



CITY OF DE PERE  
APPLICATION FOR  
SITE PLAN REVIEW

Fee: \$ 350.00  
Receipt #: 179475  
Date: 2/16/2023

Read all instructions provided before completing. If additional space is needed, attach additional pages. Type or use black ink.

**SECTION 1: Applicant / Permittee Information**

Applicant Name (Ind., Org. or Entity) PRECISION INDUSTRIAL CONTRACTORS	Authorized Representative ERIC SIMONSEN	Title PRESIDENT	
Mailing Address 1555 DOWN RIVER DR	City WOODLAND	State WA	ZIP Code 98674
Email Address eric@picateam.com	Phone Number (incl. area code)	Fax Number (incl. area code)	

**SECTION 2: Landowner Information (complete these fields when project site owner is different than applicant)**

Name (Ind. Org. or Entity) SUSTANA FIBERS	Contact Person KEVIN RICHARDS	Title PRESIDENT	
Mailing Address 1751 W. MATHEW DR	City DE PERE	State WI	ZIP Code 54115
Email Address krichard@sustanagroup.com	Phone Number (incl. area code)	Fax Number (incl. area code)	

**SECTION 3: Project or Site Location**

Project Address/Description 1751 W MATHEW DR. De Pere, WI 54115	Parcel No. WD-364-0-526
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**SECTION 4: Project Information**

Existing Zoning: BUSINESS/ INDUSTRIAL	
Present Use of Parcel: BUSINESS/ INDUSTRIAL	
Proposed Use of Parcel: BUSINESS/ INDUSTRIAL	
Estimated Start Date: 3/1/23	Estimated Completion Date: 8/1/23

Please submit 1 hard copy 24x36, 1 hard copy 11x17 and 1 PDF copy of the submittal.

**SECTION 5: Certification and Permission**

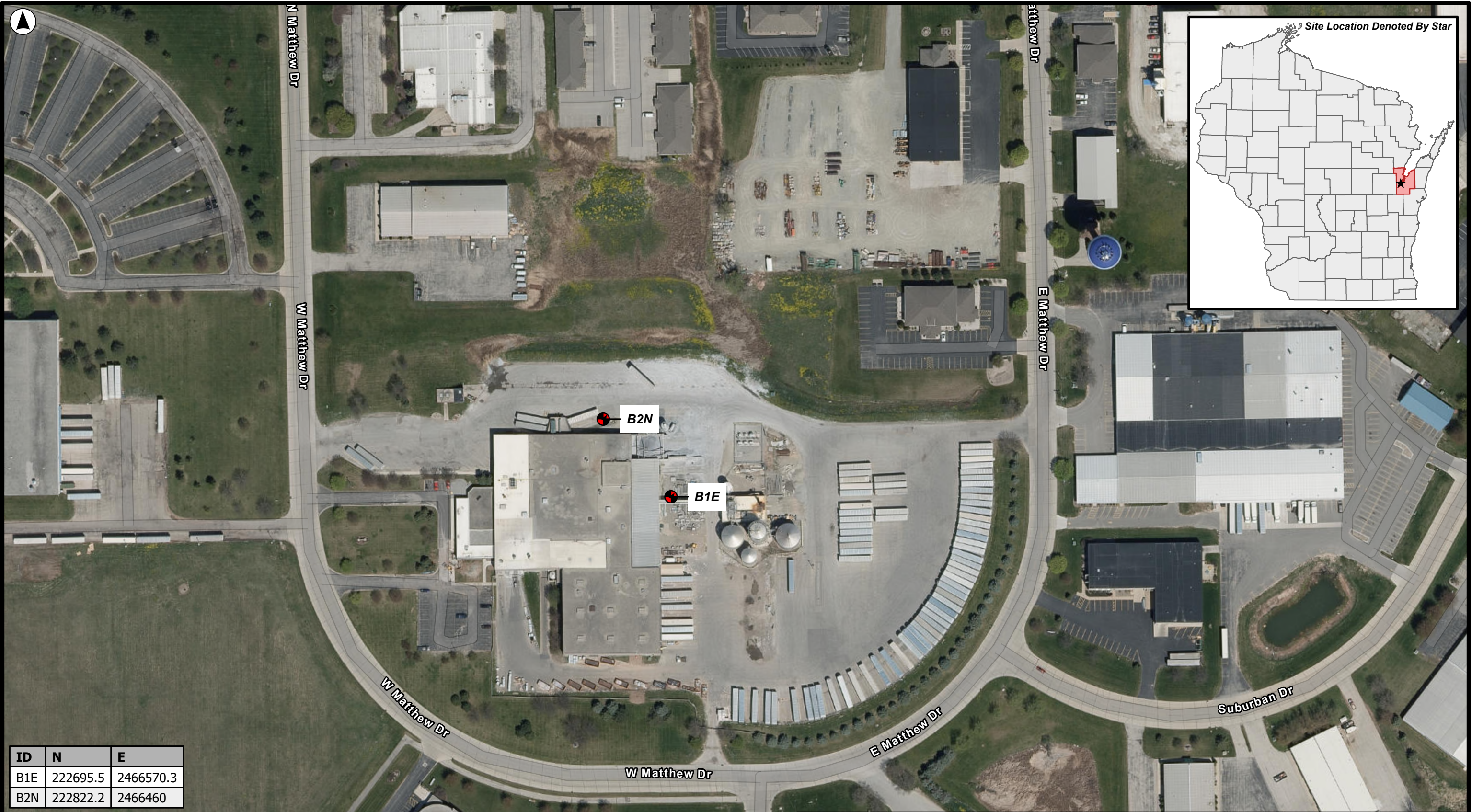
**Certification:** I hereby certify that I am the owner or authorized representative of the owner of the property which is the subject of this Permit Application. I certify that the information contained in this form and attachments is true and accurate. I certify that the project will be in compliance with all permit conditions. I understand that failure to comply with any or all of the provisions of the permit may result in permit revocation and a fine and/or forfeiture under the provisions of applicable laws.

**Permission:** I hereby give the City permission to enter and inspect the property at reasonable times, to evaluate this notice and application, and to determine compliance with any resulting permit coverage.

Name of Owner/Authorized Representative (please print) ERIC SIMONSEN	Title PRESIDENT/PIC	Phone Number 360-904-9767
Signature of Applicant 		Date Signed 2/16/23

**TO BE COMPLETED BY CITY STAFF**

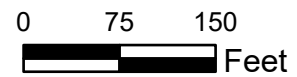
CSM Review authorized by the De Pere Municipal Code, Chapter 46.



ID	N	E
B1E	222695.5	2466570.3
B2N	222822.2	2466460

**LEGEND:**  
 Boring Locations

**NOTES:**  
 1. Aerial image obtained from WI DNR Lead Off Imagery. Image collected 5/18/2020  
 2. Map coordinate system: NAD 1983 (2011) StatePlane Wisconsin Central FIPS 4802 (US Feet)



Sustana Fibers Geotechnical  
 Precision Industrial Contractors  
 Brown County, De Pere WI

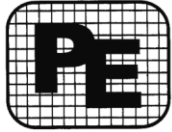


BOREHOLE LOCATION PLAN

Project 2203847

November 2022

Fig. 1



**Pearl Engineering  
Corporation**

Professional Engineering Consultants  
Project Management

**Sustana Fiber  
De Pere, WI**

## **Engineering Support Services**

### **Preliminary Structural Evaluation Calculations**

**Prepared by  
Brian R. Epley, P.E.  
Pearl Engineering Corporation**

**P.E. Project No. 240895-096**

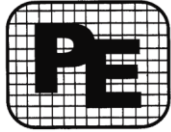
**Issued on September 12, 2024**



9-12-2024

**Brian R. Epley, P.E.**

*"Innovative Solutions to Complex Problems"*



**Pearl Engineering  
Corporation**

Professional Engineering Consultants  
Project Management

110 East Grand Avenue, Suite 210  
P.O. Box 425  
Wisconsin Rapids, WI 54495-0425  
v 715.424.4008  
f 715.424.4009  
bre@pearlengineering.com  
PearlEngineering.com

September 12, 2024

**P.E. Project No. 240895-096**

Sustana Fiber  
1751 W. Matthew Drive  
De Pere, WI 54115

Attention: Mr. Dan Bassindale <dbassindale@sustanagroup.com>  
Plant Manager

Subject: Sustana Fiber  
Engineering Support Services  
Transmittal of Preliminary Structural Evaluation

Dan,

It is our understanding that Sustana would like to add stair access to the east drying tower that was constructed last year. Additionally, they would like the tower clad with solid panel siding, and to enclose the equipment at the bottom with an equipment enclosure.

The tower was designed to contain the drying equipment and resist the wind loads on a fully enclosed tower. The tower was further designed to accommodate the drying equipment experiencing a system failure that would fill the cyclones with moist pulp material. The equipment and wind loads are by far the largest design loads on the structure.

The addition of the stair column adds relatively little volume and, therefore, little additional wind load area. The enclosed equipment space at the base of the tower does not accumulate significant wind loads due to its low height. The additional snow load on the low roof is also relatively minor compared to the high equipment loads.

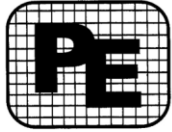
We ran a series of preliminary calculations to account for the new loads on the existing mat foundation. These calculations indicate that the additional load on the mat foundation does not exceed the design capacity. We are confident that the existing mat foundation design will be sufficient for our final design and engineering calculations.

We hope that you will find this preliminary report useful, and we thank you for this opportunity to serve Sustana Fiber in performing this structural design.

Please feel free to call me at 715 424-4008 if you wish to discuss any aspect of this report or if we can improve our services to you in any way.

Respectfully submitted,

Brian R. Epley, P.E.  
Senior Project Consultant



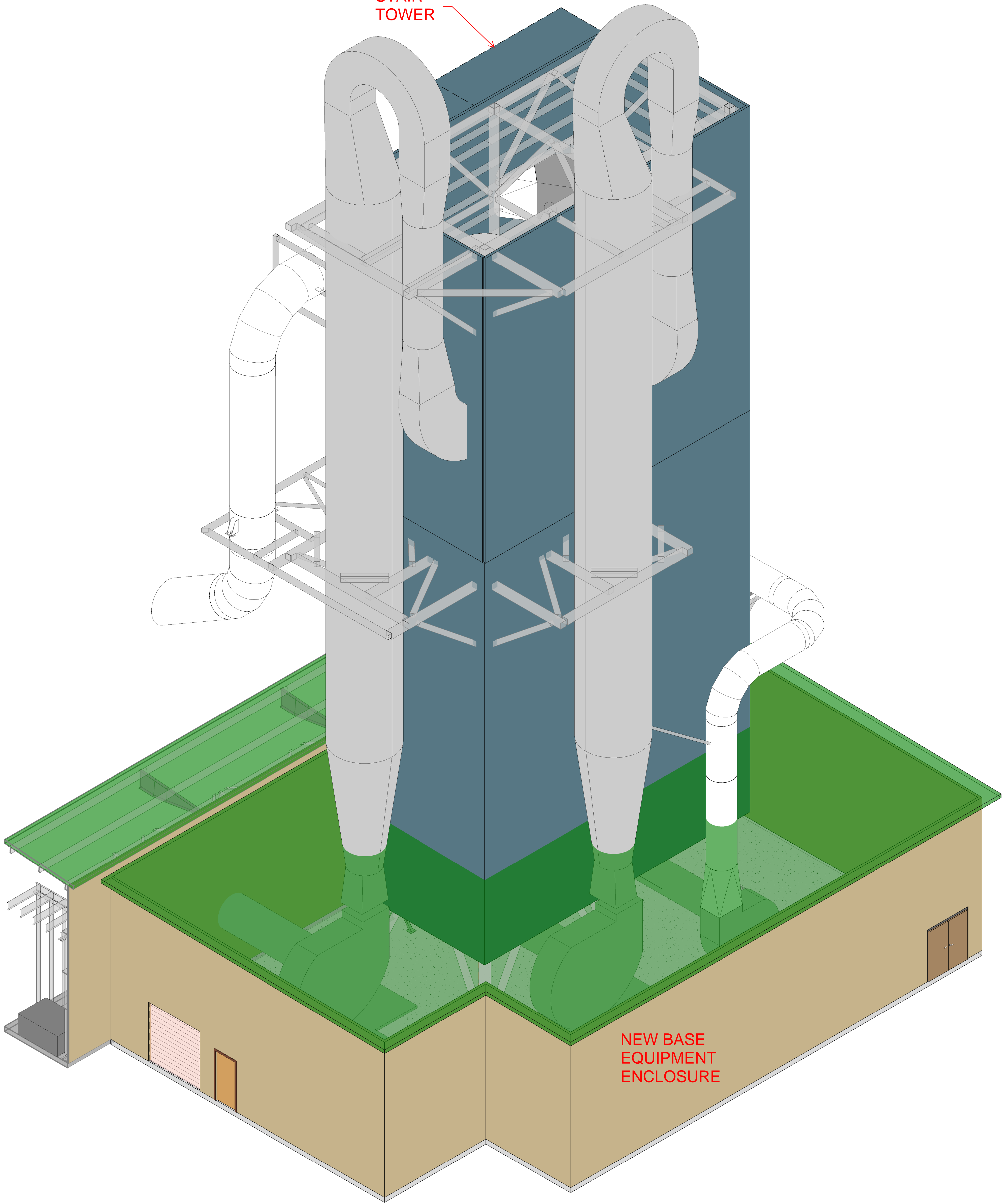
**Pearl Engineering**  
**Corporation**

**Sustana Fiber**  
De Pere, WI

**Drying Tower Preliminary Engineering**

**Appendix A – Stair Tower and Enclosure Rendering**

STAIR  
TOWER

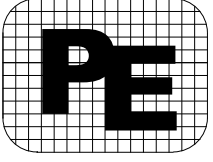


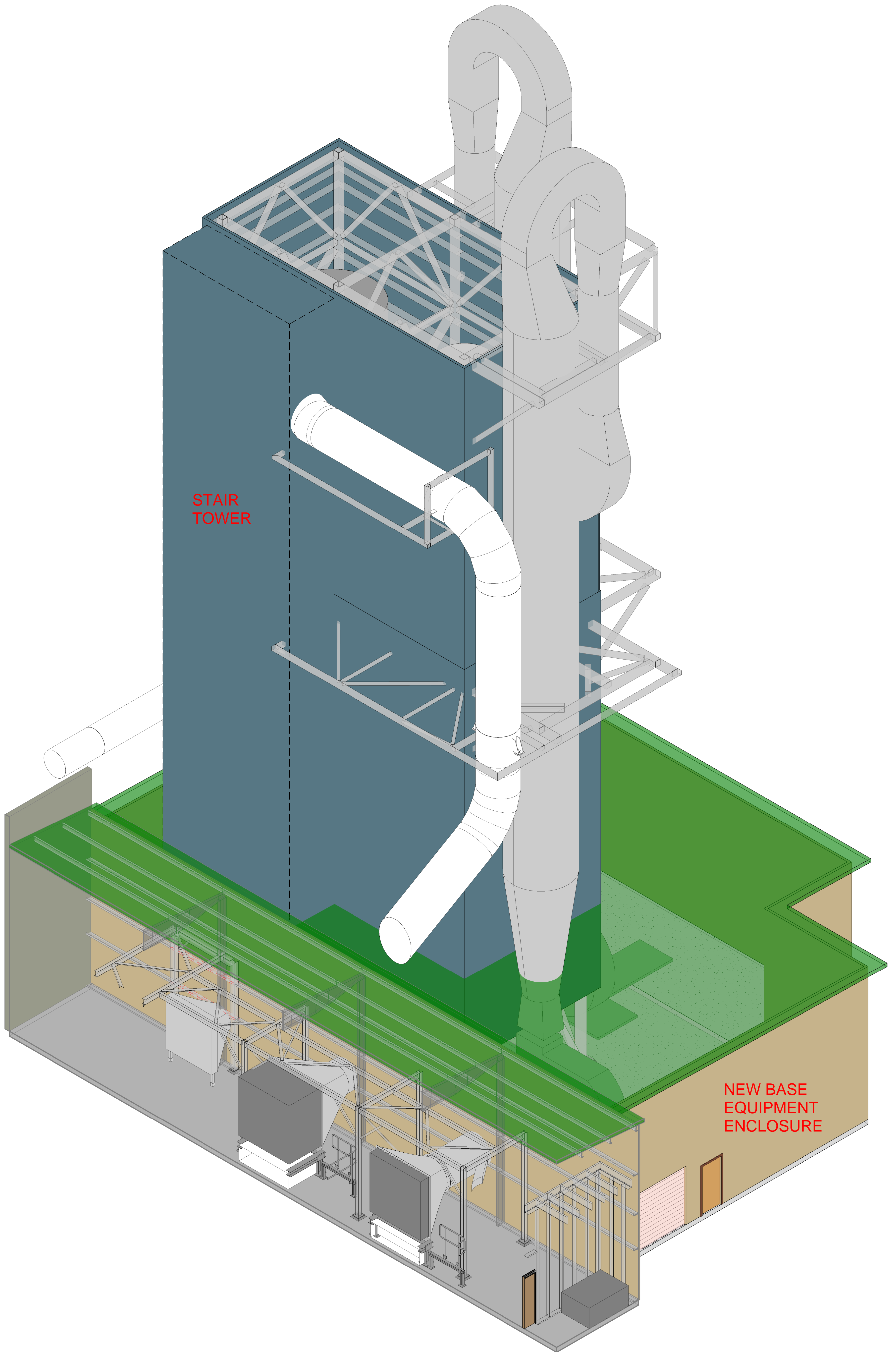
NEW BASE  
EQUIPMENT  
ENCLOSURE



SUSTANA EAST TOWER - LOOKING NORTHWEST

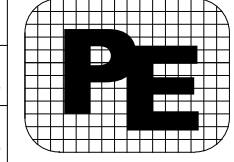
PRELIMINARY  
NOT FOR CONSTRUCTION

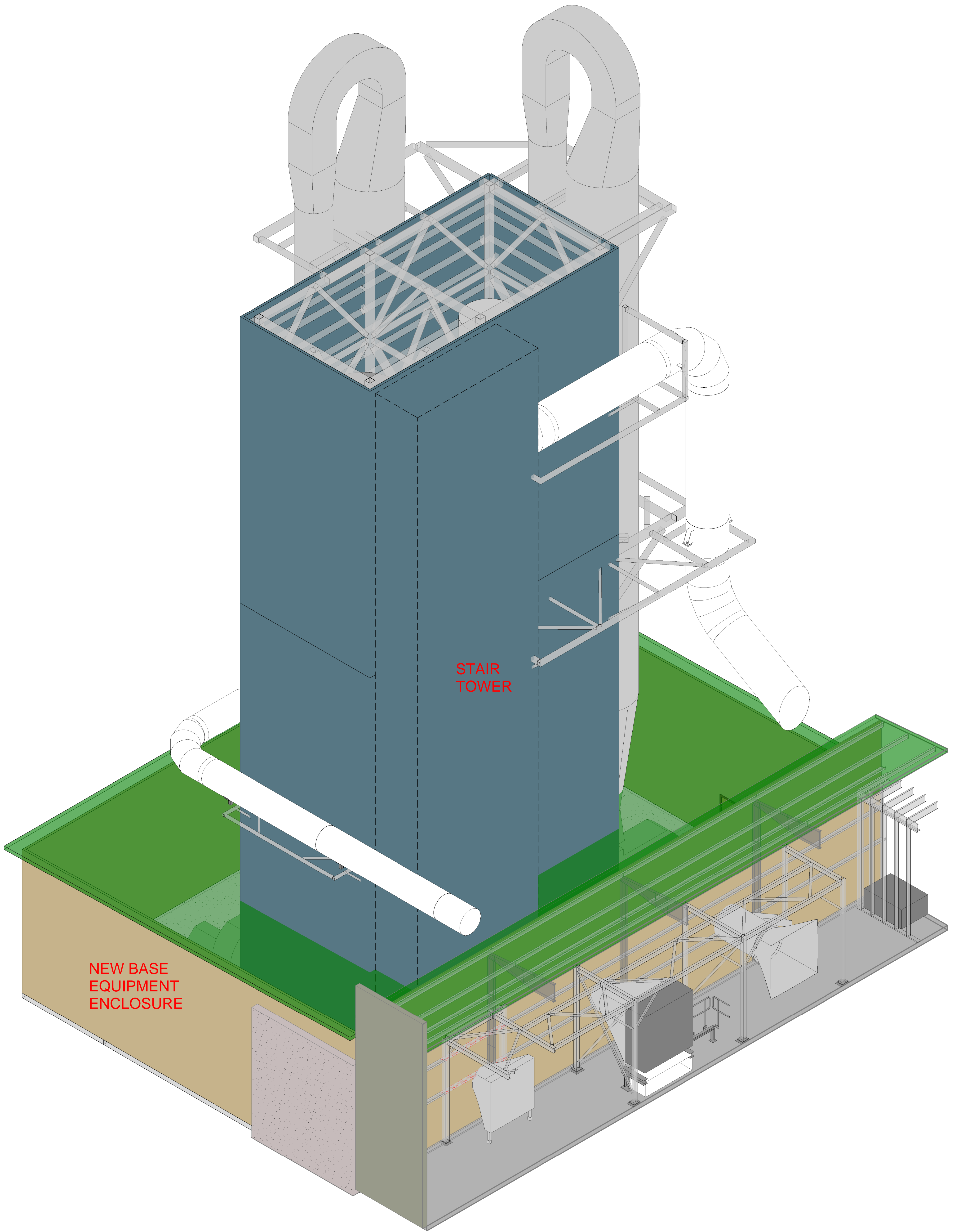
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						SCALE:							
						DRAW: CRJ		DATE: 08/22/24					
						CHECKED: BRE		DATE: 08/22/24					
						DESIGN: BRE		DATE: 08/22/24		DWG NO.		REV.	
						APPROVED: BRE		DATE: 08/22/24		<b>S901</b>		<b>A</b>	
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SUSTANA EAST TOWER - LOOKING NORTHEAST

PRELIMINARY  
NOT FOR CONSTRUCTION

								<b>SUSTANA FIBER</b> <b>1751 MATTHEW DR DE PERE, WI 54115</b> <b>RELOCATED FLASH DRYER</b> <b>SUSTANA EAST TOWER - LOOKING NORTHEAST</b>	
						SCALE:		 <b>Pearl Engineering Corporation</b> <small>P.O. BOX 425          PH 715.424.4008          FAX 715.424.4009          WISCONSIN RAPIDS, WI 54495          PROJECT NO. 230895-208</small>	
A	08/22/24	ISSUED FOR REVIEW		BRE	DRAW:	CRJ	DATE:	08/22/24	REV.
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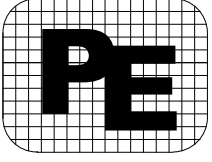
NEW BASE  
EQUIPMENT  
ENCLOSURE

STAIR  
TOWER

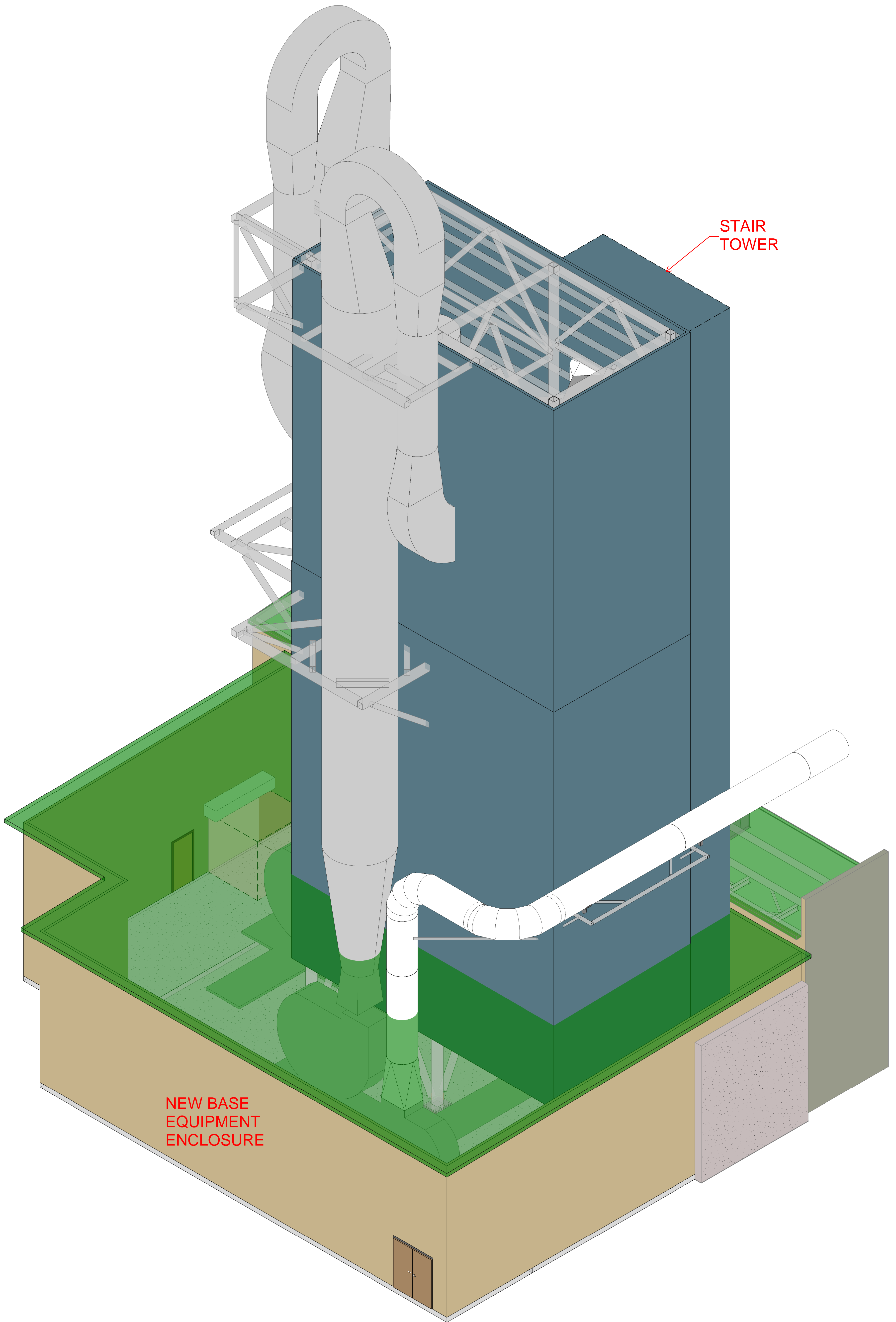


SUSTANA EAST TOWER - LOOKING SOUTHEAST

PRELIMINARY  
NOT FOR CONSTRUCTION

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								 <b>Pearl Engineering Corporation</b> <small>P.O. BOX 425          PW 715.424.4008          FAX 715.424.4009          WISCONSIN RAPIDS, WI 54495          PROJECT NO. 230895-208</small>	
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A 08/22/24 ISSUED FOR REVIEW REV. DATE DRAWING ISSUE All data furnished by Pearl Engineering Corp. is the property of Pearl Engineering Corp. and is subject to return at any time upon demand. It is furnished only in connection with specific engineering assignments and cannot be reproduced, stored in or introduced into retrieval system or transmitted in any form or by any means (electronic, mechanical, photo copying, recording or otherwise) copied, loaned or used for any purpose directly or indirectly detrimental to the interests of Pearl Engineering Corp. (Reproduction Firms will be prosecuted.)						DWG NO. <b>S903</b>		REV. <b>A</b>	






NEW BASE  
EQUIPMENT  
ENCLOSURE

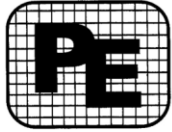
STAIR  
TOWER



SUSTANA EAST TOWER - LOOKING SOUTHWEST

PRELIMINARY  
NOT FOR CONSTRUCTION

										<b>SUSTANA FIBER</b> <b>1751 MATTHEW DR DE PERE, WI 54115</b> <b>RELOCATED FLASH DRYER</b> <b>SUSTANA EAST TOWER - LOOKING SOUTHWEST</b>		 <b>Pearl Engineering Corporation</b> <small>P.O. BOX 425          PW 715.424.4008          FAX 715.424.4009          WISCONSIN RAPIDS, WI 54495          PROJECT NO. 230895-208</small>	
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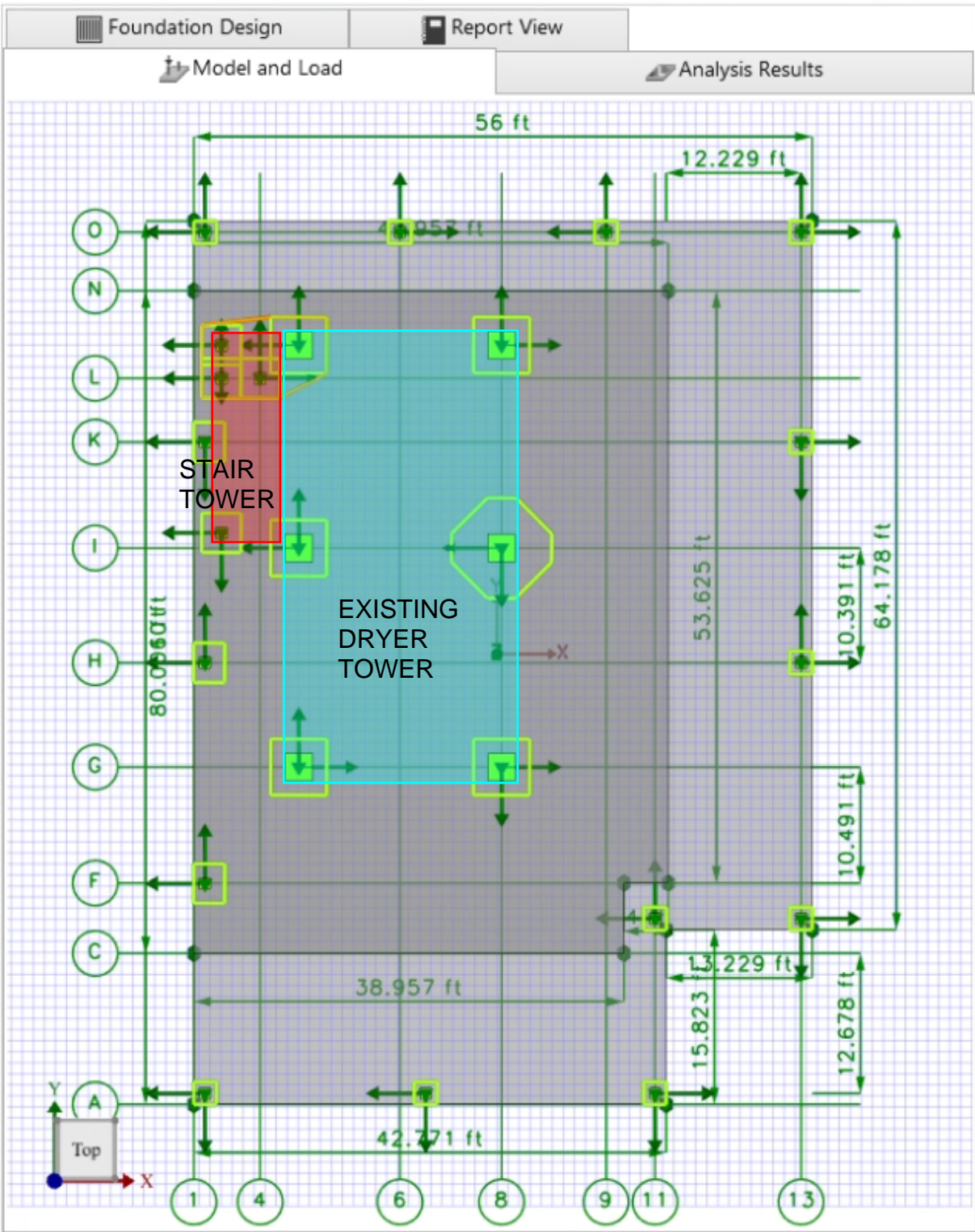
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**Corporation**

**Sustana Fiber**  
De Pere, WI

**Drying Tower Preliminary Engineering**

**Appendix B – Preliminary Structural Design Results**

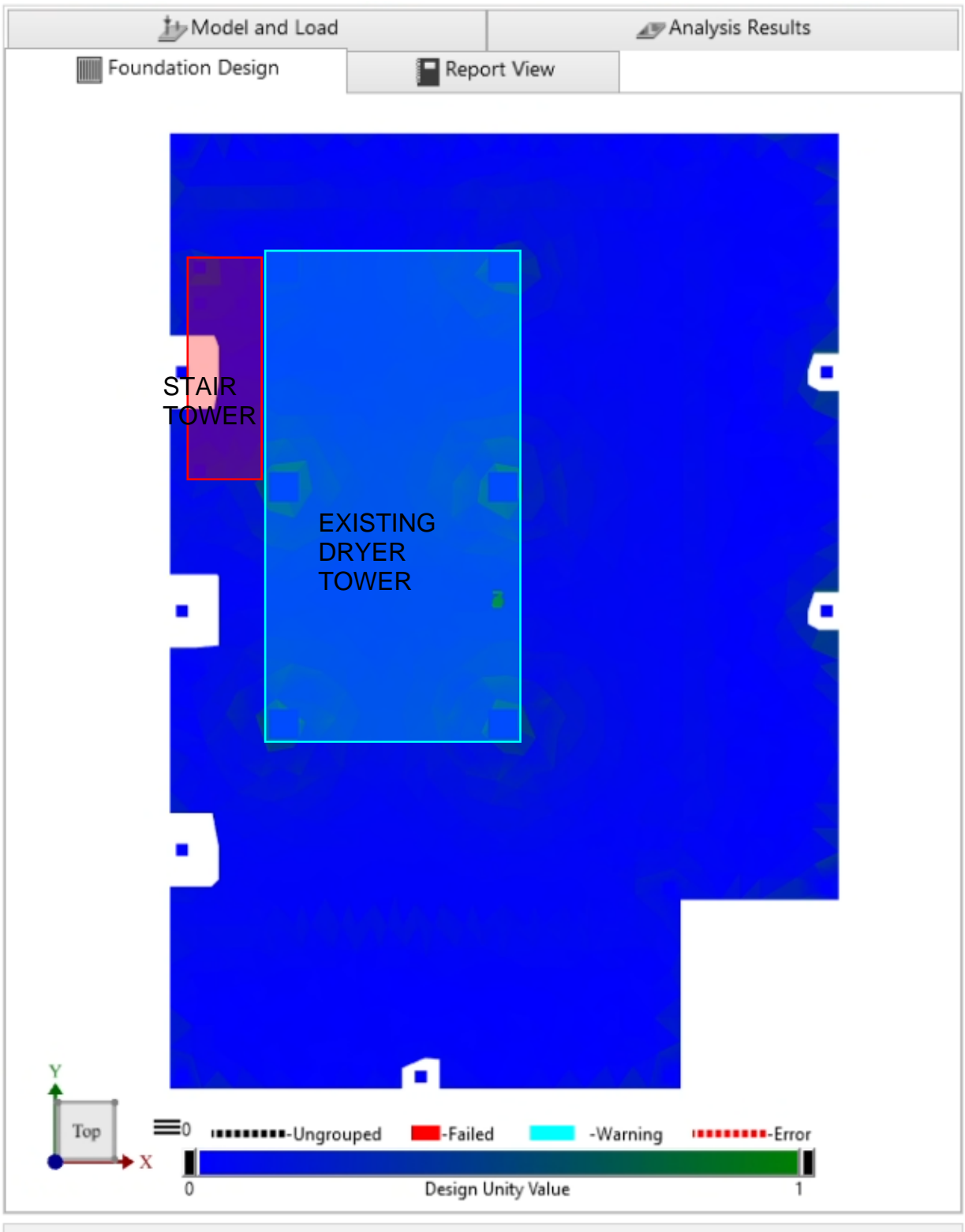
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- Project Status**
- ✓ **Model Status**
  - ✓ Meshing Done
  - ✓ Boundary Exists
  - ! **Model Warnings**
  - ✓ Load Status (9 cases)
  - ✓ Stability Unity: 0.65
  - FEA Results**
  - ✓ Analysis Done
  - ✓ Statics Check OK
  - Design**
  - ✓ Design Done
  - Plate Checks**
  - ✓ Soil Bearing (0.48)
  - ✓ Punching Shear (0.24)
  - ✓ Slab Flexural Steel (Pass)
  - ✓ Slab Shear (0.73)

PRELIMINARY FOUNDATION LAYOUT

The design above is one possible layout with columns around the perimeter for the equipment enclosure, and columns for the stair tower. This layout is a proof of concept and will likely be changed to optimize the final design.



PRELIMINARY FOUNDATION SHEAR DESIGN VALUES

Based on the column layout from the previous sheet, the above image shows the design shear values in the concrete. The areas in blue and green have a unity value of less than one, which indicates they pass the design checks.