

Richard J. Reynolds, P.E., P.A.

NC Firm License #C-0943

PE License #040348

113 Cedarwood Creek Ct.

Winston-Salem, NC 27104

0726239

August 21, 2023

Rudy's Contracting Services LLC

Re: *3006 N. Patterson Ave, Winston Salem, NC limited structural inspection*

The purpose of this report is to describe the conditions observed during the limited structural inspection at 3006 N. Patterson Ave, Winston Salem, NC for Rudy's Contracting Services LLC.

The purpose of the repair inspection was to observe the completed structural repairs. This firm completed a structural design to repair damaged structural components. In addition, the contractor removed (2) 1st floor walls for which this firm has designed headers. The scope of this inspection is limited to inspecting the completed repairs and determining if repairs were properly completed as designed.

Structure Description

This two-story, residential, wood-framed structure is constructed on a masonry foundation that forms a cellar/ crawlspace below the structure.

Prior to completed repairs, there had been significant termite damage to structural components. The affected structural components were primarily floor joists, center girders and 1st floor walls. The structural repairs included the below bulleted members. A description of the repair is provided in the main body of this report.

- 1st floor joists
- 1st floor center girder
- 1st floor (2-ply) floor joists
- 1st floor living room ceiling header repair
- 1st floor front exterior wall and header repair
- 1st floor wall removal between kitchen/ dining room, (2) walls
- 1st floor rear single story floor joists
- Masonry pier replacement in cellar/ crawlspace
- 1st floor framing band repair above front and right foundation



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Completed Repairs

1st floor joists

Most of the 1st floor joists were decayed by termites. The floor joists were repaired/replaced where lumber decay was present.

I completed an inspection on November 3, 2023. The floor joists are properly replaced as designed.

1st floor center girder

The original center girder was damaged by termites. The girder was replaced as shown in the design.

I completed an inspection on November 3, 2023. The girders were properly replaced as designed.

1st floor (2-ply) floor joists

Several (2-ply) floor joists under 1st floor walls were damaged. The design was to install a joist ply on each side of the existing and secured.

I completed an inspection on November 3, 2023. The (2-ply) joists were properly replaced as designed.

1st floor living room ceiling header repair

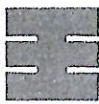
During the initial structural inspection, I observed an undersized beam in the ceiling framing. The beam spans front to rear. The beam supports the side-to-side spanning 2nd floor joists. I completed a design for the under sized header. LVL plys were added to the existing header by cutting the floor joists. A series of face mount hangers were installed to support the joists at the header.

I completed an inspection on November 3, 2023. The 1st floor living room header was properly replaced as designed.

1st floor front exterior wall and header repair

Portions of the front exterior wall were decayed by termite infestations. The damaged sections of wall framing including headers were replaced

I completed an inspection on November 3, 2023. The living room wall and headers were properly repaired.



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1st floor wall removal between kitchen/ dining room, (2) walls

(2) walls between the 1st floor rear kitchen and dining room were removed. (2) LVL (laminated headers) were designed to support the wall loads. Also, the joists between the (2) headers were altered/ repaired for proper support.

I completed an inspection on November 3, 2023. The headers and floor joists were properly installed as designed.

1st floor rear single story floor joists

The original 1st floor framing in the rear bath and laundry was significantly decayed. All floor framing was replaced in both bathroom and laundry room.

I completed an inspection on November 3, 2023. The floor framing was properly replaced.

Masonry pier replacement in cellar/ crawlspace

New masonry piers and footings were constructed below the new center girder at several locations.

I completed an inspection on November 3, 2023. The masonry piers were properly installed according to design.

1st floor framing band repair above front and right foundation

The 1st floor band beam was decayed at the front foundation wall. The repair for the framing band is shown in the attached CAD drawings. Also, the right framing band ledger was not well attached.

I completed an inspection on November 3, 2023. The framing band areas were properly repaired as designed.

The conclusions and recommendations described within are the result visual observations as described above and as requested by the customer. It should be noted that there might be hidden damage beyond the scope of this report.

Should you have any questions or comments concerning the accompanying inspection report, please contact us at richinspector@gmail.com, office 336.725.1001 and text message 336.306.0281

Sincerely,

Richard J Reynolds III, PE
NC Professional Engineer #040348
Richard J Reynolds PE PA
3006 N. Patterson Ave, Winston Salem,
NC Rudy's Contracting Services LLC
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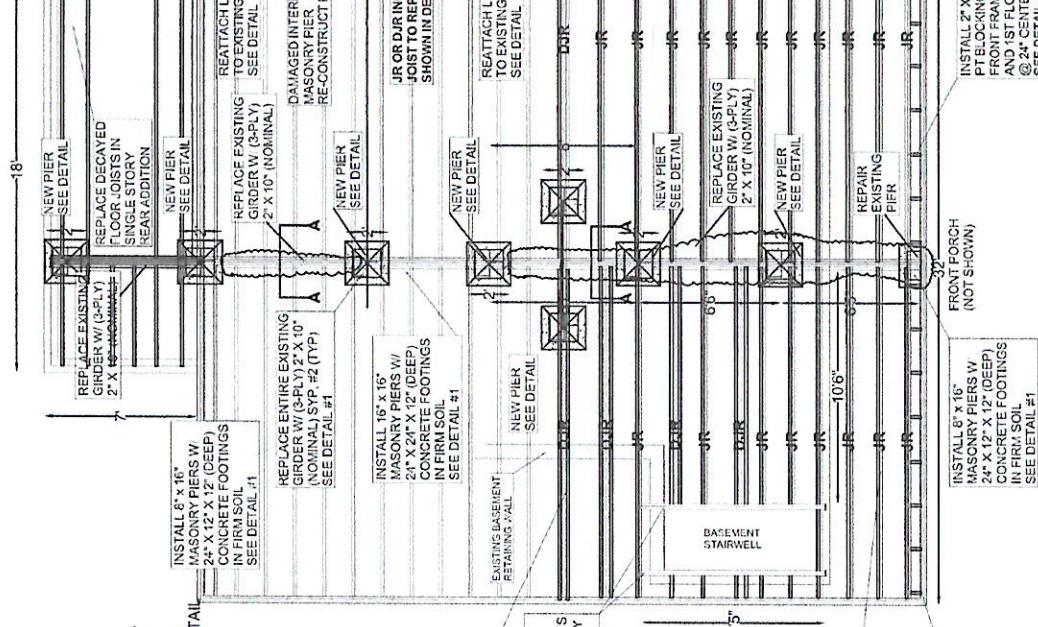


PROPERTY ADDRESS | 3006 N PATTERSON AVE., WINSTON-SALEM, NC
 DATE OF INSPECTION | JULY 26, 2023 AND AUGUST 4, 2023
 CLIENT NAME | JOSE MELNEZ

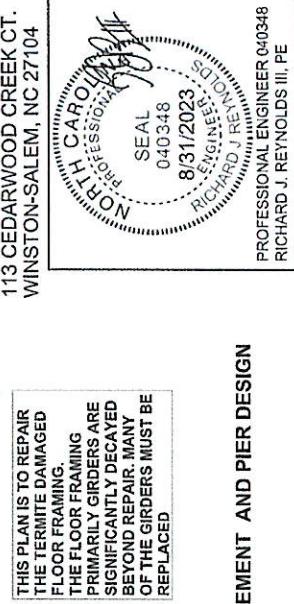
ALL ENGRAVED GIRDERS ARE DECAYED
 THE EXISTING GIRDERS SHOULD BE REMOVED AND REPLACED BY REMOVING THE 1ST FLOOR SUBFLOOR.
 NEW GIRDERS SHOULD BE INSTALLED ACCORDING TO THE DETAILS IN THIS DRAWING.
 NEW PIERS SHOULD BE INSTALLED ACCORDING TO THE DETAILS IN THIS DRAWING.

OBSERVED MANY DAMAGED FLOOR JOISTS LOCATED IN THE FRONT AND RIGHT SIDE. THE DAMAGED JOISTS SHOULD BE REPAIRED ACCORDING TO THE FLOOR JOIST REPAIR DETAIL.

(PLAN VIEW) 1ST FLOOR FRAMING REPAIR DESIGN 2/1

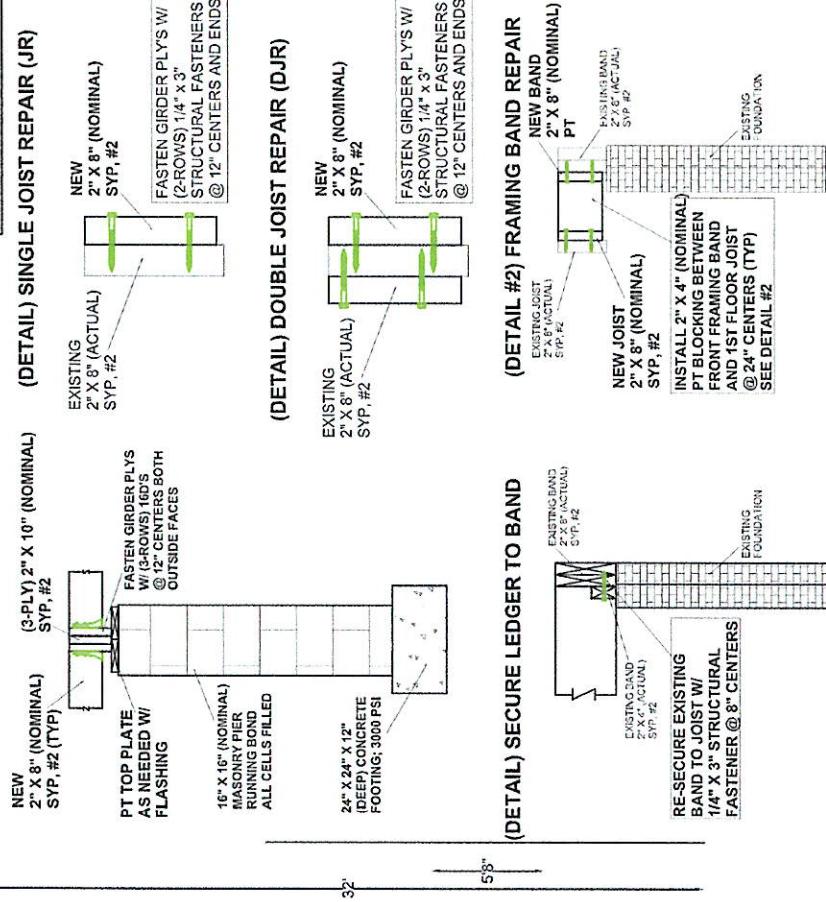


SHEET 1 OF 3 FIRM NC LICENSE #C-0943
 PE LICENSE #040348
 RICHINSPECTOR@GMAIL.COM
 336 725.1001
 EHPC.COM
 113 CEDARWOOD CREEK CT.
 WINSTON-SALEM, NC 27104

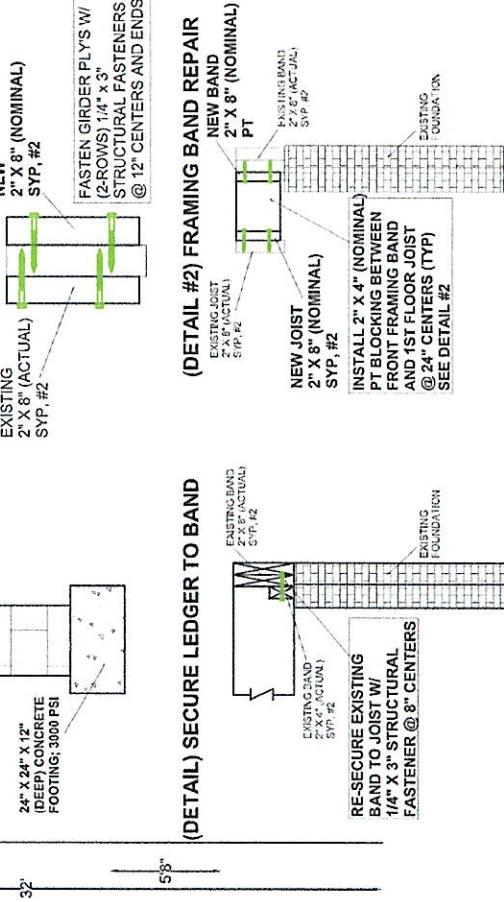


(DETAIL #1) GIRDER REPLACEMENT AND PIER DESIGN SECTION A-A

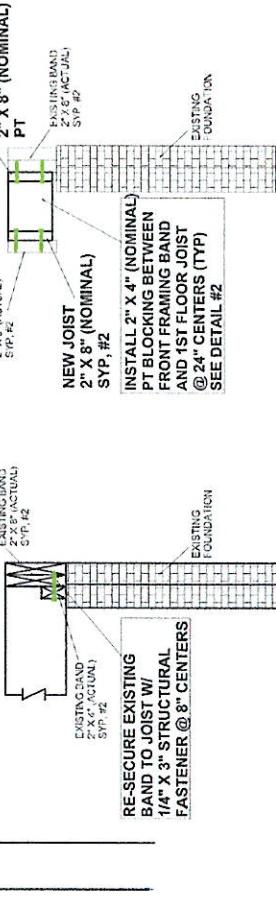
PERIMETER FOUNDATION WALL DAMAGED @ CORNER RE-CONSTRUCT DAMAGED FOUNDATION WALL SECTION



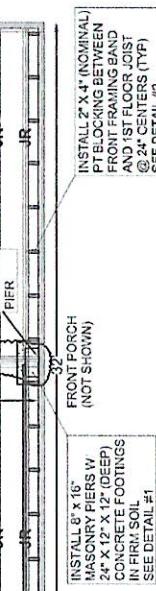
(DETAIL) SINGLE JOIST REPAIR (JR)



(DETAIL) DOUBLE JOIST REPAIR (DJR)



(DETAIL) SECURE LEDGER TO BAND

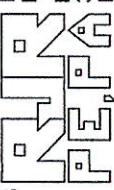


(JOIST REPAIR) JR

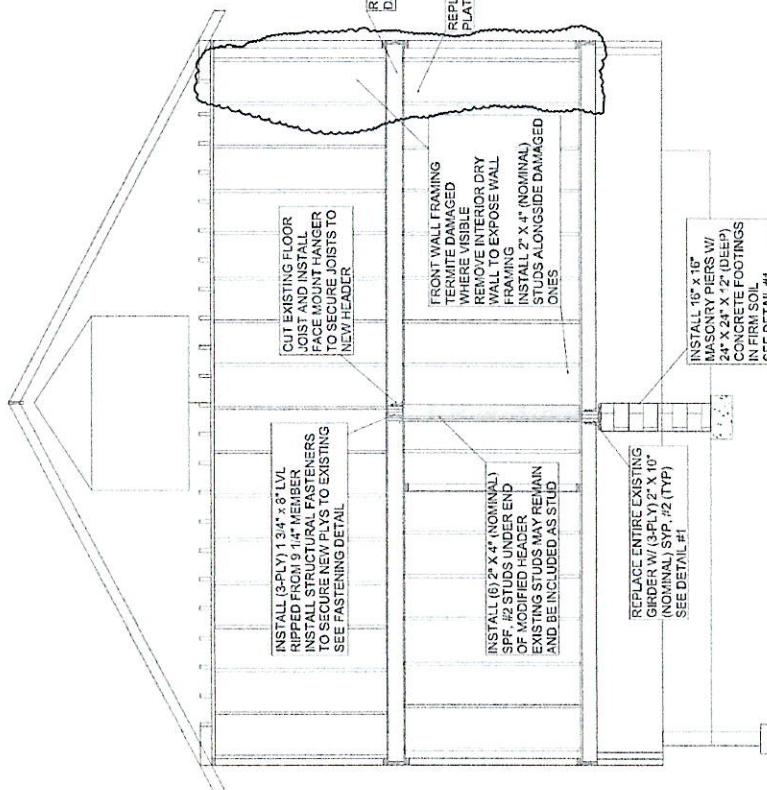


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 CLIENT NAME | JOSE MELANDEZ

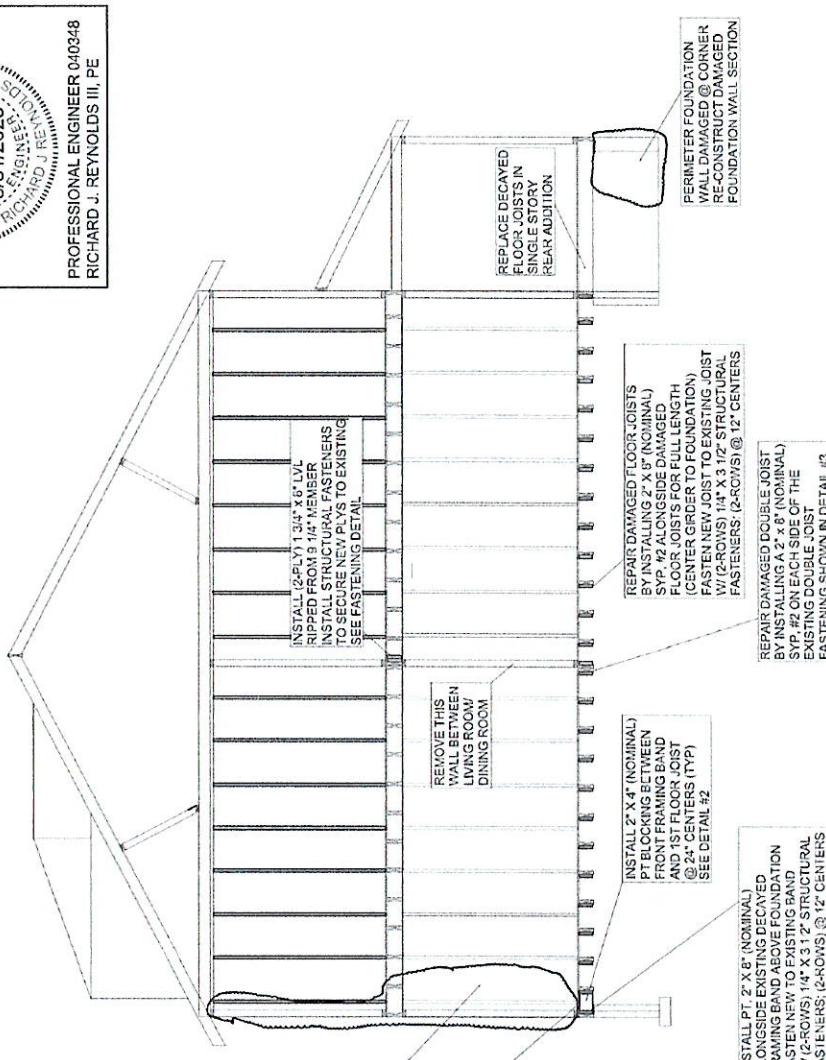
FIRM NC LICENSE #C-0943
 PE LICENSE #040348
 RICHINSPECTOR@GMAIL.COM
 336.725.1001
 EHIPC.COM
 113 CEDARWOOD CREEK CT.
 WINSTON-SALEM, NC 27104



(ELEVATION) 1ST FLOOR FRAMING; FRONT VIEW

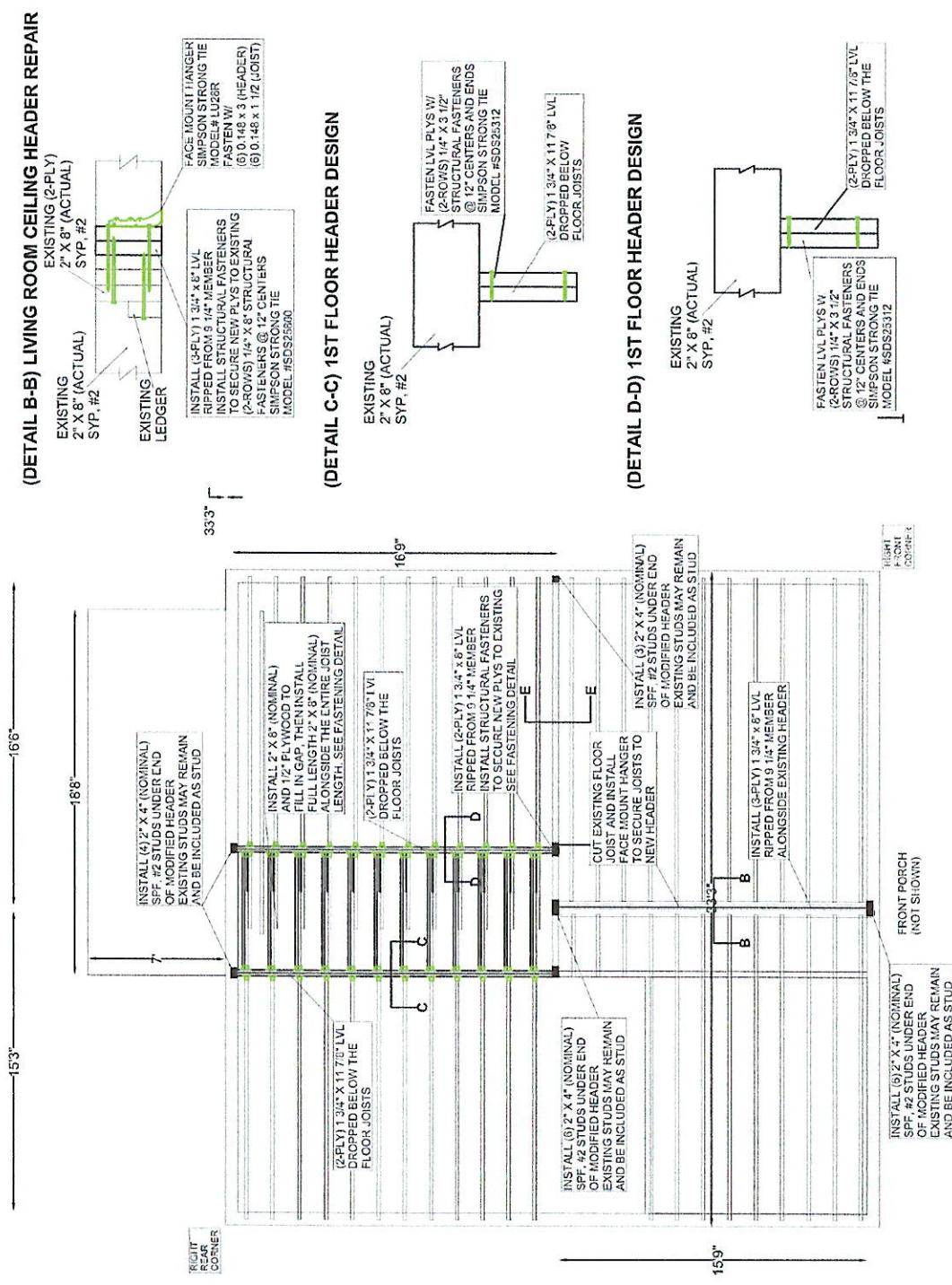


(ELEVATION) 1ST FLOOR FRAMING; RIGHT VIEW



SHEET 2 OF 3

(PLAN VIEW) 2ND FLOOR FRAMING REPAIR DESIGN



FIRM NC LICENSE #C-0943
 PE LICENSE #040348
 RICHINSPECTOR@GMAIL.COM
 336.725.1001
 EHPC.COM
 113 CEDARWOOD CREEK CT.
 WINSTON-SALEM, NC 27104

RICHARD J. REYNOLDS III, PE
 PROFESSIONAL ENGINEER 040348
 RICHARD J. REYNOLDS III, PE
 PROFESSIONAL ENGINEER 040348
 RICHARD J. REYNOLDS III, PE
 PROFESSIONAL ENGINEER 040348



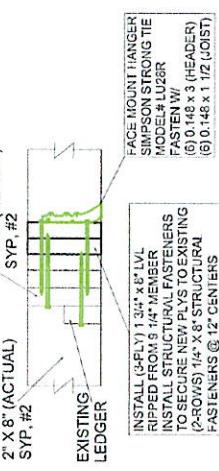
LVL CHARACTERISTICS

Fb=2900 PSI

E=2.1 x 10⁶ PSI
 FASTEN ALL WOOD STUDS
 W/ (2-ROW) 16D @ 12"
 CENTERS

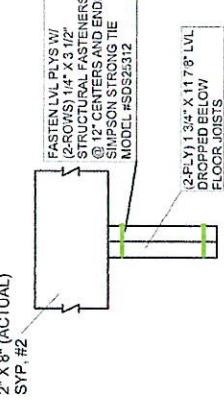
(DETAIL B-B) LIVING ROOM CEILING HEADER REPAIR

EXISTING (2-PLY)
 2" X 8" (ACTUAL)
 SYP, #2



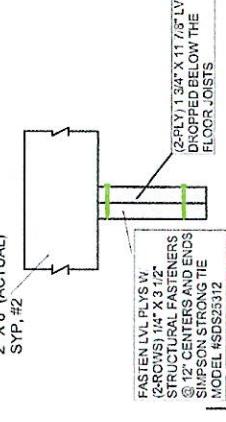
(DETAIL C-C) 1ST FLOOR HEADER DESIGN

EXISTING
 2" X 8" (ACTUAL)
 SYP, #2

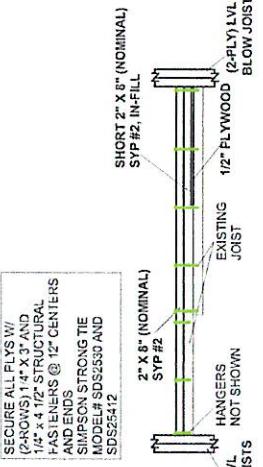


(DETAIL D-D) 1ST FLOOR HEADER DESIGN

EXISTING
 2" X 8" (ACTUAL)
 SYP, #2



(PLAN VIEW) FLOOR JOIST CONNECTIONS



(DETAIL E-E) 1ST FLOOR HEADER DESIGN

