

BULLETIN CT-01

Date: September 1st, 2022	Number: CT-1	Project #: 21162
Project Name: Piper Remodel	Attached: REV2 structural drawings (Delta 2 – Bulletin CT-1)	
Number of Pages: 17		

Subject: Grade beam revisions
Main Floor framing revisions
Main Floor sheathing addition (thickness and nailing)

Drawings affected: S2.0, S2.1

Description / Action:

This bulletin provides design clarification, variation requests or additional structural direction for the Piper Remodel Project located on Mercer Island, Washington. This bulletin was issued after a site observation visit on Thursday, August 25th as well as multiple phone discussions with Donovan Howard with Weaver Construction Company as well as Judy Tucker with Form + Function Architecture.

Please find attached REV2 structural drawings (Delta 2 – Bulletin CT-1). Please note that S2.0 revisions are associated with grade beam (GB 16x16) location refinements in support of shifting the central east-west spanning deck beam to the south. We have provided a dimension to locate the grade beam as coordinated with Judy Tucker of 7'-8" from the face of the exterior south stairwell wall. Further, please note the extension of the grade beam east of the south stairwell wall and the coordinated far south leg of the grade beam, as we understand that the existing 4" pin pile was found and can be utilized in this location (base of rock wall).

Please provide a 1" thick X 6" X 0'-6" square bearing plate atop the existing 4" diameter pipe pile.

Please note that S2.1 revisions are largely associated with refinements to the framing components at the main floor level as we understand that the existing conditions consist of 4x10's at 4'-0" O.C. accompanied by 2x8 ceiling joist between at 4'-0" O.C.. We have added some framing details to the page to clarify the intent of the framing upgrades. Further we have revised 4x and 6x materials with 3 ½ and 5 ½ GLB's typically. Please reference structural notes section 06620 for direction relating to glued-laminated members. Once the main floor framing is upgraded, please request ownership to walk the floor to determine if the stiffness meets with their approval.

The existing main floor framing diaphragm does not include plywood, but rather a 2x lumber diaphragm that is installed transverse the framing members. This type of diaphragm can perform well if installed diagonally, however this is not the case here, so the capacity of this diaphragm is quite low. We have therefore directed for a new plywood structural diaphragm be installed atop the 2x lumber deck. In order for this diaphragm to perform adequately, we recommend that all the interior walls be removed and re-built. Exterior walls can remain. Please provide 15/32" 48/24 C-D APA rated sheathing with 8d (0.131 X length, with 1 3/8" minimum penetration into 2x material - @ 6" O.C. edges, 12" O.C. field. Refer to notes section 06500 for further wood sheathing information. Acceptable to stop new sheathing at 2x base plate of exterior walls typically.

Please refer to FR-01 associated with scheduling structural observation visits. Bulletin CT-02 will provide direction relating to the steel moment frame anchorage as discussed and is expected to be issued next week following our review of the steel moment frame shop drawings. We are in receipt of the metal plate connected wood truss shop drawings and expect to review and coordinate those with you in the near future as well.

Please feel free to give me a call on my cell phone at 425.314.1209 if you have any questions.

Issued by: BJM

Distribution: Judy Tucker w/ Form + Function Architecture



09/01/2022

BULLETIN CT-02

Date: September 15th, 2022	Number: CT-2	Project #: 21162
Project Name: Piper Remodel	Attached: Sketch A, B	
Number of Pages: 3		

Subject: Sketch A - Drag connection to moment frame at main story level (deck area)
Sketch B - Grade beam at moment frame variance – 16x16 revised to 16x24
Moment Frame anchorage direction

Drawings affected: S2.0 (REV 2 drawing set issued with Bulletin CT-1)

Description / Action:

This bulletin provides design clarification, variation requests or additional structural direction for the Piper Remodel Project located on Mercer Island, Washington. This bulletin was issued after review of the structural steel shop drawings as well as phone discussions with Donovan Howard with Weaver Construction Company as well as Judy Tucker with Form + Function Architecture.

Please be sure that the entire construction crew are working with the most recent set of structural drawings issued September 1st, 2022 (REV-2) with Bulletin CT-1.

The structural drawings are silent relating to the intended drag connection to the moment frame at the main floor level (deck area), therefore we have attached sketch A, providing direction for the attachment of the 8 ¾" X 12" GLB at the south face of the moment frame W 16X45 column. Contractor will need to provide the fabricator the elevation of the top of plywood at the main floor level as this is a field dimension.

We understand that pile P17, P18 and P19 were located 4" east of the intended location. Please find attached sketch B, associated with providing a wider grade beam (GB16X24) in lieu of a GB 16X16 per plan. It is structurally acceptable to use the same shear reinforcement and top and bottom steel for the smaller GB16X16, centering the shear steel in the wider grade beam. Sketch B also clarifies the anchorage requirements for the moment frame.

Field report FR-01 outlined the required observation visit times and is repeated below. Please be sure to contact Ben McCann at 425.314.1209 to schedule a site visit at the following stages of construction:

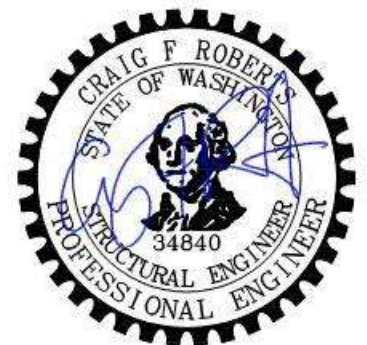
Observation Visits: Please provide a week notice associated with observation visits. Structural observation visits should be made at the following times:

1. Prior to pour of grade beams (*Please provide a couple of days' notice prior to this site visit*)
2. Just following completion of main floor framing
3. Just following completion of main floor wall framing and roof truss installation
4. Following installation of roof sheathing, prior to cover
5. At the completion of structural framing, prior to drywall installation

Please feel free to give me a call on my cell phone at 425.314.1209 if you have any questions.

Issued by: BJM

Distribution: Judy Tucker w/ Form + Function Architecture



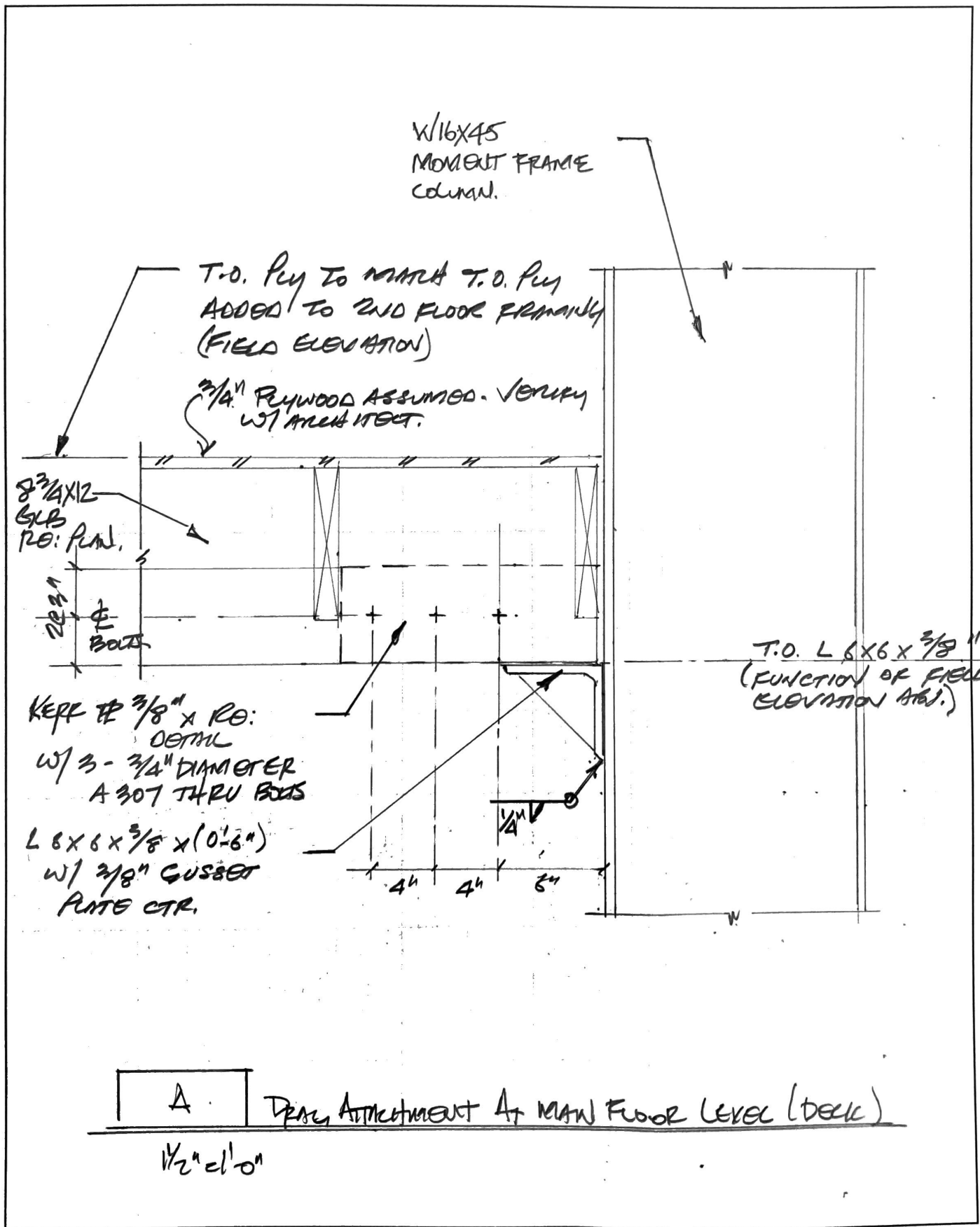
09/15/2022

Project: PIPER RENOVEL

Date: 09/14/2022

Client: _____

Page Number: _____



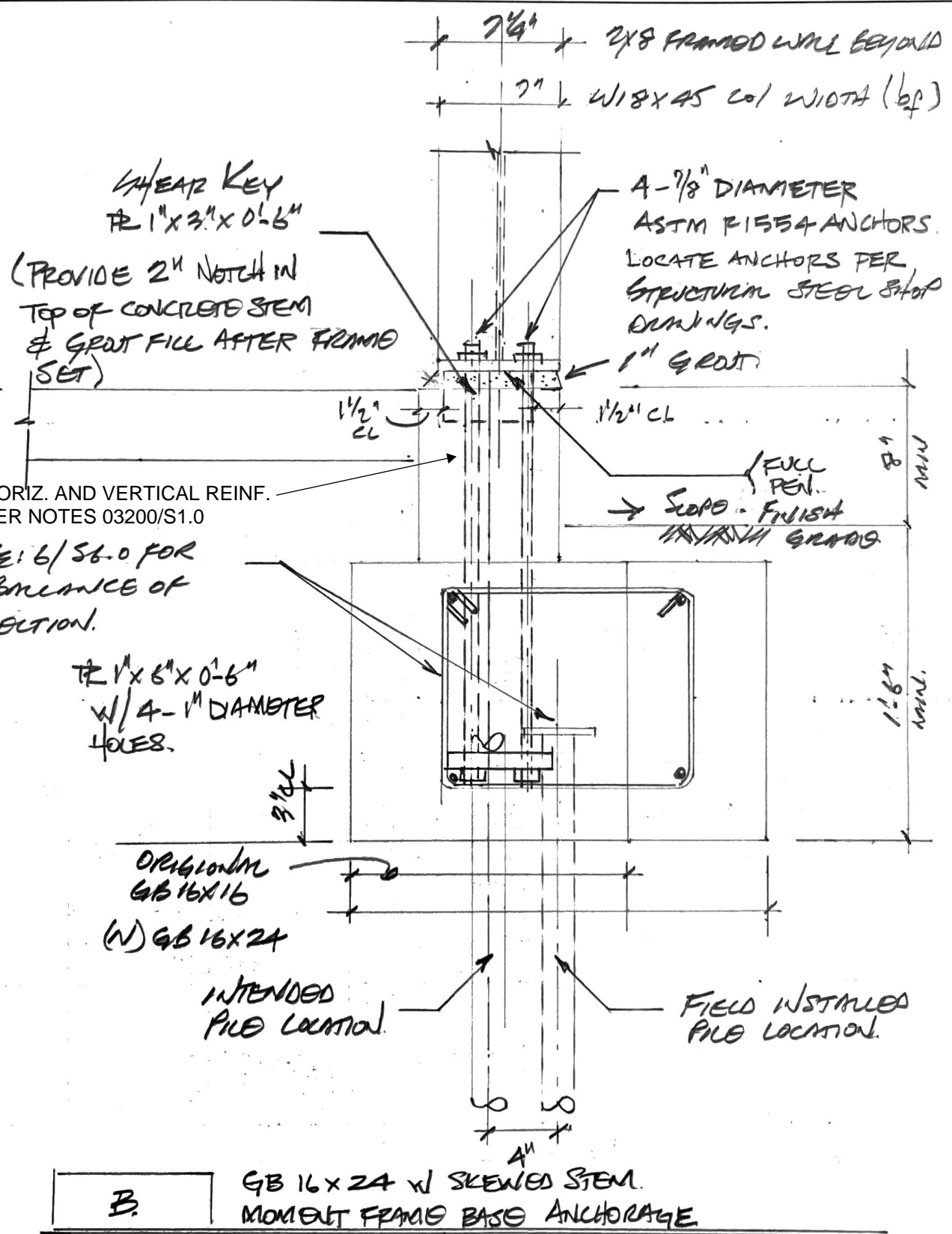
Project: PFEIR REMODEL

Date: 09/14/2022

09/15/2022

Client: _____

Page Number: _____



BULLETIN CT-03

Date: October 12th, 2022	Number: CT-3	Project #: 21162
Project Name: Piper Remodel	Attached: Sketch A, B, C, D	
Number of Pages: 8		

Subject: Sketch A – Existing steel beam upset at existing floor framing
Sketch B – Existing steel beam upset at exterior wall bearing
Sketch C – Existing steel beam upset at interior bearing
Sketch D – Deck beam at grade beam bearing
Sketch E - 3/S9.0 Multi Ply rafter or joist attachment
Partial Framing Plan S2.1 – Framing revisions / approved variances

Drawings affected: NA – Steel beam upset additional scope
NA - Deck beam bearing at grade beam – additional structural direction.
3/S9.0 – Sketch E variance approval
S2.0 North framing revisions
S2.1 Upset beam by new east stairs & stair landing framing revised

Description / Action:

This bulletin provides design clarification, variation requests or additional structural direction for the Piper Remodel Project located on Mercer Island, Washington. This bulletin was issued after visiting the site and coordinating a structural approach with Weaver Construction, ownership as well as Judy Tucker w/ Form + Function Architecture. Additional coordination phone discussions were made with Bill Weaver with Weaver Construction.

We understand that ownership would like to upset the existing steel beam located at the south end of the main floor framing level. Please find Sketches A, B and C associated with this revision to the structural drawings.

Additionally, our assumption during design of the south end deck framing at the main floor level was that water-proof deck topping would be used to protect the framing components, however we understand that the contractor may have budgeted for a flow through deck consisting of one-inch composite materials. Please note that structural notes section 06200/S1.0 directs for the use of pressure treated lumber materials where adequate protection from water is not provided. The roof framing members at the deck will have adequate protection from rainwater and can be constructed with non-pressure treated lumber, however the deck at the main level is subject to driven rain and therefore will need to be constructed of pressure treated materials if a flow through deck system is installed. We understand that ownership is currently working through determining building finish materials, therefore please note that some of the dimensions associated with sketch D are silent until finishes are defined.

We have approved a contractor variation request associated with the stitching attachment of multi-ply joist. Sketch E attached provides direction associated with this variance and can be used in tandem or in lieu of 3/S9.0.

We have coordinated some additional framing variances with Donovan with Weaver Construction and have summarized these items in the attached partial S2.1 main floor framing plan. Additionally, we have included revised header and landing framing at the new east stairs. Please reference the attached partial framing plan red-markups attached.

Observation Visits: Please provide a week notice associated with observation visits. Structural observation visits should be made at the following times:

1. Prior to pour of grade beams (*Please provide a couple of days' notice prior to this site visit*)
2. Just following completion of main floor framing
3. Just following completion of main floor wall framing and roof truss installation
4. Following installation of roof sheathing, prior to cover
5. At the completion of structural framing, prior to drywall installation

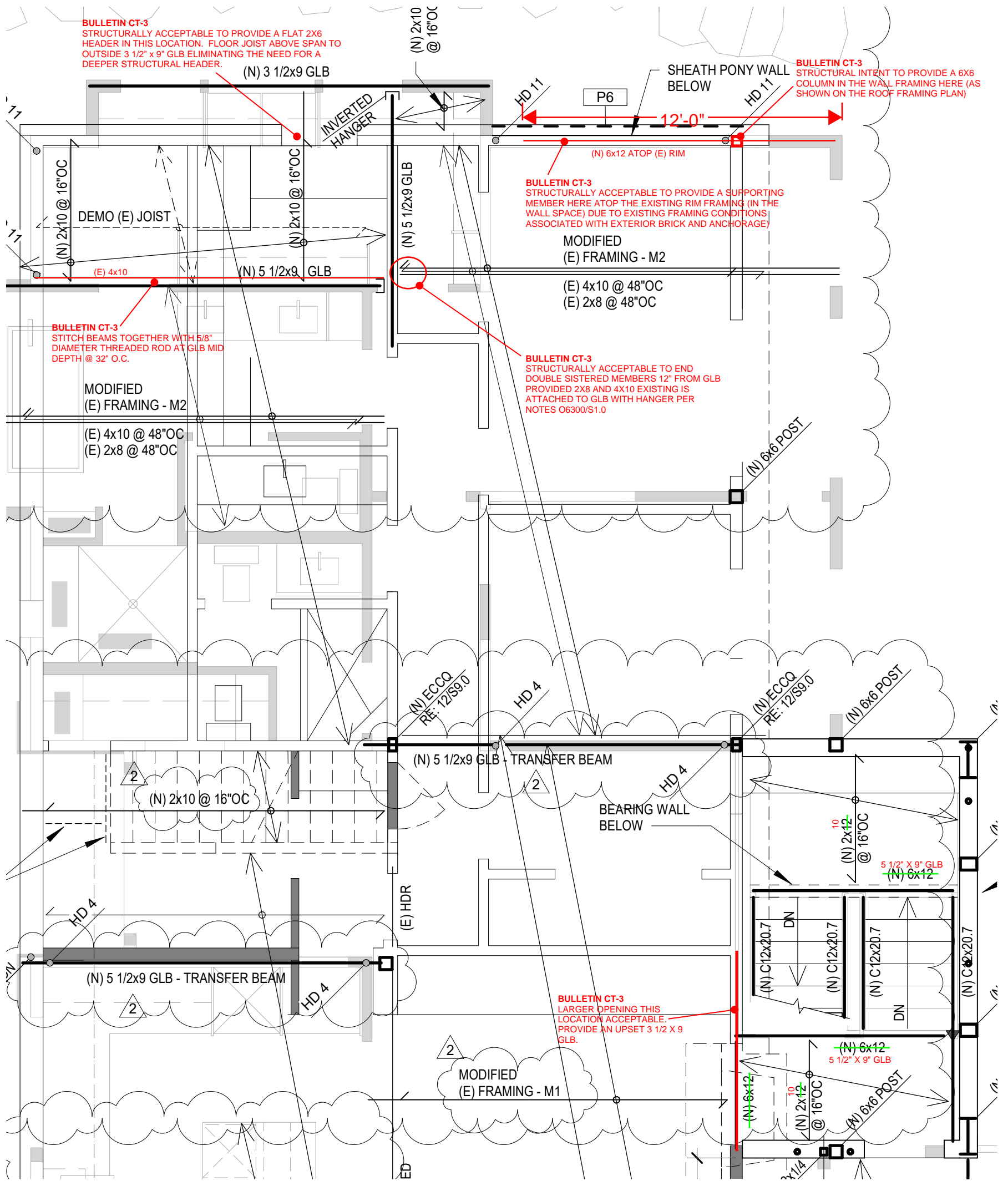
Please feel free to give me a call on my cell phone at 425.314.1209 if you have any questions.

Issued by: BJM

Distribution: Judy Tucker w/ Form + Function Architecture



10/12/2022



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

1

Partial
Main Floor Framing Over Basement Level Shear Walls

S2.1

Project: PIPER RESIDENCE

Date: 10/11/2022

Client: _____

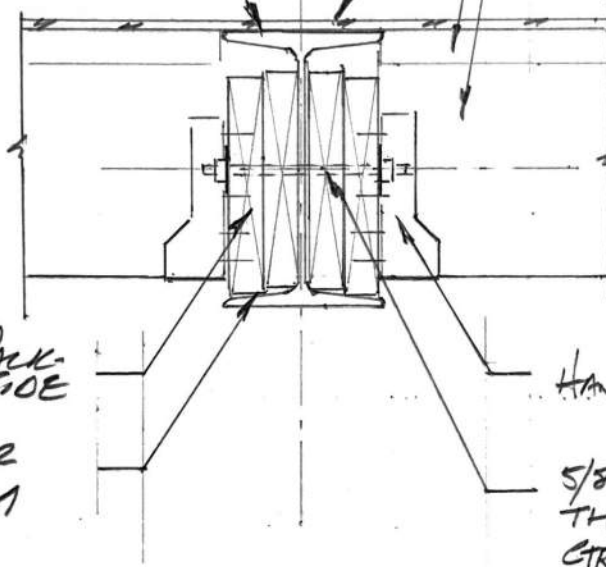
Page Number: _____

(E) STEEL IBM
UPSET INTO
FLOOR FRAMING,
LOCALLY DEMO
2X LAMBER DIA.
PIRAGMA. CUT BACK
JOIST.

(N) PLYWOOD (15/32")
RE BULLETIN CT-01

(E) 2X LAMBER DECKING

(E) 2X OR 4X FRAMING



(N) 2-2X PLY-
OUT EACH SIDE
2X^S TO BEAR
AND BOTTOM
FLANGE.

HANGERS, RE NOTES 06300/
S1.0

5/8" DIAMETER A36
THREADED ROD AT 32" O.C.
CTR. W/ STANDARD WASHERS.
(A307 TRU BOLTS OK
ALTERNATE)

NOTES.

- IT IS STRUCTURALLY ACCEPTABLE TO PROVIDE HANGERS AT 2X8^S & 4X10^S PER NOTES 06300/S1.0. HANGERS DO NOT NEED TO BE SIZED FOR 3-2X WIDTH OR 4X+2-2X WIDTH, BUT CAN BE SIZED TO SUPPORT EXISTING CENTRAL MEMBER CONSISTING OF 2X8 OR 4X10. ADDED SYSTEMED MEMBERS INCREASE STIFFNESS OF FLOOR SYSTEM BUT ARE NOT REQUIRED TO SET IN HANGERS.

A

(E) JOIST AT (E) UPSET STEEL BEAM.

1 1/2" x 1'-0"

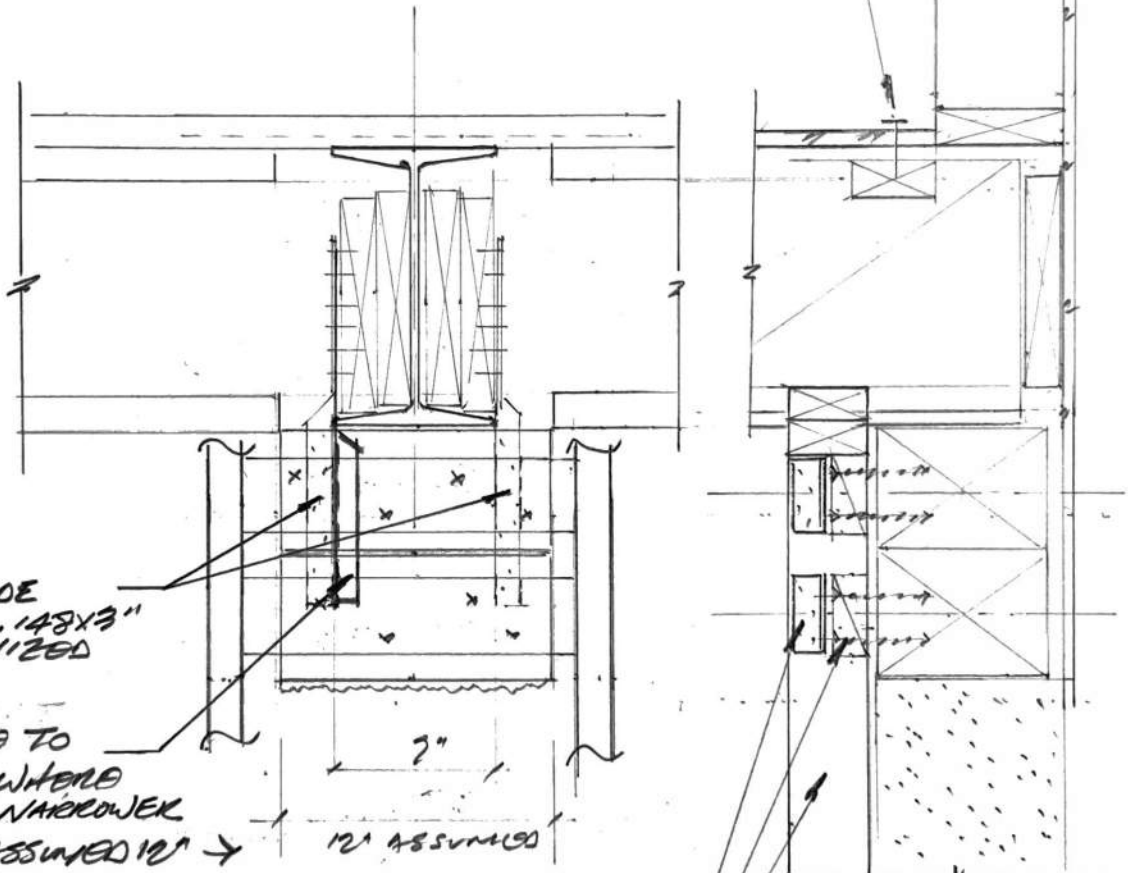
Project: PIPER RESIDENCE INC.

Date: 10/11/2022

Client: _____

Page Number: _____

SHEDDING MAN SOP
AT EXTERIOR WALL
PROVIDE 2X FLAT
AND (B.E.N.) BOUNDARY
EDGE WALLS.
TOP - MAIN FLOOR



L5T16
EACH SIDE
W/ 12 - #14X3"
GALV. NAILS

ACCEPTABLE TO
RIP STRAP WHERE
FOUR 1/2" NARROWER
THAN THE ASSUMED 12" →

SECTION b1

1 1/2" x 1'-0"

SECTION b2

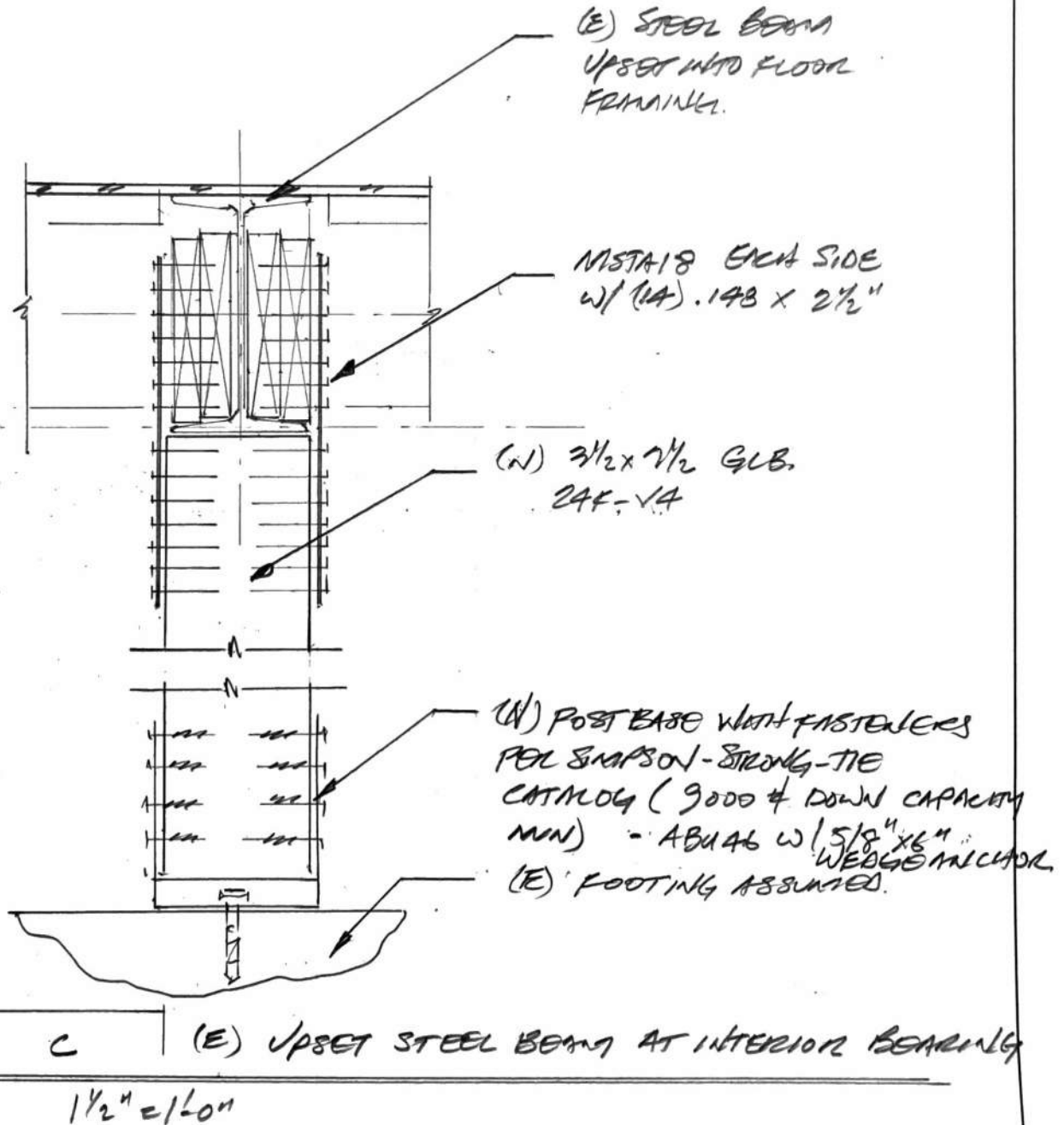
1 1/2" x 1'-0"

ANCHOR P.T. 6X8³ (OR 12X8)
W/ FLAT 2X4 BLOCKING
W/ 4 - S0S25³⁰⁰ EACH BACK TO PT. MEMBERS
W/ 1 - A35 EACH END W/ 12 - #9X1 1/2" SD CONNECTOR
SCREEN.

B.

(E) UPSET STEEL BEAM AT EXTERIOR WALL
(MAIN LEVEL)

1 1/2" x 1'-0"

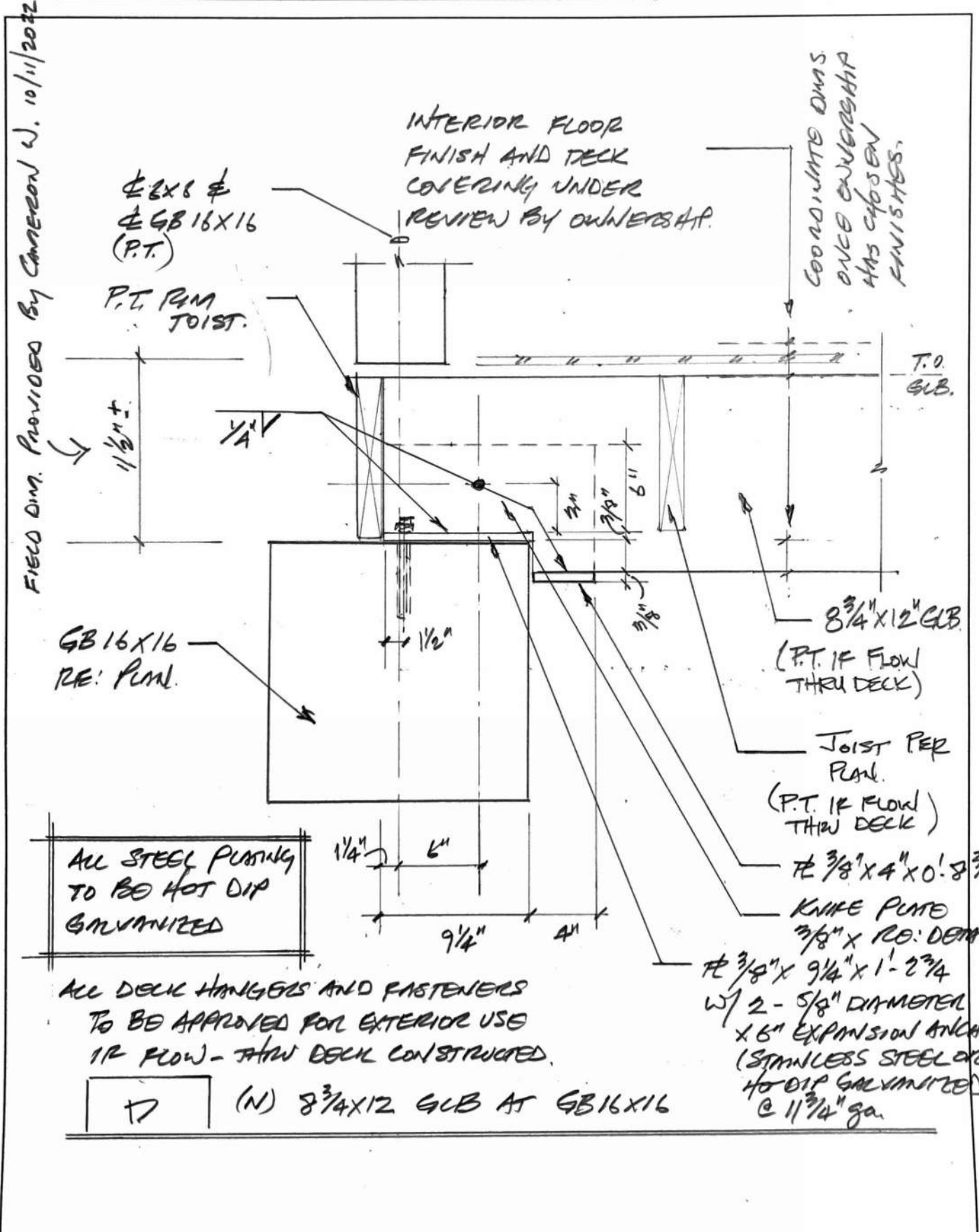


Project: PIPER RESIDENCE

Date: 10/11/2022

Client: _____

Page Number: _____



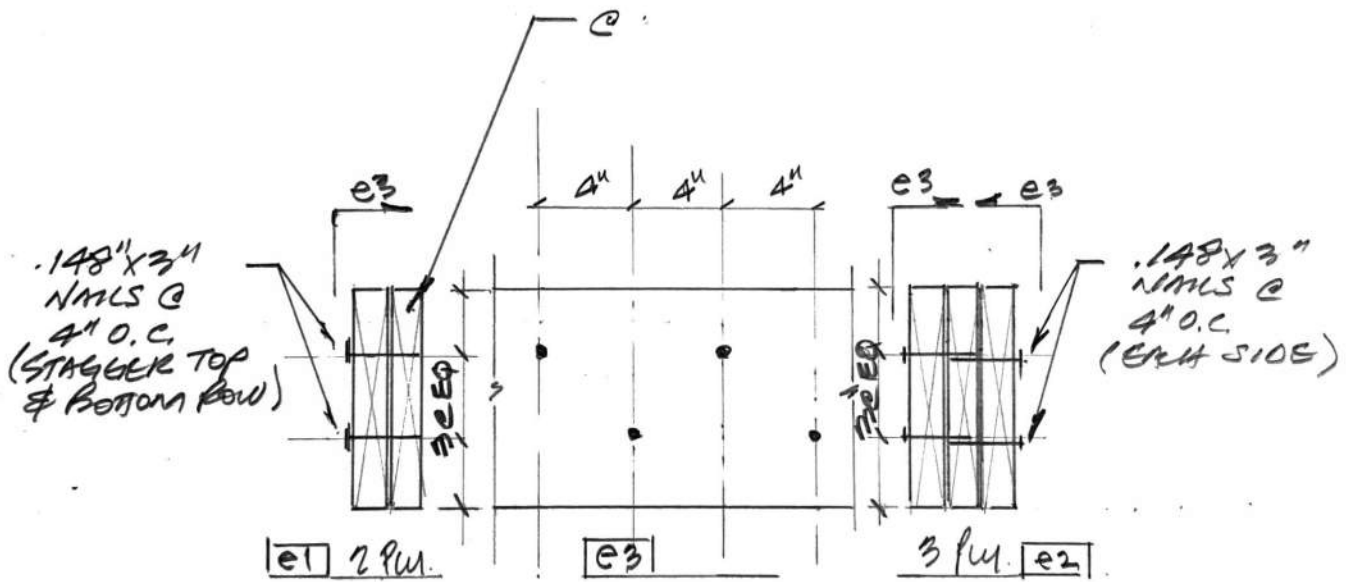
CR# 2162

Project: PIPER RESIDENCE - CA.

Date: 10/12/2022

Client: _____

Page Number: _____



E 3/59.0 ALTERNATE - MULTI PLY RATHER OR JOIST ATTACHMENT.
 1 1/2" cl-0"

BULLETIN CT-04

Date: November 9th, 2022	Number: CT-4	Project #: 21162
Project Name: Piper Remodel	Attached: Sketch A, B1, B2, C, D (d1, d2, d3, d4)	
Number of Pages: 5		

Subject: Sketch A – W10x30 south bearing end
Sketch B1 – HSS 3 south bearing end (column set atop grade beam)
Sketch B2 – HSS 3 south bearing end option (column set atop stem)
Sketch C – W10x30 at mid span 4x4 bearing (pack out and ripped 4x6 atop)
Sketch D – W10x30 north side bearing
Sketch d1 – W10x30 at HSS 3
Sketch d2 – HSS 3 north side bearing at main floor
Sketch d3 – HSS 3 north side bearing at foundation level

Drawings affected: 4/S10.0 modified (no stiffener allowed per sketches)

Description / Action:

This bulletin provides design clarification, variation requests or additional structural direction for the Piper Remodel Project located on Mercer Island, Washington. This bulletin was issued after receipt of request for information via email dated November 4th from Camden Weaver with Weaver Construction as well as approval to proceed with structural response to request for information from Judy Tucker via email.

We understand that additional information has been requested associated with the roof level W10x30 and HSS 3 supporting columns at the north and south bearing ends. Attached sketches provide additional structural direction sufficient for structural steel shop drawings development. Additional refinement of these details is expected during our shop drawing review and we have the opportunity to respond to additional comments / questions.

Please note that the following submittals are outstanding for this project:

- Structural steel shop drawings for W10x30 beam and supporting column west of deck area – re: bulletin CT-4 for response to request for information email dated November 4th from Cameron.
- Structural steel shop drawings for deck truss plating and bearing conditions re: 7, 13, 16 & 19 / S9.1
- Structural steel shop drawings for stairs – re: 19/S10.00 and architecture
- Deck GLB bucket attachment – Bulletin CT-3 Detail D

Please note the following revised structural observation schedule to complete the project:

- Just after complete installation of roof sheathing, PRIOR to cover. We will largely be looking for proper boundary edge nailing as well as the installation and connection of blocking and blocking panels at the perimeter of the roof
- Just after completion of the deck framing and associated roof.

Outstanding action coordination items:

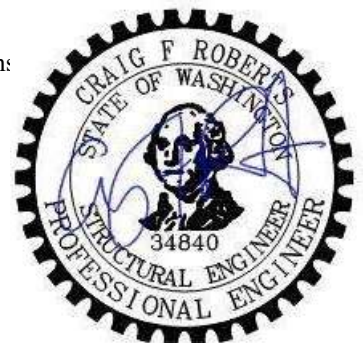
- Inform on deck topping upon ownership decision. This will impact the need for pressure treated members at the deck as well as the possible need for a cable diaphragm in lieu of a plywood diaphragm. CT engineering has assumed a plywood diaphragm atop the deck to date.

Please feel free to give me a call on my cell phone at 425.314.1209 if you have any question:

Issued by: **BJM**

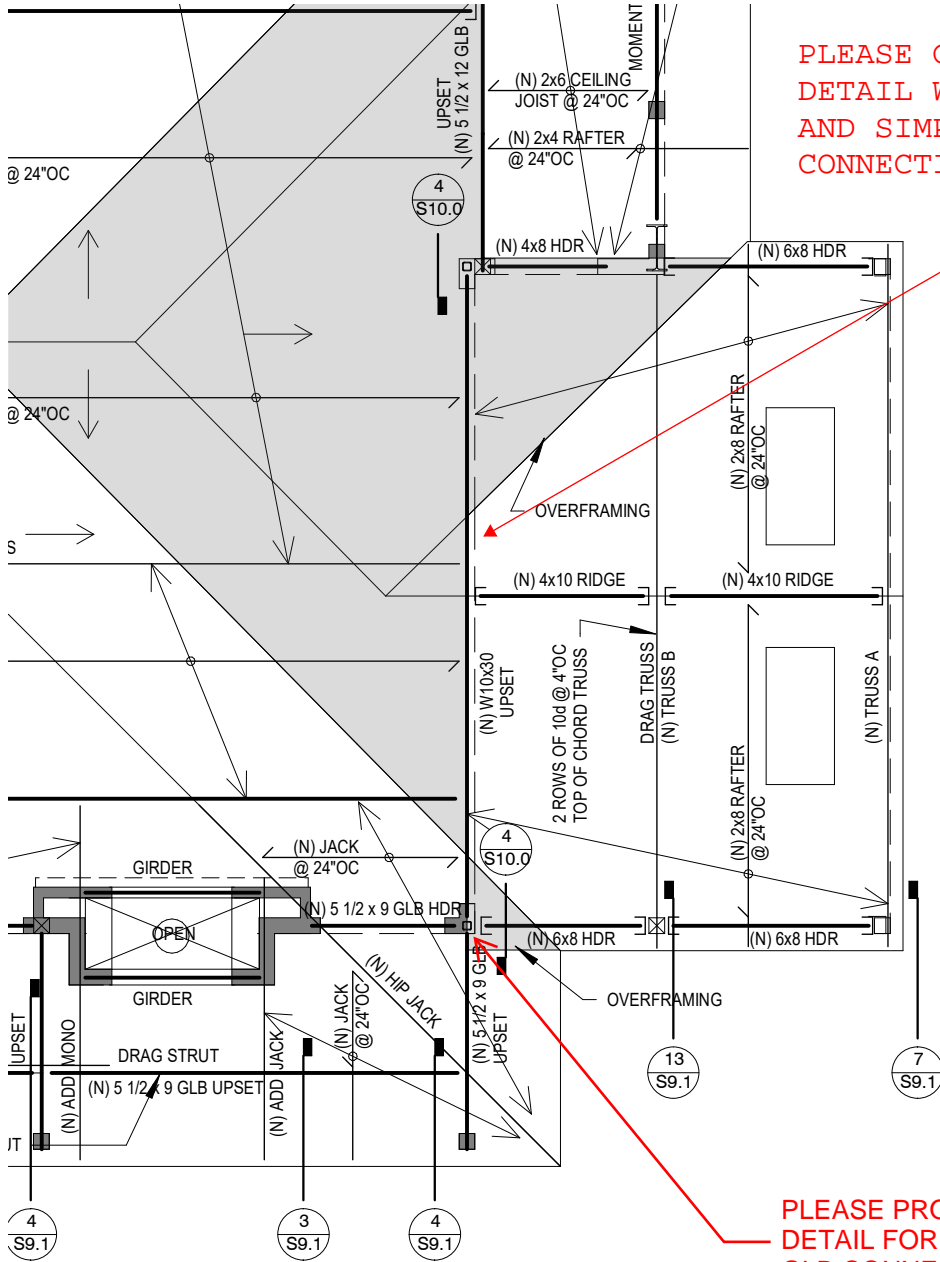
Distribution: **Judy Tucker w/ Form + Function Architecture**

Structural Engineers

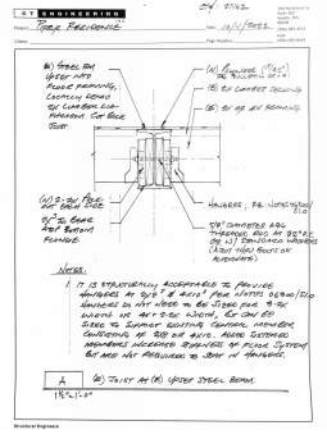


11/09/2022

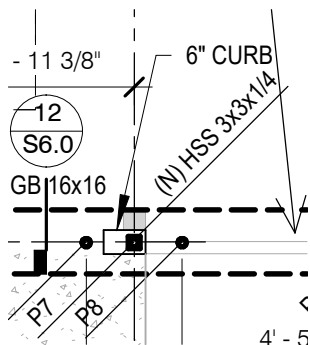
#4406 WEAVER CONSTRUCTION
 PIPER RESIDENCE
 STEEL QUESTIONS



PLEASE CONFIRM DETAIL BELOW
 DETAIL WILL WORK FOR FIRING
 AND SIMPSON BRACKET BRACKET
 CONNECTION



PLEASE PROVIDE
 DETAIL FOR W10X30
 TO
 GLB CONNECTION



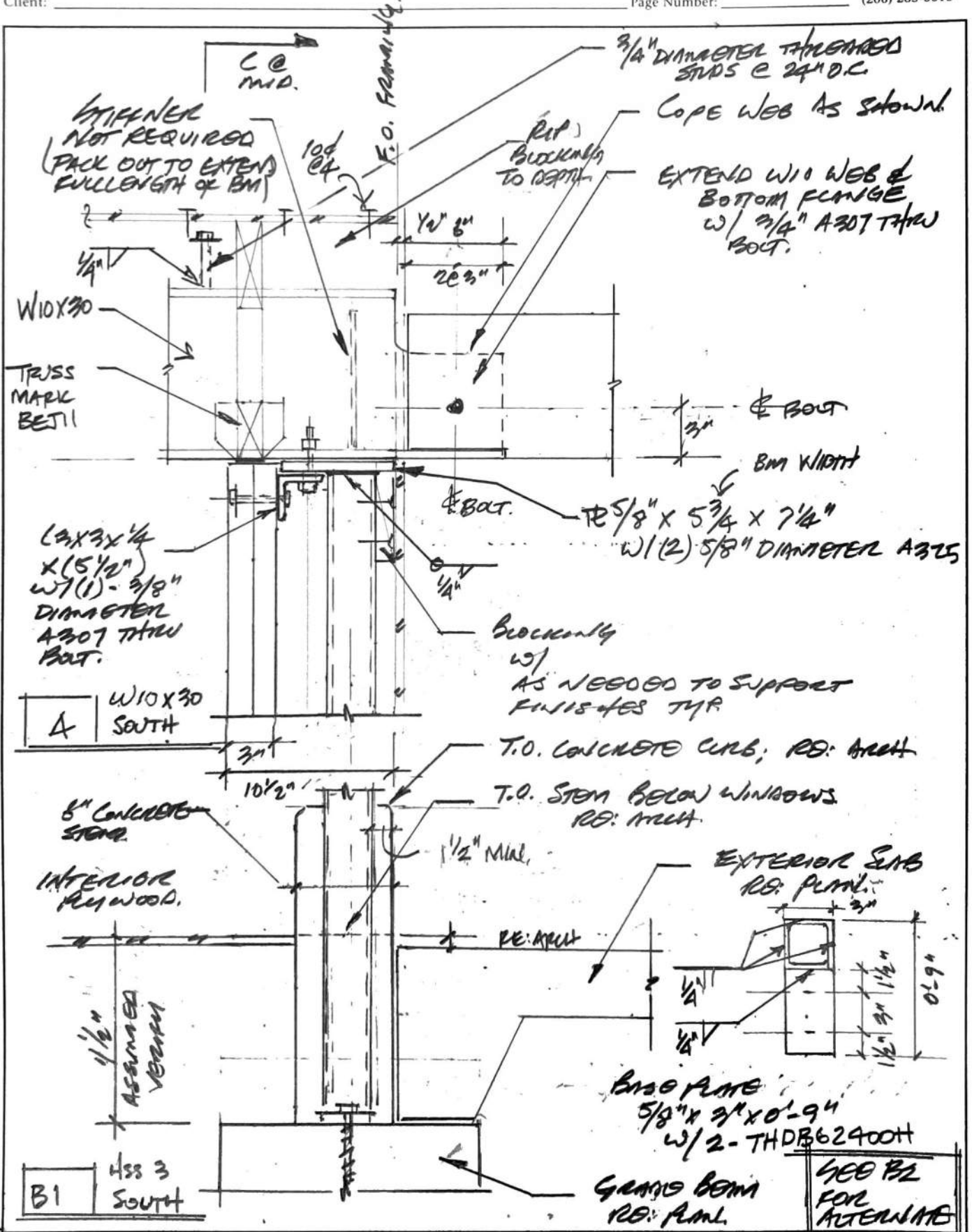
NO DETAIL PROVIDED FOR BASEPLATE OF
 HSS 3X3X1/4" COLUMNS. PLEASE SUPPLY

Project: PIPER RESIDENCE

Date: 11/08/2022

Client: _____

Page Number: _____

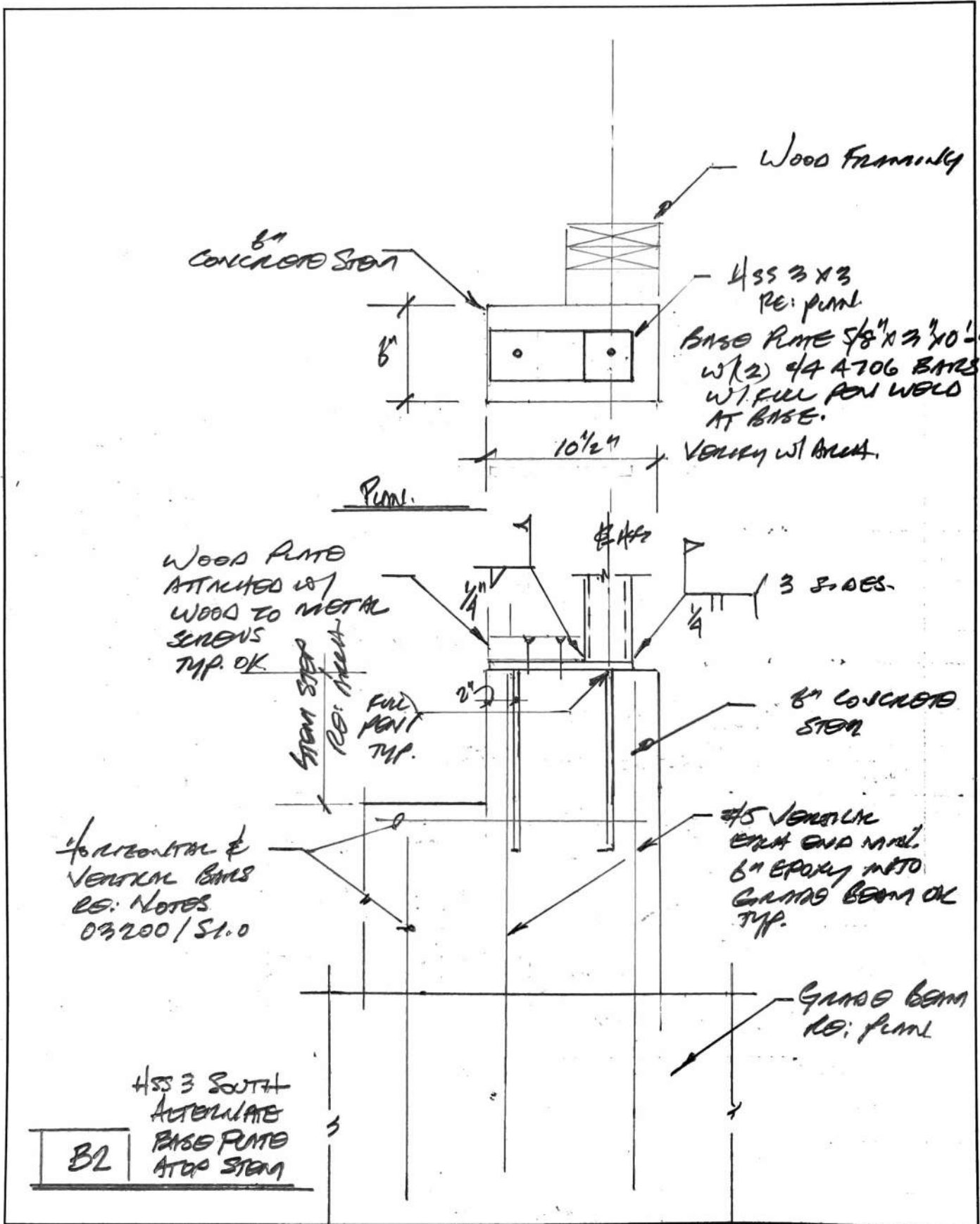


Project: Piper Residence

Date: 11/09/2022

Client: _____

Page Number: _____

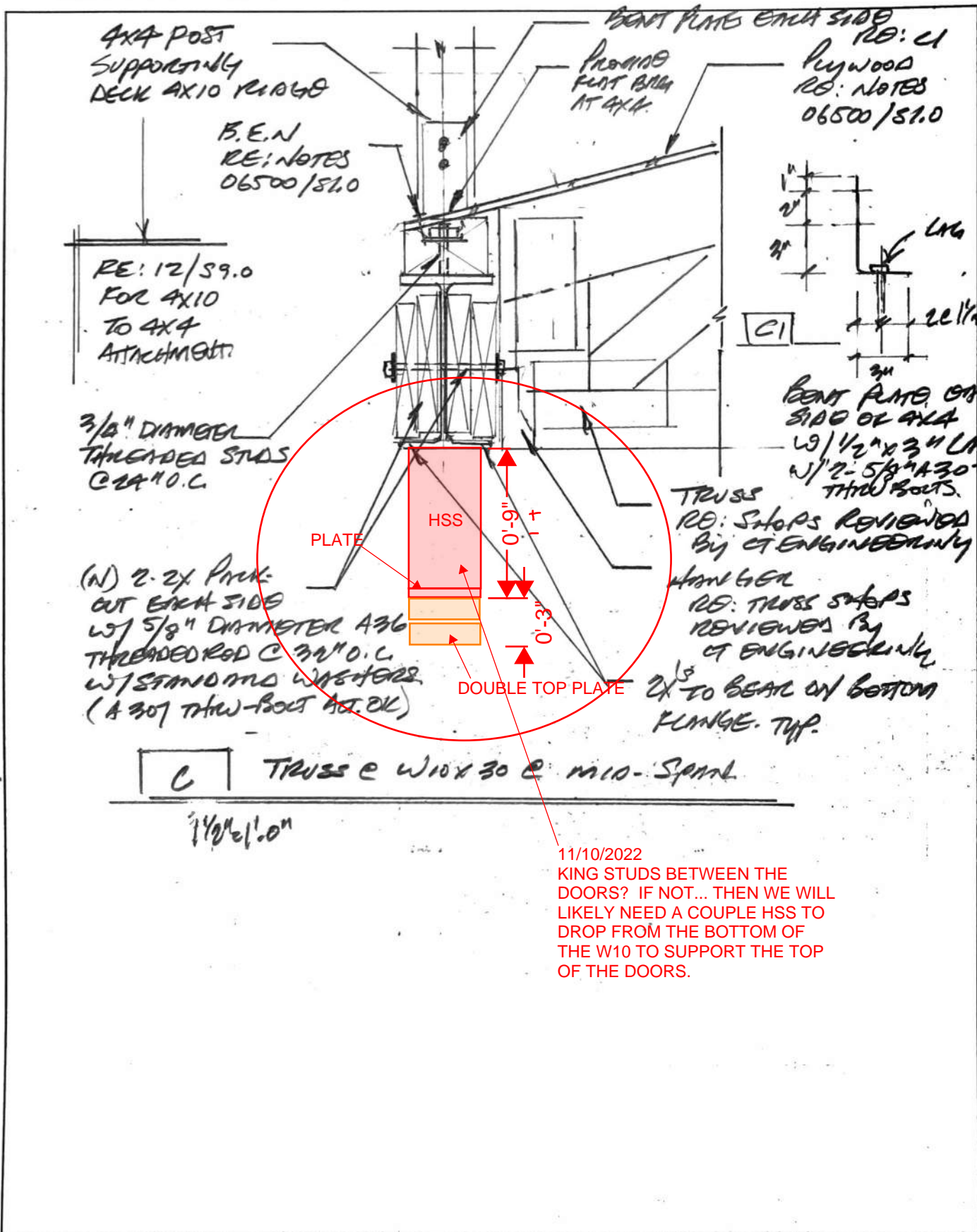


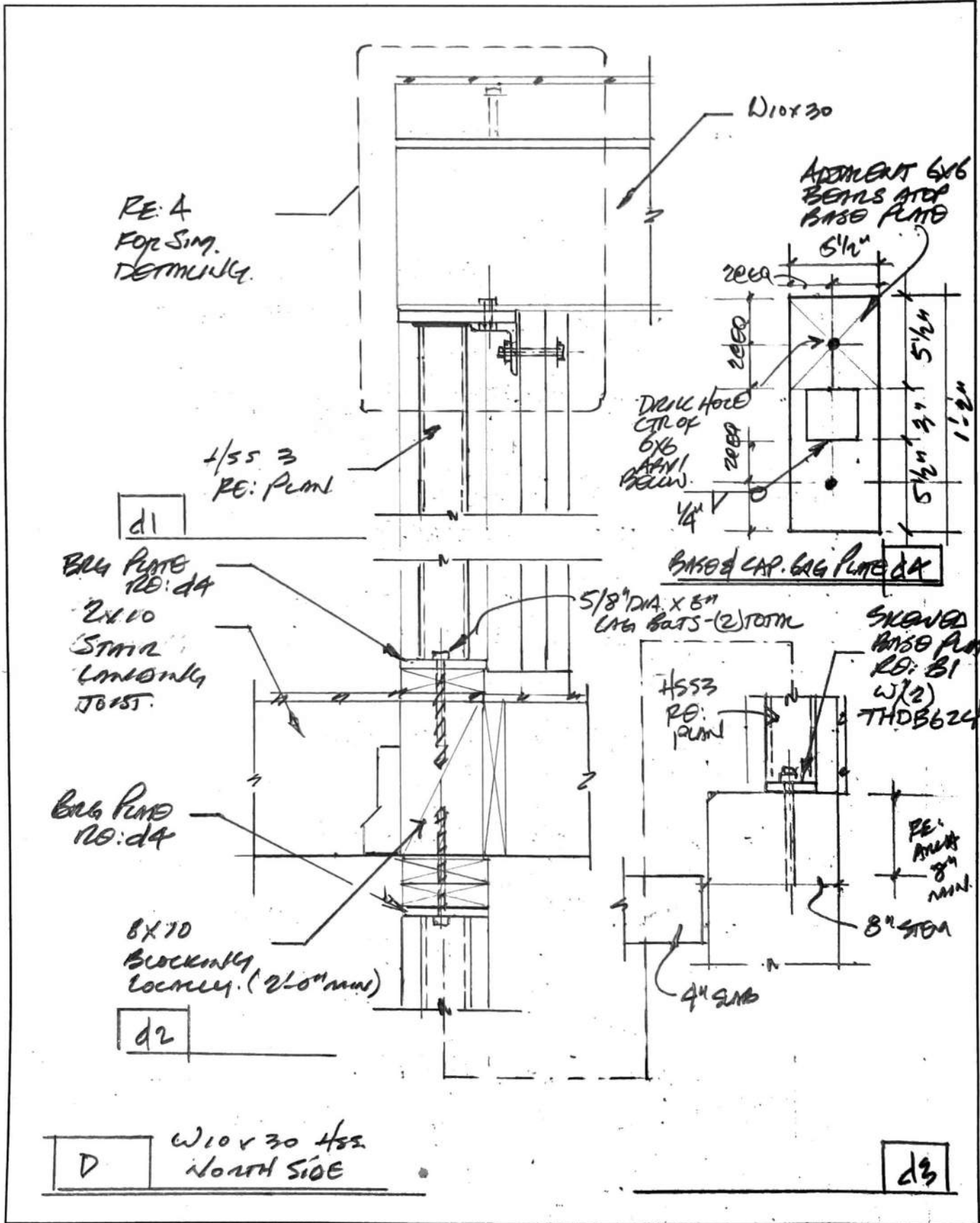
Project: Piper Residence

Date: 11/02/2022

Client:

Page Number:





BULLETIN CT-05

Date: November 13th, 2022	Number: CT-5	Project #: 21162
Project Name: Piper Remodel	Attached: Sketch A, Frame leg elevations with comments	
Number of Pages: 3		

Subject: Sketch A – Moment Frame column extension
Frame leg elevations with comments

Drawings affected: NA

Description / Action:

This bulletin provides design clarification, variation requests or additional structural direction for the Piper Remodel Project located on Mercer Island, Washington. This bulletin was issued after a phone discussion with Judy Tucker informing that the fabricated and installed height of the moment frame columns are shorter than the elevation required to locate the frame per 6/S9.1. The bottom of the 2x attached plate should be located 1'-0" below the top of plate elevation. Please see our repair direction shown on the structural steel shop drawing elevations for the frame legs.

It is structurally acceptable to modify the moment frame column legs per detail sketch A attached. The contractor will need to provide the dimension that the frame legs need to be extended. Additionally, we have provided two optional elevation locations to extend the frame legs, depending on the as-built location of the GLB bearing bracket. We have allowed for the welding to be done in the field. The welds will need to be special inspected in the field.

Ultrasonic testing (UT) is required on 10% of complete joint penetration (CJP) welds that are over 5/16" thick per the requirements of AISC 360, therefore one of the four flanges welded with CJP shall be UT tested. The web is not required to be UT tested.

We recommend that all future shop drawings are reviewed by the contractor and stamped prior to sending to CT Engineering for our review. This will allow CT Engineering to respond to any contractor related questions associated with the shop drawings as well as any questions from the fabricator at the same time.

Please note that the following submittals are outstanding for this project:

- Structural steel shop drawings for W10x30 beam and supporting column west of deck area – re: bulletin CT-4 for response to request for information email dated November 4th from Cameron.
- Structural steel shop drawings for deck truss plating and bearing conditions re: 7, 13, 16 & 19 / S9.1
- Structural steel shop drawings for stairs – re: 19/S10.00 and architecture
- Deck GLB bucket attachment – Bulletin CT-3 Detail D

Please note the following revised structural observation schedule to complete the project:

- Just after complete installation of roof sheathing, PRIOR to cover. We will largely be looking for proper boundary edge nailing as well as the installation and connection of blocking and blocking panels at the perimeter of the roof
- Just after completion of the deck framing and associated roof.

Outstanding action coordination items:

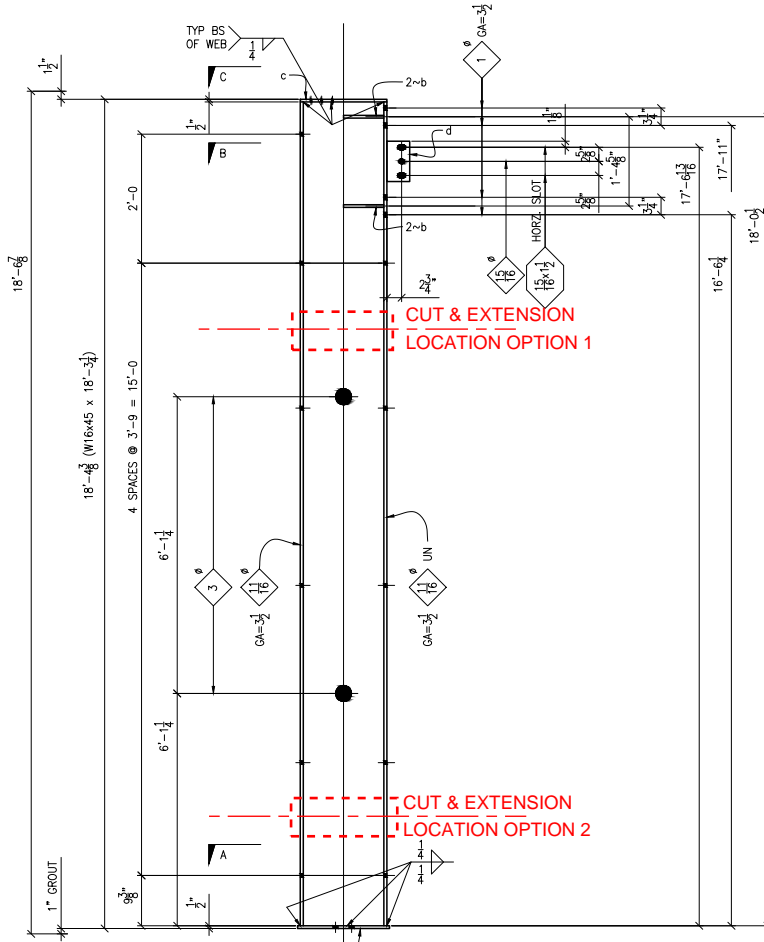
- Inform on deck topping upon ownership decision. This will impact the need for pressure treated members at the deck as well as the possible need for a cable diaphragm in lieu of a plywood diaphragm. CT engineering has assumed a plywood diaphragm atop the deck to date.

Please feel free to give me a call on my cell phone at 425.314.1209 if you have any questions.

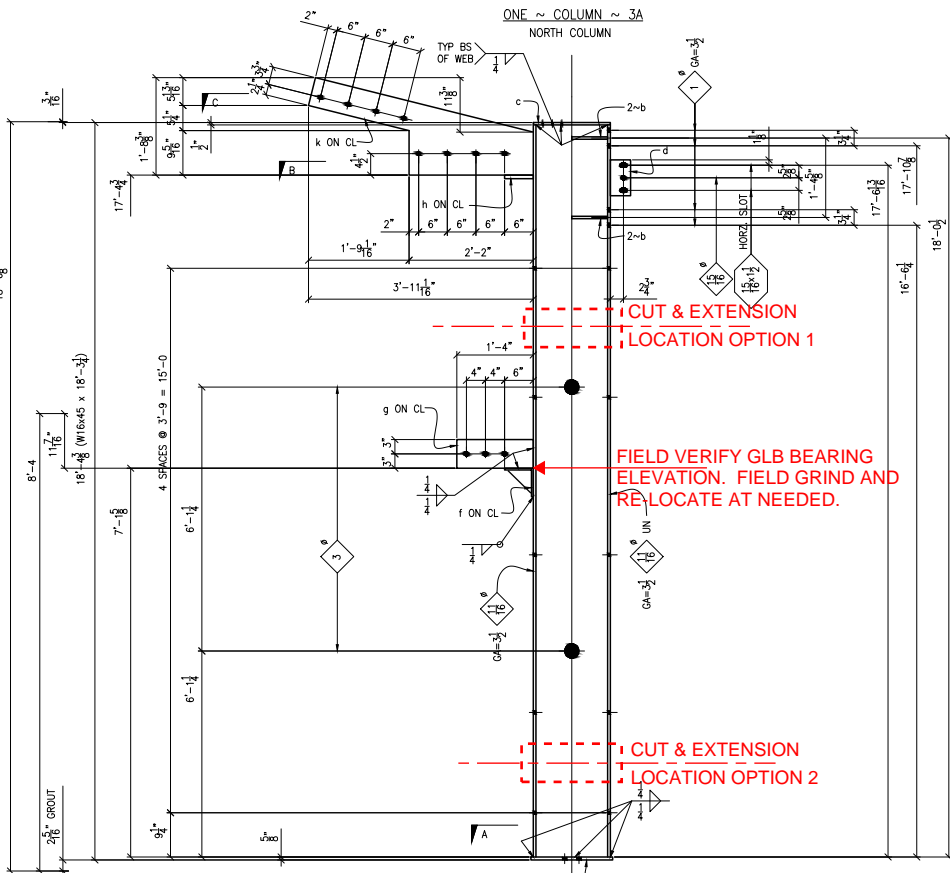
Issued by: **BJM**

Distribution: **Judy Tucker w/ Form + Function Architecture**

Structural Engineers

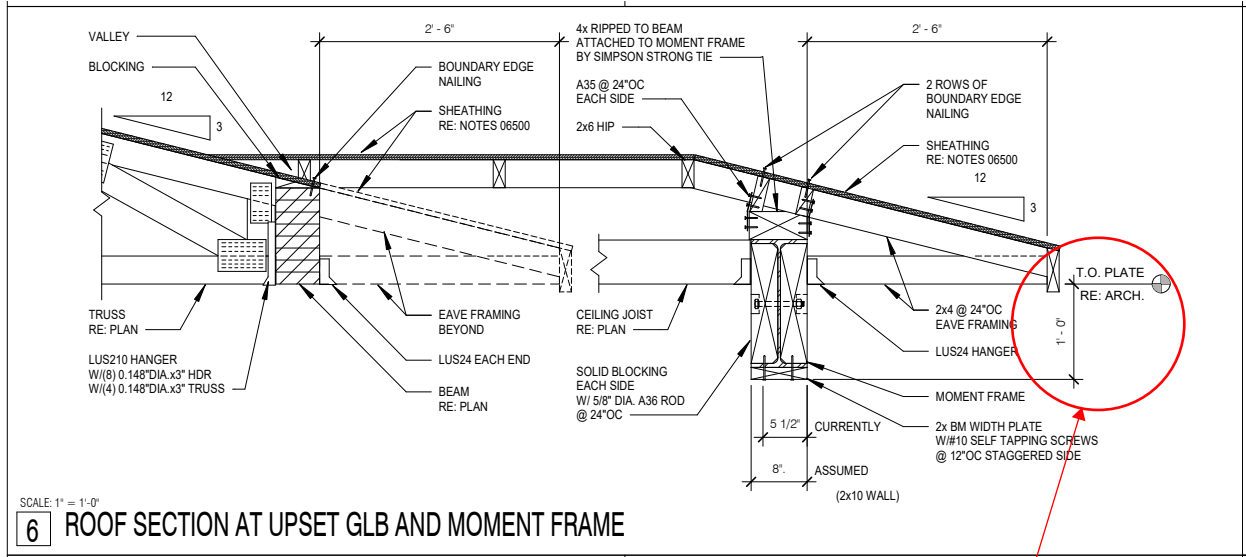


ONE ~ COLUMN ~ 3A
 NORTH COLUMN



ONE ~ COLUMN ~ 1A
 SOUTH COLUMN

IF GLB BEARING WAS LOCATED AT THE CORRECT ELEVATION, THEN CUT AND EXTEND FRAME AT LOCATION OPTION 1. IF GLB BEARING ELEVATION REQUIRES RE-LOCATION, THEN CUT AND EXTEND FRAME AT LOCATION OPTION 2. BOTH OPTION ARE LOCATED AT THE MID POINT BETWEEN THE HOLES IN THE FLANGES. PLEASE SEE REPAIR **DETAIL A** FOR FRAME COLUMN LEG EXTENSION WELDING REQUIREMENTS. CONTRACTOR TO PROVIDE FIELD EXTENSION DIMENSION FOR EACH COLUMN SUCH THAT THE OVERALL FRAME ELEVATION MEETS THE REQUIREMENTS SHOWN IN DETAIL 6/S9.1. PLEASE SEE DETAIL WITH MARKED UP DIMENSION NEXT SHEET.



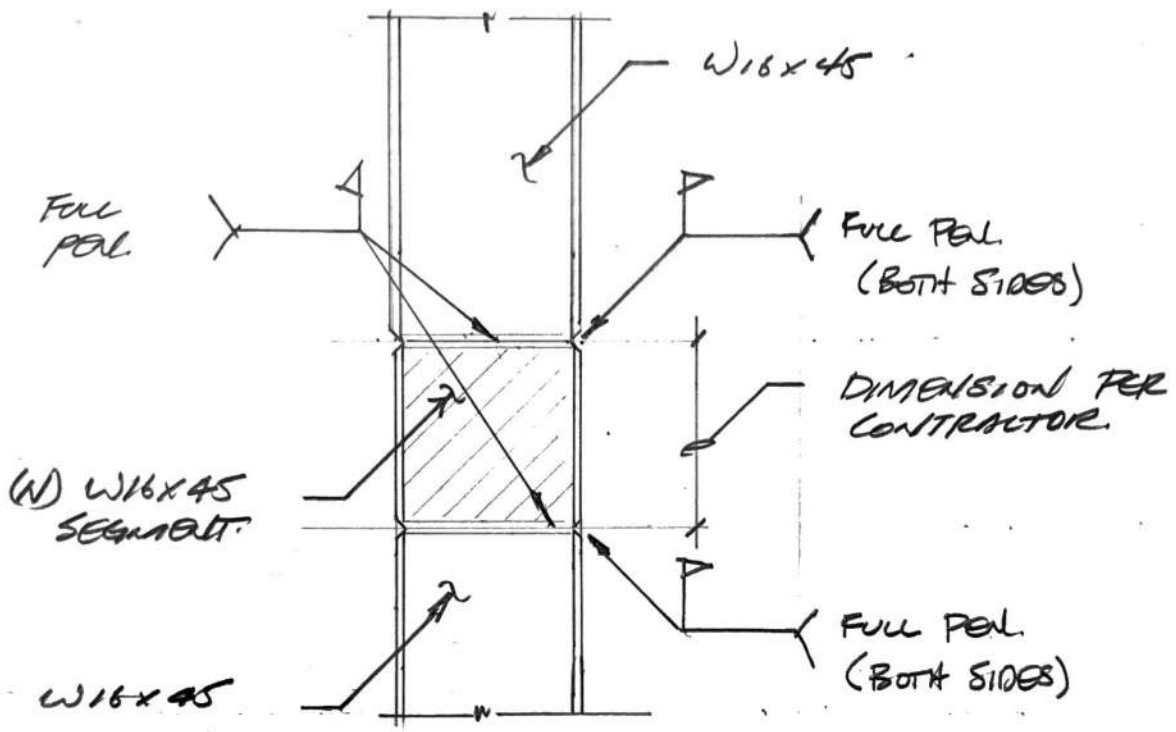
OVERALL FRAME ELEVATION SHALL BE SUCH THAT THE DISTANCE FROM THE TOP PLATE TO THE BOTTOM OF THE 2X ATTACHED AT THE BOTTOM FLANGE OF THE BEAM SHALL BE 1'-0"

Project: Piper Residence - CA

Date: 11/10/2012

Client: _____

Page Number: _____



SPECIAL INSPECTION REQUIRED (NON-DSTRUCTIVE TESTING OF WELDED JOINTS)
 UT SHALL BE PERFORMED ON 20% OF CJP GROOVE WELDS.

A | MOMENT FRAME COLUMN EXTENSION

$\frac{3}{4}'' \times 1-0''$
 $W16x45 \quad L_f = \frac{9}{16}'' = .5625''$

BULLETIN CT-05a

Date: November 15th, 2022	Number: CT-5a	Project #: 21162
Project Name: Piper Remodel	Attached: Sketch A, Sketch A alternate	
Number of Pages: 3		

Subject: Sketch A – Moment Frame column extension; Sketch A alternate
Frame leg elevations with comments

Drawings affected: NA

Description / Action:

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- Structural steel shop drawings for stairs – re: 19/S10.00 and architecture
- Deck GLB bucket attachment – Bulletin CT-3 Detail D

Please note the following revised structural observation schedule to complete the project:

- Just after complete installation of roof sheathing, PRIOR to cover. We will largely be looking for proper boundary edge nailing as well as the installation and connection of blocking and blocking panels at the perimeter of the roof
- Just after completion of the deck framing and associated roof.

Outstanding action coordination items:

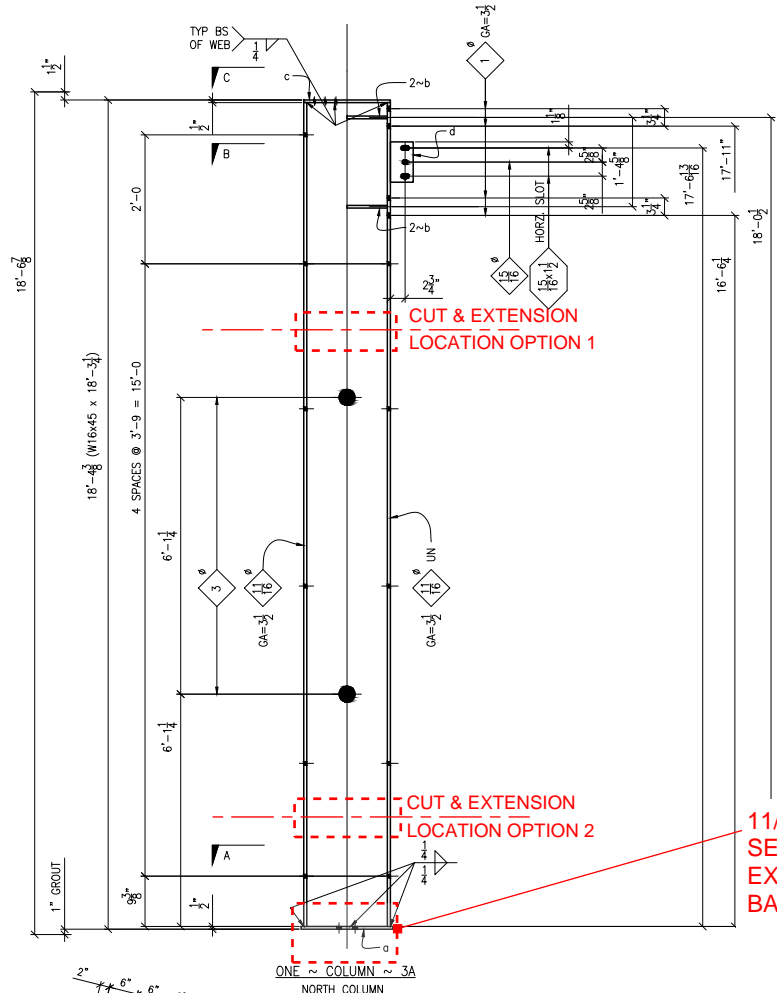
- Inform on deck topping upon ownership decision. This will impact the need for pressure treated members at the deck as well as the possible need for a cable diaphragm in lieu of a plywood diaphragm. CT engineering has assumed a plywood diaphragm atop the deck to date.

Please feel free to give me a call on my cell phone at 425.314.1209 if you have any questions.

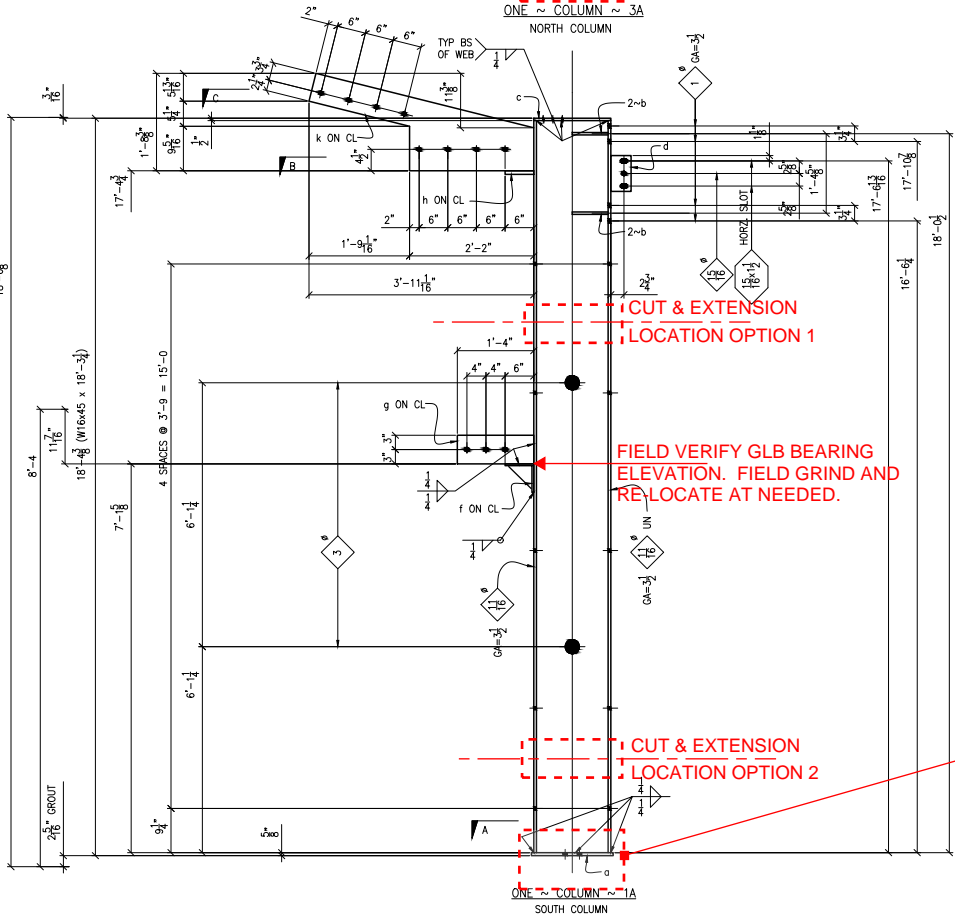
Issued by: BJM

Distribution: Judy Tucker w/ Form + Function Architecture

Structural Engineers

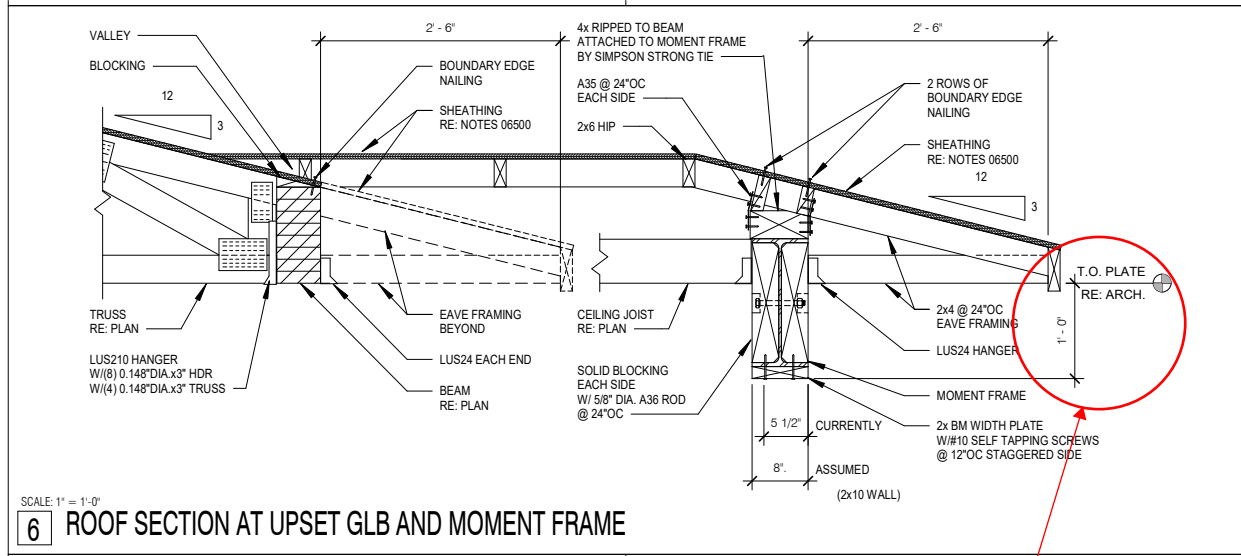


11/15/2022
SEE A ALTERNATE TO
EXTEND FRAME AT THE
BASE



IF GLB BEARING WAS LOCATED AT THE CORRECT ELEVATION, THEN CUT AND EXTEND FRAME AT LOCATION OPTION 1. IF GLB BEARING ELEVATION REQUIRES RE-LOCATION, THEN CUT AND EXTEND FRAME AT LOCATION OPTION 2. BOTH OPTION ARE LOCATED AT THE MID POINT BETWEEN THE HOLES IN THE FLANGES. PLEASE SEE REPAIR **DETAIL A** FOR FRAME COLUMN LEG EXTENSION WELDING REQUIREMENTS. CONTRACTOR TO PROVIDE FIELD EXTENSION DIMENSION FOR EACH COLUMN SUCH THAT THE OVERALL FRAME ELEVATION MEETS THE REQUIREMENTS SHOWN IN DETAIL 6/S9.1. PLEASE SEE DETAIL WITH MARKED UP DIMENSION NEXT SHEET.

11/15/2022
SEE A ALTERNATE TO
EXTEND FRAME AT THE
BASE



SCALE: 1" = 1'-0"

6 ROOF SECTION AT UPSET GLB AND MOMENT FRAME

OVERALL FRAME ELEVATION SHALL BE SUCH THAT THE DISTANCE FROM THE TOP PLATE TO THE BOTTOM OF THE 2X ATTACHED AT THE BOTTOM FLANGE OF THE BEAM SHALL BE 1'-0"

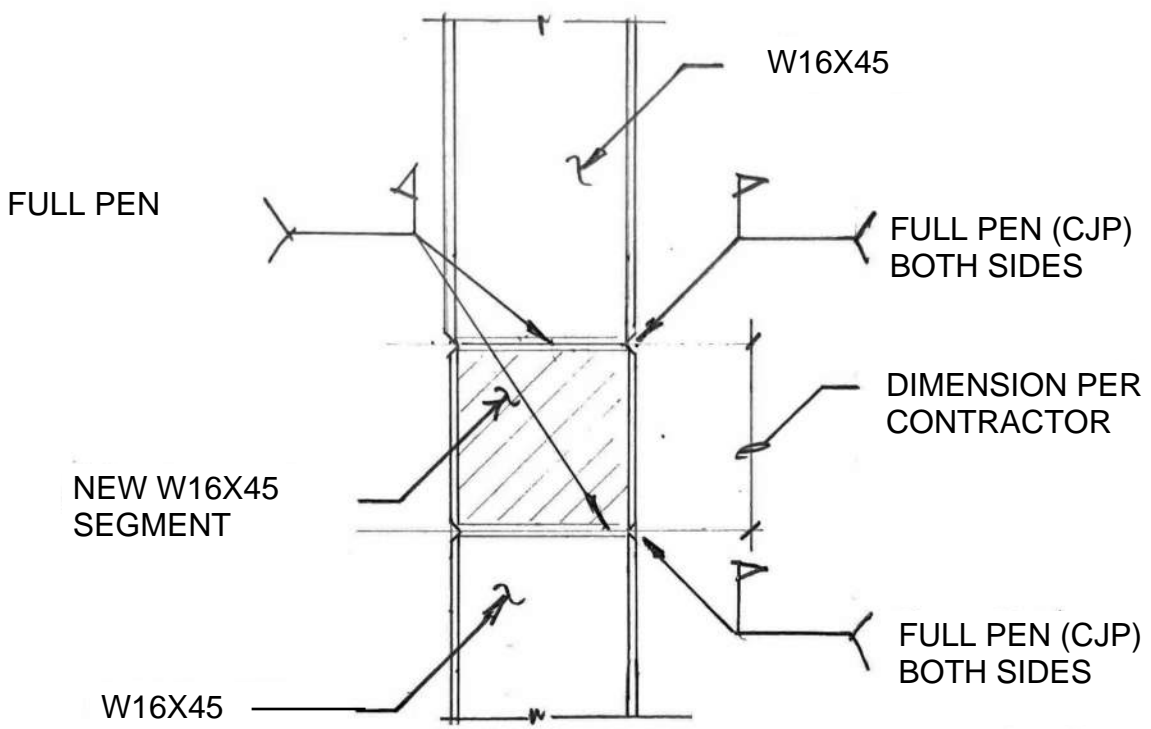
CT# 21162

Project: Piper Residence - CA

Date: 11/10/2022

Client: _____

Page Number: _____



SPECIAL INSPECTION REQUIRED (NON-DESTRUCTIVE TESTING OF WELDED JOINTS)
UT SHALL BE PERFORMED ON A MINIMUM OF 10% OF CJP GROOVE WELDS AT FLANGES. WEB CJP WELDS NOT REQUIRED TO BE UT TESTED.

A MOMENT FRAME COLUMN EXTENSION

3/4" Ac 1-04

Project: Piper Residence - Frame Ext.

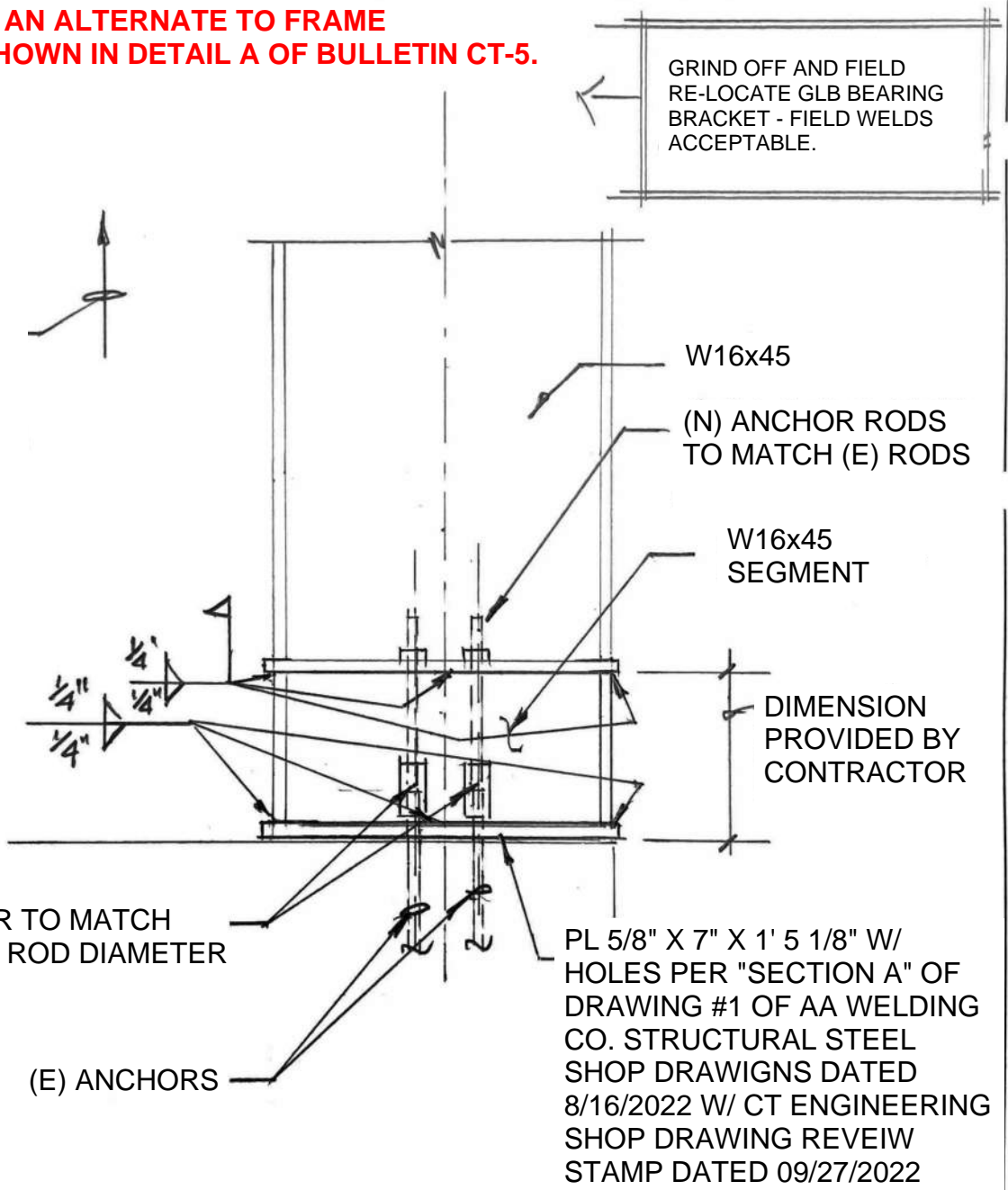
Date: 11/15/2022

Client: _____

Page Number: _____

**PROVIDED AS AN ALTERNATE TO FRAME
EXTENSION SHOWN IN DETAIL A OF BULLETIN CT-5.**

JACK FRAME
BY OTHERS
(EACH SIDE)



GRIND OFF AND FIELD
RE-LOCATE GLB BEARING
BRACKET - FIELD WELDS
ACCEPTABLE.

W16x45

(N) ANCHOR RODS
TO MATCH (E) RODS

W16x45
SEGMENT

DIMENSION
PROVIDED BY
CONTRACTOR

COUPLER TO MATCH
ANCHOR ROD DIAMETER

PL 5/8" X 7" X 1' 5 1/8" W/
HOLES PER "SECTION A" OF
DRAWING #1 OF AA WELDING
CO. STRUCTURAL STEEL
SHOP DRAWINGS DATED
8/16/2022 W/ CT ENGINEERING
SHOP DRAWING REVIEW
STAMP DATED 09/27/2022

(E) ANCHORS

NOTE:
SPECIAL INSPECTION REQUIRED

ALTERNATE
A

W16X45 MOMENT FRAME - BASE EXTENSION

1 1/2" = 1'-0"

BULLETIN CT-06

Date: November 16th, 2022	Number: CT-6	Project #: 21162
Project Name: Piper Remodel	Attached: S2.2 – Partial Roof Framing Plan (Garage Door Header) S2.1 – Partial Main Floor Framing Plan S2.2 – Partial Roof Framing Plan (east over-framing)	
Number of Pages: 4		

Subject: (N) Garage Door Header
(E) Header Check at west side of deck
Moment Frame – north leg / roof plane

Drawings affected: S2.2; S2.1

Description / Action:

This bulletin provides design clarification, variation requests or additional structural direction for the Piper Remodel Project located on Mercer Island, Washington. This bulletin was issued after receipt of an email dated November 15th, 2022 from Cameron Weaver w/ Weaver Construction requesting additional information and following a coordination phone discussion with Judy Tucker. Additional email from Cameron Weaver received November 15th regarding moment frame & roof plane interference.

We understand that a new garage door header is required. Provide a 3 1/2 " x 21" 24F-V4 GLB with (2) – trimmer studs each side. Alternate – provide 5 1/2" X 18" 24F-V4 GLB with (2) trimmer studs each side. Both beams limit the total load deflection of the beam to 3/8" max. (Dead load – 20 PSF and Snow load – 25 PSF) for proper garage door operation. Please let us know if the garage door manufacturer requires more stringent deflection requirements. Further, please inform if the beam span (from inside of double cripples each side) exceeds 16'-6". Provide a double king stud each side of the opening, adjacent the double cripple studs.

We understand that the existing exterior headers just to the south of the deck are existing 4x8. We understand that the current coordinated architectural layout locates the 8 3/4" GLB supporting the deck framing between two 5'-6" openings, therefore this GLB will not load the existing headers. It is structurally acceptable to sister a 2x8 DF#1 to the side of the existing 4x8. Provide sistering nailing per detail E of Bulletin CT-03.

Please support the 8 3/4" X 12" GLB with a HGLT9 (H=14 3/4") w/ 18-N54A at existing 4x8 header & 6 – N54A at the glued-laminated beam. Contractor to verify hanger height (T.O. existing 4x8 assumed to be 2 3/4" higher than the dropped 8 3/4" X 12" GLB supporting the deck.

Additionally, please see revised roof plan with extended eave at the north end of the stairs as well as slight hip and valley angle revisions to accommodate housing the north side moment frame leg below the roof line.

Please note that the following submittals are outstanding for this project:

- Structural steel shop drawings for W10x30 beam and supporting column west of deck area – re: bulletin CT-4 for response to request for information email dated November 4th from Cameron.
- Structural steel shop drawings for deck truss plating and bearing conditions re: 7, 13, 16 & 19 / S9.1
- Structural steel shop drawings for stairs – re: 19/S10.00 and architecture
- Deck GLB bucket attachment – Bulletin CT-3 Detail D

Please note the following revised structural observation schedule to complete the project:

- Just after complete installation of roof sheathing, PRIOR to cover. We will largely be looking for proper boundary edge nailing as well as the installation and connection of blocking and blocking panels at the perimeter of the roof
- Just after completion of the deck framing and associated roof.

Structural Engineers

Outstanding action coordination items:

- Inform on deck topping upon ownership decision. This will impact the need for pressure treated members at the deck as well as the possible need for a cable diaphragm in lieu of a plywood diaphragm. CT engineering has assumed a plywood diaphragm atop the deck to date.

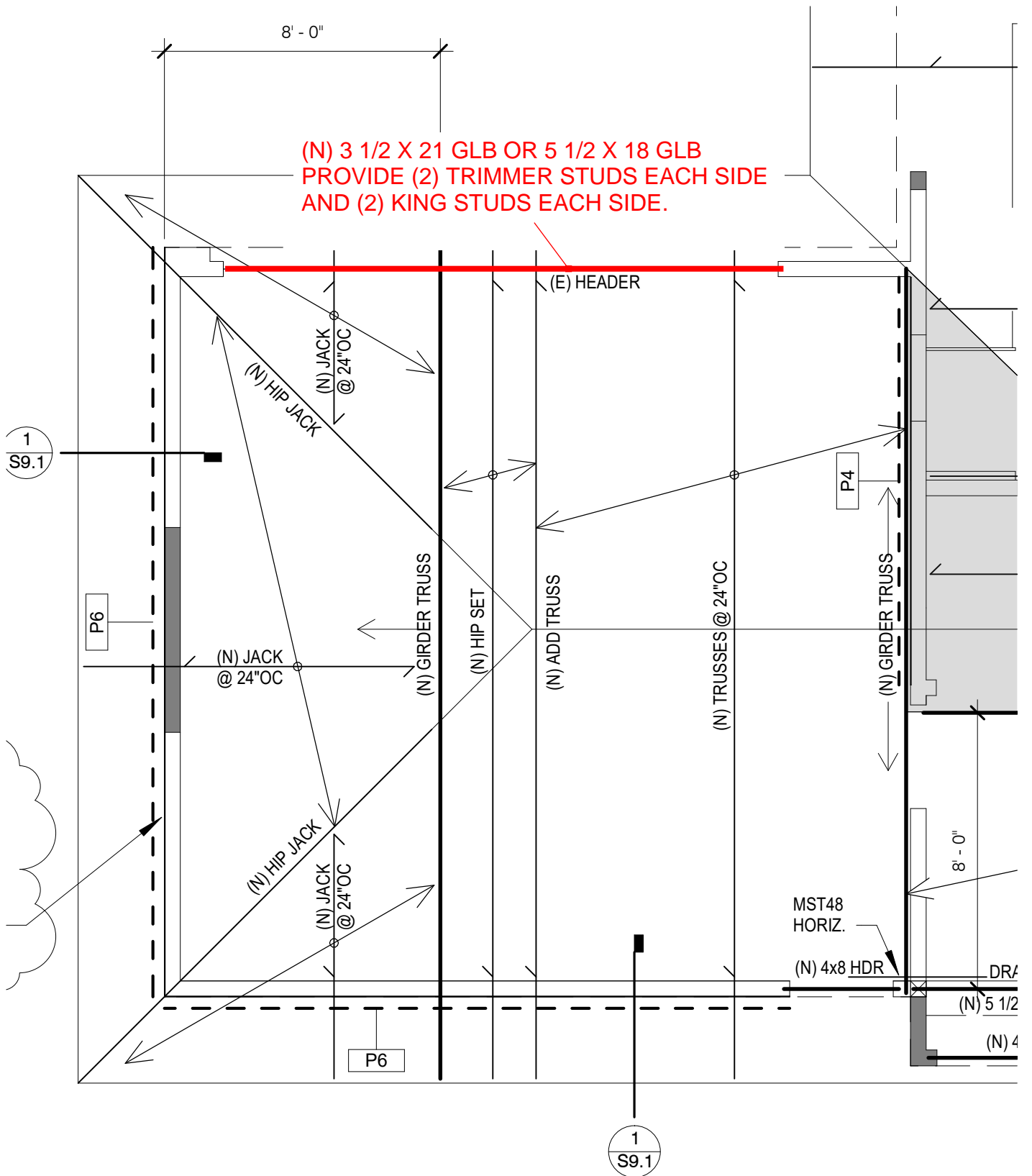
Please feel free to give me a call on my cell phone at 425.314.1209 if you have any questions.

Issued by: BJM

Distribution: Judy Tucker w/ Form + Function Architecture



11/16/2022

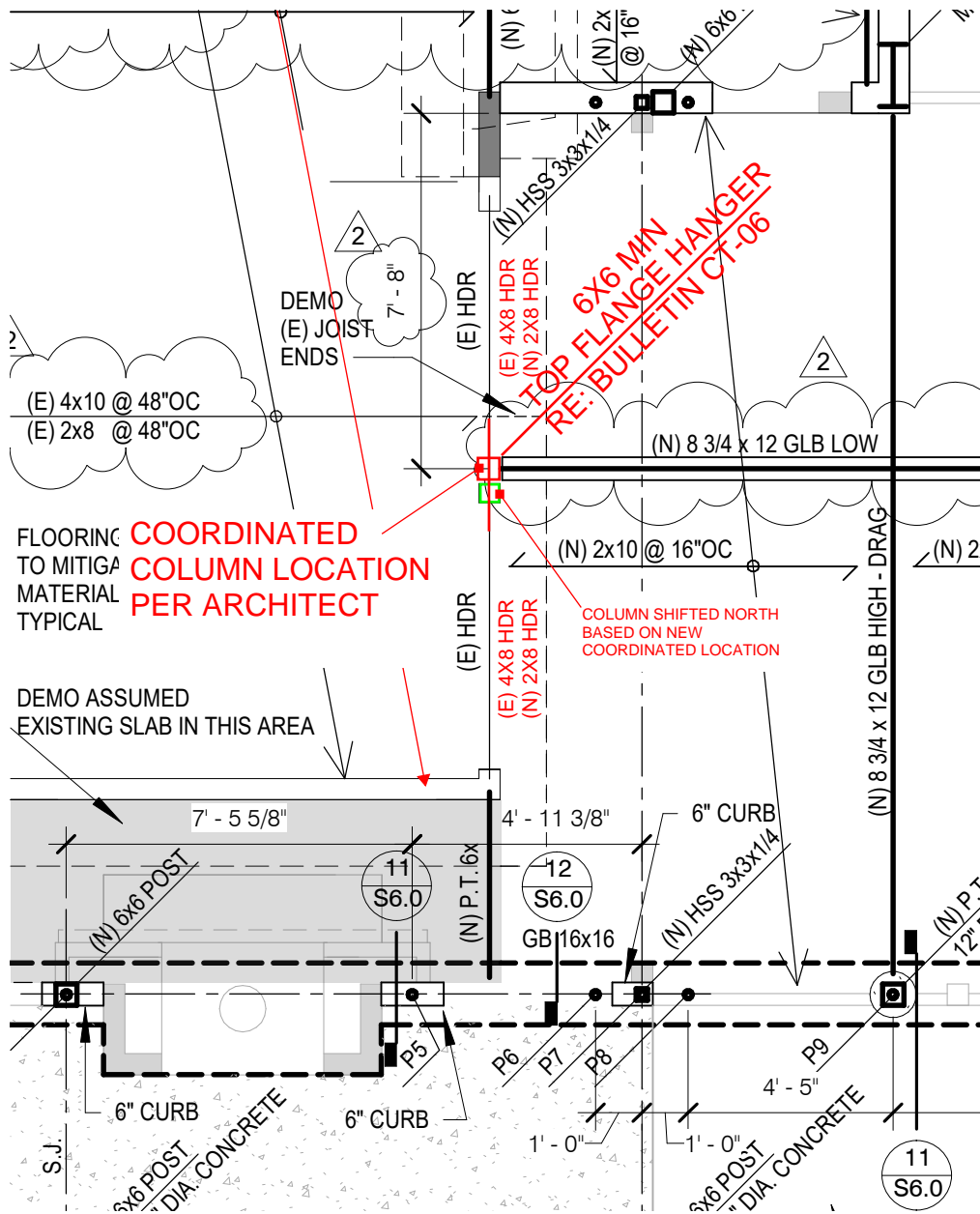


SCALE: 1/4" = 1'-0"

1

Roof Framing Over Main Level Shear Walls

PARTIAL
S2.2

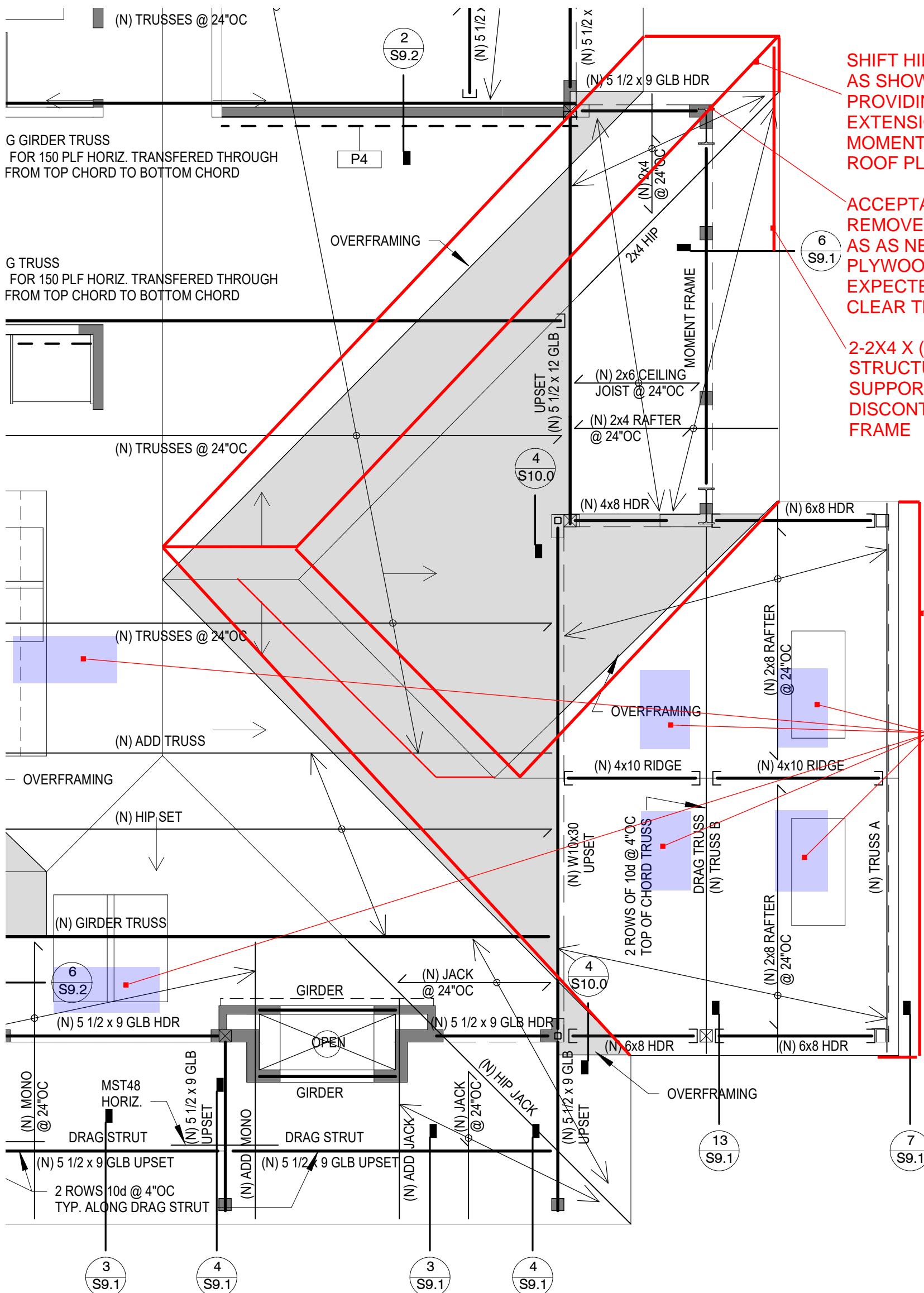


SCALE: 1/4" = 1'-0"

1

Main Floor Framing Over Basement Level Shear Walls

PARTIAL
S2.1



SHIFT HIP AND VALLEYS AS SHOWN IN RED, PROVIDING NORTH END EVE EXTENSION TO HOUSE MOMENT FRAME BELOW ROOF PLYWOOD LEVEL.

ACCEPTABLE TO LOCALLY REMOVE WOOD TOP PLATE AS NEEDED TO CLEAR PLYWOOD. FRAME EXPECTED TO ENTIRELY CLEAR THROUGH.

2-2X4 X (8'-0") STRUCTURAL FACIA TO SUPPORT HIP END - DISCONTINUOUS AT FRAME

REFER TO ARCHITECTURAL FOR EVE EXTENSION THIS LOCATION

ARCHITECT HAS PROVIDED NEW SKYLIGHT LOCATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SKYLIGHT LOCATIONS TYP.

WE UNDERSTAND THAT THE TRUSS MANUFACTURER IS SHIFTING THE TRUSS LAYOUT AND PROVIDING SHORT GIRDER TRUSSES AS NEEDED TO ACCOMMODATE THE SKYLIGHTS AT TRUSSED AREAS.

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

Roof Framing Over Main Level Shear Walls

BULLETIN CT-06a

Date: November 30th, 2022	Number: CT-6a	Project #: 21162
Project Name: Piper Remodel	Attached: S2.2 – Partial Roof Framing Plan (Garage Door Header) S2.1 – Partial Main Floor Framing Plan S2.2 – Partial Roof Framing Plan (east over-framing)	
Number of Pages: 5		

Subject: (N) Garage Door Header
(E) Header Check at west side of deck – **Revised to include additional weight of door (1400 pounds max.)**
Moment Frame – north leg / roof plane

Drawings affected: S2.2; S2.1

Description / Action:

This bulletin provides design clarification, variation requests or additional structural direction for the Piper Remodel Project located on Mercer Island, Washington. **Bulletin CT-06a was issued after receipt of an email from Cameron Weaver informing of door weight and bearing location as well as email and phone discussion with Judy Tucker.**

We understand that a new garage door header is required. Provide a 3 1/2 “x 21” 24F-V4 GLB with (2) – trimmer studs each side. Alternate – provide 5 1/2” X 18” 24F-V4 GLB with (2) trimmer studs each side. Both beams limit the total load deflection of the beam to 3/8” max. (Dead load – 20 PSF and Snow load – 25 PSF) for proper garage door operation. Please let us know if the garage door manufacturer requires more stringent deflection requirements. Further, please inform if the beam span (from inside of double cripples each side) exceeds 16’-6”. Provide a double king stud each side of the opening, adjacent the double cripple studs.

We understand that the existing exterior headers just to the south of the deck are existing 4x8. We understand that the current coordinated architectural layout locates the 8 3/4” GLB supporting the deck framing between two 5’-6” openings, therefore this GLB will not load the existing headers. **Please replace both existing headers with 5 1/2 x 7 1/2” 24F-V4 glued-laminated beams. Provide solid blocking between the joist under the new door in this area (or add additional upset header as discussed below). We understand that the contractor is concerned regarding the long-term operation of the door assembly caused by framing deflections. Please note that the current live load deflection of the headers is 0.043” and the total load deflection equates to 0.078”. Additionally, some shrinkage will occur in the dimensional lumber framing below the door, and this will depend on the moisture content of the framing when the door is installed. To minimize shrinkage below the door assembly, a header can be added atop the double top plate and joist hung into the upset header (5 1/2 X 9 glued-laminated beam). This member should be protected from moisture during construction to minimize shrinkage of the beam element after the door is installed. This header in the joist space can be added in addition to the lower headers to reduce the overall deflection / shrinkage of the framing system below the door assembly, however additional movement in the framing is possible due to natural soil settlements.**

Please support the 8 3/4” X 12” GLB with a HGLT9 (H=14 3/4”) w/ 18-N54A at existing 4x8 header & 6 – N54A at the glued-laminated beam. Contractor to verify hanger height (T.O. existing 4x8 assumed to be 2 3/4” higher than the dropped 8 3/4” X 12” GLB supporting the deck. **We now understand that the deck will be a flow-through deck. Provide hot-dipped galvanized hangers and stainless-steel fasteners typically.**

Additionally, please see revised roof plan with extended eave at the north end of the stairs as well as slight hip and valley angle revisions to accommodate housing the north side moment frame leg below the roof line. We have revised these lines based on current architectural backgrounds. Refer to the architectural drawings regarding roof slopes and valley and hip angles in this area.

Please note that the following submittals are outstanding for this project:

- Structural steel shop drawings for W10x30 beam and supporting column west of deck area – re: bulletin CT-4 for response to request for information email dated November 4th from Cameron.
- Structural steel shop drawings for deck truss plating and bearing conditions re: 7, 13, 16 & 19 / S9.1
- Structural steel shop drawings for stairs – re: 19/S10.00 and architecture
- Deck GLB bucket attachment – Bulletin CT-3 Detail D

Please note the following revised structural observation schedule to complete the project:

- Just after complete installation of roof sheathing, PRIOR to cover. We will largely be looking for proper boundary edge nailing as well as the installation and connection of blocking and blocking panels at the perimeter of the roof
- Just after completion of the deck framing and associated roof.

Outstanding action coordination items:

- Inform on deck topping upon ownership decision. This will impact the need for pressure treated members at the deck as well as the possible need for a cable diaphragm in lieu of a plywood diaphragm. CT engineering has assumed a plywood diaphragm atop the deck to date. **We now understand that the deck topping will be a flow through system.**

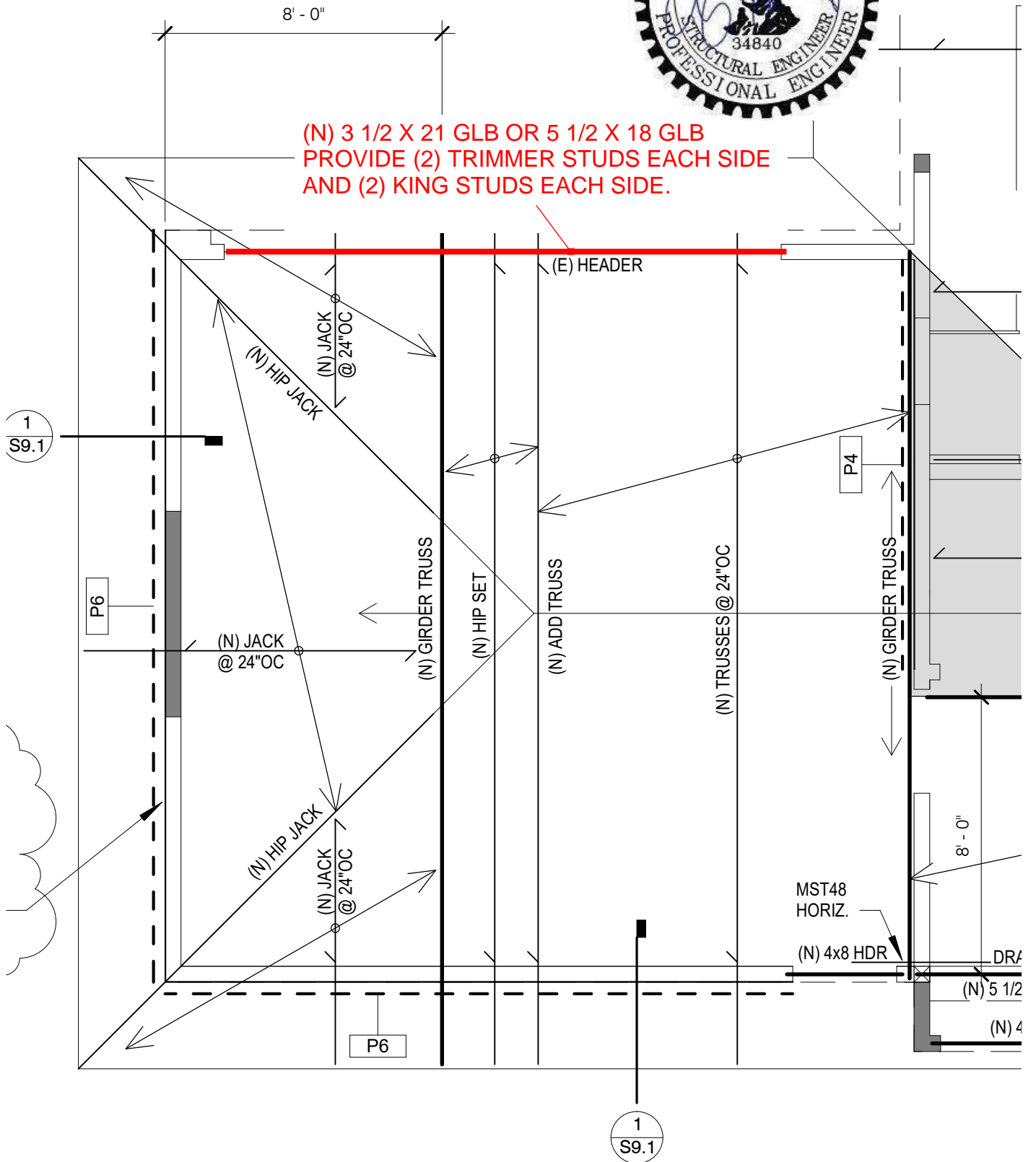
Please feel free to give me a call on my cell phone at 425.314.1209 if you have any questions.

Issued by: BJM

Distribution: Judy Tucker w/ Form + Function Architecture



11/30/2022

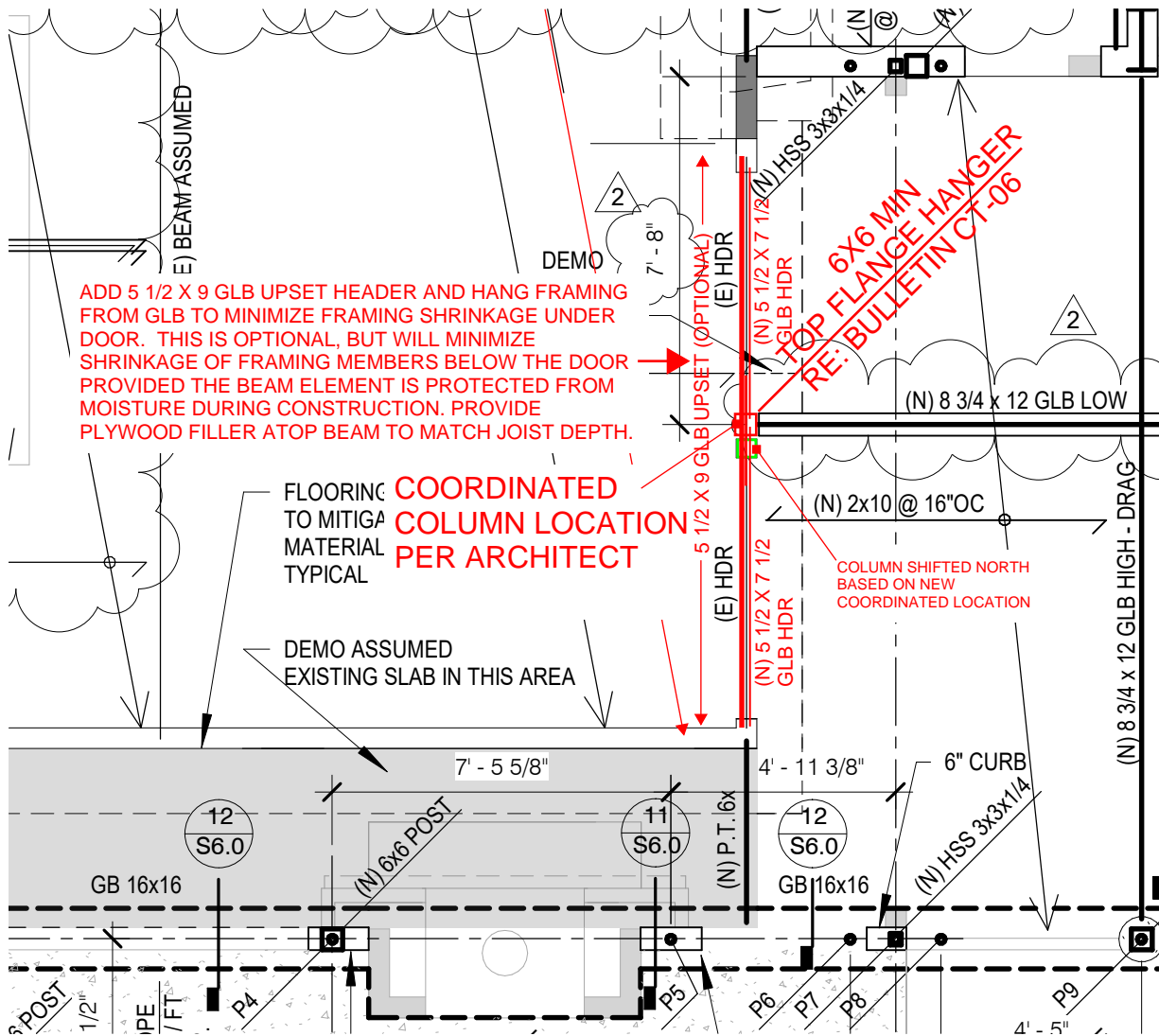


SCALE: 1/4" = 1'-0"

1

Roof Framing Over Main Level Shear Walls

PARTIAL
S2.2

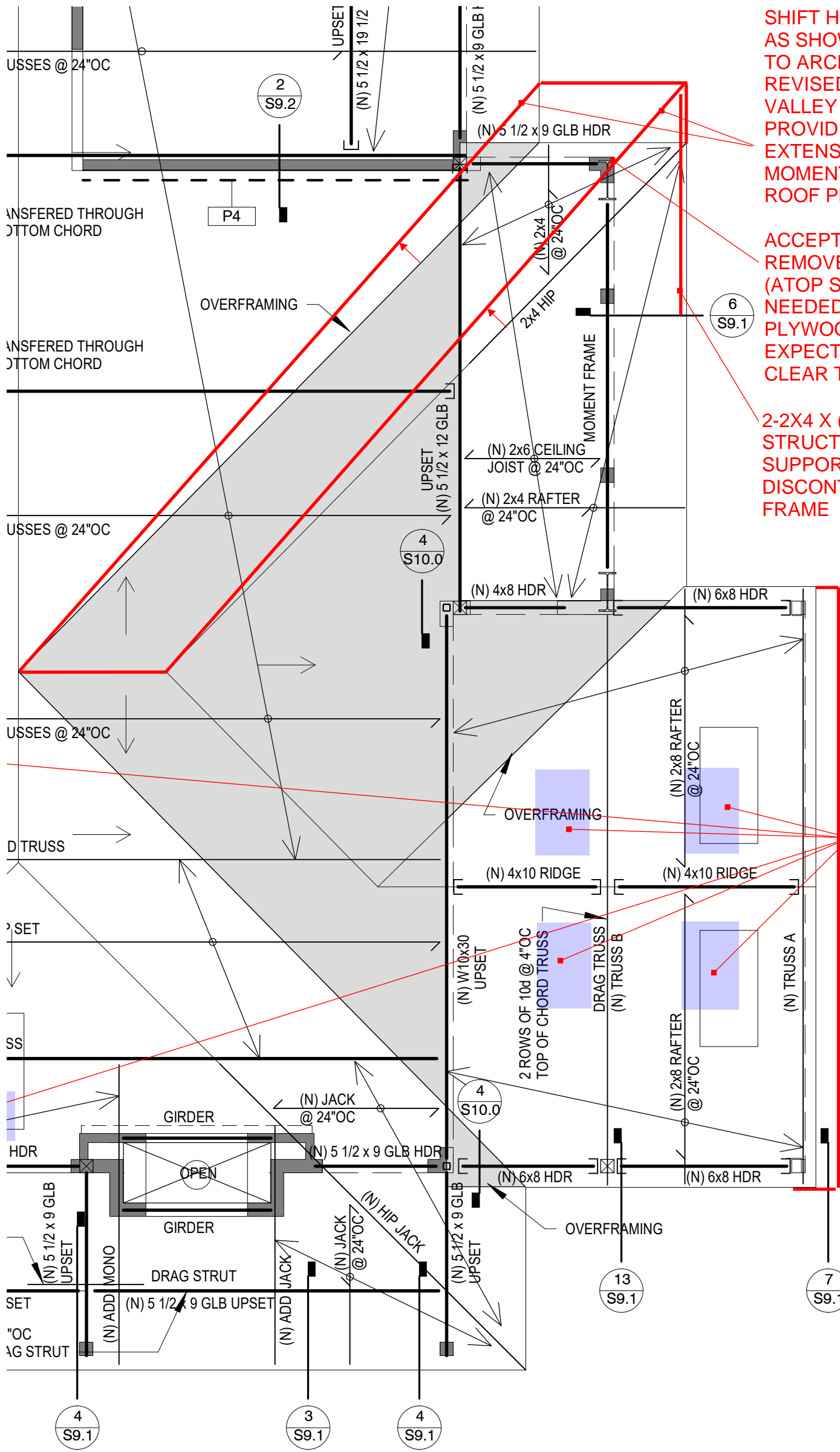


SCALE: 1/4" = 1'-0"

1

Main Floor Framing Over Basement Level Shear Walls

PARTIAL
S2.1



SHIFT HIPS AND VALLEYS AS SHOWN IN RED - REFER TO ARCHITECTURAL REVISED ROOF PLAN FOR VALLEY AND HIP ANGLES, PROVIDING NORTH END EVE EXTENSION TO HOUSE MOMENT FRAME BELOW ROOF PLYWOOD LEVEL.

ACCEPTABLE TO LOCALLY REMOVE WOOD TOP PLATE (ATOP STEEL FRAME) AS NEEDED TO CLEAR PLYWOOD. FRAME EXPECTED TO ENTIRELY CLEAR THOUGH.

2-2X4 X (8'-0") STRUCTURAL FACIA TO SUPPORT HIP END - DISCONTINUOUS AT FRAME

REFER TO ARCHITECTURAL FOR EVE EXTENSION THIS LOCATION

ARCHITECT HAS PROVIDED NEW SKYLIGHT LOCATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SKYLIGHT LOCATIONS TYP.

WE UNDERSTAND THAT THE TRUSS MANUFACTURER IS SHIFTING THE TRUSS LAYOUT AND PROVIDING SHORT GIRDER TRUSSES AS NEEDED TO ACCOMMODATE THE SKYLIGHTS AT TRUSSED AREAS.

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

1

Roof Framing Over Main Level Shear Walls

PARTIAL
S2.2

BULLETIN CT-07

Date: January 11th, 2023	Number: CT-7	Project #: 21162
Project Name: Piper Remodel	Attached: S2.1 – Partial Main Floor Framing Plan Sketches a1, a2, a3, a4, a5, b1 Revised sketch D (from Bulletin CT-3) S9.1 – Delta 3 – truss plating and component modification to simplify where possible and accommodate soffit material termination at truss top chord elements.	
Number of Pages: 9		

Subject: Deck roof and main floor framing revisions.

Drawings affected: S2.1, S9.1, Bulletin CT-3 detail D revised (attached with this bulletin)

Description / Action:

This bulletin provides design clarification, variation requests or additional structural direction for the Piper Remodel Project located on Mercer Island, Washington. Bulletin CT-7 was issued after request from Judy Tucker w/ Form + Function Architecture, as well as coordination emails and phone discussions with Bill with Weaver Construction.

Roof level revisions:

We have accommodated simplifications to the truss connection details on S9.1 (revised delta-3 attached), including shifting of the plating to accommodate outriggers atop truss A in support of the east eave. Additionally, we have added detail 11/S9.1 to provide direction associated with the termination of the soffit materials at the trusses. Top chord members have been increased to 2x10 in lieu of 2x8 members to provide a visual termination point for the soffit as coordinated with Judy Tucker.

Main Level Deck revisions:

We understand that the deck will consist of a flow through deck system and therefore have coordinated with Weaver Construction to provide structural supporting components appropriate for exterior use. Additionally, we understand that the main floor joist has been constructed with a cantilever which varies from previous structural direction, however this as-built condition has been incorporated. Therefore, the existing joist cantilever should remain.

Details associated with the cable diaphragm (which delivers main floor diaphragm forces to the moment frame) are attached and referenced on the partial main floor framing plan. Sketches a1, a2, a3, a4, and a5 all provide direction for the attachment of this cable diaphragm.

Sketch b1 has been provided to clarify the transition between the living space framing and the deck framing. Please note that the new pressure treated 2x10 members will be spaced @ 12" O.C. and dropped. The detail assumes 5/4" thick decking members but provides direction where the decking exceeds this thickness. Please note that the new P.T. 2x10 members will be continuous under the new door, extending from the basement wall to the double 8 3/4" GLB at the center of the deck.

Please note that the following submittals are outstanding for this project:

- Structural steel shop drawings for W10x30 beam and supporting column west of deck area – re: bulletin CT-4 for response to request for information email dated November 4th from Cameron. We understand that Weaver Construction constructed these components on site without the development of shop drawings.
- Structural steel shop drawings for deck truss plating and bearing conditions re: 7, 13, 16 & 19 / S9.1.
- Structural steel shop drawings for stairs – re: 19/S10.00 and architecture
- Deck GLB bucket attachment – Bulletin CT-3 Detail D (Revised this bulletin)

Please note the following revised structural observation schedule to complete the project:

- Just after complete installation of roof sheathing, PRIOR to cover. We will largely be looking for proper boundary edge nailing as well as the installation and connection of blocking and blocking panels at the perimeter of the roof.
- Just after completion of the deck framing and associated roof.

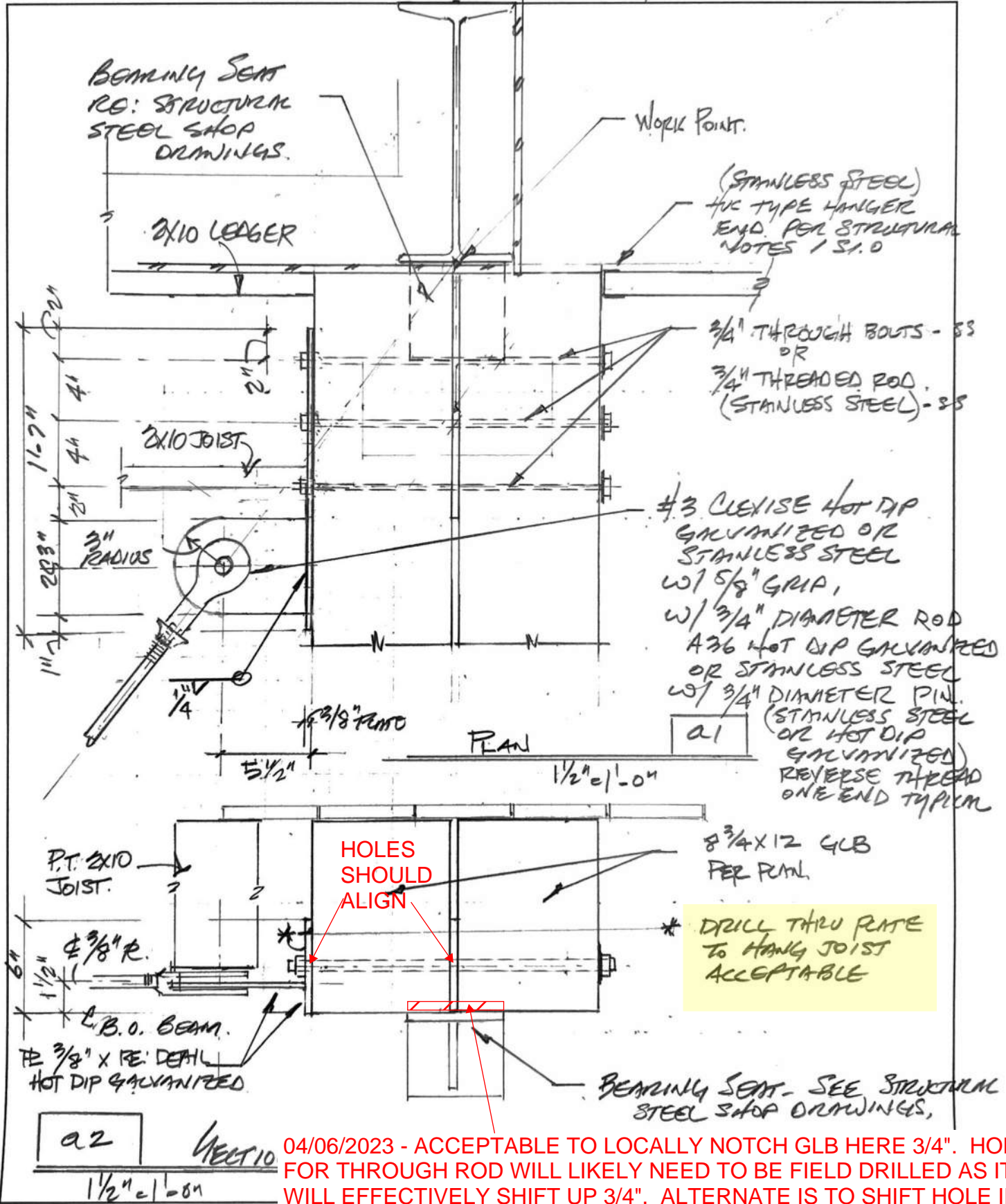
Please feel free to give me a call on my cell phone at 425.314.1209 if you have any questions.

Issued by: BJM

Distribution: Judy Tucker w/ Form + Function Architecture



01/11/2023



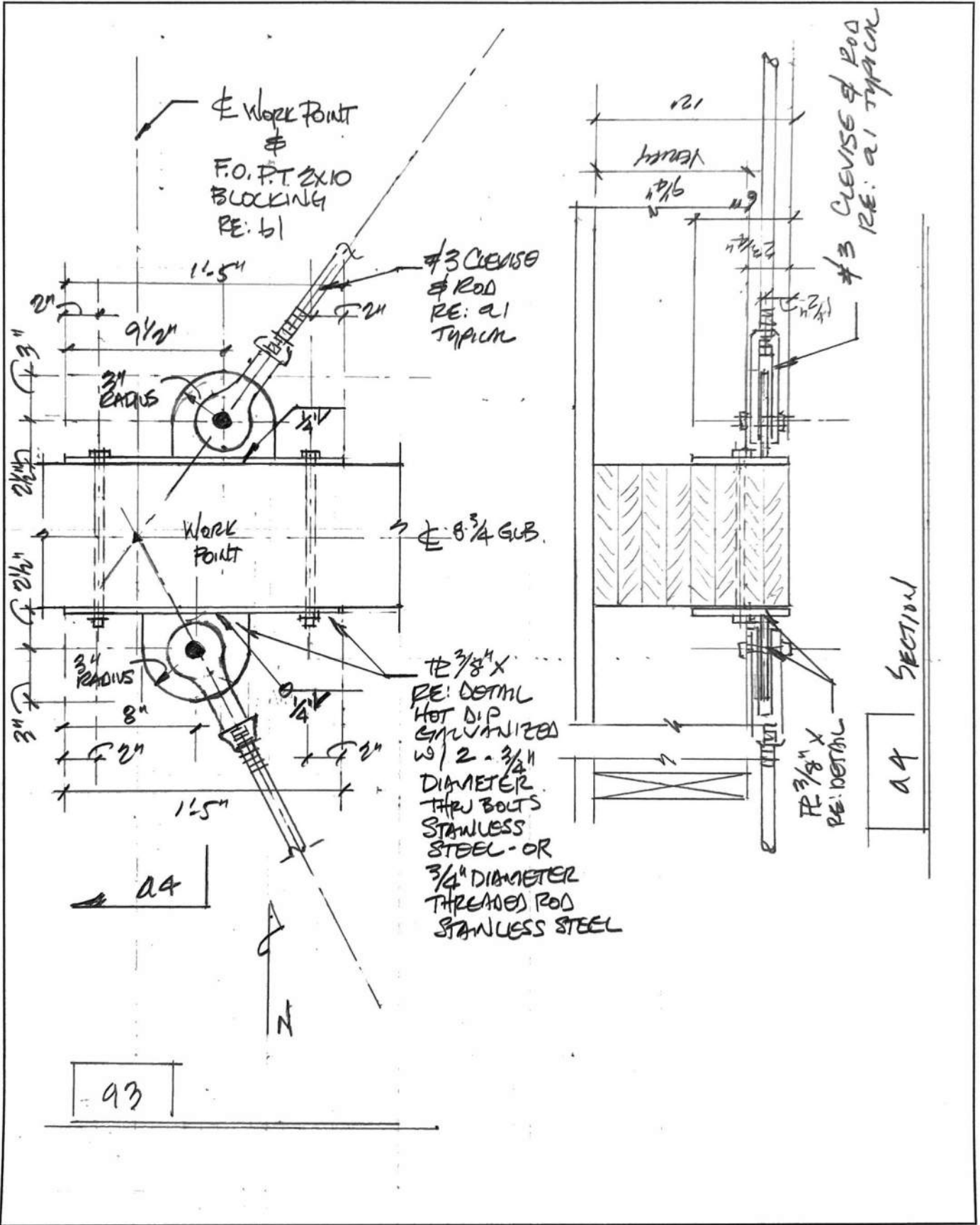
04/06/2023 - ACCEPTABLE TO LOCALLY NOTCH GLB HERE 3/4". HOLE FOR THROUGH ROD WILL LIKELY NEED TO BE FIELD DRILLED AS IT WILL EFFECTIVELY SHIFT UP 3/4". ALTERNATE IS TO SHIFT HOLE IN FABRICATED HARDWARE TO MATCH HOLE IN VERTICAL PLATE.

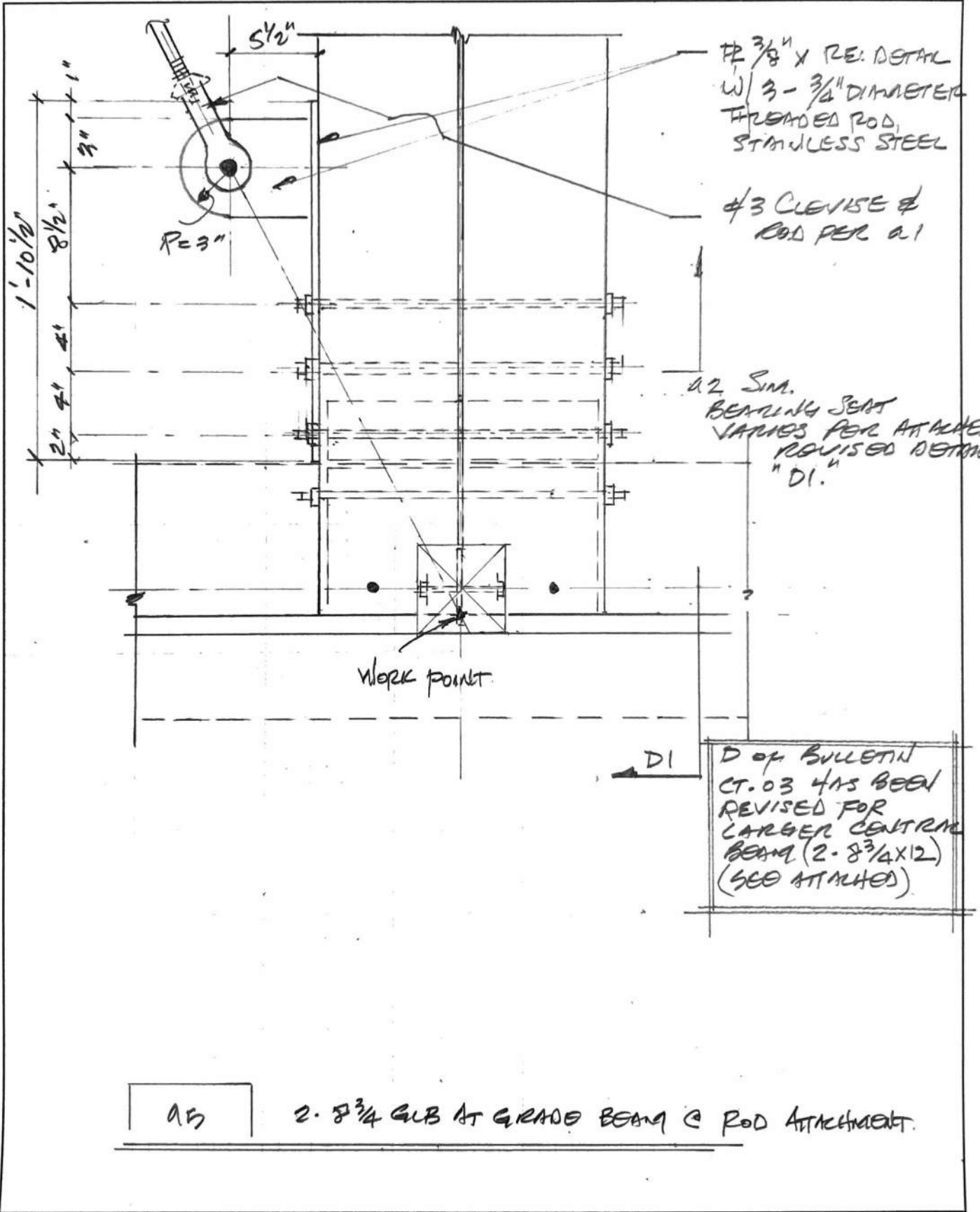
Project: Piper Residence

Date: 01/11/2023

Client: _____

Page Number: _____





3/8" X RE: DETAIL
W/ 3- 3/4" DIAMETER
THREADED ROD,
STAINLESS STEEL

#3 CLEVIS &
ROD PER D1

D2 SIM.
BEARING SEAT
VARIES PER ATTACHED
REVISED DETAIL
"D1."

D of BULLETIN
CT.03 HAS BEEN
REVISED FOR
LARGER CENTRAL
BEAM (2- 8 3/4 X 12)
(SEE ATTACHED)

05

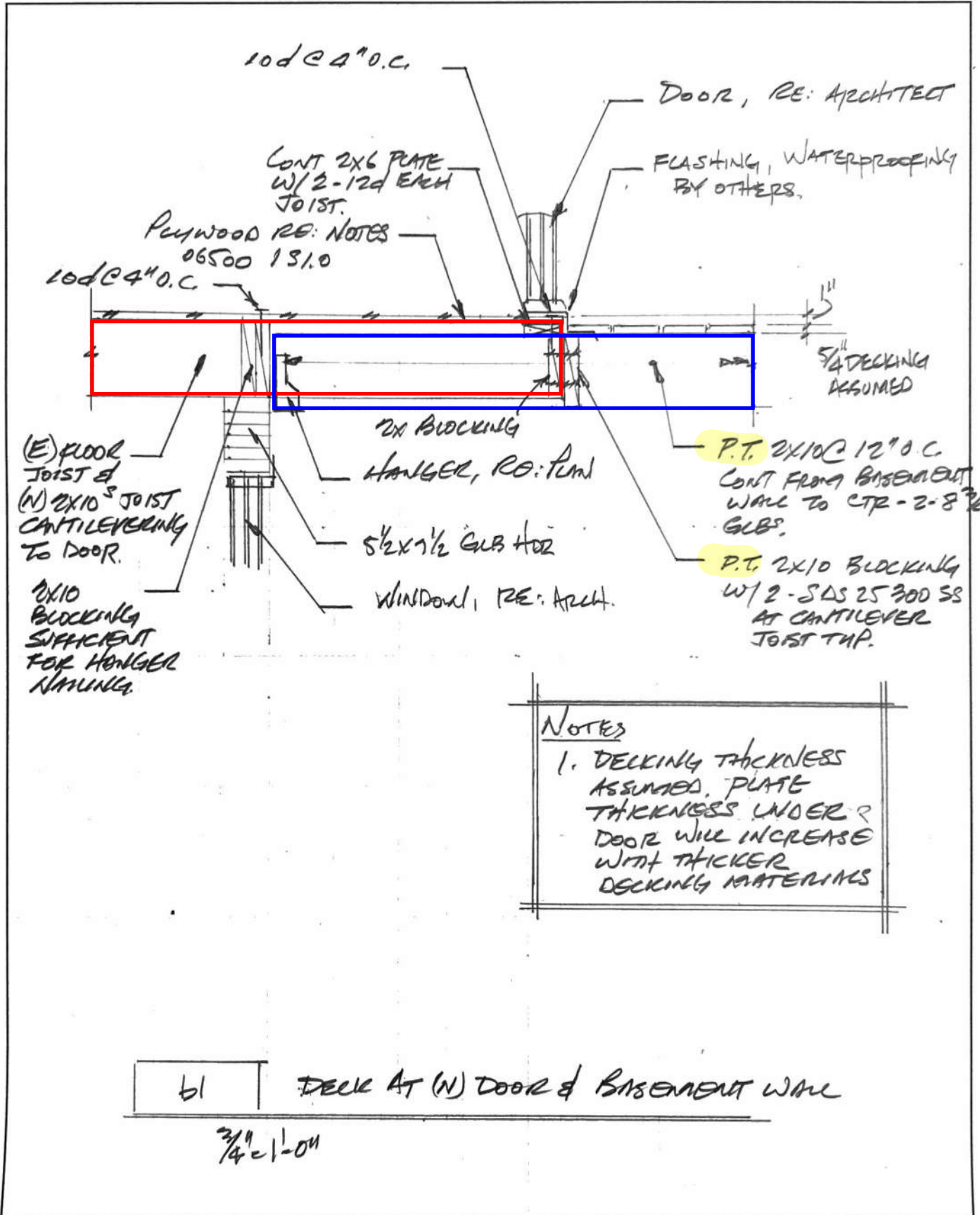
2- 8 3/4 GLB AT GRADE BEAM @ ROD ATTACHMENT.

Project: Piper Residence

Date: 01/11/2023

Client: _____

Page Number: _____



Project: **PIPER RESIDENCE**

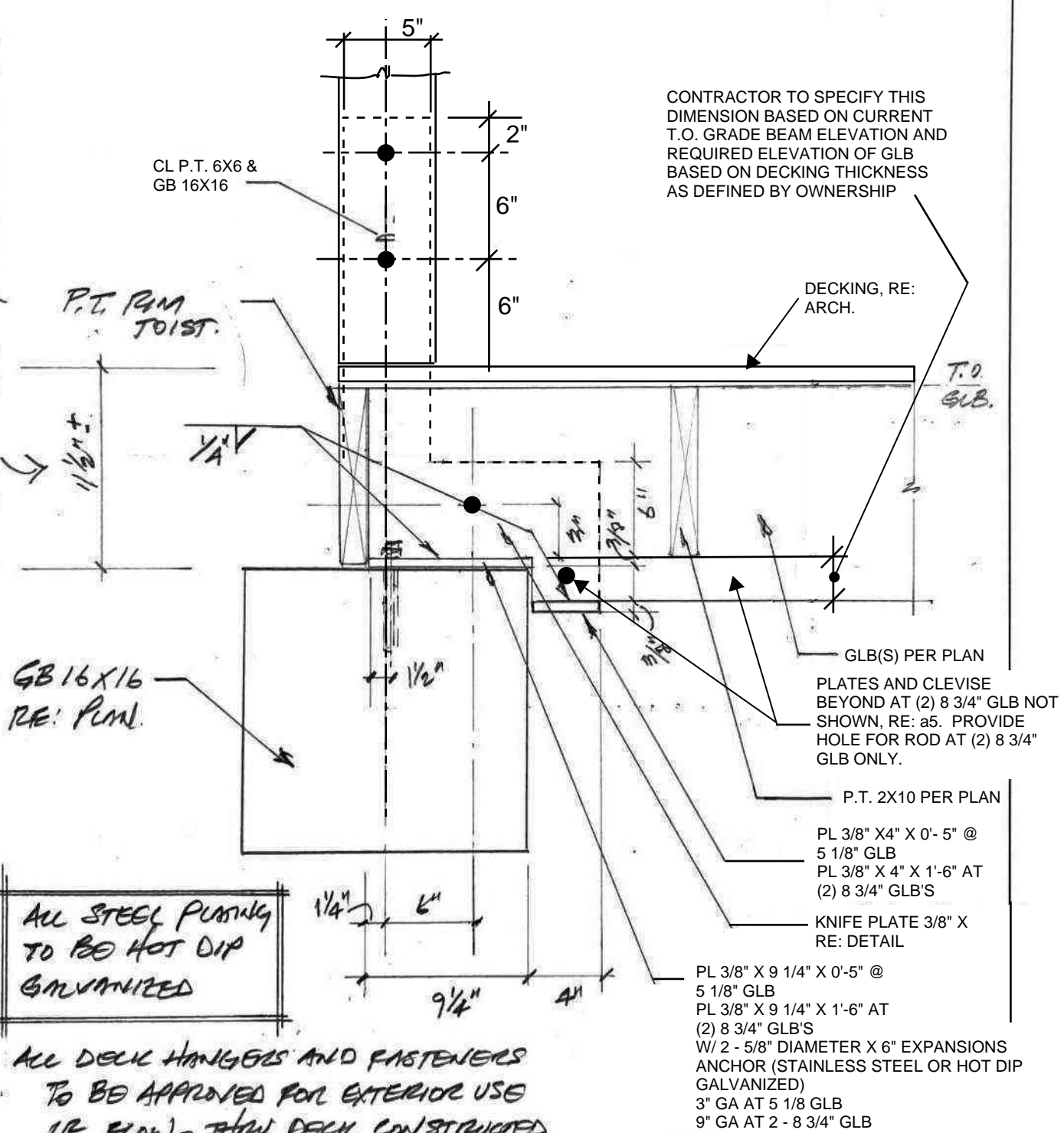
Date: **10/11/2022**

REVISED 01/11/2023

Client:

Page Number:

FIELD DIM. PROVIDED BY CARMEON W. 10/11/2022



ALL STEEL PILING TO BE HOT DIP GALVANIZED

ALL DECK HANGERS AND FASTENERS TO BE APPROVED FOR EXTERIOR USE 1R FLOW - ALLOW DECK CONSTRUCTION.

D (N) GLB (2-8 3/4 OR 5 1/8) AT GRADE BEAM

BULLETIN CT-08

Date: May 5th, 2023	Number: CT-8	Project #: 21162
Project Name: Piper Remodel	Attached: Sketch A – Deck head out detail at 3/8” plate Sketch D – HUC @ 4x10 ridge (raised) Sketch E1 & E2 – Slip Track above deck door head Clark Dietrich Email – Slip Track Fabricator TEKS 4 WTM – Wood to metal self-drilling screws	
Number of Pages: 8		

Subject: Deck joist head out detail, HUC variance, Deck Door Slip Track

Drawings affected: NA

Description / Action:

This bulletin provides design clarification, variation requests or additional structural direction for the Piper Remodel Project located on Mercer Island, Washington. This bulletin was issued after phone and email coordination discussions / requests from Donovan Howard w/ Weaver Construction as well as coordination discussions with Judy Tucker w/ Form + Function Architecture.

Sketch A was informally issued via email on 04/14/2023 as requested by Donovan Howard. It is structurally acceptable to head out the deck joist in locations where there is a conflict with the 3/8” plating as directed in attached sketch A.

Sketch D was informally issued via email for coordination w/ Judy Tucker on 04/25/2023. It is structurally acceptable to seat the ridge beam such that the hanger is upset from the bottom of the beam, provided additional cross grain tension reinforcement is provided (SDS screws) as directed by sketch D attached.

Sketch E1 and E2 provide direction associated with the slip track above the new deck door. See email attached Todd Beasley with Clark Dietrich who has confirmed that they can make the slip track with a 5 1/2” web to match wood framed construction. We assume that this is a special-order item so encourage ordering of this component early. Please also see attached wood-to-metal screws with wings for attaching the infill wood framing. Understanding and constructing this slip track assembly correctly is key to protecting the door head from being loaded when the roof supports snow load. Please note that no drywall, plywood or finish materials will attach below the 3/8” steel plate. Exterior finishes should allow for a minimum of 1/2” space between the top of the head and bottom of the finish component. Please reach out to me if you have any questions regarding this connection.

Please note that the following submittals are outstanding for this project:

- Structural steel shop drawings for stairs. We understand that Judy Tucker is finalizing finishes with ownership and once complete we will coordinate and issue supplemental structural information sufficient for the detail to develop structural steel shop drawings for the stairs.

Please note the following revised structural observation schedule to complete the project:

- No additional structural observation visits are required provided photos are submitted as outlined in field report FR-04.

Please feel free to give me a call on my cell phone 425.314.1209 if you have any questions.

Issued by: **BJM**

Distribution: **Judy Tucker w/ Form + Function Architecture**

Project: PIPER RESIDENCE - CA

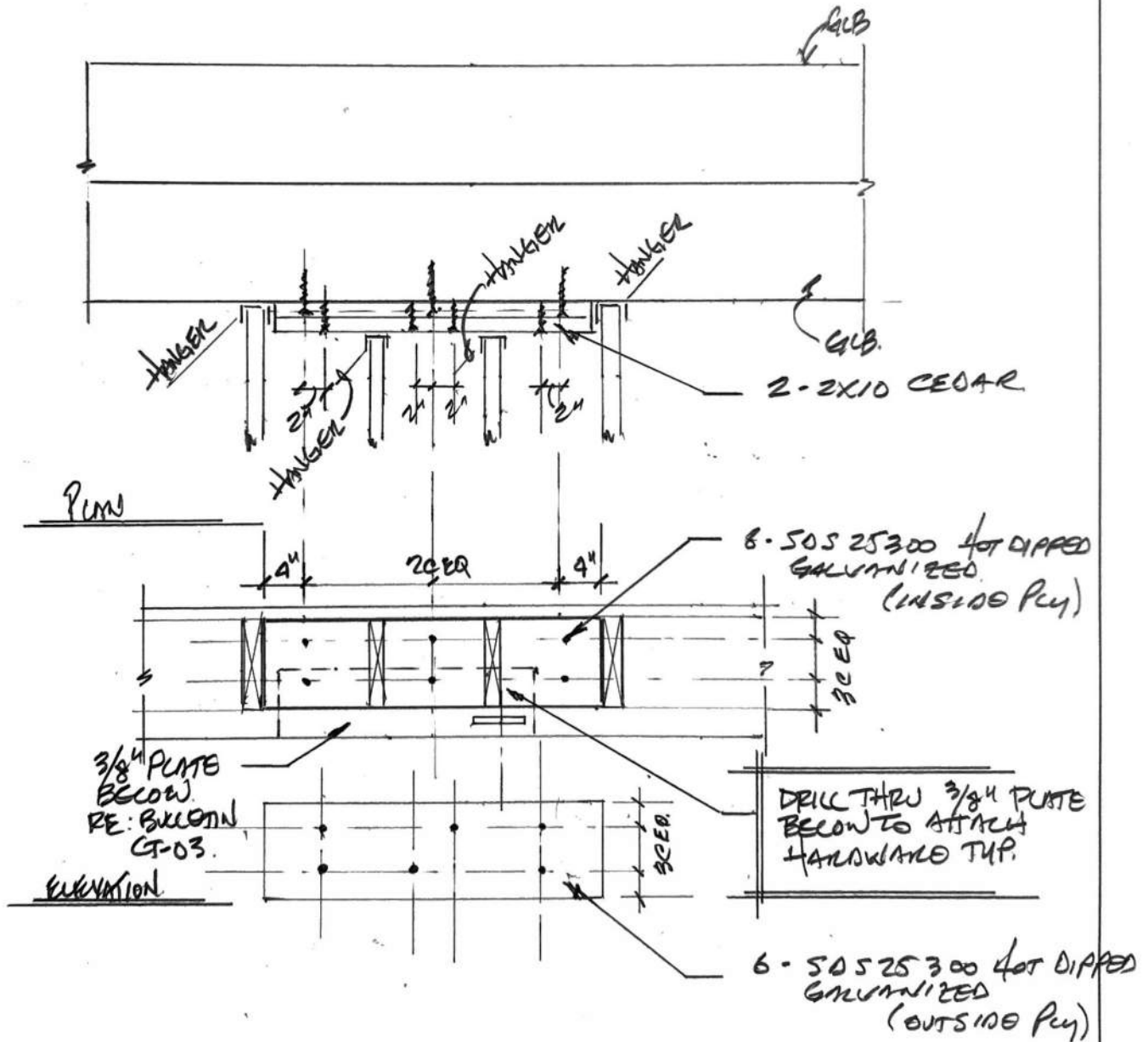
Date: 09/14/2023

Client: _____

Page Number: _____

NOTES

1. RE: BULLETIN CT-07 FOR BEAM, JOIST AND HANGER REQUIREMENTS.



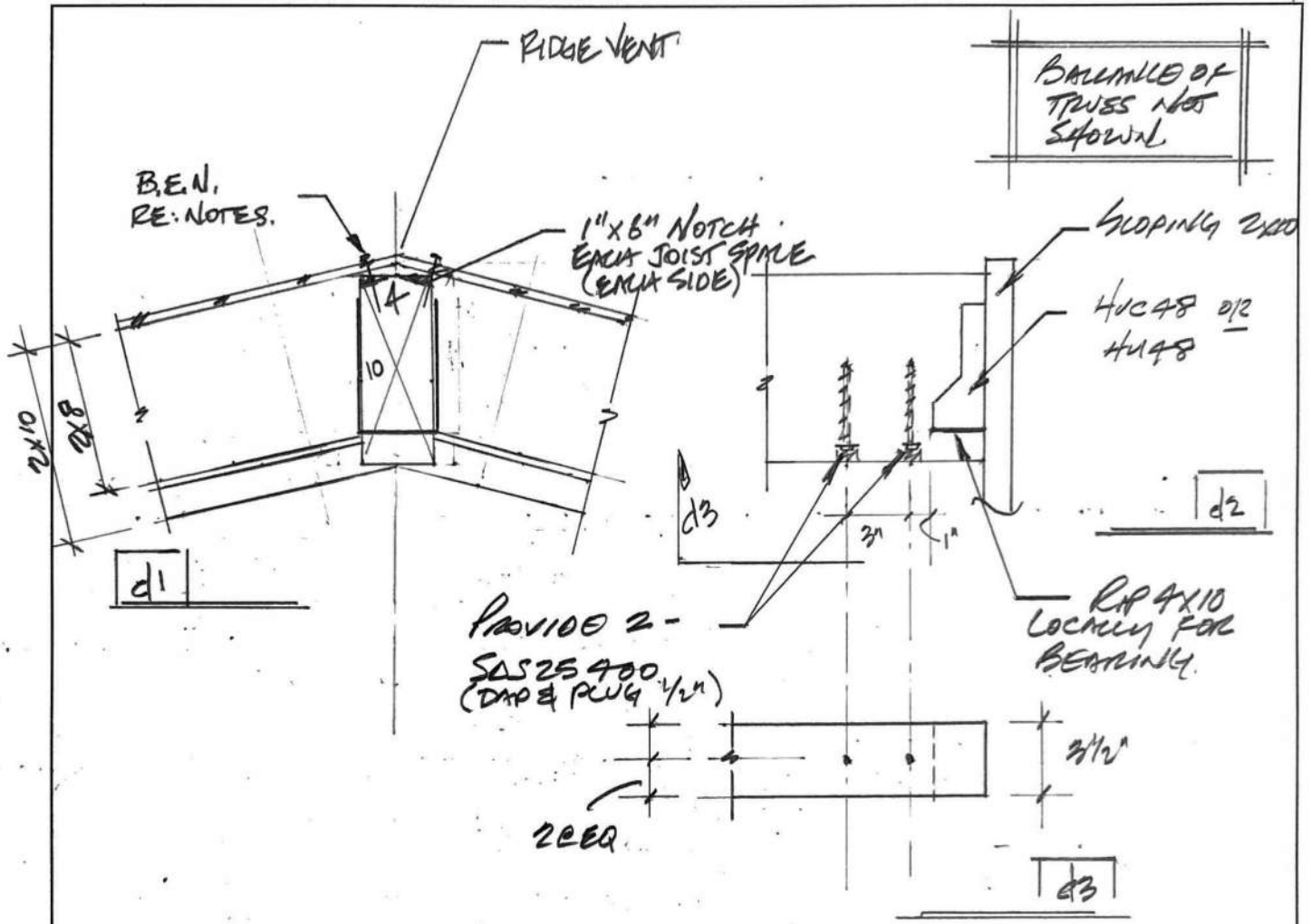
A HEAD-OUT DETAIL @ 3/8" # C GUB TYP.
3/4" x 1.0"

Project: Piper Residence RA1008

Date: 04/25/2023

Client: _____

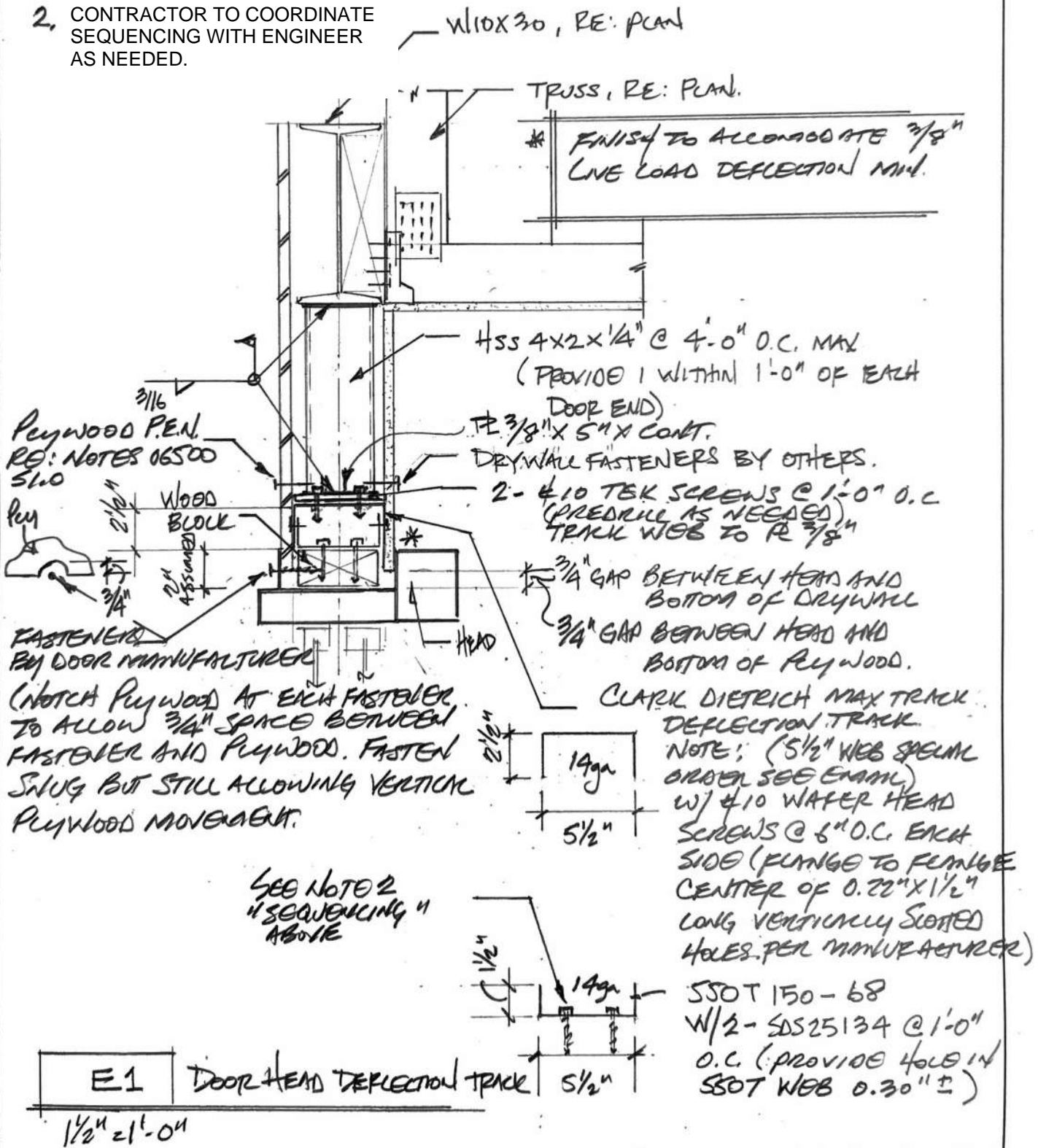
Page Number: _____



D RIDGE BEAM - CROSS GRAIN TENSION REINFORCEMENT AT PEAK
 1 1/2" x 1 1/2"

NOTES.

1. COORDINATE DETAIL WITH DOOR MANUFACTURER FOR
2. CONTRACTOR TO COORDINATE SEQUENCING WITH ENGINEER AS NEEDED.

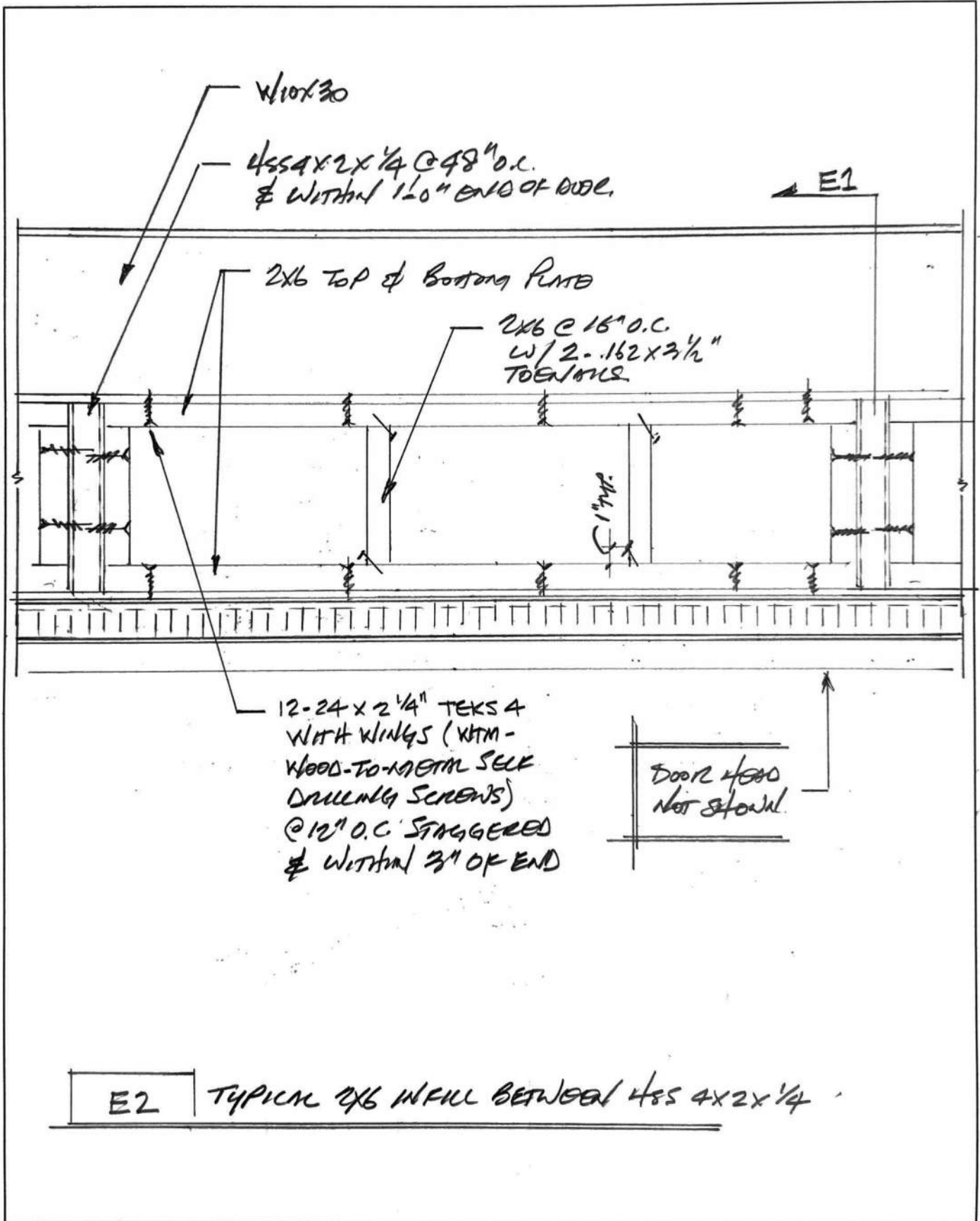


Project: PIPER RESIDENCE

Date: 05/01/2023

Client: _____

Page Number: _____



E2 TYPICAL 2×6 INFILL BETWEEN $4 \times 4 \times 2 \times 1/4$

Ben McCann

From: Todd Beasley <todd.beasley@clarkdietrich.com>
Sent: Tuesday, May 2, 2023 9:11 AM
To: Ben McCann
Subject: RE: Deflection Track

Just heard back from plant that yes, we can make these.

Will need to check with marketing on getting a data sheet. Bad week for this because we're all at our national corporate meeting this week, but I'll get the ball rolling.

Thanks!

Todd

From: Todd Beasley
Sent: Tuesday, May 2, 2023 8:15 AM
To: Ben McCann <BMcCann@ctengineering.com>
Subject: RE: Deflection Track

Thanks Ben. I have not heard back from the plant yet but will continue to follow up. Data sheet will have to be custom made and I'll look into this as well once I hear back from the plant.

Thank you!

Todd Beasley CSI, CDT
Western Region Technical Sales Manager



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From: Ben McCann <BMcCann@ctengineering.com>
Sent: Monday, May 1, 2023 5:37 PM
To: Todd Beasley <todd.beasley@clarkdietrich.com>
Subject: Deflection Track

Todd,

Thanks so much for taking my call today. I am looking for a deflection track with a 5 ½" web to match 2x6 wood framing. Thanks for navigating me through the site. I am interested in ~~2x~~ track with slip ~~and drift slip~~ ability. Please let me know what you are able to make. If you have a cut sheet with a 5 ½" stud web, that would be great.

Best,

Ben McCann PE

bmccann@ctengineering.com

CT ENGINEERING Inc.

Structural Engineers

- 180 Nickerson Street ▪ Suite 302 ▪
- Seattle, Washington 98109 ▪
- Phone : 206-285-4512 X 322 ▪
- Mobile: 425-314-1209 ▪

www.ctengineering.com

Project: PIPER RESIDENCE INC.

Date: 05/01/2023

Client: _____

Page Number: _____

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 - Non walking, cutting edges, pigtail reduction
 - Engages material faster, drills with less effort, safer installation
- Integrated Drill Point & Tapping Threads
 - Quick transition from drilling to tapping
 - Lower installation torque
- Gray Spex coating
 - Provides excellent corrosion resistance
 - Lasts longer

[Request Information](#) [Compare Items](#)

Result

Results 1 - 4 of 4

	Part Number	Size	Point Style	Drive Style	Coating	Material	Material At
<input type="checkbox"/>	1096000	1/4-20 x 3"	Teks® 4 - with wings	Phillips 3	Gray Climaseal™	Carbon Steel	3/4"-2" Wood
<input type="checkbox"/>	1552500	12-24 x 1-5/8"	Teks® 4 - with wings	Phillips 3	Gray Climaseal™	Carbon Steel	3/4"-1-1/8"
<input type="checkbox"/>	1092000	12-24 x 2-1/4"	Teks® 4 - with wings	Phillips 2	Gray Climaseal™	Carbon Steel	3/4"-1-3/8"
<input type="checkbox"/>	1094000	12-24 x 2-3/4"	Teks® 4 - with wings	Phillips 3	Gray Climaseal™	Carbon Steel	3/4"-1-5/8"



Results 1 - 4 of 4

BULLETIN CT-09

Date: **May 26th, 2023**Number: **CT-9**Project #: **21162**Project Name: **Piper Remodel**Attached: **Steel Stair sketches, Guard Sketches, Photo**Number of Pages: **11****Subject:** Steel Stairs**Drawings affected:** NA**Description / Action:**

This bulletin provides design clarification, variation requests or additional structural direction for the Piper Remodel Project located on Mercer Island, Washington. This bulletin was issued after phone and email coordination discussions / requests from Judy Tucker w/ Form + Function Architecture as well as ownership request and request from Weaver Construction.

Please find steel stair connection sketches including detail key as requested to assist with the structural steel detailing / shop drawings development. Submit shop drawings to the architect and engineer for final coordination of dimensions and design intent prior to fabrication.

Please find photo showing existing concrete curb with structural approval to remove.

Please note that the following submittals are outstanding for this project:

- Structural steel shop drawings for stairs.

Please note the following revised structural observation schedule to complete the project:

- No additional structural observation visits are required provided photos are submitted as outlined in field report FR-04.

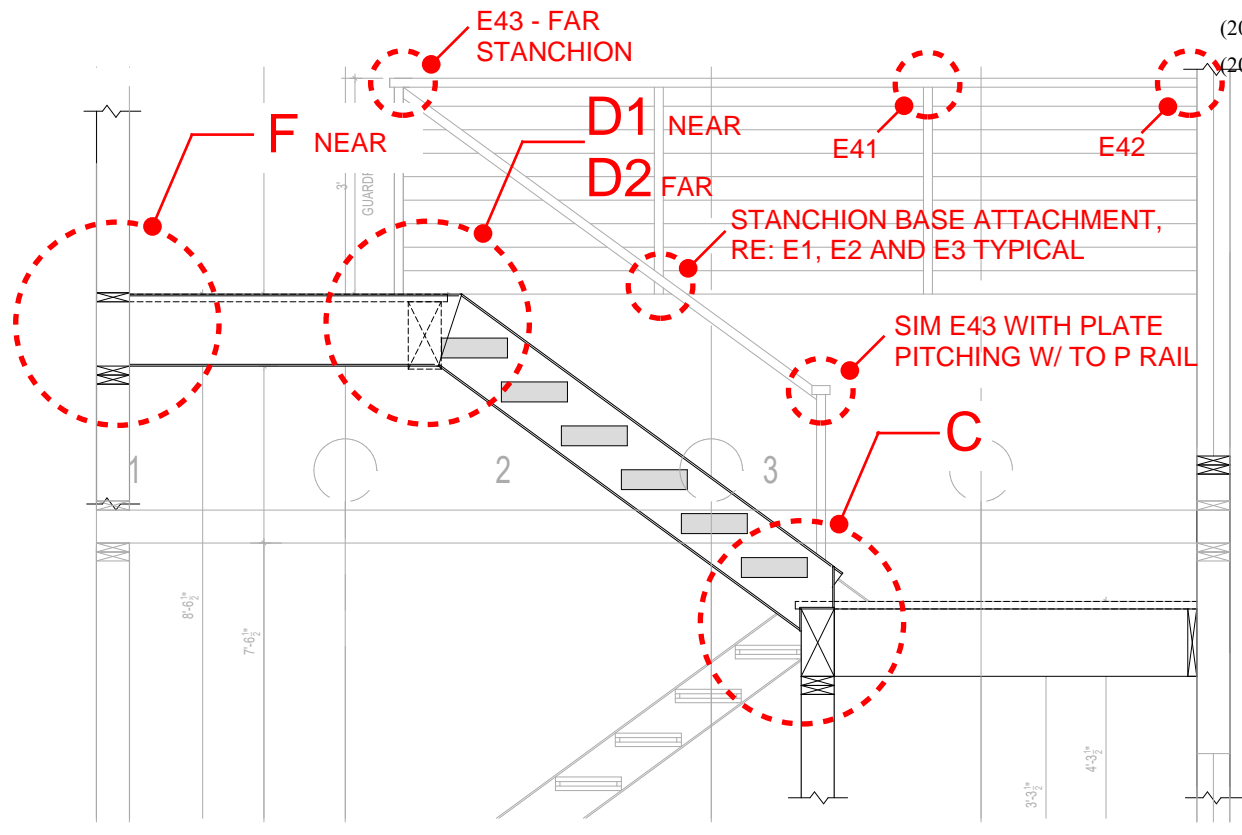
Please feel free to give me a call on my cell phone 425.314.1209 if you have any questions.

Issued by: BJM**Distribution:** Judy Tucker w/ Form + Function Architecture

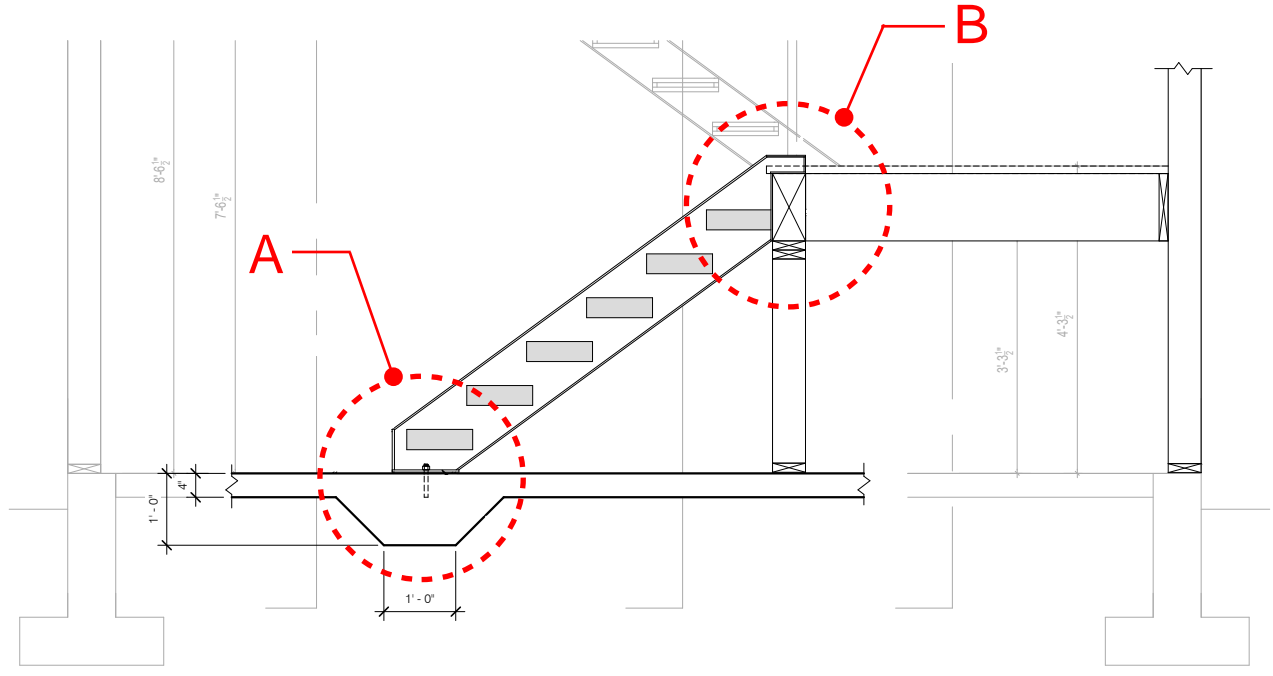
05/26/2023



STRUCTURALLY ACCEPTABLE TO REMOVE THIS PORTION OF CONCRETE SETM PROVIDED IT IS SAW CUT. VERIFY ANCHOR BOLTS AT REMAINING WALL HAVE 1 1/2" COVER.



9 / S10.0 - STEEL STAIR SECTION - UPPER FLIGHT



19 / S10.0 - STEEL STAIR SECTION - LOWER FLIGHT

Project: Piper Residence

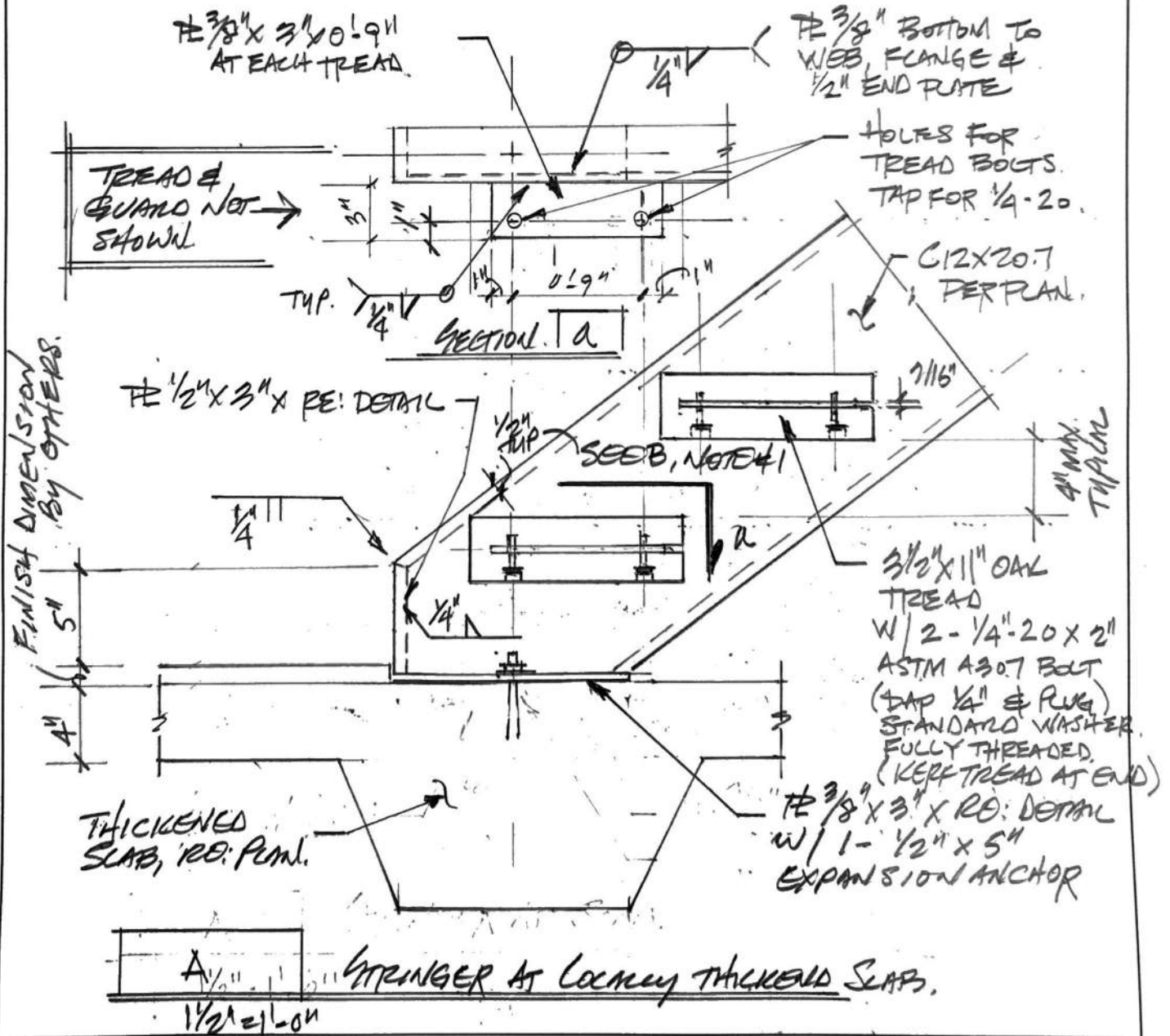
Date: 05/25/2023
05/26/2023

Client: _____

Page Number: _____

Notes

1. SUBMIT SHOP DRAWINGS TO ENGINEER AND ARCHITECT FOR REVIEW.
2. SPECIAL INSPECTION NOT REQUIRED, STOP TO TAKE PICTURES OF ALL WELDS AND SUBMIT TO ENGINEER PRIOR TO APPLICATION OF SURFACE APPLIED PRODUCTS
3. COORDINATE FINISH OF STRUCTURAL STEEL WITH ARCHITECT DURING SHOP DRAWING REVIEW.

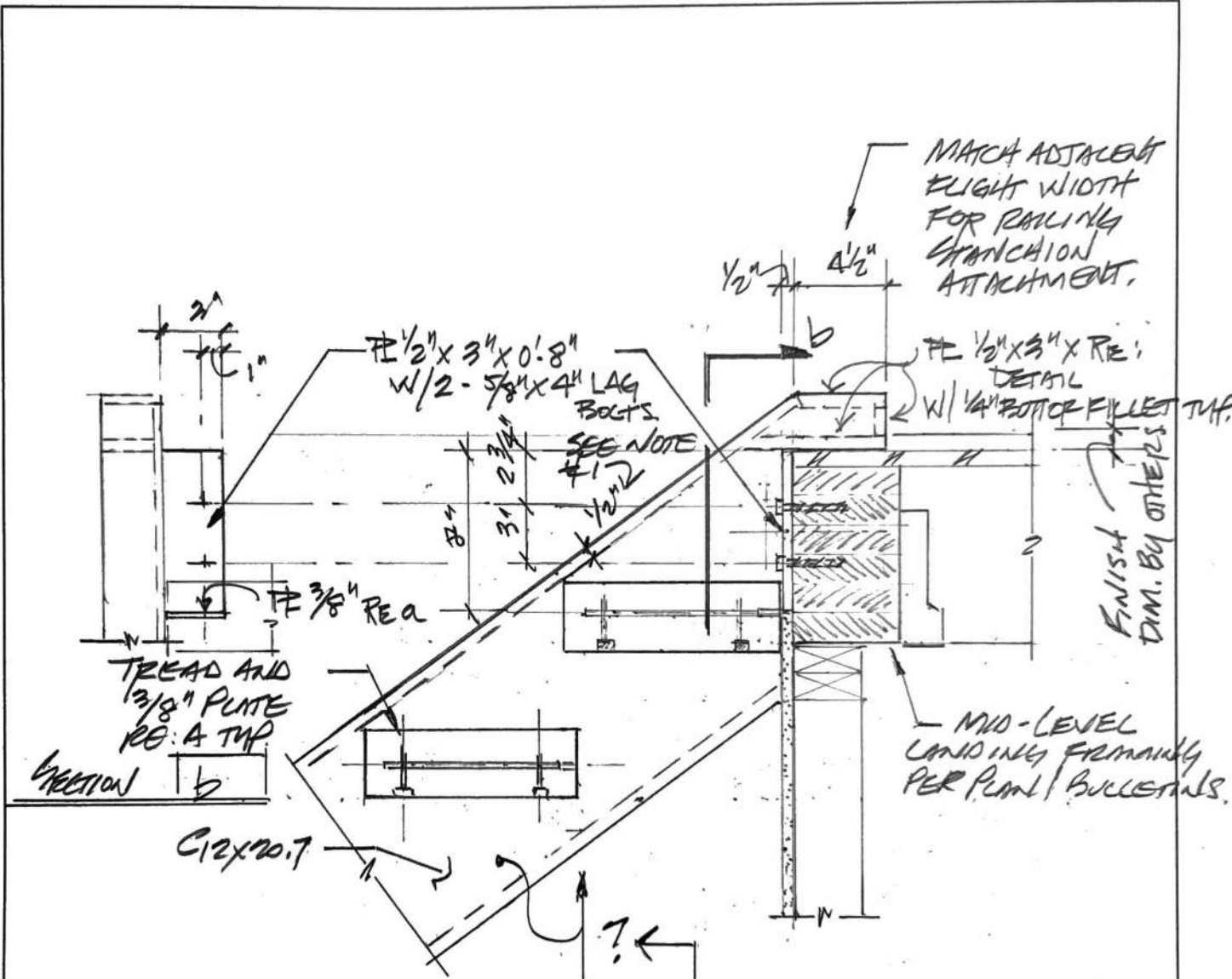


Project: Piper Residence I N C.

Date: 05/26/2023

Client: _____

Page Number: _____



NOTES - TO DETAILER

1. COORDINATE WITH ARCHITECT DURING SETUP DEVELOPMENT. ARCHITECT MAY WANT STRINGER (C12x20.7) LIFTED FROM WHAT IS SHOWN TYPICALLY IN THESE SKETCHES SUCH THAT THE TREAD IS CENTERED ON THE STRINGER.
2. RE: ARCHITECT FOR RISE & RUN REQUIREMENTS, TYPICAL AT STAIRS.

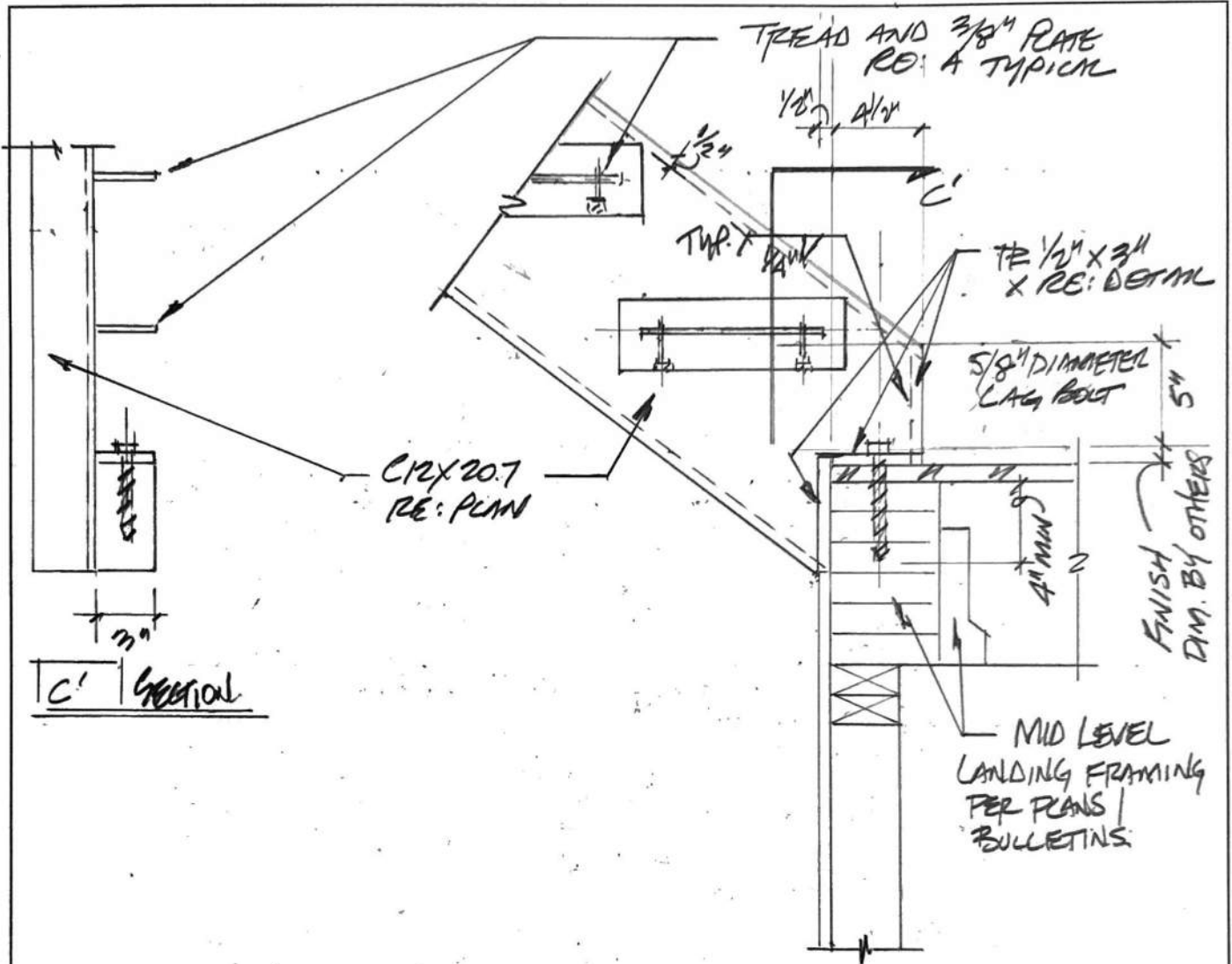
B STRINGER AT MID LEVEL LANDING

Project: PIPER RESIDENCE

Date: 05/26/2023

Client: _____

Page Number: _____



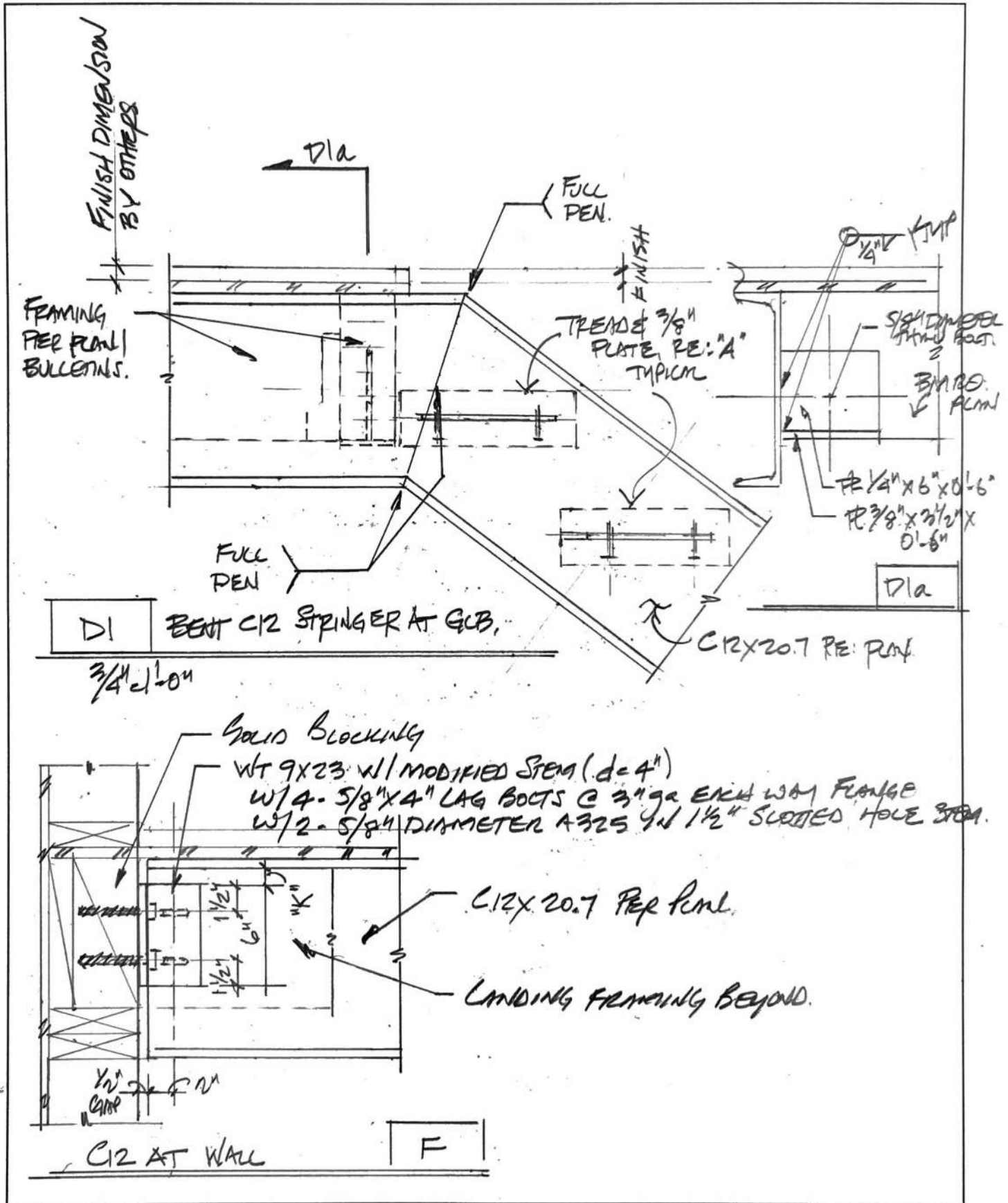
STRINGER AT MID LEVEL LANDING C

Project: PIPER RESIDENCE

Date: 05/26/2023

Client: _____

Page Number: _____



Project: PIPER RESIDENCE

Date: 05/26/2023

Client: _____

Page Number: _____

FINISH BY
STRUTTING
STAYS

#2 1/2" X 3" X RE: DETAIL

L 3 1/2" X 3 1/2" X 1/4"

W/ 2- 5/8" X 4" LAG BOLTS BEAM

W/ 2- 5/8" ANCH BOLTS C12

IN 1 1/2" LONG SLOTTED HOLES

TREAD of 3/8" PLATE
RE: "A" TYPICAL

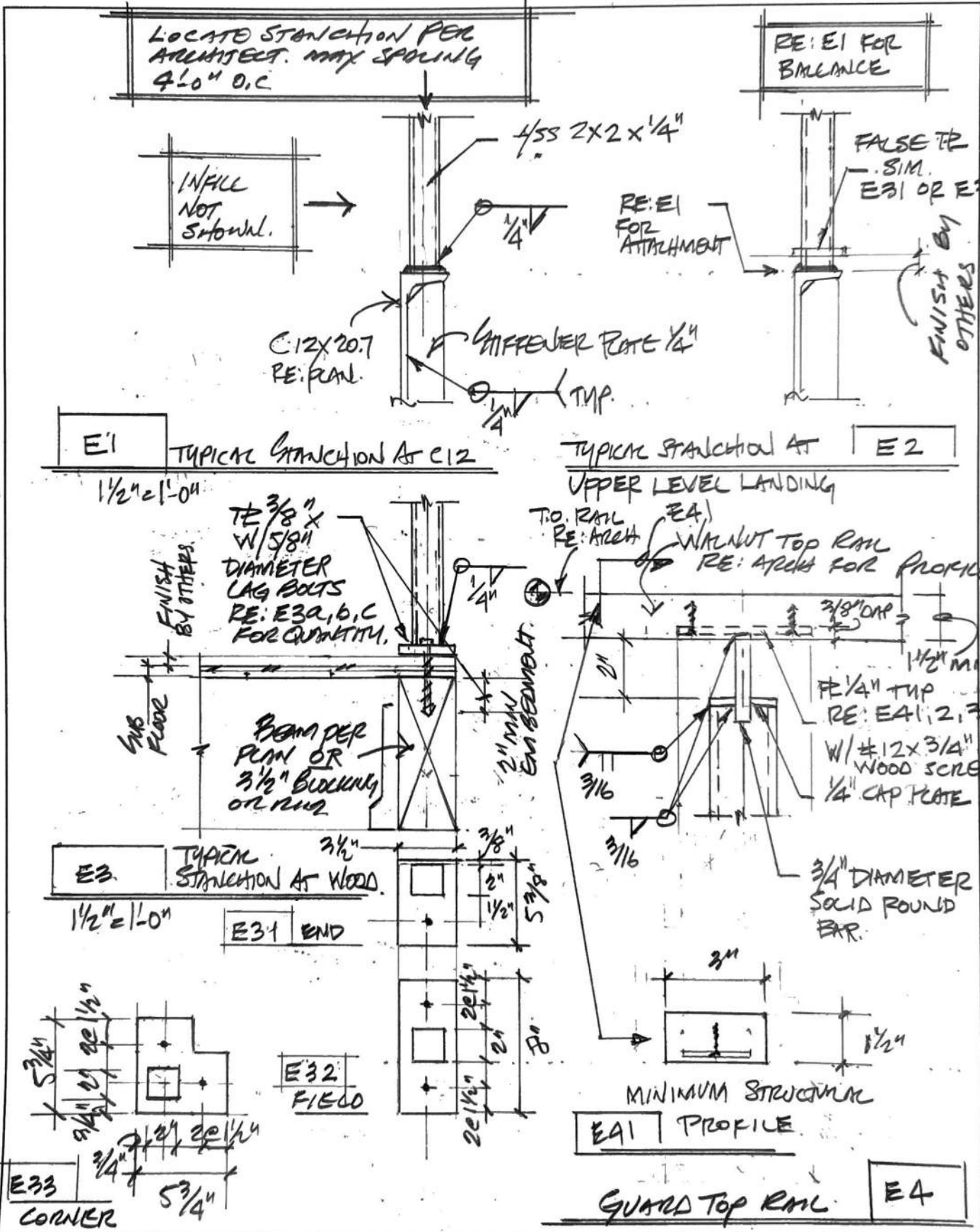
COORDINATE
ARCHITECTURAL
INFILL IF DESIRED

1/2" GAP

D2 C12 STRINGER AT UPPER LANDING

3/4" = 1'-0"

C12X20.7 RE: PLAN.

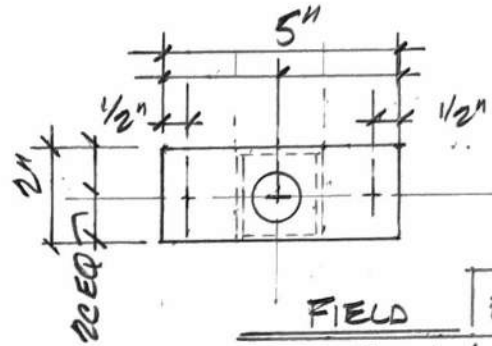


Project: PIPER RESIDENCE

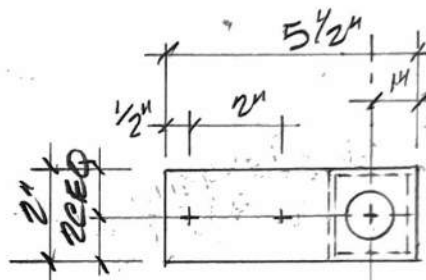
Date: 05/26/2023

Client: _____

Page Number: _____

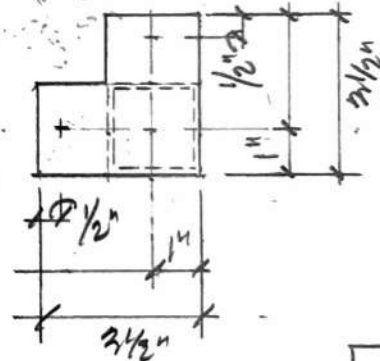


FIELD EA1
STRANCHION TOP



END EA2
STRANCHION TOP

CJM DETAIL
ONE SIDE PATCHED
FOR FLIGHT
RML.



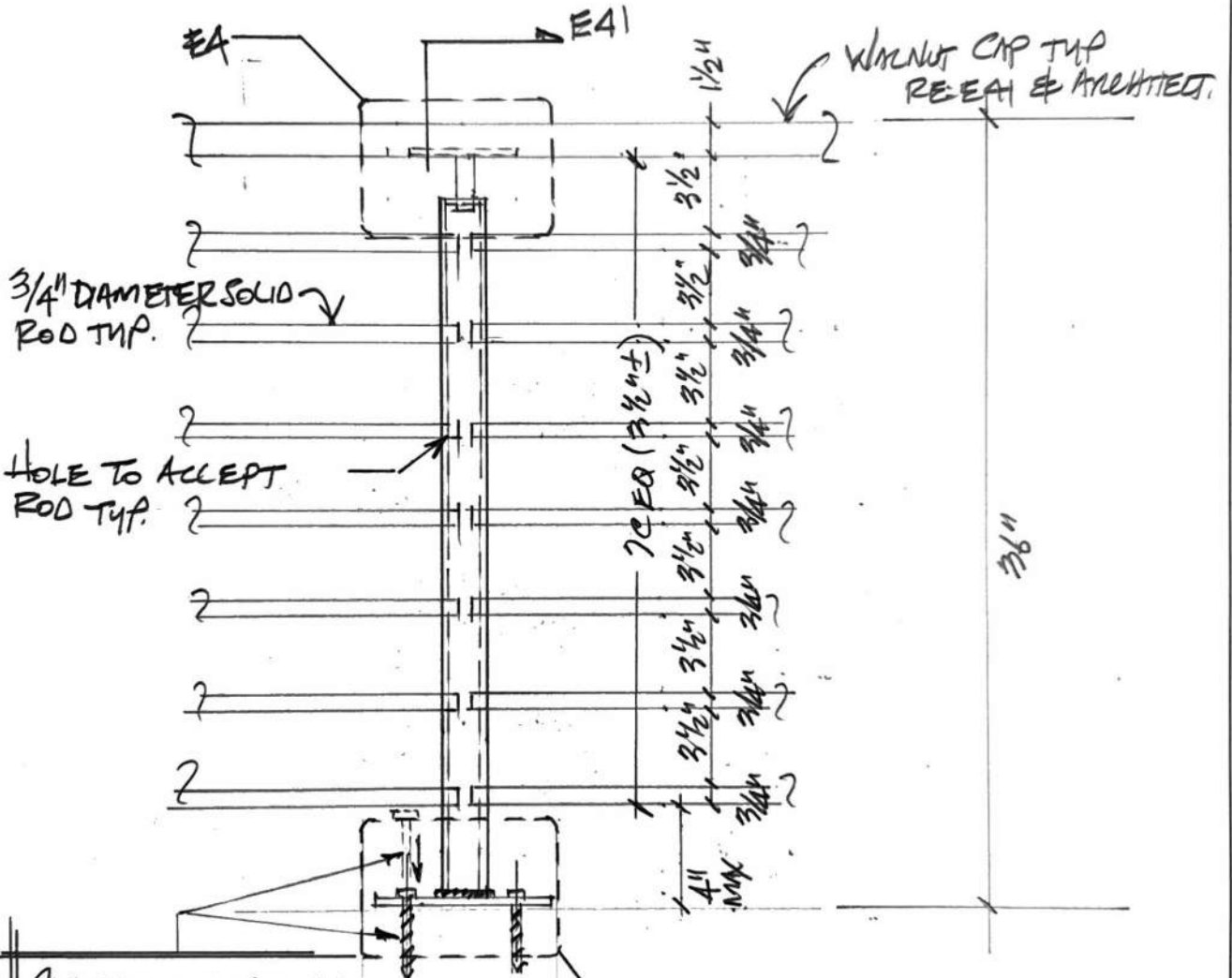
CORNER EA3
STRANCHION TOP

Project: PIPER RESIDENCE.

Date: 05/26/2023

Client: _____

Page Number: _____



CONTRACTOR TO VERIFY LAGS CAN BE INSTALLED W/ 2" MIN EMBEDMENT

ES TYPICAL STRUCTURE