

CITY OF ALBUQUERQUE



January 16, 2018

David Soule, P.E.
Rio Grande Engineering
PO Box 93924
Albuquerque, NM 87199

RE: **Cherokee Subdivision**
1304 Cherokee NW
Grading Plan Engineer's Stamp Date: 1/12/18
Drainage File: G14D089

Dear Mr. Soule:

Based on the information provided in your submittal received 1/12/18, this Grading Plan is approved for Preliminary Plat and Grading Permit.

Prior to Building Permit:

1. Pad Certifications will be required prior to Hydrology approving the residential Building Permits.

Prior to Certificate of Occupancy:

2. Engineer's Certification, per the DPM Checklist, will be required to ensure the ponds remained intact following home construction.

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

Sincerely,

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
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 (REV 09/2015)

Project Title: _____ **Building Permit #:** _____ **City Drainage #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: _____
City Address: _____

Engineering Firm: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Owner: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Architect: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

DEPARTMENT:

- HYDROLOGY/ DRAINAGE
- TRAFFIC/ TRANSPORTATION
- MS4/ EROSION & SEDIMENT CONTROL

CHECK 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

TYPE OF SUBMITTAL:

- ENGINEER/ ARCHITECT CERTIFICATION
- CONCEPTUAL G & D PLAN
- GRADING PLAN
- DRAINAGE MASTER PLAN
- DRAINAGE REPORT
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
- TRAFFIC IMPACT STUDY (TIS)
- EROSION & SEDIMENT CONTROL PLAN (ESC)
- OTHER (SPECIFY) _____

- PRE-DESIGN MEETING
- OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: Yes No

DATE SUBMITTED: _____ By: _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

CITY OF ALBUQUERQUE



January 11, 2018

David Soule, P.E.
Rio Grande Engineering
PO Box 93924
Albuquerque, NM 87199

RE: **Cherokee Subdivision**
1304 Cherokee NW
Grading Plan Engineer's Stamp Date: 1/9/18
Drainage File: G14D089

Dear Mr. Soule:

Based on the information provided in your submittal received 1/10/18, the Grading Plan cannot be approved until the following are addressed.

Prior to Preliminary Plat & Grading Permit:

1. Provide onsite ponding volume on each lot for the 100-year, 10day volume; infiltration rates cannot be accepted in lieu of this volume requirement. **UPDATED CALCULATIONS**
2. Please add swales along the side yards to direct runoff into the ponds.

ADDED

Prior to Building Permit:

3. Pad Certifications will be required prior to Hydrology approving the residential Building Permits. **ACKNOWLEDGED**

Prior to Certificate of Occupancy:

4. Engineer's Certification, per the DPM Checklist, will be required to ensure the ponds remained intact following home construction. **ACKNOWLEDGED**

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

Sincerely,

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Weighted E Method

Basin	Area (sf)	Area (acres)	Treatment				100-Year, 6-hr		10-DAY					
			A (acres)	B (acres)	C (acres)	D (acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)				
Existing	19646.00	0.451	0%	0	100%	0.451	0%	0.000	0%	0.000	0.780	0.029	1.03	0.029
LOT 1A	6360.00	0.146	0%	0	32%	0.047	15%	0.022	62%	0.076	1.522	0.019	0.53	0.029
LOT 1B	6396.00	0.147	0%	0	32%	0.047	15%	0.022	62%	0.076	1.522	0.019	0.54	0.029
LOT 1C	6890.00	0.158	0%	0	37%	0.059	15%	0.024	48%	0.076	1.476	0.019	0.56	0.030
PROPOSED	19646.00	0.451	0%	0.000	34%	0.152	15%	0.068	51%	0.228	1.505	0.057	1.63	0.087

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted E * Total Area

First flush requirement 281,642 cubic feet

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Where for 100-year, 6-hour storm (zone 2)

Ea= 0.53	Qa= 1.56
Eb= 0.78	Qb= 2.28
Ec= 1.13	Qc= 3.14
Ed= 2.12	Qd= 4.7

Developed Conditions

FLAT GRADING SCHEME

	PEAK FLOW	TOTAL FLOW
EXISTING	1.03 CFS	1277 CF
PROPOSED	1.63 CFS	3790 CF
ALLOWED	1.24 CFS	0 CF

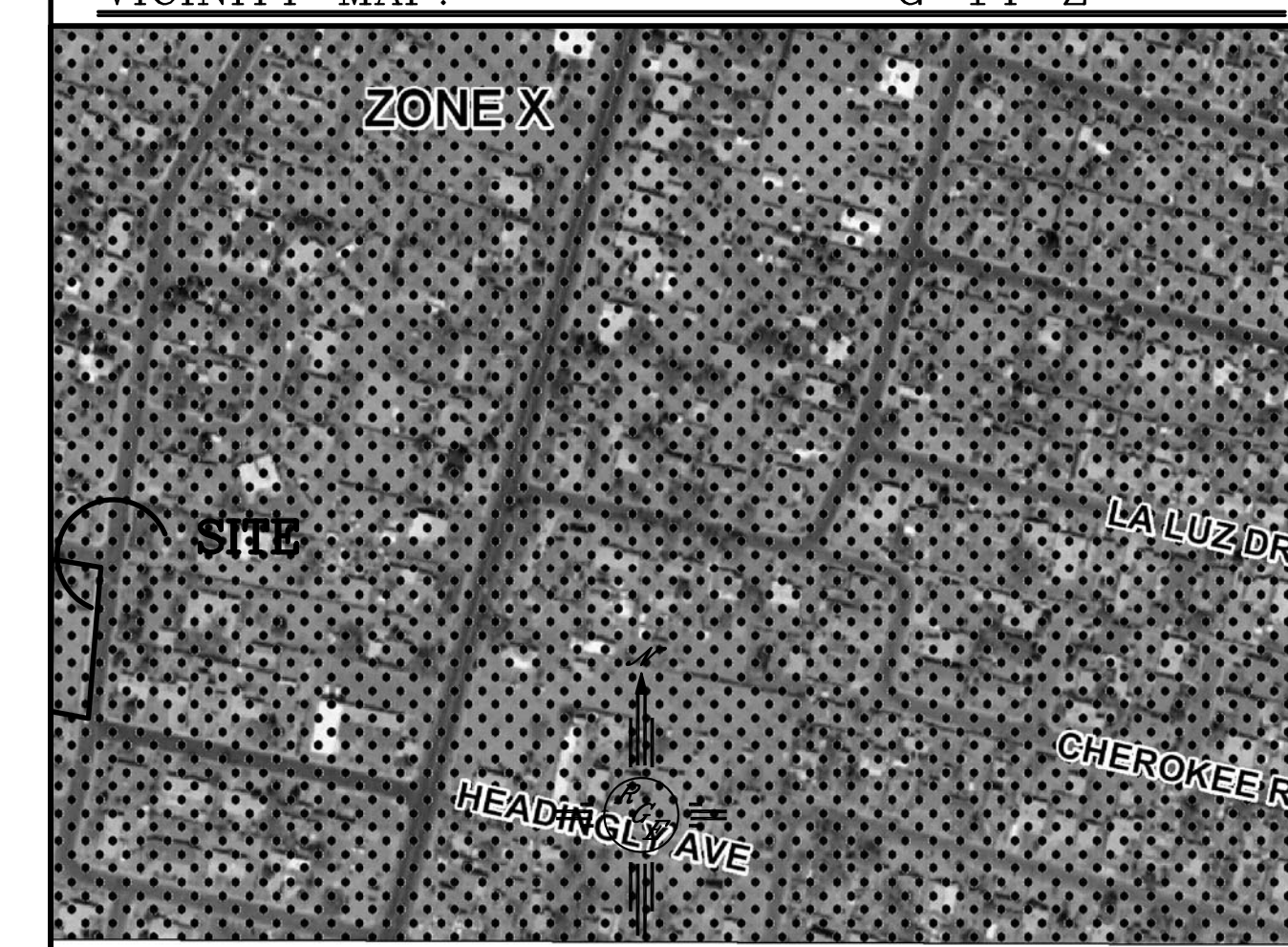
PONDING PROVIDED	GENERATED	PROVIDED
POND LOT 1A	1247 CF	1379 CF
POND LOT 1B	1264 CF	1303 CF
POND LOT 1C	1288 CF	1117 CF
TOTAL	3790 CF	3794 CF

DRAINAGE NARRATIVE

THIS SITE IS A REDEVELOPMENT OF A SITE THAT WAS PREVIOUSLY DEVELOPED. THE PROPOSED DRAINAGE SOLUTION SHALL UTILIZE THE FLAT GRADING SCHEME. THE SITE CURRENTLY DISCHARGES 1.03 CFS AND 1277 CUBIC FEET OF STORM WATER DURING A 100-YEAR, 24-HOUR EVENT. THE PROPOSED DEVELOPMENT PLACES THE FINISHED PAD 1' ABOVE THE ROADWAY FLOWLINE. THE ENTIRE 100-YEAR, 10-DAY STORM WATER VOLUME IS RETAINED ONSITE. THE TOTAL REQUIRED FIRST FLUSH VOLUME OF 282 CUBIC FEET IS RETAINED ONSITE. DUE TO EXISTING ROADWAYS AND PERIMETER FENCES THIS SITE IS NOT IMPACTED BY UPLAND FLOWS. IN THE EVENT OF A LARGER RAINFALL, THE LOTS WILL OVERFLOW TO THE STREET. THE PONDS ARE 1.25 FEET DEEP. THE SOIL CLASSIFICATION IS GE-GILA CLAY-LOAM WITH A INFILTRATION CAPACITY OF 0.6" PER HOUR, THEREFORE THE POND WILL DRAIN IN 25 HOURS

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



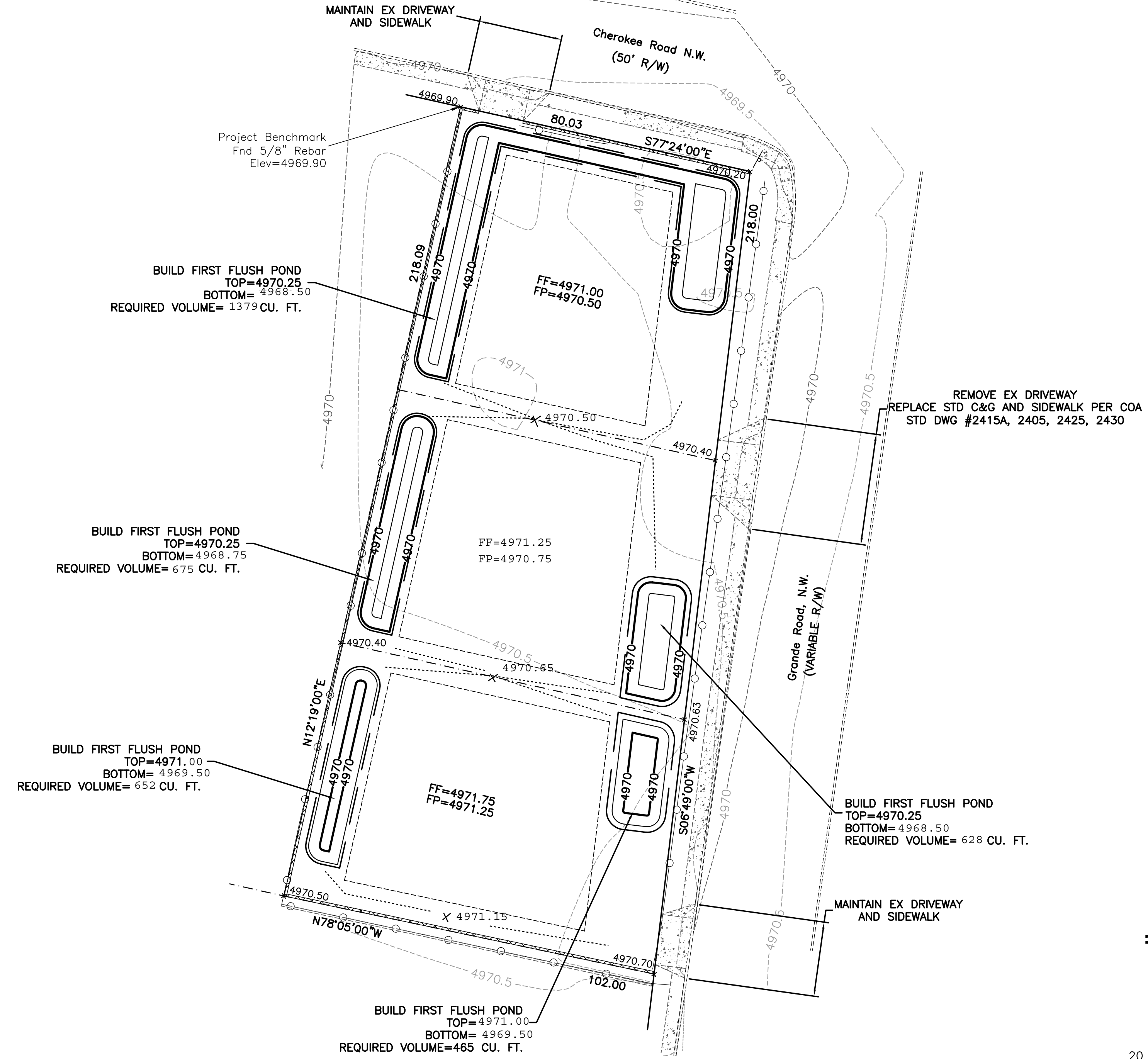
FIRM MAP: FM35001C0119G

LEGAL DESCRIPTION:

Lots 1 Block 2, ALTO ADD

NOTES:

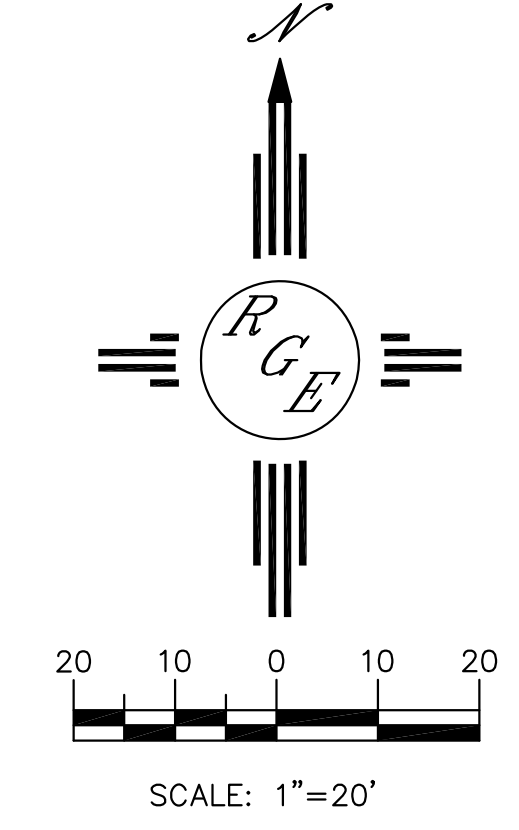
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.



CAUTION:
EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.

LEGEND

---XXXX---	EXISTING CONTOUR
- - - - -	EXISTING INDEX CONTOUR
-----	PROPOSED CONTOUR
---XXXX---	PROPOSED INDEX CONTOUR
-----	SLOPE TIE
+XXXX	EXISTING SPOT ELEVATION
+XXXX	PROPOSED SPOT ELEVATION
-----	BOUNDARY
-----	CENTERLINE
-----	RIGHT-OF-WAY
=====	EXISTING CURB AND GUTTER
=====	PROPOSED CMU SCREEN WALL--18" MAX. RETAINAGE



ENGINEER'S SEAL DAVID SOULE P.E. #14522	CHEROKKE ROAD	DRAWN BY WCVJ
	GRADING AND DRAINAGE PLAN	DATE 1-07-17
1/12/18	 Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	21845-LAYOUT-1-07-18
		SHEET #
		JOB # 21845