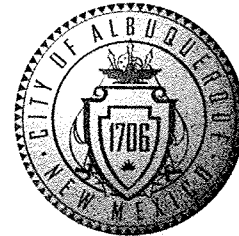


# CITY OF ALBUQUERQUE



November 30, 2009

David Soule, PE  
Rio Grande Engineering  
PO Box 67305  
Albuquerque, NM 87193

**Re: HB Contractors Office Grading and Drainage Plan  
Engineer's Stamp dated 11-15-09**

Dear Mr. Soule,

Based upon the information provided in your submittal dated 11-20-09, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Also, prior to Certificate of Occupancy release, Engineer Certification of the grading plan per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3986.

Sincerely,

*Bradley L. Bingham*

Bradley L. Bingham, PE  
Principal Engineer, Planning Dept.  
Development and Building Services

C: file

PO Box 1293

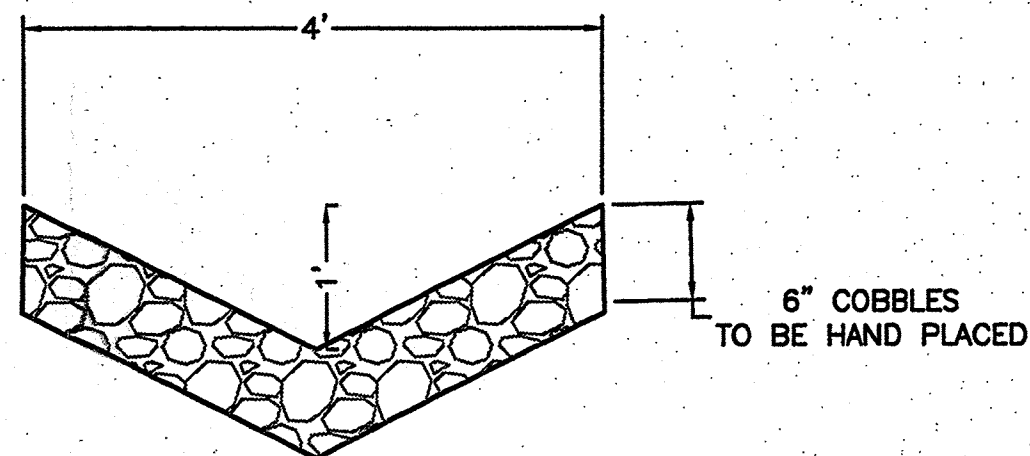
Albuquerque

NM 87103

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

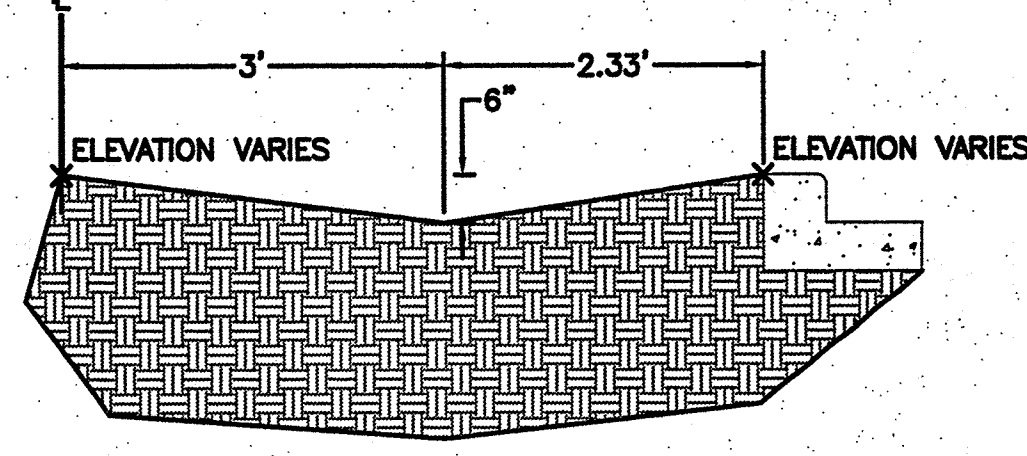
## EROSION CONTROL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
- REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS 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.



COBBLE SWALE DETAIL

NTS

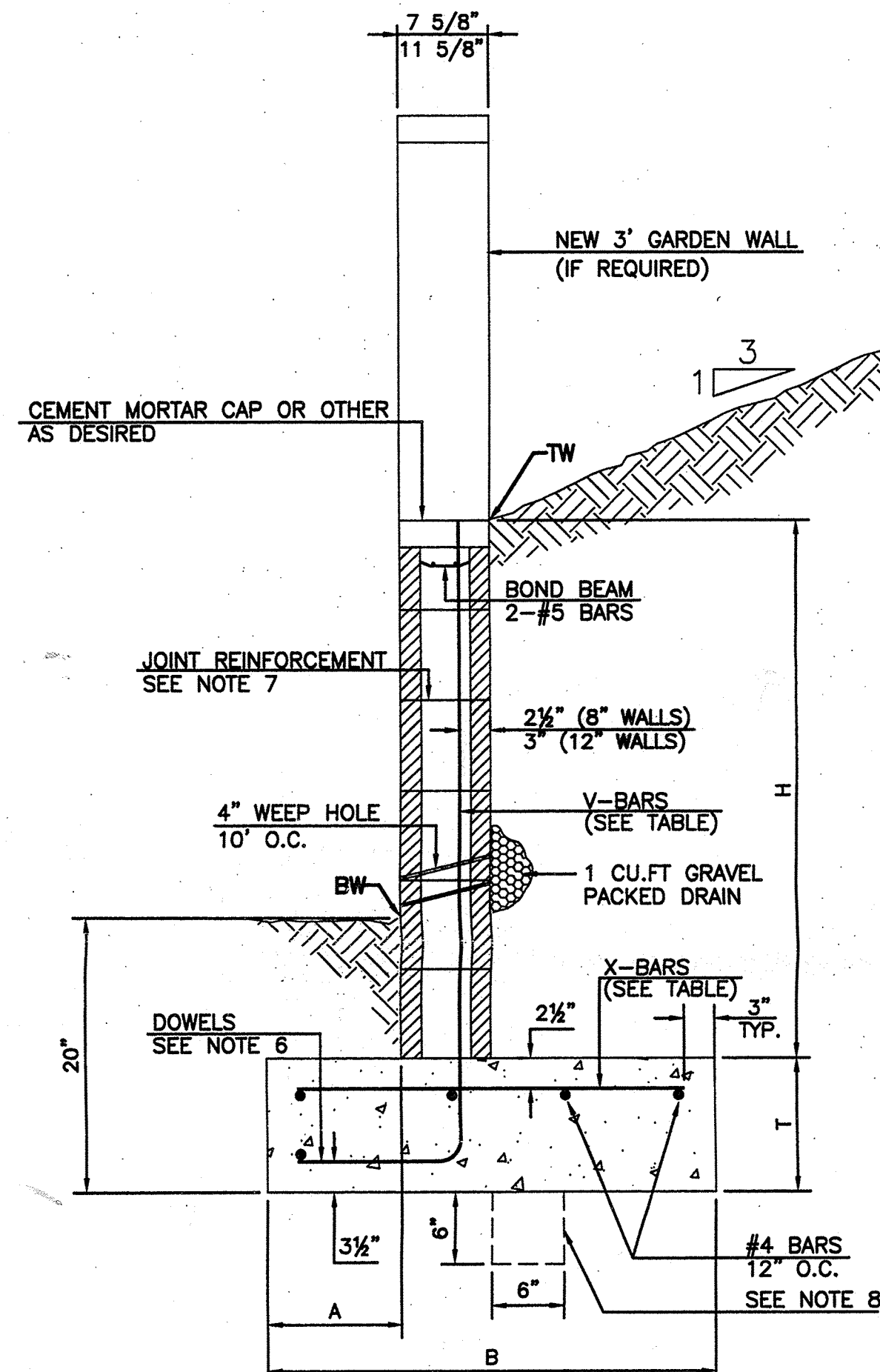


SECTION A-A

NTS

## 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.



RETAINING WALL DETAIL

NTS

### 8 INCH REINFORCED CONCRETE MASONRY WALL

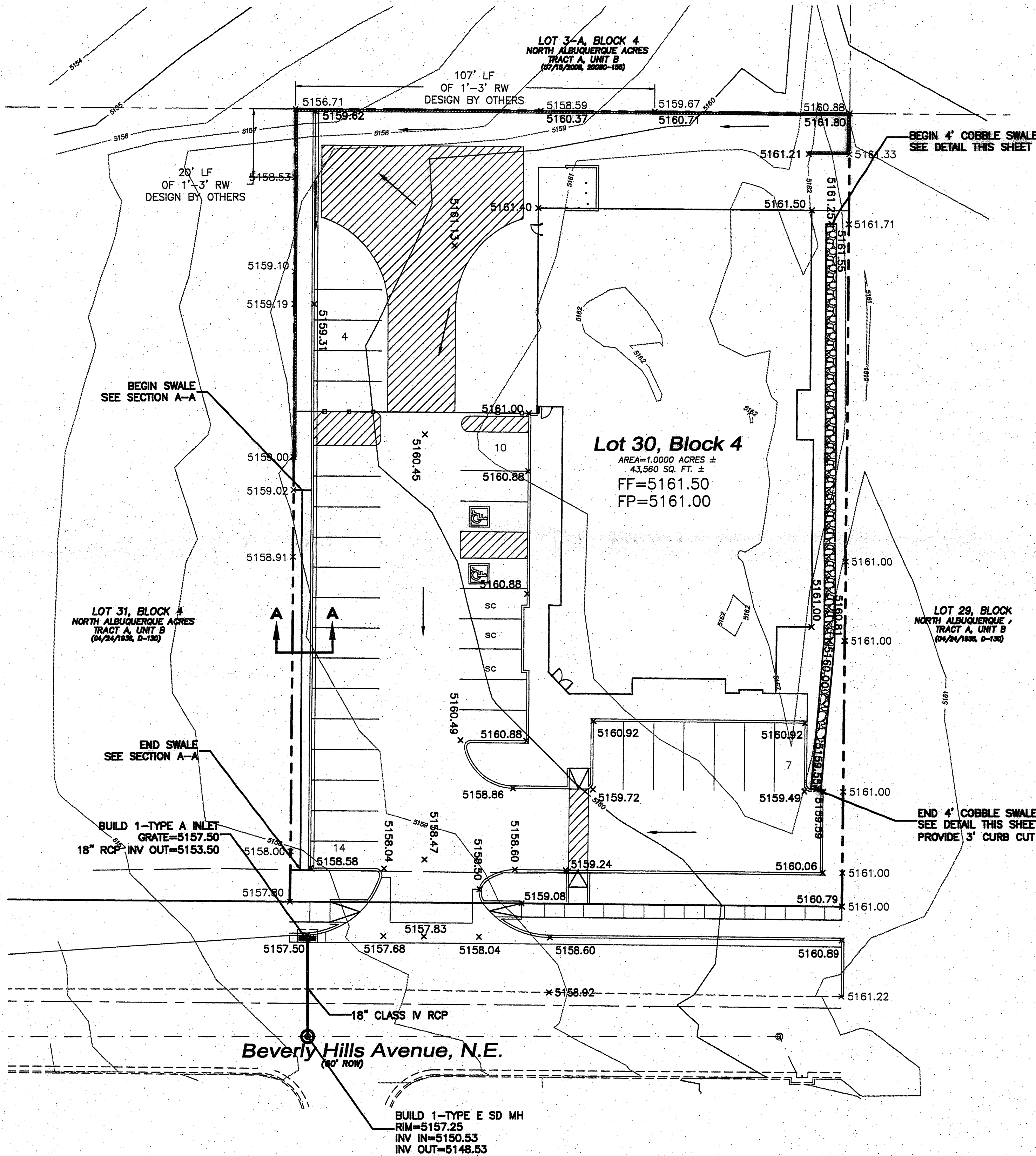
| H       | A   | B       | T   | V-BARS       | X-BARS       |
|---------|-----|---------|-----|--------------|--------------|
| ft.-in. | in. | ft.-in. | in. |              |              |
| 3'-4"   | 8"  | 2'-6"   | 10" | #4 @32" O.C. | #4 @32" O.C. |
| 4'-0"   | 10" | 2'-10"  | 10" | #4 @32" O.C. | #4 @32" O.C. |
| 4'-8"   | 12" | 3'-6"   | 12" | #4 @24" O.C. | #4 @24" O.C. |
| 5'-4"   | 14" | 3'-10"  | 12" | #4 @16" O.C. | #4 @16" O.C. |
| 6'-0"   | 16" | 4'-4"   | 12" | #4 @16" O.C. | #4 @16" O.C. |
| 6'-8"   | 18" | 4'-10"  | 14" | #5 @16" O.C. | #5 @16" O.C. |

### 12 INCH REINFORCED CONCRETE MASONRY WALL

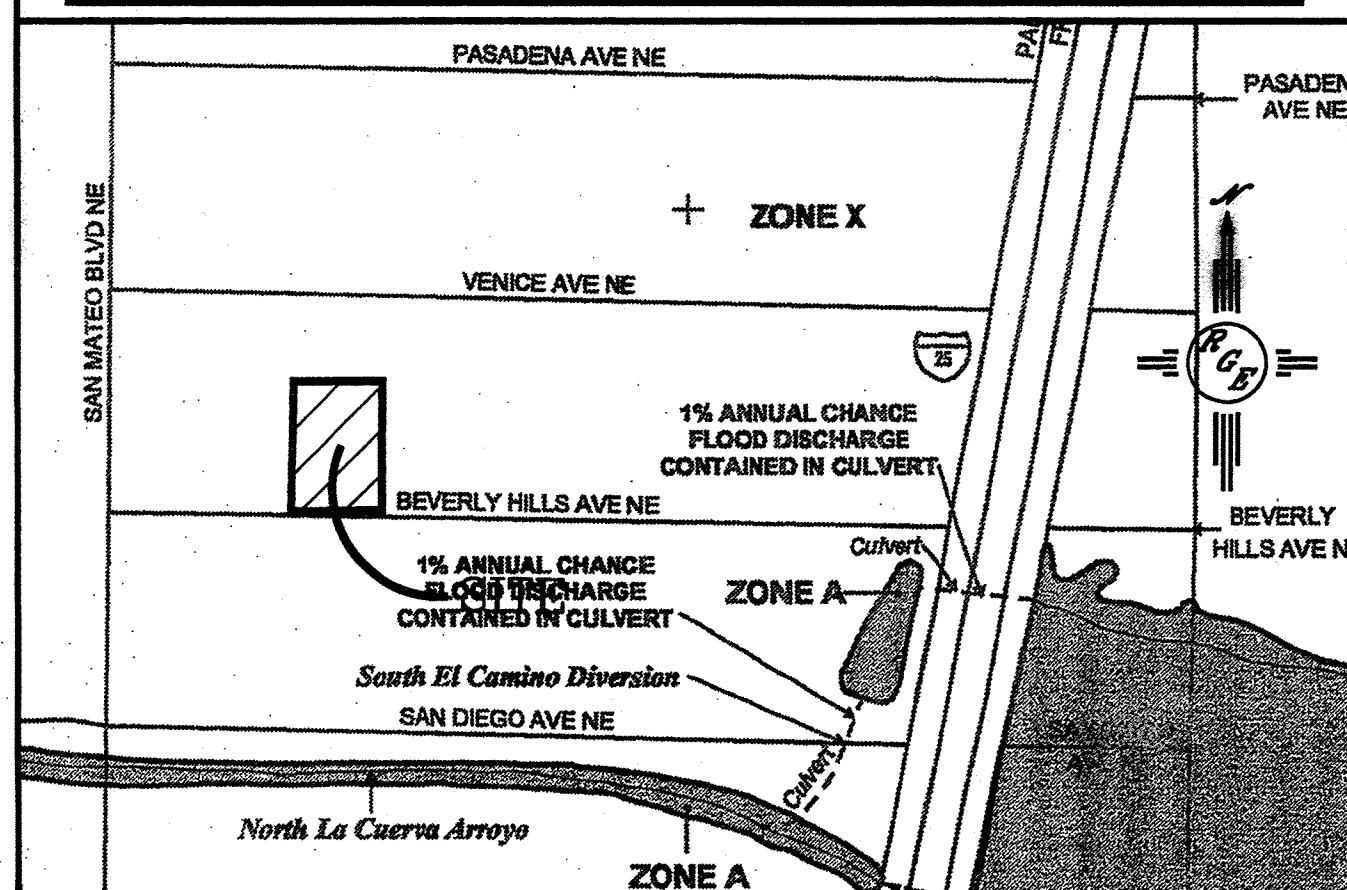
| H       | A   | B       | T   | V-BARS       | X-BARS       |
|---------|-----|---------|-----|--------------|--------------|
| ft.-in. | in. | ft.-in. | in. |              |              |
| 5'-4"   | 14" | 3'-8"   | 10" | #4 @24" O.C. | #4 @24" O.C. |
| 6'-0"   | 15" | 4'-2"   | 12" | #4 @16" O.C. | #4 @16" O.C. |
| 6'-8"   | 16" | 4'-6"   | 12" | #5 @24" O.C. | #5 @24" O.C. |
| 7'-4"   | 18" | 4'-10"  | 12" | #6 @16" O.C. | #6 @16" O.C. |
| 8'-0"   | 20" | 5'-4"   | 12" | #7 @24" O.C. | #7 @24" O.C. |

## GENERAL NOTES:

- ALL CONCRETE IS TO BE 4000 PSI @ 28 DAYS.
- MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM. D 1557 FOR A DEPTH OF 12" MOISTURE CONTENT IS TO BE  $\pm 2.0\%$ .
- BACKFILL AGAINST WALLS IS TO BE HAND-PLACED AND COMPACTED.
- ALL BARS ARE TO BE GRADE 60, ASTM 615.
- TRUSS TYPE DUR-O-WALL EVERY OTHER COURSE.
- DOWELS SHALL BE AT LEAST EQUAL IN SIZE AND SPACING TO V-BARS, SHALL PROJECT A MINIMUM OF 30 BAR DIA. INTO THE FILLED BLOCK CORES, AND SHALL EXTEND TO THE TOE OF THE FOOTING.
- JOINT REINFORCEMENT CONSISTING OF 9GA. LONGITUDINAL WIRE AND 3/16" CROSS RODS SHALL BE PROVIDED AT 8" CENTERS VERTICALLY.
- PROVIDE KEY FOR 8" AND 12" WALLS WHERE H EXCEEDS 6'-0"
- USE EITHER EXPANSION JOINTS ON 20' CENTERS OR PILASTERS EVERY 16'.



## VICINITY MAP:



## FIRM MAP:

35001C0129F

## LEGAL DESCRIPTION:

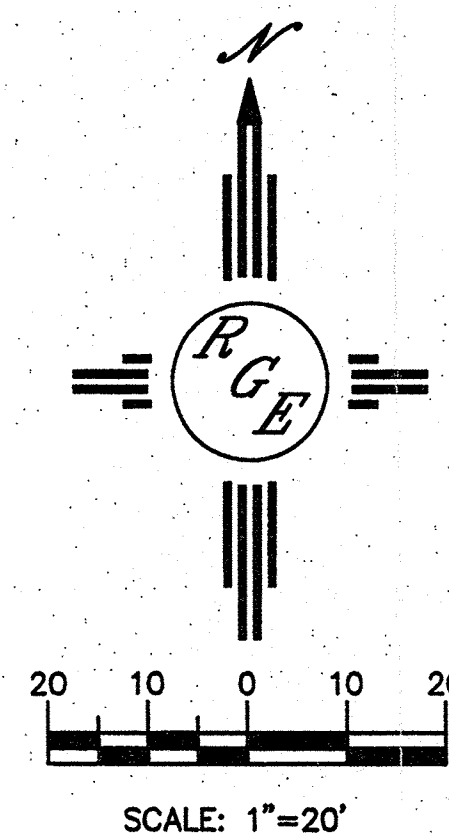
Lot 30, Block 4 North Albuquerque Acres, Tract A, Unit B

## NOTES:

- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.

## LEGEND

|  |                              |
|--|------------------------------|
|  | EXISTING STORM SEWER MANHOLE |
|  | EXISTING STORM SEWER INLET   |
|  | EXISTING STORM SEWER LINE    |
|  | PROPOSED SNGL. "A" INLET     |
|  | PROPOSED STORM SEWER LINE    |
|  | EXISTING CURB & GUTTER       |
|  | PROPOSED CURB & GUTTER       |
|  | BOUNDARY LINE                |
|  | EXISTING BOUNDARY LINE       |
|  | PROPOSED SIDEWALK            |
|  | PROPOSED PERIMETER WALL      |
|  | PROPOSED RETAINING WALL      |
|  | EXISTING CONTOUR             |
|  | EXISTING INDEX CONTOUR       |
|  | FLOW ARROW                   |
|  | EXISTING SPOT ELEVATION      |
|  | PROPOSED SPOT ELEVATION      |
|  | CENTERLINE                   |
|  | RIGHT-OF-WAY                 |



|                            |                                                                                                              |               |
|----------------------------|--------------------------------------------------------------------------------------------------------------|---------------|
| ENGINEER'S SEAL            | HB                                                                                                           | DRAWN BY WCVJ |
|                            | <b>GRADING AND DRAINAGE PLAN</b>                                                                             | DATE          |
|                            |                                                                                                              | 5-14-09       |
|                            | <b>Rio Grande Engineering</b><br>1808 CENTRAL AVENUE<br>SUITE 201<br>ALBUQUERQUE, NM 87106<br>(505) 872-0999 | SHEET #       |
|                            |                                                                                                              | 3             |
| DAVID SOULE<br>P.E. #14522 |                                                                                                              | JOB #         |
|                            |                                                                                                              | 2910          |