



**NOTICE OF PUBLIC MEETING
SUDBURY CONSERVATION COMMISSION
Monday, April 29, 2024 at 7:00 PM
Virtual Meeting**

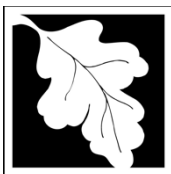
The Sudbury Conservation Commission will hold a public meeting to review the Request for Determination of Applicability filing under the Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw to convert existing deck into a sunroom and storage within the 100-foot Buffer Zone and 200-foot Riverfront Area at 53 Thunder Road, in Sudbury, MA. Hanmeng Liu, Applicant. The meeting will be held on Monday, April 29, 2024 at 7:00 pm, via Zoom.

Copies of the application may be reviewed on the Conservation Department web page at:

<https://sudbury.ma.us/conservationcommission/meeting/conservation-commission-meeting-monday-April-29-2024/>

Please contact the Conservation Office with any questions at 978-440-5470.

SUDBURY CONSERVATION COMMISSION
4/12/2024



Massachusetts Department of Environmental Protection
Bureau of Water Resources - Wetlands

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Municipality _____

A. General Information

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

First Name _____ Last Name _____

Address _____

City/Town _____ State _____ Zip Code _____

Phone Number _____ Email Address _____

2. Property Owner (if different from Applicant):

First Name _____ Last Name _____

Address _____

City/Town _____ State _____ Zip Code _____

Phone Number _____ Email Address (if known) _____

3. Representative (if any)

First Name _____ Last Name _____

Company Name _____

Address _____

City/Town _____ State _____ Zip Code _____

Phone Number _____ Email Address (if known) _____

B. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

Street Address _____ City/Town _____

Latitude (Decimal Degrees Format with 5 digits after decimal e.g. XX.XXXXX) _____ Longitude (Decimal Degrees Format with 5 digits after decimal e.g. -XX.XXXXX) _____

Assessors' Map Number _____ Assessors' Lot/Parcel Number _____

b. Area Description (use additional paper, if necessary):

c. Plan and/or Map Reference(s): (use additional paper if necessary)

Title _____ Date _____

Title _____ Date _____

[How to find Latitude and Longitude](#)

[and how to convert to decimal degrees](#)



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Municipality

B. Project Description (cont.)

2. a. Activity/Work Description (use additional paper and/or provide plan(s) of Activity, if necessary):

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary).



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Municipality

C. Determinations

1. I request the Sudbury Conservation Commission make the following determination(s). Check any that apply:

- a. whether the **area** depicted on plan(s) and/or map(s) referenced above is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced above are accurately delineated.
- c. whether the **Activities** depicted on plan(s) referenced above is subject to the Wetlands Protection Act and its regulations.
- d. whether the area and/or Activities depicted on plan(s) referenced above is subject to the jurisdiction of any **municipal wetlands' ordinance or bylaw** of:

Sudbury

Name of Municipality

- e. whether the following **scope of alternatives** is adequate for Activities in the Riverfront Area as depicted on referenced plan(s).

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Hanmei Lin
Signature of Applicant

03/08/2014
Date

Signature of Representative (if any)

Date

53 Thunder Rd,
Sudbury, MA, 01776

Supporting Documents

Dear Members of Commission,

The projects are mainly in the back of our house, using existing restructure to make home improvement, footprint will remain same, please see below pictures for proposed projects

Convert existing deck to four season sunroom(Red line), and enclose the under area(Green Line) storage like snow removal tools



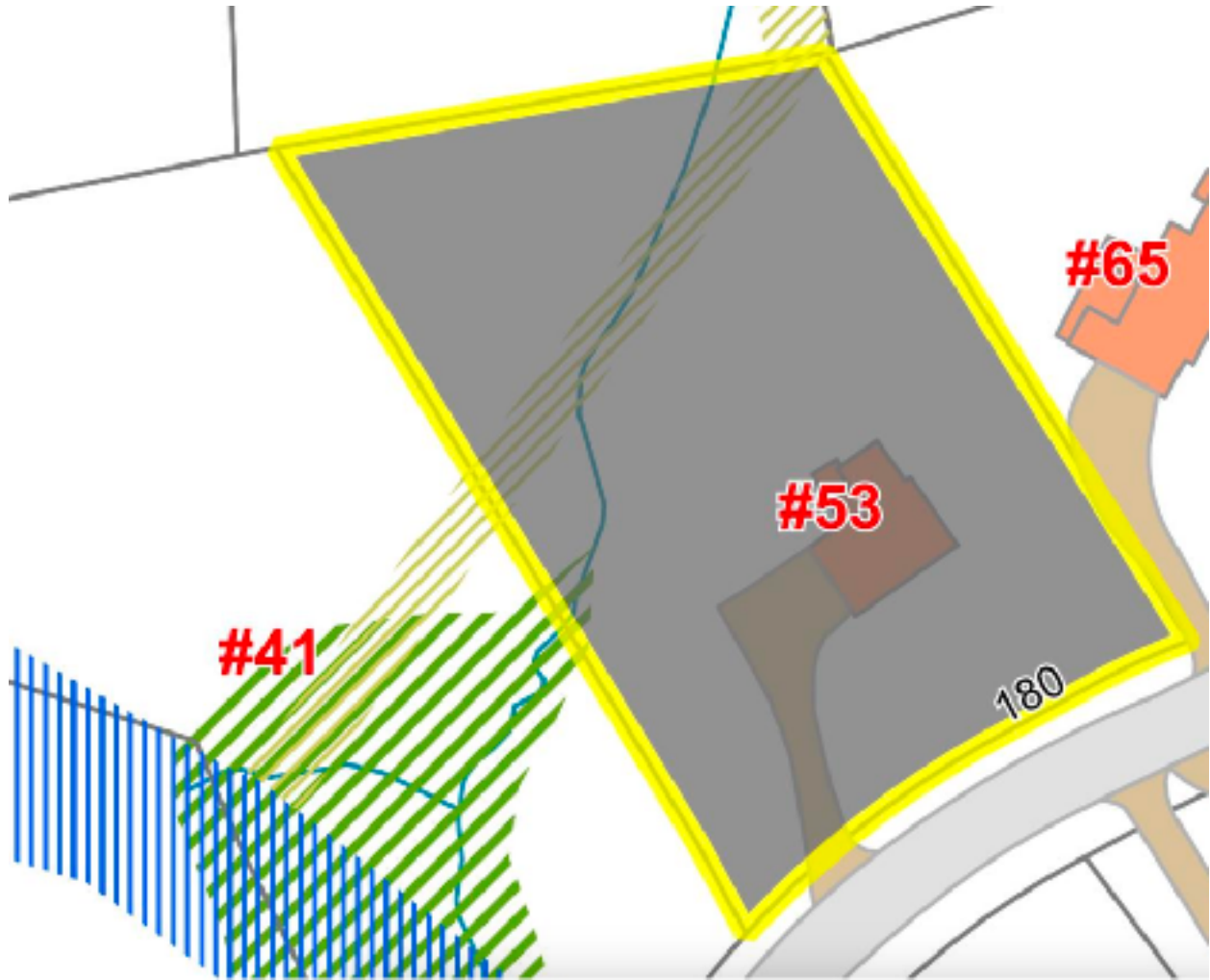
Below is the full picture of the back yard



About the area:

Our location is about 1 acre lot, with easement and stream flow through the back, and wetland-swamp is at the side near our house, see below picture, we also attached town_map and town_map_image for the lot image

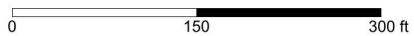
Sincerely,
Hanmeng





- Easements and Restrictions
 - Easement
 - Conservation Restriction
- Bridges
- Driveways
- Parking Lots
- Medians
- Sidewalks
- Curbs
- Roads
 - Paved Roads
 - UnPaved Roads
- Buildings
- Parcels
- Wetlands Town 2008
 - Open Water
 - Deep Marsh
 - Shallow Marsh/Meadow
 - Bog
 - Shrub Swamp
 - Wooded Swamp Deciduous
 - Wooded Swamp Coniferous
 - Wooded Swamp Mixed
- Streams Ortho
- Streams CIR
- Lake/Reservoir
- MA Highways
 - Interstate
 - US Highway
 - Numbered Routes
- Town Boundary
- Streets

The data shown on this site are provided for informational and planning purposes only. The Town and its consultants are not responsible for the misuse or misrepresentation of the data.



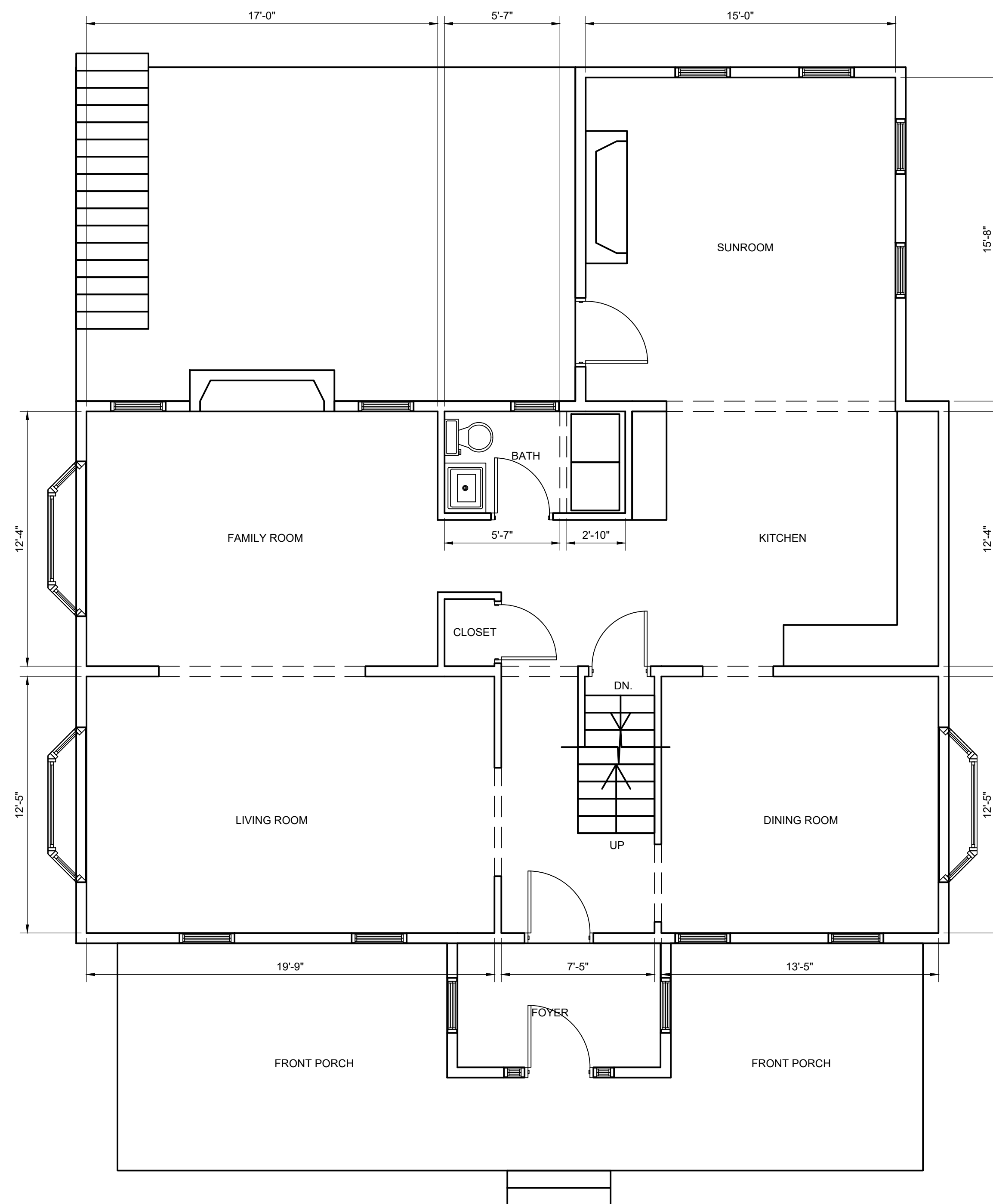
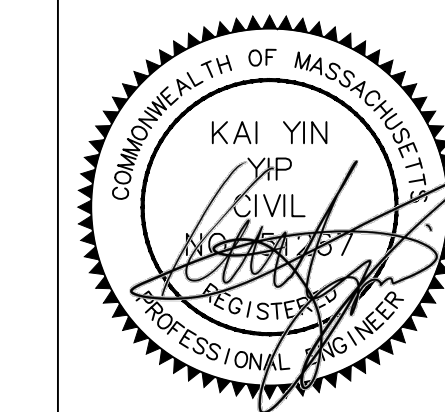
Printed on 03/08/2024 at 12:58 PM

MapsOnline

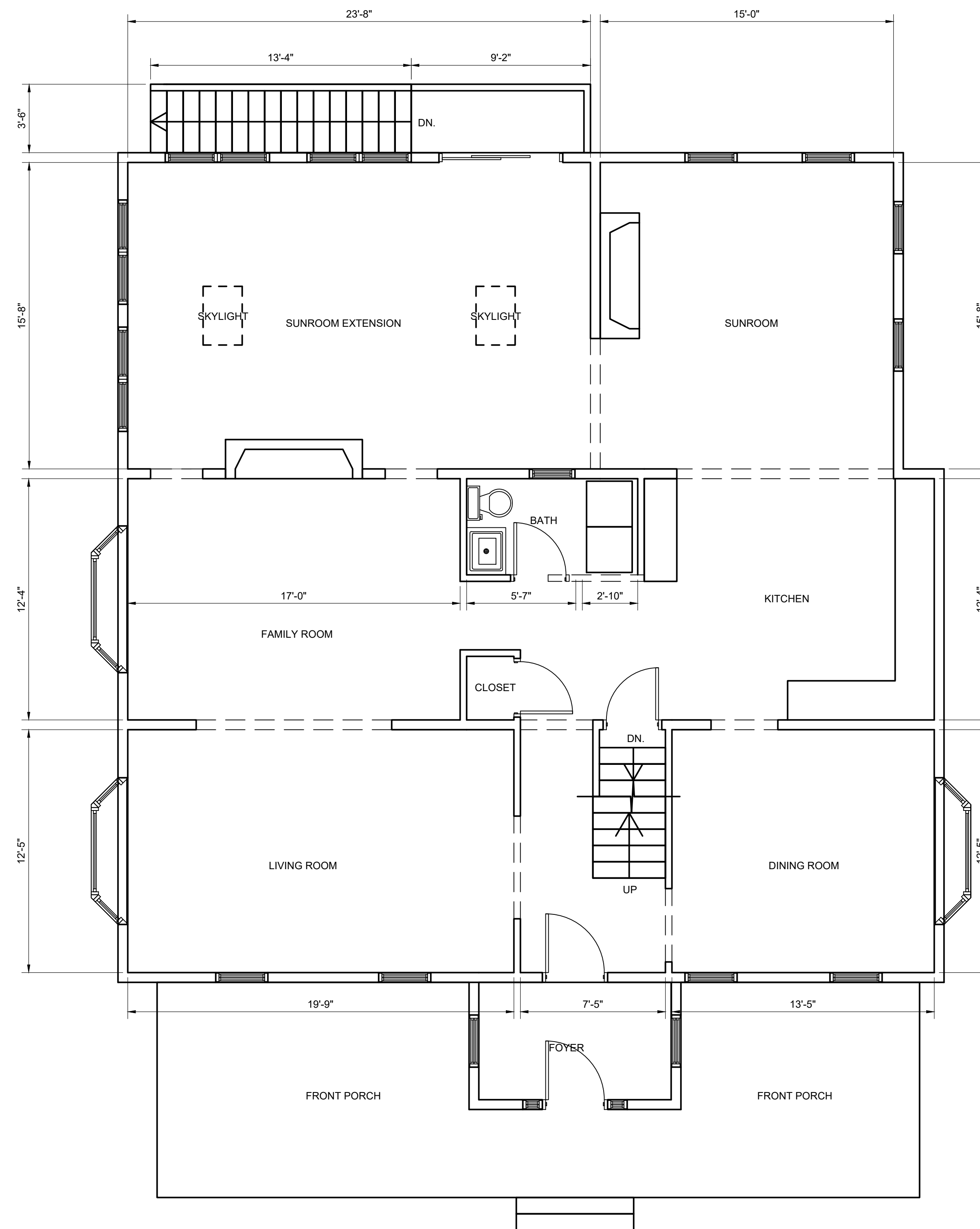
Town_map_image



© All EagleView Technology Corporation



EXISTING FIRST FLOOR FLOOR PLAN
SCALE: 1/4"=1'-0"



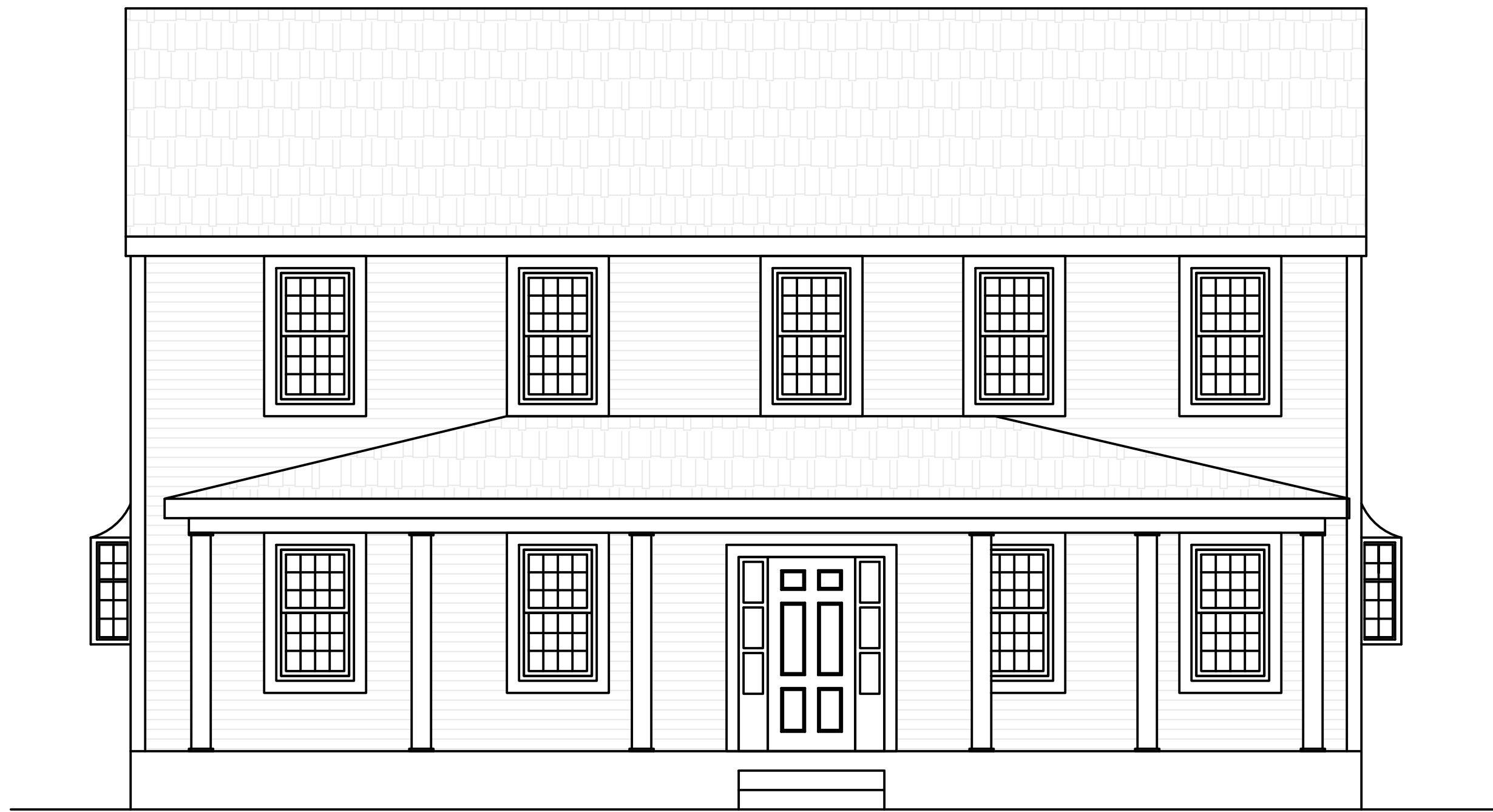
PROPOSED FIRST FLOOR FLOOR PLAN
SCALE: 1/4"=1'-0"

PROPOSED ADDITION - SINGLE FAMILY DWELLING
53 THUNDER RD. SUDBURY, MA.

TITLE:
DRAWN BY: CHECKED BY:
COMMENTS:

DWG NO:

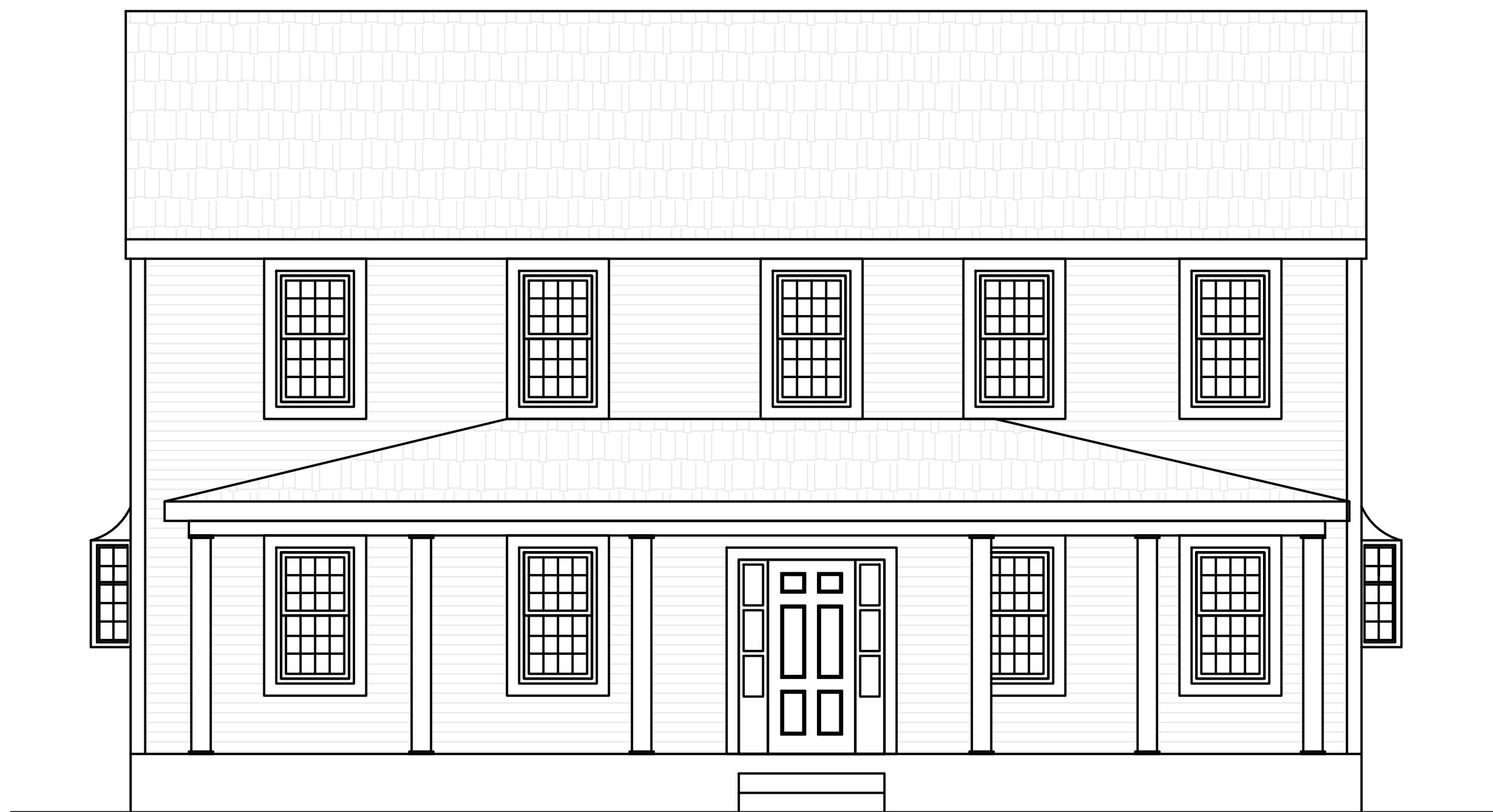
A-1



EXISTING SOUTH (FRONT) ELEVATION
SCALE: 1/4"=1'-0"



PROPOSED WEST (LEFT) ELEVATION
SCALE: 1/4"=1'-0"



PROPOSED SOUTH (FRONT) ELEVATION
SCALE: 1/4"=1'-0"

PROPOSED ADDITION - SINGLE FAMILY DWELLING
53 THUNDER RD. SUDBURY, MA.

PROJECT

TITLE
DRAWN BY: CHECKED BY:

COMMENTS:

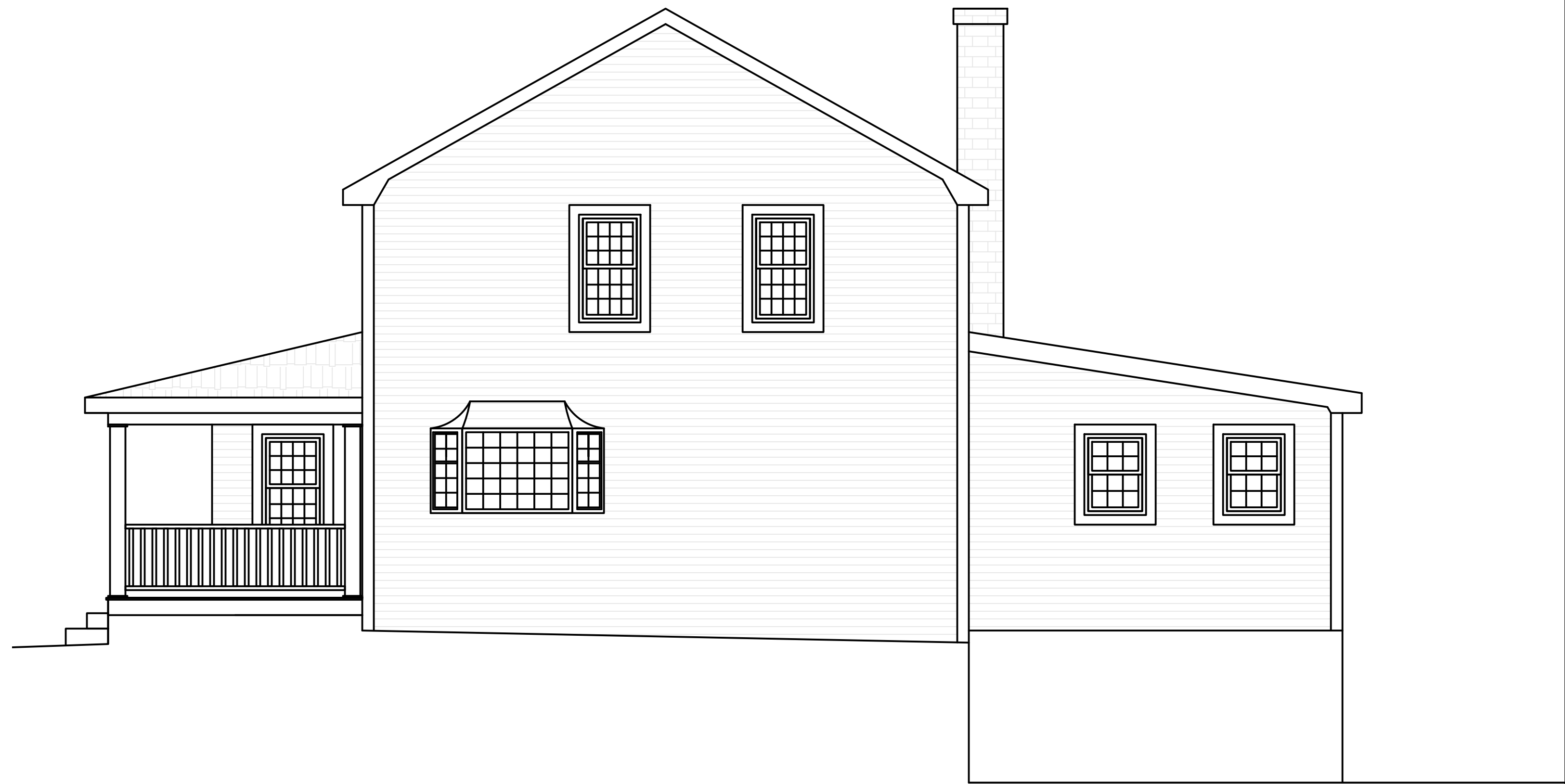
DWG NO:

A-2



EXISTING NORTH (REAR) ELEVATION

SCALE: 1/4"=1'-0



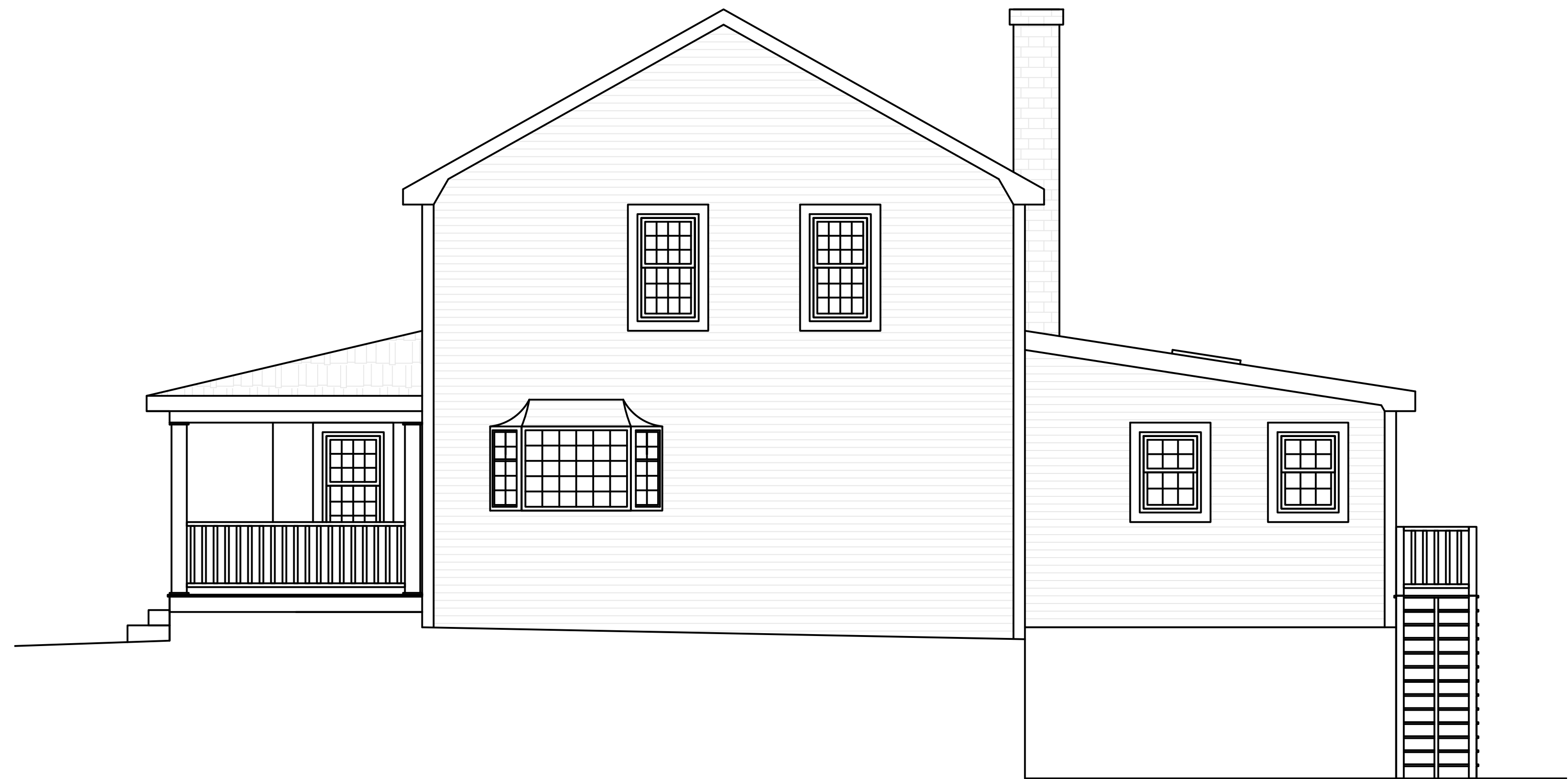
EXISTING EAST (RIGHT) ELEVATION

SCALE: 1/4"=1'-0



PROPOSED NORTH (REAR) ELEVATION

SCALE: 1/4"=1'-0



PROPOSED EAST (RIGHT) ELEVATION

SCALE: 1/4"=1'-0

PROPOSED ADDITION - SINGLE FAMILY DWELLING
53 THUNDER RD. SUDBURY, MA.

PROJECT

TITLE

DRAWN BY: CHECKED BY:

COMMENTS:

DWG NO:

A-3

GENERAL NOTES

WOOD (780 CMR 23.0)

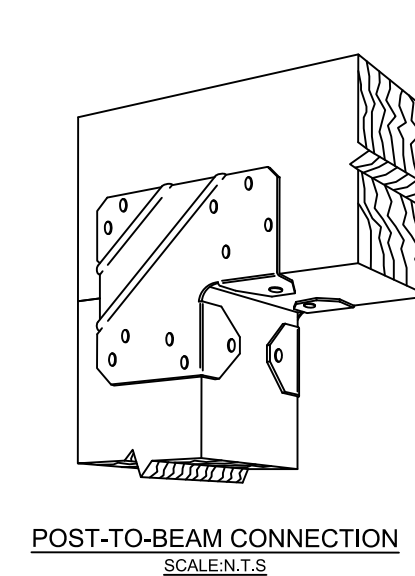
- ALL WOOD CONSTRUCTION SHALL BE SECURELY AND CONTINUOUSLY FASTENED TO SUPPORTING ELEMENTS BELOW. WOOD BEARING ON CONCRETE OR MASONRY FOUNDATION WALLS SHALL BE ATTACHED WITH ANCHOR BOLTS OR EXPANSION BOLTS CONNECTED TO APPROVED METAL CONNECTORS TO PREVENT LATERAL DISPLACEMENT. ALL WOOD POSTS SHALL HAVE APPROVED METAL CONNECTORS TOP AND BOTTOM. ALL FLUSH FRAMED JOISTS SHALL BE CONNECTED (SUPPORTED) WITH METAL HANGERS APPROVED BY DESIGNER. ALL ROOF RAFTERS SHALL BE SECURED WITH METAL HURRICANE ANCHORS AT EXTERIOR OVERHANGS.
- WOOD IN CONTACT WITH CONCRETE, OUTDOORS, OR IN MOIST CONDITIONS SHALL BE PRESERVATIVE PRESSURE-TREATED. WOOD REQUIRED TO BE NON-COMBUSTIBLE SHALL BE FIRE-RETARDANT PRESSURE-TREATED IN ACCORDANCE WITH THE CODE.
- STRUCTURAL LUMBER AND MANUFACTURED WOOD SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF THE FOLLOWING TABLE. DIMENSION LUMBER SHALL BEAR THE GRADE STAMP OF A GRADING AUTHORITY RECOGNIZED IN THE NATIONAL DESIGN SPECIFICATION OF THE AMERICAN FOREST AND PAPER ASSOCIATION:

TYPE	APPLICATION	SPECIES	GRADE	TREATMENT	F _b (PSI)	F _v (PSI)	F _c (PSI)	E (PSI)
DIMENSION LUMBER	JOISTS, BEAMS, RAFTERS	SPRUCE-PINE-FIR (SOUTH)	-	NONE	1200/1400 REPETITIVE	70	575	1,200,000
DIMENSION LUMBER	POSTS & STUDS	SPRUCE-PINE-FIR (SOUTH)	STUD	NONE	600	70	625	1,000,000
DIMENSION LUMBER	MOIST CONDITIONS	MIXED SOUTHERN PINE	NO. 2	PRESERVATIVE PRESSURE TR.	875	90	1400	1,400,000
LAMINATED VENEER LUMBER	BUILT-UP BEAMS	MANUFACTURED	1.8 E	NONE	2600	285	2400	1,800,000
PARALLEL STRAND LUMBER	POSTS, BEAMS	MANUFACTURED	2.0 E	NONE	2900	290	2900	2,000,000

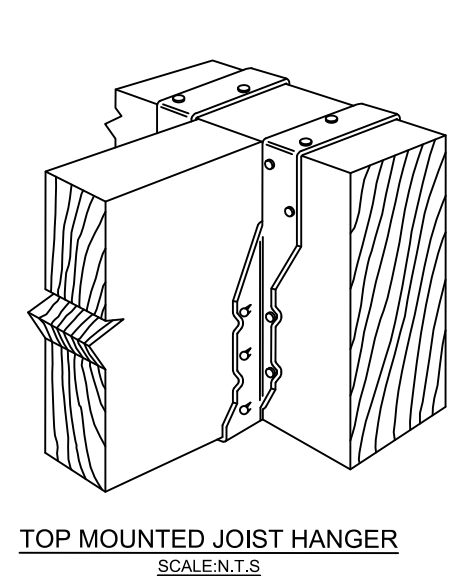
- CUTTING AND NOTCHING OF STRUCTURAL WOOD MEMBERS IS NOT PERMITTED EXCEPT BY THE EXPRESS DIRECTION OR WRITTEN PERMISSION OF THE DESIGNER.
- STUD BEARING WALLS SHALL HAVE BLOCKING BETWEEN STUDS FOR EVERY 4 FEET OF HEIGHT. ALL STUD WALLS ARE TO BE SHEATHED BOTH SIDES WITH PLYWOOD OR GYPSUM WALL BOARD UNLESS SPECIFICALLY NOTED OTHERWISE. INTERSECTING EXTERIOR STUD WALLS SHALL BE SECURELY FASTENED TOGETHER AND THE BOTTOM PLATES THROUGH BOLTED, ANCHOR BOLTED, OR METAL STRAP CONNECTED TO SUPPORTS BELOW THE INTERSECTION TO SAFEGUARD AGAINST UPLIFT AT EACH LEVEL.
- WOOD FRAMED FLOORS SHALL HAVE BRIDGING OR SOLID BLOCKING FOR EVERY 8 FT. OF SPAN. STRUCTURAL ADHESIVE SHALL BE USED BETWEEN JOISTS AND SUBFLOOR, IN ADDITION TO NAILING.
- FASTENERS FOR WOOD CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING STANDARDS (USE 780 CMR 120.Q):
 NAILS FOR LUMBER AND SHEATHING: MASS. BUILDING CODE APPENDIX C
 NAILS FOR METAL CONNECTORS: MANUFACTURER'S RECOMMENDATIONS
 STEEL BOLTS AND THREADED STOCK: ASTM A307
 STRUCTURAL ADHESIVE: ASTM D3498 (PL-400 AND LIQUID NAILS LN-902 CONFORM TO THIS STANDARD)
 GALVANIZED OR STAINLESS STEEL FASTENERS SHALL BE USED AT EXTERIOR OR MOIST CONDITIONS.
- PLYWOOD MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE APA-ENGINEERED WOOD ASSOCIATION AND SHALL BEAR A STAMP INDICATING THICKNESS, SPAN RATING, AND TYPE. PLYWOOD SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF THE FOLLOWING TABLE AND SHALL BE ERECTED WITH THE FACE GRAIN PERPENDICULAR TO SUPPORTS.

APPLICATION	TYPE	THICKNESS	SPAN RATING	EXPOSURE CLASS	EDGE
SUBFLOORS	STURD-I-FLOOR	3/4"	24 O.C.	EXPOSURE 1	T&G
EXTERIOR WALLS	RATED SHEATHING	1/2"	32 / 16	EXTERIOR	PLAIN
ROOF SHEATHING	RATED SHEATHING	5/8"	32 / 16	EXTERIOR	PLAIN

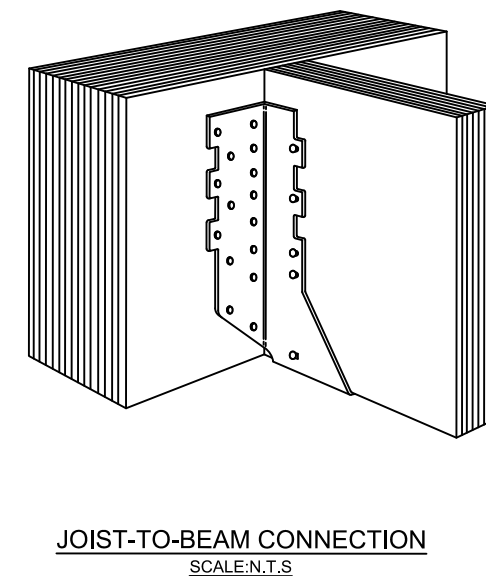
- LUMBER AND PLYWOOD DELIVERED TO THE JOB SITE SHALL BE PROTECTED FROM MUD, ICE, WATER, AND SNOW, AND SHALL BE STORED OFF THE GROUND IN A MANNER TO PRESERVE THE STRAIGHTNESS OF THE PIECES.



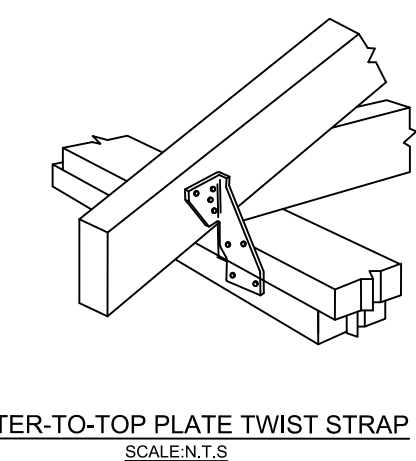
POST-TO-BEAM CONNECTION
SCALE 1/2"



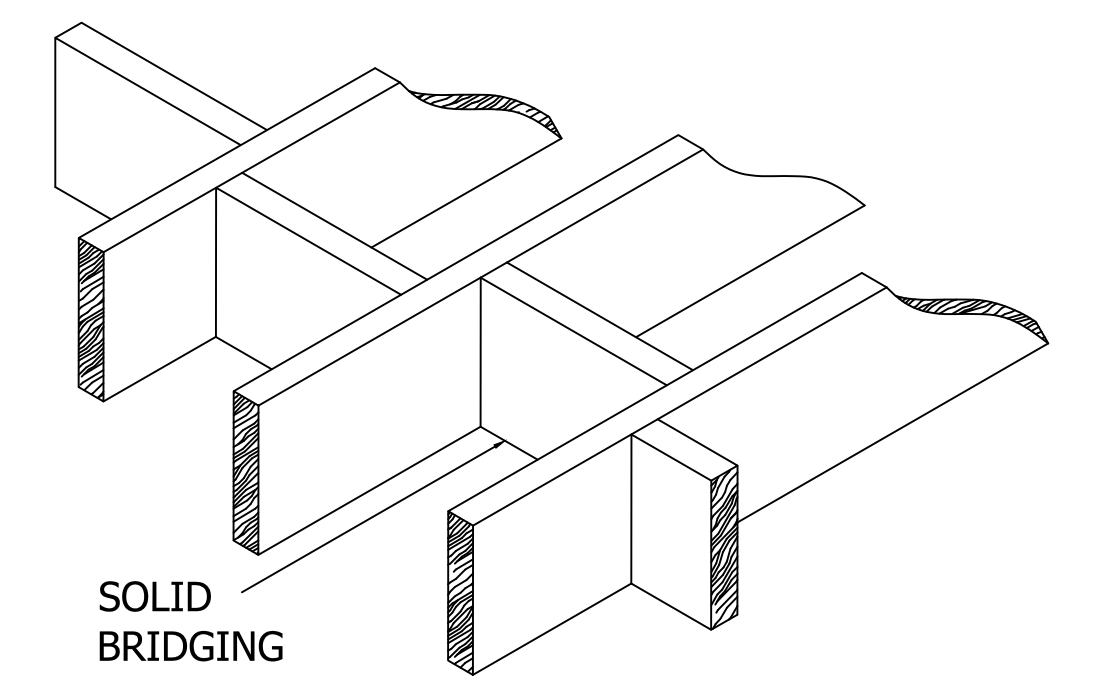
TOP MOUNTED JOIST HANGER
SCALE 1/2"



JOIST-TO-BEAM CONNECTION
SCALE 1/2"

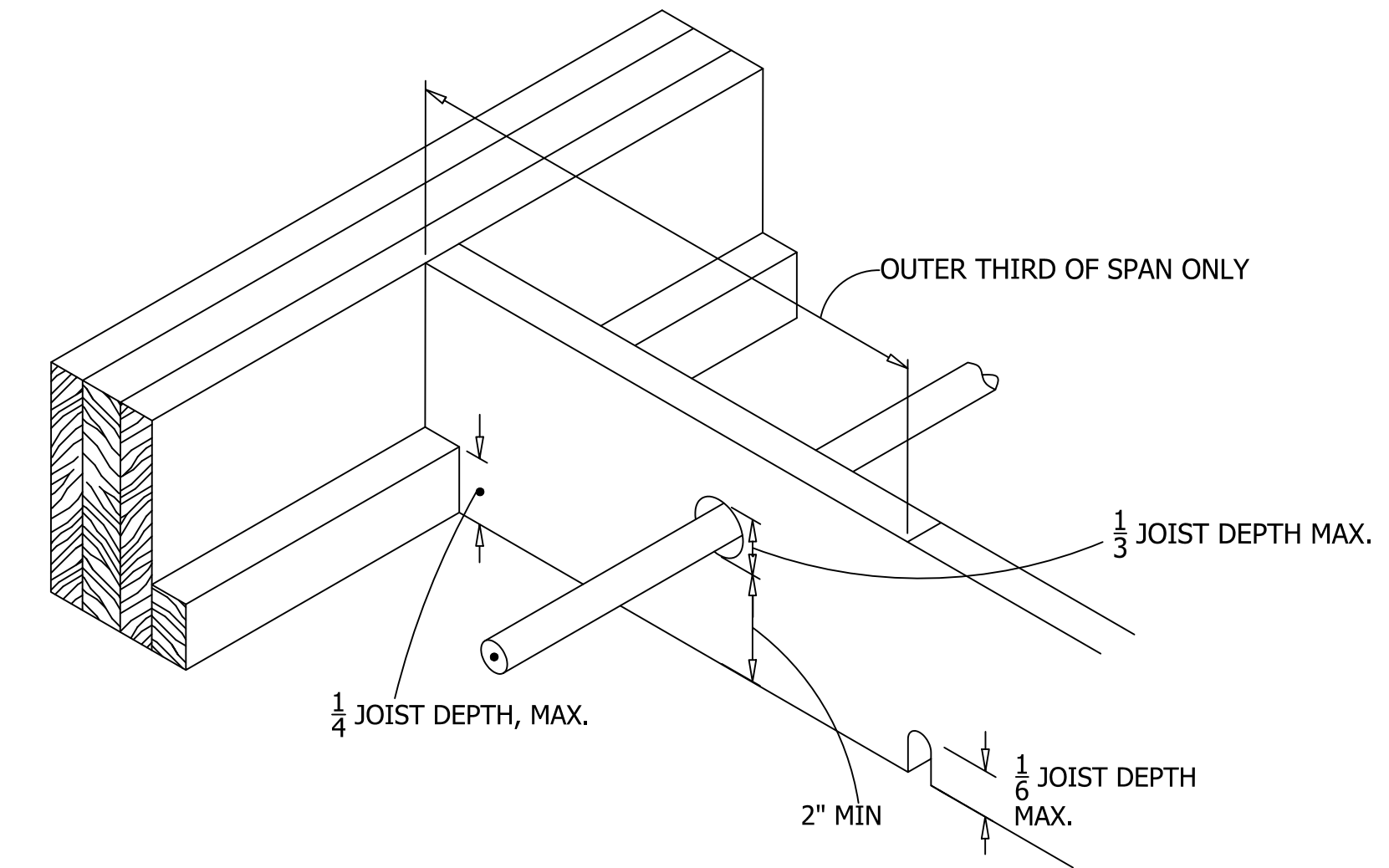


RAFTER-TO-TOP PLATE TWIST STRAP
SCALE 1/2"

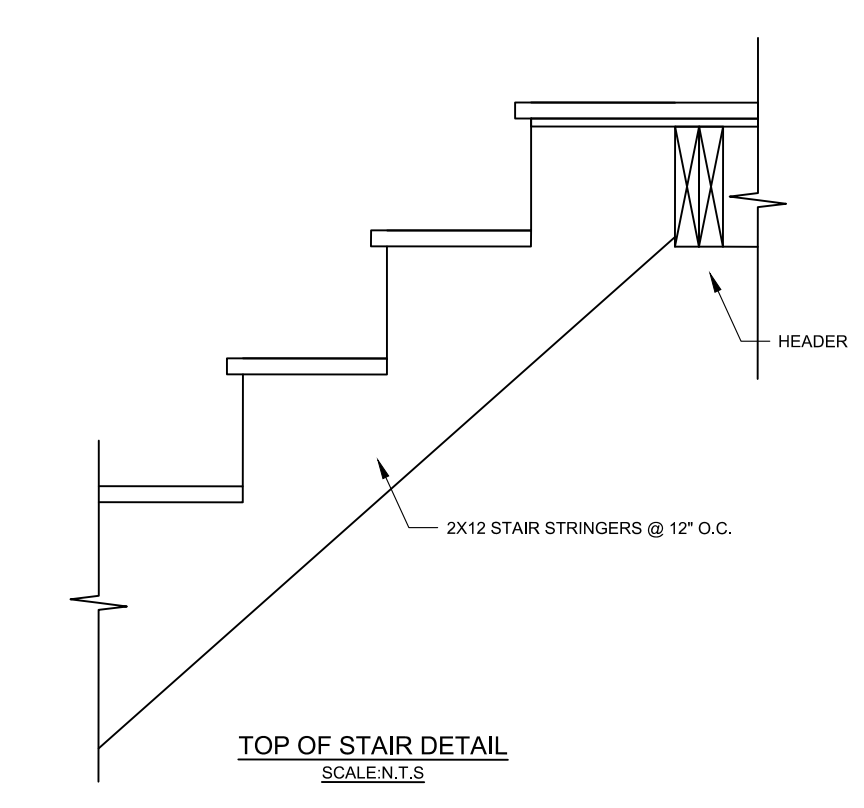


SOLID BRIDGING

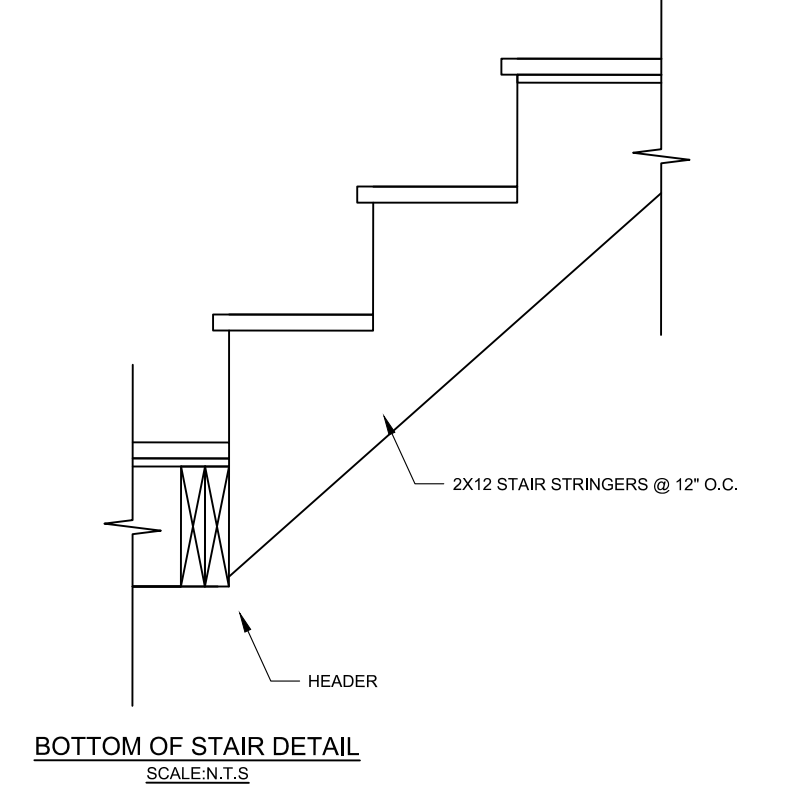
TYPICAL SOLID BLOCKING AT FLOOR JOISTS



CUTTING AND NOTCHING OF JOISTS

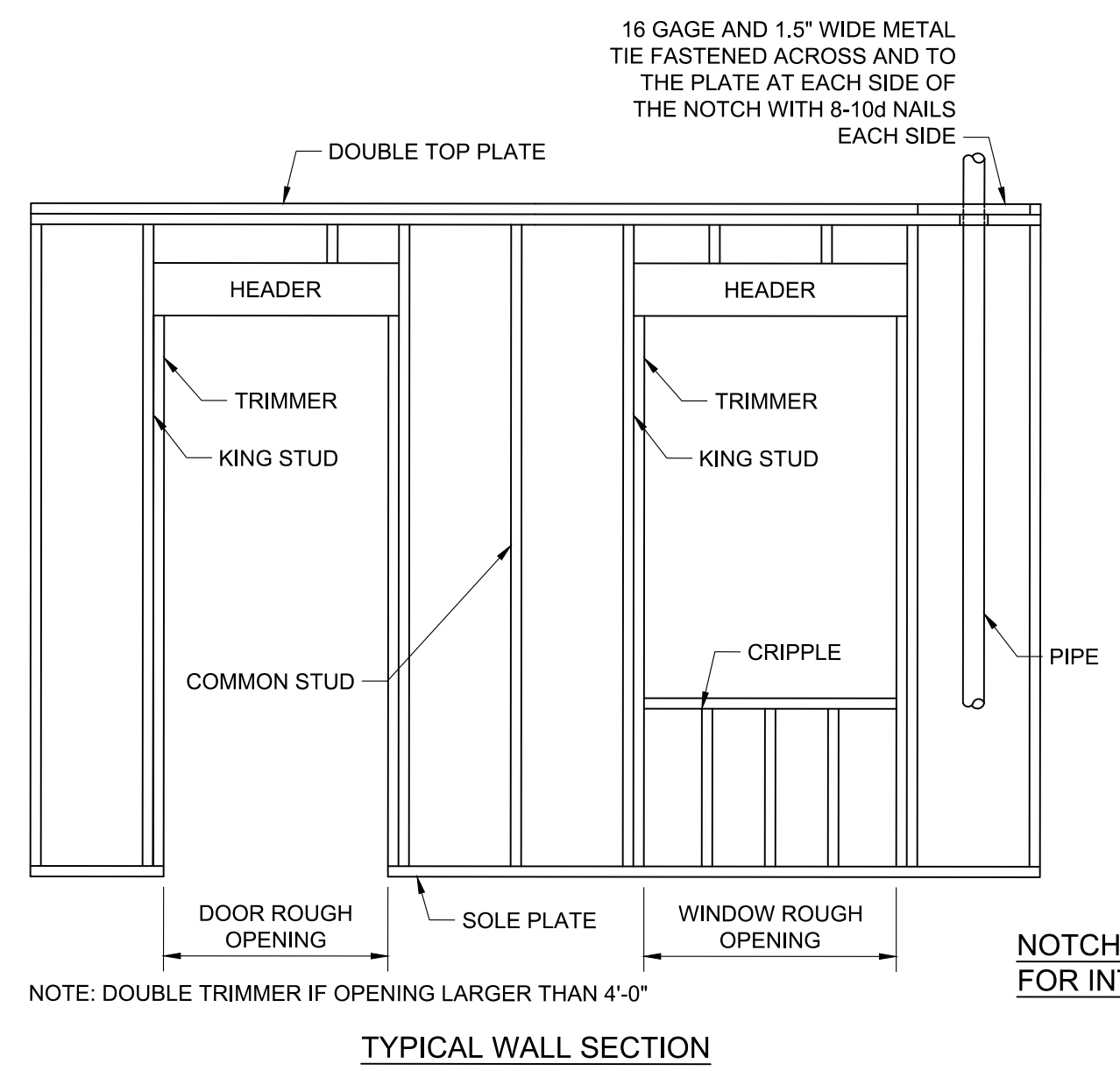


TOP OF STAIR DETAIL
SCALE 1/2"



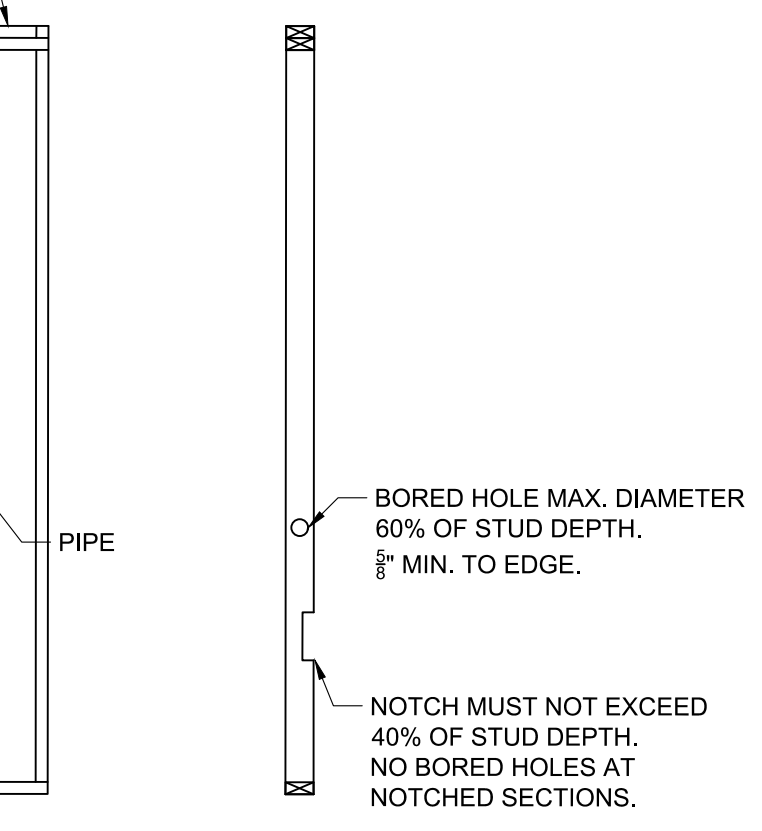
BOTTOM OF STAIR DETAIL
SCALE 1/2"

NOTE: 80" MIN. HEAD ROOM
8" MAX. RISER
9" MIN. THREAD

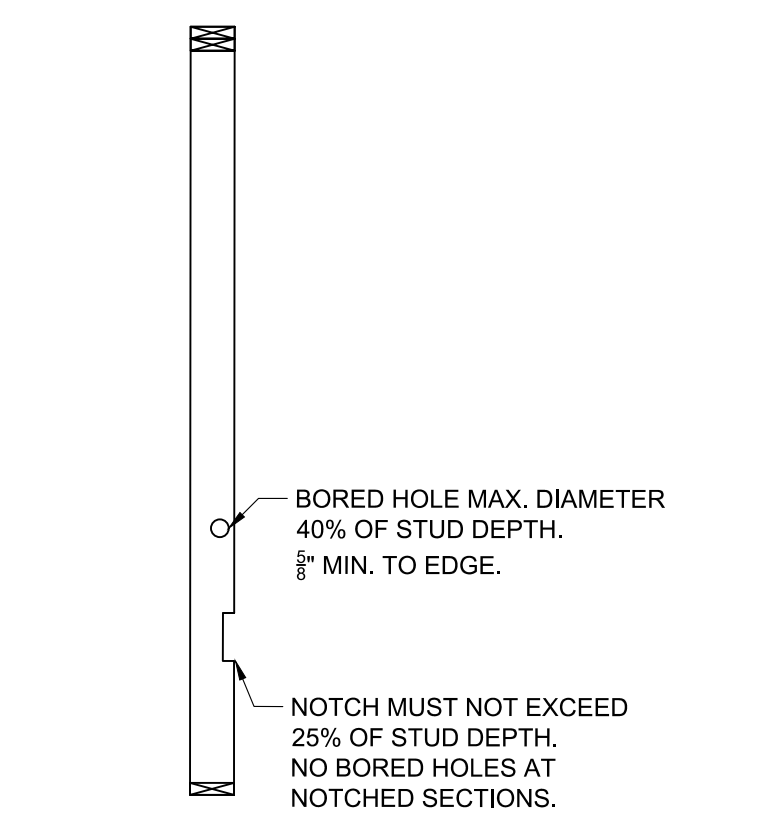


TYPICAL WALL SECTION
NOTE: DOUBLE TRIMMER IF OPENING LARGER THAN 4'-0"

16 GAGE AND 1.5" WIDE METAL TIE FASTENED ACROSS AND TO THE PLATE AT EACH SIDE OF THE NOTCH WITH 8-10d NAILS EACH SIDE



NOTCH AND BORED HOLE DETAIL FOR INTERIOR AND NONBEARING WALLS



NOTCH AND BORED HOLE DETAIL FOR EXTERIOR AND BEARING WALLS

DWG NO.

S-1

PROJECT:

PROPOSED ADDITION - SINGLE FAMILY DWELLING
53 THUNDER RD. SUDBURY, MA.



KAI YIN YIP, P.E.
TEL: (646) 420-9896
E-MAIL: KAIYIN.YIP@GMAIL.COM

S & Y DESIGN AND ENGINEERING LLC
555 HANCOCK ST
QUINCY MA 02170



SHEA New England's Premier Precaster
 CONCRETE PRODUCTS
 BILLING ADDRESS: 87 HAVENHALL RD, AMESBURY, MA 01913

800-696-7432 (SHEA)
 www.sheaconcrete.com

**FOOTING/FROST POST
 SONATUBE 8" SQUARE**

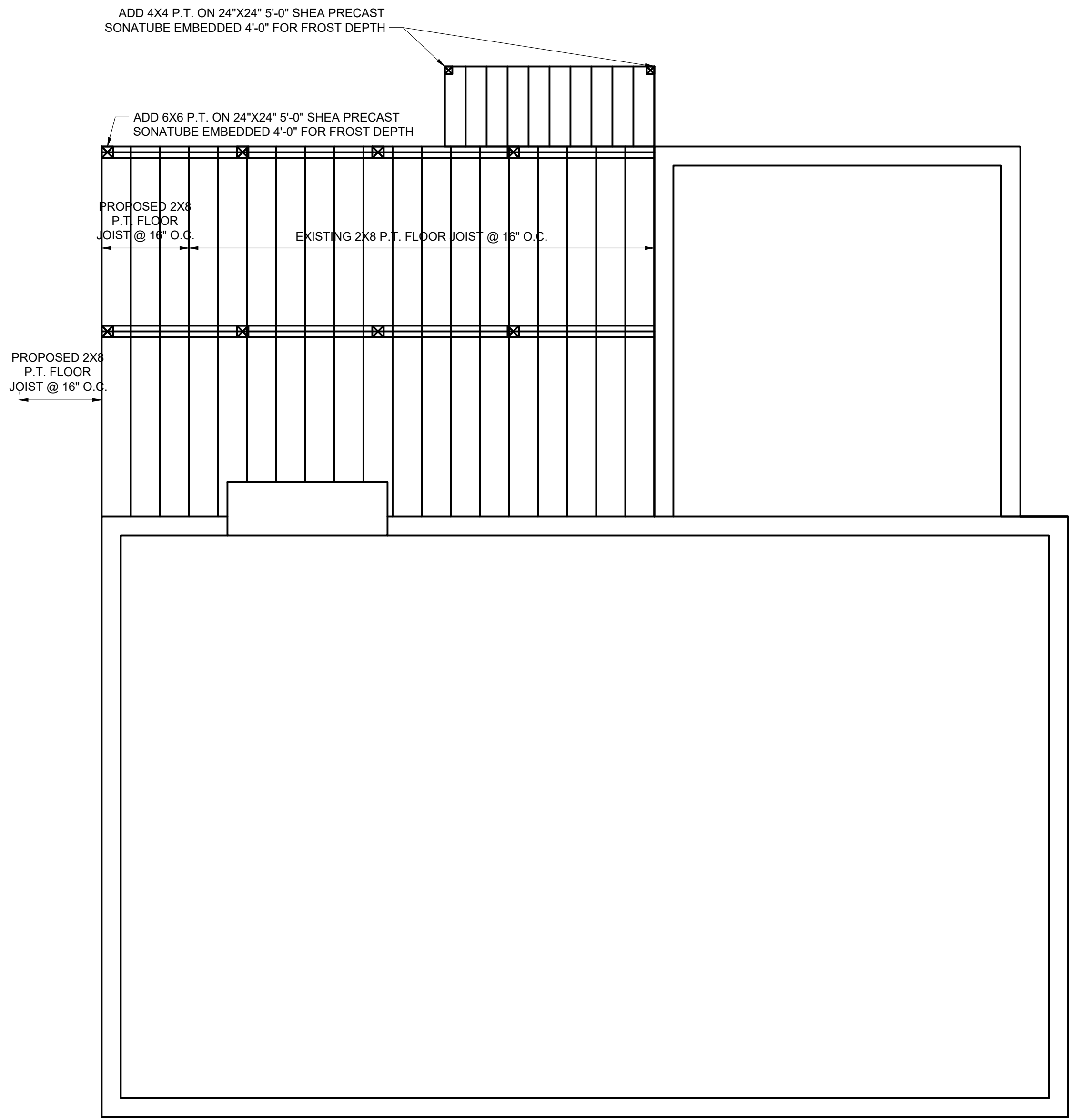
TOP VIEW: $R\frac{5}{16}$ " and $\frac{3}{4}$ " THEADED HOLE

PRECAST VS. CONVENTIONAL
 CONVENTIONAL 12" DIAMETER SONOTUBE:
 ALLOWABLE LOAD BEARING AT SOIL =
 $2000\text{PSF} \times (0.80 \times 0.80 \times 1.42) = 1871\text{LBS}$
 MAX LOAD BEARING IS 1,871LBS

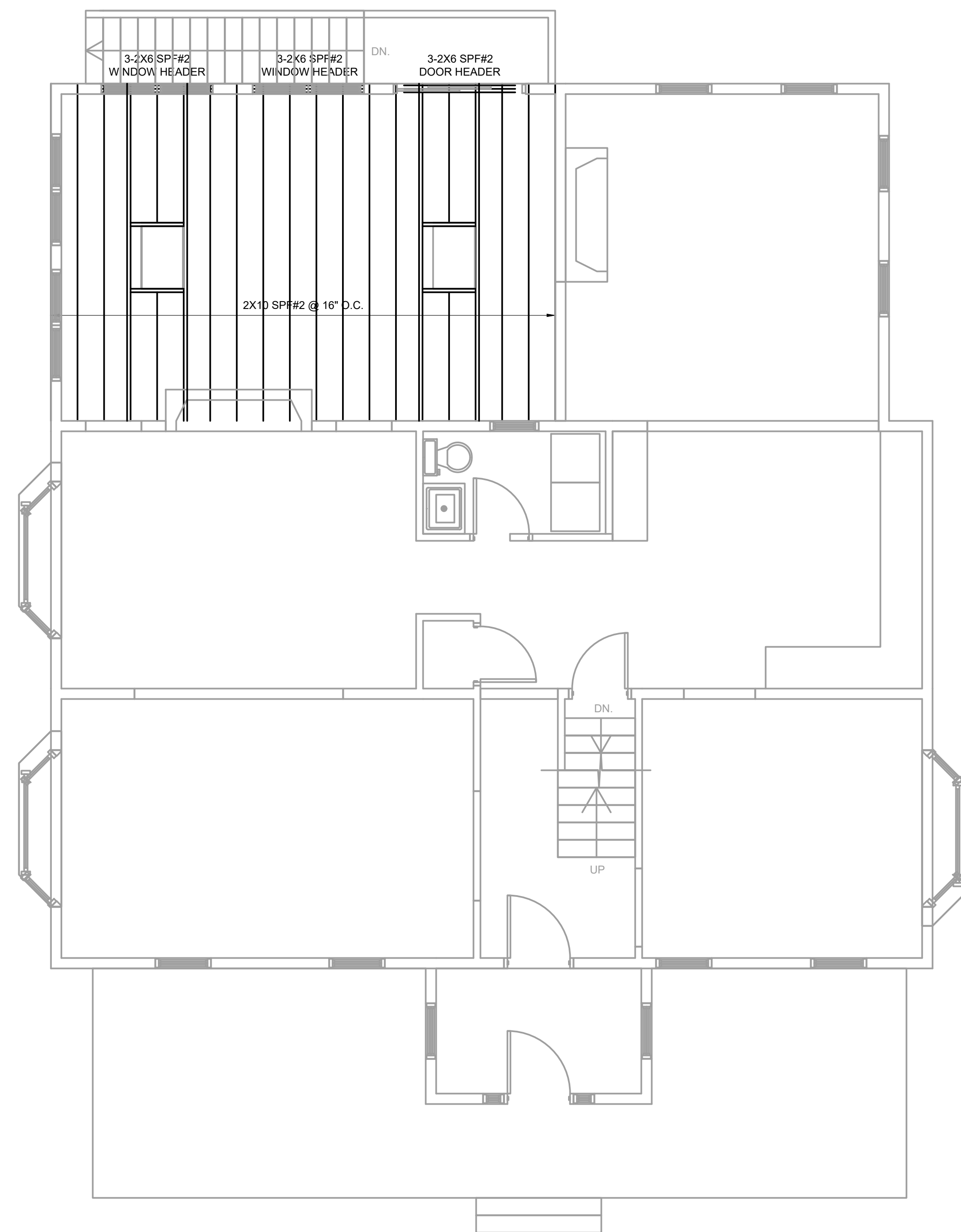
PRECAST FOOTING/FROST POST:
 ALLOWABLE LOAD BEARING AT TOP =
 $4000\text{PSI} \times (8" \times 8") / 2.22 = 115,315\text{LBS}$
 ALLOWABLE LOAD BEARING AT SOIL =
 $2000\text{PSF} \times (2' \times 2') = 8,000\text{LBS}$
 THEREFORE MAX ALLOWABLE LOAD APPLIED
 IS LIMITED BY THE SOIL'S CAPACITY OF
 8,000LBS, WHICH IS GREATER THAN THE MAX
 LOAD OF 1,871LBS FOR THE 12" SONOTUBE

GENERAL NOTES:
 1. CONCRETE 4000 PSI IN 28 DAYS.
 2. CALCULATIONS BASED ON SOIL PRESSURE OF 2000 PSF.

SHEA PRODUCT ID: SON44/SON45 PREPARED FOR: FILE NAME: FrostPostB50.dwg
 WEIGHT (LBS): 624#/725# DRAWN BY: ARO DATE: 03/01/2018 PAGE: M7.1
 773 Salem Street - Wilmington, MA | 153 Cranberry Hwy - Rochester, MA | 87 Havenhill Road - Amesbury, MA | 100 Old Tompkins Rd - Northampton, MA
 Specifications subject to change without notice



PROPOSED SUNROOM EXTENSION FRAMING PLAN
 SCALE: $\frac{1}{4}"=1'-0$



PROPOSED SUNROOM ROOF FRAMING PLAN
 SCALE: $\frac{1}{4}"=1'-0$

PROPOSED ADDITION - SINGLE FAMILY DWELLING
 53 THUNDER RD. SUDBURY, MA.

TITLE	CHECKED BY:
DRAWN BY:	COMMENTS:
DWG NO:	
S-2	