



JAMES SUTTON, P.E.

STRUCTURAL ENGINEERING

11703 DURANT RD
RALEIGH, NC 27614

P (919) 675-1680

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JSUTTONPE@GMAIL.COM

December 2, 2015

Jeff Stec
Ram Jack, LLC
4122 Bennett Memorial Rd, Suite 304
Durham, NC 27705
Tel: (919) 309-9727 / Fax: (919) 313-0102
jeff@ramjackusa.com

Re: Engineering Recommendation
Mike Wagner, 328 N Topsail Dr, Surf City, NC
Project Number: 1501-1120R

To Whom It May Concern:

James Sutton, P.E. (JSPE) visited the above referenced site on 11/25/15.

The structure is a one story wood framed residence supported on a wood pile foundation. For the purpose of this document all directions listed are from the perspective of an observer facing the structure from N Topsail Dr.

Based on the data provided the structure is exhibiting signs of movement typically seen with inadequate lateral support. The structure is showing signs of racking of the wooden pile foundation. The wood piles supporting the structure we noted to have a noticeable lean toward the rear. Several piles were also noted to be rotten at grade.

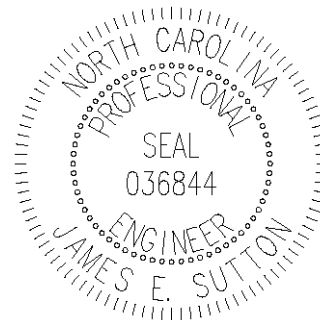
It is recommended to stabilize the foundation in the form of helical tiebacks. Please see attached pages for layout and additional details.

JSPE's scope of services was limited to a visual evaluation of the data provided by Ram Jack, LLC. The scope of services did not include subsurface exploration or exposing any concealed elements of the structure. Please contact JSPE immediately if conditions are different than those indicated or encountered during future observation or implementation of the recommended repairs. JSPE makes no warranty regarding the future performance of the structure.

Please contact us if you have any further questions.

Sincerely,

James Sutton, P.E.



James E. Sutton, P.E.

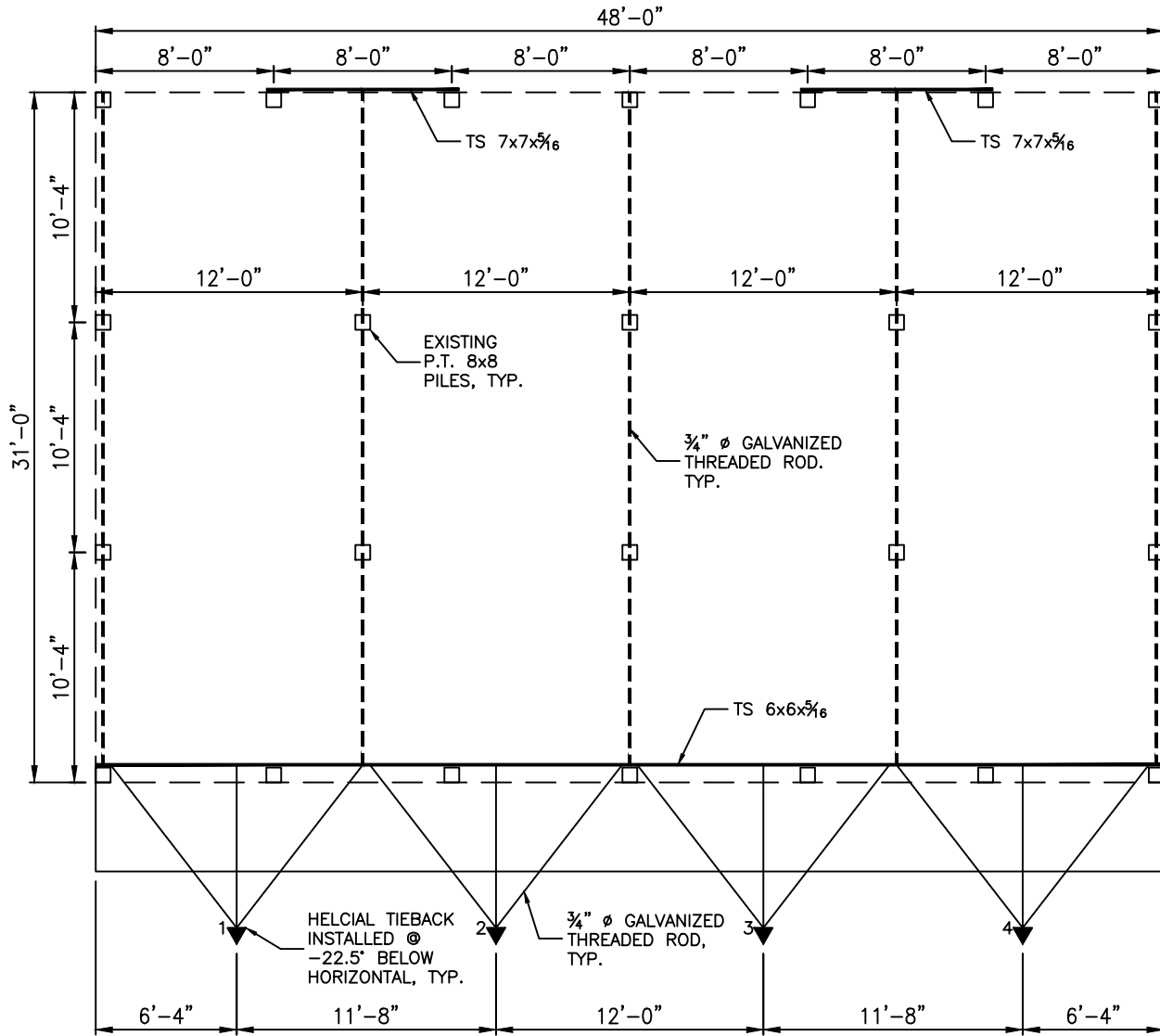


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Job No:
 1501-1120R
Date:
 12/02/2015
Sheet:
 S1



NOTE:

1. HELICAL PIERS ARE FOR STABILIZATION ONLY. TYP.
2. ALL STEEL TO BE GALVANIZED OR EQUIVALENT COATING. TYP.
3. ALL FIELD CUTS/WELDS TO BE FIELD TREATED TO PREVENT CORROSION.
4. CONTRACTOR TO FIELD VERIFY EXISTING WOODEN PIERS FOR DECAY. ALL DECAYED PIERS TO BE REPAIRED PER THE ATTACHED DETAILS.
5. SEE ATTACHED PAGES FOR ADDITIONAL DETAILS. TYP.

FOUNDATION PLAN

1/8" = 1'-0"

PILE KEY

SYMBOL	SHAFT SIZE	BRACKET	TORQUE (FT-LBS)	3K (PSI)	5K (PSI)	6K (PSI)	7K (PSI)
▼	1-5/8"	4550.58	2,500	2,700	1,474	972	1,013



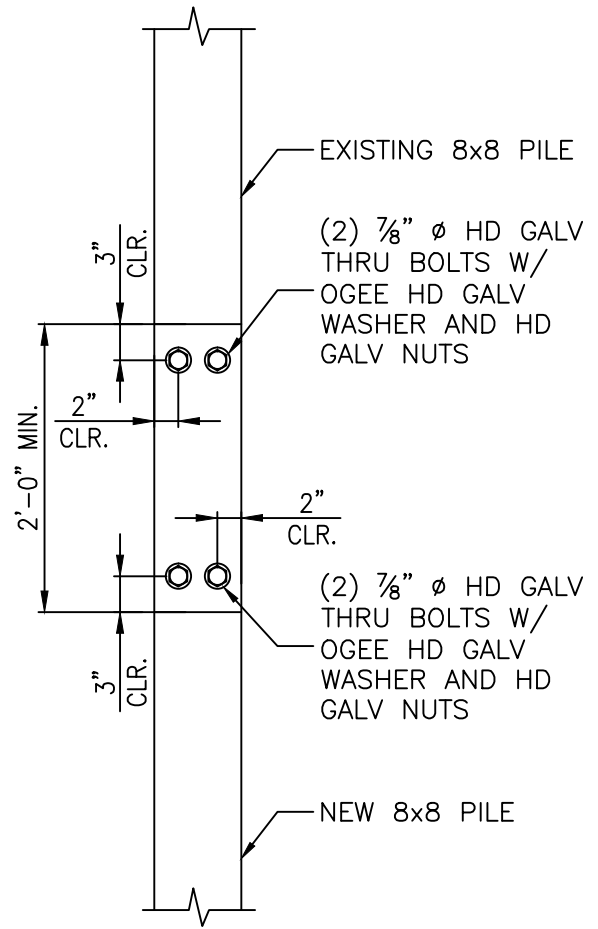
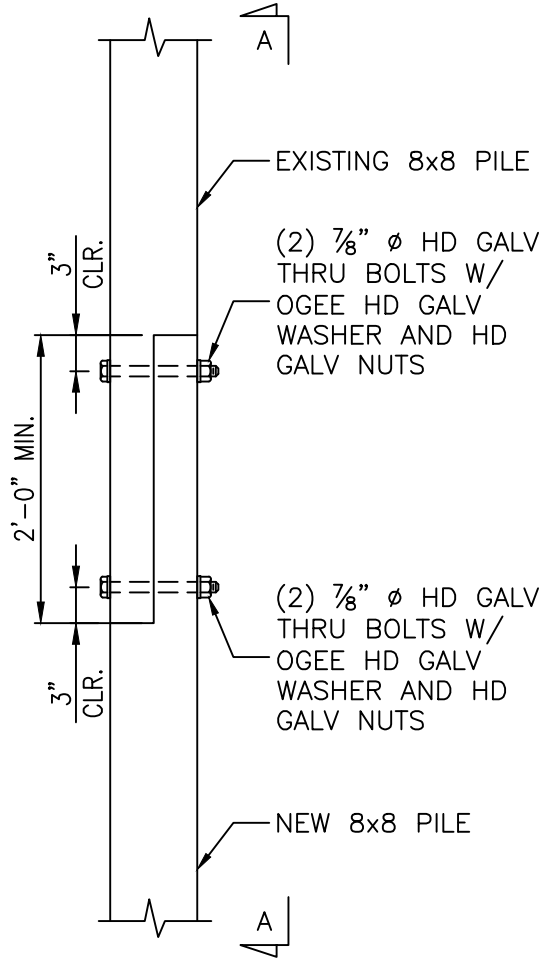


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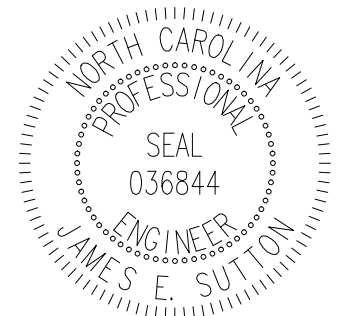
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 S2



A-A
 3/4" = 1'-0"

1 SECTION
 S2 TYP COLUMN SPLICE
 3/4" = 1'-0"



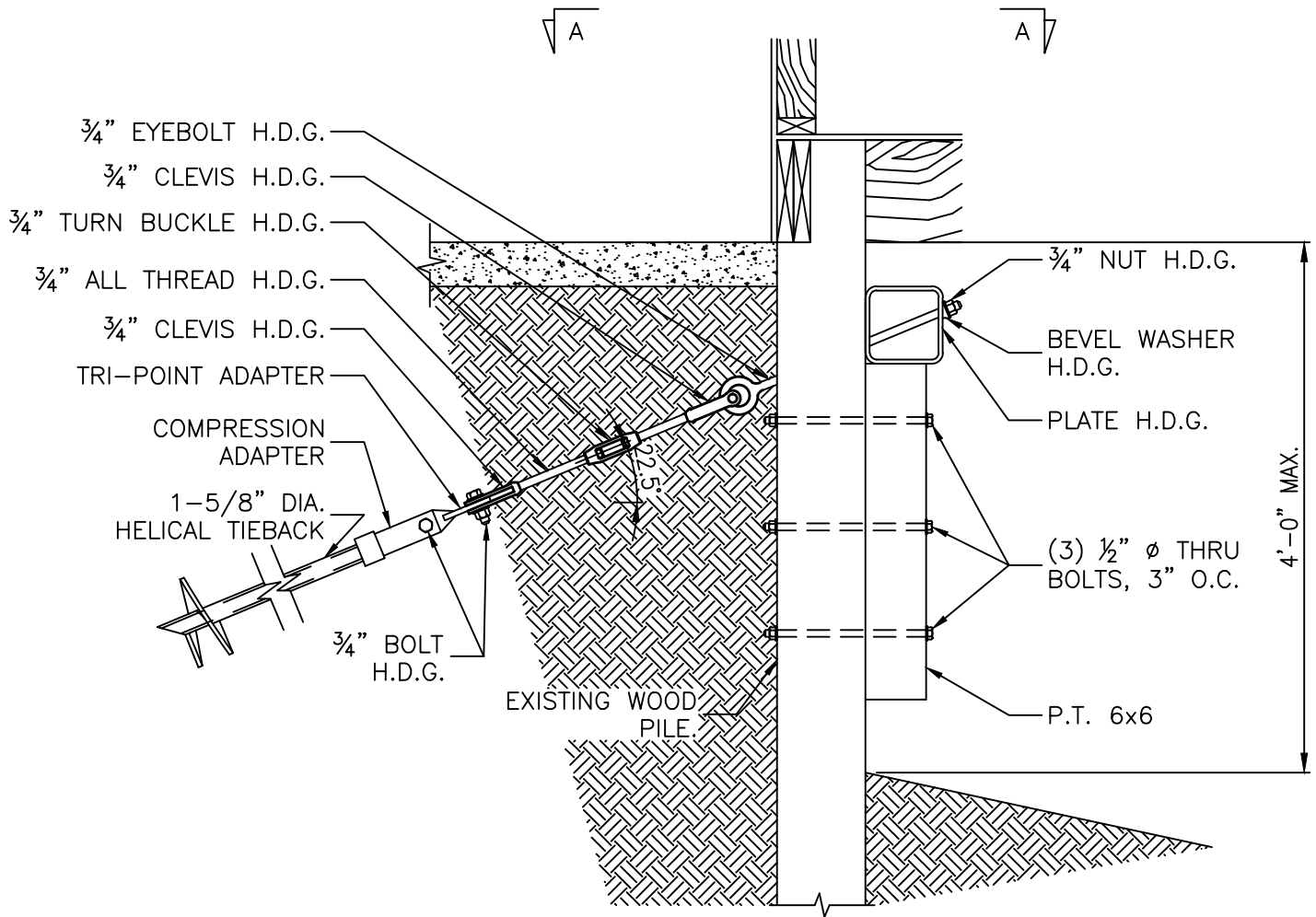


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 S3

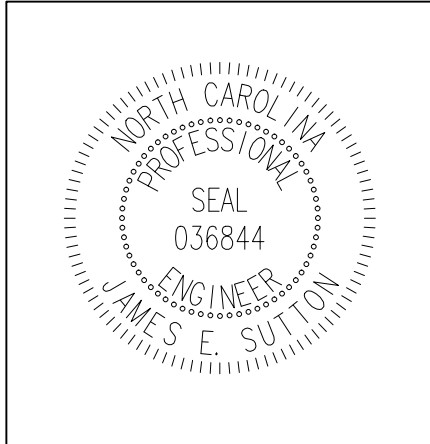


SECTION
 3/4" = 1'-0"

2
 S3

SECTION
 TYP TIEBACK
 3/4" = 1'-0"

SEE SHEET S4 FOR SECTION A-A PLAN VIEW.



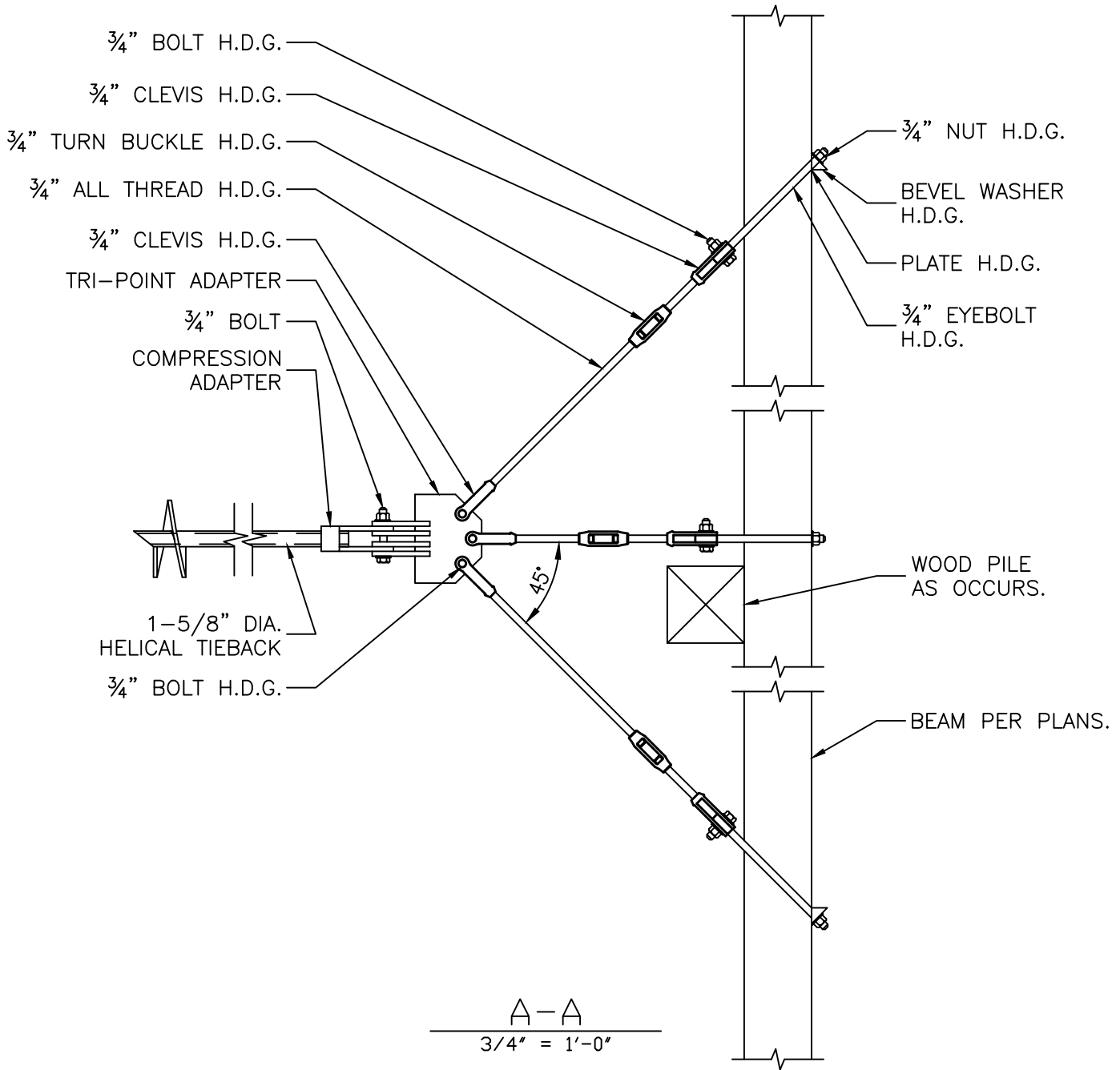


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 S4



2A
 S4

SECTION

TYP TIEBACK
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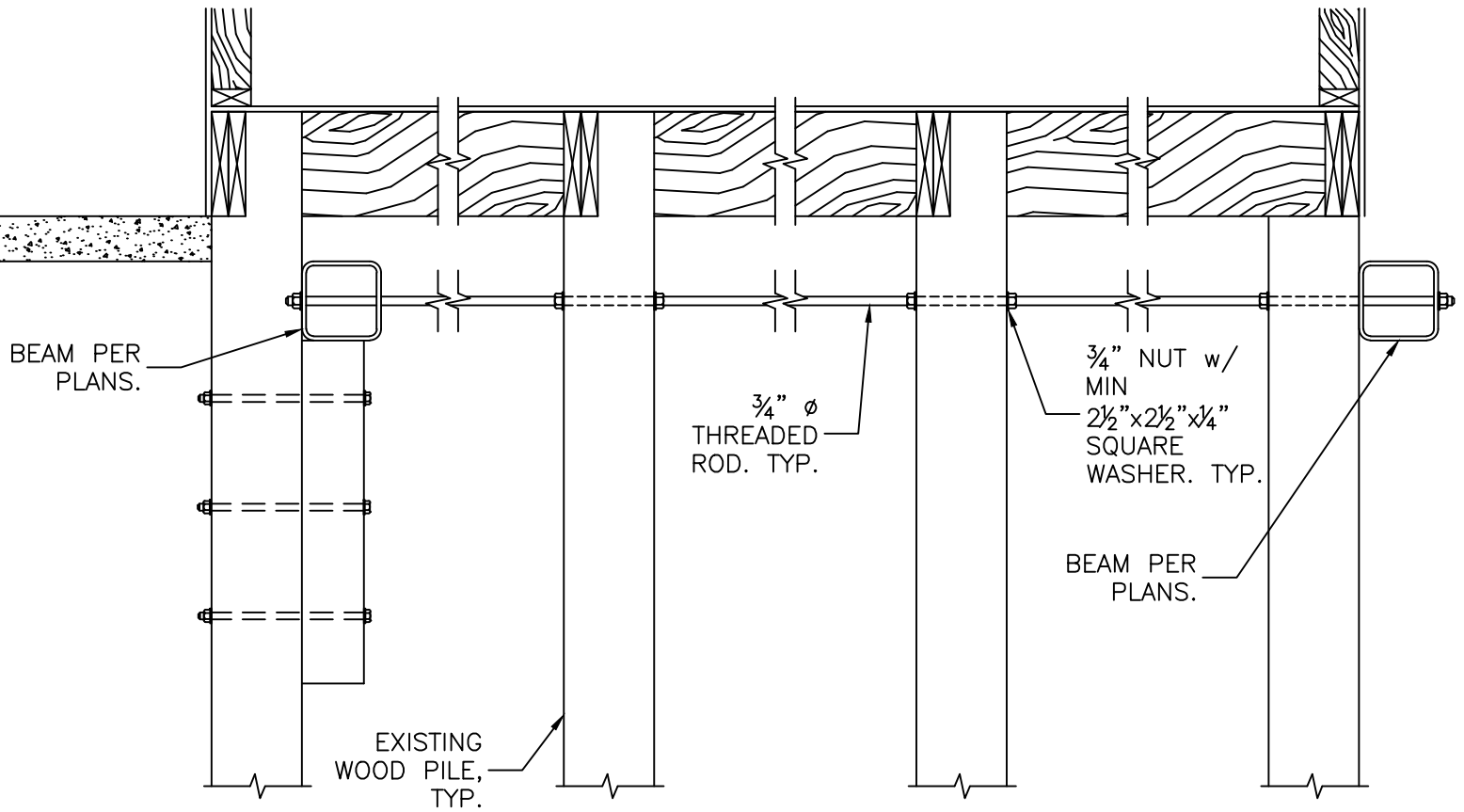


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 S5



3
S5 SECTION
 PILE CONNECTIONS
 3/4" = 1'-0"

- NOTE:**
1. ALL THREADED RODS TO BE INSTALLED IN THE CENTER OF EXISTING WOODEN PILES. TYP.
 2. TURN BUCKLES TO BE INSTALLED AS REQUIRED. TYP.
 3. TIEBACKS NOT SHOWN FOR CLARITY.

