

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

December 11, 2020

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

**RE: Kraemer Fields
2801 Karsten Court SE
Revised Grading & Drainage Plan
Engineer's Stamp Date: 12/01/20
Hydrology File: M14D012I**

Dear Mr. Fierro:

PO Box 1293 Based upon the information provided in your submittal received 12/01/2020, the Revised Grading and Drainage Plan is approved for Building Permit.

Albuquerque Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

NM 87103 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

Also, please provide the Drainage Covenant for the proposed stormwater quality ponds per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. There is a recording fee (\$25, payable to Bernalillo County). Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996). Due to COVID-19, please follow the instructions:

Either email a pdf copy of the executed drainage covenant and the exhibit to clabadie@cabq.gov or either mail or drop off the originals. Please mail the \$25.00 recording fee check made payable to Bernalillo County to:

Planning Dept./DRC
Attn: Charlotte LaBadie
600 2nd St. NW, Ste. 400
ABQ, NM, 87102

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If you drop off the originals, there is a drop box outside the building labeled DRC. Once approved and recorded, Charlotte will email you a copy.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



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: _____

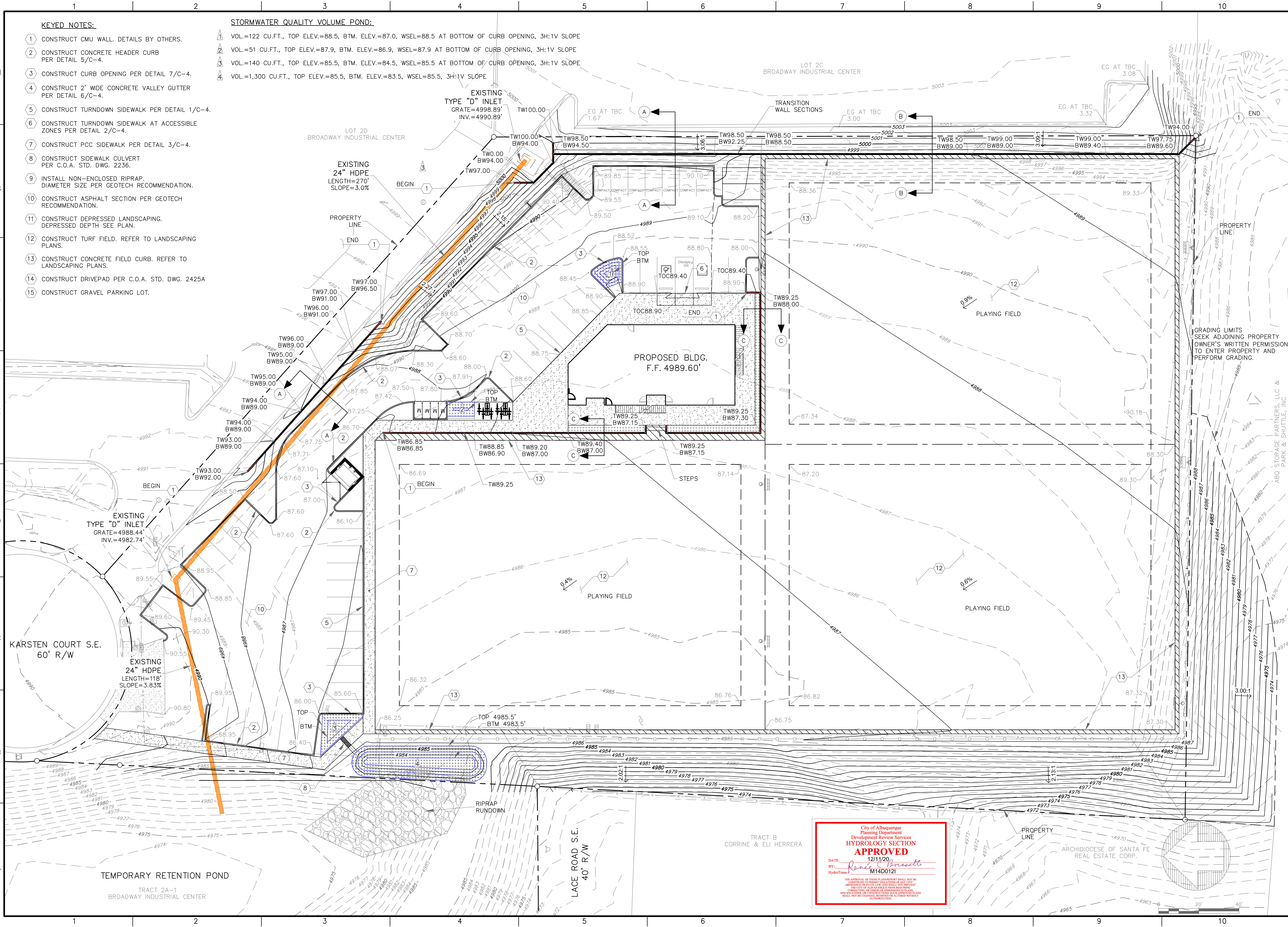
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KEYED NOTES:

1. CONSTRUCT CMU WALL. DETAILS BY OTHERS.
2. CONSTRUCT CONCRETE HEADER CURB PER DETAIL 5/C-4.
3. CONSTRUCT CURB OPENING PER DETAIL 7/C-4.
4. CONSTRUCT 2' WIDE CONCRETE VALLEY GUTTER PER DETAIL 6/C-4.
5. CONSTRUCT TURNDOWN SIDEWALK PER DETAIL 1/C-4.
6. CONSTRUCT TURNDOWN SIDEWALK AT ACCESSIBLE ZONES PER DETAIL 2/C-4.
7. CONSTRUCT PCC SIDEWALK PER DETAIL 3/C-4.
8. CONSTRUCT SIDEWALK CULVERT PER C.O.A. STD. DWG. 2236.
9. INSTALL NON-ENCLOSED RIPRAP. DIAMETER SIZE PER GEOTECH RECOMMENDATION.
10. CONSTRUCT ASPHALT SECTION PER GEOTECH RECOMMENDATION.
11. CONSTRUCT DEPRESSED LANDSCAPING. DEPRESSED DEPTH SEE PLAN.
12. CONSTRUCT TURF FIELD. REFER TO LANDSCAPING PLANS.
13. CONSTRUCT CONCRETE FIELD CURB. REFER TO LANDSCAPING PLANS.
14. CONSTRUCT DRIVEPAD PER C.O.A. STD. DWG. 2425A
15. CONSTRUCT GRAVEL PARKING LOT.

STORMWATER QUALITY VOLUME POND:

1. VOL.=122 CU.FT., TOP ELEV.=88.5, BTM. ELEV.=87.0, WSEL=88.5 AT BOTTOM OF CURB OPENING, 3H:1V SLOPE
2. VOL.=51 CU.FT., TOP ELEV.=87.9, BTM. ELEV.=86.9, WSEL=87.9 AT BOTTOM OF CURB OPENING, 3H:1V SLOPE
3. VOL.=140 CU.FT., TOP ELEV.=85.5, BTM. ELEV.=84.5, WSEL=85.5 AT BOTTOM OF CURB OPENING, 3H:1V SLOPE
4. VOL.=1,300 CU.FT., TOP ELEV.=85.5, BTM. ELEV.=83.5, WSEL=85.5, 3H:1V SLOPE





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ALBUQUERQUE, NEW MEXICO 87120
PH (505) 352-8930
www.fierrocompany.com



ENGINEER'S SEAL

KRAEMER FIELDS
LOT 2B
BROADWAY INDUSTRIAL CENTER
SUBDIVISION, UNIT 2
ALBUQUERQUE, NEW MEXICO

PROJECT NAME

REV.	DATE	DESCRIPTION	BY

PROJECT NO: 20067

DESIGNED BY: RJF

DRAWN BY: RJS

CHECKED BY: RJF

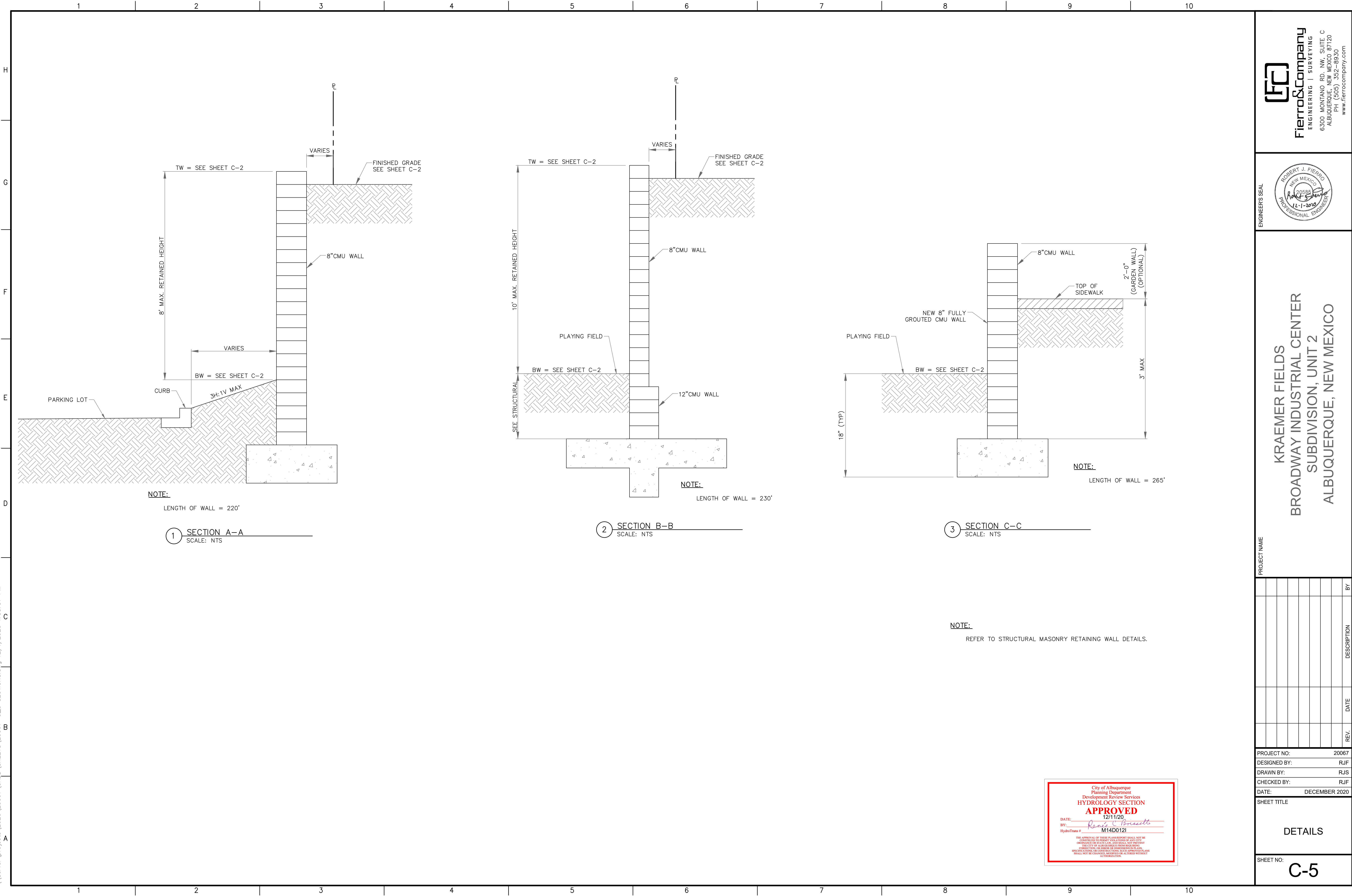
DATE: DECEMBER 2020

SHEET TITLE

DETAIL LOT 2B
GRADING PLAN

SHEET NO:
C-2

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PROJECT NAME

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	20067
DESIGNED BY:	RJF
DRAWN BY:	RJS
CHECKED BY:	RJF
DATE:	DECEMBER 2020

SHEET TITLE

DETAILS

SHEET NO:

C-5



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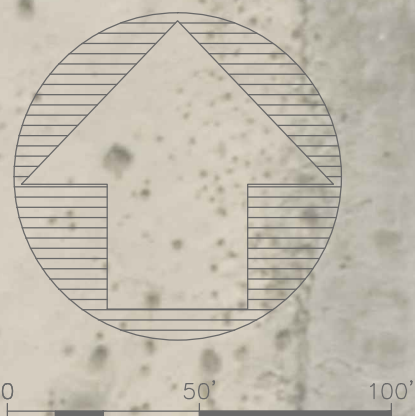


EXISTING HYDROLOGY CALCULATION SUMMARY											
Basin	Total Area (acres)	Land Treatment Area (acres)				Land Treatment (%)				Q ₁₀₀ (cfs)	V _{100yr-6hr} (ac-ft)
		A	B	C	D	A	B	C	D		
100	2.442	0.00	0.12	2.32	0.00	0.0	5.0	95.0	0.0	7.4	0.207
101	0.560	0.00	0.03	0.53	0.00	0.0	5.0	95.0	0.0	1.7	0.048
102	5.059	0.00	0.25	0.25	4.55	0.0	5.0	5.0	90.0	21.1	0.923
103	3.435	0.00	0.17	0.17	3.09	0.0	5.0	5.0	90.0	14.3	0.626
104	3.082	0.00	0.00	3.08	0.00	0.0	0.0	100.0	0.0	9.4	0.265
105	0.344	0.00	0.00	0.34	0.00	0.0	0.0	100.0	0.0	1.0	0.030
106	0.770	0.00	0.00	0.77	0.00	0.0	0.0	100.0	0.0	2.3	0.066
107	0.404	0.00	0.00	0.40	0.00	0.0	0.0	100.0	0.0	1.2	0.035
108	0.83292	0.00	0.08	0.12	0.62	0.0	10.0	15.0	75.0	3.3	0.138

EXISTING 100^{yr}-10^{day} VOLUME INTO EXISTING POND
= V_{BASIN 100} + V_{BASIN 101} + V_{BASIN 102} + V_{BASIN 103} + V_{BASIN 104} + V_{BASIN 106} + V_{BASIN 108}
= 0.207 + 0.048 + 1.427 + 0.969 + 0.265 + 0.066 + 0.207
= 3.189 AC-FT

- LEGEND**
- SWALE
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - SURFACE FLOW DIRECTION
 - ROOF FLOW DIRECTION
 - EXISTING BASIN MAP
 - EXISTING BASIN
 - EXISTING STORM DRAIN

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 12/11/20
BY: *Rene C. Brissette*
HydroTeam # M14D0121



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ENGINEER'S SEAL

PROJECT NAME

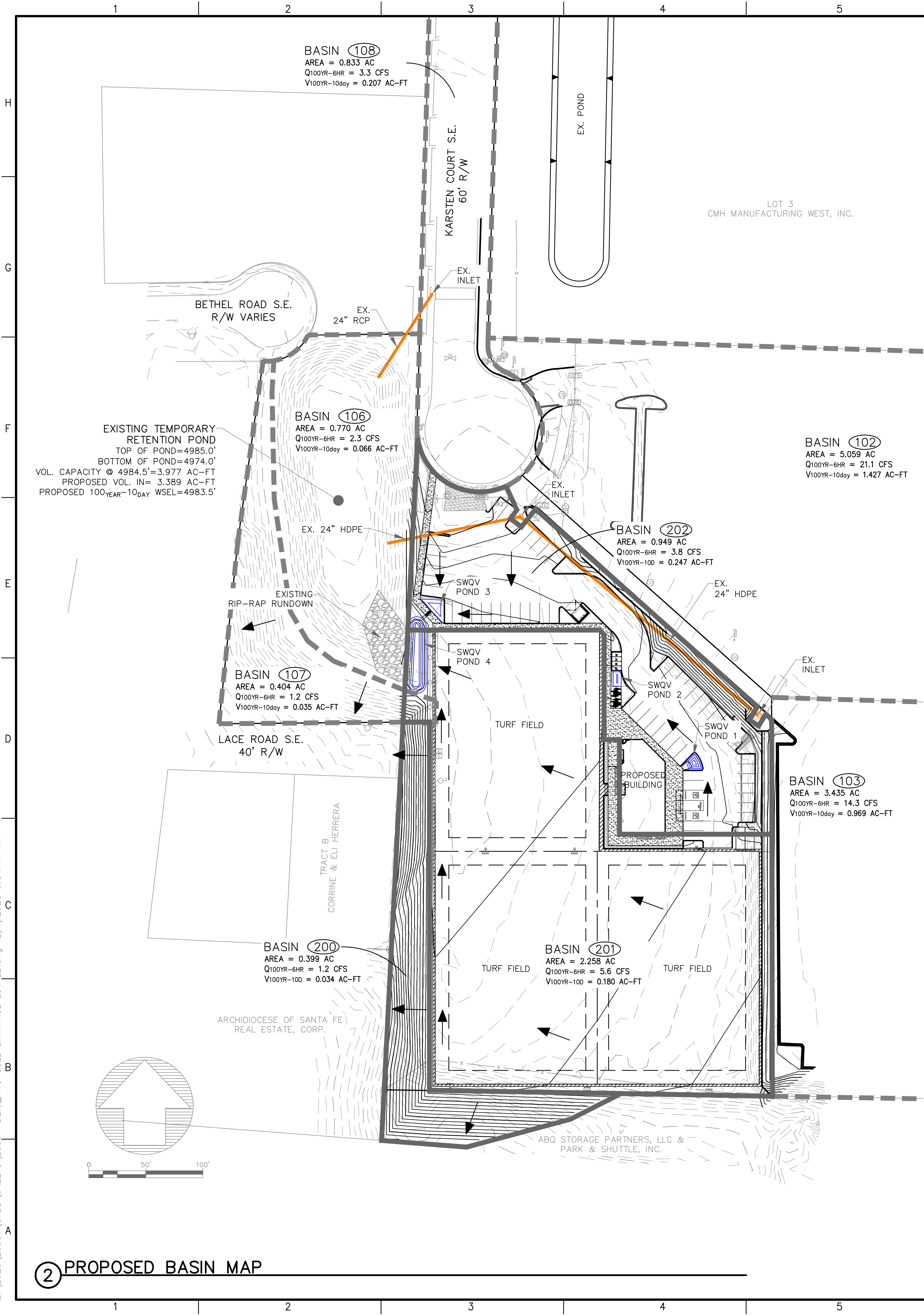
KRAEMER SPORT COMPLEX
LOT 2B
BROADWAY INDUSTRIAL CENTER
SUBDIVISION, UNIT 2
ALBUQUERQUE, NEW MEXICO

PROJECT NO.	20067
DESIGNED BY:	RJF
DRAWN BY:	RJS
CHECKED BY:	RJF
DATE:	DECEMBER 2020
SHEET TITLE	EXISTING BASIN MAP

SHEET NO.

D-1.0

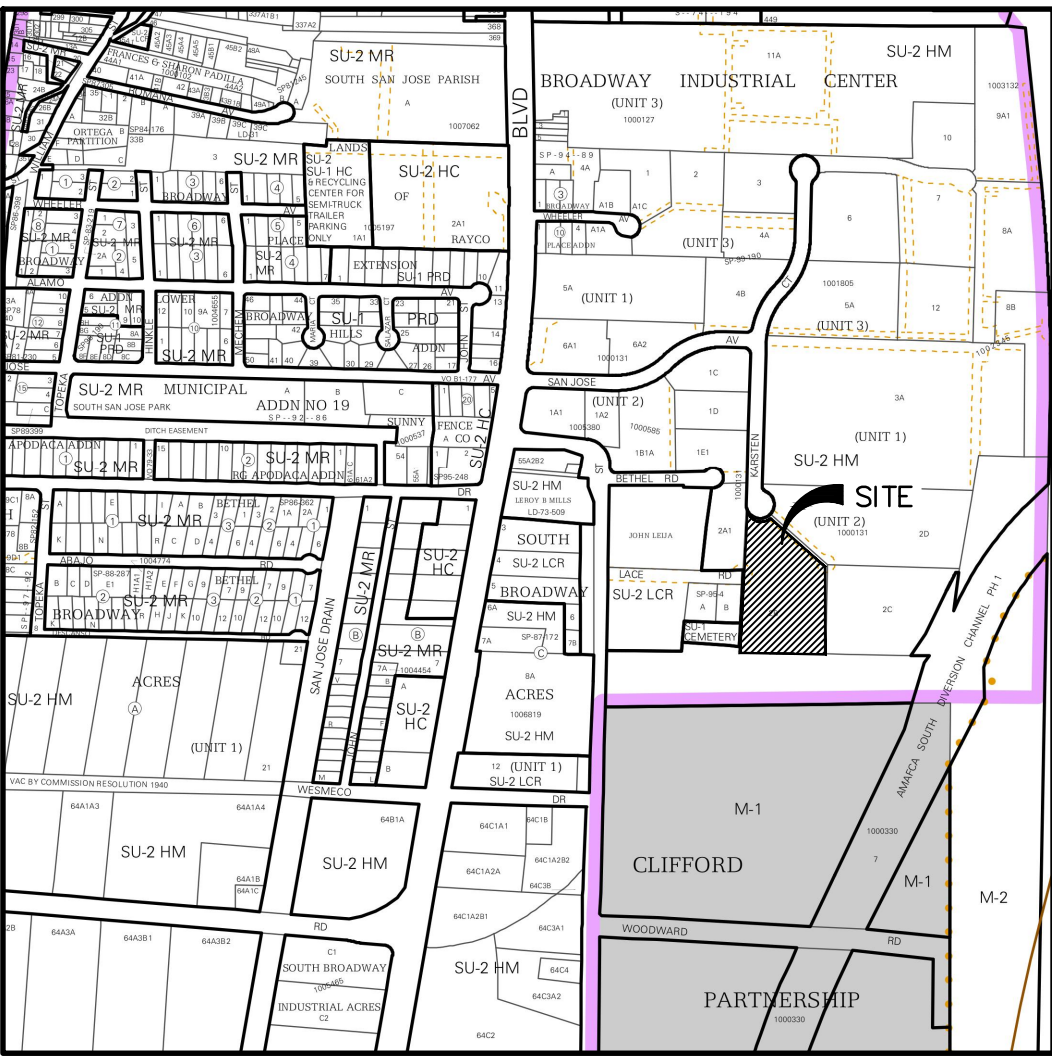
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2 PROPOSED BASIN MAP



FLOOD INSURANCE RATE MAP
MAP NO. 35001C0342G
EFFECTIVE DATE: 09/26/2008



ZONE ATLAS MAP
PAGE M-14-Z

Basin	Total Area (acres)	Land Treatment (%)				Q ₁₀₀ (cfs)	V _{100yr-6hr} (ac-ft)	V _{100yr-24hr} (ac-ft)	V _{100yr-4day} (ac-ft)	V _{100yr-10day} (ac-ft)
		A	B	C	D					
200	0.399	0.0	0.0	100.0	0.0	1.2	0.034	0.034	0.034	0.034
201	2.258	0.0	90.0	5.0	5.0	5.6	0.167	0.170	0.173	0.180
202	0.949	0.0	5.0	15.0	80.0	3.8	0.163	0.182	0.205	0.247

STORMWATER QUALITY VOLUME (0.62" STORM):
TOTAL NEW LAND TREATMENT "D" AREA = 38,000 SQ.FT.
WATER QUALITY STORAGE REQUIRED=38,000 SQ.FT.*(0.42")*(1'/12")=1,330 CU.FT.

DEPRESSED LANDSCAPING
WATER QUALITY STORAGE PROVIDED VIA DEPRESSED LANDSCAPING =1,610 CU.FT.

SWQV REQUIREMENT MET
PROVIDE 1,610 CU.FT. IS GREATER THAN REQUIRED 1,330 CU.FT.

PROPOSED 100_{YR}-10_{DAY} VOLUME INTO NEW POND
=V_{BASIN 100} + V_{BASIN 101} + V_{BASIN 102} + V_{BASIN 103} + V_{BASIN 106} + V_{BASIN 107} + V_{BASIN 201} + V_{BASIN 202} + V_{BASIN 200}
=0.207 + 0.048 + 1.427 + 0.969 + 0.207 + 0.180 + 0.247 + 0.066 + 0.035
=3,386 AC-FT

Introduction
The site is located at 2811 Karsten CT SE, Albuquerque, NM 87544. The proposed improvements include an 3,000 sq. ft. building footprint, parking lot, and three turf fields. The existing site slopes East to West at approximately 2% and drains to a temporary retention pond located on the adjoining lot to the west (Lot 2A-1). Under the proposed condition the site is allowed full development at 90% impervious cover and free discharge of all storm water runoff from Lot 2B into the temporary retention pond on Lot 2A-1, which is in accordance with the previously approved grading plan for Lots 2A, 2B, 2C, & 2D with Engineer's stamp dated 9-14-1999. 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 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 is located within the Broadway Industrial Center Master Plan that allows this site to drain to a private temporary retention pond on Lot 2A-1. The temporary retention pond accepts runoff from Basins 100, 101, 102, 103, 104, 106, and 108 as shown on sheet D-1.0. The site is vacant and was rough graded per the Grading & Drainage Plan prepared by Mark Goodwin & Associates with Engineer's stamp dated 9-14-1999. The existing site slopes East to West at approximately 2% and surface drains to an existing rip-rap rundown on Lot 2A-1 as shown on this sheet.

Off-site runoff is captured and conveyed via a 24-inch HDPE storm drain and routed through the site to the temporary retention pond as shown on Sheet D-1.0. A steep slope along the West and South is the only portion of the site that does not drain to the detention pond, which is within Basin 105. Runoff from the steep slopes surface drain to the adjoining lots as shown on Sheet D-1.0.

Proposed Condition
Improvements includes a 3,000 sq.ft. building footprint, parking lot, and three turf fields. The turf field will allow runoff to infiltrate; therefore is being categorized as Land Treatment B. The sites Land Treatment D cover is approximately 27%, which is well below the previous approved Master Plans that allows 90% impervious cover.

Three proposed Basins are identified as Basin 200, 201, and 202. Basin 200 is the side-slope embankment of the turf-field and will surface discharge to the adjoining lots similar as the existing condition. Basin 201 encompasses the three turf fields and slopes at 1% from southeast to northwest with the storm water from this basin surface discharging to Stormwater Quality Pond No. 3. Basin 202 includes the proposed building and parking lot. Storm water runoff is routed through all three Storm Water Quality Ponds. Once the water surface elevation on storm Water Quality Pond No. 3 reaches 4985.5-feet, then the storm water overtop the Storm Water Quality Pond and surface flow into the existing rip-rap rundown.

Off-site runoff will continue to be routed via a 24-inch HDPE pipe through the site and discharge into the temporary retention pond. No additional storm drain is required. The existing capacity of the temporary retention pond is 3.977 ac-ft. There is enough capacity to handle the site's proposed runoff as the total 100-year, 10-day runoff entering the retention pond is now 3.389 ac-ft. The first flush volume will be retained via four water quality ponds as shown on this C-2. See first flush volume calculations on this sheet. Hydrologic and hydraulic analysis are included on Sheet D-1.0 and this sheet. The total disturbed area is approximately 3.7 acres.

Conclusion
The City's and the Broadway Industrial Center Master Plan have been satisfied under this grading & drainage plan. The contractor shall use these civil sheets for construction, and will need a drainage certification in order to obtain a Close-out. This drainage report seeks approval for building permit.

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 12/11/20
BY: *Renee C. Brissette*
HydroTrans # M14D0121
THE APPROVAL OF THESE PLANS DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE INFORMATION PROVIDED HEREON. THE CITY OF ALBUQUERQUE IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THESE PLANS. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR OBTAINING ALL NECESSARY INFORMATION FROM THE CITY OF ALBUQUERQUE. THE USER OF THESE PLANS SHALL NOT BE HELD RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THESE PLANS. THE USER OF THESE PLANS SHALL NOT BE HELD RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THESE PLANS.

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ENGINEER'S SEAL

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LOT 2B
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SUBDIVISION, UNIT 2
ALBUQUERQUE, NEW MEXICO

PROJECT NAME

PROJECT NO: 20067
DESIGNED BY: R/JF
DRAWN BY: RJS
CHECKED BY: R/JF
DATE: DECEMBER 2020
SHEET TITLE
PROPOSED BASIN MAP

BY

DESCRIPTION

DATE

REV.

SHEET NO:

D-2.0