

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Director



Mayor Timothy M. Keller

April 21, 2022

Sheldon Greer, P.E.  
Respec  
5971 Jefferson St. NE  
Albuquerque, NM 8710

**RE: Volcano Mesa at The Trails  
Grading & Drainage Plans  
Engineer's Stamp Date: 04/01/22  
Hydrology File: C18D088**

Dear Mr. Greer:

Based upon the information provided in your submittal received 04/05/2022, the Grading & Drainage Plans approved for Work Order and Grading Permit. Please place this stamp approved Grading & Drainage Plan to the Work Order set of construction drawings.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, [jhughes@cabq.gov](mailto:jhughes@cabq.gov), 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

Sincerely,

*Renée C. Brissette*

Renée C. Brissette, P.E. CFM  
Senior Engineer, Hydrology  
Planning Department

PO Box 1293

Albuquerque

NM 87103

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



# City of Albuquerque

Planning Department  
Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

**Project Title:** Volcano Mesa at The Trails **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** C09D001H  
**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_  
**Legal Description:** Tract 2, Unit 2, The Trails  
**City Address:** \_\_\_\_\_

**Applicant:** DR Horton **Contact:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Other Contact:** RESPEC **Contact:** Jeremy Shell  
**Address:** 5971 Jefferson Street NE, Suite 101, Albuquerque NM 87109  
**Phone#:** 505.918.1053 **Fax#:** \_\_\_\_\_ **E-mail:** jeremy.shell@respec.com

**TYPE OF DEVELOPMENT:** ☒ (72) PLAT (# of lots) \_\_\_\_\_ RESIDENCE \_\_\_\_\_ DRB SITE \_\_\_\_\_ ADMIN SITE \_\_\_\_\_

IS THIS A RESUBMITTAL? ☒ Yes \_\_\_\_\_ No

**DEPARTMENT** \_\_\_\_\_ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

**TYPE OF SUBMITTAL:**

- ☐ ENGINEER/ARCHITECT CERTIFICATION  
☐ PAD CERTIFICATION  
☐ CONCEPTUAL G & D PLAN  
☒ GRADING PLAN  
☒ DRAINAGE REPORT  
☐ DRAINAGE MASTER PLAN  
☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC  
☐ ELEVATION CERTIFICATE  
☐ CLOMR/LOMR  
☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ TRAFFIC IMPACT STUDY (TIS)  
☐ STREET LIGHT LAYOUT  
☐ 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  
☐ FLOODPLAIN DEVELOPMENT PERMIT  
☐ OTHER (SPECIFY) \_\_\_\_\_

**DATE SUBMITTED:** 4/5/22 **By:** Jeremy Shell

COA STAFF:

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

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



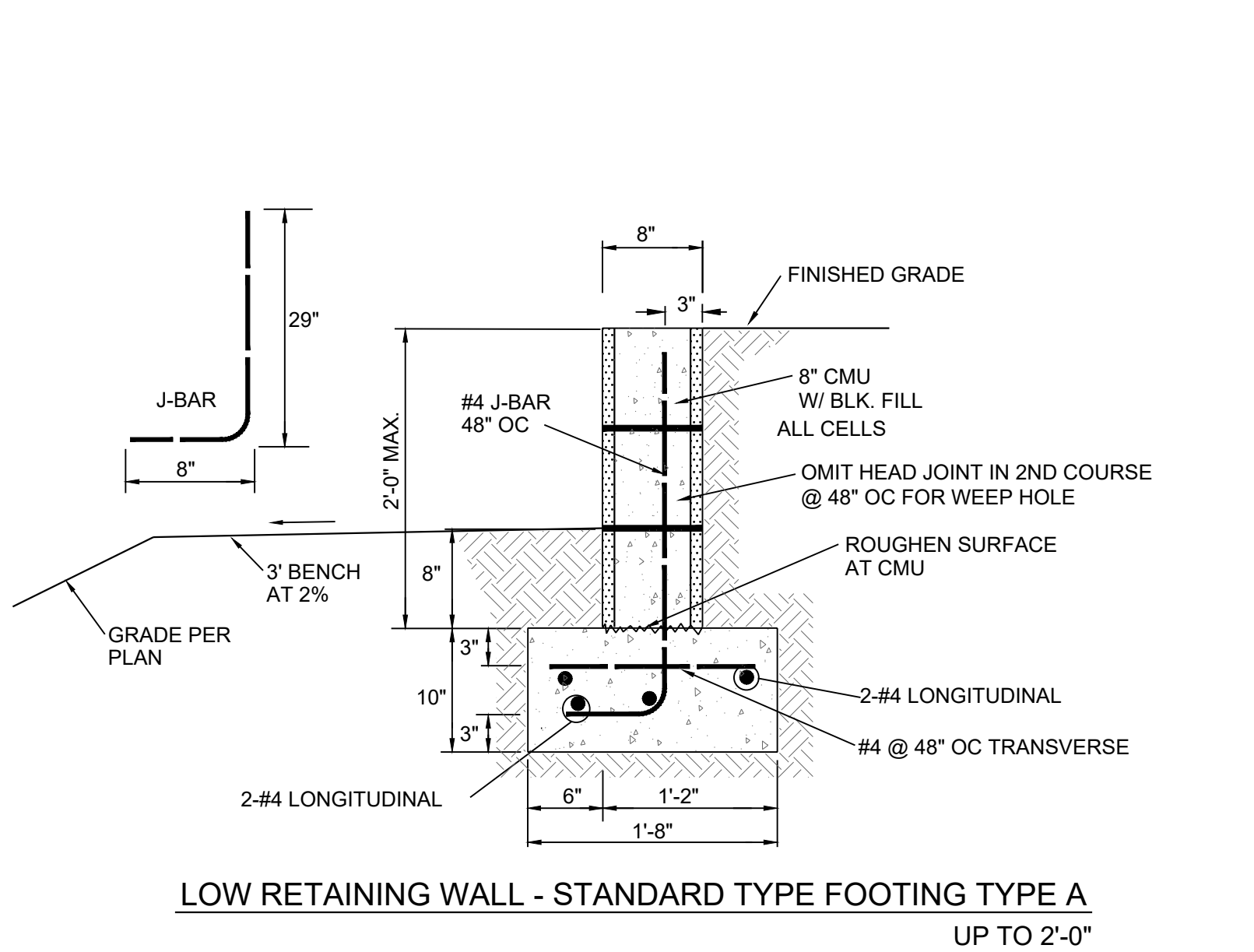
Sheet 6 of 29



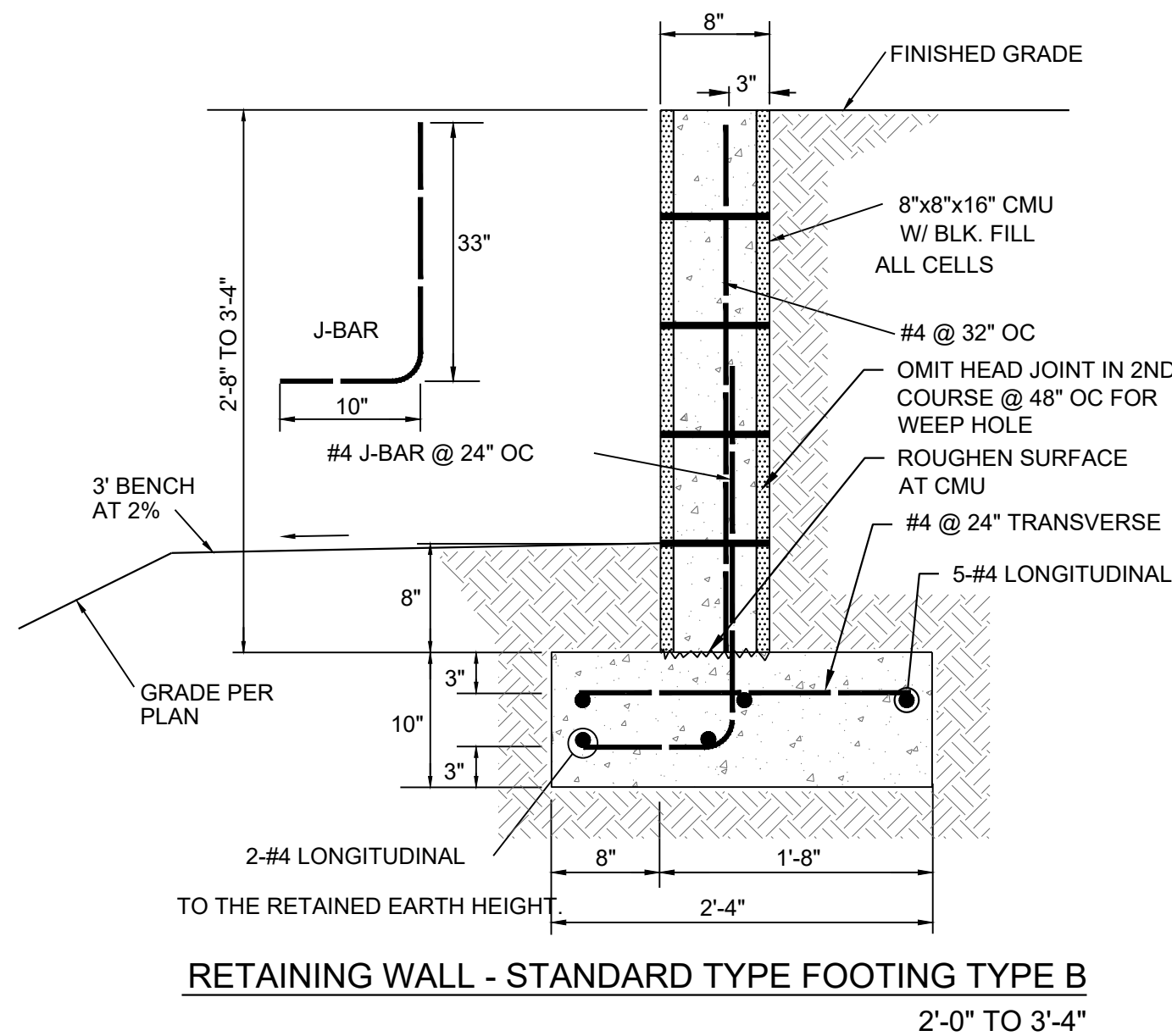




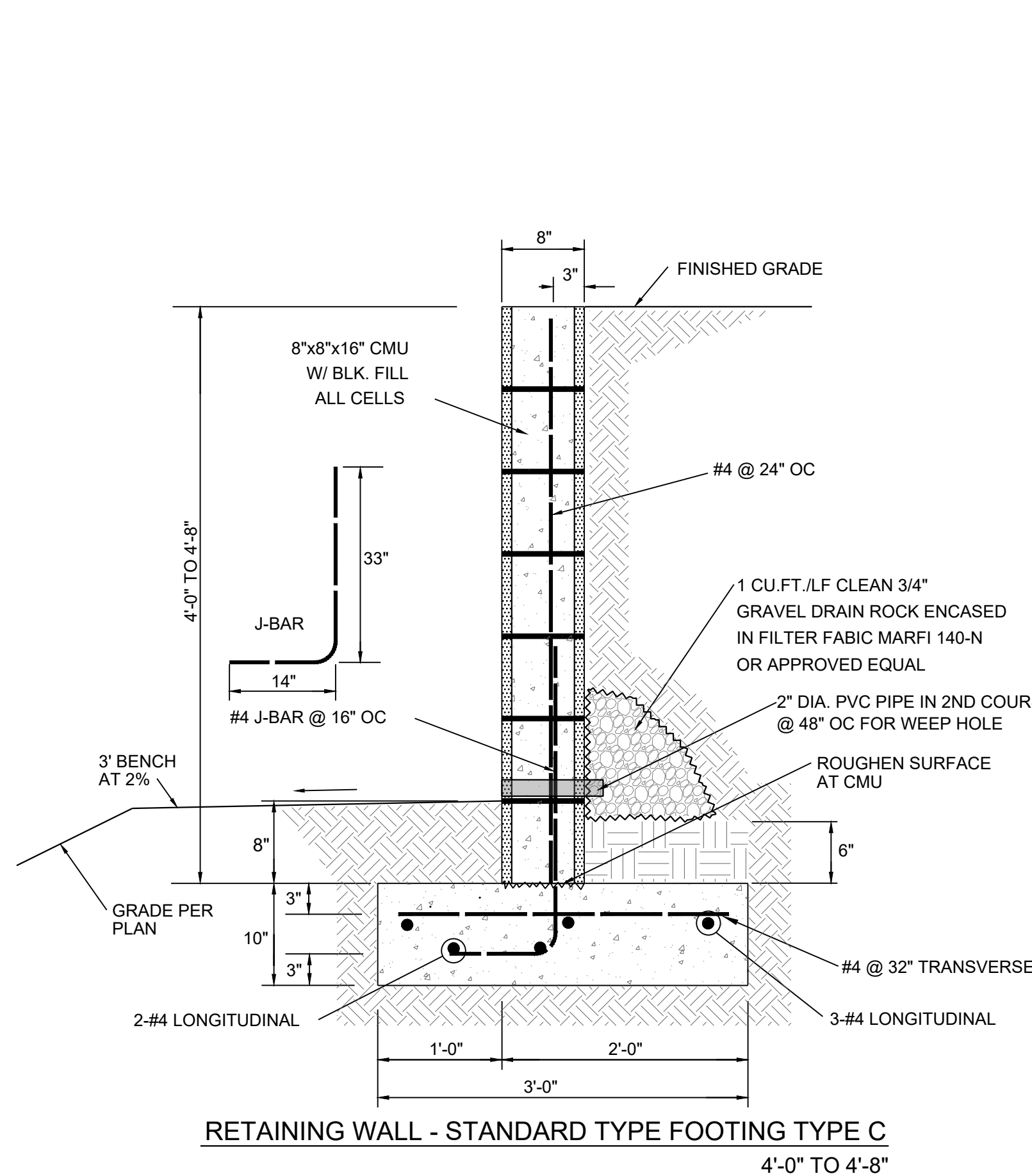
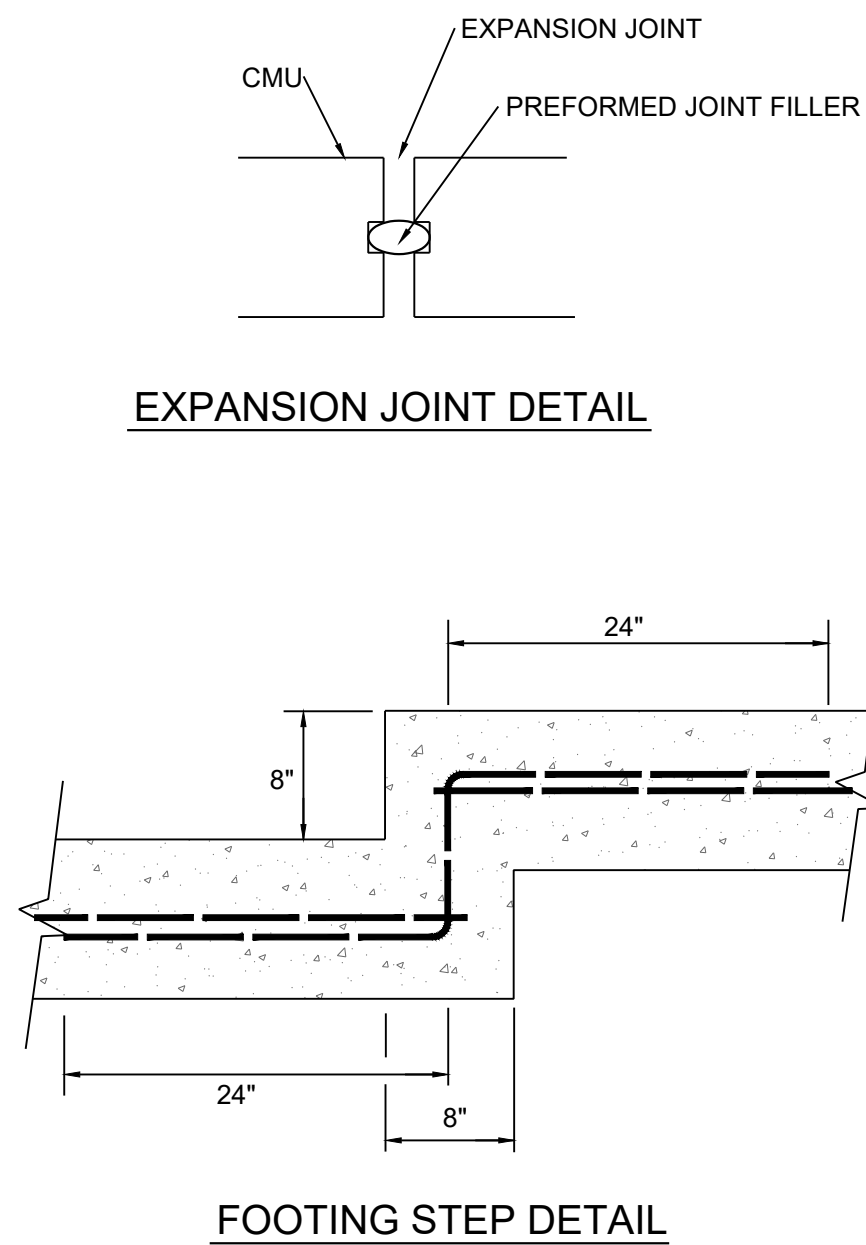
N:\Projects\W0021 DR Horton\W0021.01 Retaining Wall Details.dwg Wed, 4/20/22 - 15:41, LSR, Sid Gariss



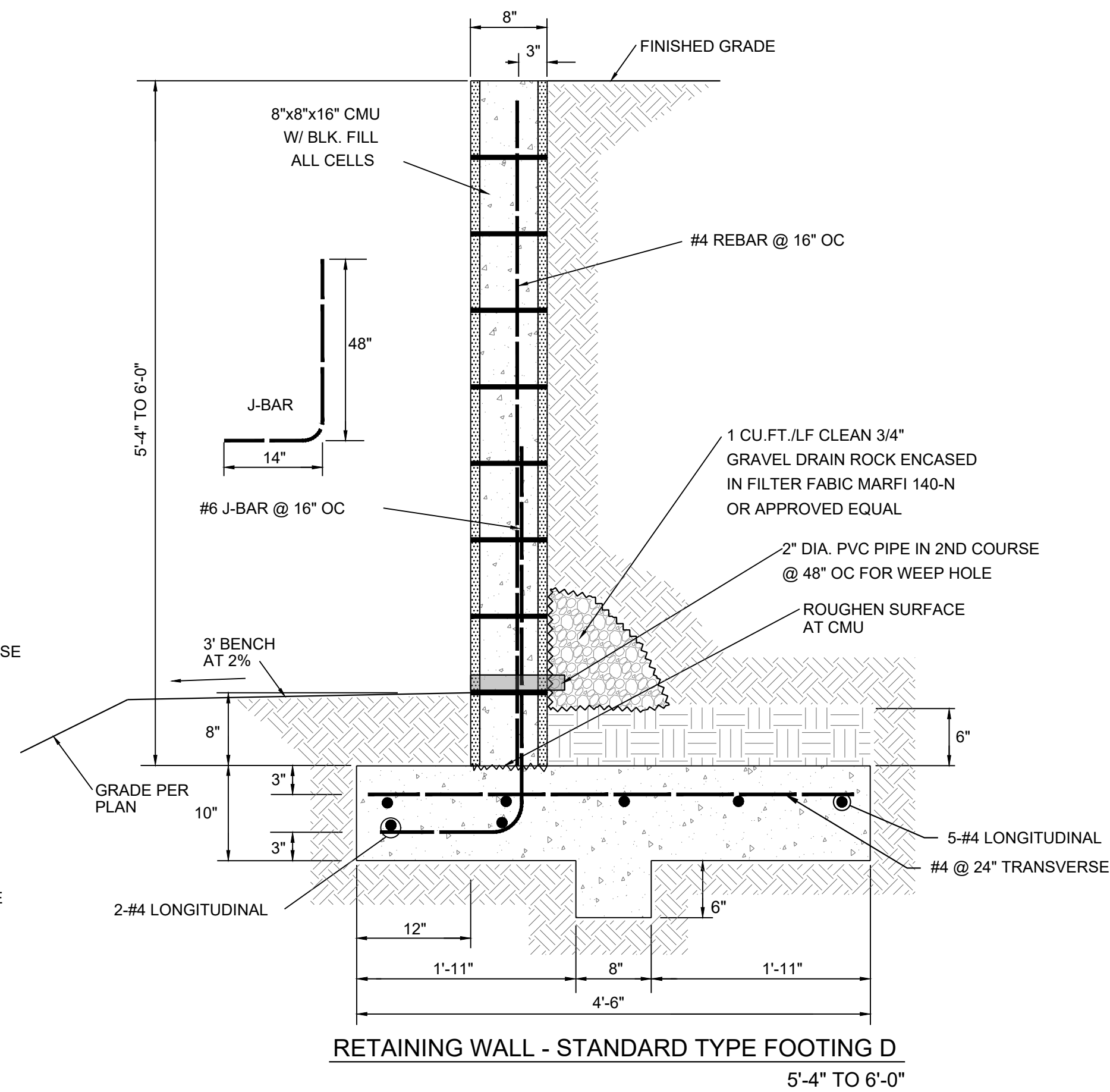
NOTE:  
FINISHED GRADE SHALL BE LEVEL WITH OR BELOW TOP OF RETAINING PORTION OF WALL, AND NO ADDITIONAL SURFACE LOADS SHALL BE PLACED, WITHIN AN AREA FROM FACE OF WALL TO A DISTANCE EQUAL TO THE RETAINED EARTH HEIGHT.



NOTE:  
FINISHED GRADE SHALL BE LEVEL WITH OR BELOW TOP OF RETAINING PORTION OF WALL, AND NO ADDITIONAL SURFACE LOADS SHALL BE PLACED, WITHIN AN AREA FROM FACE OF WALL TO A DISTANCE EQUAL TO THE RETAINED EARTH HEIGHT.



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FINISHED GRADE SHALL BE LEVEL WITH OR BELOW TOP OF RETAINING PORTION OF WALL, AND NO ADDITIONAL SURFACE LOADS SHALL BE PLACED, WITHIN AN AREA FROM FACE OF WALL TO A DISTANCE EQUAL TO THE RETAINED EARTH HEIGHT.

### RETAINING WALL GENERAL NOTES

1. COMPACT SUBGRADE TO 95% MIN. RELATIVE DENSITY (12" MIN. DEPTH) PER ASTM D1557. IF CLAY OR LOOSE SAND IS ENCOUNTERED, CONTACT THE ENGINEER BEFORE PROCEEDING.
2. COMPACT BACKFILL TO 90% MIN. RELATIVE DENSITY PER ASTM D1557. CONTRACTOR IS RESPONSIBLE FOR METHOD OF PLACEMENT AND COMPACTION OF BACKFILL MATERIAL TO ENSURE THAT LOADS SUFFICIENT TO CAUSE DAMAGE TO WALL ARE NOT EXCEEDED.
3. MAINTAIN 2" MINIMUM CLEARANCE BETWEEN ALL REINFORCING BARS AND OUTSIDE SURFACE OF FORMED CONCRETE, 3" BETWEEN BARS AND OUTSIDE SURFACE OF CONCRETE POURED AGAINST EARTH.
4. ALL BLOCKS ARE TO BE GROUTED SOLID WITH CONCRETE BLOCK FILL. GROUT SHALL MEET OR EXCEED 2,000 P.S.I AT 28 DAYS.
5. CONCRETE FOR FOOTINGS SHALL MEET OR EXCEED 3,000 P.S.I AT 28 DAYS, WITH 3/4" MAXIMUM SIZE AGGREGATE, AND A MAXIMUM SLUMP OF 5".
6. MASONRY MORTAR SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM C 270, TYPE M.
7. WALL BLOCKS ARE TO BE STANDARD MASONRY UNITS (8"x8"x16" OR AS OTHERWISE INDICATED) AND SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM C90.
8. ALL REINFORCING SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM A615, GRADE 40.
9. INSTALL 9 GA., GALV. DUR-O-WAL (OR APPROVED EQUAL) EVERY OTHER COURSE (16" OC), OR BOND BEAM WITH 2-#4 REBAR EVERY THIRD COURSE (24" OC, MAX.).
10. REINFORCING STEEL SPLICES SHALL HAVE 24" MIN. LAPS.
11. THE TOP COURSE OF BLOCK SHALL USE 2" SOLID MASONRY UNITS AS CAPS, UNLESS A CMU PARTY OR PERIMETER WALL IS TO BE INSTALLED ON TOP OF A RETAINING WALL.
12. DRAIN BLOCKS FOR PARTY WALLS, AT LOCATIONS SHOWN ON THE PLANS AND AS SPECIFIED BY OWNER, SHALL CONSIST OF STANDARD MASONRY UNITS TURNED FACE DOWN. THEY SHALL BE INSTALLED THROUGH THE PARTY WALL ABOVE THE RETAINING WALL SECTION AFTER THE RETAINING WALL SECTION IS COMPLETE AND BACKFILLED.
13. ALL WALLS FACING PUBLIC ROW MUST BE SPRAYED WITH ANTI-GRAFFITI COATING. USE PROSOCCO DEFACER ERASER OR APPROVED EQUAL. (AT OWNERS DIRECTION).
14. IF WALL IS TO BE CONSTRUCTED WITH PILASTERS (TO BE SPECIFIED BY OWNER), THEN CONSTRUCT PILASTERS AT 16' ON CENTER (MAXIMUM), AND AS APPROPRIATE FOR CORNERS, JUNCTIONS, ANGLE POINTS AND ENDS. PILASTER BLOCKS ARE TO BE SIZED APPROPRIATELY FOR THE INTENDED APPLICATION. THE TOP OF PILASTERS SHALL HAVE 2" SOLID MASONRY UNITS OF APPROPRIATE SIZE UNLESS CMU PARTY WALL IS TO BE INSTALLED ON TOP OF RETAINING WALL.
15. ALL CMU AND MORTAR COLOR SHALL BE AT THE OWNERS DIRECTION.
16. IF NO PILASTERS ARE TO BE CONSTRUCTED THE APPROPRIATE EXPANSION / CONTRACTION JOINTS SHALL BE PROVIDED AT 12' O.C. MAXIMUM SPACING.
17. ALL WALLS SHOWN HERE ON HAVE BEEN DESIGNED TO ACCEPT A 6' (MAX.) CMU PARTY WALL.
18. FOR LOCATIONS TO INCLUDE PARTY WALLS, EXTEND #4 BARS AT 48" O.C. WITH MINIMUM INBEDMENT OF 24" IN RETENTION WALL.
19. WATERPROOFING SHALL BE HYDROCIDIC LIQUID MEMBRANE HLM 5000 OR APPROVED EQUAL, AND SHALL BE APPLIED FROM FINISHED GRADE TO TOP OF FOUNDATION.
20. PARTY WALL DETAILS NOT INCLUDED, TO BE PROVIDED BY OWNER.
21. WALL, INCLUDING FOOTING, SHALL NOT EXTEND INTO ANY ADJACENT PROPERTY OWNED BY OTHERS WITHOUT THE WRITTEN CONSENT OF THE ADJACENT PROPERTY OWNER.

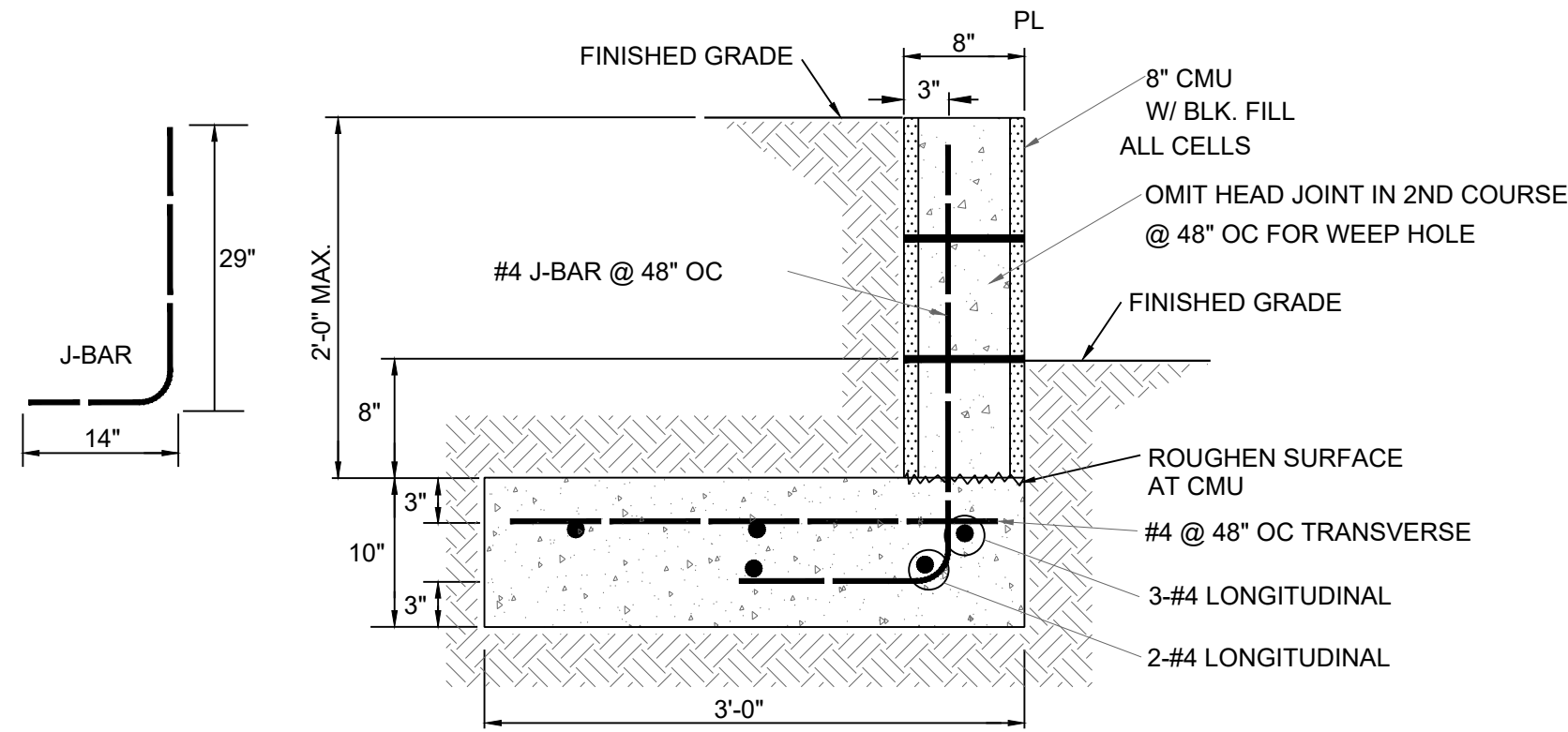
### RETAINING WALLS WITH PILASTERS

1. IF WALL IS TO BE CONSTRUCTED WITH PILASTERS (TO BE SPECIFIED BY OWNER), THEN CONSTRUCT PILASTER AT 16' ON CENTERS (MAXIMUM), AND AS APPROPRIATE FOR CORNERS, JUNCTIONS, ANGLE POINTS AND ENDS. PILASTER BLOCKS ARE TO BE SIZED APPROPRIATELY FOR THE INTENDED APPLICATION.
2. THE TOP OF PILASTERS SHALL HAVE 2" SOLID MASONRY UNITS OF APPROPRIATE SIZE UNLESS CMU PARTY WALL IS TO BE INSTALLED ON TOP OF RETAINING WALL.
3. ALL PILASTER CELLS ARE TO BE GROUTED SOLID WITH CONCRETE.
4. PROVIDE ONE J-BAR OF SPECIFIC SIZE FOR EACH.
5. PROVIDE ADDITIONAL BAR(S) AS SPECIFIED FOR WALL AT EACH PILASTER IF NORMAL OPENING DOES NOT DO SO.
6. PROVIDE 2-#4 BARS AT EACH PILASTER WITH MINIMUM INBEDMENT OF 24" IN RETAINING WALL FOR LOCATIONS TO INCLUDE CMU PARTY WALL.

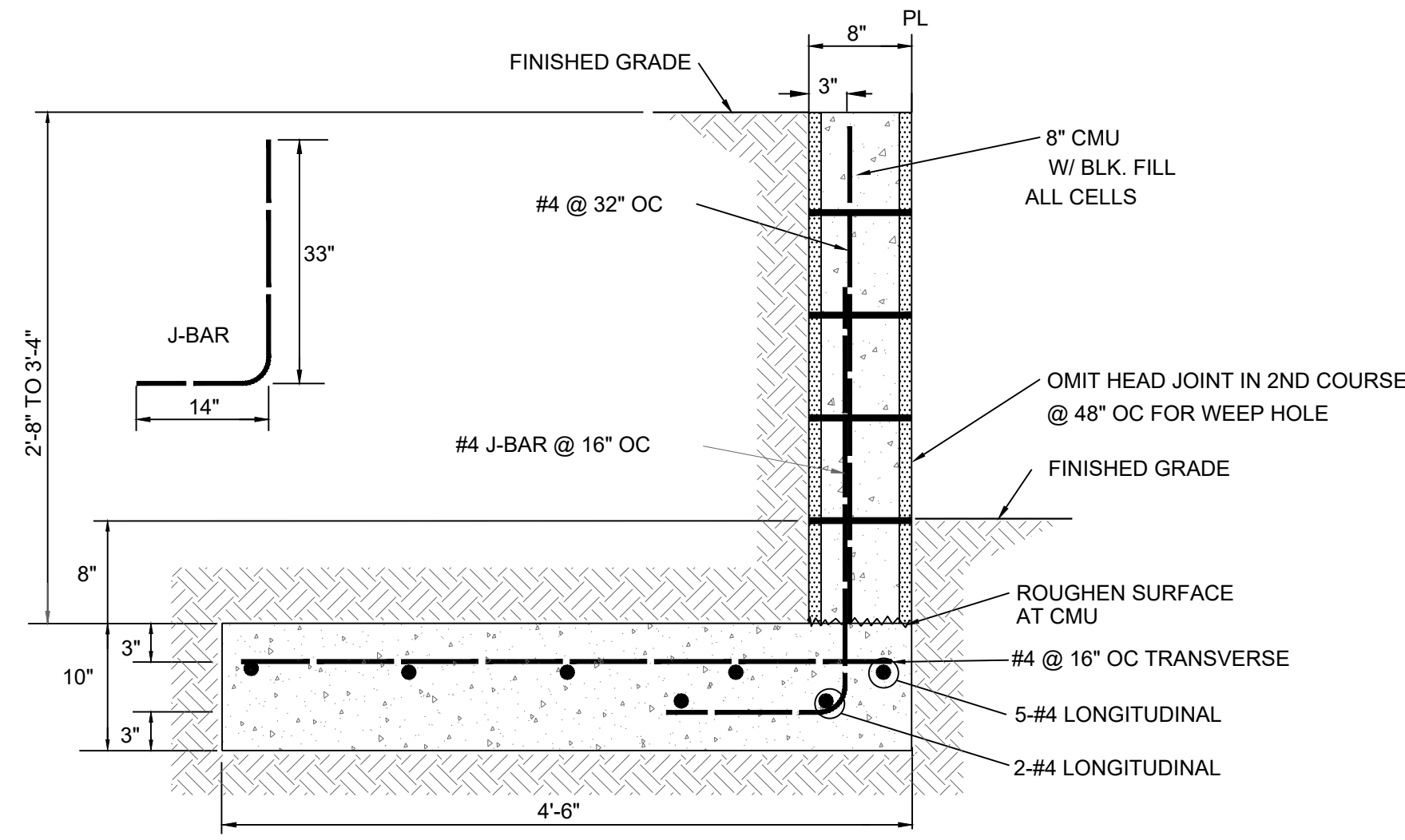
RESPEC COMMUNITY DESIGN SOLUTIONS 7770 JEFFERSON STREET NE, SUITE 200 ALBUQUERQUE, NEW MEXICO 87109 WWW.RESPEC.COM PHONE: (505)253-9718		CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION	
VOLCANO MESA AT THE TRAILS RETAINING WALL DETAILS		DESIGNED BY: IS DRAWN BY: RESPEC CHECKED BY: SEG	
Project No. 738489		Zone Map No. C-9-Z	
Sheet 9 of 29		Last Design Update	



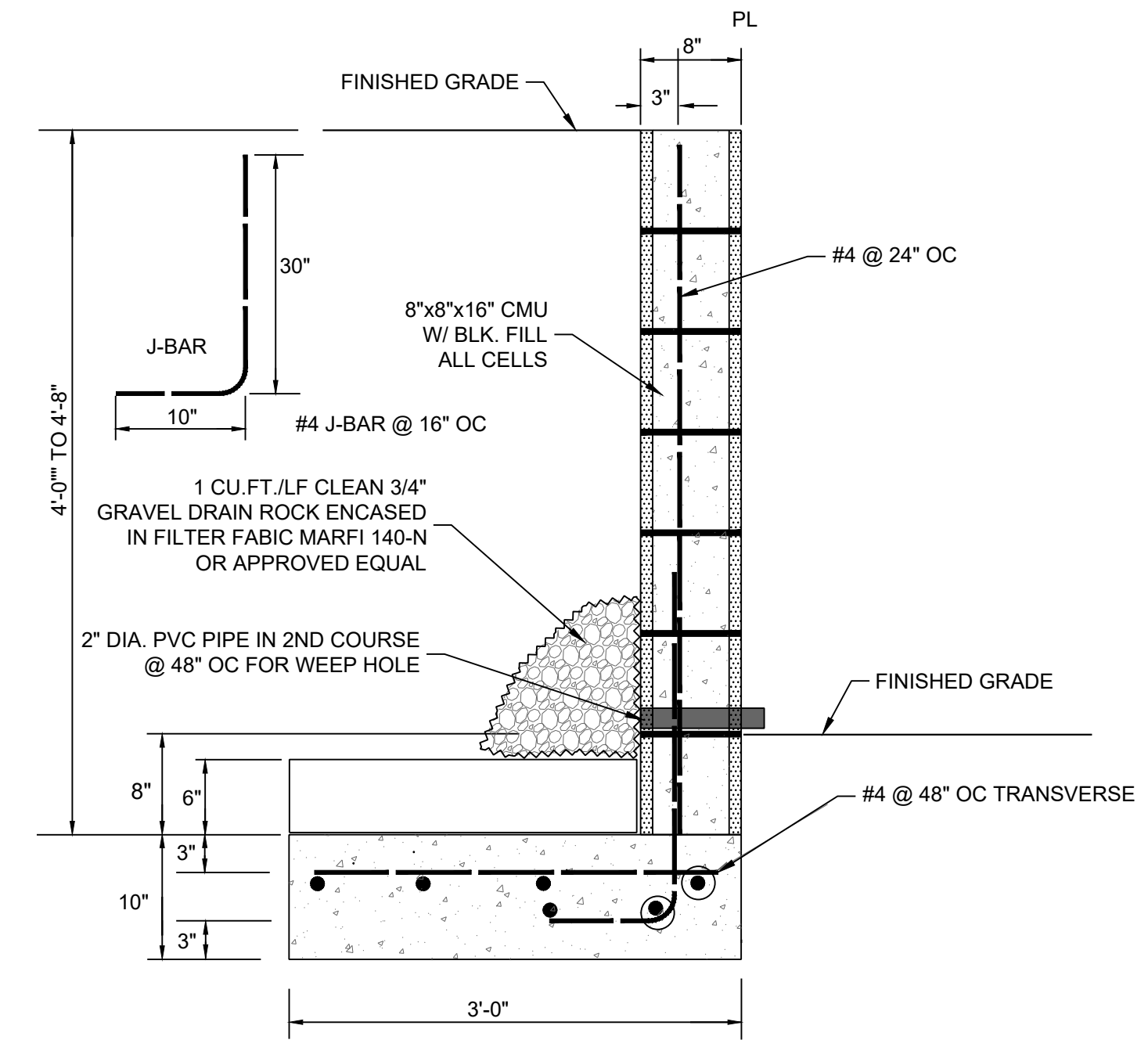
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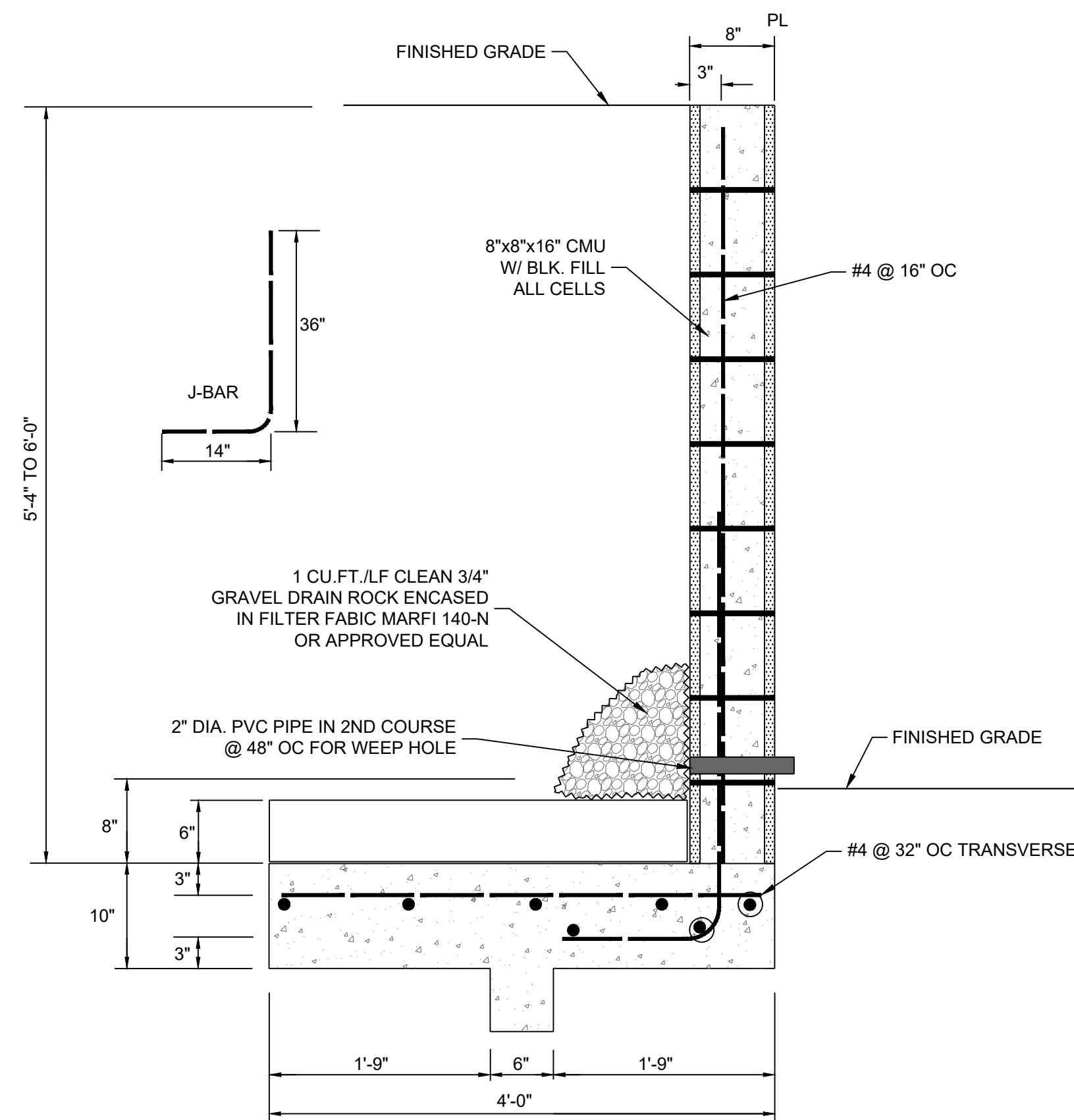
RETAINING WALL - L-TYPE FOOTING A  
UP TO 2'-0"



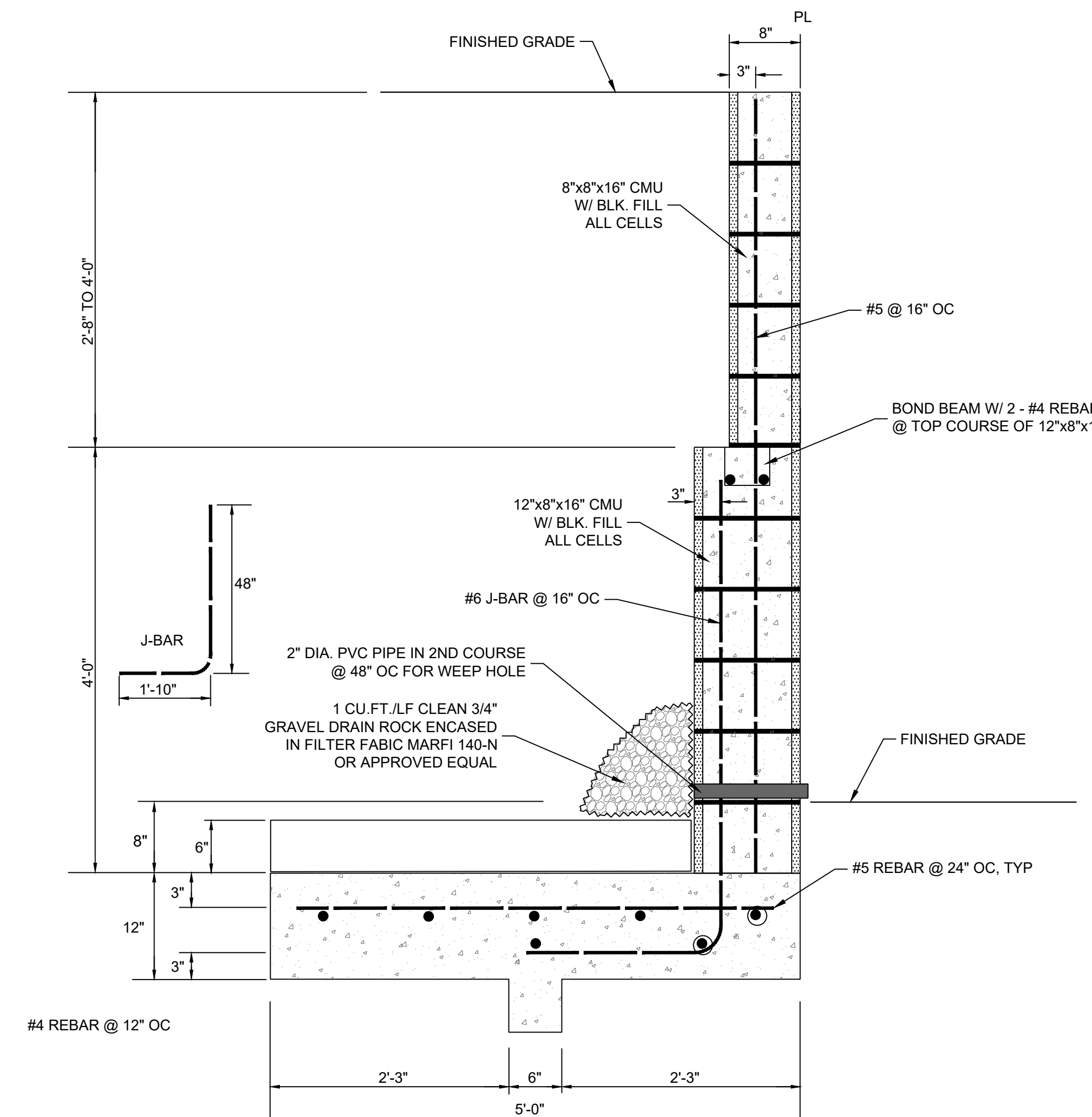
RETAINING WALL - L-TYPE FOOTING B  
2'-8" TO 3'-4"



RETAINING WALL - L-TYPE FOOTING C  
3'-4" TO 4'-8"





RETAINING WALL - L-TYPE FOOTING D  
5'-4" TO 6'-0"



RETAINING WALL - L-TYPE FOOTING E  
6'-8" TO 8'-0"

SEE RETAINING WALL NOTES ON SHEET 9.

 <b>RESPEC</b> COMMUNITY DESIGN SOLUTIONS 7770 JEFFERSON STREET NE, SUITE 200 ALBUQUERQUE, NEW MEXICO 87109 WWW.RESPEC.COM PHONE: (505)253-9718		 <b>CITY OF ALBUQUERQUE</b> DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION VOLCANO MESA AT THE TRAILS RETAINING WALL DETAILS	
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.
Project No.	738489	Zone Map No.	C-9-Z
		Sheet	10 of 29

SURVEY INFORMATION				BENCH MARKS				AS BUILT INFORMATION			
FIELD NOTES		DATE		ALBUQUERQUE CONTROL SURVEY		CONTRACTOR		DATE		DATE	
NO.	BY			MONUMENT "UNION" NEW MEXICO		STAKED BY				INSPECTED BY	
				STATE PLANE COORDINATES (CENTRAL		FIELD				DATE	
				ZONE - NAD 83		REVISIONS				DATE	
				NORTH= 1,523,503.475 FEET		REVISIONS				DATE	
				EAST= 1,493,655.03 FEET		REVISIONS				DATE	
				MAPPING ANGLE= -00°16'58.96"		REVISIONS				DATE	
				GROUND TO GRID FACTOR= 0.9986436		REVISIONS				DATE	
				ELEVATION= 5524.95 FEET		REVISIONS				DATE	