

# CITY OF ALBUQUERQUE



January 20, 2016

Richard J. Berry, Mayor

Lawrence D. Read  
Larry Read & Associates  
2430 Midtown Place NE Suite C  
Albuquerque, NM, 87107

**RE: San Antonio Commons (Office / Retail)**  
**Grading and Drainage Plan (Stamp Date 12-14-15)**  
**Hydrology File: E18D59**

Dear Mr. Read:

Based upon the information provided in your submittal received 12-15-15, the above-referenced plan cannot be approved for Grading Permit and Paving Permit until the following item is addressed:

PO Box 1293

Albuquerque

New Mexico 87103

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

The effort made on the plan to address the City's first flush is greatly appreciated. However, the Environmental Health Department of the City has advised against retaining any Stormwater on this site. The concern is related to the old landfill site that exists in the area and settling that has been observed along the San Antonio corridor. Instead of constructing a retention pond, the City requests that a water quality feature is considered, that removes debris and floatables, and oil if practicable.

If you'd like to coordinate options before making a submittal, or if you have any other question, feel free to contact me at [acarrillo@cabq.gov](mailto:acarrillo@cabq.gov), or 924-3986.

Sincerely,

Abiel Carrillo, P.E.  
Principal Engineer, Planning Dept.  
Development Review Services

Orig: Drainage file

# DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: San Antinio Office/Retail  
DRB #: \_\_\_\_\_ EPC#: \_\_\_\_\_

ZONE MAP/DRG. FILE #: E-18/D-59  
WORK ORDER#: \_\_\_\_\_

LEGAL DESCRIPTION: Lot 5, J Group Addition  
CITY ADDRESS: 5700 San Antonio Drive NE

ENGINEERING FIRM: LARRY READ & ASSOCIATES, INC  
ADDRESS: 2430 Midtown Place NE Suite C  
CITY, STATE: ALBUQUERQUE, NEW MEXICO

CONTACT: LARRY READ  
PHONE: 237-8421  
ZIP CODE: 87107

OWNER: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
ZIP CODE: \_\_\_\_\_

ARCHITECT: TAFFAZUL HUSSAIN  
ADDRESS: 2501 YALE BLVD. SE SUITE 102  
CITY, STATE: ALBUQUERQUE, NEW MEXICO

CONTACT: TAFFAZUL HUSSAIN  
PHONE: 315-1482  
ZIP CODE: 87106

SURVEYOR: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
ZIP CODE: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
ZIP CODE: \_\_\_\_\_

## CHECK TYPE OF SUBMITTAL:

## CHECK TYPE OF APPROVAL SOUGHT:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL, **REQUIRES TCL or equal**
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ☐ OTHER

- ☐ SIA / FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM.)
- ☐ CERTIFICATE OF OCCUPANCY (TEMP.)
- ☒ GRADING PERMIT APPROVAL
- ☒ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ OTHER (SPECIFY)

## WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
- ☒ NO
- ☐ COPY PROVIDED

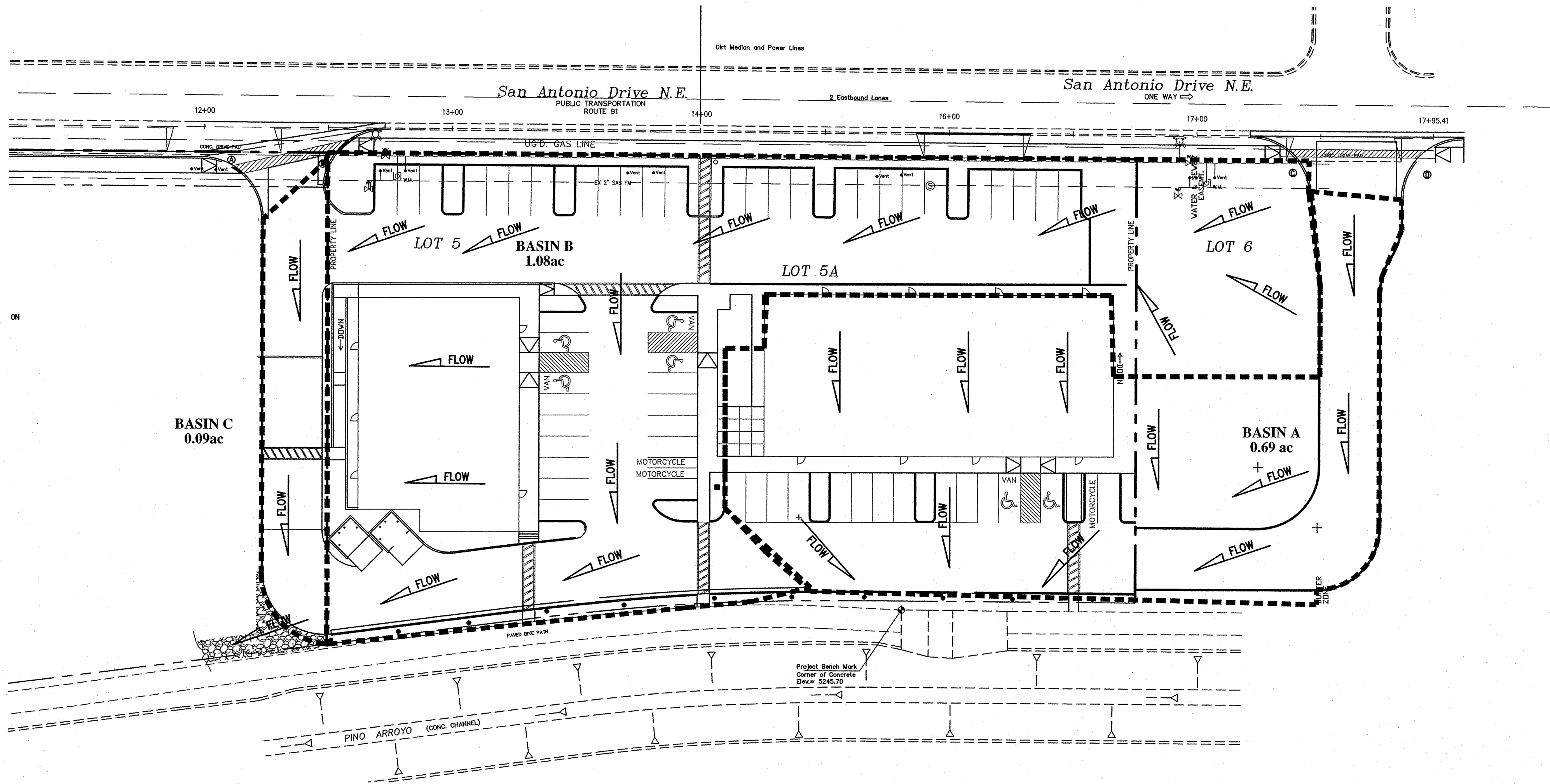
*Rec'd  
12-15-15  
JAC*

DATE SUBMITTED: Dec 10, 2015

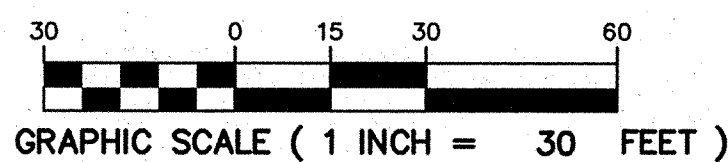
BY: LARRY D. READ PE

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.



DRAINAGE BASIN MAP



## DRAINAGE DISCUSSION

### LOCATION & DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO PROVIDE ADDITIONAL PARKING FOR THE EXISTING OFFICE /RETAIL DEVELOPMENT ON PARCEL 5A NAMED SAN ANTONIO COMMONS AT 5700 SAN ANTONIO DRIVE, NE. PARCEL 5A IS APPROXIMATELY 1.37 ACRES HOWEVER, THE PROPOSED SITE PLAN AMENDMENT WILL ADD ABOUT 0.29 ACRES TO THE EAST END OF THE PARCEL WHERE THE NEW PARKING IS PROPOSED. PARCELS 4, 5A, 6, AND 7 ARE ALL UNDER THE SAME OWNERSHIP. THEY ARE ALSO INTERCONNECTED WITH SHARED ACCESS PARKING, AND DRAINAGE. AS SUCH, THIS PLAN INCLUDES PARTS OF THE ACCESS ROAD TO THE EAST AND TO THE WEST OF PARCEL 5A SINCE THERE IS NO PRACTICAL METHOD OF SEPARATING THE FLOWS. SINCE THE ORIGINAL DEVELOPMENT OF THIS SITE ABOUT 10-YEARS AGO THE CITY HAS IMPLEMENTED A REQUIREMENT TO CONTROL THE QUALITY OF RUNOFF DISCHARGED FROM THE SITE. DO TO THIS REQUIREMENT, WE HAVE PROPOSED TWO NEW PONDS.

### FLOODPLAIN STATUS

THIS PROPERTY, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0137 H, DATED August 16, 2012 IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN.

### METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATIONS OF THE JUNE 1997 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

### PRECIPITATION

THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 3 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. TABLES WITHIN THIS SECTION WAS USED TO ESTABLISH THE 6-HOUR PRECIPITATION, EXCESS PRECIPITATION, AND PEAK DISCHARGE.

### EXISTING DRAINAGE

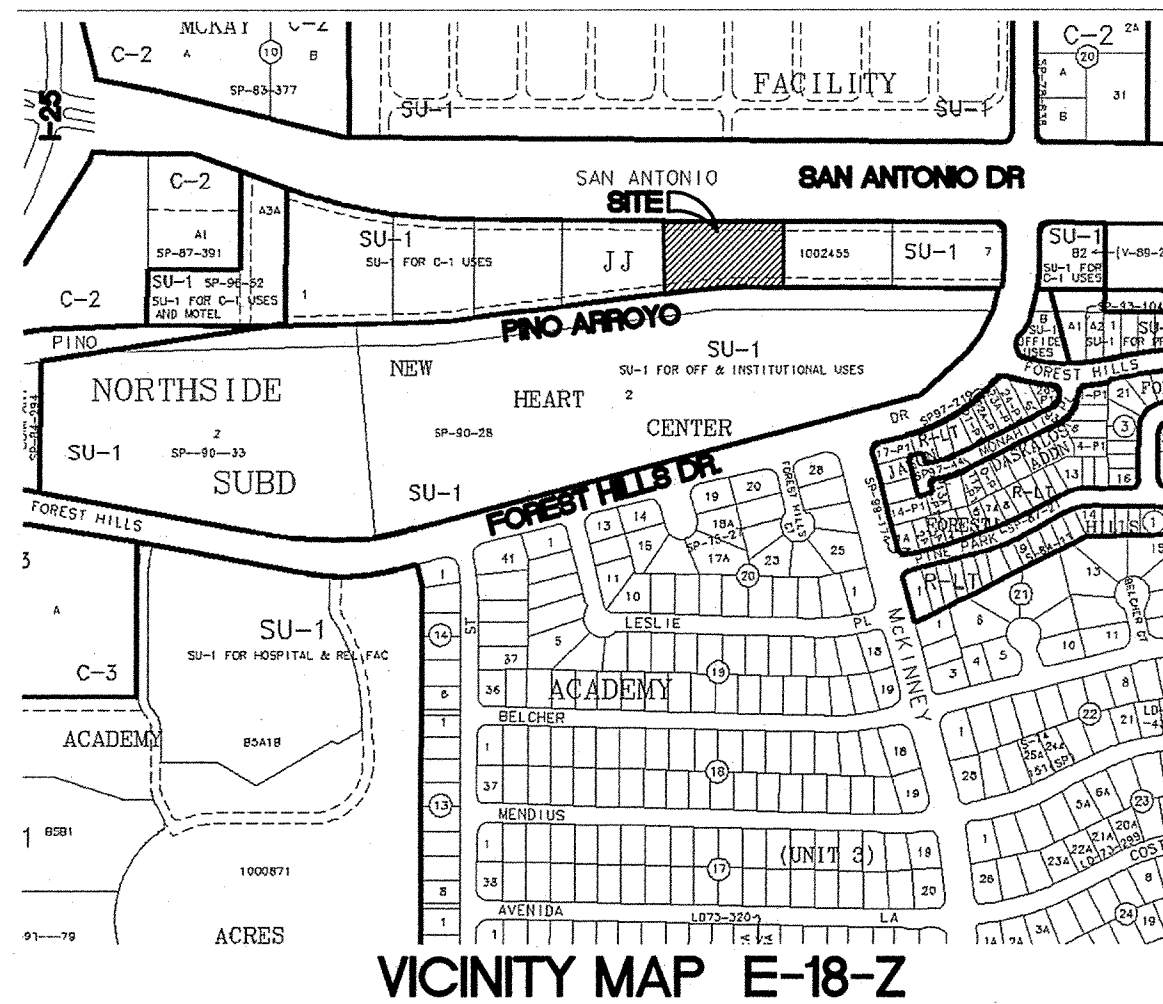
AS DISCUSSED ABOVE, THE PARCEL IS DEVELOPED WITH TWO OFFICE/RETAIL BUILDINGS AND PAVED PARKING. THERE ARE TWO DISCHARGE POINTS. THE FIRST IS THE EXISTING SIDE CHANNEL INLET DIRECTLY SOUTH OF THE EAST BUILDING. THE SECOND DISCHARGE IS AT THE SOUTHWEST CORNER OF THE SITE WHERE THE RUNOFF FROM THE NORTH AND WEST PORTION OF THE SITE COMBINE WITH RUNOFF FROM THE WEST ACCESS ROAD AND DISCHARGE TO PARCEL 4. ALL RUNOFF FROM THE SITE, REGARDLESS OF PATH, ENDS UP IN THE LINED ARROYO SOUTH OF THE SITE.

### DEVELOPED CONDITION

THE PROPOSED GRADING PLAN WILL MAINTAIN THE EXISTING DRAINAGE PATTERNS AND DISCHARGE POINTS FROM THE SITE. APPROXIMATELY 1/3 OF THE AREA OF THE NEW PAVED PARKING WILL CONTRIBUTE TO EACH DISCHARGE POINT HOWEVER THE INCREASE IN DISCHARGE WILL ONLY BE FROM COMPACTED SOIL TO IMPERVIOUS PAVEMENT SINCE THE ARE WAS ALREADY ACCOUNTED FOR IN THE ORIGINAL ANALYSIS. WE HAVE PROPOSED TWO "WATER QUALITY" PONDS FOR THE SITE. THE FIRST IS A LONG LINEAR POND SOUTH OF THE EAST BUILDING BETWEEN THE EXISTING CURB AND SOUTH PROPERTY LINE. THE POND IS FORMED WITH TWO VERTICAL CONCRETE WALLS (OR CMU) WITH A CONCRETE BOTTOM. THIS POND, POND 1, PROVIDES 1,113 CUBIC FEET OF STORAGE ( 1,102 CUBIC FEET REQUIRED ) FOR THE FIRST FLUSH RUNOFF. POND 2 AT THE SOUTHWEST CORNER OF THE SITE. IT INTERCEPTS RUNOFF FROM BASINS B AND C AND PROVIDES 1,910 CUBIC FEET OF STORAGE VS. 1,869 CUBIC FEET OF STORAGE THAT IS REQUIRED.

| 100-YEAR HYDROLOGIC CALCULATIONS                            |             |                |       |       |        |                 |                    |                  |                      |                    |         |
|-------------------------------------------------------------|-------------|----------------|-------|-------|--------|-----------------|--------------------|------------------|----------------------|--------------------|---------|
| BASIN #                                                     | AREA (acre) | LAND TREATMENT |       |       |        | WEIGHTED E (in) | V (6-hr) (acre-ft) | V (6-hr) (cu-ft) | V (10 day) (acre-ft) | V (10 day) (cu-ft) | Q (cfs) |
|                                                             |             | A (%)          | B (%) | C (%) | D (%)  |                 |                    |                  |                      |                    |         |
| PROPOSED CONDITIONS                                         |             |                |       |       |        |                 |                    |                  |                      |                    |         |
| BASIN A                                                     | 0.6900      | 0.00           | 0.00  | 8.00  | 92.00  | 2.27            | 0.13               | 5,697            | 0.25                 | 10,997             | 3.38    |
| BASIN B                                                     | 1.0800      | 0.00           | 0.00  | 11.70 | 88.30  | 2.23            | 0.20               | 8,761            | 0.38                 | 16,723             | 5.22    |
| BASIN C                                                     | 0.0900      | 0.00           | 0.00  | 0.00  | 100.00 | 2.36            | 0.02               | 771              | 0.03                 | 1,522              | 0.45    |
| ONSITE TOTAL                                                | 0.0000      |                |       |       |        |                 | 0.22               | 9532.36          | 0.42                 | 18245.71           | 5.68    |
| EXCESS PRECIP.                                              |             | 0.66           | 0.92  | 1.29  | 2.36   | Ei (in)         |                    |                  |                      |                    |         |
| PEAK DISCHARGE                                              |             | 1.87           | 2.6   | 3.45  | 5.02   | QPi (cfs)       |                    |                  |                      |                    |         |
| WEIGHTED E (in) = (EA)(%A) + (EB)(%B) + (EC)(%C) + (ED)(%D) |             |                |       |       |        |                 | ZONE = 3           |                  |                      |                    |         |
| V6-HR (acre-ft) = (WEIGHTED E)(AREA)/12                     |             |                |       |       |        |                 | P6-HR (in.): 2.60  |                  |                      |                    |         |
| V10DAY (acre-ft) = V6-HR + (AD)(P10DAY - P6-HR)/12          |             |                |       |       |        |                 | P24-HR (in.): 3.10 |                  |                      |                    |         |
| Q (cfs) = (QPA)(AA) + (QPB)(AB) + (QPC)(AC) + (QPD)(AD)     |             |                |       |       |        |                 | P10DAY (in.): 4.90 |                  |                      |                    |         |

| WATER QUALITY PONDING |          |                           |                       |                                       |
|-----------------------|----------|---------------------------|-----------------------|---------------------------------------|
| POND ID               | BASIN ID | CONTRIBUTING AREA (SQ-FT) | REQUIRED PONDING (IN) | PONDING VOLUME (0.44/12*AREA) (CU-FT) |
| POND 1                | A        | 30,056                    | 0.44                  | 1,102                                 |
| TOTAL                 |          | 30,056                    |                       | 1,102                                 |
| POND 2                | B        | 47,045                    | 0.44                  | 1,725                                 |
|                       | C        | 3,920                     | 0.44                  | 144                                   |
| TOTAL                 |          | 50,965                    |                       | 1,869                                 |



FIRM PANEL 35001C0137H

LARRY READ & ASSOCIATES  
Civil Engineers  
2430 Midtown Place, NE, Suite C  
Albuquerque, New Mexico 87107  
(505) 237-8421 Fax (505) 237-8422

| NO. | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| 1   | XX   | XX          | XX |
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| 3   |      |             |    |
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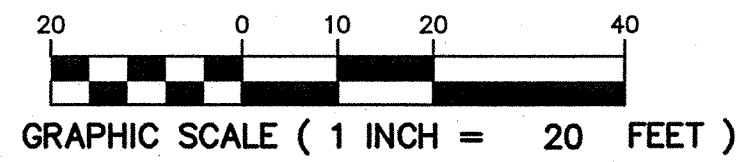
DRAINAGE BASIN MAP  
DRAINAGE CALCULATIONS



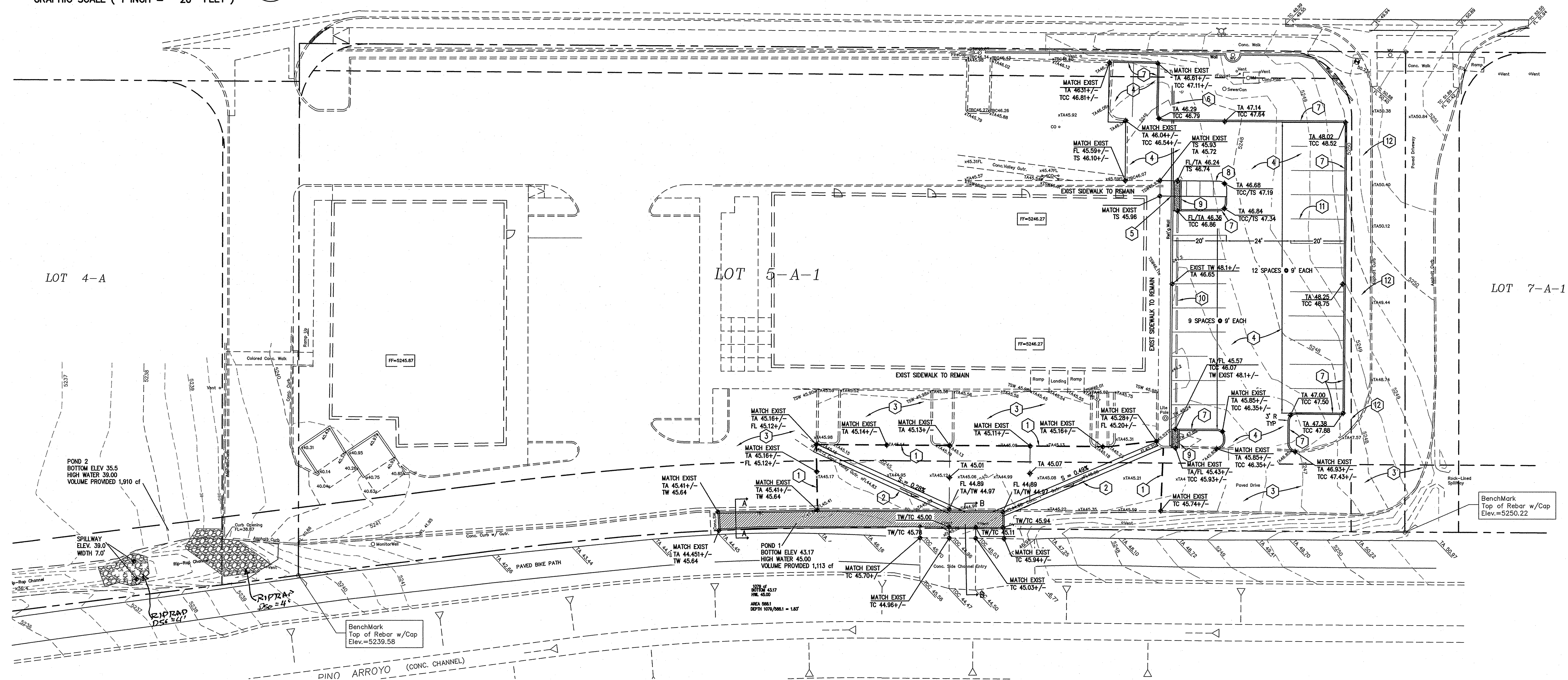
SAN ANTONIO COMMONS

5700 SAN ANTONIO DRIVE, NE  
LOS RANCHOS, NEW MEXICO

| DRAWING NAME | XX.DWG | SHEET  |
|--------------|--------|--------|
|              |        | 1 OF 3 |



San Antonio Drive N.E.



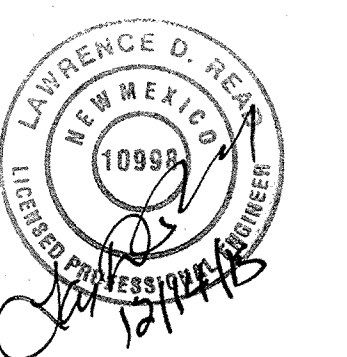
1 KEYED NOTES:

1. SAWCUT AND REMOVE ASPHALTIC PAVEMENT TO THE LIMITS SHOWN. REGRADE TO SPOTS SHOWN AND REPAVE WITH ASPHALT PAVEMENT SECTION PER GEOTECH REPORT..
2. REMOVE EXISTING CONCRETE VALLEY GUTTER TO THE LIMITS SHOWN. CONSTRUCT NEW CONCRETE VALLEY GUTTER TO NEW ELEVATIONS SHOWN.
3. EXISTING ASPHALT PAVEMENT TO REMAIN.
4. NEW ASPHALTIC PARKING LOT PAVEMENT PER GEOTECH REPORT.
5. BEGIN DEMOLITION OF EXISTING RETAINING WALL.
6. EXISTING RETAINING WALL TO BE DEMOLISHED.
7. BUILD NEW CONCRETE HEADER CURB PER DETAIL 4.
8. BUILD NEW CONCRETE SIDEWALK WITH TURNDOWN PER DETAIL 9.
9. BUILD NEW 24" SIDEWALK CULVERT PER DETAIL 6.
10. INSTALL PRECAST CONCRETE WHEEL STOPS ALL SPACES ALONG FACE OF WALL.
11. 4" WIDE WHITE PARKING STALL PAINT STRIPE - TYPICAL.
12. GRADE FROM TOP OF EXISTING ACCESS DRIVE CURB TO TOP OF NEW PARKING LOT CURB. NOTE SLOPE DOES NOT EXCEED 3:1.

LARRY READ & ASSOCIATES  
Civil Engineers  
2430 Midtown Place, NE Suite C  
Albuquerque, New Mexico 87107  
(505) 237-8421 Fax (505) 237-8422

| NO. | DATE | REVISIONS | DESCRIPTION |
|-----|------|-----------|-------------|
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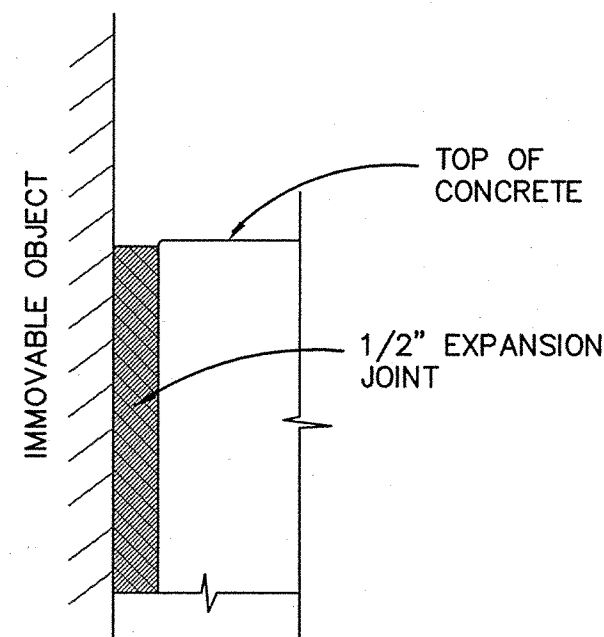
GRADING & DRAINAGE  
PLAN



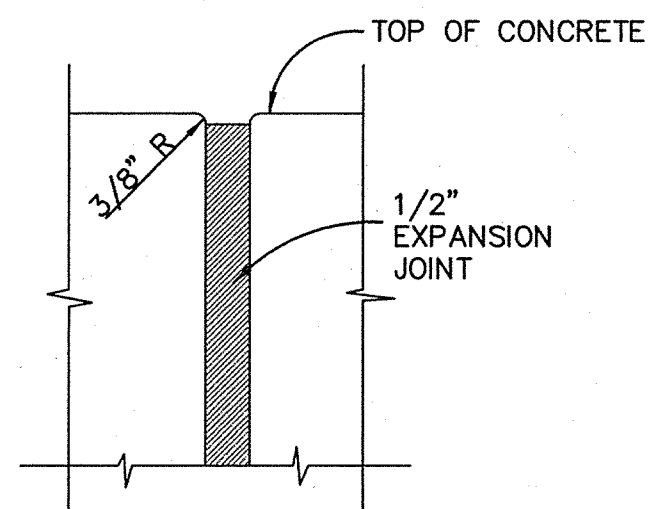
SAN ANTONIO COMMONS

5700 SAN ANTONIO DRIVE, NE  
LOS RANCHOS, NEW MEXICO

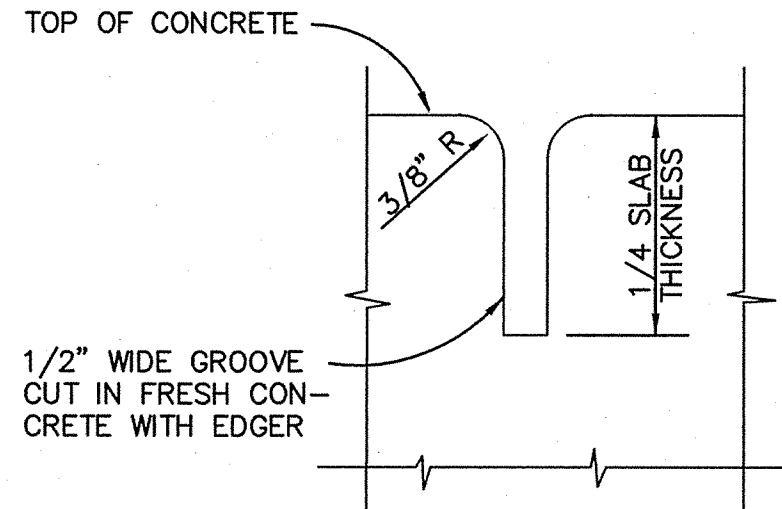
DRAWING NAME: XX.DWG  
SHEET  
2 OF 3



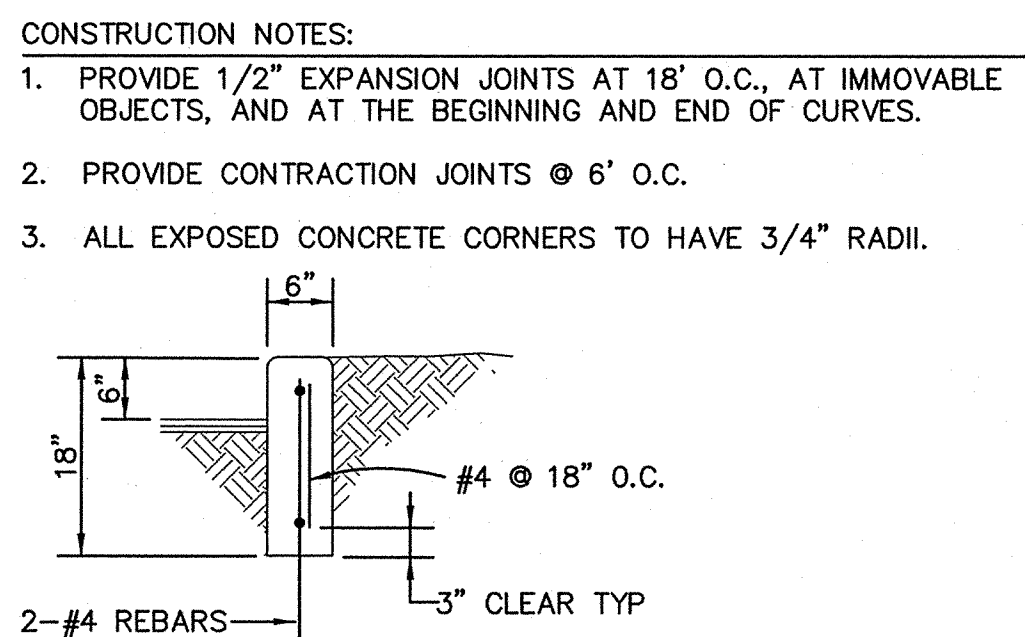
1 EXPANSION JOINT AT IMMOVABLE OBJECT  
N. T. S.



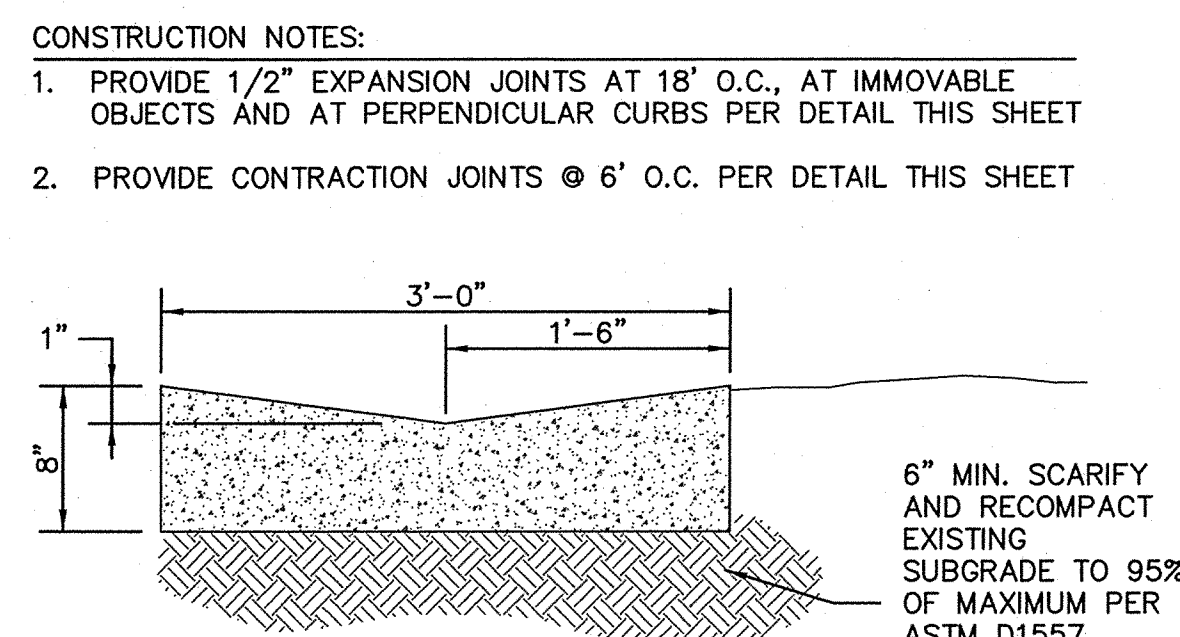
2 EXPANSION JOINT DETAIL  
N. T. S.



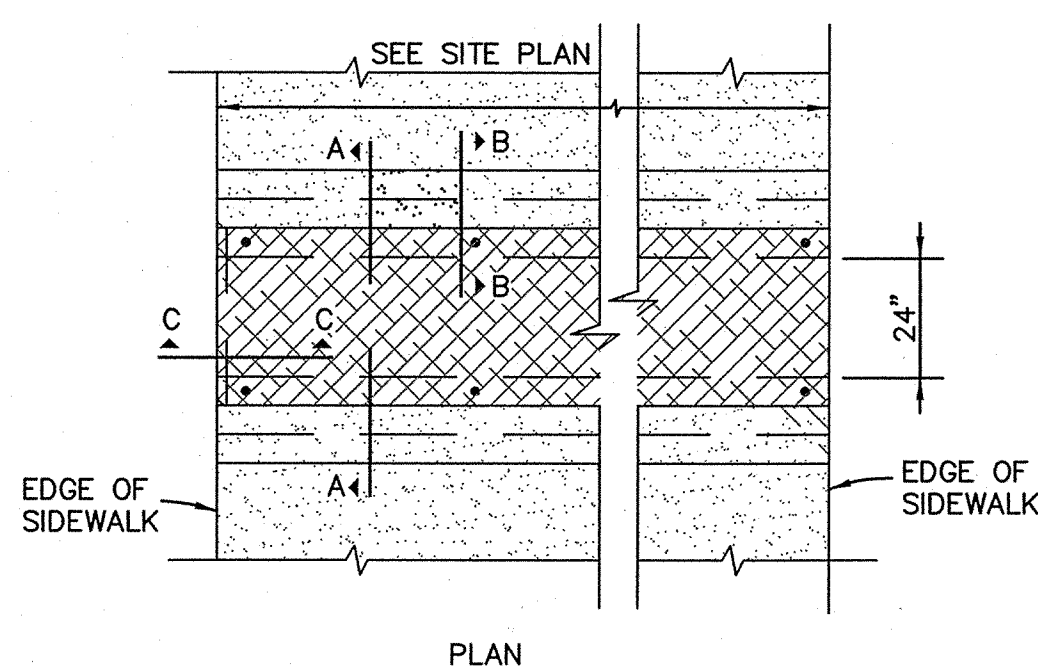
3 CONTRACTION JOINT DETAIL  
N. T. S.



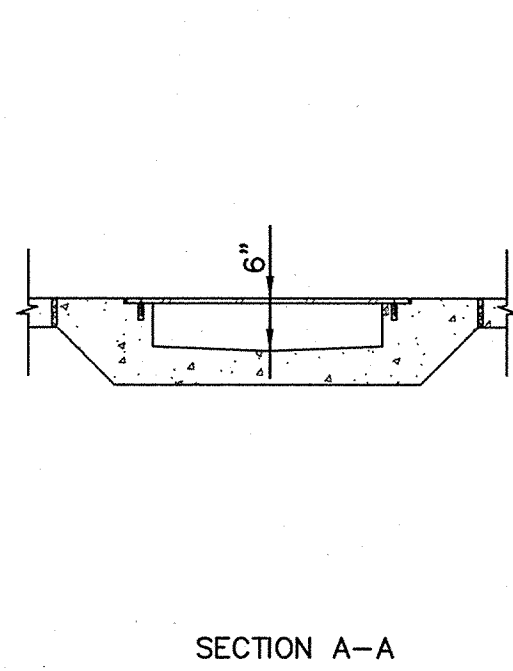
4 CONCRETE HEADER CURB DETAIL  
N. T. S.



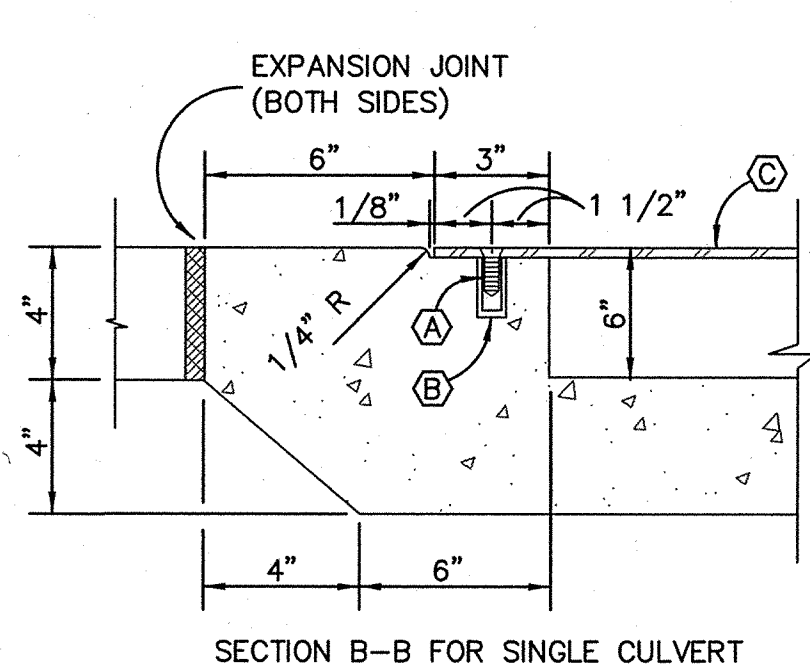
5 CONCRETE VALLEY GUTTER  
N. T. S.



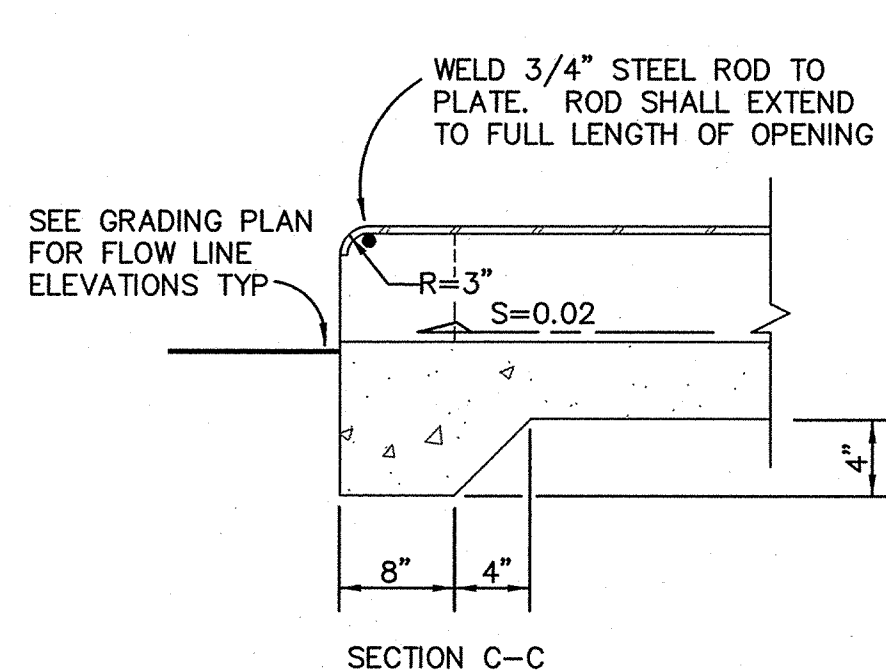
6 SIDEWALK DRAIN  
N. T. S.



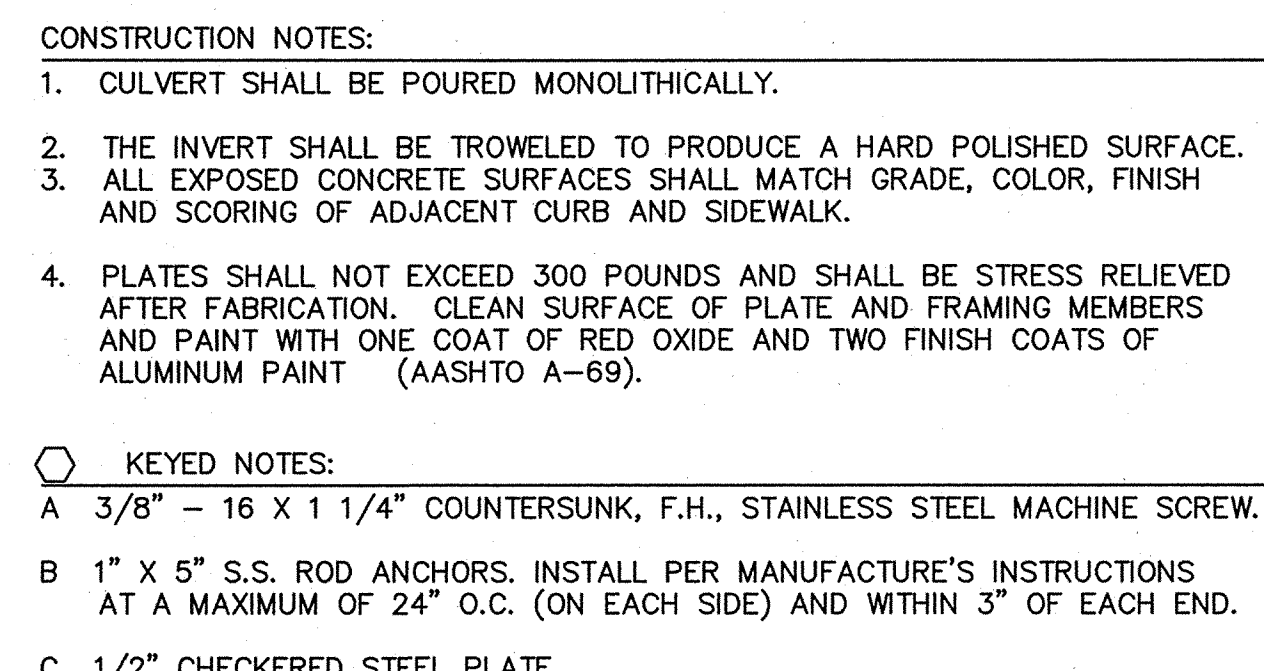
7 SECTION A-A  
N. T. S.



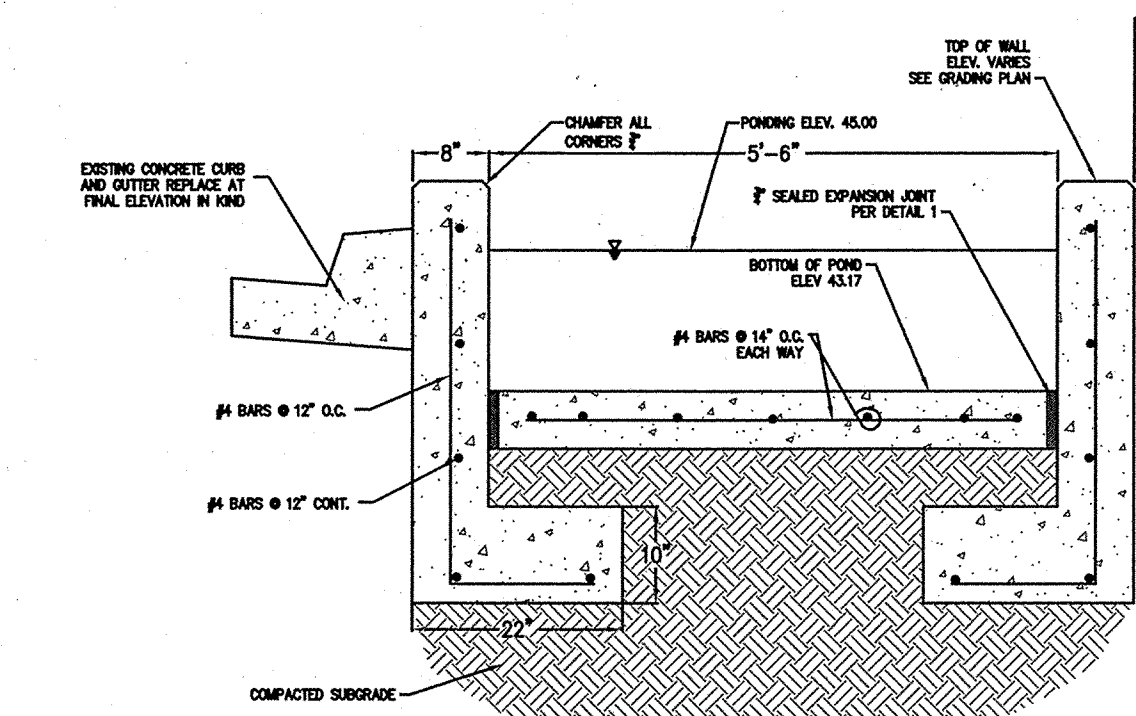
8 SECTION B-B FOR SINGLE CULVERT  
N. T. S.



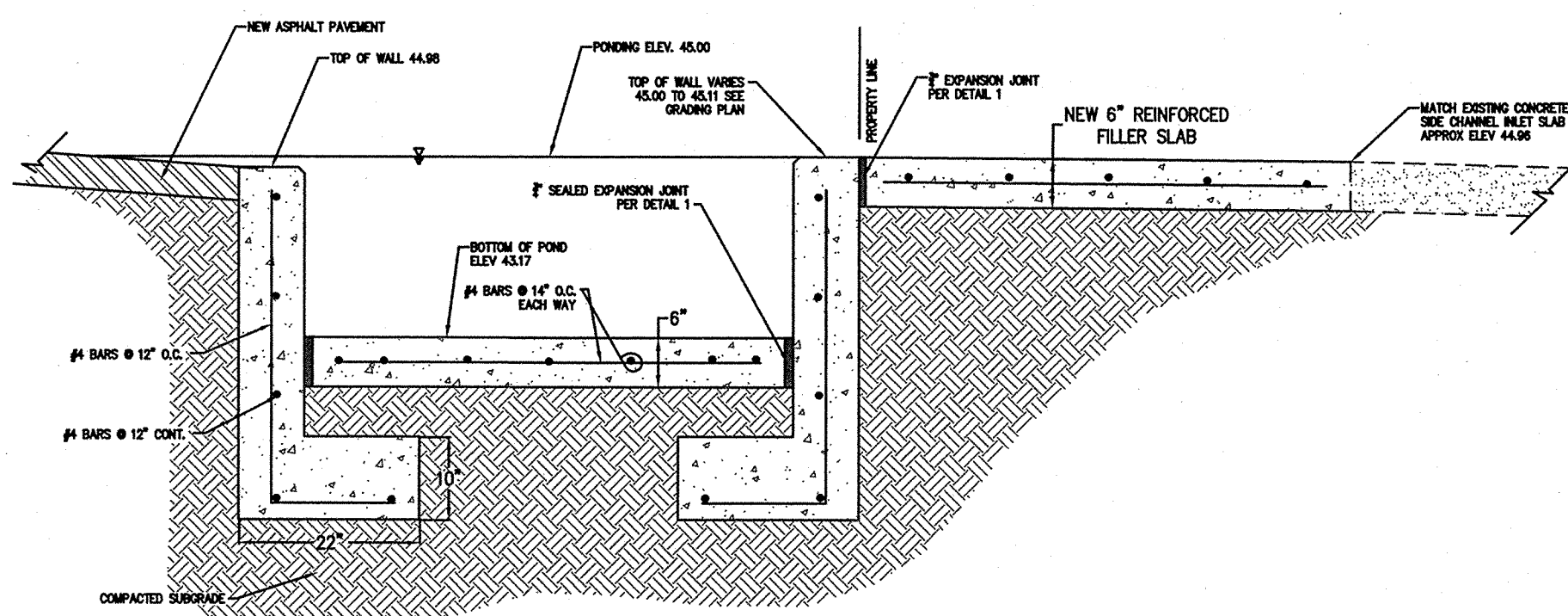
9 SECTION C-C  
N. T. S.



10 CONSTRUCTION NOTES  
N. T. S.

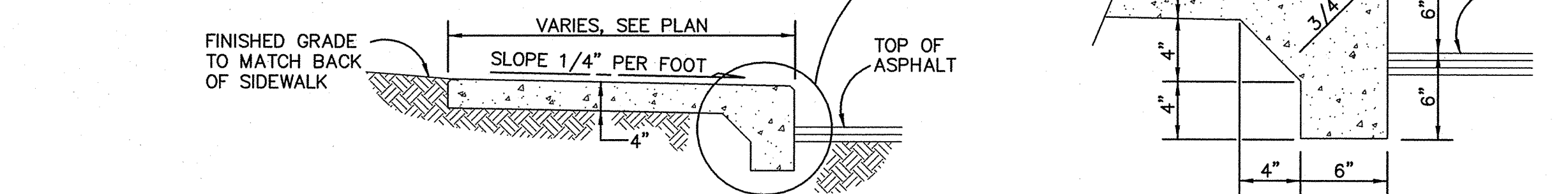


11 SECTION A-A POND 1  
N. T. S.



12 SECTION B-B POND 1  
N. T. S.

- CONSTRUCTION NOTES:
- A CROSS SLOPE OF 1/4" PER FOOT SHALL BE PROVIDED AND SHALL SLOPE TOWARDS THE DIRECTION OF THE DRAINAGE AREA.
  - CONCRETE WALKS SHALL HAVE CONTRACTION JOINTS AT 6" INTERVALS. 1/2" EXPANSION JOINTS SHALL BE INSTALLED EVERY 18", UNLESS OTHERWISE SHOWN ON PLANS. SEE DETAILS THIS SHEET.
  - 1/2" EXPANSION JOINTS SHALL BE INSTALLED WHERE WALKS ABUT RIGID STRUCTURES, SUCH AS CURBS, BUILDINGS, OR LIGHT STANDARDS. SEE DETAIL THIS SHEET.



13 SIDEWALK DETAIL WITH TURNDOWN  
N. T. S.

| NO. | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| 1   | XX   | XX          | XX |
| 2   | XX   | XX          | XX |
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DETAILS

