# INVITATION TO BID

NKCC-01-20



**Student Union Renovation – Sbarro Pizza** 

September 26, 2019



#### ATTENTION: This is not an order. Read all instructions, terms and conditions carefully.

Proposal NO:	
Issue Date:	
Purchasing Officer:	
Phone:	

NKCC-01-20 9/26/2019 Blaine Gilmore 859.572.6449

**RETURN ORIGINAL COPY OF PROPOSAL TO:** 

**Northern Kentucky University Procurement Services** I Nunn Drive 617 Lucas Administrative Center Highland Heights, KY 41099

#### IMPORTANT: BIDS MUST BE RECEIVED BY: 10/18/2019 BEFORE 2:00 P.M. HIGHLAND HEIGHTS, KY time.

#### NOTICE OF REQUIREMENTS

- 1. The University's General Terms and Conditions and Instructions to Bidders, viewable at the NKU Procurement Website, apply to this Request for Proposal.
- 2. Contracts resulting from this ITB must be governed by and in accordance with the laws of the Commonwealth of Kentucky.
- 3. Any agreement or collusion among Offerors or prospective Offerors, which restrains, tends to restrain, or is reasonably calculated to restrain competition by agreement to bid at a fixed price or to refrain from offering, or otherwise, is prohibited.
- Any person who violates any provisions of KRS 45A.325 shall be guilty of a felony and shall be punished by a fine of not less than five thousand 4 dollars nor more than ten thousand dollars, or be imprisoned not less than one year nor more than five years, or both such fine and imprisonment. Any firm, corporation, or association who violates any of the provisions of KRS 45A.325 shall, upon conviction, may be fined not less than ten thousand dollars or more than twenty thousand dollars. AUTHENTICATION OF BID AND STATEMENT OF NON-COLLUSION AND NON-CONFLICT OF INTEREST

I hereby swear (or affirm) under the penalty for false swearing as provided by KRS 523.040:

- 1. That I am the offeror (if the offeror is an individual), a partner, (if the offeror is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the offeror is a corporation);
- That the attached proposal has been arrived at by the offeror independently and has been submitted without collusion with, and without any 2 agreement, understanding or planned common course of action with, any other Contractor of materials, supplies, equipment or services described in the Request for Proposal, designed to limit independent bidding or competition;
- 3. That the contents of the proposal have not been communicated by the offeror or its employees or agents to any person not an employee or agent of the offeror or its surety on any bond furnished with the proposal and will not be communicated to any such person prior to the official closing of the ITB
- 4 That the offeror is legally entitled to enter into contracts with the Northern Kentucky University and is not in violation of any prohibited conflict of interest, including those prohibited by the provisions of KRS 45A.330 to .340, 164.390, and
- That the Offeror, and its affiliates, are duly registered with the Kentucky Department of Revenue to collect and remit the sale and use tax imposed 5 by Chapter 139 to the extent required by Kentucky law and will remain registered for the duration of any contract award 6.
  - That I have fully informed myself regarding the accuracy of the statement made above.

#### SWORN STATEMENT OF COMPLIANCE WITH FINANACE LAWS

In accordance with KRS45A.110 (2), the undersigned hereby swears under penalty of perjury that he/she has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky and that the award of a contract to a bidder will not violate any provision of the campaign finance laws of the Commonwealth of Kentucky.

#### CONTRACTOR REPORT OF PRIOR VIOLATIONS OF KRS CHAPTERS 136, 139, 141, 337, 338, 341 & 342

The Contractor by signing and submitting a proposal agrees as required by 45A.485 to submit final determinations of any violations of the provisions of KRS Chapters 136, 139, 141, 337, 338, 341 and 342 that have occurred in the previous five (5) years prior to the award of a contract and agrees to remain in continuous compliance with the provisions of the statutes during the duration of any contract that may be established. Final determinations of violations of these statutes must be provided to the University by the successful Contractor prior to the award of a contract

#### CERTIFICATION OF NON-SEGREGATED FACILITIES

The Contractor, by submitting a proposal, certifies that he/she is in compliance with the Code of Federal Regulations, No. 41 CFR 60-1.8(b) that prohibits the maintaining of segregated facilities.

#### RECIPROCAL PREFERENCE

(1) Prior to a contract being awarded to the lowest responsible and responsive bidder on a contract by a public agency, a resident bidder of the Commonwealth shall be given a preference against a nonresident bidder registered in any state that gives or requires a preference to bidders from that state. The preference shall be equal to the preference given or required by the state of the nonresident bidder.

(2) A resident bidder is an individual, partnership, association, corporation, or other business entity that, on the date the contract is first advertised or announced as available for bidding:

(a) Is authorized to transact business in the Commonwealth; and

(b) Has for one (1) year prior to and through the date of the advertisement, filed Kentucky corporate income taxes, made payments to the Kentucky unemployment insurance fund established in KRS 341.490, and maintained a Kentucky workers' compensation policy in effect. (3) A nonresident bidder is an individual, partnership, association, corporation, or other business entity that does not meet the requirements of subsection (2) of this section.

(4) If a procurement determination results in a tie between a resident bidder and a nonresident bidder, preference shall be given to the resident bidder

(5) This section shall apply to all contracts funded or controlled in whole or in part by a public agency.

(6) The Finance and Administration Cabinet shall maintain a list of states that give to or require a preference for their own resident bidders, including details of the preference given to such bidders, to be used by public agencies in determining resident bidder preferences. The cabinet shall also promulgate administrative regulations in accordance with KRS Chapter 13A establishing the procedure by which the preferences required by this section shall be given.

(7) The preference for resident bidders shall not be given if the preference conflicts with federal law.

(8) Any public agency soliciting or advertising for bids for contracts shall make KRS 45A.490 to 45A.494 part of the solicitation or advertisement for bids



#### DEFINITIONS

As used in KRS 45A.490 to 45A.494: (1) "Contract" means any agreement of a public agency, including grants and orders, for the purchase or disposal of supplies, services, construction, or any other item; and

(2) "Public agency" has the same meaning as in KRS 61.805.

**SIGNATURE REQUIRED:** This proposal cannot be considered valid unless signed and dated by an authorized agent of the offeror. Type or print the signatory's name, title, address, phone number and fax number in the spaces provided. Offers signed by an agent are to be accompanied by evidence of his/her authority unless such evidence has been previously furnished to the issuing office. Your signature is acceptance to the Terms and conditions above.

DELIVERY TIME:	NAME OF COMPANY:	DUNS #
	ADDRESS:	Dhana/Fay
PROPOSAL FIRM THROUGH:	ADDRESS:	Phone/Fax:
PAYMENT TERMS:	CITY, STATE & ZIP CODE:	E-MAIL:
TATMENT TERMO.	onn, orale d'Ell' obbe.	
SHIPPING TERMS: F.O.B. DESTINATION -	FEDERAL EMPLOYER ID NO.:	WEB ADDRESS:
PREPAID AND ALLOWED		

#### **READ CAREFULLY - SIGN IN SPACE BELOW - FAILURE TO SIGN INVALIDATES BID or OFFER**

AUTHORIZED SIGNATURE:				
NAME (Please Print Legibly):				
TITLE: D/				
**************************************		*******		
County of	)			
The foregoing statement was sworn to me t	:his	day of	, 20	, by
(Notary Public) My Commission expires:				
THIS I	DOCUMENT MUST	BE NOTORIZED		



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#### 1.0 DEFINITIONS

The term "ITB" means Invitation to Bid or this document

The term "addenda" means written or graphic instructions issued by the Northern Kentucky University prior to the receipt of proposals that modify or interpret the ITB documents by additions, deletions, clarifications and/or corrections.

The terms "offer" or "bid" mean the offeror's/offerors' response to this ITB.

The term "offeror" means the entity or contractor group submitting the proposal.

The term "contractor" means the entity receiving a contract award.

The term "purchasing agent" means Northern Kentucky University appointed contracting representative.

The term "responsible offeror" means a person, company or corporation that has the capability in all respects to perform fully the contract requirements and the integrity and reliability that will assure good faith performance. In determining whether an offeror is responsible, the University may evaluate various factors including (but not limited to): financial resources; experience; organization; technical qualifications; available resources; record of performance; integrity; judgment; ability to perform successfully under the terms and conditions of the contract; adversarial relationship between the offeror and the University that is so serious and compelling that it may negatively impact the work performed under this ITB; or any other cause determined to be so serious and compelling as to affect the responsibility of the offeror.

The term "solicitation" means ITB.

The term "University" means Northern Kentucky University.

#### General Terms & Conditions Available to view / download at:

https://inside.nku.edu/content/dam/Procurement/docs/forms/General%20Terms%20%20Conditions\_RS\_jg 11-1-18.pdf

An electronic version of the ITB, in .PDF format only, is available through Northern Kentucky University's Plan Room at <u>https://www.nkuplanroom.com/purchasing/View/Login.</u>



#### 2.0 GENERAL OVERVIEW

#### 2.1 Intent and Scope

Northern Kentucky University is seeking a Contractor to provide all materials, labor, tools, supervision, and equipment required to: Provide services for renovation of former national franchise pizza operation being retrofitted to accommodate Sbarro's full service in-line operations. Work must achieve Final Completion by Jan 6, 2019.

#### 2.2 University Information

Information regarding Northern Kentucky University can be found at <a href="https://inside.nku.edu/">https://inside.nku.edu/</a>

#### 3.0 Special Conditions to Bidder

All work and cleaning to be completed by date outlined in 3.1 as Final Completion in order to allow adequate timing for testing by owner/Sbarro's equipment.

#### **Temporary Construction**

Bidders to include temporary barricade, door, and draping as part of bid number in order to maintain construction area as a dust free zone for duration of construction. Adjacent food service areas and dining will be in active use throughout the construction period.

#### **Application made for Payment**

Application for Payment shall be submitted with a schedule of values for the Work covered by the applications and certificate of payment that has been completed in accordance with the contract documents.

#### **Change Orders**

All change orders must be approved by the Project Manager for revised/additional scope to the contract documents before Work may be completed. Description must be submitted with contractor pricing of proposed change.

#### 3.1 Key Project Dates

Release of ITB	9/26/2019
Pre-Bid Conference (Optional)	NONE
Deadline for Written Questions	Noon Eastern Time on 10/04/2019
Deadline for Written Response/Addenda	Noon Eastern Time on 10/10/2019
BIDS DUE	2 p.m. Eastern Time on 10/17/2019
Contract Award*	10/25/2018

\*Project Dates:

Start Date shall be November 27, 2019 Substantial Completion shall be December 30, 2019 Final Completion shall be January 6, 2019



#### 3.2 Offeror Communication

Information relative to this project obtained from other sources, including other university administration, faculty or staff may not be accurate, will not be considered binding and could adversely affect the potential for selection of your bid. All requests for information, questions or comments relative to this project should be directed, in writing to:

**Ryan Straus** 

Coordinator, Contracts & Bidding Procurement Services Lucas Administrative Center, Suite 617 Northern Kentucky University Highland Heights, KY 41099 <u>Strausr2@nku.edu</u>

#### 3.3 <u>Pre-Proposal Conference</u>

There will be no pre-bid conference for this project. Please email Ryan Straus, Coordinator, Procurement Services <u>strausr2@nku.edu</u> with any questions.

#### 3.4 <u>Preparation of Offers</u>

The offeror is expected to follow all specifications, terms, conditions and instructions in this ITB.

The offeror will furnish all information required by this solicitation.

Proposals should be prepared simply and economically, providing a description of the offeror's capabilities to satisfy the requirements of the solicitation. Emphasis should be on completeness and clarity of content. All documentation submitted with the proposal should be bound in the single volume except as otherwise specified.

#### 3.5 Bid Submission and Deadline

The bidder shall submit, by the time and date specified via US Postal Service, courier or other delivery service, its bid response in a **sealed package** addressed to:

Blaine Gilmore Director, Procurement Services Lucas Administrative Center, Suite 617 1 Nunn Drive Northern Kentucky University Highland Heights, KY 41099

Both inner and outer envelopes/packages should bear respondent's name and address, and clearly marked on package(s) as follows:

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Note: Bids received after the closing date and time will not be considered. In addition, proposals received via fax or e-mail are not acceptable.



#### 3.6 Modification or Withdrawal of Offer

An offer and/or modification of offer received at the office designated in the solicitation after the exact hour and date specified for receipt will not be considered.

An offer may be modified or withdrawn by written notice before the exact hour and date specified for receipt of offers. An offer also may be withdrawn in person by an offeror or an authorized representative, provided the identity of the person is made known and the person signs a receipt for the offer, but only if the withdrawal is made prior to the exact hour and date set for receipt of offers.

#### 3.7 Acceptance or Rejection and Award of Proposal

The University reserves the right to accept or reject any or all bids, to waive any informalities or technicalities, to clarify any ambiguities in bids in the proposal. In case of error in extension or prices or other errors in calculation, the unit price shall govern. Further, the University reserves the right to make a single award, split awards, multiple awards or no award, whichever is in the best interest of the University.

#### 3.8 <u>Rejection</u>

Grounds for the rejection of proposals include (but shall not be limited to):

- a) Failure of a bid to conform to the essential requirements of the ITB.
- b) Imposition of conditions that would significantly modify the terms and conditions of the solicitation or limit the offeror's liability to the University on the contract awarded on the basis of such solicitation.
- c) Failure of the offeror to sign the University ITB. This includes the Authentication of Proposal and Statement of Non-Collusion and Non-Conflict of Interest statements. (pages 1 & 2)
- d) Failure to sign the Bid Form / Form of Proposal
- e) Receipt of bid after the closing date and time specified in the ITB.

#### 3.19 Addenda

Any addenda or instructions issued by the purchasing agent prior to the time for receiving proposals shall become a part of this ITB. Such addenda shall be acknowledged on the bid form or form of proposal. No instructions or changes shall be binding unless documented by a proper and duly issued addendum.

#### 3.10 Disclosure of Offeror's Response

The ITB specifies the format, required information and general content of proposals submitted in response to this ITB. The purchasing agent will not disclose any portions of the proposals prior to contract award to anyone outside the Office of Procurement Services, the University's administrative staff, representatives of

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the state or federal government (if required) and the members of the committee evaluating the proposals. After a contract is awarded in whole or in part, the University shall have the right to duplicate, use or disclose all proposal data submitted by offerors in response to this ITB as a matter of public record.

Any submitted proposal shall remain valid for 90 days after the proposal due date.

#### 3.11 Restrictions on Communications with University Staff

From the issue date of this ITB until a contractor is selected and a contract award is made, offerors are not allowed to communicate about the subject of the ITB with any University administrator, faculty, staff or members of the board of regents except: the purchasing agent representative, any University purchasing official representing the University administration, others authorized in writing by the Office of Procurement Services and University representatives during offeror presentations. If violation of this provision occurs, the University reserves the right to reject the offeror's proposal.

#### 3.12 Cost of Preparing Bid or Proposal

Costs for developing the bids or proposals and any subsequent activities prior to contract award are solely the responsibility of the offerors. The University will provide no reimbursement for such costs.

#### 3.13 <u>Questions</u>

All questions should be submitted by either fax or e-mail to the purchasing agent listed in Section 3.2 no later than the date listed in Section 3.1.

#### 3.14 No Contingent Fees

No person or selling agency shall be employed or retained or given anything of monetary value to solicit or secure this contract, except bona fide employees of the offeror or bona fide established commercial or selling agencies maintained by the offeror for the purpose of securing business. For breach or violation of this provision, the University shall have the right to reject the proposal, annul the contract without liability, or, at its discretion, deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee or other benefit.

#### 3.15 Proposal Addenda and Rules for Withdrawal

Prior to the date specified for receipt of offers, a submitted proposal may be withdrawn by submitting a written request for its withdrawal to the University purchasing office, signed by the offeror. Unless requested by the University, the University will not accept revisions or alterations to proposals after the proposal due date.



#### 3.16 Effective Date

The effective date of the contract shall be the date upon which the parties execute it and all appropriate approvals, including that of the (if applicable) Commonwealth of Kentucky Legislative Contracts Review Committee, have been received.

#### 3.17 <u>Contractor Cooperation in Related Efforts</u>

The University reserves the right to undertake or award other contracts for additional or related work to other entities. The contractor shall fully cooperate with such other contractors and University employees and carefully fit its work to such additional work. The contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or by University employees. This clause shall be included in the contracts of all contractors with whom this contractor will be required to cooperate. The University shall equitably enforce this clause to all contractors to prevent the imposition of unreasonable burdens on any contractor.

#### 3.18 Governing Law

The contractor shall conform to and observe all laws, ordinances, rules and regulations of the United States of America, Commonwealth of Kentucky and all other local governments, public authorities, boards or offices relating to the property or the improvements upon same (or the use thereof) and will not permit the same to be used for any illegal or immoral purposes, business or occupation. The resulting contract shall be governed by Kentucky law and any claim relating to this contract shall only be brought in the Franklin Circuit Court in accordance with KRS 45A.245.

#### 3.19 Kentucky's Personal Information Security and Breach Investigation Procedures and Practices Act

To the extent Company receives Personal Information as defined by and in accordance with Kentucky's Personal Information Security and Breach Investigation Procedures and Practices Act, KRS 61.931, 61.932 and 61.933 (the "Act"), Company shall secure and protect the Personal Information by, without limitation: (i) complying with all requirements applicable to non-affiliated third parties set forth in the Act; (ii) utilizing security and breach investigation procedures that are appropriate to the nature of the Personal Information disclosed, at least as stringent as University's and reasonably designed to protect the Personal Information from unauthorized access, use, modification, disclosure, manipulation, or destruction; (iii) notifying University of a security breach relating to Personal Information in the possession of Company or its agents or subcontractors within seventy-two (72) hours of discovery of an actual or suspected breach unless the exception; (iv) cooperating with University in complying with the response, mitigation, correction, investigation and notification requirements of the Act , (v) paying all costs of notification, investigation and mitigation in the event of a security breach of Personal Information suffered by Company; and (vi) at University's discretion and direction, handling all administrative functions associated with notification, investigation and mitigation.



#### 3.20 <u>Termination for Convenience</u>

Northern Kentucky University, Office of Procurement Services, reserves the right to terminate the resulting contract without cause with a thirty (30) day written notice. Upon receipt by the contractor of a "notice of termination," the contractor shall discontinue all services with respect to the applicable contract. The cost of any agreed upon services provided by the contractor will be calculated at the agreed upon rate prior to a "notice of termination" and a fixed fee contract will be pro-rated (as appropriate).

#### 3.21 <u>Termination for Non-Performance</u>

#### a) Default

The University may terminate the resulting contract for non-performance, as determined by the University, for such causes as:

- Failing to provide satisfactory quality of service, including, failure to maintain adequate personnel, whether arising from labor disputes, or otherwise any substantial change in ownership or proprietorship of the Contractor, which in the opinion of the University is not in its best interest, or failure to comply with the terms of this contract;
- Failing to keep or perform, within the time period set forth herein, or violation of, any of the covenants, conditions, provisions or agreements herein contained;
- Adjudicating as a voluntarily bankrupt, making a transfer in fraud of its creditors, filing a petition under any section from time to time, or under any similar law or statute of the United States or any state thereof, or if an order for relief shall be entered against the Contractor in any proceeding filed by or against contractor thereunder. In the event of any such involuntary bankruptcy proceeding being instituted against the Contractor, the fact of such an involuntary petition being filed shall not be considered an event of default until sixty (60) days after filing of said petition in order that Contractor might during that sixty (60) day period have the opportunity to seek dismissal of the involuntary petition or otherwise cure said potential default; or
- Making a general assignment for the benefit of its creditors, or taking the benefit of any insolvency act, or if a permanent receiver or trustee in bankruptcy shall be appointed for the Contractor.

#### b) Demand for Assurances

In the event the University has reason to believe Contractor will be unable to perform under the Contract, it may make a demand for reasonable assurances that Contractor will be able to timely perform all obligations under the Contract. If Contractor is unable to provide such adequate assurances, then such failure shall be an event of default and grounds for termination of the Contract.

#### c) Notification

The University will provide ten (10) calendar days written notice of default. Unless arrangements are made to correct the non-performance issues to the University's satisfaction within ten (10) calendar days, the



University may terminate the contract by giving forty-five (45) days notice, by registered or certified mail, of its intent to cancel this contract.

#### 3.22 Funding Out

The University may terminate this contract if funds are not appropriated or are not otherwise available for the purpose of making payments without incurring any obligation for payment after the date of termination, regardless of the terms of the contract. The University shall provide the contractor thirty (30) calendar days' written notice of termination under this provision.

#### 3.23 Assignment and Subcontracting

The Contractor(s) may not assign or delegate its rights and obligations under any contract in whole or in part without the prior written consent of the University. Any attempted assignment or subcontracting shall be void.

#### 3.24 Permits, Licenses, Taxes

The contractor shall procure all necessary permits and licenses and abide by all applicable laws, regulations and ordinances of all federal, state and local governments in which work under this contract is performed.

The contractor must furnish certification of authority to conduct business in the Commonwealth of Kentucky as a condition of contract award. Such registration is obtained from the Secretary of State, who will also provide the certification thereof. However, the contractor need not be registered as a prerequisite for responding to the ITB.

The contractor shall pay any sales, use, personal property and other tax arising out of this contract and the transaction contemplated hereby. Any other taxes levied upon this contract, the transaction or the equipment or services delivered pursuant hereto shall be the responsibility of the contractor.

The contractor will be required to accept liability for payment of all payroll taxes or deductions required by local and federal law including (but not limited to) old age pension, social security or annuities.

#### 3.25 Attorneys' Fees

In the event that either party deems it necessary to take legal action to enforce any provision of the contract and in the event that the University prevails, the contractor agrees to pay all expenses of such action including attorneys' fees and costs at all stages of litigation.

#### 3.26 Royalties, Patents, Copyrights and Trademarks

The Contractor shall pay all applicable royalties and license fees. If a particular process, products or device is specified in the contract documents and it is known to be subject to patent rights or copyrights, the existence of such rights shall be disclosed in the contract documents and the Contractor is responsible for payment of all associated royalties. To the fullest extent permitted by law the Contractor shall indemnify,

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hold the University harmless, and defend all suits, claims, losses, damages or liability resulting from any infringement of patent, copyright, and trademark rights resulting from the incorporation in the Work or device specified in the Contract Documents.

Unless provided otherwise in the contract, the Contractor shall not use the University's name nor any of its trademarks or copyrights, although it may state that it has a Contract with the University.

#### 3.27 Indemnification

The contractor shall indemnify, hold and save harmless the University, its affiliates and subsidiaries and their officers, agents and employees from losses, claims, suits, actions, expenses, damages, costs (including court costs and attorneys' fees of the University's attorneys), all liability of any nature or kind arising out of or relating to the Contractor's response to this ITB or its performance or failure to perform under the contract awarded from this ITB. This clause shall survive termination for as long as necessary to protect the University.

#### 3.28 Insurance

If awarded, bidder / proposer must provide NKU with an insurance certificate listing NKU as a certificate holder and additionally insured.

Northern Kentucky University 617 Lucas Administrative Center 1 Nunn Drive Highland Heights, KY 41099

The Contractor shall furnish the University the Certificates of Insurance and guarantee the maintenance of such coverage during the term of the contract. The Contractor shall provide an original policy endorsement of its CGL insurance naming Northern Kentucky University and the directors, officers, trustees, and employees of the University as additional insured on a primary and non-contributory basis as their interest appears. Additionally, the Contractor shall provide an original policy endorsement for Waiver of subrogation in favor of the Northern Kentucky University its directors, officers, trustees, and employees as additional insured.

#### Our basic insurance requirements are:

Workers' Compensation insurance with Kentucky's statutory limits and Employers' Liability insurance with at least \$100,000 limits of liability.

Comprehensive General Liability (CGL) Insurance the limits of liability shall not be less than \$500,000 each occurrence for bodily injury and \$250,000 property damage.

Comprehensive Automobile Liability Insurance: To cover all owned, hired, leased or non-owned vehicles used on the Project. Coverage shall be for all vehicles including off the road tractors, cranes and rigging equipment and include pollution liability from vehicle upset or overturn. Policy limits shall not be less than \$500,000 for bodily injury and \$100,000 for property damage.



Excess liability insurance in an umbrella form for excess coverages shall have a minimum of \$1,000,000 combined single limits for bodily injury and property damage for each.

*If accessing NKU Student, Employee, or other personal records, vendor needs Security and Privacy Liability Insurance with limits no less than \$1,000,000.* 

*If accessing NKU Student, Employee, or other personal records, vendor needs Evidence Breach Response Services coverage with limits no less than \$5,000,000.* 

#### 3.29 Method of Award

It is the intent of the University to award a contract to the qualified offeror whose bid, conforming to the conditions and requirements of the ITB, is determined to be the lowest.

Notwithstanding the above, this ITB does not commit the University to award a contract from this solicitation. The University reserves the right to reject any or all offers and to waive formalities and minor irregularities in the bid received.

#### 3.30 <u>Reciprocal Preference</u>

In accordance with KRS 45A.494, a resident offeror of the Commonwealth of Kentucky shall be given a preference against a nonresident offeror. In evaluating proposals, the University will apply a reciprocal preference against an offeror submitting a proposal from a state that grants residency preference equal to the preference given by the state of the nonresident offeror. Residency and non-residency shall be defined in accordance with KRS 45A.494(2) and 45A.494(3), respectively. Any offeror claiming Kentucky residency status shall submit with its proposal a notarized affidavit affirming that it meets the criteria as set forth in the above reference statute.

An affidavit is provided and attached, for your convenience to this ITB.

#### 3.31 Reports and Auditing

The University, or its duly authorized representatives, shall have access to any books, documents, papers, records or other evidence which are directly pertinent to this contract for the purpose of financial audit or program review.

#### 3.32 Confidentiality

The University recognizes an offeror's possible interest in preserving selected information and data included in the proposal; however, the University must treat such information and data as required by the Kentucky Open Records Act, KRS 61.870, et seq.

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If the offeror declares information provided in their response to be proprietary in nature and not available for public disclosure, the offeror shall declare in their response the inclusion of proprietary information and shall noticeably label as confidential or proprietary each sheet containing such information. Proposals containing information declared by the offeror to be proprietary or confidential, either wholly or in part, not excluded by the Kentucky Open Records Act, KRS 61.870 may be deemed non-responsive and may be rejected.

The University's General Counsel shall review each offeror's information claimed to be confidential and, in consultation with the offeror (if needed), make a final determination as to whether or not the confidential or proprietary nature of the information or data complies with the Kentucky Open Records Act.

#### 3.33 Conflict of Interest

When submitting and signing a proposal, an offeror is certifying that no actual, apparent or potential conflict of interest exists between the interests of the University and the interests of the offeror. A conflict of interest (whether contractual, financial, organizational or otherwise) exists when any individual, contractor or subcontractor has a direct or indirect interest because of a financial or pecuniary interest, gift or other activities or relationships with other persons (including business, familial or household relationships) and is thus unable to render or is impeded from rendering impartial assistance or advice, has impaired objectivity in performing the proposed work or has an unfair competitive advantage.

Questions concerning this section or interpretation of this section should be directed to the University purchasing agent identified in this ITB.

#### 3.34 Personal Service Contract Policies

This ITB is for consulting or other personal services. Kentucky law requires a Personal Services Contract to be signed by the vendor and filed with the Legislative Research Commission in Frankfort prior to any work beginning. <u>KRS 45A.690</u> defines a Personal Service Contract as "an agreement whereby an individual, firm, partnership, or corporation is to perform certain services requiring professional skill or professional judgment for a specified period of time at a price agreed upon."

After Determination but prior to award, a Personal Services Contract will be sent to the winning offeror for signature. Please be sure to sign and return the **original** contract promptly to Northern Kentucky University. A Notice of Award will not be issued until the signed Personal Services Contract has been received by Procurement Services and filed with the Legislative Research Commission in Frankfort, KY.

#### **REGARDING PERSONAL SERVICE CONTRACT INVOICING**

House Bill 387 has now amended Kentucky Revised Statute 45A.695(10)(A) with the following language, "No payment shall be made on any personal service contract unless the individual, firm, partnership, or corporation awarded the personal service contract submits its invoice for payment on a form established by the committee". The Personal Service Contract Invoice Form shall be used for this purpose and for you convenience we have added fields so that it can be filled in online and printed. This form can be located on NKU's Procurement Services website at: www.lrc.ky.gov/statcomm/contracts/PSC%20INVOICE%20form.pdf

(SU RENOVATION - SBARRO PIZZA)



#### 3.35 Parking Permits

Contractor must obtain parking permits for all vehicles that will be parked on campus. Permits can be obtained at the Welcome Center for \$80/month per vehicle.

http://parking.nku.edu/rules/guidelines.html

#### 3.36 Tobacco Free Campus

Effective January 1st, 2014, NKU will be a tobacco free campus. The use of all tobacco products shall be prohibited in all campus buildings and outside areas on campus.

#### 3.37 Statutory Authority

Selection of firms to provide professional services to Northern Kentucky University are governed by the provisions of the Kentucky Revised Statutes, KRS 45A.085, <u>http://www.lrc.ky.gov/KRS/045A00/085.PDF</u>

#### 3.38 Foreign Corporations

Foreign corporations are defined as corporations that are organized under laws other than the laws of the commonwealth of Kentucky. Foreign corporations doing business within the commonwealth of Kentucky are required to be registered with the Secretary of State, New Capitol Building, Frankfort, Kentucky and must be in good standing.

The Foreign Corporate Proposer, if not registered with the Secretary of State at the time of the bid submittal, shall be required to become registered and be declared in good standing prior to the issuance or receipt of a contract.

#### 3.39 Domestic Corporations

Domestic corporations are required to be in good standing

#### 3.40 Occupational License

Northern Kentucky University was annexed by the city of Highland Heights in 2008. All contractors performing work for NKU must possess a Campbell County Occupational License and a city of Highland Heights Occupational License (administered by Campbell County) and must also pay applicable payroll taxes. For further information, call 859-572-6605.

#### 3.41 Bid Bonds:

A 5% bid bond is required with submission of this ITB.

#### 3.42 Payment and Performance Bonds

100% Payment and Performance Bonds will be required for work arising from this ITB.

## 3.43 <u>Completion Dates or Liquidated Damages if applicable</u>

It is understood and agreed that time is of the essence. The Contractor will efficiently, diligently, and expeditiously conduct the work in a manner that will satisfy compliance with approved project schedules and completion by the completion date appearing in the body of this bid.

#### Substantial Completion shall be December 30, 2019 Final Completion shall be January 6, 2019

All work and cleaning to be completed by January 6<sup>th</sup> in order to allow adequate timing for testing by owner/Sbarro's equipment.



#### 3.44 Coordination of Work

The Vendor shall be responsible for coordinating all work with the **NKU Project Manager**. The Contractor shall cooperate completely with the Owner's security forces and measures.

#### 3.45 Damage and Repairs

The Contractor shall exercise particular care to avoid damage to his own work, the Owner's property, and adjacent property of every description. He shall make good any damage resulting from or caused by the work under this contract at his sole expense in a manner satisfactory and without extra cost to the Owner including, but not limited to, finishes, furnishings, and landscaping.

#### 3.46 Hazardous Materials

No asbestos containing materials, lead based paints, or other hazardous materials shall be furnished or installed in this work.

#### 3.47 Examination of Site

Each vendor shall fully acquaint and familiarize themselves with the conditions as they exist and the character of the operation to be carried on under the proposed contract and has made such investigation as may be reasonably necessary so that the vendor shall fully understand the facilities, physical conditions and restrictions attending to the work under the contract. The specifications furnished represent a fair approximation of the material needed but all quotations submitted should take into account knowledge gained as a result of the above referenced visual inspection.

#### 3.48 Examination of Contract

Each vendor shall also thoroughly examine and become familiar with the specifications and associated contract documents. By submitting a bid, the vendor agrees that they have carefully examined the specifications and have thereupon decided that from their own investigation Contractor has satisfied themselves as to the nature and location of work, the general and local conditions and all matters which may in any way affect the work or its performance and that as a result of such examination and investigation, vendor fully understands the intent and purpose of the documents and conditions of the bidding. Claims for additional compensation and/or extension of time because of the vendor's failure to follow the foregoing procedure and to familiarize themselves with the Contract Documents and all conditions which might affect work will not be allowed.

#### 3.49 Field Verification

It is the Vendor's responsibility to verify all measurements.

#### 3.50 Hours of Work

Working days at Northern Kentucky University are Monday through Friday, 8:00am to 4:30pm. Deviation from these working hours must be approved by said project manager.

#### 3.51 Warranty

Offeror shall stand behind installed system for period of 1 year from Date of Substantial Completion against all the conditions indicated below as part of but not limited to Description of Work outlined in 4.0. Offeror is not responsible for warranty of OFCI equipment or signage. When notified in writing from Owner, Offeror shall, promptly and without inconvenience and cost to Owner correct said deficiencies.



#### 4.0 DESCRIPTION OF WORK

- A. The Work of the Project is defined by the Contract Documents and consists of the following:
  - The Work for Northern Kentucky University / Sbarro's 2<sup>nd</sup> Floor Student Union Renovation consists of retrofitting the existing food service venue to accommodate Sbarro's full service inline operation.
  - 2. Specific tasks for this renovation include but are not limited to the following:
    - a. Remove existing service equipment not to be used for new construction. Salvage equipment to be turned over to Owner representative.
    - b. Selective demolition within the construction zone as outlined herein (no Work to existing concrete building structures or envelope required except unless noted otherwise in drawing for any E/P systems upgrades)
    - c. Selective demolition of interior finishes and E/P systems.
    - d. New partial wall construction to be gypsum board on metal stud walls
    - e. Construction of new casework for in-line food service.
    - f. New finishes include but not limited to wood wall accents/casework, porcelain tile, painted gypsum boards walls and ceilings, and new acoustical panel ceiling as applicable per construction.
    - g. Partial update to electrical system
    - h. Construction of new electrical panel
    - i. Partial update to plumbing systems in order to tie in new service equipment
    - j. Equipment and signage to be furnished to offeror by Owner.
    - k. Menu boards to be furnished by Owner and installed by offeror.
    - I. Coordination of install of signage provided by Owner.
    - m. Replace any damaged finishes as a result of construction activities including ceiling grid, painted surfaces, floor finishes and wall base, or any other damage to premises caused by contractor and subcontractors.



#### 5.0 BID DOCUMENTS

- a) References Form
- b) Subcontractors Form
- c) Materials
- d) Bid Bond Form
- e) Form of Proposal / Bid Form



## 5.1 **REFERENCES**

**Bidder Qualifications:** The bidder is required to submit a list of completed projects where he has performed **<u>similar work</u>** to that specified herein.

Organization:	
Contact Name:	
Phone Number:	
Date Work Completed:	Value of Contract:
Project Manager assigned to this project: _	
Brief Project Description:	
Organization:	
Contact Name:	
Phone Number:	
Date Work Completed:	Value of Contract:
Project Manager assigned to this project: _	
Brief Project Description:	
Organization:	
Contact Name:	
Phone Number:	
Date Work Completed:	Value of Contract:
Project Manager assigned to this project: _	
Brief Project Description:	



#### 5.2 SUBCONTRACTORS (IF APPLICABLE)

**SUBCONTRACTORS:** The following is a list of subcontractors proposed by the bidder to be used to complete the project. All subcontractors are subject to approval by Northern Kentucky University. Failure to submit this list completely filled out may invalidate bid. **SUBCONTRACTORS MAY NOT BE CHANGED AFTER CONTRACT AWARD WITHOUT APPROVAL BY NKU.** 

#### BRANCH OF WORK

#### NAME, ADDRESS AND TELEPHONE OF SUBCONTRACTORS

Interior Architectural Woodwork	
Metal Studs/ Drywall	
Deveolein /Coversie Tiling	
Porcelain/Ceramic Tiling	
Interior Painting	
Plumbing	
Electric	
Data and Voice Cabling	



## 5.3 List of Materials and Equipment

#### (Must be submitted within 24 hours after bid opening)

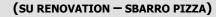
Every item listed under the different phases of this project must be clearly identified so that Northern Kentucky University will definitely know what the bidder proposes to furnish. Bidders be hereby advised that this list shall be required to be filled out completely by the apparent low bidder within twenty-four (24) hours from the close of the official reading of the bids.

The above requirement does not preclude any bidder from submitting this list, fully executed, at the time the bids are submitted.

The use of the manufacturers' dealer's name only, or stating "as per plans and specifications", will not be considered as sufficient identification. Where more than one "Make or Brand" is listed for any one item, the Owner has the right to select the one to be used.

Failure to submit a proper list may result in rejection of the Bidder's Proposal.

Porcelain Tiling	
Wood Wall Accents/ Casework	
Plumbing Fixtures	
Electric Panels/Gear	
Data Cabling	





#### 5.3 List of Unite Prices

**List of Unit Prices.** Unit prices shall include the furnishing of all labor, materials, suppliers, services, and shall include all items of cost, overhead and profit for the Trade Contractor and any Subcontractor involved, and shall be used uniformly without modification for either additions or deductions. The Unit Price as established shall be used to determine the equitable adjustment of the Contract Price in connection with changes or extra work performed under the Contract. Failure to completely fill out the unit prices requested will result in Bid rejection.

ITEM DESCRIPTION	UNIT	UNIT PRICE		
ARCHITECTURAL				
1. Paint	S.F.	\$		
2. Porcelain Tile	S.F.	\$		
3. Terrazzo Tile	S.F.	\$		
4. Wood Wall Paneling	S.F.	\$		
ELECTRICAL				
<ol> <li>Provide duplex receptacle and circuit with all necessary conduit, outlet box, junction boxes, receptacles, and 100' of 3 conductor, 10 AWG wire, circuit breaker and labor.</li> <li>Provide type "PS16" and "PS19" light fixture installed and circuited with all necessary conduit, outlet box, junction boxes, receptacles, and 100' of 3 conductor. AWG wire, circuit breaker and labor.</li> </ol>				
of 3 conductor, AWG wire, circuit breaker and labor.	EA	\$		



## **Bid Bond** 5% of Contract Price

KNOW ALL MEN BY THESE PRESENTS, that we (here insert full name and address or legal title of Contractor)

as Principal, hereinafter called the Principal, and <sub>(here insert full name and address or legal title of Surety)</sub> a corporation duly organized under the laws of the State of Kentucky as Surety, hereinafter called Surety, are held and firmly bound unto **Northern Kentucky University** as Obligee, hereinafter called Obligee, in the sum of :

Dollars	(\$		)
Donars	( <u>-</u>		/

representing 5% of the Principal's total bid price and for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for (Here insert full name, address and description of project) NOW THEREFORE, if the Obligee shall accept the bid of the Principal within the period specified, or if no period is specified, within 45 days after its opening, and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bid or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bonds or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this day of	2019	
(Principal)	(Seal)	
		(Witness)
(Title)		
(Surety)	(Seal)	
		(Witness)
(Title)		

THIS DOCUMENT MUST BE NOTORIZED

This is only an example. Other forms may be used.



#### 5.4 FORM OF PROPOSAL

#### LUMP SUM BASE BID

The Bidder agrees to furnish all labor, materials, supplies, supervision and services required to perform this contract in a workmanlike manner. These services to be provided in accordance with Specifications and Contract Documents, and any duly issued Addenda for the **LUMP SUM BASE BID** set forth below:

	Dollar	Cents
(USE WORDS)	(USE WOR	DS)
	\$	
	(USE NUMBERS)	)

This offer is for, at minimum, \_\_\_\_\_\_ calendar days from the date this offer is opened. In submitting the above it is expressly agreed that upon proper acceptance by Northern Kentucky University of any or all items offered, a contract shall thereby be created with respect to the items accepted.

THIS BID SUBMITTED BY:

(Name and Address of Bidder)

DATE: \_\_\_\_\_\_ AUTHORIZED SIGNATURE: \_\_\_\_\_

**NOTE:** The Authentication of Bid and Statement of Non-Collusion and Non-Conflict of Interest must be properly executed for this Bid to be valid.

This Bidder, in compliance with this Request for Bid, and having carefully examined the complete contract documents, as well as the specifications for the work as prepared by Northern Kentucky University, hereby proposes to furnish all labor, supervision, materials, supplies and services required to perform the specifics of the Contract Documents, within the time set forth herein and for the final negotiated price.

The Bidder, hereby acknowledges receipt of the following Addenda:

ADDENDUM NO. \_\_\_\_\_ DATED \_\_\_\_\_ ADDENDUM NO. \_\_\_\_\_ DATE \_\_\_\_\_





859-442-8050

# **DRAWING LIST**

G1.0 - COVERSHEET G1.1 - GENERAL NOTES

ARCHITECTURE

A1.0 - DEMOLTION AND NEW WORK PLANS A1.1 - DETAILS

ELECTRICAL

E-001 - ELECTRICAL COVERSHEET E-701 - ELECTRIC SPECIFICATIONS E-702 - ELECTRIC SPECIFICATIONS

EL100 - ELECTRIC LIGHTING - SECOND FLOOR

EP100 - ELECTRIC POWER - SECOND FLOOF EP601 - ELECTRIC POWER - SINGLE LINE DIAGRAM **EP602 - ELECTRIC POWER - PANEL SCHEDULES** 

PLUMBING

P-100 - PLUMBING - SECOND FLOOR PLAN P-101 - PLUMBING - SPECIFICATIONS

COPYRIGHT       Colspan="2">Colspan="2"         Consultants:       Consultants:         Consultants:       Consultants:         Consultants:       Consultants:	aht ands ent h the e the te
ARCHITECT: nectoarchitecture.com allo Old Vine Street Suite 100A Lexington, KY 40507 CTIENT:	859-338-4835
PROJECT NAME:	
NORTHERN KENTUCKY UNIVERSITY STUDENT UNION RENOVATION SBARRO PIZZA	
STAMP: STAMP: SHEET TITLE: COVER SHEET	
GENERAL PROJECT NO.: 2019-0 DRAWN BY: CHECKED BY: SCALE: DATE: SEPTEMBER 2 SHEET NUMBER: G1.0	JC

ARCHIT	<b>FECTURAL ABBREVI</b>	ATIONS								GENERAL NOTES
PL	property line	DEG.	degree	H.B.	hose bib					1. CONSTRUCTION SHALL BE IN ACCOP
۲ L ۶	and	DBL.	double	HC.	handicapped	(N)	new	SHTG.	sheathing	AND APPLICABLE CODES.
ČL	center line	DBL. D.F.	drinking fountain	HDR.	header	N	north	SIM.	similar (to)	2. DIMENSIONS ARE NOT ADJUSTABLE
0	diameter	DIAG.	3			N.I.C.	not in contract	S.M.	sheet metal	3. "TYPICAL" MEANS IDENTICAL FOR AL
U #	pound or number		diagonal diameter	HDWR.	hardware	NO.	number	S.M.S.	sheet metal screw(s)	UNLESS NOTED OTHERWISE. DETA
#		DIA.		H.R.	hand rail	NOM.	nominal	S.O.G.	slab on grade	
<u>w</u>	al	DIM.	dimension	H.I.P.	high impact plastic	N.T.S.	not to scale	S.D.	smoke detector	ARCHITECTURAL SHEETS SHALL APP
L	angle	DN.	down	H.M.	hollow metal			SPEC.	specification(s)	SPECIFICALLY SHOWN OR NOTED O
		D.S.	downspout	HORIZ.	horizontal	OBS.	obscure	SQ.	square	4. "SIMILAR" MEANS SIMILAR CHARACT
A.B.	anchor bolt	DTL.	detail	H.P.	high point	O.C.	on center(s)	S.S.	stainless steel	NOTED. VERIFY DIMENSIONS AND OF
A.C.	asphalt concrete	DWGS.	drawing(s)	HR.	hour	OCC.	occupancy	S.T.C.	sound transmission coef.	NO SPECIFIC DETAIL IS SHOWN, THE
ACC.	accessory	DWR.	drawer	HRWD.	hardwood	O.D.	outside diameter	STD.	standard	SHALL BE IDENTICAL OR SIMILAR TO
	LT.additive alternate			HT.	height	O.F.D.	overflow drain	STL.	steel	CASES OF CONSTRUCTION IN THE P
ADD'L	additional	(E), EXT	Gexisting	H.V.A.C.	heating/ventilating/air cond.	0.F.O.I.	owner furn., owner installed	STRUCT		5. DIMENSIONS NOTED "CLEAR" OR "CL
ADJ.	adjustable / adjacent	E	east	H.W.H.	hot water heater	O.F.C.I	owner furn., cont. installed	SUSP.	suspended or suspension	DIMENSIONS FOR CLEARANCE AND I
ADH.	adhear(ed)	EA.	each			OH.	overhead	S.A.T.	suspended acoustical tile	MAINTAINED. CLEAR DIMENSIONS A
A.F.F.	above finish floor	E.F.	each face	I.D.	inside diameter	OPG.	opening	SYM.	symmetry(ical)	UNLESS NOTED OTHERWISE .
ALUM.	aluminum	E.J.	expansion joint	I.G.	insulated glass	OPP.	opposite	SYS.	system	6. WRITTEN DIMENSIONS ON THE DRAW
ALT.	alternate	EL.	elevation	IN.	inch	OFF.	opposite	515.	System	PRECEDENCE OVER SCALED DIMEN
ANO.	anodized	ELEC.	electric(al)	INCL.	include(d), (ing)	PK.	norling	т	trood	VERIFY AND BE RESPONSIBLE FOR A
	X. approximate	EQ.	equal	INFO.	information		parking		tread	CONDITIONS ON THE JOB AND OWN
ARCH.	architectural	EQUIP.	equipment	INSUL.	insulate(d), (ing), (ion)	PL.	plate	T&B	top and bottom	NOTIFIED OF ANY DISCREPANCIES F
ATT.	attenuation	E.S.	each side	INT.	interior	P.L.	plastic laminate	T.G.	tempered glass	DOCUMENTS BEFORE PROCEEDING.
ATT.	attendation	EXP.	expansion	INV.	invert	PLUMB.	plumbing	T&G	tongue and groove	7. CONTRACTOR TO COORDINATE AND
BD.	board	EXT.	exterior	INV.	Inven	PNL.	panel	TEL.	telephone	WITHIN THIS SET OF DOCUMENTS P
BLDG.	building	LAT.	exterior	JAN.	iopitor	PTD.	painted	TEMP.	temporary	TO BE NOTIFIED OF ANY DISCREPAN
			fabricato (d)		janitor	PR.	pair	THK.	thick(ness)	8. ALL DETAILS ARE REFERRED BACK T
BLK.	block	FAB.	fabricate(d)	JST.	joist	PREP.	preparation	T.O.P.	top of parapet	
BLKG.	blocking	F.B.	flat bar	JT.	joint	PROP.	property	T.O.S.	top of structure	FROM WHICH THEY ORIGINATE.
B.M.	bench mark	F.D.	floor drain			PT.	point	T.O.C.	top of concrete or curb	9. WHERE REQUIRED, SHOP DRAWING
BM.	beam	FOUND		LB.	pound(s)	P.F.E.	portable fire extinguisher	T.O.W.	top of wall	APPROVAL BEFORE PROCEEDING W
BOT.	bottom	F.F.E.	finished floor elevation	LAB.	laboratory	PTN.	partition	TYP.	typical	10. ALL WORK SHALL BE DONE IN A MAN
B.O.S.	bottom of structure	F.G.	fiber glass	LAM.	laminate(d)		plywood		51	ADJOINING SPACES.
B.S.	both sides	F.G.E.	finished grade elevation	LAV.	lavatory		- ,	UG.	underground	11. CONSTRUCTION NOTED AS 'EXISTIN
BTWN.	between	FIN.	finish(ed)	L	left	R	riser	U.N.O.	unless noted otherwise	NOTED OTHERWISE, PROTECT AS R
B.U.	built-up	FIX.	fixture	L.F.	linear foot		recommend(ed)	UR.	urinal	CONSTRUCTION REMOVED BY CONT
		FLR.	floor(ing)	LOC.	location	R.A.	return air	011.		TO BE REPLACED TO MATCH EXISTIN
CAB.	cabinet	F.O.C.	face of concrete	L.P.	low point	RAD.	radius	VERT.	vertical	TO THE OWNER.
CPT.	carpet	F.O.F.	face of finish	LT.	light	R.C.P.	reflected ceiling plan	V.I.F.	verify in field	12. ALL WORK SHALL BE DONE SAFELY
C.I.P.	cast in place	F.O.M.	face of masonry		5	RT.	right	WC.T.	west composition tile	APPROPRIATE TO THE ANTICIPATED
C.B.	catch basin	F.O.S.	face of stud (or structure)	MANUF.	manufacture(r)	R.D.	roof drain			13. CHANGES TO APPROVED DRAWING
CLKG.	caulking	F.R.P.	fiberglass reinforced panel	M.H.	man hole			W/	with	BE MADE BY AN ADDENDA OR A CHA
C.F.	cubic foot	F.S.	finished slab	MAT.	material(s)	RDWD.	redwood	W.A.	wedge anchors	THE ARCHITECT.
C.Y.	cubic yard	FT.	feet or foot	MAX.	maximum	REF.	reference, refer	W/O	without	14. CONTRACTOR SHALL REVIEW THE D
C.J.	construction joint	FTG.	footing	M.B.	machine bolt	REFT.	refrigerator	W.C.	water closet	COORDINATION AMONG TRADES AN
C.L.F.	chain link fence	TTG.	looting	M.C.	medicine cabinet	REINF.	reinforce(d)	WD.	wood	DISCIPLINES AND OBTAIN WRITTEN (
		<u> </u>		MECH.		REQ.	required	W.H.	water heater	ARCHITECT PRIOR TO THE PERFORM
CLG.	ceiling	GA.	gage or gauge		mechanic(al)	RES.	resilient	W.I.	wrought iron	INFORMATION FROM ONE DISCIPLIN
CLR.	clear(ance)	G.C.	general contractor	MED.	medium	RFING.	roofing	W.M.	wire mesh	
C.M.U.	concrete masonry unit	GALV.	galvanized	MET.	metal	RM.	room	W.W.M.	welded wire mesh	INFORMATION FROM ANOTHER. IT SP
COL.	column	G.F.I.	ground fault interrupter	MEMB.	membrane	R+S	rod and shelf	W.P.	water proofing	OF THE CONTRACTOR TO PROVID
CONC.	concrete	G.I.	galvanized iron	MIN.	minimum/minute(s)	R.O.	rough opening	W.PT.	working point	DOCUMENTS TO EACH TRADE WHEF
CONN.		GL.	glass or glazing	MISC.	miscellaneous			WSCT.	wainscot	AFFECTING THE WORK OF ONE TRAI
CONST		G.L.	grid line	MIR.	mirror	S	south	WT.	weight	DRAWINGS OTHER THAN THOSE DEA
CONT.	continuous or continue	G.L.B.	glue laminated beam	MTD.	mount(ed)	S.A.	supply air			WORK OF A GIVEN TRADE.
	R. contract(or)	GYP. BI	D. gypsum board	M.O.	masonry opening	S.B.C.	state building code	YD.	yard	15. CONTRACTOR SHALL REVIEW THE D
COORE	D. coordinate / coordination	G.R.	guard rail	MTL.	metal	S.C.	solid core	10.	yuru	WITH OBSERVED FIELD AND / OR EX
C.T.	ceramic tile			MUL.	mullion	SCH.	schedule			AND REPORT AND DISCREPANCIES 1
CTSK.	countersink					S.D.	storm drain			PRIOR TO COMMENCING THE WORK
						SEC	soction			VISIT THE SITE PRIOR TO BID AND AC

SEC.

S.F.

SHT.

SH.

section

shelf

sheet

square feet

CORDANCE WITH ALL CURRENT

- BLE WITHOUT APPROVAL R ALL COMPARABLE CONDITIONS ETAILS NOTED AS TYPICAL ON APPLY IN ALL CASES UNLESS
- OTHERWISE. ACTERISTICS FOR AN ITEM O ORIENTATION ON PLAN. WHERE
- THE FRAMING OR CONSTRUCTION TO THAT INDICATED FOR LIKE E PROJECT. "CLR." ARE MINIMUM REQUIRED
- ND MUST BE ACCURATELY S ARE TO FACE OF FINISH RAWINGS SHALL TAKE IENSIONS. CONTRACTOR SHALL OR ALL DIMENSIONS AND
- WNER REPRESENTATIVE MUST BE S FROM THE CONTRACT ING. AND VERIFY ALL DIMENSIONS
- S PRIOR TO LAYOUT. ARCHITECT PANCIES BEFORE PROCEEDING. CK TO THE PRIMARY DRAWING
- INGS MUST BE SUBMITTED FOR G WITH FABRICATION.
- MANNER WHICH PROTECTS STING' IS TO REMAIN, UNLESS REQUIRED. 'EXISTING'
- ONTRACTOR FOR ANY REASON IS STING AT NO ADDITIONAL COST ELY AND IN A MANNER
- ED CONSTRUCTION.
- INGS AND SPECIFICATIONS SHALL CHANGE ORDER APPROVED BY
- HE DRAWINGS FOR AND CONSISTENCY BETWEEN EN CLARIFICATION FROM THE ORMANCE OF THE WORK WHEN LINE CONFLICTS WITH THE SHALL BE THE RESPONSIBILITY VIDE COMPLETE SETS OF HERE AS INFORMATION RADE MAY BE LOCATED ON DEALING SPECIFICALLY WITH THE
- HE DRAWINGS FOR CONSISTENCY EXISTING BUILDING CONDITIONS ES TO THE ARCHITECT IN WRITING TO COMMENCING THE WORK. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID AND ACCOUNT FOR OBSERVABLE EXISTING CONDITIONS AS THEY MAY AFFECT THEIR WORK.
- 16. CONTRACTOR SHALL CONSULT WITH THE OWNER'S REPRESENTATIVE TO COORDINATE ACCESS, WORKING HOURS AND OTHER OPERATIONAL ISSUES. CONTRACTOR SHALL BECOME FAMILIAR WITH SCOPE OF WORK TO BE PROVIDED BY THE OWNER AND INCLUDE SUCH WORK AS PART OF THE OVERALL PROJECT SCHEDULE TO INSURE ORDERLY SEQUENCING.
- 17. CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES, INCLUDING BUT NOT LIMITED TO INSTALLATION OF TEMPORARY BARRICADES, DOORS, SIGNAGE, SECURITY LIGHTING. 18. CONTRACTOR SHALL CONTACT ALL PUBLIC AND PRIVATE UTILITY COMPANIES THAT ARE TO PROVIDE SERVICE TO THE PROJECT,
- INCLUDING, BUT NOT LIMITED TO ELECTRICITY, UNLESS NOTED OTHERWISE IN DOCUMENTS CONTRACTOR SHALL PAY FOR ALL UTILITY CONNECTION FEES AS REQUIRED. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITY HOOK-UP WITH THE APPROPRIATE AGENCIES. 19. ALL PRODUCTS TO BE USED ON THE PROJECT SHALL BE
- SUBMITTED (AS A SHOP DRAWING) TO ARCHITECT FOR APPROVAL BY THE ARCHITECT/OWNER PRIOR TO INSTALLATION. ANY NON-CONFORMING PRODUCTS INSTALLED WITHOUT PRIOR APPROVAL SHALL BE REMOVED AS REQUESTED BY THE ARCHITECT/OWNER AND REPLACED WITH CONFORMING PRODUCTS AT THE CONTRACTORS SOLE EXPENSE.

## **DEMOLITION NOTES:**

- BOUNDED BY A BARRICADE.
- ARISING. UNLESS NOTED OTHERWISE.
- 4. THE DOCUMENTS HAVE BEEN PREPARED FROM AVAILABLE
- FIELD CONDITIONS. MAY BE APPLICABLE.
- APPROVAL. CONTRACTOR SHALL REPLACE OR REPAIR ANY DAMAGES AT NO COST TO THE OWNER. 9. CONTRACTOR SHALL COORDINATE DEMOLITION OPERATIONS IN SUCH A MANNER AS TO MINIMIZE HARDSHIP TO TENANTS. USERS AND OTHER TRADES. AS PART OF THE BIDDING PROCESS, THE CONTRACTOR SHALL BECOME AWARE OF ANY POTENTIAL LIMITATIONS IN SCHEDULING, ACCESS AND SEQUENCE OF WORK VIA CONSULTATION WITH THE OWNER'S REPRESENTATIVE AND THE ARCHITECT AS
- REQUIRED. FEDERAL REGULATIONS.
- STATE FIRE MARSHAL REPRESENTATIVE.

# EARTH SAND / MORTAR / PLASTER 4 CONCRETE CONCRETE BLOCK

MATERIAL LEGEND

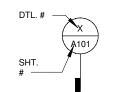
# 

- BRICK / EXISTING CONSTRUCTION PLYWOOD STEEL ALUMINUM GLASS FINISH GRADE WOOD CONTINUOUS ROUGH WOOD WOOD BLOCKING RIGID INSULATION
- BATT INSULATION / FIRE BLOCKING / SOUND ATTENUATION

## PROJECT GRID LINE ( X ) ( xxx ) DOOR IDENTIFICATION NUMBER XX DEMOLITION TAG XX WALL TYPE TAG

SHEET SYMBOLS KEY

- xx KEY NOTE TAG (xx) FIXTURE / APPLIANCE TAG
  - KEYNOTE TAG
  - CSI SPECIFICATION NUMBER
  - ROOM TAG
  - BUILDING SECTION REFERENCE



XX

ROOM 125

A101

\_\_\_\_0330\_

DTL. # —

SHT.

DETAIL REFERENCE

ENLARGED DETAIL REFERENCE

A101

F.F.E. FIRST FLOOR C.O.

1. DURING DEMOLITION, ALL MATERIAL SHALL BE HANDLED WITHIN THE BUILDING AREA OR WITHIN THE AN AREA

2. DURING DEMOLITION, ALL DEBRIS SHALL BE SUFFICIENTLY WET AT THE TIME OF HANDLING TO PREVENT DUST FROM

3. CONTRACT TO DETERMINE EXTENT OF DEMOLITION NECESSARY FOR WORK TO PERFORMED PRIOR TO BID

RECORD DRAWINGS AND SITE OBSERVATIONS. ALTHOUGH EVERY EFFORT HAS BEEN MADE TO VERIFY EXISTING CONDITIONS, DISCREPANCIES BETWEEN THE DOCUMENTS AND ACTUAL FIELD CONDITIONS MAY EXIST. THE

CONTRACTOR SHALL INSPECT ALL SITE CONDITIONS AS PART OF THE BIDDING PROCESS AND NOTIFY THE ARCHITECT IN WRITING WHEREVER DISCREPANCIES ARE OBSERVED WHICH MIGHT AFFECT THE IMPLEMENTATION OF THE WORK. 5. THE CONTRACTOR SHALL INVESTIGATE THE SCOPE OF DEMOLITION REQUIRED AND IDENTIFY ANY CONDITIONS WHERE THE WORK AS INDICATED IN THE CONTRACT DOCUMENTS CANNOT BE PERFORMED DUE TO EXISTING

6. THE TERMS 'REMOVE' AND 'DEMOLISH' AS USED IN THE DOCUMENTS ARE EQUAL IN MEANING AND UNLESS NOTED OTHERWISE INDICATE COMPLETE DEMOLITION AND REMOVAL OF THE ITEM IDENTIFIED. THE TERM 'DEMOLITION ACTIVITIES' OR 'DEMOLITION OPERATION' SHALL MEAN BOTH THE DEMOLITION AND RELATED RECONSTRUCTION WORK AS

7. DEMOLITION OF EXISTING CONSTRUCTION SHALL BE LIMITED TO THE ITEMS INDICATED TO BE DEMOLISHED. 8. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING IMPROVEMENTS TO REMAIN

WHICH COULD POTENTIALLY BE DAMAGED AS A RESULT OF DEMOLITION ACTIVITIES. PROTECTION MEASURES SHALL BE AT THE CONTRACTORS DISCRETION SUBJECT TO OWNERS

10. DISPOSAL OF ALL DEBRIS SHALL BE CONDUCTED IN A LAWFUL MANNER AND IN ACCORDANCE WITH LOCAL, STATE

11. PORTABLE FIRE EXTINGUISHERS WITH A RATING NOT LESS THAN 2-A OR 2-A 10 ABC SHALL BE PROVIDED AND LOCATED WITHIN A 75 FOOT TRAVEL DISTANCE TO ALL PORTIONS OF THE BUILDING. PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 20 ABC SHALL BE PROVIDED. PROVIDE ADDITIONAL FIRE EXTINGUISHERS AS REQUIRED BY

## **RESPONSIBILITY:**

- 1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTING THE BUILDING ELEMENTS, AND ANY ANCILLARY STRUCTURAL ELEMENTS IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. BEFORE COMMENCING WITH CONSTRUCTION AND FABRICATION DRAWINGS, THE CONTRACTOR SHALL VERIFY GOVERNING DIMENSIONS, ELEVATIONS, EXISTING CONDITIONS AND CONSTRUCTABILITY OF THE CONSTRUCTION AS DEFINED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S RESPONSIBILITIES INCLUDE
- BUT ARE NOT LIMITED TO THE FOLLOWING: A. THE SAFETY OF THE CONSTRUCTION SITE AND CONSTRUCTION
- PERSONNEL. B. THE PROTECTION, PROPER HANDLING AND INSTALLATION OF CONSTRUCTION MATERIALS.
- C. THE SEQUENCE OF CONSTRUCTION (UNLESS SPECIFICALLY SPECIFIED OTHERWISE).
- D. THE MEANS, METHODS AND PROCEDURES EMPLOYED IN IMPLEMENTING THE REQUIRED CONSTRUCTION (UNLESS SPECIFICALLY SPECIFIED OTHERWISE). E. THE STRUCTURAL DESIGN OF ALL ITEMS USED IN THE
- CONSTRUCTION WHICH MAY OR MAY NOT BE A PERMANENT PART THEREOF F. THE SCHEDULING OF CONSTRUCTION ACTIVITIES (UNLESS SPECIFICALLY SPECIFIED OTHERWISE).

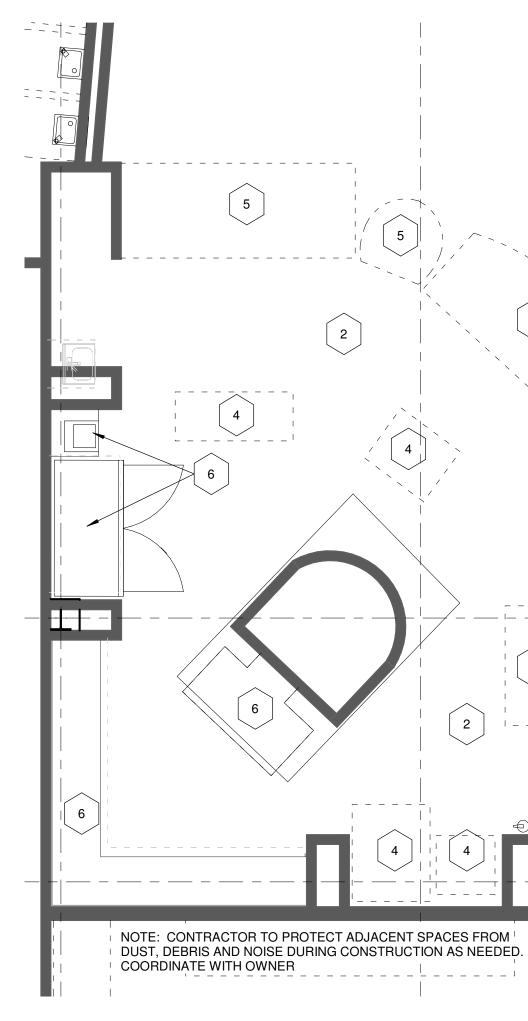


This project consists of limited demolition of existing equipment and installation of new equipment and finishes for the purposes of renovating an existing tenant space for a new tenant.

APPLICABLE CODES: BUILDING

INTERNATIONAL BUILDING CODE (IBC) 2015 KENTUCKY BUILDING CODE (KBC) 2018

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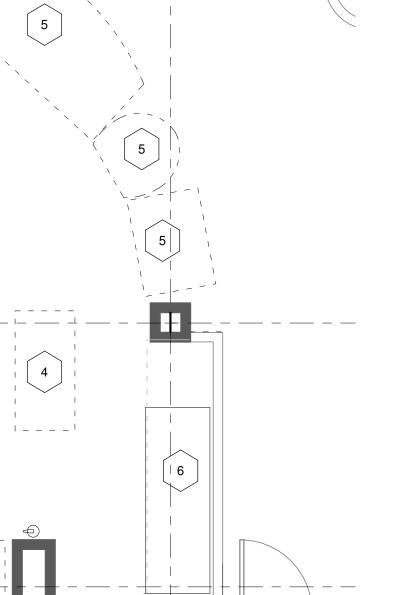


ITEM NO	QTY	EQUIPMENT CATEGORY	MANUFACTURER	MODEL NO
156	1	DUNNAGE RACK	NEW AGE INDUSTRIAL	2020
171	1	MOBILE WORK TOP PAN RACK	NEW AGE INDUSTRIAL	1313
200	1	SNEEZE GUARD W/ LED	BY OTHERS	BY OTHERS
215	1	HAND SINK	EXISTING	EXISTING
250	1	PREP TABLE	ADVANCE/TABCO	TKMS-304, NO BOTTOM SHE
252	1	PREP TABLE	ADVANCE/TABCO	TKMS-304
257	1	48"x30" STAINLESS STEEL TABLE	ADVANCE/TABCO	CUSTOM S/S FABRICATION SPECIAL HEIGHT
340	1	2 DOOR REACH IN REFRIGERATION	EXISTING	EXISTING
343	1	REFRIGERATED PIZZA PREP	EXISTING	EXISTING
400	1	DECK PIZZA OVEN	EXISTING	EXISTING
410	1	CONVEYOR OVEN	TURBOCHEF	HCS-1618 STD-36 W/ (2) HCT-4099
470	1	DOUGH MIXER	PRECISION MIXERS	HD60.3
475	1	CHEESE HOG	PALAZZOLO	GS-1 AUTOMATIC MACHINE
482	1	HOT WELL, (4) 4/3 PAN	WELLS BLOOMFIELD	MOD-427TDMAF
484	1	DROP-IN COLD FOOD WELL	WELLS	ICP-200
		REFRIGERATED DISPLAY		
485	1	CASE	FEDERAL INDUSTRIES	CGR5048CD
490	1	CUSTOM COUNTER	CUSTOM	CUSTOM
500	1	EXHAUST HOOD	EXISTING	EXISTING
700	1	PIZZA SCALE	EDLUND	EPZ-10
740	3	FLOUR BIN	WINHOLT	148 PIB
760	1	PIZZA DISPLAY PACKAGE	BY OTHERS	BY OTHERS
780	2	IN-COUNTER CUP DISPENSE	SAN JAMAR	C2410C
800	1	P.O.S TERMINAL	ALOHA	
860	1	MENU BOARDS	DIGITAL (4- 48" MONITO	IRS)
900	1	SIGNAGE	RUGGLES SIGNS	6'-0" ROUND SBARRO SIG
901	1	SIGNAGE	RUGGLES SIGNS	SOFFIT MOUNTED SIGN- SIZE TBD, ILLUMINATED

NOTE: SCHEDULE SHOWN FOR REFERENCE ONLY. COORDINATE WITH OWNER SUPPL AND ELECTRICAL/PLUMBING DRAWINGS

EQUIPMENT SCHEDULE 1/4" = 1'-0"

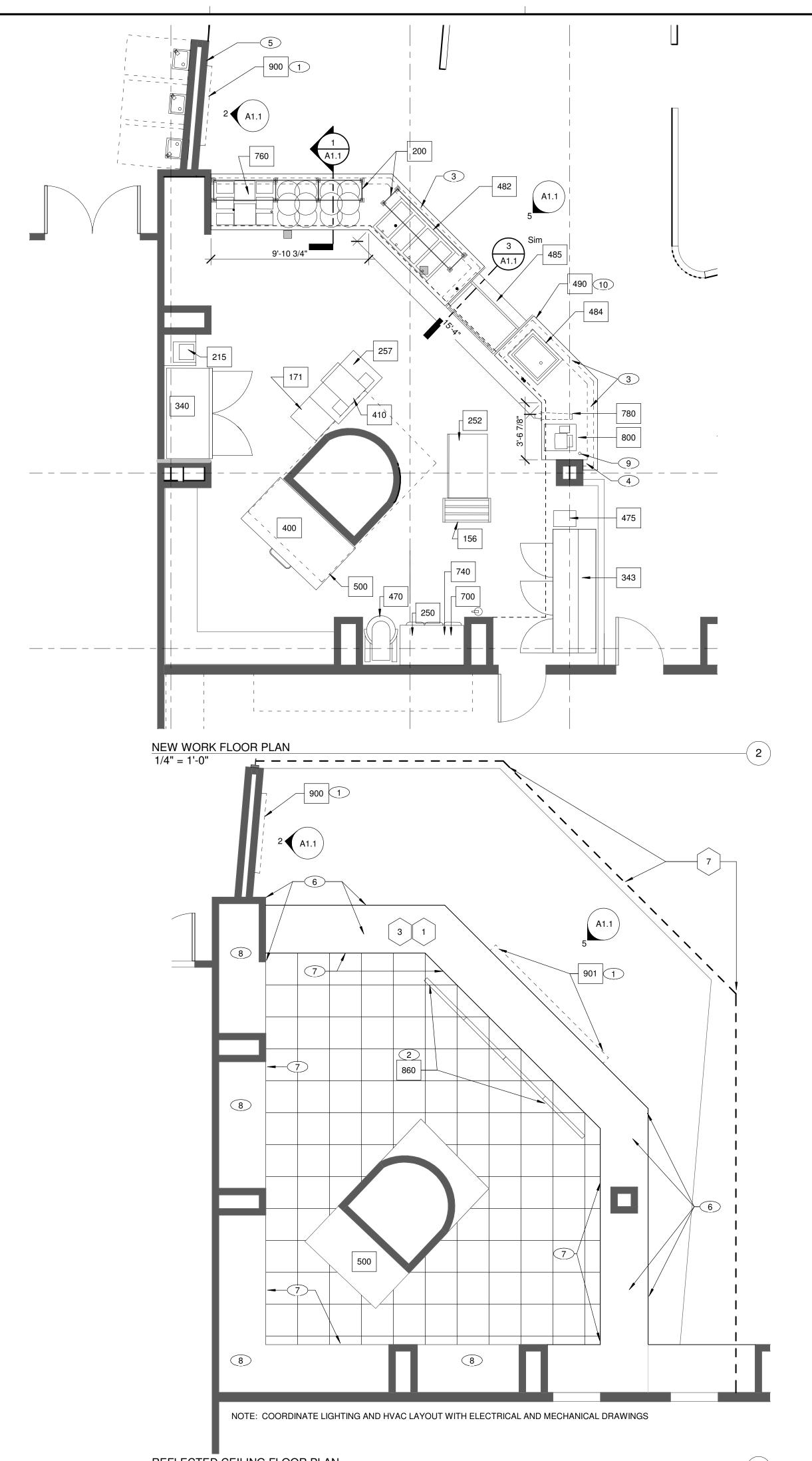
	148 PIB
	BY OTHERS
	C2410C
ORS	)
	6'-0" ROUND SBARRO SIGN ILLUMINATED
	SOFFIT MOUNTED SIGN-
	SIZE TBD, ILLUMINATED
LIED	EQUIPMENT



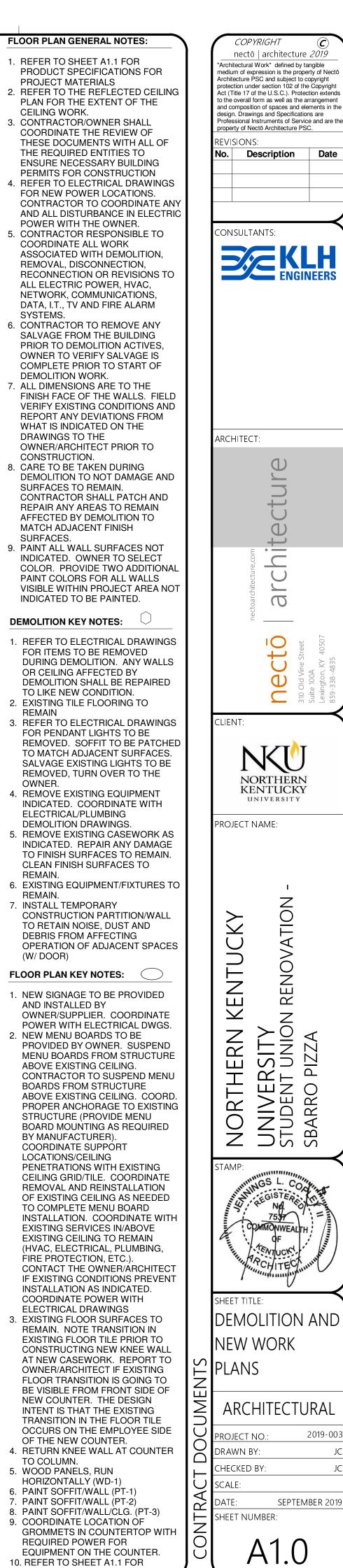
(1)

(4)

2



REFLECTED CEILING FLOOR PLAN 1/4" = 1'-0"



REMAIN

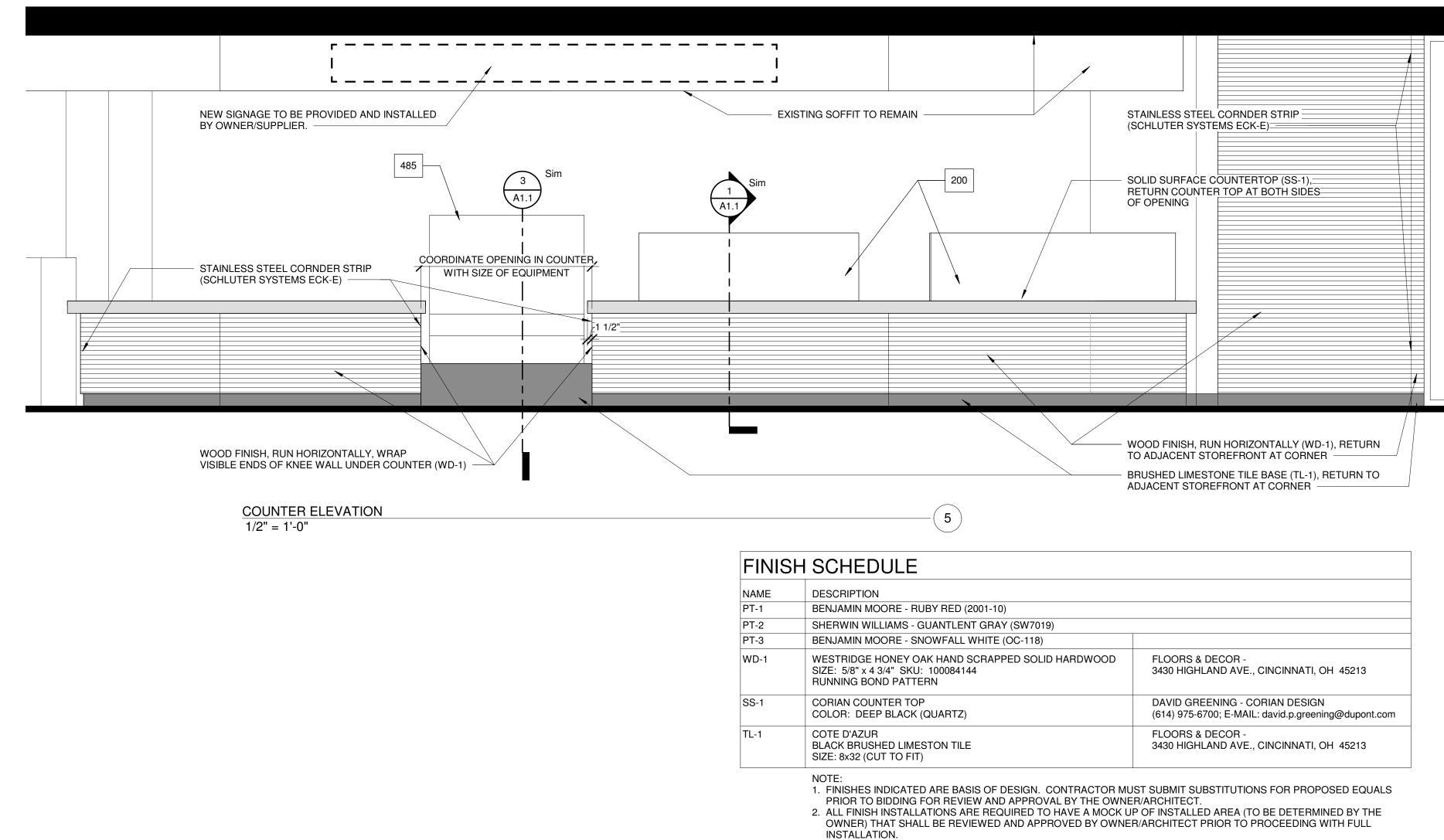
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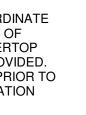
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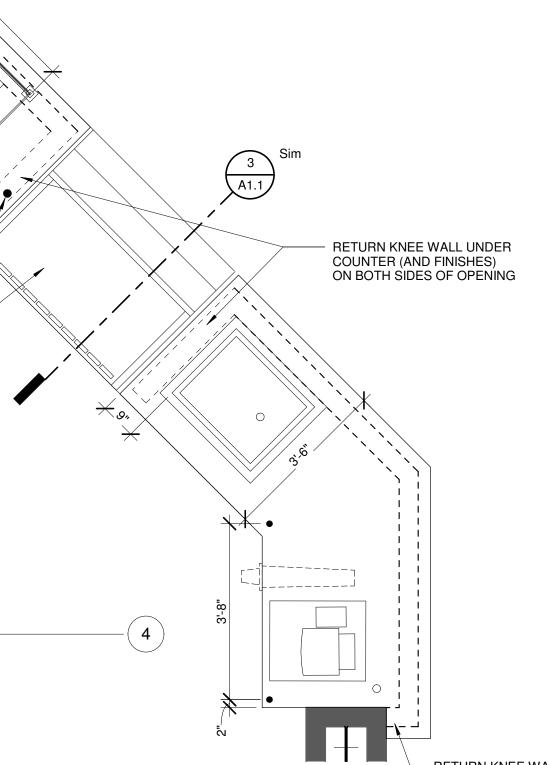
COUNTER LAYOUT DETAILS



COUNTER LAYOUT DETAIL 1/2" = 1'-0"

SNEEZE GUARD, COORDINATE INSTALLATION/LAYOUT OF SYSTEM WITH COUNTERTOP A1.1 EQUIPMENT TO BE PROVIDED. VERIFY WITH OWNER PRIOR TO 3'-10 1/2" 2'-9" 2'-8" FABRICATION/INSTALLATION - + - - -╴╴╴╶╟╴╴╴╴╴╫╶╶╴╴╶╢┰╱╴╴╴╰╱╴╴╴╰╲┠╴╱╶╶╵╴╳╴╴╴╲╴┠ 3'-0" 3'-0" 3'-6" STAINLESS STEEL COUNTER SUPPORT COORDINATE LOCATION OF NEW EQUIPMENT WITH EXISTING FLOOR ELECTRICAL CONDUIT

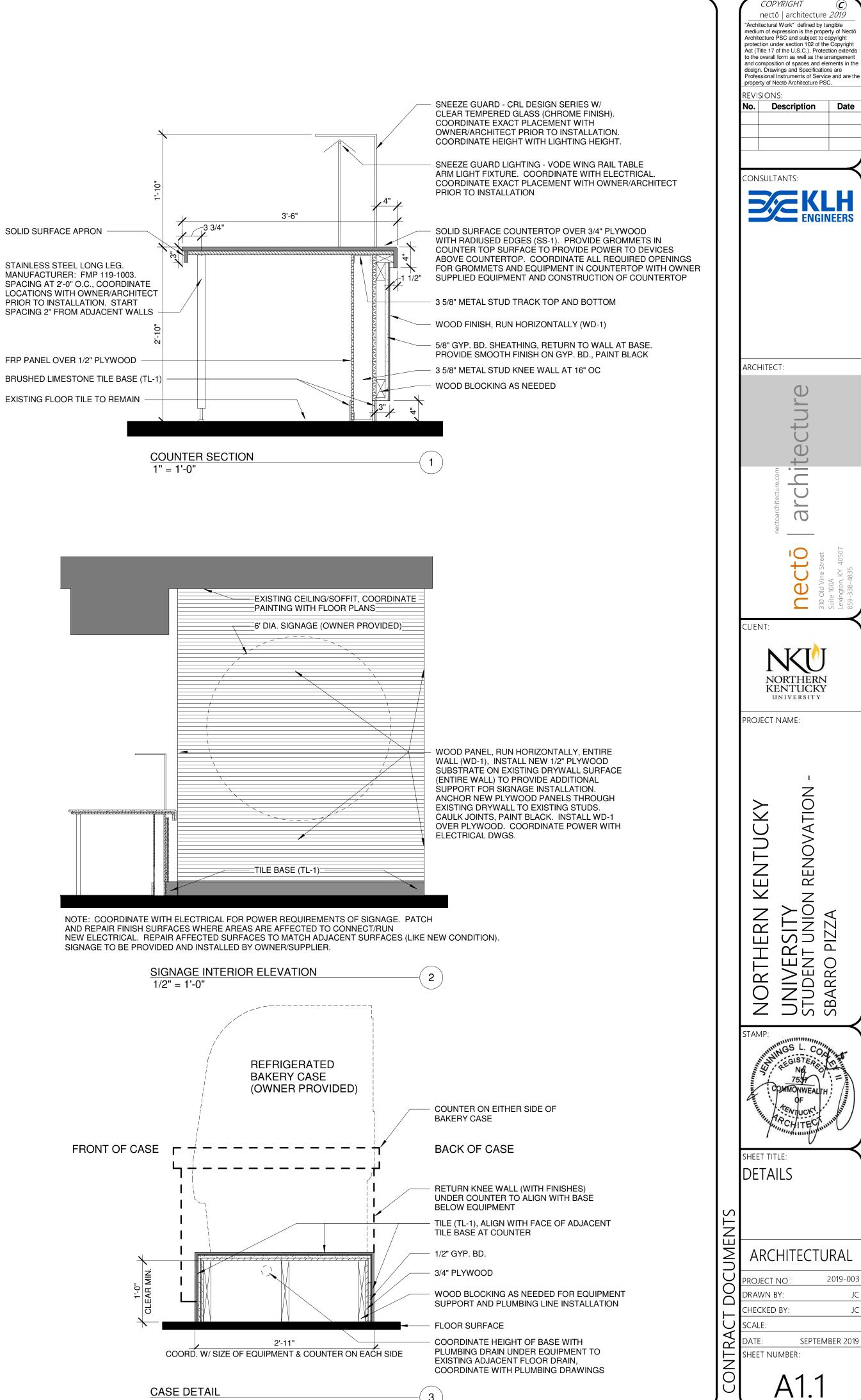


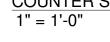


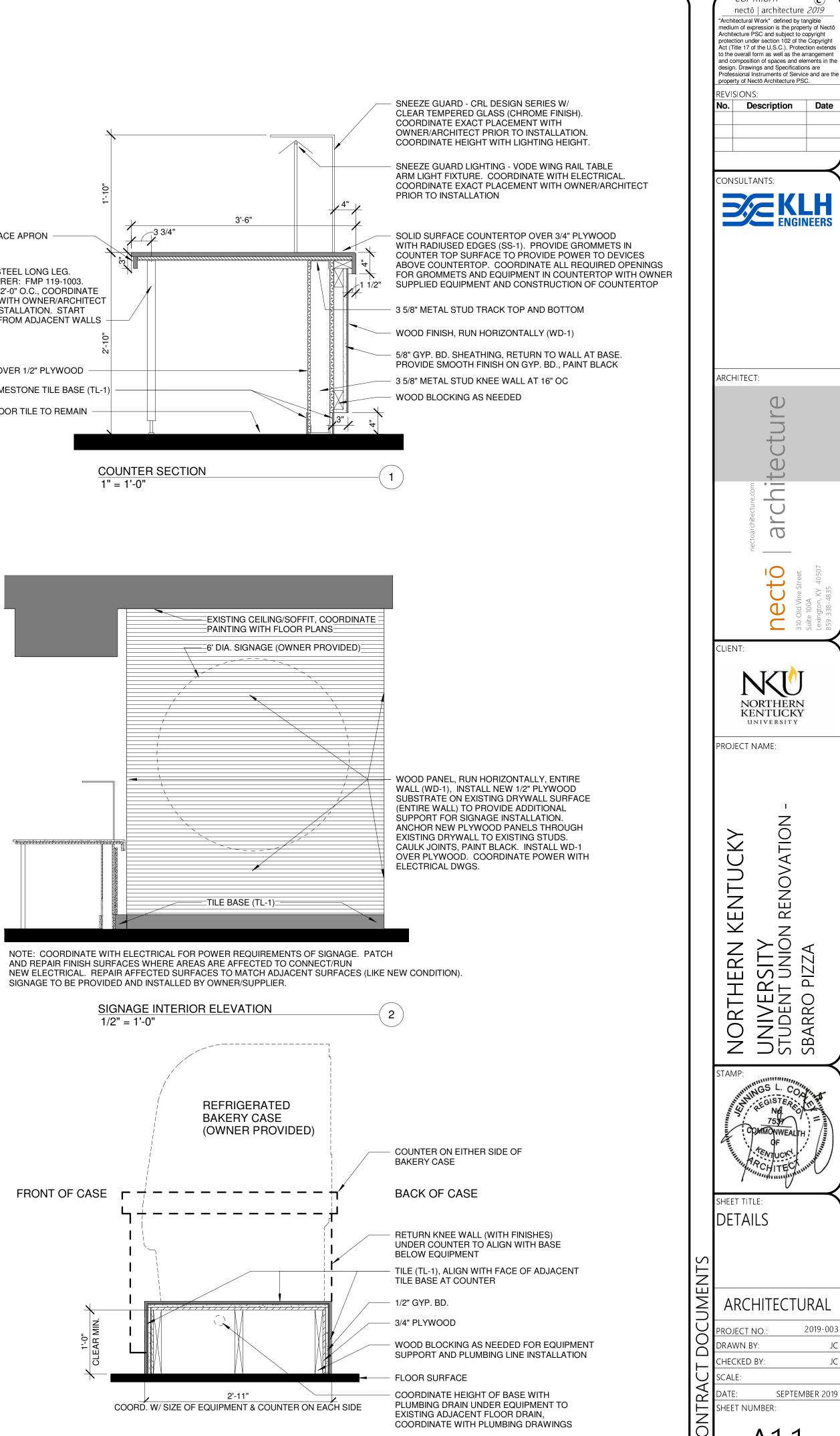


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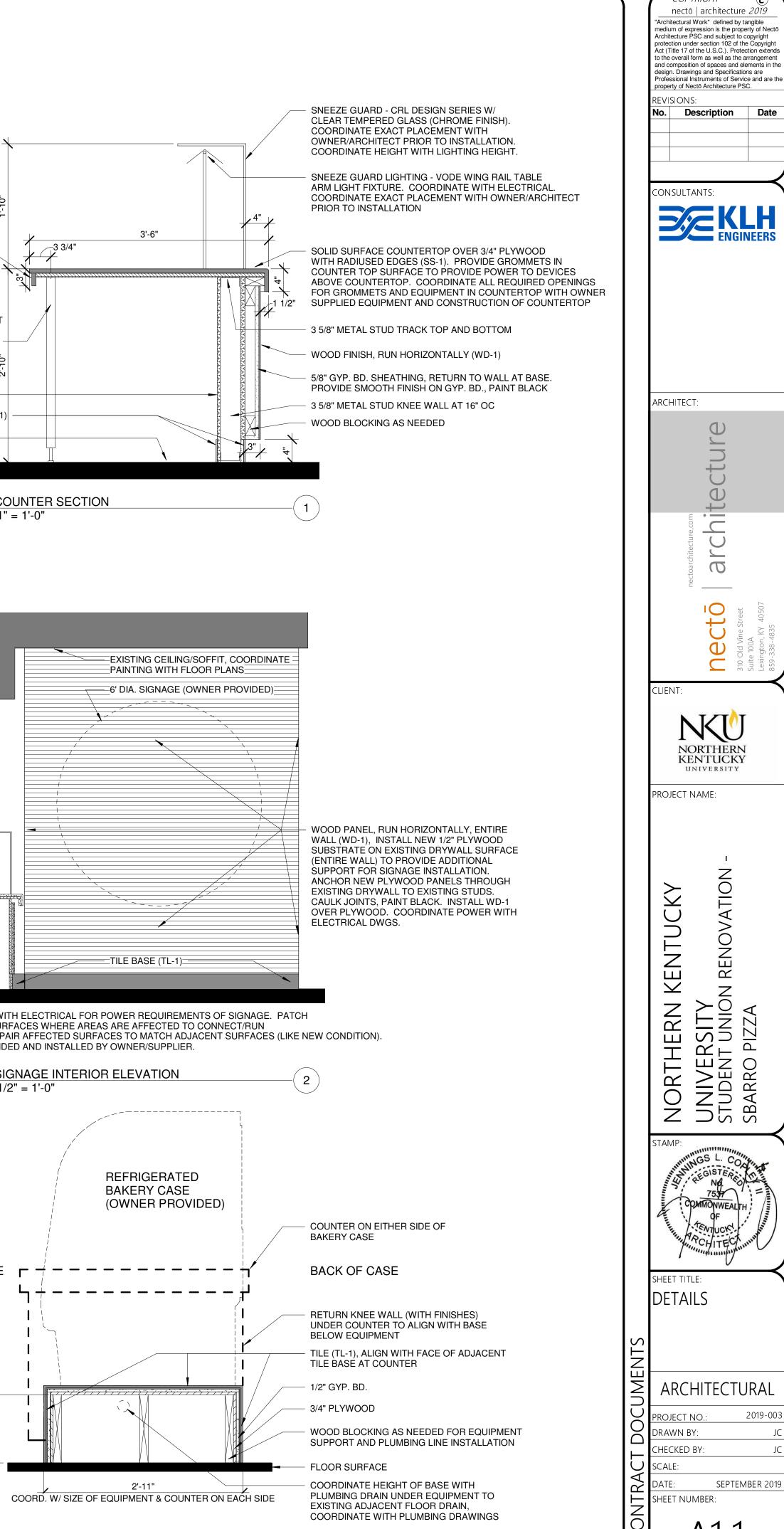
CRIPTION	
JAMIN MOORE - RUBY RED (2001-10)	
RWIN WILLIAMS - GUANTLENT GRAY (SW7019)	
JAMIN MOORE - SNOWFALL WHITE (OC-118)	
TRIDGE HONEY OAK HAND SCRAPPED SOLID HARDWOOD : 5/8" x 4 3/4" SKU: 100084144 NING BOND PATTERN	FLOORS & DECOR - 3430 HIGHLAND AVE., CINCINNATI, OH 45213
IAN COUNTER TOP OR: DEEP BLACK (QUARTZ)	DAVID GREENING - CORIAN DESIGN (614) 975-6700; E-MAIL: david.p.greening@dupont.com
E D'AZUR CK BRUSHED LIMESTON TILE : 8x32 (CUT TO FIT)	FLOORS & DECOR - 3430 HIGHLAND AVE., CINCINNATI, OH 45213
E:	



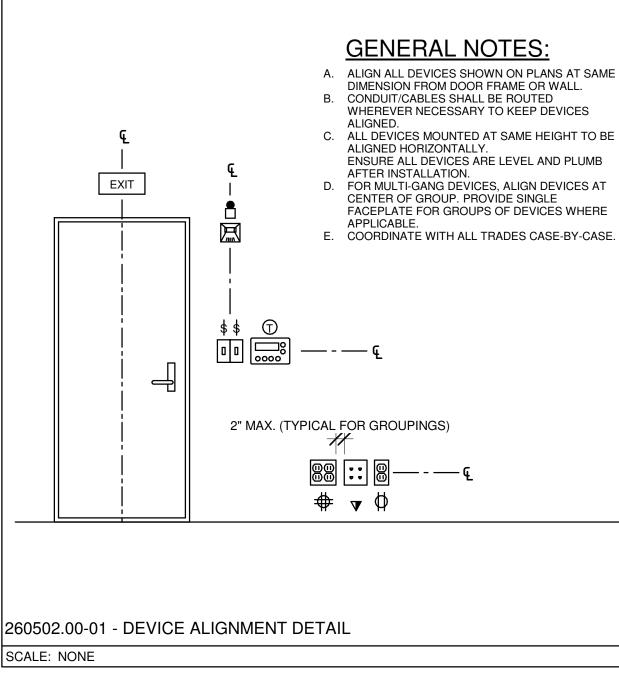








CASE DETAIL 1" = 1'-0"



# **GENERAL NOTES:**

A. ALIGN ALL DEVICES SHOWN ON PLANS AT SAME DIMENSION FROM DOOR FRAME OR WALL. B. CONDUIT/CABLES SHALL BE ROUTED WHEREVER NECESSARY TO KEEP DEVICES

SYMBOL

•**◆**♀¤₽⊙⊙

ENSURE ALL DEVICES ARE LEVEL AND PLUMB AFTER INSTALLATION. D. FOR MULTI-GANG DEVICES, ALIGN DEVICES AT CENTER OF GROUP. PROVIDE SINGLE FACEPLATE FOR GROUPS OF DEVICES WHERE E. COORDINATE WITH ALL TRADES CASE-BY-CASE.

	ELECTRIC LEGEND
	DESCRIPTION
	LIGHTING AND LIGHTING CONTROLS
$\bigcirc$	LUMINAIRE (REFER TO THE LUMINAIRE SCHEDULE) NOTE THAT OTHER SHAPES MAY ALSO BE USED TO REPRESENT LUMINAIRES
	A = LUMINAIRE TYPE, NL = NIGHT-LIGHT (UNSWITCHED), a = SWITCHING DESIGN EL = EGRESS LUMINAIRE (ILLUMINATES PATH OF EGRESS, ON ALL TIMES SPACE
	LIGHTING SWITCH (KEYS: 2 = 2-POLE, 3 = 3-WAY, 4 = 4-WAY, D=DIMMER, K=KEYE

<b>0</b> 47760	<u> </u>	NOTE THAT OTHER SHAPES MAY ALSO	BE USED TO REF	
	_	A = LUMINAIRE TYPE, NL = NIGHT-LIGHT EL = EGRESS LUMINAIRE (ILLUMINATES	T (UNSWITCHED), S PATH OF EGRES	a = SWITCHING DESIGNATION, S, ON ALL TIMES SPACE IS OCCUPIED)
\$				'AY, D=DIMMER, K=KEYED, LV = LOW VOLTAGE SWITCH W/PILOT LIGHT, T = TIMER SWITCH)
	RE		SCELLAN	EOUS OUTLETS
ΦΦ	 ✦	SINGLE ("SIMPLEX"), DUPLEX, AND DOU		
	<u> </u>	GFI / GFCI RECEPTACLES		
	<b>•</b>			
		CEILING MOUNTED RECEPTACLES		
$\odot^{TY}$	ΈE	FLOOR OUTLET - POWER AND / OR TEC	HNOLOGY	
$\overline{\mathbf{v}}$		SPECIAL PURPOSE RECEPTACLE		
ф <sup>н</sup> <sup>т</sup> ф <sup>42"</sup> ф <sup>sw</sup>	⇔ <sup>c</sup> ⇔ <sup>w</sup> Φ <sup>∟</sup>	SW = SPLIT WIRED T = TAMPER-RESISTANT W = WEATHER PROOF WHILE IN USE CO	CKSPLASH LLY R INDICATOR LIGI OVER AND WEATI	HT TO INDICATE THERE IS POWER TO RECEPTACLE
	4	FIRE ALAR		ES
	d	FIRE ALARM SYSTEM SPEAKER / STROI (PROVIDE CANDELA (cd) RATING FOR S		ATED ON DRAWINGS)
		MISCELL		6
		INDICATES DIRECT CONNECTION TO EC	QUIPMENT	
	Z⊧ 	HEAVY DUTY DISCONNECT SWITCH (NO HEAVY DUTY DISCONNECT SWITCH (FL ELECTRICAL SWITCHBOARD OR SWITC (DIMENSIONS MAY VARY) ELECTRICAL PANELBOARD OR DISTRIB	JSED) (RIĠĤT) HGEAR	)
FRONT		(DIMENSIONS MAY VARY / FLUSH OR SU		D AS INDICATED)
		DRY TYPE TRANSFORMER		
	1	SINGLE LIN GROUNDING ELECTRODE PER NFPA 70	ARTICLE 250 MIN	IIMUM
	/ <b>p</b>	HEAVY DUTY DISCONNECT SWITCH (N SIZES MAY BE SHOWN ONLY IN SCHED ELECTRICAL PANELBOARD OR DISTRIB	ULE	) (FUSED)(RIGHT)
		ELECTRICAL SWITCHBOARD OR SWITC	HGEAR	
		SURGE PROTECTIVE DEVICE		
				-\\/\\/
		WIRE / CABL BRANCH CIRCUIT HOME RUN WITH PAN		
LP	A-1,3			NOUT NONBER(3)
		CABLING / RACEWAY INSTALLED CONC	EALED IN WALLS	OR ABOVE CEILING
		CABLING / RACEWAY INSTALLED BELO	W FLOOR OR GRA	ADE
	,	CONDUIT UP OR DOWN		
	N			<b>`</b>
		ADDREN	/IATIONS	)
(R) 42"	DISTANCE	e fixture, equipment or device Above finished floor / grade /	IG	
AF	PAVEMEN AMP FRAM BREAKER	IE OF FUSED SWITCH OR CIRCUIT	LR LI LSI	LEGALLY REQUIRED STANDBY LONG - INSTANTANEOUS LONG - SHORT - INSTANTANEOUS
AFCI AIC	ARC-FAUL	T CIRCUIT INTERRUPTER ERRUPTING CURRENT	LSIG	LONG - SHORT - INSTANTANEOUS - GROUND FAULT
AT	AMP TRIP BREAKER	OF FUSED SWITCH OR CIRCUIT	MCB	MAIN CIRCUIT BREAKER
ATS BAS		IC TRANSFER SWITCH AUTOMATION SYSTEM	MFR MLO MTS	MANUFACTURER MAIN LUGS ONLY MANUAL TRANSFER SWITCH
C.T.C.	WORK UN	DER DIVISION 27 OR 28 AS	MW	MICROWAVE OVEN
C/B	APPLICAB CIRCUIT B	REAKER	NIC NTS	NOT IN CONTRACT (SHOWN FOR REFERENCE ONLY) NOT TO SCALE
CH DW	COUNTER	HEIGHT OR SPECIAL HEIGHT DEVICE HER	OFE	NOT TO SCALE OWNER-FURNISHED EQUIPMENT - INSTALLED
E E.C.		DER DIVISION 26	OS	AND WIRED BY E.C. OPTIONAL STANDBY
EMS EPO ER		ANAGEMENT SYSTEM ICY POWER OFF	P.C.	WORK UNDER DIVISION 22
ERM ESP	ENERGY F	REDUCTION MAINTENANCE SWITCH	S.C. SCCR	WORK UNDER DIVISION 21 SHORT CIRCUIT CURRENT RATING
ETR EWC	EXISTING ELECTRIC	TO REMAIN WATER COOLER	SPD ST	SURGE PROTECTIVE DEVICE SHUNT TRIP
EX. FBO FIBO	WIRED BY FURNISHE	D AND INSTALLED BY OTHERS -	TAAC TR TTB TYP	TO ABOVE ACCESSIBLE CEILING TAMPER RESISTANT TELEPHONE TERMINAL BOARD TYPICAL
FP FWE	DISPLAY. FURNISHE	E.C. CLE TO BE USED FOR A FLAT PANEL D WITH EQUIPMENT BY OTHERS - D AND WIRED BY E.C.	UCR UL U.L.S.E. UNO	UNDER COUNTER REFRIGERATOR UNDERWRITER'S LABORATORY LISTED FOR SERVICE ENTRANCE UNLESS NOTED OR INDICATED OTHERWISE ON DRAWINGS OR IN SPECIFICATIONS
GD GFEP GFI / GFCI GND	GROUND F	DISPOSAL FAULT EQUIPMENT PROTECTION FAULT CIRCUIT INTERRUPTER DEVICE	VFD / VSD VIF VM VP	VARIABLE FREQUENCY / SPEED DRIVE VERIFY IN FIELD VENDING MACHINE VANDAL PROOF
H.C. H.O.A.		DER DIVISION 23 FF - AUTO" SWITCH	VP W / WP WG WR	WEATHERPROOF WIRE GUARD WEATHER RESISTANT
			י מיוים אם	
		PLAN-VIEW AND G	RAPHICI	
WORK SHOWN (UNLESS OTHE		ITINUOUS INDICATES NEW WORK ICATED)		

WORK SHOWN FADED INDICATES EXISTING WORK TO REMAIN OR NEW WORK BY OTHERS AS APPLICABLE (UNLESS OTHERWISE INDICATED)

WORK SHOWN BOLD-DASHED INDICATES SELECTIVE DEMOLITION WORK (UNLESS OTHERWISE INDICATED)

# ELECTRIC DESIGN CRITERIA

# APPLICABLE BUILDING CODES

2018 KENTUCKY BUILDING CODE (BASED ON THE INTERNATIONAL BUILDING CODE) 2017 NFPA 70 - NATIONAL ELECTRICAL CODE 2010 NFPA 72 - NATIONAL FIRE ALARM AND SIGNALING CODE 2012 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)

GENERAL ELECTRICAL INSTALLATION NOTES
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- <u>CODE COMPLIANCE</u>: PROVIDE ALL ELECTRICAL WORK COMPLIANT WITH ALL PREVAILING CODES. <u>LISTINGS</u>: PROVIDE MATERIALS, COMPONENTS AND ASSEMBLED COMPONENTS WITH LISTINGS AND LABELS FROM A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL), MANUFACTURED, LISTED AND LABELED FOR THEIR INTENDED USE. RATED BUILDING SURFACES: SEPARATE DEVICE BOXES BY A MINIMUM OF 6 INCHES WHERE INSTALLED BACK-TO-BACK WITHIN DEMISING WALLS TO MAINTAIN REQUIRED FIRE AND SOUND RATING (TYPICAL OF ALL DEVICE BOXES INSTALLED ON DEMISING WALLS). PROVIDE LISTED FIRE-RATED WRAPS AROUND ALL RECESSED OUTLET, DEVICE AND EQUIPMENT BOXES IN FIRE/SMOKE RATED WALLS, CEILINGS AND FLOORS TO MEET OR EXCEED THE RESPECTIVE FIRE/SMOKE RATING OF THE SURFACE.
- RATED PENETRATIONS: SEAL ALL PENETRATIONS THROUGH FIRE-RATED AND/OR SMOKE-RATED MEMBRANES (FLOORS, WALLS, CEILINGS, ETC.) USING SEALANT PRODUCTS THAT MEET OR EXCEED THE RATING OF THE RESPECTIVE MEMBRANE.
- GANGED DEVICES: INSTALL WIRING DEVICES GANGED WHEREVER POSSIBLE FOR INSTANCES WHERE THEY ARE SHOWN TOGETHER. THIS INCLUDES LOCATIONS ABOVE COUNTERS AND WORK SURFACES WHERE APPLICABLE.
- OUTLET BOXES NEAR CORNERS: INSTALL WALL-MOUNTED SWITCHES, CONTROLS, RECEPTACLES, OUTLETS, ETC. AT LEAST 6 INCHES FROM WALL CORNERS. CONCEALMENTS: CONCEAL ALL CONDUIT DROPS AND RISES WITHIN WALLS, AND PROVIDE FLUSH-G.
- MOUNTED WALL OUTLET BOXES UNLESS OTHERWISE INDICATED. DOCUMENTS OF OTHER TRADES: REVIEW DOCUMENTS OF OTHER TRADES, INCLUDING ARCHITECTURAL, PRIOR TO SUBMITTING A BID. PROVIDE ELECTRICAL WORK FOR EQUIPMENT,
- DEVICES, ETC. OF OTHER TRADES AS REQUIRED TO RENDER THEM FULLY OPERATIONAL. REFER TO ARCHITECTURAL ELEVATIONS FOR INTENDED LOCATIONS AND MOUNTING HEIGHTS FOR EQUIPMENT AND OUTLETS, ETC. PRIOR TO COMMENCING WITH ANY RELATED ROUGH-IN WORK. SCHEMATIC REPRESENTATIONS: CIRCUITING WORK SHOWN ON DRAWINGS IS FOR SCHEMATIC GENERAL GRAPHIC REPRESENTATION ONLY. DETERMINE SPECIFICS IN FIELD (POINT-TO-POINT ROUTING, HOME-RUN LOCATIONS, METHODS OF CONCEALMENT, ETC.). LOCATIONS AND ROUTING INDICATED ON PLANS ARE SCHEMATIC AND DIAGRAMMATIC IN NATURE. LAYOUT AND INSTALL ALL
- ELECTRICAL WORK IN STRICT COMPLIANCE WITH CHAPTER 1, PART II, ARTICLE 110.26 OF THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70). HOME-RUN DESIGNATIONS: HOME-RUN DESIGNATIONS INDICATED ON PLANS ARE SCHEMATIC DESIGNATIONS ONLY. DETERMINE EXACT CIRCUIT ASSIGNMENTS IN FIELD BASED ON FIELD CONDITIONS. PROVIDE COLOR-CODED CONDUCTOR INSULATION ACCORDINGLY, CODED PROPERLY
- DEPENDING ON SYSTEM, PHASE, NEUTRAL, ETC. PROVIDE EQUIPMENT AND PANELBOARD SCHEDULES THAT ACCURATELY INDICATE INSTALLED CONDITIONS. LOCAL DISCONNECTS AND CONTROLS AT EQUIPMENT: LOCAL DISCONNECTS AND LOCAL CONTROLS SHOWN AT OR ON EQUIPMENT IN PLAN-VIEW ARE SHOWN FOR SCHEMATIC ASSOCIATIONS ONLY. AVOID INSTALLING DISCONNECTS OR CONTROLS ON EQUIPMENT ENCLOSURES. INSTALL ON ADJACENT WALLS OR BUILDING STRUCTURE. OR PROVIDE FIELD-FABRICATED UNISTRUT OR EQUIVALENT ASSEMBLIES AS NEEDED. PROVIDE FIELD COORDINATION WITH SITE CONDITIONS AND OTHER TRADES,
- AND PROVIDE ALL RELATED WORK IN STRICT COMPLIANCE WITH NFPA 70, INCLUDING ARTICLE 110.26. EQUIPMENT & LOAD COORDINATION: REFER TO AND COORDINATE WITH POWER FLOOR PLANS, EQUIPMENT SCHEDULES (INCLUDING EQUIPMENT COORDINATION SCHEDULES), DRAWINGS OF ALL TRADES, ALL DIVISIONS AND SECTIONS OF SPECIFICATIONS AND INSTALLERS OF ALL TRADES. BASED ON ACTUAL EQUIPMENT BEING PROVIDED, DETERMINE AND PROVIDE APPROPRIATE BREAKERS, FUSES, CONDUCTORS, CONTROLS, POWER DISTRIBUTION EQUIPMENT, ETC. PERFORM THESE SERVICES
- PRIOR TO FURNISHING POWER DISTRIBUTION EQUIPMENT, ETC. PERFORM THESE SERVICES PRIOR TO FURNISHING POWER DISTRIBUTION EQUIPMENT SUBMITTALS. <u>EXTERIOR ELECTRICAL WORK AND WORK SUBJECT TO MOISTURE</u>: EXTERIOR ELECTRICAL WORK SHALL BE WEATHERPROOF AND WATER-TIGHT, AND SHALL BE RUST-RESISTANT. PROVIDE XHHW-2 CONDUCTORS FOR ALL APPLICATIONS THAT ARE BELOW GRADE OR SUBJECT TO MOISTURE. PROVIDE MINIMUM NEMA 3R ENCLOSURES FOR ALL OUTDOOR EQUIPMENT AND ALL INDOOR EQUIPMENT THAT IS SUBJECT TO MOISTURE. PROVIDE NEMA 1 ENCLOSURES FOR ALL OTHER INDOOR EQUIPMENT. EQUIPMENT GROUNDING CONDUCTORS: PROVIDE EQUIPMENT GROUNDING CONDUCTORS IN STRICT COMPLIANCE WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70), INCLUDING ARTICLE 250 AND TABLE 250.122. THESE CONDUCTORS MAY OR MAY NOT BE INDICATED ON
- SINGLE-LINE DIAGRAMS OR ELSEWHERE, BUT SHALL BE PROVIDED UNDER BASE BID NEVERTHELESS. <u>OVERHEAD WORK</u>: HOLD ALL NEW OVERHEAD ELECTRICAL WORK AS TIGHTLY AS POSSIBLE TO THE BOTTOM OF THE OVERHEAD STRUCTURE. DO NOT INSTALL ANY ELECTRICAL WORK WITHIN SIX INCHES OF ROOF DECKING.
- <u>COORDINATION DRAWINGS</u>: LAYOUT ALL PROPOSED RACEWAY ROUTING, ELEVATIONS, INSTALLATION METHODS, ETC. ON COORDINATION DRAWINGS AND COORDINATE ALL PROPOSED RACEWAY ROUTING WITH ALL AFFECTED TRADES PRIOR TO COMMENCING WITH WORK. IN ADDITION, REVIEW THE INFORMATION WITH ARCHITECT, ENGINEER AND OWNER FOR ALL AREAS WHERE THE RACEWAYS WILL BE VISIBLE AFTER COMPLETION OF CONSTRUCTION. JUNCTION AND PULL BOXES: LOCATE JUNCTION AND PULL BOXES SO THAT THEY REMAIN ACCESSIBLE AFTER ALL CONSTRUCTION WORK IS COMPLETE. COORDINATE ALL WORK WITH ALL OTHER TRADES
- PRIOR TO COMMENCEMENT OF THE WORK. LOCATE BOXES IN A MANNER THAT AVOIDS HAVING TO USE ACCESS PANELS. IF ACCESS PANELS ARE INEVITABLE, PROVIDE THEM RATED TO MEET OR EXCEED THE FIRE AND/OR SMOKE RATINGS OF THE RESPECTIVE CEILING OR WALL, AND OBTAIN APPROVAL OF DESIGN PROFESSIONALS FOR EACH LOCATION .. <u>CONDUCTOR TERMINATIONS</u>: IN CASES WHERE CONDUCTOR SIZES ARE TOO LARGE TO FIT INTO LUGS/TERMINALS, PROVIDE APPROPRIATE FACTORY LUG KITS FOR AFFECTED EQUIPMENT IF AVAILABLE. ELSEWHERE, PROVIDE INSULATED BUTT-SPLICES OR EQUIVALENT METHOD, WITH TAILS
- SIZED TO FIT LUGS/TERMINALS. PROVIDE SPLICES IN SEPARATE BOXES IF REQUIRED BASED ON FIELD CONDITIONS, BOX SIZE LIMITATIONS, ETC. CONCEAL BOXES IN ACCESSIBLE OVERHEAD JOIST SPACES IN FINISHED REGULARLY OCCUPIED AREAS.

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## 26 05 01.00 - COMMON WORK RESULTS FOR ELECTRIC

The General Provisions of the Contract including the General and Supplemental Conditions and General Requirements apply to the work in this section. Before submitting a bid, examine documents of all other trades, visit the site and get acquainted with all conditions that may in any way affect the execution of this contract. Take measurements and be responsible for exact size and locations of all openings required for the installation of work. Noted dimensions convey desired locations for devices. Coordinate with owner representative on site prior to deviating from noted dimensions for any reason. Where detailed method of installation is not indicated or where variations exist between described work and approved practice, direction of the Owners representative on job site shall be followed.

Whenever the words "contractor", "this contractor", etc. appear on drawings or in these specifications for the Electrical Work, it shall refer to the Electrical Sub-Contractor. Whenever the word "Provide" appears in these documents, it shall be interpreted to mean "Furnish and Install". Whenever the word "Relocate" appears in these documents, it shall be interpreted to disconnect electrical feed, make safe including lock out, store and protect device, reinstall, rework and extend conduit and wire to new location, re-energize and test.

The exact mounting height of devices shall be determined in the field with relation to architectural details and equipment being served. It shall be the responsibility of this contractor to coordinate outlet location with equipment. The Owners representative shall be permitted to relocate any outlet prior to installation within a 15 foot limit at no additional charge in contract price. All fasteners, hangers and methods of hanging exposed work in finished areas shall be submitted to the Owners representative for approval before installation.

The contract includes all items of material and labor required for the complete installation and full operation of the electrical work as shown on the drawings and hereinafter specified. All materials and methods shall be in accordance with applicable codes, regulations and/or ordinances and meet the approval of local inspection authority having jurisdiction. The latest edition of NFPA 70 (NEC/National Electrical Code) shall be the minimum requirement for all work. Examine the drawings and specifications for compliance with the above codes, regulations and ordinances and base bid and work accordingly. Obtain and pay for all permits and inspections related to this work. A certificate of approval for work from inspection authority shall be given to the Owner before final acceptance will be given by Owners representative

All work, materials, and equipment shall have a one-year warranty after acceptance of the work by the Owner. Any defective items shall be removed and replaced at the electrical sub-contractor's expense and to the satisfaction of the engineer and owner's representative.

Perform work under this contract in close harmony with other contractors so completed work shall present a neat and workmanlike installation. Exposed finished materials and equipment shall be carefully cleaned and wiped to remove grease, smudges, fingerprints, dust and other spots and left smooth and clean. During the progress of the work, the electrical sub-contractor shall carefully clean the job site and shall leave the premises and all portions of the building in which he is working free of debris and in a clean and safe condition.

This contractor shall be responsible for the training of owner's representatives of each system to the satisfaction of the Owners representative.

The Electrical Contractor shall consult the Plumbing, HVAC and Structural plans (where applicable) in all instances before installing his work so that his work will not interfere with those branches. In the event of a conflict, this contractor shall report to the Owners representative at once and do no further work to be installed until a satisfactory arrangement is decided upon. Any work done, or equipment placed in position by this contractor, creating a conflict in violation hereof, shall be readjusted to the satisfaction of the Owner's representative at the expense of the contractor. The decision of the Owners representative shall be final in regard to changes due to conflicting conditions. Contractor shall complete his work or any part thereof at such time as may be designated by the Owner, so that it can be used for temporary or permanent use and such use of the system shall not be construed as an acceptance of same by Owner.

Obtain the latest Owner's Design and Construction Standards document(s) from the Owner. Comply with all Owner-specific requirements in addition to requirements set forth in these specifications and accompanying drawings. Should there be a conflict, the Owner's standards shall take precedence, unless prevailing codes and regulations mandate otherwise.

Two sets of electrical drawings shall be provided as record drawings which shall be separate, clean, copies reserved for the purpose of showing a complete picture of the work as actually installed. These drawings shall also serve as work progress report sheets and the electrical contractor shall make any notations, neat and legible thereon daily as work proceeds. The drawings shall be available for inspection at all times and shall be kept at the job at a location designated by the Owners representative. At the completion of the work, these record drawings shall be signed by the electrical contractor, dated and returned to the Owners representative. Final payment of contract will not be made until receipt and review of said drawings.

Provide two neatly bound (with tabbed sections) copies of maintenance books, instruction books and parts list pertaining to all equipment furnished. Submit to the Owners representative for approval. Final payment will not be made until drawings for record, maintenance and instruction manuals are delivered to the Owners representative.

#### 26 05 02.00 - COMMON ELECTRICAL MATERIALS AND METHODS

All materials and equipment shall be new. All materials, apparatus and equipment shall bear the seal of Underwriters Laboratories Inc. (UL), or a similar credible testing agency, label where regularly supplied. Certain manufacturers of material and equipment are specified and plans are detailed according to this material. This contractor shall base his bid on furnishing and installing this make of material and equipment.

Where more than one make of material or equipment is specified, the contractor shall state in his bid which make he proposes to furnish. Shop drawings shall be submitted on material and equipment to be furnished by the contractor for Engineers approval. This approval to be obtained prior to shipment of equipment.

Hold routing of new raceways in new and existing buildings as tightly as possible to the structure above. Obtain approval of owner's representative prior to installation. Do not install any electrical work within 6 inches of roof decking.

Neatly dress all work. Install all work parallel and perpendicular to surfaces or exposed structural members, and follow surface contours, where possible. Keep conductor splices to minimum. Install splice and tap connectors which possess equivalent or better mechanical strength and insulation rating than conductors being spliced. Use splice and tap connectors which are compatible with conductor material. All wires shall be run continuous from outlet to outlet/luminaire to luminaire. Insulation value of joints shall be 100% in excess of wire. Provide adequate length of conductors within electrical enclosures and train the conductors to terminal points with no excess. Bundle multiple conductors, with conductors no larger than 10 AWG cabled in individual circuits. Make terminations so there is no bare conductor at the terminal.

Maintain a uniform elevation for all cable runs wherever possible. All cables shall be supported/anchored at maximum 4 foot intervals and within 12" of box or outlet and shall not sag. Install cables in a manner that prevents overheating. Cables shall be fastened directly to the structure using factory clamps/clips specifically designed for the respective cable (Caddy or equal).

Keep conductor splices to minimum. Pull conductors simultaneously where more than one is being installed in same raceway. Use UL listed pulling compound or lubricant, where necessary. Increase wire sizes to offset voltage drop as/if required.

Branch subfeeder circuits shall be installed as shown on the floor plans. Where outlets are indicated by letters on plans, they shall be controlled by corresponding switches.

Outlets shall be located approximately as shown on the plans and shall be wired to provide control of outlets indicated. All wires of any one circuit shall be run in the same conduit.

Mechanical wire splicers shall be Scotchlock insulated type, TandB Stakon or approved equal. The conductors terminating at each wired outlet shall be left not less than 8" long at their outlet fittings to facilitate installment of devices or luminaires. Friction and rubber tape conform to Federal Specifications HH-T-11 and HH-T-111. Plastic electrical tape shall be Scotch #33+ or approved equal.

Do not share neutrals when amongst multiple branch circuits or with multi-wire branch circuits.

Provide grounding electrode conductors for service entrances and derived systems.

Provide all feeders and branch circuits with insulated (green covering) equipment grounding.

Only install conduit exposed on rooftops when it is impossible to do otherwise, or only if specifically indicated for such installation case-by-case elsewhere in documents. Installation convenience, financial considerations, lack of coordination with other trades and similar rationale are not sufficient reasons for doing so. In cases where conduits must be installed on rooftops, de-rate conductors and modify conduit sizes as needed to accommodate this condition. Provide expansion fittings, which are UL listed and labeled for the respective applications, at all building expansion joints and at maximum distances of 100 feet. Paint all such conduits with at least two coats of UV-resistant weatherproof paint. Provide white paint on flat rooftops that have finishes white in color, and for otherwise-colored roof finishes that are not visible from the building interior or from the ground outdoors. Elsewhere select colors to match surrounding surfaces; submit colors to Architect for review in advance of procuring paint.

Maintain a uniform elevation for all cable runs wherever possible. All cables shall be supported/anchored at maximum 4-foot intervals and within 12" of box or outlet and shall not sag. Install cables in a manner that prevents overheating. Cables shall be fastened directly to the structure using factory clamps/clips specifically designed for the respective cable (Caddy or equal).

Provide all cutting and patching required for the admission of work. Any damage done by this contractor to the building during the progress of work shall be made good at contractor's own expense. All patching shall be done by a skilled craftsman in that respective trade. It shall be the responsibility of this contractor to supervise the installation of, and pay for all additional members, wood or metal and labor which may be required to support any type of permanent or temporary electrical apparatus employed in the execution of this contractor's work.

Access Doors: Do not use access doors unless special prior written permission is granted from the Owner's Representative. Install pull boxes, junction boxes, etc. in areas which are accessible after completion of construction. Do not install pull boxes or junction boxes above gypsum board or similar inaccessible ceiling systems. Where there is no other recourse but to provide an access door/panel, and where approval of Owner's Representative has been obtained, provide required access doors/panels as required for a complete code-compliant electrical installation as defined below. Provide access doors in fire/smoke ratings that meet or exceed the surrounding surface that is being penetrated.

Seal all new floor, ceiling, wall, slab, etc. penetrations to match or exceed existing assembly fire ratings. Provide sleeve seals for all sleeves, provide sleeves for all penetrations. All penetrations of fire-rated or smoke-rated wall, floors ceilings, etc. shall be sealed immediately after raceways are installed. All new electrically related work shall be supported directly from building structural members. New electrically related work shall not be supported from ductwork, ductwork hanger, ceiling supports, existing conduit support, etc.

#### 26 05 03.00 - SUBMITTALS FOR ELECTRICAL SYSTEMS

Provide submittals in accordance with the Contract Documents. In addition to Division 01, the Contractor is advised to review and comply with the requirements articulated within each Division and within each section of that Division.

Some Divisions may include a division-specific "Submittal Requirements for ...." section. Where this section exists, it articulates additional requirements for submittals that apply to the work of that Division. The following requirements help to identify, track and keep the project organized for all parties involved. They are necessary to ensure a timely turnaround and an appropriate technical review. Submittals that do not conform to the administrative requirements are rejected and returned, without technical review.

Supply submittals for each section: Submittals shall be supplied on a section-by-section and type-by-type basis. For example, independent product data submittals shall be furnished for each section that requires product data submittals. Independent shop drawing submittals shall be furnished for each section that requires shop drawings. Separate PDF file packages shall be supplied for each section, for each submittal type. Each PDF shall represent a single standalone submittal.

Include a transmittal: Transmittals shall enumerate each submittal for each section of each type and iteration

Include cover sheet / title page: The cover sheet shall include the information identified in the contract documents. It shall be included as the first page of each electronic and/or hardcopy document-based submittal. An editable and printable PDF form created with editable fields and specification compliant appearance is available from KLH upon request. It is also downloadable from the KLH website at www.klhengrs.com.

Include an index: The index shall enumerate the contents of the submittal.

Include checklists: Where checklists are included with the specifications, complete and include them within the appropriate submittal. Supply complete submittals: Complete submittals of each type are required. Partial submittals will be rejected. Where a section requires a product data submittal, all product data for that section shall be supplied together, at one time, as one complete submittal. When resubmittal is required (e.g. Revise and Resubmit) the revised submittal shall be more complete, more accurate and more contract-compliant than its rejected predecessor. The submittal number (for each section and type) shall increment for each subsequent submittal (00 – Original submission, 01 – First Resubmission, 02 – Second Resubmission, etc...). Resubmittals shall include a copy of the reviewers comments supplied with the prior submittal rejection and shall be amended with a description of the specific action taken to comply with the reviewer's comments. The absence of this on resubmittal is cause for rejection.

Name electronic files to match the submittal ID and cover sheet: The electronic file name of submittals shall match the submittal ID included on the submittals cover page. For example: The original/first product data submittal for Section 260519 would be labeled as "260519.00-PD-00"; the first resubmittal of same shall be labeled "260519.00-PD-01". The original/first shop drawings submittal file for the same section would be labeled "260519.00-SD-00"; the first resubmittal of same shall be labeled "260519.00-SD-01".

If expressly permitted by the Owner and the terms of the Contract, editable electronic drawings may be made available for the creation of shop and as-built drawings upon request. Drawings will be made available at the discretion of the Engineer.

"Request Drawings" form can be accessed, filled out and submitted at http://www.klhengrs.com (right hand side of page - Contractor Resources). Direct access to this form can be found here: http://files.klhengrs.com/requestdrawings.html

#### 26 05 19.00 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

Submittal Requirements Product Data: For each type of conductor and cable.

Furnish and install all necessary cable of the size and type indicated on the drawings or specified hereinafter. All wire shall be copper. All wiring shall be new. No wire smaller than #12 AWG shall be installed unless specifically designated. Use of #14 color coded wire will be allowed for control circuits only. Provide stranded conductors for all sizes unless indicated otherwise.

Provide THHN/THWN-2 insulation for all conductors as appropriate for the locations where installed. Provide color coded insulation/jacket for phase identification. All wires shall be rated at 600 volts. Provide type XHHW-2 insulation for all wiring below grade or subject to moisture.

Unless specifically indicated otherwise on drawings, provide grounded ("neutral") conductors that are at least parity-sized with corresponding phase/line conductors for all applications.

All conductors shall be rated for 90 deg. C. minimum. Provide with full parity sized green insulated equipment ground conductor. Provide compatible steel fittings with integral red plastic insulated throat bushings. Cables shall be 90 deg. C. rated with all components and fittings listed for grounding and compliant with the following: UL Std.4 and UL Std. 83; ANSI E119 and E814; NFPA 70.

Aluminum Conductors: Where applicable for electrical equipment connections for aluminum wiring, provide the following supplemental requirements and work regardless of who furnishes the equipment or what type of equipment is affected. Review equipment submittals, installation documents and nameplates to determine if there are any warranty or UL limitations regarding copper versus aluminum wiring connections at equipment. If there are any limitations, provide local non-fused disconnect at or near equipment (external to the equipment) and terminate aluminum conductors to the line side terminals of the disconnect switch. Provide copper conductors from load side terminals of the disconnect switch to the respective equipment factory disconnect or terminals as applicable. Provide UL-Listed AA-8000 series compact-stranded conductors compliant with specifications, prevailing codes and end-use equipment manufacturer requirements. Provide appropriately UL-Listed connectors as recommended by conductor manufacturer.

Cables: Route cables perpendicular and parallel to the building architectural lines, surfaces, and structural members, keeping offsets to a minimum and following surface contours where possible. Maintain a uniform elevation for cable runs wherever possible. Support and anchor cables at maximum 4 foot intervals and within 12" of box or outlet in a manner that prevents sagging. Install cables in a manner that prevents overheating. Fasten cables directly to the structure using factory clamps and clips (zip ties

and like products are not permitted) specifically designed for the respective cable (Caddy or equa Cables may be utilized only if code-approved for the intended use and in the limited applications below

Type MC (Metal-Clad) Cable: Form from continuous length of spirally wound, interlocked zinc-coa galvanized (inside and outside) strip steel or aluminum jacket, with stranded copper conductors w deg. C THHN insulation system. Provide for final connections to luminaires that are installed in ac tile ceiling systems (limited to 6' maximum in length and limited to "whips" from building electrical junction boxes down to luminaires). Do not install Type MC cable from fixture to fixture unless a sp properly listed and labeled UL approved system is specifically indicated.

26 05 26.00 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

All metallic conduit, surface raceways, wireways, supports, cabinet and equipment shall be groun

#### 26 05 29.00 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

It shall be the responsibility of the electrical contractor to supervise the installation of and pay for additional members, wood or metal and labor which may be required to support any type of perma temporary electrical apparatus employed in the execution of the electrical contractor's work. Prov supports, anchors, sleeves and seals furnished as part of factory-fabricated equipment as require Locations and routing that may be shown on plans are schematic and diagrammatic in nature.

Conduit shall be supported by approved straps, fasteners and hangers. Hangers shall be suspen rods. Perforated straps will not be acceptable. Fasteners shall be lead expansion shields in block concrete, toggle bolts in hollow walls, machine screws on metal surfaces and wood screws on wo construction. At building expansion joints and where deflection is expected, conduits shall be provi with expansion fittings with bonding jumpers. Conduits passing through structural members shall I provided with stub and coupling or sleeve in the member. Where moisture conditions are encounted hole shall be drilled at the lowest point in the conduit run. Also provide sleeves for all fire wall and partition penetrations (sealed accordingly).

All conduit shall be supported independently from all other building systems and shall be supported directly from structural components. Electrically related work shall not be supported from ductwork ductwork hangers, ceiling supports, existing conduit supports, etc.

Use of synthetic or plastic "tie-wraps", "zip ties", "wire ties" and similar products are not permitted permanent means of anchoring, securing, supporting or otherwise installing any cables, conducto conduits, raceways, devices, equipment or other electrical work.

Cut, fit, and place miscellaneous metal fabrications accurately in location, alignment, and elevatio support and anchor electrical materials and equipment.

All conduits, raceways and cables (where applicable) shall be routed parallel and perpendicular to building structural members. Any and all noncompliant work installed by the electrical contractor removed and reinstalled by the electrical contractor to the satisfaction of the Owner's representati the Engineer, at the expense of the electrical contractor. At building expansion joints and where deflection is expected, provide conduits with expansion fittings with bonding jumpers. Conduits pa through structural members shall be provided with stub and coupling or sleeve in the member. Wh moisture conditions are encountered, a hole shall be drilled at the lowest point in the conduit run. sleeves for all fire wall and smoke partition penetrations (sealed accordingly).

Stem lengths of all pendant fixtures shall be as directed by the owner's representative. All fastene hangers and method of hanging exposed work in finished areas shall be submitted to the owner's representative for review before installation. Fasteners shall be zinc-coated, type, grade, and class required for a neat finished installation.

Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings templates, diagrams, instructions, and directions furnished with items to be embedded. Install and bolts to elevations required for proper attachment to supported equipment. Provide female expan anchors, and install studs and nuts after equipment is positioned. Provide bushings for floor/wall-r equipment anchors to allow for resilient media between anchor bolts/studs and mounting hole in c

Touchup Painting: Clean field welds and abraded areas of shop paint. Paint exposed areas imme after erecting hangers and supports. Use same materials as used for shop painting.

Provide supports for multiple raceways capable of supporting combined weight of supported syste equipment, connected systems and associated components/contents. Provide supports adequate tension, shear, and pullout force to resist maximum loads calculated or imposed for this project, w minimum structural safety factor of five times the applied force.

Coordinate installation of roof curbs, equipment supports, and roof penetrations.

Steel Slotted Support Systems: Comply with MFMA-4, factory-fabricated components for field as: Construct with 9/16" dia. holes, nominal 2" o.c. on top surface, with standard factory finish, and with all necessary fittings which mate and match with U-channel. Provide metallic coatings that are hot galvanized after fabrication and applied according to MFMA-4. Provide channel dimensions that a selected for applicable load criteria. Comply with NECA 1 and NECA 101 unless requirements in t other specification sections are stricter.

Conduit and Cable Support Devices: Steel hangers, clamps, and associated fittings, designed for and sizes of raceway or cable to be supported.

Riser clamps for supporting rigid metal conduit: Galvanized steel; with 2 bolts and nuts, and 4" ea

Clevis hangers for supporting rigid metal conduit: Galvanized steel with 1/2" dia. hole for round st Galvanized steel clamps: 1/2" rod size.

Galvanized steel clamps: 1-1/4" x 3/16" stock; 3/8" cross bolt; flange width 2".

Two-hole conduit straps for supporting 3/4" rigid metal conduit: Galvanized steel; 3/4" strap width 1/8" between center of screw holes.

Offset conduit clamps for supporting rigid metal conduit: Galvanized steel.

Support for Conductors in Vertical Conduit: Factory-fabricated assembly consisting of threaded b insulating wedging plug or plugs for non-armored electrical conductors or cables in riser conduits. shall have number, size, and shape of conductor gripping pieces as required to suit individual cond or cables supported. Body shall be malleable iron.

Structural Steel for Fabricated Supports and Restraints: ASTM A 36/A 36M, steel plates, shapes, bars; black and galvanized.

Mechanical-Expansion Anchors: Insert-wedge-type, zinc-coated steel, for use in hardened cement concrete with tension, shear, and pullout capacities appropriate for supported loads and materials in which used. Where specified on drawings as a corrosive area, expansion anchors stainless steel. Provide anchors by Hilti Inc. or equal.

Concrete Inserts: Steel or malleable-iron, slotted support system units similar to MSS Type 18; cd with MFMA-4 or MSS SP-58.

Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached element.

Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.

Toggle Bolts: All-steel galvanized springhead type, 3/16" x 4".

Hanger Rods: Threaded steel, Galvanized steel rods; 1/2" dia min.

Clevis hangers: For supporting rigid metal conduit; galvanized steel; with 1/2" dia. hole for round s

Galvanized steel rod reducing couplings, 1/2" x 5/8".

Galvanized steel clamps; 1/2" rod size.

Galvanized steel clamps, 1-1/4" x 3/16" stock; 3/8" cross bolt; flange width 2".

Hexagon nuts for 1/2" rod size; galvanized steel.

Lead expansion anchors, 1/2".

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				COPYRIGHT nectō   architecture 2016 "Architectural Work" defined by tangible medium of expression is the property of Nectiv
al). defined	Minimum Hanger Rod Size for R	aceway: Minimum rod size shall be 1/4 inch in diameter.		Architecture PSC and subject to copyright protection under section 102 of the Copyright Act (Title 17 of the U.S.C.). Protection extend
ated or vith 90 ccessible	can be increased by at least 50 p raceways and cables to these su	estall trapeze-type supports fabricated with steel slotted, sized so capacity bercent in future without exceeding specified design load limits. Secure apports with two-bolt conduit clamps, single-bolt conduit clamps, or spring friction action for retention in support channel as applicable.		to the overall form as well as the arrangement and composition of spaces and elements in th design. Drawings and Specifications are Professional Instruments of Service and are th property of Nectō Architecture PSC. REVISIONS:
system pecial		work so that no raceway or cable is within six inches below roof deck(s). electrical work from roof trusses and joists/joist girders only at panel therwise indicated.		No. Description Date
nded.	adequate to carry present and fu	Where not indicated, select sizes of components so strength will be ture static loads within specified loading limits. Minimum static design tion shall be weight of supported components plus 200 lb.		CONSULTANTS:
all nanent or vide ed. uded from	lumber of any species. Number rules, or Number 3 boards compl with AWPB LP-2, and kiln dried t products where subject to moist anchors. Cut, fit, and place w alignment, and elevation to supp that will not penetrate members w	lag screws or through-bolts. Provide Standard Grade, light-framing-size 3 Common or Standard Grade boards complying with WCLIB or AWPA lying with SPIB rules. Lumber shall be preservative treated in accordance to a moisture content of not more than 19 percent. Provide marine grade ure conditions. Provide Simpson Strong Tie (or equal) expansion screw rood grounds, nailers, blocking, and anchorage accurately in location, port and anchor electrical materials and equipment. Select fastener sizes where opposite side will be exposed to view or will receive finish materials. In members. Install fasteners without splitting wood members. Attach to t applied loads.		<b>ENGINEERS</b>
cor ood vided	Attachments to Wood Structural	Members: Provide bolts installed through members.		
be tered, a	Mounting To New Concrete: Prov anchors for applications where in	vide channel-type concrete inserts and bolt to inserts, or provide expansion userts are not practical.		
l smoke ed rk,	actuated driven threaded studs weight concrete 4 inches thick of for slabs less than 4 inches thick	Expansion anchor fasteners. Instead of expansion anchors, powder/gas- provided with lock washers and nuts may be used in existing standard- r greater. Do not use for anchorage to lightweight-aggregate concrete or . Do not use for work anchored to newly installed concrete. Only use this cannot or should not be used, and only after receiving case-by-case gn professionals.		ARCHITECT:
las a ors,	Holes for Expansion Anchors in 0	Concrete: Drill at locations and to depths that avoid reinforcing bars.		tu
on to	on solid masonry units.	toggle-type bolts on hollow masonry units and expansion anchor fasteners		e.com hitectur
o shall be iive and		aded studs complying with AWS D1.1/D1.1M, with lock washers and nuts, 21, 23, 25, or 27) complying with MSS SP-69, clamped to flanges of beams bists.		architecture.com
assing	Mounting To Light Steel: Sheet r			architectur
here Provide		s and Nonstructural Building Surfaces: Mount cabinets, panelboards, closures, pull and junction boxes, transformers, and other devices on o substrate.		
ers, S ass as	Fabricated metal equipment su or field fabricated to fit dimens	upport assemblies: Welded or bolted, structural-steel shapes, shop sions of supported equipment.		Vine Street
155 45	Roof Decks: Do not suspend ove decks.	erhead hangers, or support any other overhead electrical work, from roof		<b>Dect</b> 310 Old Vine St Suite 100A Lexington, KY 859-338-4835
s, chor nsion	26 05 33.00 - RACEWAYS AND	BOXES FOR ELECTRICAL SYSTEMS		CLIENT:
mounted concrete. nediately	emergency system power. All wi	nd branch circuits shall be installed in separate raceways from ring for different power voltages shall be installed in raceway systems ring for the various electrical systems shall be installed in raceway er.		NORTHERN
ems, e in vith a	or compression type steel, with in	be galvanized steel EMT (3/4" minimum); all fittings shall be set-screw nsulated throats. Unless indicated otherwise on drawings or in other parts I wiring of all systems shall be installed in conduit.		KENTUCKY UNIVERSITY PROJECT NAME:
	with standard accessories as soc	before any wires are pulled. Conduit ends shall be capped and plugged on as conduit has been permanently installed. Conduit installed without h sweep bends and baling wire for pulling.		
ssembly. vith the ot-dip are this or	with long radius elbows. The end a shoulder. Conduit shall be cont	watertight couplings matching conduit and all corners shall be made ls of all conduits shall be cut square and reamed and all joints brought to tinuous between outlets to make a complete installation and to provide a ports and fastening shall be provided for conduit.		- NOI
or types	All raceways shall be entirely free conductors or cables.	e of plaster, mortar, water and other foreign matter before installing		UCF DVAT
ears. steel rod.	be considered approximate, and construction with relation to space boxes shall be made of code gal where shown and noted on draw	es shall not be used. The outlet box locations indicated on drawings shall therefore, it shall be incumbent upon this contractor to study the general ses and equipment surrounding each outlet. All outlet, switch and junction vanized steel complete with rings and screw cover plates and located ings. Where conduit is concealed, boxes shall not be less than 4" square equipped with proper covers to bring flush with finished wall surface.		N KENTUCKY Y ON RENOVATION
h; and 2-	materials form the finished wall s cover plate will cover all parts of junction boxes shall be construct	k, cinder, or concrete block, facing tile or other material where such surface, the opening for the box shall be cut neatly and of the size that the the opening. Condulets shall be used on exposed raceways. In general, ted of #12 gauge steel with removable front fastened on with counter oved means. For special application, junction boxes shall be noted, vings or in the field as required.		NORTHERN UNIVERSITY STUDENT UNIC SBARRO PIZZA
body and . Plugs nductors	In general, where not located at a shall be as follows, unless otherw measurement would result in a s	evice mounting heights and locations in field with Owners representative. counter areas, the height of boxes from finished floor to center of boxes wise noted on plans. In cases where using center of box for witch-height device having an operable component higher than 48 inches		ND STU SBA
, and	above finished floor, install boxes higher than 48 inches. Switches: 3'10" Receptacles: 1'6" (unless counte	s lower as needed so that uppermost part of operable component is no		STAMP: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
Portland d building s shall be	Other devices: As directed in field			STEPHEN N. FEDERLE 27329
complying	26 05 53.00 - IDENTIFICATION	FOR ELECTRICAL SYSTEMS self-adhesive vinyl tape not less than 3 mils thick by 1-1/2" wide. Where		The section of the se
	applicable, install on all conceale wall/floor/roof penetrations, etc. l	ed raceways at connection to all junction boxes, pull boxes, equipment, Unless otherwise indicated or required by governing regulations, provide		09/19/19
structural	manufacturers standard color co conductors of all systems. Match	rovide circuit identification bands for all cables and conductors. Provide ding for cable/conductor jacket and/or insulation for all cables and i identification with marking system used in existing systems (where ract documents, and similar previously established identification for on all conductors of all systems.		SHEET TITLE: ELECTRIC SPECIFICATIONS
steel rod.		de shall be used for system and voltage identification. This shall apply to ring. Interchange of colors shall not be permitted. Black, Red, Blue and White (neutral) Brown, Orange, Yellow and Gray (neutral) Green To match existing where applicable - verify in field.	UMENTS	
	Provide engraved plastic-laminat	te sign on major units of electrical equipment, including panelboards,		PROJECT NO.: 2019-00
	high lettering, on 1-1/2" high sign	nels, etc. Except as otherwise indicated, provide single line of text, 1/2" a (2" high where 2 lines are required), white lettering in black field. Unless povide text matching terminology and numbering of the contract		DRAWN BY: RT

should not or cannot penetrate substrate.

documents and shop drawings. Secure to substrate with fasteners, except use adhesive where fasteners

KLH PROJ. #21271.00

SEPTEMBER 2019

) SCALE

DATE: SHEET NUMBER:

All equipment and system identification nomenclature shown on drawings or listed herein is shown general design and installation reference only. The actual nameplate, etc. nomenclature for this pr shall be verified by electrical contractor in field prior to fabrication and where applicable, shall be a extension of existing nomenclature used on the site as determined in field by electrical contractor.

Equipment to Be Labeled: All enclosures for all electrical equipment furnished or installed under D 26 and 28; Remote-controlled switches, dimmer modules, and control devices, via engraved wall p Miscellaneous Control Stations; Access doors and panels for concealed electrical items; Other sin equipment designated by owner's representative, architect or engineer in field.

#### 26 24 16.00 – PANELBOARDS

Submittal Requirements

Product Data: For each provide bus configuration, current ratings, voltage ratings, SCCR overcurrent protective device(s), surge suppression device(s), accessory, and component indicated. Include dimensions and manufacturers' technical data on features, performanc electrical characteristics, ratings, accessories, and finishes.

Subject to compliance with requirements, provide panelboard products of one of the following (for type and rating of panelboard and enclosure): Square D Company, General Electric Company, Sie Eaton/Cutler-Hammer.

Panelboards shall bear UL labels for their specific applications. Panelboards shall be suitable for s voltage with number of branch circuits of capacity scheduled. Unless otherwise indicated, panelboard sections thereof, if any, shall have main-lugs-only of capacity equal to, or greater than, the rat setting of the over the current protective device next back on the line. All circuit breaker panelboard assemblies shall be of the distributed (sequence) bussing type throughout, so that any 2 adjacent pole breakers and/or spaces shall be replaceable by a 2-pole internal common trip breaker, and an adjacent single pole breakers and/or spaces shall be replaceable by a 3 pole internal common trip breaker, 15 amp through 70 amp inclusive, without disturbing any other breaker. All panelboards s UL listed and labeled for use as service entrance equipment where being used as such.

480Y/277V panelboards shall be equal to Square D NF with bolt-on branch breakers 208Y/120V panelboards shall be equal to Square D NQ with bolt-on branch breakers

All bussing shall be copper or aluminum.

All branch circuit breakers shall be full ambient compensated thermal magnetic molded case with make and quick-break action and positive handle trip indication, both on manual and on automatic operation. Breakers shall be of the over-the-center toggle operating type with the handle going to a position between "on" and "off" to indicate automatic tripping. All breakers shall be bolt-on type.

All circuit breakers shall be full size. "Tandem" or "split" breakers shall not be permitted. All multi-p breakers shall have internal common trip with all load side box lugs of one breaker in the same gu circuit breakers shall have sealed cases to prevent tampering. All 15 and 20 ampere branch circuit breakers shall be UL Listed as SWD (switching duty). All 15-70 ampere branch circuit breakers shall be UL Class A with maximum threshold of 5 mA. All bracircuit breakers serving all ballasted (fluorescent/HID) lighting loads shall be HID rated.

Provide all electrical distribution related equipment with appropriately braced bussing and properly breakers, fuses, etc. for the available fault currents. In existing buildings where fault current values not indicated on drawings, coordinate with existing "upstream" distribution equipment provide equi AIC ratings to meet or exceed same.

Fill out panelboard's circuit directory card upon completion of installation work. Directories shall be typewritten. All panelboard directories shall include the actual room names/numbers that are select interior signage/designation.

All recessed panelboards shall be provided with a minimum of three 1-1/4" empty conduits termina a single 12" X 12" X 6" deep junction box above accessible ceiling.

#### 26 27 26.00 - WIRING DEVICES

Submittal Requirements Product Data: For each type include electrical characteristics, configurations, ratings, mar colors, etc.

#### General:

Unless specifically indicated otherwise, or directed otherwise in field, provide black color for norma wiring devices.

Provide grounded ("neutral") conductors in all wall switch, dimmer and other lighting control outlet even if not immediately utilized.

Provide wall plates with engraved legends where indicated on drawings and/or where required per 53.00 - IDENTIFICATION FOR ELECTRICAL SYSTEMS Section. All device wall plates shall be st size; "midway", "oversized" ("jumbo") or "extra deep" wall plates shall not be acceptable. Construct metal screws for securing plates to devices; screw heads colored to match finish of plates. Except where/if indicated otherwise on drawings, wall plates in finished areas shall be commercial specific grade, satin finish stainless steel, with beveled edges, equal to Leviton Type 430 series. Wall plates unfinished areas shall be galvanized steel unless otherwise noted. Refer to architectural finish sch and owner representative for additional information.

#### Wall-Box Type Lighting Controls:

Provide wall switches, that are flush self-grounding with green ground screw and color-coded cover toggle type, back and side wired, specification grade. Provide wall switches rated 20A, 120/277 vor HP at 120V, A.C. quiet type.

LED Dimmers: Specification grade; modular; thin profile; compatible with dimming drivers; dimmer combination capable of consistent full-range dimming. Provide dimming drivers and dimmer switch are fully compatible with each other. Do not break off side heat-sink sections when ganging dimmer Provide dimmer and wall plate colors that match other wiring devices in the respective room. Multi wallbox dimmers may be used sporadically throughout the project on common circuits; provide compatible dimmers accordingly. Install dimmers within terms of their listing. Verify that dimmers u fan speed control are listed for that application. Provide dedicated neutrals for circuits serving load controlled by dimmers. Provide unshared neutral conductors on line and load side of dimmers accord to manufacturers' device listing conditions in the written instructions.

#### Receptacles:

Special purpose receptacles shall be of the size, type and manufacturer as indicated on the plans determined in field.

Duplex and Single Specification Grade Receptacles: 2-pole, 3-wire grounding, self-grounding, gre grounding screw, ground terminals and poles internally connected to mounting yoke, color coded k 20-amperes, 125-volts, with metal plaster ears, back and side wiring, NEMA configuration 5-20R. duplex receptacles equal to Leviton #5362 series. For receptacle circuits protected with 15A break provide NEMA 5-15R equivalents. Provide receptacles equal to Leviton #5361 series for simplex ( applications. Provide clock hanger receptacles equal to Leviton #5361-CH.

Self-Grounding Commercial Specification grade, Duplex Receptacles, Ground-Fault Circuit Interru Feed-thru type, capable of protecting connected downstream receptacles on single circuit, ground UL-rated 943, Class A, Group 1, specification grade, 20-amperes rating (device and feed-thru), 12 60 Hz; with solid-state ground-fault sensing and signaling (maximum threshold of 5mA at 0.025 se maximum); equip with 20-ampere plug configuration, NEMA 5-20R. Provide ground fault circuit int duplex receptacles equal to Leviton #8898 series. For receptacle circuits protected with 15A break provide NEMA 5-15R equivalents. Where GFCI protected receptacles are shown on drawings, pro separate GFCI receptacle for each one shown. Do not feed downstream receptacles from load-sid (GFCI-protected) terminals of upstream receptacles.

## 26 51 00.00 - LIGHTING

## Submittal Requirements

Product Data: For each type include detailed product information, light source, color tempor color rendering index, lumen outputs, life, driver manufacturer, model and type, ceiling con details, integral controls as applicable, drawings of custom fixtures or components, wiring diagrams, warranty, etc. Arrange luminaire submittals in booklet form with separate sheets each luminaire, assembled by luminaire "type" in alphabetical order.

		_	
			COPYRIGHT nectō   architecture 2016
n for	All recessed luminaires shall be equipped with necessary plaster frames and surface trim.		"Architectural Work" defined by tangible medium of expression is the property of Nectō Architecture PSC and subject to copyright protection under section 102 of the Copyright
roject an	All junction boxes and serviceable components for recessed luminaires shall be readily accessible for service or replacement from below the ceiling, without removing any ceiling components (other than tiles).		Act (Title 17 of the U.S.C.). Protection extends to the overall form as well as the arrangement and composition of spaces and elements in the design. Drawings and Specifications are Professional Instruments of Service and are the
Divisions plates; milar	All luminaires utilized for emergency and/or egress lighting shall be connected ahead of switching. All drivers of the same type shall be of the same manufacturer and catalog number. All LED modules of the same type shall be of the same manufacturer and catalog number.		Property of Necto Architecture PSC.       REVISIONS:       No.     Description     Date
	Light Emitting Diode (LED) Systems: Provide factory installed LED modules that are specifically designed for, and matched and mated to, the respective luminaire in which they are used. Provide LED modules that can easily be replaced in the field and are readily accessible for replacement. Provide color temperature as indicated in Luminaire Schedule. Provide factory installed driver(s) for the LED source utilized that are specifically coordinated to the LED source and luminaire in which they are used. Provide		
Ratings, ts ce, r each	driver(s) having specific operating characteristics defined in the Luminaire Schedule. Provide driver(s) that can easily be replaced in the field and are readily accessible for replacement. Provide specification sheet for the specific driver as part of the Luminaire Submittal. Provide Total Harmonic Distortion (THD) rating of less than 20 percent. Provide factory-installed integral filtering system to ensure THD does not exceed 20 percent regardless of quantities and/or mixes with other manufactured LED systems.		CONSULTANTS:
emens,	All surface and recessed ceiling luminaires installed on grid or tile ceilings shall be installed to agree with module of ceiling either displacing a tile, or unit on center of tile, or centered on grid lines.		
service oards ting or rd bus t single any 3	Provide luminaires and/or luminaire outlet boxes with hangers to properly support luminaire weight. All luminaires installed in or on suspended ceiling systems shall be anchored directly to the building structural system above. Such anchoring shall be independent of the ceiling support system. All luminaires shall be installed plumb and level. Support surface mounted luminaires greater than 2 feet in length at a point in addition to the outlet box luminaire stud.		
p shall be	Occupancy Adjustments: When requested within 12 months of date of Substantial Completion, provide on-site assistance in adjusting aimable luminaires to suit actual occupied conditions. Provide up to two visits to Project during other-than-normal occupancy hours for this purpose. Some of this work may be required after dark. Adjust aimable luminaires in the presence of Owner's Representative and Design Professionals.		ARCHITECT:
	END OF SPECIFICATION		Le
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hall be ranch			architecture.com archi
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		ONTF	SHEET NUMBER:
		0	E-702

KLH PROJ. #21271.00

9/23/2019 2

1244 VA

# Interior Lighting Compliance Certificate

# 2012 IECC

Section 1: Project Information

Project Type: Alterations

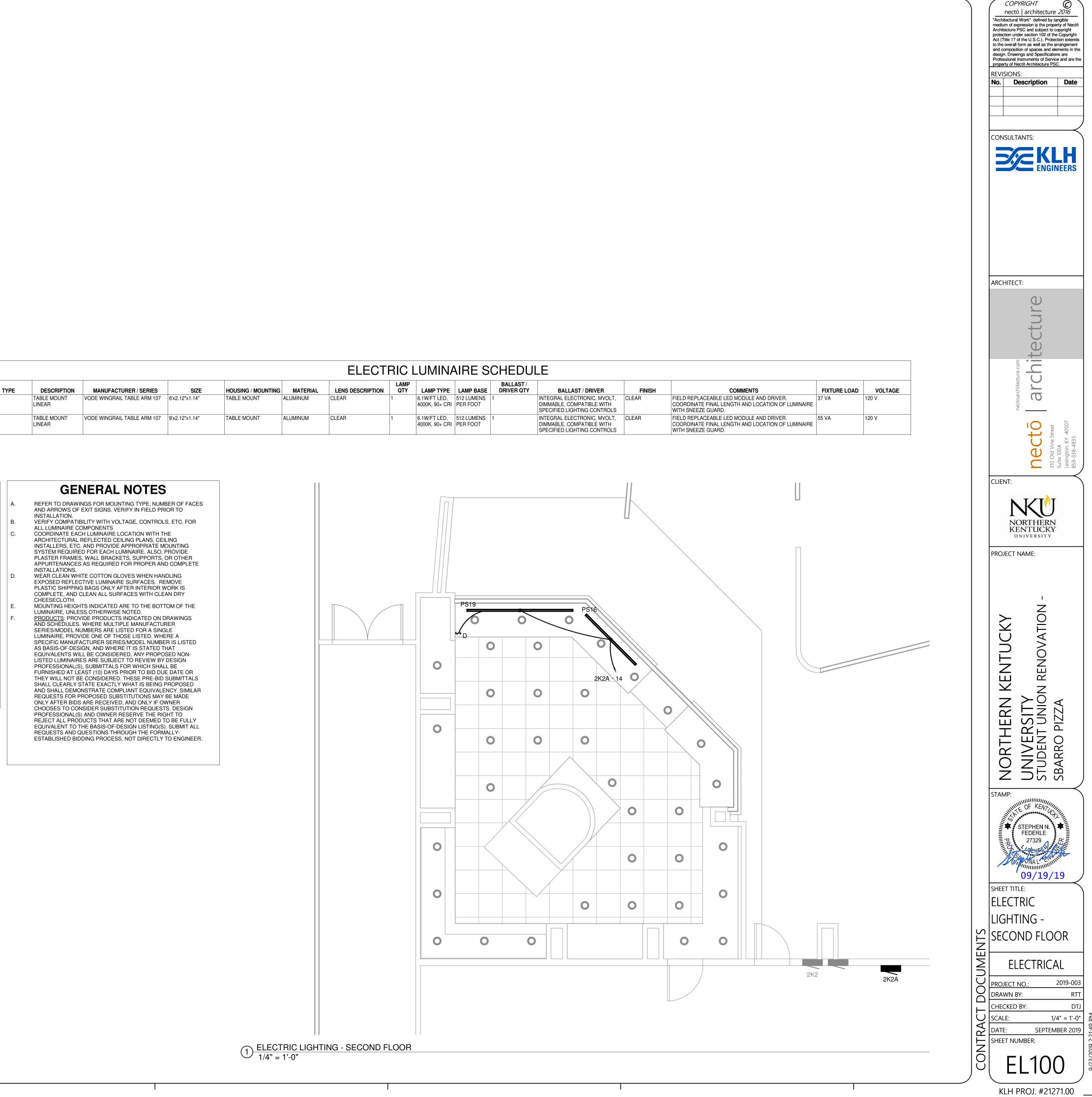
# Section 2: Interior Lighting and Power Calculation

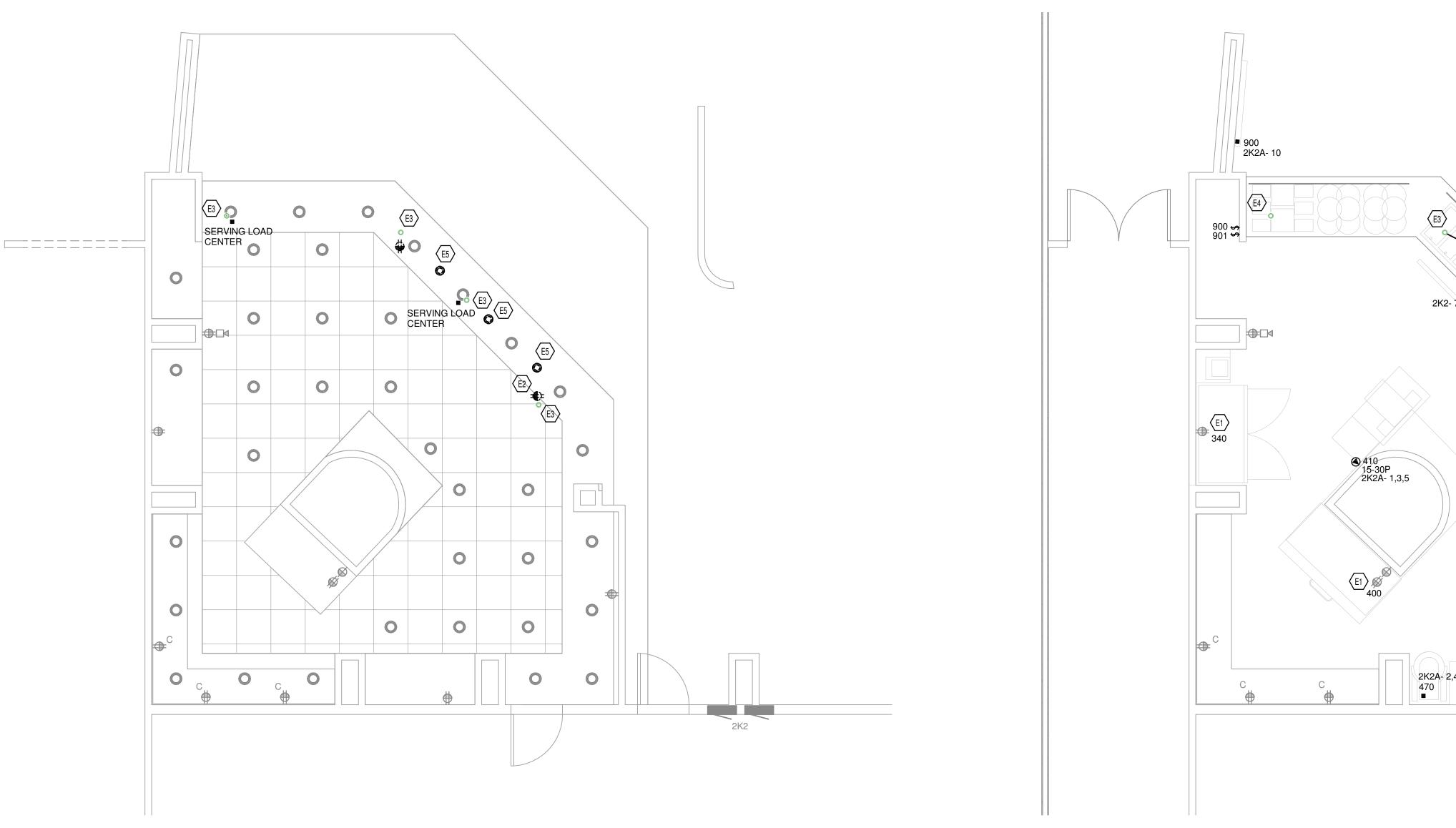
Floor Area (sq. ft.)Watts per sq. ft.Allowed WattsProposed WattsComplies9001.41260See BelowYes

# Section 3: Interior Lighting Fixture Schedule

	•	•				
TYPE	LAMP TYPE	BALLAST / DRIVER	LAMP QTY	COUNT	LOAD	TOTAL LOAD
DOWNLIGHT	EXISTING	EXISTING	1	36	32 VA	1152 VA
PS16	6.1W/FT LED, 4000K, 90+ CRI	INTEGRAL ELECTRONIC, MVOLT, DIMMABLE, COMPATIBLE WITH SPECIFIED LIGHTING CONTROLS	1	1	37 VA	37 VA
PS19	6.1W/FT LED, 4000K, 90+ CRI	INTEGRAL ELECTRONIC, MVOLT, DIMMABLE, COMPATIBLE WITH SPECIFIED LIGHTING CONTROLS	1	1	55 VA	55 VA

							LAMP			BALLAST /	
TYPE	DESCRIPTION	MANUFACTURER / SERIES	SIZE	HOUSING / MOUNTING	MATERIAL	LENS DESCRIPTION	QTY	LAMP TYPE	LAMP BASE	DRIVER QTY	BALLAST / DR
6	TABLE MOUNT LINEAR	VODE WINGRAIL TABLE ARM 107	6'x2.12"x1.14"	TABLE MOUNT	ALUMINUM	CLEAR	1	6.1W/FT LED, 4000K, 90+ CRI	512 LUMENS 1 PER FOOT		INTEGRAL ELECTRONI DIMMABLE, COMPATIB SPECIFIED LIGHTING (
9	TABLE MOUNT LINEAR	VODE WINGRAIL TABLE ARM 107	9'x2.12"x1.14"	TABLE MOUNT	ALUMINUM	CLEAR	1	6.1W/FT LED, 4000K, 90+ CRI	512 LUMENS 1 PER FOOT		INTEGRAL ELECTRONI DIMMABLE, COMPATIB SPECIFIED LIGHTING (

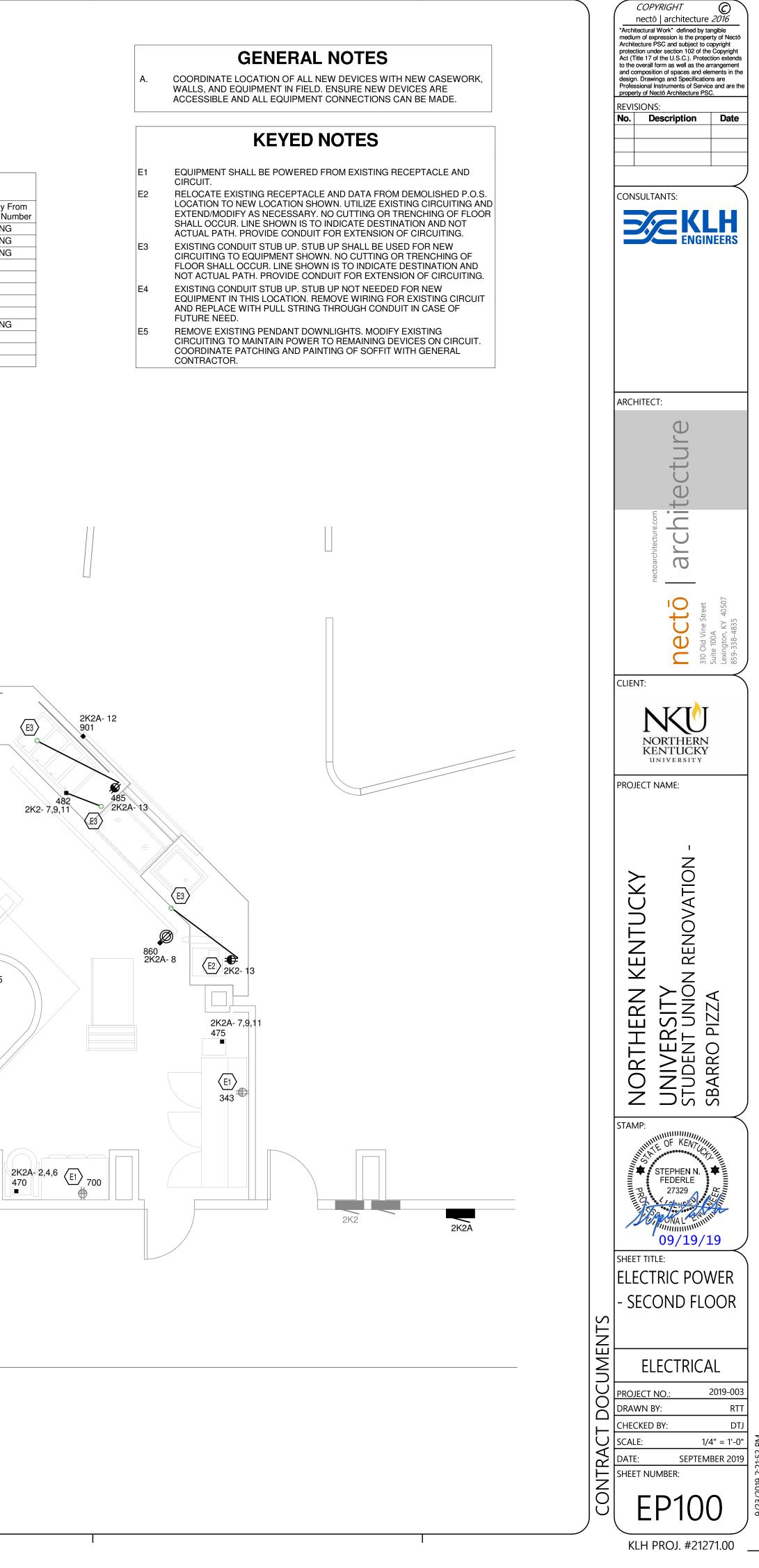




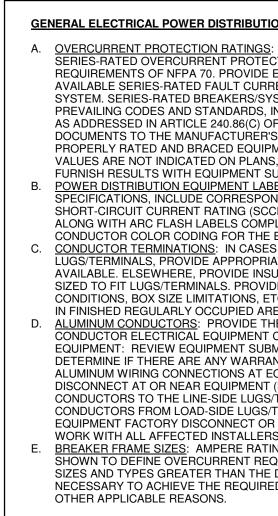


	KIT	CHEN EQUIPM	IENT SCHEDULE	1		
Equipment Mark	Description	Voltage	Phase	Load	Supply From	Supply From Circuit Number
340	2 DOOR REACH IN REFRIGERATION	120 V	1	1000 VA		EXISTING
343	REFRIGERATED PIZZA PREP	120 V	1	1000 VA		EXISTING
400	DECK PIZZA OVEN	120 V	1	500 VA		EXISTING
410	CONVEYOR OVEN	208 V	3	8276 VA	2K2A	1,3,5
470	DOUGH MIXER	208 V	3	5793 VA	2K2A	2,4,6
475	CHEESE HOG	208 V	3	5398 VA	2K2A	7,9,11
482	HOT WELL	208 V	3	4960 VA	2K2	7,9,11
485	REFRIGERATED DISPLAY CASE	120 V	1	1536 VA	2K2A	13
700	PIZZA SCALE	120 V	1	500 VA		EXISTING
860	MENU BOARDS	120 V	1	500 VA	2K2A	8
900	SIGNAGE	120 V	1	500 VA	2K2A	10
901	SIGNAGE	120 V	1	500 VA	2K2A	12

 $1 \frac{\text{ELECTRIC POWER - SECOND FLOOR}}{1/4" = 1'-0"}$ 

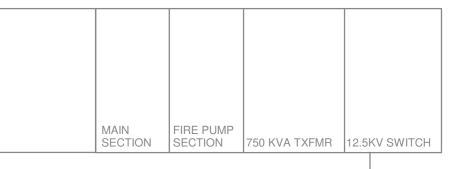


NOTES: ALL CONDUIT SIZES ACCOMMODATE CO "CU" = COPPER CON	NDUCTOR PULLI	ING EASE, FIELD		1 - POWER DIS	)N (H - 480Y/277∖ ∕EL	ΓΕΜ (BLANK - NOF	RMAL, E - EM	ERGENCY,	S - STANDE	Y, L - LIFE SAF		FEED * - INI 1 - GF U = P = X =	DER ID NOM IDICATES F ROUND TY = EQUIPME = PARITY-S = EXISTING	MENCLATU EEDER SIZ PE (MAY BI ENT GROUI SIZED EQUI G FEEDER	JRE: ZED TO COMPENSATE FOR VOL BE BLANK)	R SERVICE ENTRANCE FROM UTILI		4 - CONDUCTOR MATERIAL: ( 5 - SPECIAL (MAY BE BLANK) I = ISOLATED GROUND (PR	SE AND GROUNDED ("NEUTRAL") CC C = COPPER, A = ALUMINUM	SOLATED EQUIPME			JLATED ISOLATED GROUND BAR(S
EQUIPMENT 750 KVA TXFRMR PA DT3 T3	PHASE New Construction Existing Existing Existing	NORMAL NORMAL NORMAL	750 kVA Transformer Switchboard Safety Switch 300 kVA Transformer	SUPPLY FROM 750 KVA TXFRMR PA DT3	SPACE NUMBER	SPACE NAME	<b>VOLT</b> 480 480 480 480 480	AGE POLI 3 3 3 3 3	ES WIRES 4 4 3	DEMAND (k 628.4 kVA 292.4 kVA 292.4 kVA	756 A 352 A 352 A		<b>TING (A)</b> 12 00 45 0 45	200 50 50	MAINS TYPE FUSED - BOLTED PRESSURE MAIN LUGS ONLY	FEEDER ID         XC-MANUAL       EXISTING FEEDER,         !XC-310-4A       EXISTING FEEDER,         !XC-310-3A       EXISTING FEEDER,	4) #4/0 15KV CABLES, 4) #500 KCMIL AL, (1) 3) #500 KCMIL AL, (1)	#2 AWG AL GND. IN 4" CONDUIT #2 AWG AL GND. IN 4" CONDUIT	VD %         SPD         ULSE           0.269             0.86             0.93	NEMA 1 NEMA 1 NEMA 1 NEMA 1	NEUTRAL         K-RATING         (A)           25775         24057           18076         18076           15206         15206	NT CIRCUIT RATING (/ EXISTING EXISTING EXISTING	
KD2 2K2 2K2A	Existing Existing New Construction	NORMAL NORMAL	Distribution Panelboard Branch Panelboard Branch Panelboard	T3 KD2 KD2			208 208 208	3 3 3	4 4 4	219.5 kVA 58.4 kVA 24.1 kVA	609 A 162 A 67 A	800 200 200	) 20	00	THERMAL MAGNETIC MAIN LUGS ONLY MAIN LUGS ONLY	!XC-620-4A         EXISTING FEEDER,           !XC-155-4A         EXISTING FEEDER,           200-4A         (4) #250 KCMIL AL, (*	4) #3/0 AWG AL, (1) #2		NDUIT EACH         1.112           2.49         1.466	NEMA 1 NEMA 1 NEMA 1	14661 7258 8953	EXISTING EXISTING 22000	EXISTING EATON PRL4 DISTRIBUTIO PANELBOARD EXISTING EATON PRL1A PANELBOA
															2K2A 200A MLO								
															8953 AIC 22000 SCCR FED FROM: KD2 200-4A								
															2K2 200A MLO	<u>КD2</u> 800А МСВ		TRANSFORMER	DT3 FED FROM: PA !XC-310-4A				
															7258 AIC EXISTING SCCR FED FROM: KD2 !XC-155-4A	14661 AIC EXISTING SCCR FED FROM: T3 !XC-620-4A		T3 300.0 kVA P: 480V 3PH 3W S: 208/120V 3PH 4W FED FROM: DT3 !XC-310-3A	450AF				
					. <u>OVERCURRE</u> SERIES-RATE	RICAL POWER D	<u>I RATINGS</u> : NT PROTECI	UNLESS INI ION (OCP)	AS REQUIF	ED TO COMPL	Y WITH ALL APP	PLICABLE	3				L	#3/0 CU					
				E	AVAILABLE S SYSTEM. SEI PREVAILING AS ADDRESS DOCUMENTS PROPERLY F VALUES ARE FURNISH RES SPECIFICATIONS SHORT-CIRC	NTS OF NFPA 70. SERIES-RATED FA RIES-RATED BRE CODES AND STA SED IN ARTICLE 2 TO THE MANUF/ ATED AND BRAC SULTS WITH EQU ONS, INCLUDE CO UIT CURRENT RA ARC FLASH LAB	AULT CURRE AKERS/SYS NDARDS, IN 240.86(C) OF ACTURER'S CED EQUIPM ON PLANS, JIPMENT SU <u>MENT LABE</u> ORRESPONI ATING (SCCF	INT AT THE TEMS ARE CLUDING A NFPA 70. F REPRESEN ENT IS PRO BMITTALS. LS: IN ADD DING MAXIN FOR EAC	RESPECTI NOT PERM PPLICATIO JRNISH EL TATIVE AN VIDED UNE /IDE FAULT ITION TO L IUM AIC (A' H PIECE OF	VE NODE IN TH TTED WHERE NS INVOLVING ECTRONIC CO D/OR EQUIPME DER BASE BID. CURRENT CA ABELS REQUIF (AILABLE INRU POWER DIST	HE POWER DIST PROHIBITED BY MOTOR CONTR PIES OF THE EL ENT SUPPLIER S IF FAULT CURR ALCULATIONS AN RED WITHIN THE JSH CURRENT) A RIBUTION EQUIF	RIBUTION RIBUTION ECTRICAL SO THAT ENT ND E AND PMENT,				TO SUBSTATION	"PB"		<u>PA</u>				
				C	CONDUCTOF <u>CONDUCTOF</u> LUGS/TERMII AVAILABLE. E SIZED TO FIT CONDITIONS IN FINISHED <u>ALUMINUM C</u> CONDUCTOF EQUIPMENT:	COLOR CODING TERMINATIONS: NALS, PROVIDE A ELSEWHERE, PRO LUGS/TERMINAL , BOX SIZE LIMITA REGULARLY OCC ONDUCTORS: PI ELECTRICAL EC REVIEW EQUIPM	G FOR THE B IN CASES APPROPRIAT OVIDE INSUI LS. PROVIDE ATIONS, ETO CUPIED ARE ROVIDE THE QUIPMENT C MENT SUBM	UILDING AN WHERE CO TE FACTOR ATED BUT SPLICES I C. CONCEAI AS. FOLLOWIN ONNECTIOI ITTALS, INS	ID PHASE F NDUCTOR Y LUG KITS T-SPLICES N SEPARAT BOXES IN BOXES IN IG SUPPLE NS, REGAR TALLATION	COTATION AS A SIZES ARE TO FOR AFFECTE OR EQUIVALE E BOXES IF RE ACCESSIBLE MENTAL WOR DLESS OF WH I DOCUMENTS	APPLICABLE. O LARGE TO FIT ED EQUIPMENT NT METHOD, WI EQUIRED BASEE OVERHEAD JOIS K FOR ALUMINUI O FURNISHES TI S AND NAMEPLA	<sup>-</sup> INTO IF TH TAILS O ON FIELI ST SPACE M- HE TES TO	_D				TIE BREAKEF	480 EX FED FROI >	I200A FUSED 0/277V 3PH 4W 24057 AIC XISTING SCCR DM: 750 KVA TXFRMR XC-MANUAL BUTION SECTION(S)	MAIN SECTION	FIRE PUMP SECTION 750 KVA TXFM	R 12.5KV S	NITCH
				E	ALUMINUM W DISCONNECT CONDUCTOF CONDUCTOF EQUIPMENT WORK WITH BREAKER FR SHOWN TO D SIZES AND T	IF THERE ARE AN VIRING CONNECT T AT OR NEAR EC RS TO THE LINE-S RS FROM LOAD-S FACTORY DISCO ALL AFFECTED IN AME SIZES: AMF DEFINE OVERCUF YPES GREATER TO ACHIEVE THE	TIONS AT EQ QUIPMENT (E SIDE LUGS/TE DNNECT OR I NSTALLERS. PERE RATIN RRENT REQU THAN THE D	UIPMENT; I EXTERNAL ERMINALS ERMINALS ( UG/TERMII GS INDICAT JIREMENTS ESIGNATEI	F THERE A TO THE EQ OF THE DIS OF THE DIS NALS AS AF ED ON DR/ /TRIP RATI O OVERCUF	RE ANY LIMITA JIPMENT) AND CONNECT SW PLICABLE; CC WINGS FOR C NGS. PROVIDE RENT TRIP RA	ATIONS, PROVID TERMINATE AL (ITCH; PROVIDE ITCH TO THE RE ORDINATE ALL CIRCUIT BREAKE BREAKER FRAI ATINGS WHERE	E LOCAL UMINUM COPPER SPECTIVE RELATED ERS ARE MES IN	/E										TO 12.5KV CAMPL
					OTHER APPL	ICABLE REASON	IS.			,					PARTIAL SINGL	E LINE DIAGRAM							



SCALE: NONE

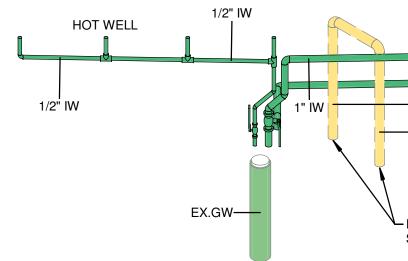
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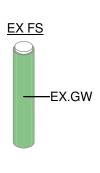


	PANEL NAM	E: 2	2K2					
	SUPPLY FR LOCATI DISTRIBUTION SYST	ON:				MAIN	NS RA Maii Fe	NS
			XISTING FEEDER, (4) #	#3/0 AV	/G AL	(1) #2	•	
СКТ	CIRCUIT [		. ,	VD%	A	1	TRIP	1
1 3	(EX) SPARE	JESCH	IPTION	VD%	A	GND	50 A	
5 7							50 A	
9 11	(G) 482   KITCHEN EQUIF	MENT		3.568	#12	#12	20 A	
13	(#) CASH REGISTER SBA	RRO		2.614	#12	#12	20 A	
15	(EX) SODA MACHINE						20 A	
17	(EX) DELI CASE						30 A	
19	(EX) HEATED CABINET (EX) PIZZA TABLES						20 A	
21 23	(EX) PIZZA TABLES (EX) DOUGH PRESS						20 A 20 A	
23 25	(EX) OUTLETS ROOM 20	ΛP					20 A 20 A	+
27	(EX) REFRIGERATOR	UF					20 A	-
29	(EX) CONVEYOR OVEN						20 A	-
31	(EX) SHUNT TRIP						20 A	-
33	(EX) SODA MACHINE						20 A	-
35	(EX) PIZZA OVEN						20 A	-
37	(EX) REFRIGERATOR						20 A	+
39 41	(EX) PROOFER						30 A	
43 45 47	(EX) DISPOSAL						20 A	
49 51	(EX) CHINESE WARMER						30 A	+
53	(EX) HEATED CABINET						20 A	+
55	(EX) HEATED CABINET						20 A	
57 59	(EX) ICE MACHINE						40 A	
61	(EX) OUTLET ABOVE CO	UNTEF	R - PIZZA				20 A	
63	(EX) HOOD LIGHTS						20 A	
65	(EX) SHUNT TRIP						20 A	
67 69	(EX) COOKING SUITE						40 A	
71 73	(EX) SHUNT TRIP						40 A	
75 77	(EX) ROTISSERIE						50 A	
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1045				<b>`</b>		OTAL		
Conti			CONNECTED LOAI				DE	⊥IVI
Cooli	•		0 VA					
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	en Equipment		4960 VA					
Lighti			0 VA					
Motor			0 VA					
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Rece	otacle		180 VA					
EXIS	EXISTING CONNECTED L TING LOAD DEMAND FAC				PAN	EL TO	TALS	
	ADDED CONNECTED L							
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DE	EMAND CALCULATION NO TOTAL DEN			DEMOL	.ISHE	D DEN	IAND	
	TOTAL DEMAND A	AMPS:	162 A					

PA	NEL	SCHEDULE LEGEND
(EX)	=	EXISTING CIRCUIT TO REMAIN
(#)	=	NEW CIRCUIT TO EXISTING CIRCUIT BREAKER
(G)	=	PROVIDE GROUND-FAULT CIRCUIT INTERRUPTER (
(GE)	=	PROVIDE GROUND-FAULT EQUIPMENT PROTECTIO
(ST)	=	PROVIDE SHUNT TRIP CIRCUIT BREAKER
(A) (L)	=	PROVIDE ARC FAULT CIRCUIT INTERRUPTER (AFCI)
(L)	=	PROVIDE LOCK-ON DEVICE

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							"Architectural Work" defin medium of expression is th Architecture PSC and subj protection under section 10 Act (Title 17 of the U.S.C.) to the overall form as well a
							and composition of spaces design. Drawings and Spe Professional Instruments o property of Nectõ Architect REVISIONS:
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							CONSULTANTS:
		PANEL	NAME: KD2				
			SUPPLY FROM: T3 Location: Tion System: 208/120V 3PH 4W	MAINS RATING (A): 800 MAINS TYPE: THERMAL MAGNETI FEEDER ID: !XC-620-4A	FAULT CURRENT (A): 14 C SHORT CIRCUIT RATING (A): E LUGS TYPE:		ARCHITECT:
			FEEDER: EXISTING FEEDER, (2)	SETS OF (4) #500 KCMIL AL, (1) #2 AWG AL GND. IN 4" C           VD%         AWG         GND         TRIP         FRAME         POLE         A           0.00<	ENCLOSURE TYPE:     N       B     C     POLE     FRAME     TR		PTION CKT
		1 3 (EX) SPARE 5 7 (EX)			0.00 0.00	SPACE SPACE SPACE SPACE	4
		9 SPACE 11 SPACE			0.00 0.00	SPACE SPACE SPACE SPACE	6 8 10 12 14
FAULT CURRENT (A S ONLY SHORT CIRCUIT RATING (A		15 (EX) 2K5				SPACE	91 16 18 18 18
LUGS TYPI	PE: 200% NEUTR PE: NEMA 1 ISOLATED GROU	RAL: (EX) 2K1			7.30         37.09         3         200 A         200           17.30         38.09         3         200 A         200	A     SL     SL     SL     (EX) 2K2   NON-CONTINUOUS	20 22 24 26
0.00         1            0.00         5.50	E         TRIP         GND         A         VD%         CIRCUIT DES           80 A            (EX) SHUNT TRIP	SCRIPTION         CKT         27         (EX) 2K3           2         4         29         21			0.37 15.40 3 200 20.37 15.40	) A (EX) 2K4	28 30 32
5.50         1.65         0.00         1	80 A           (EX) COMFORT SERVING C           20 A           (EX) SHUNT TRIP	6         33         (EX) HALTON           8         35         10	UDS		0.00 6.99	A SL SL SL 2K2A	34 36
0.50          1            0.50         2.20	20 A           (EX) HOOD LIGHTS           20 A           (EX) CASH REGISTER	12       14       16       COUNTER         12       18         12         LOAD CLASSIFICA       Continuous	TION CONNECTED LOA 0 VA 0 VA		ESTIMATED DEMAND	NOTES:BREAKERING EATON PRL4 DISTRIBUTION LBOARD(1) 200A / 31	QUANTITIES (NEW ONLY) P
2.20         Image: Constraint of the second se	40 A           (EX) CARVERY SERVING Comparison           20 A           (EX) SHUNT TRIP           20 A           (EX) SHUNT TRIP           20 A           (EX) INDUCTION COOK HOO	Image: Non-Weight Constraint     Image: Non-Weight Constraint       20     22       21     Kitchen Equipment	0 VA 6496 VA 92 VA	0.00% 100.00% 125.00%	0 VA 6496 VA 114 VA		
0.00         1            0.50         0.50         1	20 A           (EX) INDUCTION COOK HOL           20 A           (EX) SHUNT TRIP           20 A           (EX) ROTISSERIE HOOD           20 A           (EX) SHUNT TRIP	24     Lighting       26     Motor       28     Non-Continuous       30     Receptacle	11191 VA 8276 VA 1680 VA	112.94% 100.00% 100.00%	12639 VA 8276 VA 1680 VA		NORTHE KENTUC UNIVERSI
0         0.50         1            0.50         0.50         1	20 A           (EX) SHOW THIP           20 A           (EX) COOKING SUITE HOOD           20 A           (EX) COMFORT CARVERY/0           20 A           (EX) COMFORT CARVERY/0           20 A           (EX) OUTLETS ABOVE COU	D 32 CASH REGISTER 34 EXISTING COI	NNECTED LOAD: 277310 VA	PANEL TOTALS	Non-C	DEMOLITION LOAD SUMMARY: ontinuous: 100% 13.8kVA tacle: 100% 0.36kVA	PROJECT NAME:
0.50         1            2.40         0.50         1	20 A           (EX) OUTLETS KITCHEN 24           20 A           (EX) OUTLETS KITCHEN 24           20 A           (EX) OUTLETS ABOVE COU           20 A           (EX) OUTLETS ABOVE COU           20 A           (EX) UNDER COUNTER REF	40K         38         ADDED COI           JNTER         40         DEMOL	INALCTED LOAD: 73.00% INECTED LOAD: 27735 VA ISHED DEMAND: 14160 VA JLATION NOTES: 75% EXISTING, LESS	DEMOLISHED DEMAND		Idele. 100% 0.30KVA	
0.50         1            1.33         0.00         1	20 A           (EX) OUTLETS ABOVE COU           20 A           (EX) SPARE           20 A           (EX) SODA/ICE MACHINE	JNTER ROOM 240K 44 1	TOTAL DEMAND:         219488 VA           DEMAND AMPS:         609 A				
2.00         0.50         1            0.50         0.50         0.50         1	20 A           (EX) SODA/ICE MACHINE           20 A           (EX) OUTLETS ABOVE COU           20 A           (EX) OUTLETS ABOVE COU	JNTER ROOM 240N 54	NAME: 2K2A		FAULT CURRENT (A): 85	953 SURGE SUPRESSION:	
3.00         0.50         1            3.00         0.50         1	20 A           (EX) OUTLETS ABOVE COU	JNTER ROOM 240N         56           JNTER ROOM 240N         58           40N         60	LOCATION: TION SYSTEM: 208/120V 3PH 4W	MAINS RATING (A): 200 MAINS TYPE: MAIN LUGS ONLY FEEDER ID: 200-4A	SHORT CIRCUIT RATING (A): 22 LUGS TYPE:	2000 ULSE: 200% NEUTRAL:	
0.50 0.00 1 0.00 1.00	20 A           (EX) SLICER           20 A           (EX) SPARE	66 1	FEEDER: (4) #250 KCMIL AL, (1) # CIRCUIT DESCRIPTION	4 AWG AL GND. IN 3" CONDUT         VD%       AWG GND       TRIP       FRAME       POLE       A         2.76       1.93	ENCLOSURE TYPE: N B C POLE FRAME TRI		
3.50         1.00           3.50         3.50         0.50         1	20 A           (EX) FOOD PROCESSOR           20 A           (EX) FOOD CUTTER	68         3         (G) 410   NON           70         72         5           74         7         7	-CONTINUOUS	2.584 #10 #10 30 A 30 A 3 2 2	2.76 1.93	A #10 #10 1.991 (G) 470   MOTOR A #12 #12 2.006 860   MENU BOARDS	
4.00 0.50	20 A           (EX) MIXER           20 A           (EX) WORK TABLE	76         9         (G) 475   MOT           78         11		2.188 #12 #12 20 A 20 A 3	1.80         0.50         1         20 A         20 A           1.80         0.50         1         20 A         20 A	A         #12         #12         2.531         900   SIGNAGE           A         #12         #12         2.248         901   SIGNAGE	
0.00 1.00 2	20 A           (EX) WORK TABLE           20 A           (EX) PIZZA SLIDE           20 A           (EX) SHUNT POWER CC	80         13         485   KITCHEN           82         15         17		3.586       #12       #12       20 A       20 A       1       1.54       0.09	1 20 A 20 A	A #12 #12 1.615 LIGHTING - SBARRO COUNTER	$\begin{array}{c c} & 14 \\ \hline & 16 \\ \hline & 18 \end{array} \end{array} \qquad \begin{array}{c c} & O \\ O$
4.00 0.00 1	20 A           (EX) SHUNT POWER PIZZA           20 A           (EX) SHUNT POWER RIZZA           20 A           (EX) SHUNT POWER KITCH	A 88 19					20 22 24 STAMP: 0F KE
ESTIMATED DEMAND           0 VA		AKER QUANTITIES (NEW ONLY)         23           DA / 3P (G)         25					24 26 28 28
0 VA 0 VA 4960 VA		29 LOAD CLASSIFICA	TION CONNECTED LOA	TOTAL CONNECTED LOAD:     8.6 kVA       D     DEMAND FACTOR	7.0 kVA     7.0 kVA       ESTIMATED DEMAND     NOTES	S: BREAKER QUAN	30 ITITIES (NEW ONLY)
0 VA 0 VA 0 VA		Kitchen Equipment Lighting Motor	1536 VA 92 VA 11191 VA	100.00% 125.00% 112.94%	1536 VA 114 VA 12639 VA		20A / 3P (G), (1) 25A / 3P (G) 09/1
	DEMOLITION LOAD SUMMA	Non-Continuous	8276 VA 1500 VA	100.00%	8276 VA 1500 VA		SHEET TITLE: ELECTRIC P
R	Receptacle: 100% 0.36kVA			PAN TOTAL CONNECTED LO DEMAND CALCULATION NOT			- PANEL └── SCHEDULE
				DEMAND CALCULATION NOT TOTAL DEMA TOTAL DEMAND AM	ND: 24.1 kVA		
					I	PANEL KE	
(->) = CONN SOUR	/IDE LOCK-OUT/TAG-OUT DEVICE NECT BRANCH CIRCUIT, WHICH WAS DISCO RCE AS PART OF SELECTIVE DEMOLITION, 1 RMINE EXACT POLE ASSIGNMENT(S) BASE	TO POLE SPACE(S) INDICATED, A.	PROVIDE HACR RATED BREAK		ITING BRANCH CIRCUITS		DRAWN BY: CHECKED BY:
(->) = CONN SOUR DETEI DETEI OF TH CUIT BREAKER OF TH CUIT BREAKER REQU * = WIRE	NECT BRANCH CIRCUIT, WHICH WAS DISCO RCE AS PART OF SELECTIVE DEMOLITION, 1 RMINE EXACT POLE ASSIGNMENT(S) BASE HE BRANCH CIRCUIT CONDUCTOR INSULAT	TO POLE SPACE(S) INDICATED, A. ED ON EXISTING COLOR-CODING B. TION. PROVIDE NEW BREAKER IF C.	PROVIDE HACR RATED BREAK PROVIDE LOCKING TYPE BREA ALL VOLTAGE DROP CALCULA		E BASED ON RIGHT ANGLE CIRCUI		DRAWN BY:





2 PLUMBING - ISOMETRIC - SANITARY AND VENT

## **KEYED NOTES**

P01 EXISTING SINK TO REMAIN.

SERVE NEW HOT WELL.

- P02 EXISTING FLOOR SINK TO REMAIN.
- P03 P04
- EXISTING VENT PIPING SERVING ADJACENT FLOOR SINK TO REMAIN.
- EXISTING COLD WATER LINE THROUGH EXISTING FLOOR TO REMAIN. CONNECT NEW COLD WATER LINE TO EXISTING COLD WATER LINE TO

P05 TO EXISTING FLOOR SINK. P06

INDIRECT TO EXISTING FLOOR SINK.

<u>AB</u>	BREVIATIONS
ANSI	AMERICAN NATIONAL STANDARDS
ASPE	AMERICAN SOCIETY OF PLUMBING
BFP BTU	BACKFLOW PREVENTER BRITISH THERMAL UNIT
BTUH CFH	BRITISH THERMAL UNIT PER HOUR
CFM CO	CUBIC FEET PER MINUTE
CPVC CW	CHLORINATED POLYVINYL CHLORIDE COLD WATER (POTABLE)
EC EX F	ELECTRICAL CONTRACTOR EXISTING FAHRENHEIT
FCO FLA	FLOOR CLEAN OUT FULL LOAD AMPERES
FS FT	FLOOR SINK FEET
GPH GPM	GALLONS PER HOUR GALLONS PER MINUTE
GPR GW	GAS PRESSURE REGULATOR GREASE WASTE
GWI HDPE	GREASE WASTE INTERCEPTOR HIGH DENSITY POLYETHYLENE
HW IN WC KW	HOT WATER INCH WATER COLUMN KILOWATT
KWH MAU	KILOWATT HOUR MAKE-UP AIR UNIT
MAX MBH	MAXIMUM 1000 BTUH
MIN MOCP	MINIMUM MAXIMUM OVERCURRENT PROTECTION
NG NIC	NATURAL GAS NOT IN CONTRACT
NTS OCP PC	NOT TO SCALE OVER CURRENT PROTECTION PLUMBING CONTRACTOR
PRV PSI	PRESSURE REGULATING VALVE
PSIA PSIG	POUNDS PER SQUARE INCH – ABSOLUTE
PVC S	POLYVINYL CHLORIDE CONTRACT
SK TEMP	
TMV UR	THERMOSTATIC MIXING VALVE URINAL
$\bigvee$	1/2" CW EX FS BFF 1/2"

P01 EX SK

(P01) EX SK

(P07)

DROP-IN COLD

DROP-IN COLD FOOD WELL

-EX.V -EX.V

EX.VENTS SERVES EX. FS.

 $1 \frac{\text{PLUMBING - SECOND FLOOR - OVERALL PLAN}}{1/4" = 1'-0"}$ 

## **KEYED NOTES**

NEW GREASE WASTE PIPING FROM NEW HOT WELL TO DRAIN INDIRECT

P07

## **KEYED NOTES**

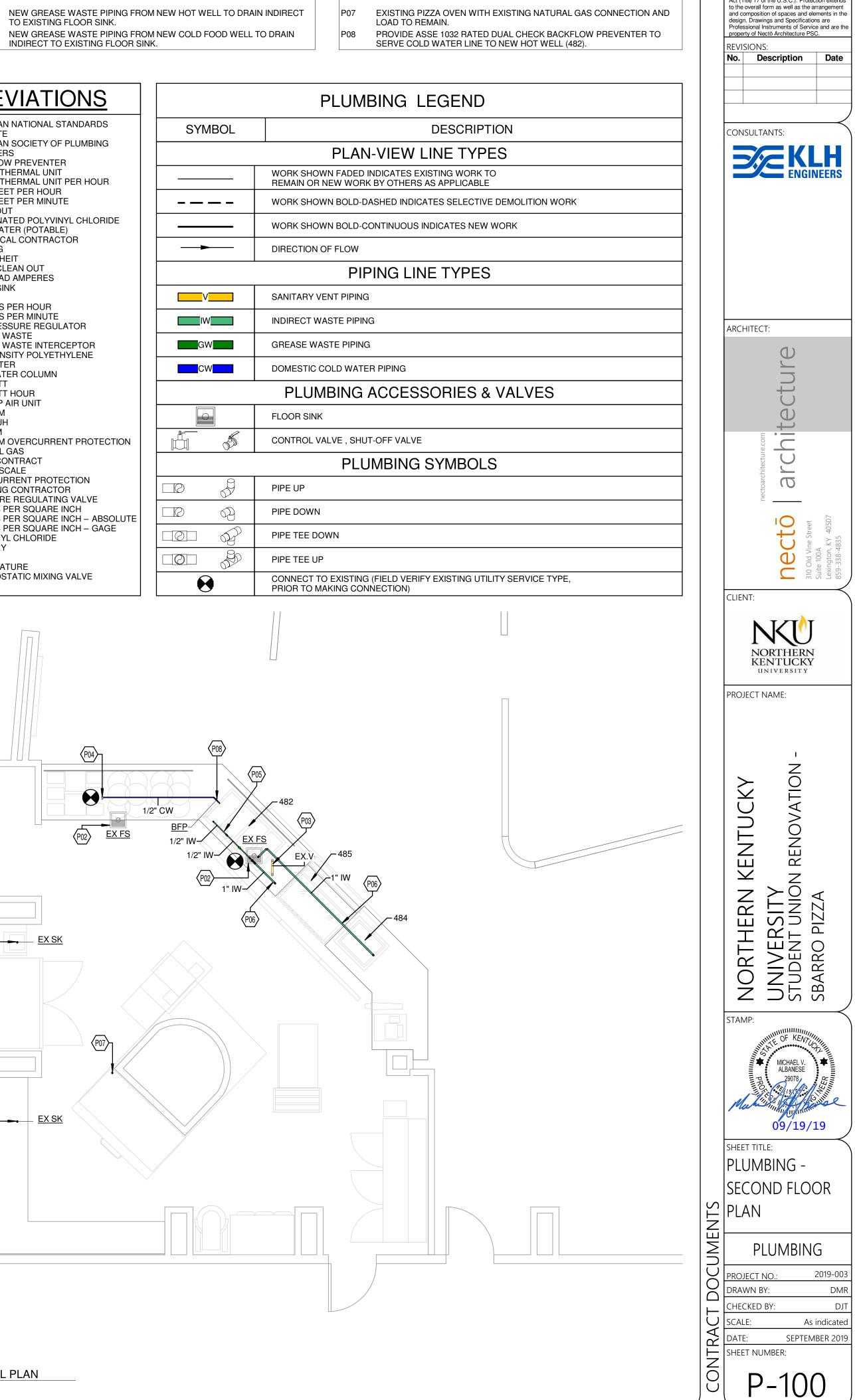
EXISTING PIZZA OVEN WITH EXISTING NATURAL GAS CONNECTION AND LOAD TO REMAIN. PROVIDE ASSE 1032 RATED DUAL CHECK BACKFLOW PREVENTER TO

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#### **DIVISION 22 - PLUMBING SPECIFICATION**

#### SECTION 22 05 00.00 - COMMON WORK RESULTS FOR PLUMBING

#### GENERAL

The General Provisions of the Contract including the General and Supplemental Conditions and General Requirements apply to the work in this section. Before submitting a bid, examine documents of all other trades, visit the site and get acquainted with all conditions that may in any way affect the execution of this contract. Contractor shall obtain and pay for all permits, certificates of inspection and approvals required. Submittal of a bid indicates that the contractor has examined the drawings, specifications, and had an opportunity to visit the site to be able to provide a comprehensive complete bid to include

providing all materials, labor, tools, and equipment required to provide complete plumbing systems as outlined in Division-22. Clearly state all full load amps (FLA), voltages and model numbers on all submittals. Include rated capacities, operating characteristics, electrical

characteristics, and furnished specialties and accessories. Provide wiring diagrams: For power, signal, and control wiring.

#### APPLICABLE STANDARDS

The installation of all plumbing work shall conform to all the following, but not limited, applicable local and municipal utility standards, rules and regulations, plumbing codes and statutes having jurisdiction.

All plumbing fixtures, equipment, accessories, and appurtenances shall be NSF/ANSI 61-372 compliant.

Kentucky Building Code;

Kentucky Plumbing Code; American Society for Test Materials (ASTM);

National Sanitation Foundation (NSF); American Standards Association (ASA); Underwriters Laboratories (UL);

National Fire Protection Association (NFPA);

### National Electric Code (NEC); PLANS AND SPECIFICATIONS

Obtain the latest design and construction standards document(s) from the owner. Comply with all owner-specific requirements in addition to requirements set forth in these specifications and accompanying drawings. Should there be a conflict, the owner's standards shall take precedence, unless prevailing codes and regulations mandate otherwise

The drawings that accompany these specifications are diagrammatic. Wherever possible make use of submittal data and verify all dimensions on site. Provide additional fittings as required by site conditions and codes at no additional cost to conform to the structure, avoid obstructions, provide required service clearances and preserve headroom. Do not scale from drawings, all measurements should be taken in the field.

#### EXISTING CONDITIONS

Where new plumbing systems are required to be connected to existing plumbing systems, provide all camera scoping and dye testing necessary to verify the exact location, size, invert elevation, pressure, pipe integrity, and system type to ensure a proper connection is executed. The contractor shall notify the engineer immediately if it is found a proper connection cannot be executed

#### CUTTING, PATCHING AND DEMOLITION

The contractor shall be responsible for damages to the grounds, walks, road, building, piping systems, electrical systems, and their equipment and contents, caused by leaks in the piping systems being installed or having been installed by him. The contractor shall repair at his expense all damaged so caused. All repair work shall be done as directed by and in such manner as satisfactory to the architect.

Owner reserves the right to make emergency repairs as required to keep equipment in operation without voiding the contractor's guarantee bond nor relieving the contractor of his responsibilities during the bonding period. Cut and drill all openings in roofs, walls, and floors required for the installation. Neatly patch all openings cut. Hold cutting and patching to a minimum by arranging with other contractors for all sleeves and openings before construction is started. When drilling/cutting concrete slabs, utilize ground penetrating radar (GPR) and/or X-ray scanning equipment to verify the location is free from obstructions, including but not limited to: structural rebar/strands/tendons, electrical conduit/wiring, and/or piping/ductwork.

#### EXCAVATION AND BACKFILL

Perform all excavation and backfilling required for this work. Contractor shall consult with utility company prior to beginning excavation. At a minimum, all piping shall be laid on a bed of sand, 6" deep, well tamped into place and properly graded to permit the pipe to have an even bearing throughout its entire length. Sand shall be installed around the piping in 6" lifts to a point 6" above the piping.

#### INTERRUPTION OF EXISTING SERVICES

Interruption of Existing Plumbing Services: Do not interrupt service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary service according to requirements indicated: Notify, Architect, Construction Manager, and Owner no fewer than seven days in advance of proposed interruption of service. Do not proceed with interruption of service without Architect's written permission.

#### WARRANTY

This contractor shall warrant that all work under this section shall be free of defective work, materials and parts for a period of one year after acceptance of the work and shall repair, revise, and replace, at no cost to the owner, any such defects occurring

within the warranty period. Use of Electronic Drawings from the Owner's Design Team If expressly permitted by the Owner and the terms of the Contract, editable electronic drawings may be made available for the creation of shop and as-built drawings upon request. Drawings will be made available at the discretion of the Engineer. "Request Drawings" form can be accessed, filled out

and submitted at http://www.klhengrs.com (right hand side of page - Contractor Resources). Direct access to this form can be found here: http://files.klhengrs.com/requestdrawings.html

#### 22 05 03.00 - SUBMITTALS FOR PLUMBING

Provide submittals in accordance with the Contract Documents. In addition to Division 01, the Contractor is advised to review and comply with the requirements articulated within each Division and within each section of that Division. Some Divisions may include a division-specific "Submittal Requirements for ...." section. Where this section exists, it

articulates additional requirements for submittals that apply to the work of that Division.

The following requirements help to identify, track and keep the project organized for all parties involved. They are necessary to ensure a timely turnaround and an appropriate technical review. Submittals that do not conform to the administrative requirements are rejected and returned, without technical review. Supply submittals for each section: Submittals shall be supplied on a section-by-section and type-by-type basis. For example, independent product data submittals shall be furnished for each

section that requires product data submittals. Independent shop drawing submittals shall be furnished for each section that requires shop drawings. Separate PDF file packages shall be supplied for each section, for each submittal type. Each PDF shall represent a single standalone submittal. Include a transmittal: Transmittals shall enumerate each

submittal for each section of each type and iteration. Include cover sheet / title page: The cover sheet shall include the information identified in the contract documents. It shall be included as the first page of each electronic and/or hardcopy document-based submittal. An editable and printable PDF form created with editable fields and specification compliant appearance is available from KLH upon request. It is also downloadable from the KLH website at www.klhengrs.com. Include an index: The index shall enumerate the contents of the submittal.

Include checklists: Where checklists are included with the specifications, complete and include them within the appropriate submittal. Supply complete submittals: Complete submittals of each type are required. Partial submittals will be rejected. Where a section requires a product data submittal, all product data for that section shall be supplied together, at one time, as one complete submittal. When resubmittal is required (e.g. Revise and Resubmit) the revised submittal shall be more complete. more accurate and more contract-compliant than its rejected predecessor. The submittal number (for each section and type) shall increment for each subsequent submittal (00 – Original submission, 01 – First Resubmission, 02 – Second

Resubmission, etc...). Resubmittals shall include a copy of the reviewers comments supplied with the prior submittal rejection and shall be amended with a description of the specific action taken to comply with the reviewer's comments. The absence of this on resubmittal is cause for rejection.

Name electronic files to match the submittal ID and cover sheet: The electronic file name of submittals shall match the submittal ID included on the submittals cover page. For example: The original/first product data submittal for Section 220523 would be labeled as "220523.00-PD-00"; the first resubmittal of same shall be labeled "220523.00-PD-01". The original/first shop drawings submittal file for the same section would be labeled "220523.00-SD-00"; the first resubmittal of same shall be labeled "220523.00-SD-01".

If expressly permitted by the Owner and the terms of the Contract, editable electronic drawings may be made available for the creation of shop and as-built drawings upon request. Drawings will be made available at the discretion of the Engineer.

"Request Drawings" form can be accessed, filled out and submitted at http://www.klhengrs.com (right hand side of page -Contractor Resources). Direct access to this form can be found here: http://files.klhengrs.com/requestdrawings.html

#### 22 05 23.00 - GENERAL DUTY VALVES

SUBMITTAL REQUIREMENTS

Product Data: For each type of product indicated.

#### GENERAL

Provide stops or isolation valves on domestic water supplies to isolate hot and cold water to each fixture, including all equipment and equipment provided by others. Access shall be provided to all valves. Provide fire-rated access

panel(s) to maintain full access to concealed valves. Ball valves - 2 inch and smaller: Lead-Free, 600 psi CWP, 100 psi at 300°F, cast bronze body, blowout-proof stem. Butterfly Valves – 3" and up: Ductile Iron Butterfly Valve, 200

WOG, Lug Body, Lever Operator. Approved Manufacturers: Milwaukee Valve, NIBCO, and Watts Water Technologies Co.

Valves to conform to: MSS-SP-110 Type I/ MSS-SP-67 Type I, NSF/ANSI -61/372.

#### CHECK VALVES

Check valves to be same size as system piping it accompanies. Lead-free, bronze body, 250 WOG, non-shock, spring check valve. Conforms to the following standard(s): MSS-SP-80 I, NSF/ANSI -61/372

#### 22 05 29.00 - HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT

#### GENERAL

Provide hangers, supports, clamps, attachments, and structural steel members where required to support piping and equipment from building structure.

Support of piping from the decking or equipment is prohibited. Arrange for grouping of parallel runs of horizontal piping supported together on field-fabricated, heavy-duty trapeze hangers where possible. Trapeze hangers shall conform to:

MSS SP-69, Type 59. Hangers shall be sized to allow insulation to pass through unobstructed.

Hangers and supports shall be placed at all changes in direction, valves and equipment.

The maximum horizontal spacing of cast-iron pipe hangers can be 10' where 10-foot lengths of pipe are installed. Piping shall also be supported at each change in direction, valves and equipment.

Clevis-type hangers shall and supports shall conform to: MSS SP-58, Type 1-58.

22 05 53.00 - IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT

#### PIPING

Provide self-adhesive pipe labels with white background and black lettering, contact type with permanent adhesive backing. Include identification of piping service using same designations or abbreviations as used on the drawings and an arrow indicating flow direction.

#### EQUIPMENT

Provide self-adhesive plastic equipment labels with white background and black lettering, contact type with permanent adhesive backing, 160 degree F temperature. Include equipment's drawing designation and specification section number where equipment is specified.

22 07 19.00 – PLUMBING SYSTEM INSULATION

GENERAL

installations employing slip on techniques. Provide insulation materials, accessories, and finishes with smooth, straight, and even surfaces; free of voids throughout the length of piping including fittings, valves, and specialties. Surface Preparation: Clean and dry surfaces to receive insulation. Remove materials that will adversely affect insulation application.

PIPING SYSTEMS REQUIRING INSULATION or per local energy code, whichever greater. with 1/2" wall thickness insulation.

#### FLEXIBLE ELASTOMERIC INSULATION Closed-cell, sponge- or expanded-rubber materials. Comply with ASTM C 534, Type I for tubular materials and Type II for sheet

materials. Adhesives, Sealers, and Protective Finishes: As recommended by insulation manufacturer for applications indicated. Manufacturers: Subject to compliance with requirements, available products that may be incorporated into the work include, and are limited to, the following: Aeroflex USA, Inc.; Aerocel., Armacell LLC; AP Armaflex.,K-Flex USA:

#### FIBERGLASS INSULATION Fiberglass piping insulation: ASTM C 547, Class 1 Encase pipe fittings insulation with one-piece pre-molded PVC

fitting covers. Vapor Barrier Material: Paper-backed aluminum foil, except as otherwise indicated, strength and permeability rating equivalent to adjoining pipe insulation jacketing. Staples, Bands, Wires, and Cement: As recommended by insulation manufacturer for applications indicated. Adhesives, Sealers, and Protective Finishes: As recommended by insulation manufacturer for applications indicated. Manufacturers: Subject to compliance with requirements, available products that may be incorporated into the work include, and are limited to, the following: Armstrong World Industries, Inc., Owens-Corning Fiberglass Corp., Johns Manville.

#### ADHESIVES

Materials shall be compatible with insulation materials, jackets, and substrates and for bonding insulation to itself and to surfaces to be insulated, unless otherwise indicated. Insulation for handicap accessible fixtures All handicap lavatory p-trap and angle stop assemblies shall be insulated with trap wrap protective kit manufactured by Proflo model PF202WH or equal. Abrasion resistant, anti-microbial vinyl exterior cover shall be smooth. For traps, the insulation shall have a cleanout nut cap to allow service to the trap without disassembly. For stops, the insulation shall have a lock lid that prevents tampering but allows access without removal of the insulation. Fasteners shall remain substantially out of sight. Manufacturers: subject to compliance with requirements: Proflo, Truebro, Plumberex

## 22 11 16.00 – DOMESTIC WATER PIPING

## SUBMITTAL REQUIREMENTS

#### GENERAL

Install piping concealed from view unless noted otherwise, free of sags and bends. Do not enclose, cover, or put piping into operation until it has been inspected and approved by authorities having jurisdiction. Clean and disinfect potable domestic water piping using approved procedures by authorities having jurisdiction.

Install at right angles; diagonal runs are prohibited unless otherwise shown. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal. Coordinate all piping with all other trades. Provide water pressure regulators where necessary to limit the incoming water pressure to 80 psi inside the building.

DOMESTIC WATER PIPING ABOVE GROUND Hard copper tube, ASTM B 88, Type L; wrought-copper, solderjoint fittings; and soldered joints. Solder Filler Metals: ASTM B 32, lead-free alloys. Flux: ASTM B 813, water flushable. Type "L"; copper pressure-seal joint; and pressure-seal joint systems.

CATHODIC PROTECTION Provide dielectric insulation at points where copper or brass pipe comes in contact with ferrous piping, reinforcing steel or other dissimilar metal in structure.

#### 22 11 19.00 – DOMESTIC WATER PIPING SPECIALTIES

SUBMITTAL REQUIREMENTS

Product Data: For each type of product indicated. Manufacturers: Subject to compliance with requirements, available products that may be incorporated into the work include, and are limited to, the following: Conbraco Industries, Inc., Watts Water Technologies Co., Zurn Industries, LLC., Thermomegatech, Acorn Engineering Co., and Caleffi, N. America., MIFAB, Inc., Precision Plumbing Products, Inc., Sioux Chief Manufacturing Company, Inc., Jay R. Smith Mfg. Co., Provent Systems, Rector Seal.

## BACKFLOW PREVENTER complies with ASSE 1032.

## WATER HAMMER ARRESTERS

PDI-WH 201. Standard: ASSE 1010 or PDI-WH 201. Type: Metal bellows or copper tube with piston. sizes a through F.

SUBMITTAL REQUIREMENTS Product Data: For each type of product indicated.

GENERAL

Insulation shall be listed and labeled per ASTM E 84 for plenum

Insulate domestic cold water piping, associated fittings and valves with flexible elastomeric 1/2" wall thickness insulation. Insulate domestic hot water piping, associated fittings and valves with 1" thick flexible elastomeric, 1-1/2" thick fiberglass insulation Insulate waste piping above ceilings that receive condensate

Insulate exposed sanitary drains, domestic water, domestic hot water, and stops for plumbing fixtures for people with disabilities.

Product Data: For each type of product indicated.

Provide a continuous pressure dual check valve backflow preventer with stainless steel body, threaded connections and

Provide water-hammer arresters in water piping according to

Size: ASSE 1010, sizes AA and A through F, or PDI-WH 201,

#### 22 16 13.00 - NATURAL GAS PIPING SYSTEMS

Plumbing contractor shall be responsible for installing gas piping run-outs to all gas-fired equipment, including equipment supplied by the HVAC and electric contractors. Piping shall be installed full-size (as indicated on the drawings) to each units' gas inlet connection, burner, regulator, etc. Plumbing subcontractor shall provide gas cock and make final connections. Connections to each gas-fired equipment item shall include a drip leg and shutoff gas cock. Comply with equipment manufacturer's instruction. For connections to gas-fired rooftop equipment, plumbing contractor shall be responsible for the roof penetration and shall install the gas piping through the roof in a location that has been coordinated with the HVAC contractor.

BUILDING DISTRIBUTION PIPING

All piping from meter/regulator to gas fired equipment connections shall be black steel. Steel Pipe: ASTM A 53/A 53M, black steel, Schedule 40, Type E

or S, Grade B. Pipe size 2" and smaller: Malleable-Iron Threaded Fittings

Malleable-Iron Threaded Fittings: ASME B16.3, Class 150, standard pattern. Press-Connect fittings: Carbon steel, cold-pressed, ANSI

LC4/CSA 6.32 Pipe size 2-1/2" and larger: Wrought-Steel Welding Fittings for

butt welding and socket welding. Wrought-Steel Welding Fittings: ASTM A 234/A 234M for butt welding and socket welding.

#### GENERAL DUTY VALVES

Metallic valves 2 inches and smaller shall comply with ASME B16.33, cold working pressure of 125 psig. Metallic valves larger than 2 inches shall comply with ASME B16.38, cold working pressure of 125 psig. Provide one-piece ball valves with bronze body, chrome-plated brass ball, blowout proof stem and seat, and bronze trim complying with MSS SP-110. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, and limited to, the following: Milwaukee valve, NIBCO, and Watts Water Technologies co.

22 13 16.00 - SANITARY, WASTE AND VENT PIPING SYSTEM

SUBMITTAL REQUIREMENTS Product Data: For each type of product indicated.

#### GENERAL

Provide a complete soil, waste and vent system in the building and on the site as indicated on the drawings and as specified

Above ground soil, waste and vent piping within buildings including soil stacks, vent stacks, horizontal branches, traps, and connections to fixtures and drains.

Underground building drain piping including mains, branches, traps, connections to fixtures and drains, and connections to stacks, terminating at connection to existing sanitary sewer.

#### INTERIOR PIPING

No-Hub cast iron soil, waste, and vent piping and fittings 1-1/2" and larger shall conform to ASTM A-888. Hub and Spigot cast iron soil, waste, and vent piping and fittings 2" and larger shall conform to ASTM A-74 with ASTM C-564

gasketed joints. Soil, waste and vent piping smaller than 1-1/2" shall be Type "M" copper and conform to ASTM B-306.

No-hub cast iron pipe and fittings may be used aboveground for soil, waste, and vent piping. Hub and spigot cast iron pipe may be used underground for soil,

waste, and vent piping. Piping alignment shall be as indicated on the drawings using approved wye branches or eight bands for direction changes and shall be surely supported or secured to maintain such alignment. Pitch of sanitary piping shall be uniform at a minimum of 1/8" per foot for building drains, drainage piping greater than 2" and as

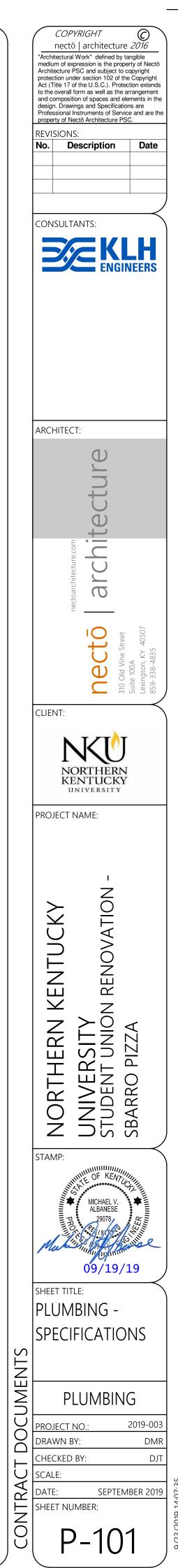
indicated on the drawings. Pitch of sanitary piping shall be uniform at a minimum of 1/4" per foot for drainage piping 2" and smaller and as indicated on the drawings. Protection shall be given all footings, other structural elements

during underground work adjacent to such items. Refer to architectural and/or structural drawings for locations.

Vent all fixtures, connect branch vents to main vent risers at least six inches above flood rim of fixtures. Pitch vent lines back to soil or waste pipe, free of drops and sags.

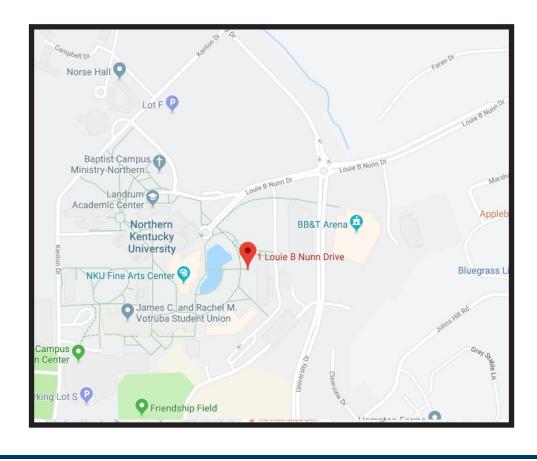
Cleanouts shall be full size of pipe up to 4", and 4" for larger sizes. For underground and concealed lines, provide cleanouts in accessible positions at each right angle turn and at intervals not to exceed fifty feet. In floors, install flush with finish floor with extension pipe from cleanout wye.

END OF SPECIFICATION





# 1 LOUIE B NUNN DRIVE HIGHLAND HEIGHTS, KY 41099





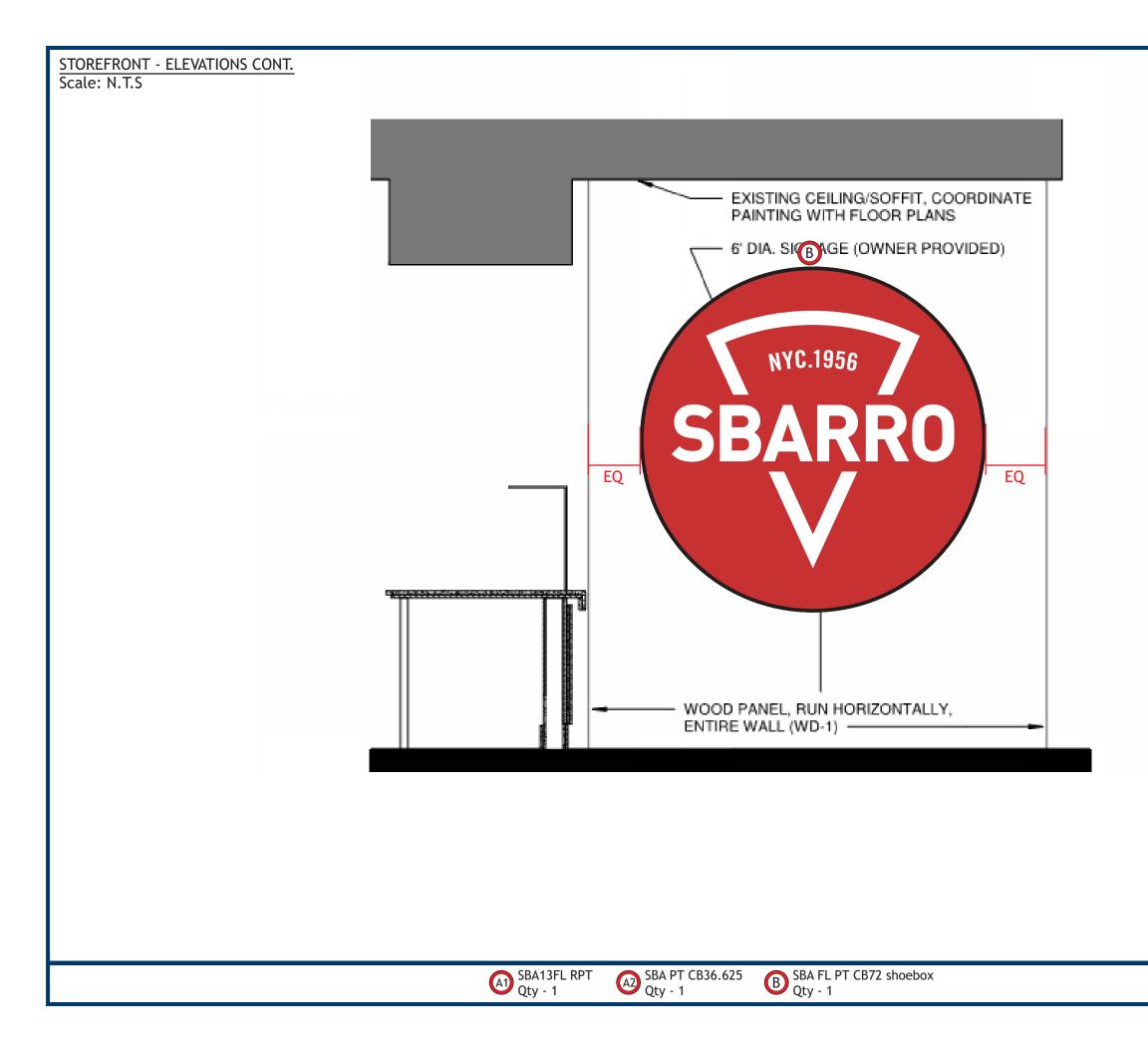




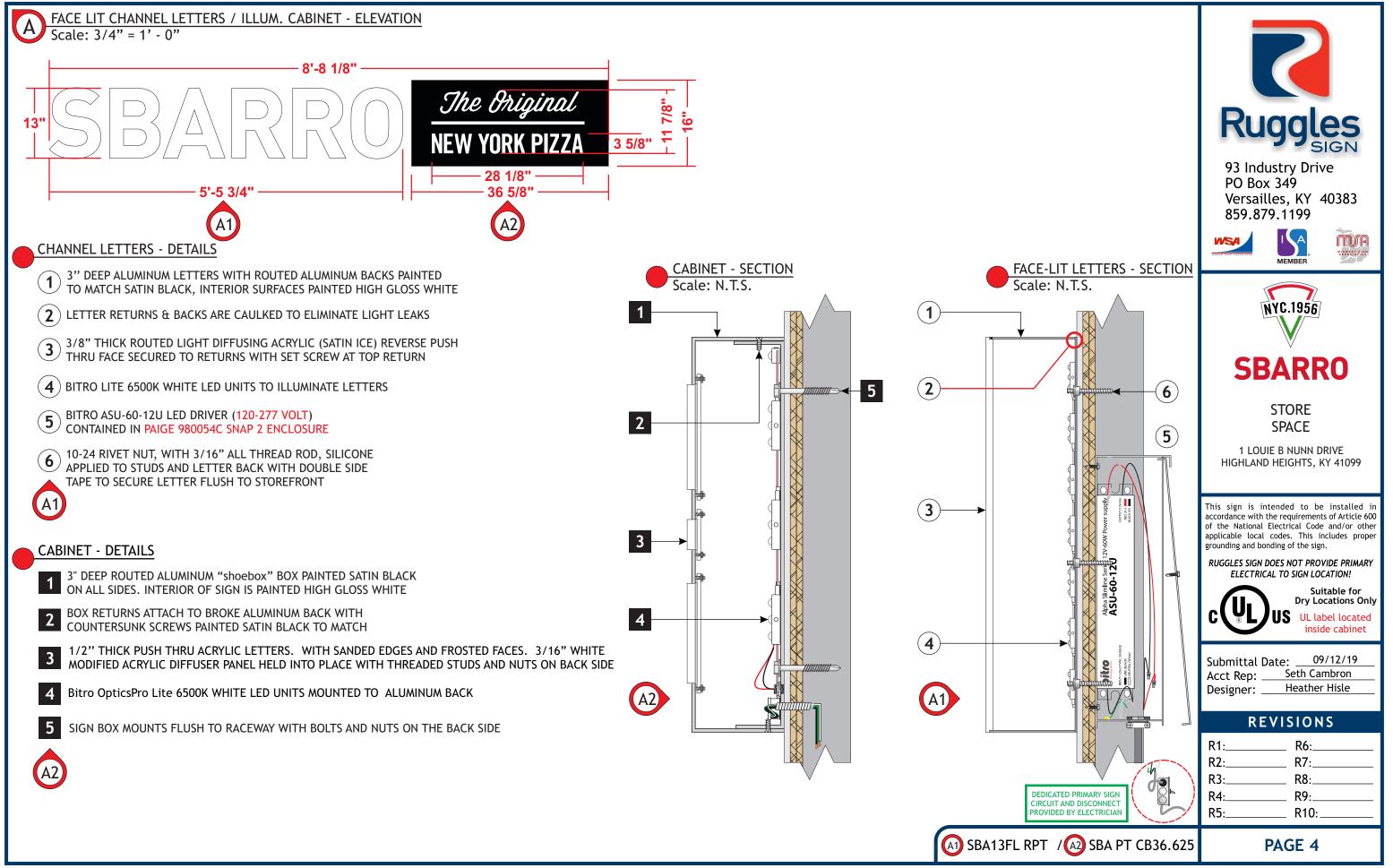


SBA13FL RPT Qty - 1 SBA PT CB36.625 Qty - 1









ILLUMINATED CABINET SIGN - ELEVATION Scale: 3/4" = 1' - 0"

B



1 3" DEEP FABRICATED ALUMINUM "SHOEBOX" CABINET WITH ROUTED FACE, RETURNS AND 3/8" BORDER ON FACE PAINTED MATCH DAYS 1840 DED. ALL INTERIOR SUBJECT STREAM OF 3/8" BORDER ON FACE PAINTED MATTE BLACK. FACE PAINTED TO MATCH PMS 186C RED, ALL INTERIOR SURFACES PAINTED HIGH GLOSS WHITE.

**(2**) .090" ALUMINUM BACK WITH 1 1/2" ANGLE ALL THE WAY AROUND PAINTED TO MATCH CABINET

 $(\,{f 3}\,)$  FORWARD CUT, MATTE WHITE VINYL "NYC. 1956" APPLIED FIRST SURFACE TO FACE OF CABINET

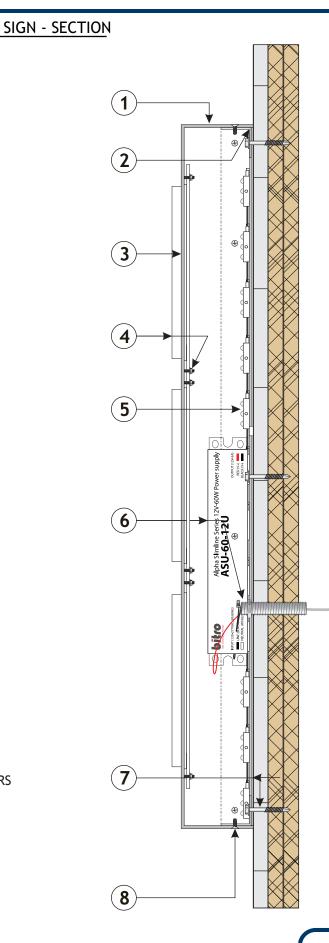
1/2" THICK ROUTED CLEAR ACRYLIC "SBARRO" AND "PIZZA" SHAPE PUSH THRU LETTERS WITH SANDED FACES AND EDGES, 1/8" THICK WHITE POLYCARBONATE BACKER PANEL SECURED TO INSIDE OF CABINET WITH POP-STUDS AND WIZ NUT FASTENERS 4

**(5)** BITRO OPTICS PRO LITE 6500K WHITE LED UNITS

BITRO ASU-60-12U LED DRIVER (120-277 VOLT) SELF-CONTAINED POWER SUPPLY, G.C. TO 6 PROVIDE ELECTRIC TO SIGN

(7) CABINET MOUNTS FLUSH TO STOREFRONT WALL WITH LAG BOLT FASTENERS THROUGH THE BACK

FACE SHOEBOXES OVER BACK AND IS SECURED WITH COUNTERSUNK SCREWS AROUND 8 PERIMETER, TOUCHED UP UPON INSTALL





**\Orchestrating** a brighter world

NEC

40", 48" and 55" Commercial Displays Ideal for Digital Signage Applications

# NEC Commercial Large Format Displays



Brand new aesthetically-focused design allows for seamless integration into any digital signage environment while maintaining the professional ruggedness necessary for the retail, education and restaurant

#### **Beyond Standard Signage**

Create maximum visual impact through seamless simplicity with the new professional NEC V Series products. New contemporary and slim mechanical design with focused aesthetics allows for the smooth and stylistic integration into any type of environment. Their full metal chassis coupled with real-time temperature sensors and integrated cooling fans maintain the professional quality necessary for commercial environments. With a wide range of the latest connectivity interfaces including resolution support up to Ultra High Definition at 60Hz, these displays offer the future-proofing necessary for the investment. These displays also include expandability options such as the Open Pluggable Specification (OPS) and Raspberry Pi Compute Module slots for source integration directly into the display. The NEC V Series boasts 500 cd/m<sup>2</sup> brightness along with a new anti-glare surface that allows for efficient readability in normal ambient light situations and is ideal for 24/7 signage in retail, education and restaurants applications.

#### Scalable Computing Power

Integrated computing options allow for cable free signage for any type of situation. The on-board multimedia player can be utilized for simple signage applications by allowing auto-play off of USB

or SD card and content transfer via LAN. For more advanced signage systems, these displays contain an industry first ability to integrate a Raspberry Pi Compute module for near limitless potential and application. Finally, each display adheres to the Open Pluggable Specification that gives the ability to seamlessly integrate a full PC, HDBaseT receiver or other options directly into the unit.

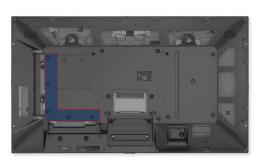


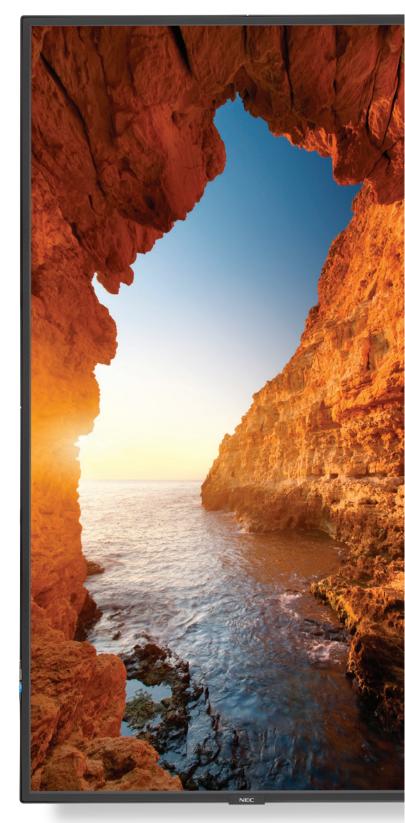
#### Advanced Heat Management

Monitoring and managing the temperature of each display is crucial to secure reliability and longevity. An industrial-strength, premium-grade panel with additional thermal protection, internal temperature sensors with self-diagnostics, and fan-based technology allows for 24/7 operation, and protects your display investment. Without thermal management, displays can be prone to damaging heat over time. This damaging heat will lower the picture quality and life expectancy of the product. Integrated cooling fans automatically turn on and stay on when high internal temperatures are detected. These will stay on until the heat is properly dissipated and the display remains under proper temperature thresholds.

#### L-Shaped Connectivity

Connectivity is located on both the bottom and side of the display to allow for easy access regardless of orientation





#### Blue ON LED and Ambient Light Sensor

New mechanical structure allows for sleeker LED and ambient light sensor design. Auto dimming of the LED backlights can be utilized through the ambient light sensor allowing for the brightness to change depending on the external lux in the room of installation.



#### Proof of Play

This function provides accurate proof that displays are working as established when checking from an external location. Information regarding video source, time on, audio source and more can be pulled through the display when coupled with NaViSet Administrator 2.

#### SpectraView Engine

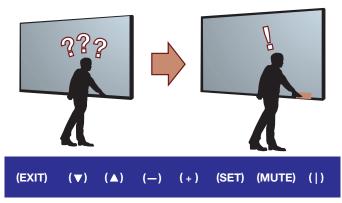
Enhanced imaging performance through advanced settings of all relevant parameters allow full control of brightness, color, gamma and uniformity via integrated color-critical chipset.

#### Auto TileMatrix, Auto ID and Auto IP Address Technologies

Auto IP Address simplifies control setup by setting the static IP address on the first display then initiating the feature so that the IP Addresses of consecutive displays follow the LAN daisy chain. These displays also have Auto TileMatrix and Auto ID that can, in the case of a video wall, automatically scale up to a UHD signal across the entirety of the wall through DisplayPort 1.2 while individually IDing each screen, saving time and overall cost of installation.

#### Key Guide

New Key Guide function allows for easier access to buttons when manually controlling the unit via the buttons on the back of the display by adding a graphic on the screen that directs the customer to the correct button layout in both landscape and portrait modes.



#### NaViSet Administrator 2

This software is an all-in-one remote support solution that runs from a central location and provides monitoring, asset management and control functionality of the majority of NEC display devices and Windows computers. It is ideal for multi-device installations over larger infrastructures.



#### **Dedicated Color Calibration Software**

As the brightness and color temperature of the LCD change with time, colors may not match across multiple screens. The NEC Display Wall Calibrator software ensures color uniformity and fidelity across multiple screens, creating a perfectly matched image in tiled environments.

# Display Wall Calibrator

#### Intelligent Wireless Data Function

The built-in near field communication (NFC) chip allows data to be read and written via a mobile phone or tablet PC. Users can significantly reduce installation costs as displays can be easily configured and serviced using the NEC NFC Android app. This is extremely useful for larger rollouts as it can be utilized even when the display is powered off.

# 

#### **Removable Logo**

When mounting from Landscape to Portrait orientation, there is now the ability to change the orientation of the logo or remove it all together





		V404	V484	V554			
LCD MODULE							
Panel Technology	1	SPVA		S-IPS			
Viewable Image	Size	40"	48"	55"			
Native Resolution	n		1920 x 1080	1			
Brightness (Typic	al/Minimum)		400 cd/m <sup>2</sup> / 500 cd/m <sup>2</sup>				
Contrast Ratio (Ty		4000:	1	1300:1			
Viewing Angle		178° Ver	t., 178° Hor. (89U/89D/89L/89R)	)@CR>10			
Aspect Ratio			16:9				
Displayable Colo	rs		Over 1.07 Billion				
Orientation		La	ndscape, Portrait, Face Up, Face D	Down			
Panel Haze (%)		25		44			
CONNECTIVITY							
	Digital	HDMI 2.0 x2 (with	HDCP), DVI-D (with HDCP), Displ	ayPort x2 (with HDCP			
	Analog		VGA 15-pin D-SUB, RCA Composi	ite			
Input Terminals	Audio	3.5mm Audio N	/ini Jack x2, DisplayPort Audio x	2, HDMI Audio x2			
	External Control	LAN (10	00Mbit), 3.5 Mini Jack IR Remote	e, RS232C			
	Data	microSD (Media Player), USB 2.0 (	Media Player), USB 2.0 (Service) Compute Module, Powered 5V/2	, USB Type-B (Upstream), USB 2.0 x2 2A)			
	Digital	Dis	playPort (Outputs DisplayPort or	OPS)			
Output Terminals	Audio		3.5mm Audio Mini Jack				
lemman	External Control		LAN (100Mb)				
POWER CONSUN	IPTION						
On (Typ/Max)		75W/95W	85W/105W	110W/150W			
Network Standby 3W							
Normal Standby			<0.5W				
Current Rating		2.7A - 1.1A @ 100V - 240V	2.7A - 1.1A @ 100V - 240V	3.3A - 1.4A @ 100V - 240V			
Speaker Rating		Inte	egrated 10W x 10W, Optional 15	W x 2			
PHYSICAL SPECIF	ICATIONS						
Bezel Width (L/R,	.T/B)	13.2mm/13.2mm/13	3.2mm/13.2mm	14.2mm/14.2mm/14.2mm/14.2mm			
Net Dimensions x H x D)	(Without stand; W	36.1 x 20.9 x 2.2 in. 918.0 x 530.6 x 54.7mm	42.8 x 24.6 x 2.2 in. 1086.5 x 625.3 x 54.7mm	49.0 x 28.1 x 2.5 in. 1244.0 x 714.8 x 62.9mm			
Net Weight (With	nout Stand)	31.5lbs / 14.3kg	38.8lbs / 17.6kg	54.2lbs / 24.6kg			
VESA Hole Config	guration		4x M6 x 12mm (300 x 300)				
SENSORS							
Ambient Light Se	ensor	Integrated and programmable					
Human Sensor		Optional through KT-RC2 Accessory					
Temperature Sen	ISOT	Integrated and programmable; linked to cooling fans					
NFC Sensor		Integrated; works in conjunction with free NEC Intelligent Wireless Data Application					
ENVIRONMENTA	LCONDITIONS						
Operating Tempe			0 to 40C				
Operating Humio	dity		20-80%				
Operating Altitud			3000m (9843ft)				
LIMITED WARRAM			3 years Advanced Replacement	t			
ADDITIONAL FEAT		Ambient Light Sensor, AMX Support, Auto ID/Auto TileMatrix, Automated Email Alert Function, CEC Support through HDMI, Crestron Roomview Support, DICOM Simulation, Display Browser Control, Display Wall Calibrator Compatible, High Haze Panel, Image Flip, Intelligent Wireless Data (NFC), Key Guide, Media Player through Browser Control/SD Card/USB, Multi Pricture Mode, Na/Stest Administrator 2 Compatible, OSD Rotation for Portrait Orientation, OPS Compatible, PJ Link Support, Point Zoom Function, Power USB Port (SV/CA), Programmable LUT x3, Raspberry PT Compute Module Compatible, Removeable Logo Oma- ment, Real Time Clock, SpectraView Engine Support, SNMP Support, 24 Hour Scheduler Function, UHD					
SHIPS WITH			Support through HDMI/DisplayP VI Cable, IR Remote Control, Batt				
OPTIONAL ACCES	SORIES	Table Top Stand (ST-401), Optional S	peakers (SP-TF1), All OPS Option	Cards, Raspberry Pi Compute Module i7), Slim Wall Mount (WMK-3255S),			

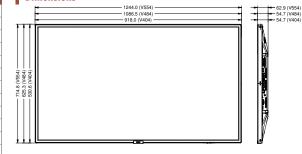


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Dimensions



#### Options

-	DC	n	C1-	
- U	22	r	ĽS	
			6 3	

OPS-APIC-P OPS-PCIB-P OPS-TCIS-PS	S OPS-	PCAEQ-PS APIS-PS	• • <b>D</b> =1183•
SDI			Alter manual and
HD-SDI	SB-01HC		<u> </u>
3G-SDI	SB-04HC		· [ <u><u>ě</u> <u>ě</u> [··</u>
HDBaseT	SB-07BC		• C 1 2 0 0 •
Compute M	odule		
	dule Interface Bo ry Pi Compute M		
Tabletop Sta	and	ST-401	
Speaker		SP-TF1	



#### **Input Panels**

1.	DVI-D	13.	USB2
2.	HDMI IN2	14.	USB CM1 (2A)
3.	DisplayPort IN2	15.	USB CM2
4.	DisplayPort IN1	16.	LAN1
5.	DisplayPort OUT	17.	LAN2
6.	VGA (RGB, YPbPr)	18.	VIDEO IN
7.	Audio IN1	19.	USB MP
8.	Audio IN2	20.	microSD
9.	External Speaker Terminal	21.	REMOTE IN
10.	Internal/External Speaker Switch	22.	RS-232C
11.	Audio OUT	23.	HDMI IN1
12.	USB1		





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Project Co <b>Item</b>	ode: 6362 <b>Qty</b>	Job Reference Number: 5194 Description	Sell	Sell Total
		·		
156	Ĩ	DUNNAGE RACK New Age Model No. 2020 Dunnage Rack, 36"W x 18"D x 12"H, all welded aluminum constru 1-1/2" x 1-3/4" x 0.070 tubing, welded aluminum caps on feet, we capacity 3000 lbs., NSF, Made in USA Lifetime warranty against rust & corrosion, 5 year workmanship a	eight	\$89.69
		material defects warranty, standard		400 CO
171		MOBILE WORK TOP PAN RACK	<b>ITEM TOTAL:</b> \$340.77	<b>\$89.69</b> \$340.77
		New Age Model No. 1313 Bun Pan Rack, mobile, undercounter, all welded aluminum construction, open sides, 8-pan capacity, accommodates 18" x 26 x 18", or 13" x 18" pans, slides on 3" centers, end loading, stainle steel top, reinforced uprights, (4) 5" stem swivel casters, NSF, M USA Lifetime warranty against rust & corrosion, 5 year workmanship a material defects warranty, standard	", 14" ss ade in	<i>9340.77</i>
			ITEM TOTAL:	\$340.77
200	1 ea	SNEEZE GUARD By Others Model No. CUSTOM		<by other=""></by>
215	1 ea	HAND SINK Existing Equipment Model No. EXISTING		<existing></existing>
250	1 ea	WORK TABLE, STAINLESS STEEL TOP	\$717.95	\$717.95
		Advance Tabco Model No. TKMS-304 Work Table, 48"W x 30"D, 16 gauge 304 stainless steel top with 5 backsplash, stainless steel legs with side & rear crossrails, adjust stainless steel bullet feet, NSF		
			ITEM TOTAL:	\$717.95
252	1 ea	WORK TABLE, STAINLESS STEEL TOP	\$717.95	\$717.95



Item	Qty	Description	Sell	Sell Total
		Advance Tabco Model No. TKMS-304		
1-		Work Table, 48"W x 30"D, 16 gauge 304 stainless steel top with 5"H		
		backsplash, stainless steel legs with side & rear crossrails, adjustable	e	
ļ	p	stainless steel bullet feet, NSF		
			TEM TOTAL:	\$717.95
257	1 ea	WORK TABLE, STAINLESS STEEL TOP	\$709.00	\$709.00
		Advance Tabco Model No. KMS-304		
-	TT	Work Table, 48"W x 30"D, 16 gauge 304 stainless steel top with 5"H		
		backsplash, 18 gauge stainless steel adjustable undershelf, stainless	;	
		steel legs & adjustable bullet feet, NSF		
·	1 ea	TA-33 Special working height (per table) - Reduce to 24" aff		
			TEM TOTAL:	\$709.00
340	1 ea	REFRIGERATOR, REACH-IN		<existing></existing>
		Existing Equipment Model No. EXISTING		
343	1 ea	PIZZA PREP TABLE		<existing></existing>
		Existing Equipment Model No. EXISTING		
410	1 ea	CONVEYOR OVEN, ELECTRIC	\$9,201.84	\$9,201.84
		Turbochef Model No. HCS-9500-23-V		
		High h Conveyor 1618™ Conveyor Oven, Rapid Cook, electric,		
		countertop, single deck, 36" conveyor length, 16" wide by 18" length		
I I		cook chamber, Catalytic converter, variable speed motor, idle mode	,	
		built-in self diagnostics, smart voltage sensor technology, cool to		
		touch covers and panels, stainless steel front, top, sides and back,	,	
		stainless steel interior, cULus, CE, UL EPH Classified, ANSI/NSF 4, TU	V	
	1	(ventless)		
	1 ea	All items FOB: Carrollton, Texas: Consumable/accessory orders less than \$5,000 will incur a handling fee. Orders shipping standard ground the stan	hd	
		will incur a \$15.00 handling fee. Orders shipping other than standard		
		ground will incur \$25.00 handling fee	•	
	1 ea	One year parts and labor warranty		
	1 ea			
	2 ea	HCS-4099 JetPlate, Standard, Top or Bottom, HhC 1618 Oven		
			TEM TOTAL:	\$9,201.84
470	1 ea	MIXER	\$9,460.50	\$9,460.50
		Precision N. America Model No. HD60.3		
		80 Quart Precision Pizza Mixer, 3 Phase,		
		208/240v. Includes 8060-quart hook, safety		
		guard, timer, #12 hub, and 80-quart stainless		Initial
				Initial:



ltem	Qty	Description	Sell	Sell Total
		steel mixing bowl. 1-year parts and labor,		
		3-year parts on motor, drive-train, and		
		transmission, 7-year parts on gears and		
		shafts in the planetary and transmission.		
	1 ea	GS-12 Cheese Grater Attachment, #12 Hub		
			ITEM TOTAL:	\$9,460.50
475	1 ea	CHEESE HOG		<by owner=""></by>
		BY OWNER Model No. PALAZZOLO GS-1		
		owner to buy direct		
482	1 ea	HOT FOOD WELL UNIT, DROP-IN, ELECTRIC	\$3,262.07	\$3,262.07
		Wells Model No. MOD-427TDM/AF		
		Food Warmer, top-mount, built-in, electric, auto-fill, (4) openings to	0	
16		hold (4) 1/3 size pans, manifold drains with one valve, wet/dry		
		operation, double control panel, thermostatic control, stainless ste	el	
		interior, aluminum steel housing, cULus		
	1 ea	Limited 2 year parts & 1 year labor warranty, standard		
	1 ea	Note: Must specify voltage and phase		
	1 ea	208/or 3-ph, 1.24/per well, field wired (field convertible)		
			ITEM TOTAL:	\$3,262.07
485	1 ea	DISPLAY CASE, REFRIGERATED DELI	\$11,263.18	\$11,263.18
		Federal Industries Model No. CGR5048CD		
		Curved Glass Refrigerated Deli Case, 50"W x 35"D x 48"H, self		
		contained refrigeration with condensate evaporator, adjustable		
		temperature control, curved thermopane tilt-front glass, LED top lig	ht	
		&lighted shelf, adjustable stainless steel mezzanine shelf, glass		
		sliding rear doors, white scratch resistant display deck, tempered gl		
		ends, removable rear wrapping board, choice of laminate, black trin	n,	
	1 00	designed for continuous lineups, 1/2 HP, UL, UL EPH CLASSIFIED		
		One year parts & labor warranty		
		Self-contained refrigeration standard		
		1/2 hp		
	1 ea	Five year compressor warranty, standard (for self-contained units		
	1	only) Laminate standard color - Black		
	1 ea	Casters, 2-1/2", includes cord & plug		
	теа		ITEM TOTAL:	¢11 767 10
196	1	COUNTER		\$11,263.18
486	теа			<by other=""></by>
		Custom Model No. CUSTOM		



Item	Qty	Description	Sell	Sell Tota
487	1 ea	EXHAUSE HOOD		<existing></existing>
		Existing Equipment Model No. CUSTOM		
700	1 ea	PORTION SCALE	\$356.80	\$356.80
		Edlund Model No. EPZ-10		
ζ		Pizza Scale, digital, 1" LCD display, 12-1/4" x 12-1/2" platform, four		
(		display options: 10 lbs. x 0.005 lbs./ 5 kg x 0.002 kg/ 10 lbs. x 0.1 oz./ 2		
-		oz. x 0.1 oz., reads: lbs., oz. & grams, wall mounting bracket, stainles steel, NSF, CE	S	
	1 ea	1 year limited warranty, standard		
			ITEM TOTAL:	\$356.80
740	3 ea	INGREDIENT BIN	\$399.11	\$1,197.33
a to		Rubbermaid Commercial Products Model No. FG360088WHT (27088)		
		ProSave <sup>®</sup> Ingredient Bin, 2-3/4 cu. ft., 13-1/8"W x 29-1/4"D x 28"H,		
	-	mobile, slant front with sliding lid, 32 oz scoop, seamless construction	on,	
		3" extra wide casters front fixed & rear swivel, white base/clear lid,		
6	•	USDA, FDA, NSF, S.O.S. (Special Order Smallwares) product; see SOS		
		document for details, Made in USA (CANNOT BREAK CASE)		
	3 ea	ZZARUBBERPROP65 WARNING: This product can expose you to		
		chemicals, which is known to the State of California to cause cancer		
		and/or other reproductive harm. For more information go to		
	2	www.P65Warnings.ca.gov.		
	3 ea	FG9F7700CLR (27089) ProSave <sup>®</sup> Ingredient Bin Lid, 29"W x 12-1/10"D 1-9/10"H, fits #3600 ingredient bin, includes 32 oz. scoop, clear, S.O.		
		(Special Order Smallwares) product; see SOS document for details,	5.	
		NSF (CANNOT BREAK CASE)		
			ITEM TOTAL:	\$1,197.33
760	1 ea	PIZZA DISPLAY PACKAGE		<by other=""></by>
		By Others Model No. CUSTOM		-,
780	2 ea	DISPOSABLE CUP DISPENSER	\$87.60	\$175.20
		San Jamar Model No. C2410C (46338) Packed 6 ea		
		EZ-Fit <sup>®</sup> One Size Fits All Dispenser, in-counter mount, 23-1/4"L tube	, 5-	
		3/4" diameter counter hole, for 8 to 46 oz. paper/plastic/foam cups		
		with rim diameter of 2-7/8" to 4-3/4", vertical or horizontal, high-		
		impact plastic, NSF		
	2 pk	C24XC Euro EZ-Fit <sup>®</sup> Rings, for C2410C, metal finish (bagged with heacard) (2 each per pack)	der	
			ITEM TOTAL:	\$175.20
800	2 ea	POS TERMINAL		
		By Others Model No. BY OTHER		,
				Initial:



Item	Qty	Description	Sell	Sell Total
860	1 ea	MENU BOARDS		<by other=""></by>
		By Others Model No. BY OTHER		
900	1 ea	SIGNAGE		<by other=""></by>
		By Others Model No. BY OTHER		
901	1 ea	SIGNAGE		<by other=""></by>
		By Others Model No. BY OTHER		
s1	1 ea	CONSOLIDATION/DELIVER \$1,920	.80	\$1,920.80
		TRIMARK STRATEGIC Model No. CUSTOM		
		price to consolidate for 2 months and delivery equpiment package in		
		one trip with liftgate during normal business hours monday - friday		
		8am - 5pm.		
		any storage periods after 2 months or additional delivery trips will be		
		charged accordingly.		
		ITEM TOTAL:		\$1,920.80
		Merchandise		\$39,413.08
		Freight		\$1,589.99
		Subtotal		\$41,003.07
		Total		\$41,003.07
	Acceptance: Date:			
	Printed N			