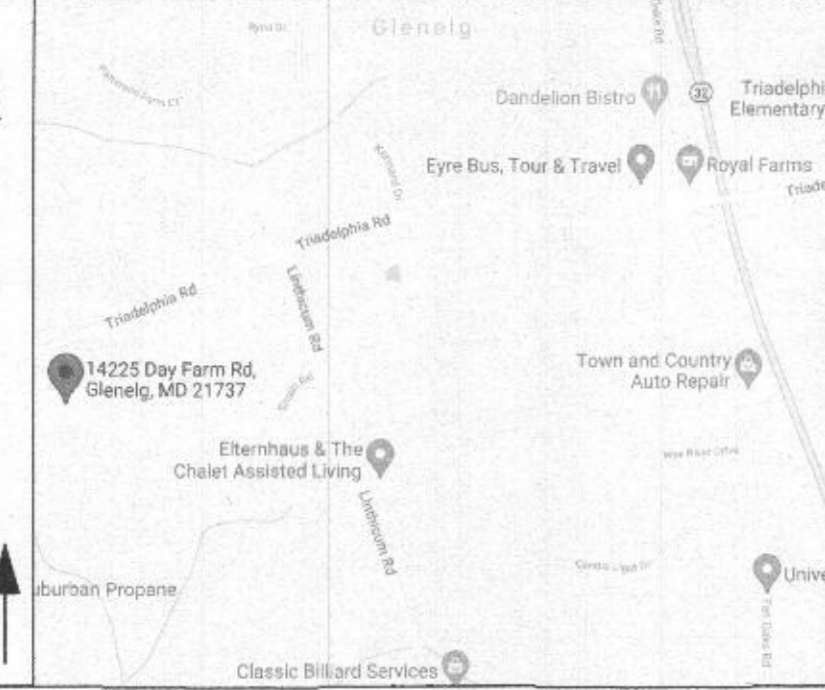


Property Information

Howard County
District 5
Account No: 380685

Owner:
Hughes
14225 Day Farm Rd
Glenelig, MD 21737

Location Plan
NTS



Building Code Design Criteria

International Residential Code 2018
ASCE 7-16

ASCE Risk Category: II	ASCE Exposure Category: B
ASCE Importance Factor: 1	
IBC Usage Group: R-3	IBC Construction: V-B
Basic Wind Speed, V = 115 mph	Design Wind Uplift: 20 psf
	Design Wind Pressure: 20 psf
Ground Snow Load: 30 psf	Design Snow Load: 22 psf (30 psf with drifting)
Seismic: SS = 0.143	S1 = 0.043
Site Class D	Design Category A
	Seismic Load / Floor = 0.01 x dead load per floor
Roof Live Load: 40 psf	Floor Live Load: 40 psf
Dead Load: 10 psf + self-weight	
Deflection Criteria: L / 240 for total loading, L/360 for live loading	
Geotechnical: 1 tsf Allowable soil bearing pressure Frost depth: 30"	

Summary of Work

- Existing single family home.
- No change in use, egress or occupancy. No addition. No reconfiguration.
- Scope of work is a Level 1 Alteration limited to repairs in kind for fire damage:
 - Rebuild three exterior walls of garage from slab on grade up, in kind.
 - Replace 100% of roof trusses over garage only.
 - No structural repairs required at residence; work is limited to the garage.

General Notes

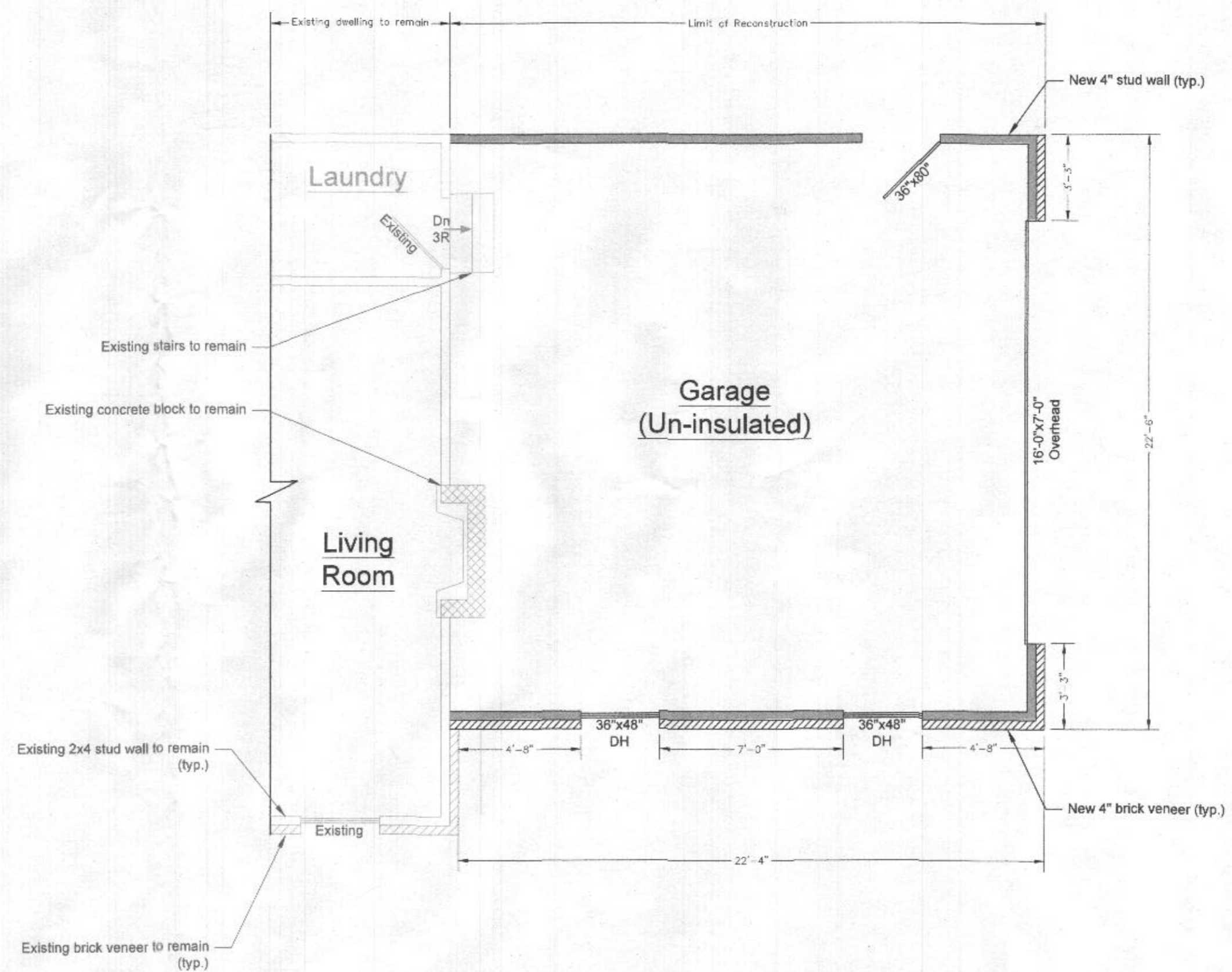
- All work to be done in accordance with noted Building Code, State and County regulations.
- Contractor must inspect premises carefully before starting work. Contractor shall assume responsibility for all existing conditions as they affect his work.
- All dimensions shown are approximate. Contractor is responsible for making his own measurements in the field, shop drawings and final fitting of all work.
- Contractor shall be responsible for cutting and patching as required to complete the scope of work.
- Contractor shall be responsible for temporary or permanent removal or relocation of building systems as required to complete the scope of work.
- Contractor shall submit certificate of insurance, with coverage approved by owner, prior to commencing work.
- Contractor shall coordinate his work with the building owners and occupants.
- All work is subject to inspection and acceptance by the engineer.
- Contractor shall be responsible for obtaining required permits.
- All plumbing work to be performed by a licensed plumber.
- All electrical work to be performed by a licensed electrician.
- Contractor shall remove all rubbish, leaving premises broom clean after each day's work.
- Contractor shall take all necessary precautions during construction activity to safeguard the property of the building owner and users.
- Contractor shall keep all exits free of obstructions at all times.
- Contractor shall arrange with owner times for delivery of material and removal of debris in order to avoid disturbance.
- Construction operations will be confined to normal working hours: 9AM to 5PM Monday through Friday, except legal holidays.
- Construction operations will not interrupt services to any occupied portions of the building.
- Construction work will be confined to the area of work described on the drawings. Take precaution to limit dust, dirt or other inconveniences to building users outside of the area of work.



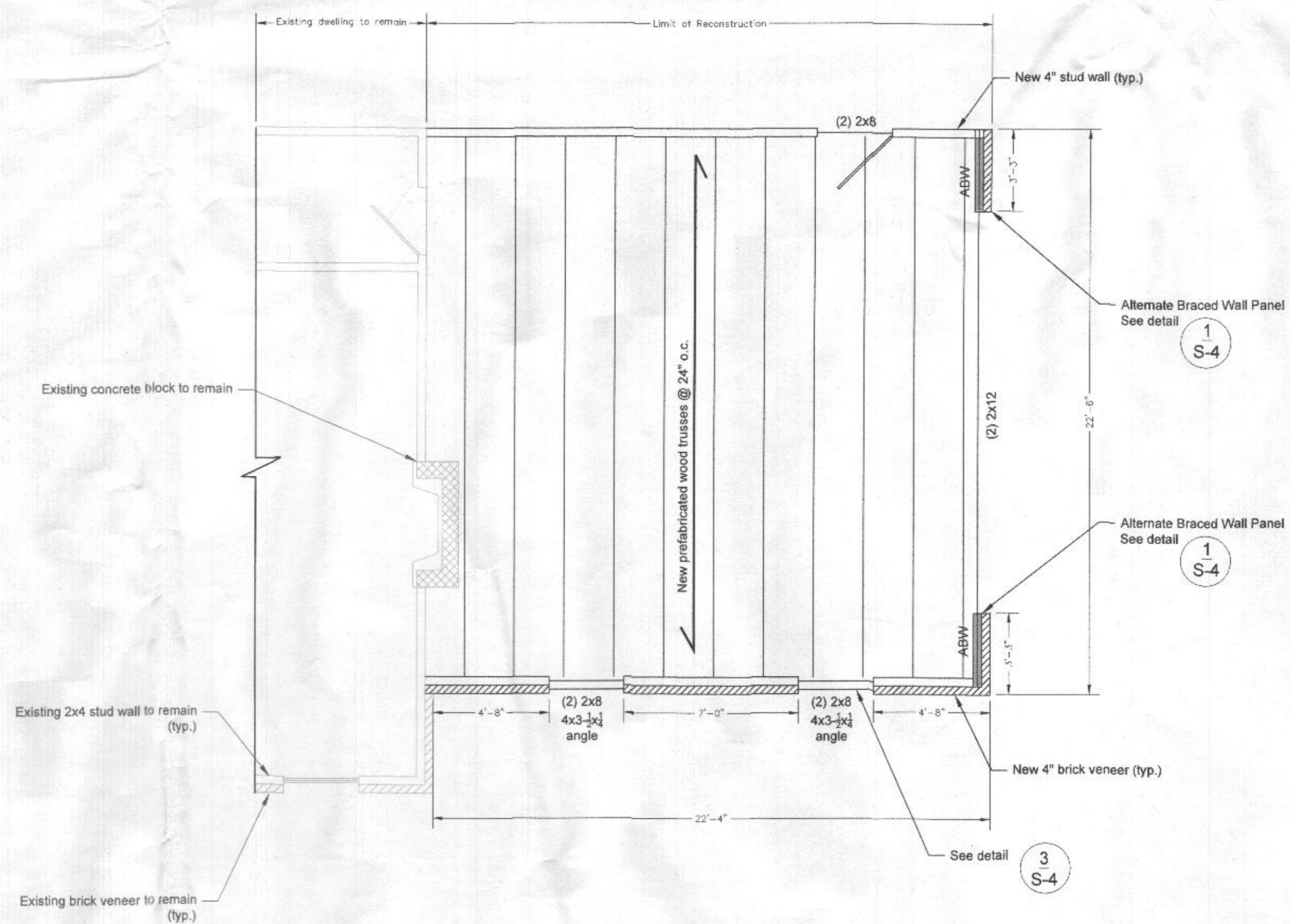
Existing Conditions

Energy Efficiency Summary IRC Climate Zone 4A

Location	Type	Value
Fenestration	Vinyl DH Windows	U = 0.35 Maximum SHGC = 0.25 Maximum
Roof	Uninsulated	
Walls	Uninsulated	



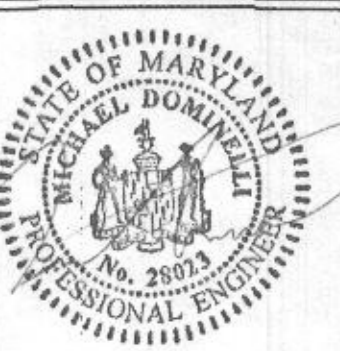
1 S-1 Partial First Floor Plan
1/4" = 1'-0"



2 S-1 Garage Roof Framing and Bracing Plan
1/4" = 1'-0"

Repairs for Fire Damage at
14225 Day Farm Road
 Glenelig, Maryland

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 410.379.9795 | steadfast.com



I, Michael F. Dominiak, hereby certify that the drawings were prepared, designed, checked, and approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 28023. Expiration Date: 10/16/2022.

Drawn by: FT MD
 Date: 8/20/21
 Project: 21-233

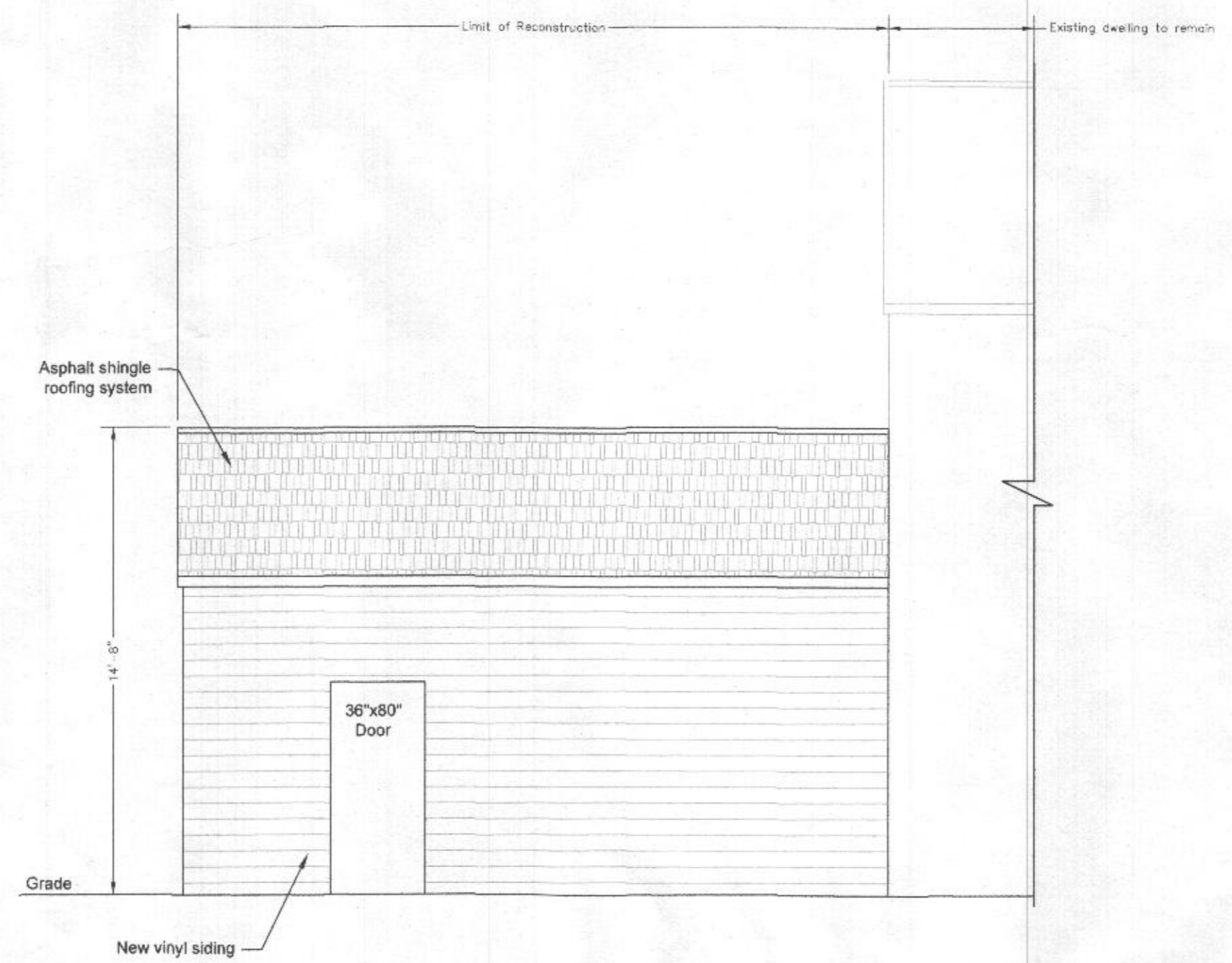
Framing Plans
 Revised:
S-1

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 DIVISION

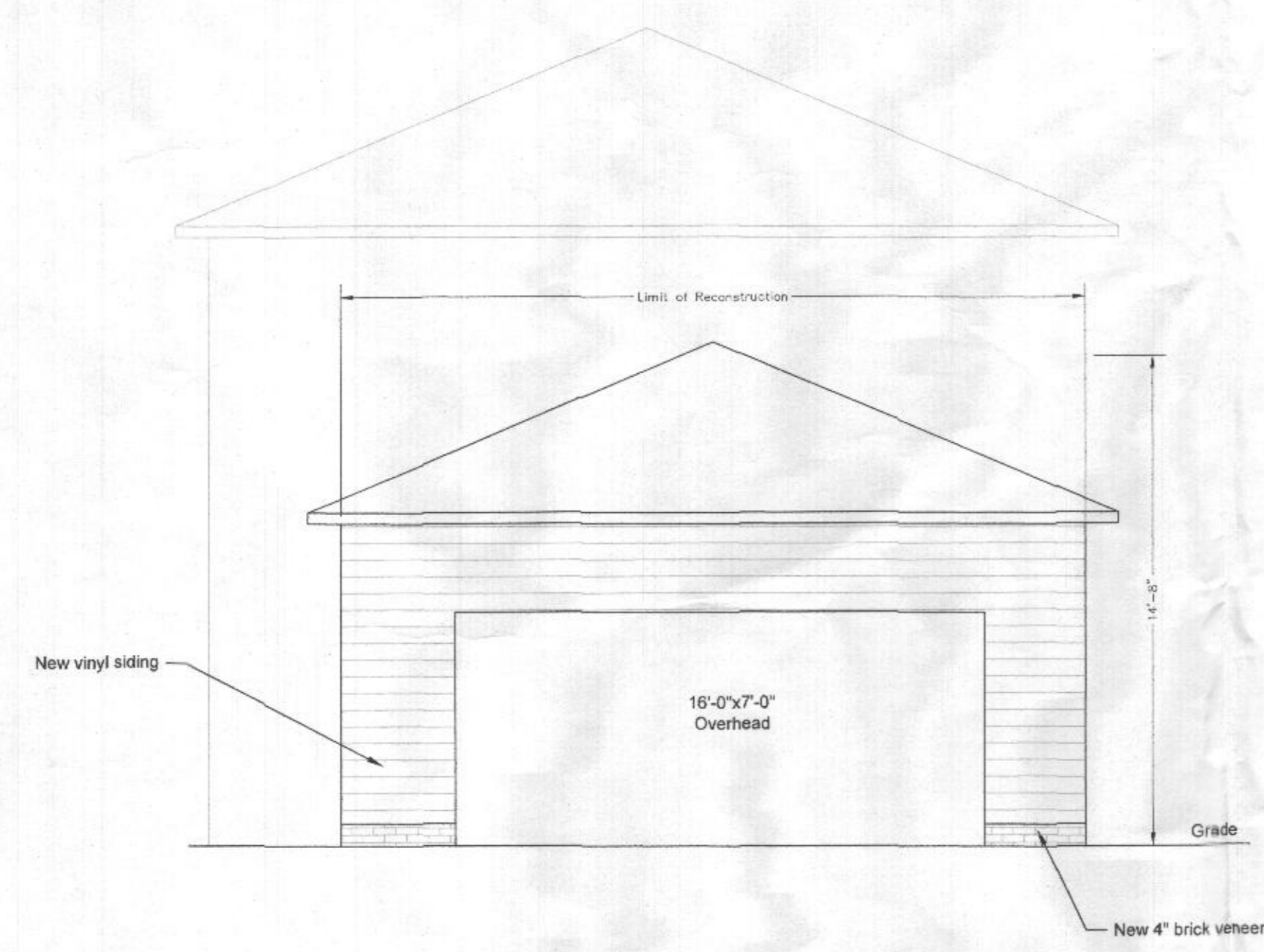
Repairs for Fire Damage at
14225 Day Farm Road
Glennelg, Maryland



1
S-2
Front (North) Elevation
1/4" = 1'-0"

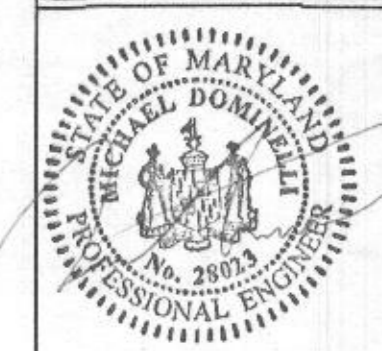


2
S-2
Rear (South) Elevation
1/4" = 1'-0"



3
S-2
Right (West) Elevation
1/4" = 1'-0"

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I, Michael F. Dominelli, hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer of the State of Maryland, License No. 28023, Expiration Date: 10-16-2022.

Drawn by: FT
Checked by: MD
Date: 6/30/21
Project: 21233

Elevations
S-2

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DIVISION

Fastener Schedule for Structural Members

Note: Fastener requirements in these tables shall not be used to supersede specifically annotated requirements on the drawings and details.

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER(a,b,c)	SPACING OF FASTENERS	SPACING OF FASTENERS	
				Edges (inches)(i)	Intermediate supports(c,e) inches
Roof					
1	Blocking between joists or rafters to top plate, toe nail	3-8d (2-1/2" x 0.113")	--		
2	Ceiling joists to plate, toe nail	3-8d (2-1/2" x 0.113")	--		
3	Ceiling joists not attached to parallel rafter, laps over partitions, face nail	3-10d	--		
4	Collar tie rafter, face nail or 1-1/4" x 20 gage ridge strap	3-10d (3" x 0.128")	--		
5	Rafter to plate, toe nail	2-16d (3-1/2" x 0.135")	--		
6	Roof rafters to ridge, valley or hip rafters:				
	toe nail	4-16d (3-1/2" x 0.135")	--		
	face nail	3-16d (3-1/2" x 0.135")	--		
Wall					
7	Built up corner studs	10d (3" x 0.128")	24" o.c.		
8	Built up header, two pieces with 1/2" spacer	16d (3-1/2" x 0.135")	16" o.c. along each edge		
9	Continued header, two pieces	16d (3-1/2" x 0.135")	16" o.c. along each edge		
10	Continuous header to stud, toe nail	4-8d (2-1/2" x 0.113")	--		
11	Double Studs, face nail	10d (3" x 0.128")	24" o.c.		
12	Double top plates, face nail	10d (3" x 0.128")	24" o.c.		
13	Double top plates, minimum 48-inch offset of end joints, face nail in lapped area	8-16d (3-1/2" x 0.135")	--		
14	Sole plate to joist or blocking, face nail	16d (3-1/2" x 0.135")	16" o.c.		
15	Sole plate to joist or blocking at braced wall panels	3-16d (3-1/2" x 0.135")	16" o.c.		
16	Stud to sole plate, toe nail	3-18d (2-1/2" x 0.113") or 2-16d (3-1/2" x 0.135")	--		
17	Top or sole plate to stud, end nail	2-16d (3-1/2" x 0.135")	--		
18	Top plates, laps at corners and intersections, face nail	2-10d (3" x 0.128")	--		
19	1" brace to each stud and plate, face nail	2-8d (2-1/2" x 0.113") 2 staples 1-3/4"	--		
20	1" x 6" sheathing to each bearing, face nail	2-8d (2-1/2" x 0.113") 2 staples 1-3/4"	--		
21	1" x 8" sheathing to each bearing, face nail	2-8d (2-1/2" x 0.113") 3 staples 1-3/4"	--		
22	Wider than 1" x 8" sheathing to each bearing, face nail	3-8d (2-1/2" x 0.113") 4 staples 1-3/4"	--		
Floor					
23	Joist to sill or girder, toe nail	3-8d (2-1/2" x 0.113")	--		
24	1" x 6" subfloor or less to each joist, face nail	2-8d (2-1/2" x 0.113") 2 staples 1-3/4"	--		
25	2" subfloor to joist or girder, blind and face nail	2-16d (3-1/2" x 0.135")	--		
26	Rim joist to top plate, toe nail (roof applications also)	8d (2-1/2" x 0.113")	6" o.c.		
27	2" planks (plank and beam - floor and roof)	2-16d (3-1/2" x 0.135")	at each bearing		
28	Built up girders and beams, 2-inch lumber layers	10d (3" x 0.128")	Nail each layer as follows: 32" o.c. at top and bottom and staggered. Two nails at ends and at each splice		
29	Ledger strip supporting joists or rafters	3-16d (3-1/2" x 0.135")	At each joist or rafter		

ITEM	DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER(b,c,e)	SPACING OF FASTENERS	
			Edges (inches)(i)	Intermediate supports(c,e) inches
Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing				
30	3/8" - 1/2"	6d common (2" x 0.113") nail (subfloor wall)(i) 8d common (2-1/2" x 0.131") nail (roof)	6	12(g)
31	5/16" - 1/2"	8d common (2" x 0.113") nail (subfloor wall) 8d common (2-1/2" x 0.131") nail (roof)(i)	6	12(g)
32	19/32" - 1"	8d common nail (2-1/2" x 0.131")	6	12(g)
33	1-1/8" - 1-1/4"	10d common (3" x 0.148") nail or deformed nail	6	12
Other wall sheathing(i)				
34	1/2" structural cellulose fiberboard sheathing	1/2" galvanized roofing nail, 7/16" crown or 1" crown staple 16ga, 1-1/4" long	3	6
35	25/32" structural cellulose fiberboard sheathing	1-3/4" galvanized roofing nail, 7/16" crown or 1" crown staple 16ga, 1-1/2" long	3	6
36	1/2" gypsum sheathing	1-1/2" galvanized roofing nail: staple galvanized, 1-1/2" long; 1-1/4" screws, Type W or S	7	7
37	5/8" gypsum sheathing	1-3/4" galvanized roofing nail: staple galvanized, 1-5/8" long; 1-5/8" screws, Type W or S	7	7
Wood structural panels, combination subfloor underlayment to framing				
38	3/4" and less	6d deformed (2" x 0.120") nail or 8d common (2-1/2" x 0.131") nail	6	12
39	7/8" - 1"	8d common (2-1/2" x 0.131") nail or 8d deformed (2-1/2" x 0.120") nail	6	12
40	1-1/8" - 1-1/4"	10d common (3" x 0.148") nail or 8d deformed (2-1/2" x 0.131") nail	6	12

Timber Framing Notes

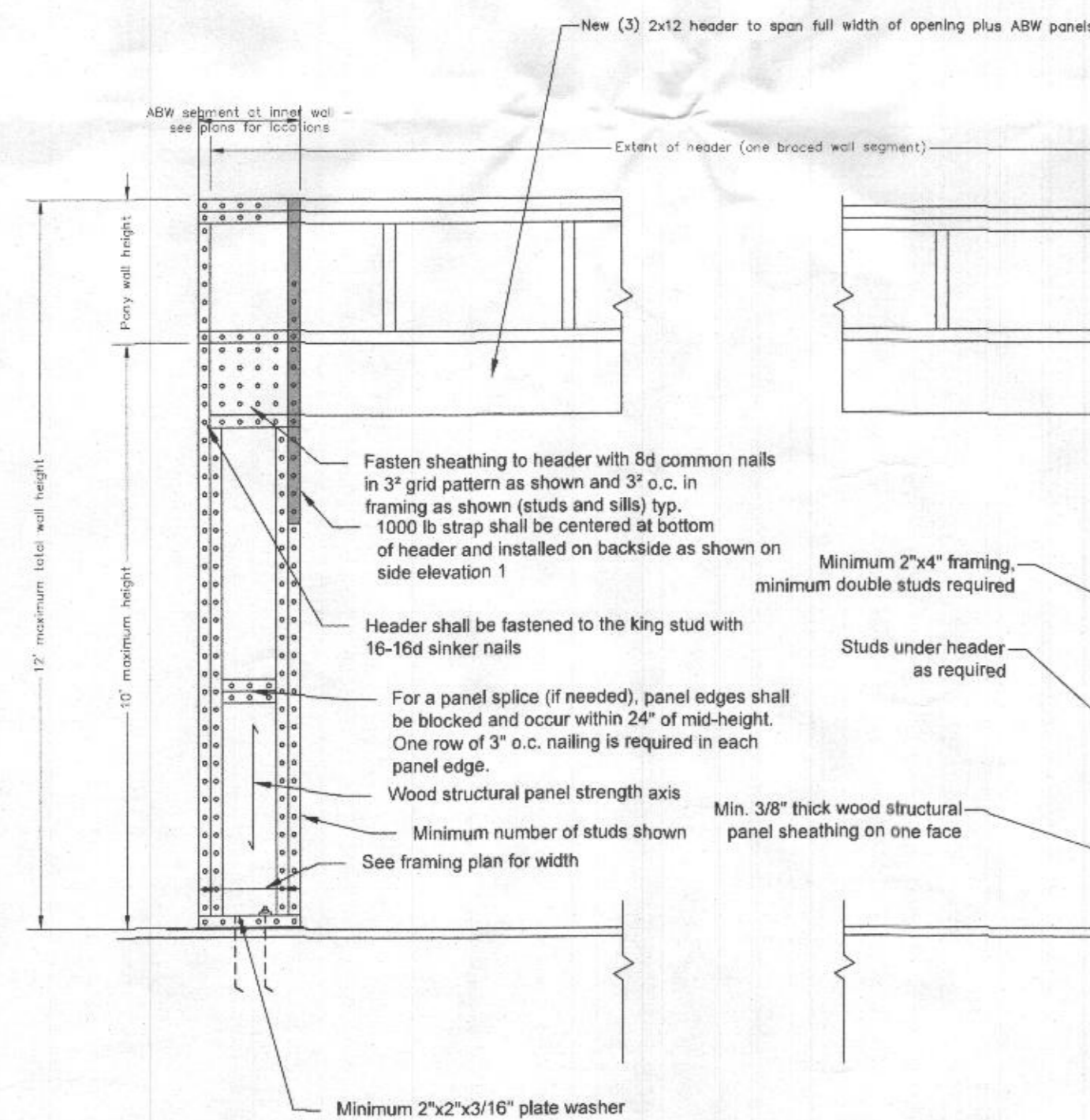
1. All framing shall be in accordance with the latest editions, including errata of the "National Design Specification for Wood Construction" (ANSI/AWC NDS) as published by the American Wood Council (AWC).
2. All wood products, fasteners and connectors shall be approved for use by the International Code Council Evaluation Service (ICC ES).
3. All lumber materials used in the building shall be good, sound, dry material free from large and loose knots, shakes and other imperfections whereby the strength may be impaired, and of the size indicated on the drawings.
4. All workmanship, including nailing, blocking, bridging, etc., shall conform to the requirements of the IBC or IRC.
5. All beams, joists and rafters to be set with natural crown up.
6. Place face grain in direction of span (transverse to joist span).
7. Joist hangers, framing anchors and post anchors shall be galvanized steel as manufactured by Teco, USP, Simpson or approved equal. Special nails as supplied by manufacturer shall be used for required nailing.
8. Provide seal of neoprene or other approved material where wood bears on masonry.
9. Provide min. blocking between joists of 8'-0" o.c. (staggered) and at all end and intermediate supports.
10. Exterior lumber and sill plates shall be pressure-treated (pt) per AWWPA requirements and recommendations. Lumber shall not be permitted to be incised unless approved by the Engineer.
11. Unless indicated on the plans, lumber shall be Douglas Fir-Larch or Southern Yellow Pine No. 2 or better (1.6E).
12. Unless otherwise indicated on the plans, dimensional lumber shall be fastened per the fastener table.

Wood Truss Notes

1. Trusses are shown schematically only. Prefabricated wood trusses shall be designed to support the required live loads and mechanical equipment. Provide adequate number and type of trusses to carry out design intent.
2. Trusses shall conform to the National Design Specifications for Stress Grade Lumber and its Fastening, latest edition, and the National Design Standard for Metal Plate Connected Wood Truss Construction, latest edition.
3. Submit shop drawings and design calculations for approval prior to fabrication. Shop drawings to be signed and sealed by a professional engineer registered in the state of installation.
4. Floor trusses shall not be cut or drilled unless authorized by the engineer.
5. Install vertical wood blocking between floors at all post supports in bearing walls.
6. Trusses shall be sized to avoid wood crushing at bearing points based on the wall width and material indicated on drawings.

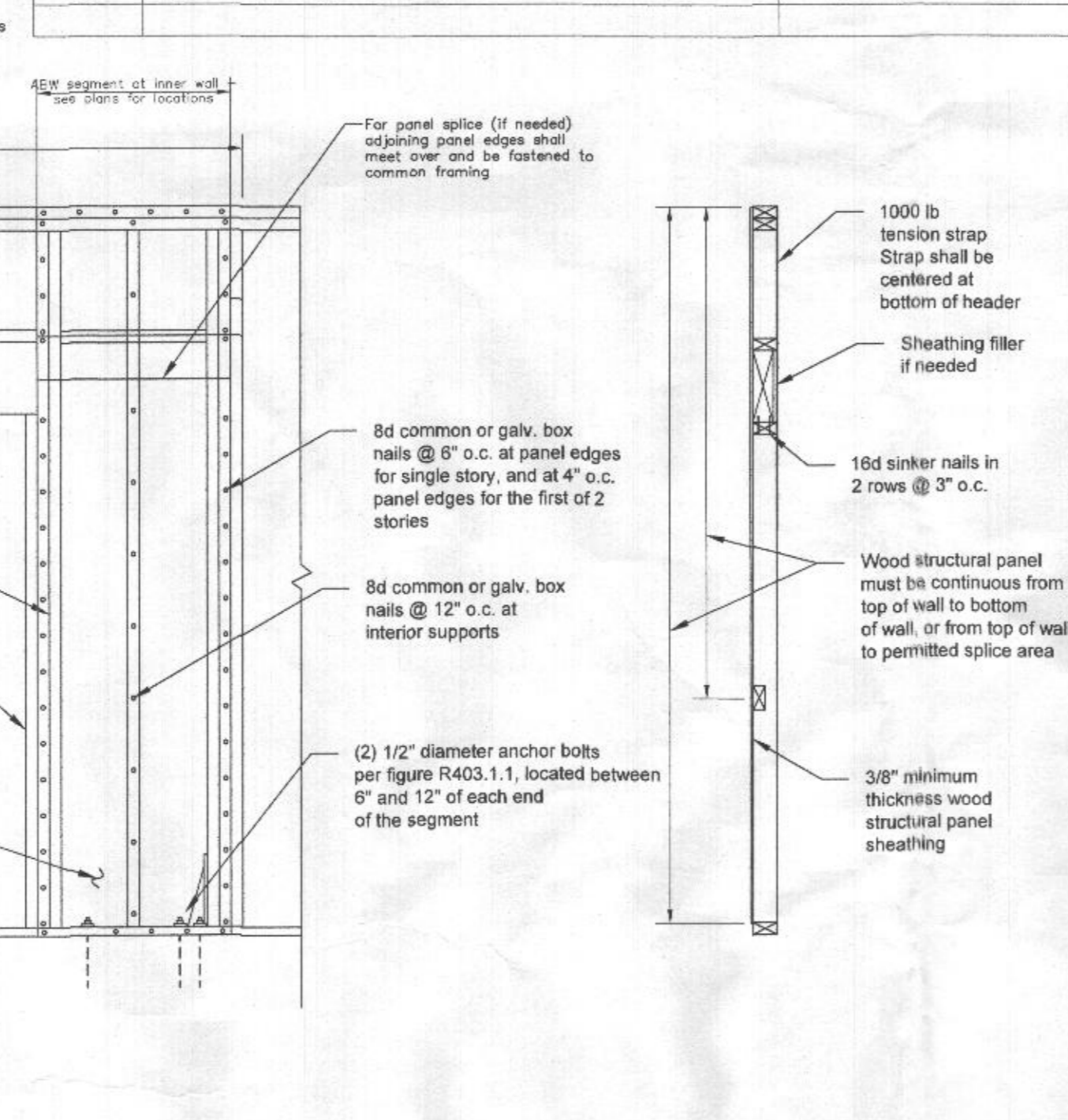
Sheathing Notes

1. All sheathing indicated shall be APA span rated, CD grade unless otherwise indicated, with exterior glue, Exposure 1, manufactured in accordance with APA PS 183, latest edition.
2. Roof sheathing shall be 5/8" minimum, 48/24 rated, tongue and groove.
3. Floor sheathing shall be 3/4" minimum, 48/24 rated, tongue and groove.
4. Wall sheathing shall be 7/16" minimum.
5. Lay sheathing with end joints staggered. Layout plywood to eliminate any panel width less than 1'-0".
6. Provide spacing for expansion between panels in accordance with APA recommendations.

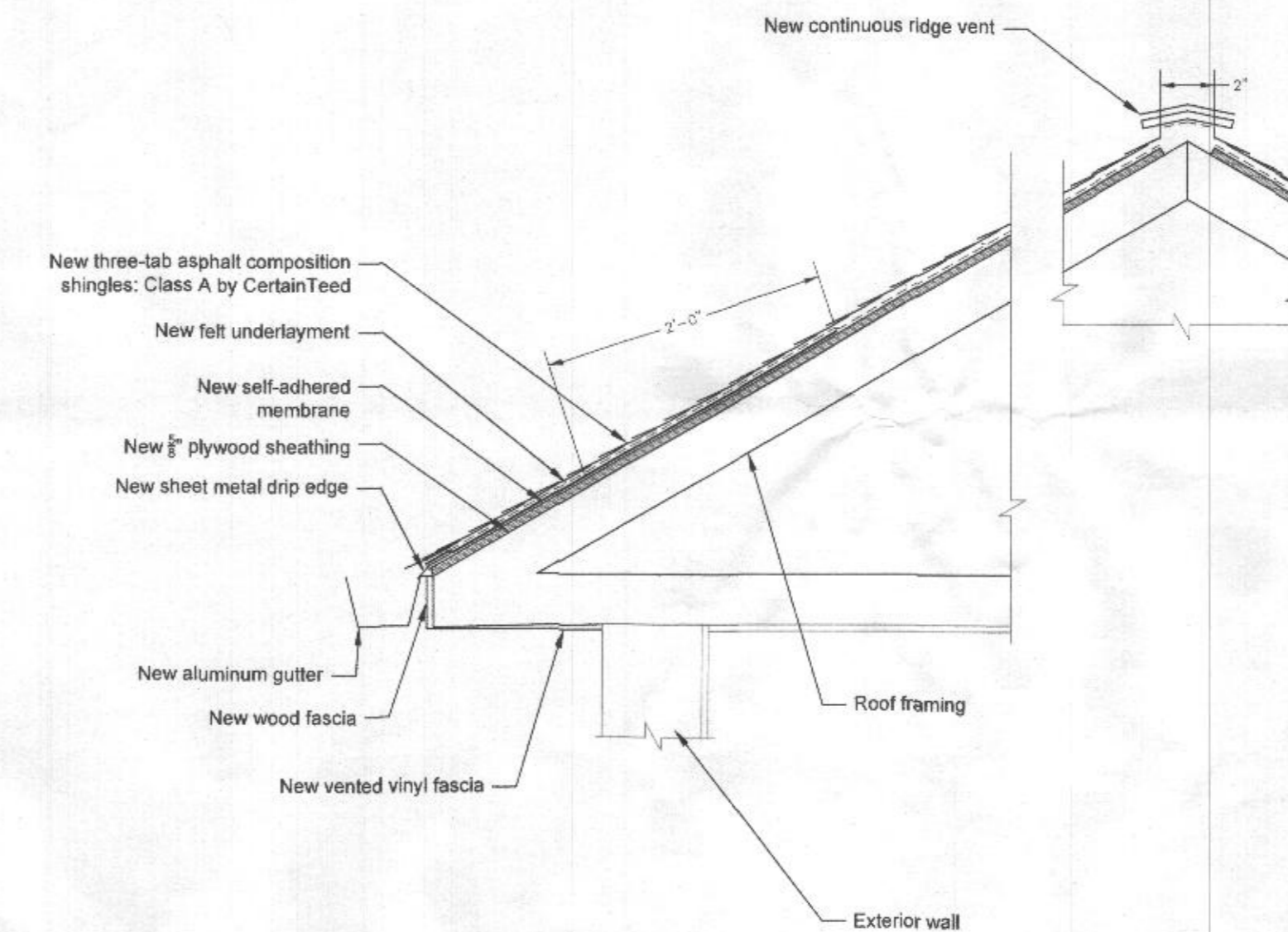


Front Elevation
N.T.S.

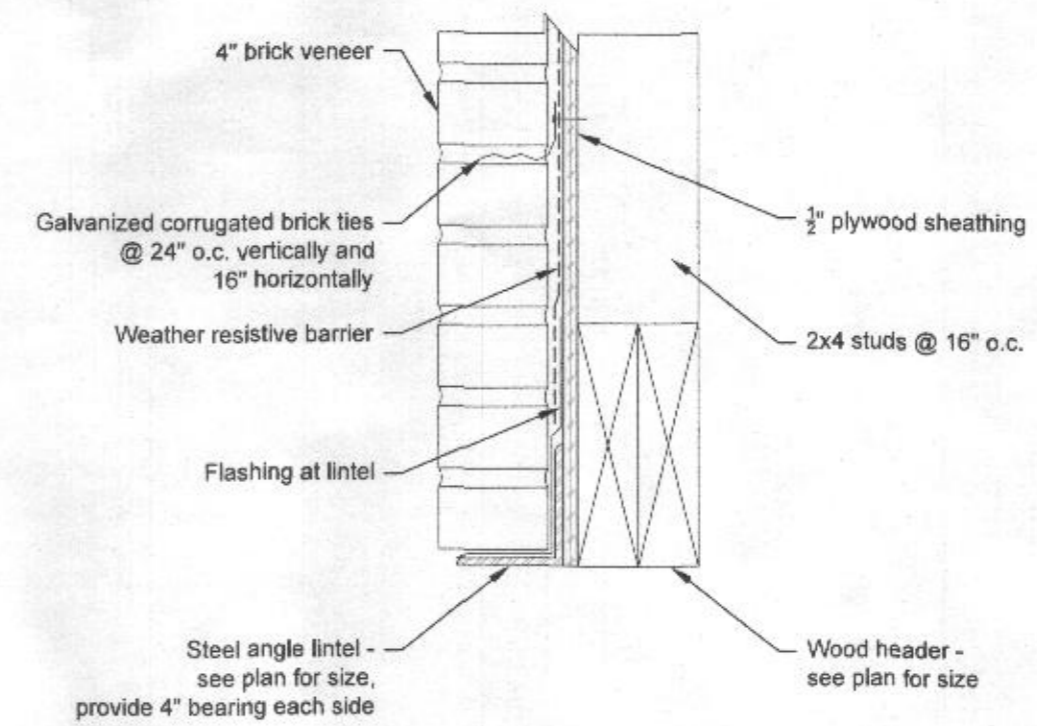
1
S-4
Alternate Braced Wall (ABW) Detail
N.T.S.



Side Elevation
N.T.S.



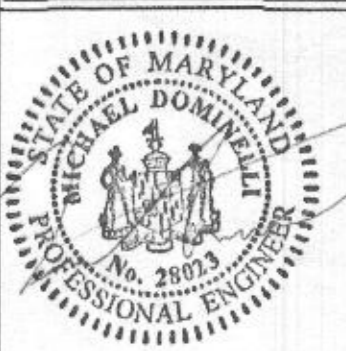
2
S-4
Roofing Detail
1" = 1'-0"



3
S-4
Lintel and Header Detail
N.T.S.

Repairs for Fire Damage at
14225 Day Farm Road
Glenelg, Maryland

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I, Michael F. Dominielli, hereby certify that these documents were prepared or approved by me or under my direct supervision and I am a duly licensed Professional Engineer in the State of Maryland. License No. 28023. Expiration Date: 10-16-2022.

Drawn by: FT
Checked by: MD
Date: 6/30/21
Project: 21-039

Notes and Details
Reviewed:
S-4

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