# Zoning Board of Appeals January 27, 2021 Regular Meeting

# **STAFF REPORT**

## Subject: ZBA 20-030; 2003 Norfolk Avenue

## Summary:

Marc Yesowitz, property owner, is requesting a two-foot variance from Section 5.16.6 Accessory Uses and Structures in order to construct a detached carport in the required five-foot side yard. The proposed carport will be 10' wide and 54 feet 8 inches in length with a 110 (11'x10') square foot attached unfinished storage room. The property is zoned R1C, Single-Family Residential.

## Background:

The subject property is located on the southeast corner of Suffolk Avenue and Norfolk Avenue in the Dicken neighborhood. The home was built in 1959 and is approximately 1,753 square feet in size.

## **Description:**

The new detached carport is designed to be large enough to accommodate two vehicles and a storage area. The carport has been designed to maintain a one-inch separation between the two structures. The previous carport has been demolished as it was the cause of drainage issues for the residence.

# Standards for Approval- Variance

The Zoning Board of Appeals has all the power granted by State law and by Section 5.29.12, Application of the Variance Power from the UDC. The following criteria shall apply:

# (a). That the practical difficulties are exceptional and peculiar to the property of the person requesting the variance and result from conditions which do not exist generally throughout the City.

The applicant contends that due to the property being located on a corner lot the front setbacks on the north and west sides of the parcel have created a 15 foot side yard thereby reducing the size of a garage of carport on the driveway side of the lot.

# (b). That the practical difficulties will result from a failure to grant the variance, include substantially more than mere inconvenience, inability to attain a higher financial return, or both.

The applicant states the variance is needed to help accommodate the desired door width of 10 feet. If the variance is denied the width of the door opening will be reduced to less than eight feet. A width of less than eight feet is unsuitable as a standard garage door measurement is eight feet.

# (c). That allowing the variance will result in substantial justice being done, considering the public benefits intended to be secured by this Chapter, the individual hardships that will be suffered by a failure of the Board to grant a variance, and the rights of others whose property would be affected by the allowance of the variance.

The variance request will not have any negative impacts to adjacent or surrounding properties. The new carport will be an improvement from an aesthetics and structural stand point. The carport will be buffered from view to the south by the existing trees and shrubs.

# (d). That the conditions and circumstances on which the variance request is based shall not be a self- imposed hardship or practical difficulty.

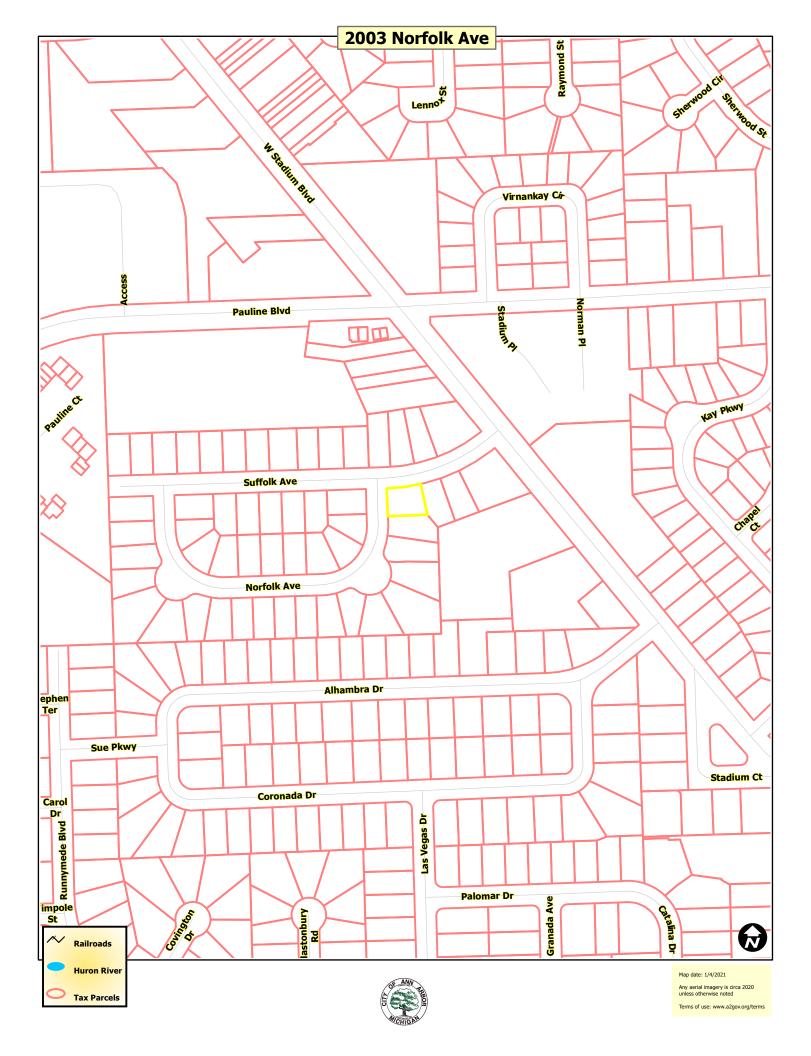
The applicant states the conditions were existing and were not self-created but rather a situation that was inherited with the purchase of the property. The significant slope of the property to the south was not self-imposed but rather an external condition that the variance will help to alleviate the drainage concerns.

# (e). A variance approved shall be the minimum variance that will make possible a reasonable use of the land or structure.

The petitioner states the request is the minimal amount in order to allow for a functional carport to be constructed.

Respectfully submitted,

Jon Barrett-Zoning Coordinator





OF ANY FREE

Tax Parcels

Map date: 1/4/2021 Any aerial imagery is circa 2020 unless otherwise noted Terms of use: www.a2gov.org/terms



Huron River

Tax Parcels



Map date: 1/4/2021 Any aerial imagery is circa 2020 unless otherwise noted Terms of use: www.a2gov.org/terms



# ZONING BOARD OF APPEALS APPLICATION

City of Ann Arbor Planning Services

City Hall: 301 E Huron Street Ann Arbor, MI 48107-8647

Phone: 734-794-6265 Fax: 734-794-8460 Email: planning@a2gov.org

PROPERTY INFORMATI	ON						
ADDRESS OF PROPERTY					Z	IP CODE	
ZONING CLASSIFICATION	NAME OF PROPERTY OWNER* owner must be provided	*If differe	nt than	applica	nt, a letter of auth	norization fr	om the property
PARCEL NUMBER		OWNER	REMAII	L ADDF	RESS		
APPLICANT INFORMAT	ION						
NAME							
ADDRESS			CITY			STATE	ZIP CODE
EMAIL			1		PHONE		
APPLICANT'S RELATIONSHIP TO P	ROPERTY						
REQUEST INFORMATIO	N						
VARIANCE REQUEST Complete Section 1 of this applic	cation				OALTER A NON ion 2 of this ap		1ING STRUCTURE
REQUIRED MATERIALS					OFF	ICE USE ONI	Y
One hard copy application complete will all required attachments must be submitted. Digital copies of supportive materials included in the submitted hard copy will only be accepted in PDF format by email or accompanying the hard copy application on a USB flash drive. <b>Required Attachments:</b> Boundary Survey of the property including all existing and proposed structures, dimensions of property, and area of property. Building floor plans showing interior rooms, including dimensions. Photographs of the property and any existing buildings involved in the request.				Fee Paid:		DATE STAMP	
ACKNOWLEDGEMENT							
All information and materials	s submitted with this applica	ation a	re tru	e and	correct.		
Permission is granted to City access the subject property f					-	Board of	f Appeals to
Property Owner Signature :	My ym	X			Date:		

V

# $Section \ 1 \ {\rm City} \ {\rm of} \ {\rm Ann} \ {\rm Arbor} \ {\rm Planning} \ {\rm Services} \ - \ {\rm Zoning} \ {\rm Board} \ {\rm of} \ {\rm Appeals} \ {\rm Application}$

VARIANCE REQUEST	
ARTICLE(S) AND SECTION(S) FROM WHICH A VARIANCE IS REQU	IESTED: (Example: Article 3, Section 5.26)
REQUIRED DIMENSION: (Example: 40' front setback)	PROPOSED DIMENSION: (Example: 32 foot 8 inch front setback )
Feet: Inches:	Feet: Inches:
DESCRIPTION OF PROPOSED WORK AND REASON FOR VARIANC	E:
The City of Ann Arbor Zoning Board of Appeals has the 55, Section 5:29. A variance may be granted by the Zon difficulties or unnecessary hardships when all of the fo provide a complete response to each of the statements	ing Board of Appeals only in cases involving practical llowing statements are found to be true. Please
The alleged practical difficulties are exceptional and peculiar result from conditions that do not exist generally throughout	
The alleged practical difficulties that will result from a failure mere inconvenience, inability to attain a higher financial retu	-
Allowing the variance will result in substantial justice being do secured by this chapter, the practical difficulties that will be s the rights of others whose property would be affected by the	uffered by a failure of the Board to grant a variance, and
The conditions and circumstances on which the variance requ	uest is based shall not be a self-imposed practical difficulty.
A variance approved shall be the minimum variance that will	make possible a reasonable use of the land or structure.

# VARIANCE REQUEST

# ARTICLE(S) AND SECTION(S) FROM WHICH A VARIANCE IS REQUESTED: (Example: Article 3, Section 5.26)

- Article III (Use Regulations), Section 5.16.6 (Accessory Uses and Structures) Paragraph A.2.c.

Detached Accessory Buildings may occupy the Side Setback Area provided that such Buildings are set back farther from the street than any part of the Principal Building on the same Lot and any part of the Principal Building on any Lot abutting said required Side Setback Area. Accessory Buildings shall not be located closer than three feet to any Lot Line.

- Article III (Use Regulations), Table 5.17-1 (Single Family Residential Zoning District Dimensions), Required Setback, Minimum on one side

REQUIRED DIMENSION: (Example: 40' front setback)Feet: 5 FeetInches: 0side setback

PROPOSED DIMENSION: (Example: 32 foot 8 inch front setback ) Feet: 3 Feet Inches: 0 side setback

### DESCRIPTION OF PROPOSED WORK AND REASON FOR VARIANCE:

We propose to build a detached carport on the southern side of the property adjacent to the house. We are requesting to reduce the side setback from 5 feet to 3 feet. If the side setback is maintained at 5 feet, the carport opening will be restricted to 8 feet wide, however, with a 3 feet setback the carport width can be designed at 10 feet.

The City of Ann Arbor Zoning Board of Appeals has the powers granted by State law and City Code Chapter 55, Section 5:29. A variance may be granted by the Zoning Board of Appeals only in cases involving practical difficulties or unnecessary hardships when all of the following statements are found to be true. Please provide a complete response to each of the statements below.

The alleged practical difficulties are exceptional and peculiar to the property of the Person requesting the variance, and result from conditions that do not exist generally throughout the City.

The practical difficulties that will result from a failure to grant the variance are unique to this property for the following reasons:

- 1) The property is on a corner lot and the front setbacks on the North and West side of the property allow for only 15' between the South side of the existing house and the southern property line.
- 2) The grading of the property to the South (2007 Norfolk Avenue, Lot 35) is significantly sloped toward the property requesting the variance (2003 Norfolk Avenue, Lot 36). Allowing the variance for the carport will significantly improve drainage and alleviate concerns regarding groundwater incursion.
- 3) The property is very close to a major thoroughfare (West Stadium Boulevard). Allowing the variance will provide safety and security for both the property requesting the variance and the property to its south (2007 Norfolk Avenue).

# The alleged practical difficulties that will result from a failure to grant the variance, include substantially more than mere inconvenience, inability to attain a higher financial return, or both.

The practical difficulties that will result from a failure to grant the variance include the following significant impacts:

- If the carport is built without the variance granted, the width of the carport between the footings and the stem wall along the southern property line would be 7' 11 <sup>3</sup>/<sub>4</sub>". This is unsuitable as a standard garage door width is 8'. This would significantly reduce or prohibit typical use of the carport.
- 2) The property requesting the variance would be subjected to a high risk of future drainage and water incursion issues.
- 3) The property requesting the variance and the property to its south would be exposed to a higher level of risk of a safety or security issue due to their proximity to West Stadium Boulevard.

Allowing the variance will result in substantial justice being done, considering the public benefits intended to be secured by this chapter, the practical difficulties that will be suffered by a failure of the Board to grant a variance, and the rights of others whose property would be affected by the allowance of the variance. This variance request will not have any negative impacts to adjacent or surrounding properties. Aesthetically, the new carport will be a significant improvement over the previously existing carport. The carport will be mostly buffered from view from the property to the south by existing trees and shrubbery.

# The conditions and circumstances on which the variance request is based shall not be a self-imposed practical difficulty.

The original carport and driveway conditions were previously existing for many years. This is not a self-created condition but rather one that was inherited with the purchase of the property. The grading of the neighbor's property and the proximity of the property to a major thoroughfare are not self-imposed, but rather are external conditions that this variance will help to address.

# A variance approved shall be the minimum variance that will make possible a reasonable use of the land or structure.

This variance request is modest and is the minimal amount needed in order to allow for a functional carport to be constructed.

# Supporting documentation:

### Additional statement:

A carport was previously existing in this location when the property was purchased in August 2020. There was an urgent need to remove the carport and replace the driveway due to an apparent drainage and groundwater incursion issue. There appeared to be significant issues with groundwater incursion in the basement, caused by the age and design of the carport and driveway, and the unique topography directing water toward the property requesting the variance.

The previously existing carport was a nonconforming structure that did not meet the current code requirement of a 5-foot side setback. A decision was made to remove the exiting carport and replace the driveway in order to mitigate any possible future issues.



Figure 1 – Showing the proximity of the subject property to West Stadium Boulevard



Figure 2 – Previously existing carport and shed

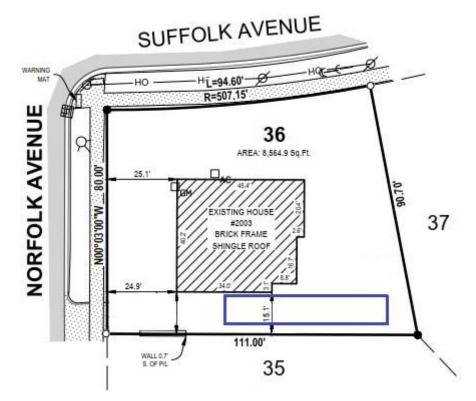
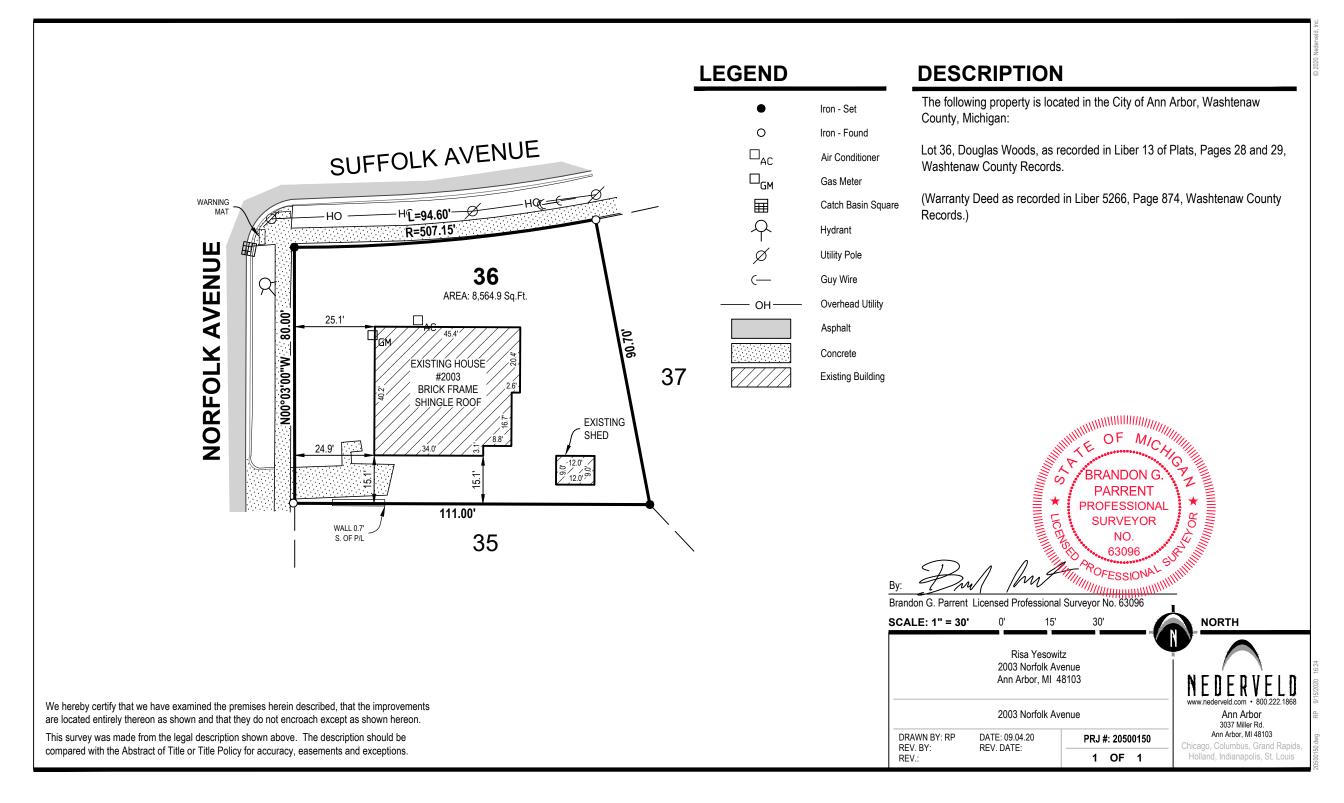
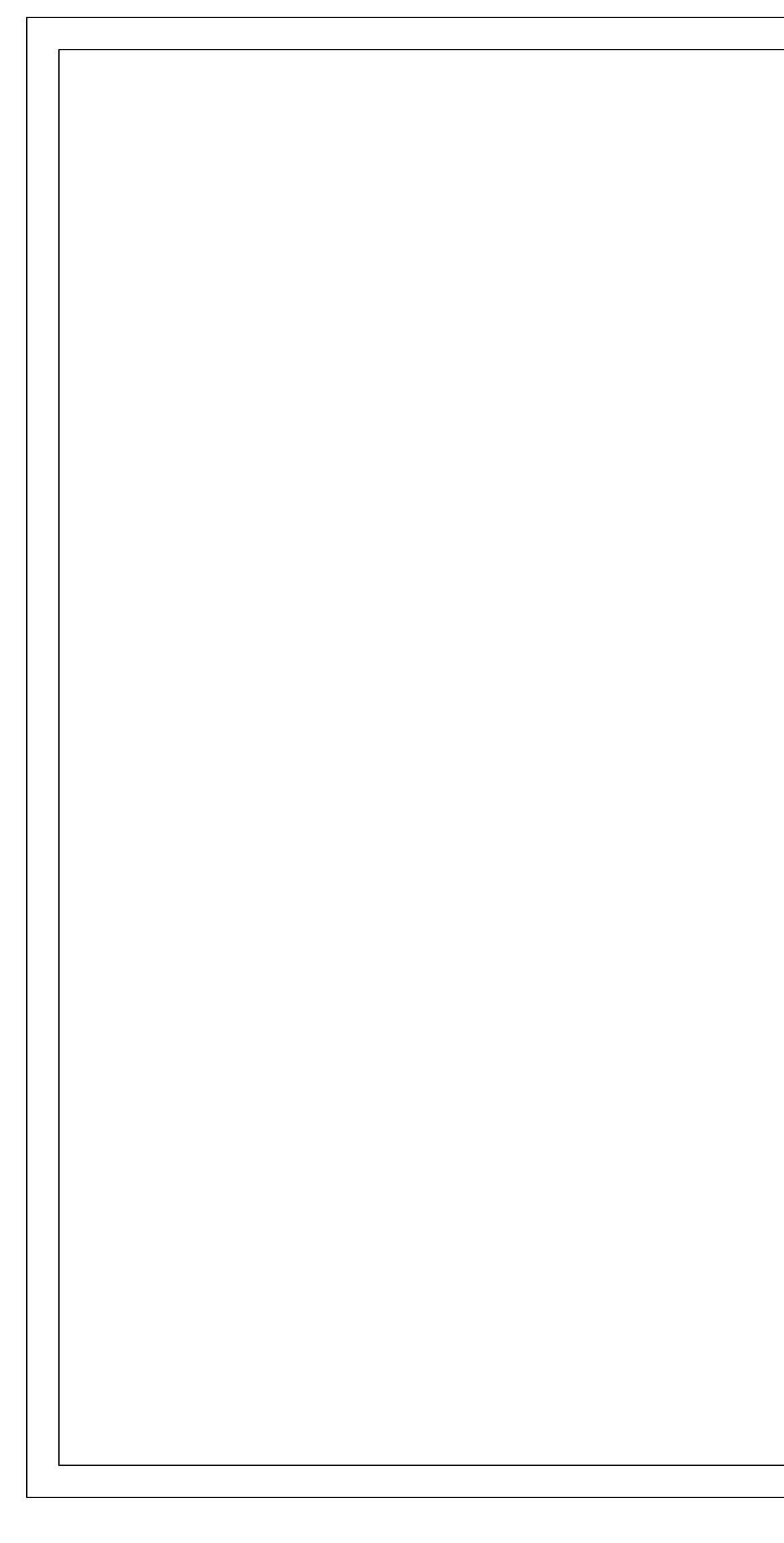
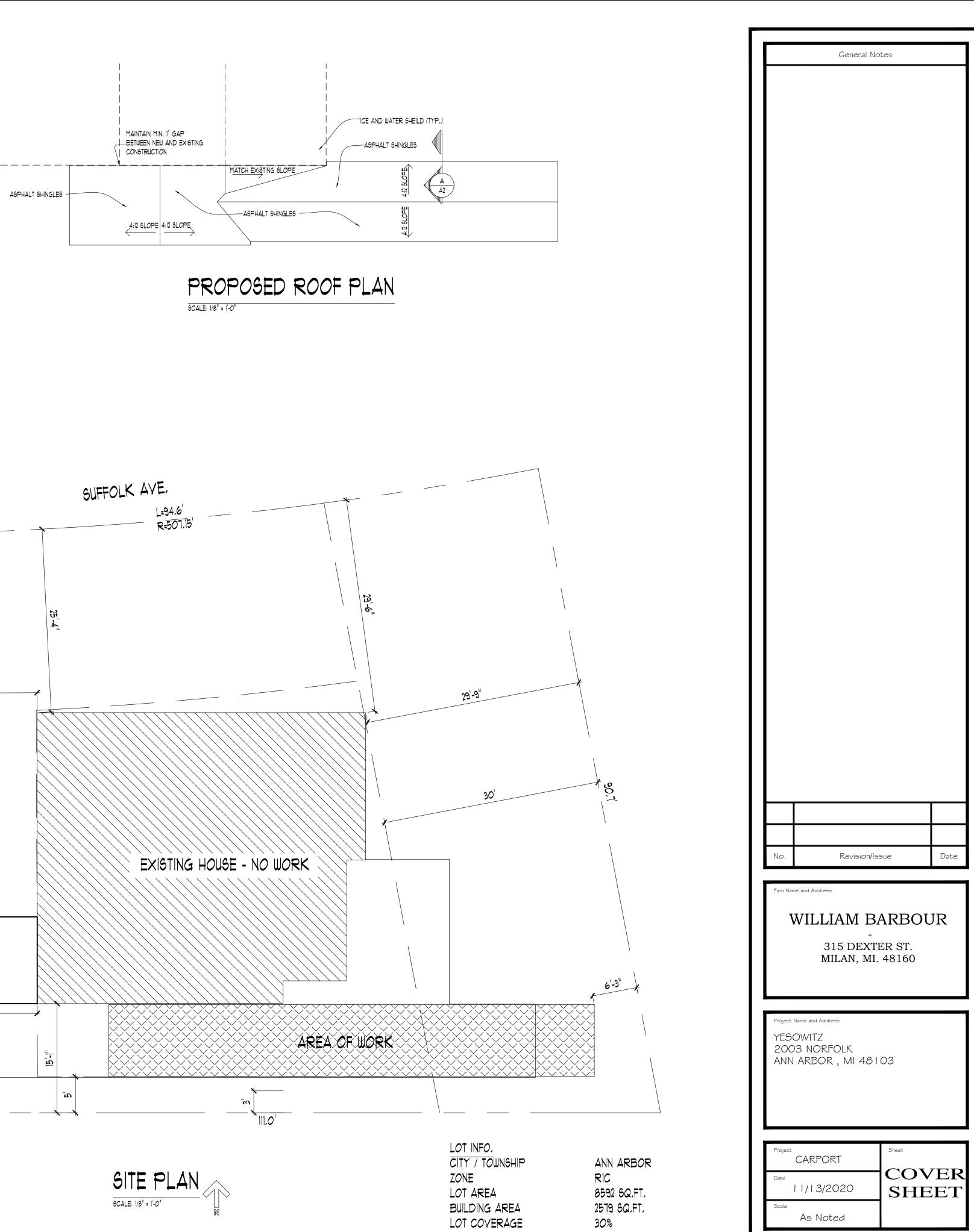


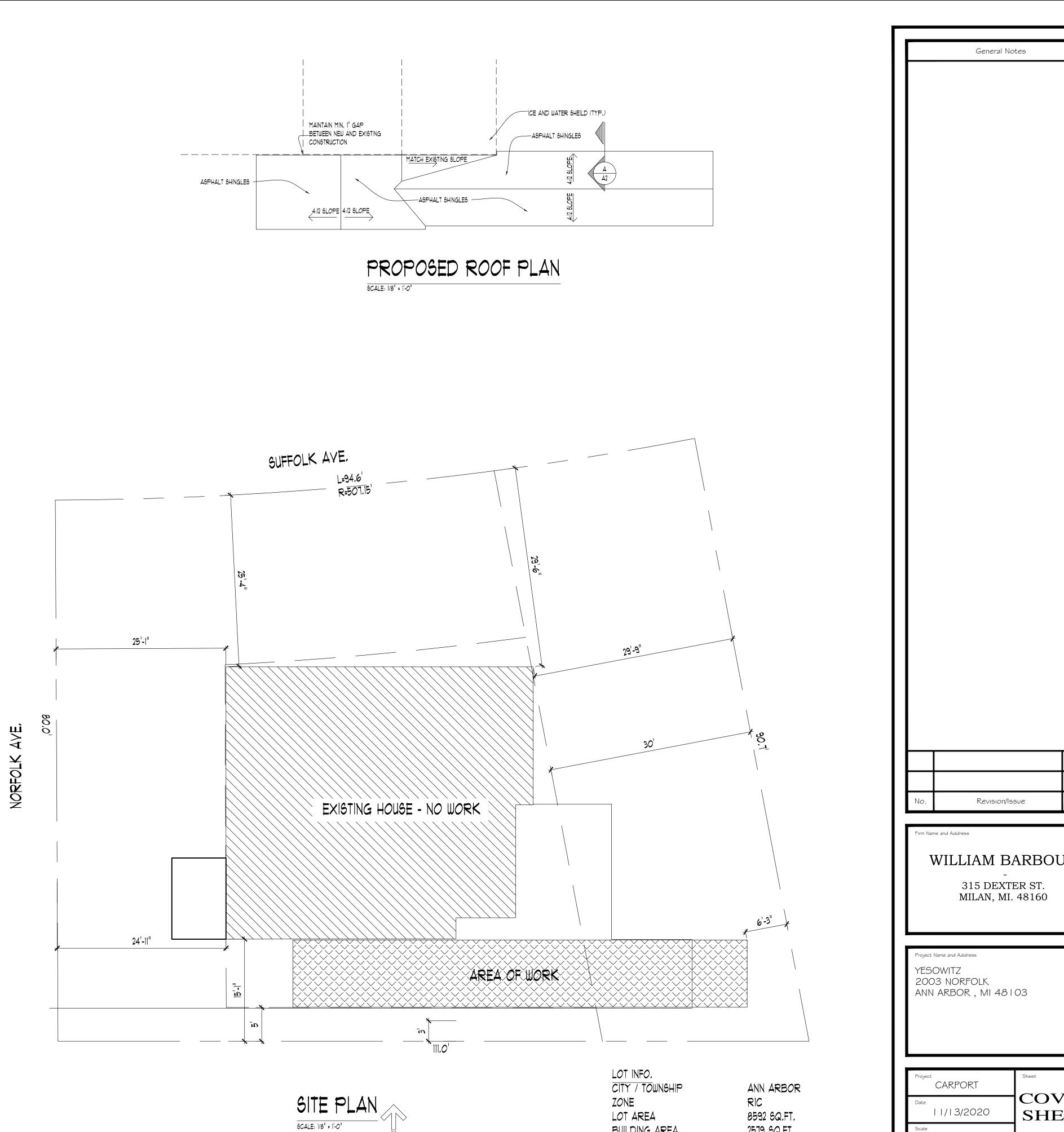
Figure 3 – Proposed footprint of new carport











30%

As Noted

Date

LENGT	H REQUIREMENTS		LL PANELS IN A CO TABLE #1	ONTINUOUSLY SHEATHI
	MAXIMUM OPENING BRACED WA (% OF WAL			
8-FOOT WALL	9-FOOT WALL	10-FOOT WALL	12-FOOT WALL**	
48*	54*	60*	72*	100%
32*	36*	40*	48*	85%
24*	27*	30*	36*	65%
*THESE	VALUES CAN BE RED	DUCED BY 50% IF SH	EATHING IS PROVIDE	ED ON INTERIOR AND EXTE

\*12 FOOT TALL STUDS SUPPORTING ONLY A ROOF MAY BE 2 X 4 @ 16" O.C. 12 FOOT TALL STUDS SUPPORTING ONE OR TWO FLOORS AND A ROOF SHALL BE 2 X 6 @ 16" O.C.

	MAXIMUM PONY	MAXIMUM TOTAL	MAXIMUM OPENING	TENSION STRAP CAPACITY REQUIRED (pounds)°					
MINIMUM WALL STUD FRAMING NOMINAL				Ultimate Design Wind Speed V <sub>utt</sub> (mph)					)
SIZE AND GRADE	WALL HEIGHT (feet)	WALL HEIGHT (feet)	WALL HEIGHT (feet)	110	115	130	110	115	130
	(leel)	(leel)	(leel)		Exposure	В		Exposure	C
	0	10	18	1,000	1,000	1,000	1,000	1,000	1,050
2 x 4 No. 2 Grade			9	1,000	1,000	1,000	1,000	1,000	1,750
	1	10	16	1,000	1,025	2,050	2,075	2,500	3,950
			18	1,000	1,275	2,375	2,400	2,850	DR
	2	10	9	1,000	1,000	1,475	1,500	1,875	3,12
			16	1,775	2,175	3,525	3,550	4,125	DR
			18	2,075	2,500	3,950	3,975	DR	DR
·		12	9	1,150	1,500	2,650	2,675	3,175	DR
	2		16	2,875	3,375	DR	DR	DR	DR
			18	3,425	3,975	DR	DR	DR	DR
·	4	12	9	2,275	2,750	DR	DR	DR	DR
	4	12	12	3,225	3,775	DR	DR	DR	DR
			9	1,000	1,000	1,700	1,700	2,025	3,05
	2	12	16	1,825	2,150	3,225	3,225	3,675	DR
2 x 6 Stud Grade			18	2,200	2,550	3,725	3,750	DR	DR
			9	1,450	1,750	2,700	2,725	3,125	DR
	4	12	16	2,050	2,400	DR	DR	DR	DR
			18	3,350	3,800	DR	DR	DR	DR

- EXTERIOR GRADE SHALL BE INSPECTED AND LOCATIONS WHERE THE GRADE IS WITHIN 8" OF THE SILL PLATE, INSPECT CLOSELY FOR SIGNS OF ROT. ANY ROTTED WOOD SHALL BE REMOVED AND REPLACED AND THEN SPOT TREATED WITH TIMBOR OR AN EQUIVALENT PRESERVATIVE.
- NEW SILICONE SEALANT SHALL BE APPLIED AROUND ANY OPENINGS THROUGH THE FOUNDATION (PIPES, WIRES, ETC).
- ALL VERTICAL CRACKS NOTED SHALL BE TUCK POINTED WITH AN EPOXY MORTAR,
- GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL SUB-TRADES.
- 5. ALL WORK IS TO BE DONE BY LICENSED CONTRACTORS
- . CONTRACTOR SHALL VERIFY ALL ON SITE CONDITIONS & DIMENSIONS AND TO NOTIFY TK DESIGN & ASSOCIATES OF ANY DISCREPANCIES OR OMISSIONS PRIOR TO CONSTRUCTION/DEMOLITION.
- CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL CONSTRUCTION RELATED DEBRIG, TRASH, RUBBIGH ETC. AND TO DISPOSE OF ALL MATERIALS IN A LEGAL MANNER, CONTRACTOR 15 TO KEEP THE PROJECT AREA CLEAN AT ALL TIMES,
- 5. CONTRACTOR SHALL NOTIFY, COORDINATE, AND SCHEDULE ANY AND ALL DISCONNECTIONS OF EXISTING UTILITY SERVICE WITH THE OWNER PRIOR TO THE WORK BEING DONE.
- REPAIR DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED. RETURN STRUCTURES AND SURFACES TO REMAIN TO CONDITION EXISTING PRIOR TO COMMENCEMENT OF SELECTIVE DEMOLITION WORK, REPAIR ADJACENT CONSTRUCTION OR SURFACES SOILED OR DAMAGED BY SELECTIVE DEMOLITION WORK,
- D. MAINTAIN EXISTING UTILITY SERVICES AND PROTECT AGAINST DAMAGE DURING ALL PHASES OF CONSTRUCTION.
- IF HAZARDOUS MATERIALS ARE ENCOUNTERED DURING DEMOLITION OPERATIONS, COMPLY WITH APPLICABLE REGULATIONS, LAWS, AND ORDINANCES CONCERNING REMOVAL, HANDLING, AND PROTECTION AGAINST EXPOSURE OR ENVIRONMENTAL POLLUTION.
- 2. ALL DRAWINGS ARE SCHEMATIC. EXTENT OF DEMOLITION SHOWN IS APPROXIMATE, FIELD VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION,
- , ALL STRUCTURAL MEMBERS ARE TO REMAIN (TYP, UNLESS NOTED OTHERWIGE)

	ALLOWABLE LENG	TH OF WOOD STUE DESIGN CATEGOR		
HEIGHT		ON-CENTER SPA	CING (INCHES)	
(FEET)	24	16	12	8
		SUPPORTING A	A ROOF ONLY	
>10	2x4	2x4	2x4	2x4
12	2x6	2x4	2x4	2x4
14	2x6	2x6	2x6	2x4
16	2x6	2x6	2x6	2x4
18	NA a	2x6	2x6	2x6
20	NA a	NA a	2x6	2x6
24	NA a	NA a	NA a	2x6
	S	UPPORTING ONE FI		F
>10	2x6	2x4	2x4	2x4
12	2x6	2x6	2x6	2x4
14	2x6	2x6	2x6	2x6
16	NA a	2x6	2x6	2x6
18	NA a	2x6	2x6	2x6
20	NA a	NA a	2x6	2x6
24	NA a	NA a	NA a	2x6
	SI	JPPORTING TWO FL	OORS AND A ROO	DF
>10	2x6	2x6	2x4	2x4
12	2x6	2x6	2x6	2x6
14	2x6	2x6	2x6	2x6
16	NA a	NA a	2x6	2x6
18	NA a	NA a	2x6	2x6
20	NA a	NA a	NA a	2x6
22	NA a	NA a	NA a	NA a
24	NA a	NA a	NA a	NA a
Snow load no design value than 1.6 by 1 roofs not exc conditions au	bility of this table assumes the of exceeding 25 psf, but no s by the repetitive use facto 06 psi, tributary dimensions seeding 12 feet, eaves not g re not within these paramet	t less than 1310 psi determin r, and by the size factor for for floors and roofs not exco greater than 2 feet in dimension	all species except souther eeding 6 feet, maximum s sion and exterior sheathing	n pine, E not less oan for floors and
TABLE R	602.3.(5)			
SIZE HEIG				

		BE	ARING WA	LLS		NONBEARI	NG WAL
STUD SIZE (inches)	Laterally unsupported stud height 'a' (feet)	Maximum spacing when supporting roof and ceiling only (inches)	Maximum spacing when supporting one floor, roof and ceiling only (inches)	Maximum spacing when supporting two floors, roof and ceiling only (inches)	Maximum spacing when supporting one floor only (inches)	Laterally unsupported stud height 'a' (feet)	Maximun spacing (inches)
2x3 b	-	-	-	-	-	10	16
2x4	10	24	16	-	24	14	24
3x4	10	24	24	16	24	14	24
2x5	10	24	24	-	24	16	24
2x6	10	24	24	16	24	20	24

SIZE OF STEEL ANGLE a,c (inches)	NO STORY ABOVE	ONE STORY ABOVE	TWO STORIES ABOVE	NO. OF <sup>1</sup> / <sub>2</sub> OR EQUIVALENT REINFORCING BARS c
3x3x <sup>1</sup> / <sub>4</sub>	6'-0''	4'-6"	3'-0"	1
4x3x <sup>1</sup> / <sub>4</sub>	8'-0''	6'-0''	4'-6"	1
5x3 <sup>1</sup> / <sub>2</sub> x <sup>5</sup> / <sub>16</sub>	10'-0"	8'-0''	6'-0''	2
6x3 <sup>1</sup> <sub>2</sub> x <sup>5</sup> <sub>16</sub>	14'-0"	9'-6"	7'-0"	2
2-6x3 <sup>1</sup> / <sub>2</sub> x <sup>5</sup> / <sub>16</sub>	20'-0"	12'-0"	9'-6''	4
b. Depth of r grouted solid.	Reinforcing bars shall ext nbers indicated are adequ	n a vertical position. be less than 8 inches and c tend not less than 8 inches uate typical examples; oth	into the support.	

TYPICAL CON	VENTIONAL	ROOF FRAM	ING	
* RIDGE BEAM SIZE	E WILL BE EQUAL	TO THE RAFTER C	CUT EDGE *	
RAFTER SPANS	0'-0" - 4'-0"	4'-0" - 8'-0"	8'-0" - 12'-0"	12'-0" - 16'-
LUMBER SIZE	2x4	2x6	2x8	2x12

# HED WALL

### NG HEIGHT NEXT TO VALL PANEL LL HEIGHT)

# TERIOR

# GENERAL NOTES

# WOOD TRUSS SPECIFICATIONS

- 1. Designs shall conform with the latest versions of (NDS), "National Design Specification for Wood Construction" by the American Forest & Paper Association, and Design Standard for Metal Plate Connected Wood Truss Construction by the American Standard (ANSI) and the Truss Plate Institute (T.P.I.) and the local code jurisdiction.
- 2. Trusses shall be spaced as indicated on the plans unless the designer determines that
- different spacing is required to meet deflection requirements. 3. Maximum deflection of floor trusses shall be limited to 1/360 for total load and 1/480 for live load. Maximum deflection of roof trusses shall be limited to 1/240 for total
- loads and 1/360 for live load u.n.o. 4. Adequate camber shall be built into floor and parallel chord roof trusses to
- compensate for normal dead load deflection. 5. Design loads:

# FLOOR JOIST LOADING CRITERIA EXT, DECK JOIST LOADING CRITERIA

	4
FIRST FLOOR LOADING: LIVE LOAD 40 P.S.F. DEAD LOAD 15 P.S.F. TOTAL LOAD 55 P.S.F. LIVE LOAD DEFLECTION L/480 TOTAL LOAD DEFLECTION L/240	DECK LOADING: LIVE LOAD 50 P.S.F. DEAD LOAD 10 P.S.F. TOTAL LOAD 60 P.S.F. LIVE LOAD DEFLECTION L/360 TOTAL LOAD DEFLECTION L/240
SECOND FLOOR LOADING: LIVE LOAD 40 P.S.F.	ROOF TRUSS LOADING CRITERIA
DEAD LOAD 10 P.S.F. TOTAL LOAD 50 P.S.F.	TOP CHORD LIVE LOAD 20 P.6.F. DEAD LOAD 1 P.6.F.
LIVE LOAD DEFLECTION L/480 TOTAL LOAD DEFLECTION L/240	BOTT, CHORD LIVE LOAD 10 P.S.F.
FLOOR W/CERAMIC TILE/MARBLE:	(UNINHABITABLE ATTICS W/OUT STORAGE
LIVE LOAD 40 P.S.F.	
DEAD LOAD 25 P.S.F. TOTAL LOAD 65 P.S.F.	(UNINHABITABLE ATTICS WITH STORAGE)
LIVE LOAD DEFLECTION L/120 TOTAL LOAD DEFLECTION L/360	DEAD LOAD 10 P.S.F. WIND LOAD 30 MPH OR AS REQUIRED

\* A 15% increase on allowable stresses for short term loading is allowed. Drift loading shall be accounted for per the current "Michigan Residential Code" requirements. \* Add additional attic storage live loads per the current "Michigan Residential Code" requirements,

BY CODE

\*\*\* Tile, marble, or other special features shall be designed using the appropriate dead loads and deflection limitations. Partition loads shall also be considered where appropriate.

# HANDLING AND ERECTION SPECIFICATIONS

- 1. Trusses are to be handled with particular care during fabrication, bundling, loading, delivery, unloading and installation in order to avoid damage and weakening of the
- 2. Temporary and permanent bracing for holding the trusses in a straight and plumb position is always required and shall be designed and installed by the erecting contractor. Temporary bracing during installation, includes cross bracing between the trusses to prevent toppling or "dominoing" of the trusses.
- 3. Permanent bracing shall be installed in accordance with the latest of the "National Design Standard", as published by the American Forest & Paper Association and H.I.B.-91 and D.S.B.-85 as published by the truss plate institute. Permanent bracing consists of lateral and diagonal bracing not to exceed spacing requirements of the truss fabricator. Top chords of trusses must be continuously braced by roof sheathing unless otherwise note on the truss shop drawings. Bottom chords must be braced at intervals not to exceed 10' o.c. or as noted on the truss fabricators drawings,
- 4. Construction loads greater than the design loads of the trusses shall not be applied to the trusses at any time.
- 5. No loads shall be applied to the truss until all fastening and required bracing is installed, 6. The supervision of the truss erecting shall be under the direct control of persons(s)
- experienced in the installation and proper bracing of wood trusses. 7. Field modification or cutting of pre-engineered roof trusses is strictly prohibited
- without expressed prior written consent and details from a licensed professional structural engineer experienced in wood truss design and modifications.

# SOIL REQUIREMENTS & EARTH WORK AND CONCRETE

- 1. All top soil, organic and vegetative material should be removed prior to construction. Any required fill shall be clean, granular material compacted to at least 95% of maximum dry density as determined by ASTM D-1557.
- 2. Foundations bearing on existing soils have been designed for a minimum allowable soil bearing capacity of 3000 psf, u.n.o.
- 3. Notify the engineer/architect if the allowable soil bearing capacity is less than 3000 psf so that the foundations can be redesigned for the new allowable bearing capacity.

# R404.1.7 Backfill placement.

Backfill shall not be placed against the wall until the wall has sufficient strength and has been anchored to the floor above or has been sufficiently braced to prevent damage by the backfill.

## R506.2.1. Fill.

Fill material shall be free of vegetation and foreign material. The fill shall be compacted to assure uniform support of the slab and, except where approved, the fill depths shall not exceed 24 inches for clean sand or gravel and 8 inches for earth,

# R506.2.3 Yapor retarder.

A 6 mil polyethylene or approved vapor retarder with joints lapped not less than 6 inches shall be placed between the concrete floor slab and the base course or the prepared subgrade where no base course exists.

- Concrete work shall conform to the requirements of ACI 301-96, "Specifications for Structural Concrete for Buildings", except as modified as supplemental requirements.
- 2. Concrete shall have a minimum of 3000 psi, 28 day compressive strength, unless noted otherwise, (4 sacks) & a water/cement ratio not to exceed 6 gallons per sack). Exterior concrete slabs shall have a minimum of 4000 psi, 28 day compressive strength, \$ 4%%% air entrainment.
- 3. The use of additives such as fly ash or calcium chloride is not allowed without prior review from the architect.

# R405.1 Concrete or masonry foundations.

Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend at least I foot beyond the outside edge of the footing and 6 inches above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper, and the drainage tiles or perforated pipe shall be placed on a minimum of 2 inches of washed gravel or crushed rock at least one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches of the same material.

Exception: A drainage system is not required when the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I Soils, as detailed in Table R405.1.

# **REINFORCING STEEL SPECIFICATIONS**

1. Reinforcing bars, dowels and ties shall conform to ASTM-615 grade 60 requirement and shall be free of rust, dirt, and mud. 2. Welded wire fabric shall conform to ASTM a-185 and be positioned at the mid heid

- of slabs U.N.O. 3. Reinforcing shall be placed and securely tied in place sufficiently ahead of place
- of concrete to allow inspection and correction, if necessary without delaying the concrete placement. 4. Extend reinforcing bars a minimum of 36" around corners and lap bars at splices a
- minimum of 24" U.N.O. 5. Welding of reinforcing steel is not allowed.

# STAIRWAYS AND HANDRAILS

R311.7.1 Width. Stairways shall not be less than 36 inches (914 mm) in clear width at all points above . permitted handrail height and below the required headroom height. Handrails shall not broject more than 4.5 inches (114 mm) on either side of the stairway and the minimum cl width of the stairway at and below the handrail height, including treads and landings, sl not be less than 3-1/2 (787 mm) where a handrail is installed on one side and 27 inches (698 mm) where handrails are provided on both sides. The width of spiral stairways sha be in accordance with Section R3.11.7.9.1. Exception: The width of spiral stairways shall be in accordance with Section R311.7.9.1.

R311.7.7 Handrails,

Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers.

R311.7.7.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing or finish surface of ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).

## Exceptions

The use of a volute, turnout or starting easing shall be allowed over the lowest tre 2. When handrail fittings or bendings are used to provide continuous transition betwee flights, the transition from handrail to quardrail, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maxim height.

# SMOKE ALARMS

R314.3 Smoke Alarms Smoke alarms shall be installed in the following locations:

## 1. In each sleeping room.

2. Outside each separate sleeping area in the immediate vicinity of the bedrooms. 3. On each additional story of the dwelling, including basements and habitable attics not including crawl spaces and uninhabitable attics. In dwellings or dwelling units wi split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provid that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwellin unit the alarm devices shall be interconnected in such a manner that the actuation of c alarm will activate all of the alarms in the individual unit.

### CARBON MONOXIDE DETECTOR

A Carbon monoxide device shall be located in the vicinity of the bedrooms, which n include I device capable of detecting carbon monoxide near all adjacent bedrooms: areas within the dwelling adjacent to an attached garage; and in areas adjacent to any fuel-burning appliances. Carbon Monoxide Detectors shall not be placed within fiftee feet of fuel-burning heating or cooking appliances such as gas stoves, furnaces, or fireplaces, or in or near very humid areas such as bathrooms.

# FLASHING AND WEEPHOLES

# R703.7.5 Flashing.

Flashing shall be located beneath the first course of masonry above finished ground level above the foundation wall or slab and at other points of support, including structural floors, shelf angles and lintels when masonry veneers are designed in accordance with Section R703.7. See Section R703.8 for additional requirements.

### R703.7.6 Weepholes.

Weepholes shall be provided in the outside wythe of masonry walls at a maximum spac of 33 inches (838 mm) on center. Weepholes shall not be less than 3/16 inch (5 mm) in diameter. Weepholes shall be located immediately above the flashing.

# R703.8 Flashing.

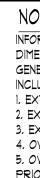
Approved corrosion-resistant flashing shall be applied shingle-fashion in a manner to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. Self-adhered membranes used as flashing shall comply wit AAMA 111. The flashing shall extend to the surface of the exterior wall finish. Approve corrosion-resistant flashings shall be installed at all of the following locations:

- . Exterior window and door openings. Flashing at exterior window and door opening shall extend to the surface of the exterior wall finish or to the water-resistive barr for subsequent drainage.
- 2. At the intersection of chimneys or other masonry construction with frame or stucco
- walls, with projecting lips on both sides under stucco copings.
- 3. Under and at the ends of masonry, wood or metal copings and sills. 4. Continuously above all projecting wood trim.
- 5. Where exterior porches, decks or stairs attach to a wall or floor assembly of
- wood-frame construction.
- 6. At wall and roof intersections. 1.7. At built-in gutters.

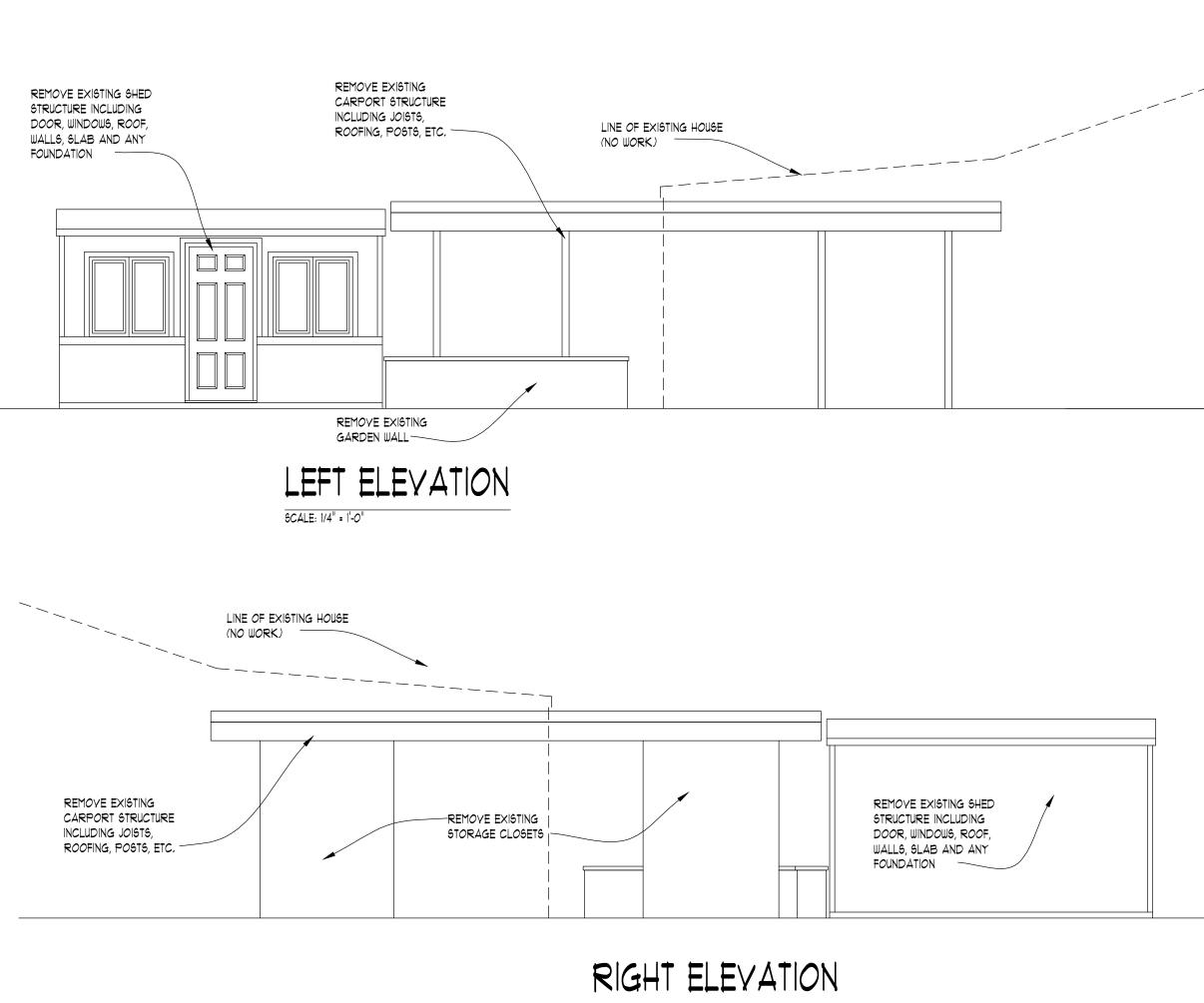
## FIREPLACES

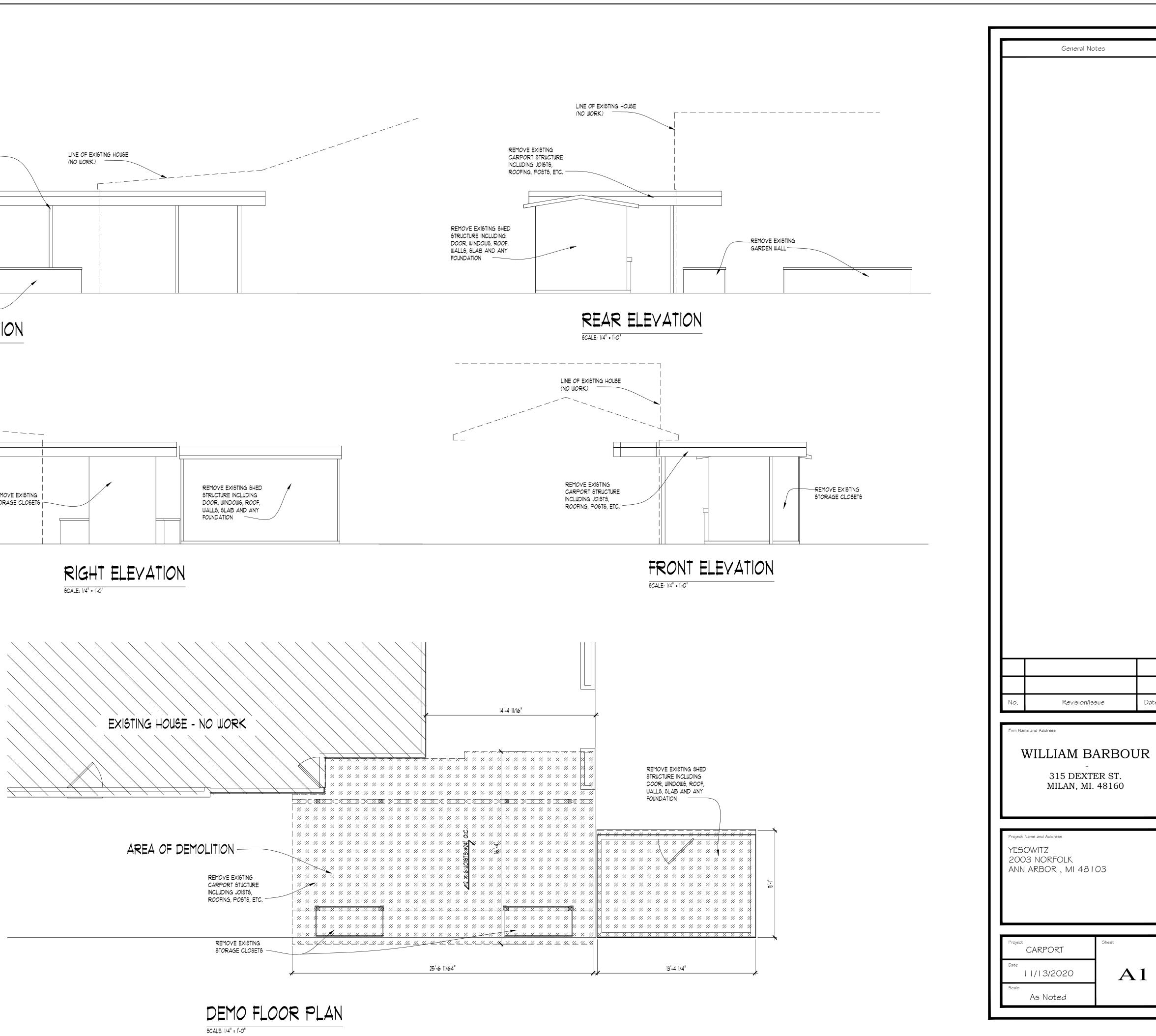
# R1001.10 Hearth extension dimensions.

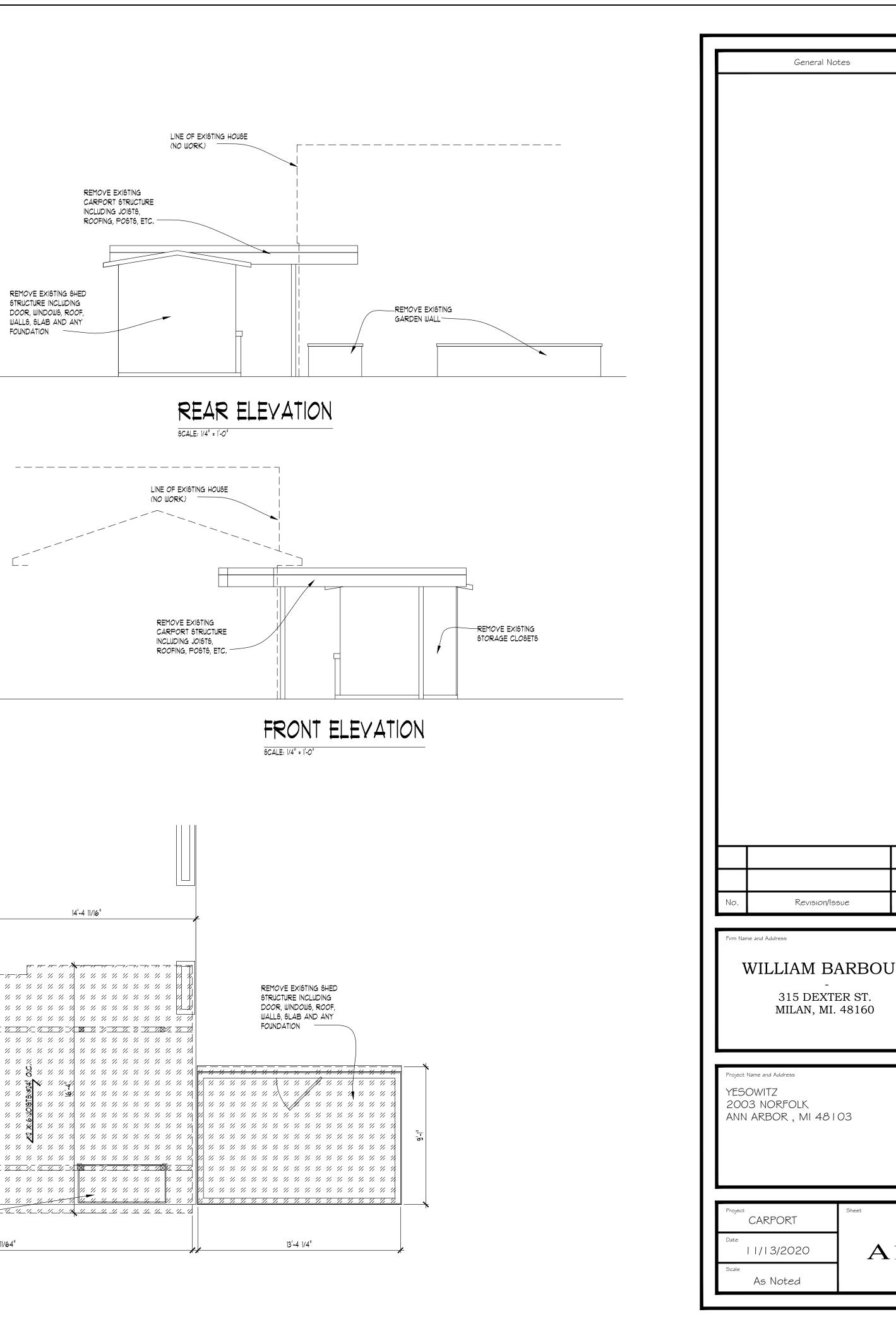
Hearth extensions shall extend at least 16 inches (406 mm)in front of and at least 8 inc (203 mm) beyond each side of the fireplace opening. ) or larger, 2 Where the fireplac opening is 6 square feet (0.6 m the hearth extension shall extend at least 20 inches (508 mm) in front of and at least 12 inches (305 mm) beyond each side of the fireplac opening.

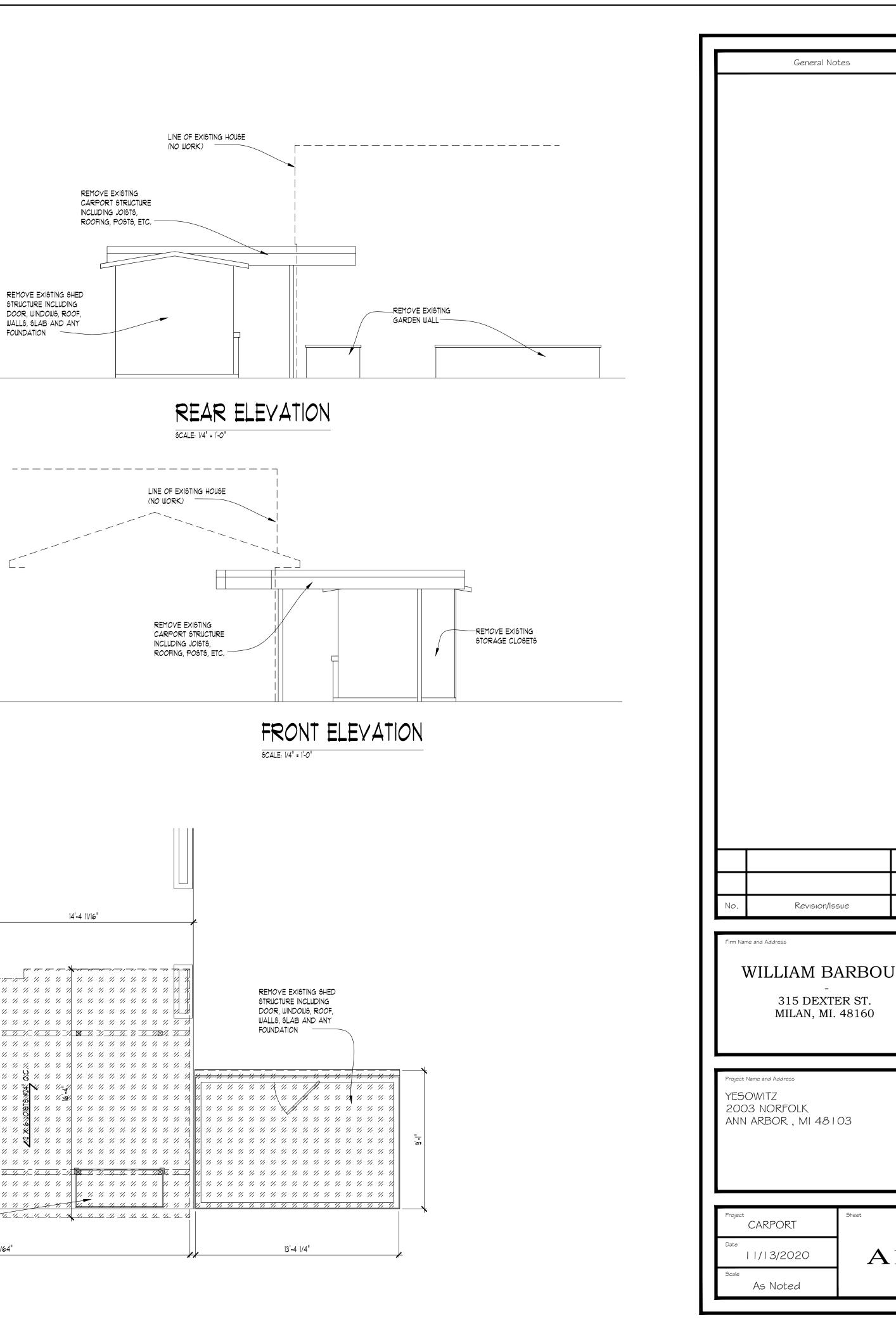


	<ul> <li>* Min. net clear opening of 5.7 sq. ft. (second floor bedrooms)</li> </ul>		Conce	al Notes	
	* Min. net clear opening of 5.0 sq. ft. (first floor bedrooms only)		Genera	al NOLES	
	* Min. net clear opening ht. of 24 inches				
	* Min. net clear opening width of 20 inches				
	* Max, sill ht, above finish floor of 44 inches				
	AREAS THAT REQUIRE SAFETY GLAZING				
	R308.4 Hazardous locations. The locations specified in Sections R308.4.1 through R308.4.1 shall be considered to be specific hazardous for the purposes of glazing.				
	R308.4.1 Glazing in doors. Glazing in fixed and operable panels of swinging, sliding and bifold doors considered to be a hazardous location.				
	Exceptions: 1. Glazed openings of a size through which a 3-inch diameter (76 mm) sphere is unable to pass. 2. Decorative glazing.				
	R308.4.2 Glazing adjacent to doors. Glazing in an individual fixed or operable panel adjacent to a door shall be considered to be a hazardous location where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) above the floor or walking surface and it meets either of the following conditions:				
	<ol> <li>Where the glazing is within 24 inches (610 mm) of either side of the door in the plane of the door in a closed position.</li> <li>Where the glazing is on a wall perpendicular to the plane of the door in a closed position and within 24 inches (610 mm) of the hinge side of an in-swinging door.</li> </ol>				
	<ol> <li>Exceptions:</li> <li>Decorative glazing.</li> <li>Where there is an intervening wall or other permanent barrier between the door and the glazing.</li> <li>Where access through the door is to a closet or storage area 3 feet (914 mm) or less in depth. Glazing in this application shall comply with Section R308.4.3.</li> <li>Glazing that is adjacent to the fixed panel of patio doors.</li> </ol>				
	R308.4.3 Glazing in windows. Glazing in an individual fixed or operable panel that meets all of the following conditions shall be considered to be a hazardous location:				
	<ol> <li>The exposed area of an individual pane is larger than 9 square feet (0.836 m2)</li> <li>The bottom edge of the glazing is less than 18 inches (451 mm) above the floor,</li> <li>The top edge of the glazing is more than 36 inches (914 mm) above the floor; and</li> <li>One or more walking surfaces are within 36 inches (914 mm), measured horizontally and in a straight line, of the glazing.</li> </ol>				
	<ol> <li>Exceptions:         <ol> <li>Decorative glazing.</li> <li>When a horizontal rail is installed on the accessible side(s) of the glazing 34 to 38 inches (864 to 965) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (150 N/m) without contacting the glass and be a minimum of 1-1/2 inches (38 mm) in cross sectional height.</li> <li>Outboard panes in insulating glass units and other multiple glazed panels when the bottom edge of the glass in 25 feet (1620 mm) or more above grade, a roof, walking surfaces, or other horizontal I within 45 degrees (0.19 rad.) of</li> </ol> </li> </ol>				
	horizontal ] surface adjacent to the glass exterior. R308.4.4 Glazing in guards and railings. Glazing in guards and railings, including structural baluster panels and nonstructural in-fill panels, regardless of area or height above a walking surface shall be considered to be a hazardous location.				
	R308.4.5 Glazing and wet surfaces. Glazing in walls, enclosures or fences containing or facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and indoor swimming pools where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) measured vertically above any standing or walking surface shall be considered to be a hazardous location. This shall apply to single glazing and each pane in multiple glazing.				
	Exceptions: Glazing that is more than 60 inches (1524 mm), measured horizontally and in a straight line, from the water's edge of a bathtub, hot tub, spa, whirlpool or swimming pool or from the edge of a shower, sauna or steam room.				
	R308.4.6 Glazing adjacent to stairs and ramps. Glazing where the bottom exposed edge of the glazing is less than 36 inches (914 mm) above the plane of the adjacent walking surface of stairways, landings between flights of stairs and ramps shall be considered to be a hazardous location.	No.	Revisi	on/lssue	Date
	<ul> <li>Exceptions:</li> <li>I. Where a rail is installed on the accessible side(s) of the glazing 34 to 38 inches (864 to 965 mm) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (730 N/m) without contacting the glass and have a cross-sectional height of not less than 1 ½ inches (38 mm).</li> <li>2. Glazing 36 inches (914 mm) or more measured horizontally from the walking</li> </ul>		me and Address	BARBO	UR
	surface. R308.4.7 Glazing adjacent to the bottom stair landing. Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches (914 mm) above the landing and within a 60-inch (1524 mm) horizontal arc less than 180 degrees from the bottom tread nosing shall be considered to be a hazardous location.			- XTER ST. MI. 48160	
	Exception: The glazing is protected by a guard complying with Section R312 and the place of the glass is more than 18 inches (457 mm) from the ground.				
		YES 200	Name and Address OWITZ D3 NORFOLK I ARBOR , MI 4	48103	
	N DEEMED RELIABLE BUT NOT GUARANTEED, ALL ARE APPROXIMATE, TRUGG MANUFACTURER AND				
C	ARE APPROXIMATE. TRUSS MANUFACTURER AND DNTRACTOR TO VERIFY ALL FIELD CONDITIONS OUT NOT LIMITED TO:	Project		Sheet	
R	WALL THICKNESS ROOF PITCH		CARPORT		
-	HEEL HEIGHT	Date	/  3/2020		<b>N</b> 1
G	G DIMENGIONS	<b>P</b>		1	
G AN LL	G DIMENSIONS DIMENSIONS ACROSS TOP PLATES RUSS FABRICATION AND / OR MATERIAL TAKEOFF	Scale			

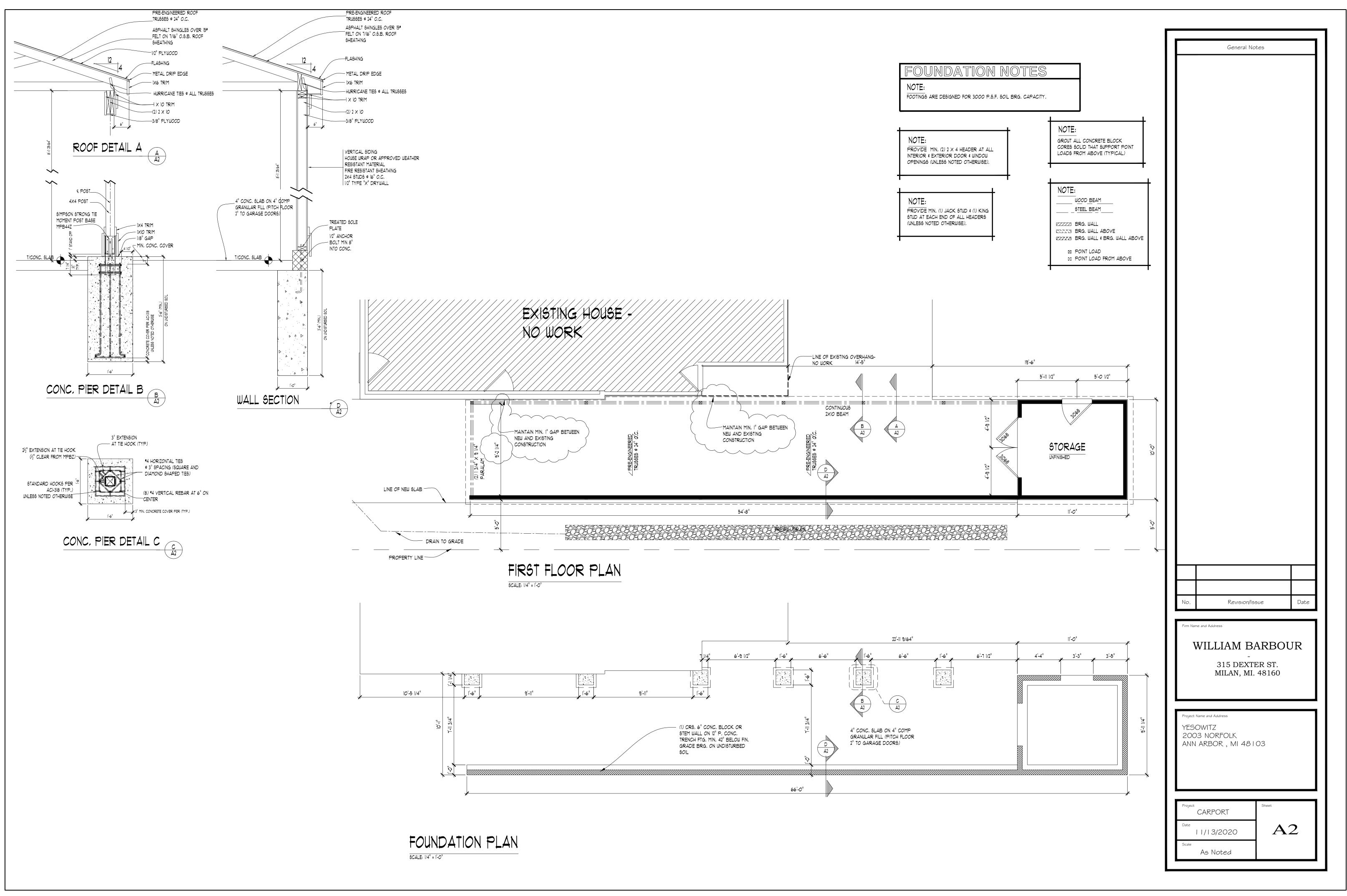


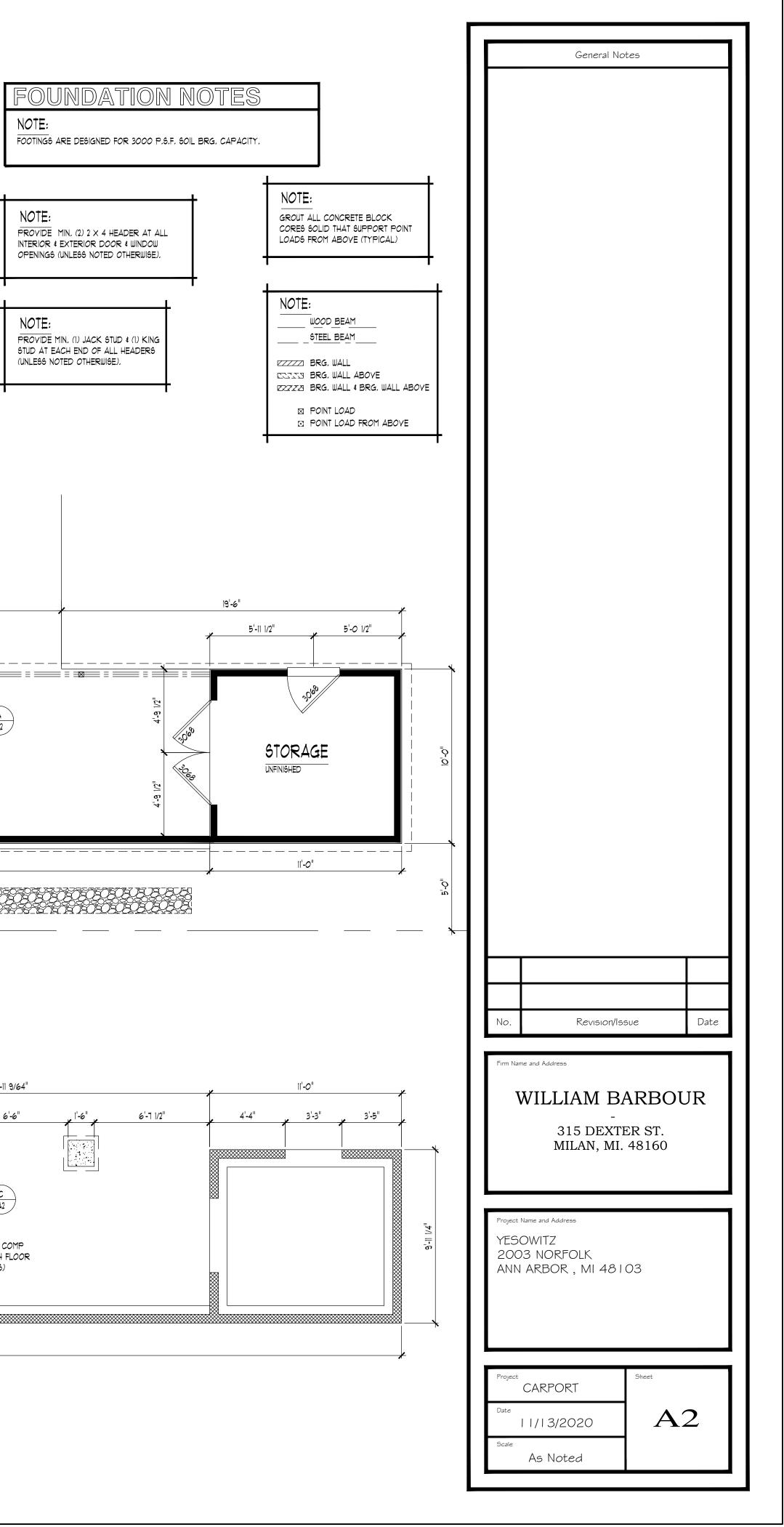


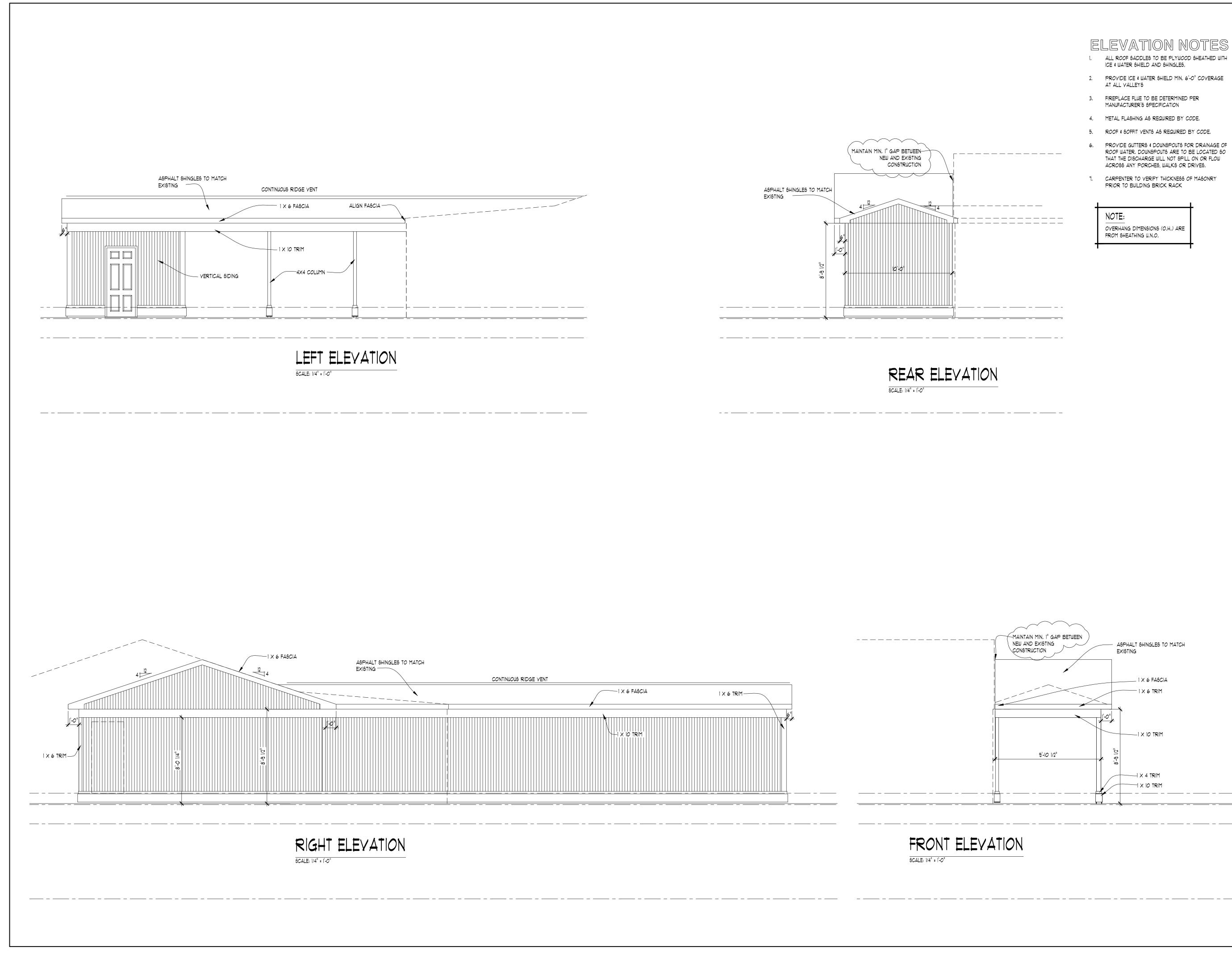




Date





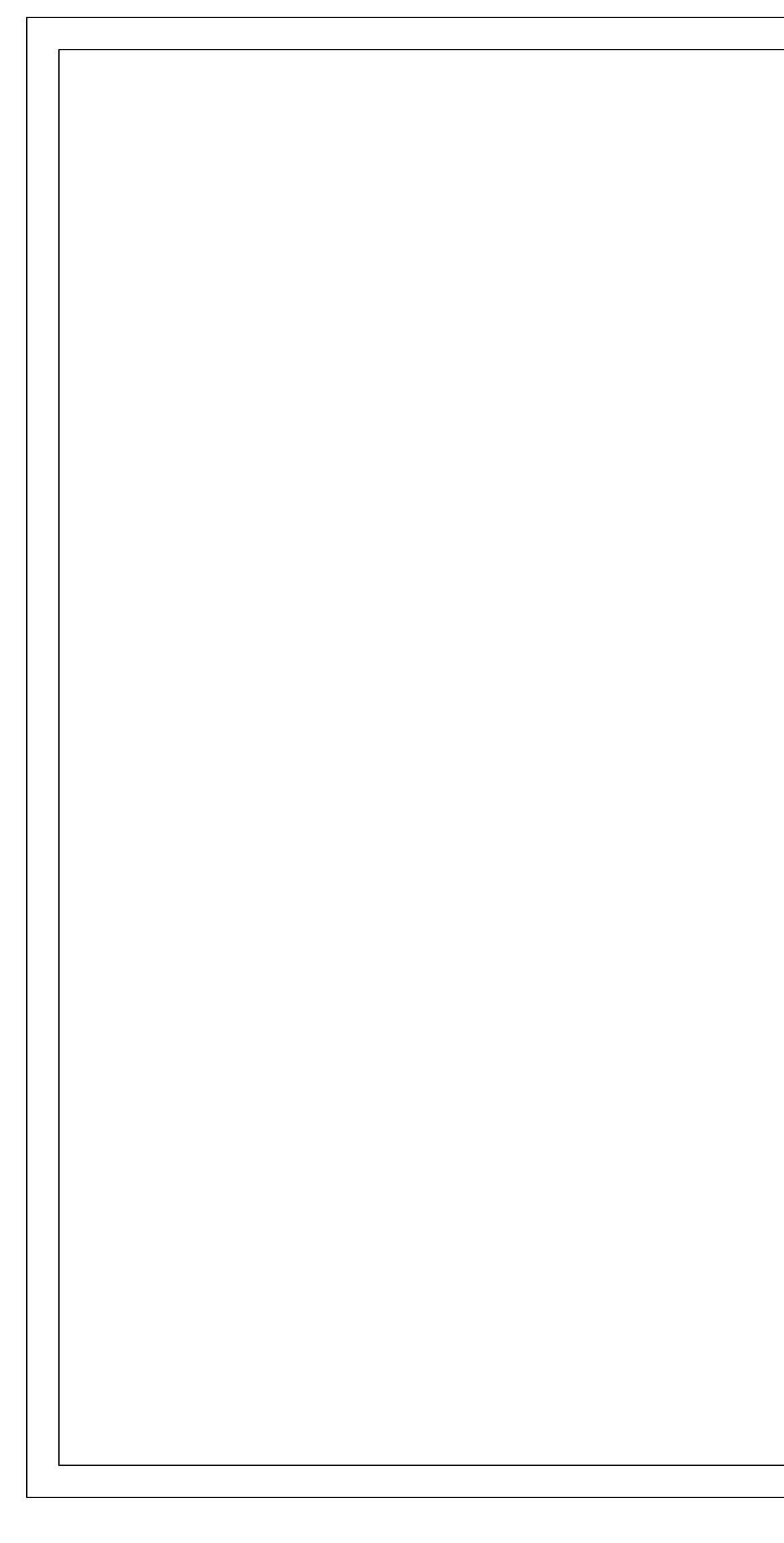


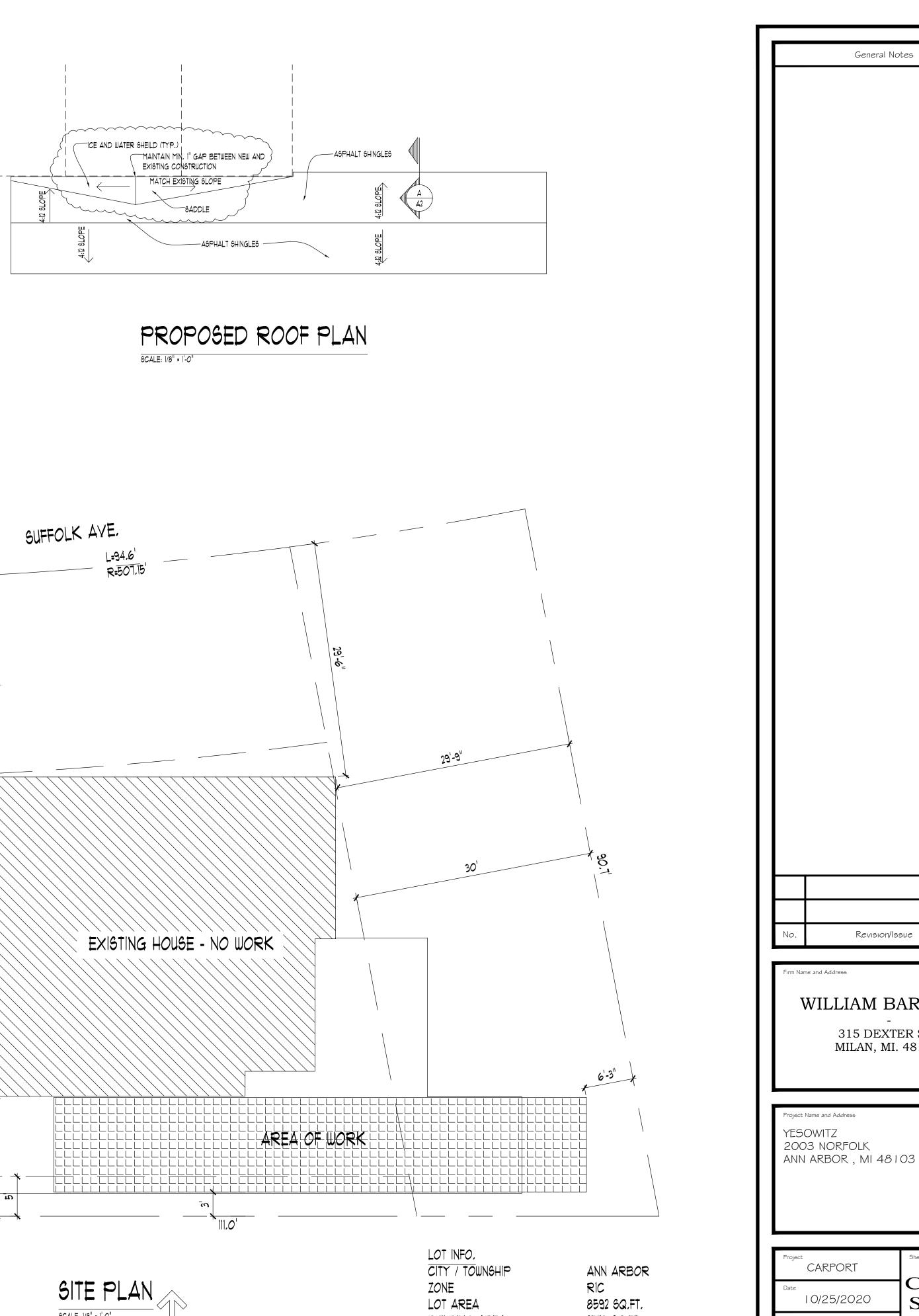
# ELEVATION NOTES ALL ROOF SADDLES TO BE PLYWOOD SHEATHED WITH ICE & WATER SHIELD AND SHINGLES. 2. PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS 3. FIREPLACE FLUE TO BE DETERMINED PER MANUFACTURER'S SPECIFICATION

- 6. PROVIDE GUTTERS & DOWNSPOUTS FOR DRAINAGE OF ROOF WATER. DOWNSPOUTS ARE TO BE LOCATED SO THAT THE DISCHARGE WILL NOT SPILL ON OR FLOW ACROSS ANY PORCHES, WALKS OR DRIVES.

No	Rev	sion/lesue	-	Date
No. Firm Na	Rev ne and Address	ision/Issue		Date
Firm Na	me and Address WILLIAN 315 D	I BARE	<b>.</b>	
Firm Na	me and Address WILLIAN 315 D	I BARE	<b>.</b>	
Firm Na Project YES 200	me and Address WILLIAN 315 D MILAN Name and Address OWITZ 3 NORFOLK	I BARE EXTER ST , MI. 4816	<b>.</b>	
Firm Na Project YES 200	me and Address WILLIAN 315 D MILAN Name and Address OWITZ	I BARE EXTER ST , MI. 4816	<b>.</b>	
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General Notes

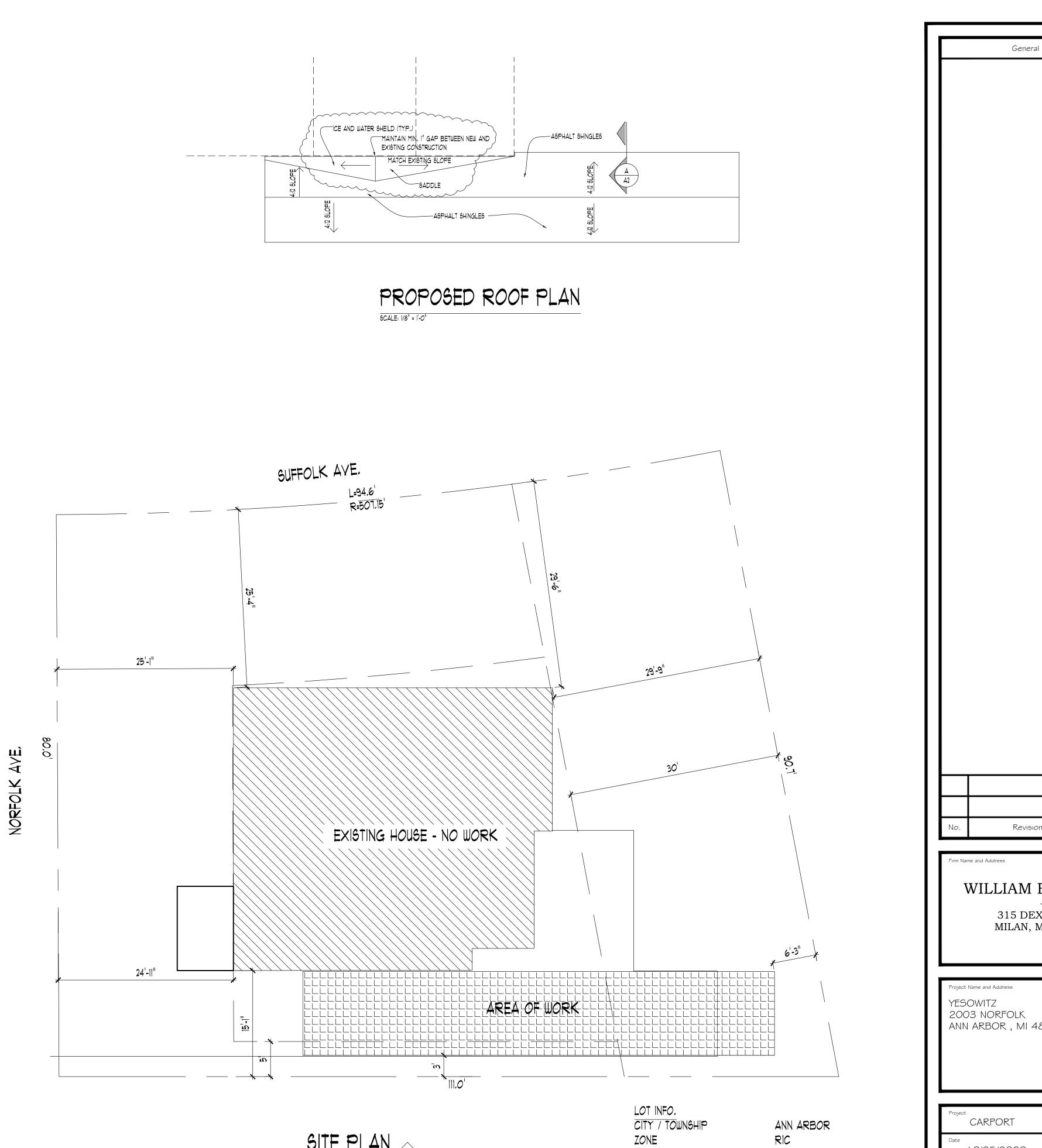




BUILDING AREA LOT COVERAGE

2579 SQ.FT.

30%



SITE PLAN SCALE: 1/8" = 1'-0"

No.	Revision/Issue	Date
=ırm Nar	ne and Address	

WILLIAM BARBOUR

315 DEXTER ST. MILAN, MI. 48160

COVER SHEET

YESOWITZ 2003 NORFOLK ANN ARBOR , MI 48103

10/25/2020 As Noted