

# CITY OF ALBUQUERQUE



May 20, 2016

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

**Re: Azar-Menaul Townhomes, Grading and Drainage Plan  
Engineer's Stamp Date 5/17/2015 (H22/D078)**

Dear Mr. Soule,

Based upon the information provided in your submittal received 5-17-15, the grading and Drainage Plan is approved for Building Permit, Grading Permit, and SO-19 Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge for disturbing one acre or more and a Topsoil Disturbance Permit for disturbing  $\frac{3}{4}$  of an acre or more. You are also required to obtain an Erosion Sediment Control Plan approval for this project. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology as well. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3999.

Sincerely,

Shahab Biazar, P.E.  
City Engineer, Planning Dept.  
Development Review Services

C: e-mail



# 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:** DAVID SOULE

COA STAFF: \_\_\_\_\_ ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

**David Soule**

---

**Subject:** FW: Indian Ridge Subd.

*Rudy E. Rael, CE, CFM*

Engineer Associate, Hydrology

Planning Department

600 2nd St. NW Suite 201

Albuquerque NM 87102

Rudy, Please find the responses to your written comments dated 5/12/16. The initial comments area in black and our response as to how we addressed are in blue:

- There are some darkened lines throughout the site, are these all retaining walls?  
**YES, I HAVE ADDED LABELS TO CLARIFY, WE HAVE TOP AND BOTTOMS CALLED OUT**
- Provide a detail for all retaining walls.  
**I HAVE ATTACHED, THESE ARE PART OF SEPARATE PERMIT**
- How will flows leave the back yards? Provide turn blocks 3" above grade.  
**WE HAVE ADDED TO NOTE TO PLAN AND ADDED TO NOTE#3**
- Provide a detail where the block wall and the 8" HDPE intersect each other.  
**I HAVE ADDED NOTE TO PLAN TO CLARIFY THE PIPE RUNS UNDER WALL  
BOTTOM OF WALL=75.00, TOP OF PIPE=74.00**
- Provide elevations around the exterior of the perimeter.  
**I HAVE ADDED**
- Show roof flows.  
**THE ROOFS ARE PITCH SO I HAVE ADDED ROOF DRAIN PATTERN ON SE BUILDING  
AND LABELED AS  
TYPICAL**
- Provide a note requiring a separate permit for all walls is required.  
**I HAVE ADDED AS NOTE#4**
- Show the extension of the sidewalk culvert 2 feet passed the property line.  
**I HAVE CORRECTED THE DRAWING TO BE GRAPHICALLY CORRECT**
- The NW corner of the sites spot elevation is higher than the invert out, please correct.  
**WE HAVE CORRECTED THIS TYPO.**

David Soule

Rio Grande Engineering

PO Box 93924

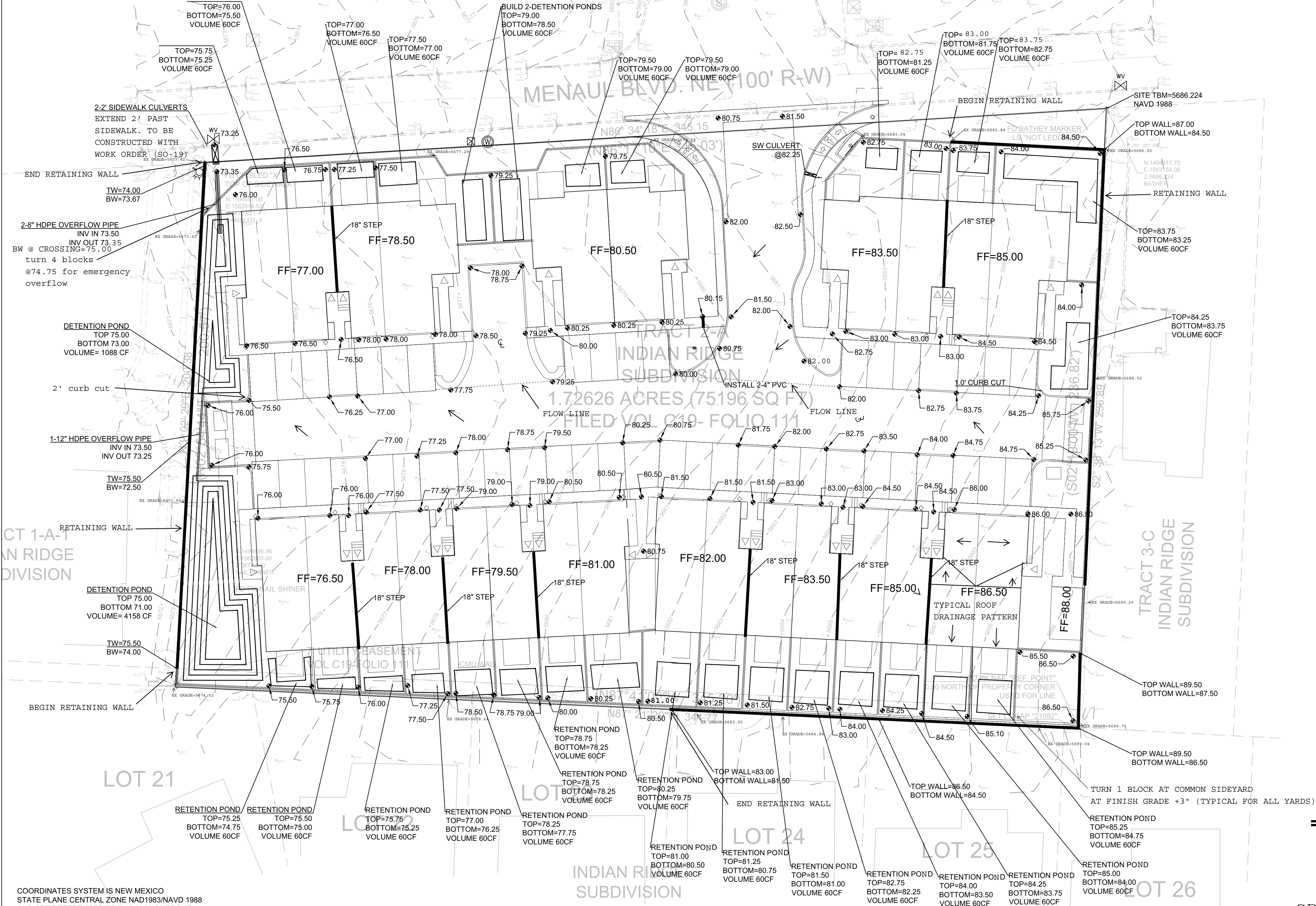
Albuquerque, NM 87199



PRIVATE DRAINAGE IMPROVEMNET IN PUBLIC ROW  
NOTICE TO CONTRACTORS

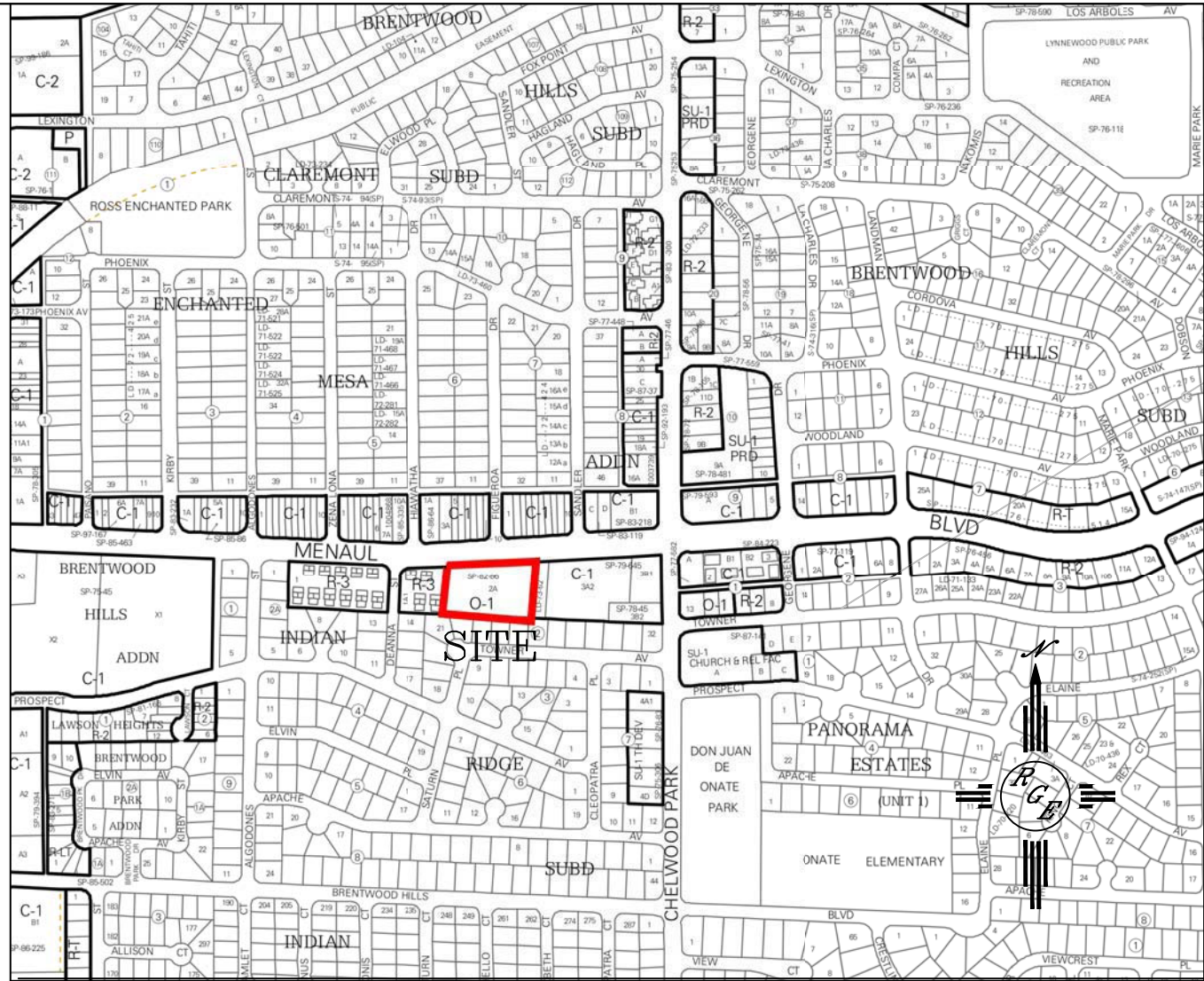
- Notice to Contractor  
(Special Order 19 -- "SO-19")
1. An excavation permit will be required before beginning any work within City Right-Of-Way.
  2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
  3. Two working days prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
  4. 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.
  5. Backfill compaction shall be according to traffic/street use.
  6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
  7. Work on arterial streets shall be performed on a 24-hour basis.
  8. Prior to pouring concrete, contractor shall notify the storm drain inspector, 857-8074, to inspect reinforcement.

APPROVAL	NAME	DATE
INSPECTOR		

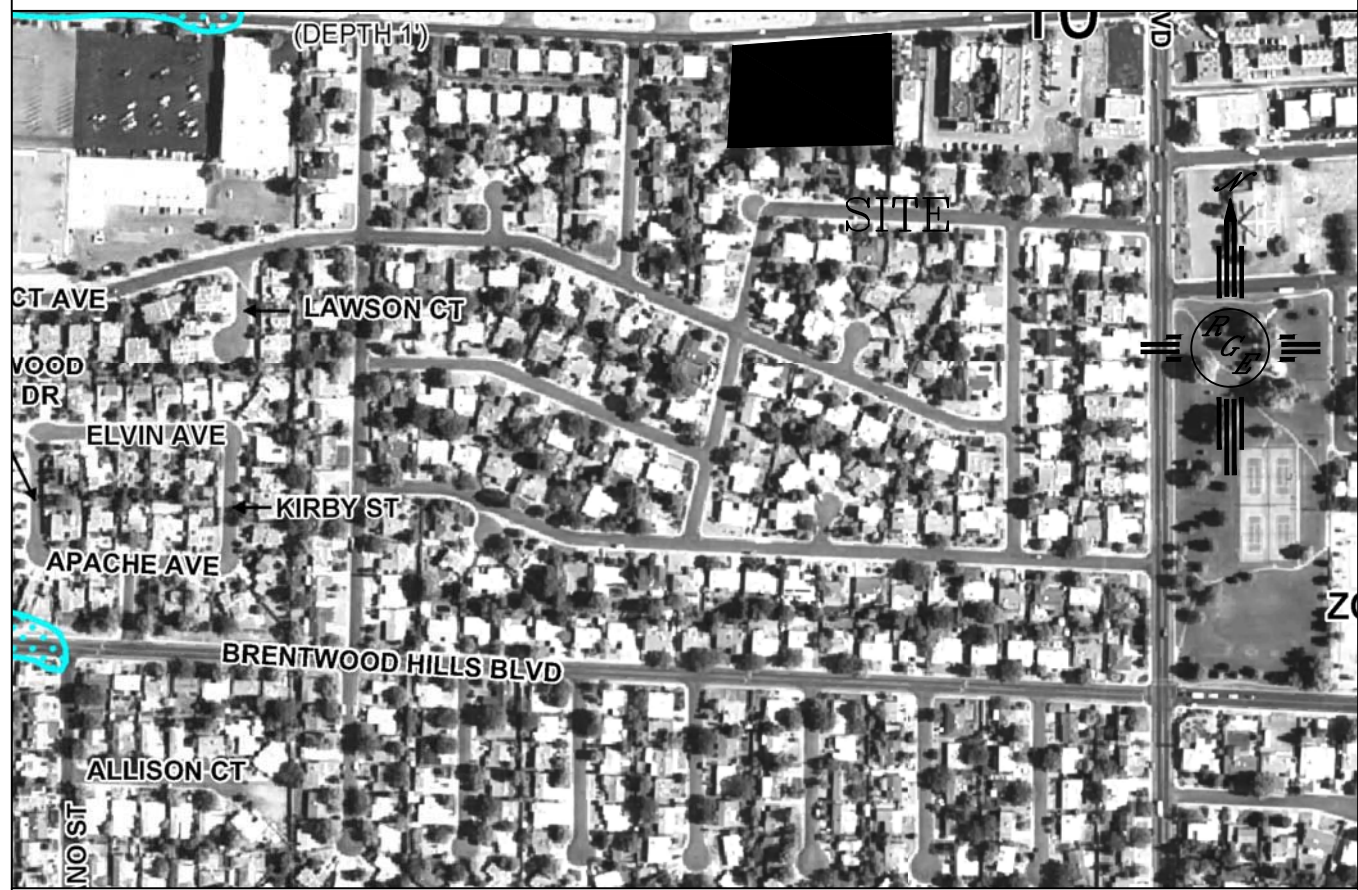


EROSION CONTROL NOTES:

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 (CITY) ACCEPTANCE OF ANY PROJECT.



VICINITY MAP:



FIRM MAP:

FM35001C0375H

LEGAL DESCRIPTION:

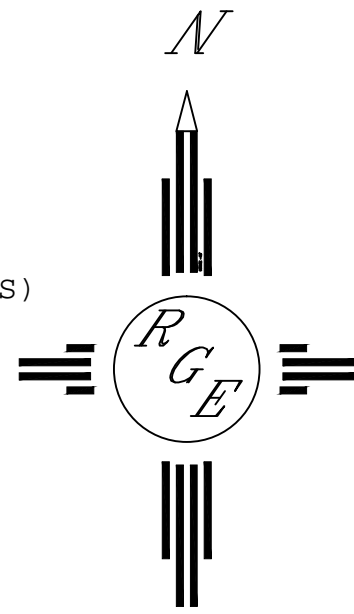
TRACT 2-A INDIAN RIDGE SUBDIVISION

NOTES:

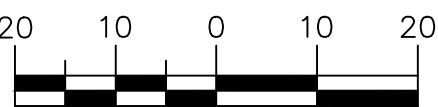
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLAN WAS OBTAINED BY CONSTRUCTION SURVEY TECHNOLOGIES, DAVID P ACOSTA PLS 21082.
3. ALL REAR YARD SHALL HAVE ONE BLOCK TURNED FOR DRAINAGE. BLOCK OPENING SHALL BE 3" ABOVE DESIGN GRADE.
4. ALL RETAINING WALLS SHALL BE CONSTRUCTED UNDER SEPARATE WALL PERMIT

LEGEND

- - - - -5411- - - - - EXISTING CONTOUR
- - - - -5410- - - - - EXISTING INDEX CONTOUR
- - - - -5411- - - - - PROPOSED CONTOUR
- - - - -5410- - - - - PROPOSED INDEX CONTOUR
- PROPOSED ELEVATION


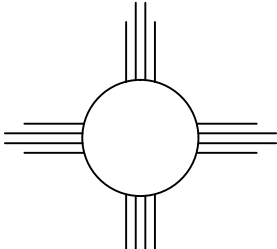


GRAPHIC SCALE



SCALE: 1"=20'

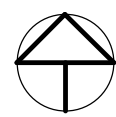
COORDINATES SYSTEM IS NEW MEXICO  
STATE PLANE CENTRAL ZONE NAD1983/NAVD 1988  
AND ARE REFERENCED TO THE ALBUQUERQUE  
GEODETIC REFERENCE SYSTEM AS DETERMINED BY  
GPS OBSERVATIONS OBTAINED USING THE  
ALBUQUERQUE REAL TIME GNSS NETWORK (ARTGN).  
DISTANCES ARE GROUND. THESE VALUES WERE  
PROVIDED BY CONSTRUCTION SURVEY TECHNOLOGIES  
NMPLS 21082

ENGINEER'S SEAL    4/21/16 5/17/16  DAVID SOULE P.E. #14522	TRACT 2-A INDIAN RIDGE SUBDIVISION	DRAWN BY JDG
	GRADING AND DRAINAGE PLAN	DATE 11-16-2015
  1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	SHEET # DRB 03	JOB #



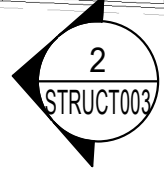
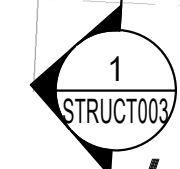


1 SITE WALLS PLAN  
Scale: 1" = 30'-0"

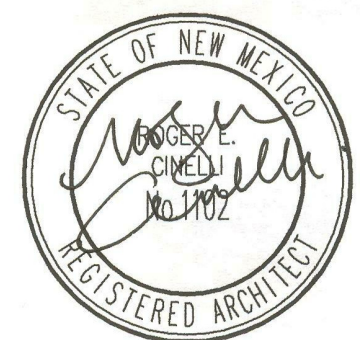


**Cinelli**  
ARCHITECTS

Roger Cinelli & Assoc.  
2418 Manuel Torres Lane N.W.  
Albuquerque, New Mexico 87107  
(505) 243-8211



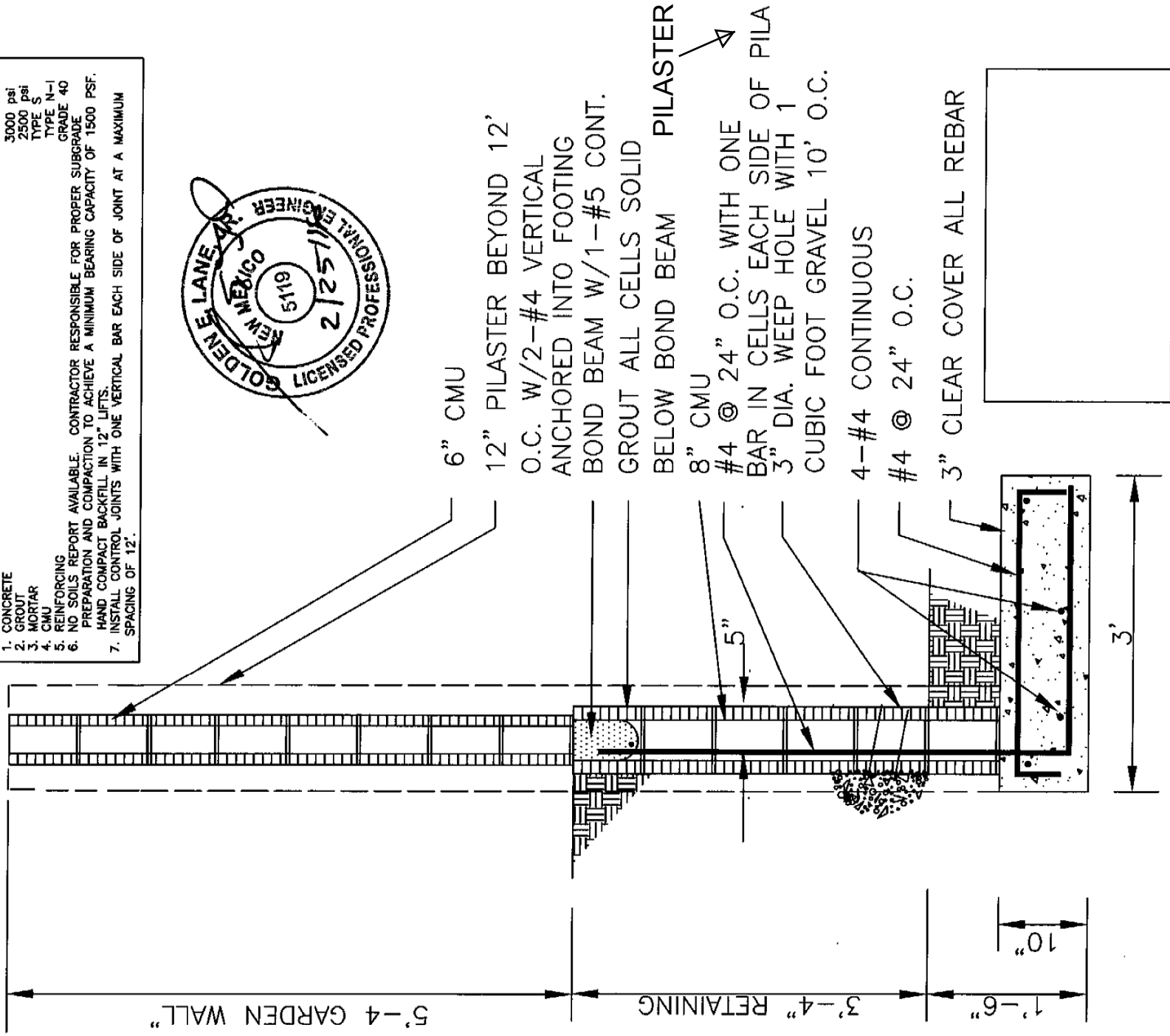
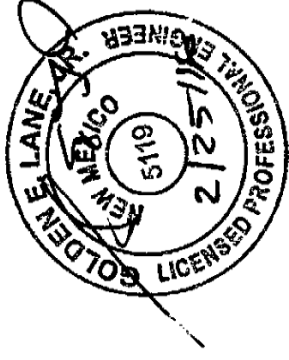
**SHEET STRUCT001**  
INDIAN RIDGE PATIO HOMES  
11,910 MENAUL BLVD. N.E.  
ALBUQUERQUE, NEW MEXICO  
**SITE WALLS PLAN**



2/10/16

## GENERAL NOTES

1. CONCRETE 3000 psi  
2. GROUT 2500 psi  
3. MORTAR TYPE S  
4. CMU TYPE N-I  
5. REINFORCING GRADE 40  
6. NO SOILS REPORT AVAILABLE. CONTRACTOR RESPONSIBLE FOR PROPER SUBGRADE PREPARATION AND COMPACTION TO ACHIEVE A MINIMUM BEARING CAPACITY OF 1500 PSF. HAND COMPACT BACKFILL IN 12" LIFTS.  
7. INSTALL CONTROL JOINTS WITH ONE VERTICAL BAR EACH SIDE OF JOINT AT A MAXIMUM SPACING OF 12'.



MASONRY RETAINING WALL/FENCE

SCALE:  $3/4" = 1'-0"$

# STRUCT002

RETAINING WALL W/  
#4'S @ 32" O.C.  
(GROUT ALL CELLS) -  
PROVIDE ASPHALTIC  
WATERPROOFING

CMU BOND BEAM  
W/ 1 - #4 CONT.

2" DIA. WEEP HOLES  
@ 10'-0" W/ 1 CU. FT. GRAVEL  
(OR ELIMINATE EVERY OTHER  
HEAD JOINT WITH CONTINUOUS  
GRAVEL

3" CLEAR COVER ON ALL  
REBAR



FOR 2' RETAINER  
021516

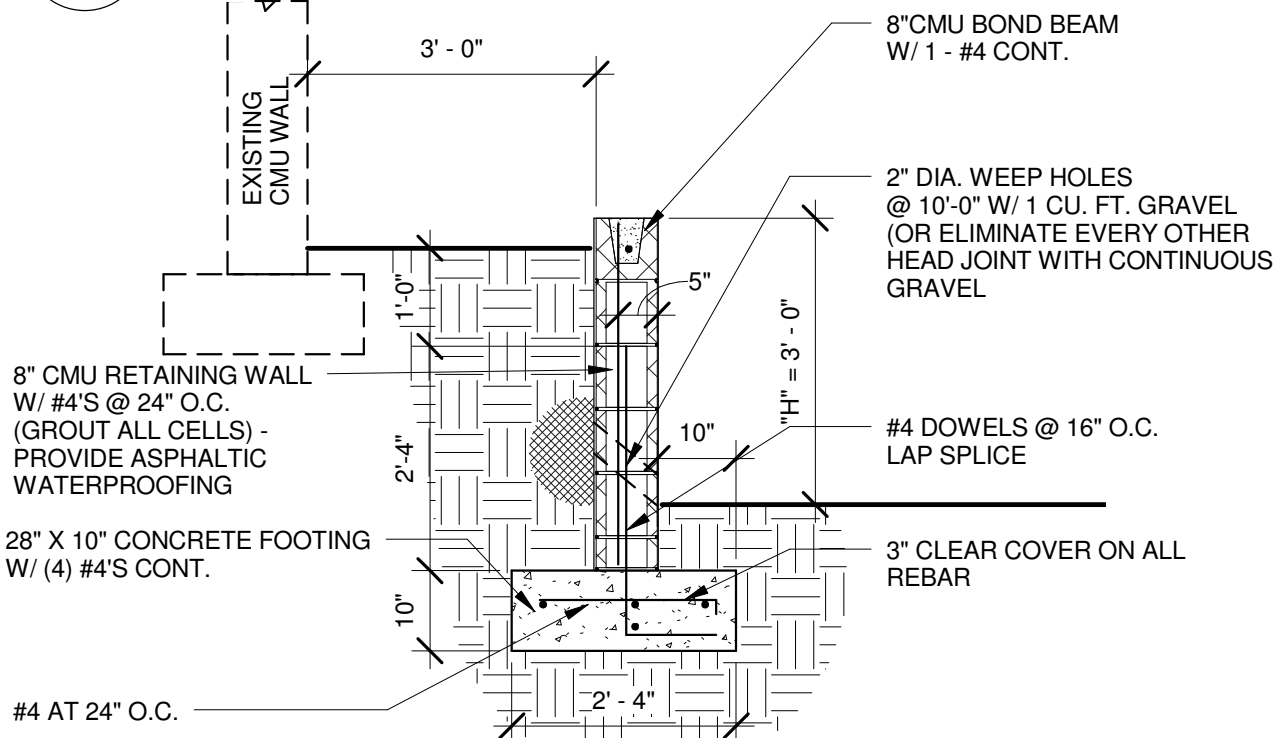
## GENERAL NOTES

1. CONCRETE 3000 PSI
2. GROUT 2500 PSI
3. MORTAR TYPE S
4. CMU TYPE N-1
5. REINFORCING GRADE 40
6. CONTRACTOR RESPONSIBLE FOR PROPER SUBGRADE PREPARATION AND COMPACTION TO ACHIEVE A MINIMUM BEARING CAPACITY OF 1500 PSF. HAND COMPACT IN 8" LIFTS.

1

## 2' TERRACE WALL

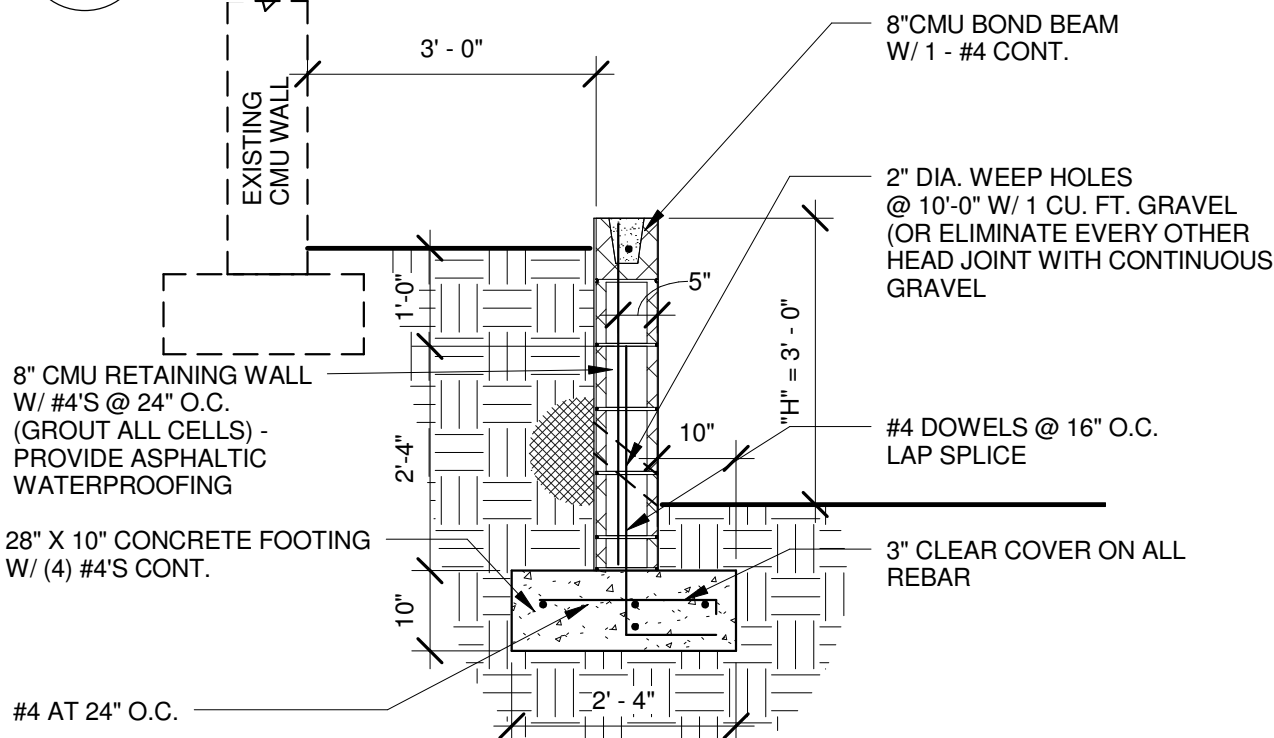
Scale: 1/2" = 1'-0"



2

## 3' TERRACE WALL

Scale: 1/2" = 1'-0"



INDIAN RIDGE PATIO HOMES

11,910 MENAUL BLVD. N.E.  
ALBUQUERQUE, NEW MEXICO  
STRUCT003

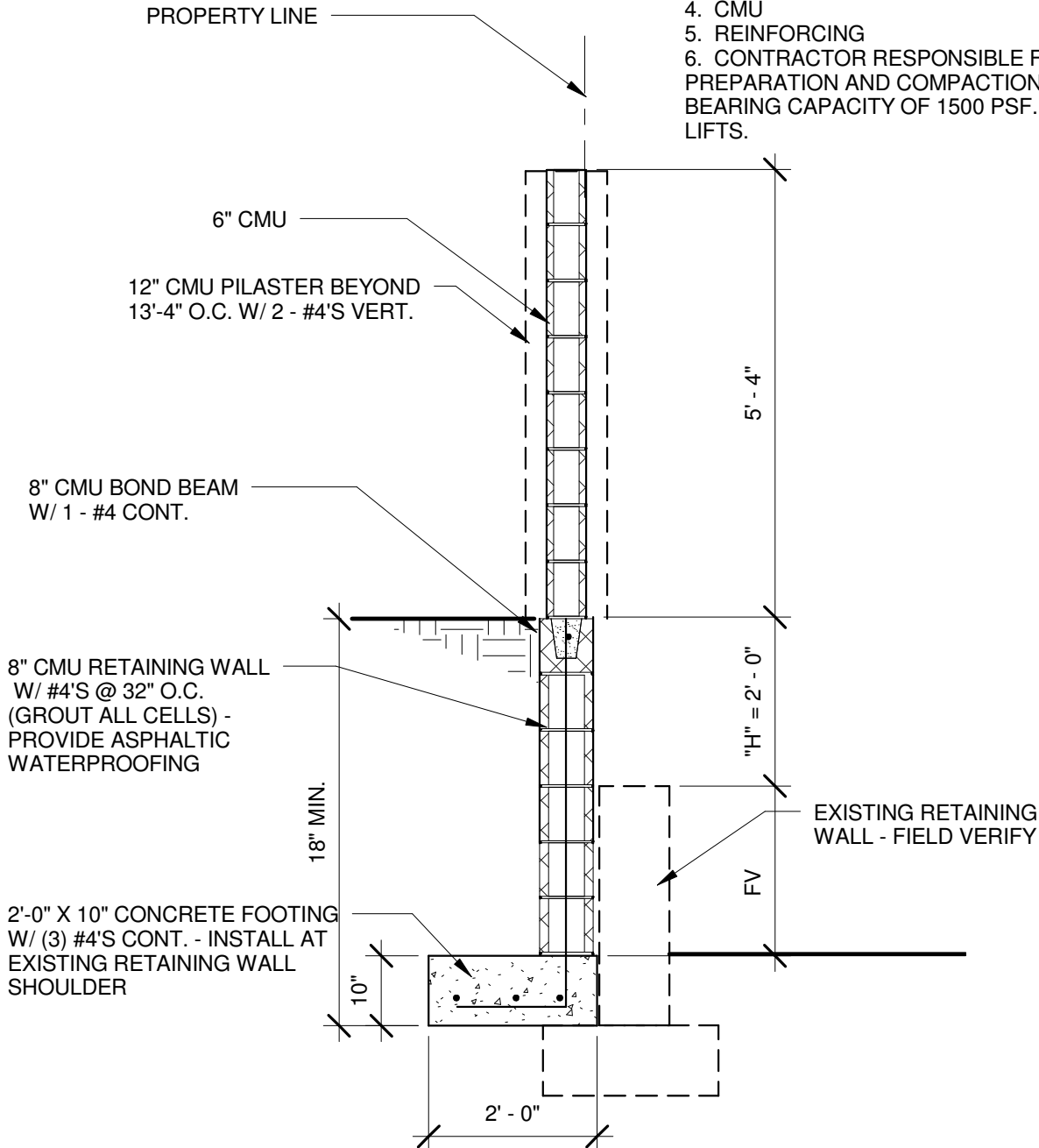
SITE TERRACE WALLS

**Cinelli**  
ARCHITECTS

Roger Cinelli & Assoc.  
2418 Manuel Torres Lane N.W.  
Albuquerque, New Mexico 87107  
(505) 243-8211

# GENERAL NOTES

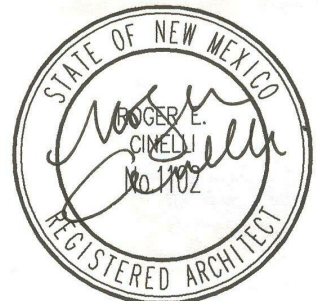
1. CONCRETE 3000 PSI
2. GROUT 2500 PSI
3. MORTAR TYPE S
4. CMU TYPE N-1
5. REINFORCING GRADE 40
6. CONTRACTOR RESPONSIBLE FOR PROPER SUBGRADE PREPARATION AND COMPACTION TO ACHIEVE A MINIMUM BEARING CAPACITY OF 1500 PSF. HAND COMPACT IN 8" LIFTS.



## WEST PROPERTY LINE WALL WITH 2' RETAINAGE

1

Scale: 1/2" = 1'-0"



2/15/16

INDIAN RIDGE PATIO HOMES

11,910 MENAUL BLVD. N.E.  
ALBUQUERQUE, NEW MEXICO  
STRUCT004

SITE RETAINING WALL

**Cinelli**  
ARCHITECTS

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(505) 243-8211

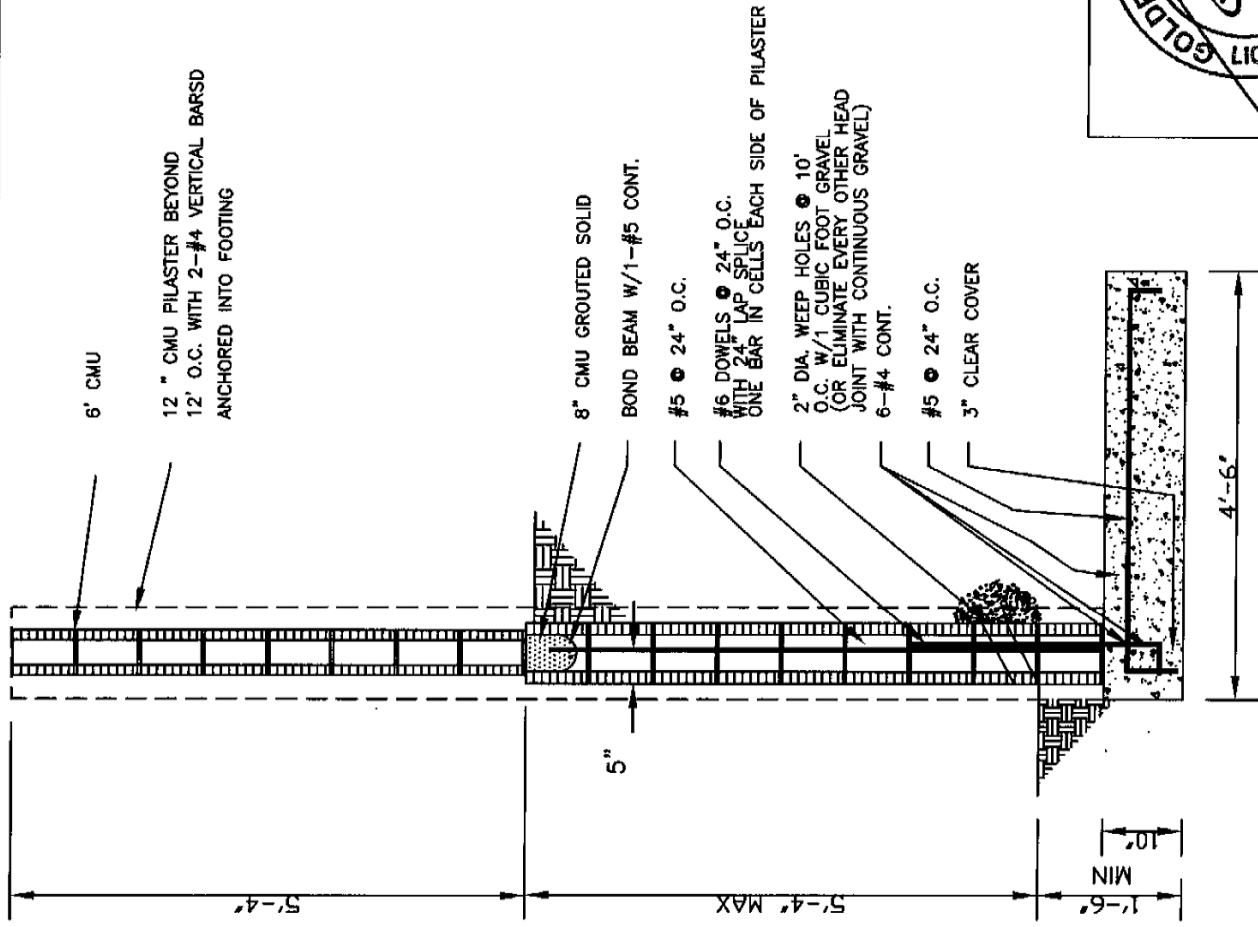


## GENERAL NOTES

1. CONCRETE
2. GROUT
3. MORTAR
4. CMU
5. REINFORCING

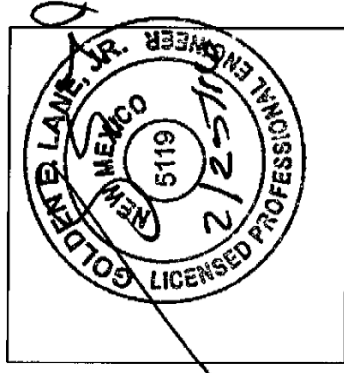
6. NO SOILS REPORT AVAILABLE. CONTRACTOR RESPONSIBLE FOR PROPER SUBGRADE PREPARATION AND COMPACTION TO ACHIEVE A MINIMUM BEARING CAPACITY OF 1500 PSF. HAND COMPACT BACKFILL IN 8" LIFTS.

3000 psi  
2500 psi  
TYPE S  
TYPE N-I  
GRADE 40



5'-4" CMU RETAINING WALL

SCALE: 1/2" = 1'-0"



STRUCT005

# GENERAL NOTES

12" CMU PILASTER BEYOND  
12'-0" O.C. W/ 2 - #4'S VERT.  
ANCHORED INTO FOOTING

6" CMU

6" CMU BOND BEAM  
W/ 1 - #4 CONT.

6" CMU RETAINING WALL  
W/ #4'S @ 32" O.C. WITH ONE  
BAR IN CELLS EACH SIDE OF  
PILASTER  
(GROUT ALL CELLS) -  
PROVIDE ASPHALTIC  
WATERPROOFING

24" X 10" CONCRETE  
FOOTING W/ (3)  
#4'S CONT.

ALTERNATE BENDS

1. CONCRETE 3000 PSI
2. GROUT 2500 PSI
3. MORTAR TYPE S
4. CMU TYPE N-1
5. REINFORCING GRADE 40
6. NO SOILS REPORT AVAILABLE. CONTRACTOR RESPONSIBLE FOR PROPER SUBGRADE PREPARATION AND COMPACTION TO ACHIEVE A MINIMUM BEARING CAPACITY OF 1500 PSF. HAND COMPACT IN 8" LIFTS.
7. INSTALL CONTROL JOINTS WITH ONE VERTICAL BAR EACH SIDE OF JOINT AT AT MAXIMUM SPACING OF 12'

3" DIA. WEEP HOLES  
@ 10'-0" W/ 1 CU. FT. GRAVEL  
(OR ELIMINATE EVERY OTHER  
HEAD JOINT WITH CONTINUOUS  
GRAVEL

3" CLEAR COVER ON ALL  
REBAR

"H" = 1' - 6"

8"

10"

2' - 0"

## COURTYARD WALL WITH 18" RETAINAGE

1

Scale: 1/2" = 1'-0"



2/15/16

INDIAN RIDGE PATIO HOMES

11,910 MENAUL BLVD. N.E.  
ALBUQUERQUE, NEW MEXICO  
STRUCT006

SITE RETAINING WALL

**Cinelli**  
ARCHITECTS

Roger Cinelli & Assoc.  
2418 Manuel Torres Lane N.W.  
Albuquerque, New Mexico 87107  
(505) 243-8211



PROPERTY LINE

## GENERAL NOTES

12" CMU PILASTER BEYOND  
12'-0" O.C. W/ 2 - #4'S VERT.  
ANCHORED INTO FOOTING

6" CMU

1. CONCRETE 3000 PSI
2. GROUT 2500 PSI
3. MORTAR TYPE S
4. CMU TYPE N-1
5. REINFORCING GRADE 40
6. NO SOILS REPORT AVAILABLE. CONTRACTOR RESPONSIBLE FOR PROPER SUBGRADE PREPARATION AND COMPACTION TO ACHIEVE A MINIMUM BEARING CAPACITY OF 1500 PSF. HAND COMPACT IN 8" LIFTS.
7. INSTALL CONTROL JOINTS WITH ONE VERTICAL BAR EACH SIDE OF JOINT AT MAXIMUM SPACING OF 12'

6" CMU BOND BEAM  
W/ 1 - #4 CONT.

6" CMU RETAINING WALL  
W/ #4'S @ 32" O.C. WITH ONE  
BAR IN CELLS EACH SIDE OF  
PILASTER  
(GROUT ALL CELLS) -  
PROVIDE ASPHALTIC  
WATERPROOFING

3" DIA. WEEP HOLES  
@ 10'-0" W/ 1 CU. FT. GRAVEL  
(OR ELIMINATE EVERY OTHER  
HEAD JOINT WITH CONTINUOUS  
GRAVEL

3" CLEAR COVER ON ALL  
REBAR

24" X 10" CONCRETE  
FOOTING  
W/ (3) #4'S CONT.

#4 AT 24" O.C.

"H" = 2'-0"  
1'-6" MIN.

2' - 0"

## PROPERTY LINE WALL WITH 2' RETAINAGE

1

Scale: 1/2" = 1'-0"



2/15/16

INDIAN RIDGE PATIO HOMES

11,910 MENAUL BLVD. N.E.  
ALBUQUERQUE, NEW MEXICO  
STRUCT007

SITE RETAINING WALL

**Cinelli**  
ARCHITECTS

Roger Cinelli & Assoc.  
2418 Manuel Torres Lane N.W.  
Albuquerque, New Mexico 87107  
(505) 243-8211