APPLICATION FOR VARIANCE

State Form 44400 (R7 / 10-13)
Approved by State Board of Accounts, 2013

INDIANA DEPARTMENT OF HOMELAND SECURITY
CODE SERVICES SECTION
302 West Washington Street, Room W246
Indianapolis, IN 46204-2739
http://www.in.gov/dhs/fire/fp_bs_comm_code/

INSTRUCTIONS: ***Please refer to the attached four (4) page instructions. Attach additional pages as needed to complete this application.***

Variance number *(Assigned by department)*: 15-01-03

1. APPLICANT INFORMATION *(Person who would be in violation if variance is not granted; usually this is the owner)*

Name of applicant	Title
Sunil Maheshwari	General Manager
Name of organization	**Telephone number**
Whitewater Mills LLC	(217) 857-2238

Address *(number and street, city, state, and ZIP code)*: P.O. Box 670, Teutopolis, IL 62467

2. PERSON SUBMITTING APPLICATION ON BEHALF OF THE APPLICANT *(If not submitted by the applicant)*

Name of applicant	Title
Name of organization	**Telephone number**
	( )

Address *(number and street, city, state, and ZIP code)*:

3. DESIGN PROFESSIONAL OF RECORD *(If applicable)*

Name of design professional	License number
William H. Bokhoven	PE 60019591
Name of organization	**Telephone number**
Todd and Sargent	(515) 956-4801

Address *(number and street, city, state, and ZIP code)*: 2905, SE 5th, Ames, Iowa, 50010

4. PROJECT IDENTIFICATION

Name of project	State project number	County
Whitewater Mills LLC		Dearborn

Address of site *(number and street, city, state, and ZIP code)*: 707, Harrison-Brookville Road, West Harrison, IN 47060

Type of project

☒ New ☐ Addition ☐ Alteration ☐ Change of occupancy ☐ Existing

5. REQUIRED ADDITIONAL INFORMATION

The following required information has been included with this application *(check as applicable)*:

- ☐ A check made payable to the Indiana Department of Homeland Security for the appropriate amount. *(see instructions)*
- ☐ One (1) set of plans or drawings and supporting data that describe the area affected by the requested variance and any proposed alternatives.
- ☐ Written documentation showing that the local fire official has received a copy of the variance application.
- ☐ Written documentation showing that the local building official has received a copy of the variance application.

6. VIOLATION INFORMATION

Has the Plan Review Section of the Division of Fire and Building Safety issued a Correction Order?

☐ Yes *(If yes, attach a copy of the Correction Order.)* ☒ No

Has a violation been issued?

☐ Yes *(If yes, attach a copy of the Violation and answer the following.)* ☒ No

Violation issued by:

☐ Local Building Department ☐ State Fire and Building Code Enforcement Section ☐ Local Fire Department

7. DESCRIPTION OF REQUESTED VARIANCE

Name of code or standard and edition involved	Specific code section
2008 Indiana Building Code	903.2.4.1

Nature of non-compliance *(Include a description of spaces, equipment, etc. involved as necessary.)*

This H-3 Occupancy will not have wet sprinkler system.

8. DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE WILL BE PROTECTED

Select one of the following statements:

☐ Non-compliance with the rule will not be adverse to the public health, safety or welfare; or

☒ Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate *(be specific)*.

Facts demonstrating that the above selected statement is true:

The storage building will have monitoring system if chlorine leaks more than 10 ppm automatic shut off valves will close each tank valve.

Each Chlorine tank is equipped with automatic shut off valves connected to monitoring unit.

9. DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE

Select at least one of the following statements:

☐ Imposition of the rule would result in an undue hardship *(unusual difficulty)* because of physical limitations of the construction site or its utility services.

☒ Imposition of the rule would result in an undue hardship *(unusual difficulty)* because of major operational problems in the use of the building or structure.

☐ Imposition of the rule would result in an undue hardship *(unusual difficulty)* because of excessive costs of additional or altered construction elements.

☐ Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure.

Facts demonstrating that the above selected statement is true:

This will be used to store chlorine gas tanks.Water should not be used directly on chlorine leak, chlorine and water react forming acid and leak quickly will get worse.

10. STATEMENT OF ACCURACY

I hereby certify under penalty of perjury that the information contained in this application is accurate.

Signature of applicant or person submitting application	Please print name	Date of signature *(month, day, year)*
Sunil Maheshwari	Sunil Maheshwari	11/19/2014
Signature of design professional *(if app* Wm. H. Bokhoven	Please print name Wm. H. Bokhoven	Date of signature *(month, day, year)* 11/19/2014

11. STATEMENT OF AWARENESS *(If the application is submitted on the applicant's behalf, the applicant must sign the following statement.)*

I hereby certify under penalty of perjury that I am aware of this request for variance and that this application is being submitted on my behalf.

Signature of applicant	Please print name	Date of signature *(month, day, year)*

K:_PROJECTS\11750-11799\11779_Whitewater_W Harrison IN_STR\STR700 CHLORINE BUILDING\STR701-0-Chlorine Building Notes.dwg, STR701_0, 11/6/2014 11:24:53 AM

1. General Notes

A. Governing Codes:
2008 Indiana State Building Code
2006 International Building Code
Occupational Safety and Health Standards for General Industry (29 CFR Part 1910)

B. Live Loads Used in Design
Basic Wind Speed ----------90 mph
Exposure ----------C
Concrete Floors on Grade----------250 psf
Roofs ----------20 psf
Snow and Drifting Loads in accordance with ASCE 7-05

C. Seismic Loads Used in Design
Seismic Design Category B
Seismic Use Group II
Spectral Response Acceleration Ss=0.186g S1=0.123g
Site Classification: D
Equivalent Lateral Force Design
Seismic Resisting System
R=5 Ordinary reinforced concrete shear walls

2. Concrete - Cast in Place

A. Minimum 28 day compressive strength of 4000 psi when tested by 6" x 12" cylinders.

Testing shall conform to the provisions of ACI 318, Section 5.6. Each set of cylinders shall be taken not less than once each day of concrete placement and for each 100 cubic yards of concrete placed
A test shall consist of 3 cylinders, one to be broken at 7 days, one to be broken at 28 days, and one to be saved in the event of a low strength test.

B. Materials:
Cement ----------ASTM C150
Aggregates ----------ASTM C33
Reinforcement:
Non-Welded ----------ASTM A615 Grade 60
Welded ----------ASTM A706

C. Lap splices: per individual drawings.

D. Concrete construction and details reference the latest edition of ACI 318.

E. Support reinforcement with chairs, bolsters or other approved devices to ensure position as shown on drawings.

F. Place reinforcement as noted on the drawings and detailed in accordance with the latest edition of ACI 315.

G. Curing:
1. Membrane curing compound material conforming to ASTM C309.
2. Curing procedure shall not strain the concrete.

H. Cold weather concrete shall conform to the latest edition of ACI 306R.

I. Round or chamfer all exposed concrete edges.

J. Provide 1/2" asphalt expansion material between slabs at grade and foundations where shown on drawings.

K. Minimum concrete protection for reinforcement
Concrete cast against and permanently exposed to earth ----- 3"
Concrete exposed to earth or weather
#6 through #18 ---------- 2"
#5, W31 or D31 wire, and smaller ---------- 1 1/2"
Concrete not exposed to weather or in contact with ground
Slab, walls, joists:
#14 and #18 bars ---------- 1 1/2"
#11 and smaller ---------- 3/4"
Beams and columns:
primary reinforcement, ties, stirrups, spirals ------- 1 1/2"

3. Steel

A. Materials:
Miscellaneous Steel ---------- ASTM A36

Structural Pipes ----------ASTM A500 GRADE B

Grout ----------Nonmetallic, non-shrink
Min. compressive strength= 2000 psi

B. Paint:

Paint for steel shall be:
Preparation: ---------- SSPC-SP2 hand tool cleaning
Manufacturer: ---------- Sherwin Williams

Primer ---------- Steel Spec Universal Primer (B50 series)
Thickness ---------- 2.0 mils (DFT)
Coats ---------- One
Color ---------- White B50WV8430

4. Welding

A. General
Welding shall be performed wherever specifically called for on the Drawings. Welding symbols used on the Drawings will be those shown in ANSI/AWS A2.4.

All fusion welding shall be done by either the Shielded Metal Arc (SMAW) Gas Metal Arc (GMAW) or Flux Cored Arc (FCAW) process. Welding processes shall be done in accordance with the specifications of ANSI/AWS D1.1-04. Only pre-qualified welding procedures shall be permitted. Electrodes shall be E60xx (field) or E70xx (shop) unless noted otherwise.

B. Operators
Operators shall be qualified in the position in which they are to weld and shall be permitted to make only those types of weldments for which each is specifically qualified.

C. Workmanship and Technique
Parts to be joined by fillet welds shall be brought into as close contact as possible and in no event shall be separated by more than 1/8 inch. If the separation is 1/16 inch or greater, the size of the fillet weld shall be increased by the amount of the separation.

Abutting parts of butt joints shall be carefully aligned. Hold members to be welded in correct position by clamps, wedges, struts or other suitable devices or by tack welds until welding has been completed. Tack welds shall be of the same quality as final welds.

The progression for all passes in vertical position welding shall be upwards. All groove and butt welds shall be complete penetration and continuous.

Welding shall not be permitted when the ambient temperature is below 0° F. When the base metal temperature is below 32° F, the base metal shall be preheated to at least 70° F and shall be maintained during welding.

Surfaces to be welded and surfaces adjacent to a weld shall be free from loose or thick scale, slag, rust, water, ice, paint, grease and other foreign material that would prevent proper welding. Remove slag adhering to oxygen cut edges prior to welding.

Weld profiles, repairs, cleaning, and termination shall be in accordance with Sections 3.6, 3.7, 3.11, and 3.12 of ANSI/AWS D1.1-04.

5. PRECAST CONCRETE HOLLOW CORE PLANKS

A. The precast concrete manufacturing plant shall be certified by the Precast / Prestressed Concrete Institute, plant certification program, prior to the start of the project.

B. Manufacturing, tolerances, and testing shall be in compliance with applicable provisions of Precast / Prestressed Concrete Institute MNL-116, manual for quality control for plants and production of precast prestressed concrete products.

C. Submit erection shop drawings indicating plans locating and defining all hollow core slab units furnished by the manufacturer, with all major openings shown and located; sections and details showing connections, edge conditions, and support conditions of the hollow core slab units; all dead, live, and other applicable loads used in the design; and short and long term deflections.

D. Submit production drawings indicating plan view of each hollow core slab unit type; sections and details to indicate quantities, location, and type of reinforcing steel and prestressing strands; lifting and erection inserts; dimensions and finishes; prestress for strand and concrete strength; and estimated cambers.

E. Submit product design criteria indicating loadings for design, initial handling and erection stresses, all dead and live loads as specified, and other loads specified for hollow core slab units where applicable.

F. Design calculations shall be performed by a professional engineer who is registered in the State of Indiana, and who is experienced in precast prestressed concrete design. The designers sealed calculations shall be submitted for approval upon request.

G. Design deviations will be permitted only after engineer's written approval of the manufacturer's proposed design supported by complete design calculations and drawings.

H. Submit test reports of concrete and other materials upon request.

I. Cement grout shall be Nonmetallic, non-shrink Min. compressive strength= 2000 psi

J. Manufacturer shall provide 1/8" thick tempered hardboard or plastic mitti-monomer bearing strips at all concrete bearing locations. Bearing strips shall have a bearing stress design Factor of Safety of 2.

K. All openings shall be located and field drilled or cut by the trade requiring them after the hollow core slab units have been erected. Opening locations shall be approved by Todd and Sargent's engineer and manufacturer before cutting. Avoid cutting prestressing strands.

L. At slab ends provide suitable end cap or dam in voids as required.

M. Grout keys shall be filled with Grout.

6. SPECIAL INSPECTIONS

Special Inspections shall be performed according to Chapter 17 of the International Building Code for the following structural components:

COMPONENT	INSPECTOR
Soil Inspection -per IBC Table 1703.7	Alt & Witzig Engineering, Inc.
Piling- per IBC Table 1703.9	Alt & Witzig Engineering, Inc.
Slipform Concrete	Alt & Witzig Engineering, Inc. And Todd and Sargent *
Structural Concrete- per IBC Table 1703.4	Alt & Witzig Engineering, Inc.
Concrete Tests	
Precast Concrete	Precast Manufacturer
Masonry- per IBC Table 1703.5.1	Alt & Witzig Engineering, Inc.
Structural Steel - per IBC Table 1703.3	Alt & Witzig Engineering, Inc.
Material Verification of High Strength Bolts	
Inspection of High Strength Bolting	
Material Verification of Structural Steel	
Material Verification of Weld Filler Metal	
Welding Inspection - per IBC Table 1703.3	Alt & Witzig Engineering, Inc.

Note:

Fabricators of Structural Steel shall have an in-house certified welding inspection and process or shall have welds inspected by an independent testing agency prior to shipment.

Engineer-of-Record will be Wm. H. Bokhoven, P.E.

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Indiana.
Wm. H. Bokhoven 11-6-14
WM. H. BOKHOVEN, P.E. DATE
My license renewal date is July 31, 2016
This sheet is issued in this seal.

No.	Revisions	Date	By
0	ORIGINAL ISSUE	11/5/14	KJG

Designed By: WHB
Drawn By: KJG
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TODD & SARGENT
2905 SE 6TH STREET, AMES, IOWA 50010 (515.232.0442)
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NEW 10,000 CWT FLOUR MILL
FOR
WHITEWATER MILL LLC
WEST HARRISON, INDIANA

Drawing Title: STRUCTURAL NOTES
Project No.: 11779
Drawing No.: STR701
Rev. No.: 0

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TABLE 1703.4
REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

Verification and Inspection	Continuous	Periodic	Referenced Standard	IBC Reference	Responsibility
1) Inspection of reinforcing steel, including prestressing tendons, and placement.	———	X	ACI 318: 3.5, 7.1-7.7	1913.4	
2) Inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5b.	———	———	AWS D1.4 ACI 318: 3.5, 2	———	
3) Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased.	X	———	———	1911.5	
4) Verifying use of required design mix.	———	X	ACI 318: Ch 4, 5.2-5.4	1904.2.2, 1913.2, 1913.3	
5) At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X	———	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	1913.10	
6) Inspection of concrete and shotcrete placement for proper application techniques.	X	———	ACI 318: 5.9, 5.10	1913.6, 1913.7, 1913.8	
7) Inspection for maintenance of specified curing temperature and techniques.	———	X	ACI 318: 5.11-5.13	1913.9	
8) Inspection of prestressed concrete: a) Application of prestressing forces. b) Grouting of bonded prestressing tendons in the seismic-force-resisting system.	 X X	———	ACI 318: 18.20 ACI 318: 18.18.4	———	
9) Erection of precast concrete members.	———	X	ACI 318: Ch 16	———	
10) Verification of in-situ concrete strength, prior to stressing of tendons in posttensioned concrete and prior to removal of shores and forms from beams and structural slabs.	———	X	ACI 318: 6.2	———	
11) Inspect formwork for shape, location and dimensions of the concrete member being formed.	———	X	ACI 318: 6.1.1	———	

TABLE 1703.3
REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION

Verification and Inspection	Continuous	Periodic	Referenced Standard	IBC Reference	Responsibility
1) Material verification of high strength bolts, nuts and washers:					
a. Identification markings to conform to ASTM Standards specified in the approved construction documents.	———	X	Applicable ASTM material specifications; AISC 360, Section A3.3	———	
b. Manufacturer's certificate of compliance required.	———	X	———	———	
2) Inspection of high-strength bolting:					
a. Bearing-type connections.	———	X	AISC 360, Section M2.5	1704.3.3	
b. Slip-critical connections.	X	X			
3) Material verification of structural steel:					
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	———	———	ASTM A 6 or ASTM A 568	1708.4	
b. Manufacturers' certified mill test reports.	———	———	ASTM A 6 or ASTM A 568		
4) Material verification of weld filler materials:					
a. Identification markings to conform to AWS specification in the approved construction documents.	———	———	AISC 360, Section A3.5	———	
b. Manufacturer's certificate of compliance required.	———	———	———	———	
5) Inspection of welding:	———	———			
a. Structural Steel:					
1) Complete and partial penetration groove welds.	X	———	AWS D1.1	1704.3.1	
2) Multipass fillet welds.	X	———			
3) Single-pass fillet welds > 5/16"	X	———			
4) Single-pass fillet welds ≤ 5/16"	———	X			
5) Floor and roof deck welds.	———	X	AWS D1.3	———	
b. Reinforcing steel:	———	———			
1) Verification of weldability of reinforcing steel other than ASTM A 706.	———	X	AWS D1.4 ACI 318: 3.5.2	———	
2) Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls and shear reinforcement.	X	———			
3) Shear reinforcement.	X	———			
4) Other reinforcing steel.	———	X			
6) Inspection of steel frame joint details for compliance with approved construction documents: a. Details such as bracing and stiffening. b. Member locations. c. Application of joint details at each connection.	 ——— ——— ———	X ——— ——— ———	———	1704.3.2	

TABLE 1703.7
REQUIRED VERIFICATION AND INSPECTION OF SOILS

Verification and Inspection Task	Continuous During Task Listed	Periodically During Task Listed	Responsibility
1) Verify materials below footings are adequate to achieve the design bearing capacity.	———	X	
2) Verify excavations are extended to proper depth and have reached proper material.	———	X	
3) Perform classification and testing of compacted fill materials.	———	X	
4) Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	———	
5) Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.	———	X	

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Indiana.

Wm. H. Rodkin 11-6-14

Wm. H. RODKIN, P.E. DATE

My license renewal date is July 31, 2016

Pages or sheets covered by this seal: This sheet is covered by this seal.

No.	Revisions	Date	By
0	ORIGINAL ISSUE	11/5/14	KJG

Designed By: KJG | Date Printed:
Drawn By: KJG | Date Drawn: 10/29/14
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NEW 10,000 CWT FLOUR MILL
FOR
WHITEWATER MILL LLC
WEST HARRISON, INDIANA

Drawing Title: SPECIAL INSPECTION REQUIREMENTS

Project No	Drawing No.	Rev. No
11779	STR702	0

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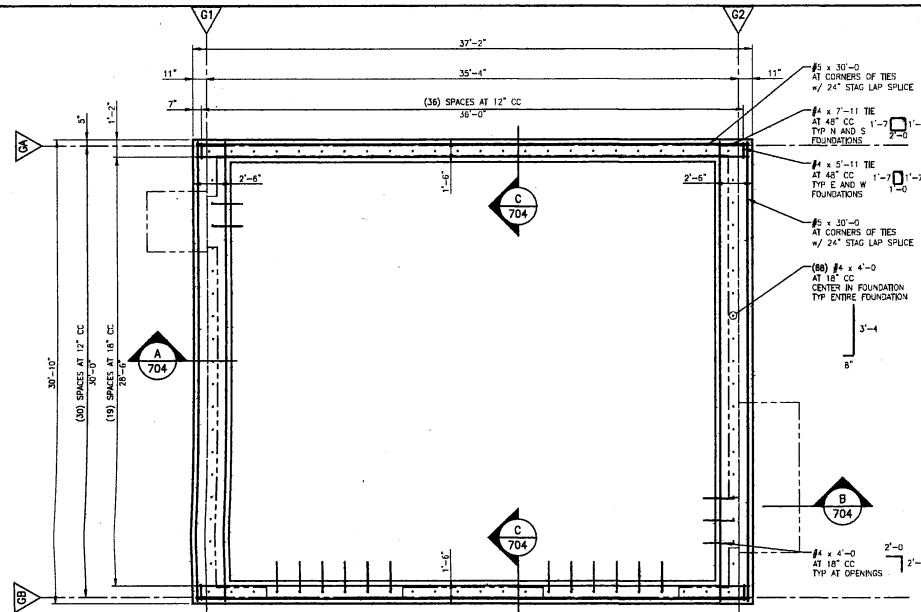
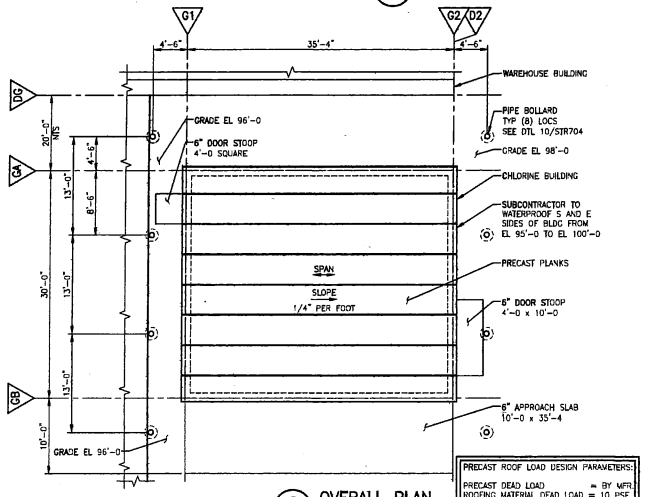
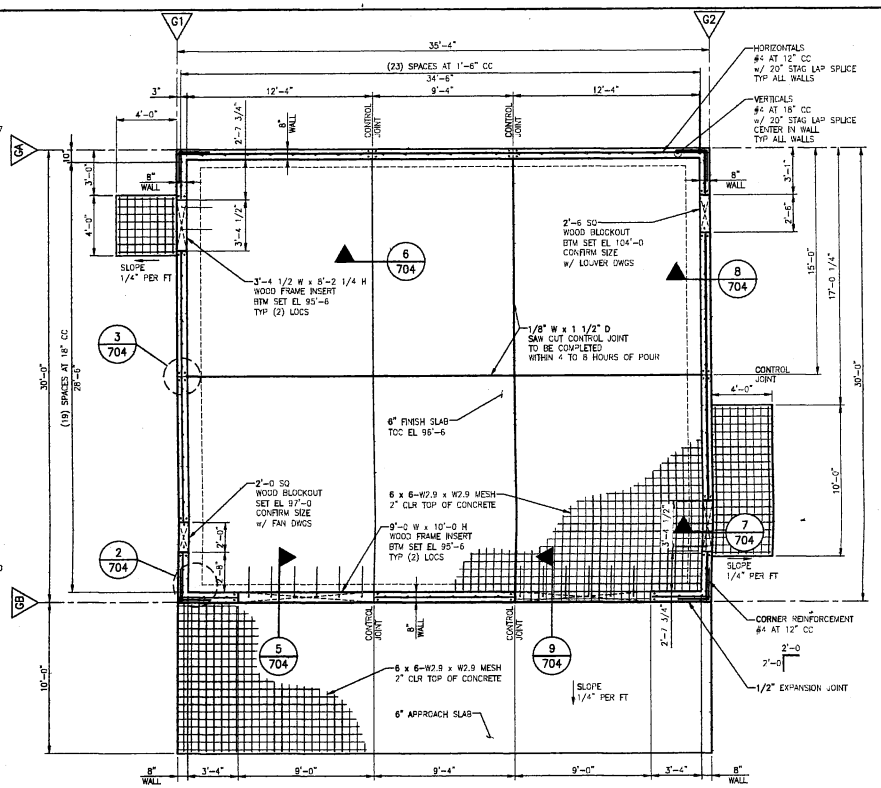


1 703 FOUNDATION PLAN
SCALE: 1/4" = 1'-0" TOC EL 95'-6



3 703 OVERALL PLAN
SCALE: 1/8" = 1'-0"

PRECAST ROOF LOAD DESIGN PARAMETERS:	
PRECAST DEAD LOAD	= BY MFR.
ROOFING MATERIAL DEAD LOAD	= 10 PSF
COLLATERAL LOAD	= 3 PSF
LIVE LOAD	= 20 PSF



2 703 SLAB AND WALL PLAN
SCALE: 1/4" = 1'-0" SLAB TOC EL 96'-6

NOTE:
1.) FOR PIPE BOLLARDS SEE 3/STR703
2.) CHAMFER ALL EXPOSED EDGES OF OPENINGS WITH 3/4" CHAMFER

FIELD NOTE:
1.) BACKFILL TO BE COMPACTED TO 98% MAXIMUM DRY DENSITY (ASTM D 698) PER SOILS REPORT BY: ALT & WITZIG ENGINEERING, INC. DATED MAY 13, 2013 PROJECT NO. 13CN0068

FIELD NOTE:
1.) ALL VERTICAL REBAR ARE TO BE CAPPED WITH IMPALEMENT PROTECTION CAPS.

SPECIAL INSPECTION REQUIRED
STEEL – TABLE 1703.1 ON STR002
CONCRETE – TABLE 1703.4 ON STR002

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Indiana.
William H. Rothen 11-6-14
WM. H. ROTHEN, P.E. DATE
My license renewal date is July 31, 2015
Pages or sheets covered by this seal:

No.	Revisions	Date	By
0	ORIGINAL ISSUE	11/5/14	KJG

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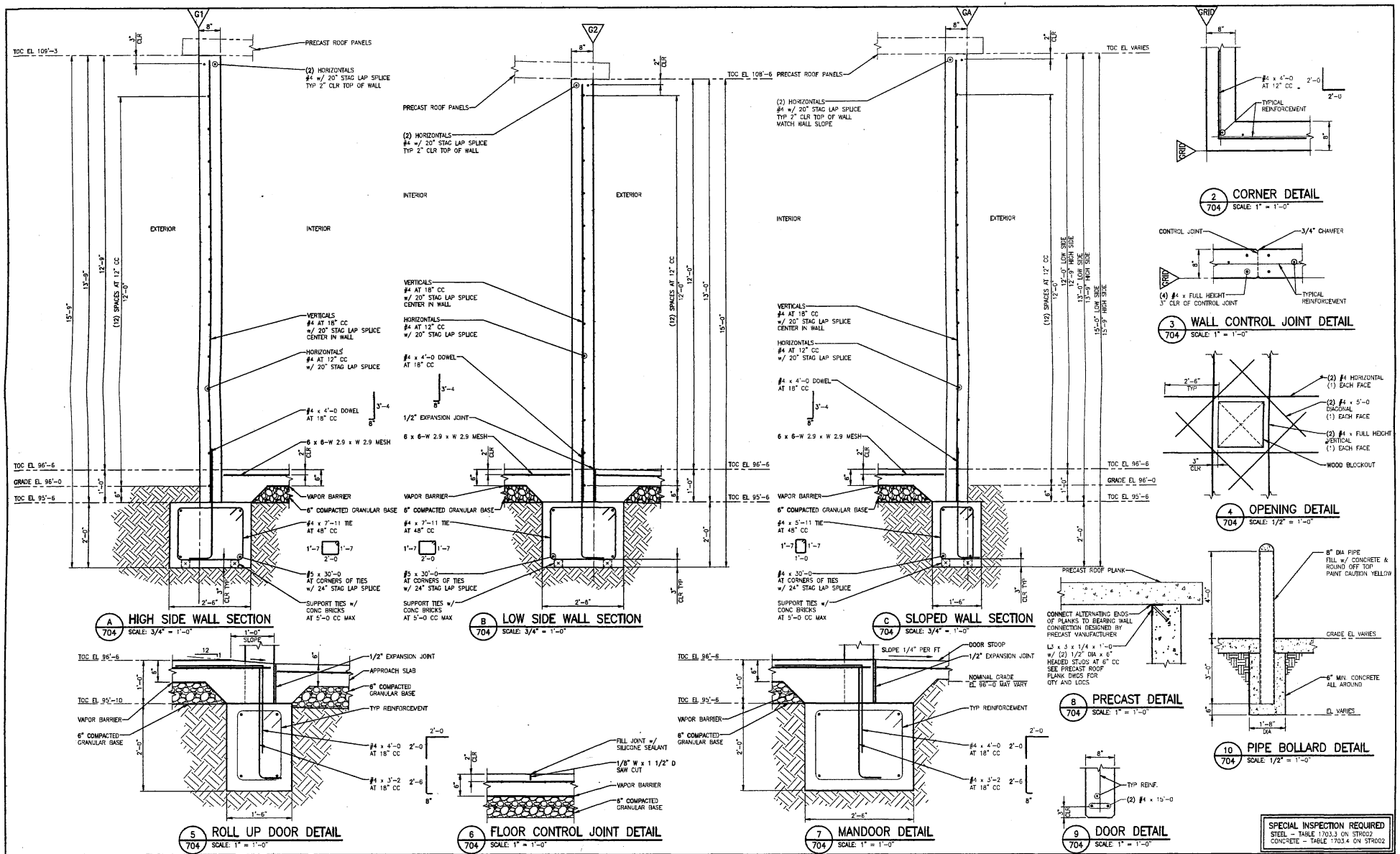
NEW 10,000 CWT FLOUR MILL
FOR
WHITEWATER MILL LLC
WEST HARRISON, INDIANA

Drawing Title: CHLORINE BUILDING PLANS

Project No.	Drawing No.	Rev. No.
11779	STR703	0

K:_PROJECTS\11750-11799\11779_Whitewater_W Harrison IN_STR\STR700 CHLORINE BUILDING\STR704-0-Chlorine Building dtls.dwg, STR704_0, 11/6/2014 11:25:43 AM



SPECIAL INSPECTION REQUIRED
STEEL – TABLE 1703.3 ON STR002
CONCRETE – TABLE 1703.4 ON STR002

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Indiana.

WM. H. ROSSKNEL, P.E. — 11-6-14

My license renewal date is July 31, 2015
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No.	Revisions	Date	By
0	ORIGINAL ISSUE	11/5/14	KJG

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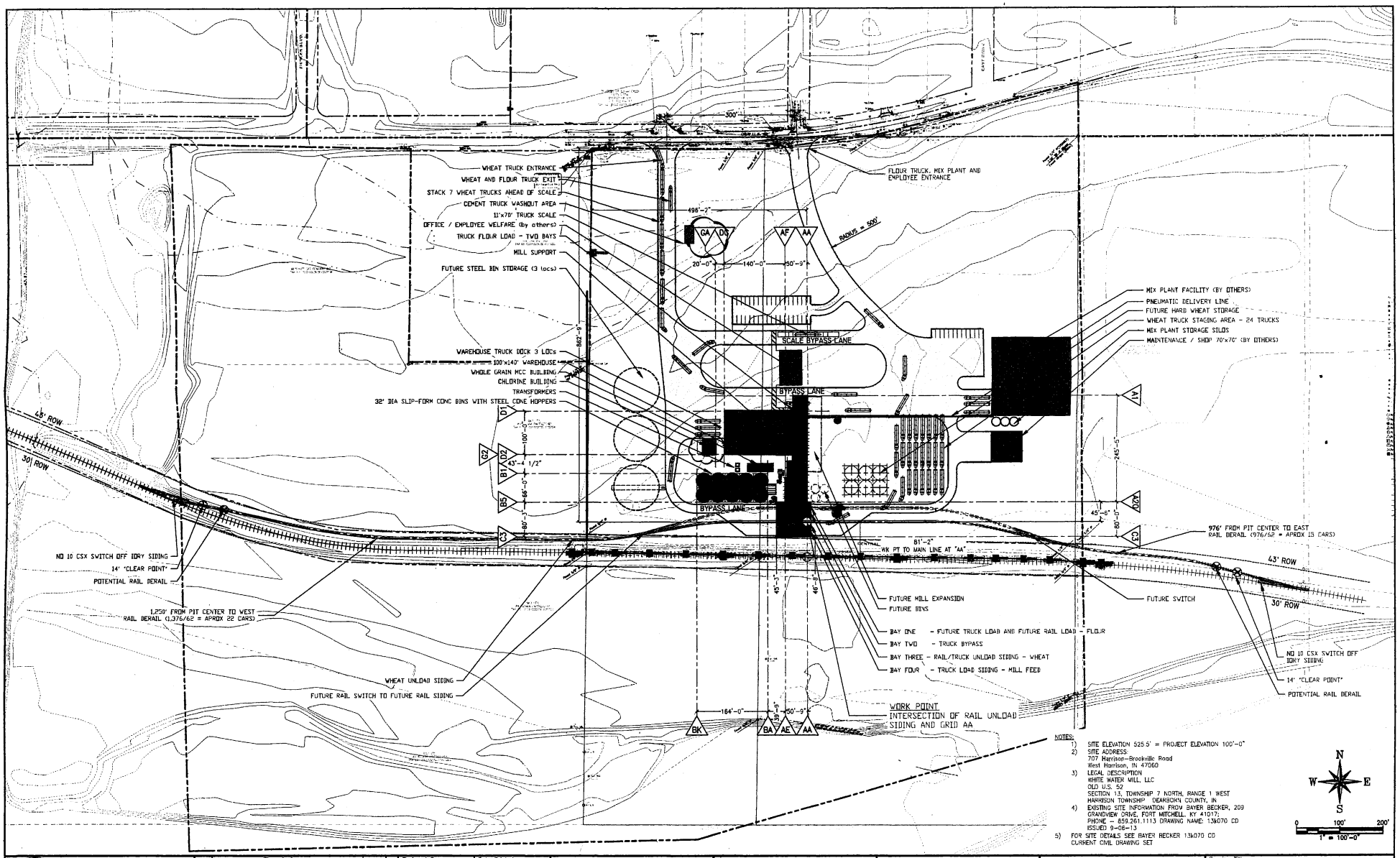
NEW 10,000 CWT FLOUR MILL
FOR
WHITEWATER MILL LLC
WEST HARRISON, INDIANA

Drawing Title: CHLORINE BUILDING SECTIONS AND DETAILS

Project No.	Drawing No.	Rev. No.
11779	STR704	0



I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Indiana.

William H. Rebhan 11-6-16

WM. H. REBHAN, P.E. DATE

My license renewal date is July 31, 2015

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No.	Revisions	Date	By
0	ORIGINAL ISSUE	10/24/13	STN
1	MOVE SILOS 3' NORTH, 3' EAST	12/17/13	mdw
2	MOVE CHLORINE BLDG/UPDATE DIM	7/3/14	---
3	MOVE CHLORINE BLDG/UPDATE DIM & GRIDS	11/06/14	STN

Designed By: mdw
Drawn By: mdw
Checked By: pwn
Date Printed:
Date Drawn: 12/12/12
Scale: 1" = 100'-0"

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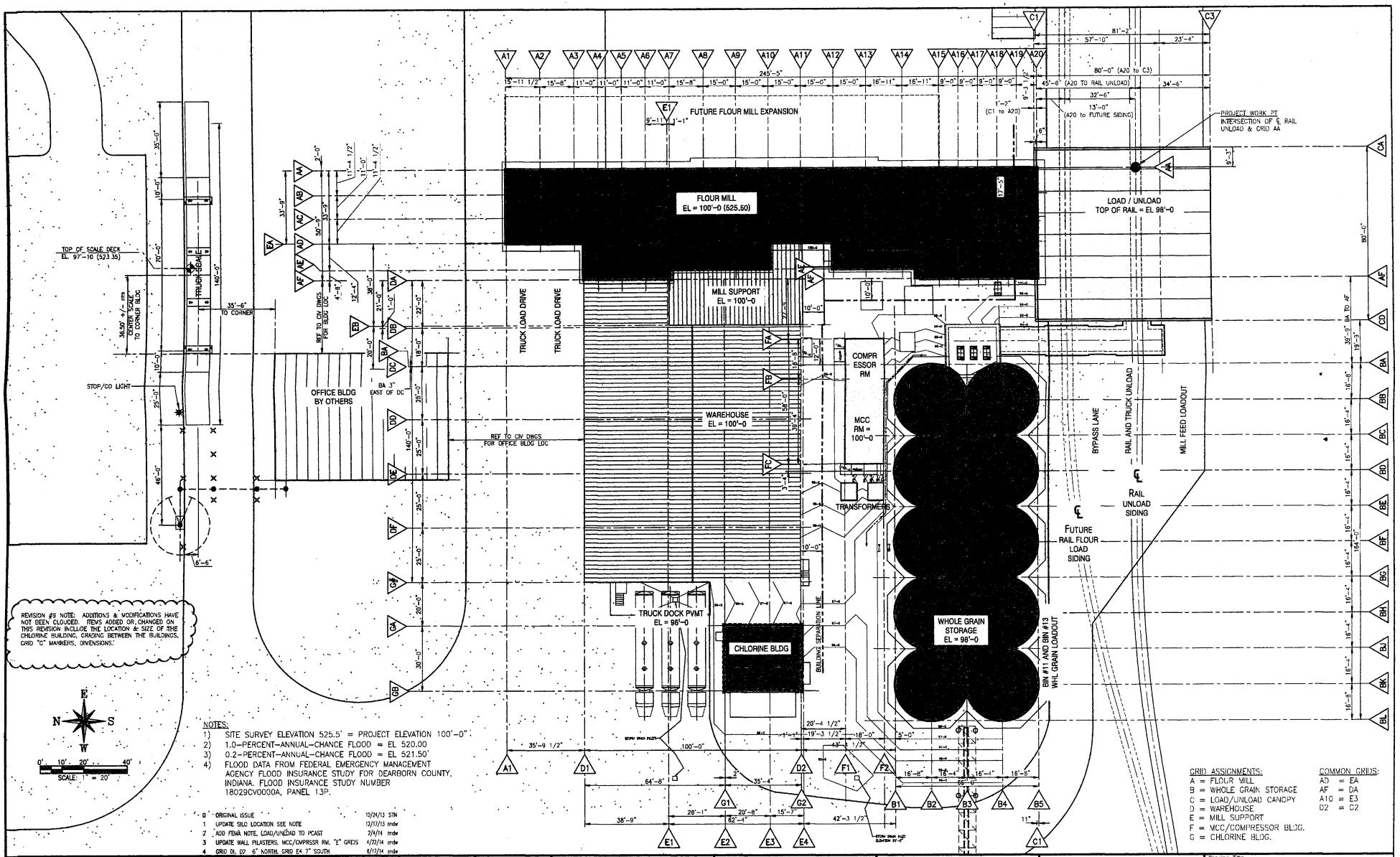
NEW 10,000 CWT FLOUR MILL
FOR
WHITEWATER MILL LLC
WEST HARRISON, INDIANA

Drawing Title: SITE PLAN

Project No. 11779
Drawing No. GAR001
Rev. No. 3



NOTES:
1) SITE SURVEY ELEVATION 525.5' = PROJECT ELEVATION 100'-0"
2) 1.0-PERCENT-ANNUAL-CHANCE FLOOD = EL 520.00
3) 0.2-PERCENT-ANNUAL-CHANCE FLOOD = EL 521.50'
4) FLOOD DATA FROM FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE STUDY FOR DEARBORN COUNTY, INDIANA. FLOOD INSURANCE STUDY NUMBER 18029CV0000A, PANEL 13P.

No.	Revisions	Date	By
0	ORIGINAL ISSUE	10/24/13	STN
1	UPDATE SILO LOCATION SEE NOTE	12/17/13	mdw
2	ADD FEMA NOTE, LOAD/UNLOAD TO PCAST	2/4/14	mdw
3	UPDATE WALL PILASTERS, MCC/COMPRSSR RM, "E" GRIDS	4/22/14	mdw
4	GRID DI, D2 6" NORTH, GRID E4 7" SOUTH	6/17/14	mdw
5	LOCATE TRUCK SCALE	6/25/14	mdw
6	ADJUST TRUCK SCALE AND OFFICE BLDG LOCs	7/31/14	mdw
7	ADD SAMPLE PROBE, STOP/GO LIGHT	8/5/14	mdw
8	UPDATE TRUCK PROBE LAYOUT	10/8/14	mdw
9	CHLORINE BLDG LOC	11/3/14	STN

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Indiana.
NO. 10991 STATE OF INDIANA PROFESSIONAL ENGINEER
Wm. H. Rothen 11-6-16
WM. H. ROTHEN, P.E. DATE
My license renewal date is July 31, 2016
This sheet is issued for bid only.

Designed By: MDW/PWN
Drawn By: MDW
Checked By: PWN
Date Printed:
Date Drawn: 9/16/13
Scale: AS NOTED

TODD & SARGENT
2905 SE 5TH STREET, AMES, IOWA 50010 (515.232.0442)
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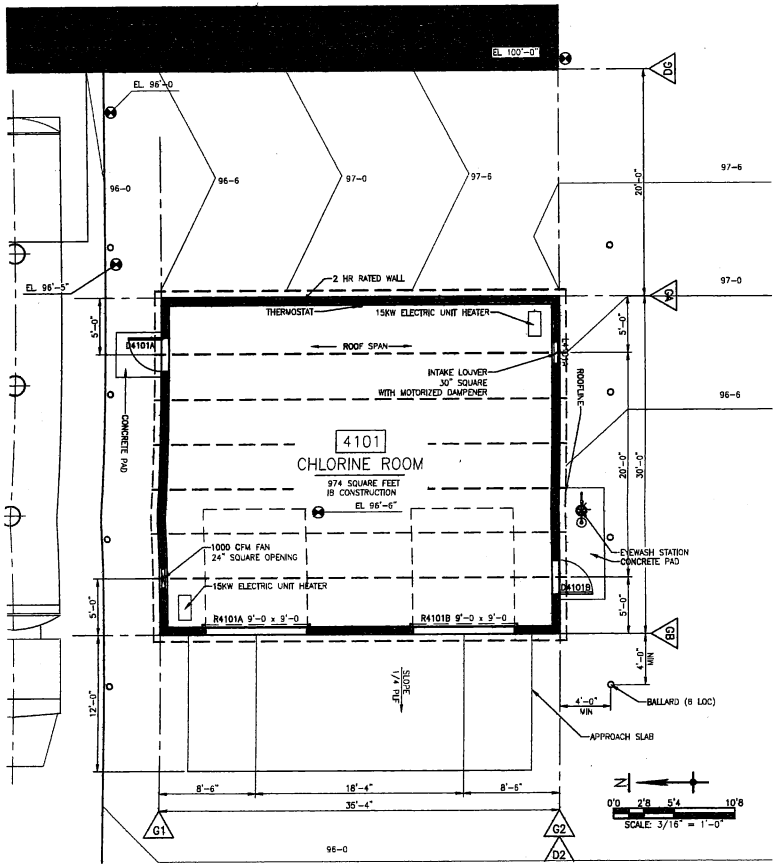
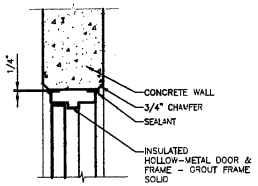
NEW 10,000 CWT FLOUR MILL
FOR
WHITEWATER MILL LLC
WEST HARRISON, INDIANA

Drawing Title: GENERAL PLAN
Project No. 11779 | Drawing No. GAR002 | Rev. No. 9

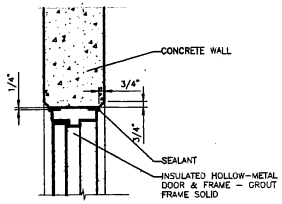
GRID ASSIGNMENTS:
A = FLOUR MILL
B = WHOLE GRAIN STORAGE
C = LOAD/UNLOAD CANOPY
D = WAREHOUSE
E = MILL SUPPORT
F = MCC/COMPRESSOR BLDG.
G = CHLORINE BLDG.

COMMON GRIDS:
AD = EA
AF = DA
A10 = E3
D2 = G2

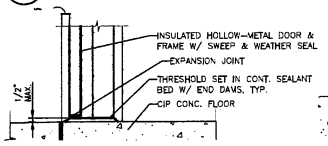




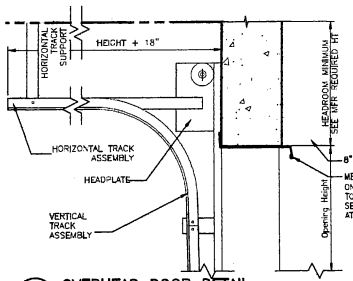
6 / 091 CONCRETE – DOOR HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



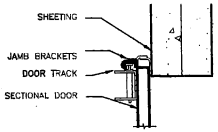
7 / 091 CONCRETE – DOOR JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



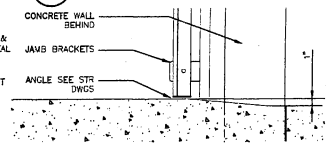
8 / 091 CONCRETE – DOOR SILL DETAIL
SCALE: 1-1/2" = 1'-0"



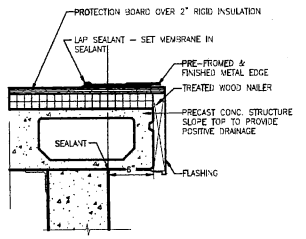
9 / 091 OVERHEAD DOOR DETAIL
SCALE: 1 1/2" = 1'-0"



10 / 091 SECTIONAL DOOR JAMB
SCALE: 1 1/2" = 1'-0"



11 / 091 LARGE DOOR SILL DETAIL
SCALE: 1-1/2" = 1'-0"



12 / 091 ROOF EAVE DETAIL
SCALE: 1 1/2" = 1'-0"

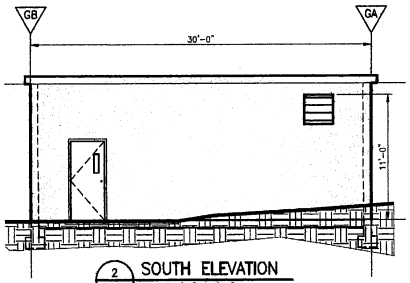
Chlorine Building Design Criteria

General Parameters

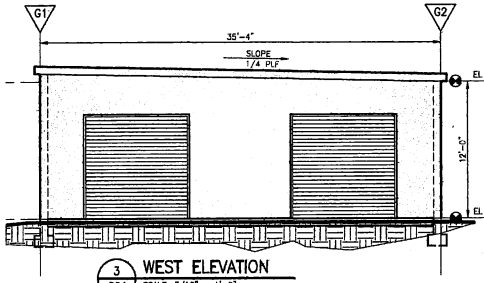
1. Product Stored: Chlorine, Liquefied Gas
2. Quantity will be provided by Owner if requested.
3. MSDS Sheet: Occidental Chemical Corporation
   a. US DOT 49 CFR 172.101 Hazard Class/Division: 2.3
   b. Toxic
   c. Oxidizer
   d. Negligible fire hazard
4. Ventilation Fan to provide exhaust at 1,000 CFM at static pressure of .25 inches of water
5. Provide (2) 15 kW Electric heater near intake louver to maintain 60° Temp
   a. Two (2) Heaters to be deactivated by chlorine sensor
   b. Two (2) Heaters controlled by individual thermostat
6. Electrical
   a. Watertight Construction
   b. Use sealed flourescent light fixtures
   c. Locate switches and outlets adjacent to doors on exterior of building
   d. Locate Chlorine Detectors 1 Foot Above Floor

Indiana Building Code Requirements		Reference
1.	Occupancy Group: H-3	IBC 307.5
2.	Building Construction Type: IB	IBC Table 601
3.	Allowable Building Area: 60,000 sq. ft.	IBC Table 503
4.	Occupancy Separation: H-3 to S-1 Separation 10 < X < 30 2HR Rating	IBC Table 602
5.	Automatic Sprinkler: Required in Group H Occupancies (Owner is requesting a variance to not install a sprinkler system)	IBC 903.2.5.1

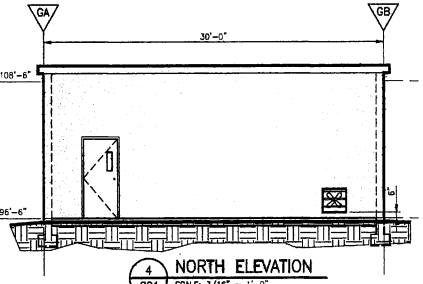
Indiana Fire Code Requirements		Reference
1.	Equipment, machinery and alarms: shall be listed or approved	IFC 2703.2.3
	a. Seismic Protection: Equipment shall be braced and anchored in accordance with the seismic design requirements of the IBC.	IFC 2703.2.8
2.	Electrical: Installation shall comply with the ICC Electrical Code	IFC 2703.9.4
3.	Ventilation	
	a. Mechanical ventilation shall be not less than 1 cubic foot per minute per square foot of floor area.	IFC 2704.3
	b. Ventilation Fan & Louver shall be activated by chlorine sensor	
5.	Automatic Sprinkler System	IFC 2704.5
	a. Shall be equipped with an approved automatic sprinkler system per Section 903.3.1.1.	
	b. Design shall be not less than that for Ordinary Hazard Group 2.	
6.	Emergency Alarm: An approved manual emergency alarm system shall be provided.	IFC 2704.9



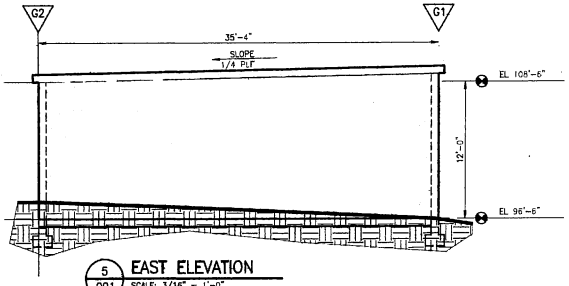
2 / 091 SOUTH ELEVATION
SCALE: 3/16" = 1'-0"



3 / 091 WEST ELEVATION
SCALE: 3/16" = 1'-0"



4 / 091 NORTH ELEVATION
SCALE: 3/16" = 1'-0"



5 / 091 EAST ELEVATION
SCALE: 3/16" = 1'-0"

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Indiana.

WM. H. ROBINSON, P.E. — DATE 11-6-16

My license renewal date is July 31, 2016
This sheet is covered by this seal.

No.	Revisions	Date	By
0	Original Issue	11/06/14	STN

Designed By: PWN	Date Printed:
Drawn By: STN	Date Drawn: 10/30/14
Checked By:	Scale: AS NOTED

TODD & SARGENT
2905 SE 5TH STREET, AMES, IOWA 50010 (515.232.0442)

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NEW 10,000 CWT FLOUR MILL
FOR
WHITEWATER MILL LLC
WEST HARRISON, INDIANA

Drawing Title: CHLORINE BUILDING PLANS AND ELEVATIONS

Project No.	Drawing No.	Rev. No.
11779	GAR071	0