DICKINSON WRIGHT PLLC

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WILLIAM V. VORYS
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May 10, 2018

Ms. Barcy F. McNeal, Secretary
Ohio Power Siting Board
Docketing Division
180 East Broad Street, 11th Floor
Columbus, OH 43215

Re: Case No. 13-197-EL-BGN, 16-1687-EL-BGA, and 17-1099-EL-BGA
Trishe Wind Ohio, LLC
Notification of Compliance with Condition 9 of the Supplement—State/Federal Permits

Dear Ms. McNeal:

Trishe Wind Ohio, LLC ("Applicant") is certified to construct a wind-powered electric generation facility in Paulding County, Ohio, in accordance with the December 16, 2013 Opinion, Order, and Certificate issued by the Ohio Power Siting Board ("OPSB"). The Certificate is subject to the 40 conditions set forth in the December 16, 2013 Order, as well as the 26 conditions set forth in the October 1, 2013 Supplement to the original application ("Supplement").

Condition 9 of the Supplement requires the Applicant to obtain and comply with any permits or authorizations required by federal or state laws and regulations. The Applicant is providing this letter to notify the OPSB that the Applicant is submitting final approvals from the Ohio Department of Commerce relating to its building permit, each of which is attached hereto. In addition, the Applicant is submitting its executed Ohio Department of Transportation Special Hauling Permit, which is also attached hereto.

We are available, at your convenience, to answer any questions you may have.

Respectfully submitted,

/s/ *William V. Vorys*
William V. Vorys (0093479)
Christine M.T. Pirik (0029759)
Terrence O'Donnell (0074213)
Dickinson Wright PLLC
150 East Gay Street, Suite 2400
Columbus, Ohio 43215
Phone: (614) 591-5461
Email: wvorys@dickinsonwright.com
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todonnell@dickinsonwright.com
Attorneys for Trishe Wind Ohio, LLC

Enclosure
COLUMBUS 73809-1 89228v1

Ohio Department of Commerce
Division of Industrial Compliance

John R. Kasich
Governor

Jacqueline T. Williams
Director

Geoffrey D. Eaton
Chief Building Official

Certificate of Final Plan Approval

Plan Number: 2018020527	**Property Address:** 11874 SR 144 HAVILAND OH 45851	**County:** PAULDING
Date of Approval: 04/20/2018	**Type of Project:** New Building	**Governing Building Code:** OBC 2017
Building / Business Name: NWOWF O&M BUILDING	**Description of the Project:** This is just for the footings and foundations plan review and approval, full building will be submit	
Property Owner: STARWOOD ENERGY GROUP GLOBAL LLC ALEX DABERKO 5 GREENWICH OFFICE PARK Floor 2ND GREENWICH CT 06831	**Submitter:** PHILLIP GARNER 33126 MAGNOLIA CIR Suite 200 MAGNOLIA TN 77354	**Design Professional:** TOD HENNING 1225 N LOOP W Suite 800 HOUSTON TX 7708
Approved Scope of Project: General Building Trade Mechanical Electrical	**Authorized No. of Inspections:** 6 6 6	**Use Occupancy Groups:** B S-1 **Construction Type:** Type V B **Number of Stories:** 1 **Building Occupant Load:** 50

The list of required inspections is specified in section 108 OBC. The owner or the owner's authorized agent is responsible for requesting applicable inspections accordingly. This certificate shall remain posted in a conspicuous and safe place on the job site until the work is completed. Failure to meet these requirements may result in the refusal of service and/or the issuance of an adjudication order. The building/structure shall pass final inspection and a State of Ohio Certificate of Use and Occupancy shall be issued before the building/structure can be legally occupied. The owner is responsible for obtaining all local zoning and sewage permits. In order to schedule an inspection, contact the numbers listed on the bottom of this certificate between the hours of 8:15 am and 2:30 pm.

Structural / Electrical / Plumbing	**State Fire Marshal**	**All Other Inquiries**
1-800-822-3208 8:15 am to 2:30 pm	614-728-5460	1-800-523-3581 8:00 am to 5:00 pm

State Inspector's Signature for Occupancy:

Building Official Signature:

Final Structural Approval: _____ Date: _____

Final Electrical Approval: _____ Date: _____

Final Plumbing Approval: _____ Date: _____

Final Fire Approval: _____ Date: _____

Ohio Department of Commerce
Division of Industrial Compliance
6606 Tussing Road, PO Box 4009
Reynoldsburg, OH 43068-9009 U.S.A.
(614) 644-2622 Fax: (614) 644-3145

Ohio Department of Commerce
Division of Industrial Compliance

John R. Kasich
Governor

Jacqueline T. Williams
Director

Geoffrey D. Eaton
Chief Building Official

Certificate of Partial Plan Approval 1

Plan Number: 2018020527	**Property Address:** 11874 SR 144 HAVILAND OH 45851	**County:** PAULDING
Date of Approval: 03/21/2018	**Type of Project:** Alteration	**Governing Building Code:** OBC 2017
Building / Business Name: NWOWF O&M BUILDING	**Description of the Project:** This is just for the footings and foundations plan review and approval, full building will be submit	
Property Owner: STARWOOD ENERGY GROUP GLOBAL LLC GREG CANTWELL 5 GREENWICH OFFICE PARK Floor 2ND GREENWICH CT 06831	**Submitter:** PHILLIP GARNER 33126 MAGNOLIA CIR Suite 200 MAGNOLIA TN 77354	**Design Professional:** TOD HENNING 1225 N LOOP W Suite 800 HOUSTON TX 7708
Approved Scope of Project: General Building Trade	**Authorized No. of Inspections:** 6	**Use Occupancy Groups:** B S-1 **Construction Type:** Type V B **Number of Stories:** 1 **Building Occupant Load:** 50

The list of required inspections is specified in section 108 OBC. The owner or the owner's authorized agent is responsible for requesting applicable inspections accordingly. This certificate shall remain posted in a conspicuous and safe place on the job site until the work is completed. Failure to meet these requirements may result in the refusal of service and/or the issuance of an adjudication order. The building/structure shall pass final inspection and a State of Ohio Certificate of Use and Occupancy shall be issued before the building/structure can be legally occupied. The owner is responsible for obtaining all local zoning and sewage permits. In order to schedule an inspection, contact the numbers listed on the bottom of this certificate between the hours of 8:15 am and 2:30 pm.

Structural / Electrical / Plumbing	**State Fire Marshal**	**All Other Inquiries**
1-800-822-3208 8:15 am to 2:30 pm	614-728-5460	1-800-523-3581 8:00 am to 5:00 pm

State Inspector's Signature for Occupancy:

Building Official Signature:

Final Structural Approval: _____ Date: _____

Final Electrical Approval: _____ Date: _____

Final Plumbing Approval: _____ Date: _____

Final Fire Approval: _____ Date: _____

Ohio Department of Commerce
Division of Industrial Compliance
6606 Tussing Road, PO Box 4009
Reynoldsburg, OH 43068-9009 U.S.A.
(614) 644-2622 Fax: (614) 644-3145

CPA # 2018020527 - April 20, 2018

Department of Commerce

Division of Industrial Compliance

John R. Kasich, **Governor**
Jacqueline T. Williams, Director

03/21/2018

STARWOOD ENERGY GROUP GLOBAL LLC
GREG CANTWELL
5 GREENWICH OFFICE PARK Floor 2ND
GREENWICH CT 06831

CORRECTION LETTER NO. 1

Project Number: **2018020527**
Response Deadline: **09/17/2018**

The plans for the project referenced below have been reviewed and were found to be incomplete and/or to contain violations of the Ohio Building Code (OBC). As a result, your plans cannot be approved at this time.

This notice serves as a Correction Letter to inform you of what information is needed to get your plans approved. Pursuant to OBC section 110, you have the right to appeal any of the items listed below. You may contact the Chief Building Official to obtain a formal Adjudication Order that will provide the procedures to request an appeal hearing. In accordance with OBC section 107.6, if corrected documents have not been submitted within 6 months of the date of this letter, or the owner has not exercised the right to appeal, an adjudication order will be issued in accordance with section 109 OBC.

The plans affected by this notice are known or described as:

NWOWF O&M BUILDING
11874 SR 144
HAVILAND OH 45851

Your plans cannot be approved until all of the information specified below is submitted and reviewed:

1. ENERGY ANALYSIS
Submit documentation showing the building has been designed in accordance with the applicable provisions of the 'International Energy Conservation Code' or the requirements of 'ASHRAE 90.1' listed in Chapter 35 of this code; Section 1301.1 OBC.

Bureau of Building Code Compliance
6606 Tussing Road
PO Box 4009
Reynoldsburg, OH 43068-9009 U.S.A.

614 | 644 - 2622
Fax 614 | 644 - 3145
TTY/TDD 800 | 750 - 0750
www.com.ohio.gov

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2. Submit the special inspection requirement requested in the partial plan approval; Chapter 17 OBC.

3. Submit oil storage building and fence under separate permits; Sections 101.2, 106.1.1, 311.2, and 312.1 OBC.

4. Submit the rest of the construction documents including mechanical, electrical, and plumbing; Section 106.1.1 OBC.

In order to minimize the time it takes to review revised plans, circle the area of changes on the revised drawings with a red pencil. Mark the item number referenced above adjacent to the circled area. This needs only to be done on one set of the revised plans. Three identical sets of revised plans (five sets when drawings include plumbing) must be submitted. Submit revised plans to the address specified above. However, if the plans were submitted electronically through our website the first time, any subsequent submission of revised plans and/or response letters should also be submitted electronically through our website. Please log onto our website for further instructions.

If there are any questions, you may call your Plan Examiner by phone (614) 644-2622 to discuss or to make an appointment to meet with your Plan Examiner. If you wish to appeal any of the items contained in this letter, please contact Geoffrey D. Eaton, Chief Building Official at 614-644-2622 and a formal Adjudication order will be issued immediately. The Adjudication Order will provide the procedures you will need to request a hearing with the Board of Building Appeals.

Sincerely,

Jeffrey Lasko,

Plans Examiner

Department of Commerce, Division of Industrial Compliance, Bureau of Building Code Compliance, State of Ohio
Electronic Plan Approval Sheet

CPA Number: 2018020527 | Building Use Groups: B,& S-1 | Plan Approval Date:

Approval Type: ☐ Final ☑ Partial No. 1 | Construction Type: VB | County: Paulding

- **Plan Approval Status Expiration Notice:**
  This plan approval status will expire if the construction work has not commenced within 12 months of the approval date or during the course of construction, the work is delayed or suspended for more than 6 months. Extensions can be granted upon receiving a written request along with $100 fee from the owner at least 10 days prior to the expiration date per section 105 OBC.

- **Contractor License Notice:**
  All electrical, plumbing, hydronics, HVAC, and refrigeration contractors working on this project must be licensed by the State of Ohio in accordance with 4740 ORC.

- **This plan approval is subject to the following additional code requirements:**

☐ Ohio Building Code, Chapter 29, minimum plumbing requirements. Please contact the Bureau of Building Code Compliance, Plumbing Section or Local Health Department.
☐ Ohio Elevator Code, Ohio Fire Code, Ohio Boiler and Unfired Vessels Rules.
☑ All other requirements of the Ohio Revised Code, Local Zoning and Other Regulations.

- **Disclaimer:**

☑ The structural elements of these drawings have been examined to the extent necessary to determine conformity of such plans with other requirements of OBC. The sufficiency of these elements to meet all code requirements is the responsibility of the registered architects or professional engineers who certified the drawings.

☐ All electrical work shall be installed in accordance with National Electrical Code.

☐ The design and calculations for the sprinkler system in these plans, if applicable, have been examined to the extent necessary to determine conformity of such plans with other requirements of OBC. The sufficiency of the design and calculations to meet all code requirements is the responsibility of author of these plans who certified the drawings. The installed sprinkler system will be inspected by DIC field inspectors to determine compliance with approved plans, and the operation of the system will be verified by local fire authority or a third party inspection agency.

- **For Partial plan approval, indicate the approval includes:** ☑ **Footing/Foundation** ☑ **Slab** ☑ **Building Shell** ☐ **Interior Finish** ☐ **Sprinkler** ☐ **Fire alarm**

▪ Effective **February 1, 2009**, the permit fees paid with this application will include the following maximum number of inspections per scope of work:		▪ Plan approval conditions and/or special notes to the inspectors:
Total square/linear footage or No. of devices	Maximum No. of inspections allowed:	
0 to 2,500	5 per each scope of work	
2,501 to 10,000	6 per each scope of work	
10,001 to 20,000	9 per each scope of work	
20,001 to 30,000	10 per each scope of work	
> 30,000	Add 1 inspection per each additional 10,000 s.f.	
▪ A re-inspection fee of $100 will be charged for each additional inspection requested.		

Site Inspection Sign-Off Log

Special Note: This inspection log must be kept on site with the approved plans at all times. Additional inspection fees will be charged when the actual number of inspections exceeds the number allowed for each scope of work.

Certificate of Plan Approval (CPA) Number: 2018020527

Scope of Work: **Building General**		Total number of inspections allowed:		6
#	Inspected Item	Date	Inspector signature	Inspection results
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

Site Inspection Sign-Off Log

Special Note: This inspection log must be kept on site with the approved plans at all times. Additional inspection fees will be charged when the actual number of inspections exceeds the number allowed for each scope of work.

Certificate of Plan Approval (CPA) Number: 2018020527

Scope of Work: **Mechanical**		Total number of inspections allowed:		6
#	Inspected Item	Date	Inspector signature	Inspection results
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

Site Inspection Sign-Off Log

Special Note: This inspection log must be kept on site with the approved plans at all times. Additional inspection fees will be charged when the actual number of inspections exceeds the number allowed for each scope of work.

Certificate of Plan Approval (CPA) Number: 2018020527

Scope of Work: **Electrical**		Total number of inspections allowed:		6
#	Inspected Item	Date	Inspector signature	Inspection results
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

PROJECT INFORMATION

SCOPE OF WORK

THE PROPOSED FACILITY CONSISTS OF THE CONSTRUCTION OF A GROUND-UP 5,000 S.F. PRE-FABRICATED METAL BUILDING THE FACILITY IS COMPRISED OF AN OFFICE AND SHOP THAT WILL BE USED FOR THE REPAIR, STORAGE OF TOOLS AND PARTS FOR WIND TURBINES.

CODE COMPLIANCE

THE PROPOSED PROJECT SHALL COMPLY WITH ALL COUNTY APPLICABLE CODES:

INTERNATIONAL BUILDING CODE 2015 ED.
INTERNATIONAL FIRE CODE 2015 ED.
INTERNATIONAL MECHANICAL CODE 2015 ED.
INTERNATIONAL PLUMBING CODE 2015 ED.
ADA ACCESSIBILITY GUIDELINES (ADAAG) 2012
INTERNATIONAL ENERGY CONSERVATION CODE 2012

LEGAL DESCRIPTION

BUILDING	SPACE	OCCUPANCY	SIZE	BUILDING HEIGHT
O&M BUILDING	OFFICE	B	2,506 SQ FT	14'-0"
	SHOP	F-1	2,494 SQ FT	14'-0"
TOTAL BUILDING			5,000 SQ FT	14'-0"

BUILDING CODE ANALYSIS - O&M BUILDING

PROJECT DESCRIPTION
B: 2,506 S.F. (TYPE VB - LIMITATIONS: 9,000 S.F: 1 STORIES)
THE AREAS LABELED AS OFFICE WILL SERVE A BUSINESS GROUP B OCCUPANCY WHERE THE TENANT'S SPECIFIC USE WILL BE OFFICE, PROFESSIONAL TRANSACTIONS, AND STORAGE OF RECORDS AND ACCOUNTS.

F-1: 2,494 S.F. (TYPE VB - LIMITATIONS: 8,500 S.F: 1 STORIES)
THE AREA LABELED AS SHOP WILL SERVE AS A MODERATE-HAZARD F-1 OCCUPANCY WHERE THE SPECIFIC USE SERVE AS THE REPAIR OF TOOLS/PARTS USED FOR WIND TURBINES.

OCCUPANCY CALCULATIONS (PER TABLE 1004.11 IBC)
FIRST FLOOR
B: 2,506/100 = 25 OCCUPANTS
F-1: 2,494/100 = 25 OCCUPANTS
TOTAL OCCUPANT = 25 + 25 = 50 TOTAL OCCUPANTS

CONSTRUCTION TYPE
TYPE VB - NON-SPRINKLERED

ALLOWABLE AREA
PER SECTIONS 302.3.1, THE TOTAL AREA (5,000S.F.) IS LESS THAN THE ALLOWABLE AREA LIMITATIONS FOR THE MOST RESTRICTIVE OCCUPANCY TYPE (F-1, 8,500 S.F.) AND THEREFORE QUALIFIES FOR NON-SEPERATED USE.

NOTE: ALL OTHER APPLICABLE CODE REQUIREMENTS ARE ADDRESSED IN THE PLAN AND ARE APPLIED, INCLUDING, BUT NOT LIMITED TO; CHAPTER 6 - TYPES OF CONSTRUCTION, CHAPTER 8 - INTERIOR FINISHES, CHAPTER 10 - MEANS OF EGRESS, ETC.

DISCLAIMER
ALL OCCUPANCY/USE DESCRIPTION IS BASED ON INFORMATION PROVIDED BY THE TENANT/BUILDING OWNER/CLIENT - METHOD ARCHITECTURE, LLC. IS NOT RESPONSIBLE FOR ANY FALSIFIED INFORMATION

MEANS OF EGRESS

EGRESS WIDTH CALCULATIONS: IBC 1005.1
OTHER EGRESS COMPONENTS WIDTH:
50 OCCUPANTS x .2 INCHES = 10" REQUIRED : 60" MIN PROVIDED

PER IBC 1005.5 MULTIPLE MEANS OF EGRESS SHALL BE SIZED SUCH THAT THE LOSS OF ANY ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAT 50 PERCENT OF THE REQUIRED CAPACITY

COMMON PATH OF EGRESS TRAVEL: IBC 1014.3
COMMON TRAVEL PATH DOES NOT EXCEED 75' IN B, F-1, OCCUPANCY AREAS

TRAVEL DISTANCE LIMITATIONS: IBC 1016.2: EXITS SHALL BE LOCATED ON EACH STORY SUCH THAT THE MAXIMUM LENGTH OF EXIT ACCESS TRAVEL, MEASURED FROM THE MOST REMOTE POINT WITHIN A STORY TO THE ENTRANCE TO AN EXIT ALONG THE NATURAL AND UNOBSTRUCTED PATH OF EGRESS TRAVEL, SHALL NOT EXCEED THE DISTANCES GIVEN IN TABLE 1016.1.

TRAVEL DISTANCES DOES NOT EXCEED 200' IN B, F-1 OCCUPANCY AREAS

TWO EXITS OR EXIT ACCESS DOORWAYS: IBC 1015.2.1: WHERE TWO EXITS OR EXIT ACCESS DOORWAYS ARE REQUIRED FROM ANY PORTION OF THE EXIT ACCESS, THE EXIT DOORS OR EXIT ACCESS DOORWAYS SHALL BE PLACED A DISTANCE APART EQUAL TO NOT LESS THAN ONE-HALF OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE BUILDING OR AREA TO BE SERVED MEASURED IN A STRAIGHT LINE BETWEEN EXIT DOORS OR EXIT ACCESS DOORWAYS.

NUMBER AND CONTINUITY OF EXITS: IBC 1021.1: MINIMUM NUMBER OF EXITS. ALL ROOMS AND SPACES WITHIN EACH STORY SHALL BE PROVIDED WITH AND HAVE ACCESS TO THE MINIMUM NUMBER OF APPROVED INDEPENDENT EXITS BASED ON THE OCCUPANT LOAD OF THE STORY.
OCCUPANT LOAD PER STORY 1-500 = 2 REQUIRED: 2 MIN PROVIDED

CORRIDOR FIRE-RESISTANCE RATING: IFC TABLE 1018.1

OCCUPANCY	OCCUPANT LOAD PER EXIT	REQUIRED FIRE RATING (WITHOUT SPRINKLER)
B/F-1	LESS THAN 30	0

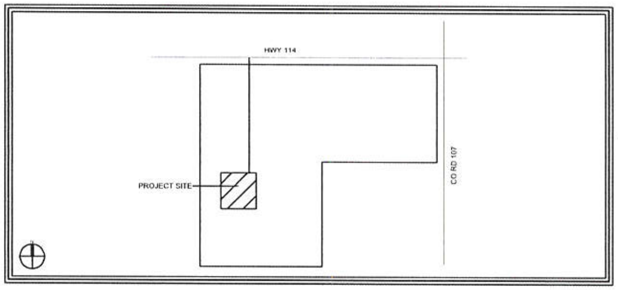
WHERE MORE THAN ONE EXIT OR EXIT ACCESS DOORWAY IS REQUIRED, THE EXIT ACCESS SHALL BE ARRANGED SUCH THAT THERE ARE NO DEAD ENDS IN CORRIDORS MORE THAN 20 FEET

PLUMBING FIXTURE CALCULATIONS -50 OCCUPANTS (25:B / 25:F)

FIXTURE TYPE	REQUIRED	PROVIDED	REMARKS
WATER CLOSETS	2	2	B: 1 per 25 occupants for 1st 50, 1 per 50 for the remainder exceeding F: 1 per 100 occupants
LAVATORIES	2	2	B: 1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80 F: 1 per 100 occupants
SERVICE SINK	1	1	
DRINKING WATER	1	1	OWNER PROVIDED DRINKING WATER SUPPLY - BOTTLED WATER COOLER, ETC. WILL BE PROVIDED IN LIEU OF HI-LOW DRINKING FOUNTAIN

IEA WHITE

HAVILAND - O&M
XX
PAULDING CO, OHIO



CONTACT LIST

OWNER:
IEA WHITE
XX
XX
TEL: (XX) XXX-XXX

DESIGN BUILDER:
MBA CONSTRUCTION
CONTACT: JONATHAN HAY
33126 MAGNOLIA CIRCLE
MAGNOLIA, TX 77354
PHONE: (855) 765-7171
E-MAIL: JHAY@mbaconstruction.net

ARCHITECT:
METHODarchitecture, LLC
ARCHITECT: JAKE DONALDSON
CONTACT: JACKIE RYE
E-MAIL: jrye@methodarchitecture.com
2118 LAMAR ST., SUITE 200
HOUSTON, TEXAS 77003
TEL: (713) 842-7500

STRUCTURAL:
H2B, INC.
CONTACT: TOD HENNING
1225 NORTH LOOP WEST
HOUSTON, TX 77008
TEL: (713) 864-2900
FAX: (713) 583-1245
E-MAIL: tod.henning@h2bengineers.com

MEP:
KCI
CONTACT: NICHOLAS BADKE
801 TRAVIS SUITE 200
HOUSTON, TX 77002
TEL: (832) 975-1504
EMAIL: nicholas.badke@kci.com

LIST OF DRAWINGS

A0.00: TITLE SHEET, INDEX, AND GENERAL NOTES
SURVEY

ARCH. DRAWINGS:
A0.01: ADA STANDARD MOUNTING HEIGHTS
A1.00: SITE PLAN
A1.01: SITE DETAILS NOTES
A2.00: FLOOR PLAN
A2.01: REFLECTED CEILING PLAN
A2.02: ROOF PLAN
A3.00: ELEVATIONS AND NOTES
A4.00: WALL SECTIONS
A6.00: RESTROOM DETAILS
A6.01: MILLWORK DETAILS
A7.00: DOOR AND WINDOW SCHEDULES
A7.01: FINISH PLAN AND SCHEDULES
A7.02: WALL DETAILS AND SCHEDULES

STRUCTURAL DRAWINGS:
S0.0: FOUNDATION GENERAL NOTES
S0.1: TYPICAL DETAILS
S1.0: FOUNDATION PLAN
S2.0: FOUNDATION PLAN

MEP DRAWINGS:
E0.1: GENERAL NOTES, SHEET INDEX, ABBREVIATIONS AND SYMBOLS
CAL SITE PLAN
OTOMETRIC SITE PLAN
HTING PLAN
WER AND SPECIAL SYSTEMS PLAN
AILS
IEDULES
ERGY CODE COMPLIANCE
L NOTES, SHEET INDEX, ABBREVIATIONS AND
...S
M1.1: MECHANICAL FLOOR PLAN
MECHANICAL DETAILS
MECHANICAL SCHEDULES
M7.1: MECHANICAL ENERGY CODE COMPLIANCE

P0.1: GENERAL NOTES, SHEET INDEX, ABBREVIATIONS AND SYMBOLS
P1.1: PLUMBING FLOOR PLAN
P5.1: PLUMBING DETAILS
P6.1: PLUMBING SCHEDULES

STATE OF OHIO DEPARTMENT OF COMMERCE DIVISION OF INDUSTRIAL COMPLIANCE BUILDING CODE COMPLIANCE
Final Plan Approval
Examiner: J. Laskowski
CPA # 20180202527 - 2018

GENERAL NOTES

1. THE CONTRACTOR, IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN THESE CONTRACT DOCUMENTS, SHALL PROVIDE ALL MATERIALS, EQUIPMENT, LABOR AND SUPERVISION REQUIRED. ALL WORK SHALL BE PERFORMED IN A GOOD WORKMANLIKE MANNER.
2. ALL WORK SHALL BE DONE BY CONTRACTORS DULY LICENSED BY THE LOCAL JURISDICTION.
3. THE CONTRACTOR AND SUBCONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, INSPECTION FEES, AND DEPOSITS REQUIRED FOR THE INSTALLATION OF ALL WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CALL FOR LOCAL INSPECTIONS AND OBTAIN APPROVAL FROM CITY INSPECTORS. MATERIAL TESTING BY THIRD PARTY AND PAID FOR BY OWNER.
4. SUBCONTRACTORS ARE REQUIRED TO CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS COVERING ALL TRADES SO THAT ALL WORK WILL BE PROPERLY COORDINATED. ANY DISPUTE RESULTING FROM NON-COORDINATION OF SPACE REQUIREMENTS SHALL BE SETTLED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER AND WITHOUT REGARD TO WHOSE MATERIAL WAS INSTALLED FIRST, BUT AS REQUIRED FOR PROPER FUNCTIONING OF THE CONFLICTING SYSTEMS AS APPROVED BY THE ARCHITECT.
5. THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE AND PERSONNEL DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, EXCAVATION PROTECTION, SCAFFOLDING, JOB SITE SAFETY, ETC. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT, OWNER, OR ENGINEER SHALL NOT INCLUDE INSPECTION OF ABOVE ITEMS.
6. CONTRACTOR AND SUBCONTRACTORS SHALL NOT USE REPRODUCTIONS OF THE CONTRACT DOCUMENTS AS SHOP DRAWINGS, OR THE BASIS OF SHOP DRAWINGS, WITHOUT WRITTEN AUTHORIZATION BY THE ARCHITECT. THE ARCHITECT ASSUMES NO LIABILITY AS THE RESULT OF THE USE OF REPRODUCTIONS OF THE CONTRACT DOCUMENTS FOR SHOP DRAWINGS.
7. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONDITIONS, ETC., PRIOR TO BEGINNING CONSTRUCTION AND NOTIFY ARCHITECT IN WRITING OF ANY DISCREPANCIES. PROCEEDING WITH WORK SHALL CONSTITUTE ACCEPTANCE BY THE CONTRACTOR THAT ALL CONDITIONS ARE CORRECT AND THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY.
8. DO NOT SCALE DRAWINGS. SCALES NOTED ON THE DRAWINGS ARE FOR GENERAL INFORMATION ONLY. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED BY DIRECT SCALING OF THE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING CONSTRUCTION. ALL MEASUREMENTS ARE SUBJECT TO VERIFICATION IN THE FIELD BY THE CONTRACTOR, AND HE SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION OR CONSTRUCTION.
9. SUBCONTRACTORS SHALL VISIT THE SITE AND INFORM CONTRACTOR OF ANY CONDITIONS THAT MAY AFFECT THE EXECUTION OF THE WORK PRIOR TO COMMENCING ANY AFFECTED WORK.
10. ALL PRODUCTS AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS UNLESS SPECIFICALLY NOTED TO THE CONTRARY. NOTIFY DESIGN IF MANUFACTURER'S REQUIREMENTS ARE MORE STRINGENT.
11. ALL MATERIALS AND EQUIPMENT FURNISHED BY SUBCONTRACTORS SHALL BE NEW AND FREE FROM DEFECTS.
12. CONTRACTORS SHALL PROVIDE BACKING BEHIND FINISH WALL AND CEILING SURFACES FOR SUPPORT AND ATTACHMENT OF CASEWORK, SHELVING, MIRRORS, PEGBOARDS, COUNTERS, TOILET PARTITIONS AND ACCESSORIES ETC.
13. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM OR WHICHEVER IS MORE STRINGENT.
14. ESTABLISH AND VERIFY ALL OPENING AND INSERTS FOR ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING PRIOR TO CONSTRUCTION.
15. NOTIFY ARCHITECT OF CONFLICT IN DETAILS OR GENERAL NOTES AND TYPICAL DETAILS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT AND TO APPLICABLE CODES. DETAILS NOTED AS "TYPICAL" SHALL APPLY UNLESS NOTED OTHERWISE.
16. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN LOCAL JURISDICTION.
17. IN CASE OF PLAN LOCATION CONFLICTS BETWEEN DISCIPLINES, NOTIFY ARCHITECT/DESIGN BUILDER.
18. ALL DRAWING REFERENCES TO MATERIALS ARE GENERAL IN NATURE IN UNLESS OTHERWISE NOTED; REFER TO SPECIFICATIONS FOR TYPES, CHARACTERISTICS AND REQUIREMENTS OF SPECIFIC MATERIALS.
19. THE CONTRACTOR STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO; BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY ARCHITECT OR ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
20. THESE DOCUMENTS ARE NOT TO BE USED FOR ANY PURPOSE OTHER THAN ORIGINALLY ISSUED UNLESS AUTHORIZED IN WRITING BY THE ARCHITECT OF RECORD.
21. SHOP DRAWINGS ARE TO COMPLIMENT AND SUPPLEMENT CONSTRUCTION DOCUMENTS. WHEN CONFLICTING INFORMATION IS PROVIDED IN SHOP DRAWINGS AND CONSTRUCTION DOCUMENTS, NOTIFY ARCHITECT PRIOR TO FABRICATION. REVIEW OF SHOP DRAWINGS BY ARCHITECT DOES NOT RELIEVE SUBCONTRACTOR OF RESPONSIBILITY FOR CONFORMANCE WITH CONSTRUCTION DOCUMENTS.
22. ALL DRYWALL PARTITIONS ARE DIMENSIONED FACE OF FINISH WALL TO FACE OF FINISH WALL UNLESS OTHERWISE NOTED.
23. ALL GYPSUM BOARD PARTITIONS SHALL BE TAPE, BED, TEXTURE (L.T. K.D. FINISH) UNLESS NOTED OTHERWISE.
24. REFUSE GENERATED BY WORK SHALL BE REMOVED FROM PROJECT SITE ON A DAILY BASIS. COORDINATE DUMPSTER LOCATION WITH BUILDING OWNER TO AVOID ACCESS AND PARKING CONFLICTS.
25. PRIOR TO START OF CONSTRUCTION, IDENTIFY GAS MAIN AND SHUTDOWN, ELECTRICAL MAIN AND SHUTDOWN, WATER MAIN AND SHUTDOWN, AND ALL OTHER EMERGENCY UTILITY SHUTDOWN DEVICES. POST A PLAN OF ALL LOCATIONS WITH EMERGENCY NUMBERS OF TRADES ASSOCIATED WITH SUCH UTILITIES. SITE SHALL BE BLUE-STAKED BEFORE START OF U.G. WORK.
26. SEAL ALL CRACKS AROUND STRUCTURAL MEMBERS, BRACING, PIPES, CONDUITS, DUCTS AND BETWEEN WALLS AND ROOF DECK WHERE AIR INFILTRATIONS BETWEEN CONDITIONED AND NON-CONDITIONED (EXTERIOR) SPACES MAY OCCUR (I.E. SEAL THE BUILDING ENVELOPE).
27. PROVIDE DOUBLE STUDS, BLOCKING, AND/OR DIAGONAL BRACING AS REQUIRED AT JAMBS OF DOORS, WALL OPENINGS, ETC.
28. FIRE EXTINGUISHERS SHALL BE PURCHASED AND INSTALLED BY THE CONTRACTOR PER LOCAL FIRE DEPARTMENT AND BUILDING CODE REQUIREMENTS. - REFER TO THE ARCHITECTURAL FLOOR PLAN FOR EXACT LOCATIONS.

RAYBURN DONALSON
2118 LAMAR ST., STE. 200
HOUSTON, TEXAS 77003
(713) 842-7500

STATE OF OHIO RAYBURN J. DONALDSON ARC. 1818879 REGISTERED ARCHITECT

RAYBURN DONALDSON

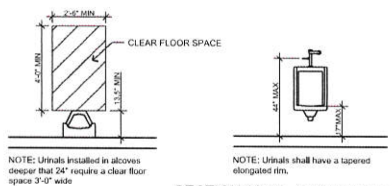
MBA Construction Co.

IEA WHITE - HAVILAND
O&M BUILDING
PAULDING COUNTY, OH

SHEET: TITLE SHEET

REVISIONS:

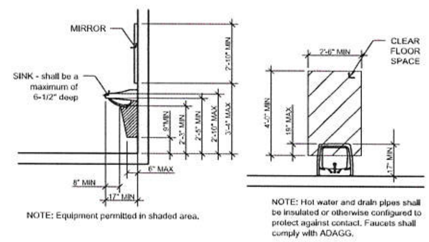
TL: JRR / DE: NDK
DATE: 01-26-18
PROJECT: MB184009
SHEET: A0.00



NOTE: Urinals installed in alcoves deeper that 24" require a clear floor space 3'-0" wide

NOTE: Urinals shall have a tapered elongated rim.

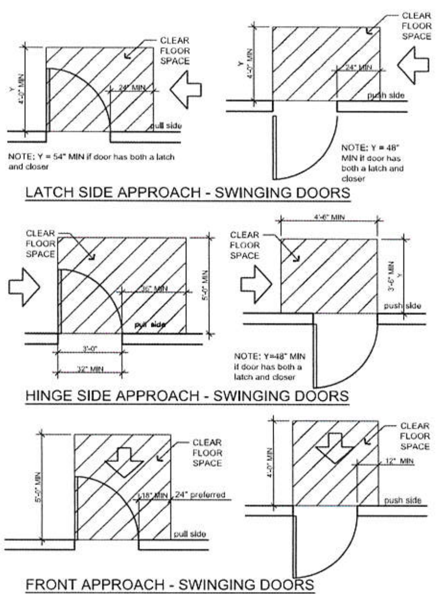
SECTION 605.2 - URINALS (16)
3/8" = 1'-0"



NOTE: Equipment permitted in shaded area.

NOTE: Hot water and drain pipes shall be insulated or otherwise configured to protect against contact. Faucets shall comply with ADAGG.

SECTION 606 - LAVATORIES (11)
3/8" = 1'-0"



NOTE: Y = 54" MIN if door has both a latch and closer

NOTE: Y = 48" MIN if door has both a latch and closer

LATCH SIDE APPROACH - SWINGING DOORS

NOTE: Y=48" MIN if door has both a latch and closer

HINGE SIDE APPROACH - SWINGING DOORS

FRONT APPROACH - SWINGING DOORS

SECTION 404 - DOORS (13)
3/8" = 1'-0"

ENTRANCES

ADAGG SECTION 216.6 - ENTRANCES
Accessible entrances, when not all are accessible, shall be identified by the International Symbol of Accessibility. Inaccessible entrances shall have directional signage to indicate the route to the nearest accessible entrance.

ADAGG SECTION 703.1 - SIGNS
Signage shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.

ACCESSIBLE ROUTE - EXTERIOR

ADAGG SECTION 403.5.1 - CLEAR WIDTH
The clear width of walking surfaces shall be 36" minimum.

ADAGG SECTION 403.3 - SLOPE
The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.

ADAGG 705 - DETECTABLE WARNINGS
Detectable warnings shall consist of a surface of truncated domes. Truncated domes in a detectable warning surface shall have a base diameter of 0.9" minimum and 1.4" maximum, a top diameter of 50% of the base diameter minimum to 65% of the base diameter maximum, and a height of 0.2". Truncated domes in a detectable warning surface shall have a center-to-center spacing of 0.65" minimum, measured between the most adjacent domes on a square grid. Detectable warning surfaces shall contrast visually with adjacent walking surfaces either light-on-dark, or dark-on-light.

ACCESSIBLE PARKING

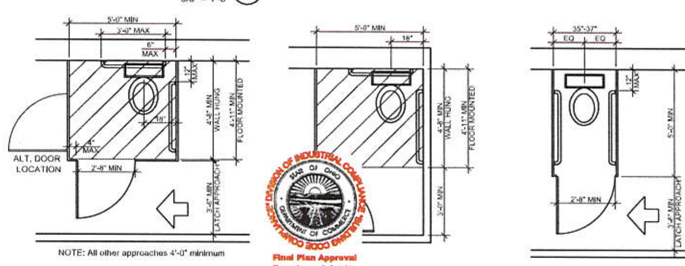
ADAGG SECTION 502.2 - VEHICLE SPACES
Car parking spaces shall be 96" wide minimum and van parking spaces shall be 132" wide minimum, shall be marked to define the width, and shall have an adjacent access aisle complying with 502.3.

ADAGG SECTION 503.3.1 & 503.3.2 - PASSENGER LOADING ZONES
Access aisles serving vehicle pull-up spaces shall be 60" wide minimum. Access aisles shall extend the full length of the vehicle pull-up spaces they serve.

ADAGG SECTION 208.2.4 & 502.2 - VAN PARKING SPACES
For every six or fraction of six parking spaces require at least one van parking space. Van parking spaces shall be 132 inches wide minimum, shall be marked to define the width, and shall have an adjacent access aisle.

ADAGG SECTION 502.6 - IDENTIFICATION
Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Sign identifying van parking spaces shall contain the designation "van accessible". Signs shall be 60 inches minimum above the finished floor or ground surface measured to the bottom of the sign.

ACCESSIBILITY STANDARDS (7)



NOTE: All other approaches 4'-0" minimum

STANDARD STALLS

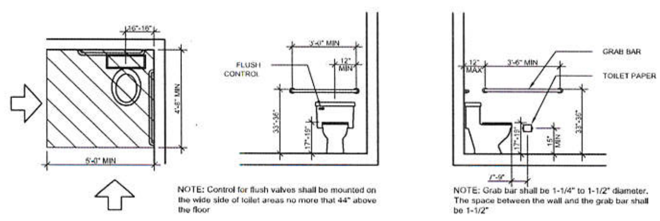
ALTERNATE STALL

CPA # 2018020527 - April 20, 2018

Final Plan Approval Examiner: J. Laske

SECTION 604.8.1.1 - TOILET STALLS (6)
3/8" = 1'-0"

NOTE:
THESE DRAWINGS ARE FOR GENERAL MOUNTING CLEARANCE REFERENCE ONLY. SEE PLANS FOR CONFIGURATIONS. REFER TO PLUMBING DRAWINGS FOR FIXTURE TYPES. ALL DIMENSIONS SHALL CONFORM TO TEXAS ACCESSIBILITY STANDARDS.



NOTE: Control for flush valves shall be mounted on the wide side of toilet areas no more that 44" above the floor

CLEAR FLOOR SPACE

NOTE: Grab bar shall be 1-1/4" to 1-1/2" diameter. The space between the wall and the grab bar shall be 1-1/2"

HEIGHT REQUIREMENTS

SECTION 604.3.1 - WATER CLOSETS (5)
3/8" = 1'-0"

CURB RAMPS

ADAGG SECTION 406.2 - COUNTER SLOPES
Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20. The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.

ADAGG SECTION 406.4 - LANDINGS
Landings shall be provided at the tops of the curb ramps. The landing clear length shall be 36" minimum. The landing clear width shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing.

ADAGG SECTION 406.3 - SIDES OF CURBS RAMPS
Where provided, curb ramp flares shall not be steeper than 1:10.

SIGNAGE

ADAGG SECTION 216 - BUILDING SIGNS
Signs which designate permanent rooms and spaces shall comply with all sections of sections 206 and 703. Elements and spaces of accessible facilities which shall be identified by the International Symbol of Accessibility are parking spaces as reserved for individuals with disabilities, accessible passenger loading zones, accessible entrances when not all are accessible, and accessible toilet and bathing facilities when not all are accessible.

ADAGG SECTION 216.2 & 216.3 - BUILDING SIGNS
Signs which designate permanent rooms and spaces and other signs which provide direction to or information about functional spaces of the building shall comply with all sections of 703.5. (Building directories, menus, and all other signs which are temporary are not required to comply.)

ADAGG SECTION 703.2.4 - CHARACTER PROPORTION
Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I".

ADAGG SECTION 703.2 703.3- RAISED AND BRAILED CHARACTERS
Raised characters shall be 1/32" minimum above their background. Characters shall be uppercase, sans serif, and shall not be italic, oblique, script, highly decorative, or of other unusual forms. Braille Characters shall be contracted (Grade 2).

Character height measured vertically from the baseline of the character shall be 5/8" minimum and 2" maximum based on the height of the uppercase letter "1"

ADAGG SECTION 703.5.1 - FINISH AND CONTRAST
Characters and their background shall have a non-glare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

HANDRAILS AND GRAB BARS

ADAGG SECTION 609.3 SPACING
The space between the wall and the grab bar shall be 1 1/2". The space between the grab bar and projecting objects above shall be 12" minimum.

ADAGG SECTION 609.2.1 & 505.7.1 CIRCULAR CROSS SECTION
Grab bars and handrail gripping surfaces with circular cross sections shall have an outside diameter of 1 1/4" minimum and 2" maximum.

ADAGG SECTION 505.7.2 & 609.2.2 NON-CIRCULAR CROSS SECTIONS
Handrail gripping surfaces with a non-circular cross section shall have a perimeter dimension of 4" minimum and 6 1/4" maximum, and a cross-section dimension of 2 1/4" maximum. Grab bars with non circular cross sections shall have a cross section dimension of 2" maximum and a perimeter dimension of 4" minimum and 4.8" maximum.

ADAGG SECTIONS 405.5 - CLEAR WIDTH
The minimum clear width of a ramp run, where handrails are provided, shall be 36" min between handrails.

ADAGG SECTION 609.8 - STRUCTURAL STRENGTH
Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds is applied at any point on the grab bar, fastener, mounting device, or supporting structure.

ADAGG SECTION 505.8 & 609.5 - SURFACE HAZARDS
Handrails, Grab bars, and any wall or other surfaces adjacent to grab bars and handrails shall be free of sharp or abrasive elements and shall have rounded edges

DOORS

ADAGG SECTION 404.2.3 - CLEAR WIDTH
Door openings shall provide a clear width of 32" minimum. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24" deep shall provide a clear opening of 36" minimum. There shall be no projections into the required clear opening width lower than 34" above the finish floor or ground. Projections into the clear opening width between 34" and 80" above the finish floor or ground shall not exceed 4 inches.

ADAGG SECTION 404.2.5 - THRESHOLDS
Thresholds, if provided at doorways, shall be 1/2" high maximum. Raised threshold and changes in level at doorways floor level changes at accessible doorways shall comply with 302 and 303.

ADAGG SECTION 404.2.7 - DOOR AND GATE HARDWARE
Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with 309.4. Operable parts of such hardware shall be 34" minimum and 48" maximum above the finish floor or ground. Where sliding doors are in the fully open positions, operating hardware shall be exposed and usable from both sides.

ADAGG SECTION 404.2.8.1 - DOOR CLOSERS AND GATE CLOSERS
Door closer's and gate closer's shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.

ADAGG SECTION 404.2.9 - DOOR AND GATE OPENING FORCE
The maximum force pertains to the continuous application of force necessary to fully open a door, not the initial force needed to overcome the inertia of the door. It does not apply to the force required to retract bolts or to disengage other devices used to keep the door in a closed position.

ACCESSIBILITY STANDARDS (1)

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MBA Construction Co.

IEA WHITE - HAVILAND
O&M BUILDING
PAULDING COUNTY, OH

SHEET:
ADA STANDARD MOUNTING HEIGHTS

REVISIONS:
0

TL: JRR / DE: NDK

DATE: 01-26-18

PROJECT:
MB184009

SHEET:
A0.01

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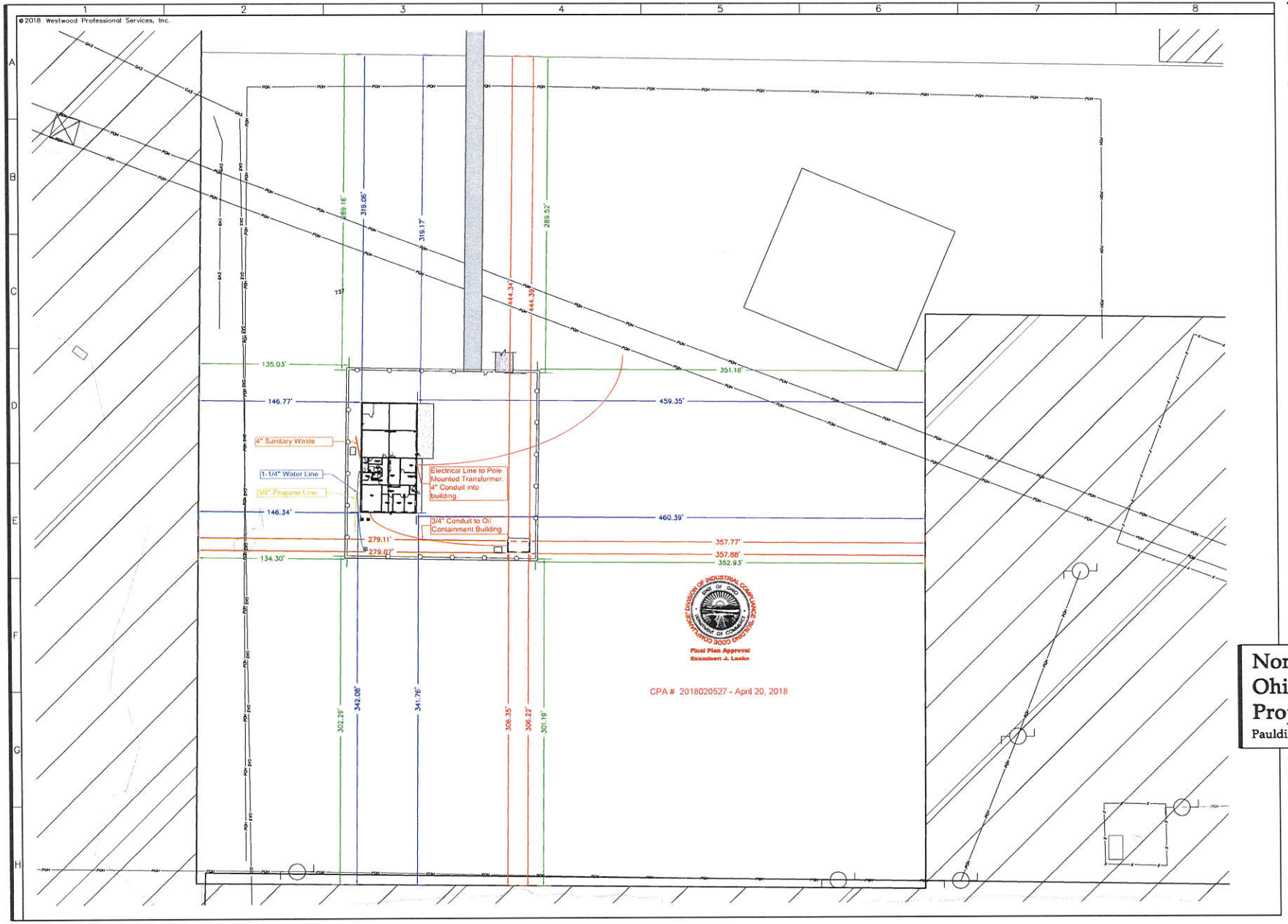

Westwood

Phone (952) 937-5150 7699 Anagram Drive
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Westwood Professional Services, Inc.

Designed: KLG
Checked: SJB
Drawn: KLG
As-Built Drawing:

Revisions:

#	DATE	DESCRIPTION

Prepared for:

WHITE

3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831

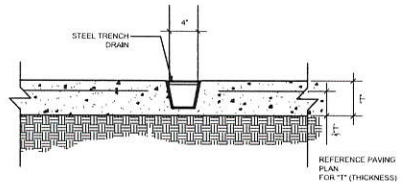
Northwest Ohio Wind Project

Paulding, Ohio

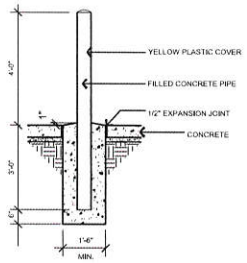
O & M
Building Dimension
Exhibit

Date: 03/20/2018
Sheet: 1 OF 1

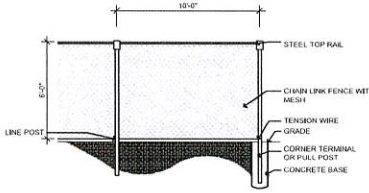
0007188 O&M EXHIBIT-BLDG Layout.dwg



TRENCH DRAIN DETAIL (15)
1/2" = 1'-0"



BOLLARD DETAIL (14)
1/2" = 1'-0"



CHAIN LINK FENCE DETAIL (13)
1/4" = 1'-0"

SYMBOL LEGEND

CONCRETE

GENERAL NOTES

WHERE APPLICABLE :

ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 1:50 SLOPE IN EITHER DIRECTION

ACCESSIBLE ROUTES FROM PARKING TO BUILDING SHALL NOT EXCEED 1:20 SLOPE

NO CROSS SLOPES SHALL EXCEED 1:50 (2.0% SLOPE) OR 1/4" PER FOOT IN ANY LOCATION

GENERAL NOTES (11)

GENERATOR

UMC 506.9.2 GENERATOR EXHAUST OUTLETS SHALL BE 10' MIN FROM PROP LINES; 3' FROM EXT WALLS OR ROOF, 10' FROM BUILDING OPENINGS.

UTILITIES

FOR REFERENCE ONLY:

ELECTRIC: PERMANENT POWER SERVICE PROVIDED BY COMPANY
WATER: WATER WELL ALLOWANCE INCLUDED PER CONTRACT
SEWER: SEPTIC SYSTEM INSTALLATION ALLOWANCE INCLUDED PER CONTRACT
TELECOM: PERMANENT TELECOM SERVICE PROVIDED BY COMPANY
INTERNET: PERMANENT INTERNET SERVICE PROVIDED BY COMPANY

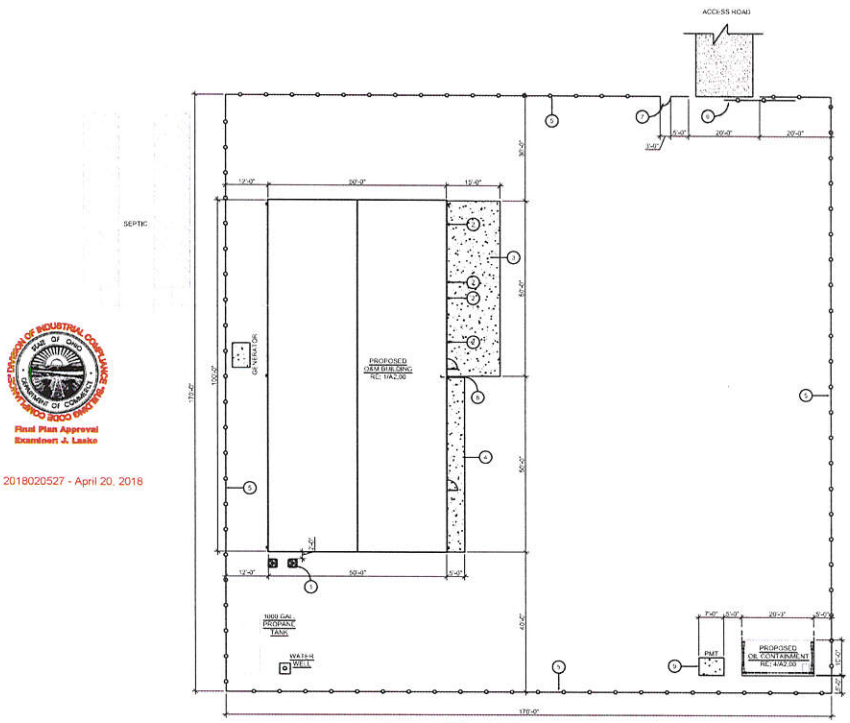
UTILITIES NOTES (10)

DIVISION OF INDUSTRIAL COMPLIANCE
BUILDING CODE COMPLIANCE
STATE OF OHIO
DEPARTMENT OF COMMERCE
Final Plan Approval
Examiner J. Laske
CPI # 2018020527 - April 20, 2018

KEY NOTES

1. LOCATION OF AHUS - PROVIDE FIBERGLASS PAD AS RECOMMENDED BY MANUFACTURER - SHIELD LINES - ADEQUACY OFFSET AHU FROM BUILDING TO AVOID SNOW DAMAGE
2. PROVIDE NEW 6" ROUND, 48" HIGH CONCRETE FILLED PIPE BOLLARD, PLASTIC YELLOW CAP (TYPICAL) - RE: 15/A1.01
3. PROVIDE 15'-0" WIDE x 50'-0" LONG LOADING APRON
4. PROVIDE 5'-0" WIDE CONCRETE SIDEWALK WITH CONTROL JOINTS AT 4'-0" O.C. (TYP.)
5. PROVIDE 8' HIGH, 2" MESH TYPE, ZINK COATED, 9GA STEEL WIRE FENCE - RE: 13/A1.01
6. PROVIDE 20' WIDE GATED OPENING EQUIPPED WITH A SINGLE CANTILEVERED SLIDING GATE - MANUAL OPERATION
7. PROVIDE 3'-0" WIDE MAN GATE NEXT TO MAIN GATE
8. PROVIDE 4" WIDE TRENCH DRAIN AT CONCRETE - RE: 15/A1.00

KEY NOTES (9)



ARCHITECTURAL SITE PLAN FOR REFERENCE ONLY - CIVIL WORK BY OTHERS.

ARCHITECTURAL SITE PLAN (1)
1" = 30'

RAYBURN DONALSON
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(713) 642 - 7300

STATE OF OHIO
RAYBURN DONALSON
REGISTERED ARCHITECT

WARNING
RAYBURN DONALDSON
THE ARCHITECT HAS AUTHORIZED THE ENGINEER TO PROVIDE THE ELECTRICAL, MECHANICAL, PLUMBING, AND STRUCTURAL DESIGN FOR THIS PROJECT.

MBA Construction Co.

IEA WHITE - HAVILAND O&M BUILDING

PAULDING COUNTY, OH

SHEET:
SITE PLAN

REVISIONS:

	04.17.18 CLIENT REVIEW
	04.20.18 CIVIL REVIEW
	1.09.18 TECH REVIEW
0	04.13.18 ISSUE FOR PERMIT

TL: JRR / DE: NDK

DATE: 01-26-18

PROJECT:
MB184009

SHEET:
A1.00

MEP NOTES

REFERENCE MEP DRAWINGS FOR ALL SANITARY TIE INS AND CLEAN OUTS TO INDIVIDUAL FIXTURES AND FLOOR DRAINS

VERIFY TYPE AND SIZE OF ALL PLUMBING FIXTURES WITH CONTRACTOR

CONTRACTOR TO PROVIDE CONNECTIONS FOR ALL OWNER PROVIDED APPLIANCES WHERE NOTED

EGRESS NOTE

ALL DOORS AT GRADE OR PROVIDED WITH ACCESSIBLE LANDING. REFER TO CIVIL PLANS FOR SIDEWALKS AND LANDINGS AT GRADE. MAINTAIN NOT MORE THAN 1/2" CHANGE IN LEVEL BOTH SIDES OF THRESHOLD - TYPICAL ALL DOORS.

STRUCTURAL NOTE

BAY DIMENSIONS SHOWN FOR REFERENCE ONLY - RE; PEMB DRAWINGS FOR EXACT SIZES AND BUILDING SPECIFICATIONS - FINAL DIMENSIONS SUBJECT TO CHANGE

GENERAL NOTES (10)

FIRE-RESISTANCE RATING REQUIREMENTS, HOURS (IBC TABLE 601)

TYPE IIB CONSTRUCTION	REQUIRED RATING (HOURS)	PROVIDED RATING (HOURS)
PRIMARY STRUCTURAL FRAME	0	0
BEARING WALLS - EXTERIOR	0	0
BEARING WALLS - INTERIOR	0	0
NONBEARING WALLS AND PARTITIONS - INTERIOR	0	0
FLOOR CONSTRUCTION/SECONDARY MEMBERS	0	0
ROOF CONSTRUCTION/SECONDARY MEMBERS	0	0

FIRE ALARM AND DETECTION REQUIREMENTS - NON SPRINKLERED

MANUAL FIRE ALARM
B; 0 < 500 OCCUPANTS = NOT REQUIRED PER IFC 907.2.2
F; 0 < 500 OCCUPANTS = NOT REQUIRED PER IFC 907.2.2
ALARM MONITORING
NOT REQUIRED FOR NON-SPRINKLERED BUILDINGS

AUTOMATIC FIRE DETECTION SYSTEM
B: NOT REQUIRED PER IFC 907.2.2
F: NOT REQUIRED PER IFC 907.2.2

OCCUPANT NOTIFICATION
NOT REQUIRED PER 907.2.2

FIRE PROTECTION NOTES (12)

KEY NOTES

1. BUILD NEW RESTROOMS AS INDICATED - MUST CONFORM TO ALL REQUIREMENTS OF THE IBC AND TAS STANDARDS - RE: A6.00
2. PROVIDE 10'-0" LINEAR FEET UPPER AND LOWER CABINETS WITH LAMINATE COUNTERTOP, 4" LAMINATE BACKSPLASH, DOUBLE SINK, 24" REFRIGERATOR, (1) COUNTER TOP MICROWAVE, 24" RANGE, AND 24" RANGE HOOD - RE: MEP FOR SPECS - RE: 3/A6.00
3. PROVIDE FLOOR MOP SINK - 24" WIDE x 24" LONG x 14" DEEP
4. PROVIDE EYE WASH FOUNTAIN AT NOTED LOCATION - RE: MEP
5. PROVIDE FLOOR DRAIN AT NOTED LOCATION - SLOPE TO DRAIN MINIMUM OF 4'-0" x 4'-0" AREA FROM DRAIN
6. PROVIDE WATER HEATER - RE: MEP
7. INSTALL ELECTRIC WALL HEATER AT EXTERIOR ENTRANCE VESTIBULE - RE: MEP & A6.00
8. INSTALL (4) ELECTRIC UNIT HEATERS IN WAREHOUSE AREA - RE: MEP
9. INSTALL 10'-0" TALL 24g LINER PANELS AT EXTERIOR WALL - L BRACKET AT BOTTOM - NO TRIM AT TOP
10. INSTALL 24g LINER PANEL ON WAREHOUSE SIDE OF DEMISING WALL TO DECK
11. INSTALL 10'-0" TALL CHAIN LINK CAGE WITH PERSONNEL GATE & CHAIN LINK CEILING AROUND SMALL PARTS ENCLOSURE
12. INSTALL VERTICAL TANK AIR COMPRESSOR IN CORNER OF SHOP - FINAL LAYOUT BY OWNER - LOCATE IN FIELD
13. INSTALL AIR LINES FROM AIR COMPRESSOR TO QUICK CONNECT COUPLINGS AT AIR HOSE REELS OR WORK STATIONS - FINAL LAYOUT BY OWNER - LOCATE IN FIELD
14. OIL CONTAINMENT PIT WALLS TO BE 6" ABOVE FINISHED GRADE OF YARD - RE: STRUCT
15. OIL SHED FLOORING TO SLOPE TO SUMP - REMOVABLE GALVANIZED WELDED BAR GRATING OVER SUMP - RE: STRUCT
16. INSTALL FILLED PIPE BOLLARD AT NOTED LOCATIONS - RE: 15/A1.01
17. INDICATES INSULATED OVERHEAD DOOR AS SCHEDULED
18. PROVIDE BLOCKING AT WET WALLS - RE: A7.03'S
19. PROVIDE FREEZE RESISTANT HOSE BIBS AT NOTED LOCATION
20. PROVIDE SOLID SURFACE WINDOW SILLS
21. PROVIDE WELDING PLUG AT NOTED LOCATION
22. APPLY CONCRETE HARDENER AT SHOP FLOOR

KEY NOTES (10)

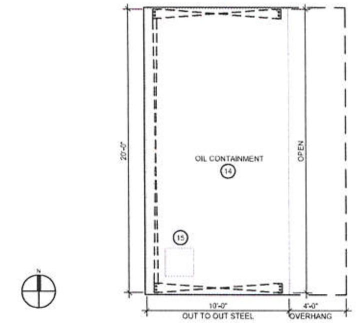
OFA # 2018020527 - April 20, 2018

DIVISION OF INDUSTRIAL COMPLIANCE "BUILDING CODE COMPLIANCE" STATE OF OHIO DEPARTMENT OF COMMERCE
Final Plan Approval
Examiner: J. Laske

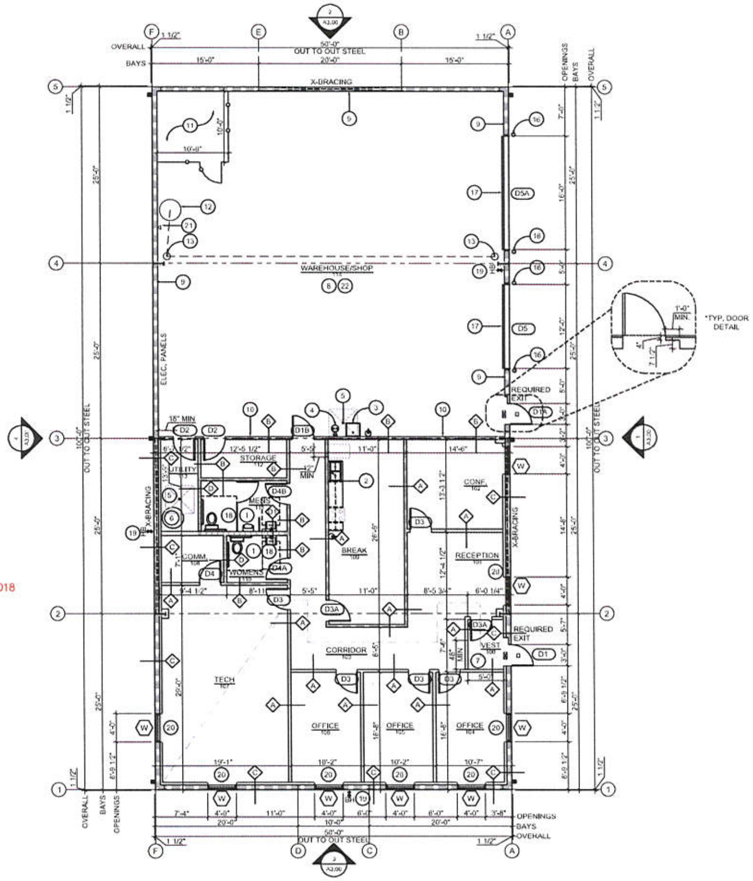
LEGEND

(X)	INDICATES GLAZING TYPE - RE:A7.00 FOR SCHEDULE/ELEVATIONS
◇	INDICATES WALL TYPE - RE:A7.00 FOR SCHEDULE/ELEVATIONS
DX	INDICATES DOOR TYPE - RE:A7.00 FOR SCHEDULE/ELEVATIONS
	INDICATES TYPICAL WALL
	INDICATES INSULATED WALL
	INDICATES WET WALL - RE: A7.00
	DENOTES FIRE EXTINGUISHER LOCATIONS - EXTINGUISHERS TO BE SURFACE MOUNTED IN WALL - MAXIMUM TRAVEL DISTANCE TO EXTINGUISHER IS 75 FEET
HB	HOSE BIB - FREEZE RESISTANT - RE: MEP

LEGEND (9)



FLOOR PLAN - SHED (4)
1/4" = 1'-0"



FLOOR PLAN - O&M BUILDING (1)
1/8" = 1'-0"

RAYBURN DONALSON
2118 LAMAR ST., STE. 200
HOUSTON, TEXAS 77003
(713) 842 - 7500

STATE OF OHIO
RAYBURN DONALSON
ARC. 1219873
REGISTERED ARCHITECT

03/15/18

MBA Construction Co.

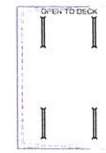
IEA WHITE - HAVILAND
O&M BUILDING

PAULDING COUNTY, OH

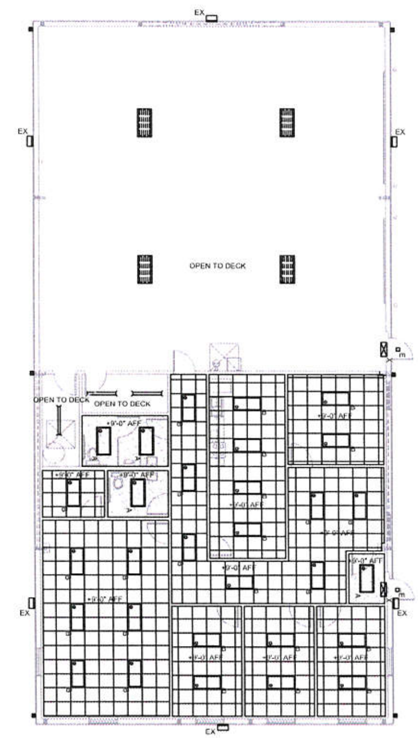
SHEET:
FLOOR PLAN AND NOTES

REVISIONS:

TL: JHH / DE: NDK
DATE: 01-26-18
PROJECT:
MB184009
SHEET:
A2.00



RCP - STORAGE SHED (14)



REFLECTED CEILING PLAN (1)
1/8" = 1'-0"

REFLECTED CEILING PLAN LEGEND

A	ACRYLIC PRISMATIC 2' X 4' LIGHT FIXTURE - LED INDIRECT - SURFACE MOUNTED
B	ACRYLIC PRISMATIC 2' X 4' LIGHT FIXTURE - LED INDIRECT - CEILING GRID MOUNTED
EX	400 WATT SUPER METAL HALIDE WALL PACK WITH PHOTOCELL
	4' STRIP LIGHT FLUORESCENT FIXTURE - RATED FOR EXTERIOR EXPOSURE
	2' x 2' SUSP. ACOUST. TILE CEILING AND GRID SYSTEM (SEE FINISH SCHEDULE) - BREAK GRID AND CENTER IN EACH ROOM AS SHOWN
	GYPSUM WALLBOARD CEILING
	T5 HIGH OUTPUT HIGH BAY SIX LAMP FIXTURE - LED - SUSPENDED AT 13' A.F.F.
X	ILLUMINATED EXIT SIGN
E	EXTERIOR EGRESS LIGHTING ON TIMER AND PHOTOCELL

LEGEND (10)

STATE OF OHIO DEPARTMENT OF COMMERCE — DIVISION OF INDUSTRIAL COMPLIANCE — BUILDING CODE COMPLIANCE
Final Plan Approval
Examiner: J. Laske
CPA # 2018020527 - April 20, 2018

RCP GENERAL NOTES

REFER TO MECHANICAL, PLUMBING & ELECTRICAL DRAWINGS FOR NUMBER, SIZE & ROOM LOCATION OF ACCESS DOORS REQUIRED IN HARD CEILINGS OR WALL ACCESS ABOVE SUSP. ACOUST. TILE CLGS.

CEILING PLANS INDICATE SUGGESTED OR PREFERRED SUSPENSION GRID LAY-OUTS. ALL CONTRACTORS TO BE RESPONSIBLE FOR CROSS COORDINATION BETWEEN MECHANICAL, ELECTRICAL, PLUMBING ITEMS AND THEIR SCOPE OF WORK

UNLESS OTHERWISE NOTED ALL PLASTER AND G.D.W. CEILINGS AND/OR SOFFITS TO BE PAINTED.

EGRESS LIGHTING GENERAL NOTES

MEANS OF EGRESS ILLUMINATION LEVELS SHALL NOT BE LESS THAN 1 FOOT-CANDLES AT THE WALKING SURFACE.

THE EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR A MINIMAL DURATION OF 90 MINUTES.

NOTE: EMERGENCY LIGHTING AND EXIT SIGNS TO COMPLY WITH UL 924. SEE ELECTRICAL DRAWINGS

EXIT SIGNAGE

EXIT DOORS SHALL BE MARKED BY AN APPROVED EXIT SIGN READILY VISIBLE FROM ANY DIRECTION OF EGRESS TRAVEL. THE PATH OF EGRESS TRAVEL TO EXITS AND WITHIN EXITS SHALL BE MARKED BY A READILY VISIBLE EXIT SIGN TO CLEARLY INDICATE THE DIRECTION OF EGRESS TRAVEL. EXIT SIGN PLACEMENT SHALL BE SUCH THAT NO POINT IN AN EXIT ACCESS CORRIDOR OR EXIT PASSAGEWAY IS MORE THAN 100' FROM THE NEAREST VISIBLE EXIT SIGN.

GENERAL NOTES (9)

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STATE OF OHIO — RAYBURN DONALSON — ARC. 1218873 — REGISTERED ARCHITECT
03/13/18

MBA Construction Co.

IEA WHITE - HAVILAND
O&M BUILDING
PAULDING COUNTY, OH

SHEET: REFLECTED CEILING PLAN

REVISIONS:

TL: JHH / DE: NDK
DATE: 01-26-18
PROJECT: MB184009
SHEET: A2.10

ROOF LEGEND	
☒ DS	PROVIDE NEW EXTERIOR 6"x6" METAL DOWNSPOUTS - SURFACE DRAIN

LEGEND (10)

ROOF DRAINAGE CALCULATIONS
BLDG 1: 5,000 S.F./ 150 S.F. = 33 / 36 = .92 REQUIRED AT 6" x 6" 6 DOWNSPOUTS PROVIDED AT 6" x 6"

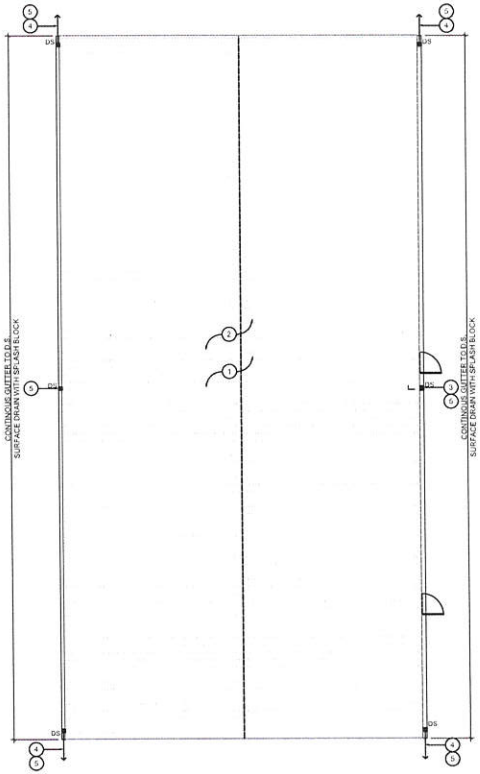
ROOF KEY NOTES	
1	ROOF IS NOT TO HAVE ANY OPENINGS - ALL VENTS, ETC, SHOULD EXIT THROUGH SIDE WALLS
2	PROVIDE 26GA R-PANEL ROOF
3	PROVIDE 4" TRENCH DRAIN AT DOWNSPOUT - RE:1/A1.60
4	DOWNSPOUT DISCHARGE DIRECTION
5	HEAT TAPE TBD - ADD ALT - CONFIRM WITH DESIGN/BUILDER

ROOF NOTES (9)

STATE OF OHIO DEPARTMENT OF COMMERCE DIVISION OF INDUSTRIAL COMPLIANCE BUILDING CODE COMPLIANCE

Final Plan Approval
Examiner J. Laske

CPC # 2018020527 - April 20, 2018



ROOF PLAN - O&M BUILDING (1)
1/8" = 1'-0"

RAYBURN DONALSON
2118 LANAR ST., STE. 200
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(713) 842-7500

STATE OF OHIO
RAYBURN DONALSON
REG. 18198
REGISTERED ARCHITECT

10/15/18

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MBA Construction Co.

IEA WHITE - HAVILAND
O&M BUILDING

PAULDING COUNTY, OH

SHEET:
ROOF PLAN AND NOTES

REVISIONS:

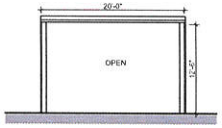
	5/21/18 SPC REVIEW
	5/30/18 TPC REVIEW
	10/08/18 100% REVIEW
0	10/15/18 ISSUE FOR PERMIT

TL: JRR / DE: NDK

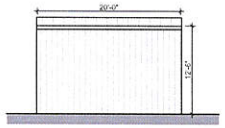
DATE: 01-26-18

PROJECT:
MB184009

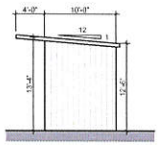
SHEET:
A2.20



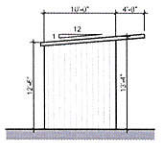
OIL SHED - NORTH ELEVATION (12)
1/8" = 1'-0"



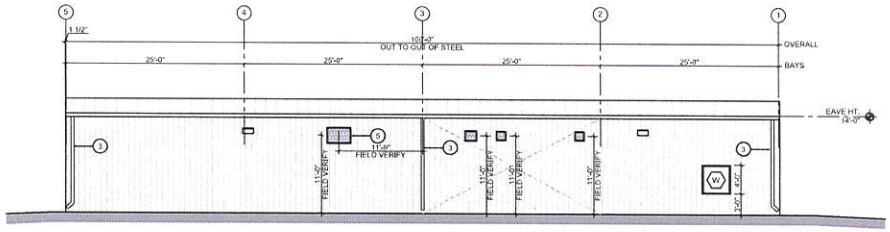
OIL SHED - SOUTH ELEVATION (11)
1/8" = 1'-0"



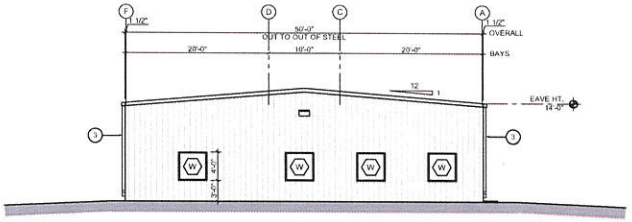
OIL SHED - WEST ELEVATION (10)
1/8" = 1'-0"



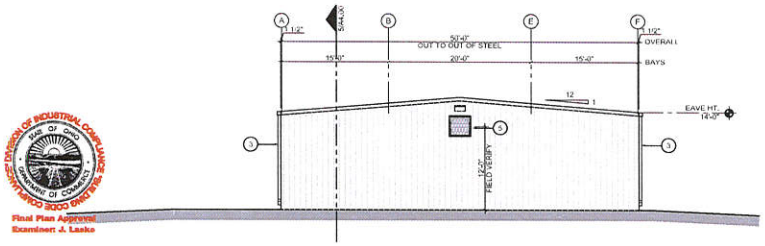
OIL SHED - EAST ELEVATION (9)
1/8" = 1'-0"



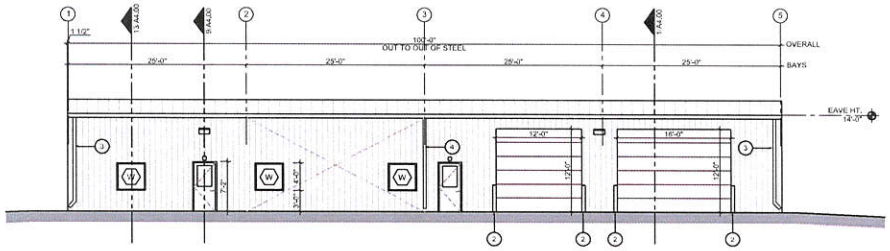
WEST ELEVATION (4)
1/8" = 1'-0"



SOUTH ELEVATION (3)
1/8" = 1'-0"



NORTH ELEVATION (2)
1/8" = 1'-0"



EAST ELEVATION (1)
1/8" = 1'-0"

MATERIAL LEGEND	
VERTICALLY MOUNTED 26 GA R PANEL	26GA R-PANEL WITH GALVALUME FINISH

FINISH SCHEDULE		
VERTICAL METAL PANEL	COLOR:	LIGHT STONE
GUTTER, DOWNSPOUT, TRIM	COLOR:	KOKO BROWN
HM DOOR	COLOR:	TBD
OH DOOR	COLOR:	WHITE
WALL PACK	COLOR:	MANUFACTURER STANDARD COLOR FINISH

LEGEND AND SCHEDULES (14)

ELEVATION KEY NOTES
(1) LED EXTERIOR WALL PACK ON PHOTOCELL - RE: MEP, RCP
(2) PROVIDE NEW 6" ROUND, 48" HIGH CONCRETE FILLED PIPE BOLLARD WHERE SHOWN - COLOR TBD (TYP) - RE: 3/A1.01
(3) PROVIDE SURFACE MOUNTED DOWNSPOUT - SURFACE DRAIN WITH SPLASHBLOCK
(4) PROVIDE SURFACE MOUNTED DOWNSPOUT - DRAIN TO TRENCH - RE: A1.00
(5) APPROXIMATE LOCATION OF LOUVER - COLOR TBD - FIELD VERIFY EXACT MOUNTING HEIGHT - RE: MEP FOR EXACT SIZE

KEY NOTES (13)

DIVISION OF INDUSTRIAL COMPLIANCE
STATE OF OHIO
DEPARTMENT OF COMMERCE
BUILDING CODE COMPLIANCE
Final Plan Approval
Examiner # Lacke
Plan # 2018020527 - April 20, 2018

RAYBURN DONALSON
2118 LAMAR ST., STE. 200
HOUSTON, TEXAS 77003
(713) 642 - 7500

STATE OF OHIO
RAYBURN DONALSON
ARC. 121875
REGISTERED ARCHITECT

03/14/18
RAYBURN DONALSON

MBA Construction Co.

IEA WHITE - HAVILAND O&M BUILDING

PAULDING COUNTY, OH

SHEET:
BUILDING ELEVATIONS

REVISIONS:

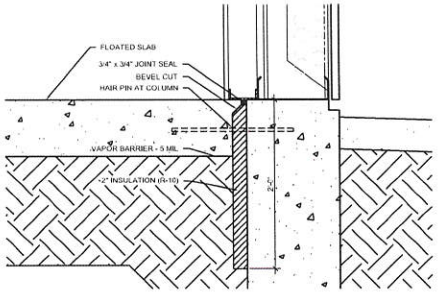
0	1st PERMIT PLAN REVIEW

TL: JRH / DE: NDK

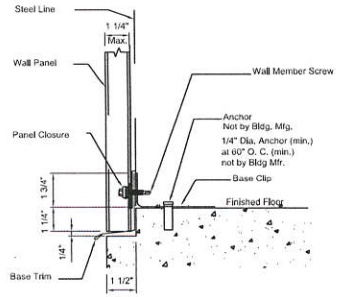
DATE: 01-26-18

PROJECT:
MB184009

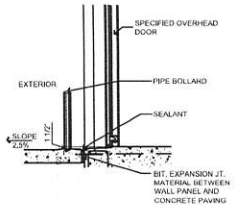
SHEET:
A3.00



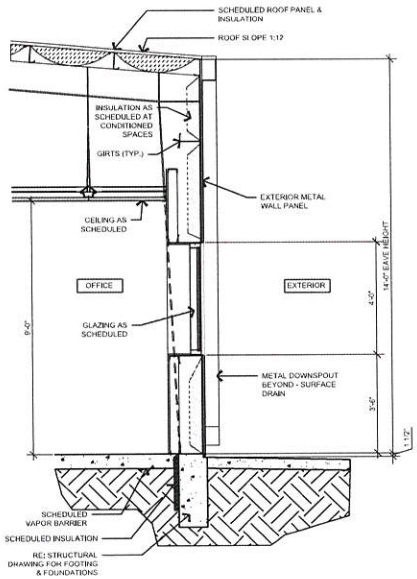
FOUNDATION INSULATION DETAIL (12)
1-1/2" = 1'-0"



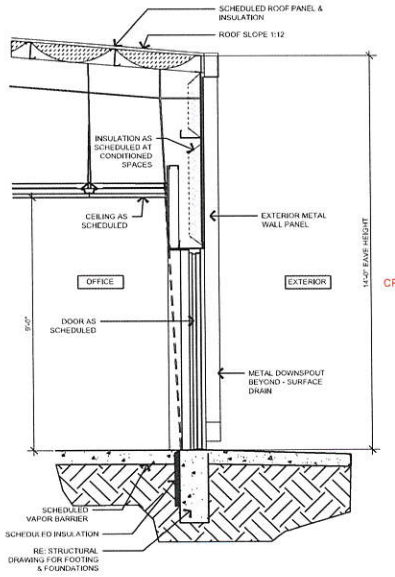
WALL PANEL DETAIL (8)
NTS



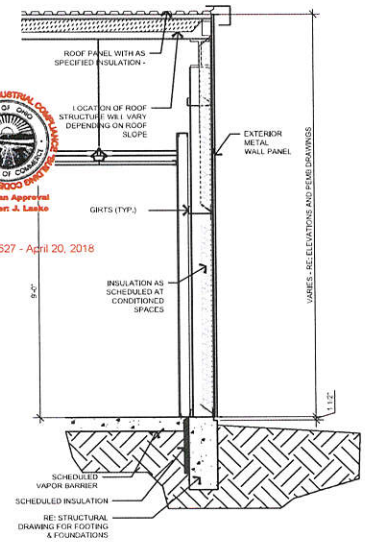
O.H. DOOR SILL DETAIL (4)
NTS



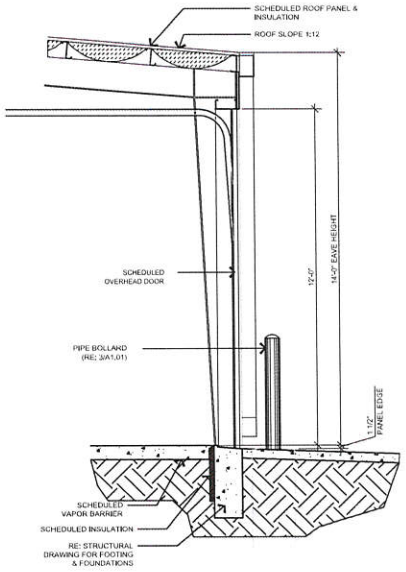
SIDE WALL SE3CTION (13)
1/2" = 1'-0"



SIDE WALL SECTION (9)
1/2" = 1'-0"



END WALL SECTION (5)
1/2" = 1'-0"



SIDE WALL OH DOOR (1)
1/2" = 1'-0"

CPA # 2018020527 - April 20, 2018

Final Plan Approval
Examiner: J. Lasko

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(713) 842-7500

STATE OF OHIO
RAYBURN DONALSON
REG. 5110073
REGISTERED ARCHITECT

RAYBURN DONALSON
ARCHITECTS

MBA Construction Co.

IEA WHITE - HAVILAND
O&M BUILDING
PAULDING COUNTY, OH

SHEET:
WALL SECTIONS AND NOTES

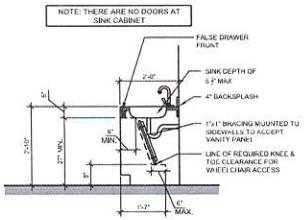
REVISIONS:
0

TL: JKR / DE: NDK

DATE: 01-26-18

PROJECT:
MB184009

SHEET:
A4.00



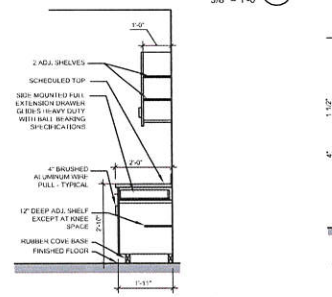
MILLWORK SECTION - SINK (8)
3/8" = 1'-0"

GENERAL NOTES

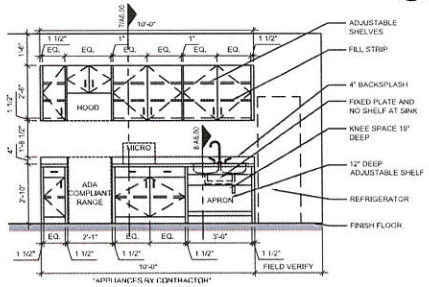
MAXIMUM SINK DEPTH - 6 1/2", ALL FAUCET HANDLES - LEVER TYPE

REFER TO ADAAG STANDARD MOUNTING HEIGHT DETAILS FOR EXACT ADAAG REQUIRED CLEARANCES AND MOUNTING HEIGHTS

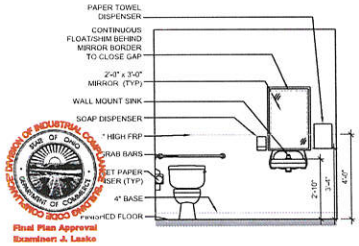
GENERAL NOTES (4)



MILLWORK SECTION - BREAKROOM TYP (7)
3/8" = 1'-0"



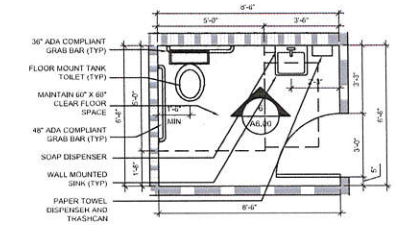
ELEVATION - MILLWORK - 109 (3)
3/8" = 1'-0"



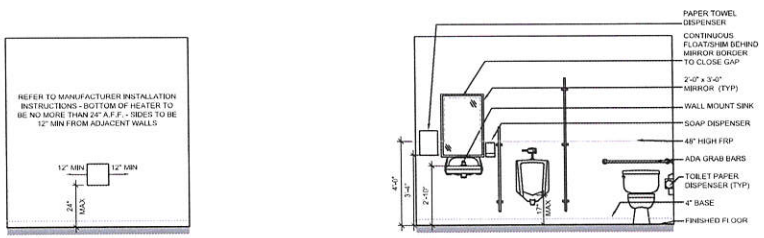
Final Plan Approval
Examiner J. Laske

CPA # 2018020527 - April 20, 2018

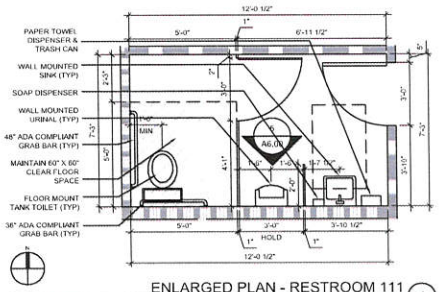
ELEVATION - RESTROOM 110 (6)
3/8" = 1'-0"



ENLARGED PLAN - RESTROOM 110 (2)
3/8" = 1'-0"



ELEVATION - RESTROOM 111 (5)
3/8" = 1'-0"



ENLARGED PLAN - RESTROOM 111 (1)
3/8" = 1'-0"

ELEVATION - VESTIBULE - WALL HEATER (9)
3/8" = 1'-0"

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STATE OF OHIO
RAYBURN DONALSON
REG. 12198
REGISTERED ARCHITECT
03-13-18

RAYBURN DONALSON
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MBA Construction Co.

IEA WHITE - HAVILAND
O&M BUILDING
PAULDING COUNTY, OH

SHEET:
ENLARGED R/R & DETAILS

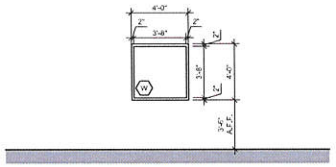
REVISIONS:
0 DATE:03-13-18 FOR PERMIT

TL: JRR / DE: [illegible]

DATE: 01-26-18

PROJECT:
MB184009

SHEET:
A6.00



GLAZING ELEVATION (10)
1/4" = 1'-0"

GLAZING SCHEDULE AND NOTES			
TAG	SIZE	TAG	SIZE
W	4'-0" x 4'-0"		

GLAZING SUBJECT TO HUMAN IMPACT LOADS AND IN ALL HAZARDOUS LOCATIONS SHALL COMPLY WITH I.B.C. SECTION 2406 (INCLUDING 2406.1, 2406.2, & 2406.3). STOREFRONT GLASS DOORS AND ADJACENT GLASS PANELS SHALL BE SAFETY/IMPACT RESISTANT GLASS.

ALL EXTERIOR GLAZING TO BE DOUBLE PANED, TEMPERED, TINTED, LOW-E - SYSTEM TO BE DESIGNED FOR LATEST ADOPTED EDITION OF APPLICABLE BUILDING CODES

ZONE 5A:
U FACTOR = .38 MAX
SHGC = PF < 0.2 = 0.48 MAX

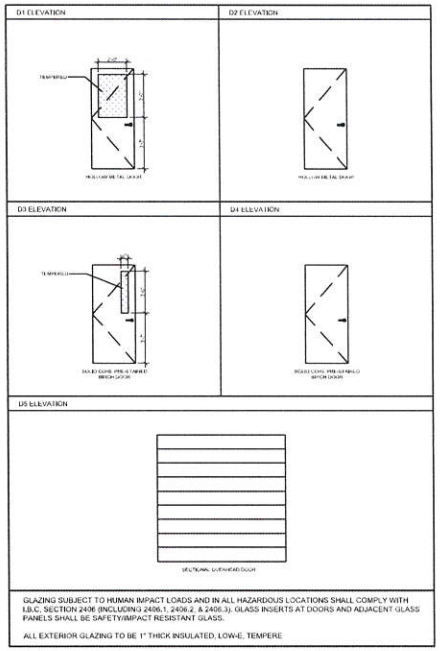
WINDOW SYSTEM TO BE VINYL WINDOW SYSTEM

GLAZING VENDOR TO FIELD VERIFY ALL MEASUREMENTS

GLAZING SCHEDULE (9)

DOOR HARDWARE SCHEDULE			
SET	QUANTITY	DESCRIPTION	REMARKS
HW-1			
HEAVY DUTY LOCKSET	1	HINGE	
	1	CLOSER	
	1	PANIC EXIT DEVICE AND LATCH	
	1	CYLINDERS	CYLINDER AND KEYING PROVIDED BY OWNER
	1	STRIKES	
	1	FLUSHBOLTS	
	1	STOPS	
	1	THRESHOLDS	
	1	WEATHERSTRIPPING	
HW-2			
PANIC - EXTERIOR	3	HINGE	
	1	PANIC DEVICE	
	1	MORTISE CYLINDER	CYLINDER AND KEYING PROVIDED BY OWNER
	1	THUMB	
	1	CLOSER	
	1 SET	SEALS	
	1	DRIP CAP	
	1	DOOR SWEEP	
	1	THRESHOLD	
HW-3			
INTERIOR LOCK SET	3	HINGE	
	1	1 STOP	
	1	LOCK	CYLINDER AND KEYING PROVIDED BY OWNER
	3	HINGE	
	1	1 STOP	
	1	DOOR SWEEP	
	SET	SEALS	
	1	LOCK	CYLINDER AND KEYING PROVIDED BY OWNER
DESIGNING SET	3	HINGE	
	1	1 STOP	
	1	DOOR SWEEP	
	1 SET	SEALS	
	1	CLOSER	
	1	LOCK	CYLINDER AND KEYING PROVIDED BY OWNER
HW-6			
PRIVACY - SINGLE USER RESTROOM	3	HINGE	
	2	1 STOP	
	1	THUMB LATCH - PRIVACY LOCK	
HW-7			
MULTI USER RESTROOM FURNITURE LOCK SET	3	HINGE	
	1	1 STOP	
	1	KICK PLATE	
	1	CLOSER	
HW-8			
PASSAGE	3	HINGE	
	1	STOP	
	* AT VESTIBULE CONDITION; PROVIDE 1" UNDERCUT AT DOOR FOR AIR RETURN		

DOOR HARDWARE (5)



GLAZING SUBJECT TO HUMAN IMPACT LOADS AND IN ALL HAZARDOUS LOCATIONS SHALL COMPLY WITH I.B.C. SECTION 2406 (INCLUDING 2406.1, 2406.2, & 2406.3). GLASS INSERTS AT DOORS AND ADJACENT GLASS PANELS SHALL BE SAFETY/IMPACT RESISTANT GLASS.

ALL EXTERIOR GLAZING TO BE 1" THICK INSULATED, LOW-E, TEMPERE

DOOR ELEVATIONS (3)
1/4" = 1'-0"

DOOR SCHEDULE					
NO.	SIZE	TYPE	FRAME	HARDWARE	REMARKS
D1	3'-0" x 7'-0"	EXTERIOR HOLLOW METAL	HOLLOW METAL	HARDWARE SET NO. 1	DOOR TO BE INSULATED U FACTOR = 0.25
D1A	3'-0" x 7'-0"	EXTERIOR HOLLOW METAL	HOLLOW METAL	HARDWARE SET NO. 2	DOOR TO BE INSULATED U FACTOR = 0.25
D1B	3'-0" x 7'-0"	INTERIOR HOLLOW METAL	HOLLOW METAL	HARDWARE SET NO. 3	DOOR TO BE INSULATED U FACTOR = 0.25
D2	3'-0" x 7'-0"	INTERIOR HOLLOW METAL	HOLLOW METAL	HARDWARE SET NO. 4	DOOR TO BE INSULATED U FACTOR = 0.25
D3	3'-0" x 7'-0"	SOLID CORE	TIMELY OR EQUAL	HARDWARE SET NO. 5	
D3A	3'-0" x 7'-0"	SOLID CORE	TIMELY OR EQUAL	HARDWARE SET NO. 6	
D4	3'-0" x 7'-0"	SOLID CORE	TIMELY OR EQUAL	HARDWARE SET NO. 5	
D4A	3'-0" x 7'-0"	SOLID CORE	TIMELY OR EQUAL	HARDWARE SET NO. 6	
D4B	3'-0" x 7'-0"	SOLID CORE	TIMELY OR EQUAL	HARDWARE SET NO. 7	
D5	12'-0" x 12'-0"	O.H. SECTIONAL DOOR			MANUAL OPERATION
D5A	10'-0" x 12'-0"	O.H. SECTIONAL DOOR			MANUAL OPERATION

NOTE 1: AT REQUIRED EXITS AND VESTIBULE EXIT DOORS PROVIDE A READILY VISIBLE SIGN ON EGRESS SIDE OR ADJACENT TO THE DOOR STATING "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED" PER IBC, SECTION 1008.1.8.3(#2)(2.2)

NOTE 2: ALL DOORS AND HARDWARE SHALL COMPLY WITH ALL SECTIONS OF THE TAS

NOTE 3: ALL EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE PER IBC, SECTION 1008.1.8

DOOR SCHEDULE (1)

RAYBURN DONALSON
2116 LAMAR ST., STE. 200
HOUSTON, TEXAS 77003
(713) 842 - 7500

STATE OF OHIO
RAYBURN DONALSON
REG. 37386
REGISTERED ARCHITECT

03-19-18

RAYBURN DONALSON
03-19-2018
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MBA Construction Co.

IEA WHITE - HAVILAND O&M BUILDING

PAULDING COUNTY, OH

SHEET:
DOOR/WINDOW SCHEDULES

REVISIONS:
0 ISSUED FOR PERMIT

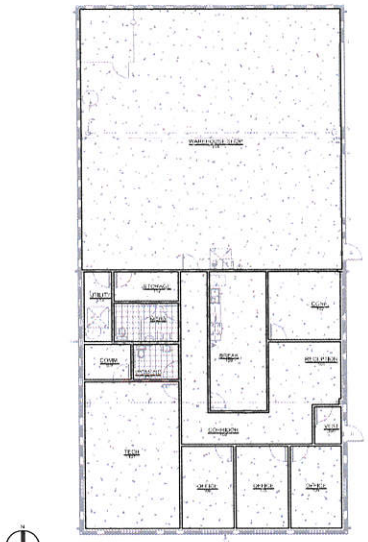
TL: JRR / DE: NDK

DATE: 01-26-18

PROJECT:
MB184009

SHEET:
A7.00

STATE OF OHIO DEPARTMENT OF COMMERCE DIVISION OF INDUSTRIAL COMPLIANCE
Plan Review Approval
Kenneth A. Lieske
CPI # 2018020527 - April 09, 2018



FINISH FLOOR PLAN 7
1/8" = 1'-0"

HATCH LEGEND

CT-1

CON-1

FINISH FLOOR PLAN 3
1/8" = 1'-0"

MATERIAL SCHEDULE

SYMBOL	MATERIAL	REMARKS
PT-1	PAINT; FIELD MANUFACTURER: TBD COLOR: TBD	EGGSHELL LATEX: 1. ONE COAT GYPSUM BOARD PRIMER, 1.1 MILS DFT. 2. ONE COAT TEXTURE, USG MULTI-PURPOSE TEXTURE FINISH 3. TWO COATS LATEX EGGSHELL, 1.6 MILS DFT PER COAT.
PT-2	PAINT; ACCENT MANUFACTURER: TBD COLOR: TBD	EGGSHELL LATEX: 1. ONE COAT GYPSUM BOARD PRIMER, 1.1 MILS DFT. 2. ONE COAT TEXTURE, USG MULTI-PURPOSE TEXTURE FINISH 3. TWO COATS LATEX EGGSHELL, 1.6 MILS DFT PER COAT.
PT-3	PAINT; CEILING MANUFACTURER: TBD COLOR: TBD	EGGSHELL LATEX: 1. ONE COAT GYPSUM BOARD PRIMER, 1.1 MILS DFT. 2. ONE COAT TEXTURE, USG MULTI-PURPOSE TEXTURE FINISH 3. TWO COATS LATEX EGGSHELL, 1.6 MILS DFT PER COAT.
FRP	FRP COLOR: TBD MANUFACTURER: TBD	
CON-1	CONCRETE; SEALER MANUFACTURER: TBD	
CON-2	CONCRETE; EPOXY FLOOR PAINT MANUFACTURER: BEHR - 1-PART COLOR: TBD	
CT-1	CERAMIC FLOOR TILE; COLOR: TBD MANUFACTURER: TBD	X" X X" TILE 1/16 INCH THICK, SLIP RESISTANT, FINISH MATCHING COVED WALL BASE
B-1	VINYL BASE - STANDARD TOE COLOR: TBD MANUFACTURER: ROPPE	
CNT-1	LAMINATE COUNTER TOP COLOR: TBD MANUFACTURER: TBD	1 1/4" THICK SOLID PARTICLEBOARD CORE W/ (HPL) BACKSPLASH MATCHING 4 INCH HIGH
SILL-1	WINDOW SILL; SOLID SURFACE COLOR: TBD MANUFACTURER: TBD	
MBL-1	LAMINATE BASE AND WALL CABINETS COLOR: TBD MANUFACTURER: TBD	
LP-1	LINER PANEL; 24 GAUGE COLOR: TBD MANUFACTURER: TBD	
ACT-1	SUSPENDED ACOUSTICAL CEILING SIZE: 24" x 24" EDGE: BEVEL TEGULAR OR SQUARE COLOR: WHITE	
ES	EXPOSED TO INTERIOR ROOF STRUCTURE	

* CONTRACTOR TO PROVIDE SAMPLES OF THE MANUFACTURER'S STANDARD LINE FOR ALL FINISHES LISTED FOR THE TENANT TO SELECT AND APPROVE. THE COLOR/FINISH PRIOR TO ORDERING AND INSTALLATION

MATERIAL SCHEDULE 9

STATE OF OHIO DIVISION OF INDUSTRIAL COMPLIANCE
Plan Approval
Examiner: Leslie
CPA # 2018029527 - April 20, 2018

ROOM FINISH SCHEDULE - OFFICE

NO.	SPACE	FLOOR	BASE	WALLS NORTH	WALLS EAST	WALLS SOUTH	WALLS WEST	CEILING S.C. TYPE	CEILING CLG. HT.
100	VESTIBULE	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	GYP-1	9'-0"
101	RECEPTION	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	9'-0"
102	CONFERENCE	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	9'-0"
103	CORRIDOR	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	9'-0"
104	OFFICE	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	9'-0"
105	OFFICE	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	9'-0"
106	OFFICE	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	9'-0"
107	TECH	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	9'-0"
108	COMMUNICATIONS	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	9'-0"
109	BREAK ROOM	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	9'-0"
110	WOMENS	CT-1	B-1	PT-1 FRP-1	PT-1	PT-1	PT-1 FRP-1	GYP-1	9'-0"
111	MENS	CT-1	B-1	PT-1	PT-1	PT-1 FRP-1	PT-1 FRP-1	GYP-1	9'-0"
112	STORAGE	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	ES-1	*
113	UTILITY	CON-1	B-1	PT-1	PT-1	PT-1	PT-1	ES-1	*
114	SHOP	CON-1	B-1*	LP-1	LP-1	PT-1	LP-1	ES-1	*

*BASE APPLIED ONLY TO GYPSUM WALLS IN SHOP AREA

ROOM FINISH SCHEDULES 5

FINISH NOTES

PER THE IBC, WALLS WITHIN TWO (2) FEET OF URINALS AND WATER CLOSETS SHALL HAVE A SMOOTH, HARD, NONABSORBENT SURFACE TO A HEIGHT OF FOUR (4) FEET A.F.F., AND EXCEPT FOR STRUCTURAL ELEMENTS, THE MATERIALS USED IN SUCH WALLS SHALL BE OF A TYPE THAT IS NOT ADVERSELY AFFECTED BY MOISTURE. ACCESSORIES SUCH AS GRAB BARS, TOWEL BARS, PAPER DISPENSERS AND SOAP DISHES PROVIDED ON OR WITHIN SUCH WALLS SHALL BE INSTALLED AND SEALED TO PROTECT STRUCTURAL ELEMENTS FROM MOISTURE.

TAPE, BED, TEXTURE, AND PAINT IN NEUTRAL COLORS

PROVIDE DOOR STOPS FOR ALL DOORS

ALLOW FOR $\frac{1}{2}$" TOLERANCE ON ALL ROUGH OPENINGS

ALL DOOR HARDWARE SHALL BE COMMERCIAL GRADE VERIFY FINISH WITH DESIGN BUILDER.

PROVIDE STANDARD RESTROOM ACCESSORIES INCLUDING MIRRORS, PAPER TOWEL DISPENSER, TOILET PAPER DISPENSERS, AND ADA GRAB BARS

RESTROOM SIGNAGE SHALL BE IN COMPLIANCE WITH ADAGG STANDARDS

OH DOORS, PADS, AND EXTERIOR PERSONNEL ENTRANCE DOORS MUST BE IN GOOD WORKING CONDITION, CLOSE TIGHTLY, BE RODENT PROOFED, AND SEALED AT THE SILL AND JAMB

ALL INTERIOR FINISH MATERIALS MUST COMPLY WITH IBC SECTION 803 THROUGH 805, SECTION 803.5, AND TABLE 803.5 - SEE BELOW FOR MINIMUM CLASS REQUIREMENTS:

INTERIOR FINISHES - CLASSIFICATION CHART

OCCUPANCY GROUP	EXIT ENCLOSURES, EXIT PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES
B - NON SPRINKLERED	B	B	C
F - NON SPRINKLERED	B	C	C

FINISH NOTES 1

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STATE OF OHIO
RAYBURN J. DONALSON
REG. 12118978
REGISTERED ARCHITECT
03/13/18

RAYBURN DONALSON
ARCHITECTS
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MBA Construction Co.

IEA WHITE - HAVILAND
O&M BUILDING
PAULDING COUNTY, OH

SHEET:
FINISH PLAN/ SCHEDULES

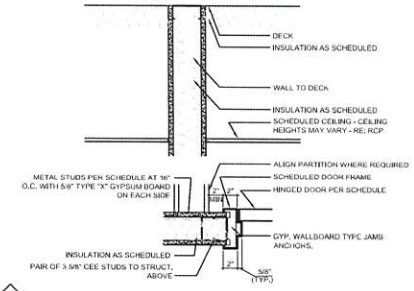
REVISIONS:
0 CLIENT REVIEW
1 CLIENT REVIEW
2 CLIENT REVIEW
3 CLIENT REVIEW
0 CLIENT REVIEW FOR PERMIT

TL: JRR / DE: NDK

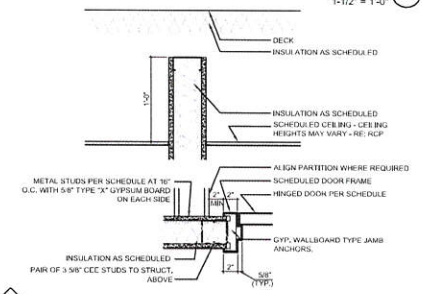
DATE: 01-26-18

PROJECT:
MB184009

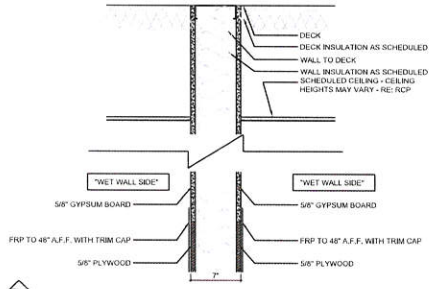
SHEET:
A7.01



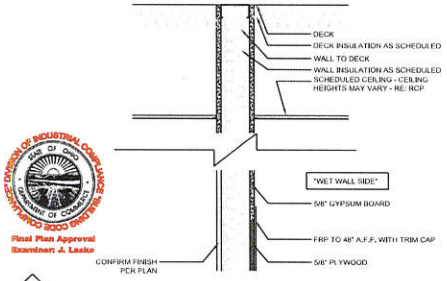
B WALL DETAIL - NON RATED WALL TO DECK 4
1-1/2" = 1'-0"



A WALL DETAIL - TYPICAL WALL 3
1-1/2" = 1'-0"

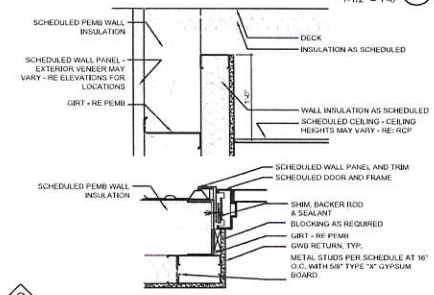


D1 WALL DETAIL - PLUMBING WALL CHASE 7
1-1/2" = 1'-0"



DIVISION OF INDUSTRIALIZED BUILDING SYSTEMS
STATE OF OHIO
DEPARTMENT OF COMMERCE
Final Plan Approval
Examiner: J. Lacke
CPA # 2015-D-027 - April 20, 2018

C WALL DETAIL - WET WALL 6
1-1/2" = 1'-0"



C WALL DETAIL - FURR WALL PEMB 5
1-1/2" = 1'-0"

INSULATION SCHEDULE — ZONE 5 PER 2012 IECC & ASHRAE 90.1-2010

	LOCATION	INSULATION TYPE	REMARKS
CONDITIONED SPACE	ROOF - TYPE	R19 + R11 LINER SYSTEM	CONFIRM INSULATION PLACEMENT WITH PLAN - RE:A2.00
	EXTERIOR WALL	R-25 + 1/8" FOAM TAPE @ GIRTS	
	DEMISING WALL	R-19	
	INTERIOR WALL	R-11	
	SLAB	R-10 FOR 24" BELOW	
SEMI-HEATED SPACE	ROOF	R-19	
	EXTERIOR WALL	R-13	
VAPOR BARRIER	FOUNDATION	5 MILL	

INSULATION SCHEDULE 2

METAL STUD SCHEDULE

STUD SIZE	WALL HEIGHT (MAXIMUM)	NOTES (1,2,7)
2 1/2" X 25 GAUGE X 1 1/4"	13'-0"	3,5
2 1/2" X 20 GAUGE X 1 1/4"	18'-0"	3,5
3 5/8" X 25 GAUGE X 1 1/4"	15'-0"	3,5
3 5/8" X 20 GAUGE X 1 1/4"	20'-6"	3,5
4" X 25 GAUGE X 1 1/4"	17'-0"	3,5
4" X 20 GAUGE X 1 1/4"	23'-0"	3,5
6" X 25 GAUGE X 1 1/4"	19'-6"	4,5
6" X 20 GAUGE X 1 1/4"	27'-0"	4,5
6" X 18 GAUGE X 1 5/8"	28'-0"	4,6
6" X 16 GAUGE X 1 5/8"	30'-0"	4,6
8" X 18 GAUGE X 1 5/8"	35'-0"	4,6

NOTES:
1. ALL STUDS ARE AT 16" O.C. AND ARE TO BE FULLY BRACED AT TOP AND BOTTOM
2. ALL LIMITING HEIGHTS ARE FOR A CODE HORIZONTAL LOADING OF 5 PSF
3. DEFLECTION CRITERIA: HEIGHT/120 FOR 2 1/2", 3 5/8", AND 4" STUDS
4. DEFLECTION CRITERIA: HEIGHT/240 FOR 6" STUDS
5. HEIGHT BASED ON A COMPOSITE WALL SYSTEM WITH FULL HEIGHT GYPSUM WALL BOARD ON BOTH SIDES OF STUDS. MINIMUM ATTACHMENTS ARE W/ #6 SCREWS @ 12" O.C. (2 1/2", 3 5/8", 4", AND 6" 25 GAUGE STUDS)
6. HEIGHT BASED ON A NON-COMPOSITE WALL SYSTEM FOR 6" STUDS, 20 GAUGE OR THICKER
7. THESE MAXIMUM HEIGHTS DO NOT APPLY TO WALLS WITH CERAMIC TILE, PLASTER, OR WALLS SUPPORTING DECK ABOVE

STUD SCHEDULE 1

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STATE OF OHIO
RAYBURN DONALSON
ARC. 12188
REGISTERED ARCHITECT

01/31/18

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NBA Construction Co.

IEA WHITE - HAVILAND O&M BUILDING

PAULDING COUNTY, OH

SHEET:
WALL DETAILS AND SCHEDULES

REVISIONS:

	02.01.18 INFO. REVIEW
	02.06.18 TL REVIEW
	02.08.18 INFO. REVIEW
0	02.13.18 ISSUED FOR PERMIT

TL: JRR / DE: NDK

DATE: 01-26-18

PROJECT:
MB184009

SHEET:
A7.02

1. GENERAL

1.1 THE STRUCTURAL DRAWINGS AND SPECIFICATIONS ARE A PORTION OF THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR AND SUBCONTRACTORS SHALL REFERENCE AND COORDINATE WITH ALL OTHER DISCIPLINES' DRAWINGS. ANY DISCREPANCIES OR OMISSIONS SHALL BE REPORTED TO THE STRUCTURAL ENGINEER AND ARCHITECT.

1.2 DESIGN CRITERIA:

A. CODES AND SPECIFICATIONS:

1. GENERAL BUILDING CODE: INTERNATIONAL BUILDING CODE.

2. CONCRETE: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE. AMERICAN CONCRETE INSTITUTE, ACI 318-14.

B. DESIGN LOADS (PSF):

1. DEAD LOADS:

ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.

2. LIVE LOADS:

ROOF ---------- 20 PSF
OIL CONTAINMENT ---------- 80 PSF

3. WIND LOADS:

THE ULTIMATE DESIGN WIND SPEED (V-ULT) FOR USE IN THE DESIGN OF RISK CATEGORY II BUILDINGS AND STRUCTURES SHALL BE 115 MPH.

WIND IMPORTANT FACTOR (IW) ---------- 1.0
WIND EXPOSURE CATEGORY ---------- B
INTERNAL PRESSURE COEFFICIENT ---------- ±0.18

LIVE LOAD REDUCTIONS HAVE BEEN APPLIED IN ACCORDANCE WITH THE BUILDING CODE, UNLESS NOTED.

1.3 CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO FABRICATION/CONSTRUCTION. NOTIFY STRUCTURAL ENGINEER AND ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION/CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ALL WORK FITTING AS INTENDED BY THE DRAWINGS AND SPECIFICATIONS.

1.4 SHOP DRAWINGS: THE CONTRACTOR SHALL SUBMIT FOR STRUCTURAL ENGINEER REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS. ITEMS MARKED (*) SHALL HAVE SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.

1. CONCRETE REINFORCING
2. CONCRETE MIX DESIGNS

1.5 THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE.

1.6 THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETED STRUCTURE. APPLICATIONS OF CONSTRUCTION LOADS TO THE PARTIALLY COMPLETED STRUCTURE SHALL BE CONSIDERED BY THE CONTRACTOR AND SO INCLUDED IN THE DESIGN OF SHORING, BRACING, FORMWORK, AND ANY OTHER SUPPORTING ELEMENTS PROVIDED FOR CONSTRUCTION OF THE STRUCTURE. DURING ERECTION AND UNTIL ALL PERMANENT CONNECTIONS ARE MADE, THE CONTRACTOR MUST PROVIDE TEMPORARY BRACING TO BRACE THE STRUCTURE IN ALL DIRECTIONS.

1.7 THE ENGINEER SHALL NOT HAVE CONTROL OR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES FOR CONSTRUCTION OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSON PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

2. FOUNDATION NOTES:

2.1 CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO COMMENCING ANY WORK.

2.2 CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE SHOULD ANY DIMENSIONS OR CONDITIONS VARY FROM THE INTENT OF THE DRAWINGS.

2.3 IN AREAS WHERE THERE IS VEGETATION, CONTRACTOR SHALL SCALP VEGETATION COMPLETELY TO A DEPTH OF 4 TO 6 INCHES DEEP AT LEAST FIVE FEET BEYOND THE BUILDING EDGES. STRIPPED MATERIAL CLASSIFIED AS TOPSOIL SHALL BE STOCKPILED FOR REUSE. OTHER STRIPPED MATERIAL SHALL BE HAULED OFF OR SPREAD ON SITE AS DIRECTED BY OWNER.

2.4 CONTRACTOR SHALL PROOF ROLL THE SUBGRADE TO DETERMINE LOCATION OF SOFT OR LOOSE SOILS WHICH MUST BE REMOVED AND REPLACED WITH SELECT FILL.

2.5 GRADE THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AND SLABS. WATER SHALL NOT BE ALLOWED TO POND ADJACENT TO THE BUILDINGS OR SLABS.

2.6 CONTRACTOR SHALL SCARIFY SUBGRADE TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR DENSITY TEST (ASTM D-698). THE MOISTURE CONTENT SHALL RANGE BETWEEN 0 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT.

2.7 STRUCTURAL SELECT FILL SHALL BE A CLEAN SANDY CLAY FREE OF DELETERIOUS MATERIAL WITH A LIQUID LIMIT LESS THAN 40 AND A PLASTICITY INDEX (P.I.) BETWEEN 12 AND 20. SELECT FILL SHALL BE PLACED IN MAXIMUM 8 INCH LOOSE LIFTS AND COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY TEST (ASTM D-698). THE MOISTURE CONTENT SHALL RANGE BETWEEN -3 TO +3 PERCENT OF OPTIMUM MOISTURE CONTENT.

2.8 SAND SHALL BE CLEAN, SHARP, GRANULAR TYPE, LOCALLY AVAILABLE AND EASILY COMPACTED FREE OF VEGETATION OR OTHER DELETERIOUS MATERIAL. .

2.9 ALL FORM WORK SHALL BE PLACED AND SHORED. ALL REINFORCING STEEL SET AND TIED. ALL CONCRETE PLACED, FINISHED AND CURED PER THE AMERICAN CONCRETE INSTITUTE LATEST EDITION AND PER ALL SAFETY PROCEDURES OF THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA).

2.10 CONTRACTOR SHALL HAND TAMP BOTTOM OF GRADE BEAM EXCAVATIONS TO A HARD SURFACE BEFORE PLACING REINFORCING STEEL.

2.11 REINFORCING STEEL SHALL BE LAP SPLICED A MINIMUM OF 42 BAR DIAMETERS. MINIMUM 10-FOOT LONG CORNER BARS BENT 90-DEGREES SHALL BE PROVIDED AT ALL GRADE BEAM CORNERS, 5 FEET EACH LEG. MINIMUM REINFORCING STEEL COVER SHALL BE PROVIDED AS FOLLOWS:

3" WHERE CONCRETE CONTACTS EARTH
1 1/2" WHERE CONCRETE CONTACTS FORM

2.12 ALL CONCRETE SURFACES SHALL BE PROPERLY CURED AND SUFFICIENT TIME ALLOWED BEFORE PERMITTING TRAFFIC OR CONSTRUCTION TO PROCEED. A HARD STEEL TROWEL FINISH SHALL BE PROVIDED ON ALL CONCRETE.

2.13 THIS FOUNDATION DESIGN IS BASED ON IBC TABLE 1806.2, "PRESUMPTIVE LOAD-BEARING VALUES." THE BEARING CAPACITY FOR TYPE S SOIL IS 1,500 PSF.

2.14 FOOTINGS SHALL BE POURED IMMEDIATELY UPON COMPLETION OF EXCAVATION AND CLEANING OF FOOTING BEARING SURFACE. ALL SPOILS FROM THE FOOTING EXCAVATIONS SHALL BE REMOVED FROM THE BUILDING PAD.

2.15 QUALITY CONTROL TESTING IS FOR THE OWNER'S BENEFIT AND FOR HIS ACCOUNT. THE FREQUENCIES AND THE TYPES OF TESTING SHALL BE DIRECTED BY THE OWNER OR HIS AGENT IN FULL COOPERATION WITH AND WITH PRIOR ANNOUNCEMENT TO THE CONTRACTOR.

2.16 CONCRETE IN FOOTINGS SHALL HAVE A MIX DESIGN FOR A MINIMUM OF 3,500 PSI AT 28 DAYS WITH 5 SACKS OF STANDARD TYPE I CEMENT, 1 1/2 INCH COURSE AGGREGATE, NARROW GRADED, PLACED BY MEANS OF A METAL CHUTE. DESIGN SLUMP RANGE IS 3 TO 5 INCHES. POURS BETWEEN THE TEMPERATURES OF 50 TO 90 DEGREES F MAY BE MADE WITHOUT SPECIAL PROVISIONS.

2.17 CONCRETE IN SLABS AND GRADE BEAMS SHALL HAVE A MIX DESIGN FOR A MINIMUM OF 3,500 PSI AT 28 DAYS WITH 5 SACKS OF STANDARD TYPE I CEMENT, 1 1/2 INCH COURSE AGGREGATE, NARROW GRADED, PLACED BY MEANS OF A METAL CHUTE. ALTERNATE DESIGNS CONTAINING FLY ASH TYPE POZZOLANS BLENDED WITH TYPE I CEMENT ARE ACCEPTABLE PROVIDED 1) THE STRENGTH AT 3, 7, AND 14 DAYS HAS BEEN CONTROLLED TO MATCH AN ALL CEMENT DESIGN BY SUITABLE ADDITIVES OR AIR ENTRAINMENT. 2) THE TIME OF INITIAL SET HAS BEEN CONTROLLED TO MATCH AN ALL CEMENT DESIGN BY SUITABLE ADDITIVE. DESIGN SLUMP RANGE IS 3 TO 5 INCHES. POURS BETWEEN THE TEMPERATURES OF 50 TO 90 DEGREES F MAY BE MADE WITHOUT SPECIAL PROVISIONS.

2.18 ALL REINFORCING STEEL SHALL BE CLEAN, NEW AND FREE OF DIRT, RUST OR OIL, AND SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM A-615, GRADE 60, EXCEPT #3 STIRRUP BARS WHICH MAY BE GRADE 40.

2.19 PLAIN SMOOTH RODS OR DOWELS SHALL CONFORM TO ASTM A-675, GRADE 80.

2.20 WELDED WIRE REINFORCEMENT (WWR): ASTM A185, MINIMUM LAP AND EMBEDMENT TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2" OR 8" PROVIDE FLAT SHEETS ONLY, NO ROLLS.

2.20 JOINT FILLER STRIPS FOR JOINTS SHALL CONFORM TO ASTM D-1751 OR D-1752. JOINT FILLER SHALL BE 1/2 INCH THICK MINIMUM UNLESS SHOWN OTHERWISE ON DRAWINGS. JOINT SEALANT FOR PORTLAND CEMENT CONCRETE PAVEMENTS SHALL CONFORM TO ASTM D-3405.

2.21 #5 X 5'-0" LONG REINFORCING STEEL SHALL BE PROVIDED AT ALL RE-ENTRANT CORNERS.

3. PRE-ENGINEERED METAL BUILDINGS:

3.1 THE SCOPE OF WORK INCLUDES THE FOLLOWING AT A MINIMUM:

A. PROVIDING SHOP DRAWINGS FOR METAL BUILDING WHICH MATCHES ARCHITECTURAL AND STRUCTURAL DIMENSIONS.
B. PROVIDING ALL PRE-ENGINEERED METAL BUILDING FRAMES AND COMPONENTS, FASTENERS, SHEETING, ETC.
C. TRANSPORTING AND ERECTING NEW FRAMES AND COMPONENTS ON SITE.
D. PROVIDING NEW GIRTS AS REQUIRED AND AS SHOWN ON THE CONTRACT DOCUMENTS TO ENCLOSE THE BUILDING.
E. PROVIDE METAL PANEL CLADDING AS SHOWN ON ARCHITECTURAL DRAWINGS.
F. PUNCH-OUT/CLOSE-OUT AS REQUIRED BY THE OWNER/CONTRACTOR.

3.2 ALL STRUCTURAL STEEL USED FOR PRE-ENGINEERED BUILDING COMPONENTS SHALL BE DESIGNED, FABRICATED, AND ERECTED IN CONFORMANCE WITH THE LATEST STANDARDS OF THE AISC. THE DESIGN AND FABRICATION OF LIGHT GAGE STEEL MEMBERS SHALL COMPLY WITH THE AISI, LATEST EDITION.

3.3 THE DESIGN FOR ALL PRE-ENGINEERED BUILDING MEMBERS AND COMPONENTS (INCLUDING ANCHOR BOLT SIZES, LENGTHS AND EMBEDMENT) SHALL BE THE RESPONSIBILITY OF THE PRE-ENGINEERED BUILDING MANUFACTURER. THE DESIGN SHALL BE CARRIED OUT UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS.

3.4 THE DESIGN OF ALL PRE-ENGINEERED COMPONENTS SHALL BE BASED ON THE LOADS INDICATED IN THE "DESIGN LOADS" SECTION OF THE STRUCTURAL NOTES. DEFLECTIONS OF THE PRE-ENGINEERED BUILDING STRUCTURE UNDER LOADING SHALL NOT EXCEED THE FOLLOWING:

1. RIGID FRAMES AND COLUMNS - DRIFT H/300 LATERAL
2. WALL GIRTS AND EAVE STRUTS L/180 LATERAL

3.5 BASES OF COLUMNS SHALL BE DESIGNED AS PINNED SUPPORTS.

3.6 ALL BUILDING COMPONENTS SHALL BE COMPATIBLE WITH THE CONTRACT DOCUMENTS. ANY REQUESTS FOR MODIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT DURING THE BIDDING PROCESS.

3.7 FIELD WELDED CONNECTIONS FOR LIGHT GAUGE MEMBERS SHALL NOT BE PERMITTED WITHOUT SPECIFIC WRITTEN APPROVAL OF THE ARCHITECT.

3.8 LATERAL STABILITY OF THE BUILDING FRAME SHALL BE PROVIDED IN THE STRUCTURAL FRAMING. WALLS AND OTHER BUILDING COMPONENTS SHALL NOT BE USED TO RESIST LATERAL LOADS UNLESS NOTED OTHERWISE.

3.9 SHOP DRAWINGS SHALL BE PREPARED FOR ALL STRUCTURAL ITEMS AND SUBMITTED FOR REVIEW. CONTRACT DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS. ANY ITEMS DEVIATING FROM THE CONTRACT DRAWINGS OR FROM PREVIOUSLY SUBMITTED SHOP DRAWINGS SHALL BE SO NOTED. SHOP DRAWINGS SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEERED REGISTERED IN THE STATE OF OHIO.

DIVISION OF INDUSTRIAL COMPLIANCE
STATE OF OHIO
BUILDING CODE COMPLIANCE
DEPARTMENT OF COMMERCE
Final Plan Approval
Examiner: J. Laske

CPA # 2018020527 - April 20, 2018

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STATE OF OHIO
TODD J. HENNING
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IEA WHITE - HAVILAND
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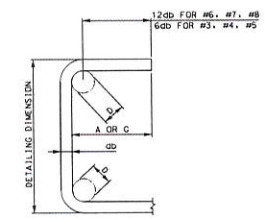
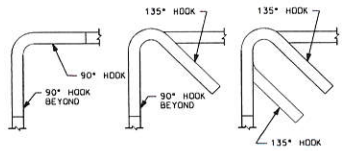
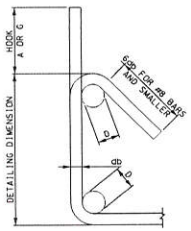


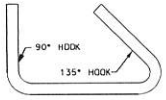
90° HOOK



CORNER CONDITIONS-STIRRUP OR TIE



135° HOOK

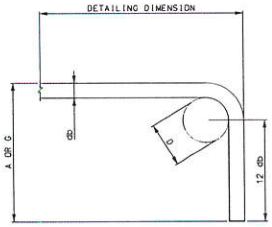


CROSS TIE

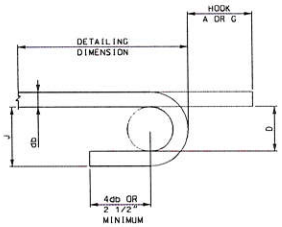
STIRRUP AND TIE HOOK			
BAR SIZE	D (IN.)	90°HOOK A OR C (IN.)	135°HOOK A OR C (IN.)
#3	1 1/2	4	4
#4	2	4 1/2	4 1/2
#5	2 1/2	6	5 1/2

D=INSIDE DIAMETER OF BEND

1 TYPICAL STIRRUP AND HOOK TIES
SCALE: NTS



90° HOOK



180° HOOK

END HOOK DIMENSIONS				
BAR SIZE	FINISHED BEND DIAMETER D. (INCHES)	180° HOOKS		90° HOOK
		A OR G' (INCHES)	J. (INCHES)	A OR G' (INCHES)
#3	2 1/4	5	3	6
#4	3	6	4	8
#5	3 3/4	7	5	10
#6	4 1/2	8	6	12
#7	5 1/4	10	7	14
#8	6	11	8	16
#9	9 1/2	15	11 3/4	19
#10	10 3/4	17	13 1/4	22
#11	12	19	14 3/4	24
#14	18 1/4	27	21 3/4	31
#18	24	36	28 1/2	41

D=INSIDE DIAMETER OF BEND

2 TYPICAL END HOOK DIMENSIONS
SCALE: NTS

DEVELOPMENT LENGTHS OF STANDARD HOOKS IN TENSION GRADE 60 REINFORCEMENT, NORMAL CONCRETE													
BAR SIZE	fc=3000PSI		fc=4000PSI		fc=5000PSI		fc=6000PSI		fc=7000PSI		fc=8000PSI		BAR SIZE
	Lhb	0.7 Lhb	Lhb	0.7 Lhb	Lhb	0.7 Lhb	Lhb	0.7 Lhb	Lhb	0.7 Lhb	Lhb	0.7 Lhb	
#3	9	7	8	6	7	6	6	6	6	6	6	6	#3
#4	11	8	10	7	9	7	8	6	8	6	7	6	#4
#5	14	10	12	9	11	8	10	7	9	7	9	7	#5
#6	17	12	15	11	13	10	12	9	11	8	11	8	#6
#7	20	14	17	12	15	11	14	10	13	10	12	9	#7
#8	22	16	19	14	17	12	16	12	15	11	14	10	#8
#9	25	18	22	16	20	14	18	13	17	12	16	12	#9
#10	28	20	25	18	22	16	20	14	19	14	18	13	#10
#11	31	22	27	19	24	17	22	16	21	15	19	14	#11
#14	38	-	33	-	29	-	27	-	25	-	23	-	#14
#18	50	-	43	-	39	-	35	-	33	-	31	-	#18

NOTES:
1. Ldh = DEVELOPMENT LENGTH OF STANDARD HOOKS IN TENSION (INCHES).
2. Ldh = Lhb UNLESS CONDITIONS OF 3 SATISFIED.
3. Ldh = 0.7Lhb FOR #11 BARS AND SMALLER WHEN SIDE COVER(NORMAL TO PLANE OF HOOK) IS NOT LESS THAN 2 1/2 INCHES AND FOR 90° HOOKS COVER ON BAR EXTENSION BEYOND HOOK IS NOT LESS THAN 2 INCHES.
4. HOOKS ARE NOT CONSIDERED EFFECTIVE FOR DEVELOPING BAR IN COMPRESSION.
5. Ldh SHALL BE MULTIPLIED BY 1.2 FOR EPOXY-COATED HOOKED REINFORCEMENT BARS.

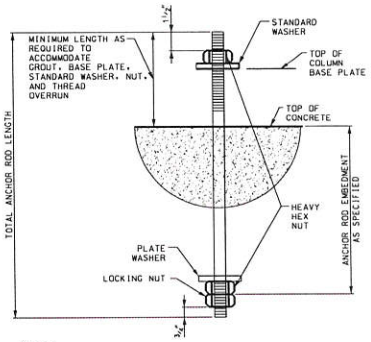
3 TYPICAL DEVELOPMENT LENGTHS FOR HOOKS
SCALE: NTS

SLAB TENSION DEVELOPMENT AND LAP SPLICE LENGTHS GRADE 60 REINFORCEMENT, NORMAL WEIGHT CONCRETE							
BAR SIZE	LAP CLASS	fc = 3000 PSI		fc = 4000 PSI		fc = 5000 PSI	
		BOTTOM BARS	OTHER BARS	BOTTOM BARS	OTHER BARS	BOTTOM BARS	OTHER BARS
#3	A	12	13	12	12	12	12
	B	16	17	16	16	16	16
#4	A	[illegible]	[illegible]	15	19	13	17
	B	[illegible]	[illegible]	20	25	17	23
#5	A	[illegible]	[illegible]	21	28	19	25
	B	[illegible]	[illegible]	28	37	25	33
#6	A	[illegible]	[illegible]	29	37	26	34
	B	[illegible]	[illegible]	38	49	34	45
#7	A	[illegible]	[illegible]	46	60	42	54
	B	[illegible]	[illegible]	60	78	55	71
#8	A	66	86	57	74	51	67
	B	86	112	75	97	67	88
#9	A	80	104	69	90	62	81
	B	104	136	90	117	81	106
#10	A	96	125	83	108	75	97
	B	125	163	108	141	98	127
#11	A	113	146	98	127	87	114
	B	147	190	128	166	114	149

STATE OF OHIO DEPARTMENT OF COMMERCE DIVISION OF INDUSTRIAL COMPLIANCE
Plan Approval Expiration Date
CPD # 2018020527 April 22, 2018

NOTES:
1. ALL SPLICE LENGTHS ARE IN INCHES.
2. THIS TABLE SHALL BE USED FOR SLAB ONLY.
3. THE TENSION DEVELOPMENT LENGTH (ld) IS EQUAL TO THE SCHEDULED "CLASS A" LAP SPLICE LENGTH.
4. A BOTTOM BAR IS DEFINED AS ANY BAR THAT DOES NOT HAVE MORE THAN 12" OF FRESH CONCRETE BELOW THE BAR.
5. OTHER BARS INCLUDE TOP BARS AND ALL OTHER BARS THAT HAVE MORE THAN 12" FRESH CONCRETE BELOW THE BAR. FOR TOP REINFORCEMENT IS SLABS THAT ARE 12" THICK OR LESS, TABULATED SPLICE LENGTH FOR BOTTOM BARS SHALL BE USED.
6. FOR EPOXY-COATED BARS, MULTIPLY THE TABULATED SPLICE LENGTHS OF BOTTOM BARS BY 1.5 AND THE TABULATED SPLICE LENGTHS OF OTHER BARS BY 1.3.
7. WHEN LAP SPLICING BARS OF DIFFERENT SIZES, THE LAP LENGTH IS DETERMINED BY THE SMALLER BAR BUT MAY NOT BE LESS THAN THE "CLASS A" SPLICE LENGTH OF THE LARGER BAR.

4 TYPICAL DEVELOPMENT LENGTHS
SCALE: NTS



NOTES:
1. REFER TO PRE-ENGINEERED METAL BUILDING PLAN FOR ANCHOR ROD DIAMETER AND QUANTITY.
2. ANCHOR BOLTS SHALL BE ASTM F1554 GRADE 36 WITH HEAVY HEX NUT. SIZES SPECIFIED BY THE METAL BUILDING SUPPLIER. EMBEDMENT LENGTHS CORRESPONDING TO ANCHOR BOLT DIAMETERS SHALL BE:

   5/8" DIAMETER BOLT: MIN 8" EMBEDMENT
   3/4" DIAMETER BOLT: MIN 12" EMBEDMENT
   1" DIAMETER BOLT: MIN 16" EMBEDMENT
   1 1/4" DIAMETER BOLT: MIN 20" EMBEDMENT
   1 1/2" DIAMETER BOLT: MIN 24" EMBEDMENT
3. UNLESS NOTED OTHERWISE, ALL ANCHOR RODS NUTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC AFTER THE CONCRETE IS AT LEAST 14 DAYS OLD.
4. THE HOLE IN THE PLATE WASHER SHALL BE 1/16" LARGER THAN THE DIAMETER.

5 TYPICAL ANCHOR BOLT DETAIL
SCALE: NTS

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03/14/2018

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PAULDING COUNTY, OH

SHEET:
TYPICAL DETAILS

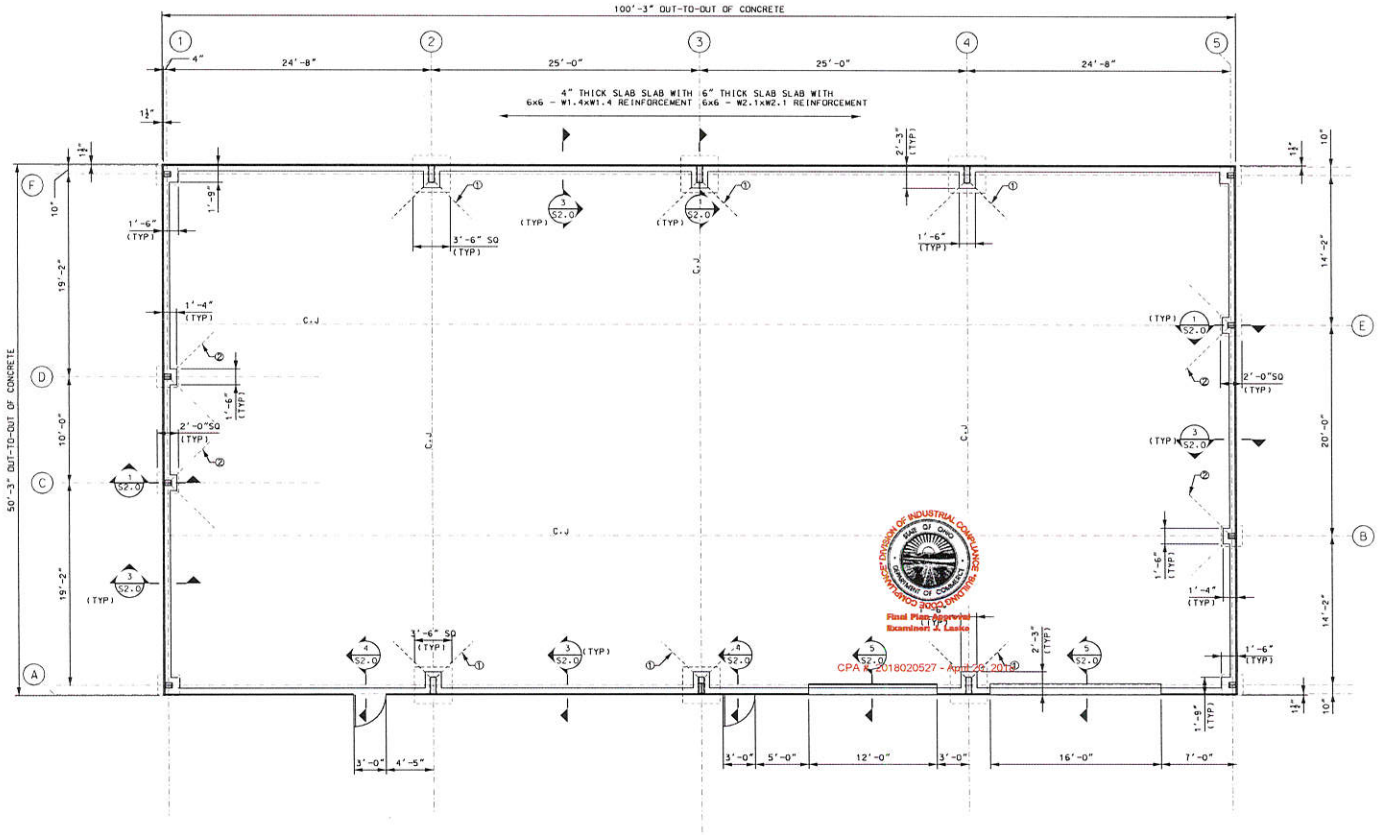
REVISIONS:
9 ISSUE FOR CONSTRUCTION

TL: X DE: X

DATE: 03-14-18

PROJECT:

SHEET:
S0.1



1 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

FOUNDATION GENERAL NOTES:

SEE PLAN FOR SLAB THICKNESS AND REINFORCEMENT. REINFORCEMENT TO BE SUPPORTED BY CHAIRS WITH 2" TOP COVER OVER 10 MIL VAPOR BARRIER AND 2" (MAX) COMPACTED SAND CUSHION ON PREPARED SUBGRADE. SELECT FILL MATERIAL REQUIRED TO BRING BUILDING PAD TO GRADE SHALL BE PREPARED IN ACCORDANCE WITH THE STRUCTURAL FILL AND SUBGRADE PREPARATION NOTES AND THE GEOTECHNICAL ENGINEER'S REPORT.

ANCHOR BOLT NOTE:

COORDINATE THIS FOUNDATION PLAN WITH THE ANCHOR BOLT SETTING PLAN SUPPLIED BY THE OWNER AND COMPLETED BY MESO BUILDING SOLUTIONS JOB NO.16-B-37440-B DATED 2/26/18.

NOTES:

1. FOR CONCRETE GENERAL NOTES. SEE DWG S0.0.
3. SEE DETAIL 5/S0.1 FOR ANCHOR BOLT DETAIL.
4. C.J. - CONTROL JOINT (RE: 2/S2.0)

CONSTRUCTION NOTES:

1. PROVIDE TWO (2) #5 X 13'-4" LONG HAIRPIN AT EACH COLUMN 45 DEGREES TO CENTERLINE OF COLUMN (TYPICAL 6 LOCATIONS)
2. PROVIDE ONE (1) #5 X 13'-4" LONG HAIRPIN AT EACH COLUMN 45 DEGREES TO CENTERLINE OF COLUMN (TYPICAL 4 LOCATIONS)

DIVISION OF INDUSTRIALIZED BUILDING COMPLIANCE
STATE OF OHIO
DEPARTMENT OF COMMERCE
Final Plan Approval
Examiner: Z. Lacke
CPA # 2018020527 - April 26, 2018

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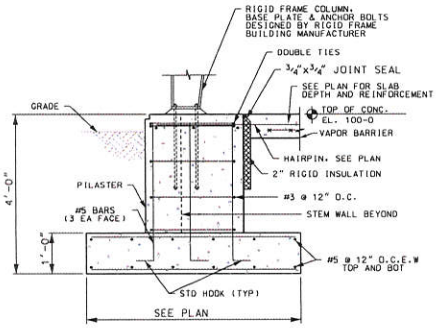
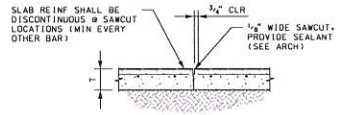


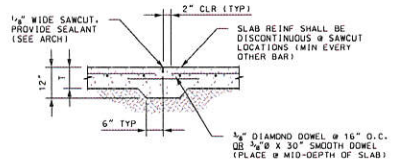
1 SPREAD FOOTING DETAIL
SCALE: NTS



NOTE:

PROVIDE CONTRACTION JOINTS IN SLAB SUCH THAT NO DISTANCE BETWEEN JOINTS EXCEEDS 40 FEET AND NO AREA BOUNDED BY JOINTS EXCEED 1600 SQUARE FEET.

TYPICAL SLAB-ON-GRADE CONTROL JOINT DETAIL

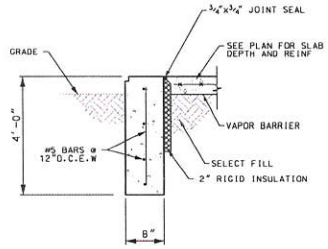


TYPICAL SLAB-ON-GRADE CONSTRUCTION JOINT DETAIL

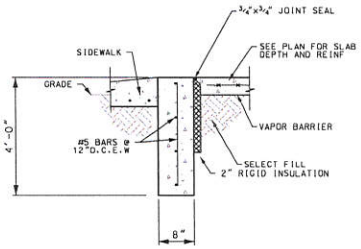
SAWCUT NOTES:

1. SAWCUT SLAB BETWEEN 6-8 HOURS AFTER FINISH (2-4 HOURS FOR EARLY-ENTER DRY-CUT SAWS).
2. SAWCUT DEPTH SHALL BE 1/4 THE SLAB THICKNESS "T" BUT NOT LESS THAN 1" (WHICHEVER IS GREATER). SAWCUT DEPTH SHALL BE ONE (1) INCH MINIMUM FOR EARLY-ENTER DRY-CUT SAWS.
3. JOINTS SHALL BE PROTECTED FROM HARD-WHEELED EQUIPMENT TRAFFIC OR WILL BE REPLACED AT THE CONTRACTOR'S EXPANSE.
4. SPACING OF CONSTRUCTION/CONTROL JOINTS SHALL BE NO FURTHER THAN 18'-0" APART. ALIGN WITH COLUMN CENTERLINE OR WALL FACE WHERE POSSIBLE.

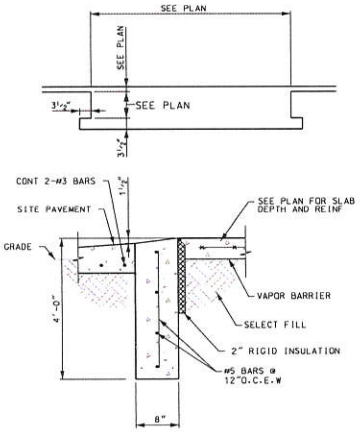
2 TYPICAL SLAB JOINT DETAILS
SCALE: NTS



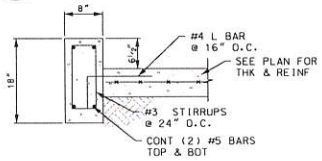
3 PERIMETER STRIP FOOTING DETAIL
SCALE: NTS



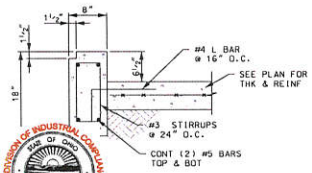
4 PERIMETER BEAM SECTION AT MAN DOOR
SCALE: NTS



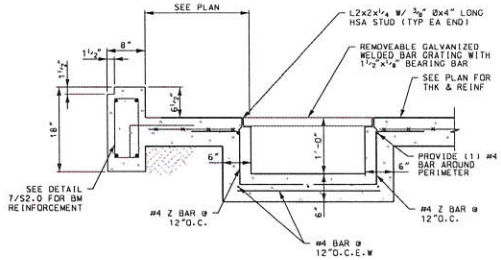
5 PERIMETER BEAM SECTION AT OVERHEAD DOOR
SCALE: NTS



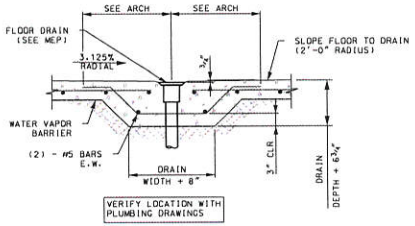
6 PERIMETER BEAM-OIL SHED
SCALE: NTS



TER BEAM-OIL SHED



8 SUMP PIT DETAIL-OIL SHED
SCALE: NTS



9 FLOOR DRAIN DETAIL
SCALE: NTS

CPA # 2018020527 - April 20, 2018

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SHEET:
FOUNDATION DETAILS

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DATE: 03-14-18

PROJECT:

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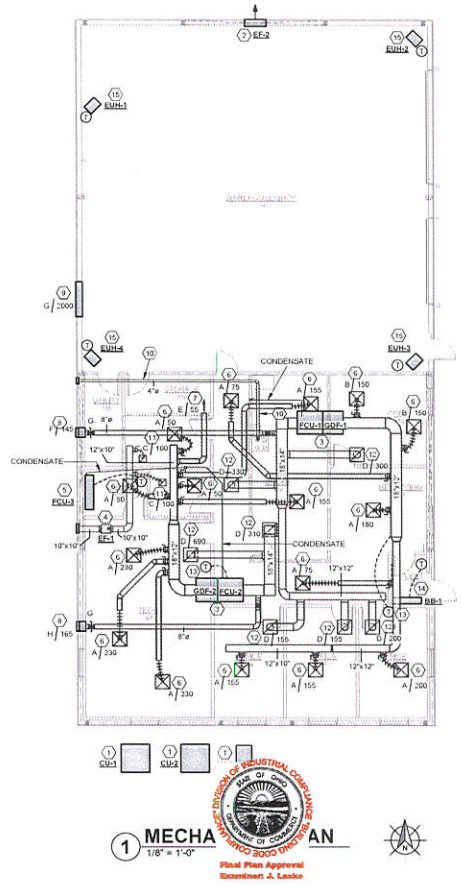

1 MECHANICAL PLAN
1/8" = 1'-0"

Final Plan Approval
Examiner J. Laske

MECHANICAL LEGEND

	MECHANICAL EQUIPMENT
	SUPPLY AIR DEVICE
	RETURN AIR DEVICE
	EXHAUST AIR DEVICE
	CONICAL TAP WITH DAMPER
G	GRAVITY DAMPER
	RIGID DUCTWORK
	FLEX DUCT
T	ZONE THERMOSTAT @ 48" A.F.F.
tt / 200	DIFFUSER TAG / AIRFLOW
FCU-#	EQUIPMENT TAG
#	KEYNOTE

MECHANICAL GENERAL NOTES

A. CONTRACTOR SHALL PROPERLY SEAL AND CAP ALL UNUSED DUCT TAPS AND NEW DUCTWORK. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE BUILDING ENGINEER.
B. AIR IS RETURNED DIRECTLY TO THE FCU THROUGH DUCTED RETURN.

KEYED NOTES

1 NEW DX CONDENSING UNIT SHALL BE MOUNTED ON TOP CONCRETE PAD. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID AND CONSTRUCTION. PROVIDE DX PIPING FROM CONDENSING UNIT TO ASSOCIATED FCU. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES. SEE SCHEDULE AND DETAIL.
2 NEW SIDEWALL EXHAUST FAN. COORDINATE FINAL LOCATION WITH BUILDING OWNER'S REPRESENTATIVE. SEE SCHEDULE AND DETAIL.
3 NEW HORIZONTAL DX FAN COIL UNIT AND GAS DUCT FURNACE SHALL BE INSTALLED. FIELD VERIFY EXACT FINAL LOCATION WITH EXISTING CONDITIONS PRIOR TO BID AND CONSTRUCTION. PROVIDE S/R DUCTWORK AS SHOWN. PROVIDE OUTSIDE AIR DUCT AND ROUTE TO EXTERIOR LOUVER. PROVIDE GRAVITY DAMPER ON OA DUCT NEAR LOUVER. PROVIDE PVC FLUE GAS VENT THROUGH EXTERIOR WALL. SEAL ALL DUCT CONNECTIONS AIR TIGHT. ROUTE 3/4" INSULATED CONDENSATE LINE TO RESTROOM LAVATORY TAILPIECE. PROVIDE SECONDARY DRAIN PAN WITH FLOAT SWITCH AND ALARM TO TURN UNIT OFF IF STANDING WATER IS DETECTED IN DRAIN PAN. PROVIDE UNIT WITH FACTORY THERMOSTAT. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES. SEE SCHEDULE AND DETAILS.
4 NEW EXHAUST FAN. PROVIDE EXHAUST DUCTWORK AND ROUTE TO BRICK VENT ON EXTERIOR AS SHOWN. SEE SCHEDULE AND DETAIL.
5 NEW WALL MOUNTED DX FAN COIL UNIT. FIELD VERIFY EXACT FINAL LOCATION WITH EXISTING CONDITIONS PRIOR TO BID AND CONSTRUCTION. ROUTE 3/4" INSULATED CONDENSATE LINE TO RESTROOM LAVATORY TAILPIECE. PROVIDE WITH FLOAT SWITCH AND ALARM TO TURN UNIT OFF IF STANDING WATER IS DETECTED IN DRAIN PAN. PROVIDE UNIT WITH FACTORY THERMOSTAT. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES. SEE SCHEDULE AND DETAILS.
6 NEW SUPPLY DIFFUSER. BALANCE TO CFM INDICATED. PROVIDE NEW SPIN-IN AND FLEX DUCT. SEE SCHEDULE AND DETAILS.
7 NEW SIDEWALL SUPPLY DIFFUSER. BALANCE TO CFM INDICATED. PROVIDE NEW DUCTWORK AS SHOWN. SEE SCHEDULE AND DETAIL.
8 NEW EXTERIOR LOUVER. PROVIDE 1FT DEEP INSULATED PLENUM SIZED TO MATCH ASSOCIATED LOUVER. INTAKE OPENING MUST BE AT MINIMUM 10 FT AWAY FROM ALL EXHAUST OPENINGS. SEAL ALL CONNECTIONS AIR TIGHT. SEE SCHEDULE.
9 NEW EXTERIOR INTAKE LOUVER. COORDINATE WITH ARCHITECT FOR EXACT FINAL LOCATION. SEE SCHEDULE.
10 PROVIDE RANGE EXHAUST DUCT AND ROUTE TO BRICK VENT ON EXTERIOR AS SHOWN.
11 NEW EXHAUST GRILLE. BALANCE TO CFM INDICATED. PROVIDE NEW SPIN-IN AND FLEX DUCT. SEE SCHEDULE AND DETAILS.
12 NEW DUCTED RETURN GRILLE. PROVIDE DUCT AND DUCT TRANSITIONS AS REQUIRED TO CONNECT TO RETURN DUCTWORK. SEE SCHEDULE AND DETAIL.
13 NEW ZONE TSTAT.
14 NEW BASEBOARD HEATER. SEE SCHEDULE.
15 NEW ELECTRIC UNIT HEATER (EUH). VERIFY EXACT LOCATION PRIOR TO BID AND CONSTRUCTION. PROVIDE 1 ZONE STAT AND DAISY CHAIN TO ALL UNIT HEATERS. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES. SEE SCHEDULE AND DETAILS.

AIR DEVICE SCHEDULE

CPA # 20180207527 - April 20, 2018

TAG	SERVICE	MANUFACTURER AND MODEL	FACE SIZE	NECK SIZE	CFM	FINISH	MATERIAL	NOTES
A	SUPPLY	PERFORATED LAY-IN BY SUBMITTAL	24"x24"	6"ø	0-100	WHITE	STEEL	1,2,3
				8"ø	101-225			
				10"ø	226-325			
B	VAV SUPPLY	PERFORATED LAY-IN (WITH RELIEF RING) BY SUBMITTAL	24"x24"	8"ø	SEE PLAN	WHITE	STEEL	1,2,3
C	EXHAUST	LAY-IN BY SUBMITTAL	12"x12"	8"ø	SEE PLAN	WHITE	STEEL	2,3
D	RETURN	LAY-IN BY SUBMITTAL	24"x24"	10"ø	0-350	WHITE	STEEL	3
				12"ø	351-550			
				12"x12"	551-700			
E	SIDEWALL SUPPLY	BY SUBMITTAL	10"X8"	8"X6"	SEE PLAN	--	--	1,2,3

NOTES:
1. 4-WAY UNLESS SHOWN DIFFERENT
2. PROVIDE OPP BLADE DAMPER AT EACH SUPPLY OR EXH UNLESS BALANCING DAMPER IS PROVIDED AT RUNOUT TAKEOFF
3. PROVIDE PROPER INSTALLATION TRIM KIT BASED ON CEILING TYPE THAT DIFFUSER IS BEING INSTALLED ON.

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713.521.5480 Ph. 713.521.4861 Fax
TBPE Firm Registration No. F-2626
TBAE Firm Registration No. BR-2626
(Non-Registered Engineering Firm) 6954

STATE OF OHIO
CLAYTON F. CLEMENTS
82566
REGISTERED
PROFESSIONAL ENGINEER
03-15-18

IEA WHITE - HAVILAND
O&M BUILDING
PAULDING COUNTY, OH

SHEET
MECHANICAL PLAN

REVISIONS

TL NWB / DE DRW
DATE 3-15-18
PROJECT 7918040.00
SHEET
M-100

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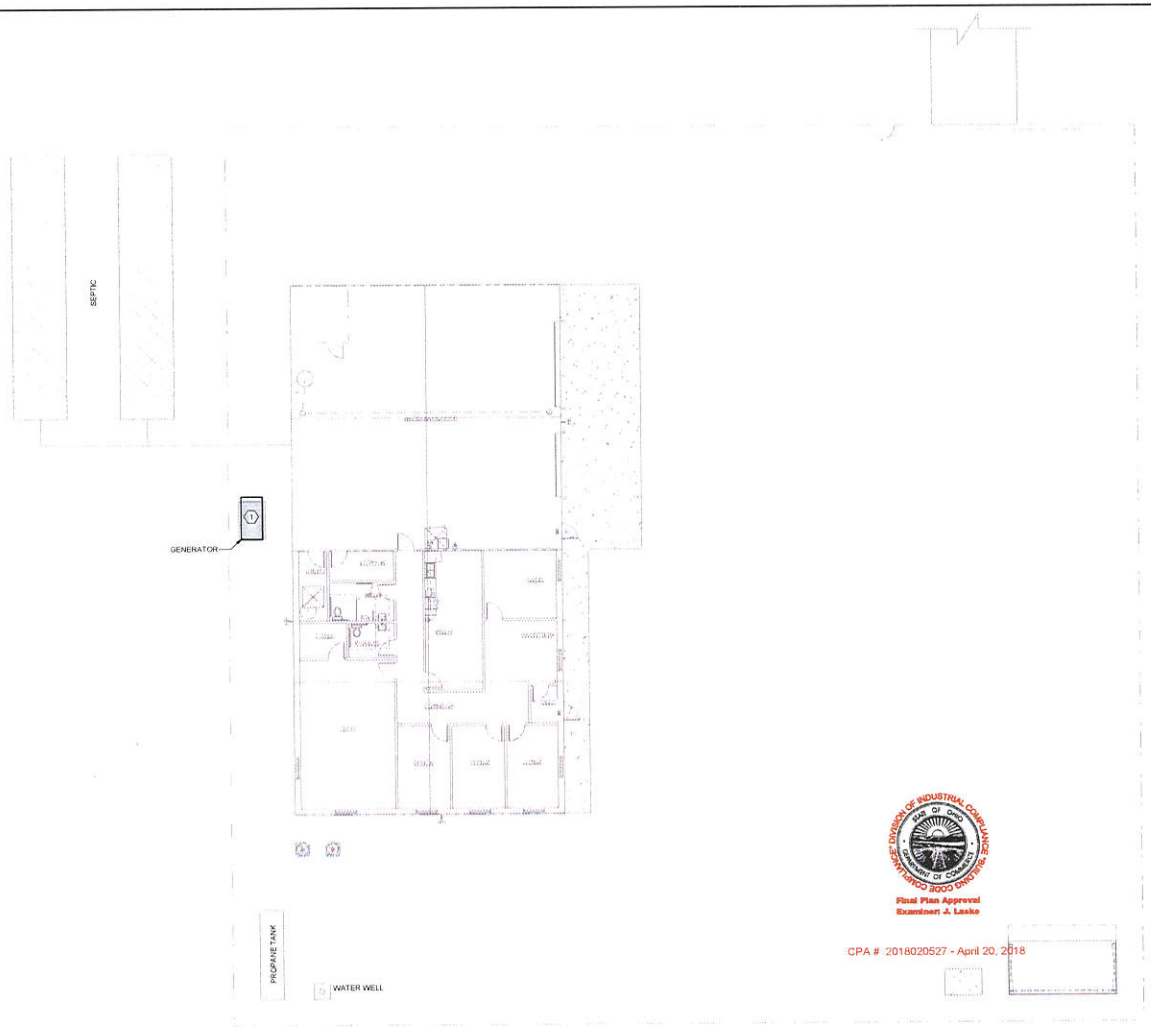

1 ELECTRICAL SITE PLAN
3/32" = 1'-0"

SITE PLAN GENERAL NOTES

A. PLAN REPRESENTS ENGINEER'S PROPOSED DESIGN. COORDINATE LOCATION AND INSTALLATION OF ELECTRICAL SERVICE AND ALL RELATED DEVICES AND EQUIPMENT WITH OWNER AND UTILITY.
B. UNDERGROUND SITE WORK: CONTRACTOR IS REQUIRED TO USE LINE LOCATOR TO IDENTIFY LOCATION(S) OF ALL EXISTING UTILITY LINES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGES TO ANY EXISTING UTILITY LINES CAUSED BY EXCAVATION AND SUBSEQUENT REPAIR OF UTILITY LINE DAMAGES.
C. AS-BUILT UNDERGROUND UTILITY DRAWINGS MUST BE PROVIDED SHOWING SPECIFIC LOCATIONS OF ALL UTILITIES BURIED ON THE ENTIRE SITE.

KEYED NOTES

1 PROPOSED GENERATOR LOCATION. COORDINATE LOCATION WITH OWNER PRIOR TO INSTALLATION.

DIVISION OF INDUSTRIAL COMPLIANCE
BUILDING CODE COMPLIANCE
STATE OF OHIO
DEPARTMENT OF COMMERCE
Final Plan Approval
Examiner J. Laske
CPA # 2018020527 - April 20, 2018

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03-15-18

IEA WHITE - HAVILAND
O&M BUILDING
PAULDING COUNTY, OH

SHEET
ELECTRICAL SITE PLAN

REVISIONS

1	03-06-18	100% REVIEW
2	03-15-18	ISSUED FOR PERMIT

Checker / Designer
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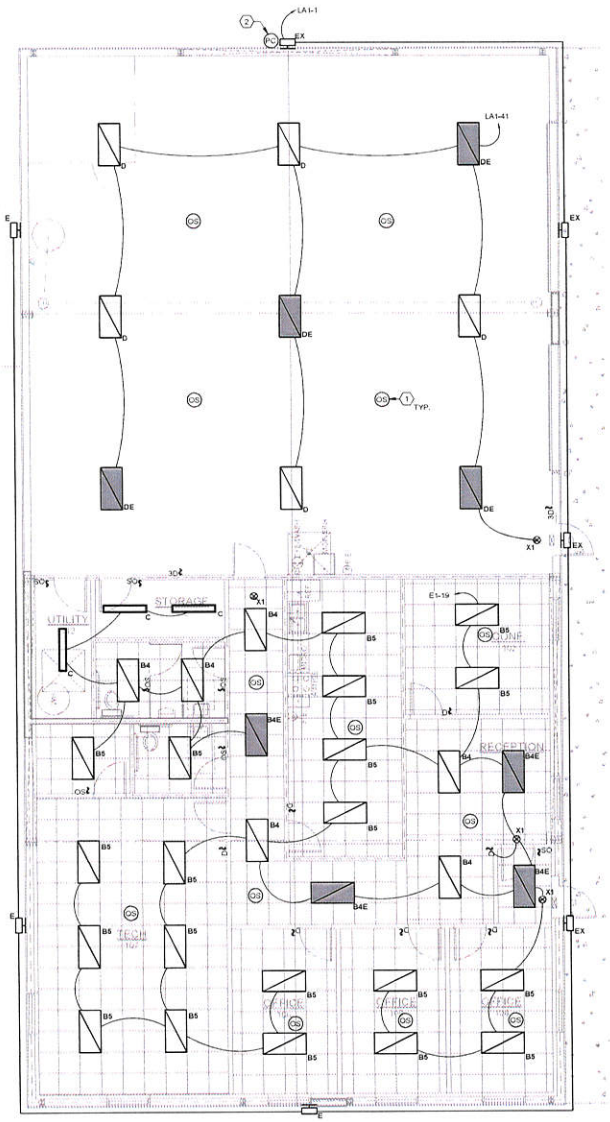

1 **LIGHTING PLAN**
3/16" = 1'-0"

LIGHTING GENERAL NOTES

A. REFER TO ARCH. REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF ALL FIXTURES
B. VERIFY COLOR OF ALL FIXTURES WITH ARCHITECT/OWNER.
C. DRAWINGS DO NOT SHOW DETAILS OF FIXTURE MOUNTING. ELECTRICAL CONTRACTOR TO PROVIDE ALL NECESSARY AND REQUIRED MOUNTING HARDWARE AND ACCESSORIES AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM. SLOPED CEILING: PROVIDE SLOPED-CEILING ADAPTORS AS REQUIRED FOR ALL FIXTURES INSTALLED IN SUCH CEILING.
D. ALL 2'x4' FIXTURES SUPPORTED BY FRAMING MEMBER BY MECHANICAL MEANS, SUCH AS BOLTS, SCREWS, OR RIVETS. CLIPS IDENTIFIED FOR USE WITH THE TYPE OF CEILING FRAMING MEMBER(S) AND FIXTURE(S) SHALL BE PERMITTED. ALL FOUR SIDES OF FIXTURES SHALL BE FASTENED TO CEILING FRAMING MEMBERS. REFERENCE N.E.C. 2017 ARTICLE 410-36(B).
E. ACCEPTABLE LAMP MANUFACTURERS: MATCH BASE BUILDING STANDARDS. ACCEPTABLE BALLAST MANUFACTURERS: MATCH BASE BUILDING STANDARDS.
F. ALL LAMPS ARE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE (THIS APPLIES TO ALL NEW FIXTURES). REPLACE ALL BURNT OUT OR DEFECTIVE LAMPS AND BALLAST WITHIN 6 MONTHS AFTER ACCEPTANCE OF SUBSTANTIAL COMPLETION AT NO ADDITIONAL COST TO THE OWNER (THIS APPLIES TO NEW FIXTURES ONLY, NOT REUSED/EXISTING FIXTURES).
G. ALL FIXTURES SHALL BE FACTORY PAINTED-AFTER-FABRICATION TYPE.
H. IN GENERAL, ALL FIXTURES IN AREAS WITH LAY-IN CEILING ARE CONNECTED USING EMT CONDUIT AND 6-FT (MAXIMUM LENGTH) FIXTURE WHIP, ON PLAN DRAWINGS, FIXTURE CIRCUITING AND CONNECTION ARE SHOWN DIAGRAMMATICALLY WITH ARCS AND CURVES. SUCH DIAGRAMMATIC REPRESENTATION DOES NOT IMPLY OR INDICATE EXCLUSIE USE OF ARMORED OR METAL CLAD CABLE (TYPE BX OR MC). ALL FIXTURE CONNECTION IN AREAS WITH LAY-IN CEILING SHALL BE MADE WITH CONDUIT AND WHIPS.
I. ALL T8 FLUORESCENT LAMPS AND ELECTRONIC BALLASTS SHALL MATCH BASE BUILDING STANDARD.
J. EXISTING FIXTURES RELOCATED BY ELECTRICAL CONTRACTOR: PROVIDE NEW MOUNTING ACCESSORIES, PLASTIC FRAME, BRACKET, BOXES, ETC... AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM.
K. EXISTING FIXTURES RE-USED BY ELECTRICAL CONTRACTOR: EXISTING FIXTURES INDICATED TO BE RE-USED SHALL BE CLEANED AND RE-LAMPED. ELECTRICAL CONTRACTOR TO EXAMINE CONDITION OF EXISTING BALLAST. REPLACE IF NOISY OR DEFECTIVE. ALL BALLAST DATED BEFORE 1976 ARE PRESUMED TO CONATIN PCB AND SHALL BE REMOVED BY THE ELECTRICAL CONTRACTOR. DISPOSE OF SUCH BALLAST IN STRICT COMPLIANCE WITH APPLICABLE FEDERAL AND STATE LAWS AND LOCAL ORDINANCES. FIXTURES NOT INDICATED FOR RE-USE SHALL BE DELIVERED TO A LOCATION TO BE SPECIFIED BY OWNER. DISPOSE OF SUCH FIXTURES IF NOT NEEDED BY OWNER.

KEYED NOTES

1 OCCUPANCY SENSOR WITHIN WAREHOUSE SHALL BE ACUITY #CMRB OR EQUIVALENT. COORDINATE LOCATION WITH EQUIPMENT LAYOUT PRIOR TO INSTALLATION.
2 EXTERIOR LIGHTS TO BE CONTROLLED BY ACUITY #SBO-6-OEX-P OR EQUIVALENT PHOTOCELL.

DIVISION OF INDUSTRIAL COMPLIANCE
BUILDING CODE COMPLIANCE
STATE OF OHIO
DEPARTMENT OF COMMERCE
Final Plan Approval
Examiner: J. Laske

CPA # 2018020527 - April 20, 2018

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03-15-18

IEA WHITE - HAVILAND O&M BUILDING

PAULDING COUNTY, OH

SHEET
ELECTRICAL LIGHTING PLAN

REVISIONS

1	03-06-18	100% REVIEW
2	03-15-18	ISSUED FOR PERMIT

Checker / Designer

DATE: 3-15-18

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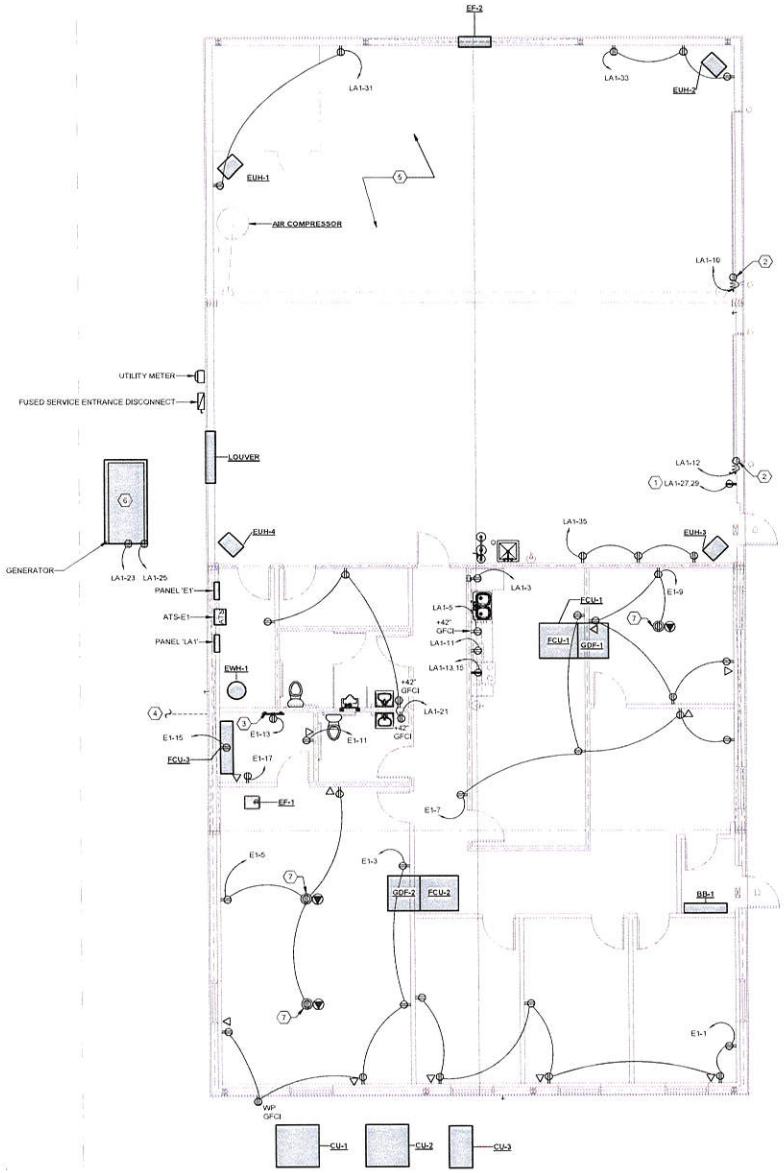

1 ELECTRICAL POWER PLAN

3/16" = 1'-0"

SITE PLAN GENERAL NOTES

A. PLAN REPRESENTS ENGINEER'S PROPOSED DESIGN. COORDINATE LOCATION AND INSTALLATION OF ELECTRICAL SERVICE AND ALL RELATED DEVICES AND EQUIPMENT WITH OWNER AND UTILITY.
B. UNDERGROUND SITE WORK: CONTRACTOR IS REQUIRED TO USE LINE LOCATOR TO IDENTIFY LOCATION(S) OF ALL EXISTING UTILITY LINES. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGES TO ANY EXISTING UTILITY LINES CAUSED BY EXCAVATION AND SUBSEQUENT REPAIR OF UTILITY LINE DAMAGES.
C. AS-BUILT UNDERGROUND UTILITY DRAWINGS MUST BE PROVIDED SHOWING SPECIFIC LOCATIONS OF ALL UTILITIES BURIED ON THE ENTIRE SITE.

KEYED NOTES

1 WELDER RECEPTACLE. VERIFY LOCATION AND ELECTRICAL EQUIPMENT REQUIREMENTS UPON FINAL EQUIPMENT SELECTION PRIOR TO ROUGH-IN.

2 POWER CONNECTION FOR MOTORIZED OVERHEAD DOORS. VERIFY LOCATION AND ELECTRICAL REQUIREMENTS UPON FINAL EQUIPMENT SELECTION PRIOR TO ROUGH-IN.

3 TELEPHONE TERMINAL BOARD: PROVIDE 8'X4'X3/4" THICK PLYWOOD BOARD. PAINTED AND TREATED WITH FIRE RETARDANT. PROVIDE AN ERICO #TMGB-A29L41PT (29"X4"X1/4") TELECOMMUNICATIONS GROUNDING BUS BAR (TGB) MOUNTED ON THE BOARD (COORDINATE FINAL LOCATION W/TELECOMMUNICATION CONTRACTOR). PROVIDE 1#6 WITH GREEN INSULATION CONNECTED TO THE TGB. ROUTE THE #6 IN A 3/4" CONDUIT TO PANEL INDICATED ON PLANS AND CONNECT TO GROUND BUS.

4 PROPOSED TELECOM SERVICE. COORDINATE ROUTING WITH TELECOM COMPANY PRIOR TO INSTALLATION.

5 ELECTRICAL PLANS COMPLETED PRIOR TO FINAL EQUIPMENT SELECTION AND PLACEMENT FOR THE WAREHOUSE. COORDINATE AND CONFIRM ALL ELECTRICAL REQUIREMENTS IN WAREHOUSE WITH OWNER PRIOR TO INSTALLATION OF ELECTRICAL SERVICE. PROVIDE CONNECTIONS AND/OR PLUGS FOR ALL EQUIPMENT AS NEEDED. CONTRACTOR SHALL VERIFY ELECTRICAL SERVICE IS ADEQUATE AFTER ALL EQUIPMENT IS KNOWN. SUBMIT RFI TO KCI WITH ALL ELECTRICAL LOADS SUMMARIZED FOR ENGINEER TO SIGN OFF.

6 PROPOSED GENERATOR LOCATION. COORDINATE LOCATION WITH OWNER PRIOR TO INSTALLATION.

7 PROVIDE AND INSTALL WIREMOLD (OR EQUIVALENT) OMNIBOX 880 SERIES WITH 3/4"C FOR POWER UNDER SLAB TO NEAREST WALL. STUBBED TO ACCESSIBLE CEILING. VERIFY EXACT FINISHES WITH ARCHITECT PRIOR TO INSTALLATION. COORDINATE EXACT LOCATION WITH TENANT/ARCHITECT PRIOR TO ROUGH-IN AND INSTALLATION.

HVAC & PLUMBING EQUIP. CIRCUITING

EQUIPMENT TAG	PANEL-CKT	NOTES
AIR COMPRESSOR	LA1-6,8	1,4
EWH-1	LA1-2,4	1
FCU-1	LA1-51,53	1
FCU-2	LA1-14,16	1
FCU-3	LA1-7,9	1
CU-1	LA1-47,49	2
CU-2	LA1-55,57	2
CU-3	LA1-17,19	2
EF-1	LA1-37	3,5
EF-2	LA1-43,45	1,5
GDF-1	LA1-14	3
GDF-2	LA1-16	3
UH-1	LA1-22,24	1
UH-2	LA1-26,28	1
UH-3	LA1-30,32	1
UH-4	LA1-34,36	1
BB-1	LA1-38,40	1

NOTES:

1. PROVIDE DISCONNECT FOR EACH UNIT. FIELD VERIFY MOUNTING LOCATION WITH MECHANICAL CONTRACTOR. REFER TO PANEL SCHEDULE.
2. PROVIDE DISCONNECT FOR EACH CONNECTION FOR CONDENSING UNIT. FIELD VERIFY MOUNTING LOCATION WITH MECHANICAL CONTRACTOR. REFER TO PANEL SCHEDULE.
3. PROVIDE MOTOR RATED TOGGLE SWITCH.
4. EQUIPMENT PROVIDED BY OWNER. VERIFY ELECTRICAL REQUIREMENTS AND LOCATION PRIOR TO ROUGH-IN.
5. FAN CONTROLLED BY 24/7/365 ASTRONOMICAL TIME CLOCK. REFER TO MEC. SCHEDULE.

DIVISION OF INDUSTRIAL COMPLIANCE
BUILDING CODE COMPLIANCE
STATE OF OHIO
COMMERCE
Final Plan Approval
Examiner: J. Leake

CPA # 2018020527 - April 20, 2018

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IEA WHITE - HAVILAND O&M BUILDING

PAULDING COUNTY, OH

SHEET
ELECTRICAL POWER PLAN

REVISIONS

1	03-06-18	100% REVIEW
2	03-15-18	ISSUED FOR PERMIT

Checker / Designer

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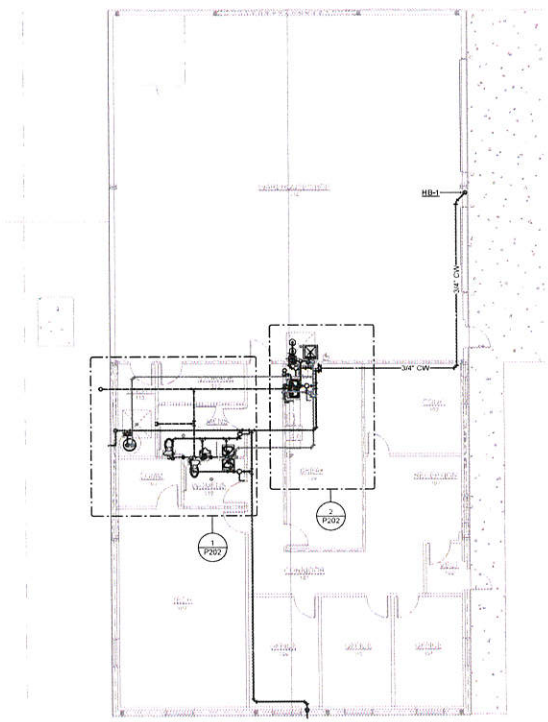
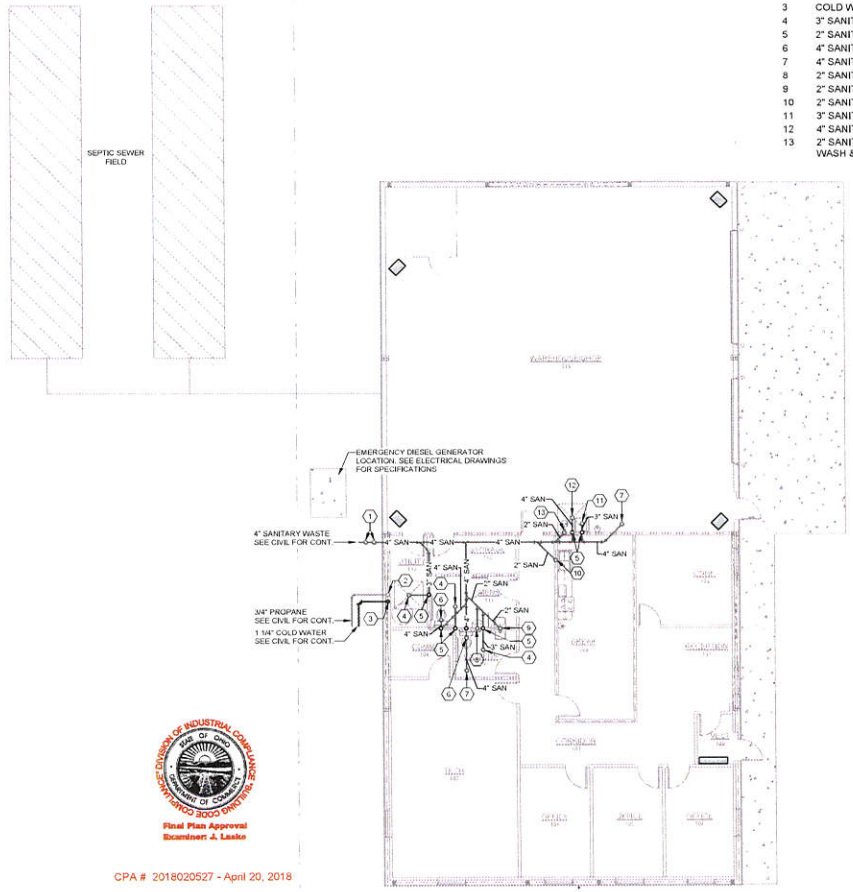
KEYED NOTES

1. 4" SANITARY WASTE UP TO TWO-WAY CLEANOUT
2. PROPANE GAS PIPING UP
3. COLD WATER PIPING UP
4. 3" SANITARY WASTE UP TO FLOOR DRAIN
5. 2" SANITARY VENT UP
6. 4" SANITARY WASTE UP TO WATER CLOSET
7. 4" SANITARY WASTE UP TO FLOOR CLEANOUT
8. 2" SANITARY WASTE UP TO URINAL
9. 2" SANITARY WASTE UP TO LAVATORY
10. 2" SANITARY WASTE UP TO SINK
11. 3" SANITARY WASTE UP TO MOP SINK
12. 4" SANITARY WASTE UP TO FLOOR DRAIN
13. 2" SANITARY WASTE UP TO EMERGENCY EYE WASH & SHOWER



2 PLUMBING ABOVEFLOOR PLAN
1/8" = 1'-0"



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Final Plan Approval
Examiner: J. Laske

PLUMBING GAS EQUIPMENT SCHEDULE

MARK	DESCRIPTION	FUEL TYPE	GAS INPUT (BTUHR)	LP/PROPANE CFH
GDF-1	GAS DUCT FURNACE	PROPANE	120000	48
Grand total				

PROPOSED PROPANE TANK LOCATION. PRESSURE @ 2.0 PSI, CONNECTED LOAD OF 40 CFH.

PRESSURE OF TANK SHALL BE CONFIRM BEFORE INSTALLED OF PIPING. IF PRESSURE OF TANK IS DIFFERENT THAT 2.0 PSI, PIPING SHALL BE RESIZED ACCORDINGLY.

DOMESTIC WATER WELL

1 PLUMBING UNDERFLOOR PLAN
1/8" = 1'-0"

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03-15-18

IEA WHITE - HAVILAND
O&M BUILDING
PAULDING COUNTY, OH

SHEET
PLUMBING FLOOR PLANS

REVISIONS

TL CFC / DE JPC

DATE 3-15-18

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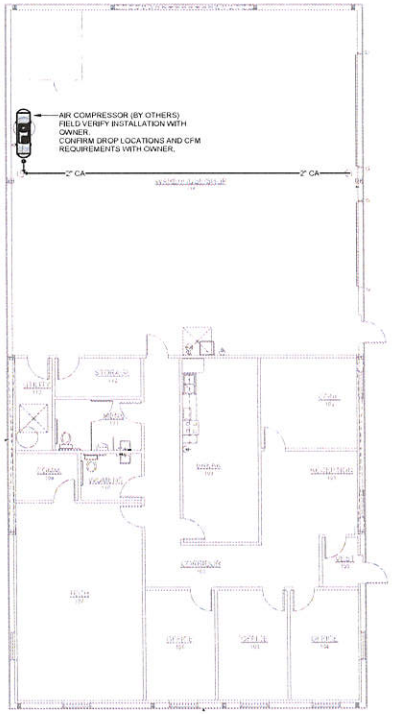

1 **PLUMBING COMPRESSED AIR PLAN**
1/8" = 1'-0"

Final Plan Approval
Examiner J. Lasko

CPA # 2018020527 - April 20, 2018

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IEA WHITE - HAVILAND
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PAULDING COUNTY, OH

SHEET
PLUMBING COMPRESSED AIR PLAN

REVISIONS

TL CFC / DE JPC

DATE 3-15-18

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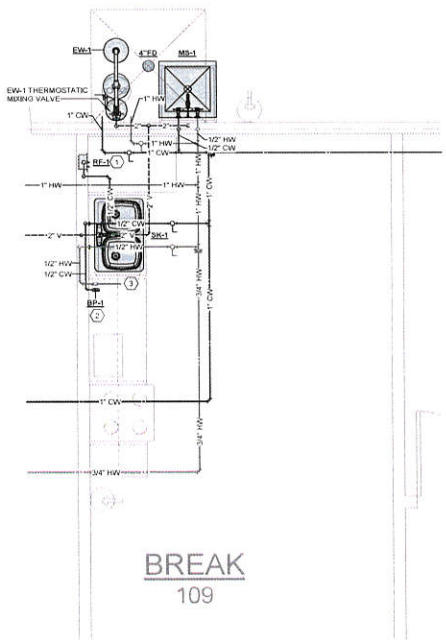
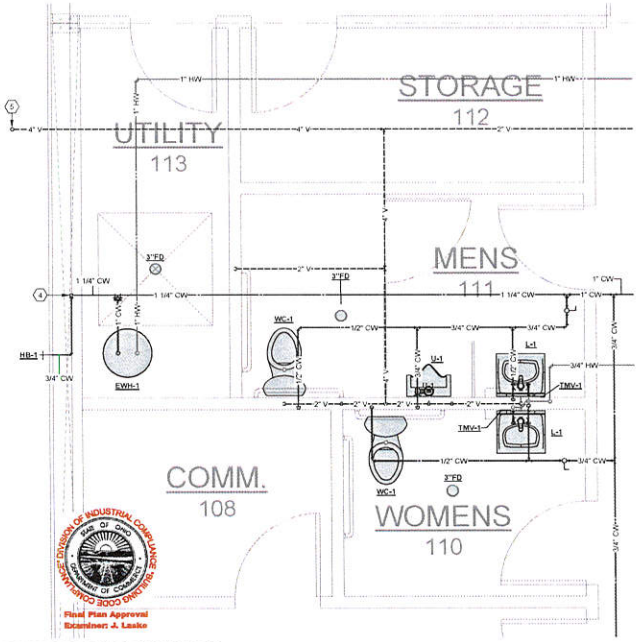
SHEET
P201

KEYED NOTES

1. PROVIDE 1/2" COLD WATER CONNECTION TO REFRIGERATOR WALL BOX .
2. PROVIDE 1/2" COLD WATER CONNECTION WITH QUARTER TURN SHUT-OFF VALVE AND DOUBLE CHECK VALVE (BP-1) AND IN-LINE WATER FILTER (AQUA PURE AP#117) FOR COFFEE MAKER. INSTALL BP-1 BELOW SINK FOR MAINTENANCE AND TESTING. VERIFY LOCATION WITH ARCHITECTURAL PLANS.
3. PROVIDE 1/2" HOT WATER CONNECTION WITH QUARTER TURN SHUT-OFF VALVE TO DISHWASHER.
4. 1 1/4" COLD WATER UP FROM BELOW
5. 4" SANITARY VENT UP TO ABOVE ROOF LINE PER CODE.



2 **BREAKROOM**
1/2" = 1'-0"



1 **RESTROOM / UTILITY RM**
1/2" = 1'-0"

DLA # 2018020021 - April 20, 2018

File Name: C:\DMS\Revit_Projects\7918040.00-MEP-R18_nicholas.badke.rvt
User: Author
Date/Time: 3/16/2018 7:44:11 AM

KCI ENGINEERS PLANNERS ENVIRONMENTAL CONSULTANTS/LANDSCAPES
801 TRAVIS, SUITE 2000
HOUSTON, TX 77002
TEL: 713.423.8888 FAX: 713.423.0883
(Non-Registered Engineering Firm #1914)

STATE OF OHIO
CLAYTON F. CLEMENTS
82568
REGISTERED
PROFESSIONAL ENGINEER
03-15-18

IEA WHITE - HAVILAND
O&M BUILDING
PAULDING COUNTY, OH

SHEET
PLUMBING ENLARGED PLANS

REVISIONS

TL CFC / DE JPC

DATE 3-15-18

PROJECT
7918040.00

SHEET
P202

BUILDER/CONTRACTOR RESPONSIBILITIES

Drawing Validity – These drawings, supporting structural calculations and design certification are based on the order documents as of the date of these drawings. These documents describe the material supplied by the manufacturer as of the date of these drawings. Any changes to the order documents after the date on these drawings may void these drawings, supporting structural calculations and design certification. The Builder/Contractor is responsible for notifying the building authority of all changes to the order documents which result in changes to the drawings, supporting structural calculations and design certification.

Builder Acceptance of Drawings – Approval of the manufacturer's drawings and design data affirms that the manufacturer has correctly interpreted and applied the requirements of the order documents and constitutes Builder/Contractor acceptance of the manufacturer's interpretations of the order documents and standard product specifications, including its design, fabrication and quality criteria standards and tolerances. (AISC code of standard practice Sept 86 Section 4.2.1) (Mar 05 Section 4.4.1)

Code Official Approval – It is the responsibility of the Builder/Contractor to ensure that all project plans and specifications comply with the applicable requirements of any governing building authority. The Builder/Contractor is responsible for securing all required approvals and permits from the appropriate agency as required.

Builder is responsible for State, Federal and OSHA safety compliance – The Builder/Contractor is responsible for applying and observing all pertinent safety rules and regulations and OSHA standards as applicable.

Building Erection – The Builder/Contractor is responsible for all erection of the steel and associated work in compliance with the Metal Building Manufacturers drawings. Temporary supports, such as temporary guys, braces, false work or other elements required for erection will be determined, furnished and installed by the erector. (AISC Code of Standard Practice Sept 86 Section 7.9.1) (Mar 05 Section 7.10.3)

Discrepancies – Where discrepancies exist between the Metal Building plans and plans for other trades, the Metal Building plans will govern. (AISC Code of Standard Practice Sept 86 Section 3.3) (Mar 05 Section 3.3)

Materials by Others – All interface and compatibility of any materials not furnished by the manufacturer are the responsibility of and to be coordinated by the Builder/Contractor or A/E firm. Unless specific design criteria concerning any interface between materials if furnished as a part of the order documents, the manufacturers assumptions will govern.

Modification of the Metal Building from Plans – The Metal Building supplied by the manufacturer has been designed according to the Building Code and specifications and the loads shown on this drawing. Modification of the building configuration, such as removing wall panels or braces, from that shown on these plans could affect the structural integrity of the building. The Metal Building Manufacturer or a Licensed Structural Engineer should be consulted prior to making any changes to the building configuration shown on these drawings. The Metal Building Manufacturer will assume no responsibility for any loads applied to the building not indicated on these drawings.

Foundation Design – The Metal Building Manufacturer is not responsible for the design, materials and workmanship of the foundation. Anchor rod plans prepared by the manufacturer are intended to show only location, diameter and projection of the anchor rods required to attach the Metal Building System to the foundation. It is the responsibility of the end customer to ensure that adequate provisions are made for specifying rod embedment, bearing values, tie rods and or other associated items embedded in the concrete foundation, as well as foundation design for the loads imposed by the Metal Building System, other imposed loads, and the bearing capacity of the soil and other conditions of the building site. (MBMA 06 Sections 3.2.2 and A3)

PROJECT NOTES

Material properties of steel bar, plate, and sheet used in the fabrication of built-up structural framing members conform to ASTM A529, ASTM A572, ASTM A1011 SS, or ASTM A1011 HSLAS with a minimum yield point of 50 ksi. Material properties of hot rolled structural shapes conform to ASTM A992, ASTM A529, or ASTM A572 with a minimum specified yield point of 50 ksi. Hot rolled angles, or other than flange braces, conform to ASTM 36 minimum. Hollow structural shaped conform to ASTM A500 grade b, minimum yield point is 42 ksi for round HSS and 46 ksi for rectangular HSS. Material properties of cold form light gage steel members conform to the requirements of ASTM A1011 SS Grade 55 or ASTM A1011 HSLAS Class 1 Grade 55, with a minimum yield point of 55 ksi.

The manufacturer does not assume any responsibility for the erection nor field supervision of the structure and or any special inspections that may be required by the local building authority during erection (including inspection of the high strength bolts or field welds) as required during erection. The coordination and the costs associated for setting up and Special Inspections are the responsibility of the Erector, Owner, Architect, or Engineer of Record.

Design is based upon the more severe loading of either the roof snow load or the roof live load.

Loads, as noted, are given within order documents and are applied in general accordance with the applicable provisions of the model code and/or specification indicated. Neither the manufacture nor the certifying engineer declares or attests that the loads as designated are proper for the local provisions that may apply or for site specific parameters. The manufacturer's Engineer's certification is limited to design loads supplied by an Architect and/or engineer of record for the overall construction project.

This project is designed using manufacture's standard serviceability standards. Generally this means that all stresses and deflections are within typical performance limits for normal occupancy and standard metal building products. If special requirements for deflections and vibrations must be adhered to, then they must be clearly stated in the contract documents.

This metal building system is designed as enclosed. All exterior components (i.e. doors, windows, vents, etc.) must be designed to withstand the specified wind loading for the design of components and cladding in accordance with the specified building code. Doors are to be closed when a maximum of 50% of design wind velocity is reached.

Using 7x7 eave gutter with 4 x 5 downspouts, the roof drainage system has been designed using the method outlined in the MBMA Metal Building Systems Manual. Downspout locations have not been located on these drawings. The downspouts are to be placed on the building sidewalls at a spacing not to exceed 100 feet with the first downspout from both ends of the gutter run within 100 feet of the end. Downspout spacing that does not exceed the maximum spacing will be in compliance with the building code. The gutter and downspout system as provided by the manufacturer is designed to accommodate 5.77 in/hr rainfall intensity

Final Plan Approval
Examiner J. Laske

CPA # 2018020527 - April 20, 2018

DESIGN LOADING

THIS STRUCTURE IS DESIGNED UTILIZING THE LOADS INDICATED AND APPLIED AS REQUIRED BY:

IBC 15

THE BUILDER IS TO CONFIRM THAT THESE LOADS COMPLY WITH THE REQUIREMENTS OF THE LOCAL BUILDING DEPARTMENT.

ROOF DEAD LOAD
- SUPERIMPOSED: 2.000 PSF
- COLLATERAL: 3 PSF

ROOF LIVE LOAD: 20.00 PSF (REDUCIBLE)

RISK CATEGORY: II – Normal

SNOW LOAD
- GROUND SNOW LOAD (Pg): 20.000 PSF
- SNOW LOAD IMPORTANCE FACTOR (Is): 1.0000
- FLAT ROOF SNOW LOAD (Pf): 14.0 PSF (PER CODE)
- MIN ROOF SNOW LOAD (Pf): 20.0 PSF (USED IN DESIGN)
- SNOW EXPOSURE FACTOR (Ce): 1.0
- THERMAL FACTOR (Ct): 1.00

WIND LOAD
- ULTIMATE WIND SPEED: 115 MPH
- NOMINAL WIND SPEED (Vasd): 89 MPH (IBC SECTION 1609.3.1)
- SERVICEABILITY WIND SPEED: 76 MPH
- WIND EXPOSURE CATEGORY: C
- TOPOGRAPHICAL FACTOR: 1.0
- INTERNAL PRESSURE COEFFICIENT (GCpi) 0.18 /–0.18
- ZONE 4, COMPONENT WIND LOAD ≤ 10FT²
  - 26.418 PSF PRESSURE –28.619 PSF SUCTION
- ZONE 5, COMPONENT WIND LOAD < 10FT²
  - 26.418 PSF PRESSURE –35.158 PSF SUCTION

ZONES PER ASCE 7–10; FIG. 30.4–1
ZONES PRESSURES SHOWN ARE UN–FACTORED

RAIN INTENSITY
- 5–MINUTE DURATION, 5–YEAR RECURRENCE (I1): 5.7700 IN/HOUR

SEISMIC LOAD
- SEISMIC IMPORTANCE FACTOR (Ie): 1.00
- S_s 0.1390 — S_{Ds} 0.1483
- S1 0.0620 — S_{D1} 0.0992
- SITE CLASS: D STIFF SOIL
- SEISMIC DESIGN CATEGORY: B

ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

COLUMN LINE	TRANSVERSE	LONGITUDINAL FRONT	LONGITUDINAL BACK
BASIC FORCE RESISTING SYSTEM*	H	H	H
RESPONSE MODIFICATION COEFFICIENT(R)	3	3	3
SYSTEM OVER–STRENGTH FACTOR(Ω_0)	2.5000	2.5000	2.5000
SEISMIC RESPONSE COEFFICIENT(C_s)	0.049	0.049	0.049

BLDG DESIGN BASE SHEAR (V) Transverse 1.84 (k) Longitudinal 1.94 (k)

THE TRANSVERSE DIRECTION IS PARALLEL TO THE RIGID FRAMES
THE LONGITUDINAL DIRECTION IS PERPENDICULAR TO THE RIGID FRAMES

BASIC FORCE RESISTING SYSTEM*
H. STRUCTURAL STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE

DRAWING INDEX

PAGE	DESCRIPTION
C1	COVER SHEET
F1	ANCHOR BOLT PLAN
F2	ANCHOR BOLT REACTIONS
F3	ANCHOR BOLT DETAILS
E1	ROOF FRAMING PLAN
E2	ROOF SHEETING PLAN
E3	FRONT SIDEWALL
E4	BACK SIDEWALL
E5	LEFT ENDWALL
E6	RIGHT ENDWALL
E7–E9	FRAME CROSS SECTION
DET1–11	STANDARD DETAILS
R1–R8	INSTALLATION SHEETS

DRAWING STATUS

☐ FOR APPROVAL
THESE DRAWINGS, BEING FOR APPROVAL, ARE BY DEFINITION NOT FINAL, AND ARE FOR CONCEPTUAL REPRESENTATION ONLY. THEIR PURPOSE IS TO CONFIRM PROPER INTERPRETATION OF THE PROJECT DOCUMENTS. ONLY DRAWINGS ISSUED "FOR ERECTOR INSTALLATION" CAN BE CONSIDERED AS COMPLETE.

☐ FOR CONSTRUCTION PERMIT
THESE DRAWINGS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL. ONLY DRAWINGS ISSUED "FOR ERECTOR INSTALLATION" CAN BE CONSIDERED AS COMPLETE.

☒ FOR ERECTOR INSTALLATION
FINAL DRAWINGS FOR CONSTRUCTION.

FOR QUESTIONS OR ASSISTANCE CONCERNING ERECTION CALL:
800–556–3726
MONDAY – FRIDAY 7:30AM TO 5:00PM

ENGINEERING SEAL

THIS CERTIFICATION COVERS PARTS MANUFACTURED AND DELIVERED BY THE MANUFACTURER ONLY, AND EXCLUDES PARTS SUCH AS DOORS, WINDOWS, FOUNDATION DESIGN AND ERECTION OF THE BUILDING.

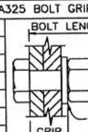
THESE DRAWINGS AND THE METAL BUILDING SYSTEM THEY REPRESENT ARE THE PRODUCT OF AN AFFILIATE OF NCI GROUP, INC. – 10943 N. SAM HOUSTON PARKWAY W., HOUSTON, TX 77064. THE PROFESSIONAL ENGINEER WHOSE SEAL APPEARS HEREON IS EMPLOYED BY AN AFFILIATE OF NCI GROUP, INC. AND IS NOT THE ENGINEER–OF–RECORD FOR THE OVERALL PROJECT.

THE ENGINEER WHOSE SEAL APPEARS HEREON IS AN EMPLOYEE FOR THE MANUFACTURER FOR THE MATERIALS DESCRIBED HEREIN. SAID SEAL OR CERTIFICATION IS LIMITED TO THE PRODUCTS DESIGNED AND MANUFACTURED BY MANUFACTURER ONLY.THE UNDERSIGNED ENGINEER IS NOT THE OVERALL ENGINEER OF RECORD FOR THIS PROJECT.

Mar 15, 2018
STATE OF OHIO — S. H. DAVIDSON — E-47008 — REGISTERED PROFESSIONAL ENGINEER

1/2"ø A325 BOLT GRIP TABLE

GRIP	LENGTH
0 TO 9/16"	1 1/4" F.T.
Over 9/16" TO 1 1/16"	1 3/4" F.T.
Over 1 1/16" TO 1 5/16"	2"
Over 1 5/16" TO 1 9/16"	2 1/4"
Over 1 9/16" TO 1 13/16"	2 1/2"
Over 1 13/16" TO 2 1/16"	2 3/4"
LOCATIONS OF BOLTS LONGER THAN 2 3/4" NOTED ON ERECTION DRAWINGS	
F.T. DENOTES FULLY THREADED	



NOTE:
FULL THREAD ENGAGEMENT IS DEEMED TO HAVE BEEN MET WHEN THE END OF THE BOLT IS FLUSH WITH THE FACE OF THE NUT.

WASHER REQUIRED ONLY WHEN SPECIFIED. WASHER MAY BE LOCATED UNDER HEAD OF BOLT, UNDER NUT, OR AT BOTH AT LOCATIONS NOTED ON ERECTION DRAWINGS.

ADD 5/32" FOR EACH WASHER TO MATERIAL THICKNESS TO DETERMINE GRIP.

Rev. 4/4/2017

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

BUILDING SIZE: 50'–0" x 100'–0" x 14'–0" 1.0:12

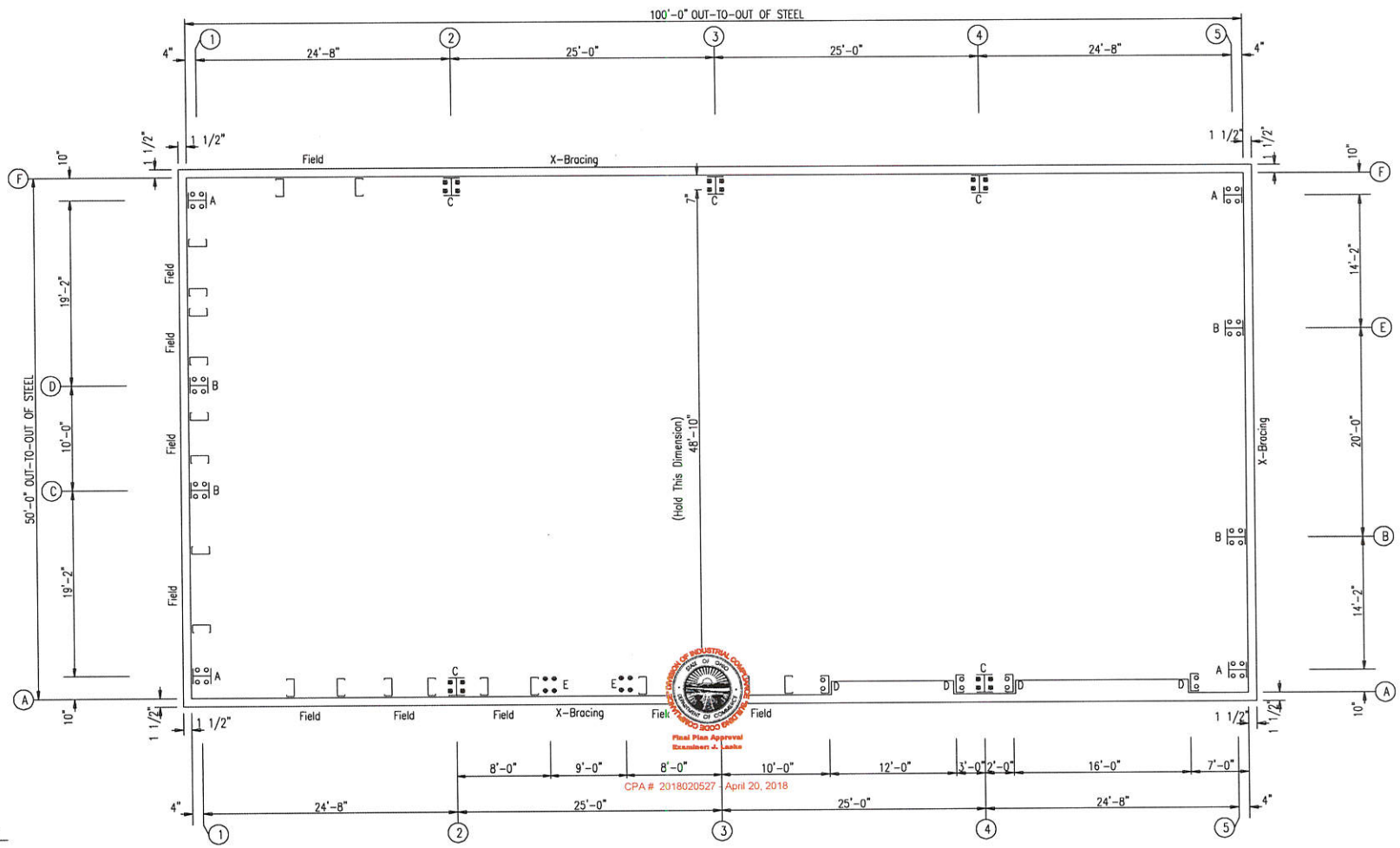
MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214–687–9999 Fax 214–687–9737

PROJECT: IEA WHITE–HAVILAND
CUSTOMER: MBA CONSTRUCTION — OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

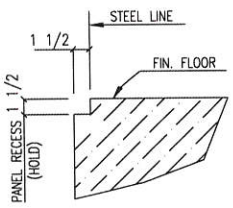
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16–B–37440–B	C1	1

○ Dia= 5/8"

⊠ Dia= 3/4"



ANCHOR BOLT PLAN



CONCRETE NOTCH DETAIL

NOTE: ALL BASE PLATES @ 100.0' (U.N.)
ASSUMED FINISH FLOOR @ 100.0' (U.N.)

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

MBMA

PROJECT:	IEA WHITE-HAVILAND
CUSTOMER:	MBA CONSTRUCTION
OWNER:	IEA WHITE
LOCATION:	HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	F1	1

Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED PROFESSIONAL ENGINEER

DIVISION OF INDUSTRIAL COMPLIANCE
STATE OF OHIO
DEPARTMENT OF COMMERCE
Final Plan Approval
Examiner: J. Lasko
CPA # 2018020527 - April 20, 2018

GENERAL NOTES

1. THE REACTIONS PROVIDED ARE BASED ON THE ORDER DOCUMENTS AT THE TIME OF MAILING. ANY CHANGES TO BUILDING LOADS OR DIMENSIONS MAY CHANGE THE REACTIONS. THE REACTIONS WILL BE SUPERSEDED AND VOIDED BY ANY FUTURE MAILING.
2. REACTIONS ARE PROVIDED AS UN-FACTORED FOR EACH LOAD GROUP APPLIED TO THE COLUMN. THE FOUNDATION ENGINEER WILL APPLY THE APPROPRIATE LOAD FACTORS AND COMBINE THE REACTIONS IN ACCORDANCE WITH THE BUILDING CODE AND DESIGN SPECIFICATIONS TO DETERMINE BEARING PRESSURES AND CONCRETE DESIGN. THE FACTORS APPLIED TO LOAD GROUPS FOR THE STEEL COLUMN DESIGN MAY BE DIFFERENT THAN THE FACTORS USED IN THE FOUNDATION DESIGN.
3. THE MANUFACTURER DOES NOT PROVIDE "MAXIMUM" LOAD COMBINATION REACTIONS. HOWEVER, THE INDIVIDUAL LOAD REACTIONS PROVIDED MAY BE USED BY THE FOUNDATION ENGINEER TO DETERMINE THE APPLICABLE LOAD COMBINATIONS FOR HIS/HER DESIGN PROCEDURES AND ALLOW FOR AN ECONOMICAL FOUNDATION DESIGN.
4. THE METAL BUILDING MANUFACTURER IS RESPONSIBLE FOR THE DESIGN OF THE ANCHOR BOLT DIAMETER ONLY TO PERMIT THE TRANSFER OF FORCES BETWEEN THE BASE PLATE AND THE ANCHOR BOLT IN SHEAR, BEARING AND TENSION, BUT IS NOT RESPONSIBLE FOR THE ANCHOR BOLT EMBEDMENT FOR TRANSFER OF FORCES TO THE FOUNDATION. THE METAL BUILDING MANUFACTURER DOES NOT DESIGN AND IS NOT RESPONSIBLE FOR THE DESIGN, MATERIAL AND CONSTRUCTION OF THE FOUNDATION EMBEDMENTS. THE END USE CUSTOMER SHOULD ASSURE HIMSELF THAT ADEQUATE PROVISIONS ARE MADE IN THE FOUNDATION DESIGN FOR LOADS IMPOSED BY COLUMN REACTIONS OF THE BUILDING, OTHER IMPOSED LOADS, AND BEARING CAPACITY OF THE SOIL AND OTHER CONDITIONS OF THE BUILDING SITE. IT IS RECOMMENDED THAT THE ANCHORAGE AND FOUNDATION OF THE BUILDING BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER EXPERIENCED IN THE DESIGN OF SUCH STRUCTURES. (SECTION A3 MBMA 2006 METAL BUILDING SYSTEMS MANUAL)
5. BOTTOM OF ALL BASE PLATES ARE AT THE SAME ELEVATION. (UNLESS NOTED)
6. ANCHOR RODS ARE ASTM F1554 GRADE 36 MATERIAL UNLESS NOTED OTHERWISE.

BUILDING BRACING REACTIONS

Reactions in plane of wall ± Reactions(k)

Wall Loc	Wall Line	Col Line	Wind Horz	Wind Vert	Seismic Horz	Seismic Vert	Panel_Shear (lb/ft) Wind	Panel_Shear (lb/ft) Seis
L_EW	1						30	14
F_SW	A	2,3	3.5	*	1.0	*		
R_EW	5	B,E	Bracing, see EW reactions					
B_SW	F	3,2	3.5	*	1.0	*		

*See RF reactions table for vertical and horizontal reactions in plane of the rigid frame.

ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horz	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert
1	F	0.4	0.3	2.2	1.6	-2.9	-1.8	-1.9	-0.7	0.0	0.0	-3.0	-1.8
1	D	0.7	0.6	4.1	2.9	-6.0	-2.9	-4.3	-1.2	-2.2	2.5	-6.0	-2.9
1	C	0.7	0.6	4.1	2.9	-2.9	-6.0	-1.2	-4.3	-2.2	2.5	-2.9	-6.0
1	A	0.4	0.3	2.2	1.6	-1.8	-2.9	-0.7	-1.9	0.0	0.0	-1.8	-3.0

Frm Line	Col Line	Seis Left Vert	Seis Right Vert	-MIN_SNOW-- Horz	-MIN_SNOW-- Vert	E1UNB_SL_L- Horz	E1UNB_SL_L- Vert	E1UNB_SL_R- Horz	E1UNB_SL_R- Vert
1	F	0.0	0.0	0.0	2.2	0.0	1.6	0.0	0.5
1	D	0.0	0.0	0.0	4.1	0.0	4.3	0.0	0.5
1	C	0.0	0.0	0.0	4.1	0.0	0.5	0.0	4.3
1	A	0.0	0.0	0.0	2.2	0.0	0.5	0.0	1.6

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind_Left1 Horz	Wind_Left1 Vert	Wind_Right1 Horz	Wind_Right1 Vert	Wind_Left2 Horz	Wind_Left2 Vert	Wind_Right2 Horz	Wind_Right2 Vert	Wind Press Horz
5	A	0.3	0.2	1.4	1.0	0.0	-1.9	0.0	-1.2	0.0	-1.2	0.0	-0.5	-1.1
5	B	0.8	0.7	4.9	3.4	1.7	-7.6	0.0	-2.9	1.7	-5.5	0.0	-0.8	-2.6
5	E	0.8	0.7	4.9	3.4	0.0	-2.9	1.7	-7.6	0.0	-0.8	1.7	-5.5	-2.6
5	F	0.3	0.2	1.4	1.0	0.0	-1.2	0.0	-1.9	0.0	-0.5	0.0	-1.2	0.0

Frm Line	Col Line	Wind Suct Horz	Wind_Long1 Horz	Wind_Long1 Vert	Wind_Long2 Horz	Wind_Long2 Vert	Seis_Left Horz	Seis_Left Vert	Seis_Right Horz	Seis_Right Vert	-MIN_SNOW-- Horz	-MIN_SNOW-- Vert	E2UNB_SL_L- Horz	E2UNB_SL_L- Vert
5	A	1.2	0.0	-2.0	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	1.4	0.0	1.0
5	B	2.8	0.0	-6.2	0.3	-4.4	0.3	-0.2	0.0	0.2	0.0	4.9	0.0	4.2
5	E	2.8	0.3	-4.4	0.0	-6.2	0.0	0.2	0.3	-0.2	0.0	4.9	0.0	1.5
5	F	0.0	0.0	-1.1	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.2

Frm Line	Col Line	E2UNB_SL_R- Horz	E2UNB_SL_R- Vert
5	A	0.0	0.2
5	B	0.0	1.5
5	E	0.0	4.2
5	F	0.0	1.0

ANCHOR BOLT SUMMARY

	Qty	Locate	Dia (in)	Type	Proj (in)
O	8	Jamb	5/8"	F1554	2.00
O	32	Endwall	5/8"	F1554	2.00
⊠	24	Frame	3/4"	F1554	2.50
⊠	8	Windbent	3/4"	F1554	2.50

ENDWALL COLUMN: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc._Bolt Qty	Anc._Bolt Dia	Base_Plate (in) Width	Base_Plate (in) Length	Thick	Grout (in)
1	F	4	0.625	6.000	8.000	0.375	0.0
1	D	4	0.625	6.000	8.000	0.375	0.0
1	C	4	0.625	6.000	8.000	0.375	0.0
1	A	4	0.625	6.000	8.000	0.375	0.0
5	A	4	0.625	6.000	8.000	0.375	0.0
5	B	4	0.625	6.000	8.000	0.375	0.0
5	E	4	0.625	6.000	8.000	0.375	0.0
5	F	4	0.625	6.000	8.000	0.375	0.0

NOTES FOR REACTIONS

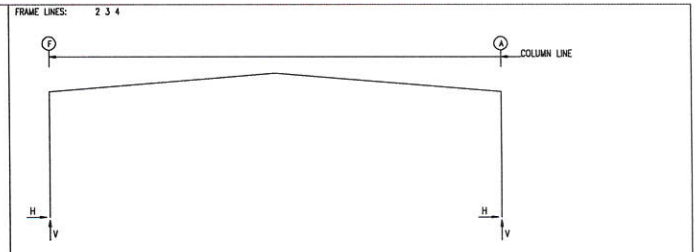
BUILDING REACTIONS ARE BASED ON THE FOLLOWING BUILDING DATA:

WIDTH (FT)	= 50
LENGTH (FT)	= 100
EAVE HEIGHT (FT)	= 14 / 14
ROOF SLOPE (rise/12)	= 1.0:12 / 1.0:12
DEAD LOAD (psf)	= 2.000
COLLATERAL LOAD (psf)	= 3
ROOF LIVE LOAD (psf)	= 20.00 (REDUCIBLE)
FRAME LIVE LOAD (psf)	= 12
ROOF SNOW LOAD (psf)	= 14.0 (PER CODE)
MIN ROOF SNOW LOAD (psf)	= 20.0 (PER DESIGN)
GROUND SNOW LOAD (psf)	= 20.0000
WIND SPEED (MPH)	= 115
WIND CODE	= IBC 15
EXPOSURE	= C
CLOSED/OPEN	= Closed
...NCE - WIND	= 1.00
...NCE - SEISMIC	= 1.00
...ZONE	= B
...WIND SPEED(Vasd)	= 89 MPH (IBC SECTION 1609.3.1)
...BILITY WIND SPEED	= 76 MPH

WIND_Left/Right 1 = (with +GCpi Internal Pressure)
WIND_Left/Right 2 = (with -GCpi Internal Pressure)
Wind_Long 1 = Wind Load Case B at Left EW
Wind_Long 2 = Wind Load Case B at Right EW
MIN_SNOW = Minimum Snow (Pm) per code
E#UNB_SL_L = Endwall Unbalanced Snow Left
E#UNB_SL_R = Endwall Unbalanced Snow Right
F#UNB_SL_L = Rigid Frame Unbalanced Snow Left
F#UNB_SL_R = Rigid Frame Unbalanced Snow Right

STATE OF OHIO DEPARTMENT OF COMMERCE DIVISION OF INDUSTRIAL COMPLIANCE BUILDING CODE COMPLIANCE
Final Plan Approval
Examiner
CPA # 20180205?? April 20, 2018

FRAME LINES: 2 3 4



RIGID FRAME: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc._Bolt Qty	Anc._Bolt Dia	Base_Plate (in) Width	Base_Plate (in) Length	Thick	Grout (in)
2	F	4	0.750	6.000	19.00	0.375	0.0
2	A	4	0.750	6.000	19.00	0.375	0.0

RIGID FRAME: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc._Bolt Qty	Anc._Bolt Dia	Base_Plate (in) Width	Base_Plate (in) Length	Thick	Grout (in)
3	F	4	0.750	6.000	19.00	0.375	0.0
3	A	4	0.750	6.000	19.00	0.375	0.0

RIGID FRAME: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc._Bolt Qty	Anc._Bolt Dia	Base_Plate (in) Width	Base_Plate (in) Length	Thick	Grout (in)
4	F	4	0.750	6.000	19.00	0.375	0.0
4	A	4	0.750	6.000	19.00	0.375	0.0

RIGID FRAME: BASIC COLUMN REACTIONS (k)

Frame Line	Column Line	Dead Horiz	Dead Vert	Collateral Horiz	Collateral Vert	Live Horiz	Live Vert	Snow Horiz	Snow Vert	Wind_Left1 Horiz	Wind_Left1 Vert	Wind_Right1 Horiz	Wind_Right1 Vert
2	F	1.0	2.0	1.2	1.9	4.6	7.5	5.4	8.7	-9.1	-12.9	-3.1	-8.8
2	A	-1.0	2.0	-1.2	1.9	-4.6	7.5	-5.4	8.8	3.1	-8.8	9.1	-12.9

Frame Line	Column Line	Wind_Left2 Horiz	Wind_Left2 Vert	Wind_Right2 Horiz	Wind_Right2 Vert	Wind_Long1 Horiz	Wind_Long1 Vert	Wind_Long2 Horiz	Wind_Long2 Vert	Seismic_Left Horiz	Seismic_Left Vert	Seismic_Right Horiz	Seismic_Right Vert
2	F	-7.4	-7.4	-1.3	-3.3	-3.8	-13.7	-4.2	-11.4	-0.2	-0.1	0.2	0.1
2	A	1.3	-3.3	7.4	-7.4	4.2	-11.4	3.8	-13.7	-0.2	0.1	0.2	-0.1

Frame Line	Column Line	Seismic_Long Horiz	Seismic_Long Vert	MIN_SNOW Horiz	MIN_SNOW Vert	F1UNB_SL_L Horiz	F1UNB_SL_L Vert	F1UNB_SL_R Horiz	F1UNB_SL_R Vert
2	F	0.0	-0.5	7.7	12.5	4.5	8.7	4.5	5.0
2	A	0.0	-0.5	-7.7	12.5	-4.5	5.0	-4.5	8.7

Frame Line	Column Line	Dead Horiz	Dead Vert	Collateral Horiz	Collateral Vert	Live Horiz	Live Vert	Snow Horiz	Snow Vert	Wind_Left1 Horiz	Wind_Left1 Vert	Wind_Right1 Horiz	Wind_Right1 Vert
3	F	1.0	2.0	1.2	1.9	4.6	7.5	5.4	8.7	-9.1	-12.9	-3.1	-8.8
3	A	-1.0	2.0	-1.2	1.9	-4.6	7.5	-5.4	8.8	3.1	-8.8	9.1	-12.9

Frame Line	Column Line	Wind_Left2 Horiz	Wind_Left2 Vert	Wind_Right2 Horiz	Wind_Right2 Vert	Wind_Long1 Horiz	Wind_Long1 Vert	Wind_Long2 Horiz	Wind_Long2 Vert	Seismic_Left Horiz	Seismic_Left Vert	Seismic_Right Horiz	Seismic_Right Vert
3	F	-7.4	-7.4	-1.3	-3.3	-3.8	-13.7	-4.2	-11.4	-0.2	-0.1	0.2	0.1
3	A	1.3	-3.3	7.4	-7.4	4.2	-11.4	3.8	-13.7	-0.2	0.1	0.2	-0.1

Frame Line	Column Line	Seismic_Long Horiz	Seismic_Long Vert	MIN_SNOW Horiz	MIN_SNOW Vert	F2UNB_SL_L Horiz	F2UNB_SL_L Vert	F2UNB_SL_R Horiz	F2UNB_SL_R Vert
3	F	0.0	-0.5	7.7	12.5	4.5	8.7	4.5	5.0
3	A	0.0	-0.5	-7.7	12.5	-4.5	5.0	-4.5	8.7

Frame Line	Column Line	Dead Horiz	Dead Vert	Collateral Horiz	Collateral Vert	Live Horiz	Live Vert	Snow Horiz	Snow Vert	Wind_Left1 Horiz	Wind_Left1 Vert	Wind_Right1 Horiz	Wind_Right1 Vert
4	F	1.0	2.0	1.2	1.9	4.6	7.5	5.4	8.7	-9.1	-12.9	-3.1	-8.8
4	A	-1.0	2.0	-1.2	1.9	-4.6	7.5	-5.4	8.8	3.1	-8.8	9.1	-12.9

Frame Line	Column Line	Wind_Left2 Horiz	Wind_Left2 Vert	Wind_Right2 Horiz	Wind_Right2 Vert	Wind_Long1 Horiz	Wind_Long1 Vert	Wind_Long2 Horiz	Wind_Long2 Vert	Seismic_Left Horiz	Seismic_Left Vert	Seismic_Right Horiz	Seismic_Right Vert
4	F	-7.4	-7.4	-1.3	-3.3	-3.8	-12.0	-4.2	-9.7	-0.2	-0.1	0.2	0.1
4	A	1.3	-3.3	7.4	-7.4	4.2	-9.7	3.8	-12.0	-0.2	0.1	0.2	-0.1

Frame Line	Column Line	MIN_SNOW Horiz	MIN_SNOW Vert	F3UNB_SL_L Horiz	F3UNB_SL_L Vert	F3UNB_SL_R Horiz	F3UNB_SL_R Vert
4	F	7.7	12.5	4.5	8.7	4.5	5.0
4	A	-7.7	12.5	-4.5	5.0	-4.5	8.7

MINIMUM WALL LENGTHS FOR USE OF PANEL SHEAR BRACING SYSTEM

Panel diaphragm action is utilized to resist seismic and/or wind forces applied parallel to this elevation. Wall sheeting must be continuous from eave strut / rake angle to base support in order to be considered effective. The effective length of wall panel at each wall must be determined by rational analysis considering included openings and height to width ratios of panel segments. Minimum effective length required on this wall for applied force is shown below. Additional openings not indicated should be avoided without prior consultation with the metal building manufacturer.

MIN. FSW REQ'D. – FEET OF CONTINUOUS PANEL*
MIN. BSW REQ'D. – FEET OF CONTINUOUS PANEL*
MIN. LEW REQ'D. 14' FEET OF CONTINUOUS PANEL*
MIN. REW REQ'D. – FEET OF CONTINUOUS PANEL*

*THIS MAY BE BROKEN DOWN INTO SEPARATE SECTIONS OF NO LESS THAN 1/2 THE EAVE HEIGHT

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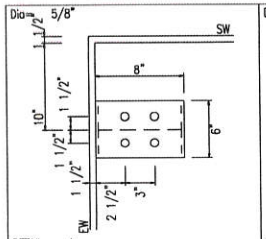
MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

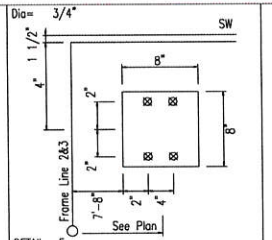
PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	F2	1

Mar 15, 2018
STATE OF OHIO S. H. DAVIDSON E-47008 REGISTERED PROFESSIONAL ENGINEER



DETAIL A



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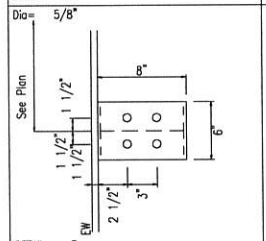

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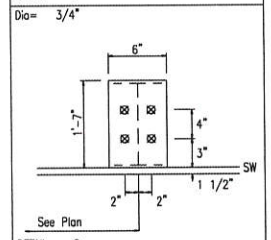

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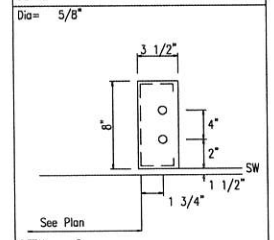

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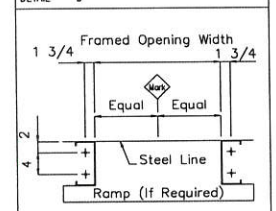

ARDia= 5/8" Framed Opening AR Layout

CPA # 2018020527 - April 20, 2018

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MESCO Building Solutions

5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: IEA WHITE-HAVILAND

CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE

LOCATION: HAVILAND OH, 45851

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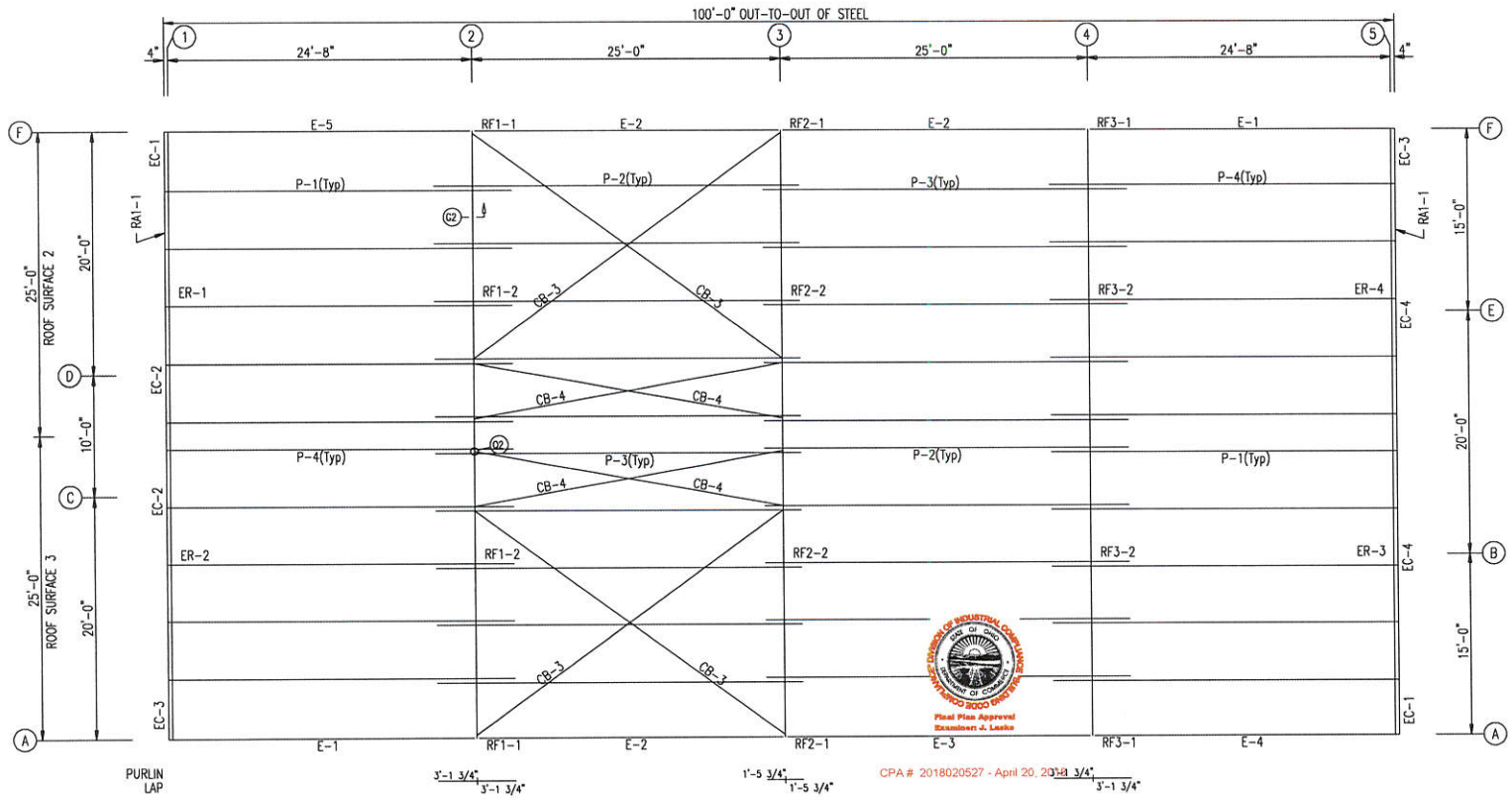
	3/13/18	N.T.S.	1	A	16-B-37440-B	F3	1

Mar 15, 2018

STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED PROFESSIONAL ENGINEER

MEMBER TABLE ROOF PLAN		
MARK	PART	LENGTH
P-1	8X25Z14	28'-1 1/2"
P-2	8X25Z14	29'-7 1/2"
P-3	8X25Z14	29'-7 1/2"
P-4	8X25Z14	28'-1 1/2"
E-1	8ES1L14	24'-11 1/2"
E-2	8ES1L14	24'-11 1/2"
E-3	8ES1L14	24'-11 1/2"
E-4	8ES1L14	24'-11 1/2"
E-5	8ES1L14	24'-11 1/2"
CB-3	3/8" CABLE	31'-5"
CB-4	3/8" CABLE	26'-0"



CPA # 2018020527 - April 20, 2018

Final Plan Approval
Examiner J. Lusko

ROOF FRAMING PLAN

GENERAL NOTES:

1. INSTALL ALL PURLIN AND FLANGE BRACES (FB) AS SHOWN.
2. ROOF PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. STRUT PURLINS, IF PROVIDED, MUST BE INSTALLED AND FASTENED TO ROOF SHEETING PER "PBR" PANEL ROOF DETAIL.
4. DO NOT ADD ANY ADDITIONAL ROOF OPENINGS WITHOUT BUILDING MANUFACTURER APPROVAL OR PROFESSIONAL ENGINEER APPROVAL.
5. DO NOT STACK SHEET BUNDLES ON ROOF. ONLY RAISE INDIVIDUAL SHEETS AS NEEDED.
6. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

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MESCO Building Solutions

5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

MBMA

PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	E1	1

Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
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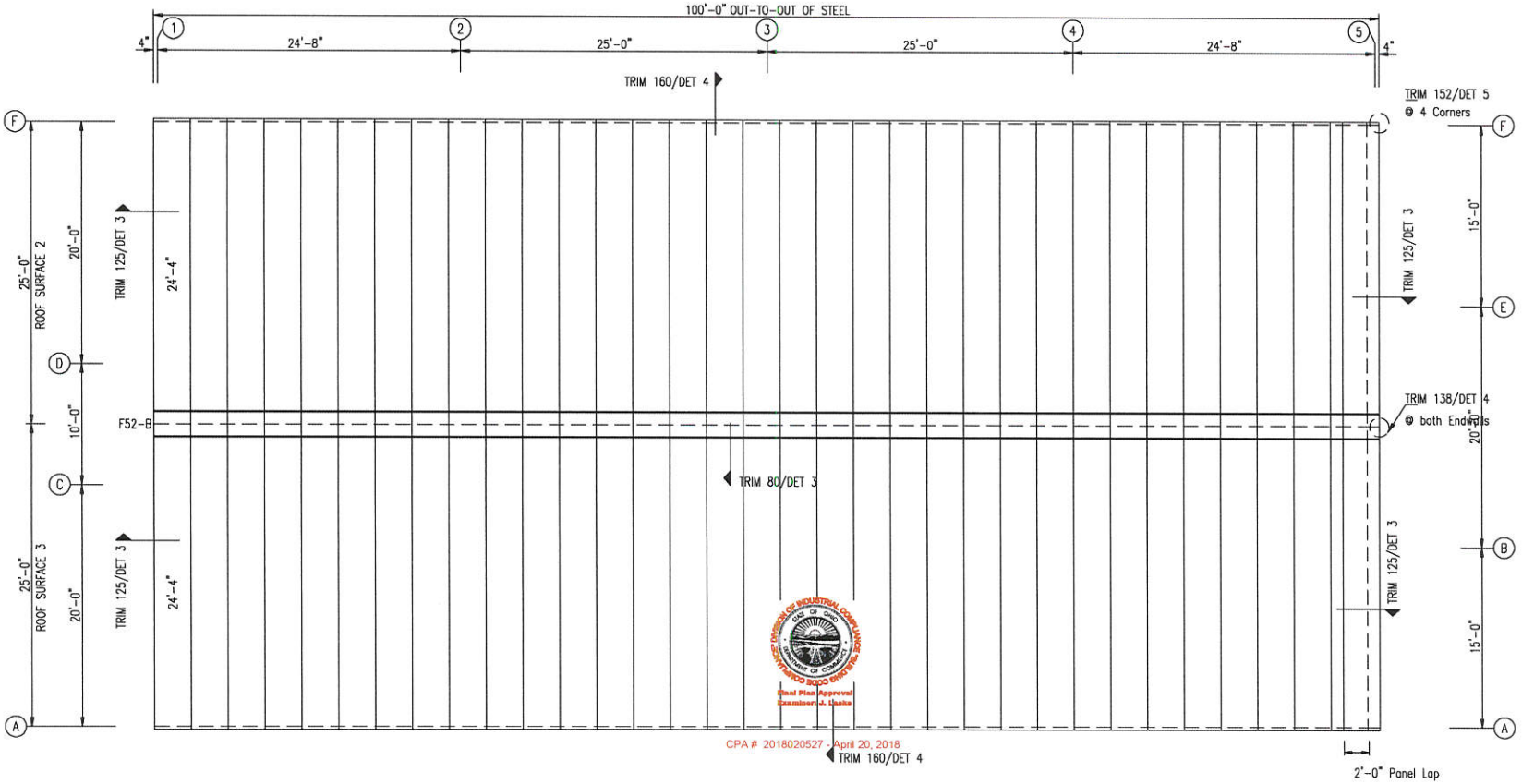

DIVISION OF INDUSTRIAL COMPLIANCE
STATE OF OHIO
DEPARTMENT OF COMMERCE
BOARD OF BUILDING STANDARDS
Final Plan Approval
Examiner: J. Banks
CPA # 2018020527 - April 20, 2018

ROOF SHEETING PLAN

PANELS: 26 Gauge PBR – Galvalume

GENERAL NOTES:

1. INSTALL ALL PURLIN AND FLANGE BRACES (FB) AS SHOWN.
2. ROOF PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. STRUT PURLINS, IF PROVIDED, MUST BE INSTALLED AND FASTENED TO ROOF SHEETING PER "PBR" PANEL ROOF DETAIL.
4. DO NOT ADD ANY ADDITIONAL ROOF OPENINGS WITHOUT BUILDING MANUFACTURER APPROVAL OR PROFESSIONAL ENGINEER APPROVAL.
5. DO NOT STACK SHEET BUNDLES ON ROOF. ONLY RAISE INDIVIDUAL SHEETS AS NEEDED.
6. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

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PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION
OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

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	3/13/18	N.T.S.	1	A	16-B-37440-B	E2	1

Mar 15, 2018
STATE OF OHIO
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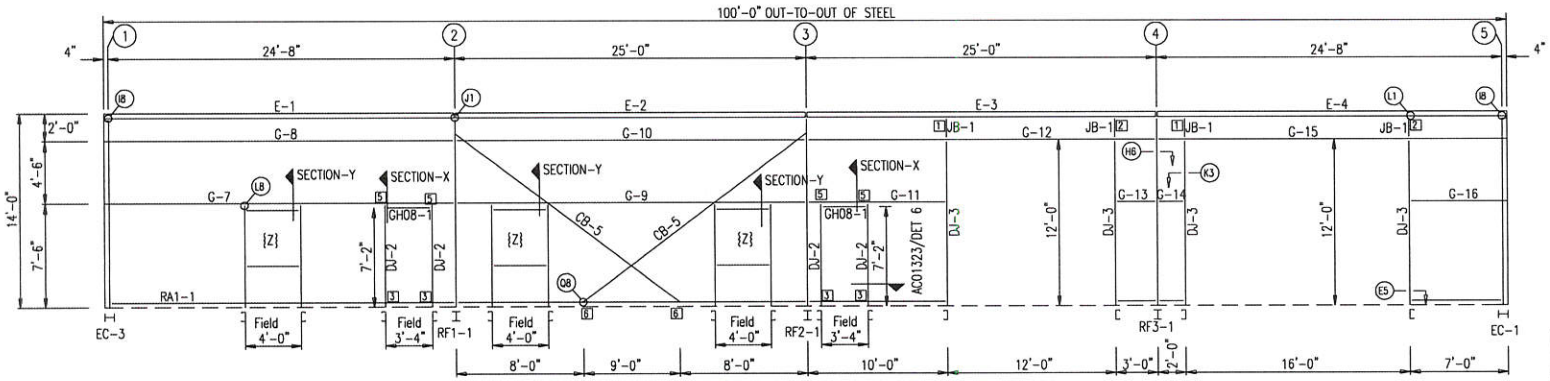
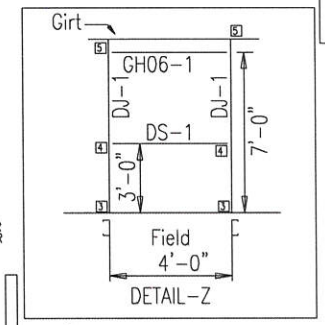


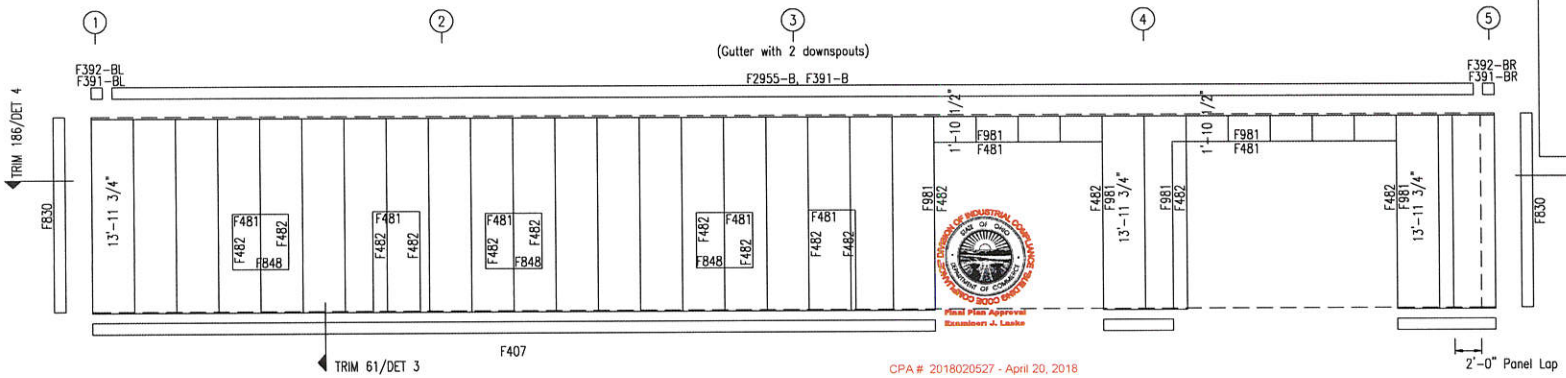
SIDEWALL FRAMING: FRAME LINE A

MEMBER TABLE FRAME LINE A		
MARK	PART	LENGTH
DJ-1	8F25C16	7'-1 3/4"
DJ-2	8F25C16	7'-1 3/4"
DJ-3	8F35C14	12'-0"
GH06-1	GH06	4'-0"
GH08-1	GH08	3'-4"
DS-1	8F25C16	3'-11 3/4"
E-1	8ES1L14	24'-11 1/2"
E-2	8ES1L14	24'-11 1/2"
E-3	8ES1L14	24'-11 1/2"
E-4	8ES1L14	24'-11 1/2"
G-7	8X35Z12	24'-7 3/4"
G-8	8X25Z14	24'-7 3/4"
G-9	8X35Z12	24'-4"
G-10	8X25Z16	24'-4"
G-11	8X25Z16	9'-4 1/4"
G-12	8X35C12	24'-4"
G-13	8X25Z16	2'-4 1/4"
G-14	8X25Z16	1'-4 1/4"
G-15	8X25C12	24'-7 3/4"
G-16	8X25Z16	6'-8"
CB-5	3/8" CABLE	21'-4"
JB-1	8F35C14	1'-3 3/16"

CONNECTION PLATES FRAME LINE A	
ID	MARK/PART
1	SC584_L
2	SC584_R
3	CL-753
4	SC425
5	CL-751
6	CL-331



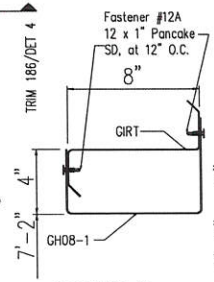
DETAIL-Z



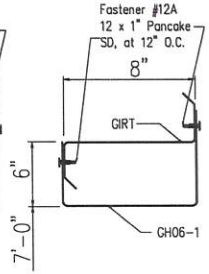
SIDEWALL SHEETING & TRIM: FRAME LINE A

PANELS: 26 Gauge PBR – Light Stone

NOTE:
FIELD SLOT IN GIRTS FOR BRACING SEE DETAIL ZZ



SECTION-X



SECTION-Y

DOWNSPOUT SPACING LOCATIONS

DOWNSPOUTS ARE TO BE PLACED AT A SPACING NOT TO EXCEED 100 FT. WITH A DOWNSPOUT WITHIN 100 FT. OF EACH END OF THE GUTTER RUN.

GENERAL NOTES:

1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

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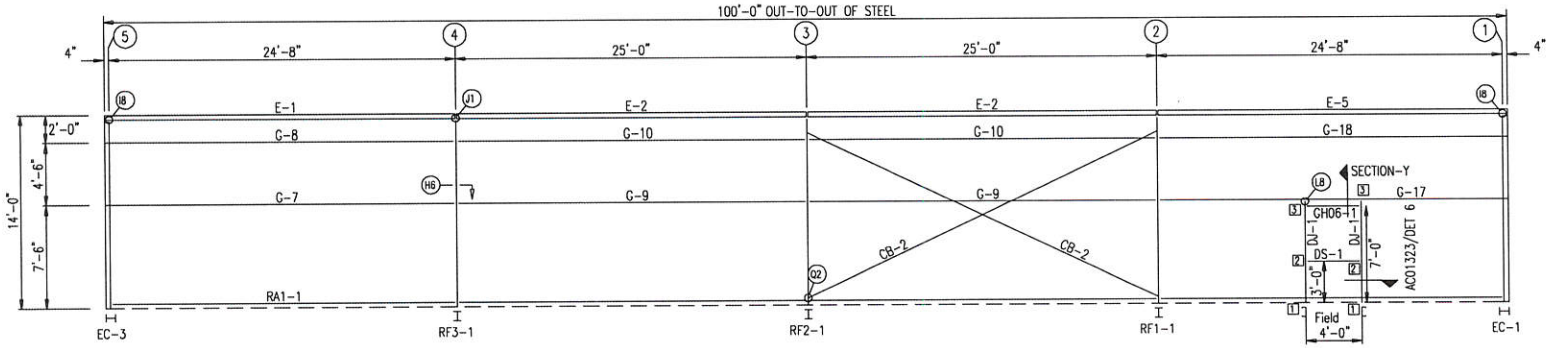
PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	E3	1

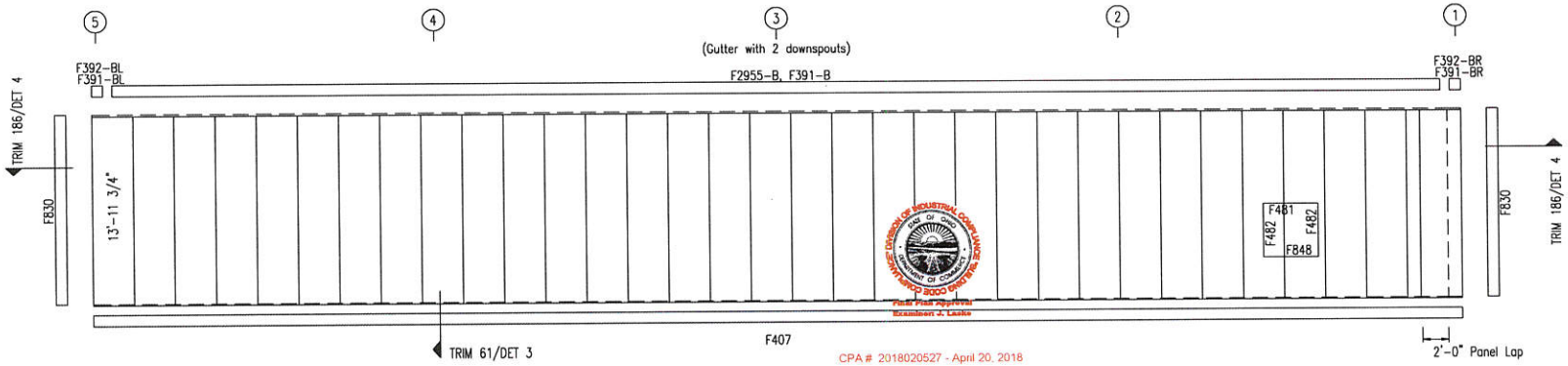
Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED
PROFESSIONAL ENGINEER

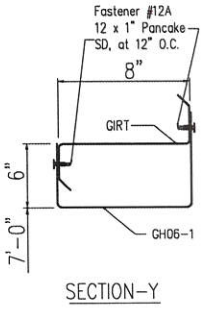
MEMBER TABLE FRAME LINE F		
MARK	PART	LENGTH
DJ-1	8F25C16	7'-1 3/4"
GH06-1	GH06	4'-0"
DS-1	8F25C16	3'-11 3/4"
E-1	8ES1L14	24'-11 1/2"
E-2	8ES1L14	24'-11 1/2"
E-5	8ES1L14	24'-11 1/2"
G-7	8X35Z12	24'-7 3/4"
G-8	8X25Z14	24'-7 3/4"
G-9	8X35Z12	24'-4"
G-10	8X25Z16	24'-4"
G-17	8X35Z12	24'-7 3/4"
G-18	8X25Z14	24'-7 3/4"
CB-2	3/8" CABLE	28'-5"

CONNECTION PLATES FRAME LINE F	
ID	MARK/PART
1	CL-753
2	SC425
3	CL-751



SIDEWALL FRAMING: FRAME LINE F





CPA # 2018020527 - April 20, 2018

SIDEWALL SHEETING & TRIM: FRAME LINE F

PANELS: 26 Gauge PBR – Light Stone

NOTE:
FIELD SLOT IN GIRTS FOR BRACING SEE DETAIL ZZ

DOWNSPOUT SPACING LOCATIONS

DOWNSPOUTS ARE TO BE PLACED AT A SPACING NOT TO EXCEED 100 FT. WITH A DOWNSPOUT WITHIN 100 FT. OF EACH END OF THE GUTTER RUN.

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Mar 15, 2018
STATE OF OHIO
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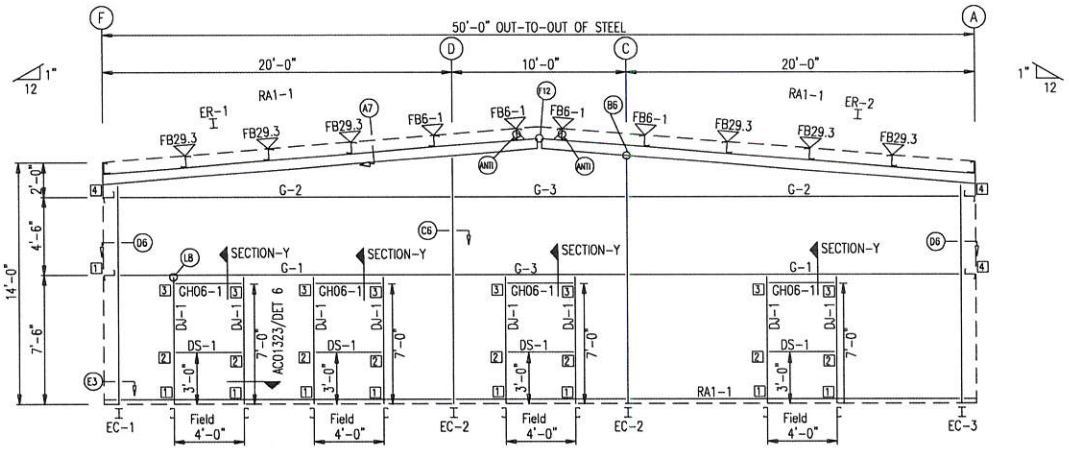
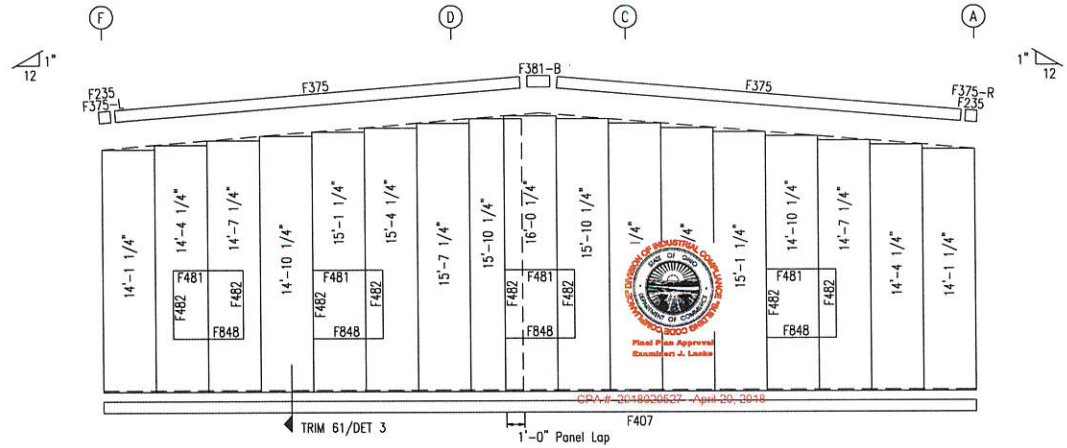
E-47008
REGISTERED PROFESSIONAL ENGINEER



ENDWALL FRAMING: FRAME LINE 1



ENDWALL SHEETING & TRIM: FRAME LINE 1

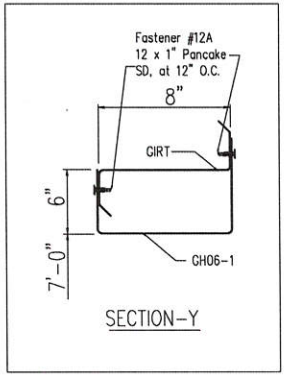
PANELS: 26 Gauge PBR – Light Stone

BOLT TABLE FRAME LINE 1				
LOCATION	QUAN	TYPE	DIA	LENGTH
ER-1/ER-2	8	A325	5/8"	1 3/4"
Columns/Raf	4	A325	1/2"	1 1/4"

MEMBER TABLE FRAME LINE 1		
MARK	PART	LENGTH
EC-1	W8X10	12'-7 5/8"
EC-2	W8X10	14'-2 13/16"
EC-3	W8X10	12'-7 5/8"
ER-1	W8X10	25'-0 13/16"
ER-2	W8X10	25'-0 13/16"
DJ-1	8F25C16	7'-1 3/4"
CH06-1	CH06	4'-0"
DS-1	8F25C16	3'-11 3/4"
G-1	8X35Z14	18'-6"
G-2	8X25Z16	18'-6"
G-3	8X25Z16	9'-4"

FLANGE BRACE TABLE FRAME LINE 1		
▽ ID	PART	LENGTH
FB29.3	L2X2X14G	2'-5 1/4"
FB6-1	L2X2X1/8"	2'-5 1/4"

CONNECTION PLATES FRAME LINE 1	
☐ ID	MARK/PART
1	CL-753
2	SC425
3	CL-751
4	SC-5



BEARING FRAME ONLY!

WASHER TO BE USED AT ENDWALL COLUMN TO ENDWALL RAFTER CONNECTION. USE ONE WASHER ON COLUMN SIDE. WASHER NOT NEEDED ON CLIP SIDE.

GENERAL NOTES:

1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

MESCO Building Solutions

5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

MBMA

PROJECT: IEA WHITE-HAVILAND

CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE

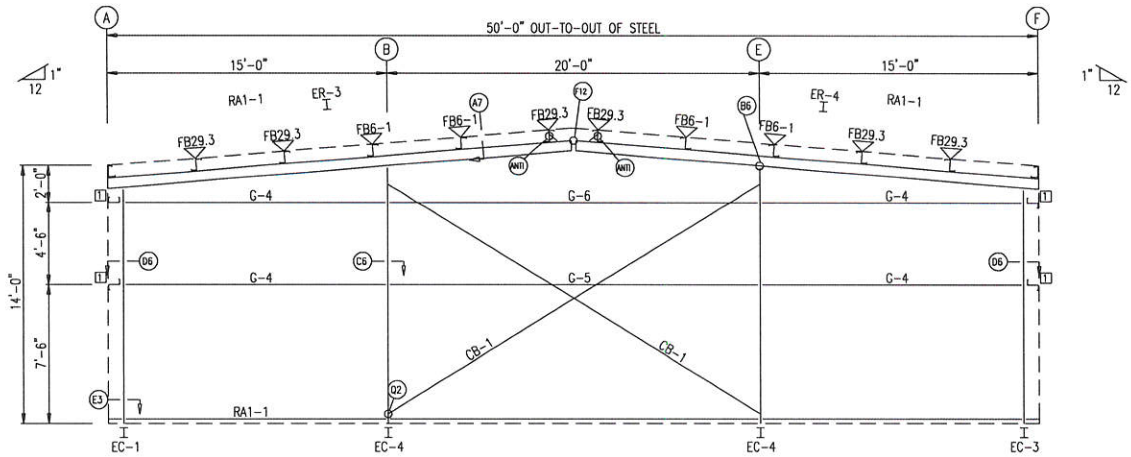
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	E5	1

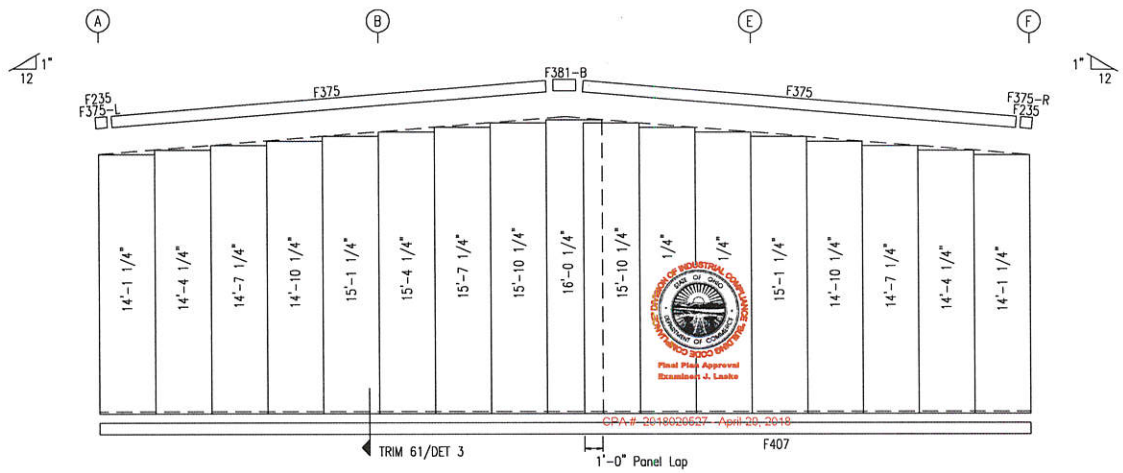
Mar 15, 2018

STATE OF OHIO S. H. DAVIDSON E-47008 REGISTERED PROFESSIONAL ENGINEER

DIVISION OF INDUSTRIAL COMPLIANCE BUILDING CODE COMPLIANCE STATE OF OHIO DEPARTMENT OF COMMERCE
Final Plan Approval Examiner: J. Lanka
CPA # 20180206627 - April 20, 2018



ENDWALL FRAMING: FRAME LINE 5



ENDWALL SHEETING & TRIM: FRAME LINE 5

PANELS: 26 Gauge PBR – Light Stone

BOLT TABLE FRAME LINE 5				
LOCATION	QUAN	TYPE	DIA	LENGTH
ER-3/ER-4	8	A325	5/8"	1 3/4"
Columns/Raf	4	A325	1/2"	1 1/4"

MEMBER TABLE FRAME LINE 5		
MARK	PART	LENGTH
EC-1	W8X10	12'-7 5/8"
EC-3	W8X10	12'-7 5/8"
EC-4	W8X10	13'-9 13/16"
ER-3	W8X10	25'-0 13/16"
ER-4	W8X10	25'-0 13/16"
G-4	8X25Z16	13'-6"
G-5	8X25Z13	19'-4"
G-6	8X25Z16	19'-4"
CB-1	1/4" CABLE	24'-3"

FLANGE BRACE TABLE FRAME LINE 5		
▽ ID	PART	LENGTH
FB29.3	L2X2X14G	2'-5 1/4"
FB6-1	L2X2X1/8"	2'-5 1/4"

CONNECTION PLATES FRAME LINE 5	
☐ ID	MARK/PART
1	SC-5

NOTE:
FIELD SLOT IN GIRTS FOR BRACING SEE DETAIL ZZ

BEARING FRAME ONLY!
WASHER TO BE USED AT ENDWALL COLUMN TO ENDWALL RAFTER CONNECTION. USE ONE WASHER ON COLUMN SIDE. WASHER NOT NEEDED ON CLIP SIDE.

GENERAL NOTES:
1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	E6	1

Mar 15, 2018
STATE OF OHIO S. H. DAVIDSON E-47008 REGISTERED PROFESSIONAL ENGINEER

DIVISION OF INDUSTRIAL COMPLIANCE BUILDING CODE COMPLIANCE
STATE OF OHIO DEPARTMENT OF COMMERCE
Final Plan Approval
Examiner: J. Laske
CPA #: 20180206627 - April 26, 2018

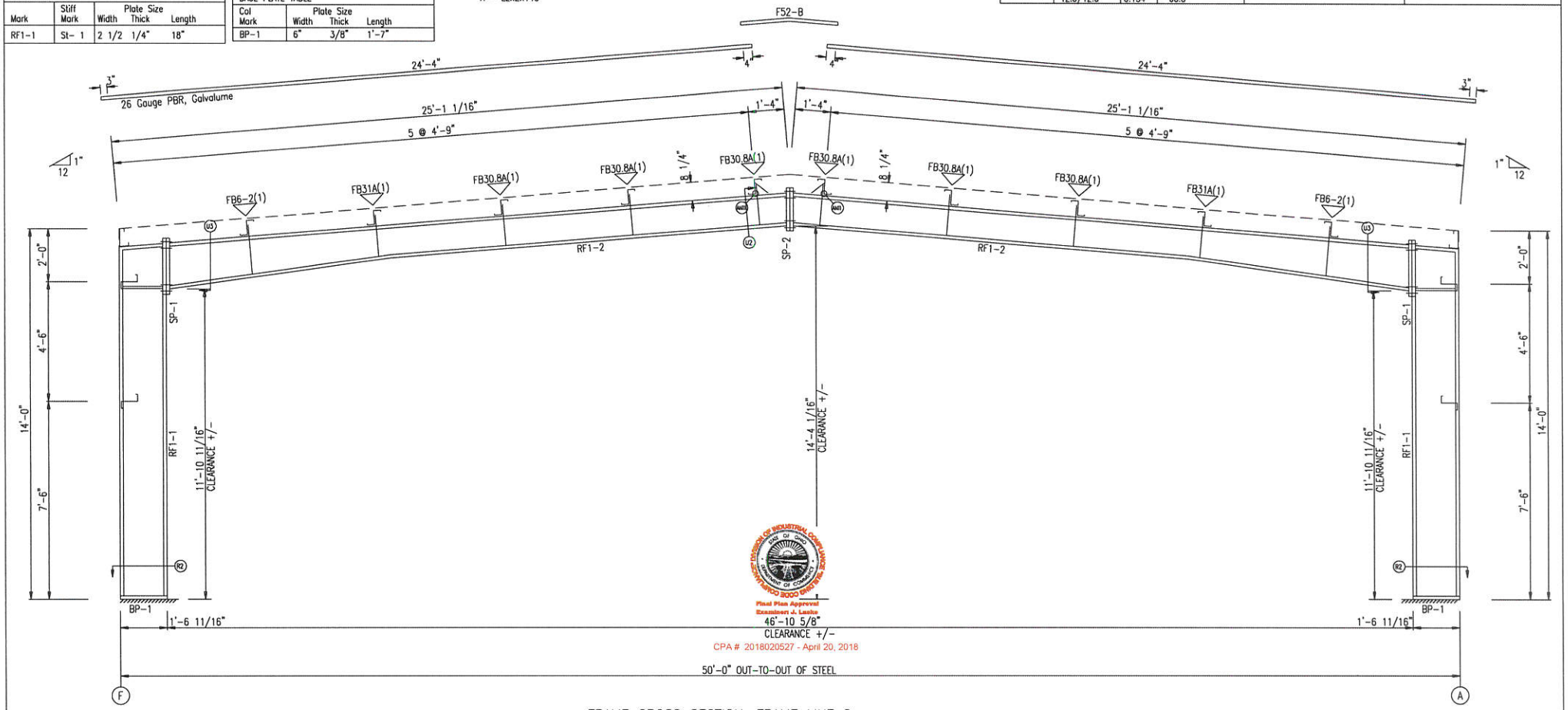
SPLICE PLATE & BOLT TABLE									
Mark	Qty Top	Qty Bot	Qty Int	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	0	A325	3/4"	2 1/2"	6"	3/4"	2'-1"
SP-2	4	4	0	A325	3/4"	2"	6"	1/2"	1'-6 7/8"

STIFFENER TABLE				
Mark	Stiff Mark	Plate Size Width	Thick	Length
RF1-1	St- 1	2 1/2	1/4"	18"

BASE PLATE TABLE			
Col Mark	Plate Size Width	Thick	Length
BP-1	6"	3/8"	1'-7"

FLANGE BRACES: BOTH SIDES(UNLESS NOTED)
FBxxA(1): xx=length(in)
FB6 - L2X2X1/8"
A - L2X2X14G

MEMBER TABLE					
Mark	Web Depth Start/End	Web Plate Thick	Web Plate Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF1-1	18.0/18.0	0.185	139.1	6 x 5/16" x 159.0	6 x 3/8" x 139.1
	18.0/18.0	0.250	21.5	6 x 5/16" x 18.3	
RF1-2	18.0/12.0	0.185	102.2	6 x 5/16" x 100.6	6 x 5/16" x 102.3
	12.0/12.0	0.156	120.0	6 x 1/4" x 180.0	6 x 1/4" x 179.0
	12.0/12.0	0.134	60.0		



FRAME CROSS SECTION: FRAME LINE 2

Final Plan Approval
Examiner: J. Leslie
CPA # 2018020527 - April 20, 2018

GENERAL NOTES:

1. SNUG TIGHT - ALL BOLTED JOINTS WITH A325 TYPE 1 BOLTS ARE SPECIFIED AS SNUG-TIGHTENED JOINTS IN ACCORDANCE WITH THE SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, DECEMBER 31, 2009. PRE-TENSIONING METHODS, INCLUDING TURN-OF-NUT, CALIBRATED WRENCH, TWIST-OFF-TYPE TENSION-CONTROL BOLTS OR DIRECT TENSION INDICATOR ARE NOT REQUIRED. INSTALLATION INSPECTION REQUIREMENTS FOR SNUG TIGHT BOLTS (SPECIFICATION FOR STRUCTURAL JOINTS SECTION 9.1) IS SUGGESTED.
2. ALL FIELD WELDED CONNECTIONS OF SECONDARY FRAMING SHALL BE BOLTED WITH A325 MACHINE BOLTS
3. INSTALL ALL FLANGE BRACES ON COLUMN AND RAFTER AS SHOWN

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	E7	1

Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED PROFESSIONAL ENGINEER

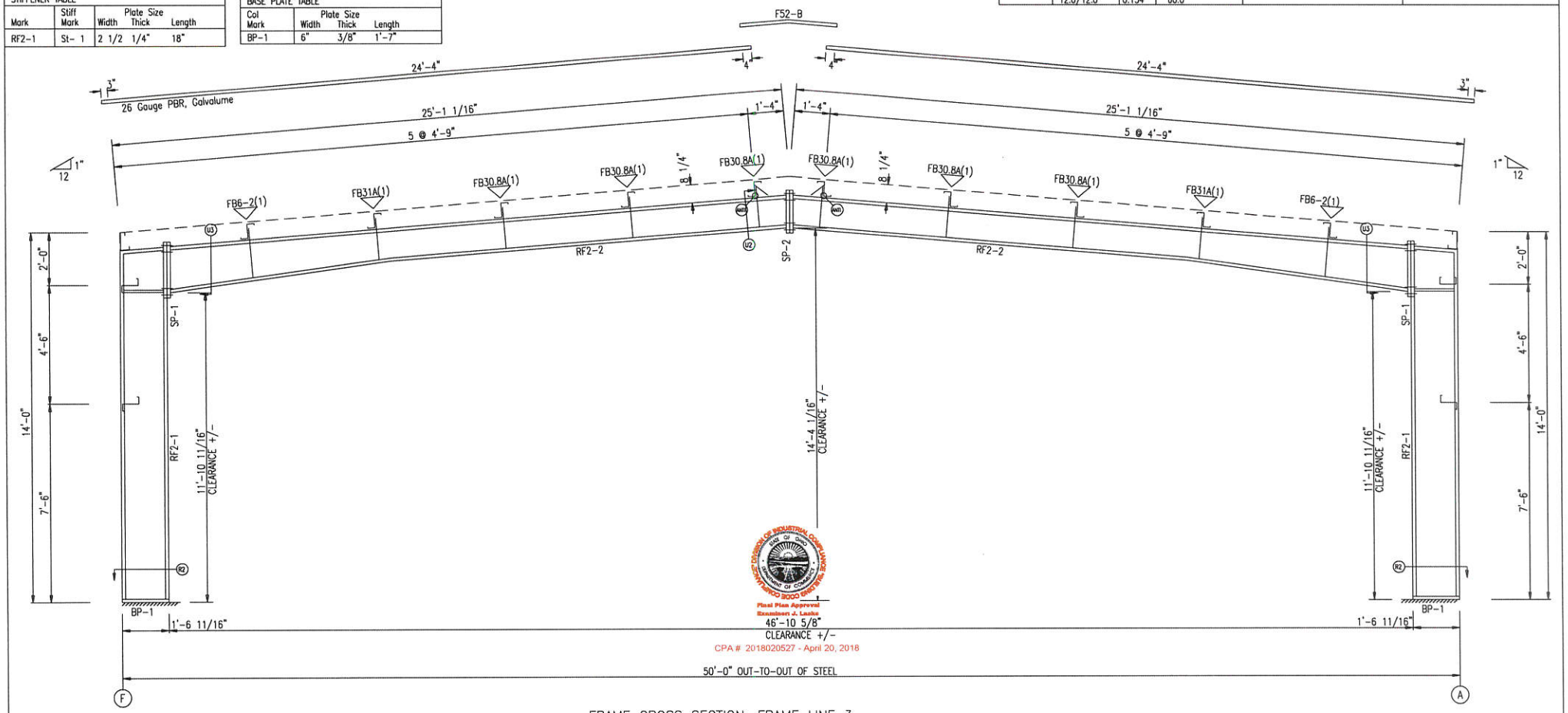
SPLICE PLATE & BOLT TABLE									
Mark	Qty Top	Qty Bot	Qty Int	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	0	A325	3/4"	2 1/2"	6"	3/4"	2'-1"
SP-2	4	4	0	A325	3/4"	2"	6"	1/2"	1'-6 7/8"

STIFFENER TABLE				
Mark	Stiff Mark	Plate Size Width	Plate Size Thick	Plate Size Length
RF2-1	St- 1	2 1/2	1/4"	18"

BASE PLATE TABLE			
Col Mark	Plate Size Width	Plate Size Thick	Plate Size Length
BP-1	6"	3/8"	1'-7"

FLANGE BRACES: BOTH SIDES(UNLESS NOTED)
FBxxA(1): xx=length(in)
FB6 - L2X2X1/8
A - L2X2X14G

MEMBER TABLE					
Mark	Web Depth Start/End	Web Plate Thick	Web Plate Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF2-1	18.0/18.0	0.185	139.1	6 x 5/16" x 159.0	6 x 3/8" x 139.1
	18.0/18.0	0.250	21.5	6 x 5/16" x 18.3	
RF2-2	18.0/12.0	0.185	102.2	6 x 5/16" x 100.6	6 x 5/16" x 102.3
	12.0/12.0	0.156	120.0	6 x 1/4" x 180.0	6 x 1/4" x 179.0
	12.0/12.0	0.134	60.0		



FRAME CROSS SECTION: FRAME LINE 3

GENERAL NOTES:

1. SNUG TIGHT - ALL BOLTED JOINTS WITH A325 TYPE 1 BOLTS ARE SPECIFIED AS SNUG-TIGHTENED JOINTS IN ACCORDANCE WITH THE SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, DECEMBER 31, 2009. PRE-TENSIONING METHODS, INCLUDING TURN-OF-NUT, CALIBRATED WRENCH, TWIST-OFF-TYPE TENSION-CONTROL BOLTS OR DIRECT TENSION INDICATOR ARE NOT REQUIRED. INSTALLATION INSPECTION REQUIREMENTS FOR SNUG TIGHT BOLTS (SPECIFICATION FOR STRUCTURAL JOINTS SECTION 9.1) IS SUGGESTED.
2. ALL FIELD WELDED CONNECTIONS OF SECONDARY FRAMING SHALL BE BOLTED WITH A325 MACHINE BOLTS
3. INSTALL ALL FLANGE BRACES ON COLUMN AND RAFTER AS SHOWN

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
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MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	E8	1

Division of Industrial Compliance
State of Ohio
Department of Commerce
Final Plan Approval
Examiner J. Lasko
CPA # 2018020527 - April 20, 2018

Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED
PROFESSIONAL ENGINEER

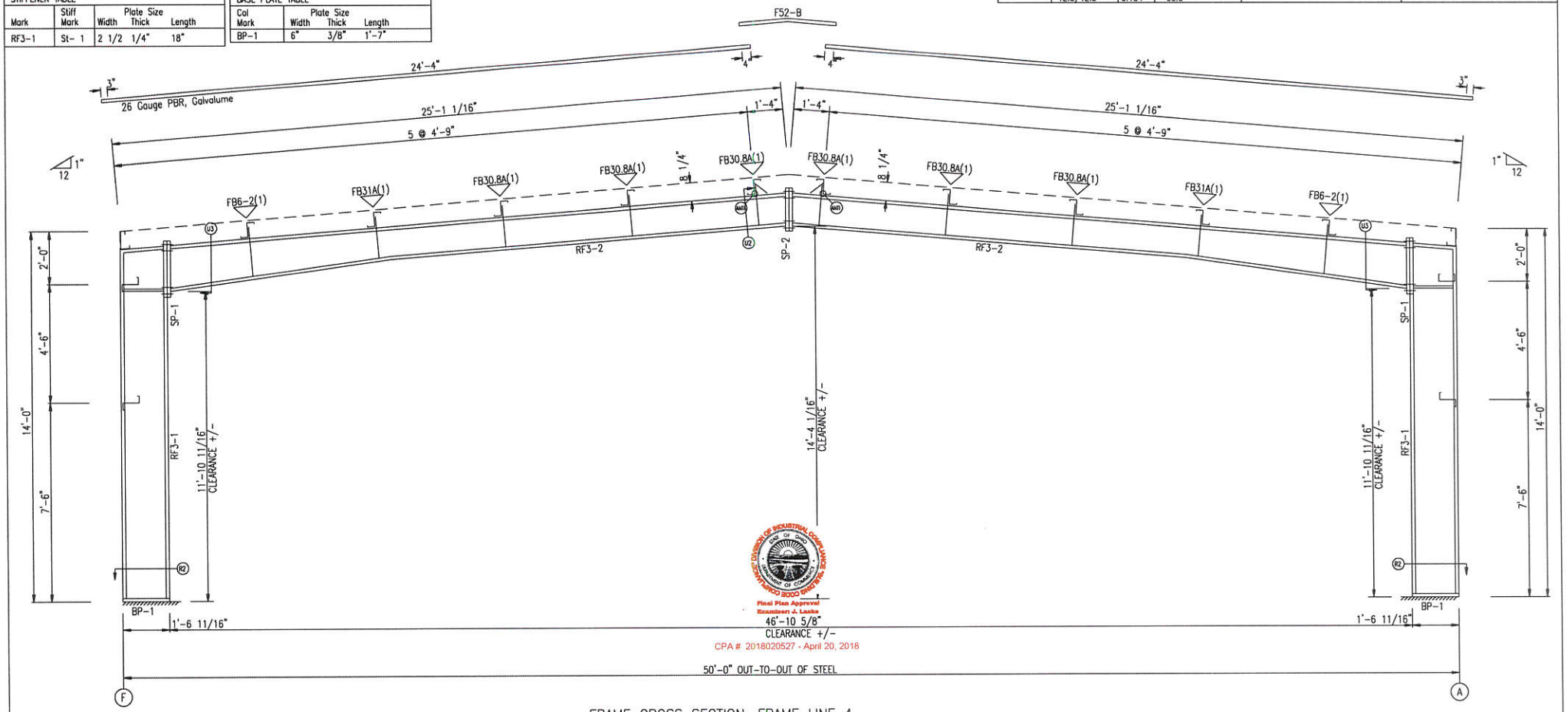
SPLICE PLATE & BOLT TABLE									
Mark	Qty Top	Qty Bot	Qty Int	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	0	A325	3/4"	2 1/2"	6"	3/4"	2'-1"
SP-2	4	4	0	A325	3/4"	2"	6"	1/2"	1'-6 7/8"

STIFFENER TABLE				
Mark	Stiff Mark	Plate Size Width	Plate Size Thick	Length
RF3-1	St- 1	2 1/2	1/4"	18"

BASE PLATE TABLE			
Col Mark	Plate Size Width	Plate Size Thick	Length
BP-1	6"	3/8"	1'-7"

FLANGE BRACES: BOTH SIDES(UNLESS NOTED)
FBxxA(1): xx=length(in)
FB6 - L2X2X1/8"
A - L2X2X14G

MEMBER TABLE					
Mark	Web Depth Start/End	Web Plate Thick	Web Plate Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF3-1	18.0/18.0	0.185	139.1	6 x 5/16" x 159.0	6 x 3/8" x 139.1
	18.0/18.0	0.250	21.5	6 x 5/16" x 18.3	
RF3-2	18.0/12.0	0.185	102.2	6 x 5/16" x 100.6	6 x 5/16" x 102.3
	12.0/12.0	0.156	120.0	6 x 1/4" x 180.0	6 x 1/4" x 179.0
	12.0/12.0	0.134	60.0		



FRAME CROSS SECTION: FRAME LINE 4

Final Plan Approval
Examiner J. Leske
CPA # 2018020527 - April 20, 2018

GENERAL NOTES:

1. SNUG TIGHT - ALL BOLTED JOINTS WITH A325 TYPE 1 BOLTS ARE SPECIFIED AS SNUG-TIGHTENED JOINTS IN ACCORDANCE WITH THE SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, DECEMBER 31, 2009. PRE-TENSIONING METHODS, INCLUDING TURN-OF-NUT, CALIBRATED WRENCH, TWIST-OFF-TYPE TENSION-CONTROL BOLTS OR DIRECT TENSION INDICATOR ARE NOT REQUIRED. INSTALLATION INSPECTION REQUIREMENTS FOR SNUG TIGHT BOLTS (SPECIFICATION FOR STRUCTURAL JOINTS SECTION 9.1) IS SUGGESTED.
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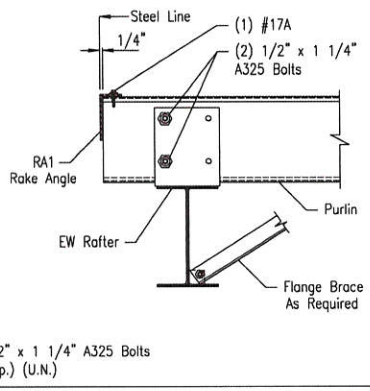
MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

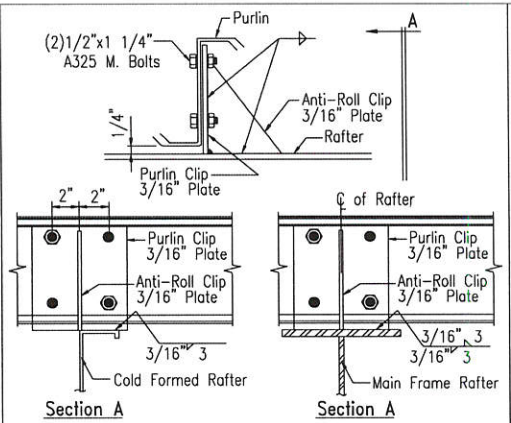
PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	E9	1

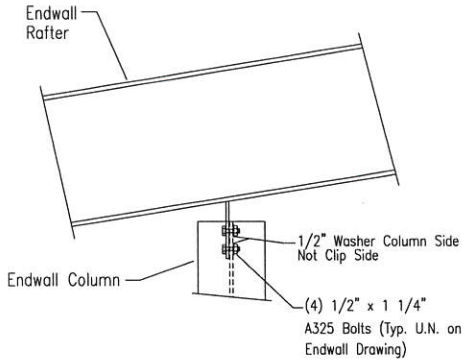
Mar 15, 2018
STATE OF OHIO S. H. DAVIDSON E-47008 REGISTERED PROFESSIONAL ENGINEER



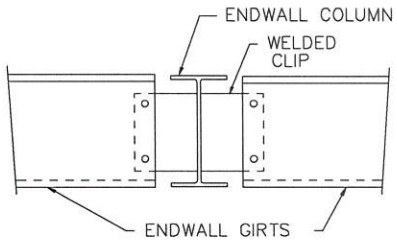
A7 SECTION THRU HOT ROLLED RAFTER



ANTI PURLIN ANTI-ROLL CLIP

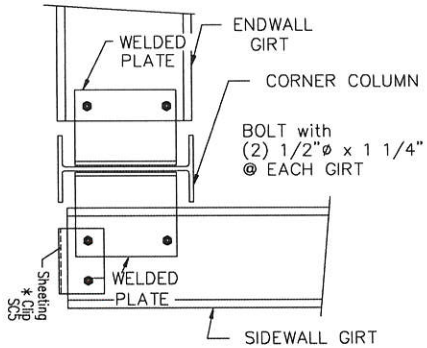


B6 HOT ROLLED ENDWALL COLUMN TO RAFTER

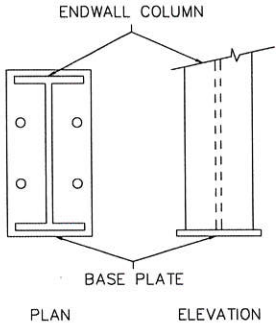


1/2"ø x 1 1/4" A325 BOLTS

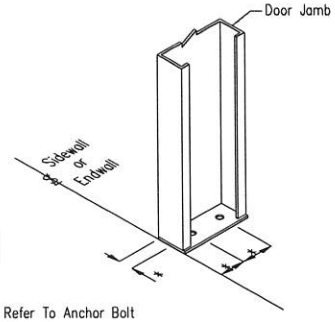
C6 ENDWALL COLUMN TO WALL GIRT



D6 CORNER COLUMN TO WALL GIRT

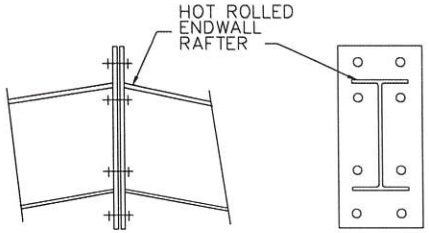


E3 BASE PLATE FOR ENDWALL COLUMN



= Refer To Anchor Bolt Plan

E5 BASE PLATE FOR DOOR JAMB



SEE ENDWALL DRAWING
FOR BOLT DIA AND TYPE.

F12 RAFTER SPLICE
AT SURFACE CHANGE

DIVISION OF INDUSTRIAL COMPLIANCE
STATE OF OHIO
DEPARTMENT OF COMMERCE
Final Plan Approval
Examiner
CPA # 20180205-27 April 20, 2018

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
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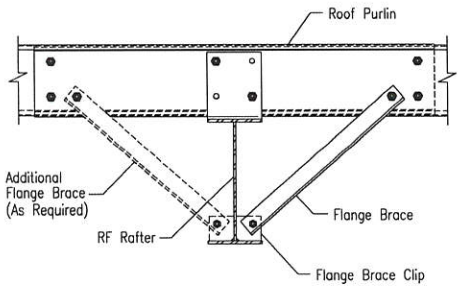
MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION
OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

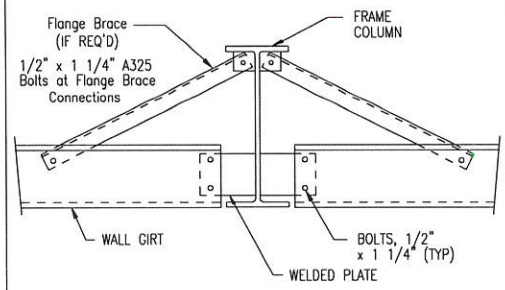
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	DET1	1

Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED PROFESSIONAL ENGINEER

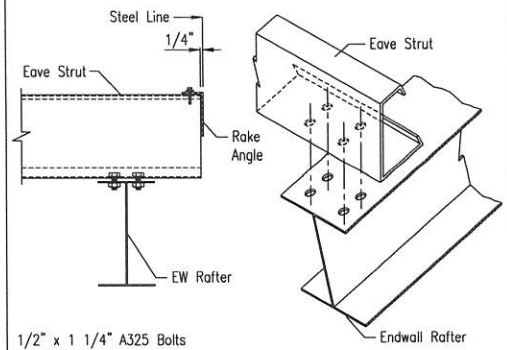


1/2" x 1 1/4" A325 Bolts (Typ.) (U.N.)

G2 ROOF PURLIN TO INTERIOR FRAME RAFTER

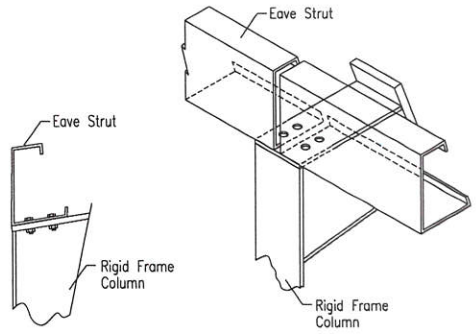


H6 WALL GIRT TO FRAME COLUMN



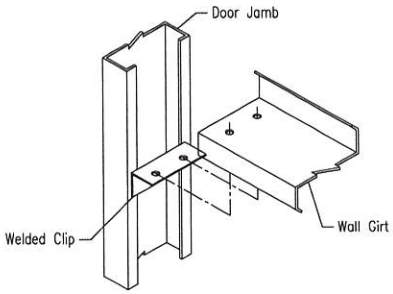
1/2" x 1 1/4" A325 Bolts (Typ.) (U.N.)

I8 LOW SIDE EAVE STRUT TO HOT ROLLED RAFTER



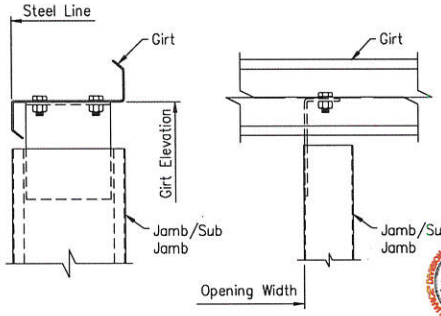
1/2" x 1 1/4" A325 Bolts (Typ.) (U.N.)

J1 EAVE STRUT TO RIGID FRAME

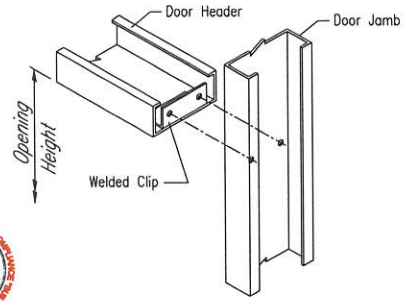


1/2" x 1 1/4" A325 Bolts (Typ.) (U.N.)

K3 WALL GIRT TO DOOR JAMB

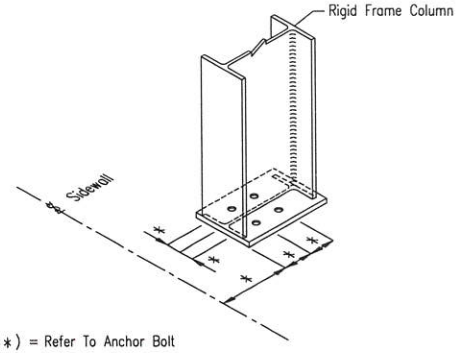


L8	Single Cold Form Jamb/ Sub Jamb To Girt	Date Jun '17
Page MB-L8		Rev 00



1/2" x 1 1/4" A325 Bolts (Typ.) (U.N.)

M3 DOOR HEADER TO DOOR JAMB



(*) = Refer To Anchor Bolt Plan

R2 ANCHOR BOLTS AT SIDEWALL COLUMNS

CPA # 0180257 April 20, 2018

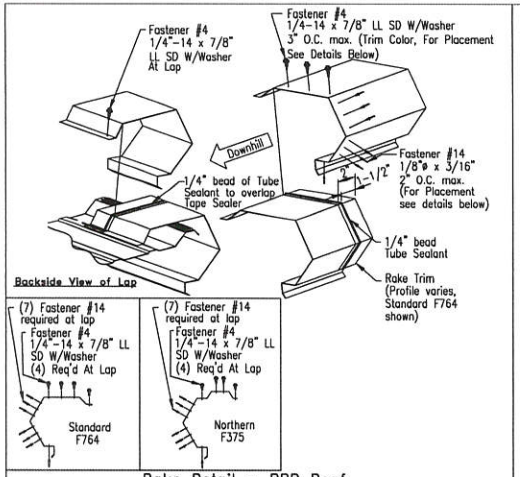
ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

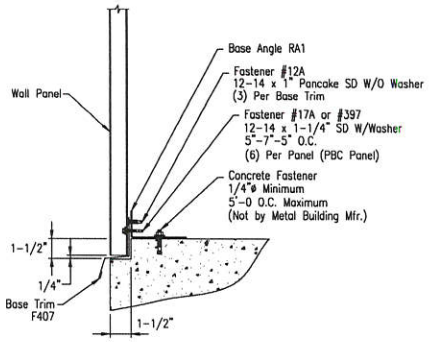
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	DET2	1

Mar 15, 2018
STATE OF OHIO S. H. DAVIDSON E-47008 REGISTERED PROFESSIONAL ENGINEER



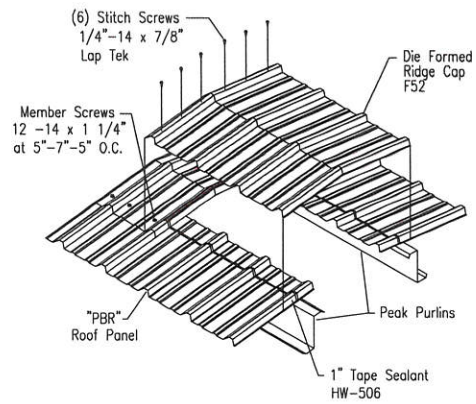
Rake Detail – PBR Roof

Classic Standard and Northern Rake End Lap Installation TRIM_50



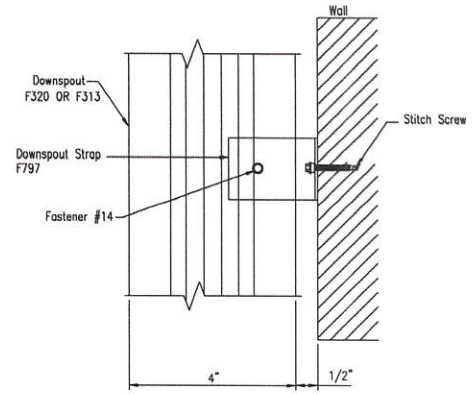
Base Angle With Panel Recess

With Base Trim TRIM_61



"PBR" ROOF FIXED RIDGE DETAIL

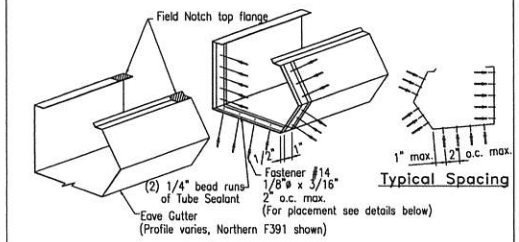
Trim_80

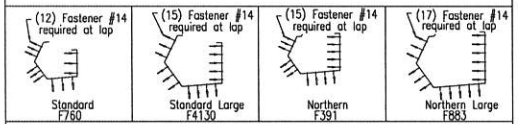


Downspout Strap Attachment Detail

4" x 5" Roll-Form

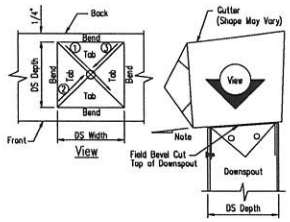
TRIM_81





Eave Gutter End Lap Installation – PBR Roof

Classic Trim Profile TRIM_90



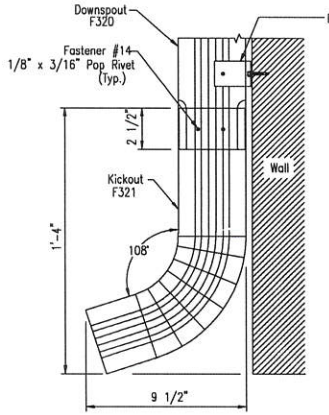
Downspout To Gutter Attachment Detail

1. Refer to the building erection drawings for the location and spacing of the downspouts.
2. Locate all downspouts over a major panel rib if possable.
3. Make a cardboard template of the downspout shape . Place the template on the bottom of the gutter and trace the outline. Remove the template and draw a line from corner to corner, forming an "X" pattern.
4. Drill a whole at the center of the "X". Using tin snips, cut along the lines of the X only. Do not cut along the outside lines of the downspout square.
5. Bend each triangular tab down toward the ground, 90 Degrees to the bottom of the gutter.
6. Position the top of the downspout under the gutter. Make sure all four gutter tabs are on the inside of the downspout.
7. Install Fastener #14 through the downspout into the gutter tab. Only the two sides and the front of the downspout will receive fasteners.

TRIM_98

Final Plan Approval
Examiner J. Laske

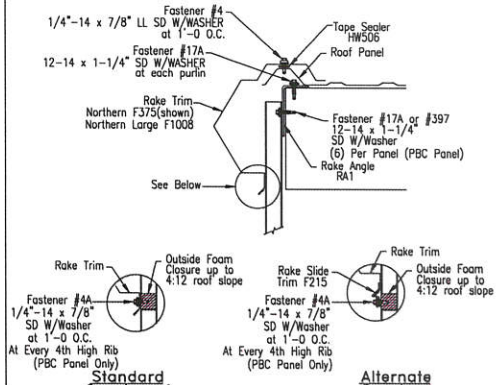
CPA # 2018020527 - April 20, 2018



Downspout Kickout

4" x 5" Roll-Form

TRIM_123



Standard
For roof runs of 100' or less

Alternate
For roof runs greater than 100'

Note: For some special conditions the outside rib of the finish panel may fall short of the rake trim. Use the rake extension trim for this condition. Field cut the rake trim and rake extension trim if required.

Rake Detail – PBR Roof

Classic Northern and Northern Large Rake Trim – Sheeted Wall TRIM_125

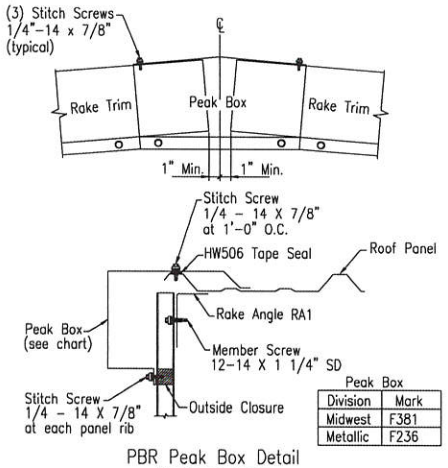
ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	DET3	1

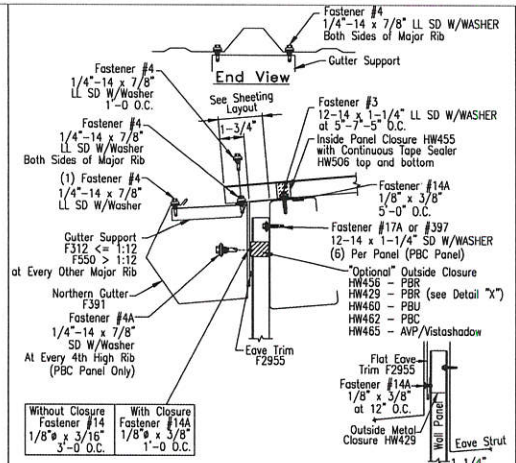
Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED PROFESSIONAL ENGINEER



Peak Box	
Division	Mark
Midwest	F381
Metallic	F236

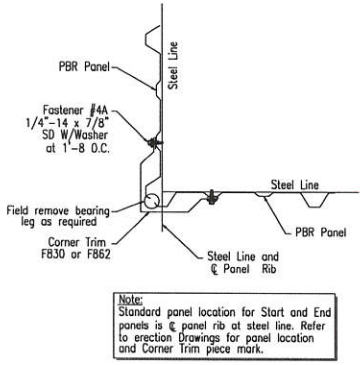
PBR Peak Box Detail
Northern Trim

TRIM_138



Low Eave Detail - PBR Roof
Classic Northern Gutter - Sheeted Wall

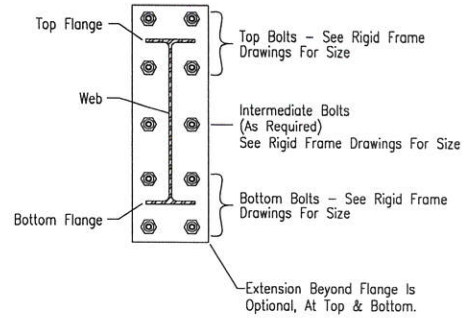
TRIM_160



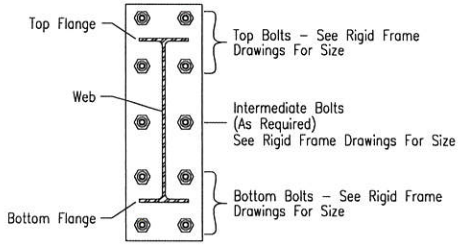
Note:
Standard panel location for Start and End panels is ℄ panel rib at steel line. Refer to erection Drawings for panel location and Corner Trim piece mark.

Outside Corner Trim - PBR Wall Panel

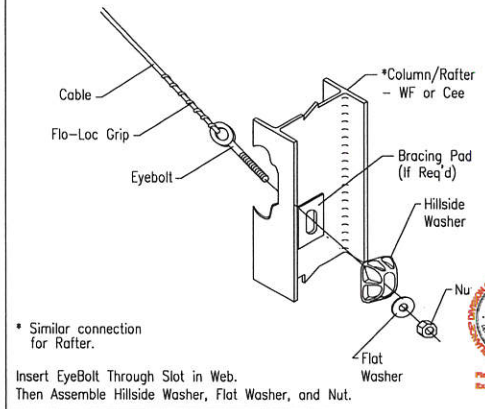
TRIM_186



U2 BOLTS FOR RIGID FRAME RAFTER AT BUILDING PEAK



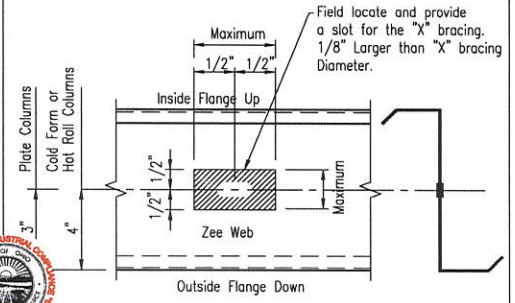
U3 BOLTS FOR RIGID FRAME RAFTER TO COLUMN CONNECTION



* Similar connection for Rafter.

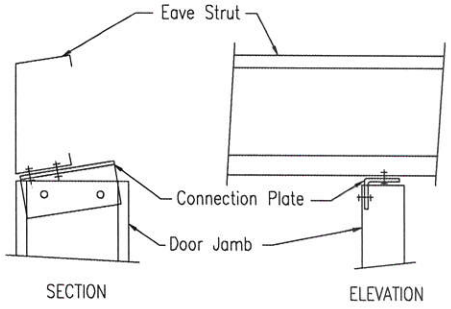
Insert EyeBolt Through Slot in Web.
Then Assemble Hillside Washer, Flat Washer, and Nut.

Q2 DIAGONAL CABLE, EYEBOLT END



Pull Cable, Unravel Flo-Lock Grip
and Remove Eye Bolt, Slip Through
Slotted Girts, then Reassemble Cable.

ZZ CABLE AT FLUSH WALL GIRT



1/2" x 1 1/4" A325 Bolts (typ)

L1 DOOR JAMB TO EAVE STRUT

CPA # 2018020527 April 20, 2018

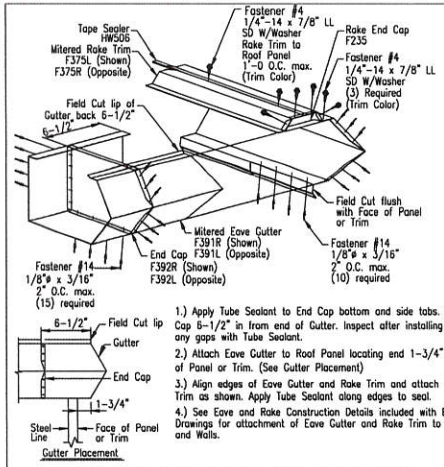
ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	DET4	1

Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED PROFESSIONAL ENGINEER



1.) Apply Tube Sealant to End Cap bottom and side tabs. Install Cap 6-1/2" in from end of Gutter. Inspect after installing and seal any gaps with Tube Sealant.

2.) Attach Eave Gutter to Roof Panel locating end 1-3/4" past face of Panel or Trim. (See Gutter Placement)

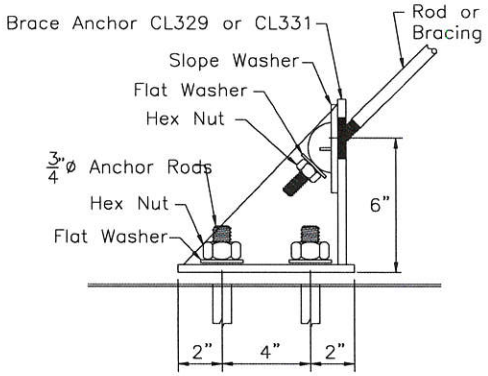
3.) Align edges of Eave Gutter and Rake Trim and attach Rake Trim as shown. Apply Tube Sealant along edges to seal.

4.) See Eave and Rake Construction Details included with Erection Drawings for attachment of Eave Gutter and Rake Trim to Roof and Walls.

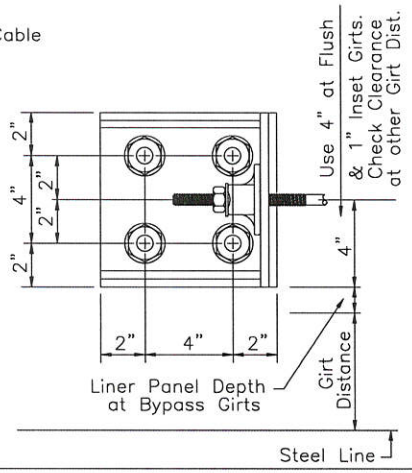
Low Eave Rake Corner with Eave Gutter

Northern Rake and Northern Gutter

TRIM_152



Q8 DIAGONAL BRACE CLIP TO FLOOR DETAIL



Final Plan Approval
Examiner J. Laske

CPA # 2018020527 - April 20, 2018

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	3/13/18	N.T.S.	1	A	16-B-37440-B	DET5	1

Mar 15, 2018
STATE OF OHIO S. H. DAVIDSON E-47008 REGISTERED PROFESSIONAL ENGINEER

Bolted Clips - Framed Opening Connections
Three and Four Sided Openings - Girt Header

Page AC01322 | Date Jun '15 | Rev 03

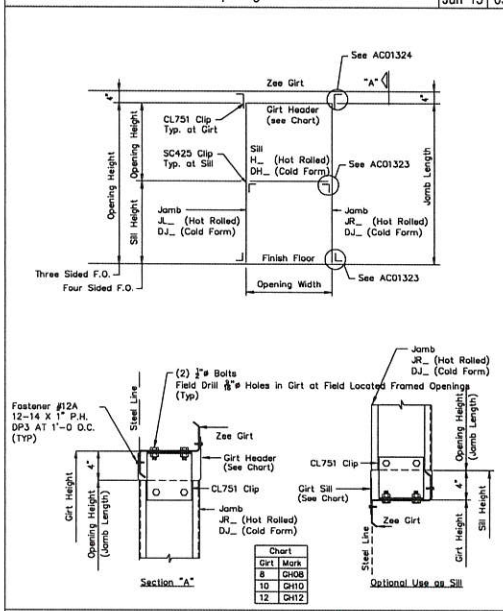
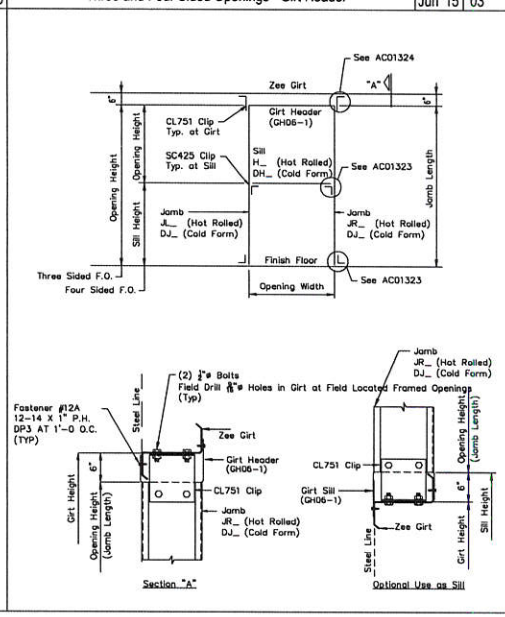


Chart	
Girt	Mark
8	GH08
10	GH10
12	GH12

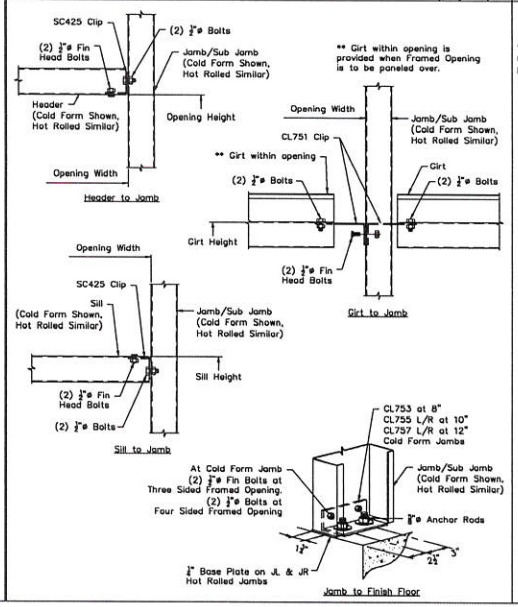
Bolted Clips - Framed Opening Connections
Three and Four Sided Openings - Girt Header

Page AC01322-X | Date Jun '15 | Rev 03



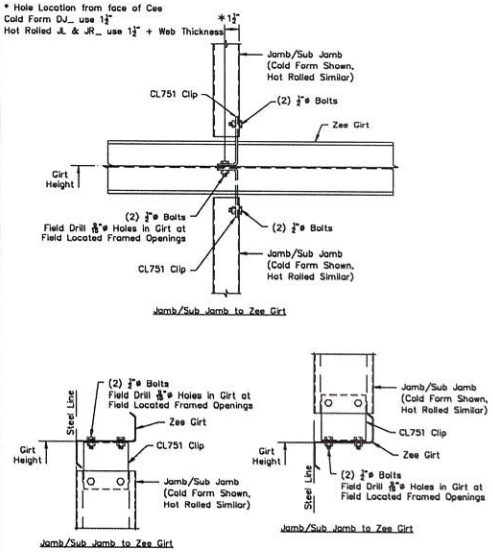
Bolted Clips - Framed Opening Connections
Cold Form and Hot Rolled - Base, Girt, Header, and Sill to Jamb

Page AC01323 | Date May '14 | Rev 02



Bolted Clips - Framed Opening Connections
Cold Form and Hot Rolled - Jamb/Sub Jamb to Zee Girt

Page AC01324 | Date Jul '11 | Rev 00



CPA # 2018020527 - April 20, 2018

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

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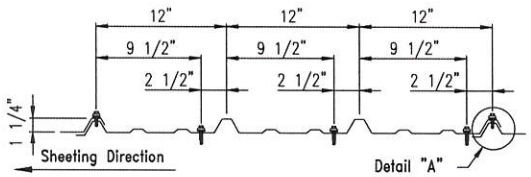
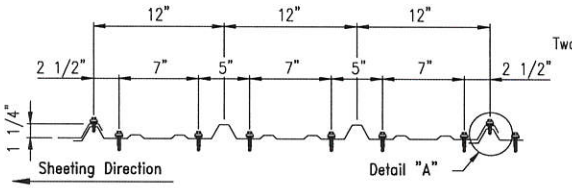
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	DET6	1

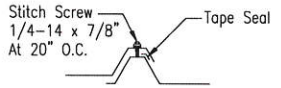
Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED PROFESSIONAL ENGINEER



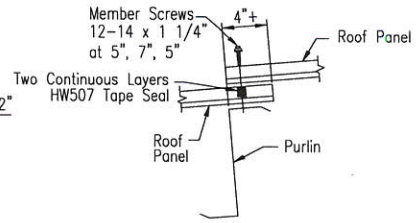
All Roof Members Except As Noted Below



At Eave Strut, Panel End Lap, and Peak Purlin



Detail "A"



Section Thru Panel End Laps

Fastener Location for "PBR" Roof Panel

TRIM_175

Standard Grade

Description	Fastener Number	Application
1/4"-14 x 7/8"	4A	Stitch & Trim Screw
12-14 x 1 1/4"	17A	Member Screw
12-14 x 1 1/2"	17B	Member Screw
12-14 x 2"	28	Member Screw

Long Life

Description	Fastener Number	Application
1/4"-14 x 7/8"	4	Stitch & Trim Screw
12-14 x 1 1/4"	3	Member Screw
12-14 x 1 1/2"	3A	Member Screw
12-14 x 2"	5B	Member Screw

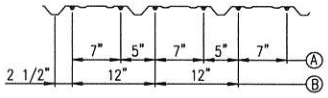
Note:

Standard details call for 1 1/4" fasteners as member screws by default.

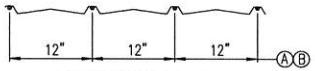
Member screws may be 1 1/4", 1 1/2", or 2" depending on insulation, application, or customer request.

Self-Drilling Screw Application

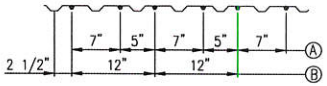
SCRW1



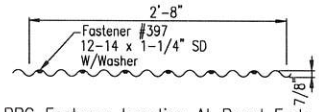
"PBR" Panel



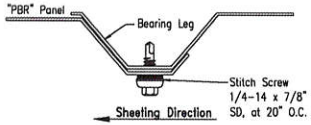
"PBA"/"AVP" Panel

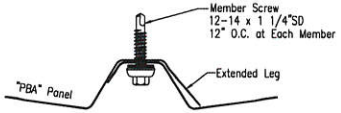


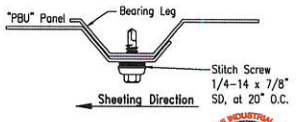
"PBU" Panel

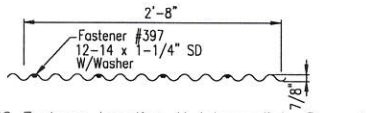


PBC Fastener Location At Panel Ends

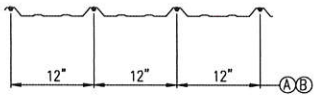








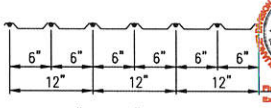
PBC Fastener Location At Intermediate Supports



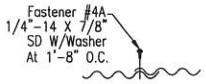
"RVPBR" Panel

Ⓐ = At Base, Rake, Eave, and Mid Span End Laps

Ⓑ = At Intermediate Member, and at Optional Liner Panel



"RVPBU" Panel



PBC Panel Sidelap

CPA # 2018020527 - April 20, 2018

Fastener Location for Panel At Wall

TRIM_174

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MWH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MWH	AMK

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

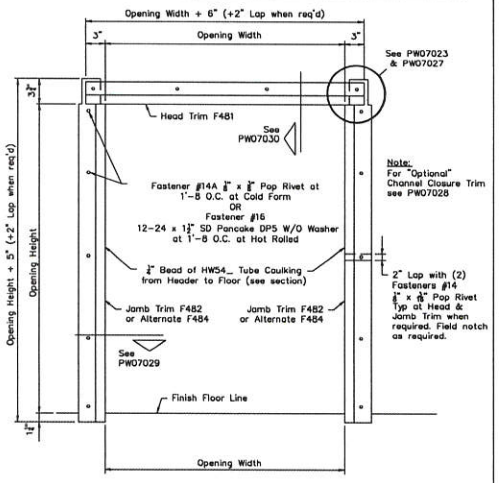
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	DET7	1

Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED
PROFESSIONAL ENGINEER

PBR Wall Panel - Three Sided Framed Opening
Trim Installation with Field Notch Panel at Head Trim

Page PW07022 | Date Sep '14 | Rev. 03

Note: Trim Installation can be done by Field Notch Panel as shown on PW07022 & PW07023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



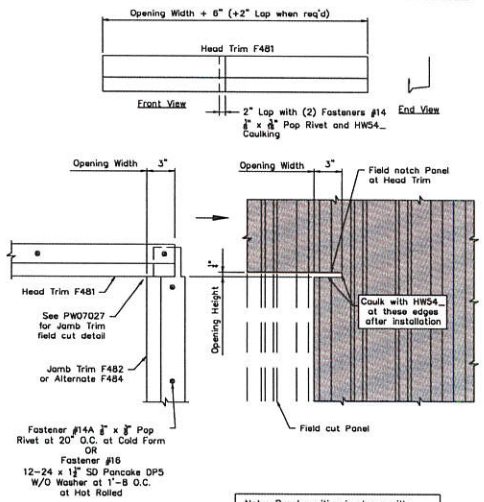
Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

PBR Wall Panel - Three Sided Framed Opening
Field Notch Panel at Head Trim

Page PW07023 | Date Sep '14 | Rev. 03

Note: Trim Installation can be done by Field Notch Panel as shown on PW07022 & PW07023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



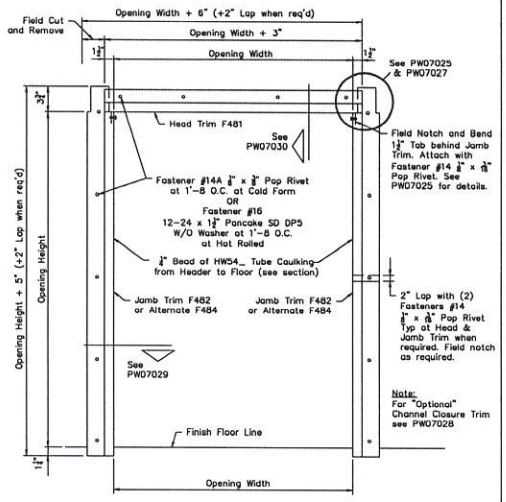
Note: All trim is to be installed BEFORE blanket insulation is applied to walls

Note: Panel position is shown with Panel Rib and Opening on 1'-0 module. Location of Rib may vary depending on the Opening Width and location. Field measure before cutting Panel and Trim.

PBR Wall Panel - Three Sided Framed Opening
Trim Installation with Field Notch and Bend Tabs at Head Trim

Page PW07024 | Date Sep '14 | Rev. 03

Note: Trim Installation can be done by Field Notch Panel as shown on PW07022 & PW07023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



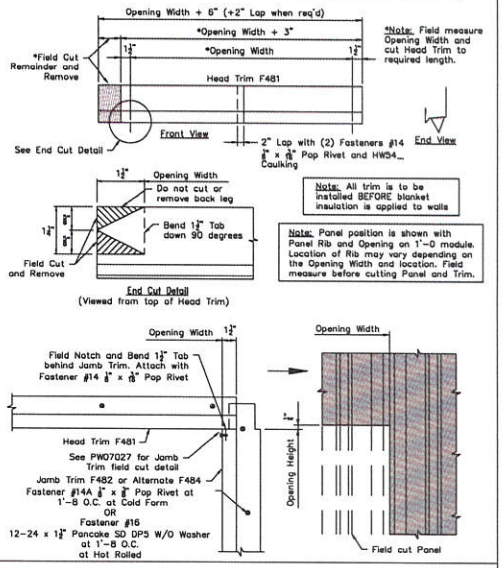
Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

PBR Wall Panel - Three Sided Framed Opening
Field Notch and Bend Tabs at Head Trim

Page PW07025 | Date Sep '14 | Rev. 03

Note: Trim Installation can be done by Field Notch Panel as shown on PW07022 & PW07023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



CPA # 2018020527 - April 20, 2018

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: IEA WHITE-HAVILAND

CUSTOMER: MBA CONSTRUCTION | OWNER: IEA WHITE

LOCATION: HAVILAND OH, 45851

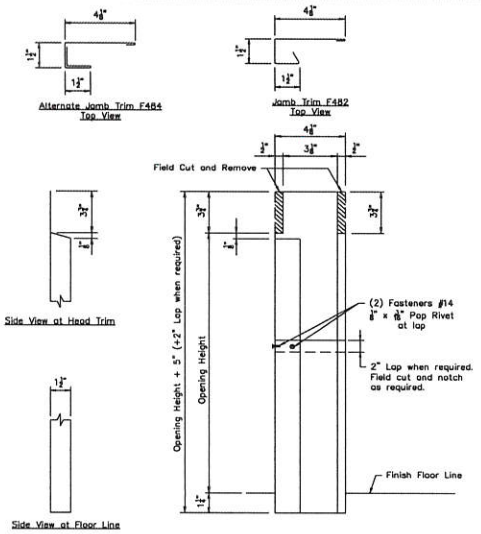
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	DET8	1

Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED PROFESSIONAL ENGINEER

STANDARD FRAMED OPENING DETAILS (PBR WALL PANEL)

PBR Wall Panel - Three Sided Framed Opening
Jamb Trim Field Cut Details

Page PW07027 | Date Nov '17 | Rev 02

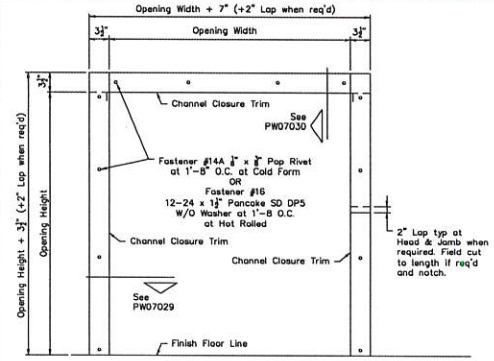


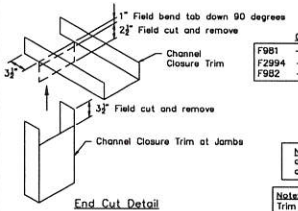
Jamb Trim F482 and
Alternate Jamb Trim F484
Front View
Right Jamb Trim as shown
Left Jamb Trim opposite hand

Note: Field measure Opening Height before making field cuts and adjust cut dimensions accordingly.

PBR Wall Panel - Three Sided Framed Opening
"Optional" Channel Closure Trim

Page PW07028 | Date Mar '15 | Rev 03





End Cut Detail

Optional
Channel Closure Trim Piece Mark

F981	– 8" Member	F2993	– 10 1/2" Member
F2994	– 8 1/2" Member	F169	– 12" Member
F982	– 10" Member	F2995	– 12 1/2" Member

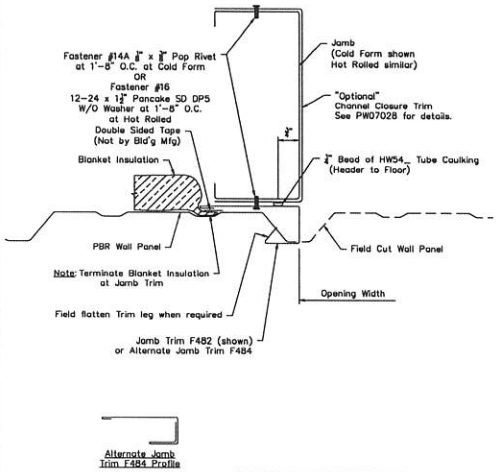
Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

Note: The interior leg of the Channel Closure Trim is to be oriented (±1/8") to match the interior leg of the Header or Jamb.

PBR Wall Panel - Three Sided Framed Opening
Jamb Trim Installation

Page PW07029 | Date Nov '17 | Rev 03



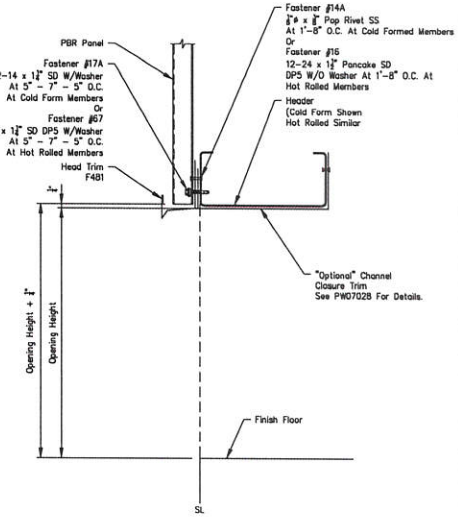
Alternate Jamb
Trim F484 Profile

Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Panel position is shown with Panel Rib and Opening on 1'-0" module. Location of Rib may vary depending on the Opening Width and location. Field measure before cutting Panel and Trim.

PBR Wall Panel - Three Sided Framed Opening
Head Trim Installation

Page PW07030 | Date Oct '17 | Rev 02



Final Plan Approval
Examiner J. Lasko

CPA # 2018020527 - April 20, 2018

STANDARD FRAMED OPENING DETAILS (PBR WALL PANEL)
CONT.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

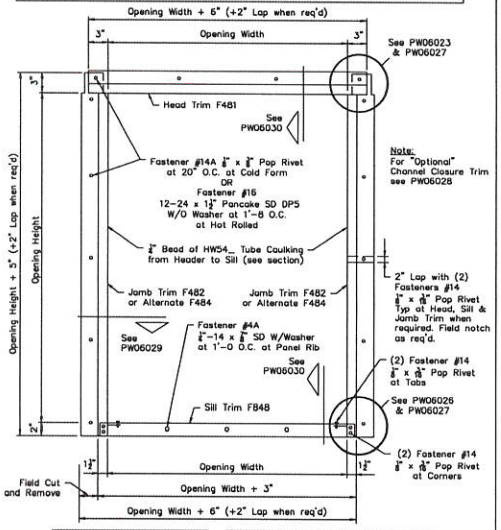
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	DET9	1

Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED
PROFESSIONAL ENGINEER

PBR Wall Panel - Four Sided Framed Opening
Trim Installation with Field Notch Panel at Head Trim

Page PW06022 | Date Sep '14 | Rev. 03

Note: Trim Installation can be done by Field Notch Panel as shown on PW06022 & PW06023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW06024 & PW06025.



Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

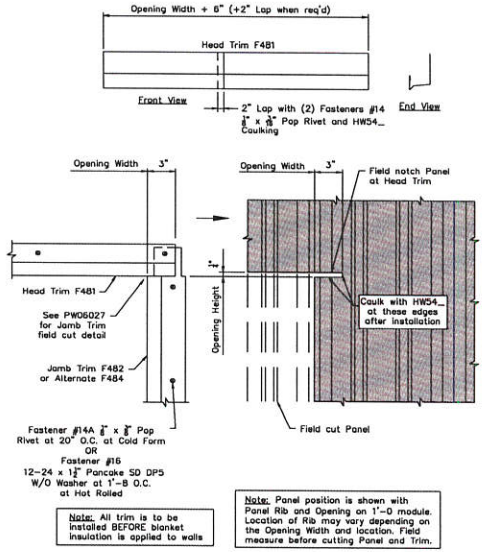
Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

Note: For "Optional" Channel Closure Trim see PW06028

PBR Wall Panel - Four Sided Framed Opening
Field Notch Panel at Head Trim

Page PW06023 | Date Sep '14 | Rev. 03

Note: Trim Installation can be done by Field Notch Panel as shown on PW06022 & PW06023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW06024 & PW06025.



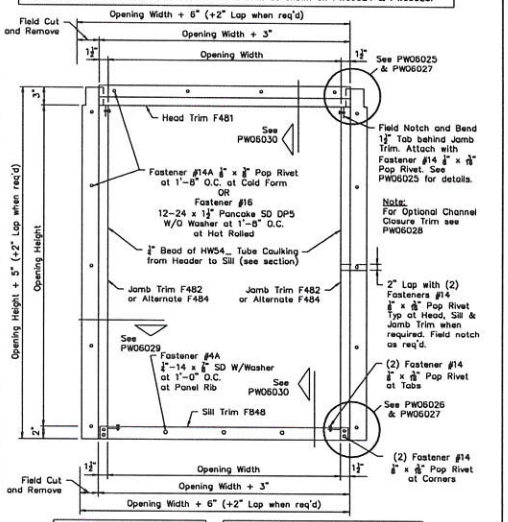
Note: All trim is to be installed BEFORE blanket insulation is applied to walls

Note: Panel position is shown with Panel Rib and Opening on 1'-0 module. Location of Rib may vary depending on the Opening Width and location. Field measure before cutting Panel and Trim.

PBR Wall Panel - Four Sided Framed Opening
Trim Installation With Field Notch and Bend Tabs at Head Trim

Page PW06024 | Date Sep '16 | Rev. 04

Note: Trim Installation can be done by Field Notch Panel as shown on PW06022 & PW06023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW06024 & PW06025.



Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

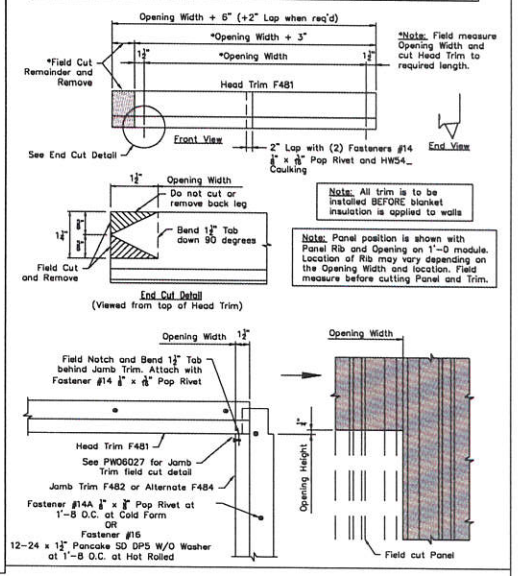
Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

Note: For Optional Channel Closure Trim see PW06028

PBR Wall Panel - Four Sided Framed Opening
Field Notch and Bend Tabs at Head Trim

Page PW06025 | Date Sep '14 | Rev. 03

Note: Trim Installation can be done by Field Notch Panel as shown on PW06022 & PW06023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW06024 & PW06025.



*Note: Field measure Opening Width and cut Head Trim to required length.

Note: All trim is to be installed BEFORE blanket insulation is applied to walls

Note: Panel position is shown with Panel Rib and Opening on 1'-0 module. Location of Rib may vary depending on the Opening Width and location. Field measure before cutting Panel and Trim.

Division of Industrial Compliance — Building Code Compliance — State of Ohio — Department of Commerce

Final Plan Approval
Examiner: J. Locke

CPA # 2018020527 - April 20, 2018

STANDARD 4 SIDED FRAMED OPENING DETAILS (PBR WALL PANEL)

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

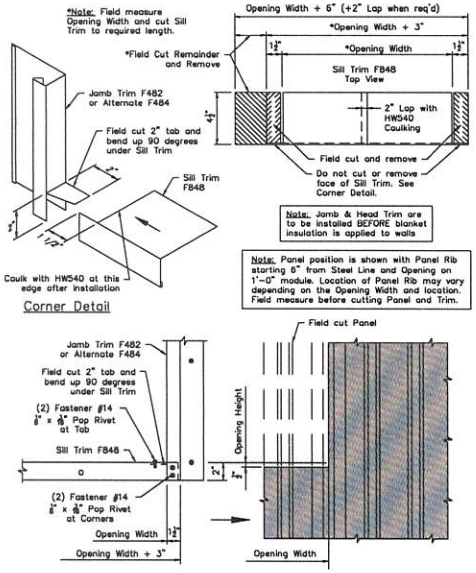
PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION
OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	DET10	1

Mar 15, 2018
State of Ohio — S. H. Davidson — E-47008 — Registered Professional Engineer

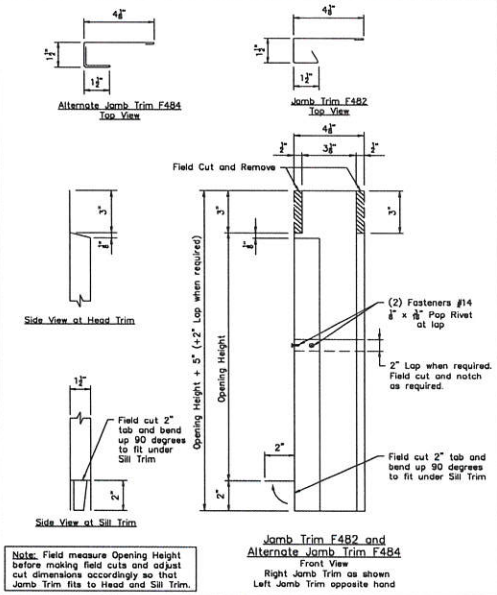
PBR Wall Panel - Four Sided Framed Opening
Sill Trim Installation

Page PW06026 | Date Nov '17 | Rev 03



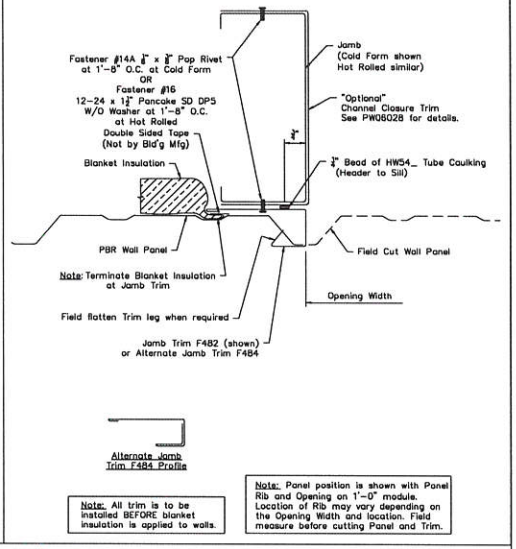
PBR Wall Panel - Four Sided Framed Opening
Jamb Trim Field Cut Details

Page PW06027 | Date Nov '17 | Rev 02



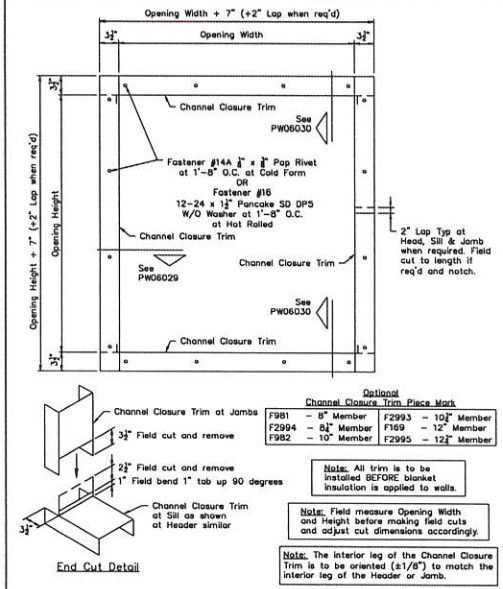
PBR Wall Panel - Four Sided Framed Opening
Jamb Trim Installation

Page PW06029 | Date Nov '17 | Rev 03



PBR Wall Panel - Four Sided Framed Opening
Optional Channel Closure Trim

Page PW06028 | Date Sep '16 | Rev 04

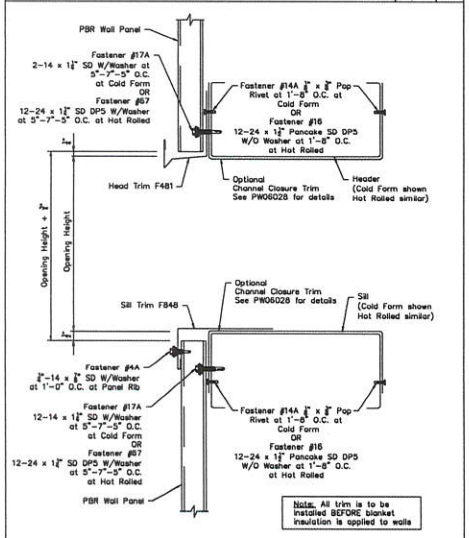


Optional Channel Closure Trim Piece Mark

F981	– 8" Member	F2993	– 10 1/2" Member
F2994	– 8 1/2" Member	F169	– 12" Member
F982	– 10" Member	F2995	– 12 1/2" Member

PBR Wall Panel - Four Sided Framed Opening
Head and Sill Trim Installation

PW06030 | Date Sep '16 | Rev 02



DIVISION OF INDUSTRIALIZED COMPLIANCE
STATE OF OHIO
BUILDING CODE COMPLIANCE
DEPARTMENT OF COMMERCE
Final Plan Approval
Examiner J. Lasko

CPA # 2018020527 - April 20, 2018

STANDARD 4 SIDED FRAMED OPENING DETAILS (PBR WALL PANEL) CONT.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	2/26/18	FOR ERECTOR INSTALLATION	TXK	MMH	AMK
1	3/13/18	REV FOR ERECTOR INSTALLATION	TXK	MMH	AMK

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

MBMA

PROJECT: IEA WHITE-HAVILAND
CUSTOMER: MBA CONSTRUCTION | OWNER: IEA WHITE
LOCATION: HAVILAND OH, 45851

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	3/13/18	N.T.S.	1	A	16-B-37440-B	DET11	1

Mar 15, 2018
STATE OF OHIO
S. H. DAVIDSON
E-47008
REGISTERED
PROFESSIONAL ENGINEER

COMcheck Software Version 4.0.8.1

Envelope Compliance Certificate

Project Information

Energy Code:	90.1 (2010) Standard
Project Title:	
Location:	Paulding, Ohio
Climate Zone:	5a
Project Type:	New Construction
Vertical Glazing / Wall Area:	4%

Construction Site: Owner/Agent: Designer/Contractor:

Building Area	Floor Area
1-Office : Nonresidential	2500

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Floor 1: Slab-On-Grade:Unheated, Vertical 2 ft., [Bldg. Use 1 - Office] (c)	200	---	10.0	0.540	0.540
Roof 1: Other Metal Building Roof, [Bldg. Use 1 - Office] (b)	2500	---	---	0.037	0.055
NORTH					
Exterior Wall 4: Steel-Framed, 16" o.c., [Bldg. Use 1 - Office]	750	19.0	0.0	0.109	0.064
Door 2: Insulated Metal, Swinging, [Bldg. Use 1 - Office]	72	---	---	0.370	0.700
EAST					
Exterior Wall 1: Other Metal Building Wall, [Bldg. Use 1 - Office] (b)	700	---	---	0.060	0.069
Window 1: Vinyl/Fiberglass Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Clear , SHGC 0.59, VT 0.64, [Bldg. Use 1 - Office]	48	---	---	0.600	0.350
Door 1: Insulated Metal, Swinging, [Bldg. Use 1 - Office]	24	---	---	0.370	0.700
SOUTH					
Exterior Wall 3: Other Metal Building Wall, [Bldg. Use 1 - Office] (b)	750	---	---	0.060	0.069
Window 3: Vinyl/Fiberglass Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Clear , SHGC 0.59, VT 0.64, [Bldg. Use 1 - Office]	64	---	---	0.600	0.350
WEST					
Exterior Wall 2: Other Metal Building Wall, [Bldg. Use 1 - Office] (b)	700	---	---	0.060	0.069
Window 2: Vinyl/Fiberglass Frame:Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Clear , SHGC 0.59, VT 0.64, [Bldg. Use 1 - Office]	16	---	---	0.600	0.350

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) 'Other' components require supporting documentation for proposed U-factors.
(c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

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Envelope PASSES: Design 6% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2010) Standard requirements in COM*check* Version 4.0.8.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title	Signature	Date
RAYBURN J. DONALDSON		03/21/18

REGISTERED ARCHITECT
RAYBURN J. DONALDSON
20263
STATE OF TEXAS

03/21/18.

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Inspection Checklist

Energy Code: 90.1 (2010) Standard

Requirements: 0.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
4.2.2,5.4.3.1.1,5.7 [PR1][1]	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

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Section # & Req.ID	Footing / Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.5.3.3 [FO1][2]	Below-grade wall insulation R-value.	R-____	R-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.5.3.5 [FO3][2]	Slab edge insulation R-value.	R-____ ☐ Unheated ☐ Heated	R-____ ☐ Unheated ☐ Heated	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.1.2 [FO4][2]	Slab edge insulation installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.5.3.5 [FO5][2]	Slab edge insulation depth/length.	____ ft	____ ft	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.1.7.3 [FO7][1]	Insulation in contact with the ground has <=0.3% water absorption rate per ASTM C272.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.4.1.5 [FO11][3]	Bottom surface of floor structures incorporating radiant heating insulated to >=R-3.5.	R-____	R-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

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Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.4.3.2 [FR1][3]	Factory-built fenestration and doors are labeled as meeting air leakage requirements.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.5.4.3a [FR8][1]	Vertical fenestration U-Factor.	U-____	U-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.5.4.3b [FR9][1]	Skylight fenestration U-Factor.	U-____	U-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.5.4.4.1 [FR10][1]	Vertical fenestration SHGC value.	SHGC:____	SHGC:____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.5.4.4.2 [FR11][1]	Skylight SHGC value.	SHGC:____	SHGC:____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.2.1 [FR12][2]	Fenestration products rated in accordance with NFRC.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.2.2 [FR13][1]	Fenestration products are certified as to performance labels or certificates provided.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.2.3,5.5.3.6 [FR14][2]	U-factor of opaque doors associated with the building thermal envelope meets requirements.	U-____ ☐ Swinging ☐ Nonswinging	U-____ ☐ Swinging ☐ Nonswinging	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.4.3.1 [FR15][1]	Continuous air barrier is wrapped, sealed, caulked, gasketed, and/or taped in an approved manner, except in semiheated spaces and in climate zones 1-6.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

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Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.4.3.1 [IN1][1]	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.5.3.1 [IN2][1]	Roof R-value. For some ceiling systems, verification may need to occur during Framing Inspection.	R-____ ☐ Above deck ☐ Metal ☐ Attic	R-____ ☐ Above deck ☐ Metal ☐ Attic	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.1.2,5.8.1.3 [IN3][1]	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the roof slope is <=3 in 12.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.5.3.2 [IN6][1]	Above-grade wall insulation R-value.	R-____ ☐ Mass ☐ Metal ☐ Steel ☐ Wood	R-____ ☐ Mass ☐ Metal ☐ Steel ☐ Wood	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.1.2 [IN7][1]	Above-grade wall insulation installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.5.3.4 [IN8][2]	Floor insulation R-value.	R-____ ☐ Mass ☐ Steel ☐ Wood	R-____ ☐ Mass ☐ Steel ☐ Wood	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
5.8.1.1 [IN10][2]	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.4 [IN11][2]	Eaves are baffled to deflect air to above the insulation.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.5 [IN12][2]	Insulation is installed in substantial contact with the inside surface separating conditioned space from unconditional space.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.6 [IN13][2]	Recessed equipment installed in building envelope assemblies does not compress the adjacent insulation.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

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Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.8.1.7 [IN14][2]	Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.7.1 [IN15][2]	Attics and mechanical rooms have insulation protected where adjacent to attic or equipment access.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.7.2 [IN16][2]	Foundation vents do not interfere with insulation.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.8 [IN17][3]	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
5.4.3.3 [FI1][1]	Weatherseals installed on all loading dock cargo doors in Climate Zones 4-8.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

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TTL associates inc
Environmental, Geotechnical Engineering & Testing

Steven P. Obertacz

Structural Steel Inspector

www.ttlassoc.com

Education

- Mechanical Engineering, The University of Toledo, Toledo, OH

Certifications

- NACE CIP Level I Cert. No. 8573
- Certified Welding Inspector, American Welding Society, AWS QC1-92, Cert. No. 92030011
- SSI Certified Open Water Diver No. 606960242
- ODOT Coatings Inspector

Training

- ODOT, Work Type 26, Structural Steel Painting Course
- ODOT, Work Type 57, Sealing of Concrete Surfaces Course
- OSHA 10-Hour Construction Safety Course
- KTA-Tator, Quality Coatings Inspection
- Hobart School of Welding Technology, Troy, Ohio, Oxygen Flame Welding, Shielded Metal Arc Welding I and II
- American Welding Society, Columbus, Ohio, Welding Inspection Technology, Structural Steel Code, Practical Inspection
- Terra Technical College, Fremont, Ohio, Training, Levels I and II, Liquid Dye Penetrant, Magnetic Particle
- Kraut Kramer-Branson/Hobart School of Technology, Training, Levels I and II, Ultrasonic

Summary of Experience

Steven joined TTL in 1986 and has over 32 years of experience in structural steel testing, welding and coatings inspections. He has experience performing quality assurance inspections, both in and out of the laboratory, on a wide variety of projects.

Relevant Project Experience

LUCAS-75-2.75 Part 1 and Part 2, ODOT Project No. 140268, Toledo, Ohio. Independent Lead Structural Inspector (ILSI) responsible for the inspection and field documentation of all structural elements on the Project including but not limited to bridges, box culverts, walls, foundations, etc. primarily the structural steel for Oakwood Bridge over I-75.

ODOT Maintenance Facility, Sandusky County, Ohio. Lead structural steel inspector performing the steel inspection on this lightly-loaded, single-story, slab-on-grade structure. Testing also being performed includes soil bearing evaluation, soil/stone compaction, concrete testing (steel reinforcement inspection), and asphalt testing. All tests are being performed in accordance with the project plans and specifications.

Third Lane Construction, Contract No. 77-13-01, Mileposts 59.52 To 64.13, Wood & Lucas Counties, Ohio. Lead inspector performing the bridge painting inspections on seven bridges on the Ohio Turnpike.

BGSU, Wolfe Center for Performing Arts, Bowling Green, Ohio. Lead structural steel inspector for the construction materials testing services for this 122,000 square foot building constructed of a structural steel frame with concrete slab-on-grade floors and limited load-bearing masonry walls. Structural steel inspection services included visual weld inspection, ultrasonic weld examination, and bolt tension examination.

University of Toledo, Fetterman Training Center, Toledo, Ohio. Lead structural steel inspector for the construction material testing services for this 90,400 square-foot new indoor practice facility. Structural steel inspection services included visual weld inspection, ultrasonic weld examination, and bolt tension examination.

Toledo Public Schools, Toledo, Ohio. This program consists of the construction/renovation of 55 school facilities. Lead structural steel inspector for the services which included visual weld inspection, ultrasonic weld inspection, bolt torque inspection, paint thickness inspection, steel fabrication shop inspections and fireproofing inspections.

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TTL associates inc
Environmental, Geotechnical Engineering & Testing

Richard M. Grant
Engineering Technician

www.ttlassoc.com

Certifications

- ACI Concrete Field Testing Technician, Level I
- Certificate of Radiological Safety Training and Equipment Operation

Summary of Experience

Rick joined TTL in 1991 and has over 27 years of experience.

Relevant Project Experience

The Andersons Corporate Headquarters, Maumee, Ohio. Lead Engineering Technician for the construction material testing services for this 100,000 + square foot corporate headquarters facility located on 55 acers of land. Services included testing and inspection for shallow foundations, reinforcing steel, concrete testing, asphalt testing, and masonry inspection.

New Keyser Elementary School, Toledo, Ohio. Engineering technician who performed the materials testing and inspection services for this new elementary school. The new building was a slab-on-grade structure with a footprint of approximately 46,000 square feet. Services included soil bearing evaluation, soil/stone compaction, concrete testing, concrete steel reinforcement inspection, asphalt testing, structural steel inspection, and special inspection of masonry.

BGSU Student Dining Commons, Bowling Green, Ohio. Lead engineering technician for testing and inspection services for this single story slab-on-grade dining hall structure Services included soil bearing evaluations, soil compaction, concrete testing, and special inspection of masonry.

Daimler Chrysler Bid Pack FP1 – Site Preparation, Toledo, Ohio. Lead engineering technician for the testing and inspection services for the site preparation work at the Chrysler Jeep project. Services included soil/stone compaction testing, concrete testing, and asphalt testing.

Maumee CSO Storage Basin, Toledo, Ohio. Lead engineering technician for the testing and inspection services for the construction of a new combined sewer overflow (CSO) storage basin. The basin is approximately 180 feet long and 100 feet wide. All necessary services were performed including soil bearing evaluation, soil/stone compaction, and concrete/grout testing and inspection.

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Department of Commerce

Division of Industrial Compliance

John R. Kasich, Governor
Jacqueline T. Williams, Director

Statement of Special Inspections

State CPA No.: _____

Project Name: _____

Project Location: _____

Pursuant to section 1704.1.1 Ohio Building Code, this statement of special inspections must be prepared by the registered design professional in responsible charge acting as the owner's agent. This statement (2-part documents) should be submitted as a condition for plan approval and should include the following:

- **Part I**: A complete list of materials and work requiring special inspections and the required frequency of inspections by sections 1704.2 through 1704.16 Ohio Building Code.
- **Part II**: A list of special inspectors who are qualified and are competent to the particular type of construction or operations. **These special inspectors shall be employed by the owner or by the registered design professional in responsible charge acting as the owner's agent. Submit proper resumes and/or certificates of the special inspectors.**

** Please mark "X" on all work items requiring special inspection and the required frequency of inspections for this project per requirements in section 1704 OBC.

PART I: SCHEDULE OF SPECIAL INSPECTIONS				
No.	**ITEM**	**Req'd**	**Continuous Inspection**	**Periodic Inspection**
1	**Fabricators: (1704.2 OBC)**			
	▪ Structural load-bearing members			
	▪ Structural load-bearing assemblies			
2	**Steel Construction (1704.3 OBC)**			
	▪ High strength bolts			
	▪ Structural steel materials			
	▪ Structural steel welding			
	▪ Structural steel frame joint details			
3	**Concrete construction (1704.4 OBC)**			
	▪ Reinforcing steel placement			
	▪ Reinforcing steel welding			
	▪ Reinforcing steel bolting			
	▪ On site concrete testing			
	▪ Concrete application techniques			
	▪ Concrete curing temperature and techniques			
	▪ Pre-stressed concrete			

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This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

5/10/2018 4:17:27 PM

in

Case No(s). 13-0197-EL-BGN, 16-1687-EL-BGA, 17-1099-EL-BGA

Summary: Notification of Compliance with Condition 9 of the Supplement—State/Federal Permits (Part 1 of 2) electronically filed by Mr. William V Vorys on behalf of Trishe Wind Ohio, LLC