B-D-22-1AE-4

PROJECT

New Leaf

Public Facility Improvements

ATHENS COUNTY COMMISSIONERS

Lenny Eliason

Charlie Adkins

Chris Chmiel

BID DOCUMENTS PREPARED BY:

HOCKING ATHENS PERRY COMMUNITY ACTION AGENCY
3 Cardaras Dr.
P.O. BOX 220
Glouster, Ohio 45732
740.767.4500
1.800.686.1093

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NOTICE TO CONTRACTORS SECTION A

NOTICE TO CONTRACTORS

Sealed proposals for the New Leaf-Public Facility Improvements project will be received at the office of the Athens County Commissioners, 15 South Court Street (2nd Floor), Athens, Ohio 45701 until June 18th at 10:45am. Plans, specifications and bid forms may be secured by contacting the Community Development Division at the office of Hocking Athens Perry Community Action, 3 Cardaras Dr., Glouster, OH 45732, (740)-767-4500, for a non-refundable fee of \$20.00. Plans, specifications, and bid forms may also be downloaded from www.hapcap.org at no charge.

Each bid must be accompanied by either a bid bond, in an amount of 100% of the bid amount with a surety satisfactory to the aforesaid <u>Athens County Commissioners</u>, or by certified check, cashier's check, or irrevocable letter of credit from a solvent bank in the amount of not less than 10% of the bid amount in favor of the aforesaid <u>Athens County Commissioners</u>. Bid Bonds shall be accompanied by Proof of Authority of the official or agent signing the bond.

Bids shall be sealed and marked as **New Leaf – Public Facility Improvements** and mailed or hand-delivered to:

Athens County Commissioners

15 South Court Street (2nd Floor)

Athens, OH 45701

A MANDATORY PRE BID MEETING WILL BE HELD ON JUNE 6 AT 1:00 PM ON SITE AT 96 HIGH STREET GLOUSTER OHIO 45732.

Attention of bidders is called to all of the requirements contained in this bid packet, particularly to the Federal Davis-Bacon Wages, various insurance requirements, various equal opportunity provisions, and the requirement for a payment bond and performance bond for 100% of the contract price.

No bidder may withdraw their bid within ninety (90) days after the actual date of the bid opening thereof. The **Athens County Commissioners** reserve the right to waive any informality or to reject any or all bids.

INSTRUCTIONS TO BIDDERS

SECTION B

1. **RECEIPT AND OPENING OF BIDS:** The <u>Athens County Commissioners</u> (herein called the "Owner"), invite bids on the form attached hereto, all blanks of which must be appropriately completed. Bids will be received by the Owner at the office of the <u>Athens County Commissoners</u>, at 15 South Court Street (2nd Floor), Athens, OH 45701 until <u>June 18th at 10:45am</u>, at which time they will be publicly opened and read aloud. The envelopes containing the bids must be sealed and addressed to <u>Athens County Commissioner</u>, at 15 South Court Street (2nd Floor), Athens, OH 45701. Envelopes must be designated for the New Leaf-Public Facility Improvements.

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within ninety (90) days after the actual date of the opening thereof.

- After Bid Opening, Bidder may withdraw his bid from consideration if the price bid was substantially lower than the other bids, providing the bid was submitted in good faith and the reason for the price bid being substantially lower was a clerical mistake as opposed to a judgment mistake and was actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of work, labor or material made directly in the compilation of the bid. Bidder shall submit evidence of error with request to withdraw Bid. Notice of a Claim of Right to Withdraw such bid must be made in writing filed with the Owner within two business days after the conclusion of the bid opening procedure.
- It is the intent of the Owner to award a Contract to the lowest responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents. The Owner shall have the right to waive any informality or irregularity in any Bid or Bids received and to accept the Bid or Bids which, in his judgment, is in his own best interest.
- The Owner shall have the right to accept Alternates in any order or combination, and to determine the low Bidder on the basis of the sum of the Base Bid and the Alternates accepted.
- 2. **PREPARATION OF BID:** Each bid must be submitted on the prescribed form and accompanied by the required form in Section F including a bid bond or certified check, the Non-Collusion Affidavit, Certification Regarding Debarment, Suspension, and Other Responsibility Matters Primary Covered Transactions, Experience Statement, Bonding and Insurance Requirements and the Statement on Delinquent Taxes. All blank spaces for bid prices must be filled in, in ink or typewritten, in both words and figures, and foregoing Certifications must be fully completed and executed when submitted.

The Bidder's total is his total bid based on his unit prices and lump sum prices and the estimated quantities

shown on the plans. This figure is for information only at the time of opening bids. The owner will make the tabulation from the unit prices and lump sum prices bid. If there is an error in the total by the bidder, it shall be changed as only the unit prices and lump sum prices shall govern.

Each bid must be submitted in a sealed envelope, bearing on the outside, the name of the bidder, his/her address, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form.

One copy of each Bid must be submitted on the prescribed form. All blank spaces for bid prices must be filled in, in ink or typewritten. Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, address of the bidder, the name of the project, and, if applicable, the Items of Work for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form. The Proposal shall contain the following documents:

- 1. The Form of Proposal
- 2. The Bid Bond

The wording of the Proposal shall be used without change, alteration, or addition. Any change in the wording will cause a Proposal to be rejected as not complying with bidding requirements.

No Contract shall be entered into until Contract and Bond are submitted to the Owner's Legal Authority and approval is certified thereon.

- 3. <u>TELEGRAPHIC MODIFICATION:</u> Any bidder may modify his/her bid by telegraphic communication at any time prior to the scheduled closing time for recipient of bids, provided such telegraphic communication is received prior to the closing time, and provided further, the Owner is satisfied that a written confirmation of the telegraphic modification over the signature of the bidder was mailed prior to closing time. The telegraphic communication should not reveal the bid price, but should provide the addition or subtraction or other modification so that the final prices or terms will not be known by the Owner until the sealed bid is opened. If written confirmation is not received within two days from the closing time, no consideration will be given to the telegraphic modification.
- 4. **METHOD OF BIDDING:** The Owner invites unit price/lump sum price bids as indicated in the Bid Form. If the lowest responsive bid received exceeds the amount of funds available to finance the contract, the Owner may:
 - a) Reject all bids;
 - b) Augment the funds available in an amount sufficient to enable award to the lowest responsive bidder or bidders; and
 - c) Take the base bid less a number of items as listed on the proposal form as to produce a net amount which is within available funds.

IF THE LOWEST RESPONSIVE BIDDER IS ABOVE 10% OF THE ESTIMATE, ALL BIDS MUST BE REJECTED

The estimate on this project is: \$1,800,000 Maximum Allowable Bid: \$2,250,000

5. QUALIFICATIONS OF BIDDER: The Owner may make such investigations as he/she deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted. Past performance will be an evaluation criterion. Attention is called to Attachment A: "QUALITATIVE and RESPONSIBLE" CONTRACTOR CRITERIA

10% of the bid, or a bid bond prepared on the form entitled bid bond attached hereto, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner.

Such cash, checks or bid bonds will be returned to all except the three lowest bidders within three days after the opening of the bids, and the remaining cash, checks or bid bonds will be returned promptly after the Owner and the accepted bidder have executed the contract, or, if no award has been made within ninety (90) days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he/she has not been notified of the acceptance of his/her bid. Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

7. **LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT:** The successful bidder, upon his/her failure or refusal to execute and deliver the contract and bonds required within ten (10) days after he/she has received acceptance of his/her bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his/her bid.

Bidder must agree to complete the project within 300 calendar days of notice to proceed:

The Bidder also agrees to pay as liquidated damages, and not as penalty, in the amount of \$750 per day for each consecutive calendar day after the established date for substantial completion that the work remains in an unfinished condition.

8. **CONDITIONS OF WORK:** Each bidder must inform himself/herself fully to the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his/her obligation to furnish all material and labor necessary to carry out the provisions of his/her contract. Insofar as possible, the contractor in carrying out the work, must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor.

Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well asthe information furnished by the Owner, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

9. **OBLIGATION OF BIDDER:** At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect of his/her bid.

All Bidders shall use complete sets of Bidding Documents in preparing their bids; neither the Owner nor the Architect assume any responsibility for misinterpretations resulting from the use of incomplete sets of Bidding Documents.

- 10. **EXAMINATION OF SITE:** Each bidder shall, and is hereby directed to inspect the entire site of the proposed work and judge for himself/herself as to all the circumstances affecting the cost and progress of the work and shall assume all patent and latent risks in connection herewith.
 - Site verification, except for the pre-bid conference will require an appointment.
 - The bidder shall promptly notify the Architect of any ambiguity, inconsistency or error which they may discover
- 11. **SOIL CONDITIONS:** Subject to the convenience of the Owners, prospective bidders will be permitted to explore the site by making borings or digging test pits. In such event, the work shall be done at the sole expense and risk of the bidder, and he/she shall maintain and restore the site to original condition.

The Owner does not guarantee the accuracy of any information or samples which it may have obtained from test borings or otherwise as to the kind or condition of the soil that may be encountered in the prosecution of the proposed work, neither does the Owner represent that the plans and specifications drawn are based upon any data so obtained. The Owner does not make any representation as to the soil which may be encountered or of soil or water which underlies the work or is adjacent thereto, including any difficulties that may be due to quicksand, or other unfavorable conditions that may be encountered in the work, whether apparent upon surface inspection or disclosed in the process of carrying forward the work.

12. **WORKING FACILITIES:** The plans/work specifications show, in the general manner, the existing structures and land available for construction purposes. The bidders must satisfy themselves of the conditions and difficulties that may be encountered in the execution of the work at this site.

The proposed sequencing of work is as follows:

- Intent is to have the building enclosed prior to winter weather.
- Contractor to perform a blower door test prior to the installation of insulation and interior finishes
- ADDENDA AND INTERPRETATIONS: No official interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally. Every request for such interpretation should be in writing addressed to Hocking Athens Perry Community Action and to be given consideration, must be received at least five (5) days prior to the date fixed for the opening of the bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be mailed by certified mail or faxed with return receipt requested in both instances to all prospective bidders (at the respective addresses furnished for such purposes), not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his/her bid as submitted. All addenda so issued shall become part of the contract documents.

Bidders requiring clarification or interpretation of the Bidding Documents shall make a request which shall be received by the Architect at least four days prior to the date for receipt of Bids. Every request for such interpretation should be in in an email to Don Dispenza at ddispenza@bdtaid.com.

Any interpretation, correction or change of the Bidding Documents will be made by Addendum. Interpretation, correction or change of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections and changes.

If, in examining the Bidding Documents, the Bidder discovers an apparent violation of the Ohio Building Code or other applicable statute or regulation, he shall report such apparent violation to the Architect promptly. However, this provision shall not be construed as imposing responsibility on the Contractor to insure conformity of the Plans and Specifications to the Ohio Building Code and other applicable

regulations.

Addenda will be emailed to all who are registered with the Architect to have received a complete set of Bidding Documents. Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.

Bidders are responsible for sending bidding addendums to their vendors and subcontractors.

- 14. **WATER SUPPLY:** All water for construction purposes, as well as the expense of having water conveyed about the work, must be provided by the Contractor and the cost of this work shall be included in the unit prices stipulated for the various items of the work to be done under this contract. The source, quality and quantity of water furnished shall, at all times, be satisfactory to the Engineer and/or Owner or their representatives.
- 15. **SIGNATURE OF BIDDERS:** The firm, corporate or individual name of the bidder must be signed in ink in the space provided for the signatures on the proposed blanks. In case of a corporation, the title of the officer signing must be stated and such officer must be thereunto duly authorized and the seal of said corporation duly affixed. In the case of a partnership, the signature of at least one of the partners must follow the firm name, using the term "member of the firm". In the case of an individual, use the terms "doing business as", or "sole owner". The bidder shall further state, in his proposal, the name and address of each person or corporation interested therein.
- 16. **NOTICE OF SPECIAL CONDITIONS:** Attention of the bidder is particularly called to those parts of the General Contract Conditions (Section C) and other contract documents and specifications which deal with the following:
 - a) Insurance requirements
 - b) Federal Labor Standards Provisions, including Davis-Bacon wage rates
 - c) Requirement for a payment bond and performance bond for 100% of contract price
 - d) Requirement that all subcontractors be approved by the Owner
 - e) Time-for-completion and liquidated damages requirements
 - f) Safety standards
 - g) Contractor's responsibility to obtain permits
 - h) Affirmative Action and Equal Opportunity provisions
- 17. <u>ADDITIONAL OBLIGATIONS UPON CONTRACT AWARD:</u> Upon award of the contract, but prior to execution of the final agreement and notice to proceed, the contractor shall submit all of the following documents, completed as required:
 - a) Acceptance of Notice of Award
 - b) Contract
 - c) Insurance certificate(s) and/or policy(ies), including Bureau of Workers' Compensation documentation
 - d) Performance bond
 - e) Certification of Bidder Regarding Section 3 and Segregated Facilities
 - f) Certification(s) of (all) Proposed Subcontractors Regarding Section 3 and Segregated Facilities
 - g) Contractor's Certification concerning Labor Standards and Prevailing Wage Requirements
 - h) (All) Subcontractor's Certification(s) concerning Labor Standards and Prevailing Wage Requirements.
 - i) ALL OF THE FOLLOWING IF CONTRACT EXCEEDS \$10,000.00:
 - Contractor's Section 3 Plan
 - Certification of Bidder Regarding Equal Employment Opportunity
 - Certification(s) by (all) Proposed Subcontractors regarding Equal Employment

Opportunity

Certification by Contractor and Subcontractors of Compliance with Air and Water Acts

18. **FOREIGN CORPORATIONS AND CONTRACTORS**

A. Foreign Corporations

Definition: "Foreign Corporation" means a corporation incorporated under the laws of another state. No contract shall be entered into with a foreign corporation until the Secretary of State has certified that such corporation is authorized to do business in Ohio; and until, if the bidder so awarded the Contract is a person or partnership, it has filed with the Secretary of State Power of Attorney designating the Secretary of State as its agent for the purpose of accepting service of summons in any action brought under Section 153.05 of the Ohio Revised Code or under Sections 4123.01 to 4123.94, inclusive of the Revised Code.

19. <u>Basis of Bids</u> Project will be constructed under one general contract.

20. **Post-Bid Submittals**

A. The Bidder shall, within seven days of notification of selection for the award of a Contract for the Work, submit the following information to the Architect:

- 1. The proprietary names and the suppliers of principal items or systems of materials and equipment proposed for the Work.
- 2. A list of names of the Subcontractors proposed for the principal portions of the Work.
- 3. Completed continuation sheet, AIA Document G703, copy included in this Project Manual. Include column B Description of Work and column C Schedule of Value.
- 4. Proof of insurance and Workman's Compensation.
- B. Prior to the award of the Contract, the Architect will notify the Bidder in writing if either the Owner or the Architect has reasonable objection to any such proposed person or entity. If there is such objection, the Bidder may, at his option, (1) withdraw his Bid, or (2) submit an acceptable substitute with an adjustment.
- **21.** <u>Allowances</u> Include the ALLOWANCE in the Base Bid below. The allowance value indicated below is for labor and materials and sub-contractor overhead and profit.

	Estimated	Unit of	
ITEM 1: ALLOWANCE			AMOUNT
A. Allowance No. 01: Wood Flooring/ Framing Replacement		\$15,000.00	
B. Allowance No. 02: East Exterior W	lowance No. 02: East Exterior Wall Restoration		\$15,000.00
C. Allowance No. 03: Exterior Masonr	y Restoration		\$10,000.00

ITEM 2: GENERAL TRADES CONTRACT, includes all work in drawings and specifications and Allowances

- 1. Allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts
- 2. Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances
- 3. Whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order.

Attachment A

ADDING "QUALITATIVE and RESPONSIBLE" CONTRACTOR CRITERIA TO THE <u>ATHENS</u> <u>COUNTY</u> INVITATION TO BID ON ALL CONSTRUCTION PROJECTS SUBJECT TO PREVAILING WAGE THRESHOLD STANDARDS

WHEREAS, the <u>Athens</u> County Board of Commissioners wish to add "Qualitative and Responsible" contractor criteria to the Invitation to Bid for <u>Athens</u> "County Appropriated" construction projects.

WHEREAS, the Commissioners desire to further ensure that the County's contractors are compliant with the law, financially stable, and capable of executing construction contracts in a competent and professional manner; and

WHEREAS, the Commissioners desire to help ensure the opportunity for workers in <u>Athens</u> County to obtain health insurance and pension benefits so desperately needed in today's society as well as the proper training to maintain a quality workforce

WHEREAS, the "Qualitative and Responsible" criteria enumerated in the attached document will be appropriately included in the <u>Athens</u> County Invitation to Bid for construction projects.

BE IT RESOLVED BY THE ATHENS COUNTY COMMISSIONERS

That the "Qualitative and Responsible" criteria enumerated are hereby approved and will be added to the <u>Athens</u> County Invitation to Bid for construction projects managed by the Athens County Commissioners

- 1. Before any contracts are awarded for any construction work within the jurisdiction of the <u>Athens</u> County Commissioners they shall, or their agent shall, hold with the apparent "Low" bidder a "Compliance of Scope" Review. This to verify that bidder is in compliance with this resolution and that all required work under contract is included in bid.
- 2. The "Low" Bidder whose bid is more than twenty percent (20%) below the next lowest bidder shall list three (3) projects that are each within seventy-five percent (75%) of the bid project estimate for similar projects and that were successfully completed by the bidder not more than five (5) years ago. This information shall be provided, if necessary, at the post-bid "Compliance of Scope Review"
- 3. Any low bidder shall also be prepared to substantiate their cost over-run and job completion timeliness record. This information shall be provided, at the post-bid "Compliance of Scope" Review
- 4. The successful bidder shall certify that they will employ "qualified craft workers" with the experience and continuity befitting the wages they will be paid and hired from the labor pool. They possess and maintain any appropriate state licenses.
- 5. The successful bidder must certify that they have not been penalized or debarred from any public contract for falsified certified payroll records or any other violation of the Fair Labor Standards Act in the last five (5) years.
- 6. The successful bidder must not be debarred from any public contracts or found by the state (after all appeals) to have violated prevailing wage laws in the last 5 years.
- 7. The successful bidder must certify that they have implemented a drug free workplace policy.
- 8. The successful bidder must certify they will secure any required bonds from a surety, licensed to do business in the State of Ohio with an A.M. Best Company rating of at least "A".
- 9. The successful bidder must certify that they have complied with unemployment and worker's compensation laws for at least the nine months preceding the date of bid submittal
- 10. The successful bidder must certify that they provide a minimum health care plan for those employees that will be working on the proposed project.
- 11. The successful bidder must certify that they provide a pension or retirement program for those employees that will be working on the proposed project.
- 12. The successful bidder must submit a list of sub-contractors to be used on the project or before notice to proceed is issued.
- 13. The successful bidder must certify that their construction license has not been revoked in any state or municipality.

GENERAL CONTRACT CONDITIONS

SECTION C

ARTICLE 1 - CONTRACT AND CONTRACT DOCUMENTS

- A. The project to be constructed pursuant to this contract will be financed with assistance from the Department of Housing and Urban Development and is subject to all applicable Federal laws and regulations.
- B. All applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.
- C. The Plans, Specifications and Addenda, hereinafter enumerated in Paragraph 1 of the Supplemental General Conditions shall form part of this Contract and provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The table of contents, titles, headings, running headlines and marginal notes contained herein and in said documents are solely to facilitate reference to various provisions of the Contract Documents and in no way affect, limit or cast light on the interpretation of the provisions to which they refer.

ARTICLE 2 - PERFORMANCE AND PAYMENT BONDS

Simultaneously with his/her delivery of the executed contract, the Contractor shall furnish a surety bond or bonds as security for faithful performance of this contract and for the payment of all persons performing labor on the project under this Contract and furnishing materials in connection with this contract, as specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner. The bond shall be for 100 percent of the contract price. A Payment Bond and Performance Bond are required per regulations below:

A state or local unit of government receiving a grant from the Federal government which requires contracting for construction of facility improvement shall follow its own requirement relating to bid guarantees, performance bonds, and payment bonds, except for contracts or subcontracts exceeding \$100,000.00. For contracts or subcontracts exceeding \$100,000.00, the Federal agency may accept the bonding policy requirement of the grantee provided the Federal agency has made a determination that the Government's interest in adequately protected. If such a determination has not been made, the minimum requirements shall be as follows:

- A. A bid guaranty from each bidder equivalent to ten percent of the proposal price. The "bid guarantee" shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a proposal as assurance that the bidder will, upon acceptance of his/her proposal, execute such contractual documents as may be required within the time specified.
- B. <u>A performance bond on the part of the contractor for 100 percent of the contract price</u>. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.
- C. <u>A payment bond on the part of the contractor for 100 percent of the contract price</u>. A "payment bond" is one executed in connection with a contract to assure payment as required by law of all persons supplying

labor and material in the execution of the work provided for in the contract.

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney. Under certain conditions, and within the limits of State and local laws and regulations, the Owner may waive the requirement that the Payment and Performance Bond be underwritten by a surety company and may authorize in lieu thereof, a personal bond backed by a letter of credit from a local lending institution for the full value of the Contract.

ARTICLE 3 - WAGE RATES

In the event that the rate of wages paid for any trade or occupant in the locality where such work is being performed are under current collective agreements or understandings between bona fide organizations of labor and employer, then the wages to be paid shall be not less than such agreed wage rates, nor less than the minimum rates compiled by the Federal Labor Standard Provision. A copy of these prevailing rates of wages has been included in these specifications.

Every Contractor and Subcontractor who is subject to this contract shall, as soon as he/she begins performance under his/her contract with the Owner, supply the Owner a schedule of dates on which he/she is required to pay wages to employees. He/She shall also deliver to the prevailing wage coordinator within three weeks after each pay date, a certified copy of his/her payroll which shall exhibit for each employee paid any wages, name, current address, social security number, number of hours worked each day of the pay period and total for each week, hourly rate of pay, job classification, fringe payments, and deductions from wages. The certification of each payroll shall be executed by the Contractor, Subcontractor, or duly executed by the Contractor, Subcontractor, or duly appointed agent thereof and shall recite that the payroll is correct and complete and that the wage rate shown is not less than those required by the contract. **Insofar as possible, local labor shall be employed on this project.**

ARTICLE 4 - AFFIRMATIVE ACTION

Each bidder, Contractor, and/or Subcontractor, must fully comply with either Part 1 or Part 11, as applicable, of Executive Order 1246 as stated during the performance of this contract or subcontract. The Contractor commits itself to the goals for minority manpower utilization in either Part 1 or Part 11, as applicable, and all other requirements, terms and conditions of those proposal conditions by submitting a properly signed bid.

The Contractor shall appoint a company executive to assume the responsibility for the implementation of the requirements, terms and conditions of these bid conditions.

ARTICLE 5 - INSURANCE

- A. The Contractor shall not commence work under this Contract until he has obtained all the insurance required hereunder and such insurance has been approved by the Owner, nor shall the Contractor allow any Subcontractor to commence work on his subcontract until all similar insurance required of the Subcontractor has been so obtained and approved. Approval of the insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder.
- B. The Contractor shall file with the Owner all Certificate(s) of Insurance as are necessary to document the insurance coverage required hereunder, subject to the approval of the Owner and receipt of any additional forms/documentation requested, prior to final execution of the Agreement Contract and issuance of the Notice to Proceed.

C. Worker's Compensation

a) All contractors and subcontractors shall acquire and maintain, during the term of the Contract, Worker's Compensation insurance in full compliance with the laws of the State of Ohio.

D. Contractor's Liability Insurance

- a) The Contractor shall acquire and maintain during the term of the Contract Bodily Injury and Property Damage Liability Insurance under a standard Comprehensive General/Automobile Liability Policy which shall provide and include coverage on all Contractor's Operations, Contractor's Protective (Sublet) Liability, Contractual Liability, Completed Operations Liability, Owned Automobiles and Non-owned and Hired Automobiles.
- b) Property Damage Liability Insurance shall be provided on any demolition, blasting, excavating, shoring or similar operation on an "if any" basis.
- c) Bodily Injury Liability limits shall be for an amount of no less than Two Hundred Fifty Thousand (\$250,000) Dollars for injuries, including wrongful death to any one person and subject to the same limit for each person, in an amount of not less than Five Hundred Thousand (\$500,000) Dollars on the account of any one occurrence.
- d) Property Damage Liability insurance shall be in an amount of not less than One Hundred Thousand (\$100,000) per occurrence. General Liability shall be extended to provide "Broad Form Property Damage Liability," and in an amount of not less than One Million (\$1,000,000) Dollars aggregate for damage on account of all occurrences.
- e) Any combination of underlying Comprehensive General/Automobile Liability coverage with Umbrella/Excess Liability coverage which provides no less than One Million (\$1,000,000) Dollars Single Limit Bodily Injury and Property Damage Liability Insurance for the Contractor will also be acceptable.
- f) The Owner may adjust the liability limits to coincide with local government procurement policies and practice within the limits of state and local law.

E. Builder's Risk Insurance

a) Each Contractor shall maintain insurance from loss incurred by fire, lightning, extended coverage hazards, vandalism, theft, explosion and malicious mischief in the full amount of the Contract and such insurance shall cover all labor and material connected with the work, including materials delivered to the site, but not yet installed. This insurance shall be project specific and valued in the full amount of the contract.

F. Installation Floater Insurance

- a) When a contractor is involved solely in the installation of materials and not in the construction of a building (i.e. plumbing), an Installation Floater is required in lieu of a Builder's Risk Policy with the same general conditions applying as set forth in Paragraph E.
- G. The Policies as listed above shall all contain all the following special provisions:
 - a) The Company agrees that thirty (30) days prior to cancellation or reduction of the insurance afforded by this policy with respect to the Contract involved, written notice will be mailed to HOCKING ATHENS PERRY COMMUNITY ACTION AGENCY.
 - b) The maintaining of such insurance as outlined herein shall in no way constitute a waiver of legal liability for damage to any adjoining buildings or their contents or the work and property of others on the site beyond the limits of insurance thus maintained. The Contractor shall hold the Owner free and harmless from any injury and damage resulting from the negligent or faulty performance

- of the Contract by the Contractor or by his/her Subcontractors.
- c) Each Contractor shall hold the Owner harmless from all payments for patents, either as royalty or otherwise, in the use of materials, methods, appliances, etc., that he may be any way involved in or connected with any part of his work or the work of his Subcontractors.
- d) Prior to commencement of any work under the Contract, the Contractor shall furnish one (1) copy of Declaration of Insurance as evidence of coverage.

ARTICLE 6 - SAFETY

- A. The Contractor will be responsible for initiating, maintaining and supervising all safety precautions and program in connection with the Work. He/She will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury, or loss to all employees on the work and other persons who may be affected thereby, and all the work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated form removal, relocation, or replacement in the course of construction.
- B. The Contractor will erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety protection. He/She will notify owners of adjacent utilities when prosecution of the work may affect them.
- C. The Contractor shall comply with the safety standards guidelines provisions of applicable laws, building and construction codes as well as the requirements of the Occupational Safety and Health Act of 1970, as amended through January 1, 2004, and the requirements of Title 29 of the Code of Federal Regulations. The Chapter shall also comply with Chapter 4104.9-2 of the Ohio Revised Code prohibiting the Employment of Minors in Occupations Hazardous or Detrimental to their health and OSHA Part 1926, Safety and Health Regulations for Construction.
- D. The Contractor shall maintain at his/her office or other well-known place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or a doctor's car of persons (including employees) who may be injured at the job site. In no case shall employees be permitted to work at a job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor's care.
- E. Lights, signs and barricades shall be used to maintain traffic and safety for vehicular and pedestrian traffic during the course of this contract in accordance with the specifications.
- F. The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the work. The Contractor shall not permit employment of unfit persons not properly skilled in tasks assigned to them.
- G. If, in the course of the work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites wetlands not indicated in the Contract Documents, the Contractor shall immediately susupend any operations that would affect them and shall notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to optian governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features.

ARTICLE 7 - PERMITS

The Owner is responsible for obtaining and paying for the following permits:	
	(If blank, contractor
is responsible for all permitting necessary.)	

The Contractor is responsible for obtaining and paying for all other necessary permits and licenses from the proper authorities. The Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the Contract Documents are at variance therewith, he/she shall promptly notify the Owner in writing.

If the Contractor performs work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such work and shall bear the costs attributable to correction.

ARTICLE 8 - SUPERVISION

- A. The Contractor will supervise and direct the work. He/She will be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The Contractor will employ and maintain on the work site a qualified supervisor or superintendent who shall have been designated in writing by the Contractor at the pre-construction meeting as the Contractor's representative at the site. The Supervisor shall have full authority to act on behalf of the Contractor and communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall be present and on the site at all times as required to perform adequate supervision and coordination of the work.
- B. The Owner and its representative will, at all times, have access to the work. In addition, authorized representatives and agents of any participating federal or state agency shall be permitted to inspect all work, materials, and payrolls, records of personnel, invoices of materials, and other relevant data and records. The Contractor will provide proper facilities for such access and observation of the work and also for any inspection or testing thereof.
- C. The Contractor shall submit a proposed program of operation, showing clearly how he/she proposed to conduct the work as to bring about the completion of his/her work within the time limit specified. This program shall outline the proposed sequence of operations, the rates of progress and the dates when his/her work will be sufficiently advances to permit the installation of the work under other contract, and the estimated progress payments due under the Contract. The work under this contract shall be so scheduled that as structures are completed, they can be placed into useful operation with a minimum of delay. The program shall be subject to the approval of the Owner.
- D. All construction as proposed along all City, Township, County, State and Federal roads including storage and stockpiling of materials, is to be conducted within the limits of the public right-of-way. Bracing, sheeting and shoring shall be used to keep all construction work within the construction limits unless work agreements are secured from the adjacent property owners. It is the Contractor's responsibility to secure these work agreements, if deemed necessary. Copies of the work agreements shall be delivered to the Engineer and the Owner prior to any work beginning on the affected property.

The Contractor shall be responsible for inspection of portions of work already performed to determine that such portions are in proper condition to receive subsequent work.

Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment, and completions of the work, whether temporary or permanent and whether or not incorporated or to be incorporated in the work.

The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance the project site during performance of the work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. As soon as practicable after award of the Contract, shall notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Architect to provide notice with the 14-day period shall constitute notice of no reasonable objection.

ARTICLE 9 - CLAIMS AGAINST CONTRACTOR

The Contractor shall indemnify and save the Owner or the Owner's agents harmless from all claims growing out of the lawful demands of Subcontractor's laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the work. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the Contractor fails to do so, the Owner, may, after having notified the Contractor, wither pay unpaid bills or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with the terms of the Contract Documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor, his Surety, or any third party. In paying any unpaid bills of the Contractor, any payment so made by the Owner shall be considered as a payment made under the Contract Documents by the Owner to the Contractor and the Owner shall not be liable to the contractor for any such payments in good faith.

ARTICLE 10 - SUBCONTRACTING

- A. Neither the Contractor nor the Owner shall sell, transfer, assign, or otherwise dispose of his right, title, or interest therein, or his obligations thereunder.
- B. The Contractor shall not sublet, sell, transfer or assign any portion of the contract without written consent of the Owner of his/her designated agent. When such consent is given, the Contractor will be permitted to sublet a portion thereof, but shall perform with his/her own organization, work amounting to no less than fifty percent of the total contract cost, except that any item designated in the contract before computing the amount of work required to be performed by the Contractor with his/her own organization. No subcontract, or transfer of contract, shall in any way release the Contractor of his/her liability under the contract and bonds.
- C. The Contractor shall not award work to Subcontractor(s) without prior written approval of the Owner, after verification by the Ohio Department of Development of the subcontractor's current eligibility status, and after submission of all certifications as required in

INSTRUCTIONS TO BIDDERS. The Contractor shall be fully responsible to the Owner for the acts and omissions of the subcontractor(s), and of the persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him/her.

ARTICLE 11 - CHANGE OF WORK

- A. The Owner reserves the right to make, at any time during the progress of the work, such increases or decreases in quantities and such alterations in details of work as may be deemed necessary or desirable. Such increases or decreases and alterations shall not invalidate the contractor nor release the surety, the Contractor agrees to perform the work as altered, the same as if it had been a part of the original contract.
- B. Authorized alterations in plans or quantities of work involving work not covered by unit prices in the proposal are paid for as stipulated in the change order authorizing such work.
- C. No changes in work covered by the approved Contract shall be made without having prior written approval of the Owner.

ARTICLE 12 - TIME

- A. The Date of beginning and time for completion of the work are essential conditions of the Contract Documents and work embraced shall be commenced on a date specified in the Notice to Proceed.
- B. The Contractor will proceed with the work at such rate of progress to ensure full completion with in the Contract Time. It is expressly understood and agreed, by and between the Contractor and the Owner, that the Contract Time for the completion of the work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work.
- C. The Contract Time to fully complete the project shall be <u>300</u> consecutive calendar days following the date of commencement of work to be specified in a written "Notice to Proceed".
- D. If the Contractor shall fail to complete the work within the Contract Time, and an extension of time is not granted by the Owner, the Contractor will pay the Owner for liquidated damages \$750.00 for each calendar day that the Contractor shall be in default after the time stipulated in the Contract Documents.
- E. The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information a Contractor's construction schedule for the work. The schedule shall contain detail appropriate for the project, including (1) the date of commencement of the work, interim schedule milestone dates, and the date of substantial completion; (2) an apportionment of the work by construction activity; and (3) the time required for completion of each portion of the work. The schedule shall provide for the orderly progression of the work to completion and shall not exceed time limits current under the contract documents. The schedule shall be revised at appropriate intervals as required by the conditions of the work of the project.

ARTICLE 13 - COMPLETION OF WORK

- A. The Contractor shall guarantee all materials and equipment furnished and work performed for a <u>period of one year</u> from the date of Substantial Completion. The Contractor warrants and guarantees for a period of one year from the date of Substantial Completion of the improvement that it is free from all defects due to faulty materials or workmanship, and the Contractor shall promptly make corrections as may be necessary by reason of such defects. The Owner will give notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make repairs, adjustments, or other work which may be made necessary by such defects, the Owner may do so and charge the Contractor the cost thereby incurred. The Contract Bond shall remain in full force and effect through the guarantee period.
- B. All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner.

- C. When the work, including that performed by Subcontractors, is completed, the site shall be cleaned of all rubbish and debris caused by the construction. All sheds or other temporary structures, surplus materials, and equipment shall be removed and the project left in a neat and presentable condition. All of the following must be cleaned:
 - 1. Interior and exterior glass and surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces.
 - 2. Equipment and fixtures to a sanitary condition.
 - 3. Remove debris from roofs, gutters, downspouts, and drainage systems.
 - 4. Sweep paved areas, rake clean landscaped surfaces.

ARTICLE 14 - TERMINATION

After ten (10) days from delivery of a Written Notice to the Contractor, the Owner may, without cause and without prejudice to any other right or remedy, elect to terminate the Contract. In such case, the Contractor shall be paid for all work executed and any expense sustained plus reasonable profit, unless such termination was due to the act or conduct of the Contractor.

ARTICLE 15 - PAYMENT

Upon receipt of an approved invoice from the Contractor, the Owner shall submit a drawdown request to the Ohio Department of Development for CDBG funds to pay the Contractor. A turnaround time of 30 - 45 days is expected before said funds are forwarded to the Owner. Payments can be made for work completed and / or materials stored on site as approved by Design Professional and Agent of the Owner.

ARTICLE 16 - CONTRACT CLOSEOUT

A. CLOSEOUT PROCEDURES

- 1. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect's inspection.
- 2. Provide submittals to Architect that are required by governing or other authorities.
- 3. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

B. ADJUSTING

1. Adjust operating Products and equipment to ensure smooth and unhindered operation.

C. PROJECT RECORD DOCUMENTS

- 1. Maintain on site, one set of the following record documents; record actual revisions to the Work:
 - I. Contract Drawings.
 - II. Specifications.
 - III. Addenda.
 - IV. Change Orders and other Modifications to the Contract.
 - V. Reviewed shop drawings, product data, and samples.
- 2. Store Record Documents separate from documents used for construction.
- 3. Record information concurrent with construction progress.
- 4. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:

- I. Manufacturer's name and product model and number.
- II. Product substitutions or alternates utilized.
- III. Changes made by Addenda and Modifications.
- 5. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
 - I. Measured depths of foundations in relation to main floor datum.
 - II. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - III. Measured locations of utilities and appurtenances concealed in construction, referenced to visible/accessible features of the Work.
 - IV. Field changes of dimension and detail.
 - V. Details not on original Contract Drawings.
- 6. Submit documents to Architect with claim for final Application for Payment. Including lein wavers and affidavit noting contractor and all sub contractors have paid prevailing wage rates to all workers on the project.
- 7. All door keys
- 8. "Site", State of Ohio permit drawings with sign off sheets completed

D. OPERATION AND MAINTENANCE DATA

- 1. Submit two sets prior to final inspection, bound in 8-1/2 x 11 inch text pages binders with durable covers.
- 2. Prepare binder covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project.
- 3. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- 4. Contents: Prepare a Table of Contents for each volume, with each Product or system description identified.
- 5. Part 1: Directory listing names, addresses, and telephone numbers of Architect, Contractor, Subcontractors, and major equipment suppliers.
- 6. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - I. Parts and equipment list.
 - II. Operating instructions.
 - III. Maintenance instructions for equipment and systems.
 - IV. Maintenance instructions for finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.
- 7. Part 3: Project documents and certificates, including the following:
 - I. Shop drawings and product data.
 - II. Air and water balance reports, if required.
 - III. Certificates.

IV. Warranties.

- 8. Submit one copy of completed volumes in final form 15 days prior to final inspection. This copy will be returned, with Architect comments. Revise content of documents as required prior to final submittal.
- 9. Submit final volumes revised, within ten days after final inspection

E. SPARE PARTS AND MAINTENANCE MATERIALS

- 1. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification Sections.
- 2. Deliver to Project site and place in location as directed; obtain receipt prior to final payment.

F. FINAL INSPECTION

- 1. Architect will schedule a final inspection of work upon notification from contractor that work has been completed.
- 2. Contractor to inspect and correct work prior to final inspection:
 - I. Verify any defects in finishes.
 - II. Verify all equipment and fixtures are operating.
 - III. Final cleaning.
 - IV. Final State inspections completed.

SUPPLEMENTAL GENERAL CONDITIONS

1. ENUMERATION OF PLANS, SPECIFICATIONS AND ADDENDA

Following are the Plans, Specifications and an Addenda which form a part of this contract, as set forth in Article I of the General Contract Conditions, "Contract and Contract Document".

	Drawings	Number	Date
	Specifications	Number	Date
	Addenda	Number	Date
	ATED ALLOWANCES the Contractor shall include the	following cash allowances in his pr	oposal:
- 5. SP	ECIAL HAZARDS		
_			

4. CONTRACTOR'S AND SUBCONTRACTOR'S PUBLIC LIABILITY, VEHICLE LIABILITY, AND PROPERTY DAMAGE INSURANCE

- **a.** As required under Article 5 of the General Contract Conditions, the Contractor's Public Liability Insurance and Vehicle Liability Insurance shall be in an amount not less than \$1,000,000 for injuries, including accidental death, to any one person, and subject to the same limit for each person in an amount not less than \$500,000 on account of one accident, and Contractor's Property Damage Insurance in an amount not less than \$1,000,000.
- **b.** The Contractor shall either (1) require each of his subcontractors to procure and to maintain during the life of his subcontract, Subcontractor's Public Liability and Property Damage of the type and in the same amount as specified in the preceding paragraph, or (2) insure the activities of his subcontractors in his own policy.

5. PHOTOGRAPHS OF THE PROJECT

The Contractor will furnish photographs in the number, type and state as enumerated below:

6. SCHEDULE OF FEDERAL OCCUPATIONAL CLASSIFICATIONS AND DAVIS-BACON MINIMUM HOURLY WAGE RATES

Refer to Section E

WORK SPECIFICATIONS SECTION D

SUPPLEMENTARY CONDITIONS

The following supplements, modify, change, delete from or add to the General Conditions of the Contract for Construction," AIA Document A201, 2007 Edition. Where any Article of the General Conditions is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

ARTICLE 3; CONTRACTOR

- A. Paragraph 3.5, add the following sub-paragraph 3.5.1:
 - 3.5.1 Products and completed Operations to be maintained for one year after substantial completion. This warranty shall be in addition to and not a limitation of other rights the Owner may have against the Contractor under the Contract Documents.
- B. 3.7.1 Revise as follows:
 - 3.7.1 Local building permits and any required approval by the State of Ohio will be paid for and obtained by the Owner. Any tap fees, use fees, etc, from utilities, shall be paid for by the Owner.

ARTICLE 11; INSURANCE

- A. 11.1.1 In the first line following the word "maintain," insert the words "in a company or companies licensed to do business in the State of Ohio."
- B. Add the following Clause 11.1.2.1 to 11.1.2:
 - 11.1.2.1 The insurance required by Subparagraph 11.1.2 shall be written for not less than the following, or greater if required by law:
 - 1. Workers' Compensation:

State of Ohio Statutory Applicable Federal Statutory

- 2. Comprehensive General Liability (including Premises and Operations; Independent Contractors' Protective; Products and Completed Operations: Broad Form Property Damage):
 - a) Bodily Injury:

\$500,000 Each Occurrence \$1,500,000 Annual Aggregate

b) Property Damage:

\$500,000 Each Occurrence \$1,500,000 Annual Aggregate

3. Contractual Liability:

a) Bodily Injury:

\$500,000 Each Occurrence \$1,500,000 Annual Aggregate

b) Property Damage:

\$500,000 Each Occurrence \$1,500,000 Annual Aggregate 4. Comprehensive Automobile Liability:

a) Bodily Injury:

\$500,000 Each Person \$1,500,000 Each Occurrence

b) Property Damage:

\$1,500,000 Each Occurrence

- C. Add the following Clause 11.1.3.1 to 11.1.3:
 - 11.1.3.1 The Contractor shall furnish one copy each of Certificates of Insurance herein required for each copy of the Agreement which shall specifically set forth evidence of all coverage required by Subparagraphs 11.1.1, 11.1.2, and 11.1.2 The Contractor shall furnish to the Owner copies of any endorsements that are subsequently issued amending coverage or limits.

Name the architect and the owner as additional insured on a primary basis on the commercial general liability portion for ongoing and completed work per ISO form CG 20 10 11 85 (or on a substitute form providing equivalent coverage) or on a combination of ISO forms, CG 20 10 10 01 and CG 20 37 10 01(or on substitute forms providing equivalent coverage).

END OF SUPPLEMENTARY CONDITIONS

SECTION 01 10 00

SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Access to site.
 - 4. Attic Stock
 - 5. Work restrictions.
 - 6. Specification and drawing conventions.

1.3 PROJECT INFORMATION

- A. Project Identification: New Leaf Facility Improvements
 - 1. 96 High Street Glouster, Ohio 45732.
- B. Owner: Athens County Commissioners, 15 S Court Street, Athens, Ohio 45701
 - 1. Owner Representative: Lenny Eliason, ph. 740-592-3219.
- C. Project Coordinator: Jeff Jenkins, HAPCAP, ph. 740-767-4500.
- D. New Leaf Representative: Jen Seifert, PH.D., jen@saopseoh.org,.
- E. Project Architect: Donald J Dispenza, BDT Architects & Designers, 26 East Park Drive, Athens, Ohio 45701, 740-592-2420.

1.4 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of the Project is defined by the Contract Documents and consists of the following:
 - 1. Renovation and New Construction including site, architectural, electrical mechanical and HVAC systems
- B. Type of Contract
 - 1. Project will be constructed under single prime contract.

1.5 PHASING OF THE PROJECT

A. No phasing is planned for the project:

1.6 ACCESS TO SITES

- A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
- B. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Maintenance of Traffic/ Site Usage Plan: Contractor to prepare a MOT/ Site Usage plan indicating use of the site, planned crane set up locations, lay-down areas, fences, access, pedestrian protections, etc. and provide to A/E and City of Glouster for review and approval and provide any and all revisions as required.
 - 2. Driveways and Entrances: Keep driveways, loading areas, and entrances serving adjacent premises clear and available to vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries/ removals to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries/ removals to minimize space and time requirements for storage of materials and equipment on-site.

1.7 ATTIC STOCK

A. Attic stock required by contract or available at the end of the project to be stored within the building:

1.8 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations of site, on use of public streets and County property and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: No limit. Evening work hours as requested by the contractor are to be coordinated with the County/ University.
 - 1. Weekend Hours: As agreed to by the County.
 - 2. Hours for Utility Shutdowns: As agreed to by the County.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
- D. Noise, Vibration, Dust and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, dust or other disruption.
 - 1. Notify County not less than two days in advance of proposed disruptive operations.
 - 2. Comply with the City of Glouster Noise Ordinance requirements.
- E. Controlled Substances: Use of controlled substances on the Project site is not permitted.

1.9 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the Specifications. One or more of the following are used on the Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.
 - 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

END OF SECTION

SECTION 01 21 00

ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
 - 1. General Trades.

1.2 GENERAL CONSTRUCTION ALLOWANCES

- A. Use the allowance only as directed by Architect for Owner's purposes. Expenditure of the allowance to be documented, including material and labor breakdowns in order to reviewed and approved for request payment.
- B. The contractor is to include **ALL** indicated allowances in their bid total
- C. Contractor's overhead and profit are **NOT** included in the allowance total.
 - 1. The Contractor is to include all overhead and profit for allowance work as part of their bid total
- D. At Project closeout, credit unused amounts, including assigned overhead and profit remaining in the allowance to Owner by Change Order.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

A. Allowance No. 01: Wood Flooring/ Framing Replacement. \$15,000.00

BDTAID, Inc. Allowances 01 21 00 - 1

- 1. REMOVE AND REPLACE FLOOR WOOD FRAMING, WOOD FLOOR SHEATHING, WOOD FLOORING WHERE DAMAGED. REPLACE WOOD FLOORING AS NEEDED WHERE EXISTING WALLS WERE REMOVED.
- B. Allowance No. 02: East Exterior Elevation Restoration. \$15,000.00
 - 1. WHERE BALCONY IS REMOVED MODIFY AND REPAIR, PROVIDE ADDITIONAL MATERIALS AND FRAMING AS REQUIRED TO STABILIZE AND MAKE WATER TIGHT BUILDING EXTERIOR ENVELOPE. RE-ATTACHED/ RE-FASTEN CAST IRON CLADDING PANELS.
- C. Allowance No. 03: Exterior Masonry Restoration. \$10,000.00
 - 1. REPLACE BRICK AND PROVIDE TUCK POINTING AS DIRECTED IN THE FIELD.

END OF SECTION 01 21 00

BDTAID, Inc. Allowances 01 21 00 - 2

SECTION 01 31 00

COORDINATION AND MEETINGS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Coordination.
- B. Preconstruction meeting.
- C. Progress meetings.
- D. Examination.

1.2 COORDINATION

- A. Coordinate scheduling, submittals, and Work of the various sections of the Project Manual to assure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas conceal pipes, ducts, and wiring within the construction unless noted otherwise. Coordinate locations of fixtures and outlets with finish elements.
- E. Coordinate completion and clean up of Work of separate sections in preparation for Substantial Completion.
- F. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 PRECONSTRUCTION MEETING

- A. Architect will schedule a meeting prior to the start date to execute contract and coordinate schedule of work.
- B. Attendance Required: Owner, Architect and Contractor and selected sub contractors (fire suppression, plumbing, mechanical, electrical).
- C. Agenda:
- 1. Submission of executed insurance certificates.
- 2. Distribution of Contract Documents and Permit Documents.
- 3. Designation of personnel representing the parties in Contract and the Architect.
- 4. Review procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
- 5. Scheduling of jobsite work hours.
- 6. Parking and storage locations.
 - 7. Detailed work schedule and coordination.
 - 8. Submittals.

1.4 PROGRESS MEETINGS

A. Meetings will be scheduled every two weeks after start of construction.

- B. Architect will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required: Prime contractor's superintendents, sub-contractors, Owner, Architect, as appropriate to agenda topics for each meeting.
- D. Agenda:
- 1. Review minutes of previous meeting.
- 2. Review Work progress since previous meeting.
- 3. Review of planned progress prior to next meeting.
- 4. Review coordination of projected progress.
- 5. Identify possible delays.
- 6. Review status of submittals.
- 7. Review progress schedule.
- 8. Change order status and effect of changes on progress schedule.
- 9. Old Business (field observation, problems, decisions, review quality).
- 10. New Business.

PART 2 PRODUCTS

No Requirements

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that existing site conditions are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Examine and verify specific conditions described in individual specification sections.
- C. Verify that utility services are available, of the correct characteristics, and in the correct location.

END OF SECTION

SECTION 01 32 33 - PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
 - 1. Predemolition photographs.

1.3 SUBMITTALS

- A. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same label information as corresponding set of photographs.
- B. Construction Photographs: Submit digital of each photographic view within seven days of taking photographs.
 - 1. Digital Images: Submit a complete set of digital image electronic files as a Project Record Document on CD-ROM. Identify electronic media with date photographs were taken. Submit images that have same aspect ratio as the sensor, uncropped.

1.4 COORDINATION

A. Auxiliary Services: Cooperate with photographer and provide auxiliary services requested, including access to Project site and use of temporary facilities, including temporary lighting required to produce clear, well-lit photographs without obscuring shadows.

1.5 USAGE RIGHTS

A. Obtain and transfer copyright usage rights from photographer to County for unlimited reproduction of photographic documentation.

PART 2 - PRODUCTS

2.1 PHOTOGRAPHIC MEDIA

A. Digital Images: Provide images in uncompressed TIFF format, produced by a digital camera with minimum sensor size of 4.0 megapixels, and at an image resolution of not less than 1024 by 768 pixels.

PART 3 - EXECUTION

3.1 CONSTRUCTION PHOTOGRAPHS

- A. Photographer: Engage a qualified commercial photographer to take construction photographs.
- B. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
 - 1. Maintain key plan with each set of construction photographs that identifies each photographic location.
- C. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
 - 1. Date and Time: Include date and time in filename for each image.
 - 2. Field Office Images: Maintain one set of images on CD-ROM in the field office at Project site, available at all times for reference. Identify images same as for those submitted to Architect.
- D. Preconstruction Photographs: Before commencement of demolition, take color, digital photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by Architect.
 - 1. Flag construction limits before taking construction photographs.
 - Take photographs to show existing conditions adjacent to property before starting the Work.
 - 3. Take photographs of existing buildings either on or adjoining property to accurately record physical conditions at start of construction.
 - 4. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.
- E. Periodic Construction Photographs: Take color, digital photographs daily with the cutoff date associated with each Application for Payment. Select vantage points to show status of construction and progress since last photographs were taken.
- F. Architect-Directed Construction Photographs: From time to time, Architect will instruct photographer about number and frequency of color, digital photographs and general directions on vantage points. Select actual vantage points and take photographs to show the status of construction and progress since last photographs were taken.

END OF SECTION 013233

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

1.3 SUBMITTAL PROCEDURES

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.
 - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
 - 2. Initial Submittal: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
 - 3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
 - Submit revised submittal schedule to reflect changes in current status and timing for submittals.
 - 4. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Submittal category: Action; informational.
 - d. Name of subcontractor.
 - e. Description of the Work covered.
 - f. Scheduled date for Architect's final release or approval.
 - g. Scheduled date of fabrication.
 - h. Scheduled dates for purchasing.

- i. Scheduled dates for installation.
- j. Activity or event number.
- B. Architect's Digital Data Files: Electronic digital data files of the Contract Drawings will be provided by Architect for Contractor's use in preparing submittals upon request.
 - 1. Architect will furnish Contractor requested digital data drawing files of the Contract Drawings for use in preparing Shop Drawings.
 - a. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
 - b. Digital Drawing Software Program: The Contract Drawings are available in AutoCad.
 - Contractor shall execute a data licensing agreement in the form provided by the Architect.
 - d. The following digital data files will by furnished for each appropriate discipline:
 - 1) Floor plans.
 - 2) Reflected ceiling plans.
 - 3) Schedules.
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
 - 4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- D. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal.
 - Initial Review: Allow 10 business days for initial review of each submittal. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. Architect will advise Contractor when a submittal being processed must be delayed for coordination
- E. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
 - 1. Assemble complete submittal package into a single indexed file with links enabling navigation to each item.
 - 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., OHOH HVSR-061000.01). Resubmittals shall include a revision suffix after another decimal point (e.g., OHOH HVSR-061000.01.R1).
 - 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
 - 4. Transmittal Form for Electronic Submittals: Use form acceptable to Architect containing the following information:
 - a. Project name.

- b. Date.
- c. Name and address of Architect.
- d. Name of Contractor.
- e. Name of firm or entity that prepared submittal.
- f. Names of subcontractor, manufacturer, and supplier.
- g. Category and type of submittal.
- h. Submittal purpose and description.
- i. Specification Section number and title.
- j. Specification paragraph number or drawing designation and generic name for each of multiple items.
- k. Drawing number and detail references, as appropriate.
- I. Related physical samples submitted directly.
- m. Submittal and transmittal distribution record.
- n. Remarks
- Metadata: Include the following information as keywords in the electronic submittal file metadata:
 - a. Project name.
 - b. Number and title of appropriate Specification Section.
 - c. Manufacturer name.
 - d. Product name.
- F. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions of the Contract Documents, initial submittal may serve as final submittal.
 - 1. Submit one digital copy of submittal to concurrent reviewer in addition to Architect.
 - 2. Additional copies submitted for maintenance manuals will **not** be marked with action taken and will be returned.
- G. Options: Identify options requiring selection by Architect.
- H. Deviations: Identify deviations from the Contract Documents on submittals. On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- I. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of
 - 3. Resubmit submittals until they are marked acceptable by Architect's action stamp.
- J. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- K. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are acceptable by Architect's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTALS

- A. General: Prepare and submit submittals required by individual Specification Sections.
 - 1. Action Submittals: Submit electronic submittals via email as PDF electronic files.
 - 2. Informational Submittals: Submit electronic submittals via email as PDF electronic files.
 - 3. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - 4. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. Mark each copy of each submittal to show which products and options are applicable.
 - 2. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 - 3. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 - 4. Submit Product Data before or concurrent with Samples.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal based on Architect's digital data drawing files is otherwise permitted.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.
 - e. Specification paragraph number and generic name of each item.

- 3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
- 4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
- E. Coordination Drawing Submittals: Comply with requirements of the General Conditions.
- F. Contractor's Construction Schedule: Comply with requirements of the General Conditions.
- G. Application for Payment and Schedule of Values: Comply with requirements of the General Conditions.
- H. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements of individual specification sections where tests are required.
- I. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 01 Section "Closeout Procedures."
- J. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- K. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- L. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- M. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- N. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- O. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- P. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- Q. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

- R. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - 1. Name of evaluation organization.
 - 2. Date of evaluation.
 - 3. Time period when report is in effect.
 - 4. Product and manufacturers' names.
 - 5. Description of product.
 - 6. Test procedures and results.
 - 7. Limitations of use.
- S. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- T. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- U. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
 - 1. Reviewed, Rejected, Revised and Resubmit, and Furnish as Corrected.

- C. Informational Submittals: Architect will review each submittal and will not return it, or will reject and return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Submittals not required by the Contract Documents will not be reviewed and may be discarded.

END OF SECTION 01 33 00

SECTION 01 45 00

QUALITY CONTROL

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Quality assurance control of installation.
- B. Tolerances
- C. References.

1.2 RELATED SECTIONS

- A. Section 01 33 00 Submittals: Submission of manufacturers' instructions and certificates.
- B. Section 01 60 00 Material and Equipment: Requirements for material and product quality.

1.3 QUALITY ASSURANCE - CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, or physical distortion.

1.4 TOLERANCES

- A. Monitor tolerance control of installed Products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust Products to appropriate dimensions; position before securing Products in place.

1.5 REFERENCES

- A. For Products or workmanship specified by association, trade, or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where a specific date is established by code.
- C. Obtain copies of standards where required by product specification sections.
- D. The contractual relationship, duties, and responsibilities of the parties in Contract nor those of the Architect shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01 73 29 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. Related Sections include the following:
 - 1. Division 02 Section "Selective Demolition" for demolition of selected portions of the building.
 - 2. Divisions 02 through 49 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.

1.3 DEFINITIONS

- Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

1.4 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
- C. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
- D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.

3.3 PERFORMANCE

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 - 4. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - Clean piping, conduit, and similar features before applying paint or other finishing materials.
 - b. Restore damaged pipe covering to its original condition.
 - c. Match parge finish and color of adjacent concrete along all cuts in concrete wall.
 - 1) Where cutting walls horizontally grind smooth to align with adjacent grade.
 - 2) Provide 2" chamfer at edges of cut concrete to match existing construction.
 - 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 - a. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
- D. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 01 73 29

01 77 00

CONTRACT CLOSEOUT

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Closeout procedures.
- B. Final cleaning.
- C. Adjusting.
- D. Project record documents.
- E. Operation and maintenance data.
- F. Warranties.
- G. Spare parts and maintenance materials.

1.2 RELATED SECTIONS

- A. Section 01 50 00 Construction Facilities and Temporary Controls: Progress cleaning.
- B. Section 01 66 00 Starting of Systems: System start-up, testing, adjusting, and balancing.

1.3 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect's inspection.
- B. Provide submittals to Architect that are required by governing or other authorities.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

1.4 ADJUSTING

A. Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.5 PROJECT RECORD DOCUMENTS

- A. Maintain on site, one set of the following record documents; record actual revisions to the Work:
 - 1. Contract Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other Modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:
 - 1. Manufacturer's name and product model and number.

- 2. Product substitutions or alternates utilized.
- 3. Changes made by Addenda and Modifications.
- E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to main floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of utilities and appurtenances concealed in construction, referenced to visible/accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Contract Drawings.
- F. Submit documents to Architect with claim for final Application for Payment. Including lein wavers and affidavit noting contractor and all sub contractors have paid prevailing wage rates to all workers on the project.
- G. All door keys.
- H. "Site", State of Ohio permit drawings with sign off sheets completed.

1.6 OPERATION AND MAINTENANCE DATA

- A. Submit two sets prior to final inspection, bound in 8-1/2 x 11 inch text pages binders with durable covers.
- B. Prepare binder covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project.
- C. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- Contents: Prepare a Table of Contents for each volume, with each Product or system description identified.
- E. Part 1: Directory listing names, addresses, and telephone numbers of Architect, Contractor, Subcontractors, and major equipment suppliers.
- F. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - 1. Parts and equipment list.
 - 2. Operating instructions.
 - 3. Maintenance instructions for equipment and systems.
 - 4. Maintenance instructions for finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.
- G. Part 3: Project documents and certificates, including the following:
 - 1. Shop drawings and product data.
 - 2. Air and water balance reports, if required.
 - 3. Certificates.
 - 4. Warranties.
- H. Submit one copy of completed volumes in final form 15 days prior to final inspection. This copy will be returned, with Architect comments. Revise content of documents as required prior to final submittal.
- J. Submit final volumes revised, within ten days after final inspection.

1.7 WARRANTIES

- A. Provide notarized copies for project-specific warranties. Bind in manuals.
- B. Execute and assemble documents from Subcontractors, suppliers, and manufacturers.
- C. Submit prior to final Application for Payment.
- D. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

1.8 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification Sections.
- B. Deliver to Project site and place in location as directed; obtain receipt prior to final payment.

PART 2 PRODUCTS Not used

PART 3 EXECUTION

3.1 FINAL CLEANING

- A. Execute final cleaning prior to final inspection:
 - 1. Clean interior and exterior glass and surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces.
 - 2. Clean equipment and fixtures to a sanitary condition.
 - 3. Clean debris from roofs, gutters, downspouts, and drainage systems.
 - 4. Clean site; sweep paved areas, rake clean landscaped surfaces.
- B. Remove waste and surplus materials, rubbish, and construction facilities from the site.

3.1 FINAL INSPECTION

- A. Architect will schedule a final inspection of work upon notification from contractor that work has been completed.
- B. Contractor to inspect and correct work prior to final inspection:
 - 1. Verify any defects in finishes.
 - 2. Verify all equipment and fixtures are operating.
 - 3. Final cleaning.
 - 4. Final State inspections completed.

END OF SECTION

New Leaf Facility Improvements 96 High Street, Glouster

SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Demolition and removal of selected portions of building or structure.
 - 2. Salvage of existing items to be reused or recycled.
- B. Related Sections include the following:
 - 1. Division 01 Section "Summary" for use of premises and County-occupancy requirements.
 - 2. Division 01 Section "Temporary Facilities and Controls" for temporary construction and environmental-protection measures for selective demolition operations.
 - 3. Division 01 Section "Cutting and Patching" for cutting and patching procedures.

1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver them to the County.

1.4 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI A10.6 and NFPA 241.

1.5 PROJECT CONDITIONS

- A. County will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Universities operations will not be disrupted.
 - 1. Comply with requirements specified in Division 01 Section "Summary."

- B. Conditions existing at time of inspection for bidding purpose will be maintained by the County as far as practical.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: Hazardous materials are present in construction to be selectively demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
 - 1. Hazardous material remediation is specified in Project Manual in the Contract Documents.
 - 2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.
- E. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

A. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations.

- 1. Comply with requirements for existing services/systems interruptions specified in Division 01 Section "Summary."
- B. Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. County will arrange to shut off indicated services/systems when requested by Contractor.
 - If services/systems are required to be removed, relocated, or abandoned, before
 proceeding with selective demolition provide temporary services/systems that bypass
 area of selective demolition and that maintain continuity of services/systems to other
 parts of building.
 - 3. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.
 - a. Where entire wall is to be removed, existing services/systems may be removed with removal of the wall.

3.3 PLUMBING SYSTEMS

- A. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage
 - 1. Comply with requirements for existing services/systems interruptions specified in Division 01 Section "Summary."

3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
 - 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
 - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
 - 5. Maintain adequate ventilation when using cutting torches.
 - 6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
 - 7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
 - 8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 - 9. Dispose of demolished items and materials promptly.

- B. Removed and Salvaged Items:
 - 1. Clean salvaged items.
 - 2. Store items in a secure area until delivery to County.
 - 3. Protect items from damage during transport and storage.

3.5 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain Universities property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off County's property and legally dispose of them.

3.6 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 02 41 19

SECTION 06 10 00 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Framing with dimensional lumber.
 - 2. Wood blocking and nailers.
- B. Related Sections include the following:
 - 1. Refer to structural plans for more information on framing members.

1.3 DEFINITIONS

- A. Rough Carpentry: Carpentry work not specified in other Sections and not exposed, unless otherwise indicated.
- B. Lumber grading agencies, and the abbreviations used to reference them, include the following:
 - 1. NLGA National Lumber Grades Authority.
 - 2. SPIB Southern Pine Inspection Bureau.
 - 3. WCLIB West Coast Lumber Inspection Bureau.
 - 4. WWPA Western Wood Products Association.

1.4 SUBMITTALS

A. Product Data: none required.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Stack lumber, plywood, and other panels; place spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS also see sheets S0.1 and S0.2 for additional structural wood notes.

A. Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review.

- 1. Factory mark each piece of lumber with grade stamp of grading agency.
- Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
- 3. Provide dressed lumber, S4S, unless otherwise indicated.
- 4. Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.
- 5. Provide dry lumber with 15 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.

B. Wood Structural Panels:

- 1. Plywood: DOC PS 1, unless otherwise indicated.
- Oriented Strand Board: DOC PS 2.
- Thickness: As needed to comply with requirements specified but not less than thickness indicated.
- 4. Comply with "Code Plus" provisions in APA Form No. E30K, "APA Design/Construction Guide: Residential & Commercial."
- 5. Factory mark panels according to indicated standard.

2.2 DIMENSION LUMBER

- A. General: Provide dimension lumber of grades indicated according to the American Lumber Standards Committee National Grading Rule provisions of the grading agency indicated.
- B. Joists, Rafters, and Other Framing Not Listed Above: Construction or No. 2 grade and any of the following species:
 - 1. Hem-fir; WCLIB or WWPA.
 - 2. Spruce-pine-fir; NLGA.

2.3 MISCELLANEOUS LUMBER

- A. General: Provide lumber for support or attachment of other construction, including the following:
 - 1. Blocking.
 - 2. Nailers.
- B. For items of dimension lumber size, provide Construction, Stud, or No. 2 grade lumber with 15 percent maximum moisture content and the following species:
 - 1. Mixed southern pine; SPIB.
- C. For concealed boards, provide lumber with 15 percent maximum moisture content and the following species and grades:
 - 1. Mixed southern pine, No. 2 grade; SPIB.

2.4 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.
 - 1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: CABO NER-272.
- D. Wood Screws: ASME B18.6.1.
- E. Screws for Fastening to Cold-Formed Metal Framing: ASTM C 954, except with wafer heads and reamer wings, length as recommended by screw manufacturer for material being fastened.
- F. Lag Bolts: ASME B18.2.1..
- G. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.
- H. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to 6 times the load imposed when installed in unit masonry assemblies and equal to 4 times the load imposed when installed in concrete as determined by testing per ASTM E 488 conducted by a qualified independent testing and inspecting agency.
 - Material: Carbon-steel components, zinc plated to comply with ASTM B 633, Class Fe/Zn 5.
 - 2. Material: Stainless steel with bolts and nuts complying with ASTM F 593 and ASTM F 594, Alloy Group 1 or 2.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- B. Do not use materials with defects that impair quality of rough carpentry or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- C. Use common wire nails, unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood; predrill as required.

D. Use finishing nails for exposed work, unless otherwise indicated. Countersink nail heads and fill holes with wood filler.

3.2 WOOD BLOCKING, AND NAILER INSTALLATION

- A. See drawings for indicated blocking.
- B. Each trade to provide or coordinate with framer all required blocking.
- C. Blocking to be provided for cabinets, counters, wall hung items, wash room accessories, door wall stops and any other wall mounted door hardware.
- D. Install where indicated and where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- E. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces, unless otherwise indicated. Build anchor bolts into masonry during installation of masonry work. Where possible, secure anchor bolts to formwork before concrete placement.

3.3 WOOD FRAMING INSTALLATION, GENERAL

- A. Framing Standard: Comply with AFPA's "Manual for Wood Frame Construction," unless otherwise indicated.
- B. Do not splice structural members between supports.
- C. Were patching areas of existing construction, use salvaged wood were possible. If not possible contact architect for discussion.

END OF SECTION 06100

SECTION 072119 - FOAMED-IN-PLACE INSULATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Closed-cell spray polyurethane foam.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1.3 INFORMATIONAL SUBMITTALS

- A. Product test reports.
- B. Research reports.

PART 2 - PRODUCTS

2.1 CLOSED-CELL SPRAY POLYURETHANE FOAM

- A. Closed-Cell Spray Polyurethane Foam: ASTM C1029, Type II, minimum density of 1.5 lb/cu. ft. and minimum aged R-value at 1-inch thickness of 6.2 deg F x h x sq. ft./Btu at 75 deg F.
 - 1. Johns Manville Corebond III or Equal
 - 2. Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - a. Flame-Spread Index: 25 or less.
 - b. Smoke-Developed Index: 450 or less.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with insulation manufacturer's written instructions applicable to products and applications.
- B. Spray insulation to envelop entire area to be insulated and fill voids.
- C. Apply in multiple passes to not exceed maximum thicknesses recommended by manufacturer. Do not spray into rising foam.

END OF SECTION 072119

SECTION 07 62 00

SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Formed roof-drainage sheet metal fabrications.

1.3 COORDINATION

- A. Coordinate sheet metal flashing and trim layout and seams with sizes and locations of penetrations to be flashed, and joints and seams in adjacent materials.
- B. Coordinate sheet metal flashing and trim installation with adjoining roofing and wall materials, joints, and seams to provide leakproof, secure, and noncorrosive installation.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation conference: Conduct conference at project site.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each manufactured product and accessory
- B. Shop Drawings: Show fabrication and installation layouts of sheet metal flashing and trim, including plans, elevations, expansion-joint locations, and keyed details. Distinguish between shop- and field-assembled works. Include the following:
 - 1. Identification of material, thickness, weight, and finish for each item and location in Project.
 - 2. Details for forming sheet metal flashing and trim, including profiles, shapes, seams, and dimensions.
 - 3. Details for joining, supporting, and securing sheet metal flashing and trim, including layout of fasteners, cleats, clips, and other attachments. Include pattern of seams.
 - 4. Details of termination points and assemblies, including fixed points.

- 5. Details of expansion joints and expansion-joint covers, including showing direction of expansion and contraction.
- 6. Details of edge conditions, including eaves, ridges, valleys, rakes, crickets, and counter flashings as applicable.
- 7. Details of special conditions.
- 8. Details of connections to adjoining work.
- 9. Detail formed flashing and trim at a scale of not less than 1-1/2 inches per 12 inches.
- C. Samples for Initial Selection: For each type of sheet metal flashing, trim, and accessory indicated with factory-applied color finishes involving color selection.
- D. Sample for Verification: For each type of exposed finish required, prepared on Samples of size indicated below:
 - 1. Sheet Metal flashing: 12 inches long by actual width of unit, including finished seam and in required profile. Include fasteners, cleats, clips, closures, and other attachments.
 - 2. Trim, Metal Closures, Expansion Joints, Joint Intersections, and Miscellaneous Fabrications: 12 inches long and in required profile. Include fasteners and other exposed accessories.
 - 3. Accessories and Miscellaneous Materials: Full-size sample.

1.6 INFORMATION SUBMITTALS

- A. Qualification Data: For qualified fabricator.
- B. Warranty: Sample of warranty. Warranty to include labor and materials.

1.7 CLOSEOUT SUBMITTALS

A. Maintenance Data: For sheet metal flashing, trim, and accessories to include in maintenance manuals.

1.8 QUALITY ASSURANCE

A. Fabricator Qualifications: Employs skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project and whose products have a record of successful in-service performance.

1.9 DELIVERY, STORAGE AND HANDLING

- A. Do not store sheet metal flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage. Store sheet metal flashing and trim materials away from uncured concrete and masonry.
- B. Protect strippable protective covering on sheet metal flashing and trim from exposure to sunlight and high humidity, except to the extent necessary for the period of sheet metal flashing and trim installation.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General: Sheet metal flashing and trim assemblies, including cleats, anchors, and fasteners, shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Sheet Metal Standard for Flashing and Trim: Comply with NRCA's "The NRCA Roofing Manual: Architectural Metal Flashing, Condensation and Air Leakage Control, and Reroofing" and SMACNA's "Architectural Sheet Metal Manual" requirements for dimensions and profiles shown unless more stringent requirements are indicated.
- C. Thermal Movements: Provide sheet metal flashing and trim that allows for thermal movements from ambient and surface temperature changes.
 - 1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.

2.2 ROOF DRAINAGE SHEET METAL FABRICATIONS

A. Hanging Gutters:

- Fabricate to cross section required, complete with end pieces, outlet tubes, and other accessories as required.
- 2. Fabricate in minimum 96-inch long sections.
- 3. Furnish flat-stock gutter brackets and flat-stock gutter spacers and straps fabricated from same metal as gutters, of size recommended by cited sheet metal standard, but with thickness not less than twice the gutter thickness.
- Fabricate expansion joints, expansion-joint covers, gutter bead reinforcing bars, and gutter accessories from same metal as gutters. Shop fabricate interior and exterior corners.
- 5. Accessories: Wire-ball downspout strainer.
- 6. Gutters with Girth up to 15 Inches: Fabricate from the following materials:
 - Aluminum: 0.032 inch thick.
- B. Downspouts: Fabricate rectangular downspouts to dimensions indicated on Drawings, complete with mitered elbows. Furnish with metal hangers from same material as downspouts and anchors.
 - 1. Profile: Match existing.
 - 2. Hanger Style: Fig. 1-35C and Fig. 1-35E in accordance with SMACNA's "Architectural Sheet Metal Manual."
 - 3. Fabricate from the following materials:
 - a. Aluminum: 0.024 inch thick.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions and other conditions affecting performance of the Work.
 - 1. Verify compliance with requirements for installation tolerances of substrates.
 - 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
- B. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.
- D. Before proceeding with soldering of joints, the copper is to be cleaned and all joints pre-tinned. The Contractor shall wash the metal with Dawn dish washing liquid and completely fully clean the area metal to be soldered. The metal is to be washed and dried completely. Then the area is to be washed with weathered membrane cleaner and thoroughly dried before applying solder. Other cleaners may be used in conjunction with the steps listed above. The steps listed above for cleaning copper are the minimum steps required and must be followed prior to soldering.

3.2 INSTALLATION, GENERAL

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, protective coatings, separators, sealants, and other miscellaneous items as required to complete the sheet metal flashing and trim system. Install flashing and trim to fit substrates and to result in a watertight performance.
- B. Metal Protection: Where dissimilar metals contact each other, or where metal contacts pressure-treated wood or other corrosive substrates, protect against galvanic action or corrosion by painting contact surfaces with bituminous coating or by other permanent separation as recommended by sheet metal manufacturer or cited sheet metal standard.
 - 1. Underlayment: Where installing sheet metal flashing and trim directly on cementitious or wood substrates, install underlayment and cover with slip sheet.
- C. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.
- D. Install sheet metal roof-drainage items to produce complete roof-drainage system in accordance with cited sheet metal standard unless otherwise indicated. Coordinate installation of roof perimeter flashing with installation of roof-drainage system.

E. Downspouts:

- 1. Join sections with 1-1/2-inch (38-mm) telescoping joints.
- 2. Provide hangers with fasteners designed to hold downspouts securely to walls.
- 3. Locate hangers at top and bottom and at approximately 60 inches (1500 mm) o.c.

- 4. Provide elbows at base of downspout to direct water away from building.
- 5. Connect downspouts to underground drainage system.

3.3 INSTALLATION TOLERANCES

A. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerance of 1/4 inch in 20 feet on slope and location lines as indicated and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.

3.4 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Clean off excess sealants.
- C. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturers written installation instructions. On completion of installation, remove unused materials and clean finished surfaces. Maintain in a clean condition during construction.
- D. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 076200

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Silicone joint sealants.
- 2. Nonstaining silicone joint sealants.
- 3. Urethane joint sealants.
- 4. Latex joint sealants.

1.2 ACTION SUBMITTALS

- A. Product Data: For each joint-sealant product.
- B. Samples: For each kind and color of joint sealant required.
- C. Joint-Sealant Schedule: Include the following information:
 - 1. Joint-sealant application, joint location, and designation.
 - 2. Joint-sealant manufacturer and product name.
 - 3. Joint-sealant formulation.
 - 4. Joint-sealant color.

1.3 INFORMATIONAL SUBMITTALS

- A. Product test reports.
- B. Preconstruction laboratory test reports.
- C. Preconstruction field-adhesion-test reports.
- D. Field-adhesion-test reports.
- E. Sample warranties.

1.4 WARRANTY

- A. Special Installer's Warranty: Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Two years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer agrees to furnish joint sealants to repair or replace those joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.

1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 JOINT SEALANTS, GENERAL

A. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.2 SILICONE JOINT SEALANTS

- A. Silicone, S, NS, 100/50, NT: Single-component, nonsag, plus 100 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C920, Type S, Grade NS, Class 100/50, Use NT.
 - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following or equal:
 - a. GE Construction Sealants; Momentive Performance Materials Inc.

2.3 NONSTAINING SILICONE JOINT SEALANTS

- A. Nonstaining Joint Sealants: No staining of substrates when tested according to ASTM C1248.
- B. Silicone, Nonstaining, S, NS, 100/50, NT: Nonstaining, single-component, nonsag, plus 100 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C920, Type S, Grade NS, Class 100/50, Use NT.
 - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following or equal:
 - a. GE Construction Sealants; Momentive Performance Materials Inc.

2.4 URETHANE JOINT SEALANTS

- A. Urethane, S, NS, 25, NT: Single-component, nonsag, nontraffic-use, plus 25 percent and minus 25 percent movement capability, urethane joint sealant; ASTM C920, Type S, Grade NS, Class 25, Use NT.
 - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following or equal:
 - a. GE Construction Sealants; Momentive Performance Materials Inc.

2.5 JOINT-SEALANT BACKING

- A. Cylindrical Sealant Backings: ASTM C1330, Type C (closed-cell material with a surface skin), and of size and density to control sealant depth and otherwise
- B. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer.

2.6 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
 - 1. Remove laitance and form-release agents from concrete.
 - 2. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces.

3.2 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with ASTM C1193 and joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
- C. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- D. Install sealants using proven techniques that comply with the following and at the same time backings are installed:

- 1. Place sealants so they directly contact and fully wet joint substrates.
- 2. Completely fill recesses in each joint configuration.
- 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- E. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
 - 1. Provide concave joint profile per Figure 8A in ASTM C1193 unless otherwise indicated.
- F. with indicated requirements.

END OF SECTION 079200

SECTION 081213

HOLLOW METAL FRAMES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes hollow-metal frames.

1.3 DEFINITIONS

A. Minimum Thickness: Minimum thickness of base metal without coatings according to NAAMM-HMMA 803 or SDI A250.8.

1.4 COORDINATION

A. Coordinate anchorage installation for hollow-metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to Project site in time for installation.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, fire-resistance ratings and finishes.
- B. Shop Drawings: Include the following:
 - 1. Frame details for each frame type, including dimensioned profiles and metal thicknesses.
 - 2. Locations of reinforcement and preparations for hardware.
 - 3. Details of each different wall opening condition.
 - 4. Details of anchorages, joints, field splices, and connections.
- C. Schedule: Provide a schedule of hollow-metal work prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings. Coordinate with final Door Hardware Schedule.

1.6 INFORMATIONAL SUBMITTALS

A. Product Test Reports: For each type of frame assembly, for tests performed by a qualified testing agency.

B. Oversize Construction Certification: For assemblies required to be fire rated and exceeding limitations of labeled assemblies.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver hollow-metal work palletized, packaged, or crated to provide protection during transit and Project-site storage. Do not use nonvented plastic.
 - 1. Provide additional protection to prevent damage to factory-finished units.
- B. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- Amweld/Div. American Welding & Mfg. Co
- 2. Republic Builders Products.
- 3. Ceco Door Products
- 4. Fenestra Corp
- B. Source Limitations: Obtain hollow-metal work from single source from single manufacturer.

2.2 REGULATORY REQUIREMENTS

A. Fire-Rated Assemblies: Complying with NFPA 80 and listed and labeled by a qualified testing agency acceptable to authorities having jurisdiction for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.

2.3 INTERIOR FRAMES

- A. Construct interior frames to comply with the standards indicated for materials, fabrication, hardware locations, hardware reinforcement, tolerances, and clearances, and as specified.
- B. Hollow-Metal Frames: NAAMM-HMMA 860.
 - 1. Physical Performance: Level A according to SDI A250.4.
 - 2. Materials: Uncoated, cold-rolled steel sheet, minimum thickness of 0.053 inch.
 - 3. Construction: Knocked down.
 - 4. Exposed Finish: Prime

2.4 FRAME ANCHORS

A. Jamb Anchors:

- 1. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, not less than 0.042 inch thick, with corrugated or perforated straps not less than 2 inches wide by 10 inches long; or wire anchors not less than 0.177 inch thick.
- Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 0.042 inch thick.

- 3. Compression Type for Drywall Slip-on Frames: Adjustable compression anchors.
- 4. Postinstalled Expansion Type for In-Place Concrete or Masonry: Minimum 3/8-inch-diameter bolts with expansion shields or inserts. Provide pipe spacer from frame to wall, with throat reinforcement plate, welded to frame at each anchor location.
- B. Floor Anchors: Formed from same material as frames, minimum thickness of 0.042 inch, and as follows:
 - 1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.
 - 2. Separate Topping Concrete Slabs: Adjustable-type anchors with extension clips, allowing not less than 2-inch height adjustment. Terminate bottom of frames at finish floor surface.

2.5 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- B. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.
- C. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B.
- D. Frame Anchors: ASTM A 879/A 879M, Commercial Steel (CS), 04Z coating designation; mill phosphatized.
 - For anchors built into exterior walls, steel sheet complying with ASTM A 1008/A 1008M or ASTM A 1011/A 1011M, hot-dip galvanized according to ASTM A 153/A 153M, Class B.
- E. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.
- F. Power-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hollow-metal frames of type indicated.
- G. Grout: ASTM C 476, except with a maximum slump of 4 inches, as measured according to ASTM C 143/C 143M.

2.6 FABRICATION

- A. Fabricate hollow-metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for metal thickness. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.
- B. Hollow-Metal Frames: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.
 - Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.
 - 2. Door Silencers: Except on weather-stripped frames, drill stops to receive door silencers as follows. Keep holes clear during construction.
 - a. Single-Door Frames: Drill stop in strike jamb to receive three door silencers.

- C. Hardware Preparation: Factory prepare hollow-metal work to receive templated mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to SDI A250.6, the Door Hardware Schedule, and templates.
 - 1. Reinforce frames to receive nontemplated, mortised, and surface-mounted hardware.
 - 2. Comply with applicable requirements in SDI A250.6 and BHMA A156.115 for preparation of hollow-metal work for hardware.

2.7 STEEL FINISHES

- A. Prime Finish: Clean, pretreat, and apply manufacturer's standard primer.
 - 1. Shop Primer: Manufacturer's standard, fast-curing, lead- and chromate-free primer complying with SDI A250.10; recommended by primer manufacturer for substrate; compatible with substrate and field-applied coatings despite prolonged exposure.

2.8 ACCESSORIES

- A. Mullions and Transom Bars: Join to adjacent members by welding or rigid mechanical anchors.
- B. Grout Guards: Formed from same material as frames, not less than 0.016 inch thick.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine roughing-in for embedded and built-in anchors to verify actual locations before frame installation.
- C. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove welded-in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.
- B. Drill and tap frames to receive nontemplated, mortised, and surface-mounted hardware.

3.3 INSTALLATION

A. General: Install hollow-metal work plumb, rigid, properly aligned, and securely fastened in place. Comply with Drawings and manufacturer's written instructions.

- B. Hollow-Metal Frames: Install hollow-metal frames for doors, of size and profile indicated. Comply with SDI A250.11 or NAAMM-HMMA 840 as required by standards specified.
 - Set frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.
 - a. At fire-rated openings, install frames according to NFPA 80.
 - b. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
 - c. Install frames with removable stops located on secure side of opening.
 - d. Install door silencers in frames before grouting.
 - e. Remove temporary braces necessary for installation only after frames have been properly set and secured.
 - f. Check plumb, square, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.

3.4 ADJUSTING AND CLEANING

- A. Final Adjustments: Remove and replace defective work, including hollow-metal work that is warped, bowed, or otherwise unacceptable.
- B. Remove grout and other bonding material from hollow-metal work immediately after installation.
- C. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.
- D. Metallic-Coated Surface Touchup: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.
- E. Factory-Finish Touchup: Clean abraded areas and repair with same material used for factory finish according to manufacturer's written instructions.
- F. Touchup Painting: Cleaning and touchup painting of abraded areas of paint are specified in painting Sections.

END OF SECTION

SECTION 081416 - FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Five-ply flush wood veneer-faced doors for transparent finish.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product, including the following:
 - 1. Door core materials and construction.
 - 2. Door edge construction
 - 3. Door face type and characteristics.
- B. Shop Drawings: Indicate location, size, and hand of each door; elevation of each type of door; construction details not covered in Product Data; and the following:
 - 1. Door schedule indicating door location, type, size, fire protection rating, and swing.
 - 2. Door elevations, dimension and locations of hardware, lite and louver cutouts, and glazing thicknesses.
 - 3. Details of frame for each frame type, including dimensions and profile.
 - 4. Details of electrical raceway and preparation for electrified hardware, access control systems, and security systems.
 - 5. Dimensions and locations of blocking for hardware attachment.
 - 6. Clearances and undercuts.

1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For door inspector.
 - 1. Fire-Rated Door Inspector: Submit documentation of compliance with NFPA 80, Section 5.2.3.1.
 - 2. Egress Door Inspector: Submit documentation of compliance with NFPA 101, Section 7.2.1.15.4.
 - 3. Submit copy of DHI's Fire and Egress Door Assembly Inspector (FDAI) certificate.
- B. Field quality-control reports.

1.4 CLOSEOUT SUBMITTALS

A. Record Documents: For fire-rated doors, list of door numbers and applicable room name and number to which door accesses.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire-Rated Wood Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency acceptable to authorities having jurisdiction, for fire-protection ratingsindicated on Drawings, based on testing at positive pressure in accordance with UL 10C or NFPA 252.

2.2 FLUSH WOOD DOORS, GENERAL

- A. Quality Standard: In addition to requirements specified, comply with ANSI/WDMA I.S. 1A.
- 2.3 SOLID-CORE, FIVE-PLY FLUSH WOOD VENEER-FACED DOORS FOR TRANSPARENT FINISH
 - A. Interior Doors:
 - 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by the following or equal:
 - a. <u>Eggers Industries</u>.
 - b. Additional Manufacturers as-equal may be used
 - 2. Performance Grade: ANSI/WDMA I.S. 1A Heavy Duty.
 - 3. Performance Grade:
 - a. ANSI/WDMA I.S. 1A Heavy Duty unless otherwise indicated on Drawings.
 - 4. Faces: Single-ply wood veneer not less than 1/50 inch thick.
 - a. Species: Birch Match existing.
 - b. Cut: Plain sliced (flat sliced).
 - c. Assembly of Veneer Leaves on Door Faces: Balance match.
 - 5. Exposed Vertical Edges: Same species as faces Architectural Woodwork Standards edge Type A.
 - a. Fire-Rated Single Doors: Provide edge construction with intumescent seals concealed by outer stile. Comply with specified requirements for exposed vertical edges.
 - b. Mineral-Core Doors: At hinge stiles, provide laminated-edge construction with improved screw-holding capability and split resistance. Comply with specified requirements for exposed edges.
 - 1) Screw-Holding Capability: 475 lbf in accordance with WDMA T.M. 10.
 - 6. Core for Non-Fire-Rated Doors:

- a. ANSI A208.1, Grade LD-1 particleboard.
 - 1) Blocking: Provide wood blocking in particleboard-core doors as needed to eliminate through-bolting hardware.
- b. Glued wood stave.
- c. Either glued wood stave or WDMA I.S. 10 structural composite lumber.
- 7. Core for Fire-Rated Doors: As required to achieve fire-protection rating indicated on Drawings.
 - a. Blocking for Mineral-Core Doors: Provide composite blocking with improved screw-holding capability approved for use in doors of fire-protection ratings indicated on Drawings as needed to eliminate through-bolting hardware.
- 8. Construction: Five plies, hot-pressed bonded (vertical and horizontal edging is bonded to core), with entire unit abrasive planed before veneering.

2.4 FABRICATION

- A. Factory fit doors to suit frame-opening sizes indicated.
 - Comply with clearance requirements of referenced quality standard for fitting unless otherwise indicated.
 - 2. Comply with NFPA 80 requirements for fire-rated doors.
- B. Factory machine doors for hardware that is not surface applied.
 - 1. Locate hardware to comply with DHI-WDHS-3.
 - 2. Comply with final hardware schedules, door frame Shop Drawings, ANSI/BHMA-156.115-W, and hardware templates.
 - 3. Coordinate with hardware mortises in metal frames, to verify dimensions and alignment before factory machining.
 - 4. For doors scheduled to receive electrified locksets, provide factory-installed raceway and wiring to accommodate specified hardware.
 - 5. Metal Astragals: Factory machine astragals and formed-steel edges for hardware for pairs of fire-rated doors.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Hardware: For installation, see DRAWINGS
- B. Install doors to comply with manufacturer's written instructions and referenced quality standard, and as indicated.
- C. Install frames level, plumb, true, and straight.
 - 1. Shim as required with concealed shims. Install level and plumb to a tolerance of 1/8 inch in 96 inches.

- 2. Anchor frames to anchors or blocking built in or directly attached to substrates.
 - a. Secure with countersunk, concealed fasteners and blind nailing.
 - b. Use fine finishing nails for exposed fastening, countersunk and filled flush with woodwork.
 - 1) For factory-finished items, use filler matching finish of items being installed.
- 3. Install fire-rated doors and frames in accordance with NFPA 80.
- 4. Install smoke- and draft-control doors in accordance with NFPA 105.

D. Job-Fitted Doors:

- 1. Align and fit doors in frames with uniform clearances and bevels as indicated below.
 - a. Do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors.
- 2. Machine doors for hardware.
- 3. Seal edges of doors, edges of cutouts, and mortises after fitting and machining.
- 4. Clearances:
 - a. Provide 1/8 inch at heads, jambs, and between pairs of doors.
 - b. Provide 1/8 inch from bottom of door to top of decorative floor finish or covering unless otherwise indicated on Drawings.
 - c. Where threshold is shown or scheduled, provide 1/4 inch from bottom of door to top of threshold unless otherwise indicated.
 - d. Comply with NFPA 80 for fire-rated doors.
- 5. Bevel non-fire-rated doors 1/8 inch in 2 inches at lock and hinge edges.
- 6. Bevel fire-rated doors 1/8 inch in 2 inches at lock edge; trim stiles and rails only to extent permitted by labeling agency.
- E. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.
- F. Factory-Finished Doors: Restore finish before installation if fitting or machining is required at Project site.

3.2 ADJUSTING

- A. Operation: Rehang or replace doors that do not swing or operate freely.
- B. Finished Doors: Replace doors that are damaged or that do not comply with requirements. Doors may be repaired or refinished if Work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION 081416

SECTION 092216 - NON-STRUCTURAL METAL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Non-load-bearing steel framing systems for interior partitions.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1.3 INFORMATIONAL SUBMITTALS

A. Product Certificates: For each type of code-compliance certification for studs and tracks.

1.4 QUALITY ASSURANCE

A. Code-Compliance Certification of Studs and Tracks: Provide documentation that framing members are certified according to the product-certification program of the Certified Steel Stud Association.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Test-Response Characteristics: For fire-resistance-rated assemblies that incorporate non-load-bearing steel framing, provide materials and construction identical to those tested in assembly indicated, according to ASTM E119 by an independent testing agency.
- B. STC-Rated Assemblies: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated on Drawings, according to ASTM E90 and classified according to ASTM E413 by an independent testing agency.

2.2 FRAMING SYSTEMS

- A. Framing Members, General: Comply with AISI S220 and ASTM C645, Section 10 for conditions indicated.
 - 1. Steel Sheet Components: Comply with ASTM C645 requirements for metal unless otherwise indicated
- B. Studs and Track: ASTM C645.

- 1. Clark Deitrich, Marino Ware
- C. Slip-Type Head Joints: Where indicated, provide the following:
 - Single Long-Leg Track System: ASTM C645 top track with 2-inch-deep flanges in thickness not less than indicated for studs, installed with studs friction fit into top track and with continuous bridging located within 12 inches of the top of studs to provide lateral bracing.

2.3 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards.
 - 1. Fasteners for Steel Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Installation Standard: ASTM C754.
 - 1. Gypsum Plaster Assemblies: Also comply with requirements in ASTM C841 that apply to framing installation.
 - 2. Portland Cement Plaster Assemblies: Also comply with requirements in ASTM C1063 that apply to framing installation.
 - 3. Gypsum Veneer Plaster Assemblies: Also comply with requirements in ASTM C844 that apply to framing installation.
 - 4. Gypsum Board Assemblies: Also comply with requirements in ASTM C840 that apply to framing installation.
- B. Install framing and accessories plumb, square, and true to line, with connections securely fastened.
- C. Install supplementary framing, and blocking to support fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, or similar construction.
- D. Install bracing at terminations in assemblies.
- E. Do not bridge building control and expansion joints with non-load-bearing steel framing members. Frame both sides of joints independently.

3.2 INSTALLING FRAMED ASSEMBLIES

- A. Install framing system components according to spacings indicated, but not greater than spacings required by referenced installation standards for assembly types.
- B. Where studs are installed directly against exterior masonry walls or dissimilar metals at exterior walls, install isolation strip between studs and exterior wall.
- C. Install studs so flanges within framing system point in same direction.

- D. Install tracks at floors and overhead supports. Extend framing full height to structural supports or substrates above suspended ceilings except where partitions are indicated to terminate at suspended ceilings. Continue framing around ducts that penetrate partitions above ceiling.
 - Slip-Type Head Joints: Where framing extends to overhead structural supports, install to produce joints at tops of framing systems that prevent axial loading of finished assemblies.
 - 2. Door Openings: Screw vertical studs at jambs to jamb anchor clips on door frames; install track section (for cripple studs) at head and secure to jamb studs.
 - a. Install two studs at each jamb unless otherwise indicated.
 - b. Install cripple studs at head adjacent to each jamb stud, with a minimum 1/2-inch clearance from jamb stud to allow for installation of control joint in finished assembly.
 - Extend jamb studs through suspended ceilings and attach to underside of overhead structure.
 - 3. Other Framed Openings: Frame openings other than door openings the same as required for door openings unless otherwise indicated. Install framing below sills of openings to match framing required above door heads.
 - 4. Fire-Resistance-Rated Partitions: Install framing to comply with fire-resistance-rated assembly indicated and support closures and to make partitions continuous from floor to underside of solid structure.
 - a. Firestop Track: Where indicated, install to maintain continuity of fire-resistance-rated assembly indicated.
 - 5. Sound-Rated Partitions: Install framing to comply with sound-rated assembly indicated.
 - 6. Curved Partitions:
 - a. Bend track to uniform curve and locate straight lengths so they are tangent to arcs.
 - b. Begin and end each arc with a stud, and space intermediate studs equally along arcs. On straight lengths of no fewer than two studs at ends of arcs, place studs 6 inches o.c.
- E. Installation Tolerance: Install each framing member so fastening surfaces vary not more than 1/8 inch from the plane formed by faces of adjacent framing.

END OF SECTION 092216

SECTION 092900 - GYPSUM BOARD

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Interior gypsum board.

1.2 ACTION SUBMITTALS

- A. Product data.
- B. Shop Drawings: Show locations and installation of control and expansion joints, including plans, elevations, sections, details of components, and attachments to other work.
- C. Samples: For each texture finish indicated on same backing indicated for Work.
- D. Sustainable Design Submittals:

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E119 by an independent testing agency.
- B. STC-Rated Assemblies: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E90 and classified according to ASTM E413 by an independent testing agency.

2.2 GYPSUM BOARD, GENERAL

A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

2.3 INTERIOR GYPSUM BOARD

A. Gypsum Wallboard: ASTM C1396/C1396M.

Thickness: 5/8 inch.
 Long Edges: Tapered.

B. Gypsum Board, Type X: ASTM C1396/C1396M.

Thickness: 5/8 inch.
 Long Edges: Tapered.

2.4 TRIM ACCESSORIES

- A. Interior Trim: ASTM C1047.
 - 1. Material: Galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized-steel sheet.
 - 2. Shapes:
 - a. Cornerbead.
 - b. Bullnose bead.
 - c. LC-Bead: J-shaped; exposed long flange receives joint compound.
 - d. L-Bead: L-shaped; exposed long flange receives joint compound.
 - e. U-Bead: J-shaped; exposed short flange does not receive joint compound.
 - f. Expansion (control) joint.
 - g. Curved-Edge Cornerbead: With notched or flexible flanges.

2.5 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C475/C475M.
- B. Joint Tape:
 - 1. Interior Gypsum Board: Paper.
 - 2. Exterior Gypsum Soffit Board: Paper.
 - 3. Glass-Mat Gypsum Sheathing Board: 10-by-10 glass mesh.
 - 4. Tile Backing Panels: As recommended by panel manufacturer.
- C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.
 - 1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
 - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.
 - a. Use setting-type compound for installing paper-faced metal trim accessories.
 - 3. Fill Coat: For second coat, use setting-type, sandable topping compound.
 - 4. Finish Coat: For third coat, use setting-type, sandable topping compound.
 - 5. Skim Coat: For final coat of Level 5 finish, use setting-type, sandable topping compound.

2.6 AUXILIARY MATERIALS

- A. Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.
- B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
- C. Steel Drill Screws: ASTM C1002 unless otherwise indicated.
 - 1. Use screws complying with ASTM C954 for fastening panels to steel members from 0.033 to 0.112 inch thick.

- 2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- D. Sound-Attenuation Blankets: ASTM C665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.
 - 1. Fire-Resistance-Rated Assemblies: Comply with mineral-fiber requirements of assembly.

PART 3 - EXECUTION

3.1 INSTALLATION OF PANELS

- A. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- B. Comply with ASTM C840.
- C. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. Provide 1/4- to 1/2-inch-wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- D. For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.

3.2 FINISHING OF GYPSUM BOARD

- A. Prefill open joints, rounded or beveled edges, and damaged surface areas.
- B. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- C. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C840:
 - 1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
 - 2. Level 2: Panels that are substrate for tile.
 - Level 3: Where indicated on Drawings.
 - 4. Level 4: At panel surfaces that will be exposed to view unless otherwise indicated and where VWC has been removed.
 - a. Primer and its application to surfaces are specified in Section 099123 "Interior Painting."

3.3 PROTECTION

- A. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- B. Remove and replace panels that are wet, moisture damaged, and mold damaged.

END OF SECTION 092900

SECTION 09 65 13 - RESILIENT BASE AND ACCESSORIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Resilient base.
 - 2. Resilient molding accessories.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Product Certificates: For each type of product, signed by product manufacturer.
- C. Material Test Reports: For each resilient and related adhesive product.

1.4 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: As determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
 - 1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store resilient products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F.

1.6 PROJECT CONDITIONS

- A. Maintain ambient temperatures within range recommended by manufacturer, but not less than 70 deg F or more than 95 deg F, in spaces to receive resilient products during the following time periods:
 - 1. 48 hours before installation.
 - 2. During installation.
 - 3. 48 hours after installation.

- B. Until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 95 deg F.
- C. Install resilient products after other finishing operations, including painting, have been completed.

1.7 EXTRA MATERIALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Furnish not less than 10 linear feet for every 500 linear feet or fraction thereof, of each type, color, pattern, and size of resilient product installed.

PART 2 - PRODUCTS

2.1 RESILIENT BASE

- A. Resilient Base:
 - 1. Manufacturers: Basis of Design refer to drawings. Acceptable manufacturers include, but are not limited to the following (If providing alternate manufacturer, GC to submit match sample selection for approval):
 - a. Armstrong World Industries
 - b. Burke Flooring
 - c. Roppe Corporation
- B. Resilient Base Standard: ASTM F 1861.
 - 1. Material Requirement: Type TS (rubber, vulcanized thermoset)
 - 2. Manufacturing Method: Group I (solid, homogeneous)
 - 3. Style: Refer to A701 for selections
- C. Minimum Thickness: 0.080 inch.
- D. Outside Corners: job formed.
- E. Inside Corners: job formed.

2.2 RESILIENT MOLDING ACCESSORY

- A. Resilient Molding Accessory:
 - 1. Manufacturers: Basis of Design refer to plans. Acceptable manufacturers include, but are not limited to the following (If providing alternate manufacturer, GC to submit match sample selection for approval)::
 - a. Armstrong World Industries.
 - b. Burke Flooring
 - c. Roppe Corporation, USA.

- B. Description: Transition strips.
- C. Material: Rubber.
- D. Profile and Dimensions: Metal Edge Rubber Transition.
- E. Colors: Refer to A701 for selections
- F. Installation locations: Contractor responsible to install between flooring changes that cannot be butted flush against one another.

2.3 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by manufacturer to suit resilient products and substrate conditions indicated.
 - 1. Use adhesives that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):
 - a. Cove Base Adhesives: Not more than 50 g/L.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.
- B. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound and remove bumps and ridges to produce a uniform and smooth substrate.
- C. Do not install resilient products until they are same temperature as the space where they are to be installed.
 - 1. Move resilient products and installation materials into spaces where they will be installed at least 48 hours in advance of installation.

D. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation.

3.3 RESILIENT BASE INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient base.
- B. Apply resilient base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.
- C. Install resilient base in lengths as long as practicable without gaps at seams and with tops of adjacent pieces aligned.
- D. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
- E. Do not stretch resilient base during installation.
- F. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient base with manufacturer's recommended adhesive filler material.
- G. Job-Formed Corners:
 - 1. Outside Corners: Use straight pieces of maximum lengths possible. Form without producing discoloration (whitening) at bends.
 - 2. Inside Corners: Use straight pieces of maximum lengths possible.

3.4 RESILIENT ACCESSORY INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient accessories.
- B. Resilient Molding Accessories: Butt to adjacent materials and tightly adhere to substrates throughout length of each piece. Install transition strips between resilient and carpet products and between ceramic tile and carpet.

3.5 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protection of resilient products.
- B. Perform the following operations immediately after completing resilient product installation:
 - 1. Remove adhesive and other blemishes from exposed surfaces.
 - 2. Sweep and vacuum surfaces thoroughly.
 - 3. Damp-mop surfaces to remove marks and soil.
- C. Protect resilient products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.
- D. Cover resilient products until Substantial Completion.

SECTION 099113 - EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Primers.
 - 2. Finish coatings.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each type of topcoat product.

1.3 QUALITY ASSURANCE

A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Sherwin Williams

2.2 PAINT PRODUCTS, GENERAL

- A. Material Compatibility:
 - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer based on testing and field experience.
 - 2. For each coat in a paint system, provide products recommended in writing by topcoat manufacturer for use in paint system and on substrate indicated.
- B. Colors: As selected by Architect from manufacturer's full range.

2.3 PRIMERS

A. Water-Based Bonding Primer: Pigmented, water-based-emulsion primer formulated for exterior use and to promote adhesion of subsequent specified coatings.

EXTERIOR PAINTING 099113 - 1

1. Extreme Bond Primer, SW, over all exterior metals

2.4 FINISH COATINGS

- A. Exterior Latex Paint, Semigloss: Water-based, pigmented emulsion coating formulated for alkali, mold, microbial, and water resistance and for use on exterior surfaces, such as masonry, portland cement plaster, and primed wood and metal.
 - 1. Duration Exterior Acrylic Latex, SW, overall exterior metals

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify suitability of substrates, including surface conditions and compatibility, with finishes and primers.
- B. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems specified in this Section.

3.3 INSTALLATION

- A. Apply paints in accordance with manufacturer's written instructions.
- B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

EXTERIOR PAINTING 099113 - 2

3.4 CLEANING AND PROTECTION

- A. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- B. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- C. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

END OF SECTION 099113

EXTERIOR PAINTING 099113 - 3

SECTION 099123 -- INTERIOR PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes surface preparation and the application of paint systems on interior substrates.
 - 1. Steel.
 - 2. Gypsum board.

B. Related Requirements:

1. Division 05 Sections for shop priming of metal substrates with primers specified in this Section.

1.3 DEFINITIONS

- A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- D. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- E. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
- F. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- G. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product. Include preparation requirements and application instructions.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.6 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.
- B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - 1. Basis of Design: Sherwin-Williams Company (The).
 - 2. Benjamin Moore, Inc.
 - 3. PPG Paints

2.2 PAINT, GENERAL

- A. Whenever possible and feasible, restrict painting to those times when the building is unoccupied.
- B. Paints should be applied using appropriate techniques to reduce the amount of volatiles released into the air.
- C. Sufficient amounts of local exhaust ventilation should be employed to keep the buildup of odors and toxic compounds within the building to a minimum.
- D. The building occupants should be notified of the scheduled application so they are aware of the work and can make other occupancy arrangements if chemically sensitive.
- E. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List."

F. Material Compatibility:

- 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
- 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

- G. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction and, for interior paints and coatings applied at Project site, the following VOC limits, exclusive of colorants added to a tint base, when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
 - 1. Flat Paints and Coatings: 50 g/L.
 - 2. Nonflat Paints and Coatings: 150 g/L.
 - 3. Dry-Fog Coatings: 400 g/L.
 - 4. Primers, Sealers, and Undercoaters: 200 g/L.
 - 5. Anticorrosive and Antirust Paints Applied to Ferrous Metals: 250 g/L.
- H. Colors: Patch and match to surrounding finishes.

2.3 PRIMERS/SEALERS

- A. Primer Sealer, Interior, Institutional Low Odor/VOC: MPI #149.
 - 1. Gypsum Substrates: Pro Industrial Low-Odor Interior Latex Coating
 - 2. Initial Coat over new block wall only: Sherwin Williams Prep-rite Block Filler B25W00025

2.4 METAL PRIMERS

- A. Primer, Rust-Inhibitive, Water Based: MPI #107.
 - 1. Metal Substrates: Where not called to be shop-primed use: Pro Industrial Pro-Cryl Universal Acrylic Primer

2.5 WATER-BASED PAINTS

- A. Latex, Interior, Institutional Low Odor/VOC, Satin (Gloss Level 3): MPI #145.
 - 1. Gypsum & CMU Block Substrates: Pro Industrial Low-Odor Interior Latex Coating
- B. Latex, Interior, Institutional Low Odor/VOC, Semi-Gloss (Gloss Level 5): MPI #147.
 - 1. Metal Substrates: Pro Industrial 0 VOC Acrylic
 - 2. Elevator Machine Beams: Sherwin Williams DTM in Gloss Safety Yellow

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

- 1. Concrete: 12 percent.
- 2. Masonry (Clay and CMU): 12 percent.
- 3. Wood: 15 percent.
- 4. Gypsum Board: 12 percent.
- 5. Plaster: 12 percent.
- C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
- D. Plaster Substrates: Verify that plaster is fully cured.
- E. Spray-Textured Ceiling Substrates: Verify that surfaces are dry.
- F. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- G. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Steel Substrates: Remove rust, loose mill scale, and shop primer, if any. Clean using methods recommended in writing by paint manufacturer.
- E. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.

3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.

- 3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces. Contact architect for color match approval.
- 4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- 5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- E. Painting Fire Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
 - 1. Paint the following work where exposed in equipment rooms:
 - a. Equipment, including panelboards.
 - 2. Paint the following work where exposed in occupied spaces:
 - a. Other items as directed by Architect/shown on drawings.
 - 3. Paint portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets that are visible from occupied spaces.

3.4 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
 - 1. Contractor shall touch up and restore painted surfaces damaged by testing.
 - 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 INTERIOR PAINTING SCHEDULE

- A. Steel Substrates:
 - 1. Institutional Low-Odor/VOC Latex System:
 - a. Prime Coat: Primer, rust-inhibitive, water based MPI #107.
 - b. Intermediate Coat: Acrylic, interior, institutional low odor/VOC, matching topcoat.
 - c. Topcoat: Acrylic, interior, institutional low odor/VOC, semi-gloss (Gloss Level 5), MPI #147.
- B. Gypsum Board Substrates:
 - 1. Institutional Low-Odor/VOC Latex System:
 - a. Prime Coat: Primer sealer, interior, institutional low odor/VOC, MPI #149.
 - b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
 - c. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3), MPI #145.

END OF SECTION 099123

SECTION 099300 - STAINING AND TRANSPARENT FINISHING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Wood stains.
 - 2. Transparent finishes.

1.2 ACTION SUBMITTALS

Action submittals are submittals requiring responsive action and return of reviewed documents to Contractor.

- A. Product Data: For each type of product.
- B. Samples: For each type of finish system and in each color and gloss of finish required.
- C. Product List: Cross-reference to finish system and locations of application areas. Use same designations indicated on Drawings and in schedules. Include color designations.

1.3 MOCKUPS

A. Apply mockups of each finish system indicated and each color selected to set quality standards for materials and execution.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Sherwin Willaims – Or Equal

2.2 MATERIALS, GENERAL

- A. Material Compatibility:
 - 1. Provide materials for use within each coating system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
- B. Stain Colors: As selected by Architect from manufacturer's full range.

2.3 WOOD STAINS

- A. Stain, Interior, Semitransparent, for Interior Wood: Solvent-based, oil or oil/alkyd, semitransparent, pigmented stain for new interior wood surfaces that are to be finished with a clear varnish.
- B. Sherwin Willaims Or Equal

2.4 TRANSPARENT FINISHES

- A. Varnish, Interior, Flat/Satin: Solvent-based, alkyd-type, clear flat/satin varnish for new or properly prepared, previously varnished interior wood surfaces.
 - 1. Sherwin Williams Or Equal
 - 2. Gloss and Sheen Level: Manufacturer's standard flat finish.
- B. Varnish, Interior, Water Based, Clear, flat/ satin: Water-based clear coating for interior wood trim, frames, doors, paneling and cabinetry.
 - 1. Sherwin Williams Or Equal
 - 2. Gloss Level: Manufacturer's standard flat finish.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Maximum Moisture Content of Exterior Wood Substrates: 15 percent, when measured with an electronic moisture meter.
- B. Maximum Moisture Content of Interior Wood Substrates: 13 percent, when measured with an electronic moisture meter.

3.2 PREPARATION

- A. Remove hardware, covers, plates, and similar items already in place that are removable. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and finishing.
 - 1. After completing finishing operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- B. Clean and prepare surfaces to be finished according to manufacturer's written instructions for each substrate condition and as specified.
 - 1. Remove dust, dirt, oil, and grease by washing with a detergent solution; rinse thoroughly with clean water and allow to dry. Remove grade stamps and pencil marks by sanding lightly. Remove loose wood fibers by brushing.

2. Remove mildew by scrubbing with a commercial wash formulated for mildew removal and as recommended by stain manufacturer.

3.3 APPLICATION

- A. Apply finishes according to manufacturer's written instructions.
- B. Apply finishes to produce surface films without cloudiness, holidays, lap marks, brush marks, runs, ropiness, or other surface imperfections.

3.4 CLEANING AND PROTECTION

- A. Protect work of other trades against damage from finish application. Correct damage by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- B. At completion of construction activities of other trades, touch up and restore damaged or defaced finished wood surfaces.

3.5 INTERIOR WOOD-FINISH-SYSTEM SCHEDULE

- 1. Semitransparent Stain System:
 - a. Prime Coat: Stain, semitransparent, matching topcoat.
 - b. Topcoat: Stain, semitransparent, for interior wood.
- 2. Water-Based Varnish over Stain System:
 - a. Stain Coat: Stain, semitransparent, for interior wood.
 - b. First Intermediate Coat: Water-based varnish matching topcoat.
 - c. Second Intermediate Coat: Water-based varnish matching topcoat.
 - d. Topcoat: Varnish, water based, clear.

END OF SECTION 099300

HAZARDOUS BUILDING MATERIALS INSPECTION REPORT

93 High Street Glouster, Ohio 45732

(L&A Project 23-0409)



Prepared for:

Don Dispenza Principal Architect BDTAID 26 E. Park Drive Athens, Ohio 45701 (740) 592-2420

Prepared by:

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October 16, 2023



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Hazardous Building Materials Inspection Report 93 High Street Glouster, Ohio 45732

1.0 Introduction

Lawhon & Associates, Inc. (L&A) conducted a Hazardous Building Materials Inspection, including asbestos containing materials (ACMs) at 93 High Street, Glouster, Ohio 45732. This survey was conducted on September 22, 2023 by Mr. Jordan Mederer, Ohio Environmental Protection Agency (OEPA) Certified Asbestos Hazard Evaluation Specialist (CAHES [AHES #35005]). The consultant's certifications are attached in **Appendix A.**

The purpose of the inspection was to determine the presence of hazardous building materials, including asbestos containing materials (ACMs) which may be impacted by future renovations. L&A inspected all accessible areas throughout the building. Roofing materials were not assessed or included in this scope of work.

This report conforms to the requirements of the Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP). This report should not to be construed as a remediation design.

2.0 Asbestos Containing Materials

Asbestos containing materials are governed by the Environmental Protection Agency's (EPA) National Emission Standards of Hazardous Air Pollutants (NESHAP) during a demolition. These materials are defined as containing greater than one percent asbestos. The Occupational Safety and Health Administration (OSHA) govern building materials containing any amount of asbestos.

The Clean Air Act (CAA) of 1970 required the EPA to develop and enforce regulations to protect the general public from exposure to airborne contaminants that are known to be hazardous to human health; therefore, EPA promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) (Title 40, CFR Part 61) on April 6, 1973. NESHAP is intended to minimize the release of asbestos fibers during certain activities (i.e., renovations, demolition, and installations). It specifies work practices to be followed during renovations of buildings (except apartment buildings that have no more than four dwelling units), which contain a specific amount of friable asbestos. NESHAP requires that buildings be inspected for asbestos containing building materials (ACBM) prior to renovation/demolition projects regardless of the age of the structure.

NESHAP also requires owners and operators subject to the asbestos rules to notify delegated state and local agencies and/or the regional EPA offices before demolition or renovation activities begin. In addition, NESHAP requires the removal of all regulated asbestos containing materials (RACM) prior to demolition. Regulated Asbestos-Containing Materials (RACM) are (a) friable asbestos material, which are materials easily reduced to powder with hand pressure (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations. (Category I non-friable materials consist of materials such as resilient floor

covering products, roofing products, gaskets, and packing. Category II non-friable materials consist of all other non-friable materials such as transite.). NESHAP also requires all ACM (including Category I and II) be removed prior to intentional burning, such as for a fire department training exercise.

The Ohio Environmental Protection Agency (EPA) regulates asbestos activities within the state. Professionals performing asbestos related activities must be certified/ licensed by OEPA.

2.1 Methodology

A list of suspect ACMs was compiled from the investigation of the building. Materials were categorized into RACM, Category I and Category II materials. L&A inventoried and procured select confirmatory samples of materials that must be removed prior to demolition/renovation.

Materials suspected of containing asbestos were grouped into homogeneous areas for bulk sampling purposes. A homogeneous area is composed of specific material that appears to be the same in color, texture, date of installation or location (e.g., grey spray-applied fireproofing in a specific construction unit).

The number of bulk samples to be procured for each identified homogeneous area of suspected Surfacing Materials, Thermal System Insulations, and Miscellaneous Materials were determined in accordance with 40 CFR 763.

Specifically, Friable and Nonfriable Surfacing Materials (i.e., fireproofing, acoustical plaster, decorative plaster, hard plaster, and textured coatings) were sampled following the guidelines set forth by the USEPA in the document "Asbestos in Buildings - Simplified Sampling Scheme Friable Surfacing Materials." Based upon the square footage of the homogenous surfacing materials, either a minimum of 3, 5, or 7 bulk samples were randomly procured and analyzed. For Thermal System Insulation (TSI), at least 3 random samples of each homogeneous area of TSI were procured and analyzed and 1 sample of patched TSI if it was <6 linear or square feet. For Miscellaneous Materials (MM), at least 2 random samples of each homogeneous area of MM were procured and analyzed.

Samples were placed into clean sealed containers and identified with a unique sample number. Sampling tools were decontaminated between each sampling episode.

All samples were sent to certified National Voluntary Lab Accredited Program laboratories. The lab used for sample analysis of asbestos on this project was SanAir Technologies Laboratory (NVLAP #200870-0) located at 10501 Trade Court, North Chesterfield, Virginia 23236. Samples were analyzed by the EPA Polarized Light Microscopy (PLM) 600 Method. Samples reported with low concentrations of asbestos, <3% asbestos content, were reanalyzed using the EPA Point Count Method to determine a more accurate content.

3.0 Asbestos Containing Material Summaries

The following tables present ACM summaries. A bulk sample diagram depicting where samples were collected can be found in **Appendix B**. An inventory of asbestos

containing materials, including locations and quantities, is included in **Appendix C.** A bulk sample summary form summarizing the asbestos bulk samples collected and analyzed is attached in **Appendix D**. Laboratory analysis certificates and chain of custody information can be found in **Appendix E**.

3.1 Confirmed Asbestos Containing Materials

The following is a list of materials, confirmed by PLM laboratory analysis, that contain greater than 1% asbestos.

Confirmed Asbestos Containing Material				
Patterned Linoleum (2 nd Floor Front/ West Kitchen and Bathroom Only) (3)	Black Sink Undercoating (2)			
Exterior Window Glazing Compound (2)	Exterior Window Caulking (2)			

Notes: (1) RACM.

(2) Category II ACM.

(3) Category I ACM.

3.2 Assumed Asbestos Containing Materials

The following materials are assumed to contain asbestos associated with the HVAC replacement project. Any suspect materials not listed in this report should be assumed to contain asbestos until further testing determines otherwise.

Assumed Asbestos Containing Material	
Electrical Components in Disconnect Boxes (2)	

Notes: (1) RACM.

(2) Category II ACM.

(3) Category I ACM.

3.3 Non-Asbestos Containing Materials

The following is a list of materials, confirmed by PLM laboratory analysis, that are asbestos free. Any encountered materials not listed below should be assumed to contain asbestos until further sampling determines otherwise.

Non-Asbestos Containing Materials				
Hard Plaster (Finish and Base Coats) (>5,000 sf)	Drywall and Joint Compound			
Wall Skim Coat on Wallpaper (<1,000 sf) (2 nd Floor Rear/ East Kitchen)	Textured Wall Compound (<1,000 sf) (2 nd Floor Rear/ East Bathroom)			
Textured Ceiling Compound (<1,000 sf) (3 rd Floor Front/ West Apartment)	Gypsum Wall/ Ceiling Board			

Non-Asbestos Containing Materials				
Textured Wall Coating on Plaster (<1,000 sf) (1st Floor Front/ West Area)	Textured Wall Coating (<1,000 sf) (2 nd Floor Rear/ East Family Room)			
Exterior Soffit Gypsum Ceiling Board	Carpet Mastic			
Linoleum/ Mastic (1st Floor Bathroom)	Vapor Barrier Beneath Hardwood Flooring on 1 st Floor			
12" Floor Tile, Mastic, Green Subfloor and Black Floor Mastic	Linoleum/ Paper Backing (2 nd to 3 rd Floor Mezzanine/ Water Heater Room)			
White Sink Undercoating	Electrical Wiring Insulation			

4.0 Other Hazardous Materials

4.1 Lead Based Paint

Due to the date of construction, Lead Based Paint is assumed to be present throughout the building. If paint with even small quantities of lead is turned into dust from abrasion or other means, lead hazard dust may result. A lead hazard is defined as a "material such as lead-based paint, lead-containing dust, lead-contaminated soil, and lead-contaminated water pipes containing a level of lead at or in excess of the level hazardous to human health as set forth in rule 3701-32-07 of the Administrative Code (HUD Guidelines)."

Any disturbance to paint should be conducted in accordance to the OSHA Lead in Construction Standard. It is recommended that all contractors that impact painted building materials perform personal air monitoring on their employees to ensure that they are not being exposed to lead above the Action Level (AL) or Permissible Exposure Limit (PEL) or maintain a negative exposure assessment.

4.2 Bulbs and Ballasts

L&A observed fluorescent/CFL light bulbs and associated ballasts throughout the structure. L&A also observed several stored florescent light bulbs/ tubes in the far rear (east) room of the first floor. If these are to be impacted by renovation activities, they should be removed and recycled because the fluorescent bulbs are assumed to contain mercury, or other potentially hazardous heavy metals. Furthermore, light ballasts potentially contain PCB oils and are normally labeled "Contains No PCBs" if PCBs are not present. All light ballasts will need to be investigated prior to impact from renovation activities. Ballasts not identified with a "Contains No PCBs" label, will need to be disposed of as a regulated hazardous material; ballasts containing a "Contains No PCBs" label should be containerized and recycled. All removal, packaging, and handling of these materials should be performed by a trained hazardous material abatement contractor. The hazardous material contractor should remove and package this material and safely transport off-site.

4.3 Mercury Thermostats

L&A observed mercury thermostats in the building. One mercury thermostat was observed in the front (west) apartment on the second floor; however, more may be present in the building. The hazardous materials remediation contractor should conduct an investigation of the building and safely remove, package and properly dispose of all mercury containing thermostats prior to demolition/ renovation activities in the building.

4.4 Avian Droppings

L&A observed avian droppings in the building, most notably in the front (west) apartment on the third floor. Any droppings cleaning/ decontamination should be performed by appropriately trained construction personnel in accordance with the NIOSH document *Histoplasmosis: Protecting Workers at Risk.* Generally, this will require the following:

- 1. Donning of appropriate personal protective equipment. Gloves, coveralls with shoe covers, eye protection and appropriate respiratory protection (minimally, an N-95 respirator) should be worn.
- 2. Use of dust suppression techniques to reduce dust aerosolized. Bird-related materials or contaminated substrates should be wetted with a detergent solution prior to removal.
- 3. Placement of waste in 6-mil polyethylene bags sealed with duct tape. Permission should be obtained from the landfill prior to disposal.
- 4. Porous, non-cleanable surfaces such as carpet which is contaminated should also be removed and disposed of in 6-mil polyethylene bags sealed with duct tape.

5.0 Conclusions

L&A conducted a Hazardous Building Materials Inspection of 93 High Street, Glouster, Ohio 45732. This assessment was conducted on September 22, 2023, by Mr. Jordan Mederer, of L&A. The purpose of the inspection was to determine the presence of hazardous building materials, including asbestos containing building materials at the property prior to renovation activities.

5.1 Asbestos Containing Materials Summary

As a result of the Hazardous Building Materials Inspection, the following asbestos containing materials are present, and projected to be impacted by the project. All RACM and Category I and Category II materials which will become RACM must be removed by an OEPA licensed asbestos abatement contractor prior to demolition or disturbance from renovation activities in accordance with EPA regulations.

- Patterned Linoleum (2nd Floor Front/ West Kitchen and Bath)- Category I
- Black Sink Undercoating (2nd Floor Rear/ East Kitchen)- Category II
- Exterior Window Caulking and Glazing Compound- Category II
- Electrical Components (Assumed)- Category II

5.2 Other Hazardous Materials Summary

As a result of the Hazardous Building Materials Inspection, the following other hazardous materials were observed in the building and may require removal by trained workers prior to renovation activities:

- Lead Based Paint
- Light bulbs/ tubes and associated ballasts
- Mercury containing thermostats
- Avian droppings

This report conforms to the EPA NESHAPs requirements prior to renovation. This report should not be construed as a remediation design. If you have any further questions please contact Jordan Mederer at (614) 481-8600.

Sincerely,

Jordan Mederer, AHES # 35005

Practice Leader, HBM

Jan

Chuck Wilson Vice President

APPENDIX A Inspector's Certifications



Mike DeWine, Governor Jon Husted, Lt. Governor Anne M. Vogel, Director

6/26/2023

Jordan Mederer Lawhon & Associates, Inc. 1441 King Avenue Columbus, OH 43212

RE:

Evaluation Specialist

Certification Number: ES35005 Expiration Date: 8/8/2024

Dear Jordan Mederer:

This letter and enclosed certification card approves your request to be certified as an asbestos Evaluation Specialist. You must present your card upon request at any project site while performing duties. Copies of cards are not acceptable as proof of certification.

This certification may be revoked by the Director of the Ohio Environmental Protection Agency (EPA) for violation of any of the requirements of 3745-22 or 3745-20 of the Ohio Administrative Code.

If you have any questions, please contact the Asbestos Program at 614-644-0226 or by email at asbestoslicensing@epa.ohio.gov.

Sincerely,

Brandon W. Schwendeman
Brandon Schwendeman
Manager, Business Operations Support Section
Ohio EPA - Division of Air Pollution Control





The InService Training Network

Asbestos Building Inspector and Management Planner Refresher Courses



Jordan Mederer

has successfully completed the Asbestos Building Inspector and Management Planner Refresher Courses and passed by at least 70% the course examinations for accreditation under Section 206 of the Toxic Substance Control Act, Title II, and Indiana 326 IAC 18-2 Provided by: The InService Training Network, Inc., 705D Lakeview Plaza Blvd, Worthington, OH 43085 (614) 436-0980

Course Dates: April 19, 2023

Course Instructor: Kuyt Varga

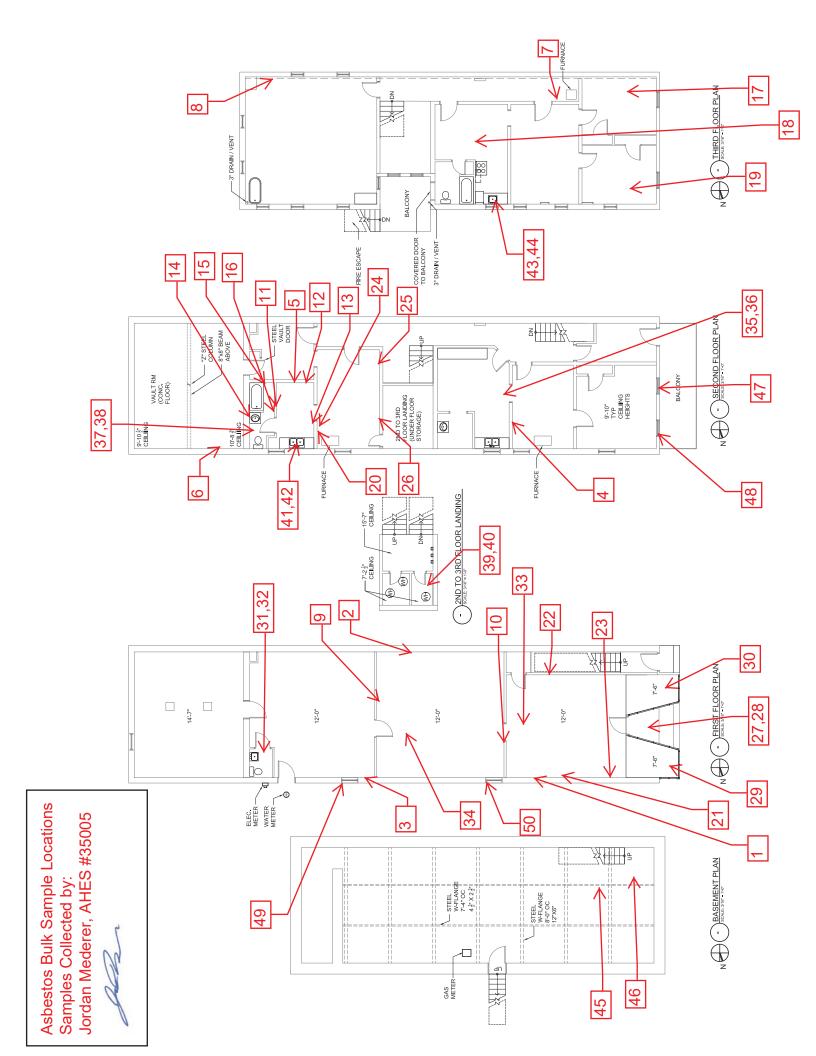
Expiration Date: April 19, 2024

Examination Date: April 19, 2023

Course Location: Worthington, Ohio

Certificate Numbers: ITNIR7419 & ITNMPR7419

APPENDIX B Asbestos Bulk Sample Location Diagram



APPENDIX C Inventory of Asbestos Containing Materials

INVENTORY OF ASBESTOS CONTAINING MATERIALS 93 High Street Glouster, Ohio 45732

ACM	Locations	Approximate Quantity	Condition	EPA NESHAP Classification & Comments
Patterned Linoleum	2 nd Floor Front (West) Kitchen and Bathroom	220 square feet	Intact	Category I
Black Sink Undercoating	2nd Floor Rear (East) Kitchen	1 sink; 4 square feet	Intact	Category II
Windows with ACM Glazing Compound and Exterior Caulking	Throughout Building	32 windows/ openings (128 square feet)	Intact	Category II
Transite within Electrical Disconnect Boxes (Assumed)	2 nd to 3 rd Floor Landing	4 Boxes (2 square feet)	Intact	Category II

APPENDIX D Asbestos Bulk Sample Summary

Sample Number	Hom. Area #	Material Sampled	Sample Location	Percent Asbestos
1	1	Hard Plaster- Grey Base Coat	1 st Floor Front Area	NAD
1	2	Hard Plaster- White Finish Coat	™ Floor Front Area	NAD
2	1	Hard Plaster- Grey Base Coat	1 st Floor Middle Area	NAD
2	2	Hard Plaster- White Finish Coat	1 1 1001 Wildule Alea	NAD
3	1	Hard Plaster- Grey Base Coat	1 st Floor Rear Area	NAD
3	2	Hard Plaster- White Finish Coat	1 1 1001 Real Alea	NAD
4	1	Hard Plaster- Grey Base Coat	2 nd Floor Front Family Room	NAD
4	2	Hard Plaster- White Finish Coat	(Room with Heater)	NAD
5	1	Hard Plaster- Grey Base Coat	2 nd Floor Rear Kitchen	NAD
5	2	Hard Plaster- White Finish Coat	2. Floor Real Ritcherr	NAD
6	1	Hard Plaster- Grey Base Coat	2 nd Floor Back Room	NAD
0	2	Hard Plaster- White Finish Coat	Z. FIOOI Back ROOIII	NAD
7	1	Hard Plaster- Grey Base Coat	3 rd Floor Front Hallway	NAD
,	2	Hard Plaster- White Finish Coat	3 Tiodi Tiont Hallway	NAD
8	1	Hard Plaster- Grey Base Coat	3 rd Floor Rear Area	NAD
0	2	Hard Plaster- White Finish Coat	3 Tiodi Real Alea	NAD
9	3	Drywall	1 st Floor Middle Area	NAD
9	3	Joint Compound	1 1 1001 Wildule Alea	NAD
10	3	Drywall	1 st Floor Front Area	NAD
10	3	Joint Compound	1 Floor Florit Alea	NAD
11	4	Wall Skim Coat on Wallpaper	2 nd Floor Rear Kitchen	NAD
12	4	Wall Skim Coat on Wallpaper	2 nd Floor Rear Kitchen	NAD
13	4	Wall Skim Coat on Wallpaper	2 nd Floor Rear Kitchen	NAD
14	5	Textured Wall Compound	2 nd Floor Rear Bathroom	NAD

Bold text denotes an Asbestos Containing Material; as defined by EPA and OSHA. *Italics* text denotes an Asbestos Containing Material; as defined by OSHA only.

Legend

Abbreviation: Definition: Abbreviation: Definition:

PC Point Count Method Performed NAD No Asbestos Detected

Bulk Sample Summary 93 High Street Glouster, Ohio 45732

Sample Number	Hom. Area #	Material Sampled	Sample Location	Percent Asbestos
15	5	Textured Wall Compound	2 nd Floor Rear Bathroom	NAD
16	5	Textured Wall Compound	2 nd Floor Rear Bathroom	NAD
17	6	Textured Ceiling Compound	3 rd Floor Front Bedroom	NAD
18	6	Textured Ceiling Compound	3 rd Floor Kitchen	NAD
19	6 7	Textured Ceiling Compound Drywall Board	3 rd Floor North Bedroom	NAD NAD
20	7	Drywall Board	2 nd Floor Rear Family Room	NAD
21	8	Textured Wall Coating	1st Floor Front Area	NAD
22	8	Textured Wall Coating	1st Floor Front Area	NAD
23	8	Textured Wall Coating	1st Floor Front Area	NAD
24	9	Textured Wall Coating	2 nd Floor Rear Family Room	NAD
25	9	Textured Wall Coating	2 nd Floor Rear Family Room	NAD
26	9	Textured Wall Coating	2 nd Floor Rear Family Room	NAD
27	10	Gypsum Ceiling Board	1 st Floor Entry (Exterior)	NAD
28	10	Gypsum Ceiling Board	1 st Floor Entry (Exterior)	NAD
29	11	Carpet Mastic	1 st Floor Entry Bay Window (North)	NAD
30	11	Carpet Mastic	1 st Floor Entry Bay Window (South)	NAD
31	12a	Linoleum	1st Floor Bathroom	NAD
J.	12b	Tan Mastic		NAD
32	12a	Linoleum	1 st Floor Bathroom	NAD
J <u>L</u>	12b	Tan Mastic	. Tios. Baumoom	NAD

Bold text denotes an Asbestos Containing Material; as defined by EPA and OSHA. *Italics* text denotes an Asbestos Containing Material; as defined by OSHA only.

Legend

Abbreviation: Definition: Abbreviation: Definition:

PC Point Count Method Performed NAD No Asbestos Detected

Bulk Sample Summary 93 High Street Glouster, Ohio 45732

Sample Number	Hom. Area #	Material Sampled	Sample Location	Percent Asbestos
33	13	Vapor Barrier	1st Floor Beneath Hardwood	NAD
34	13	Vapor Barrier	1st Floor Beneath Hardwood	NAD
35	14	Linoleum	2 nd Floor Front Kitchen	15% Chrysotile
36	14	Linoleum	2 nd Floor Front Kitchen	Sample Not Analyzed
37	15	12" Floor Tile Yellow Floor Mastic Green Sub-Flooring Sub-Floor Mastic (Black)	2 nd Floor Rear Bathroom	NAD NAD NAD NAD
38	15	12" Floor Tile Yellow Floor Mastic Green Sub-Flooring Sub-Floor Mastic (Black)	2 nd Floor Rear Bathroom	NAD NAD NAD NAD
39	16a 16b	Linoleum Paper Backing	2 nd /3 rd Floor Mezzanine Water Heater Room	NAD NAD
40	16a 16b	Linoleum Paper Backing	2 nd /3 rd Floor Mezzanine Water Heater Room	NAD NAD
41	17	Black Sink Undercoating	2 nd Floor Rear Kitchen	1.5% Chrysotile (PC)
42	17	Black Sink Undercoating	2 nd Floor Rear Kitchen	Sample Not Analyzed
43	18	White Sink Undercoating	3 rd Floor Kitchen	NAD
44	18	White Sink Undercoating	3 rd Floor Kitchen	NAD
45	19	Electrical Wiring Insulation	Basement	NAD
46	19	Electrical Wiring Insulation	Basement	NAD

Bold text denotes an Asbestos Containing Material; as defined by EPA and OSHA. *Italics* text denotes an Asbestos Containing Material; as defined by OSHA only.

Legend

Abbreviation: Definition: Abbreviation: Definition:

PC Point Count Method Performed NAD No Asbestos Detected

Bulk Sample Summary 93 High Street Glouster, Ohio 45732

Sample Number	Hom. Area #	Material Sampled	Sample Location	Percent Asbestos
47	20	Exterior Window Glazing Compound	Exterior- 2 nd Floor	2% Chrysotile (PC)
48	20	Exterior Window Glazing Compound	Exterior- 2 nd Floor	Sample Not Analyzed
49	21	Exterior Window Caulking	1 st Floor East Elevation	4% Chrysotile
50	21	Exterior Window Caulking	1 st Floor East Elevation	Sample Not Analyzed

Bold text denotes an Asbestos Containing Material; as defined by EPA and OSHA. *Italics* text denotes an Asbestos Containing Material; as defined by OSHA only.

Legend

Abbreviation: Definition: Abbreviation: Definition:

PC Point Count Method Performed NAD No Asbestos Detected

Bulk Sample Summary 93 High Street Glouster, Ohio 45732

APPENDIX E Asbestos Laboratory Analysis Certificates & Chain of Custody



The Identification Specialists

Analysis Report prepared for Lawhon & Associates, Inc.

Report Date: 10/9/2023

Project Name: BOT-93-HIGH GLOUSTER

Project #: 23-0409

SanAir ID#: 23053830



NVLAP LAB CODE 200870-0

10501 Trade Court | North Chesterfield, Virginia 23236 888.895.1177 | 804.897.1177 | fax: 804.897.0070 | IAQ@SanAir.com | SanAir.com



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212

Phone: 614-481-8600 ext. 142

Project Number: 23-0409

P.O. Number:

Project Name: BOT-93-HIGH GLOUSTER

Collected Date: 9/22/2023

Received Date: 9/27/2023 10:25:00 AM

Dear Jordan Mederer,

We at SanAir would like to thank you for the work you recently submitted. The 50 sample(s) were received on Wednesday, September 27, 2023 via UPS. The final report(s) is enclosed for the following sample(s): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 47, 48.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Sandra Sobrino

Asbestos & Materials Laboratory Manager

Sandra Sobiino

SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter

- Analysis Pages

- Disclaimers and Additional Information

Sample conditions:

- 52 samples in Good condition.



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212

Phone: 614-481-8600 ext. 142

Project Number: 23-0409

P.O. Number:

Project Name: BOT-93-HIGH GLOUSTER

Collected Date: 9/22/2023

Received Date: 9/27/2023 10:25:00 AM

Analyst: Mayes, Jean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Com	ponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
1 / 23053830-001 HP Finish Base Coats 1st Floor Front Area, Finish Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
1 / 23053830-001 HP Finish Base Coats 1st Floor Front Area, Base Coat	Grey Non-Fibrous Homogeneous		100% Other	None Detected
2 / 23053830-002 HP Finish Base Coats 1st Floor Middle Area, Finish Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
2 / 23053830-002 HP Finish Base Coats 1st Floor Middle Area, Base Coat	Grey Non-Fibrous Homogeneous		100% Other	None Detected
3 / 23053830-003 HP Finish Base Coats 1st Floor Back Area, Finish Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
3 / 23053830-003 HP Finish Base Coats 1st Floor Back Area, Base Coat	Grey Non-Fibrous Homogeneous		100% Other	None Detected
4 / 23053830-004 HP Finish Base Coats 2nd Floor Front Room W/Heater, Finish Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
4 / 23053830-004 HP Finish Base Coats 2nd Floor Front Room W/Heater, Base Coat	Grey Non-Fibrous Homogeneous	1% Cellulose	99% Other	None Detected
5 / 23053830-005 HP Finish Base Coats 2nd Floor Near Kitchen, Finish Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
5 / 23053830-005 HP Finish Base Coats 2nd Floor Near Kitchen, Base Coat	Grey Non-Fibrous Homogeneous	2% Hair	98% Other	None Detected

Analyst:

Approved Signatory:

Analysis Date: 10/9/2023



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Collected Date: 9/22/2023

Received Date: 9/27/2023 10:25:00 AM

Analyst: Mayes, Jean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Com	ponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
6 / 23053830-006 HP Finish Base Coats 2nd Floor Rear Room, Finish Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
6 / 23053830-006 HP Finish Base Coats 2nd Floor Rear Room, Base Coat	Grey Non-Fibrous Homogeneous		100% Other	None Detected
7 / 23053830-007 HP Finish Base Coats 3rd Floor Hall By Front, Finish Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
7 / 23053830-007 HP Finish Base Coats 3rd Floor Hall By Front, Base Coat	Grey Non-Fibrous Homogeneous		100% Other	None Detected
8 / 23053830-008 HP Finish Base Coats 3rd Floor Rear, Finish Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
8 / 23053830-008 HP Finish Base Coats 3rd Floor Rear, Base Coat	Grey Non-Fibrous Homogeneous		100% Other	None Detected
9 / 23053830-009 DW/JC 1st FI 2nd Area, Drywall	Various Non-Fibrous Heterogeneous	10% Cellulose	90% Other	None Detected
9 / 23053830-009 DW/JC 1st Fl 2nd Area, Joint Compound	White Non-Fibrous Homogeneous		100% Other	None Detected
10 / 23053830-010 DW/JC 1st FI 1st Area, Drywall	Various Non-Fibrous Heterogeneous	10% Cellulose	90% Other	None Detected
10 / 23053830-010 DW/JC 1st Fl 1st Area, Joint Compound	White Non-Fibrous Homogeneous		100% Other	None Detected

Analyst:

Approved Signatory:

Analysis Date: 10/9/2023



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212 **Phone:** 614-481-8600 ext. 142

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Analyst: Mayes, Jean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Com	ponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
11 / 23053830-011 Wall Skim On Wallpaper 2nd Fl Near Kitchen	Off-White Non-Fibrous Homogeneous		100% Other	None Detected
12 / 23053830-012 Wall Skim On Wallpaper 2nd Fl Near Kitchen	Off-White Non-Fibrous Homogeneous		100% Other	None Detected
13 / 23053830-013 Wall Skim On Wallpaper 2nd Fl Near Kitchen	Off-White Non-Fibrous Homogeneous		100% Other	None Detected
14 / 23053830-014 Textured Wall 2nd Floor Near Bath	Off-White Non-Fibrous Homogeneous		100% Other	None Detected
15 / 23053830-015 Textured Wall 2nd Floor Near Bath	Off-White Non-Fibrous Homogeneous		100% Other	None Detected
16 / 23053830-016 Textured Wall 2nd Floor Near Bath	Off-White Non-Fibrous Homogeneous		100% Other	None Detected
17 / 23053830-017 Textured Wall 3rd Floor Front Bedroom	Off-White Non-Fibrous Homogeneous		100% Other	None Detected
18 / 23053830-018 Textured Wall 3rd Floor Kitchen	Off-White Non-Fibrous Homogeneous		100% Other	None Detected
19 / 23053830-019 Textured Ceiling Drywall 3rd Fl North Bedroom, Drywall	Various Non-Fibrous Heterogeneous	10% Cellulose	90% Other	None Detected
19 / 23053830-019 Textured Ceiling Drywall 3rd Fl North Bedroom, Joint Compound	White Non-Fibrous Homogeneous		100% Other	None Detected

Analyst:

Approved Signatory:

Analysis Date: 10/9/2023



Name: Lawhon & Associates, Inc.

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Columbus, OH 43212 **Phone:** 614-481-8600 ext. 142

Project Number: 23-0409

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Collected Date: 9/22/2023

Received Date: 9/27/2023 10:25:00 AM

Analyst: Mayes, Jean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Components		
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
20 / 23053830-020 Textured Ceiling Drywall 2nd Fl Rear Family Rm	Various Non-Fibrous Heterogeneous	8% Cellulose	92% Other	None Detected
21 / 23053830-021 Textured Wall Coating 1st Fl Front Area	White Non-Fibrous Homogeneous		100% Other	None Detected
22 / 23053830-022 Textured Wall Coating 1st Fl Front Area	White Non-Fibrous Homogeneous		100% Other	None Detected
23 / 23053830-023 Textured Wall Coating 1st Fl Front Area	White Non-Fibrous Homogeneous		100% Other	None Detected
24 / 23053830-024 Textured Wall Coating 2nd Fl Rear Family Room	Cream Non-Fibrous Homogeneous		100% Other	None Detected
25 / 23053830-025 Textured Wall Coating 2nd Fl Rear Family Room	Cream Non-Fibrous Homogeneous		100% Other	None Detected
26 / 23053830-026 Textured Wall Coating 2nd FI Rear Family Room	Cream Non-Fibrous Homogeneous		100% Other	None Detected
27 / 23053830-027 Gypsum Ceiling 1st Fl Entry	Various Non-Fibrous Heterogeneous	13% Cellulose	87% Other	None Detected
28 / 23053830-028 Gypsum Ceiling 1st Fl Entry	Various Non-Fibrous Heterogeneous	13% Cellulose	87% Other	None Detected
29 / 23053830-029 Carpet Mastic 1st Fl Front Bay Windows N	Yellow Non-Fibrous Homogeneous		100% Other	None Detected

Analyst:

Analysis Date:

10/9/2023

Approved Signatory:

Date:

0/9/2023



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212 **Phone:** 614-481-8600 ext. 142

Project Number: 23-0409

P.O. Number:

Project Name: BOT-93-HIGH GLOUSTER

Collected Date: 9/22/2023

Received Date: 9/27/2023 10:25:00 AM

Analyst: Mayes, Jean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Com	Components	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
30 / 23053830-030 Carpet Mastic 1st FI Front Bay Windows S	Various Non-Fibrous Heterogeneous		100% Other	None Detected
31 / 23053830-031 Linoleum 1st Fl Bath, Linoleum	Tan Non-Fibrous Heterogeneous	10% Cellulose 5% Glass	85% Other	None Detected
31 / 23053830-031 Linoleum 1st Fl Bath, Mastic	Tan Non-Fibrous Homogeneous		100% Other	None Detected
32 / 23053830-032 Linoleum 1st Fl Bath, Linoleum	Tan Non-Fibrous Heterogeneous	10% Cellulose 5% Glass	85% Other	None Detected
32 / 23053830-032 Linoleum 1st Fl Bath, Mastic	Tan Non-Fibrous Homogeneous		100% Other	None Detected
33 / 23053830-033 Vapor Barrier 1st Fl Ren Hardwood	Black Fibrous Heterogeneous	80% Cellulose	20% Other	None Detected
34 / 23053830-034 Vapor Barrier 1st Fl Ren Hardwood	Black Fibrous Heterogeneous	80% Cellulose	20% Other	None Detected
35 / 23053830-035 Linoleum 2nd Fl Front Kitchen	Various Non-Fibrous Heterogeneous	3% Cellulose	82% Other	15% Chrysotile
36 / 23053830-036 Linoleum 2nd Fl Front Kitchen				Not Analyzed
37 / 23053830-037 12" FT Mastic Floor Mastic 2nd Fl Rear Bath, Floor Tile	Grey Non-Fibrous Homogeneous		100% Other	None Detected

Analyst:

Approved Signatory:

Analysis Date: 10/9/2023



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212

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Analyst: Mayes, Jean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Com	ponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
37 / 23053830-037 12" FT Mastic Floor Mastic 2nd Fl Rear Bath, Mastic	Yellow Non-Fibrous Homogeneous		100% Other	None Detected
37 / 23053830-037 12" FT Mastic Floor Mastic 2nd Fl Rear Bath, Flooring	Green Non-Fibrous Homogeneous		100% Other	None Detected
37 / 23053830-037 12" FT Mastic Floor Mastic 2nd Fl Rear Bath, Mastic	Black Non-Fibrous Homogeneous		100% Other	None Detected
38 / 23053830-038 12" FT Mastic Floor Mastic 2nd Fl Rear Bath, Floor Tile	Grey Non-Fibrous Homogeneous		100% Other	None Detected
38 / 23053830-038 12" FT Mastic Floor Mastic 2nd Fl Rear Bath, Mastic	Yellow Non-Fibrous Homogeneous		100% Other	None Detected
38 / 23053830-038 12" FT Mastic Floor Mastic 2nd Fl Rear Bath, Flooring	Green Non-Fibrous Homogeneous		100% Other	None Detected
38 / 23053830-038 12" FT Mastic Floor Mastic 2nd Fl Rear Bath, Mastic	Black Non-Fibrous Homogeneous		100% Other	None Detected
39 / 23053830-039 Linoleum 2nd /3rd Membrane, Linoleum	Orange Fibrous Heterogeneous	70% Cellulose	30% Other	None Detected
39 / 23053830-039 Linoleum 2nd /3rd Membrane, Paper	Grey Fibrous Heterogeneous	95% Cellulose	5% Other	None Detected
40 / 23053830-040 Linoleum 2nd/3rd Membrane, Linoleum	Orange Fibrous Heterogeneous	70% Cellulose	30% Other	None Detected

Analyst: (

Analysis Date:

10/9/2023

Approved Signatory:

Date:

0/9/2023



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212

Phone: 614-481-8600 ext. 142

Project Number: 23-0409

P.O. Number:

Project Name: BOT-93-HIGH GLOUSTER

Collected Date: 9/22/2023

Received Date: 9/27/2023 10:25:00 AM

Analyst: Mayes, Jean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic Components		ponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
40 / 23053830-040 Linoleum 2nd/3rd Membrane, Paper	Grey Fibrous Heterogeneous	95% Cellulose	5% Other	None Detected
41 / 23053830-041 BSU 2nd Fl Rear Kitchen	Black Non-Fibrous Homogeneous		97% Other	3% Chrysotile
42 / 23053830-042 BSU 2nd Fl Rear Kitchen				Not Analyzed
43 / 23053830-043 WSU 3rd Fl Kitchen	White Non-Fibrous Homogeneous	10% Cellulose	90% Other	None Detected
44 / 23053830-044 WSU 3rd Fl Kitchen	White Non-Fibrous Homogeneous	10% Cellulose	90% Other	None Detected
45 / 23053830-045 Electrical Wiring Basement	Black Fibrous Heterogeneous	70% Cellulose	30% Other	None Detected
46 / 23053830-046 Electrical Wiring Basement	Black Fibrous Heterogeneous	70% Cellulose	30% Other	None Detected
47 / 23053830-047 Ext Window Glazing Comp 2nd Fl	Grey Non-Fibrous Heterogeneous		97% Other	3% Chrysotile
48 / 23053830-048 Ext Window Glazing Comp 2nd Fl				Not Analyzed
49 / 23053830-049 Ext Window Caulk 1st Fl	Grey Non-Fibrous Homogeneous		96% Other	4% Chrysotile

Analyst: ¿

Approved Signatory:

Analysis Date: 10/9/2023



Name: Lawhon & Associates, Inc.

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Columbus, OH 43212

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Project Number: 23-0409

P.O. Number:

Project Name: BOT-93-HIGH GLOUSTER

Collected Date: 9/22/2023

Date:

Received Date: 9/27/2023 10:25:00 AM

Analyst: Mayes, Jean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Com	ponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
50 / 23053830-050 Ext Window Caulk 1st Fl				Not Analyzed

Analyst: Je Maux

Approved Signatory:

Analysis Date: 10/9/2023

0/9/2023



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212

Phone: 614-481-8600 ext. 142

Project Number: 23-0409

P.O. Number:

Project Name: BOT-93-HIGH GLOUSTER

Collected Date: 9/22/2023

Received Date: 9/27/2023 10:25:00 AM

Analyst: Mayes, Jean

Asbestos Bulk EPA PLM 400 Point Count

	Stereoscopic	Com	ponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
47 / 23053830-051 Ext Window Glazing Comp 2nd Fl	Grey Non-Fibrous Heterogeneous		98% Other	2% Chrysotile
48 / 23053830-052 Ext Window Glazing Comp 2nd Fl				Not Analyzed

Analyst:

Analysis Date:

10/9/2023

Approved Signatory:

Disclaimer and Additional Information

400 Point Count Method EPA 600/R-93/116

 ${\sf EPA-40\ CFR\ Appendix\ E}$ to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

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Asbestos Accreditations

National Voluntary Laboratory Accreditation Program (NVLAP) Lab Code 200870-0
City of Philadelphia Department of Public Health Air Management Services, Certification#ALL-460
Commonwealth of Pennsylvania Department of Environmental Protection Number 68-05397
California State Environmental Laboratory Accreditation Program Certificate Number 2915
Colorado Department of Public Health and Environment Registration Number AL-23143
Connecticut Department of Public Health Environmental Laboratory Registration Number PH-0105
Massachusetts Department of Labor Standards Asbestos Analytical Services License Number: AA000222
State of Maine Department of Environmental Protection License Number: LB-0075, LA-0084
New York State Department of Health Laboratory ID: 11983

State of Rhode Island Department of Health Certification No.: PCM00126, PLM00126, TEM00126

Texas Department of State Health Services License Number: 300440

Commonwealth of Virginia Department of Professional and Occupational Regulation Number: 3333000323

State of Washington Department of Ecology Laboratory ID: C989

State of West Virginia Bureau for Public Health Analytical Laboratory Number: LT000616

Vermont Department of Health License Number: Asb-Co-An-000006

Louisiana Department of Environmental Quality Al Number 212253, Certificate #05088

Revision Date: 5/10/2023

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NYELAP Disclaimer:

Polarized- light microscopy is not consistently reliable in detecting asbestos in floor covering and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Asbestos Accreditations

National Voluntary Laboratory Accreditation Program (NVLAP) Lab Code 200870-0
City of Philadelphia Department of Public Health Air Management Services, Certification#ALL-460
Commonwealth of Pennsylvania Department of Environmental Protection Number 68-05397
California State Environmental Laboratory Accreditation Program Certificate Number 2915
Colorado Department of Public Health and Environment Registration Number AL-23143
Connecticut Department of Public Health Environmental Laboratory Registration Number PH-0105
Massachusetts Department of Labor Standards Asbestos Analytical Services License Number:
AA000222

State of Maine Department of Environmental Protection License Number: LB-0075, LA-0084 New York State Department of Health Laboratory ID: 11983

State of Rhode Island Department of Health Certification No.: PCM00126, PLM00126, TEM00126 Texas Department of State Health Services License Number: 300440

Commonwealth of Virginia Department of Professional and Occupational Regulation Number: 3333000323

State of Washington Department of Ecology Laboratory ID: C989

State of West Virginia Bureau for Public Health Analytical Laboratory Number: LT000616

Vermont Department of Health License Number: Asb-Co-An-000006

Louisiana Department of Environmental Quality Al Number 212253, Certificate #05088

Revision Date: 4/18/2023 Page 13 of 16

Lawhon & Associates, Inc. Columbus, OH 43212 Phone: (614) 481-8600 Fax: (614) 481-8610 1441 King Avenue

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9121123 Date: __ ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name			Doiog No .		i
	•		riojed No.	rioject contract.	Signature
BOT-93 HICH - 60005TER) + (Lousten	4040-52	Johnson Meseren	K
Sample I.D. No.	Homog. Area No.	Sample /Hon	Sample /Homogeneous Area Description	Sample Location	Remarks
1	1/5	HP - FiresH	H / BASE COARS		
2				1	
3				l	
7					
5				In A-repr KITCHEN	
9				J	
2				3. FL- HALL BY FOUNT	
8	-	-1	-1	300 FL- NEAR	
6	~	DU / JC		10t FC- 2-1 AneA	* composite IF POSITIVE
2	4	1		1st fl- 1st AREA	4
11	5	WALL SELM 0	or wantapen	2-4 FL- NEAL KITCHEN	
ال					
13	-1	1		1	
7	5	TEXTU LES L	WALL	7. FL. NEAL BATH	
15					
91	4	4		J	
71	9	TEXTORS (1010×6	3' fe - fourt Bergan	
81	1	1		3 M FL- KITCHEN	
SAMPLE ANALYSIS BY EPA METHOD 600/R-93/116 UNLESS OTHERWISE N	PA METH	4OD 600/R-93/116 UI	NLESS OTHERWISE NOTED.		A-Stop 1st Positive C Analyze All Samples
Relinquished by: (signature)	Dar	9/26/23 Yen SNC	Received by: (signature)	Date / Times Relinquished by: (signature) Date / Time Reco	Received by: (signature) Date / Time

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Page 15 of 16

No. 3952

VIA: UPS

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Date: 9/22/23

ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name:			Project No.:	Project Contact:	Sampler (print):	Signature
130T- 93 H	+191+	93 Hill - bouster	52-0409	Introper	8	R
Sample I.D. No.	Homog. Area No.	Sample /Ho	Sample /Homogeneous Area Description	Sample Location		Remarks
19	49	18th-000 (6	LEICING / DANAL	3" FL NOUTH BEY ROOM	,A	
20	~		1	Total Fames Amen	いっ	
ĭ	5 C	TEXTURED W.	WALL CORTING	1st pe front pres		
77				1		
23	-1	→				
42	<u></u>	TEATURED W	WALL COATING	2 L Cost Tomey 200	といく	
25						
97	4			-1		
17	2	67PSUM 66	16/11/20	I'T FC ENTRY		
32	4	1		1		
52	11	CARPET	MASTIL	157 pe front BAY W	BAT WINDOWS - PA	
30	1	1		1	5-	
34	71	じいのいかい		15 FL BATH		
32	1	7		-1		
33	13	VAPOR BADRIER	LIEAL	15T FL BEN- HARONOW	0	
34	1	-1		-1		
35	١٠	いっっっとり		2" for found to stuffer	ten	
36	-4	4		1		
SAMPLE ANALYSIS BY E	EPA ME	THOD 600/R-93/116 (SAMPLE ANALYSIS BY EPA METHOD 600/R-93/116 UNLESS OTHERWISE NOTED.		•	CStop 1st Positive ☐ Analyze All Samples
Relinquished by: (signature)	9/4/	Date / Time Receive $q/u/23$ $4/h$	d by: (signature)	Apple / Times Relinquished by: (signature)	Date / Time Received by: (signature)	ignature) Date / Time

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Page 16 of 16

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Date: 9/11/2

ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name:			Project No.:	Project Contact: Sample	Sampler (print):	
BOT - 93 HIGH - 400-17ET	- 49	40001722	6040-12	5 neveres	1	
Sample I.D. No.	Homog. Area No.	Sample /Hon	Sample /Homogeneous Area Description	Sample Location	Remarks	
37	15	12" FT /mastu	TL / CAREN FLUSA/MINIC	mil 2nd pe near 150714		
38	-1	1				
39	91	LINDLEUM		2nd / sta merranue		
202	4	1		1		
F	~	Bsu		7-4 fr nem kutchen		
44	7	7		4		
۲۶	81	W S C		3rt fl KITLIFEN		
አካ	1	4		4		
۸ک	ره	Electrical w	してしたいし	Bastener		
94	+	7		-6		
۲,	2,5	Ett. Window	begreat comp.	2-> FC		
84	4	1	1	1		
79	12	EXT. WINDOW	w casch	150 FL		
25	4	7	1	7		
SAMPLE ANALYSIS BY EPA METHOD 600/R-93/116 UNLESS OTHERWISE	PA MET	'HOD 600/R-93/116 U	NLESS OTHERWISE NOTED.	-	CLStop 1st Positive	S
Relinquished by: (signature)	192/6	Pate / Time Received	Sn Sn	Tiggs Relinquished by: (signature) Date / Time	ne Received by: (signature) Date / Time	

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The Identification Specialists

Analysis Report prepared for Lawhon & Associates, Inc.

Report Date: 10/11/2023

Project Name: BDT-93 High-Glouster

Project #: 23-0409

SanAir ID#: 23055850



NVLAP LAB CODE 200870-0

10501 Trade Court | North Chesterfield, Virginia 23236 888.895.1177 | 804.897.1177 | fax: 804.897.0070 | IAQ@SanAir.com | SanAir.com



SanAir ID Number 23055850 FINAL REPORT 10/11/2023 9:28:59 AM

Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212

Phone: 614-481-8600 ext. 142

Project Number: 23-0409

P.O. Number:

Project Name: BDT-93 High-Glouster

Collected Date: 9/22/2023

Received Date: 10/9/2023 9:10:00 AM

Dear Jordan Mederer,

We at SanAir would like to thank you for the work you recently submitted. The 2 sample(s) were received on Monday, October 09, 2023 via COC further analysis. The final report(s) is enclosed for the following sample(s): 41, 42.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Sandra Sobrino

Asbestos & Materials Laboratory Manager

Sandra Sobiino

SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter

- Analysis Pages

- Disclaimers and Additional Information

Sample conditions:

- 2 samples in Good condition.



SanAir ID Number
23055850
FINAL REPORT
10/11/2023 9:28:59 AM

Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212

Phone: 614-481-8600 ext. 142

Project Number: 23-0409

P.O. Number:

Project Name: BDT-93 High-Glouster

Collected Date: 9/22/2023

Received Date: 10/9/2023 9:10:00 AM

Analyst: Mayes, Jean

Asbestos Bulk EPA PLM NOB EPA 600/R-93/116

SanAir ID / Description	Appearance	% Fibrous	% Non Fibrous	Asbestos Types	% Total Asbestos
23055850-001 / 41 BSU 2nd Fl Rear Kitchen	Black Non-Fibrous Homogeneous		98.5 %	Chrysotile	1.5 %
23055850-002 / 42 BSU 2nd Fl Rear Kitchen	Black Non-Fibrous Homogeneous			Not Analyzed	

EPA 400 Point Count with Gravimetric Reduction.

Analyst: Le Mauxs

Approved Signatory:

Analysis Date: 10/11/2023 Date: 10/11/2023

Disclaimer:

Method for the Determination of Asbestos in Bulk Building Materials EPA 600/R-93/116, July 1993 PLM EPA NOB

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Lawhon & Associates, Inc.

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Date: 9/20/23

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ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name:			Project No.:	Project Contact: Sampler (print):	Signature
BOT-93	HICH -	BOT-93 HICH - 6000STER	6040-82	Jongan MEDEREN	
Sample I.D. No,	Homog. Area No.		Sample /Homogeneous Area Description	Sample Location	Remarks
	115	HP - FINISH	1 BASE (vat)	1st from fourt Anea	
7				1st from missie Area	
3				I'T FLOOR BACK AVEA	
7				22 fl - front noon we Hearted	
5				In A-rea KITCHN	
9				2-1 pt. REAR Ason	
2				3.2 FL- Have By Farest	
30	4	_;	+	300 FL- NEAR	
4	3	25/20			* composite IF Positive
0_	4	1			4
11	5	Wall Stin ON	ON WALLPAPEN	7-1 FL- REAL KITCHEN	
11					
13	<u> </u>	4			
7	ک	TEXTO NEW WALL	7	2" FL- REAL BOTH	
7.7					
9	-)				
77	` 0	TEXTURES LE	LEIUND	3x fe - fourt Approx	
<u>.</u> ئەت	1	4		3 -> FL - K-17646~	
SAMPLE ANALYSIS I	BY EPA ME	THOD 600/R-93/116 UNL	SAMPLE ANALYSIS BY EPA METHOD 600/R-93/116 UNLESS OTHERWISE NOTED.		A Stop 1st Positive
Relinquished by: (signature)		Time	Received by: (signature)	Relinquished by: (signature) Date / Time	Received by: (signature) Date / Time
X	19/2	9/2/23 28 SAL	- T	-	

Lawhon & Associates, Inc.

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Date: 9/22/23

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ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name:			Project No .	Project Contact:	Signature
į.	HIGH	93 HIGH - 6 worster	6040-52	man de	X
Sample I.D. No.	Homog. Area No.		Sample /Homogeneous Area Description	Sample Location	Remarks
19	6/7	1875-aB	LEIGING / DATUAL	3. 4 North Beram	
20	^		4	2 - Fr Real FAMES AM	
77	8	TEXTURED IN	WALL COATING	1st Pe Frunt Area	
75					
42	4	7	1		
hz	5	TEATURED V	won teating	2 fr post formy noch	
25				l	
22	-1		-	-1	
77	2	67PSUM 61	(E Un6	IT FO ENTAN	
28	1	1		-1	
52	11	CARPET	MOSTU	15 FL FRUNT BAY WINDOWS - Y	
30	1	4		S- 1	
31	77	じいるいだいん		15T FL BATH	
32	1	٦		-1	
33	13	VAPOR BADE	BADASEAL	15T FL BEN- HANDWOOD	
34	1	4		4	
35	۲.	Unsuesum		2th from to tellow	
36	-1	7		4	
SAMPLE ANALYSIS B	Y EPA ME	THOD 600/R-93/116 L	SAMPLE ANALYSIS BY EPA METHOD 600/R-93/116 UNLESS OTHERWISE NOTED		Stop 1st Positive
Relinquished-by: (signature)			Received by: (signature)	Relinquished by: (signature) Date / Time	Received by: (signature) Date / Time
7	7.7	163 45			

Dietributor Whita . I sh. Vallow - Fila

Lawhon & Associates, Inc.

1441 King Avenue Columbus, OH 43212 Phone: (614) 481-8600 Fax: (614) 481-8610

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Date:	
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ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name:			Project No.:	Project Contact: Sampler (print):	rint):	
BOT - 93 HIGH - 4 . WITTER	HIGH -	4 conster	6040-(2	Themen		
Sample I.D. No.	Homog. Area No.		Sample /Homogeneous Area Description	Sample Location	Remarks	
37	15	12" FT /maste	it / batter prosulmin	in 2nd for near BATH		
38	4	1	+			
ડેવ	91	しいってのか		2nd / six merrance		
ک	4	1		1		
7	~	1350		2-1 fr new testour		
44	<u> </u>	4		7		
٣,	81	253		3' FL KITLIFEN		
7,	4	+		+		
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SAMPLE ANALYSIS E	3Y EPA ME	THOD 600/R-93/116 UNI	SAMPLE ANALYSIS BY EPA METHOD 600/R-93/116 UNLESS OTHERWISE NOTED.		Costop 1st Positive ☐ Analyze All Samples	Samples
Relinquished by: (signature)		Date / Time Received by	Received by: (signature)	/ Tigg Relinquished by: (signature) Date / Time	Received by: (signature) Date / Time	
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Distributor: White - Lab; Yellow - File

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200870-0

SanAir Technologies Laboratory, Inc.

N. Chesterfield, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2023-04-01 through 2024-03-31

Effective Dates



HOLL X Schmill

For the National Voluntax Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

SanAir Technologies Laboratory, Inc.

10501 Trade Court
N. Chesterfield, VA 23236
Ms. Sandra Sobrino

Phone: 804-897-1177 Fax: 804-897-0070

Email: ssobrino@sanair.com http://www.sanair.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200870-0

Bulk Asbestos Analysis

Code

Description

18/A01

EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of

Asbestos in Bulk Insulation Samples

18/A03

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code

Description

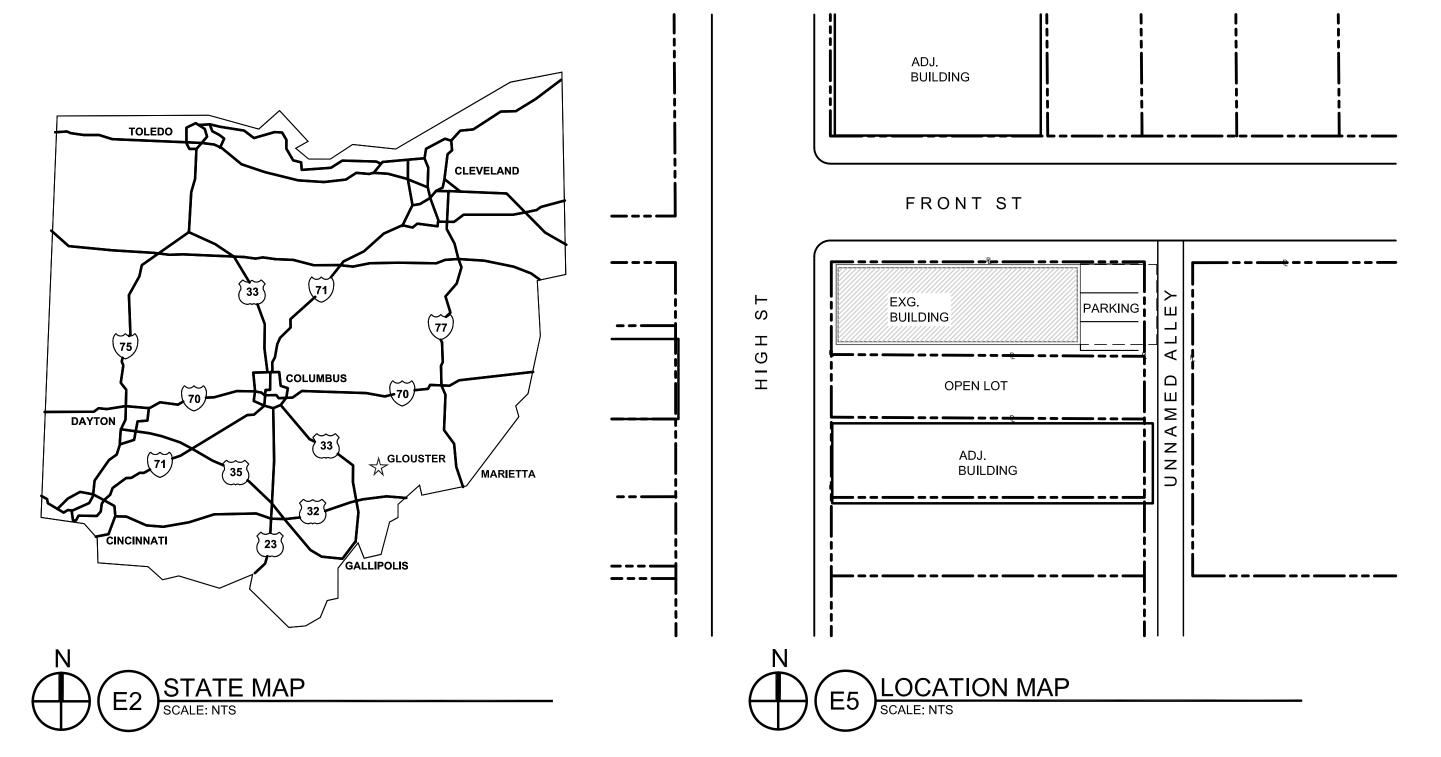
18/A02

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in

40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

NEW LEAF RENOVATION 96 HIGH STREET GLOUSTER, OHIO 45732



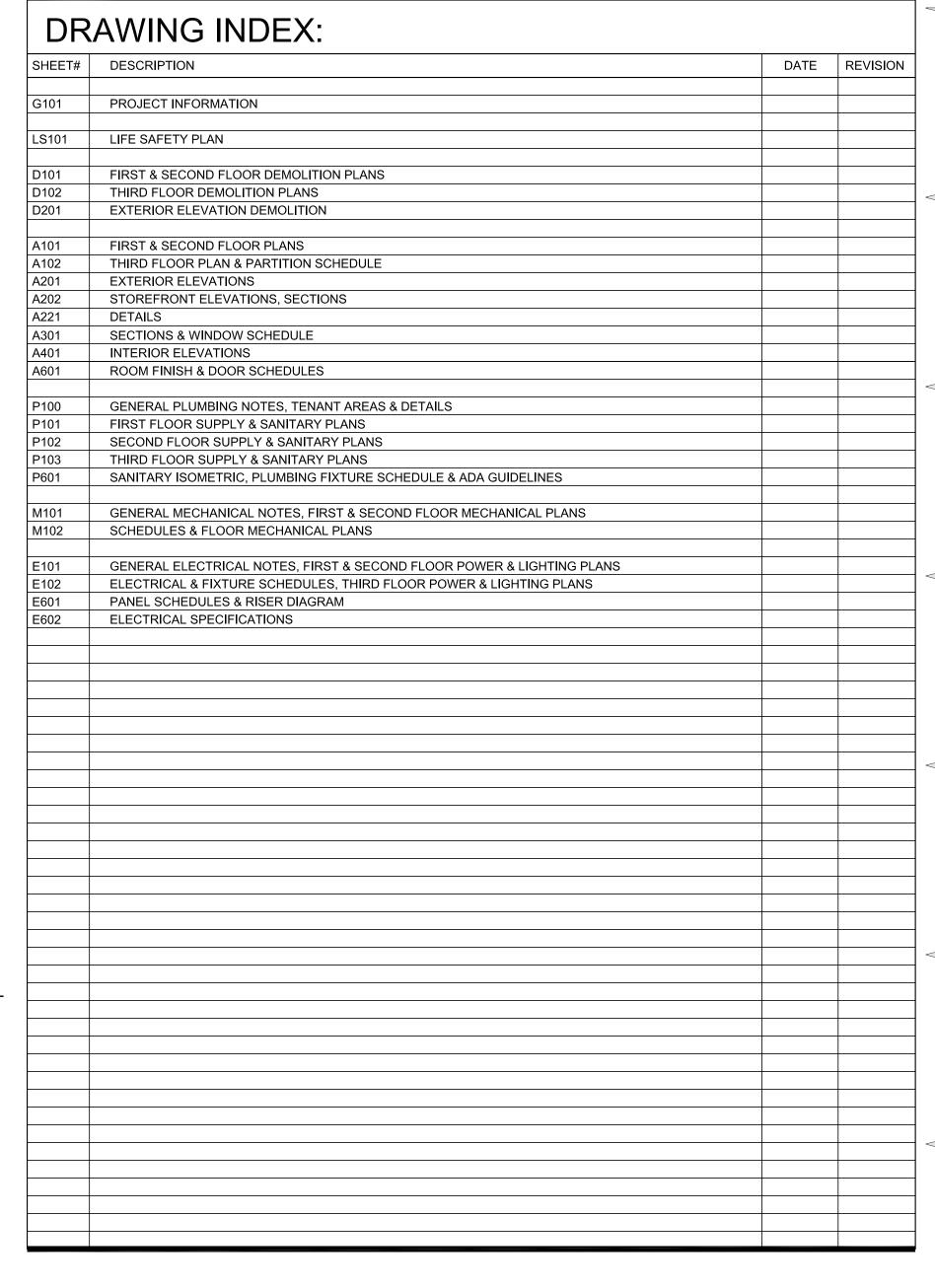
SCHEDULE OF ALLOWANCES

ALLOWANCES - REFER TO SPECIFICATIONS

ALLOWANCE 01 - WOOD FLOORING/ FRAMING
REMOVE AND REPLACE FLOOR WOOD FRAMING, WOOD FLOOR
SHEATHING, WOOD FLOORING WHERE DAMAGED. REPLACE WOOD
FLOORING AS NEEDED WHERE EXISTING WALLS WERE REMOVED

ALLOWANCE 02 - EAST ELEVATION EXTERIOR RESTORATION.
WHERE BALCONY IS REMOVED MODIFY AND REPAIR, PROVIDE ADDITIONAL MATERIALS
AND FRAMING AS REQUIRED TO STABILIZE AND MAKE WATER TIGHT BUILDING
EXTERIOR ENVELOPE. RE-ATTACHED/ RE-FASTEN CAST IRON CLADDING PANELS

ALLOWANCE 03 - EXTERIOR MASONRY RESTORATION.
REPLACE BRICK AND PROVIDE TUCK POINTING AS DIRECTED IN THE FIELD



ONLINE www.bdtaid.com

BDT PROJECT NO: 23020

PROFESSIONAL SEAL

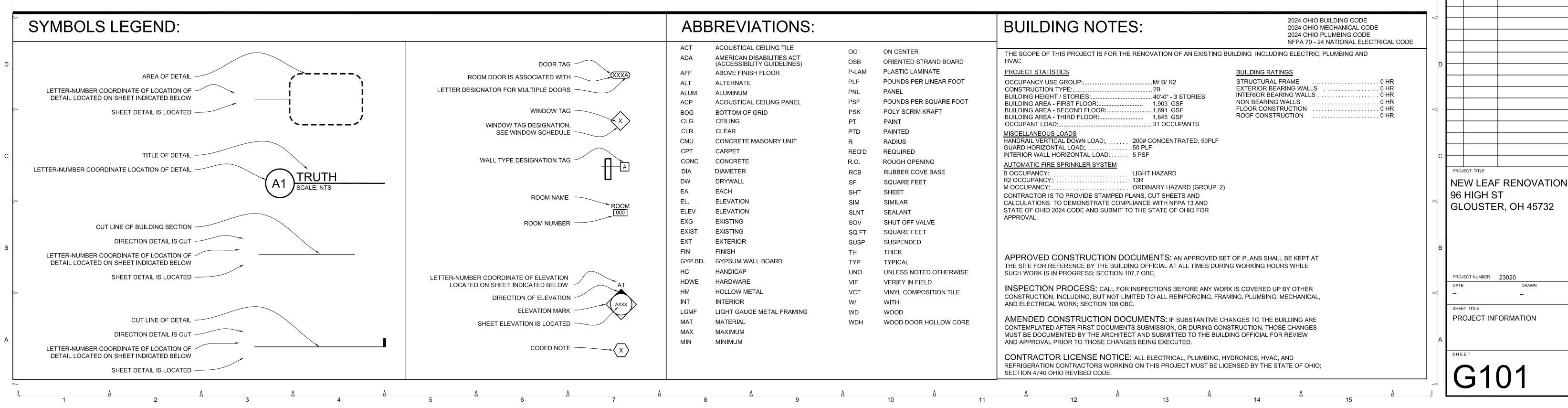
DISPENZA

Donald J Dispenza, License #12528

Expiration Date 12/31/2025

04/22/24 BID/ PERMIT SET

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GENERAL STRUCTURAL NOTES:

GENERAL:

- 1. THE STRUCTURE IS DESIGNED TO BE SELF-STANDING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE, AND TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, SHEETING, TEMPORARY BRACING, GUYS, OR TIEDOWNS WHICH MIGHT BE NECESSARY. SUCH MATERIAL SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER COMPLETION OF THE PROJECT.
- 2. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
- 3. MECHANICAL EQUIPMENT LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO MECHANICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF MECHANICAL AND OTHER TRADES BEFORE PROCEEDING WITH SUCH PORTION OF WORK. EXCESS COST RELATED TO VARIATION IN MECHANICAL REQUIREMENTS TO BE BORNE BY THE MECHANICAL CONTRACTOR.
- 4. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THE GENERAL STRUCTURAL NOTES, THE STRICTEST PROVISION SHALL
- 5. GOVERNING CODE: 2023 OHIO BUILDING CODE.

REINFORCED CONCRETE:

1 MATERIALS A. STRUCTURAL CONCRETE

_					
	CLASS	LOCATION	fc (PSI)		
	I	FOOTINGS, GRADE BEAMS, INTERIOR PIERS	3000		
	II	INTERIOR SLABS ON GRADE, AND ALL OTHER INTERIOR CONCRETE NOT OTHERWISE IDENTIFIED	3500		
	III	EXTERIOR SLABS ON GRADE, SITE CONCRETE, RETAINING WALLS, AND ALL OTHER EXTERIOR CONCRETE NOT OTHERWISE IDENTIFIED	4000 (W/AIR)		
	IV	BACKFILL BELOW FOOTINGS	1500		
	V	MASONRY CORE FILL	2500, #8 agg. 8" SLUMP		
۱۸	LDEEODI	AED DEINEODOINO DADO, EV = 60 000 DOI	LL DEFORMED DEINEODOING DADO, Ev. – 60 000 DOI		

- B. ALL DEFORMED REINFORCING BARS: Fy = 60,000 PSI FOOTINGS, PIERS:
- A. DOWELS IN FOOTINGS TO MATCH MASONRY WALL REINFORCING. B. PROVIDE CORNER BARS AT FOOTING CORNERS TO MATCH HORIZONTAL REINFORCING. MINIMUM LENGTH OF EACH LEG = 50 BAR DIAMETERS.
- C. KEEP FOUNDATIONS FREE OF WATER AT ALL TIMES. REPLACE WEAKENED SOIL WITH CLASS IV CONCRETE. D. SEE FOUNDATION DETAILS FOR TYPICAL FOOTING STEP. STEP AT A
- MAXIMUM RATIO OF ONE VERTICAL TO TWO HORIZONTALS. SPLICES:
- A. SPLICES FOR VERTICAL STEEL IN PIERS, LAP 50 DIAMETERS, UNLESS OTHER-WISE NOTED.
- B. MINIMUM LAP FOR FOOTING REINFORCING = 50 DIAMETERS. 4. WEDGE ANCHORS AND CHEMICAL ANCHORS:
- A. MINIMUM EMBEDMENT SHALL BE 6 BOLT DIAMETERS, EXCEPT AS OTHERWISE DESIGNATED.
- B. STRICTLY FOLLOW MANUFACTURERS INSTRUCTIONS FOR INSTALLATION OF CHEMICAL ANCHORS. VERIFY IF CORE DRILLING OR ROTARY HAMMER DRILLING IS REQUIRED FOR THE SYSTEM USED.
- 5. REINFORCEMENT COVER: A. FOOTING REINFORCEMENT TO HAVE A MINIMUM OF 6" CONCRETE COVER
- B. CONCRETE CAST AGAINST EARTH SHALL HAVE A MINIMUM OF 3" CONCRETE
- C. CONCRETE NOT CAST AGAINST EARTH SHALL HAVE A MINIMUM OF 1" CONCRETE COVER FOR 5/8" BAR OR SMALLER, LARGER BAR TO HAVE A MINIMUM OF 2" CONCRETE COVER.

DRAINAGE FILL:

- MATERIALS:
- AGGREGATE BASE COURSE, NOTED "DRAINAGE" FILL ON DRAWINGS. FOR PLACEMENT UNDER PAVEMENT, USE ODOT ITEM 304
- 2. SPREAD AGGREGATE OVER PREPARED SUBSTRATE TO A COMPACTED
 - THICKNESS OF: A. 4 INCH COMPACTED THICKNESS AT EXTERIOR WALKWAYS.
- B. 4 INCH MINIMUM COMPACTED THICKNESS AT SLABS-ON-GRADE. C. 6 INCH MINIMUM COMPACTED THICKNESS AT AUTOMOBILE PARKING AREAS.
- D. 8 INCH MINIMUM COMPACTED THICKNESS AT TRUCK PARKING AND DRIVEWAY
- 3. PLACE AGGREGATE IN MAXIMUM OF 6 INCH LAYERS AND ROLLER COMPACT TO 100 PERCENT OF MAXIMUM DENSITY.
- 4. LEVEL AND CONTOUR SURFACES TO ELEVATIONS AND GRADIENTS INDICATED OR REQUIRED TO PROVIDE POSITIVE SHEET DRAINAGE TO PAVEMENT AREA EDGE OR CATCH BASINS.
- 5. USE MECHANICAL TAMPING EQUIPMENT IN AREAS INACCESSIBLE TO COMPACTION EQUIPMENT.

STRUCTURAL METAL STUDS AND JOISTS:

- MATERIALS:
 - A. METAL STUDS, METAL JOISTS, TRACKS, AND ACCESSORIES: Fy = 33 KSI MINIMUM
- 2. CONNECTIONS:
- B. FIELD CONNECTIONS MAY EITHER BE WELDED OR SCREWED, EXCEPT AS SPECIFICALLY DETAILED OTHERWISE.
- FINISH:
- A. ALL MATERIAL TO BE GALVANIZED COATED IN ACCORDANCE WITH ASTM A525 G-60.
- B. TOUCH-UP FIELD WELDS WITH ZINC RICH PAINT.

4. MISCELLANEOUS:

- A. ALL FIELD CUTTING TO BE PERFORMED WITH A SAW.
- B. WELD SIZE TO BE 3/32" WITH AWS TYPE 6013 OR 7014 ROD. C. EXCEPT AS NOTED OTHERWISE, MECHANICAL FASTENERS TO BE
- SELF-TAPPING #10 SCREWS AS MANUFACTURED BY BUILDEX, INC.
- D. TRACKS TO BE SECURELY ANCHORED TO SUPPORTING STRUCTURE WITH WELD OR SCREWS AT EACH SIDE OF TRACKS.
- E. PROVIDE BRIDGING AT 48" OC MAXIMUM FOR ALL STUD WALLS, UNLESS NOTED OTHERWISE.
- F. JOISTS TO BE LOCATED DIRECTLY OVER BEARING STUDS OR A LOAD
- DISTRIBUTION MEMBER SHALL BE PROVIDED AT THE TOP TRACK. G. END BLOCKING OR CONTINUOUS TRACK IS TO BE PROVIDED WHERE JOIST

ENDS ARE NOT NOT OTHERWISE RESTRAINED FROM ROTATION.

H. FOR COLUMNS AND BEAMS COMPRISED OF 2 OR MORE MEMBERS, PROVIDE 1" OF FILLET WELD AT 18" OC, EACH SIDE, FOR THE FULL LENGTH OF THE

MASONRY:

- MATERIALS:
- A. CONCRETE BLOCK: ASTM C90 (HOLLOW OR SOLID) MORTAR: TYPE M FOR REINFORCED MASONRY WALLS AND BELOW GRADE WALLS. TYPE S FOR ABOVE GRADE NON-REINFORCED WALLS.
- B. BOND BEAM AND CORE FILL: ASTM C476, COARSE TYPE. JOINT REINFORCING: STANDARD "DUR-O-WAL" W1.7 GAGE STEEL, MILL GALVANIZED FINISH.

2. MISCELLANEOUS:

- A. FILL CORE SOLID AROUND ANCHOR BOLTS.
- B. HOLLOW MASONRY UNITS TO BE LAID WITH FULL MORTAR COVERAGE OR HORIZONTAL AND VERTICAL FACE SHELLS. WEBS SHALL ALSO BE BEDDED IN THE STARTING COURSE AND WHEN ADJACENT TO CELLS OR CAVITIES TO BE REINFORCED OR FILLED WITH CONCRETE OR GROUT. SOLID UNITS TO
- BE LAID WITH FULL HEAD AND BED JOINTS. C. PROVIDE JOINT REINFORCING AT 16" OC, EXCEPT AS OTHERWISE NOTED. D. PROVIDE APPROPRIATE MASONRY ANCHORS AT 16" OC TO TIE MASONRY
- TO ABUTTING VERTICAL STEEL AND CONCRETE SURFACES. E. PROVIDE SOLID BLOCKS OR SOLIDLY FILLED HOLLOW BLOCKS AT ALL SLEEVE ANCHOR LOCATIONS.
- F. SLEEVE ANCHORS SHALL HAVE A MINIMUM EMBEDMENT OF 6 BOLT DIAMETERS, EXCEPT AS DETAILED OTHERWISE.\
- G. WHERE HOLLOW MASONRY UNITS ARE USED ABOVE HOLLOW MASONRY UNITS OF A DIFFERENT THICKNESS, PROVIDE A CONTINUOUS COARSE OF SOLID MASONRY AT LEAST 8" HIGH BELOW THE TRANSITION.
- H. ALL SPLICES FOR VERTICAL WALL REINFORCING ARE TO BE LAPPED A MINIMUM OF 50 BAR DIAMETERS.
- I. ALL GROUTING OF MASONRY WALLS SHALL BE THE LOW-LIFT GROUTING METHOD (MAXIMUM LIFT HEIGHT 48") UNLESS CLEAN-OUTS AND INSPECTION ARE PROVIDED.
- BRICK VENEER:
- A. USE TWO PIECE ANCHORS AT 16" OC VERTICAL AND HORIZONTAL. B. AT VENEER BASE AND AT OPENING LINTELS, USE FLASHING AND WEEP HOLES AT24" OC.

STRUCTURAL LUMBER:

- STRUCTURAL LUMBER: INTERIOR BEAMS, HEADERS, JOISTS, AND RAFTERS TO BE SPRUCE-PINE-FIR No 2 OR HEM-FIR No 2. 2x4 OR 2x6 STUDS TO BE SPRUCE-PINE-FIR "STUD" GRADE UNLESS STATED OTHERWISE. EXTERIOR PRESERVATIVE TREATED BEAMS, JOISTS, AND POSTS TO BE SOUTHERN- YELLOW-PINE No 2. ALL DESIGN VALUES PER 1991 NFPA NATIONAL DESIGN SPECIFICATIONS, ANY SUBSTITUTIONS SHALL MEET MINIMUM DESIGN VALUES OF ABOVE MEMBERS
- 2. MICRO-LAM (M-L) OR LAMINATED VENEER LUMBER (LVL): Fb = 2800 PSI Fv = 285 PSI Fc (PREP) = 500 PSI E = 2000 KSI
- 3. DECKING AND SHEATHING (OSB OR PLYWOOD): ROOFS 1/2" APA RATED SHEATHING WITH CLIPS ON 24" SPANS.
- 4. UNLESS SPECIFICALLY SHOWN OTHERWISE, DESIGN, FABRICATION, AND ERECTION SHALL BE GOVERNED BY THE LATEST REVISIONS OF: NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, US PRODUCT STANDARDS PS-1 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD AND APA DESIGN/CONSTRUCTION GUIDE - RESIDENTIAL AND COMMERCIAL.
- 5. CONNECTIONS: (UNLESS NOTED OTHERWISE)
- A. JOISTS TO BEAMS 16 GAGE STANDARD JOIST HANGERS, UNO B. TRUSS TO WALL OR RAFTERS TO WALL - STANDARD HURRICANE ANCHORS

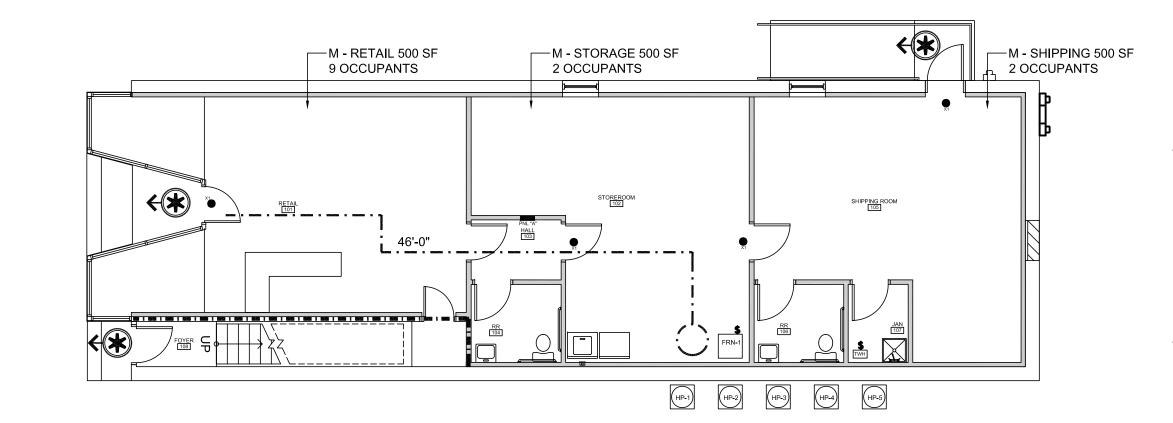
T EACH BEARING POINT.	
NAILIN	IG SCHEDULE
FLOOR C	CONSTRUCTION:
BUILT-UP BEAMS	16d, 16" OC DIRECT
BRIDGING TO JOISTS	TWO 8d EA END
FLOOR JOISTS TO STUDS	FIVE 10d DIRECT
FLOOR JOIST LAPS	FIVE 10d DIRECT
LEDGER STRIP	THREE 16d EA STUD
PLYWOOD / OSB SUBFLOOR <1/2"	6d, 6" OC AT EDGES 12" OC AT INTERMEDIATES
PLYWOOD / OSB SUBFLOOR >1/2"	8d, 6" OC AT ENDS 12" OC AT INTERMEDIATES
WALL C	ONSTRUCTION:
STUD TO BASE PLATE	FOUR 8d TOE NAIL OR TWO 8d DIRECT
DOUBLE STUDS	10d AT 12" OC STAGGERED
CORNER STUDS	16d AT 12" OC STAGGERED
BASE PLATE TO JOIST OR BLOCKING	16d AT 16" OC
DOUBLE TOP PLATE	10d AT 16" OC, TWO 10d AT ENDS
HEADER TO STUD	FOUR 8d TOE NAIL
FIBERBOARD SHEATHING	6d OR 1-1/2" ROOFING NAIL, 3" OC AT EDGES 6" OC AT INTERMEDIATES
DRYWALL SHEATHING	1-3/4" ROOFING NAIL OR #10 SCREW COATED AT 4" OC
PLYWOOD SHEATHING	8d, 6" OC AT ENDS 12" OC AT INTERMEDIATES
ROOF AND CE	ILING CONSTRUCTION:
CEILING JOISTS TO TOP PLATE	THREE 16d TOE NAIL
CEILING JOIST LAPS	THREE 10d DIRECT
RAFTER TO TOP PLATE	TWO 16d DIRECT OR TOE NAIL
RAFTER TO RIDGE OR HIP	TWO 16d DIRECT OR TOE NAIL
PLYWOOD DECKING	8d, 6" OC AT ENDS 12" OC AT INTERMEDIATES

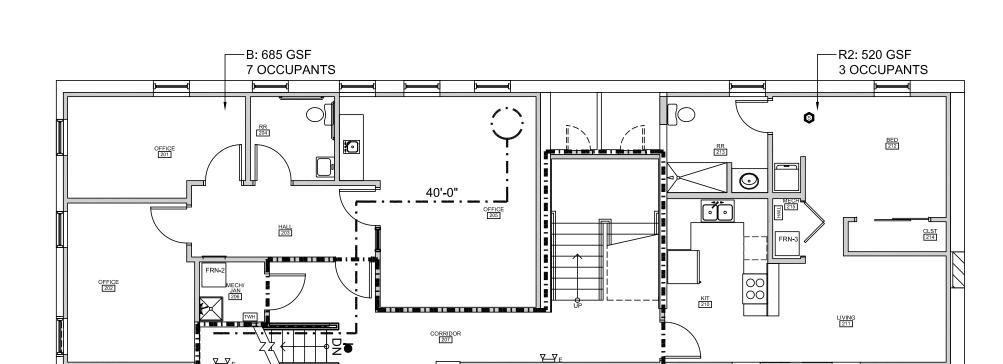
- 6. PROVIDE ONE LINE OF SOLID BLOCKING OR CROSS BRIDGING AT 8'-0" OC MAX FOR ALL FLOOR JOISTS. USE SOLID BLOCKING AT ALL JOISTS AND RAFTER BEARINGS.
- 7. PROVIDE SOLID BLOCKING AT MID-HEIGHT FOR ALL EXTERIOR STUD WALLS AND INTERIOR BEARING PARTITIONS WHICH ARE NOT SHEATHED EACH SIDE WITH GYPSUM BOARD OR APA-RATED SHEATHING.
- 8. USE SINGLE JACK STUDS UNDER BEAM AND HEADER BEARINGS FOR ROUGH OPENINGS UP AND INCLUDING 4'-0" AND DOUBLE JACK STUDS UNDER BEAM AND HEADER BEARINGS FOR SPANS GREATER THAN 4'-0", UNLESS SHOWN
- 9. APPLY CONTINUOUS BEAD OF GLUE ON JOISTS AND GROOVE OF TONGUE AND **GROOVE PANELS.**
- 10. BEFORE APPLYING FINISH FLOORING, SET NAILS 1/8" BUT DO NOT FILL, AND SAND LIGHTLY ANY SURFACE ROUGHNESS, PARTICULARLY AT JOINTS AND AROUND WALLS.

LINTEL NOTES:

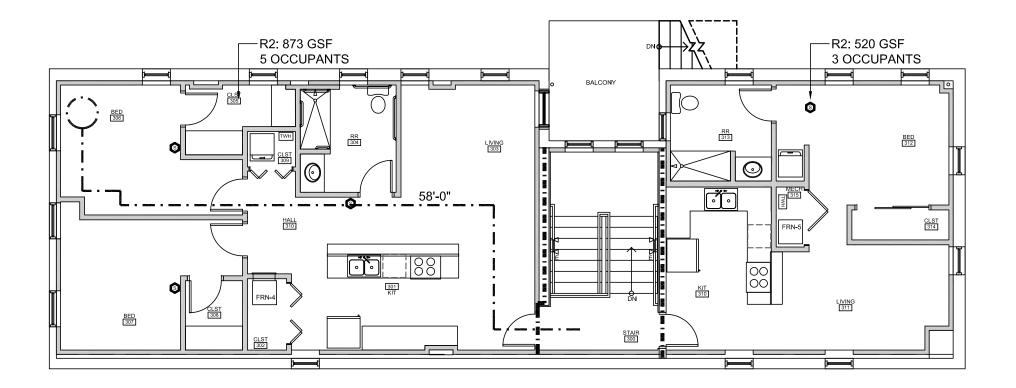
- 1. PROVIDE LINTELS OVER ALL OPENINGS IN MASONRY WALLS
- 2. PROVIDE ONE ANGLE FOR EACH 4" OF WALL THICKNESS, AND USE 6" MINIMUM BEARING EACH END. FOR BEAM LINTELS, STOP BOTTOM PLATE 1/8" SHORT OF JAMBS, AND USE 8" MINIMUM BEARING AT EACH END.

MASONRY	ROUGH OPENING SECTION
TO 4'-0"	L 3-1/2" x 3-1/2" x 5/16"
4'-1" TO 5'-6"	L 4" x 3-1/2" x 5/16" LLV
5'-7" TO 6'-6"	L 5" x 3-1/2" x 5/16" LLV
6'-7" TO 8'-0"	L 6" x 3-1/2" x 5/16" LLV
8'-1" TO 10'-0"	W8x18 W/PL 5/16" x (WALL "T"-1/2")
10'-1" TO 12'-0"	W8x21 W/PL 5/16" x (WALL "T"-1/2")



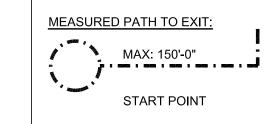








ENTRY INTO PROTECTED 'EXITWAY' AND/PR EXIT DISCHARGE POINT TO OUTSIDE THE BUILDING



2180180180 1 1 HOUR 2 HOUR 3 HOUR 30 MINUTE PARTITION

品│ARCHITECTS || Q|| U | & DESIGNERS BDTAID, Inc. 26 E. Park Drive, Athens, Ohio 45701 OFFICE 740-592-2420 ONLINE www.bdtaid.com

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PROFESSIONAL SEAL



ISSUE DATES

DESCRIPTION 04/22/24 BID/ PERMIT SET

PROJECT TITLE

NEW LEAF RENOVATION 96 HIGH ST GLOUSTER, OH 45732

PROJECT NUMBER 23020

SHEET TITLE LIFE SAFETY PLANS STRUCTURAL NOTES

1. Nail heads- Exposed or covered with joint compound.

2. Joints- Exposed or covered with fiber tape and joint compound, except where required for specific edge configuration. For tapered, rounded edge wallboard, joints covered with joint compound or fiber tape and joint compound. As an alternate, nom 3/32 in, thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints

reinforced 3. Wallboard, Gypsum* - 5/8" thick wallboard or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Wallboard nailed 7 in. OC with 6d cement-coated nails 1-7/8" long, 0.0915 in. shank diam and 1/4" diam heads. When used in widths of other

of other than 48 in., wallboard is to be installed horizontally. Boral Gypsum Inc. - Type DDN1 (finish rating 20 min), Type DDG2 (finish rating 20 min), Type DDW3 (finish rating 20 min) or Type DDDG3 (finish rating 20 min) or

Canadian Gypsum Co., Ltd - Types SCX, SHX, WRX (finish rating 26 min), Type C

(finish rating 26 min).

Celotex Corp. - Type 1, Type SF3 (finish rating 20 min), Type A (finish rating 21 min), Type B (finish rating 20 min), Type C (finish rating 21 min) or FRP. Domtar Gypsum - Type C (finish rating 26 min), Type 4 (finish rating 26 min), Type 5 (finish rating 26 min), Type 6, Type 8 (finish rating 23 min) or Type 9 (finish

rating 26 min). Eagle Gypsum Products - Types EGX-1, EGX-2, EGX-3, (finish rating 23 min), Type Egx-7 (finish rating 26 min), or Type EG-C

Georgia-Pacific Corp., Gypsum Division - Type GPSF1 (finish rating 20 min), Type GPSF2 (finish rating 20 min), Type GPSF3 (finish rating 20 min), Type GPSF4 (finish rating 20 min), Type GPSF6 (finish rating 26 min), or Type GPSF-C (finish rating

20 min). Gold Bond Building Products - Type FSW (finish rating 20 min), Type FSW-G (finish rating 20 min), Type FSW2 (finish rating 24 min), Type FSW3 (finish rating 20 min), Type FSW4 (finish rating 20 min), Type FSK (finish rating 20 min), or FSK-G

James Hardie Gypsum - Type Fire X (finish rating 26 min), Type III or IV (finish rating 20 min), Type V, VI, VII, VI-WG, VI-ISH (finish rating 23 min). Pabco Gypsum - Type C, PG-2 (finish rating 20 min), Pg-3 (finish rating 20 min),

3W, PG-5W (finish rating 20 min), PG-4 (finish rating 20 min), PG-6 (finish rating 23 min), PG-3WS, PG-5WS (finish rating 20 min), PG-5 or PG-9 (finish

rating 26 min)PG-C. Republic Gypsum Co. - Type RG-1 (finish rating 20 min), Type RG-2 (finish rating 20 min), Type RG-3 (finish rating 20 min) or Type RG-4 (finish rating 26 min) Type

RG-6 (finish rating 20 min) or Type RG-C Standard Gypsum Corp. - Type SGC (finish rating 20 min), Type SGC-3 (finish rating

20 min) or SGC-G (finish rating 20 min). Temple-Island Forest Products Corp. - Types T (finish rating 20 min), VPB-Type T (finish rating 20 min), WR-Type T (finish rating 20 min), Type T SHTG (finish rating 20 min), FRX-6, VPBX-6, FRWRX-6, TP-5 or FRX-6 Exterior Gypsum Soffit Board.

Three Rivers Gypsum, Inc. - Type 3R3 (finish rating 20 min). United States Gypsum Co. - Type SCX (finish rating 26 min), Type C (finish rating 26 min), Type WRX (finish rating 26 min), Type WRC (finish rating 26 min), Type D (finish rating 23 min), Type IP-X1 (finish rating 26 min), Type FCV (finish rating 26 min), Type IP-X2 (finish rating 26 min), Type SHX (finish rating 26 min) or Type

SHC (finish rating 26 min). Westroc Industries Limited - Type Fireboard

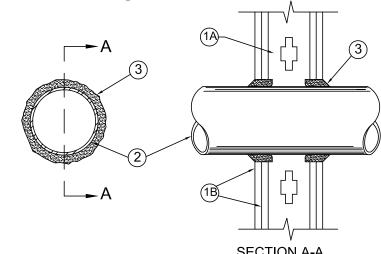
4. Steel Corner Fasteners -(Optional)- For use at wall corners. channel shaped, 2 in. long by 1 in. high on the back side with two 1/8" wide cleats protruding into the 5/8" wide channel, fabricated from 24 gauge galv. steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the wallboard, no greater than 2 in. from corner of wallboard, max spacing 16 in O.C. Nailed to adjacent stud through tab using one No.6d cement-coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d

cement-coated nails. 5. Batts and Blankets* -(Optional, Not Shown) Glass fiber or mineral wool insulation.

Certainteed Corp. Knauf Fiber Glass GmbH Manville Sales Corp.

Owens-Corning Fiberglass Corp. United States Gypsum Co. USG Interiors Inc. * Bearing the UL Classification Marking. System No.W-L-1001

June 15, 2005 F Ratings - 1, 2, 3 and 4 Hr (See Items 2 and 3) T Ratings - 0, 1, 2, 3, and 4 Hr (See Item 3) L Rating At Ambient - less than 1 CFM/sq ft L Rating At 400 F - less than 1 CFM/sq ft



1. Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs - Wall framing may consist of either wood studs (max 2 hr fire rated assemblies) or steel channel studs. Wood studs to consist of nom 2 by 4 in, (51 by 102 mm) lumber spaced 16 in, (406 mm) OC with nom 2 by 4 in, (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC. B. Gypsum Board* - Nom 1/2 or 5/8 in. (13 or 16 mm) thick, 4 ft. (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm).

2. Through Penetrant - One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (0 mm) (point contact) to max 2 in. (51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes,

conduits or tubing may be used: A. Steel Pipe - Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe. **B. Iron Pipe** - Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. (305 mm) diam (or

smaller) or Class 50 (or heavier) ductile iron pressure pipe. C. Conduit - Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in. (102 mm) diam (or smaller) steel electrical metallic D. Copper Tubing - Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing

E. Copper Pipe - Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe. F. Through Penetrating Product* - Flexible Metal Piping - The following types of steel flexible metal gas piping may be

1. Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

OMEGA FLEX INC

2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

A BUNDY CO

3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both

3. Fill, Void or Cavity Material* - Caulk or Sealant - Min 5/8. 1-1/4,1-7/8 and 2-1/2 in. (16, 32, 48 and 64 mm) thickness of caulk for 1, 2, 3 and 4 hr rated assemblies, respectively, applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall. The hourly F Rating of the firestop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown

The hourly T Rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:

(mm)	F Rat i ng Hr	T Ratling Hr
1 (25)	1 or 2	0+, 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
6 (152)	3 or 4	0

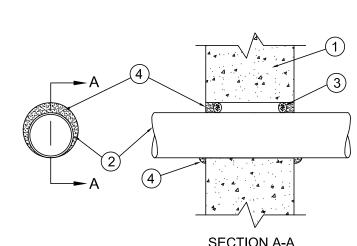
+When copper pipe is used, T Rating is 0 hr.

3M COMPANY - CP 25WB+ caulk or FB-3000 WT sealant,

*Bearing the UL Classification Marking

System No.W-J-2029

May 19, 2005 F Ratings - 1 and 2 Hr (See Item 2) T Ratings - 0, 1 and 2 Hr (See Item 2)



1. Wall Assembly - Min 4-1/2 in. (114 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Diam of opening shall be 7/8 in. to 1 in. (22 mm to 25 mm) larger than the outside diam of nonmetallic pipe or conduit (Item 2).

See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. Through Penetrants - One nonmetallic pipe or conduit to be centered within the firestop system. The annular space for nom 1-1/4 in. (32 mm) diam and smaller between the pipe or conduit and periphery of opening shall be min 0 in. (point contact) to max 7/8 in. (0 mm to max 22 mm). The annular space for pipe or conduit greater than nom 1-1/4 in. (32 mm) diam between the pipe or conduit and periphery of opening shall be min 1/2 in. to max 1 in. (13 mm to 25 mm). Pipe or conduit to be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic pipes or conduits may be used:

A. Polyvinyl Chloride (PVC) Pipe - Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system. B. Polyvinyl Chloride (PVC) Pipe - Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in

closed (process or supply) piping system C. Chlorinated Polyvinyl Chloride (CPVC) Pipe - Nom 3 in. (76 mm) diam (or smaller) SDR11 CPVC pipe for use in closed (process or supply) piping systems **D. Rigid Nonmetallic Conduit++** - Nom 3 in. (76 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70).

E. Electrical Nonmetallic Tubing (ENT)++ - Nom 1 in. (25 mm) diam (or smaller) ENT formed of PVC, installed in accordance with the National Electrical Code (NFPA No. 70). F. Acrylonitrile Butadiene Styrene (ABS) Pipe - Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

See Rigid Nonmetallic Conduit (DZKT), Electrical Nonmetallic Tubing (FKHU) in UL Construction Materials

The hourly T Rating is dependent on the hourly rating of the wall assembly, the pipe or conduit size and whether the pipe is intended for use as a closed or vented system, as shown in the following table:

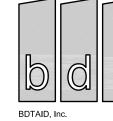
			-
Nom Pipe Diam in. (mm)	Wall Assembly Rating Hr	Closed (c) or Vented (v)	T Rating Hr
1/2 to 3 (13 to 76)	1	С	1
1/2 to 1-1/4 (13 to 32)	1	٧	1
1/2 to 1-1/4 (13 to 32)	2	С	2
1/2 to 1-1/4 (13 to 32)	2	V	1
2 (51)	1	٧	0
2 (51)	2	V	0
Material (Ontional) A	linaral wool or fibor	aloos inquiation or	polyothylopo bor

3. Packing Material (Optional) - Mineral wool or fiberglass insulation or polyethylene backer rod firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of caulk fill material.

4. Fill, Void or Cavity Materials* - Caulk, Sealant or Putty - Min thickness of 5/8 in. and 1-1/4 in. (16 mm to max 32 mm) of caulk or putty for 1 and 2 hr rated wall assemblies, respectively, applied within annulus between pipe or conduit and periphery of the opening, flush with both surfaces of wall assembly. At the point contact location between pipe or conduit and wall, a min 1/2 in. (13 mm) diam bead of caulk or putty shall be applied at the pipe or conduit/wall interface on both surfaces of

3M COMPANY - CP 25WB+, IC 15WB+ caulk, FB-3000 WT sealant or MP+ Stix putty (Note: CP 25WB+ not suitable for use with CPVC pipes.)

++Bearing the UL Listing Mark.



ARCHITECTS

26 E. Park Drive, Athens, Ohio 45701

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Design No. U419 Nonbearing Wall Rating- 1, 2, 3 or 4 Hr (See Items 3 and 4)

1. Floor and Ceiling Runners — (Not Shown) — Channel shaped, fabricated from min 25msg (min 20 MSG when Item 4A is used) corrosion—protected steel, min width to accommodate stud size, with min 1" long legs, attached to floor and ceiling with fasteners 24" OC max.

2. Steel Studs — Channel shaped, fabricated from min 25msg (min 20 MSG when Item 4A is used) corrosion-protected steel, min width as indicated under Item 4, min 1-1/4" flanges and 1/4" return, spaced a max of 24" OC. Studs to be cut 3/8" to 3/4" less than assembly height.

3. Batts and Blankets* — (Required as indicated under Item 4) — Mineral wool batts, friction fitted between stude and runners. Min nom thickness as indicated under Item 4. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.

3A. Batts and Blankets* - (Optional) - Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.

4. Wallboard, Gypsum* — Gypsum panels with beveled, square, or tapered edges, applied vertically or horizontally. Vertical joints, centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal edge joints and horizontal butt joints on opposite sides of study need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12." The thickness and number of layers for the 1 hr, 2 hr, 3 hr, and 4 hr ratings are as follows:

RATING	MIN STUD DEPTH	# OF LAYERS AND THICKNESS OF PANELS	MIN THICKNESS OF INSULATION (ITEM 3)
1	3-1/2"	1 layer, 5/8" thick	Optional
1	2-1/2"	1 layer, 1/2" thick	1-1/2"
1	1-5/8"	1 layer, 3/4" thick	Optional
2	1-5/8"	2 layers, 1/2" thick	Optional
2	1-5/8"	2 layers, 5/8" thick	Optional
2	3-1/2"	1 layer, 3/4" thick	3"
3	1-5/8"	3 layers, 1/2" thick	Optional
3	1-5/8"	2 layers, 3/4" thick	Optional .
3	1-5/8"	3 layers, 5/8" thick	Optional
4	1-5/8"	4 layers, 5/8" thick	Optional
4	1-5/8"	4 layers, 1/2" thick	Optional
4	2-1/2	2 layers, 3/4" thick	2"

Canadian Gypsum Co. - 1/2" thick Type C WRC or IP-X2; 5/8" thick Type SCX, SHX, WRX, IP-X1, AR, C, WRC, or IP-X2; 3/4" thick ULTRACODE or Type IP-X3. Untied States Gypsum Co. - 1/2" thick Type C, WRC, or IP-X2; 5/8" thick Type SCX, SHX, WRX, IP-X1, AR, C, WRC, or IP-X2; 3/4" thick ULTRACODE or Type IP-X3. Yeso Panamerican SA de CV - 1/2" thick Type C, WRC, or IP-X2; 5/8" thick Type SCX, SHX, WRX, Ip-X1, AR, C, WRC, or IP-X2; 3/4" thick ULTRACODE or Type IP-X3.

4A. Wallboard, Gypsum* – (As an alternative to Item 4) – 5/8" thick gypsum panels, installed as described in Item 4 with Type S-12 steel screws. The length and spacing of the screws as specified under Item 5.

> Canadian Gypsum Co. – Type FRX Untied States Gypsum Co. — Type FRX

5. Fasteners - (Not shown) - Type S or S-12 steel screws used to attach panels to stude (Item 2) or furring channels (Item 6)

Single Layer Systems: 1" long for 1/2" and 5/8" thick panels or 1-1/4" long for 3/4" thick panels, spaced 8" OC when panels are applied horizontally, or 12" OC when panels are applied

Two Layer Systems: First layer = 1" long for 1/2" and 5/8" thick panels or 1-1/4" long for 3/4" thick panels, spaced 16" OC. Second layer = 1-5/8" long for 1/2" or 5/8" thick panels or 2-1/4" long for 3/4" thick panels, spaced 16" OC with screws offset 8" from first layer.

Three Layer Systems: First layer = 1" long for 1/2" and 5/8" thick panels, spaced 24" OC. Second layer = 1-5/8" long for 1/2" or 5/8" thick panels, spaced 24" OC. Third layer = 2-1/4" long for 1/2" or 5/8" thick panels or 2-5/8" long for 5/8" thick panels, spaced 12" OC. Screws offset min 6" from layer below.

Four Layer Systems: First layer = 1" long for 1/2" and 5/8" thick panels, spaced 24" OC. Second layer = 1-5/8" long for 1/2" or 5/8" thick panels, spaced 24" O/C. Third layer = 2-1/4" long for 1/2" or 2-5/8" long for 5/8" thick panels, spaced 24" OC. Fourth layer = 2-5/8" long for 1/2" thick panels or 3" long for 5/8" thick panels, spaced 12" O/C. Screws offset min 6" from layer below.

6. Furring Channels — (optional, not shown, for single or double layer systems) — Resilient furring channels fabricated from min 25msg corrosion proofed steel, spaced vertically a max of 24" OC. Flange portion attached to each intersecting stud with 1/2" long type S-12 steel screws. Not for use with Item 4A.

7. Joint Tape and Compound — Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads of outer layers. paper tape, nom 2" wide, embedded in first layer of compound over all joints of outer panels.

8. Siding, Brick, or Stucco — (Optional, not shown) — Aluminum, vinyl or steel siding, brick veneer or stucco, meeting the requirements of local code agencies, installed over gypsum panels. Brick veneer attached to stude with corrugated metal ties attached to each stud with steel screws, not more that each sixth course of brick.

9. Caulking and Sealants* — (Optional, not shown) — A bead of acoustical sealant applied around the partition perimeter for sound control.

Untied States Gypsum Co. — Type AS * Bearing the UL Classification Marking

PROFESSIONAL SEAL

DISPENZA 0012528

Donald J Dispenza, License #12528 Expiration Date 12/31/2025

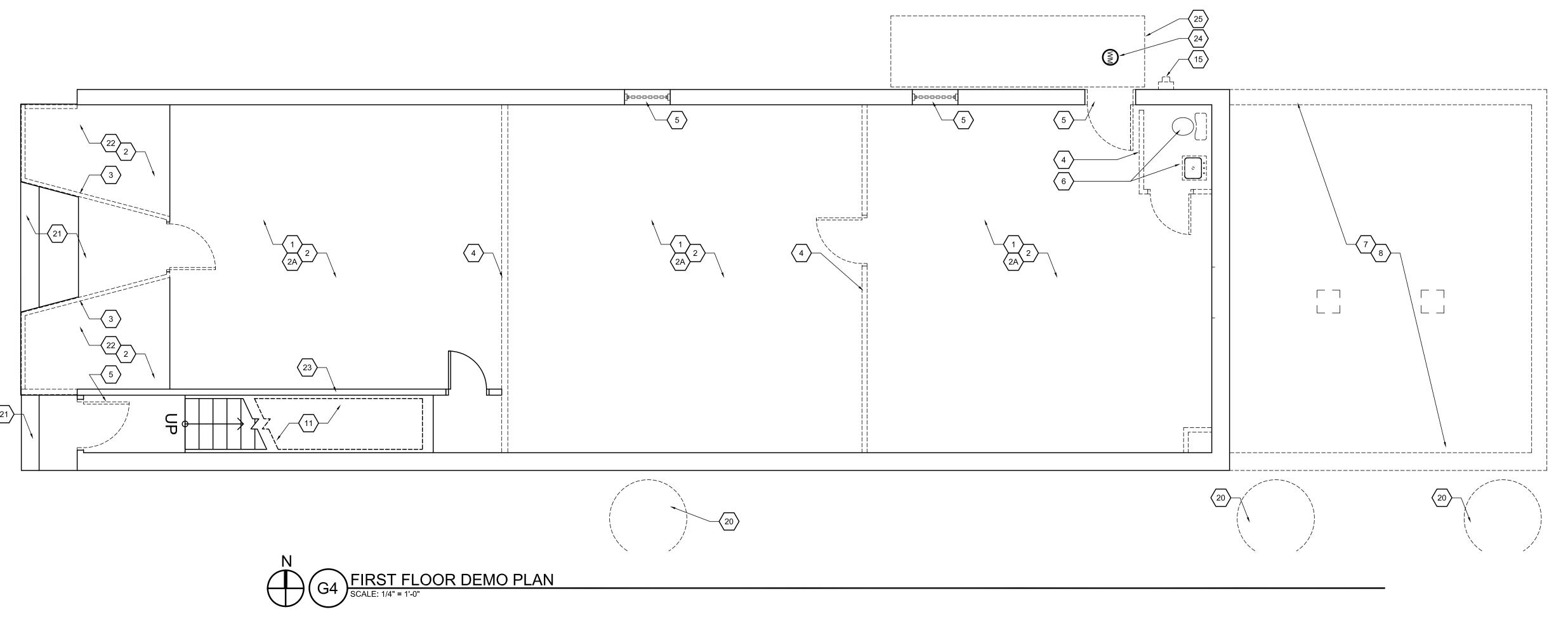
DESCRIPTION 04/22/24 BID/ PERMIT SET

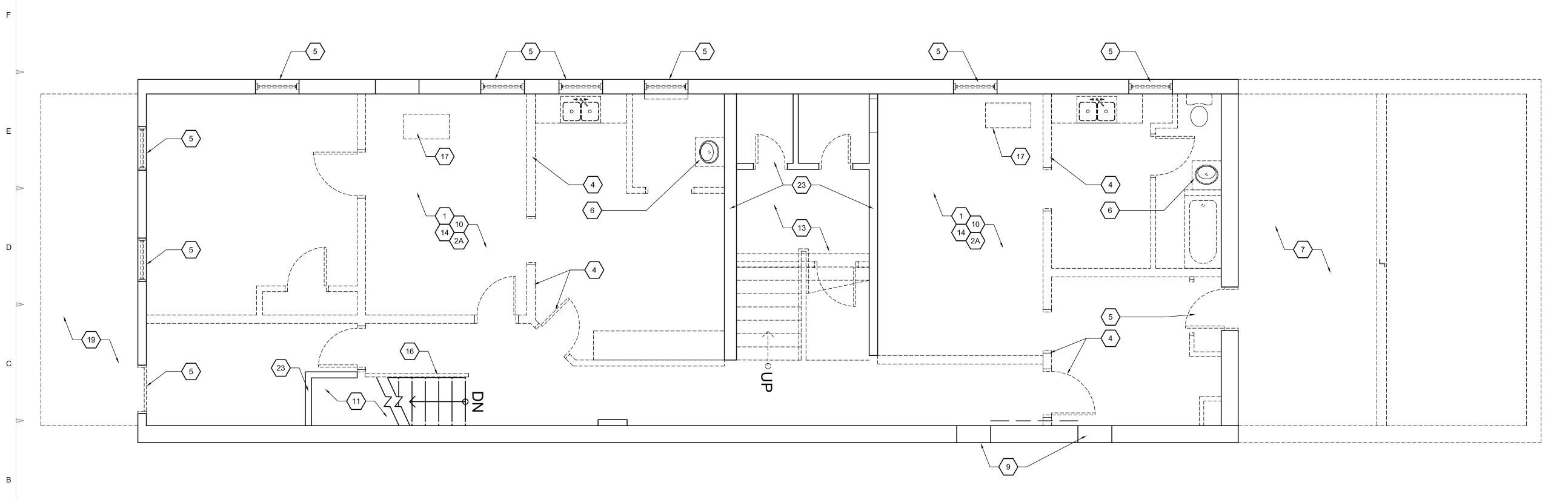
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NEW LEAF RENOVATION 96 HIGH ST GLOUSTER, OH 45732

PROJECT NUMBER 23020

LIFE SAFETY DETAILS





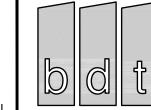
SECOND FLOOR DEMO PLAN

CODED NOTES:

- 1. REMOVE ALL DEBRIS FROM ALL ROOM2. CLEAN EXISTING WOOD FLOOR AND PREP FOR NEW FINISH. REFER TO ALLOWANCE 01.
- 2. REMOVE ALL LIGHTS AND CEILING MOUNTED DEVICES INCLUDING JUNCTION BOXES, CONDUITS, ETC. PULL ALL CIRCUITS BACK TO SOURCE AND REMOVE. PATCH ALL HOLES RESULTING FROM REMOVALS WITH METAL PLATE RIVETED IN PLACE. REMOVE ENTIRE PRESSED METAL PANEL CEILING SYSTEM AND RETAIN FOR REINSTALLATION.
- 2A. REMOVE ALL WALL MOUNTED DEVICES INCLUDING JUNCTION BOXES, CONDUITS, ETC, FROM ALL EXTERIOR WALLS TO REMAIN. FILL HOLES RESULTING FROM REMOVALS WITH MINERAL WOOL.
- 3. REMOVE STOREFRONT SYSTEM INCLUDING GLAZING, PLYWOOD, FRAMES, FLASHING FASTENERS, ETC. REMOVE DOOR AND FRAME. MAINTAIN BUILDING SECURITY.
- 4. REMOVE WALL INCLUDING ALL FINISHES, FRAMING, FASTENERS, ETC. FOR COMPLETE REMOVAL. REMOVE ALL ELECTRICAL DEVICES, SWITCHES, ETC. INCLUDING CONDUIT AND WIRE BACK TO PANEL. REMOVE, DOOR, TRANSOM, FRAME, THRESHOLD, HARDWARE, ETC. FOR COMPLETE REMOVAL.
- 5. REMOVE WINDOW/ DOOR INCLUDING FRAME, TRIM, CASING MOLDING, FLASHING, ETC FOR COMPLETE REMOVAL TO ROUGH MASONRY OPENING. TYPICAL ALL EXISTING WINDOWS.
- 6. REMOVE PLUMBING FIXTURES AND ANY ASSOCIATED CASEWORK OR COUNTERS. REMOVE SUPPLY, WASTE AND VENT PIPING BACK TO MAIN.
- 7. REMOVE EXISTING MASONRY BUILDING ADDITION INCLUDING WALLS, FRAMING, ROOFING, ELECTRICAL AND MECHANICAL SYSTEMS, ETC FOR COMPLETE REMOVAL.
- 8. REMOVE FOOTINGS, FOUNDATIONS AND SLAB ON GRADE FOR COMPLETE REMOVAL. BACKFILL EXCAVATION WITH 6" #57S OVER CLEAN COMPACTED
- 9. REMOVE MASONRY FOR NEW WINDOW. PROVIDE STEEL LINTEL PER SCHEDULE.
- 10. REMOVE EXISTING PLASTER/ GYP. CEILING SYSTEM AND FURRING/ LATH THROUGHOUT ENTIRE CEILING. REMOVE ALL LIGHTS AND CEILING MOUNTED DEVICES INCLUDING JUNCTION BOXES, CONDUITS, ETC, THROUGHOUT. PULL ALL CIRCUITS BACK TO SOURCE AND REMOVE.
- 11. EXISTING EXIT STAIRWAY TO REMAIN.
- 12. EXISTING BALCONY TO REMAIN.
- 13. REMOVE EXISTING STAIRWAY SYSTEM INCLUDING STRINGERS, TREADS, RISERS, RAILINGS, TRIM ETC. FOR COMPLETE REMOVAL. MODIFY INTERMEDIATE LANDINGS TO REMAIN.
- 14. REMOVE EXISTING BASEBOARD, TRIM, PICTURE AND CHAIR RAIL THROUGHOUT ENTIRE LEVEL ON ALL EXISTING EXTERIOR WALLS TO REMAIN.
- 15. REMOVE EXISTING ELECTRIC METER.
- 16. REMOVE EXISTING HANDRAIL/ GUARDRAIL.
- 17. REMOVE EXISTING FURNACE, DUCTWORK AND GAS LINES. TERMINATE GAS LINES AT EXG. GAS METER. CORD. W/ PLUMBER. TYPICAL ALL EXISTING MECHANICAL EQUIPMENT.
- 18. REMOVE DOOR, TRANSOM, FRAME, TRIM, HARDWARE, ETC. TO MASONRY ROUGH OPENING
- 19. REMOVE EXISTING EXTERIOR BALCONY INCLUDING FRAMING, RAILINGS, ROOF, SUPPORTS, FLASHINGS, ETC FOR COMPLETE REMOVAL. REFER TO D201. REFER TO **ALLOWANCE 02**
- 20. REMOVE ALL LANDSCAPING ALONG BUILDING EDGE INCLUDING ROOT BALL. LEVEL WITH TOP SOIL AND INSTALL GRASS SEED AND MULCH.
- 21. EXISTING STONE/ CONCRETE STEPS TO REMAIN
- 22. EXISTING RAISED DISPLAY PLATFORMS TO REMAIN
- 23. EXISTING INTERIOR WALL TO REMAIN. PROVIDE NEAT SEPARATION FROM DEMO WALLS AND PATCH CUT ENDS. REMOVE DEVICES AND CONDUITS/ WIRE BACK TO
- 24. EXISTING WATER METER TO REMAIN. REFER TO PLUMBING PLANS
- 25. REMOVE EXISTING CONCRETE SIDEWALK AS REQURIED FOR INSTALLATION OF NEW ADA RAMP. COORDINATE WORK WITH CITY REQUIREMENTS

GENERAL NOTES:

- 1. ALL CODED NOTES ARE TYPICAL.
- 2. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY LIGHTING AND HEAT AND FACILITIES.
- 3. REFER TO SPECIFICATIONS AND G101 FOR ALLOWANCE
- DESCRIPTIONS.
- 4. CONTRACTOR TO REMOVE ALL DEBRIS, MATERIALS, FALLEN PLASTER, ETC FROM BUILDING.
- 5. NOTES ARE STANDARDIZED, NOT ALL NOTES APPLY TO EVERY SHEET.
- 6. CONTRACTOR IS RESPONSIBLE FOR SITE AND BUILDING SECURITY THROUGHOUT PROJECT.



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PROFESSIONAL SEAL



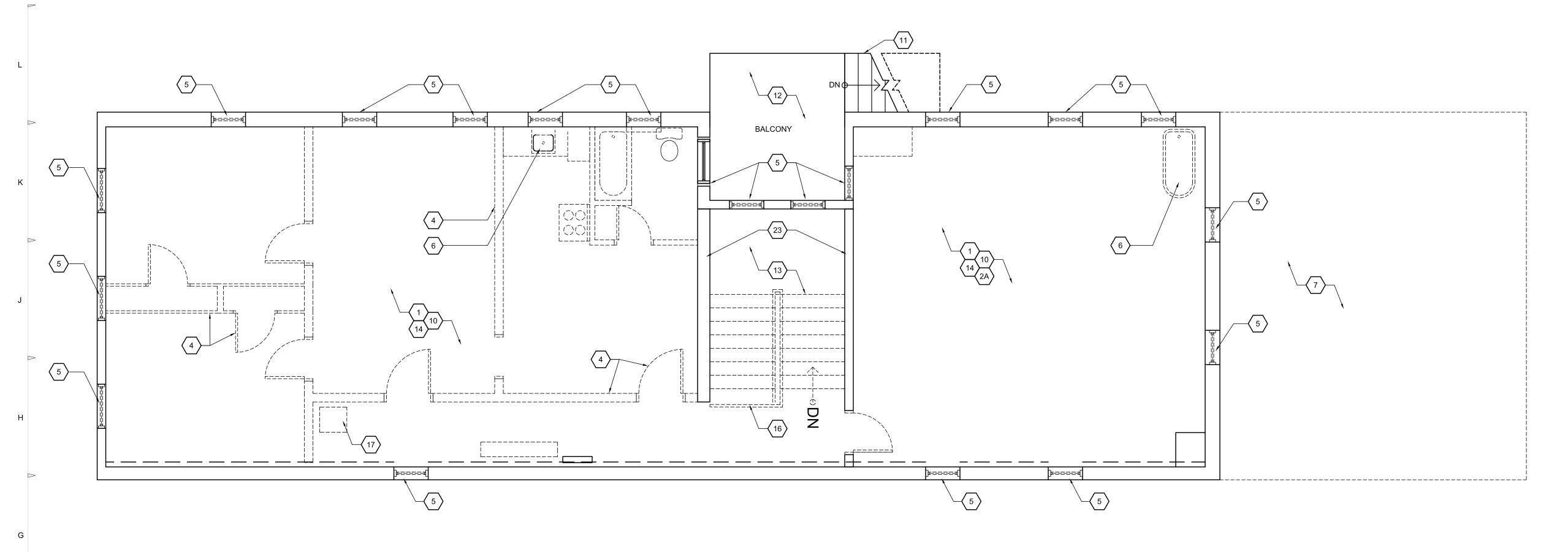
ISSUE DATES

DESCRIPTION 04/22/24 BID/ PERMIT SET

NEW LEAF RENOVATION 96 HIGH ST GLOUSTER, OH 45732

PROJECT NUMBER 23020

FIRST AND SECOND FLOOR **DEMOLITION PLANS**





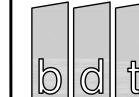
CODED NOTES:

- REMOVE ALL DEBRIS FROM ALL ROOM2. CLEAN EXISTING WOOD FLOOR AND PREP FOR NEW FINISH. REFER TO ALLOWANCE 01.
- 2. REMOVE ALL LIGHTS AND CEILING MOUNTED DEVICES INCLUDING JUNCTION BOXES, CONDUITS, ETC, AT ENTIRE PRESSED METAL PANEL CEILING SYSTEM. PULL ALL CIRCUITS BACK TO SOURCE AND REMOVE. PATCH ALL HOLES RESULTING FROM REMOVALS WITH METAL PLATE RIVETED IN PLACE.
- 2A. REMOVE ALL WALL MOUNTED DEVICES INCLUDING JUNCTION BOXES, CONDUITS, ETC, FROM ALL EXTERIOR WALLS TO REMAIN. FILL HOLES RESULTING FROM REMOVALS WITH MINERAL WOOL.
- REMOVE STOREFRONT SYSTEM INCLUDING GLAZING, PLYWOOD, FRAMES, FLASHING FASTENERS, ETC. REMOVE DOOR AND FRAME. MAINTAIN BUILDING SECURITY.
- 4. REMOVE WALL INCLUDING ALL FINISHES, FRAMING, FASTENERS, ETC. FOR COMPLETE REMOVAL. REMOVE ALL ELECTRICAL DEVICES, SWITCHES, ETC. INCLUDING CONDUIT AND WIRE BACK TO PANEL. REMOVE, DOOR, TRANSOM, FRAME, THRESHOLD, HARDWARE, ETC. FOR COMPLETE REMOVAL.
- 5. REMOVE WINDOW/ DOOR INCLUDING FRAME, TRIM, CASING MOLDING, FLASHING, ETC FOR COMPLETE REMOVAL TO ROUGH MASONRY OPENING. TYPICAL ALL EXISTING WINDOWS.
- REMOVE PLUMBING FIXTURES AND ANY ASSOCIATED CASEWORK OR COUNTERS. REMOVE SUPPLY, WASTE AND VENT PIPING BACK TO MAIN.
- 7. REMOVE EXISTING MASONRY BUILDING ADDITION INCLUDING WALLS, FRAMING, ROOFING, ELECTRICAL AND MECHANICAL SYSTEMS, ETC FOR COMPLETE REMOVAL.
- 8. REMOVE FOOTINGS, FOUNDATIONS AND SLAB ON GRADE FOR COMPLETE REMOVAL. BACKFILL EXCAVATION WITH 6" #57S OVER CLEAN COMPACTED FILL
- 9. REMOVE MASONRY FOR NEW WINDOW. PROVIDE STEEL LINTEL PER SCHEDULE.
- 10. REMOVE EXISTING PLASTER/ GYP. CEILING SYSTEM AND FURRING/ LATH THROUGHOUT ENTIRE CEILING. REMOVE ALL LIGHTS AND CEILING MOUNTED DEVICES INCLUDING JUNCTION BOXES, CONDUITS, ETC, THROUGHOUT. PULL ALL CIRCUITS BACK TO SOURCE AND REMOVE.
- 11. EXISTING EXIT STAIRWAY TO REMAIN.
- 12. EXISTING BALCONY TO REMAIN.
- 13. REMOVE EXISTING STAIRWAY SYSTEM INCLUDING STRINGERS, TREADS, RISERS, RAILINGS, TRIM ETC. FOR COMPLETE REMOVAL. MODIFY INTERMEDIATE LANDINGS TO REMAIN.
- 14. REMOVE EXISTING BASEBOARD, TRIM, PICTURE AND CHAIR RAIL THROUGHOUT ENTIRE LEVEL ON ALL EXISTING EXTERIOR WALLS TO REMAIN.
- 15. REMOVE EXISTING ELECTRIC METER.
- 16. REMOVE EXISTING HANDRAIL/ GUARDRAIL.
- 17. REMOVE EXISTING FURNACE, DUCTWORK AND GAS LINES. TERMINATE GAS LINES AT EXG. GAS METER. CORD. W/ PLUMBER. TYPICAL ALL EXISTING MECHANICAL EQUIPMENT.
- 18. REMOVE DOOR, TRANSOM, FRAME, TRIM, HARDWARE, ETC. TO MASONRY ROUGH OPENING
- 19. REMOVE EXISTING EXTERIOR BALCONY INCLUDING FRAMING, RAILINGS, ROOF, SUPPORTS, FLASHINGS, ETC FOR COMPLETE REMOVAL. REFER TO D201. REFER TO ALLOWANCE 02
- 20. REMOVE ALL LANDSCAPING ALONG BUILDING EDGE INCLUDING ROOT BALL. LEVEL WITH TOP SOIL AND INSTALL GRASS SEED AND MULCH.
- 21. EXISTING STONE/ CONCRETE STEPS TO REMAIN
- 22. EXISTING RAISED DISPLAY PLATFORMS TO REMAIN
- 23. EXISTING INTERIOR WALL TO REMAIN. PROVIDE NEAT SEPARATION FROM DEMO WALLS AND PATCH CUT ENDS. REMOVE DEVICES AND CONDUITS/ WIRE BACK TO
- 24. EXISTING WATER METER TO REMAIN. REFER TO PLUMBING PLANS
- 25. REMOVE EXISTING CONCRETE SIDEWALK AS REQURIED FOR INSTALLATION OF NEW ADA RAMP. COORDINATE WORK WITH CITY REQUIREMENTS

GENERAL NOTES:

SOURCE.

1. REFER TO D101 FOR GENERAL NOTES

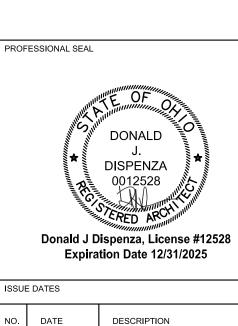


& DESIGN

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04/22/24 BID/ PERMIT SET

PROJECT TITLE

NEW LEAF RENOVATION

96 HIGH ST

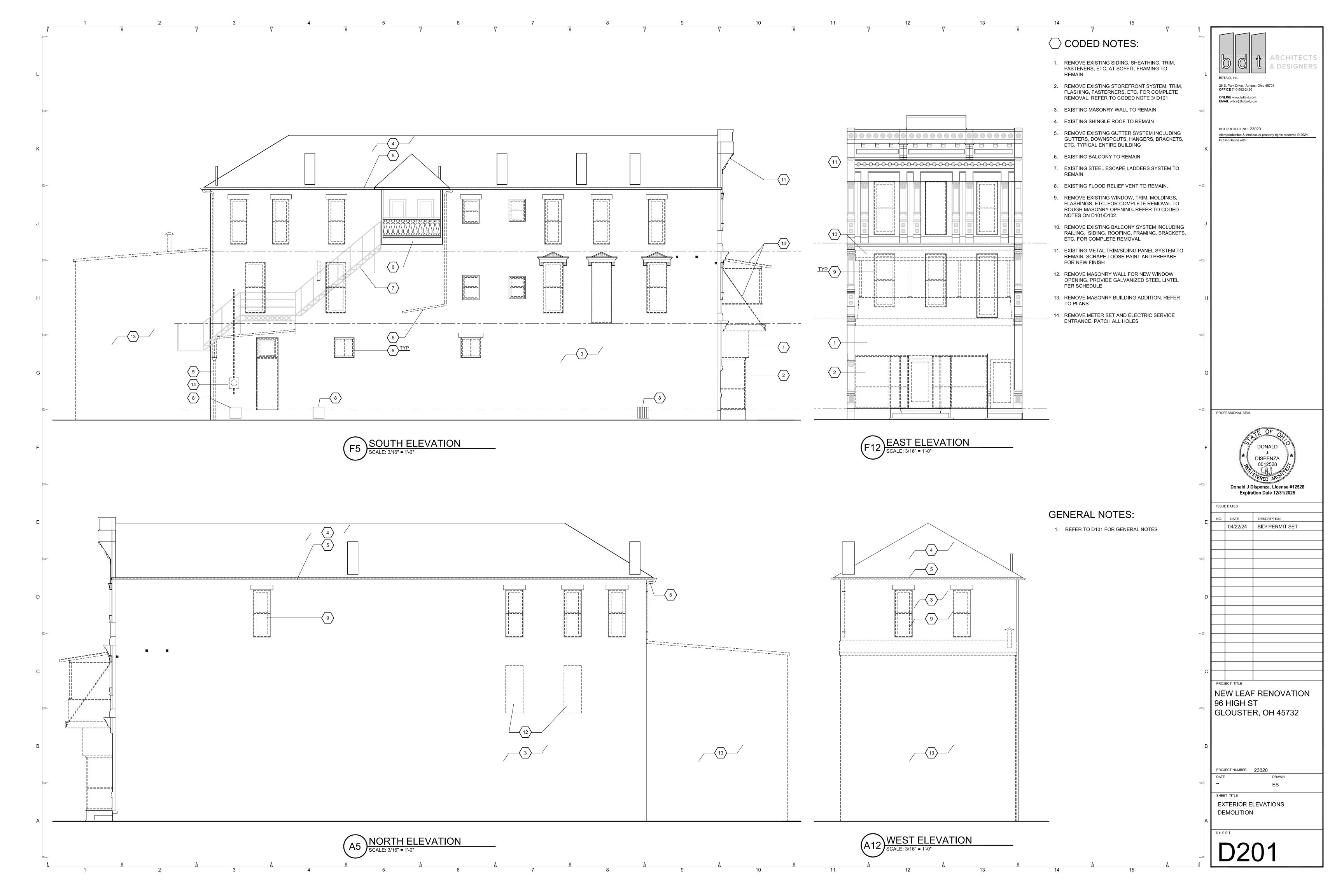
GLOUSTER, OH 45732

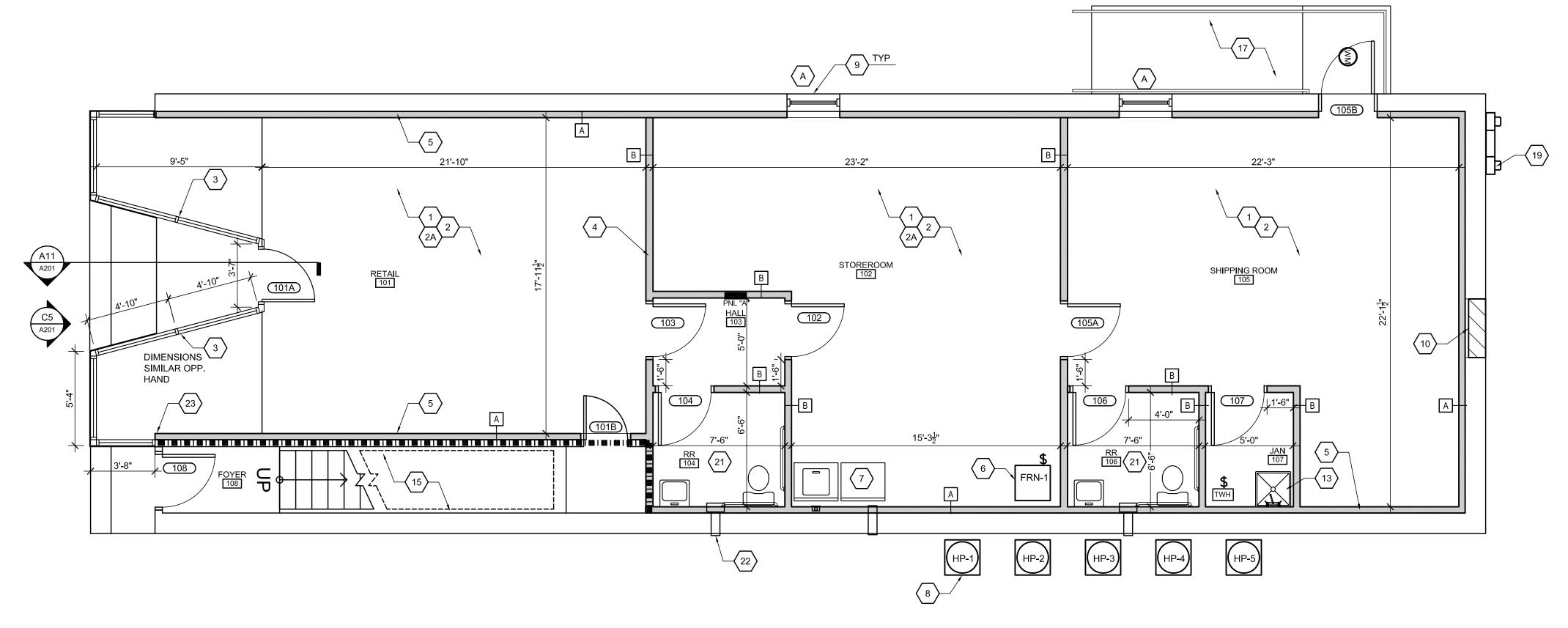
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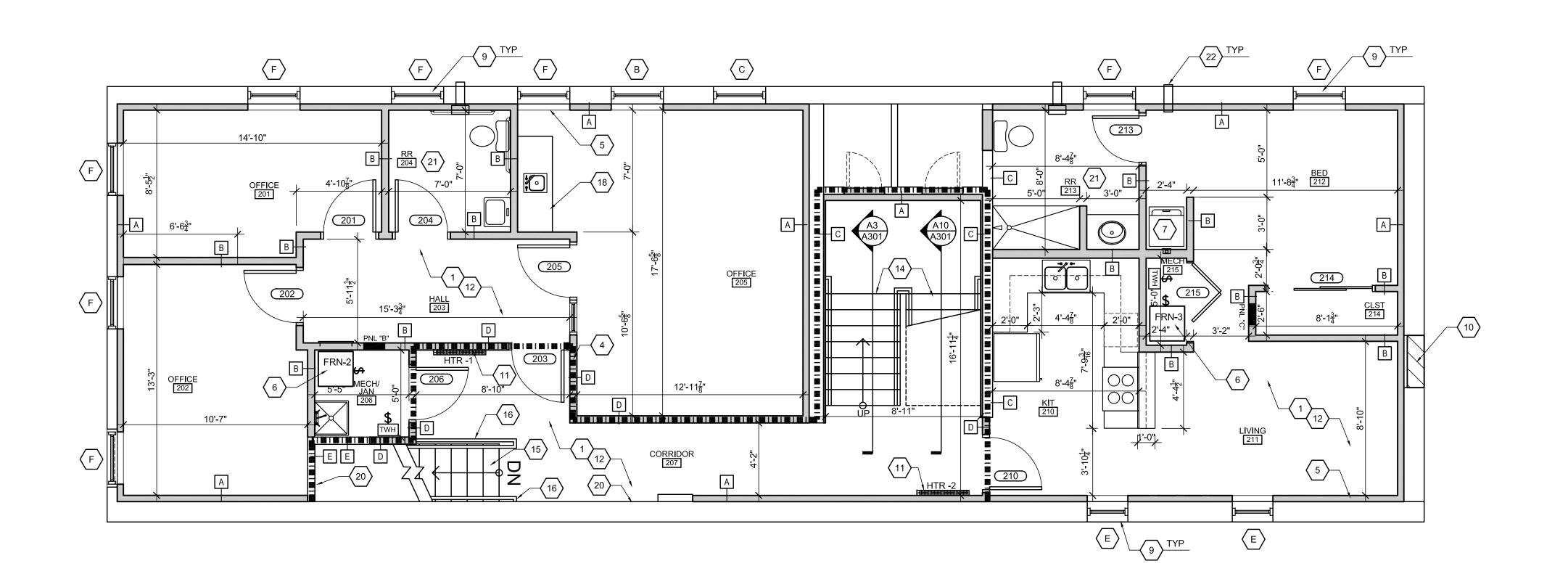
THIRD FLOOR DEMOLITION PLAN
DETAILS

D102





N G5 FIRST FLOOR PLAN SCALE: 1/4" = 1'-0"



N SECOND FLOOR PLAN

CODED NOTES:

- SAND, STAIN AND PROVIDE 2 COATS OF FLOOR VARNISH ON ALL EXISTING AND NEW WOOD FLOORING. REFER TO ALLOWANCE 01 FOR FLOORING REPAIRS/ REPLACEMENT
- 2. REINSTALL METAL PANEL CEILING SYSTEM AND MODIFY AS REQUIRED FOR NEW WORK. SCRAPE LOOSE PAINT,
- PRIME AND PAINT METAL CEILING PANELS.

 2A. INSTALL (2) LAYERS 5" TYPE X GYP BD TO EXISTING WOOD JOISTS. INSTALL AS REQUIRED TO PROTECT SUPPORT STRUCTURE FOR STAIR AND EXIT PASSAGE
- 3. NEW ALUMINUM STOREFRONT SYSTEM. REFER TO SHEET A202
- 4. NEW INTERIOR PARTITION. REFER TO PARTITION SCHEDULE TYPICAL
- 5. NEW INTERIOR FURRED WALL AT ALL EXISTING

EXTERIOR WALLS AND AS NOTED.

- ELECTRIC FURNACE CONNECTED TO EXTERIOR HEAT PUMP. REFER TO MECHANICAL PLANS
- WASHER/ DRYER BY OWNER. CONTRACTOR TO PROVIDE ALL CONNECTIONS AND VENTING
- 8. EXTERIOR CONCRETE PAD MOUNTED HEAT PUMPS -
- 9. NEW INSULATED ALUMINUM CLAD-WOOD DOUBLE HUNG WINDOW. REFER TO WINDOW SCHEDULE TYPICAL
- 10. INFILL OPENING W/ MASONRY TO MATCH EXISTING WALL <
- 11. 3' ELECTRIC BASEBOARD HEATER. REFER TO MECHANICAL PLANS.

CONSTRUCTION.

TYP.. REFER TO MECHANICAL PLANS

- 12. NEW 1/2" GYP. BD. CLG. APPLY TO 7/8" HZT CHANNELS OVER EXG. FLOOR JOISTS, TYPICAL ENTIRE LEVEL.
- 13. MOP SINK. REFER TO PLUMBING PLAN. PROVIDE FRP ON BOTH ADJACENT WALLS.
- 14. NEW STAIR SYSTEM. REFER TO A301
- 15. EXISTING STAIRWAY TO REMAIN.
- 16. NEW HANDRAIL. HANDRAIL SHALL BE MOUNTED 34"MIN TO 38" MAX. ABOVE STAIR NOSING AND WALKING SURFACES. CLEARANCE BETWEEN GRIPPING SURFACE AND ADJ. SURFACE SHALL BE 1-1/2" MIN. AND SHALL EXTEND HORIZONTALLY ABOVE THE LANDING 12" MIN. BEGINNING DIRECTLY ABOVE THE LANDING NOSING. EXTENSION SHALL RETURN TO WALL
- 17. NEW ADA RAMP AND RAILINGS. REFER TO DETAILS SHEET A221
- 18. NEW KITCHENETTE CASEWORK. REFER TO A401
- 19. NEW ELECTRIC METER SET. REFER TO ELECTRICAL PLANS
- 20. LAMINATE $\frac{1}{2}$ " GYP. BD. TO EXISTING WALL.
- 21. NEW RESTROOM / BATHROOM. PROVIDE ACCESSORIES PER SCHEDULE
- 22. THRU-WALL VENT FOR APPLIANCES. REFER TO MECHANICAL PLANS
- 23. PROVIDE WOOD TRIM AT WALL END. RETURN TO WALL.

PROFESSIONAL SEAL

ARCHITECTS & DESIGNERS

OFFICE 740-592-2420

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Expiration Date 12/31/2025

DONALD

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 NO.
 DATE
 DESCRIPTION

 04/22/24
 BID/ PERMIT SET

3 HOUR

O HR SMOKE PARTITION

GENERAL NOTES:

- 1. ALL CODED NOTES ARE TYPICAL.
- 2. CODED NOTES ARE STANDARDIZED. NOT ALL NOTES APPLY TO EACH SHEET.
- 3. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY LIGHTING AND HEAT.
- 4. REFER TO SPECIFICATIONS AND G101 FOR ALLOWANCE DESCRIPTIONS.
- 5. ALL NEW AND EXISTING WALLS, TRIM, COVES, ETC AND CEILINGS TO RECEIVE PRIMER AND 2 COATS OF FINISH PAINT.
- 6. CONTRACTOR IS RESPONSIBLE FOR SITE AND BUILDING SECURITY THROUGHOUT PROJECT
- 7. CLOSED CELL POLYURETHANE SPRAY FOAM INSULATION TO BE R-21.
- 8. BUILDING IS TO BE FULLY FIRE SPRINKLERED. REFER TO CODED NOTES FOR SYSTEM PERFORMANCE

B

PROJECT NUMBER 23020

DATE DRAWN

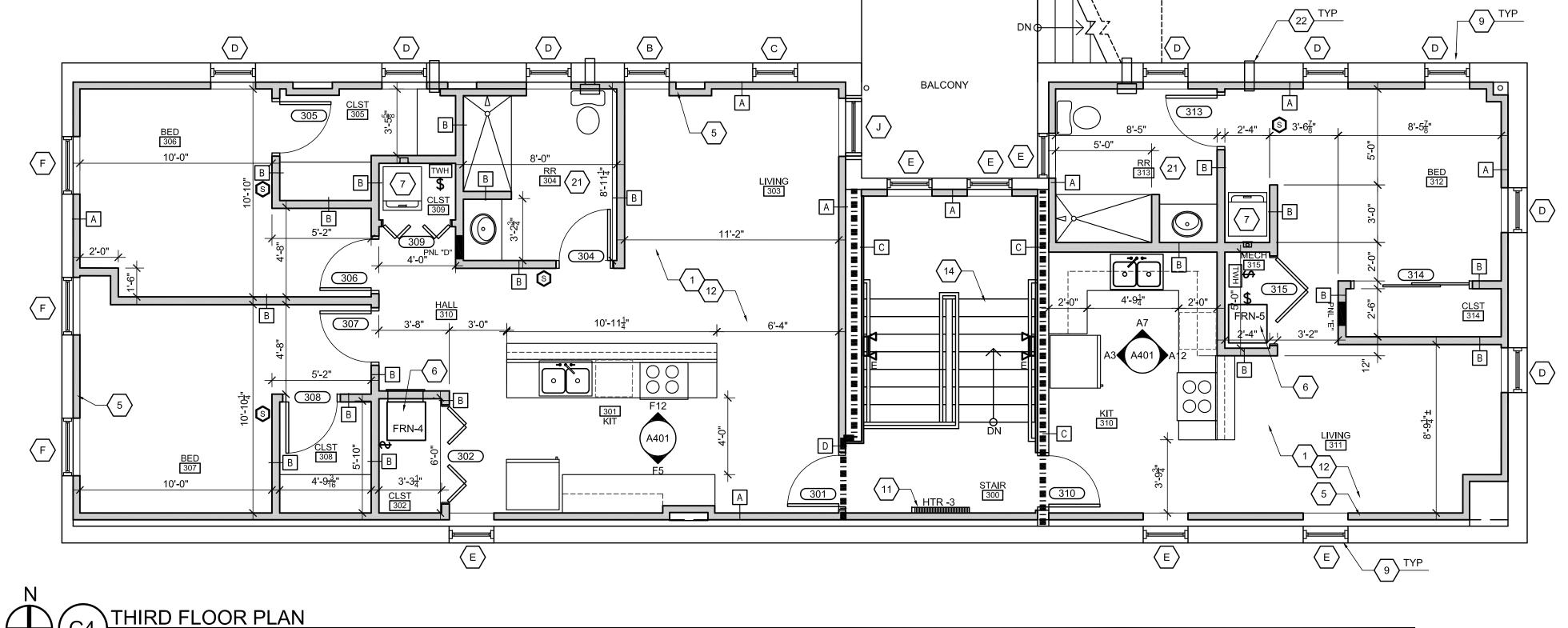
GLOUSTER, OH 45732

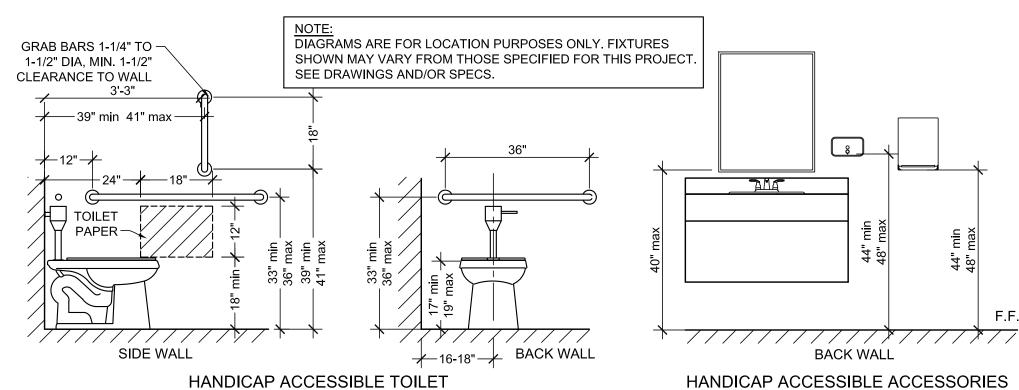
NEW LEAF RENOVATION

96 HIGH ST

SHEET TITLE
FIRST AND SECOND FLOOR PLANS

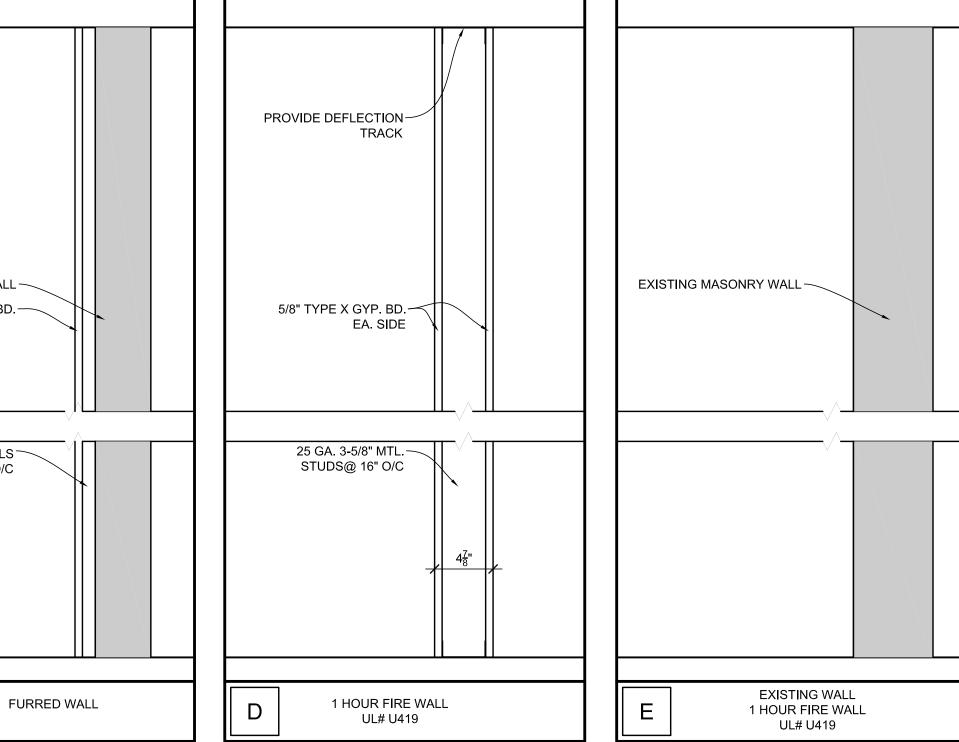
A101





TYPICAL ADA REQUIREMENTS

SCALE: NTS



CODED NOTES:

SHEET A202

- SAND, STAIN AND PROVIDE 2 COATS OF FLOOR VARNISH ON ALL EXISTING AND NEW WOOD FLOORING. REFER TO ALLOWANCE 01 FOR FLOORING REPAIRS/ REPLACEMENT
- 2. SCRAPE LOOSE PAINT, PRIME AND PAINT METAL CEILING PANELS SYSTEM.
- 3. NEW ALUMINUM STOREFRONT SYSTEM. REFER TO
- 4. NEW INTERIOR PARTITION. REFER TO PARTITION
- SCHEDULE TYPICALNEW INTERIOR FURRED WALL AT ALL EXISTING
- EXTERIOR WALLS AND AS NOTED.

 6. ELECTRIC FURNACE CONNECTED TO EXTERIOR HEAT
- PUMP. REFER TO MECHANICAL PLANS
- WASHER/ DRYER BY OWNER. CONTRACTOR TO PROVIDE ALL CONNECTIONS AND VENTING
- 8. EXTERIOR CONCRETE PAD MOUNTED HEAT PUMPS TYP.. REFER TO MECHANICAL PLANS
- WINDOW. REFER TO WINDOW SCHEDULE TYPICAL

 10. INFILL OPENING W/ MASONRY TO MATCH EXISTING WALL

9. NEW INSULATED ALUMINUM CLAD-WOOD DOUBLE HUNG

- CONSTRUCTION.
- 11. 3' ELECTRIC BASEBOARD HEATER. REFER TO MECHANICAL PLANS.
- 12. NEW 1/2" GYP. BD. CLG. APPLY TO 7/8" HZT CHANNELS OVER EXG. FLOOR JOISTS, TYPICAL ENTIRE LEVEL.
- 13. MOP SINK. REFER TO PLUMBING PLAN. PROVIDE FRP ON BOTH ADJACENT WALLS.
- 14. NEW STAIR SYSTEM. REFER TO A301
- 15. EXISTING STAIRWAY TO REMAIN.
- 16. NEW HANDRAIL. HANDRAIL SHALL BE MOUNTED 34"MIN TO 38" MAX. ABOVE STAIR NOSING AND WALKING SURFACES. CLEARANCE BETWEEN GRIPPING SURFACE AND ADJ. SURFACE SHALL BE 1-1/2" MIN. AND SHALL EXTEND HORIZONTALLY ABOVE THE LANDING 12" MIN. BEGINNING DIRECTLY ABOVE THE LANDING NOSING. EXTENSION SHALL RETURN TO WALL
- 17. NEW ADA RAMP AND RAILINGS. REFER TO DETAILS SHEET A221
- 18. NEW KITCHENETTE CASEWORK. REFER TO A401
- 19. NEW ELECTRIC METER SET. REFER TO ELECTRICAL PLANS
- 20. LAMINATE $\frac{1}{2}$ " GYP. BD. TO EXISTING WALL.
- 21. NEW RESTROOM / BATHROOM. PROVIDE ACCESSORIES PER SCHEDULE
- 22. THRU-WALL VENT FOR APPLIANCES. REFER TO MECHANICAL PLANS
- 23. PROVIDE WOOD TRIM AT WALL END. RETURN TO WALL.

LEGEND

1 HOUR
2 HOUR
3 HOUR
0 HR SMOKE PARTITION

GENERAL NOTES:

1. REFER TO A101 FOR GENERAL NOTES

				ACCESSORY	SCHEDULE
ITEM NO.	DESCRIPTION	MANUFACTURER	ID NO	LOCATION	
Α	Heavy Duty Stainless Steel Standard Grab Bar with Concealed Mounting 36"	Bradley	8120-001360	PUBLIC RESTROOMS	
В	Heavy Duty Stainless Steel Standard Grab Bar with Concealed Mounting 42"	Bradley	8120-001420	PUBLIC RESTROOMS	
С	Heavy Duty Stainless Steel Standard Grab Bar with Concealed Mounting 18"	Bradley	8120-001180	PUBLIC RESTROOMS	
D	Toilet Roll Holders 6"W x 11"H x 6"D.	Bobrick	B-4288	PUBLIC RESTROOMS/ BATHROOMS	
E	Napkin Disposal Container 8"W x 10"H x 4"D.	Bobrick	B-270	PUBLIC RESTROOMS	
F	Paper Towel Dispenser 11"W x 14"H x 4"D.	Bobrick	B-4262	PUBLIC RESTROOMS	
G	Channel Frame Mirror 24x30	Bobrick	B-165 2430	PUBLIC RESTROOMS/ BATHROOMS	
Н	Soap Dispenser 8"W x 4"H x5"D	Bobrick	B-4112	PUBLIC RESTROOMS	
J	ROBE НООК	Bobrick		BATHROOMS	
К	24" TOWEL BAR	Bobrick		BATHROOMS	

b d t

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OFFICE 740-592-2420
ONLINE www.bdtaid.com

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In association with:

BDT PROJECT NO: 23020

PROFESSIONAL SEAL

PROFESSIONAL SEAL

DONALD
J
DISPENZA
0012528
Expiration Date 12/31/2025

ISSUE DATES

NO. DATE DESCRIPTION
04/22/24 BID/ PERMIT SET

DONALD
J
DISPENZA
0012528
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A1) PARTITION SCHEDULE
SCALE: NTS

PROVIDE DEFLECTION-

EXISTING MASONRY WALL-

5/8" GYP. BD.-

25 GA. 3-5/8" MTL.-

STUDS@ 16" O/C

2" CLOSED CELL — SPRAY FOAM

FURRED WALL

TRACK

PROVIDE DEFLECTION-

TRACK

5/8"GYP. BD. -

STUDS@ 16" O/C

PARTITION

EA. SIDE

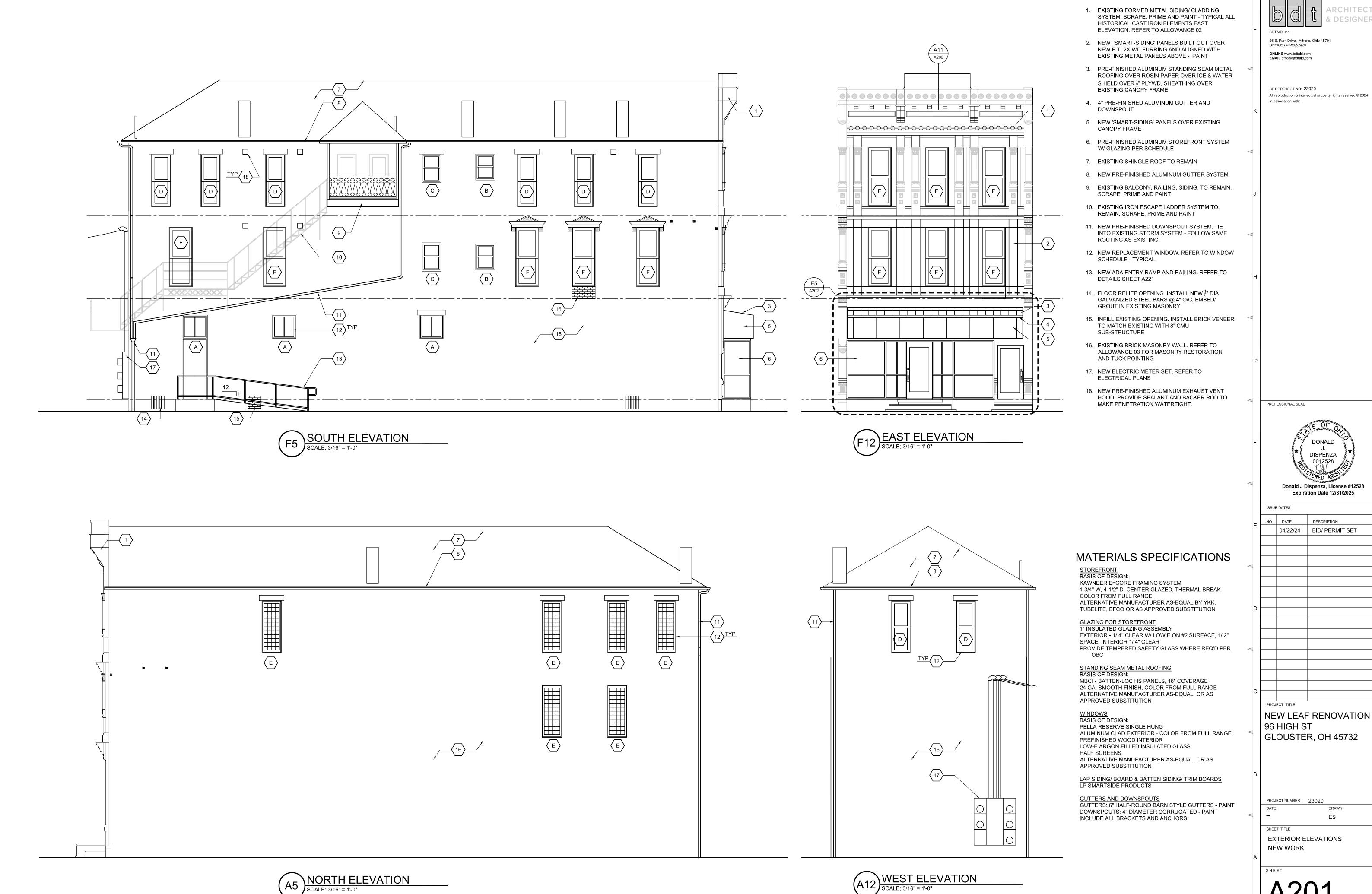
EXISTING MASONRY WALL-

5/8" GYP. BD.-

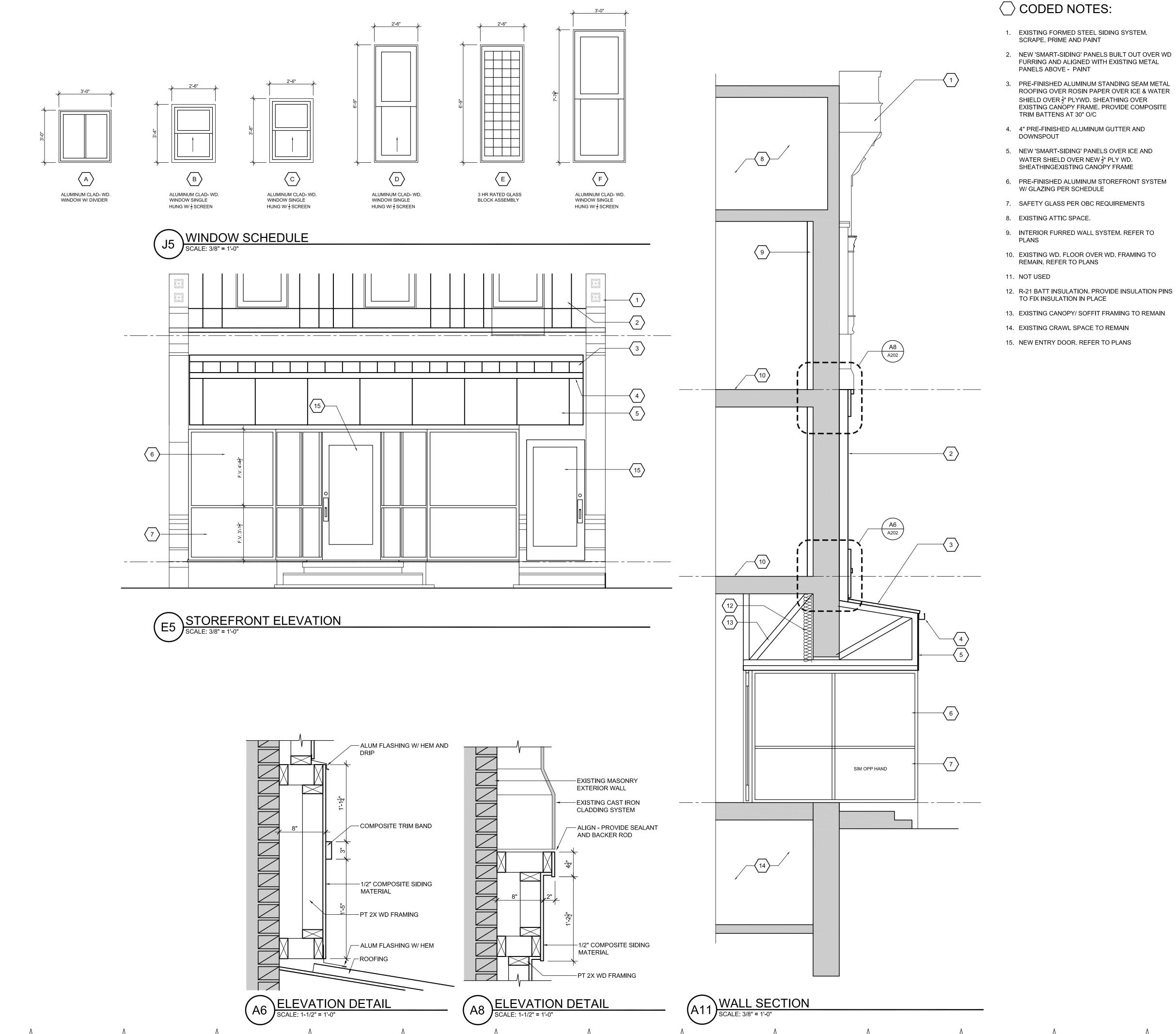
 $\frac{7}{8}$ " HAT CHANNELS $^-$

@ 16" O/C

A102



CODED NOTES:



26 E. Park Drive, Athens, Ohio 45701

OFFICE 740-592-2420

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PROFESSIONAL SEAL

DISPENZA 0012528 Donald J Dispenza, License #12528

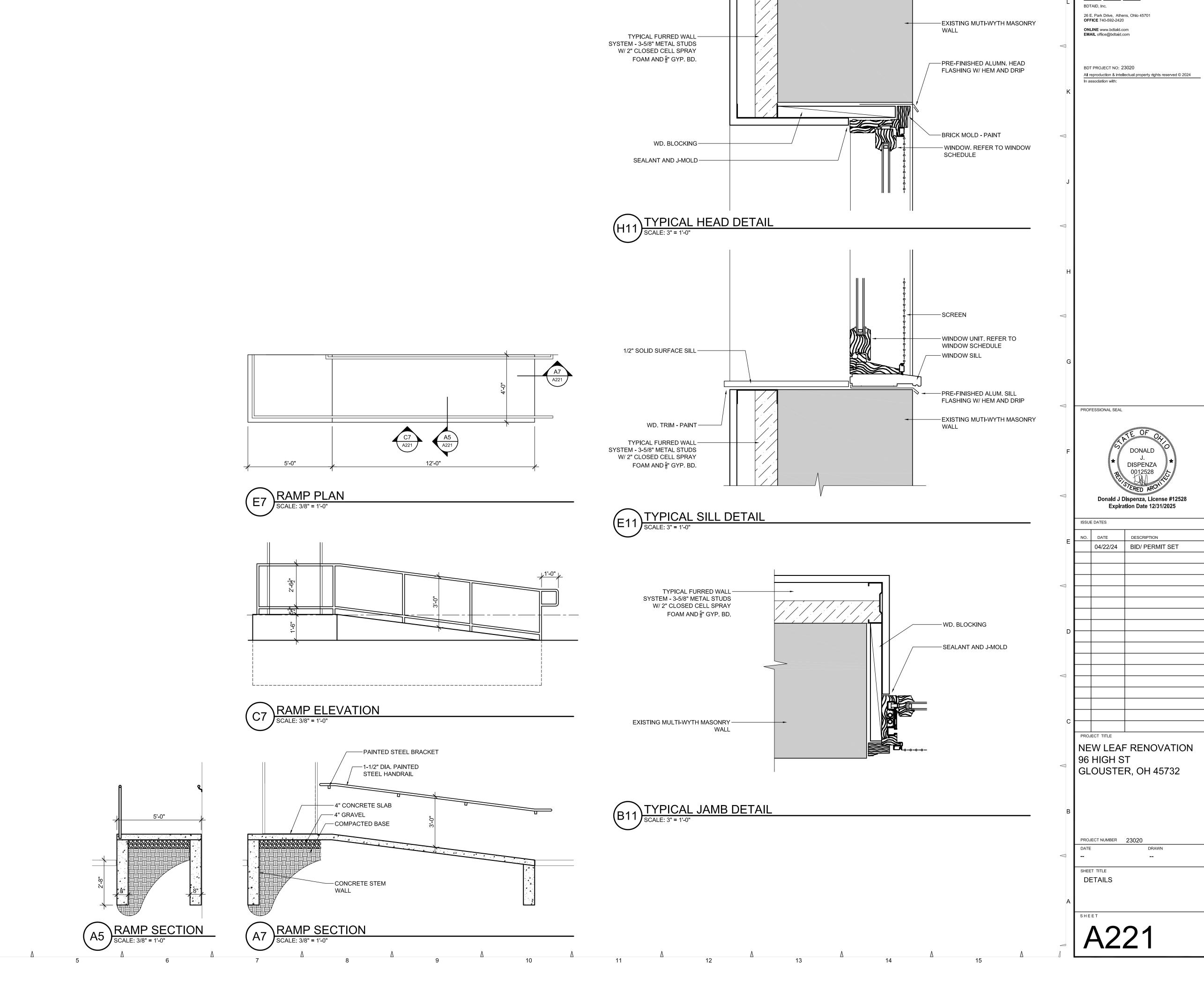
Expiration Date 12/31/2025

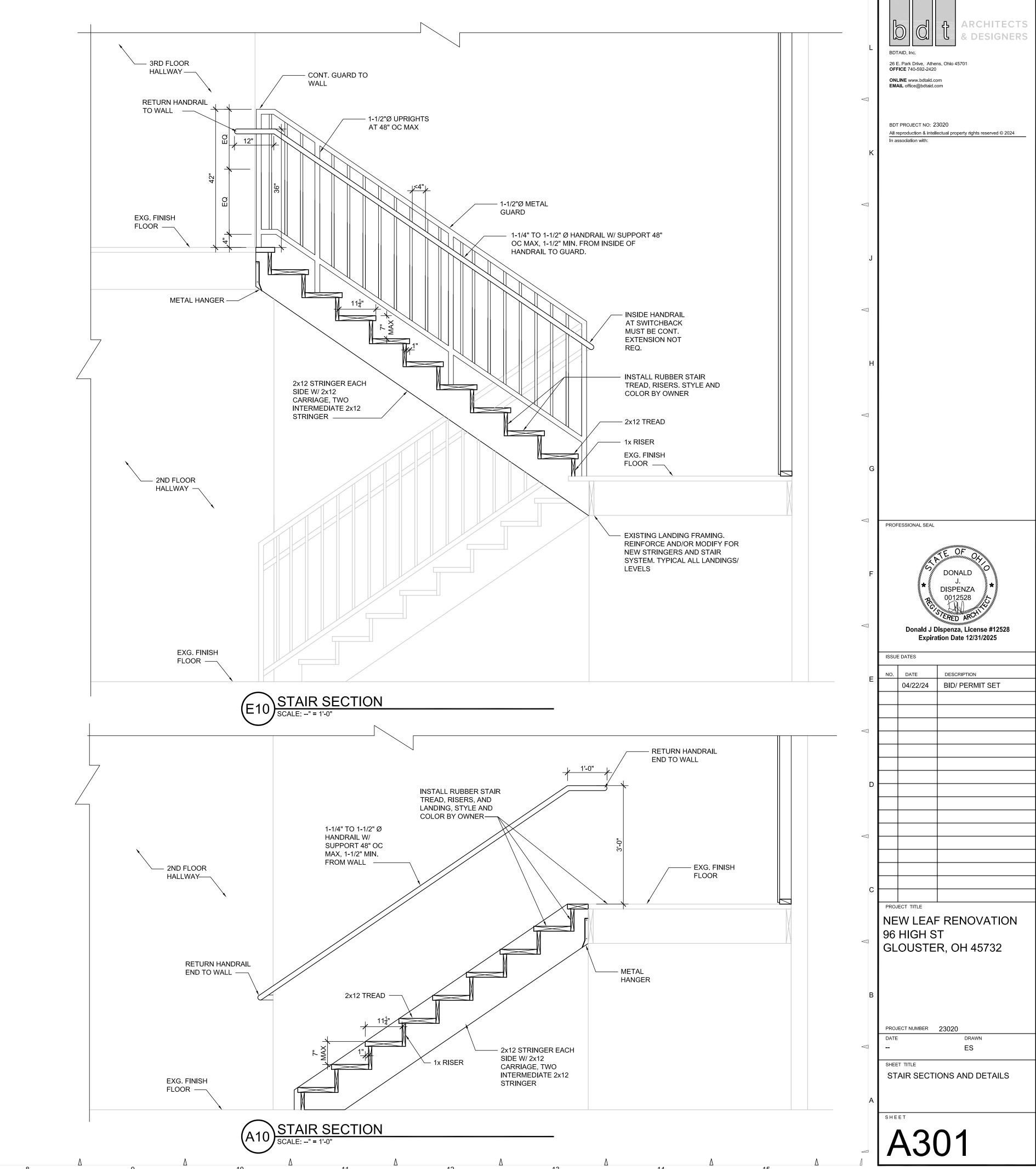
ISSUE DATES 04/22/24 | BID/ PERMIT SET

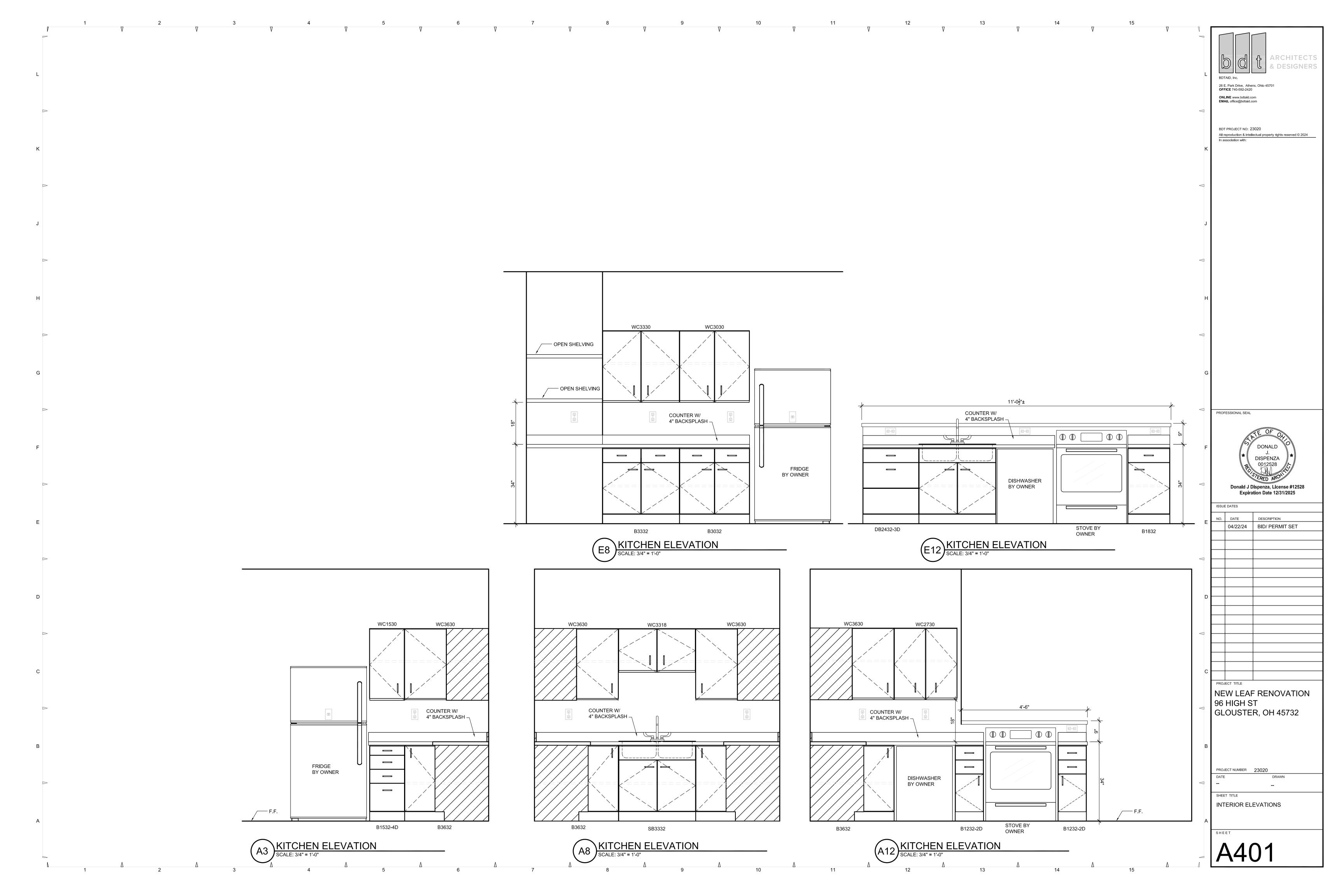
NEW LEAF RENOVATION 96 HIGH ST GLOUSTER, OH 45732

PROJECT NUMBER 23020

WALL SECTION, WINDOW AND STOREFRONT ELEVATIONS







					F	O(MC	FIN	IISI	+S	CH	ED	ULE			
No.	NAME	FLO MAT.	OOR FINISH	BA MAT.	SE FINISH	NORTI	H WALL FINISH		WALL	SOUTH MAT.	WALL FINISH	WEST MAT.	WALL		CEILING FINISH	REMARKS
101	RETAIL	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	EXG		EX	PT	
102	STOREROOM	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	EX	PT	
103	HALL	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	EX	PT	
104	RESTROOM	LVT		VCB		DW	PT	DW	PT	DW	PT	DW	PT	EX	PT	
105	SHIPPING ROOM	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	EX	PT	
106	RESTROOM	LVT		VCB		DW	PT	DW	PT	DW	PT	DW	PT	EX	PT	
107	JANITOR CLOSET	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	EX	PT	
108	FOYER	EXG	SLR	VCB		DW	PT	PT	PT	DW	PT	DW	PT	EX	PT	
201	OFFICE	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
202	OFFICE	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
203	HALL	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
204	RESTROOM	LVT		VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
205	OFFICE	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
206	MECHANICAL & JANITOR CLOSET	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
207	CORRIDOR	EXG	SLR	VCB		DW	PT	DW	PT	EXG	PT PT	DW	PT	DW	PT	
210	KITCHEN	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
211	LIVING ROOM	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
212	BEDROOM	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
213	RESTROOM	LVT		VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
214	CLOSET	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
215	MECHANICAL CLOSET	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
300	STAIR	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
301	KITCHEN	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
302	MECHANICAL CLOSET	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
303	LIVING ROOM	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
304	RESTROOM	LVT		VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
305	CLOSET	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
306	BEDRROOM	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
307	BEDROOM	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
308	CLOSET	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
309	LAUNDRY CLOSET	LVT		VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
310	KITCHEN	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
311	LIVING ROOM	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	 1
312	BEDRROM	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
313	RESTROOM	LVT		VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
314	CLOSET	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	
315	MECHANICAL CLOSET	EXG	SLR	VCB		DW	PT	DW	PT	DW	PT	DW	PT	DW	PT	

ROOM FINISH NOTES:

- 1. SUSPENDED CEILINGS:
- A. 2X4 LAY-IN PANELS WITH EXPOSED METAL TEE GRID. SYSTEM TO BE INSTALLED PER
- ASTM C636. B. MAIN RUNNERS TO BE INSTALLED AT 48" ON CENTER AND SUPPORTED WITH HANGER
- C. LAY-IN LIGHTS AND MECHANICAL EQUIPMENT TO BE SUPPORTED WITH HANGER WIRE ON AT LEAST TWO OPPOSITE CORNERS. EQUIPMENT THAT IS NOT SUPPORTED ON ONE SIDE BY A MAIN RUNNER TO HAVE ALL FOUR CORNERS SUPPORTED BY HANGER WIRE. D. HANGER WIRES TO BE A MINIMUM 12 GAGE GALVANIZED WIRE. AT ANCHOR AND GRID CONNECTION, WIRE TO BE WRAPPED AROUND ITSELF 3 FULL TIMES WITHIN 3" OF
- LENGTH. DO NOT SUPPORT HANGER WIRE ON CONDUIT, DUCT OR ANY MECHANICAL E. VERTICALLY HANGER WIRE SHALL NOT SLOPE MORE THAN 1 HORIZONTAL UNIT TO 6 VERTICAL UNITS UNLESS COUNTER SLOPING WIRE IS PROVIDED. MINIMUM ANGLE OF
- 2. CERAMIC TILE TO HAVE A MINIMUM SLIP RESISTANT COEFFICIENT OF FRICTION OF 0.60.
- 3. UNLESS DIRECTED OTHERWISE BY THE OWNER, PAINTING (OTHER THAN FACTORY APPLIED) TO BE ONE BASE COAT AND TWO FINISH COATS. TYPE AND COLOR OF PAINT PER OWNER.
- 4. PAINTS ARE TO BE APPLIED PER MANUFACTURER'S RECOMMENDATIONS INCLUDING SUBSTRATE PREPARATION, BASE COATING AND APPLICATION.
- 5. ALL CARPETS SHALL BE TESTED BY AN APPROVED AGENCY. A COPY OF THE TEST REPORT IDENTIFYING AND REPRESENTING THE STYLE TO BE INSTALLED SHALL BE PROVIDED. THE TEST REPORT SHALL IDENTIFY THE CARPET BY MANUFACTURER AND STYLE NAME, AND SHALL BE REPRESENTATIVE OF THE CURRENT CONSTRUCTION OF THE CARPET. CARPET TO HAVE CLASS II ASTM E648 RATING.
- 6. INTERIOR WALLS AND CEILING FINISHES FOR EXITS OR CORRIDORS TO BE CLASS"_". ALL OTHERS TO BE CLASS "_". (REF OBC TBLE 803.11)

SMOKE DEVELOPED INDEX 0-450

- FINISH CLASS RATINGS:
 - CLASS A FLAME SPREAD INDEX 0-25 SMOKE DEVELOPED INDEX 0-450 CLASS B FLAME SPREAD INDEX 26-75 SMOKE DEVELOPED INDEX 0-450 CLASS C FLAME SPREAD INDEX 76-200

COUNTER SLOPING WIRE TO BE 45 DEGREES.

ABBREVIATIONS:

- ACP1 SUSPENDED CEILING PANELS 24" x 24" SQ. EDGE, 15/16" TEE GRID,
- SEE REFLECTED CEILING PLAN
- ACP2 SUSPENDED CEILING PANELS 24"X48" SQ. EDGE, 15/16" TEE GRID, SEE REFLECTED CEILING PLAN
- CONCRETE MASONRY UNIT
- CONC CONCRETE
- DRYWALL, 1/2" AT 16" SPANS, 5/8" AT 24" SPANS UNLESS NOTED OTHERWISE, USE WATER RESISTANT TYPE DRYWALL AT RESTROOMS AND JANITOR SPACE
- EXG **EXISTING**
- FIBERGLASS REINFORCED PANEL
- **HOLLOW METAL**
- LUXURY VINYL TILE
- PAINT
- SEALER, LOW SOLIDS
- VINYL COVE BASE, 4" HIGH 6" HIGH IN RESTROOMS
- WOOD

3'-0"x7'-0"x1-3/4" AL KYNAR AL KYNAR ENTRANCE LOCK SET, CLOSER, THRESHOLD, WEATHER SEALS HM | PT STOREROOM LOCKSET, CLOSER, SMOKE SEALS HM | PT STOREROOM LOCKSET, CLOSER 3'-0"x6'-8" WD STN STOREROOM LOCKSET, CLOSER 103 | B HM | PT 3'-0"x6'-8" WD | STN 3'-0"x6'-8" HM | PT PRIVACY LOCKSET STOREROOM LOCKSET, CLOSER 105A | 3'-0"x6'-8" HM | PT ENTRANCE LOCK SET, CLOSER, THRESHOLD, WEATHER SEALS, INSULATED 105B | F 3'-0"x7'-0" HM | PT WD | STN HM PT PRIVACY LOCKSET 106 | B 3'-0"x6'-8" HM STN HM | PT 3'-0"x6'-8" STOREROOM LOCKSET 108 | A 3'-0"x7'-0" --- | safety | ENTRANCE LOCK SET, CLOSER, THRESHOLD, WEATHER SEALS 3'-0"x6'-8" HM | PT OFFICE LOCKSET WD STN OFFICE LOCKSET HM | PT 3'-0"x6'-8" WD | STN 203 | B HM PT ENTRANCE LOCKSET, CLOSER, SMOKE SEALS 3'-0"x6'-8" WD | STN PRIVACY LOCKSET 3'-0"x6'-8" HM | PT HM PT OFFICE LOCKSET 3'-0"x6'-8" WD | STN STOREROOM LOCKSET, CLOSER, SMOKE SEALS 3'-0"x6'-8" HM PT WD | STN | HM | PT ENTRANCE LOCKSET, CLOSER, SMOKE SEALS 3'-0"x6'-8" WD | STN WD | PT PRIVACY LOCKSET 3'-0"x6'-8" WD | STN WD PT SLIDING CLOSET DOOR HARDWARE 6'-0"x6'-8" WD STN WD PT BI-FOLD CLOSET DOOR HARDWARE 4'-6"x6'-8" WD | STN 301 | B 3'-0"x6'-8" HM PT ENTRANCE LOCKSET, CLOSER, SMOKE SEALS WD | STN WD | PT BI-FOLD CLOSET DOOR HARDWARE 5'-0"x6'-8" WD | PT PRIVACY LOCKSET 3'-0"x6'-8" WD STN PASSAGE LOCKSET WD PT 305 | B 3'-0"x6'-8" 3'-0"x6'-8" WD | STN | WD | PT PRIVACY LOCKSET WD | STN 307 B 3'-0"x6'-8" WD | PT PRIVACY LOCKSET WD | PT PASSAGE LOCKSET 3'-0"x6'-8" WD | STN BI-FOLD CLOSET DOOR HARDWARE WD PT 309 l 3'-6"x6'-8" WD | STN | 3'-0"x6'-8" HM | PT ENTRANCE LOCKSET, CLOSER, SMOKE SEALS WD | STN WD | PT PRIVACY LOCKSET 3'-0"x6'-8" 6'-0"x6'-8" WD | PT SLIDING CLOSET DOOR HARDWARE WD | STN 4'-6"x6'-8" WD PT BI-FOLD CLOSET DOOR HARDWARE

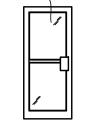
REMARKS

DOOR SCHEDULE

DOOR SCHEDULE NOTES:

- 1. EGRESS DOORS TO BE READILY OPENABLE FROM THE DIRECTION OF EGRESS WITHOUT THE USE OF KEY OR SPECIAL KNOWLEDGE OR EFFORT 2. ALL LOCKSETS AND LATCHES TO BE HANDICAP ACCESSIBLE LEVER TYPE, ONE HAND SINGLE OPERATION WITH NOT TIGHT GRASPING REQUIRED.
- 3. EGRESS DOORS TO BE SINGLE OPERATION, NO DEAD BOLTS ON DOORS WITH LATCH OR LOCKSET.
- 4. DOORS WITH DEAD BOLTS TO HAVE ACCESSIBLE THUMB TURN OPERATION ON INTERIOR OF DOOR, MAXIMUM 48" ABOVE FINISH FLOOR.
- 5. DOOR THRESHOLDS TO BE HANDICAP ACCESSIBLE TYPE, SEE HANDICAP CHANGES IN LEVEL DETAIL.
- 6. ALL EGRESS DOORS TO BE HANDICAP ACCESSIBLE, SEE REQUIRED DOOR CLEARANCES.
- ALL FIRE RATED DOORS TO HAVE CLOSERS.
- DOOR LATCH NOTES:
- LATCHBOLT OPERATED B Y LEVER FROM EITHER SIDE AT ALL TIMES. 8.1. PASSAGE ANSI No. F75
- LATCHBOLT OPERATED BY LEVER FROM EITHER SIDE. OUTSIDE LEVER IS LOCKED BY PUSH BUTTON INSIDE AND 8.2. PRIVACY UNLOCKED BY EMERGENCY RELEASE OUTSIDE, OPERATING INSIDE LEVER OR CLOSING DOOR.
- 8.3. ENTRY / OFFICE DEADLOCKING LATCHBOLT OPERATED BY LEVER FROM EITHER SIDE EXCEPT WHEN OUTSIDE LEVER IS LOCKED BY PUSH BUTTON ON INSIDE LEVER. WHEN OUTSIDE LEVER IS LOCKED, OPERATING KEY IN OUTSIDE LEVER OR OPERATING INSIDE LEVER UNLOCKS PUSH BUTTON. CLOSING DOOR DOES NOT RELEASE PUSH BUTTON.
- DEADLOCKING LATCHBOLT BY LEVER EITHER SIDE, EXCEPT WHEN TURN BUTTON INSIDE LOCKS OUTSIDE LEVER. 8.4. ENTRY TURN BUTTON IN LOCKS OUTSIDE LEVER, REQUIRING THE USE OF KEY OUTSIDE TO UNLOCK. (LEVER HANDLE IS FREE WHEELING IN LOCKED POSITION.) TURNING INSIDE LEVER UNLOCKS OUTSIDE LEVER. PUSHING IN AND TURNING BUTTON LOCKS OUTSIDE LEVER, REQUIRING KEY AT ALL TIMES. TUNRING INSIDE LEVER DOES NOT UNLOCK OUTSIDE LEVER UNTIL BUTTON IS MANUALLY TURNED TO UNLOCK POSITION. INSIDE LEVER ALWAYS OPERATED LATCHBOLT.
- 8.5. STOREROOM DEADLOCKING LATCHBOLT OPERATED BY KEY IN OUTSIDE LEVER, OR BY OPERATING INSIDE LEVER. OUTSIDE LEVER IS ALWAYS LOCKED. INSIDE LEVER IS ALWAYS UNLOCKED.

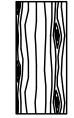
DOOR TYPE:



ALUM STOREFRONT

SAFETY GLASS ~

 $\frac{1}{1}$ $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{7}$ $\frac{1}{8}$ $\frac{1}{9}$ $\frac{1}{10}$ $\frac{1}{10$

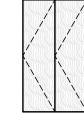


TYPE B

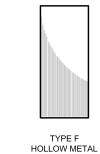
WOOD PANEL











FLUSH PANEL (EXTERIOR DOORS

TO BE INSULATED)

HM FOLLOW METAL
PLAM PLASTIC LAMINATE
PT PAINT
STN STAIN
WD WOOD



PROFESSIONAL SEAL

ISSUE DATES

D d d ARCHITECTS & DESIGNERS

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	PROJ	ECT TITLE	
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NEW LEAF RENOVATION 96 HIGH ST GLOUSTER, OH 45732

PROJECT NUMBER 23020

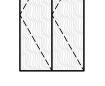
FINISH, DOOR, & WINDOW SCHEDULES



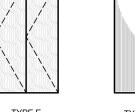




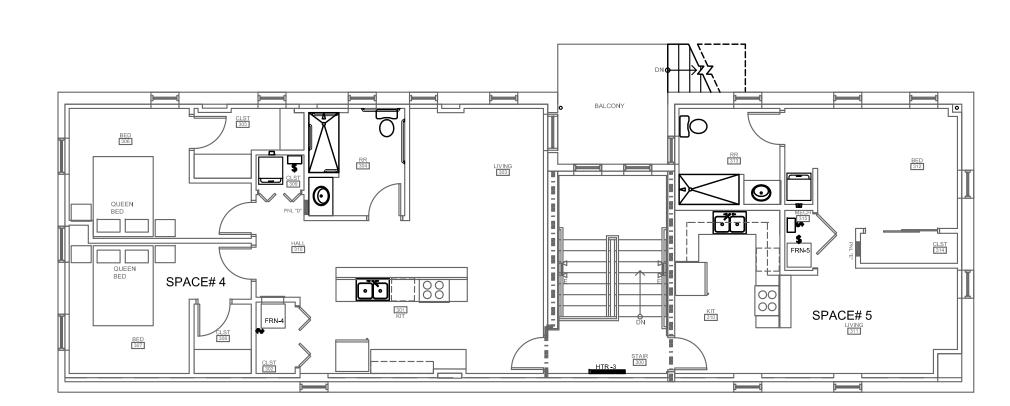


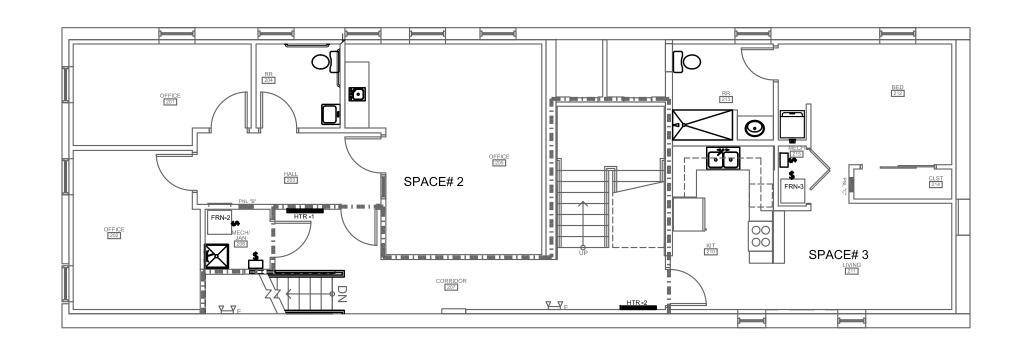


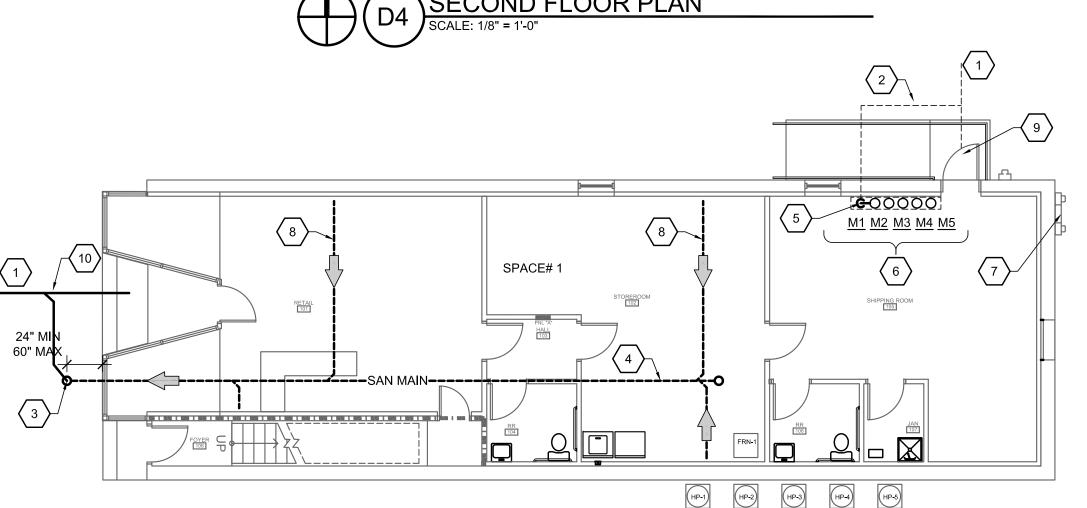
WOOD BI-FOLD



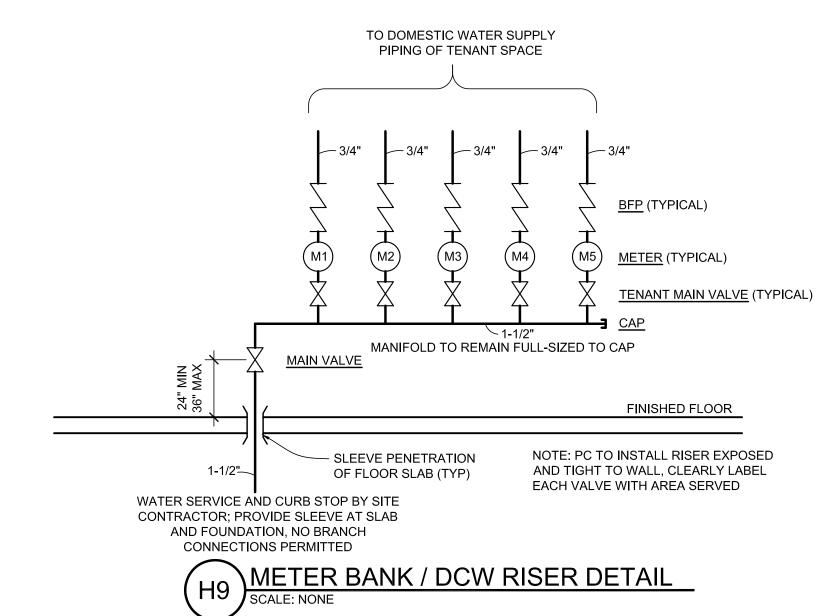
WOOD SLIDER

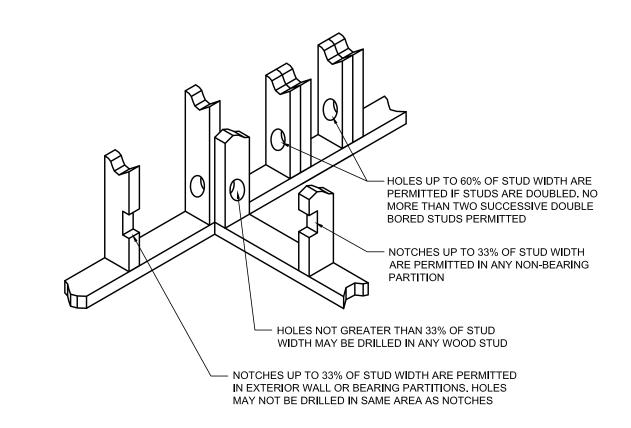


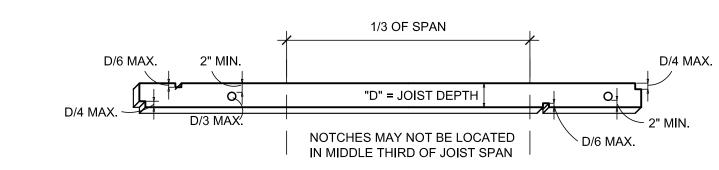












STUD / JOIST PENETRATION DETAIL

CODED NOTES

1. EXISTING UTILITY LINE EXTENDS TO CONNECT TO IN-STREET UTILITY MAIN.

2. NEW 1-1/2" DOMESTIC WATER MAIN SUPPLY. TIE INTO EXISTING SUPPLY, INSTALL NEW IN-SIDEWALK SOV PER CITY STANDARDS AND EXTEND NEW SUPPLY LINE TO INTERIOR

EXTERIOR CLEANOUT TO BE 2-WAY. LOCATED IN SIDEWALK. REPLACE SIDEWALK FROM JOINT TO JOINT WITH CONCRETE TO MATCH EXISTING

4. NEW 4" SANITARY MAIN. RUN IN CRAWL SPACE WITHIN BUILDING

5. 1-1/2" DOMESTIC WATER RISER, SEE DETAIL THIS SHEET.

6. DEDICATED SPACE FOR DOMESTIC WATER METER BANK, SEE DETAIL THIS SHEET. COORDINATE EXACT LOCATION WITH GC PRIOR TO STARTING PROJECT.

7. ELECTRIC METER, TYPICAL.

8. SEE ISOMETRIC FOR PIPE SIZES OF SANITARY BRANCH PIPING, TYPICAL.

9. REMOVE METER AND CAP SUPPLY LINE

10. CUT AND CAP EXISTING SANITARY. CONNECT NEW SANITARY TO EXISTING PER CITY STANDARDS

LEGEND

1 HOUR 3 HOUR 0 HR SMOKE

SUPPLY PIPING GENERAL NOTES:

PARTITION

1. SUPPLY PIPING ROUTED IN EXTERIOR WALL CAVITIES TO BE ROUTED ON "WARM" SIDE OF INSULATION.

2. NO SUPPLY PIPING TO BE ROUTED IN ANY UN-HEATED SPACE.

3. SUPPLY PIPING ROUTED EXPOSED TO BE PARALLEL / PERPENDICULAR TO STRUCTURE.

4. SUPPLY PIPING ROUTED UNDERSLAB TO HAVE NO JOINTS OR

CONNECTIONS UNDERSLAB.

5. ALL SUPPLY PIPING TO BE 3/4" IN TENANT AREAS. SUPPLY PIPING SERVING ONLY ONE FIXTURE TO BE 1/2" UNO.

6. PROVIDE TMV AT ALL LAVATORIES TAGGED "LAV1", SEE GENERAL

GENERAL PLUMBING NOTES

- 1. ALL PLUMBING WORK SHALL COMPLY WITH THE 2017 OHIO PLUMBING CODE (OPC) AND BE PERFORMED BY A LICENSED CONTRACTOR PER OPC 4740.
- 2. ALL EXISTING SUPPLY, WASTE & VENT PIPING TO BE REMOVED BACK TO THE BUILDING MAIN ENTRY POINT.
- 3. PLUMBING CONTRACTOR (PC) RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO STARTING WORK AND WILL PROVIDE A COMPLETE SET OF PLUMBING AS-BUILTS UPON COMPLETION OF PROJECT TO THE ARCHITECT AND THE OWNER. AS-BUILTS TO SHOW EXACT ROUTING OF ALL SANITARY AND SUPPLY PIPING.
- 4. ALL MATERIALS, PIPE, FITTINGS, JOINTS, DEVICES, AND CONNECTION MATERIALS SHALL COMPLY WITH THE LATEST NSF/ANSI-61 STANDARD FOR CLEAN DRINKING WATER AND BE CERTIFIED "LEAD FREE" PER THE STANDARD.
- 5. ALL WALL AND SLAB PENETRATIONS OF MASONRY OR CONCRETE CONSTRUCTION SHALL BE
- 6. DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW EVERY FITTING, OFFSET, BEND OR EXACT PIPE ROUTING THAT MAY BE REQUIRED. THIS CONTRACTOR RESPONSIBLE FOR FIELD COORDINATION AND ROUTING OF ALL PIPING WITH RESPECT TO EXISTING CONDITIONS, NEW CONSTRUCTION, OTHER TRADES, ETC.
- 7. CONTRACTOR SHALL OBTAIN A COMPLETE SET OF PLANS AND BE FAMILIAR WITH ENTIRE PROJECT PRIOR TO STARTING WORK.
- 8. ALL PLUMBING WORK SHALL BE LEFT EXPOSED FOR INSPECTION AND PC TO BE AT SITE FOR EACH INSPECTION UNLESS PRIOR ARRANGEMENTS HAVE BEEN MADE.
- 9. PC RESPONSIBLE FOR VERIFYING STATIC WATER PRESSURE DOES NOT TO EXCEED 80psi AND FOR INSTALLING A PRESSURE REGULATOR CONFORMING TO ASSE 1003 IF PRESSURE IS IN EXCESS OF 80psi.
- 10. ALL TOILETS & LAVATORIES TO BE SEALED AT FLOOR/WALL CONNECTION WITH EITHER LATEX OR SILICONE CAULKING.
- 11. PROVIDE FIRE STOPPING AT ALL PENETRATIONS OF FIRE RATED ENCLOSURES, PER UL 1479. PROVIDE 3M FIRE STOP STRAPPING MATERIAL ON ALL PVC PIPING PENETRATIONS. REFER TO ARCH DRAWINGS FOR MORE INFORMATION.
- 12. ALL INVERTS, STATED OR NOT, NEW OR EXISTING, SHALL BE COORDINATED IN THE FIELD, VERIFY ALL EXISTING INVERTS PRIOR TO STARTING WORK.
- 13. PC TO VERIFY TYPE OF EXISTING PIPING PRIOR TO MAKING ANY CONNECTIONS.
- 14. ALL SANITARY AND VENT PIPING SHALL BE SLOPED AT A MINIMUM OF 1/8" PER 1'-0".
- 15. ALL SANITARY AND VENT PIPING SHALL BE SCHEDULE 40 PVC.
- 16. CLEANOUTS TO BE INSTALLED AT EACH CHANGE OF DIRECTION GREATER THAN 45° AS WELL AS EVERY 100'-0" OF DEVELOPED RUN; PC RESPONSIBLE FOR VERIFYING ARCHITECTURAL FINISHES AND SELECTING APPROPRIATE CLEANOUT FOR APPLICATION.
- 17. CLEANOUTS TO BE INSTALLED AT THE BASE OF EVERY STACK.
- 18. MINIMUM UNDERGROUND SANITARY PIPING SHALL BE 2".
- 19. ALL VENT AND SANITARY PIPING SHALL BE RAN INSIDE WALLS OR OTHER SPACES NOT EXPOSED TO PUBLIC VIEW, UNLESS NOTED OTHERWISE.
- 20. UNDERGROUND SANITARY DRAINAGE AND VENT PIPING TO BE PVC SCHEDULE 40 PER STANDARD ASTM D2665
- 21. INSTALL ONLY SANITARY TYPE TEES AND WYES IN WATER BEARING FITTINGS.

IMMEDIATELY AFTER METER AND BEFORE ANY BRANCH CONNECTIONS.

- 22. BACKFILL 6" UNDER AND 6" OVER TOP OF ALL PIPING USING ONLY SAND OR #9 PEA GRAVEL.
- 23. SOLVENT CEMENT JOINTS OR JOINTS OF DIFFERENT TYPES OF PLASTIC ARE PROHIBITED.
- 24. PC TO INSTALL BACKFLOW PREVENTER CONFORMING TO ASSE 1013 OR ASSE1015
- 25. TEMPERED WATER FOR PUBLIC HAND WASHING FACILITIES SHALL BE DELIVERED THROUGH AN APPROVED WATER TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070 AND LIMITS THE HOT WATER TO 110°F MAX.
- 26. TEMPERED WATER FOR SHOWERS OR TUB/SHOWER COMBINATION VALVES SHALL BE BALANCED PRESSURE AND THERMOSTATIC VALVES THAT CONFORM TO ASSE1016 AND SHALL BE EQUIPPED WITH A MEANS TO LIMIT THE MAX SETTING OF THE VALVE TO 120°F
- WHICH SHALL BE FIELD ADJUSTED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. 27. WATER SERVICE PIPING SHALL CONFORM TO NSF 61 AND SHALL CONFORM TO ONE OF THE
- STANDARDS LISTED IN TABLE 605.3 OF THE OPC. 28. WATER DISTRIBUTION PIPE SHALL CONFORM TO NSF 61 AND SHALL BE COPPER OR
- COPPER-ALLOY TUBING (TYPE K, WK, L, WL, M OR WM). 29. ALL SUPPLY PIPE FITTINGS SHALL COMPLY WITH NSF 61 AND SHALL BE APPROVED FOR

APPLICABLE STANDARDS LISTED IN TABLE 605.5 OF THE OPC.

INSTALLATION WITH THE PIPING MATERIAL INSTALLED AND SHALL COMPLY WITH THE

- 30. COMPLETELY FLUSH AND STERILIZE ALL DOMESTIC WATER PIPING PER OPC SECTION 610 AND PER THE LOCAL HEALTH DEPARTMENT REQUIREMENTS. PROVIDE AND PAY FOR ALL APPLICABLE TESTS, PERMITS AND FEES. DOMESTIC WATER PIPING SHALL BE PRESSURE TESTED PER OPC SECTION 312.5.
- 31. NO SUPPLY LINES SHALL BE ROUTED ABOVE ELECTRICAL GEAR OR IN THE SPACE REQUIRED BY THE NATIONAL ELECTRICAL CODE.
- 32. ALL FIXTURES SHALL HAVE SHUT-OFF STOP VALVES IN AN ACCESSIBLE LOCATION.
- 33. PIPING BEYOND THE SHUT-OFF STOP VALVES AND EXPOSED IN PUBLIC SPACES SHALL BE CHROME PLATED.
- 34. PROVIDE ISOLATION SEPARATORS FOR COPPER PIPING RUNNING THROUGH METAL STUDS.
- 35. ALL COLD AND HOT WATER SUPPLY PIPING SHALL BE INSULATED TO MEET OR EXCEED THE REQUIREMENTS OF ASHRAE 90.1, ENERGY CONSERVATION.
- 36. THIS CONTRACTOR IS RESPONSIBLE FOR TRACING ALL EXISTING MUNICIPAL UTILITIES AND COORDINATING WITH THE CITY FOR NEW CONNECTIONS. PROVIDE ALL NECESSARY EXCAVATION AND REPLACEMENT CONSTRUCTION FOR UTILITY CONNECTIONS

PIPING SUPF	ORT BRACING	
PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (FEET)	MAXIMUM VERTICAL SPACING (FEET)
ABS PIPE	4	4
CAST IRON PIPE	5	15
COPPER PIPE	12	10
COPPER TUBING, 1" OR SMALLER	6	10
COPPER TUBING, 1-1/4" OR LARGER	10	10
CPVC PIPE, 1" OR SMALLER	3	5
CPVC PIPE, 1-1/4" OR LARGER	4	6
STEEL PIPE	12	15
PVC PIPE	4	4

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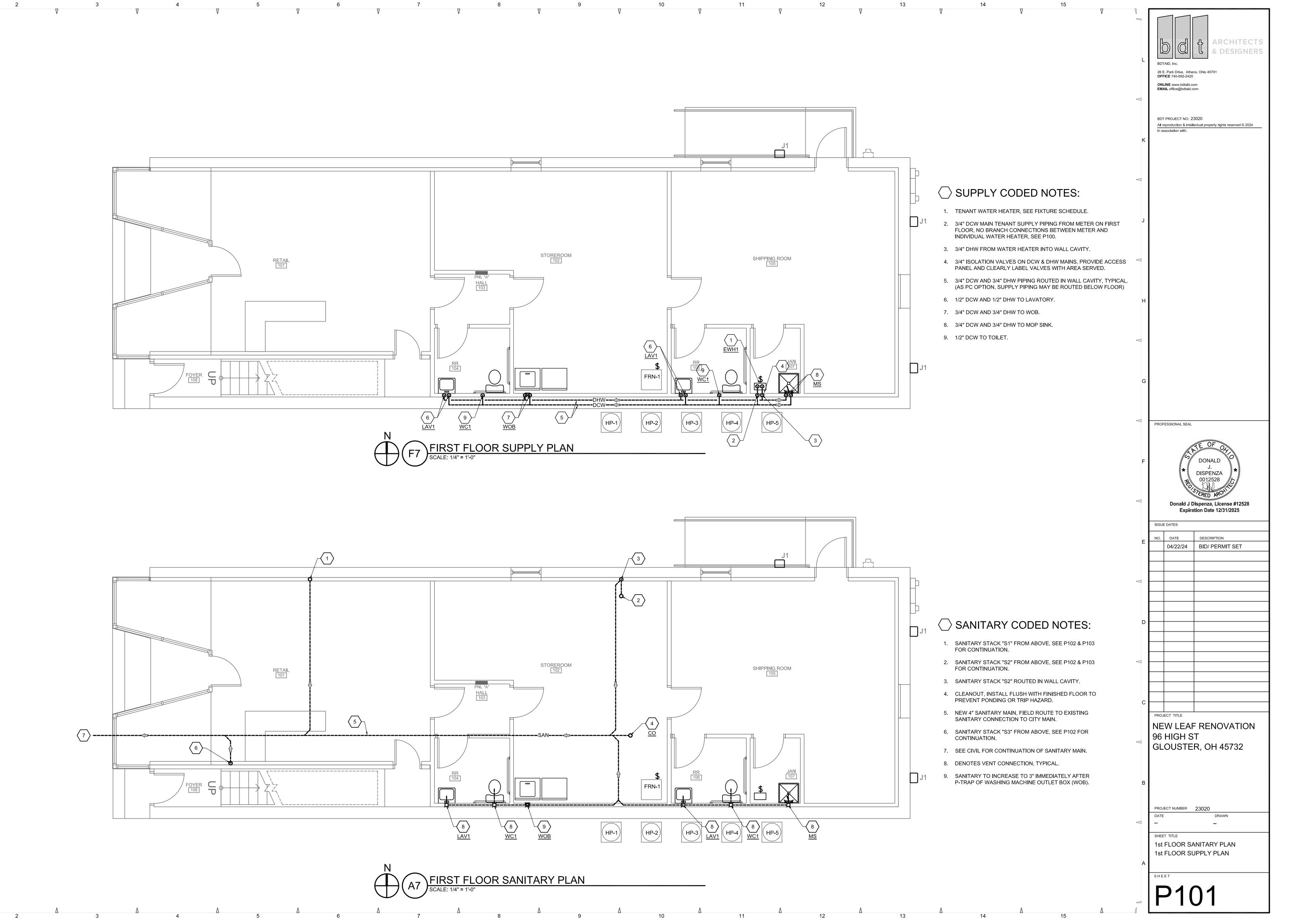
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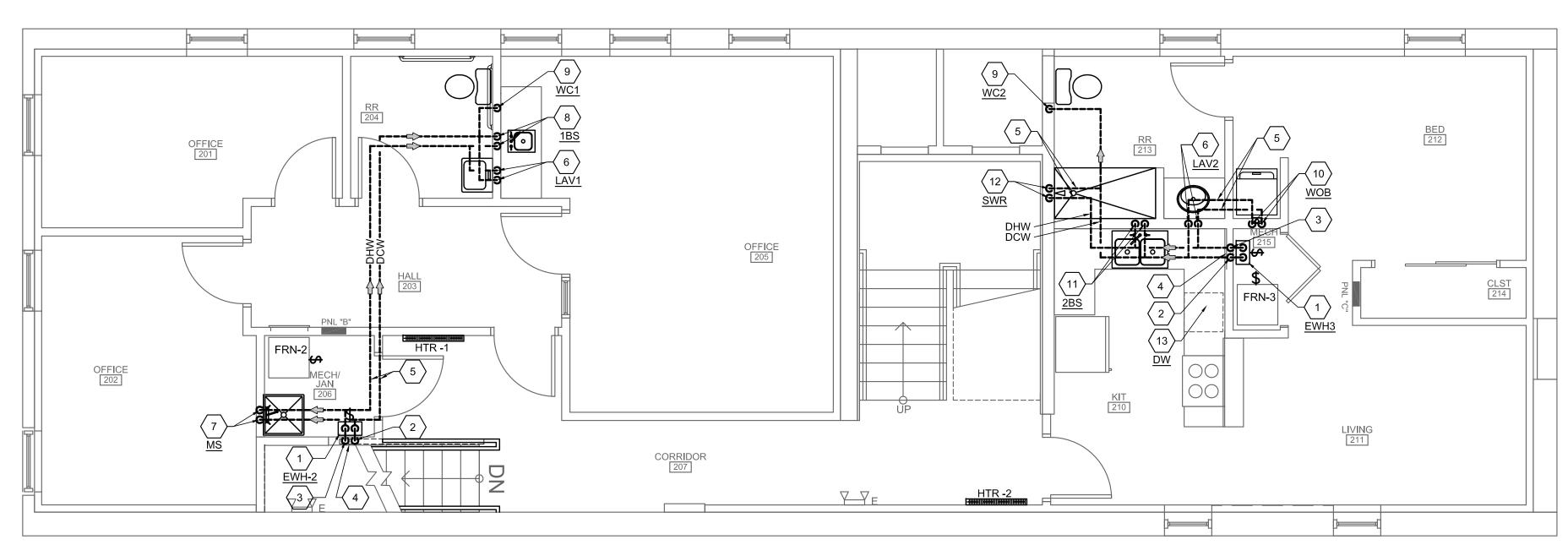
DESCRIPTION 04/22/24 BID/ PERMIT SET

NEW LEAF RENOVATION 96 HIGH ST GLOUSTER, OH 45732

PROJECT NUMBER 23020

GENERAL PLUMBING NOTES





3/4" DCW MAIN TENANT SUPPLY PIPING FROM METER ON FIRST FLOOR, NO BRANCH CONNECTIONS BETWEEN METER AND INDIVIDUAL WATER HEATER, SEE P100.
 3/4" DHW FROM WATER HEATER INTO WALL CAVITY.

SUPPLY CODED NOTES:

1. TENANT WATER HEATER, SEE FIXTURE SCHEDULE.

4. 3/4" ISOLATION VALVES ON DCW & DHW MAINS, PROVIDE ACCESS PANEL AND CLEARLY LABEL VALVES WITH AREA SERVED.

5. 3/4" DCW AND 3/4" DHW PIPING ROUTED BELOW FLOOR, TYPICAL.

6. 1/2" DCW AND 1/2" DHW UP TO LAVATORY.

7. 3/4" DCW AND 3/4" DHW UP TO MOP SINK.

8. 1/2" DCW AND 1/2" DHW UP TO 1BS.

9. 1/2" DCW UP TO TOILET.

10. 3/4" DCW AND 3/4" DHW UP TO WOB.

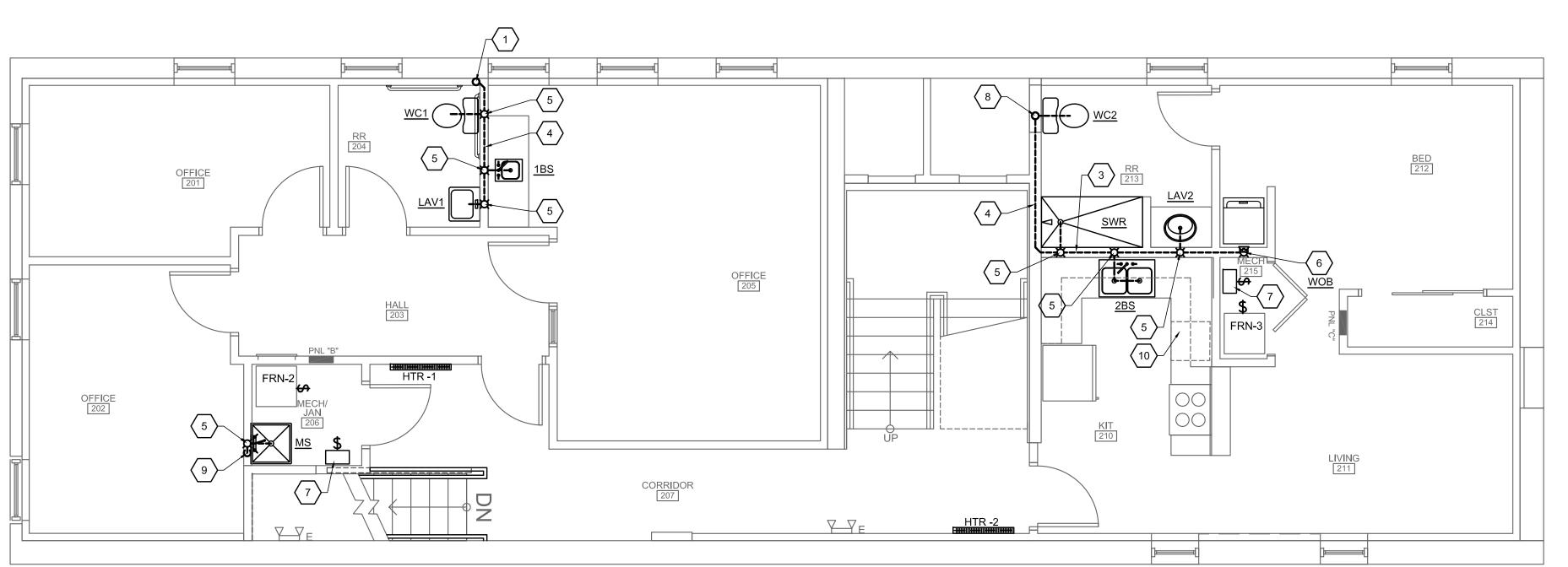
11. 1/2" DCW AND 1/2" DHW UP TO 2BS.

12. 1/2" DCW AND 1/2" DHW UP TO SHOWER.

13. UNDER-COUNTER DISHWASHER (DW) INSTALL PER MANUFACTURER.

SECOND FLOOR SUPPLY PLAN

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



SANITARY CODED NOTES:

- 1. SANITARY STACK "S1" FROM ABOVE AND TO BELOW, SEE P101 FOR CONTINUATION.
- 2. NOT USED.
- 3. SANITARY PIPING ROUTED BELOW FLOOR PERPENDICULAR TO FRAMING, SEE WOOD NOTCH DETAIL P100.
- 4. SANITARY PIPING ROUTED PARALLEL TO FRAMING.
- 5. DENOTES VENT CONNECTION, TYPICAL.
- 6. SANITARY TO INCREASE TO 3" IMMEDIATELY AFTER P-TRAP OF WASHING MACHINE OUTLET BOX (WOB).
- 7. WATER HEATER, SEE SUPPLY PLAN FOR MORE INFORMATION.
- 8. SANITARY STACK "S2" TO BELOW, SEE P101 FOR CONTINUATION.
- 9. SANITARY STACK "S3" TO BELOW, SEE P101 FOR CONTINUATION.
- 10. UNDER-COUNTER DISHWASHER (DW) INSTALL PER MANUFACTURER.

PROFESSIONAL SEAL DISPENZA Donald J Dispenza, License #12528 Expiration Date 12/31/2025 04/22/24 | BID/ PERMIT SET NEW LEAF RENOVATION 96 HIGH ST GLOUSTER, OH 45732 PROJECT NUMBER 23020 2nd FLOOR SANITARY PLAN 2nd FLOOR SUPPLY PLAN

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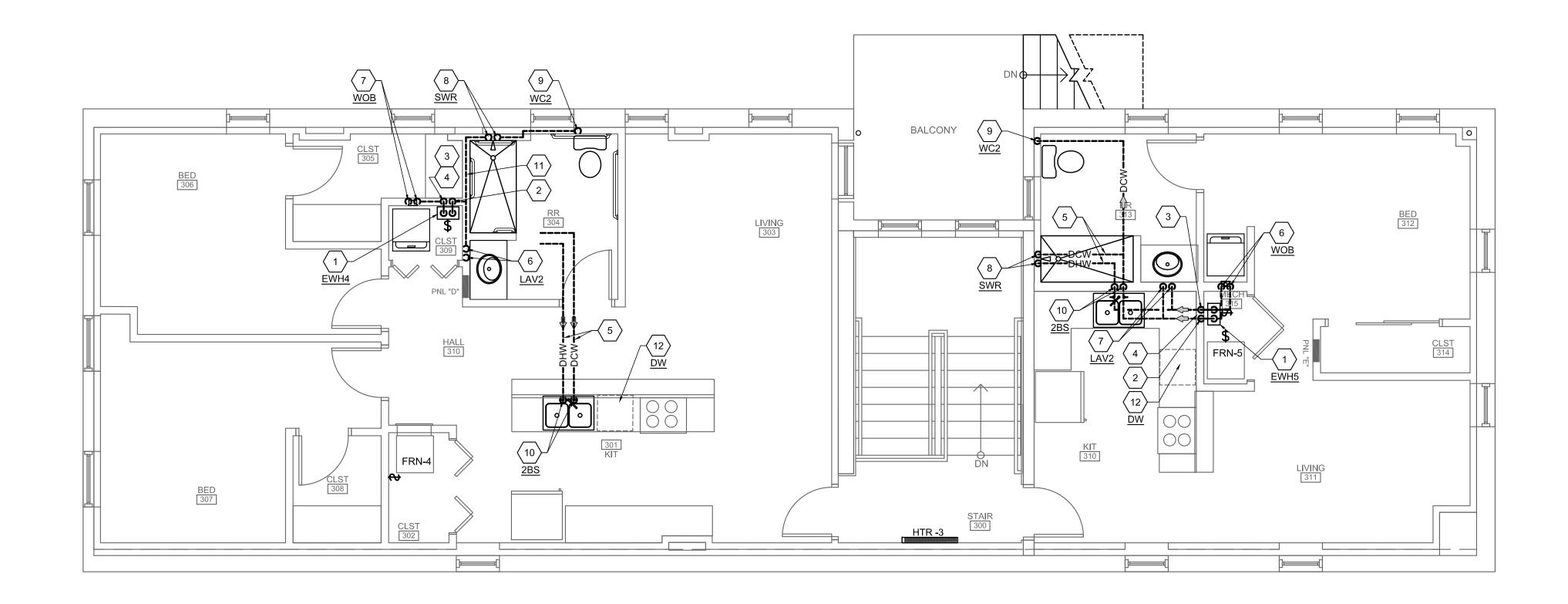
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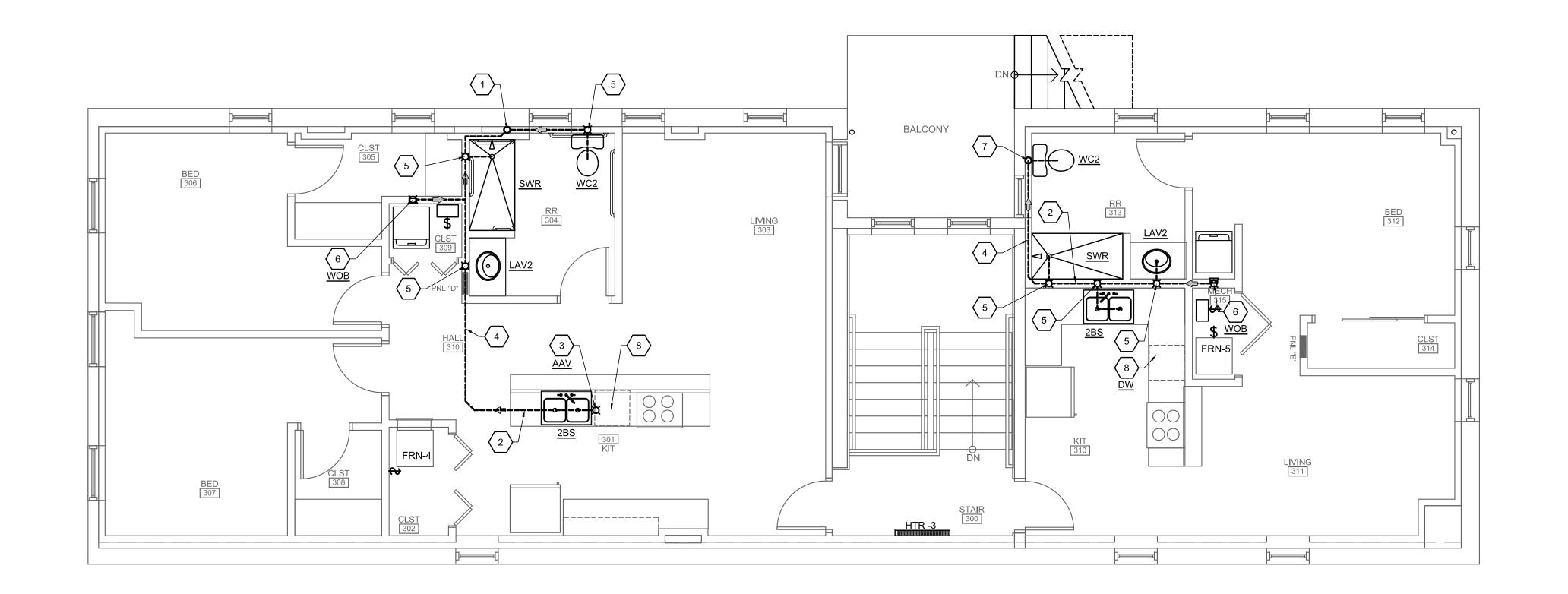
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SECOND FLOOR SANITARY PLAN

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









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SUPPLY CODED NOTES:

1. TENANT WATER HEATER, SEE FIXTURE SCHEDULE.

- 2. 3/4" DCW MAIN TENANT SUPPLY PIPING FROM METER ON FIRST FLOOR, NO BRANCH CONNECTIONS BETWEEN METER AND INDIVIDUAL WATER HEATER, SEE P100.
- 3. 3/4" DHW FROM WATER HEATER INTO WALL CAVITY.
- 4. 3/4" ISOLATION VALVES ON DCW & DHW MAINS, PROVIDE ACCESS PANEL AND CLEARLY LABEL VALVES WITH AREA SERVED.
- 5. 3/4" DCW AND 3/4" DHW PIPING ROUTED BELOW FLOOR, TYPICAL.
- 6. 1/2" DCW AND 1/2" DHW UP TO LAVATORY.
- 7. 3/4" DCW AND 3/4" DHW UP TO WOB.
- 8. 1/2" DCW AND 1/2" DHW UP TO SHOWER.

10. 1/2" DCW AND 1/2" DHW UP TO 2BS.

- 9. 1/2" DCW UP TO TOILET.
- 11. DCW & DHW SUPPLY PIPING ROUTED IN WALL CAVITY (MAY BE ROUTED UNDER FLOOR AS CONTRACTOR'S OPTION).
- 12. UNDER-COUNTER DISHWASHER (DW) INSTALL PER MANUFACTURER.

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SANITARY CODED NOTES:

- 1. SANITARY STACK "S1" TO BELOW, SEE P102 FOR CONTINUATION.
- SANITARY PIPING ROUTED BELOW FLOOR PERPENDICULAR TO FRAMING, SEE WOOD NOTCH DETAIL P100.
- 3. AIR ADMITTANCE VALVE UNDER COUNTER, INSTALL PER OPC SECTION 918, INSURE CLEAR ACCESS.
- 4. SANITARY PIPING ROUTED PARALLEL TO FRAMING.
- 5. DENOTES VENT CONNECTION, TYPICAL.
- 6. SANITARY TO INCREASE TO 3" IMMEDIATELY AFTER P-TRAP OF WASHING MACHINE OUTLET BOX (WOB).
- 7. SANITARY STACK "S2" TO BELOW, SEE P102 FOR CONTINUATION.
- 8. UNDER-COUNTER DISHWASHER (DW) INSTALL PER MANUFACTURER.

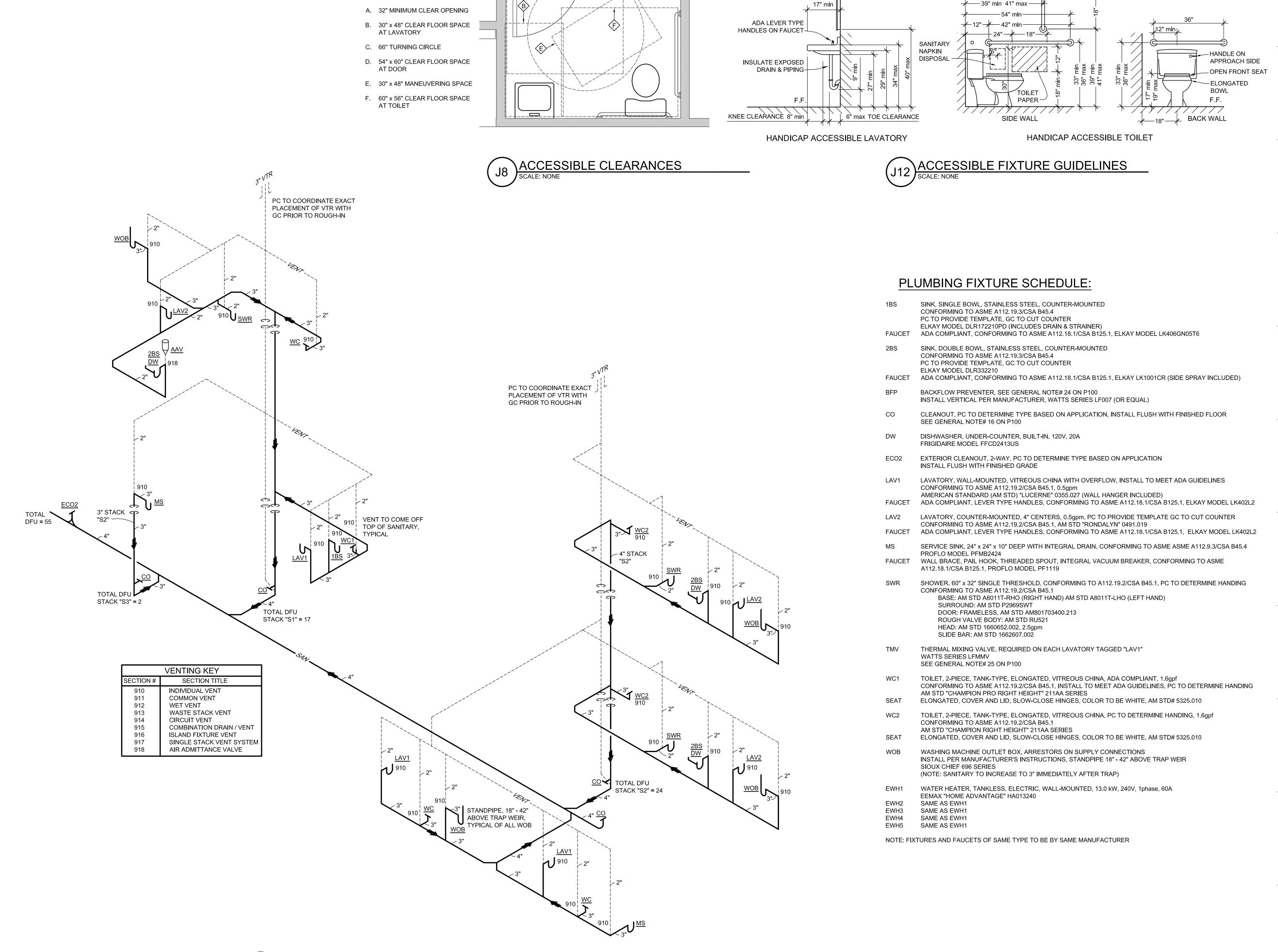
NEW LEAF RENOVATION 96 HIGH ST GLOUSTER, OH 45732

3rd FLOOR SANITARY PLAN

3rd FLOOR SUPPLY PLAN

PROJECT NUMBER 23020

THIRD FLOOR SANITARY PLAN
SCALE: 1/4" = 1'-0"



MIRROR-

♦ LEGEND

b d t ARCHI

26 E. Park Drive, Athens, Ohio 45701 OFFICE 740-592-2420

BRAB BARS 1-1/4" TO 1-1/2" DIA,
 MIN. 1-1/2" CLEARANCE TO WALL

ONLINE www.bdtaid.com EMAIL office@bdtaid.com

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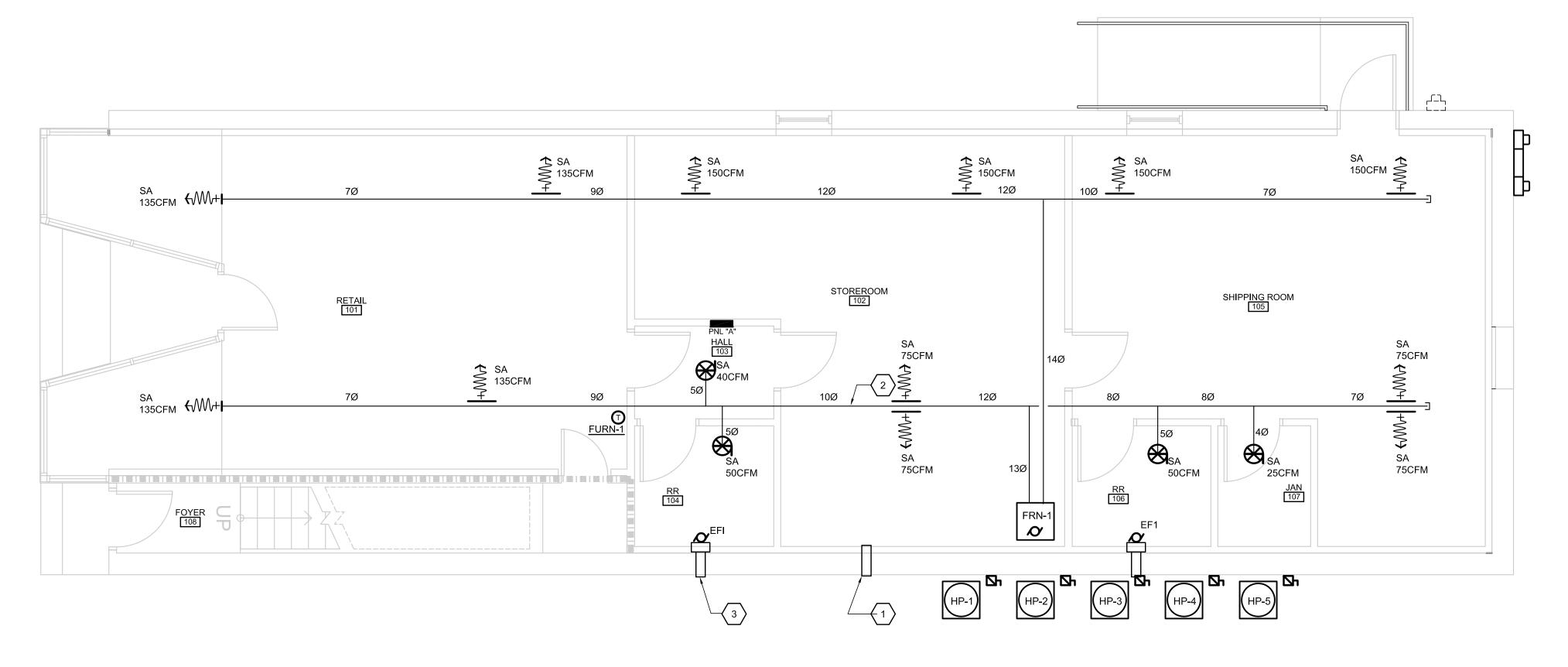
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PROJECT NUMBER 23020

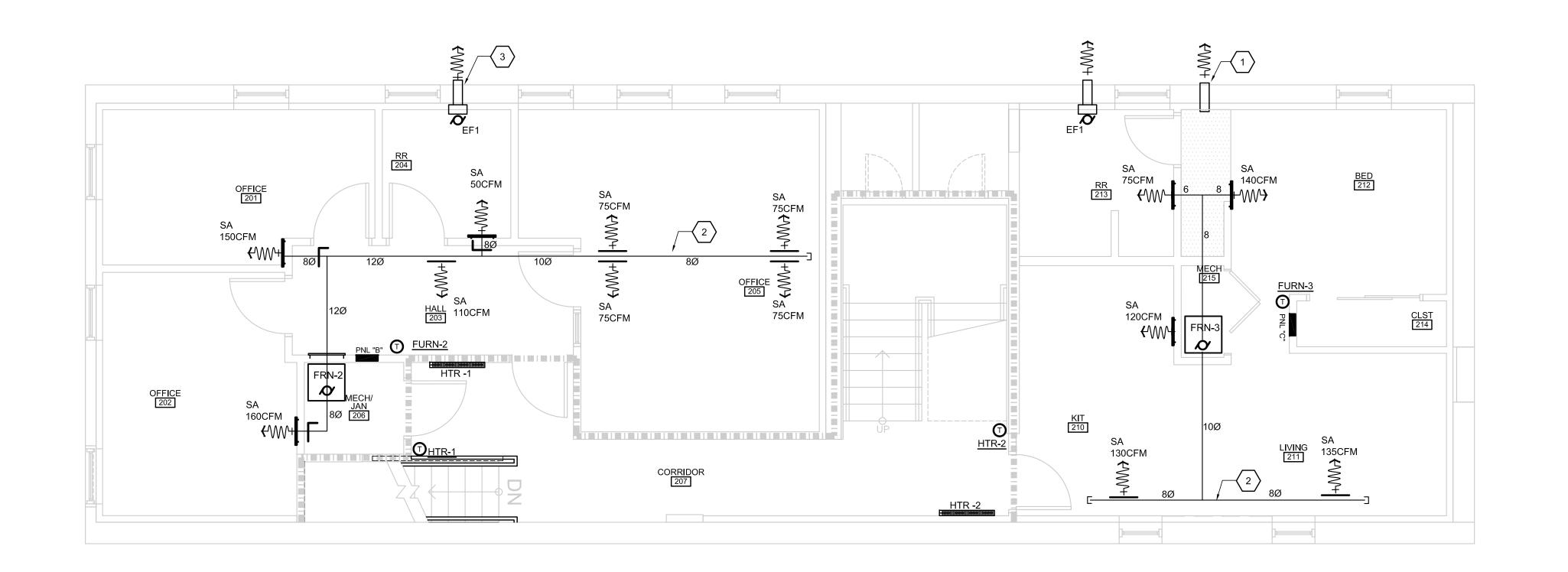
SHEET TITLE
ISOMETRIC
FIXTURE SCHEDULE

ADA CLEARANCE DETAILS

P601







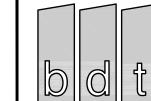
N SECOND FLOOR MECHANICAL PLAN

GENERAL MECHANICAL NOTES:

- 1. ALL HVAC WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL MECHANICAL CODE AND LOCAL CODES AS THEY APPLY TO THE INSTALLATION OF ALL HVAC EQUIPMENT SHOWN IN THESE DOCUMENTS AND IS SUBJECT TO THE APPROVAL OF SITE INSPECTOR ASSIGNED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
- 2. AFTER INSTALLATION, THE INSTALLER IS RESPONSIBLE FOR BALANCING AIR FLOW FROM EACH DIFFUSER TO WITH-IN 5% OF THE LISTED CFM AT THE STATIC PRESSURE LISTED. THIRD PARTY TESTING IS NOT REQUIRED UNLESS REQUESTED BY OWNER.
- 3. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT OR ENGINEER AND RESOLVED BEFORE WORK COMMENCES ON THE ISSUE IN QUESTION.
- 4. ALL DIFFUSER AND DUCT LOCATIONS ARE APPROXIMATELY ONLY AND MAY BE MOVED SLIGHTLY DUE TO UNSEEN OBSTRUCTIONS AND INTERFERENCES. WHERE EQUIPMENT RELOCATION IS REQUIRED, CONTACT THE OWNER'S ARCHITECT OR ENGINEER FOR EVALUATION AND DOCUMENTATION UPDATE. CONTRACTOR IS RESPONSIBLE TO IDENTIFY OBSTRUCTIONS AND OBSTACLES PRIOR TO INSTALLING ANY EQUIPMENT OR DUCT.
- 5. MAIN DUCTS AND EXPOSED DUCT TO BE GALVANIZED SHEET STEEL, SEE TABLE FOR MATERIAL THICKNESS.
- 6. ALL CONCEALED DUCTING LOCATED WITH-IN THE BUILDING ENVELOPE TO BE MIN R3.5 INSULATED.
- 7. HVAC CONTRACTOR CAN USE ALTERNATE SIZE OF DUCT SHOWN ON THE DRAWINGS, PROVIDED THE SAME CROSS SECTION AREA IS MAINTAINED.
- 8. FLEXIBLE DUCTS SHALL BE LABELED CLASS 0 OR CLASS 1 PER UL181. FLEXIBLE DUCTS ARE LIMITED TO 10'-0" IN LENGTH.
- 9. PROVIDE VOLUMETRIC DAMPERS AT EACH BRANCH DUCT.
- 10. ALL RECTANGULAR SUPPLY DUCT CHANGES IN DIRECTION SHALL HAVE TURNING VANES.
- 11. DIFFUSER AND GRILL SIZE TO BE SELECTED FROM MANUFACTURERS CHART FOR DESIRED FACE VELOCITY. RECOMMENDED FACE VELOCITIES ARE 500 TO 800 FPM FOR SUPPLIES, 400 TO 600 FOR RETURNS (MAX. 450 FOR FILTER RETURNS).
- 12. HVAC CONTRACTOR TO SUPPLY, INSTALL, WIRE AND TEST ALL THERMOSTATS. THERMOSTATS TO BE 7 DAY PROGRAMMABLE TYPE.
- 13. HVAC CONTRACTOR TO SUPPLY AND INSTALL ALL INTERIOR HOUSEKEEPING PADS.
- 14. ALL ROOF INSTALLATIONS AND PENETRATIONS TO BE COORDINATED WITH ROOF INSTALLER.
- 15. ALL REFRIGERANT PIPING TO BE INSTALLED PER OMC SECTION 1107. AT EXTERIOR CONDENSING UNITS PROVIDE LOCKING TAMPER RESISTANT LOCKS OR CAPS AT SERVICE PORTS.
- 16. USE PVC CONCENTRIC VENTS FOR HIGH EFFICIENCY FURNACES, PENETRATIONS THROUGH THE ROOF. VENTS TO BE 10'-0" FROM OUTSIDE AIR INTAKES AND OPERABLE WINDOWS.
- 17. FINAL EQUIPMENT SELECTION PER OWNER AND MECHANICAL CONTRACTOR. IF SELECTED UNITS DIFFERS FROM THE UNITS NOTED ON THESE DRAWINGS, VERIFY POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR AND GAS SUPPLY REQUIREMENTS WITH PLUMBING CONTRACTOR. ALL HVAC EQUIPMENT TO BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS. MANUFACTURER'S INSTRUCTIONS TO REMAIN AT SITE FOR INSPECTION OF WORK.

CODED NOTES:

- DRYER VENT THROUGH-WALL EXHAUST PIPE WITH RAIN HOOD ON EXTERIOR WALL.
- 2. NEW EXPOSED DUCTWORK. SINGLE WALL SPIRAL WOUND GALVANIZED PIPE WITH INTERNAL INSULATION LINER. PAINT DUCT
- 3. EXHAUST VENT THROUGH-WALL EXHAUST PIPE WITH RAIN HOOD ON EXTERIOR WALL. CONNECT TO EXHAUST FAN



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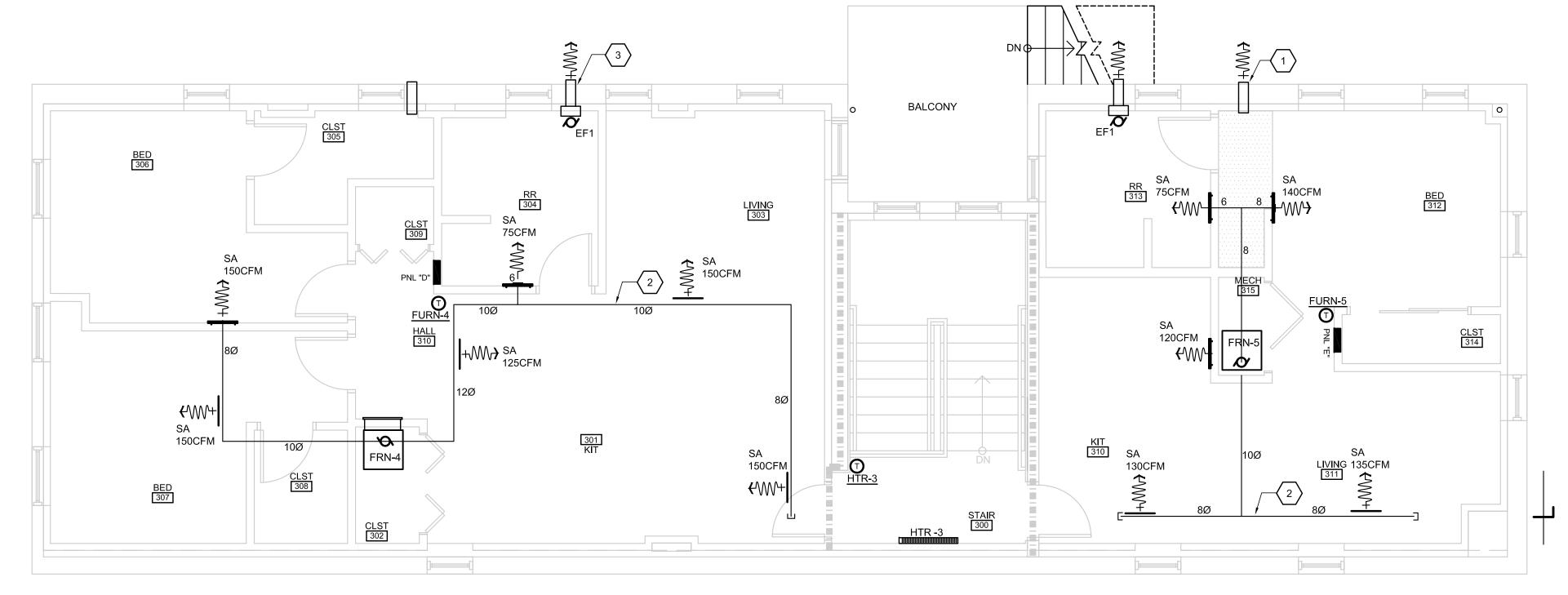
NEW LEAF RENOVATION 96 HIGH ST GLOUSTER, OH 45732

PROJECT NUMBER 23020
DATE DRAWN

SHEET TITLE
MECHANICAL DETAILS &

MECHANICAL DETAILS & SCHEDULES

M101



N
G8 THIRD FLOOR MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

							RWISE EQUIP	
TAG	MODEL	LENGTH	BTU/HR	WATTS	VOLTS/ PHASE	MCA.	МОСР	REMARKS
HTR-1	2543W	3'-0"	-	750	240/1Ø	6.2	20	-
HTR-2	2543W	3'-0"	-	750	240/1Ø	6.2	20	-
HTR-3	2543W	3'-0"	-	750	240/1Ø	6.2	20	-

	HEAT PUMP UNLESS NOTED OTHERWISE EQUIPMENT BASED ON CARRIER											
TAG	MODEL	INDOOR UNIT	COOLING BTU/HR	SEER	INDOOR UNIT COOLING COIL	VOLTS/ PHASE	MCA.	MOCP	REMARKS			
HP-3	25HCE4	-	18,000	14.0	1-1/2 TON	230V / 1Ø	11.8	20	-			
HP-5	25HCE4	-	18,000	14.0	1-1/2 TON	230V / 1Ø	11.8	20	-			
HP-2	25HCE4	-	24,000	14.0	2 TON	230V / 1Ø	14.2	25	-			
HP-4	25HCE4	-	24,000	14.0	2 TON	230V / 1Ø	14.2	25	-			
HP-1	25HCE4	-	48,000	14.0	4 TON	230V / 1Ø	25.2	40	-			

	FAN COIL UNLESS NOTED OTHERWISE EQUIPMENT BASED ON CARRIER											
TAG	MODEL	TYPE	COOLING BTU/HR	CFM	INPUT HEATING kWATT	COOLING COIL	VOLTS/ PHASE	MCA.	MOCP	CIRCUIT	REMARKS	
FURN-3	FB4C	UPFLOW	18,000	600	5	1-1/2 TON	230V/1P	28.5	30	SINGLE		
FURN-5	FB4C	UPFLOW	18,000	600	5	1-1/2 TON	230V/1P	28.5	30	SINGLE		
FURN-2	FB4C	UPFLOW	24,000	800	8	2 TON	230V/1P	48.5	50	SINGLE		
FURN-4	FB4C	UPFLOW	24,000	800	8	2 TON	230V/1P	48.5	50	SINGLE		
FURN-1	FB4C	UPFLOW	48,000	1600	15	4 TON	230V/1P	55.2 / 20.0	60 / 25	DUAL		

RECTANGULAR	DUCT	ROUND DUCT	ROUND DUCT						
MAX. SIDE (IN INCHES)	METAL GAGE (GALV.)	MAX. SIDE (IN INCHES)	METAL GAGE (GALV.) SPIRAL SEAM	METAL GAGE (GALV.) LONGITUDINAL SEAM					
UP TO 12	26	UP TO 12	28	26					
13 TO 30	24	13 TO 18	26	24					
31 TO 54	22	19 TO 28	24	22					

MARK DESCRIPTION SA1 SPIRAL DUCT SUPPLY AIR DIFFUSER GALVANIZED FINISH SA2 24" x 24" LAY-IN SUPPLY AIR DIFFUSER WHITE SA3 ALUMINUM DRYWALL CEILING SUPPLY AIR DIFFUSER WHITE SA4 12" x 12" SUPPLY AIR REGISTER GALVANIZED FINISH R1 24" x 24" LAY-IN RETURN AIR GRILLE	D	IFFUSERS, REGISTERS AND GRILLES SCHEDULE
SA1 GALVANIZED FINISH SA2 24" x 24" LAY-IN SUPPLY AIR DIFFUSER WHITE SA3 ALUMINUM DRYWALL CEILING SUPPLY AIR DIFFUSER WHITE SA4 12" x 12" SUPPLY AIR REGISTER GALVANIZED FINISH 24" x 24" LAY-IN RETURN AIR GRILLE	MARK	DESCRIPTION
SA2 WHITE SA3 ALUMINUM DRYWALL CEILING SUPPLY AIR DIFFUSER WHITE SA4 12" x 12" SUPPLY AIR REGISTER GALVANIZED FINISH 24" x 24" LAY-IN RETURN AIR GRILLE	SA1	
SA3 WHITE 12" x 12" SUPPLY AIR REGISTER GALVANIZED FINISH 24" x 24" LAY-IN RETURN AIR GRILLE	SA2	
GALVANIZED FINISH 24" x 24" LAY-IN RETURN AIR GRILLE	SA3	7.20
P1	SA4	
VVIIIIE	R1	24" x 24" LAY-IN RETURN AIR GRILLE WHITE
R2 24" x 30" ALUMINUM WALL RETURN AIR GRILLE WHITE	R2	

	EQUIPMENT SCHEDULE
MARK	DISCRIPTION
Ţ	THERMOSTAT MOUNT AT MAX OF 48" A.F.F.

CODED NOTES:

- DRYER VENT THROUGH-WALL EXHAUST PIPE WITH RAIN HOOD ON EXTERIOR WALL.
- 2. NEW EXPOSED DUCTWORK. SINGLE WALL SPIRAL WOUND GALVANIZED PIPE WITH INTERNAL INSULATION LINER. PAINT DUCT
- 3. EXHAUST VENT THROUGH-WALL EXHAUST PIPE WITH RAIN HOOD ON EXTERIOR WALL. CONNECT TO EXHAUST FAN

GENERAL NOTES:

1. REFER TO M101 FOR GENERAL NOTES.

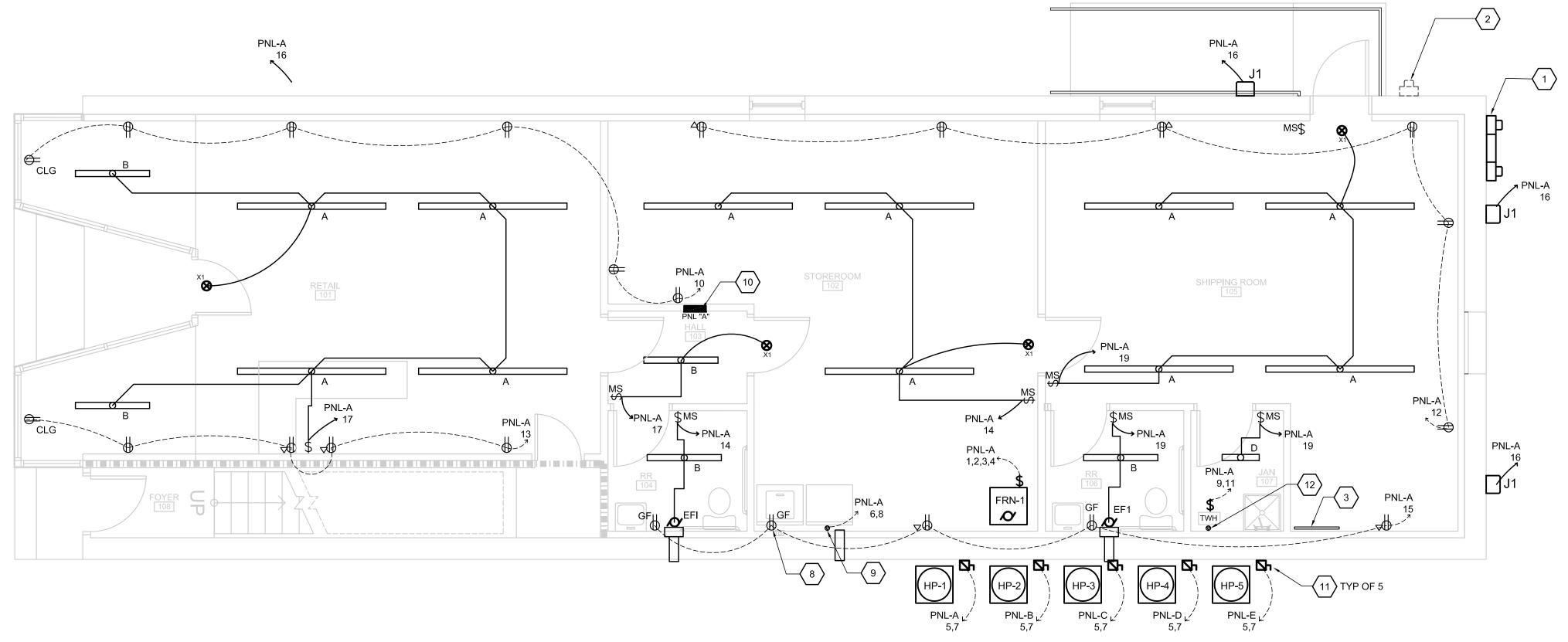
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In association with: PROFESSIONAL SEAL J. DISPENZA ___0012528 Donald J Dispenza, License #12528 Expiration Date 12/31/2025 ISSUE DATES DESCRIPTION 04/22/24 | BID/ PERMIT SET NEW LEAF RENOVATION 96 HIGH ST GLOUSTER, OH 45732 PROJECT NUMBER 23020 MECHANICAL DETAILS & SCHEDULES

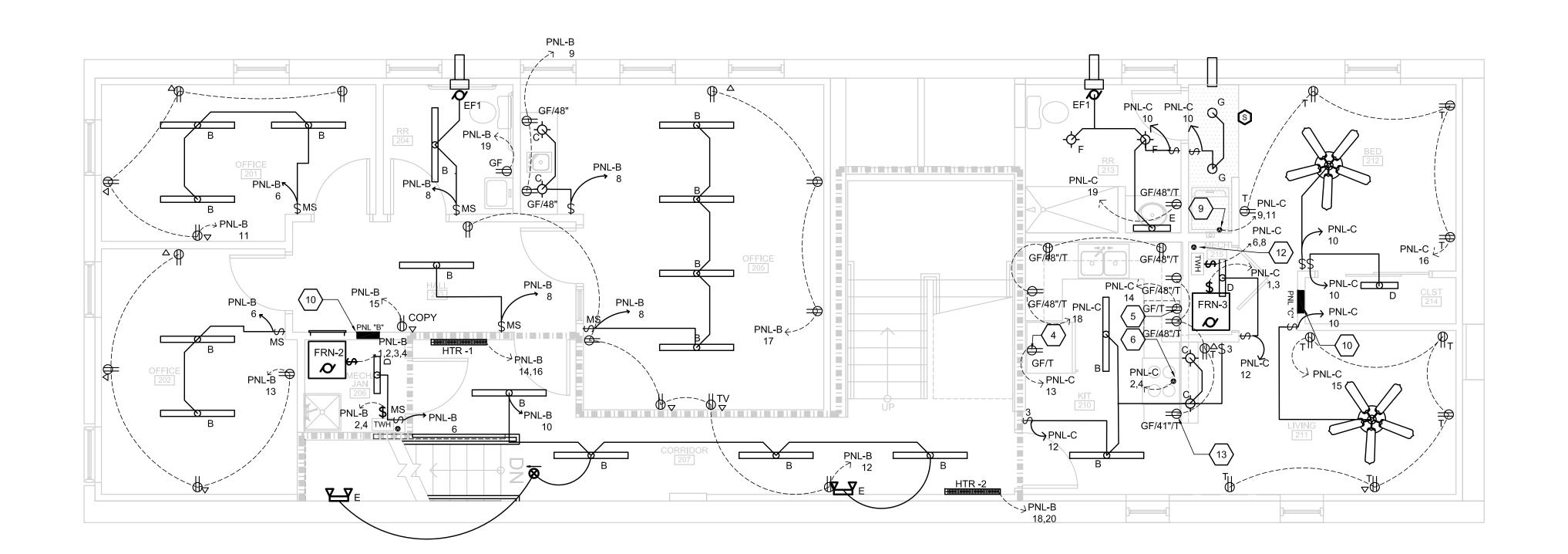
BDTAID, Inc.

26 E. Park Drive, Athens, Ohio 45701 **OFFICE** 740-592-2420

ONLINE www.bdtaid.com EMAIL office@bdtaid.com



FIRST FLOOR ELECTRICAL POWER AND LIGHTING PLAN



SECOND FLOOR ELECTRIC POWER AND LIGHTING PLAN

CODED NOTES:

- 1. UTILITY COMPANY DEMAND METER PER LOCAL UTILITY COMPANY REQUIREMENTS. SEE ELECTRICAL RISER DIAGRAM ON SHEET E601 FOR ADDITIONAL INFORMATION.
- 2. REMOVE EXISTING UTILITY DEMAND METER. COORDINATE REMOVAL WITH UTILITY COMPANY REQUIREMENTS
- 3. 3/4"x4'x4' PLYWOOD BACKBOARD FOR TELECOMMUNICATIONS EQUIPMENT. BOARD SHALL BE MOUNTED AT 7'-0" A.F.F. TO TOP OF BOX. DOUBLE DUPLEX OUTLET SHALL BE MOUNTED ON BOARD AT 48" A.F.F. TO TOP OF BOX.
- 4. RECEPTACLE FOR REFRIGERATOR/FREEZER (120 VOLT, 8.5 AMPS). RECEPTACLE SHALL BE MOUNTED AT 48" A.F.F. TO TOP OF BOX.
- 5. RECEPTACLE FOR DISHWASHER (120 VOLT, 6.3 AMPS). RECEPTACLE SHALL BE MOUNTED UNDER SINK AT 20" A.F.F. TO TOP OF BOX.
- 6. 40 AMP, 240 VOLT RECEPTACLE FOR RANGE (240 VOLT). RECEPTACLE SHALL BE MOUNTED AT 20" A.F.F. TO TOP OF BOX. VERIFY EXACT NEMA CONFIGURATION PRIOR TO ROUGH-IN.
- 7. RECEPTACLE FOR COPIER (120 VOLT, 12.0 AMPS). RECEPTACLE SHALL BE MOUNTED AT 48" A.F.F. TO TOP OF
- 8. RECEPTACLE FOR WASHER (120 VOLT, 8.0 AMPS). RECEPTACLE SHALL BE MOUNTED AT 48" A.F.F. TO TOP OF
- 9. 30 AMP, 240 VOLT RECEPTACLE FOR DRYER (240 VOLT). RECEPTACLE SHALL BE MOUNTED AT 20" A.F.F. TO TOP OF
- 10. <u>SUB PANEL;</u> FLUSH-MOUNTED PANEL, MAIN LUG ONLY. REFER TO PANEL SCHEDULES AND RISER DIAGRAM FOR SIZING. CIRCUIT NUMBER SHOWN ON PANEL ARE MIN, MORE CAN BE PROVIDED.
- 11. 208 VOLT CIRCUIT EACH TO OUTDOOR UNIT HEAT PUMPS. MAKE FINAL CONNECTIONS.
- 12. 208 VOLT CIRCUIT EACH TO TANKLESS WATER HEATER. MAKE FINAL CONNECTIONS
- 13. SEE DETAIL A12/A401 FOR OUTLET ORIENTATION.

GENERAL NOTES:

- 1. CODED NOTES ARE STANDARDIZED. NOT ALL NOTES APPLY TO EACH SHEET.
- 2. ALL OUTLETS WITHIN APARTMENT UNITS TO BE TAMPERPROOF
- 3. ALL OUTLETS WITHIN BATHROOM OR KITCHENS OR KITCHENETTES TO BE GFC1 TYPE



BDTAID, Inc.

26 E. Park Drive, Athens, Ohio 45701 **OFFICE** 740-592-2420 ONLINE www.bdtaid.com EMAIL office@bdtaid.com

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ISSUE DATES

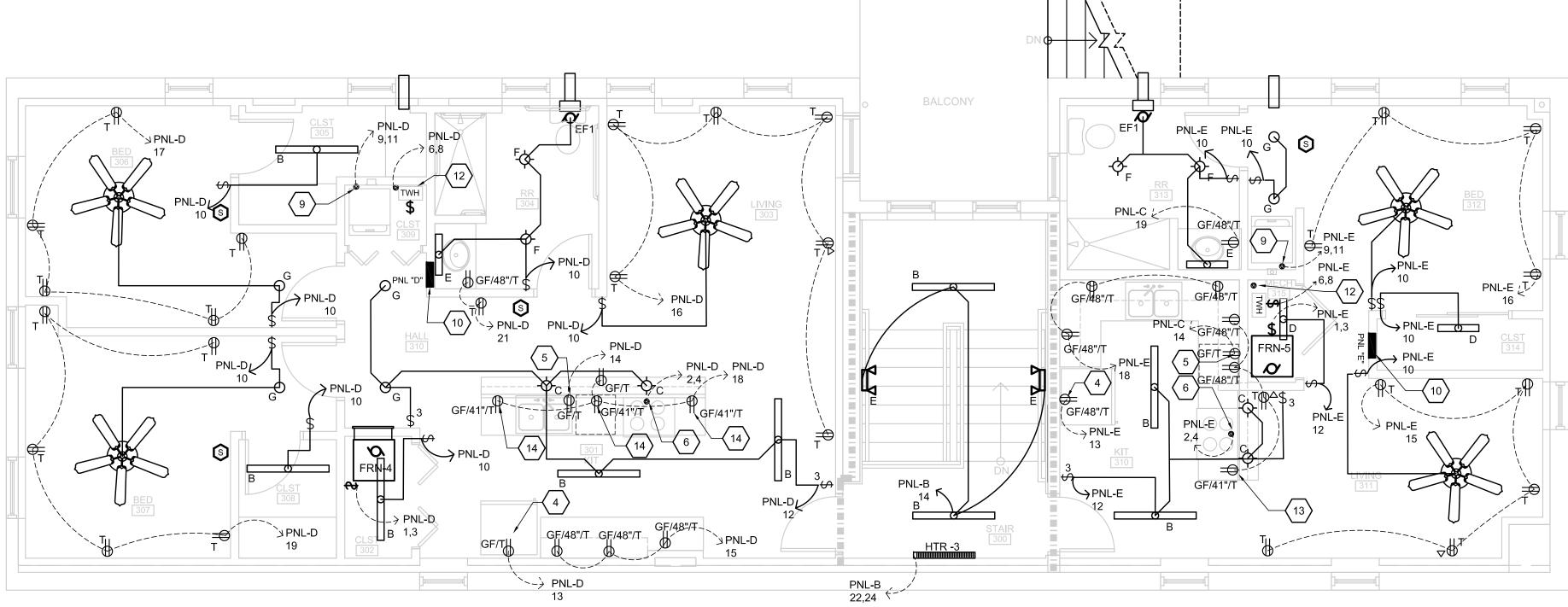
04/22/24 | BID/ PERMIT SET NEW LEAF RENOVATION 96 HIGH ST

GLOUSTER, OH 45732

PROJECT NUMBER 23020

FIRST AND SECOND ELECTRICAL **PLANS**

E101



N	
	THIRD FLOOR ELECTRIC POWER AND LIGHTING PLAN SCALE: 1/4" = 1'-0"
	SCALE: 1/4" = 1'-0"

ELECTRICA	AL FIXTURE SCHEDULE
Ф	DUPLEX OUTLET, 120 VOLT, 20 AMP. MOUNT AT 20" A.F.F. TO TOP OF BOX, U.N.O.
⊌ ^{GF}	DUPLEX OUTLET, 120 VOLT, 20 AMP, GROUND-FAULT CIRCUIT INTERRUPTER TYPE MOUNT AT 48" A.F.F. TO TOP OF BOX, UNLESS NOTED OTHERWISE.
₩ GF WP	DUPLEX OUTLET, 120 VOLT, 20 AMP, GROUND-FAULT CIRCUIT INTERRUPTER TYPE WITH WEATHERPROOF "IN-USE" COVER MOUNT AT 48" A.F.F. TO TOP OF BOX, UNLESS NOTED OTHERWISE.
₽	DUPLEX OUTLET, 120 VOLT, 20 AMP. TAMPER RESISTANT, MOUNT AT 20" A.F.F. TO TOP OF BOX, U.N.O.
⊕ ^{CLG}	DUPLEX OUTLET, 120 VOLT, 20 AMP. CEILING MOUNTED.
•	TELECOMMUNICATIONS JACK. ELECTRICAL CONTRACTOR SHALL PROVIDE 2"x4"x2" JUNCTION BOX WITH DRYWALL FLANGE AND 1/2" CONDUIT TO ABOVE ACCESSIBLE CEILING. MOUNT JUNCTION BOX AT 20" A.F.F., U.N.O. CABLING, JACK, COVERPLATE AND FINAL TERMINATIONS SHALL BE BY OWNER'S REPRESENTATIVE.
⊘ _{EF1}	RESTROOM EXHAUST FAN (120 VOLT, 0.4 AMPS). FAN SHALL BE SWITCHED WITH RESTROOM LIGHT.
	30 AMP, 240 VOLT RECEPTACLE FOR DRYER (240 VOLT). RECEPTACLE SHALL BE MOUNTED AT 20" A.F.F. TO TOP OF BOX, U.N.O.
S	SMOKE ALARM, CEILING-MOUNTED, 120V WITH BATTERY BACKUP, INTERCONNECTED IN EACH APARTMENT
ㅁ	DISCONNECT, USE NEMA 3R TYPE AT EXTERIOR

_	ONIOLE DOLE OMITOLI (400 VOLT, 00 AMB). MOUNT DELIGE AT 401 A E.E. TO TOD OF DOV. LLV. C
<u> </u>	SINGLE POLE SWITCH (120 VOLT, 20 AMP). MOUNT DEVICE AT 48" A.F.F. TO TOP OF BOX, U.N.O.
\$ ³	THREE-WAY SWITCH (120 VOLT, 20 AMP). MOUNT DEVICE AT 48" A.F.F. TO TOP OF BOX, U.N.O.
D	SINGLE-POLE ELECTRONIC 0-10V SLIDE DIMMER (1200 WATT, 120 VOLT, 20 AMP) WITH LED LIGHT LEVEL INDICATOR, TAP ON TO PRESET LEVEL, PUSH SLIDE TO ADJUST LIGHT LEVEL, WHITE WITH WHITE COVERPLATE. MOUNT DEVICE AT 48" A.F.F. TO TOP OF BOX, U.N.O. (LEVITON ILLUMATECH "IP710-DLZ" OR APPROVED EQUAL)
\$ ^{MS}	150 WATT MOTION SENSOR, 120 VOLT, WHITE WITH WHITE COVERPLATE. MOUNT DEVICE AT 48" A.F.F. TO TOP OF BOX, U.N.O. (LEVITON TOPGREENER "TD0S5-J-W" OR APPROVED EQUAL)
ф _С	LED CORD-HUNG PENDANT; CORD-HUNG PENDANT WITH CLEAR GLASS SHADE AND INNER WOOD DIFFUSER (MEDIUM), DOME CANOPY (SATIN NICKEL FINISH), 800 LUMENS, 9 WATT REPLACEABLE LED LAMP, 120 VOLT. FIXTURE SHALL BE SUSPENDED AT 7'-0" A.F.F. TO BOTTOM OF FIXTURE. (BESA LIGHTING DANO "1JC-DANOCLMD-LED-SN" OR APPROVED EQUAL)
В	4' LED STRIP; NARROW SUSPENDED LED STRIP, STEEL HOUSING WITH CURVED, FROSTED ACRYLIC LENS, 5851 LUMENS, WIDE DISTRIBUTION, 49.4 WATT INPUT, 0-10 VOLT DIMMABLE LED DRIVER, 120/277 VOLT. FIXTURE SHALL BE SUSPENDED AT 8'-0" A.F.F TO BOTTOM OF FIXTURE. (COLUMBIA LIGHTING "MPS4-40HL-CN-EDU" OR APPROVED EQUAL)
D D	2' LED STRIP; NARROW SUSPENDED LED STRIP, STEEL HOUSING WITH CURVED, FROSTED ACRYLIC LENS, 3700 LUMENS, WIDE DISTRIBUTION, 49.4 WATT INPUT, 0-10 VOLT DIMMABLE LED DRIVER, 120/277 VOLT WITH 48" ADJUSTABLE CABLE MOUNTING KIT, 3 WIRE FEED. FIXTURE SHALL BE SUSPENDED AT 8'-0" A.F.F. TO BOTTOM OF FIXTURE. (COLUMBIA LIGHTING "MPS2-40HL-CW-EDU-CN48CF3-KIT" OR APPROVED EQUAL)
A A	8' LED STRIP; NARROW SUSPENDED LED STRIP, STEEL HOUSING WITH CURVED, FROSTED ACRYLIC LENS, 11710 LUMENS, WIDE DISTRIBUTION, 98.8 WATT INPUT, 0-10 VOLT DIMMABLE LED DRIVER, 120/277 VOLT WITH 48" ADJUSTABLE CABLE MOUNTING KIT, 3 WIRE FEED. FIXTURE SHALL BE SUSPENDED AT 8'-0" A.F.F. TO BOTTOM OF FIXTURE. (COLUMBIA LIGHTING "MPS8-40HL-CW-EDU-CN48CF3-KIT" OR APPROVED EQUAL)
∳ _F	LED PENDANT FIXTURE; PLATED STEEL HOUSING (OILED BRONZE FINISH) WITH WHITE TIFFANY GLASS, 1343 LUMENS, 24 WATT REPLACEABLE LED LAMP, 120 VOLT. FIXTURE SHALL BE CAPABLE OF USE AT SLOPED CEILING. FIXTURE SHALL BE SUSPENDED AT 11'-6" A.F.F. TO BOTTOM OF FIXTURE. (OXYGEN LIGHTING DANO "3-6204-22" OR APPROVED EQUAL)
■ E	2' LED STRIP; ABOVE LAV; 15 WATT INPUT, 1300 LUMENS, 120 VOLT.
J1	LED WALL PACK; DIE CAST ALUMINUM HOUSING, FIVE STAGE FINISH PROCESS (DARK BRONZE FINISH), OPTICAL ONE-PIECE CARTRIDGE SYSTEM OF A LED ENGINE, LED LAMPS, OPTICS, GASKET AND STAINLESS STEEL BEZEL, TWO-PIECE DIE CUT SILICONE AND POLYCARBONATE FOAM GASKET ENSURES A WEATHERPROOF SEAL AROUND EACH INDIVIDUAL LED; BACK PLATE IS DESIGNED FOR DIRECT WALL MOUNTING OR MOUNTING TO A RECESSED 4" JUNCTION BOX, 5610 LUMENS, 4000K COLOR TEMPERATURE, TYPE II DISTRIBUTION, 55 WATT INPUT LED DRIVER, 120 VOLT. FIXTURE SHALL BE MOUNTED AT 13'-0" A.F.G. TO BOTTOM OF FIXTURE. (HUBBELL LIGHTING BEACON "TRV-D/24L-55/4K7/2/UNV/DB" OR APPROVED EQUAL)
o _G	6" DIA. RECESSED LED CAN LIGHT2; 15 WATT INPUT, 1025 LUMENS, 120 VOLT.
	CEILING FAN/ LIGHT
⊗ _{X1}	EXIT SIGN; SINGLE FACE RED-LETTER STENCIL FACE EXIT SIGN WITH 90 MINUTE BATTERY BACKUP, 120 VOLT. FIXTURE SHALL BE CEILING-MOUNTED (DUALLITE "EVCURW" OR APPROVED EQUAL).
 ⊗ _{X2}	EXIT SIGN; DUAL FACE RED-LETTER STENCIL FACE EXIT SIGN WITH 90 MINUTE BATTERY BACKUP, 120 VOLT. FIXTURE SHALL BE CEILING-MOUNTED. ARROW INDICATES DIRECTION OF CHEVRON KNOCKOUT. (DUALLITE "EVCURW" OR APPROVED EQUAL).
8 _{X3}	EXIT SIGN; SINGLE FACE RED-LETTER STENCIL FACE EXIT SIGN WITH 90 MINUTE BATTERY BACKUP, 120 VOLT. FIXTURE SHALL BE MOUNTED DIRECTLA ABOVE THE DOOR. (DUALLITE "EVCURW" OR APPROVED EQUAL).
NL	"NIGHT LIGHT" FIXTURE.
A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
U.N.O.	UNLESS NOTED OTHERWISE

NOTE: MOUNTING HEIGHTS ARE TO TOP OF DEVICE, UNLESS NOTED OTHERWISE

CODED NOTES:

- UTILITY COMPANY DEMAND METER PER LOCAL UTILITY COMPANY REQUIREMENTS. SEE ELECTRICAL RISER DIAGRAM ON SHEET E601 FOR ADDITIONAL INFORMATION.
- 2. REMOVE EXISTING UTILITY DEMAND METER. COORDINATE REMOVAL WITH UTILITY COMPANY REQUIREMENTS
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- 4. RECEPTACLE FOR REFRIGERATOR/FREEZER (120 VOLT, 8.5 AMPS). RECEPTACLE SHALL BE MOUNTED AT 48" A.F.F. TO TOP OF BOX.
- 5. RECEPTACLE FOR DISHWASHER (120 VOLT, 6.3 AMPS).
 RECEPTACLE SHALL BE MOUNTED UNDER SINK AT 20" A.F.F.
 TO TOP OF BOX.
- 6. 40 AMP, 240 VOLT RECEPTACLE FOR RANGE (240 VOLT). RECEPTACLE SHALL BE MOUNTED AT 20" A.F.F. TO TOP OF BOX. VERIFY EXACT NEMA CONFIGURATION PRIOR TO ROUGH-IN.
- 7. RECEPTACLE FOR COPIER (120 VOLT, 12.0 AMPS).
 RECEPTACLE SHALL BE MOUNTED AT 48" A.F.F. TO TOP OF BOX.
- 8. RECEPTACLE FOR WASHER (120 VOLT, 8.0 AMPS).
 RECEPTACLE SHALL BE MOUNTED AT 48" A.F.F. TO TOP OF BOX.
- 9. 30 AMP, 240 VOLT RECEPTACLE FOR DRYER (240 VOLT).
 RECEPTACLE SHALL BE MOUNTED AT 20" A.F.F. TO TOP OF
- 10. <u>SUB PANEL;</u> FLUSH-MOUNTED PANEL, MAIN LUG ONLY. REFER TO PANEL SCHEDULES AND RISER DIAGRAM FOR SIZING. CIRCUIT NUMBER SHOWN ON PANEL ARE MIN, MORE CAN BE PROVIDED.
- 208 VOLT CIRCUIT EACH TO OUTDOOR UNIT HEAT PUMPS. MAKE FINAL CONNECTIONS.
- 12. 208 VOLT CIRCUIT EACH TO TANKLESS WATER HEATER. MAKE FINAL CONNECTIONS.
- 13. SEE DETAIL A12/A401 FOR OUTLET ORIENTATION.
- 14. SEE DETAIL F12/A401 FOR OUTLET ORIENTATION.

GENERAL NOTES:

- CODED NOTES ARE STANDARDIZED. NOT ALL NOTES APPLY TO EACH SHEET.
- ALL OUTLETS WITHIN APARTMENT UNITS TO BE TAMPERPROOF
- ALL OUTLETS WITHIN BATHROOM OR KITCHENS OR KITCHENETTES TO BE GFC1 TYPE

PROFESSIONAL SEAL

F DONALD J. DISPENZA 0012528

Donald J Dispenza, License #12528
Expiration Date 12/31/2025

ISSUE DATES

NO. DATE DESCRIPTION

04/22/24 BID/ PERMIT SET

26 E. Park Drive, Athens, Ohio 45701 **OFFICE** 740-592-2420

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SHEET TITLE
THIRD FLOOR ELECTRICAL
PLAN, DETAILS, SCHEDULES

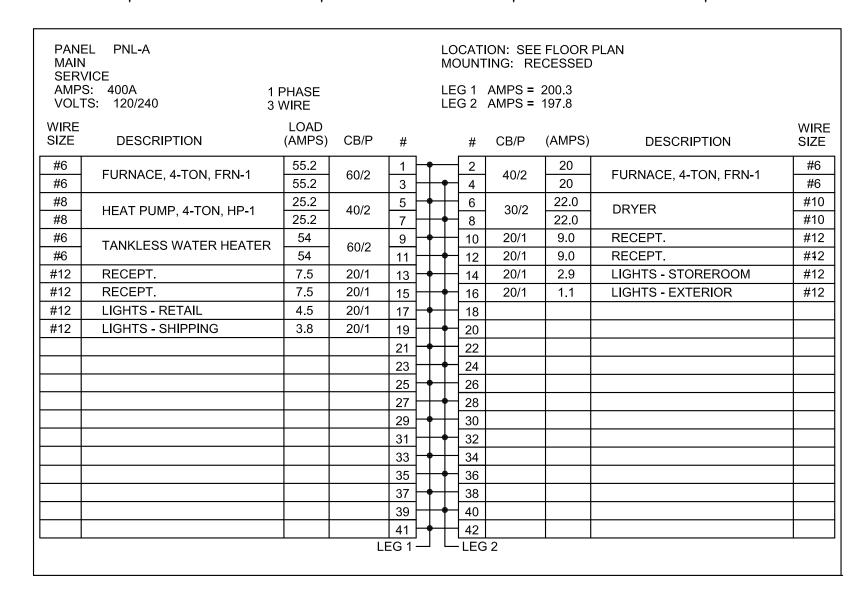
NEW LEAF RENOVATION

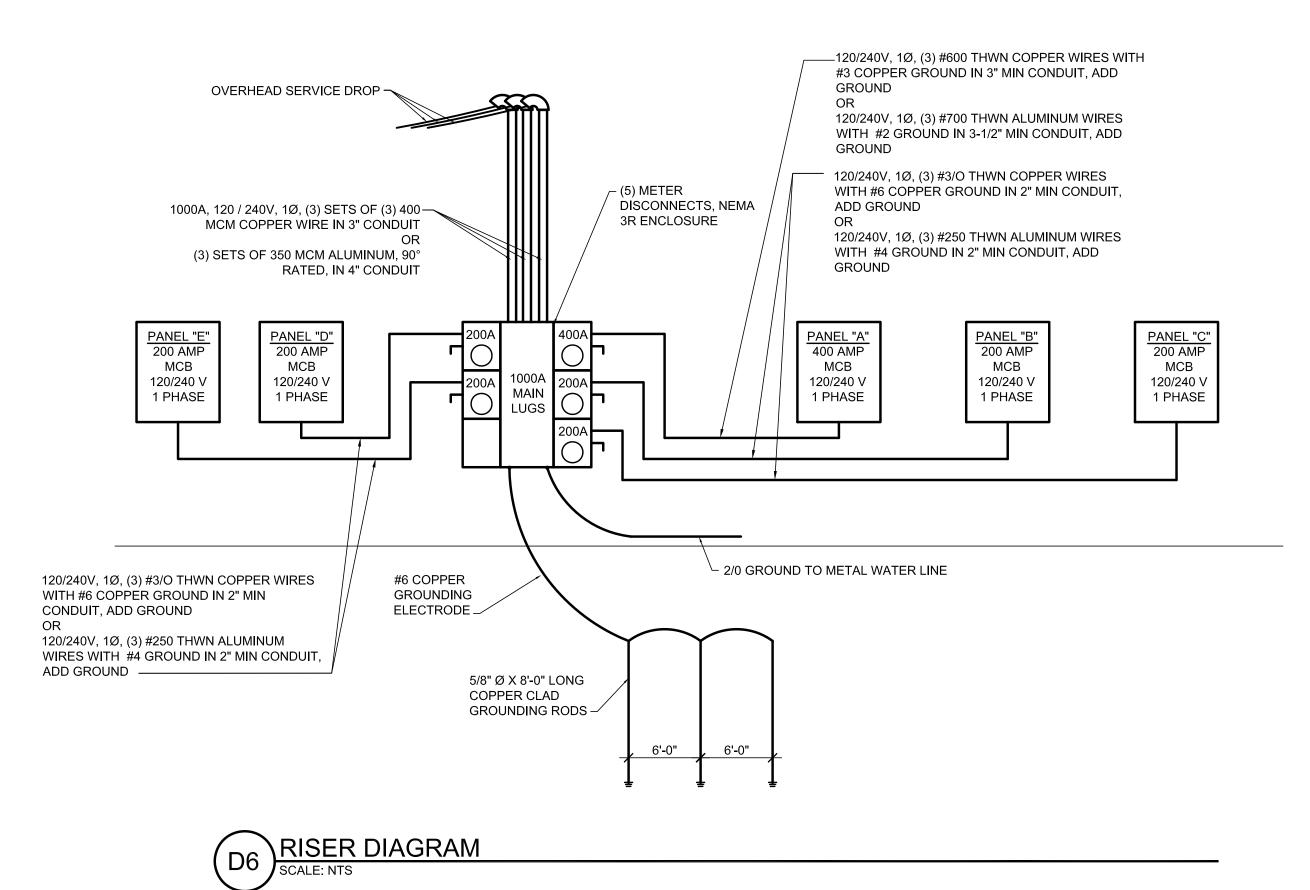
GLOUSTER, OH 45732

96 HIGH ST

F102

PROJECT NUMBER 23020





	S: 200A	1 PHASE						AMPS =			
VOLT	S: 120/240	3 WIRE				LEG :	2 <i>F</i>	AMPS =	145.1		
WIRE SIZE	DESCRIPTION	LOAD (AMPS)	CB/P	#		7	#	CB/P	(AMPS)	DESCRIPTION	\ S
#6 #6	FURNACE, 2-TON, FRN-2	48.5 48.5	50/2	1 3			2 4	60/2	54 54	TANKLESS WATER HEATER	\vdash
#8	LIEAT BUND O TON LIB O	14.2	05.0	5	-	+	6	20/1	2.2	LIGHTS	
#8	HEAT PUMP, 2-TON, HP-2	14.2	25/2	7	-	+ 7	8	20/1	2.6	LIGHTS	T
#12	RECEPT.	3.0	20/1	9	├	 1	0	20/1	2.5	LIGHTS- STAIRS/HALLWAY	
#12	RECEPT.	6.0	20/1	11		1	2	20/1	7.5	RECEPT.	
#12	RECEPT.	6.0	20/1	13	-	 1	4	20/2	3.1	BASEBOARD HEATER HTR-1	
#12	RECEPT COPY	1.5	20/1	15	\vdash	1	6	20/2	3.1	BASEBOARD HEATER HTR-T	
#12	RECEPT.	4.5	20/1	17	-	 1	8	20/2	3.1	BASEBOARD HEATER HTR-2	
#12	RECEPT RR	1.5	20/1	19		2	20	20/2	3.1	BASEBOARD HEATER HTR-2	
-	-	-	-	21	-	1 2	2	20/2	3.1	BASEBOARD HEATER HTR-3	
-	-	-	-	23	\vdash	+ 2	4	2012	3.1	BASEBOAND HEATEN HIN-S	:
-	-	-	-	25	-	<u> </u>	6	-	-	-	
-	-	-	-	27	\vdash	<u>+ 2</u>	8	-	-	-	
-	-	-	-	29	- +	 3	0	-	-	-	

CIRCUITS IN "UPPER CASE" LETTERS ARE CIRCUITS THAT HAVE BEEN MODIFIED. CIRCUITS IN "lower case" LETTERS ARE EXISTING, NO CHANGE.

12

MAIN SERV								CESSED		
		PHASE WIRE					AMPS = AMPS =			
WIRE SIZE	DESCRIPTION	LOAD (AMPS)	CB/P	#		#	CB/P	(AMPS)	DESCRIPTION	WIRE SIZE
#10 #10	FURNACE, 1.5-TON, FRN-3	28.5 28.5	30/2	1 3	•	2 4	40/2	32.0 32.0	RANGE	#8
#12 #12	HEAT PUMP, 1.5-TON, HP-3	11.8 11.8	20/2	5 7	+	6 8	60/2	54.0 54.0	TANKLESS WATER HEATER	#6 #6
#10 #10	DRYER	22.0 22.0	30/2	9		10 12	20/1 20/1	2.2	LIGHTS LIGHTS - KITCHEN	#12 #12
#12	RECEPT FRIDGE	1.5	20/1	13	+-	14	20/1	1.5	RECEPT DISHWASHER	#12
#12	RECEPT LNV RM	7.5	20/1	15	+	16	20/1	6.0	RECEPT BD RM	#12
#12	RECEPT KITCHEN	6.0	20/1	17	+ +	18	20/1	4.5	RECEPT KITCHEN	#12
#12	RECEPT BATH ROOM	1.5	20/1	19	+	20		-	-	-
-	_	-	-	21	+ +	22	-	-	-	-
-	-	-	-	23	+	24	-	-	-	-
-		-	-	25	+ +	26	-	-	-	-
-	-	-	-	27	 	28	-	-	-	-
-	-	-	-	29	+	30	-	-	-	-
				.EG 1 -		150	. 0			

CIRCUITS IN "UPPER CASE" LETTERS ARE CIRCUITS THAT HAVE BEEN MODIFIED. CIRCUITS IN "lower case" LETTERS ARE EXISTING, NO CHANGE.

PANEL PNL-D MAIN SERVICE					LOCATION: SEE FLOOR PLAN MOUNTING: RECESSED						
AMPS	S: 200A S: 120/240	1 PHASE 3 WIRE			_		AMPS = AMPS =				
WIRE SIZE	DESCRIPTION	LOAD (AMPS)	CB/P	#		#	CB/P	(AMPS)	DESCRIPTION	WIR SIZE	
#10 #10	FURNACE, 2-TON, FRN-4	48.5 48.5	50/2	1 3		2 4	40/2	32.0 32.0	RANGE	#8 #8	
#12 #12	HEAT PUMP, 2-TON, HP-4	18.3 18.3	30/2	5 7	+	6 8	60/2	54.0 54.0	TANKLESS WATER HEATER	#6 #6	
#10 # 1 0	DRYER	22.0 22.0	30/2	9		10	20/1 20/1	3.9 1.3	LIGHTS LIGHTS - KITCHEN	#12 #12	
#12	RECEPT FRIDGE	1.5	20/1	13	-	14	20/1	1.5	RECEPT DISHWASHER	#12	
#12	RECEPT KITCHEN	4.5	20/1	15	\dashv	16	20/1	9.0	RECEPT LVN RM	#12	
#12	RECEPT BED RM	7.5	20/1	17	-	18	20/1	6.0	RECEPT KITCHEN	#12	
#12	RECEPT BED RM	7.5	20/1	19	\dashv	20	_	-	-	-	
#12	RECEPT BATH/HALL	3.0	20/1	21	-	22	-	-	-	-	
-	-	-	-	23	\dashv	24	-	-	-	-	
-	_	-	-	25	+	26	-	-	_	-	
-	-	-	-	27	\dashv	28	-	-	-	-	
-		-	-	29	+	30	-	-	-	-	
			L	.EG 1 -		LEG	S 2				

CIRCUITS IN "UPPER CASE" LETTERS ARE CIRCUITS THAT HAVE BEEN MODIFIED. CIRCUITS IN "lower case" LETTERS ARE EXISTING, NO CHANGE.

MAIN MOUNTING: RECESSED SERVICE										
		PHASE WIRE					AMPS = AMPS =			
WIRE SIZE	DESCRIPTION	LOAD (AMPS)	CB/P	#		#	CB/P	(AMPS)	DESCRIPTION	WIR SIZE
#10 #10	FURNACE, 1.5-TON, FRN-5	28.5 28.5	30/2	1 3	1	2 4	40/2	32.0 32.0	RANGE	#8
#12 #12	HEAT PUMP, 1.5-TON, HP-5	11.8 11.8	20/2	5	*	- <u>6</u> - 8	60/2	54.0 54.0	TANKLESS WATER HEATER	#6 #6
#10 #10	DRYER	22.0 22.0	30/2	9	+	10	20/1 20/1	2.2	LIGHTS LIGHTS - KITCHEN	#12 #12
#12	RECEPT FRIDGE	1.5	20/1	13	+	14	20/1	1.5	RECEPT DISHWASHER	#12
#12 #12	RECEPT LNV RM RECEPT KITCHEN	7.5 6.0	20/1	15 17		16 18	20/1 20/1	6.0 4.5	RECEPT BD RM RECEPT KITCHEN	#12
#12	RECEPT BATH ROOM	1.5	20/1	19	+	20	-	-	-	-
-	-	_	-	21		22	-	-	-	-
-	-	-	-	25	++	26	-	-	-	-
-	-	-	-	27 29		28 30	-	-	-	-
		1 1	L	.EG 1 -						<u> </u>

PROFESSIONAL SEAL DONALD DISPENZA 0012528 Donald J Dispenza, License #12528 Expiration Date 12/31/2025 ISSUE DATES DESCRIPTION 04/22/24 BID/ PERMIT SET PROJECT TITLE NEW LEAF RENOVATION

ARCHITECTS & DESIGNERS

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BDTAID, Inc.

OFFICE 740-592-2420

ONLINE www.bdtaid.com

EMAIL office@bdtaid.com

BDT PROJECT NO: 23020

96 HIGH ST GLOUSTER, OH 45732

PROJECT NUMBER 23020

SHEET TITLE PANEL SCHEDULES AND DETAILS

ELECTRICAL SPECIFICATIONS

BASIC ELECTRICAL REQUIREMENTS

1. THE CONTRACTOR FOR THIS DIVISION OF WORK IS REQUIRED TO READ THE SPECIFICATIONS AND REVIEW DRAWINGS FOR ALL DIVISIONS OF WORK AND IS RESPONSIBLE FOR THE COORDINATION OF HIS WORK AND THE WORK OF HIS SUBCONTRACTORS WITH ALL DIVISIONS OF WORK. IT IS THIS CONTRACTOR'S RESPONSIBILITY TO PROVIDE HIS SUBCONTRACTORS WITH A COMPLETE SET OF BID DOCUMENTS.

2. THIS CONTRACTOR IS RESPONSIBLE FOR SCHEDULING THE COMPLETION AND INSPECTION OF HIS WORK AND THE WORK OF HIS SUBCONTRACTORS WORK TO COMPLY WITH THE SCHEDULE AND THE PROJECT COMPLETION DATE.

1. CONTRACTOR SHALL PROVIDE ALL INSURANCE, LABOR, MATERIALS, EQUIPMENT, SERVICES, TOOLS, TRANSPORTATION, INCIDENTALS, AND DETAILS NECESSARY TO PROVIDE A COMPLETE ELECTRICAL SYSTEM AS INTENDED ON THE DRAWINGS, CALLED FOR IN THE SPECIFICATIONS, AND AS REQUIRED BY JOB CONDITIONS. CLOSELY COORDINATE THE ENTIRE INSTALLATION WITH THE CONSTRUCTION MANAGER, AS REQUIRED.

2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO SUPPLEMENT EACH OTHER AND ANY MATERIAL OR LABOR CALLED FOR IN ONE SHALL BE FURNISHED AND INSTALLED EVEN THOUGH NOT SPECIFICALLY MENTIONED IN BOTH. ANY MATERIAL OR LABOR WHICH IS NEITHER SHOWN ON THE DRAWINGS NOR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK, AND WHICH IS USUALLY INCLUDED IN WORK OF SIMILAR CHARACTER, SHALL BE FURNISHED AND INSTALLED AS PART OF CONTRACT.

3. WHERE THE DRAWINGS OR SPECIFICATIONS CALL FOR ITEMS WHICH EXCEED CODES, THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING THE SYSTEM WITH THE MORE STRINGENT REQUIREMENTS AS DESIGNED AND DESCRIBED ON THESE DRAWINGS, UNLESS SPECIFICALLY NOTED OTHERWISE.

4. ALL ELECTRICAL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING MAINTAINING, AND REPAIRING. THIS CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUFFICIENT SERVICE ACCESS TO ALL

5. ALL WORK SHALL BE PERFORMED IN A NEAT PROFESSIONAL MANNER INCORPORATING GOOD ENGINEERING PRACTICES.

6. UNLESS SPECIFICALLY NOTED OTHERWISE, MATERIALS, PRODUCTS, AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW, UNDERWRITERS LABORATORIES LISTED AND LABELED AND SIZED IN CONFORMITY WITH REQUIREMENTS OF STATE AND LOCAL CODES, WHICHEVER IS MORE STRINGENT.

1. ALL WORK SHALL CONFORM TO STATE, COUNTY, CITY, AND LOCAL CODES AND ORDINANCES, SAFETY AND HEALTH CODES, NFPA CODES, NEC, ENERGY CODES, AND ALL OTHER APPLICABLE CODES AND REQUIREMENTS. THIS CONTRACTOR SHALL INQUIRE INTO AND COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, AND REGULATIONS. THIS CONTRACTOR SHALL INCLUDE ANY CHANGES REQUIRED BY CODES IN THE BID AND IF THESE CHANGES ARE NOT INCLUDED IN THE BID, THEY MUST BE QUALIFIED AS A SEPARATE LINE ITEM IN THE BID. AFTER CONTRACT IS ISSUED, NO ADDITIONAL COST DUE TO CODE ISSUES SHALL BE REIMBURSED TO THE CONTRACTOR.

D. LICENSES, PERMITS, INSPECTIONS & FEES

1. THIS CONTRACTOR SHALL OBTAIN AND PAY FOR ALL LICENSES, PERMITS, INSPECTIONS, AND FEES REQUIRED OR RELATED TO HIS WORK.

2. FURNISH TO THE CONSTRUCTION MANAGER ALL CERTIFICATES OF INSPECTION AND FINAL INSPECTION APPROVAL AT COMPLETION OF PROJECT.

E. TRADE NAMES, MANUFACTURERS, AND SHOP DRAWINGS

1. WHERE TRADE NAMES AND MANUFACTURERS ARE USED ON THE DRAWINGS OR IN THE SPECIFICATIONS, THE EXACT EQUIPMENT SHALL BE USED AS A MINIMUM FOR THE BASE BID. MANUFACTURERS CONSIDERED AS AN EQUAL OR BETTER IN ALL ASPECTS TO THAT SPECIFIED WILL BE SUBJECT TO APPROVAL IN WRITING BY THE ENGINEER PRIOR TO THE SHOP DRAWING SUBMITTAL PROCESS, FOR ACCEPTANCE. THE USE OF ANY UNAUTHORIZED EQUIPMENT SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

2. CONTRACTOR SHALL SUBMIT SUBSTITUTION REQUESTS TO THE ENGINEER FOR APPROVAL. SUBMISSIONS SHALL BE MADE EARLY ENOUGH IN PROJECT TO ALLOW FOUR (4) WORKING DAYS FOR THE ENGINEER'S REVIEW WITHOUT CAUSING DELAYS OR CONFLICTS TO THE JOB'S PROGRESS. SUBMITTALS SHALL BEAR THE STAMP OF THE CONTRACTOR AND THE SUB-CONTRACTOR SHOWING THAT HE HAS REVIEWED AND CONFIRMED THAT THE SUBMITTALS ARE IN CONFORMANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS OR INDICATE WHERE EXCEPTIONS HAVE BEEN TAKEN.

1. THIS CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORK PROVIDED UNDER HIS CONTRACT AND SHALL MAKE GOOD, REPAIR, OR REPLACE AT HIS OWN EXPENSE, ANY DEFECTIVE WORK, MATERIAL, OR EQUIPMENT WHICH MAY BE DISCOVERED WITHIN A PERIOD OF 12 MONTHS FROM THE DATE OF ACCEPTANCE (IN WRITING) OF THE INSTALLATION. EXTENDED WARRANTIES ARE AS SPECIFIED WITH INDIVIDUAL EQUIPMENT.

G.RECORD DRAWINGS

1. THIS CONTRACTOR SHALL MAINTAIN ONE COPY OF DRAWINGS ON THE JOB SITE TO RECORD DEVIATIONS FROM CONTRACT DRAWINGS.

2. AT COMPLETION OF THE PROJECT AND BEFORE FINAL APPROVAL, THE CONTRACTOR SHALL MAKE ANY FINAL CORRECTIONS TO DRAWINGS AND CERTIFY THE ACCURACY OF EACH PRINT BY SIGNATURE THEREON.

H. DISCREPANCIES IN DOCUMENTS

DRAWINGS (PLANS, SPECIFICATIONS, AND DETAILS) ARE DIAGRAMMATIC AND INDICATE THE GENERAL LOCATION AND INTENT OF THE ELECTRICAL SYSTEMS. WHERE DRAWINGS, SPECIFICATIONS OR OTHER TRADES CONFLICT OR ARE UNCLEAR, ADVISE THE CONSTRUCTION MANAGER IN WRITING, PRIOR TO SUBMITTAL OF BID. THE CONSTRUCTION MANAGER IS RESPONSIBLE TO ADVISE THE OWNER, IN WRITING, OF DISCREPANCIES IN THE CONTRACT DOCUMENTS PRIOR TO SUBMISSION OF BID. OTHERWISE. THE ARCHITECT INTERPRETATION OF CONTRACT DOCUMENTS OR CONDITIONS SHALL BE FINAL WITH NO ADDITIONAL COMPENSATION PERMITTED.

GENERAL PRODUCTS

A. RACEWAYS

1. MINIMUM RACEWAY SIZE IS 1/2" UNLESS NOTED OTHERWISE.

2. CONDUIT SHALL BE ELECTRICAL METALLIC TUBING (EMT) OR POLYVINYL CHLORIDE CONDUIT (PVC) 3. FLEXIBLE METAL CONDUIT MAY BE USED FOR FINAL CONNECTION TO LIGHT FIXTURES, FOR FINAL CONNECTION TO MOTORS. WHERE CONCEALED.

4. METAL CLAD CABLE (TYPE MC) MAY BE USED BETWEEN WIRING DEVICES WHERE ALLOWED BY CODE AND LOCAL

AUTHORITY HAVING JURISDICTION AND INSTALLED BE NEC ARTICLE 334. CONDUIT INSTALLED CONCEALED MAY BE EMT OR IC, UNLESS NOTED OTHERWISE.

6. EXTERIOR CONDUIT SUBJECT TO PHYSICAL DAMAGE SHALL BE SCHEDULE 80 PVC, UNLESS NOTED OTHERWISE. 7. UNDERGROUND OR IN-SLAB CONDUIT SHALL BE SCHEDULE 40 PVC, UNLESS NOTED OTHERWISE.

B. CONDUIT FITTINGS

1. IMC AND RGS: NON-SPLIT THREADED STEEL, ZINC DIE CAST IS NOT ACCEPTABLE.

2. EMT: COMPRESSION OR DOUBLE SET SCREW TYPE. 3. BUSHINGS SHALL BE METALLIC INSULATED TYPE

4. FACTORY BENDS SHALL BE USED FOR ANY CONDUIT SIZE 2" OR LARGER. UNDERGROUND BENDS SHALL BE SCHEDULE 80 PVC

C. OUTLET/JUNCTION /PULL BOXES

1. OUTLET BOXES SHALL BE PROVIDED AS SHOWN OR REQUIRED BY CODE.

2. OUTLET BOXES SHALL BE CODE GAUGE GALVANIZED STEEL, 4" SQUARE AND 2-1/8" DEEP WITH PLASTER RING.

3. PROVIDE RAISES COVERS AND FIXTURE STUDS FOR OUTLET BOXES WHERE REQUIRED. 4. PROVIDE BLANK COVERS FOR OUTLET BOXES WITHOUT DEVICES.

5. PROVIDE 6" SEPARATION BETWEEN BACK-TO-BACK OUTLET BOXES.

6. BOXES FOR OUTDOOR USE AND DAMP LOCATIONS SHALL BE WEATHERPROOF GASKETED CAST METAL TYPE. 7. BOXES IN HAZARDOUS LOCATIONS SHALL BE CASE FREE ALUMINUM OR AS REQUIRED TO SUIT INTENDED

8. ALL BOXES SHALL BE SIZED PER NEC REQUIREMENTS FOR NUMBER AND SIZE OF CONDUCTORS AND CONDUIT

ENTRIES TO SUIT INTENDED APPLICATION. 9. COVERS SHALL BE FULLY ENCLOSED AND SECURED AT ALL CORNERS.

10. GRADE MOUNTED PULL BOXES SHALL BE MADE OF CONCRETE CONSTRUCTION WITH BOLT DOWN CONCRETE COVERS. PROVIDE A MINIMUM 4" CONCRETE COLLAR AROUND PULL BOX.

11. FLOOR BOXES SHALL BE GALVANIZED CAST IRON TYPE WITH BRASS COVERS AND FLANGES SUITABLE FOR CONDUIT AND DEVICES INDICATED. FLOOR BOXES SHALL BE MANUFACTURED BY STEEL CITY OR APPROVED EQUAL.

D. WIRE AND CABLE

1. CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS LARGER THAN #10 AWG SHALL BE

STRANDED. 2. ALL CONDUCTORS SHALL BE MINIMUM 75 DEGREES C COPPER UNLESS NOTED OTHERWISE.

3. POWER AND LIGHTING CONDUCTOR SIZE SHALL BE MINIM #12 AWG UNLESS NOTED OTHERWISE. 4. CONDUCTOR INSULATION TYPE SHALL BE THHN/THWN UNLESS NOTED OTHERWISE.

5. ALL TERMINATIONS AND DEVICES SHALL BE LISTED FOR 75 DEGREES C UNLESS OTHERWISE NOTED. 6. ALL WIRING SHALL BE IDENTIFIED WITH MARKERS TO REFLECT CIRCUIT DESIGNATIONS AT ALL POINTS WHERE

7. ALUMINUM CONDUCTORS ARE ACCEPTABLE FOR FEEDERS 100A OR HIGHER.

8. THE FOLLOWING CONDUCTOR SIZES SHALL BE PROVIDED FOR 20A, 1Ø BRANCH CIRCUITS (HOT, NEUTRAL AND GROUND, BASED ON ACTUAL CIRCUIT LENGTH, UPSIZE RACEWAYS ACCORDINGLY).

CONDUCTOR S	<u> 120V</u>	<u>208V</u>	<u>277V</u>	<u>480V</u>
#12 AWG	0-70FT.	0-135FT.	0-160FT.	0-310FT
#10 AWG	71-120FT.	136-220FT.	161-250FT.	311-500F
#8 AWG	121-180FT.	221-325FT.	251-375FT.	501-760F
#6 AWG	181-315FT	_	376-585FT	_

9. CONDUCTORS SHALL HAVE THE FOLLOWING COLOR UNLESS OTHERWISE REQUIRED PER LOCAL ORDINANCES OR REQUIREMENTS:

> VOLTAGE SYSTEM LEG 1 LEG 2 NEUTRAL GROUND 120/240V,1Ø,3W RED BLACK WHITE GREEN

WIRING DEVICES SHALL BE COMMERCIAL SPECIFICATION GRADE AS FOLLOWS:

1. WALL SWITCHES: 20A RATED, 120/277V, SINGLE POLE, SILENT TYPE. 2. DIMMER SWITCHES: LUTRON NOVAT SERIES RATED FOR LOAD SERVED.

3. RECEPTACLES: 20A RATED, 125V DUPLEX GROUNDED TYPE. 4. GFI TYPE: 20A RATED GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE.

5. SPECIAL PURPOSE RECEPTACLES SHALL BE TYPE AND RATING PER PLANS AND VERIFIED WITH EQUIPMENT 6. DEVICES AND COVER PLATE COLOR SHALL BE PER OWNER.

7. MOUNTING HEIGHTS SHALL BE INDICATED ON THE DRAWINGS OR AS REQUIRED BY ADA OR AUTHORITY HAVING

1. FUSES PROTECTING MOTORS SHALL BE EQUIVALENT TO BUSSMAN DUAL ELEMENT TIME DELAY CLASS RK-5. 2. CIRCUIT BREAKERS SHALL BE OF THE SAME MANUFACTURER AS THE SWITCHBOARD, DISTRIBUTION PANEL OR

PANELBOARDS WITH THE RATING AND NUMBER OF POLES AS INDICATED OR SCHEDULED. 3. CIRCUIT BREAKERS SERVING HVAC TYPE EQUIPMENT SHALL BE HACR TYPE AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.

4. CIRCUIT BREAKERS USED FOR SWITCHING SHALL BE SWD TYPE RATED FOR SWITCHING USE. 5. SERIES RATED CIRCUIT BREAKERS AND EQUIPMENT IS NOT ACCEPTABLE.

G.MOTOR STARTERS AND DISCONNECTS

F. FUSES AND CIRCUIT BREAKERS

1. MOTOR CONTROLLERS: 600V AC HEAVY DUTY RATED, SINGLE OR MULTI-POLE TO SUIT APPLICATION AND MOUNTED IN SUITABLE NEMA ENCLOSURE.

2. ALL MOTOR CONTROLLERS SHALL BE HORSEPOWER RATED TO SUIT MOTOR BEING CONTROLLED. 3. PROVIDE H-O-A OR START/STOP OPERATION AS NEEDED FOR APPLICATION. VERIFY WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.

4. PROVIDE MINIMUM TWO (2) NORMALLY OPEN AND TWO (2) NORMALLY CLOSED AUXILIARY CONTACTS FOR

5. DISCONNECTS: 600V AC HEAVY DUTY RATED, FUSED OR NON-FUSED AS INDICATED, SINGLE OR MULTI-POLE TO SUIT APPLICATION AND MOUNTED IN SUITABLE NEMA ENCLOSURE.

H. DISTRIBUTION PANELS AND PANELBOARDS

1. ACCEPTABLE EQUIPMENT MANUFACTURERS SHALL BE GENERAL ELECTRIC, SIEMENS, SQUARE D, EATON OR APPROVED EQUAL.

2. DISTRIBUTION PANELS AND PANELBOARDS SHALL MEET THE SEISMIC QUALIFICATIONS OF THE ADOPTED

BUILDING CODE. 3. GROUNDING CONNECTIONS SHALL BE MADE WITH APPROVED CONNECTORS AND METHODS ACCEPTABLE TO AUTHORITY HAVING JURISDICTION.

4. ALL PANELBOARDS SHALL BE BOLT-ON CIRCUIT BREAKER TYPE,

UNLESS NOTED OTHERWISE ON THE DRAWINGS.

5. WIRE TERMINATIONS SHALL BE UL LISTED FOR 75 DEGREES. 6. FLUSH MOUNTED PANELBOARDS SHALL HAVE A MINIMUM OF TWO (2) 1" AND FOUR (4) 3/4" EMPTY CONDUITS STUBBED UP FROM PANEL TO ABOVE ACCESSIBLE CEILING SPACE FOR FUTURE BRANCH CIRCUIT WIRING. 7. DISTRIBUTION PANELS AND PANELBOARDS SHALL HAVE A SEPARATE GROUND BUS ISOLATED FROM

8, ALL DISTRIBUTION PANELS AND PANELBOARDS SHALL BE UL LISTED AND FULLY RATED FOR THE AIC RATING INDICATED ON THE DRAWINGS. SERIES RATED EQUIPMENT IN NOT ACCEPTABLE.

9. CONTRACTOR IS RESPONSIBLE TO CONFIRM SUBMITTED EQUIPMENT WILL FIT WITHIN ALLOTTED SPACE SHOWN AND COMPLY WITH ALL NEC CLEARANCE REQUIREMENTS. 10. ALL BUSSES SHALL BE COPPER.

J. LIGHTING FIXTURES

1. ALL LIGHTING FIXTURES SHALL BE UL LISTED FOR IT'S PURPOSE. 2. ALL FIXTURES SHALL BE LIGHT EMITTING DIODE (LED) STYLE FIXTURES WITH INTEGRAL LED DRIVER.

K, TV, TELEPHONE, AND DATA SYSTEMS

1. PROVIDE A COMPLETE CONDUIT SYSTEM FOR TV, TELEPHONE, DATA AND COMBINATION OUTLETS SHOWN. 2. TV, TELEPHONE, DATA AND COMBINATION OUTLETS INDICATED SHALL TERMINATE AT THE TERMINAL BOARD OR

CABINET INDICATED ON THE DRAWINGS, UNLESS NOTED OTHERWISE. 3. TERMINAL BOARD SHALL BE A 4'X8'X3/4' FIRE RATED SHEET OF PLYWOOD, UNLESS NOTED OTHERWISE. 4. TERMINAL CABINETS SHALL BE SIZED AS INDICATED ON THE DRAWINGS OR SUITABLE FOR INSTALLATION IF NOT

INDICATED WITH NEMA ENCLOSURE. 5. TELEPHONE SERVICE AND CABLE TV SERVICE DEMARC CONDUITS AND REQUIREMENTS SHALL BE COORDINATED AND VERIFIED WITH THE SERVING UTILITIES AND OWNER PRIOR TO BID.

GENERAL EXECUTION

A. THOROUGHLY CLEAN ALL ITEMS BEFORE INSTALLATION.

B. ALL WORK SHALL BE PROPERLY SUPPORTED FROM THE BUILDING STRUCTURE IN AN APPROVED MANNER. C. ALL EQUIPMENT SHALL BE FASTENED TO BUILDING CONSTRUCTION WITH APPROVED SUPPORTS. D. COORDINATE ELECTRICAL WORK WITH OTHER TRADES PRIOR TO SUBMITTING BID. E. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ELECTRICAL DEVICES, INCLUDING RECEPTACLES, SWITCHES, DATA AND TELEPHONE OUTLETS. IF LOCATIONS ARE NOT DEPICTED ON THE ARCHITECTURAL DRAWINGS, OBTAIN APPROVAL OF ARCHITECT PRIOR TO ROUGH-IN.

F. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, PATCHING AND COMPLETE REPAIR OF EXITING BUILDING WALLS, CEILINGS ETC AS REQUIRED FOR INSTALLATION OF ELECTRICAL SYSTEMS. G.PROVIDE ENGRAVED NAME PLATES WITH SHEET METAL SCREWS FOR EACH PIECE OF EQUIPMENT INCLUDING: PANELBOARDS, TRANSFORMERS, DISTRIBUTION PANELS, SWITCHBOARDS, DISCONNECTS, MOTOR STARTERS, ETC.

LABELED FOR AS-BUILT DRAWINGS. H. ALL ELECTRICAL DISTRIBUTION EQUIPMENT SHALL BE OF THE SAME MANUFACTURER, INCLUDING PANELBOARDS, TRANSFORMERS, DISTRIBUTION PANELS, SWITCHBOARDS, DISCONNECTS, MOTOR STARTERS, ETC.

12

A. RACEWAYS

1. RACEWAYS SHALL BE INSTALLED CONCEALED, UNLESS NOTED OTHERWISE. 2. ALL RACEWAYS REQUIRED TO BE EXPOSED SHALL BE PAINTED TO MATCH THE ADJACENT BUILDING SURFACE. 3. SUPPORT RACEWAYS WITH TOGGLE BOLTS ON HOLLOW MASONRY, MACHINE SCREWS ON METAL SURFACES,

BEAM CLAMPS ON FRAMEWORK, WOOD SCREWS ON WOOD. 4. RACEWAYS SHOULD BE INSTALLED PARALLEL AND PERPENDICULAR TO BUILDING SURFACES AND AT RIGHT ANGLES.

5. PROVIDE 200LB PULL STRING IN ALL EMPTY RACEWAYS. 6. RACEWAYS PASSING THROUGH FIRE RATED CONSTRUCTION SHALL BE SEALED WITH UL LISTED FIRE RATED

SEALANT. WHERE ELECTRICAL RACEWAYS ARE INSTALLED THROUGH RATED FLOORS OR WALLS, THE CONTRACTOR

SHALL PROVIDE APPROPRIATE FITTINGS APPROVED BY ALL REQUIRED LOCAL AUTHORITIES FOR INTENDED

7. OBTAIN FINAL APPROVAL FROM ARCHITECT PRIOR TO THE INSTALLATION OF RACEWAYS THROUGH RATED WALLS OR

8. HOME RUNS MAY BE COMBINED IN CONDUIT PER NEC REQUIREMENTS FOR DERATING AND FILL.

9. INSTALL ALL RACEWAY SYSTEMS PER THE NEC. DEVIATIONS FROM THE WIRING INDICATED SHALL NOT BE ALLOWED WITHOUT SPECIFIC WRITTEN APPROVAL PRIOR TO PLACING BID AND INSTALLATION.

10. INCLUDE ALL COSTS FOR RACEWAYS SYSTEMS AS SPECIFIED UNLESS WRITTEN APPROVAL FOR ALTERNATE WIRING METHOD IS OBTAINED FROM THE ARCHITECT, ENGINEER AND OWNER PRIOR TO SUBMITTING BID.

PROVIDE EQUIPMENT GROUNDING CONDUCTOR PER NEC 250 IN RACEWAYS.

PROVIDE SEPARATE RACEWAYS FOR EMERGENCY SYSTEM WIRING AND NORMAL SYSTEM WIRING. ALL RACEWAYS AND CONDUCTORS SIZES SHOWN ARE TO BE INSTALLED WITHIN THE BUILDING STRUCTURE NOT EXPOSED TO AMBIENT CONDITIONS. IF RACEWAYS AND CONDUCTORS ARE ROUTED EXPOSED TO AMBIENT

CONDITIONS, CONTRACTOR SHALL DERATE CONDUCTORS AND UPSIZE RACEWAYS ACCORDINGLY. 14. RACEWAYS PENETRATING THROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK AND SLEEVE. INSTALLATION

SHALL BE WATERTIGHT. ALL UNDERGROUND SERVICE CONDUITS SHALL BE SEALED PER NEC ARTICLE 230.8.

16. ALL UNDERGROUND OR BELLOW GRADE RACEWAYS SHALL INSTALLED IN COMPLIANCE WITH NEC TABLE 300.5.

B. FITTINGS AND ACCESSORIES

1. PROVIDE EXPANSION AND DEFLECTION FITTINGS FOR CONDUITS CROSSING EXPANSION JOINTS. PROVIDE BONDING JUMPERS FOR ALL EXPANSION FITTINGS.

2. FITTINGS SHALL BE SUITABLE FOR CONDITIONS OF INSTALLATION. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL.

C. OUTLET, JUNCTION AND PULL BOXES

1. OUTLET BOXES SHALL BE METALLIC WITH GROUND CONNECTION AND EQUIPMENT GROUNDING CONDUCTOR CONNECTION AND EQUIPMENT GROUNDING CONDUCTOR CONNECTION.

2. PROVIDE INSULATED SUPPORTS FOR CABLES. 3. PROVIDE SEPARATE BOXES FOR DIFFERENT VOLTAGE SYSTEMS.

4. PROVIDE SEPARATE BOXES FOR EMERGENCY SYSTEM WIRING AND FOR NORMAL SYSTEM WIRING. 5. COORDINATE FLOOR BOX LOCATIONS WITH ARCHITECT, STRUCTURAL ENGINEER, FURNITURE CONSULTANT AND INTERIOR DESIGNER PRIOR TO ROUGH-IN. SEE THOSE DRAWINGS FOR ADDITIONAL INFORMATION.

D. WIRE AND CABLE

1. DO NOT COMBINE HOMERUNS, UNLESS NOTED OTHERWISE.

2. PROVIDE INSULATION TESTING DOCUMENTATION OF ALL FEEDER AND DISTRIBUTION WIRING. REMOVE AND REPLACE WIRING NOT MEETING MANUFACTURER'S RECOMMENDED INSULATION RESISTANCE. 3. PROVIDE TESTING DOCUMENTATION SHOWING GROUNDING SYSTEM FOR THIS PROJECT WITH RESISTANCE OF LESS

1. INSTALL SWITCHES @48" AFF TO CENTER OF SWITCH, UNLESS NOTED OTHERWISE

2. INSTALL RECEPTACLES @18" AFF TO CENTER OF DEVICE, UNLESS NOTED OTHERWISE. 3. RECEPTACLES LOCATED FOR COUNTERTOP USE SHALL BE 6" TO THE CENTER OF DEVICE ABOVE THE COUNTERTOP.

F. FUSES AND CIRCUIT BREAKERS

1. PROVIDE ALL FUSES FOR DEVICES SHOWN. 2. PROVIDE OWNER TWO (2) SPARE SETS OF FUSES OF EACH TYPE AND RATING INSTALLED.

3. PROVIDE FUSE PULLER FOR EACH TYPE OF FUSE. 4. PROVIDE SPARE FUSE CABINET WHERE INDICATED ON THE DRAWINGS

5. VERIFY FUSES WITH MANUFACTURER OF EQUIPMENT PRIOR TO INSTALLATION. 6. WHERE NEW OVERCURRENT DEVICES ARE ADDED TO EXISTING SWITCHBOARD, DISTRIBUTION PANELS AND PANELBOARDS, UTILIZE SPARES AND/OR PROVIDE ADDITIONAL BREAKERS OR SWITCHES AS REQUIRED TO EXISTING SPACES OR PROVIDE A NEW PANELBOARD OR SECTION SUBFED FROM THE EXISTING SYSTEM. SHORT CIRCUIT

INTERRUPTING RATING OF NEW OVERCURRENT DEVICES SHALL MATCH THE RATING OF THE EXISTING EQUIPMENT. G.MOTOR STARTERS AND DISCONNECTS

1. INSTALL MOTOR STARTERS AND DISCONNECTS AS REQUIRED PER THE NEC. 2. WALL MOUNTED MOTOR STARTERS AND DISCONNECTS SHALL BE INSTALLED @54" TO BOTTOM OF DEVICE,

UNLESS NOTED OTHERWISE. H. DISTRIBUTION PANELS AND PANELBOARDS

1. CONTRACTOR SHALL BALANCE THE LOADS IN ALL PANELBOARDS TO LESS THAN 10% IMBALANCE BETWEEN THE

2. PROVIDE TYPEWRITTEN PANELBOARD SCHEDULES IN PANELBOARD DOORS DEPICTING THE FINAL AS-BUILT

CONDITIONS AT PROJECT COMPLETION. 3. ALL ELECTRICAL SYSTEMS, EQUIPMENT AND COMPONENTS SHALL BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC) ARTICLE 250.

4. ALL FLOOR MOUNTED SWITCHBOARDS AND DISTRIBUTION PANELS SHALL HAVE 4" HIGH HOUSEKEEPING PAD EXTENDING 4" OUTSIDE THE EQUIPMENT FOOTPRINT IN ALL DIRECTIONS. 5. ALL SWITCHBOARDS, DISTRIBUTION PANELS AND PANELBOARDS SHALL BE INSTALLED TO MEET THE NEC 110-26

CLEARANCE REQUIREMENTS. 6. ALL UTILITY METERING DEVICES SHALL BE INSTALLED PER THE SERVING UTILITY COMPANY'S REQUIREMENTS. 7. ANY CUSTOMER OWNED MEETING DEVICES SHALL BE INSTALLED AS INDICATED ON DRAWINGS.

8. PROVIDE ALL REQUIRED DEVICES AND EQUIPMENT FOR A COMPLETE AND OPERABLE METER INSTALLATION.

J. LIGHTING FIXTURES

1. PROVIDE ALL NECESSARY SUPPORTS FOR LIGHTING FIXTURES REQUIRED. 2. WHERE FIXTURES ARE INSTALLED ON OR IN SUSPENDED CEILING SYSTEMS, SECURE FIXTURES TO CEILING FRAME SYSTEM AND PROVIDE FIXTURE SUPPORTS INDEPENDENT OF CEILING SUSPENSION SYSTEM AS REQUIRED PER

APPLICABLE CODE. 3. INCLUDE IN BASE BID ALL LABOR AND MATERIAL TO INSTALL FIXTURES, INCLUDING THOSE PROVIDED BY THE

4. PROVIDE CEILING MOUNTED PENDANT FIXTURE WITH APPROVED SUPPORT FOR WEIGHT TO BE SUPPORTED AND

FOR SEISMIC COMPLIANCE. 5. RECESSED FIXTURES IN FIRE RATED CEILINGS AND RETURN OR PLENUMS SHALL BE APPROVED FOR THE FIRE RATING OF THE CEILING OR SHALL BE FULLY ENCLOSED IN A FIRE RATED HOUSING ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.

6. SEAL ALL OPENINGS AS REQUIRED TO ELIMINATE AIR LEAKS. 7. VERIFY TYPE OF MOUNTING REQUIRED FOR ALL LIGHTING FIXTURES AND PROVIDE ALL MOUNTING HARDWARE REQUIRED FOR A COMPLETE INSTALLATION.

8. ALL ADJUSTABLE FIXTURES SHALL BE LOCATED AND PROPERLY AIMED AS DIRECTED BY THE ARCHITECT OR

LIGHTING DESIGNER. ALL AIMING OF BUILDING FACADE LIGHTING SHALL BE PERFORMED BY CONTRACTOR AT

K. TV, TELEPHONE AND DATA SYSTEM

1. MINIMUM RACEWAY SIZE IS 3/4", UNLESS NOTED OTHERWISE.

2. PROVIDE #6 AWG GROUND WIRE FROM SERVICE ENTRANCE GROUNDING ELECTRODE TO TELEPHONE SYSTEM LOCATION AND ALL TELEPHONE TERMINAL BOARDS, UNLESS NOTED OTHERWISE.

ARCHITECTS & DESIGNERS

26 E. Park Drive, Athens, Ohio 45701 **OFFICE** 740-592-2420

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PROFESSIONAL SEAL



Expiration Date 12/31/2025 ISSUE DATES DESCRIPTION 04/22/24 BID/ PERMIT SET

PROJECT TITLE **NEW LEAF RENOVATION** 96 HIGH ST GLOUSTER, OH 45732

PROJECT NUMBER 23020

ELECTRICAL SPECIFICATIONS

ATTACHMENT A

Itemized Bid Sheet

This itemized bid sheet must be completed in its entirety and returned with the contractor's bid submittal packet.

BASE BID

Item	Description	Qty.	Price Ea.	Total
L/S	All project materials	1	\$	\$
L/S	All project labor	1	\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
	TOTAL			\$

All work is to be completed as described in Section D, Work Specifications, in the bidd	ding documents
Bid submitted by:	
Authorized signature	
Date:	
Federal Tax ID Number:	

DAVIS-BACON WAGE DETERMINATIONS SECTION E

"General Decision Number: OH20240033 04/05/2024

Superseded General Decision Number: OH20230033

State: Ohio

Construction Type: Building

County: Athens 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)(1).

```
| If the contract is entered | Executive Order 14026
into on or after January 30, | generally applies to the |
2022, or the contract is | contract.
renewed or extended (e.g., an |. The contractor must pay
option is exercised) on or | all covered workers at
after January 30, 2022:
                          | least $17.20 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 2024.
|If the contract was awarded on|. Executive Order 13658
or between January 1, 2015 and generally applies to the
January 29, 2022, and the
                           contract.
|contract is not renewed or |. The contractor must pay all|
extended on or after January | covered workers at least |
                      | $12.90 per hour (or the
30, 2022:
                   applicable wage rate listed
                    on this wage determination,
                    if it is higher) for all
                    hours spent performing on |
                    that contract in 2024.
```

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.

1 01/1	05/2024 19/2024	ation Date	
	08/2024 05/2024		
* ASBE0080-001 02	2/26/2024		
	Rates	Fringes	
ASBESTOS WORK INSULATOR			30.52
* BROH0052-004 0	06/01/2023		
	Rates	Fringes	
BRICKLAYER	\$	32.43	20.44
* BROH0055-007 0	06/01/2023		
	Rates	Fringes	
TILE FINISHER			
CARP0356-002 05	/01/2023		
	Rates	Fringes	
CARPENTER	\$	30.86	25.19
ELEC0972-007 06/	/01/2023		
	Rates	Fringes	
ELECTRICIAN (Involtage Wiring and Installation)	Alarm		25
ELEV0011-002 01/	/01/2024		
	Rates	Fringes	
ELEVATOR MECH	HANIC	\$ 55 (01 37.885

37.885+a+b

PAID HOLIDAYS:

a. New Year's Day, Memorial Day, Independence Day, Labor Day, Vetern's 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. ENGI0018-022 05/01/2019 Rates Fringes POWER EQUIPMENT OPERATOR Bobcat/Skid Steer/Skid Loader: Bulldozer......\$ 37.02 15.20 Crane.....\$ 37.14 15.20 Forklift.....\$ 35.98 15.20 _____ IRON0550-012 05/01/2023 Rates Fringes IRONWORKER, ORNAMENTAL.....\$ 33.00 22.27 IRON0769-001 06/01/2023 Rates Fringes IRONWORKER, STRUCTURAL.....\$ 36.16 28.34 _____ LABO0083-003 05/01/2021 Rates Fringes LABORER Common or General; Mason Tender - Brick & Cement/Concrete......\$ 37.52 ._____ PAIN0093-003 12/01/2023 Rates Fringes PAINTER (Brush and Roller)......\$ 29.29 23.69 PAIN1195-001 12/01/2023 Rates Fringes GLAZIER.....\$ 32.47

Rates Fringes	
CEMENT MASON/CONCRETE FINISHER\$ 31.87 15	.45
PLUM0577-001 06/01/2023	
Rates Fringes	
PIPEFITTER (Excludes HVAC Pipe Installation)\$36.22 26.48	
PLUM0577-003 06/01/2023	
Rates Fringes	
PLUMBER (Includes HVAC Pipe Installation)\$36.22 26.48	
SFOH0669-009 01/01/2024	
Rates Fringes	
SPRINKLER FITTER (Fire Sprinklers)\$ 43.08 27.49	
SHEE0024-010 06/01/2022	
Rates Fringes	
SHEET METAL WORKER (HVAC Duct and Unit Installation Only)\$ 33.53 26.36	
SHEE0033-008 06/01/2022	
Rates Fringes	
SHEET METAL WORKER (Excludes HVAC Duct and Unit Installation)\$ 31.73 27.44	
* UAVG-OH-0001 01/01/2019	
Rates Fringes	
IRONWORKER, REINFORCING\$ 29.44 22.68	
* UAVG-OH-0002 01/01/2019	
Rates Fringes	
ROOFER\$ 30.19 15.73	

Rates Fringes

DRYWALL FINISHER/TAPER.....\$ 20.66 4.91

DRYWALL HANGER AND METAL STUD INSTALLER.....\$ 22.27 14.40

LABORER: Pipelayer......\$ 18.37 4.79

OPERATOR:

Backhoe/Excavator/Trackhoe......\$ 29.18 10.69

OPERATOR: Loader.....\$ 22.69 8.01

OPERATOR: Paver (Asphalt,

Aggregate, and Concrete)......\$ 23.91 10.42

TRUCK DRIVER: Dump (All Types)...\$ 19.33 6.55

WELDERS - Receive rate prescribed for craft performing

operation to which welding is incidental.

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) (iii)).

.....

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 DECISION"

BID FORMS SECTION F

BID OPENING	
PLACE:	
DATE:	
Proposal of	(hereinafter called "Bidder") a (circle
	Proprietor, organized and existing under the laws of the State of
TO THE	(hereinafter called "Owner"):
for theexamined the specifications with related doct accordance with the contract documents, within prices are to cover all expenses incurred in perthis proposal is a part. Bidder hereby agrees to commence wo "Notice to Proceed" of the Owner and to fully thereafter as stipulated in the specifications. B	nvitation for bids for the furnishing of materials and/or equipment project, having uments, hereby proposes to furnish all materials and supplies in the time set forth therein, and at the process stated below. These forming the work required under the contract documents of which rk under this contract on or before a date to be specified in written complete the project within consecutive calendar days idder further agrees to pay liquidated damages, the sum of \$750.00 as hereinafter provided in Paragraph 29 of the General Contract addendum(s):
materials and/or equipment described in thespecifications and shown on the plans (if app	licable) for the total amount of the bid based on the approximate
TOTAL BID PER UNIT PRICE PROPOSAL	unit prices specified by the bidder amount to the sum of: \$
IN WORDS	
	figures. In case of a discrepancy, amount shown in words will
All unit prices shall include all labor, material cover providing the materials/equipment called	als, bailing, shoring, removal, overhead, profit, insurance, etc., to d for.
The Bidder understands that the Owner reserv in the bidding process.	es the right to reject any or all bids and to waive any informalities

The bidder agrees that this bid shall be good and may not be withdrawn for a period of 90 calendar days after the scheduled closing time for receiving bids.

within 10 days and deliver a Surety Conditions. The bid security attached	he acceptance of this bid, Bidder will execute the for Bond or Bonds as required by Article 12, Section C o ed in the sum of \$ is to become the property of the Owner in the event	f the General Contract(in words)_ the contract and bond
are not executed within the time ab the Owner caused thereby.	ove set forth, as liquidated damages for the delay and	additional expense to
RESPECTFULLY SUBMITTED:		
	BY	
	TITLE	
	BUSINESS NAME AND ADDRESS:	
	PHONE	
	FED. ID OR SS#	

SEAL

(If Applicable)

ATTACHMENT A

Itemized Bid Sheet

This itemized bid sheet must be completed in its entirety and returned with the contractor's bid submittal packet.

BASE BID

Item	Description	Qty.	Price Ea.	Total
L/S	All project materials	1	\$	\$
L/S	All project labor	1	\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
	TOTAL			\$

All work is to be completed as described in Section D, Work Specifications, in the bidding documents			
Bid submitted by:			
Authorized signature			
Date:			
Federal Tax ID Number:			

BID GUARANTY AND CONTRACT BOND

(SECTION 153.571 Ohio Revised Code)

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned	
(Name and Address)	
as Principal and	
(Name of Surety) as Surety	7,
are hereby held and firmly bound unto the penal sum of the dollar amount of the bid submitted by the Principal to the Obligee on the project known as	to undertake
The penal sum referred to herein shall be the dollar amount of the Principal's bid to the Ol any additive or deductive alternate proposals made by the Principal on the date referred to a which are accepted by the Obligee. In no case shall the penal sum exceed the amount of dol (If the above line is left blank, the penal sum will be the full amount of the Principal's bid indollars and cents. A percentage is not acceptable.) For the payment of the penal sum well a we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successed	bove to the Obligee. Ilars () cluding alternates, ir and truly to be made

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above named Principal has submitted a bid on the above referred to 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 bid, plans, details, specifications, and bills of material; and in the event the Principal pays to the Obligee the difference not to exceed ten percent of the penalty 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 ten days after the awarding of the contract, enters into a proper contract in accordance with the bid, plans, details, specifications, and bills of material, which said contract is made a part of this bond the same as though set forth herein; and 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 plans, details, specifications, and bills of material therefore; and shall pay all lawful claims of subcontractors, materialmen, 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 benefit of any materialman 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 or in or to the plans and specifications therefore shall in any way affect the obligations of said Surety on this bond, and it does hereby waive notice of any such modifications, omissions or additions to the term of the contract or to the work or to the specifications.

SIGNED AND SEALED This	day of	
Principal		
Principal		
By:		
<u> </u>		
Title:		
Surety		
,		
By:Attorney-in-Fact		
Attorney-in-Fact		
Surety Company Address:		
Surety Agent's Name and Address:		

AFFIDAVIT OF CONTRACTOR OR SUPPLIER OF NON-DELINQUENCY OF PERSONAL PROPERTY TAXES

O.R.C.	5919	.042											
STATE	E OF	OHIO:											
SS:													
TO:				_									
				_									
				_									
	The	undersigned,	being	first	duly	sworn,	having	been	awarded			by yo	
list of p	erson	at the time the pal property of a ent personal pr	any coun	ity in v	vhich y	ou as a ta	xing dist						
		tion of the awa		ne abo	ve cor	ntract, the	e above s	tateme	nt is incorp	porated	in said	d contrac	ct as a
Subscri	ibed a	and sworn to be	efore me	this _	da _`	y of							
						Nota	ry Public	<u> </u>					
						Му	Commiss	ion Ex	pires				

SEAL

NON-COLLUSION AFFIDAVIT

State of Ohio	
County of	
BID Identification:	
CONTRACTOR:	
being duly sworn, deposed and says that he is	party making the person, partnership ive or sham; that said ake or sham BID and anyone else to put in y manner directly or price of said BIDDEF or of that of any other one interested in the thid BIDDER has not thereof, or divulged h, to any corporation ent thereof, or to any ent thereof.
Signed:	
Subscribed and sworn to before me thisday of,	
Notary Public	
My Commission Expires	

SEAL

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS PRIMARY COVERED TRANSACTIONS

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, Section 85.510, Participant's responsibilities. The regulations were published as Part VII of the May 26, 1988 Federal Register (pages 19160 - 19211). Copies of the regulation may be obtained by contacting the U.S. Department of Education, Grants and Contracts Service, 400 Maryland Avenue, S.W. (Room 3633 GSA Regional Office Building No. 3), Washington, DC. 20202-4725, telephone (202) 732-2505.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or Local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or Local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Organization Name	
PR/Award Number or Project Name	
Name and Title of Authorized Representative	
Signature ED Form GCS-008 (REV.12/88)	Date

AFFIDAVIT IN COMPLIANCE WITH SECTION 3517.13 OF THE OHIO REVISED CODE

COUNTY OF	, SS:		
Personally appeared be	efore me the undersigned, as	an individual or as a representati	ve of
	for a contract fo	or	
(Name of Entit	y)	or(Type of Product or Ser	vice)
statement with respect Revised Code Section	ty of, v	who, being duly cautioned and stituting a conflict of interest or that the undersigned has the autl	sworn, makes the following other violations under Ohio
awarded a conindividually with following the cexcess of \$1,00 their individual a. myself; b. any parce. any own d. each spee. each ch	tract for the purchase of godill make, beginning on the onclusion of the contract, as 00.00, to any member of the campaign committees: there or owner or shareholder her of more than 20% of the ouse of any person identified ild seven years of age to several makes.	ly made within the two previous ods or services in excess of \$50 date the contract is awarded at an individual, one or more cample County of the partnership (if applicable) corporation or business trust (if a din (a) through (c) of this section wenteen years of age of any persolicable to contributions made on	00.00, none of the following and extending until one year aign contributions totaling in Board of Commissioners or splitcable); applicable); c; on identified in divisions (a)
for the purchas beginning on the contract, or a. myself; b. nay parc. any own d. each speed e. each ch	e of goods or services in exche date the contract is award ne or more campaign contrib County Board of the or owner or shareholder ner of more than 20% of the ouse of any person identified ild seven years of age to seven	ly made since January 1, 2007 are cess of \$500.00, none of the followed and extending until one year outions totaling in excess of \$2,0 f Commissioners or their individual of the partnership (if applicable) corporation or business trust (if a d in (a) through (c) of this section wenteen years of age of any persolicable to contributions made on	wing collectively will make, following the conclusion of 00.00, to any member of the nal campaign committees: c; applicable); c; on identified in divisions (a)
Sworn to before me an	d subscribed in my presence	e this day of	, 20
	Notary Public	c	
		sion Expires:	

ADDITIONAL CERTIFICATIONS

Project Name:
Grant Number:
I certify that my company has the facilities to complete this job.
I certify that my company has the <i>labor force</i> to complete this job.
I certify that my company has the equipment to complete this job.
I certify that my company has the administrative capacity to complete this job.
I certify that my company has the <i>knowledge</i> to complete this job.
I certify that my company maintains a drug free workplace.
Name and Title of Authorized Representative
Name and True of Authorized Representative
Circulation 8 Date
Signature & Date

BONDING AND INSURANCE REQUIREMENTS

A state or local unit of government receiving a grant from the Federal government which requires contracting for construction of facility improvement shall follow its own requirement relating to bid guarantees, performance bonds, and payment bonds, except for contracts or subcontracts exceeding \$100,000.00. For contracts or subcontracts exceeding \$100,000.00, the Federal agency may accept the bonding policy requirement of the grantee provided the Federal agency has made a determination that the Government's interest in adequately protected. If such a determination has not been made, the minimum requirements shall be as follows:

- A. A bid guarantee from each bidder equivalent to ten percent of the bid price. The "bid guarantee" shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of his/her bid, execute such contractual documents as may be required within the time specified.
- B. A performance bond on the part of the contractor for 100 percent of the contract price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.
- C. <u>A payment bond on the part of the contractor for 100 percent of the contract price</u>. A "payment bond" is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

EXPERIENCE STATEMENT OF BIDDER

The BIDDER/CONTRACTOR is required to state in detail, in the space provided below, what work of character similar to that included in this proposed Contract Documents it has done, to give reference and such other detailed information as it will enable the OWNER to determine responsibility including experience, skill and financial standing.

PROJECT NAME:	CONTACT:
ADDRESS:	
PHONE:	FAX:
EMAIL:	DATE OF PROJECT:
DESCRIPTION OF WORK:	<u> </u>
PROJECT NAME:	CONTACT:
ADDRESS:	
PHONE:	FAX:
EMAIL:	DATE OF PROJECT:
DESCRIPTION OF WORK:	
PROJECTAVA VE	COMPLET
PROJECT NAME:	CONTACT:
ADDRESS:	DAY
PHONE:	FAX:
EMAIL:	DATE OF PROJECT:
DESCRIPTION OF WORK:	
PROJECT NAME:	CONTACT:
ADDRESS:	- Conner.
PHONE:	FAX:
EMAIL:	DATE OF PROJECT:
DESCRIPTION OF WORK:	DAIL OF IROUGE I.