADE
- ← FLOW PATH
- FLOW DIRECTION
- ↘ ROOF FLOW DIRECTION
- NEW CONCRETE
- DEPRESSED LANDSCAPING

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
DATE: 02/01/21
BY: *Renee C. Brissett*
HydroTrans # C18D049
THESE PLANS AND/OR REPORT ARE CONCEPTUAL ONLY. MORE INFORMATION MAY BE NEEDED IN THEM AND SUBMITTED TO HYDROLOGY FOR BUILDING PERMIT APPROVAL.



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6300 MONTANO RD., NW, SUITE C
ALBUQUERQUE, NEW MEXICO 87120
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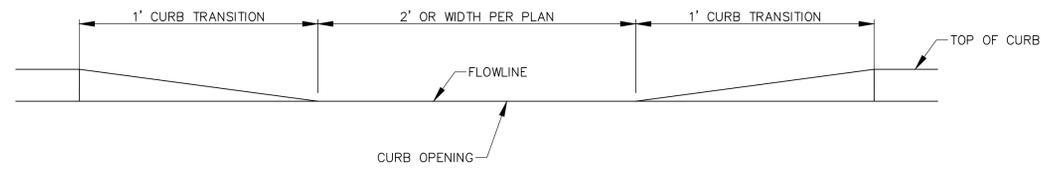
MEINEKE
5901 CARMEL AVE N.E.
ALBUQUERQUE, NEW MEXICO

PROJECT NAME	REV.	DATE	DESCRIPTION	BY

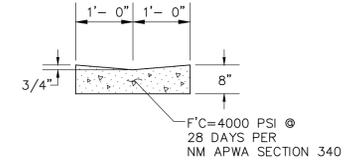
PROJECT NO: 20060
DESIGNED BY: RJF
DRAWN BY: RJS
CHECKED BY: RJF
DATE: JANUARY 2021

SHEET TITLE
GRADING PLAN
SHEET NO: **C-1**

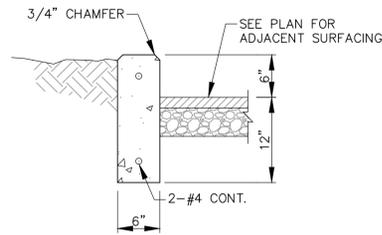
Z:\2020\20060\CADD\SHEETS\20060-GRADING.dwg 2/1/2021 9:24:06 AM



1 TYPICAL CURB OPENING
SCALE: NTS



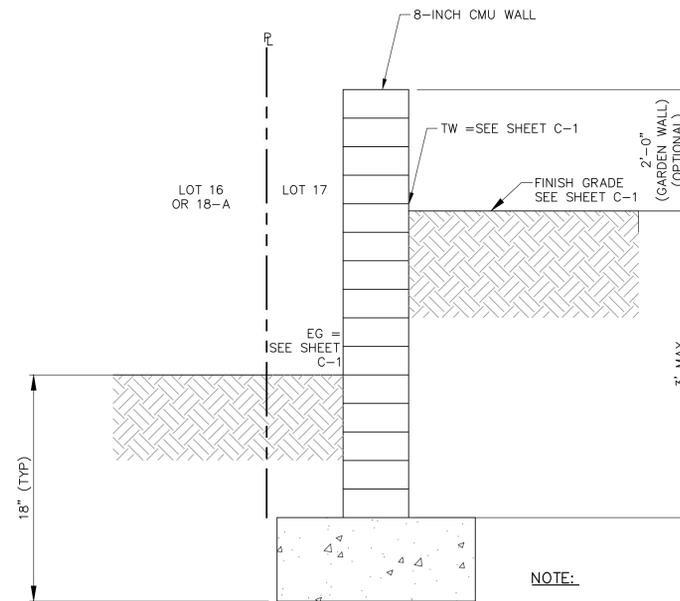
3 2-FT WIDE GUTTER (COA STD. DWG. 2415)
SCALE: NTS



2 HEADER CURB DETAIL
SCALE: NTS

CURB GENERAL NOTES

1. ANY DEVIATIONS FROM THESE STANDARDS SHALL BE SUBMITTED TO THE CITY ENGINEER FOR PRIOR APPROVAL
2. ALL WORK IN PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BY A LICENSED CONTRACTOR AND REQUIRES PERMIT AND APPROVAL BY THE DEPT OF PUBLIC WORKS.
3. SUBGRADE SHALL BE COMPACTED TO 95% ASTM D 1557, MIN.
4. CURB SHALL BE PORTLAND CEMENT CONCRETE. PORTLAND CEMENT CONCRETE SHALL BE 3000 PSI @ 28 DAYS w/CLASS F FLY ASH AND 7% +/- 2% AIR ENTRAINMENT. (MAX 20% FLY ASH BY WEIGHT).
5. FOR CONCRETE CURB CONSTRUCT TRANSVERSE JOINTS AS FOLLOWS:
 - TOOLED CONTRACTION JOINTS AT 5' INTERVALS.
 - 1/2" PRE-MOLDED BITUMINOUS EXPANSION JOINTS AT 15' INTERVALS.
 - SEALED EXPANSION JOINTS AT 90' INTERVALS.
6. DIMENSIONS AT ROUNDED CORNERS MEASURED TO INTERSECTION OF STRAIGHT LINES.



4 SECTION A-A
SCALE: NTS

NOTE:
ENTIRE WALL INCLUDING FOOTER TO BE BUILT ON SITE'S PROPERTY BEING LOT 17, BLOCK 16, NORTH ALBUQUERQUE ACRES, TRACT A, UNIT B



MEINEKE
5901 CARMEL AVE N.E.
ALBUQUERQUE, NEW MEXICO

PROJECT NAME

REV.	DATE	DESCRIPTION	BY

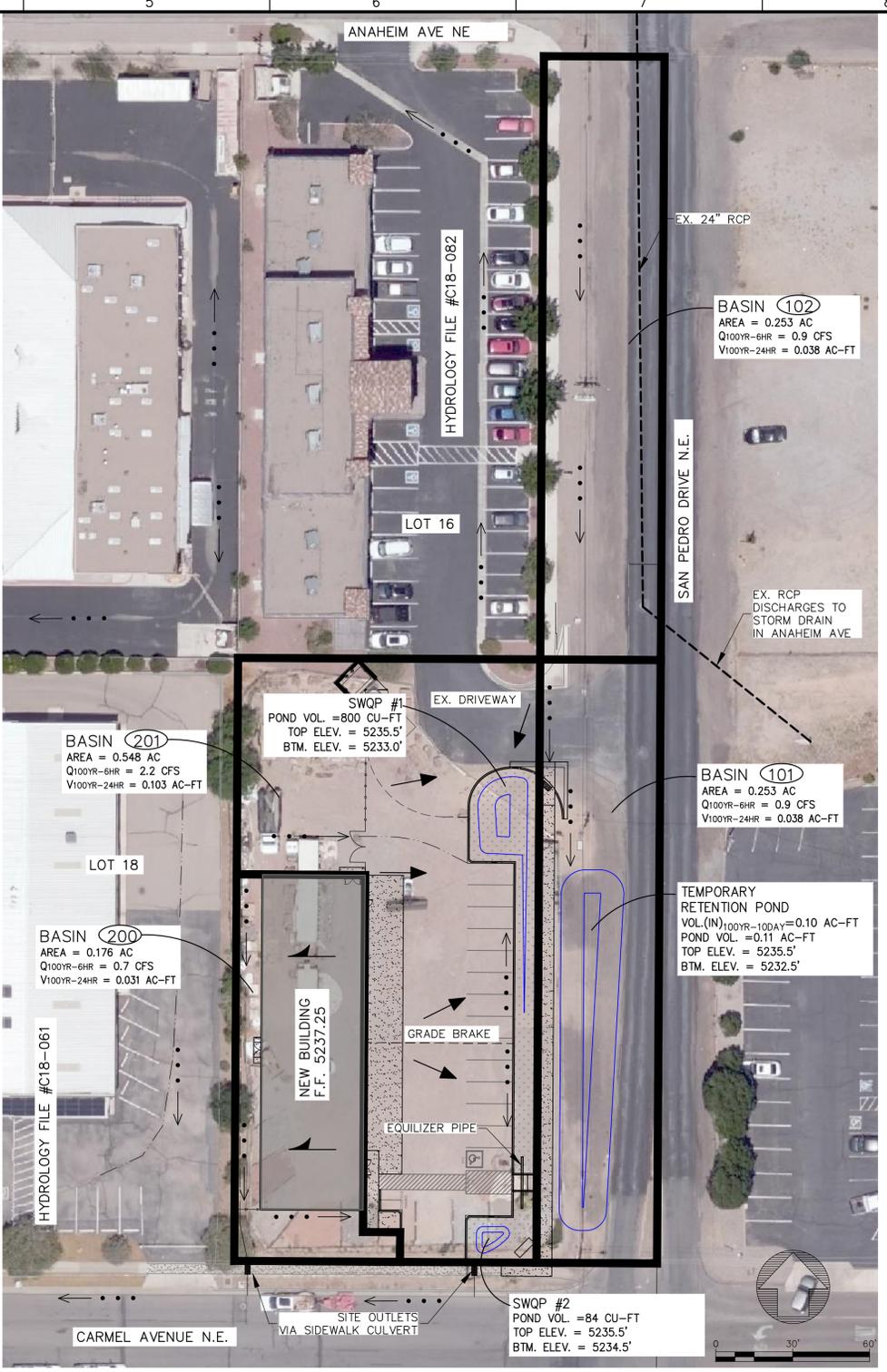
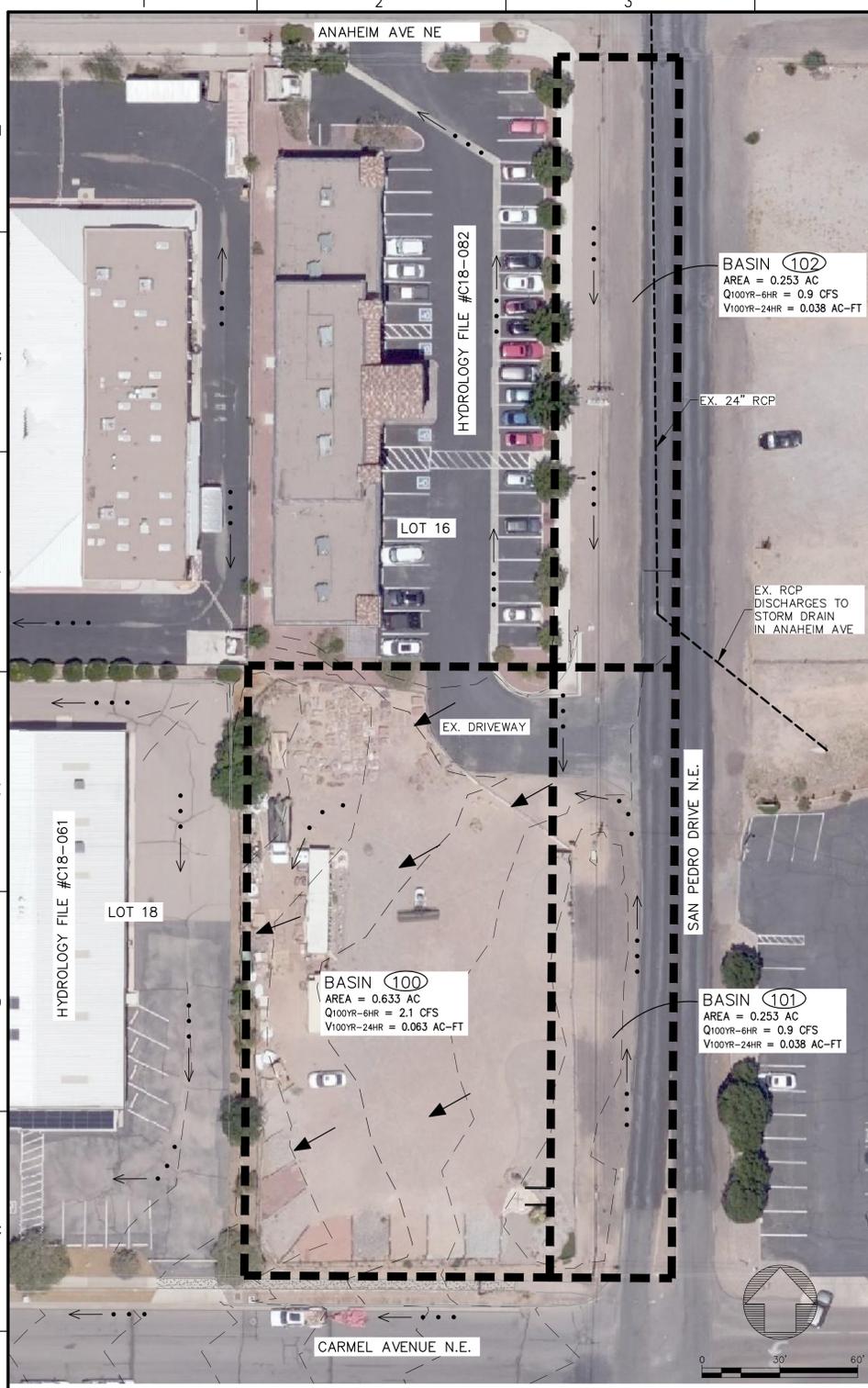
PROJECT NO: 20060
DESIGNED BY: R/JF
DRAWN BY: RJS
CHECKED BY: R/JF
DATE: JANUARY 2021

SHEET TITLE
DETAILS

SHEET NO:
C-2



Z:\2020\20060\CADD\SHEETS\20060-DETAILS.dwg 2/1/2021 9:17:08 AM



Introduction
The site is located at 5901 San Pedro Drive NE being on Lot 17, Block 16, North Albuquerque Acres. Said lot will dedicate the east 17-feet for additional right-of-way for San Pedro Drive, which will require platting action from City of Albuquerque's DRB. The additional right-of-way is being requested by the City for future widening of San Pedro Drive. On-site improvements include a 5,200 sq.ft. building and parking lot for an automotive shop. The site most recently was used as a yard for a landscaping supplier company. The purpose of this Grading & Drainage Plan is to 1) provide hydrologic and hydraulic analysis of the existing and proposed condition, 2) satisfy the Stormwater Quality Volume requirement, and 3) seek permit for grading and building approval.

Methodology
Hydrologic procedures presented in the Hydrology Section of the DMP, Section 22.2, revised April 7, 1993 were followed.

Existing Condition
The existing site was most recently used by a landscaping supplier that sold several types of gravel and landscaping rocks. The soil has been heavily compacted by the landscaping company and prior businesses located on this site. Offsite runoff from Basin 101 and 102 enter the site at the northeast corner as shown on the "Existing Basin Map". The offsite and on-site runoff then flow west to the adjoining lot (Lot 18), which then flows across the parking lot and into Carmel Avenue NE. With the development of Lot 16, located north of the site, an inlet was proposed at the shared driveway and to be connected to the storm drain system on San Pedro Drive. However, the proposed inlet was not installed resulting in runoff from Basin 101 and 102 to discharge through the site and Lot 18. Refer to Hydrology File #C18-082.

Proposed Condition
Improvements include a 5200 sq.ft. building and parking lot to be used for an automotive repair shop. On-site Basins include Basin 200 and 201.

Improvements in Basin 200 includes the proposed building and landscaping south of the building. This basin will discharge to Carmel without being treated via a storm water quality feature. There will be minimal pollutants from this basin as it will not contain any parking from automobiles or storage of any contaminants related to an automobile facility. The site is small and made smaller with 17-feet being dedicated to the City. Also runoff cannot be routed by surface conveyance from behind the building to the front and the pond is not that deep to connect to via pipe. The owner is proposing to make a payment in lieu of treating the storm water quality volume from this basin.

Improvements from Basin 201 includes the parking lot, shared driveway, and landscaping with stormwater quality ponds. There are two stormwater quality ponds separated by an ADA ramp that connects to the sidewalk along San Pedro Drive. However, these ponds will be connected via a pipe and will act as one stormwater quality pond. Once runoff reaches the top of the stormwater quality pond, runoff will overflow to the sidewalk culvert south of Stormwater Quality Pond #2.

Basin 101 and 102 will not discharge through the site as under the existing condition. Basin 102 will drain across the shared driveway and into Basin 101. The combined 100-year, 10-day runoff from Basin 101 and 102 will be stored in the temporary pond located in Basin 101. The pond is temporary until inlets are built and connected to the storm system on San Pedro. It is anticipated that the inlets will be built under the San Pedro Drive Widening Project.

Conclusion
The proposed development will not increase the peak discharge or volumetric runoff into Carmel Avenue, since runoff from Basin 101 and 102 will be stored in the temporary pond and in the future will be captured via the storm drain in San Pedro Drive. The City's drainage criteria was used and met. This drainage report is being submitted for review, and seeks approval.



EXISTING BASIN MAP

PROPOSED BASIN MAP

HYDROLOGY SUMMARY EXISTING CONDITION

Basin	Total Area (acres)	Land Treatment (%)				Q ₁₀₀ (cfs)	V _{100yr-24hr} (ac-ft)	V _{100yr-10day} (ac-ft)
		A	B	C	D			
100	0.633	0.0	0.0	93.8	6.2	2.1	0.063	0.067
101	0.253	0.0	0.0	55.7	44.3	0.9	0.038	0.050
102	0.253	0.0	0.0	55.5	44.5	0.9	0.038	0.050

HYDROLOGY SUMMARY PROPOSED CONDITION

Basin	Total Area (acres)	Land Treatment (%)				Q ₁₀₀ (cfs)	V _{100yr-24hr} (ac-ft)	V _{100yr-10day} (ac-ft)
		A	B	C	D			
200	0.176	0.0	32.3	0.0	67.7	0.7	0.031	0.044
201	0.548	0.0	10.6	17.6	71.8	2.2	0.103	0.144

HYDROLOGIC CALCULATIONS

STORMWATER QUALITY VOLUME POND (BASIN 200):
TOTAL NEW LAND TREATMENT "D" AREA = 5,200 SQ.FT.
WATER QUALITY STORAGE REQUIRED (NEW DEVELOPMENT)=5,200 SQ.FT.*(0.42)*(1/12")=182 CU.FT.
Waiver for Payment-in-lieu is requested for the SWQV from Basin 200.
Payment-in-Lieu amount = 182 cu.ft. * \$8/cu.ft. = \$1,456.00

STORMWATER QUALITY VOLUME POND (BASIN 201):
TOTAL NEW LAND TREATMENT "D" AREA = 17,128 SQ.FT.
WATER QUALITY STORAGE REQUIRED (NEW DEVELOPMENT)=17,128 SQ.FT.*(0.42)*(1/12")=600 CU.FT.

PROPOSED STORMWATER QUALITY VOLUME:
TOTAL SWQP VOL. = SWQP #1VOL. + SWQP #2VOL. = 800 CU.FT. + 84 CU.FT. = 884 CU.FT.
THEREFORE; THE DESIGNED SWQ POND VOLUME OF 884 CU.FT. IS SUFFICIENT TO TREAT THE STORM WATER QUALITY VOLUME OF 600 CU.FT. FROM BASIN 201.

STORMWATER QUALITY VOL. CALCULATIONS

SIDEWALK CULVERT CAPACITY (BASIN 200 OUTLET):
REQUIRED CONVEGANCE = 0.7 CFS
CAPACITY CALCULATED USING MANNINGS EQUATION = 2.7 CFS
COMPUTATION BELOW:
 $Q_{CAPACITY} = CLH^{3/2} = 2.7 * 1 * 0.5^{3/2} = 1.0$ CFS

SIDEWALK CULVERT CAPACITY (BASIN 201 OUTLET):
REQUIRED CONVEGANCE = 2.2 CFS
CAPACITY CALCULATED USING MANNINGS EQUATION = 2.7 CFS
COMPUTATION BELOW:
 $Q_{CAPACITY} = CLH^{3/2} = 2.7 * 2 * 0.6^{3/2} = 2.5$ CFS

SIDEWALK CULVERT WEIR CALC.

LEGEND

- PROPERTY BOUNDARY
- FLOW PATH
- ROOF FLOW
- SURFACE DRAINAGE
- UTILITY EASEMENT LINE
- FLOWLINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED BASIN
- EXISTING BASIN



MEINEKE
5901 CARMEL AVE N.E.
ALBUQUERQUE, NEW MEXICO

PROJECT NAME

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REV.	DATE	DESCRIPTION	BY

PROJECT NO: 20060
DESIGNED BY: RJF
DRAWN BY: RJS
CHECKED BY: RJF
DATE: JANUARY 2021
SHEET TITLE

DRAINAGE PLAN

SHEET NO: **C-3**

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