

*Robert Barrilleaux & Assoc., Inc.
42333 Deluxe Plaza Ste. 8
Hammond, LA 70403*

Clay Barrilleaux

Todd Ryan

Mark Chemay

June 25th, 2024

Mr. Tommy Cousin
1715 Claiborne St.
Mandeville, 70448

Re: Statement of Responsibility for 2108 10th Street Slidell, LA

Dear Mr. Cousin,

By this letter, I certify that the plans that bear my seal and signature regarding the raising and construction at the above address are consistent with the IRC 2021, ASCE 07-16, ASCE 24-14 and local specifications. I have prepared and reviewed these plans for this specific location and have approved them as a professional engineer and my firm bears the liability that comes with that approval.

This responsibility is only for the design of construction. Engineer does not supervise the construction unless specifically requested and only makes a final inspection to ensure work has been completed and that pilings, piers, footings, and/or columns have been properly placed to support the home.

Should you have any questions please contact me at my office.

Sincerely,



06/25/24

Clay Barrilleaux, PE

*Robert Barrilleaux & Assoc., Inc.
42333 Deluxe Plaza Ste. 8
Hammond, LA 70403*

Clay Barrilleaux

Todd Ryan

Mark Chemay

June 25, 2024

Mr. Tommy Cousin
1715 Claiborne St.
Mandeville, 70448


Re: Lateral Load and Uplift Load Bracing for 2108 10th Street Drive Slidell, LA

Dear Mr. Cousin,

Regarding the forces encountered during a Risk (II) 3 sec peak of 142 mph given by ASCE 7-16, this homes foundation has been designed to withstand these forces. The homes concrete columns have been spaced so that home's foundation can withstand the later forces encountered. Regarding the uplift, the weight of the house is more than enough to hold the house to the columns, but in addition each of the exterior columns' rebar are set 6" into the original footing of the home. Note that this does not guarantee that the roof of the home is strong enough to resist the wind force and in the event of the 142 mph wind the roof will fail before the house is pulled off the foundation.

Should you have any questions please contact me at my office.

Sincerely,



6/25/24

Clay Barrilleaux, PE

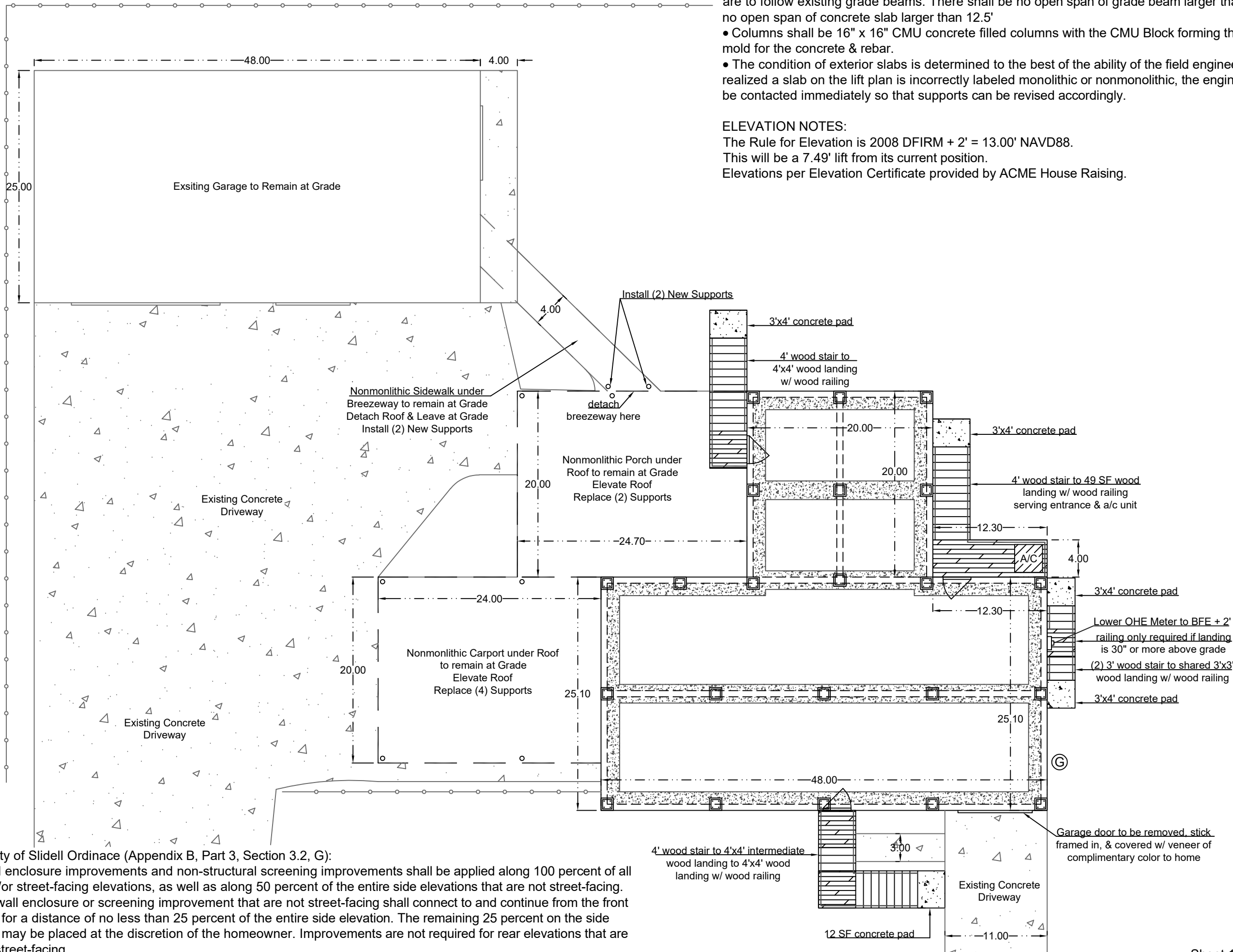
- Existing Grade Beams shown are assumed & shall be field verified once home has been elevated. Placement of columns is to be field verified & revised if needed after home is elevated. New Columns are to follow existing grade beams. There shall be no open span of grade beam larger than 12.5', & no open span of concrete slab larger than 12.5'
- Columns shall be 16" x 16" CMU concrete filled columns with the CMU Block forming the 12"x12" mold for the concrete & rebar.
- The condition of exterior slabs is determined to the best of the ability of the field engineer. If it is realized a slab on the lift plan is incorrectly labeled monolithic or nonmonolithic, the engineer should be contacted immediately so that supports can be revised accordingly.

ELEVATION NOTES:
 The Rule for Elevation is 2008 DFIRM + 2' = 13.00' NAVD88.
 This will be a 7.49' lift from its current position.
 Elevations per Elevation Certificate provided by ACME House Raising.

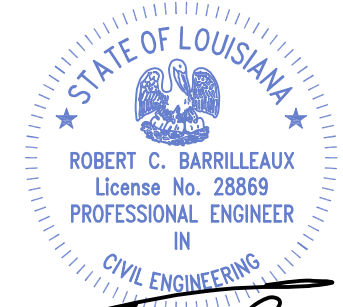
Legend	
16"x16" CMU Block concrete filled column	
w/ Steel Support	
Vented CMU Wall	
New concrete Footing	
Existing Grade Beam	
Water Supply	
Gas Supply	
Aerator	
Electrical	
Air Conditioner	
This is a legend only & does not represent what is currently on site.	

Building Notes:

Living Area:	1,605 ft ²
Nonmonolithic Garage:	1200ft ²
Nonmonolithic Porch under Roof:	974 ft ²
# of Columns +/-	37
Metal Railing +/-	0 LF
Wood Railing +/-	99 LF



As per City of Slidell Ordinance (Appendix B, Part 3, Section 3.2, G):
 Structural enclosure improvements and non-structural screening improvements shall be applied along 100 percent of all front and/or street-facing elevations, as well as along 50 percent of the entire side elevations that are not street-facing. The sidewall enclosure or screening improvement that are not street-facing shall connect to and continue from the front elevation for a distance of no less than 25 percent of the entire side elevation. The remaining 25 percent on the side elevation may be placed at the discretion of the homeowner. Improvements are not required for rear elevations that are not also street-facing.



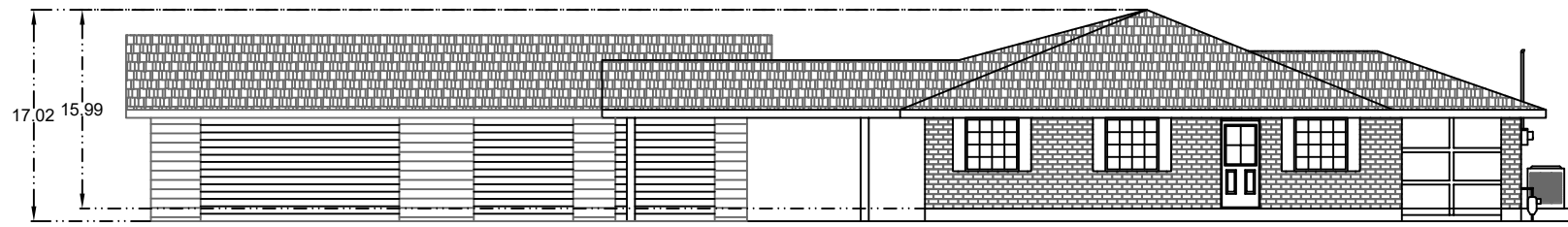
Robert C. Barrilleaux
 9/19/24

Post-Lift Plan
 Lift Company: ACME House Raising

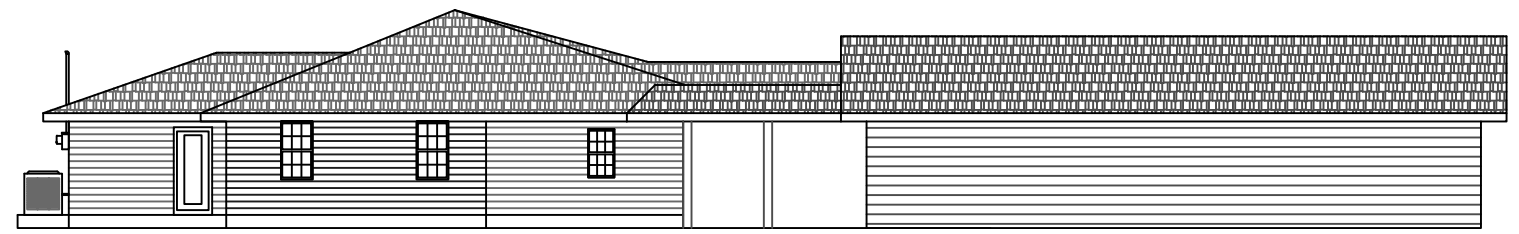
2108 10th Street
 Slidell, LA



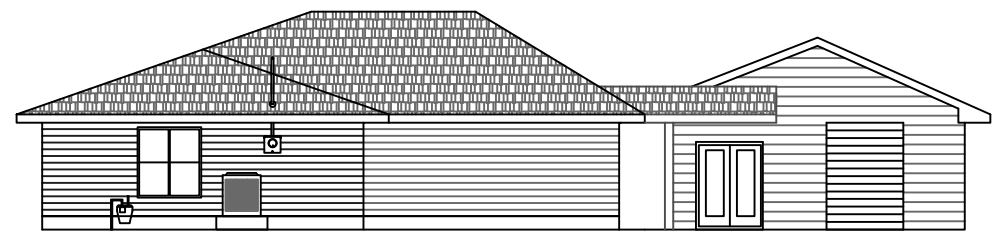
Date: June 24, 2024 Scale: 1" = 10'
 Drawn by: TB Revised:



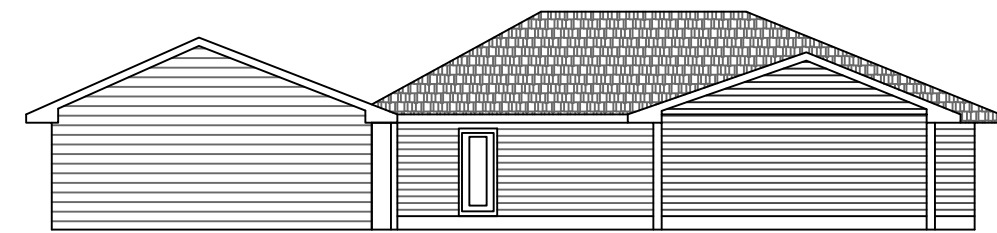
Front Elevation



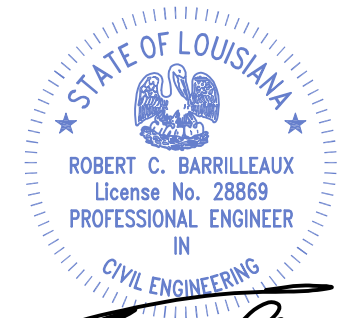
Rear Elevation



Right Elevation



Left Elevation



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9/19/24

Pre-Lift Side Views
Lift Company: ACME House Raising
2108 10th Street
Slidell, LA

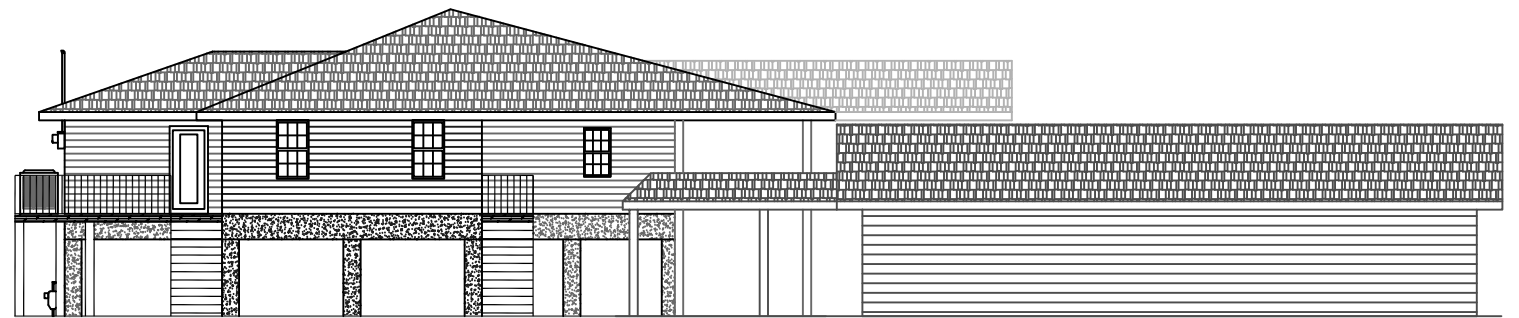


Robert Barrilleaux & Associates, Inc.
ph: (985)-542-0391 fax: (985)-542-6515
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Engineer - Robert C. Barrilleaux, PE # 28869

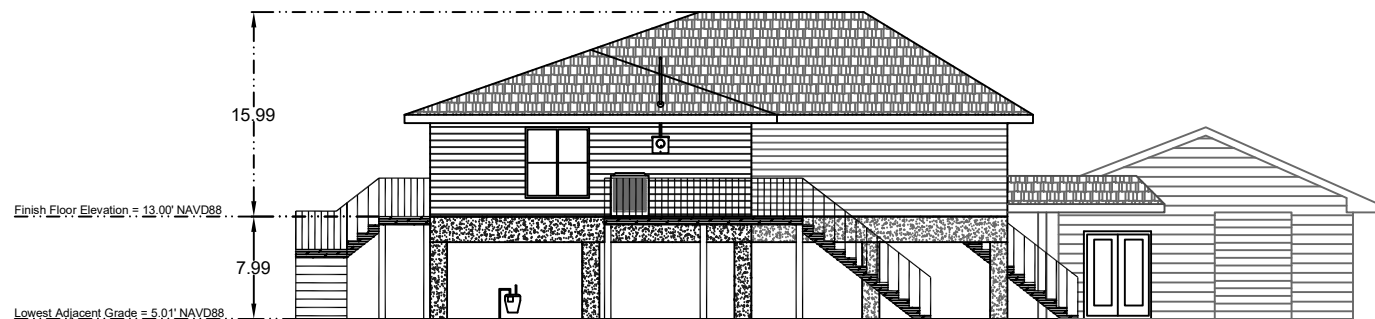
Date: June 26, 2024 Scale: 1" = 15'
Drawn by: DF Revised:



Front Elevation

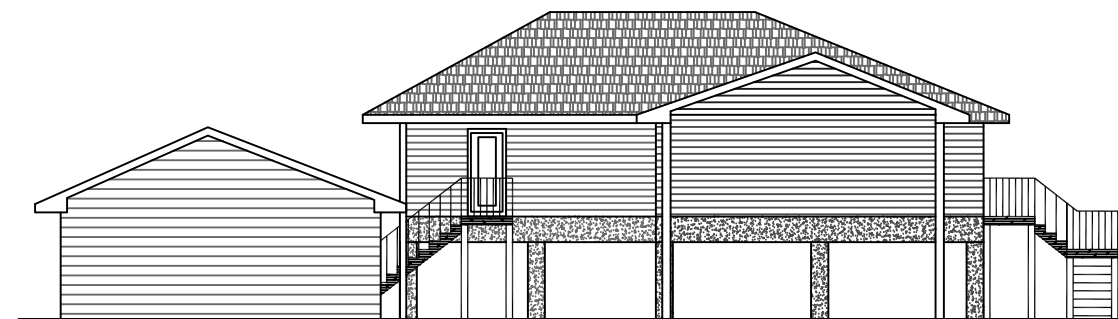


Rear Elevation

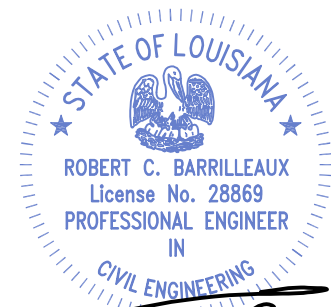


Right Elevation

Finish Floor Elevation = 13.00' NAVD88
 Lowest Adjacent Grade = 5.01' NAVD88



Left Elevation



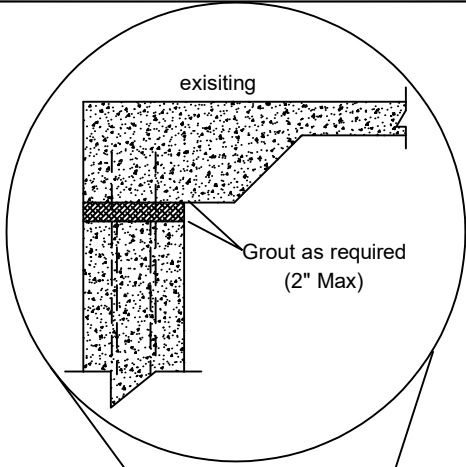
R.C.B.
 9/19/24

Post-Lift Side Views
 Lift Company: ACME House Raising
 2108 10th Street
 Slidell, LA

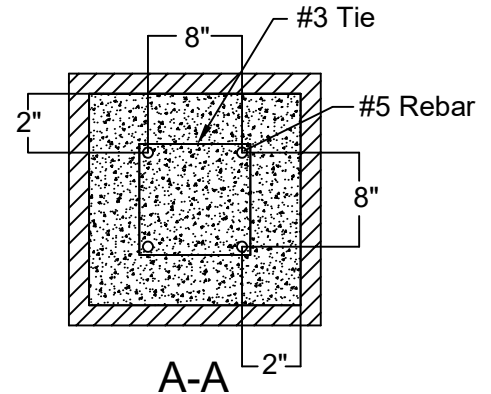
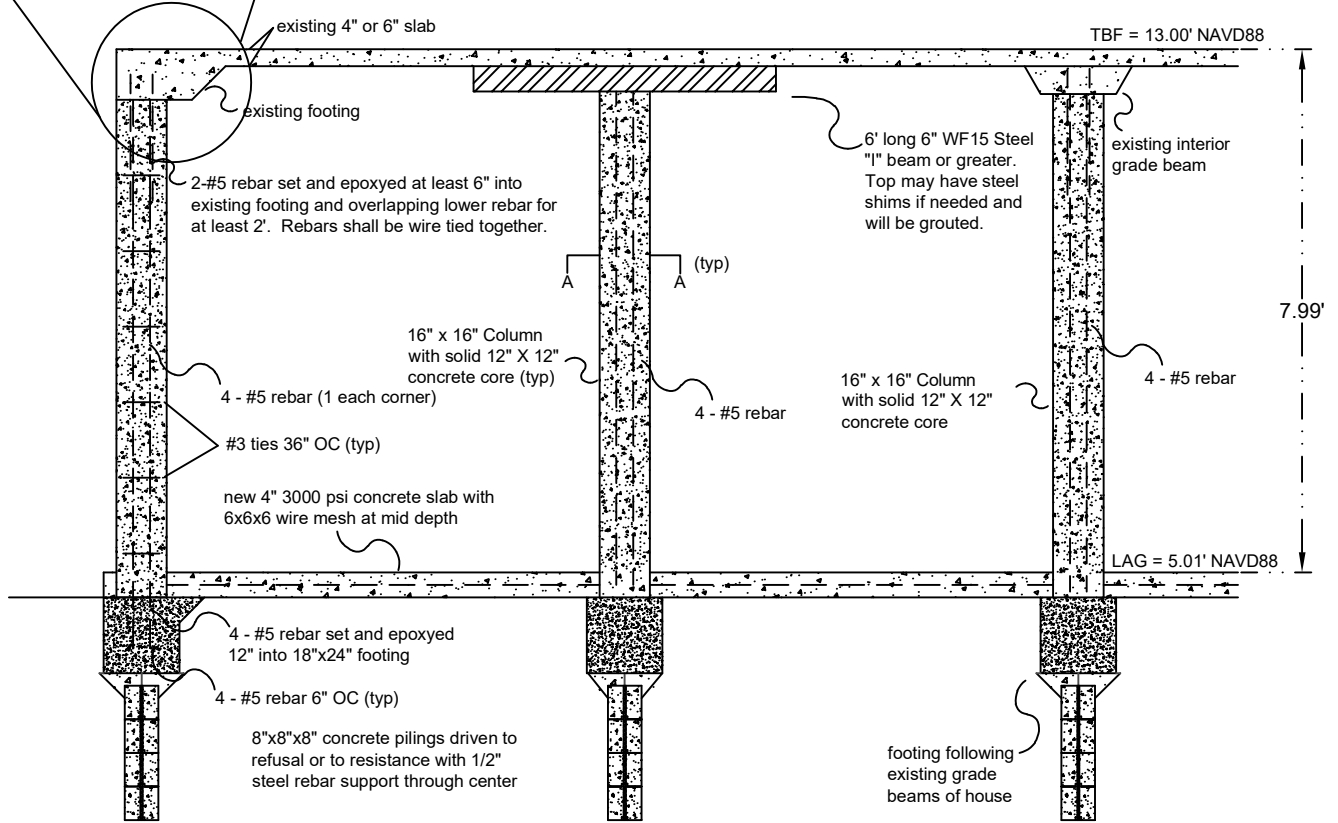


Robert Barrilleaux & Associates, Inc.
 ph: (985)-542-0391 fax: (985)-542-6515
 42333 Deluxe Plaza Suite 8 Hammond, LA
 Engineer - Robert C. Barrilleaux, PE # 28869

Date: June 26, 2024 Scale: 1" = 15'
 Drawn by: DF Revised:



Note:
 Due to "I" beam support not being under a load bearing wall or on exterior it will be held in place by horizontal pressure from slab and non-shrink grout.



Typical 16" Square CMU Block Section

GENERAL NOTES:

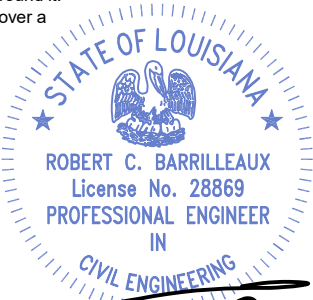
- 1) If slab is a 4" slab, un-beamed cross span can not be longer than 8'.
- 2) Exterior Columns shall set directly on footing and 4" slab shall be poured around it.
- 3) Column not supporting footing or grade beam does not have to be directly over a pushed piling, but shall be over a pile supported footing.
- 4) Footing shall be 18" deep and min. of 24" wide with 3000 psi concrete

Typical Detail of Steel Structural Beam & Foundation Footing with Concrete Columns
 Lift Company: ACME House Raising

2108 10th Street
 Slidell, LA



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 Engineer - Robert C. Barrilleaux, PE # 28869



[Signature]
 9/19/24

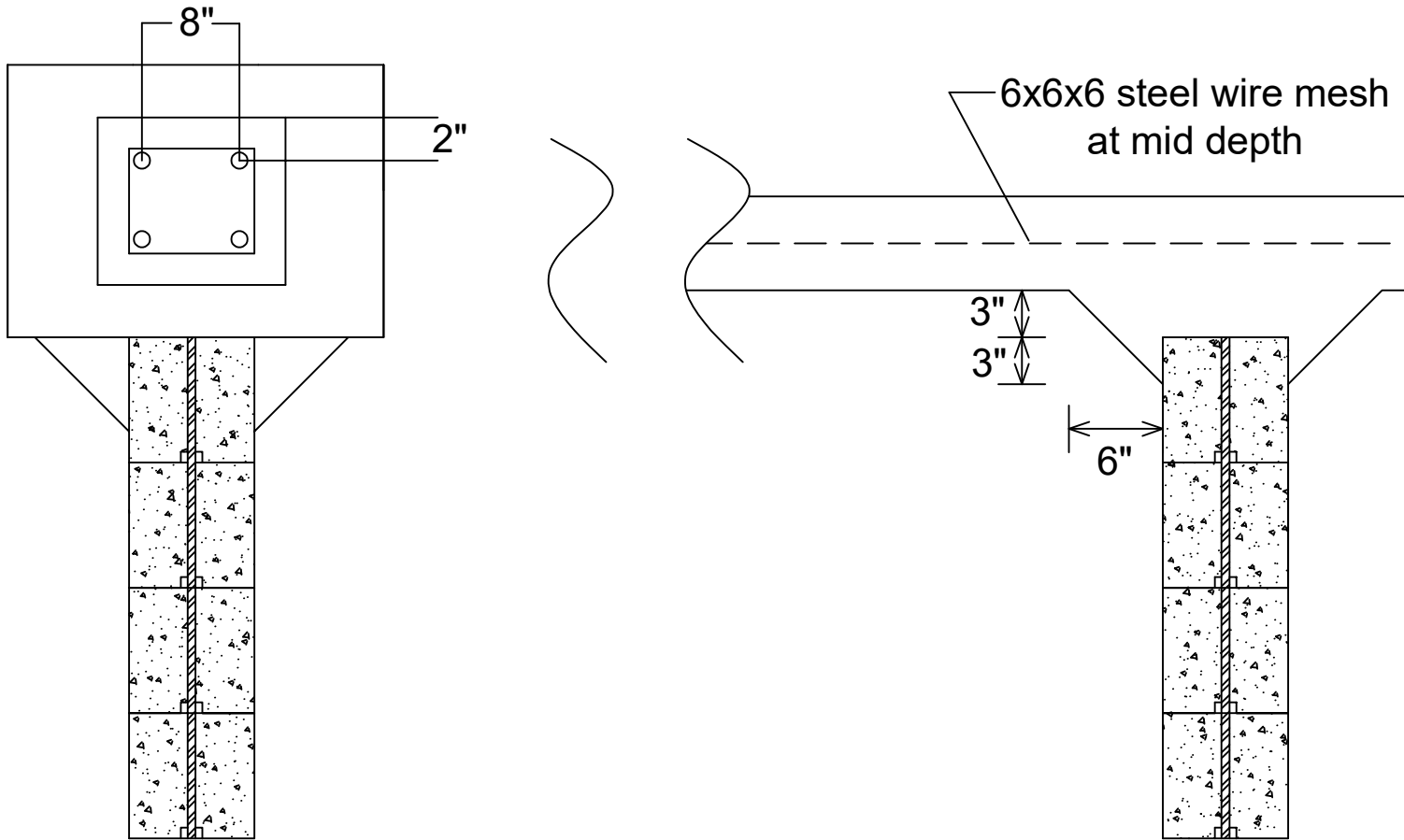
Date: June 24, 2024

Scale: 1" = 4'

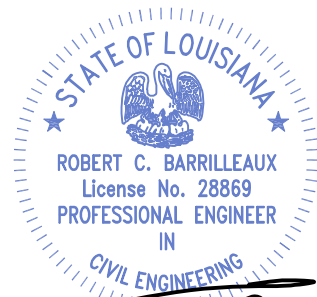
Drawn by: RCB

Revised: N/A

new 4" 3000 psi concrete slab
with 6x6x6 wire mesh



8"x8"x8" concrete pilings driven
to refusal or to resistance with
1/2" steel rebar support through
center



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9/19/24

Typical Detail of Piling Cap
Lift Company: ACME House Raising
2108 10th Street
Slidell, LA



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Engineer - Robert C. Barrilleaux, PE # 28869

GENERAL NOTES:

1. Spacing for piles will be determined during lifting of slab.
2. Piling may extend 1" into footing or be at bottom of footing.
If so, no cap is needed.

Date: June 24, 2024

Scale: 1" = 3'

Drawn by: *RCB*

Revised: N/A

16" x 16" concrete filled CMU column
with 12" poured 3000 psi concrete core

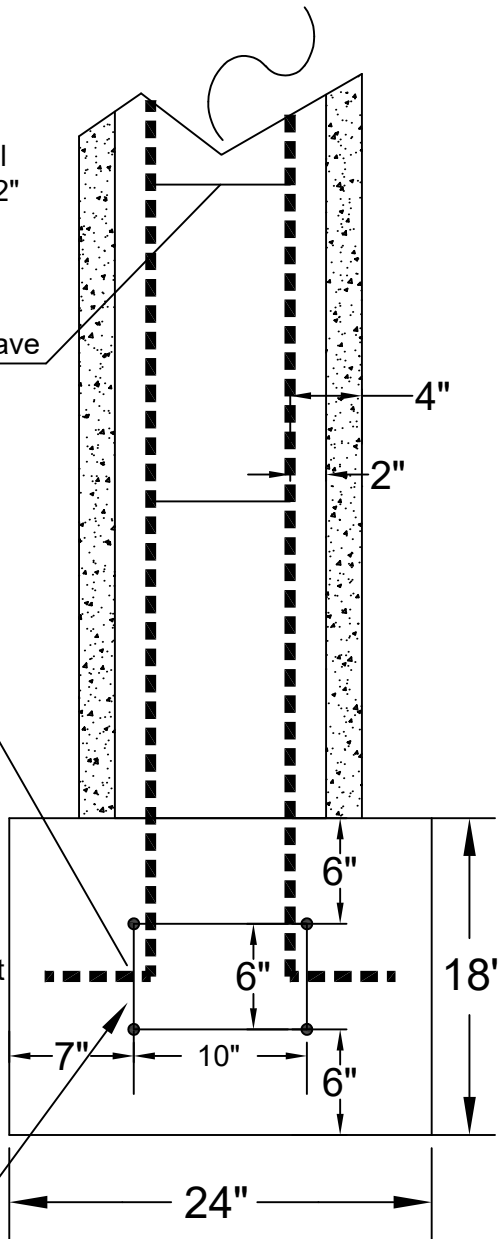
Column rebar will
extend to within 2"
of top of column

rebar shall have
#3 steel ties
@36" OC

Column rebar will
extend 9" into
footing and "L" at
least 6" as shown
or epoxy set 12"
into
footing.

Footing is 24" wide by 18"
deep with (4) #5 rebar.
Concrete shall have at least
a 3000 psi compressive
strength after 28 day cure.

#3 ties every
36" OC



Construction Notes:

I. General

- 1) Engineer is designing foundation only and has not been retained to supervise construction to ensure that it is built to design. His seal does not warranty any other part of the design.
- 2) All work and materials shall meet local, state and federal codes including IRC 2021.
- 3) Contractor or government agency shall notify engineer in writing of missing information or questions regarding these plans. Email is allowable and any questions can be emailed to clay.1@cox.net

II. Site Preparation

- 1) Footing shall be poured in earthen trench with sides and bottoms of undisturbed soil or soil that has been compacted to 95% standard proctor or sides shall be lined with wooden form boards. Pour shall be made during dry conditions. If a rain event occurs after trench is formed but before concrete is poured, all free water shall be removed and wet earth removed. Trench shall be free of organic debris and trash.
- 2) Contractor shall place concrete as soon as possible after soil has been prepared for construction in order to minimize exposure of the soil by to the elements. Do not place concrete on soils that have been disturbed by rainfall, ponding water or desiccated soils.
- 3) Louisiana one call (800) 272-3020 shall be contacted before any excavation.

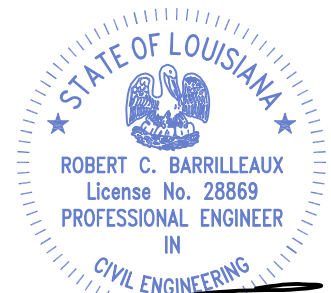
III Concrete

- 1) All concrete work (including mix design, formwork & materials) shall comply with ACI 301
- 2) Structural concrete: normal weight, maximum water/cement ratio shall be 0.45 U.N.O.
- 3) All concrete shall attain a minimum compressive strength of 3,000 PSI at 28 days, unless noted otherwise.
- 4) Total air content shall be 5%.
- 6) Footing reinforcement shall be supported at 4 ft on center max. In both directions (the use of concrete bricks of an equal or greater compressive strength as required for the slab is acceptable).
- 7) Contractor shall thoroughly consolidate concrete (especially at anchorages and dowels).
- 8) Contractor shall cure concrete in accordance with ACI-308 immediately after finishing to minimize the appearance of shrinkage cracks.
- 9) All rebar shall conform to ASTM A615, grade 60.
- 10) Minimum clear cover for rebar shall 2"
- 11) Provide corner bars at all beam corners and "T" intersections to match horizontal rebar reinforcement. Minimum lap length of each leg is 30"

New Footing & Column Detail
Lift Company: ACME House Raising
2108 10th Street
Slidell, LA



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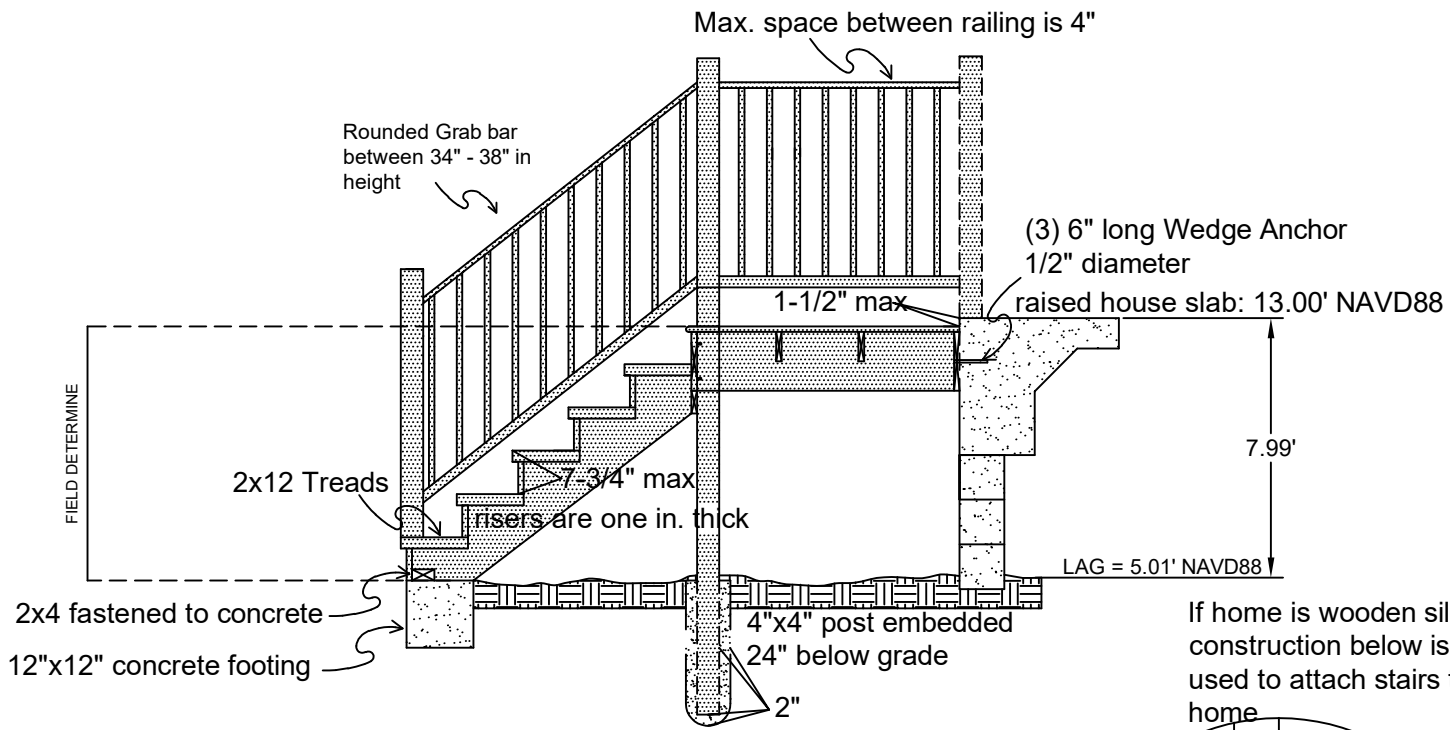
Robert C. Barrilleaux
9/19/24

Date: June 24, 2024

Scale: 1" = 1'

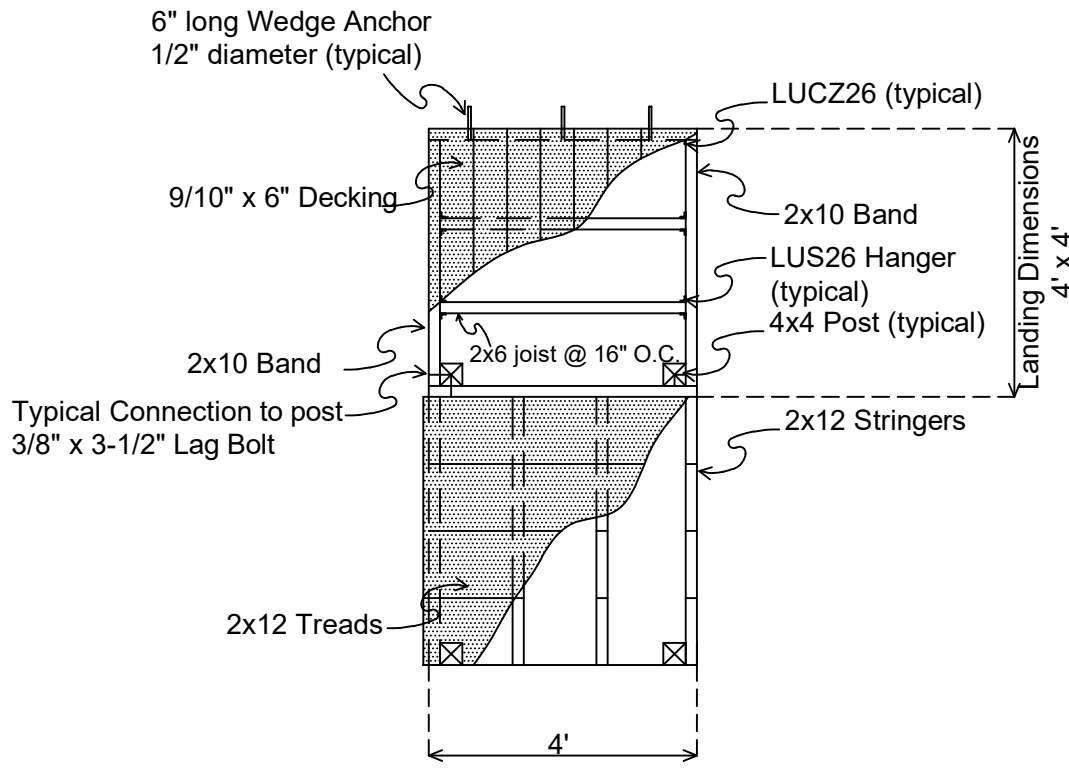
Drawn by: *RCB*

Revised: N/A

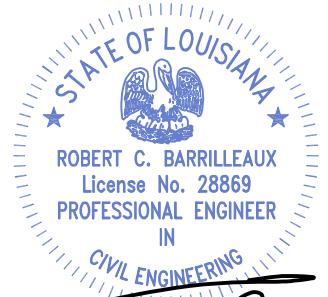
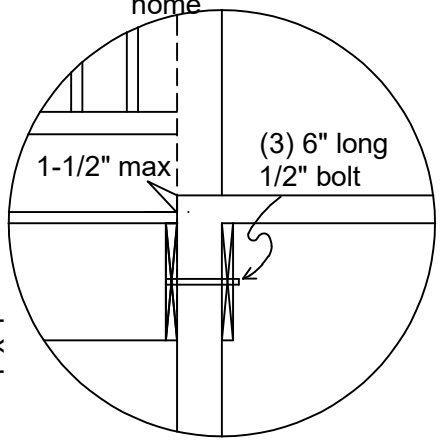


Cross Section

If home is wooden sill construction below is used to attach stairs to home



Plan View



Robert C. Barrilleaux
9/19/24

NOTES:

1. Construction shall conform to 2021 International Residential Code R311.3, R311.5, & R311.7
2. All wood shall be new pressure treated lumber.
3. Railing height shall be 36". Both stairway and any landing over 30" above grade shall have a railing.
4. As per IRC 2021 R311.7.4, min. tread depth to be 10" nosing to nosing and max. riser height to be 7-3/4"
5. No Gaps shall be allowed between back of tread and riser.
6. There shall be no more than a 6" sphere space between top of tread and bottom of rail at any point.
7. All treads shall be secured with screws rather than nails.
8. Any stairs higher than 6' will require 6"x6" post instead of 4"x4"
9. Grab bar shall meet IRC2021 311.7.7.1

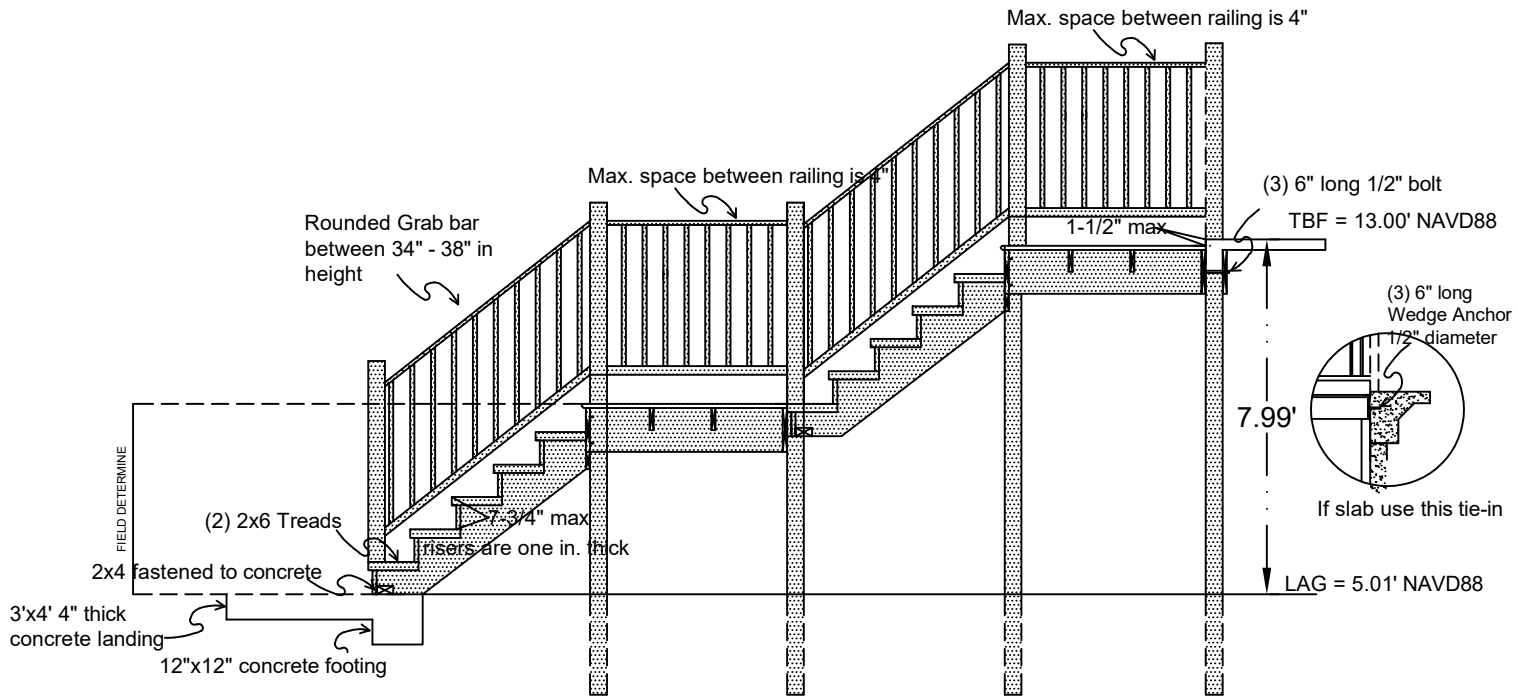
Typical Detail of Wood Stair (<12')

Lift Company: ACME House Raising
2108 10th Street
Slidell, LA

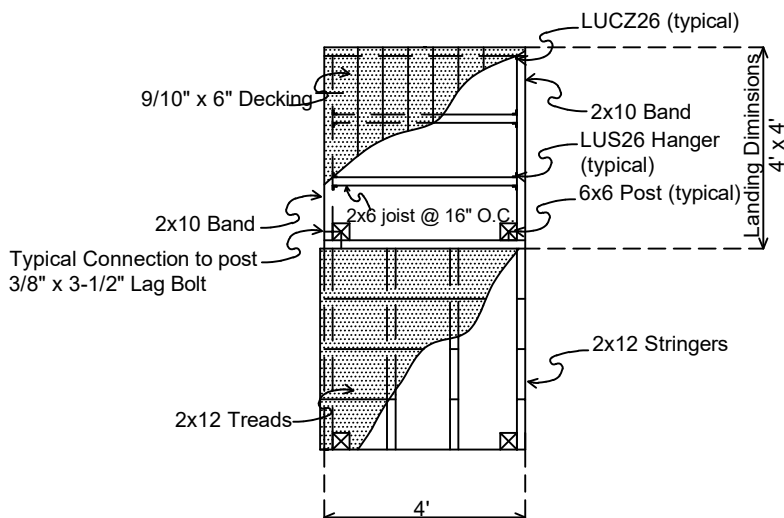


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Engineer - Robert C. Barrilleaux, PE # 28869

Date: June 24, 2024	Scale: 1" = 3'
Drawn by: RCB	Revised:



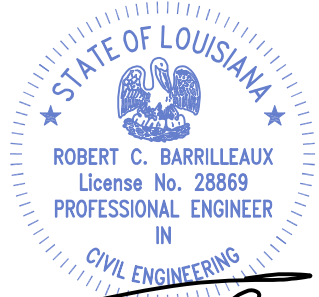
Cross Section



Plan View

* Note *

Actual dimensions not show of stairs and landings, just typical construction.



Robert C. Barrilleaux
9/19/24

GENERAL NOTES:

1. Construction shall conform to 2021 International Residential Code R311.3, R311.5, & R311.7
2. All wood shall be new pressure treated lumber.
3. Railing height shall be 36". Both stairway and any landing over 30" above grade shall have a railing.
4. As per IRC 2021 R311.7.4, min. tread depth to be 10" nosing to nosing and max. riser height to be 7-3/4"
5. As per IRC 2021 maximum vertical distance between landings shall be 12'
6. No Gaps shall be allowed between back of tread and riser.
7. There shall be no more than a 6" sphere space between top of tread and bottom of rail at any point.
8. All treads shall be secured with screws rather than nails.
9. Any stairs higher than 6' will require 6"x6" post instead of 4"x4"
10. Grab bar shall meet IRC2021 311.7.7.1

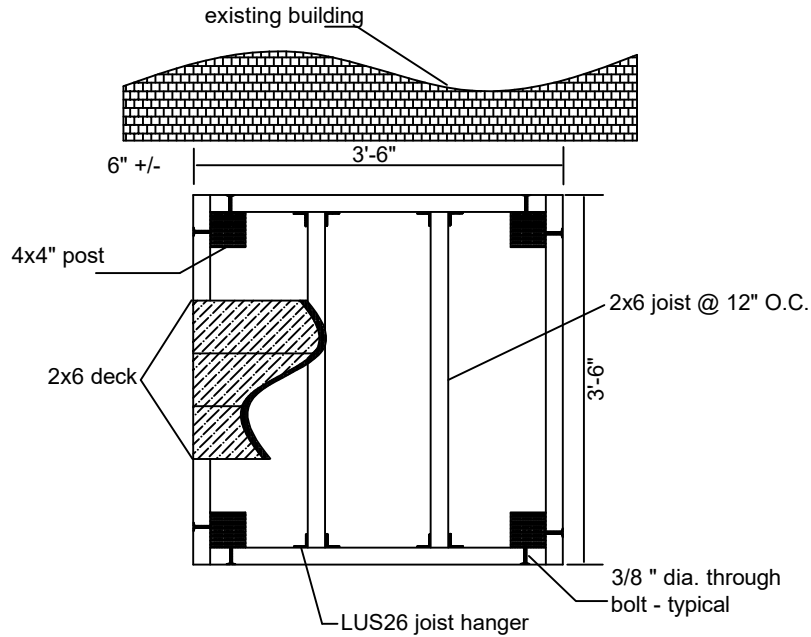
Wood Stair & Landing Detail High lift (>12')
Lift Company: ACME House Raising
2108 10th Street
Slidell, LA



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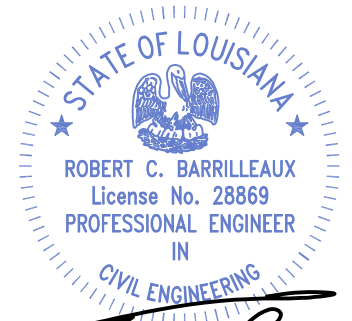
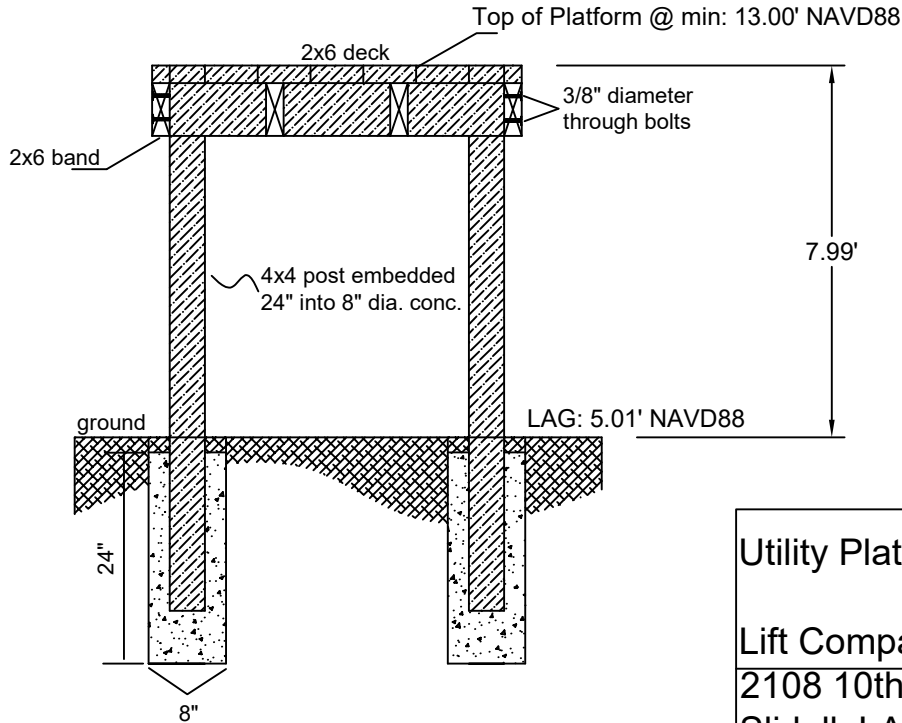
Date: June 24, 2024 Scale: NTS
Drawn by: *RCB* Revised: N/A

(PLAN VIEW)



*All wood construction shall be of pressure treated lumber

(CROSS SECTION)



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9/19/24

Utility Platform Detail

Lift Company: ACME House Raising
2108 10th Street
Slidell, LA



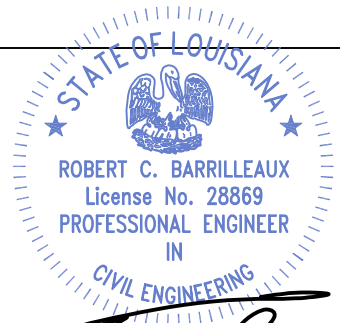
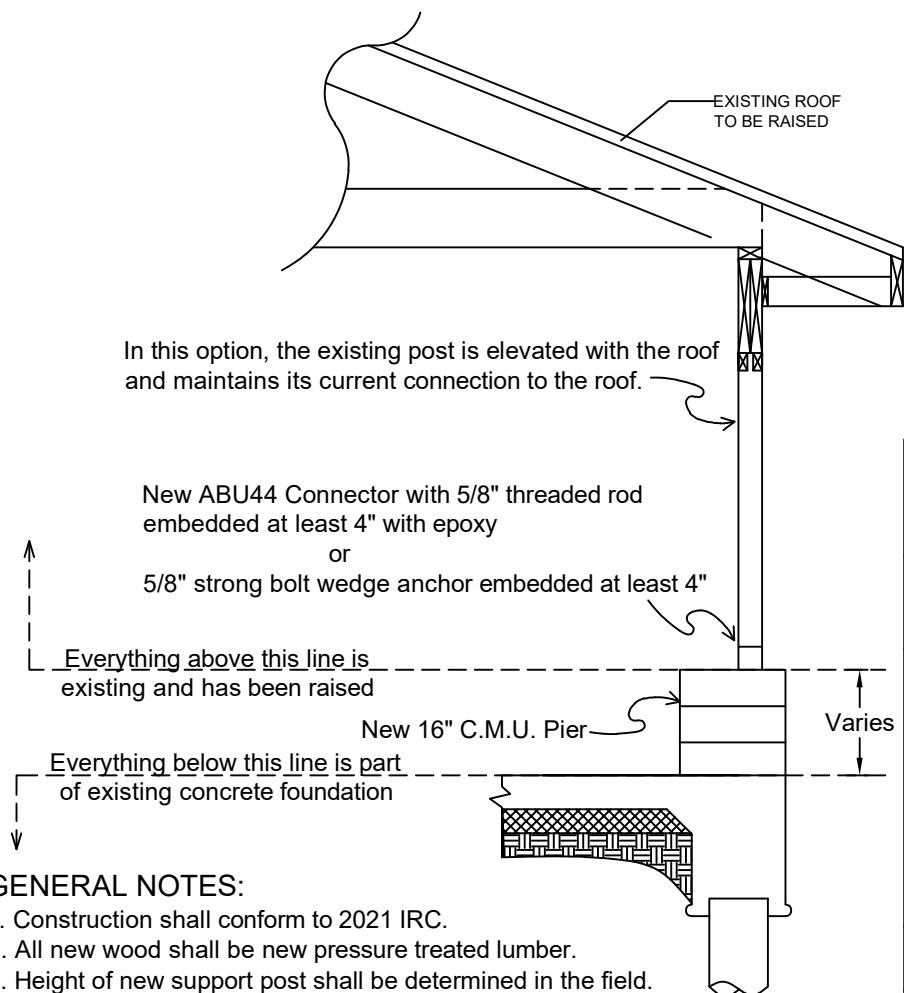
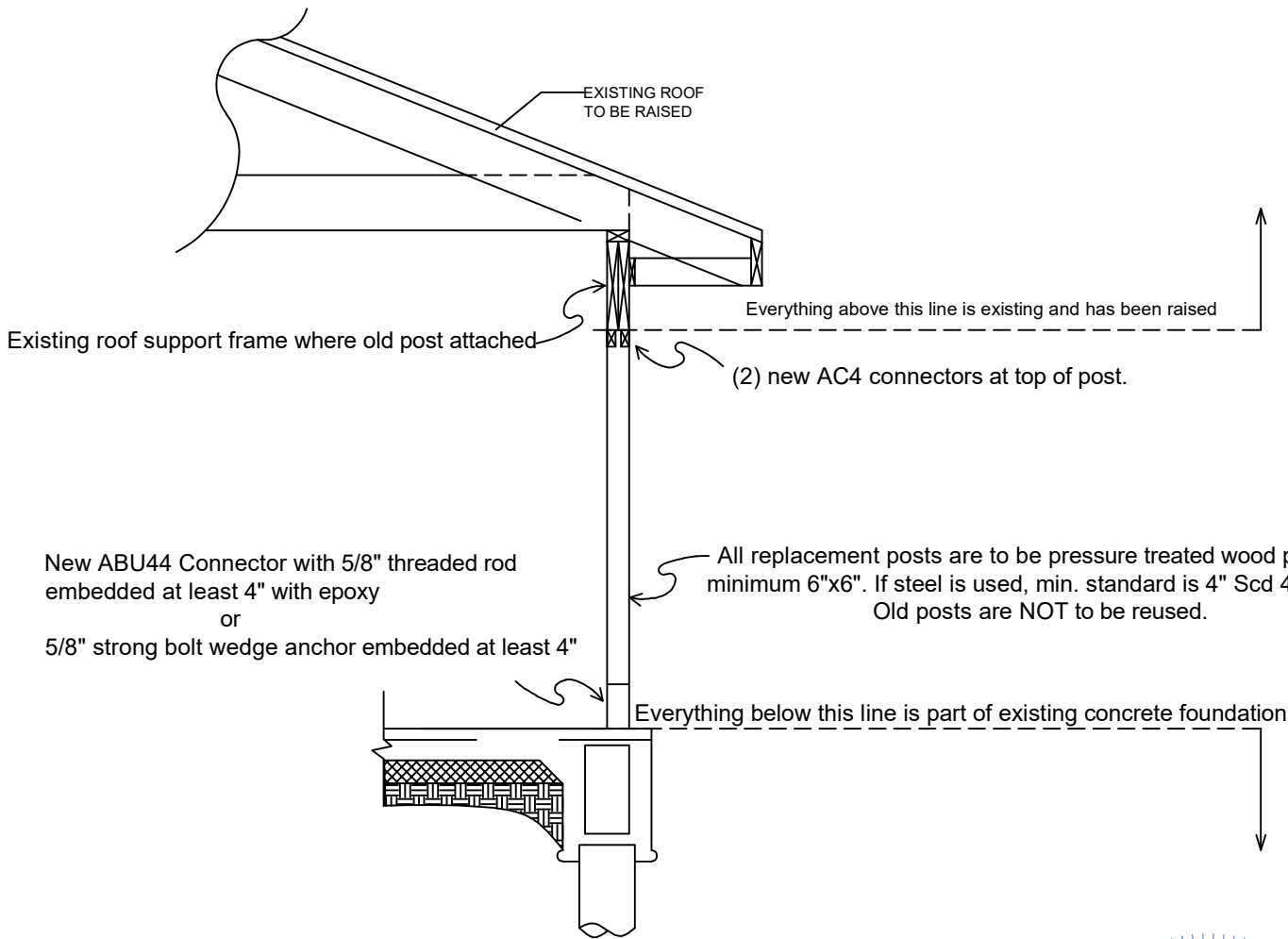
Robert Barrilleaux & Associates, Inc.
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42333 Deluxe Plaza Suite 8 Hammond, LA
Engineer - Robert C. Barrilleaux, PE # 28869

Date: June 24, 2024

Scale: 1" = 1'

Drawn by: RCB

Revised: N/A



Robert C. Barrilleaux
9/19/24

Roof Support Post Replacement Detail
Lift Company: ACME House Raising
2108 10th Street
Slidell, LA

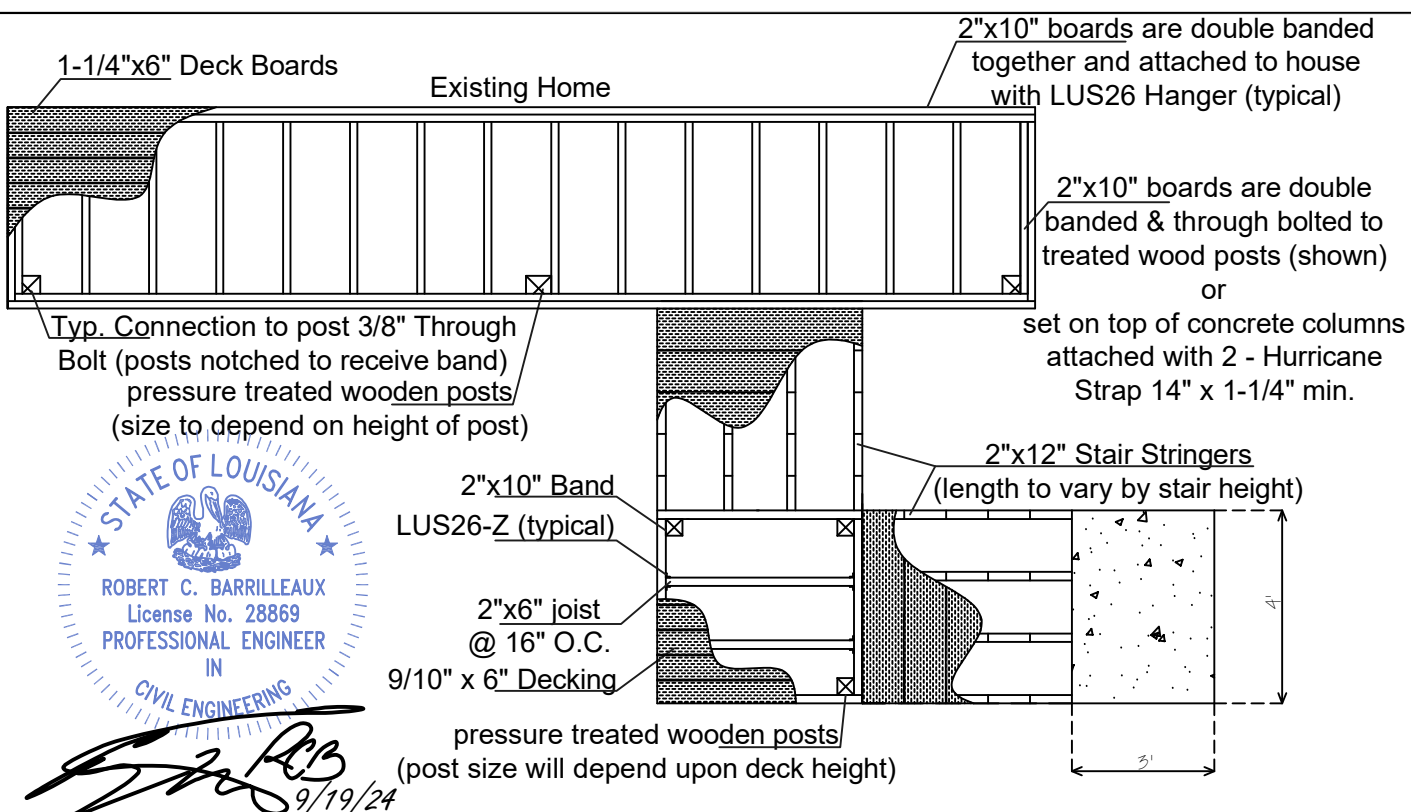


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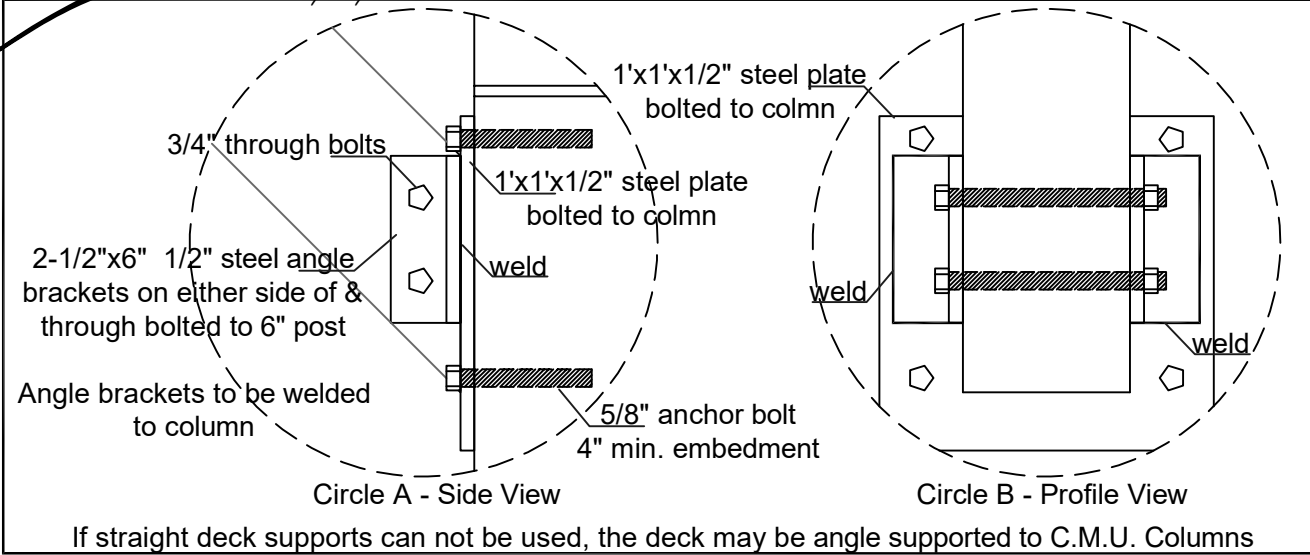
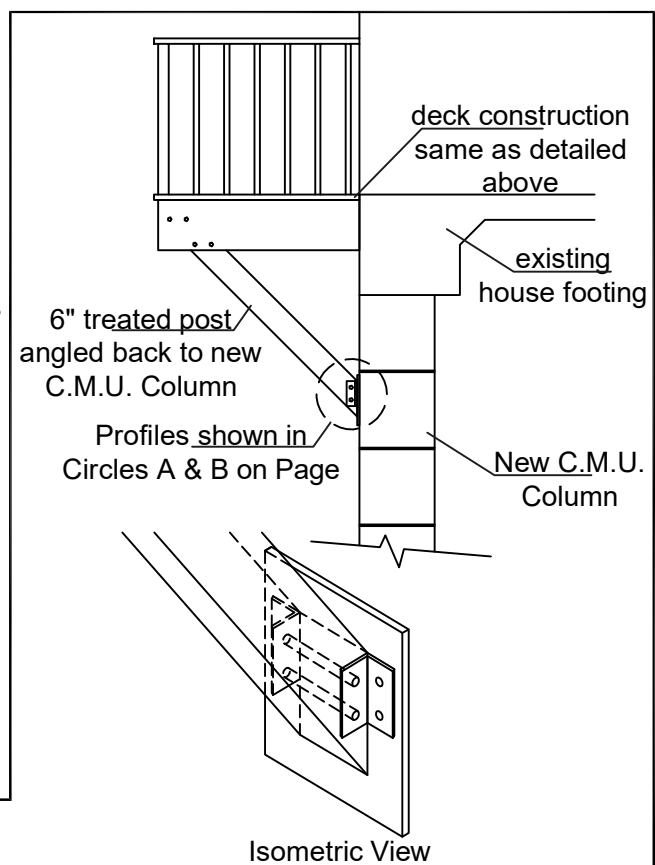
GENERAL NOTES:

1. Construction shall conform to 2021 IRC.
2. All new wood shall be new pressure treated lumber.
3. Height of new support post shall be determined in the field.

Date: June 24, 2024	Scale: 1" = 3'
Drawn by: TB	Revised: N/A



RCB
9/19/24



Note:
This drawing is for construction methods only. For actual dimensions of deck see elevation construction plan drawing

Wood Deck & Landing Detail
Lift Company: ACME House Raising
2108 10th Street
Slidell, LA



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GENERAL NOTES:

1. Construction shall conform to 2021 International Residential Code R311.3, R311.5, & R311.7
2. All wood shall be new pressure treated lumber.
3. Railing height shall be 36". Both stairway and any landing over 30" above grade shall have a railing.
4. As per IRC 2021 R311.7.4, min. tread depth to be 10" nosing to nosing and max. riser height to be 7-3/4"
5. All support post shall be no more than 10' OC.
6. Any deck over 6' shall have 6"x6" posts instead of 4"x4".

Date: June 24, 2024

Scale: NTS

Drawn by: RCB

Revised: N/A