# CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



March 17, 2023

Scott Eddings, P.E. Huitt-Zollers Inc. 6561 Americas Parkway NE Albuquerque, NM 87110

**RE:** MDS - Montage Subdivision Unit 7 on Bobby Foster

Grading and Drainage Submittal for Preliminary Plat and Grading Permit

Grading Plan Engineer's Stamp Date: 3/5/2023 Drainage Report Engineer's Stamp Date: 3/6/2023

Hydrology File: R16D100A

Dear Mr. Eddings,

Based upon the information provided in your submittal received 3/6/2023, the Grading Plans and Drainage Report are preliminary approved for Grading Permit, Work Order and for action by the DHO for Platting action.

PO Box 1293

Albuquerque

Please make the following corrections for WO plans:

- 1. Add existing SD and proposed SD on to the legend.
- 2. Sheet 3, Hopper Alley to Newhall Drive: Add "3-24 inch" to the "Sidewalk Culverts" build note.
- 3. Sheet 4, Rose Alley to Newhall Drive: Add "1-24 inch" to the "Sidewalk Culvert" build note.
- 4. Add SO-19 notes. (Attached)

NM 87103

#### PRIOR TO BUILDING PERMIT:

www.cabq.gov

• Provide more detailed design as needed in order to obtain Hydrology's approval.

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 (Dough Hughes, PE, <a href="mailto:jhughes@cabq.gov">jhughes@cabq.gov</a>, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3695 or tchen@cabq.gov.

Sincerely,

Tiequan Chen P.E.

Principal Engineer, Hydrology

Planning Department, Development Review Services



# City of Albuquerque

### Planning Department Development & Building Services Division

### DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title:	Building I	Permit #:	Hydrology File #:				
DRB#:	EPC#:		Work Order#:				
Legal Description:							
City Address:							
Applicant:			Contact:				
Address:							
		E-mail:					
Owner:			Contact:				
Address:							
			E-mail:				
TYPE OF SUBMITTAL:PLAT	(# OF LOTS)	_ RESIDENCE _	DRB SITE ADMIN SITE				
IS THIS A RESUBMITTAL?:	Yes	No					
DEPARTMENT: TRAFFIC/ TR	ANSPORTATION _	HYDROLO	GY/ DRAINAGE				
Check all that Apply:		TYPE OI	F APPROVAL/ACCEPTANCE SOUGHT:				
TYPE OF SUBMITTAL:		_	LDING PERMIT APPROVAL				
ENGINEER/ARCHITECT CERTI	FICATION	CER	TIFICATE OF OCCUPANCY				
PAD CERTIFICATION		PRE	LIMINARY PLAT APPROVAL				
CONCEPTUAL G & D PLAN		SITI	E PLAN FOR SUB'D APPROVAL				
GRADING PLAN		SITI	E PLAN FOR BLDG. PERMIT APPROVAL				
DRAINAGE MASTER PLAN		FIN	AL PLAT APPROVAL				
DRAINAGE REPORT		SIA/	RELEASE OF FINANCIAL GUARANTEE				
FLOODPLAIN DEVELOPMENT	PERMIT APPLIC	FOU	INDATION PERMIT APPROVAL				
ELEVATION CERTIFICATE		GR A	ADING PERMIT APPROVAL				
CLOMR/LOMR		SO-1	19 APPROVAL				
TRAFFIC CIRCULATION LAYO	, ,	PAV	ING PERMIT APPROVAL				
TRAFFIC IMPACT STUDY (TIS)		GRA	ADING/ PAD CERTIFICATION				
OTHER (SPECIFY)		WOI	RK ORDER APPROVAL				
PRE-DESIGN MEETING?		CLC	OMR/LOMR				
		FLO	ODPLAIN DEVELOPMENT PERMIT				
		OTH	HER (SPECIFY)				
DATE SUBMITTED:							
COA STAFF:		NIC SUBMITTAL RE					

COA STAFF:

FEE PAID:\_\_\_

### **PROPERTY**

THE PROJECT SITE IS WITHIN TRACT A-1-A-5-C MESA DEL SOL INNOVATION PARK. TRACT A-1-A-5-C IS APPROXIMATELY 7.4572 ACRES AND PART OF THE LEVEL B MESA DEL SOL MASTER PLAN.

### FLOOD ZONE

PER THE FEMA MAP NUMBER 35001C0555H DATED AUGUST 16, 2012 SHOWS THE SITE IS NOT LOCATED WITHIN FLOOD HAZARD ZONE X.

#### EXISTING DRAINAGE PLANS

- BOBBY FOSTER ROAD AND UNIVERSITY BOULEVARD IMPROVEMENTS •• DRAINAGE STUDY FOR BOBBY FOSTER ROAD UNIVERSITY BOULEVARD DATED NOVEMBER 2020
- •• DRB PR-2020-004138
- •• CITY PROJECT NUMBER 393581 CONSTRUCTION PLANS APPROVED SEPTEMBER 20, 2021
- BOBBY FOSTER ROAD AND UNIVERSITY BOULEVARD AMENDED DRAINAGE STUDY - MARCH 2023
- CHANGE POND 1 TO RETENTION

#### **EXISTING CONDITIONS**

THE SITE IS UNDISTURBED SURROUNDED ON ALL SIDES BY FULLY IMPROVED ROADS, DRAINAGE AND UTILITIES. THE EXISTING DRAINAGE INFRASTRUCTURE WITHIN THE ADJACENT ROADWAYS (BOBBY FOSTER ROAD, SAGAN LOOP, STIEGLITZ AVENUE AND NEWHALL DRIVE) WAS CONSTRUCTED AS PART OF CPN 393581 AND SIZED TO ACCEPT DEVELOPED FLOWS FROM TRACT A-1-A-5-C.

#### PROPOSED MONTAGE 7 DRAINAGE STUDY

MONTAGE 7 SUBDIVISION AT MESA DEL SOL DRAINAGE SUBMITTED PREPARED BY HUITT-ZOLLARS AND SUBMITTED TO CITY OF ALBUQUERQUE FOR APPROVAL MARCH 5, 2023.

## PROPOSED IMPROVEMENTS

THIS PROJECT DEVELOPS (57) SINGLE FAMILY RESIDENTIAL LOTS, (11) PARCELS, (2) TRACTS AND (4) ALLEY TRACTS.

# PROPOSED DRAINAGE CONDITIONS

BLOCK 1 LOTS 1 THRU 10 1 DISCHARGE TO HOPPER ALLEY. BLOCK 2 LOTS 1 THRU 5 DISCHARGE TO NEWHALL DRIVE. BLOCK 3 LOTS 1 THRU 3 DISCHARGE TO HOPPER ALLEY. BLOCK 3 LOTS 4 THRU 11 DISCHARGE TO AARON ALLEY. BLOCK 3 LOTS 12 THRU 14 DISCHARGE TO ROSE ALLEY. BLOCK 4 LOTS 1 THRU 7 DISCHARGE TO SAGAN LOOP. BLOCK 5 LOTS 1 THRU 3 DISCHARGE TO NEWHAL DRIVE BLOCK 6 LOTS 1 THRU 8 DISCHARGE TO SAGAN LOOP. BLOCK 7 LOTS 1 THRU 10 DISCHARGE TO STIEGLITZ AVENUE. PARCELS A AND B DISCHARGE TO HOPPER ALLEY. PARCEL C AND J DISCHARGE TO AARON ALLEY. PARCELS D AND G DISCHARGE TO WOOD ROAD SE. PARCEL E DISCHARGE TO WOOD ALLEY. PARCELS F AND H DISHCARGE TO AARON ROAD SE. PARCEL K AND L DISCHARGE TO ROSE ALLEY.

HOPPER ALLEY DISCHARGES 7.7 CFS TO NEWHALL DRIVE VIA (3) EA 24-INCH WIDE SIDEWALK CULVERTS.

AARON ALLEY DISCHARGES 2.7 CFS TO NEWHALL DRIVE VIA (3) EA 24-INCH WIDE SIDEWALK CULVERTS.

### STORM WATER QUALITY

STORM WATER QUALITY IS PROVIDED WITHIN POND 1

# BENCHMARK

A STANDARD CITY OF ALBUQUERQUE MONUMNET "5-R15 2006" ALUMINUM DISC. NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE - N.A.D. 1983)

N=1,452,149.458 U.S. SURVEY FEET

E = 1.529.053.738 U.S. SURVEY FEET PUBLISHED ELEVATION = 5306.674 U.S. SURVEY FEET (NAVD 1988) GROUND TO GRID FACTOR = 0.999664300 DELTA ALPHA ANGLE = -0°12'47.60".

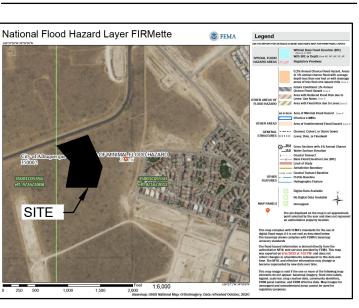
## AREA OF DISTURBANCE IS APPROXIMATELY 7,5 AC

AN EROSION SEDIMENT CONTROL PLAN IS REQUIRED.

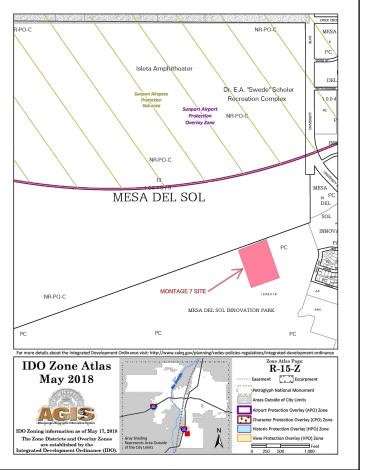
### PLANIMETRIC AND TOPOGRAPHIC SURVEY

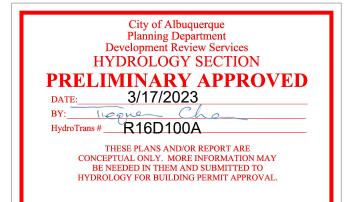
PROVIDED BY HUITT-ZOLLARS, DATED MARCH 2020 AND AUGMENTED WITH DESIGN CONTOURS AND FIELD SURVEYS FROM CPN 393581.

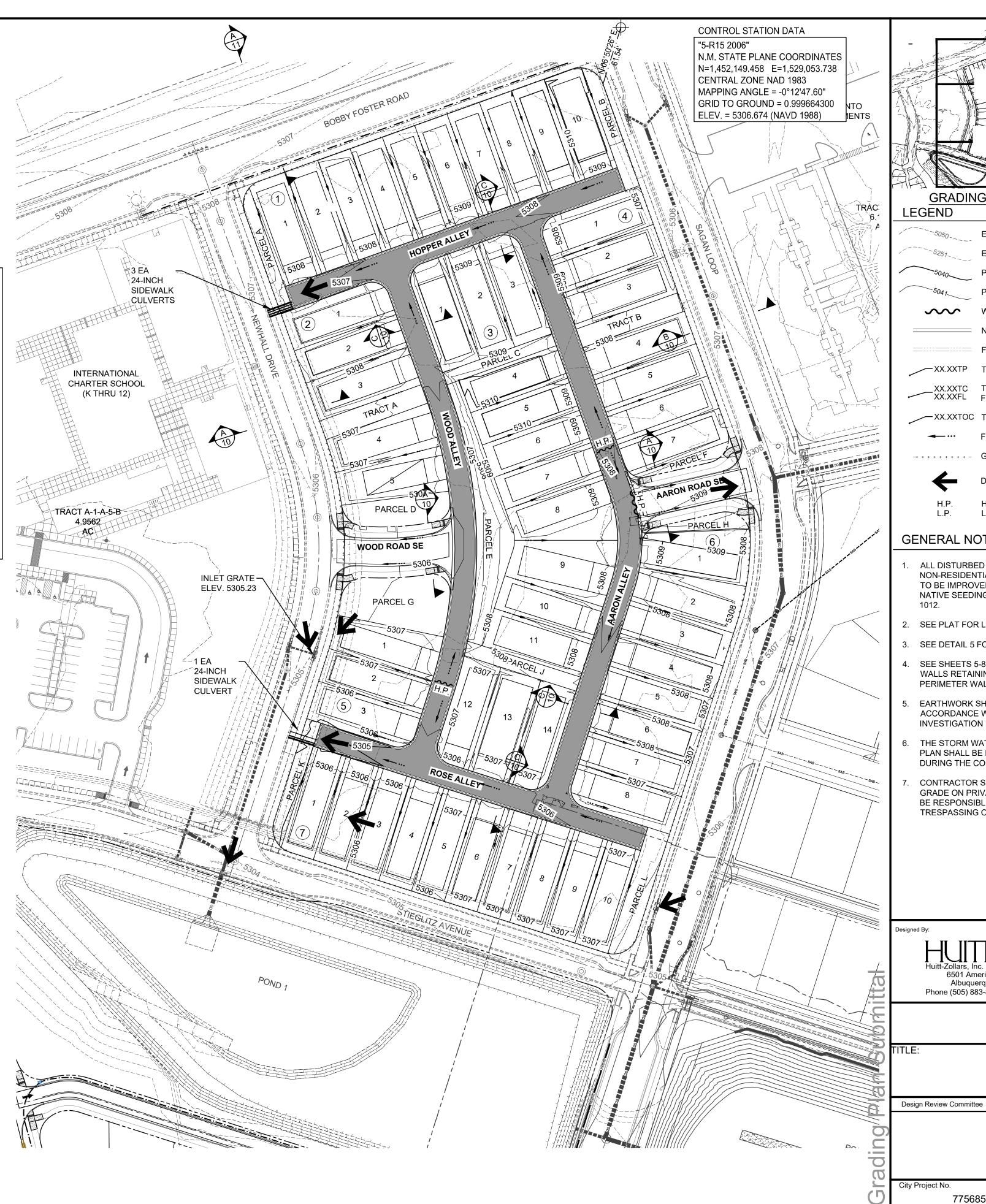
### FIRMETTE

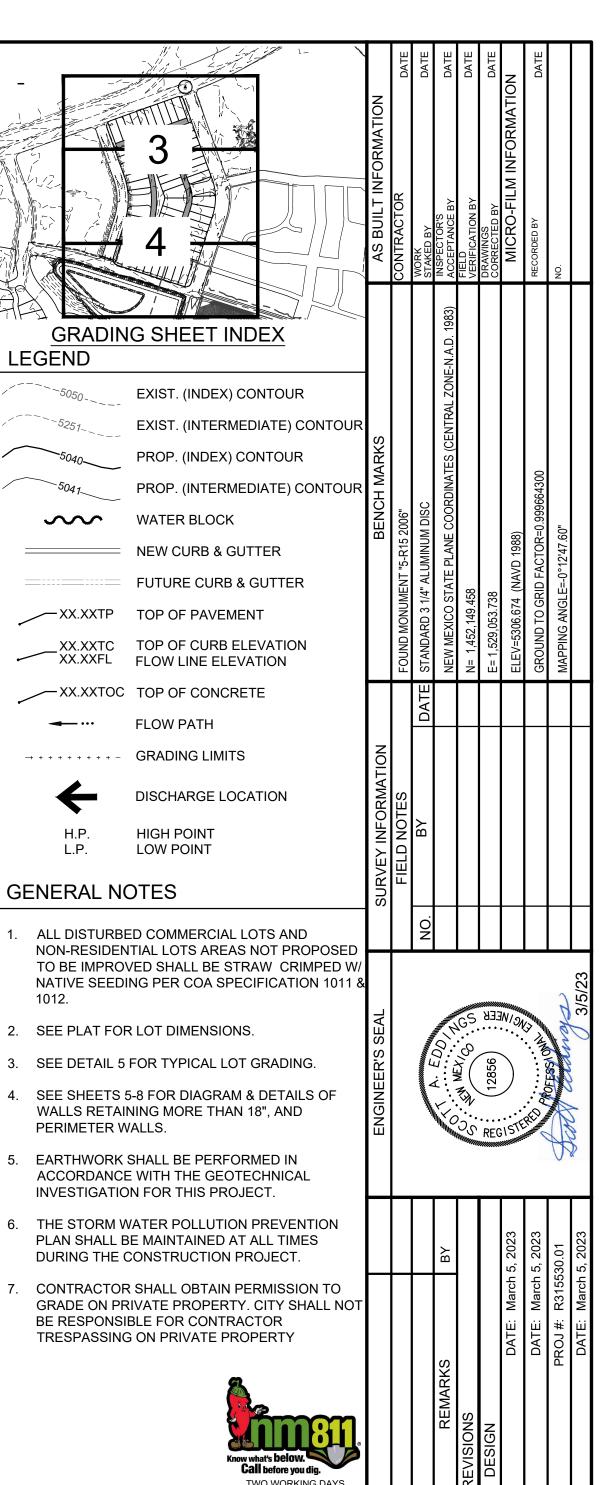


#### **IDO ZONE MAP R-15**









BEFORE YOU DIG CALL

MESA DEL SOL

**MONTAGE 7** 

**GRADING COMPOSITE** 

R-15-Z, S-15-Z

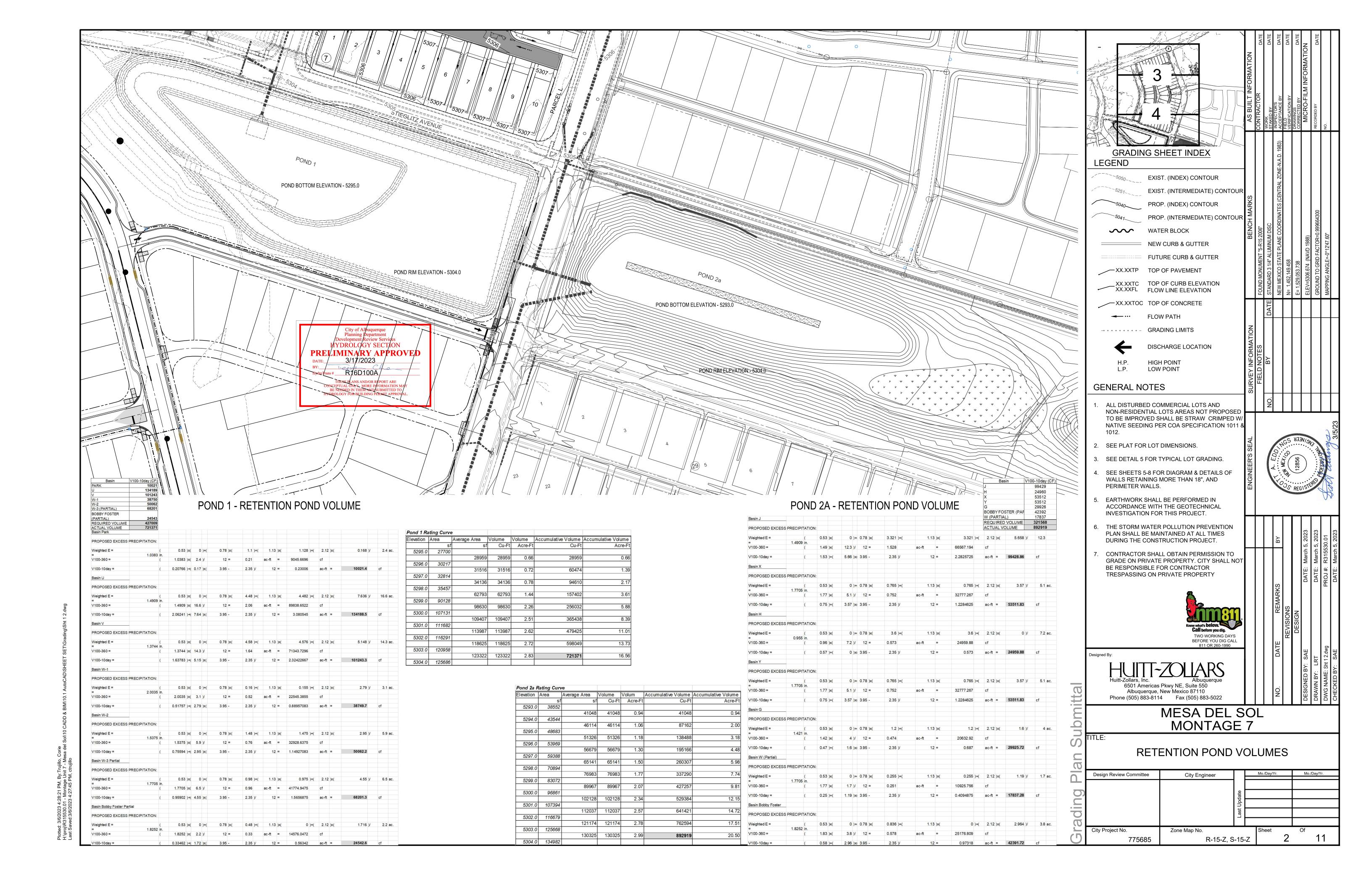
City Engineer

Zone Map No.

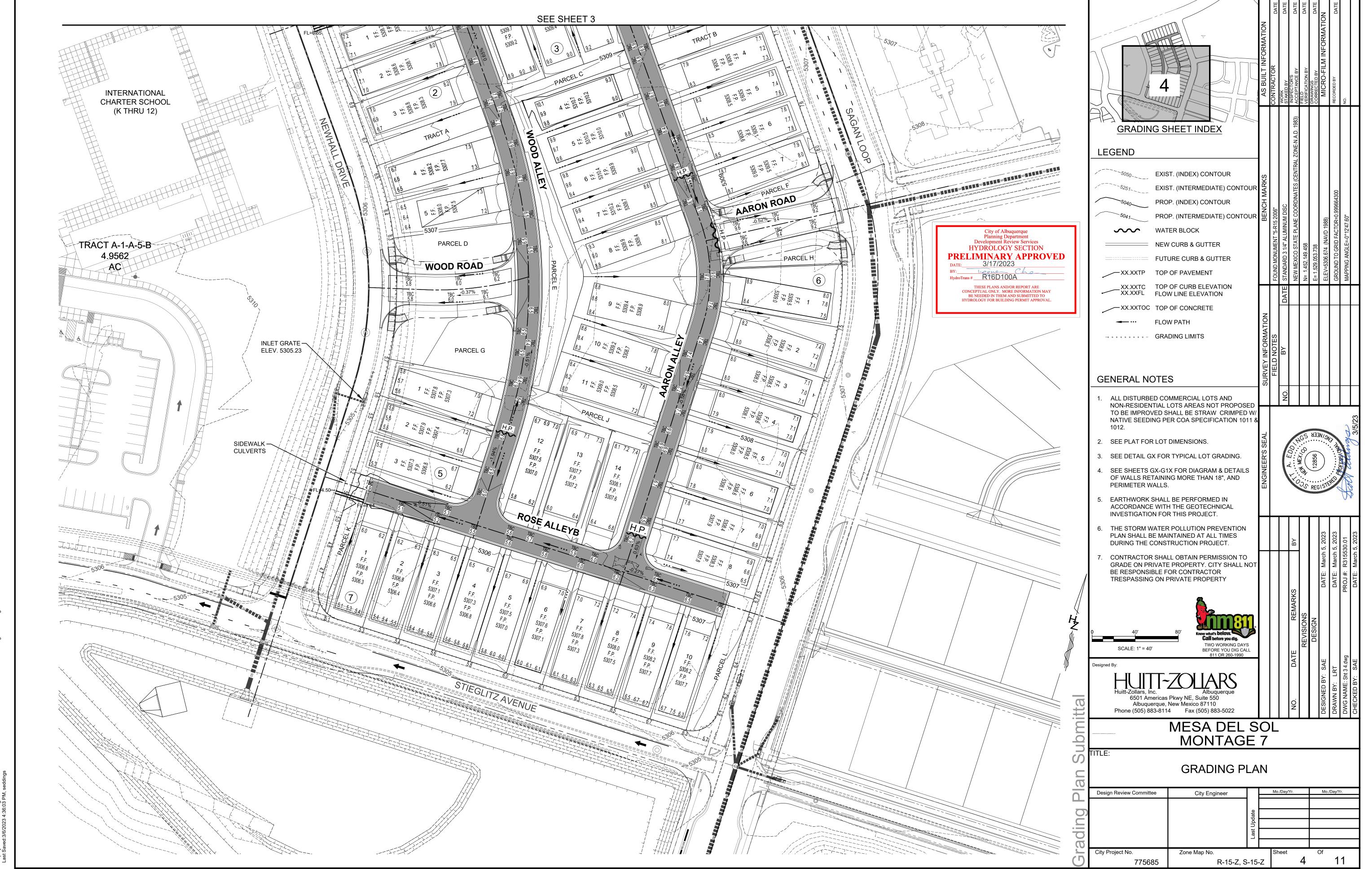
775685

HUITT-ZOLLARS

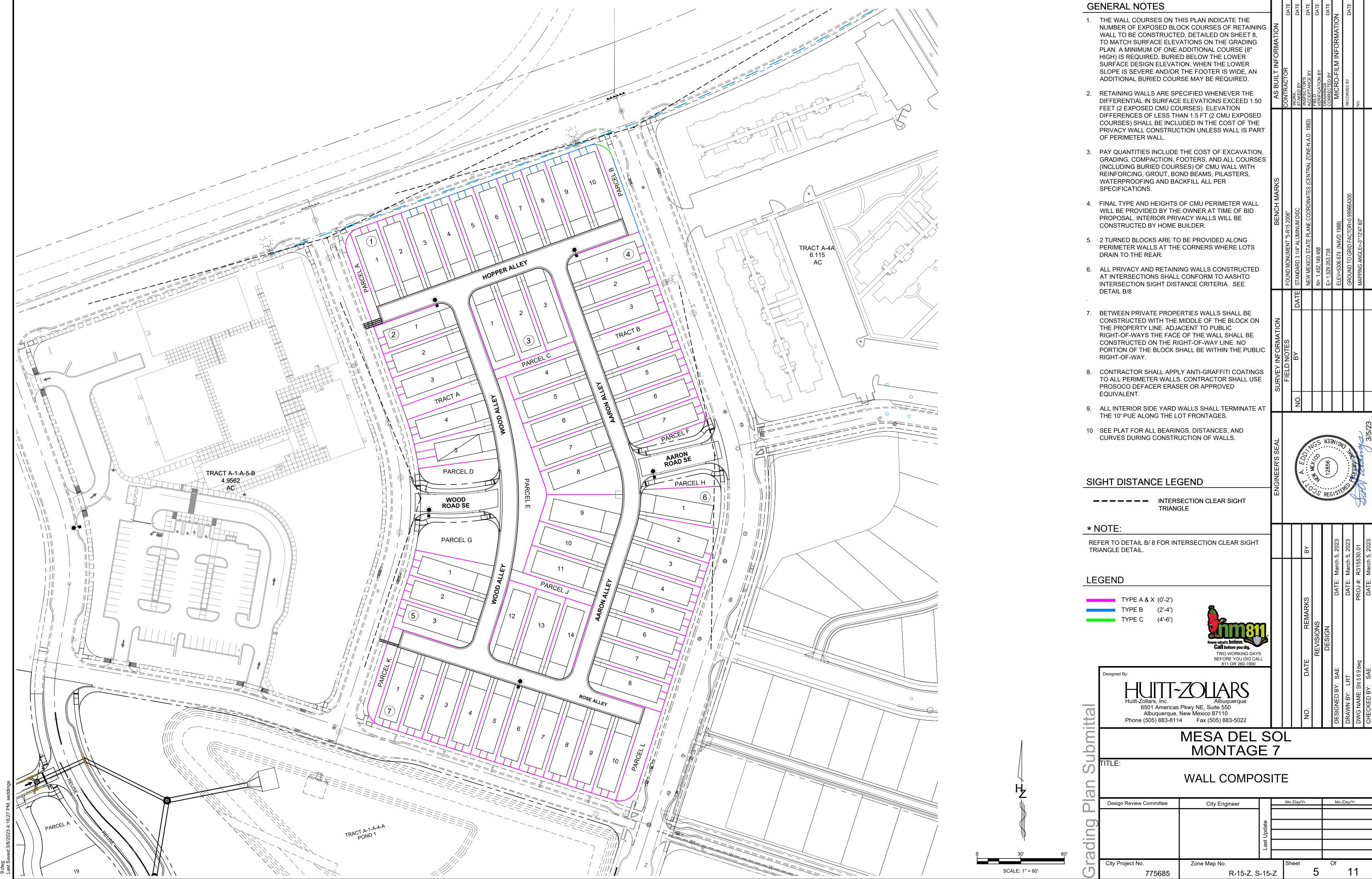
6501 Americas Pkwy NE, Suite 550 Albuquerque, New Mexico 87110 Phone (505) 883-8114 Fax (505) 883-5022



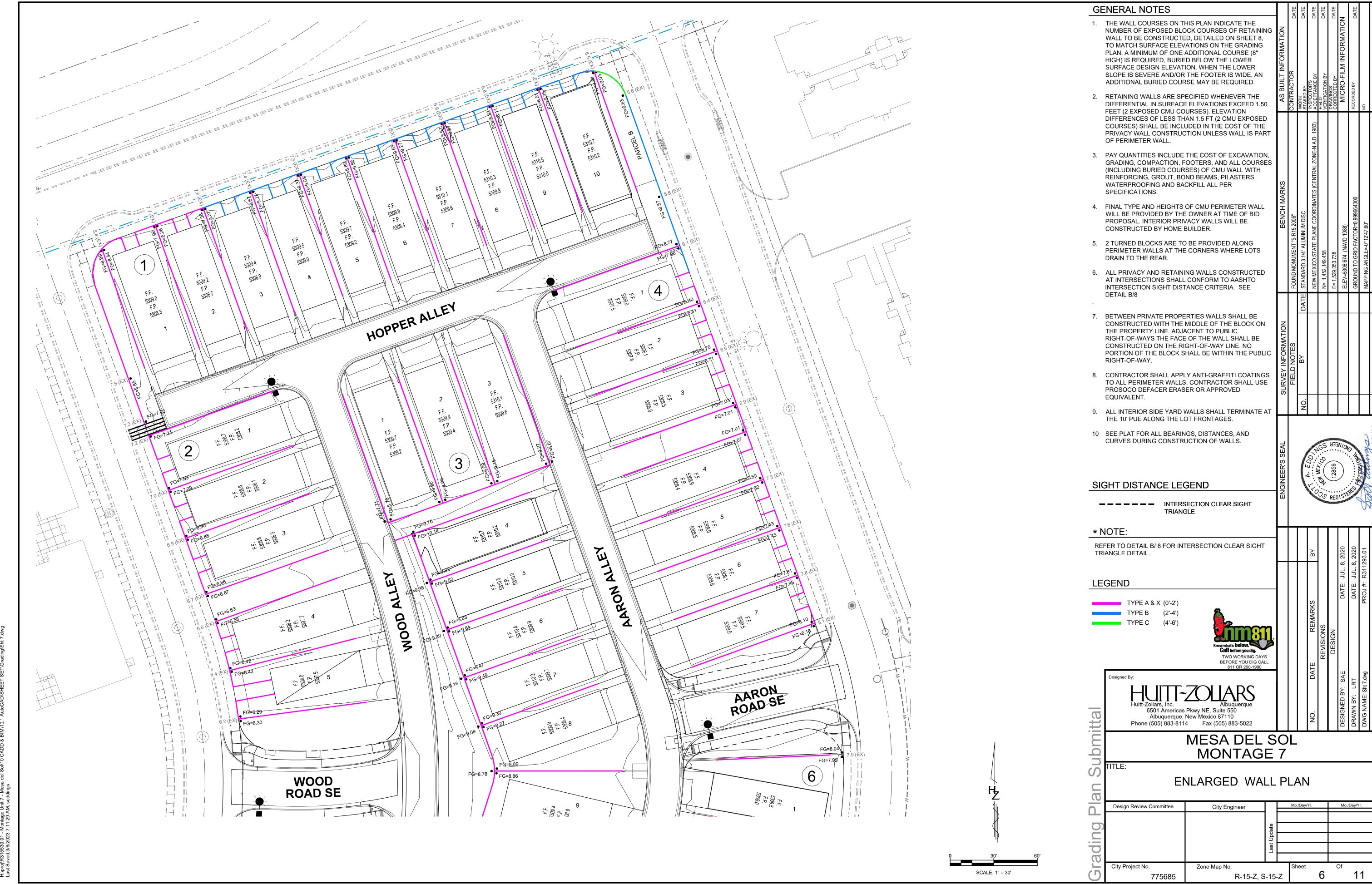


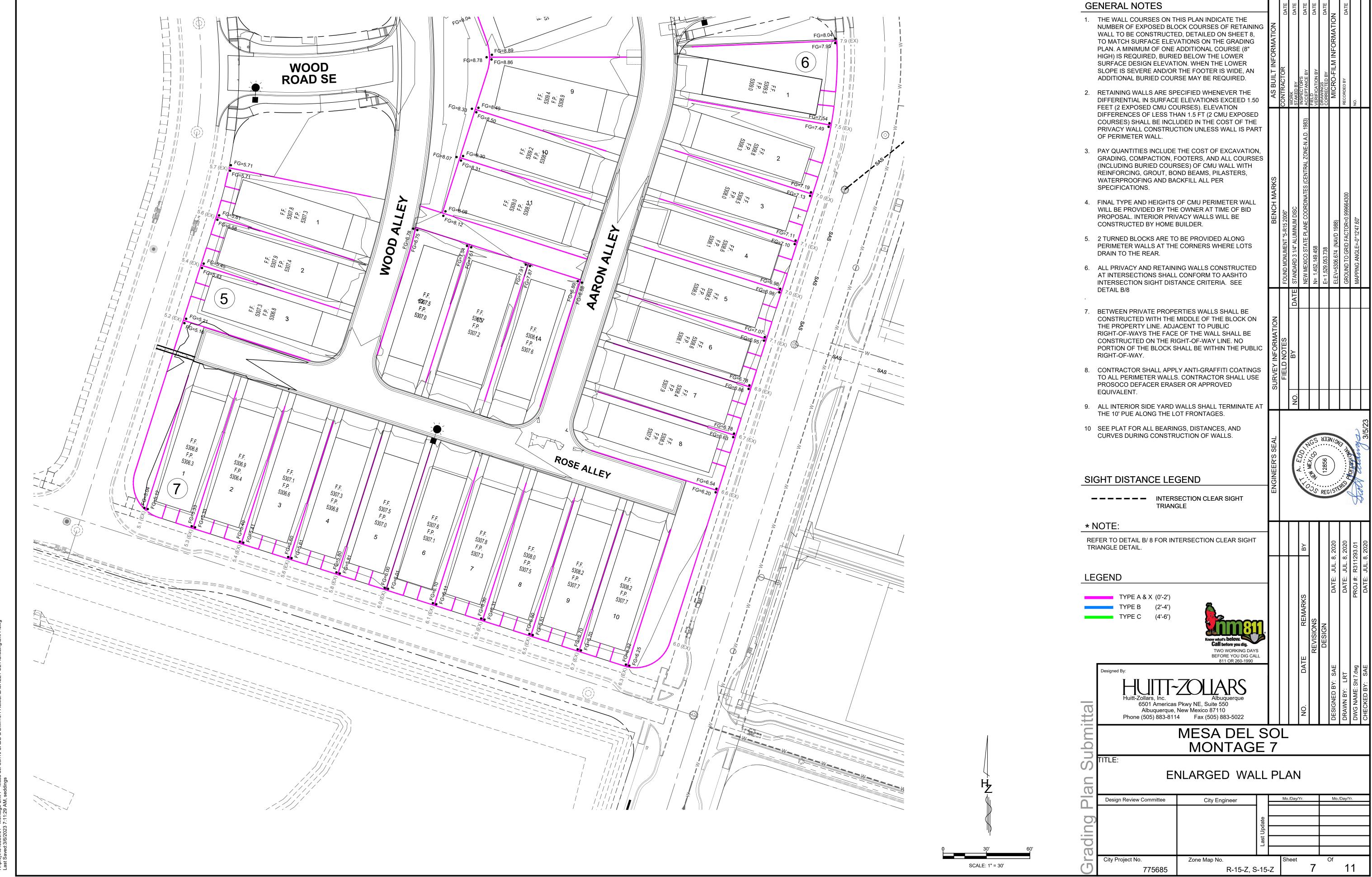


Plotted: 3/6/2023 4:36:24 PM, By:Eddings, Scott H:\oroi\R315530.01 - Montage Unit 7 - Mesa del Sol\10 CADD & BIM\10.1 AutoCAD\SHEET \$

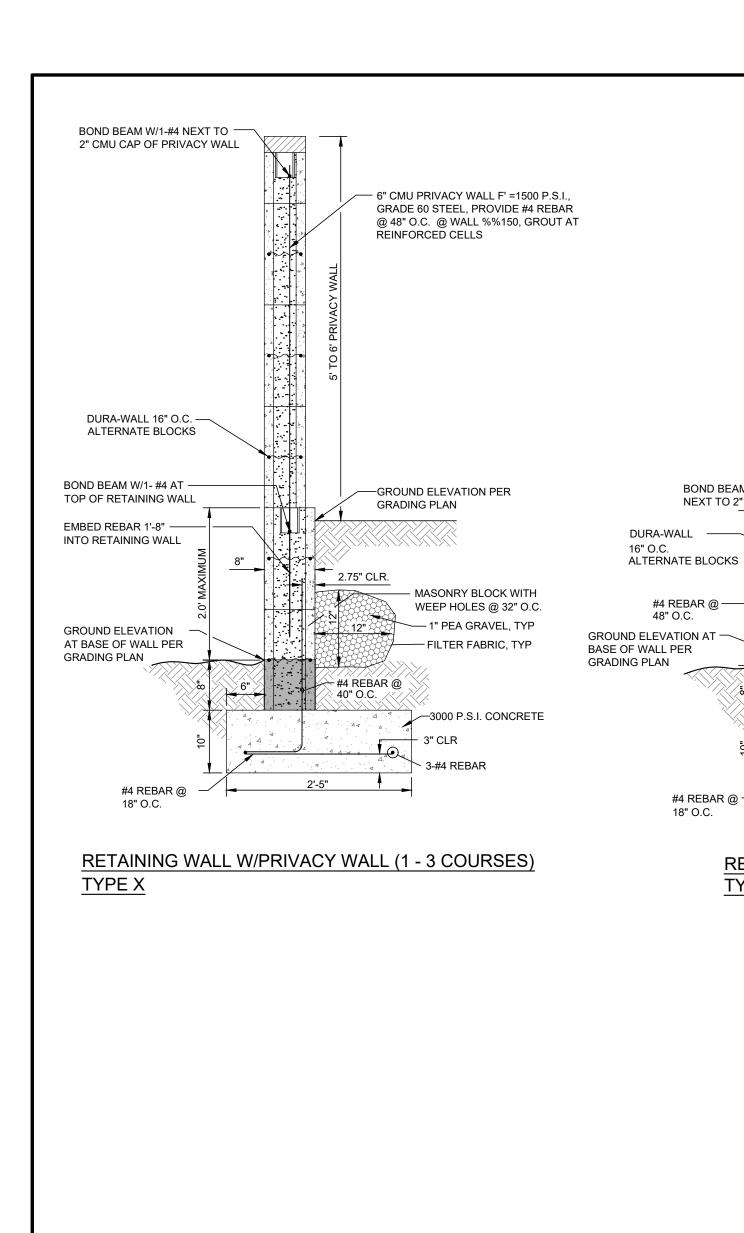


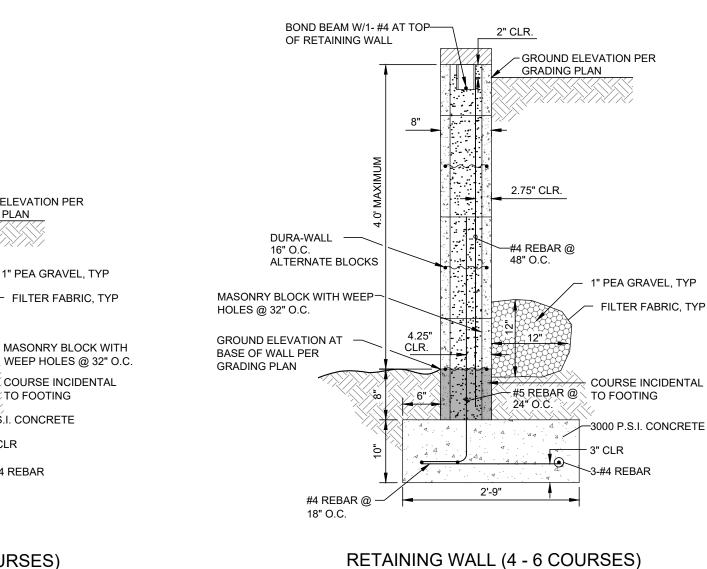
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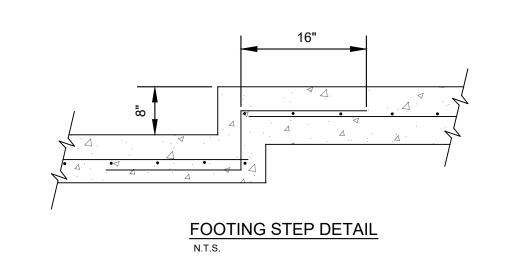




Plotted: 3/6/2023 4:20:19 PM, By:Eddings, Scott H:\proi\R315530.01 - Montage Unit 7 - Mesa del Sol\10 CADD & BIM\10.1 AutoCAD\SHEET S

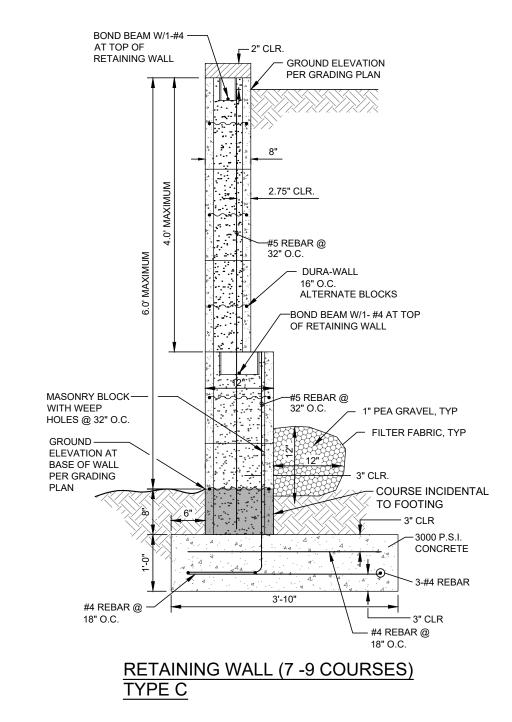






— 16" EXPANSION JOINT - PREFORMED JOINT FILLER C.M.U.—

**EXPANSION JOINT DETAIL** 



18. PROVIDE ANTI-GRAFFITI SURFACE COATING ON THE CMU WALL WHEN FACING THE PUBLIC AREAS AND RIGHT-OF-WAY LOCATIONS. **GENERAL NOTE:** 1. WHERE C.M.U. PRIVACY WALLS OR RETAINING WALLS ARE INSTALLED, WEEP HOLES SHALL BE PROVIDED IN THE PORTION OF THE WALL BELOW GRADE, TO RELIEVE POTENTIAL HYDROSTATIC PRESSURE, BY ELIMINATING THE MORTAR FROM ALTERNATING VERTICAL JOINTS IN EVERY OTHER COURSE OF BLOCK BELOW GRADE. NO TURNED BLOCKS WILL BE ALLOWED. 2. ADDITIONAL COURSE MAY BE BURIED AS A RESULT OF FIELD CONDITIONS. 3. PAY ITEM IS FOR EXPOSED BLOCKS ONLY.

**MASONRY WALL CONSTRUCTION NOTES** 

1. RETAINING WALLS ARE REQUIRED WHENEVER THE DIFFERENCE IN SURFACE ELEVATIONS EXCEED 1.50

2. ALL MASONRY UNITS SHALL BE TYPE 1, GRADE N WITH A COMPRESSIVE STRENGTH OF 1900 PSI (NET AREA).

5. CELLS CONTAINING REBAR SHALL BE GROUTED SOLID

FROM THE BOTTOM TO THE TOP OF THE WALL IN ACCORDANCE WITH THE UNIFORM BUILDING CODE. 6. PROVIDE PILASTERS AT 12' O.C. MAXIMUM, OR IF NO

8. ALL CELLS BELOW GRADE SHALL BE GROUTED SOLID.

10. ALL HORIZONTAL REINFORCING IN BOND BEAMS SHALL

11. PROVIDE STANDARD TRUSS TYPE JOINT REINFORCING

PREFABRICATED CORNERS AND TEES AT ALL WALL

CORNERS AND INTERSECTIONS RESPECTIVELY.

12. MIN. CONCRETE COMPRESSIVE STRENGTH SHALL BE

13. WEEPHOLES MAY BE PROVIDED BY ELIMINATING THE

MORTAR BETWEEN EVERY OTHER JOINT OF THE

14. SUBGRADE UNDER FOOTING SHALL BE COMPACTED TO

COMPACTED TO 90% ASTM D-1557 IN NON-PAVED

15. REINFORCING STEEL SHALL COMFORM TO ASTM A-615

16. ALL RETAINING WALLS REPRESENTED ON THIS SHEET HAVE BEEN DESIGNED TO ACCEPT A 5' TO 6' PRIVACY

17. THE TOP COURSE OF RETAINING WALL SHOULD BE A 2

THICK SOLID MASONRY CAP UNLESS A PRIVACY WALL

AREAS, AND 95% ASTM D-1557 IN PAVED AREAS.

95% ASTM D-1557, AND ALL BACKFILL SHALL BE

BARS OF THE SAME SIZE AND A LAP OF 48 BAR DIAMETERS OR 24" MINIMUM. VERTICAL STEEL SHALL

BE CONTINUOUS AROUND CORNERS OR HAVE CORNER

7. THE BACK OF WALLS BELOW GRADE SHALL BE

WATERPROOFED PRIOR TO BACKFILLING.

9. LAP ALL REBAR 40 BAR DIAMETERS, UNLESS

CONTINUE THROUGH BOND BEAMS.

SECOND COURSE OF BLOCK.

IS TO BE CONSTRUCTED ON TOP.

AT 16" O.C. (ALTERNATE COURSES). USE

PILASTERS ARE USED, PROVIDE EXPANSION JOINTS AT

FEET (2 EXPOSED CMU COURSES)

F'M=1500 PSI

20' O.C.

3000 PSI.

GRADE 60.

4. GROUT - F' =2000 PSI

3. MORTAR SHALL BE TYPE S.

OTHERWISE NOTED.

ubmitta Albuquerque, New Mexico 87110 Phone (505) 883-8114 Fax (505) 883-5022 MESA DEL SOL **MONTAGE 7** (1)

radin

CD

6501 Americas Pkwy NE, Suite 550

RETAINING WALL DETAILS

TWO WORKING DAYS

Design Review Committee	City Engineer			Mo./Day/Yr.		Mo./	Day/Yr.
		1					
		Update					
		Last					
City Project No.	Zone Map No.			Sheet		Of	
775685	R-15-Z, S-15-Z				8		11

-3000 P.S.I. CONCRETE

RETAINING WALL (1 - 3 COURSES) TYPE A

✓ GROUND ELEVATION PER

1" PEA GRAVEL, TYP

FILTER FABRIC, TYP

COURSE INCIDENTAL

>TO FOOTING

— 3" CLR

~ 2-#4 REBAR

GRADING PLAN

BOND BEAM W/1- #4

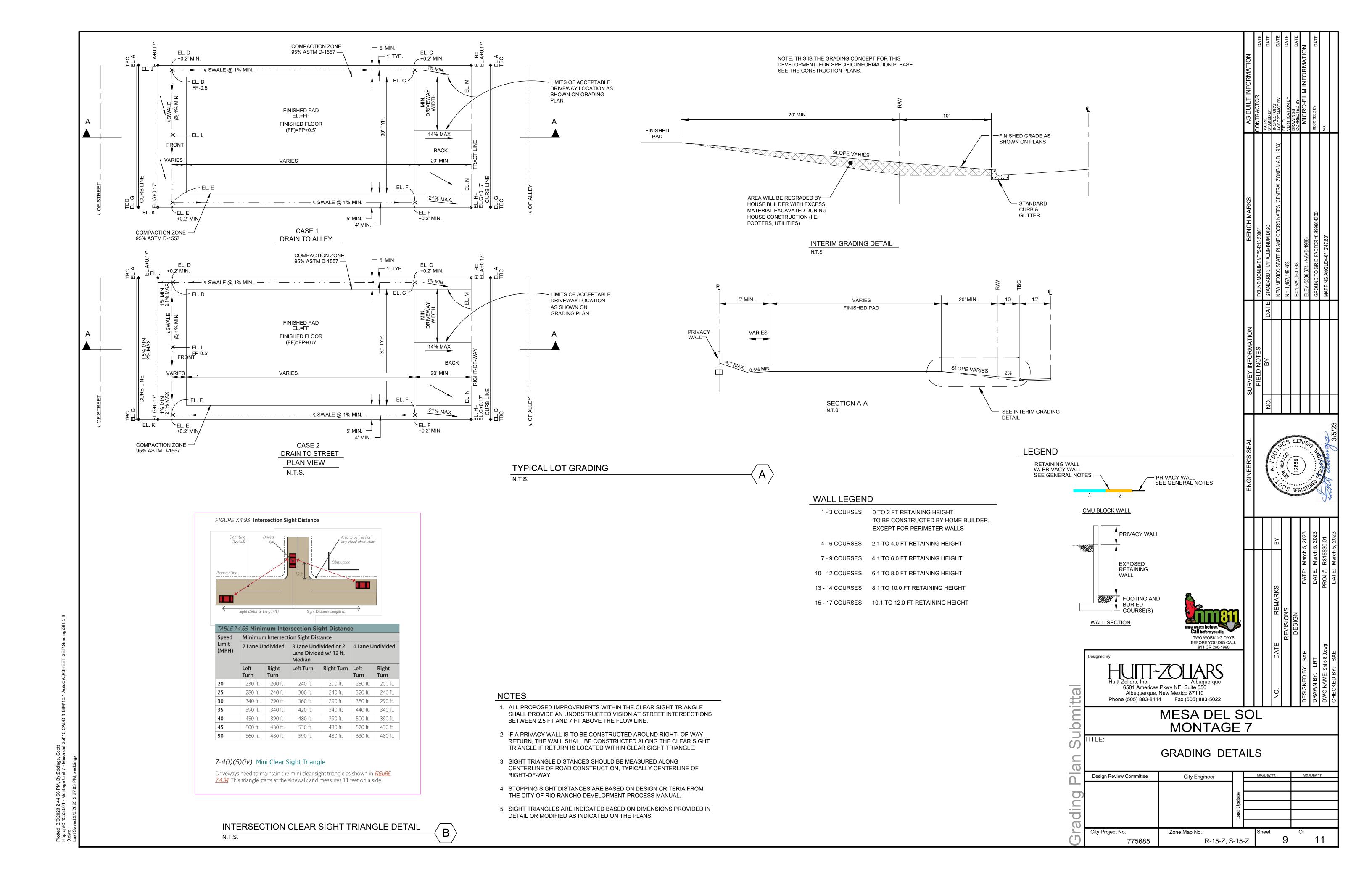
NEXT TO 2" CMU CAP

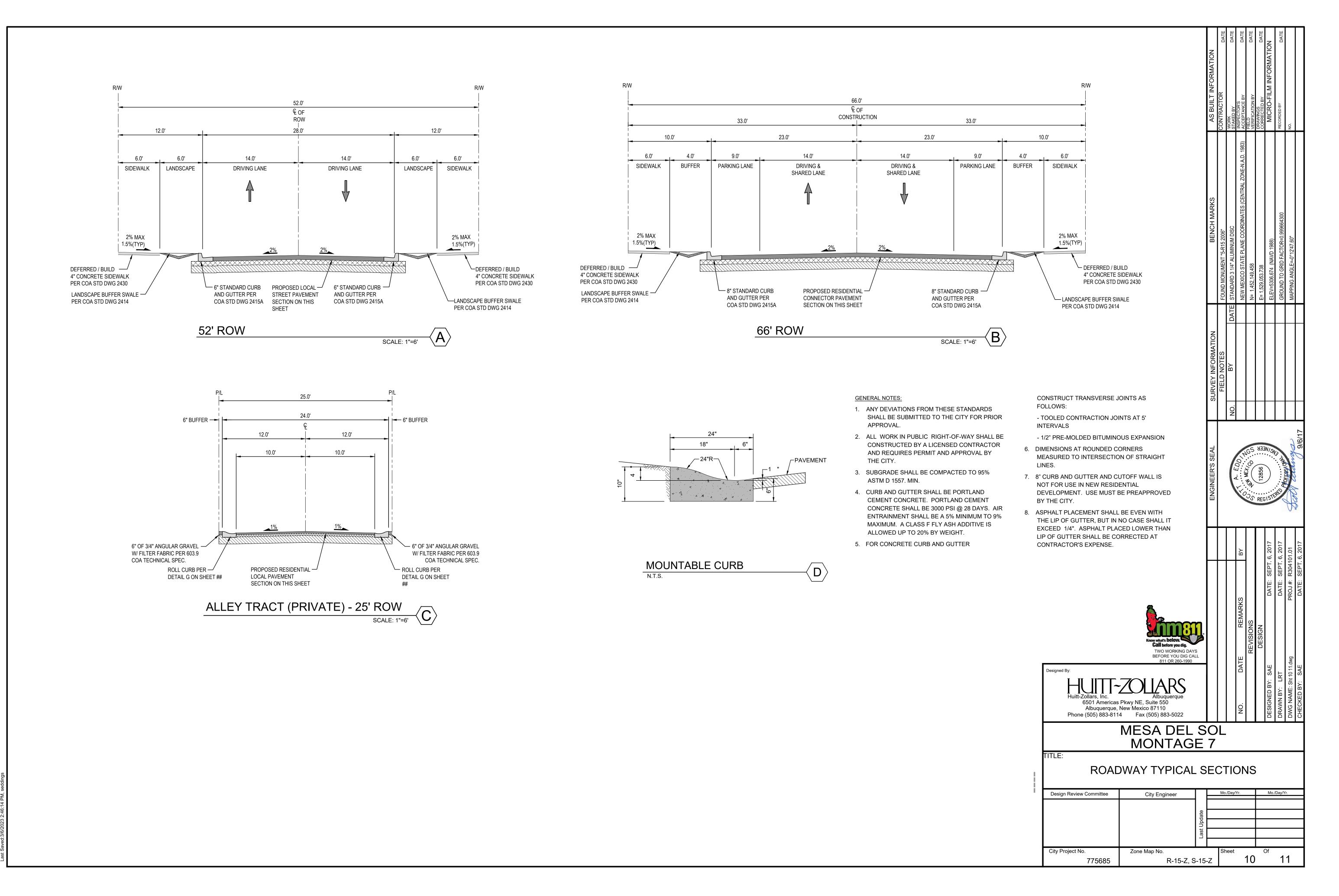
#4 REBAR @ -

#4 REBAR @

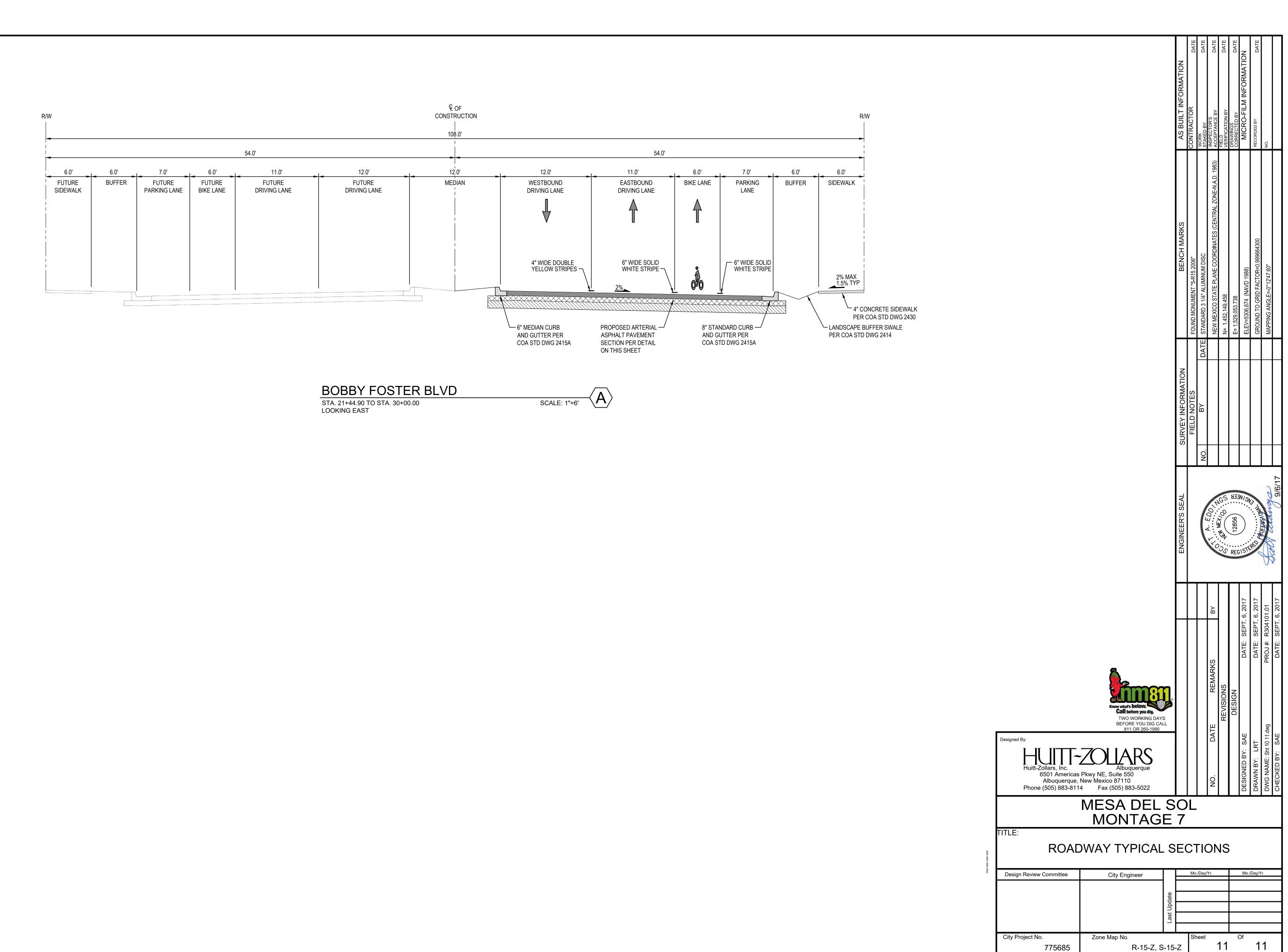
48" O.C.

TYPE B





H:\proj\R315530.01 - Montage Unit 7 - Mesa del Sol\10 CADD & BIM\10.1 AutoCAD\SHEET SET\G



775685

R-15-Z, S-15-Z



March 13, 2023

Tiequan Chen, P.E. City of Albuquerque 600 2<sup>nd</sup> St NW Albuquerque, Nm 87102

RE: MDS – Montage Subdivision Unit 7 on Bobby Foster

**Grading and Drainage Submittal for Preliminary Plat and Grading Permit** 

Hydrology File: R16D100A

Dear Chen.

We are requesting approval of the grading plans for Montage Subdivision Unit 7. The grading plans and drainage report have been revised according to comments received from City of Albuquerque on December 1, 2022.

Below is a list of comments received on December 1, 2022, which are included in *italics* and our responses in **bold** text.

#### City of Albuquerque Grading Plan Comments 12/1/22:

- 1. The Grading Plan that was missing from the first submittal was provided with this second submittal, but it is still missing typical sections of streets, alleys, retaining walls, and other details on the Grading Plan Checklist, DPM 6-14(C). The new plan raises these additional concerns.
  - a. Please provide the Benchmark information (location, description and elevation) for the survey contour information provided.
    - Benchmark information provided on sheet 1 City Monument 5-R15.
  - Please provide the FIRM Map number in a flood plain note with effective date.
     Fema Map number 35001C0444H dated 8/16/2012 included on sheet 1. Site is within flood hazard zone X.
  - c. Please provide a legal Description of the property.
     Legal description provided on sheet 1 Tract A-1-A-5-C Mesa Del Sol Innovation Park.
  - d. Show both existing and proposed storm pipes and inlets with sizes. This project does not require additional storm drain or storm drain inlets. Storm drains and storm inlets are constructed as part of work order 393581 with a final inspection date currently being planned for of April 14, 2023.
  - e. Show sidewalk culverts in Parcels A & K, box culvert in Parcel G, and drainage channel in Parcel J labeling the number, size, and type of each. Add details of connection to streets at both ends of each. Sidewalk culverts are shown on sheet 1. Sidewalk culverts convey stormwater from Hopper Alley to Newhall Drive and from Rose Alley to Newhall Drive. Details will be incorporated into work order under CPN 775685.
  - f. Provide typical sections of drainage structures thru Parcels A, G, J, and K with material specifications, lot lines, and dimensions.
    - Grading scheme changed and Parcels A, G, J and K no longer accept "off-site" flows.
  - g. Add valley gutters through the alley intersections. Provide valley gutters at each of the four alley intersections in accordance with the Intersection standard DWG 2401 and Concrete Valley Gutter standard

DWG 2420.

Alley intersections are private and it has not been determined as yet if valley gutters or concrete pavements are to be selected.

- h. The highest point at entrance 2 is at the valley gutter for Alley D; so, Alley D will drain out the entrance to Sagan Loop contrary to the drainage Basin Map. Instead provide a water block farther to the east in entrance 2 to and adjust the Basin Map accordingly.
  - Alley D is renamed Aaron Alley and Entrance 2 is renamed Aaron Road. Aaron Road has a high point along Aaron Alley is not conveyed to Sagan Loop via Aaron Road.
- i. Add a typical lot grading detail with typical section through the side yards at the front corner of the houses.
   The plan should clearly indicate which portions of each lot drains to the alley and to the street.
   Typical lot grading detail included on sheet 9.
- j. Add typical sections from the house pads to the existing adjacent street showing the maximum grade change between pad and street. Show how that grade change is to be accomplished on the private property, while maintaining the required typical sections within the public right of way per COA DWG 2414. Correct the grades shown on the sidewalk around the perimeter to agree with the projected 2% grade shown on the detail.
  - In some cases lot grading schemes require future homes to step down to public sidewalks. This will be part of future building permit submittals.
- k. Identify Landscape Buffer Swales per COA DWG 2414 along all of the adjacent public streets with a hatch pattern in the legend and in the plan view.
  - Adjacent landscape buffers are being installed as part of CPN 393581 and are within the public right-of-way. This project will not grade into the public right-of-way except with the proposed entrance road.
- Identify all right-of-ways and drainage easements.
   Rights-of-ways are identified and Parcel A and Parcel K include public drainage across the entire parcels.
- m. The layout and sections of the streets, alleys, and sidewalks as shown on the Grading Plan must match the Traffic Circulation Layout, but a traffic plan hasn't been submitted yet. So, a condition of approval will be that the sections match and the G&D Plan will have to be revised if they don't.
  - Traffic Circulation submitted to transportation on March 14, 2023 for review.

Below is a list of comments received on March 3, 2023, which are included in *italics* and our responses in **bold** text.

#### <u>City of Albuquerque Grading Plan Comments 3/3/23:</u> Grading Plan Comments:

- Please address Doug Hughes' comments dated 12/1/2022.
   Addressed above.
- 2. Add vicinity map and the Firm Map number in a flood plain note with effective date on the plan.

  Fema Map number 35001C0444H dated 8/16/2012 included on sheet 1. Site is within flood hazard zone X.

### **HUITT-ZOLIARS**

- 3. Provide the Benchmark information (location, description and elevation) for the survey contour information provided.
  - Benchmark information provided on sheet 1 City Monument 5-R15.
- 4. Add a summary table showing the 100-yr, 10-day volume calculations and provided pond volume. Originally, pond 1 was anticipated to be constructed as a detention pond. It now proposes as a retention pond. Does it need to be upsized?
  - Sheet 2 includes summary table showing the required volume and provided pond. No, the pond does not require upsizing.
- 5. Label "Pond 1" on the plan. Add drainage basins and alley names used in the drainage report on sheet 1.

  Pond 1 is labeled on sheet 1 and Pond 2a is labeled on sheet 2. Alley names are updated on the revised sheets.
- 6. Add "Existing SD" to the legend.
  - Existing storm drain occurs within platted right-of-way and will be shown on future work order sheets submitted to DRC under CPN 775685.
- 7. Define "design 1" and "design 2" on sheet 1.

  Reference to "design 1" and "design 2" removed from sheet 1.

#### **Drainage Report Comments:**

- 1. Neither this report nor the 2020 Bobby Foster Drainage Report has demonstrated adequate downstream capacity. Ponds 1 and 2A must be redesigned to retain the 100-year 10-day volume in accordance with the Montage Unit 3 & 4 Drainage Report with engineer's stamp date 1/18/2019. The 2020 Bobby Foster report and the 2011 Montage Units 1& 2 Drainage Reports both undersized the ponds by designing them as detention ponds rather than retention ponds.
  - Ponds 1 and 2a are redesigned to retain 100-year 10-day volume as shown on sheet 2.
- 2. Page 2, under "Existing Conditions":
  - a. "A retention pond (pond 1?) exists south of Montage 7 and is designed to accommodate the runoff from the undeveloped site." Please provide support documents for this statement. Originally, pond 1 was anticipated to be constructed as a detention pond, not a retention pond. (BP).

Pond rating curve is included on sheet 2 and within the report.

We greatly appreciate your time and consideration. Please contact me if you have any questions.

Sincerely,

Scott Eddings, PE Project Manager