



Board of Alderman Request for Action

MEETING DATE: 12/21/2021

DEPARTMENT: Development

AGENDA ITEM: Resolution 1010 - Smithville Townhomes Site Plan

REQUESTED BOARD ACTION:

A motion to adopt Resolution 1010 approving a site plan for Smithville Townhomes.

SUMMARY:

Adopting this resolution approves the site plan for eight townhomes to be constructed at 319 East Main Street.

PREVIOUS ACTION:

The Planning Commission reviewed and approved the Site Plan application at its December 14, 2021 meeting.

POLICY OBJECTIVE:

Increases housing density near the downtown core.

FINANCIAL CONSIDERATIONS:

n/a

ATTACHMENTS:

- ☐ Ordinance
- ☒ Resolution
- ☒ Staff Report
- ☐ Other:

- ☐ Contract
- ☒ Plans
- ☐ Minutes

RESOLUTION 1010

A RESOLUTION APPROVING A SITE PLAN FOR SMITHVILLE TOWNHOMES FOR 8 UNITS AT 319 EAST MAIN STREET

WHEREAS the owners of 319 East Main Street submitted a proposed site plan for construction of eight, 1,500 ft² townhomes on the lot; and

WHEREAS staff completed its review of the application and recommended approval of the site plan with several proposed changes to the utility connections as well as requiring park fees for each of the eight units in accordance with the new site plan review process for R-3 zoned land; and

WHEREAS, the Planning Commission reviewed the staff recommendation at its December 14, 2021 meeting and recommends approval of the site plan with the conditions identified by staff, and;

**NOW THEREFORE BE IT RESOLVED BY THE BOARD OF ALDERMEN OF
THE CITY OF SMITHVILLE, MISSOURI, AS FOLLOWS:**


**THAT THE SMITHVILLE TOWNHOMES AT 319 EAST MAIN STREET ARE
APPROVED FOR CONSTRUCTION UPON APPROVAL OF THE FINAL
CONSTRUCTION PLANS AND PAYMENT OF PARKS FEES PRIOR TO
FINAL OCCUPANCY.**

PASSED AND ADOPTED by the Board of Aldermen and **APPROVED** by the Mayor of the City of Smithville, Missouri, the 21st day of December 2021.

Damien Boley, Mayor

ATTEST:

Linda Drummond, City Clerk

	<div>STAFF</div> <div>REPORT</div>
Date:	12-10-21
Prepared By:	Jack Hendrix
Subject:	319 E. Main St. – Smithville Townhomes Site Plan

This report addresses proposed findings for the Smithville Townhomes Site Plan at 319 E. Main St. With our recent changes to the Site Plan Review process, this project is the first submittal for our new R-3 district requirements. Those can be found here: <https://ecode360.com/37903737>

The standards of review of submittals for site plan approval follow the provisions of Section 400.410 of the code, and are listed below, with staff's findings.

The extent to which the proposal conforms to these regulations.

The submittal, with staff proposed changes, conforms to the site plan standards for R-3 properties. The project includes the following items:

The building materials and colors are to be standards residential products used throughout Smithville by the current builder, with variations of color in the earth tones ranges approved in the code.

The massing and façade treatments are handled in two different methods: first will be the different materials used in different areas; and secondly with depth and height differences of the respective units at different elevations. The elevation differences will address grade changes on site, and eliminate the large, massive wall look.

Site layout is designed to focus the traffic onto the smaller classification roadway to the south and places the parking area on the side of the building from both the north and south roadways. This layout also gives the shortest distance of travel to each unit, which will also eliminate additional lighting.

Lighting is designed into the buildings with front and rear porch area lighting which will sufficiently illuminate the area.

Landscaping will be needed on the north and south of the site in accordance with the code, but until such time as the existing trees that can be saved are identified during construction, the size and location of additional landscaping cannot be determined. This approval is subject compliance once all existing vegetation that can be saved is identified.

The extent to which the development would be compatible with the surrounding area.

The surrounding area has older multifamily projects along with older single-family homes on R-3 zoned property. With this site located across from the Heritage Park entrance, the density of this housing fits with the future of downtown.

The extent to which the proposal conforms to the provisions of the City's subdivision regulations concerning the design and layout of the development, as well as water system, sewer system, stormwater protection and street improvements.

The design, with the staff changes noted on the plans make the public infrastructure issues fully compliant with the standards of the respective departments and reduce the maintenance requirements of the city with no public improvements needed.

The extent to which the proposal conforms to the policies and provisions of the City's Comprehensive Plan.

This development plan in the downtown area fully complies with higher density residential near the core of downtown and the recreational access to the lake via the trail.

The extent to which the proposal conforms to the adopted engineering standards of the city.

The staff changes to the plans make the project fully compliant with the adopted standards

The extent to which the locations of streets, paths, walkways and driveways are located so as to enhance safety and minimize any adverse traffic impact on the surrounding area.

The sole vehicular access point is on the lower classification street (in compliance with our standards) there will be ADA pedestrian access to the sidewalks to the south, and by focusing traffic to the south, there are fewer chances of traffic conflicts on Meadow than on Main Street.

The extent to which the buildings, structures, walkways, roads, driveways, open space and parking areas have been located to achieve the following objectives:

Preserve existing off-site views and create desirable on-site views;

Conserve natural resources and amenities available on the site;

Minimize any adverse flood impact;

Ensure that proposed structures are located on suitable soils;

Minimize any adverse environmental impact; and

Minimize any present or future cost to the municipality and private providers of utilities in order to adequately provide public utility services to the site.

The lot itself was previously developed with a single-family residence that was ultimately demolished. The project area will focus the onsite and offsite views towards the Heritage Park area, with limited east or west views as was the case prior.

Staff recommends approval of the project with the conditions that are both noted on the plans, as well as the landscaping provisions to be determined once the scope of existing vegetation that can be saved is identified, and payment of the park's fees prior to final occupancy approval by the city.

/s/

Jack Hendrix

Development Director

Smithville Townhomes

Part of Block 2 - Calvin Smith's Addition


Smithville

Clay County, Missouri

Index of Sheets:

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Site Plan	2
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Drainage Plan	4
Utility Plan	5
Erosion & Sediment Control Plan	6
Details	7

Prepared By:


Todd R. Polk, P.E.
Project Engineer
e: tpolk@cfse.com

10/20/2021
Date

Utility Information:

Power:	Everygy 888.471.5275	Fiber:	Spectrum 816.358.8833	Telephone:	AT&T 800.464.7928
	Platte/Clay Electric Cooperative 816.628.3121		KC Coyote/Isotech, Inc. 816.370.2546		Spectrum 816.358.8833
Water:	City of Smithville Bob Lemley 816.532.0577 utilities@smithvillemo.org		AT&T 800.695.3679		Vonage 888.218.9015
			HughesNet 888.659.5325		
Sewer:	City of Smithville Bob Lemley 816.532.0577 utilities@smithvillemo.org		Direct TV 877.916.5137		
			Dish Network 877.647.7793		
Cable:	Spectrum 816.358.8833		Century Link 855.530.5620		
Gas:	Spire 816.756.5252				

Site Data:

PROJECT ZONING:	R-3
PROJECT AREA:	0.79 ACRES
SIGNAGE:	ALL SIGNAGE TO BE WALL MOUNTED SIGNS
FEMA:	SUBJECT PROPERTY IS LOCATED IN ZONE X (AREA OF MINIMAL FLOOD HAZARD) AS DEPICTED ON FEMA FIRM MAP 29047C0102E EFFECTIVE DATE 08/03/2015

PARKING SUMMARY:

REQUIRED:	3 SPACES PER UNIT = 24 SPACES
PROVIDED:	25 SPACES

BUILDING SUMMARY:

TOTAL FIRST FLOOR AREA:	7,510 SF
GARAGE:	2,070 SF
LIVING:	5,440 SF
TOTAL SECOND FLOOR (ALL LIVING):	7,510 SF

GREEN SPACE:

TOTAL LANDSCAPE AREA:	19,870 SF	(58% OF SITE)
INTERIOR GREENSPACE:	1,600 SF	
200 SF PER UNIT BETWEEN DRIVEWAYS		

STORMWATER RUNOFF:

CONDITION	1-YR	10-YR	100-YR
PRE-DEV	1.24 CFS	3.03 CFS	4.97 CFS
POST-DEV	0.98 CFS	2.87 CFS	4.58 CFS

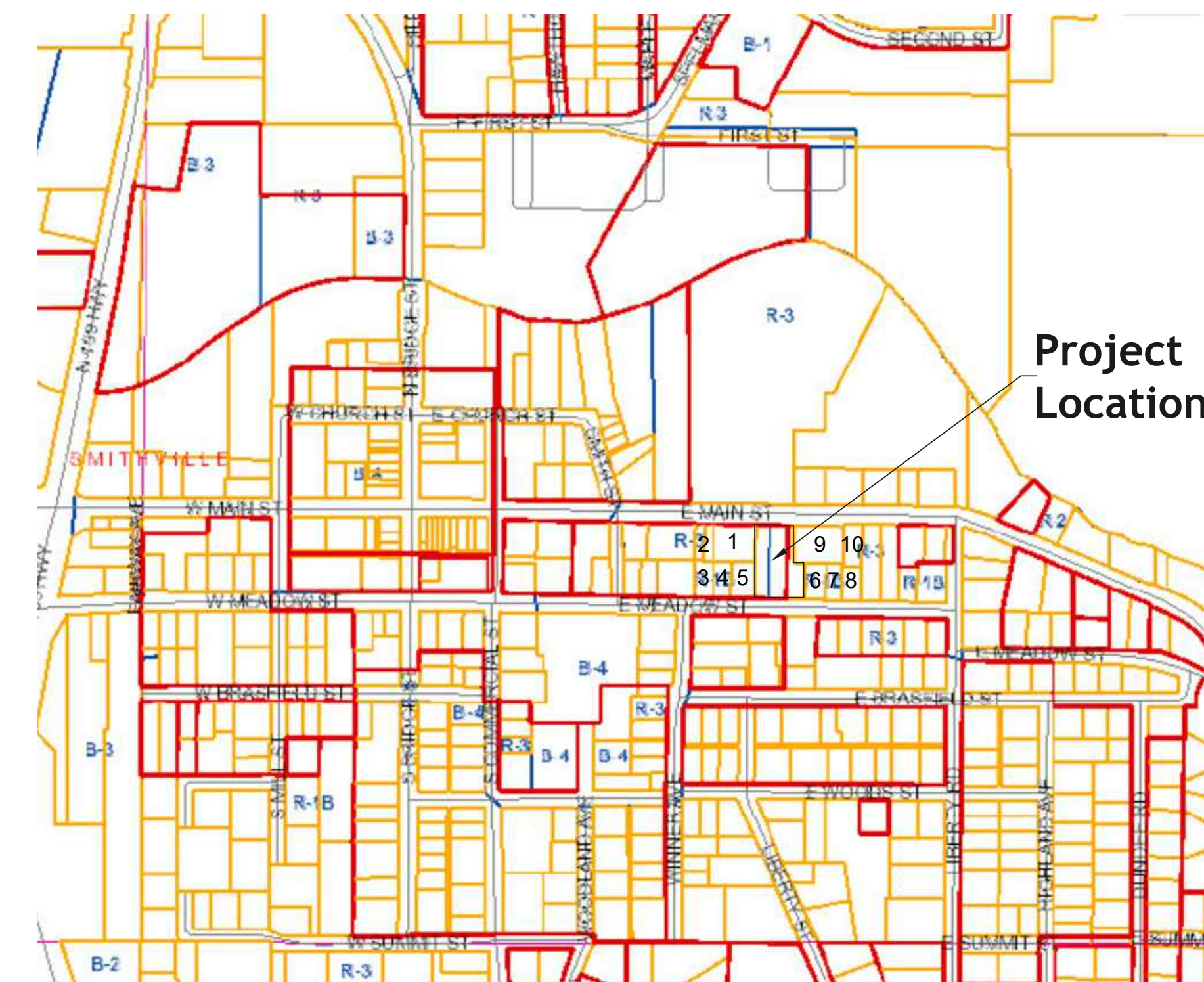
Adjacent Ownership:

1	MAIN STREET LEASING LLC.	313A E MAIN ST (R-3)
2	STEVE & MELISSA FISHER	311 A & B MAIN ST (R-3)
3	KEITH & CHERYLE TAYLOR	304 E MEADOW ST (R-1B)
4	LINDA MATTHEWS	306 E MEADOW ST (R-1B)
5	CHARLES & JESSIE NICHOLS	308 E MEADOW ST (R-1B)
6	RONALD MAJOR	314 E MEADOW ST (R-1B)
7	DON & ARLENE MCGEE	316 E MEADOW ST (R-1B)
8	BILL & SANDRA BOSEWILL	318 E MEADOW ST (R-1B)
9	ROBERT & NANCY LEMLEY	321 E MAIN ST (R-3)
10	JACOB PATCHER	325 E MAIN ST (R-3)

Project Developer:

Clayton Cox
LMW Investments, LLC.
319 E. Main Street
Smithville, Missouri

Location Map:



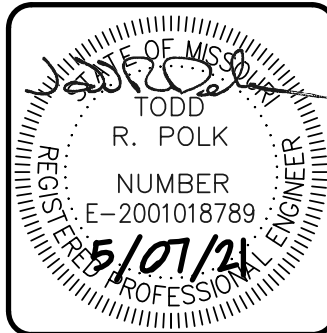
SECTION 34-T53N-R33W



Kansas: 1.800.DIG.SAFE (344.7233)

Missouri: 1.800.DIG.RITE (344.7483)

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Mark	Description	Date

Designed by: TRP	Date: 9/20/2021	Reviewed by: MM	Plot scale: N/A
Drawn by: MM	Submitted by: TRP	File name: 	Plot date:
LMW INVESTMENTS, LLC.		Cover Sheet	

SMITHVILLE TOWNHOMES
319 EAST MAIN STREET

Sheet
reference
number:

1

Sheet 1 of 7

MAIN STREET

EAST MEADOW ST.

40' BLDG
SETBACK LINE

15' BLDG SETBACK LINE

25' BLDG SETBACK LINE

15' BLDG SETBACK LINE

RETAINING WALL

RETAINING WALL

10" WATER
MAIN

EXIST. BLDG
TO BE
REMOVED

0.79 AC±

FFE
822.5

CONCRETE DRIVEWAY

ABANDONED WATER MAIN

MH #1
RIM EL 823.22
FL EL 814.22

8" WATER
MAIN

R=15'

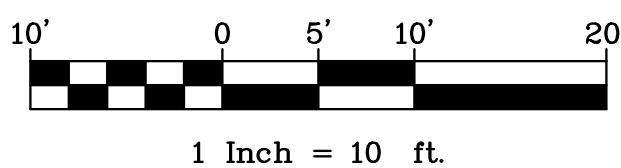
R=15'

LEGEND

FFE FINISHED FLOOR ELEVATION

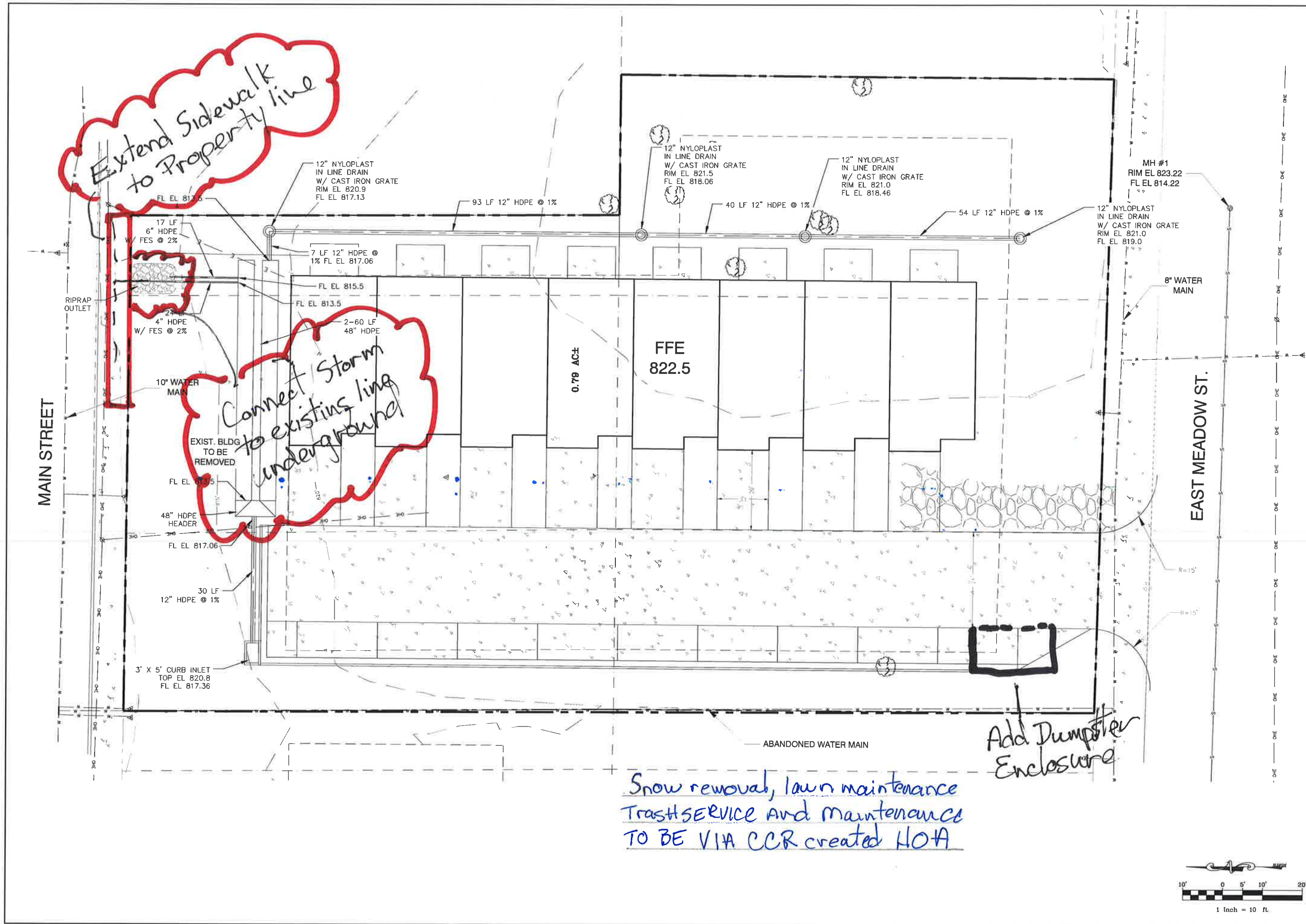
901 EXISTING CONTOURS

901 PROPOSED CONTOURS



Mark	Description	Date

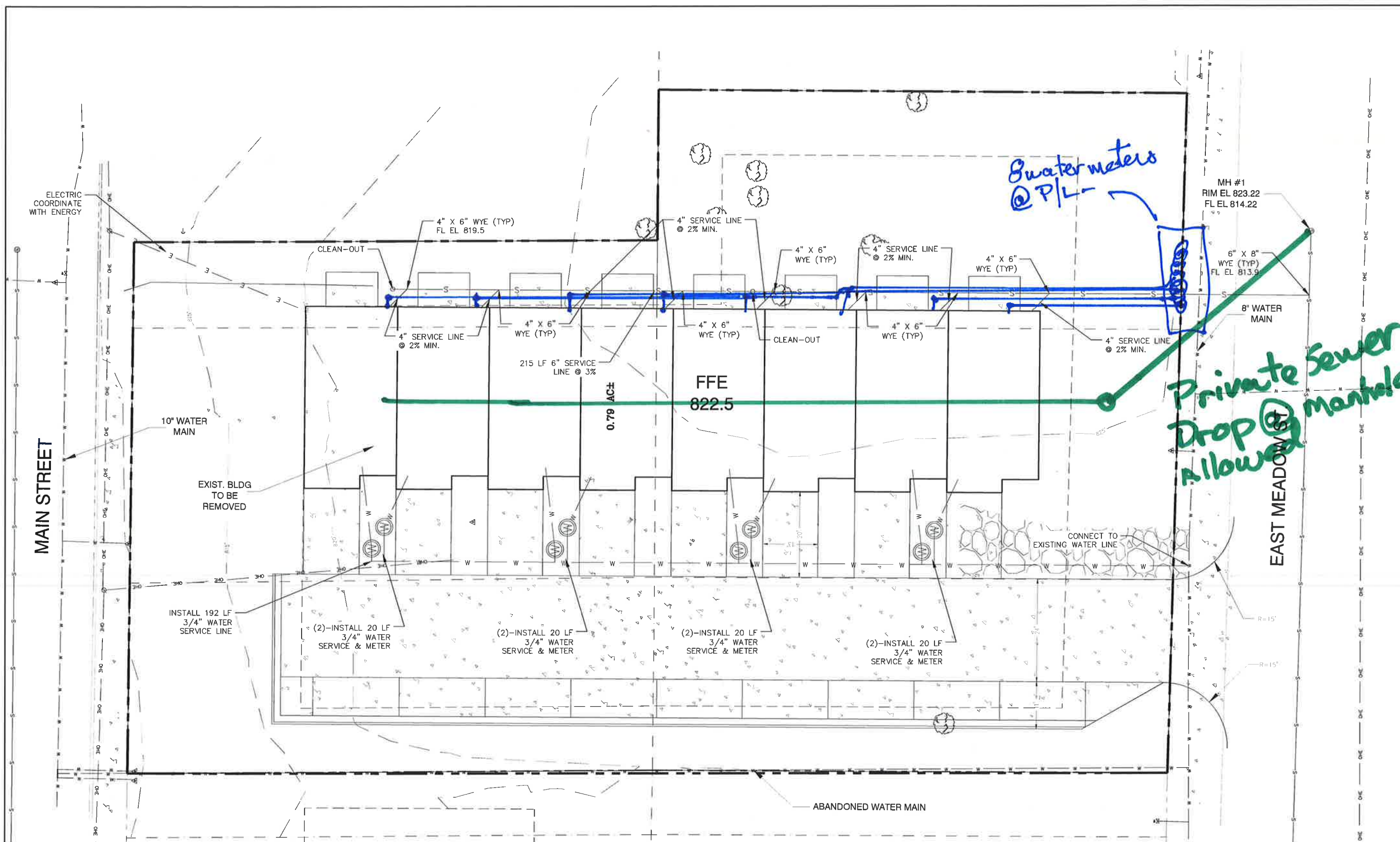
LMW INVESTMENTS, LLC.	Designed by: TRP	Drawn by: LH	Date: 9/28/2021
	Submitted by: TRP	Reviewed by: TRP	Plot scale: 1"=10'
GRADING PLAN		File name:	Plot date:



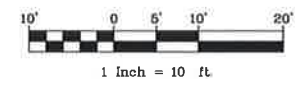
Work	Description	Date

LMW INVESTMENTS, LLC.	Date: 9/28/2021
DRAINAGE PLAN	Designed by: TRP
	Drawn by: LHL
	Reviewed by: TRP
	Submitted by: TRP
	Plot scale: 1"=10'
	File name: Plot date:

SMITHVILLE TOWNHOMES
319 EAST MAIN STREET



- GENERAL NOTES:
1. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE CURRENT "CITY STANDARD" SPECIFICATIONS LAND DEVELOPMENT DIVISION, SMITHVILLE, MISSOURI, EXCEPT AS NOTED.
 2. BOUNDARY INFORMATION, EXISTING UTILITIES, AND TOPOGRAPHIC FEATURES SHOWN ARE ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE ENGINEER, HOWEVER ALL UTILITIES ACTUALLY EXISTING MAY NOT BE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY EXISTING TOPOGRAPHIC FEATURES AND EXISTING UTILITY LOCATIONS AND REPORT ANY DISCREPANCIES TO THE OWNER REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.
 3. THE BASE DRAWINGS, INCLUDING EXISTING FEATURES AND TOPOGRAPHIC INFORMATION WERE PROVIDED TO THE ENGINEER BY THE DEVELOPER. THE ENGINEER ACCEPTS NO RESPONSIBILITY FOR DISCREPANCIES FROM DRAWINGS GENERATED.
 4. ALL UTILITIES SHOWN OR NOT SHOWN DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
 5. ALL APPLICABLE PERMITS MUST BE OBTAINED FROM THE CITY ENGINEER PRIOR TO COMMENCING CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY.
 6. THE CONTRACTOR SHALL CONTACT THE SMITHVILLE MO PERMITS SECTION NO LESS THAN 24 HOURS PRIOR TO STARTING WORK ON THIS JOB, ANY CURB WORK AND FOR A FINAL INSPECTION BEFORE LEAVING THE JOB SITE.
 7. SANITARY SEWER SERVICE LINES SHALL BE 1 1/4" HDPE OR 11 PRESSURE PIPE AND SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4'.
 8. WATER SERVICE LINES SHALL HAVE A COVER OF NOT LESS THAN FOUR (4) FEET NOR MORE THAN (5) FEET, UNLESS OBSTRUCTIONS REQUIRE DEEPER EXCAVATION FOR CLEARANCE.



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R. POLK
NUMBER
E-2001018789
9/28/2021
PROFESSIONAL ENGINEER

Work	Description	Date

Design by:	Date:	Design by:	Date:
TRP	9/28/2021	TRP	9/28/2021
MM		MM	
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TRP		TRP	
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Plot date: <td> </td> <td>Plot date:<td> </td></td>		Plot date: <td> </td>	

LW INVESTMENTS, LLC.

UTILITY PLAN

SMITHVILLE TOWNHOMES
319 EAST MAIN STREET

Sheet reference number:

5

Sheet 5 of 7

LEGEND

STABILIZED CONSTRUCTION ENTRANCE/EXIT

PARKING AND STAGING AREA (OFF-SITE)

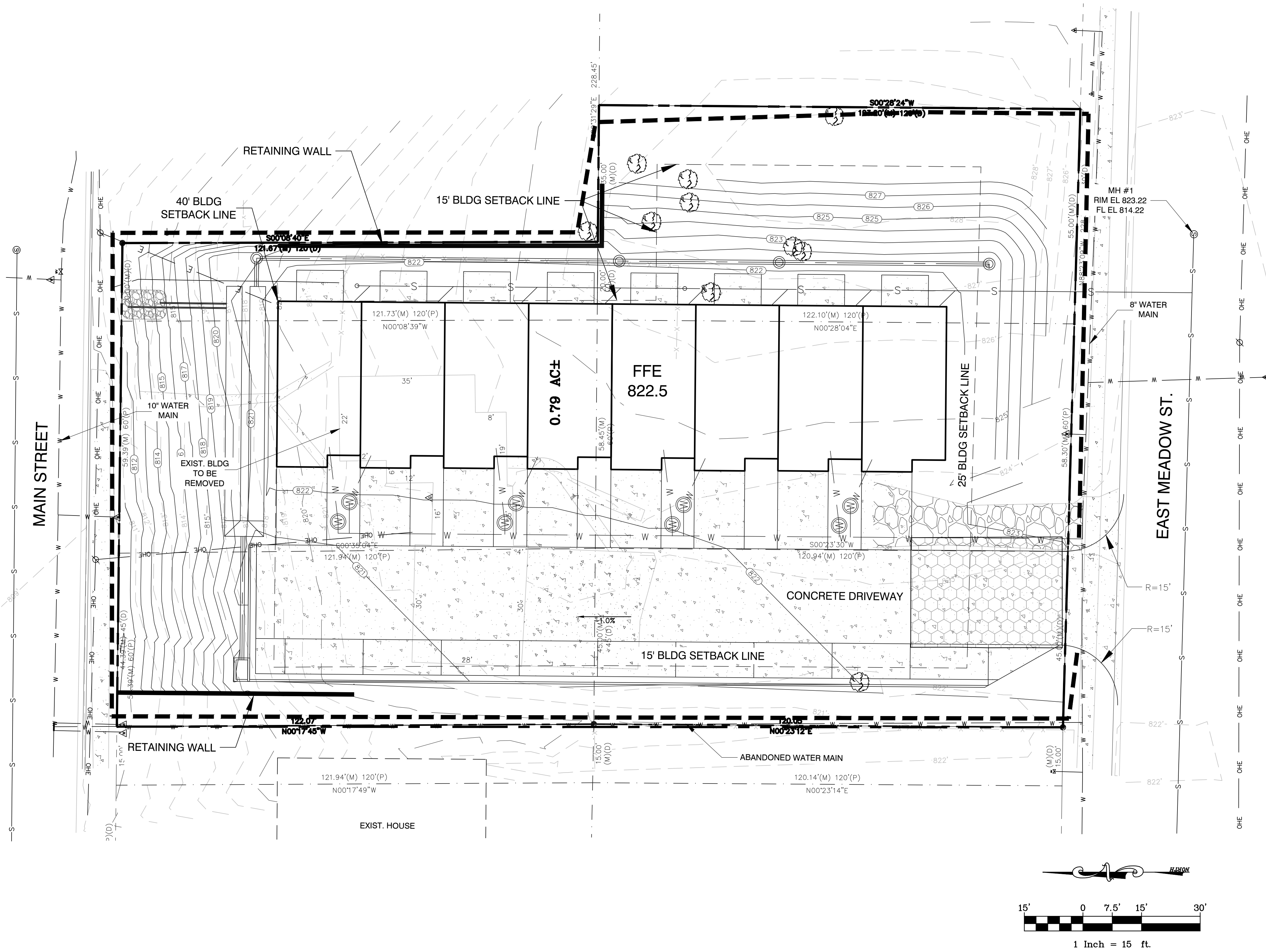
CONCRETE TRUCK WASH OUT (OFF-SITE)

STOCKPILE AT CONTRACTOR'S DISCRETION (OFF-SITE)

COMPOST FILTER SOCK/
SILT FENCE

EXISTING CONTOURS

PROPOSED CONTOURS



Erosion and Sediment Control Staging Chart				
Project Stage	BMP Plan Ref No.	BMP Description	May Remove after Stage:	Notes
A – Prior to Land Disturbance	1	Construction Entrance	D	
	2	Parking & Staging Area	D	Off-Site If Needed
	3	Stockpile	D	Off-Site If Needed
	4	Compost Filter Sock	D	If Stockpile is Needed
B – After Mass Grading	5	Compost Filter Sock/ Silt Fence	E	
	6	Seeding & Mulching	N/A	
	7	Concrete Washout	E	Off-Site (See Notes)
C – After Storm Sewer Construction	8	Curb Inlet Sediment Filter	E	

NOTES

- PRIOR TO BEGINNING CONSTRUCTION EROSION CONTROL MUST BE STABILIZED.
- THE CONTRACTOR SHALL INSPECT ALL COMPOST FILTER SOCKS AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. THE CONTRACTOR SHALL IMMEDIATELY MAKE ANY REQUIRED REPAIR.
- THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE THE COMPOST FILTER SOCK IF THE FABRIC TEARS, DECOMPOSES, OR BECOMES INEFFECTIVE.
- THE CONTRACTOR SHALL REMOVE ALL SEDIMENT DEPOSITS TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN EVENT AND TO REDUCE THE PRESSURE ON THE FILTER SOCK DURING CLEANOUT. SEDIMENT ACCUMULATION SHALL NOT EXCEED 1/2 THE HEIGHT OF THE FILTER SOCK.
- EROSION CONTROL TO BE INSTALLED IN DISTURBED AREAS IN PHASES AS REQUIRED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES AND PHASES DURING CONSTRUCTION. IF THE CITY DETERMINES THAT THE BMP'S IN PLACE DO NOT PROVIDE ADEQUATE EROSION AND SEDIMENT CONTROL AT ANY TIME DURING THE PROJECT, THE CONTRACTOR SHALL INSTALL ADDITIONAL OR ALTERNATE MEASURES THAT PROVIDE EFFECTIVE CONTROL.
- CONCRETE WASH OR RINSEWATER FROM CONCRETE MIXING EQUIPMENT, TOOLS AND /OR READY-MIX TRUCKS, TOOLS, ETC., MAY NOT BE DISCHARGED INTO OR BE ALLOWED TO RUN DIRECTLY INTO ANY EXISTING WATER BODY OR STORM INLET. THE WASHING OF CONCRETE EQUIPMENT WILL NOT BE PERMITTED ON THE JOB SITE IF THE CONTRACTOR OR DEVELOPER CHOOSES NOT TO HAVE A CONCRETE WASHOUT INSTALLED.
- THE CONTRACTOR SHALL TEMPORARILY SEED ALL DISTURBED AREAS IF THERE HAS BEEN NO CONSTRUCTION ACTIVITY ON THEM FOR A PERIOD OF FOURTEEN (14) CALENDAR DAYS. IF THE ENGINEER DETERMINES THAT A SITE HAS A HIGH POTENTIAL FOR EROSION BASED ON PREVIOUS INFORMATION SUBMITTED, HE MAY DIRECT THAT DISTURBED SOIL BE STABILIZED AFTER PERIODS OF CONSTRUCTION INACTIVITY OF MORE THAN FORTY-EIGHT (48) HOURS.
- UPON FINAL GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED BY SEEDING WITHIN ONE (1) WEEK. WHEN THIS OCCURS OUTSIDE THE STANDARD SPECIFICATION SEEDING DATES, SEED SHALL CONSIST OF A TEMPORARY COVER CROP OF ANNUAL RYE OR WHEAT. ALL DISTURBED AREAS SHALL BE SEEDED, FERTILIZED, & MULCHED IN ACCORDANCE WITH THE CITY OF SMITHVILLE GUIDELINES.
- CHEMICALS OR MATERIALS CAPABLE OF CAUSING POLLUTION MAY ONLY BE STORED ONSITE IN THEIR ORIGINAL CONTAINER. MATERIALS STORED OUTSIDE MUST BE IN CLOSED AND SEALED WATER-PROOF CONTAINERS AND LOCATED OUTSIDE OF DRAINAGEWAYS OR AREAS SUBJECT TO FLOODING. LOCKS AND OTHER MEANS TO PREVENT OR REDUCE VANDALISM SHALL BE USED. SPILLS WILL BE REPORTED AS REQUIRED BY LAW AND IMMEDIATE ACTIONS TAKEN TO CONTAIN THEM.

GRAVEL CONSTRUCTION ENTRANCE

- STONE STABILIZED PADS SHALL BE CONSTRUCTED AT THE LOCATION SHOWN ON THE PLANS WHERE CONSTRUCTION AND PRIVATE VEHICULAR TRAFFIC WILL BE ALLOWED TO ENTER AND EXIT THE CONSTRUCTION SITE. CONSTRUCTION EQUIPMENT (INCLUDING PERSONAL VEHICLES) ARE NOT ALLOWED TO EXIT THE SITE DIRECTLY ONTO ARTERIAL OR COLLECTOR STREETS. ALL VEHICLES/CONSTRUCTION EQUIPMENT MUST USE THE STABILIZED CONSTRUCTION ENTRANCES SHOWN ON THE PLANS.
- CONSTRUCTION ENTRANCE TO BE COMPOSED OF 2 TO 3 INCH DIAMETER WASHED STONE UNDERLINED BY A GEOTEXTILE FABRIC TO IMPROVE STABILITY. STONE THICKNESS TO BE A MINIMUM OR 6-INCHES. ENTRANCES TO BE 20-FOOT WIDE AND 50-FOOT IN LENGTH.
- CONTRACTOR SHALL APPLY ADDITIONAL TOP DRESSING OF 2-INCH STONE AS NEEDED TO MAINTAIN THE INTEGRITY OF THE ENTRANCE.

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SEAL

R. POLK

NUMBER E-2001018789

9/28/2021

PROFESSIONAL ENGINEER

Mark	Description	Date

LMW INVESTMENTS, LLC.

EROSION CONTROL PLAN

SMITHVILLE TOWNHOMES

319 EAST MAIN STREET

Sheet reference number:

6

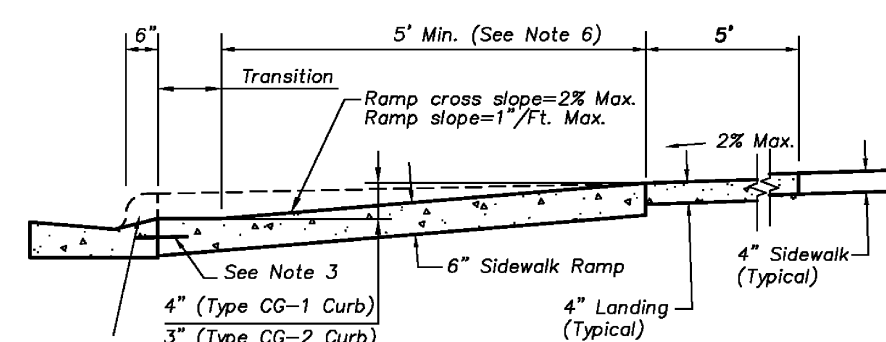
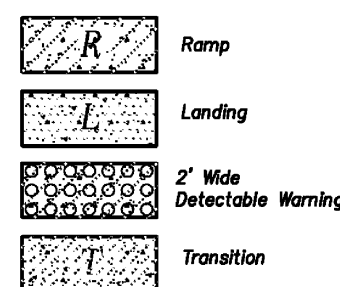
Sheet 6 of 7

Type A Sidewalk Ramp
Scale: $\frac{1}{4}"=1'-0"$

Sidewalk Ramp Notes:

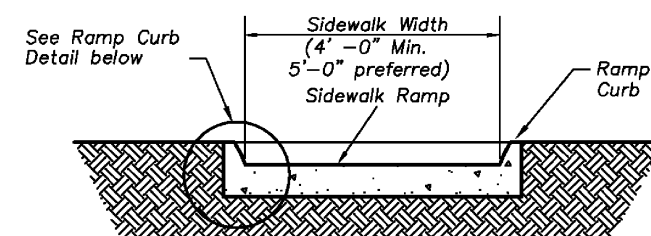
1. Sidewalk ramp location determined from the intersection of the extension of back of sidewalk and back of curb & gutter.
2. Plan drawings shall include a table of elevations for all points labeled as City.
3. Vertical clear construction joints or use bars #4 epoxy coated 12" o.c.
4. Longitudinal joint spacing to match width of sidewalk.
5. Isolation joints shall be placed where walk abuts driveways and similar structures, and 250' centers max.
6. Sidewalk Ramp shall be lengthened to provide ADA compliance slope and not exceed 15'.
7. ADA maximum ramp slope = 1"/ft.
8. ADA maximum cross slope = 2%.
9. Detectable warnings to comply with ADA requirements.
10. Landings for Type C ramp along the entire curb return required, but may be shortened to minimum ADA compliant dimension.

Legend:

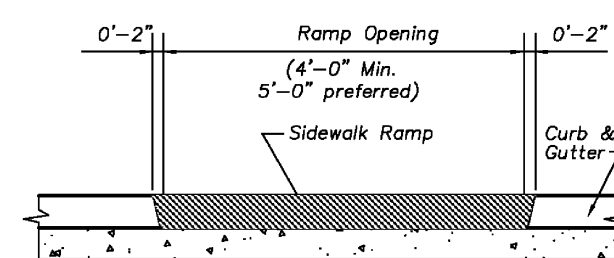


Section A-A
Type A & B Sidewalk Ramp

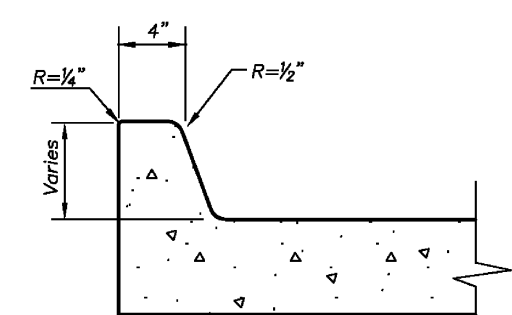
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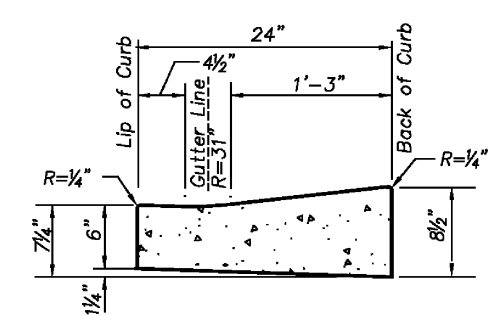
Section B-B
Type A & B Sidewalk Ramp
Scale: 1/2"=1'-0"



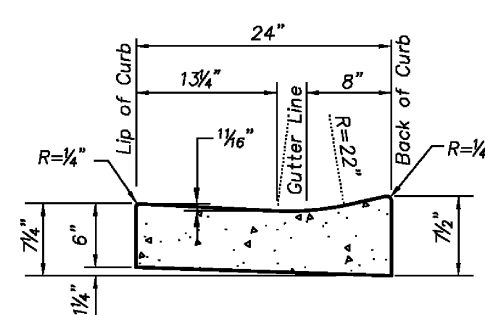
Section C-C
Type A & B Sidewalk Ramp
Scale: $\frac{1}{2}"=1'-0"$



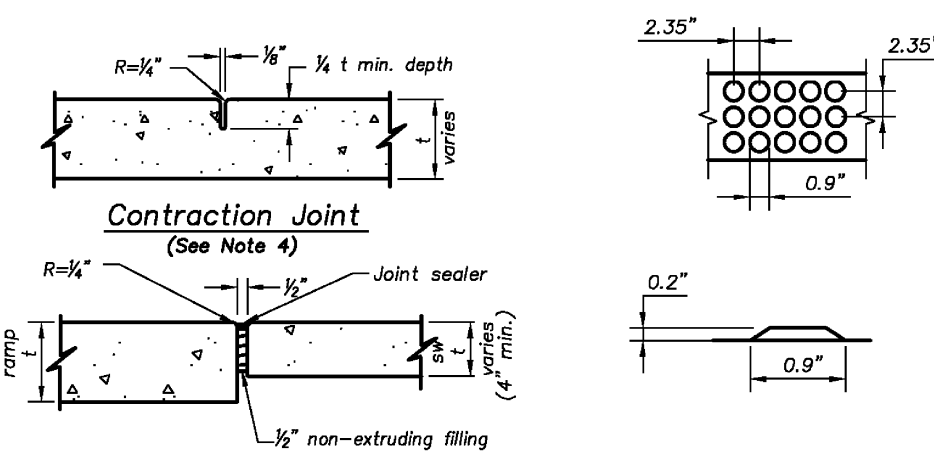
Ramp Curb Detail
Scale: 1 1/2" = 1'-0"



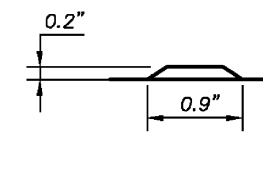
Use With Type CG-2 Curb
Scale: 1"=1'-0"



Use With Type CG-1 Curb
Scale: 1"=1'-0"

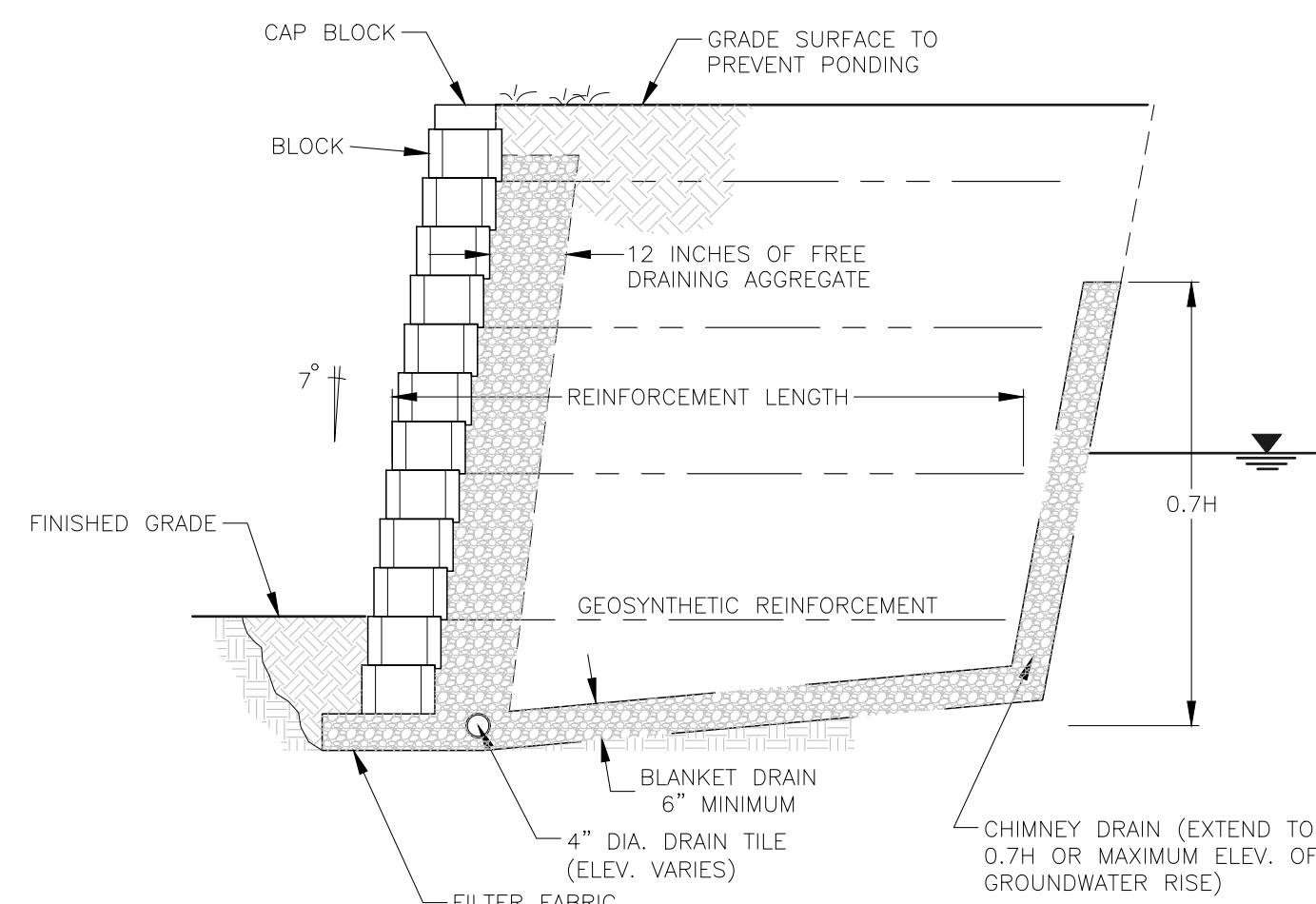


Isolation Joint
(See Note 5)

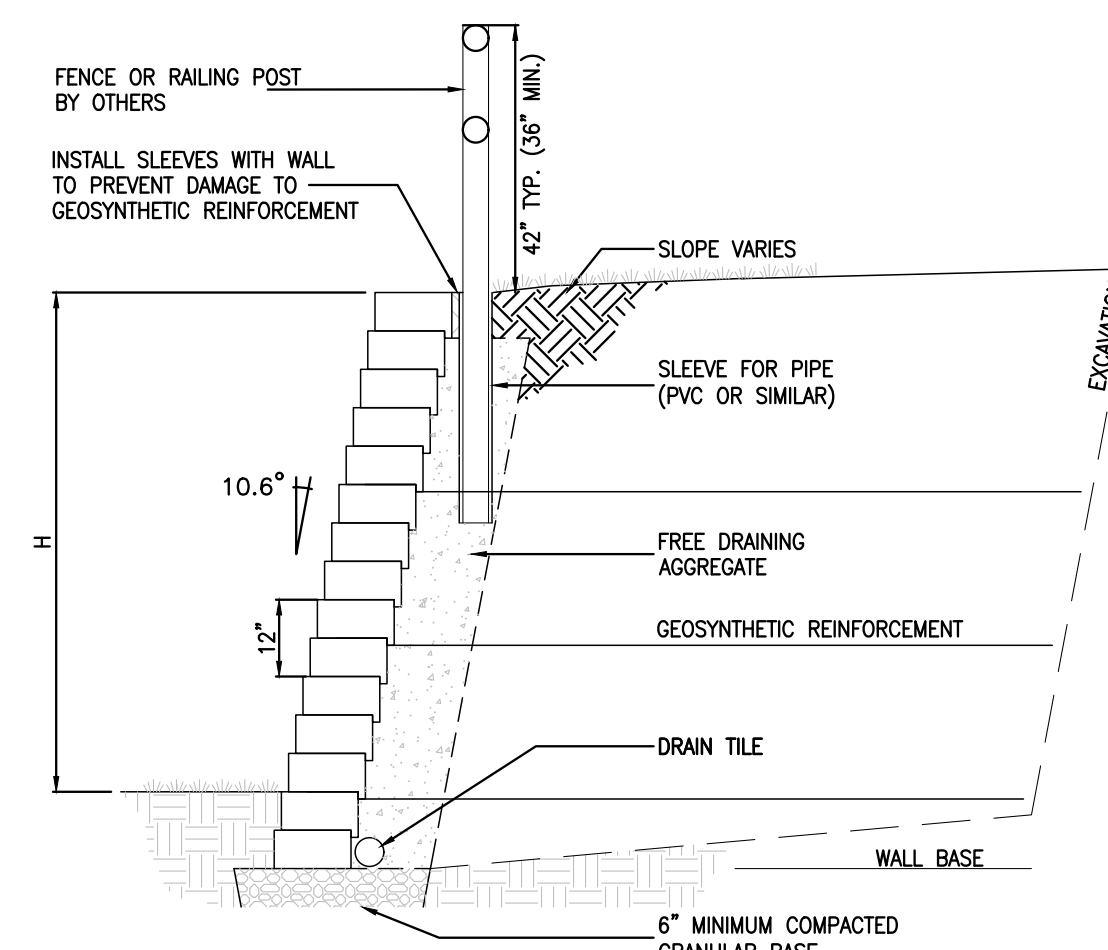


*Detectable Warning
Dome Spacing and Section*

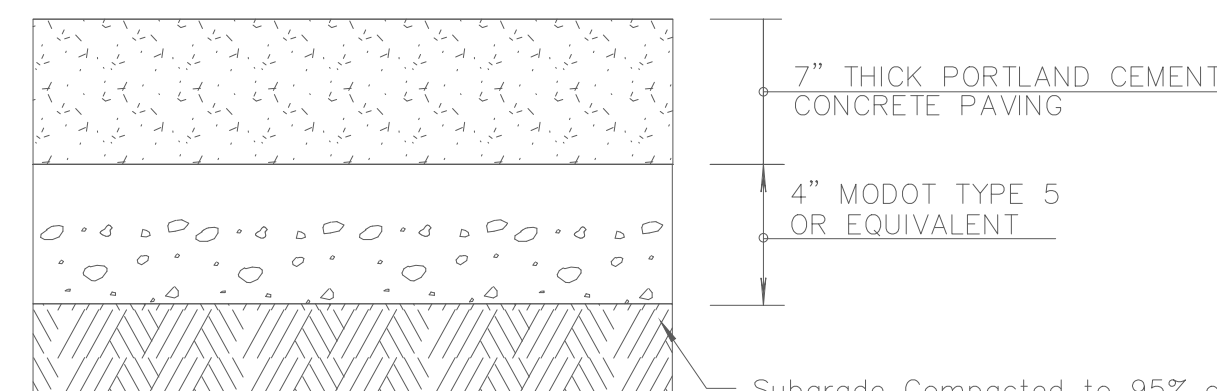
Not to Scale



RETAINING WALL DETAIL

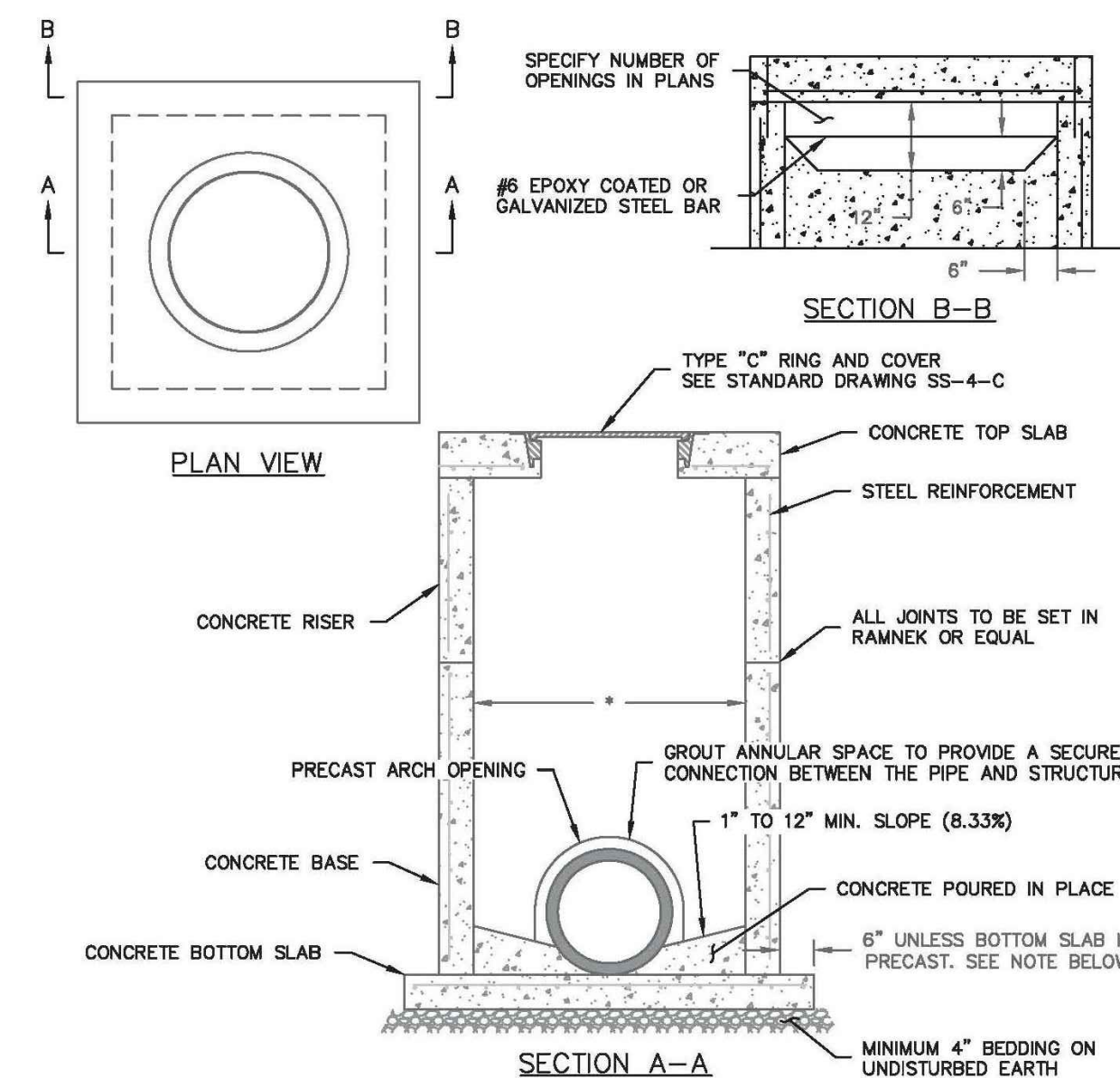


RETAINING WALL SECTION WITH RAILING



CONCRETE PAVEMENT SECTION
NOT TO SCALE

- Subgrade Compacted to 95% of Materials Maximum Dry Density per ASTM D698 at a moisture content of plus or minus 3%

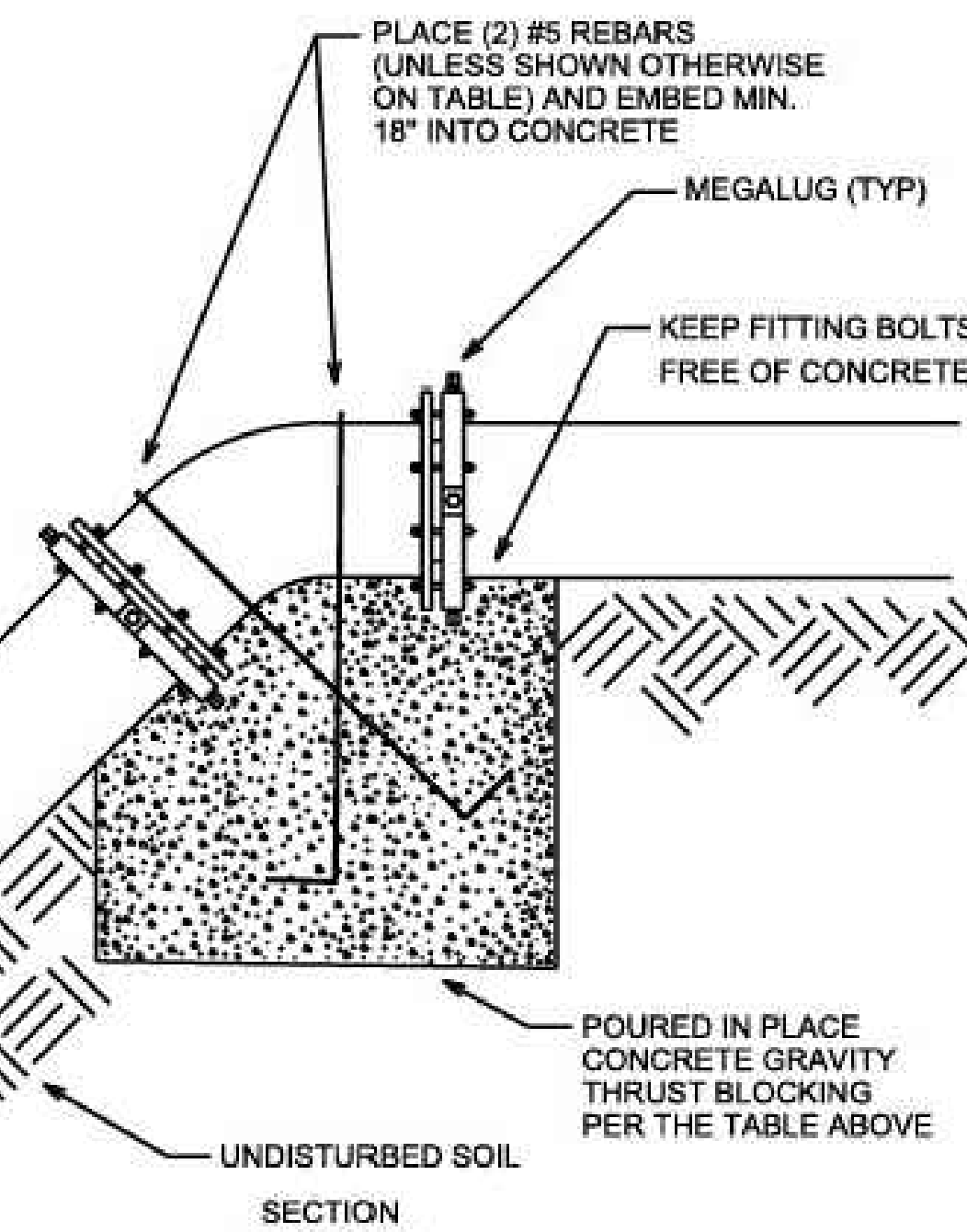


- NOTES:
1. AREA INLET SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ASTM C 913.
 2. AREA INLET SHALL BE CONSTRUCTED WITH AS FEW JOINTS AS REASONABLY PRACTICAL. WHEN JOINTS ARE REQUIRED, JOINTS SHALL BE WATER TIGHT, DETAILING AND DESIGNED TO PREVENT LATERAL MOVEMENT DURING AND AFTER CONSTRUCTION.
 3. TOP SLAB SHALL BE DESIGNED TO WITHSTAND LOADING BASED ON A COMBINATION OF DEAD LOADS, SNOW LOADS, AND A-16 (HS20-44) TRAFFIC LOADS IN ACCORDANCE WITH ASTM C890.
 4. BOTTOM SLAB SHALL BE POSITIONED IN PLACE. IF MANUFACTURER IS CONCERNED ABOUT STRUCTURAL INTEGRITY OF BOTTOM SLAB, IT SHALL BE REINFORCED WITH CONCRETE BARS.
 5. PIPE TO BE ON GRADE BEFORE BOTTOM SLAB IS CONSTRUCTED UNLESS BOTTOM IS PRECAST WITH BASE.
 6. ALL PIPES SHALL FIT FLUSH WITH INSIDE FACE OF INLET.
 7. BOTTOM OF INLET SHALL BE FLUSH WITH CONCRETE CHANNELS TOWARD OUTLET PIPE FROM ALL INLET PIPES. CONCRETE SHALL BE FLUSH WITH INVERT OF OUTLET PIPE.
 8. CONCRETE TOP SLAB SHALL BE FINISHED TO STRUCTURE AT THE CORNERS USING ONE #4 DEFORMED BAR IN EACH CORNER.

PIPE DIAMETER	*MINIMUM INSIDE DIMENSION OF STRUCTURE
15" - 24"	THREE FEET (3')
27" - 30"	FOUR FEET (4')
36" - 42"	FIVE FEET (5')
48" - 54"	SIX FEET (6')

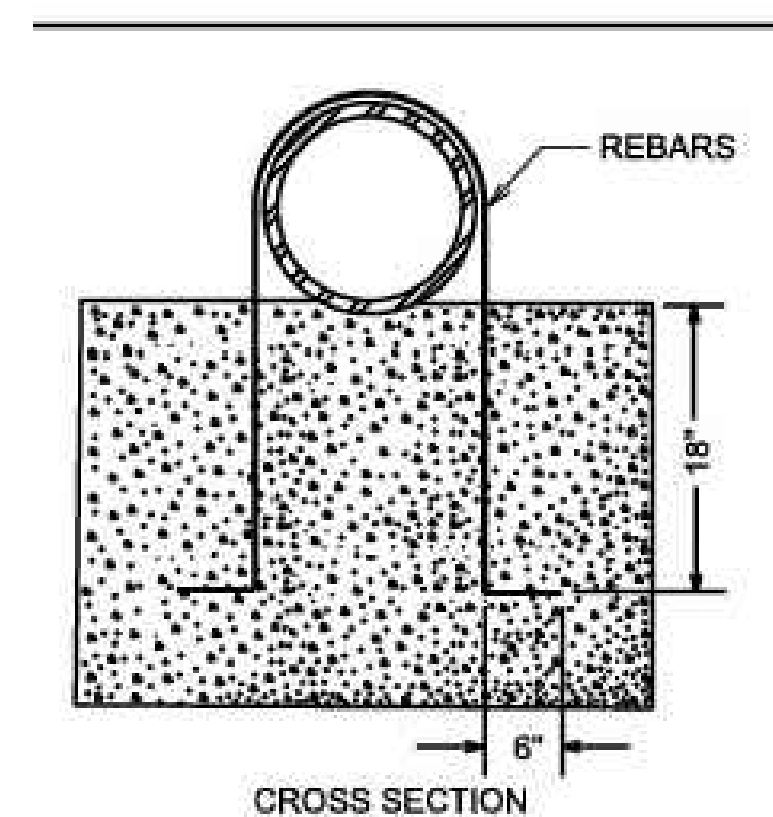
AREA INLET DETAIL
NOT TO SCALE

VOLUME REQUIREMENT FOR VERTICAL DOWN BENDS (C.Y.)				
FITTING SIZE (IN)	90° BEND	45° BEND	22.5° BEND	11.25° BEND
4	0.7	0.5	0.3	0.1
6	1.6	1.1	0.6	0.3
8	2.8	2.0	1.1	0.6
10	4.4	3.1	1.7	0.9
12	6.4	4.5	2.4	1.2
16	11.3	8.0	4.3	2.2
20	17.7 3 BARS	12.5 3 BARS	6.8	3.4
24	25.4 6 BARS	18.0 4 BARS	9.7	5.0

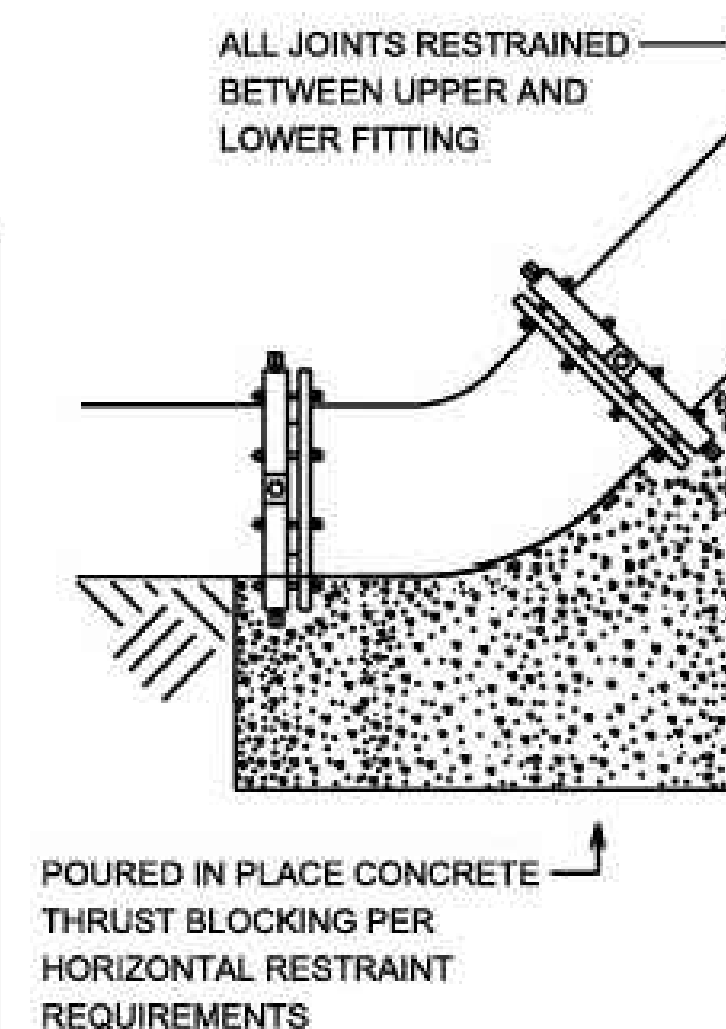


NOTES:

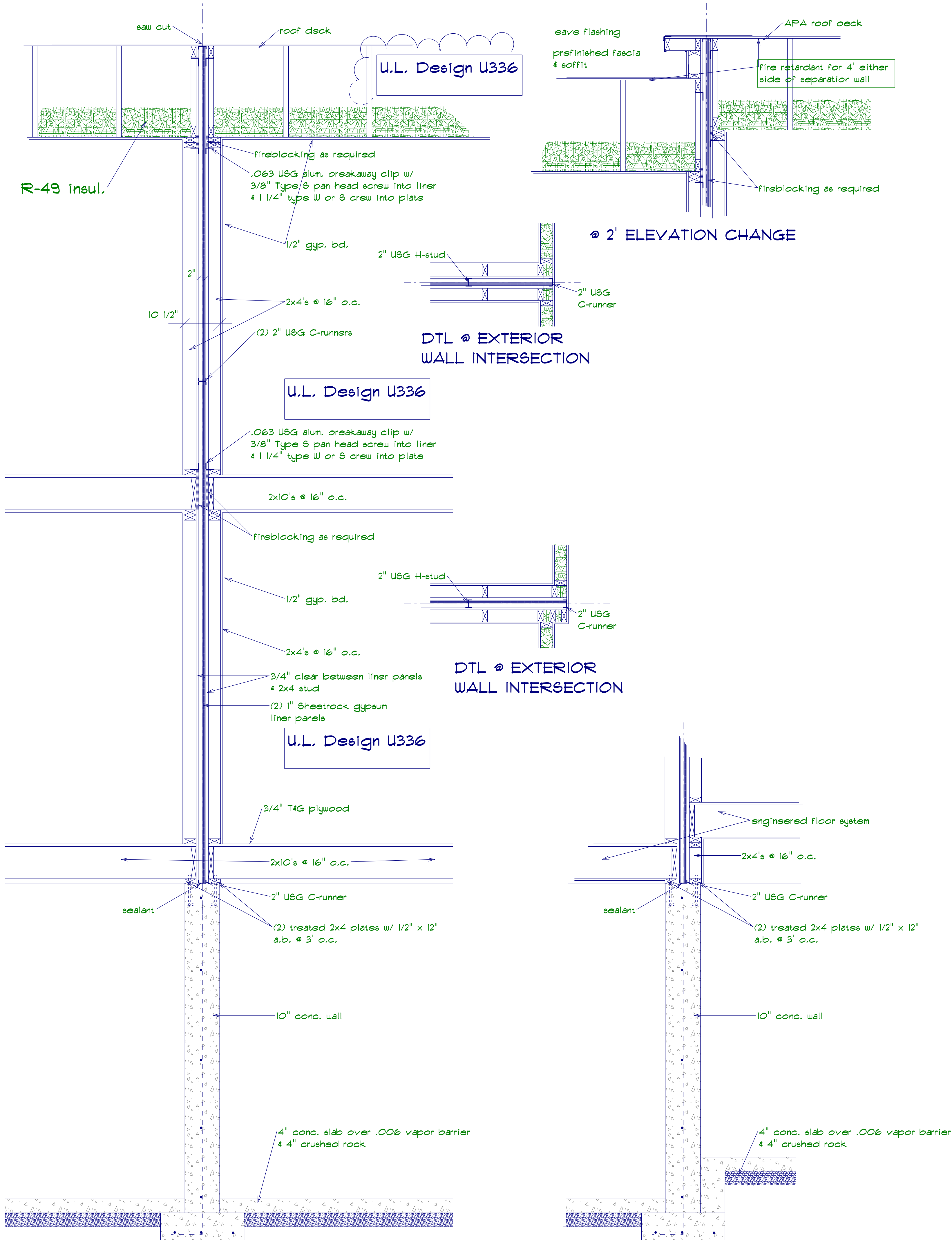
- 1) REBAR SHALL BE #5 EXPOXY COATED GRADE 60
- 2) CONCRETE SHALL BE MIN. 3,000 PSI COMPRESSIVE STRENGTH
- 3) ABOVE VALUES ARE BASED ON 150 PSI TEST PRESSURE FOR OTHER TEST PRESSURES PROPORTION AS FOLLOWS:
BLOCK VOLUME=TEST PRESSURE/150 X TABLE VALUE



CROSS SECTION

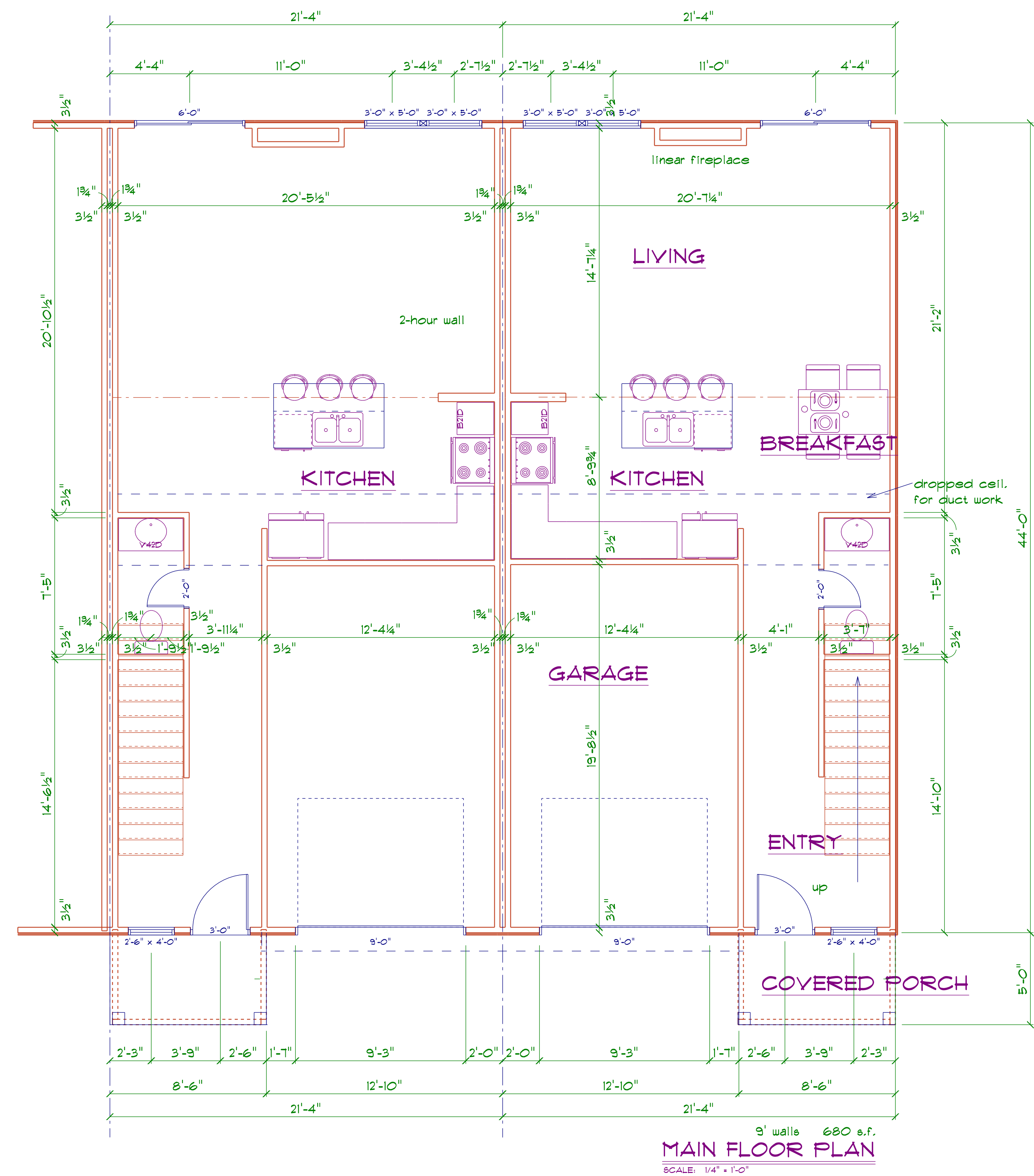


GRAVITY BLOCK THRUST RESTRAINT FOR VERTICAL BENDS
NOT TO SCALE

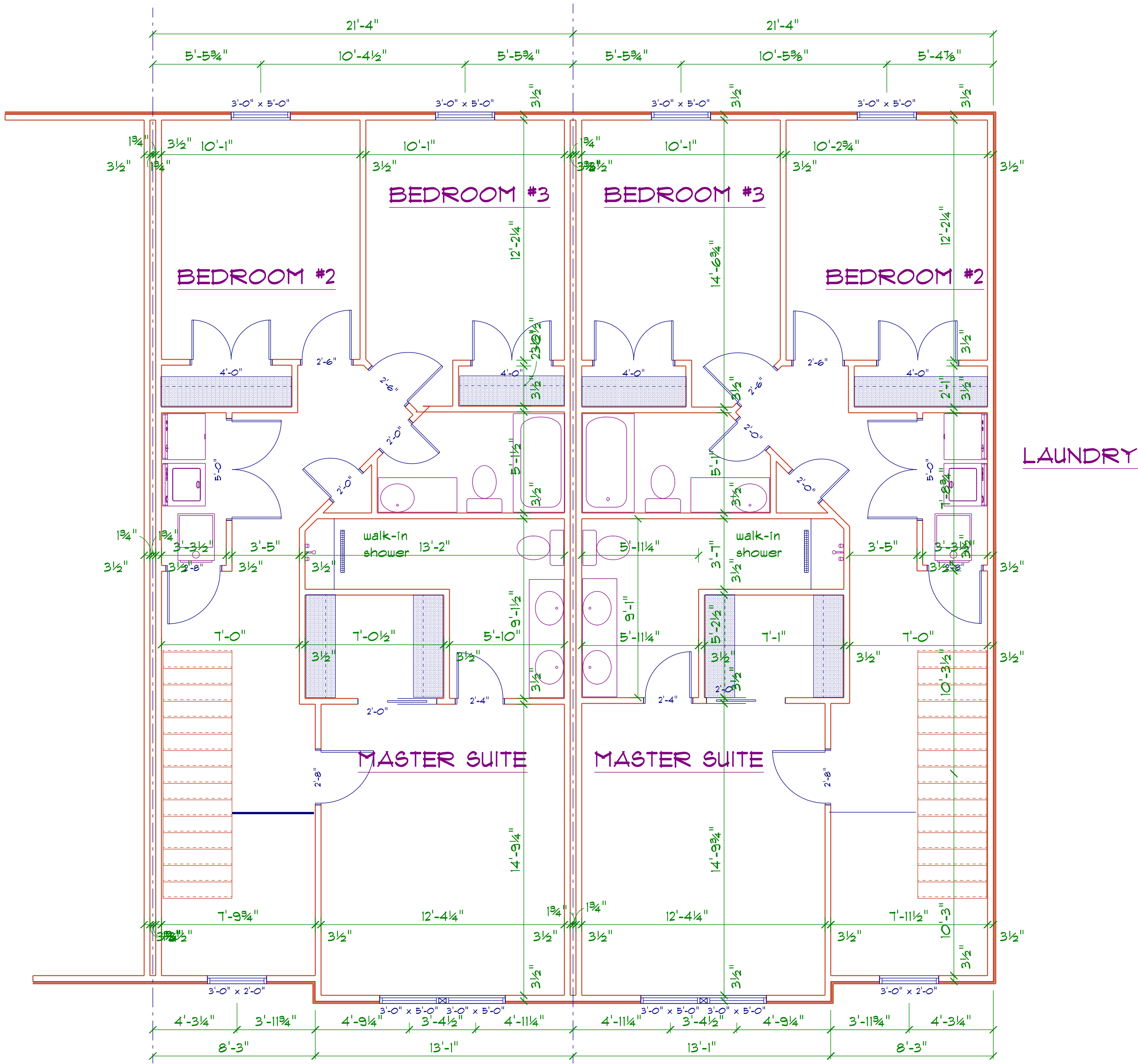


PARTY-WALL DETAIL @ 2' ELEVATION CHANGE

3/4" = 1'-0"



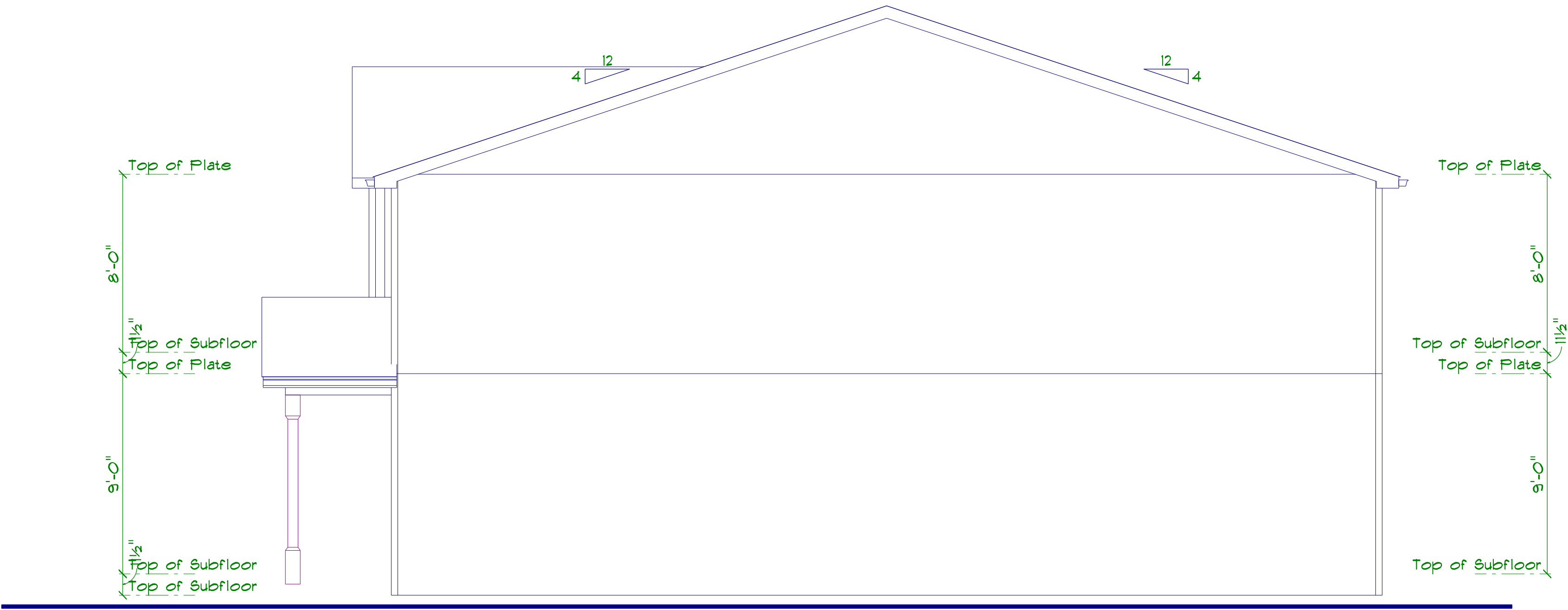
Archituckture		Dennis E. Tuck, Architect 12319 Moffitt Liberty, MO 64068	8-unit Townhouse Project Clayton Cox	GROUND SNOW LOAD - 20#/S.F.
Sheet		816.628.5013		WIND SPEED - 115 M.P.H.
1				SEISMIC DESIGN CATEGORY - A
Monday, November 1,				FROST LINE DEPTH - 36"
Job. NO. 21.082				



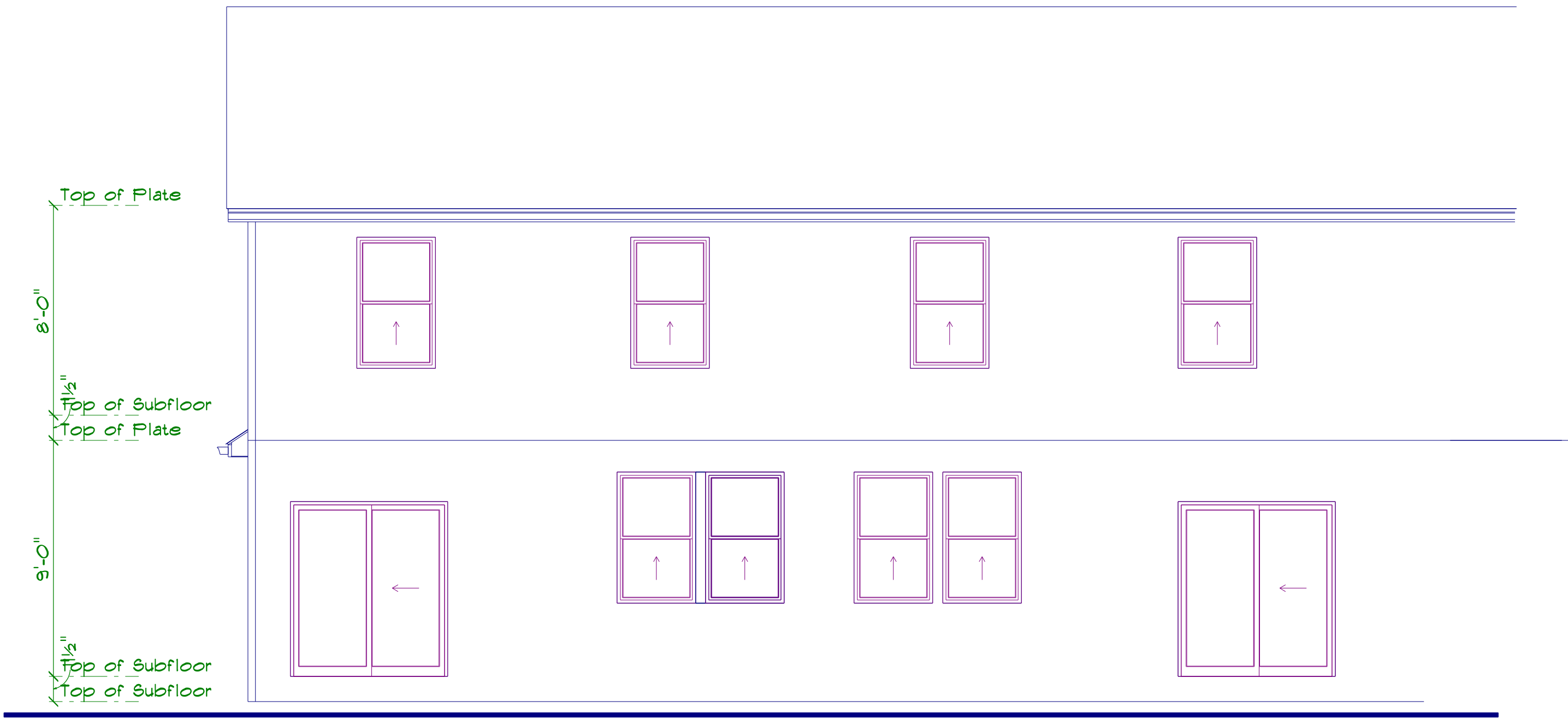
828 s.f.
SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

ArchiTuckture		8-unit Townhuse Project Clayton Cox		GROUND SNOW LOAD - 20#/s.f. WIND SPEED - 115 M.P.H. SEISMIC DESIGN CATEGORY - A FROST LINE DEPTH - 36"
Dennis E. Tuck, Architect 12319 Morfitt Liberty, MO 64068		Sheet 2		
Monday, November 1, 2021		Job. NO. 21.082		

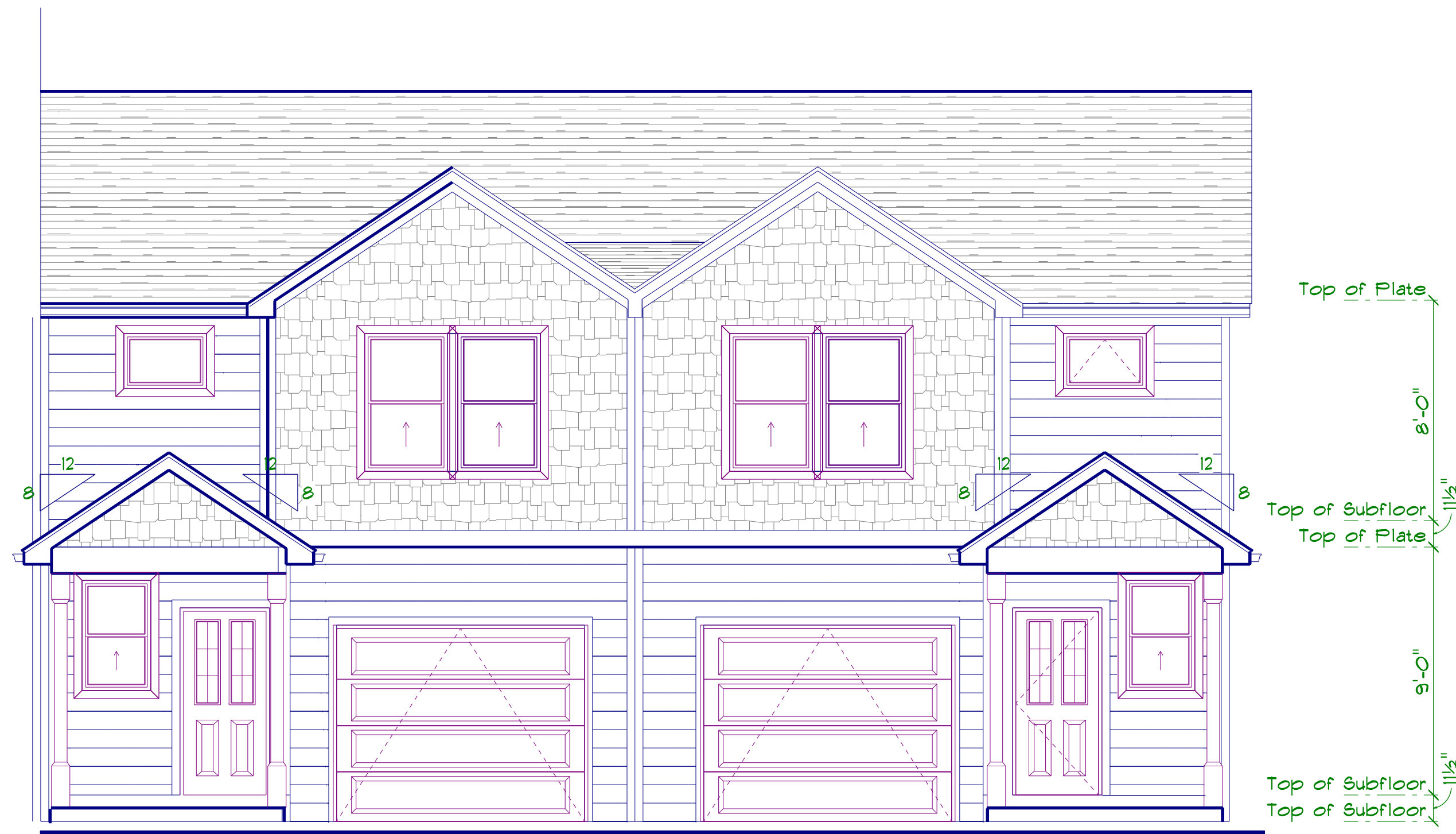
C:\SoftPlan\Projects\cottownhouses\



RIGHT ELEVATION
SCALE: 1/4" = 1'-0"
left side reversed

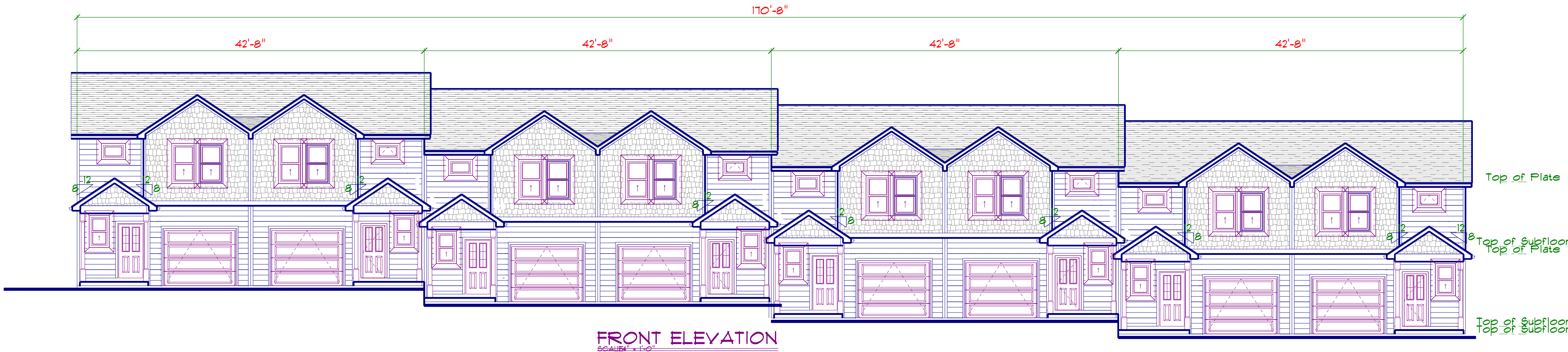
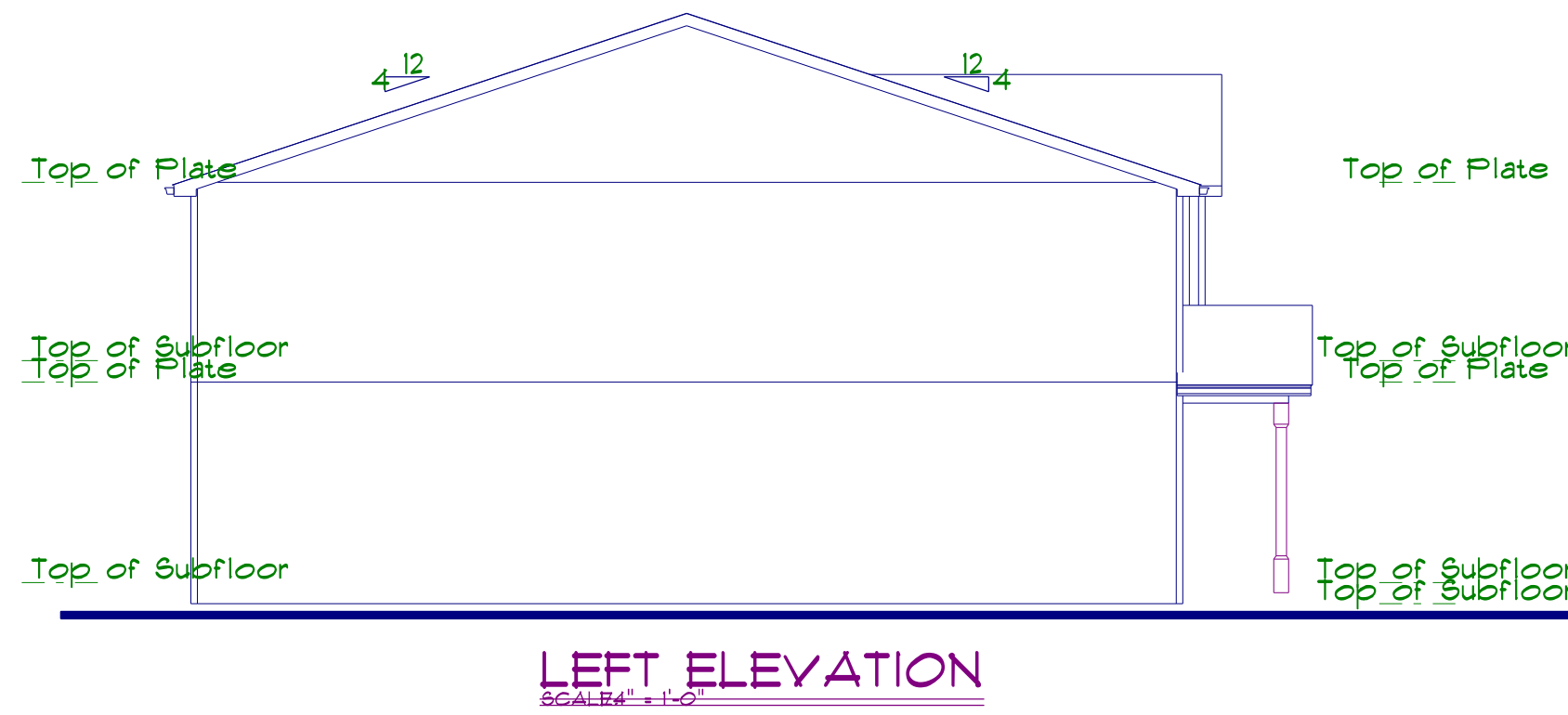
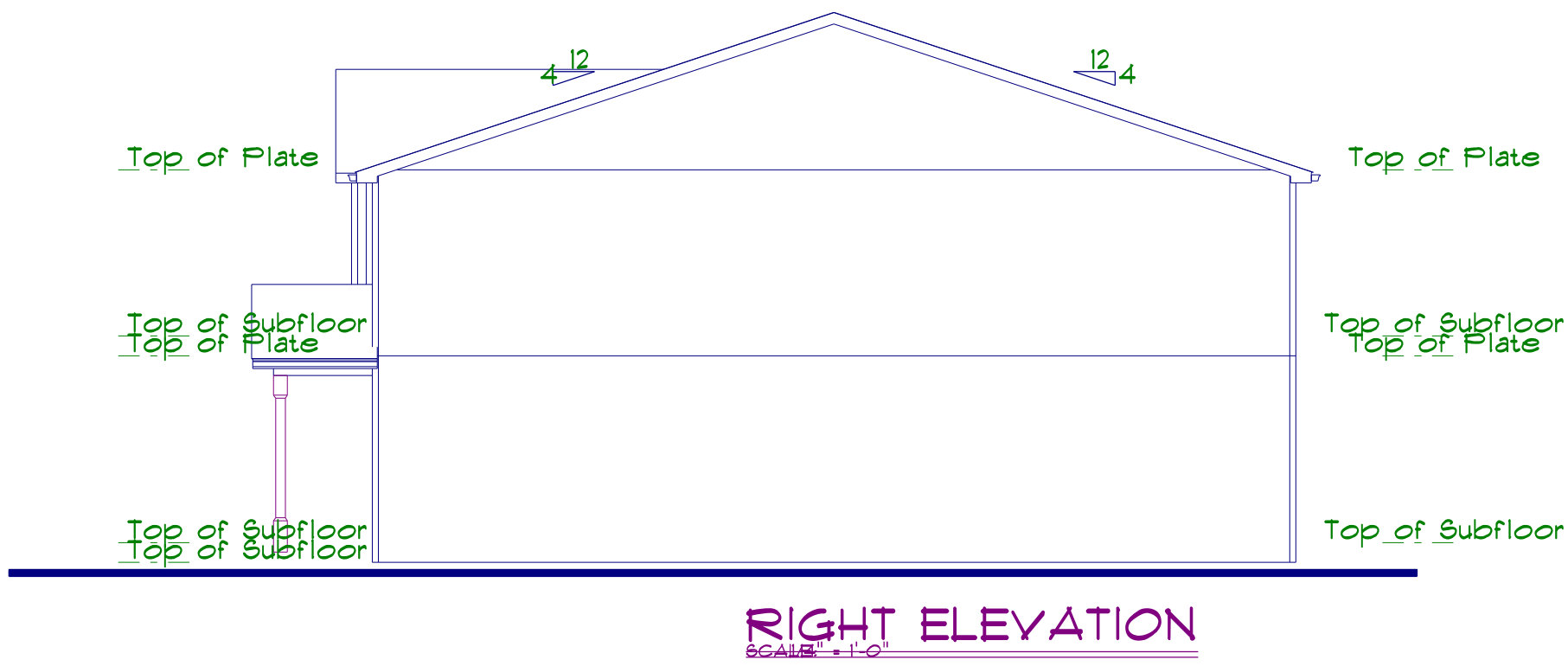


**PARTIAL
REAR ELEVATION**
SCALE: 1/4" = 1'-0"

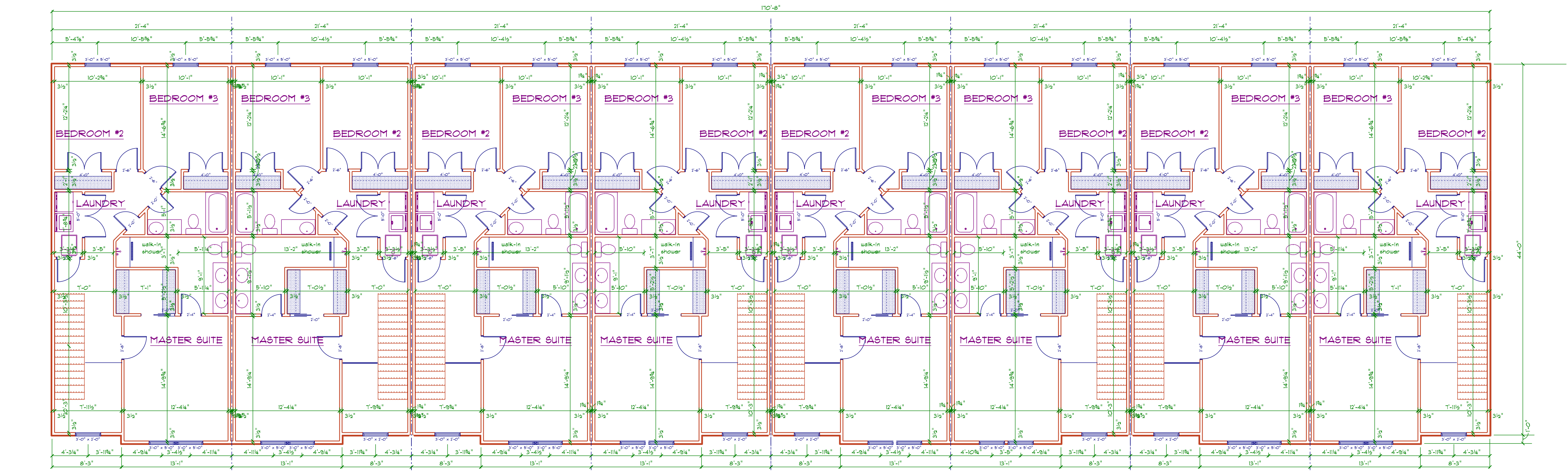


**PARTIAL
FRONT ELEVATION**
SCALE: 1/4" = 1'-0"

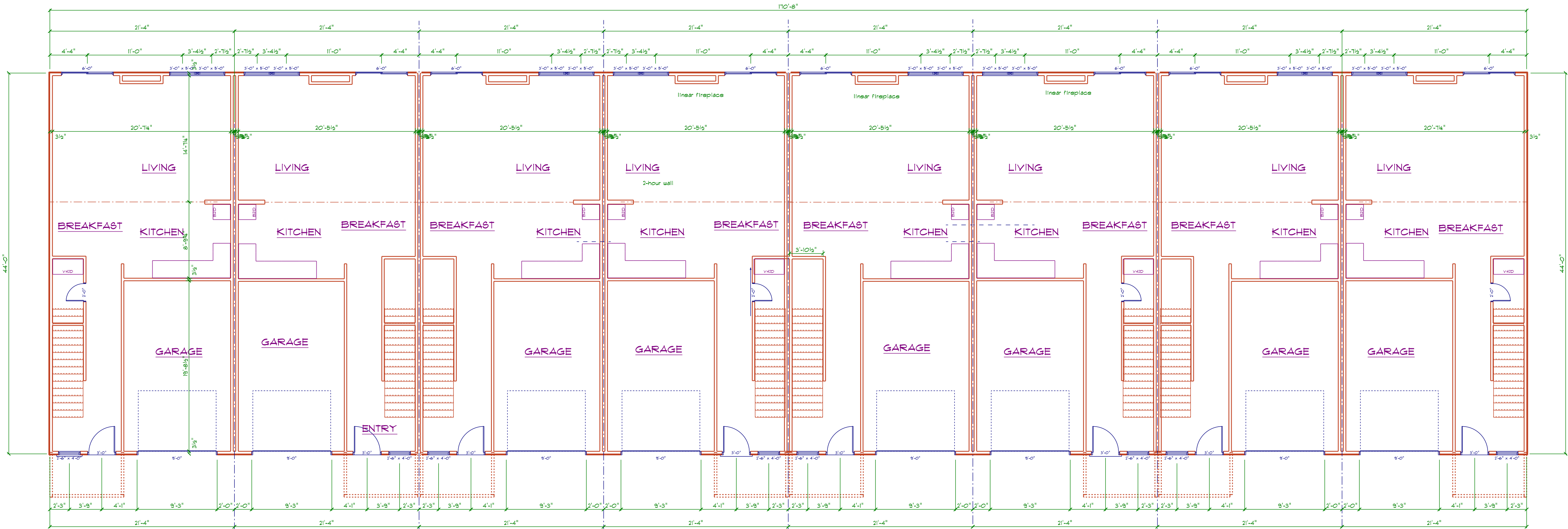
8-unit Townhouse Project Clayton Cox		Dennis E. Tuck, Architect 12319 Moffitt Liberty, MO 64068	ArchiTuckture	816.628.5013	Sheet	3	Monday, November 1,	Job. NO.	21.082
GROUND SNOW LOAD - 20#/S.F.									
WIND SPEED - 115 M.P.H.									
SEISMIC DESIGN CATEGORY - A									
FROST LINE DEPTH - 36"									



GROUND SNOW LOAD - 20#/S.F. WIND SPEED - 115 M.P.H. SEISMIC DESIGN CATEGORY - A FROST LINE DEPTH - 36"	
8-unit Townhouse Project Clayton Cox	
Dennis E. Tuck, Architect 12319 McFitt Liberty, MO 64068	
ArchiTuckture 816.628.5013	
Sheet	4
Monday, November 1, 2021	
Job. NO.	21.082



UPPER FLOOR PLAN
SCALE: 1/8" = 1'-0"



MAIN FLOOR PLAN
SCALE: 1/8" = 1'-0"

Archituckture 816.622.5013	Dennis E. Tuck, Architect 12315 Moffitt Liberty MO 64068	8-unit Townhouse Project Clayton Cox	GROUND SNOW LOAD - 20#/S.F. WIND SPEED - 115 M.P.H. SEISMIC DESIGN CATEGORY - A FROST LINE DEPTH - 36"
	Sheet 5	Job. NO. 21.082	

10/21/2021

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