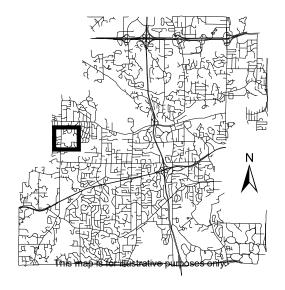




#### **Location Map**

Project: Bennett Family Park Address: 3717 Co Road 101



Dale Gronberg Building Official City of Minnetonka 14600 Minnetonka Blvd Minnetonka, MN 55345

RE: Temporary Structure at Bennett Family Park (3717 County Rd 101, Minnetonka, MN 55345)

#### Dear Dale:

Cornerstone Consulting has completed the structural peer review for the 4,306± SF Dockzilla - Sales & Demonstration Center which is a 20Mx20Mx5.2M L2 TITAN Series Structure (aka H-Line Structure manufactured by Roder Asia Group) based on the manufacturer's standard calculation package prepared by Roder Asia Group dated September 2022. The standard calculation package provided are for a 20Mx50Mx5.2M structure which is reasonably similar to a 20Mx20Mx5.2M structure. The original calculations are attached for reference. It is our understanding that the temporary structure is intended to be installed for under 180 days.

The objective of this review is to determine if the structural calculations provided for the referenced project are in compliance with the structural requirements of the applicable building code in Minnesota. The review is limited in scope and will be conducted to the extent necessary to render an opinion regarding the stability and integrity of the primary structural system of the project.

Cornerstone Consulting is relying on the accuracy of information provided by the Roder Asia Group. No attempt will be made to independently verify dimensions, except to the except to the extent necessary to review the adequacy of a particular structural component. This prepared peer review report is intended for the one-time use in connection with this project and location. Any reuse without written approval or adaptation by Cornerstone Consulting is prohibited.

We have completed our structural peer review for the above referenced project for the conformance to the structural provisions of the current edition of the 2020 Minnesota Building Code, International Building Code 2024 (as noted below), ASCE 7-16, and ASCE 37-14.

Key <u>minimum</u> design criteria are as follows:

Design Wind Speed: 107 mph (110 mph in calculations)

• Exposure Category: B (Exposure C in calculations)

Risk Factor: II



Key minimum design criteria are as follows (continued):

- Ground Snow Load: 50 psf x 0.7 = 35 psf (per reduction below)
  - 42 psf ground snow load in calculations
  - o Reviewed in both balanced and unbalanced conditions
  - 0.7 reduction modification factor applied from IBC 2024 3103.6.1.1 for installation periods <10 years</li>
  - We believe the reduction factor adopted from IBC 2024 is appropriate for the expected <180 installation period of the structure</li>
- Seismic lateral loads were not addressed in the calculations, which is consistent with the temporary nature of the structure and lightweight construction.

Foundation and tent anchorage requirements shall be per the manufacturer's specifications as shown in Appendix A of this package.

In conclusion, the 20Mx20Mx5.2 L2 TITAN Series Structural was reviewed and will be structurally adequate as described in the original calculations.

We trust this information is sufficient for your needs at this time. Please do not hesitate to contact our office should you have any questions or require further information.

Sincerely,

Daniel Louis Cornerstone Consulting Engineers & Design Services, Inc.



Attachments:

Appendix A: Reference Drawings

Appendix B: Roder Asia Group Structural Calculations



#### Operation Details

We are donating the use of our building that we had approved and permitted with the City of Minnetonka this summer, located at the Minneapolis Mart. The building has been taken down and we are working with the Minnetonka Baseball Association to reconstruct the building ONLY with flooring for use as a baseball training facility for the winter. Therefore, depending on this approval process, the project may be cancelled due to the permitting process.

This is a temporary use as a baseball training facility. The END date when it must be closed and removed is April 13, 2025. The beginning use date is as soon as we get approval from the city on the permits.

Since it is a baseball training facility, the use will be mainly children, instructors and parents. No more than 20 at one time, typically 10-12.

- Hours of operation will be
  - o Monday- Friday 4pm to 10pm
  - O Saturday 10am to 10pm
  - O Sunday 12pm to 10pm

Floor plan is attached as it is an open space with batting cage nets hung from the ceiling



# DOCKZILLA BATTING CAGE SHELTER

**3717 COUNTY RD.101** MINNETONKA, MN 55345

PROJ. NO. 24417

**ISSUE DATE** 10/08/2024

**PROJECT PHASE CONSTRUCTION DOCUMENTS** 



#### **PROJECT GENERAL NOTES - ARCHITECTURAL**

- 1. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED PROJECT. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE MEANS OR METHOD OF
- 2. THE CONTRACTOR SHALL OBTAIN SUFFICIENT LIABILITY INSURANCE TO COVER WORKMAN'S COMPENSATION, GENERAL LIABILITY AND CONTRACTUAL LIABILITY. A COPY SHALL BE FILED WITH THE OWNER.
- 3. THE CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS AS REQUIRED BY THE CONSTRUCTION DOCUMENTS AND IN FULL ACCORDANCE WITH ALL APPLICABLE CODES AND
- 4. THE CONTRACTOR WILL MAINTAIN BUILDER'S RISK INSURANCE ON THE FORM KNOWN AS "ALL RISK" OR "MULTIPLE PERIL". THE CONTRACTOR, ALL SUBCONTRACTORS, ARCHITECTS AND ENGINEERS SHALL BE INCLUDED IN EACH CAPACITY AS INSURED JOINTLY WITH THE OWNER IN
- 5. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND FIELD CONDITIONS PRIOR TO ANY DEMOLITION, FABRICATION, CONSTRUCTION OR INSTALLATION & NOTIFY ARCHITECT IF CONDITIONS, MATERIALS, SIZES AND DIMENSIONS ARE DIFFERENT FROM THOSE SHOWN.
- 6. CROSS REFERENCE ALL DIMENSIONS AND DETAILS WITH STRUCTURAL, CIVIL, MECHANICAL, AND ELECTRICAL DRAWINGS BEFORE COMMENCING ANY FABRICATION AND/OR
- CONSTRUCTION. 7. CONTRACTORS SHALL INSTALL ALL MANUFACTURED ITEMS, MATERIALS AND EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS. EXCEPT WHERE THE SPECIFICATIONS HEREIN, ARE MORE STRINGENT, AND SHALL BE COMPLIED WITH.
- 8. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS, LICENSES AND CERTIFICATES AND PAY ALL FEES CONNECTED THEREWITH THE ABOVE REFERENCED PROJECT.
- 9. THE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM WASTE MATERIAL OR RUBBISH CAUSED BY THE WORK.
- 10. WHEN WORK IS COMPLETED IN AN AREA, THOROUGHLY CLEAN THE SPACES, ITEMS & SURFACES OF SOIL, WASTE MATERIAL, SMUDGES, SPATTERS, MISAPPLIED MATERIAL, SPOTS, STAINS, AND THE LIKE, WITHOUT DAMAGING THE MATERIALS AND SURFACES INVOLVED. 11. PROVIDE FIRE EXTINGUISHERS AS REQUIRED BY APPLICABLE CODES AND ORDINANCES UNLESS
- 12. PROVIDE FIRE DEPARTMENT KEY LOCK BOX ON BUILDING EXTERIOR IN LOCATION INDICATED AND/OR AS REQUIRED BY THE LOCAL AUTHORITIES HAVING JURISDICTION. KEY BOX SHALL BE OF THE BRAND AND TYPE DICTATED BY THE FIRE MARSHAL COORDINATE ALTERNATE FIRE DEPARTMENT ACCESS REQUIREMENTS WITH FIRE MARSHAL.
- 13. ALL DOORS, FRAMES, HARDWARE, LIGHTING AND CEILING MATERIALS ARE TO FOLLOW BUILDING STANDARDS UNLESS OTHERWISE NOTED.

#### **PROJECT GENERAL NOTES - MECHANICAL**

- 1. THE MECHANICAL CONTRACTOR IS TO DESIGN ALL MECHANICAL SYSTEMS AND OBTAIN NECESSARY PERMITS. MECHANICAL DOCUMENTS ARE TO BE PROVIDED BY THE MECHANICAL CONTRACTOR AND SIGNED BY A PROFESSIONAL ENGINEER AS REQUIRED BY CODE. THE MECHANICAL DESIGN IS TO BE COORDINATED WITH THE ATTACHED ARCHITECTURAL CONSTRUCTION DOCUMENTS. THE DESIGN IS TO BE REVIEWED BY THE OWNER AND/OR TENANT, AS APPLICABLE, PRIOR TO IMPLEMENTATION.
- 2. THE MECHANICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY MECHANICAL EQUIPMENT AND CONTROLS TO COMPLETE THE JOB. THE MECHANICAL CONTRACTOR IS TO COORDINATE W/ THE ELECTRICAL CONTRACTOR ALL THE NECESSARY WIRING TO COMPLETE THE JOB. THE WIRING IS TO BE COMPLETED BY THE ELECTRICAL CONTRACTOR.

#### **PROJECT GENERAL NOTES - ELECTRICAL**

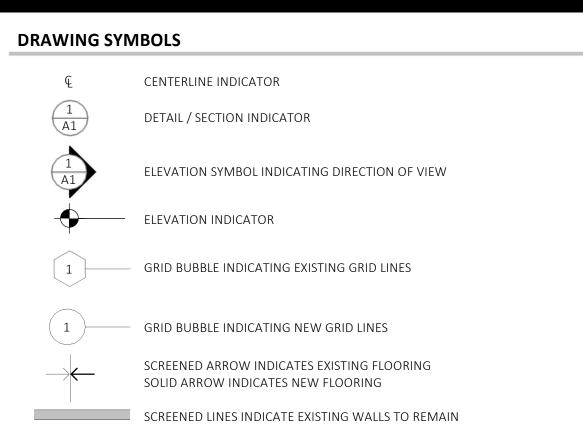
- 1. THE ELECTRICAL CONTRACTOR IS TO DESIGN ALL ELECTRICAL SYSTEMS AND OBTAIN NECESSARY PERMITS. THE ELECTRICAL DESIGN IS TO BE COORDINATED WITH THE ATTACHED ARCHITECTURAL CONSTRUCTION DOCUMENTS. THE ELECTRICAL DESIGN IS TO BE REVIEWED BY THE ARCHITECT OF RECORD AND OWNER AND/OR TENANT, AS APPLICABLE, PRIOR TO IMPLEMENTATION.
- 2. THE ELECTRICAL CONTRACTOR IS TO COORDINATE THE INSTALLATION OF ALL MECHANICAL EQUIPMENT AND TO PROVIDE DISCONNECT AND POWER WIRING FOR ALL MECHANICAL
- 3. THE ELECTRICAL CONTRACTOR IS TO PROVIDE EXIT AND EMERGENCY LIGHTS AS REQUIRED BY APPLICABLE CODES AND ORDINANCES.

#### APPLICABLE CODES

MN STATE BUILDING CODE (MSBC)	2020
INTERNATIONAL BUILDING CODE (IBC)	2018
AMENDMENTS IN MSBC: CHAPTER 1305	2020
AMENDMENTS IN MSBC: CHAPTER 1341	2020
AMENDMENTS IN MSBC: CHAPTER 1307	2020
MN STATE FIRE CODE	2020
INTERNATIONAL FIRE CODE (IFC)	2018
AMENDMENTS IN MSFC: CHAPTER 7511	2020
MN ENERGY CODE	2024
ASHRAE 90.1	2019
AMENDMENTS IN MNBC CHAPTER 1323	2024
MINNESOTA MECHANICAL AND FUEL GAS CODE	2020
INTERNATIONAL MECHANICAL AND FUEL GAS CODE	2018
AMENDMENTS IN MSBC: CHAPTER 1346	2020
MINNESOTA PLUMBING CODE, CHAPTER 4714	2020
MINNESOTA ELECTRICAL CODE (NEC)	2023

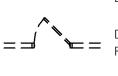
# OCCUPANCY RECHIREMENTS

CCUPANCY REQUIREMENTS									
NONSPRINKLERED									
II-B									
A-3									
0									
0									
0									
0									
0									
0									
0									
0									
N.A.									





==== DASHED LINE INDICATES EXISTING PARTITIONS, CASEWORK, EQUIPMENT AND FIXTURES TO BE REMOVED

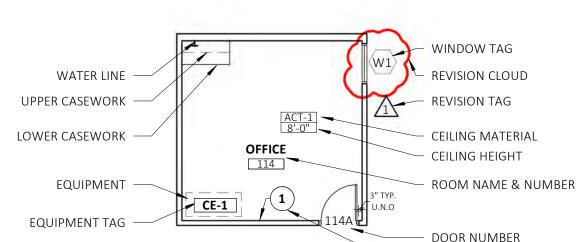


DASHED LINE INDICATES EXISTING DOOR, FRAME, & HARDWARE TO BE



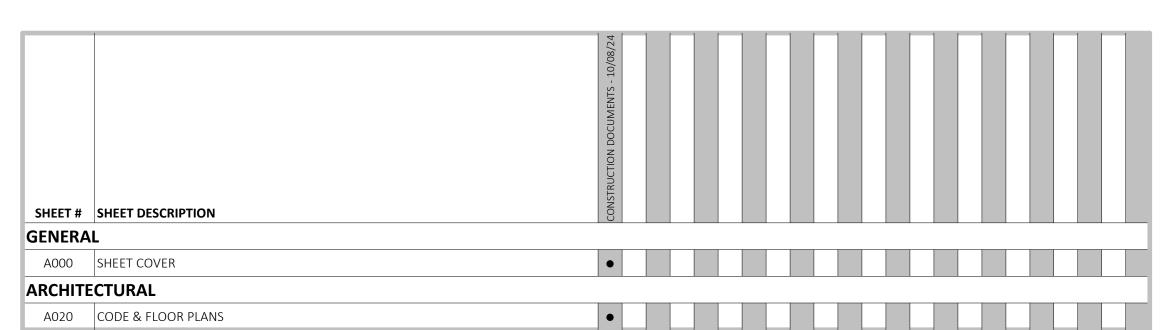


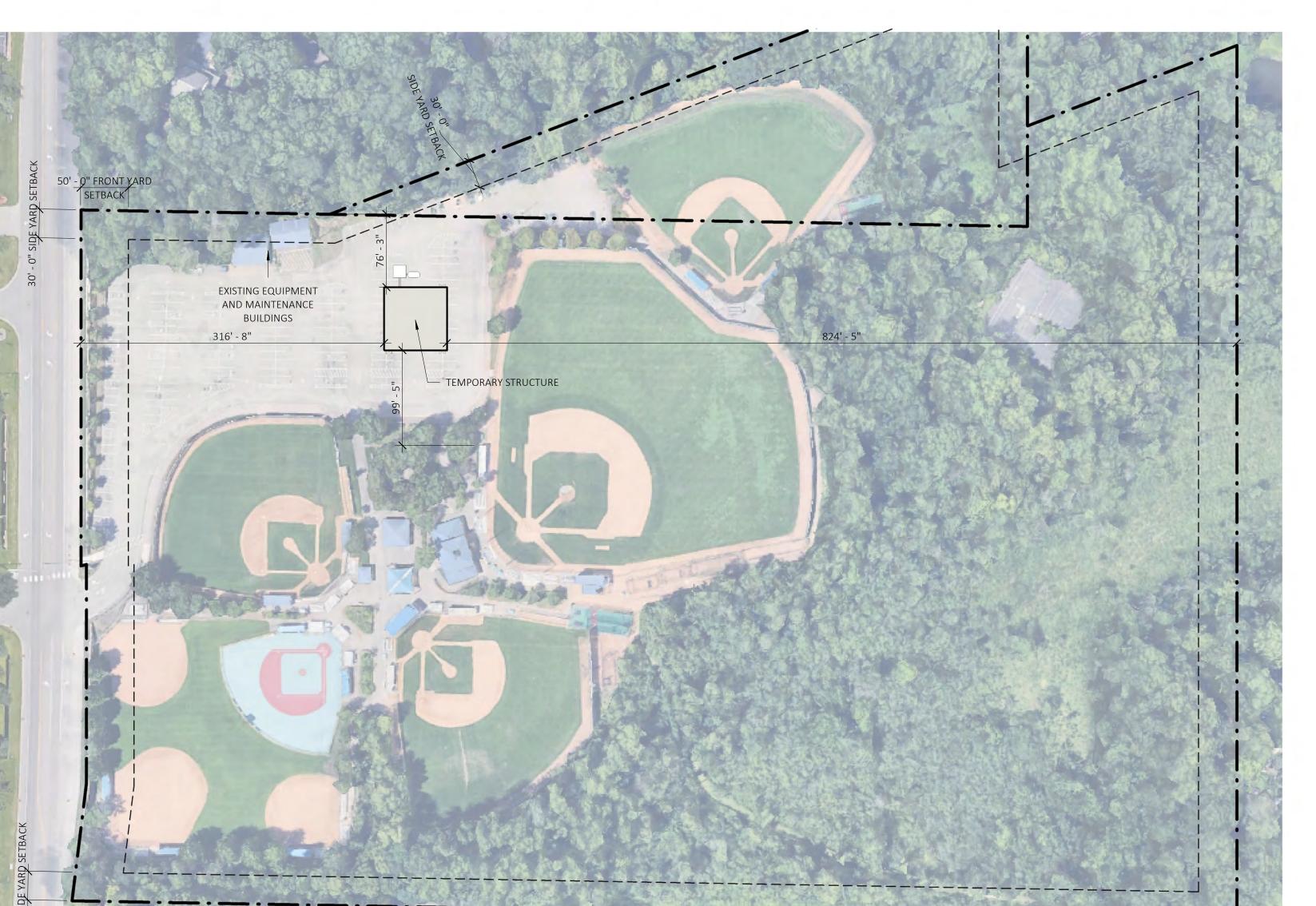
NEW DOOR/ FRAME IN NEW OR EXISTING WALL



# **AREA PLAN**







1000 Twelve Oaks Center Drive Suite 200, Wayzata, MN 55391 T: 952-426-7400 F: 952-426-7440

MohagenHansen.com

I HEREBY CERTIFY THAT THIS PLAN, **SPECIFICATION OR REPORT WAS PREPARED BY** ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

**DATE** 06-05-2024 **LIC. NO. 47242** 

THE ARCHITECT SHALL BE DEEMED THE AUTHORS AND OWNERS OF THEIR RESPECTIVE INSTRUMENTS OF SERVICE AND SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING COPYRIGHTS OF THE ATTACHED DOCUMENTS.

#### **PROJECT TEAM**

# CLIENT

DOCKZILLA 12400 WHITEWATER DR. #110 MINNETONKA, MN 55343 PHONE: 952-401-0127

GRANT LEUM

Email: gleum@dockzilla.com

### **ARCHITECT**

MOHAGEN HANSEN ARCHITECTURE | INTERIORS WAYZATA, MN 55391 PHONE: 952-426-7400

StTEVE OLIVER

Email: soliver@mohagenhansen.com

### **SIGNAGE - BUILDING COMMUNICATION**

A LIGHTED SIGN STATING 'EXIT' IN RAISED CHARACTERS AND BRAILLE SHALL BE PROVIDED ADJACENT TO EACH DOOR AT THE EXIT DISCHARGE. (MNSBC, SECTION 1013.4)

# **CODE PLAN LEGEND**

• FIRE EXTINGUISHER LOCATION

**← − − ♦** EGRESS PATH

#### **GENERAL PROJECT NOTES**

- 1. OWNER FURNISHED EQUIPMENT SUPPLIERS ARE TO COORDINATE FINAL LOCATION OF EQUIPMENT AND INSTALLATION WITH THE OWNER.
- 2. ELECTRICAL CONTRACTOR & CABLE CONTRACTOR ARE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED TO EXISTING CONDITIONS IN THE COURSE OF THEIR CONSTRUCTION. IF CONTRACTORS BEGIN WORK IN AN AREA WITH EXISTING DAMAGE THEY ARE TO IMMEDIATELY NOTIFY THE OWNER OR ASSUME RESPONSIBILITY OF SUCH DAMAGE.

#### FLOOR PLAN KEYNOTES

#### TAG KEYNOTE

- 1 HEATER.
- 2 LIQUID PROPANE TANK.
- 3 TEMPORARY POWER CONNECTION PROVIDED BY ADJACENT EXISTING SHED.
- 4 15'-0" X 55'-0" BATTING CAGE.
- 5 MODULAR FIBERGLASS FLOORING OVER EXISTING ASPHALT.
- 6 DOUBLE EGRESS DOOR ON GRADE WITH PUSH BAR ACTIVATION AND LIGHTED EXIT SIGNS

## **PLUMBING CODE REVIEW**

CLASSIFICATION	1000	OCC. LOAD/2	WATER CLOSETS				LAVATORIES					
			REQ'D		PROVIDED			REQ'D		PROVIDED		
			М	W	М	W	UNI.	М	W	М	W	UNI.
ASSEMBLY	A-3	42.5	1/40 (· .56 1/120 (	<1500) <1520) 1.06 (>1500) >1520)	<u> </u>	-	2	1/200	1/150	-	-	2
			_	-				.21	.20			
SUBTOTAL			.56	1.06	-	-	2	.21	.28	-	-	2
TOTAL			1.62		2		.49		2			

1. TWO PORTABLE TEMPORARY FACILITIES TO BE PROVIDED; ONE TO BE ADA.

### **CODE SUMMARY**

#### I. <u>CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS</u>

A. TABLES 504.3 AND 504.4: ALLOWABLE BUILDING HEIGHT AND STORIES ABOVE GRADE: 1. CONSTRUCTION TYPE: II-B A-3 (II-B) 2. OCCUPANCY:

NOT PROVIDED 3. SPRINKLER SYSTEM: 4. HEIGHT: 55' FEET ALLOWED (A-3) 28'-2" FEET PROPOSED MAX 5. STORIES: 2 STORIES ALLOWED 1 STORIES PROPOSED MAX

B. TABLE 506 ALLOWABLE BUILDING AREA

1. FLOOR AREA: 16,625 SQ FT ALLOWED 4,228 SQ FT PROPOSED

C. SECTION 508.2.3 ACCESSORY OCCUPANCIES 1. AGGREGATE ACCESSORY OCCUPANCIES SHALL NOT OCCUPY MORE THAN 10 PERCENT OF THE AREA OF THE STORY IN WHICH THEY ARE LOCATED

#### II. CHAPTER 6 - TYPES OF CONSTRUCTION

A. TABLE 602 - WALL RATING BASED ON FIRE SEPARATION DISTANCE FROM PROPERTY LINE

1. FIRE SEPARATION DISTANCE 1.1. NORTH WALL: 76'-3" 0 HOURS 1.2 WEST WALL: 316'-8" 0 HOURS 1.2. SOUTH WALL: 99"-5" 0 HOURS

#### III. CHAPTER 7 - FIRE-RESISTANCE-RATED CONSTRUCTION

1.3. EAST WALL:

A. TABLE 705.8 - MAXIMUM AREA OF EXTERIOR WALL OPENINGS 1. 20 FEET TO LESS THAN 25 FEET - UNPROTECTED, NONSPRINKLERED: 45% MAX OPENINGS

B. SECTION 705.8.5 - VERTICAL SEPARATIONS OF OPENINGS 1. EXCEPTION 1 APPLIES - NOT REQUIRED.

C. IBC 705.11 - PARAPETS SHALL BE PROVIDED ON EXTERIOR WALLS. 1. EXCEPTION 1 APPLIES - NOT REQUIRED.

IV. CHAPTER 8 - INTERIOR FINISHES

1. CLASS A FINISHES: FLAME SPREAD 0-25, SMOKE DEVELOPED 0-450 2. CLASS B FINISHES: FLAME SPREAD 26-75, SMOKE DEVELOPED 0-450 3. CLASS C FINISHES: FLAME SPREAD 76-200, SMOKE DEVELOPED 0-450

#### B. TABLE 803.13:

1. CONSTRUCTION TYPE 2. OCCUPANCY

II-B A-3 NONSPRINKLERED

824'-5"

0 HOURS

3. VERTICAL EXIT ENCLOSURES 4. CORRIDORS 5. ROOMS AND ENCLOSED SPACES

#### V. CHAPTER 9 - FIRE PROTECTION SYSTEMS

A. SECTION 906 PORTABLE FIRE EXTINGUISHERS 1. 906.1 GENERAL: PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED IN OCCUPANCIES

AND LOCATIONS AS REQUIRED BY THE MINNESOTA STATE FIRE CODE.

#### VI. CHAPTER 10 - MEANS OF EGRESS

A. SECTION 1017 EXIT ACCESS TRAVEL DISTANCE 1. TABLE 1017.2 EXIT ACCESS TRAVEL DISTANCE: MAX 200'

# VII. CHAPTER 31 - SPECIAL CONSTRUCTION

A. SECTION 3101.1 SCOPE 1. TEMORARY STRUCTURES

#### B. SECTION 3102.3 TYPE OF CONSTRUCTION

1. NON COMBUSTABLE FRAME COVERED BY AN APPROVED MEMBRANE IN ACCORDANCE WITH 3102.3.1 SHALL BE CLASSIFIED AS TYPE IIB CONSTRUCTION.

# C. SECTION 3102.4 ALLOWABLE FLOOR AREAS

1. THE AREA OF THE MEMBRANE STRUCTURE SHALL NOT EXCEED THE LIMITATION

#### SPECIFIFED IN SECITON 506.

D. SECTION 3102.5 MAXIMUM HEIGHT 1. MEMBRANE STRUCTURES SHALL NOT EXCEED ONE STORY NOR SHALL SUCH STRUCTURE

A. AVERAGE HEIGHT OF SLOPED MEMBRANE ROOF = 22'-10 1/4"

EXCEED HEIGHT LIMITATIONS IN FEET SPECIFIED IN SECTION 504.3. **HEIGHT:** 55' FEET ALLOWED (A-3)

# E. SECTION 3102.6.1.1 MEMBRANE

1. MEMBRANE MEETS FIRE PROPAGATION PERFORMATION CRITERIA OF TEST METHOD 2, OF NFPA 701.

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MOHAGEN HANSEN

Architecture | Interiors

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

STEPHEN M. OLIVER, AIA, NCARB

**DATE** 06-05-2024 **LIC. NO. 47242** THE ARCHITECT SHALL BE DEEMED THE AUTHORS AND OWNERS OF THEIR RESPECTIVE INSTRUMENTS OF SERVICE AND SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING COPYRIGHTS OF THE ATTACHED DOCUMENTS.

# **DOCKZILLA BATTING CAGE SHELTER**

# **DOCKZILLA 3717 COUNTY RD.101** MINNETONKA, MN 55345



PROJECT NUMBER:

DRAWN BY M. SILVESTRINI CHECKED BY: S. OLIVER

DATE: 10/08/2024

COMPUTER DIRECTORY:

CODE & FLOOR



**PLANS** 



