PROPOSAL PACKAGE FOR

WEATHERSFIELD TOWNSHIP MULTI-JURISDICTIONAL CENTER
1388 Stewart Street, Mineral Ridge, Ohio 44440

for the

Weathersfield Township Board of Trustees
1451 Prospect Street
Mineral Ridge, OH 44440

Contact: David Rouan, Township Administrator
Telephone: 330-652-6326
drouan@weathersfieldtwp.com

The Design Professional for the

Project is:

FMC architects
Frank M. Castrovillari,
President
7675 Harley Hills Drive
North Royalton, OH 44133
FrankC@FMCArchitectsLLC.com
(cell) 216.287.8547

October 19, 2023

CONTENTS

LEGAL NOTICE TO BIDDERS

Sealed bids will be received by the Weathersfield Township Board of Trustees, 1415 Prospect Street, Mineral Ridge, OH 44440 **until 2:00 PM, Thursday November 30, 2023,** for a single prime contract for the Multi-Jurisdictional Center in accordance with Drawings & Specifications prepared by FMC Architects, when they will be opened and read. Submit all questions to David Rouan, Township Administrator, 330-652-6326 drouan@weathersfieldtwp.com.

A pre-bid meeting is scheduled for Tuesday November 14, 2023 at 9:00 AM at the project site, 1388 Stewart Street, Mineral Ridge, Ohio 44440.

Contract Documents are available electronically in pdf format at www.weathersfieldtwp.org

The Contractor is responsible for scheduling the Project, coordinating the Subcontractors, and providing other services identified in the Contract Documents. Bidders must comply with the FEDERAL prevailing wage rates pursuant to the Davis Bacon Act for Public Improvements on this project.

DOMESTIC STEEL USE REQUIREMENTS AS SPECIFIED IN OHIO REVISED CODE SECTION 153.011 APPLY TO THIS PROJECT. COPIES OF OHIO REVISED CODE SECTION 153.011 CAN BE OBTAINED FROM ANY OF THE OFFICES OF THE OHIO FACILITIES CONSTRUCTION COMMISSION.

All bids must be accompanied by a Bid Guaranty and Contract Bond for the full amount of the bid or a certified check, cashier's check, or an irrevocable letter of credit in an amount equal to 10% of the bid, as described in the Instructions to Bidders.

No Bidder may withdraw its bid within 60 days after the bid opening. The Owner reserves the right to waive irregularities in bids, to reject any or all bids, and to investigate contractor qualifications and experience as necessary to determine the lowest and best bidder.

This notice is also published on www.publicnoticesohio.com and at the township website www.weathersfieldtwp.org.

David Rouan, Administrator
1415 Prospect Street, Mineral Ridge, OH 44440
330-652-6326
drouan@weathersfieldtwp.com

Publish Dates: October 30, 2023, November 6, 2023

INSTRUCTIONS TO BIDDERS

1. EXAMINATION OF DOCUMENTS AND SITE CONDITIONS

1.1 Each Bidder shall carefully review the site and all of the Contract Documents, including, but not limited to, the Instructions for Submitting a Bid, Bid Form, Owner-Contractor Agreement, the Drawings and the Specifications.

1.2 If a Bidder finds any perceived ambiguity, conflict, error, omission, or discrepancy within the Contract Documents, including the Drawings, Specifications, and Addenda, or between any of the Contract Documents and Applicable Law, the Bidder shall submit a written Request for Interpretation ("RFI") to the Design Professional for an interpretation or clarification at least four (4) days prior to the bid opening. Any response interpreting the Contract Documents will be posted at www.weathersfieldtwp.org . **The Bidder is responsible for checking the website for any clarifications or Addenda issued.** The Owner will not be responsible for any other explanation or interpretation of the proposed documents.

1.3 The successful Bidder shall not be compensated for a claim alleging insufficient data, incomplete, ambiguous, conflicting, or erroneous Contract Documents or assumed conditions regarding the nature, extent, or character of the Work, if the Bidder did not submit a related RFI prior to the bid opening. **No allowance will be made subsequently for any omission, error, or negligence of the Bidder selected to perform the Work.**

1.4 The Bidder is encouraged to attend the pre-bid meeting at the site, where the Design Professional and the Owner's Representative will receive questions regarding the Contract Documents. Failure of a Bidder to attend the pre-bid meeting, which failure to attend results in the Bidder not fully being familiar with the existing conditions and Project Requirements, shall not be considered a basis for additional compensation to the successful Bidder for the Work. Each Bidder will be deemed to have actual knowledge of all information provided or discussed at the pre-bid meeting.

1.5 All Bidders shall be familiar with the existing conditions in the material and labor markets, as well as the conditions related to the Work, and the fact that a bid is submitted will be construed by the Owner as an agreement by the Bidder to carry out the improvements in full conformance with the Specifications and other Contract Documents, notwithstanding the existing conditions.

1.6 It is the purpose and intent of the Contract Documents that a complete job be accomplished. It is the Bidder's responsibility to include in its bids all costs necessary to provide labor and materials for the Work in their proposal, including incidentals, whether or not specifically called for.

2. OWNER & DESIGN PROFESSIONAL

2.1 The Owner is the Weathersfield Township Board of Trustees, 1415 Prospect Street, Mineral Ridge, OH 44440.

2.2 The Owner's Representative is David Rouan, Township Administrator, 330-652-6326 drouan@weathersfieldtwp.com.

2.3 Drawings and Specifications for the Project were prepared by the Design Professional, Frank M. Castrovillari, FMC architects, 7675 Harley Hills Drive, North Royalton, OH 44133 (216.287.8547) FrankC@FMCArchitectsLLC.com.

3. PROJECT: WEATHERSFIELD TOWNSHIP MULTI-JURISDICTIONAL CENTER

3.1 The Project consists of all labor, materials, and services necessary for the timely and proper completion of construction of the **Weathersfield Township Multi-Jurisdictional Center, 1388 Stewart Street, Mineral Ridge, OH 44440** as specified in the Contract Documents.

3.2 Federal Funds are being used in this Project, and Bidders must comply with the **FEDERAL**

prevailing wage rates pursuant to the Davis Bacon Act for Public Improvements on this Project.

3.3 This Project is being bid and constructed pursuant to the Township's authority under R.C. 505.50 and 505.26.

3.4 The estimated construction cost for the Project is:

Base Bid:	$800,000.00
Alternate 1	Add $80,000.00 (alternative roof plan)
Alternate 2	Add $7,000.00 (dropped ceiling in lieu of GTO Board)
Alternate 3	Deduct $50,000.00 (plywood deck w/asphalt in lieu of metal roof)
Alternate 4	Add $30,000.00 (allowance labor & material for kitchen millwork)

4. PRE-BID MEETING

4.1 A pre-bid meeting is scheduled for **Tuesday November 14, 2023 at 9:00 AM** at the project site, 1388 Stewart Street, Mineral Ridge, Ohio 44440. Bidders are strongly encouraged to attend this meeting.

5. WORK

5.1 The Project will be awarded as a single general contract.

5.2 All bids must be submitted on the "Bid Form" furnished with the Contract Documents.

5.3 The Bidder shall submit with the Bid a Non-Collusion Affidavit, a Statement of Qualifications and References form, and other documents indicated as required in these instructions.

6. CONTRACT DOCUMENTS. The Contract Documents include the following:

1) Legal Notice
2) Instructions to Bidders
3) Bid
4) Addenda
5) Bidder Qualifications and References
6) Bid Guaranty and Contract Bond Form
7) Owner-Contractor Agreement
8) Contractor's Personal Property Tax Affidavit
9) Non-collusion Affidavit
10) Davis-Bacon Compliance Affidavit
11) Substitution Request Form
12) Davis-Bacon Act Contract Terms and Wage Rates
13) Project Drawings and Specifications

7. DESIGN STANDARDS AND SUBSTITUTIONS

7.1 The Contract Documents may list components produced by specific manufacturers to denote kind, quality, or performance requirements. Each bid will be based on these brands, which may be referred to in the Contract Documents as Standards

7.2 Any Bidder wishing to obtain approval to bid non-specified products shall submit a written request, using the Substitution Request Form included in the Specifications, to the Design Professional a minimum of five (5) working days before the bid date and time. The Contractor shall include the name of the material or equipment for which it is to be substituted and a complete

description of the proposed substitution, including the name of the proposed manufacturer and/or product and a complete description of the proposed product including the manufacturer's name and model number or system proposed, drawings, product literature, performance and test data, color selections or limitations, and any other information necessary for evaluation. Include a statement including any changes in other materials, equipment, or other work that would be required if the proposed product is incorporated in the materials, equipment, or other work that would be required if the proposed product is incorporated in the work. The burden of proof of the merit of the proposed product is on the bidder proposing the substitution. The Design Professional's decision of approval of a proposed substitution will be final.

The following will be cause for rejection of a proposed substitution:

1. Requests submitted by subcontractors, material suppliers, and individuals other than Prime Contractors;
2. Requests submitted without adequate documentation;
3. Requests received after the specified cut-off date.

7.3. If the Design Professional approves a product submission, the approval will be included in an Addendum and bidders may include the pricing of this product in their bid. Bidders shall not rely on approvals made in any other manner.

7.4 In proposing a non-specified product or a substitution, the Bidder represents and warrants that the proposed product will not result in any changes to the Project, including changes to the Work of other contractors, or any decrease in the performance of any equipment or systems to be installed in the Project and agrees to pay any additional costs incurred by the Owner and the Owner's consultants as a result of a non-specified or substitute product that is accepted.

7.5 Following the award of the Contract, there shall be no substitutions for specified products, except pursuant to a Change Order. The Owner in its sole discretion may decline to consider a substitution for a Change Order.

7.6 DOMESTIC STEEL USE REQUIREMENTS AS SPECIFIED IN OHIO REVISED CODE SECTION 153.011 APPLY TO THIS PROJECT. COPIES OF OHIO REVISED CODE SECTION 153.011 CAN BE OBTAINED FROM ANY OF THE OFFICES OF THE OHIO FACILITIES CONSTRUCTION COMMISSION.

8. ALTERNATES

8.1 If an Alternate is listed on the Bid Form, the Bidder shall fill in the applicable blank with the amount bid on the alternate. The Owner reserves the right to accept or reject any or all bids for Alternates, in whole or in part, and in any order.

8.2 Failure to make a bid on any Alternate shall cause the Bid to be rejected as non-responsive if that Alternate is selected. If that Alternate is not selected, failure to bid on the alternate shall not by itself render the bid non-responsive.

9. ADDENDA

9.1 The Owner reserves the right to issue Addenda changing, altering, or supplementing Contract Documents prior to the time set for receiving bids. The Design Professional will issue responses to Requests for Information to respond to bidders' questions, to change, alter, or supplement the Contract Documents. Any Addendum, response to RFI, or explanation, interpretation, correction or modification of the Contract Documents will be issued in writing and posted at www.weathersfieldtwp.org which will become a part of the Contract Documents.

9.2 Bidders must submit questions to the Design Professional or the Owner in sufficient time to allow a response, at least four (4) days prior to the bid opening.

9.3 All Addenda and responses to requests for information will be posted on the township

website www.weathersfieldtwp.org Bidders are responsible for reviewing all postings on the website.

9.4 Each Bidder is instructed to carefully read and review the Contract Documents and immediately bring to the attention of the Design Professional any error, omission, inconsistency, or ambiguity therein.

10. BONDS

10.1 Bid Guaranty: The bid shall be accompanied by Bid Guaranty and Contract Bond for the full amount of the bid issued by a Surety licensed to do business in Ohio, or a certified check, cashier's check, or an irrevocable letter of credit in an amount equal to 10% of the bid.

10.2 Contract Bond: The successful Bidder who, as a Bid Guaranty, submits a certified check, cashier's check, or irrevocable letter of credit in an amount equal to 10% of the bid, shall furnish a Contract Bond in the form Contract Bond included in the Bid Documents in an amount equal to 100% of the Contract Sum.

11. AWARD OF CONTRACT

11.1 All bids shall remain open for acceptance for sixty (60) days following the day of the bid opening, but the Owner may, in its sole discretion, release any bid and return the Bid Guaranty prior to that date. The Bid Guaranty shall be subject to forfeiture, as provided in the Ohio Revised Code, if a bid is withdrawn during the period the bids are being held.

11.2 The Owner reserves the right to reject any, part of any, or all bids and to waive or to allow any Bidder a reasonable opportunity to cure a minor irregularity or technical deficiency in a Bid, provided the irregularity or deficiency does not affect the bid amount, or otherwise give the Bidder a competitive advantage.

11.3 The Owner will award a single contract for the Project.

11.4 Subject to the right of the Owner to reject any or all bids, the Owner will award the Contract for the Work to the Bidder submitting the lowest and best bid, taking into consideration accepted alternates. The award of the Contract to the lowest and best bidder will only be made pursuant to a vote by the Weathersfield Township Trustees. No property interest in the contract is created until the agreement is signed by the Owner.

11.5 In evaluating bids, the Owner may consider the qualifications of the Bidder. The Owner may conduct such investigations as are deemed necessary to establish the qualifications of the Bidder and its subcontractors and suppliers. The Owner may consider the qualifications of the Bidders, including but not limited to work history, prior experience with similar work, history of successful and timely completion of projects, equipment and facilities, adequacy of Bidder's workforce, and Bidder's compliance with federal, state and local laws and regulations.

11.6 By submitting a Bid, the Bidder agrees that the Owner's determination of the contractor that submitted the lowest and best bid will be final and conclusive, and that if the Bidder, or any person at the Bidder's urging, directly or indirectly challenges such determination in any legal proceeding and such challenge is not successful, the Bidder will reimburse the Owner for all legal fees and expenses incurred by the Owner that are related to such challenge.

12. CONDITIONS PRECEDENT TO EXECUTION OF CONTRACT

12.1 Notice of Proposed Award of Contract. The Owner will notify the Bidder determined to have submitted the lowest and best bid. The successful Bidder must submit the following items to the Owner within 10 days of notice of proposed award of the Contract:

1. Contract Bond, and to support the Bond, a Certificate of Compliance issued by the Ohio

Department of Insurance, showing the Surety is licensed to do business in the state of Ohio, if a Bid and Contract Bond was not provided with the Bid.

2. The list of all proposed Subcontractors, suppliers, and manufacturers. After approval by the Owner of the list of proposed Subcontractors, suppliers, and manufacturers submitted by the successful Contractor, the list may not be changed unless written approval of the change is authorized by the Owner.

3. Ohio Workers' Compensation Certificate

4. Certificate of Compliance with Affirmative Action Programs, issued by the Equal Opportunity Coordinator. Available through the Ohio Business Gateway: http://business.ohio.gov/efiling/

5. Certificate of Insurance showing Liability Insurance Policies as required under the contract. The Contractor must provide protection from claims which may arise out of or result from operations under the Contract, and for which the Contractor and/or Owner may be legally liable, whether such operations are performed by the Contractor or by a Subcontractor or by anyone directly employed by any of them or by anyone for whose acts or omissions they may be held liable.

6. If a Bidder is a corporation or an LLC, a Certificate of Good Standing from the Ohio Secretary of State. If the Bidder is a foreign corporation or LLC (e.g., not incorporated under the laws of Ohio) it must submit a certificate of registration showing the right of the Bidder to do business in the state of Ohio.

7. Proof of current licensing pursuant to applicable law for the Contractor or its Subcontractors for plumbing, electrical, and heating, ventilating and air conditioning ("HVAC") Work.

8. Required Notice of No Unresolved Findings for Recovery by the Auditor of State under ORC Section 9.24.

9. Personal Property Tax Affidavit given under Revised Code Section 5719.024.

10. Any other documents identified in the Contract Documents for submission with the signed agreement.

11. The failure to submit requested information on a timely basis may result in the determination that the Contractor is not the best qualified company to perform the work.

12. TAX EXEMPTION

The Owner is a political subdivision of the State of Ohio and is exempt from taxation under the Ohio Sales Tax and Use Tax Laws. Building materials that the successful Bidder purchases for incorporation into the Project will be exempt from state sales and use taxes if the successful Bidder provides a properly completed sales tax exemption certificate, executed by the successful Bidder and the Owner, to the vendors or suppliers when the materials are acquired. The Owner will provide a completed and signed certificate to the successful bidder.

13. PROJECT SCHEDULE

The site will be available for site preparation work to begin on or around January 2, 2024 and work is to be complete by June 30, 2024.

14. EQUAL EMPLOYMENT OPPORTUNITY/NONDISCRIMINATION

15.1 Minority, female, and disadvantaged businesses will be afforded full opportunity to submit proposals, and contractors will not be discriminated against on the grounds of race, color, religion, sex, age, handicap, ancestry, or national origin in the consideration of an award. The successful contractor will include a provision in any subcontract for the Project a requirement that each of its subcontractors not discriminate against any employee or applicant for employment on the basis of

race, religion, color, sex, age, handicap, ancestry, or national origin in any actions that it takes. Such actions include, without limitation, employment, upgrading, demotion, transfer recruitment or recruiting advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeships.

15.2 The contract document to be executed by the successful Bidder contains nondiscrimination provisions as required by 41 C.F.R. Part 60-1.4(b).

END OF INSTRUCTIONS FOR SUBMITTING BID

BID FORM

WEATHERSFIELD TOWNSHIP MULTI-JURISDICTIONAL CENTER

Project Name and Location: WEATHERSFIELD TOWNSHIP MULTI-JURISDICTIONAL CENTER
1388 Stewart Street
Mineral Ridge, Ohio 44440

Contractor: _____

The undersigned, having read and examined the site and the Contract Documents, including without limitation the Drawings and Specifications prepared by the Architect for the above-referenced Project, including Addenda and Responses to Request for Information posted on www.weathersfieldtwp.org submits its bid for the Project.

The undersigned Bidder proposes to perform all Work for the applicable Contract, in accordance with the Contract Documents, for the following sum(s):

WEATHERSFIELD TOWNSHIP MULTI-JURISDICTIONAL CENTER

1. **SINGLE GENERAL CONTRACT:**
   BASE BID: TOTAL ALL LABOR AND MATERIALS, for the sum of

   $_____

   Sum in words: _____

2. **ALTERNATE 1 – ALTERNATIVE ROOF PLAN**

   If Alternate 1 is accepted, **ADD** TO BASE BID: $ _____

   Sum in words: _____

3. **ALTERNATE 2 – DROPPED CEILING IN LIEU OF GTO BOARD**

   If Alternate 2 is accepted, **ADD** TO BASE BID: $ _____

   Sum in words: _____

4. **ALTERNATE 3 – PLYWOOD DECK W ASPHALT SHINGLES IN LIEU OF METAL ROOF**

   If Alternate 3 is accepted, **DEDUCT** FROM BASE BID: $ _____

   Sum in words: _____

5. **ALTERNATE 4 – ALLOWANCE – LABOR & MATERIAL FOR KITCHEN MILLWORK**

   If Alternate 4 is accepted, **ADD** TO BASE BID: $ _____

   Sum in words: _____

BIDDER'S CERTIFICATION

The Bidder submits this Bid with the following representations which are material and not mere recitals:

1. The Bidder has read and understands the Contract Documents and agrees to comply with all requirements of the Contract Documents, regardless of whether the Bidder has actual knowledge of the requirements and regardless of any statement or omission made by the Bidder which might indicate a contrary intention.
2. The Bidder represents that the Bid is based upon the Basis of the Drawings and Specifications, including Design Standards specified by the Contract Documents.
3. The Bidder has visited the Site, become familiar with local conditions, and has correlated personal observations with the requirements of the Contract Documents. The Bidder has no outstanding questions regarding the interpretation or clarification of the Contract Documents.
4. The Bidder will not, and it will ensure that its Subcontractors, regardless of tier, will not, discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. Such action includes but not be limited to the following: employment, upgrading, demotion, transfer, recruitment or recruiting advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of nondiscrimination. The Contractor will and will ensure that each of its Subcontractors will, regardless of tier, state in all solicitations or advertisements for employees placed by them or on their behalf that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, or national origin.
5. The Bidder and each person signing on behalf of the Bidder certifies, and in the case of a Bid by a joint venture each member thereof certifies as to such member's entity, under penalty of perjury, that to the best of the undersigned's knowledge and belief: (a) the Base Bid, any Unit Prices and any Alternate bid in the Bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition as to any matter relating to such Base Bid, Unit Prices or Alternate bid with any other Bidder; (b) unless otherwise required by law, the Base Bid, any Unit Prices and any Alternate bid in the Bid have not been knowingly disclosed by the Bidder and shall not knowingly be disclosed by the Bidder prior to the bid opening, directly or indirectly, to any other Bidder who would have any interest in the Base Bid, Unit Prices or Alternate bid; (c) no attempt has been made or shall be made by the Bidder to induce any other Person to submit or not to submit a Bid for the purpose of restricting competition.
6. The Bidder understands that Federal Funds are being used in this Project, and the Bidder will comply with the FEDERAL prevailing wage rates pursuant to the Davis Bacon Act for Public Improvements on this Project.
7. The Bidder understands that the Copeland Anti-Kickback Act applies to this Project.
8. The Bidder shall execute the Contract Form with the Owner if a Contract is awarded on the basis of this Bid, and if the Bidder does not execute the Contract, the Bidder and the Bidder's Surety are liable to the Owner as provided by law.
9. The Bidder certifies that the upon the execution of the Contract the Bidder shall provide a Drug-Free workplace.
10. The Bidder agrees to furnish any information requested by the Owner or the Design Professional to evaluate the qualifications of the Bidder.
11. The Bidder represents that the Bidder is not subject to a finding for recovery under ORC Section 9.24 or that Bidder has taken the appropriate remedial steps required under ORC Section 9.24 or otherwise qualifies under this section.
12. The Bidder acknowledges that, by signing the Bid Form on the Bidder Signature and Information Form on the following page, it is signing the actual Bid and when submitted as a part of its bid packages, shall serve as the Bidder’s authorization for the further consideration in the bidding and contract process.

BIDDER SIGNATURE AND INFORMATION

BIDDERS NAME (PRINT): _____

Bidder's Authorized Signature: _____

Please print or type the following:

Name of Bidder's Authorized Signatory _____

Title: _____

Company Name: _____

Mailing Address: _____

_____

Telephone Number: _____

E-Mail Address: _____

Type of Business (circle one):

Corporation Partnership Sole proprietorship Limited liability corporation

Where Incorporated: _____

Federal Tax Identification Number: _____

BIDDER QUALIFICATIONS AND REFERENCES

BIDDER'S NAME (PRINT): _____

The Bidder is required to provide the following information regarding the Bidder's experience and qualifications for providing the services included in the proposed Contract, to enable the Owner to evaluate the Bidder's responsibility, relevant experience, skill and financial standing.

Organization:

1. How many years has your organization been in business under its present business name? _____
2. Under what other or former names has your organization operated? _____
   _____
3. Who are the principals of your Business?_____

Experience:

4. What type of work does your Business normally perform with its own forces? _____
   _____
5. Has your organization ever failed to complete any work? _____
6. What is the average dollar amount of construction work your organization has performed annually over the last five years? _____.
7. Within the last five (5) years has your organization or any of its officers initiated any Claims, had any Claims initiated against it or them, or been involved in or is currently involved in any mediation or arbitration proceedings or lawsuits suits related to any construction project, or have any judgments or awards outstanding against it or them? _____

   If the answer is yes, please provide details. _____

   _____

PROJECT REFERENCES

Provide the information requested for all projects completed within the last five years of a similar size and nature.

The Contractor authorizes the Owner and its representatives to contact the owners and design professionals on projects on which the Contractor has worked and authorizes and requests such owners and design professionals to provide the Owner with a candid evaluation of the Contractor's performance.

Project Name: _____

Project Description: _____

_____

Contract Amount: _____ Contract Date: _____

Owner's Name: _____

Owner Contact: _____ Phone: _____

Design Professional: _____ Phone: _____

Project Name: ____

Project Description: ____

____

Contract Amount: ______________________ Contract Date: ______________

Owner's Name: ____

Owner Contact: ________________________ Phone: ________________

Design Professional: _____________________ Phone: ________________

Project Name: ____

Project Description: ____

____

Contract Amount: ______________________ Contract Date: ______________

Owner's Name: ____

Owner Contact: ________________________ Phone: ________________

Design Professional: _____________________ Phone: ________________

Project Name: ____

Project Description: ____

____

Contract Amount: ______________________ Contract Date: ______________

Owner's Name: ____

Owner Contact: ________________________ Phone: ________________

Design Professional: _____________________ Phone: ________________

Project Name: ____

Project Description: ____

____

Contract Amount: ______________________ Contract Date: ______________

Owner's Name: ____

Owner Contact: ________________________ Phone: ________________

Design Professional: _____________________ Phone: ________________

BID GUARANTY AND CONTRACT BOND

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned _____, as Principal, and _____ as Sureties, are hereby held and firmly bound unto Weathersfield Township, Trumbull County, Ohio as Obligee(s), in the penal sum of the dollar amount of the Bid submitted by the Principal to the Obligee on _____ (date) to undertake the Project known as:

Project Name: Weathersfield Township Multi-Jurisdictional Center -Single General Contract

The penal sum, referred to herein, shall be the dollar amount of the Principal's Bid to the Obligee, incorporating any additive alternate Bids made by the Principal on the date referred to above to the Obligee, which are accepted by the Obligee. In no case shall the penal sum exceed the amount of dollars ($_____). (If the preceding line is left blank, the penal sum will be the full amount of the Principal's Bid, including add alternates. Alternatively, if completed, the amount stated shall not be less than the full amount of the Bid, including Alternates, in dollars and cents. A percentage is not acceptable.) For the payment of the penal sum well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above-named Principal has submitted a Bid for the above referenced Project;

NOW, THEREFORE, if the Obligee accepts the Bid of the Principal, and the Principal fails to enter into a proper contract in accordance with the Bid, Plans, Specifications, details, and bills of material; and in the event the Principal pays to the Obligee the difference, not to exceed ten percent of the penal sum hereof between the amount specified in the Bid and such larger amount for which the Obligee may in good faith contract with the Bidder determined by the Obligee to be the next lowest responsive and responsible to perform the Work covered by the Bid; or in the event the Obligee does not award the Contract to such next lowest responsive and responsible Bidder and resubmits the Project for bidding, the Principal pays to the Obligee the difference not to exceed ten percent of the penal sum hereof between the amount specified in the Bid, or the costs, in connection with the resubmission, of printing new Contract Documents, required advertising and printing and mailing notices to prospective Bidders, whichever is less, then this obligation shall be null and void, otherwise to remain in full force and effect. If the Obligee accepts the Bid of the Principal, and the Principal, within 10 days after the awarding of the Contract, enters into a proper contract and executes the Agreement Form in accordance with the Contract Documents, including without limitation the Bid, Plans, Specifications, details, and bills of material, which said Contract is made a part of this Bond the same as though set forth herein; and

NOW ALSO, IF THE SAID Principal shall well and faithfully perform each and every condition of such Contract; and indemnify the Obligee against all damage suffered by failure to perform such Contract according to the provisions thereof and in accordance with the Contract Documents, including without limitation Plans, Specifications, details, and bills of material therefore; and shall pay all lawful claims of Subcontractors, Material Suppliers and laborers for labor performed and materials furnished in the carrying forward, performing or completing of said Contract; we, agreeing and assenting that this undertaking shall be for the benefit of any Subcontractor, Material Suppliers or laborer having a just claim, as well as for the Obligee herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

THE SAID Surety hereby stipulates and agrees that no modifications, omissions or additions, in or to the terms of said Contract, the Work thereunder or the Contract Documents, including without limitation the Plans and Specifications, therefore, shall in any way affect the obligations of said Surety on its bond, and it does hereby waive notice of any such modifications, omissions or additions in or to the terms of the Contract, the Work, or the Contract Documents, including without limitation the Plans and Specifications.

SIGNED AND SEALED this _____ day of _____ , _____ .

PRINCIPAL:

_____
Signature

By: _____
Name

_____
Title

SURETY:

_____
Signature

By: _____
Attorney-in-Fact

SURETY INFORMATION:

_____
Name

_____
Address 1

_____
Address 2

_____
City State Zip

_____
Telephone

_____
Email

SURETY AGENT'S INFORMATION:

_____
Name

_____
Address 1

_____
Address 2

_____
City State Zip

_____
Telephone

_____
Email

OWNER-CONTRACTOR AGREEMENT

Owner: Weathersfield Township, Trumbull County, Ohio
1451 Prospect Street
Mineral Ridge, OH 44440

Contractor: _____

Project: Multi-Jurisdictional Center
1388 Stewart Street
Mineral Ridge, Ohio 44440

The Owner, a political subdivision of the State of Ohio, and the Contractor have entered into this Owner- Contractor Agreement ("Agreement") as of the date signed by the Owner at the end of this Agreement. The Owner and the Contractor agree as follows:

1. WORK.

1.1 The Contractor will furnish all the labor, services, materials, plant, equipment, tools, scaffolds, and all other things (collectively called the "Work") necessary for the timely and proper completion of the Project based upon the drawings and specifications prepared by the Design Professional and the Contract Documents.

1.2 The Contractor shall at all times furnish sufficient skilled workers, materials, and equipment to perform the Work in strict conformance with the Contract Documents and to the entire satisfaction of the Owner, so as to complete the Project by the Date for Final Completion.

1.3 All materials and equipment provided shall be new, free from all defects, fit for the purpose for which intended, and merchantable.

1.4 The Contractor shall supervise the Work and shall assign a competent Project Supervisor to manage the Project. All communications to the Contractor's project manager or superintendent shall be binding as if given directly to the Contractor. At the Owner's request, the Contractor shall replace the Project Supervisor, provided that the request is reasonable. Neither the Owner nor the Design Professional will be responsible for the acts or omissions of the Supervisor or his assistants.

1.5 The Contractor is solely responsible for and has control over all construction means, methods, manners, techniques, sequences, and procedures, for safety precautions and programs in connection with the Work, and for coordinating all portions of the Work.

1.6 The Contractor shall comply with ORC Sections 3781.25 through 3781.32. Before starting excavation or trenching, the Contractor shall determine the location of any underground utilities and notify any public authority or utility having jurisdiction over the Project and secure any required approval. The Contractor shall give notice at least 2 business days in advance of excavation to the owners of underground utilities registered with the Ohio Underground Utility Protection Services ("OUPS" at http://oups.org, phone 811 or 800-362-2764), and the owners of underground utilities shown on the Drawings and Specifications who are not registered members of OUPS.

1.7 The Contractor shall develop the Construction Progress Schedule which shall provide for reasonable, efficient, and economical execution of the Project. The Contractor shall use the Construction Progress Schedule to plan, organize, and execute the Project, record and report actual performance and progress, and show how it plans to coordinate and complete all remaining Work within applicable Milestones.

1.8 The Contractor shall provide monthly Progress Status Reports to the Contracting Authority, A/E, and Owner, which shall include recommendations for adjusting the Construction Progress Schedule to meet Milestone dates and the Substantial Completion date.

1.9 The Contractor shall protect the Work from weather and maintain the Work and all materials, apparatus, and fixtures free from injury or damage until Completion of the Work. The Contractor shall protect the Project and existing or adjacent property from damage at all times and shall erect and maintain necessary barriers, furnish and keep lighted necessary danger signals at night, and take reasonable precautions to prevent injury or damage to individuals or property.

1.10 The Contractor shall bring to or store at the Site only the materials and equipment required in the Work. If possible, materials and equipment should be installed in their final positions when brought to the Site. The Contractor shall properly store and protect all materials and equipment it provides to the Project.

1.11 The Contractor shall maintain a sufficient workforce and enforce good discipline and order among its employees and the employees of its Subcontractors. The Contractor shall not permit employment of individuals not skilled in tasks assigned to them.

1.12 The Contractor shall take reasonable precautions to ensure the safety of individuals on the Project. The Contractor is responsible for designing and implementing its own safety program, including compliance with OSHA regulations, including fall protection, hazards, communications, competent person, etc.

1.13 The Contractor shall protect its Work and materials from weather and damage from heat, cold, and humidity. Until the permanent HVAC system is complete and available for use the Contractor shall make arrangements and pay for installation and maintenance of temporary heating and ventilating systems as required by construction activities. This includes providing temporary heating to keep the new building from freezing during the work. The Contractor shall pay the costs incurred in operating the temporary heating and ventilating systems. When the permanent HVAC system is complete and available for use the Contractor shall start up and maintain operation of the permanent HVAC system, including filters, and promptly remove temporary heating and ventilating systems. The Contractor shall pay the costs of energy consumed in operating the permanent HVAC system until Substantial Completion.

1.14 The Contractor shall provide all materials and labor required for the Work.

1.15 The Contractor shall provide temporary drainage and dewatering necessary for the Work and shall employ pumps, trenches, drains, sumps, and other necessary elements required to provide satisfactory working conditions for the protection, execution, and completion of the Project.

1.16 The Contractor shall provide temporary, portable, onsite sanitary facilities with weekly cleanout until the permanent plumbing system is available for use. When the permanent plumbing system is complete and available for use, the Contractor shall start up and maintain operation of the permanent plumbing systems. The Contractor shall pay the costs of water consumed and sewerage charges until Substantial Completion.

1.17 The Contractor shall provide temporary light and power; pay the charges for temporary electric service installation, and removal if required. The Contractor shall pay the cost of energy consumed until Substantial Completion.

1.18 The Contractor shall provide a dumpster and shall remove all waste materials, rubbish, and debris attributable to the Work to an appropriate disposal location. Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, State and local requirements, pertaining to legal disposal of all construction and demolition waste materials. The Contractor shall dispose of waste materials, rubbish, and construction debris in a lawful manner in approved recycling facilities or landfills.

1.19 The Contractor is responsible to secure and protect (if necessary) the facility during construction and until the building is turned over to the Owner for occupancy.

1.20 The Contractor shall perform the Work in a workmanlike manner, consistent with the standards of skill and care exercised by entities licensed to perform (where required under Applicable Law) and regularly performing comparable work in Trumbull County.

1.21 The Contractor and its subcontractors shall pay the wages required by the Davis-Bacon Federal prevailing wage rates for all work on this Project.

1.22 The Contractor and its subcontractors shall comply with the Copeland Anti-Kickback Act (18

U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR Part 3). The Act provides that each contractor or subcontractor is prohibited from inducing, by any means, any person employed in the construction, completion, or repair of a public work, to give up any part of the compensation to which that person is otherwise entitled.

1.23 The Contractor shall comply with Applicable Law regarding equal employment opportunity, and no contractor, subcontractor, or any person on a contractor's or subcontractor's behalf, in any manner, shall discriminate against any person in hiring or discriminate against or intimidate any employee hired for the performance of work under the contract on account of race, creed, sex, disability or military status as defined in section 4112.01 of the Revised Code, or color.

1.24 The Contractor and Subcontractors shall comply with ORC Section 153.011 regarding the use of domestically produced steel products.

1.25 Throughout the performance of the Work, the Contractor and each subcontractor shall be enrolled in and remain in good standing in the Ohio Bureau of Workers' Compensation ("OBWC") Drug-Free Safety Program ("DFSP") or a comparable program approved by the OBWC that meets the requirements specified in ORC Section 153.03 ("OBWC-approved DFSP").

1.26 The Owner or Architect's review and approval of the Work and any information the Contractor submits to them is for the sole purpose of determining whether the Work and information are generally consistent with the Contract's intent and will not relieve the Contractor of its sole responsibility for the performance, preparation, completeness, and accuracy of the Work and information.

2. CONTRACT DOCUMENTS.

2.1 The Contract Documents together define the responsibilities and obligations of the parties.

2.2 Subcontract Form. The Contractor acknowledges that each subcontractor is subject to the General conditions and other contract requirements.

3. OWNER'S REPRESENTATIVE AND DESIGN PROFESSIONAL.

3.1 Drawings and Specifications for the Project were prepared by the Design Professional, FMC architects, Frank M. Castrovillari, President, 7675 Harley Hills Drive, North Royalton, OH 44133. The Design Professional's contract during construction is FrankC@FMCArchitectsLLC.com. (cell) 216.287.8547. The Design Professional is referred to in the Drawings and Specifications as Architect Engineer.

3.2 The Contract Documents shall not be construed to create a contractual relationship of any kind between the Design Professional and the Contractor or any Subcontractor or Material Supplier to the Project. The Design Professional, however, shall be entitled to performance of the obligations of the Contractor intended for their benefit and to enforcement of such obligations, but nothing contained herein shall be deemed to give the Contractor or any third party any claim or right of action against the Design Professional which does not otherwise exist without regard to this Contract. The Contractor and its Subcontractors shall not be deemed to be beneficiaries of any of the acts or services of the Design Professional, which are performed for the sole benefit of the Owner.

3.3 Dave Rouan, Township Administrator drouan@weathersfieldtwp.com (330) 652-6326, is the Owner's Representative for the Project.

3.4 The Design Professional will monitor the progress of the Contractor's Work and will conduct regular inspections of the progress of the Work as provided in the Contract Documents.

3.5 The Contractor shall always provide the Design Professional and the Owner's Representative access to the Work.

4. TIME FOR COMPLETION AND PROJECT COORDINATION.

4.1 DATE FOR COMMENCEMENT. The date for commencement of the Work shall be the date established in the written Notice to Proceed issued by the Owner to the Contractor. The Notice to Proceed shall establish the time when the Contractor may have access to the Project site. The date for commencement is anticipated to be January 2, 2024.

4.2 DATE FOR SUBSTANTIAL COMPLETION. The Date for Substantial Completion of the Contractor's Work is June 30, 2024 (referred to as the "Date for Substantial Completion" in the Contract Documents). Substantial Completion, as defined in the General Conditions, is the stage in the progress of the Work when the Work is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use. Final Completion shall mean that the Work is complete in accordance with the Contract Documents and the Contractor has submitted to the Design Professional all documents required to be submitted to the Design Professional for final payment. By entering into this Agreement, the Contractor agrees that the period for performing the Work is reasonable and that the Contractor's Work can be substantially complete by the date stated in this Agreement.

4.3 The Date for Substantial Completion shall only be modified by Change Order.

4.4 Project Coordination. The Contractor will be responsible for coordinating the Work on the Project and for coordinating any Work on the Project performed by Subcontractors, and the delivery to the Project of any equipment and materials. The Contractor will supply sufficient skilled workers, clean up the Project, and furnish the necessary materials, equipment and any temporary services or facilities to perform the Work to the entire satisfaction of the Owner and the Design Professional, and so as not to delay any part of the Project.

4.5 Construction Schedule. The Construction Schedule shall be developed by the Contractor in accordance with the Contract Documents. The Contractor's obligation to furnish requested scheduling information is a material term of its Contract. If the Contractor will deviate from the Construction Schedule, the Contractor will notify the Design Professional and Owner in writing at least two (2) business days of the commencement of the delay and provide the Design Professional and Owner with a detailed description of how Contractor will meet the Construction Schedule.

4.6 LIQUIDATED DAMAGES. If the Contractor does not have its Work on the Project Substantially Complete by its Date for Substantial Completion, or if the Contractor does not have its Work Finally Complete within thirty (30) days of achieving Substantial Completion, the Contractor shall pay the Owner (and the Owner may set off from sums coming due the Contractor) liquidated damages in the amount of Five Hundred Dollars ($500.00) per day. The Contractor acknowledges by signing this Agreement with the Owner that the amount of liquidated damages represent a reasonable estimate of the actual damages the Owner would incur if the work is not substantially complete by the foregoing date and that the damages that may result from the failure to substantially complete the work by the foregoing date are uncertain and difficult to ascertain. These liquidated damages are damages for loss of use of the Project, and the Contractor in addition to the liquidated damages will be obligated to indemnify and hold the Owner harmless from any claims related to the delay of the Work.

4.7 The Contractor acknowledges that such amounts of liquidated damages represent a reasonable estimate of the actual damages for loss of or interference with the intended use of the Project that the Owner would incur if the Work is not Substantially Complete by the Contractor's Date for Substantial Completion.

5. CORRECTIVE ACTION.

5.1 If the Owner determines that the Contractor is not cooperating or coordinating its work properly with its subcontractors, not supplying sufficient skilled workers, not cleaning up the Project, not furnishing the necessary materials, equipment, or any temporary services or facilities to perform the Work in strict conformance with the Contract Documents, or the Contractor is not on schedule, or is not otherwise performing its obligations under the Contract Documents, THE CONTRACTOR SHALL IMMEDIATELY, AND IN NOT LESS THAN 2 BUSINESS DAYS AFTER NOTICE OF SUCH DETERMINATION, (1) COMMENCE SUCH ACTION AS IS NECESSARY TO CORRECT THE DEFICIENCIES NOTED BY THE OWNER, (2) PROCEED TO USE ITS BEST EFFORTS TO CORRECT SUCH DEFICIENCIES WITHIN 30 DAYS OF SUCH NOTICE AND/OR, (3) IF THE OWNER INSTRUCTS THE CONTRACTOR TO TAKE

SPECIFIED CORRECTIVE ACTION, SHALL IMMEDIATELY TAKE SUCH CORRECTIVE ACTION, including but not limited to increasing the number of skilled workers, providing temporary services or facilities, and cleaning up the Project. Such corrective action shall be taken and continued uninterruptedly without waiting to initiate any dispute.

6. COMPENSATION AND PAYMENT

6.1 CONTRACT SUM**.** The lump sum Contract Sum to be paid by the Owner to the Contractor, as provided herein, for the satisfactory performance and completion of the Project and all of the duties, obligations and responsibilities of the Contractor under this Agreement and the other Contract Documents will be $ _____.

7. LIMITATION ON LIABILITY.

7.1 The Owner's total liability under this Agreement is limited to the amount set forth in the Fiscal Officer's certificate at the end of this Agreement. Under no circumstances will the elected officials, officers, employees, board members, or agents of the Owner be personally liable for any obligations or claims arising out of or related to this Agreement.

8. PAYMENT AND RETAINAGE

8.1 APPLICATIONS FOR PAYMENT. Payment applications must be submitted on a monthly basis and reflect the amount of work completed as of the date the application for payment is submitted. On or before the date of the month specified by the Owner, the Contractor will submit to the Owner, through the Design Professional, an itemized payment application for such period in the following format and with one copy of the following documentation:

(a) Invoice for work performed and materials and equipment provided for the previous pay period;
(b) Current list of the Contractor's Subcontractors and suppliers showing their respective contract sums, amount paid, and amount due;
(c) Contractor's Affidavit of Release of Liens, on a form acceptable to Owner and Design Professional, with lien releases in a format approved by the Owner for all the Contractor's Subcontractors and suppliers current through the date of the Contractor's previous Application for Payment;
(d) Such other supplemental information as the Owner may require. Such other information may include a schedule of all materials and equipment stored on site.

8.2 DEDUCTIONS FROM PAYMENT. The Owner may withhold payment in whole or in part, and may demand that the Contractor refund amounts previously paid, to protect the Owner from loss because of:

(a) The Contractor's default or failure to perform any of its obligations under the Contract Documents, including but not limited to: failure to provide sufficient skilled workers; Work, including equipment or materials, which is defective or otherwise does not conform to the Contract Documents; failure to conform to the Project Time Schedule; and failure to follow the directions of or instructions from the Owner;
(b) The Contractor's default or failure to perform any of its obligations under another contract that it has with the Owner;
(c) The filing of third-party claims, or reasonable evidence that third party claims have been or will be filed;
(d) The Work has not proceeded to the extent set forth in the application for payment;
(e) Any representations made by the Contractor are untrue;
(f) The failure of the Contractor to make payments to its Subcontractors;
(g) Damage to the Owner's property or the property of another person or laborer;
(h) The determination that there is a substantial possibility that the Work cannot be completed for the unpaid balance of the Contract Sum; and/or

(i) Liens filed or reasonable evidence indicating the probable filing of such liens.

8.3 The Owner will pay the Contractor within 30 days after receipt of the approved Contractor's payment application from the Design Professional, provided that the payment application has been properly submitted on a timely basis and is accompanied by all of the required documentation. The Owner may establish a cut-off date for the submission of the payment application.

8.4 RETAINAGE.

8.4.1 AMOUNT OF PAYMENTS. Subject to Paragraph 8.1, the amount of the payments to the Contractor shall be determined in accordance with the following paragraphs:

8.4.2 PAYMENTS FOR LABOR. Payments for labor incorporated into the Work will be at the rate of 92% of the amount set forth in the Contractor's payment application and approved by the Owner, All labor performed after the work is fifty percent competed shall be paid at one hundred percent of the approved application.

8.4.3 PAYMENTS FOR MATERIALS AND EQUIPMENT. Payments for materials and equipment will be at the rate of 90% of the invoice cost of materials and equipment delivered to the Project site or other storage site approved by the Owner. The balance of the invoice cost will be payable when the materials or equipment are incorporated into the Work. Incorporated into the Work means such materials and equipment are installed and conform to the requirements of the Contract Documents. When payment is made on account of materials or equipment not yet incorporated into the Project, such materials and equipment will become the property of the Owner; provided that if such materials or equipment are stolen, destroyed, or damaged before being fully incorporated into the Project, the Contractor shall be required to replace them at its expense.

8.4.4 DOCUMENTATION. Upon request, the Contractor immediately will supply the Owner with such information as may be requested so as to verify the amounts due to the Contractor, including but not limited to original invoices for materials and equipment and documents showing that the Contractor has paid for such materials and equipment, and so as to verify that amounts due laborers, subcontractors, and materialmen have been paid to them.

8.5 FINAL PAYMENT

8.5.1 The final application for payment must be itemized, and the Contractor will ensure that the final application for payment contains one (1) copy of each of the following documents, if not previously delivered to the Owner.

(a) Items (a)-(d) in Paragraph 8.1;
(b) A.I.A. Document G706a (Contractor's Affidavit of Release of Liens), or another form acceptable to Owner and Design Professional, with lien releases in a format approved by the Owner for each Subcontractor and supplier, current through the date of the Contractor's last application for payment;
(c) Contractor's Certificate of Insurance;
(d) Contractor's Workers' Compensation Certificate;
(e) Consent of the Contractor's Surety to Payment;
(f) An assignment to the Owner of all warranties obtained or obtainable by the Contractor from manufacturers and suppliers of equipment and materials incorporated into the Work by written instrument of assignment in a form acceptable to the Owner; and
(g) Such other documentation as required by the Contract Documents, the Owner, or applicable law.

8.5.2 The making of Final Payment by the Owner does not constitute a waiver of Claims by the Owner for the following:

(a) Liens, Claims, security interests, or encumbrances arising out of the Contract Documents that are unsettled;
(b) Failure of the Work to comply with the requirements of the Contract Documents;

(c) Terms of special warranties required by the Contract Documents;
(d) Claims for Indemnification;
(e) Claims about which the Owner has given the Contractor written notice; or
(f) Claims arising after Final Payment.

8.6 RETAINAGE ACCOUNT. The Owner and the Contractor agree that the statutory requirements for retainage do not apply to this Project. Owner may keep the retained amounts from each Application for Payment in the Construction Fund.

9. CHANGE ORDERS

9.1 A Change Order is a written instrument signed by the Owner, the Design Professional, and the Contractor stating their agreement upon a change in the Work, the amount of the adjustment or the method for computing the amount of the adjustment of the Contract Sum, if any, and the extent of the adjustment in the Project Time Schedule, if any.

9.2 Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.

a. Proposal Requests issued by Architect are for price quote only. They are not to be considered instructions either to stop work in progress or to execute the proposed change.

b. Within seven (7) calendar days after receipt of an Owner Proposal Request, the Contractor shall submit a quotation proposing a cost adjustment to the Contract Sum and the Contract Time necessary to execute the change.

1) Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.

2) Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.

3) Include an updated Contractor's Construction Schedule that indicates the effect of the proposed change.

9.3 Contractor-Initiated Change Order Requests: The Contractor may make a request for a Change Order to the Design Professional by submitting a written request for a Change Order including:

1) A statement outlining reasons for the proposed change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.

2) A list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.

3) Applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.

9.4 A request for a Change Order from a Contractor is accepted by the Owner only through a signed Change Order. A Proposal Request does not authorize the Contractor to proceed with a change in the Work.

9.5 There shall be no change to the Work, the Contract Price or the Construction Schedule without a written change order signed by the Owner and Contractor.

9.6 The Contractor must continue to work while the Owner is evaluating a request for a Change Order.

10.0 CONTRACTOR CLAIMS

10.1 Differing Site Conditions If the Contractor encounters a Differing Site Condition, the Contractor shall stop Work on that Differing Site Condition and give immediate written notice of the condition to the Design Professional and Owner. The Contractor's failure to give immediate notice of the Differing Site Condition shall constitute an irrevocable waiver of any associated Claim.

10.2 Promptly after receiving notice from the Contractor, the Design Professional shall investigate to determine whether the Contractor has encountered a Differing Site Condition and shall give written notice of its

determination to the Owner and Contractor within 10 days of notice. If the Design Professional determines that the Contractor has encountered a Differing Site Condition and the Owner agrees with the Design Professional's determination, the Owner shall process an appropriate Change Order.

10.3 If the Design Professional determines that the Contractor has not encountered a Differing Site Condition and the Contractor does not agree with that determination, the Contractor must initiate a Claim within 7 days of the date that the Design Professional issues its determination.

10.4 All other Contractor Claims. Every Claim shall accrue upon the date of occurrence of the event giving rise to the Claim. The Contractor must make a Claim in writing within seven (7) days after the occurrence of the event giving rise to the Claim. Failure to do so is an irrevocable waiver of the claim.

10.5 The responsibility to substantiate the Claim rests with the Contractor. All documentation supporting the Claim must be presented to the Design Professional with the Claim.

10.6 The Contractor will not knowingly (as "knowingly" is defined in the federal False Claims Act, 31 U.S.C. Section 3729, et seq.) present or cause to be presented a false or fraudulent claim. The Contractor shall certify a claim with it an affidavit sworn to before a notary public or other person authorized to administer oaths in the State of Ohio and executed by an authorized representative of the Contractor, which states that:

> The Contractor certifies that the Claim is made in good faith; that the supporting data is accurate and complete to the best of the Contractor's knowledge and belief; that the amount requested is a fair, reasonable, and necessary adjustment for which the Contractor believes the Owner is liable; and that the undersigned is duly authorized to certify the Claim on behalf of the Contractor. The Claim complies with the False Claims Act, which provides that the Contractor will not Knowingly present or cause to be presented a false or fraudulent Claim.

10.7 Notwithstanding any other provision of the Contract Documents to the contrary, the Contractor shall not be entitled to an increase in the Contract Sum, or any type of damages caused by the occurrence or non-occurrence of an event beyond the Owner's control such as acts of Nature or fires, floods, epidemics, labor disputes, unusual delivery delays, weather, or damages caused by the Contractor or its subcontractors.

10.8 The Design Professional and Owner shall respond to the Contractor's Claim within fourteen (14) days after submission. If a Claim is not resolved by a signed Change Order, the Contractor's exclusive remedy is to file suit in the Common Pleas Court in Trumbull County Ohio.

10.9 Filing of a Claim does not relieve the Contractor of the obligation to complete the Work in accordance with the Contract Documents.

11.0 SUBCONTRACTORS

11.1 Within ten days after the Notice to Proceed, or other period as mutually agreed by the Contractor and Owner, the Contractor shall submit a Subcontractor and Material Supplier Declaration form through which the Contractor identifies its Subcontractors. If the Contracting Authority rejects any proposed Subcontractor, the Contractor shall propose a replacement Subcontractor with no adjustment of the Contract Sum.

11.2 The Contractor is fully responsible for all acts and omissions of its Subcontractors and is responsible for scheduling and coordinating the Work of its Subcontractors. The Contractor is fully responsible for any delay, interference, disruption, or hindrance attributable to the Contractor's Subcontractors.

11.3 The Contractor shall require that each of its Subcontractors have a competent supervisor at the Site whenever the Subcontractor is performing Work.

11.4 The Contractor shall bind its Subcontractors to the terms of the Contract Documents, so far as applicable to the Work of the Subcontractor.

11.5 Prompt Payment. The Contractor shall make payments to Subcontractors in accordance with Applicable Law, including ORC Section 4113.61, the Prompt Payment Act.

12.0 PERMITS AND LICENSES

12.1 Plan Approval. The Design Professional shall secure the required structural, plumbing, HVAC,

and electrical plan approvals.

12.2 Inspections. The Contractor shall schedule and attend all intermediate and final inspections required for any permit applicable to the Work. The Contractor and Owner shall schedule the Weathersfield Fire Chief for the life safety inspection for occupancy permits. The Contractor shall give the Design Professional and Owner reasonable notice of the dates and times arranged for inspections.

12.3 Local Permits. The Contractor shall secure and pay the fees for any permits, inspections, reinspections, licenses, capacity charges, or tap fees required by local authorities having jurisdiction over the Project. The Contractor shall give the Design Professional and Owner reasonable notice of the date arranged for inspections.

12.4 Trade Permits and Licenses. The Contractor or Subcontractors shall obtain, maintain, and pay for any permit, inspection, or license applicable to the Contractor's or Subcontractors particular trade.

13. PROJECT DOCUMENT MAINTENANCE AND SUBMITTAL

13.1 During Construction. The Contractor shall maintain in good order at a secure location on the Site a complete copy of all Contract Documents; Shop Drawings, Product Data, Samples and similar required submittals; manufacturer operating and maintenance instructions; certificates; warranties; RFIs and responses thereto; and other Project-related documents, all marked currently and accurately to record field changes and selections made during construction and to show actual installation where installation varies from Work as originally shown, including the exact location and depth of underground utility lines; and a set of Drawings and Specifications.

13.2 At Contract Completion. The Contractor, as a condition precedent to execution of the Certificate of Contract Completion and final payment, shall organize the As-Built Documents into manageable sets, bind the sets with durable paper cover sheets, and deliver the As-Built Documents to the Design Professional certifying that they are complete, correct, and accurate. The Contractor's As-Built Documents submission shall include, but is not limited to:

1) Certificate of Occupancy;
2) inspection certificates for pressure piping, elevator, boiler, electrical, plumbing or piping purification, etc.;
3) Letter of Approval from the Weathersfield Fire Chief;
4) Operation and Maintenance Manuals, organized into suitable sets of manageable size. Indexed data bound in individual binders, with pocket folders for folded sheet information and appropriate identification marked on the front and the spine of each binder;
5) neatly and accurately marked sets of As-Built Documents, and other Contract Documents reflecting the actual construction of the Project;
6) detailed Drawings reflecting the exact location of any concealed utilities, mechanical or electrical systems, and components;
7) assignment to the Owner of all warranties and guarantees, including the most-recent address and telephone number of any Subcontractors or manufacturers;
8) an affidavit to certify that all Subcontractors have been paid in full for all Work performed or materials furnished for the Project;
9) final certified payroll reports; and
10) an affidavit to certify that the Contractor and each of its Subcontractors, regardless of tier, have complied with all requirements of Federal Davis-Bacon Wage requirements and the Copeland Anti-Kickback Act.

14. CONTRACT COMPLETION

14.1 Substantial Completion. When the Contractor considers the Work Substantially Complete the Contractor shall in writing to the Design Professional request for the Substantial Completion inspection of the Work.

14.1.1 Within 7 days after receipt of the Contractor's request, the Design Professional shall conduct the Substantial Completion inspection to determine whether the Work is in conformity with the Contract Documents and Substantially Complete. The Design Professional shall notify the Contractor and Owner of the scheduled time of the inspection.

14.1.2 If the Design Professional determines that the Work is Substantially Complete, within 3 business days after the Substantial Completion inspection, the Design Professional shall prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion and include a list of Defective, incomplete, or unacceptable Work ("Punch List"). The Design Professional's failure to include an item on the Design Professional Punch List shall not alter the Contractor's responsibility to complete the Work in accordance with the Contract Documents.

14.1.3 If the Design Professional determines that the Work is not Substantially Complete, the Contractor will pay the cost of the Design Professional Inspection.

14.2 Completion of Punch List Items.

14.2.1 Within 30 days after the date of Substantial Completion the Contractor shall complete all items on the Punch List. After completing all items on the Punch List, the Contractor shall provide a written request for Final Inspection of the Work to the Design Professional.

14.2.2 Within 3 business days after receipt of the request for the Final Inspection of the Work, the Design Professional shall complete a Final Inspection of the Work for compliance with the Contract Documents.

14.2.3 If multiple inspections of items on the Punch List are required due to the Contractor's failure to properly and timely complete them, the Contractor shall pay any additional costs incurred by the Design Professional and Owner resulting the multiple inspections and the delay. The Owner may deduct those additional costs from payments then or thereafter due the Contractor.

14.3 Final Cleaning Before requesting the Substantial Completion inspection of the Work, the Contractor shall clean the Site, and remove waste materials and rubbish attributable to the Project so that upon Substantial Completion, the premises are ready for occupancy by the Owner.

14.4 Contract Completion. When all items on the Punch List have been completed to the satisfaction of the Design Professional and all requirements of the Contract Documents have been completed, the Design Professional shall prepare and recommend execution of a final Certificate of Contract Completion. The date that the Owner executes the final Certificate of Contract Completion is the date of Contract Completion.

15. INSURANCE AND INDEMNIFICATION.

15.1 Commercial General Liability The Contractor shall maintain commercial general liability ("CGL") coverage that provides (1) an each-occurrence limit of not less than $1,000,000, (2) a general-aggregate limit of not less than $2,000,000, and (3) a products and completed-operations aggregate limit of not less than $2,000,000. The Contractor shall include the Owner and Design Professional as additional insureds under the CGL policy. The CGL insurance shall apply as primary and non-contributory insurance with respect to any other insurance or self-insurance programs that cover the additional insured(s).

15.3 Business Automobile Liability. The Contractor shall maintain business automobile coverage, providing coverage with a limit of not less than $1,000,000 each accident. The coverage shall extend to any auto. The Contractor shall include the Owner and Design Professional as additional insureds under the BA policy.

15.4 Workers Compensation. The Contractor shall maintain workers compensation coverage meeting the requirements of Applicable Law.

15.5 Employers Liability Coverage. The Contractor shall maintain employers' liability coverage with an each- accident limit of not less than $1,000,000, (2) a disease each-employee limit of not less than $1,000,000, and (3) a disease policy limit of not less than $1,000,000.

15.6 Builder's Risk The Contractor shall maintain a Builder's Risk insurance policy to cover all Work in the course of construction and materials used in the construction process, stored on or off-site or while in transit, in an amount not less than the completed value of the Project. The Contractor shall include the Owner and Subcontractors as additional insureds under the Builder's Risk policy. Coverage shall include "soft cost endorsement" including, but not limited to, the reasonable extra costs of the Design Professional and reasonable Contractor extension or acceleration costs.

15.7 Certificates of Coverage. Before starting the Work on the Site, upon renewal of any policy, and upon a change of any insurance carrier, the Contractor shall deliver to the Owner certificates evidencing that the required insurance is in force.

15.8 Subcontractors The Contractor's subcontractors shall comply with the insurance requirements of this Article 15. If a Subcontractor's usual insurance coverage does not meet the minimum coverage requirements, before entering into an agreement with that Subcontractor, the Contractor shall submit to the Owner (1) a certificate of insurance evidencing the insurance the Subcontractor will carry. The Owner will decide whether to accept the non-conforming insurance coverage.

15.9 Insurance furnished by the Owner, if any, is not intended to and shall not cover equipment and materials before they are physically incorporated into the Work or tools. The Contractor bears the entire risk of loss with respect to tools, equipment, and materials.

15.10 Waiver of Subrogation To the fullest extent permitted by Applicable Law, the Contractor waives all rights against the Owner and their agents and employees for damages to the extent covered by any insurance, except rights to the proceeds of that insurance. All policies shall accomplish the waiver of subrogation by endorsement or otherwise.

15.11 Indemnification To the maximum extent permitted by law, the Contractor will indemnify, defend and hold harmless the Owner and the Owner's agents and employees from and against all claims, costs, damages, losses, fines, penalties, and expenses (including but not limited to all fees and charges of attorneys and other professionals, and all court, arbitration, or other dispute-resolution costs) arising out of or in connection with the Project, provided that any such claim, cost, damage, loss, fine, penalty, or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property but only to the extent caused by the negligent acts, errors, or omissions of the Contractor or a person or entity for whom the Contractor may be liable; or a violation of law but only to the extent attributable to the Contractor or a person or entity for whom the Contractor may be liable. The Owner may set off amounts equal to any sums for which it is entitled to be indemnified from the amounts otherwise due the Contractor under the Contract Documents.

16. WARRANTIES.

16.1 In addition to any other warranties, guarantees, or obligations set forth in the Contract Documents or applicable as a matter of law and not in limitation of the terms of the Contract Documents, the Contractor warrants and guarantees that:

(a) The Owner will have good title to the Work and all materials and equipment incorporated into the work;

(b) The Work and all materials and equipment incorporated into the Work are new and of good quality and free from all defects, including any defects in workmanship or materials;

(c) The Work and all materials and equipment incorporated into the Work are fit for the purpose for which intended;

(d) The Work and all materials and equipment incorporated into the Work are merchantable; and,

(e) The Work and all materials and equipment incorporated into the Work conform in all respects to the Contract Documents.

16.2 Contractor shall provide a labor and material warranty on all items in the Work for one year from date of Final Completion.

16.3 Upon notice of the breach of any of the foregoing warranties or guarantees or any other warranties or guarantees under the Contract Documents, the Contractor will commence to correct such breach and all damage resulting therefrom within 2 business days after notice thereof and use its best efforts to correct such breach and damage to the satisfaction of the Owner within a reasonable time and in no case more than 30 days. If notice of breach is given after final payment the Contractor must start on the repair work within 5 days of the date of notice. If the Contractor fails to commence to correct such breach and damage, or to correct such breach and damage, the Owner, without prejudice to any of its other rights or remedies, may employ such other persons as the Owner may deem proper to correct the deficiencies. The Contractor upon written notice from the Owner will pay the Owner, within 10 days after the date of such notice, all of the Owner's costs and expenses incurred in connection with or related to such correction and/or breach, including without limitation the Owner's administrative, legal, and consulting expenses. The foregoing warranties and obligations of the Contractor will survive the final payment and/or termination of this Agreement. If the Contractor fails to pay the Owner any amounts due under this Section, the Contractor will pay the Owner, in addition to the amounts due, a late payment fee of one and one-half percent (1.5%) per month for each month or part thereof that the payments are not paid when due.

17. DEFAULT OF THE CONTRACTOR

17.1 Events of Default: Each of the following constitutes an event of default of the Contractor:

1) failure to prosecute the Work with the necessary force or in a timely manner;

2) failure to perform any of its obligations under the Contract Documents

3) failure to proceed to commence to correct any defective work within 2 business days and thereafter to use its best efforts to correct such work timely;

4) failure to supply enough properly skilled workers or proper materials;

5) failure to properly make payment to Subcontractors or Consultants;

6) failure to perform any of its obligations under the Contract Documents or

7) disregarding laws, ordinances, or rules, regulations, or orders of a public authority with jurisdiction over the Project.

17.2 OWNER'S REMEDIES. Upon the occurrence of an event of default the Owner shall give Contractor notice in writing of the default, and if the default is not remedied within 5 days, the Owner has the following remedies, which are cumulative:

17.2.1 Order the Contractor to stop the Work, which the Contractor will do immediately;

17.2.2 To perform through others all or any part of the Work remaining to be done and to deduct the cost thereof from the unpaid balance of the Contract Sum or, if the unpaid balance of the Contract Sum is inadequate, to demand reimbursement of amounts previously paid to the Contractor;

17.2.3 Declare the Contractor in default, terminate the Contract, and employ upon the Work additional force or supply materials or either as appropriate, and remove Defective Work;

17.2.4 If the Contract is terminated, notify the Contractor’s Surety of the right to perform the Contract. If the Contractor’s Surety does not commence performance of the Contract within 10 days of the date of Contract termination, the Owner may complete the Work;

17.2.5 To terminate this Agreement and take possession of, for the purpose of completing

the Work or any part of it, all materials, equipment, scaffolds, tools, and other items belonging to or possessed by the Contractor, all of which the Contractor hereby transfers and assigns to the Owner for such purpose, and to employ any person or persons to complete the Work, including the Contractor's employees; and/or,

17.2.6 All other remedies which the Owner may have at law or in equity or otherwise under the Contract Documents.

17.2.7 If the Contract is terminated, the Contractor shall not be entitled to further payment. If the unpaid balance of the Contract Sum is exceeded by the costs of finishing the Work,

17.2 TERMINATION OF AGREEMENT. The termination of this Agreement will be without prejudice to the Owner's rights and remedies, including without limitation the Owner's right to be indemnified by the Contractor.

17.3 PAYMENTS DUE CONTRACTOR. If the unpaid balance of the Contract Sum exceeds the cost of finishing the Project, including any costs, expenses or damages incurred by the Owner as a result of the event of default, including without limitation the fees and charges of engineers, architects, attorneys, and other professionals and court costs, and other damages incurred by the Owner, the Contractor or Surety shall immediately pay the amount of the insufficiency to the Owner. This obligation for payment shall survive termination of the Contract.

18. TERMINATION FOR THE CONVENIENCE OF THE OWNER.

18.1 The Owner may, in its discretion and without cause, by 10 days written notice to the Contractor terminate this Agreement for the Owner's convenience.

18.2 Upon receipt of a written notice from the Owner terminating this Agreement without cause and for the Owner's convenience, the Contractor will (i) immediately cease performing the Work, unless otherwise directed by the Owner, in which case the Contractor will take the action directed by the Owner, (ii) take all reasonable and necessary action to protect and preserve the Work, and (iii) unless otherwise directed by the Owner, terminate all agreements with Subcontractors and suppliers.

18.3 If this Agreement is terminated without cause and for the Owner's convenience and there exists no event of the Contractor's default, as defined in this Agreement, the Owner will pay the Contractor for Work completed, including a fair and reasonable profit and reasonable expenses directly attributable to termination of the Contract. In no event shall the Contractor be entitled to (1) Contractor’s Fee on Work not performed or (2) compensation in excess of the total Contract Sum.

18.4 If this Agreement is terminated without cause for the Owner's convenience and there exists an event of the Contractor's default, as defined in this Agreement, the Contractor will be entitled to receive only such sums as it would be entitled to receive following the occurrence of an event of default under this Agreement.

19. DEFAULT OF THE OWNER

19.1 EVENTS OF DEFAULT. The following constitutes the exclusive events of default of the Owner: (1) The failure of the Owner to perform any of its obligations under the Contract Documents and to correct such failure within 30 days after receipt of written notice thereof from the Contractor specifying the default and the necessary corrective action; and (2) the failure of the Owner to pay the Contractor as payment becomes due under this Contract.

19.2 CONTRACTOR’S REMEDY. The Contractor's sole and exclusive remedy for the default of the Owner will be to bring a suit for damages in the Trumbull County Common Pleas Court.

20. GENERAL PROVISIONS

20.1 MODIFICATION. The Contract Documents represent the entire and integrated agreement between the Owner and Contractor and supersede all prior negotiations, representations, or agreements, either written or oral. No modification or waiver of any of the terms of this Agreement or of any other Contract Documents will be effective against a party unless set forth in writing and signed by or on behalf of a party, which in the case of the Owner requires the signature of the Owner's Administrator acting under the authority of a specific resolution of the Owner. Under no circumstances will forbearance, including the failure or repeated failure to insist upon compliance with the terms of the Contract Documents, constitute the waiver or modification of

any such terms. The parties acknowledge that no person has authority to modify this Agreement or the other Contract Documents or to waive any of its or their terms, except as expressly provided in this Paragraph.

20.2 ASSIGNMENT. The Contractor may not assign this Agreement without the written consent of the Owner, which the Owner may withhold in its sole discretion.

20.3 THIRD PARTIES. Nothing contained in the Contract Documents creates a contractual relationship with or a cause of action in favor of a third party against either the Owner or the Contractor.

20.4 LAW AND JURISDICTION. All questions regarding the validity, intention, or meaning of this Agreement or any modifications of it relating to the rights and obligations of the parties will be construed and resolved under the laws of the State of Ohio. Any suit, which may be brought to enforce any provision of this Agreement or any remedy with respect hereto, may be brought only in the Common Pleas Court for Trumbull County, and each party hereby expressly consents to the jurisdiction of such court.

20.5 STATUTE OF LIMITATIONS. The parties agree the statute of limitations with respect to any defective or non-conforming Work will not commence until the discovery of such defective or non-conforming Work by the Owner.

20.6 NOTICES. Notices, requests, or demands by either party shall be in writing, unless otherwise expressly authorized, and must be personally served, sent by overnight delivery, by certified mail, return receipt requested, or sent by facsimile transmission or electronic transmission. A copy of each notice shall be delivered to the attorney for the party at the address provided. All notices, requests, and demands will be deemed received upon delivery in the case of personal delivery or delivery by overnight mail or certified mail, in the case of a notice given by facsimile transmission or electronic mail delivery, upon the confirmation of receipt.

20.7 DAYS. When the Contract Documents refer to a period of time by a number of days, it excludes the first day and includes the last day of the period. If the last day of the period falls on a Saturday, Sunday, or a legal holiday, that day shall be omitted, and the period shall end on the next day which is not a Saturday, Sunday, or legal holiday.

20.8 CONSTRUCTION. The parties acknowledge that each party has reviewed this Agreement and the other Contract Documents and has voluntarily entered into this Agreement. Accordingly, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party will not be employed in the interpretation of this Agreement, the other Contract Documents, or any amendments or exhibits to it or them.

20.9 APPROVALS. Except as expressly provided herein, the approvals and determinations of the Owner are subject to the sole discretion of the Owner and will be valid and binding on the Contractor, provided only that they be made in good faith, *i.e.,* honestly. If the Contractor challenges any such approval or determination, the Contractor bears the burden of proving by clear and convincing evidence that it was not made in good faith.

20.10 PARTIAL INVALIDITY. If any term or provision of this Agreement is found to be illegal, unenforceable, or in violation of any laws, statutes, ordinances, or regulations of any public authority having jurisdiction, then, notwithstanding such term or provision, this Agreement will remain in full force and effect, and such term will be deemed stricken; provided this Agreement will be interpreted, when possible, so as to reflect the intentions of the parties as indicated by any such stricken term or provision.

20.11 COMPLIANCE WITH LAWS AND REGULATIONS. The Contractor, at its expense, will comply with all applicable federal, state, and local laws, rules, and regulations applicable to the Work.

20.12 PROJECT SAFETY. The Contractor will follow all applicable safety and health regulations during the progress of the Project and monitor all of its employees and its subcontractors for compliance with such safety and health regulations. The Owner assumes no responsibility for the development, review, or implementation of the any project safety plan or for Project safety and has no authority to direct the means and methods of the Contractor.

20.13 EQUAL OPPORTUNITY. The Contractor will not, and it will ensure that its Subcontractors, regardless of tier, will not, discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. Such action includes but not be limited to the following: employment,

upgrading, demotion, transfer, recruitment or recruiting advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of nondiscrimination. The Contractor will and will ensure that each of its Subcontractors will, regardless of tier, state in all solicitations or advertisements for employees placed by them or on their behalf that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, or national origin.

20.14 TIME OF THE ESSENCE. Time limits stated in the Contract Documents are of the essence of the Contract and all obligations under the Contract. By signing the Agreement, the Contractor acknowledges that the Contract Times are reasonable, taking into consideration the usual weather and other conditions prevailing in the locality of the Project.

20.15 SURVIVAL OF OBLIGATIONS. All representations, indemnity obligations, warranties, guarantees, and necessarily continuing obligations under the Contract, will survive final payment, completion and acceptance of the Work, and termination or completion of the Contract.

20.16 ENTIRE AGREEMENT. This Agreement and the other Contract Documents constitute the entire agreement among the parties with respect to their subject matter and will supersede all prior and contemporaneous, oral or written, agreements, negotiations, communications, representations, and understandings with respect to such subject matter, and no person is justified in relying on such agreements, negotiations, communications, representations, or understandings.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their properly authorized representatives as of the date first set forth above.

WEATHERSFIELD TOWNSHIP

By:_____
(signature)

_____
(printed name)

Title: _____

Date: _____

CONTRACTOR:

By:_____
(signature)

_____
(printed name)

Title: _____

Date: _____

CERTIFICATE OF AVAILABILITY OF FUNDS
(ORC Section 5705.41)

The undersigned, Fiscal Officer of Weathersfield Township Trumbull County, Ohio, hereby certifies in connection with the preceding Agreement that the amount of $_____ required to meet the obligations under the contract, obligation, or expenditure for the services described in the Agreement, has been lawfully appropriated for the purpose, and is in the treasury or in process of collection to the credit of an appropriate fund, free from any outstanding obligation or encumbrance.

IN WITNESS WHEREOF, I have hereunto set my hand this _____ day of _____, 2023.

_____
Fiscal Officer

CONTRACTOR'S PERSONAL PROPERTY TAX AFFIDAVIT

(O.R.C. § 5719.042)

State of Ohio
County of_____, SS:

_____, being first duly sworn, deposes and says that he is the
(Name)

_____ of _____
(Title) (Contractor)

with offices located at _____, and as its duly
(Address of Contractor)

authorized representative, states that effective this_____day of_____, 20___,

_____
(Name of Contractor)

( ) is charged with delinquent personal property taxes on the general list of personal property as set forth below:

County	Amount (includes total amount due, plus penalties and interest thereon)
_____	$_____

( ) is not charged with delinquent personal property taxes on the general list of personal property in any County in the State of Ohio.

_____
(Affiant)

Sworn to and subscribed before me by the above-named affiant this_____day of_____, 20__.

_____
(Notary Public)

My commission expires

_____, 20_

_____

NON-COLLUSION AFFIDAVIT

State of _____

County of _____

Company _____

Being first duly sworn, deposes and says that he/she is _____
(sole owner, partner, president, secretary)

of _____

the party submitting the foregoing Bid: that such Bid is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization, or Corporation; that such Bid is genuine and not collusive or sham; that said Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham Bid, or that anyone shall refrain from bidding; that said Bidder has not in any manner, directly or indirectly, sought by agreement, communication or conference with anyone to fix the Bid price of said Bidder or of any other Bidder, or to fix any overhead, profit, or cost element of such Bid price, or of that of any other bidder, or to secure any advantage against the township awarding the contract or anyone interested in the proposed contract; that all statements contained in such Bid are true; and further, that said Bidder has not, directly or indirectly, submitted his bid price or any breakdown thereof, or the contents thereof, or divulged information relative thereof, or paid and will not pay any fee in connection therewith, to any corporation, partnership, company, association, organization, Bid depository, or to any member or agent thereof, or to any other individual except to such person or persons as have a partnership or other financial interest with said Bidder in his general business.

State of Ohio }SS
County of _____ }

I, _____, being duly cautioned and sworn, do

hereby state that I have full power and authority to enter into this Bid Proposal on behalf of _____.

_____
Signature

Sworn to and subscribed in my presence this _____day of _____, 2023.

_____
Notary Public

Affidavit of Compliance
Davis-Bacon Federal Prevailing Wages

State of _____,
County of _____, SS:

_____, being first duly sworn, deposes and says that he is the
(Name)

_____of _____ with offices located at
(Title) (Contractor or Subcontractor)

_____, and as its duly
(Address of Contractor or Subcontractor)
authorized representative, do hereby certify:

1. That I pay or supervise the payment of the persons employed by the Contractor or Subcontractor identified above on the Weathersfield Township Multi-Jurisdictional Project.
2. That all persons employed on said Project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said Contractor or Subcontractor from the full weekly wages earned by any person.
3. That no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145).
4. That any payrolls under this contract required to be submitted are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; and that the classifications set forth therein for each laborer or mechanic conform with the work performed.
5. That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.
6. That where fringe benefits are paid to approved plans, funds or programs, that in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees.

_____
(Signature of Officer or Agent)

Sworn to and subscribed before me by the above-named affiant this ____day of _____, 20__ .

_____
(Notary Public)
My commission expires:

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 3729 OF TITLE 31 OF THE UNITED STATES CODE

SUBSTITUTION REQUEST FORM

We hereby submit for your consideration the following product instead of the specified item:

WEATHERSFIELD MULTI-JURISDICTIONAL CENTER

DRAWING NO. _____ DRAWING NAME _____

SPECIFIED ITEM _____

Proposed Substitution:_____

Manufacturer: _____ Model: _____

Differences between Proposed Substitution and Specified Product: _____

_____

_____

Reasons for not Providing Specified Product: _____

_____

Savings to Owner for accepting Substitution: _____

Submit, with request, all necessary samples and substantiating data to prove equal quality and performance to that which is specified. Clearly mark manufacturer's literature to indicate equality in performance.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Contractor will pay for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

SUBMITTED BY:_____ DATE:_____

PRINTED NAME AND TITLE:_____
Signature shall be by person having authority to legally bind the company to the above terms.

For Use by Design Professional:

_____ Recommended _____ Recommended as Noted

_____ Not Recommended _____ Received Too Late

Signed By: _____ DATE: _____

For Use by Owner's Representative

_____ Accepted _____ Accepted as Noted

_____ Not Accepted _____ Received Too Late

Signed By: _____ DATE: _____

"General Decision Number: OH20230101 08/04/2023

Superseded General Decision Number: OH20220101

State: Ohio

Construction Type: Building

County: Trumbull County in Ohio.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2023
1	01/13/2023
2	02/03/2023
3	03/03/2023
4	04/14/2023
5	06/30/2023
6	07/14/2023
7	08/04/2023

ASBE0008-010 03/01/2023

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR	$ 33.08	20.69

BROH0008-006 06/01/2022

	Rates	Fringes
BRICKLAYER	$ 31.10	22.59

BROH0008-008 06/01/2022

	Rates	Fringes
BRICK POINTER/CAULKER/CLEANER	$ 31.10	22.59

BROH0036-001 05/01/2022

	Rates	Fringes
TILE SETTER	$ 33.60	18.71

CARP0171-003 05/01/2019

	Rates	Fringes
CARPENTER (Includes Drywall Hanging and Metal Stud Installation, and Excludes Form Work)	$ 26.70	19.31

ELEC0064-004 11/29/2022

	Rates	Fringes
ELECTRICIAN (Excludes Low Voltage Wiring)	$ 36.10	18.91

ELEV0045-004 01/01/2023

	Rates	Fringes
ELEVATOR MECHANIC	$ 55.63	37.335+a+b

PAID HOLIDAYS:

a. New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving, and Christmas Day.

b. Employer contributes 8% of regular hourly rate to vacation pay credit for employee who has worked in business more than 5 years; 6% for less than 5 years' service.

ENGI0066-049 06/01/2017

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Backhoe/Excavator/Trackhoe; Bobcat/Skid Steer/Skid Loader; Bulldozer; Crane; Grader/Blade; Loader	$ 32.42	19.66
Forklift	$ 28.87	19.66
Mechanic	$ 32.92	19.66
Oiler	$ 22.75	19.66

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* IRON0207-014 06/01/2023

	Rates	Fringes
IRONWORKER (Ornamental, Reinforcing and Structural)	$ 33.00	27.16

LABO0125-004 06/01/2023

	Rates	Fringes
LABORER		
Mason Tender - Cement/Concrete	$ 30.79	12.65

LABO0935-001 05/01/2021

	Rates	Fringes
LABORER		
Form Work	$ 29.34	11.80

LABO0935-002 06/01/2022

	Rates	Fringes
LABORER		
Common or General	$ 30.24	12.23
Mason Tender - Brick	$ 30.24	12.23

PAIN0847-002 06/01/2022

	Rates	Fringes
GLAZIER	$ 27.51	19.70

PLAS0526-016 06/01/2018

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 29.65	18.61

* PLUM0396-004 06/01/2023

	Rates	Fringes
PIPEFITTER (Includes HVAC Pipe Installation)	$ 37.10	28.51
PLUMBER (Excludes HVAC Pipe Installation)	$ 37.10	28.51

ROOF0044-003 04/30/2023

	Rates	Fringes
ROOFER	$ 37.75	20.68

* SHEE0033-022 06/01/2023

	Rates	Fringes
SHEET METAL WORKER (HVAC Duct Installation Only)	$ 35.24	28.23

* SHEE0033-023 06/01/2023

	Rates	Fringes
SHEET METAL WORKER (Excluding HVAC Duct Installation)	$ 35.24	28.23

* UAVG-OH-0029 01/01/2019

	Rates	Fringes
PAINTER: Spray	$ 25.62	13.83

* UAVG-OH-0033 01/01/2018

	Rates	Fringes
OPERATOR: Roller	$ 30.65	19.66

* UAVG-OH-0034 01/01/2019

	Rates	Fringes
PAINTER (Drywall Finishing/Taping Only)	$ 25.80	13.83

SUOH2012-103 08/29/2014

	Rates	Fringes
ELECTRICIAN (Low Voltage Wiring Only)	$ 20.58	0.00
LABORER: Pipelayer	$ 23.98	8.58
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)	$ 30.28	13.29
PAINTER (Brush and Roller)	$ 20.52	10.06
TILE FINISHER	$ 24.24	9.75
TRUCK DRIVER: Dump (All Types)	$ 24.32	11.73

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic

violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination

* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on
   a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

==========

END OF GENERAL DECISIO"

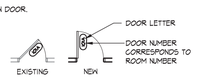
New Community Center For:

WEATHERSFIELD TOWNSHIP

Corner of Main Street and Stewart Street
Weathersfield, Ohio

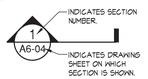
SYMBOLS:

NEW DOOR.

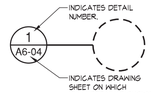


REVISION REFERENCE NUMBER.

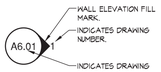
BUILDING, WALL AND DETAIL SECTION MARK.



ENLARGED PLAN OR DETAIL REFERENCE.



INTERIOR/EXTERIOR ELEVATION REFERENCE.

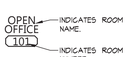


EXISTING PARTITION TO REMAIN.

EXISTING PARTITION TO BE REMOVED.

NEW PARTITION, SEE SCHEDULE.

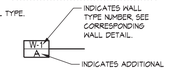
ROOM NUMBER.



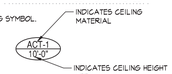
EXISTING COLUMN LINE.

NEW COLUMN LINE.

WALL TYPE.



CEILING SYMBOL.



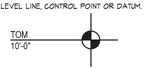
KEYNOTE SYMBOL USED FOR DEMO, FLOOR AND CEILING NOTES.

FINISH KEYNOTE SYMBOL.

EQUIPMENT/ACCESSORY KEYNOTE SYMBOL.

EXISTING: LEVEL LINE, CONTROL POINT OR DATUM.

NEW: LEVEL LINE, CONTROL POINT OR DATUM.



CONTRACT LIMIT LINE.

FLOOR LINE, PROPERTY LINE.

ITEMS ABOVE, BEYOND, OR NOT IN CONTRACT (N.I.C.).

PROJECT TEAM:

TENANT:

DESIGN/BUILDER:

ARCHITECT:

FMC architects
7675 Harley Hills Drive
North Royalton, Ohio 44133
Phone: 216.287.8547
Fax: 440.877.1560
E-mail: FrankC@FMCArchitectsLLC.com

ENGINEER:

MAKARICH STRUCTURAL ENGINEERING
P.O. BOX 1389
WILLOUGHBY, OHIO 44096
(440)283-7252
mike@buildingcrafter.com

ENGINEER:

M&H Engineering LLC
7449 Willowood Court
Painesville TWP., OH 44077
C: 330-323-3065

CONSULTANT:

CONSULTANT:

DRAWING INDEX:

SHEET NO	DESCRIPTION
GENERAL:	
G0.01	COVER SHEET
CIVIL:	
STRUCTURAL:	
S0	GENERAL NOTES
S1	FOUNDATION PLAN
S2	ROOFING PLAN
S3	SECTIONS AND DETAILS

SHEET NO	DESCRIPTION
ARCHITECTURAL:	
A5-1	ARCHITECTURAL SITE PLAN
A5-2	EXISTING UTILITY/GRADING PLAN
A0.01	ARCHITECTURAL SPECIFICATIONS
A0.10	SCHEDULES
A1.01	FLOOR PLANS, WALL TYPES
A1.10	CEILING PLAN & ROOF PLAN
A4.01	EXTERIOR ELEVATIONS
A5.01	WALL SECTIONS
A6.01	INTERIOR ELEVATIONS

SHEET NO	DESCRIPTION
MECHANICAL:	
M0.01	HVAC SPECIFICATIONS
M1.01	HVAC PLAN
M2.01	HVAC SCHEDULE
PLUMBING:	
P0.01	PLUMBING SPECIFICATIONS
P1.01	PLUMBING PLAN
ELECTRICAL:	
E0.01	ELECTRICAL SPECIFICATIONS
E0.02	ELECT DETAILS, DIAGRAM & SCHEDULES
E1.01	ELECTRICAL LIGHTING PLAN
E1.02	ELECTRICAL POWER PLAN

BUILDING CODE INFORMATION:

PROJECT DESCRIPTION:	NEW BANQUET HALL/ COMMUNITY CENTER WITH SMALL CONFERENCE ROOM AND WARMING KITCHEN.			
GOVERNING CODES:	2017 OHIO BUILDING CODE, 2017 OHIO MECHANICAL AND PLUMBING CODES, NEC 2017, ANSI 117.1 2009 EDITION AND CURRENT UPDATES. ENERGY CODE: ASHRAE 90.1-2010 UTILIZED ON THIS PROJECT			
CHAPTER 3	USE AND OCCUPANCY CLASSIFICATION			
303.3	ASSEMBLY GROUP A-3			
CHAPTER 5	GENERAL BUILDING HEIGHTS AND AREAS			
T 504.3 ALLOWABLE BUILDING HT	OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION - V		
		SPRINKLERED	TYPE B	
	A	YES	60 FT	
T 504.4 ALLOWABLE NUMBER OF STORIES	OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION - V		
		SPRINKLERED	TYPE B	
	A	YES	2 STORIES	
T 506.2 ALLOWABLE AREA FACTOR	OCCUPANCY CLASSIFICATION	SEE FOOTNOTES:	TYPE OF CONSTRUCTION	
			TYPE VB	
	A-3	NS	24,000 SF	
CHAPTER 6	TYPES OF CONSTRUCTION			

T 601 BUILDING ELEMENT	TYPE V B
PRIMARY STRUCTURAL FRAME	0
BEARING WALLS EXTERIOR	0
BEARING WALLS INTERIOR	0
NONBEARING WALLS AND PARTITIONS EXTERIOR	SEE T 602
NONBEARING WALLS AND PARTITIONS INTERIOR	0
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	0
ROOF CONSTRUCTION AND SECONDARY MEMBERS	0

CHAPTER 8	INTERIOR FINISHES
T 803.1	CLASS A: FLAME SPREAD 0-25; SMOKE-DEVELOPED 0-450 CLASS B: FLAME SPREAD 26-75; SMOKE-DEVELOPED 0-450 CLASS C: FLAME SPREAD 76-200; SMOKE-DEVELOPED 0-450

T 803.11 ⚠1	NONSPRINKLERED	EXIT ENCLOSURES AND PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES
USE GROUP A-3	A	B	C	

CHAPTER 9	FIRE PROTECTION SYSTEMS
⚠1	SPACE DOES NOT HAVE A SPRINKLER SYSTEM.
906	PORTABLE FIRE EXTINGUISHERS AS REQUIRED BY IFC, MINIMUM OF 2. LOCATE WITH LOCAL FIRE DEPARTMENT

CHAPTER 10	MEANS OF EGRESS	
T 1004.1.2	- DESIGN OCCUPANT LOAD -	5,418 SF
⚠1	USE OPEN HALL: 4,574 SF 26 - 10 PERSON TABLES = 260 PEOPLE MEETING ROOM: 533 SF/15 GROSS SF PER PERSON = 36 PEOPLE WARMING KITCHEN: 329 SF/200 GROSS SF PER PERON = 2 PEOPLE TOTAL 298 PEOPLE ACTUAL OCCUPANT LOAD SHALL BE LIMITED TO 298 FOR ENTIRE BUILDING	
1010.1.1	SIZE OF DOORS. THE REQUIRED CAPACITY OF EACH DOOR OPENING SHALL BE SUFFICIENT FOR THE OCCUPANT LOAD THEREOF AND SHALL PROVIDE A MINIMUM CLEAR WIDTH OF 32 INCHES. CLEAR OPENINGS OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES. WHERE THIS SECTION REQUIRES A MINIMUM CLEAR WIDTH OF 32 INCHES AND A DOOR OPENING INCLUDES TWO DOOR LEAVES WITHOUT A MULLION, ONE LEAF SHALL PROVIDE A CLEAR OPENING WIDTH OF 32 INCHES. THE MAXIMUM WIDTH OF A SWINGING DOOR LEAF SHALL BE 48 INCHES NOMINAL. MEANS OF EGRESS DOORS IN A GROUP I-2 OCCUPANCY USED FOR THE MOVEMENT OF BEDS SHALL PROVIDE A CLEAR WIDTH NOT LESS THAN 41½ INCHES. THE HEIGHT OF DOOR OPENINGS SHALL BE NOT LESS THAN 80 INCHES.	
	BUSINESS AREA (36" EXIT DOOR+32" CLEAR) X 3 EXITS = 96" (72" EXIT DOOR+68" CLEAR) X 1 EXITS = 68" TOTAL INCHES PROVIDED: = 164"	
T 1020.1 ⚠1	OCCUPANT LOAD SERVED BY CORRIDOR WITH SPRINKLER SYSTEM OCCUPANCY A - GREATER THAN 30 = 1 HOUR	
CHAPTER 12	INTERIOR ENVIRONMENT	
1210.2.2	WALLS AND PARTITIONS: WALLS AND PARTITIONS WITHIN 2 FEET OF SERVICE SINKS, URINALS AND WATER CLOSETS SHALL HAVE A SMOOTH, HARD, NONABSORBENT SURFACE, TO A HEIGHT OF NOT LESS THAN 4 FEET ABOVE THE FLOOR, AND EXCEPT FOR STRUCTURAL ELEMENTS, THE MATERIALS USED IN SUCH WALLS SHALL BE OF A TYPE THAT IS NOT ADVERSELY AFFECTED BY MOISTURE.	
CHAPTER 29	PLUMBING	

USE A-3 OCCUPANT LOAD (ACTUAL LOAD 1004.1.1) = 308

FIXTURE TYPE	OCC / SF	NO OF OCC	REQUIRED	PROVIDED
WATER CLOSETS				
MALE	1 PER 75	154	2	2
FEMALE	1 PER 75	154	2	2
UNI-SEX				
LAVATORIES				
MALE	1 PER 200	154	1	2
FEMALE	1 PER 200	154	1	2
UNI-SEX				
DRINKING FOUNTAIN	1 PER 500	308	1	OPC 410
SERVICE SINK	--	--	1	1
URINALS	--	--	--	2

CHAPTER 4 OPC	MINIMUM PLUMBING FACILITIES
410	BOTTLE WATER COOLER SHALL BE PROVIDED, FINAL LOCATION TBD, EITHER IN FRONT WAITING AREA OR IN BREAK ROOM.

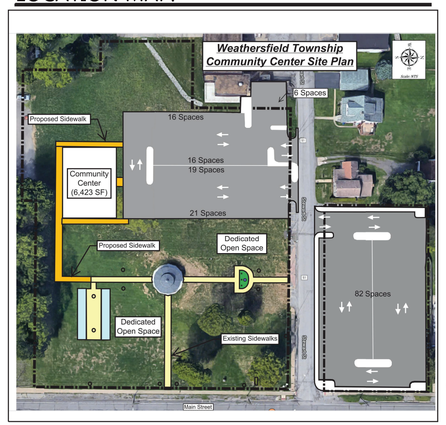
ABBREVIATION LEGEND:

AB	ANCHOR BOLT	COL	COLUMN	FL	FLOOR	ID	INSIDE DIAMETER	OA	OVERALL	QT	QUARRY TILE	SUSP	SUSPENDED	W	WIDTH
A/C	AIR CONDITIONING	CONC	CONCRETE	FLUOR	FLUORESCENT	IN	INCH	OC	ON CENTER	QTY	QUANTITY	SV	SHEET VINYL	W/	WITH
ACOUS	ACOUSTICAL)	CONN	CONNECTION	FM	FACE OF MASONRY	INCL	INCLUDE (INCLUSIVE)	OCAFF	ON CENTER ABOVE FINISH FLOOR	R	RISER	SVNS	SEAMLESS VINYL - NON SLIP	W/O	WITHOUT
ACT	ACOUSTICAL CEILING TILE	CONST	CONSTRUCTION	FR	FIRE RESISTANT	INSUL	INSULATION			RA	RETURN AIR	SVS	SEAMLESS VINYL SHEET	WN	WALL TO WALL
ADJ	ADJACENT	CONT	CONTINUOUS	FRP	FIBERGLASS REINFORCED PANELS	INT	INTERIOR	OD	OUTSIDE DIAMETER	RAD	RADIUS	SYS	SYSTEMS	WC	WATER CLOSET
APF	ABOVE FINISH FLOOR	COORD/	COORDINATE	FRT	FIRE-RETARDANT TREATED	JAN	JANITOR	OHDR	OVERHEAD DOOR	RAG	RETURN AIR GRILLE	T	THREAD	WCAR	WALL CARPET
ALT	ALTERNATE	CORR	CORRIDOR	FRTWD	FIRE-RETARDANT TREATED WOOD	JST	JOIST	OPH	OPPOSITE HAND	RD	ROOF DRAIN	T/G or T&G	TONGUE AND GROOVE	WD	WOOD
ALUM	ALUMINUM	CPT	CARPET					OVRD	OVERFLOW ROOF DRAIN	REC	RECEPTACLE			WH	WATER HEATER
ANOD	ANODIZED	CS	COURSE					O/O	OUT TO OUT	REF	REFRIGERATOR	TD	TRENCH DRAIN	WSMB	MOISTER AND MOLD RESISTANT GYPSUM WALL BOARD
APPROX	APPROXIMATE	CSLR	CONCRETE SEALER	FT	FEET	KD	KNOCK DOWN	OPG	OPENING	REG	REGISTER	TEL	TELEPHONE		
ARCH	ARCHITECT(URAL)	CT	CERAMIC TILE	FTG	FOOTING	KO	KNOCK OUT	OPP	OPPOSITE	REINF	REINFORCEMENT	TEMP	TEMPORARY	WIN	WINDOW
AUTO	AUTOMATIC	CTP	CERAMIC TILE - PORCELAIN	FURR	FURRING			OPT	OPTIONAL		(REINFORCING)	TEMPD	TEMPERED	WG	WIRE GLASS
		CTR	CENTER	FVC	FIRE VALVE CABINET					REQ'D	REQUIRED	TER	TERRAZZO	WT	WEIGHT
BD	BOARD			FWC	FABRIC WALLCOVERING	L	LENGTH (LONG)	PT	PAVER TILE	RES	RESILIENT	TEX	TEXTURE	WWF	WELDED WIRE FABRIC
BETW	BETWEEN	D	DEPTH			LAM	LAMINATE(D)	PBD	PARTICLE BOARD	RET	RETURN	THK	THICK		
BLDG	BUILDING	DBL	DOUBLE	GA	GAUGE	LAV	LAVATORY	PC	PRECAST CONCRETE	REV	REVISED (REVISION)	THLD	THRESHOLD	YD	YARD
BLK	BLOCK(ING)	DEG	DEGREES	GALV	GALVANIZED	LB	POUND	PCF	POUNDS PER CUBIC FOOT	RF	RESINOUS FLOORING	TOC	TOP OF CONCRETE (TOP OF CURB)		
BLKHD	BULKHEAD	DEMO	DEMOLITION	GC	GENERAL CONTRACTOR	LF	LINEAR FEET (FOOT)	PCM	PREFACED CONCRETE MASONRY	RM	ROOM	TOS	TOP OF STEEL		
BM	BEAM	DF	DRINKING FOUNTAIN	GL	GLASS	LIM	LIMITED	PERIM	PERIMETER	RO	ROUGH OPENING	TOD	TOP OF DECK		
BOT	BOTTOM	DIA	DIAMETER	GR	GRADE	LT	LIGHT	PG BD	PEG BOARD	RVS	REVERSE	TOM	TOP OF MASONRY		
BRDG	BRIDGING	DIM	DIMENSION	GYP BD	GYPSUM BOARD	LTG	LIGHTING	PL	PLATE	SC	SOLID CORE	TOJ	TOP OF JOIST		
BRG	BEARING	DISP	DISPENSER	GWB	GYPSUM WALL BOARD	LVR	LOUVER	PLAS	PLASTIC	SCHED	SCHEDULE	TOP	TOP OF PARAPET		
BRK	BRICK	DN	DOWN					PLAM	PLASTIC LAMINATE	SD	SMOKE DETECTOR	TOW	TOP OF WALL		
BSMT	BASEMENT	DR	DOOR	H	HIGH	MARB	MARBLE	PLBG	PLUMBING	SDL	SADDLE	TYP	TYPICAL		
BUR	BUILT-UP ROOFING	DS	DOWN SPOUT	HB	HOSE BIBB	MAS	MASONRY	PMLD	PREMOLDED	SECT	SECTION				
		DET	DETAIL	HC	HOLLOW CORE	MAT	MATERIAL	PNL	PANEL	SHT	SHEET	UC	UNDERCUT		
C/C	CENTER TO CENTER	DWG	DRAWING	HDBD	HARDBOARD	MAX	MAXIMUM	PNT	PAINT	SIM	SIMILAR	UG	UNDERGROUND		
CABT	CABINET	DWR	DRAWER	HDCPD	HANDICAPPED	MECH	MECHANICAL	PLYWD	PLYWOOD	SL	SLATE	UNFIN	UNFINISHED		
CAD	CADMIUM	DW	DRYWALL	HDWR	HARDWARE	MEMB	MEMBRANE	POL	POLISHED	SP	STAND PIPE	UNLIM	UNLIMITED		
CB	CATCH BASIN			HDWD	HARDWOOD	MFR	MANUFACTURER	PR	PAIR	SPEC	SPECIFICATIONS	UNO	UNLESS NOTED OTHERWISE		
CEM	CEMENT	ES	EXPOSED STEEL	HM	HOLLOW METAL	MH	MANHOLE	PREFIN	PREFINISHED	SPKR	SPEAKER	UR	URINAL		
CL or ℄	CENTER LINE	ETR	EXISTING TO REMAIN	HORIZ	HORIZONTAL	MIN	MINIMUM	PREFAB	PREFABRICATED	SPKLR	SPRINKLER				
CFM	CUBIC FEET PER MINUTE	EXIST	EXISTING	HPC	HIGH PERFORMANCE COATING	MISC	MISCELLANEOUS	PROJ	PROJECTION	SPR	SINGLE PLY ROOFING	VERT	VERTICAL		
CG	CORNER GUARD			HPDL	HIGH PRESSURE DECORATIVE LAMINATE	MO	MASONRY OPENING	PSC	PRE-STRESS CONCRETE	SQ	SQUARE	VEST	VESTIBLE		
CI	CAST IRON	FA	FIRE ALARM			MTD	MOUNTED	PSF	POUNDS PER SQUARE FOOT	SQ IN	SQUARE INCH	VC	VINYL COVE		
CJ	CONTROL JOINT	FB	FACE BRICK	HR	HOUR	MTL	METAL	PSI	POUNDS PER SQUARE INCH	SY	SQUARE YARD	VCT	VINYL COMPOSITE TILE		
CLG	CEILING	FCU	FAN COIL UNIT	HT	HEIGHT	MULL	MULLION	PT	POINT/PAVER TILE	SS	STAINLESS STEEL/ SLOP SINK	VIF	VERIFY IN FIELD		
CLR	CLEAR	F/F	FACE TO FACE	HTG	HEATING			PTD	PAINTED			VS	VINYL STRAIGHT		
CLL	CONTRACT LIMIT LINE	FD	FLOOR DRAIN	HTR	HEATER	N/A	NOT APPLICABLE	PTN	PARTITION	STD	STANDARD	VWC	VINYL WALLGOVERING		
CNTR	COUNTER	FDN	FOUNDATION	HVAC	HEATING, VENTILATION AIR CONDITIONING	NIC	NOT IN CONTRACT	PTWD	PRESSURE TREATED WOOD	STL	STEEL				
CMT	CERAMIC MOSAIC TILE	FE	FIRE EXTINGUISHER			NO	NUMBER	PVC	POLYVINYLCHLORIDE	STOR	STORAGE				
CMU	CONCRETE MASONRY UNIT	FEC	FIRE EXTINGUISHER CABINET	HW	HOT WATER	NOM	NOMINAL	PVMT	PAVEMENT	STRUC	STRUCTURE(AL)				
CO	CASED OPENING/CLEAN OUT	FHC	FIRE HOSE CABINET	HWH	HOT WATER HEATER	NTS	NOT TO SCALE								
		FIN	FINISH												

GENERAL PROJECT NOTES:

1. THE CONTRACT DOCUMENTS ARE PREPARED FOR THE CONTRACTOR TO BECOME FAMILIAR WITH THE SCOPE OF WORK AND PROPOSED DESIGN CONCEPT.
2. DO NOT SCALE THE CONTRACT DOCUMENTS. DIMENSIONS AS INDICATED SHALL GOVERN.
3. CONTRACTORS SHALL WARRANT THEIR RESPECTIVE CONSTRUCTION AND WORK TO BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS IF ALL LOCAL, STATE, AND FEDERAL LAWS, AUTHORITIES HAVING JURISDICTION, AND MANUFACTURER'S INSTALLATION AND WARRANTY REQUIREMENTS.
4. CONTRACTORS SHALL PROVIDE ALL REQUIRED LABOR AND MATERIALS TO ACHIEVE INDUSTRY STANDARD OF MEANS AND METHODS TO ACHIEVE THE DESIGN INTENT OF THE CONTRACT DOCUMENTS REGARDLESS WHETHER OR NOT DOCUMENTED HEREIN; CONSIDERATIONS FOR ADDITIONAL LABOR OR MATERIAL COSTS ON THE BASIS OF OMISSIONS SHALL NOT BE GRANTED.
5. INTERPRETATIONS, CLARIFICATIONS, CHANGES, DELETIONS, AND RELATED MODIFICATIONS TO THE CONTRACT DOCUMENTS SHALL BE SOLELY BY THE ARCHITECT EITHER BY ISSUANCE OF A CONSTRUCTION CHANGE DIRECTIVE OR ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS.
6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO VERIFY ALL FIELD CONDITIONS PRIOR TO SUBMITTING PROJECT BIDS, ORDERING MATERIALS, GENERATING SHOP DRAWINGS AND SUBMITTALS, AND START OF WORK. THE ARCHITECT SHALL NOT BE HELD LIABLE FOR UN-VERIFIED FIELD CONDITIONS.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES, DIFFERENCES, OR ABNORMALITIES WITH THE FIELD CONDITIONS AGAINST THOSE AS DOCUMENTED IN THE CONSTRUCTION DOCUMENTS IN A TIMELY FASHION. THE CONTRACTOR SHALL BE HELD LIABLE FOR FAILURE TO REPORT ITEMS TO THE ARCHITECT AND RESPONSIBLE FOR CONSTRUCTION COSTS AND APPLICABLE FEES TO REMEDY CONFLICTS.
8. NO SUBSTITUTIONS, CHANGES, OR OMISSIONS TO THE CONTRACT DOCUMENTS ARE PERMITTED. CONTRACTOR MAY REQUEST SUBSTITUTIONS, CHANGES, AND/OR OMISSIONS IN WRITING TO THE ARCHITECT, ALLOW MIN 2 WEEKS FOR REVIEW/APPROVAL.
9. CLARIFICATIONS TO THE DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT FOR REVIEW AND RESPONSE.
10. THE CONTRACTOR IS RESPONSIBLE FOR THE REVIEW AND COORDINATION OF WORK AS ENTAILED WITHIN THE CONTRACT DOCUMENTS, INCLUDING THOSE OF THE ARCHITECT'S CONSULTANTS. COORDINATION OF RELATED TRADE WORK SHALL INCLUDE BUT NOT BE LIMITED TO: SEQUENCING, PHASING, FIELD COORDINATION, CUTS AND OPENINGS, INSPECTIONS, AND APPROVALS.
11. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES PRIOR TO ORDERING MATERIALS. THE ARCHITECT SHALL NOT BE HELD LIABLE FOR QUANTITIES AS NOTED ON CONTRACT DOCUMENTS.

LOCATION MAP:



NORTH

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Fax: 440.877.1560
E-mail:FrankC@FMCArchitectsLLC.com

Architect Stamp:

STATE OF OHIO
FRANK M. CASTROVILLARI
0012628
REGISTERED ARCHITECT

FRANK CASTROVILLARI, LICENSE#: 0012628
EXPIRATION DATE: 12/31/2023

Engineer Stamp:

Weathersfield Township Community Center

Corner of Main Street and Stewart Street
Weathersfield, Ohio

☒ Design	04/30/2021
☒ Approval	06/02/2021
☒ Permit	07/28/2021
☐ Bid	
☐ Construction	

Revisions:

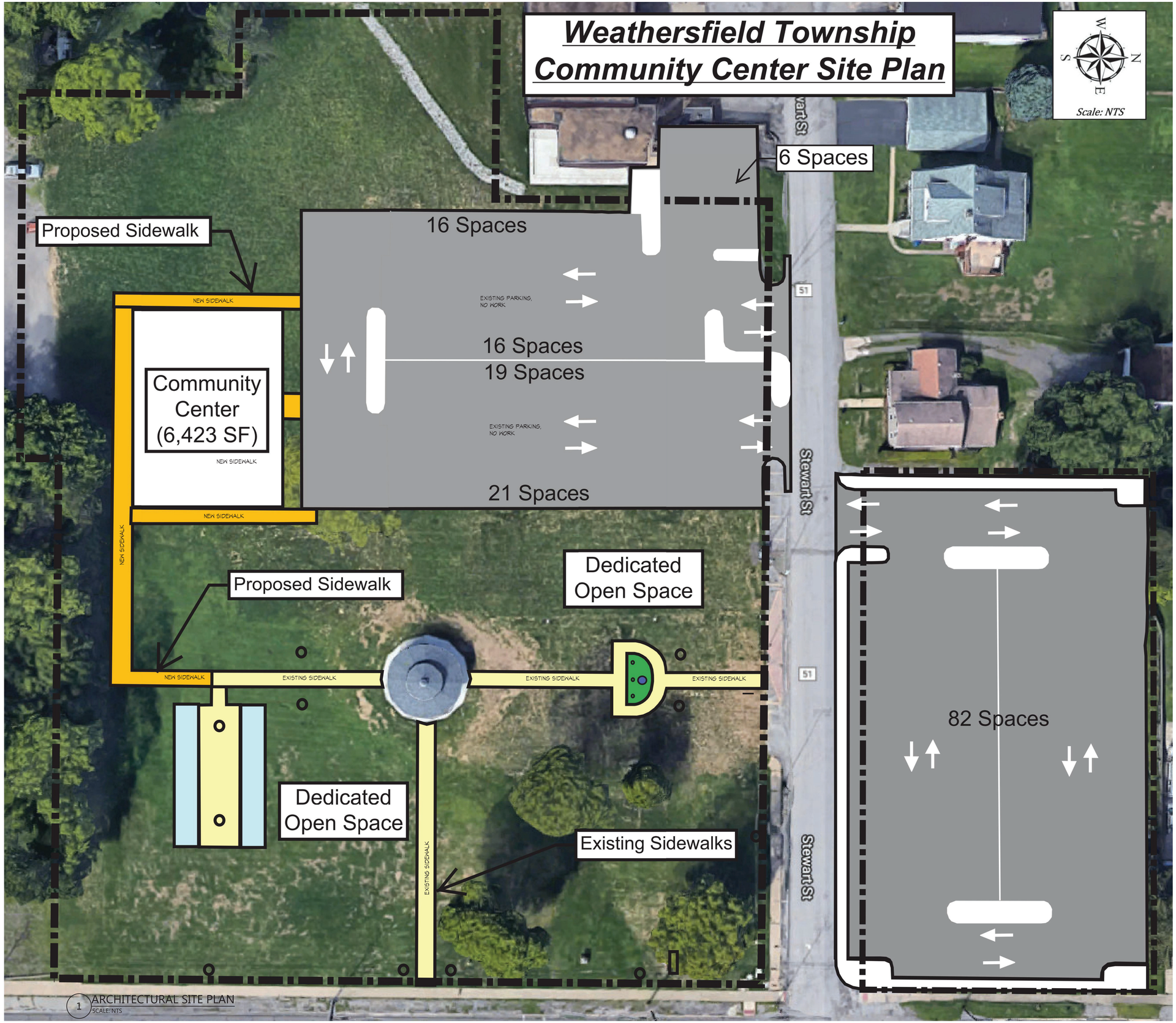
No.	Date/Description
⚠1	CITY LETTER-01 04/13/2022

Project No. 21109
Drawn By: FMC/PWB
Checked By: FMC

Sheet Title:
COVER SHEET

Sheet No:
G0.01

Weathersfield Township
Community Center Site Plan



1 ARCHITECTURAL SITE PLAN
SCALE: NTS

FMC architects
7675 Harley Hills Drive
North Royalton, Ohio 44133
Phone: 216.287.8547
Fax: 440.877.1560
E-mail:FrankC@FMCArchitectsLLC.com

Architect Stamp:

STATE OF OHIO
FRANK M. CASTROVILLARI
0012628
REGISTERED ARCHITECT

FRANK CASTROVILLARI, LICENSE#: 0012628
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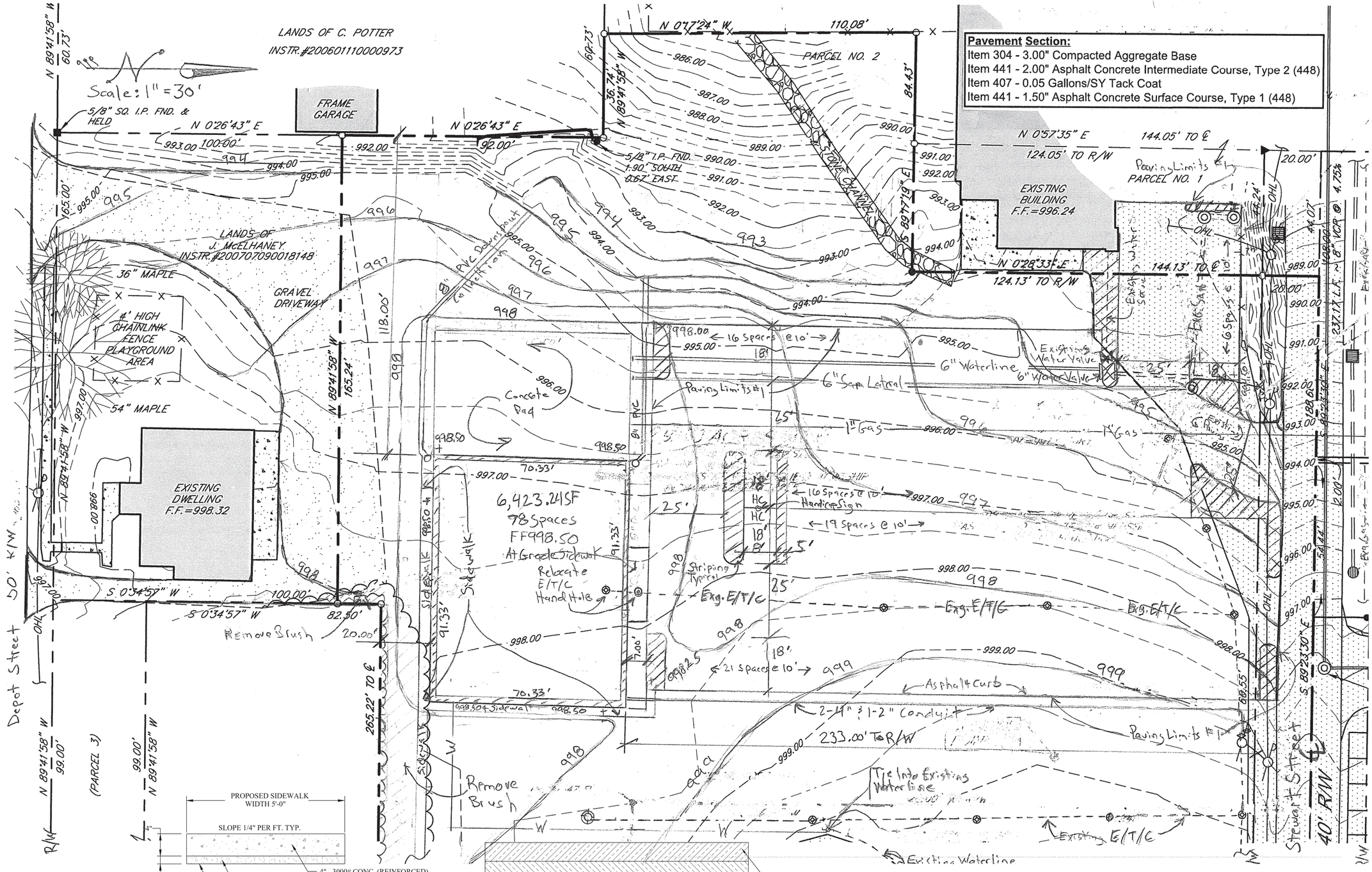
ARCHITECTURAL SITE PLAN

Sheet No:
AS-1



PROPOSED SIDEWALK
WIDTH 5'-0"

SLOPE 1/4" PER FT. TYP.

4"

2"

4" - 3000# CONC. (REINFORCED)

2" - AGGREGATE BASE

SUBGRADE

NOTE:
CRACK CONTROL SHALL BE AT FIFTEEN FOOT (15') INTERVALS AND SCORE MARKS SHALL BE AT FIVE FOOT (5') INTERVALS. CONSTRUCTION SHALL BE IN ACCORDANCE WITH O.D.O.T. ITEM 608. PRIOR TO THE START OF SIDEWALK CONSTRUCTION THE SUBGRADE MUST BE INSPECTED AND APPROVED BY THE OWNERS REPRESENTATIVE. ANY SETTLEMENT OR DEFICIENT AREAS IDENTIFIED BY THE OWNERS REPRESENTATIVE SHALL BE REPAIRED BY A A METHOD ACCEPTABLE TO THE OWNER. THE REPAIRED AREAS WILL BE SUBJECT TO COMPACTION TESTING AND APPROVAL BY THE OWNER PRIOR TO THE START OF SIDEWALK CONSTRUCTION.

ON-SITE CONCRETE SIDEWALK

REFERENCE ONLY NOT TO SCALE

ODOT ITEM 441 SURFACE COURSE
1 ½" THICK

ODOT ITEM 441
BINDER COURSE
2" THICK

ODOT ITEM 304
3" AGGREGATE BASE ON 6" EXISTING #304 VIF

EXISTING SUBGRADE COMPACTION

PROP. REGULAR DUTY ASPHALT PAVEMENT

1 REFERENCE SITE PLAN
SCALE: NTS

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Checked By:	FMC

Sheet Title:
EXISING UTILITY AND GRADING FOR REFERENCE ONLY

Sheet No:
AS-2

DIVISION 1 - GENERAL DATA

SECTION 01000 - CONDITIONS AND REQUIREMENTS

A. The contractor and sub-trades are responsible for the verification of all site dimensions relative to their work and shall immediately notify the Architect, in writing, of any discrepancy for approval before executing their work.
B. The General Contractor, (GC), shall be responsible for following all City, State, Regional, and Federal codes and regulations for the entire construction of the Project.
C. GC shall be responsible for securing and paying for all required permits, insurance, performance bonds, inspections, etc. required for the completion of the Project as required by the owner and all authorities having jurisdiction over the premises.
D. GC shall guarantee all materials and workmanship for a period of one (1) year from date of final acceptance by the owner, and agrees to make good all defects without cost to the owner in a reasonable length of time.
E. The contractors, subcontractors, and sub-trades shall visit the site to inspect and familiarize themselves with all conditions affecting the construction work and the submission of his bid shall be construed as indication of such knowledge. No payment will be made due to lack of knowledge of existing conditions.
F. All materials and labor shall be supplied by the GC and sub-trades as herein specified, and as required to complete and finish all construction and finish work. It is the responsibility of the GC to coordinate a smooth construction schedule.
G. GC shall maintain at the project site during construction a minimum of one (1) set of complete and current City approved construction documents and shop drawings.
H. GC shall supply and install all other finish materials necessary to complete this project whether or not such materials are called out on schedules and drawings, unless noted otherwise.
I. The contractor and sub-trades shall from time to time during the construction and at the completion of the project, remove all excess materials and debris caused by his work. He shall leave the site in a very clean condition and shall clean all surfaces to be free from spatters, stains, drips, excess glue, sealants, caulking compounds, etc.
J. GC shall patch and match any and all existing partitions which he has altered or cut to match as closely as possible in color and texture. Edges shall be feathered to avoid lumps and uneven appearances.
K. Work under this contract includes, but is not limited to the complete scope of work shown on the drawings and the patching and repairing and finishing of all adjacent rooms where remodeling or modifications take place.
L. Items Not In Contract, (NIC) include:
  1. Furnishing and installing Furniture
  2. Telecommunications and network system. GC is responsible to provide a standard junction box and min 3/4" dia (or as noted on drawings) conduit stubbed above the ceiling with a pull wire. GC shall coordinate the work of the tenant's and owner's forces. At network room provide panduit and conduit. Size of conduit and panduit box into network room to be determined by Architect at a later date.
M. Sequence of the work
  1. The contractor may work normal daytime hours. Construction duration may be a consideration in the award of the contract.
  2. Time Restrictions for performing work requiring system shutdowns may occur only with prior coordination with the Landlord.

SECTION 01019 - CONTRACT CONSIDERATIONS

A. The Contractor shall enter into the latest edition of the AIA A-101 or AIA A-105 Standard Form of Agreement Between Owner and Contractor where the basis of payment is a stipulated sum, or the latest edition of AIA A-102 Standard Form of Agreement Between Owner and Contractor where the basis of payments is a Guaranteed Maximum Price. Election of contract type at Owner's discretion and shall override this section.
B. Contractor shall submit a schedule of values within 7 days of the award of the contract.
C. Contractor shall utilize AIA G702 Application for Payment forms, and shall include waivers of lien for each payment made. The Contractor shall also provide the Notice of Commencement and Notice of Furnishing forms required for proper execution of the State requirements for Waivers of Liens. Submit three copies of AIA G702 and two copies of each Waiver of Lien. Payments will not be processed without proper documentation.

SECTION 01040 - PROJECT COORDINATION

A. GC shall coordinate all items furnished and installed by Owner and Owner's forces (listed on drawings), including but not limited to:
  1. Carpeting, computer system network(s), telecommunications, furniture systems, Security system, equipment installation and all wiring thereof.
B. Use written dimensions only do not scale drawings.
C. The Architect is not responsible for Mechanical, Electrical, Plumbing/Fire Protection drawings done by others.
D. Report all discrepancies in dimensions, code compliance or other issues to architect prior to proceeding with project or ordering any materials.
E. The contractor is responsible to coordinate all Mechanical, Electrical and Plumbing installations with the structural system to assure that proper clearances can be achieved, prior to fabricating any systems.
F. Dimensions indicated with +/- shall be field verified by the GC.
G. It is each contractors responsibility to check model numbers of components specified in this project with description of product for conformance with the intent of the design. if discrepancies are discovered, notify the architect prior to ordering materials.
H. Provide all demolition as indicated on drawings and as required to complete the work.
I. Provide all cutting and patching of existing walls, floors and ceilings as required to accommodate new layout. Patch to match existing adjacent walls, floors and ceilings for smooth even appearance unless otherwise indicated.

SECTION 01300 - SUBMITTALS

NO NON-STRUCTURAL SUBMITTALS REQUIRED IF USING ITEMS LISTED IN THE DRAWING SET.

A. The GC shall submit all shop drawings, product literature and samples to the Architect within ten (10) days after the start of construction or as deemed appropriate by approved schedule.
B. Submit shop drawings for the following work and or items:
  1. All door hardware.
  2. All doors and frames.
  3. Millwork, cabinetry, hardware.
  4. Steel framing and lintels.
  5. Roofing materials.
  6. Fire pit equipment and accessories.
  7. New Mechanical and Electrical equipment, fixtures and accessories.
C. Submit Manufacturer's literature for Architect's review and approval for the following items, including but not limited to:
  1. Acoustical ceiling tile.
  2. Light fixtures.
  3. Door and Frames.
  4. Hardware (door, cabinetry, etc.).
D. Submit at least two product samples of each of the following items for Architect's review and approval:
  1. Paint finishes submitted on 12" x 12" drywall samples showing color and finish.
  2. Stain finishes submitted on a 1" x 6" x 12" long wood sample showing color and finish.
  3. Ceiling Tiles.
  4. Sealants.
  5. Wood trims: Submit two pieces at least 12" long.
  6. All other finishes.

SECTION 01500 - CONSTRUCTION FACILITIES

A. If no power is available, GC to provide power via generators or arrange meter installation and pay for all power used. If power is available, GC to connect to Owner's power supply only at locations designated by Landlord. Provide sub-meter and pay for all power used. GC and Owner to negotiate fees and payments prior to contract start date.
B. Provide protection of the existing facilities at all times during construction.
  1. Provide a dumpster and remove all construction debris at the end of each day. Leave the site broom clean as well as street and driveways free from dirt. Locate dumpster and remove all wastes in accordance with the Landlord's requirements and within the time periods allowed by the Landlord.
  2. Provide temporary protection of the carpet and other finishes on the way to and from the work areas.

SECTION 01631 - PRODUCT SUBSTITUTIONS

A. No substitutions to specified materials an/or brands of materials will be accepted unless approved by the Architect, in writing, prior to construction. Any contractor requesting substitutions shall submit six (6) copies of drawings or electronic copy, and/or product literature along with the amount of cost savings for the item in question. The contractor must allow the Architect at least seven business days to determine the suitability of the substitution.

SECTION 01700 - PROJECT CLOSEOUT

A. Submit request for substantial completion walk thru, followed by final application for payment and notification of final inspection if part of Owner and Architect contract.
B. Provide a copy of final approval by the governing authorities and certificate of occupancy.
C. Final Cleaning:
  1. Remove all temporary barriers and protections.
  2. Clean all interior finish spaces clean from all dirt, dust, debris, stains, spills, etc. Polish and wipe all surfaces. Remove temporary labels, foreign materials, vacuum carpets areas, wet mop hard surfaces.
D. Turn over all warranties, notices, and operating instructions to the Owner.
E. See Engineer drawings for further closeout requirements.

DIVISION 2 - SITE CONSTRUCTION

SECTION 02072 - MINOR DEMOLITION FOR REMODELING

A. Disconnect, dismantle, remove, cap any utilities within the spaces as required for the work.
B. Provide, erect and maintain barricades, and provide signage indicating dangerous, hazardous or deleterious conditions or areas.

DIVISION 6 - WOOD AND PLASTICS

SECTION 06402 - ARCHITECTURAL WOODWORK

A. This section includes: Interior standing and running trim and rails, wood cabinets, laminate clad cabinets, cabinet tops (countertops), and interior door and window frames.
B. Where woodwork is indicated to be fitted to other construction, check actual dimensions of other construction by accurate field measurements; show recorded measurements on final shop drawings. Coordinate manufacturing schedule with construction progress to avoid delay of work.
C. All high pressure decorative laminate to be as specified on the drawings. All finishes to be selected by the Architect if not specified on the drawings.
  1. All laminates to be regular grade 0.050" thick, UNO.
D. Complete fabrication, including assembly, finishing, and hardware application, before shipment to project site to maximum extent possible. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.
E. Materials:
  1. All Cabinetry to be custom grade or equal, UNO. Style and color by Architect.
  2. Comply with the appropriate AWI quality standard as listed below:
  3. All Counters and cabinetry - Custom Grade.
    3.1. Door and Window Frames - Custom Grade.
    3.2. Running trim - Custom Grade.
    3.3. Bookcases and miscellaneous woodwork - Custom Grade.
    3.4. Cabinet hardware including pulls, drawer slides, adjustable shelves, catches, and hinges, shall be determined per project by architect. If not on drawings, GC shall include allowance of custom grade quantity and submit brochure of samples for architect review.
F. Comply with AWI Standards for finishing of woodwork. All woodwork to be finished per AWI Custom Grade requirements.
G. To the greatest extent possible, finish architectural woodwork at the factory. Defer only final touch-up, cleaning, and polishing until after installation.

SECTION 06112 - FRAMING AND SHEATHING

A. Follow recommended or preferred guidelines of the following reference standards: ALSC; American Lumber Standards Committee, APA; American Plywood Assoc., NFPA; Nat'l Forest Products Assoc., SPIB; Southern Pine Inspection Bureau, WCLIB; West Coast Lumber Inspection Bureau, WWPA; Western Woods Products Assoc.
B. Lumber grading rules: NFPA, RIS, SPIB, WCLIB, WWPA.
C. Framing and blocking to be fire retardant treated per the local Building Code(UNO).
D. Paper-surfaced gypsum wall sheathing per ASTM C 1396/C 1396M.
E. Glass-Mat gypsum wall sheathing per ASTM C 1177 / 1177M.

DIVISION 8 - DOORS AND WINDOWS

SECTION 08110 - STEEL DOORS AND FRAMES

A. Furnish steel doors and frames as indicated on the drawings.
B. Comply with Steel Door Institute "Recommended Specifications for Standard Steel Doors and Frames" (SDI - 100).

SECTION 08211 - FLUSH WOOD DOORS

A. Furnish flush wood doors as shown on the drawings - custom grade - 7 ply.
B. Comply with AWI Standards for Custom Grade solid core doors, 7 ply - structural composite lumber cores.
C. Finish for doors to be Custom grade AWI Finish System, color to be determined by architect.

SECTION 08710 - DOOR HARDWARE
(DOOR AND HARDWARE SCHEDULE ON DRAWINGS OVERRIDE THE FOLLOWING)

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this Section.
B. Submittals:
  1. Submit final hardware schedule organized by "hardware sets", to indicate specifically the product to be furnished for each item required on each door.
  2. Furnish templates to each fabricator of doors and frames, as required for preparation to receive hardware.
C. PRODUCTS:
  1. Acceptable manufactures/products
    1.1. All hardware to be new. Finish to be brushed nickel, clear coated or match building standards unless otherwise noted on drawings/door schedule. Verify with landlord/tenant. The grade of the hardware is to be as specified herein. The following specification is presented as a guide for quality and function. Acceptable manufacturers for various types of products are listed below. An asterisk (*) following a manufacturers name designates manufacturer whose products are indicated in Finish Hardware Schedule. Such products are listed in the schedule by specific reference to manufacturers catalog numbers. Except as otherwise indicated, products of equivalent quality, design and function by other listed manufacturers may be used, subject to approval of Architect.
  2. Materials and fabrication:
    2.1. Finish and base material designations are indicated in accordance with ANSI A156.18 or the nearest traditional U.S. commercial finish.
      2.1.1. Where base material and quality of finish are not otherwise indicated, provide at least the commercially recognized quality specified in ANSI A156 series standards applicable to each particular type of hardware.
D. DOOR LOCKSETS, LATCHSETS:
  1. All sets shall be lever sets to meet or exceed State Regulated Accessible requirements. Manufactured by Schlage Series XXX or equal. Lever set style to be selected by Architect.
    1.1. Locksets: Cylinder sets keyed to building system master key system.
E. DOOR CONTROL DEVICES:
  1. Mfr's of Overhead Closers: Corbin, Dorma, LCN*, Norton, S. Parker, Rixson-Firemark, Russwin, Sargent, Yale.
    1.1. LCN: 4040 Super Smoothee series, hold open arm. With delayed action closer, force to open door to be set at State Regulated Accessible requirement standard 5# pressure. Finish to be brushed alum.
  2. Mfr's. of Holders, Stops, Bumpers: Baldwin, Brookline, Builders Brass Works, Cipco, Corbin, Door Controls Int'l, Glynn-Johnson, Ives*, Liberty, S. Parker, Quality, Sargent, Stanley, or Triangle Brass.
    2.1. Door Stop; Wall Stop; 232W
    2.2. Floor Stop; Dome type 242F.
      2.2.1. Provide gray rubber exposed resilient parts.
  3. Size and mount units indicated or, if not indicated, to comply with mfr's recommendations for the exposure condition. Reinforce the substrate as recommended.
    3.1. Where parallel-arm closers are indicated, provide units one size larger than recommended for standard-arm units.
  4. Hinges - Stainless steel, color and texture to match lever set. Use exterior or interior grade per door location. See door schedule for more information.
F. HARDWARE FINISHES:
  1. All hardware, unless noted otherwise, shall be brushed alum w/ clear coat or match building standards unless otherwise noted on drawings/door schedule.
G. MISCELLANEOUS DOOR HARDWARE:
  1. Silencers: Provide silencers in metal door frames, unless not permitted for fire rating, or unless bumper-type weatherstripping is provided; 3 per single-door frame, 4 per double-door frame.
  2. Mfr's of Miscellaneous Hardware: Provide plates, trim, letter box, viewers, knockers, bells, and similar units as indicated, produced by A-J Mfg. Co., Baldwin*, Brookline, Builders Brass Works, Cipco, Ives, Triangle Brass.
  3. Fabricate plates and edge trim units 2" smaller than actual door dimension. Install with self-tapping screws.
    3.1. Provide .050" thick (18 ga.) stainless steel with beveled edges and brushed alum for kick plates, armor plates, and edge protection stripping. Match adjacent hardware finishes. Where more than one finish is adjacent to item, consult the Architect.
H. THRESHOLDS:
  1. Mfr's of Thresholds: Combo Alum. Products, K.N. Crowder, A-J May, National Guard, Pemko*, Reese, Zero.
  2. Provide extruded aluminum threshold of type, design and profile indicated, complete with replaceable resilient vinyl wiper-type insert. Provide non-corrosive fasteners.
F. INSTALLATION:
  1. Hardware Mounting Heights: Door and Hardware Institute "Recommended Locations for Builders Hardware for Standard Steel Doors and Frames", except as otherwise indicated.
  2. Install each hardware item to comply with manufacturer's instructions and recommendations.
  3. Set thresholds for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant. Remove excess sealant and clean adjacent surfaces.
G. ADJUST AND CLEAN:
  1. Hardware Adjustment: Return to project one month after Tenant's occupancy, and adjust hardware to proper operation and function. Instruct Tenant's personnel in proper maintenance and adjustment.

DIVISION 9 - FINISHES

SECTION 09250 - GYPSUM BOARD SYSTEMS

A. SECTION INCLUDES:
  1. Metal stud wall framing.
  2. Wood stud wall framing.
  3. Metal channel ceiling framing.
  4. Acoustical insulation.
  5. Gypsum board.
  6. Gypsum sheathing, Cementitious backer board.
  7. Taped and sanded joint treatment.
B. REFERENCES:
  1. ASTM C36 - Gypsum Wallboard.
  2. ASTM C79 - Gypsum Sheathing Board.
  3. ASTM C665 - Mineral Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.
  4. ASTM C754 - Installation of Framing Members to Receive Screw Attached Gypsum Wallboard, Backing Board, or Water Resistant Backing Board.
  5. ASTM C840 - Application and Finishing of Gypsum Board.
  6. ASTM E119 - Fire Tests of Building Construction and Materials.
  7. GA-201 - Gypsum Board for Walls and Ceilings.
  8. GA-216 - Recommended Specifications for the Application and Finishing of Gypsum Board.
  9. GA-600 - Fire Resistance Design Manual.
C. SYSTEM DESCRIPTION:
  1. Acoustical Attenuation for Interior Partitions: in accordance with ASTM E90.
  2. Gypsum wall board system on wood or metal framing.
D. QUALITY ASSURANCE:
  1. Perform Work in accordance with ASTM C840. GA-201, GA-216, and GA-600.

*** **Use Proper Gypsum Board Level of Finish per Wall Application** ***

  2. Levels of gypsum finishing per GA-214-96:
    2.1. Level 0 - Unfinished
    2.2. Level 1 - Tool marks and ridges acceptable. Tape embedded in compound over joints and angles. Free of excess compound - surface. Optional - One coat of compound over accessories and fasteners.
    2.3. Level 2 - Tool marks and ridges okay. Thin coating of compound covers tape; one coat compound over fasteners heads. Tape embedded in compound and immediately wiped to leave a thin coating of compound over tape - joints and angles. One coat of compound - accessories and fasteners. Free of excess compound - surface.
    2.4. Level 3 - No marks or ridges. Ready for priming, to be followed by heavy texture. One separate coat of compound over Level 2 - joints and angles. Two separate coats of compound - accessories and fasteners. Joints filled and smooth. Shall be primed before painting or texturing - surface.
    2.5. Level 4 - No marks or ridges. Ready for priming, followed by wallcoverings, flat paints or light textures. Two separate coats of compound over Level 2 - joints and angles. Three separate coats of compound - accessories and fasteners. Joints filled and smooth again. Shall be primed before painting or texturing - surface.
    2.6. Level 5 - No marks or ridges. Entire surface covered with skim coat of compound and ready to prime before decorating with gloss, semigloss or enamel, or flat joints over an untextured surface. As in Level 4 - joints and angles. As in Level 4 - accessories and fasteners. Skim coat plus primer before painting or texturing - surface.

LEVEL 2 FINISH FOR ALL WALLS TO HAVE FRP APPLIED.
LEVEL 4 FINISH FOR ALL WALLS TO BE PAINTED/SS SHEETS
LEVEL 5 FOR EXISTING WALLS THAT CAN NOT MEET LEVEL 4 CONDITIONS.

E. QUALIFICATIONS:
  1. Applicator: Company specializing in performing the work of this section with minimum three years experience and approved by manufacturer.
F. MANUFACTURERS:
  1. U.S. Gypsum (USG)
    1.1. Other acceptable manufacturers offering equivalent products.
      1.1.1. CertainTeed Corp.
      1.1.2. Georgia Pacific Gypsum
      1.1.3. National Gypsum Company
  2. Substitutions: Under provisions of Section 01600.
G. FRAMING MATERIALS:
  1. Metal Studs and Tracks: ASTM C645; GA-216 and GA-600; galvanized sheet steel, C shape, with knurled faces, unless shown otherwise on the drawings. Gage and sizes are indicated on the drawings.
  2. Hat Channel and Z-Furring: ASTM C645; GA-216 and GA-600; galvanized sheet steel. Gage and sizes are as indicated on the drawings.
  3. Wood Studs and Plates: Construction grade 1; nom 2 inch x 4 inch or larger, spaced not more than 16 inches oc.
  4. Shaft Wall Studs: ASTM C645, GA-216 and GA-600; galvanized sheet steel C-H studs, 22 gage thick, with knurled faces, spaced maximum of 24 inches on center.
  5. Metal Furring, Framing and Accessories: ASTM C645. GA-216 and GA-600, spaced not more than 16 inches oc.
  6. Wood Furring, Framing and Accessories: GA-216, and GA-600, construction grade wood furring nom. 1 inch x 2 inches, spaced maximum of 16 inches oc.
  7. Fasteners: ASTM C514. ASTM C1002. GA-216.
  8. Anchorage to Substrate: Tie wire, screws and other metal supports, of type and size to suit application; to rigidly secure materials in place.
  9. Adhesive: ASTM C557. GA-216.
H. GYPSUM BOARD MATERIALS: ASTM C 1396/C 1396M
  1. Standard Gypsum Board: ASTM C36; 1/2 inch thick, maximum permissible length; ends square cut, tapered and beveled edges.
  2. Fire Rated Gypsum Board: ASTM C36; fire resistive type, UL rated; 1/2, 5/8 or 1 inch thick, maximum permissible length; ends square cut, tapered and beveled edges.
  3. Mold - Moisture Resistant Gypsum Board: ASTM C 1396/C 1396M; 1/2 or 5/8 inch thick, maximum permissible length; ends square cut, tapered and beveled edges.
  4. Cementitious Backing Board: High density, glass fiber reinforced, 1/2 or 5/8 inch thick; coated glass fiber tape for joints and corners; manufactured by U.S. Gypsum; Product; Durock.
I. ACCESSORIES:
  1. Acoustical Insulation: ASTM C665; preformed friction fit type, unfaced, 3-1/2 inch thick, 2.5 lbs/cu ft.
  2. Acoustical Sealant: Non-hardening, non-skinning, for use in conjunction with gypsum board.
  3. Corner Beads: Metal.
  4. Edge Trim: GA 201 and GA 216; Type J bead.
  5. Joint Materials: ASTM C475; GA 201 and GA 216; reinforcing tape, joint compound, adhesive, and water.
  6. Fasteners: ASTM C1002, Type S12, W and GA-216.
J. EXAMINATION:
  1. Verify site conditions under provisions of Section 01039.
K. METAL STUD INSTALLATION:
  1. Install studs in accordance with ASTM C754. GA-201, GA-216 and GA-600. and manufacturer's instructions.
  2. Stud Spacing: 16 inches on center, or closer.
  3. Refer to Drawings for indication of partitions extend stud framing through the ceiling to the structure above. Maintain clearance under structural building members to avoid deflection transfer to studs. Provide extended leg ceiling runners.
  4. Door Opening Framing: Install double studs at door frame jambs. Install stud tracks on each side of opening, at frame head height, and between studs and adjacent studs.
  5. Blocking: Screw wood blocking to studs. Bolt or screw steel channels to studs. Install blocking for support of plumbing fixtures, toilet partitions, wall cabinets, toilet accessories, and hardware, and wood base and trims.
L. WALL FURRING INSTALLATION:
  1. Erect wall furring for direct attachment to concrete block.
  2. Erect furring channels vertically; space maximum 16 inches on center, not more than 4 inches from floor and ceiling lines. Secure in place on alternate channel flanges at maximum 24 inches on center, or through wood furring at maximum 16 inches oc.
M. FURRING FOR FIRE RATINGS:
  1. Install furring as required for fire resistance ratings indicated and to GA-600 requirements.
N. CEILING FRAMING INSTALLATION:
  1. Install in accordance with ASTM C754. GA 201 and GA 216. and with manufacturer's instructions.
  2. Coordinate location of hangers with other work.
  3. Install ceiling framing independent of walls, columns, and above ceiling work.
  4. Reinforce openings in ceiling suspension system which interrupt main carrying channels or furring channels, with lateral channel bracing. Extend bracing minimum 24 inches past each end of openings.
  5. Laterally brace entire suspension system.
O. GYPSUM BOARD INSTALLATION:
  1. Install gypsum board in accordance with GA-201, GA-216 and GA-600 and manufacturer's instructions.
  2. Erect single layer standard gypsum board vertical, with ends and edges occurring over firm bearing.
  3. Erect single layer fire rated gypsum board vertically, with edges and ends occurring over firm bearing.
  4. Use screws when fastening gypsum board to wood or metal furring or framing.
  5. Double Layer Applications: Use gypsum backing board for first layer, placed perpendicular to framing or furring members. Use fire rated gypsum backing board for fire rated partitions.
  6. Place second layer perpendicular to first layer. Offset joints of second layer from joints of first layer. Install according to UL and manufacturer's requirements.
  7. Treat cut edges and holes in moisture resistant gypsum board with sealant.
  8. Place control joints consistent with lines of building spaces as indicated. If no direction is indicated, then locations are to be selected by Architect/Engineer.
  9. Place corner beads at external corners. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials.
  10. Install backing board over metal studs and plywood sheet in accordance with manufacturer's instructions.
  11. Apply gypsum board to curved walls in accordance with GA-216.
P. JOINT TREATMENT:
  1. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
  2. Feather coats onto adjoining surfaces so that camber is maximum 1/32 inch.
  3. Tape joints and corners of cementitious backing board.
Q. TOLERANCES:
  1. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

SECTION 09500 - ACOUSTICAL CEILINGS

1. Acoustical lay-in ceiling tiles shall be as manufactured by Armstrong: Fissured MinaBoard #755; white 24" x 48" x 5/8" for 15/16" white "T" grid. Unless otherwise noted on drawings. Refer to reflected ceiling plan for ceiling heights. New grid to match existing grid manufacturer, style, size, finish and color.
2. Ceiling grid shall be standard weight, inverted "T" 15/16" white grid supported with #8 tie wire. Support grid, light fixtures from bar joists and steel beams only. Do not attach wires to ductwork or deck.

SECTION 09650 - RESILIENT FLOORING

1. Vinyl Composition Tile Flooring: Tile to meet or exceed Type IV, Composition 1, commercial grade.
2. Vinyl Tile: 12" x 12" x 1/8" ga. Manufacturer and style to be determined by Architect.
3. Vinyl Base, Cove at Vinyl Tile, Straight at carpet; Johnsonite 4" x 1/8" Color(UNO); to be determined by Architect. 6" cove used at toilet and utility rooms, see finish schedule.

A. EXAMINATION:
  1. Verify floor and lower wall surfaces are free of substances that may impair adhesion of new adhesive and finish materials.

B. PREPARATION:
  1. Remove sub-floor ridges and bumps. Fill minor or local low spots, cracks, joints, holes, and other defects with sub-floor filler to achieve smooth, flat, hard surface.
  2. Self leveling Gyp-Crete or equal for floor preparation as required, see plans, notes and existing field conditions.
  3. Prohibit traffic until filler is cured.
  4. Vacuum clean substrate.

C. INSTALLATION - TILE FLOORING:
  1. Install in accordance with manufacturer's instructions.
  2. Mix tile from container to ensure shade variations are consistent when tile is placed.
  3. Spread only enough adhesive to permit installation of materials before initial set.
  4. Set flooring in place, press with heavy roller to attain full adhesion.

D. CLEANING:
  1. Clean work under provisions of 01700.
  2. Remove excess adhesive without damage, from floor, base, and wall surfaces.
  3. Clean and vacuum carpet surfaces.

E. SCHEDULE:
  1. See Plans for locations and patterns of flooring.

SECTION 096519 - RESILIENT TILE FLOORING

A. SECTION REQUIREMENTS
  1. Submittals: Product Data and Samples.
  2. Extra Materials: Deliver to Owner one box of each type and color of resilient floor tile installed.
B. PRODUCTS
  1. VINYL COMPOSITION FLOOR TILE
    1.1 Manufacturers: Subject to compliance with requirements, provide products by the following:
      1.1.2 Armstrong World Industries, Inc.
      1.1.3 Tile Standard: ASTM°F°1066, tile.
      1.1.4 Thickness: 0.125 inch.
      1.1.5 Size: 12 by 12 inches.
C. NSTALLATION ACCESSORIES
  1. Trowelable Leveling and Patching Compounds: Latex-modified, portland-cement- or blended-hydraulic-cement-based formulation provided or approved by flooring manufacturer for applications indicated.
  2. Adhesives: Water-resistant type recommended by manufacturer to suit floor covering and substrate conditions indicated.
  3. Low-Emitting Materials: Adhesives shall comply with Green Seal's GS-36 and with the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
  4. Floor Polish: Protective liquid floor polish products as recommended by manufacturer.
  5. EXECUTION
D. INSTALLATION
  1. Prepare concrete substrates according to ASTM°F°710. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
  2. Lay out tiles so tile widths at opposite edges of room are equal and are at least one-half of a tile.
  3. Match tiles for color and pattern by selecting tiles from cartons in same sequence as manufactured and packaged. Lay tiles in basket-weave pattern with grain direction alternating in adjacent tiles.
  4. Floor Polish: Remove soil, visible adhesive, and surface blemishes from floor covering before applying liquid floor polish.
  5. Apply 4 coats.

SECTION 09900 - PAINTING

1. All paint to be Sherwin Williams, or equal, or as noted on drawings, colors as noted on the Finish Schedule.
2. Gyp Bd Walls: One coat primer, two finish coats, Flat or Satin finish, see Finish Schedule.
3. Trim: One coat primer, two finish coats, latex semi-gloss or gloss, see Finish Schedule.
4. Interior Metal: One coat primer, two finish coats, see Finish Schedule.
5. Interior Woodwork: Per AWI Standards.

DIVISION 10 - SPECIALS

SECTION 10520 - FIRE PROTECTION

1. GC shall supply and install (minimum 2) Multipurpose Dry-Chemical Type (MP-4) UL Rated 4-A:60-B:C 10 lbs fire extinguisher(s) within the premises as specified by governing local code.
2. Fire Extinguisher Cabinets to be as manufactured by Larsen; Model 2409- R4 (accessible compliant fire rated or non-fire rated) semi recessed cabinet with MP-4 fire extinguisher and brackets.

DOOR NOTES

1. ALL EXTERIOR HM DR FRAMES SHALL BE:
  1.1. PRE-PRIMED
  1.2. MIN 14 GA STEEL (GALV)
  1.3. WELDED CONSTRUCTION
  1.4. PAINT PER FINISH NOTES
2. ALL EXTERIOR HM DRS SHALL BE:
  2.1. PRE-PRIMED
  2.2. MIN 16 GA STEEL (GALV)
  2.3. INSULATED
  2.4. PAINT PER FINISH NOTES
3. ALL INTERIOR HM DR FRAMES SHALL BE:
  3.1. PRE-PRIMED
  3.2. MIN 16 GA STEEL (GALV AS INDICATED)
  3.3. WELDED CONSTRUCTION
  3.4. PAINT PER FINISH NOTES
4. ALL INTERIOR HM DRS SHALL BE:
  4.1. PRE-PRIMED
  4.2. MIN 18 GA STEEL (GALV AS INDICATED)
  4.3. PAINT PER FINISH NOTES
5. ALL INTERIOR WD DOORS SHALL BE SOLID CORE ROTARY SELECT WHITE BIRCH.
  5.1. SEE FINISH NOTES
6. ALL EXTERIOR ALUM DRS SHALL BE:
  6.1. PREFINISHED, CLEAR ANODIZED
  6.2. CLEAR, 1" INSULATED GLASS (TEMPERED WHERE NOTED)
7. ALL INTERIOR ALUM DRS SHALL BE:
  7.1. PREFINISHED, CLEAR ANODIZED
  7.2. CLEAR, 1/4" GLASS (TEMPERED WHERE NOTED)
8. ALL DOOR HARDWARE NOT SPECIFIED BUT INDICATED IN THE HARDWARE SCHEDULE SHALL BE SUBMITTED IN THE FORM OF SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW AND APPROVAL.
9. ALL DR HARDWARE SHALL BE ACCESSIBLE COMPLIANT INCLUDING:
  9.1. LOCKSETS AND LATCHSETS WITH LEVER HANDLES
  9.2. ACCESSIBLE COMPLIANT CLOSERS
  9.3. ACCESSIBLE COMPLIANT THRESHOLDS
10. ALL LOUVER INFORMATION (IF REQUIRED; SIZE, STYLE, ETC) SHALL BE COORDINATED WITH MECHANICAL DRAWINGS.

ALL DOOR HARDWARE ITEMS LISTED SHALL BE AS FOLLOWS AS BASIS OF DESIGN. YALE OR CORBIN RUSSWIN ARE EQUALS WITH ARCHITECT APPROVAL, UNLESS NOTED ON DOOR HARDWARE SCHEDULE:

DOOR HINGES
INTERIOR DOORS UNO; HAGAR BB1279 4½ X 4½
NON-RISING REMOVABLE PINS-FOR REVERSE BEVEL LOCKING DOORS
EXTERIOR DOORS UNO; HAGAR BB1191 4½ X 4½ NRP
PROVIDE HEAVYWEIGHT HINGES FOR ALL DOORS 3'-6" AND WIDER
FOR DOORS OVER 7'-6" PROVIDE 4 HINGES
CONTINUOUS HINGES SHOULD BE HAGER 780-112HD

CYLINDRICAL LOCKSETS:	
STOREROOM/CLOSET	SARGENT 28 7G04 KL 26D
CLASSROOM	SARGENT 28 7G37 KL 26D
ENTRANCE/OFFICE	SARGENT 28 7G05 KL 26D
PRIVACY/BATHROOM	SARGENT 28 7U65 KL 26D
PASSAGE	SARGENT 28 7U15 KL 26D
EXIT/COMMUNICATING	SARGENT 28 7G15-3 KL 26D
LATCH PROTECTION PLATE	HAGAR 341D US32D
THUMBTURN CYLINDER	ADAMS RITE 4066 130
DUST PROOF STRIKE	HAGAR 280X US26D
MORTISE LOCKSET	SARGENT 82001 LNB 26D
MORTISE CYLINDER	SARGENT 41 26D
DEADBOLT LOCK	ADAMS RITE MS1850S US28
DEADBOLT LEVER	ADAMS RITE 4550 LOCKED/OPEN INDICATOR) US28
DEADLATCH LOCK	ADAMS RITE 4990 US28
DEADLATCH LEVER	ADAMS RITE 4560 US28
NIGHT LATCH (DOOR GUARD)	HAGAR 274D (INCLUDE 274B) US26D
PROTECTION (KICK) PLATE	HAGAR 190S US32D (8"X 2" LESS DOOR WIDTH)
WALL BUMPER	HAGAR 236W
FLOOR STOPS	HAGAR 242F
SADDLE THRESHOLD	NATIONAL GUARD PRODUCT - 424
DRIP CAP	NATIONAL GUARD PRODUCT - 16 A
SWEEPS	NATIONAL GUARD PRODUCT - 200NA
MECHANICAL KEY PAD	SCHLAGE CO-200
CLOSERS	
STANDARD ARM	SARGENT 351-O
HOLD OPEN	SARGENT 351-UH (HOLD OPEN)
TOP JAMB	SARGENT 351-OZ
PUSH/PULL	ROCKWOOD RM251 US32D
OFFSET PULLS	ROCKWOOD RM201 US32D
MANUAL FLUSH BOLTS	HAGAR 282D US26D
PANIC HARDWARE (EXIT DEVICE)	SARGENT 80 SERIES US26D
PANIC (EXIT DEVICE) TRIM	SARGENT ETL US26D
PROVIDE FIRE RATED EXIT DEVICES WHERE REQUIRED	
AUTO FLUSH BOLTS	
WOOD DOOR	HAGAR 291D
METAL DOORS	HAGAR 292D
CARD READER	BY ACCESS CONTROL SUPPLIER
DOOR POSITION SWITCH	SECURITRON DPS
ELECTRIC STRIKE	1006CS / 9600
REQUEST TO EXIT MOTION SENSOR	XMS
POWER SUPPLIES	SECURITRON BPS 24-2 X BATTERY BACK UP
POWER TRANSFER	EL-CEPT
PEEP HOLE (DOOR VIEWER)	HAGAR 1775 US26D

1

DR HARDWARE SUPPLIER SHALL REVIEW ALL HARDWARE FUNCTIONS W/ BUILDING OWNER/TENANT PRIOR TO SHOP DRAWING SUBMITTALS AND REVISE AS REQUIRED.

THIS DRAWING CONTAINS GENERAL SPECIFICATIONS STANDARDS FOR COMMON BUILDING MATERIALS. SEE DRAWINGS FOR ADDITIONAL INFORMATION. DRAWINGS SUPERSEDES THIS SHEET. SOME INFORMATION LISTED HEREIN MAY NOT BE APPLICABLE TO ALL PROJECTS.

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FRANK M. CASTROVILLARI
0012628
REGISTERED ARCHITECT
FRANK CASTROVILLARI, LICENSE#: 0012628
EXPIRATION DATE: 12/31/2023

Engineer Stamp:

Weathersfield Township Community Center
Corner of Main Street and Stewart Street
Weathersfield, Ohio

☒	Design	04/30/2021
☒	Approval	06/02/2021
☒	Permit	07/28/2021
☐	Bid	
☐	Construction	

Revisions:

No.	Date/Description
1	CITY LETTER-01 04/13/2022

Project No.	21109
Drawn By:	FMC/PWB
Checked By:	FMC

Sheet Title:
ARCHITECTURAL SPECIFICATIONS

Sheet No:
A0.01

ROOM FINISH SCHEDULE MATERIALS

PAINT FINISHES

NO:	MATERIAL:	NOTES:
PNT-*	MANUFACTURER: PATTERN: COLOR:	**
PNT-*	MANUFACTURER: PATTERN: COLOR:	**
PNT-*	MANUFACTURER: PATTERN: COLOR:	**
PNT-*	MANUFACTURER: PATTERN: COLOR:	**

WALLCOVERING FINISHES

NO:	MATERIAL:	NOTES:
VWC-*	MANUFACTURER: PATTERN: COLOR:	**
VWC-*	MANUFACTURER: PATTERN: COLOR:	**
VWC-*	MANUFACTURER: PATTERN: COLOR:	**
VWC-*	MANUFACTURER: PATTERN: COLOR:	**

FLOOR FINISHES

NO:	MATERIAL:	NOTES:
CT-*	MANUFACTURER: PATTERN: COLOR:	**
CPT-*	MANUFACTURER: PATTERN: COLOR:	**
LVL-*	MANUFACTURER: PATTERN: COLOR:	**
CT-*	MANUFACTURER: PATTERN: COLOR:	**
ASH-1	MANUFACTURER: ASHFORD SEALER/HARDENER PATTERN: ASHFORD FORMULA COLOR: CLEAR	**
CONC-1	MANUFACTURER: LASER SCREED AND STEEL TROWELED PATTERN: SMOOTH HARD SURFACE COLOR:	**
CONC-1	POLISHED CONCRETE FINISH PATTERN: SMOOTH HARD SURFACE COLOR: CLEAR	**
VCT	MANUFACTURER: ARMSTRONG PATTERN: FROM STANDARD LINE COLOR: TBD	4" BASE - COLOR TBD

BASE FINISHES

NO:	MATERIAL:	NOTES:
VC-1	MANUFACTURER: PATTERN: COLOR:	**
CT B-*	MANUFACTURER: PATTERN: COLOR:	**
VS-1	MANUFACTURER: PATTERN: COLOR:	**
CPT-1	MANUFACTURER: PATTERN: COLOR:	**
VC-1-1	MANUFACTURER: PATTERN: COLOR:	**

CEILING FINISHES

NO:	MATERIAL:	NOTES:
ACT-*	MANUFACTURER: PATTERN: COLOR:	1
ACT-*	MANUFACTURER: PATTERN: COLOR:	1
ACT-*	MANUFACTURER: PATTERN: COLOR:	1
GYPBD-1	MANUFACTURER: PATTERN: COLOR:	1

ROOM FINISH SCHEDULE

NUMBER	NAME	FLOOR	BASE	WALL FINISH				CEILING		REMARKS
				N.	S	E	W	MATL	HEIGHT	
101	VESTIBULE	VCT-*	VC-*	PNT-*	PNT-*	PNT-*	PNT-*	ACT-*	9'-0"	--
102	OPEN HALL	VCT	VC	PNT	PNT	PNT	PNT	GWB	12'-4"	--
103	METTING ROOM	VCT	VC	PNT	PNT	PNT	PNT	ACT	10'-0"	--
104	HALL	VCT	VC	PNT	PNT	PNT	PNT	ACT	8'-0"	--
105	WOMEN'S	VCT	VC	PNT	PNT	PNT	PNT	ACT	8'-0"	--
106	MEN'S	VCT	VC	PNT	PNT	PNT	PNT	ACT	8'-0"	--
107	MECHANICAL	CONC	VC	PNT	PNT	PNT	PNT	GWB	12'-4"	--
108	CLOSET	VCT	VC	PNT	PNT	PNT	PNT	ACT	8'-0"	--
109	WARMING KITCHEN	VCT	VC	PNT	PNT	PNT	PNT	ACT	9'-0"	--

DOOR HARDWARE SETS

HARDWARE NUMBERING MAY BE OUT OF ORDER OR MISSING

SET NO 1-2 — ALUMINUM / GLASS STOREFRONT - PAIR, EXTERIOR
- (2) CONTINUOUS HINGE
- (1) PANIC BAR - EXIT DEVICE 8504
- (1) PANIC BAR - EXIT DEVICE 8510
- (1) KEYED REM MULLION
- (2) CYLINDER
- (2) OFFSET PULL
- (2) CLOSER
- (1) SADDLE THRESHOLD
- (2) DOOR SWEEP
- GASKETING FURNISHED BY DOOR SUPPLIER.

SET NO 3-2 — TOILET ROOM - MULTI USER
- (3) HINGES
- (1) PUSH/PULL PLATE
- (1) CLOSER
- (1) KICK PLATE
- (1) WALL BUMPER OR FLOOR STOP

SET NO 4-1 — STOREROOM - INTERIOR
- (3) HINGES
- (1) LEVER STOREROOM LOCKSET
- (1) CLOSER
- (1) KICK PLATE
- (1) WALL BUMPER OR FLOOR STOP SILENCERS

SET NO 4-2 — STOREROOM - PAIR - INTERIOR
- (8) HINGES
- (1) LEVER STOREROOM LOCKSET
- (2) FLUSH BOLTS
- (2) CLOSER
- (2) KICK PLATE
- (2) WALL BUMPER OR FLOOR STOP

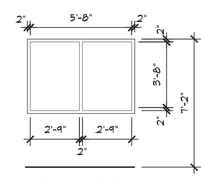
SET NO 6-1 — GENERAL EXIT DOOR - EXTERIOR
- (3) HINGES
- (1) EXIT DEVICE
- (1) EXIT DEVICE TRIM
- (1) CYLINDER
- (1) CLOSER
- (1) KICKPLATE
- (1) SADDLE THRESHOLD
- (1) DOOR SWEEP
- (1) GASKETING SET
- (1) DRIP CAP

SET NO 7-1 — OVERHEAD DOOR
- ALL HARDWARE BY OH DOOR MANUFACTURER
- SEE OH DOOR TYPE FOR FURTHER INFORMATION
- PROVIDE WEATHER STRIPPING AT HEAD, JAMBS, SILL

DOOR AND FRAME SCHEDULE

NUMBER	ROOM NAME	DOOR SIZE WIDTH	DOOR SIZE HIGH	DOOR SIZE THK	DOOR Type	DOOR MATL	DOOR GLAZING	FIRE RATING LABEL	FRAME MATL	FRAME TYPE	FRAME DETAIL HEAD	FRAME DETAIL JAMB	FRAME DETAIL SILL	HARDWARE SET NO	REMARKS
101A	VESTIBULE	6'-0"	7'-0"	1 3/4"	AL	AL/GL	--	--	ALUM	--	--	--	--	1-2	--
101B	VESTIBULE	6'-0"	7'-0"	1 3/4"	AL	AL/GL	--	--	ALUM	--	--	--	--	1-2	--
102A	OPEN HALL	3'-0"	7'-0"	1 3/4"	F	HM/INSUL	--	--	HM	DF1	HD*	JD*	--	6-1	--
102B	OPEN HALL	22'-0"	8'-0"	1 5/8"	OH	MTL/INSUL	--	--	--	--	--	--	--	7-1	--
102C	OPEN HALL	3'-0"	7'-0"	1 3/4"	F	HM/INSUL	--	--	HM	DF1	HD*	JD*	--	6-1	--
102D	OPEN HALL	6'-0"	7'-0"	1 3/4"	AL	AL/GL	--	--	ALUM	--	--	--	--	1-2	--
103A	METTING ROOM	8'-0"	7'-0"	1 3/4"	F	HM	--	--	HM	DF2	DH-1-01	DJ-1-01	--	4-2	--
103B	METTING ROOM	3'-0"	7'-0"	1 3/4"	F	SCWD	--	20 MIN	HM	DF1	DH-1-01	DJ-1-01	--	3-2	--
104A	HALL	3'-0"	7'-0"	1 3/4"	F	SCWD	--	20 MIN	HM	DF1	DH-1-01	DJ-1-01	--	4-1	--
104B	HALL	3'-0"	7'-0"	1 3/4"	F	HM/INSUL	--	--	HM	DF1	HD*	JD*	--	6-1	--
105	WOMEN'S	3'-0"	7'-0"	1 3/4"	F	SCWD	--	20 MIN	HM	DF1	DH-1-01	DJ-1-01	--	4-1	--
106	MEN'S	3'-0"	7'-0"	1 3/4"	F	SCWD	--	20 MIN	HM	DF1	DH-1-01	DJ-1-01	--	4-1	--
107A	MECHANICAL	3'-0"	7'-0"	1 3/4"	F	SCWD	--	--	HM	DF1	DH-1-01	DJ-1-01	--	4-1	--
107B	MECHANICAL	6'-0"	7'-0"	1 3/4"	F	HM/INSUL	--	--	HM	DF2	HD*	JD*	--	4-2	--
109A	WARMING KITCHEN	3'-0"	7'-0"	1 3/4"	F	SCWD	--	--	HM	DF1	DH-1-01	DJ-1-01	--	4-1	--
109B	WARMING KITCHEN	3'-6"	7'-0"	1 3/4"	F	HM/INSUL	--	--	HM	DF1	HD*	JD*	--	6-1	--

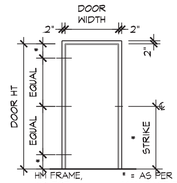
WINDOW FRAMES:



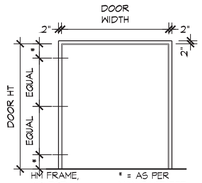
WHITE VINYL CASEMENT WINDOW, 1" INSUL GLAZING, CLEAR.

(WF1)

DOOR FRAME TYPES:

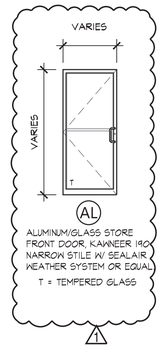


(DF1)



(DF2)

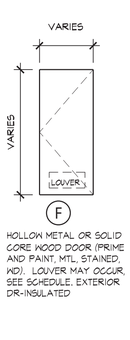
DOOR TYPES:



(AL)

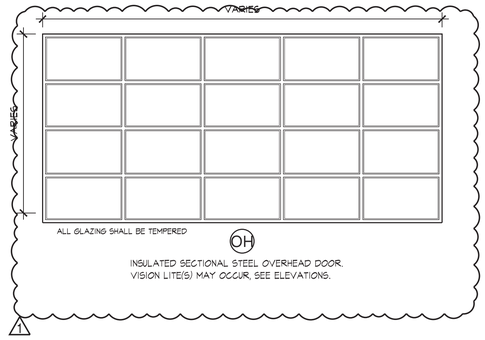
ALUMINUM/GLASS STORE FRONT DOOR, KAWNEER 190 NARROW STILE W/ SEALAIR WEATHER SYSTEM OR EQUAL

T = TEMPERED GLASS



(F)

HOLLOW METAL OR SOLID CORE WOOD DOOR (PRIME AND PAINT, MTL, STAINED, WD). LOUVER MAY OCCUR, SEE SCHEDULE. EXTERIOR DR-INSULATED



ALL GLAZING SHALL BE TEMPERED

(OH)

INSULATED SECTIONAL STEEL OVERHEAD DOOR. VISION LITE(S) MAY OCCUR, SEE ELEVATIONS.

TOILET ACCESSORIES

BOBRICK, BRADLEY OR EQUAL. VERIFY WITH OWNER FOR FINAL SELECTION

ROOM NO	ROOM NAME	GB-18	GB-36	GB-42	MIR-01 (18X36)	MIR-02 (24X36)	TP-01	SN-01 (4A00)	SN-02 (4AII)	SD-01	PT-01	PT-01	SC-01 (584)	SC-02 (582)
105	WOMEN'S TOILET ROOM	1	1	1		2	2		1	1			1	1
106	MEN'S TOILET ROOM	1	1	1		2	1		1	1			1	1

ALL ACCESSORIES MOUNTED PER MANUFACTURER'S RECOMMENDATIONS AND ANSI COMPLIANCE. COORDINATE WITH OWNER FOR FINAL SELECTIONS.

TOILET ACCESSORIES:

NOT ALL ITEMS USED, SEE TOILET ACCESSORY SCHEDULE

TOILET ROOM GENERAL NOTES:

1. PROVIDE FIRE RETARDANT TREATED (FRT) WOOD BLOCKING IN WALLS AT TOILET PARTITIONS, GRAB BARS, ETC. AS REQUIRED PER MFR'S RECOMMENDATIONS.
2. COORDINATE PLUMBING FIXTURE TYPES AND FLOOR DRAINS (FD) AND INSTALLATION PROCEDURES WITH APPROVED PLUMBING DRAWINGS AND MFR'S RECOMMENDATIONS.
3. INSTALL SOUND ATTENUATION/BATT INSULATION (MIN 3-½" THICK-FULL HT OF WALL) IN ALL TOILET ROOM WALLS (TYP).
4. ACCESSIBLE TOILET FIXTURES AND INSTALLATION SHALL CONFORM TO LOCAL ACCESSIBILITY GUIDELINES.
5. ACCESSIBLE COMPLIANT LAVATORIES WITH EXPOSED PIPING SHALL HAVE INSULATED DRAIN AND HOT WATER PIPES PER ACCESSIBLE GUIDELINES.
6. ALL ACCESSORIES SHALL BE MOUNTED PER THE MANUFACTURER'S RECOMMENDATIONS AND PER ACCESSIBLE GUIDELINES.

MIR-01 MIR-02
- SURFACE MOUNTED 18" OR 24" WIDE X 36" HIGH STAINLESS STEEL FRAMED MIRROR
- BRADLEY: *180
- MOUNTING HT: BOTTOM EDGE OF REFLECTIVE SURFACE AT 40" MAX AFF.

GB-18
- SURFACE MOUNTED, VERT 18" LONG X 1½" DIA GRAB BAR WITH SAFETY-GRIP
- BRADLEY: *8122
- MOUNTING HT: 34-41" AFF TO CENTERLINE OF BOTTOM BAR; 34-41" FROM REAR WALL
- GC TO SUPPLY SPACER FOR END OF GRAB BAR NOT MOUNTED TO TILE

GB-36
- SURFACE MOUNTED 36" LONG X 1½" DIA GRAB BAR WITH SAFETY-GRIP
- BRADLEY: *8122
- MOUNTING HT: 33"-36" TO TOP OF BAR

GB-42
- SURFACE MOUNTED 42" LONG X 1½" DIA GRAB BAR WITH SAFETY-GRIP
- BRADLEY: *8122
- MOUNTING HT: 33"-36" TO TOP OF BAR

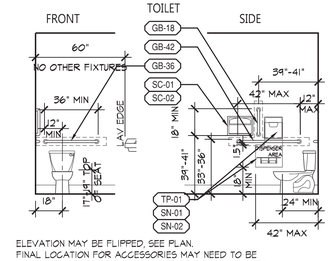
TP-01
- SURFACE MOUNTED DUAL ROLL TOILET TISSUE DISPENSER WITH SHELF
- BRADLEY: *5263
- MOUNTING HT: MOUNT WITH-IN THE DISPENSER AREA, SEE BELOW.

SN-01 SN-02
- SURFACE/PARTITION MOUNTED SANITARY NAPKIN DISPOSAL - WOMEN'S TOILET ONLY
- BRADLEY: *4A00 / 4AII(DUAL SIDED FOR PARTITIONS)
- MOUNTING HT: ALIGN WITH TOP OF TOILET TISSUE DISPENSER, COORDINATE WITH ANSI RECOMMENDATION.

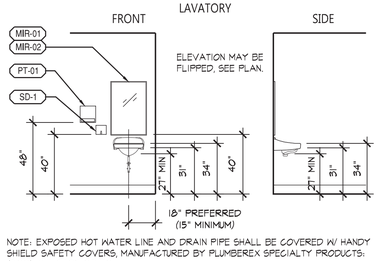
SD-01
- SURFACE MOUNTED SOAP DISPENSER
- BRADLEY: 6562
- VERTICAL, VANDAL-RESISTANT FILLER HOLE COVER AND SIGHT GAUGE

PT-01
- SURFACE MOUNTED PAPER TOWEL DISPENSER
- BRADLEY: 515
- MOUNTING HT: ACCESS TO PAPER TOWELS AT 48" AFF MAX.

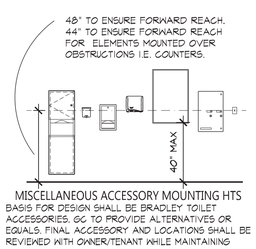
SC-01 SC-02
- SURFACE/PARTITION MOUNTED SEAT COVER
- BRADLEY: *584 / 582 (DUAL SIDED FOR PARTITIONS)
- MOUNTING HT: COORDINATE WITH ANSI RECOMMENDATION MOUNT IN WALL OR ON PARTITION.



ELEVATION MAY BE FLIPPED, SEE PLAN.
FINAL LOCATION FOR ACCESSORIES MAY NEED TO BE ADJUSTED FOR PARTITIONS, SPACE, ANSI REQUIREMENTS

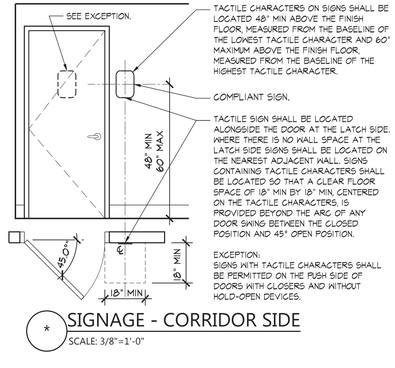


NOTE: EXPOSED HOT WATER LINE AND DRAIN PIPE SHALL BE COVERED W/ HANDY SHIELD SAFETY COVERS, MANUFACTURED BY PLUMBEREX SPECIALTY PRODUCTS: (800)-475-8629 OR EQUAL.



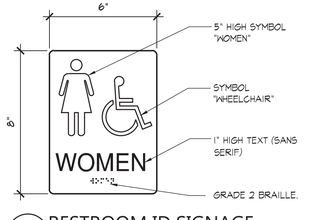
MISCELLANEOUS ACCESSORY MOUNTING HTS

BASIS FOR DESIGN SHALL BE BRADLEY TOILET ACCESSORIES. GC TO PROVIDE ALTERNATIVES OR EQUALS. FINAL ACCESSORY AND LOCATIONS SHALL BE REVIEWED WITH OWNER/TENANT WHILE MAINTAINING CODE COMPLIANCE.



(*) SIGNAGE - CORRIDOR SIDE

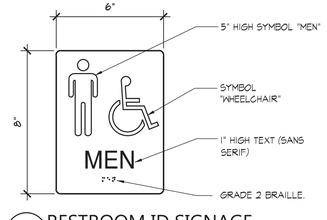
SCALE: 3/8"=1'-0"



(*) RESTROOM ID SIGNAGE

SCALE: 3"=1'-0"

- WALL MOUNTED COMPLIANT ROOM ID. BACKGROUND: 1/8" THICK BLUE MATTE FINISHED ACRYLIC WITH EASED CORNERS
- TEXT AND SYMBOL COLOR: WHITE.
- 1/32" RAISED PICTOGRAMS AND TEXT



(*) RESTROOM ID SIGNAGE

SCALE: 3"=1'-0"

- WALL MOUNTED COMPLIANT ROOM ID. BACKGROUND: 1/8" THICK BLUE MATTE FINISHED ACRYLIC WITH EASED CORNERS
- TEXT AND SYMBOL COLOR: WHITE.
- 1/32" RAISED PICTOGRAMS AND TEXT

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FRANK CASTROVILLARI, LICENSE#: 0012628
EXPIRATION DATE: 12/31/2023

Engineer Stamp:

Weathersfield Township Community Center

Corner of Main Street and Stewart Street
Weathersfield, Ohio

☒ Design	04/30/2021
☒ Approval	06/02/2021
☒ Permit	07/28/2021
☐ Bid	
☐ Construction	

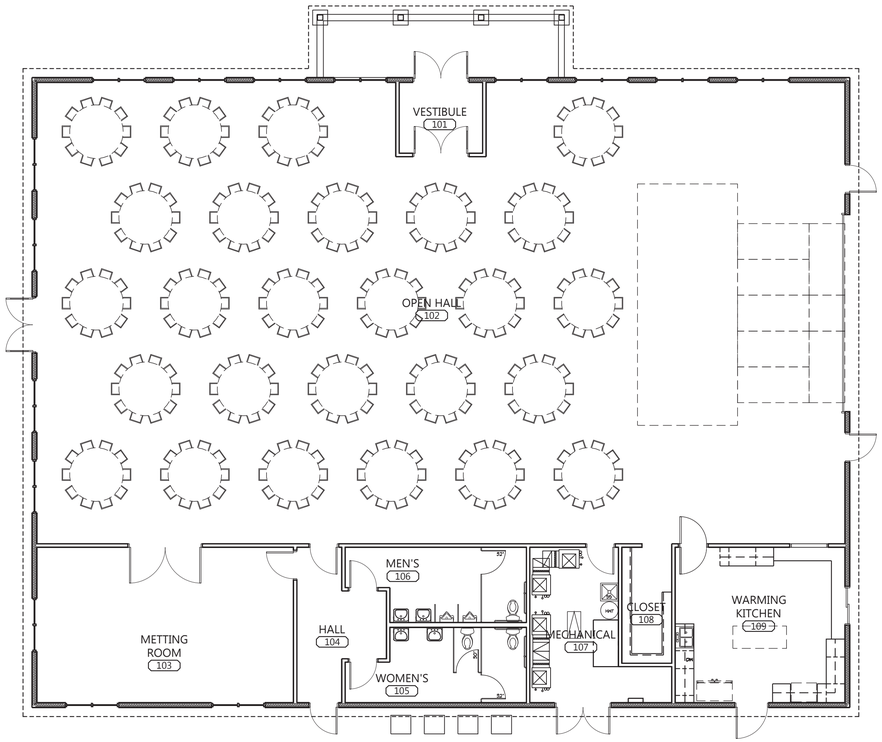
Revisions:

No.	Date/Description
1	CITY LETTER-01 04/13/2022

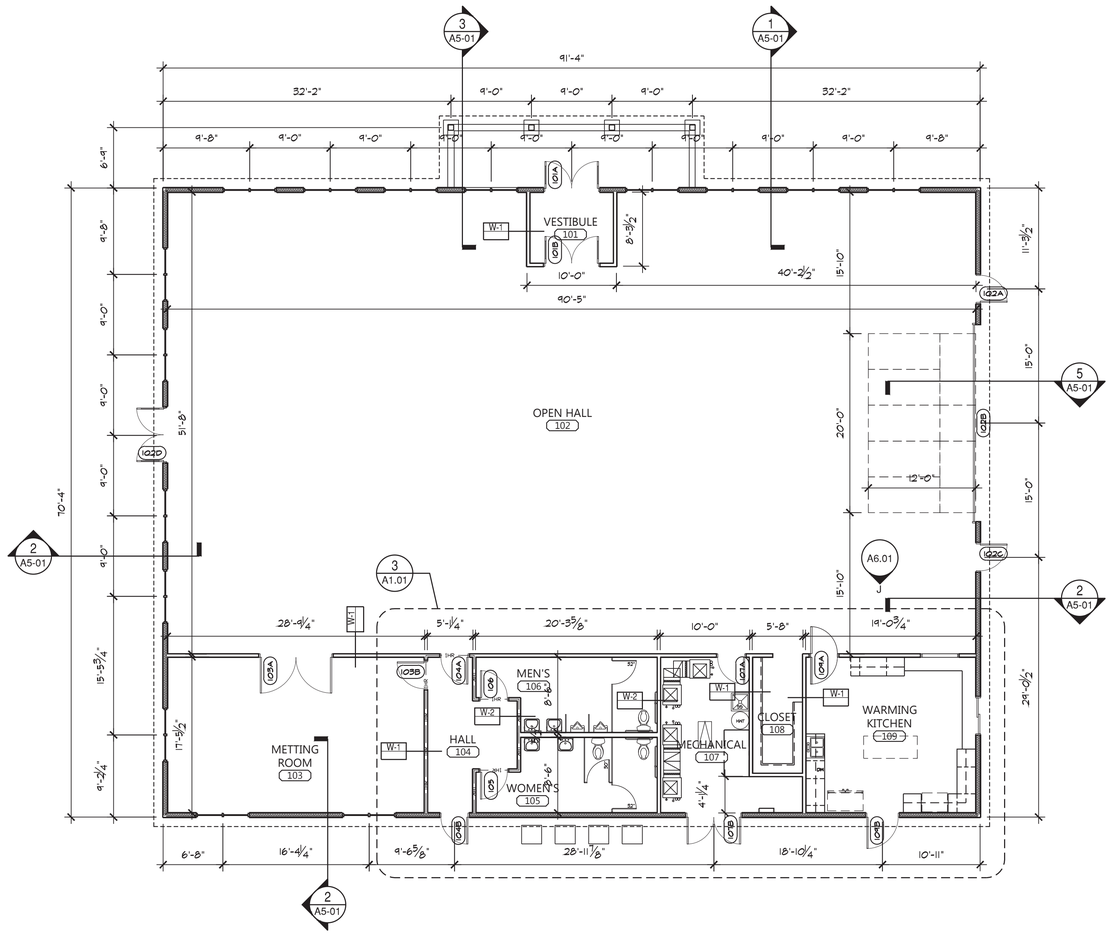
Project No.	21109
Drawn By:	FMC/PWB
Checked By:	FMC

Sheet Title: SCHEDULES

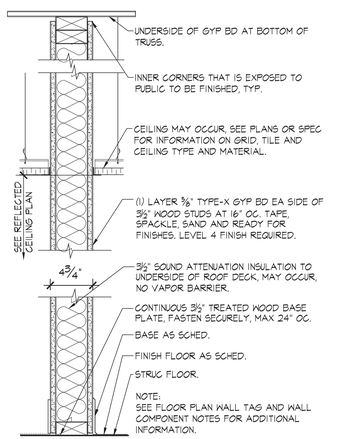
Sheet No: A0.10



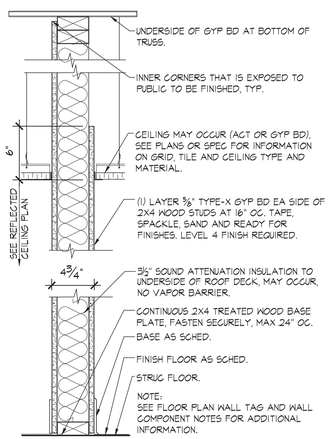
2 FURNTIRE PLAN - ENTIRE FACILITY
SCALE: 1/8"=1'-0"



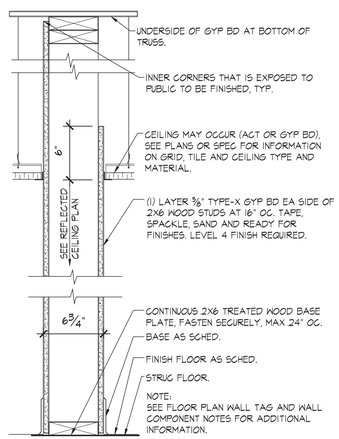
1 FLOOR PLAN - ENTIRE FACILITY
SCALE: 1/8"=1'-0"



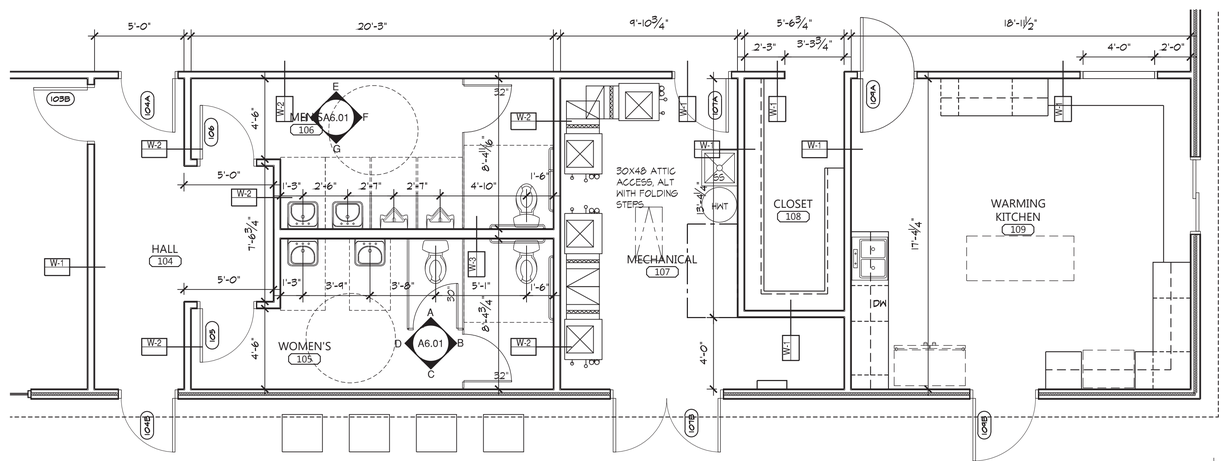
W-1 WALL PARTITION
SCALE: 1-1/2"=1'-0" NON BEARING



W-2 WALL PARTITION
SCALE: 1-1/2"=1'-0" TOILET ROOMS, NON BEARING



W-3 WALL PARTITION
SCALE: 1-1/2"=1'-0" TOILET ROOMS, NON BEARING



3 FLOOR PLAN - PARTIAL ENLARGED
SCALE: 1/4"=1'-0"

NORTH

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Project No.	21109
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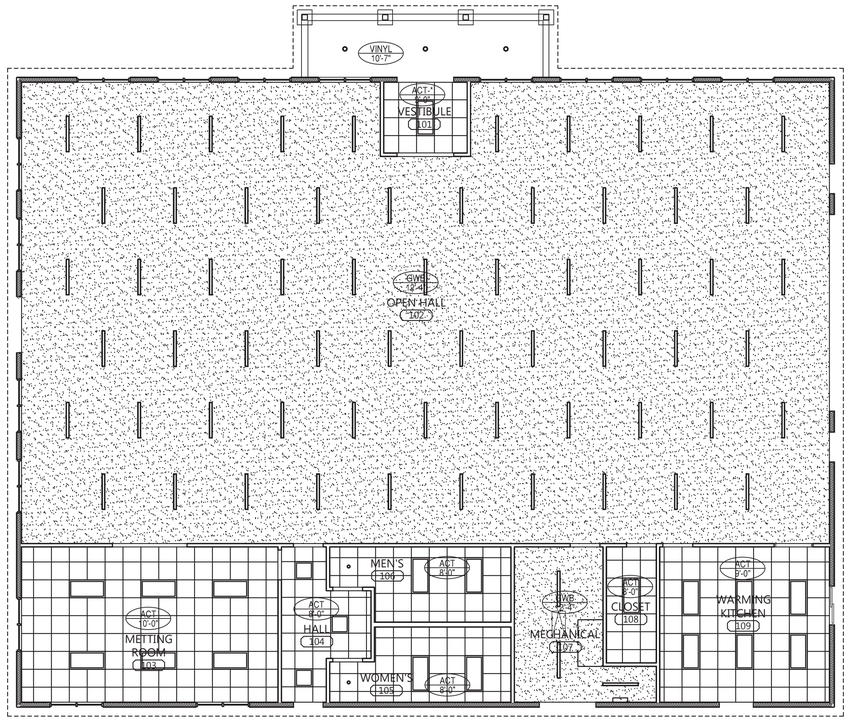
Checked By:	FMC

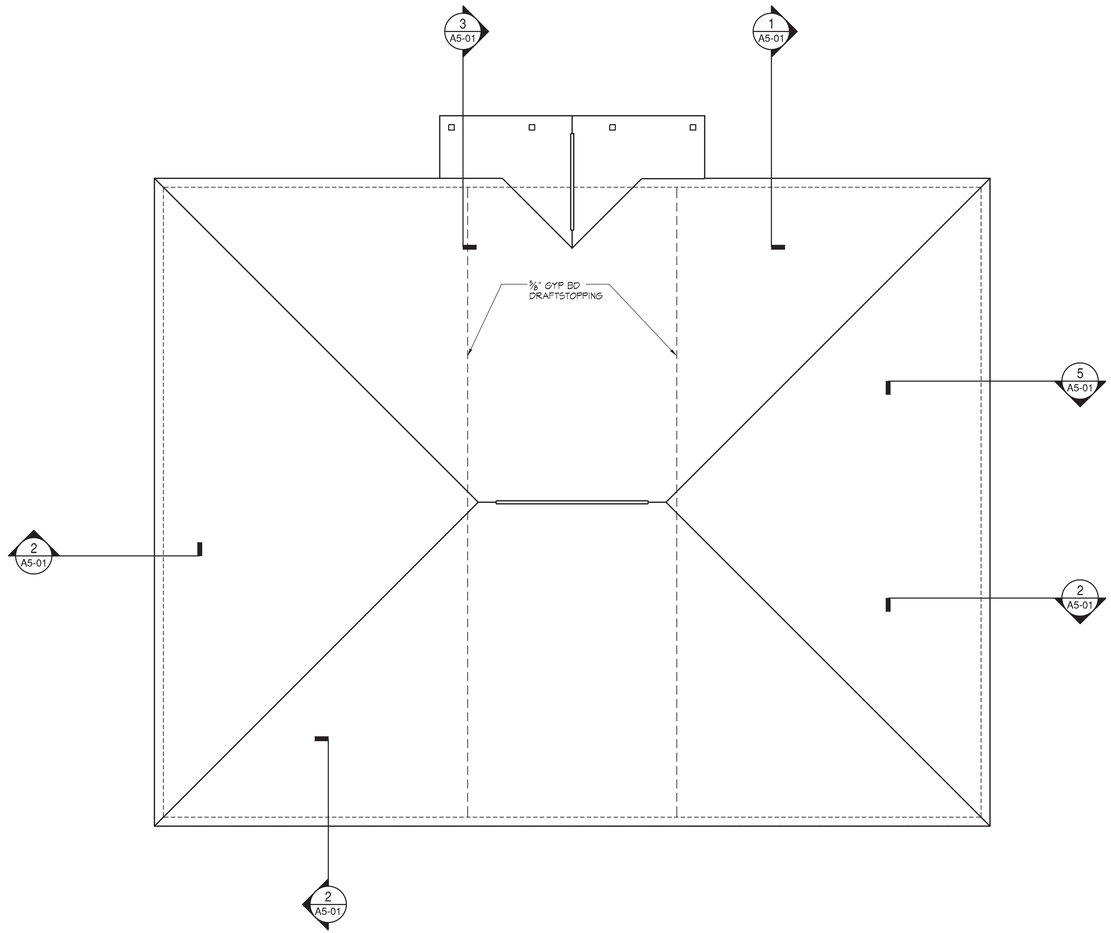
Sheet Title:
FLOOR PLANS
WALL TYPES

Sheet No:
A1.01



AREAS THAT CONTAIN ACT REQUIRE GYP BD AT BOTTOM OF TRUSS LIKE NON ACT AREAS

1 REFLECTED CEILING PLAN - ENTIRE FACILITY
SCALE: 1/16"=1'-0"



2 ROOF PLAN - ENTIRE FACILITY
SCALE: 1/16"=1'-0"

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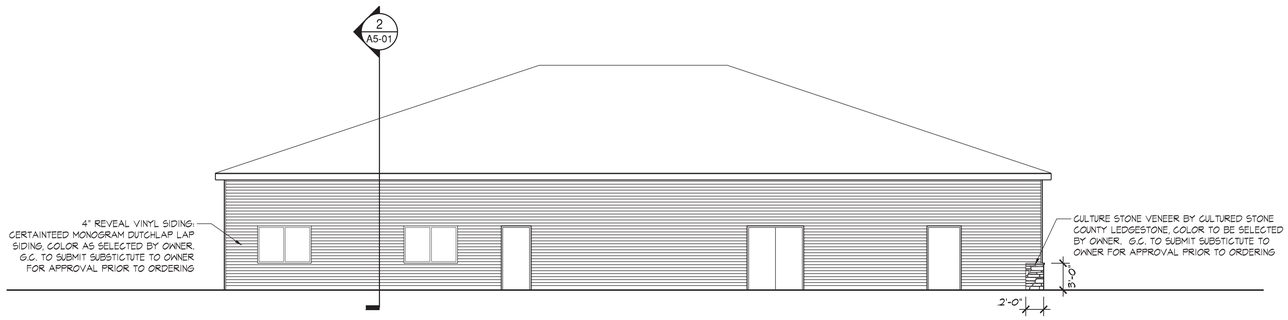
1	CITY LETTER-01 04/13/2022

Project No.	21109
Drawn By:	FMC/PWB
Checked By:	FMC

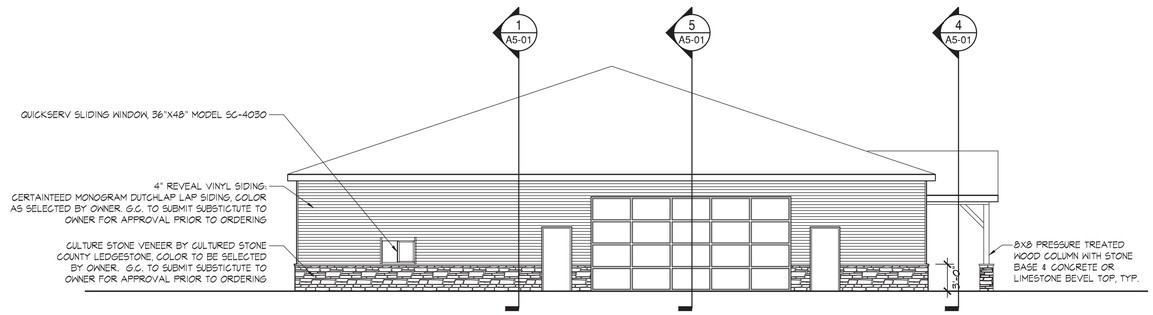
Sheet Title:
REFLECTED CEILING PLAN & ROOF PLAN ENTIRE FACILITY

Sheet No:
A1.10

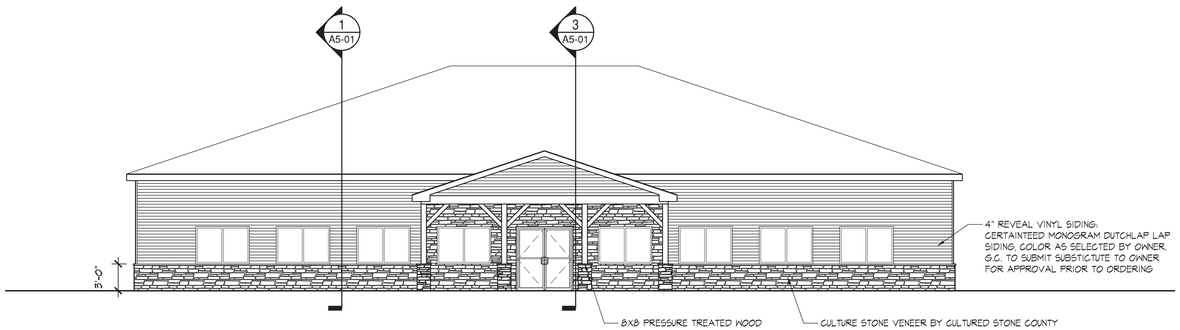
NORTH



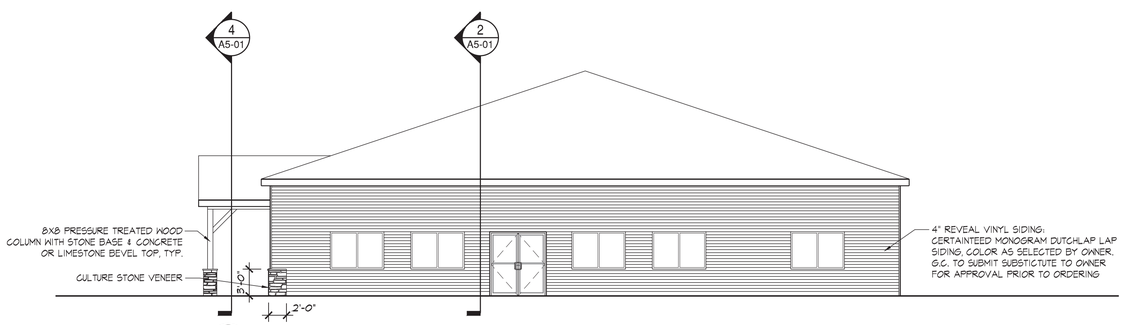
1 EXTERIOR ELEVATION - SOUTH
SCALE: 1/8"=1'-0"



2 EXTERIOR ELEVATION - EAST
SCALE: 1/8"=1'-0"



3 EXTERIOR ELEVATION - NORTH
SCALE: 1/8"=1'-0"



4 EXTERIOR ELEVATION - WEST
SCALE: 1/8"=1'-0"

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Project No.	21109
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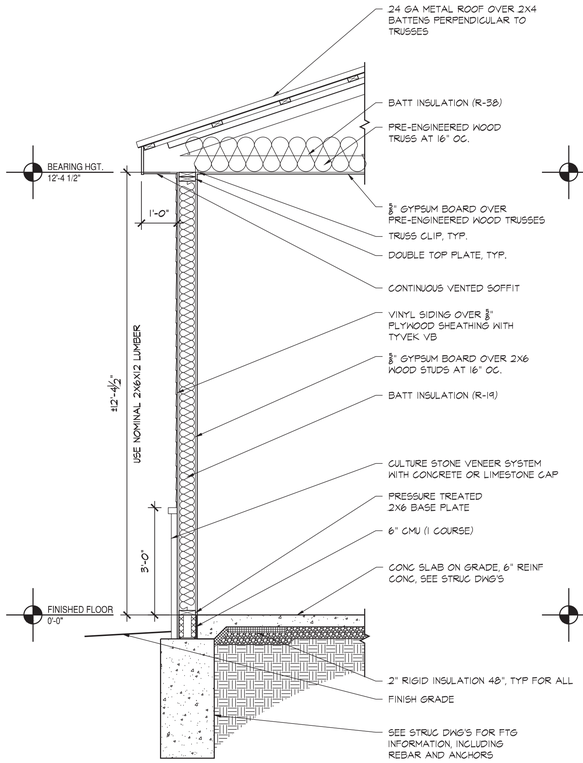
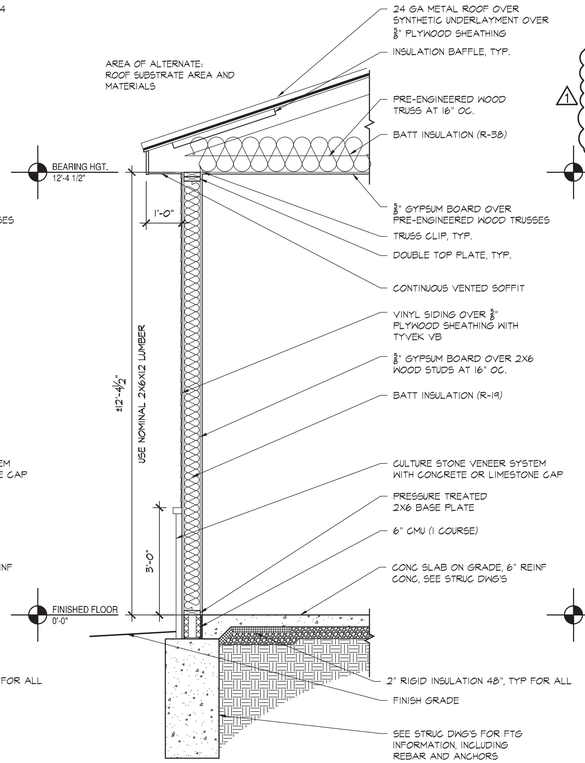
Sheet Title:
EXTERIOR ELEVATIONS

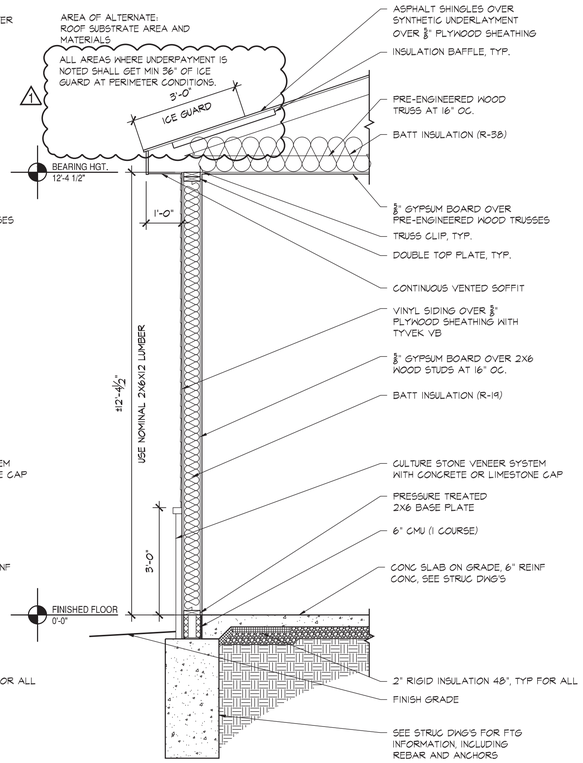
Sheet No:
A4.01



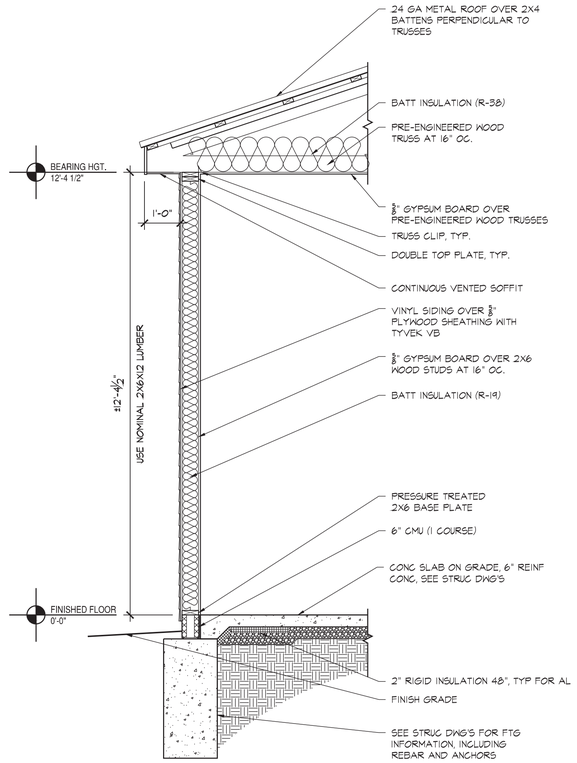
1 WALL SECTION - - BASE BID
SCALE: 1/2" = 1'-0"



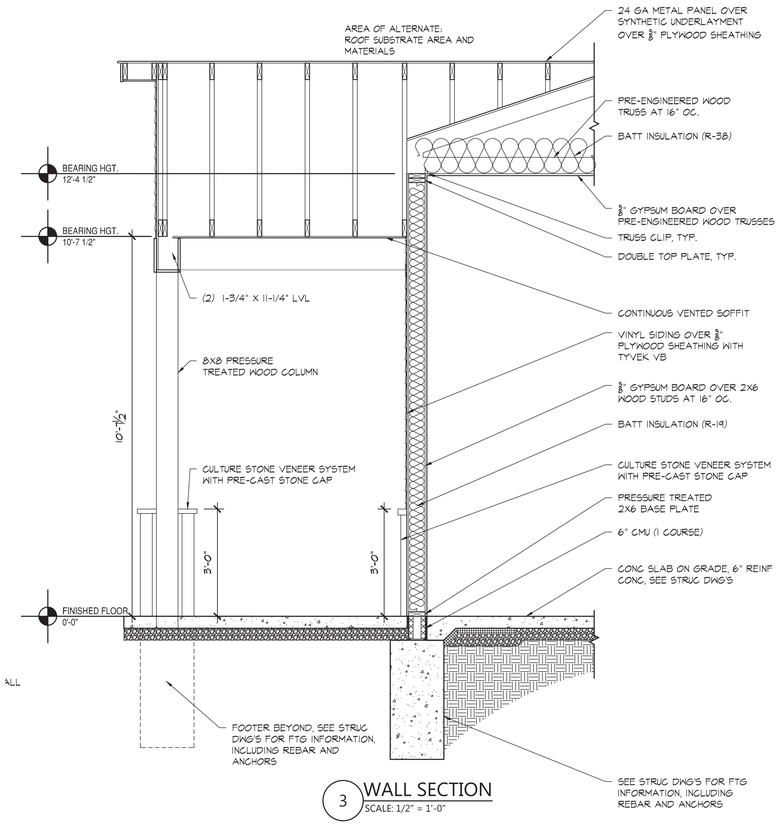
1 WALL SECTION - ALTERNATE
SCALE: 1/2" = 1'-0"



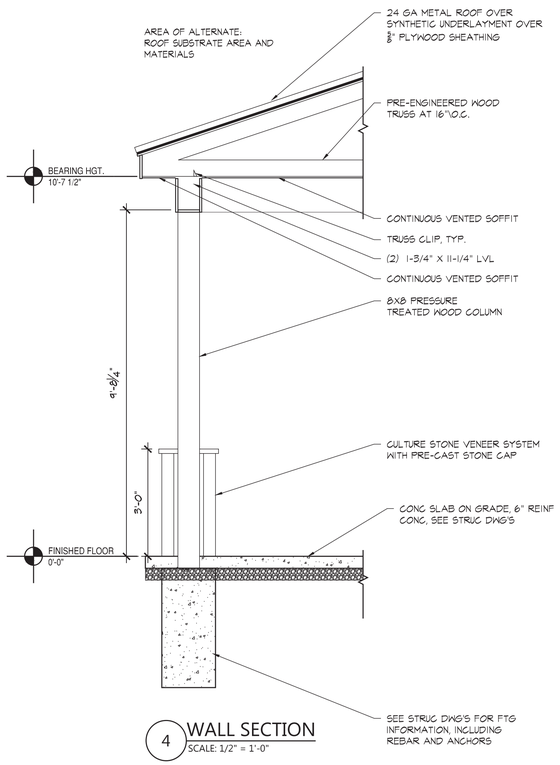
1 WALL SECTION - ALTERNATE
SCALE: 1/2" = 1'-0"



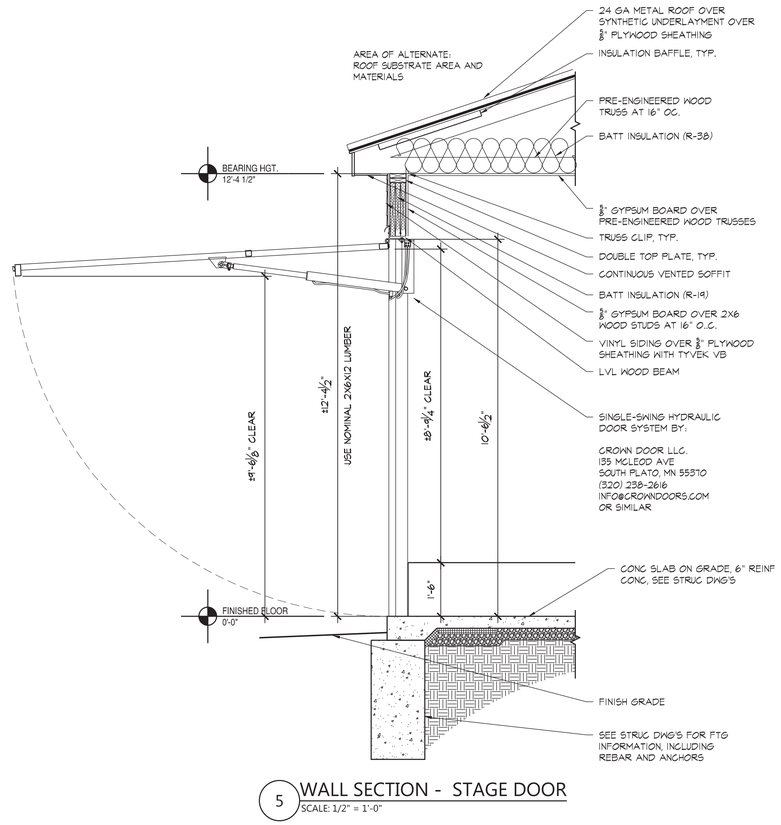
2 WALL SECTION - BASE BID
SCALE: 1/2" = 1'-0"



3 WALL SECTION
SCALE: 1/2" = 1'-0"



4 WALL SECTION
SCALE: 1/2" = 1'-0"



5 WALL SECTION - STAGE DOOR
SCALE: 1/2" = 1'-0"

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Project No. 21109
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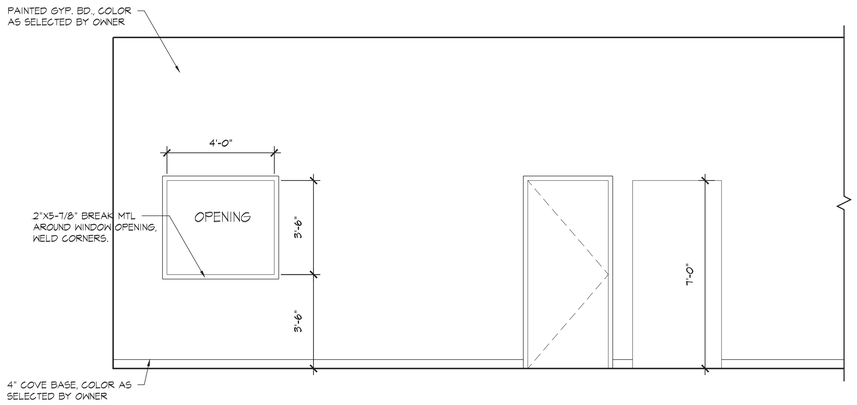
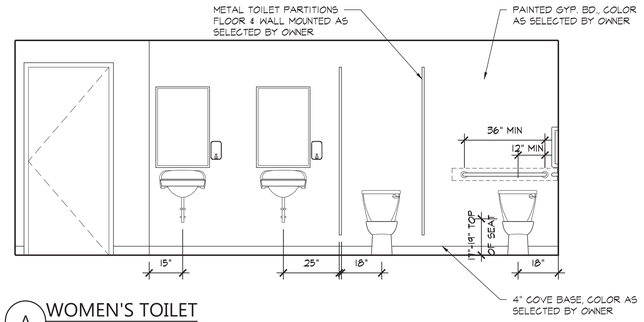
Checked By: FMC

Sheet Title:
WALL SECTIONS

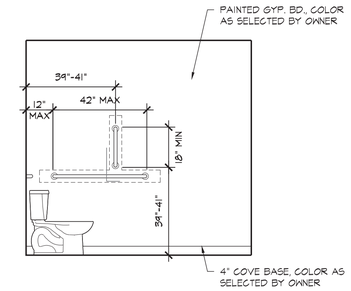
Sheet No:
A5.01



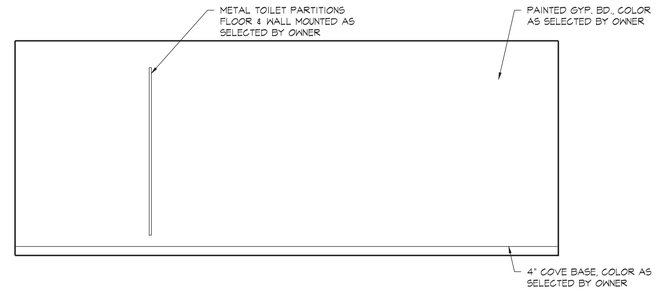
J OPEN HALL - VIEW OF WARMING KITCHEN
3/8" = 1'-0" #102



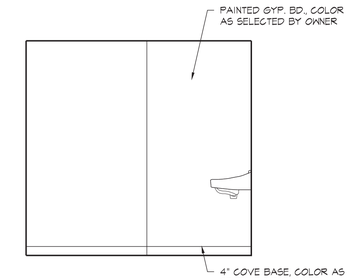
A WOMEN'S TOILET
3/8" = 1'-0" #105



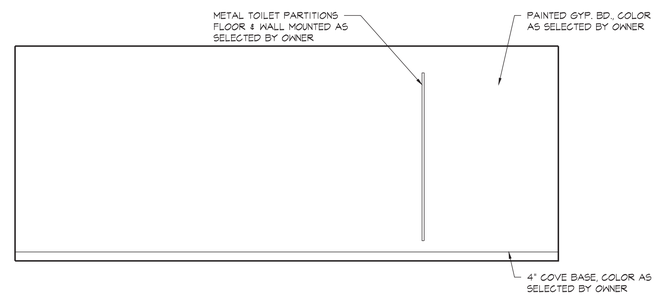
B WOMEN'S TOILET
3/8" = 1'-0" #105



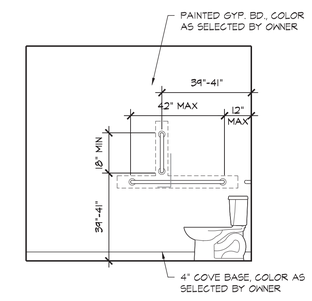
C WOMEN'S TOILET
3/8" = 1'-0" #105



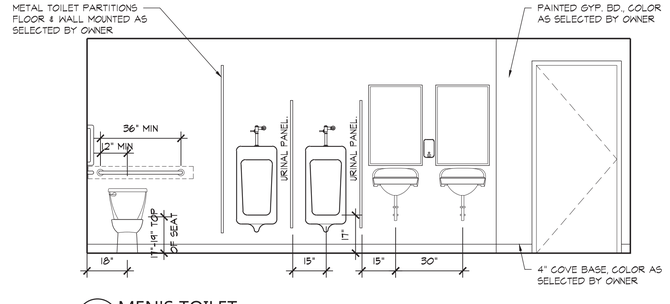
D WOMEN'S TOILET
3/8" = 1'-0" #105



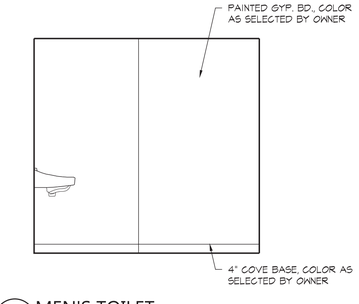
E MEN'S TOILET
3/8" = 1'-0" #106



F MEN'S TOILET
3/8" = 1'-0" #106



G MEN'S TOILET
3/8" = 1'-0" #106



H MEN'S TOILET
3/8" = 1'-0" #106

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Drawn By:	FMC/PWB
Checked By:	FMC

Sheet Title:
INTERIOR ELEVATIONS

Sheet No:
A6.01

SECTION 23 00 00 -HVAC GENERAL CONDITIONS

SECTION 23 00 00 -HVAC GENERAL CONDITIONS	
1 - CODE COMPLIANCE STATEMENT	ALL WORK COMPLETED BY THIS CONTRACTOR, FOR PURPOSES OF PROVIDING A COMPLETE AND WORKING SYSTEM, TO BE PROVIDED IN COMPLIANCE WITH:
	STATE MECHANICAL CODE
	STATE PLUMBING CODE
	STATE BUILDING CODE
	STATE RESIDENTIAL CODE (IF APPLICABLE)
	INTERNATIONAL FUEL GAS CODE
	INTERNATIONAL ENERGY CONSERVATION CODE
	ALL LOCAL CITY ORDINANCES APPLICABLE
	ALL PROFESSIONAL BEST PRACTICES INCLUDING ASHRAE, ASPE, AND NEC REQUIREMENTS
	GREEN BUILDING, LEED, OR OTHER SIMILAR GREEN RATINGS AS APPLICABLE AND REQUIRED BY OWNER
	CONTRACTOR SHALL HAVE KNOWLEDGE AND UNDERSTANDING OF THE BASICS OF THE APPLICABLE CODES PRIOR TO BID OF PROJECT. NO ADDITIONAL PAYMENT IS TO BE RENDERED DUE TO A LACK OF KNOWLEDGE OF THE APPLICABLE CODES OR RATINGS. COORDINATE ANY REQUIREMENTS FOR GREEN TECHNOLOGIES PRIOR TO BID.
2 -QUALITY ASSURANCE	PROVIDE ALL LABOR, MATERIALS, ACCESSORIES, CONTROLS (PER CONTRACT), FLASHING, OPENINGS, CLEANING AND PATCHING, BALANCING AND TESTING, AND EQUIPMENT INDICATED ON DRAWINGS, REQUIRED FOR A PROPER WORKING AND BALANCED SYSTEM, AND AS REASONABLY IMPLIED. ALL WORK TO BE TESTED, CLEANED AND READY FOR USE BY OWNER AT CONCLUSION OF CONSTRUCTION. ALL WORK TO BE PURCHASED, INSTALLED, COMMISSIONED, AND STARTED IN ACCORDANCE WITH AND COMPLIANCE WITH ALL LOCAL, CITY, STATE, FEDERAL AND INDUSTRY CODES AND STANDARDS APPLICABLE. PROTECT ALL EQUIPMENT, PIPING AND DUCTWORK DURING CONSTRUCTION FROM DAMAGE AND DEBRIS.
3 -CONTRACTOR LIABILITY STATEMENT	PROVIDE LABOR AND MATERIAL WARRANTY ON ALL ITEMS IN SCOPE FOR A PERIOD NOT LESS THAN 1 YEAR FROM START UP DATE (OR AGREED UPON DATE BY OWNER, G.C. AND CONTRACTOR). PROTECT ALL INSTALLED EQUIPMENT FROM CONSTRUCTION DAMAGE DURING DURATION OF CONSTRUCTION. REPLACE OR REPAIR DAMAGED ITEMS AT NO COST TO OWNER AS NEEDED DUE TO NEGLECT TO PROTECT ITEMS. CONTRACTOR IS SOLELY RESPONSIBLE FOR ACCURATE AND CODE COMPLIANT INSTALLATION INCLUDING BUT NOT LIMITED TO VENTILATION RATES, GAS PRESSURE, ELECTRICAL REQUIREMENTS AND BALANCING.
4 -CONTRACT DOCUMENT STATEMENT	REFER TO ALL DRAWINGS INCLUDING ARCHITECTURAL, SITE, CIVIL, ELECTRICAL, PLUMBING, AND STRUCTURAL FOR SCOPE OF PROJECT. COORDINATE MECHANICAL WORK WITH WORK OF ALL OTHER TRADES. NO ADDITIONAL FEES WILL BE PAID FOR CHANGES DUE TO LACK OF KNOWLEDGE OF PROJECT OR SPACE REQUIREMENTS. SHOULD DISCREPANCIES BE FOUND BETWEEN DRAWINGS, SPECIFICATIONS, SCHEDULES, OR SCOPES OF TRADES, THEY ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING PRIOR TO BID. MECHANICAL SCOPE OF WORK INCLUDES BUT IS NOT LIMITED TO: MECHANICAL DUCTWORK, SERVICE PIPING, AIR DISTRIBUTION, EQUIPMENT, TESTING AND BALANCING, FANS, ROOF CURBS AND PENETRATIONS, MECHANICAL DUCTWORK AND PIPING INSULATION, HANGERS AND VIBRATION CONTROL, CONTROLS (PER CONTRACT), AND GENERAL TRADES ITEMS PERTAINING TO THE INSTALLATION OF MECHANICAL EQUIPMENT (PER CONTRACT).
5 -SCOPE OF WORK STATEMENT	THE SCOPE OF WORK OF THE CONTRACTOR OF THESE PLANS (UNLESS OTHERWISE AGREED UPON BY CONTRACTOR, G.C. AND OWNER) INCLUDES EQUIPMENT, DUCTWORK, MECHANICAL PIPING (NON-SEWER, NON-DOMESTIC, NON-GAS), FLUES AND INTAKES, LOUVERS, CUTTING AND PATCHING FOR MECHANICAL ITEMS, HANGERS, INSULATION, BALANCING AND TESTING, START-UP AND TRAINING FOR EQUIPMENT IN SCOPE, CONTROLS AND CONTROL WIRING, LOW-VOLTAGE WIRING FOR MECHANICAL ITEMS, SMOKE DETECTORS LISTED UL 268A OR 268 FOR ABOVE 2000 CFM UNITS OR COMMON RTN, AND ALL ITEMS REQUIRED FOR A FULL, OPERATIONAL, BALANCED AND USEABLE SYSTEM.
6 -COORDINATION OF TRADES STATEMENT	COORDINATE ALL WORK WITH GENERAL TRADES CONTRACTOR, ELECTRICAL CONTRACTOR, STRUCTURAL CONTRACTOR, PLUMBING CONTRACTOR, SPRINKLER CONTRACTOR, FIRE ALARM CONTRACTOR, ARCHITECT AND ENGINEER, AND OWNER. ANY INTERFERENCES BETWEEN TRADES ARE TO BE RAISED TO G.C. AND ARCHITECT AS SOON AS POSSIBLE, IN WRITING, FIELD COORDINATION OF INTERFERING ITEMS IS APPROPRIATE WHERE ACCEPTABLE TO G.C. AND SIMILAR ITEMS CAN BE INSTALLED IN NEW LOCATION (I.E. DUCTWORK HAS SAME FREE AREA AND SIMILAR STATIC PRESSURE, PIPING COMPLIES WITH MANUFACTURER'S INSTRUCTIONS, ETC.)
7 -SUBMITTALS	CONTRACTOR TO PROVIDE SUBMITTALS FOR THE FOLLOWING ITEMS:
	EQUIPMENT OF THIS CONTRACTOR'S SCOPE
	PIPING AND DUCTWORK MATERIALS AS APPLICABLE TO THE PROJECT
	INSULATION AND JACKETS AS APPLICABLE TO THE PROJECT
	TESTING AND BALANCING REPORT -AIR, WATER, STEAM AND REFRIGERANT CHARGE AS APPLICABLE
	START-UP SHEETS INCLUDING DATE, TIME AND CONTRACTOR DOING START-UP
8 -RED-LINE AND AS-BUILT DRAWINGS	CONTRACTOR TO PROVIDE ANY CHANGES, UPDATES, AND FIELD COORDINATION ITEMS THRU A RED-LINE DRAWING (AS-BUILT DRAWING) PROVIDED AT NO SMALLER THAN 1/8TH INCH TO 1 FOOT SCALE. CHANGES PROPOSED PRIOR TO CONSTRUCTION TO BE REVIEWED BY ARCHITECT AND ENGINEER.
9 -FIELD CHANGE STATEMENT	CHANGES DUE TO FIELD COORDINATION ARE THE SOLE RESPONSIBILITY OF THIS CONTRACTOR (FOR THE SCOPE OF THIS CONTRACTOR'S WORK). ALL CHANGES TO SYSTEMS TO BE COORDINATED WITH ALL OTHER TRADES AS APPLICABLE, INCLUDING BUT NOT LIMITED TO G.C., STRUCTURAL CONTRACTOR, ELECTRICAL CONTRACTOR AND PLUMBING CONTRACTOR. CHANGES INITIATED BY THIS CONTRACTOR SHALL BE THE FINANCIAL RESPONSIBILITY OF THIS CONTRACTOR UNLESS OTHERWISE AGREED UPON BY G.C. OWNER AND ALL INVOLVED PARTIES.
10 -PERMITS	CONTRACTOR TO SECURE, PAY AND MAINTAIN ALL PERMITS RELATED TO SCOPE OF WORK. COORDINATE PERMIT REQUIREMENTS WITH G.C., ENGINEER AND OWNER. CONTRACTOR SHALL SECURE, PAY AND COORDINATE ALL INSPECTIONS RELATED TO SCOPE OF WORK. COORDINATE INSPECTIONS OF THIS SCOPE AND SCOPE OF OTHERS WITH RESPECT TO CONSTRUCTION ACTIVITIES OF ALL PARTIES ON SITE.
11 -START-UP, TESTING AND CLEAN UP	CONTRACTOR SHALL PROVIDE INDUSTRY STANDARD TESTING (NEBB OR ABC CERTIFIED FOR AIRFLOW) FOR AIRFLOW, WATER FLOW, STEAM, REFRIGERANT CHARGE, AND ANY OTHER ITEMS REQUIRED IN SCOPE. PROVIDE TESTING AND BALANCE REPORT TO G.C., OWNER, ARCHITECT AND ENGINEER. PROVIDE MANUFACTURER'S RECOMMENDED START-UP FOR ALL EQUIPMENT, PROVIDE START UP REPORT TO G.C. OWNER, ARCHITECT AND ENGINEER. CLEAN UP ALL MATERIALS AND DEBRIS RELATED TO SCOPE OF WORK. COORDINATE DISPOSAL OF DEBRIS AND EXCESS MATERIAL WITH G.C./OWNER. IF NO DUMPSTER IS PROVIDED, CONTRACTOR SHALL SECURE AND PAY FOR REMOVAL OF REFUSE FROM CONSTRUCTION ACTIVITIES OF THIS SCOPE. PROVIDE OWNER OR OWNER'S REP A STARTUP, OPERATIONS AND MAINTENANCE MANUAL INCLUDING IOM MANUAL FOR EACH PIECE OF EQUIPMENT UNDER SCOPE. PROVIDE 1-HR (OR ADDITIONAL AS REQUIRED UNDER CONTRACT) TRAINING TO OWNER OR REP. REGARDING THE OPERATION OF EQUIPMENT IN SCOPE
12 -DRAWINGS	DRAWINGS ARE TO BE CONSIDERED SCHEMATIC IN NATURE. INTENT AND SCOPE MAY INCLUDE ITEMS IN ARCHITECTURAL, ELECTRICAL AND PLUMBING PLANS. FINAL INSTALLED ITEMS MAY REQUIRE OFFSETS, ELBOWS, AND CHANGES. CONTRACTOR SHALL ACCOUNT FOR THESE CHANGES AS BEST AS POSSIBLE IN BID. DRAWINGS ARE TO SHOW CODE COMPLIANCE AND INTENT OF SYSTEMS.

SECTION 23 10 00 - HVAC MATERIALS AND INSULATION

	TYPE/LOCATION	MATERIAL	INSULATION	NOTES
1 - DUCTWORK	IN PLENUM SPACE			
	SUPPLY	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	MINIMUM R-3.5 FIBERGLASS INSULATION WITH VAPOR BARRIER JACKET. PLENUM RATED MATERIALS	UP TO 16" TO BE 22 GA. UP TO 30" TO BE 16 GA. BEYOND 30" TO BE 22 GA. WITH REINFORCING. PER SMACNA 006 TABLE 2-3 FOR 2" MAX PRESSURE UPDATE AS NEEDED FOR ACTUAL APPLICATION AND PRESSURE
	RETURN	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION	
	TRANSFER	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION	
	EXHAUST	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION	
	IN ATTIC SPACE - ABOVE INSULATION LAYER			
	SUPPLY	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	R-8 FIBERGLASS INSULATION WITH VAPOR BARRIER JACKET AND FOIL FACE	UP TO 16" TO BE 22 GA. UP TO 30" TO BE 16 GA. BEYOND 30" TO BE 22 GA. WITH REINFORCING. PER SMACNA 006 TABLE 2-3 FOR 2" MAX PRESSURE UPDATE AS NEEDED FOR ACTUAL APPLICATION AND PRESSURE
	RETURN	G-60 GALVANIZED STEEL PER ASTM A653 AND A924		
	TRANSFER	G-60 GALVANIZED STEEL PER ASTM A653 AND A924		
	EXHAUST	G-60 GALVANIZED STEEL PER ASTM A653 AND A924		
	IN ATTIC/CEILING SPACE - BELOW INSULATION LAYER			
	SUPPLY	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	MINIMUM R-3.5 FIBERGLASS INSULATION WITH VAPOR BARRIER JACKET.	UP TO 16" TO BE 22 GA. UP TO 30" TO BE 16 GA. BEYOND 30" TO BE 22 GA. WITH REINFORCING. PER SMACNA 006 TABLE 2-3 FOR 2" MAX PRESSURE UPDATE AS NEEDED FOR ACTUAL APPLICATION AND PRESSURE
	RETURN	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION	
	TRANSFER	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION	
	EXHAUST	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION	
	BELOW GRADE/BELOW SLAB			
	SUPPLY	HDPE CONFORMING TO ASTM-D2412, UL 181B, AND BSS 7239088	MINIMUM R-3,5 FIBERGLASS LINER WITH FOIL FACE. ~OR~ R-5 EXTERIOR INSULATION WITH HDPE JACKET	PITCH AND DRAIN ALL PIPING MINIMUM 1/4" PER FOOT TO DRAIN LINE. COORDINATE WORK WITH CIVIL AND STRUCTURAL ENGINEERS. CONSTRUCT PER SMACNA +10" W.G. STANDARDS.
	RETURN	HDPE CONFORMING TO ASTM-D2412, UL 181B, AND BSS 7239088		
	TRANSFER	HDPE CONFORMING TO ASTM-D2412, UL 181B, AND BSS 7239088		
	EXHAUST	HDPE CONFORMING TO ASTM-D2412, UL 181B, AND BSS 7239088		
	THRU RATED ASSEMBLY	SIMILAR TO ADJACENT	SIMILAR TO ADJACENT	PROVIDE WITH FIRE DAMPER OR SLEEVE AS REQUIRED BY STATE BUILDING CODE TO MAINTAIN FIRE RATING
	EXPOSED IN SPACE			
	SUPPLY	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	INTERNALLY LINED WITH R-6.5 DUCT LINER FOIL FACED. NOTE DUCTWORK TO BE SIZED FOR TOTAL FREE AREA WITH LINER PER DRAWINGS. .	UP TO 16" TO BE 22 GA. UP TO 30" TO BE 16 GA. BEYOND 30" TO BE 22 GA. WITH REINFORCING. SPIRAL WHERE POSSIBLE. RECTANGULAR IN SHAFT ENCLOSURES.
	RETURN	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION	
	TRANSFER	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION	
	EXHAUST	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	NO INSULATION	
	EXPOSED TO ELEMENTS			
	SUPPLY	G-60 GALVANIZED STEEL PER ASTM A653 AND A924	R-6 INSULATION WITH WEATHER PROOF JACKET SIMILAR TO VENTURE CLAD. ANY DUCTWORK EXPOSED TO FOOT TRAFFIC TO BE PROVIDED WITH STAIRWAY AND PLATFORM TO PREVENT WALKING ON DUCT	UP TO 16" TO BE 22 GA. UP TO 30" TO BE 16 GA. BEYOND 30" TO BE 22 GA. WITH REINFORCING.
	RETURN	G-60 GALVANIZED STEEL PER ASTM A653 AND A924		
	TRANSFER	G-60 GALVANIZED STEEL PER ASTM A653 AND A924		
	EXHAUST	G-60 GALVANIZED STEEL PER ASTM A653 AND A924		
	GREASE EXHAUST	STAINLESS STEEL FULLY WELDED GREASE DUCT 0.047 THICK. NFPA-96 RATED	2 LAYERS OF 3M 615+ GREASE WRAP INSTALLED FOR ZERO INCH CLEARANCE TO COMBUSTIBLES.	ALL TRANSITIONS OVER 45 DEG AND HORIZONTAL RUNS LONGER THAN 10 FT TO BE PROVIDED WITH CLEANOUT. HOOD AND HINGED FAN TO BE COUNTED AS CLEANOUT AS NEEDED.
	CORROSIVE EXHAUST	MATERIAL TO BE SPECIFIC TO CORROSIVE MATERIALS.	NO INSULATION	COORDINATE FINAL REQUIREMENTS WITH OWNER PER MATERIALS AND CHEMICALS HANDLED.
2 - STANDARD AND SUBSTITUTIONS	CONTRACTOR TO INSTALL AND FABRICATE ALL DUCTWORK PER SMACNA, NFPA, AND ASME STANDARDS APPLICABLE. SUBSTITUTION OF ALUMINUM DUCTWORK FOR GALVANIZED STEEL IS ACCEPTABLE AS LONG AS SIMILAR INTEGRITY, LEAKAGE, ETC. IS MAINTAINED. PROVIDE CONTINUOUS TRANSITIONS AND ELBOWS. ELBOWS OVER 45 DEGREES IN SQUARE/RECTANGULAR DUCTWORK TO BE PROVIDED WITH TURNING VANES. WHERE REQUIRED BY OWNER, PROVIDE SOUND LINING IN RETURN, TRANSFER AND EXHAUST DUCTWORK (FOR SOUND SENSITIVE AREAS). DRAWINGS AND SCHEMATIC, PROVIDE TRANSITIONS, HANGERS, ELBOWS AND ACCESSORIES AS NEEDED FOR A COMPLETE AND BALANCED SYSTEM. NOTE BALANCE DAMPERS MAY NOT BE SHOWN ON PLANS, PROVIDE MEANS OF BALANCE AT ALL AIR DISTRIBUTION DEVICES. (AND RETURNS IF LABELED TO BE BALANCED)			
3 - DUCTWORK INSTALLATION STATEMENT	INSTALL ALL DUCTWORK IN A NEAT AND PROFESSIONAL MANNER. PROVIDE HANGERS AS REQUIRED BY CODE. HANGERS TO BE SECURED TO STRUCTURE DIRECTLY. FLEXIBLE DUCTWORK TO BE MAXIMUM 10 FT IN LENGTH, INSTALLED TIGHT WITH NO HARSH BENDS OR OBSTRUCTIONS, AND TO BE INSULATED SIMILAR TO DUCTWORK SERVED.			
4 - DUCTWORK CONSTRUCTION	CONSTRUCT DUCTWORK PER ASME, SMACNA, OBC, OMC AND NFPA STANDARDS. PROVIDE CONNECTIONS (SLIP AND DRIVE, LONGITUDINAL SEAMS, ETC) PER STANDARDS.			
5- INSULATION INSTALLATION STATEMENT	PROVIDE INSULATION CONTINUOUS FROM EQUIPMENT TO OUTLET. INSULATION TO BE PROVIDED WITH VAPOR BARRIER CONTINUOUSLY TO PREVENT CONDENSATE SWEATING. PROVIDE ADHESIVES RATED FOR APPLICATION INCLUDING PLENUM RATING, WEATHER PROOF, ETC. AS REQUIRED BY APPLICATION.			
6 - STANDARDS OF CARE	PROTECT ALL MATERIALS ON SITE FROM CONSTRUCTION DAMAGE. ALL MATERIALS TO BE NEW AN FREE FROM DEFECT. SEAL ALL UN-USED HOLES PRIOR TO INSTALLATION OF INSULATION. PROVIDE AIR TIGHT MASTIC CAPABLE OF PRESSURE DEVELOPED IN DUCTWORK.			
7 - MECHANICAL PIPING	TYPE/LOCATION	MATERIAL	INSULATION	NOTES
	CHILLED WATER	BLACK IRON, PVC OR CPVC PIPING CONFORMING TO STANDARDS REQUIRED AND CAPABLE OF TEMPERATURES DEVELOPED IN CHILLED WATER APPLICATION.	PLENUM RATED (AS REQUIRED) FIBER GLASS INSULATION WITH VAPOR BARRIER JACKET. K-0.26 OR LOWER VALUE, 1" THICK (1.5" THICK ABOVE 8 INCH PIPING)	PROVIDE HANGERS, FIRE CAULKING AND ACCESSORIES REQUIRED FOR A FULL, CODE COMPLIANT AND BALANCED SYSTEM.
	HEATING WATER UP TO 200F	BLACK IRON, PVC OR CPVC PIPING CONFORMING TO STANDARDS REQUIRED AND CAPABLE OF TEMPERATURES DEVELOPED IN APPLICATION.	PLENUM RATED (AS REQUIRED) FIBER GLASS INSULATION WITH VAPOR BARRIER JACKET. K-0.27OR LOWER VALUE, 2" THICK	PROVIDE HANGERS, FIRE CAULKING AND ACCESSORIES REQUIRED FOR A FULL, CODE COMPLIANT AND BALANCED SYSTEM.
	CONDENSER LOOP WATER (WATER SOURCE HEAT PUMP)	BLACK IRON, PVC OR CPVC PIPING CONFORMING TO STANDARDS REQUIRED AND CAPABLE OF TEMPERATURES DEVELOPED IN APPLICATION.	PLENUM RATED (AS REQUIRED) FIBER GLASS INSULATION WITH VAPOR BARRIER JACKET. K-0.27 OR LOWER VALUE, 1" THICK	PROVIDE HANGERS, FIRE CAULKING AND ACCESSORIES REQUIRED FOR A FULL, CODE COMPLIANT AND BALANCED SYSTEM.
	CONDENSATE WASTE PIPING	TYPE-K CU, PVC OR CPVC PIPING CONFORMING TO STANDARDS REQUIRED AND CAPABLE OF TEMPERATURES DEVELOPED IN APPLICATION.	PLENUM RATED (AS REQUIRED) FIBER GLASS INSULATION WITH VAPOR BARRIER JACKET. K-0.27 OR LOWER VALUE, 1" THICK	PROVIDE HANGERS, FIRE CAULKING AND ACCESSORIES REQUIRED FOR A FULL, CODE COMPLIANT AND BALANCED SYSTEM.
	REFRIGERANT PIPING	PRE INSULATED LINESETS WHERE AVAILABLE, TYPE-K COPPER PIPING IF FIELD BUILT. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SIZING AND APPLICATION.	PLENUM RATED (AS REQUIRED) CLOSED CELL INSULATION WITH VAPOR BARRIER JACKET. K-0.27 OR LOWER VALUE, 1" THICK	PROVIDE HANGERS, FIRE CAULKING AND ACCESSORIES REQUIRED FOR A FULL, CODE COMPLIANT AND BALANCED SYSTEM.
	STEAM PIPING UP TO 350F	BLACK IRON PIPING CAPABLE OF TEMPERATURES DEVELOPED IN APPLICATION	PLENUM RATED (AS REQUIRED) FIBER GLASS INSULATION WITH VAPOR BARRIER JACKET. K-0.34 OR LOWER VALUE,5" THICK	PROVIDE HANGERS, FIRE CAULKING AND ACCESSORIES REQUIRED FOR A FULL, CODE COMPLIANT AND BALANCED SYSTEM.
8 - PIPING INSTALLATION STATEMENT	PERFORM ALL WORK IN ACCORDANCE WITH ASME, ASPE, AND WELDING STANDARDS. ALL MATERIAL TO BE NEW AND FREE OF DEFECTS. PROVIDE ALL PIPING AND MATERIALS IN FIELD FROM CONSTRUCTION DAMAGE. PROVIDE END CAPS ON EACH LENGTH OF PIPING TO PREVENT DEBRIS FROM ENTERING. PROVIDE VALVES, PORTS, FITTINGS, AND ACCESSORIES FOR A COMPLETE, WORKING AND BALANCED SYSTEM. PROVIDE ALL RIGGING AND HANDLING FOR MATERIALS AND ACCESSORIES. PROVIDE HANGERS PER OPC, OMC, OBC AND ALL APPLICABLE STANDARDS. WHERE 3 OR MORE PIPING IS RUN TOGETHER AND WHERE APPROPRIATE TRAPEZE HANGERS MAY BE USED. PROVIDE EXPANSION JOINTS, THRUST BLOCKS, FLEXIBLE CONNECTIONS AND UNIONS FOR A COMPLETE INSTALLATION. COORDINATE THRUST BLOCK LOCATIONS WITH ARCHITECT AND STRUCTURAL ENGINEER. COORDINATE ROUTING AND HANGERS WITH ALL TRADES. PROVIDE BALANCE VALVES, FLOW CONTROL DEVICES, SHUTOFF VALVES AND RELIEF FOR A COMPLETE AND CODE COMPLIANT INSTALLATION REGARDLESS OF DETAILS OR DRAWINGS.			
9 - HANGER SPACING	PER OBC, REFER TO TABLE 308.5 (SHOWN BELOW) FOR HANGER SPACING			
	HANGER SPACING			
	PIPING MATERIAL		MAXIMUM HORIZONTAL SPACING (FEET)	MAXIMUM VERTICAL SPACING (FEET)
	ACRYLONITRILE BUTADIENE STYRENE (ABS) PIPE		4	10B
	ALUMINUM TUBING		10	15
	BRASS PIPE		10	10
	CAST-IRON PIPE		5A	15
	CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE AND TUBING, 1 INCH AND SMALLER		3	10B
	CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE AND TUBING, 1¼ INCHES AND LARGER		4	10B
	COPPER OR COPPER-ALLOY PIPE		12	10
	COPPER OR COPPER-ALLOY TUBING, 1¼-INCH DIAMETER AND SMALLER		6	10
	COPPER OR COPPER-ALLOY TUBING, 1½-2-INCH DIAMETER AND LARGER		10	10
	CROSS-LINKED POLYETHYLENE (PEX) PIPE		2.67 (32 INCHES)	10B
	CROSS-LINKED POLYETHYLENE/ ALUMINUM/CROSS-LINKED POLYETHYLENE (PEX-ALPEX) PIPE		2.67 (32 INCHES)	4
	LEAD PIPE		CONTINUOUS	4
	POLYETHYLENE/ALUMINUM/ POLYETHYLENE (PE-AL-PE) PIPE		2.67 (32 INCHES)	4
	POLYETHYLENE OF RAISED TEMPERATURE (PE-RT) PIPE		2.67 (32 INCHES)	10B
	POLYPROPYLENE (PP) PIPE OR TUBING 1 INCH AND SMALLER		2.67 (32 INCHES)	10B
	POLYPROPYLENE (PP) PIPE OR TUBING, 1¼ INCHES AND LARGER		4	10B
	POLYVINYL CHLORIDE (PVC) PIPE		4	10B
	STAINLESS STEEL DRAINAGE SYSTEMS		10	10B
	STEEL PIPE		12	15
	FOR SI: 1 INCH = 25.4 MM, 1 FOOT = 304.8 MM.			
	A. THE MAXIMUM HORIZONTAL SPACING OF CAST-IRON PIPE HANGERS SHALL BE INCREASED TO 10 FEET WHERE 10-FOOT LENGTHS OF PIPE ARE INSTALLED.			
	B. FOR SIZES 2 INCHES AND SMALLER, A GUIDE SHALL BE INSTALLED MIDWAY BETWEEN REQUIRED VERTICAL SUPPORTS. SUCH GUIDES SHALL PREVENT PIPE MOVEMENT IN A DIRECTION PERPENDICULAR TO THE AXIS OF THE PIPE.			

SECTION 23 10 00 - HVAC EQUIPMENT

	SYSTEM TYPE	ENERGY REQUIREMENTS	ACCESSORY REQUIREMENTS
1 - GENERAL NOTE	CONTRACTOR TO PROVIDE EQUIPMENT, CONTROLS, VALVES, FITTINGS, TRANSITIONS, FILTERS AND BOX, GAS TRAIN AND DIRT LEG, INSULATION AND BALANCING ITEMS FOR A COMPLETE, CODE COMPLIANT, ENERGY COMPLIANT, AND USEABLE INSTALLATION. DRAWINGS ARE SCHEMATIC, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE A FULL AND WORKING SYSTEM AND AN ACCURATE PRICE FOR SAID SYSTEM.		
2 - COMMON SYSTEMS AND ACCESSORIES	NOTE: SYSTEMS LISTED BELOW ARE THE COMMON SYSTEMS AND MAY NOT COVER ALL POSSIBILITIES. PROVIDE ALL QUESTIONS IN WRITING TO ARCHITECT AND ENGINEER PRIOR TO BID.		
	PACKAGED ROOF MOUNTED UNIT	IECC 2015 COMPLIANT SEER VALUE (14 SEER), INSULATED CABINET AND HOUSING, MINIMUM 80% EFFICIENT GAS TRAIN, SINGLE ENTHALPY ECONOMIZER (AIR SIDE)	14" ROOF CURB (VERTICAL OR HORIZONTAL AS NEEDED FOR PLANS, GAS TRAIN WITH SHUT-OFF AND DIRT LEG, THRU BASE UTILITY CONNECTION KIT (IF POSSIBLE), 1" PLEATED FILTER (REPLACE AT CONCLUSION OF CONSTRUCTION), REFRIGERANT CHARGE, CONDENSATE WASTE TO ABOVE ROOF DRAIN OR AS INDICATED ON PLAN. 7-DAY PROGRAMMABLE THERMOSTAT. NON-FUSED DISCONNECT.
	SPLIT SYSTEM (FURNACE AND CONDENSING UNIT)	IECC 2015 COMPLIANT SEER VALUE (14 SEER), INSULATED CABINET AND HOUSING, MINIMUM 80% EFFICIENT GAS TRAIN, SINGLE ENTHALPY ECONOMIZER (AIR SIDE)	NONCOMBUSTIBLE BASE (FURNACE) AND 4" CONCRETE CURB (CONDENSING UNIT), GAS TRAIN WITH SHUT-OFF AND DIRT LEG, FIELD FABRICATED FILTER RACK AND 1" PLEATED FILTER (REPLACE AT CONCLUSION OF CONSTRUCTION), REFRIGERANT CHARGE AND REFRIGERANT PIPING AND REQUIRED ACCESSORIES (OIL TRAP, ETC), CONDENSATE WASTE TO ABOVE LOCAL DRAIN OR AS INDICATED ON PLAN. 7-DAY PROGRAMMABLE THERMOSTAT. NON-FUSED DISCONNECT.
	WATER SOURCE HEAT PUMP	IECC 2015 COMPLIANT COP MINIMUM 3.02, EER MINIMUM 11.9. VFD OR ECM DRIVEN PUMPING SYSTEM	VALVES, FLEX CONNECTIONS AND RECIRCULATION PUMP FOR EACH HEAT PUMP, WELL FIELD MANIFOLD, PUMPS AND CONTROLS,, FIELD FABRICATED FILTER RACK AND 1" PLEATED FILTER (REPLACE AT CONCLUSION OF CONSTRUCTION), REFRIGERANT CHARGE AND REFRIGERANT PIPING AND REQUIRED ACCESSORIES (OIL TRAP, ETC), CONDENSATE WASTE TO ABOVE LOCAL DRAIN OR AS INDICATED ON PLAN. 7-DAY PROGRAMMABLE THERMOSTAT. NON-FUSED DISCONNECT.
	VARIABLE REFRIGERANT FLOW (VRF)	IECC 2015 COMPLIANT COP MINIMUM 3.02, EER MINIMUM 11.9.	VALVES, FLEX CONNECTIONS AND LINESETS FOR EACH TERMINAL AND OUTDOOR UNIT, DUCTED SYSTEMS TO HAVE FIELD FABRICATED FILTER RACK AND 1" PLEATED FILTER (REPLACE AT CONCLUSION OF CONSTRUCTION), REFRIGERANT CHARGE AND REFRIGERANT PIPING AND REQUIRED ACCESSORIES (OIL TRAP, ETC), CONDENSATE WASTE TO ABOVE LOCAL DRAIN OR AS INDICATED ON PLAN. 7-DAY PROGRAMMABLE THERMOSTAT. NON-FUSED DISCONNECT.
	FAN COIL - HYDRONIC/STEAM	IECC 2015 COMPLIANT COP MINIMUM 3.02, EER MINIMUM 11.9. ~OR~ 80% MINIMUM EFFICIENT BOILER	VALVES, FLEX CONNECTIONS AND CONTROL VALVES FOR EACH FAN COIL, MAIN LOOP, PUMPS AND CONTROLS,, FIELD FABRICATED FILTER RACK AND 1" PLEATED FILTER (REPLACE AT CONCLUSION OF CONSTRUCTION), WATER TREATMENT ACCESSORIES, GLYCOL, AIR/DIRT SEPARATOR, CONDENSATE WASTE TO ABOVE LOCAL DRAIN OR AS INDICATED ON PLAN. 7-DAY PROGRAMMABLE THERMOSTAT. NON-FUSED DISCONNECT.
	GAS FIRED MAKE-UP AIR UNIT	IECC 2015 COMPLIANT SEER VALUE (14 SEER), INSULATED CABINET AND HOUSING, MINIMUM 80% EFFICIENT GAS TRAIN,	14" ROOF CURB (VERTICAL OR HORIZONTAL AS NEEDED FOR PLANS, GAS TRAIN WITH SHUT-OFF AND DIRT LEG, THRU BASE UTILITY CONNECTION KIT (IF POSSIBLE), 1" PLEATED FILTER (REPLACE AT CONCLUSION OF CONSTRUCTION), REFRIGERANT CHARGE, CONDENSATE WASTE TO ABOVE ROOF DRAIN OR AS INDICATED ON PLAN. 7-DAY PROGRAMMABLE THERMOSTAT. NON-FUSED DISCONNECT.
	EXHAUST, SUPPLY AND TRANSFER FANS	IECC 2015 MAXIMUM HORSE POWER ALLOWANCE	PROVIDE FAN SPEED CONTROLLER ON HOUSING FOR BALANCING, FLEXIBLE CONNECTIONS AT SUPPLY AND OUTLET, VIBRATION ISOLATION HANGERS (OR INTERNALLY VIBRATION ISOLATED MOTOR), PREMIUM EFFICIENCY TEFC MOTOR UNLESS OTHERWISE SPECIFIED. NON-FUSED DISCONNECT.
	UNIT HEATER/INFRARED TUBE HEATERS	IECC 2015 80% EFFICIENT MINIMUM	PROVIDE WITH SEALED COMBUSTION AND INTAKE, NON-FUSED DISCONNECT, 7-DAY PROGRAMMABLE THERMOSTAT, GAS TRAIN WITH DIRTLEG AND SHUTOFF, REFLECTOR PANELS (TUBE HEATERS) MOUNT PER MFG AND PLANS.
	CABINET HEATERS, ELECTRIC UNIT HEATERS	IECC 2015 ELECTRICAL EFFICIENCIES	PROVIDE RECESSED MOUNTING FRAME UNLESS OTHERWISE SPECIFIED, NON-FUSED DISCONNECT, 7-DAY PROGRAMMABLE THERMOSTAT,
	GREASE EXHAUST FAN AND HOOD	IECC 2015 MAXIMUM HORSE POWER ALLOWANCE	PROVIDE HIGH TEMPERATURE MOTOR OUT OF AIRSTREAM TYPE FAN, HOOD TO BE MANUFACTURER FOR ZERO INCH CLEARANCE TO COMBUSTIBLES, GREASE DUCT, FAN AND OUTLET TO BE FULL INSULATED FOR ZERO INCH CLEARANCE TO COMBUSTIBLES.
3 - COORDINATION	CONTRACTOR TO COORDINATE SETTING, LOCATION, UTILITIES, PIPING AND INSTALLATION OF EQUIPMENT WITH GENERAL TRADES, OWNER, ARCHITECT, AND OTHER TRADES. PROVIDE TRANSITIONS, FLEXIBLE CONNECTIONS AND ALTERATIONS AS NEEDED FOR A COMPLETE INSTALLATION.		

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E-77425
REGISTERED
PROFESSIONAL ENGINEER
EXP. 12-31-21

Weathersfield Township Community Center

Corner of Main Street and Stewart Street
Weathersfield, Ohio

- ☒ Design 04/30/2021
- ☒ Approval 06/02/2021
- ☐ Permit 07/16/2021
- ☐ Bid
- ☐ Construction

Revisions:

No.	Date/Description
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Project No. 21109
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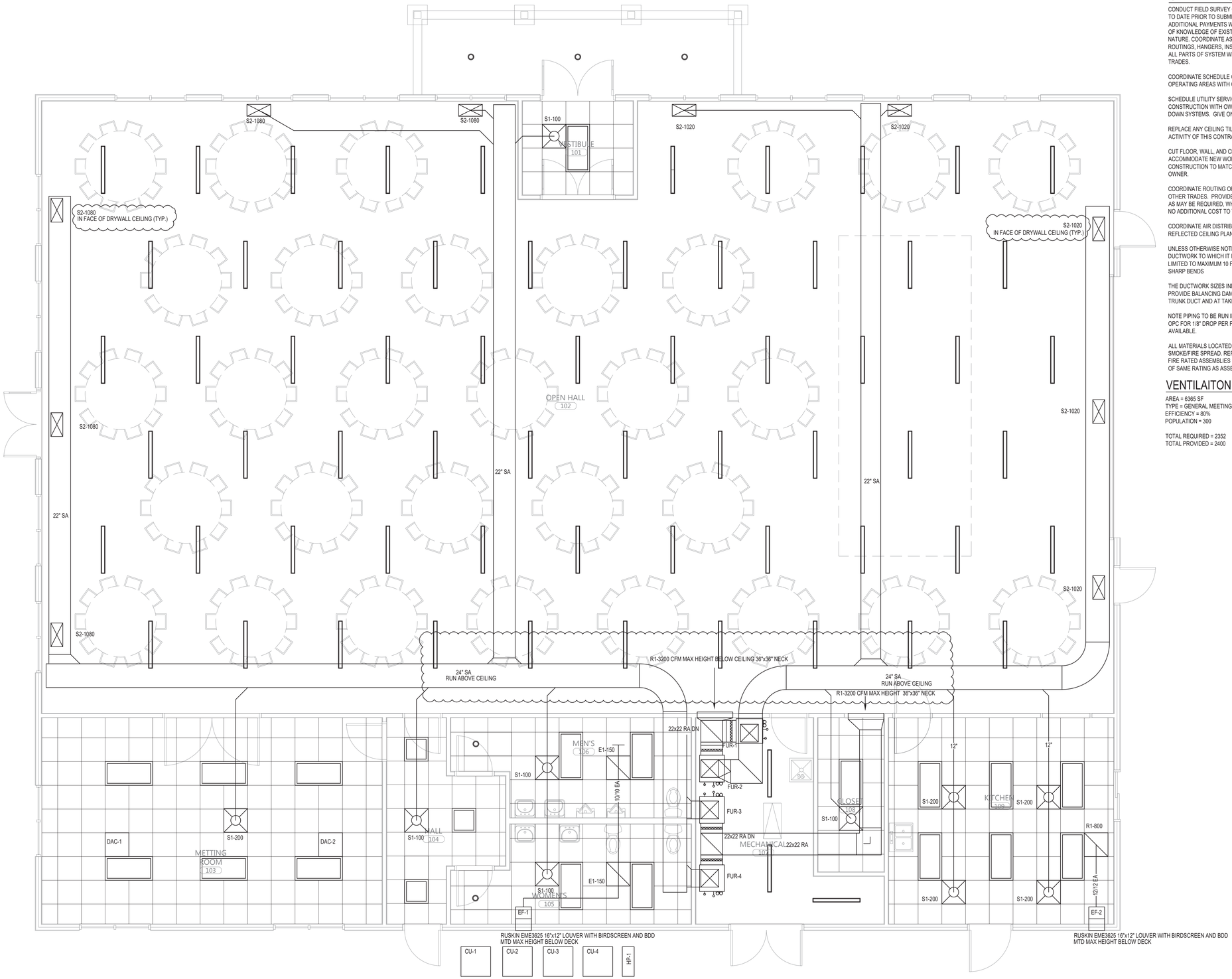
HVAC SPEC.

Sheet No:
M0.01



MECHANICAL PLAN

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

GENERAL NOTES - NEW HVAC

CONDUCT FIELD SURVEY OF EXISTING CONDITIONS AND WORK COMPLETED TO DATE PRIOR TO SUBMISSION OF BID AND START OF WORK. NO ADDITIONAL PAYMENTS WILL BE MADE ON CLAIMS THAT ARISE FROM LACK OF KNOWLEDGE OF EXISTING CONDITIONS. DRAWINGS ARE SCHEMATIC IN NATURE. COORDINATE AS SOLE RESPONSIBILITY OF THIS CONTRACTOR ROUTINGS, HANGERS, INSULATION, VALVES AND STEMS, CONTROLS AND ALL PARTS OF SYSTEM WITH RESPECT TO BUILDING AND WORK OF OTHER TRADES.

COORDINATE SCHEDULE OF WORK REQUIRED IN OCCUPIED AND OPERATING AREAS WITH OWNER PRIOR TO STARTING SUCH WORK.

SCHEDULE UTILITY SERVICE SHUTDOWNS REQUIRED FOR NEW CONSTRUCTION WITH OWNER AND GENERAL TRADES PRIOR TO SHUTTING DOWN SYSTEMS. GIVE ONE WEEK ADVANCE NOTICE IN WRITING.

REPLACE ANY CEILING TILES DAMAGED DURING CONSTRUCTION DUE TO ACTIVITY OF THIS CONTRACT

CUT FLOOR, WALL, AND CEILING CONSTRUCTION FOR PENETRATIONS TO ACCOMMODATE NEW WORK. COORDINATE WITH GENERAL TRADES. PATCH CONSTRUCTION TO MATCH, OR TO SATISFACTION OF ARCHITECT AND OWNER.

COORDINATE ROUTING OF NEW DUCTWORK AND PIPING WITH WORK OF OTHER TRADES. PROVIDE CHANGES IN LOCATION, DIRECTION, OFFSETS, AS MAY BE REQUIRED. WHETHER SPECIFICALLY INDICATED OR NOT, AND AT NO ADDITIONAL COST TO THE OWNER.

COORDINATE AIR DISTRIBUTION DEVICE LOCATIONS WITH FINAL REFLECTED CEILING PLAN.

UNLESS OTHERWISE NOTED, FLEXIBLE DUCTWORK IS SAME SIZE AS ROUND DUCTWORK TO WHICH IT IS CONNECTED. FLEXIBLE DUCTWORK TO BE LIMITED TO MAXIMUM 10 FEET AND HUNG STRAIGHT WITHOUT KINKS OR SHARP BENDS

THE DUCTWORK SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS. PROVIDE BALANCING DAMPER AT ALL BRANCH TAKE OFFS FROM MAIN TRUNK DUCT AND AT TAKE OFFS SERVING DIFFUSER, GRILLE, OR REGISTER.

NOTE PIPING TO BE RUN IN FLOOR, SANITARY PIPING SHOWN SIZED PER OPC FOR 1/8" DROP PER FOOT. PROVIDE 1/4" DROP PER FOOT WHERE AVAILABLE.

ALL MATERIALS LOCATED IN PLENUM SPACE TO BE PLENUM RATED FOR SMOKE/FIRE SPREAD. REFER TO OBC. FIRE SEAL ANY PENETRATIONS THRU FIRE RATED ASSEMBLIES PER OBC. SEALS TO BE FULL, CONTINUOUS AND OF SAME RATING AS ASSEMBLY

VENTILAITON CALCULATION

AREA = 6365 SF
TYPE = GENERAL MEETING/CONFERENCE
EFFICIENCY = 80%
POPULATION = 300

TOTAL REQUIRED = 2352
TOTAL PROVIDED = 2400

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Corner of Main Street and Stewart Street
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AIR DISTRIBUTION SCHEDULE

ALL SUPPLY GRILLES TO BE FITTED WITH BALANCING DAMPER. COORDINATE WITH OWNER REGARDING FACE ACCESSIBLE DAMPERS (RADIAL NECK) VS. CONCEALED ABOVE CEILING. WHERE LOCATED IN DRYWALL OR HARD CEILING, PROVIDE WIRE ACTUATED DAMPER WITH CEILING MOUNTED DIAL. DUCTWORK SERVING SINGLE DEVICE SHALL BE SAME SIZE AS DEVICE NECK UNLESS OTHERWISE MARKED.

S1 TITUS OMNI 24"x24" FACE

NECK SIZES

6"	UP TO 125 CFM
8"	UP TO 225 CFM
10"	UP TO 375 CFM
12"	UP TO 450 CFM
14"	UP TO 625 CFM
15"	UP TO 725 CFM

S2 TITUS 300 FL PROVIDE 22.5 DEG DEFLECTION UNLESS SPECIFIED OTHERWISE

NECK SIZES - (FIELD VERIFY SPACE AVAILABLE IN FIELD, KEEP SIMILAR FREE AREA IF SUBSTITUTING SIZES)

6"X10"	UP TO 150 CFM
8"X12"	UP TO 200 CFM
6"X18"	UP TO 300 CFM
10"X18"	UP TO 550 CFM
10"X22"	UP TO 650 CFM
12"X36"	UP TO 1100 CFM

R1 & E1 TITUS 350 FL UNBALANCED RETURN (FIT TO GRID WORK 24"x24" WHERE LAY-IN CEILING IS PRESENT)

NECK SIZES

6"x6"	UP TO 100 CFM
10"x10"	UP TO 300 CFM
22"x10"	UP TO 650 CFM
22"x22"	UP TO 1550 CFM

Global Plasma Solutions

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Savannah, GA 31406
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VERSION 1.6 running ASHRAE 62.1-2013

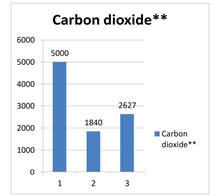
Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft) Az	Zone Max Occupancy Pz	Table 6.1 OA per Occupant Rp	Table 6.1 cfm/ft2 Ra	Pz * Rp	Az * Ra	Table 6.2 Ventilation Effectiveness Ez	Outdoor Air to Zone (CFM) with Ez correction (Vbz/Ez)
church	Public Assembly Spaces	Multi-purpose Assembly	6,365.0	310.0	5.0	0.06	1550	382	0.8	2415 OA required per VRP

Zone Height (feet)	30.0
Desired Outside Air (Vo) IAQP	1,600
Supply Air (Vs)	8,000
Return Air (Vr)	6400
Recirc. Flow Factor (R)	0.80
Ventilation Effectiveness (Ez)	0.8
Level of Physical Activity	Standing (desk work)
Filter Location	B
HVAC Flow Type	Constant
Outdoor Air Flow Type	Constant

Air Changes Per Hour	2.5	VRP OA CFM per person	7.8
Outside Air Per VRP	2415 CFM	IAQ OA CFM per person	5.2
Outside Air Per IAQ	1600 CFM		
Outside Air Savings	815 CFM	Winter Heating Savings	
OA Summer Drybulb	94.0	OA Winter Design DB (F)	-10
OA Summer Wetbulb	76.0	Supply Air DB Setpoint (F)	90
Coil Leaving Air Drybulb (F)	55.0	MBH Saved Winter	88.4
Coil Leaving Air Wetbulb (F	55.0	KW Saved Winter	25.9
OA MBH Saved Summer*	59.5		
OA Tons Saved Summer*	5.0		

*OA = Outside Air
***OSHA, NIOSH & WHO most conservative values us http://www.cdc.gov/niosh/npg/npgsyn-a.html

Indoor Contaminants Generated By People & From Outdoors	Maximum Threshold Value (PPM)	Steady State Using the VRP* (Prescribed OA) Plasma Off	Steady State Using the IAQ Method (Reduced OA) Plasma On	Is Steady State Level Acceptable at Reduced OA Levels?	Contaminant Generation Rate (PPM)	Filtration Effectiveness	Cognizant Authority***
Acetaldehyde	100.0	0.01117	0.00189	Yes	0.00048	50%	OSHA
Acetone	250.0	0.00231	0.00074	Yes	0.00654	50%	NIOSH
Ammonia	25.00	0.03616	0.01761	Yes	0.21460	50%	NIOSH
Benzene	1.0000	0.00254	0.00044	Yes	0.00022	50%	OSHA
2- Butanone (MEK)	200.0	0.00032	0.00012	Yes	0.00133	50%	NIOSH
Carbon dioxide**	5000	1840	2627	Yes	441	0%	NIOSH
Chloroform	2.0000	0.00011	0.00002	Yes	0.00004	50%	NIOSH
Dioxane	100.0	0.00000	0.00000	Yes	0.00000	50%	OSHA
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	0.00000	50%	NIOSH
Methane	NA	1.68094	1.68094	Yes	0.00000	0%	NA
Methanol	200.0	0.00000	0.00000	Yes	0.00000	0%	NIOSH
Methylene Chloride	25.0	0.00089	0.00021	Yes	0.00121	50%	OSHA
Propane	1000.0	0.00998	0.00998	Yes	0.00000	0%	NIOSH
Tetrachloroethane	5.0000	0.00000	0.00000	Yes	0.00000	50%	OSHA
Tetrachloroethylene	100.0000	0.00037	0.00006	Yes	0.00001	50%	OSHA
Toluene	100.0000	0.00536	0.00091	Yes	0.00032	50%	NIOSH
1,1,1 - Trichloroethane	350.0000	0.00083	0.00017	Yes	0.00058	50%	NIOSH
Xylene	100.0000	0.00230	0.00038	Yes	0.00000	50%	OSHA



1 = ASHRAE & NIOSH C02 Limit
2 = C02 Level at Ventilation Rate OA Flow Rate
3 = C02 Level at IAQ Procedure OA Flow Rate

**Carbon dioxide has been provided for reference only for gathering demand control ventilation (DCV) setpoints. The National Research Council was commissioned by the US Navy to prove C02 is not a contaminant of concern when using air purification to control the other contaminants of concern, as found on submarines.

Building materials and furnishings assumed to have no VOCs and off-gassing is complete
All yellow shaded boxes require user input or review

Is IAQ acceptable at reduced outside air levels? Yes

Date	7/15/2021
Job Name	-
Representative	-
Engineer	-
Contractor	-

IMC 2006 & later allows for ASHRAE 62 IAQP through the engineered exception found in Section 403.2
Exhaust flow rates may differ from Table 6.5 based on ASHRAE 62 IAQP via Section 6.5.2

FAN SCHEDULE

MARK	MODEL	MFG.	AIRFLOW	E.S.P.	VOLTAGE-PH	POWER
EF-1	GN-822	COOK	350	0.5	115V-1PH	120 WATT
EF-2	GN-842	COOK	800	0.5	115V-1PH	234 WATT

ACCESSORIES AND NOTES:

1) FAN SPEED CONTROLLER ON HOUSING FOR BALANCING
2) VIBRATION ISOLATION HANGERS
3) NON-FUSED DISCONNECT
4) TO RUN CONTINUOUSLY DURING OCCUPIED HOURS

SPLIT SYSTEM SCHEDULE - FURNACES

MARK	MODEL	MFG.	SUPPLY AIR	MIN. VENT. AIR	NOMINAL TONS	COOLING (TOTAL)	COOLING (SENS.)	EER	HEATING SOURCE	HEATING INPUT	HEATING OUTPUT	ELECTRICAL		
												VOLTAGE-PH	MCA	MOCP
FUR-1 THRU 4	59MN7A100V21-22	CARRIER	2000 CFM	300 CFM	5 TONS				NAT. GAS	100 CFH	98 MBH	115V-1PH	19.1	20
CU-1 THRU 4	24VNA2060	CARRIER				60	48	20				208V-1PH	36.6	50

ACCESSORIES AND NOTES:

1) 1" PLEATED FILTER WITH FIELD FABRICATED FILTER RACK
2) NON-COMBUSTIBLE BASE
3) PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT FOR EACH ZONE (OR SINGLE FOR NON-ZONED)
4) EXTEND CONDENSATE WASTE TO LOCAL DRAIN
5) PROVIDE 4" CONCRETE BASE FOR CONDENSING UNIT
6) NON-FUSED DISCONNECT
7) APRIL AIRE OR SIMILAR HUMIDIFIER WITH RETURN AIR HUMIDISTAT
8) RETURN AIR SMOKE DETECTOR IN ANY UNIT 2000 CFM OR ABOVE, OR IN PLENUM SERVING 2000 CFM OR MORE
9) GAS CONNECTION WITH UNION, VALVE, AND DIRTLEG
10) GLOBAL PLASMA SOLUTIONS AIR CLEANER FC-4 OR SIMILAR FOR IAQ VENTILATION COMPLIANCE

SPLIT SYSTEM SCHEDULE

MARK	MODEL	MFG.	SUPPLY AIR	MIN. VENT. AIR	NOMINAL TONS	COOLING (TOTAL)	COOLING (SENS.)	SEER	HEATING SOURCE	HEATING OUTPUT	ELECTRICAL		
											VOLTAGE-PH	MCA	MOCP
DAC-1	40MBCQ12	CARRIER	375	N/A	1 TONS				HP		208V-1PH	N/A	N/A
DAC-2	40MBCQ12	CARRIER	375	N/A	1 TONS				HP		208V-1PH	N/A	N/A
HP-1	38MGRQ24	CARRIER			2 TONS	22.0	17.6	20.0	HEAT PUMP	27.6 @ 47	208V-1PH	19.0	25.0

ACCESSORIES AND NOTES:
1) NON-FUSED DISCONNECT
2) PROVIDE VENTILATION AIR TO KNOCK OUT, REFER TO INSTALLATION MANUAL FOR FINAL CONNECTION SIZE. PROVIDE TRANSITION
3) EXTEND REFRIGERANT PIPING TO HEAT PUMP - 2 HEADS, 1 HEAT PUMP
4) PROVIDE REMOTE THERMOSTATS (FINAL LOCATION BY OWNER)
5) WASH FILTERS AT CONCLUSION OF CONSTRUCTION.
6) CONDENSATE WASTE TO LOCAL DRAIN ****OR/AND**** PROVIDE LITTLE GIANT CONDENSATE WASTE PUMP VCC-20 SERIES LOW PROFILE, DISCHARGE TO LOCAL DRAIN
7) BASE PAN HEATER AND LOW AMBIENT COOLING KIT

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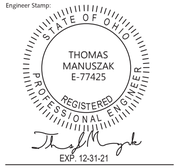

Weathersfield Township Community Center

Corner of Main Street and Stewart Street
Weathersfield, Ohio

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SECTION 22 00 00 - PLUMBING GENERAL CONDITIONS	
1 - CODE COMPLIANCE STATEMENT	ALL WORK COMPLETED BY THIS CONTRACTOR, FOR PURPOSES OF PROVIDING A COMPLETE AND WORKING SYSTEM, TO BE PROVIDED IN COMPLIANCE WITH: STATE MECHANICAL CODE STATE PLUMBING CODE STATE BUILDING CODE STATE RESIDENTIAL CODE (IF APPLICABLE) INTERNATIONAL FUEL GAS CODE INTERNATIONAL ENERGY CONSERVATION CODE ALL LOCAL CITY ORDINANCES APPLICABLE ALL PROFESSIONAL BEST PRACTICES INCLUDING ASHRAE, ASPE, AND NEC REQUIREMENTS GREEN BUILDING, LEED, OR OTHER SIMILAR GREEN RATINGS AS APPLICABLE AND REQUIRED BY OWNER CONTRACTOR SHALL HAVE KNOWLEDGE AND UNDERSTANDING OF THE BASICS OF THE APPLICABLE CODES PRIOR TO BID OF PROJECT. NO ADDITIONAL PAYMENT IS TO BE RENDERED DUE TO A LACK OF KNOWLEDGE OF THE APPLICABLE CODES OR RATINGS. COORDINATE ANY REQUIREMENTS FOR GREEN TECHNOLOGIES PRIOR TO BID.
2 - QUALITY ASSURANCE	PROVIDE ALL LABOR, MATERIALS, ACCESSORIES, CONTROLS (PER CONTRACT), FLASHING, OPENINGS, CLEANING AND PATCHING, BALANCING AND TESTING, AND EQUIPMENT INDICATED ON DRAWINGS, REQUIRED FOR A PROPER WORKING AND BALANCED SYSTEM, AND AS REASONABLY IMPLIED. ALL WORK TO BE TESTED, CLEANED AND READY FOR USE BY OWNER AT CONCLUSION OF CONSTRUCTION. ALL WORK TO BE PURCHASED, INSTALLED, COMMISSIONED, AND STARTED IN ACCORDANCE WITH AND COMPLIANCE WITH ALL LOCAL, CITY, STATE, FEDERAL AND INDUSTRY CODES AND STANDARDS APPLICABLE. PROTECT ALL EQUIPMENT, PIPING AND DUCTWORK DURING CONSTRUCTION FROM DAMAGE AND DEBRIS.
3 - CONTRACTOR LIABILITY STATEMENT	PROVIDE LABOR AND MATERIAL WARRANTY ON ALL ITEMS IN SCOPE FOR A PERIOD NOT LESS THAN 1 YEAR FROM START UP DATE (OR AGREED UPON DATE BY OWNER, G.C. AND CONTRACTOR). PROTECT ALL INSTALLED EQUIPMENT FROM CONSTRUCTION DAMAGE DURING DURATION OF CONSTRUCTION. REPLACE OR REPAIR DAMAGED ITEMS AT NO COST TO OWNER AS NEEDED DUE TO NEGLECT TO PROTECT ITEMS. CONTRACTOR IS SOLELY RESPONSIBLE FOR ACCURATE AND CODE COMPLIANT INSTALLATION INCLUDING BUT NOT LIMITED TO VENTILATION RATES, GAS PRESSURE, ELECTRICAL REQUIREMENTS AND BALANCING.
4 - CONTRACT DOCUMENT STATEMENT	REFER TO ALL DRAWINGS INCLUDING ARCHITECTURAL, SITE, CIVIL, ELECTRICAL, HVAC, AND STRUCTURAL FOR SCOPE OF PROJECT. COORDINATE PLUMBING WORK WITH WORK OF ALL OTHER TRADES. NO ADDITIONAL FEES WILL BE PAID FOR CHANGES DUE TO LACK OF KNOWLEDGE OF PROJECT OR SPACE REQUIREMENTS. SHOULD DISCREPANCIES BE FOUND BETWEEN DRAWINGS, SPECIFICATIONS, SCHEDULES, OR SCOPES OF TRADES, THEY ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING PRIOR TO BID. MECHANICAL SCOPE OF WORK INCLUDES BUT IS NOT LIMITED TO: PLUMBING PIPING, SERVICE PIPING, EQUIPMENT, ACCESSORIES, TESTING AND BALANCING, ROOF PENETRATIONS WALL PENETRATIONS, PIPING INSULATION HANGERS AND VIBRATION AND THRUST CONTROL, CONTROLS (PER CONTRACT), AND GENERAL TRADES ITEMS PERTAINING TO THE INSTALLATION OF MECHANICAL EQUIPMENT (PER CONTRACT).
5 - SCOPE OF WORK STATEMENT	THE SCOPE OF WORK OF THE CONTRACTOR OF THESE PLANS (UNLESS OTHERWISE AGREED UPON BY CONTRACTOR, G.C. AND OWNER) INCLUDES EQUIPMENT, PLUMBING PIPING, FLUES (PVC) AND INTAKES (PVC), CUTTING AND PATCHING FOR PLUMBING ITEMS HANGERS, INSULATION, BALANCING AND TESTING, START-UP AND TRAINING FOR EQUIPMENT IN SCOPE, CONTROLS AND CONTROL WIRING, LOW-VOLTAGE WIRING FOR PLUMBING ITEMS, ALL ITEMS REQUIRED FOR A FULL, OPERATIONAL, BALANCED AND USEABLE SYSTEM.
6 - COORDINATION OF TRADES STATEMENT	COORDINATE ALL WORK WITH GENERAL TRADES CONTRACTOR, ELECTRICAL CONTRACTOR, STRUCTURAL CONTRACTOR, HVAC CONTRACTOR, SPRINKLER CONTRACTOR, FIRE ALARM CONTRACTOR, ARCHITECT AND ENGINEER, AND OWNER. ANY INTERFERENCES BETWEEN TRADES ARE TO BE RAISED TO G.C. AND ARCHITECT AS SOON AS POSSIBLE, IN WRITING, FIELD COORDINATION OF INTERFERING ITEMS IS APPROPRIATE WHERE ACCEPTABLE TO G.C. AND SIMILAR ITEMS CAN BE INSTALLED IN NEW LOCATION (I.E. DUCTWORK HAS SAME FREE AREA AND SIMILAR STATIC PRESSURE, PIPING COMPLIES WITH MANUFACTURER'S INSTRUCTIONS, ETC.)
7 - SUBMITTALS	CONTRACTOR TO PROVIDE SUBMITTALS FOR THE FOLLOWING ITEMS: EQUIPMENT OF THIS CONTRACTOR'S SCOPE PIPING AND MATERIALS AS APPLICABLE TO THE PROJECT INSULATION AND JACKETS AS APPLICABLE TO THE PROJECT TESTING AND BALANCING REPORT - AIR, WATER, STEAM AND REFRIGERANT CHARGE AS APPLICABLE START-UP SHEETS INCLUDING DATE, TIME AND CONTRACTOR DOING START-UP
8 - RED-LINE AND AS-BUILT DRAWINGS	CONTRACTOR TO PROVIDE ANY CHANGES, UPDATES, AND FIELD COORDINATION ITEMS THRU A RED-LINE DRAWING (AS-BUILT DRAWING) PROVIDED AT NO SMALLER THAN 1/8TH INCH TO 1 FOOT SCALE. CHANGES PROPOSED PRIOR TO CONSTRUCTION TO BE REVIEWED BY ARCHITECT AND ENGINEER.
9 - FIELD CHANGE STATEMENT	CHANGES DUE TO FIELD COORDINATION ARE THE SOLE RESPONSIBILITY OF THIS CONTRACTOR (FOR THE SCOPE OF THIS CONTRACTOR'S WORK). ALL CHANGES TO SYSTEMS TO BE COORDINATED WITH ALL OTHER TRADES AS APPLICABLE, INCLUDING BUT NOT LIMITED TO G.C., STRUCTURAL CONTRACTOR, ELECTRICAL CONTRACTOR AND PLUMBING CONTRACTOR. CHANGES INITIATED BY THIS CONTRACTOR SHALL BE THE FINANCIAL RESPONSIBILITY OF THIS CONTRACTOR UNLESS OTHERWISE AGREED UPON BY G.C. OWNER AND ALL INVOLVED PARTIES.
10 - PERMITS	CONTRACTOR TO SECURE, PAY AND MAINTAIN ALL PERMITS RELATED TO SCOPE OF WORK. COORDINATE PERMIT REQUIREMENTS WITH G.C., ENGINEER AND OWNER. CONTRACTOR SHALL SECURE, PAY AND COORDINATE ALL INSPECTIONS RELATED TO SCOPE OF WORK. COORDINATE INSPECTIONS OF THIS SCOPE AND SCOPE OF OTHERS WITH RESPECT TO CONSTRUCTION ACTIVITIES OF ALL PARTIES ON SITE.
11 - START-UP, TESTING AND CLEAN UP	CONTRACTOR SHALL PROVIDE INDUSTRY STANDARD TESTING WATER FLOW, STEAM, REFRIGERANT CHARGE, AND ANY OTHER ITEMS REQUIRED IN SCOPE. PROVIDE TESTING AND BALANCE REPORT TO G.C., OWNER, ARCHITECT AND ENGINEER. PROVIDE MANUFACTURER'S RECOMMENDED START-UP FOR ALL EQUIPMENT, PROVIDE START UP REPORT TO G.C. OWNER, ARCHITECT AND ENGINEER. CLEAN UP ALL MATERIALS AND DEBRIS RELATED TO SCOPE OF WORK. COORDINATE DISPOSAL OF DEBRIS AND EXCESS MATERIAL WITH G.C./OWNER. IF NO DUMPSTER IS PROVIDED, CONTRACTOR SHALL SECURE AND PAY FOR REMOVAL OF REFUSE FROM CONSTRUCTION ACTIVITIES OF THIS SCOPE. PROVIDE OWNER OR OWNER'S REP A STARTUP, OPERATIONS AND MAINTENANCE MANUAL INCLUDING IOM MANUAL FOR EACH PIECE OF EQUIPMENT UNDER SCOPE. PROVIDE 1-HR (OR ADDITIONAL AS REQUIRED UNDER CONTRACT) TRAINING TO OWNER OR REP. REGARDING THE OPERATION OF EQUIPMENT IN SCOPE.
12 - DRAWINGS	DRAWINGS ARE TO BE CONSIDERED SCHEMATIC IN NATURE. INTENT AND SCOPE MAY INCLUDE ITEMS IN ARCHITECTURAL, ELECTRICAL AND PLUMBING PLANS. FINAL INSTALLED ITEMS MAY REQUIRE OFFSETS, ELBOWS, AND CHANGES. CONTRACTOR SHALL ACCOUNT FOR THESE CHANGES AS BEST AS POSSIBLE IN BID. DRAWINGS ARE TO SHOW CODE COMPLIANCE AND INTENT OF SYSTEMS.

SECTION 22 15 00 - PLUMBING PIPING AND INSULATION

PART 1 - GENERAL

1 QUALITY ASSURANCE
- 1.1 PERFORM ALL WORK IN ACCORDANCE WITH ASME AND WELDING STANDARDS. ALL MATERIAL TO BE NEW AND FREE OF DEFECT.
- 1.2 PROVIDE END CAPS ON EACH LENGTH OF PIPING AND PREVENT DAMAGE TO PIPING DURING STORAGE AND INSTALLATION.
- 1.3 PROVIDE VALVES AND FITTINGS FOR A COMPLETE SYSTEM, ENSURE VALVES ARE CLEAN, DRY AND FREE OF DEBRIS.
- 1.4 RIG ALL LARGER PIPING WITH APPROPRIATE HANGERS TO PREVENT DAMAGE.
- 1.5 PROVIDE HANGERS ON PIPING PER OPC, OMC, AND OBC.
- 1.6 PROVIDE EXPANSION JOINTS AND THRUST BEARINGS AS REQUIRED TO PREVENT DAMAGE TO PIPING OR BUILDING.

2 PROVIDE FLEXIBLE CONNECTIONS WHERE PIPING CONNECTS TO MOTOR DRIVEN EQUIPMENT. (EXCEPTION - REFRIGERANT PIPING)

3 PROVIDE BALANCE VALVES, FLOW CONTROL DEVICES, SHUT OFF VALVES AND RELIEF VALVES AS REQUIRED BY CODE, PER MANUFACTURER'S INSTRUCTIONS, AND FOR A COMPLETE AND WORKING SYSTEM REGARDLESS OF DETAILS OR DRAWINGS.

4 COORDINATE ROUTING WITH OTHER TRADES PRIOR TO INSTALLATION.

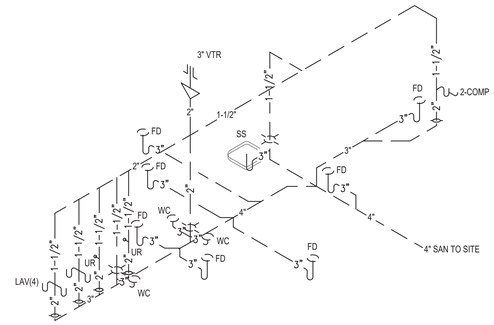
5 SUBMIT PIPING MATERIALS, HANGERS, VALVES, AND INSULATION.

PART 2 - MATERIALS AND APPLICATION

1 THE OUTLINE BELOW DESCRIBES PIPING MATERIALS ACCEPTABLE TO APPLICATIONS. NOT ALL APPLICATIONS MAY APPLY. PROVIDE ALTERNATE PRICING WHEN REQUESTED (PER CONTRACT) WHERE MULTIPLE MATERIALS ARE LISTED. REFER TO MANUFACTURER'S INSTRUCTIONS FOR ADDITIONAL MATERIAL REQUIREMENTS

MATERIAL, INSULATION AND APPROVAL SCHEDULE				
	MATERIAL	APPROVAL	INSULATION	NOTES
SANITARY PIPING - ABOVE GRADE				
OPTION 1	CAST-IRON PIPE	ASTM A 74; ASTM A 888; CISPI 301	N/A	PROVIDE CATHODIC PROTECTION AS NEEDED
OPTION 2	POLYVINYL CHLORIDE (PVC) PLASTIC PIPE IN IPS DIAMETERS, INCLUDING SCHEDULE 40, DR 22 (PS 200), AND DR 24 (PS 140); WITH A SOLID, CELLULAR CORE OR COMPOSITE WALL	ASTM D 2665; ASTM F 891; ASTM F 1488; CSA B 181.2	N/A	NOT ALLOWABLE IN RETURN AIR PLENUMS (UNLESS RATED AND LISTED)
SANITARY PIPING - BELOW				
OPTION 1	CAST-IRON PIPE	ASTM A 74; ASTM A 888; CISPI 301	N/A	PROVIDE CATHODIC PROTECTION AS NEEDED
OPTION 2	POLYVINYL CHLORIDE (PVC) PLASTIC PIPE IN IPS DIAMETERS, INCLUDING SCHEDULE 40, DR 22 (PS 200) AND DR 24 (PS 140); WITH A SOLID, CELLULAR CORE, OR COMPOSITE WALL	ASTM D 2665; ASTM F 891; ASTM F 1488; CSA B 181.2	N/A	NOT ALLOWABLE IN RETURN AIR PLENUMS (UNLESS RATED AND LISTED)
WATER SERVICE				
OPTION 1	CHLORINATED POLYVINYL CHLORIDE (CPVC) PLASTIC PIPE	ASTM D 2846; ASTM F 441; ASTM F 442; CSA B 137.6	N/A	
OPTION 2	COPPER OR COPPER-ALLOY PIPE	ASTM B 42; ASTM B 302	N/A	
OPTION 3	POLYVINYL CHLORIDE (PVC) PLASTIC PIPE	ASTM D 1785; ASTM D 2241; ASTM D 2672; CSA B 137.3	N/A	NOT ALLOWABLE IN RETURN AIR PLENUMS (UNLESS RATED AND LISTED)
WATER DISTRIBUTION - COLD		137.6		
OPTION 1	COPPER OR COPPER-ALLOY TUBING (TYPE K, WK, L, WL, M OR WM)	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 447	0.5 INCH MAXIMUM 0.27 BTU*IN/(H*FT^2*F) RATED, WITH VAPOR BARRIER	
OPTION 2	CROSS-LINKED POLYETHYLENE (PEX) PLASTIC TUBING	ASTM F 876; ASTM F 877; CSA B 137.5	0.5 INCH MAXIMUM 0.27 BTU*IN/(H*FT^2*F) RATED, WITH VAPOR BARRIER	NOT ALLOWABLE IN RETURN AIR PLENUMS (UNLESS RATED AND LISTED)
WATER DISTRIBUTION - HOT <140F				
OPTION 1	COPPER OR COPPER-ALLOY TUBING (TYPE K, WK, L, WL, M OR WM)	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 447	1 (1.5 INCH FOR 2" AND LARGER) INCH MAXIMUM 0.27 BTU*IN/(H*FT^2*F) RATED, WITH VAPOR BARRIER	
OPTION 2	CROSS-LINKED POLYETHYLENE (PEX) PLASTIC TUBING	ASTM F 876; ASTM F 877; CSA B 137.5	1 (1.5 INCH FOR 2" AND LARGER) INCH MAXIMUM 0.27 BTU*IN/(H*FT^2*F) RATED, WITH VAPOR BARRIER	NOT ALLOWABLE IN RETURN AIR PLENUMS (UNLESS RATED AND LISTED)
WATER DISTRIBUTION - HOT >140F				
OPTION 1	COPPER OR COPPER-ALLOY TUBING (TYPE K, WK, L, WL, M OR WM)	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 447	1.5 (2 INCH FOR 2" AND LARGER) INCH MAXIMUM 0.27 BTU*IN/(H*FT^2*F) RATED, WITH VAPOR BARRIER	
OPTION 2	CROSS-LINKED POLYETHYLENE (PEX) PLASTIC TUBING	ASTM F 876; ASTM F 877; CSA B 137.5	1.5 (2 INCH FOR 2" AND LARGER) INCH MAXIMUM 0.27 BTU*IN/(H*FT^2*F) RATED, WITH VAPOR BARRIER	NOT ALLOWABLE IN RETURN AIR PLENUMS (UNLESS RATED AND LISTED)
NATURAL GAS				
BASE	STEEL AND WROUGHT IRON	ASME B 36.10,10M ASTM A 53/A52, ASTM A106		PAINT EXTERIOR PIPING WITH UV RESISTANT PAINT. EXTERIOR PIPING ON MINIMUM 6" BLOCKS ON ROOF
OPTION 1	POLY ETHYLENE (PE) PLASTIC PIPE AND TUBING	ASTM D 2513		EXTERIOR PIPING ON MINIMUM 6" BLOCKS ON ROOF
FLEX CONNECTORS, NO MORE THAN 5' FROM MAIN TO FIXTURE	CSST - STAINLESS STEEL TUBING	ASTM A 254 ANSI LC 1/ CSA 6.26		SECURE TO WALL/CEILING AND PROVIDE PUNCTURE SHIELDING. SECURE PER IFGC AND MFG.

ALL PIPING TO BE APPROVED BY OWNER AND G.C. PRIOR TO PURCHASE



VENT AND SANITARY PIPING IN PLUMBING ISOMETRIC IS SCHEMATIC ONLY. SANITARY PIPING SIZED BASED ON TABLE 710.1 FOR 1/8" PER FOOT DROP (PROVIDE 1/4" PER FOOT WHERE POSSIBLE).

VENT PIPING SHOWN PROVIDES SINGLE FIXTURE VENTS. CONTRACTOR MAY SUBMIT MARKUPS FOR USE OF COMMON VENTS, GROUP VENTS, COMBINATION VENT/SANITARY, ETC. ENGINEER WILL REVIEW AND APPROVE OR DENY CHANGES. CUT ALL VENT PIPING THRU ROOF AND PROVIDE FLASHING AND COUNTER FLASHING. VENTS TO BE TERMINATED IN CODE COMPLIANT LOCATION/HEIGHT. VERIFY EXISTING CONDITIONS PRIOR TO INSTALLATION.

ALL CHANGES TO BE SUBMITTED TO BUILDING AND HEALTH DEPARTMENT PRIOR TO CONSTRUCTION.

SANITARY ISOMETRIC PLAN

NO SCALE

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Phone: 216.287.8547
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Architect Stamp:

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STATE OF OHIO
THOMAS MANUSZAK
E-77425
REGISTERED
PROFESSIONAL ENGINEER
EXP. 12-31-21

Weathersfield Township Community Center

Corner of Main Street and Stewart Street
Weathersfield, Ohio

☒ Design	04/30/2021
☒ Approval	06/02/2021
☐ Permit	07/16/2021
☐ Bid	
☐ Construction	

Revisions:

No.	Date/Description
1	4/7/2022 PERMIT RESP.

Project No. 21109
Drawn By:
Checked By:

Sheet Title:
PLUMBING SPEC

Sheet No:
P0.01

GENERAL NOTES - NEW PLUMBING

CONDUCT FIELD SURVEY OF EXISTING CONDITIONS AND WORK COMPLETED TO DATE PRIOR TO SUBMISSION OF BID AND START OF WORK. NO ADDITIONAL PAYMENTS WILL BE MADE ON CLAIMS THAT ARISE FROM LACK OF KNOWLEDGE OF EXISTING CONDITIONS. DRAWINGS ARE SCHEMATIC IN NATURE. COORDINATE AS SOLE RESPONSIBILITY OF THIS CONTRACTOR ROUTINGS, HANGERS, INSULATION, VALVES AND STEMS, CONTROLS AND ALL PARTS OF SYSTEM WITH RESPECT TO BUILDING AND WORK OF OTHER TRADES.

COORDINATE SCHEDULE OF WORK REQUIRED IN OCCUPIED AND OPERATING AREAS WITH OWNER PRIOR TO STARTING SUCH WORK.

SCHEDULE UTILITY SERVICE SHUTDOWNS REQUIRED FOR NEW CONSTRUCTION WITH OWNER AND GENERAL TRADES PRIOR TO SHUTTING DOWN SYSTEMS. GIVE ONE WEEK ADVANCE NOTICE IN WRITING.

REPLACE ANY CEILING TILES DAMAGED DURING CONSTRUCTION DUE TO ACTIVITY OF THIS CONTRACT

CUT FLOOR, WALL, AND CEILING CONSTRUCTION FOR PENETRATIONS TO ACCOMMODATE NEW WORK. COORDINATE WITH GENERAL TRADES. PATCH CONSTRUCTION TO MATCH, OR TO SATISFACTION OF ARCHITECT AND OWNER.

COORDINATE ROUTING OF NEW PIPING WITH EXISTING BUILDING CONDITIONS AND WITH WORK OF OTHER TRADES. PROVIDE CHANGES IN LOCATION, DIRECTION, OFFSETS, AS MAY BE REQUIRED, WHETHER SPECIFICALLY INDICATED OR NOT, AND AT NO ADDITIONAL COST TO THE OWNER.

NOTE PIPING TO BE RUN IN FLOOR, SANITARY PIPING SHOWN SIZED PER OPC FOR 1/8" DROP PER FOOT. PROVIDE 1/4" DROP PER FOOT WHERE AVAILABLE. SANITARY BELOW FLOOR TO BE NO SMALLER THAN 2"

ALL MATERIALS LOCATED IN PLENUM SPACE TO BE PLENUM RATED FOR SMOKE/FIRE SPREAD. REFER TO OBC, FIRE SEAL ANY PENETRATIONS THRU FIRE RATED ASSEMBLIES PER OBC. SEALS TO BE FULL, CONTINUOUS AND OF SAME RATING AS ASSEMBLY

ALL PLUMBING IN EXTERIOR WALL TO BE HELD TO WARM SIDE AND INSULATED BEHIND TO PREVENT FREEZING

DRINKING WATER NOTE

OWNER TO PROVIDE, AT NO CHARGE, DISPENSED WATER VIA REFILLABLE WATER COOLER IN LIEU OF HARD PLUMBED DRINKING FOUNTAIN

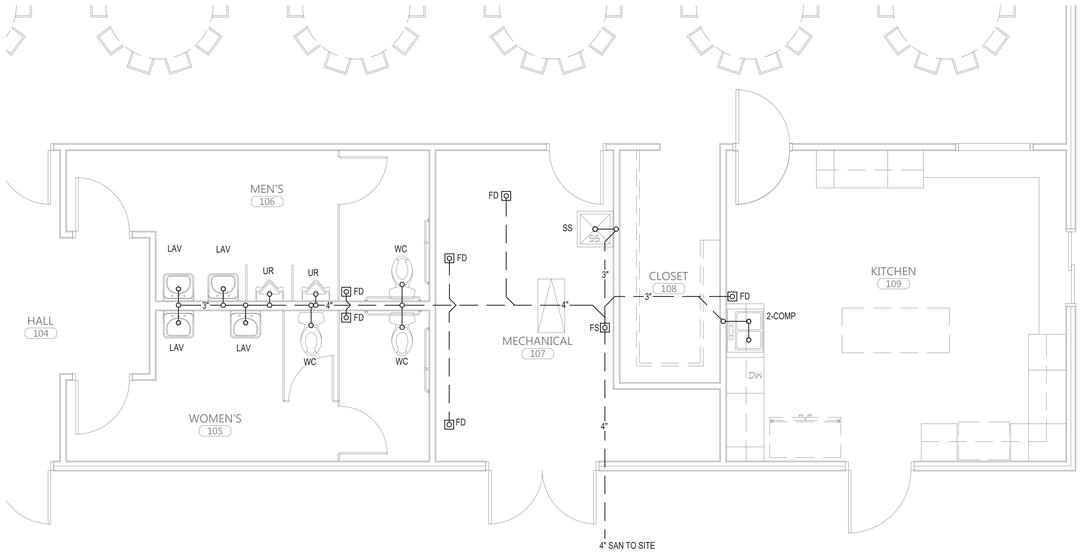
PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	SAN	VENT	105 DHW	140 DHW	DCW	MANUFACTURER, MODEL NUMBER, AND DESCRIPTION
WC	FLR. MTD. VALVE WC PUBLIC	3"	1-1/2"	--	--	1"	AMERICAN STANDARD 3043.660 MADERA RIGHT HEIGHT 1.6 GPF AUTO VALVE MODEL 6065.161.002 ADA COMPLIANT 1.6 GPF MANUAL VALVE MODEL 6047.161.002 3" CLOSET FLANGE, WATER HAMMER ARRESTOR BEFORE FIRST BEND
2-COMP	CABINET MTD. SINK 2-COMPARTMENT	1-1/2"	1-1/4"	1/2"	--	1/2"	AMERICAN STANDARD PEKOE 29/18 DOUBLE BOWL 18DB.9291800.075 AMERICAN STANDARD ELLIS 9391.321.002 PULL DOWN GOOSENECK FAUCET PROVIDE WITH ASSE 1070 MIXING VALVE
SS	MOP RECEPTOR	3"	1-1/2"	--	3/4"	3/4"	MUSTEE 63M 24"x24" MOP BASIN AND 63.600A FAUCET WALL MOUNTED
LAV	LAVATORY	1-1/2"	1-1/4"	1/2"	--	1/2"	AMERICAN STANDARD 0355.012 4" ON CENTER WALL HUNG LAV AMERICAN STANDARD 5502.175 4" ON CENTER FAUCET WITH WRIST BLADE WITH GRID STRAINER. PROVIDE WITH ASSE 1070 MIXING VALVE
FD	ROUND FLOOR DRAIN	3"	CWV	--	--	--	WATTS FD-100-A OR APPROVED EQUAL. PROVIDE TRAP PRIMER AS REQUIRED. WHERE APPROVED PROVIDE A WATERLESS TRAP SEAL AND BACKWATER VALVE IN LIEU OF PRIMER
FS	8" FLOOR SINK	3"	CWV	--	--	--	WATTS FS-710 OR APPROVED EQUAL. PROVIDE TRAP PRIMER AS REQUIRED. WHERE APPROVED PROVIDE A WATERLESS TRAP SEAL AND BACKWATER VALVE IN LIEU OF PRIMER
TP-1	TRAP PRIMER (FIXTURE DOWNSTREAM)	--	--	--	--	1/2"	WATTS LFTP300 OR APPROVED EQUAL
TP-2	TRAP PRIMER (TIMER W/O FIXTURES)	--	--	--	--	1/2"	PRECISION PLUMBING PRODUCTS MP-500-24V OR APPROVED EQUAL. PROVIDE ALL CONTROL AND POWER WIRING.
FPHB	FROST PROOF HOSE BIBB	---	--	---	--	3/4"	WOODFORD MFG. MODEL MB65 6" DIAMETER HOLE WITH FLUSH MOUNTED BOX.

MODELS FOR REFERENCE ONLY, FINAL SELECTIONS BY OWNER PRIOR TO CONSTRUCTION
ALL FIXTURES TO HAVE SHUTOFF VALVES IN DOMESTIC PIPING AS CLOSE TO FIXTURE AS POSSIBLE
VERIFY EXISTING DOMESTIC PRESSURE, IF LOWER THAN 55 PSI RESIDUAL, ALERT OWNER/ARCHITECT AND ENGINEER FOR INSTRUCTIONS ON VALVE TYPE FIXTURES

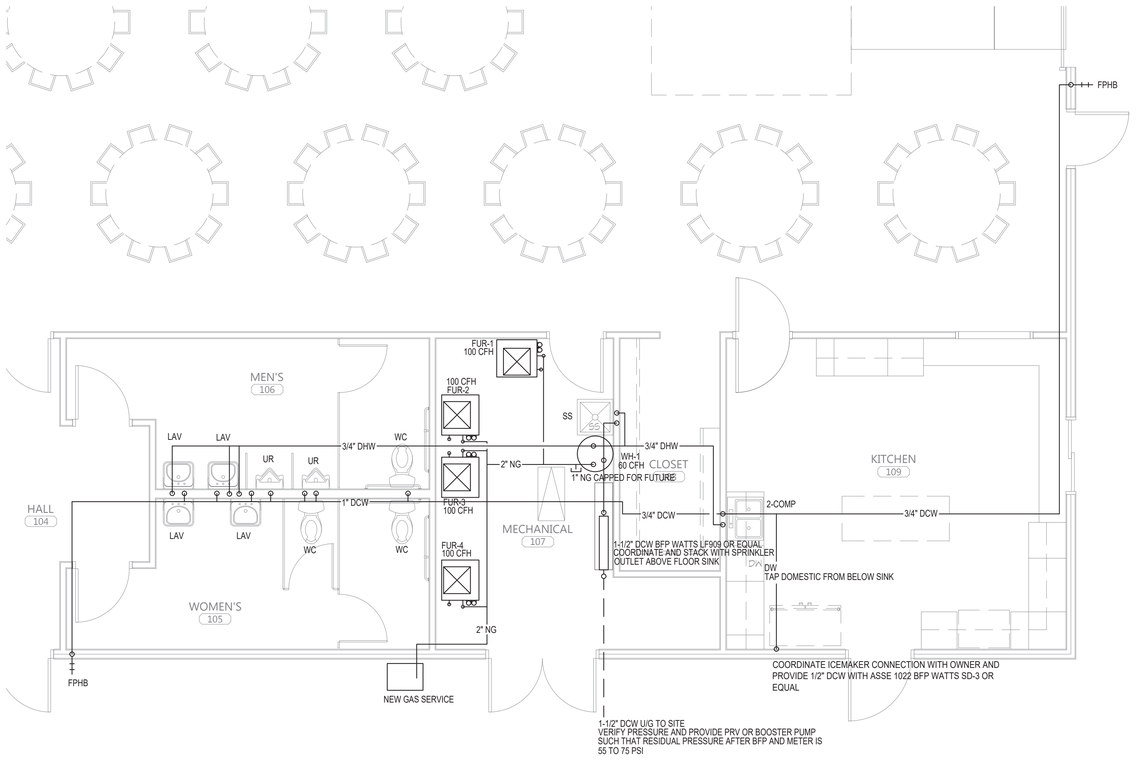
GAS WATER HEATER SCHEDULE							
MARK	MODEL	MFG.	GPH RISE@ 90F	CAPACITY	VOLT-PH	GAS INPUT	EFF.
WH-1	BT-60	A.O. SMITH	73 GPH	55 GAL	115V-1PH-2A	60 CFH	80%

PROVIDE WITH:
1) GAS TRAIN WITH SHUTOFF AND DIRTLEG
2) PIPE SAFETIES AND OVERFLOW TO ABOVE LAUNDRY TRAY
3) NON-FUSED DISCONNECT
4) AMTROL ST-5 EXPANSION TANK
5) RECIRCULATION PUMP IF ANY FIXTURE IS OVER 50' AWAY



SANITARY PIPING PLAN

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



DOMESTIC PIPING PLAN

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

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STATE OF OHIO
THOMAS MANUSZAK
E-77425
REGISTERED
PROFESSIONAL ENGINEER
EXP. 12-31-21

Weathersfield Township Community Center

Corner of Main Street and Stewart Street
Weathersfield, Ohio

☒	Design	04/30/2021
☒	Approval	06/02/2021
☐	Permit	07/16/2021
☐	Bid	
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Revisions:

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Checked By:

Sheet Title:
PLUMBING PLAN

Sheet No:
P1.01

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL ELECTRICAL WORK AS HEREIN DESCRIBED OR AS INDICATED ON THE DRAWINGS. MATERIAL AND/OR LABOR WHICH IS NOT INDICATED ON THE DRAWINGS OR SPECIFICATIONS, BUT NECESSARY TO COMPLETE THE WORK (AND USUALLY INCLUDED IN SIMILAR WORK), SHALL BE PROVIDED.

B. THIS CONTRACTOR IS TO READ ALL SPECIFICATIONS OF ALL PARTS OF THE WORK AND INCLUDING WIRING FOR THEIR EQUIPMENT UNLESS SPECIFICALLY EXCEPTED HEREIN.

C. THE WORK REQUIRED UNDER DIVISION 16 OF THE SPECIFICATIONS INCLUDES ALL REQUIREMENTS OF ALL SECTIONS OF THIS DIVISION. IN GENERAL, THE WORK CONSISTS OF FURNISHING AND INSTALLING THE EQUIPMENT, SERVICE AND ALL OTHER MATERIALS NECESSARY TO PROVIDE THE COMPLETE ELECTRICAL SYSTEM AND ALL WORK IN CONNECTION WITH SUCH SYSTEMS INCLUDING LABOR, TRANSPORTATION, ETC., COMPLETE IN EVERY RESPECT AS SHOWN ON THE PLANS, HEREIN SPECIFIED, OR REASONABLE IMPLIED AS READY FOR USE UNLESS OTHERWISE SPECIFIED.

D. THE CONTRACTOR IS ALSO REFERRED TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND OTHER DRAWINGS PERTAINING TO THE PROJECT. THE ABOVE MENTIONED DRAWINGS, AS WELL AS THEIR RESPECTIVE SPECIFICATIONS, ARE PART OF THE COMPLETE CONTRACT DOCUMENTS.

E. THE CONTRACTOR IS CAUTIONED TO CAREFULLY STUDY ALL DRAWINGS AND SPECIFICATIONS TO DETERMINE TO WHAT EXTENT OTHER WORK AND EXISTING WORK AFFECTS THE WORK INVOLVED UNDER THIS DIVISION.

1.2 DEFINITIONS

A. WHEREVER THE WORD "OWNER" APPEARS WITHIN THIS DOCUMENT, IT SHALL MEAN "OWNER OR HIS REPRESENTATIVE".

B. "PROVIDE" SHALL MEAN FURNISHED AND INSTALLED BY THIS CONTRACTOR.

C. "INSTALL" SHALL MEAN FURNISHED BY OTHER TRADES, BUT INSTALLED BY THIS CONTRACTOR.

D. "CONTRACTOR" OR SUBCONTRACTOR" SHALL MEAN THE CONTRACTOR BIDDING THE WORK DESCRIBED HEREIN.

E. ABBREVIATIONS:

P.C.	–	PLUMBING CONTRACTOR
M.C.	–	MECHANICAL CONTRACTOR
E.C.	–	ELECTRICAL CONTRACTOR
G.C.	–	GENERAL CONTRACTOR

1.3 DESCRIPTION OF WORK

A. PROVIDE A COMPLETE WORKING ELECTRICAL SYSTEM READY FOR USE.

B. ELECTRICAL SYSTEM INCLUDES THE DISTRIBUTION, LIGHTING, POWER OUTLETS, COMMUNICATION CONDUITS, AND RACEWAYS

C. PROVIDE ALL COORDINATION AND ADMINISTRATION NECESSARY TO INSTALL ELECTRICAL SYSTEM AND UTILITY SERVICES.

1.4 WORK INCLUDED

A. SWITCHES AND PANELBOARDS.

B. DISCONNECTS AND CONTROL DEVICES (UNLESS PROVIDED WITH

C. ACCESS PANELS FOR EQUIPMENT AS REQUIRED FOR YOUR WORK.

D. ELECTRICAL SERVICE AND DISTRIBUTION EQUIPMENT.

E. LIGHTING.

F. EMERGENCY LIGHTING AND EXIT SIGNS.

G. POWER WIRING.

H. CONNECTIONS TO ELECTRICAL EQUIPMENT.

I. GROUNDING AND BONDING.

J. WIRE, RACEWAYS AND BOXES.

K. TELEPHONE CONDUIT.

L. CONTROL WIRING (BOTH PROCESS AND TEMPERATURE CONTROL).

M. SPARE CONDUITS WITH PULL WIRE.

N. NEW ELECTRIC SERVICE

1.5 RELATED WORK

A. WORK PROVIDED BY THIS CONTRACTOR, BUT SPECIFIED ELSEWHERE:

1. DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS
2. DIVISION 1, SECTION 01045 – CUTTING AND PATCHING
3. DIVISION 9 – FINISHED

B. MATERIAL PROVIDED BY OTHERS, BUT WIRED BY THIS CONTRACTOR:

1. DIVISION 15 – MECHANICAL

1.6 GENERAL

A. IT IS THE PURPOSE OF THE DRAWINGS TO INDICATE THE APPROXIMATE LOCATIONS OF ALL EQUIPMENT, OUTLETS, ETC. THE EXACT LOCATION OF APPARATUS AND OUTLETS MAY BE GIVEN AS THE WORK PROGRESSES. THIS CONTRACTOR SHALL ASCERTAIN FROM THE OWNER THE EXACT LOCATIONS AND ARRANGE HIS WORK ACCORDINGLY. THE OWNER RESERVES THE RIGHT TO EFFECT REASONABLE CHANGES IN THE LOCATION OF OUTLETS UP TO THE TIME OF ROUGHING–IN WITHOUT ADDITIONAL COST. EXACT RACEWAY ROUTINGS, REQUIRED PULL–BOXES, AND OTHER DETAILS ARE LEFT TO THE GOOD JUDGMENT OF THE CONTRACTOR TO PRODUCE THE MOST SATISFACTORY INSTALLATION AT THE LEAST COST.

B. THIS CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY FOR THIS WORK AND SHALL ASSUME RESPONSIBILITY FOR THEIR ACCURACY. DO NOT SCALE DRAWINGS. ANY INTERFERENCES OR FIELD PROBLEMS SHALL BE REPORTED TO THE OWNER FOR RESOLUTION.

C. THE WORK COVERED BY THIS SPECIFICATION CONSISTS OF PROVIDING ALL LABOR, EQUIPMENT, SUPPLIES, MATERIALS, PERMITS, AND SERVICES REQUIRED FOR THE COMPLETE INSTALLATION OF THE ELECTRICAL WORK, READY FOR USE.

D. THE DESIGN DESCRIBED HEREIN IS INTENDED TO COMPLY WITH APPLICABLE CODES AND STANDARDS, AND WITH SAFEGUARDS IN EXCESS OF CODE REQUIREMENTS WHERE NECESSARY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THESE STANDARDS FOR ACHIEVING A COMPLETE AND SAFE INSTALLATION AND TO OBSERVE AND REPORT TO THE OWNER ANY ITEMS WHICH, IN HIS OPINION, DO NOT CONFORM TO THE CODES AND STANDARDS, OR WHICH WOULD IMPROVE THE SAFETY AND/OR SERVICEABILITY OF THE INSTALLATION.

E. IT IS THE INTENT OF THE CONTRACT ELECTRICAL DRAWINGS AND SPECIFICATIONS TO DESCRIBE AS ACCURATELY AS POSSIBLE THE WORK REQUIRED. SHOULD ANY ERRORS, OMISSIONS, OR INTERFERENCES WITH OTHER TRADES BE FOUND, THEY SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE OWNER FOR RESOLUTION. MINOR DISCREPANCIES AND INTERFERENCES IN LOCATIONS OF OUTLETS, CONDUIT ROUTINGS, AND FIXTURE LOCATIONS SHALL BE RESOLVED BY THE CONTRACTOR UNDER FIELD CONDITIONS AND SHALL NOT BE JUSTIFICATION FOR ADDITIONAL COST.

F. IT IS THE INTENT OF THE DRAWINGS AND SPECIFICATIONS TO REQUIRE THE ELECTRICAL INSTALLATION TO BE A COMPLETE AND WORKABLE SYSTEM, SAFE FROM ALL ELECTRICAL HAZARDS, COMPLETE AND READY FOR OCCUPANCY.

1.7 EQUIPMENT MANUFACTURER'S DIRECTIONS, DIAGRAMS, AND MANUALS

A. EXCEPT WHERE SPECIFICALLY PERMITTED OTHERWISE, ALL MATERIALS, EQUIPMENT, AND DEVICES FURNISHED BY THE CONTRACTOR SHALL BE NEW AND SHALL CONFORM TO NECA, NEMA, IEEE, ANSI, AND UNDERWRITERS' LABORATORIES STANDARDS AND SHALL BEAR THE U.L. LISTING OR LABEL MARK.

B. ALL MANUFACTURED ARTICLES AND ALL OTHER MATERIALS AND EQUIPMENT FURNISHED BY THE CONTRACTOR SHALL BE APPLIED, CONNECTED, ERECTED, USED, CLEANED, AND CONDITIONED AS DIRECTED IN THE MANUFACTURER'S LATEST PRINTED INSTRUCTIONS.

C. THE CONTRACTOR SHALL COMPILE AND DELIVER TO THE OWNER, BEFORE REQUEST FOR FINAL PAYMENT, ALL INSTALLATION DRAWINGS, WIRING DIAGRAMS, OPERATING AND MAINTENANCE MANUALS, ETC., PERTAINING TO ALL EQUIPMENT FURNISHED AND INSTALLED OR MODIFIED BY HIM.

D. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONSULT THE MANUFACTURER'S DRAWINGS, INSTALLATION MANUALS, AND INSTRUCTIONS FOR ALL EQUIPMENT. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THESE MANUALS AND INSTRUCTIONS.

1.8 GUARANTEE

A. THIS CONTRACTOR SHALL GUARANTEE HIS WORKMANSHIP AND MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE AND LEAVE HIS WORK IN PERFECT ORDER AT COMPLETION. SHOULD ANY DEFECTS DEVELOP WITHIN THE GUARANTEE PERIOD, THIS CONTRACTOR SHALL, UPON NOTICE OF SAME, REMEDY THE DEFECTS AND HAVE ALL DAMAGES TO OTHER WORK OR FURNISHINGS CAUSED BY THE DEFECTS OR THE WORK OF CORRECTING SAME, REPAIRED AND/OR REPLACED AT HIS EXPENSE, TO THE CONDITION BEFORE SUCH DAMAGE. THE DATE OF FINAL ACCEPTANCE IS DEFINED AS THE DATE OF SIGNATURE OF THE OWNER ON THE FINAL PAYMENT OF THE CONTRACT.

B. THIS GUARANTEE SHALL BE SUPPLIED IN WRITING AND SHALL BE ATTACHED TO THE CONTRACTOR'S REQUEST FOR FINAL PAYMENT.

1.9 SAFETY AND CLEAN–UP

A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN A CLEAN, SAFE WORK PLACE WHILE PERFORMING HIS WORK AND UPON LEAVING EACH EVENING. LIVE ELECTRICAL PARTS OF FIXTURES, DEVICES, AND EQUIPMENT SHALL BE COMPLETELY PROTECTED TO PREVENT ACCIDENTAL INJURY TO OTHERS IN THE BUILDING. ALL STAIRWAYS, HALLS, AND EXITS SHALL BE LEFT WITH FREE ACCESS. TOOLS, TOOL BOXES, LADDERS, MATERIALS, ETC., SHALL BE KEPT IN A CONFINED AREA AWAY FROM NORMALLY OCCUPIED AREAS WHEN NOT IS USE.

B. THIS CONTRACTOR WILL BE HELD RESPONSIBLE FOR DAMAGE TO OTHER WORK CAUSED BY HIS WORK OR THROUGH THE NEGLIGENCE OF HIS WORKMEN. ALL PATCHING OR REPAIRING OF DAMAGED WORK SHALL BE DONE BY PERSONS OR CONTRACTORS NORMALLY EXPERIENCED IN THE WORK TO BE PERFORMED. SUCH CONTRACTORS OR SUBCONTRACTORS SHALL BE SUBJECT TO PRIOR APPROVAL OF THE OWNER. THE COST OF SUCH WORK SHALL BE PAID BY THE CONTRACTOR.

1.10 INTERFERENCES, CUTTING AND PATCHING

A. THE CONTRACTOR SHALL PREDETERMINE THE LOCATION, SIZE, ETC., OF ALL CHASES AND OPENINGS NECESSARY IN NEW AND EXISTING CONSTRUCTION FOR THE INSTALLATION OF HIS WORK AND SHALL BE RESPONSIBLE TO PROVIDE ALL SUCH OPENINGS. HE SHALL SET ALL SLEEVES, INSERTS, LINTELS AND HANGERS AND BE RESPONSIBLE FOR THEIR PROPER LOCATION AND FOR FINAL PATCHING. CUTTING AND PATCHING SHALL SATISFY DIVISIONS 4, 5, 6, 7 AND 9. SHOULD HE FAIL TO COMPLY WITH THIS CLAUSE AND CUTTING OF NEW CONSTRUCTION IS REQUIRED BECAUSE THE OTHER TRADES WERE NOT PROPERLY NOTIFIED AND INSTRUCTED, THIS CONTRACTOR SHALL, AT HIS OWN EXPENSE, HAVE ANY NECESSARY CUTTING AND PATCHING DONE BY THE CONTRACTOR WHO FIRST INSTALLED THE WORK.

B. ALL PENETRATIONS SHALL BE FINISHED BY THE ELECTRICAL CONTRACTOR WITH APPROPRIATE AND ACCEPTABLE TRIMS.

1.11 RECEIPT OF PORTABLE OR DETACHABLE PARTS

A. THE CONTRACTOR SHALL RETAIN IN HIS POSSESSION AND SHALL BE RESPONSIBLE FOR ALL PORTABLE OR DETACHABLE PORTIONS OF THE INSTALLATION SUCH AS FUSES, KEYS, LOCKS, ETC., UNTIL THE COMPLETION OF THE WORK, AND SHALL TURN THEM OVER TO THE OWNER AND OBTAIN AN ITEMIZED RECEIPT. THIS RECEIPT, TOGETHER WITH A CERTIFICATE OF APPROVAL, SHALL BE ATTACHED TO THE CONTRACTOR'S REQUEST FOR FINAL PAYMENT.

1.13 CODES, PERMITS AND INSPECTIONS

A. ALL WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE AND THE STATE CODE, IN ADDITION TO ANY LOCAL, CITY OR COUNTY CODES IN EFFECT AT THE TIME OF CONSTRUCTION.

B. AT ALL TIMES DURING WHICH THE CONTRACTOR OR ANY SUBCONTRACTOR ARE ENGAGED IN WORK COVERED BY THESE DOCUMENTS, ALL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT SHALL BE OBSERVED.

C. THE INSTALLATION COVERED BY THESE DOCUMENTS SHALL COMPLY WITH ALL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT.

D. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS FROM ALL AGENCIES AND OBTAIN ALL INSPECTIONS REQUIRED FOR THE PROSECUTION OF THE ELECTRICAL WORK. ALL PERMITS AND CERTIFICATES OF INSPECTION AND APPROVAL SIGNED BY THE BUILDING DEPARTMENT SHALL BE FURNISHED IN DUPLICATE TO THE OWNER AND SHALL BECOME THE PROPERTY OF THE OWNER.

E. ALL ELECTRICAL WORK SHALL BE INSPECTED BY THE LOCAL AUTHORITIES HAVING JURISDICTION.

1.12 WORKMANSHIP

A. ALL ELECTRICAL WORK SHALL BE INSTALLED UNDER THE DIRECTION OF A SKILLED ELECTRICAL FOREMAN ACCEPTABLE TO THE OWNER. ALL WORK SHALL BE TESTED, INSPECTED AND CERTIFIED APPROVED AS TO MATERIALS AND WORKMANSHIP BY THE PROPER AUTHORITY PRIOR TO ACCEPTANCE.

B. THE INSTALLATION SHALL ENSURE THAT ITS SEVERAL COMPONENT PARTS WILL FUNCTION AS A WORKABLE SYSTEM, COMPLETE WITH ALL ACCESSORIES NECESSARY FOR ITS OPERATION, AND SHALL BE LEFT WITH ALL EQUIPMENT PROPERLY ADJUSTED AND IN WORKING ORDER. THE WORK SHALL BE EXECUTED IN CONFORMITY WITH THE BEST ACCEPTED STANDARD PRACTICE, SO AS TO CONTRIBUTE TO EFFICIENCY OF OPERATION AND MAINTENANCE, MAXIMUM ACCESSIBILITY, APPEARANCE AND MINIMUM COST IN CONSTRUCTION OF FUTURE ALTERATIONS AND ADDITIONS. THE WORK SHALL ALSO BE EXECUTED SO THAT THE INSTALLATION WILL CONFORM WITH THE ADJUST ITSELF TO THE BUILDING STRUCTURE, ITS EQUIPMENT AND ITS USAGE.

C. THE WORKMANSHIP OF ALL INSTALLED ELECTRICAL EQUIPMENT SHALL BE SUBJECT TO FINAL APPPROVAL OF THE OWNER. ANY WORK WHICH DOES NOT MEET RECOGNIZED STANDARDS OF PROPER INSTALLATION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THE OWNER'S DISCRETION. THE COST OF ANY REPAIR AND/OR REPLACEMENTS NECESSARY DUE TO FAULTY WORKMANSHIP SHALL NOT BE JUSTIFICATION FOR ADDITIONAL COMPENSATION BY THE CONTRACTOR.

1.15 VISITING THE SITE

A. THE CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING HIS PROPOSAL, COMPARE THE DRAWINGS WITH THE EXISTING, AND INFORM HIMSELF OF ALL PERTINENT LOCAL CONDITIONS INCLUDING LOCATION ACCESSIBILITY AND GENERAL CHARACTER OF THE SITE, THE CHARACTER AND EXTENT OF EXISTING WORK WITHIN OR ADJACENT TO THE SITE, AND ANY OTHER WORK BEING PERFORMED THEREON AT THE TIME OF THE SUBMISSION OF HIS BID. FAILURE TO VISIT THE SITE WILL IN NO WAY RELIEVE THE CONTRACTOR FROM THE NECESSITY OF FURNISHING ANY MATERIALS OR PERFORMING ANY WORK THAT MAY BE REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THESE DOCUMENTS. LACK OF KNOWLEDGE WILL NOT BE ACCEPTABLE AS A VALID EXCUSE FOR GRANTING ANY EXTRA COMPENSATION OR FOR FAILURE OR NEGLECT TO PERFORM ANY OR ALL WORK IN THIS CONTRACT.

PART 2 – PRODUCTS AND SYSTEMS

2.1 MATERIALS

A. ELECTRICAL MATERIALS SHALL BE NEW, SHALL MEET N.E.C. STANDARDS, SHALL BEAR THE U.L. LABEL, AND SHALL BE PROTECTED FROM INJURY UNTIL FINAL ACCEPTANCE.

B. INTERIOR CONDUIT SHALL BE RIGID GALVANIZED STEEL, RIGID ALUMINUM, ELECTRICAL METALLIC TUBING, OR P.V.C. (WHERE ACCEPTABLE BY CODE) UNDER THE GROUND FLOOR. BURIED EXTERIOR CONDUITS SHALL BE SCHEDULE 40 P.V.C. RUN A GROUND CONDUCTOR IN EACH P.V.C. CONDUIT. ALL HOMERUNS TO BE 3/4–INCH MINIMUM. TYPE MC CABLE MAY BE USED IN CEILINGS AND WALLS WHERE ACCEPTABLE BY CODE. IN UNFINISHED AREAS, E.M.T. MAY BE RUN ABOVE 8 FEET ABOVE FINISHED FLOOR. EXPOSED P.V.C. SHALL BE ULTRAVIOLET PROTECTED.

C. WIRE AND CABLE SHALL BE COPPER WITH 600 VOLT TYPE "THW", "THWN", OR "THHN" INSULATION. WIRE SMALLER THAN #12 AWG SHALL NOT BE USED. 150 DEGREES C TYPE "AF" WIRING IS REQUIRED FOR INCANDESCENT FIXTURE WIRING. HOMERUNS SHALL BE #10 AWG AND ABOVE 150 FEET SHALL BE #8 AWG.

D. TELEPHONE, DATA AND LOW VOLTAGE CABLE RUN IN AIR HANDLING PLENUM SHALL BE PLENUM RATED.

E. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS AND CAST ALLOY WITH THREADED HUBS IN WET AND DAMP LOCATIONS.

F. UNLESS OTHERWISE NOTED, ALL SAFETY SWITCHES SHALL BE HEAVY DUTY NEMA 1 OR NEMA 3R, FUSED OR UNFUSED, AND SHALL BE U.L. LISTED. SWITCHES SHALL HAVE A SHORT CIRCUIT WITHSTAND RATING OF NOT LESS THAN 100,000 AMPERES RMS SYMMETRICAL. SWITCHES SHALL BE SQUARE D COMPANY, GENERAL ELECTRIC, ITE/SIEMENS, OR CUTLER–HAMMER, USING CLASS J AND L FUSES. (ALL EXTERIOR SWITCHES SHALL BE NEMA 3R UNLESS OTHERWISE NOTED).

G. THE CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE SET OF FUSES FOR ALL FUSIBLE EQUIPMENT ON THE JOB. UNLESS OTHERWISE NOTED, ALL FUSES SHALL BE U.L. LISTED, CURRENT–LIMITING, WITH AN INTERRUPTING RATING OF 200,000 RMS AMPERES SYMMETRICAL, AND SHALL BE U.L. CLASS J (LESS THAN 600 AMPS) AND CLASS L (GREATER THAN 600 AMPS), BY GOULD, SHAWMUT OR BUSSMAN.

H. PANELBOARDS SHALL HAVE A HINGED DOOR WITH TYPEWRITTEN PANEL LEGEND INDICATING ALL CIRCUITS SUPPLIED INCLUDING SPARES, ALONG WITH MAIN BREAKER OR MAIN LUGS ONLY. IN GENERAL, PANELBOARDS SHALL BE 3–PHASE, 4–WIRE. ALL PANELS SHALL HAVE A MINIMUM 10,000 A.I.C. RATED BREAKERS. PROVIDE A SEPARATE GROUND BUS. REFER TO DRAWINGS FOR THE NUMBER AND SIZE OF BRANCH BREAKERS TO BE PROVIDED AND THE RATING OF PANEL MAINS, AMPACITY OF MAIN BREAKER OR MAIN LUGS (PLUG–IN TYPE CIRCUIT BREAKERS SHALL NOT BE ACCEPTABLE). PANELS SHALL BE U.L. LISTED OR LABELED, CONFORM TO NEMA STANDARDS, AND SHALL BE AS MANUFACTURED BY CUTLER–HAMMER, SQUARE D COMPANY, GENERAL ELECTRIC, OR ITE/SIEMENS.

I. WALL PLATES FOR SWITCHES, RECEPTACLES, TELEPHONE, AND OTHER OUTLETS SHALL BE DESIGNED FOR THE DEVICE WITH WHICH USED. ALL WALL AND COVER PLATES SHALL BE SMOOTH FINISH, THERMOPLASTIC, WITH COLOR BY OWNER. COVER PLATES FOR EXPOSED OUTLETS SHALL BE CADMIUM PLATED STEEL.

J. FOR EXTERIOR OR WET LOCATIONS, PROVIDE THE FOLLOWING WEATHERPROOF COVERS FOR ALL OTHER WIRING DEVICES:

	HUBBELL	LEVITON	SLATER
DUPLEX (PORTABLE TOOLS)	5222 5221	4976	3780SC

RECEPTACLES (CONTINUAL USE) PER NEC ARTICLE 410–57.

2.2 LIGHTING SYSTEMS

A. PROVIDE ALL LIGHTING FIXTURES AND LAMPS AS SHOWN IN THE FIXTURE SCHEDULE AND/OR DESCRIBED IN THESE SPECIFICATIONS. COORDINATE WITH ALL OTHER TRADES IN THE LOCATING OF LIGHTING OUTLETS.

B. EGRESS EMERGENCY LIGHTING AND EXIT LIGHTING SHALL BE PROVIDED BY SELF– CONTAINED BATTERY OPERATED EQUIPMENT.

2.3 COMMUNICATION SYSTEMS

A. TELEPHONE

1. PROVIDE ONE (1) 3/4" CONDUIT FROM EACH OUTLET AND STUB UP TO ABOVE ACCESSIBLE CEILING. PROVIDE PULL WIRE AND TAG CONDUIT.
2. PROVIDE A 4–11/16" SQUARE BOX WITH SINGLE GANG PLASTER RING AT EACH TELEPHONE LOCATION AND COVER PLATE WITH RJ45 JACK.

PART 3 – EXECUTION

3.1 INSTALLATION

A. ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE N.E.C., ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, AND THE OWNER'S DESIGN CRITERIA. DURING CONSTRUCTION, OBSERVE ALL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT.

B. THIS DESIGN IS ADDRESSED TO A CONTRACTOR WHICH IS LICENSED IN HIS WORK AND UNDERSTANDS THE NATIONAL, STATE, AND LOCAL CODES. IT IS NOT POSSIBLE TO REPRODUCE THE ENTIRE CODE WITHIN THESE DRAWINGS AND SPECIFICATIONS; THEREFORE, IT IS THE RESPONSIBILITY OF THE INSTALLER TO USE APPROVED MATERIALS, METHODS, AND LOCATIONS ACCEPTABLE TO THE FEDERAL, STATE, AND LOCAL CODES AND AUTHORITIES.

C. CODE REQUIREMENTS SHALL BE INCLUDED AN INSTALLED EVEN IF NOT SHOWN. DRAWINGS ARE SCHEMATIC AND MAY NOT SHOW CODE REQUIREMENTS.

D. FUSES WITH DOWN LINE CIRCUIT BREAKERS AND CIRCUIT BREAKERS WITH DOWN LINE CIRCUIT BREAKERS SHALL BE COORDINATED BY THE MANUFACTURER.

E. THE INSTALLATION SHALL BE COORDINATED WITH THE REFLECTED CEILING PLANS (WHEN AVAILABLE) AND ARCHITECTURAL DRAWINGS.

F. ELECTRICAL WORK SHALL BE CONCEALED IN FINISHED AREAS WITH DEVICES AND EQUIPMENT MOUNTED FLUSH WHERE POSSIBLE.

G. EXIT AND EMERGENCY LIGHTING SHALL CONFORM TO LOCAL CODES.

H. ALL WIRING SHALL BE INSTALLED IN CONDUIT.

I. SURFACE–MOUNTED FIXTURES, FLUORESCENT AND INCANDESCENT, SHALL BE MOUNTED SECURELY TO THE CEILING. PROVIDE AIR GAP TO CEILING IF REQUIRED.

J. INSULATION SHALL NOT BE PLACED ON FIXTURES.

K. LIGHT FIXTURES SHALL BE SUPPORTED FROM BUILDING STRUCTURE.

L. CLEAN AFTER CONSTRUCTION IS FINISHED.

M. PROVIDE ALL CUTTING, PATCHING, AND OPENINGS IN FLOORS

N. WIRING DEVICES SHALL BE INSTALLED IN OUTLET BOXES. BOXES SHALL BE 4–INCH SQUARE MINIMUM WITH DEVICE COVERS TO SUIT.

O. MOUNT ALL RECEPTACLES VERTICALLY UNLESS OTHERWISE NOTED.

P. PERMANENTLY MARK BACK OF DEVICE PLATES WITH PANEL AND CIRCUIT NUMBER. PROVIDE NAMEPLATES FOR ALL EQUIPMENT.

Q. INSTALL PULL–CORDS IN EMPTY CONDUIT.

R. NEUTRALS FOR COMPUTER, ELECTRONIC BALLASTS, AND H.I.D. LIGHT FIXTURES SHALL BE RUN SEPARATE FOR EACH PHASE OR TWO TIMES WIRE SIZE FOR COMBINED PHASES.

S. INTERIOR EQUIPMENT MOUNTED ON EXTERIOR WALLS SHALL BE ATTACHED TO 3/4–INCH PAINTED FIRE–PROOFED PLYWOOD BOARDS FURRED OUT 1–INCH FROM THE WALL.

T. EXTERIOR EQUIPMENT SHALL BE NEMA 3R

U. EXTERIOR OUTLETS SHALL BE GFI (GROUND FAULT INTERRUPTED).

V. DO NOT RUN CONDUITS ON OUTSIDE OF EXTERIOR WALLS.

W. PROVIDE A COMPLETE GROUNDING SYSTEM PER N.E.C. PROVIDE SEPARATE GROUND CONDUCTOR FOR ALL POWER CIRCUITS.

X. HARDWARE, SUPPORTS, HANGERS, ANGLE IRONS, CHANNELS, RODS AND CLAMPS NECESSARY TO INSTALL ELECTRICAL EQUIPMENT SHALL BE SUPPLIED TO SUIT CONDITIONS AND APPLICATION. THE USE OF PERFORATED STRAPS WILL NOT BE PERMITTED.

Y. SUPPORTING DEVICES SHALL BE GALVANIZED OR ALUMINUM MATERIAL. STEEL WORK ERECTED FOR THE SUPPORT OF ELECTRICAL EQUIPMENT SHALL BE PAINTED WITH ONE COAT OF IRON–OXIDE GRAY PAINT AFTER CUTTING, DRILLING, WELDING, ETC., AND ONE COAT OF GRAY EPOXY PAINT.

Z. PROVIDE DUPLEX OUTLETS FOR MAINTENANCE AT HEATING AND/OR COOLING EQUIPMENT (LIGHTING FOR INTERIOR EQUIPMENT).

3.2 UTILITIES

A. PROVIDE UTILITIES TO UTILITY COMPANIES REQUIREMENTS.

B. COORDINATE WITH OWNER APPLICATION FOR SERVICE AS SOON AS AWARDED CONTRACT.

C. VERIFY REQUIREMENTS WITH UTILITY COMPANIES.

D. INSTALLATION SHALL BE ACCEPTABLE TO THE UTILITY COMPANIES.

E. THE ELECTRICAL CONTRACTOR WILL PROVIDE:

1. CONDUITS FOR LOW VOLTAGE ELECTRIC SERVICE.
2. (1) 2" CONDUIT FOR TELEPHONE LINE.
3. (1) 2" CONDUIT FOR TELEVISION CABLE.
4. ALL NECESSARY TRENCHING AND BACKFILL TO ACCOMMODATE CONDUITS PER UTILITY COMPANY REQUIREMENTS AND SITE SPECIFICATIONS.
5. PULL WIRES AND JUNCTION BOXES AS NEEDED.

F. UTILITY COMPANIES WILL PROVIDE:

1. SERVICE TO TRANSFORMER.
2. TELEVISION CABLE.
3. TELEPHONE CABLE

ALL UTILITY LINES ARE TO BE RUN FROM DESIGNATED ELECTRIC, CABLE AND TELEPHONE LOCATIONS, VERIFY IN FIELD.

G. THE OWNER SHALL PAY FOR ALL PERMANENT UTILITY COMPANY SERVICES.

3.3 UNDERGROUND WARNING TAPES

A. PLACE PLASTIC WARNING TAPE OF 6–INCH WIDTH (MINIMUM) AT A LEVEL OF 12 INCHES APPROXIMATELY ABOVE ALL

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EXP. 12-31-21

Weathersfield Township Community Center

Corner of Main Street and Stewart Street
Weathersfield, Ohio

☒	Design	04/30/2021
☒	Approval	06/02/2021
☐	Permit	07/16/2021
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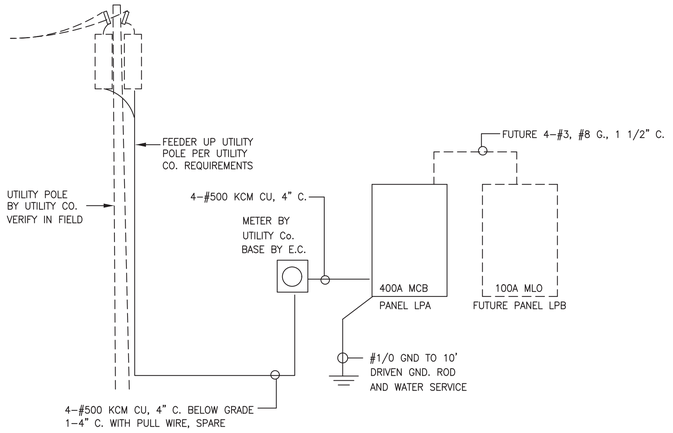
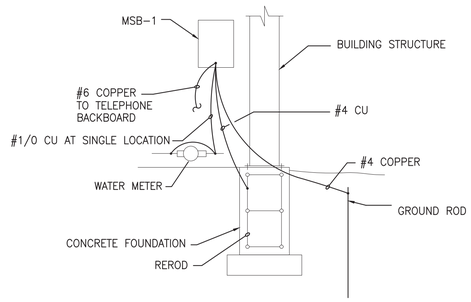
ELECTRICAL SPECIFICATIONS

Sheet No:
E0.01



120/208V 3ø–4W DISTRIBUTION DIAGRAM

NO SCALE



GROUNDING ELECTRODE SYSTEM

LIGHTING FIXTURE SCHEDULE

TYPE	LAMP	WATTAGE FIXTURE	DESCRIPTION	CATALOG NUMBER
A	1–50 LED	50	LED, 2 X 4, SURFACE MT.,FLAT PANEL ACRYLIC MINIMUM .125 INCH PRISMATIC LENS, 120V	LITHONIA EPANL–2X4–3400LM–80CRI–4000K
B	1–30 LED	30	LED, 2 X 2, SURFACE MT.,FLAT PANEL ACRYLIC MINIMUM .125 INCH PRISMATIC LENS, 120V	LITHONIA EPANL–2X2–3400LM–80CRI–4000K
C	1–27 LED	27	LED 4–FOOT LONG, STRIP LIGHT WHITE WITH OPAL LENS, 120V	LITHONIA #CLX–L48–4000LM–SEF–WDL–120 EDAB–TUWH–PRDR–90CRI
D	18 LED	18	LED, RECESSED DOWNLIGHT WITH WHITE RING. AND WHITE BAFFLE, 120V INTEGREL LENS, UL WET	HALO #H750TCP–RL560WH12935
E	2–6 LED	15	EMERGENCY LIGHTING 6–VOLT BATTERY PACK, 2 LIGHTING HEADS, WALL MTD. 120V	LITHONIA #ELM6
E1	4–6 LED	24	COMBINATION EMERGENCY LIGHT/EXIT SIGN, LED, NICKEL CADMIUM BATTERY, 120V (WITH 2 REMOTE LIGHT HEADS AS NEEDED)	LITHONIA #LHQM–SW3–R–120/277–N–ELANXH0606
E2	2–12 LED	24	COMBINATION EMERGENCY LIGHT/EXIT SIGN, LED, NICKEL CADMIUM BATTERY, 120V	LITHONIA: LHQM–SWRN
F	1–25 LED	25	LED, WALL PACK. FIXTURE, CUT OFF OPTICS, ALUMINUM HOUSING, 120V, BRONZE COLOR	LITHONIA: WSTLED–P2–10A700/40K–VF–SR3–120DDBXD

NOTES:

1. SUPPORT EACH LIGHT FIXTURE INDEPENDENTLY FROM STRUCTURE.

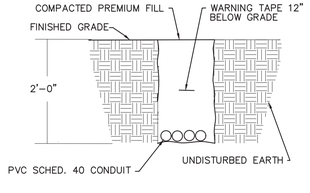
CIRCUIT BREAKER PANEL SCHEDULE

PANEL LPA VOLTAGE 120/208–3ø AMPS 400A

SPACES 54 LOCATION MCB 400A

MINIMUM INTEGRATED EQUIPMENT RATING 10,000 AMP. (ASYM)

CIRC. NO.	TRIP AMPS	NO. POLES	LOAD SERVED	LOAD/PHASE (VA) øA	øB	øC	CIRC. NO.	TRIP AMPS	NO. POLES	LOAD SERVED
1	20	1	LIGHTS	1700			2	20	1	SPARE
3	20	1	LIGHTS		1050		4	20	1	EXT. LIGHTS
5	20	1	RECEPTACLES		400	1000	6	20	1	RECEPTACLES
7	20	1	RECEPTACLES	1000		1000	8	20	1	DUCT DETECTORS
9	20	1	FUR–1	1600	1800		10	20	1	FUR–2
11	20	1	FUR–3		1800	1800	12	20	1	FUR–4
13	20	1	WTR. HTR.	400		1800	14	20	1	DISHWASHER
15	20	1	TELEPHONE	1200	500		16	20	1	KITCHEN
17	20	1	KITCHEN		1500	1500	18	20	1	KITCHEN
19	20	1	REFRIGERATOR	1100		1500	20	20	1	KITCHEN
21	20	1	KITCHEN	1000	1500		22	20	1	KITCHEN
23	20	1	KITCHEN		1500	1500	24	20	1	KITCHEN
25	20	1	KITCHEN	1500		1500	26	20	1	KITCHEN
27	20	1	OH DOOR	1500	1800		28	20	1	RECEPTACLES
29	20	1	RECEPTACLES		1000	1000	30	20	1	RECEPTACLES
31	20	1	RECEPTACLES	1000			32	20	1	SPARE
33	20	1	SPARE				34	20	1	SPARE
35	20	1	SPARE				36	20	1	SPARE
37	20	1	SPARE				38	20	1	SPARE
39	20	1	SPARE				40	20	1	SPARE
41	20	1	SPARE				42	20	1	SPARE
43	30	2	HP–1	2000			44	50	2	RANGE
45	"	"	"	4500	2000		46	"	"	"
47	60	2	CU–1		4500	3810	48	60	2	CU–3
49	"	"	"	3810		3810	50	"	"	"
51	60	2	CU–2	3810	3810		52	60	2	CU–4
53	"	"	"			3810	54	"	"	"
				26620	26970	28840				TOTALS



LOW VOLTAGE TRENCH DETAIL

SYMBOL LEGEND

	SPECIAL PURPOSE RECEPTACLE – MTD. AT 18" AFF, SEE DWG FOR AMPERAGE AND VOLTAGE
J	JUNCTION BOX WITH FLUSH COVER
G	DUPLEX RECEPTACLE – GROUND FAULT INTERRUPTER TYPE
	DUPLEX RECEPTACLE – MTD 48" AFF (TO BE VERIFIED)
	DUPLEX RECEPTACLE – MTD 18" AFF (TO BE VERIFIED)
	DOUBLE DUPLEX RECEPTACLE – MTD 48" AFF (TO BE VERIFIED)
S	SWITCH – SINGLE POLE
S_3	SWITCH THREE WAY
S_D	DIMMER SWITCH
$(S)_D$	DUCT SMOKE DETECTOR
	3 WIRES, 1 NEUTRAL
	4 WIRES , 1 NEUTRAL
A–1	HOME RUN PANEL AND CIRCUIT NUMBER,2–#12, #12G., 3/4" C. TO A 20A–1P C/B TYPICALLY
S	"RUN CONTINUES" INDICATION
	BACK BOARD
	FUSED/UNFUSED DISCONNECT SWITCH
	120V/60/1ø MOTOR – HP INDICATED
	ELECTRICAL PANEL
	TELEPHONE OUTLET MOUNTED AT 18" A.F.F.
	COMBINATION TELEPHONE/DATA OUTLET MOUNTED AT 18" A.F.F.
	TELEVISION CATV OUTLET VERIFY MTG. WITH DRAWING
	BELOW FLOOR CONDUIT
E.C.	ELECTRICAL CONTRACTOR
HVAC	HEATING, VENTILATING, AIR CONDITIONING CONTRACTOR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
WP	WEATHER PROOF
RTU	ROOF TOP UNIT
C.	CONDUIT
G.	GROUND
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUG ONLY
EF	EXHAUST FAN

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Corner of Main Street and Stewart Street
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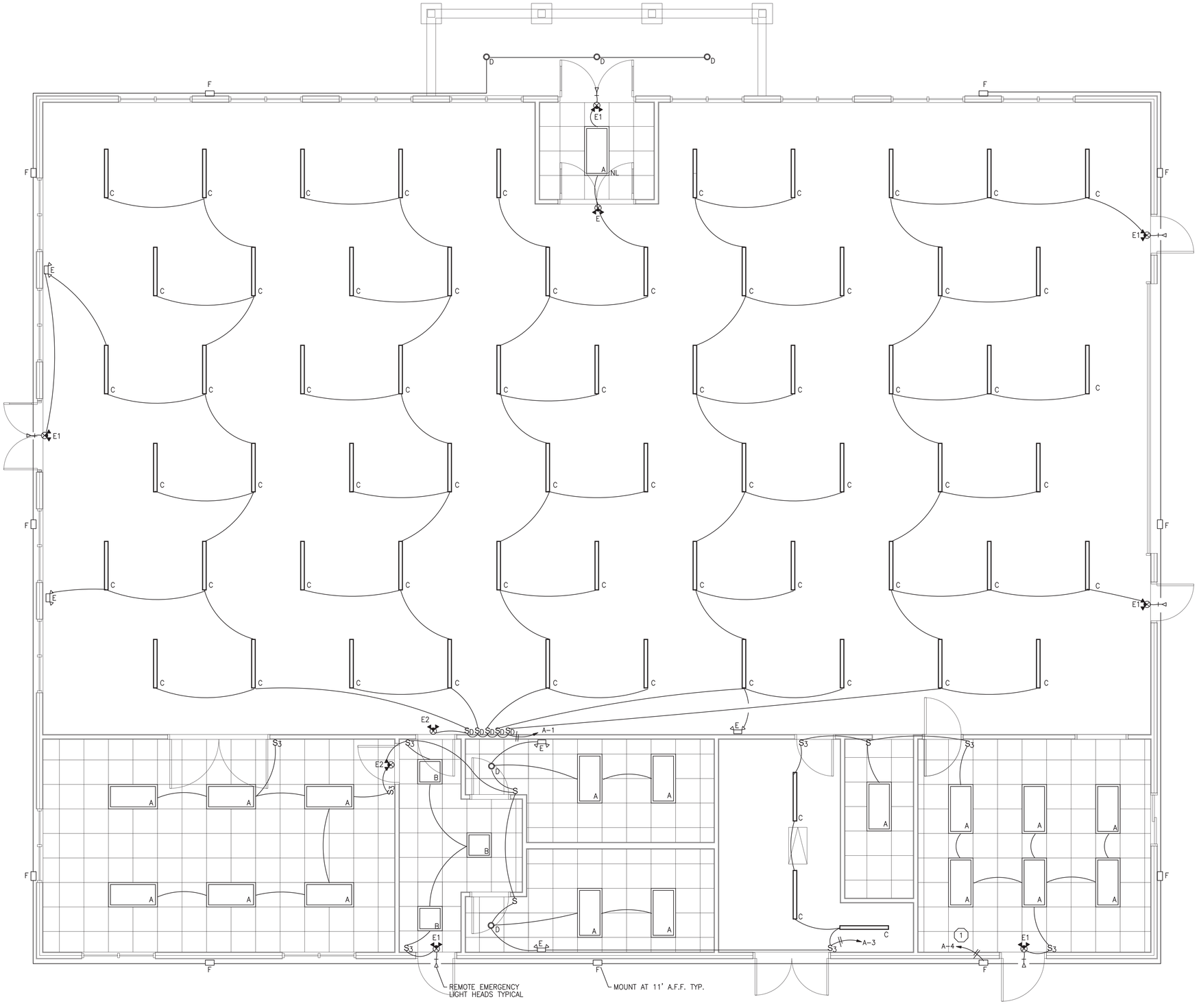
Sheet Title:
ELECTRICAL DETAILS, DIAGRAMS, & SCHEDULES

Sheet No:
E0.02



LIGHTING PLAN NOTES

1 WIRE VIA TIMECLOCK AND PHOTOCELL

ELECTRICAL LIGHTING PLAN
SCALE: 1/4" = 1'-0"

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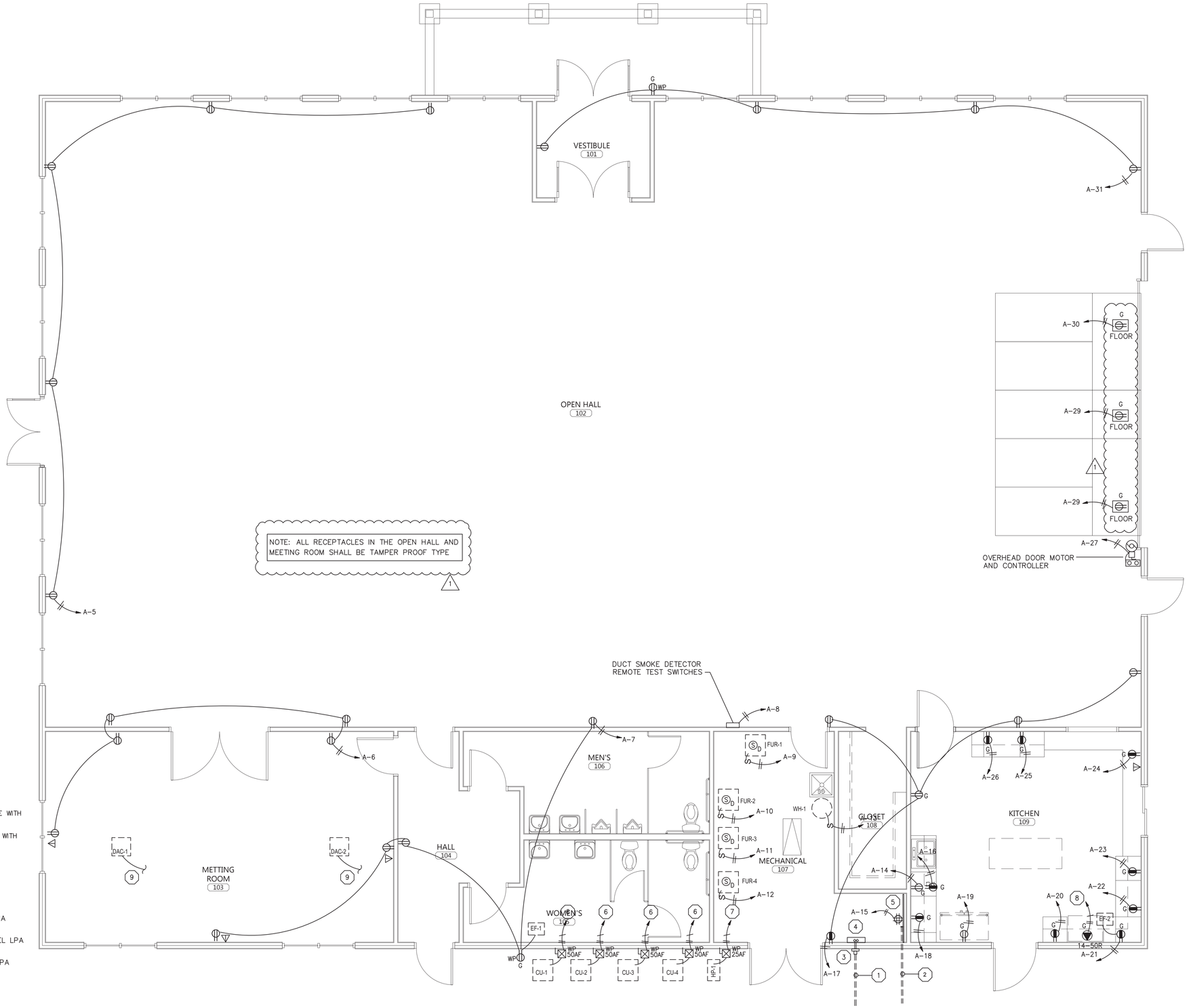

ELECTRICAL POWER PLAN
SCALE: 1/4" = 1'-0"

POWER PLAN NOTES

1. 2–4" CONDUITS FOR MAIN ELECTRIC SERVICE. COORDINATE WITH RUN WITH UTILITY COMPANY IN FIELD.
2. 2–2" CONDUITS FOR TELEPHONE AND CATV. COORDINATE WITH RUN WITH UTILITY COMPANY IN FIELD.
3. METER
4. MAIN PANEL LP–A.
5. 3/4"x4'x8' TELEPHONE BACKBOARD.
6. 2–#6, #8 G., 1" C. TO A 60A–2P C/B IN PANEL LPA
7. 2–#10, #10 G., 3/4" C. TO A 30A–2P C/B IN PANEL LPA
8. 2–#8, #10 G., 1" C. TO A 50A–2P C/B IN PANEL LPA
9. 2–#12, #12 G., 3/4" C. TO HP–1

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ELECTRICAL POWER PLAN

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GENERAL STRUCTURAL NOTES (GSN)

STRUCTURAL DESIGN CRITERIA

CODE:	OHIO BLDG CODE, LATEST EDITION
BUILDING CONSTRUCTION TYPE:	5B
OCCUPANCY USAGE:	A3
ROOF LIVE LOAD:	20 PSF
GROUND SNOW LOAD:	20 PSF
SNOW IMPORTANCE FACTOR:	1
SNOW EXPOSURE FACTOR:	.9
FLOOR LIVE LOAD:	100 PSF

OCCUPANCY CATEGORY: II (ASCE 7 Table 1-1)

WIND LOAD:	DESIGN VELOCITY 120 MPH EXPOSURE B IMPORTANCE FACTOR 1 DESIGN PRESSURE 20 PSF
EARTHQUAKE:	S_{DS}= .054 S_{D1}= .17 SITE CLASS - D SEISMIC FORCE SYSTEM - LIGHT FRAMED WALLS DESIGNED FOR SHEAR IMPORTANCE FACTOR: 1 ANALYSIS PROCEDURE: EQUIV. LAT. FORCE SEISMIC DESIGN CATEGORY - B SEISMIC BASE SHEAR: 12.8 KIPS
DESIGN BASIS	ALLOWABLE STRESS DESIGN (ASD) FOR ALL MEMBERS EXCEPT CONCRETE ULTIMATE STRENGTH DESIGN (USD) FOR REINFORCED CONCRETE MEMBERS

GENERAL

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES. IN CASE OF CONFLICT, MORE COSTLY REQUIREMENTS GOVERN FOR BIDDING. SUBMIT CLARIFICATION REQUEST PRIOR TO PROCEEDING WITH WORK.
2. ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE.
3. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK. UNLESS NOTED OTHERWISE, DETAILS IN STRUCTURAL DRAWINGS ARE TYPICAL AS INDICATED BY CUTS, REFERENCES, OR TITLES.
4. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES:
   OHIO BLDG CODE AND LATEST REVISIONS REFERRED TO HERE AS "THE CODE", AND ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK.
5. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
   SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT AS NOTED.
   SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-BEARING PARTITIONS.
   SIZE AND LOCATION OF ALL CONCRETE CURBS, EQUIPMENT PADS, PITS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGE IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC.
   SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS EXCEPT AS SHOWN.
   FLOOR AND ROOF FINISHES.
   DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
6. SEE MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
   PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
   ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
   CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL, OR PLUMBING FIXTURES.
   SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS.
7. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
8. ASTM SPECIFICATIONS ON THE DRAWINGS SHALL BE OF THE LATEST REVISION.
9. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
10. CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.
11. UNLESS NOTED OTHERWISE, EXPANSION BOLTS IN CONCRETE SHALL BE 1/2" DIAMETER X 3 1/2" EMBEDMENT HILTI KWIK BOLTS II (ICBO 4627) OR APPROVED ALTERNATE WITH ALLOWABLE VALUES EQUAL TO OR EXCEEDING THOSE FOR HILTI, PER CURRENT ICBO RESEARCH REPORT. UNLESS NOTED OTHERWISE, ALL EPOXY ANCHORS SHALL BE 1/2" DIAMETER WITH 4 1/4" EMBEDMENT HILTI HIT SYSTEM (ICBO 4016) OR APPROVED ALTERNATE WITH ALLOWABLE VALUES EQUAL TO OR EXCEEDING THOSE FOR HILTI, PER CURRENT ICBO RESEARCH REPORT. INSTALL EXPANSION AND EPOXY ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.
12. GROUT OTHER THAN FOR MASONRY CELLS SHALL BE NON-SHRINK, NON-METALLIC, MEETING ASTM C-827, C-191, AND C-109, MIXED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS. MINIMUM COMPRESSIVE STRENGTH 5,000 PSI IN TWO DAYS.

SPECIAL INSPECTION

THE FOLLOWING ELEMENTS OF CONSTRUCTION SHALL REQUIRE SPECIAL INSPECTION PER OBC SECTION 1701. CONTRACTOR TO FURNISH INSPECTION UNLESS INSTRUCTED OTHERWISE BY THE CONSTRUCTION CONTRACT.

DESCRIPTION	DESIGN VALUE
SOILS	PER GEOTECH REPORT
SOIL COMPACTION, AT ±2% OPTIMUM MOISTURE	98% ASTM D-698
CONCRETE	
COMPRESSIVE STRENGTH AT 7 AND 28 DAYS	ASTM C-31 AND C-39
FOOTINGS	3000 PSI
SLABS ON GRADE	4000 PSI
CONCRETE DENSITY, ASTM C-138	145 PCF NORMAL 115 PCF LIGHTWEIGHT
CONCRETE SLUMP (1 PER 50 CY OR FRACTION),	4" MAX ASTM C-143
PERCENTAGE ENTRAINED AIR FOR EXTERIOR CONCRETE	±1% ASTM C-231 ±6%
VERFIY REINFORCING SIZES AND PLACEMENT	ASTM A-615, GRADE 60
MASONRY	
MORTAR TYP, ASTM C-109 AND C-270	PER SPEC'S
GROUT STRENGTH AT 28 DAYS, ASTM C-1019 AND C-476	2500 PSI
PRISM STRENGTH AT 28 DAYS, ASTM C-1314	1800 PSI
STRUCTURAL STEEL	
HIGH STRENGTH BOLTS, 10% OF ALL BOLTS	AISC SPEC'S
FILLET WELDS, 5/16" OR LESS, AWS D1.1	VISUAL
FILLET WELDS, 3/8" OR GREATER, AWS D1.1	DYE PENETRANT
PARTIAL OR FULL PENETRATION WELDS, AWS D1.1	ULTRA-SONIC OR MAGNETIC PARTICLE
WOOD FRAMING	
VERFIY LUMBER GRADES	VISUAL
SHEAR WALL NAILING PATTERNS	VISUAL
LIGHT GAGE METAL CONNECTORS	VISUAL

a. THE CONSTRUCTION INSPECTIONS LISTED ARE IN ADDITION TO THE CALLED INSPECTIONS REQUIRED BY OBC, AS AMENDED. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR INSPECTION BY LOCAL BUILDING DEPARTMENT. SPECIALLY INSPECTED WORK WHICH IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE LOCAL BUILDING INSPECTOR IS SUBJECT TO REMOVAL OR EXPOSURE AT CONTRACTOR'S EXPENSE.

b. CONTINUOUS INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS OTHERWISE SPECIFIED.

c. THE SPECIAL INSPECTORS MUST BE CERTIFIED BY THE LOCAL BUILDING DEPARTMENT TO PERFORM THE TYPES OF INSPECTION SPECIFIED.

d. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE SPECIAL INSPECTOR OR INSPECTION AGENCY AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION. ALL WORK PERFORMED WITHOUT REQUIRED SPECIAL INSPECTION IS SUBJECT TO REMOVAL.

e. SUBMIT WRITTEN REPORTS WITHIN TWO DAYS OF TESTING TO ENGINEER OF RECORD.

f. G.C. TO NOTIFY BUILDING DEPT. OF SPECIAL INSPECTORS NAME AND CONTACT INFORMATION.

CONSTRUCTION SUBMITTALS

1. THE STRUCTURAL SUBMITTAL REVIEW IS INTENDED TO HELP THE ENGINEER VERIFY HIS DESIGN CONCEPT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK HIS OWN SUBMITTALS. THE ENGINEER WILL REVIEW THE SUBMITTALS FOR CONFORMANCE WITH CONSTRUCTION DOCUMENTS, GENERAL DIMENSIONS, MEMBERS, ELEVATIONS AND CONNECTIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL DIMENSIONS IN SUBMITTALS AND COORDINATIONS WITH OTHER TRADES.
2. SHOP DRAWINGS ARE THE CONTRACTOR'S AND FABRICATOR'S WORK PRODUCT. THE CONTRACTOR AND FABRICATOR ARE SOLELY RESPONSIBLE FOR ANY ERRORS IN THEIR SHOP DRAWINGS. THE ENGINEER IS NOT ENGAGED TO PERFORM DETAIL CHECKING OF THE SHOP DRAWINGS NOR WILL BE RESPONSIBLE FOR ANY ERRORS IN OR MISSING MATERIALS FROM THE SHOP DRAWINGS.
3. CONTRACTOR IS TO SUBMIT ONLY 3 SETS OF SHOP DRAWINGS TO ENGINEER. FOR REVIEW. ANY ADDITIONAL SETS WILL BE RETURNED UNMARKED.
4. ALL SUBMITTALS ARE TO BE REVIEWED AND APPROVED BY THE GENERAL CONTRACTOR AND CHECKED BY THE FABRICATOR OR VENDOR PRIOR TO SUBMITTAL FOR REVIEW BY ENGINEER.
5. THE STRUCTURAL SUBMITTALS WILL BE RETURNED FOR RESUBMITTAL IF A CURSORY REVIEW SHOWS MAJOR ERRORS WHICH SHOULD HAVE BEEN FOUND BY THE GENERAL CONTRACTOR'S CHECKING.
6. THE FOLLOWING SUBMITTALS, WHEN APPLICABLE, ARE REQUIRED FOR SUBMITTAL FOR STRUCTURAL REVIEW

ITEM	PROD. DATA	DRAWINGS	CALCULATIONS	PE SEAL
a. SPLICED REINFORCING.	☐	■	☐	☐
b. CONCRETE MIX DESIGNS.	■	☐	☐	☐
c. STRUCTURAL STEEL.	☐	■	☐	☐
d. ENGINEERED WOOD BEAMS.	■	☐	☐	☐
e. WOOD TRUSSES	☐	■	■	■

7. ANY SUBMITTAL OF A DETAIL SHEET WITH ADDED INFORMATION SHALL BE ACCOMPANIED BY LOCATION PLAN IDENTIFYING THE MEMBERS INVOLVED AND CLOUDING AROUND ADDED INFORMATION
8. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BE BY A REGISTERED STRUCTURAL ENGINEER, AND SUBMITTAL SHALL BE SEALED BY THE ENGINEER. SAID ENGINEER MUST BE REGISTERED WITH THE STATE THE PROJECT IS LOCATED WITHIN.
9. THE CONTRACT DOCUMENTS MAY NOT BE USED BY THE DETAILER AS USE IN ERECTION OR DETAIL DRAWINGS WITH OUT PRIOR WRITTEN PERMISSION FROM THE STRUCTURAL ENGINEER.
10. SUBMITTALS ARE TO BE RECEIVED BY THE STRUCTURAL ENGINEER A MINIMUM OF 10 WORKING DAYS PRIOR TO CONSTRUCTION SCHEDULING. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION DELAYS DUE TO INADEQUATE SCHEDULING OF SUBMITTAL REVIEW. SUBMITTALS TO BE SUBMITTED TO ARCHITECT PRIOR TO ENGINEERS REVIEW.
11. ANY ALTERNATE PRODUCTS ARE TO BE SUBMITTED IN ADVANCE OF PRODUCT'S INSTALLATION FOR APPROVAL BY ENGINEER OF RECORD. PRODUCT MUST EQUAL OR EXCEED SPECIFICATIONS AND QUALITY OF PRODUCTS SPECIFIED BY ENGINEER OF RECORD. ENGINEER OF RECORD RESERVES THE RIGHT TO ACCEPT OR REJECT ANY PRODUCT SUBSTITUTION WITHOUT CAUSE.

FOUNDATION

1. FOUNDATION DESIGN AND SITEWORK IS BASED ON THE GEOTECHNICAL REPORT PREPARED BY PSI, PROJ NO. 01393478, DATED 5/26/21. THE GENERAL CONTRACTOR IS REQUIRED TO REVIEW THE REPORT AND INCLUDE ALL REQUIREMENTS AND RECOMMENDATIONS IN HIS WORK WHETHER SHOWN ON THE CONTRACT DRAWINGS OR NOT.
2. FOOTINGS ARE DESIGNED BASED ON THE FOLLOWING INFORMATION:
   ALLOWABLE BEARING = 3000 PSF
   FOOTINGS SHALL BEAR ON COMPACTED FILL OR NATIVE SOILS TESTED.
3. CONTRACTOR TO PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM EITHER SURFACE WATER, GROUND WATER, OR SEEPAGE, IF REQUIRED.
4. CONTRACTOR SHALL PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING, AND SHORING REQUIRED AND SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS, AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL SAFETY ORDINANCES.
5. EXCAVATION FOR FOOTINGS SHALL BE APPROVED BY THE INSPECTOR OR SOILS ENGINEER PRIOR TO PLACING THE CONCRETE AND REINFORCING. CONTRACTOR TO NOTIFY THE INSPECTOR WHEN INSPECTION OF EXCAVATION IS READY. INSPECTOR TO SUBMIT A LETTER OF COMPLIANCE.
6. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. DO NOT PLACE BACKFILL BEHIND RETAINING WALLS BEFORE CONCRETE OR GROUT HAS ATTAINED FULL DESIGN STRENGTH.
7. FOUNDATIONS SHALL BE PLACED AND ESTIMATED ACCORDING TO DEPTHS SHOWN ON DRAWINGS. SHOULD SOIL ENCOUNTERED AT THESE DEPTHS NOT BE APPROVED BY THE INSPECTOR OR SOILS ENGINEER, FOUNDATION ELEVATIONS WILL BE ALTERED BY CHANGE ORDER.
8. FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS IN ACCORDANCE WITH THE SOILS REPORT AND APPROVED BY THE INSPECTOR. ALL FILLS USED TO SUPPORT FOUNDATIONS SHALL BE INSPECTED BY THE SOILS ENGINEER REPRESENTATIVE PER CODE SECTION 1704.
9. ALL ABANDONED FOOTINGS, UTILITIES, ETC. WHICH INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED. NEW FOOTINGS SHALL EXTEND INTO UNDISTURBED SOILS.
10. SLABS ON GRADE SHALL BE SUPPORTED ON NATURAL GRADE OR COMPACTED FILL AS PER THE RECOMMENDATIONS OF THE SOILS REPORT. PROOF ROLL PRIOR TO PLACING BASE. REPLACE SOFT AREAS WITH COMPACTED FILL.
11. PLACE FILLS TO BE COMPACTED IN MAX 8" LOOSE LIFTS. COMPACT TO MINIMUM 98% OF MAXIMUM DENSITY AT +/-2% OPTIMUM MOISTURE WHEN TESTED IN ACCORDANCE WITH ASTM D-698.
12. WHEN REQUIRED OR DIRECTED BY THE GEOTECHNICAL ENGINEER COMPACT ALL AREAS WITH IN 5'-0" OUTSIDE OF BUILDING FOOTPRINT TO DENSITY SPECIFIED IN GEOTECHNICAL REPORT
13. COMPACT UNDERSLAB GRANULAR FILL TO 98% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-698.
14. DO NOT BACKFILL AGAINST BASEMENT WALLS UNTIL FLOOR STRUCTURE IS COMPLETE OR WALL IS ADEQUATELY BRACED. USE STRUCTURAL PIPE BRACING. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF BRACING.

CONCRETE

1. ALL CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19 OF THE CODE AND WITH THE PROVISIONS OF ACI 318, LATEST EDITION.
2. REINFORCED CONCRETE IS DESIGNED BY THE "ULTIMATE STRENGTH DESIGN METHOD".
3. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY AND APPROVED BY THE STRUCTURAL ENGINEER. MIX DESIGN METHODS (TEST HISTORY OR TRIAL BATCH METHOD) PER ACI SECTION 5.3 SHALL BE USED TO PROPORTION CONCRETE. SUBMIT MIX DESIGN METHOD DATA. IF 3-POINT CURVES ARE USED, GC TO CLEARLY IDENTIFY WHICH POINT ON CURVE IS USED AND MIX DESIGN ON 3-POINT CURVE.
4. SCHEDULE OF STRUCTURAL CONCRETE 28-DAY STRENGTH AND TYPES (SLUMP LISTED IS MAX):

LOCATION IN STRUCTURE	STRENGTH	W/C RATIO	DENSITY	SLUMP
ALL CONCRETE FOOTINGS	3000 PSI	.55	145 PCF	4"
ALL CONCRETE SUBSTRUCTURE WALLS	3000 PSI	.50	145 PCF	4"
SLAB-ON-GRADE (INT & EXT)	4000 PSI	.45	145 PCF	2"-4"

   CONTRACTOR AT HIS OPTION MAY INCREASE SLUMP WITH USE OF HRWR ADMIXTURE. LIMIT SLUMP INCREASE TO 2" GREATER THAN THAT ALLOWED WITHOUT HRWRA.
5. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE I OR II.
6. AGGREGATE FOR CONCRETE SHALL CONFORM TO ALL REQUIREMENTS AND TESTS OF ASTM C-33 AND PROJECT SPECIFICATIONS.
7. CONCRETE MIXING OPERATION, ETC. SHALL CONFORM TO ASTM C-94.
8. PLACEMENT OF CONCRETE SHALL CONFORM TO ACI CODE SECTION 5 AND PROJECT SPECIFICATIONS. CLEAN AND ROUGHEN TO 1/4" AMPLITUDE ALL CONCRETE SURFACES AGAINST WHICH NEW CONCRETE IS TO BE PLACED.
9. ALL REINFORCING BARS, ANCHOR BOLTS, AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
10. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING CONCRETE IS NOT PERMITTED. NOTIFY THE ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS. SEE THESE DRAWINGS FOR ADDITIONAL RESTRICTIONS ON THE PLACEMENT OF OPENINGS IN SLABS AND WALLS.
11. PIPES LARGER THAN 1-1/2" DIAMETER SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED BY ENGINEER. PIPES SHALL NOT DISPLACE OR INTERRUPT REINFORCING BARS. SPACE EMBEDDED PIPES AT A MINIMUM OF 3 DIAMETERS.
12. CUT JOINTS FOR SLABS ON GRADE A MAXIMUM OF 12'-0" O.C., UNLESS NOTED OTHERWISE ON THE CONTRACT DOCUMENTS. CUT JOINTS WITHIN 8 (EIGHT) HOURS AFTER PLACING CONCRETE.
13. CONCRETE EXPOSED TO THE WEATHER, FREEZE-THAW, DEICING CHEMICALS, AND OR PARKED VEHICLES SHALL CONTAIN 6% (±2%) ENTRAINED AIR EITHER BY USING TYPE "A" PORTLAND CEMENTS OR ADMIXTURES CONFORMING TO ASTM C-260.
14. CURE CONCRETE BY WET CURING OR LIQUID SPRAY CONFORMING TO ASTM C-309. CONTRACTOR TO VERIFY CURING AGENT IS COMPATIBLE WITH ANY FLOOR ADHESIVES SPECIFIED WITHIN THE CONTRACT DOCUMENTS.
15. ALL ADMIXTURES SHALL BE COMPATIBLE WITH ONE ANOTHER. PREFERABLY ONE MANUFACTURER SHALL BE USED FOR ALL ADMIXTURES.
16. CALCIUM CHLORIDE OR CHLORIDE CONTAINING ADMIXTURES WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES.
17. FLYASH CONTENT, IF APPROVED IN ADVANCE BY ENGINEER, SHALL BE LIMITED TO 20% OF TOTAL CEMENTITIOUS MATERIAL OR 25% OF PORTLAND CEMENT CONTENT. IF FLYASH IS USED, CONTRACTOR SHALL TAKE ADDITIONAL CONCRETE TEST CYLINDERS FOR 56 DAY BREAKS.
18. DURING HOT WEATHER PLACE CONCRETE IN ACCORDANCE WITH ACI 305. DURING COLD WEATHER PLACE CONCRETE IN ACCORDANCE WITH ACI 306.
19. EXPOSED FINISHED CONCRETE SURFACES, EXCEPT TOP OF SLABS SHALL MEET THE REQUIREMENTS OF ACI-303.1, "STD SPEC FOR C.I.P. ARCHITECTURAL CONCRETE". CONTRACTOR SHALL MAINTAIN COPY ON JOBSITE. REPAIR ALL AIRHOLES PER ACI-303.1 SUBJECT TO APPROVAL OF ENGINEER OF RECORD. IF SURFACE DEFECTS ARE EXCESSIVE OR AFFECT THE INTEGRITY OF THE WALL THE CONTRACTOR SHALL REPLACE THE DEFECTIVE SECTIONS AS DIRECTED BY THE ENGINEER OF RECORD.

REINFORCING STEEL

1. REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 12 OF THE ACI CODE, ASTM A615, GRADE 60 U.N.O.
2. BARS SHALL BE CLEAN OF RUST, GREASE, OR OTHER MATERIALS LIKELY TO IMPAIR BOND. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 (MATS ONLY). PROVIDE LAPS PER THE ACI CODE SECTION 12.8, 9" MINIMUM. WWF SHALL BE SUPPORTED ON APPROVED CHAIRS.
4. REINFORCING BAR SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS. MINIMUM SPLICE LENGTH FOR REINFORCING STEEL BARS IN MASONRY SHALL BE 40 BAR DIAMETERS, 24" MINIMUM. MINIMUM SPLICE LENGTH FOR REINFORCING STEEL BARS IN CONCRETE SHALL BE PER THE ACI CODE SECTION 12. LAP ALL HORIZONTAL BARS AT CORNERS AND INTERSECTIONS. DOWEL ALL VERTICAL REBAR TO FOUNDATIONS. ALL SPLICE LOCATIONS ARE SUBJECT TO APPROVAL BY STRUCTURAL ENGINEER. PROVIDE REQUIRED SHOP DRAWINGS AND FABRICATE AFTER ENGINEER'S APPROVAL.
5. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE.
6. BARS IN SLABS SHALL BE SECURELY SUPPORTED ON WELL-CURED CONCRETE BLOCKS (MAX 2" HIGH) OR METAL CHAIRS, PRIOR TO PLACING CONCRETE.
7. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE "A.C.I. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", LATEST EDITION.
8. REBAR SPACINGS GIVEN ARE MAXIMUM ON CENTER WHETHER STATED AS "O.C." OR NOT. ALL REBAR IS CONTINUOUS WHETHER STATED AS "CONT." OR NOT.
9. WHERE REINFORCING IS SHOWN CONTINUOUS THROUGH CONSTRUCTION JOINTS, MECHANICAL BAR SPLICE DEVICES MAY BE USED. SIZES AND TYPES SHALL BE SELECTED TO DEVELOP THE FULL TENSION STRENGTH OF THE BAR PER ICBO RESEARCH REPORT. SUBMIT FOR APPROVAL BY STRUCTURAL ENGINEER.
10. CONTINUOUS INSPECTION OF CONCRETE SHALL INCLUDE INSPECTION DURING INSTALLATION OF REINFORCING STEEL. INSPECTION SHALL BE SCHEDULED SO THAT PLACEMENT OF REINFORCING STEEL, CONDUIT, SLEEVES, AND EMBEDDED ITEMS MAY BE CORRECTED PRIOR TO PLACEMENT OF OVERLYING GRIDS OF REINFORCING STEEL.
11. CONCRETE PROTECTION FOR REINFORCEMENT
    CAST-IN-PLACE CONCRETE (NON-PRESTRESSED) THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT UNLESS NOTED OTHERWISE:

	COVER
A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3"
B. CONCRETE EXPOSED TO EARTH OR WEATHER: NO. 6 THROUGH NO. 18 BAR	2"
NO. 5 BAR, W31 OR D31 WIRE & SMALLER	1 1/2"
C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	1 1/2"
D. SLABS, WALLS, JOISTS: NO. 11 BAR AND SMALLER	3/4"

12. MILL TEST REPORTS FOR GRADE 60 BARS SHALL BE SUBMITTED PRIOR TO PLACEMENT OF CONCRETE.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED BY AN APPROVED AND LICENSED FABRICATOR IN ACCORDANCE WITH THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS LATEST EDITION (EXCLUDING SECTION A7).
2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE ASTM DESIGNATION AS INDICATED BELOW (U.N.O.):

ALL WF SHAPES, U.N.O.	ASTM A992 (ASTM A572, GR50)
BASE PLATES, CONNECTION PLATES, ANGLES, CHANNELS, AND MISCELLANEOUS	ASTM A-36
PIPE COLUMNS	A-53, GRADE B
TUBE SECTIONS	A-500, GRADE B
H.S. BOLTS	A-325, S.C. U.N.O.
NON-STRUCTURAL BOLTS	A-307

3. THE STRUCTURAL STEEL FABRICATOR SHALL FURNISH SHOP DRAWINGS TO THE ENGINEER OF ALL STEEL FOR ARCHITECT'S AND STRUCTURAL ENGINEER'S REVIEW AND APPROVAL BEFORE FABRICATION.
4. HOLES IN STEEL SHALL BE 1/16" LARGER DIAMETER THAN NOMINAL SIZE OF BOLT USED, EXCEPT AS NOTED.
5. ALL STRUCTURAL STEEL SURFACES THAT ARE ENCASED IN CONCRETE, MASONRY, OR SPRAY ON FIREPROOFING, OR ARE ENCASED BY BUILDING FINISH, SHALL BE LEFT UNPAINTED.
6. ALL WELDING IS TO BE DONE BY CERTIFIED WELDERS USING E70XX ELECTRODES (U.N.O.). ALL WELDS SHALL BE IN CONFORMITY WITH THE PROJECT SPECIFICATIONS AND THE CODE FOR WELDING IN BUILDING CONSTRUCTION (AWS D1.1 LATEST REVISION) OF THE AMERICAN WELDING SOCIETY. SEE SPECIAL INSPECTION SECTION AND STEEL DETAIL DRAWINGS FOR WELDING INSPECTION REQUIREMENTS.
7. WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WHERE FILLET WELD SYMBOL IS GIVEN WITHOUT INDICATION OF SIZE, USE MINIMUM SIZE WELDS AS SPECIFIED IN AISC MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.
8. PAINT STRUCTURAL STEEL WITH FABRICATOR'S STANDARD LIGHT GRAY RUST INHIBITIVE OXIDE PRIME PAINT UNLESS DIRECTED OTHERWISE BY ENGINEER

ROUGH CARPENTRY

1. DETAIL, FABRICATE, AND ERECT ALL STRUCTURAL LUMBER IN ACCORDANCE WITH NATIONAL DESIGN SPECIFICATION BY NATIONAL FOREST PRODUCTS ASSOCIATION AND TIMBER CONSTRUCTION MANUAL BY BY AMERICAN INSTITUTE OF TIMBER CONSTRUCTION, LATEST EDITION
2. MATERIALS:
   S4S LUMBER (ASLS PS 20)
   SPECIES: DOUGLAS FIR, HEM FIR OR S-P-F OR AS SELECTED BY ARCHITECT
   GRADE: NO. 2 OR BETTER, 19% MC, KILN DRIED
   ENGINEERED 'I' JOISTS
   LVL FLANGES WITH OSB WEB ASTM D 5055 AND APA PRI-400
   ALTERNATE MANUFACTURERS MAY BE SUBSTITUTED FOR SIZES SPECIFIED PROVIDED BOTH MOMENT CAPACITY AND EI VALUES EQUAL OR EXCEED THOSE OF SPECIFIED PRODUCT
   GLUE LAMINATED LUMBER (AITC 103 AND 117):
   Fb = 2400 PSI
   Fv = 200 PSI
   E = 1,700,000 PSI
   ADHESIVE TO BE WATER RESISTANT TYPE
   LAMINATED VENEER LUMBER (LVL): (ASTM D 5456)
   Fb = 2800 PSI
   Fv = 105 PSI
   E = 1,900,000 PSI
   SHEATHING - APA RATED FOR APPLICATION: EXTERIOR GRADE AT ROOFS EXPOSURE 1 FOR WALLS AND FLOORS
   PLYWOOD - APA VOLUNTARY STANDARD PS-1
   ORIENTATED STRAND BOARD - VOLUNTARY STANDARD PS-2
   TREATED LUMBER - TO BE FACTORY PRESSURE APPLIED AS FOLLOWS: EXTERIOR EXPOSURES GROUND CONTACT, AWPA UC3B OR UC4B FIRE RESISTANT: AWPA UCFA FOR INTERIOR AND UCFB FOR EXTERIOR. SEE ARCHITECTURAL DRAWINGS FOR FIRE TREATED LUMBER LOCATIONS.
3. LUMBER SUPPLIER SHALL FURNISH ALL APPROPRIATE CONNECTIONS FOR ATTACHING LUMBER FRAMING AND ANCHORING TO ADJACENT CONSTRUCTION. CONNECTIONS SHALL BE MADE WITH STANDARD DESIGNS, FABRICATED FROM 16 OR 18 GA. SHEET METAL FOR SINGLE OR DOUBLE 2x LUMBER MEMBERS OR 3.7 OR 12 GA. STEEL PLATE FOR MULTIPLE PLY, GLULAM OR LVL MEMBERS, AS AS MANUFACTURED BY CLEVE STL SPEC, U S P, SIMPSON STRONGTIE, OR EQUAL. DETAILS SHALL CONFORM TO AITC STANDARD NO. 104.
4. BOLTS, NAILS, SPIKES, AND OTHER CONNECTORS SHALL BE APPROPRIATE FOR THE USE INTENDED. FASTENERS EXPOSED TO FIRE-TREATED LUMBER, CHEMICAL FUMES, WEATHER AND/OR HIGH HUMIDITY SHALL BE HOT DIPPED GALVANIZED. UNLESS INDICATED OTHERWISE ON DRAWINGS.
5. ALL CONNECTORS, FASTENERS, NAILS, BOLTS AND SPIKES USED FOR PRESSURE TREATED LUMBER CONNECTIONS SHALL BE FABRICATED FROM STAINLESS STEEL, TYPE 304 OR 316.
6. DESIGN, FABRICATE AND ERECT PRE-ENGINEERED WOOD TRUSSES IN ACCORDANCE WITH TRUSS PLATE INSTITUTE "DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES." SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. DRAWINGS ARE TO INCLUDE: DESIGN LOADS, REACTIONS, MEMBER SIZES, STRESSES, PLATE SIZES, DIMENSIONS, AND ERECTION DRAWINGS AS REQUIRED. TRUSS MANUFACTURER TO PROVIDE CERTIFIED DOCUMENTS INDICATING THE MANUFACTURER HAS A MINIMUM OF 5 YEARS EXPERIENCE IN DESIGNING AND PRODUCING TRUSSES FOR NON-RESIDENTIAL CONSTRUCTION. FAILURE TO SUBMIT THIS DOCUMENT WILL BE CAUSE FOR REJECTION OF TRUSS MANUFACTURER AND ANY TRUSS SUBMITTALS.
7. ERECT PRE-ENGINEERED WOOD TRUSSES IN ACCORDANCE WITH TRUSS PLATE INSTITUTE DSB-89 "TEMPORARY BRACING OF METAL PLATE CONNECTED WOOD TRUSSES" INCLUDING GROUND BRACE, LATERAL BRACES AND DIAGONAL 'X' BRACES. IF NOT SHOWN OTHERWISE ON CONSTRUCTION DOCUMENTS, TEMPORARY BRACING IS TO BE LEFT PERMANENTLY IN PLACE.
8. PROVIDE WOOD HEADERS AS PER THE FOLLOWING SCHEDULE IN ALL STUD WALL OPENINGS WHEN NOT SHOWN ON DRAWINGS, OR IN OPENINGS REQUIRED BY THE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.
   FOR OPENINGS FROM 4'-0" TO 6'-0": 2-2x10's
   FOR OPENINGS FROM 6'-1" TO 8'-0": 2-2x12's
   FOR OPENINGS FROM 8'-1" TO 10'-0": 2-1 3/4 x 11 7/8 LVL
9. STUD SCHEDULE - USE THE FOLLOWING SCHEDULE, UNLESS NOTED OTHERWISE ON PLANS. PROVIDE ONE ADDITIONAL KING STUD EACH SIDE, FULLY NAILED TO JACK STUDS.

MAX OPENING SIZE	NON-BEARING WALLS	BEARING WALLS
UP TO 4 '	ONE	ONE
4' TO 6'	ONE	2
6' TO 8'	ONE	2
8' TO 10'	2	3
10' TO 12'	2	3
OVER 12'	SEE PLAN	SEE PLAN

10. ADD ONE 2x MEMBER FOR EACH 2" NOMINAL WALL WIDTH.
11. PROVIDE BEARING JACK-STUDS EQUAL TO NUMBER OF BEAM LAMINATIONS PLUS ONE KING-STUD AT ALL BEAM BEARING LOCATIONS. STUDS ARE TO EXTEND DOWN TO SOLID OR BEAM BEARING OR AS NEEDED. BLOCK SOLID AS NEEDED.

MASONRY

1. CONSTRUCT ALL MASONRY WALLS IN ACCORDANCE WITH ACI 530 AND ACI 530.1 UNLESS OTHERWISE SHOWN OR NOTED.
2. MATERIALS:

LOAD BEARING UNITS:	ASTM C-90
CONCRETE BRICK:	ASTM C-55
FACING BRICK:	ASTM C-216, TYPE FBS, GRADE SW
NON LOAD BEARING UNITS:	ASTM C-129
MORTAR (TYPE M, S, N, or O):	ASTM C-270 (PROPORTION METHOD)
GROUT :	ASTM C-476 (2000 PSI, PROPORTION METHOD)
REINFORCING STEEL BARS:	ASTM A-615 GRADE 60

3. MASONRY PRISM STRENGTH (f'm) = 1,800 PSI AT 28 DAYS, UNLESS NOTED
4. MORTAR USAGE FOR ABOVE AND BELOW GRADE WALLS:

REINFORCED MASONRY:	TYPE S
LOAD BEARING (INTERIOR AND EXTERIOR):	TYPE S
NON-LOAD BEARING (EXTERIOR):	TYPE N
NON-LOAD BEARING PARTITIONS (INTERIOR):	TYPE N

5. ACCELERATING ADMIXTURES MAY BE USED IN MORTAR FOR COLD WEATHER CONST, EXCEPT ADMIXTURES SHALL NOT CONTAIN CALCIUM CHLORIDE OR CHLORIDE IONS. EUCLID CHEMICAL "ACCELGARD 80" OR EQUAL WILL BE ACCEPTABLE.
6. CONCRETE MASONRY UNITS AND MORTAR ARE TO CONTAIN AN INTEGRAL WATER REPELLENT ADMIXTURE, GRACE "DRY-BLOCK", DEGUSSA 'RHEOPEL WR" OR EQUAL. ADD DOSAGES TO BLOCK MIX AND MORTAR MIX PER MANUFACTURER'S WRITTEN RECOMMENDATIONS
7. IN MASONRY WALLS, NO CHASES, RISERS, CONDUITS OR TOOTHING OF MASONRY SHALL OCCUR WITHIN 17" OF CENTERLINE OF BEAM BEARING OR CONCENTRATED LOADS.
8. DO NOT INSTALL ANY BEAM, JOIST, BEARING PL OR CONT ANGLE ACROSS CONTROL OR EXPANSION JOINT. SHIFT BEAM, JOIST OR BRG PL TO ONE SIDE, ADJUST SPACING AS NEEDED. CUT CONT ANGLES AT JOINTS. GC TO COORD JOINT LOCATIONS WITH BEAM/JOIST BEARING
9. USE TWO COURSES (16") OF SOLID OR GROUTED SOLID MASONRY BELOW EACH BEAM BEARING MINIMUM UNLESS NOTED OTHERWISE..
10. PROVIDE HORIZONTAL JOINT REINFORCING IN ALL MASONRY WALLS AT 16" O.C. VERTICALLY. JOINT REINFORCING SHALL BE DUR-O-WAL LADDER TYPE, 9 GA. GALVANIZED WIRE, OR EQUAL. LAP SPLICES MINIMUM 6"
11. VENEER ANCHORS TO BE TWO PIECE, PINTEL AND EYE RECTANGULAR TYPE OR ADJUSTABLE WITH TRIANGULAR TIES. TIES ARE TO BE MIN 3/16" GALVANIZED WIRE. SPACE TIES AT 16" O.C. VERT AND 24" O.C. HORZ STAGGER ROWS. CORRUGATED TIES WILL NOT BE PERMITTED
12. PROVIDE UNITS APPROPRIATE FOR THE USE, I.E., SASH, BULLNOSE, BOND, ETC..
13. PROVIDE FIRE RATED OR EQUIVALENT MASONRY UNITS AT FIREWALLS, STAIRWELLS AND ELEVATOR SHAFT. CERTIFICATES OF COMPLIANCE SHALL BE FURNISHED UPON REQUEST.
14. DURING CONSTRUCTION, BRACE MASONRY WALLS IN ACCORDANCE WITH "STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION" BY THE COUNCIL FOR MASONRY WALL BRACING. CONTRACTOR IS SOLELY RESPONSIBLE TO MEET THESE REQUIREMENTS.
15. CONSTRUCT MASONRY IN ACCORDANCE WITH ACI 530.1 SECTION 1.8 DURING COLD OR HOT WEATHER. USE OF 100% CHLORIDE FREE ACCELERATING ADMIXTURE IS SUBJECT TO APPROVAL BY ENGINEER. SUBMIT PRODUCT DATA PRIOR TO APPLICATION.

CONNECTION NAILING SCHEDULE

1. JOIST TO SILL OR GIRDER, TOENAIL	3-8d (1)
2. BRIDGING TO JOIST, TOENAIL EACH END	2-8d
3. 1" x 6" (25 mm x 152 mm) SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2-8d
WIDER THAN 1" x 6" (25 mm x 152 mm) SUBFLOOR TO EACH JOIST, FACE NAIL	3-8d
2" (51 mm) SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2-16d
4. SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL	16d @ 16" (406 mm) O.C.
5. SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANELS	3-16d PER 16" (406 mm) O.C.
6. TOP PLATE TO STUD, END NAIL	2-16d
7. STUD TO SOLE PLATE	4-8d TOENAIL, OR 2-16d END NAIL
8. DOUBLED STUDS, FACE NAIL	16d @ 24" (610 mm) O.C.
9. DOUBLED TOP PLATES, TYPICAL FACE NAIL	16d @ 16" (406 mm) O.C.
10. DOUBLE TOP PLATES, LAP SPLICE	8-16d
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3-8d
12. RIM JOIST TO TOP PLATE, TOENAIL	8d @ 6" (152 mm) O.C.
13. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2-16d
14. CONTINUOUS HEADER, TWO PIECES ALONG EACH EDGE.	16d AT 16" (406 mm) O.C.
15. CEILING JOISTS TO PLATE, TOENAIL	3-8d
16. CONTINUOUS HEADER TO STUD, TOENAIL	4-8d
17. CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16d
18. CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16d
19. RAFTER TO PLATE, TOENAIL	3-8d
20. 1" (25 mm) BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8d
21. 1" x 8" (25 mm x 203 mm) SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2-8d
22. WIDER THAN 1" x 8" (25 mm x 203 mm) SHEATHING TO EACH BEARING, FACE NAIL	3-8d
21. BUILT-UP CORNER STUDS	16d @ 24" (610 mm)O.C.
22. BUILT-UP GIRDER AND BEAMS	20d @ 32" (813 mm)O.C.
AT TOP AND BOTTOM AND STAGGERED,	2-20d AT ENDS AND AT EA SPLICE.
23. 2" (51 mm) PLANKS	2-16d AT EACH BEARING
24. WOOD STRUCTURAL PANELS AND PARTICLE BOARD: (2) SUBROOF, ROOF AND WALL SHEATHING, (TO FRAMING):	
1/2" AND LESS	6d (3)
19/32" - 3/4"	8d (4) OR 5d (5)
7/8" - 1"	8d (3)
1 1/8" - 1 1/4"	10d (4) OR 8d (5)
COMBINATION SUBFLOOR-UNDERLAYMENT (TO FRAMING):	
3/4" AND LESS	6d (5)
7/8" - 1"	8d (5)
1 1/8" - 1 1/4"	10d (4) OR 8d (5)
25. PANEL SIDING (TO FRAMING):	
1/2" (13 mm) OR LESS	6d (6)
5/8" (16 mm)	8d (6)
26. FIBERBOARD SHEATHING: (7)	
1/2" (13 mm) THICKNESS	6d (4)
25/32" (20 mm) THICKNESS	No. 16 GA (9)
27. INTERIOR PANELING	
1/4" THICKNESS	6d (10)
3/8" THICKNESS	8d (11)

NOTES (AS IDENTIFIED IN PARENTHESES ABOVE)

1. COMMON OR BOX NAILS MAY BE USED EXCEPT WHERE OTHERWISE STATED.
2. NAILS SPACED AT 6 INCHES ON CENTER AT EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS EXCEPT 6 INCHES (152 mm) AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLE BOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2314.3. NAILS FOR WALL SHEATHING MAY BE COMMON, BOX OR CASING.
3. COMMON OR DEFORMED SHANK.
4. COMMON.
5. DEFORMED SHANK.
6. CORROSION-RESISTANT SIDING AND CASING NAILS CONFORMING TO THE REQUIREMENTS OF SECTION 2325.1.
7. FASTENERS SPACED 3 INCHES (76 mm) ON CENTER AT EXTERIOR EDGES AND 6 INCHES (152 mm) ON CENTER AT INTERMEDIATE SUPPORTS.
8. CORROSION-RESISTANT ROOFING NAILS WITH 7/16"-DIAMETER-HEAD AND 1-1/2-INCH LENGTH FOR 1/2-INCH SHEATHING AND 1 3/4-INCH. FOR 25/32-INCH SHEATHING CONFORMING TO THE REQUIREMENTS OF SECTION 2325.1.
9. STAPLES OF ANY TYPE MAY NOT BE USED UNDER ANY CIRCUMSTANCES.
10. PANEL SUPPORTS AT 16 INCHES IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED]. CASING OR FINISH NAILS SPACED 6 INCHES ON PANEL EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS.
11. PANEL SUPPORTS AT 24 INCHES CASING OR FINISH NAILS SPACED 6 INCHES ON PANEL EDGES, 12 INCHES (305 mm) AT INTERMEDIATE EDGES.

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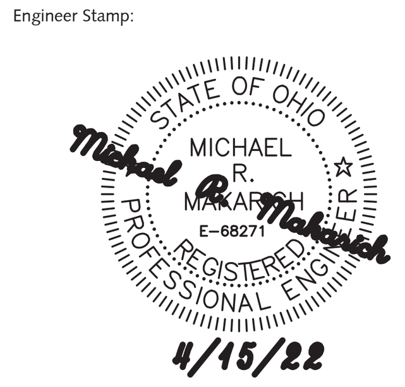
Engineer Stamp:



Weathersfield Township
Community Center
Corner of Main Street and Stewart Street
Weathersfield, Ohio

☒	Design	04/30/2021
☒	Approval	06/02/2021
☐	Permit	
☐	Bid	
☐	Construction	

Revisions:

No.	Date/Description
	7/28/2021 PERMIT
	4/15/2022 ADJUDICATION

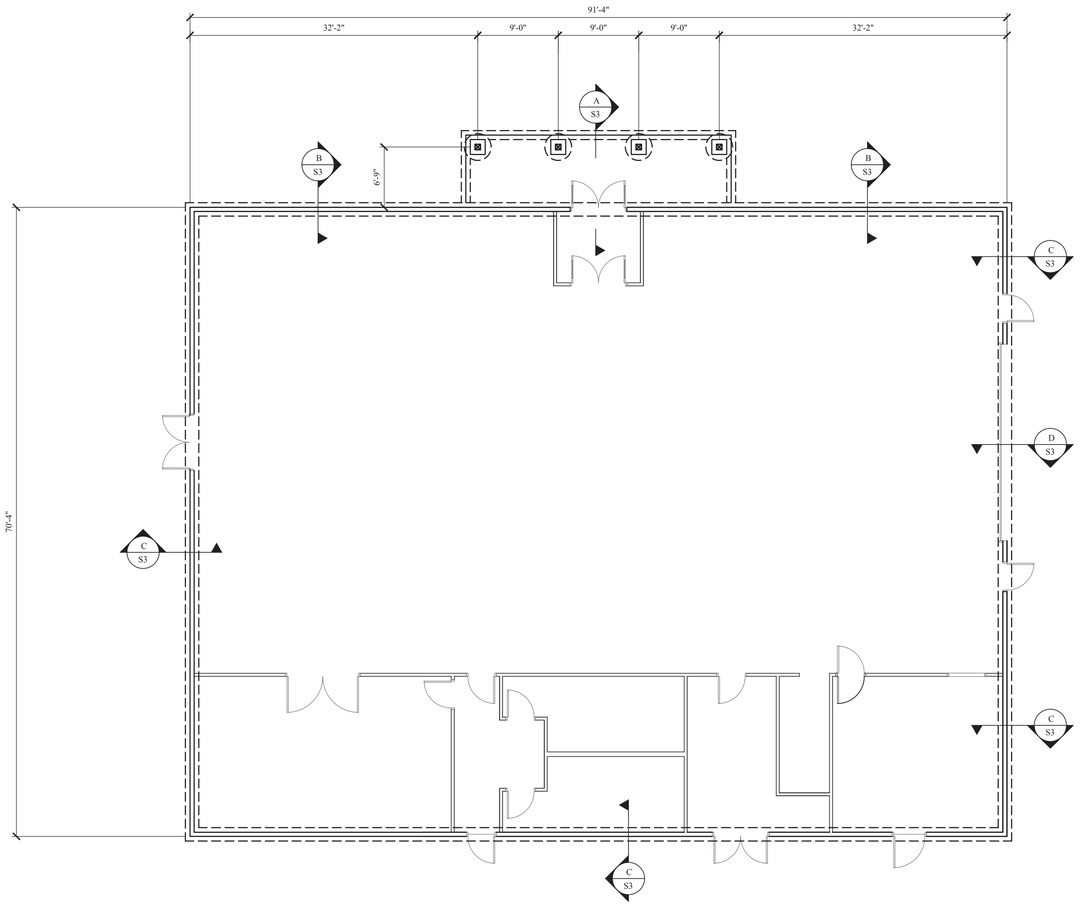
Project No.	21109
Drawn By:	FMC/PWB
Checked By:	FMC

Sheet Title:

GENERAL NOTES

Sheet No:

S0



INTERIOR SLAB ON GRADE CONSTRUCTION
6"-4000 PSI CONCRETE USING
PORTLAND CEMENT, FLYASH AND A
HIGH WATER REDUCING ADMIXTURE W/
#4 @ 12 E.W.
10 MIL VAPOR BARRIER ON
12" COMPACTED ODOT 304
PROOFROLLED SUBGRADE PER GEOTECH

FOOTING TYPES

MARK	LENGTH	WIDTH	DEPTH	REINF.
WF1	CONT.	1'-6"	1'-4"	(2) #5 BOT. CONT.

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

NOTES:
- T/FTG ELEVATIONS ARE REFERENECED FROM TOP OF FIN FLR ELEV 0'-0" (ACTUAL XXX')
- FROST SLAB SIZE & LOCATION COORD. W/ARCH
- G.C. TO PREPARE SITE PER GEOTECH REPORT. EXTEND 1.5M BACKFILL TO ADEQUATE BEARING PER GEOTECH ENGINEER.
- SEE ARCHITECTURAL DRAWINGS FOR EXTENT AND FINISH OF SLAB ON GRADE AND ANY FLOOR DEPRESSIONS.
- SEE SHEET S-0 FOR GENERAL NOTES
- SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN ON PLAN
- DIMENSIONS ARE TO FACE OF CMU AT FLR LINE

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Architect Stamp:

Engineer Stamp:

STATE OF OHIO
MICHAEL R MAKARICH
E-68271
REGISTERED PROFESSIONAL ENGINEER
4/15/22

Weathersfield Township
Community Center

Corner of Main Street and Stewart Street
Weatherfield, Ohio

☒ Design	04/30/2021
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Checked By:	FMC

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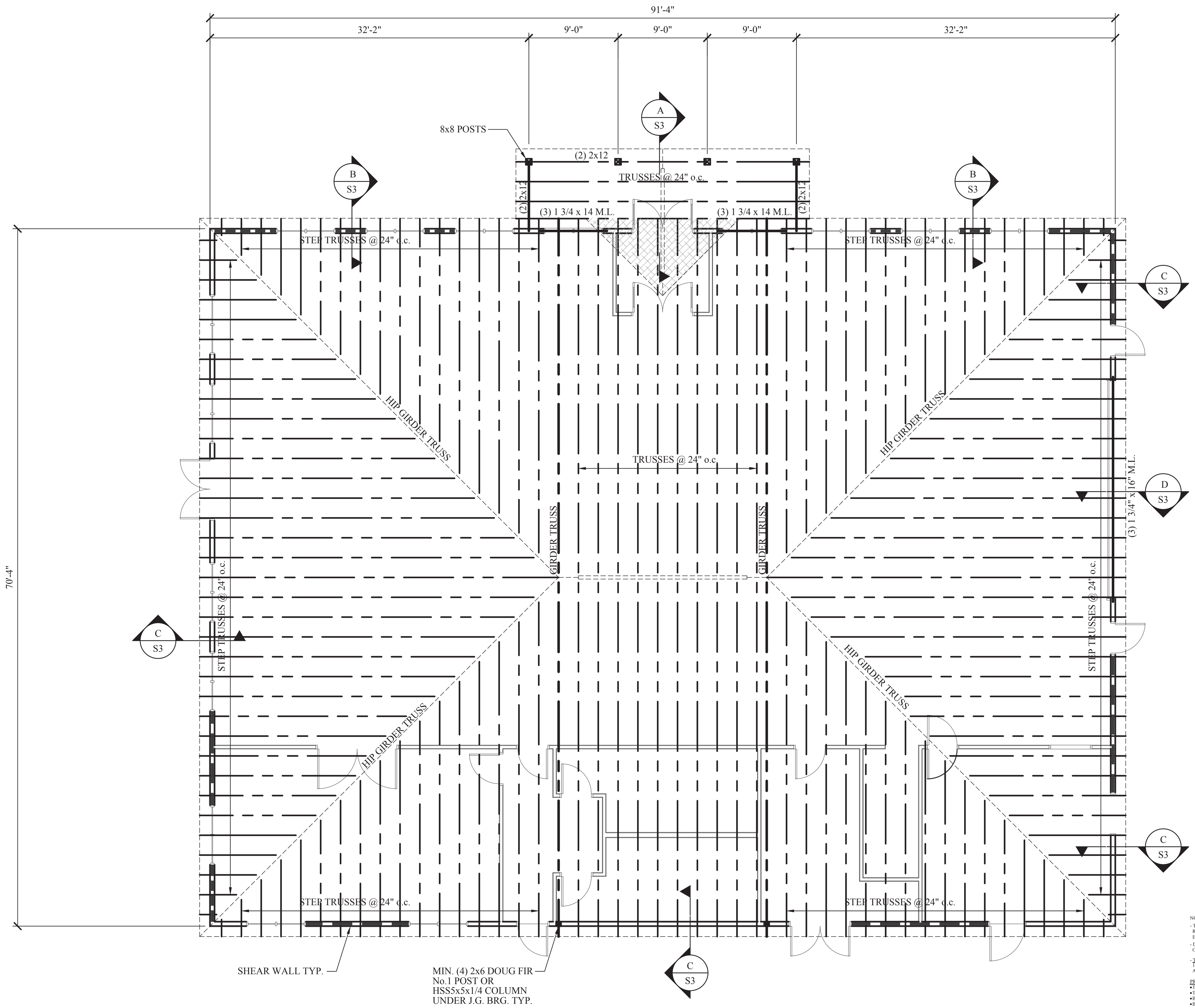
FOUNDATION PLAN

Sheet No:

S1



NOTES:

- T/STL. & TRUSS BRG. ELEVATIONS ARE REFERENCED FROM TOP OF FIN. FLR. ELEV. +0'-0"
- DIMENSIONS (U.N.O.) ARE TO THE FACE OF THE MASONRY AT THE FLOOR LINE
- TYPICAL WOOD ROOF SHEATHING
  19/32" (5/8" NOMINAL) FRT EXTERIOR GRADE APA RATED SHEATHING

PRE-ENGINEERED TRUSS DESIGN LOADS:
- TCLL = 20 PSF (U.N.O.)
- TCDL = 10 PSF (U.N.O.)
- BCDL = 10 PSF (U.N.O.)
- BCLL = 10 PSF (U.N.O.)

- NET UP LIFT = 10 PSF MIN.
- DEAD LOAD DOES NOT ACCOUNT FOR TRUSS WEIGHT

SEE SCHEDULE ON S-0 FOR HEADERS NOT SHOWN

ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"

NORTH

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4/15/22

Weathersfield Township Community Center
Corner of Main Street and Stewart Street
Weathersfield, Ohio

- ☒ Design 04/30/2021
- ☒ Approval 06/02/2021
- ☐ Permit
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Project No.	21109
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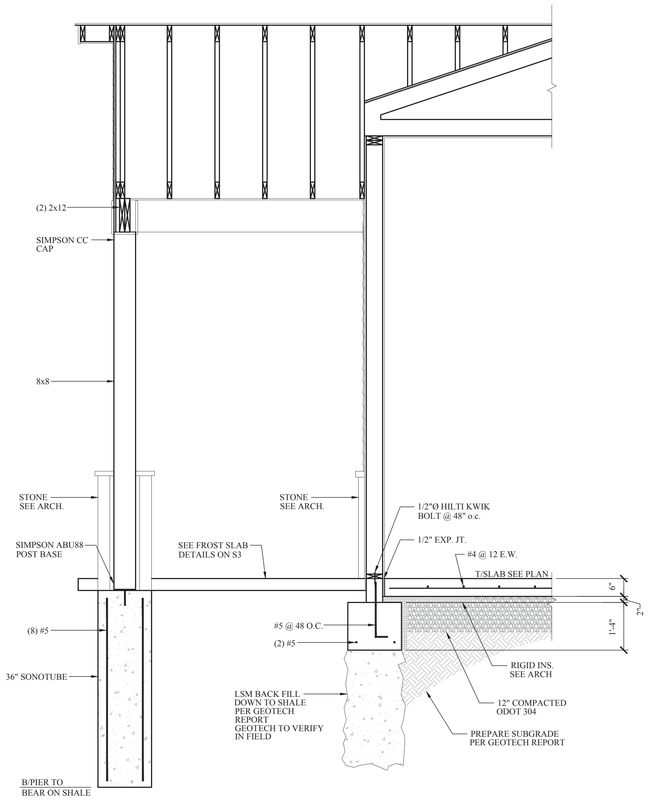
Sheet Title:

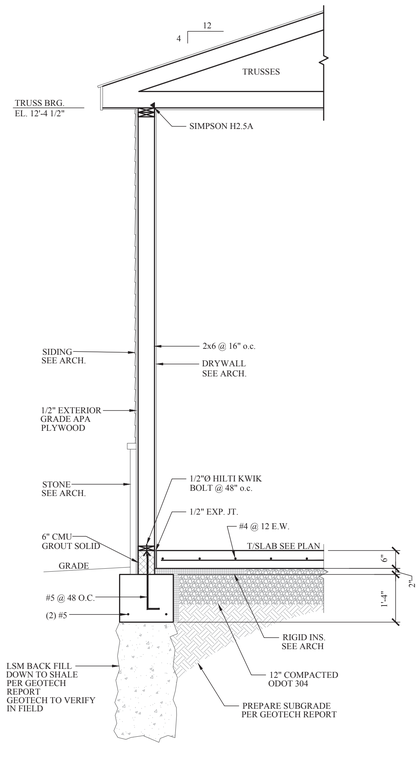
ROOF FRAMING PLAN

Sheet No:

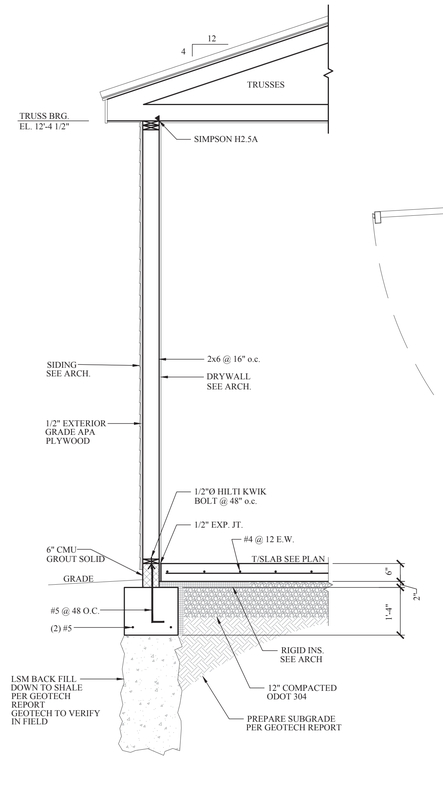
S2



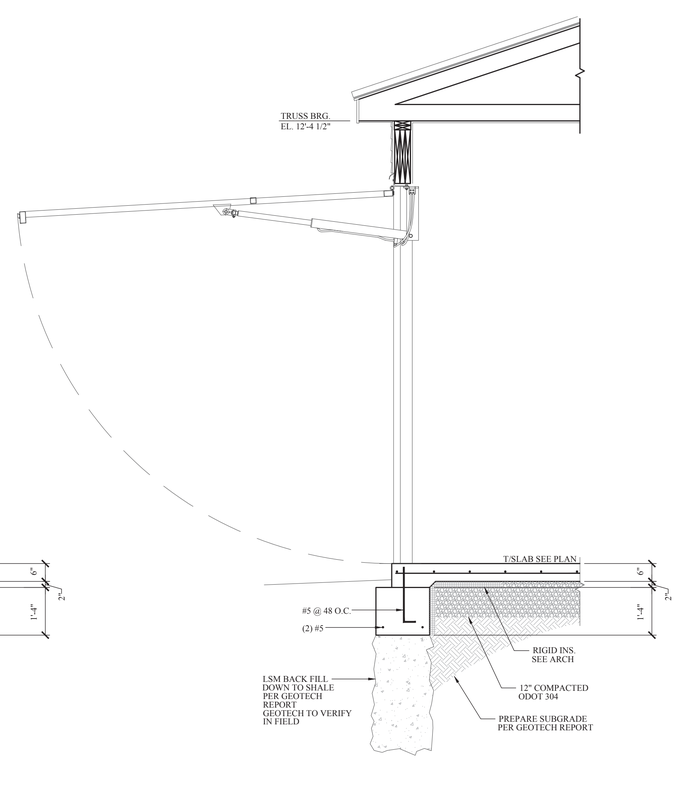
SECTION A
SCALE: 1/2" = 1'-0"
S1, S2



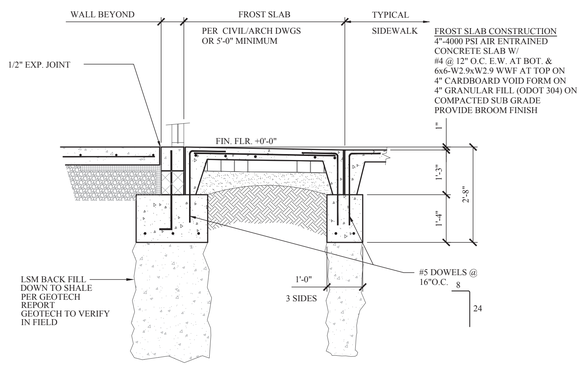
SECTION B
SCALE: 1/2" = 1'-0"
S1, S2



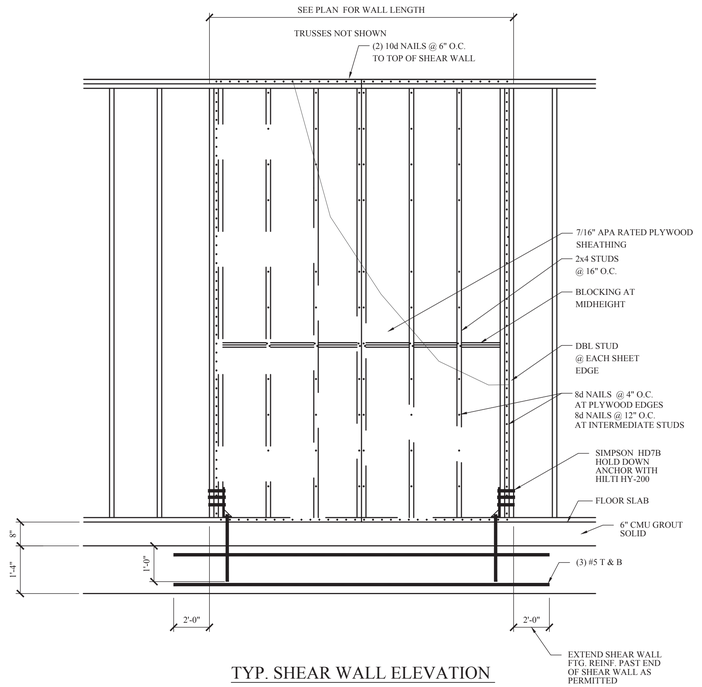
SECTION C
SCALE: 1/2" = 1'-0"
S1, S2



SECTION D
SCALE: 1/2" = 1'-0"
S1, S2



TYP. FROST SLAB
SCALE: 1/2" = 1'-0"



TYP. SHEAR WALL ELEVATION

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Architect Stamp:

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Weathersfield Township Community Center

Corner of Main Street and Stewart Street
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Drawn By:	FMC/PWB
Checked By:	FMC

Sheet Title:

SECTIONS & DETAILS

Sheet No:

S3

Intertek-PSI
1280 Trumbull Avenue
Girard, Ohio 44420

(330)759.0288
intertek.com/building

May 6, 2021

FMC Architects
7675 Harley Hills Drive
North Royalton, OH 44133

Attn: Mr. Frank M. Castrovillari, NCARB ICC

Re: Geotechnical Engineering Exploration Report
Proposed Building Structure
Weathersfield Township Community Center
SWC of S Main Street and Stewart Street
Mineral Ridge, Ohio
PSI Project Number 01393478

Dear Mr. Castrovillari:

Thank you for choosing Professional Service Industries, Inc. (PSI) as your consultant for the proposed new Community Center for Weathersfield Township. Per your authorization, PSI has completed a geotechnical engineering exploration for the proposed new Community Center project located at the southwest corner of S. Main Street and Stewart Street, in Mineral Ridge, Trumbull County, Ohio. The results of the exploration are discussed in the accompanying revised report.

If you have any questions pertaining to this report, please contact our office at (330)759.0288. PSI would be pleased to continue providing geotechnical services throughout the implementation of the project, and we look forward to working with you and your organization on this and future projects.

Respectfully submitted,
PROFESSIONAL SERVICE INDUSTRIES, Inc.

Scott Hynes
Branch Manager

A. Veeramani, P.E.
Director/Principal Consultant

Geotechnical Engineering Exploration Report
For the

Proposed Community Center
Weathersfield Township
SWC of S. Main St. & Stewart St.
Mineral Ridge, Ohio

A. Veeramani, P.E.
Director/Principal Consultant

Prepared for

FMC Architects
7675 Harley Hills Drive
North Royalton, Ohio 44133

Scott Hynes
Branch Manager

Prepared by

Professional Service Industries, Inc.
1280 Trumbull Ave.
Girard, OH 44420

May 26, 2021
PSI Project 01393478

TABLE OF CONTENTS

FIGURES

LIST OF APPENDICES

1 PROJECT INFORMATION

1.1 PROJECT AUTHORIZATION

The following Table summarizes (in chronological order) the Project Authorization history for the services performed and represented in this report by Professional Service Industries, Inc. (PSI):

PROJECT TITLE: PROPOSED WEATHERSFIELD TOWNSHIP COMMUNITY CENTER		
Document / Reference No.	**Date**	**Requested/Provided By**
PSI Proposal No. 0139-337715R1	04/08/2021	Mr. Scott Hynes with PSI
Proposal Authorization Form	04/30/2021	Mr. Frank Castrovillari with FMC Architects

1.2 PROJECT DESCRIPTION

Based on the information provided by Mr. Frank Castrovillari with FMC Architects, PSI understands the project will consist of development of a new Community Center building structure for Weathersfield Township. Based on the Preliminary Site Plan and other information provided to PSI, the proposed community center will be a wood-framed structure and will encompass a plan area of approximately 9,450 square feet in plan area, and measure 70-feet by 136-feet in plan dimension. The building will measure one-story in height and will be constructed with a concrete slab-on-grade. Prior to PSI's arrival onsite, crushed concrete aggregate has been placed over the proposed building pad area. The table below lists materials and information provided for this project:

DESCRIPTION OF MATERIAL	PROVIDER/SOURCE	DATE
Preliminary Site Plans	FMC Architects	Not Dated

The following Table lists the structural loads and site features that are required for or are the design basis for the conclusions of this report:

STRUCTURAL LOAD/PROPERTY	REQUIREMENT/REPORT BASIS		
BUILDING		**R***	**B***
Maximum Column Loads	25 kips	☐	☒
Maximum Wall Loads	3 klf	☐	☒
Finish Floor type	Concrete slab on-grade	☒	☐
Maximum Floor Loads and size	100 psf	☐	☒
Settlement Tolerances	1" total / ¾ "differential	☐	☒
GRADING			
Max. estimated grade variations at site, 2 feet within the construction limits (997 to 998 MSL) (Proposed Finished Floor Elevation 998.5 MSL)	Maximum 1 feet of cut/fill within the building footprint	☒	☐
Utility Depths	Up to 4 feet	☐	☒

*"R" = Requirement indicates specific design information was supplied.
"B" = Report Basis indicates specific design information was not supplied; therefore, this report is based on this parameter.

The geotechnical recommendations presented in this report are based on the available project information, the proposed location and orientation of the building on the site, and the subsurface materials described in this report. If any of the information noted above is incorrect, please inform PSI in writing so that we may amend the recommendations presented in this report if necessary. PSI will not be responsible for the implementation of its recommendations when it is not notified of changes in the project.

1.3 PURPOSE AND SCOPE OF SERVICES

The purpose of this exploration was to explore the subsurface conditions at the site and to prepare recommendations for foundation systems and site preparation for the proposed construction. PSI's contracted scope of services included drilling six (6) soil test borings at the site to depths ranging from 3'-7" to 14'-5" below existing surface grades, select laboratory testing, and preparation of this geotechnical engineering report. This report briefly outlines the testing procedures, presents available project information, describes the site and subsurface conditions, and presents recommendations regarding the following:

- Review of geologic setting
- Grading procedures for site development
- Foundation types, depths, allowable bearing capacities, and estimated settlement
- Seismic coefficients for use in seismic design
- Floor slab recommendations and subgrade modulus
- Comments regarding factors that could impact construction and performance of the proposed construction

The scope of services did not include an environmental assessment for determining the presence or absence of wetlands, or hazardous or toxic materials in the soil, bedrock, surface water, groundwater, or air on, below, or around this site. Any statements in this report or on the boring logs regarding odors, colors, and unusual or suspicious items or conditions are strictly for informational purposes. PSI's geotechnical scope also did not include any service to investigate or detect the presence of moisture, mold or other biological contaminants in or around any structure, or any service that was designed or intended to prevent or lower the risk of the occurrence or the amplification of the same. Client should be aware that mold is ubiquitous to the environment with mold amplification occurring when building materials are impacted by moisture. Client should be aware that site conditions are outside of PSI's control, and that mold amplification will likely occur, or continue to occur, in the presence of moisture. As such, PSI cannot and shall not be held responsible for the occurrence or reoccurrence of mold amplification.

2 FIELD TESTING AND MEASUREMENTS

2.1 FIELD DRILLING

The soil test borings were advanced utilizing 3¼-inch inside diameter, hollow stem auger drilling methods. During the test boring sampling procedure, standard penetration tests were performed at regular intervals to obtain the standard penetration value of the soil. The standard penetration value (N) is defined as the number of blows ("blow counts") of a 140-pound hammer free falling 30 inches, required to advance the split-spoon sampler a distance of 1 foot into the soil at each sampling increment. The sampler is lowered to the bottom of the drill hole and the number of blows recorded for each of 3 successive increments of 6-inch penetration. The "N" value is obtained by adding the second and third incremental blow count results. The results of the standard penetration test indicate the relative density and comparative consistency of the soils, and thereby provide a basis for estimating the relative strength and compressibility of the soil profile constituents. Select soil samples were later tested in the laboratory to obtain soil material properties for the foundation recommendations. Drilling, sampling, and laboratory testing was accomplished in general accordance with ASTM procedures.

2.2 WATER LEVEL MEASUREMENTS

Water level observations were made during and at completion of drilling activities, and prior to backfilling the boreholes, and are noted on the boring logs presented herewith. Please note that the groundwater levels in open boreholes are often not representative of the actual groundwater level because the boreholes remain open for a relatively short time. To obtain longer-term measurements, it is necessary to install groundwater level observation wells or piezometers. Seasonal variations, temperature and recent rainfall conditions may influence the levels of the groundwater table and volumes of water will depend on the permeability of the soils.

2.3 GROUND SURFACE ELEVATIONS

Based on elevations estimated from the provided topographic information, the surface elevation in the vicinity of the building structure test borings (B-1 thru B-6) were approximately 998 feet above mean sea level. The boring elevations provided in this report are approximate. If required by others, the precise test boring elevations and locations should be determined in the field by an Ohio licensed surveyor.

3 SITE AND SUBSURFACE CONDITIONS

3.1 SITE LOCATION AND DESCRIPTION

The site for the proposed new Weathersfield Township Community Center is located at the southwest corner of S. Main Street and Stewart Street, in Mineral Ridge, Trumbull County, Ohio. The site Latitude and Longitude coordinates are approximately 41.14054°, and -80.76971°, respectively. Prior to drilling operations, a layer of crushed concrete aggregate was placed over the proposed building pad area. The property was formerly the site of Weathersfield Local Schools, which was demolished in 2015. The site bordered by a community park and gazebo to the east, Stewart Street to the north, a commercial property to the west and residential properties to the south. Based on the topographic information provided, the site surface topography slopes downward, generally from downward from east to west, with approximately 2 feet of elevation difference across the entire site area. However, crushed concrete aggregate has been placed and the building pad area has been graded to an approximate elevation of 998 MSL.

3.2 SITE GEOLOGY

Based on the glacial and physiographic geologic maps for Ohio, the natural soils are typically Wisconsinan-age Clay loamy Till, containing silt, sand, and gravel lenses. Beneath the Clay Loamy Till, the areas bedrock consists of Pennsylvanian-age sandstone, shale, siltstone, claystone, limestone, and coal bedrock, and associated colluvium.

Information obtained from the Ohio Department of Natural Resources (ODNR) website (https://gis.ohiodnr.gov/MapViewer/) indicated that extensive underground mining has occurred in the immediate are of the site. However, based on the available ODNR mine maps, no underground mining occurred directly under the proposed site property. ODNR Mine Number TL-006 abuts the site immediately to the east. Mine No. TL-006 was an underground mine, operated by the Osborne Coal Company, and was abandoned in 1889

3.3 SUBSURFACE CONDITIONS

The subsurface conditions at the project site were explored with six (6) soil test borings. Building area Borings B-1 through B-6 were extended to auger refusal conditions, encountered at depths of about 3'-7" to 14'-5" below existing surface grade. The boring locations and depths were determined by PSI and reviewed by the client prior to drilling. PSI personnel staked the borings in the field using a measuring wheel, the preliminary site plan provided, and the existing site features as references. PSI recommends that the surface elevations at the boring locations be determined by an Ohio licensed surveyor prior to construction activities.

SURFACE: At the time of PSI's field activities, crushed concrete aggregate ranging in thickness from about 5 to 12-inches was encountered at test borings B-1 and B-6. The surface course thickness should be expected to vary across the site. **FILL** materials consisting of concrete and brick fragments, poorly graded sand, and sandy silty clay soils were encountered in test boring locations B-1 and B-2 beneath the crushed concrete aggregate, extending to depths of 6 ½ to 7 ½ feet below existing surface grades, respectively.

NATURAL SOILS: Underlying the crushed concrete aggregate, natural soils consisting of Sandy Lean Clay (CL), and Sandy Silty Clay (CL-ML) containing varying abouts of sand and gravel fragments were encountered to boring depths of about 2-feet below existing surface grades in test borings B-3, and B-4. The soils were classified in

general accordance with the Unified Soil Classification System (USCS). The standard penetration N-values generally indicate very stiff consistencies within the cohesive strata.

The area's bottommost formation consisted of soft to moderately hard, brown, highly weathered Sandstone, and soft to moderately hard, brown and gray Sandy Shale formations and was encountered from a depth of as shallow as 5-inches to depths of 7.5 feet below the existing grade.

The following table briefly summarizes the range of results from the field and laboratory testing programs. Refer to the attached boring logs and laboratory data sheets for more specific information:

Soil Strata Type	Approximate Strata Depth, feet	RANGE OF VALUES	
		Standard penetration test "blow counts," N	Natural Insitu Moisture content, %
Crushed Concrete Aggregate Base	6" to 12"	--	--
Fill Materials (B-1 & B-2)	10" to 7.5	3 to SSR*	10 to 18
Natural Cohesive Soils (CL & CL-ML) (B-3 & B-4)	5" to 2	42 to SSR*	16 to 23
Weathered Rock	5" to 7.5	21 to SSR*	1 to 17

*SSR = Split Spoon Refusal (greater than 50 blows for one 6-inch increment)

The above subsurface descriptions are of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs included in the Appendix should be reviewed for specific information at individual boring locations.

These records include soil descriptions, stratifications, penetration resistances, and locations of the samples and laboratory test data. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials and the actual transition may be gradual. Water level information obtained during field operations is also shown on these boring logs. The samples that were not altered by laboratory testing will be retained for 60 days from the date of this report and then will be discarded.

3.4 GROUNDWATER LEVEL MEASUREMENTS

Groundwater was encountered during drilling operations in test boring B-1 at a depth of about 8 feet below surface grades, at completion of drilling operations at boring B-1 water was observed at a depth of 8 feet below surface grade, and again at 2 hours after completion at a depth of about 5 feet below existing surface grades. No groundwater was encountered during or at the completion of drilling operations at test boring locations B-2 thru B-6. Cave-in depths of about 3 to 12 feet were reported for the test borings. Please note that the fill materials observed at this site can discharge significant quantities of groundwater into excavations for foundations and utilities. It should also be noted that the groundwater levels at this site, as well as perched water levels and volumes, will fluctuate significantly based on variations in rainfall, snowmelt, evaporation, surface run-off and other related hydrogeologic factors. The groundwater levels in boreholes are often not representative of the actual groundwater level because the boreholes remained open for a relatively short time. To obtain longer-term measurements, it is

necessary to install groundwater level observation wells or piezometers. The water level measurements presented in this report are the levels that were measured at the time of PSI's field activities.

4 GEOTECHNICAL EVALUATION

4.1 GEOTECHNICAL RECOMMENDATIONS

The following geotechnical-related recommendations have been developed on the basis of the subsurface conditions encountered and PSI's understanding of the proposed development. If any changes in the project criteria occur, a review must be made by PSI to determine if modifications to our recommendations will be required.

4.1.1 GEOTECHNICAL DISCUSSION

Two (2) potentially significant geotechnical-related issues exist at this site which may affect the performance of the foundations for this structure or could adversely impact construction activities.

1. **Shallow bedrock was encountered in all six (6) test boring B-1 thru B-6 at depths as shallow as 5-inches below existing surface grades.** It is anticipated that the building foundations will bear within the area's weathered rock formation. Under no circumstance should the foundation be permitted to bear simultaneously on the area's bedrock and soil formations. If weathered rock is not encountered at design footer elevation, the foundation excavation should be continued to a depth at which the weathered rock is encountered.

2. **Undocumented Fill materials were encountered in test boring locations B-1 and B-2, which consisted of a concrete and brick fragments, poorly graded sand, and sandy silty clay soils extending to depths of about 7.5 feet below existing site grades.** In view of the proposed construction, the encountered FILL materials should be completely removed from beneath the building foundations and replaced with flowable fill or lean concrete bearing directly on the areas rock formation. Please note that borings are widely spaced, and conditions may differ between borings.

   In the floor slab areas, the existing FILL may be left in-place provided the owner accepts the risk of potential excessive differential settlement of unremoved FILL, the exposed FILL does not contain slag, coal, carbonaceous material, or other deleterious materials, and the subgrades do not exhibit yielding under proof roll equipment loads.

   There are inherent risks for conventional footing foundations and grade-supported slabs implemented on sites containing previously placed FILL. Due to the potential variability and potential for deleterious inclusions of human-placed fill, including possible nested debris, cobbles, and/or boulders, settlement predictions for foundations and grade-supported concrete floor slabs supported on undocumented fill carry with it less confidence and therefore more risk. The degree of acceptable risk of excessive total and differential settlement must be evaluated and accepted by the owner. This risk can only be significantly reduced through removal and replacement fill materials.

4.1.2 SITE PREPARATIONS

As previously stated, a layer of crushed concrete aggregate has previously been placed over the entire building pad area. Site preparation activities should include the complete removal of the encountered FILL materials from beneath the building foundations and backfilled with flowable fill or lean concrete. It is imperative to note that the building foundations should not be supported directly on the encountered fill materials. Under no circumstance should the foundation be permitted to bear simultaneously on the area's bedrock and FILL materials. Remnants of previously existing structures, if encountered, should be removed. Backfill associated with demolition should be

placed and compacted in accordance with the recommendations in Section 4.1.3 of this report. At the design finished subgrades in planned cut excavation areas and prior to placement of any new fill, the exposed subgrades should be visually observed by a representative of PSI. Visual observation should be performed by proof rolling using a tandem-axle truck with a minimum gross vehicle weight of at least 20 tons. Loose, soft, wet, deleterious, and/or unstable soils identified during the proof compaction should be over excavated to an acceptable bearing stratum and replaced as determined by the PSI representative.

In general, subgrade areas should be properly drained and free of ponded water surfaces at all times. This may be achieved by either sloping the site topography adjacent to the construction areas to direct the water away from the excavation or trenching and berming to collect the excess run-off. Final excavations to desired subgrades should be accomplished immediately prior to the placement of concrete. The contractor should not place concrete on disturbed subgrades. If the subgrade soils are wet, machine or foot traffic should be reduced or eliminated to lessen disturbance of the subgrade. If the site clearing is performed separate from the proposed building construction, restoration of the site to provide for positive drainage is recommended.

4.1.3 SITE GRADING AND COMPACTION OF FILL

After subgrade observation and preparation have been completed, fill placement required to establish grade may begin. Low-plasticity structural fill materials placed beneath the structural features or slabs should be free of organic or other deleterious materials and have a maximum particle size of less than 3 inches. Low-plasticity soils are defined those having a liquid limit less than 45 and plasticity index less than 20. New fill for building structures and pavement elements must not be placed on unstable or frozen ground. Based on limited laboratory testing, the on-site existing soils are suitable for use as structural fill, but some moisture conditioning may be needed to achieve the required level of compaction.

A representative of PSI should be on-site to observe, test, and document the placement of the fill. If the fill is too dry, water should be uniformly applied and thoroughly mixed into the soil by disking or scarifying. If the fill is too moist, drying should be accomplished by disking and aeration. Close moisture content control will be required to achieve the recommended degree of compaction. If imported fill material is required, PSI recommends the use of imported fill materials meeting the requirements for “Borrow” as specified by the Ohio Department of Transportation (ODOT) 2016 Construction Materials Specifications, Section 203.03 C. Fill should be placed in maximum loose lifts of 8 inches and compacted to at least 98% of the materials’ standard Proctor maximum dry density, and within a range of the optimum moisture content as designated in the table on page 8 of this report, as determined in general accordance with ASTM procedures. Each lift of compacted-engineered fill should be tested and documented by a representative of the geotechnical engineer prior to placement of subsequent lifts. The edges of compacted fill should extend a minimum of 5 feet beyond the building footprint, or a distance equal to the depth of fill beneath the footings, whichever is greater.

In utility trenches and shallow foundation excavations (or other areas where structural fill is required, and large compaction equipment cannot be used) well-graded granular engineered fill should be placed as backfill. PSI recommends the use of material meeting the gradation requirements for No. 57 or No. 67 coarse aggregate as specified by the Ohio Department of Transportation (ODOT) 2016 Construction Materials Specification Section 703.11 (Structure Backfill). Well graded granular fill meeting the ODOT “Borrow” specification per Section 203.03 C of the Standard Specification may also be used. Engineered structural fill must be placed in accordance with the recommendations stated in this section of the report. The fill placed should be tested and documented by a geotechnical technician and directed by a geotechnical engineer to evaluate the placement of fill material. It

should be noted that the geotechnical engineer of record can only certify the testing that is performed, and the work observed by that engineer or staff in direct report to that Engineer. The fill should be evaluated in accordance with the following table:

MATERIAL TESTED	PROCTOR TYPE	MINIMUM % DRY DENSITY	PLACEMENT MOISTURE CONTENT RANGE*1	FREQUENCY OF TESTING *2
Structural Cohesive Fill (Clay)	Standard	98%	-1 to +3 %	1 per 2,500 ft^2 / lift
Structural Granular Fill (Sand)	Standard	98%	-2 to +2 %	1 per 2,500 ft^2 / lift
Random Fill (Non-load bearing)	Standard	90%	-3 to +3 %	1 per 2,500 ft^2 / lift
Utility Trench Backfill	Standard	98%	-1 to +3 %	1 per 150 lineal ft. / lift

*1 Moisture range relative to the soil's optimum moisture content

*2 Minimum 2 per lift.

Tested fill materials that do not achieve either the required dry density or moisture content range shall be recorded, the location noted, and reported to the Contractor and Owner. A re-test of that area should be performed after the Contractor performs remedial measures.

4.1.4 FOUNDATION RECOMMENDATIONS

The proposed construction can be supported on conventional shallow bearing isolated and/or continuous spread footing members bearing on the area's weathered rock formation. Individual spread footings for building columns and continuous footings for bearing walls can be designed for a maximum allowable **rock** bearing pressure of **5,000** pounds per square foot (psf), based on dead load plus design live load.

PSI recommends a minimum dimension of 24 inches for square footings and 18 inches for continuous footings to minimize the possibility of a local bearing capacity failure. Perimeter footings and footings in unheated areas should be located at a minimum depth of 42 inches below the final exterior grade to provide adequate frost protection. If the building is to be constructed during the winter months or if footings will likely be subjected to freezing temperatures after foundation construction, then the footings should be protected from freezing. PSI recommends that interior footings be set at least 18 inches below the finished floor elevation. The foundation excavations should be observed and documented by a representative of PSI prior to steel or concrete placement to assess that the foundation materials are consistent with the materials discussed in this report, and therefore are capable of supporting the design loads.

If over-excavation of the foundations is required to remove soft or unsuitable materials, the excavation should extend outward horizontally from each footing edge for a distance equal to ½ the depth of the over excavation. A representative of PSI should be present on site to verify proper excavation depths. Backfilling and compaction procedures, as described above, should then be implemented to re-establish the design bottom of footing elevation. In lieu of compacted and tested soil backfill, a controlled low strength flowable fill material (CLSM) with a minimum 28-day specified compressive strength of 100 psi could also be used as backfill. After opening, footing excavations should be observed, and concrete placed as quickly as possible to avoid exposure of the footing bottoms to wetting and drying. Surface run-off water should be drained away from the excavations and not be allowed to pond. If

possible, the foundation concrete should be placed during the same day the excavation is made. If footing excavations are left open for more than one day, they should be protected to reduce evaporation or moisture entry.

Based on the assumed structural loads, it is anticipated that total and differential foundation settlements will be less than 1-inch and ½-inch, respectively. However, actual settlements will be dependent upon the depth of the foundations, column spacing, structural loads and other related factors. The structural and architectural design should include provisions for liberally spaced, vertical control joints to minimize the effects of potential settlement.

After opening, footings should be evaluated, and concrete placed immediately to avoid exposure of the footing bottoms to wetting and drying. If it is required that footing excavations be left open for more than one day, they should be protected to reduce evaporation or entry of soil moisture.

4.1.5 EARTHQUAKE AND SEISMIC DESIGN CONSIDERATIONS

The 2015 International Building Code requires a site class for the calculation of earthquake design forces. This class is a function of soil type (i.e., depth of soil and strata types). Based on the depth to rock and the estimated shear strength of the soil at the boring locations, **Site Class "C"** is recommended. The USGS-NEHRP probabilistic ground motion values near Latitude 41.14054° and Longitude -80.76971° are as follows:

Period (seconds)	2% Probability of Event in 50 years * (%g)	Site Coefficients	Max. Spectral Acceleration parameters	Design Spectral Acceleration parameters	
0.2 (S_s)	16.9	F_a = 1.2	S_{ms} = 0.202	S_{Ds}= 0.135	T_0= 0.096
1.0 (S_1)	5.7	F_v = 1.7	S_{m1} = 0.098	S_{D1}= 0.065	T_s= 0.481

The Site Coefficients, F_a and F_v were interpolated from IBC 2015 Tables 1613.3.3(1) and 1613.3.3(2) as a function of the site classifications and the mapped spectral response acceleration at the short (S_s) and 1 second (S_1) periods.

4.1.6 FLOOR SLAB SUBGRADE RECOMMENDATIONS

The floor slab can be grade supported on the naturally soils or properly compacted, low plasticity structural fill. Proof-rolling, as discussed earlier in this report, should be performed to identify soft or unstable soils that should be removed from the floor slab area prior to fill placement and/or floor slab construction. These soils should be replaced with properly compacted structural fill as described earlier in this report. PSI recommends that a minimum 4-inch thick free-draining granular material be placed beneath the floor slab to enhance drainage. The soil surface shall be graded to drain away from the building without low spots that could trap water prior to placing the granular drainage layer. Polyethylene sheeting should be placed to act as a vapor retarder where the floor will be in contact with moisture sensitive equipment or products such as tile, wood, carpet, etc., as directed by the design engineer.

The decision to locate the vapor retarder in direct contact with the slab or beneath the layer of granular fill should be made by the design engineer after considering the moisture sensitivity of subsequent floor finishes, anticipated project conditions, and the potential effects of slab curling and cracking. The floor slabs must have

an adequate number of properly oriented joints to control cracking resulting from differential movement and concrete shrinkage.

For subgrade prepared as recommended and properly compacted fill, a modulus of subgrade reaction, *k* value, of 75 pounds per cubic inch (pci) may be used in the grade slab design based on correlation to values typically resulting from a 12-inch diameter plate load test. However, depending on how the slab load is applied, the value will have to be geometrically modified. The value should be adjusted for larger areas using the following expression for cohesive and cohesionless soil:

Modulus of Subgrade Reaction; $k_s = (\frac{k}{B})$ for cohesive soil and

$$k_s = k\,(\frac{B+1}{2B})^2 \text{ for cohesionless soil}$$

where: k_s = coefficient of vertical subgrade reaction for loaded area,
k = coefficient of vertical subgrade reaction for 1 square foot area, and
B = effective width of area loaded, in feet

The precautions listed below should be followed for construction of slab-on-grade pads. These details will not reduce the amount of movement but are intended to reduce potential damage should some settlement of the supporting subgrade take place. Some increase in moisture content is inevitable as a result of development and associated landscaping. However, extreme moisture content increases can be largely controlled by proper and responsible site drainage, building maintenance, and irrigation practices.

- Cracking of slab-on-grade concrete is normal and should be expected. Cracking can occur not only as a result of heaving or compression of the supporting soil and/or bedrock material, but also as a result of concrete curing stresses. The occurrence of concrete shrinkage crack, and problems associated with concrete curing may be reduced and/or controlled by limiting the slump of the concrete, proper concrete placement, finishing, and curing, and by the placement of crack control joints at frequent intervals, particularly where re-entrant slab corners occur. PSI also recommends that the slab be independent of the foundation walls. Using fiber reinforcement in the concrete can also control shrinkage cracking.
- The American Concrete Institute (ACI) recommends a maximum panel size (in feet) equal to approximately three times the thickness of the slab (in inches) in both directions. For example, joints are recommended at a maximum spacing of 12 feet based on having a 4-inch thick slab.
- Areas supporting slabs should be properly moisture conditioned and compacted. Backfill in all interior and exterior utility line trenches should be properly compacted to reduce the shear stress in the concrete extending over these areas.

Exterior slabs should be isolated from the building, should not be structurally connected to the building or foundation, and should be reinforced to function as independent units. Movement of these slabs should not be transmitted to the building foundation or superstructure.

4.1.7 UTILITIES TRENCHING

Excavation for utility trenches shall be performed in accordance with OSHA regulations as stated in 29 CFR Part 1926. It should be noted that utility trench excavations have the potential to degrade the properties of the adjacent fill materials. Utility trench walls that are allowed to move laterally can lead to reduced bearing capacity and increased settlement of adjacent structural elements and overlying slabs. Backfill for utility trenches is as important as the original subgrade preparation or structural fill placed to support either a foundation or slab. Therefore, it

is imperative that the backfill for utility trenches be placed and compacted to meet the project specifications for the structural fill of this project. In areas that are not accessible to construction personnel and standard compaction equipment, PSI recommends that flowable fill or lean mix concrete be utilized for utility trench backfill.

If on-site soils are placed as trench backfill, the backfill for the utility trenches should be placed in 4 to 6-inch loose lifts and compacted to a minimum of 95% of the maximum dry density achieved by the Standard Proctor test. The backfill soil should be moisture conditioned to be within 2% of the optimum moisture content as determined by the Standard Proctor test. Up to 4 inches of bedding material placed directly under the pipes or conduits placed in the utility trench can be compacted to the 90% compaction criteria with respect to the Standard Proctor. Compaction testing should be performed for every 200 cubic yards of backfill placed or each lift within 150 linear feet of trench, whichever is less. Backfill of utility trenches should not be performed with water standing in the trench. If granular material is used for the backfill of the utility trench, the granular material should have a gradation that will filter protect the backfill material from the adjacent soils. If material having this gradation is not available, a geosynthetic non-woven filter fabric should be used to reduce the potential for the migration of fines into the backfill material. Granular backfill material shall be compacted to meet the above compaction criteria. The clean granular backfill material should be compacted to achieve a relative density greater than 75% or as specified by the geotechnical engineer for the specific material used.

4.1.8 SILTATION CONTROL

The Clean Water Act implemented in 1990 includes a federal permit program called the National Pollutant Discharge Elimination System (NPDES). This program requires that projects sites in excess of 1 acre or are part of a development which exceeds 1 acre be covered under a permit. This typically includes the development of a storm water pollution prevention plan (SWPPP) as well as period inspections (typically once a week plus after significant rainfall). PSI is available to assist with these services.

5 CONSTRUCTION CONSIDERATIONS

PSI should be retained to provide observation and testing of construction activities involved in the foundation, earthwork, and related activities of this project. PSI cannot accept responsibility for conditions that deviate from those described in this report, nor for the performance of the foundation system if not engaged to also provide construction observation and testing for this project.

5.1 FILL MATERIAL

Undocumented fill materials consisting of concrete and brick fragments, poorly graded sand, slag, cinders, and sandy silty clay was encountered to a depth of about 7.5 feet below surface grades at test boring locations B-1 and B-2. The encountered fill materials should be completely removed from the building foundations and backfilled with flowable fill. It is imperative to note that the building foundations should not be supported directly on the fill materials.

5.2 SHALLOW BEDROCK

Bedrock was encountered in all six (6) test borings B-1 thru B-6 at depths as shallow as 5-inches below existing site grades. Under no circumstance should the building foundation be permitted to bear simultaneously on the area's bedrock and FILL materials.

5.3 DRAINAGE AND GROUNDWATER CONSIDERATIONS

PSI recommends that the Contractor determine the actual groundwater levels at the site at the time of the construction activities to assess the impact groundwater may have on construction. Water should not be allowed to collect in the foundation excavations, on floor slab areas, or on prepared subgrades of the construction area either during or after construction. Undercut or excavated areas should be sloped toward one corner to facilitate removal of collected rainwater, groundwater, or surface runoff. Positive site drainage should be provided to reduce infiltration of surface water around the perimeter of the building and beneath the floor slabs. The grades should be sloped away from the building and surface drainage should be collected and discharged such that water is not permitted to infiltrate the backfill and floor slab areas of the building. Groundwater was encountered during drilling operations in test boring location B-1 at depths between 5 to 8 feet below surface grades. However, the soil rock interface, and the encountered FILL materials can discharge significant quantities of groundwater into excavations for foundations and utilities. Therefore, temporary dewatering of excavations for foundations and utilities should be anticipated. The geotechnical engineer should be consulted if excessive water seepage occurs or if the rate of seepage cannot be controlled with normal pumping techniques, such as pumping from shallow sumps along the perimeter of the excavations.

It should be noted that perched water levels and volumes will fluctuate significantly based on variations in rainfall, snowmelt, surface run-off and other related hydrogeologic factors. Please note that the free groundwater levels in the boreholes are often not representative of the actual level because the boreholes remain open for a relatively short time. To obtain longer-term measurements, it is necessary to install groundwater level observation wells or piezometers. The water level measurements presented in this report are the levels that were measured at the time of PSI's field activities. The possibility of groundwater level fluctuation should be considered when developing the design and construction plans for the project.

5.4 EXCAVATIONS

In Federal Register, Volume 54, Number 209 (October 1989), the United States Department of Labor, Occupational Safety and Health Administration (OSHA) amended its "Construction Standards for Excavations, 29 CFR, part 1926, Subpart P". This document was issued to better enhance the safety of workers entering trenches or excavations. It is mandated by this federal regulation that excavations, whether they be utility trenches, basement excavation or footing excavations, be constructed in accordance with the new OSHA guidelines. It is PSI's understanding that these regulations are being strictly enforced and if they are not closely followed, the owner and the contractor could be liable for substantial penalties. The contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "responsible person", as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. PSI is providing this information solely as a service to our client. PSI does not assume responsibility for construction site safety or the contractor's or other parties' compliance with Local, State, and Federal safety or other regulations. A trench safety plan is beyond the scope of PSI's services for this project.

6 GEOTECHNICAL RISK

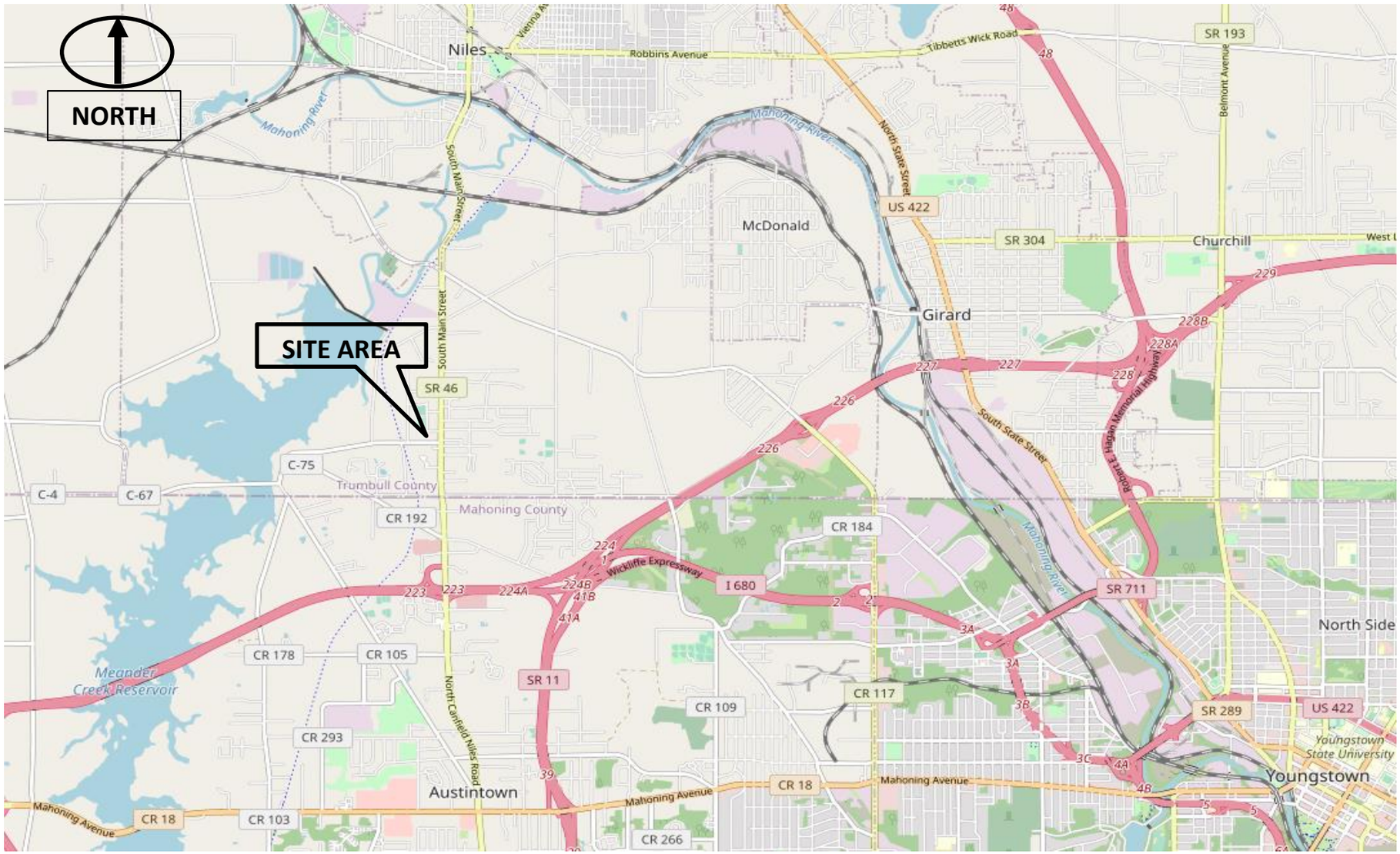
The concept of risk is an important aspect of the geotechnical exploration. The primary reason for this is that the analytical methods used to develop geotechnical recommendations do not comprise an exact science. The analytical tools which geotechnical engineers use are generally empirical and must be used in conjunction with engineering judgment and experience. Therefore, the solutions and recommendations presented in the geotechnical exploration should not be considered risk-free and, more importantly, are not a guarantee that the interaction between the soils and the proposed structure will perform as planned. The engineering recommendations presented in the preceding section constitutes PSI's professional estimate of those measures that are necessary for the proposed structure to perform according to the proposed design based on the information generated and referenced during this exploration, and PSI's experience in working with these conditions.

7 REPORT LIMITATIONS

The recommendations submitted are based on the available subsurface information obtained by PSI and design details furnished by Mr. Frank Castrovillari with FMC Architects. If there are revisions to the plans for this project or if deviations from the subsurface conditions noted in this report are encountered during construction, PSI should be notified immediately to determine if changes in the foundation recommendations are required. If PSI is not retained to perform these functions, PSI will not be responsible for the impact of those conditions on the project. The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been made in accordance with generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed. After the plans and specifications are more complete, the geotechnical engineer should be retained and provided the opportunity to review the final design plans and specifications to check that our engineering recommendations have been properly incorporated into the design documents. At that time, it may be necessary to submit supplementary recommendations. This report has been prepared for the exclusive use of FMC Architects for the specific application to the proposed Weathersfield Township Community Center, to be located the southwest corner of S. Main Street and Stewart Street, Mineral Ridge, Trumbull County, Ohio.

FIGURES

Professional Service Industries, Inc.



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1280 Trumbull Avenue, Suite B, Girard, OH 44420
phone 330-759-0288 fax 330-759-0923

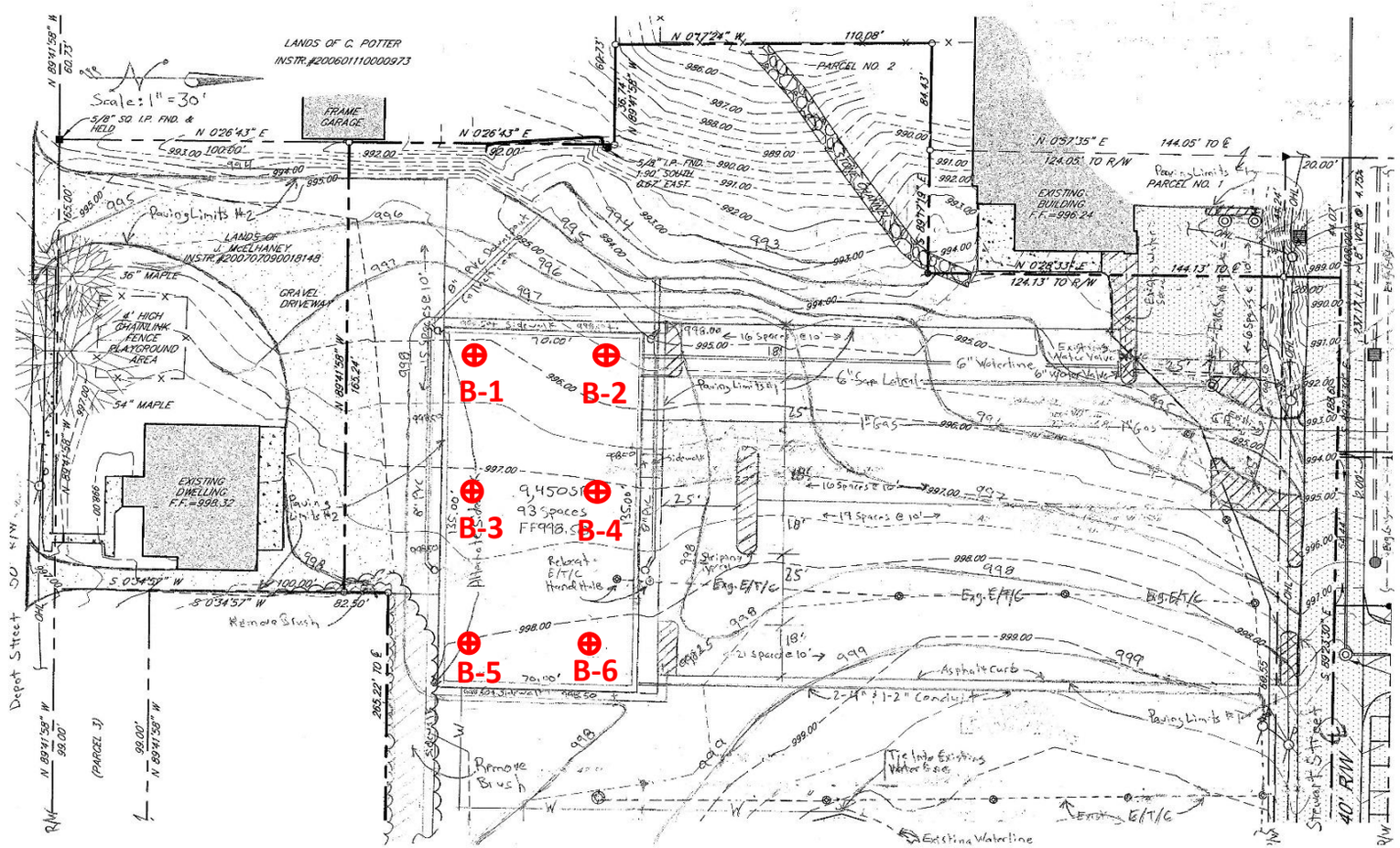
Site Vicinity Plan

PROJECT NO. : 01393478

PROJECT: Weathersfield Community Center

LOCATION: 3750 S. Main Street
Mineral Ridge, OH

Professional Service Industries, Inc.



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Boring Location Plan

PROJECT NO. : 01393478

PROJECT: Weathersfield Community Center

LOCATION: 3750 S. Main Street
Mineral Ridge, OH

APPENDIX A – BORING LOGS AND SYMBOLS

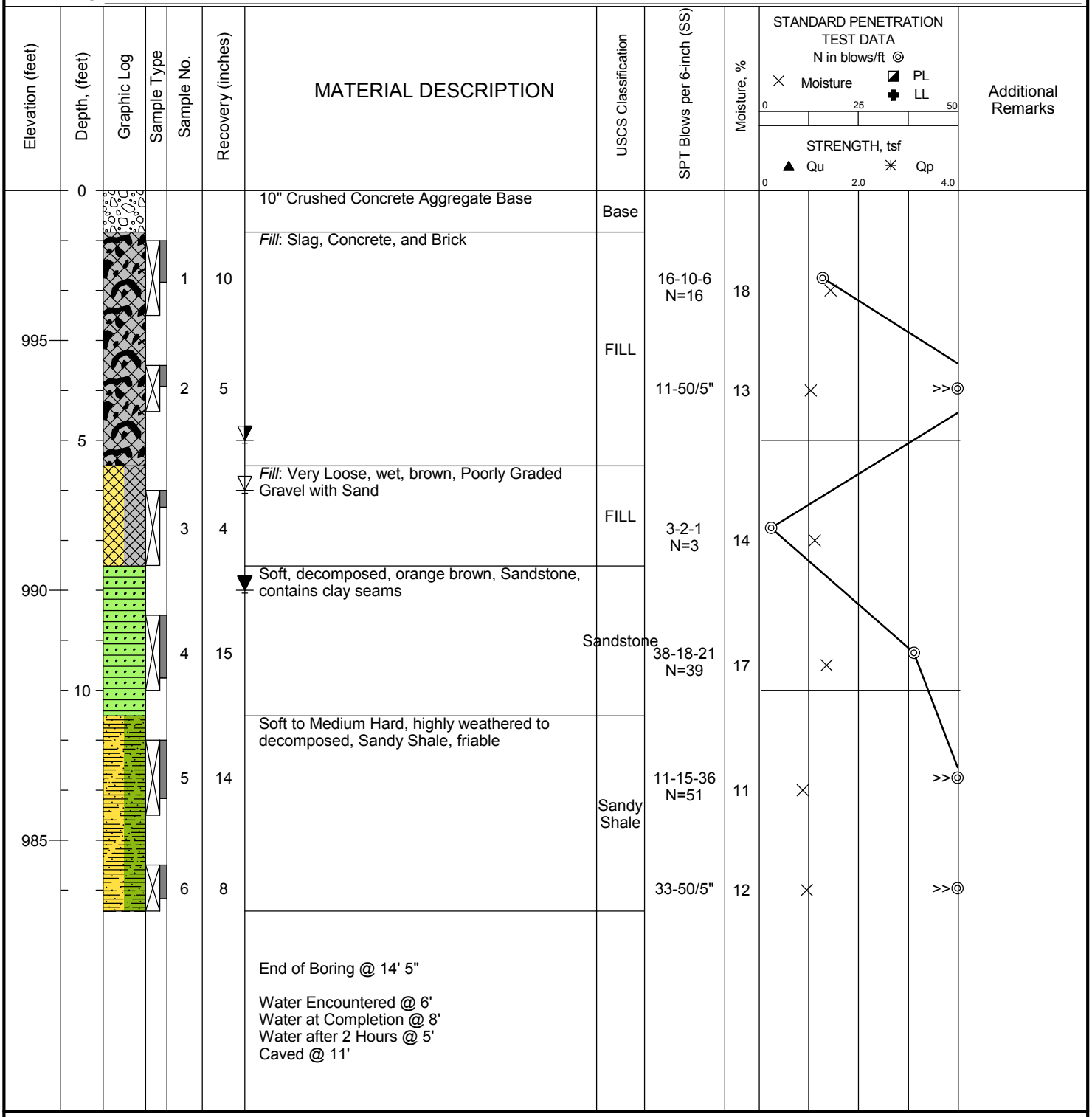
BORING B-1

DATE STARTED:	5/13/21	**DRILL COMPANY:**	Ridgeway Drilling
DATE COMPLETED:	5/13/21	**DRILLER:** P, Posedly	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	14.4 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	6 feet
	Upon Completion	8 feet
	2 HRS	5 feet

BORING LOCATION:
Proposed Building Pad



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Girard, OH 44420
Telephone: (330) 759-0288

PROJECT NO.:	01393478
PROJECT:	Weathersfield Community Center
LOCATION:	3750 S. Main St.
	Mineral Ridge, OH

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B-2

DATE STARTED:	5/13/21	**DRILL COMPANY:**	Ridgeway Drilling
DATE COMPLETED:	5/13/21	**DRILLER:** P, Posedly	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	14.4 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
While Drilling	N/E	feet
Upon Completion	N/E	feet
Delay	N/A	

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0, 25, 50) STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
	0					12" Crushed Concrete Aggregate Base	Base				
				1	16	*Fill*: Slag, Cinders, Brick, and Sandy Silty Clay		12-5-9 N=14	18		
995											
				2	9		FILL	9-18-13 N=31	13		
	5										
				3	8			5-6-6 N=12	10		
990						Soft, highly weathered, brown and gray, Sandy Shale, friable	Sandy Shale				
				4	12			5-11-10 N=21	10		
	10					Soft, highly weathered, light brown, Sandstone, contains clay seams					
				5	16		Sandstone	11-15-24 N=39	16		
985						Soft to Medium Hard, highly weathered, brown and gray, Sandy Shale	Sandy Shale				
				6	8			15-50/5"	17	>>◎	
						End of Boring @ 14' 5" No Free Water Encountered Caved @ 12'					

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PROJECT NO.: 01393478
PROJECT: Weathersfield Community Center
LOCATION: 3750 S. Main St.
Mineral Ridge, OH

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B-3

DATE STARTED:	5/13/21	**DRILL COMPANY:**	Ridgeway Drilling
DATE COMPLETED:	5/13/21	**DRILLER:** P, Posedly	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	6.1 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	N/E feet
	Upon Completion	N/E feet
	Delay	N/A

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ / STRENGTH, tsf	Additional Remarks
	0					5" Crushed Concrete Aggregate Base	Base				
				1	15	Very Stiff, moist, dark brown, Sandy Lean Clay, trace organics	CL	5-22-50/4"	23	>>◎	LL = 34 PL = 19
995				2	2	Moderately Hard, highly weathered to decomposed, brown, Sandstone, friable	Sandstone	50/2"	8 6	× × >>◎	
	5			3	1			50/1"	1	× >>◎	
						Auger Refusal @ 6' 1" No Free Water Encountered Caved @ 5'					

Moisture × PL ◪ LL ✚ (0 — 25 — 50)

STRENGTH, tsf: Qu ▲ Qp ✳ (0 — 2.0 — 4.0)

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PROJECT NO.: 01393478
PROJECT: Weathersfield Community Center
LOCATION: 3750 S. Main St.
Mineral Ridge, OH

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B-4

DATE STARTED:	5/13/21	**DRILL COMPANY:**	Ridgeway Drilling
DATE COMPLETED:	5/13/21	**DRILLER:** P, Posedly	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	6.3 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	N/E feet
	Upon Completion	N/E feet
	Delay	N/A

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0, 25, 50) STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
	0					6" Crushed Concrete Aggregate Base	Base				
				1	16	Very Stiff, moist, dark brown, Sandy Silty Clay, trace organics L.O.I. @ 1.5' = 3.9%	CL-ML	11-11-31 N=42	16	× ◎	
995						Soft to Moderately Hard, highly weathered to decomposed, brown, Sandstone					
				2	11		Sandstone	39-50/5"	7	× >>◎	
	5										
				3	2			50/4"	7	× >>◎	
						Auger Refusal @ 6' 4" No Free Water Encountered Caved @ 5'					

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PROJECT NO.: 01393478
PROJECT: Weathersfield Community Center
LOCATION: 3750 S. Main St.
Mineral Ridge, OH

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B-5

DATE STARTED:	5/13/21	**DRILL COMPANY:**	Ridgeway Drilling
DATE COMPLETED:	5/13/21	**DRILLER:** P, Posedly	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	3.6 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
While Drilling	N/E feet	
Upon Completion	N/E feet	
Delay	N/A	

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ / STRENGTH, tsf	Additional Remarks
	0					5" Crushed Concrete Aggregate Base	Base				
						Soft to Moderately Hard, decomposed to highly weathered, brown, Sandstone					
				1	10			8-13-50/1"		>>◎	
							Sandstone		10	×	
995				2	1			50/1"	4	× >>◎	
						Auger Refusal @ 3' 7"					
						No Free Water Encountered Caved @ 3'					

Moisture: × | PL: ◪ | LL: ✚ (0 – 25 – 50)

STRENGTH, tsf: ▲ Qu | ✳ Qp (0 – 2.0 – 4.0)

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PROJECT NO.: 01393478
PROJECT: Weathersfield Community Center
LOCATION: 3750 S. Main St.
Mineral Ridge, OH

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B-6

DATE STARTED:	5/13/21	**DRILL COMPANY:**	Ridgeway Drilling
DATE COMPLETED:	5/13/21	**DRILLER:** P, Posedly	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	8.6 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water

While Drilling	N/E	feet
Upon Completion	N/E	feet
Delay	N/A	

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ / Moisture × / PL ◪ / LL ✚ (0, 25, 50) / STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
	0					5" Crushed Concrete Aggregate Base	Base				
				1	5	Moderately Hard, decomposed to highly weathered, brown, Sandstone, friable		5-50/4"	9	× >>◎	
995				2	2		Sandstone	50/2"	5	× >>◎	
	5			3	1			50/1"	6	× >>◎	
990				4	1			50/1"	6	× >>◎	
						Auger Refusal @ 8' 7"					
						No Free Water Encountered Caved @ 6'					

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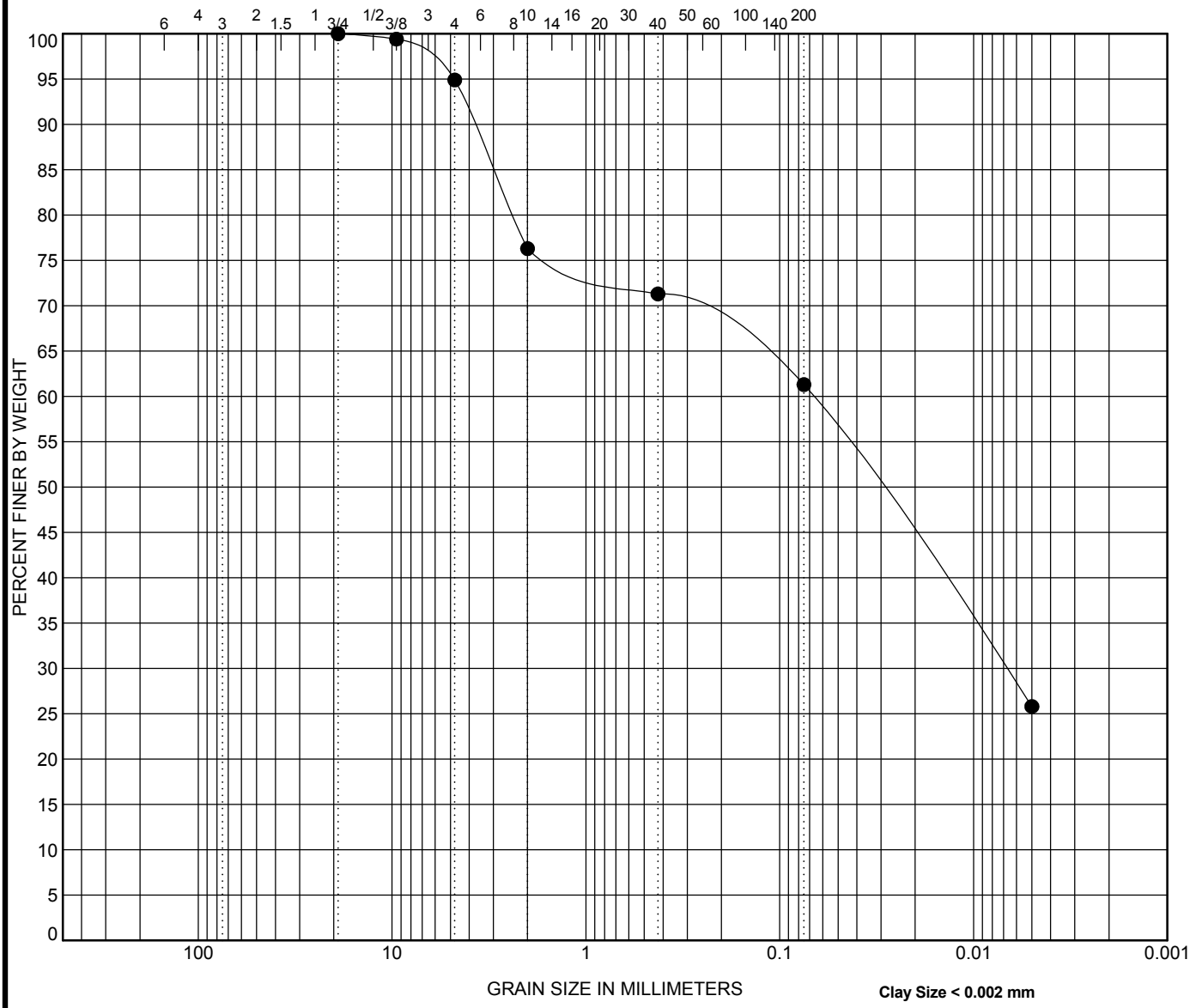
Telephone: (330) 759-0288

PROJECT NO.: 01393478
PROJECT: Weathersfield Community Center
LOCATION: 3750 S. Main St.
Mineral Ridge, OH

The stratification lines represent approximate boundaries. The transition may be gradual.

APPENDIX B – LABORATORY RESULTS



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification	LL	PL	PI	Cc	Cu
● **B-3**	**1.5**	**Sandy Lean Clay (CL)**	**34**	**19**	**15**		

Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● **B-3**	**1.5**	**19**	**0.068**	**0.007**		**5.1**	**33.6**	**61.3**	

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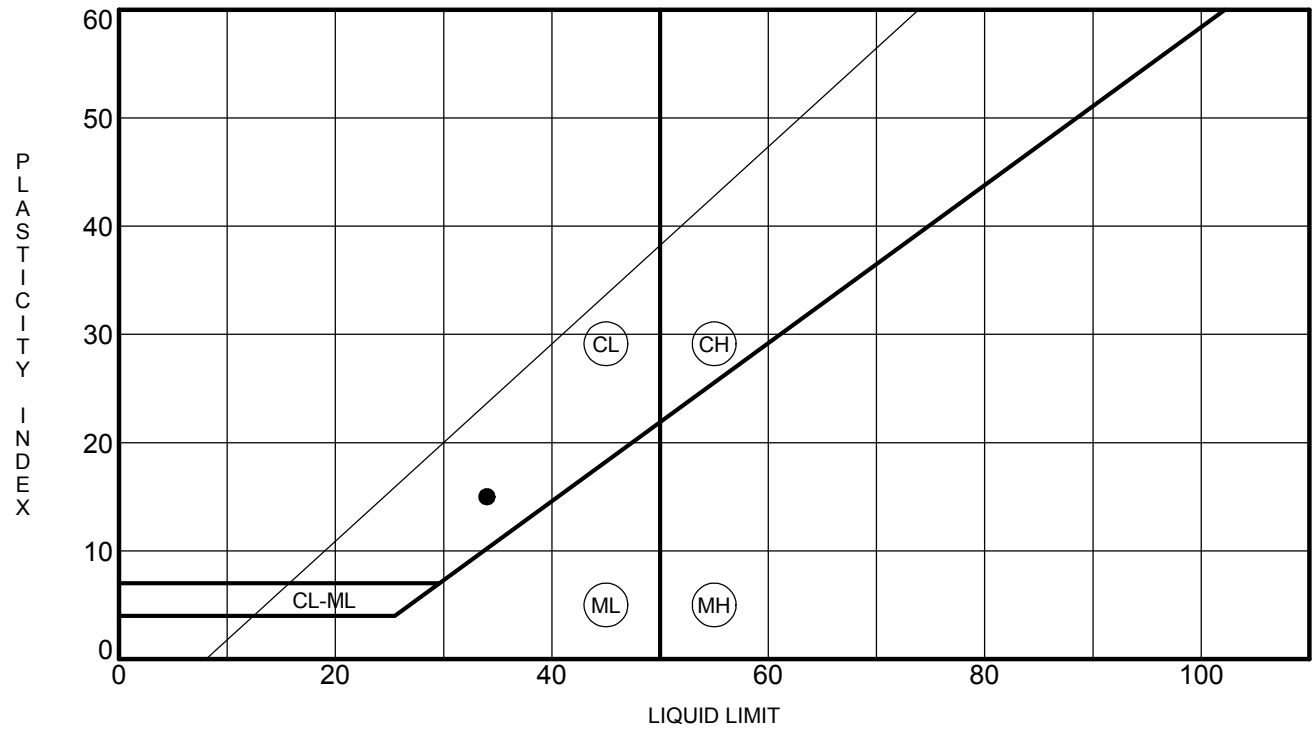
GRAIN SIZE DISTRIBUTION

Project: Weathersfield Community Center
PSI Job No.: 01393478
Location: 3750 S. Main St.
Mineral Ridge, OH



	Boring	Depth (ft)	LL	PL	PI	Fines	Classification (*Visual)
●	**B-3**	**1.5**	**34**	**19**	**15**	**61.3**	**Sandy Lean Clay (CL)**

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Fax: (330) 759-0923

ATTERBERG LIMIT RESULTS

PSI Job No.: 01393478
Project: Weathersfield Community Center
Location: 3750 S. Main St.
Mineral Ridge, OH

APPENDIX C – SEISMIC DESIGN MAPS

Weathersfield Community Center

Latitude, Longitude: 41.14054, -80.76971

Date	5/26/2021, 2:34:01 PM
Design Code Reference Document	ASCE7-10
Risk Category	III
Site Class	C - Very Dense Soil and Soft Rock

Type	Value	Description
S_S	0.169	MCE_R ground motion. (for 0.2 second period)
S_1	0.057	MCE_R ground motion. (for 1.0s period)
S_{MS}	0.202	Site-modified spectral acceleration value
S_{M1}	0.098	Site-modified spectral acceleration value
S_{DS}	0.135	Numeric seismic design value at 0.2 second SA
S_{D1}	0.065	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	A	Seismic design category
F_a	1.2	Site amplification factor at 0.2 second
F_v	1.7	Site amplification factor at 1.0 second
PGA	0.092	MCE_G peak ground acceleration
F_{PGA}	1.2	Site amplification factor at PGA
PGA_M	0.111	Site modified peak ground acceleration
T_L	12	Long-period transition period in seconds
SsRT	0.169	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	0.19	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.5	Factored deterministic acceleration value. (0.2 second)
S1RT	0.057	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.062	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.6	Factored deterministic acceleration value. (1.0 second)
PGAd	0.5	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	0.886	Mapped value of the risk coefficient at short periods
C_{R1}	0.928	Mapped value of the risk coefficient at a period of 1 s

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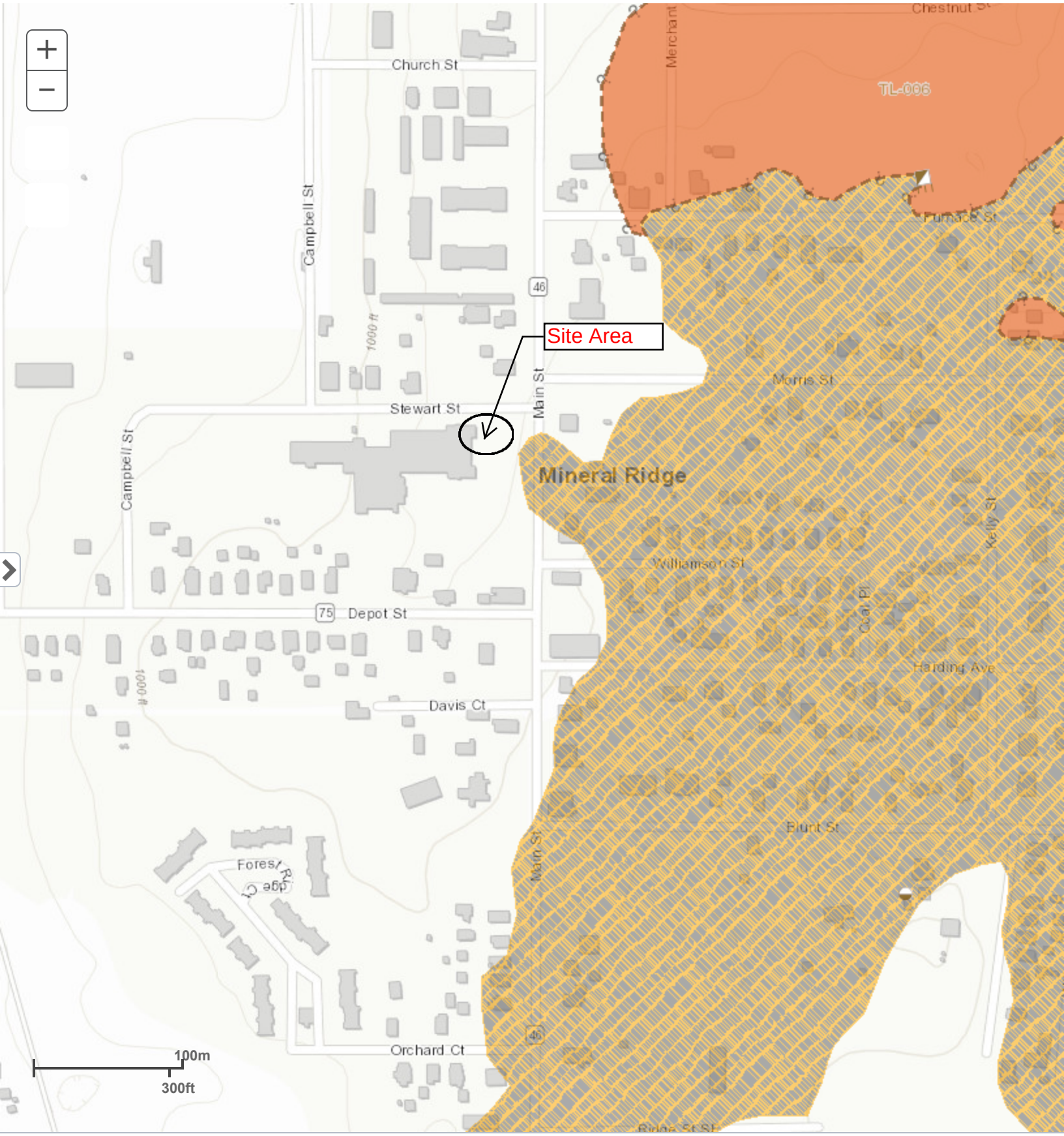
APPENDIX D – MINE MAP

Mines of Ohio

ODNR



APPENDIX E – GENERAL NOTES AND UNIFIED SOIL CLASSIFICATION

GENERAL NOTES

SAMPLE IDENTIFICATION

The Unified Soil Classification System (USCS), AASHTO 1988 and ASTM designations D2487 and D-2488 are used to identify the encountered materials unless otherwise noted. Coarse-grained soils are defined as having more than 50% of their dry weight retained on a #200 sieve (0.075mm); they are described as: boulders, cobbles, gravel or sand. Fine-grained soils have less than 50% of their dry weight retained on a #200 sieve; they are defined as silts or clay depending on their Atterberg Limit attributes. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size.

DRILLING AND SAMPLING SYMBOLS

SFA: Solid Flight Auger - typically 4" diameter flights, except where noted.
HSA: Hollow Stem Auger - typically 3¼" or 4¼ I.D. openings, except where noted.
M.R.: Mud Rotary - Uses a rotary head with Bentonite or Polymer Slurry
R.C.: Diamond Bit Core Sampler
H.A.: Hand Auger
P.A.: Power Auger - Handheld motorized auger
SS: Split-Spoon - 1 3/8" I.D., 2" O.D., except where noted.
ST: Shelby Tube - 3" O.D., except where noted.
BS: Bulk Sample
PM: Pressuremeter
CPT-U: Cone Penetrometer Testing with Pore-Pressure Readings

SOIL PROPERTY SYMBOLS

N: Standard "N" penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2-inch O.D. Split-Spoon.
N_{60}: A "N" penetration value corrected to an equivalent 60% hammer energy transfer efficiency (ETR)
Q_u: Unconfined compressive strength, TSF
Q_p: Pocket penetrometer value, unconfined compressive strength, TSF
w%: Moisture/water content, %
LL: Liquid Limit, %
PL: Plastic Limit, %
PI: Plasticity Index = (LL-PL),%
DD: Dry unit weight, pcf
▼,▽,▼ Apparent groundwater level at time noted

RELATIVE DENSITY OF COARSE-GRAINED SOILS

Relative Density	N - Blows/foot
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	50 - 80
Extremely Dense	80+

ANGULARITY OF COARSE-GRAINED PARTICLES

Description	Criteria
Angular:	Particles have sharp edges and relatively plane sides with unpolished surfaces
Subangular:	Particles are similar to angular description, but have rounded edges
Subrounded:	Particles have nearly plane sides, but have well-rounded corners and edges
Rounded:	Particles have smoothly curved sides and no edges

GRAIN-SIZE TERMINOLOGY

Component	Size Range
Boulders:	Over 300 mm (>12 in.)
Cobbles:	75 mm to 300 mm (3 in. to 12 in.)
Coarse-Grained Gravel:	19 mm to 75 mm (¾ in. to 3 in.)
Fine-Grained Gravel:	4.75 mm to 19 mm (No.4 to ¾ in.)
Coarse-Grained Sand:	2 mm to 4.75 mm (No.10 to No.4)
Medium-Grained Sand:	0.42 mm to 2 mm (No.40 to No.10)
Fine-Grained Sand:	0.075 mm to 0.42 mm (No. 200 to No.40)
Silt:	0.002 mm to 0.075 mm
Clay:	<0.002mm to <0.005 mm depending on agency

PARTICLE SHAPE

Description	Criteria
Flat:	Particles with width/thickness ratio > 3
Elongated:	Particles with length/width ratio > 3
Flat & Elongated:	Particles meet criteria for both flat and elongated

RELATIVE PROPORTIONS OF FINES

Descriptive Term	% Dry Weight
Trace:	< 5%
With:	5% to 12%
Modifier:	>12%

GENERAL NOTES

(Continued)

CONSISTENCY OF FINE-GRAINED SOILS

Q_U - TSF	N - Blows/foot	Consistency
0 - 0.25	0 - 2	Very Soft
0.25 - 0.50	2 - 4	Soft
0.50 - 1.00	4 - 8	Firm (Medium Stiff)
1.00 - 2.00	8 - 15	Stiff
2.00 - 4.00	15 - 30	Very Stiff
4.00 - 8.00	30 - 50	Hard
8.00+	50+	Very Hard

MOISTURE CONDITION DESCRIPTION

Description	Criteria
Dry:	Absence of moisture, dusty, dry to the touch
Moist:	Damp but no visible water
Wet:	Visible free water, usually soil is below water table

RELATIVE PROPORTIONS OF SAND AND GRAVEL

Descriptive Term	% Dry Weight
Trace:	< 15%
With:	15% to 30%
Modifier:	>30%

STRUCTURE DESCRIPTION

Description	Criteria
Stratified:	Alternating layers of varying material or color with layers at least ¼-inch (6 mm) thick
Laminated:	Alternating layers of varying material or color with layers less than ¼-inch (6 mm) thick
Fissured:	Breaks along definite planes of fracture with little resistance to fracturing
Slickensided:	Fracture planes appear polished or glossy, sometimes striated
Blocky:	Cohesive soil that can be broken down into small angular lumps which resist further breakdown
Lensed:	Inclusion of small pockets of different soils
Layer:	Inclusion greater than 3 inches thick (75 mm)
Seam:	Inclusion 1/8-inch to 3 inches (3 to 75 mm) thick extending through the sample
Parting:	Inclusion less than 1/8-inch (3 mm) thick

SCALE OF RELATIVE ROCK HARDNESS

Q_U - TSF	Consistency
2.5 - 10	Extremely Soft
10 - 50	Very Soft
50 - 250	Soft
250 - 525	Medium Hard
525 - 1,050	Moderately Hard
1,050 - 2,600	Hard
>2,600	Very Hard

ROCK BEDDING THICKNESSES

Description	Criteria
Very Thick Bedded	Greater than 3-foot (>1.0 m)
Thick Bedded	1-foot to 3-foot (0.3 m to 1.0 m)
Medium Bedded	4-inch to 1-foot (0.1 m to 0.3 m)
Thin Bedded	1¼-inch to 4-inch (30 mm to 100 mm)
Very Thin Bedded	½-inch to 1¼-inch (10 mm to 30 mm)
Thickly Laminated	1/8-inch to ½-inch (3 mm to 10 mm)
Thinly Laminated	1/8-inch or less "paper thin" (<3 mm)

ROCK VOIDS

Voids	Void Diameter
Pit	<6 mm (<0.25 in)
Vug	6 mm to 50 mm (0.25 in to 2 in)
Cavity	50 mm to 600 mm (2 in to 24 in)
Cave	>600 mm (>24 in)

GRAIN-SIZED TERMINOLOGY

(Typically Sedimentary Rock)

Component	Size Range
Very Coarse Grained	>4.76 mm
Coarse Grained	2.0 mm - 4.76 mm
Medium Grained	0.42 mm - 2.0 mm
Fine Grained	0.075 mm - 0.42 mm
Very Fine Grained	<0.075 mm

ROCK QUALITY DESCRIPTION

Rock Mass Description	RQD Value
Excellent	90 -100
Good	75 - 90
Fair	50 - 75
Poor	25 -50
Very Poor	Less than 25

DEGREE OF WEATHERING

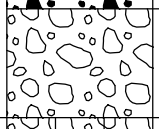
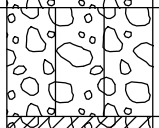
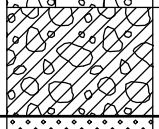
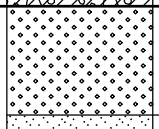
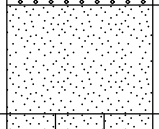
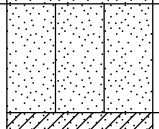
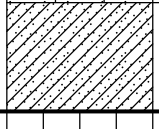
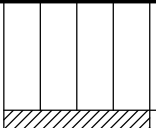
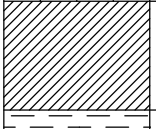
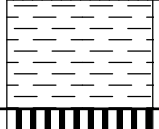
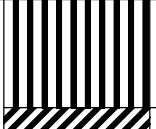
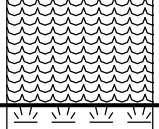
Slightly Weathered: Rock generally fresh, joints stained and discoloration extends into rock up to 25 mm (1 in), open joints may contain clay, core rings under hammer impact.

Weathered: Rock mass is decomposed 50% or less, significant portions of the rock show discoloration and weathering effects, cores cannot be broken by hand or scraped by knife.

Highly Weathered: Rock mass is more than 50% decomposed, complete discoloration of rock fabric, core may be extremely broken and gives clunk sound when struck by hammer, may be shaved with a knife.

SOIL CLASSIFICATION CHART

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

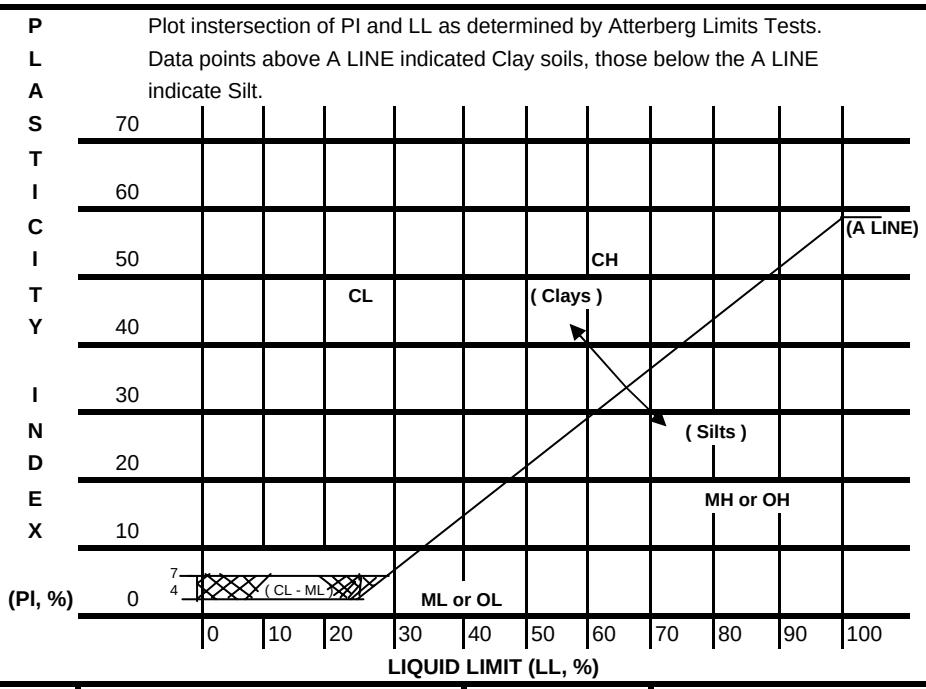
MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

United Soil Classification System
ASTM Designation D - 2487

psi Information To Build On
Engineering • Consulting • Testing

Based upon percentage of material passing No. 200 sieve classify as:

Less than 5%	**GW, GP, SW, SP**
More than 12%	**GM, GC, SM, SC**
5% to 12%	**Borderline, use dual symbols**



Coarse Grained Soils **(More than half of is larger than No. 200 sieve)**	**Gravels (More than 50% retained on No.4 sieve)**	**GW**	**Well graded gravels, gravel-sand mixtures, little or no fines**	$C_u = \frac{D_{60}}{D_{10}} > 4$	$1 < C_c = \frac{[D_{30}]^2}{D_{10} * D_{60}} < 3$
		GP	**Poorly graded gravels, gravel-sand mixtures, little or no fines**	**Does not meet all requirements for GW**	
		GM	**Silty gravels, gravel-sand-silt mixtures**	**below A Line, PI < 4**	**in shaded area 4 < PI < 7 Dual Symbols**
		GC	**Clayey gravels, gravel-sand-clay mixtures**	**above A Line, PI > 7**	
	Sands (More than 50% passing a No. 4 sieve)	**SW**	**Well graded sands, gravelly sands, little or no fines**	$C_u = \frac{D_{60}}{D_{10}} > 6$	$1 < C_c = \frac{[D_{30}]^2}{D_{10} * D_{60}} < 3$
		SP	**Poorly graded sands, gravelly sands, little or no fines**	**Does not meet all requirements for SW**	
		SM	**Silty sands, sand-silt mixtures**	**below A Line, PI < 4**	**in shaded area**
		SC	**Clayey sands, sand-clay mixtures**	**above A Line, PI > 7**	**4 < PI < 7 Dual Symbols**
Fine Grained Soils **(More than half of material is smaller than No. 200 sieve)**	**Silts & Clays (LL less than 50)**	**ML**	**Inorganic silts, very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity**		
		CL	**Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays**		
		OL	**Organic silts and organic silty clays of low plasticity**		
	Silts & Clays (LL greater than 50)	**MH**	**Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, plastic silts**		
		CH	**Inorganic clays of high plasticity fat clays**		
		OH	**Organic clays of medium to high plasticity**		
	Highly Organic Soil	**Pt**	**Peat and other highly organic soils**		

1280 Trumbull Ave.
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psiusa.com

May 26, 2021

FMC Architects
7675 Harley Hills Drive
North Royalton, OH 44133

Re: **Addendum #1**
Proposed Building Structure
Weathersfield Township Community Center
SWC of S Main Street and Stewart Street
Mineral Ridge, Ohio
PSI Project Number 01393478

Dear Mr. Castrovillari:

Per your email request for additional soil borings sent June 3, 2021, Professional Service Industries, Inc. (PSI), an Intertek Company, is pleased to submit this Addendum to PSI's Geotechnical Engineering Services Report for the proposed Weathersfield Township Community Center. Per your request, PSI performed four (4) additional soil borings within the proposed new building structure footprint. The borings were advanced to further define the extent of the previously encountered FIL materials, as well as the depth of the areas weathered rock formation.

PREVIOUS GEOTECHNICAL FINDINGS

Based on the findings presented in our Geotechnical Engineering Exploration Report for the Weathersfield Township Community Center, report number 01393478, dated May 6, 2021, **FILL** materials consisting of concrete and brick fragments, poorly graded sand, and sandy silty clay soils were encountered in test boring locations B-1 and B-2 beneath the crushed concrete aggregate, extending to depths of about 7 ½ feet below existing surface grades, and shallow bedrock was encountered in all six (6) soil borings, B-1 thru B-6, at depths from 5-inches to 7½-feet below surface grades. Specifically, the encountered fill materials were located within the western 1/3 of the proposed new building structure and would require extensive excavation in order limit differential settlement, allowing all building foundations to bear on the areas weathered rock formation.

ADDITIONAL SUBSURFACE EXPLORATION

SUBSURFACE CONDITIONS

The subsurface conditions at the project site were explored with four (4) additional soil test borings. Building area Borings B-7 through B-10 were extended to auger refusal conditions, encountered at depths of about 3'-10" to 13'-10" below existing surface grade. The boring locations and depths were determined by FMC Architects and reviewed by PSI prior to drilling. PSI personnel staked the borings in the field using a measuring wheel, the preliminary site plan provided, and the existing site features as references. PSI recommends that the surface elevations at the boring locations be determined by an Ohio licensed surveyor prior to construction activities.

SURFACE: At the time of PSI's field activities, crushed concrete aggregate ranging in thickness from about 8 to 12-inches was encountered at test borings B-7 and B-10. The surface course thickness should be expected to vary across the site. **FILL materials consisting of sandy silty clay with gravel, brick, concrete, slag, cinders, and trace organics, and cinders mixed with asphalt fragments were encountered in all four (4) additional test boring locations, extending to depths of 2½ to 10½-feet below existing surface grades.**

The area's bottommost formation consisted of soft to moderately hard, brown, highly weathered Sandstone, and soft to moderately hard, brown and gray Shale formations and was encountered from a depth of as shallow 2½ to 10½-feet below the existing grade.

The following table briefly summarizes the range of results from the field and laboratory testing programs. Refer to the attached boring logs and laboratory data sheets for more specific information:

Soil Strata Type	Approximate Strata Depth, feet	RANGE OF VALUES	
		Standard penetration test "blow counts," N	Natural Insitu Moisture content, %
Crushed Concrete Aggregate Base	8" to 12"	--	--
Fill Materials (B-7, B-8, B-9, & B-10)	2.5 to 10.5	5 to 50	11 to 21
Weathered Rock	2.5 to 13.75	43 to SSR*	6 to 11

*SSR = Split Spoon Refusal (greater than 50 blows for one 6-inch increment)

The above subsurface descriptions are of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs included in the Appendix should be reviewed for specific information at individual boring locations.

These records include soil descriptions, stratifications, penetration resistances, and locations of the samples and laboratory test data. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials and the actual transition may be gradual. Water level information obtained during field operations is also shown on these boring logs. The samples that were not altered by laboratory testing will be retained for 60 days from the date of this report and then will be discarded.

GROUNDWATER LEVEL MEASUREMENTS

No groundwater was encountered during or at the completion of drilling operations at test boring locations B-7 thru B-10. Cave-in depths of about 3 to 11 feet were reported for the test borings. Please note that the fill materials observed at this site can discharge significant quantities of groundwater into excavations for foundations and utilities. It should also be noted that the groundwater levels at this site, as well as perched water levels and volumes, will fluctuate significantly based on variations in rainfall, snowmelt, evaporation, surface run-off and other related hydrogeologic factors. The groundwater levels in boreholes are often not representative of the actual groundwater level because the boreholes remained open for a relatively short time. To obtain longer-term measurements, it is necessary to install groundwater level observation wells or piezometers. The water level measurements presented in this report are the levels that were measured at the time of PSI's field activities.

GEOTECHNIAL RECOMMENDATONS

Based on the subsurface conditions encountered in the four (4) additional soils borings, B-7 thru B-10, PSI recommends following the recommendations as stated in PSI's Geotechnical Engineering Exploration Report, number 01393478, dated May 6, 2021, sections 4.1.1, and 4.1.2, be followed as modified below:

4.1.1 GEOTECHNICAL DISCUSSION

Two (2) potentially significant geotechnical-related issues exist at this site which may affect the performance of the foundations for this structure or could adversely impact construction activities.

1. **Shallow bedrock was encountered in all ten (10) test boring B-1 thru B-10 at depths as shallow as 5-inches below existing surface grades.** It is anticipated that the building foundations will bear within the area's weathered rock formation. Under no circumstance should the foundation be permitted to bear simultaneously on the area's bedrock and soil formations. If weathered rock is not encountered at design footer elevation, the foundation excavation should be continued to a depth at which the weathered rock is encountered.
2. **Undocumented Fill materials were encountered in test boring locations B-1, B-2, B-7, B-8, B-9, and B-10, which consisted of a concrete and brick fragments, poorly graded sand, and sandy silty clay soils extending to depths of about 2½ to 10½-feet below existing site grades.** In view of the proposed construction, the encountered FILL materials should be completely removed from beneath the building foundations and replaced with flowable fill or lean concrete bearing directly on the areas rock formation. Please note that borings are widely spaced, and conditions may differ between borings.

   In the floor slab areas, the existing FILL may be left in-place provided the owner accepts the risk of potential excessive differential settlement of unremoved FILL, the exposed FILL does not contain slag, coal, carbonaceous material, or other deleterious materials, and the subgrades do not exhibit yielding under proof roll equipment loads.

   There are inherent risks for conventional footing foundations and grade-supported slabs implemented on sites containing previously placed FILL. Due to the potential variability and potential for deleterious inclusions of human-placed fill, including possible nested debris, cobbles, and/or boulders, settlement predictions for foundations and grade-supported concrete floor slabs supported on undocumented fill carry with it less confidence and therefore more risk. The degree of acceptable risk of excessive total and differential settlement must be evaluated and accepted by the owner. This risk can only be significantly reduced through removal and replacement fill materials.

SITE PREPARATIONS

As previously stated, a layer of crushed concrete aggregate has previously been placed over the entire building pad area. Site preparation activities should include the complete removal of the encountered FILL materials from beneath the building foundations and backfilled with flowable fill or lean concrete. It is imperative to note that the building foundations should not be supported directly on the encountered fill materials. Under no circumstance should the foundation be permitted to bear simultaneously on the area's bedrock and FILL materials. Remnants of previously existing structures, if encountered, should be removed. Backfill associated with demolition should be placed and compacted in accordance with the recommendations in Section 4.1.3 of PSI's Geotechnical Engineering Exploration Report, number 01393478, dated May 6, 2021. At the design finished subgrades in planned cut

excavation areas and prior to placement of any new fill, the exposed subgrades should be visually observed by a representative of PSI. Visual observation should be performed by proof rolling using a tandem-axle truck with a minimum gross vehicle weight of at least 20 tons. Loose, soft, wet, deleterious, and/or unstable soils identified during the proof compaction should be over excavated to an acceptable bearing stratum and replaced as determined by the PSI representative.

In general, subgrade areas should be properly drained and free of ponded water surfaces at all times. This may be achieved by either sloping the site topography adjacent to the construction areas to direct the water away from the excavation or trenching and berming to collect the excess run-off. Final excavations to desired subgrades should be accomplished immediately prior to the placement of concrete. The contractor should not place concrete on disturbed subgrades. If the subgrade soils are wet, machine or foot traffic should be reduced or eliminated to lessen disturbance of the subgrade. If the site clearing is performed separate from the proposed building construction, restoration of the site to provide for positive drainage is recommended.

If you have any questions pertaining to this addendum report, please contact our office at (330)759.0288. PSI would be pleased to continue providing geotechnical services throughout the implementation of the project, and we look forward to working with you and your organization on this and future projects.

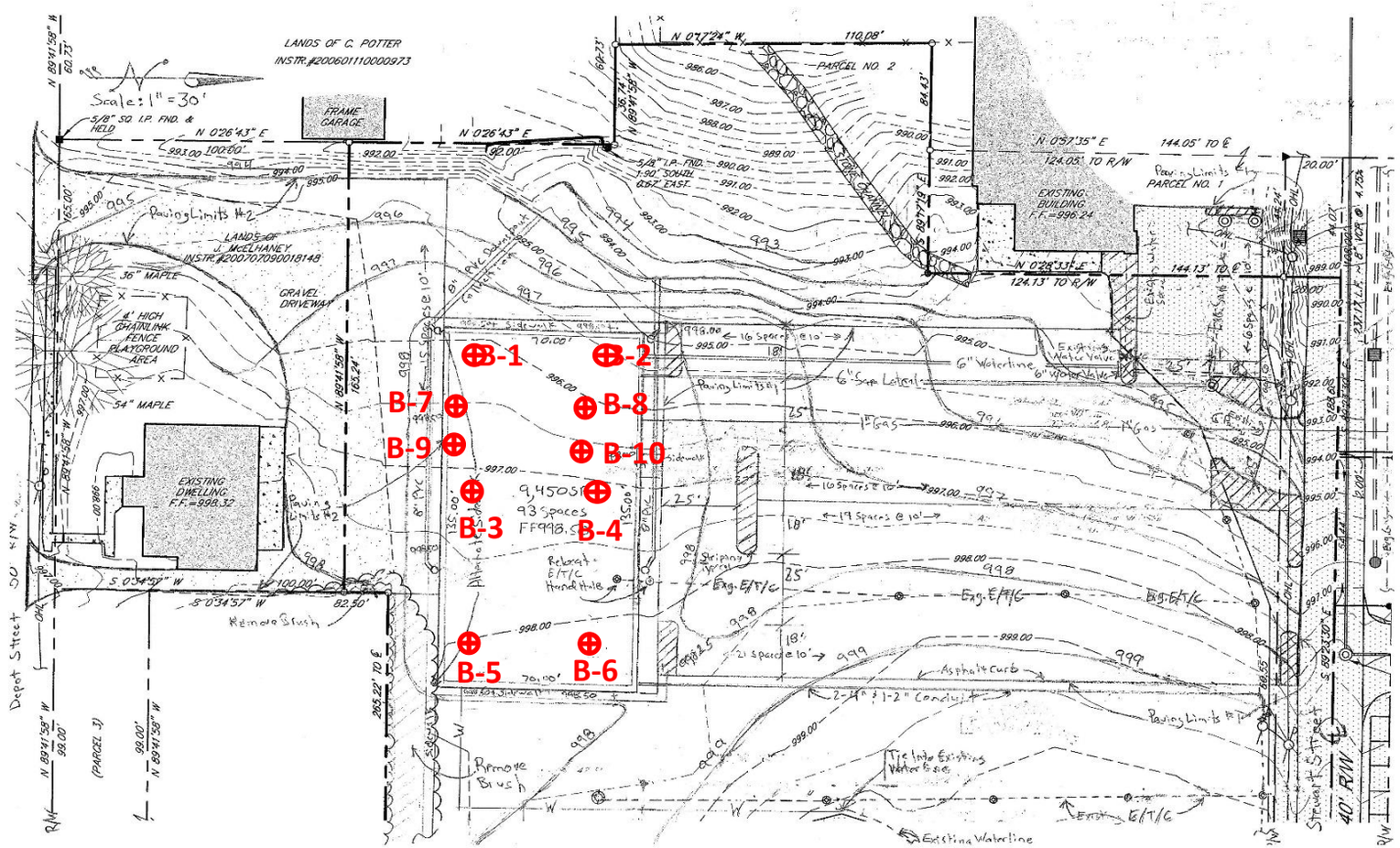
Respectfully submitted,
PROFESSIONAL SERVICE INDUSTRIES, Inc.

Scott Hynes
Branch Manager

A. Veeramani, PE
Director/Principal Consultant

Attachments
Boring Location Plan
Boring Logs

Professional Service Industries, Inc.



intertek psi

1280 Trumbull Avenue, Suite B, Girard, OH 44420
phone 330-759-0288 fax 330-759-0923

Boring Location Plan

PROJECT NO. : 01393478

PROJECT: Weathersfield Community Center

LOCATION: 3750 S. Main Street
Mineral Ridge, OH

BORING B-1

DATE STARTED:	5/13/21
DATE COMPLETED:	5/13/21
COMPLETION DEPTH	14.4 ft
BENCHMARK:	N/A
ELEVATION:	998 ft
LATITUDE:	
LONGITUDE:	
STATION:	N/A **OFFSET:** N/A
REMARKS:	

DRILL COMPANY:	Ridgeway Drilling
DRILLER:	P. Posedly **LOGGED BY:** J. Mellinger
DRILL RIG:	Diedrich D50 Truck
DRILLING METHOD:	Hollow Stem Auger
SAMPLING METHOD:	2-in SS
HAMMER TYPE:	Automatic
EFFICIENCY	N/A
REVIEWED BY:	Scott Hynes

Water

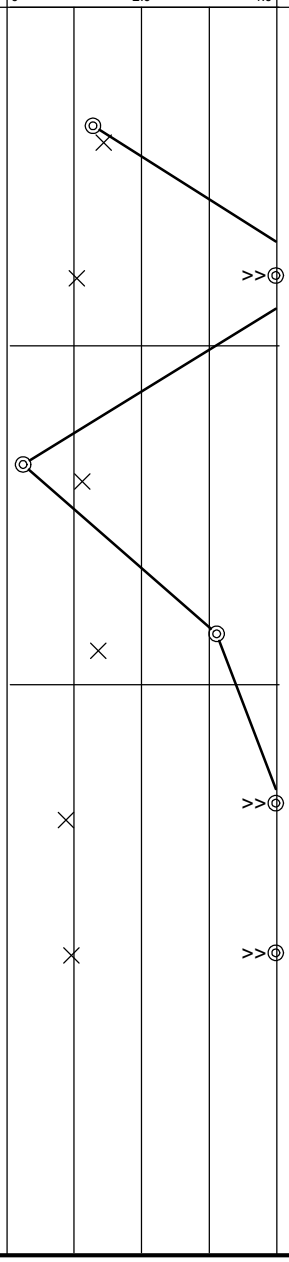
While Drilling	6 feet
Upon Completion	8 feet
2 HRS	5 feet

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %
	0			10" Crushed Concrete Aggregate Base	Base		
		1	10	*Fill*: Slag, Concrete, and Brick		16-10-6 N=16	18
995		2	5		FILL	11-50/5"	13
	5						
		3	4	*Fill*: Very Loose, wet, brown, Poorly Graded Gravel with Sand	FILL	3-2-1 N=3	14
990				Soft, decomposed, orange brown, Sandstone, contains clay seams	Sandstone		
		4	15			38-18-21 N=39	17
	10						
		5	14	Soft to Medium Hard, highly weathered to decomposed, Sandy Shale, friable	Sandy Shale	11-15-36 N=51	11
985							
		6	8			33-50/5"	12
				End of Boring @ 14' 5"			
				Water Encountered @ 6' Water at Completion @ 8' Water after 2 Hours @ 5' Caved @ 11'			

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
Moisture ✕ PL ◪ LL ✚
0 25 50
STRENGTH, tsf
Qu ▲ Qp ✳
0 2.0 4.0

Additional Remarks



intertek psi

Professional Service Industries, Inc.
1280 Trumbull Avenue
Girard, OH 44420
Telephone: (330) 759-0288

PROJECT NO.: 01393478
PROJECT: Weathersfield Community Center
LOCATION: 3750 S. Main St.
Mineral Ridge, OH

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B-2

DATE STARTED:	5/13/21	**DRILL COMPANY:**	Ridgeway Drilling
DATE COMPLETED:	5/13/21	**DRILLER:** P. Posedly	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	14.4 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	N/E
	Upon Completion	N/E
	Delay	N/A

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0, 25, 50) STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
	0					12" Crushed Concrete Aggregate Base	Base				
				1	16	*Fill*: Slag, Cinders, Brick, and Sandy Silty Clay		12-5-9 N=14	18		
995				2	9		FILL	9-18-13 N=31	13		
	5			3	8			5-6-6 N=12	10		
990				4	12	Soft, highly weathered, brown and gray, Sandy Shale, friable	Sandy Shale	5-11-10 N=21	10		
	10			5	16	Soft, highly weathered, light brown, Sandstone, contains clay seams	Sandstone	11-15-24 N=39	16		
985				6	8	Soft to Medium Hard, highly weathered, brown and gray, Sandy Shale	Sandy Shale	15-50/5"	17	>>◎	
						End of Boring @ 14' 5" No Free Water Encountered Caved @ 12'					

intertek psi

Professional Service Industries, Inc.
1280 Trumbull Avenue
Girard, OH 44420
Telephone: (330) 759-0288

PROJECT NO.: 01393478
PROJECT: Weathersfield Community Center
LOCATION: 3750 S. Main St.
Mineral Ridge, OH

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B-3

DATE STARTED:	5/13/21	**DRILL COMPANY:**	Ridgeway Drilling
DATE COMPLETED:	5/13/21	**DRILLER:** P. Posedly	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	6.1 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	N/E
	Upon Completion	N/E
	Delay	N/A

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ / STRENGTH, tsf	Additional Remarks
	0					5" Crushed Concrete Aggregate Base	Base				
				1	15	Very Stiff, moist, dark brown, Sandy Lean Clay, trace organics	CL	5-22-50/4"	23	>>◎	LL = 34 PL = 19
995				2	2	Moderately Hard, highly weathered to decomposed, brown, Sandstone, friable	Sandstone	50/2"	8 6	× × >>◎	
	5			3	1			50/1"	1	× >>◎	
						Auger Refusal @ 6' 1" No Free Water Encountered Caved @ 5'					

Moisture × PL ◪ LL ✚ (0 — 25 — 50)

STRENGTH, tsf: Qu ▲ Qp ✳ (0 — 2.0 — 4.0)

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1280 Trumbull Avenue
Girard, OH 44420
Telephone: (330) 759-0288

PROJECT NO.: 01393478
PROJECT: Weathersfield Community Center
LOCATION: 3750 S. Main St.
Mineral Ridge, OH

The stratification lines represent approximate boundaries. The transition may be gradual.

BORING B-4

DATE STARTED:	5/13/21	**DRILL COMPANY:**	Ridgeway Drilling
DATE COMPLETED:	5/13/21	**DRILLER:** P. Posedly	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	6.3 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	N/E
	Upon Completion	N/E
	Delay	N/A

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0 25 50) STRENGTH, tsf ▲ Qu ✳ Qp (0 2.0 4.0)	Additional Remarks
	0					6" Crushed Concrete Aggregate Base	Base				
				1	16	Very Stiff, moist, dark brown, Sandy Silty Clay, trace organics L.O.I. @ 1.5' = 3.9%	CL-ML	11-11-31 N=42	16	× ◎	
995				2	11	Soft to Moderately Hard, highly weathered to decomposed, brown, Sandstone	Sandstone	39-50/5"	7	× >>◎	
	5			3	2			50/4"	7	× >>◎	
						Auger Refusal @ 6' 4" No Free Water Encountered Caved @ 5'					

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BORING B-5

DATE STARTED:	5/13/21	**DRILL COMPANY:**	Ridgeway Drilling
DATE COMPLETED:	5/13/21	**DRILLER:** P. Posedly	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	3.6 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	N/E
	Upon Completion	N/E
	Delay	N/A

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ / STRENGTH, tsf	Additional Remarks
	0					5" Crushed Concrete Aggregate Base	Base				
						Soft to Moderately Hard, decomposed to highly weathered, brown, Sandstone					
				1	10			8-13-50/1"		>>◎	
							Sandstone		10	×	
995				2	1			50/1"	4	× >>◎	
						Auger Refusal @ 3' 7"					
						No Free Water Encountered Caved @ 3'					

Moisture: × | PL: ◪ | LL: ✚ (0 – 25 – 50)

STRENGTH, tsf: ▲ Qu | ✳ Qp (0 – 2.0 – 4.0)

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BORING B-6

DATE STARTED:	5/13/21	**DRILL COMPANY:**	Ridgeway Drilling
DATE COMPLETED:	5/13/21	**DRILLER:** P. Posedly	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	8.6 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	N/E
	Upon Completion	N/E
	Delay	N/A

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ / Moisture × / PL ◪ / LL ✚ (0, 25, 50) / STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
	0					5" Crushed Concrete Aggregate Base	Base				
				1	5	Moderately Hard, decomposed to highly weathered, brown, Sandstone, friable		5-50/4"	9	×, >>◎	
995				2	2		Sandstone	50/2"	5	×, >>◎	
	5			3	1			50/1"	6	×, >>◎	
990				4	1			50/1"	6	×, >>◎	
						Auger Refusal @ 8' 7" No Free Water Encountered Caved @ 6'					

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BORING B-7

DATE STARTED:	6/11/21	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	6/11/21	**DRILLER:** P. Simpson	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	5.0 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	N/E
	Upon Completion	N/E
	Delay	N/A

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ / STRENGTH, tsf	Additional Remarks
	0					12" Crushed Concrete					
				1	15	*Fill*: Stiff, moist, brown, Sandy Silty Clay with Gravel, trace debris	CL-ML	9-6-7 N=13	20		
995											
				2	16	Soft, highly weathered, brown, Sandstone		13-15-50 N=65	7	>>◎	
	5					End of Boring @ 5' No Free Water Encountered Caved @ 3'					

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
Moisture ✕ PL ◪ LL ✚
0 25 50
STRENGTH, tsf
Qu ▲ Qp ✳
0 2.0 4.0

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BORING B-8

DATE STARTED:	6/11/21	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	6/11/21	**DRILLER:** P. Simpson	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	13.8 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	N/E
	Upon Completion	N/E
	Delay	N/A

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft / Moisture / PL / LL (0, 25, 50) / STRENGTH, tsf Qu / Qp (0, 2.0, 4.0)	Additional Remarks
	0					12" Crushed Concrete					
				1	14	*Fill*: Very Stiff, moist, brown, Sandy Silty Clay with bricks, cinders, concrete, slag and organics		6-7-12 N=19	18		
995							CL-ML				
				2	16			10-11-7 N=18	11		
	5										
				3	16	*Possible Fill*: Firm, moist, brown, Sandy Silty Clay with Sandstone fragments		8-5-3 N=8	11		
990							CL-ML				
				4	6			4-3-2 N=5	12		
	10					Soft, highly weathered, brown, Shale interbedded with Sandstone					
				5	17			10-17-26 N=43	10		
985											
				6	2			50/4"	11	>>	
						End of Boring @ 13' 10" No Free Water Encountered Caved @ 11'					

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BORING B-9

DATE STARTED:	6/11/21	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	6/11/21	**DRILLER:** P. Simpson	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	3.8 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	N/E
	Upon Completion	N/E
	Delay	N/A

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA (N in blows/ft ◎; × Moisture; ◪ PL; ✚ LL; 0 25 50) (STRENGTH, tsf: ▲ Qu; ✳ Qp; 0 2.0 4.0)	Additional Remarks
	0					12" Crushed Concrete					
				1	17	*Fill*: Stiff, moist, brown, Sandy Silty Clay	CL-ML	6-9-27 N=36	21	×	
						Fill: Cinders and Asphalt					
995						Moderately Hard, highly weathered, brown, Sandstone					
				2	3			50/4"	7	× >>◎	
						End of Boring @ 3' 10"					
						No Free Water Encountered Caved @ 3'					

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BORING B-10

DATE STARTED:	6/11/21	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	6/11/21	**DRILLER:** P. Simpson	**LOGGED BY:** J. Mellinger
COMPLETION DEPTH	5.0 ft	**DRILL RIG:**	Diedrich D50 Truck
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	998 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	Scott Hynes

REMARKS:

Water		
	While Drilling	N/E
	Upon Completion	N/E
	Delay	N/A

BORING LOCATION:
Proposed Building Pad

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0 / 25 / 50) STRENGTH, tsf ▲ Qu ✳ Qp (0 / 2.0 / 4.0)	Additional Remarks
	0					8" Crushed Concrete					
				1	16	*Fill*: Very Stiff, moist, brown, Sandy Silty Clay, contains cinders, brick, sand, and trace organics	CL-ML	6-23-27 N=50	12	× ◎	
995						Soft, highly weathered, brown, Sandstone					
				2	15			25-25-50 N=75	6	× >>◎	
	5					End of Boring @ 5' No Free Water Encountered Caved @ 3'					

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7675 Harley Hills Drive
North Royalton, OH 44133
P: 216.287.8547
F: 440.877.1560

FMC architects

04/06/2022

RFI NO.: 1

PROJECT: Weathersfield Township Community Center

FMC Architects LLC Project No.: 21109

This RFI, hereby modifies, supplements, and amends the Specifications and/or Contract Documents, for Weathersfield Township Community Center, dated 07/28/2021, as prepared by FMC Architects LLC. Wherein this RFI varies or is in conflict with the Specifications and/or Contract Documents, the requirements of this RFI shall govern. In all other particulars, the requirements of the original Specifications and Contract Documents, including any previous RFI, shall govern.

This RFI is comprised of the following:

ITEM 1

Question:
Drawing Number G0.01 Cover Sheet
Building Code Information – Chapter 9 Fire Protection Systems
New Sprinkler System, Attic Shall Be sprinklered. Sprinkler Contractor Shall Submit Required Drawings under Separate Submittal. Include Any Fire Alarm/Detection System by Code.
Drawing A0.01 Architectural Specifications
Section 10520 – Fire Protection Only refers to Fire Extinguishers.

Please clarify if a sprinkler system is to be provided for the attic space. Please clarify if a fire alarm is to be included in the scope of this project. Will it be monitored? Please clarify the scope of the fire alarm if it is required.

Response:
Yes, the attic needs to be sprinklered as drawings state. Specification on lists fire extinguishers as we do not design the sprinkler system. You need to get a sub on board to quote the project.
Yes, it needs to be monitored as per code.

ITEM 2

Question:
Drawing S0 – General Notes/ General
Note 9. Contractor shall investigate site during clearing and earthwork operations for filled excavations or buried structures such as cesspools, cisterns, and foundations.

Is there any known structures reasonably expected to be buried below the surface that

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may be known to the township or designers that the G.C. should be made aware of?

Response:
Yes, there is some underground issues. We believe we slide the building to miss the area. CG shall verify and if we need to adjust final location of the building it will be in the field.

ITEM 3

Question:
Drawing S0 – General Notes/Foundations; Foundation's design and site work is based on the
Geo-technical report prepared by PSI Project No 01393478 Dated 5/26/21. The general contractor is
required to review the report and include all requirements and recommendations in his work whether
shown on the contract drawings or not.

Please provide the Geo-technical Report.

Response:
See attached soil report.

ITEM 4

Question:
Drawing AS -1 Architectural Site Plan vs A1.01 vs S1
All three drawings show the building orientation different. The site plan seems to be the correct orientation with the
entrance, just off the main parking lot which putts the overhead door to the right or east.

Please clarify which is the correct orientation of the building?

Response:
AS-1 North is to the right. All other plans North it to the top of the sheet.

ITEM 5

Question
Drawing AS – 2 Existing Utility and Grading For Reference Only
a. It is hard to determine what utilities are existing and what is to be used for the building.

Please indicate where the utilities will be the responsibility of the GC to bring the utilities to the building.

b. It appears that a Hand Hole has been moved for electric service but then there are 2 – 4″ conduits and 1 – 2″ conduit run from the street in a different location.

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What location is the electric for the building to be secured? If from the existing conduits do they exist or is it the responsibility of the GC to install them?

c. The sanitary sewer appears to be stubbed to what appears to be in front of a concrete slab on the west side of the project site in the limits of the existing asphalt.

Is this where the sanitary sewer is to be tied in? Do we have to cut the asphalt to extend the sanitary into the building?

d. Water is in several location on the site plan.

Which existing water line is to be the source of water for the building?

e. I didn't see natural gas location on the map.

Is natural gas located on the site or should it be planed to extend it in from the street?

f. The storm sewer laterals for the downspouts seems to be 2 - 8" existing storm pipe that daylights into grass.

Is the intent of the design to connect our downspout laterals to the 2 8" storm pipe identified on the existing utility and grading plan?

Please identify the distance from the centerline of Stewart Street to the face of the building so we can itemize utility extensions and other cost.

Response:

a. Utilities are studded to the building pad, the GC is responsible to extend them into the building.
b. The GC is responsible to install the electric, telephone, cable in the existing 2-4" and 1-2" conduit.
c. Yes, for the area to tie into for sanitary. No, you do not have to cut asphalt.
d. 6' for fire service and ¾" for domestic service.
e. A 1" gas line is installed already near the building.
f. Yes, the downspouts needs to be installed by the GC. All utilities are already extended to the building pad (255' from center line)

ITEM 6

Question;
Alternate – Drawing vs Bid Documents pg 9/71 Bid 2. Alternate 1 – Remaining Site Work, Pave Parking Lot and Sidewalks.
Drawing A5.01 Wall Sections
Detail wall section 1 calls for Alternate Roof detail 2 X 4 purlins vs 5/8" OSB.
Bid Documents page 9 of 71 Bid 2. Alternate 1 – Remaining Site Work, Pave Parking Lot, and Sidewalks.

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The alternate on the drawing refers to using 2 X 4 purlins vs 5/8 roof sheathing. In the bid documents Alternate 1 refers to Site Work, Pave Parking Lot and Sidewalks. There is a photographic
architectural site plan with no specifications associated with the scope.

Please clarify what alternate 1. Is it the alternative roof substrate or is it the site work? Is there more than one alternate? If so, please add them to the bid paperwork. If the Alternate 1 is
referring to the site work, please provide details so that appropriate bids can be put together. (Asphalt details (profile, mix design, striping, curbs, curb stops, signage, dimensions, elevations),
Site Work (storm drainage, aprons, curbs, dumpster pads, dumpster enclosures, site lighting, bollards, ADA ramps, landscaping) Sidewalks (profile, mix design, base, dimensions, finish)

After reviewing the drawings and specifications it is unclear what is part of the base bid and what is part of the alternate. Please clarify.

Response:
The pavement Start typing here.

ITEM 7

Question:
Drawing A0.01 Schedules vs A4.01 Elevations
Drawing A0.01 shows window WF1 as typical. The specifications do not identify any windows so all we have is a window size.

Please clarify the product for the window and type. Are they vinyl, aluminum, wood aluminum clad? Are they single hung, double hung?

Response:
Use white vinyl casement windows, 1" insulated, clear.

ITEM 8

Question:
Drawing A4.01 shows what appears to be a casement window in the warming kitchen.
There is no size nor specifications for this window.

Please clarify (WF2).

Response:
The interior "window" in the warming kitchen is just an opening, the opening shall be wrapped with break metal or metal framing with no stops. This is just to protect the gyp bd from trays being passed through opening. Size is on plan and elevations.

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The outside kitchen window is a QUICKSERV SLIDING WINDOW, 36"X48" MODEL SC-4030

ITEM 9

Question:
Drawing A0.10 Schedules – Room Finish Schedule
Rooms 105 Women's and 106 Men's identify the ceiling as ACT.

Is this correct or is it to be drywall ceiling painted?

Response:
We require gpd bd to be applied to the bottom of the trusses for all rooms. In some rooms a drop ceiling was added below that. As per the drawing states.

ITEM 10

Question:
Drawing A1.01 – detail 3 Floor Plan – Partial Enlarged
The drawing shows the refrigerator/freezer located in front of the cabinets preventing their usage. A
suggested location would be next to the sink as to allow the use of the full counter and access to the
cabinets. This affects the electrical for the appliance.

Is the drawing correct?

Response:
It is understood that it will be problematic for that counter area, but it is still usable. Kitchen layout to remain as is. Locating next to sink will cause the door to be non-compliant.

ITEM 11

Question:
Drawing A5.01 Wall Sections - All Sections
All wall sections call out a top plate height of 12'-4 ½". To achieve this, all wall studs will have to be individually cut as the quantity does
not warrant a custom cut order with out special cost. It would be more cost effective to order 12' precut studs to the length of 140 5/8"
which renders and actual plate height of 12' – 1 1/8".

Is the plate height of 12' 1 1/8" acceptable?

Response:
A 12 foot wd stud is a standard length, if you place on a 2x plat and have (2) 2x top plates we get our nominal 12'4.5" height. We do not want to go lower.

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We do not understand your precut at 11'-8 5/8"? If you need to order that length, get the 12 footers.

ITEM 12

Question:
Drawing A0.01 Section 01040 – Project Coordination
Carpeting, Computer systems, telecommunications, furniture systems, security systems and all wiring are to be furnished by the owner and
coordinated by the G.C.

Please provide a list of contractors trades and the scope of work they will be providing on behalf of the owner and time frames for each of their scope
of work so their durations and associated coordination/management expenses can be allotted in our budgets.

Response:
Shall be available to the awarded GC.

ITEM 13

Question:
Drawing A0.01 Section 08710 – Door Hardware
C Products 1.1 All hardware to be New with brushed Aluminum finish. Brushed aluminum is not an available finish.

Is brushed stainless steel an acceptable alternative

Response:
Satin Nickel shall be used for all hardware.

ITEM 14

Question:
Drawing A0.10 Room Finish Schedule – Schedule Notes
Many notes have "**" but no corresponding notes.

Please provide missing notes.

Response:
"**" located on schedules – not remarks available.

ITEM 15

Question:
Drawing A1.01 – detail 3 Floor Plan – Partial Enlarged

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The drawing shows the refrigerator/freezer located in front of the cabinets preventing their usage. A

suggested location would be next to the sink as to allow the use of the full counter and access to the

cabinets. This affects the electrical for the appliance.

Is the drawing correct?

Response:
This is a repeat of #10.

ITEM 16

Question:
Drawing A5.01 Wall Sections - All Sections

All wall sections call out a top plate height of 12'-4 ½". To achieve this, all wall studs will have to be individually cut as standard 12' lengths are

between 12' 1/4" to 12' 3/4" in actual length. Also the quantity does not warrant a custom cut order with out special cost. It would be more cost

effective to order 12' precut studs to the length of 140 5/8" which renders and actual plate height of 12' – 1 1/8".

Is the plate height of 12' 1 1/8" acceptable?

Response:
This is a repeat of #11.

ITEM 17

Question:
General

a. Are spoils from excavation to relocated on site or removed?

There are no specifications for landscaping.

b. Is the owner going to be taking of the landscaping scope of work or is that to be included in the base bid?

c. There are appliances identified including Refrigerator/Freezer and dishwasher are these to be included in the contract?

d. It appears a stage is to be installed. There are no specifications for a stage, but electric is to be installed. Please clarify.

e. Are there any window coverings? Please clarify.

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f. Please provide the size of the roof overhang as we are not to scale the drawings.

g. I didn't see any dumpster enclosures. Will there be a dumpster pad and enclosure for this project?

h. What is the size of the lawn area in front of the building? Is it the GC's responsibility to seed the green space?

i. Is striping the existing parking lot part of the scope of work?

j. Is there parking lot lighting included in this scope of work?

Response:
a. Export spoils.
b. Owner shall take care of landscaping. GC shall bring to finish grading of site.
c. No
d. Yes, electric is to be installed. No, a stage is not to be constructed.
e. No
f. 12″
g. No
h. No
i. No
j. No

ITEM 18

Question:
Structural drawing S3 references using an LSM backfill down to shale per Geotech report. The Geotech report was not included in the base bid document set. Please provide the mentioned Geotech report. Please also confirm to what extent LSM backfill should be included. Please confirm if all bidders should use a specific allowance for this work.

Response:
See attached Soil Report.

ITEM 19

Question:
Please confirm the extents of paving required for this project. Please confirm if new sidewalks shown on AS-1 should be included in base bid. Please confirm that the 82 parking space lot will be the extent of Alternate #1 paving scope. Please provide any additional requirements such as curb details, line striping requirements, etc.

Response:
The limits are shown on AS-2. Sidewalks are an alternate. The 82 spaces parking lot is the extent of paving in the alternate bid. No stripping, no curbing.

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ITEM 20

Question:
Windows shown on elevation drawings are not referenced in the Division 8 specifications on A0.01. Please provide specification for window and window frame required for this work.

Response:
See # 7 and 8.

ITEM 21

Question:
Division 8 specification on A0.01 does not reference requirements for the overhead door shown on 5/A5.01. Please provide specification, hardware requirements, and basis-of-design manufacturer for this scope.

Response:
CROWN DOOR LLC.
135 MCLEOD AVE
SOUTH PLATO, MN 55370
(320) 238-2616 INFO@CROWNDOORS.COM
Or similar. There are no standard sizes. 22'-4"w x 10'-6 ½' h
.

ITEM 22

Question:
Drawing A6.01 references that toilet partitions should be floor or wall mounted as specified. Please confirm which partitions should be floor mounted and which partitions should be wall mounted. Please provide specification on required partitions, if available.

Response:
Floor mounted partitions. Use Scranton Hiny Hider as basis of design. Color TBD, texture shall be orange peel.

ITEM 23

Question:
Drawing A1.01 shows casework in kitchen 19 in detail 2/A1.01. No elevations or specifications are included for what casework to provide in this spot. Please confirm if casework will be GC furnished and installed. Please provide elevations and specifications if required.

Response:
Provide an allowance for cabinetry per the floor plan layout. City may decide to do on their own.

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ITEM 24

Question:
Drawing E0.01 (1.4 Work Included) does not reference fire alarm scope. Drawing E1.02 does not include any fire alarm devices. Please confirm if fire alarm is required for this building. Please provide device layout and/or specifications for this system, if required.

Response:
As of 04/07/2022 with county review, we do not need a fire alarm.

ITEM 25

Question:
Drawing A5.01 shows two separate alternates for wall section 1. These alternates do not appear on the bid form provided. Please confirm how this scope should be included on the bid form

Response:
Add to bid form for the 2 different wall alternates.

ITEM 26

Question:
Instructions to Bidders Item 3.2 references Federal prevailing wage rates (Davis Bacon Act) are required for this project. Please confirm this requires certified payroll.

Response:
Yes, it is required.

ITEM 27

AS OF 04/07/2022
WILL COUNTY APPROVAL WE ARE LIMITING THE OCCUPANT LOAD TO LESS THAN 300 PEOPLE. THIS EFFECTS THE FOLOOWING:

- SPRINKLER AND FIRE ALARM IS NOT REQURIED ON THIS PROJECT.
- ADD ALAOANCE FOR KITCHEN MILLWORK
- REMOVE GYP DB ABOVE ALL AREAS WITH CEILING TILE
    - PRIOVIDE ALTERNATE TO REPLACE THE MAIN ASSEMBLE AREA WITH A DROP CEILING IN-LUIE OF THE GTO BD CEILING. LIGHTS TO REMAIN.
    - ALL DUCKWORK CAN NOW BE RUN ABOVE ALL CEILINGS

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END OF RFI NO. 1

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04/21/2022

RFI NO.: 2

PROJECT: Weathersfield Township Community Center

FMC Architects LLC Project No.: 21109

This RFI, hereby modifies, supplements, and amends the Specifications and/or Contract Documents, for Weathersfield Township Community Center, dated 07/28/2021, as prepared by FMC Architects LLC. Wherein this RFI varies or is in conflict with the Specifications and/or Contract Documents, the requirements of this RFI shall govern. In all other particulars, the requirements of the original Specifications and Contract Documents, including any previous RFI, shall govern.

This RFI is comprised of the following:

ITEM 1

Question:
Please provide specification for urinal.

Response:
Use dada compliant American standard or equal

ITEM 2

Question:
Are trusses to be 24" or 16" O.C.?

Response:
Trusses at 24" oc as shown on structural drawings

ITEM 3

Question:
The general contractor is required to adhere to both the geotechnical report and drawings. If drawings and Geotechnical report are in conflict, which has authority.

Response:
Notify structural engineer at that time.

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ITEM 4

Question:
Are there any areas where the footer will not bear on the weathered shale or sandstone?

Response:
All footers shall bear on shale or sandstone (rock)

ITEM 5

Question:
The geotechnical report states that all foundation excavations will have to be excavated 1' wider for every 1' of depth. (6" from each face of footer for every 1' of depth). Boring B-1 is 10 1/2' from elevation 998 or 9' deep from bottom of footing to weathered stone. This makes the excavation for bearing of the flowable fill 10'4" wide.

Is this the intent of the foundation design?

Response:
Footings to be extended down to shale or sandstone with LSM, and width shown on drawings.

ITEM 6

Question:
Section 4.1.4 of the Geotechnical Report indicates that compacted soil may be used to place the footing on. This is in direct conflict with other areas of the report which state in no circumstance should the foundation be permitted to bear simultaneously on the area's of bedrock and soil. Since we have to excavate bedrock to install footers on easterly footing the area where soil is compacted would make the footing bear on both soil and bedrock.

Is backfilling under footings allowed

Response:
Per OBC, if rock is encountered at depths above frost elevation, footing can be cast at that elevation directly on rock. All footings are to bear on rock either directly or with LSM backfill as shown on drawings.

ITEM 7

Question:
Drawing S3 TYP. Frost Slab detail/ Geotechnical report. The drawing detail calls out LSM Backfill down to shale/sandstone per Geotech report. Geotech to verify in field.

Is LSM the same as CLSM (flowable fill) in the geotechnical report?
Response:

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Yes, LSM is the same as CLSM. This office will reference ODOT 613, if a specific spec is requested.

ITEM 8

Question:
If FF (finished floor) is at 998.50 then the building pad sub-grade is 997.00. Boring B-5 and B-6 sandstone is located at 997.50.

Is the intent to prepare the slab to remove 6" of sandstone to place the 12" of #304?
Response:
Depth of 304 can be reduced to 6″ at east end of building if sandstone is encountered.

ITEM 9

Question:
Note 12 on Drawing S0 "General Notes" states that the general contractor is responsible for compacting soil 5' outside the building footprint as directed by the geotechnical engineer.

Known is that the west side of the building including the concrete slab to the right of the building contain unsuitable backfill materials at unknown depth and width. To mitigate extensive cost and make the bids equal can we omit this requirement from our bids and handle it as a change order since the extent of this directive is unknown at this time?.

Response:
This office has no objection to the requested change, Owner will have final decision

ITEM 10

Question:
Is the LSM backfill to be included in this bid? Drawing S3, details A, B, C and D read "geotech to verify in the field". If LSM is to be included in the bid, can an elevation be established for the bottom of LSM so that all bidding contractors are figuring the same depth?

Response:
Yes it needs to be included. No one knows the depth, except at the boring points. We would have to do 1 every 24″ to get that information. For base bid assume 6 foot of depth around entire building. Add a line item for a cubic yard of additional material and labor if required.

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ITEM 11

Question:
Is the "Typ. Frost Slab" detail to be used at all exterior door?

Response:
Yes

ITEM 12

Question:
For the covered porch to the east, is the entire porch to be a frost slab or is a frost slab only to be placed in front of the entrance?

Response:
Just the width of the exterior doors x a minimum of 48".

ITEM 13

Question:
Please provide details for excavation/sitework/site improvements.

Response:
See drawings.

ITEM 14

Question:
What is the metal roof panel type for base bid and then for the alternate? It just says 24 ga nothing specific called out.

Response:
Contractors' preference, but city approved. Color TBD. Min 24 ga

ITEM 15

Question:
Please provide roof panel type and width (suggest IL2018).

Response:
This should be fine.

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ITEM 20

Question:
Are soffits metal or vinyl? If Metal, please advise if flush panel or v-groove.

Response:
Either, with material issues both are fine. v-grove is fine.
Response:

END OF RFI NO. 2