

# COMMUNITY DEVELOPMENT DEPARTMENT

45175 Ten Mile Road Novi, MI 48375 (248) 347-0415 Phone (248) 735-5600 Facsimile www.cityofnovi.org

# ZONING BOARD OF APPEALS STAFF REPORT

FOR: City of Novi Zoning Board of Appeals ZONING BOARD APPEALS DATE: October 10, 2023

REGARDING: 233 Bernstadt Street, Parcel # 50-22-03-456-005 (PZ23-0042)

**BY:** Alan Hall, Deputy Director Community Development

# **GENERAL INFORMATION:**

# **Applicant**

Zachary Rzotkiewicz

# Variance Type

**Dimensional Variance** 

# **Property Characteristics**

Zoning District: This property is zoned One-Family Residential (R-4)

Location: south of South Lake Drive, east of Old Novi Road

Parcel #: 50-22-03-456-005

# Request

The applicant is requesting a variance from the City of Novi Zoning Ordinance Section 4.19.1.E.i for an increase in garage square foot coverage to 1,768 sq. ft. (850 sq. ft. maximum, variance of 918 sq. ft.); Section 4.19.1.E.v to allow the aggregate of all accessory buildings to exceed the principal building on the lot or parcel; Section 4.19.1.G to allow accessory structure to be placed 3 ft. from property line (6 ft. minimum, variance of 3 ft.); Section 4.19.1.J to allow two detached accessory structures for a lot having less than 21,780 square feet of area (maximum of one allowed, variance of one additional). This variance would accommodate the addition of an accessory structure to the property. This property is zoned One-Family Residential (R-4).

# **II. STAFF COMMENTS:**

The petitioner is requesting variances to allow construction of an additional garage structure near the east property line. A maximum of (1) detached structure is allowed by right.

# III. RECOMMENDATION:

1.	I	mo	ve									PZ23-0042,	_	-
	be	caus	e			er						difficulty		
		(a)					etition	er will be ur	nrea	sonably	preve	nted or limite	d with res	pect
		(b)	The	prope	erty is	s unique	e beca	use						
		(c)	Peti	itioner	did n	ot creat								
		(d)			_				-			n adjacent oi		ding 
		(e)	The	relie				•				of the ordina		
		(f)	 The	variar	nce gr	anted is	subjec	t to:						·
				1. 2. 3. 4.	- - -									
2.	I 	mo	ve	that	we	<u>deny</u>		variance 				PZ23-0042,	sought	by
				Po			has	not		show	n	practical	diffic	culty ——

(a) The	circumstances	and	features	of	the   _ are not			_
exist	generally throughou	t the Cit	у.					
, ,	circumstances and for reated because			•	_		•	t are 
(c) The fa	ailure to grant relief omic or financia		ult in mere in ırn based			•		_
	variance would re erties by				-		surrour	nding
(e) Grant to _	ing the variance wo				spirit and i	ntent of t	he ordin	 ance 

Should you have any further questions with regards to the matter please feel free to contact me at (248) 347-0423.

Alan Hall – Deputy Director Community Development - City of Novi



# Community Development Department EIVED 45175 Ten Mile Road

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SEP 0 1 2023

# ZONING BOARD OF APPEALS APPLICATION

COMMUNITY DEVELOPMENT

COMMUNITY DEVELOPMENT

I. PROPERTY INFORMATION (Address of subject ZBA Case)  Application Fee: 400.000						
PROJECT NAME / SUBDIVISION 233 BERNSTAUT						
ADDKE22		LOT/SIUTE/SPACE #	Meeting Date:	J-10-23		
233 BERNSTAUT S	Navylo a ala	tained from the	ZBA Case #: PZ 2	3-0042		
50-22- 63 - 456 - 0		Department	EDA Gusc II.	0012		
CROSS ROADS OF PROPERTY	hr-sir-C					
IS THE PROPERTY WITHIN A HOMEOWNER'S ASS	OCIATION JURISDICTION?	REQUEST IS FOR:				
YES NO		<u></u>	MERCIAL VACANT PR	OPERTY SIGNAGE		
II. APPLICANT INFORMATION	ICE OF VIOLATION OR CI	TATION ISSUED?	s <u></u> NO			
The Manual Control of	EMAIL ADDRESS		CELL BUONE NO			
A. APPLICANT	The second secon	GMAIL. COM	CELL PHONE NO. 586-344-	7334		
NAME O-			TELEPHONE NO.			
ORGANIZATION/COMPANY KZ	CTKIEWICZ		FAX NO,			
ADDRESS						
233 BERNSTA	DT ST	NOVI	STATE	ZIP CODE 48377		
B. PROPERTY OWNER CHECK H	ERE IF APPLICANT IS ALSO T	THE PROPERTY OWNER				
Identify the person or organization that owns the subject property:	EMAIL ADDRESS		CELL PHONE NO.			
NAME			TELEPHONE NO.			
ORGANIZATION/COMPANY			FAX NO.			
ADDRESS		NITI /	. mov situeses			
ADDRESS	C	CITY	STATE	ZIP CODE		
III. ZONING INFORMATION						
A. ZONING DISTRICT						
	□ R-3 <b>\</b> R-4	□RM-1 □ RM-2 [	MH			
I-1 I-2 RC  B. Variance requested	□TC □TC-1	OTHER				
INDICATE ORDINANCE SECTION (S) AND	VARIANCE DECLIECTED.					
11 10	/ariance requested _	1 70 2. (7	WO) STRUCT	un Se		
11 10 T	·	+ 918 59.	TWO) STRUCT	51023		
11 10 1/	/ariance requested _ /ariance requested _	the state of the s	+ ft. VAR			
4. Section 4.19 G		31 REDUCTION				
IV. FEES AND DRAWNINGS						
A. FEES						
Single Family Residential (Existing) \$200 (With Violation) \$250 Single Family Residential (New) \$250						
Multiple/Commercial/Industrial \$300 (With Violation) \$400 (Signs \$300 (With Violation) \$400						
☐ House Moves \$300						
B. DRAWINGS 1-COPY & 1 DIGITAL COPY SUBMITTED AS A PDF						
<ul><li>Dimensioned Drawings and Plans</li><li>Site/Plot Plan</li></ul>		<ul> <li>Existing &amp; proposed</li> </ul>	distance to adjacent	property lines		
	ddition on the propert	<ul> <li>Location of existing</li> <li>Floor plans &amp; elevat</li> </ul>		pplicable		
Existing or proposed buildings or addition on the property  • Floor plans & elevations  • Number & location of all on-site parking, if applicable  • Any other information relevant to the Variance application						



# **ZONING BOARD OF APPEALS APPLICATION**

V. VARIANCE
A. VARIANCE (S) REQUESTED
MENSIONAL USE SIGN
There is a five (5) hold period before work/action can be taken on variance approvals.
B. SIGN CASES (ONLY) Your signature on this application indicates that you agree to install a Mock-Up Sign ten (10) days before the scheduled ZBA meeting. Failure to install a mock-up sign may result in your case not being heard by the Board, postponed to the next schedule ZBA meeting, or cancelled. A mock-up sign is NOT to be an actual sign. Upon approval, the mock-up sign must be removed within five (5) days of the meeting. If the case is denied, the applicant is responsible for all costs involved in the removal of the mock-up or actual sign (if erected under violation) within five (5) days of the meeting.
C. ORDINANCE
City of Novi Ordinance, Section 7.10 – Miscellaneous
No order of the ZBA permitting the erection of a building shall be valid for a period longer than one (1) year, unless a building permit for such erection or alteration is obtained within such period and such erection or alteration is started and proceeds to completion in accordance with the terms of such permit.
No order of the ZBA permitting a use of a building or premises shall be valid for a period longer than one-hundred and eighty (180) days unless such use is established within such a period; provided, however, where such use permitted is dependent upon the erection or alteration of a building such order shall continue in force and effect if a building permit for such erection or alteration is obtained within one (1) year and such erection or alteration is started and proceeds to completion in accordance with the terms of such permit.
D. APPEAL THE DETERMINATION OF THE BUILDING OFFICIAL
PLEASE TAKE NOTICE:
The undersigned hereby appeals the determination of the Building Official / Inspector or Ordinance made
CONSTRUCT NEW HOME/BUILDING ADDITION TO EXISTING HOME/BUILDING SIGNAGE
ACCESSORY BUILDING USE OTHER
VI. APPLICANT & PROPERTY SIGNATURES
A. APPLICANT
Applicant Signature Date  19/01/2023  Date
B. PROPERTY OWNER
If the applicant is not the owner, the property owner must read and sign below:
The undersigned affirms and acknowledges that he, she or they are the owner(s) of the property described in this application, and is/are aware of the contents of this application and related enclosures.
The undersigned affirms and acknowledges that he, she or they are the owner(s) of the property described in this
The undersigned affirms and acknowledges that he, she or they are the owner(s) of the property described in this application, and is/are aware of the contents of this application and related enclosures.  Property Owner signature  VII. FOR OFFICIAL USE ONLY
application, and is/are aware of the contents of this application and related enclosures.  Property Owner signature  A 9 / 01 / 2023  Date
The undersigned affirms and acknowledges that he, she or they are the owner(s) of the property described in this application, and is/are aware of the contents of this application and related enclosures.    A g / o l / 2023
The undersigned affirms and acknowledges that he, she or they are the owner(s) of the property described in this application, and is/are aware of the contents of this application and related enclosures.  Property Owner signature  VII. FOR OFFICIAL USE ONLY  DECISION ON APPEAL:
The undersigned affirms and acknowledges that he, she or they are the owner(s) of the property described in this application, and is/are aware of the contents of this application and related enclosures.    A g / o l / 2023



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# REVIEW STANDARDS DIMENSIONAL VARIANCE

The Zoning Board of Appeals (ZBA) will review the application package and determine if the proposed Dimensional Variance meets the required standards for approval. In the space below, and on additional paper if necessary, explain how the proposed project meets each of the following standards. (Increased costs associated with complying with the Zoning Ordinance will not be considered a basis for granting a Dimensional Variance.)

# Standard #1. Circumstances or Physical Conditions.

Explain the circumstances or physical conditions that apply to the property that do not apply generally to other properties in the same zoning district or in the general vicinity. Circumstances or physical conditions may include:

-	maraness of physical containors may include.
a.	Shape of Lot. Exceptional narrowness, shallowness or shape of a specific property in existence on the effective date of the Zoning Ordinance or amendment.  Not Applicable
	and/or
b.	Environmental Conditions. Exceptional topographic or environmental conditions or other extraordinary situations on the land, building or structure.  ☐ Not Applicable ☐ Applicable ☐ If applicable, describe below:
	AN EXTRAORDINARY ENVIRONENTAL WAS CREATED BY THE CITY WITH THE CONSTRUCTION OF PAULION 1 AT LAKESHORE DRAND ITS RELATION and/or to the subject PROPERTY.
	Abutting Property. The use or development of the property immediately adjacent to the subject property would prohibit the literal enforcement of the requirements of the Zoning Ordinance or would involve significant practical difficulties.  ☐ Not Applicable ☐ Applicable ☐ If applicable, describe below:
	USE OF & PAVILION 1 AT LAKESHORE PK. IS IN CONSTANT VIOLATION OF RULES AND REGULATIONS. PROPOSAL FOR SUBJECT PROPERTY IS PRIMARLY A MITIGATION OF THE ABUTING PROPERTY.

# Standard #2. Not Self-Created.

Describe the immediate practical difficulty causing the need for the Dimensional Variance, that the need for the requested variance is not the result of actions of the property owner or previous property owners (i.e., is not self-created).

PLANNING, DESIGN AND CONSTRUCTION OF PAVILION 1
AT & LAKESHORE PK. WAS DONE BY THE CITY OF NOVI.

# Standard #3. Strict Compliance.

Explain how the Dimensional Variance in strict compliance with regulations governing area, setback, frontage, height, bulk, density or other dimensional requirements will unreasonably prevent the property owner from using the property for a permitted purpose, or will render conformity with those regulations unnecessarily burdensome.

PLACEMENT AND DIMENSIONS OF PROPOSED STRUCTURE ARE SPECIFICALLY DESIGNED TO ABSTRUCT VISUAL AND AUDIBLE NUISANCES FROM ABUTTING PROPERTY.

# Standard #4. Minimum Variance Necessary.

Explain how the Dimensional Variance requested is the minimum variance necessary to do substantial justice to the applicant as well as to other property owners in the district.

A BUILDING OF THIS DIMENSION IS THE ONLY PRACTICAL STRUCTURE TO ACHIEVE THE NECESSARY BLOCKAGE. A FENCE OR WALL GOLD NOT BE CONSTRUCTED TO THE MINIMUM HEIGHT REQUIRED

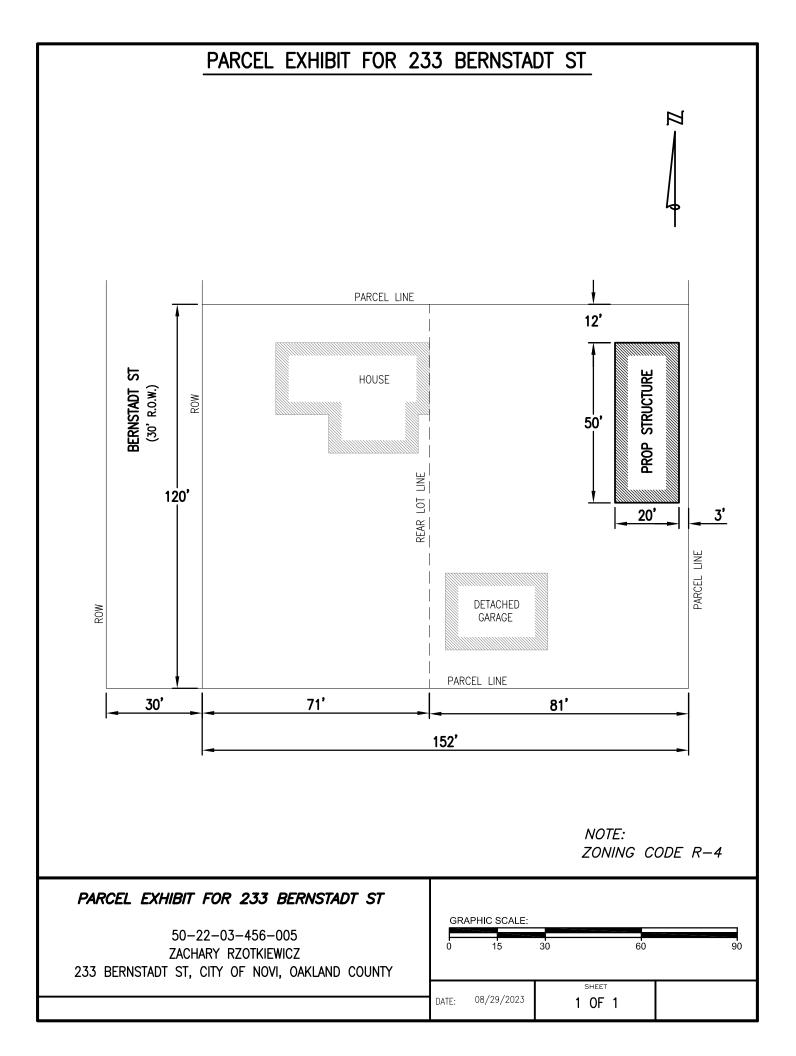
# Standard #5. Adverse Impact on Surrounding Area.

Explain how the Dimensional Variance will not cause an adverse impact on surrounding property, property values, or the use and enjoyment of property in the neighborhood or zoning district.

THE STRUCTURE DESIGN WILL BE "OF BOOD TASTE"

AND FIT THE RUSTIC "UP NORTH FEEL" OF THE

IPLEMERE PARK / LAKESHORE PARK COMMUNITY.





# REGULAR / A-FRAME 20'-0" WIDE

# CARPORT STYLE BUILDINGS

# DESIGN NOTES

OWNER:

ADDRESS:

- 1. ALL CONSTRUCTION SHALL BE PROVIDED IN ACCORDANCE WITH IBC 2018, OSHA, AISC 360, AISI 100, ASCE 7-16, AWS D1.3 CODES AND ALL APPLICABLE LOCAL REQUIREMENTS.
- 2. ALL MATERIALS IDENTIFIED BY MANUFACTURER NAME MAY BE SUBSTITUTED WITH MATERIAL EQUAL OR EXCEEDING ORIGINAL.
- 3. ALL SHOP CONNECTIONS SHALL BE WELDED CONNECTIONS.
- 4. ALL STRUCTURAL FIELD CONNECTIONS SHALL BE #12-14 X 3/4" SDS (ESR-2196 OR EQ) WITHOUT WASHERS.
- 5. STEEL SHEATHING SHALL BE 29GA. CORRUGATED GALV. OR PAINTED STEEL - MAIN RIB HT. 3/4" (FY=80KSI) OR EQ. CONNECTIONS SHALL BE #12-14 X 3/4" SDS (ESR-2196 OR EQ) WITH NEOPRENE WASHERS.
- 6. ALL STRUCTURAL LIGHT GAUGE TUBING AND CHANNELS SHALL BE GRADE 50 STEEL (FY = 50 KSI, FU = 65 KSI).
- 7. STRUCTURAL TUBE 2 1/8" X 2 1/8" 14GA, IS EQUIVALENT TO TS 2 14" X 2 1/4" - 12GA AND EITHER ONE MAY BE USED IN LIEU OF THE OTHER.
- 8. GYPSUM BOARD OR DRYWALL FINISH OR ANY BRITTLE BASE MATERIAL IS NOT CONSIDERED OR ACCOUNTED FOR ON THE DESIGN CRITERIA.
- 9. ALL DESIGN CRITERIA MUST BE INCREASED TO THE NEXT HIGHER INCREMENT BASED ON THE TABLES ON PAGE 4. NO INTERPOLATION IS ALLOWED.

CUSTOMER INFORMATION

# DESIGN CRITERIA

PREVAILING CODE: USE GROUP: RISK CATEGORY:

MBC 2015 (IBC 2015) U (CARPORTS, BARNS)

ROOF DEAD LOAD (D) D = 4 PSFROOF LIVE/SNOW LOAD (Lr)

Lr = 20 - 61 PSF(AS PER SNOW LOAD SEE TABLE 4)

- SNOW LOAD (S) GROUND SNOW LOAD Pg = 20 - 90 PSF IMPORTANCE FACTOR Is = 0.8 THERMAL FACTOR Ct = 1.2EXPOSURE FACTOR Ce = 1.0ROOF SLOPE FACTOR Cs = 1.0
- WIND LOAD (W) BASIC WIND SPEED V<sub>ULT</sub> = 105 - 180 MPH **EXPOSURE**
- SEISMIC LOAD (E) DESIGN CATEGORY IMPORTANCE FACTOR Te = 1.00

## LOAD COMBINATIONS:

- D + (Lr OR S)
- $D + (0.6W OR \pm 0.7E)$
- D + 0.75 (0.6W OR ±0.7E) + 0.75 (Lr OR S)

HEIGHT:

 $0.6D + (0.6W OR \pm 0.7E)$ 

# DRAWING INDEX

COVER SHEET SCHEDULES & MEMBER -SECTIONS FRAME SECTIONS & DETAILS -----3-A. 3-B SPACING SCHEDULES -& ENCLOSURE NOTES PURLIN & GIRT SCHEDULES

SHEATHING OPTIONS SIDE WALL FRAMING

& OPENINGS END WALL FRAMING

8-A, 8-B & OPENINGS

CORNER BRACING DETAILS 9 10 OPTIONAL LEAN-TO ADDITION

FOUNDATION OPTIONS ---- 11-A TO 11-D

# NE

MANUFACTURED BY:

# STEEL

# DRAWING INFORMATION

PROJECT: 20'-O" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

# COVER SHEET

1 / 11 SHEET NO .:

DRAWN BY: AW DATE: 5/17/22

CHECKED BY: OAA

DATE: 5/17/22

## **LEGAL INFORMATION**

- ANY DUPUCATION OF THIS DRAWING IN WHOLE OR - ANT DUFFICE OF THIS DRAWING IN WILL CK PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW. - DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

NO. 6201040679 ... 62

DATE EXPIRES: 03-24-2024 DATE SIGNED: 05-20-2022

**DESIGN LOADS** GROUND SNOW: ROOF LIVE LOAD:

BASIC WIND SPEED:

☐ A-FRAME FRAME TYPE: WIDTH: ☐ REGULAR ☐ FULL LENGTH: **ENCLOSURE** ☐ PARTIAL

**BUILDING INFORMATION** 

☐ OPEN

CERTIFICATION ON THESE DRAWINGS IS VALID FOR ONE YEAR FROM DATE OF ISSUE

**CERTIFICATION VALIDITY** 

NOTICE

05-20-2023

# TABLE 21 MEMBER PROPERTIES

	1 ADLE 2.1: 1	VIEWIDER PROPERTIES	
NO.	LABEL	PROPERTY	DETAIL NO.
1	COLUMN POST	2.5" X 2.5" X 14GA TUBE	1
2	ROOF BEAM	2.5" X 2.5" X 14GA TUBE	1
3	BASE RAIL	2.5" X 2.5" X 14GA TUBE	1
4	PEAK BRACE	2.5" X 2.5" 14GA CHANNEL	4
5	KNEE BRACES	2.5" X 1.5" 14GA CHANNEL	4
6	CONNECTOR SLEEVE	2.25" X 2.25" X 12GA TUBE	2
7	BASE ANGLE	2" X 2" X 3" LG. 3/16" ANGLE	10
8	PURLIN	4.25" X 1.5" X 14GA / 18GA HAT CHANNEL	5
9	GIRT	4.25" X 1.5" X 14GA / 18GA HAT CHANNEL	5
9A	OPT. END WALL GIRT	2.5" X 1.5" 14GA CHANNEL	1
10	SHEATHING	29 GA CORRUGATED SHEET	8
11	END WALL POST	2.5" X 2.5" X 14GA TUBE	1
12	DOOR POST	2.5" X 2.5" X 14GA TUBE	1
13	SINGLE HEADER	2.5" X 2.5" X 14GA TUBE	1
14	DOUBLE HEADER	DBL. 2.5" X 2.5" X 14GA TUBE	1
15	SERVICE DOOR / WINDOW FRAMING	2.5" X 2.5" X 14GA TUBE	1
16	ANGLE BRACKET	2" X 2" X 2" LG. 14GA ANGLE	7
17	STRAIGHT BRACKET	2" X 2" X 4" LG. 14GA PLATE	6
18	PB SUPPORT	2.5" X 2.5" X 14GA TUBE	1
19	DIAGONAL BRACE	2" X 2" X 14 GA TUBE	3
20	GABLE BRACE	2" X 2" X 14 GA TUBE	3
21	DB BRACKET	2.25" X 2.25" X 6" LG. 14GA ANGLE	9
22	TRUSS SPACER	2.5" X 2.5" X 14GA TUBE	1
23	ALL FASTENERS	#12 X 1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER	

# TABLE 2.2: SHEATHING FASTENER SCHEDULE

LOCATION	CORNER PANELS	SIDE LAPS	EDGE LAPS	ELSEWHERE
SPACING	9" C/C	MIN. 1	4½" C/C	9" C/C

FASTENER TYPE: #12X1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/

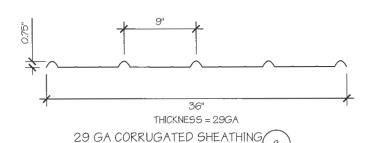
NEOPRENE/STEEL WASHER

SCALE: NTS

\*SEE TYP. SHEATHING FASTENER SCHEDULE DIAGRAM ON PAGE 6.

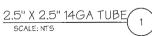
# TABLE 2.3: GAUGE THICKNESS

GAUGE	29	18	14	12
THICKNESS (IN)	0.0135	0.049	0.083	0.109





THICKNESS = 14GA





THICKNESS = 12GA

2.25" X 2.25" 12GA TUBE SCALE: NTS



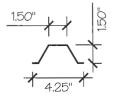
THICKNESS = 14GA

2" X 2" 14GA TUBE SCALE: NTS



THICKNESS = 14GA

2.5" X 1.5" 14GA CHANNEL SCALE: NTS



THICKNESS = 14GA / 18GA 4.25" X 1.5" X 14GA / 18GA HAT CHANNEL



SCALE: NTS

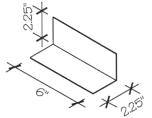
THICKNESS = 14GA

STRAIGHT BRACKET SCALE: NTS



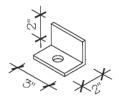
THICKNESS = 14GA

ANGLE BRACKET SCALE: NTS



THICKNESS = 14GA

DB BRACKET SCALE: NTS



THICKNESS = 3/16"

BASE ANGLE SCALE: NTS

MANUFACTURED BY:



# DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

SCHEDULES & MEMBER SECTIONS

2 / 11 SHEET NO .:

DRAWN BY: AW

DATE: 5/17/22

CHECKED BY: OAA

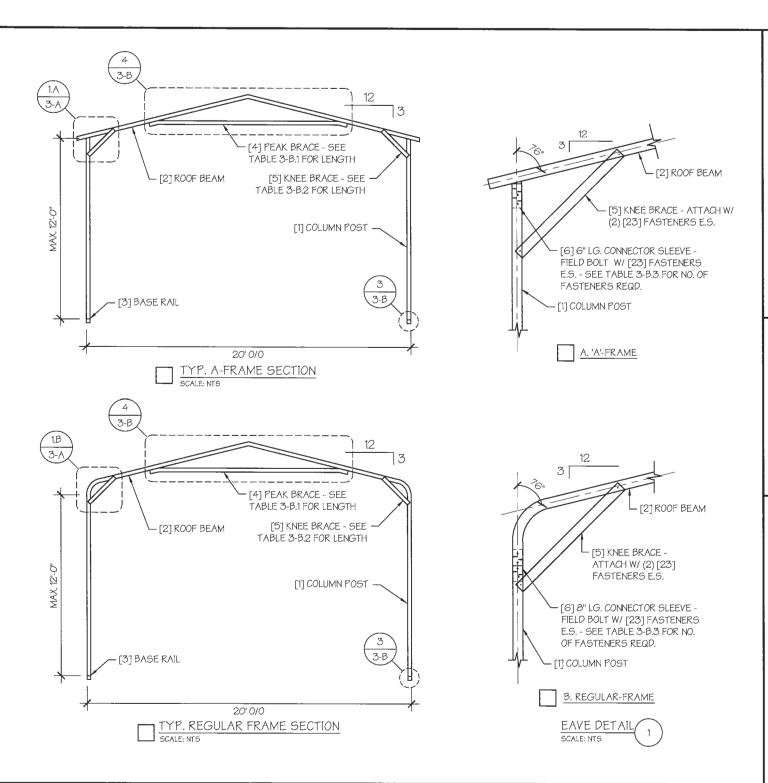
DATE: 5/17/22

# LEGAL INFORMATION

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DATE EXPIRES: 03-24-2024



MANUFACTURED BY:



# DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

FRAME SECTIONS & DETAILS

3-A / 11 SHEET NO .:

AW DRAWN BY:

DATE: 5/17/22

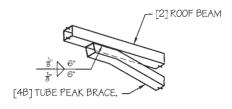
CHECKED BY: OAA DATE: 5/17/22

# **LEGAL INFORMATION**

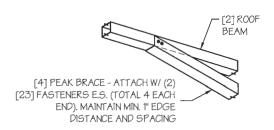
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DATE EXPIRES: 03-24-2024

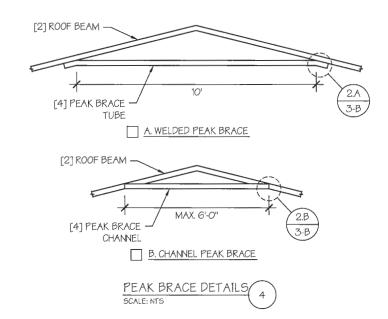


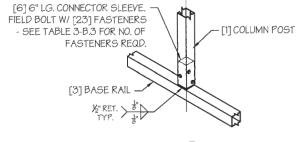
A. PEAK BRACE TUBE



B. PEAK BRACE CHANNEL

PEAK BRACE CONNECTION DETAILS SCALE: NTS





BASE DETAIL

TABLE 3-B1 PEAK BRACE SCHEDULE

GROUND SNOW / ROOF	WIND SI	°EED
LIVE LOAD (PSF)	□105 T0 130	□140 TO 180
30/20	6	10'
□ 35 / 25 TO 90 / 61	10'	10'

TABLE 3-B.2: KNEE BRACE SCHEDULE

EAVE HEIGHT	KNEE BRACE LENGTH
□UP TO 8'	24"
□ 9' TO 12'	36"

TABLE 3-B.3 FASTENER SCHEDULE

WIND SPEED (MPH)	NO. OF FASTENERS
□ 105 TO 125	4
□ 130 TO 155	6
□160 TO 180	8

NOTE: COLUMN POST MAY BE ADJUSTED ±1" FOR LEVELING. MANUFACTURER IS NOT RESPONSIBLE FOR LEVELING OF GROUND AND/OR CONCRETE SURFACE PROVIDED BY OTHERS.

MANUFACTURED BY:



### DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

FRAME DETAILS

3-B / 11 SHEET NO .:

DRAWN BY: AW

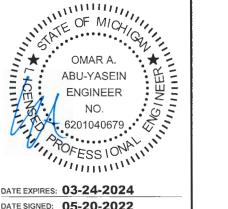
DATE: 5/17/22

CHECKED BY: OAA

DATE: 5/17/22

# LEGAL INFORMATION

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DATE EXPIRES: 03-24-2024

TABLE 4: FRAME SPACING CHART / SCHEDULE

	GROUND			■ ENCLO	SED BUIL	DINGS				- Element	■ OPE	N BUILDIN	NG5		James V.
	SNOW / ROOF LIVE	WIND SPEED (MPH)					WIND SPEED (MPH)								
	LOAD (PSF)	□105	□ 115	□130	□140	□155	□165	□180	□105	□ 115	<b>□130</b>	□140	□155	□165	□180
-	30/20	60	60	54/60	54	42	36	36	60	54/60	48/60	42/54	36/42	36	36
10	40/27	48/60	48/60	42/60	42/54	42	36	36	48	48	42/48	42/48	36/42	36	36
GHT = 12'-0"	□50/34	40/48	40/48	40/48	40/48	40/42	36	36	40/42	40/42	40/42	40/42	36/42	36	36
単足	□ 60 / 41	36/42	36/42	36/42	36/42	36/42	36	36	36	36	36	36	36	36	36
	70/47	32/36	32/36	32/36	32/36	32/36	32/36	30	30	30	30	30	30	30	30
EAVE 10'-0"	□80/54	30	30	30	30	30	30	30	24	24	24	24	24	24	24
	90 / 61	24	24	24	24	24	24	24	18	18	18	18	18	18	18
	30/20	60	60	54/60	54	48	42/48	42	60	54/60	48/60	42/54	36/48	36/48	36/42
GHT = 9-0'	40/27	48/60	48/60	42/60	42/54	42/48	42/48	42	48/54	48/54	42/54	42/54	36/48	36/48	36/42
至9	□50/34	40/48	40/48	40/48	40/48	40/48	40/48	40/42	40/42	40/42	40/42	40/42	36/42	36/42	36/42
単り	□ 60 / 41	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36	36	36	36	36	36	36
	70/47	32/36	32/36	32/36	32/36	32/36	32/36	32/36	30	30	30	30	30	30	30
EAVE 7'-O"	□80/54	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	90/61	24	24	24	24	24	24	24	24	24	24	24	24	24	24
	30/20	60	60	54/60	54	48	42/48	42	60	54/60	48/60	42/54	36/48	36/48	36/42
	40/27	48/60	48/60	42/60	42/54	42/48	42/48	42	48/60	48/60	42/60	42/54	36/48	36/48	36/42
£ 5'	□50/34	40/48	40/48	40/48	40/48	40/48	40/48	40/42	40/48	40/48	40/48	40/48	36/48	36/48	36/42
HEIGHT TO 6'-O"	G 60 / 41	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42	36/42
P T	70/47	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36	32/36
EAVE UP 1	□80/54	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	90/61	24	24	24	24	24	24	24	24	24	24	24	24	24	24

## NOTES:

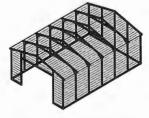
- FRAME SPACINGS ARE IN UNITS OF INCHES (IN).
- WHERE TWO VALUES ARE SHOWN, THE HIGHER VALUE CAN ONLY BE USED FOR VERTICAL SHEATHING.
- SNOW LOADS AND ROOF LIVE LOADS ARE IN POUNDS PER SQUARE FOOT (PSF), WIND SPEED IS 3 SEC. GUST IN MILES PER HOUR (MPH).
- 4. FOR VALUES THAT LIE BETWEEN TWO CELLS, THE HIGHER (MORE STRINGENT) VALUE HAS TO BE USED. INTERPOLATION BETWEEN CELLS IS NOT ALLOWED.

# ENCLOSURE CLASSIFICATION:

- ENCLOSED BUILDING = ALL 4 WALLS FULLY ENCLOSED WITH DOORS/WINDOWS = USE ENCLOSED BUILDING SPACING CHART.
- OPEN BUILDING = ALL 4 WALLS FULLY OPEN = USE OPEN BUILDING SPACING CHART.
- 3FT PARTIALLY ENCLOSED = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ONLY 3FT ENCLOSED = USE OPEN BUILDING SPACING CHART.
- 4. PARTIALLY ENCLOSED = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ENCLOSED MORE THAN 3FT = START WITH OPEN BUILDING SPACING CHART AND THEN REDUCE SPACING BY 6".
- 3 SIDED ENCLOSED = ALL WALLS ARE ENCLOSED EXCEPT FOR 1 END-WALL = START WITH ENCLOSED BUILDING SPACING + THE OPEN END FRAME MUST HAVE EITHER A GABLED END OR HAVE DOUBLED WELDED LEGS & ROOF.
- 6. FOR ALL SHEATHING ENCLOSURES NOT LISTED ABOYE, REFER TO SHEET 5 FOR SPACING AND DESIGN REQUIREMENTS.

# GENERAL NOTES:

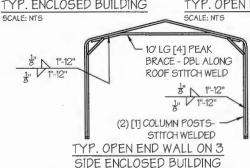
- THE MAX. BUILDING LENGTH FOR ENCLOSED BUILDINGS IS 50'-O". THIS CAN BE INCREASED BY ADDING A DOUBLE FRAME AT THE CENTER TO BREAK THE LENGTH OF THE BUILDING.
- 2. BUILDINGS WITH PARTIALLY ENCLOSED END WALLS NEED TO HAVE SIDE WALL BRACING TO SUPPORT THE PARTIALLY ENCLOSED END WALL. (SEE FIGURE A ON SHEET 5).
- 3. ALL BUILDINGS WITH AN OPEN END WALL MUST HAVE A 10'-O" TUBE PEAK BRACE.





TYP. ENCLOSED BUILDING

TYP. OPEN BUILDING



SCALE: NTS

MANUFACTURED BY:

# STEEL

# DRAWING INFORMATION

PROJECT: 20'-O" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

SPACING SCHEDULES & ENCLOSURE NOTES

SHEET NO .:

DRAWN BY: AW

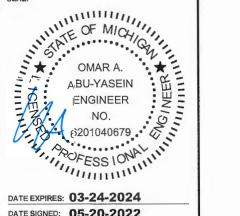
DATE: 5/17/22

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DATE: 5/17/22

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DATE EXPIRES: 03-24-2024

# TABLE 5.1: PURLIN SPACING SCHEDULE

GROUND SNOW /		14GA	. HAT	CHAI	NNEL	PURL	.IN		18GA	. HAT	CHAI	NNEL	PURL	IN
ROOF LIVE		Y	VIND S	PEED	(MPH	1)			W	IND S	PEED	(MPH	1)	
LOAD (PSF)	105	115	130	140	155	165	180	105	115	130	140	155	165	180
□ 30 / 20	54	48	42	36	30	24	24	36	30	24	18	18	12	12
40 / 27	42	42	42	36	30	24	24	30	30	24	18	18	12	12
D 50 / 34	40	40	40	36	30	24	24	24	24	24	18	18	12	12
0 60 / 41	36	36	36	36	30	24	24	18	18	18	18	18	12	12
□ 70 / 47	32	32	32	32	30	24	24	18	18	18	18	18	12	12
080/54	30	30	30	30	30	24	24	18	18	18	18	18	12	12
<b>90/61</b>	24	24	24	24	24	24	24	12	12	12	12	12	12	12
□ 30 / 20	54	48	42	42	36	30	30	48	36	30	24	18	18	12
□ 40 / 27	42	42	42	42	36	30	30	42	36	30	24	18	18	12
050/34	40	40	40	40	36	30	30	30	30	30	24	18	18	12
60 / 41	36	36	36	36	36	30	30	30	30	30	24	18	18	12
0 70 / 47	32	32	32	32	32	30	30	24	24	24	24	18	18	12
080/54	32	32	32	32	32	30	30	18	18	18	18	18	18	12
<b>90/61</b>	30	30	30	30	30	30	30	18	18	18	18	18	18	12
□ 30 / 20	54	48	42	42	36	36	30	54	48	36	30	24	24	18
□ 40 <i>l</i> 27	42	42	42	42	36	36	30	42	42	36	30	24	24	18
□ 50 / 34	40	40	40	40	36	36	30	40	40	36	30	24	24	18
60 / 41	36	36	36	36	36	36	30	36	36	36	30	24	24	18
□ 70 / 47	32	32	32	32	32	32	30	30	30	30	30	24	24	18
080/54	32	32	32	32	32	32	30	24	24	24	24	24	24	18
<b>90/61</b>	30	30	30	30	30	30	30	24	24	24	24	24	24	18
□ 30 / 20	54	48	42	42	36	36	30	54	48	42	42	36	30	30
□ 40 / 27	42	42	42	42	36	36	30	42	42	42	42	36	30	30
050/34	40	40	40	40	36	36	30	40	40	40	40	36	30	30
□ 60 / 41	36	36	36	36	36	36	30	36	36	36	36	36	30	30
0 70 / 47	32	32	32	32	32	32	30	32	32	32	32	32	30	30
080/54	32	32	32	32	32	32	30	<b>3</b> 2	32	32	32	32	30	30
90 / 61	30	30	30	30	30	30	30	30	30	30	30	30	30	30
□ 30 / 20	54	48	42	42	36	36	30	54	48	42	42	36	36	30
□ 40 / 27	42	42	42	42	36	36	30	42	42	42	42	36	36	30
□ 50 / 34	40	40	40	40	36	36	30	40	40	40	40	36	36	30
D 60 / 41	36	36	36	36	36	36	30	36	36	36	36	36	36	30
□ 70 / 47	32	32	32	32	32	32	30	32	32	32	32	32	32	30
080/54	32	32	32	32	32	32	30	32	32	32	32	32	32	30
□ 90 / 61	30	30	30	30	30	30	30	30	30	30	30	30	30	30

- PURLIN SPACING UNITS ARE IN INCHES.
- FRAME SPACING NEEDS TO BE DETERMINED FROM TABLE 4.

## IRREGULAR BUILDING NOTES:

- FIGURES A, B, C & D ON THE RIGHT INDICATE EXAMPLES OF IRREGULAR BUILDINGS.
- FOR IRREGULAR BUILDINGS, FRAME SPACING MUST BE REDUCED BY 12" FROM OPEN BUILDING SPACING TABLE. SEE SHEET 4 FOR OPEN BUILDING TABLE.
- SITE SPECIFICS MAY ALLOW FOR ALTERNATIVE SPACING.
- IRREGULAR BUILDING & BUILDINGS W/ MORE THAN 2 SIDE OPENINGS MUST HAVE A 10' TUBE PEAK BRACE ON ALL FRAMES.

# TABLE 5.2: GIRT SPACING SCHEDULE

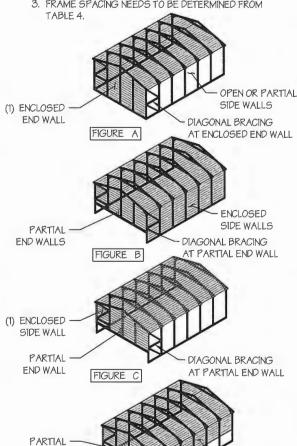
FRAME	WIND SPEED (MPH)									
SPACING	105	115	130	140	155	165	180			
□ 5'-O"	60	48	36	30	24	24	18			
□ 4'-6"	60	60	48	42	36	30	24			
□ 4'-O"	60	60	54	54	42	36	30			
□3'-6"	60	60	54	54	48	42	42			
□2'-0' TO 3'-0"	60	60	54	54	48	42	42			

END WALL

FIGURE D

- 1. GIRT SPACING UNITS ARE IN INCHES.
- 2. THIS SCHEDULE IS TO BE USED FOR BOTH 14GA AND 18 GA GIRTS.





# STEEL

MANUFACTURED BY:

# DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

PURLIN & GIRT SPACING SCHEDULES

5 / 11 SHEET NO .:

DRAWN BY: AW

DATE: 5/17/22 DATE: 5/17/22

CHECKED BY: OAA

# LEGAL INFORMATION

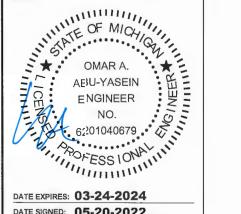
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PARTIALLY ENCLOSED

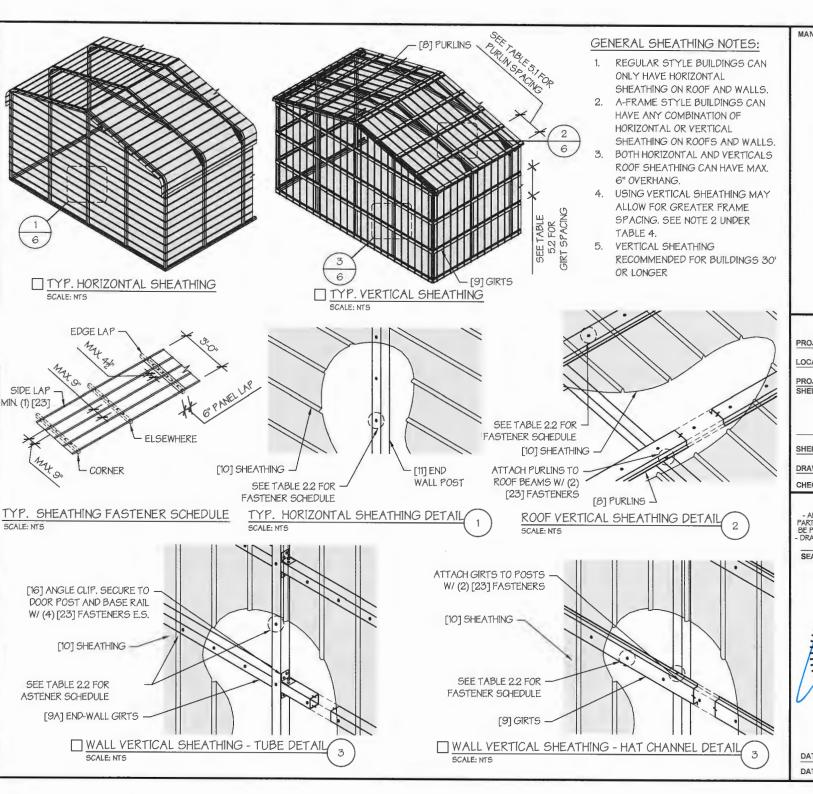
SIDE WALLS

DIAGONAL BRACING

AT PARTIAL END WALL



DATE EXPIRES: 03-24-2024



MANUFACTURED BY:

# NE STEEL

# DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

SHEATHING OPTIONS & DETAILS

6 / 11 SHEET NO .:

DRAWN BY: AW

DATE: 5/17/22

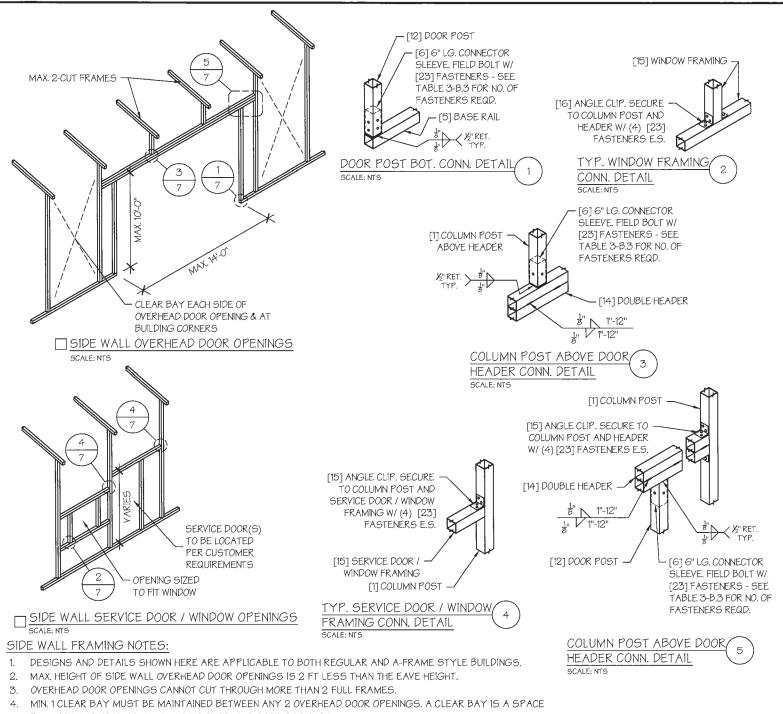
DATE: 5/17/22 CHECKED BY: OAA

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DATE EXPIRES: 03-24-2024



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# DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SIDE WALL FRAMING & OPENINGS

7 / 11 SHEET NO .:

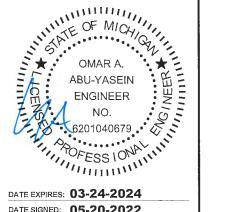
ΑW DRAWN BY:

DATE: 5/17/22

CHECKED BY: OAA DATE: 5/17/22

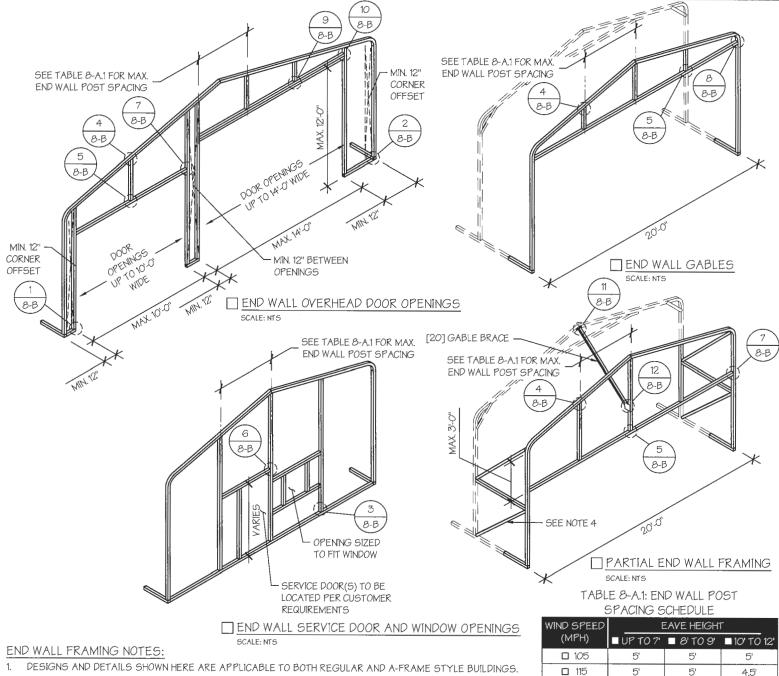
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DATE EXPIRES: 03-24-2024

- BETWEEN TWO FRAMES THAT HAS NO OVERHEAD DOOR OPENINGS.
- MIN. 1 CLEAR BAY MUST ALSO BE MAINTAINED FROM THE BUILDING CORNERS.
- 6. SERVICE DOORS AND WINDOWS CAN BE PLACED IN CLEAR BAYS OR ANY WHERE ELSE AS NEEDED.



130

140

155

□ 165 - 180

4.5

4.5

4'

35

4.5

4.5

4'

31

4'

3'

2.5'

 $2^{i}$ 

- DESIGNS AND DETAILS SHOWN HERE ARE APPLICABLE TO BOTH REGULAR AND A-FRAME STYLE BUILDINGS.
- MIN. 12" CLEARANCE MUST BE MAINTAINED BETWEEN ANY TWO OPENINGS (OVERHEAD DOOR OR SERVICE DOOR) AND FROM CORNERS.
- 3. SERVICE DOORS AND WINDOWS CAN BE PLACED AS NEEDED.
- 4. DIAGONAL BRACES NEED TO BE ADDED FOR PARTIAL END WALL ENCLOSURES, SEE SHEET 9 FOR DIAGONAL BRACE CONNECTION DETAILS.

MANUFACTURED BY:



## DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

END WALL FRAMING

8-A / 11 SHEET NO .:

DRAWN BY: AW DATE: 5/17/22

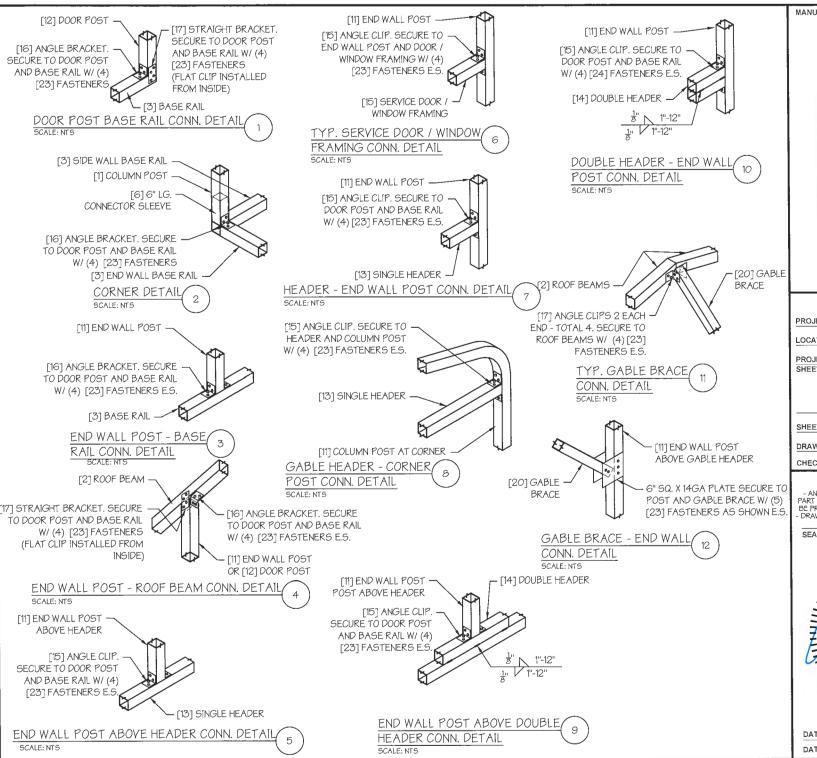
CHECKED BY: OAA DATE: 5/17/22

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DATE EXPIRES: 03-24-2024



MANUFACTURED BY:



# DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

END WALL FRAMING DETAILS

8-B / 11 SHEET NO .:

DRAWN BY: AW

DATE: 5/17/22

CHECKED BY: OAA

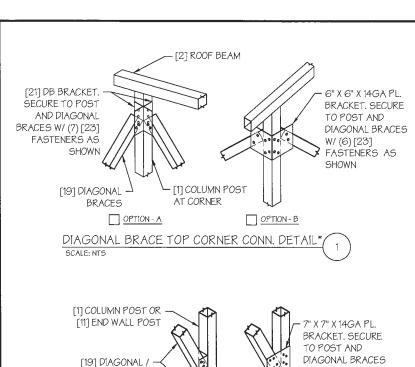
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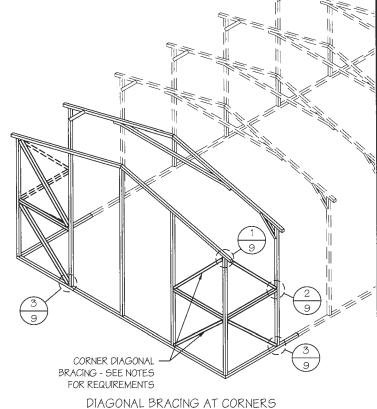
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DATE EXPIRES: 03-24-2024





7" X 7" X 14GA PL. [1] COLUMN POST BRACKET, SECURE TO POST AND DIAGONAL [21] DB BRACKET. SECURE BRACES W/ (14) [23] TO POST AND DIAGONAL FASTENERS AS SHOWN BRACES W/ (7) [23] FASTENERS AS SHOWN

W/ (14) [23]

SHOWN

OPTION - B

OPTION - B

FASTENERS AS

[19] DIAGONAL BRACES [3] BASE RAIL

HORZ. BRACES

BRACES W/ (7) [23]

FASTENERS AS SHOWN OPTION-A

DIAGONAL BRACE - POST CONN. DETAIL

[21] DB BRACKET. SECURE TO POST AND DIAGONAL

SCALE: NTS

DIAGONAL BRACE BOT. CORNER CONN. DETAIL SCALE: NTS

\* INSIDE VIEW SHOWN FOR CLARITY

OPTION - A

# CORNER BRACING NOTES:

SCALE: NTS

- DIAGONAL BRACING AT BUILDING CORNERS IS REQUIRED FOR ALL BUILDINGS IN LOCATIONS WHERE WIND SPEED IS 140 MPH OR GREATER.
  - FOR 3 SIDED ENCLOSED BUILDINGS 140 MPH OR GREATER WIND SPEED - THE BUILDING MUST BE DESIGNED WITH OPEN BUILDING SPACING AND DIAGONAL BRACING IS REQUIRED ON ALL ENCLOSED WALLS.
- 2. SIDE-WALL DIAGONAL BRACING IS REQUIRED WHEN THE ADJACENT END-WALL IS PARTIALLY ENCLOSED.
- 3. ALL BUILDINGS WITH IRREGULAR ENCLOSURE (SEE SHEET 5) WILL REQUIRE SIDE-WALL BRACING CLOSE TO THE PARTIALLY ENCLOSED END-WALL.

MANUFACTURED BY:



# DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

CORNER BRACING DETAILS

9 / 11 SHEET NO .:

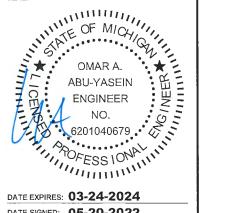
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DATE: 5/17/22

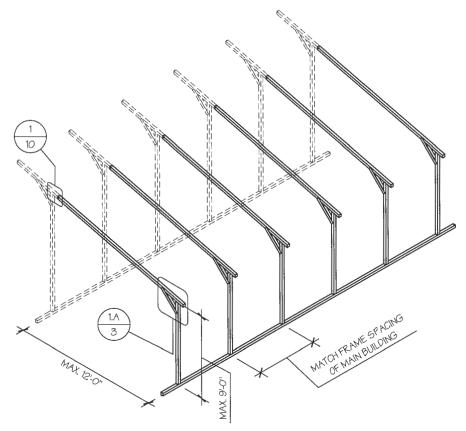
CHECKED BY: OAA DATE: 5/17/22

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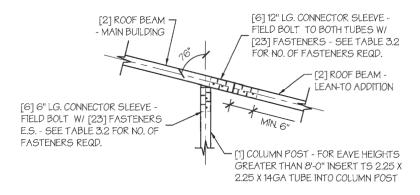


DATE EXPIRES: 03-24-2024



OPTIONAL LEAN-TO ADDITION

SCALE: NTS



LEAN-TO ATTACHMENT DETAIL

SCALE: NTS

# LEAN-TO ADDITION NOTES:

- 1. LEAN-TO ADDITIONS CAN BE ADDED ON EITHER OR BOTH SIDES OF THE BUILDING.
- 2. ROOF SLOPE, PURLIN, GIRT AND FRAME SPACING OF THE ADDITION HAVE TO MATCH THAT OF THE MAIN STRUCTURE.
- 3. IF THE LEAN-TO ADDITION IS "OPEN "(BOTH END WALLS OR SIDE WALL IS NOT ENCLOSED), THE DESIGN OF THE MAIN BUILDING HAS TO USE THE FRAME SPACING OF AN OPEN BUILDING FROM TABLE 4.

MANUFACTURED BY:



# DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

OPTIONAL LEAN-TO ADDITION

10 / 11 SHEET NO .:

DRAWN BY: AW

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DATE: 5/17/22

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DATE EXPIRES: 03-24-2024

# CONCRETE SLAB FOUNDATION NOTES:

- 1. DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE SLAB FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- 2. CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
- 3. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4"
- 4. MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-A.2.
- 5. THE SIZE OF THE SLAB SHALL BE THE SIZE (WIDTH AND LENGTH) OF THE BUILDING PLUS 5% FOR 14GA MATERIAL AND 53 FOR 12GA MATERIAL.
- 6. DEPTH OF SLAB TURN DOWN FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- 7. CONTROL JOINTS SHALL BE PLACED SO AS TO LIMIT MAX. SLAB SPANS TO 20' IN EACH DIRECTION.

2" WIDE X 1" DEEP

VERTICAL

□ 12GA

17/8"

NOTCH ALONG

NOVERHEAD DOOR AND SLOPE TO 2"

- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.

OVERHEAD DOOR NOTCH DETAIL

12 12 GA

NOTE: DEPTH IS TO BE 11/2"

27/8"

HORIZONTAL/OPEN

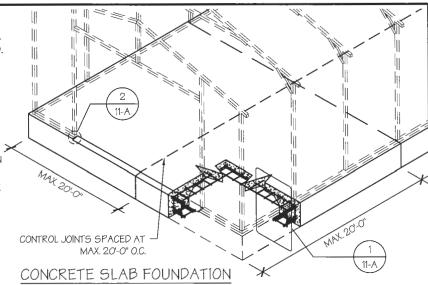
□14GA

2.3/4"

TABLE 11-A.1: NOTCH WIDTH

□ 14GA

13/4



# STEEL

MANUFACTURED BY:

# DRAWING INFORMATION

PROJECT: 20'-O" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

BASE RAIL

END WALL POST

DOOR POST

FOUNDATION OPTION 1: CONCRETE SLAB

11-A / 11 SHEET NO .:

DRAWN BY: AW

DATE: 5/17/22

CHECKED BY: OAA

DATE: 5/17/22

## LEGAL INFORMATION

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DATE EXPIRES: 03-24-2024

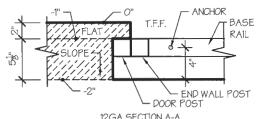
DATE SIGNED: 05-20-2022

# TABLE 11-A.2: CONCRETE SLAB ANCHOR SCHEDULE

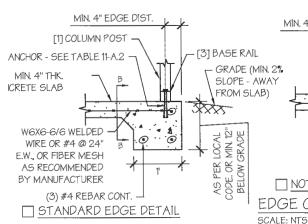
WIND SPEED (MPH)	ANCHOR SIZE/NUMBER			
□105 TO 135	(1) 1/2"Ø X 7"			
□136 TO 180	(2) 1/2"Ø X 7"			
□105 T0 135	(1) 1/2"Ø X 7"			
□136 TO 180	(2) 1/2"Ø X 7"			
	(MPH)  105 T0 135  136 T0 180  105 T0 135			

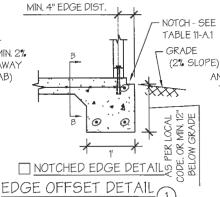


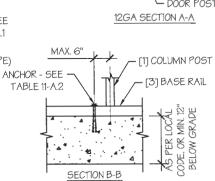
- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- MIN. EMBEDMENT DEPTH TO BE  $2\frac{7}{8}$ ".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.



14GA SECTION A-A







# CONCRETE SLAB FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE SLAB FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- 2. CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
- 3. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" > SPACING.
- 4. MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-A.1.
- 5. THE SIZE OF THE SLAB SHALL BE THE SIZE (WIDTH AND LENGTH) OF THE BUILDING PLUS &" FOR 14GA MATERIAL AND 1" FOR 12GA MATERIAL.
- 6. DEPTH OF SLAB TURN DOWN FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- 7. CONTROL JOINTS SHALL BE PLACED SO AS TO LIMIT MAX. SLAB SPANS TO 20' IN EACH DIRECTION.
- 8. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- 9. CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.

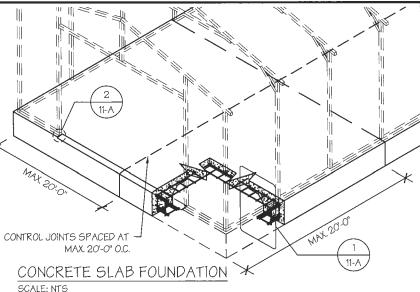
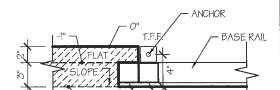


TABLE 11-A.1: CONCRETE SLAB ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER				
ENCLOSED	□105 T0 135	(1) 1/2"Ø X 7"				
ENCLUSED	□136 TO 180	(2) 1/2"Ø X 7"				
OPEN	□105 TO 135	(1) 1/2"Ø X 7"				
OPEN	□136 TO 180	(2) 1/2"Ø X 7"				

- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- 2. MIN. EMBEDMENT DEPTH TO BE 27.
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.



OVERHEAD DOOR NOTCH DETAIL

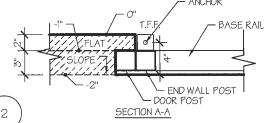
BUILDING POST

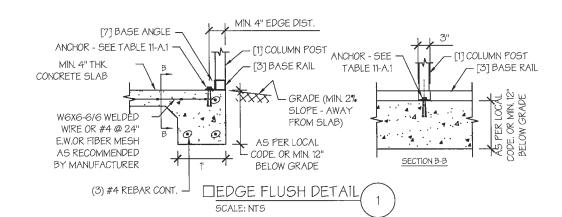
2" WIDE X 1" DEEP

AND SLOPE TO 2"

NOTCH ALONG

NOVERHEAD DOOR





MANUFACTURED BY:



# DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

FOUNDATION OPTION 1: CONCRETE SLAB

11-A / 11 SHEET NO .:

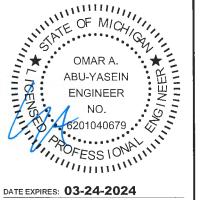
DRAWN BY: AW DATE: 5/17/22

CHECKED BY: OAA

DATE: 5/17/22

# LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRUCTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW. DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.



DATE EXPIRES: 03-24-2024

# TABLE 11-B.1: ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER			
ENCLOSED	□105 TO 135	(1) 1/2"Ø X 7"			
ENCLUSED	□136 TO 180	(2) 1/2"Ø X 7"			
OPEN	□105 TO 135	(1) 1/2"Ø X 7"			
Or EN	□136 TO 180	(2) 1/2"Ø X 7"			

## NOTES:

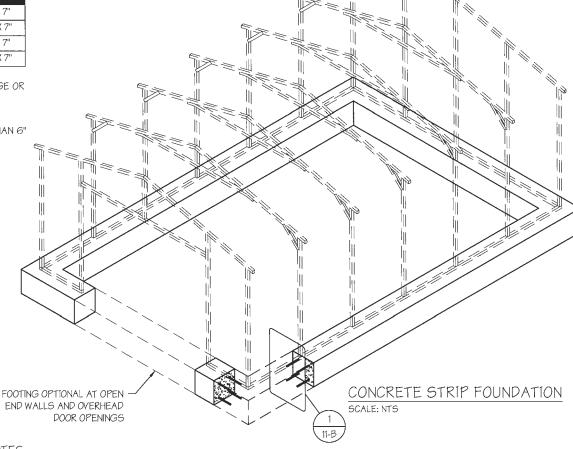
- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- MIN. EMBEDMENT DEPTH TO BE 27.
- 3. ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

# TABLE 11-B.2: CONC. STRIP SCHEDULE

WIND SPEED (MPH)	MIN. SIZE REQD.
□105 T0 130	12" X 12"
□140 T0 155	18" X 12"
□165 T0 180	26" X 12" 21 X 15" 18" X 18"

## NOTES:

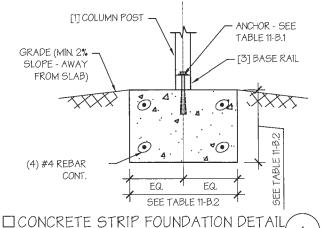
WIDTH AND DEPTH DIMENSIONS CAN BE INTERCHANGED.



SCALE: NTS

# CONCRETE STRIP FOUNDATION NOTES:

- 1. DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE STRIP FOUNDATION, ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- 2. CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
- 3. MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE
- 4. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- 5. DEPTH OF CONCRETE STRIP FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- 6. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.
- 8. BUILDING IS TO BE MOUNTED ON THE CENTER OF THE STRIP FOUNDATION.



MANUFACTURED BY:

# NE STEEL

### DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

FOUNDATION OPTION 2: CONCRETE STRIP

11-B / 11 SHEET NO .:

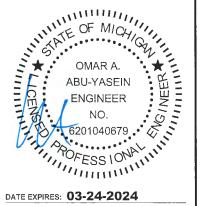
DRAWN BY: AW

DATE: 5/17/22

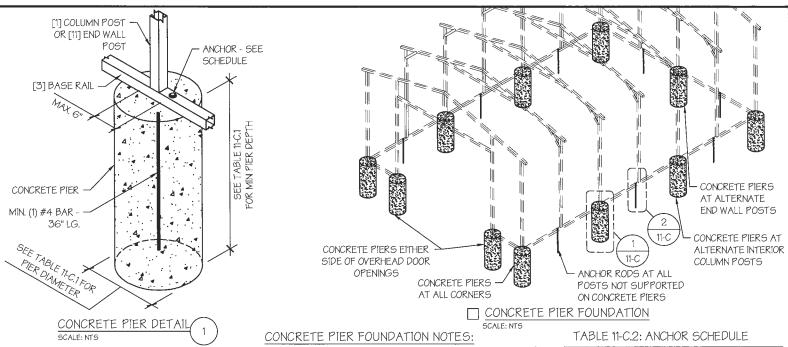
CHECKED BY: OAA DATE: 5/17/22

# LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW. - DRAWINGS VALID UP TO ! YEAR FROM DATE OF ISSUE



DATE EXPIRES: 03-24-2024



DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE PIER FOUNDATION, ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.

2. CONCRETE PIERS SHALL BE LOCATED AT ALL 4 CORNERS. ON EACH SIDE OF OVERHEAD DOOR OPENINGS AND ON ALTERNATE INTERIOR COLUMN POSTS AND END WALLS POSTS.

- 3. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST WITH A PIER.
- 4. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- 5. MIN. NUMBER OF CONCRETE ANCHORS PER POST WITH A PIER SHALL BE AS SHOWN IN TABLE 11-C.2.
- TWO ANCHORS AND A PIER ARE REQUIRED AT DIAGONAL BRACING LOCATIONS WHEN REQUIRED.
- 7. ALL POSTS NOT SUPPORTED ON CONCRETE PIERS SHALL BE ANCHORED TO THE GROUND WITH A 1/2" X 30" LG. THREADED ROD, RODS WILL HAVE A PRE-FORMED HEAD AT THE TOP AND ONE COAT OF RUST PROOF MATERIAL.
- 8. PIERS SHALL BE FORMED BY DIGGING A HOLE OF THE SAME SIZE AS THE PIER ON LEVEL GRADE AND FILLING IT WITH CONCRETE, THRD, ROD ANCHORS SHOULD BE DROPPED INTO THE PIERS PRIOR TO POURING THE CONCRETE.
- 9. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- 10. CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER			
ENCLOSED	□105 TO 135	(1) 1/2"Ø X 7"			
ENCLOSED	□136 TO 180	(2) 1/2"Ø X 7"			
OPFN	□105 TO 135	(1) 1/2"Ø X 7"			
Orten	□136 TO 180	(2) 1/2"Ø X 7"			

- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- 2. MIN. EMBEDMENT DEPTH TO BE 22".
- ANCHORS TO BE SPACED NO MORE THAN 6' FROM POSTS.

MANUFACTURED BY:



# DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

FOUNDATION OPTION 3: CONCRETE PIERS

11-C / 11 SHEET NO .:

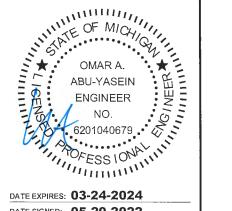
DRAWN BY: AW

DATE: 5/17/22

DATE: 5/17/22 CHECKED BY: OAA

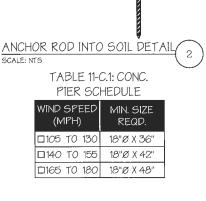
# LEGAL INFORMATION

- ANY DUPUCATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW. - DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.



DATE EXPIRES: 03-24-2024

DATE SIGNED: 05-20-2022



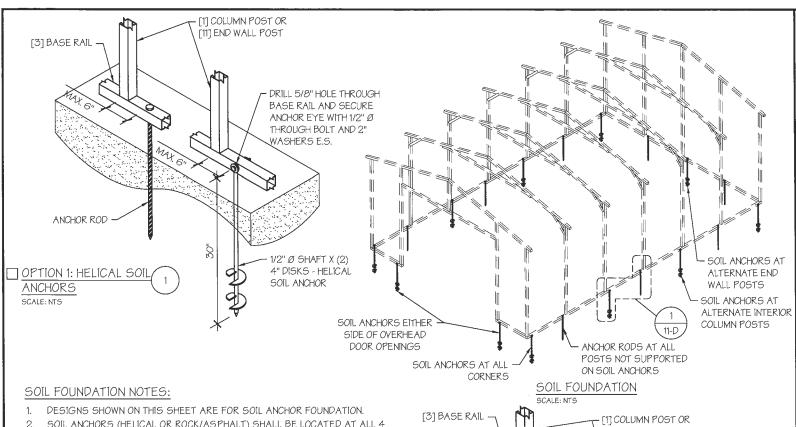
[1] COLUMN POST

OR [11] END WALL

[3] BASE RAIL

POST

ANCHOR ROD



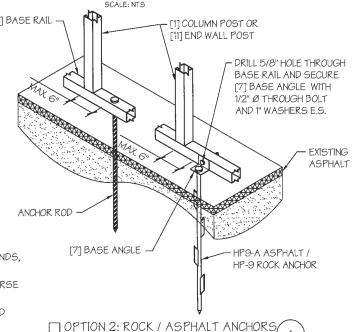
- 2. SOIL ANCHORS (HELICAL OR ROCK/ASPHALT) SHALL BE LOCATED AT ALL 4 CORNERS, ON EACH SIDE OF OVERHEAD DOOR OPENINGS, ON POSTS WITH DIAGONAL BRACING IF REQUIRED. AND ON ALTERNATE INTERIOR COLUMN POSTS AND END WALLS POSTS.
- 3. HELICAL ANCHORS ARE TO BE USED ONLY IF THE DRIVING TORQUE INTO THE GROUND IS 150 FT-LBS OR GREATER, MANUFACTURER IS NOT RESPONSIBLE FOR SOIL QUALITY AT SITE.
- 4. HELICAL ANCHORS CAN ONLY BE USED FOR CLASS 2, 3 & 4 SOILS (SEE SOIL CLASSIFICATIONS THIS PAGE).
- 5. ALL POSTS WITH NO ANCHORS ADJACENT SHALL BE ANCHORED TO THE GROUND WITH A 1/2" X 30" LG. ROD. RODS WILL HAVE A PRE-FORMED HEAD AT THE TOP AND ONE COAT OF RUST PROOF MATERIAL.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.

# SOIL CLASSIFICATIONS:

SOIL CLASS DESCRIPTION

- SANDY GRAVEL AND GRAVEL, VERY THIN DENSE AND/OR CEMENTED SANDS, COARSE GRAVEL/COBBLES, PRELOADED SILTS, CLAYS AND CORAL.
- SAND. SILTY SAND. CLAYEY SAND. SILTY GRAVEL. MEDIUM DENSE COARSE SANDS, SANDY GRAVEL, VERY STIFF SILT AND SANDY CLAYS.
- LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS AND ALLUVIAL FILLS.

\*FROM HUD "MODEL MANUFACTURED HOME INSTALLATION STANDARDS"



SCALE: NTS

MANUFACTURED BY:

# NE STEEL

### DRAWING INFORMATION

PROJECT: 20'-0" WIDE BUILDINGS

LOCATION: STATE OF MICHIGAN

PROJECT NO.: 451-22-1572

SHEET TITLE:

FOUNDATION OPTION 4: SOIL ANCHORS

11-D / 11 SHEET NO .:

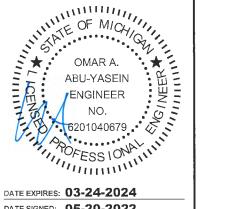
DRAWN BY: AW

DATE: 5/17/22

CHECKED BY: OAA DATE: 5/17/22

# LEGAL INFORMATION

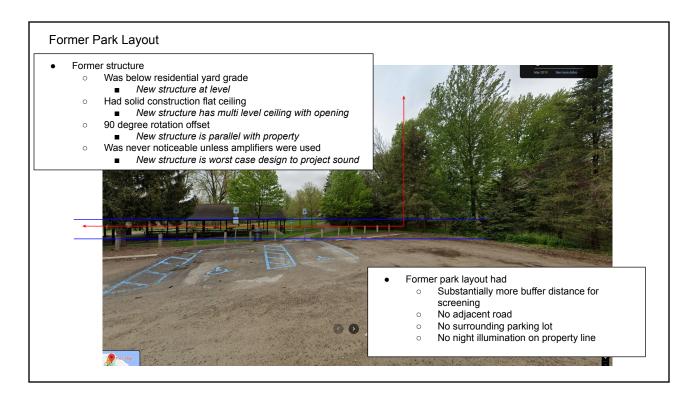
- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW. - DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE



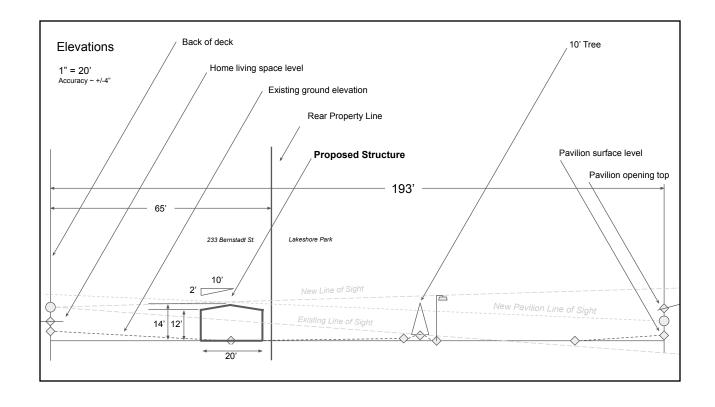
DATE EXPIRES: 03-24-2024

# 233 Bernstadt St. Building Proposal as Barrier to Park









# **Nuisances**

- Direct visibility of
  - Foot and vehicle traffic (34.5' from property)
  - Vehicle parking
  - Night parking lot illumination
  - Public gatherings at Pavilion 1
  - Public surveillance
- Excessive noise from
  - Vehicle traffic
  - Ambient non-amplified gathering noise at Pavilion 1
    - 10-100 room level speaking voices penetrate property
  - Amplified noise at Pavilion 1 (city events OR otherwise)



The city committed to 85-90% 4 season screening to park neighbors - simply not possible with vegetation alone.

# **Variances**

Variance Notes:

4.19 J - More than two accessory structures on a lot less than twenty-one thousand seven-hundred eighty square feet (21,780 sq ft)

Lot 0.42 ac = 18,240.00 sq ft

4.19 I - Aggregate square footage of both the detached garage and the new structure – maximum aggregate of 850 sf.

Secondary Structures = 1,768 sq ft

4.19 V – aggregate square footage of the accessory structures being greater than that of the primary structure

Primary House = 1,417 sq ft

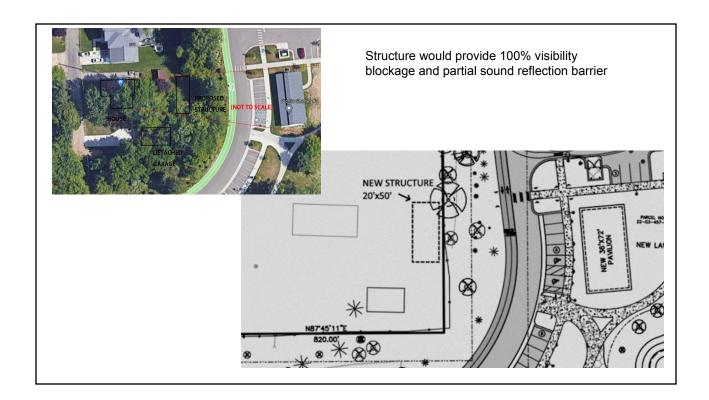
(OK) 4.19.1.C – total floor area of accessory buildings shall not occupy more than 25% of the rear yard

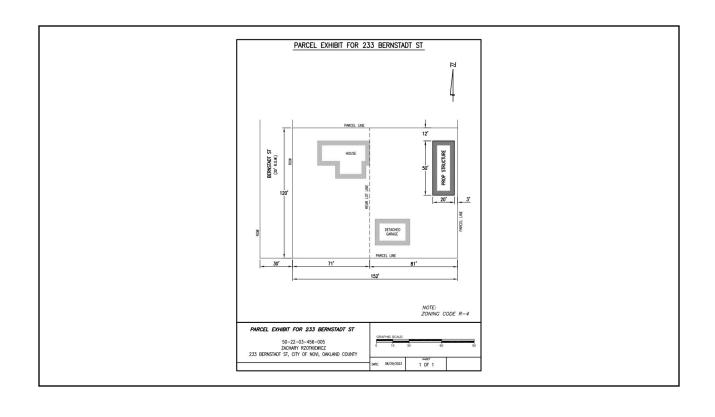
Rear Yard 79' x 120' = 9,480 sq ft Structure 1 = 24' x 32' = 768 sq ft Structure 2 = 20' x 50' = 1,000 sq ft (Structure 1 + Structure 2) / Rear Yard \* 100 (768 + 1,000) / 9,480 \* 100 = 18.65% < 25%

4.19 G - 6' from rear yard setback requirement

Proposed distance from rear property line 3'

https://cityofnovi.org/city-services/communi ty-development/information-requirements-s heets.-checklists.-manua/bldg-shedanddet achedgarage.aspx







# Cost estimate to owner

~ \$28,000

# Conforming to Colors Of surrounding area









Grey steel roof Brown steel siding Black steel trim Black steel two-tone base









Renders. Not to scale.



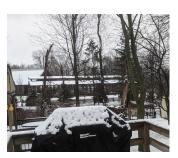
# Spring



Summer



Winter



Fall







Daytime visibility - summer (best case)



View into kitchen after dark



New: City surveillance 140' from property





CITY OF NOVI

COMMUNITY DEVELOPMENT

# Fletcher, Sarah SEP 1 3 2023

From:

Leanne Link <lealealink@gmail.com>

Sent:

Wednesday, September 13, 2023 1:05 PM

To: Cc: Fletcher, Sarah

Subject:

Zachary Rzotkiewicz Letter of support for building project 233 Bernstadt St.

Attachments:

97809707-C86A-48F6-93D0-4399FAD973A2.jpeg; CA77CB90-E962-461B-910D-

AB1B1DC9CAEF.jpeq

Mr Fletcher,

The Zoning Board is to hear **Zackary Rzotkiewicz's** plea for relief on October 10th,
His residence at **233 Bernstadt Street is absolutely the most affected** by the new Lakeshore Park design. Mr.
Rzotkiewicz has a unique property to the rest of Bernstadt St. as his property is the only one with the park **noise burdon on two (2) sides of his property** and is absolutely the closest to pavilion #1 and the thoroughfare that runs through the park.

We, as 35 year residents of the same street, situated caddy-corner to the appealing property, have seen first hand the dramatic change in noise that the 2020-22 Lakepark design has had on Bernstadt Street.

Regarding the change in park noise from pavilion #1. The following is our witness:

- 1. Constant drone of people talking (amplified by the vaulted and vented pavilion roof)
- 2. Eruptions of cheering and yelling at pavilion #1 (any given day and time)
- 3. Amplified music by those disregarding the park rules (any given day and time)
- 4. **Traffic** at all hours traveling at any given speed (no posted speed signs)
- 5. Car alarms going off and unattended to (any given time of the day)
- 6. Slamming of car doors
- 7. Squealing tires (any given time of the day) (previous gate to the back of the park was removed)

The new design of Lakeshore Park Pavilion #1, with its current elevation, design and location has put a rather large burden on its neighbors.

Pavilion #1 has a **vault in the roof with the open vent allowing normal volume conversations to be heard at great distance**. Now, multiply one conversation by a large group of 10-100 people competing with each other to be heard, then add amplified music and an MC on a microphone. Here you may start to see our problem.

The previous pavilion structure #1 (prior to 2019) had no open vent, was at a much lower elevation, was perpendicular to the current one, had no thoroughfare between the structure and our neighborhood and had dense vegetation between the structure and our subdivision which helped squelch any audibles.

Our decades of being neighbors to Lakeshore Park gives us the ability to know the difference.

The noise is not only a burden to 233 Berstadt but many others on our street. Personally we hear the park noise standing on our property in our front and back yards as well as from within our home with our windows open.

Our street has a group chat and the park noise has several times been the subject of conversation.

Videos of the noise from several locations were emailed it to Jeff Muck to handle. (see attached)
We have also suggested for Mr. Muck to collect a rather large deposit from the pavilion renters which would appropriately be returned to the rents if they didn't break the rules and if the police were not called.

Our neighbors have taken turns calling the Novi Police to report the noise multiple times each summer. We've even called out park staff in person for not addressing the situation of the obvious rule breakers. The staff seem to be oblivious to certain rules and to our plight.

At times, when the noise is unacceptable, we've walked over and politely pointed out the amplified music rule that is posted at each pavilion location. This all in an effort to extinguish the problem.

Many of us feel the complaints are falling on deaf ears. This problem should not be ours to police!

The city's action of taking away the original buffer zone, replacing such with a thoroughfare of pavement and traffic, elevating and resituating pavilion #1 has caused a headache for our street.

We feel the proposal by Zackary Rzotkiewicz may help give him and his family some relief from the noise and help restore some of their privacy. This proposal also may even lend relief to us as well. The proposed structure will help block the direct noise/sight line between our property and pavilion #1 of Lakeshore Park. (see attached)

**IMG** 32483920.MOV

**IMG\_125635367.MOV** 

**IMG\_260520683.MOV** 

If the proposed structure can give the residence of 233 Bernstadt Street any relief, we are in full support.

Sincerely, Leanne & Michael Link 210 Bernstadt St. Novi, MI 48377



