

# **Specifications and Contract Documents**

**For**

**Butler Tech and Career  
Development Schools**

**Lesourdsville Campus - High Bay Laboratory  
HVAC Alterations and Upgrades**

**FOR BID**

**March 15, 2023**

**MSP Project No. 06398.82**

**Architect / Engineer**

McGill Smith Punshon, Inc  
3700 Park 42 Dr., Suite 190B  
Cincinnati, OH 45241-2097  
Tel: (513) 759-0004  
Fax:(513)563-7099

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**00 2113**

**INSTRUCTIONS TO BIDDERS**

**1. EXAMINATION OF CONTRACT DOCUMENTS AND SITE**

- A. Bidders are cautioned to review carefully the site and all parts of the Contract Documents made available to each bidder, including, but not limited to the Instructions to Bidders, Bid Form, Drawings, and Specifications. The Contract Documents, as defined in the Owner-Contractor Agreement, shall govern the relationship between the successful Bidder and the Owner upon execution of an Owner-Contractor Agreement by the Owner and the successful Bidder.
- B. No allowance will be made subsequently for any omission, error, or negligence of the Bidder.
- C. All Bidders shall be familiar with the existing conditions in the material and labor markets, as well as the conditions related to the Work, and the fact that a bid is submitted will be construed by the Owner as an agreement by the bidder to carry out the improvements in full conformance with the Specifications and other Contract Documents, notwithstanding the existing conditions.
- D. Failure of a Bidder to attend the pre-bid meeting, which failure to attend results in the Bidder not fully being familiar with the existing conditions and Project Requirements, shall not be considered a basis for additional compensation to the successful Bidder for the Work.

**2. OWNER and ARCHITECT**

- A. The Owner is:

<b>Name:</b> Address  Phone Number Project Contact:	<b>Butler Tech and Career Development Schools</b> <b>3605 Hamilton-Middletown Road</b> <b>Hamilton, Ohio 45011</b> 513-645-8221 Mr. Steve Von Barga
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- B. The Architect is:

<b>Name:</b> Address  Phone Project Contact:	McGill Smith Punshon 3700 Park 42 Drive, Suite 190B Cincinnati, Ohio 45241 513-759-3278 Mr. David Clark dclark@mspdesign.com
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**3. PROJECT**

**The Project is the modifications and alterations to the existing electrical infrastructure within the welding laboratory at the Lesourdsville Campus Hi-Bay Lab: 101 Jerry Couch Blvd., Middletown, Ohio 45044.**

**5. CONTRACT DOCUMENTS**

- a. Instruction to Bidders
- b. Bid Form

- c. Bid Guaranty and Contract Bond Form
- d. Project Specifications
- e. Project Drawings

**Contract Documents may be obtained from the Butler Tech website, starting March 15, 2023 at:**

[www.butlertech.org/bids](http://www.butlertech.org/bids)

Bidders shall use complete sets of Bid Documents in preparing bids. Neither the Owner nor the Architect assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bid Documents.

The Owner or the Architect, in making the Bid Documents available on the above terms, do so only for the purpose of obtaining bids on the Work and do not confer a license or grant for any other use.

7. PRE-BID MEETING

**A Mandatory Pre-Bid Walk through will be held on Tuesday, March 21, 2023 at 11:00 AM EST, at the project location, 101 Jerry Couch Blvd., Middletown, Ohio 45044.**

8. PREPARATION OF BIDS

- A. All bids must be submitted on the "Bid Form" furnished with the Contract Documents.
- B. All blank spaces shall be filled in, in ink or typewritten, in words and figures, and in figures only where no space is provided for words, and signed by the Bidder. The wording on the Bid Form shall be used without change, alteration, or addition. Any change in the wording or omission of specified accompanying documents may cause the bid to be rejected. If both numbers and words are requested for any bid item, the amount in words shall prevail if there is an inconsistency between the numbers and words written.
- C. Bidders shall note receipt of Addenda on the Bid Form. If the Bidder fails to acknowledge receipt of each Addendum, the Bid shall be deemed non-responsive, unless the Bid amount reflects receipt of the Addendum or the Addendum involves only a matter of form and does not affect the price, quantity or quality of the Work to be performed.
- D. Each Bidder shall submit two (2) copies of its bid to the Owner. The Bid Form shall be signed with the name typed or printed below the signature. A bid shall not be submitted by facsimile transmission. A Bidder that is a corporation shall sign its bid with the legal name of the corporation followed by the name of the state of incorporation and the legal signature of an officer authorized to bind the corporation to a contract.
- E. Each bid shall be enclosed in a sealed opaque envelope with the Bidder's name and the title of the Project printed in the upper left hand corner and addressed as follows: Butler Technology and Career Development Schools: 2021 Pavement Maintenance. **Bids must be received at the main, upper level entry of the ERC Building, 3605 Hamilton-Middletown Road, Hamilton, Ohio 45011 for the bid opening by 2:00 PM EST, on Friday, March 31st, 2023, where bids shall be opened and read by the CFO.**
- F. The completed Bid Form shall be accompanied by the Bid Guaranty (see Section 9 below).
- G. The Bidder shall take the following precautions in preparing its bid:
  - 1. Sign the bid and check to insure all blank spaces have been filled in with requested information and that the specified accompanying documents (listed in Item F above) have been included in a sealed opaque envelope addressed as described in Item E above.
  - 2. When the Bid Form provides for quoting either an addition or deduction for an Alternate item, indicate whether the sum named is an addition or deduction.
  - 3. When the Bid Form provides for quoting a unit price, the Bidder should quote the unit price as set forth in the Bid Documents.
  - 4. When applicable, make sure that the Bid Guaranty is properly executed and signed by:
    - (a) The Bidder
    - (b) The Surety or Sureties
  - 5. Make sure that the amount of the Bid Guaranty (if the Bid Guaranty is in the form of a certified check, letter of credit, or cashier's check) is for a specific sum in an amount as instructed in Section 9 below. If the Bid Guaranty is in the form of the Bid Guaranty and Contract Bond, the amount may be left blank; if an amount is inserted, it must equal the

total of the base bid and all add alternates included. Failure to state an amount equal to the total of the base bid and all add alternates shall make the bid non-responsive if the Owner selects alternates not included in the amount.

6. Make sure that the appropriate bid package and scope of work is inserted in the correct space on the Bid Guaranty and Contract Bond Form. Failure to include work covered by the bid submitted may make the bid non-responsive.

9. **BONDS AND GUARANTEES**

- A. Bid Guaranty: Bidder shall furnish a Bid Guaranty, as prescribed in Sections 153.54, 153.57, and 153.571 of the Ohio Revised Code, in the form of either: (1) a bond for the full amount of the bid in the form of the Bid Guaranty and Contract Bond included in the Bid Documents; or (2) a certified check, cashier's check, or irrevocable letter of credit in an amount equal to 10% of the bid. Bid amount shall be the total of all sums bid, including all add alternatives, but excluding all deduct alternatives.
- B. Contract Bond: The successful Bidder who, as a Bid Guaranty, submits a certified check, cashier's check, or irrevocable letter of credit in an amount equal to 10% of the bid, shall furnish a Contract Bond in the form Contract Bond included in the Bid Documents in an amount equal to 100% of the Contract Sum.
- C. The bond must be issued by a surety company ("Surety") authorized by the Ohio Department of Insurance to transact business in the State of Ohio and acceptable to the Owner. The bond must be issued by a Surety capable of demonstrating a record of competent underwriting, efficient management, adequate reserves, and sound investments. These criteria will be deemed to be met if the Surety currently has an A.M. Best Company Policyholders Rating of "A-" or better and has or exceeds the Best Financial Size Category of Class VI. Other sureties may be acceptable to the Owner, in its sole discretion.
- D. All bonds shall be signed by an authorized agent of an acceptable Surety and by the Bidder.
- E. Bonds shall be supported by credentials showing the Power of Attorney of the agent, a certificate showing the legal right of the Surety to do business in the State of Ohio, and a financial statement of the Surety.
- F. The Bid Guaranty, as applicable, shall be in the name of or payable to the order of the Owner.
- G. The name and address of the Surety and the name and address of the Surety's Agent should be typed or printed on each bond.

10. **METHOD OF AWARD**

- A. All bids shall remain open for acceptance for sixty (60) days following the day of the bid opening, but the Owner may, in its sole discretion, release any bid and return the Bid Guaranty prior to that date. The Bid Guaranty shall be subject to forfeiture, as provided in the Ohio Revised Code, if a bid is withdrawn during the period the bids are being held.
- B. The Owner reserves the right to reject any, part of any, or all bids and to waive any informalities and irregularities. The Bidder expressly acknowledges this right of the Owner to reject any or all bids, or to reject any incomplete or irregular bid. The Owner will award a single contract for each

of the Bid Packages listed above or one or more combined contracts for combinations of the Bid Packages. Bidders must furnish all information requested on or accompanying the Bid Form. Failure to do so may result in disqualification of the bid.

- C. Determination of Lowest Responsible Bid. Subject to the right of the Owner to reject any or all bids, the Owner will Award the Contract for the Work to the Bidder submitting the lowest responsible bid, taking into consideration accepted alternates. The Owner, in its sole discretion, will determine whether a bid or bidder is responsible. In evaluating Bids, the Owner shall consider the qualifications of the bidders, whether or not the bids comply with the prescribed requirements, and alternatives and unit prices, if requested, in the Bid Form. The Owner may also consider the qualifications and experience of suppliers and distributors. The Owner may conduct such investigations as are deemed necessary to establish the responsibility, qualifications and financial ability of the Bidders, proposed distributors and other persons and organizations to do the work in accordance with the Contract Documents to the Owner's satisfaction within the prescribed time. The Owner reserves the right to reject the bid of any Bidder that does not pass any such evaluation to the Owner's satisfaction. The factors to be considered by the Owner in making its determination as to whether a Bidder is a responsible bidder include the following as the Owner, in its discretion, deems appropriate; the Owner may give such weight to each factor as it deems appropriate:

- a. The Bidder's work history. The Bidder should have a record of consistent customer satisfaction and of consistent completion of projects, including projects which are comparable to or larger and more complex than the Owner's Project, on time and in accordance with the applicable Contract Documents. If the Bidder's management operates or has operated another construction company, the Owner may consider the work history of that company in determining responsibility of the Bidder.

The Owner will consider the Bidder's prior experience on other projects of the Owner and Architect, including the Bidder's demonstrated ability to complete its work on these projects in accordance with the Contract Documents and on time, and its ability to work with the Owner, and Architect.

The Bidder authorizes the Owner and its representatives to contact the owners and design professionals on projects on which the Bidder has worked, and authorizes and requests such owners and design professionals to provide the Owner with a candid evaluation of the bidder's performance. By submitting its bid, the Bidder agrees that if it or any person, directly or indirectly, brings an action against any of such owners or design professionals or the employees of any of them as a result of or related to such candidate evaluation and such action is not successful, the Bidder will reimburse such owners and design professionals, and the employees of each of them, for all legal fees and expenses incurred by them related to such legal action. This obligation is expressly intended for the benefit of such owners and design professionals, and the employees of each of them.

- b. The Bidder's financial ability to complete the Contract successfully and on time, without resort to its Surety.
- c. The Bidder's prior experience with similar work on comparable or more complex projects;
- d. The Bidder's equipment and facilities;
- e. The adequacy, in numbers and experience, of the Bidder's work force to complete the Contract successfully and on time;

- f. The Bidder's compliance with federal, state, and local laws, and regulations, including but not limited to the Occupational Safety and Health Act; and
  - g. The ability of the Subcontractors the Bidder intends to use on the Project to meet these same criteria.
  - h. The Bidder's participation in a drug-free workplace program acceptable to the Owner, and the Bidder's record for both resolved and unresolved findings for recovery as defined in Ohio Revised Code Section 9.24; and/or
  - i. Depending upon the type of the Work, other essential factors, as the Owner may determine.
- D. Within three (3) business days after the Owner's receipt of the bids, the apparent low bidder will complete and submit to the Owner AIA Document A305, Contractor Qualifications Statement, and the information required by the supplement to AIA Document A305 included with the Contract Documents in the Project Manual, and thereafter will provide the Owner with such additional information as the Owner may request regarding the Bidder's responsibility. Additionally, upon request from the Owner, any other Bidder will promptly complete and submit to the Owner AIA Document A305 and the information required by the supplement to AIA Document A305, and thereafter will provide the Owner with such additional information as the Owner may request regarding the Bidder's responsibility. A Bidder will submit any requested information within three (3) business days of the date of the request.
- E. The failure to submit requested information on a timely basis may result in the determination that the Bidder is not responsible.
- F. By submitting its bid, the Bidder agrees that the Owner's determination of responsibility shall be final and conclusive, and that if the Bidder or any person challenges such determination in any legal proceeding and such challenge is not successful, the Bidder will reimburse the Owner for all legal fees and expenses incurred by the Owner that are related to such challenge, including the cost of collection.
- G. Within three (3) calendar days of the Owner's receipt of the bids or such longer time as may be permitted in writing by the Owner, the apparent low bidder will submit the following:
  - a. A list of all proposed Subcontractors, suppliers, and manufacturers; and
  - b. A breakdown of labor and material for the Project, including the sum of each.

After approval by the Owner and Architect of the list of proposed Subcontractors, suppliers, and manufacturers submitted by the successful Bidder, the list shall not be changed unless written approval of the change is authorized by the Owner and Architect.

- H. Affidavit as to Property Taxes. The successful Bidder will be required to submit, prior to the time of the entry into the Contract for the Work, an affidavit in the form required by Section 5719.042, Ohio Revised Code, regarding the status of the Bidder's personal property taxes. A copy of the form of affidavit is included in the Contract Documents.
- I. No Bidder may withdraw its bid within sixty (60) days after the date the bids are opened.



- J. The Owner reserves the right to disqualify bids, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices on the part of the bidder.

**11. SUBSTITUTIONS/NON-SPECIFIED PRODUCTS**

- A. Certain brands of material or equipment are specified in the Contract Documents. Each bid will be based on these brands, which may be referred to in the Contract Documents as Standards. The use of another brand (referred to as a substitution or proposed equal in the Contract Documents, when the bidder or the contractor seeks to have a different brand or material or apparatus than that specified approved by the Owner for use in the Project) may be requested as provided herein. Substitutions, however, shall not be considered in determining the lowest responsible bid.
- B. The products specified in the Contract Documents establish a standard of required function, dimension, appearance, and quality.
- C. Contractors wishing to obtain approval to bid non-specified products shall submit written requests to the Architect, a minimum of ten (10) working days before the bid date and hour. The Contractor shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution, including the name of the proposed manufacturer and/or product and a complete description of the proposed product including manufacturer's name and model number or system proposed, drawings, product literature, performance and test data, color selections or limitations, and any other information necessary for evaluation. Include a statement including any changes in other materials, equipment, or other work that would be required if the proposed product is incorporated in the materials, equipment, or other work that would be required if the proposed product is incorporated in the work. The burden of proof of the merit of the proposed product is on the bidder proposing the substitution. The Architect's decision of approval of a proposed product will be final.

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

- (1) Requests submitted by subcontractors, material suppliers, and individuals other than Prime Contractors;
  - (2) Requests submitted without adequate documentation;
  - (3) Requests received after the specified cut-off date.
- D. When the Architect approves a product submission before receipt of bids, the approval will be included in an Addendum and bidders may include the pricing of this product in their bid. Bidders shall not rely on approvals made in any other manner.
  - E. In proposing a non-specified product or a substitution, the Bidder represents and warrants that each proposed product will not result in any changes to the Project, including changes to the Work of other contractors, or any decrease in the performance of any equipment or systems to be installed in the Project and agrees to pay any additional costs incurred by the Owner and the Owner's consultants as a result of a non-specified or substitute product that is accepted.
  - F. Following the award of the Contract, there shall be no substitutions for specified products, except pursuant to a Change Order. The Owner in its sole discretion may decline to consider a substitution for a Change Order.

12. ALTERNATES

- A. The Owner may request bids on alternates. If the Owner requests bids on alternates, the bidder should include the cost of the alternates requested on its Bid Form.
- B. At the time of awarding the contract, the Owner will select or reject alternates as it determines is in its best interest. A bidder's failure to include in its Bid Form the cost of an alternate selected by the Owner and applicable to the bidder's work may render the bid non-responsive and be grounds for the rejection of the bid. Otherwise, the failure to include the cost of an alternate will not be deemed material.
- C. The Bidder acknowledges that although there is an estimate for the cost of the Project, the market conditions may and frequently do result in the estimate being different from the sum of the bids received, either higher or lower. The Bidder understands that the Owner may include alternates, which may include deduct alternates as well as add alternates, to give it the flexibility in building the Project with the funds that are available. The Bidder further understands and acknowledges that use of add and deduct alternates is a long held customary practice in the construction industry in the State of Ohio. The Bidder also acknowledges that the Owner will not make a decision about the alternates on which to base the award of contracts until the bids are received, and the Owner can compare its available funds with the base bids and the cost or savings from selecting different alternates. The Bidder understands that the award to the lowest responsible Bidder will be based on the lowest base bid plus selected alternates, and may result in an award to a Bidder other than the Bidder that submitted the lowest base bid.
- D. If, during the progress of the Work, the Owner desires to reinstate any alternate not included in the contract, the Owner reserves the right to reinstate the alternate at the price bid by the contractor provided that such action is taken in sufficient time so as not to delay the progress of the work or cause the contractor additional expense.

14. ADDENDA

- A. The Owner reserves the right to issue Addenda changing, altering, or supplementing Contract Documents prior to the time set for receiving bids. The Architect will issue the Addenda to clarify bidders' questions, to change, alter, or supplement the Contract Documents.
- B. Any explanation, interpretation, correction or modification of the Bid Documents will be issued in writing in the form of an Addendum, which shall be the only means considered binding. Explanations or interpretations made by any other means shall **NOT** be legally binding. All Addenda shall become a part of the Contract Documents.
- C. Bidders must submit questions to the Architect, in sufficient time in advance of the bid opening to allow the Architect to respond. All Addenda will be issued, except as hereinafter provided, and mailed or otherwise issued to persons who have obtained Contract Documents for the Project, at least seventy-two (72) hours prior to the published time for the opening of bids, excluding Saturdays, Sundays and legal holidays. If any Addendum is issued within such seventy-two (72) hour period, then the time for opening of bids shall be extended one (1) week with no further advertising of bids required.
- D. Copies of each Addendum will be sent only to the Contractors to whom Contract Documents have been issued. Receipt of Addenda shall be indicated by Bidders in the space provided on the Bid Form. Bidders are responsible for acquiring issued Addenda in time to incorporate them into their

bid. Bidders should contact the Architect prior to the bid opening to verify the number of Addenda issued.

- E. If a Bidder fails to indicate receipt of all Addenda issued by the Architect on its Bid Form, the bid of such Bidder will be deemed to be responsive only if:
- a. The bid received clearly indicates that the Bidder received the Addendum, such as where the Addendum added another item to be bid upon and the bid documents clearly indicates that the Bidder submitted a bid on that item; or
  - b. The Addendum involves only a matter of form or is one that has either no effect or merely a trivial or negligible effect on price, quantity, quality, or delivery of the item bid upon.

**15. INTERPRETATION**

- A. If a Contractor contemplating submitting a bid for the proposed project is in doubt as to the true meaning of any part of the Specifications or Contract Documents, it may submit a written request for an interpretation thereof to David Clark, MSP Design at the numbers listed on the first page of these Instructions to Bidders or at [dclark@mspdesign.com](mailto:dclark@mspdesign.com). Any interpretation of the Contract Documents will be made by Addendum only, duly signed, and a copy of such Addendum will be mailed or delivered to each person receiving a set of Contract Documents. The Owner will not be responsible for any other explanation or interpretation of the proposed documents.
- B. In interpreting the Contract Documents, words describing materials that have a well-known technical or trade meaning, unless otherwise specifically defined in the Contract Documents, shall be construed in accordance with the well-known meaning recognized by the trade.
- C. Bidders are responsible for notifying the Architect in a timely manner of any ambiguities, inconsistencies, errors or omissions in the Contract Documents. The Bidder shall not, at any time after the execution of the Contract, be compensated for a claim alleging insufficient data, incomplete Contract Documents, or incorrectly assumed conditions regarding the nature or character of the Work, if no request for interpretation was made by the Bidder prior to the bid opening.
- D. **RFI's must be submitted no later than 9:00 AM, EST on Tuesday, March 28, 2023.**

16. TAX STATUS

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

17. DATE FOR COMPLETION

A. Each successful Bidder shall have its work substantially completed by the respective Dates for Substantial Completion set forth in the 00 4100 Bid Form and as stated in the Project Time Schedule finalized by the General Contractor (with the cooperation from the Prime Contractors and input from the Owner and Architect) . The Project Time Schedule will be finalized after award of the contracts for the Work, as described in the Contract Documents, and is subject to review and acceptance by the Owner and Architect. The term Substantial Completion is defined in the Contract Documents. For purposes of the Contract Documents applicable to the Contractor, the term Substantial Completion shall refer to the date of completion for the Contractor's portion of the Work as established in the Project Time Schedule. By submitting a bid for the Work, the Bidder agrees that the periods for performing the Work are reasonable, and that the Bidder's Work can be substantially complete by its applicable date for Substantial Completion.

18. PREVAILING WAGE (**Prevailing Wage Rates Do Not Apply to this Project**)

19. OWNER'S RIGHT TO WAIVE DEFECTS AND IRREGULARITIES

- A. The Owner reserves the right to waive any and all irregularities provided that the defects and irregularities do not affect the amount of the bid in any material respect or otherwise give the Bidder a competitive advantage.
- B. By submitting its bid, the Bidder agrees that (i) the Owner's determination of whether a defect or irregularity affects the amount of the bid in any material respect or otherwise gives the Bidder a competitive advantage will be final and conclusive; and (ii) the Bidder will pay the Owner's attorneys and consultants' fees related to any challenge to the bid procedure or process, brought directly or indirectly by the Bidder and/or any of its affiliates, which is unsuccessful.

20. EXECUTION OF THE CONTRACT

Within seven (7) calendar days of the Award of the Contract, or such other time designated by the Owner, the successful Bidder shall execute and deliver to the Owner the required number of the following documents:

- a. Contract Bond, if the Bidder did not submit a Bid Guaranty and Contract Bond with its bid;
- b. Insurance Certificates;
- c. Valid Workers' Compensation Certificate; and
- d. Any other documents identified in the Contract Documents for submission with the signed agreement.

The failure of the successful bidder to execute and deliver the required documents shall constitute a default that entitles the Owner to the Bidder's bid guaranty, as provided in the Ohio Revised Code.

**21. MODIFICATION/WITHDRAWAL OF BIDS**

- A. Modification. A Bidder may modify its bid by written communication to the Owner addressed to the Owner, attention of the Treasurer (with a copy to the Business Manager), at the Owner's address at any time prior to the scheduled closing time for receipt of bids, provided such written communication is received by the Treasurer prior to the bid deadline. The written communication shall 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 until the sealed bid is opened. If the Bidder's written instructions with the change in bid reveal the bid amount in any way prior to the bid opening, the bid may be rejected as non-responsive.
- B. Withdrawal Prior to Bid Deadline. A Bidder may withdraw its bid at any time for any reason prior to the bid deadline established in the Notice to Bidders. The request to withdraw shall be made in writing and submitted to the Owner, attention of the Treasurer (with a copy to the Business Manager), at the Owner's address. The request for withdrawal must be received by the Treasurer prior to the time of the bid opening.
- C. Withdrawal After Bid Deadline.
- (1) All bids shall remain valid and open for acceptance for a period of at least 60 days after the bid opening; provided, however, that a Bidder may request withdrawal its bid from consideration after the bid deadline when all of the following apply:
    - (a) the price bid was substantially lower than the other bids;
    - (b) the reason for the bid being substantially lower was a clerical mistake, rather than a mistake in judgment, and was due to an unintentional and substantial error in arithmetic or an unintentional omission of a substantial quantity of work, labor, or material;
    - (c) the bid was submitted in good faith;
    - (d) the Bidder provides written notice to the Owner, to the attention of the Treasurer, within two (2) business days after the bid opening for which the right to withdraw is claimed.
  - (2) No bid may be withdrawn under this provision if the result would be the awarding of the contract on another bid for the bid package from which the Bidder is withdrawing its bid to the same Bidder.
  - (3) If a bid is withdrawn under this provision, the Owner may award the Contract to another Bidder determined by the Owner to be the lowest responsible bidder or the Owner may reject all bids and advertise for other bids. In the event the Owner advertises for other bids, the withdrawing Bidder shall pay the costs incurred in connection with the rebidding by the Owner, including the cost of printing new Contract Documents, required advertising, and printing and mailing notices to prospective bidders, if the Owner finds that such costs would not have been incurred but for such withdrawal.

22. EQUAL EMPLOYMENT OPPORTUNITY/NONDISCRIMINATION

- A. Minority, female, and disadvantaged businesses will be afforded full opportunity to submit bids, and bidders will not be discriminated against on the grounds of race, color, religion, sex, age, handicap, ancestry, or national origin in the consideration of an award. The successful Bidder(s) shall follow the EEO/nondiscrimination requirements, as applicable to the Project and as required by State and Federal regulations.

END OF SECTION

**DOCUMENT 00 4100**

**BID FORM**

**DATE** \_\_\_\_\_, 20\_\_\_\_

**PROJECT** **Butler Tech and Career Development Schools – Lesourdsville Hi-Bay Electrical Alterations and Modifications**

**PROPOSAL OF** \_\_\_\_\_

hereinafter called "Bidder", a (corporation) (partnership) (sole proprietorship) (Bidder strike out inapplicable terms)

**TO** **Butler Tech and Career Development Schools** (hereinafter called "Owner")

The undersigned, in compliance with your Advertisement for Bids, submits the following Bid.

**1.1 REPRESENTATIONS**

- A. Bidder will accept the provisions of the Bidding Documents.
- B. Bidder will enter into and execute a contract with the Owner within 10 days after notification of the acceptance of this Bid.
- C. Bidder will accomplish the Work in accordance with the Bidding Documents prepared by McGill Smith Punshon, 3700 Park 42 Drive, Suite 190B, Cincinnati, Ohio 45241.

**1.2 TIME OF COMPLETION**

- A. Bidder will achieve Substantial Completion of the Work in the shortest time frame possible. Please provide preliminary, milestone schedule as part of bid package for reference.

**1.3 BID AMOUNTS**

- A. The Owner requests that the base bid be separated as follows:
- B. **LUMP SUM BASE BID:** The undersigned Bidder proposes to perform all Work for the applicable Contract(s), in accordance with the Contract Documents, for the following sum(s):

\_\_\_\_\_ Dollars  
(\$ \_\_\_\_\_)

**1.4 ADDENDA**

- A. Bidder acknowledges receipt of the following Addenda:

No. \_\_\_\_\_ Dated \_\_\_\_\_, 20\_\_\_\_

No. \_\_\_\_\_ Dated \_\_\_\_\_, 20\_\_\_\_



Respectfully Submitted,

\_\_\_\_\_  
Firm Name

\_\_\_\_\_  
By

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
Signature

\_\_\_\_\_  
City, State and Zip Code

\_\_\_\_\_  
Title

\_\_\_\_\_  
Telephone

Corporations: Affix Corporate Seal

\_\_\_\_\_  
State in which incorporated

END OF DOCUMENT

## BUTLER TECH BOARD OF EDUCATION

### FORM OF BID GUARANTY AND CONTRACT BOND

(As prescribed by Section 1563.571, ORC)

**KNOW ALL PERSONS BY THESE PRESENTS**, that we, the undersigned

\_\_\_\_\_ As Principal at \_\_\_\_\_,

(Address) \_\_\_\_\_

And \_\_\_\_\_ as Surety, are hereby held and firmly bound

unto the State of Ohio and the Butler Tech Board of Education as Obligees in the penal sum

of the dollar amount of the bid submitted by the Principal to the Obligee on (date) \_\_\_\_\_,

\_\_\_\_\_ to undertake the Project known as: Butler Tech and Career Development Schools, modifications and alterations to the Welding Lab electrical system at the LeSourdsville Campus: 101 Jerry Couch Blvd., Middletown, Ohio 45044.

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

THE CONDITIONS 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 Obligees accept the bid of the Principal, and the Principal fails to enter into a proper contract in accordance with the bid, plans, details, specifications and bills of material; and in the event the Principal pays to the Obligees the difference not to exceed ten percent of the penalty hereof between the amount specified in the bid and such larger amount for which the Obliees may in good faith contract with the next lowest bidder to perform the work covered by the bid; or resubmits the project for bidding, the Principal will pay the Obligees 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 Obligees accept the bid of the Principal, and the Principal, within ten days after the awarding of the contact, enters into a proper contract in accordance with the bid, plans, details, specifications and bills of material, which said contact 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 contact; and indemnify the Obligees against all damage suffered by failure to perform such contact according to the provisions thereof and in accordance with the plans, details, specifications and bills of material therefor; and shall pay all lawful claims of subcontractors, material suppliers and laborers for labor performed and materials furnished in the carrying forward, performing or completing of said contract; we, agreeing and assenting to, at this undertaking shall be for the benefit of any material supplier or laborer having a just claim, as well as for the Obligees herein; then thus 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 wise affect the obligations or additions to the terms of the contract or to the work or to the specifications.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

**PRINCIPLE:**

\_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**SURETY:**

\_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: (    ) \_\_\_\_\_

By: \_\_\_\_\_

Attorney-in-Fact

**SURETY AGENT:**

\_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: (    ) \_\_\_\_\_

**BUTLER TECH BOARD OF EDUCATION**

**DELINQUENT PERSONAL PROPERTY TAX AFFIDAVIT**

(Section 5719.042, ORC)

Stat of Ohio }  
County of \_\_\_\_\_ } SS.

The undersigned individual, or duly authorized representative of the identified company, having been first duly cautioned and sworn, alleges and states that said individual or company has been advised that he has or it has received a Notice of Intent to Award a Contract(s) let by competitive bid by Butler Tech and Career Development Schools , on behalf of the State of Ohio under Section 3318.10, ORC, but prior to the execution of said contract(s), and pursuant to Section 5719.042, ORC, provides this statement to the Treasurer under oath that he or it was not charged, on the date the Bid(s) was submitted, with any delinquent personal property of Butler County, Ohio, or that he or it is so charged in the following amount:

Delinquent Tax: \_\_\_\_\_  
Penalties and interest due and unpaid: \_\_\_\_\_  
Total (if none, indicate "None") \_\_\_\_\_

A copy of this sworn statement will be attached to and incorporated into the Contract(s) for this Project which shall enable payments to be made under said Contract(S).

By: \_\_\_\_\_ Date: \_\_\_\_\_ , \_\_\_\_\_

Company: \_\_\_\_\_

Project: **Butler Tech and Career Development Schools**  
**Lesourdsville Campus – High Bay Laboratory Electrical Alterations**

Sworn to and executed before me this \_\_\_\_\_ day of \_\_\_\_\_ , \_\_\_\_\_

\_\_\_\_\_  
Notary Public  
My Commission Expires: \_\_\_\_\_

**SECTION 01 1100**

**SUMMARY OF WORK**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Project description.
  - 2. Work sequence.
  - 3. Contractor's use of site and premises.

**1.2 PROJECT DESCRIPTION**

- A. Work of this Project is described as modifications and alterations to the existing electrical infrastructure for the welding program at the LeSourdsville Campus: 101 Jerry Couch Blvd., Middletown, Ohio 45044
- B. The Project will be constructed under a single contract.

**1.3 WORK SEQUENCE**

- A. **The Owner requires the contractor to mobilize on site on Monday, May 22, 2023.**
- B. **Construct Work as required to achieve substantial competition, no later than Tuesday, August 1, 2023.**
- C. Contractor is responsible to prepare the Master Project Schedule and properly coordinate with the Owner for Work across the campus. The Master Project Schedule will be approved by the Owner.
- D. Schedule the Work to accommodate this requirement.

**1.4 CONTRACTOR'S USE OF SITE AND PREMISES**

- A. Contractor shall have complete and exclusive use of site and premises for execution of the Work.
- B. Move any stored products under Contractor's control that interfere with the operations of the Owner or separate contractors.
- C. Coordinate and consult with Owner / Architect regarding any existing students on site during construction.
- D. Assume full responsibility for protection and safekeeping of products under this Contract stored on site.
- E. Do not close or obstruct existing exits.
- F. Do not use or store hazardous or flammable materials on premises without Owner's approval; follow requirements of governing authorities having jurisdiction over the work.
- G. Butler Tech is a weapons and tobacco free campus.

**PART 2 - PRODUCTS**

Not used

**PART 3 - EXECUTION**

Not used

END OF SECTION

**SECTION 01 25 00**

**SUBSTITUTION PROCEDURES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Product Substitution Procedures.

**1.2 GENERAL**

- A. Definition: Proposal by Contractor to use manufacturer, product, material, or system different from one required in Contract Documents.
- B. Do not substitute Products unless a substitution request has been approved by Architect.
- C. Substitutions during Bidding: Refer to Instructions to Bidders.
- D. Architect will consider substitution requests within 30 days after award of Contract. After initial 30 day period, substitutions requests will be considered only due to non-availability of a specified Product through no fault of Contractor.
- E. In case of non-availability of a specified Product notify Architect in writing as soon as non-availability becomes apparent.

**1.3 SUBSTITUTION REQUESTS**

- A. Submit substitution requests on form provided by Architect.
- B. Document specified product and proposed substitution with complete data, including:
  - 1. Product identification, including name and address of manufacturer.
  - 2. Product description, performance and test data, and reference standards.
  - 3. Sample, if requested.
  - 4. Description of any anticipated effect that acceptance of proposed substitution will have on Progress Schedule, construction methods, or other items of Work.
  - 5. Description of any differences between specified product and proposed substitution.
  - 6. Difference in cost between specified product and proposed substitution.
- C. Burden of proof for substantiating compliance of proposed substitution with Contract Document requirements remains with Contractor.
- D. A request constitutes a representation that the Contractor:
  - 1. Has investigated the proposed Product and determined that it meets or exceeds the quality level of the specified Product.
  - 2. Will provide the same warranty for the substitution as for the specified Product.
  - 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
  - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
  - 5. Will reimburse Owner for design services associated with re-approval by authorities or revisions to Contract Documents to accommodate the substitution.
- E. Substitutions will not be considered if:
  - 1. They are indicated or implied on Shop Drawings or other submittals without submittal of a substitution request.

- 2. Approval will require substantial revision of Contract Documents without additional compensation to Architect.
- F. Submit hard copy or electronically in Adobe PDF format to the Architect
- G. Architect will notify Contractor of approval or rejection of each Substitution Request.
- H. Approved Substitutions will be incorporated into Contract by Change Order or Construction Change Directive.

**PART 2 PRODUCTS**

Not used

**PART 3 EXECUTION**

Not used

END OF SECTION



DOCUMENT 01 25 19  
SUBSTITUTION REQUEST FORM

DATE: \_\_\_\_\_  
TO: \_\_\_\_\_  
ATTENTION: \_\_\_\_\_  
PROJECT: \_\_\_\_\_

We submit for your consideration the following product as a substitution for the specified product:

Section No.	Paragraph	Specified Product
_____	_____	_____
Proposed Substitution: _____		
_____		
Reason for Substitution: _____		
_____		

Product Data:

Attach complete technical data for both the specified product and the proposed substitution. Include information on changes to Contract Documents that the proposed substitution will require for its proper installation.

Samples:

\_\_\_ Attached    \_\_\_ Will be furnished upon request

Does the substitution affect dimensions shown on Drawings?

\_\_\_ No    \_\_\_ Yes (explain) \_\_\_\_\_

\_\_\_\_\_

Effects of proposed substitution on other Work:

\_\_\_\_\_

\_\_\_\_\_

Differences between proposed substitution and specified Product:

\_\_\_\_\_

\_\_\_\_\_

Manufacturer's warranties of the proposed substitution are:

☐ Same ☐ Different (explain) \_\_\_\_\_  
\_\_\_\_\_

Maintenance service and spare parts are available for proposed substitution from:

\_\_\_\_\_  
\_\_\_\_\_

Previous installations where proposed substitution may be seen:

Project: _____	Project: _____
Owner: _____	Owner: _____
Architect: _____	Architect: _____
Date Installed: _____	Date Installed: _____

Cost savings to be realized by Owner, if proposed substitution is approved:

\_\_\_\_\_

Change to Contract Time, if proposed substitution is approved:

☐ No Change ☐ Add \_\_\_\_\_ days ☐ Deduct \_\_\_\_\_ days

Submittal constitutes a representation that Contractor has read and agrees to the provisions of Section 01 2500.

Submitted by Contractor:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Firm

For Use by Architect:

Based on the information supplied by the Contractor the Architect has reviewed the proposed substitution on the basis of design concept of the Work and conformance with information given in Contract Documents.

☐ Approved ☐ Approved as Noted ☐ Rejected

Submit Additional Information: \_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_

**SECTION 01 26 13**

**REQUESTS FOR INFORMATION**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Requests for Information (RFI's).
- B. Related Sections:
  - 1. Section 01 25 00 - Substitution Procedures.
  - 2. Section 01 26 00 - Contract Modification Procedures.
  - 3. Section 01 33 00 - Submittal Procedures.
  - 4. Section 01 77 00 - Closeout Procedures.

**1.2 GENERAL**

- A. Request for Information (RFI): Request from Contractor seeking interpretation or clarification of Contract Documents not involving Substitutions or changes to Contract Sum or Contract Time.
- B. RFI's constitute a request for information only.
- C. Do not submit RFI's:
  - 1. To request approval of Substitutions; refer to Section 01 25 00.
  - 2. To request changes known to include changes to Contract Sum or Contract Time; refer to Section 01 26 00.
  - 3. To request approval of submittals; refer to Section 01 33 00.
  - 4. To submit Project Record Documents; refer to Section 01 77 00.

**1.3 SUBMITTAL**

- A. Submit RFI's on standard form provided by Contractor.
- B. Include on each RFI:
  - 1. Name of Contractor.
  - 2. Project name.
  - 3. Date submitted.
  - 4. Sequential RFI number.
  - 5. Applicable Drawing sheet and detail numbers or Specification Section numbers.
  - 6. Date when response information is required to avoid impact on Construction Schedule and Construction Cost.
- C. Review and sign RFI's submitted by Subcontractors, Sub-Subcontractors, or Suppliers prior to submittal to Architect.
- D. Maintain log of RFI's showing RFI number and current status of each RFI.
- E. When RFI's require submittal of drawings, follow submittal procedures specified for Shop Drawings in Section 01 33 00.
- F. Submit electronically in Adobe PDF format.

- G. Allow minimum 7 days for Architect's review and response to each RFI.

**PART 2 PRODUCTS**

Not used

**PART 3 EXECUTION**

Not used

END OF SECTION

**SECTION 01 29 00**

**PAYMENT PROCEDURES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Schedule of Values.
  - 2. Applications for Payment.
- B. Related Sections:
  - 1. Section 01 77 00 - Closeout Procedures.

**1.2 SCHEDULE OF VALUES**

- A. General:
  - 1. Submit a Schedule of Values to Architect at least 20 days prior to submitting first Application for Payment.
  - 2. Upon request of Architect, furnish additional data to support values given that will substantiate their correctness.
  - 3. Approved Schedule of Values will be used as basis for reviewing Contractor's Applications for Payment.
- B. Form and Content:
  - 1. Format: AIA Document G703 - Continuation Sheet of Application and Certification for Payment.
  - 2. Use Table of Contents of Project Manual as basis of format for listing costs of Work.
  - 3. List installed value of component parts of Work in sufficient detail to serve as basis for computing values for progress payments.
  - 4. Include separate line items for:
    - a. Site mobilization.
    - b. Bonds and insurance.
    - c. Contractor's overhead and profit.
  - 5. For items on which payment will be requested for stored materials, break down value into:
    - a. Cost of materials, delivered and unloaded, with taxes paid.
    - b. Total installed value.
  - 6. For each line item that has a value of more than \$25,000.00, break down costs to list major products or operations under each item.
  - 7. Total of costs listed in Schedule shall equal Contract Sum.
- C. Submit electronically in Adobe PDF format.
- D. Review and Resubmittal:
  - 1. After initial review by Architect, revise and resubmit if required.
  - 2. Revise and resubmit along with next Application for Payment when a Change Order is issued. List each Change Order as a new line item.

**1.3 APPLICATIONS FOR PAYMENT**

- A. Preparation:
  - 1. Format: AIA Document G702 - Application and Certification for Payment, supported by AIA Document G703 - Continuation Sheet.
  - 2. Prepare required information in typewritten format or on electronic media format.
  - 3. Use data from reviewed Schedule of Values. Provide dollar value in each column for each line item representing portion of work performed.

4. List each authorized Change Order as a separate line item, listing Change Order number and dollar value.
  5. Prepare Application for Final Payment as specified in Section 01 7700.
- B. Waivers of Lien:
1. Along with the each Application for Payment, submit waivers of lien from Contractor and each Subcontractor or Sub-subcontractor included on the current month's Application for Payment.
  2. Submit partial waivers on each item for amount requested, prior to deduction of retainage.
  3. For completed items, submit full or final waiver.
- C. Submittal:
1. Submit one hard copy and one electronic copy in Adobe PDF format of each Application for Payment.
  2. Payment period: Submit by the 25 day of each month.

**PART 2 PRODUCTS**

Not used

**PART 3 EXECUTION**

Not used

END OF SECTION

**SECTION 01 31 00**

**PROJECT MANAGEMENT AND COORDINATION**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Project coordination.
  - 2. Coordination drawings.
  - 3. Project meetings.
- B. Related Sections:
  - 1. Section 01 77 00 - Contract Closeout.

**1.2 PROJECT COORDINATION**

- A. Submit required project submittals electronically in Adobe PDF format.
- B. Coordinate scheduling, submittals, and work of various Sections of specifications to assure efficient and orderly sequence of installation of interdependent construction elements.
- C. Coordinate completion and clean up of work of separate Sections in preparation for Substantial Completion.
- D. 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 PROJECT MEETINGS**

- A. Schedule and administer preconstruction conference, progress meetings and pre-installation conferences.
- B. Make physical arrangements for meetings; notify involved parties at least 5 days in advance.
- C. Record significant proceedings and decisions at each meeting; reproduce and distribute copies to parties in attendance and others affected by proceedings and decisions made.

**1.4 PRECONSTRUCTION CONFERENCE**

- A. Schedule within 10 days after date of Notice to Proceed at Contractor's Project field office.
- B. Attendance:
  - 1. Contractor.
  - 2. Owner.
  - 3. Architect
  - 4. Representative of Testing Laboratory for Construction Materials
  - 5. Major subcontractors and suppliers as Contractor deems appropriate.
- C. Review and Discuss:
  - 1. Relation and coordination of various parties, and responsible personnel for each party.
  - 2. Use of premises, including office and storage areas, and security procedures.
  - 3. Construction schedule and critical work sequencing.
  - 4. Processing of:
    - a. Contract modifications.

- b. Shop Drawings, Product Data, and Samples.
- c. Applications for Payment.
- d. Substitutions.
- e. Requests for Information.
- f. Other required submittals.
- 5. Adequacy of distribution of Contract Documents.
- 6. Procedures for maintaining contract closeout submittals.
- 7. Notification procedures and extent of testing and inspection services.

#### **1.5 PROGRESS MEETINGS**

- A. Schedule weekly progress meetings.
- B. Location: Contractor's Project field office.
- C. Attendance:
  - 1. Contractor.
  - 2. Owner / Owner's Representative
  - 3. Architect and consultants as appropriate to agenda.
  - 4. Subcontractors and suppliers as appropriate to agenda.
  - 5. Others as appropriate to agenda.
- D. Review and Discuss:
  - 1. Work progress since previous meeting, including:
    - a. Field observations, deficiencies, conflicts, and problems.
    - b. Progress and completion date.
    - c. Corrective measures needed to maintain quality standards, progress, and completion date.
  - 2. Status of:
    - a. Requests for information.
    - b. Submittals.
    - c. Contract modifications.
  - 3. Coordination between various elements of Work.
  - 4. Maintenance of Project Record Documents.

#### **1.6 PRE-INSTALLATION CONFERENCES**

- A. Where required in individual specification Section, convene a pre-installation conference at project site or other designated location.
- B. Require attendance of parties directly affecting or affected by work of the specific Section.
- C. Review conditions of installation, preparation and installation procedures, and coordination with related work.

### **PART 2 PRODUCTS**

Not used

### **PART 3 EXECUTION**

Not used

END OF SECTION



**SECTION 01 32 16**

**CONSTRUCTION PROGRESS SCHEDULES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Construction progress schedule.
- B. Related Sections:
  - 1. Section 01 11 00 - Summary of Work: Work sequence.
  - 2. Section 01 29 00 - Payment Procedures.

**1.2 FORMAT**

- A. Prepare Progress Schedule on network analysis system using the critical path method.
- B. Sequence of Listings: The chronological order of the start of each item of Work.
- C. Scale and Spacing: To provide space for notations and revisions.
- D. Sheet Size: Multiples of 8-1/2 x 11 inches.

**1.3 CONTENT**

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by specification Section number.
- C. Identify work of separate sites / areas.
- D. Provide sub-schedules for each phase of Work identified in Section 01 11 00.
- E. Provide sub-schedules to define critical portions of the entire Progress Schedule.
- F. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- G. Provide separate schedule of submittal dates for Shop Drawings, Product Data, and Samples, including:
  - 1. Dates reviewed submittals will be required from Architect.
  - 2. Decision dates for selection of finishes.
  - 3. Delivery dates for Owner furnished products and Products identified under Allowance.
- H. Coordinate content with Schedule of Values specified in Section 01 29 00.
- I. Revisions:
  - 1. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
  - 2. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
- J. Provide narrative report to define problem areas, anticipated delays, and impact on Progress Schedule. Report corrective action taken, or proposed, and its effect.

**1.4 SUBMITTAL**

- A. Submit initial Progress Schedule within 14 days after date of Notice to Proceed. After review, resubmit required revised data within 10 days.
- B. Submit revised Progress Schedule with each every other Application for Payment.
- C. Submit electronically in Adobe PDF format.

**1.5 DISTRIBUTION**

- A. Distribute copies of approved Progress Schedule to project site file, Subcontractors, suppliers, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in Progress Schedule.

**PART 2 PRODUCTS**

Not used

**PART 3 EXECUTION**

Not used

END OF SECTION

**SECTION 01 33 00**

**SUBMITTAL PROCEDURES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Submittal procedures.
  - 2. Proposed Products list.
  - 3. Submittal schedule.
  - 4. Shop Drawings.
  - 5. Product Data.
  - 6. Samples.
  - 7. Quality control submittals.
- B. Related Sections:
  - 1. Section 01 40 00 - Quality Requirements.

**1.2 SUBMITTAL PROCEDURES**

- A. Number each submittal with Project Manual section number and a sequential number within each section. Number resubmittals with original number and an alphabetic suffix.
- B. Identify Project, Contractor, Subcontractor or supplier, pertinent Drawing sheet and detail numbers, and specification Section number, as appropriate.
- C. Submit all submittals listed under “Submittals for Review” simultaneously for each Product or Specification Section.
- D. Where multiple Products function as an assembly, group submittals for all related Products into single submittal.
- E. Architect will not review incomplete submittals.
- F. Apply Contractor’s stamp, signed or initialed certifying that:
  - 1. Submittal was reviewed.
  - 2. Products, field dimensions, and adjacent construction have been verified.
  - 3. Information has been coordinated with requirements of Work and Contract Documents.
- G. Schedule submittals to expedite the Project, and deliver to Architect. Coordinate submittal of related items.
- H. For each submittal, allow 7 days for Architect’s review, excluding delivery time to and from Contractor.
- I. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of completed Work.
- J. Revise and resubmit submittals when required; identify all changes made since previous submittal.
- K. Distribute copies of reviewed submittals to concerned parties and to Project Record Documents file. Instruct parties to promptly report any inability to comply with provisions.

**1.3 PROPOSED PRODUCTS LIST**

- A. Within 15 days after date of Notice to Proceed, submit a complete list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.
- C. Submit electronically in Adobe PDF format.

**1.4 SUBMITTAL SCHEDULE**

- A. Within 15 days after date of Notice to Proceed, submit a submittal schedule showing all submittals proposed for project, including submittals listed as:
  - 1. Submittals for Review.
  - 2. Quality Control Submittals.
  - 3. Closeout Submittals.
- B. Include for each submittal:
  - 1. Specification section number.
  - 2. Description of submittal.
  - 3. Type of submittal.
  - 4. Anticipated submittal date.
  - 5. For submittals requiring Architect's review, date reviewed submittal will be required from Architect.
- C. Submit electronically in Adobe PDF format.

**1.5 SHOP DRAWINGS**

- A. Present information in clear and thorough manner.
- B. Identify details by reference to sheet and detail numbers or room number shown on Drawings.
- C. Reproductions of details contained in Contract Documents are not acceptable.
- D. Coordinate specific requirements for each shop drawing and what is required by the Contractor and their Subcontractors. Submit one copy plus the number of copies the Contractor needs for distribution and/or Submit electronically in Adobe PDF format. Architect will return all but one copy to Contractor for printing and distribution as necessary.

**1.6 PRODUCT DATA**

- A. Mark each copy to identify applicable products, models, options, and other data.
- B. Supplement manufacturers' standard data to provide information unique to this Project.
- C. Submit electronically in Adobe PDF format. Architect will return one copy to Contractor for printing and distribution.

**1.7 SAMPLES**

- A. Submit samples to illustrate functional and aesthetic characteristics of Products, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

- B. Where so indicated, submit samples of finishes from the full range of manufacturers' standard colors, textures, and patterns for Architect's selection.
- C. Include identification on each sample, with full Project information.
- D. Unless otherwise specified in individual specifications, submit two of each sample.
- E. Architect will notify Contractor of approval or rejection of samples, or of selection of color, texture, or pattern if full range is submitted.

**1.8 QUALITY CONTROL SUBMITTALS**

- A. Quality control submittals specified in Section 01 4000 are for information and do not require Architect's responsive action except to require resubmission of incomplete or incorrect information.

**PART 2 PRODUCTS**

Not used

**PART 3 EXECUTION**

Not used

END OF SECTION

**SECTION 01 40 00**  
**QUALITY REQUIREMENTS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. References.
  - 2. Quality assurance and control of installation.
  - 3. Test reports and certifications.
  - 4. Manufacturer's installation instructions.

**1.2 REFERENCES**

- A. For products or workmanship specified by reference to association, trade or industry standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Conform to edition of reference standard in effect as of date of Project Manual.
- D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

**1.3 QUALITY ASSURANCE AND CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when 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, physical distortion or disfigurement.

**1.4 TEST REPORTS AND CERTIFICATIONS**

- A. When specified in individual specification Sections, require material or Product suppliers or manufacturers to provide test reports and manufacturers' certifications.
- B. Indicate that material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

- C. Submittals may be recent or previous test results on material or Product, but must be acceptable to Architect.
- D. Submit electronically in Adobe PDF format.

**1.5 MANUFACTURER'S INSTALLATION INSTRUCTIONS**

- A. When Contract Documents require that Products be installed in accordance with manufacturer's instructions:
  - 1. Submit manufacturer's most recent printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, as applicable.
    - a. Submit in quantities specified for Product Data.
    - b. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
    - c. Identify conflicts between manufacturers' instructions and requirements of Contract Documents.
  - 2. Perform installation of Products to comply with requirements of manufacturer's instructions.
  - 3. If installation cannot be performed in accordance with manufacturer's instructions, notify Architect and await instructions.
  - 4. Submit electronically in Adobe PDF format.

**PART 2 PRODUCTS**

Not used

**PART 3 EXECUTION**

Not used

END OF SECTION

**SECTION 01 45 23**

**TESTING AND INSPECTION SERVICES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Laboratory selection and payment.
  - 2. Laboratory duties.
  - 3. Contractor's responsibilities.
- B. Related Sections: Individual specifications sections contain specific tests and inspections to be performed.

**1.2 REFERENCES**

- A. ASTM International (ASTM):
  - 1. C1077 - Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.
  - 2. D3666 - Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials.
  - 3. D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
  - 4. E329 - Standard Specification for Agencies Engaged in Construction Inspection and/or Testing.
  - 5. E543 - Standard Specification for Agencies Performing Nondestructive Testing.

**1.3 QUALITY ASSURANCE**

- A. Owner will employ and pay for services of an independent testing laboratory to perform specified testing and inspection.
- B. Contractor shall cooperate with the Testing Laboratory to facilitate performance of its work.
- C. Refer to the Conditions of the Contract for provisions related to special inspections and testing.
- D. Qualifications of Laboratory:
  - 1. Meet requirements of ASTM [C1077] [D3666] [D3740] [E329] [and] [E543].
  - 2. Authorized to operate in State in which project is located.

**1.4 LABORATORY DUTIES**

- A. Cooperate with Architect and Contractor; provide qualified personnel after due notice.
- B. Perform specified inspections, sampling, and testing of materials and methods of construction:
  - 1. Comply with specified standards.
  - 2. Ascertain compliance or noncompliance of materials with requirements of Contract Documents.
- C. Promptly notify Architect and Contractor of observed irregularities or deficiencies of Work or products.
- D. Promptly submit written report of each test and inspection; electronically in Adobe PDF format to Architect, Owner, and Contractor.
- E. Each report to include:



1. Date issued.
2. Project title and number.
3. Testing Laboratory name, address, and telephone number.
4. Name of Inspector and signature of individual in charge.
5. Date and time of sampling or inspection.
6. Record of temperature and weather conditions.
7. Date of test.
8. Identification of product and specification section.
9. Location of sample or test in project.
10. Type of inspection or test.
11. Results of tests and compliance or noncompliance with Contract Documents.
12. Interpretation of test results when requested by Architect or Contractor.

F. Perform additional tests when required by Architect or Contractor.

G. Laboratory is not authorized to:

1. Release, revoke, alter, or enlarge on requirements of Contract Documents.
2. Approve or accept any portion of work.
3. Perform any duties of Contractor.

#### **1.5 CONTRACTOR'S RESPONSIBILITIES**

A. Cooperate with Laboratory personnel, provide access to Work, and to manufacturer's operations.

B. When materials require testing prior to being incorporated into Work, secure and deliver to Laboratory adequate quantities of representative samples of materials proposed to be used.

C. Furnish copies of product test reports as required.

D. Furnish incidental labor and facilities:

1. To provide access to work to be tested.
2. To obtain and handle samples at site or at source of product to be tested.
3. To facilitate inspections and tests.
4. For safe storage and curing of test samples.

E. Notify Laboratory sufficiently in advance of operations to allow for Laboratory assignment of personnel and scheduling of tests.

F. When tests or inspections cannot be performed after such notice, reimburse Owner for Laboratory personnel and travel expenses incurred due to Contractor's negligence.

G. Make arrangements with Laboratory and pay for additional samples and tests required for Contractor's convenience.

#### **PART 2 PRODUCTS**

Not used

#### **PART 3 EXECUTION**

Not used

END OF SECTION

**SECTION 01 60 00**

**PRODUCT REQUIREMENTS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Products.
  - 2. Transportation and handling.
  - 3. Storage and protection.
  - 4. Product options.
- B. Related Sections:
  - 1. Section 01 25 00 - Substitution Procedures.

**1.2 PRODUCTS**

- A. Provide interchangeable components by the same manufacturer for identical items.
- B. Do not use products containing asbestos or other known hazardous materials.

**1.3 TRANSPORTATION AND HANDLING**

- A. Coordinate delivery of Products to prevent conflict with Work and adverse conditions at site.
- B. Transport and handle Products in accordance with manufacturer's instructions.
- C. Promptly inspect shipments to ensure that Products comply with requirements of Contract Documents, are undamaged, and quantities are correct.
- D. Provide equipment and personnel to handle products by methods to prevent damage.

**1.4 STORAGE AND PROTECTION**

- A. Store and protect Products in accordance with manufacturer's instructions with manufacturer's seals and labels intact and legible.
- B. Store Products on site unless prior written approval to store off site has been obtained from Owner.
- C. Store Products subject to damage by elements in weathertight enclosures. Maintain temperature and humidity within ranges required by manufacturer's instructions.
- D. Exterior Storage:
  - 1. Store fabricated Products above ground; prevent soiling and staining.
  - 2. Cover products subject to deterioration with impervious sheet coverings; provide ventilation to prevent condensation.
  - 3. Store loose granular materials in well drained area on solid surfaces; prevent mixing with foreign matter.
- E. Arrange storage areas to permit access for inspection. Periodically inspect stored products to verify that products are undamaged and in acceptable condition.

**1.5 PRODUCT OPTIONS**

- A. Products specified by reference standard only:
  - 1. Select any Product meeting the specified standard.
  - 2. Submit Product Data to substantiate compliance of proposed Product with specified requirements.
- B. Products specified by naming two or more acceptable Products: Select any named Product.
- C. Products specified by stating that the Contract Documents are based on a Product by a single manufacturer followed by the statement "Equivalent products by the following manufacturers are acceptable":
  - 1. Select the specified Product or a Product by a named manufacturer having equivalent or superior characteristics to the specified Product and meeting the requirements of the Contract Documents.
  - 2. If the specified Product is not selected, submit Product Data to substantiate compliance of proposed Product with specified requirements.
  - 3. The specified Product establishes the required standard of quality.
- D. Products specified by naming one or more Products followed by "or approved substitute" or similar statement:
  - 1. Submit a substitution request under provisions of Section 01 25 00 for Products not listed.
  - 2. The specified Product establishes the required standard of quality.
- E. Products specified by naming one or more Products or manufacturers followed by the statement "Substitutions: Under provisions of Division 01":
  - 1. Submit a substitution request under provisions of Section 01 25 00 for Products not listed.
  - 2. The specified Product establishes the required standard of quality.
- F. Products specified by naming one Product followed by the statement "Substitutions: Not permitted": Substitutions will not be allowed.
- G. Products specified by required performance or attributes, without naming a manufacturer or Product:
  - 1. Select any Product meeting specified requirements.
  - 2. Submit Product Data to substantiate compliance of proposed Product with specified requirements.

**PART 2 PRODUCTS**

Not used

**PART 3 EXECUTION**

Not used

END OF SECTION

**SECTION 01 71 23**

**FIELD ENGINEERING**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Survey and field engineering.
  - 2. Submittals.
  - 3. Records.
- B. Provide and pay for field engineering services required for Project:
  - 1. Survey work required in execution of Work.
  - 2. Other professional engineering services specified or required to execute Contractor's construction methods.

**1.2 QUALIFICATIONS**

- A. Technician: Qualified, experienced instrument technician.
- B. Surveyor: Qualified land surveyor, licensed in State in which project is located.
- C. Engineer: Registered professional engineer of discipline required for specific service on Project. Licensed in State in which project is located.

**1.3 SUBMITTALS**

- A. Submit documentation to verify accuracy of field engineering work upon Architect's request.
- B. Submit certification that elevations and locations of improvements are in conformance with Contract Documents.

**1.4 SURVEY REFERENCE POINTS**

- A. Existing horizontal and vertical control points for project are those designated on Drawings.
- B. Locate, verify, and protect control points prior to beginning Work; preserve permanent reference points during construction.

**1.5 PROJECT SURVEY REQUIREMENTS**

- A. Establish minimum of two permanent bench marks on site, referenced to survey control points. Record locations on Project Record Documents.
- B. Establish lines and levels, locate and lay out, by instrumentation:
  - 1. Site improvements:
    - a. Stakes for grading, fill, and topsoil placement.
    - b. Utility slopes and invert elevations.
  - 2. Building foundation and column locations, floor elevations, and other controlling dimensions.
  - 3. Controlling lines and levels required for mechanical and electrical trades.

- C. Promptly notify Architect of any errors or discrepancies noted; await instructions prior to proceeding with Work.

1.6 RECORDS

- A. Maintain accurate log of control and survey work.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

END OF SECTION

**SECTION 01 77 00**

**CLOSEOUT PROCEDURES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Closeout procedures.
  - 2. Final cleaning.
  - 3. Project record documents.
  - 4. Operation and maintenance data.
  - 5. Warranties.
  - 6. Demonstration and instructions.

**1.2 CLOSEOUT PROCEDURES**

- A. Final Inspection:
  - 1. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with the Contract Documents and ready for Architect's inspection.
  - 2. If Architect performs reinspection due to failure of Work to comply with claims of status of completion made by Contractor, Owner will compensate Architect for such additional services and will deduct the amount of such compensation from final payment to Contractor.
- B. Submit final Application for Payment showing original Contract Sum, adjustments, previous payments, retainage withheld from previous payments, and sum remaining due.
- C. Closeout Submittals:
  - 1. Evidence of compliance with requirements of governing authorities (if applicable).
  - 2. Project Record Documents.
  - 3. Operation and Maintenance Data.
  - 4. Warranties.
  - 5. Evidence of payment of Subcontractors and suppliers.
  - 6. Final lien waiver.
  - 7. Certificate of insurance for products and completed operations.
  - 8. Consent of Surety to final payment.
- D. Owner will occupy all portions of the building as specified in Section 01 11 00.

**1.3 FINAL CLEANING**

- A. Execute final cleaning prior to final inspection.

- B. Clean debris from all paved areas.
- C. Clean site; sweep paved areas, rake clean landscaped surfaces.
- D. Remove waste and surplus materials, rubbish, and construction facilities from the site.

#### **1.4 PROJECT RECORD DOCUMENTS**

- A. Maintain following record documents on site; record actual revisions to the Work:
  - 1. Drawings.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Change Orders and other Modifications to the Contract.
  - 5. Reviewed Shop Drawings, Product Data, and Samples.
  - 6. Material Safety Data Sheets.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Make entries neatly and accurately.
- E. Label each set or volume with title "PROJECT RECORD DOCUMENTS", project title, and description of contents.
  - 1. Organize contents according to Project Manual table of contents.
  - 2. Provide table of contents for each volume.
- F. Drawings: Mark each item to record actual construction including:
  - 1. Measured depths of foundations in relation to finish floor datum.
  - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  - 4. Field changes of dimension and detail.
  - 5. Details not on original Drawings.
- G. Specifications: Mark 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.
- H. Shop Drawings: Mark each item to record actual construction including:
  - 1. Field changes of dimension and detail.
  - 2. Details not on original Shop Drawings.
- I. Submit one hard copy and one electronic copy in PDF Format.

#### **1.5 OPERATION AND MAINTENANCE DATA**

- A. Identify as "OPERATION AND MAINTENANCE INSTRUCTIONS" and title of project.
- B. Contents:
  - 1. Directory: List names, addresses, and telephone numbers of Architect, Contractor, Subcontractors, and major suppliers.

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:
    - a. Significant design criteria.
    - b. Maintenance instructions
    - c. Maintenance instructions for special finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.
  3. Project documents and certificates including:
    - a. Shop drawings and product data.
    - b. Certificates.
    - c. Copies of warranties and bonds.
- C. Submittal:
1. Submit one Hard copy and Submit electronically in Adobe PDF format at least 15 days prior to final inspection.
  2. Architect will notify Contractor of any required revisions after final inspection.
  3. Revise content of documents as required prior to final submittal.
  4. Submit one hard copy of revised documents and one copy electronically in Adobe PDF format within 10 days after final inspection.

#### **1.6 WARRANTIES**

- A. Execute and assemble documents from Subcontractors, suppliers, and manufacturers.
- B. Include Table of Contents.
- C. Submit one hard copy and one copy electronically in Adobe PDF format along with final Application for Payment.
- D. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within 10 days after acceptance, listing date of acceptance as start of warranty period.

#### **PART 2 PRODUCTS**

Not used

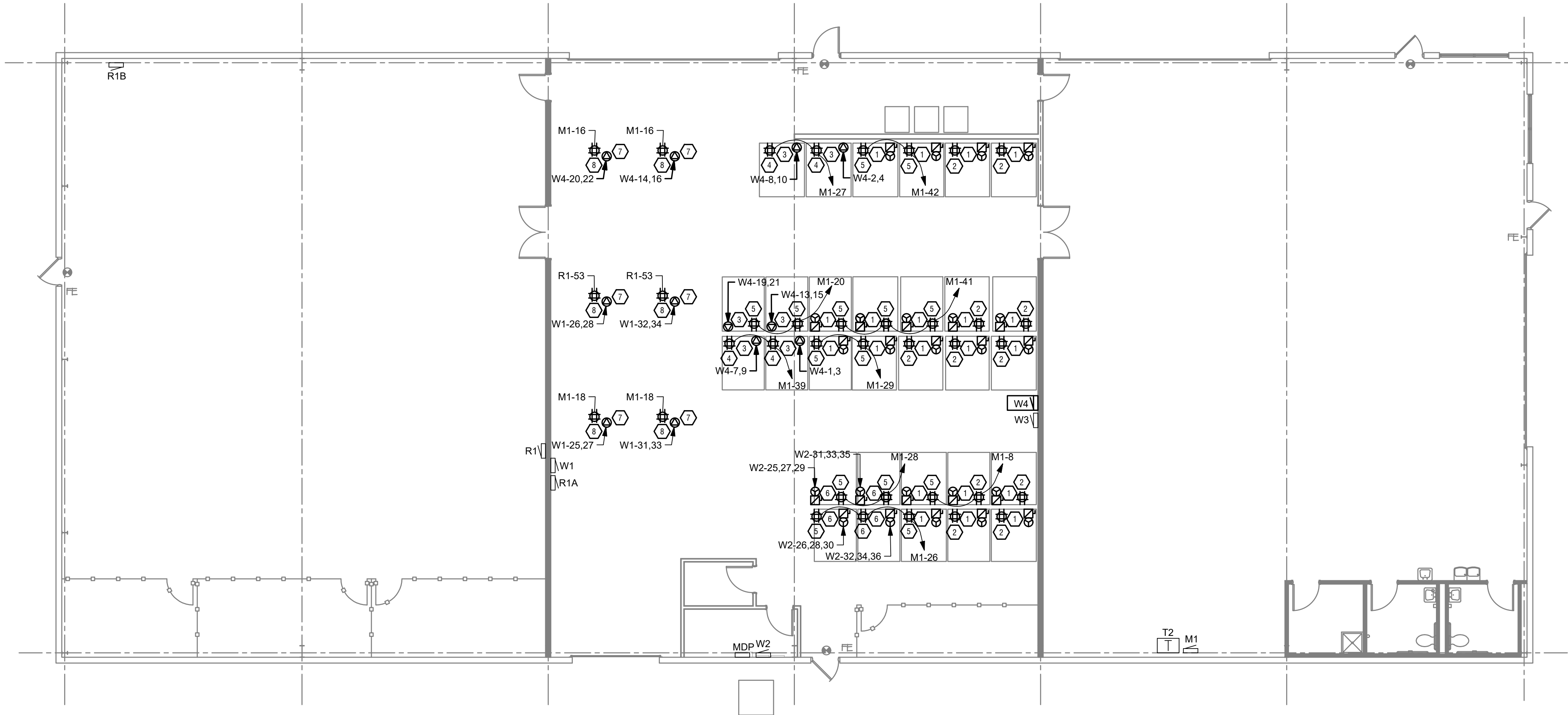
#### **PART 3 EXECUTION**

Not used

END OF SECTION

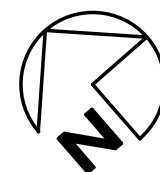


Z:\Project Directories\9500-5599\9575- Butler Tech- LeSourdville High Bay Lab\Construction Documents\9575-E1-0-ELECTRICAL-POWER-FLOOR-PLAN.dwg - EBS. Plot Date/Time: Mar 14, 2023 - 1:08pm - By: m.mullins  
THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INTENDED TO PROVIDE THE AUTHORITIES HAVING JURISDICTION WITH INFORMATION TO DETERMINE CODE COMPLIANCE. THE INSTALLING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONSTRUCTION ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTUAL AGREEMENT THAT MAY EXIST WITH AN OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, ETC.



## ELECTRICAL POWER FLOOR PLAN

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



### SCOPE OF WORK

PROJECT CONSISTS OF INSTALLATION OF 10 NEW BOOTH MOUNTED WELDER RECEPTACLES, 10 NEW BOOTH MOUNTED QUAD RECEPTACLES, 6 NEW WELDER RECEPTACLE CORD REELS, AND 6 NEW QUAD RECEPTACLE CORD REELS. ALL NEW DEVICES TO BE FED FROM EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT.

### GENERAL NOTES-OVERALL PROJECT

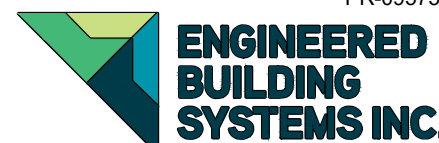
- A. EBS DRAWINGS INDICATE DESIGN INTENT AND REQUIRED OUTCOMES. IF CONDITIONS ARISE IN THE FIELD THAT REQUIRE DEVIATIONS FROM THE DRAWINGS IT IS ASSUMED THAT THE CONTRACTOR WILL DETERMINE THE APPROPRIATE DEVIATION WITH APPROVAL FROM THE OWNER. EBS IS AVAILABLE TO ASSIST WHEN REQUIRED IF ISSUES ARISE.

### GENERAL NOTES-POWER

- A. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL CONDUIT/CABLE ROUTING. COORDINATE ROUTING WITH ALL OTHER TRADES AND BUILDING CONDITIONS.
- B. SEE SINGLE LINE DIAGRAM FOR FEEDER WIRE AND CONDUIT SIZE. ALL CIRCUITS NOT SIZED ON DRAWING SHALL BE INSTALLED TO MEET MINIMUM SIZE REQUIRED BY NEC.
- C. PROVIDE MOTOR STARTERS FOR EQUIPMENT AS INDICATED ON DRAWINGS. COORDINATE ANY INTERLOCKING WIRING WITH HVAC CONTRACTOR AND PROVIDE WIRING, COILS, AND AUXILIARY CONTACTS AS NECESSARY. SIZE ALL CIRCUITS FOR ACTUAL EQUIPMENT TO BE CONNECTED.
- D. ALL PANELS AND DISCONNECTS LOCATED OUTDOORS SHALL BE LABELED NEMA 3R.
- E. ROOF MOUNTED AND OUTDOOR EQUIPMENT SHALL HAVE 120V RECEPTACLE MOUNTED WITHIN 25' OF EACH PIECE. RECEPTACLES SHALL BE IN WEATHER PROOF BOX AND HAVE GFCI PROTECTION.
- F. FOR ITEMS FURNISHED BY OTHER TRADES, ELECTRICAL CONTRACTOR TO FULLY COORDINATE BREAKER AND WIRE SIZES WITH ACTUAL EQUIPMENT BEING CONNECTED PRIOR TO ROUGH-IN, OR INSTALLATION. THE SIZES ON PANEL SCHEDULES REFER TO BASIS OF DESIGN SELECTIONS, AND ACTUAL ITEMS MAY DEVIATE FROM BASIS OF DESIGN. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO CONFIRM REQUIRED WIRE AND BREAKER SIZES WITH THE CONTRACTOR FURNISHING THE EQUIPMENT.
- G. MOUNTING HEIGHTS TO BE COORDINATED WITH OWNER IN FIELD.
- H. CONTRACTOR TO PROVIDE GROUNDING AND BONDING AS REQUIRED FOR ELECTRICAL SYSTEMS. GROUNDING AND BONDING IS CONSIDERED MEANS AND METHODS OF CONSTRUCTION AND SHOULD BE COMPLETED BY THE ELECTRICAL CONTRACTOR IN ACCORDANCE WITH NEC 250. GAS PIPING SYSTEMS MUST BE BONDED PER UTILITY PROVIDER'S INSTALLATION GUIDELINES WHERE REQUIRED.
- I. REFER TO NEC SECTION 630.11 (A) FOR WIRE SIZING REQUIREMENTS FOR WELDERS.

### # KEYED SHEET NOTES

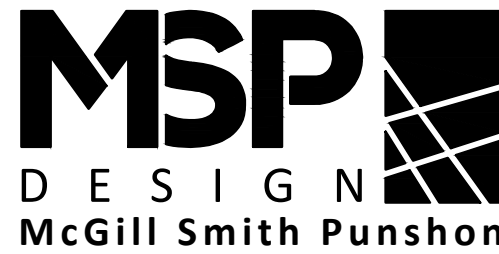
1. RELOCATE EXISTING WELDER DISCONNECT TO ACCOMMODATE NEW BOOTH LAYOUT. REWORK EXISTING UNISTRUT, CONDUITS, AND WIRING AS NECESSARY.
2. RELOCATE EXISTING DUPLEX RECEPTACLE TO NEW LOCATION IN NEW BOOTH LAYOUT. CHANGE DUPLEX RECEPTACLE TO NEW QUAD RECEPTACLE. REWORK CONDUITS AND WIRING AS NECESSARY.
3. ADD NEW WELDER RECEPTACLE IN WELDING BOOTH. MOUNT RECEPTACLE ON UNISTRUT SO BOOTH CAN BE MOVED WITHOUT REMOVING RECEPTACLE. ROUTE CONDUIT IN SAME MANNER AS EXISTING WELDER CONDUITS. ADD OR REWORK EXISTING UNISTRUT AS NECESSARY TO ACCOMMODATE NEW BOOTH LAYOUT.
4. ADD NEW QUAD RECEPTACLE IN WELDING BOOTH. MOUNT RECEPTACLE ON UNISTRUT SO BOOTH CAN BE MOVED WITHOUT REMOVING RECEPTACLE. ROUTE CONDUIT IN SAME MANNER AS EXISTING WELDER CONDUITS. ADD OR REWORK EXISTING UNISTRUT AS NECESSARY TO ACCOMMODATE NEW BOOTH LAYOUT.
5. ADD NEW QUAD RECEPTACLE IN WELDING BOOTH. ROUTE CONDUIT IN SAME MANNER AS EXISTING WELDER CONDUITS.
6. ADD NEW WELDER DISCONNECT AND CONNECTION IN WELDING BOOTH. ROUTE CONDUIT IN SAME MANNER AS EXISTING WELDER CONDUITS. DISCONNECT TO BE PROVIDED BY OWNER, INSTALLED BY CONTRACTOR.
7. ADD NEW WELDER RECEPTACLE CORD REEL IN CEILING. VERIFY CORD REEL TYPE, SIZE, AND NEMA CONFIGURATION WITH OWNER PRIOR TO INSTALL. FIELD VERIFY DROP LOCATION WITH OWNER / ARCHITECT IN FIELD PRIOR TO INSTALLATION.
8. ADD NEW QUAD RECEPTACLE CORD REEL IN CEILING. VERIFY CORD REEL TYPE, AND SIZE, PRIOR TO INSTALL. FIELD VERIFY DROP LOCATION WITH OWNER / ARCHITECT IN FIELD PRIOR TO INSTALLATION.



PR-09575

Shared Success Through  
Collaboration and Efficiency  
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Project Manager  
Drawn By WMM  
DWG  
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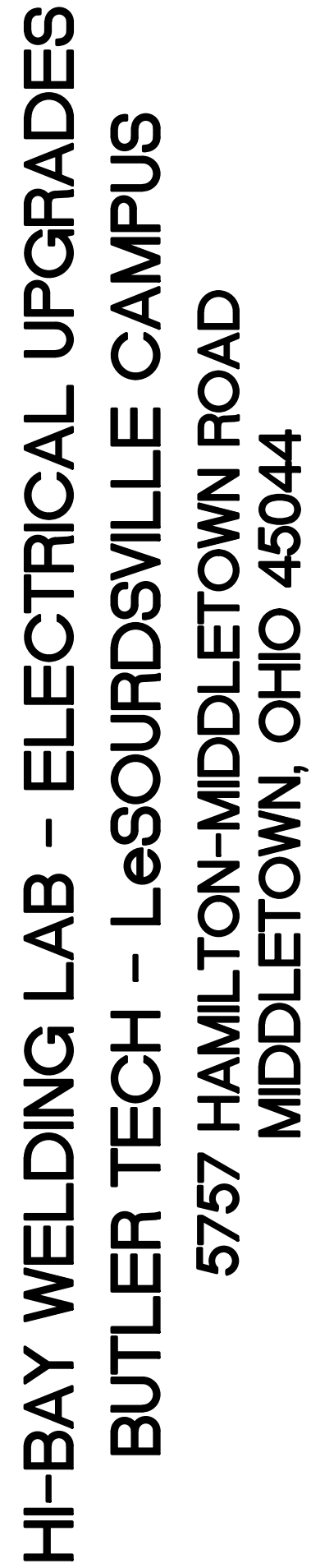
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HI-BAY WELDING LAB - ELECTRICAL UPGRADES  
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MIDDLETOWN, OHIO 45044

Sheet Title  
ELECTRICAL POWER  
FLOOR PLAN

Project Number  
Drawing Scale AS NOTED  
Sheet Number E1.0  
File Number

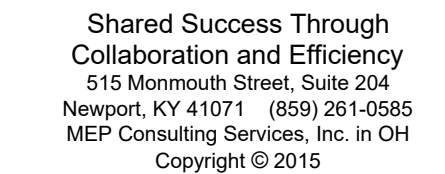
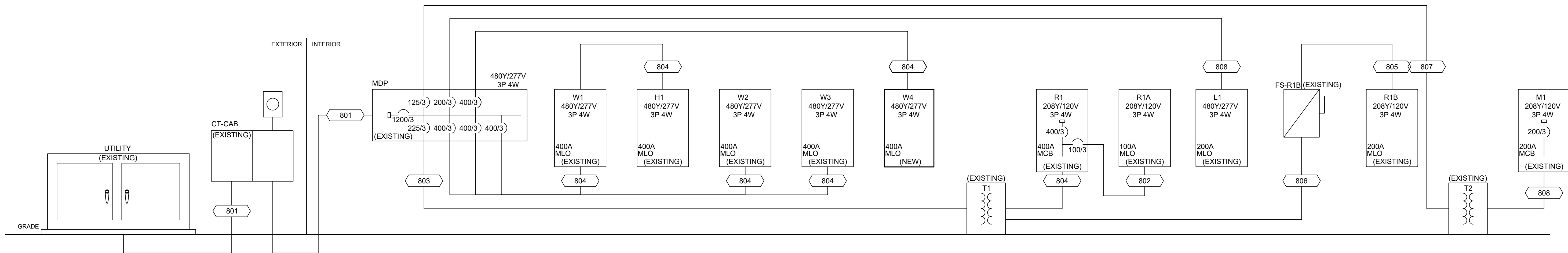
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Project Number  
Drawing Scale AS NOTED  
Sheet Number E3.0  
File Number

- A. ALL BREAKERS SHALL BE RATED TO WITHSTAND THE AVAILABLE FAULT CURRENT AT THEIR LOCATION. WHERE SERIES-RATED COMBINATIONS ARE USED IN ACCORDANCE WITH IEEE 242-1986 (B) AND (C) THE CONTRACTOR AND HIS EQUIPMENT SUPPLIER MUST PROVIDE APPROPRIATE DOCUMENTATION AND LABELING.
- B. WHERE BREAKERS WITH ADJUSTABLE SETTINGS ARE FURNISHED TO THE PROJECT, THE MANUFACTURER'S REPAIR SHOP SHALL IDENTIFY AND PROVIDE APPROPRIATE SETTINGS TO THE ELECTRICAL CONTRACTOR FOR HIS USE IN INSTALLATION.
- C. PANEL SCHEDULES INDICATE BREAKER SIZE ONLY. PROVIDE AFCI/GFCI PROTECTION AS REQUIRED BY NEC. INDICATE FINAL BREAKER SIZE AND TYPE REQUIRED BY THE PROJECT BY OTHER THAN PANEL DRAWINGS OR PROTECT INFORMATION FOR ACTUAL EQUIPMENT BEING CONNECTED.
- D. ELECTRICAL CONTRACTOR SHALL NOT ORDER OR PURCHASE ANY MATERIALS OR EQUIPMENT UNTIL PERMIT DRAWINGS HAVE BEEN APPROVED BY AHJ.
- E. PROVIDE SELECTION COORDINATION FOR EMERGENCY SYSTEMS IN ACCORDANCE WITH NFPA 70-2005 (NEC) ARTICLE 240.13 AND ARTICLE NEC 700 27.
- F. PROVIDE GROUND-FAULT PROTECTION FOR EQUIPMENT IN ACCORDANCE WITH NEC 240.13 AND NEC 230.95.
- G. OVERCURRENT PROTECTION DEVICES SUPPLYING TRANSFORMERS WHICH ARE NOT LOCATED WITHIN SIGHT OF THEIR OVERCURRENT PROTECTION SHALL BE IDENTIFIABLE BY THE CONTRACTOR AND PERMANENTLY MARKED WITH THE LOCATION OF THE OVERCURRENT PROTECTION DEVICE.

ID	CONDUIT AND FEEDER
801	(4)3"C,3#500kcmil AL, #500kcmil AL, N
802	2"C,3#1 AL, #1 AL, N, #8 AL G
803	2-1/2"C,3#4/0 CU, #4 CU G
804	3-1/2"C,3#500kcmil CU, #500kcmil CU, N, #3 CU G
805	2"C,3#4/0 AL, #4/0 AL, N, #4 AL G
806	2-1/2"C,3#250kcmil AL, #250kcmil AL, N, #2 AL G
807	2"C,3#1/0 AL, #6 AL G
808	2"C,3#3/0 CU, #3/0 CU, N, #6 CU G

SIZING METHOD: COMPACT AL 75°C 100A AND ABOVE, CU 75°C  
BELOW 100A



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Z:\Project Directories\9500-5599\9575- Butler Tech- LeSourdville High Bay Lab\Construction Documents\9575-53-1-ELECTRICAL-DETAILS.dwg- EBS, Plot Date/Time: Mar 14, 2023--1:05pm --By: m.mullins  
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MDP

ROOM MOUNTING SURFACE			VOLTS 480Y/277V 3P 4W			AIC T.B.D.		
FED FROM CT-CAB			BUS AMPS 1200			MAIN BKR 1200		
NOTE			NEUTRAL 100%			LUGS STANDARD		
CKT #	BREAKER TRIP/POLES	CIRCUIT DESCRIPTION	LOAD KVA			FEEDER RACEWAY AND CONDUCTORS		
			A	B	C			
1	20/3	MAIN	0	0	0	—		
2	400/3	PANEL W1	26.9	26.9	0	3-1/2"C,3#500kcmil CU,#500kcmil CU N,#3 CU G		
3	400/3	PANEL W2	25.1	25.1	25.1	3-1/2"C,3#500kcmil CU,#500kcmil CU N,#3 CU G		
4	400/3	PANEL W3	0	0	0	3-1/2"C,3#500kcmil CU,#500kcmil CU N,#3 CU G		
5	20/3	EXISTING	0	0	0	—		
6	225/3	XFMR T1	1.08	0	1.08	2-1/2"C,3#4/0 CU,#4 CU G		
7	20/3	SPARE	0	0	0	—		
8	20/3	EXISTING	0	0	0	—		
9	50/3	RTU-1	9.98	9.98	9.98	3/4"C,3#6 CU,#10 CU G		
10	50/3	RTU-2	9.98	9.98	9.98	3/4"C,3#6 CU,#10 CU G		
11	50/3	RTU-3	9.98	9.98	9.98	3/4"C,3#6 CU,#10 CU G		
12	175/3	DC-1	34.4	34.4	34.4	1-1/2"C,3#2/0 CU,#6 CU G		
13	125/3	XFMR T2	2.88	2.7	3.06	2"C,3#1/0 AL,#6 AL G		
14	200/3	PANEL L1	0	0	0	2"C,3#3/0 CU,#3/0 CU N,#6 CU G		
15	400/3	PANEL W4	53.8	53.8	0	3-1/2"C,3#500kcmil CU,#500kcmil CU N,#3 CU G		
16	20/3	SPACE	0	0	0			
17	20/3	SPACE	0	0	0			
18	20/3	SPACE	0	0	0			
19	20/3	SPACE	0	0	0			
20	20/3	SPACE	0	0	0			
TOTAL CONNECTED KVA BY PHASE			190	189	109			

W1									
ROOM MOUNTING FLUSH FED FROM MDP NOTE			VOLTS 480Y/277V 3P 4W BUS AMPS 400 NEUTRAL 100%			AIC T.B.D. MAIN BKR MLO LUGS FEEDTHRU			
CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	
1	50/3	0	EXISTING LOAD		a 2	50/3	0	EXISTING LOAD	
3					b 4				
5					c 6				
7	50/3	0	EXISTING LOAD		a 8	50/3	0	EXISTING LOAD	
9					b 10				
11					c 12				
13	50/3	0	EXISTING LOAD		a 14	50/3	0	EXISTING LOAD	
15					b 16				
17					c 18				
19	50/3	0	EXISTING LOAD		a 20	50/3	0	EXISTING LOAD	
21					b 22				
23					c 24				
25	50/2	13.4	WELDER		a 26	50/2	13.4	WELDER	
27					b 28				
29	20/1	0	SPACE		c 30	20/1	0	SPACE	
31	50/2	13.4	WELDER		a 32	50/2	13.4	WELDER	
33					b 34				
35	20/1	0	SPACE		c 36	20/1	0	SPACE	
37	50/3	0	EXISTING LOAD		a 38	50/3	0	EXISTING LOAD	
39					b 40				
41					c 42				
			LUG LOAD: 0 KVA PANEL H1						
		CONN KVA	CALC KVA				CALC KVA		
NONCONTINUOUS		53.8	53.8	(100%)	TOTAL LOAD		53.8		
					BALANCED 3-PHASE LOAD		64.7 A		
					PHASE A		150%		
					PHASE B		150%		
					PHASE C		0%		


M1									
ROOM MOUNTING FLUSH			VOLTS 208Y/120V 3P 4W				AIC T.B.D.		
FED FROM T2			BUS AMPS 200				MAIN BKR 200		
NOTE			NEUTRAL 100%				LUGS STANDARD		
CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	
1	20/1	0	EXISTING LOAD		a 2	20/1	0	EXISTING LOAD	
3	20/1	0	EXISTING LOAD		b 4	20/1	0	EXISTING LOAD	
5	20/1	0	EXISTING LOAD		c 6	20/1	0	EXISTING LOAD	
7	20/1	0	EXISTING LOAD		a 8	20/1	0.72	RECEPTACLE	
9	20/1	0	EXISTING LOAD		b 10	20/1	0	EXISTING LOAD	
11	20/1	0	EXISTING LOAD		c 12	20/1	0	EXISTING LOAD	
13	20/1	0	EXISTING LOAD		a 14	20/1	0	EXISTING LOAD	
15	20/1	0	EXISTING LOAD		b 16	20/1	0.72	RECEPTACLE	
17	20/2	0	EXISTING LOAD		c 18	20/1	0.72	RECEPTACLE	
19					a 20	20/1	0.72	RECEPTACLE	
21	20/1	0	EXISTING LOAD		b 22	20/1	0	EXISTING LOAD	
23	20/1	0	EXISTING LOAD		c 24	20/1	0	EXISTING LOAD	
25	20/1	0	EXISTING LOAD		a 26	20/1	1.08	RECEPTACLE	
27	20/1	0.72	RECEPTACLE		b 28	20/1	0.72	RECEPTACLE	
29	20/1	0.72	RECEPTACLE		c 30	20/3	0	EXISTING LOAD	
31	50/2	0	EXISTING LOAD		a 32				
33					b 34				
35	50/2	0	EXISTING LOAD		c 36	20/3	0	EXISTING LOAD	
37					a 38				
39	20/1	0.72	RECEPTACLE		b 40				
41	20/1	1.08	RECEPTACLE		c 42	20/1	0.72	RECEPTACLE	
			CONN KVA	CALC KVA	CALC KVA				
RECEPTACLES			8.64	8.64	(50%>10)				
					TOTAL LOAD			8.64	
					BALANCED 3-PHASE LOAD			24 A	
					LOAD			87.5%	
					PHASE A			100%	
					PHASE B			113%	
					PHASE C				

W2									
ROOM MOUNTING FLUSH FED FROM MDP			VOLTS 480Y/277V 3P 4W BUS AMPS 400 NEUTRAL 100%			AIC T.B.D. MAIN BKR MLO LUGS STANDARD			
NOTE									
CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	
1	50/3	0	EXISTING LOAD		a 2	50/3	0	EXISTING LOAD	
3					b 4				
5					c 6				
7	50/3	0	EXISTING LOAD		a 8	50/3	0	EXISTING LOAD	
9					b 10				
11					c 12				
13	50/3	0	EXISTING LOAD		a 14	50/3	0	EXISTING LOAD	
15					b 16				
17					c 18				
19	50/3	0	EXISTING LOAD		a 20	50/3	0	EXISTING LOAD	
21					b 22				
23					c 24				
25	50/3	18.8	WELDER		a 26	50/3	18.8	WELDER	
27					b 28				
29					c 30				
31	50/3	18.8	WELDER		a 32	50/3	18.8	WELDER	
33					b 34				
35					c 36				
37	20/3	0	EXISTING LOAD		a 38	30/3	0	EXISTING LOAD	
39					b 40				
41					c 42				
			CONN KVA				CALC KVA		
NONCONTINUOUS			75.2		75.2		(100%)		TOTAL LOAD
									BALANCED 3-PHASE LOAD
									PHASE A
									100%
									PHASE B
									100%
									PHASE C
									100%



HI-BAY WELDING LAB – ELECTRICAL UPGRADES  
for  
BUTLER TECH AND LeSOURDSVILLE CAMPUS  
101 JERRY COUCH BLVD.  
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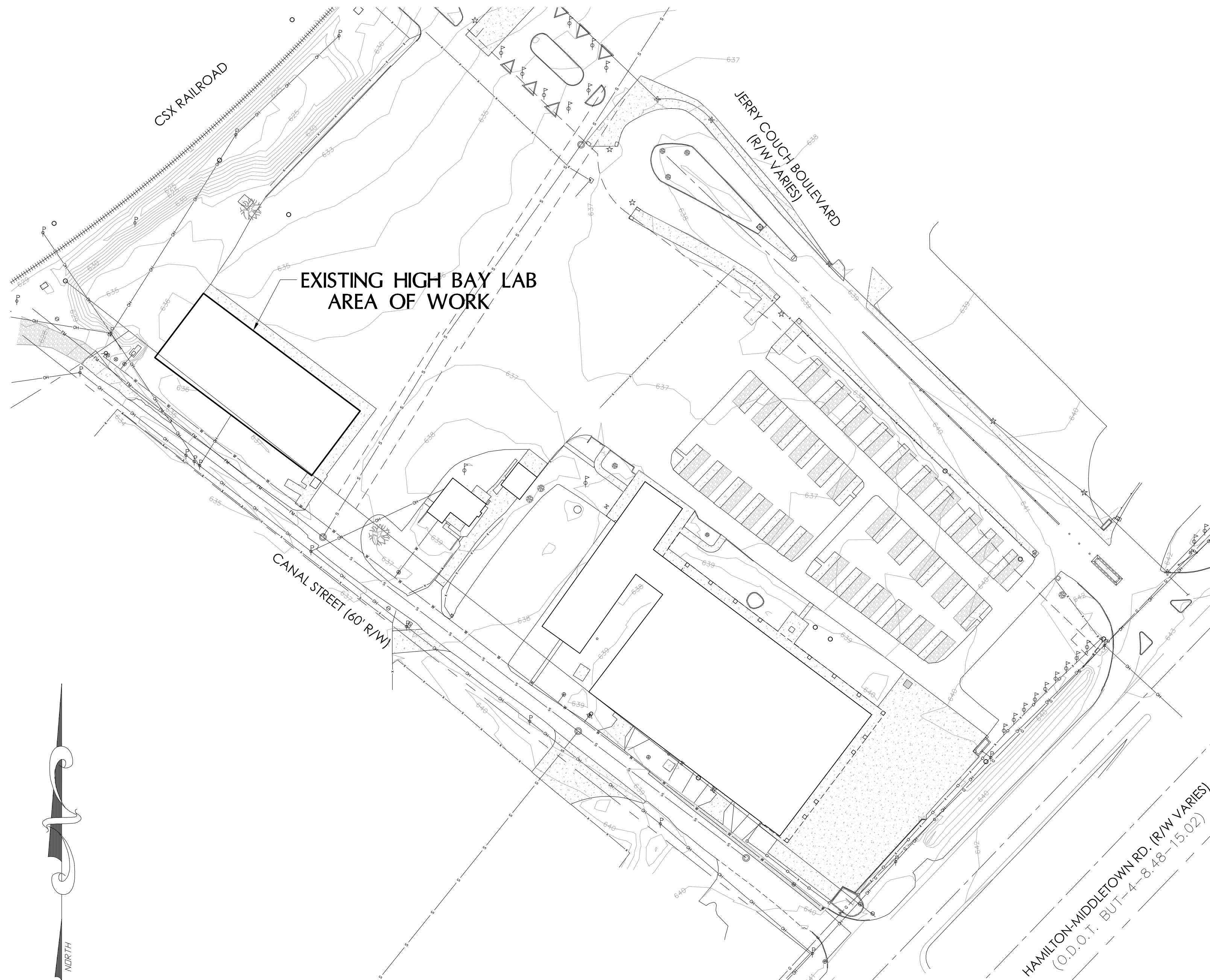
DRAWING INDEX	
SHEET #	DESCRIPTION
G0.0	COVER SHEET, SITE REFERENCE PLAN AND DRAWING INDEX
G0.1	CODE NOTES, FLOOR PLANS AND GENERAL NOTES
E1.0	ELECTRICAL POWER FLOOR PLAN
E3.0	ELECTRICAL DETAILS
E3.1	ELECTRICAL DETAILS



- Architecture
- Engineering
- Landscape Architecture
- Planning
- Surveying

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Project Manager DCC  
 Drawn By EMJ  
 DWG 06398171-4LO GARAGE  
 X-Ref(s)

[illegible]

BEFORE SUBMITTING A BID, THE BIDDER SHALL EXAMINE ALL CONTRACT DOCUMENTS, INCLUDING, BUT NOT LIMITED TO, THE DRAWINGS, SPECIFICATIONS, AND ADDENDA FOR ALL DIVISIONS OF WORK FOR THE PROJECT, NOTING, IN PARTICULAR, ALL REQUIREMENTS THAT MAY AFFECT THE WORK IN ANY WAY.

IF THE CONTRACTOR FINDS ANY PERCEIVED AMBIGUITY, CONFLICT, ERROR, OMISSION, OR DISCREPANCY ON OR BETWEEN ANY OF THE CONTRACT DOCUMENTS, OR BETWEEN ANY OF THE CONTRACT DOCUMENTS AND ANY APPLICABLE LAW, THE CONTRACTOR, BEFORE PROCEEDING WITH THE WORK, SHALL PROMPTLY SUBMIT A REQUEST FOR INTERPRETATION ( "RFI" ) TO THE A/E FOR AN INTERPRETATION OR CLARIFICATION.

ANY INTERPRETATION OR CLARIFICATION OF THE CONTRACT DOCUMENTS MADE BY ANY PERSON OTHER THAN THE A/E, OR IN ANY MANNER OTHER THAN IN WRITING, SHALL NOT BE BINDING AND THE CONTRACTOR SHALL NOT RELY ON IT.

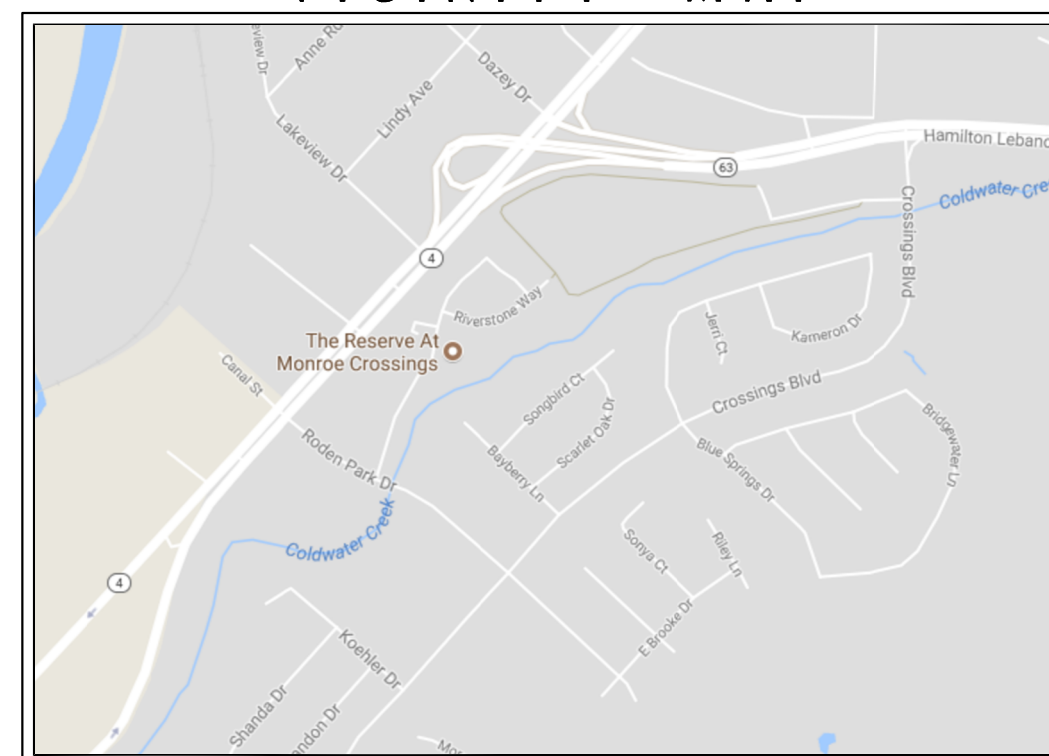
IN THE EVENT OF INCONSISTENCY OR CONFLICT WITH THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROVIDE THE BETTER QUALITY OR GREATER QUANTITY OF WORK, AND COMPLY WITH THE STRICTER REQUIREMENTS.

## SITE REFERENCE PLAN

SCALE: 1" = 50'-0"



VICINITY MAP



## ARCHITECTURAL ABBREVIATIONS

[illegible]

## GRAPHIC SYMBOLS

♦ NOTE NUMBERS  
 ▲ REVISION NUMBERS  
 ○ DOOR NUMBERS

○ COLUMN REFERENCE GRID

○ IDENTIFICATION OF SECTION, ELEVATION OR ENLARGED DETAIL

SECTION CUT (NUMBERS)  
 LOCATED ON SHEET  
 INTERIOR ELEVATION

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HI-BAY WELDING LAB - ELECTRICAL UPGRADES  
FOR  
BUTLER TECH LeSOURDSVILLE CAMPUS  
101 JERRY COUCH BLVD.  
MIDDLETOWN, OHIO 45044

Sheet Title

COVER SHEET, SITE PLAN AND  
DRAWING INDEX

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Project Number	06398.82
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Drawing Scale AS NOTED

File Number



Issue/Revision	No.	Date
FOR BID		03/15/23

## GENERAL CONSTRUCTION & PROJECT NOTES

1. PROVIDE COMPETENT PROJECT MANAGEMENT, SUPERVISION AND LAYOUT OF PROJECT THROUGHOUT ALL PHASE OF THE WORK.
2. ALL DIMENSIONS ARE TAKEN TO FINISH SURFACES UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS SHALL HAVE PREFERENCE OVER SCALE. DO NOT SCALE DRAWINGS.
4. SEE MEP DRAWINGS FOR ALL RELATED WORK.
5. SEE BOOK SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
6. THE WORD "PROVIDE" SHALL MEAN TURNISH AND INSTALL.
7. PROVIDE TRASH REMOVAL AND REGULAR, SCHEDULED CLEANUP OF ALL WORK AREAS.
8. MATERIALS USED IN THIS WORK SHALL CONFORM TO THE LATEST STANDARD SPECIFICATIONS OF THE APPROPRIATE INDUSTRY AGENCY. THE WORKMANSHIP SHALL BE CONSISTENT WITH THE BEST PRACTICES OF THE VARIOUS BUILDING TRADES.
9. ALL MATERIALS AND LABOR SHALL BE GUARANTEED FOR ONE (1) YEAR UNLESS SPECIFICALLY STATED.
10. ALL WORK SHALL COMPLY WITH LOCAL, STATE AND FEDERAL CODES AND STANDARDS. ALL WORK SHALL BE IN ACCORDANCE WITH THE QUALITY STANDARDS OF THE TRADE.
11. ALL FIXTURES, EQUIPMENT AND MATERIALS SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS, RECOMMENDATIONS AND INSTRUCTIONS.
12. ALL SUBMITTALS SHALL BE REVIEWED BY THE CONTRACTOR AND SHALL BE PRIOR TO DELIVERY TO THE ARCHITECT AND SHALL BE STAMPED WITH THE CONTRACTOR'S REVIEW STAMP, WITH THE APPROPRIATE ACTION NOTED. THE MANUFACTURER OR CONSTRUCTION OF ANY PIECES OF EQUIPMENT, DEVICE OR OTHER ITEM FOR WHICH SHOP DRAWINGS, PRODUCT DATA AND SAMPLES ARE REQUIRED TO BE FURNISHED SHALL NOT COMMENCE PRIOR TO COMPLETE PROCESSING OF THE APPROVED SUBMITTAL.
13. BEFORE FINAL PAYMENTS SHALL BE RELEASED, ALL AS-BUILT PLANS, SUBMITTALS, INSURANCE CERTIFICATES, WAIVER AND OTHER ITEMS AS MAY BE REQUIRED MUST BE SUBMITTED FOR OWNER / ARCHITECT REVIEW.
14. TRANSPORT ALL TRASH, RUBBISH AND DEBRIS FROM SITE AND LEGALLY DISPOSE OF SAME. THE MANNER OF REMOVAL MUST BE CONFIRMED WITH THE OWNER AND AS ALLOWED BY ALL CITY AND STATE REGULATIONS PROVIDE REGULAR CLEAN UP THROUGHOUT DURATION OF THE PROJECT.
15. SEAL PERIMETER OF FRAMES OF ALL EXTERIOR OPENINGS TO ADJACENT WALL CONSTRUCTION SEAL PERIMETER OF PENETRATIONS THROUGH EXTERIOR WALLS ON BOTH SIDES OF JOINT BETWEEN PENETRATION ITEM AND EXTERIOR WALL CONSTRUCTION.
16. CONTRACTOR TO COORDINATE PHASING OF WORK, SITE AND BUILDING SECURITY, AND HOURS OF WORK WITH OWNER PRIOR TO START OF CONSTRUCTION.
17. WORK OF ALL TRADES SHALL BE COORDINATED. EACH CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE FULLY WITH OTHER TRADES AND PROTECT ALL FINISHED WORK FROM DAMAGE. ALL INSTALLED WORK THAT IS DAMAGED SHALL BE REPLACED OR CORRECTED BY THE CONTRACTOR.
18. IF CONTRACTOR SHOULD DISCOVER ANY UNFORESEEN PROBLEMS DURING CONSTRUCTION, THE OWNER AND THE ARCHITECT SHOULD BE IMMEDIATELY NOTIFIED AND THAT PARTICULAR WORK SHOULD BE DISCONTINUED UNTIL NECESSARY REVISIONS CAN BE DECIDED UPON.
19. THE COORDINATION OF ALL MATERIALS, LABOR AND THE SUB-CONTRACTOR'S WORKMANSHIP IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
20. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING LOCAL BUILDING OFFICIALS AND INSPECTORS FOR PERMITS AND INSPECTIONS. NOTIFY THE ARCHITECT IMMEDIATELY OF ANY NON-CONFORMING DESIGN ISSUES - CONTRACTOR RESPONSIBLE FOR ALL FEES RELATED TO BUILDING PERMIT.

## CODE NOTES

1. PROJECT DESCRIPTION:  
PROJECT INVOLVES THE MODIFICATION OF EXISTING ELECTRICAL INFRASTRUCTURE TO SUPPORT NEW WELDING BOOTHS AND NEW BOOTH LAYOUT WITHIN AN EXISTING SINGLE STORY, 11885 SQUARE FOOT STRUCTURE. THE EXISTING STRUCTURE IS A FIRE-ENGINEERED METAL BUILDING, NON-SPRINKLERED AND CLASSIFIED AS BEING OF TYPE IIB CONSTRUCTION.  
  
THE CURRENT USE IS VOCATIONAL TYPE EDUCATION, F-1 MODERATE HAZARD. BUILDING IS CURRENTLY USED FOR ADULT EDUCATION SPECIFICALLY RELATED TO THE CONSTRUCTION TRADES, WELDING, MACHINING AND HVAC REPAIR.  
  
SITE IS ZONED "C-4 - GATEWAY COMMERCIAL".  
  
NO CHANGE IN USE OR OCCUPANCY.
2. APPLICABLE CODES:  
21. 2011 OHIO BUILDING CODE (OBC)  
22. 2011 OHIO FIRE CODE (OFC)
3. USE GROUP (OBC CHAPTER 3): (F-1) - MODERATE HAZARD FACTORY
4. TYPE OF CONSTRUCTION (OBC CHAPTER 6, TABLE 601)  
4.1 TYPE IIB
5. HEIGHT AND AREA LIMITATIONS (OBC CHAPTER 5, TABLE 506.2)  
5.1 NO CHANGE TO EXISTING HEIGHT AND AREA  
  
PER OBC SECTIONS 503 THRU 506, A NON-SPRINKLERED GROUP F-1 BUILDING OF TYPE IIB CONSTRUCTION IS PERMITTED TO BE A MAXIMUM OF 35 FEET / 3 STORIES IN HEIGHT WITH A MAXIMUM AREA OF 9000 SF PER STORY. OBC SECTION 506.3 ALLOWS FOR AN INCREASE IN AREA WHEN THERE IS A MINIMUM 50 FOOT OPEN SPACE AROUND THE BUILDING. THE EXISTING BUILDING HAS 100% OF ITS PERIMETER OPEN WHICH RESULTS IN AN ALLOWABLE AREA INCREASE OF 75%.  
  
BUILDING PERIMETER = 479'  
PERIMETER OPEN SPACE = 479'  
479' / 479' = 100% 100% - 25% = 75%  
  
THE EXISTING GROUP F-1 OCCUPANCY OF IIB CONSTRUCTION IS ALLOWED UP TO 15,750 SF. WITHOUT SPRINKLERS. EXISTING BUILDING ACTUAL SQUARE FOOTAGE IS 11,885.
6. FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (OBC CHAPTER 6, TABLE 601)  

	IIB
6.1 STRUCTURAL FRAME INCLUDING COLLINS, GIRDERS, TRUSSES	0 HOUR
6.2 EXTERIOR BEARING WALLS	0 HOUR
6.3 INTERIOR BEARING WALLS	0 HOUR
6.4 EXTERIOR NONBEARING WALLS AND PARTITIONS (TABLE 602)	0 HOUR
6.5 INTERIOR NONBEARING WALLS AND PARTITIONS	0 HOUR
6.6 FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS	0 HOUR
6.7 ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS	0 HOUR

  
7. FIRE PROTECTION SYSTEMS (OBC CHAPTER 9)  
7.1 EXISTING BUILDING IS NOT EQUIPPED WITH AN AUTOMATIC FIRE SUPPRESSION SYSTEM (SEE SUMMARY ABOVE).  
7.2 FIRE ALARM - A FIRE ALARM SYSTEM IS EXISTING IN THE BUILDING AND SHALL REMAIN.  
7.3 ALL FIRE EXTINGUISHERS ARE EXISTING TO REMAIN - EXTINGUISHERS SHALL MEET THE REQUIREMENTS OF NFPA 10 AND SUITABLE FOR CLASS A, B AND C HAZARDS.
8. MEANS OF EGRESS AND OCCUPANCY (OBC CHAPTER 10)  
8.1 EXIT ACCESS TRAVEL DISTANCE (OBC TABLE 1012 - NON-SPRINKLERED)  
8.1.1 (F-1) 100'  
8.2 COMMON PATH OF EGRESS (OBC SECTION 1006 AND TABLE 1006.2) - NON-SPRINKLERED)  
8.2.1 OBC 1006.2) TWO EXITS OR EXIT ACCESS DOORWAYS FROM ANY SPACE SHALL BE PROVIDED WHERE THE DESIGN OCCUPANT LOAD OR THE COMMON PATH OF EGRESS TRAVEL DISTANCE EXCEEDS THE VALUES LISTED IN TABLE 1006.2.  
8.2.2 PER OBC TABLE 1006.3 OCCUPANT LOAD EXCEEDS 49 - AS SUCH A MINIMUM OF 2 EXITS ARE PROVIDED FROM ALL SPACES WITHIN THE BUILDING. COMMON PATH OF EGRESS TRAVEL SHALL NOT EXCEED 75'-0"  
8.3 OCCUPANCY CLASSIFICATION AND SUMMARY OF SPACES  
8.3.1 (F-1) 11885 SF / 100 GROSS = 119 OCCUPANTS  
8.4 EXITS PROVIDED  
8.4.1 A TOTAL OF FIVE (5) EXITS ARE PROVIDE FROM THE SPACE WITH EACH LABORATORY HAVING A DIRECT MEANS OF EGRESS TO THE EXTERIOR.  
8.5 ALL INTERIOR FINISHES SHALL COMPLY WITH OHIO BUILDING CODE CHAPTER 8, SPECIFICALLY TABLE 803.1 FOR PLATE SPREAD AND SMOKE DEVELOPED RATINGS
9. PLUMBING FIXTURE REQUIREMENTS (OBC CHAPTER 23) (ALL FIXTURES ARE EXISTING)  
9.1 TOTAL BUILDING OCCUPANTS = 119 OCCUPANTS  

USE GROUP		OCCUPANT LOAD PER GENDER				REQUIRED				PROVIDED				MOP
		UC	U	L	DF	UC	U	L	DF	UC	U	L	DF	
F-1	MALE	60	6	-	6	1	1	1	1	1	1	1	1	
	FEMALE	60	6	-	6	1	1	1	1	1	1	1	1	
10. MISCELLANEOUS  
10.1 NO CHANGE IN USE OR OCCUPANCY. A TOTAL OF 746 PARKING SPACES ARE PROVIDED. SEVEN (7) STANDARD ACCESSIBLE SPACES AND TWO (2) VAN ACCESSIBLE SPACES ARE PROVIDED. COMPLIES WITH OBC TABLE 1106.1.

## EXISTING CONDITIONS PLAN

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

## NEW WORK PLAN

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

## DRAWING NOTES

1. EXISTING FIRE EXTINGUISHER TO REMAIN
2. EXISTING MOBILE "SMOKE EATER" EXTRACTION SYSTEM TO BE REMOVED BY OWNER
3. EXISTING ILLUMINATED EMERGENCY EXIT SIGN TO REMAIN
4. EXISTING WELDING BOOTHS TO REMAIN IN SPACE - ELECTRICAL CONTRACTOR SHALL PERFORM PENULTION SCORE AS NOTED ON ELECTRICAL DRAWINGS AND THEN RELOCATE EXISTING BOOTHS TO NEW LOCATIONS AS INDICATED ON THE NEW WORK PLANS - FINAL LOCATIONS TO BE COORDINATED IN FIELD WITH OWNER, ARCHITECT AND HVAC CONTRACTOR
5. APPROXIMATE LOCATION OF RELOCATED WELDING BOOTH - COORDINATE WITH OWNER IN FIELD - SEE ELECTRICAL DRAWINGS FOR SCOPE OF WORK WITH EXISTING BOOTH
6. NEW WELDING BOOTH PROVIDED BY OWNER AND SET IN PLACE BY ELECTRICAL CONTRACTOR - SEE ELECTRICAL DRAWINGS FOR SCOPE OF WORK WITH NEW BOOTH
7. REMOVABLE PANEL BY OWNER
8. SEE ELECTRICAL DRAWINGS FOR CHORD REEL DROPS IN THIS AREA - FIELD VERIFY EXACT LOCATION OF ALL DROPS WITH OWNER, PRIOR TO INSTALLATION

## SYMBOL LEGEND

- ▲ DENOTES EXISTING EXTERIOR EXIT DOOR TO REMAIN

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Sheet Title

CODE NOTES, REFERENCE PLAN  
AND GENERAL NOTES

Project Number 06398.82

Drawing Scale AS NOTED

Sheet Number G0.1

File Number