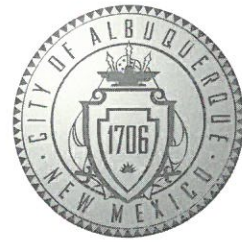


# CITY OF ALBUQUERQUE



February 16, 2018

Mike Walla, P.E.  
Walla Engineering  
6501 Americas Parkway, Suite 301  
Albuquerque, NM 87110

RE: **File/Gul Development**  
**Grading and Drainage Plan**  
**Engineer's Stamp Date 1/25/18**  
**Hydrology File: G13D033**

Dear Mr. Walla:

Based on the information provided in your submittal received 1/25/18, the Grading and Drainage Plan is approved for Preliminary Plat (infrastructure list) and Grading Permit.

On the Plat, add a blanket (exclusive of buildings) cross-lot drainage easement for all three lots to support this drainage scheme.

Prior to Work Order Approval:

1. Three Private Facility Drainage Covenants are required for the ponds, one for each lot. The original notarized forms, exhibits, and recording fee (\$25/ea, payable to City of Albuquerque) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants.
2. On the exhibits for the covenants, label each pond and include bottom of pond, top of pond, and required volume. Ensure all text is legible (0.10" or larger) and the exhibit is printed on 8.5x11.

Prior to Building Permit:

3. Pad Certifications (or Release of Financial Guarantee) will be required prior to Hydrology approving the residential Building Permits.

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.

# CITY OF ALBUQUERQUE



5. The Drainage Covenants must also be recorded with Bernalillo County and a copy included with the Certification.

If you have any questions, please contact me at 924-3695 or [dpeterson@cabq.gov](mailto:dpeterson@cabq.gov).

Sincerely,

A handwritten signature in dark ink, appearing to read 'Dana Peterson', is written over a faint, large watermark of the state of New Mexico.

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

PO Box 1293

Albuquerque

NM 87103

[www.cabq.gov](http://www.cabq.gov)



LEGAL DESCRIPTION

TRACTS 1-A, 1-B-1 AND 1-B-2 ALVARADO GARDENS, UNIT 1, WITHIN TOWN OF ALBUQUERQUE GRANT, PROJECTED SECTION 6, TOWNSHIP 10 NORTH, RANGE 3 EAST, N.M.P.M., CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, SEPTEMBER 1917

BASIS OF ELEVATIONS

ELEVATIONS ARE BASED ON ACS MONUMENT "8\_H13" NMSPCC/NAVB83/NAVD88 HAVING AN ELEVATION OF 4963.168

DESIGN NARRATIVE

THE SUBJECT PROJECT IS A 1.01 ACRE DEVELOPED SITE THAT HAD PREVIOUSLY BEEN THE LOCATION OF A RESIDENCE WITH SEVERAL RANDOM OUT BUILDINGS. THESE BUILDINGS AND THE CURRENT RESIDENCE WILL BE DEMOLISHED AND OR REMOVED FROM THE SITE FOR THIS NEW DEVELOPMENT WHICH WILL INCLUDE 2 INDIVIDUAL RESIDENCES AND SIX COMMON WALL TOWNHOUSES. AN ASPHALT PAVED ACCESS DRIVE WILL BE CONSTRUCTED TO PROVIDE CONNECTION FROM MATTHEW AVE NW TO EACH RESIDENTIAL UNIT. THE DEVELOPMENT WILL INCLUDE A SMALL CONCRETE DRIVE CONNECTING THE ACCESS ROAD TO EACH RESIDENCE. THE CURRENT SITE IS UNAFFECTED BY OFFSITE DRAINAGE AND THE NEW DEVELOPMENT WILL BE UNAFFECTED AS WELL AND THE NEW GRADING WILL NOT ADVERSELY AFFECT ADJACENT PROPERTIES EITHER, EACH SITE RESIDENCE WILL BE GRADED TO PROVIDE 100-YR. 10 DAY PONDING OF NEWLY DEVELOPED RUNOFF IN ORDER TO ACHIEVE 100% STORAGE OF DRAINAGE VOLUME FOR THE SITE. THE POND VOLUME PROVIDED CAPTURES ALL RUNOFF DEVELOPED ON THIS SITE.

EROSION CONTROL PLAN

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT OUT OF EXISTING RIGHT-OF-WAY.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORM RUN OFF ON SITE.
- REPAIR OF DAMAGED FACILITIES AND CLEAN-UP OF SEDIMENT ACCUMULATION ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING NPDES PERMIT FOR THE SITE, IF NECESSARY.

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY NOTICE TO CONTRACTOR

- AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- 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.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE LINE LOCATING SERVICE, NEW MEXICO ONE CALL 260-1990, (NM ONE CALL "811") FOR THE LOCATION OF EXISTING UTILITIES.
- 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.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

HYDROLOGY CALCULATIONS

PRECIPITATION ZONE 2

DESIGN STORM: (IN)

|  | 1hr  | 6hr  | 24hr | 4day | 10day |
|--|------|------|------|------|-------|
|  | 2.01 | 2.35 | 2.75 | 3.30 | 3.95  |

EXISTING CONDITIONS - OVERALL SITE

| LAND   | AREA   | AREA | P6       | Q     | Q     | V6    | V24   | V4DAY | V10DAY |
|--------|--------|------|----------|-------|-------|-------|-------|-------|--------|
| TRTMNT | (ACRE) | %    | (CFS/AC) | (CFS) | (CF)  | (CF)  | (CF)  | (CF)  | (CF)   |
| A      | 0.000  | 0%   | 0.53     | 1.56  | 0.00  | 0     | 0     | 0     | 0      |
| B      | 0.766  | 76%  | 0.78     | 2.28  | 1.75  | 2,169 | 2,169 | 2,169 | 2,169  |
| C      | 0.115  | 11%  | 1.13     | 3.14  | 0.36  | 472   | 472   | 472   | 472    |
| D      | 0.129  | 13%  | 2.12     | 4.70  | 0.61  | 993   | 1,180 | 1,438 | 1,742  |
| TOTALS | 1.010  | 100% |          | 2.71  | 3,633 | 3,821 | 4,078 | 4,383 |        |

PROPOSED CONDITIONS - OVERALL SITE

| LAND   | AREA   | AREA | P6       | Q     | Q     | V6    | V24   | V4DAY | V10DAY |
|--------|--------|------|----------|-------|-------|-------|-------|-------|--------|
| TRTMNT | (ACRE) | %    | (CFS/AC) | (CFS) | (CF)  | (CF)  | (CF)  | (CF)  | (CF)   |
| A      | 0.000  | 0%   | 0.53     | 1.56  | 0.00  | 0     | 0     | 0     | 0      |
| B      | 0.508  | 50%  | 0.78     | 2.28  | 1.16  | 1,438 | 1,438 | 1,438 | 1,438  |
| C      | 0.000  | 0%   | 1.13     | 3.14  | 0.00  | 0     | 0     | 0     | 0      |
| D      | 0.502  | 50%  | 2.12     | 4.70  | 2.36  | 3,863 | 4,592 | 5,594 | 6,779  |
| TOTALS | 1.010  | 100% |          | 3.52  | 5,301 | 6,030 | 7,032 | 8,217 |        |

PROPOSED CONDITIONS - SUB-BASIN I

| LAND   | AREA   | AREA | P6       | Q     | Q    | V6   | V24  | V4DAY | V10DAY |
|--------|--------|------|----------|-------|------|------|------|-------|--------|
| TRTMNT | (ACRE) | %    | (CFS/AC) | (CFS) | (CF) | (CF) | (CF) | (CF)  | (CF)   |
| A      | 0.000  | 0%   | 0.53     | 1.56  | 0.00 | 0    | 0    | 0     | 0      |
| B      | 0.029  | 54%  | 0.78     | 2.28  | 0.07 | 82   | 82   | 82    | 82     |
| C      | 0.000  | 0%   | 1.13     | 3.14  | 0.00 | 0    | 0    | 0     | 0      |
| D      | 0.025  | 46%  | 2.12     | 4.70  | 0.12 | 192  | 229  | 279   | 338    |
| TOTALS | 0.054  | 100% |          | 0.19  | 274  | 311  | 361  | 420   |        |

PROPOSED CONDITIONS - SUB-BASIN II

| LAND   | AREA   | AREA | P6       | Q     | Q    | V6   | V24  | V4DAY | V10DAY |
|--------|--------|------|----------|-------|------|------|------|-------|--------|
| TRTMNT | (ACRE) | %    | (CFS/AC) | (CFS) | (CF) | (CF) | (CF) | (CF)  | (CF)   |
| A      | 0.000  | 0%   | 0.53     | 1.56  | 0.00 | 0    | 0    | 0     | 0      |
| B      | 0.017  | 42%  | 0.78     | 2.28  | 0.04 | 48   | 48   | 48    | 48     |
| C      | 0.000  | 0%   | 1.13     | 3.14  | 0.00 | 0    | 0    | 0     | 0      |
| D      | 0.023  | 58%  | 2.12     | 4.70  | 0.11 | 177  | 210  | 256   | 311    |
| TOTALS | 0.040  | 100% |          | 0.15  | 225  | 259  | 304  | 359   |        |

PROPOSED CONDITIONS - SUB-BASIN III

| LAND   | AREA   | AREA | P6       | Q     | Q    | V6   | V24  | V4DAY | V10DAY |
|--------|--------|------|----------|-------|------|------|------|-------|--------|
| TRTMNT | (ACRE) | %    | (CFS/AC) | (CFS) | (CF) | (CF) | (CF) | (CF)  | (CF)   |
| A      | 0.000  | 0%   | 0.53     | 1.56  | 0.00 | 0    | 0    | 0     | 0      |
| B      | 0.016  | 39%  | 0.78     | 2.28  | 0.04 | 45   | 45   | 45    | 45     |
| C      | 0.000  | 0%   | 1.13     | 3.14  | 0.00 | 0    | 0    | 0     | 0      |
| D      | 0.025  | 61%  | 2.12     | 4.70  | 0.12 | 192  | 229  | 279   | 338    |
| TOTALS | 0.041  | 100% |          | 0.16  | 238  | 274  | 324  | 383   |        |

PROPOSED CONDITIONS - SUB-BASIN IV

| LAND   | AREA   | AREA | P6       | Q     | Q    | V6   | V24  | V4DAY | V10DAY |
|--------|--------|------|----------|-------|------|------|------|-------|--------|
| TRTMNT | (ACRE) | %    | (CFS/AC) | (CFS) | (CF) | (CF) | (CF) | (CF)  | (CF)   |
| A      | 0.000  | 0%   | 0.53     | 1.56  | 0.00 | 0    | 0    | 0     | 0      |
| B      | 0.016  | 41%  | 0.78     | 2.28  | 0.04 | 45   | 45   | 45    | 45     |
| C      | 0.000  | 0%   | 1.13     | 3.14  | 0.00 | 0    | 0    | 0     | 0      |
| D      | 0.023  | 59%  | 2.12     | 4.70  | 0.11 | 177  | 210  | 256   | 311    |
| TOTALS | 0.039  | 100% |          | 0.15  | 222  | 256  | 302  | 356   |        |

PROPOSED CONDITIONS - SUB-BASIN V

| LAND   | AREA   | AREA | P6       | Q     | Q    | V6   | V24  | V4DAY | V10DAY |
|--------|--------|------|----------|-------|------|------|------|-------|--------|
| TRTMNT | (ACRE) | %    | (CFS/AC) | (CFS) | (CF) | (CF) | (CF) | (CF)  | (CF)   |
| A      | 0.000  | 0%   | 0.53     | 1.56  | 0.00 | 0    | 0    | 0     | 0      |
| B      | 0.015  | 38%  | 0.78     | 2.28  | 0.03 | 42   | 42   | 42    | 42     |
| C      | 0.000  | 0%   | 1.13     | 3.14  | 0.00 | 0    | 0    | 0     | 0      |
| D      | 0.025  | 62%  | 2.12     | 4.70  | 0.12 | 192  | 229  | 279   | 338    |
| TOTALS | 0.040  | 100% |          | 0.15  | 229  | 271  | 321  | 380   |        |

PROPOSED CONDITIONS - SUB-BASIN VI

| LAND   | AREA   | AREA | P6       | Q     | Q    | V6   | V24  | V4DAY | V10DAY |
|--------|--------|------|----------|-------|------|------|------|-------|--------|
| TRTMNT | (ACRE) | %    | (CFS/AC) | (CFS) | (CF) | (CF) | (CF) | (CF)  | (CF)   |
| A      | 0.000  | 0%   | 0.53     | 1.56  | 0.00 | 0    | 0    | 0     | 0      |
| B      | 0.059  | 72%  | 0.78     | 2.28  | 0.13 | 167  | 167  | 167   | 167    |
| C      | 0.000  | 0%   | 1.13     | 3.14  | 0.00 | 0    | 0    | 0     | 0      |
| D      | 0.023  | 28%  | 2.12     | 4.70  | 0.11 | 177  | 210  | 256   | 311    |
| TOTALS | 0.082  | 100% |          | 0.24  | 344  | 377  | 423  | 478   |        |

PROPOSED CONDITIONS - SUB-BASIN VII

| LAND   | AREA   | AREA | P6       | Q     | Q     | V6    | V24   | V4DAY | V10DAY |
|--------|--------|------|----------|-------|-------|-------|-------|-------|--------|
| TRTMNT | (ACRE) | %    | (CFS/AC) | (CFS) | (CF)  | (CF)  | (CF)  | (CF)  | (CF)   |
| A      | 0.000  | 0%   | 0.53     | 1.56  | 0.00  | 0     | 0     | 0     | 0      |
| B      | 0.180  | 49%  | 0.78     | 2.28  | 0.41  | 510   | 510   | 510   | 510    |
| C      | 0.000  | 0%   | 1.13     | 3.14  | 0.00  | 0     | 0     | 0     | 0      |
| D      | 0.189  | 51%  | 2.12     | 4.70  | 0.89  | 1,454 | 1,729 | 2,106 | 2,552  |
| TOTALS | 0.369  | 100% |          | 1.30  | 1,964 | 2,239 | 2,616 | 3,062 |        |

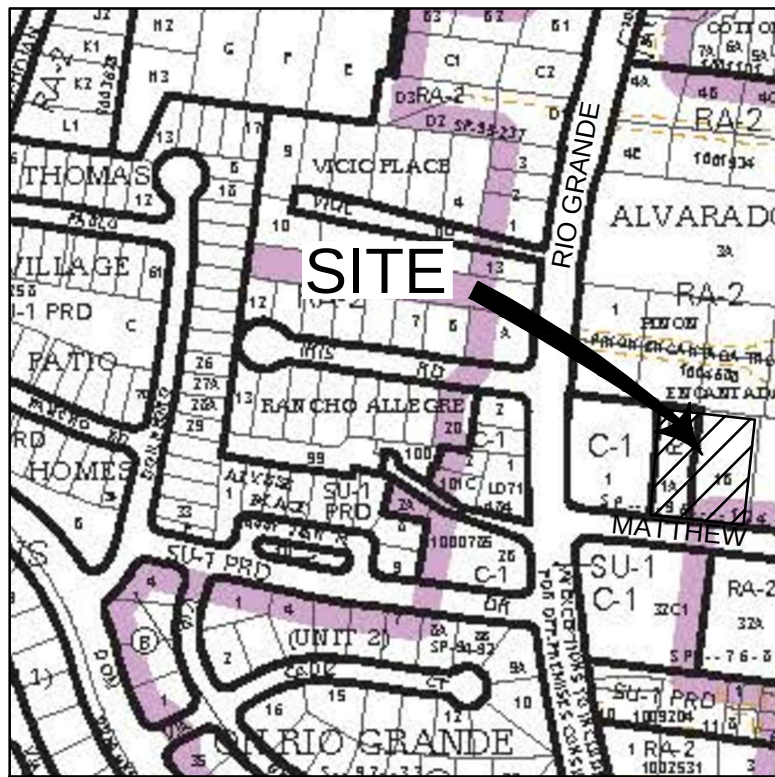
PROPOSED CONDITIONS - SUB-BASIN VIII

| LAND   | AREA   | AREA | P6       | Q     | Q     | V6    | V24   | V4DAY | V10DAY |
|--------|--------|------|----------|-------|-------|-------|-------|-------|--------|
| TRTMNT | (ACRE) | %    | (CFS/AC) | (CFS) | (CF)  | (CF)  | (CF)  | (CF)  | (CF)   |
| A      | 0.000  | 0%   | 0.53     | 1.56  | 0.00  | 0     | 0     | 0     | 0      |
| B      | 0.180  | 52%  | 0.78     | 2.28  | 0.41  | 510   | 510   | 510   | 510    |
| C      | 0.000  | 0%   | 1.13     | 3.14  | 0.00  | 0     | 0     | 0     | 0      |
| D      | 0.167  | 48%  | 2.12     | 4.70  | 0.78  | 1,285 | 1,528 | 1,861 | 2,255  |
| TOTALS | 0.347  | 100% |          | 1.19  | 1,795 | 2,037 | 2,371 | 2,765 |        |

FIRST FLUSH VOLUME REQUIRED : 0.44' x 21,876 SF = 802 CF

PONDING PROVIDED : 100-YR STORM, 10-DAY VOLUME REQUIRED

- SUB-BASIN I = 430 CF
- SUB-BASIN II = 371 CF
- SUB-BASIN III = 371 CF
- SUB-BASIN VI = 371 CF
- SUB-BASIN V = 371 CF
- SUB-BASIN VI = 621 CF
- SUB-BASIN VII = 3152 CF
- SUB-BASIN VIII = 2840 CF
- TOTAL = 8527 CF



VICINITY MAP G-12-Z

SHEET KEYNOTES

- REMOVE EXISTING DRIVEPAD
- REMOVE EXISTING CURB AND GUTTER AND REPLACE WITH NEW CURB, GUTTER, AND SIDEWALK PER C.O.A. STANDARD DRAWING #2430 AND #2415
- NEW PRIVATE DRIVE ENTRANCE PER C.O.A. STANDARD DRAWING #2426
- 8"x16" DRAIN BLOCK AT GRADE LEVEL INV. = 66.00
- 8"x16" DRAIN BLOCK AT GRADE LEVEL INV. = 65.50
- MOUNTABLE CONCRETE CURB PER A1/C200
- ASPHALT PAVING PER A2/C200
- 5" THICK, 4000 PSI, AIR-ENTRAINED CONCRETE DRIVEWAY
- 4" THICK, 4000 PSI, AIR-ENTRAINED CONCRETE SIDEWALK - SEE ARCHITECTURAL FOR JOINT PATTERN
- NEW STORM INLET AND 18"Ø RCP LATERAL - SEE SITE UTILITIES PLAN - PER C.O.A. WORK ORDER
- 12" WIDE SIDEWALK CULVERT PER A4/C200
- 12" WIDE CURB BREAK FOR DRAINAGE

LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- NEW SPOT ELEVATION
- NEW CONTOUR
- SD STORM DRAIN
- FL FLOW LINE
- TA TOP OF ASPHALT
- TC TOP OF CONCRETE
- FF FINISHED FLOOR
- MH MANHOLE
- SAS SANITARY SEWER
- INV INVERT
- ROOF DRAIN
- FLOW DIRECTION
- SWALE
- FF ELEVATION STEP
- SUB-BASIN BOUNDARY
- NEW ASPHALT PAVING
- NEW CONCRETE PAVING

Date Issue



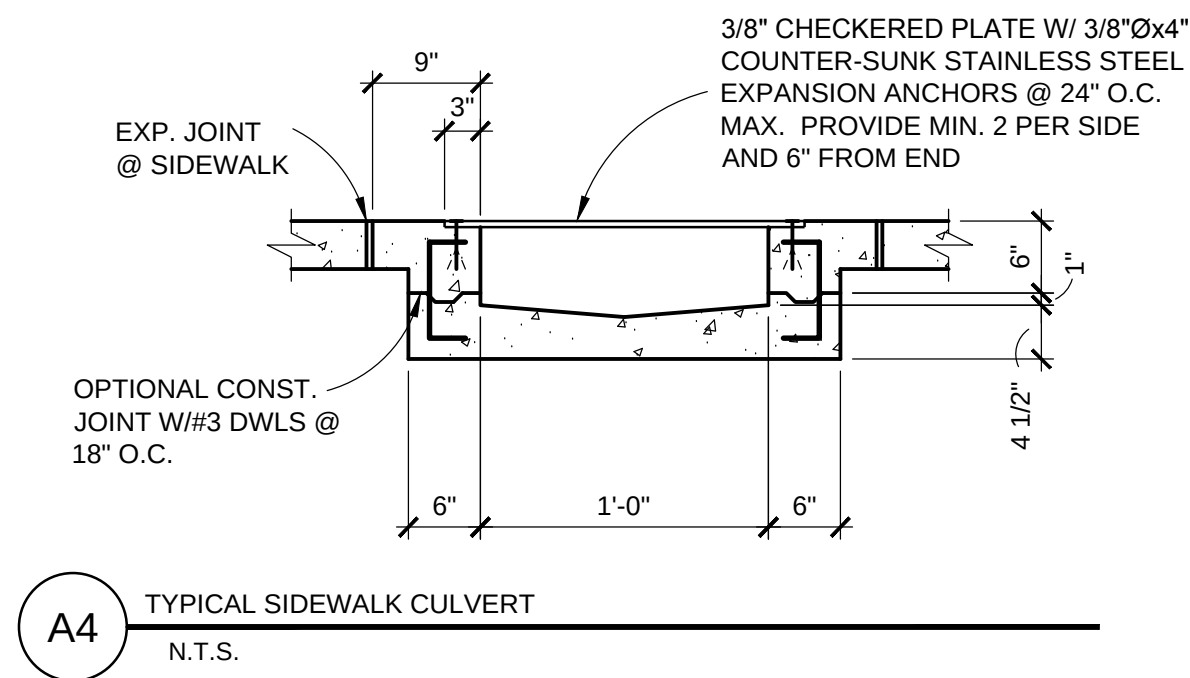
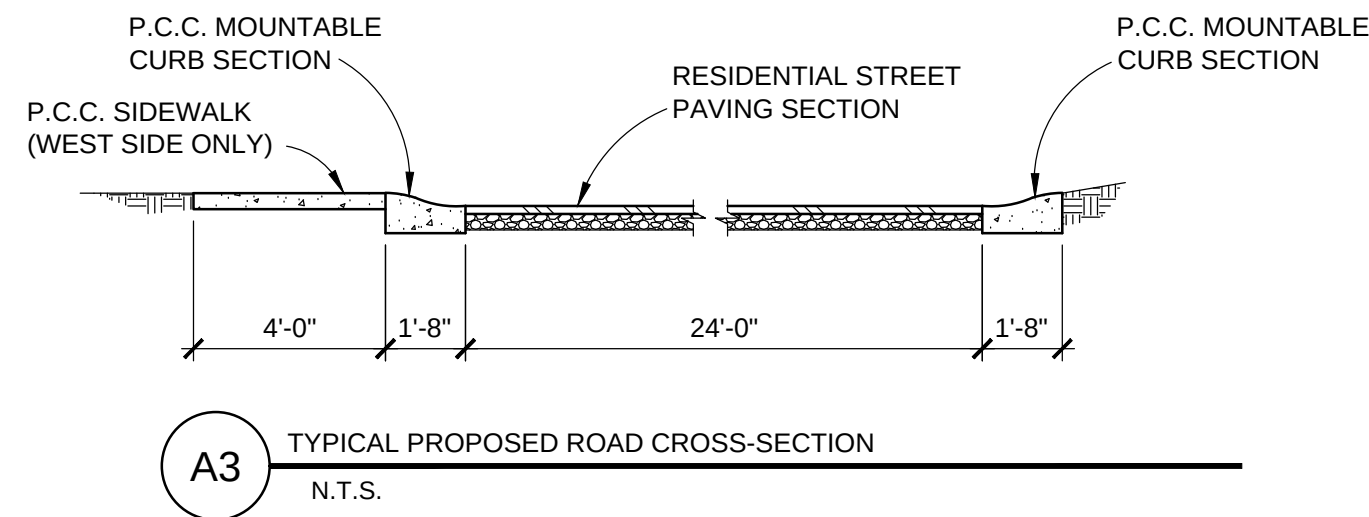
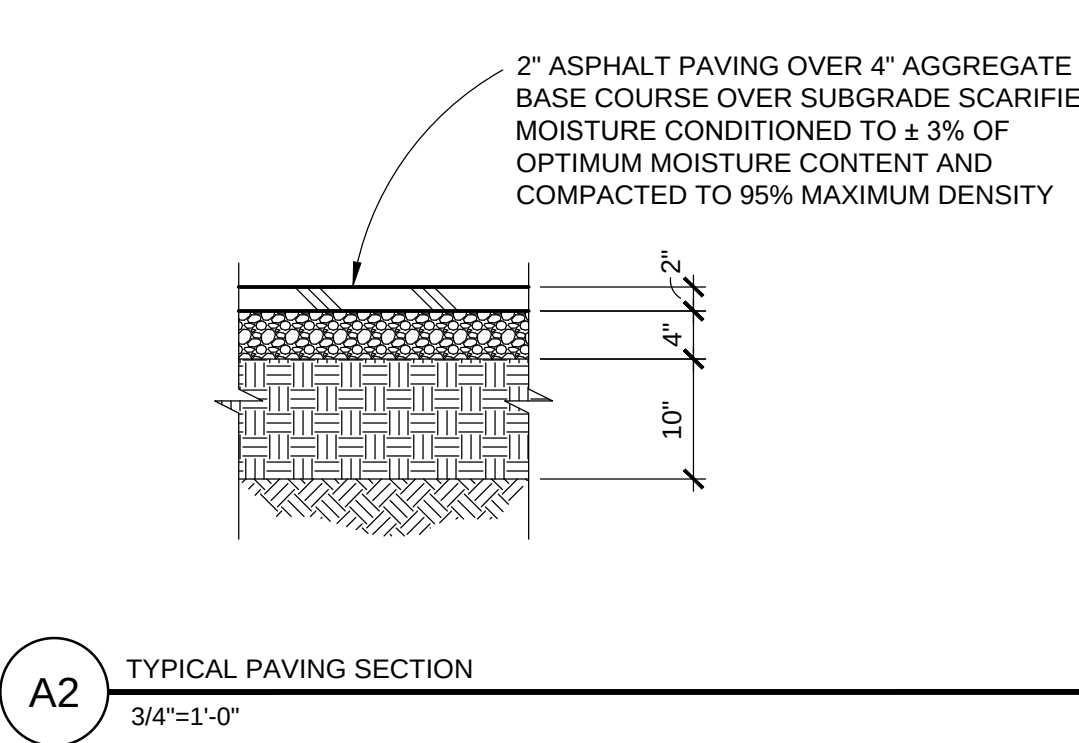
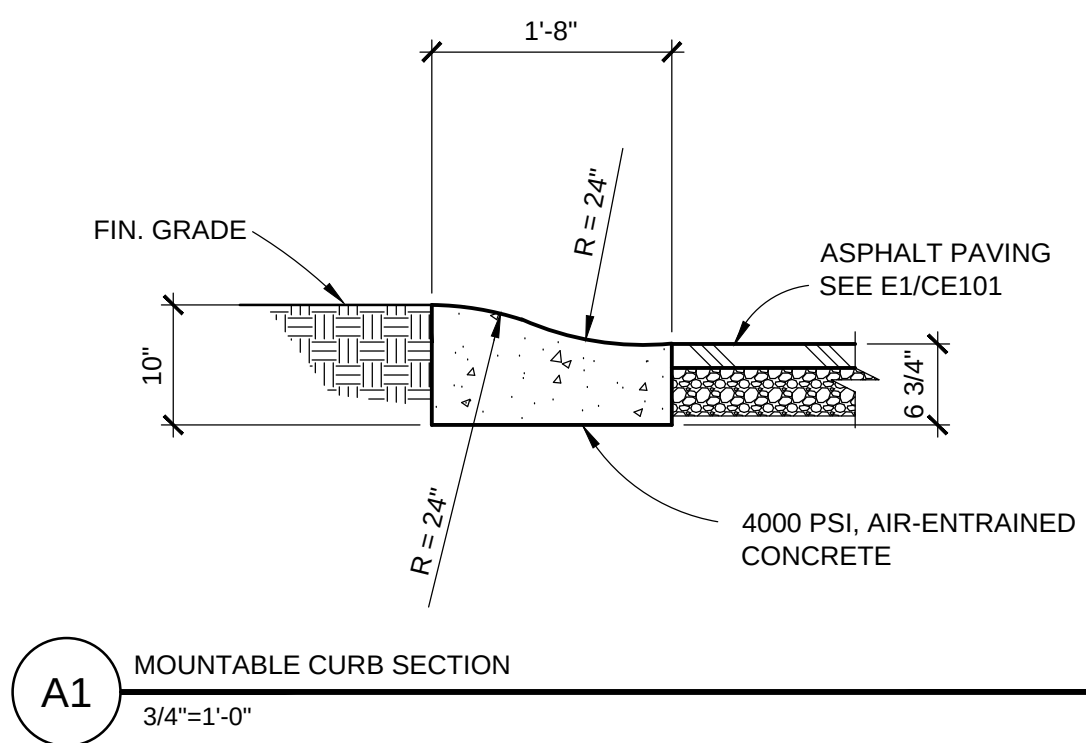
January 25, 2018

Grading and Drainage Plan

Walla Engineering Ltd  
6501 Americas Parkway NE • Suite 301  
Albuquerque • New Mexico • 87110  
881-3008 • Facsimile 881-4025

C100







# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2016)

**Project Title:** \_\_\_\_\_ **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** \_\_\_\_\_

**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_

**Legal Description:** \_\_\_\_\_

**City Address:** \_\_\_\_\_

**Applicant:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Other Contact:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

Check all that Apply:

**DEPARTMENT:**

☐ HYDROLOGY/ DRAINAGE  
☐ TRAFFIC/ TRANSPORTATION

**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)

☐ 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

☐ OTHER (SPECIFY) \_\_\_\_\_

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

**DATE SUBMITTED:** \_\_\_\_\_ **By:** \_\_\_\_\_

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_