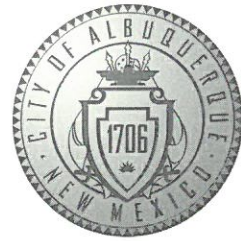


CITY OF ALBUQUERQUE



January 11, 2018

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

RE: **Mountain Subdivision**
2406 Mountain Rd NW
Grading Plan Engineer's Stamp Date: 1/8/18
Drainage File: J13D207

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.
2. Please add swales along the side yards to direct runoff into the ponds.
3. Ensure that the Preliminary Plat includes cross lot drainage easements identifying maintenance and beneficiary responsibilities to support the ponds crossing the lot lines.

Prior to Building Permit:

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

Prior to Certificate of Occupancy:

5. 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



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

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) _____

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
- ☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

DATE SUBMITTED: _____ **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

Weighted E Method

Basin	Area (sq) (acres)	Area (acres)	Treatment A				Treatment B				Treatment C				Treatment D				100-Year, 6-hr.		24-HOUR	
			% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
Existing	25837.00	0.593	0%	0	52%	0.308	20%	0.119	28%	0.166	1.225	0.061	1.86	0.069								
east basin	5164.00	0.119	0%	0	57%	0.068	20%	0.024	23%	0.027	1.158	0.011	0.36	0.013								
west basin	1236.00	0.028	0%	0	32%	0.009	15%	0.004	52%	0.015	1.522	0.004	0.10	0.004								
onsite basin	19437.00	0.446	0%	0	43%	0.192	20%	0.089	37%	0.165	1.346	0.050	1.49	0.058								
PROPOSED	25837.00	0.593	0%	0.000	45%	0.269	20%	0.117	35%	0.207	1.317	0.065	1.95	0.076								

Equations:

Weighted E = Ea**A*a + Eb**A*b + Ec**A*c + Ed**A*d / (Total Area)

Volume = Weighted D * Total Area

First flush requirement 255.627 cubic feet

Flow = Qa * *A*a + Qb * *A*b + Qc * *A*c + Qd * *A*d

Where for 100-year, 6-hour storm(zone2)

Ea= 0.53
Eb= 0.78
Ec= 1.13
Ed= 2.12

Qa= 1.56
Qb= 2.28
Qc= 3.14
Qd= 4.7

Developed Conditions

FLAT GRADING SCHEME

EXISTING
PROPOSED
ALLOWED

PEAK FLOW
1.86 CFS
0.46 CFS
1.63 CFS

TOTAL FLOW
3006 CF
3294 CF
748 CF

PONDING PROVIDED
POND

GENERATED
2645 CF

PROVIDED
2568 CF

DRAINAGE NARRATIVE

THIS SITE IS A REDEVELOPMENT OF A SITE THAT IS CURRENTLY DEVELOPED. THE PROPSD DRAINAGE SOLUTION SHALL UTILIZE THE FLAT GRADING SCHEME. THE SITE CURRENTLY DISCHARGES 1.86 CFS AND 3007 CUBIC FEET OF STORM WATER DURING A 100-YEAR, 24-HOUR EVENT. THE PROPOSED DEVELOPMENT PLACES THE FINISHED PAD 1' ABOVE THE LOT OVERFLOW. THE SITE WILL FREE DISCHARGE TWO BASINS TO THE STREET AND RETAIN THE REMAINING 100-YEAR, 24-HOUR STORM WATER VOLUME ONSITE. THE TOTAL REQUIRED FIRST FLUSH VOLUME OF 256 CUBIC FEET IS RETAINED ONSITE. DUE TO EXISTING ONSITE GRADES, ROADWAYS AND PERIMTER FENCES THIS SITE IS NOT IMPACTED BY UPLAND FLOWS. IN THE EVENT OF A LARGER RAINFALL, THE LOTS WILL OVERFLOW TO THE HISTORICAL OUTFALLS TO THE SOUTH. THE PONDS ARE 1.25 FEE 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:

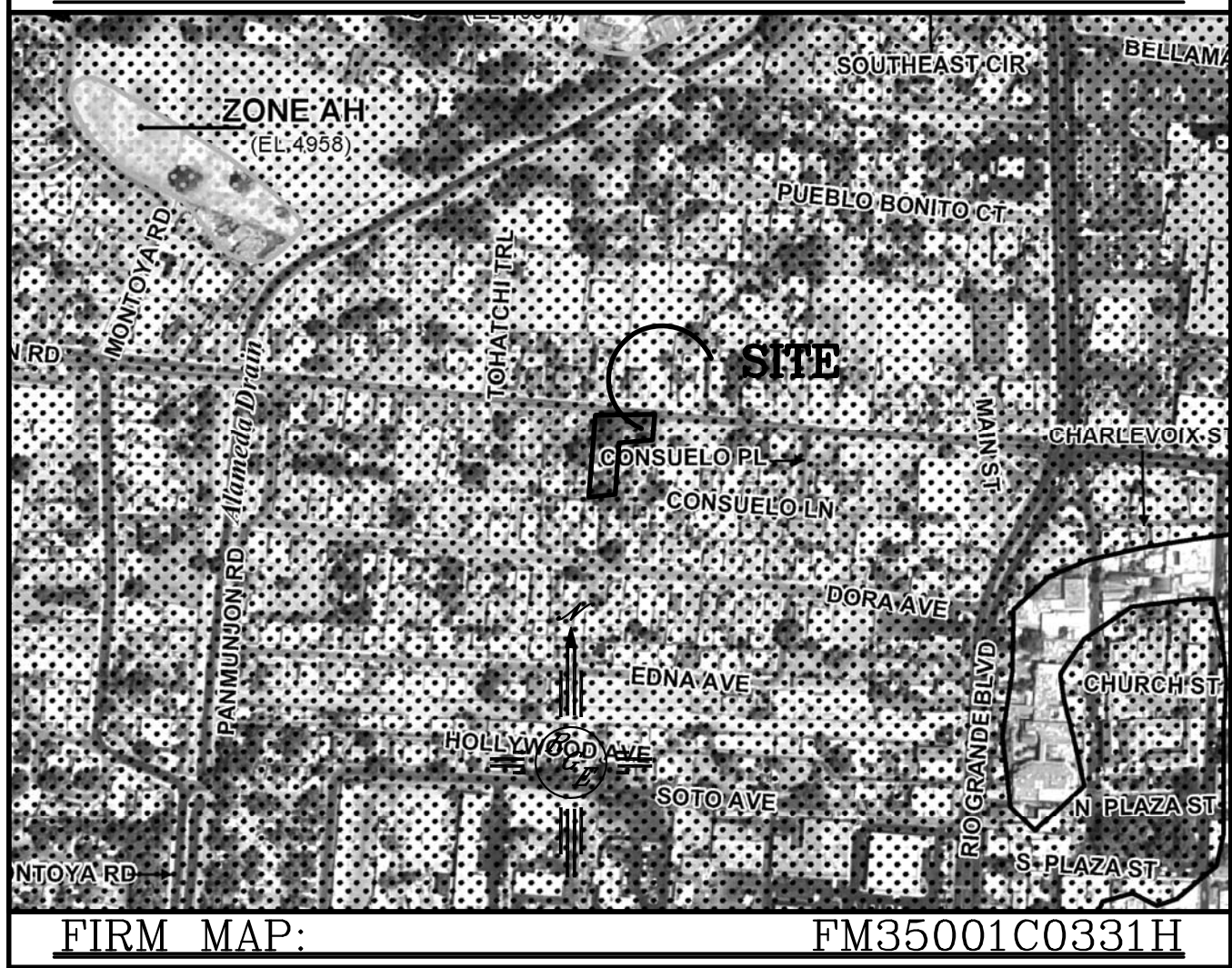
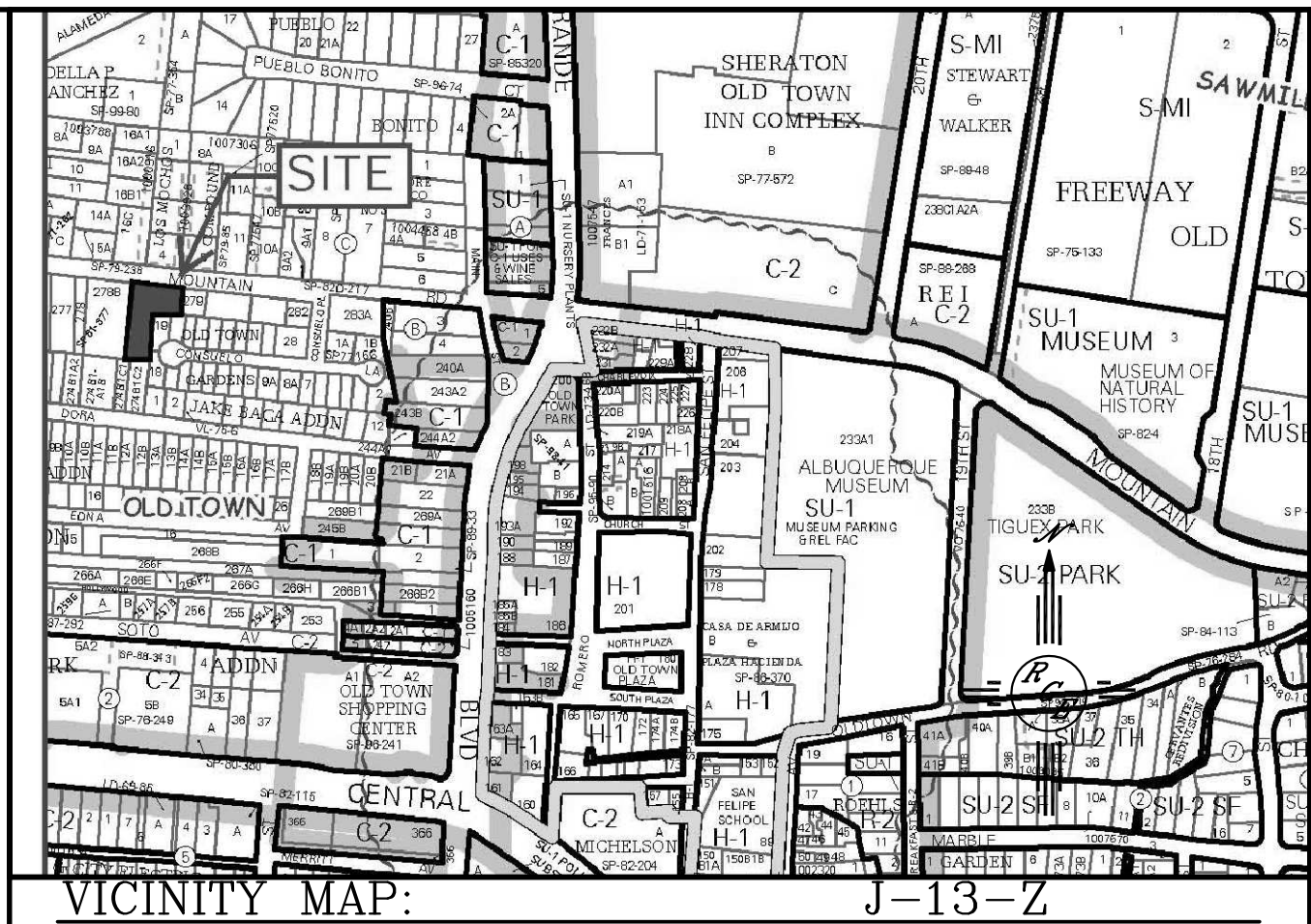
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

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.



LEGAL DESCRIPTION:

Tracts 242A, 242B, AND 242C, M.R.G.C.D. Map 38

NOTES:

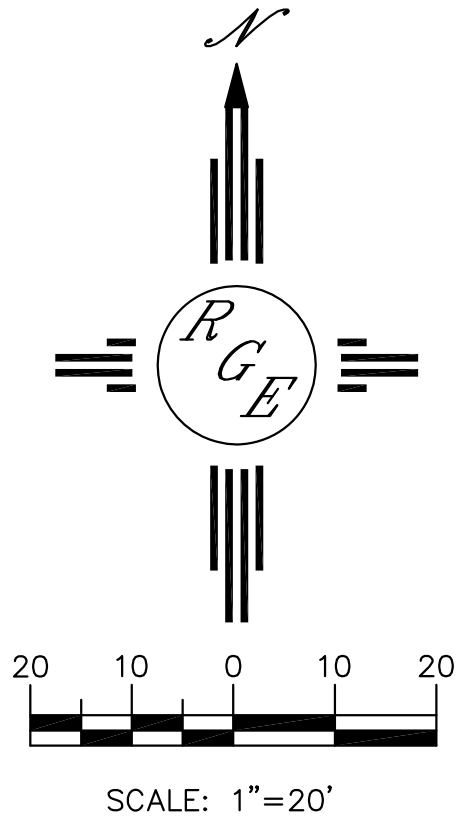
- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.

LEGEND

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

CAUTION:

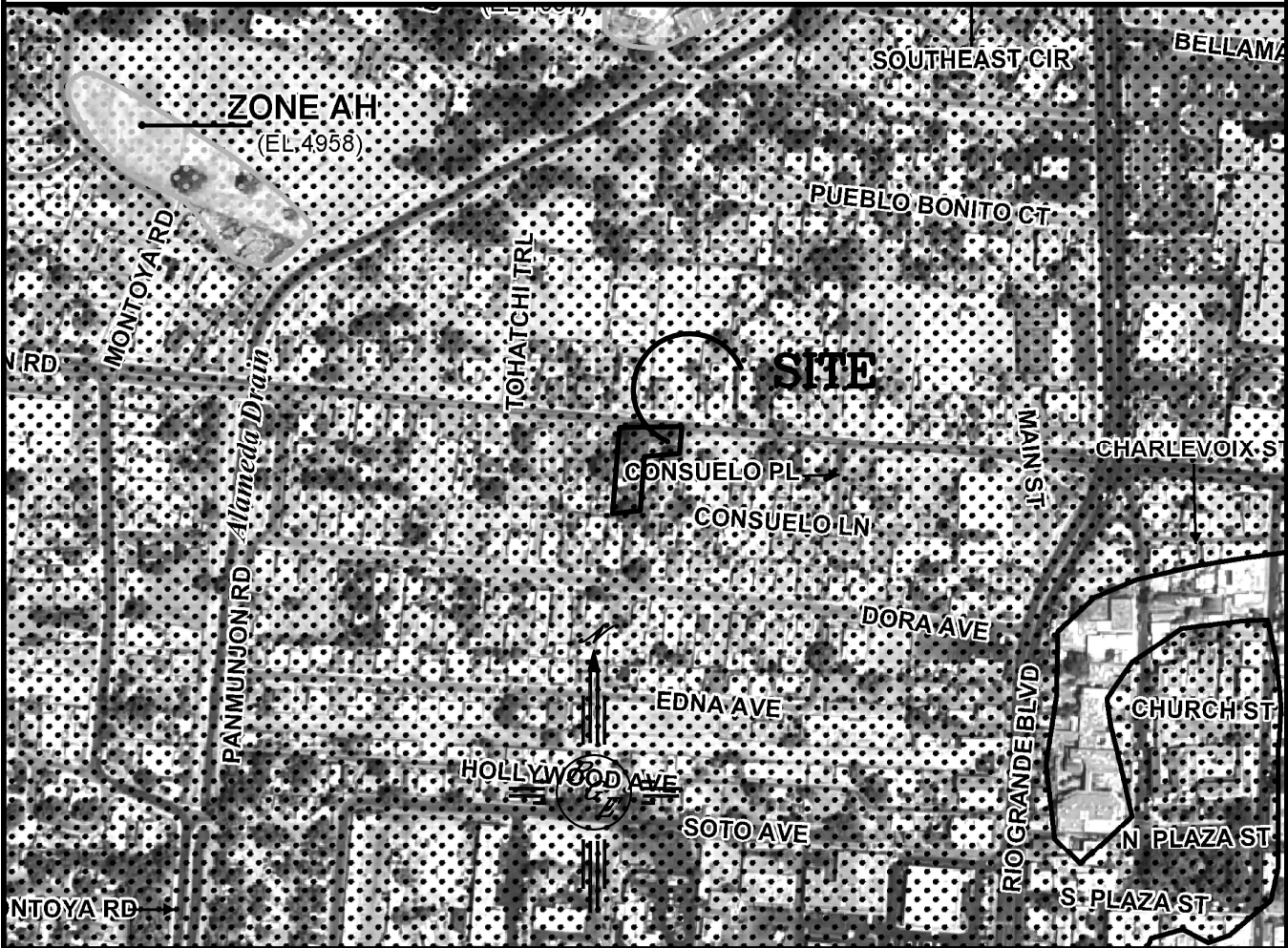
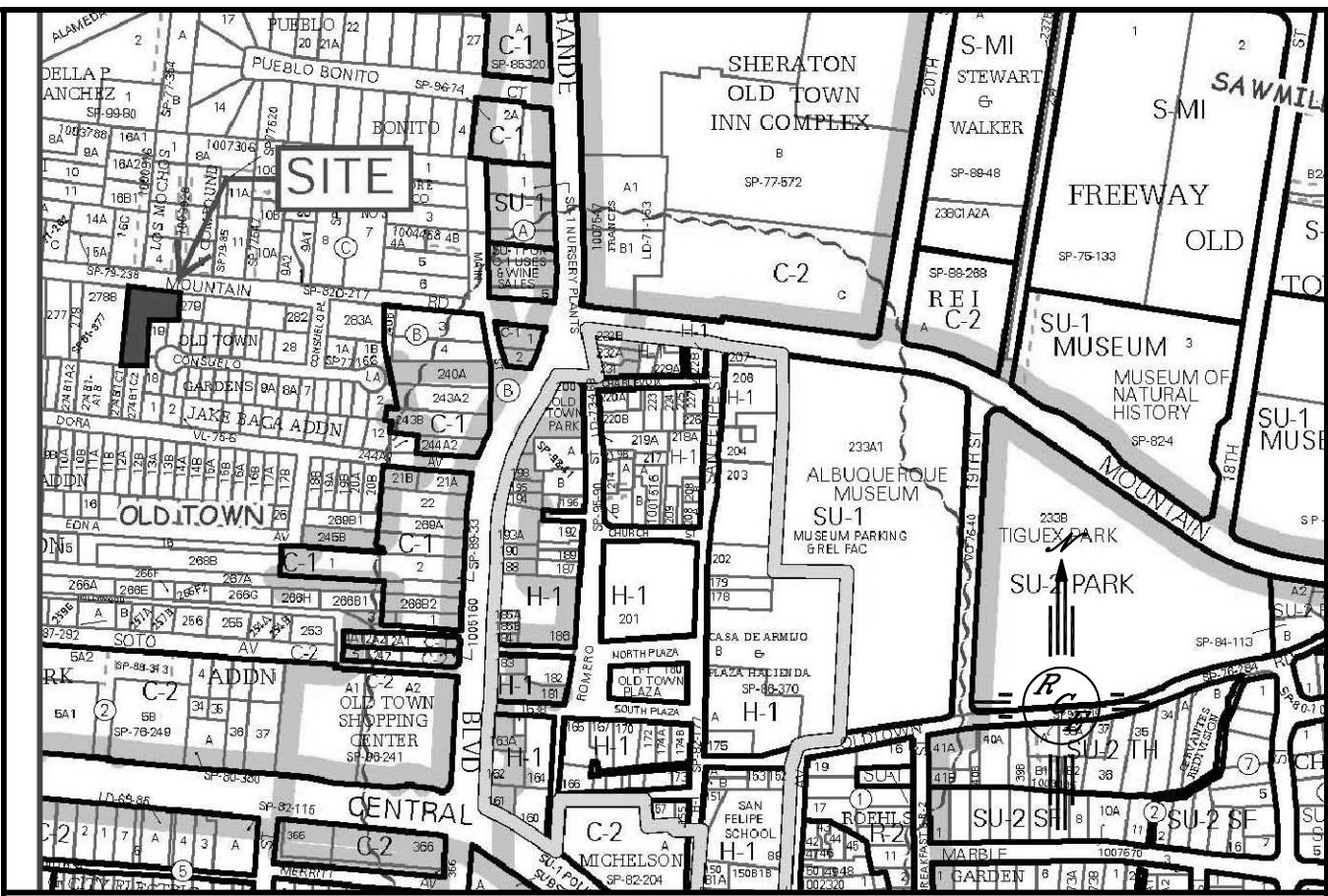
EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.



<div>ENGINEER'S SEAL</div> <div>DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER</div> <div>DAVID SOULE P.E. #14522</div>	2406 MOUNTAIN ROAD	DRAWN BY WCWJ
	GRADING AND DRAINAGE PLAN	DATE 1-07-17
	<div></div> <div>1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0998</div>	21842-LAYOUT-1-07-18
		SHEET # —
		JOB # 21842

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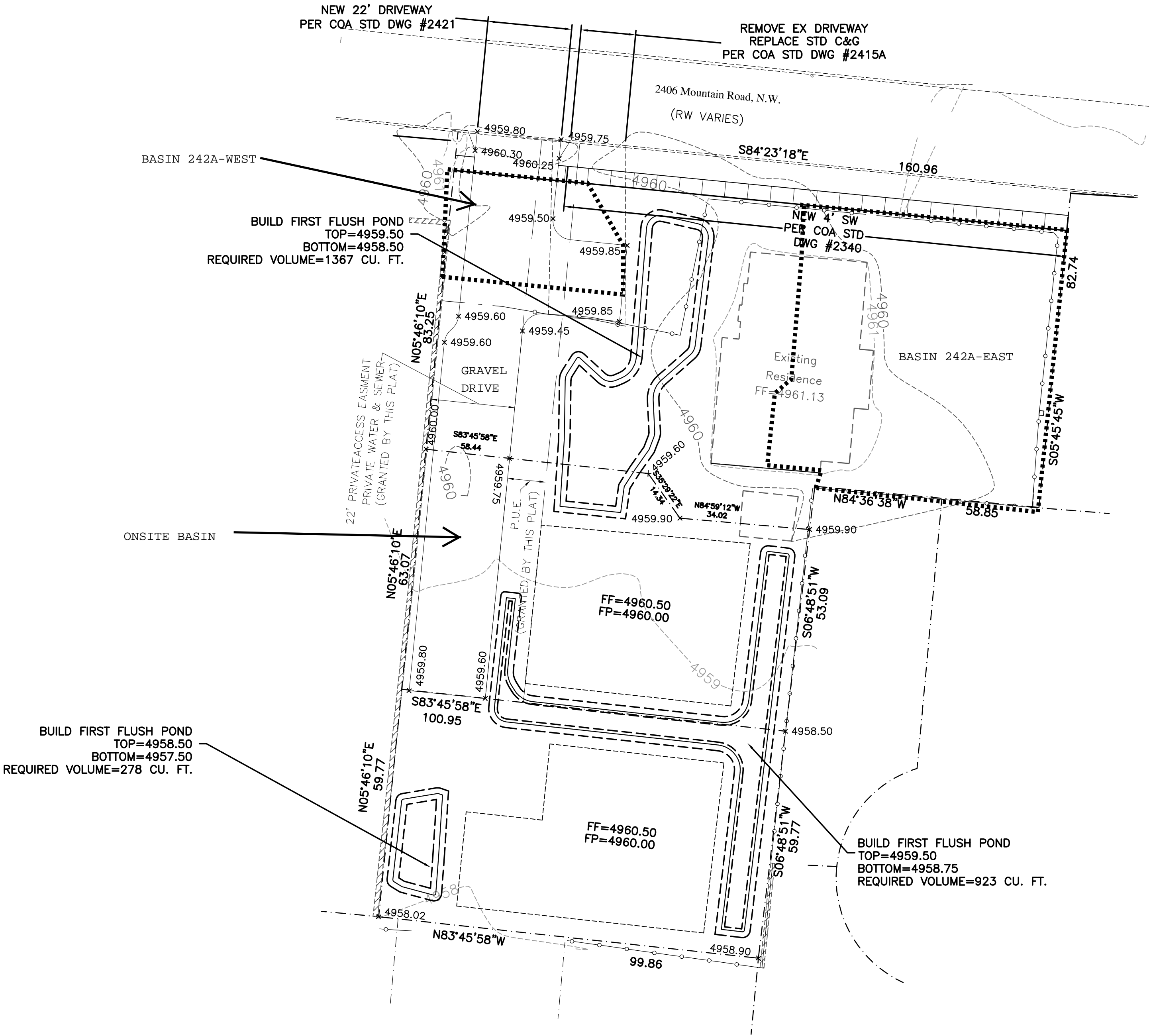
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LEGEND

- XXXX --- EXISTING CONTOUR
- XXXX --- EXISTING INDEX CONTOUR
- XXXX --- PROPOSED CONTOUR
- XXXX --- PROPOSED INDEX CONTOUR
- XXXX --- SLOPE TIE
- + XXXX EXISTING SPOT ELEVATION
- + XXXX PROPOSED SPOT ELEVATION
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