

# AHLSTROM PB4 BOILER

## KAUKAUNA, WI

KW0423137

### PROJECT DESCRIPTION

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THIS PROJECT CONSISTS OF A NEW BOILER ENCLOSURE ADDITION TO AN EXISTING F-1 OCCUPANCY PAPER MANUFACTURING FACILITY, MODERATE HAZARD. BUILDING IS UNOCCUPIED EXCEPT FOR OCCASIONAL MAINTENANCE. BOILER IS OPERATED REMOTELY FROM AN EXISTING CONTROL ROOM. BUILDING IS NOT BEING HEATED FOR HUMAN OCCUPANCY, BUT RATHER TO MEET THE OPERATING ENVIRONMENTAL REQUIREMENTS OF THE BOILER.

#### APPLICABLE BUILDING CODES:

2015 INTERNATIONAL BUILDING CODE - WISCONSIN  
2015 INTERNATIONAL MECHANICAL CODE  
2015 INTERNATIONAL ENERGY CONSERVATION CODE  
2015 INTERNATIONAL FIRE CODE

#### APPLICABLE STANDARDS:

2015 NFPA 13  
BUILDING IS NOT REQUIRED TO BE ACCESSIBLE PER IBC SECTION 1103.2.9

#### BUILDING USE & OCCUPANCY:

OCCUPANCY CLASSIFICATION = F-1, FACTORY, MODERATE HAZARD.  
DESIGN OCCUPANT LOAD:  
F OCCUPANCY = 100 SF/PERSON  
4850 SF/100 = 49 PERSONS

#### CONSTRUCTION TYPE:

CONSTRUCTION TYPE = 2B, FULLY SPRINKLED PER NFPA 13

#### HEIGHT & AREA LIMITATIONS:

NEW CONSTRUCTION IS ADDITION TO EXISTING FACILITY THAT COMPLIES WITH REQUIREMENTS OF UNLIMITED AREA BUILDING PER IBC CHAPTER 507.

BUILDING HEIGHT = 39'-0" (PER IBC 202)

#### BUILDING SIZE:

NEW CONSTRUCTION, SINGLE STORY = 4851 SF

#### NUMBER OF EMPLOYEES:

NO ADDITIONAL EMPLOYEES ARE BEING ADDED AS THE RESULT OF THIS WORK

#### EXIT DISTANCES:

FULLY SPRINKLED, F-1 = 400 FEET PER IBC 1017.2.2  
MAXIMUM COMMON PATH OF TRAVEL = 100 FEET  
MAXIMUM DEAD END COORIDOR LENGTH = 50 FEET  
BUILDING IS 77 FEET LONG

#### ACCESSIBLE ROUTE:

BUILDING IS NOT REQUIRED TO BE ACCESSIBLE PER IBC SECTION 1103.2.9

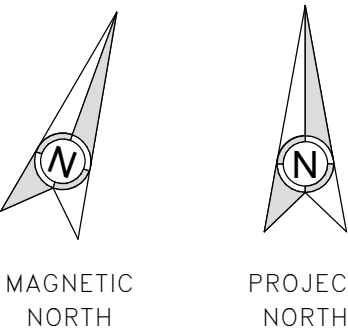
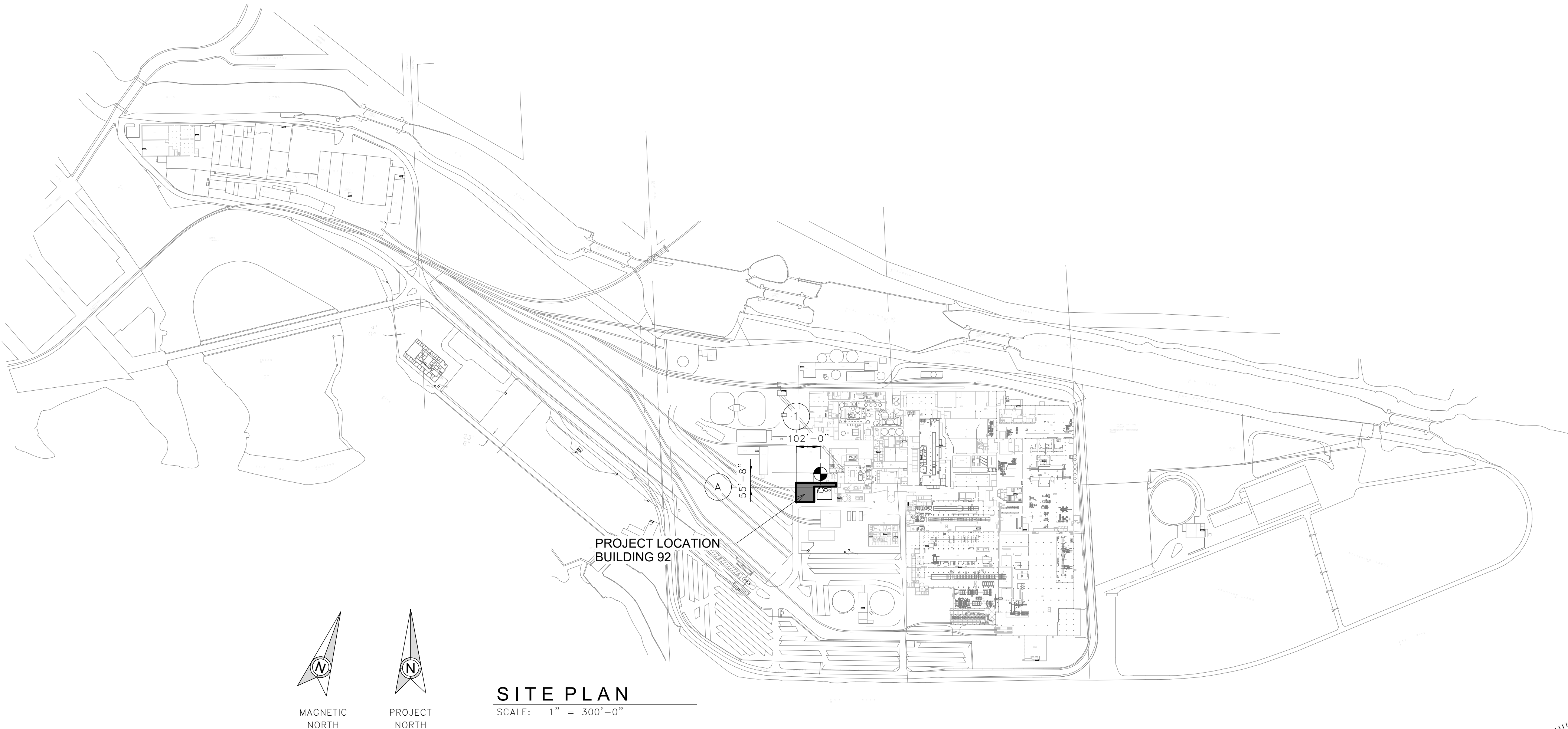
#### PLUMBING FIXTURES:

THERE ARE NO PLUMBING FIXTURES BEING ADDED AS PART OF THIS WORK.  
NO NEW PLUMBING FIXTURES INCLUDED. EXISTING FACILITIES MEET REQUIREMENTS

#### MEANS OF EGRESS:

OCCUPANCY LOAD PER TABLE 1004.1.2 (49) 9.8" REQ'D  
MEANS OF EGRESS ILLUMINATION SHALL COMPLY WITH SECTION IBC 1008

### SITE PLAN



SITE PLAN  
SCALE: 1" = 300'-0"

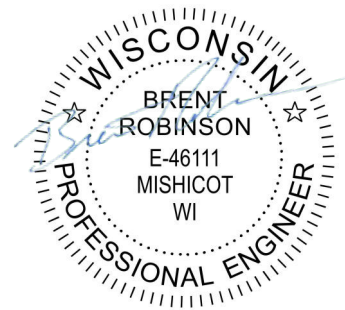
### DRAWING INDEX

| DWG # | DESCRIPTION                              |
|-------|--|
| 30470 | COVER SHEET                              |
| 30471 | DRAWING INDEX                            |
| 30472 | ROOF WIND UPLIFT DIAGRAM                 |
| 30473 | SNOW DRIFT LOADING DIAGRAM               |
| 30474 | GROUND FLOOR PLAN                        |
| 30475 | ROOF PLAN                                |
| 30476 | EXTERIOR ELEVATIONS                      |
| 30477 | EXTERIOR ELEVATIONS                      |
| 30478 | BUILDING SECTION                         |
| 30479 | DETAILS                                  |
| 30480 | DOOR SCHEDULE AND DETAILS                |
| 30483 | FOUNDATION PLAN                          |
| 30484 | GROUND FLOOR SLAB PLAN                   |
| 30485 | FOUNDATION ELEVATIONS                    |
| 30486 | EQUIPMENT ANCHORAGE LAYOUT PLAN          |
| 30487 | FOUNDATION SECTIONS                      |
| 30488 | U-DRAIN DETAILS                          |
| 30489 | CONCRETE DETAILS                         |
| 30490 | COLUMN PIER SCHEDULE AND DETAILS         |
| 30491 | ANCHOR ROD SCHEDULE                      |
| 30493 | ROOF FRAMING PLAN                        |
| 30494 | ROOF FRAMING PLAN                        |
| 30495 | FRAMING ELEVATIONS                       |
| 30496 | FRAMING ELEVATIONS                       |
| 30497 | PIPE BRIDGE PLANS                        |
| 30498 | PIPE BRIDGE SECTIONS                     |
| 30500 | STEEL SECTIONS                           |
| 30501 | STEEL DETAILS                            |
| 30502 | TYP. ROOF TRUSS/SWAY FRAME CONNX DETAILS |
| 30503 | TYP. BUILDING CONNX DETAILS              |
| 30504 | TYP. BUILDING CONNX DETAILS              |
| 30505 | PIPE BRIDGE CONNX DETAILS                |

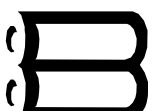

### CODE COMPLIANCE & PROJECT DATA

#### DESIGN LOADS

|   |                 |  |       |
|---|-----------------|--|-------|
| 1. ROOF SNOW LOAD                           |                 | 8. SEISMIC DESIGN DATA                             |       |
| GROUND SNOW LOAD, Pg                        | 40 PSF          | SITE CLASS   | D     |
| SNOW EXPOSURE FACTOR, Ce                    | 1.0             | RISK CATEGORY                                      | II    |
| SNOW IMPORTANCE FACTOR, Is                  | 1.0             | SEISMIC DESIGN CATEGORY, SDC                       | A     |
| SNOW THERMAL FACTOR, Ct                     | 1.0             | SEISMIC IMPORTANCE FACTOR, Ia                      | 1.0   |
| SNOW THERMAL FACTOR (SNOW SHELF), Ct        | 1.2             | SPECTRAL RESPONSE ACCELERATION                     |       |
| FLAT ROOF SNOW LOAD, Pf                     | 34 PSF          | SHORT PERIODS, Ss                                  | 0.056 |
| RAIN ON SNOW SURCHARGE, Prs                 | 0 PSF           | SPECTRAL RESPONSE ACCELERATION                     |       |
| SNOW DRIFT                                  | SEE SHEET 30473 | 1-SECOND PERIODS, S1                               | 0.035 |
|   |                 | SPECTRAL RESPONSE COEFFICIENT,                     |       |
|   |                 | SHORT PERIOD, Sds                                  | 0.059 |
| 2. GROUND FLOOR LIVE LOAD                   | 400 PSF         | SPECTRAL RESPONSE COEFFICIENT,                     |       |
|   |                 | 1-SECOND PERIOD, Sd1                               | 0.056 |
| 3. ROOF LIVE LOAD                           | 20 PSF          |  |       |
| (ROOF LIVE LOAD REDUCTIONS ARE NOT ALLOWED) |                 |  |       |
| 4. COLLATERAL LOADS                         |                 | BASIC SEISMIC FORCE RESISTING SYSTEM FOR BUILDING: |       |
| ROOF  | 15 PSF          | STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC |       |
| PIPE RACKS (PER LEVEL)                      | 30 PSF          | RESISTANCE (R=3)                                   |       |
|   |                 |  |       |
| 5. WIND DESIGN DATA                         |                 | ANALYSIS PROCEDURE                                 |       |
| BASIC WIND SPEED, ASCE 7-10 (3 SEC GUST)    | 115 MPH         | EQUIVALENT LATERAL FORCE METHOD                    |       |
| WIND IMPORTANCE FACTOR, Iw                  | 1.0             |  |       |
| WIND EXPOSURE                               | B               | 9. ALLOWABLE NET SOIL BEARING CAPACITIES           |       |
| INTERNAL PRESSURE COEFFICIENT, Gcpi         | 0.18 (+/-)      | FOUNDATION ON NEWLY PACKED STRUCTURAL FILL         | 6 KSF |
| COMPONENTS AND CLADDING DESIGN              | VARIES          | OR LIMESTONE BEDROCK                               |       |
|   |                 |  |       |
| 6. FLOOD DESIGN                             | N/A             |  |       |
|   |                 |  |       |
| 7. EQUIPMENT LOADS                          |                 |  |       |
| REFERENCE EQUIPMENT VENDOR DATA             |                 |  |       |



Digitally signed by Brent J. Robinson  
Location: Baisch Engineering Inc., Kaukauna, WI  
Reason: I attest to the accuracy and integrity of this document.  
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Date: 2023.10.20 11:59:31-0500

|   |                            |         |                   |                       |                                  |
|---|----------------------------|---------|-------------------|-----------------------|----------------------------------|
| <br>809 HYLAND AVENUE,<br>KAUKAUNA, WI 54130<br>(920)-766-3521 | REV: 0.1                   | BY: BRH | DATE: 10/20/23    | DRAWING STATUS CODES: |                                  |
|   | AUTHORIZATION NUMBER: N/A  |         |                   | A                     | Preliminary not for Construction |
|   | PROJECT NUMBER: KW0423137  |         |                   | B                     | Approval not for Construction    |
|   | DRAWING NUMBER: 30470      |         |                   | C                     | Process not for Construction     |
|   | DRAWING CODE: XX - XX - XX |         |                   | D                     | Bid not for Construction         |
|   |                            |         |                   | E                     | Reference not for Construction   |
|   |                            |         |                   | F                     | Fabrication                      |
|   |                            |         |                   | G                     | Construction                     |
|   |                            |         | H                 | Record                |                                  |
|   |                            |         |                   |                       |                                  |
|   |                            |         |                   |                       |                                  |
| REFERENCES  |                            |         |                   | DWG. NO.              |                                  |
|    |                            |         |                   |                       |                                  |
| UTILITIES   |                            |         |                   |                       |                                  |
| POWER   |                            |         |                   |                       |                                  |
| B84 BOILER AND BUILDING INSTALLATION<br>COVER SHEET   |                            |         |                   |                       |                                  |
| SCALE:  |                            |         | JOB NO. KW0423137 |                       | ISSUE NO.                        |
| DATE: 10/13/23  |                            |         | PLOT DATE:        |                       | 0.1                              |
| DWN.  | BRH                        | ENGR.   | BJR               | SERVICE LOCATION      | FILE NO. SIZE                    |
| CH.   | LJS                        | APP.    |                   | X -                   | 30470 - C                        |