Mount Vernon

Board of Zoning Appeals | June 2, 2021

Board Meeting | Agenda | 5:30 PM

CALL TO ORDER

MINUTES APPROVAL

- Board of Zoning Appeals - Board Meeting - Apr 7, 2021 5:30 PM

BZA FILES

- 2021-BZA-08 : 810 N Sandusky ST - Variance for Accessory Structure Larger Than 35% of the Primary Structure

ADJOURN AT THE CALL OF THE CHAIRMAN

Board of Zoning Appeals Meeting: 06/02/21 5:30 PM
City of Mount Vernon Dept: Board of Zoning Appeals
Mount Vernon, OH 43050

Category: N/A
DRAFT Prepared By: Lacie Blankenhorn
Initiator: Lacie Blankenhorn

BZA FILE (ID # 2337) **DOC ID: 2337**

2021-BZA-08 : 810 N SANDUSKY ST - VARIANCE FOR ACCESSORY STRUCTURE LARGER THAN 35% OF THE PRIMARY STRUCTURE

Item Number	2021-BZA-08
Site Address	810 N Sandusky ST
Parcel Number	66-00627.000
Zoning District	GB – General Business
Presented By	Brad Beaver, Mount Vernon Overhead Door

Quick Guide to Codified Ordinance Sections (may not be inclusive):
1167 GB General Business District
1173 Supplementary District Regulations (1173.04 – 1173.06; 1173.10; 1173.11)

Request: Mount Vernon Overhead Door requests to build a 60’ x 100’ storage building.

The primary structure is 50’ x 132’ (6,600 sf).

Mount Vernon

City of Mount Vernon, Ohio
Board of Zoning Appeals

Request for Hearing

Applicant's Information

Owner's Name, Address and Phone
Brad Beaver 810 North Sandusky ST 740-397-2536

Agent's Name, Address and Phone
—

Site Information

Site Address	Legal Description
810 North Sandusky St.	13 6 1 NPT of 13.156 AC

Parcel Number	Deed Volume and Page Number	Zoning District
66-00627.000	1518/663 1808/504	GB

Existing use of property	Proposed use of property
Mt. Vernon Overhead Door	MUOD Storage

Hearing Request

Type of Hearing Requested

☒ Variance ☐ Conditional Use ☐ Appeal of Decision ☐ Map Interpretation ☐ Substantially Similar Use

In the following section, please list a brief description of the request. Narrative statements and any additional documents or information required by the Zoning Code and Chapter 1155 should be attached to this application as separate sheets.

Request:

I hereby certify that the information submitted on this application and on any sketches, drawings or other documents submitted with this application is true and exact.

Date: 5-7-2021 By: Brad Beaver

Status of Application

Filing Date	Case Number		
5/7/21	2021-BZA-08		
	Hearing Date	June 2, 2021	
	Fee deposit	Date Paid	Receipt Number
	$75.00	5/7/21	003331

Status of Board's Action

☐ Approved ☐ Denied

Mount Vernon
Overhead Door
Sales • Service • Commercial • Residential
810 North Sandusky Street, Mount Vernon, OH 43050
Phone: 740.397.2536 Fax: 740.397.4942

5-10-2021

Application and Standards for Variances:

1.) The variance will be in accord with the general purpose and intent of the regulations imposed by this zoning ordinance at the district in which it is located, and shall not be injurious to the area of otherwise detrimental to the public welfare.

2.) By granting us this variance, we will not use it for something that is not permitted in the district.

3.) We are adding a building for storage for Mount Vernon Overhead door and potential growth to the business. A lot split was considered. Maintaining 1 parcel is preferred because the proposed additional storage structure will directly support the existing business. A lot split would also require shared use easements of the stormwater facility, water and wastewater access as well as the access entrance of SR 13.

4.) Mount Vernon Overhead has grown over the past year. We have had to order doors and supplies ahead of time due to the delays with Covid 19 so the additional space will help us to store that. We also would like to have growth in the company. Water retention and site prep was prepared already for the possibility of building.

5.) By getting the variance we will use it for reasonable use of the building.

6.) We will have adequate supply of light and air to adjacent property, it will not increase the congestions on public streets, or increase the danger of fire, public safety and will not diminish or impair property values of the adjacent area.

7.) I understand that the granting of the variance requested will not confer on the applicant any special privileges that is denied by this regulation to other lands, structures, or buildings in the same district.

Sincerely,
Brad Beaver

Permit No. 2021267

MountVernon

City of Mount Vernon, Ohio
Application for Zoning Permit

Application		
Owner's Name, Address and Phone and e-mail: Brad Beaver 810 N. Sandusky ST. 740-627-0899 bradamvohd		
Contractor's Name, Address and Phone and e-mail: SAM SlAbAugh 4488 HAndscrabble Rd 740-501-5635		
Applicant's Name, Address and Phone and e-mail: Brad Beaver		
Site Information		
Site Address: 810 North Sandusky ST.		Side Street (if corner lot)
Legal Description: 13 61 N PT of 13.156 AC	Parcel Number: 66-00627.000	Deed Volume and Page Number
Zoning District (circle one): RR R-1 R-2 R-3 PND NC CB (GB circled) O/I M-1 M-1A P-1 R-MH		Flood Zone: ☐ Floodway ☐ AE Zone ☐ A Zone ☐ X Zone
Historic District ☐Yes ☒No	Status of Historic Review Commission's Action: ☐ Approved ☐ Denied Case Number:	
Project Information		
Description of Proposed Work: Storage for MVOHD 60' X 100' (attach site plan and/or drawings)		
Existing use of property: MT. Vernon Overhead Door	Proposed use of property: Storage for MVOHD	
Parking spaces/loading berths	Structure height	Dwelling units
State Approval: *(commercial only)* Date	Approval Number	☐ Full approval ☐ Partial approval ☐ Not required

I hereby certify that the information submitted on this application and on any sketches, drawings or other documents submitted with this application is true and exact. This permit shall expire and may be revoked if work has not begun within **six months** or substantially completed within **one year**.

Date: 4-29-2021 By: [signature]

Status of Application			
☐ Application rejected	Date	By	Reason(s)
☐ Referred to Board of Appeals:	Status of Board's Action: ☐ Approved ☐ Denied	Case Number:	
Code Review ____ Date: ____		Site Review ____ Date: ____	
☐ Application approved			
Comments			
By:		Date:	

Fee Calculation		
Estimated Cost: 220,000 —	Base Fee	Date Paid/Permit Issued:
	Park Development Fee	
	Total Fee	Cash Check#

Updated 4-30-2019

Attachment: APP - ZNG - Sandusky ST, 810 N (2337 : 2021-Bza-08)

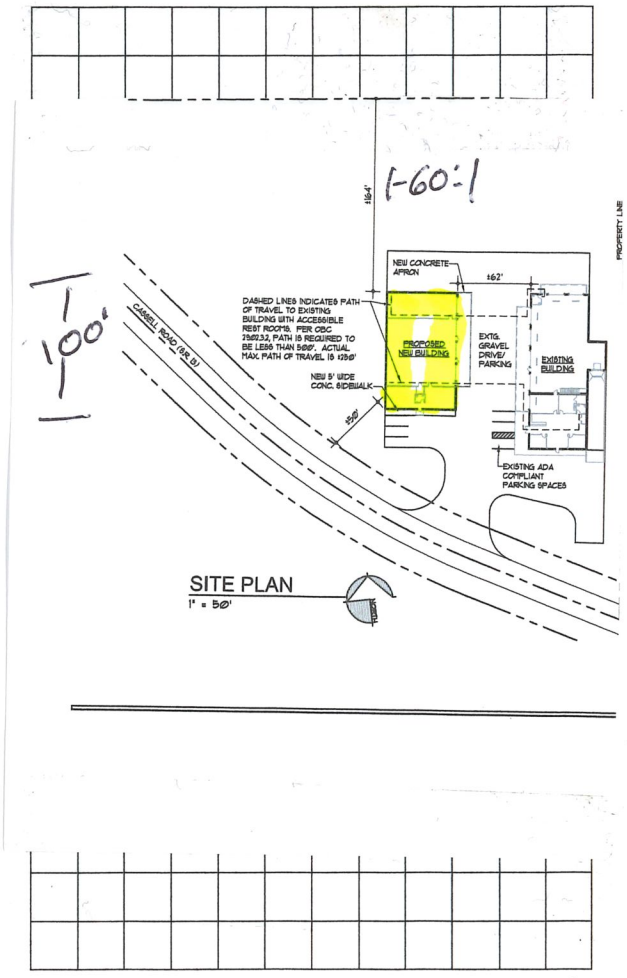
City of Mount Vernon
Zoning Permit Sketch

Site Address 810 North Sandusky ST

Instructions to Applicant

Supply all the information requested and complete the diagram below by showing the following:

1. Existing structures with solid lines
2. Proposed structures with dashed lines
3. Setback distances from all property lines.
4. Dimensions of all structures
5. Dimensions of the lot
6. Street name(s)



Street Name 810 North Sandusky ST.

I hereby certify that the information submitted on this sketch and/or other attached drawings and documents is true and correct.
By
Date

Zoning Enforcement Officer Action
☐ Approved ☐ Disapproved
By
Date

PROJECT DESCRIPTION

THE PROPOSED PROJECT IS A NEW BUILDING FOR MOUNT VERNON OVERHEAD DOOR COMPANY. THE BUILDING WILL BE USED AS STORAGE/WAREHOUSE FOR MISCELLANEOUS STORAGE THAT WILL ALSO BE USED FOR PARKING NON-COMMERCIAL MOTOR VEHICLES OVERNIGHT. THE BUILDING WILL ALSO CONTAIN AN AREA THAT WILL BE BUILT-OUT AS AN OFFICE SPACE UNDER A FUTURE CONTRACT AND SEPARATE PERMIT.

NO REPAIR WORK WILL BE PERFORMED IN THE BUILDING. NO MOTOR VEHICLES WILL BE OPERATED WITHIN THE BUILDING PER MECHANICAL CODE SECTION 502.14, EXCEPTION 3, MECHANICAL VENTILATION IS NOT REQUIRED IN MOTOR VEHICLE SERVICE AREAS WHERE ENGINES ARE OPERATED INSIDE THE BUILDING ONLY FOR THE DURATION NECESSARY TO MOVE THE MOTOR VEHICLES IN AND OUT OF THE BUILDING.

THE INSIDE STORAGE, DISPENSING AND USE OF MATERIAL IN EXCESS OF THOSE PERMITTED THE THE OHIO BUILDING CODE, TABLES 307.7(1) AND 307.7(2) SHALL BE PROHIBITED IN THIS BUILDING.

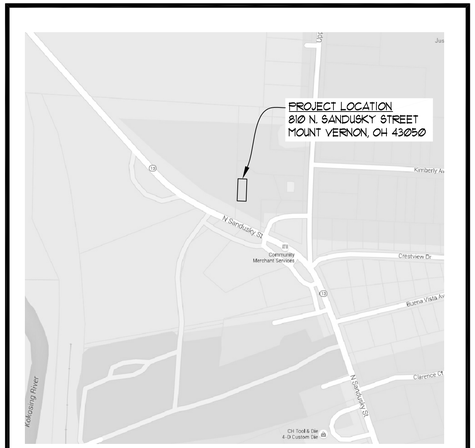
THERE SHALL BE NO HIGH-PILED OR RACK STORAGE IN THIS BUILDING EXCEEDING 12 FT. IN HEIGHT TO THE TOP OF THE HIGHEST STORED COMMODITY. STORAGE SHALL MEET THE DEFINITION OF NFPA 3.3.18 LOW-PILED STORAGE. SOLID-PILED, PALLETIZED, RACK STORAGE, BIN BOX, AND SHELF STORAGE UP TO 12 FT. IN HEIGHT.

OHIO BUILDING CODE INFORMATION

SECTION REF.	DESCRIPTION
SECTIONS 304 & 311 STORAGE & BUSINESS	**CHAPTER 3: USE AND OCCUPANCY CLASSIFICATION** A. USE GROUP CLASSIFICATION — MIXED S-1 & B
TABLES 504.3, 504.4 & 506.2 ALLOWABLE NO. OF STORIES, HEIGHT &AREA	**CHAPTER 5: GENERAL BUILDING HEIGHTS AND AREAS** A. ALLOWABLE AREA & HEIGHT BASED ON MOST RESTRICTIVE USE (TABLE 503) (STORAGE (S-1) 9,000 S.F., 1 STORY, 40' B. ACTUAL GROSS AREA FIRST FLOOR FUTURE OFFICE AREA — 1,122 S.F. STORAGE/WAREHOUSE & UTILITY — 4,878 S.F. TOTAL FIRST FLOOR — 6,000 S.F.
508.3.2 NONSEPARATED OCCUPANCIES	C. THE STORAGE/WAREHOUSE (S-1) AND FUTURE OFFICE (B) AREAS SHALL BE CONSIDERED NON-SEPARATED MIXED USES PER SECTION 508.3.2. THE MOST RESTRICTIVE OCCUPANCY (S-1) ALLOWABLE HEIGHT AND AREA SHALL APPLY TO THE ENTIRE BUILDING.
TABLE 601 FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS	**CHAPTER 6: TYPES OF CONSTRUCTION** A. CONSTRUCTION TYPE — 5B STRUCTURAL FRAME — 0 HOUR BEARING WALLS EXTERIOR — 0 HOUR INTERIOR — 0 HOUR NONBEARING WALLS EXTERIOR — 0 HOUR ROOF CONSTRUCTION — 0 HOUR
903.2.9 SPRINKLER SYSTEMS IN GROUP (S-1)	**CHAPTER 9: FIRE PROTECTION SYSTEMS** A. THIS BUILDING WILL NOT MEET ANY OF THE CRITERIA THAT WOULD REQUIRE THE INSTALLATION OF AN AUTOMATIC SPRINKLER SYSTEM.
903.2.9.1 REPAIR GARAGES	B. NO COMMERCIAL VEHICLES WILL BE STORED IN THIS BUILDING. C. NO REPAIR WORK WILL BE PERFORMED IN THE BUILDING.
907.2.2 FIRE ALARM SYSTEMS IN GROUP (B)	D. THIS BUILDING WILL NOT MEET ANY OF THE CRITERIA THAT WOULD REQUIRE THE INSTALLATION OF A FIRE ALARM SYSTEM
TABLE 1004.1.2 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT	**CHAPTER 10: MEANS OF EGRESS** A. NUMBER OF OCCUPANTS FUTURE OFFICE AREA: 1,122 S.F. @ 100 S.F. GROSS/OCC. = (12) OCC. STORAGE/WAREHOUSE & UTILITY AREA: 4,878 S.F. @ 500 S.F. GROSS/OCC. = (10) OCCUPANTS TOTAL OCCUPANT LOAD = (22) OCCUPANTS
TABLE 2902.1 MIN NUMBER OF PLUMBING FIXTURES	**CHAPTER 29: PLUMBING SYSTEMS** A. WATER CLOSETS: — REQUIRED — PROVIDED PROPOSED BUILDING (B) MEN'S - 6 OCC. @ 1:50 = — 0.12 (S-1) MEN'S - 5 OCC. @ 1:100 = — 0.05 EXISTING BUILDING (B) MEN'S - 5 OCC. @ 1:50 = — 0.10 (S-1) MEN'S - 8 OCC. @ 1:100 = — 0.08 TOTAL MEN'S WATER CLOSETS = — 1 (0.35) — 1 PROPOSED BUILDING (B) WOMEN'S - 6 OCC. @ 1:50 = — 0.12 (S-1) WOMEN'S - 5 OCC. @ 1:100 = — 0.05 EXISTING BUILDING (B) WOMEN'S - 5 OCC. @ 1:50 = — 0.10 (S-1) WOMEN'S - 8 OCC. @ 1:100 = — 0.08 TOTAL WOMEN'S REQUIRED = — 1 (0.35) — 1 B. LAVATORIES: — REQUIRED — PROVIDED PROPOSED BUILDING (B) MEN'S - 6 OCC. @ 1:80 = — 0.08 (S-1) MEN'S - 5 OCC. @ 1:100 = — 0.05 EXISTING BUILDING (B) MEN'S - 5 OCC. @ 1:80 = — 0.07 (S-1) MEN'S - 8 OCC. @ 1:100 = — 0.08 TOTAL MEN'S REQUIRED = — 1 (0.28) — 1 PROPOSED BUILDING (B) WOMEN'S - 6 OCC. @ 1:80 = — 0.08 (S-1) WOMEN'S - 5 OCC. @ 1:100 = — 0.05 EXISTING BUILDING (B) WOMEN'S - 5 OCC. @ 1:80 = — 0.07 (S-1) WOMEN'S - 8 OCC. @ 1:100 = — 0.08 TOTAL MEN'S REQUIRED = — 1 (0.28) — 1 C. EXISTING REST ROOMS ARE LOCATED WITHIN 500' OF THE STORAGE BUILDING IN THE EXISTING OFFICE BUILDING ON THE SAME SITE AND UNDER THE SAME OWNERSHIP. D. EXISTING BUILDING FIXTURE CALCULATIONS SHOWN ABOVE TO SHOW THAT ADDITIONAL OCCUPANTS OF THE PROPOSED BUILDING WILL NOT INCREASE THE NUMBER OF REQUIRED FIXTURES. E. PER OPC 410.1 BOTTLED WATER WILL BE PROVIDED IN STEAD OF THE DRINKING FOUNTAIN PER OBC TABLE 2902.1. REFER TO ATTACHED LETTER FROM OWNER.
	CHAPTER 16: STRUCTURAL DESIGN A. REFER TO SHEET S-1 FOR STRUCTURAL DESIGN LOADS.

A NEW COMMERCIAL BUILDING: MOUNT VERNON OVERHEAD DOOR

810 N. SANDUSKY STREET MOUNT VERNON, OH 43050



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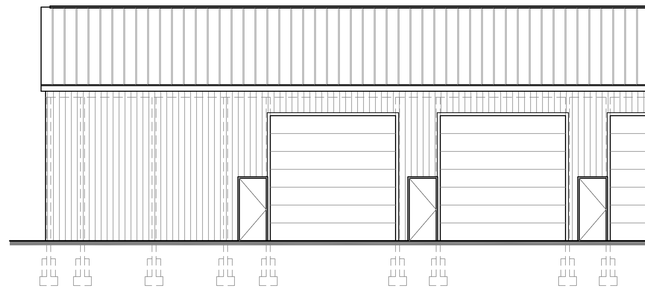

COVER	BUILDING CODE NOTES, SHEET INDEX, LOCATION MAP
A1	SITE PLAN, FLOOR PLAN, NOTES AND SCHEDULES
A2	EXTERIOR ELEVATIONS
A3	¼" BUILDING SECTIONS AND ¾" WALL SECTIONS
S1	FOUNDATION AND FRAMING PLANS
SD-1	GENERAL STRUCTURAL NOTES
SD-2	STRUCTURAL FOUNDATION DETAILS
SD-3	STRUCTURAL FRAMING DETAILS
SD-4	STRUCTURAL FRAMING DETAILS
MP1	MECHANICAL AND PLUMBING PLANS, NOTES AND DETAILS
E1	ELECTRICAL PLANS AND NOTES

index

PROJECT DIRECTORY

OWNER
Mount Vernon Overhead Door, LLC
810 N. Sandusky St.
Mount Vernon, OH 43050
(740) 397-2536

ARCHITECT
Green Valley Design, LLC
9301 Green Valley Road
Mount Vernon, OH 43050
(740) 397-2282
(740) 397-8718 (Fax)

M.E.P. ENGINEER
Hill Engineering
3 W. Central Ave.
Delaware, OH 43015
(740) 363-0400

STRUCTURAL ENGINEER
Jack D. Walters and Associates, Inc.
5166 Blazer Parkway
Dublin, OH 43017
(614) 889-2516

GREEN VALLEY DESIGN, LLC
9301 Green Valley Road
Mt. Vernon, Ohio 43050
740-397-2282
info@greenvalleydesign.net

REVISIONS
1
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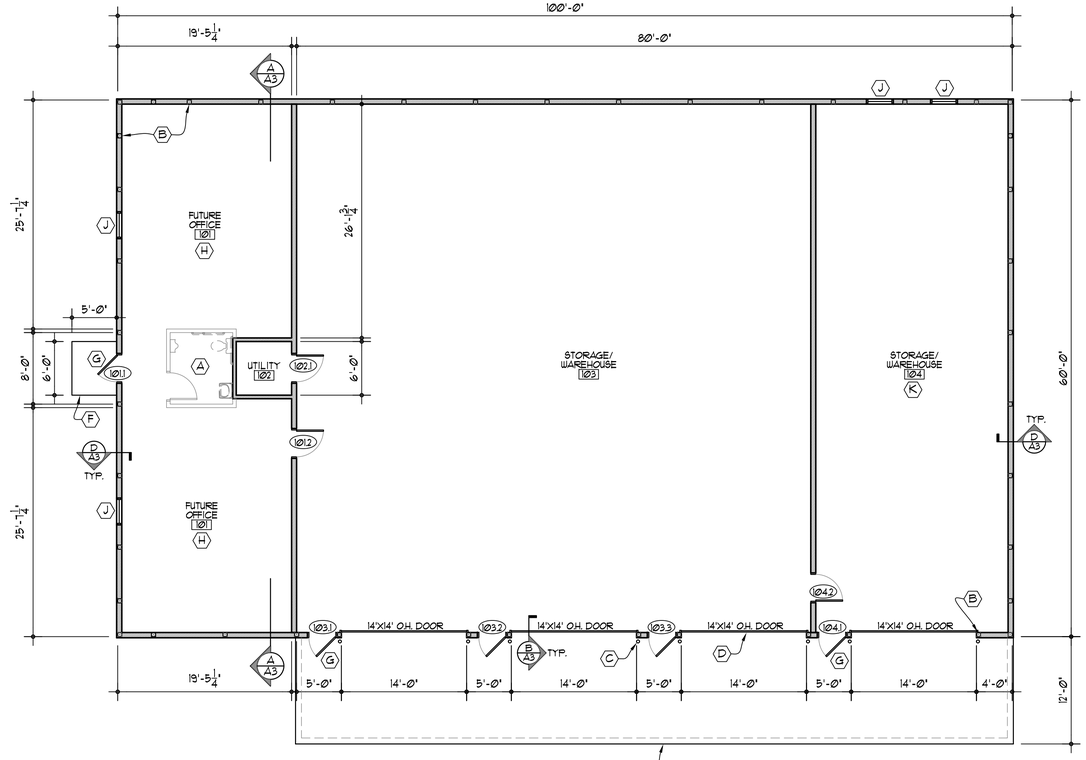
APRIL 27, 2021

zoning submission	☐
design development	☐
construction document	■
bidding	☐
building permit submission	■
not for construction	☐
record / archive	☐
owner review	☐

STATE OF OHIO — JEFFREY J. SALVA 6456 — REGISTERED ARCHITECT

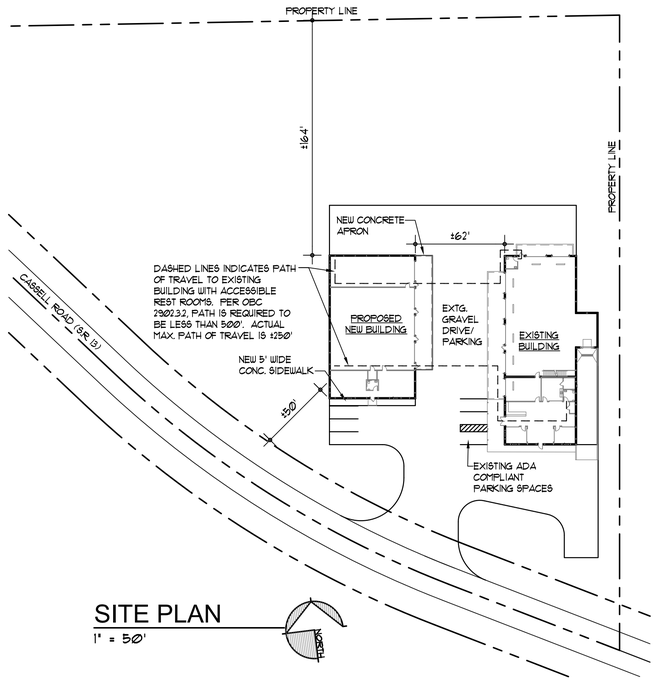
Jeffrey J. Salva, License # 7906456
Expiration Date 12/31/2021



FLOOR PLAN

1/8" = 1'-0"

NORTH



SITE PLAN

1" = 50'

NORTH

DOOR AND FRAME SCHEDULE

NO.	DOOR SIZE	DOOR EL	DOOR MATL	DOOR GLAZING	FRAME EL	FRAME MATL	FIRE RATING	HDWARE SET	REMARKS
Ø11	3'-Ø" X 7'-Ø"	--	ALUM	1/4" TEMP.	--	ALUM	--	Ø1	A, B
Ø12	3'-Ø" X 6'-8"	--	INSUL HM	--	--	INSUL HM	--	Ø3	--
Ø21	3'-Ø" X 6'-8"	--	INSUL HM	--	--	INSUL HM	--	Ø2	--
Ø31	3'-Ø" X 6'-8"	--	INSUL HM	--	--	INSUL HM	--	Ø4	A
Ø32	3'-Ø" X 6'-8"	--	INSUL HM	--	--	INSUL HM	--	Ø4	A
Ø33	3'-Ø" X 6'-8"	--	INSUL HM	--	--	INSUL HM	--	Ø4	A
Ø41	3'-Ø" X 6'-8"	--	INSUL HM	--	--	INSUL HM	--	Ø4	A
Ø42	3'-Ø" X 6'-8"	--	INSUL HM	--	--	INSUL HM	--	Ø3	--

DOOR SCHEDULE NOTES

1. ABBREVIATIONS:
   SC. WD. - SOLID CORE WOOD
   INSUL. HM - INSULATION HOLLOW METAL
   (E) - EXISTING
   HM. - HOLLOW METAL
   ALUM. - ALUMINUM
   INSUL. TEMP - INSULATED TEMPEREED
2. ALL DOOR HARDWARE SHALL COMPLY WITH THE OHIO BASIC BUILDING CODE AND ITS REFERENCE STANDARDS TO THE "AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAG). ALL LATCHING DEVICES SHALL BE LEVER HANDLE.
3. CONTRACTOR SHALL VERIFY DOOR HARDWARE MANUFACTURE AND KEYING WITH OWNER PRIOR TO ORDERING HARDWARE.

DOOR SCHEDULE REMARKS

A. DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS.

B. FULL-LITE DOOR.

DOOR HARDWARE SETS

SET Ø1
THUMB TURN DEADBOLT
ADA THRESHOLD
CLOSER
PUSH PLATE AND PULL HANDLE
WEATHER STRIPPING

SET Ø2
STORAGE LATCHSET

SET Ø3
PASSAGE LATCHSET
CLOSER

SET Ø4
ENTRANCE LATCHSET
THUMB TURN DEADBOLT
ADA THRESHOLD
CLOSER
WEATHERSTRIPPING

CODED NOTES

(A) ROUGH IN PLUMBING BELOW SLAB FOR FUTURE ADA COMPLIANT REST ROOM. INSTALL FIXTURE ROUGH-INS TO PROVIDE REQUIRED HEIGHTS AND CLEARANCES. SEE DETAIL ON SHEET A0.

(B) ENGINEERED WOOD COLUMN, TYPICAL. (SEE STRUCTURAL DRAWINGS)

(C) TYPICAL 4' BOLLARD. SEE DETAIL F/A3.

(D) OVERHEAD SECTIONAL DOOR SUPPLIED AND INSTALLED BY OWNER (TYPICAL OF 4). (SIZE NOTED ON PLAN)

(E) CONCRETE FROST APRON PER DETAIL E/A3.

(F) TURN DOWN FROST SLAB PER DETAIL G/A3.

(G) EXIT DOOR W/ EXIT SIGN & EMERGENCY LIGHTS W/ BATTERY BACK-UP. COORDINATE WITH ELECTRICAL DWGS.

(H) FUTURE OFFICE SPACE TO BE FINISHED UNDER SEPARATE PERMIT APPLICATION AT LATER DATE. AREA TO BE LEFT UNFINISHED.

(J) 3' X 5' ALUMINUM FRAMED WINDOW WITH DOUBLE PANE LOW-E GLASS. INSTALL PER MANUFACTURERS SPECIFICATIONS.

(K) STORAGE/WAREHOUSE BAY Ø4 TO BE THE ONLY PORTION OF THE BUILDING WITH HEATING AND COOLING. ALL EXTERIOR WALLS CAVITIES TO BE FILLED WITH SPRAY FOAM INSULATION. WALL CAVITIES OF WOOD STUD PARTITION WALL TO BE FILLED WITH SPRAY FOAM INSULATION. MIN OF R-34 BLOW-IN INSULATION ABOVE METAL CEILING PANELS ABOVE ENTIRE BAY Ø4 AREA. COORDINATE WITH MECHANICAL DRAWINGS FOR HVAC.

GENERAL NOTES

1. ALL ELEMENTS OF CONSTRUCTION SHALL CONFORM TO LOCAL AND OHIO BUILDING CODES.
2. ALL CONTRACTORS SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS BEFORE SUBMITTING BIDS.
3. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF ANY SHORING, SHEETING, TEMPORARY GUYS, BRACING OR TIEDOWNS THAT MIGHT BE NECESSARY. SUCH MATERIAL IS NOT SHOWN ON THE DRAWINGS.
4. IT IS SOLELY THE RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
5. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF EXISTING CONSTRUCTION AND STRUCTURAL COMPONENTS. ACTUAL FIELD CONDITIONS SHALL BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.

SYMBOLS LEGEND

- Ø1 — DOOR NUMBER
- 1 — WINDOW NUMBER
- A — CODED NOTE
- 1 — PARTITION TYPE
- ROOM Ø01 — ROOM NAME, NUMBER
- A A11 — DETAIL TAG
- A A11 — SECTION TAG
- F.E. — WALL MOUNTED FIRE EXTINGUISHER
- F.E. — FIRE EXTINGUISHER IN RECESSED CABINET

ROOM FINISH SCHEDULE

NO.	ROOM	FLOOR	BASE MAT.	BASE HGT.	WALLS MAT.	WALLS FIN.	CEILING MAT.	CEILING FIN.
Ø1	FUTURE OFFICE	STAINED CONCRETE	--	--	EXPOSED	--	OPEN FRAMING	--
Ø2	UTILITY	STAINED CONCRETE	VINYL	4"	GYP. BD.	PAINT	GYP. BD.	PAINT
Ø3	STORAGE/WAREHOUSE	STAINED CONCRETE	--	--	METAL PANEL	PRE-FINISHED	METAL PANEL	PRE-FINISHED
Ø4	STORAGE/WAREHOUSE	STAINED CONCRETE	--	--	METAL PANEL	PRE-FINISHED	METAL PANEL	PRE-FINISHED

REVISIONS

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STATE OF OHIO
JEFFREY J. SALVA 6456
REGISTERED ARCHITECT

Jeffrey J. Salva, License # 7906456
Expiration Date 12/31/2021

GREEN VALLEY DESIGN, LLC
112 Harcourt Rd., Suite 5
Mount Vernon, Ohio 43050
740-397-2282

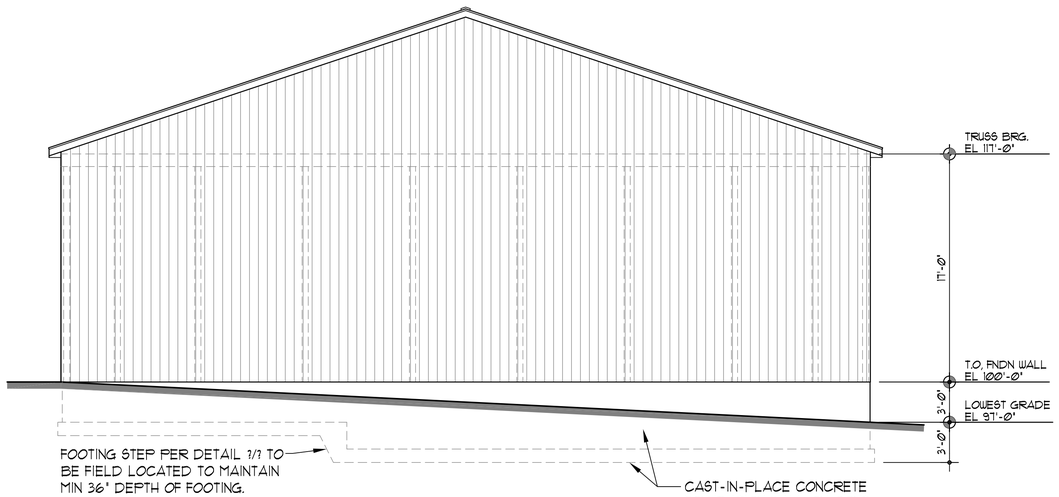
A NEW COMMERCIAL BUILDING FOR:
MOUNT VERNON OVERHEAD DOOR
MOUNT VERNON, OH 43050
810 N. SANDUSKY ST.

APRIL 27, 2021

zoning submission	☐
design development	☐
construction document	■
bidding	☐
building permit submission	■
not for construction	☐
record / archive	☐
other	☐

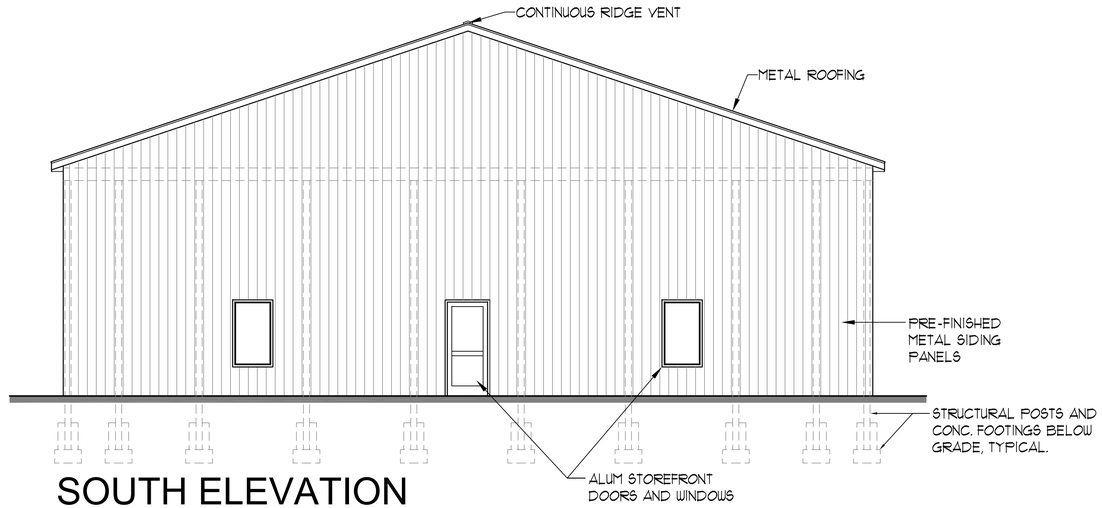
cadfile
2Ø1-a1
job no.
2Ø1
drawn
JCS

sheet
A1



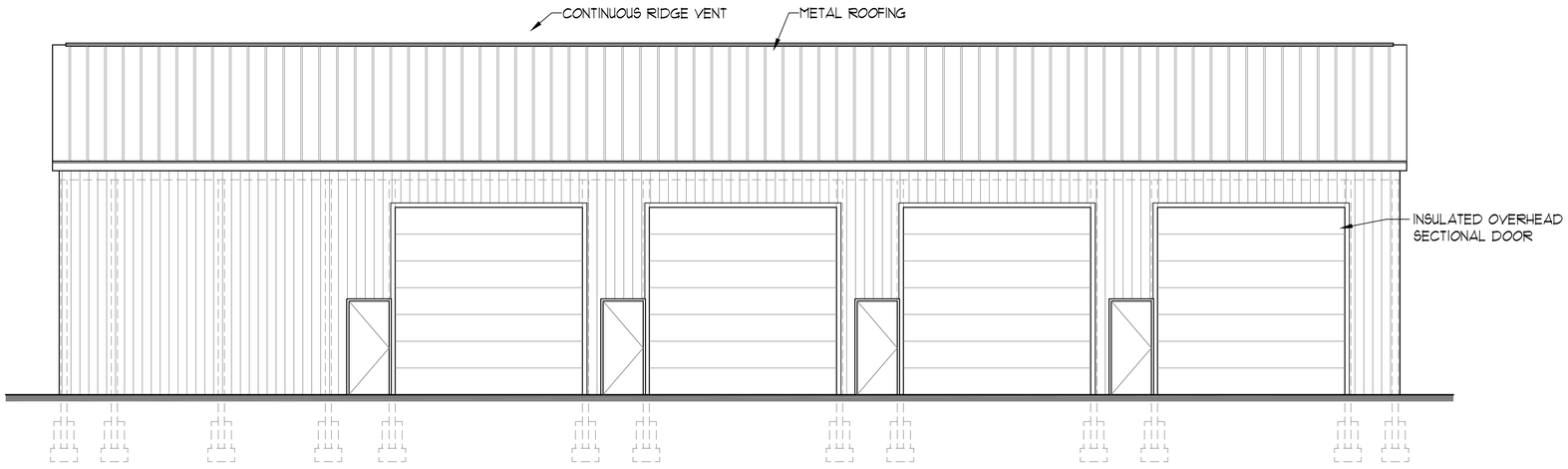
NORTH ELEVATION

3/16" = 1'-0"



SOUTH ELEVATION

3/16" = 1'-0"



EAST ELEVATION

3/16" = 1'-0"

REVISIONS

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STATE OF OHIO
JEFFREY J. SALVA 6456
REGISTERED ARCHITECT

Jeffrey J. Salva, License # 7906456
Expiration Date 12/31/2021

GREEN VALLEY DESIGN, LLC
112 Harcourt Rd., Suite 5
Mount Vernon, Ohio 43050
740-397-2282

A NEW COMMERCIAL BUILDING FOR:

MOUNT VERNON
OVERHEAD DOOR

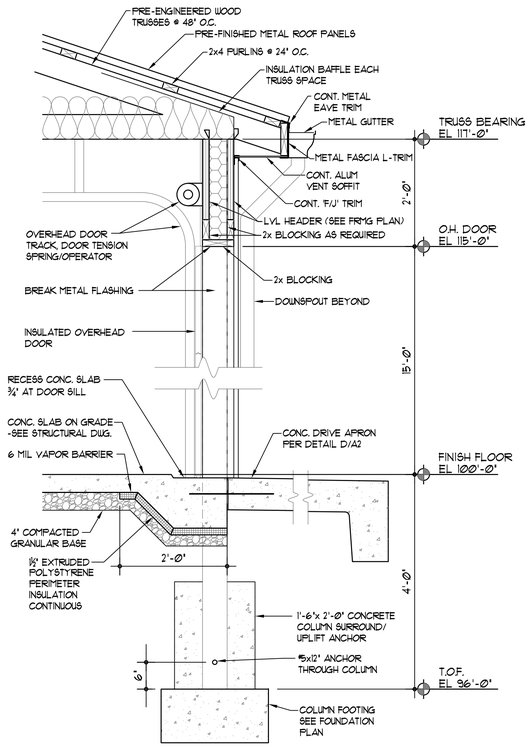
810 N. SANDUSKY ST. MOUNT VERNON, OH 43050

APRIL 27, 2021

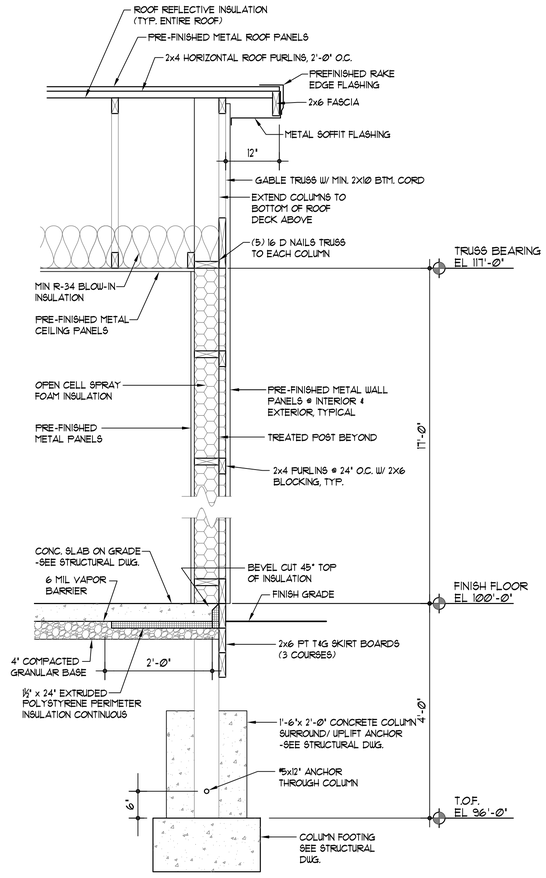
zoning submission	☐
design development	☐
construction document	■
bidding	☐
building permit submission	■
not for construction	☐
record / archive	☐
other	☐

cadfile
21m01-a2
job no.
21m01
drawn
JCS

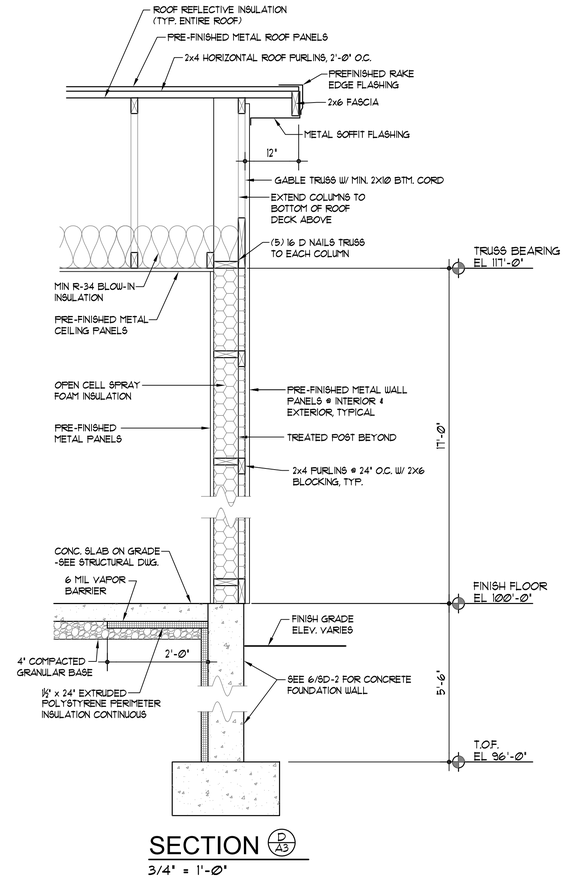
sheet
A2



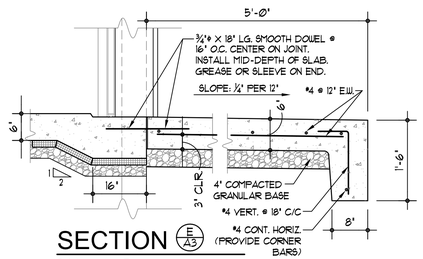
SECTION (B/A3)
3/4" = 1'-0"



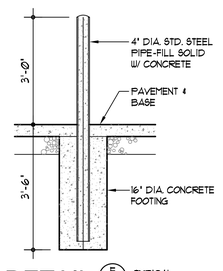
SECTION (C/A3)
3/4" = 1'-0"



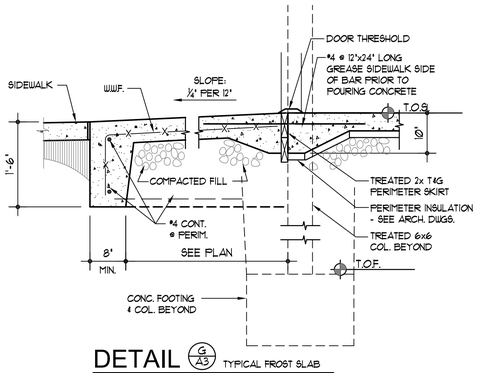
SECTION (D/A3)
3/4" = 1'-0"



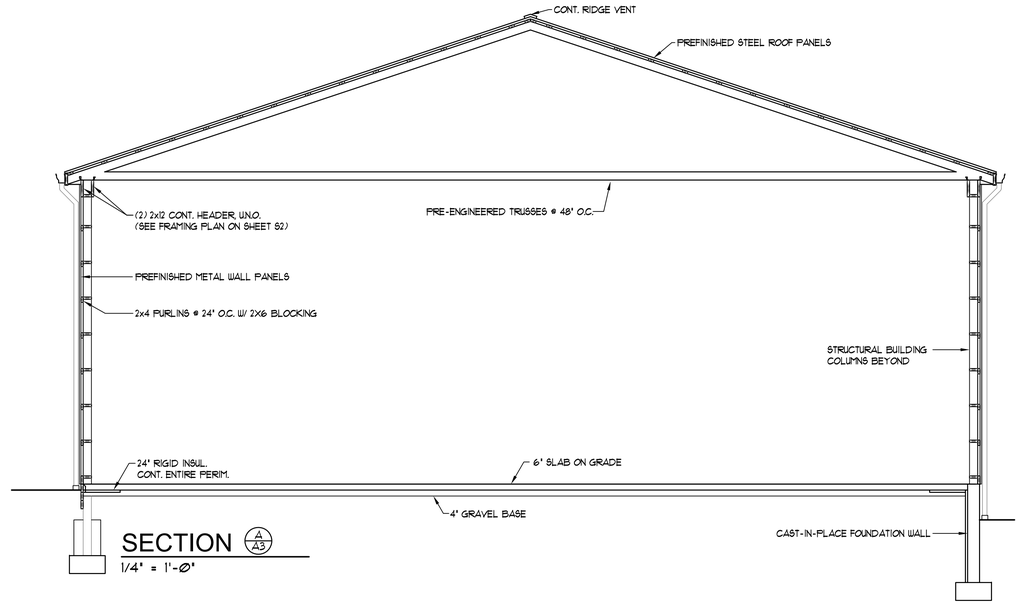
SECTION (E/A3)
3/4" = 1'-0"



DETAIL (F/A3) TYPICAL BOLLARD
1/2" = 1'-0"



DETAIL (G/A3) TYPICAL FROST SLAB
3/4" = 1'-0"



SECTION (A/A3)
1/4" = 1'-0"

REVISIONS
1
2
3

STATE OF OHIO
JEFFREY J. SALVA 6456
REGISTERED ARCHITECT
Jeffrey J. Salva, License # 7906456
Expiration Date 12/31/2021

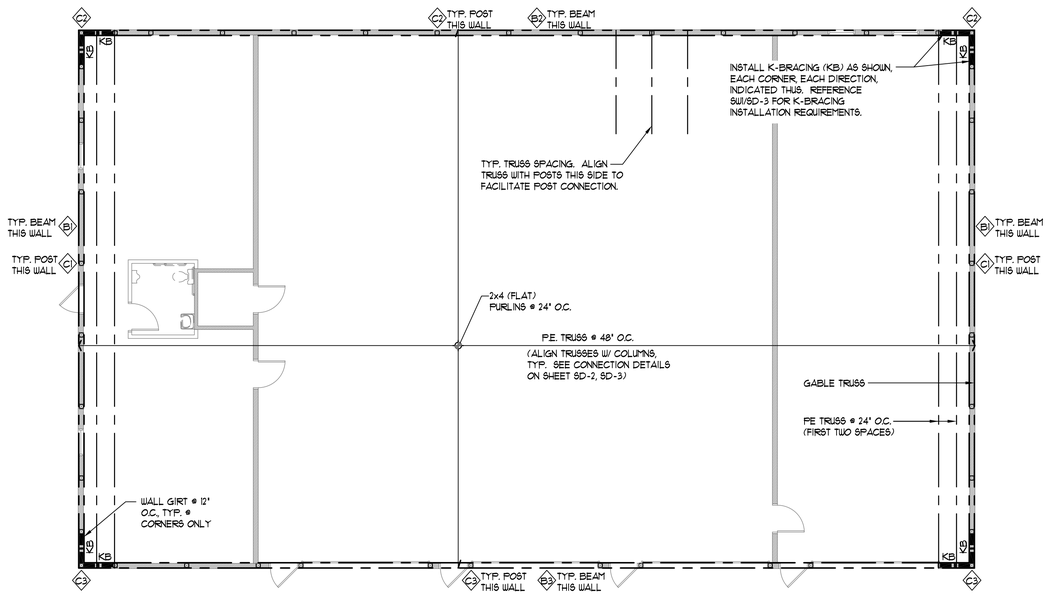
GREEN VALLEY DESIGN, LLC
112 Harcourt Rd., Suite 5
Mount Vernon, Ohio 43050
740-397-2282

PREPARING FOR:
A NEW COMMERCIAL BUILDING FOR:
MOUNT VERNON
OVERHEAD DOOR
810 N. SANDUSKY ST.
MOUNT VERNON, OH 43050

APRIL 27, 2021
zoning submission
design development
construction document
bidding
building permit submission
not for construction
record / archive
other

cadfile
21m01-a3
job no.
21m01
drawn
JCS

sheet
A3



ROOF FRAMING PLAN

1/8" = 1'-0"

NORTH

ROOF FRAMING LEGEND

- H1 — HEADER MARK. SEE SCHEDULE.
- L1 — MASONRY LINTEL MARK. SEE SCHEDULE.
- B1 — BEAM MARK. SEE SCHEDULE.
- C1 — POST MARK. SEE SCHEDULE.
- K1 — STRUCTURAL KEY NOTE MARK. SEE SCHEDULE.
- INDICATES HEADER LOCATION. PROVIDE HEADERS OVER ALL OPENINGS; U.N.O. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND ELEVATION OF HEADERS. SEE HEADER SCHEDULE FOR HEADER SIZE AND INSTALLATION REQUIREMENTS. PROVIDE BRICK LINTELS OVER ALL OPENINGS PER SCHEDULE. BRICK LINTELS ARE NOT SHOWN ON PLAN FOR CLARITY.

ROOF FRAMING NOTES

1. DESIGN ROOF LOAD: 20 PSF UNIFORM SNOW LOAD + DRIFTING. 10 PSF NET UNIFORM UPLIFT LOAD
2. POST FRAME BUILDING ROOF CONSTRUCTION: 29 GA. MTL. ROOFING ON 2x4 PURLINS @ 24" O.C. ON P.E. WOOD TRUSSES @ 48" O.C.
3. CONVENTIONAL BUILDING ROOF CONSTRUCTION: 29 GA. MTL. ROOFING ON APA RATED SHEATHING ON P.E. WOOD TRUSSES @ 24" O.C.
4. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND ELEVATIONS; TYP. U.N.O.
5. NO FIELD MODIFICATIONS TO WOOD TRUSSES IS PERMITTED. DO NOT CUT, DRILL, OR NOTCH TRUSS WEB OR CHORD WITHOUT WRITTEN APPROVAL FROM MANUFACTURER OR ENGINEER.
6. DIMENSIONS TYPICALLY ARE TO EXTERIOR FACE OF MASONRY, CONCRETE, SHEATHING, INTERIOR FACE OF STUD, MASONRY, CONCRETE, CENTERLINE OF POST/COLUMN.
7. REFER TO THE GENERAL STRUCTURAL NOTE SHEET SD-1 AND TYPICAL DETAIL SHEETS SD-2 AND SD-3 FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE DEPICTED AND NOTED ON THE PLAN AND DETAIL SHEETS.
8. REFER TO THE TYPICAL DETAIL SHEETS SD-2, SD-3, AND SD-4 FOR MINIMUM CONSTRUCTION REQUIREMENTS FOR POST FRAME WOOD CONSTRUCTION.

HEADER/BEAM SCHEDULE

MARK	SIZE	LUMBER GRADE	NOTES
B1	(2) 2 X 12	SOUTHERN PINE NO. 2	SEE 5/SD-3 FOR CONN. REQ'MNTS TO POST FRAMING. SEE 4/SD-3 FOR CORNER CONNECTION REQ'MNTS.
B2	(2) 2 X 12	SOUTHERN PINE SELECT STRUCTURAL	SEE 6/SD-3 FOR CONN. REQ'MNTS TO POST FRAMING. SEE 4/SD-3 FOR CORNER CONNECTION REQ'MNTS.
B3	(2) 1.75 x 14.0 LVL	1.9E	SEE 7/SD-3 FOR CONN. REQ'MNTS TO POST FRAMING.

NOTES: C? = POST FRAME COLUMN BM? = POST FRAME TOP BEAM H? = CONVENTIONAL HEADER
PT = PRESERVATIVE TREATED LUMBER
1. ALL METAL PLATE CONNECTION MODEL SPECIFIED ARE SIMPSON STRONG TIE PRODUCTS. EQUIVALENT PRODUCTS MAY BE SUBSTITUTED.

POST SCHEDULE

MARK	SIZE	LUMBER GRADE	NOTES
C1	(4) PLY 2 x 6 SELECT STRUCTURAL	Fb=1900psi, Fc=1800psi PT-0.60 CCA (bottom)	SEE 5/SD-3 FOR CONN. REQ'MNTS TO BEAM FRAMING.
C2	(4) PLY 2 x 6 SELECT STRUCTURAL	Fb=1900psi, Fc=1800psi PT-0.60 CCA (bottom)	SEE 6/SD-3 FOR CONN. REQ'MNTS TO BEAM FRAMING.
C3	(4) PLY 2 x 6 SELECT STRUCTURAL + LVL REINF. MEMBER	Fb=1900psi, Fc=1800psi PT-0.60 CCA (bottom)	SEE 7/SD-3 FOR CONN. REQ'MNTS TO BEAM FRAMING. SEE 8/SD-3 FOR REINF. MEMBER REQ'MNTS.

NOTES: C? = POST FRAME COLUMN BM? = POST FRAME TOP BEAM
PT = PRESERVATIVE TREATED LUMBER
1. THE SPECIFIED LUMBER GRADE VALUES ARE MINIMUMS. LUMBER MEETING THESE MINIMUM VALUES OR EXCEEDING THE VALUES MAY BE INSTALLED.
2. ALL LAMINATED COLUMNS ARE TO BE FASTENED TOGETHER WITH TWO ROWS OF 0.131"ø @ 8" O.C. THE MINIMUM FASTENER LENGTH IS 3.75" FOR 3 PLY AND 4 PLY COLUMNS AND 4.5" FOR 5 PLY COLUMNS.
3. PRE-FABRICATED LAMINATED COLUMNS MAY BE INSTALLED. THE COLUMNS MUST MEET OR EXCEED THE DESIGN VALUES AND PROPERTIES LISTED IN THE TABLE. (PERMA-STRAIGHT COLUMNS OR EQUAL).

FOUNDATION LEGEND

- INDICATES LOCATION OF WALL FOOTING OR GRADE BEAM. CENTER FOOTING UNDER SUPPORTED WALL, COLUMN, PIER; TYP. U.N.O.
- INDICATES LOCATION OF POST PIER FOUNDATION. CENTER FOOTING UNDER POST; TYP. U.N.O.
- F? INDICATES FOOTING MARK
- P? INDICATES PIER MARK
- EL. XX'-X" INDICATES TOP OF FOOTING ELEVATION
- SEE SCHEDULES FOR REQUIRED SIZES AND REINFORCING
- EL. 0'-0" INDICATES TOP OF CONCRETE SLAB ELEVATION
- SL INDICATES SLOPED CONCRETE SLAB. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- INDICATES LOCATION OF FLOOR SLAB DEPRESSION AND/OR AREA OF SLAB BLOCK OUT. SEE ARCHITECTURAL DRAWINGS FOR SPECIFIC LOCATION AND SIZE; TYP.
- K1 — STRUCTURAL KEY NOTE MARK. SEE SCHEDULE.

FOUNDATION NOTES

1. REFERENCE ELEVATION: TOP OF CONCRETE SLAB ON GRADE = 100'-0".
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO PLACING CONCRETE.
3. FOUNDATION DESIGN CRITERIA: CONVENTIONAL SPREAD FOOTINGS, PIER FOOTINGS. ALLOWABLE SOIL BEARING PRESSURE = 1.5 KSF
4. PLACE NO CONCRETE PRIOR TO INSPECTION AND APPROVAL OF SOILS CONDITIONS BY GEOTECHNICAL ENGINEER.
5. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL DE-WATERING SERVICES, AS REQUIRED, TO KEEP WATER OUT OF FOUNDATION EXCAVATIONS.
6. CONCRETE SLABS SHALL BE PLACED ON VAPOR BARRIER ON A FREE-DRAINING AGGREGATE BASE. VAPOR BARRIER IS REQUIRED UNDER ENCLOSED OFFICE LOCATIONS ONLY. THE DRAINAGE COURSE SHALL BE A MINIMUM 4" THICK AND BE COMPACTED PER PROJECT SPECIFICATIONS. DO NOT PLACE CONCRETE BEFORE INSPECTION AND APPROVAL OF DRAINAGE COURSE BY SOILS ENGINEER, U.N.O.
7. THE CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES WITH SITE CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS PRIOR TO THE PLACEMENT OF FOUNDATION CONCRETE. THIS INCLUDES BUT IS NOT LIMITED TO: DOOR OPENINGS IN FOUNDATION WALLS, DRAINS, SLAB SLOPES, SLAB DEPRESSIONS, SLAB BLOCK-OUTS, UNDERGROUND PLUMBING, ELECTRIC, AND HVAC, FOUNDATION SLEEVE REQUIREMENTS, SPRINKLER LINES.
8. THE CONSTRUCTION MANAGER IS RESPONSIBLE TO FIELD VERIFY SITE UTILITY LOCATIONS AND ELEVATIONS AND COORDINATE THE FOUNDATION INSTALLATION WITH THE UTILITY INSTALLATIONS. REFER TO TYPICAL DETAILS FOR MINIMUM PROXIMITY REQUIREMENTS.
9. REFER TO THE GENERAL STRUCTURAL NOTE SHEET AND TYPICAL DETAIL SHEET FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE DEPICTED AND NOTED ON THE PLAN AND DETAIL SHEETS.

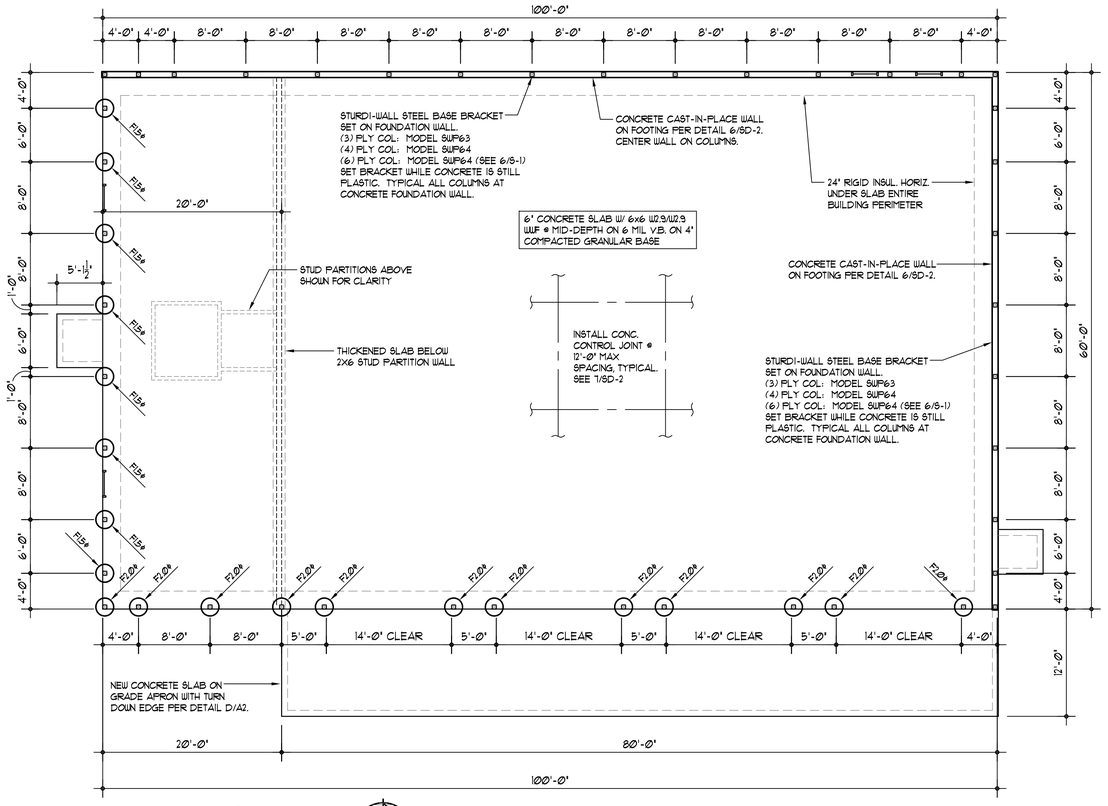
FOOTING SCHEDULE

MARK	SIZE	REINFORCING	NOTES
F1.5@	1'-6"@ x 10" DP.	SEE 1/SD-3	T.O.F. = 96'-0"
F2.0@	2'-0"@ x 12" DP.	SEE 1/SD-3	T.O.F. = 96'-0"
		--	

NOTES: FTS-? = THICKENED SLAB FOOTING FW-? = CONT. WALL FOOTING F? = COLUMN PAD FOOTING FM-? = MAT FOOTING T.O.F. = TOP OF FOOTING
E.W. = EACH WAY S.W. = SHORT WAY (SHORT DIRECTION) L.W. = LONG WAY (LONG DIRECTION) DP. = DEEP (DEPTH OF FOOTING)
WD. = WIDE (WALL FTG.) SQ. = SQUARE (PAD) CONT. = CONTINUOUS BOT. = BOTTOM

STRUCTURAL REVIEW
JACK D. WALTERS & ASSOCIATES, INC.
ARCHITECTS • ENGINEERS
P.O. BOX 855 DUBLIN, OH 43017
614-889-2516 incoming@jdwoe.com
KARL L. WALTERS, P.E.
PROJECT: REVERE ROOFING
DATE: 4/8/2021
JOB NO.: 21-061

STATE OF OHIO — Karl L. Walters E-60652 — PROFESSIONAL ENGINEER — CIVIL



FOUNDATION PLAN

1/8" = 1'-0"

NORTH

REVISIONS
1
2
3

GREEN VALLEY DESIGN, LLC
112 Harcourt Rd., Suite 5
Mount Vernon, Ohio 43050
740-397-2282

A NEW COMMERCIAL BUILDING FOR:
MOUNT VERNON OVERHEAD DOOR
MOUNT VERNON, OH 43050
810 N. SANDUSKY ST.

APRIL 27, 2021
zoning submission ☐
design development ☐
construction document ■
bidding ☐
building permit submission ■
not for construction ☐
record / archive ☐
other ☐

cadfile
21m01-s1
job no.
21m01
drawn
JCS

sheet
S1

GENERAL STRUCTURAL NOTES

DEFINITION OF RESPONSIBILITIES

1. "ARCHITECT/ENGINEER":
THE ARCHITECT OF RECORD AND THE STRUCTURAL ENGINEER OF RECORD.

2. "STRUCTURAL ENGINEER OF RECORD" (SER):
THE STRUCTURAL ENGINEER WHO IS LICENSED TO STAMP & SIGN THE STRUCTURAL DOCUMENTS FOR THE PROJECT. THE SER IS RESPONSIBLE FOR THE DESIGN OF THE PRIMARY STRUCTURAL SYSTEM, THE STRENGTH AND STABILITY OF THE PRIMARY STRUCTURE IN ITS COMPLETED FORM.

3. "SPECIALTY STRUCTURAL ENGINEER" (SSE):
A PROFESSIONAL ENGINEER (PE OR SE), LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED, (TYPICALY NOT THE SER), WHO PERFORMS SPECIALTY STRUCTURAL ENGINEERING SERVICES FOR SELECTED SPECIALITY-ENGINEERED ELEMENTS IDENTIFIED IN THE CONTRACT DOCUMENTS, AND WHO HAS EXPERIENCE AND TRAINING IN THE SPECIALITY. DOCUMENTS STAMPED AND SIGNED BY THE SSE SHALL BE COMPLETED BY OR UNDER THE DIRECT SUPERVISION OF THE SSE.

4. "GENERAL CONTRACTOR", "GC", "CONTRACTOR", "CONSTRUCTION MANAGER", "CM":
THE BUSINESS ENTITY MANAGING THE CONSTRUCTION OF THE PROJECT AND WHO IS DIRECT CONTRACT WITH THE OWNER OR OWNER'S REPRESENTATIVE. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND ALL RELATED SAFETY STANDARDS.

5. "BIDDER-DESIGNED":
COMPONENTS OF THE STRUCTURE THAT REQUIRE THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIER WHO IS RESPONSIBLE FOR DESIGN, FABRICATION AND INSTALLATION OF SPECIALTY-ENGINEERED ELEMENTS IDENTIFIED IN THE CONTRACT DOCUMENTS TO RETAIN THE SERVICES OF AN SSE. SUBMITTALS OF "BIDDER-DESIGNED" ELEMENTS SHALL BE STAMPED AND SIGNED BY THE SSE.

6. "IRC":
INTERNATIONAL RESIDENTIAL CODE.

BIDDER-DESIGNED ELEMENTS

1. SUBMIT "BIDDER-DESIGNED" DEFERRED SUBMITTALS TO THE ARCHITECT AND SER FOR REVIEW PRIOR TO SUBMISSION TO THE CITY FOR APPROVAL.

2. DESIGN OF PREFABRICATED, "BIDDER DESIGNED", MANUFACTURED, PRE-ENGINEERED, OR OTHER FABRICATED PROJECT SHALL BE COMPLY WITH THE FOLLOWING REQUIREMENTS:

   A. DESIGN CONSIDERS THE LOAD PATHS AND FOUNDATION LOCATIONS DEFINED ON THE CONTRACT DRAWINGS BY THE SER.
   B. DESIGN CONSIDERS TRIBUTARY DEAD, LIVE, WIND AND SEISMIC LOADS IN COMBINATIONS REQUIRED BY GOVERNING CODE.
   C. DESIGN WITHIN THE DEFLECTION LIMITS NOTED HEREIN AS SPECIFIED AND REFERENCED IN THE GOVERNING CODE.
   D. DESIGN SHALL CONFORM TO THE SPECIFICATIONS AND REFERENCE STANDARDS OF THE GOVERNING CODE.
   SUBMITTAL SHALL INCLUDE:
   a. CALCULATIONS PREPARED, STAMPED AND SIGNED BY THE SSE DEMONSTRATING CODE CONFORMANCE.
   b. ENGINEERED COMPONENT DESIGN DRAWINGS ARE PREPARED, STAMPED AND SIGNED BY THE SSE.
   c. PRODUCT DATA, TECHNICAL INFORMATION AND MANUFACTURER'S WRITTEN REQUIREMENTS ANDAGENCY APPROFALS AS APPLICABLE.
   d. SSE MAY SUBMIT TO THE ARCHITECT/ENGINEER, A REQUEST TO UTILIZE RELEVANT ALTEMATE DESIGN CRITERIA OF SIMILAR NATURE AND GENERALLY EQUIVALENCY WHICH IS RECOGNIZED BY THE CODE AND ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION. SUBMIT ADEQUATE DOCUMENTATION OF DESIGN.

   VERTICAL/LIMIT (L IS SPAN LENGTH, INCHES)

ROOF MEMBERS, DEAD+LIVE OR SNOW OR WIND, TOTAL LOAD (TL) DEFLECTION	L/240
ROOF, LIVE OR SNOW OR WIND LOAD (RLL)	L/360
FLOOR MEMBERS, TOTAL LOAD (TL) UNO	L/360
FLOOR LIVE LOAD (LL) UNO	L/480
OPERABLE PARTITION SUPPORT MEMBERS	L/600 OR 1/4" MAXIMUM

   HORIZONTAL/LIMIT AND FOOTNOTE

MEMBERS SUPPORTING BRITTLE FINISHES	L/240 (1)
MEMBERS SUPPORTING FLEXIBLE FINISHES	L/180 (1)
MEMBERS SUPPORTING MASONRY	L/600 @ 0.7 (1)

   (1) WIND LOAD IS REDUCIBLE TO 0.7 TIMES THE COMPONENT AND CLADDING LOADS PER TABLE 1604.3 FOOTNOTE F.

3. GENERAL CONTRACTOR'S PRIOR REVIEW:
THE GC IS RESPONSIBLE TO THOROUGHLY REVIEW THE BIDDER-DESIGNED SUBMITTAL (SHOP DRAWINGS) PRIOR TO SUBMITTING TO THE ARCHITECT AND ENGINEER OF RECORD. THE CONTRACTOR IS RESPONSIBLE TO STAMP THE SUBMITTAL INDICATING COMPETION OF REVIEW AND ACTION OF REVIEW.

GENERAL NOTES

GENERAL CONDITIONS:

1.
   A. THE GENERAL STRUCTURAL NOTES ARE INTENDED TO AUGMENT THE PROJECT DRAWINGS AND SPECIFICATIONS, AND MAY SPECIFY STRUCTURAL CONSTRUCTION REQUIREMENTS NOT SHOWN ON THE PROJECT DRAWINGS OR SPECIFICATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO READ AND UNDERSTAND THE GENERAL STRUCTURAL NOTES PRIOR TO START OF CONSTRUCTION.
   B. THE STRUCTURAL DRAWINGS ARE INTENDED TO BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, AND CIVIL (SITE) DRAWINGS. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL INFORMATION RELATED TO STRUCTURAL WORK AND SHOP DRAWINGS. THIS INCLUDES, BUT IS NOT LIMITED TO: DIMENSIONS, COLUMN LOCATIONS, OPENING LOCATIONS AND ELEVATIONS, SLAB RECESSES, MECHANICAL COMPONENTS EMBEDDED IN CONCRETE.
   C. WHERE A DETAIL OR NOTE IS SHOWN FOR ONE CONDITION ON THE DRAWINGS, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY MARKED ON THE DRAWINGS.
   D. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING DETAILS AND ACCURACY OF THE WORK: FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; FOR SELECTING FABRICATION PROCESSES; FOR TECHNIQUES OF ASSEMBLY; AND FOR PERFORMING WORK IN A SAFE AND SECURE MANNER.
   E. IN CASE OF DISCREPANCIES BETWEEN THE GENERAL STRUCTURAL NOTES, SPECIFICATIONS, DRAWINGS, OR REFERENCE STANDARDS, THE ARCHITECT/ENGINEER SHALL DETERMINE WHICH SHALL GOVERN. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. SHOULD ANY DISCREPANCY BE FOUND IN THE CONTRACT DOCUMENTS, THE CONTRACTOR WILL BE DEEMED TO HAVE INCLUDED IN THE PRICE THE MOST EXPENSIVE WAY OF COMPLETING THE WORK; UNLESS, PRIOR TO THE SUBMISSION OF THE BID PRICE, THE CONTRACTOR REQUESTS A DECISION FROM THE ARCHITECT/ENGINEER AS TO WHICH SHALL GOVERN. ACCORDINGLY, ANY CONFLICT IN OR BETWEEN THE CONTRACT DOCUMENTS SHALL NOT BE A BASIS FOR ADDITIONAL COST ADJUSTMENT TO THE CONTRACT PRICE.
   F. THE CONTRACTOR SHALL NOT STORE CONSTRUCTION MATERIALS OR PERFORM CONSTRUCTION OPERATIONS IN A MANNER OR METHOD THAT WILL EXCEED THE LOADS SPECIFIED IN THE DESIGN CRITERIA AND LOADS SECTION OF THE NOTES.
   G. THE CONTRACTOR IS RESPONSIBLE TO BE IN COMPLIANCE WITH ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
   H. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE MEANS AND METHODS, ERECTION PROCEDURE AND SEQUENCE, AS REQUIRED TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF ANY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS WHICH MIGHT BE NECESSARY. SUCH MATERIAL SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THE COMPLETION OF THE PROJECT.
   I. CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL AND MOISTURE MOVEMENTS OF STRUCTURAL COMPONENTS DURING THE CONSTRUCTION PERIOD.
   J. EQUIPMENT FRAMING LOADS, OPENINGS, AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. THE CONTRACTOR SHALL OBTAIN APPROVAL OF THE APPLICABLE TRADES BEFORE PROCEEDING WITH SUCH PORTION OF WORK. COORDINATE SIZE AND LOCATION OF ALL OPENINGS WITH THE MECHANCAL DRAWINGS.
   K. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION RELATED PROCEDURES AND PROTECTION OF STRUCTURES, UTILITIES, ADJACENT PROPERTIES, ETC. IN ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ORDINANCES.
   L. WHEN THE CONTRACTOR FAILS TO CONSTRUCT ANY PORTION OF THE STRUCTURE IN ACCORDANCE WITH THE DRAWINGS AND NOTES, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE REMEDIATION OF THE DEFECT AND ALL RELATED COSTS INCLUDING ENGINEERING SERVICES. WHEN A DEFECT IS FIRST IDENTIFIED, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION.
   M. THE DRAWINGS ARE NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
   N. REFER TO ARCHITECTURAL DRAWINGS FOR WALL LOCATIONS, WALL TYPE, ELEVATIONS, AND BUILDING LAYOUT.
   O. THE NOTES ON THIS DRAWING ARE THE SOLE PROPERTY OF JACK D. WALTERS & ASSOCIATES, INC. JACK D. WALTERS AND ASSOCIATES, INC. EXPRESSLY RESERVES IT'S COPYRIGHT AND OTHER PROPERTY RIGHTS IN THIS PLAN, NOTES, AND DRAWINGS. THESE NOTES, PLANS, AND DRAWINGS ARE NOT TO BE REPRODUCED OR COPIED IN ANY FORM OR MANNER.

SOIL AND FOUNDATION PREPARATION

1. ALL EXCAVATIONS, GRADING, COMPACTION, ETC., SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE BUILDING CODE AND REFERENCE STANDARDS.
2. DESIGN OF EXTERIOR FOUNDATIONS IS BASED ON A MINIMUM FROST DEPTH OF 36" BELOW FINISH GRADE. ALL EXTERIOR AND PERIMETER FOUNDATIONS SHALL BEAR BELOW THIS MINIMUM PROTECTION DEPTH, U.N.O..
3. FOUNDATIONS ARE DESIGNED TO BEAR ON FIRM UNDISTURBED EARTH OF APPROVED CONTROLLED FILL. NO FOOTING SHALL BEAR DIRECTLY ON ROCK UNLESS SPECIFICALLY DETAILED OR NOTED.
4. FOUNDATION CONCRETE SHALL BE PLACED THE SAME DAY THE EXCAVATION IS MADE WHEN FEASIBLE. WHERE FOUNDATION EXCAVATIONS MUST REMAIN OPEN OR EXPOSED, SPECIAL CARE SHOULD BE TAKEN TO PROTECT THE EXPOSED SOILS FROM BEING DISTURBED, SATURATED, OR DRIED OUT PRIOR TO THE PLACEMENT OF SELECT FILL OR CONCRETE.
5. CONCRETE SLABS SHALL BE PLACED ON A VAPOR BARRIER ON A FREE-DRAINING AGGREGATE BASE. THE DRAINAGE COURSE SHALL BE A MINIMUM 4" THICK (U.N.O.) AND BE COMPACTED PER PROJECT SPECIFICATIONS.
6. THE CONTRACTOR SHALL LOCATE AND VERIFY THE FOLLOWING WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS PRIOR TO THE PLACEMENT OF CONCRETE: ALL DOOR OPENINGS IN FOUNDATION WALLS, DRAINS, SLAB SLOPES, BLOCKOUTS FOR POOLS, SPAS, FREEZERS, COOLERS, PLUMBING, SPRINKLERS, AND HVAC. ALL DUCT CHASES. CONCRETE CURBS AND LOCATIONS SHALL BE PER ARCHITECTURAL DRAWINGS.
7. FOUNDATIONS SHALL NOT BE PLACED OVER UTILITY LINES OR UTILITY TRENCH EXCAVATIONS UNLESS SPECIFICALLY DETAILED OTHERWISE. FOUNDATIONS SHALL BE STEPPED DOWN IN ELEVATION(S) SO THAT UTILITY LINE(S) PASS ABOVE FOOTING ELEVATION. REFERENCE TYPICAL DETAIL SECTION OF DRAWINGS FOR FOOTING REQUIREMENTS ADJACENT TO UTILITY LINES. "UTILITY" DESIGNATES ANY UNDERGROUND ELECTRIC, GAS, WATER, OR SANITARY LINE.

QUALITY CONTROL - REQUIRED SPECIAL INSPECTIONS AND TESTING

1. GENERAL

   A. THE SPECIAL INSPECTOR SHALL USE ONLY BUILDING DIVISION APPROVED DRAWINGS.
   B. ONLY THE TESTING AGENCY, SPECIAL INSPECTOR SHOULD TAKE SAMPLES AND TRANSPORT THEM TO THEIR LABORATORY.
   C. COPIES OF ALL LABORATORY REPORTS AND INSPECTIONS ARE TO BE SENT DIRECTLY TO THE BUILDING DEPARTMENT / DIVISION ON A WEEKLY BASIS OR AFTER THE INSPECTIONS ARE PERFORMED. COPIES SHALL ALSO BE SUBMITTED TO THE ARCHITECT AND ENGINEER OF RECORD.
   D. ALL NON-CONFORMING INSTALLATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION.
   E. THE SPECIAL INSPECTOR IS RESPONSIBLE TO THE CHIEF BUILDING OFFICIAL FOR IMMEDIATE NOTIFICATION OF ANY CONCERNS AND/OR PROBLEMS ENCOUNTERED. THE SPECIAL INSPECTION SHALL FURNISH/COPY ALL REPORTS AND PROJECT CORRESPONDANCE TO THE GOVERNING BUILDING DIVISION, PROJECT CONSTRUCTION MANAGER, PROJECT ARCHITECT, PROJECT ENGINEER.
   F. THE CONSTRUCTION MANAGER, ON BEHALF OF THE OWNER, SHALL COORDINATE AND PROVIDE ALL INSPECTIONS AND TESTING, UNLESS STATED OTHERWISE IN THE CONTRACT DOCUMENTS.

2. SPECIAL INSPECTIONS

SOILS (OBC 1704.7):	APPLICABILITY	FREQUENCY	REFERENCE STANDARD
1) VERIFY MATERIALS BELOW FOOTINGS ADEQUATE TO DESIGN BEARING	YES	PERIODIC	BUILDING CODE
2) VERIFY DEPTH OF EXCAVATIONS, PROPER MATERIALS	YES	PERIODIC	BUILDING CODE
3) CLASSIFICATION AND TESTING OF CONTROLLED FILL	NO		
4) VERIFY MATERIALS, DENSITIES, LIFT THICKNESS OF CONTROLLED FILL	NO		
5) BEFORE CONTROLLED FILL, VERIFY SITE PREP	NO		

DESIGN CRITERIA AND LOADS

GOVERNING BUILDING CODE: 2017 OHIO BUILDING CODE

DESIGN LOADS:
FLOOR LIVE LOADS:

FLOOR LIVE LOADS	WAREHOUSE - HEAVY STORAGE	250 PSF
DESIGN ROOF LIVE LOADS (MINIMUM):		20 PSF
WIND LOADS:	ULTIMATE DESIGN WIND SPEED:	115 MPH
	NOMINAL DESIGN WIND SPEED:	89.1 MPH
	RISK CATEGORY:	II
	EXPOSURE CATEGORY:	C
	ENCLOSURE CLASSIFICATION:	ENCLOSED
	INTERNAL PRESSURE COEFFICIENT (GCpi):	0.18 +/-
	DIRECTIONALITY (Kd):	0.85
ROOF SNOW LOADS:	DESIGN UNIFORM ROOF SNOW LOAD:	20.0 PSF
	FLAT-ROOF SNOW LOAD (Pf):	16.8 PSF
	BALANCED SNOW LOAD (Ps):	16.8 PSF
	GROUND SNOW LOAD (Pg):	20.0 PSF
	IMPORTANCE FACTOR (I):	1.0
	SNOW EXPOSURE FACTOR (Ce):	1.0
	THERMAL FACTOR (Ct):	1.2
	SLOPED ROOF FACTOR (Cs):	1.0
	DRIFT SURCHARGE LOAD (Pd):	31.7 PSF
	WIDTH OF SNOW DRIFT (w):	7.64 FT.
SEISMIC DESIGN CRITERIA:	RISK CATEGORY:	II
	IMPORTANCE FACTOR (I):	1.0
	MAPPED SPECTRAL RESPONSE (Ss):	11.20%g
	MAPPED SPECTRAL RESPONSE (S1):	5.70%g
	SITE SOIL CLASS:	D
	SPECTRAL RESPONSE COEF. (Sds):	0.119
	SPECTRAL RESPONSE COEF. (Sd1):	0.091
	SEISMIC DESIGN CATEGORY:	B
	BASIC STRUCTURAL SYSTEM(S):	LIGHT FRAME SYSTEM
	BASIC SEISMIC RESISTING SYSTEM(S):	WOOD WITH WOOD SHEAR PANEL
	DESIGN BASE SHEAR (V):	0.018W
	SEISMIC RESPONSE COEF.(Cs):	0.018
	RESPONSE MODIFICATION FACTOR (R):	6.5
	ANALYSIS PROCEDURE:	EQUIV. LATERAL FORCE
OTHER LOADS:	INTERIOR PARTITIONS (1607.13)	5 PSF (HORIZ.)
	HANDRAILS AND GUARDS (1607.7)	50 PLF, 200#
	DESIGN SOIL BEARING PRESSURE:	1500 PSF

ADDITIONAL LOADS: ADDITIONAL DESIGN LOADS INDICATED ON STRUCTURAL DRAWINGS SHALL BE INDENTIFIED AS FOLLOWS:

DL = DEAD LOAD	EL = SEISMIC LOAD
LL = DEAD LOAD	Lr = ROOF LIVE LOAD
WL = DEAD LOAD	S = SNOW LOAD

CAST-IN-PLACE CONCRETE

1. REFERENCE STANDARDS: REFER TO PROJECT SPECIFICATION MANUAL. CONFORM TO:
   A. ACI 301-10 'SPECIFICATIONS FOR STRUCTURAL CONCRETE',
   B. IBC CHAPTER 19-CONCRETE
   C. ACI 318-08/318R-11
   D. ACI 117-10
2. FIELD REFERENCE: THE CONTRACTOR SHALL KEEP A COPY OF ACI FIELD REFERENCE MANUAL, SP-15, "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301) WITH SELECTED ACI AND ASTM REFERENCES".
3. CONCRETE MIXTURES: CONFORM TO ACI 301 SECTION 4 "CONCRETE MIXTURES" AND IBC SECTION 1904.3.
4. MATERIALS: CONFORM TO ACI 301 SECTION 4.2.1 "MATERIALS" FOR REQUIREMENTS FOR CEMENTITIOUS MATERIALS, AGGREGATES, MIXING WATER AND ADMIXTURES.
5. SUBMITTALS: PROVIDE ALL SUBMITTALS REQUIRED BY ACI 301 SECTION 4.1.2. SUBMIT MIX DESIGNS FOR EACH MIX IN THE TABLE BELOW. SUBSTANTIATING STRENGTH RESULTS FROM PAST TESTS SHALL NOT BE OLDER THAN 12 MONTHS PER ACI 318 SECTION 5.3. REFER TO PROJECT SPECIFICATION MANUAL FOR ADDITIONAL SUBMITTAL REQUIREMENTS.

TABLE OF MIX DESIGN REQUIREMENTS

CLASS	INTENDED USE OF CONCRETE	F'c (28 DAY)	MINIMUM CEMENTITIOUS CONTENT	MAXIMUM W/C RATIO	AIR CONTENT	MAX AGGREGATE SIZE	POLY FIBERS
I	FOOTINGS, INTERIOR PIERS	3000	470#/C.Y.	___	2%-4%	1"	---
II	INTERIOR SLABS	3500	517#/C.Y.	0.53	-	3/4"	YES SEE SCHED
III	EXTERIOR CONCRETE: SLABS ON GRADE, PIERS, WALLS, SITE CONCRETE. ALL CONCRETE EXPOSED TO WEATHER.	4000	564#/C.Y.	0.40	5%-7%	3/4"	YES SEE SCHED
IV	BACKFILL BELOW FOOTINGS	1500	376#/C.Y.	___	___	___	___

TABLE OF MIX DESIGN REQUIREMENTS NOTES:
1. W/C RATIO: WATER-CEMENTITIOUS MATERIAL RATIOS SHALL BE BASED ON THE TOTAL WEIGHT OF CEMENTITIOUS MATERIALS. MAXIMUM RATIOS ARE CONTROLLED BY STRENGTH NOTED IN THE TABLE OF MIX DESIGN REQUIREMENTS AND DURABILITY REQUIREMENTS GIVEN IN ACI 318 SECTION 4.3.
2. CEMENTITIOUS MATERIALS:
   A. THE USE OF FLY ASH, OTHER POZZOLANS, SILICA FUME, OR SLAG SHALL CONFORM TO ACI 318 SECTIONS 4.3.1 AND 4.4.2. MAXIMUM AMOUNT OF FLY ASH SHALL BE 25% OF TOTAL CEMENTITIOUS CONTENT UNLESS REVIEWED AND APPROVED OTHERWISE BY SER.
   B. CEMENTITIOUS MATERIALS SHALL CONFORM TO THE RELEVANT ASTM STANDARDS LISTED IN ACI 318 SECTION 3.2.1.
3. AIR CONTENT: CONFORM TO ACI 318 SECTION 4.4.1. MINIMUM STANDARDS FOR EXPOSURE CLASS ARE NOTED IN THE TABLE. IF FREEZING AND THAWING CLASS IS NOT NOTED, AIR CONTENT GIVEN IS THAT REQUIRED BY THE SER. CONCRETE SURFACES IN CONTACT WITH THE SOIL REQUIRE ENTRAINED AIR. TOLERANCE IS ±1-%. AIR CONTENT SHALL BE MEASURED AT POINT OF PLACEMENT. AGGREGATES SHALL CONFORM TO ASTM C33.
4. SLUMP: CONFORM TO ACI 301 SECTION 4.2.2.2. SLUMP SHALL BE DETERMINED AT POINT OF PLACEMENT.
5. CHLORIDE CONTENT: CONFORM TO ACI 318 SECTION 4.3.1.
6. NON-CHLORIDE ACCELERATOR: NON-CHLORIDE ACCELERATING ADMIXTURE MAY BE USED IN CONCRETE PLACED AT AMBIENT TEMPERATURES BELOW 50°F AT THE CONTRACTOR'S OPTION.
7. ACI 318, SECTION 4 EXPOSURE CLASSES SHALL BE ASSUMED TO BE FO, SO, PO, AND CO UNLESS DIFFERENT EXPOSURE CLASSES ARE LISTED IN THE TABLE OF MIX DESIGN REQUIREMENTS THAT MODIFY THESE BASE REQUIREMENTS.
8. SHRINKAGE LIMIT: CONCRETE USED IN ELEVATED SLABS AND BEAMS SHALL HAVE A SHRINKAGE LIMIT OF .035% AT 28 DAYS MEASURED IN ACCORDANCE WITH ASTM C157. SUBMIT LABORATORY TEST RESULTS TO SER FOR APPROVAL PRIOR TO CONSTRUCTION.
9. MEASURING, MIXING AND DELIVERY: CONFORM TO ACI 301 SECTION 4.3.
10. HANDLING. PLACING. CONSTRUCTING AND CURING: CONFORM TO ACI 301 SECTION 5. IN ADDITION, HOT WEATHER CONCRETING SHALL CONFORM TO ACI 305.1-06 AND COLD WEATHER CONCRETING SHALL CONFORM TO ACI 306.1-90.
11. CONCRETE CURING: PROVIDE CURING COMPOUNDS FOR CONCRETE AS FOLLOWS: ASTM C1315, TYPE 1 CLASS A.
    A. USE MEMBRANE CURING COMPOUNDS THAT ARE COMPATIBLE WITH AND WILL NOT AFFECT SURFACES TO BE COVERED WITH FINISH MATERIALS APPLIED DIRECTLY TO CONCRETE.
    B. APPLY CURING COMPOUNDS AT A RATE EQUIVALENT TO THE RATE OF APPLICATION AT WHICH CURING COMPOUND WAS ORIGINALLY TESTED FOR IN CONFORMANCE TO THE REQUIREMENTS OF ASTM C 309-07 AND THE MANUFACTURER'S RECOMMENDATIONS.
    C. APPLY SPECIFIED CURING COMPOUND TO CONCRETE SLABS AS SOON AS FINAL FINISHING OPERATIONS ARE COMPLETE (WITHIN 2 HOURS AND AFTER SURFACE WATER SHEEN HAS DISAPPEARED). APPLY UNIFORMLY IN CONTINUOUS OPERATION BY POWER SPRAY OR ROLLER IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS. RECOAT AREAS SUBJECTED TO HEAVY RAINFALL WITHIN 3 HOURS AFTER INITIAL APPLICATION. MAINTAIN CONTINUITY OF COATING AND REPAIR DAMAGE DURING CURING PERIOD.
    D. USE CURING COMPOUND COMPATIBLE WITH AND APPLIED UNDER DIRECTION OF SYSTEM MANUFACTURER OF PROTECTIVE SEALER.
    E. APPLY TWO SEPARATE COATS WITH FIRST ALLOWED TO BECOME TACKY BEFORE APPLYING SECOND. DIRECTION OF SECOND APPLICATION SHALL BE AT RIGHT ANGLES TO DIRECTION OF FIRST.
13. CONSTRUCTION JOINTS: CONFORM TO ACI 301 SECTIONS. 2.2.2.5, 5.2.2.1 AND 5.3.2.6. CONSTRUCTION JOINTS SHALL BE LOCATED AND DETAILED AS ON THE CONSTRUCTION DRAWINGS. SUBMIT ALTERNATE LOCATIONS PER ACI 301 SECTION 5.1.2.3A FOR REVIEW AND APPROVAL BY THE SER TWO WEEKS MINIMUM PRIOR TO FORMING. USE OF AN ACCEPTABLE ADHESIVE, SURFACE RETARDANT, PORTLAND CEMENT GROUT OR ROUGHENING THE SURFACE IS NOT REQUIRED UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.
14. EMBEDDED ITEMS: POSITION AND SECURE IN PLACE EXPANSION JOINT MATERIAL, ANCHORS AND OTHER STRUCTURAL AND NON-STRUCTURAL EMBEDDED ITEMS BEFORE PLACING CONCRETE. CONTRACTOR SHALL REFER TO MECHANICAL, ELECTRICAL, PLUMBING AND ARCHITECTURAL DRAWINGS AND COORDINATE OTHER EMBEDDED ITEMS.
15. GROUTED REBAR: SEE POST-INSTALLED ANCHORS TO CONCRETE.
16. POST-INSTALLED ANCHORS TO CONCRETE: ANCHOR LOCATION, TYPE, DIAMETER AND EMBEDMENT SHALL BE AS INDICATED ON DRAWINGS. REFERENCE THE POST INSTALLED ANCHORS SECTION FOR APPLICABLE POST-INSTALLED ANCHOR ADHESIVES. ANCHORS SHALL BE INSTALLED AND INSPECTED IN STRICT ACCORDANCE WITH THE APPLICABLE ICC-EVALUATION SERVICE REPORT (ESR). SPECIAL INSPECTION SHALL BE PER THE TESTS AND INSPECTIONS SECTION.
17. FLOOR FINISHES: THE CONTRACTOR MUST PROVIDE AND CORRECTLY INSTALL AN ISOLATION MEMBRANE AND PROPERLY DETAILED EXPANSION JOINTS TO HELP MINIMIZE CRACKING OF FINISHES WITH CEMENTITIOUS SETTING BEDS OR FINISH PROPERTIES (TILE, STONE, TERRAZZO, CONCRETE TOPPING, ETC). THE EXPANSION JOINTS SHALL BE SIZED FOR AN EXPECTED SHORTENING MOVEMENT OF 0.01 INCHES PER FOOT.

CONCRETE REINFORCEMENT

1. REFERENCE STANDARDS: REFER TO PROJECT SPECIFICATIONS. CONFORM TO:
   A. ACI 301-10 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE", SECTION 3 "REINFORCEMENT AND REINFORCEMENT SUPPORTS."
   B. ACI SP-66-04 "ACI DETAILING MANUAL" INCLUDING ACI 315-99 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT."
   C. CRSI MSP-09, 281H EDITION, "MANUAL OF STANDARD PRACTICE."
   D. ANSI/AWS D1.4 "STRUCTURAL WELDING CODE- REINFORCING STEEL."
   E. IBC CHAPTER 19-CONCRETE.
   F. ACI 318-11 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY".
   G. ACI 117-10 "STANDARD SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS".
2. SUBMITTALS: CONFORM TO ACI 301 SECTION 3.1.1 "SUBMITTALS, DATA AND DRAWINGS." SUBMIT PLACING DRAWINGS SHOWING FABRICATION DIMENSIONS AND LOCATIONS FOR PLACEMENT OF REINFORCEMENT AND REINFORCEMENT SUPPORTS.
3. MATERIALS:

REINFORCING BARS	ASTM A615, GRADE 60, DEFORMED BARS.
WELDABLE REINFORCING BARS	ASTM A706, GRADE 60, DEFORMED BARS.
SMOOTH WELDED WIRE FABRIC	ASTM A185 DEFORMED
WELDED WIRE FABRIC	ASTM A497
BAR SUPPORTS	CRSI MSP-09, CHAPTER 3 "BAR SUPPORTS."
TIE WIRE	16 GAGE OR HEAVIER, BLACK ANNEALED.
STUD RAILS	ASTM A1044, DECON OR APPROVED EQUIVALENT.
HEADED DEFORMED BARS	ASTM A970

4. FABRICATION: CONFORM TO ACI301, SECTION 3.2.2. "FABRICATION", AND ACI SP-66 "ACI DETAILING MANUAL."
5. WELDING: BARS SHALL NOT BE WELDED UNLESS AUTHORIZED. WHEN AUTHORIZED, CONFORM TO ACI 301, SECTION 3.2.2.2. "WELDING" AND PROVIDE ASTM A706, GRADE 60 REINFORCEMENT.
6. PLACING: CONFORM TO ACI 301, SECTION 3.3.2 "PLACEMENT." PLACING TOLERANCES SHALL CONFORM TO ACI 117.
7. CAST-IN-PLACE CONCRETE COVER: CONFORM TO THE FOLLOWING COVER AND CORROSION PROTECTION REQUIREMENTS UNLESS NOTED OTHERWISE IN THE DRAWINGS:

REINFORCEMENT LOCATION	MINIMUM COVER
FOOTING BOTTOM REINFORCING	3"
FOOTING TOP REINFORCING	2"
SLAB-ON-GRADE REINFORCING	2" FROM TOP
WALLS NOT IN CONTACT WITH EARTH	3/4"
WALLS IN CONTACT WITH EARTH	2"
STAIRS TOP REINFORCING	2"
STAIRS BOTTOM REINFORCING	1"

8. SPLICES: CONFORM TO ACI 301, SECTION 3.3.2.7, "SPLICES". REFER TO "TYPICAL LAP SPLICE DEVELOPMENT LENGTH SCHEDULE" FOR TYPICAL REINFORCING SPLICES. REFER TO "COLUMN COLUMN VERTICAL REINFORCING SPLICE SCHEDULE" AND "SHEAR WALL REINFORCING SPLICE SCHEDULE" FOR THOSE SPECIFIC ELEMENTS. SPLICES INDICATED ON INDIVIDUAL SHEETS SHALL TAKE PRECEDENCE OVER THE SCHEDULE. MECHANICAL CONNECTIONS MAY BE USED WHEN APPROVED BY THE SER. FOR REINFORCING WITHIN THE LATERAL SYSTEM SHEAR WALLS AND REINFORCING CONNECTING THE DIAPHRAGM SLAB TO THE LATERAL SYSTEM, MECHANICAL SPLICE STRENGTH IS INCREASED TO DEVELOP 100 PERCENT OF THE SPECIFIED TENSILE STRENGTH OF THE SPLICES BAR.
9. FIELD BENDING: CONFORM TO ACI 301, SECTION 3.3.2.8, "FIELD BENDING OR STRAIGHTENING". BAR SIZES #3 THROUGH #5 MAY BE FIELD BENT COLD THE FIRST TIME. OTHER BARS REQUIRED PREHEATING. DO NOT TWIST BARS. BARS SHALL NOT BE BENT PAST 45 DEGREES.

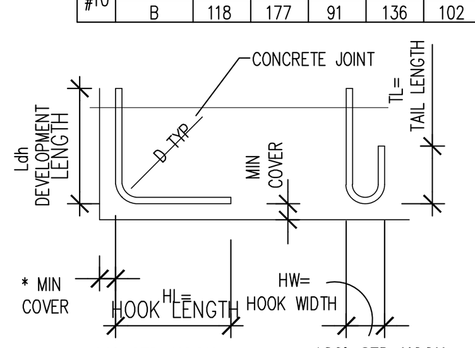
10. SPLICES AND EMBEDMENT:

   A. REINFORCING BAR DETAILING, BENDING, FABRICATION AND PLACEMENT SHALL CONFORM TO THE LATEST EDITION OF THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDING" (ACI 301) AND ACI DETAILING MANUAL (SP66).
   B. PROVIDE WWF IN FLAT SHEETS AND LAP A MINIMUM OF 14" AT SPLICES. PLACE WWF IN THE CENTER OF THE SLAB OR 2" DOWN FROM THE TOP OF THE SLAB. PROVIDE CHAIRS AND SPACERS AS REQUIRED TO MAINTAIN WWF PLACEMENT AND SPECIFIED PROTECTIVE COVERING.
   C. PROVIDE CLASS B TENSION LAP SPLICES FOR HORIZONTAL AND VERTICAL WALL AND FOOTING REINFORCING, U.N.O.
   D. SPLICES NOT PERMITTED IN BEAM, JOIST, OR SLAB STEEL UNLESS SPECIFICALLY DETAILED OTHERWISE.
   E. TENSION SPLICES, WHEN PERMITTED, SHALL BE IN ACCORDANCE WITH ACI CODES AND SCHEDULES ON DRAWINGS.
   F. THE TABULATED TENSION LAP-SPLICE LENGTHS ARE CALCULATED PER ACI 318, FOR NON-SEISMIC, UNCOATED BARS, AND NORMAL WEIGHT CONCRETE. LENGTHS MUST BE ADJUSTED FOR NON-CONFORMING APPLICATIONS.
   CASES 1 AND 2, WHICH DEPEND ON THE TYPE OF STRUCTURAL ELEMENT, CONCRETE COVER, AND CENTER-TO-CENTER SPACING OF THE BARS ARE DEFINED AS (db = diameter of bar):
   BEAMS OR COLUMNS:
   CASE 1 - COVER AT LEAST 1.0 db AND CENTER-TO-CENTER SPACING AT LEAST 2.0 db
   CASE 2 - COVER SPACING LESS THAN 1.0db OR CENTER-TO-CENTER SPACING LESS THAN 2.0 db.
   ALL OTHERS:
   CASE 1 - COVER AT LEAST 1.0 db AND CENTER-TO-CENTER SPACING AT LEAST 3.0db.
   CASE 2 - COVER LESS THAN 1.0 db OR CENTER-TO-CENTER SPACING LESS THAN 3.0 db.

REINFORCEMENT TENSION DEVELOPMENT AND LAP SPLICE SCHEDULE

BAR SIZE	LAP CLASS	3000 PSI TOP BARS CASE 1	3000 PSI TOP BARS CASE 2	3000 PSI OTHER BARS CASE 1	3000 PSI OTHER BARS CASE 2	4000 PSI TOP BARS CASE 1	4000 PSI TOP BARS CASE 2	4000 PSI OTHER BARS CASE 1	4000 PSI OTHER BARS CASE 2	4500 PSI TOP BARS CASE 1	4500 PSI TOP BARS CASE 2	4500 PSI OTHER BARS CASE 1	4500 PSI OTHER BARS CASE 2
#3	A	22	33	17	25	19	28	15	22	18	27	14	21
	B	28	42	22	33	25	37	19	28	23	35	18	27
#4	A	29	43	22	33	25	37	19	29	24	35	18	27
	B	38	56	29	43	33	49	25	37	31	46	24	35
#5	A	36	54	28	42	31	47	24	36	30	44	23	34
	B	47	70	36	54	41	61	31	47	38	57	30	44
#6	A	43	65	33	50	37	56	29	43	35	53	27	41
	B	56	84	43	65	49	73	37	56	46	69	35	53
#7	A	63	94	48	72	54	81	42	63	51	77	40	59
	B	81	122	63	94	71	106	54	81	67	100	51	77
#8	A	72	107	55	83	62	93	48	72	59	88	45	68
	B	93	139	72	107	81	121	62	93	76	114	59	88
#9	A	81	121	62	93	70	105	54	81	66	99	51	76
	B	105	157	81	121	91	136	70	105	86	128	66	99
#10	A	91	136	70	105	79	118	61	91	74	111	57	86
	B	118	177	91	136	102	153	79	118	96	144	74	111

(LENGTHS (IN.))



REINFORCING HOOK SCHEDULE (IN.)

BAR SIZE	HL	HW	TL	D	Ldh *
#3	6"	3"	4"	2 1/4"	6"
#4	8"	4"	4 1/2"	3"	8"
#5	10"	5"	5"	3 3/4"	10"
#6	1'-0"	6"	6"	4 1/2"	12"
#7	1'-2"	7"	7"	5 1/4"	14"
#8	1'-4"	8"	8"	6"	16"
#9	1'-7"	1'-3/4"	10 1/2"	9 1/2"	18"
#10	1'-10"	1'-1 1/4"	11 1/2"	10 3/4"	20"
#11	2'-0"	1'-2 3/4"	1'-1"	12"	22"

COMPLYING WITH MINIMUM COVER REQUIREMENTS OF ACI 318, 12.5.3, GENERAL USE, 3000 PSI CONCRETE, OTHERWISE EMBEDMENT LENGTH MUST BE RE-CALCULATED.

STRUCTURAL STEEL

1. SPECIFICATIONS AND QUALIFICATIONS:

   A. ALL FABRICATION AND ERECTION SHALL CONFORM TO THE LATEST EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION.
   B. ALL STRUCTURAL STEEL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER AND BE IN ACCORDANCE WITH AWS, STRUCTURAL WELDING CODE D1.1. UNLESS SPECIFICALLY NOTED OTHERWISE.

2. MATERIALS:

WIDE FLANGE (W), TEE (WT) SHAPES:	ASTM A992, Fy = 50 ksi.
STRUCTURAL (S), (M) & (HP) SHAPES:	ASTM A36, Fy = 36 ksi.
ANGLES (L), CHANNELS (C), PLATES (PL):	ASTM A36, Fy = 36 KSI
HOLLOW STRUCTURAL SECTION - SQUARE/RECT (HSS):	ASTM A500, GRADE B, Fy = 46 KSI.
HOLLOW STRUCTURAL SECTION - ROUND (HSS):	ASTM A500, GRADE B, Fy = 42 KSI.
STRUCTURAL PIPE (PIPE):	ASTM A53, GRADE B, Fy = 35 KSI.
HIGH STRENGTH BOLTS:	ASTM A325/F1852, TYPE 1, PLAIN
NUTS:	ASTM A563
WASHERS (FLAT OR BEVELED):	ASTM A436 (REQUIRED AT SLOTTED & OVERSIZE HOLES)
ANCHOR RODS:	ASTM F1554 GR. 55 (WELDABLE)
THREADED RODS:	ASTM A36
HEADED ANCHOR STUDS:	ASTM A108 Fy = 60 KSI.
WELDING ELECTRODES:	E70XX, E71TXX, UNLESS NOTED OTHERWISE.

3. CONNECTIONS:

   A. FIELD CONNECTIONS TO BE BOLTED, EXCEPT AS OTHERWISE INDICATED. SHOP CONNECTIONS TO BE WELDED OR BOLTED. CONNECTIONS TO BE DESIGNED BY THE FABRICATOR TO DEVELOP FULL STRENGTH OF MEMBER OR FORCES SHOWN ON PLANS, WHICHEVER GOVERNS. FOLLOW INSTRUCTIONS ON DRAWINGS FOR GENERAL ARRANGEMENT OR PARTICULAR DETAILS.
   B. CONNECTIONS SHOWN AND DETAILED ON THE DRAWINGS MAY BE REDESIGNED BY THE STRUCTURAL STEEL CONTRACTOR FOR EQUAL FORCES PROVIDED THE SAME ARRAMNGEMENT OF MEMBERS IS USED AND THE OVERALL SIZE OF THE CONNECTION DOES NOT EXCEED THAT OF THE CONNECTION DETAILED.
   C. ALL BOLTED CONNECTIONS SHALL USE 3/4"ø BOLTS, INSTALLED SNUG-TIGHT, PER AISC REQUIRMENTS, U.N.O.
   D. ALL BOLTED CONNECTIONS SHALL HAVE A MINIMUM OF TWO BOLTS, U.N.O.
   E. PROVIDE STANDARD HERDENED WASHERS FOR ALL CONNECTIONS WITH STANDARD, OVERSIZE, AND SHORT-SLOTTED HOLES FOR LONG-SLOTTED HOLES PROVIDE WASHERS OR A CONTINUOUS BAR OF SUFFICIENT SIZE TO COMPLETELY COVER THE SLOT. PLATE WASHERS OR BARS TO BE A MINIMUM OF 5/16" THICK FOR LONG-SLOTTED HOLES.
   F. INSTALL HEAVY WASHERS AT ALL ANCHOR ROD/BOLT LOCATIONS.
   G. FOR WELDING SYMBOLS WITH NO LENGTH DIMENSION GIVEN, THE WELD SHALL BE CONTINUOUS BETWEEN ABRUPT CHANGES IN DIRECTION. WELDS NOT OTHERWISE NOTED SHALL BE 1/4" IN SIZE.

4. SHOP PAINT / FINISH:

   A. PAINT ALL INTERIOR STEEL WITH ONE COAT OF FABRICATOR'S STANDARD PRIMER, UNLESS NOTED OTHERWISE.
   B. PAINT ALL EXTERIOR STEEL WITH TWO COATS OF RED OXIDE PRIMER UNLESS NOTED OTHERWISE ON PLAN.
   C. DO NOT PAINT ANCHOR BOLTS WHICH WILL BE ENCASED IN CONCRETE OR MASONRY.
   D. ALL EXTERIOR, EXPOSED ANCHOR RODS, ANCHOR BOLTS, AND HIGH STRENGTH BOLTS ARE TO BE HOT-DIP GALVANIZED, INCLUDING NUTS AND WASHERS.
   E. ALL EXTERIOR BRICK LINTELS ARE TO BE GALVANIZED WITH "PAINT GRIP" (GALV. TO ACCEPT FINISH PAINT).
   F. ALL STEEL EXPOSED TO VIEW SHALL BE CLASSIFIED AS ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) AS DEFINED BY THE AISC CODE OF STANDARD PRACTICE AND SHALL BE TREATED AS SUCH, U.N.O.
   G. GALVANIZED STEEL:
   ALL STEEL COMPONENTS INDICATED TO BE GALVANIZED, HOT DIP GALVANIZED, OR HDG ARE TO BE COATED PER THE FOLLOWING MINIMUM STANDARDS:

STRUCTURAL STEEL:	ASTM A 123
FASTENERS:	ASTM A 153
GALVANIZED STEEL TO BE FINISHED PAINTED:	ASTM A 123

   ALL FIELD WELDING OF GALVANIZED MEMBERS ARE TO BE CLEANED AND COATED WITH COLD GALVANIZING COMPOUND. COLD GALVANIZING COMPOUNDS ARE TO HAVE MIN. 92% METALLIC ZINC CONTENT AND THE APPLICATION IS TO BE 50% MORE THAN THE SURROUNDING COATING THICKNESS.

STRUCTURAL LUMBER

1. SPECIFICATIONS: UNLESS NOTED OR SHOWN OTHERWISE, DESIGN, FABRICATION AND ERECTION SHALL BE GOVERNED BY LATEST REVISIONS OF:

   A. NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (AMERICAN WOOD COUNCIL).
   B. U.S. PRODUCT STANDARD PS-1 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD.
   C. APA DESIGN/CONSTRUCTION GUIDE - RESIDENTIAL AND COMMERCIAL.

2. MATERIALS:

   A. DIMENSION LUMBER:

   SAWN LUMBER TO CONFORM TO GRADING RULES OF WWPA, WCLIB, OR NLGA AND THE TABLE BELOW. FINGER JOINTED STUDS ACCEPTABLE AT INTERIOR WALLS ONLY:

MEMBER USE	SPECIES	GRADE	PRESERVATIVE TREATMENT (PT)
POSTS, BEAMS, HEADERS	REFER TO SCHEDULE		
STUDS, PURLINS, GIRTS:	SPRUCE PINE FIR	NO. 2	
BLOCKING:	SPRUCE PINE FIR	STUD	

   ALL DESIGN VALUES PER ANSI/ AF&PA NDS-2005; NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION

   B. ENGINEERED LUMBER:

   THE FOLLOWING MATERIALS ARE BASED ON LUMBER MANUFACTURED BY I-LEVEL AND WERE USED FOR THE DESIGN AS SHOWN ON THE PLANS. ALTERNATE PRODUCTS BY OTHER MANUFACTURES MAY BE SUBSITUTED PROVIDED THEY HAVE CURRENT ICC APPROVAL FOR EQUIVALENT OR GREATER LOAD AND STIFFNESS PROPERTIES AND ARE REVIEWED AND APPROVED BY THE SER.
   CURRENT ICC APPROVAL FOR EQUIVALENT OR GREATER LOAD AND STIFFNESS PROPERTIES AND ARE REVIEWED AND
   a) LAMINATED VENEER LUMBER (LVL): CONFORM TO ICC ES REPORT NO. ESR-1387 OR CMCC REPORT NO. 08675-R.
   b) PARALLEL STRAND LUMBER (PSL): CONFORM TO ICC ES REPORT NO. ESR-1387 OR CMCC REPORT NO. 11161-R.
   c) LAMINATED STRAND LUMBER (LSL): CONFORM TO ICC ES REPORT NO. ESR-1387 OR CMCC REPORT NO. 08675-R.

MEMBER TYPE	USE	E (10^6)	Fb (PSI)	Fc II (PSI)
TIMBERSTRAND LSL:	HEADER, BM, JST <9" DEPTH	1.3E	1700	1400
TIMBERSTRAND LSL:	HEADER, BM, JST =>9" DEPTH	1.55E	2325	2050
TIMBERSTRAND LSL:	WALL STUD	1.5E	2250	1950
MICROLLAM LVL:	HEADER, BM, JST	1.9E	2600	2510

   SHEATHING:

   WOOD STRUCTURAL SHEATHING INCLUDES ALL VENEER PLY-WOOD, ORIENTED STRAND BOARD (OSB), AS IDENTITIED ON THE STRUCTURAL PLANS, DETAILS, AND NOTES AS "SHEATHING". WOOD SHEATHING PRODUCTS SHALL CONFORM TO AMERICAN PLYWOOD ASSOCIATION APA PDS-97 AND THE FOLLOWING TABLE:

LOCATION	PLAN NOTATION	PLAN LOCATION*	ACTUAL THICKNESS	SPAN RATING	PLYWOOD GRADE	EXPOSURE
SHEAR WALL:	3/4"	SHEAR WALL, POST FRAME	30/32"	48/24	C-D	I

3. CONNECTIONS:
   A. EXCEPT AS SHOWN OR OTHERWISE NOTED ON PLAN, ALL LUMBER FASTENINGS SHALL BE IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE FASTENING SCHEDULE (2011 OBC TABLE 2304.9.1).
   B. GUN TYPE NAILS MAY BE SUBSTITUTED CONTINGENT THEY MEET THE FOLLOWING MIN. REQUIREMENTS:

SPECIFIED NAIL	APPROVED GUN NAIL SUBSTITUTION
16d	0.131" DIAMETER x 3" LONG
12d	0.131" DIAMETER x 3" LONG
10d	0.128" DIAMETER x 3" LONG
8d	0.113" DIAMETER x 2 1/2" LONG
6d	0.113" DIAMETER x 2" LONG

   C. ALL FASTENERS THAT ARE IN CONTACT WITH FIRE RETARDANT, ACG, COPPER AZOLE, AND OTHER NOT-DOT BORATE TREATED WOODS (PRESERVATIVE TREATED LUMBER) ARE REQUIRED TO HAVE APPROPRIATE PROTECTIVE FINISHES/MATERIALS. POST HOT DIP GALVANIZED AND/OR STAINLESS STEEL FASTENERS ARE APPROVED. DO NOT PLACE DIS-SIMILAR METALS IN CONTACT WITH EACH OTHER (COORDINATE BOLT + WASHER + NUT).

   D. ALL ENGINEERED LUMBER BEAMS OF 3 MEMBERS (3 PLYS) SHALL HAVE EACH PLY FASTENED TO THE ADJACENT PLY WITH CONSTRUCTION ADHESIVE AND (3) 16d NAILS @ 12" O.C., MINIMUM.

4. MISCELLANEOUS:

   A. CONSTRUCTION ADHESIVE (FOR GLUE AND NAIL APPLICATIONS)
   1) ADHESIVE SHALL BE A MINIMUM OF "TITEBOND CONSTRUCTION ADHESIVE" AS MANUFACTURED BY FRANKLIN INTERNATIONAL OR EQUAL.
   2) ADHESIVE SHALL BE EVENLY APPLIED TO 100% OF THE CONTACT SURFACES.
   B. ANY NEW WOOD FRAMING THAT EXHIBITS STRUCTURAL DEFECTS SHALL BE REMOVED FROM THE SITE AND REPLACED AT THE CONTRACTOR'S EXPENSE. STRUCTURAL DEFECTS MAY INCLUDE, BUT ARE NOT LIMITED TO: NOTCHES, SPLITS, CHECKS, BOWED STUDS, BOWED JOISTS.

5. PRESERVATIVE TREATMENT:

   A. ALL COMPONENTS IDENTIFIED AT "PRESERVATIVE TREATED", "TREATED", "PRESSURE TREATED", "EXTERIOR GRADE", "PT", "DECAY RESISTANT", ARE REQUIRED TO PRESERVATIVE TREATED LUMBER. ALL WOOD FRAMING THAT IS EXPOSED TO EXTERIOR CONDITIONS IS REQUIRED TO PRESERVATIVE TREATED LUMBER UNLESS NOTED OTHERWISE ON PLAN.
   B. ALL SILL PLATES IN CONTACT WITH FOUNDATIONS, CONCRETE, OR MASONRY ARE TO BE PRESERVATIVE TREATED LUMBER.
   C. ALL LEDGERS IN CONTACT WITH FOUNDATIONS, CONCRETE, OR MASONRY ARE TO BE PRESERVATIVE TREATED LUMBER.
   D. PRESERVATIVE TREATMENT (PT): WOOD MATERIALS ARE REQUIRED TO BE "TREATED WOOD" IN ACCORDANCE WITH IBC SECTION 2304.11. "DECAY AND TERMITE PROTECTION" SHALL CONFORM TO THE APPROPRIATE STANDARDS OF THE AMERICAN WOOD-PRESERVERS ASSOCIATION (AWPA) FOR SAWN LUMBER, GLUED LAMINATED TIMBER, ROUND POLES, WOOD PILES AND MARINE PILES. FOLLOW AMERICAN LUMBER STANDARDS COMMITTEE (ALSC) QUALITY ASSURANCE PROCEDURES. PRODUCTS SHALL BEAR THE APPROPTIATE MARK.
   E. FASTENERS, ANCHORS, AND ASSOCIATED HARDWARE IN CONTACT WITH TREATED WOOD SHALL BE STAINLESS STEEL, HOT-DIPPED GALVANIZED, OR HAVE AN APPROVED PROTECTIVE FINISH PER IBC 2304.9.5. THIS INCLUDES, BUT IS NOT LIMITED TO, NAILS, SCREWS, BOLTS, WASHERS, NUTS, HANGERS, CAPS AND BASES, STRAPS.

PRE-ENGINEERED WOOD ROOF TRUSS

1. SPECIFICATIONS AND REFERENCE STANDARDS: UNLESS NOTED OR SHOWN OTHERWISE, DESIGN, FABRICATION, ERECTION, HANDLING AND BRACING REQUIREMENTS ARE TO BE GOVERNED BY THE LATEST REVISIONS OF:

   A. NATIONAL DESIGN SPECIFICATIONS FOR STRESS-GRADE LUMBER AND ITS FASTENINGS.
   B. TIMBER CONSTRUCTION STANDARDS.
   C. DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES.
   D. TRUSS PLATE INSTITUTE PUBLICATION-BTW BRACING WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS.

2. MATERIALS:

   A. LUMBER: AS REQUIRED BY THE TRUSS MANUFACTURER. MINIMUM GRADE TO BE SYP NO. 2 KD 19 PERCENT MC, EXCEPT FOR WEBS, WHICH MAY BE MINIMUM GRADE OF SYP NO. 3, KD 19 PERCENT MC.
   B. CONNECTIONS: ALL INTERNAL TRUSS CONNECTIONS TO BE DESIGNED BY THE TRUSS MANUFACTURER. CONNECTORS SHALL BE DEFORMED PLATE TYPE, OF MINIMUM 20 GAUGE GALVANIZED STEEL SHEET. ALL JOINTS ARE TO BE DESIGNED USING METHODS AS SET FORTH IN TPI STANDARDS 1985.
   C. HANGERS: ALL TRUSS TO TRUSS HANGERS SHALL BE MINIMUM 16 GA., AND SHALL BE PROVIDED BY THE TRUSS SUPPLIER.
   D. SEE PLAN FOR LOCATIONS REQUIRING FIRE RETARDANT TREATED LUMBER (FRT).

3. DESIGN:

   A. ALL TRUSSES ARE TO BE DESIGNED BY THE TRUSS MANUFACTURER FOR THE FOLLOWING LOADS:
   DESIGN LOADS:

TOP CHORD:	LIVE LOAD:	20 PSF + SNOW DRIFTING AND RTU LOADS.
	DEAD LOAD:	7 PSF
BOT CHORD:	DEAD LOAD:	7 PSF
	WIND PRESSURES:	PER ASCE/SEI 7-05

   REFERENCE "BIDDER DESIGNED COMPONENTS" SECTION IN GENERAL STRUCTURAL NOTES FOR ADDITIONAL DESIGN REQUIREMENTS.
   B. WHERE TRUSSES ARE REQUIRED TO FRAME INTO OTHER TRUSSES, DESIGN OF THE HANGERS SHALL BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER SHALL MAKE NECESSARY PROVISIONS IN THE SUPPORTING TRUSS TO ACCEPT THE TYPE OF HANGER REQUIRED.
   C. THE TRUSS SUPPLIER SHALL DESIGN ALL UPLIFT ANCHORS AND COORDINATE AND DEFINE ANCHOR TYPE AND LOCATION ON THE TRUSS SHOP DRAWINGS.
   D. THE TRUSS DESIGNER IS SOLELY RESPONSIBLE TO DESIGN ALL CHORD AND WEB MEMBER BRACING, PIGGY BACK BRACING, AND INTERMEDIATE LATERAL BRACES FOR GABLE TRUSS WEB MEMBERS.
   E. ALL INTERNAL TRUSS CONNECTOR PLATES, TRUSS HANGERS, AND CONNECTORS THAT ARE IN CONTACT WITH WITH FIRE RETARDANT, ACG, COPPER AZOLE, AND OTHER NOT-DOT BORATE TREATED LUMBER (PRESERVATIVE TREATED LUMBER) ARE REQUIRED TO HAVE APPROPRIATE PROTECTIVE FINISHES/MATERIALS.

4. SUBMITTALS:

   A. TRUSS DESIGNS ARE TO BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION. TRUSS SUBMITTAL SHALL INCLUDE THE FOLLOWING INFORMATION:

   1. DESIGN INFORMATION FOR EACH TYPE OF TRUSS SUPPLIED.
   2. LAYOUT DRAWING INDICATING LOCATION OF EACH SPECIFIC TRUSS TYPE.
   3. TRUSS HANGER TYPE AND LOCATION FOR ALL TRUSSES FRAMING INTO TRUSSES.
   4. TRUSS BRACING LOCATIONS (PERMANENT MEMBER), SIZES AND LOCATIONS.
   5. TRUSS DESIGNS AND LAYOUT DRAWING STAMPED BY A REGISTERED PROFESSIONAL ENGINEER, STATE IN WHICH PROJECT IS CONSTRUCTED.

   B. SUBMITTALS WHICH DO NOT INCLUDE THE ABOVE LISTED INFORMATION WILL BE RETURNED TO THE CONTRACTOR WITHOUT REVIEW.

5. TRUSS TEMPORARY AND PERMANENT BRACING:
   A. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL REQUIRED ROOF TRUSS TEMPORARY, ERECTION, AND PERMANENT BRACING. BRACING DESIGN AND INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE FOLLOWING TRUSS PLATE INSTITUTE (TPI) SPECIFICATIONS: ANSI/TPI 1, BCSI, AND DSB; LATEST EDITIONS.
   B. FOR TRUSS SPANS 60 FEET AND GREATER, THE CONTRACTOR IS RESPONSIBLE TO CONTRACT A REGISTERED DESIGN PROFESSIONAL FOR THE DESIGN OF THE TEMPORARY INSTALLATION RESTRAINT/BRACING AND THE PERMANENT BRACING. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE TO HAVE ALL SPECIAL INSPECTIONS OF THE BRACING PERFORMED. THE CONTRACTOR IS RESPONSIBLE FOR COSTS ASSOCIATED WITH THE PERMANENT BRACING DESIGN, INSTALLATION, AND INSPECTION.

6. MISCELLANEOUS:

   A. ALL MEMBERS OF MULTIPLE PLY TRUSSES ARE TO BE NAILED TOGETHER PER TRUSS SUPPLIER REQUIRMENTS.
   B. INSTALL METAL UPLIFT ANCHOR AT ALL TRUSS BEARING LOCATIONS UNLESS NOTED OTHERWISE.
   C. THE DESIGN OF WEB MEMBER PERMANENT BRACING AND CONNECTIONS, REQUIRED FOR THE ERECTION AND FINAL STABILITY OF THE TRUSSES, SHALL BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER.
   D. DRYWALL INSTALLATION ALLOWANCES SHALL BE MADE BY THE CONTRACTOR TO ACCOUNT FOR POTENTIAL UPLIFT OF ROOF TRUSS BOTTOM CHORDS THAT MIGHT BE CAUSED BY DISTORTION OF THE TRUSS MEMBERS DUE TO VARIATIONS IN THE MOISTURE CONTENT OF THE TRUSS MEMBER. AT THESE LOCATIONS, FLOATING DRYWALL WITH BACK BLOCKING SHALL BE INSTALLED. CONTACT THE ARCHITECT OR ENGINEER FOR RECOMMENDED TYPICAL INSTALLATION DETAILS PRIOR TO CONSTRUCTION.

MASONRY

1. REFERENCE STANDARDS: REFER TO PROJECT SPECIFICATION MANUAL.

   A. PERFORM ALL MASONRY CONSTRUCTION IN ACCORDANCE WITH ACI 530 / ASCE 5 / TMS 402 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"; CURRENT EDITION.

2. MATERIALS:

   A. CONCRETE MASONRY UNITS: ASTM C90, (HOLLOW AND SOLID):
   1. NORMAL WEIGHT BLOCK ALL LOCATIONS, U.N.O. ON PLAN. (125 PCF DENSITY)
   2. MINIMUM NET COMPRESSIVE UNIT STRENGTH=1900 PSI.
   B. CONCRETE BRICK: ASTM C55, GRADE N1
   C. CLAY BRICK: BUILDING BRICK ASTM C62; FACE BRICK ASTM C216, GRADE SW (COLOR AND SIZE AS NOTED ON THE ARCHITECTURAL DRAWINGS).
   D. MORTAR: ASTM C270
   1. ALL WALLS, FOUNDATION WALLS: TYPE S MORTAR, 28 DAY COMPRESSIVE STRENGTH 1800 PSI MIN.
   E. BOND BEAM AND CORE FILL (GROUT): ASTM C476, COARSE TYPE, MINIMUM COMPRESSIVE STRENGTH 2000 PSI (28 DAYS)
   F. JOINT REINFORCING: STANDARD "DUR-O-WAL", MILL GALVANIZED FINISH, OR APPROVED EQUIVALENT.

3. REINFORCEMENT INSTALLATION:

   A. PROVIDE HORIZONTAL JOINT REINFORCEMENT IN EVERY SECOND BLOCK COURSE, FULL HEIGHT, U.N.O.
   B. PROVIDE HORIZONTAL JOINT REINFORCEMENT WITHIN 16" ABOVE AND BELOW OPENINGS, EXTENDING 24" BEYOND OPENING, U.N.O.
   C. LAP HORIZONTAL REINFORCEMENT A FULL WIDTH AT CORNERS AND INTERSECTIONS.
   D. PROVIDE DOWELS FROM FOOTING, CONCRETE BEAM, OR SLAB; UNLESS DETAILED OTHERWISE. DOWEL SHALL BE STANDARD 90° HOOKED DOWEL, SIZE AND SPACING TO MATCH VERTICAL WALL REINFORCEMENT. LAP DOWEL WITH VERTICAL WALL REINFORCEMENT; TYP.
   E. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE, IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN SIX VERTICAL. DOWELS SHALL BE GROUTED INTO A CORE IN VERTICAL ALIGNMENT, EVEN THOUGH IT IS IN AN ADJACENT CELL TO THE VERTICAL WALL REINFORCEMENT.
   F. PROVIDE APPROPRIATE REINFORCEMENT ALIGNING DEVICES AT A MAXIMUM SPACING OF 192 BAR DIAMETERS.
   G. UNLESS INDICATED OR DETAILED OTHERWISE, PROVIDE VERTICAL WALL REINFORCING AT THE FOLLOWING LOCATIONS:
   1. CORNER CONDITIONS
   2. ENDS OF WALLS
   3. EACH SIDE OF OPENINGS
   4. EACH SIDE OF CONTROL JOINTS
   REINFORCING SHALL MATCH SPECIFIED ADJACENT WALL REINFORCING.

4. CONTROL JOINTS:

   A. PROVIDE CONTROL JOINTS AT LOCATIONS APPROVED BY ARCHITECT IN ALL MASONRY WALLS AND BRICK VENEER, U.N.O.
   B. UNLESS INDICATED OR DETAILED OTHERWISE, PROVIDE THE FOLLOWING MINIMUM CONTROL JOINT LOCATIONS:
   1. MAXIMUM SPACING OF 25 FEET OR 3 TIMES THE WALL HEIGHT, WHICHEVER IS LESS.
   2. ADJACENT TO CORNERS, AT CHANGES IN WALL HEIGHT AND AT CHANGES IN FOUNDATION CONDITIONS.
   3. DO NOT LOCATE CONTROL JOINTS WITHIN 16 INCHES OF OPENINGS UNLESS MASONRY ABOVE IS SUPPORTED FROM THE BUILDING FRAMING (MASONRY NOT SUPPORTED ON LINTEL BEARING ON MASONRY WALL).
   4. DO NOT LOCATE CONTROL JOINTS IN WALLS IDENTIFIED AS "SHEAR WALLS" ON DRAWINGS.

5. OPENINGS:

   A. PROVIDE LINTELS OVER ALL WALL OPENINGS, U.N.O. REFERENCE SCHEDULE ON DRAWINGS FOR SPECIFIED LINTELS, REFERENCE STEEL LINTEL SCHEDULE IN GENERAL NOTES FOR TYPICAL LINTEL REQUIREMENTS TO BE INSTALLED IF NO LINTEL SIZE IS SPECIFIED ON DRAWINGS.

6. MISCELLANEOUS:

   A. PROVIDE 100% SOLID BEARING, MINIMUM 3 COURSES x 24" WIDE UNDER BEAMS AND LINTELS, 2 COURSES x 16" WD. UNDER JOISTS, UNLESS DETAILED OTHERWISE.
   B. FILL CORE SOLID AROUND ANCHOR BOLTS, FULL LENGTH OF ANCHOR, EXTEND 8" MIN. BELOW BOTTOM OF ANCHOR.
   C. PROVIDE SOLID BLOCKS OR 100% GROUT FILLED HOLLOW BLOCKS AT ALL MECHANICAL ANCHOR LOCATIONS.
   D. WHERE HOLLOW MASONRY UNITS ARE USED ABOVE HOLLOW MASONRY UNITS OF A DIFFERENT THICKNESS, PROVIDE A CONTINUOUS COURSE OF SOLID MASONRY AT LEAST 8" HIGH BELOW THE TRANSITION.
   E. PROVIDE CONTINUOUS COURSE OF SOLID MASONRY AT ELEVATION OF EXTERIOR GRADE, TYPICAL. THE TOP OF THE SOLID COURSE SHALL APPROXIMATE TOP OF EXTERIOR GRADE ELEVATION AND SHALL COORDINATE WITH ARCHITECTURAL FLASHING REQUIREMENTS.
   F. ALL CORNERS AND INTERSECTIONS OF STRUCTURAL MASONRY WALLS SHALL BE INTERLOCKING (LACED) COURSES, U.N.O.
   G. BOND BEAM BLOCK UNITS SHALL HAVE OPEN BOTTOMS WHEN LOCATED IN WALL CONSTRUCTION. PROVIDE SOLID BOTTOM UNITS OVER OPENINGS; TYP.
   H. CHLORIDE ADMIXTURES OR ANTIFREEZE COMPOUNDS ARE NOT PERMITTED TO BE USED.
   PROVIDE TEMPORARY LATERAL BRACING FOR MASONRY WALLS DURING CONSTRUCTION AND UNTIL LATERAL SUPPORTS AND DIAPHRAGMS HAVE BEEN ATTACHED AND GROUT HAS ATTAINED THE SPECIFIED DESIGN STRENGTH.
   I. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY WALLS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
   J. SEE POST INSTALLED ANCHOR NOTES FOR ANCHOR TYPE AND INSTALLATION REQUIREMENTS.
   K. KEEP AIR SPACE (CAVITY) BEHIND VENEER FREE OF MORTAR DROPPINGS.
   L. SLEEVE ALL PLUMBING, ELECTRICAL, AND FIRE PROTECTION PENETRATIONS THRU WALLS.

LIGHT GAUGE METAL FRAMING

1. SPECIFICATIONS AND REFERENCE STANDARDS: UNLESS SPECIFICALLY NOTED OR SHOWN OTHERWISE, DESIGN, FABRICATION, ERECTION, HANDLING AND BRACING REQUIREMENTS ARE TO BE GOVERNED BY THE LATEST REVISIONS OF:

   A. A.I.S.I. "SPECIFICATION OF THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS."
   B. STRUCTURAL WELDING CODE, AWS D1.3 OF THE AMERICAN WELDING SOCIETY.
   C. ALL STRUCTURAL FRAMING PRODUCTS SHALL BE IN CONFORMANCE TO THE MINIMUM REQUIREMENTS OF ASTM C955.

2. MATERIALS:

   A. 16 GA. AND HEAVIER MEMBERS SHALL BE 50 ksi MIN. MATERIAL.
   B. 18 GA. AND LIGHTER MEMBERS SHALL BE 33 ksi MIN. MATERIAL.
   C. ALL SUPPORT CLIPS AND CLIP ANGLES ARE TO BE 16 GA. MIN., 50 ksi., UNLESS NOTED OTHERWISE.
   D. ALL TRACKS ARE TO BE 16 GA. MIN., 33 ksi., UNLESS NOTED OTHERWISE.
   E. MEMBER PROPERTIES USED FOR DESIGN ARE BASED UPON SSMA (STEEL STUD MANUFACTURES ASSOCIATION) ICBO ER-4943P PRODUCT IDENTIFICATION AND MEMBER PROPERTIES PER THE FOLLOWING:

PRODUCT IDENTIFICATION	SECTION	SSMA IDENTIFICATION	FLANGE WIDTH	RETURN LIP
600-S-162-43 (MEMBER WIDTH - MEMBER STYLE - FLANGE WIDTH - MEMBER THICKNESS)	S-SECTIONS (STUDS)	S-137	1 3/8"	3/8"
		S-162	1 5/8"	1/2"
		S-200	2"	5/8"
		S-250	2 1/2"	5/8"
	T-SECTIONS (TRACKS)	T-125	1 1/4"	
		T-150	1 1/2"	
		T-200	2"	

MATERIAL THICKNESS COMPARISON TABLE

MILS	GAUGE	MINIMUM DELIVERED THICKNESS	DESIGN THICKNESS
33	20	0.0329"	0.0346"
43	18	0.0428"	0.0451"
54	16	0.0538"	0.0566"
68	14	0.0677"	0.0713"
97	12	0.0966"	0.1017"

   SUPPLIED MATERIAL SHALL MEET OR EXCEED THE MINIMUM PROPERTIES OF SSMA ICBO ER-4943P.

3. CONNECTIONS:

   A. FIELD CONNECTIONS MAY BE EITHER WELDED OR SCREWED, UNLESS SPECIFICALLY NOTED OTHERWISE.
   B. UNLESS SPECIFIED OTHERWISE, THE MINIMUM MECHANICAL FASTENER IS TO BE SELF TAPPING #10-16 SCREWS MANUFACTURED AND TESTED BY ITW BUILDEX. A MINIMUM OF 1/2 INCH EDGE DISTANCE AND SCREW SPACING IS REQUIRED, UNLESS NOTED OTHERWISE ON THE DRAWINGS. SCREW PENETRATION THROUGH JOINED MATERIALS SHALL NOT BE LESS THAN THREE EXPOSED THREADS. SELECT SCREWS WITH AN ADEQUATE CUTTING TIP TO ACCOMMODATE THE TOTAL THICKNESS TO BE DRILLED. DRILLING MUST BE COMPLETED BEFORE THE THREADS ENGAGE THE MATERIAL. WHERE SCREW ATTACHMENTS ARE MADE TO FRAMING COMPONENTS OF DIFFERENT THICKNESSES, THE THINNEST COMPONENT MUST BE PENETRATED FIRST.
   C. MINIMUM WELD THROAT THICKNESS (t) MUST MATCH OR EXCEED THE BASE STEEL THICKNESS OF THE THINNEST CONNECTED PART UNLESS NOTED OTHERWISE. MINIMUM WELD 1/8", 60 ksi WELD MATERIAL, U.N.O.
   D. THE FRAMING CONTRACTOR MAY SUBSTITUTE FASTENERS OF EQUIVALENT SPECIFICATIONS AND LOAD CARRYING CAPACITIES. PRIOR TO INSTALLATION, SUBMIT FOR APPROVAL TO THE ENGINEER.

4. FINISHES:

   A. ALL MATERIAL TO BE GALVANIZED COATED IN ACCORDANCE WITH ASTM A525 G-60.
   B. FIELD WELDS ARE TO BE CLEANED AND PAINTED WITH ZINC RICH PAINT.

5. MISCELLANEOUS:

   A. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS OR AS REQUIRED FOR ANGULAR FIT AGAINST MEMBERS. MEMBERS SHALL BE HELD POSITIVELY IN PLACE UNTIL PROPERLY FASTENED.
   B. ALL FIELD CUTTING OF MEMBERS MUST BE DONE BY SAWING OR SHEARING. TORCH CUTTING OF COLD FORMED MEMBERS IS NOT PERMITTED.
   C. NO SPLICES IN STUDS, JOISTS, OR OTHER LOAD CARRYING MEMBERS MAY BE MADE WITHOUT PRIOR ENGINEERING REVIEW AND SPECIFIC DETAILS FOR ANY SUCH SPLICES.
   D. WHERE STEEL JOIST, STUD, AND/OR TRACK IS USED FOR A BEAM, GIRDER, OR HEADER APPLICATION, THE MEMBER SHALL BE CONTINUOUS AND HAVE UNPUNCHED WEBS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SPECIFY UNPUNCHED MEMBERS WHEN ORDERING MATERIALS. THE TRACK IS NOT PERMITTED TO BE SPLICED IN COMPOSITE MEMBERS (HEADERS, BOX BEAMS).
   E. PERMANENT MECHANICAL BRACING/BRIDGING:
   1.) INSTALL CONTINUOUS BRIDGING AT 4'-0" O.C. FOR VERTICAL LOAD BEARING STUD WALLS, U.N.O.
   2.) INSTALL CONTINUOUS BRIDGING AT 6'-0" O.C. FOR CURTAIN WALLS, U.N.O.
   F. AT LOAD BEARING WALLS, MECHANICAL BRIDGING SHALL BE TERMINATED AND CONNECTED TO STRUCTURAL STEEL MEMBERS, CONCRETE WALLS, OR MASONRY WALLS, UNLESS NOTED OTHERWISE.
   G. INSTALL DEFLECTION TRACKS AND/OR CLIPS AT ALL STUDWALL SUPPORT CONNECTIONS TO THE STRUCTURAL STEEL FRAMING, PRECAST CONCRETE FRAMING, CONCRETE FRAMES.
   H. TRACKS SHALL BE SECURELY ANCHORED TO FLOOR AND OVERHEAD STRUCTURES AS INDICATED AND AT THE ENDS OF EACH TRACK SECTION. TWO ANCHORS MINIMUM PER TRACK SECTION, ANCHORS SHALL BE INSTALLED NO MORE THAN 12" FROM TRACK END CONDITIONS.
   J. MULTIPLE MEMBER STUD COLUMNS ARE TO HAVE 1" OF FILLET WELD VERTICALLY SPACED AT 18" O.C., EACH SIDE OF MEMBER, FULL HEIGHT OF COLUMN.

JACK D. WALTERS & ASSOCIATES, INC.
PROJECT NO. 21-061
DESIGNED BY KLW
DRAWN BY MJN/KLW
PROGRESS DRAWINGS ___
OWNER REVIEW ___
PERMIT DRAWINGS X
CONSTRUCTION DRAWINGS X

REVISIONS
1
2
3

STATE OF OHIO
Karl L Walters E-60652
CIVIL
PROFESSIONAL ENGINEER

GREEN VALLEY DESIGN, LLC
112 Harcourt Rd., Suite 5
Mount Vernon, Ohio 43050
740-397-2282

A NEW COMMERCIAL BUILDING FOR:
MOUNT VERNON
OVERHEAD DOOR
810 N. SANDUSKY STREET
MT. VERNON, OH 43050

4/7/2021

zoning submission	☐
design development	☐
construction document	☒
bidding	☐
building permit submission	☒
not for construction	☐
record / archive	☐
In Progress	☐

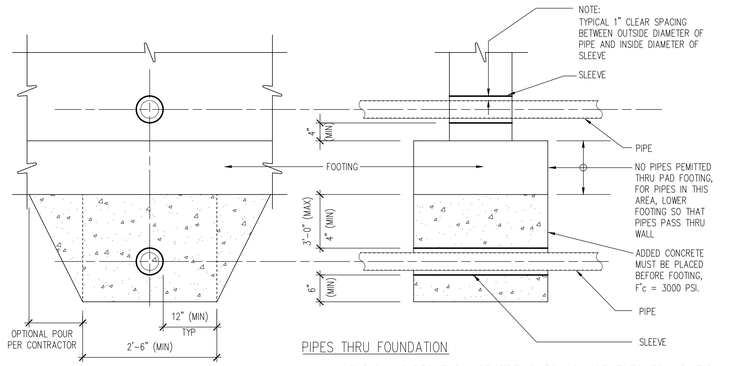
cadfile

job no.

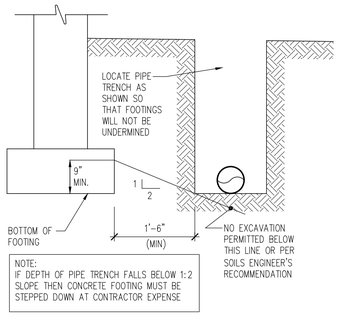
drawn
MJN

GENERAL STRUCTURAL NOTES

SD-1



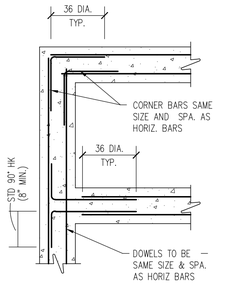
PIPES THRU FOUNDATION



PIPE AND TRENCH ADJACENT TO FOUNDATION

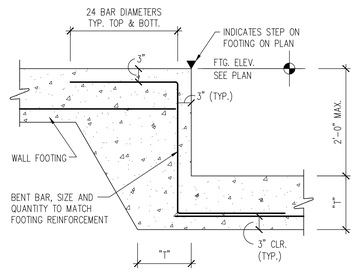
TYPICAL PIPES THRU OR TRENCHES ADJACENT TO FOUNDATION

TYPICAL DETAIL 3/4" = 1'-0" 1

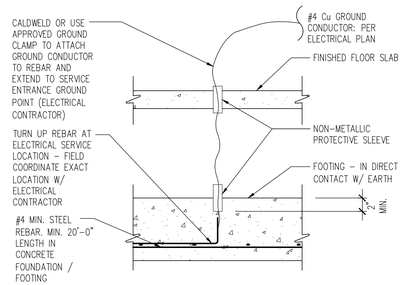


2 LAYERS OF REINF.

PLAN DETAIL 3/4" = 1'-0" 2

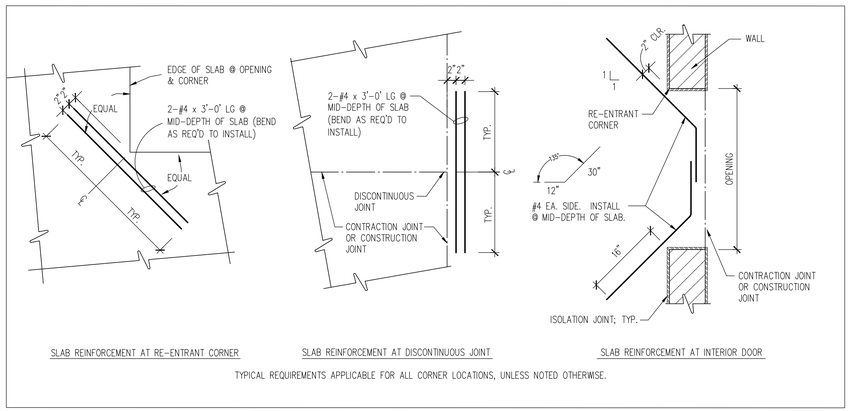


TYPICAL DETAIL 3/4" = 1'-0" 3



REQUIRED GROUNDING DETAIL – SEE ELECTRICAL PLAN FOR DESIGNATED LOCATION.

TYPICAL DETAIL NOT TO SCALE 4



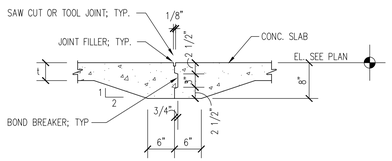
SLAB REINFORCEMENT AT RE-ENTRANT CORNER

SLAB REINFORCEMENT AT DISCONTINUOUS JOINT

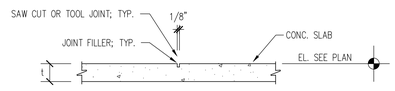
SLAB REINFORCEMENT AT INTERIOR DOOR

TYPICAL REQUIREMENTS APPLICABLE FOR ALL CORNER LOCATIONS, UNLESS NOTED OTHERWISE.

TYPICAL DETAIL 3/4" = 1'-0" 5



TYPICAL FLOOR CONSTRUCTION JOINT

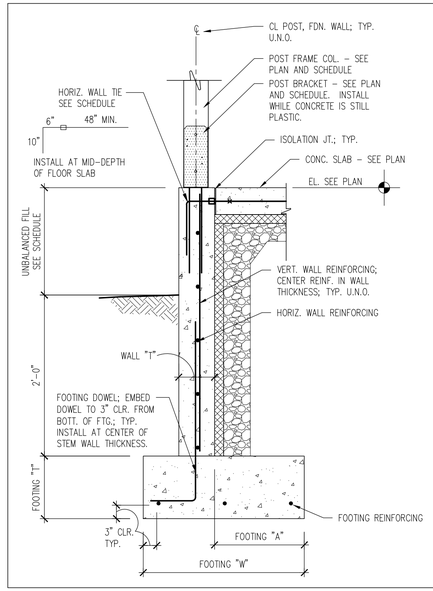


TYPICAL FLOOR CONTRACTION JOINT

GENERAL NOTES:
1. TYPICAL REQUIREMENTS APPLICABLE FOR ALL CONCRETE SLABS, UNLESS NOTED OTHERWISE.
2. SEE PLAN FOR CONCRETE SLAB THICKNESS AND REINFORCEMENT REQUIREMENTS.
3. SAWED JOINTS SHALL BE CUT WITHIN 8 HOURS OF SLAB POUR; TYP. JOINT DEPTH SHALL BE 1/3 OF SLAB DEPTH "t". JOINTS SHALL BE CUT STRAIGHT (TRUE).
4. APPLY BOND BREAKER TO COMPLETE SURFACE AREA OF CONSTRUCTION JOINT PRIOR TO 2ND CONCRETE PLACEMENT.
5. ALL JOINT SHALL BE FILLED WITH JOINT FILLER AND FINISHED SMOOTH. SEE SPECIFICATIONS FOR JOINT FILLER REQUIREMENTS.
6. ALTERNATE CONSTRUCTION JOINT MAY BE DIAMOND DOWEL SYSTEM OR EQUIVALENT. SUBMIT ALTERNATE TO ENGINEER FOR WRITTEN APPROVAL PRIOR TO INSTALLATION.

CONSTRUCTION JOINT REQUIREMENTS FOR 4" TO 7" SLAB.

TYPICAL DETAIL 3/4" = 1'-0" 7



SCHEDULE – RETAINING WALL

MARK	UNBALANCED FILL				
	0'-0" TO 1'-0"	1'-1" TO 2'-0"	2'-1" TO 3'-1"		
WALL "T"	8"	8"	8"		
FOOTING "T"	12"	14"	14"		
FOOTING "W"	18"	24"	36"		
FOOTING "A"	5"	12"	20"		
FOOTING DOWEL	#5 @ 32" O.C.	#5 @ 24" O.C.	#5 @ 16" O.C.		
FOOTING REINFORCING	(2) #4 CONT.	(3) #5 CONT.	(3) #5 CONT.		
VERT. WALL REINFORCING	#5 @ 32" O.C.	#5 @ 24" O.C.	#5 @ 16" O.C.		
HORIZ. WALL REINFORCING	(3) #5	(4) #5	(5) #5		
HORIZ. WALL TIE	NOT REQ'D	#5 @ 48" O.C.	#5 @ 24" O.C.		

NOTES:
1. THE CONSTRUCTION MANAGER IS SOLELY RESPONSIBLE TO COORDINATE FINAL SITE GRADING TO BE IN CONFORMANCE WITH THE SPECIFIED WALL CONSTRUCTION AND LIMITATION ON UNBALANCED FILL.
2. ALL FOOTING DIMENSIONS SPECIFIED IN SCHEDULE ARE PERMITTED TO HAVE FIELD TOLERANCE OF 2" MAXIMUM DIFFERENCE.
3. ALL GRADE DIMENSIONS SPECIFIED IN SCHEDULE ARE PERMITTED TO HAVE A FIELD TOLERANCE OF 4" MAXIMUM DIFFERENCE.
4. BOTT. OF FOOTING SHALL BE BELOW LOCAL FROST DEPTH REQUIREMENTS. EXTEND FOOTING DEPTH AS REQUIRED.

TYPICAL DETAIL 3/4" = 1'-0" 6

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A NEW COMMERCIAL BUILDING FOR:
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810 N. SANDUSKY STREET

4/7/2021
zoning submission ☐
design development ☐
construction document ☒
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PROJECT NO. 21-061
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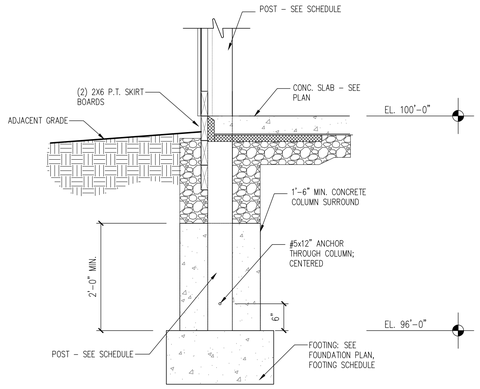
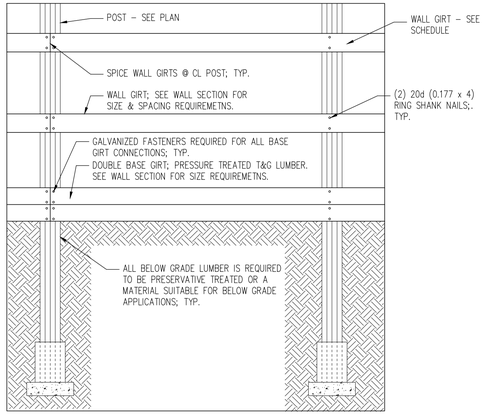
PROGRESS DRAWINGS —
OWNER REVIEW —
PERMIT DRAWINGS X
CONSTRUCTION DRAWINGS X

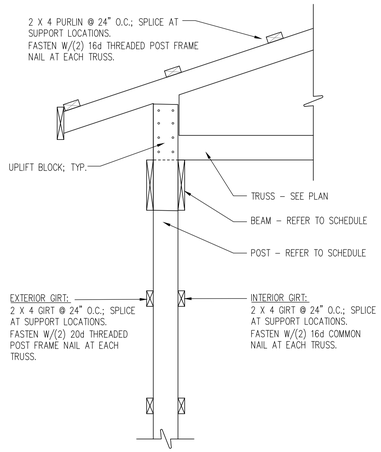
SD-2



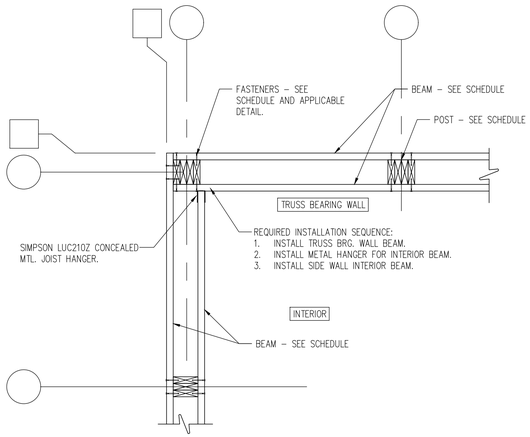
TYPICAL DETAIL 1
FOUNDATION DETAIL 3/4" = 1'-0"



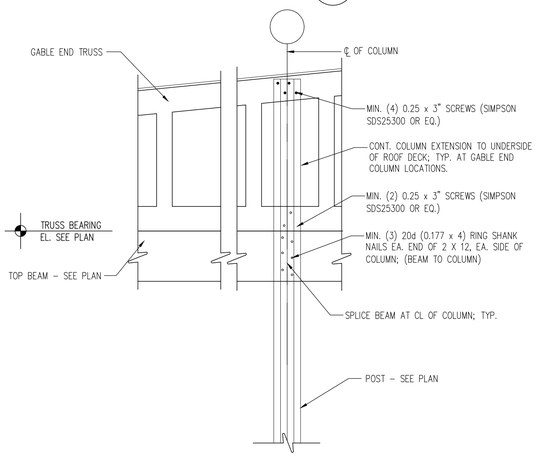
TYPICAL DETAIL 2
WALL ELEVATION 3/4" = 1'-0"



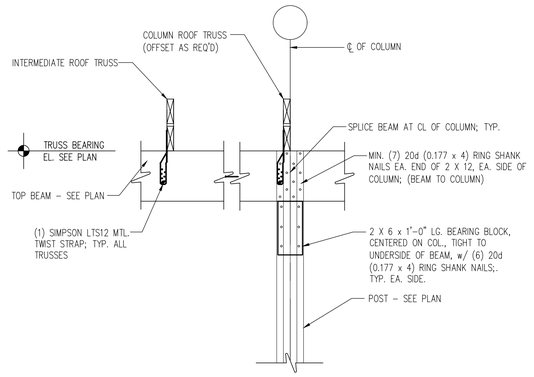
TYPICAL DETAIL 3
PURLIN AND GIRT REQUIREMENTS 3/4" = 1'-0"



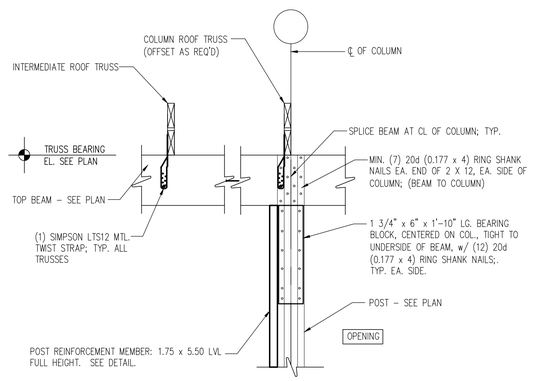
TYPICAL PLAN DETAIL 4
CORNER CONDITIONS 3/4" = 1'-0"



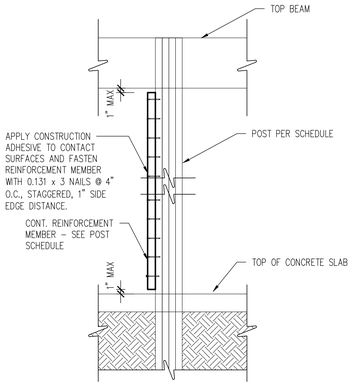
TYPICAL DETAIL 5



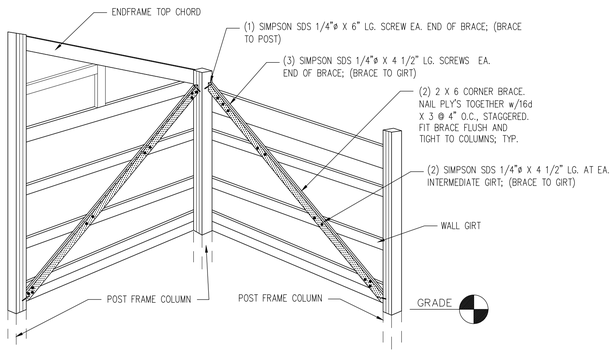
TYPICAL DETAIL 6
(2) 2 x 12 3/4" = 1'-0"



TYPICAL DETAIL 7
(2) LVL BEAM 3/4" = 1'-0"



TYPICAL DETAIL 8
3/4" = 1'-0"



LATERAL BRACING ELEVATION SW1
N.T.S.

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zoning submission	☐
design development	☐
construction document	☒
bidding	☐
building permit submission	☒
not for construction	☐
record / archive	☐
In Progress	☐

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job no.

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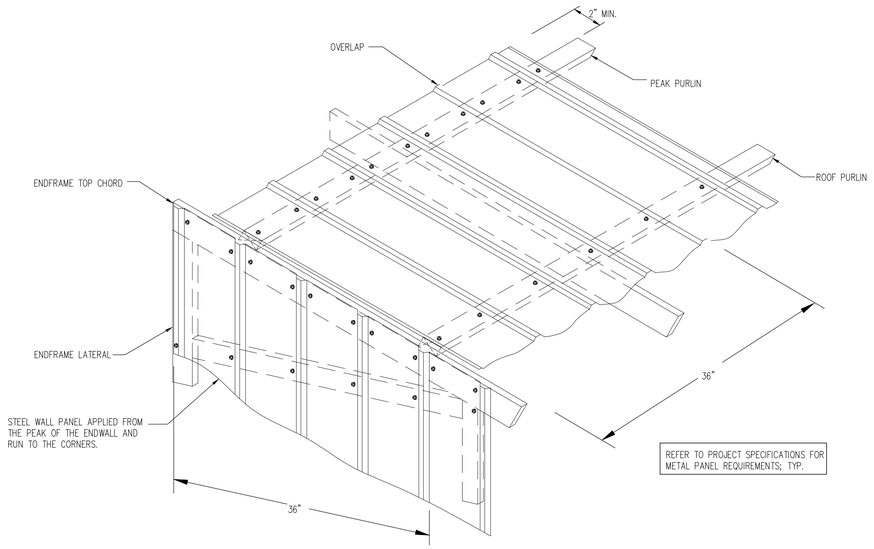
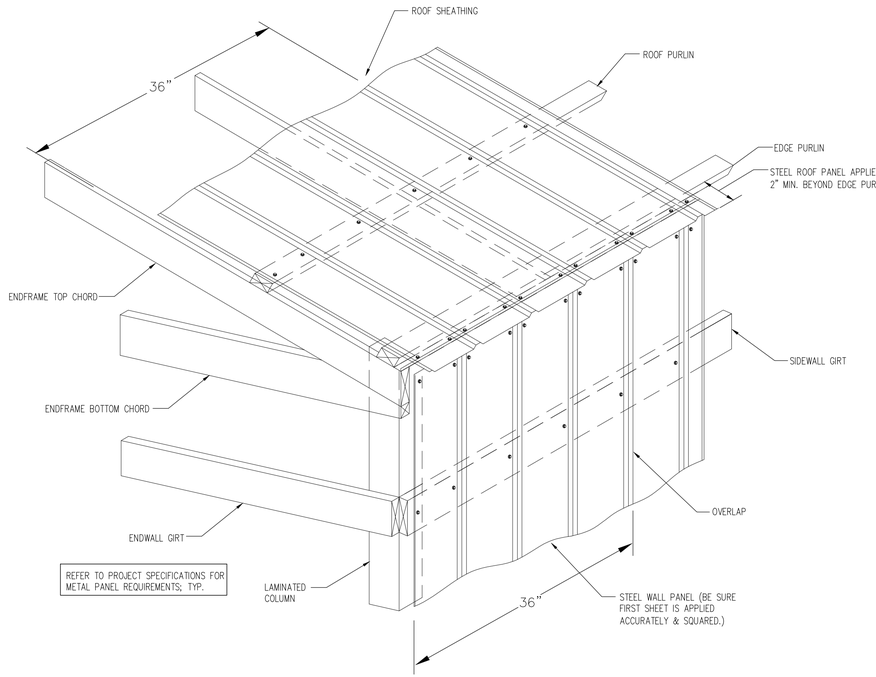
CONSTRUCTION DRAWINGS X



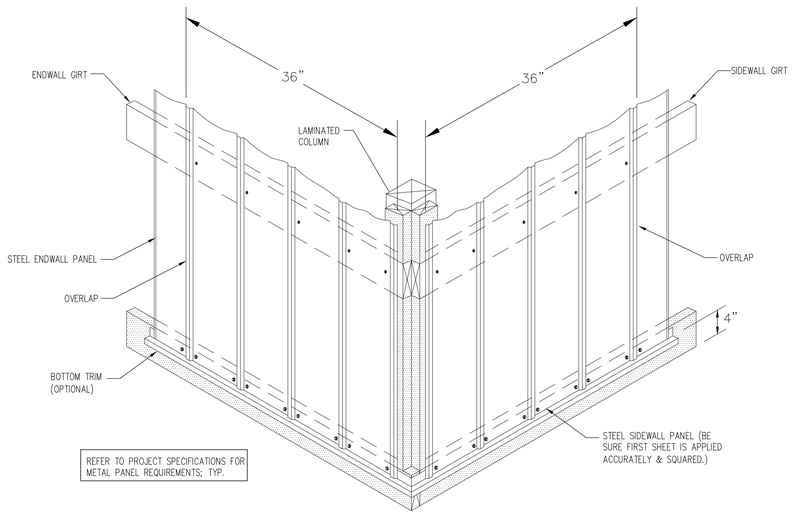
ROOF & ENDWALL STEEL APPLICATION @ GABLE PEAK & INTERMEDIATE

TYPICAL DETAIL 1
3/4" = 1'-0"



ROOF & SIDEWALL STEEL APPLICATION @ EAVE

TYPICAL DETAIL 2
3/4" = 1'-0"



WALL STEEL APPLICATION @ GRADEBOARD

TYPICAL DETAIL 3
3/4" = 1'-0"

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OWNER REVIEW	___
PERMIT DRAWINGS	X
CONSTRUCTION DRAWINGS	X

SD-4

prepared by
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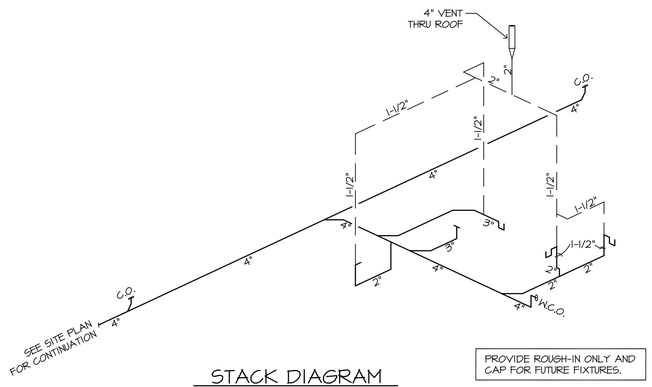
Delaware, Ohio 43015
740-363-0400

PLUMBING GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH ALL STATE AND LOCAL CODES AND STANDARDS.
2. PLUMBING CONTRACTOR SHALL SCHEDULE ALL INSPECTIONS REQUIRED FOR THEIR WORK.
3. PLUMBING CONTRACTOR TO PROVIDE ALL TRIM REQUIRED FOR A COMPLETE INSTALLATION INCLUDING STOP VALVES, TRAPS, DRAINS, AND ESCUTCHEON PLATES.
4. SANITARY AND VENT PIPING SHALL BE PER OPC CHAPTER 7 AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. ABOVE GROUND DRAINAGE AND VENT PIPE SHALL BE PER TABLE 702.1 WITH UNDERGROUND BUILDING DRAINAGE AND VENT PIPE PER TABLE 702.2. ALL FITTINGS SHALL BE PER TABLE 702.4.
5. GAS PIPING SHOWN ON THE DRAWINGS SIZED USING IFGC TABLE 402.4 (3). FOR SCH. 40 METALLIC PIPE, LESS THAN 2 PSI, PRESSURE DROP 0.5" WC. PROVIDE PIPING SUPPORTS PER IFGC CHAPTER4, GAS PIPING INSTALLATIONS, SECTION 415, PIPING SUPPORT INTERVALS, TABLE 415.1 SUPPORT OF PIPING.

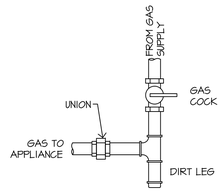
MECHANICAL GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH ALL STATE AND LOCAL CODES AND STANDARDS.
2. MECHANICAL CONTRACTOR SHALL SCHEDULE ALL INSPECTIONS REQUIRED FOR THEIR WORK.
3. DUCT WORK SHALL BE METAL PER THE MOST RECENT SMACNA STANDARDS AND OMC CHAPTER 6, DUCT SYSTEMS, SECTION 603, DUCT CONSTRUCTION AND INSTALLATION. ALL SUPPLY AND RETURN DUCTS SHALL BE SEALED AND INSULATED IN CONFORMANCE WITH SECTION C403.2.7 IECC-12 FOR CLIMATE ZONE 5.
4. PROVIDE ALL HANGERS AND SUPPORTS REQUIRED TO INSTALL DUCT. COORDINATE LOCATION OF DUCT WITH EXISTING STRUCTURAL MEMBERS, LIGHTS, AND ALL OTHER TRADES.
5. REFRIGERANT AND PVC VENT/ COMBUSTION AIR PIPING SHALL BE SIZED FOR LENGTH OF RUN PER MANUFACTURER'S RECOMMENDATIONS.
6. PROVIDE A PROGRAMMABLE THERMOSTAT WITH SET-BACK CONTROLS PER C403.2.4.3 IECC-12.



STACK DIAGRAM
N.T.S.

PROVIDE ROUGH-IN ONLY AND CAP FOR FUTURE FIXTURES.



GAS COCK/ DIRT LEG DETAIL
N.T.S.

AIR DEVICE SCHEDULE

D-1 12/8 DUCT MOUNTED DOUBLE DEFLECTION SUPPLY AIR REGISTER

R-1 16/16 DUCT MOUNTED RETURN GRILLE

EQUIPMENT SCHEDULE

AH-1 MIN. 92% AFUE HORIZONTAL GAS FIRED FURNACE RATED AT 1,000 CFM @ 0.5" SP, 120V, 1Ø, 60 hZ; HEATING = 60 MBH INPUT WITH NATURAL GAS; COOLING = 30 MBH AT STD ARI CONDITIONS WITH R-410a; EXTEND PVC VENT/ COMBUSTION AIR PIPING THRU WALL WITH CONCENTRIC TERMINATION KIT SIZED PER MANUFACTURER'S RECOMMENDATIONS FOR LENGTH OF RUN; EXTEND CONDENSATE DRAINS DOWN WALL AND TO OUTSIDE AT 18" ABOVE GRADE.

CU-1 AIR COOLED CONDENSING UNIT RATED AT 30 MBH TO MACH COOLING COIL, 24V, 1Ø, 60 hZ, REFRIGERANT PIPING SHALL BE SIZED PER MANUFACTURER'S RECOMMENDATIONS FOR LENGTH OF RUN.

OUTSIDE AIR SCHEDULE

AH-1: PER OMC 502.14, MOTOR VEHICLE OPERATION, EXCEPTION 3, MECHANICAL VENTILATION PER OMC 403 SHALL NOT APPLY TO MOTOR VEHICLE GARAGE WHERE ENGINES ARE OPERATED INSIDE THE BUILDING ONLY FOR THE DURATION NECESSARY TO MOVE THE MOTOR VEHICLES IN AND OUT OF THE BUILDING.

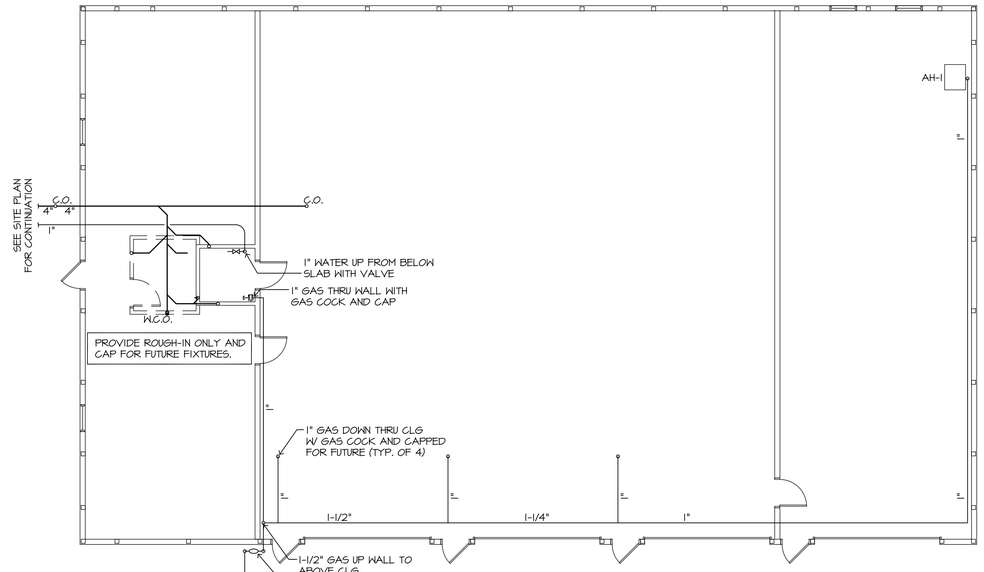
PER CHAPTER 4, VENTILATION, SECTION 402, NATURAL VENTILATION, 402.2 VENTILATION AREA REQUIRED, THE MINIMUM OPENABLE AREA TO THE OUTDOORS SHALL BE 4 PERCENT OF THE FLOOR AREA BEING VENTILATED.

AREA FOR NATURAL VENTILATION = 1,265 SQ. FT.
OPENABLE AREA REQUIRED = 1,265 SQ. FT. x 0.04 = 51 SQ. FT.
OPENABLE AREA PROVIDED:
(1 GARAGE DOOR (14'-0" x 14'-0")) = 196 SQ. FT.
(1 DOOR (3'-0" x 6'-8")) = 20 SQ. FT.
TOTAL OPENABLE AREA PROVIDED = 216 SQ. FT.

GARAGE AREA: PER OMC 502.14, MOTOR VEHICLE OPERATION, EXCEPTION 3, MECHANICAL VENTILATION PER OMC 403 SHALL NOT APPLY TO MOTOR VEHICLE GARAGE WHERE ENGINES ARE OPERATED INSIDE THE BUILDING ONLY FOR THE DURATION NECESSARY TO MOVE THE MOTOR VEHICLES IN AND OUT OF THE BUILDING.

PER CHAPTER 4, VENTILATION, SECTION 402, NATURAL VENTILATION, 402.2 VENTILATION AREA REQUIRED, THE MINIMUM OPENABLE AREA TO THE OUTDOORS SHALL BE 4 PERCENT OF THE FLOOR AREA BEING VENTILATED.

AREA FOR NATURAL VENTILATION = 3,400 SQ. FT.
OPENABLE AREA REQUIRED = 3,400 SQ. FT. x 0.04 = 136 SQ. FT.
OPENABLE AREA PROVIDED:
(3 GARAGE DOORS (14'-0" x 14'-0")) = 588 SQ. FT.
(3 DOORS (3'-0" x 6'-8")) = 60 SQ. FT.
TOTAL OPENABLE AREA PROVIDED = 648 SQ. FT.

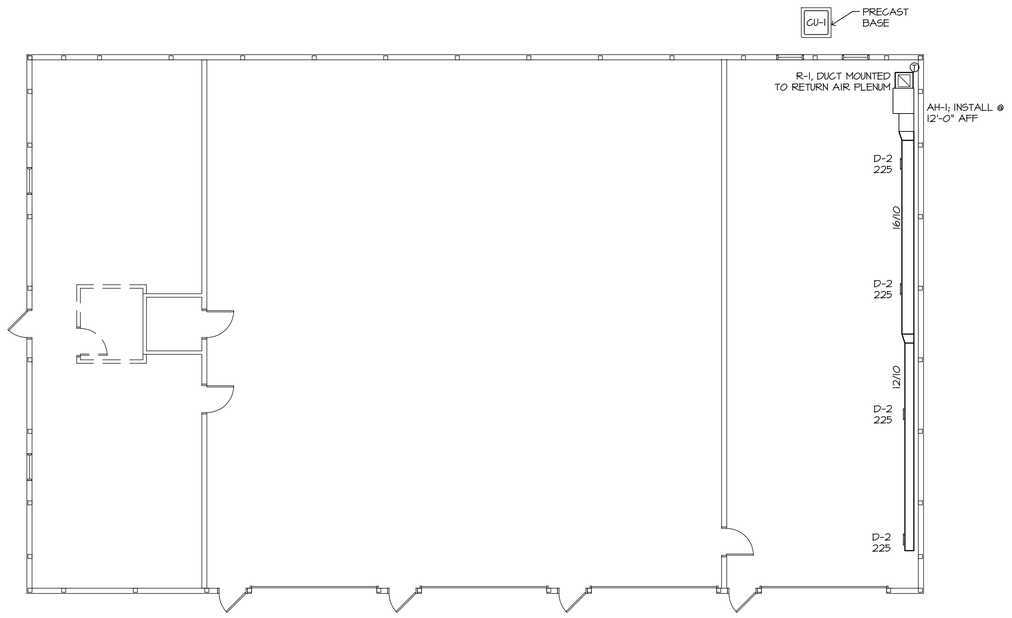


TOTAL CONNECTED GAS LOAD

AH-1: 60,000 INPUT x 1 FURNACE = 60,000
FUTURE UNIT HEATERS: 150,000 INPUT x 4 UNIT HEATERS = 600,000
TOTAL CONNECTED GAS LOAD = 660,000
GAS TO BE DELIVERED AT 7" W.C. TO EQUIPMENT.

PLUMBING PLAN
SCALE: 1/8"= 1'-0"

LEGEND
CW COLD WATER
HW HOT WATER
SAN SANITARY
VENT VENT
G GAS



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

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APRIL 27, 2021
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prepared by
HILL ENGINEERING
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Delaware, Ohio 43015
740-363-0400

ELECTRICAL LEGEND

SINGLE POLE SWITCH	$
RECEPTACLE	
JUNCTION BOX	J
30A WP DISCONNECT	
MOTOR RATED SWITCH	
WATER PROOF & GFI	WP
ABOVE COUNTER	ac
GROUND FAULT INTERRUPTER	gfi

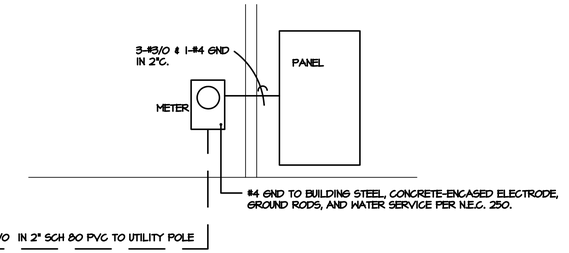
LIGHT FIXTURE SCHEDULE

MARK	MANUFACTURER & MODEL	LAMPS
	COOPER HBLED LD5 125E WA UNV LB40	71w LED
	COOPER 4NLW4040C	38w LED
	COOPER 4SNLED LD4 45L5LW UNV LB40I	41w LED
O1	COOPER XTOR 3A W/ PHOTOCELL	26w LED
	COOPER APCHT W/ APRI REMOTE	LED
	COOPER APEL	LED
$	1-10v LED DIMMER W/ ON-OFF SWITCH	
	PIR WALL MOUNT VACANCY DETECTOR W/ SWITCH. COOPER ONW-D-1001-MV	

EXIT/EMERGENCY FIXTURES SHALL HAVE 90 MIN. EMERGENCY BATTERY

ELECTRICAL GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE NATIONAL ELECTRICAL CODE.
2. CONNECT ALL EMERGENCY AND EXIT LIGHTS TO LOCAL CIRCUITS AHEAD OF SWITCHING.
3. ALL WIRING SHALL BE COPPER TYPE THHN OR THWN MINIMUM SIZE #12 AND SHALL BE RUN IN EMT OR RIGID CONDUIT. MC CABLE SHALL BE ACCEPTABLE FOR SWITCH AND RECEPTACLE WIRING IN OFFICE AREAS.
4. LABEL INCOMING SERVICE PER N.E.C. 110.16 & N.E.C. 110.24(A).
5. RUN EXTERIOR LIGHTING CIRCUITS THROUGH PHOTOCELLS.
6. RUN 3-#2 & 1-#6 GND IN 1-1/4"C. TO PANEL B.



ELECTRIC RISER

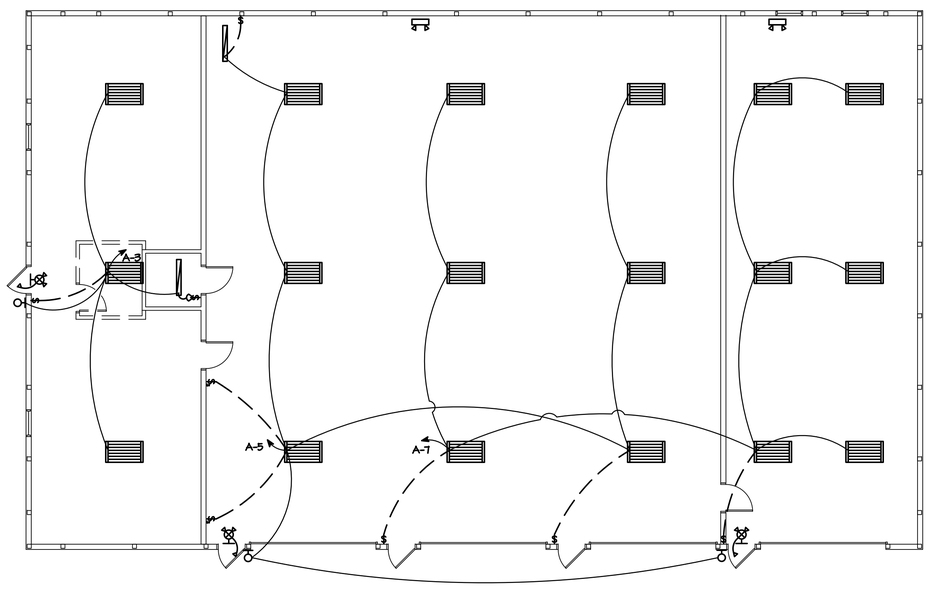
NO SCALE

PANEL A

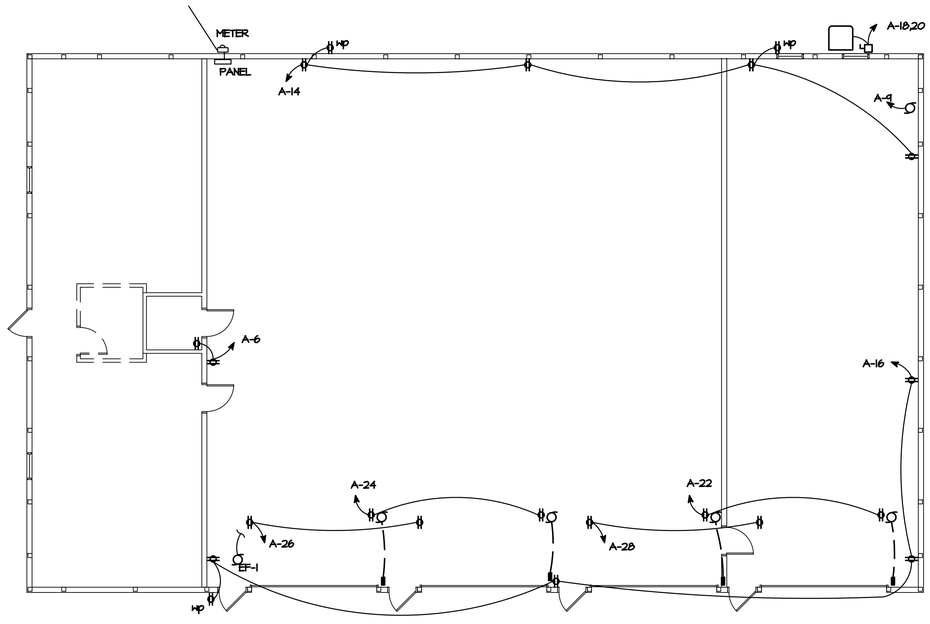
SURFACE MOUNTED 120/240 VOLT 1Ø 3 WIRE 60 HZ
200 AMP MAIN BREAKER W/ SOLID NEUTRAL & GROUND- 10,000 A.I.C.

LOAD	CB/P	CKT	WIRE	WIRE	CKT	CB/P	LOAD
SPARE	20/1	1	12	12	2	20/1	SPARE
LIGHTS	20/1	3	12	12	4	20/1	SPARE
LIGHTS	20/1	5	12	12	6	20/1	RECEPT
LIGHTS	20/1	7	12	12	8	20/1	SPARE
FURNACE	20/1	9	12	12	10	20/1	SPARE
SPARE	20/2	11	12	12	12	20/1	RECEPT
		13	12	12	14	20/1	RECEPT
SPARE	20/1	15		12	16	20/1	RECEPT
SPARE	20/1	17		10	18	25/2	COND UNIT
SPARE	20/1	19		10	20		
SPARE	20/1	21		12	22	20/1	OH DOOR
SPARE	20/1	23		12	24	20/1	OH DOOR
SPACE		25		12	26	20/1	UNIT HEATER
		27		12	28	20/1	UNIT HEATER
		29			30		SPACE
		31			32		
		33			34		
		35			36		
		37			38		
		39			40		
		41			42		

PANEL LOAD = 17.5 KW = 73 A @ 240V, 1Ø



MAIN LIGHTING
SCALE: 1/8"= 1'-0"



MAIN ELECTRICAL
SCALE: 1/8"= 1'-0"

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GREEN VALLEY DESIGN, LLC
112 Harcourt Rd., Suite 5
Mount Vernon, Ohio 43050
740-397-2282

A NEW COMMERCIAL BUILDING FOR:
MOUNT VERNON
OVERHEAD DOOR
MOUNT VERNON, OH 43050
810 N. SANDUSKY ST.

APRIL 27, 2021
zoning submission
design development
construction document ■
bidding
building permit submission ■
not for construction
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