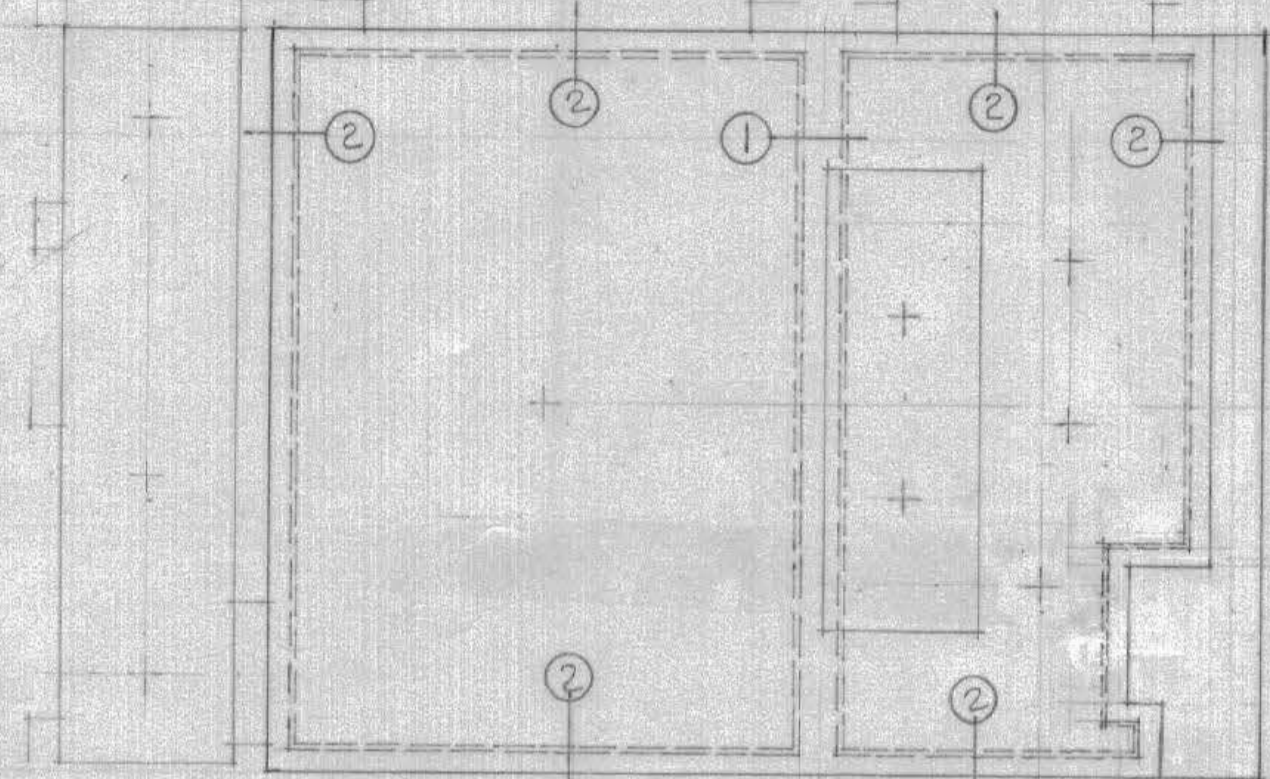
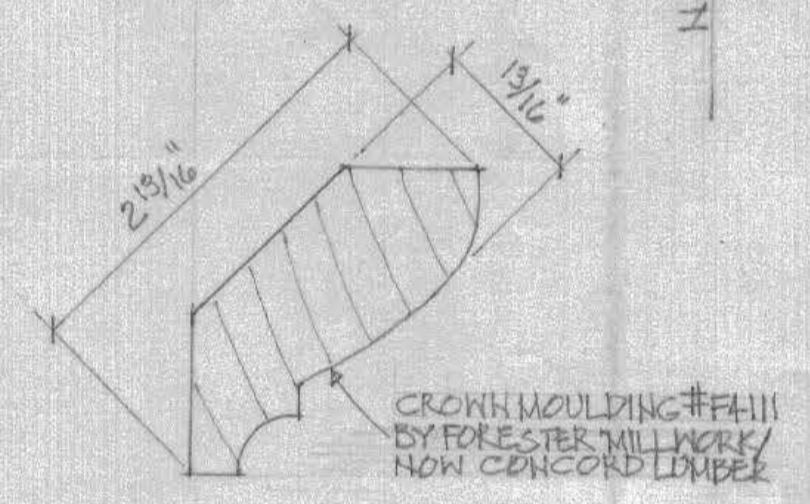


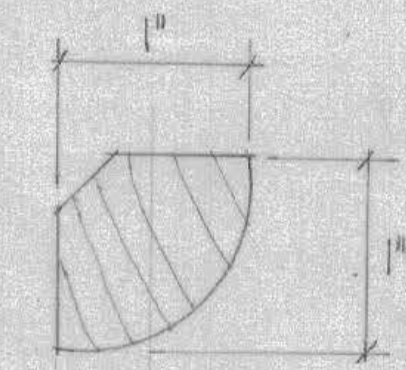
① CEILING FAKE BEAM DET. IN DINING RM./KITCHEN AREA SCALE 3"=1'-0"
 ② HALF BEAM DETAIL IN DINING RM./KITCHEN AREA SCALE 3"=1'-0"



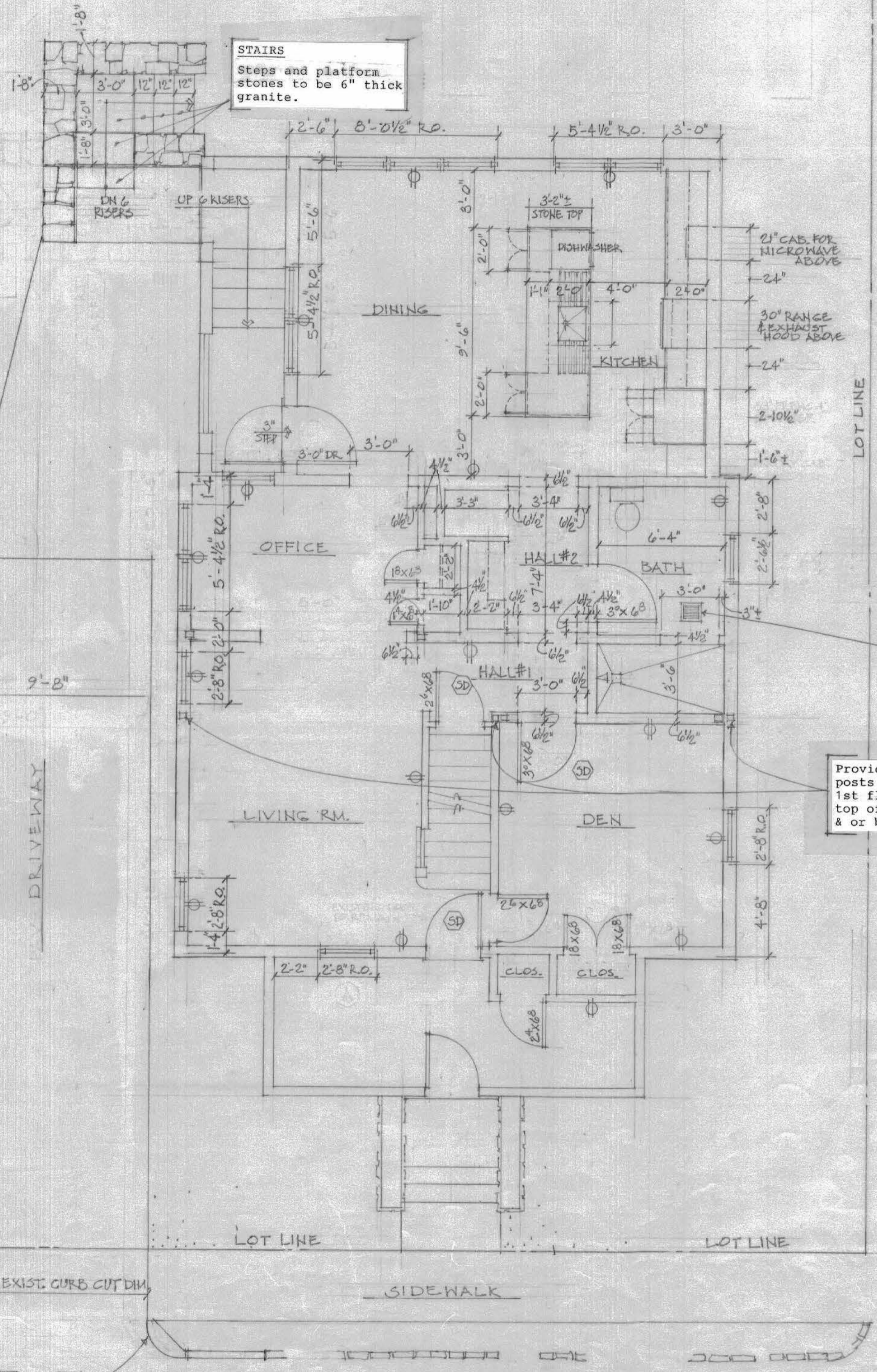
ADDITION REFLECTED CEILING PLAN SCALE 1/4"=1'-0"



CROWN MOULDING FOR 1ST FLOOR LIVING RM., OFFICE, DEN & HALL#1 SCALE = FULL SIZE



CROWN MOULDING AT BATH & HALL#2 SCALE = FULL SIZE



STAIRS
 Steps and platform stones to be 6" thick granite.

NOTE: ALL EXISTING DOORS, DOOR FRAMES & TRIM TO BE REMOVED (WITH THE EXCEPTION OF FRONT ENTRY DOORS) & REPLACED BY NEW FRAMES, CASINGS & TRIM.

PANASONIC WHISPER FIT VENT FAN #FY-09VF1 @90 CFM & 1.A. SONES

Provide 3 1/2" x 3 1/2" sq. PSL posts from underside of 1st fl. wall plate down to top of foundation wood sill & or beam at stair wall.

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

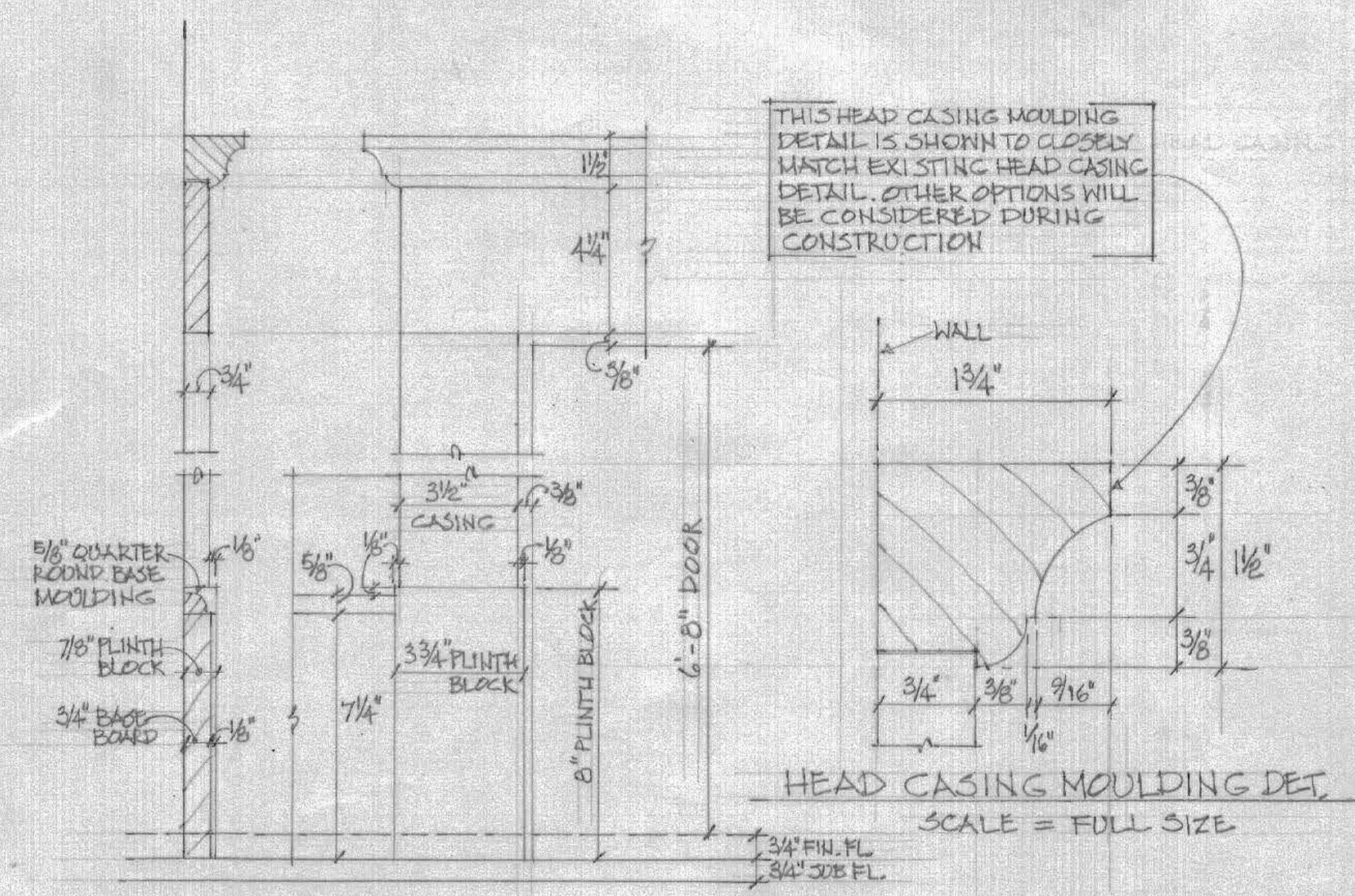
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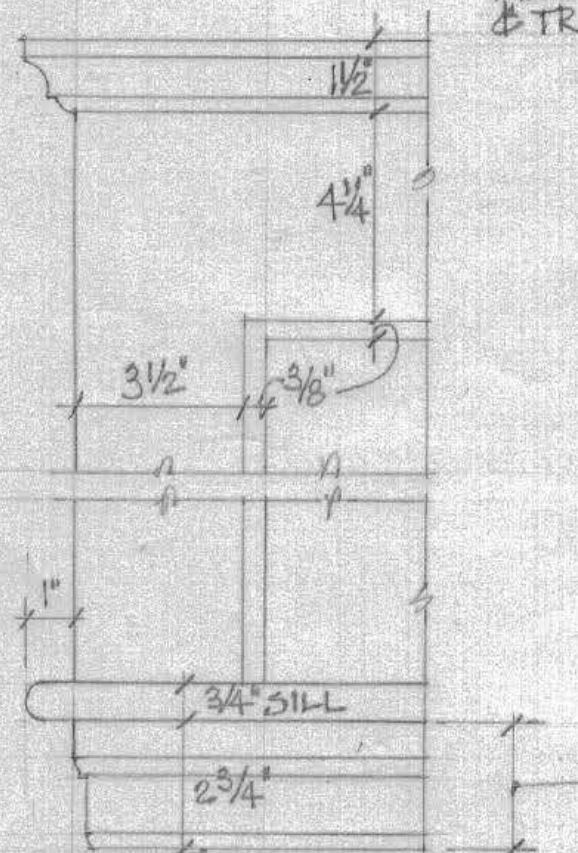


BERGGREN HOUSE
 2 RESERVOIR ROAD
 ARLINGTON, MASS.

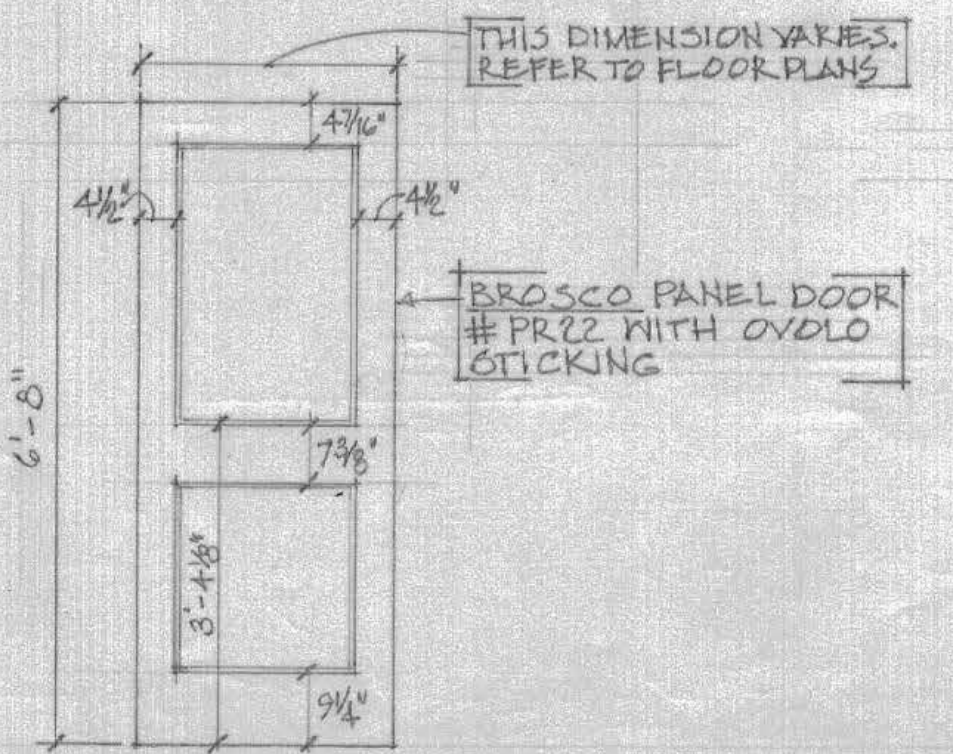


1ST & 2ND FL. TYP. DETAILS @ DOOR & CASED OPENINGS
SCALE 3" = 1'-0"

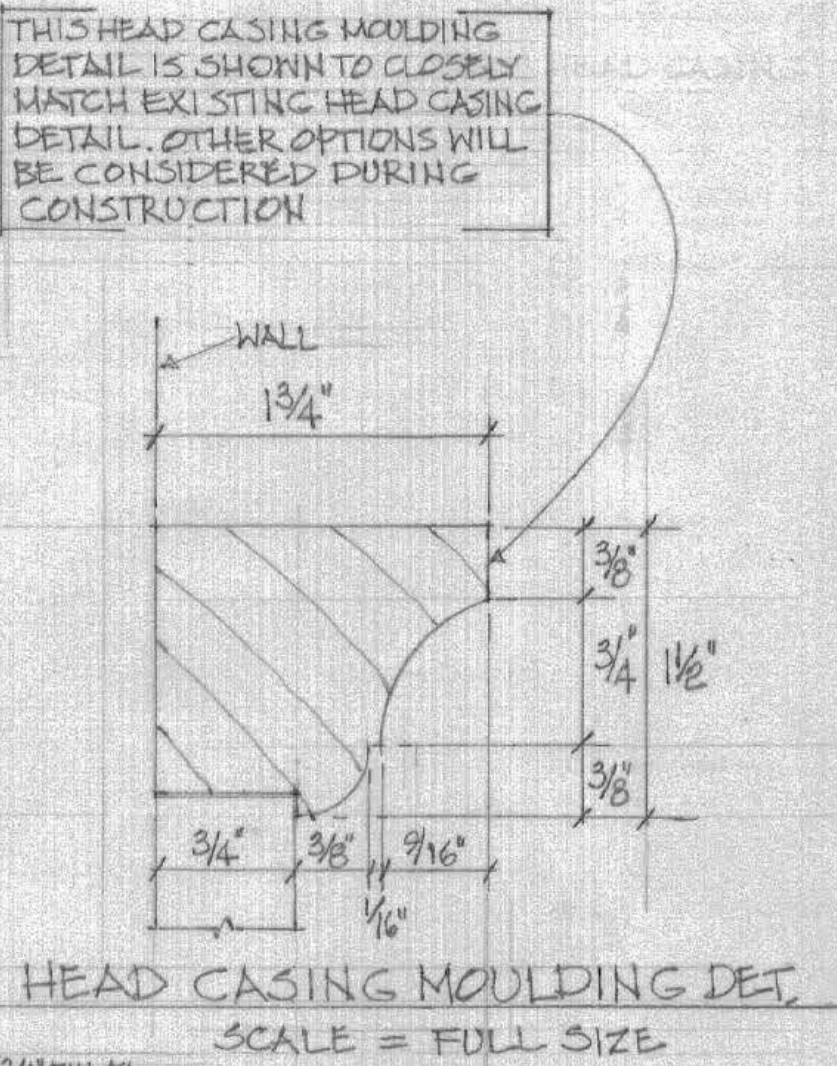
NOTE
ALL TRIM & MOULDINGS & TRIM TO BE POPLAR



1ST & 2ND FL. TYP. CASING DETAIL @ WINDOWS
SCALE 3" = 1'-0"

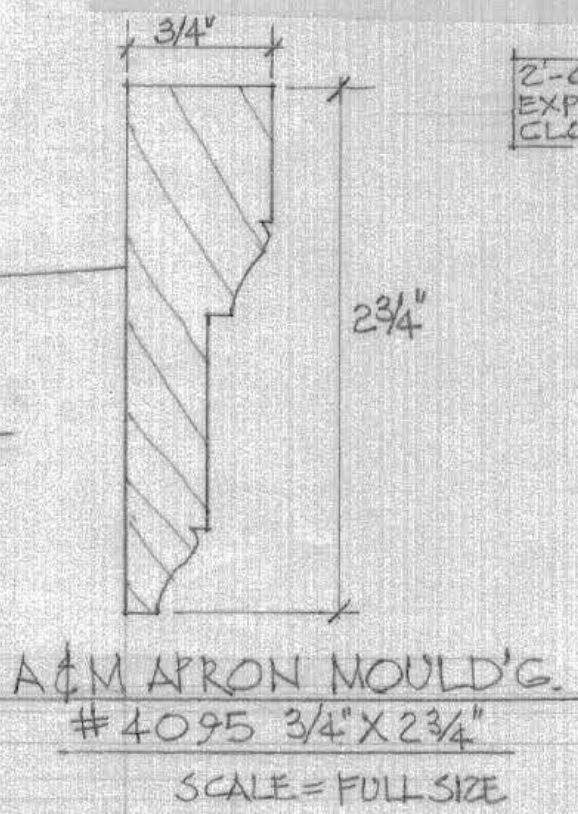


TYPICAL PRIMED PANEL DOOR FOR BOTH 1ST & 2ND FLOORS
SCALE 1/2" = 0"

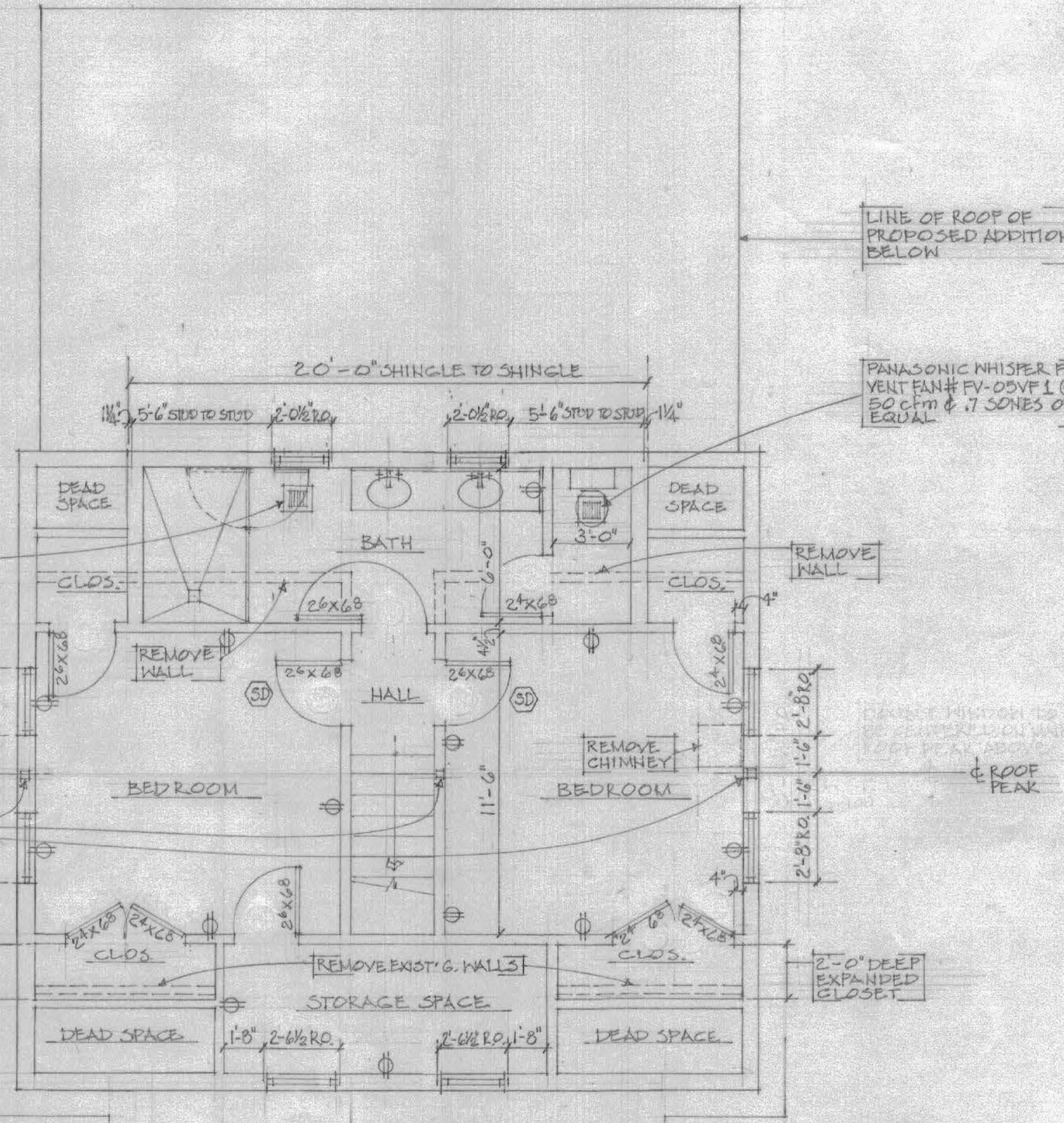


HEAD CASING MOULDING DET.
SCALE = FULL SIZE

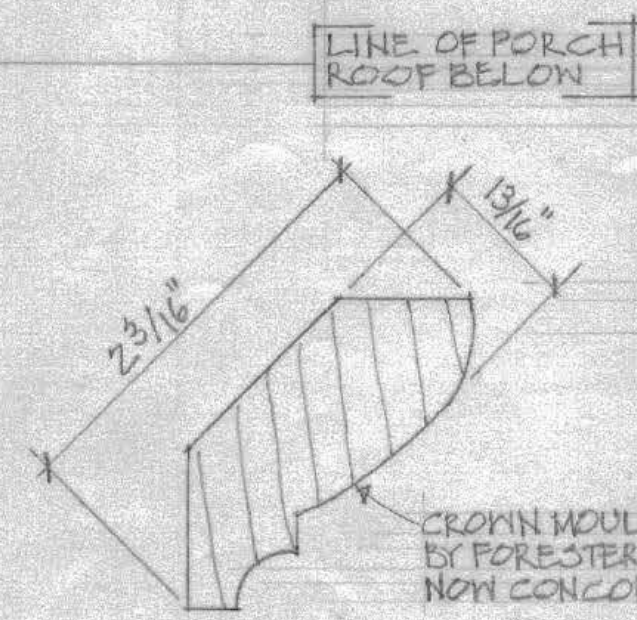
Provide 3 1/2" x 3 1/2" sq. PSL posts from underside of 2nd fl. wall plate down to top of 1st fl. wall plate.



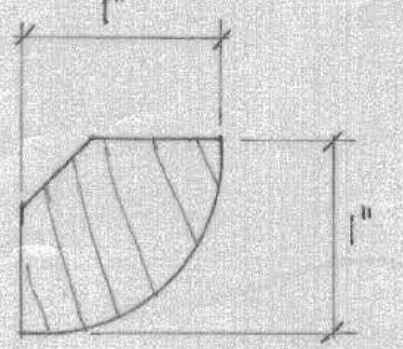
A & M APRON MOULD'G.
4095 3/4" X 2 3/4"
SCALE = FULL SIZE



SECOND FLOOR PLAN
SCALE 1/4" = 1'-0"



CROWN MOULDING FOR 2ND FLOOR BEDROOMS & STAIRHALL
SCALE = FULL SIZE



CROWN MOULDING AT BATH & WC NITCH
SCALE = FULL SIZE

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BERGGREN HOUSE
2 RESERVOIR ROAD
ARLINGTON, MASS.

SEPT. 9, 2022-ARB

A2

SHINGLES
Shingles to be clear eastern white cedar shingles, 16" long & 6" to weather, rebuttet & resquared.

WINDOWS
Windows to be by Anderson, E-Series (Alum Clad outside & primed wood inside), with HP glass Dual Pane, Low-E4 standard, Argon Filled Simulated Divided Light (SDL) with 5/8" grille bars (chamber grilles outside & Ovolo grilles inside). Window types as follows:

- Type (A) TCLDH2850 Double Hung
- Type (B) AAX2626 Awning
- Type (C) AAX2029 Awning

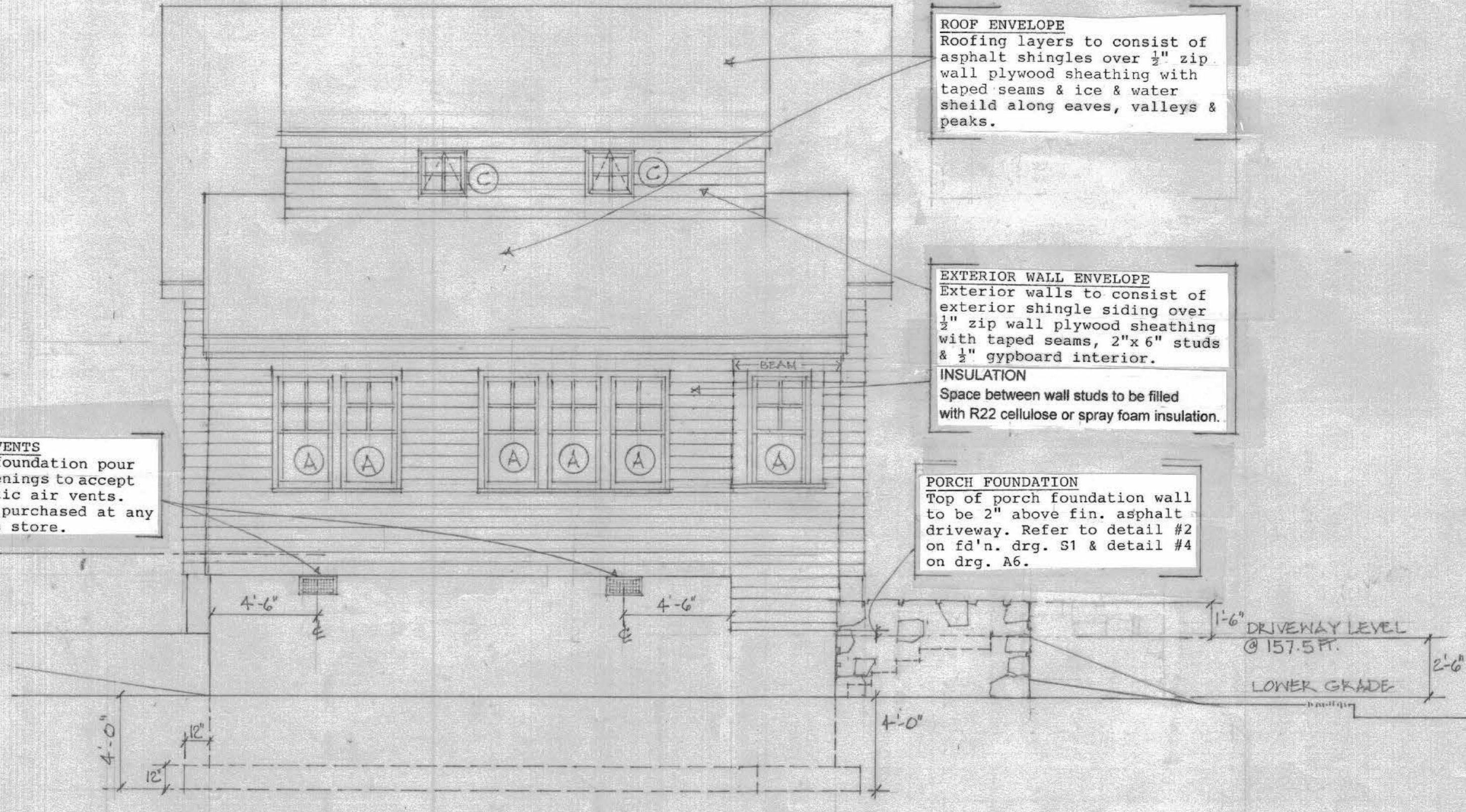
FOUNDATION VENTS
During the foundation pour form out openings to accept RABL automatic air vents. They can be purchased at any ACE hardware store.

ROOF ENVELOPE
Roofing layers to consist of asphalt shingles over 1/2" zip wall plywood sheathing with taped seams & ice & water sheild along eaves, valleys & peaks.

EXTERIOR WALL ENVELOPE
Exterior walls to consist of exterior shingle siding over 1/2" zip wall plywood sheathing with taped seams, 2"x 6" studs & 1/2" gypboard interior.
INSULATION
Space between wall studs to be filled with R22 cellulose or spray foam insulation.

PORCH FOUNDATION
Top of porch foundation wall to be 2" above fin. asphalt driveway. Refer to detail #2 on fd'n. drg. S1 & detail #4 on drg. A6.

- EXISTING STRUCTURE GENERAL NOTES**
- Existing frame structure inclusive of roof framing, wall framing, floor framing & foundation to remain except where otherwise indicated on drawings.
 - All windows to be removed from exterior walls.
 - All interior finishes to be removed from exterior walls.
 - All exterior walls to receive 2"x 6" studs sistered onto existing 2"x 4" studs to acheive depth of insulation required by code.
 - Existing heating system, hot water delivery system & electrical system to be removed.



REAR ELEVATION
SCALE 1/4" = 1'-0"

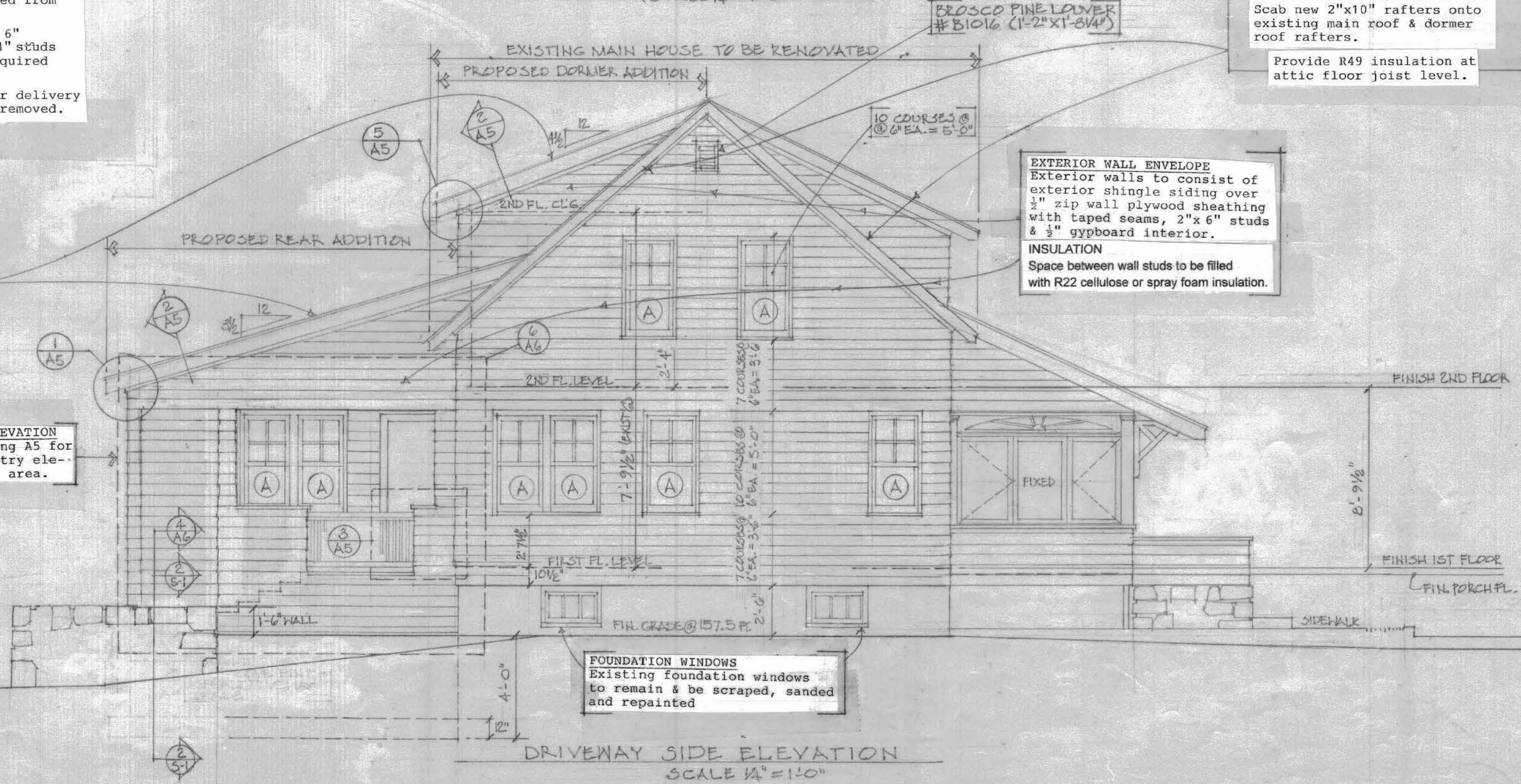
ROOF ENVELOPE
Roofing layers to consist of asphalt shingles over 1/2" zip wall plywood sheathing with taped seams & ice & water sheild along eaves, valleys & peaks.
Provide R49 insulation at first floor ceiling joist level.

LARGE SCALE ELEVATION
Refer to drawing A5 for large scale entry elevation of this area.

Scab new 2"x10" rafters onto existing main roof & dormer roof rafters.
Provide R49 insulation at attic floor joist level.

EXTERIOR WALL ENVELOPE
Exterior walls to consist of exterior shingle siding over 1/2" zip wall plywood sheathing with taped seams, 2"x 6" studs & 1/2" gypboard interior.
INSULATION
Space between wall studs to be filled with R22 cellulose or spray foam insulation.

FOUNDATION WINDOWS
Existing foundation windows to remain & be scraped, sanded and repainted



DRIVENAY SIDE ELEVATION
SCALE 1/4" = 1'-0"

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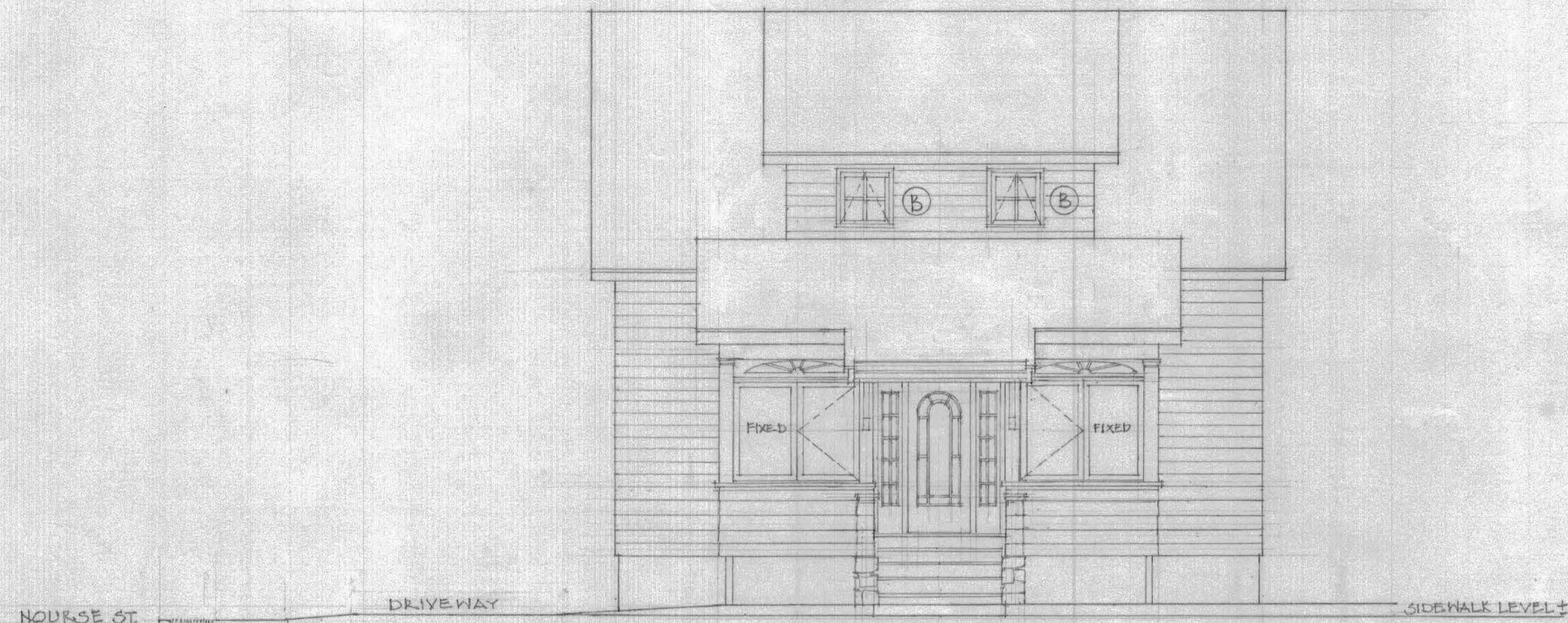


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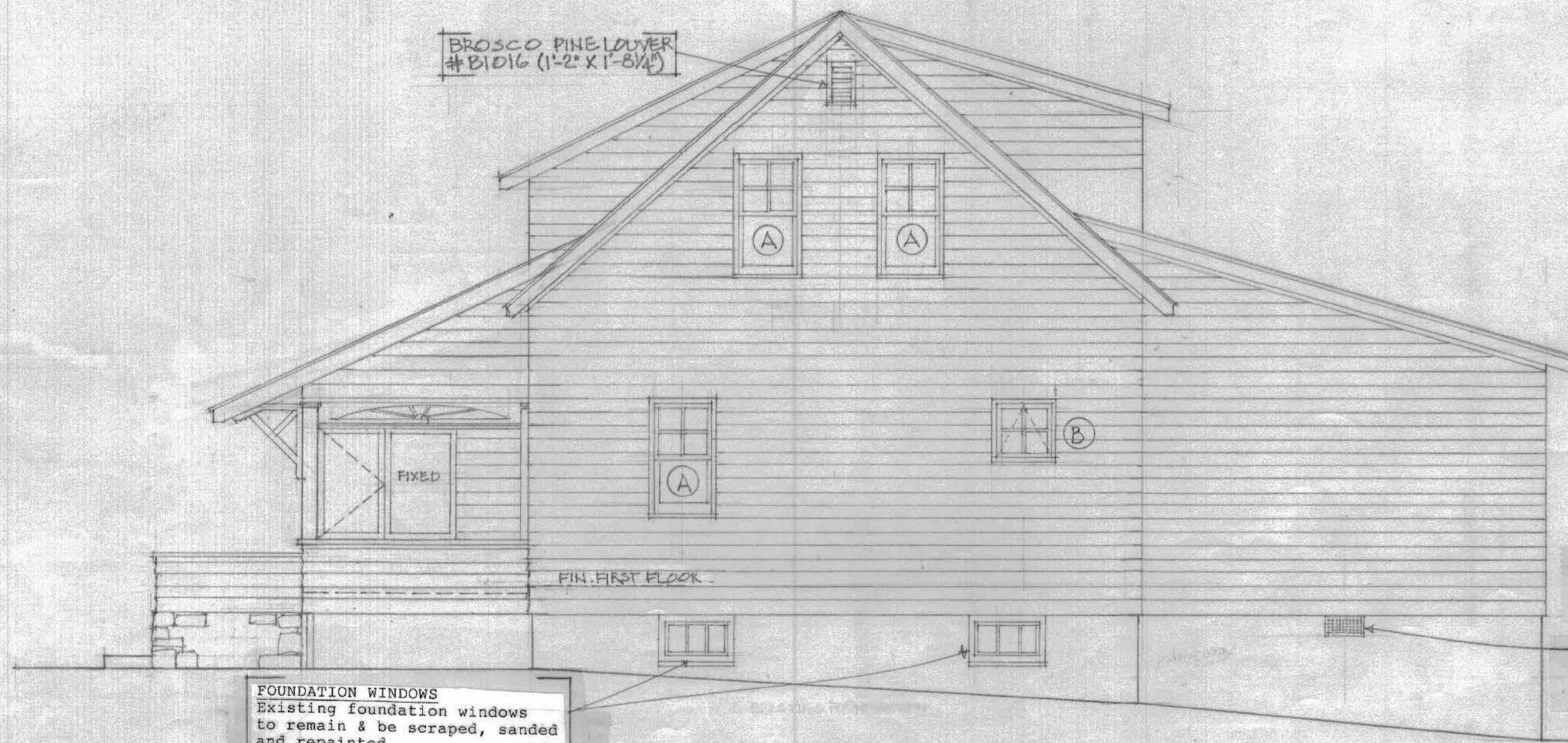


BERGGREN HOUSE
2 RESERVOIR ROAD
ARLINGTON, MASS.

SEPT. 8, 2024-ARB A3



RESERVOIR ROAD ELEVATION
SCALE 1/4" = 1'-0"



NEIGHBOR SIDE ELEVATION
SCALE 1/4" = 1'-0"

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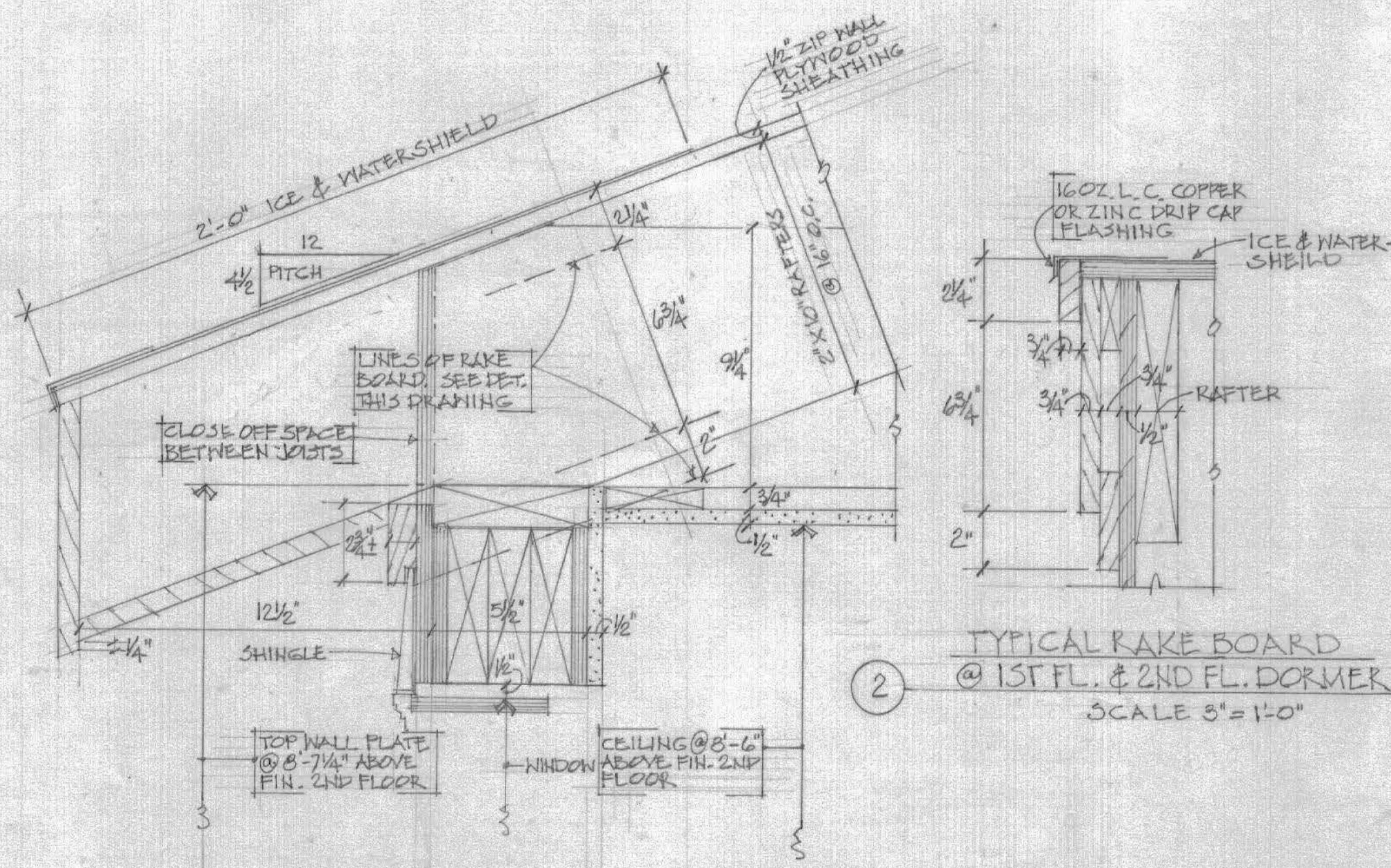
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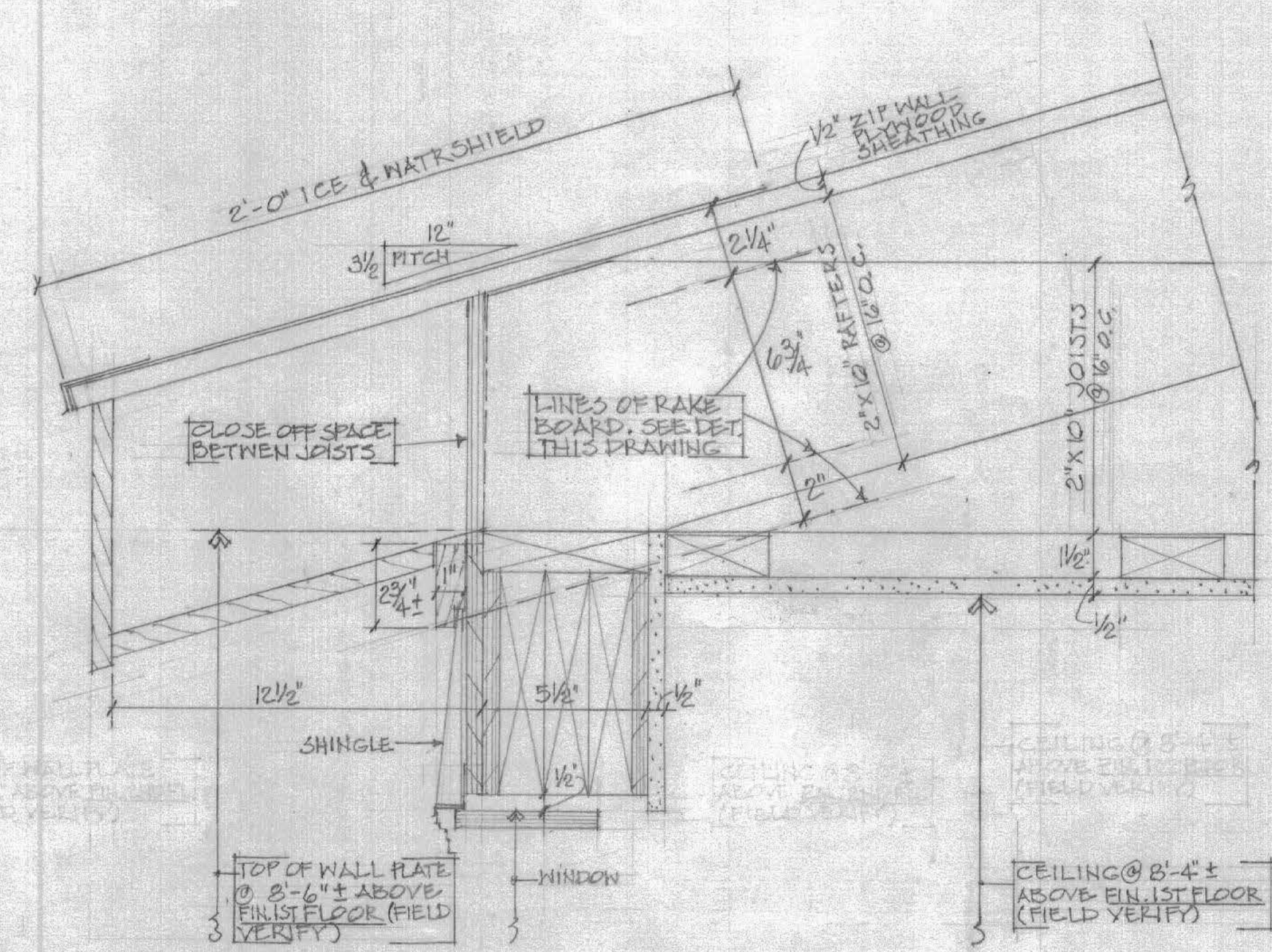
BERGGREN HOUSE
2 RESERVOIR ROAD
ARLINGTON, MASS.

FOUNDATION VENTS
During the foundation pour
form out openings to accept
RABL automatic air vents.
They can be purchased at any
ACE hardware store.

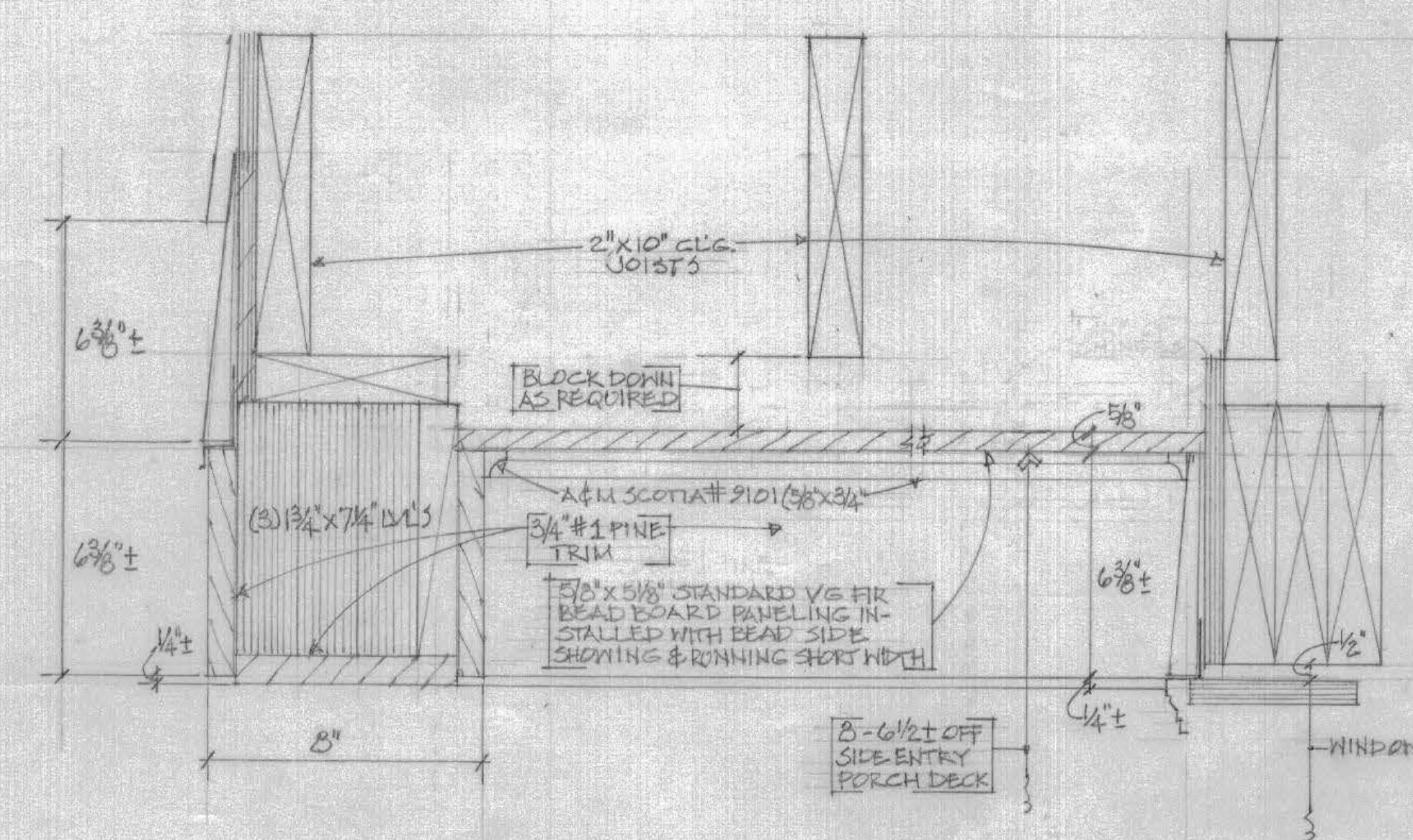
FOUNDATION WINDOWS
Existing foundation windows
to remain & be scraped, sanded
and repainted



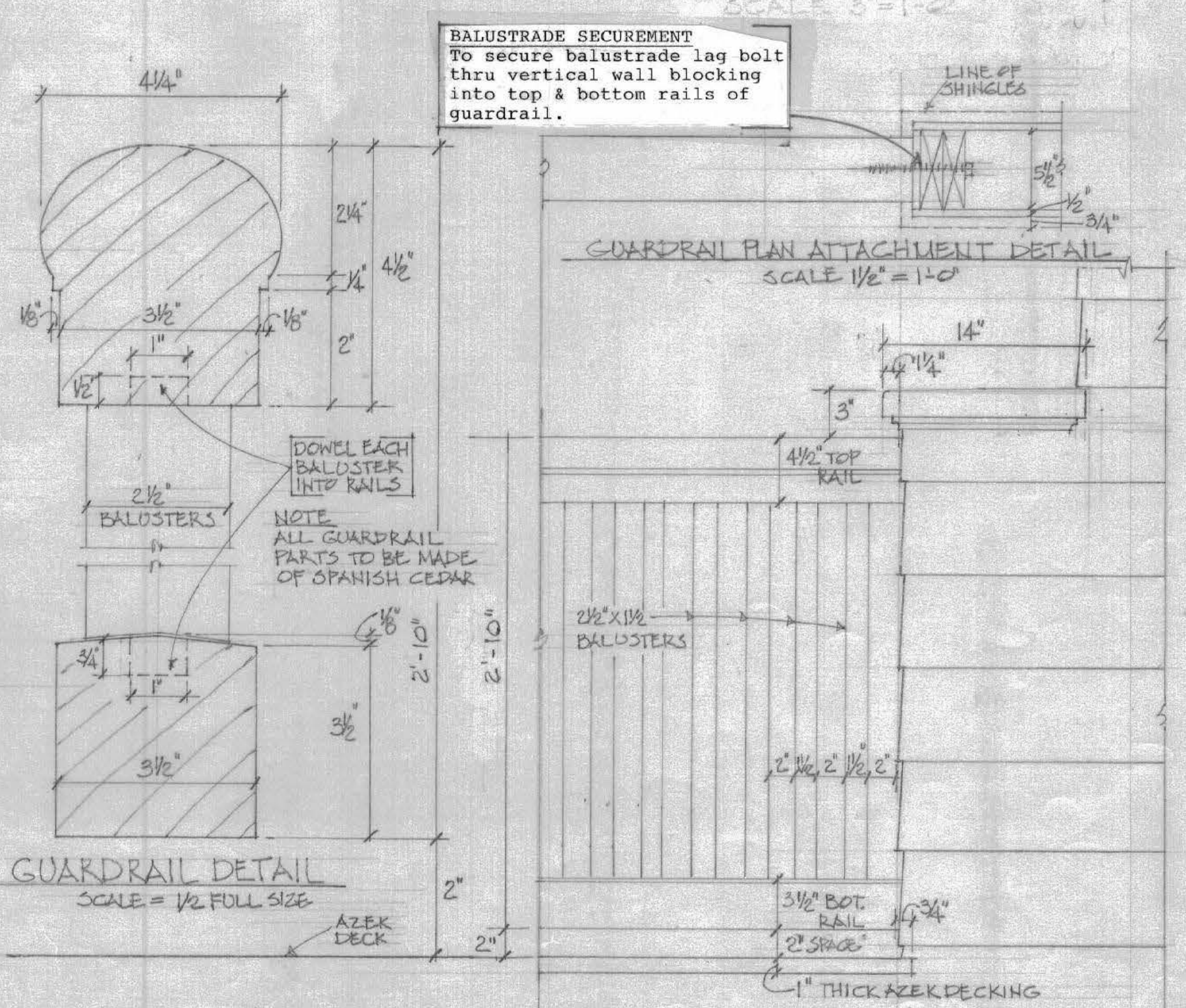
5 EAVE DETAIL @ 2ND FLOOR DORMER
SCALE 3" = 1'-0"



1 EAVE DETAIL @ FIRST FLOOR ADDITION
SCALE 3" = 1'-0"



4 SIDE PORCH CEILING SECTION
SCALE 3" = 1'-0"



GUARDRAIL DETAIL
SCALE = 1/2 FULL SIZE

3 SIDE ENTRY PORCH GUARDRAIL DETAIL
SCALE 1/2" = 1'-0"

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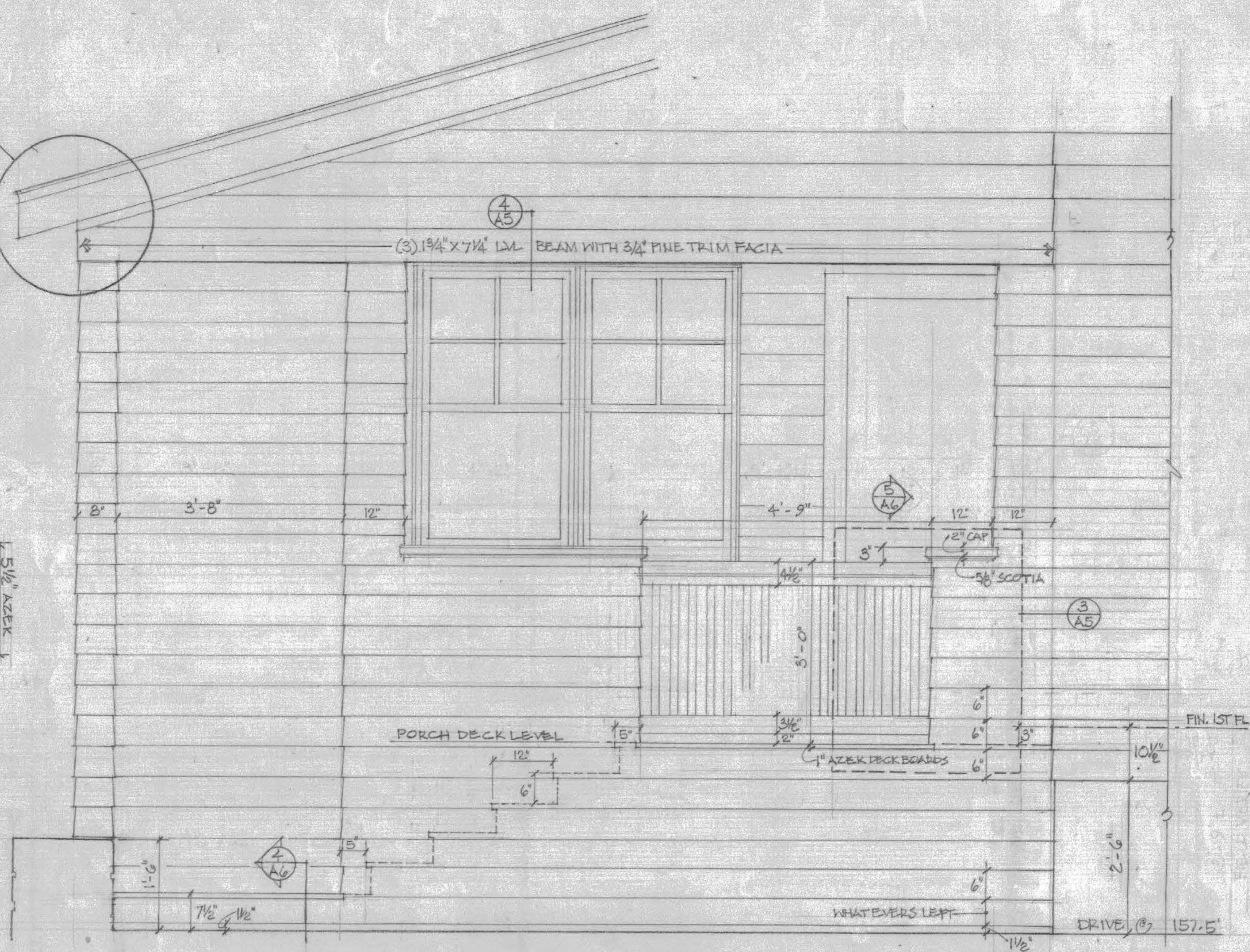
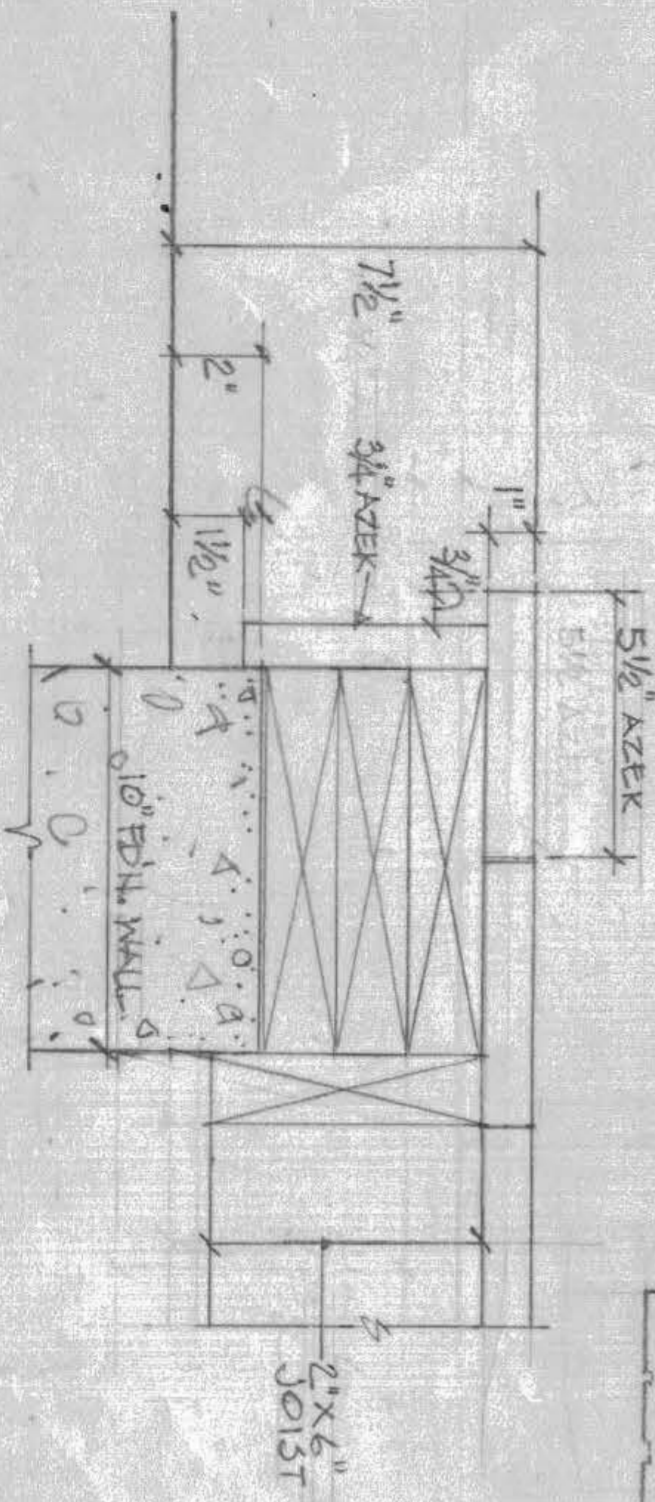


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PORCH F.D.N. DETAIL 4 @ 1ST STEP
SCALE 3"=1'-0"



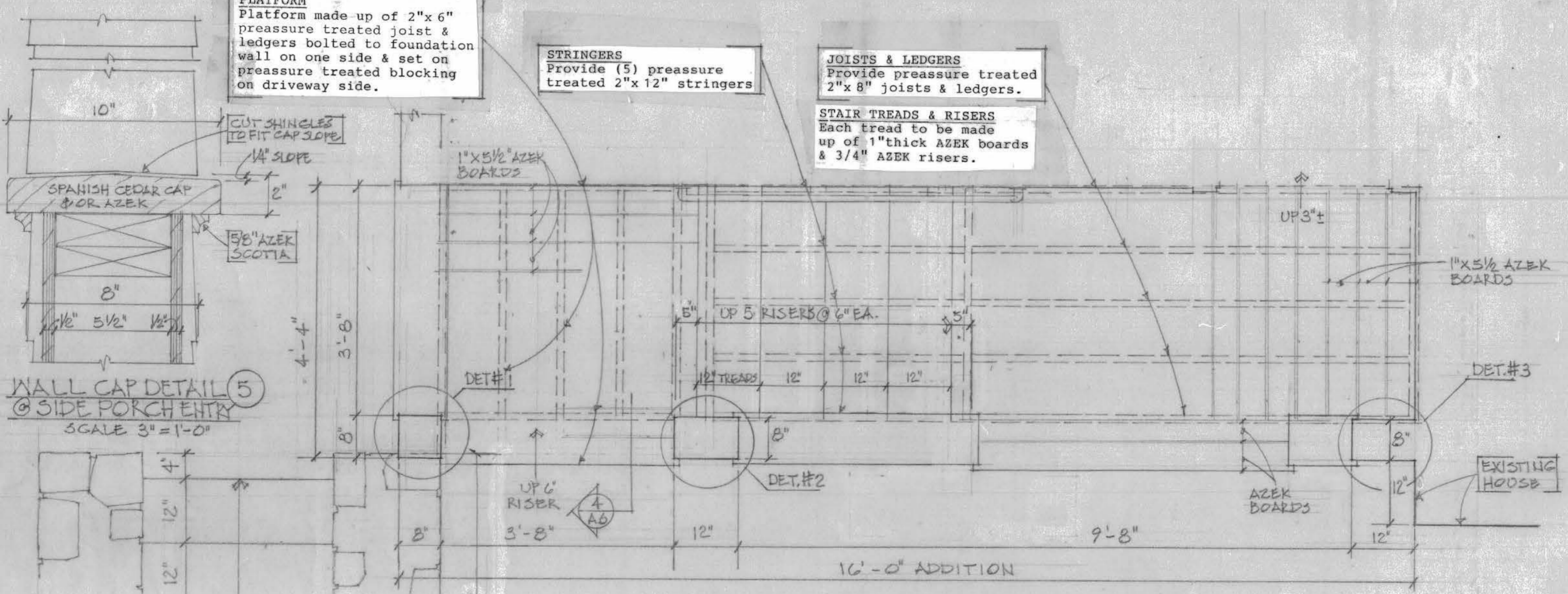
6 SIDE ENTRY PORCH ELEVATION
SCALE 3/4"=1'-0"

PLATFORM
Platform made up of 2"x6" pressure treated joist & ledgers bolted to foundation wall on one side & set on pressure treated blocking on driveway side.

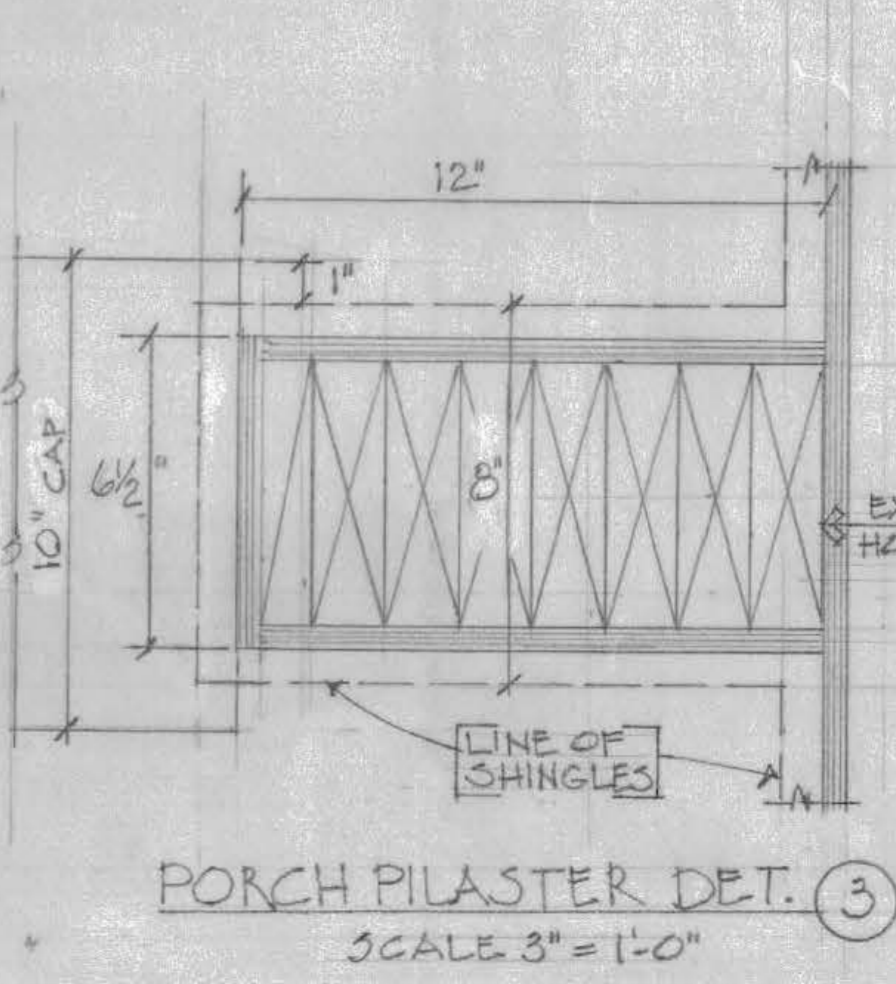
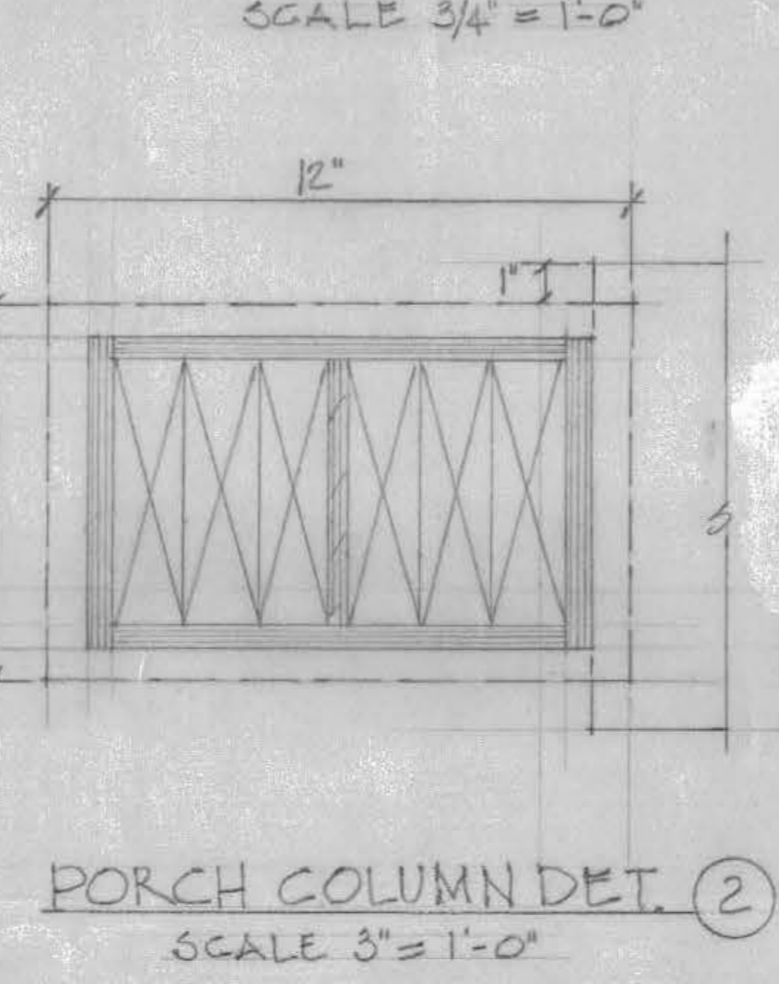
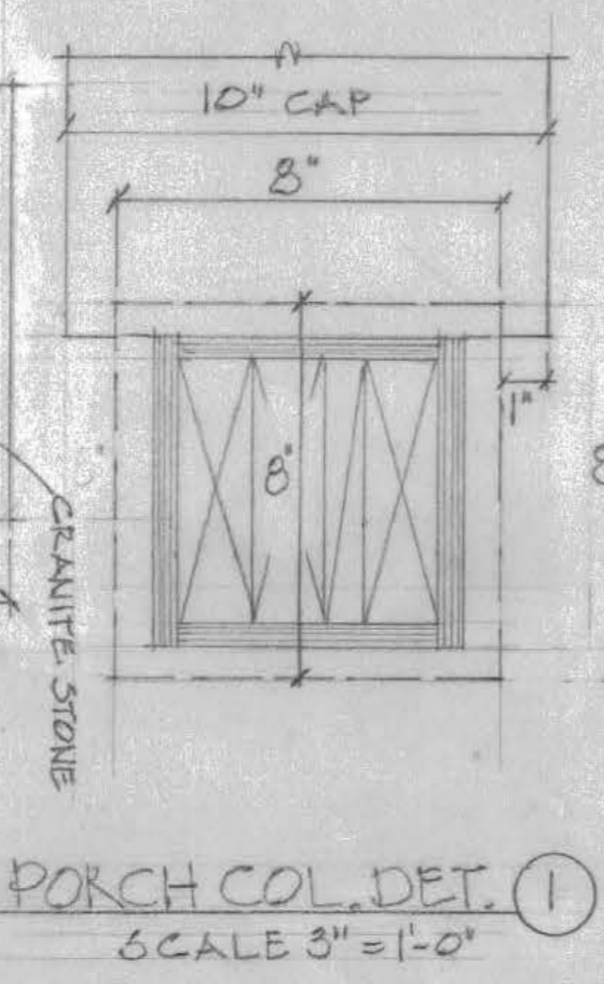
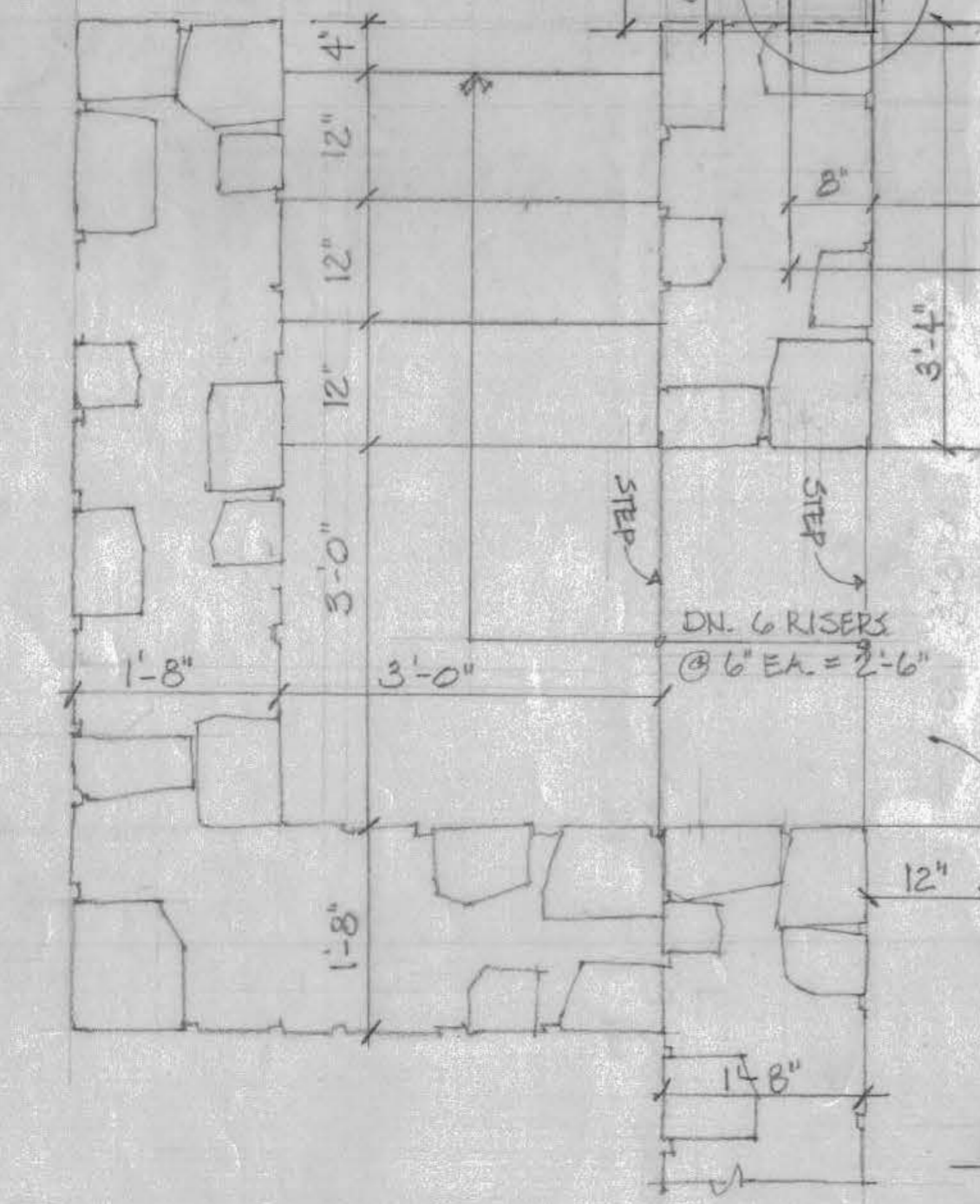
STRINGERS
Provide (5) pressure treated 2"x12" stringers

JOISTS & LEDGERS
Provide pressure treated 2"x8" joists & ledgers.

STAIR TREADS & RISERS
Each tread to be made up of 1" thick AZEK boards & 3/4" AZEK risers.



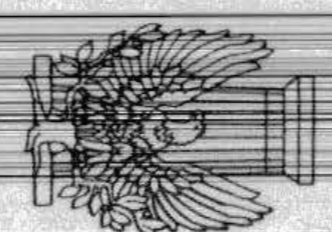
5 WALL CAP DETAIL @ SIDE PORCH ENTRY
SCALE 3"=1'-0"



BERGEREN HOUSE
2 RESERVOIR ROAD
ARLINGTON MASS.

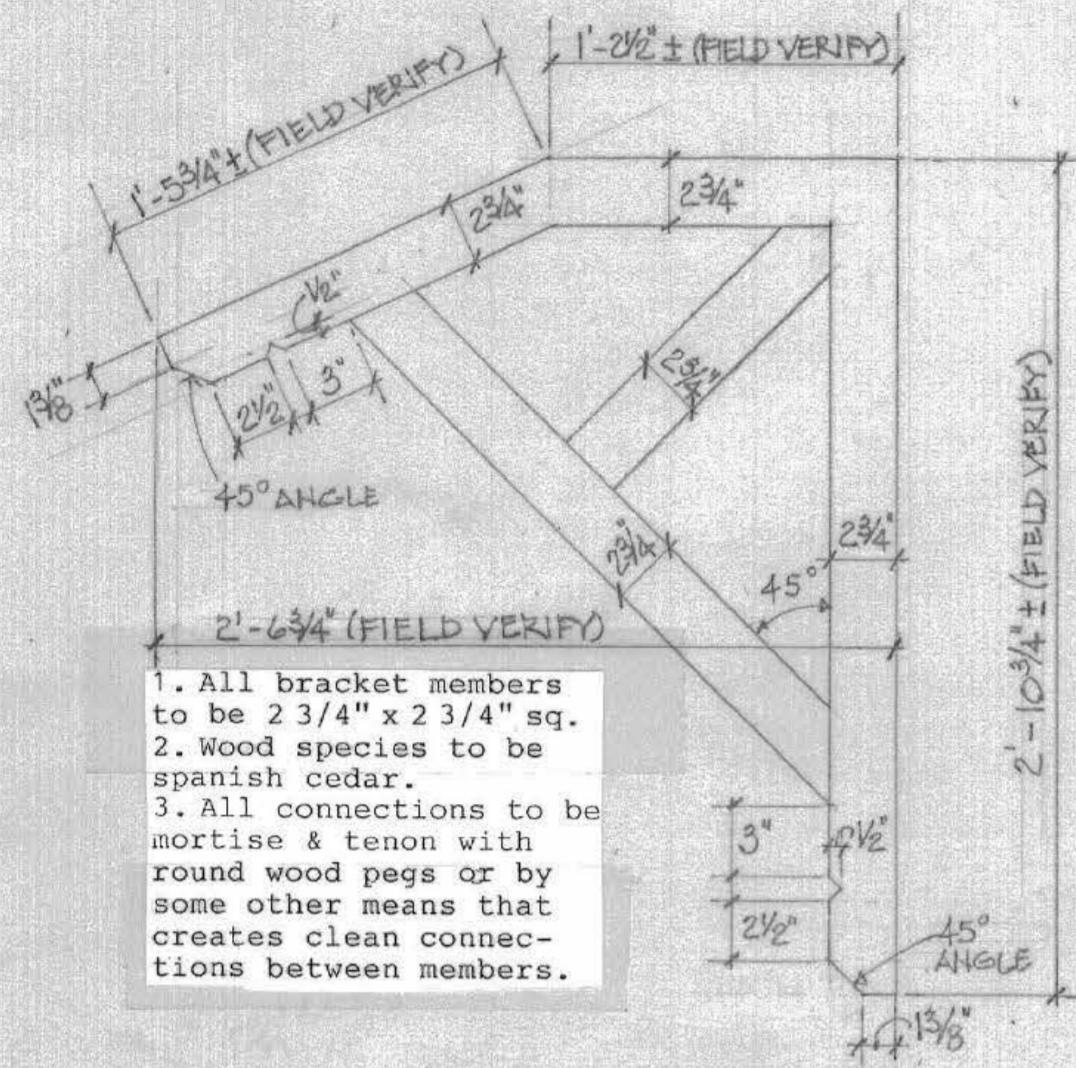


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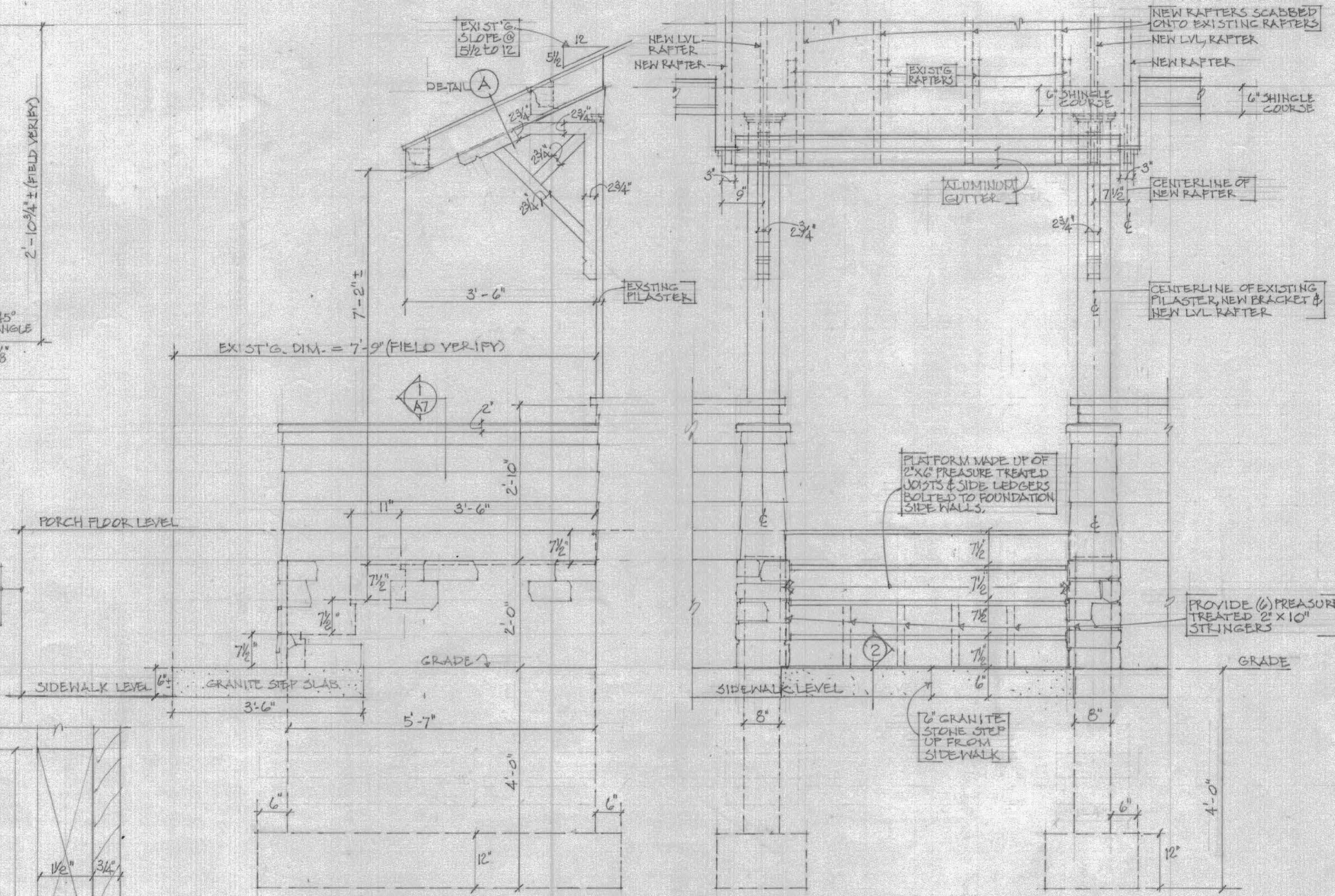


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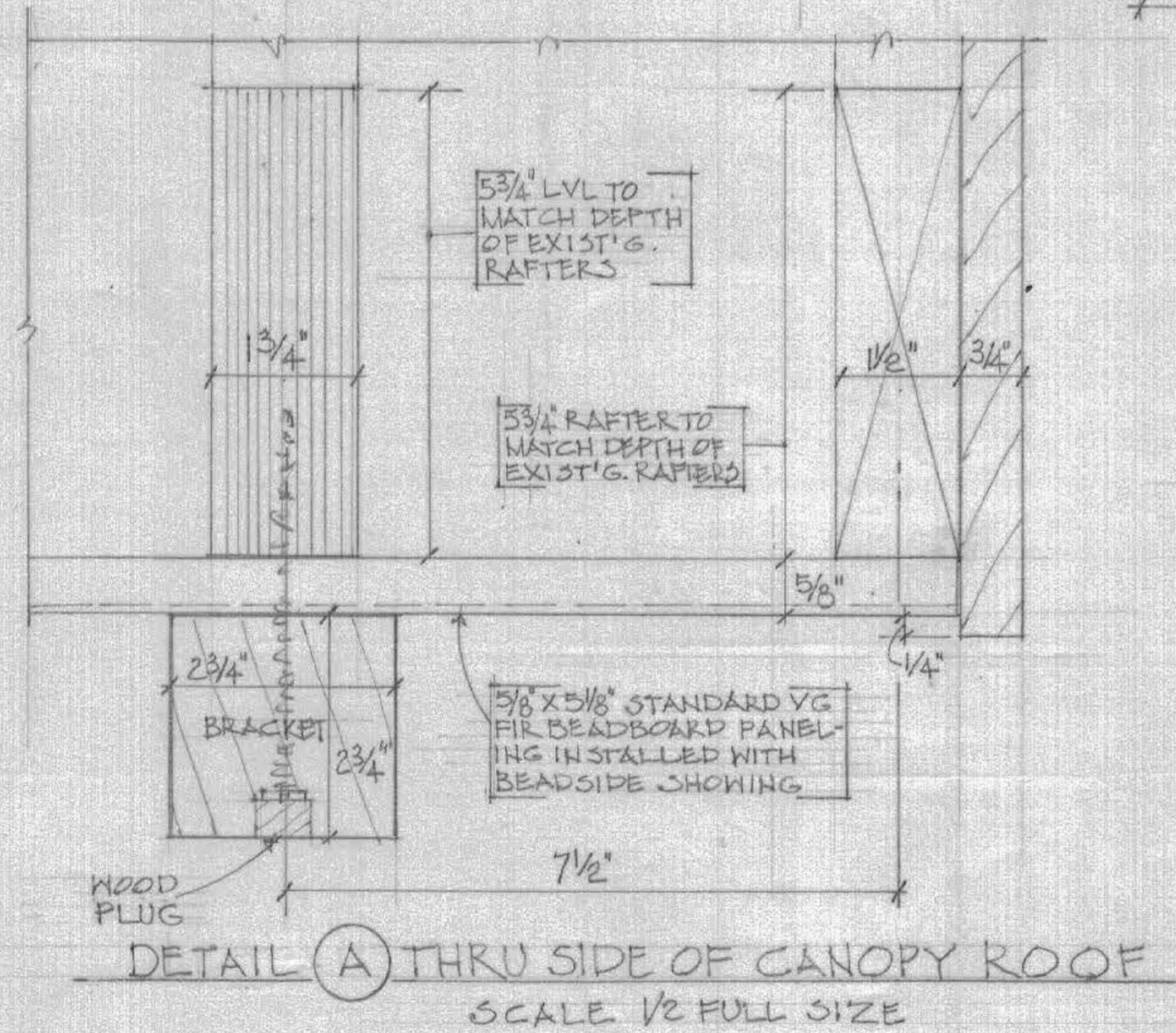


BRACKET DETAIL
SCALE 1/2" = 1'-0"

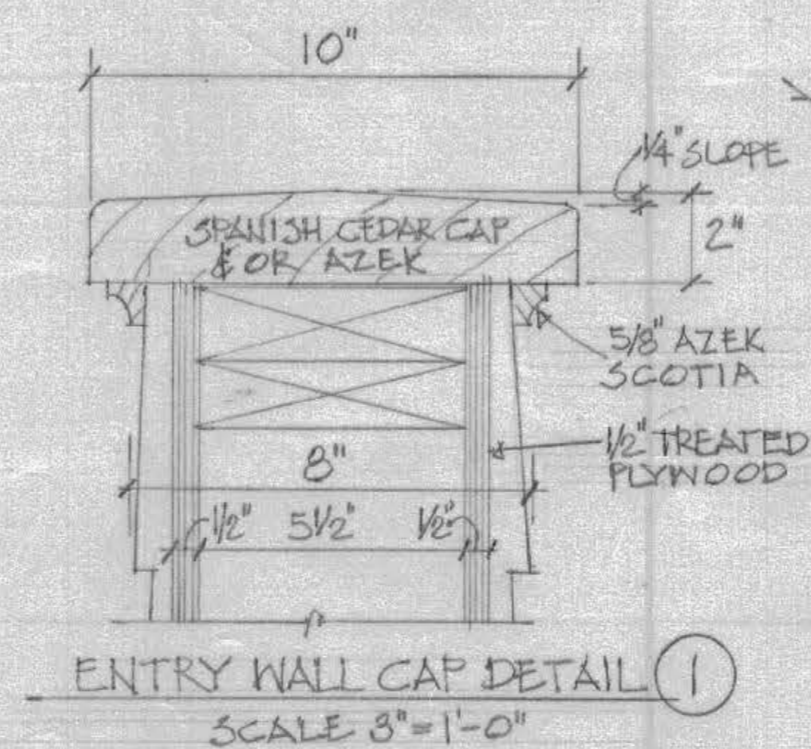


NEW FRONT ENTRY & ROOF CANOPY EXTENSION

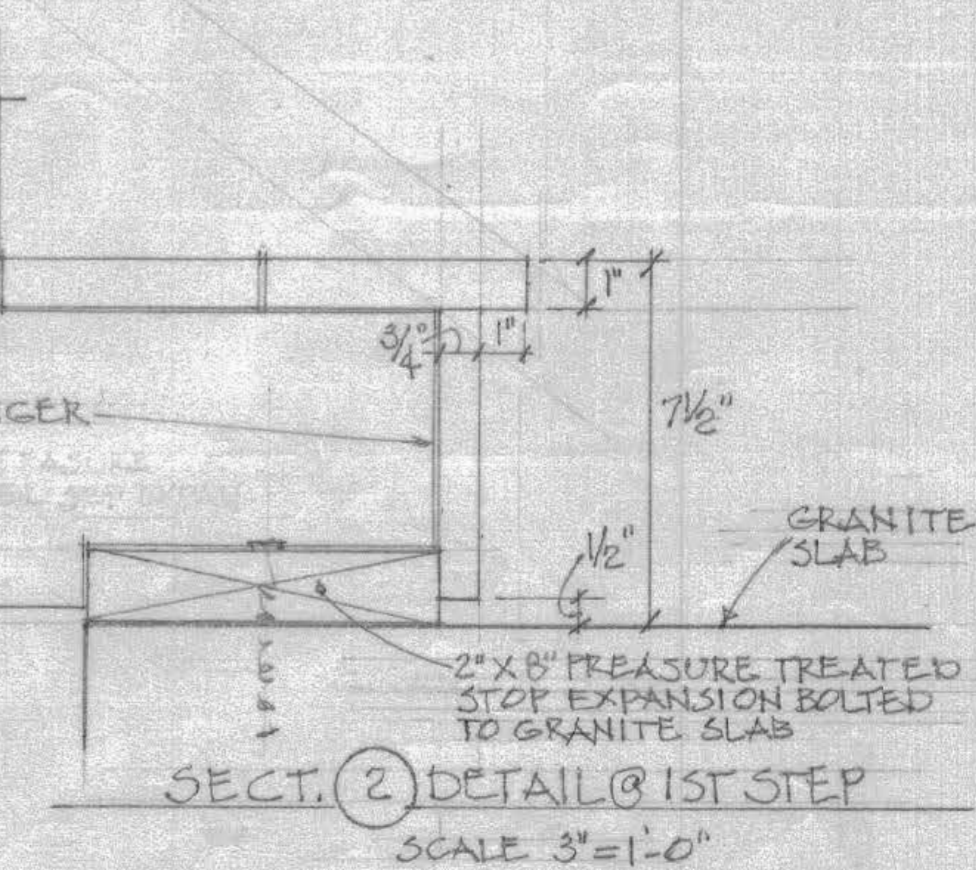
SCALE 3/4" = 1'-0"



DETAIL (A) THRU SIDE OF CANOPY ROOF
SCALE 1/2" FULL SIZE



ENTRY WALL CAP DETAIL (1)
SCALE 3" = 1'-0"



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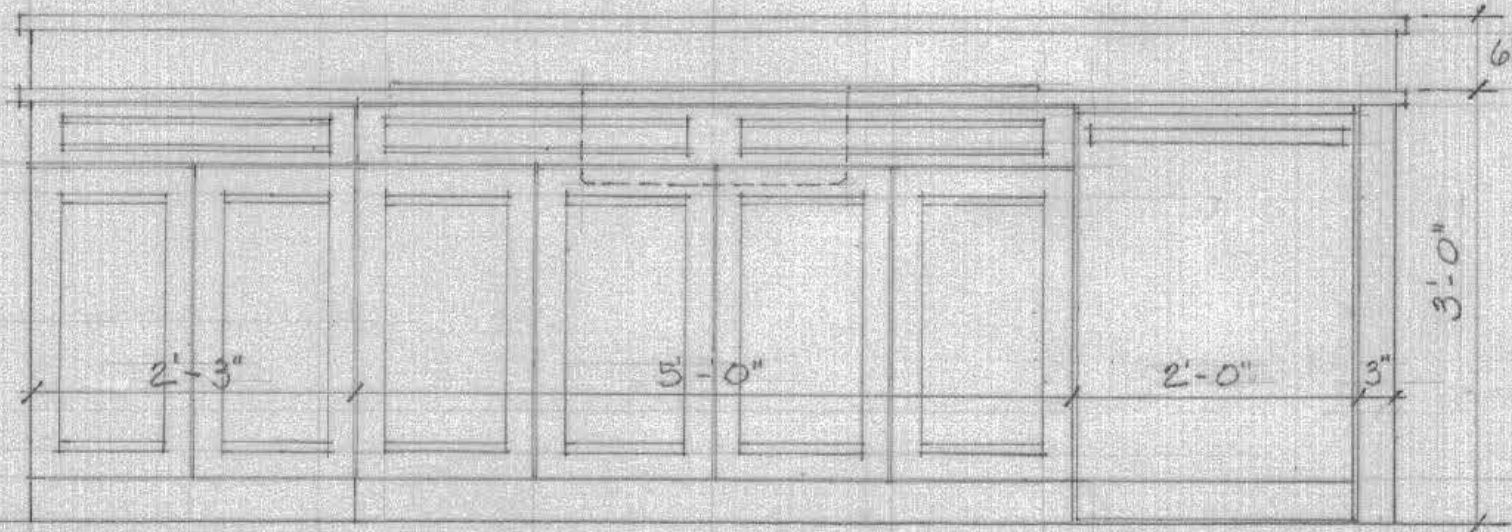
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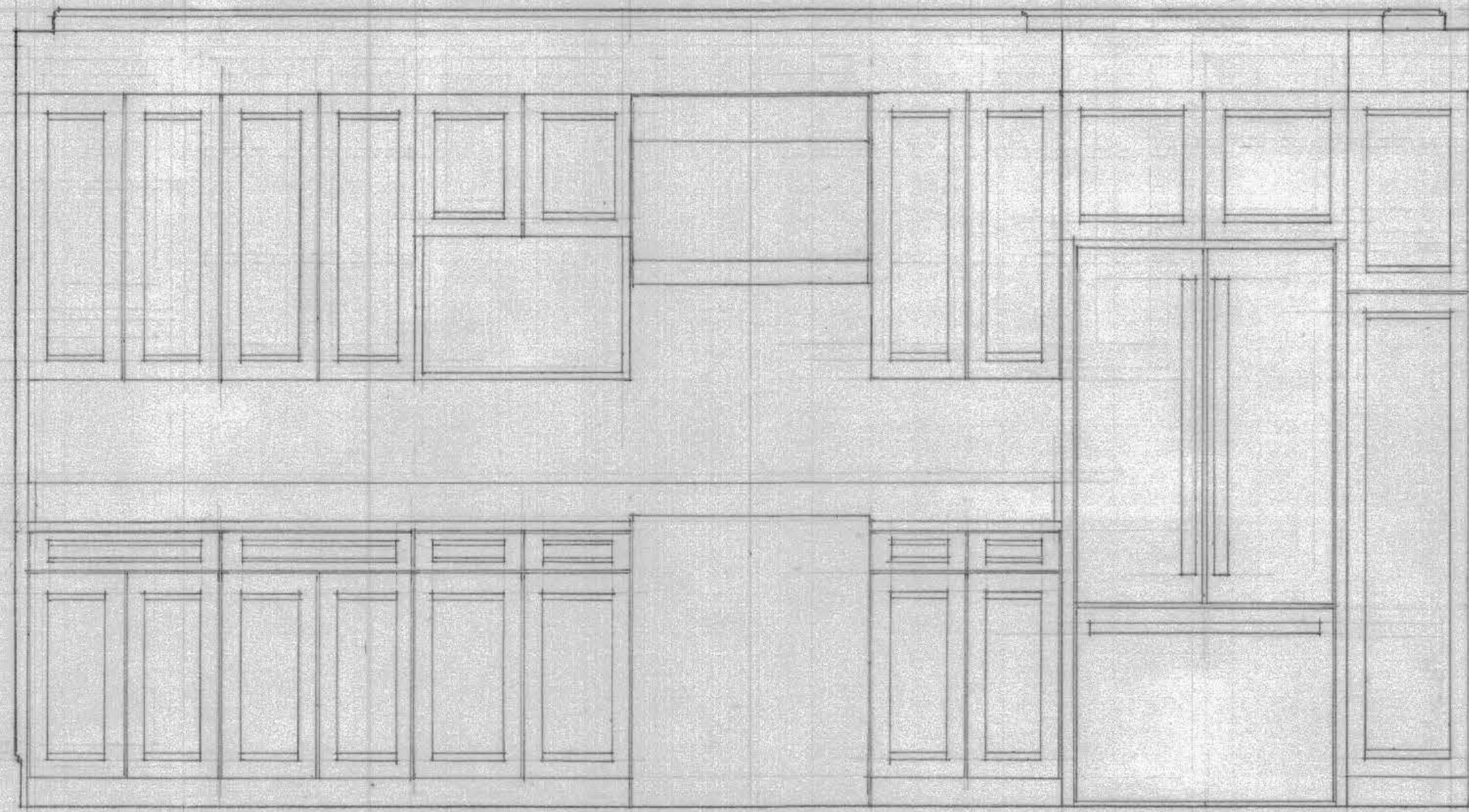
SEPT. 9 2024 ARB

A7



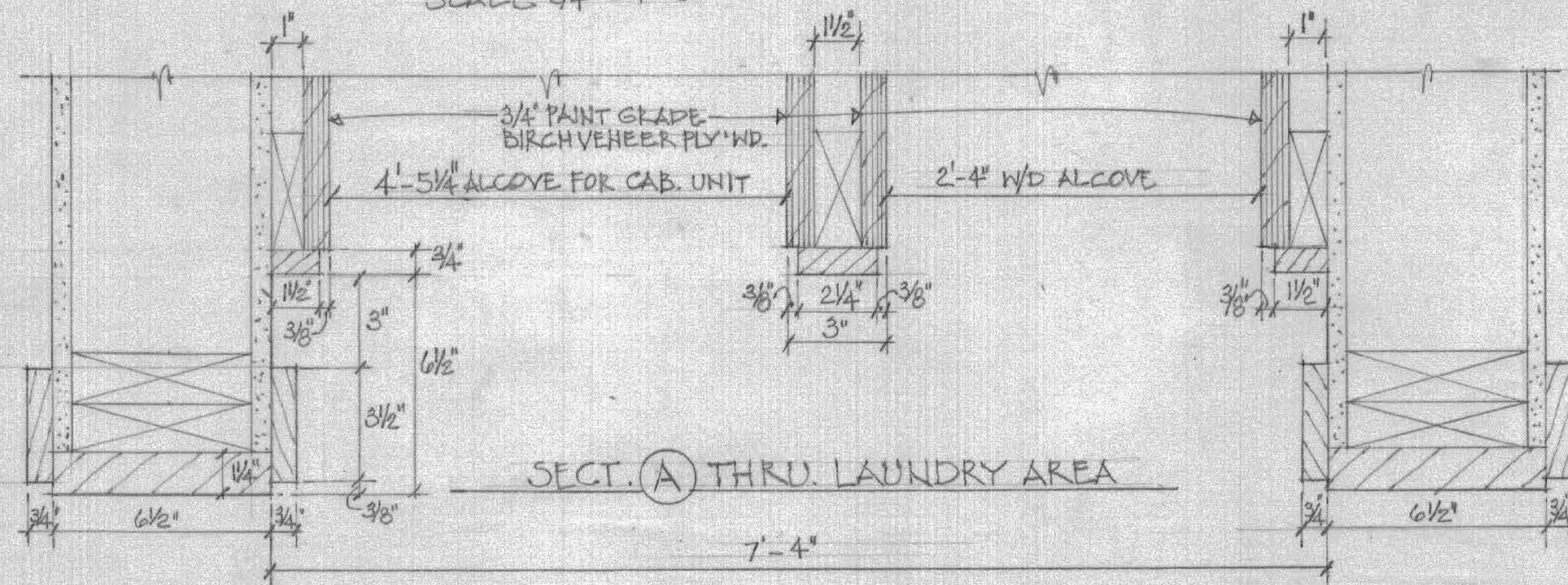
KITCHEN SIDE ISLAND ELEVATION

SCALE 3/4" = 1'-0"

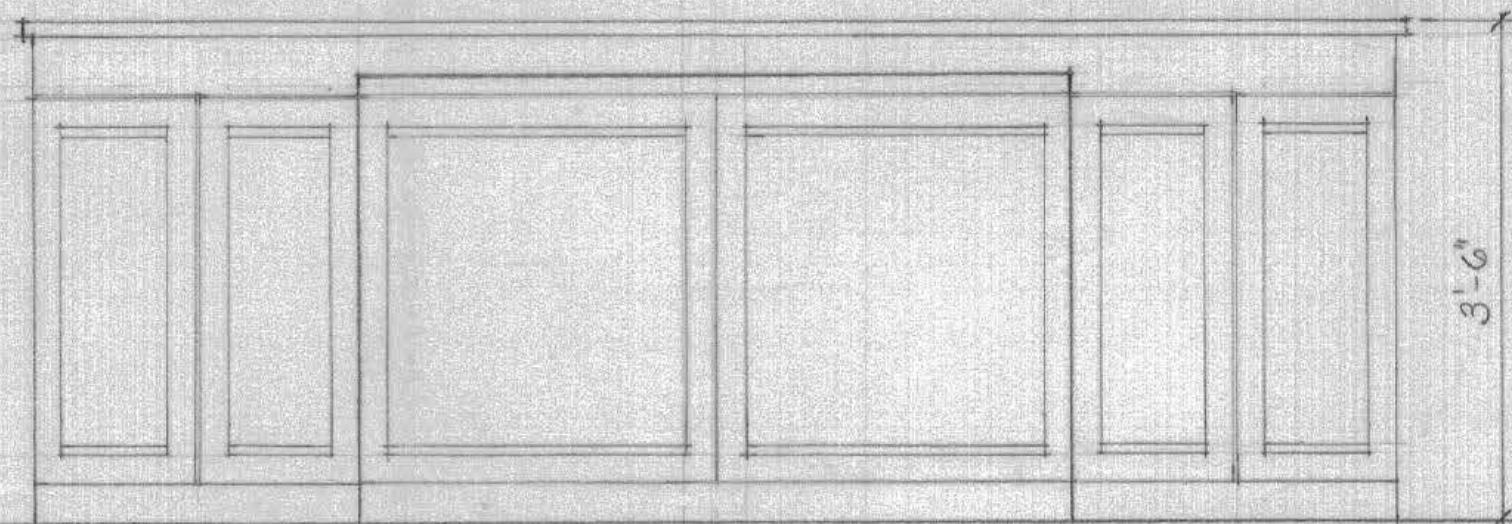


KITCHEN CABINET ELEVATION

SCALE 3/4" = 1'-0"

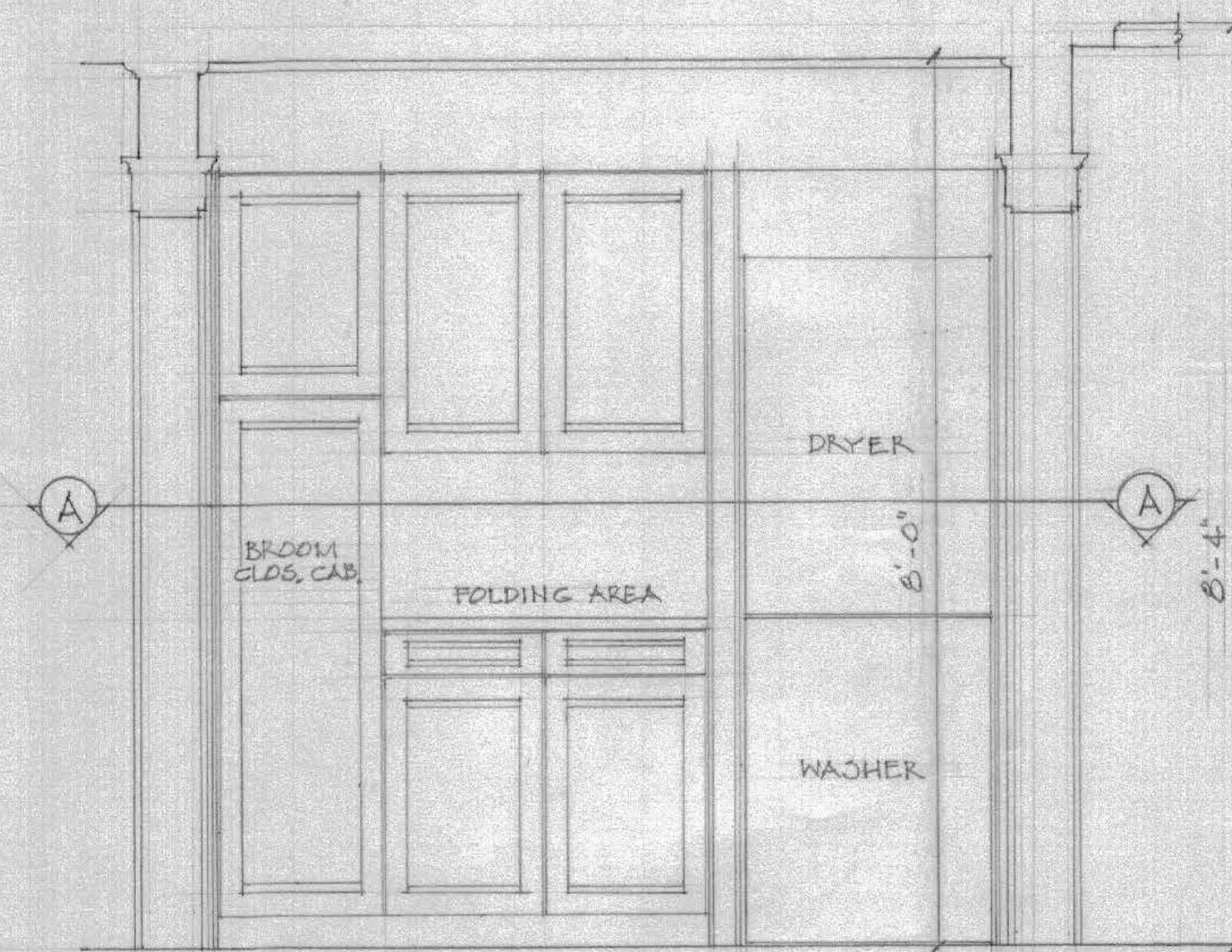


SECT. (A) THRU LAUNDRY AREA



DINING RM. SIDE ISLAND ELEVATION

SCALE 3/4" = 1'-0"



LAUNDRY AREA ELEVATION

3/4" = 1'-0"

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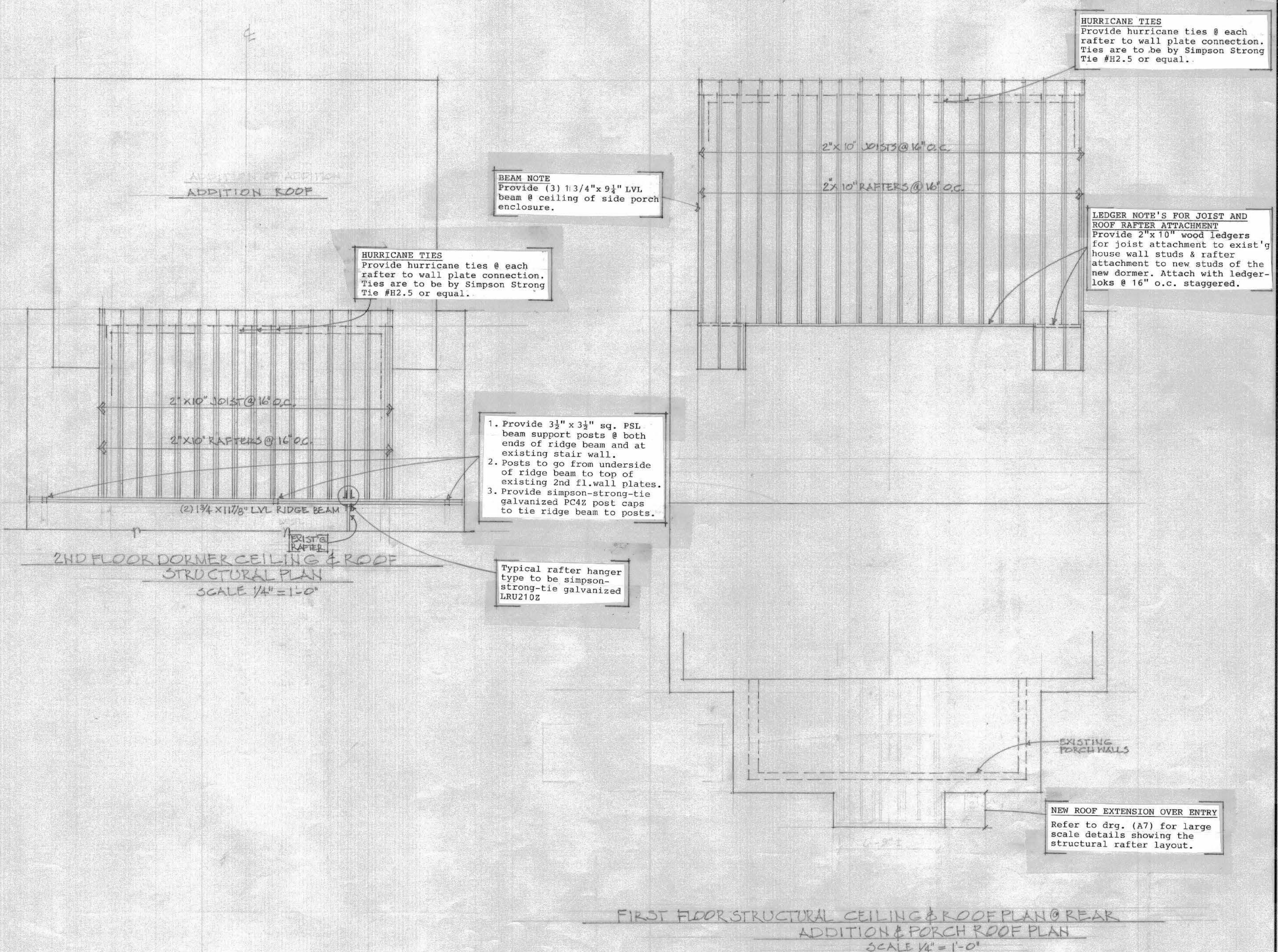
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BERGGREN HOUSE
2 RESERVOIR ROAD
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HURRICANE TIES
Provide hurricane ties @ each rafter to wall plate connection. Ties are to be by Simpson Strong Tie #H2.5 or equal.

BEAM NOTE
Provide (3) 1 1/4" x 9 1/4" LVL beam @ ceiling of side porch enclosure.

HURRICANE TIES
Provide hurricane ties @ each rafter to wall plate connection. Ties are to be by Simpson Strong Tie #H2.5 or equal.

LEDGER NOTE'S FOR JOIST AND ROOF RAFTER ATTACHMENT
Provide 2"x10" wood ledgers for joist attachment to exist'g house wall studs & rafter attachment to new studs of the new dormer. Attach with ledger-locks @ 16" o.c. staggered.

1. Provide 3 1/2" x 3 1/2" sq. PSL beam support posts @ both ends of ridge beam and at existing stair wall.
2. Posts to go from underside of ridge beam to top of existing 2nd fl. wall plates.
3. Provide simpson-strong-tie galvanized PC4% post caps to tie ridge beam to posts.

Typical rafter hanger type to be simpson-strong-tie galvanized LRU210Z

NEW ROOF EXTENSION OVER ENTRY
Refer to drg. (A7) for large scale details showing the structural rafter layout.

FIRST FLOOR STRUCTURAL CEILING & ROOF PLAN @ REAR
ADDITION & PORCH ROOF PLAN
SCALE 1/4" = 1'-0"

GENERAL STRUCTURAL NOTES AND SPECIFICATIONS

GENERAL:

1. REFER TO THE PROJECT SPECIFICATIONS AND THE COMPLETENESS OF MASSACHUSETTS STATE BUILDING CODE FOR THE UNIFORM AND WORKMANSHIP NOT SPECIFIED HEREIN.
2. STRUCTURAL DRAWINGS SHALL BE CONSIDERED TO BE SUPERSEDED BY ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS. THESE DRAWINGS AND SPECIFICATIONS SHALL BE REFERRED TO FOR SIZE AND LOCATION OF OPENINGS.
3. ALL DIMENSIONS OF CONSTRUCTION SHALL BE AS SHOWN ON THE DRAWINGS UNLESS OTHERWISE NOTED.
4. THE CONTRACTOR SHALL REVIEW ALL DRAWINGS AND RECEIVE APPROVAL FROM THE ARCHITECT BEFORE ANY CONSTRUCTION BEGINS. THE CONTRACTOR SHALL NOT BE PERMITTED TO MAKE ANY CHANGES TO THE DRAWINGS WITHOUT THE ARCHITECT'S FULL REVIEW AND APPROVAL. APPROVED AND SIGNED BY ARCHITECT SHALL BE MADE FROM THE APPROVED DRAWING ONLY.
5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND REPORT ANY DISCREPANCY TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY IN WRITING OF ANY DISCREPANCY OR OMISSIONS OF THIS DRAWING TO BE PRE-APPROVED BY THE ARCHITECT AT THE TIME OF THE DESIGN.
6. DESIGN LIVE LOADS:

ROOF LOADS (SLOPE)	20 PSF
MINIMUM LIVE LOAD	20 PSF
WIND LOADS	20 PSF

ROOF/GARAGE/DECK:

1. ALL DIMENSIONS TO BE SHOWN UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS TO BE SHOWN UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS TO BE SHOWN UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS TO BE SHOWN UNLESS OTHERWISE NOTED.
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17. ALL DIMENSIONS TO BE SHOWN UNLESS OTHERWISE NOTED.
18. ALL DIMENSIONS TO BE SHOWN UNLESS OTHERWISE NOTED.
19. ALL DIMENSIONS TO BE SHOWN UNLESS OTHERWISE NOTED.
20. ALL DIMENSIONS TO BE SHOWN UNLESS OTHERWISE NOTED.

STRUCTURAL QUALITY CONTROL

ALL WORK TO BE SUBJECT TO THE APPROVAL OF THE ENGINEER IN THE FIELD.

DISCREPANCIES

REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT INCLUDED IN THE STRUCTURAL DOCUMENTS.

SUPPORTING ROOF ONLY	SIZE
OPENINGS UP TO 4'-0"	(3)-2x8
5'-1" TO 6'-0"	(3)-2x8
6'-1" TO 8'-0"	(3)-2x10
8'-1" TO 12'-0"	(3)-2x12

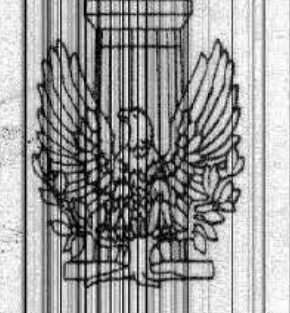
SUPPORTING ONE STORY ABOVE	SIZE
OPENINGS UP TO 4'-0"	(3)-2x8
4'-1" TO 6'-0"	(3)-2x8
6'-1" TO 8'-0"	(3)-2x10
8'-1" TO 12'-0"	(3)-2x12

SUPPORTING TWO STORIES ABOVE	SIZE
OPENINGS UP TO 4'-0"	(3)-2x10
4'-1" TO 6'-0"	(3)-2x12

NOTES:

1. ALL MEMBERS TO BE SFI #2 GRADE OR BETTER.
2. PROVIDE 1/2" THK PLYWOOD LAYER BETWEEN MEMBER MEMBERS, ALL AND SPACE OR SCREW TOGETHER.
3. SCHEDULE SHALL BE USED TO DETERMINE MINIMUM MEMBER SIZE.
4. SCHEDULE NOT VALID FOR ANY CONCENTRATED LOADS FROM CEILING BEAMS OR POSTS. REFER TO FRAMING PLAN FOR SPECIFIED SIZES POST.

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BERGGREN HOUSE
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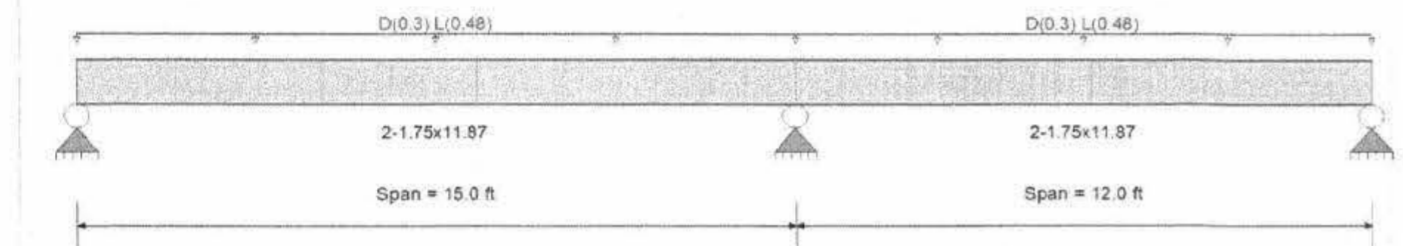
Wood Beam Project File: 23.210 - 2 Reservoir Road.ec6
LIC#: KW-06015748, Build 20.23.2.14 COWEN ASSOCIATES (c) ENERCALC INC 1983-2022

CODE REFERENCES

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16
Load Combination Set: ASCE 7-05

Material Properties

Analysis Method: Load Resistance Factor D	Fb +	2800 psi	E: Modulus of Elasticity	0.674 : 1
Load Combination: ASCE 7-05	Fb -	2900 psi	Ebend-xx	2000 ksi
	Fc - Pfl	2510 psi	Eminbend-xx	1016.535 ksi
	Fc - Perp	750 psi		
Wood Species: ILevel Truss Joist	Fv	285 psi		
Wood Grade: MicroLam LVL 2.0 E	Ft	1555 psi	Density	42.01 pcf
Beam Bracing: Beam is Fully Braced against lateral-torsional buckling				



Applied Loads

Beam self weight NOT internally calculated and added
Load for Span Number 1: Uniform Load: D = 0.30, L = 0.480, Tributary Width = 1.0 ft, (Roof)
Load for Span Number 2: Uniform Load: D = 0.30, L = 0.480, Tributary Width = 1.0 ft, (Roof)

DESIGN SUMMARY

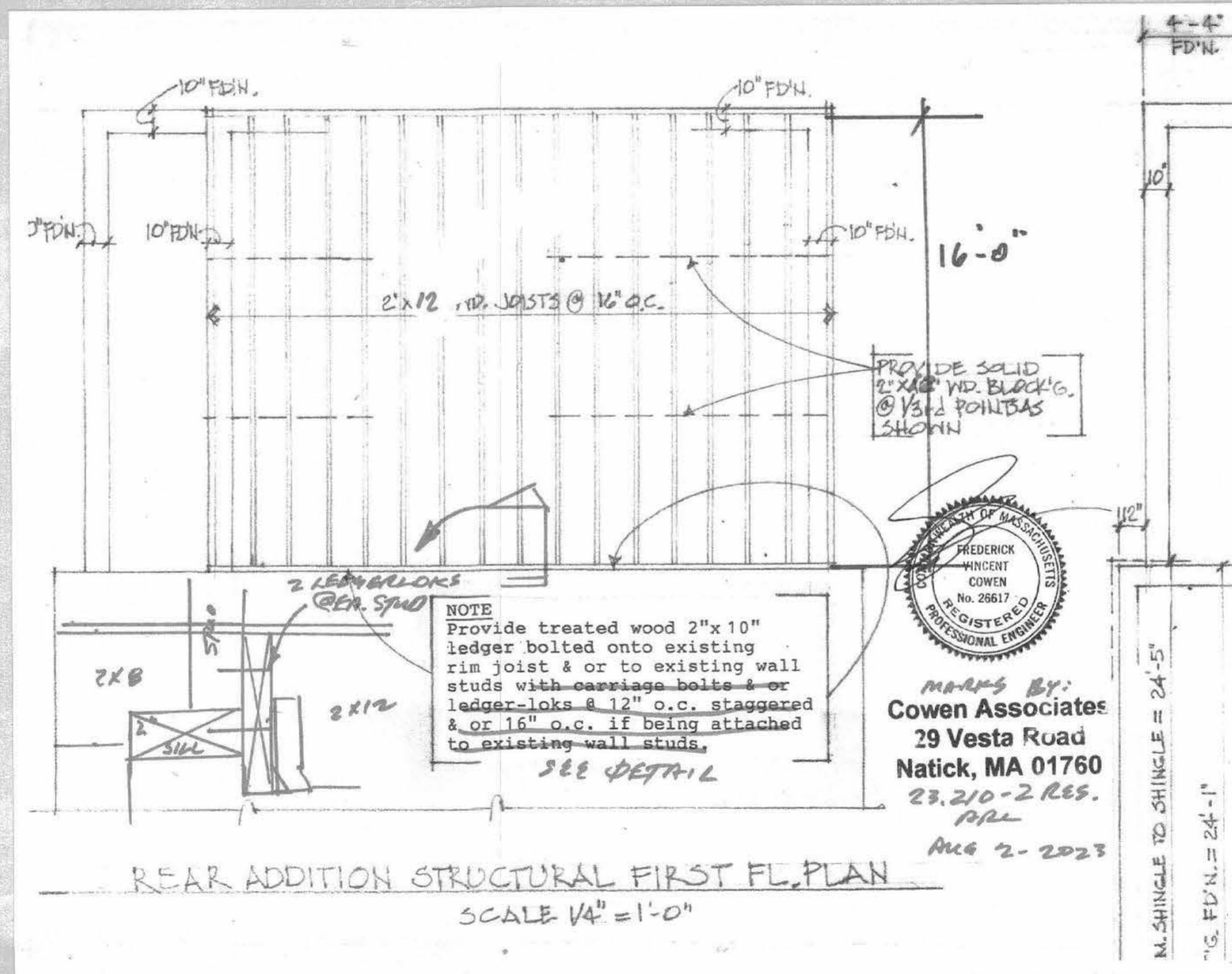
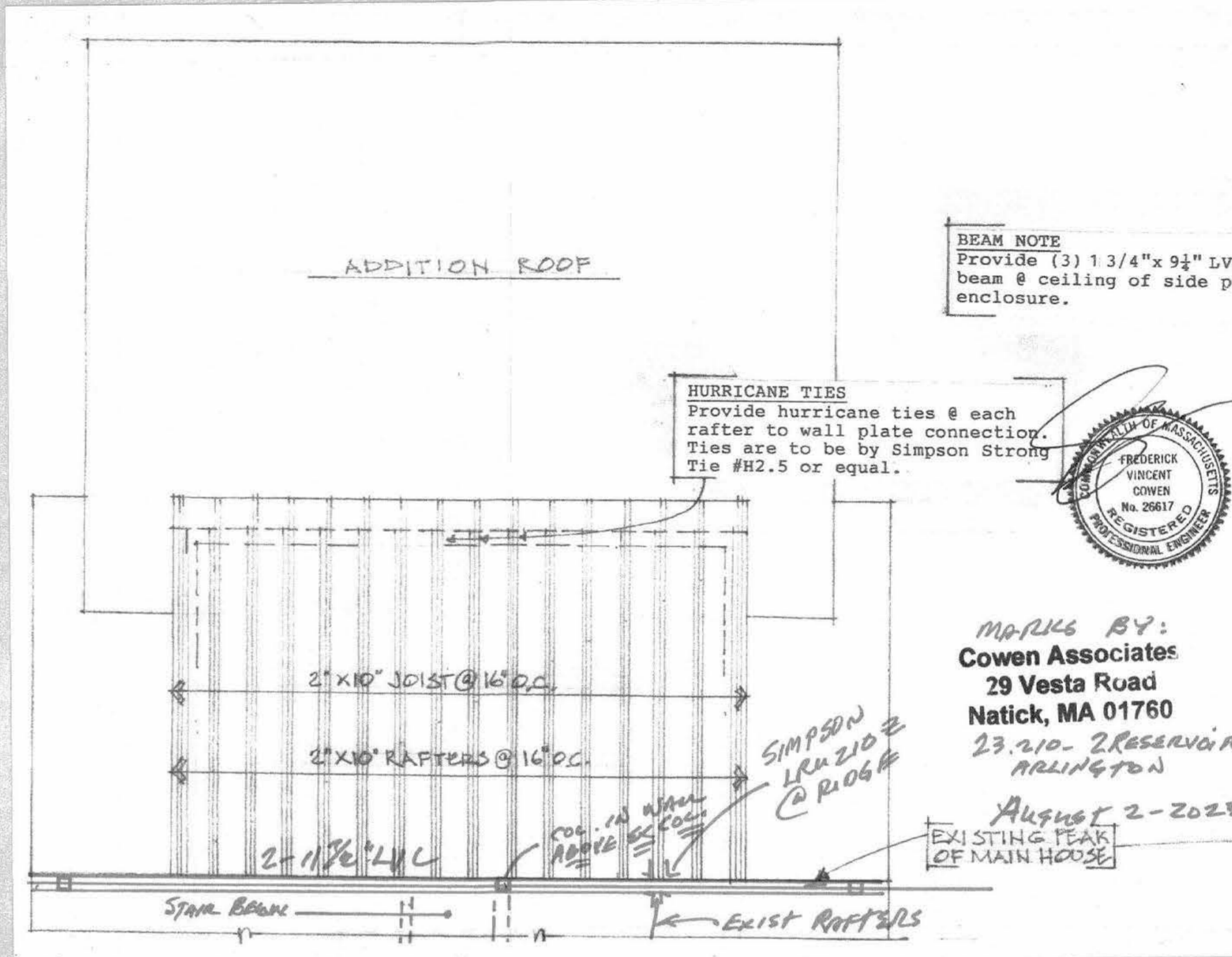
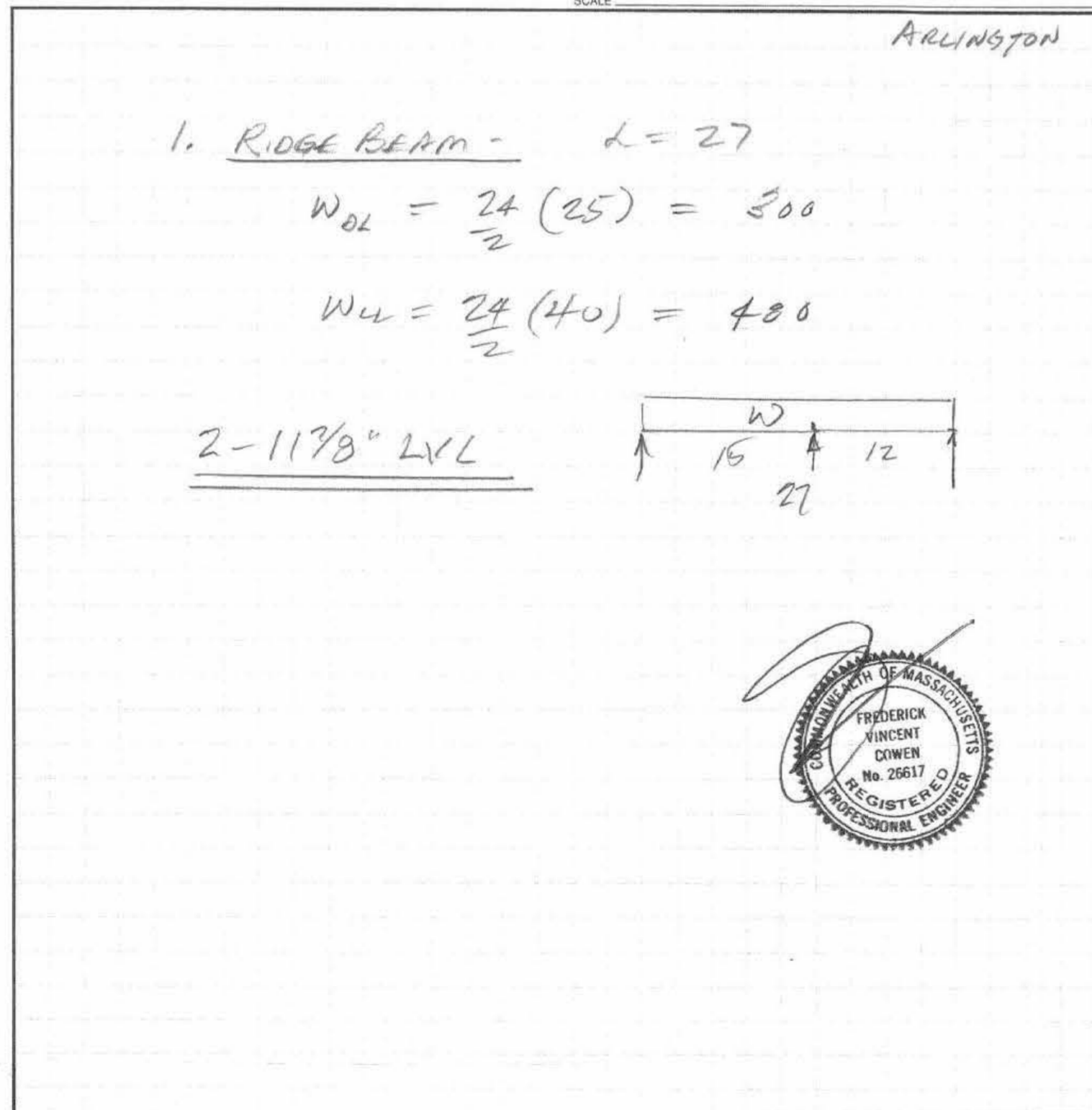
Maximum Bending Stress Ratio	=	0.864	1	Maximum Shear Stress Ratio	=	0.674	: 1
Section used for this span	=	2-1.75x11.87		Section used for this span	=	2-1.75x11.87	
f _b Actual	=	3,887.57 psi		f _v Actual	=	331.92 psi	
F _b	=	4,499.20 psi		F _v	=	492.48 psi	
Load Combination	=	+1.20D+1.60L		Load Combination	=	1.60L	
Location of maximum on span	=	15.000ft		Location of maximum on span	=	0.78 ft	
Span # where maximum occurs	=	Span # 1		Span # where maximum occurs	=	Span # 1	
Maximum Deflection							
Max Downward Transient Deflection	=	0.286 in	Ratio = 629 >= 360	Span: 2: L Only			
Max Upward Transient Deflection	=	-0.011 in	Ratio = 13075 >= 360	Span: 2: L Only			
Max Downward Total Deflection	=	0.465 in	Ratio = 387 >= 180	Span: 2: +D+L			
Max Upward Total Deflection	=	-0.018 in	Ratio = 8045 >= 180	Span: 2: +D+L			

Overall Maximum Deflections

Load Combination	Span	Max. "v" Defl	Location in Span	Load Combination	Max. "v" Defl	Location in Span
+D+L	1	0.4649	6.704	+D+L	0.0000	0.000
+D+L	2	0.0918	7.642	+D+L	-0.0179	1.207

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JOB: 23.210-2 RESERVOIR RD.
SHEET NO. SK-1 OF
CALCULATED BY: FVC DATE: 8-2-23
CHECKED BY: DATE:
SCALE:



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BERGGREN HOUSE
2 RESERVOIR ROAD
ARLINGTON, MASS.