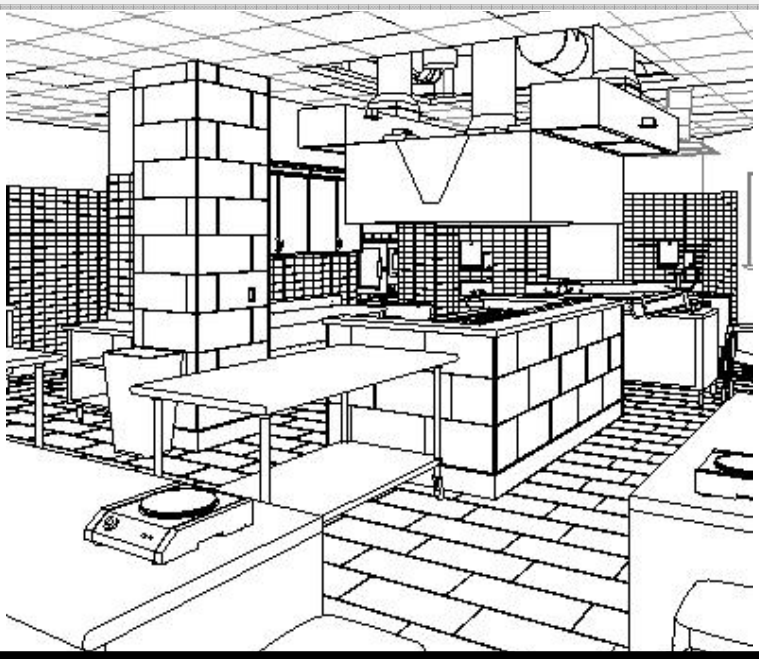

PROJECT MANUAL – Kitchen Equipment Procurement

DECEMBER 01, 2017

BL227 IU READ HALL - CATERING KITCHEN EQUIPMENT PACKAGE

INDIANA UNIVERSITY BLOOMINGTON
BLOOMINGTON, INDIANA

ARCHITECT :
CSO Architects, Inc
8831 Keystone Crossing, Indianapolis, IN 46240
T (317) 848.7800

MEP ENGINEERS:
Circle Design Group
5510 S. East Streeet, Indianapolis, IN 46227
T (317) 781-6200

STRUCTURAL ENGINEERS:
Cornerstone Engineering, Inc
7212 North Shadeland Ave., Suite 200, Indianapolis, IN 46250
T (317) 579-

INFORMATION TECHNOLOGY:
Design 27, Inc.
5636 Winthrop Ave., Indianapolis, IN 46220
T (317) 536-8000

TITLE AND LOCATION OF WORK

INDIANA UNIVERSITY BLOOMINGTON

BL227 READ HALL
CATERING KITCHEN
EQUIPMENT PACKAGE

Bloomington, Indiana

OWNER:

Indiana University
1800. North Range Road
Service Buidling BL630
Bloomington, Indiana 47408

ARCHITECT:
CSO Architects, Inc.
8831 Keystone Crossing
Indianapolis, Indiana 46240

MECHANICAL AND ELECTRICAL ENGINEERS:

Circle Design Group, Inc.
5510 S. East Street
Indianapolis, Indiana 46227

STRUCTURAL ENGINEERS:

Cornerstone Engineering, Inc.
7212 North Shadeland Ave., Suite 200
Indianapolis, Indiana 46250

INFORMATION TECHNOLOGY:

Design 27 Technology and Acoustics, Inc.
5366 Winthrop Avenue
Indianapolis, Indiana 46220

PROCUREMENT AND CONTRACTING DOCUMENTS GROUP

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

Indiana University Invitation to Quote
Formal Bid Proposal
Supplier's/Contractor's Representation
Proposal Certification
Minority, Women's and Veteran's Business Enterprise Participation Plan
E-Verify Affidavit
Provisions: Terms and Conditions
VPCPF Contractor Operating Guidelines
Attachment A – University Departments & Services
Attachment B – As Built Requirements
Attachment C – VPCPF Directory
Contractor and Supplier Operating Summary

SPECIFICATIONS GROUP

General Requirements Subgroup

DIVISION 01 - GENERAL REQUIREMENTS
NOT APPLICABLE

Facility Construction Subgroup

DIVISION 02 - 08
NOT APPLICABLE

DIVISION 09 – FINISHES
09 78 13 Stainless Steel Wall Panels

DIVISION 10 - SPECIALTIES
NOT APPLICABLE

DIVISION 11 - EQUIPMENT
11 40 00 Food Service Equipment
11 40 10 Food Service Equipment Schedule

DIVISION 12 – FURNISHINGS
12 36 16 Metal Countertops

DIVISION 13 - 14
NOT APPLICABLE

Facility Services Subgroup

DIVISION 21 - 22
NOT APPLICABLE

DIVISION 23 - 28
NOT APPLICABLE

Site and Infrastructure Subgroup

DIVISION 31 - 33
NOT APPLICABLE

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Date: October 18, 2017

Indiana University Invitation to Quote

Purpose:

The intent of this Request for Quotation (RFQ) is to solicit the necessary information and communicate the Indiana University ('University') standard terms and conditions concerning the materials and or services required and described herein in order to select a Supplier or Contractor as an approved source based upon their competitive response.

BL227 Read Hall Catering Kitchen Equipment Package
Project Number#: 20165072
IU Campus: Bloomington

QUOTES DUE – January 4, 2018 at 2:00 pm

Quotes should include:

1. **Formal Bid Proposal Form**
2. **Supplier's Representation Form**
3. **Proposal Certification Form**
4. **Minority, Women's and Veteran's Business Enterprise Participation Plan**

(MANDATORY) Pre-Quote Conference - Friday December 8th, 2017 at 11:00 am and Wednesday December 13th, 2017 at 11:00 am. Not required to attend both.

Room C138 - IU Read Hall
125 S. Jordan Ave., Bloomington IN 47406

All inquiries for information and submittal of quotes regarding this request should be directed to:

Vice President for Capital Planning & Facilities
Procurement, Support Resources
1800 N Range Rd
Bloomington, IN 47408
PHONE: 812-855-5294
bidtab@indiana.edu

The purpose of the Pre-Quote Conference will be to clarify the contents of this Invitation to Quote (RFQ) in order to prevent any misunderstandings of the University's position. Any doubt as to the requirements of this RFQ, or any apparent omission or discrepancy should be presented to the University representative at this conference. The University representative will issue a written amendment to the RFQ. Oral statements or instruction shall not constitute an amendment to this RFQ.

FORMAL BID PROPOSAL

Bid Due: January 4, 2018 2:00 pm

*** * E-Mail to bidtab@indiana.edu**

PROJECT NAME & #: 20165072 BL227 Read Hall Catering Kitchen Equipment Package

---

LIST ALL PROJECT DOCUMENTS RECEIVED:

_____

_____

_____

BASE BID: (Labor) $ _____ + (Material) $_____ = $_____

PROJECT COMPLETION DATE / DAYS TO COMPLETE: **July 27, 2018**

SUBCONTRACTOR LIST (by company)	Diversity Classification
1. _____	_____
2. _____	_____
3. _____	_____

CONTRACTOR'S COMMENTS:_____

_____

COMPANY NAME: _____

COMPANY PHONE: ( )_____COMPANY FAX:( )_____

We agree to perform all work in accordance with all University construction documents, Contractor Operating Guidelines, standards, terms and conditions.

_____ _____

(Representative's Signature) (Date) (e-mail address)

_____

(Name) (Title)

SUPPLIER'S / CONTRACTOR'S REPRESENTATION

By the act of submitting a Quote for the proposed contract award, the Supplier or Contractor represents that:

- The Supplier, Contractor, and all subcontractors have carefully and thoroughly reviewed the drawings, specifications and or other construction documents provided and have found them complete and free from ambiguities and sufficient for the purpose intended.

- The Supplier or Contractor and all workers, employees and subcontractors are skilled and experienced in the type of construction represented by the construction contract documents quoted upon.

- The quote is based solely upon the materials specifications or construction contract documents and properly issued written addenda(s) or (clarification sheet(s), and not upon any other written or oral representation.

- Neither the Supplier or Contractor, or any of its employees, agents, intended Suppliers or subcontractors have relied upon any verbal representations from the University or its employees in assembling the quotation.

- Supplier or Contractor, and its subcontractors acknowledge that no asbestos containing products were specified for use in this project and that to the best of their knowledge no asbestos products will be used.

- The Contractor, Supplier or subcontractors accepts that their response to this RFQ, the terms and conditions set forth herein and the specifications, references and clarifications provided shall all become a part of any contract or purchase order awarded as a result of this solicitation.

- E-Verify:

  - Supplier or Contractor shall enroll in and verify the work eligibility status of all newly hired employees of the Supplier or Contractor through the E-Verify program as described in IC 22-5-1.7-3. Supplier or Contractor is not required to verify the work eligibility status of all newly hired employees through the E-Verify program if the E-Verify program no longer exists. Prior to commencing the Work, Supplier or Contractor shall sign and provide an affidavit, in a form acceptable to Owner, affirming that the Supplier or Contractor does not knowingly employ any unauthorized aliens. Neither Supplier or Contractor nor any of its Subcontractors may knowingly (a) employ or contract with an unauthorized alien or (b) retain an employee or contract with a person that the Supplier, Contractor or Subcontractor subsequently learns is an unauthorized alien. If Supplier or Contractor uses a Subcontractor to provide work or services for any portion of the Work, Supplier or Contractor must obtain certification from the Subcontractor that the Subcontractor, at the time of certification (a) does not knowingly employ or contract with any unauthorized aliens, and (b) has enrolled and is participating in the E-Verify program.

  - Prior to commencing any work, Supplier or Contractor agrees, and represents to Owner, that Supplier or Contractor and all subcontractors of any tier that furnishes any portion of the Work, either directly or indirectly to Supplier or Contractor (collectively referred to herein as "Subcontractors"), will submit the E-Verify case verification number for each individual who is required to be verified under IC 22-5-1.7 prior to commencing work in connection with the Project.

- Supplier or Contractor agrees, and represents to Owner, that at least 15% of the Base Bid, including any accepted alternates, (at the time the bid or quote is accepted) is comprised of any combination of the following

  - Work performed by Supplier or Contractor's employees;
  - Services supplied directly by Supplier or Contractor's employees; or
  - Material supplied directly by Supplier or Contractor

- Supplier or Contractor agrees, and represents to the Owner, that Supplier, Contractor and Subcontractors will comply with the following employee related programs and laws during the Project:

  - Supplier, Contractor and Subcontractors will not pay cash to any employee for any work performed on the Project.

  - Supplier, Contractor and Subcontractors are, and will continue to be during the Project, in compliance with the following:

    (a) The Federal Fair Labor Standards Act of 1938, as amended and IC 22-2-2-1 through IC 22-2-2-8;
    (b) IC 22-3-5-1 and IC 22-3-7-4; and
    (c) IC 22-4-1 through IC 22-4-39.5.

Acknowledged:

By Representative: _____

For Company: _____

Date: _____

PROPOSAL CERTIFICATION

_____
(Date)

VPCPF Support Resources
1800 N Range Rd
Bloomington, IN 47408

The undersigned certifies that to the best of his/her knowledge: **(check one)**

( ) There is no officer or employee of the University who has, or whose relative has, a substantial interest in any contract award subsequent to this proposal/Quote.

( ) The names of any and all public officers or employees of the University who have, or whose relative has, a substantial interest in any contract award subsequent to this proposal/Quote are identified by name as part of this submittal.

The undersigned further certifies that their firm (check one) _____IS or _____ IS NOT currently debarred, suspended, or proposed for debarment by any federal entity. The undersigned agrees to notify the University of any change in this status, should one occur, until such time as an award has been made under this procurement action.

In compliance with this Invitation to Quote for **BL227 Read Hall Catering Kitchen Equipment Package, 20165072** and after carefully reviewing all the terms, conditions and requirements contained therein, the undersigned agrees to furnish such goods/services in accordance with the specifications/scope of work.

_____
(Firm)

_____
(Fed. Id no.)

_____
Street Address

_____
City, State, Zip

_____
(By)

_____
(Title)

MINORITY, WOMEN'S AND VETERAN'S BUSINESS ENTERPRISE PARTICIPATION PLAN

The Bidder/Firm is expected to submit with its bid/proposal a Minority, Women's, and Veteran's Business Enterprise Participation Plan. Minority Business Enterprise (MBE), Women's Business Enterprise (WBE), and Veteran's Business Enterprise (VBE) are defined below. In this Plan, the Bidder/Firm must show that there are certified racial minority-, women-, and/or veteran-owned enterprises participating in the project. Participation may be as a subcontractor or second tier participation with common suppliers (e.g., office suppliers, courier services). The Bidder/Firm must indicate the name of the MBE/WBE/VBE(s) with which it will work; the contact name and phone number at the MBE/WBE/VBE(s); the service supplied by the MBE/WBE/VBE(s); and the specific dollar amount from the project that will be directed toward each MBE/WBE/VBE. Please note: If the Trade is an overhead item for your entire business, please calculate the proportion of the business that will actually apply to the project in question.

Documentation of the Bidder's/Firm's good faith effort to meet the participation goal must be submitted at bid time; see Page 3 of this form.

Failure to provide the Plan and evidence of a good faith effort at the time of bid/proposal submission will result in the rejection of the bid/proposal. Indiana University reserves the right to verify all information included in the Minority, Women's, and Veteran's Business Enterprise Participation Plan before making final determination of the Bidder's/Firm's responsiveness and responsibility.

By submission of the bid/proposal, the Bidder/Firm thereby acknowledges and agrees to be bound by the IU Business Diversity Initiative. Questions involving the Minority, Women's, and Veteran's Business Enterprise Participation Plan should be directed to the IU Business Diversity Department at 317/278-5384.

Definitions:

a. "Minority Business Enterprise" (MBE) means an individual, partnership, corporation, limited liability company, or joint venture of any kind that is owned and controlled by (1) or more persons who are (a) United States citizens; and (b) members of a racial minority group: African American, American Indians, Hispanics, Asian Americans, or other similar minority group as defined by 13 CFR 124.103

b. "Women's Business Enterprise" (WBE) means an individual, partnership, corporation, limited liability company, or joint venture of any kind that is owned and controlled by (1) or more persons who are (a) United States citizens; and (b) whose gender is female.

c. "Veteran's Business Enterprise" (VBE) means an individual, partnership, corporation, limited liability company, or joint venture of any kind that is owned and controlled by (1) or more persons who are (a) United States citizens; and (b) veterans or service-disabled veterans.

MBE/WBE/VBE PARTICIPATION PLAN

PROJECT # _____ BID/PROPOSAL DUE DATE _____

PROJECT NAME _____

BIDDER/FIRM _____

ADDRESS _____

CITY/STATE/ZIP _____

PHONE: ( ) _____

EMAIL: _____

URL: _____

MBE, WBE and VBE Participation Plan (Continued)

BIDDER/FIRM _____ PROJECT # _____

PROJECT NAME _____

The following certified minority-, women- and/or veteran-owned firms will be participating in the project according to the following schedule. Indicate whether each firm is an MBE, WBE or a VBE by circling MBE, WBE or VBE below.
Submit each firm's certification document, within 48 hours post-bid, to the Owner via fax @ 812-855-5635.

1. MBE/WBE/VBE **TRADE** **AMOUNT**

_____

CONTACT NAME **PHONE** **EMAIL**

_____

2. MBE/WBE/VBE **TRADE** **AMOUNT**

_____

CONTACT NAME **PHONE** **EMAIL**

_____

3. MBE/WBE/VBE **TRADE** **AMOUNT**

_____

CONTACT NAME **PHONE** **EMAIL**

_____

4. MBE/WBE/VBE **TRADE** **AMOUNT**

_____

CONTACT NAME **PHONE** **EMAIL**

_____

If additional room is necessary, please attach a separate page.

By my signature, I certify that the above statements are true and accurate, all as of the date below. I also understand that any changes to this plan must be approved by Indiana University and documented by Construction Change Directive.

_____
Agent of Bidder

_____
Date

MBE, WBE and VBE Participation Plan (Continued)

BIDDER/FIRM _____ PROJECT # _____

PROJECT NAME _____

Describe below your efforts to obtain minority, women's and veteran's business enterprise participation for this project. Be sure to attach a copy of all solicitation efforts, e.g., ads that were published or networking events, etc.

_____

_____

_____

_____

_____

List below the minority contractors you individually contacted to request a quote for this project.

Check all that apply:

Minority firms contacted (company name and commodity)	Method of contact (i.e., phone number, fax number, email address, mailing address AND contact name)	MBE	WBE	VBE	Quote Rec'd – Not low	No response

If extra space is necessary, please attach additional pages.

PA

GES 1, 2, AND 3 OF THIS DOCUMENT MUST BE SUBMITTED WITH THE BID

This page will be requested of the contractor awarded the project

E-VERIFY AFFIDAVIT

The undersigned, being first duly sworn, states and deposes that:

1. He or she is a representative of the Company identified below, and is authorized to make this affidavit on behalf of the Company.

2. Pursuant to Indiana Code 22-5-1.7-11, a contractor, vendor or other service provider who enters into an agreement to provide work or services to The Trustees of Indiana University, Bloomington, Indiana, is required to enroll in and verify the work eligibility status of all its newly hired employees through the electronic verification of work authorization program of the Illegal Immigration Reform and Immigration Responsibility Act of 1996, as amended (the "E-Verify Program").

3. Based on the above, the undersigned hereby confirms that:
   a. The Company has enrolled in, and is participating in, the E-Verify Program; and
   b. The Company does not knowingly employ any unauthorized aliens.

I swear or affirm, under the penalties for perjury, that the foregoing statements are true.

_____ _____
Company Name *Project*

_____ _____
Signature *Printed Name*

_____
Title

STATE OF _____

COUNTY OF_____

Before me, a Notary Public in and for said County and State, personally appeared _____, who being first duly sworn, acknowledged the execution of this E-Verify Affidavit, and stated that the facts and matters therein set forth are true and correct to the best of his or her knowledge.

Witness my hand and Notarial Seal this ____ day of _____, _____.

_____ My Commission Expires:_____
Notary Public

_____ My Count of Residence:_____
Printed Name

PROVISIONS: TERMS AND CONDITIONS

INSTRUCTIONS TO POTENTIAL SUPPLIERS:

1. Proposals ***must*** be addressed and delivered to the VPCPF Support Resources, on or before the time and date of Quote Due. Quotes may be e-mailed to bidtab@indiana.edu, sent by facsimile (812-855-5635), delivered in person, or by US Postal mail.

2. No oral advice given to Suppliers or Contractors will bind the University, and a prospective Supplier or Contractor ***must*** seek clarification in writing so that the University may provide any clarification in writing to all participating Suppliers or Contractors. All inquiries or requests for clarification or interpretation or to notify the University of errors or omissions relating to the Invitation To Quote ***must*** be directed, in writing or by facsimile, to:

   Vice President for Capital Planning & Facilities
   Support Resources - Construction Procurement
   1800 N Range Rd / Bloomington IN 47408
   bidtab@indiana.edu / Phone: 812-855-5294

3. No department, school, or office at the University has the authority to solicit or receive official proposals for this project other than the Vice President for Capital Planning & Facilities office. All solicitations are performed under the direct supervision of this office, and in complete accordance with University policies and procedures.

4. As indicated in the University Contractor Operating Guidelines, the Supplier, Contractor, or Subcontractor ***shall*** be required to conform to the policies, rules, regulations and requirements of the University, pertaining to behavior, performance, receiving materials, equipment and the conduct of its employees or subcontractors while on the premises.

5. The University reserves the right to conduct discussions with Bidders, and to seek and accept revisions of proposals, and to negotiate price changes. During this discussion period, the University will not disclose any information derived from proposals submitted or from discussions with other bidders. Once an award is made, the solicitation file and the proposals contained therein are public record and will be disclosed upon request.

6. The University is committed to the development of Disadvantaged Business Enterprise (DBE) [Minority Business Enterprise (MBE), Woman-Owned Business Enterprise (WBE), and Small Business Suppliers (SB)]. If subcontracting is necessary, the Contractor will make every effort to use a DBE in the performance of this contract. A report will be required at the completion of the contract indicating the extent of DBE participation. A description of the bidders expected efforts to solicit DBE participation should be enclosed with the proposal. (To include Subcontractor Names and Diversity Classifications)

7. Any manufacturer names, trade names, brand names or catalog numbers used in the specifications are for the purpose of describing and or establishing the quality, design and performance required. Any such reference is not intended to limit or restrict an offer (unless indicated) by any Contractor or Supplier but is only enumerated in order to advise potential Supplier of the requirements for the University. Deviation from the stated specifications within this solicitation shall be annotated in the exception area on "Project Quote Form". Any offer, which, proposes like quality, design or performance will be considered, but ***must*** be accepted as equal from an authorized University Construction Manager.

8. Any person, firm, corporation or association submitting a proposal ***shall*** be deemed to have read and understood all the terms, conditions and requirements in the specifications/scope of work, included herein and in the Contractor Operating Guidelines.

9. Bidders invited to submit formal sealed price Quotes ***shall not*** be required to submit a quote bond or a performance bond with the Invitation to Quote.

10. If subcontractors are included in the proposals, then only one subcontractor per work category is to be listed on the Bid Proposal.

11. Control and possession of the premises ***shall*** remain with the University and Contractor(s) ***shall*** respect the University's rights therein.

12. The Contractor, Supplier or subcontractor agrees to execute its respective responsibilities by following and applying at all times the highest professional and ethical standards. The Contractor, Supplier or subcontractor ***shall*** employ only competent employees skilled in the work specified and shall enforce good order among them. The Contractor, Supplier or subcontractor ***shall*** be called upon to dismiss any employee when, in the opinion of the University, the employee is disobedient, incompetent, unfaithful, disrespectful, or otherwise exhibits conduct inappropriate to the University and its policies. If the University becomes dissatisfied with the work product or the working relationship with those individuals assigned to work on this or any contract, the University may request the replacement of any or all such individuals.

13. Indemnification: Both parties shall indemnify the other party, and the agents and employees of either against damages, losses, and expenses occurring in connection with or in any way incident to or arising out of the occupancy, use, service, operations, or performance of work in connection with any legal agreement/contract arising from the provider(s) services, except for matters caused solely by the University's negligence. Provided however, that the University's obligations hereunder shall be limited in substance by statutes and constitutional provisions designed to protect the exposure and liability of University as an instrumentality of the State of Indiana e.g. actions and conditions as to which the University is immunized by the Indiana Tort Claims Act, dollar limits stated in such Act, exemption from punitive damages, the continued ability to defeat a claim by reason of contributory negligence or fault of claimant, so that it's liability to indemnify, defend and hold harmless shall not exceed what might have been its liability to a claimant if sued directly by the claimant in Indiana and all appropriate defenses had been raised by the University.

14. The Contractor or subcontractor agrees to remedy any defects due to faulty materials, equipment, or workmanship at no cost to the University and shall be financially responsible for any damages to University property resulting from such defects for a period of two (2) years from the date of Substantial Completion unless otherwise specified and agreed to in writing. It is understood that all guarantees from materials and equipment manufacturers for the purposes of the project specifications hereunder shall pass to the University at final payment.

15. In the event that either party is unable to perform any of its obligations under this contract or to enjoy any of its benefits because of (or if failure to perform the services is caused by) natural disaster, actions or decrees of governmental bodies or communication line failure not the fault of the affected party (hereinafter referred to as a "Force Majeure Event"), the party who has been so effected shall immediately give notice to the other party and shall do everything possible to resume performance. Upon receipt of such notice, all obligations under this contract shall be immediately suspended. If the period of nonperformance exceeds thirty (30) days from the receipt of notice of the Force Majeure Event, the party whose ability to perform has not been so effected may, by giving written notice, terminate this contract.

16. Quoted prices are considered valid for sixty (60) days from Quote opening date unless stated otherwise.

17. Materials or equipment shall be quoted FOB destination, freight allowed.

18. The Certificate of Insurance and Worker's Compensation Certificate must be received in the Vice President for Capital Planning & Facilities prior to commencement of work by the Contractor and/or subcontractor preferably within 48 hours of bid award.

19. No work may commence on any University property or facility prior to the receipt by the Contractor of a University Purchase Order.

20. The University will not pay for stored materials unless prior approval is granted by the office of the Vice-President Capital Planning and Facilities, which will be applicable to unique situations.

VPCPF CONTRACTOR OPERATING GUIDELINES

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All prime contractors and all subcontractors are bound by the same provisions of the contract as the prime. These guidelines are prepared to assist the contractor in understanding their responsibilities concerning contract administration.

Prior To Start Of Work

The following documents must be received prior to contractor Mobilization.

For Invitational Bids under $150,000

- Certificate of Liability Insurance - **Must be received and approved**
- Worker's Compensation Certificate of Compliance - **Must be received**

IU VPCPF Support Resources
1800 N Range Road / Bloomington IN 47408
bidtab@iu.edu / Phone: 812-855-5294

Correspondence and Communication

- All correspondence must contain the Project Name and IU Project Number.
- All direction on this project must come from either the IU VPCPF personnel or Owner's Representative ONLY.
- Provide shop drawings, submittals and other data as required by the Owner's Representative.
- e-Builder – Indiana University has chosen to host and use the e-Builder collaboration system for use in posting documents, drawings, meeting minutes, photos, etc. The IU Team Lead will request your access for the project and if you are a new user you will be sent instructions for using the system. The site login URL is: http://www.e-builder.net/
- Provide emergency phone numbers for contractor and subcontractors that can be reached 24 hours per day, 7 days per week.

Project Construction Schedule

- The Contractor is responsible to submit a Critical Path Method (CPM) schedule for review and approval prior to the start of work. Please review the specifications for the complete list of requirements.
- Updated Progress Schedules shall be submitted throughout the duration of the project.

Rules & Regulations

- General
  - Absolutely no entertainment radios (this includes: headphones, I-Pods, and MP3 Players)
  - Absolutely no tobacco products are allowed
  - Under no circumstances will sexual harassment be tolerated. Violators will be asked to vacate the premises immediately.
  - Construction workers shall remain properly clothed at all times
  - No shorts, No sleeveless shirts, No offensive language on clothing
- Construction Site
  - Protection of university property, adjacent areas, vehicles and pedestrians, whether written or implied, is the responsibility of the contractor, his subcontractors, and persons employed by each.
  - All construction activities need to remain within the construction limits
  - In the event of a building alarm the contractors are required to evacuate
  - Construction fencing location (if required) shall be coordinated with IU Project Manager
  - Construction site is to be cleaned daily and kept orderly
  - When cutting or grinding concrete or masonry, water or vacuums must be used to prevent dust migration
  - Dumpster location and Site / Building access shall be coordinated with IU Project Manager

Shut-Down Procedures

- Allow a minimum of 72 hours' notice prior to any anticipated shutdowns.
- Shutdowns are used for more than utility shutoff. These are also used to notify zone personnel as well as building occupants of upcoming construction activities.
- Do not shut-off any existing services without prior direction from university personnel.

Hot Work Permits

- Contact the IU Facility Operations Control Center at 812-855-9514 to obtain a permit for the day.
- 72 hours prior to cutting or welding, the contractor's designated fire safety supervisor will complete the tag and post onsite.
- The responsibility for completing the tag and complying with NFPA contractually rests with the contractor and/or subcontractor.
- Each area performing hot work requires a separate Hot Work Permit.
- Hot work permits must be filled out daily and cannot serve for multiple days.
- Use tags when onsite combustible materials or construction activities present a fire hazard to lives or Indiana University property or when deemed necessary by the IU Construction Manager.
- If the IU Construction Manager observes a violation that presents an immediate threat to life or property, the hazardous work will be shut down immediately. The IU Construction Manager will then resolve the issue with the contractor.

Payment Procedures

- Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment:
    - List of subcontractor / vendors
    - Subcontractors on the project are as listed on the bid form. Changes to the subcontractor list, including additions, must be executed via Construction Change Order to be considered accepted by Indiana University.
    - Submit schedule of values for approval to Architect and IU Project Manager
    - Contractor's final construction schedule
    - Submittal schedule
- Monthly Applications for Payment
    - Certificates for Payment shall be issued monthly provided the work is processed diligently and to the satisfaction of the Owner's Representative and Owner and shall be in the amount 5% less than the value of the work completed and materials appropriately stored on the site to the date of application of the Certificate.
    - If, upon Substantial Completion of the Work, there are any remaining uncompleted minor items and/or Punch List items, the Owner shall be entitled to retain up to two hundred percent (200%) of the dollar value of such items until those items are completed. In addition, Owner shall be entitled to retain up to one hundred percent (100%) of any unresolved claims against the project until Owner has received written notification that all claims have been resolved. Owner shall release all retainage after all items are complete and all claims are resolved.
    - Pencil copies of Application for Payment shall be submitted to the Owner's Representative and IU Project Manager for approval prior to formal submission.

- AIA Form G702 & G703 is required for payment requests but notarization on the form is not a requirement. **Submit two (2)** directly to Consultant, if there is one; and **one (1)** directly to IU if there is not. After it has been signed by the Consultant, the approved Pay Application is forwarded to:

  Barbara Wells
  IU VPCPF Support Resources
  1800 N Range Road
  Bloomington, IN 47408
  812-855-5316

- Final Payment Applications must contain a Final Waiver of Lien document, signed and notarized.

Construction Change Directives (CCD)

- Markups: Include 25% on Labor and 10% on Material and Equipment. Contractor may add 5% markup for himself when processing changes performed by subcontractor.
- Do not include markup on Change Directives for bond, insurance, tax or supervision.
- Hard copies of executed CCDs will not be mailed. A valid e-mail address must be provided for the appropriate person to receive.
- If there is an outside Consultant, they will issue Change Directives on the IU form with Consultant and Contractor's signatures. If there is no Consultant, the IU Project Manager will have it issued to the contractor.

Progress Meetings

- Progress meetings will be held bi-weekly throughout the duration of the project.

  Tentative Date:__

  Tentative Time:__

Closeout Documents

- Refer to the Supplementary General Conditions in the project specifications book to determine the Closeout Project Category of this project.
- Per the Indiana University As-Built and Record Document Requirements, submit closeout documents to the Owner's Representative for approval, who will forward to the following so that final payment may be made. **(Attachment C)**

  - For IUB and IUS projects –

    Clifton Hubbard / IU VPCPF Space Information / 1800 N Range Road / Bloomington IN 47408

  - For all other campuses –

    Tonie Barrett / IU VPCPF / Regenstrief / Suite 4100 / 1050 Wishard Blvd / Indianapolis IN 46202

- AIA form G704 Certificate of Substantial Completion, with punchlist attached, will be issued and signed by the Owner's Representative, if there is one. If there is no consultant, IU will issue the completion letter. Form will then be sent to the contractor for signature and forwarded to –

  IU VPCPF Support Resources / 1800 N Range Road / Bloomington IN 47408

- Projects with Roof Warranty must submit the manufacturer's roof warranty as part of close-out procedure for final payment. Send to –

  IU Construction Management / 1800 N Range Road / Bloomington IN 47408

Attachments

1. **Attachment A – University Departments & Services**
2. **Attachment B – As-Built Requirements**
3. **Attachment C – VPCPF Directory**

Attachment A

University Departments & Services

Campuses

Campus	Location	Acronym
Bloomington	**Bloomington, IN**	**IUB**
Columbus	**Columbus, IN**	**IUPUC**
East	**Richmond, IN**	**IUE**
Indianapolis	**Indianapolis, IN**	**IUPUI**
Kokomo	**Kokomo, IN**	**IUK**
Northwest	**Gary, IN**	**IUN**
Southeast	**New Albany, IN**	**IUS**
South Bend	**South Bend, IN**	**IUSB**

Asbestos Handling

- Asbestos Awareness Training for all contractor personnel is required for projects taking place in buildings or spaces built prior to January 1, 1981 unless otherwise directed by the Owner.

IUB / IUE / IUK / IUN / IUS / IUSB - 812-856-3108 - Jami Bennett-Hamman
IUPUC – 317-274-5239 – Jerry Bush
IUPUI - 317-274-5239 - Jerry Bush

Campus Police

IUB - 812-855-4111
IUPUC – Columbus Police Department 812-376-2600 / IUPUC Business Office 812-348-7399 /
Paul Burris - 812-348-7237
IUE – 765-993-3488 or 765-973-8429
IUPUI - 317- 274-7911- Bob True
IUK – 765-455-9363
IUN - 219-980-6969
IUS - 812-941-2400
IUSB – 574-520-4499

Environmental Health & Safety

- Contractor is required to complete the online safety training which can be accessed through the following web address: **http://ehs.iupui.edu/training.asp?content=contractor-safety-training**

IUB - 812-855-6311
IUPUC – 812-348-7237 – Paul Burris
IUE / IUS - 812-941-2989 - Jon Hoffman
IUPUI – 317-274-4612 – Lee Langlotz
IUK / IUSB - 574-520-4575 - Kellene Quillen
IUN – 219-981-4230 - Kathryn Manteuffel

Facilities

IUB – 812-855-8728
IUPUC – 812-348-7237
IUE - 765-973-8254 – Gail Smoker
IUPUI - 317-278-1900 - Campus Facility Services
IUK - 765-455-9273
IUN - 219-981-4291
IUS – 812-941-2400 – Charles Edelen or 812-941-2330 - Jim Wolfe
IUSB – 765-520-4386

Parking and Transportation Services

IUB – 812-855-9848 – Parking Operations located at Henderson Parking Garage, 310 S Fess Ave.
IUPUC – 812-348-7399
IUE - 765-973-8254 – Gail Smoker
IUPUI – 317-274-4232 – Jay Joyce
Contractor is allowed to purchase one on-campus parking pass. All other employees are required to park at 1302 Indiana Avenue and use shuttle service to campus. Permits can be purchased at Parking Services located in the Vermont Street garage.
IUK – 765-455-9557
IUN – 219-981-4246
IUS – 812-941-2400 – Charles Edelen
IUSB – 574-520-5528

Risk Management / Fire Protection - Office of Insurance, Loss Control & Claims (INLOCC)

- Builders Risk Insurance – Please note that Indiana University's Builder's Risk insurance deductible has increased from $5,000 to $25,000.

  For all campuses contact Mel Lane – 812-855-9758

  Fire protection design drawings and supporting calculations submitted to the State shall also be submitted simultaneously and electronically (PDF) to Tom Pappas at Travelers Insurance - tpappas2@travelers.com.

Utilities

- Three days prior to digging, contact Indiana Underground Plant Protection Services at 1-800-382-5544 to locate all utilities owned by the city in which you are working. In addition to the utilities located by calling this number, you will also need to contact the companies listed below for each campus.

- Hand digging is required within a three (3) foot area on either side of the Utility Paint Marks or Flags to verify or expose all underground utilities.

- Stormwater - Ensure Rule 5 & IDEM requirements are followed.

- Notice of 72 hours is required on all shutdown requests. Comply with owner's lockout / tagout procedures.

IUB - Duke Energy, AT&T, Vectren Gas 812-855-1147 for IUB Utilities locate of existing utilities
IUPUC
IUE - 765-973-8254 – Gail Smoker
IUPUI – Call Holey Moley and 317-274-5230 – Eric Mauser
IUK – 800-382-5544 - Underground Plant Protection Services
IUN - 219-980-6712
IUS – 812-941-2330- Jim Wolfe
IUSB – 800-382-5544 - Underground Plant Protection Services

ATTACHMENT B

Overview of Project Document Deliverables

- **As-built and Record Documents:** During the construction phase, changes to the project that modify intent described in original Bid Documents (bid-upon set of plans and specifications) may arise.
    1. **As-built (or Field Data Set):** Changes are recorded by the contractor, resulting in an "as-built" set (paper or electronic) documents, which are maintained by the contractor through the project's construction and then submitted by the contractor to the designer.
    2. **Record Drawings:** The designer compiles all As-builts submitted by contractor(s) into Record Drawings and/or Record BIM model(s), with the design consultant's concurring review of *what* changes were denoted, *why* they were made (such as accepted alternate or a found condition, etc.), and *where* they occurred.

Contract or Construction Documents Deliverables are the same issue of documents cited in the paragraph above, however these deliverables are to be submitted to the University as they were natively created - in Revit *.rvt* and/or AutoCAD *.dwg* format and in Word *.docx* format. These file types are commonly required for public and invitational bid contracts. Within 10 days following award of bid for contract for construction, the design consultant must provide the UAO with one set of files in digital/electronic format as follows:

1. **CAD Files; one file each - representing *every* sheet in the bid documents** and *with Addenda incorporated*. Native CAD files shall be in *.dwg* format, one file for *each sheet* in the complete set *with all xrefs fully bound*. These documents must comply with University Architects' Office CAD Standards. Use of AutoCAD *e-transmit* is recommended to bind each file.

As-Built Deliverables are revisions to the construction documents based on changes that occur in the field. Contractor marks changes onto a field set of prints of the construction plans (required by their contract to be kept on site) as a log, denoting what and where the changes were made. The entire field set of plans denoting the changes are either scanned or created electronically by the contractor such that they clearly show and differentiate changed elements from originally intended. The resultant contractor's field set drawing files (.pdf format file) must then be submitted to the design professional for review and to allow for producing necessary revisions to the native design program, whether created in a Revit Model or AutoCAD .dwg files. Changes may be indicated by either graphics or notations. The revised version recording all the changes in the field to the original construction documents is called a *Record Drawing*, created by the design professional. The submission of the contractor's field set scans and the revised native design files must be in accord for acceptance by the University of these two "as-built documents." The University requires electronic project deliverables be submitted via hard copy (CD or DVD). The deliverable should include: *.dwg* files for each document sheet, and all addenda & specification files. Use of "AutoCAD e-transmit" to bind all *.dwg* files is recommended to insure that no x-ref files, text files, or plot styles are lost in the submittal.

Specific requirements for Contractor's field record of changes to contract drawings:

The Contractor shall keep at the construction site a complete set of full size prints of the contract drawings, reproduced at Contractor expense. During construction, these prints shall be marked to show all deviations in actual construction from the contract drawings. The color red shall be used to indicate all additions and green to indicate all deletions. The drawings shall show the following information but not be limited thereto:

a. The locations and description of any utility lines and other installations of any kind or description known to exist within the construction area. The location includes dimensions and elevations of permanent features.

b. The locations and dimension of any changes within the building or structure, and the accurate location and dimension of all underground utilities and facilities.

c. Correct grade or alignment of roads, structures, and utilities if any changes were made from contract plans.

d. Correct elevations if changes were made in site grading from the contract plans.

e. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor including, but not limited to, fabrication erection, installation, and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.

f. The topography and grades of all drainage installed or affected as part of the project construction.

g. All changes or modifications from the original design and from the final inspection.

h. Where contract drawings or specifications allow options, only the option actually used in the construction shall be shown on the as-built drawings. The option not used shall be indicated as deleted.

These deviations shall be shown in the same general detail utilized in the contract drawings. Markings of the prints shall be pursued continuously during construction to keep them up to date. This information shall be maintained in a current condition at all times until the completion of the work. The resulting field-marked data shall be referred to and marked as "As-Built Field Data" and shall be used for no other purpose. They shall be made available for inspection by IU's representative whenever requested during construction and shall be jointly inspected for accuracy and completeness by IU's representative and a responsible representative of the Contractor prior to submission of each monthly pay estimate. Failure to keep the As-Built Field Data (including Equipment-in-Place lists in the COBIE spreadsheet) current shall be sufficient justification to withhold a retained percentage from the monthly pay estimate.

Close-out / As-Built Documents Deliverable Requirements
Indiana University requires that the As-Built Documents Deliverable be submitted via hard copy (CD or DVD and Paper). The electronic portion of this deliverable should include: .dwg files for each document sheet, .pdf files for each document sheet, As-built Field Data Set (a .pdf of each sheet), and O & M Manuals. When a sheet has no changes, it still must be included along with a notation of "no changes" on it. Use AutoCAD e-transmit to bind all .dwg files; this is the best way to insure that no x-ref files, text files, or plot styles are lost in the submittal. Follow the As-Built Document Matrix below to determine the responsible party for each deliverable, and in what format.

O&M (Operations & Maintenance) Manuals
The contractor shall submit to Indiana University – one pdf of the O&M manuals along with the Construction Operations Building Information Exchange (COBIE) file; which shall include: (1) the make, model and serial number of each piece of installed equipment, (2) the location of any equipment installed in the building.

As-Built and Record Document Deliverable Matrix
The following matrix outlines the various As-Built and Record Documents deliverables that are required on two different project categories with the associated responsible parties that will be in place for contracts entered into as of February 1, 2014. All deliverables identified in this article are to be provided as indicated.

Document Deliverables Matrix
The following matrix outlines the Document deliverables required on three different project categories; indicating the associated responsible parties. All deliverables identified in this article are to be provided as indicated.

Responsible Parties **A/E** = Architect/Engineer **C** = Contractor

Category 3: non-public bid Projects at or under $150,000 of invitational bidding from contractors, or procured through job order contracting (JOC), or other methods not qualifying for categories 1 or 2:				
As-built and Record Documents Deliverables	***Resp. Party***	***Quantity***	***Format***	***Due Date***
Record Document CAD Drawings and all project Affidavit(s)	A/E	(see note)	(see note)	* 1 set each .pdf & .dwg on CD or DVD as well as 2 sets hard copy (paper). Prior to Final Payment
As-Built Field Mark-ups - Files and/or Scans	C	1 set	.pdf & hard	At Substantial Completion & Prior to Final Payment
Operations & Maintenance Manuals (O&M)	C	1 set	.pdf	At Substantial Completion & Prior to Final Payment

Responsible Parties **A/E** = Architect/Engineer **C** = Contractor

ATTACHMENT C

VPCPF Directory

Steve Wiesner
Director of Construction Management
Office of the Vice President Capital Planning and Facilities
1800 N Range Road
Bloomington IN 47408
812-855-7830

IUPUI , IPFW, IUE, IUPUC

Office of the Vice President Capital Planning and Facilities
Regenstrief
Suite 4100
1050 Wishard Blvd
Indianapolis IN 46202
Phone: (317) 274-8396
Fax: (317) 274-8827
http://www.indiana.edu/~uao/

Construction Management
Michael Medley, Director
317-274-3599

IUB, IUS

Office of the Vice President Capital Planning and Facilities
1800 N Range Road
Bloomington IN 47408
812-855-9234
http://www.indiana.edu/~uao/

Construction Management
Gary Chambers, Director - 812-855-6435

IUK, IUN, IUSB

Office of the Vice President Capital Planning and Facilities
Regenstrief
Suite 4100
1050 Wishard Blvd
Indianapolis IN 46202
Phone: (317) 274-8396
Fax: (317) 274-8827
http://www.indiana.edu/~uao/

Construction Management
Vanessa Combs, Construction Manager - 765-455-9474

License

The Supplier, Contractor, or Subcontractor shall not commence work under the Contract/Project until he/she has obtained all licenses required by city, state, or federal agencies regarding these specifications and until such licenses have been approved by the University, nor shall the Supplier or Contractor allow any Subcontractor to commence work on his Subcontract until all similar licenses required of the Subcontractor have been so obtained and approved. Licenses expiring on a fixed date before final acceptance of the project must be renewed and evidence of such renewal submitted to the University before such date.

Revised: 11.14.2014 (per University Office of Insurance, Loss Control & Claims)

INDIANA UNIVERSITY
MINIMUM INSURANCE REQUIREMENTS
FOR CONSTRUCTION, NON-CONSTURCTION AND PROFESSIONAL DESIGN CONTRACTS

Contractor (whether corporation, sole proprietorship or partnership) shall procure and maintain during the term of the contract and until final acceptance of the completed work under the contract, and shall deposit with Owner prior to beginning work, Certificate(s) of Insurance evidencing the types of coverages and minimum limits as set out in this Exhibit.

No contractor or subcontractor shall commence work and shall not be paid for any work performed until proper certificate(s) of insurance have been submitted to and approved by the owner. It is the Contractor's responsibility to ensure that all subcontractors, at any tier, maintain general liability insurance in the minimum amounts required by I.C. 5-16-13-10(b). All required insurance policies shall be written by a company(s) authorized to do business in Indiana. The owner shall not be liable to any person for the failure of the contractor or any subcontractor to carry specified insurance.

CERTIFICATE HOLDER:
The Trustees of Indiana University
c/o Office of Insurance, Loss Control & Claims
400 E. 7th Street Room 705
Bloomington, IN 47405-2206

ENDORSEMENTS

All insurance policies must provide the following endorsements to their policy and must be noted on the certificate(s):

1. Additional Insured Endorsement (CG2010 10 01 and CG2037) or equivalent form required on General Liability, Automobile Liability and Excess Liability policies naming the Owner and/or Other Parties as defined in Owner's Contract and including coverage for completed operations. (Owner is defined as: "The Trustees of Indiana University, its officers, agents and employees").

2. Waiver of Subrogation on Comprehensive General Liability, Automobile Liability, and Employer's Liability/Workers' Compensation Policies.

3. All insurance policies shall be primary and non-contributing with any insurance carried by the University, and shall contain a severability of interests clause in respect to liability, protecting each named insured as though a separate policy had been issued to each.

4. All policies shall contain a covenant requiring (30) days written notice by the insurer to the Indiana University Office of Insurance, Loss Control & Claims before cancellation, reduction or other modifications of coverage for any reason.

5. Because of the provisions of the ACORD 25 form, each type of liability insurance (general, automobile and excess) must include a copy of a valid endorsement such as CG 20 33 07 04 as assurance that the additional insured requirement has been met.

TYPE OF INSURANCE COVERAGES REQUIRED

TYPE OF INSURANCE COVERAGES REQUIRED:	MINIMUM COVERAGE REQUIREMENTS	
GENERAL LIABILITY/OCCURRENCE FORM		
Commercial General Liability	General Aggregate	$2,000,000
Premises and Operations	Occurrence	$1,000,000
The policy must cover claims arising from sexual misconduct.		
Personal and Advertising Injury	Aggregate	$1,000,000
AUTOMOBILE LIABILITY (Contact INLOCC about the need for this coverage.) Combined Single Limit • Any Auto • Hired Autos • Non-Owned • Medical Payments	$1,000,000 Each Accident	

Note: Owner reserves the right to require increased limits of coverage if, in opinion of the Owner, project is hazardous in nature or poses a higher than usual risk.

WORKER'S COMPENSATION, OCCUPATIONAL DISEASE AND EMPLOYER'S LIABILITY

If the Vendor will be on University premises (other than incidental visits to the Purchasing Department), the Vendor shall procure and maintain a Workers' Compensation policy to cover its obligation under the applicable laws of any state or federal government to its employees employed on the jobsite or elsewhere on this project, including its liability as an employer under common law (commonly known as Employer's Liability Coverage "B") with limits of not less than that listed below. Before commencing contracted activities, Vendor shall submit to IU a valid State Form 41321 (Certificate of Compliance - Worker's Compensation and Occupational Diseases) or a facsimile thereof at IU's option. If the Vendor is not required to carry workers compensation insurance then a Certificate of Exception must be obtained from the State. See http://www.in.gov/dor/4473.htm. Form WCE-1 can be obtained at https://forms.in.gov/download.aspx?id=7134.

Worker's Compensation:	Statutory
Employer's Liability:	$ 1,000,000 each accident or disease $ 1,000,000 policy limit $ 1,000,000 each employee
University as Additional Insured	"The Trustees of Indiana University, it's officers, agents and employees" shall be added as an additional insured under the commercial general and automobile liability policies only.

INSURANCE CARRIERS

All insurance carriers selected by contractor must be rated "A-" or above in the most recent edition of the "A.M. Best's Key Rating Guide."

Hold Harmless Agreement: Contractor shall indemnify and save harmless the Owner from any and all losses, costs, damages, liability and expenses, including reasonable attorney fees, arising out of or in conjunction with claims or suits for damage to property and/or injury to persons, including contractor's employees and all subcontractor's employees at any tier, including death, alleged or claimed to have been caused by or through the performance of the work or operations incidental to the work by the Contractor, its agents or employees, or by its subcontractors of any tier, their agents or employees, whether through negligence or willful act; and Contractor shall, at the request of Owner, undertake to investigate and defend any and all such claims or suits against Owner.

Anything herein contained to the contrary notwithstanding, the Owner and Contractor waive all rights, each against the other, for damages caused by perils covered by any insurance purchased in accordance with the provisions of the Fire and Extended Coverage section of the Contractor's insurance policy, except such rights as they may have to the proceeds of such insurance. This provision shall not release the Contractor from its obligation to complete, according to plans and specifications, the project covered by the Contract and the Contractor and its Surety shall be obligated to the full performance of the Contractor's undertaking.

CONTRACTOR AND SUPPLIER OPERATING SUMMARY

1.0 INTRODUCTION

This document provides Contractors and Suppliers with requirements for their compliance with Indiana University policies and their performance of work while on the Indiana University ("University") campus.

2.0 DEFINITIONS

2.1 **Contractor/Supplier:** Any individual, company or subcontractor contracted via a valid University Purchase Order to perform services or provide equipment through specifications for the University.

2.2 **Department of Environmental Health & Safety (EHS):** The University department charged with the responsibility for overseeing environmental & safety compliance.

2.3 **University Project Manager & Team Leader:** The University representative designated to oversee and coordinate the Contractor/Supplier activity and performance.

2.4 **Operating Area:** Definition: areas in which campus processes are active or areas occupied by University personnel. Some examples of operating areas are existing process buildings, research laboratories and functional utility buildings. Questions concerning the definition of operating areas should be directed to the University Project Manager.

2.5 **Site:** The confines or boundaries, as defined by the University Project Manager, of any University owned properties where work is performed by Contractors.

3.0 GENERAL CAMPUS INFORMATION AND REQUIREMENTS

3.1 **Point of Contact:** The university Project Manager (or their designated representative) is the Contractors point of contact for any items or issues affecting contracted work for the University. The University Project Manager may direct the Contractor to other University personnel as required for consultation, however, the Contractor shall take direction from University employees other than the Project Manager at their own risk.

3.2 **Accident Reporting Procedures:** In the event of an injury requiring emergency medical assistance, or any vehicular accident, the University Police Department shall be immediately notified, with a description of the emergency and location. Contractors shall also notify the University Project Manager of Contractor accidents immediately.

3.3 **Alcohol and drug-free workplace, ref. University HRA Policy:** The University absolutely prohibits the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance or alcohol on university premises or while conducting university business off university premises. Violation of this policy may result in immediate termination of employment. Contractors shall fully comply with University Substance-Free Workplace Policy 5.2 available here or by logging on to www.hra.iupui.edu/Policy_Manual/policy/5_2.html and shall remove from the site any of its employees who do not fully comply with the policy.

3.4 **Behavior, ref. University HRA Policies, 1.2; 5.5:** Harassment of any type, abusive language or attitudes, horseplay, selling, raffling, gambling or any other unacceptable behavior is prohibited on all University sites. Contractors and their employees shall comply with University policies on Sexual Harassment 1.2 and Workplace Violence 5.5.

3.5 **Driving and Parking:** Maximum speed limit on University sites, if not posted shall be fifteen (15) MPH. All traffic signs and signals must be obeyed. All persons driving a vehicle on University property must have a valid driver's license. Parking is allowed only in designated parking areas with a valid University parking permit. Contractor must purchase proper parking permits through the University Project Manager and University Parking Services. All citations and employee vehicles are the responsibility of the Contractor. Contractors are encouraged to have a business logo and telephone number on their vehicles while parked on campus.

3.6 **Emergency Procedures & Reporting:** In the event of an emergency, such as a chemical release, accident or severe injury, University Police Department must be notified immediately. The University Project Manager should be notified immediately after calling the University Police Department. The Contractor is required to keep emergency phone numbers available at the worksite.

3.7 **Fire Reporting:** Report all fires to the University Police Department, and to the University Project Manager. State the emergency and the location of the fire. Contractor personnel shall know where fire extinguishers are located and be properly trained to operate them. Proper fire extinguishers shall be kept within 25 feet of the storage area for flammable liquids. For all Hot Work Permits, Contractors are to provide their own fire extinguishers Fire extinguishers are to be in close proximity during Hot Work.

3.8 **Tobacco Policy:** Tobacco use or sale, including, but not limited to smoking, is prohibited on University owned, operated, or leased property. Exceptions may be granted for specific auxiliary enterprises, as approved by the Chancellor. Tobacco use, including, but not limited to smoking, is not permitted in University owned, operated, or leased vehicles.

3.9 **Weapons:** The possession of any weapon is prohibited on University sites and is grounds for dismissal and contract termination.

3.10 **Personal Protective Equipment:** The Contractor shall furnish and require the wearing of personal protective equipment that is customary for the job, per all University, local, state, and federal OSHA requirements.

3.11 **Clothing:** Proper clothing is required while on campus. Contractor's employees and/or subcontractors shall be in appropriate dress and easily identifiable. Uniforms are preferred and shall be laundered as needed to maintain a presentable appearance. Each worker shall have some form of picture identification, such as official driver's license, in his or her possession while working. Workers, if not wearing a uniform, shall not wear shorts or loose clothing. Denim jeans are permissible as long as they are not torn or ripped. T-shirts with inappropriate designs, slogans or lettering of any type are not permitted. Shirts and shoes must be worn at all times while on campus

3.12 **Radios (Two-Way):** Two-way radios may be used on University sites if allowed by the University Project Manager.

4.0 **OPERATING INFORMATION AND REQUIREMENTS**: The University expects Contractors to perform all work in a professional manner, exercise due diligence, and meet published standards and practices in accomplishing the work specified in the "Scope of Work" document. All work shall be done in accordance with local, state and federal requirements, including but not limited to the NESC Standards, NFPA 70 "National Electric Code" for components and installation, ANSI and OSHA standards, and according to University Standards.

4.1 **Purchase Orders:** Contractors shall not commence work on the University campus or provide equipment or materials for the University until provided a valid Purchase Order by the University Purchasing Department or unless otherwise authorized by the University Project Manager.

4.2 **Scope of Work:** All contracted work is specified and determined by a "Scope of Work" document that shall be provided by the University Project Manager along with the Purchase Order. This document may be in the form of written specifications, blue prints, drawings or verbal communication. The Contractor shall **NOT** make any changes to the "Scope of Work" without expressed written consent and approval by the University Project Manager. Specific Scopes of Work will vary on a project-by-project basis.

4.3 **Quality Control:** Contractors shall monitor quality control over suppliers, manufacturers, products services, site conditions and workmanship to produce work of acceptable quality. Contractor shall comply with any manufacturer's instructions including performing each step in sequence. Should instructions conflict with contract documents, clarification from the University Project Manager shall be obtained before proceeding. Contractor shall comply with specified standards as minimum quality for work except where more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.

4.4 **Protection of Existing Property:** Contractor shall be responsible for damages caused by their actions, or their employees or their subcontractors to any affected personal property or University property and shall restore damaged property to original condition, at the Contractor's expense.

4.5 **Chemical Hazard Communication (HAZ-COM):** Contractor is required to comply with all HAZ-COM requirements as well as all local, state, and federal laws associated with chemical use, storage, ventilation, labeling, information sharing, etc.

4.6 **Staging, Storage, Demolition:** Contractor/Supplier shall stage material in locations designated and approved by the University Project Manager. Contractor/supplier will be responsible for securing all staged material and be aware of pedestrian's safety in and around staging area.

4.6.1 Storage of materials, including Contractor tools or equipment, University provided material, etc. shall be in specified areas only as designated by the University Project Manager.

4.6.2 Compressed gas cylinders are to be stored in an area approved by the University Project Manager, and handled according to all local, state, and federal regulations.

4.6.3 Contractor may not reuse or claim any material or items resulting from demolition of University property without the express written consent of the University Project Manager.

4.7 **Proactive Measures Required for Air Quality During Construction:** The use of hazardous or irritating materials must be properly controlled where it may affect building occupants.

4.8 **Asbestos:** It is possible that Contractors may encounter some asbestos materials or products containing asbestos during their work. .

4.8.1 It shall NOT be the responsibility of the Contractor(s) to abate asbestos. The cost of abatement and disposal of asbestos and products containing asbestos will be a separate project to be handled by a specialized service or will be otherwise abated and disposed of by the owner.

4.8.2 The University Project Manager may define in the "Scope of Work" the known nature and extent of existing asbestos to the extent that this condition is known at the time of the issuance of the "Scope of Work."

4.8.3 If an (unforeseen) suspect material is discovered during the course of the project, the Contractor is to stop work immediately and notify the University Project Manager and EHS.

4.9 **Barricades:** Contractors are responsible for providing all barrier materials for both interior and exterior application including but not limited to appropriate street closing barricades and signage that meet DOT requirements, and all local, state and federal laws. The University may require traffic control personnel on certain types of jobs. All crane radii, with counter weights that present an exposure, must be barricaded before operations commence. All openings in floors, roofs or decking must be covered, labeled and secured in place.

4.10 **Biohazards/ Infectious Materials:** Contractors may be working near biological materials that are potentially hazardous. Examples of these include, work on sewer lines, sumps, drain traps, areas containing infectious waste, fume hoods etc. It is the Contractor's responsibility to have an OSHA approved Blood borne Pathogens training program for the recognition and control of these hazards.

4.11 **Shutdowns:** Before performing work which requires systems to be shutdown in order to perform or safely execute the work, the Contractor shall request the shutdown through the University Project Manager at least three business days (72 hours) in advance and wait for written approval before proceeding. Shutdown requests must be provided any time any service or utility will be disrupted or out of service. Examples include the following:

- Fire Alarm Systems and components
- Sprinkler systems, standpipes, fire pumps
- Special Suppression Systems
- Access to Buildings
- Any obstruction of exits (corridors, stairs, doors, etc.)
- Building/Room Power
- Supply or Return Fans for AHU
- Steam
- Water Mains
- Elevators
- Streets, Parking Lots

4.12 **Safety**: Contractors performing project work shall be informed and comply with the requirements of the University Contractor Safety Policy; a copy of the document may be obtained from www.ehs.iupui.edu. A designated Contractor representative will also be required to complete the online Contractor Safety Program training session prior to beginning work on campus. The representative is responsible for communicating the information from the training to all employees and subcontractors on the job. Documentation that all employees and subcontractors have been informed of the University safety policies and procedures shall be provided to the University

Project Manager prior to the beginning of the project. Contractor shall also comply with all applicable local, state and federal safety and OSHA regulations. Contractor shall report all accidents and any OSHA inspection of the jobsite to the University Project Manager.

4.13 **Lockout/ Tag out:** Before working on a process, all energies (electrical, mechanical, thermal, pneumatic, chemical, hydraulic, etc.) shall be purged, dissipated and locked out according to OSHA standards. Unlocked or open electrical distribution panels shall not be left unattended by the Contractor.

4.14 **Excavating:** No digging or underground work shall begin without specific approval to begin by the University Project Manager and the request of a utility locate through Holey Moley. The Contractor is responsible for coordinating with local utility companies and the University Project Manager to assure that utilities are marked. Excavations outside of the specific locations planned are not permitted without approval from the University Project Manager. All local, state, & federal laws shall be adhered to regarding barricades, trenching, safety, etc.

4.14.1 Erosion control plans are to be devised and implemented for all projects that involve the disturbance or excavation of soil on campus.

4.15 **Flammable Material Storage:** Only UL listed or Factory Mutual approved containers and portable tanks shall be used for storage of flammable material. Flammable materials shall not be stored in areas used for exits, stairways or normally used for the safe passage of people. Contractor/Supplier shall comply with all EHS, local, state, & federal laws.

4.16 **Housekeeping:** The work area is to be kept clean at all times. Special attention must be given in maintaining clear walkways and roadways, removing or identifying slipping and tripping hazards and stacking of materials. Contractors must make every effort to keep mud, slush or other slippery substances off roads and out of buildings. Compressed air shall not be used to clean surfaces. The Contractor is responsible for daily clean up and at the end of the project to the cleanliness level which existed before the start of the project.

4.17 **Permits:** The following permits are used when working on University sites. Any questions regarding the applicability or use of the permits at each site should be directed to the University Project Manager. In addition to University specific permits, the Contractor is required to obtain all necessary city and state permits pertinent to the work.

4.17.1 **Confined Space Entry Permit:** A confined space has limited or restricted means for entry and exit and is limited enough for a worker to enter and perform assigned work, and is a space which is not intended for continuous worker occupancy. Examples of confined spaces include, but are not limited to: tanks, boilers, pits, ventilation and exhaust ducts, some false ceilings, sewers, vats, manholes, electrical vaults, pipelines, tunnels, interstices, and ditches. Identification and information related to all confined spaces at the University is available through the University Project Manager. For operating in facility-confined spaces, a “Confined Space Entry Permit” (available on University website) must be obtained from the University Project Manager and filled out completely with the assistance of the necessary operating department personnel. Contractors may use their own permit in conjunction with the University Permit. The Contractor shall assure that the necessary equipment to comply with the University Permit (atmospheric monitoring devices, fall protection, rescue equipment, respiratory protection, etc.) is available for each worker involved in the confined space entry. The permit shall be used for one day. Permits shall be displayed prominently at the job location, and shall be returned to the University Project Manager after completion of the entry.

4.17.2 **Confined Space Training:** All Contractor personnel required to perform a confined space entry on University property must be trained by their employer according to the applicable OSHA regulation (general industry and/or construction) and, if applicable, the University Confined Space Entry Procedures. The training should be provided and documented by the Contractor. Documentation of training should include the date of the training, name of trainee, and signature of the trainer and trainee. Documentation of training may be subject to auditing by University EH&S.

4.17.3 **Hot Work Permit:** Hot work shall be planned in advance and is defined as any temporary operation involving open flames or producing heat or sparks including brazing, cutting, grinding, soldering, arc welding, and torch applied roofing. Contractor shall obtain a “Hot Work Permit” from University Project Manager where necessary. Contractors shall adhere to the attached procedure and permits. Contractor is responsible for providing all necessary equipment (fire extinguishers, etc.) and personnel in order to comply.

4. 17.4 **Underground Utility Locates:** All underground utility locates on the University campus shall be requested through 1-800-HoleyMoley. Utility locates may be required for most concrete work.

4.17.5 **Right-of-Way Use/ Excavation/ Crane Work Permit:** A permit will be required if there is need to block access to city streets. Such as crane or large equipment usage, etc. The permit may be obtained through the City, "Division of Permits".

4.17.5.1 If streets are to be blocked, University Project Manager must be notified of location three working days before crane is to be set up. Projects of this nature must have University Project Management involvement at all times.

4.17.5.2 If streets and sidewalks are to be blocked Contractor must also contact University Police Department so they may be aware of project.

4.17.5.3 Contractor will have at least one (1) flag official present unless otherwise specified. Blocking of city streets may require two safety officers as well as a Right-of- Way/Excavation Permit from the City.

4.18 **Removal of Environmentally Hazardous Materials (excluding asbestos):** Contractor is responsible for complying with all local, state and federal laws associated with removal and disposal of environmentally hazardous materials. Unless otherwise stated in the bid process, Contractor shall be responsible for removal and disposal of these materials.

4.18.1 1 In most cases, University EH&S will perform all or part of the project work associated with hazardous materials. The Contractor must acquire all necessary permits, licenses, etc. associated with transporting and disposal. Contractor shall provide documentation when requested of (but not limited to): manifests or chain-of-custody records, bill of ladings, disposal receipts, and any "certificates of disposal or destruction".

4.18.2 Contractor is responsible for contacting the University Project Manager in the event that unforeseen environmentally hazardous materials, i.e., Lead Based Paint, are discovered during the project.

4.19 **Submittals:** Contractor shall provide shop drawing submittals for equipment and materials planned for use as detailed in the "Scope of Work" specifications. All items submitted for approval must be stamped and signed by authorized Engineer or other authorized University staff to be approved for use on any project.

4.19.1 **Red-line Drawings, O&M Manuals:** Contractor is required to red-line Construction Drawings to reflect the as built conditions. These red-lined drawings are required to be delivered on completion of a project to the University Project Manager. Some projects may require O&M (Operation & Maintenance) Manuals as directed in the specifications. If O&M Manuals are required label manuals with building name, project title, and the University work request number. Both as built conditions and O&M Manuals shall be submitted in an electronic form (PDF and CADD), along with a hard copy.

4.19.2 **CAD:** The University has adopted AutoCAD (current software release) as the standard electronic documentation format and requires that Contractors use this format when specifically directed by the University Project Manager.

4.20 **Hours of Operation:** University typical business hours are Monday through Friday, 8am to 5pm.

4.20.1 **Contractor Operating Hours:** All work shall be completed during University normal operating hours unless otherwise directed by the University Project Manager.

4.20.2 **Weekend/Evening/Holiday Entry Form:** If Contractor requires weekend, evening, or Holiday work notify the University Project Manager at least 24 hours in advance. Upon request of the specific weekend, evening or holiday an "After Hours Entry Form" shall be provided by the University Project Manager for use as an authorization for after-hours entry by the Contractor.

4.21 **Remedy for Non-Compliance:** In the event that a Contractor does not perform or is found to be non-compliant with the policies and requirements herein, the University may, at its option, terminate any contract, withhold payment, or charge the Contractor for replacement or final completion of work as was originally detailed in the "Scope of Work" specifications.

BL227 - IU Read Hall - Catering Kitchen Equipment Package
Bid Form

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Mark	Model #	Manufacturer	Description	Qty.	Unit	Unit Price	Extended Price	Comments
E01		InPro Corporation	Stainless Steel Wall Flashing		EA	0.00	$0.00	See Specifications
E02		Rubbermaid	20 Gallon BRUTE Container without Lid		EA	0.00	$0.00	NIKEC -Future
E03		Caddy	Ventilation Hood - Test Kitchen		LF	0.00	$0.00	
		Ansul	Fire Suppression System		EA		$0.00	
		Melink System	Controls		EA		$0.00	
E03A		Caddy	Ventilation Hood - Bakery		EA	0.00	$0.00	
		Ansul	Fire Suppression System		EA		$0.00	
		Melink System	Controls		EA		$0.00	
E04		Jade	8 open burners with oven		EA	0.00	$0.00	
E05		Advance Tabco	Triple compartment sink		EA	0.00	$0.00	
E06		Keating of Chicago	IFM Gas Instant Recovery Fryer		EA	0.00	$0.00	
E07		Keating of Chicago	Safe & Easy Central Filter		EA	0.00	$0.00	
E08		Blodgett	Dual Flow Gas Convection Oven - Double		EA	0.00	$0.00	
E09		Continental Refrigerator	2-Section Reach-In Refrigerator		EA	0.00	$0.00	NIKEC -Future
E10		Continental Refrigerator	2-Section Reach-In Freezer		EA	0.00	$0.00	NIKEC -Future
E11		Owner provided	72" wall-mounted flat screen tv		EA	0.00	$0.00	Owner installed
E12		Vollrath	Professional series countertop induction range		EA	0.00	$0.00	NIKEC -Future
E13			Not Used		EA	0.00	$0.00	
E14		Advance Tabco	Work Table, 72"W x 36"D, 16 gauge 304 series stainless steel top, 18 gauge stainless steel adjustable undershelf, stainless steel legs & adjustable bullet feet, NSF		EA	0.00	$0.00	
E15		Eagle Group	Hand Sink with faucet		EA	0.00	$0.00	
E16		NU VU	Floor model Proofer		EA	0.00	$0.00	
E17		Bakers Pride	Super Deck 3836 Series Electric Deck Oven		EA	0.00	$0.00	
E18		Advance Tabco	Work Table, 60"W x 36"D, 16 gauge 304 series stainless steel top, stainless steel legs with side & rear crossrails, adjustable stainless steel bullet feet, NSF		EA	0.00	$0.00	
E18A		Advance Tabco	Work table with sink insert			0.00	$0.00	
E19		Master-Bilt	Undercounter Solid Door Refrigerator		EA	0.00	$0.00	NIKEC -Future
E20		Advance Tabco	48" single overshelf		EA	0.00	$0.00	
E21		Hobart	60Qt. Mixer		EA	0.00	$0.00	NIKEC -Future
E22		Eagle Group	Five-Shelf Starter Unit - Chrome		EA	0.00	$0.00	NIKEC -Future
E23		Advance Tabco	Regaline Sink, 3-compartment, with left & right-hand drainboards, 24" front-to-back x 18"W sink compartments, 12" deep, with 8"H backsplash, stainless steel open frame base, side crossrails, 36" drainboards, 1" adjustable bullet feet, 16 gauge 304 series stainless steel, overall 31" F/B x 133" L/R, NSF		EA	0.00	$0.00	
E24		Advance Tabco	Shelf with Pot Rack at dish 3 compartment sink		EA	0.00	$0.00	
E25		Advance Tabco	Stainless steel shelving with adjustable chrome overshelf		EA	0.00	$0.00	
E26		Advance Tabco	Dishtable - Soil straight		EA	0.00	$0.00	
E27		Hatco	GLO-RAY stainless steel infrared strip heater		EA	0.00	$0.00	
E28		T&S Brass	Pre-rinse faucet with sprayer		EA	0.00	$0.00	
E29		Hobart	Dishwasher - Stainless steel pressure-less 15/30 KW booster heater; Higher than standard chamber		EA	0.00	$0.00	
E30		Advance Tabco	Dishtable - Clean straight		EA	0.00	$0.00	
E31			Not Used			0.00	$0.00	
E32		American Panel Corp.	Walk-In Freezer		EA	0.00	$0.00	
E33		American Panel Corp.	Walk-In Cooler		EA	0.00	$0.00	
E34		Cambro	Low temperature hot food holding cabinets		EA	0.00	$0.00	NIKEC -Future

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Mark	Model #	Manufacturer	Description	Qty.	Unit	Unit Price	Extended Price	Comments
E35		Bradley	Solid Plastic 3-Tier Lockers		EA	0.00	$0.00	NIKEC -Future
E36			Bulletin board		EA	0.00	$0.00	By Owner
E37			Time clock		EA	0.00	$0.00	By Owner
E38		Cambro	Ice caddy		EA	0.00	$0.00	NIKEC -Future
E39		Scotsman	800 lb. Cube Ice Machine		EA	0.00	$0.00	NIKEC -Future
E40		Scotsman	Modular storage bin		EA	0.00	$0.00	NIKEC -Future
E41		Advance Tabco	Enclosed Base, Beverage Table		EA	0.00	$0.00	
E42		Cres Cor	Queen Mary Rack		EA	0.00	$0.00	NIKEC -Future
E43		Fetco	Handle Operated Coffee Brewer		EA	0.00	$0.00	NIKEC -Future
E44		Fetco	Luxux Thermal Dispenser		EA	0.00	$0.00	NIKEC -Future
E45		Caddy Ansul Melink System	Ventilation Hood - Catering Kitchen Fire Suppression System Controls		EA	0.00	$0.00	
E46		Jade	10 open burners with 2 ovens		EA	0.00	$0.00	
E47		Jade	Shallow depth heavy-duty griddle with oven		EA	0.00	$0.00	
E48		Jade	Charbroiler with cabinet		EA	0.00	$0.00	
E49		Market Forge	Tilt Skillet		EA	0.00	$0.00	
E50		Hobart	Slicer		EA	0.00	$0.00	NIKEC -Future
E51		Market Forge	2/3 Jacketed tilting electric tri leg kettle		EA	0.00	$0.00	
E52		Advance Tabco	16 Ga. 304 S/S Fabricated Sink, Two Comp		EA	0.00	$0.00	
E53		Bradley	Hat and Coat Rack		EA	0.00	$0.00	Provided & installed by GC
E54		Rubbermaid	Prosave Ingredient bin with 32 oz scoop		EA	0.00	$0.00	NIKEC -Future
E55		Rubbermaid	Slim Jim Waste Container		EA	0.00	$0.00	NIKEC -Future
E56		Ary Inc	VacMaster Chamber Machine		EA	0.00	$0.00	NIKEC -Future
E57		Master-Bilt	Undercounter Blast Chiller/Freezer		EA	0.00	$0.00	NIKEC -Future
E58		Rational	Electric boiler-free, combi- oven		EA	0.00	$0.00	
E59						0.00	$0.00	
E60		Cambro	Mobile Refrigerated Cart		EA	0.00	$0.00	NIKEC -Future
E61		Luxor	Wall-mounted magnetic whiteboard		EA	0.00	$0.00	Provided & installed by GC
E61A		Luxor	Wall-mounted magnetic whiteboard		EA	0.00	$0.00	NIKEC -Future
E62		Advance Tabco	Work Table, 72"W x 36"D, 16 gauge 304 series stainless steel top, 18 gauge stainless steel adjustable undershelf, stainless steel legs, casters, NSF		EA	750.00	$0.00	
E63		Cres Cor	Retractable ceiling mounted infra red warmer		EA	0.00	$0.00	Provided & installed by Electrical contractor
E64		Advance Tabco	Work Table, 48"W x 24"D, 16 gauge 304 series stainless steel top, 18 gauge stainless steel adjustable undershelf, stainless steel legs, casters, NSF		EA	0.00	$0.00	NIKEC -Future
E65					EA	0.00	$0.00	
E66		Advance Tabco	Wall shelf		EA	0.00	$0.00	
E67		Advance Tabco	Worktable, enclosed base with midshelf		EA	0.00	$0.00	NIKEC -Future
E68		Advance Tabco	12" swing spout splash mount faucet		EA	0.00	$0.00	
E69		Advance Tabco	Work Table, 36"W x 30"D, 16 gauge 304 series stainless steel top with 5"H backsplash, 18 gauge stainless steel adjustable undershelf, stainless steel legs & adjustable bullet feet, NSF		EA	0.00	$0.00	
E70		Custom Fabricated	Single bowl undermount sink kit		EA	0.00	$0.00	
E71		Custom Fabricated	30/70 double bowl undermount sink kit		EA	0.00	$0.00	
E72		Elkay			EA	0.00	$0.00	
E72A		Elkay	Prep sink faucet		EA	0.00	$0.00	

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Mark	Model #	Manufacturer	Description	Qty.	Unit	Unit Price	Extended Price	Comments
E73		American Standard	Field-convertible rigid / swivel gooseneck spout. Vandal-resistant metal wrist blade handles with red/blue indexes. 1.5 gpm pressure compensating aerator		EA	0.00	$0.00	
E74			Not Used			0.00	$0.00	
E75		Advance Tabco	Work Table, 72"W x 30"D, 16 gauge 304 series stainless steel top, stainless steel legs with side & rear crossrails, casters, NSF		EA	0.00	$0.00	
E76		Advance Tabco	Sink Welded Into Table Top, 10"W x 14"D x 10" deep bowl, includes faucet (must specify sink location)		EA	0.00	$0.00	
E77		Advance Tabco	Work Table, 96"W x 36"D, 16 gauge 304 series stainless steel top, stainless steel legs with side & rear crossrails, adjustable stainless steel bullet feet, NSF		EA	0.00	$0.00	
E78			Not Used				$0.00	
E79			Not Used				$0.00	
E80			Not Used				$0.00	
E81			Not Used				$0.00	
E82			Not Used				$0.00	
E83		Advance Tabco or equal	Work Table, 72"W x 30"D, 16 gauge 304 series stainless steel top, 18 gauge stainless steel adjustable undershelf, stainless steel legs & casters, NSF		EA	0.00	$0.00	
E84		Universal or equal	Stainless steel storage dish cabinet - open front		EA	0.00	$0.00	
E85		Universal or equal	Stainless steel storage dish cabinet - open front		EA	0.00	$0.00	
E86		Eagle Group	18" x 36" chrome finish - wire wall shelf kits.		EA	0.00	$0.00	
E87		Eagle Group	Five-Shelf Starter Unit - Stainless Steel		EA	0.00	$0.00	NIKEC -Future
E88		Advance Tabco or equal	Shelf, wall-mounted, 24"W x 15"D, 1-5/8" bullnose front edge, 1-1/2" rear upturn, 18/430 satin finish stainless steel, NSF		EA	0.00	$0.00	
E89		Advance Tabco or equal	Shelf, wall-mounted, 60"W x 15"D, 1-5/8" bullnose front edge, 1-1/2" rear upturn, 18/430 satin finish stainless steel, NSF		EA	0.00	$0.00	
E90		Eagle Group	Five-Shelf Starter Unit - Epoxy with Microgard		EA	0.00	$0.00	NIKEC -Future
E91		Eagle Group	Five-Shelf Starter Unit - Epoxy with Microgard		EA	0.00	$0.00	NIKEC -Future
E92		Eagle Group	Five-Shelf Starter Unit - Epoxy with Microgard		EA	0.00	$0.00	NIKEC -Future
E93		Eagle Group	Five-Shelf Starter Unit - Epoxy with Microgard		EA	0.00	$0.00	NIKEC -Future
E94		Rational	Ventless Combi Oven		EA	0.00	$0.00	
E95		Rational	Mobile stand		EA	0.00	$0.00	
E96		Rational	Single cartridge water filter		EA	0.00	$0.00	
E97		Rational	UltraVent condensation hood		EA	0.00	$0.00	
E98		Advance Tabco	Shelf, wall-mounted, 48"W x 15"D, 1-5/8" bullnose front edge, 1-1/2" rear upturn, 18/430 satin finish stainless steel, NSF		EA		$0.00	Installed by GC
E99		John Boos & Co	Stainless Steel Pot Rack		EA	0.00	$0.00	
E100		T&S Brass	Enclosed stainless steel hose reel with 30' of hose, high flow spray valve with swivel		EA	0.00	$0.00	
E100 A		T& S Brass	Enclosed stainless steel hose reel with 30' of hose, high flow spray valve with swivel		EA	0.00	$0.00	NIKEC -Future
E101		CUSTOM	Front counter concept 01		EA	0.00	$0.00	Provided by GC
E102		Caddy	Condensate Hood 60" W x 24" H x 12" D - Estimate included E03		EA	0.00	$0.00	

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Mark	Model #	Manufacturer	Description	Qty.	Unit	Unit Price	Extended Price	Comments
E103		TBD	Backless stool		EA	0.00	$0.00	NIKEC -Future
E104		Universal or equal	Stainless steel base cabinet with midshelf		EA	0.00	$0.00	
E105		Advance Tabco	Stainless steel base cabinet with midshelf		EA	0.00	$0.00	
E106		Advance Tabco	Stainless steel base cabinet with midshelf		EA	0.00	$0.00	
E107		Advance Tabco	Stainless steel base cabinet with midshelf		EA	0.00	$0.00	
E108		CUSTOM	Stainless steel sink base		EA	0.00	$0.00	
E109		CUSTOM	Stainless steel sink base		EA	0.00	$0.00	
E110		Advance Tabco	Stainless steel base cabinet with midshelf		EA	0.00	$0.00	
E111		Custom	Custom Stainless Steel tops with 6 inch back splach - xx lineal feet		LF.	0.00	$0.00	
A			**Installation Labor**					
B			**Freight**				$0.00	
C			**Sales Tax - Not applicable**			NA	$0.00	
				Total Bid Price			$0.00	

SECTION 09 78 13 – STAINLESS STEEL WALL PANELS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

A. Section Includes:

1. Stainless steel wall panels.

1.03 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include data on physical characteristics, durability, fade resistance, and fire-test-response characteristics.

B. Shop Drawings: Show location and extent of each wall panel type. Indicate seams and termination points.

C. Samples: For each type of wall covering and for each color, pattern, texture, and finish specified, full width by 36-inch- (914-mm-) long in size.

1. Wall Panel Sample: From same production run to be used for the Work, with specified applied.

1.04 CLOSEOUT SUBMITTALS

A. Maintenance Data: For wall panels to include in maintenance manuals.

1.05 FIELD CONDITIONS

A. Environmental Limitations: Do not deliver or install wall panels until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above ceilings is complete, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at levels intended for occupants after Project completion during the remainder of the construction period.

1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in unopened factory packaging to the jobsite

B. Inspect materials at delivery to assure that specified products have been received.

C. Store in original packaging in a climate controlled location away from direct sunlight.

1.07 WARRANTY

A. Standard Limited Lifetime Warranty against material and manufacturing defects.

PART 2 - PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

A. Fire-Test-Response Characteristics: As determined by testing identical wall panels applied with identical adhesives to substrates according to test method indicated below by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

1. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

a. Flame-Spread Index: 25 or less.
b. Smoke-Developed Index: 450 or less.

2.02 MANUFACTURER

A. Acceptable Manufacturer:

1. IPC Door and Wall Protection Systems, InPro Corporation, PO Box 406 Muskego, WI 53150 USA; or approved equivalent

B. Provide all stainless steel wall panels and wall protection from a single source.

2.03 STAINLESS STEEL WALL PANELS

A. Wall Panels

1. Stainless Steel Wall Panels

a. Provide stainless steel wall panel systems that include panels, outside corners and inside corners. Panel system shall include stainless steel panels that have recessed overlap joints that maintain panel flatness and minimizes panel protrusion.

2. Panel Size – Custom, Maximum 4’ x 10’
3. Panel Thickness - 18 gauge
4. Stainless Steel - Type 430 or type 304 (type 304 conforms to NSF Standard 51)

B. Stainless Steel Outside Corners :

1. 2” (50.8mm) x 2” (50.8mm), 16 gauge. Maximum Height 96”, edges shall have an 11° taper

a. Stainless Steel - Type 430 or type 304 (type 304 conforms to NSF Standard 51)
b. Attachment: Adhesive mount or screw mount

C. Stainless Steel Inside Corners

1. 2” (50.8mm) x 2” (50.8mm) 16 gauge. Maximum Height 96”, edges shall have an 11° taper

a. Stainless Steel - Type 430 or type 304 (type 304 conforms to NSF Standard 51)
b. Attachment: Adhesive mount or screw mount

2.04 MATERIALS

A. Stainless Steel

1. Wall panels shall be manufactured from Type 304, 18 gauge. Stainless Steel. Options: Type 430 stainless steel.
2. Outside and Inside Corners

a. Thickness - 16 gauge
b. Type 430 or Type 304 (conforms to NSF Standard 51)

2.05 COMPONENTS

A. Attachment

1. Panels

a. Panels shall be adhered with field applied heavy duty adhesive.

2. Corner Guards

a. Adhesive mount - Corner guards shall be adhered with field applied heavy duty adhesive and foam tape.
b. Screw mount – Corner guards shall be attached with stainless steel Phillips head screws into counter sunk beveled mounting holes.

3. Edge finish – Edges shall be finished with color-matched caulk.

2.06 FINISH

A. Stainless Steel: Panels and corner guards shall have a No. 4 satin finish.

2.07 ACCESSORIES

A. Adhesive: Mildew-resistant, nonstaining, strippable adhesive, for use with specific wall panel and substrate application indicated and as recommended in writing by wall-panel manufacturer.

B. Primer/Sealer: Mildew resistant, complying with requirements in Section 099123 "Interior Painting" and recommended in writing by primer/sealer and wall panel manufacturers for intended substrate.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates and conditions, with Installer present, for compliance with requirements for levelness, wall plumbness, maximum moisture content, and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Comply with manufacturer's written instructions for surface preparation.

B. Clean substrates of substances that could impair bond of wall panel, including dirt, oil, grease, mold, mildew, and incompatible primers.

C. Prepare substrates to achieve a smooth, dry, clean, structurally sound surface free of flaking, unsound coatings, cracks, and defects.

1. Moisture Content: Maximum of 5 percent on new plaster, concrete, and concrete masonry units when tested with an electronic moisture meter.
2. Gypsum Board: Prime with primer as recommended in writing by primer/sealer manufacturer and wall panel manufacturer.

D. Remove hardware and hardware accessories, electrical plates and covers, light fixture trims, and similar items.

E. Acclimatize wall-panel materials by removing them from packaging in the installation areas not less than 24 hours before installation.

3.03 WALL LINER INSTALLATION

A. Install wall liner, without gaps or overlaps. Form smooth wrinkle-free surface for finished installation. Do not begin wall panel installation until wall liner has dried.

3.04 WALL PANEL INSTALLATION

A. Comply with wall panel manufacturers' written installation instructions applicable to products and applications indicated.

B. Install seams vertical and plumb at least 6 inches (150 mm) from outside corners and 3 inches (75 mm) from inside corners unless a change of pattern or color exists at corner. Horizontal seams are not permitted.

C. Trim edges and seams for color uniformity, pattern match, and tight closure. Butt seams without overlaps or gaps between strips.

D. Fully bond wall covering to substrate. Remove air bubbles, wrinkles, blisters, and other defects.

3.05 CLEANING

A. Remove excess adhesive at seams, perimeter edges, and adjacent surfaces.

B. Use cleaning methods recommended in writing by wall panel manufacturer.

C. Replace strips that cannot be cleaned.

D. Reinstall hardware and hardware accessories, electrical plates and covers, light fixture trims, and similar items.

END OF SECTION

SECTION 11 40 00 - FOODSERVICE EQUIPMENT

PART 1 - GENERAL

1.1 SPECIFIER IDENTIFICATION SYSTEM

A. Each model number includes the code E01 – E69 as a suffix. This code is known as the Specifier Identification System. The code identifies the specifying consultant or designer for this project. It is not to be removed by the bidders. The purpose is to identify the specifier to the vendors providing equipment in the event they need to communicate questions, clarifications and comments necessary to resolve questions prior to bid award. It is to be used on all correspondence including fax and e-mail when communicating with manufacturer representatives and factories.

1.2 SCOPE

A. The work referred to in this section consists of furnishing all labor and material required to provide and deliver all equipment hereinafter specified into the building, uncrate, assemble, hang, set in place, level, and completely install, exclusive of final utility connections.

B. Coordinate but do not install (unless specifically directed to do so in the technical specifications) Owner and Vendor-supplied equipment noted on the drawings or in the specifications as NIKEC. Show on roughing in plans the sizes, utilities, and other requirements as furnished in the Specifications, by Owner or appropriate supplier in submittals as if the equipment is contractor furnished.

B. Coordinate and show sizes, utilities, and other requirements as determined by physical inspection for equipment noted as existing to be reused. Include costs for marking, removing, storing, cleaning, redelivering and installing such equipment. All requirements within the project manual apply to reused equipment except warranty as if contractor furnished including but not limited to code compliance and accessories necessary to conform with the new application. It is understood that due to the General Construction project schedule constraints:

1. Some rough-in activities have been started based on the dimensioned rough-in plans provided in the procurement drawings.
2. Notify the Owner, immediately of any changes to the rough-in drawings required by discontinued equipment or updated configurations from the specified equipment manufacturers.

1.3 SUBMITTALS

A. Upon award of Contract, furnish the Architect with reproducible copies of the following drawings, in accordance with the approved project schedule, which shall be made on sheets equal in size and matching the bid set drawing size. Reproduced copies of bid documents will not be accepted for this purpose in any fashion.

1. Equipment specified for fabrication shall be detailed and fully dimensioned to a minimum scale of 3/4" = 1'-0" (1:20) for plan and elevation views and 1-1/2" = 1'-0" (1:10) for sections.
2. KEC shall provide dimensioned rough-in drawings. Notify the Owner immediately of any modification to the construction document drawings. Any modification shall show exact point of penetration of floors, walls, and ceilings for all services required to operate the equipment that the Contractor shall furnish. These drawings shall also show exact locations of final connections to

equipment. Indi- cate floor drains, floor sinks, receptacles, lights, and other special conditions related to the equipment known to the Contractor but provided under other Sections.

3. Dimensioned drawings shall be submitted showing the location and size of all bases, depressions, grease interceptors, special height walls, openings in walls for equipment or operations, and critical dimensions, etc. Drawings shall be drawn to a scale of not less than 1/4" = 1'-0" (1:50).

B. Manufacturers' Data: Upon award of Contract, submit bound copies of Manufacturers' Illustrations and Technical Data to the Architect for review prior to procurement. Items of Standard Manufacture shall be submitted, including items purchased to be built into fabricated equipment. Each illustration shall be marked to describe accurately the item to be furnished as specified, including voltage, phase, load, accessories, etc. If an acceptable alternate manufacturer is selected, the KEC must alert the Architect/Engineer in writing of any variance to base utilities when shop drawings are submitted and before equipment installation commences.

C. Manufacturers' List: Submit in writing a list of all manufacturers' representatives of the foodservice equipment, such as convection ovens, ranges, etc., and their authorized service agencies' addresses and telephone numbers.

D. Foundation Data: Data and drawings shall be submitted for each item, if any, requiring special foundations, structures, or supports. Such foundations, structures, or supports will be provided and installed by other appropriate trades in accordance with the drawings and specifications which shall be provided by the Contractor and reviewed by the Architect.

E. Operation and Maintenance Manuals: Provide three bound copies of operation, maintenance, and parts manuals for all equipment items of standard manufacture including standard component assemblies built into all custom-fabricated items.

F. Review by the Architect of the drawings and brochures submitted by the Contractor does not waive the responsibility of the Contractor to furnish each item of equipment in complete compliance with the specifications and contract drawings.

G. The number of copies of all submittals shall be as determined by the Architect.

H. Samples: Samples of materials, products, and fabrication methods shall be submitted for review at no additional cost, before proceeding with the work.

1.4 QUALITY ASSURANCE

A. Standard Products: Materials, products, and equipment furnished under this contract shall be the standard items of manufacturers regularly engaged in the production of such materials, products, and equipment and shall be of the manufacturers' latest design that complies with the specifications.

B. Manufacturers' Qualifications: Manufacturers shall be regularly engaged in the production of the items furnished and shall have demonstrated the capability to furnish similar equipment that performs the functions specified or indicated herein.

C. Installation Qualifications: Contractor shall use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work defined in this Section.

D. Coordination of Work: Coordinate work with the respective trades performing preparatory work for installation of equipment under this Contract, including, but not limited to: construction of pits, trenches, receptors; rough-in of supply, waste and vent piping; electrical connections; and field verification of dimensions.

E. Product Options: Drawings indicate foodservice equipment based upon equipment specified herein. All substitutions shall be in compliance with the requirements in Division 1 (or Section I if appropriate). Contractor shall be responsible for any costs incurred by the design team for drawing revisions or other changes required by the substitution of foodservice equipment that does not match the drawings. This shall also include any costs incurred for changes required in the field by Mechanical, Electrical, Plumbing or other trades.

F. Conflict: Where written specifications and drawings conflict or appear to conflict, request clarification. Prior to receiving clarification use the greater quality or greater quantity.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver foodservice equipment in containers designed to protect equipment and finish until final installation. Make arrangements to receive equipment at project site at a time and place agreed with the General Contractor. If the site is not ready for delivery, then either delay delivery or arrange to hold in a secure and protected warehouse until delivery can be made to job site.

B. Store foodservice equipment in original containers and in location to provide adequate protection to equipment while not interfering with other construction operations. Coordinate with other trades so that worktables, serving counters and equipment are not used for scaffolding or as workbenches.

C. Handle foodservice equipment carefully to avoid damage to components, enclosures, and finish. Do not install damaged foodservice equipment; replace and return damaged components to equipment manufacturer.

1.6 APPLICABLE CODES AND STANDARDS

A. Except as otherwise indicated, each item of equipment shall comply with the latest current edition of the following standards as applicable to the manufacture, fabrication, and installation of the work in this section. Comply with all Federal, State, and Municipal regulations and notifications which bear on the execution of this work. Call to the attention of the Owner in writing any design conflict with the requirements of the Americans with Disabilities Act (ADA) during Bid Process so resolution can be effected prior to Contract Award.

1. NSF Standards: Comply with applicable National Sanitation Foundation standards and criteria and provide NSF "Seal of Approval" on each manufactured item and on major items of custom-fabricated work.
2. UL / ETL / CSA Standards: For electrical components and assemblies, provide either UL / ETL / CSA listed products or, where no listing service is available, provide a complete index of the components used as selected from the UL / ETL / CSA "Recognized Component Index." For wet chemical fire extinguishing systems comply with UL 300.
3. ANSI Standards: Comply with applicable ANSI standards for electric-powered and gas-burning equipment; for piping to compressed-gas cylinders; and for plumbing fittings, including vacuum breakers and air gaps, to prevent siphonage in water piping.

4. AGA / CGA: All gas-fired equipment shall be AGA / CGA approved, equipped to operate on the type gas available at the job site, and shall contain 100% automatic safety shut-off devices.
5. NFPA Standards: Comply with NFPA Bulletin 96 for exhaust systems; with NFPA Bulletins 13, 17, 17A and 96 for fire extinguishing systems; and with NFPA 54, National Fuel Gas Code and NFPA 70, National Electrical Code.
6. ASME Code: Comply with ASME boiler code requirements for steam-generating and steam-heated equipment; provide ASME inspection, stamps, and certification of registration with National Board.
7. SMACNA Guidelines: Provide seismic restraints for food service equipment to comply with the Sheet Metal and Air Conditioning Contractors National Association's (SMACNA) "Kitchen Equipment Fabrication Guidelines", appendix 1, "Guidelines for Seismic Restraints of Kitchen Equipment", unless otherwise indicated.
8. ASHRAE: Provide mechanical refrigeration systems complying with the American Society of Heating, Refrigerating and Air Conditioning Engineers' ASHRAE 15, "Safety Code for Mechanical Refrigeration".

1.7 PROJECT CONDITIONS

A. Visit the job site to field check actual wall dimensions and roughing-in and be responsible for furnishing, fabricating, and installing the equipment in accordance with the available space and utility services as they exist on the job site for an accurate fit.

B. Check all door openings, passageways, elevators, etc., to be sure that the equipment can be conveyed to its proper location within the building and, if necessary, check with the Contractor regarding the possibility of holding wall erection, placement of doorjambs, windows, etc., for the purpose of moving the equipment to its proper location. Any removal and rebuilding of walls, partitions, doorjambs, etc., necessary to place the equipment or, if caused by incorrect information on the Contractor's drawings, shall be done at the expense of the Contractor.

C. Physically check the location and utility size of all "rough-ins" at the job site for compatibility with the equipment being installed before finished floors, walls, and/or ceilings are in place.

D. Check electrical characteristics and water, steam, and gas pressure. Provide pressure-regulating valves where required for proper operation of equipment.

1.8 GUARANTIES AND WARRANTIES

A. Self-contained or remote refrigeration systems furnished under this Contract shall be provided with start-up and a one-year service contract providing free service, 24 hours per day, seven days per week, including parts and labor. Hermetic or semi-hermetic compressors shall be covered by the manufacturers' factory warranty for an additional four years. Other equipment provided shall include a one-year warranty covering parts and labor, plus any extended warranties as normally provided by individual manufacturers. Equipment including refrigeration systems both self-contained and remote shall be warrantied by the Contractor on the project for one year as indicated in the preceding sentence. The first day of the first year commences upon the issuance of a certificate of occupancy for each area.

PART 2 - PRODUCTS

2.1 GENERAL

A. The equipment and its component parts shall be new and unused. All items of standard manufactured equipment shall be current models at the time of delivery. Parts subject to wear, breakage, or distortion shall be accessible for adjustment, replacement, and repair.

B. Means shall be provided to ensure adequate lubrication for moving parts. Oil holes, grease fittings, and filler caps shall be accessible without the use of tools.

C. Plastic nameplates, to identify controls on fabricated equipment and when specified elsewhere, shall be provided of two-ply, 1/16" (2 mm), rigid plastic material which shall be specifically manufactured for engraving such nameplates. The finished nameplate shall be machine engraved with white letters on a black background and shall have edges beveled at a 45° angle. Nameplates shall be attached using an adhesive recommended by the manufacturer of the engraved material.

D. The design of the equipment shall be such as to provide for safe and convenient operation. Covers or other safety devices shall be provided for all items of equipment presenting safety hazards. Such guards or safety devices shall not present substantial interference to the operation of the equipment. Guards shall provide easy access to guarded parts.

E. Trim shall not be an acceptable substitute for accuracy and neatness. When trim is required and accepted by Architect in lieu of rejection of items of equipment, it shall be the Contractor's responsibility to provide same at no additional cost.

F. Unless otherwise specified herein, no material lighter than #20 gauge shall be incorporated into the work. Gauges for sheet iron and sheet steel shall be U.S. Standard Gauges and finished equipment gauge thickness shall not vary more than 5% plus or minus from the thickness indicated below.

GAUGE	THICKNESS	GAUGE	THICKNESS
#10	0.1406” (3.0mm)	#16	0.0625” (1.6mm)
#12	0.1094” (2.5mm)	#18	0.0500” (1.25mm)
#14	0.0781” (2.0mm)	#20	0.0375” (1.0mm)

G. Materials or work described in words which have a well-known and accepted technical or trade meaning shall be held to refer to such accepted meanings.

2.2 MATERIALS

A. Submit a certified copy of the mill analysis of materials if requested by the Architect.

B. Stainless steel sheets shall conform to American Society for Testing and Materials (ASTM) specification A240, Type 304 Condition A, 18-8, having a No. 4 finish. A No. 2B finish shall be acceptable on surfaces of equipment not exposed to view. Sheets shall be uniform throughout in color, finish, and appearance.

C. Stainless steel tubing and pipe shall be Type 304, 18-8, having a No. 4 finish, and shall conform to either ASTM A213 if seamless or ASTM A249 if welded.

D. Rolled shapes shall be of the cold-rolled type conforming to ASTM A36.

E. Galvanized sheet steel shall conform to ASTM A526; where extensive forming to take place, conform to ASTM A527; conform to ASTM A525, coating designation G115, chemical treatment.

F. Galvanized steel sheets shall be cold-rolled, stretcher leveled, bonderized, and rerolled to ensure a smooth surface.

G. Castings shall be corrosion-resisting metal containing not less than 30% nickel. Castings shall be rough ground, polished, and buffed to bright luster and free from pit marks, runs, checks, burrs, and other imperfections. In lieu of corrosion- resisting metal castings, die-stamped or cast 18-8 stainless steel will be acceptable.

H. Millwork materials shall be free from defects impairing strength, durability, or appearance; straight and free from warpage; and of the best grade for their particular function. Wood shall be well seasoned and kiln dried and shall have an average moisture content of 8%, a maximum of 10%, and a minimum of 5%.

1. Plywood and other woodwork of treatable species, where so required by the code, shall be fire-retardant treated to result in a flame spread rating of 25 or less with no evidence of significant progressive combustion when tested for 30 minutes duration under ASTM E84 and shall bear the testing laboratory mark on a surface to be concealed.
2. Concealed softwood or hardwood lumber shall be of poplar, Douglas fir, basswood, red oak, birch, maple, beech, or other stable wood and shall be select or better grade, unselected for color and grain, surfaced four sides, square-edged, and straight. Basswood may be used where fire-retardant treated materials are required.
3. Plywood for transparent finish shall conform to U.S. Product Standard PS-51-71, Type I (fully waterproofed bond), with architectural grade face veneers of species as specified, free of all pin knots, patches, color streaks and spots, sapwood, and other defects. Plywood designated to have plywood cores shall be of either 5 ply or 7 ply construction. Plywood so designated on the drawings and plywood not otherwise shown shall have a particle board core, cross banding of veneers, and face and back veneers. Particle board cores shall have a 45-pound density, except where the fire retardant treatment requires cores of lesser density.
4. Face veneers shall be matched for color and grain to produce balance and continuity of character. Mineral streaks and other discolorations, worm holes, ruptured grain, loose texture, doze, or shake will not be permitted. Face veneer leaves on each surface shall be full-length, book matched, center matched, and sequence matched. Surfaces shall be sequenced and blueprint matched. Veneers not otherwise indicated shall be plain sliced. Backing veneers for concealed surfaces shall be of a species and thickness to balance the pull of the face veneers.
5. Hardwood plywood for painted surfaces shall conform to U.S. Product Standard PS-51-71, Type I, and shall have sound birch, maple, or other approved close grain hardwood faces suitable for a paint finish.

6. Perforated hardboard shall be a tempered hardboard, 1/4" (6 mm) thick, conforming to Federal Specification LLL-B-810B, Type I, SIS, Finish B (primed), Design B (perforated), with ¼" (6 mm) diameter holes spaced on 1" (25 mm) centers both ways.
7. Plastic laminate surfaces shall be laminated with thermosetting decorative sheets of the color, pattern, and style as selected by the Architect. Horizontal surfaces shall be laminated with sheets conforming to Federal Specification L-P-508F, Style D, Type I (general purpose), Grade HP, Class 1, 1/16" (2 mm) thick, satin finish, with rough sanded backs. Vertical surfaces shall be laminated with sheets conforming to Federal Specification L-P-598F, Style D, Type II, (vertical surfac), Grade HP, Class 1, non-forming, satin finish, 1/32" (1 mm) thick or heavier. Surfacing for curved surfaces shall be laminated from sheets conforming to Federal Specification L-P-508F, Style D, Type III (post-forming), Grade HP, Class 1, satin finish. Balance sheets for backs in concealed locations shall be either reject material of the same type and thickness as the general purpose grade facing or may be .020" (0.5 mm) thick laminate backing sheets conforming to Federal Specification L-P-00508E, Style ND, Type V (backing sheet), Grade HP.
8. Adhesive for application of plastic laminate to wood substrates of counter tops shall be a phenolic, resorcinol, or melamine adhesive conforming to Federal Specification MMM-A-181C and producing a waterproof bond. Adhesive for applying plastic laminate to vertical surfaces shall be either a waterproof type or a water resistant type such as a modified urea- formaldehyde resin liquid glue conforming to Federal Specification MMM-A-188C. Contact adhesive will not be acceptable.
9. Plywood for laminate assemblies shown or specified with plywood core shall be of the 5 or 7 ply construction with sanded close-grain hardwood face and back veneers, laminated with waterproof glue, in thickness shown, conforming to U.S. Product Standard PS-51-71. Particle board for plastic laminate assemblies shown or specified with particle board wood core shall conform to U.S. Products Standard CS-236-66, Type 1 or 2, Grade B (45 pound density), Class 2; except where fire-retardant treatment is required, the density shall conform to the treatment requirements.

I. Sealant: ASTM C 920; type S, Grade NS, Class 25, use, NT. Provide elastomeric sealant, NSF certified for end use application indicated. Provide sealant that, when cured and washed, meeting requirements of Food and Drug Adminstration's 21 CFR, Section 177.2600 for use in areas that come in contact with food. Dow-Corning #780 or General Electric "Silastic" or approved equal in either clear or approved color to match surrounding surfaces and applied in accordance with sealant manufacturers' recommendations for smooth, sealed finish.

J. Tempered Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated surfaces), Type I (transparent), Class 1 (clear), Quality q3 (glazing select). Provide products complying with ANSI Z97.1, manufactured by horizontal (roller hearth) process and ¼" (6 mm) thick, unless otherwise indicated. Provide exposed safety edges, if any, seamed before tempering.

K. Sound Dampening: NSF-certified, nonabsorbant, hard-drying, sound deadening coating. Provide coating compounded for permanent adhesion to metal in 1/8" (3 mm) thickness that does not chop, flake, or blister.

2.3 FINISHES

A. Paint and coatings shall be of an NSF approved type suitable for use in conjunction with foodservice equipment. Such paint or coating shall be durable, non-toxic, non-dusting, non-flaking, and mildew resistant; shall comply with all governing regulations; and shall be applied in accordance with the recommendations of the manufacturer.

B. Exterior, galvanized parts, exposed members of framework, and wrought steel pipe where specified to be painted shall be cleaned, properly primed with rust-inhibiting primer, degreased, and finished with two (2) coats of epoxy-based grey hammertone paint, unless otherwise specified.

C. Stainless steel, where exposed, shall be polished to a #4 commercial finish. Where unexposed, finish shall be #2B. The grain of polishing shall run in the same direction wherever possible. Where surfaces are disturbed by the fabricating process, such surfaces shall be finished to match adjacent undisturbed surfaces.

D. Galvanized shelving shall not be painted.

E. Fabricated equipment shall be spray coated with plastic suitable for protecting the equipment during transport and installation. The coating shall be easily removable and shall be removed after the equipment installation is complete at the work site or, alternatively, when directed by the Architect.

F. Exposed surfaces on brass, bronze, or steel shall be plated with chromium over nickel in accordance with Federal Specifications WW-P-541, Paragraph 9.5 and Table 9.4, unless otherwise specified.

2.4 ELECTRICAL AND MECHANICAL REQUIREMENTS

A. Standard UL / ETL / CSA listed materials, devices, and components shall be selected and installed in accordance with NEMA Standards and recommendations and as required for safe and efficient use and operation of the foodservice equipment without objectionable noise, vibration, and sanitation problems.

1. Provide recognized commercial grade signals, "on-off" pushbuttons or switches, and other speed and temperature controls as required for operation of each item, complete with pilot lights and permanent engraved, plastic laminate signs and graphics identifying each item. Provide stainless steel cover plates at controls and signals.
2. Each item requiring electrical power shall be equipped with either a terminal box for permanent connection or with cord and plug for interruptable connection, as indicated. Provide NEMA standard grounding type plugs, where used.
3. Furnish foodservice equipment completely wired internally using wire and conduit suitable for a wet location, including a separate grounding wire. Provide electrical outlets and receptacles required to be mounted on or in fabricated equipment and interconnect to a suitable terminal box (subpanel, starter, or disconnect switch if so specified) with all wires neatly tagged showing item number, voltage characteristics, and load information.
4. Receptacles for all wall- and floor-mounted outlets will be provided to be used for plug-in equipment with characteristics as noted on the drawings. Provide Hubbell three-wire or four-wire grounding-type connectors and neoprene cords installed on each item of plug-in equipment to match receptacles provided.

5. Electrically heated equipment shall be internally wired to a thermostatic control and an "on-off" red neon light indicator, which shall be mounted in a terminal box on a removable stainless steel access panel.
6. Only rigid steel zinc-coated conduit shall be used, painted to match adjacent surfaces where exposed. Wiring shall be run concealed wherever possible.
7. Provide on, or for, each motor-driven appliance or electrical heating or control unit, a suitable control switch or starter of the proper type and rating.
8. Appliances shall be furnished complete with motors, driving mechanism, starters, and controllers, including but not limited to, master switches, timers, cut-outs, reversing mechanism, and other electrical equipment if and as applicable. Wiring and connection diagrams shall be furnished with electrically operated machines and for electrically wired fabricated equipment.
9. Appliances shall be of rigid construction, free from objectionable vibration. Quietness of operation of all foodservice equipment is a requirement. Remove or repair any equipment producing objectionable noise and/or vibration as directed by the Architect.
10. Motors shall be of the drip-proof, splash-proof, or totally enclosed type, having a continuous duty cycle and ball bearings, except small timing motors which may have sleeve bearings. Motors shall have windings impregnated to resist moisture. Motors located where subject to deposits of dust, lint, or other similar matter from the machine on which installed shall be of the totally enclosed type. Motors shall have ample power to operate the machines for which designated under full load operating conditions without exceeding their nameplate ratings. Horsepower requirements on driven equipment shall be determined by the manufacturer based on normal operation at maximum capacity. The nominal rated motor horsepower shall be not less than the horsepower required for normal operation of the equipment at maximum capacity. Insulation shall be NEMA Class B, or better.
11. Cover plates shall be furnished and installed for all electrical outlets, receptacles, switches, etc., to match the material and finish of the equipment to which they will be fastened.
12. Switches, controls, etc., shall be conspicuously labeled as to use with plastic nameplates secured to the adjacent surface as previously specified in Article 2.01-C. Submit a sample for approval if requested by Architect.
13. Where specified for custom fabricated equipment, provide compartment with electrical sub-panel which shall be pre-wired in conduit concealed in cabinet body construction and connected to all electrical components built into or set upon the counter. Electrical sub-panel shall be UL / ETL / CSA listed, 3-phase, 4-wire circuit breaker type with a ground buss main breaker and individual breakers for each serviced load. Buss shall be copper and the circuit breakers shall be the molded case, bolt-on type with thermomagnetic quick-make, quick-break trip. Multi-pole circuit breakers shall have an internal trip bar. The circuit breakers shall have an interrupting capacity of 10,000 amperes at 120 volts and there shall be a separate breaker for each connected load. Each breaker shall be sized for 125% of the connected load and a minimum of two (2) extra, single pole, 20 amp circuit breakers shall be provided. The loads shall be connected through the breakers in a phased sequence to balance the load on each phase.

B. Water inlets shall be located above the positive water level wherever possible to prevent siphoning of liquids into the water supply system. Wherever conditions shall require a submerged inlet, a suitable type of back flow prevention or check valve (except in jurisdictions where check valves are prohibited) and vacuum breaker shall be provided with the fixture to prevent siphoning. Where exposed, piping and fittings shall be chrome-plated. Where vacuum breaker piping is through equipment, provide chrome - plated escutcheon plates to cover holes.
   1. Provide and install indirect waste lines from equipment which will discharge into floor drains or safe wastes, chrome-plated where exposed. Extend to a point at

least 1" (25 mm) (or as required by local or state code) above the rim of the floor drain, cut bottom on 45-degree angle and secure in position.

2. Horizontal piping lines shall be run at the highest possible elevation and not less than 6" (150 mm) above the floor, through equipment where possible.
3. No exposed piping in or around fixtures or in other conspicuous places shall show tool marks or more than one thread at the fitting.
4. Steam operating valves on or in fabricated and purchased foodservice equipment shall be provided with composition hand wheels, which shall remain reasonably cool in service.
5. Provide suitable gas and liquid pressure-reducing valves for equipment with such components that might reasonably be expected to be affected over a period of time by adverse pressure conditions, including but not limited to dishwashers, booster heaters, coffee urns, ranges, steam boilers, etc.

C. Provide and install complete refrigeration systems--charged, started, and operating properly--including, but not limited to:

compressors, condensers, racks, coils, vibration eliminators, sight glasses (moisture indicating type), expansion valves, filters, oil separators, thermostats, defrost time clocks, all controls and control wiring, liquid line driers, piping, and refrigeration grade copper tubing with all sweat joints using Safety-Silv No. 1200 or approved equal silver solder (with as few joints as possible)

1. Where specifications call for pre-piped lines (i.e., from a fixture to a valve compartment, etc.), provide such work in strict conformance with other sections of the specifications which set forth standards for this type of work or in conformity with the requirements of the ASHRAE Standards or local authorities, whichever is the greater.
2. Mechanically refrigerated cold pans shall have a normally closed liquid line electric solenoid valve installed before the expansion valve and wired to a silent-type toggle switch complete with an "on-off" red neon light indicator and both mounted in a terminal box on a removable access panel. This switch shall be fed by a separate control circuit and shall not to be wired into the compressor circuit so that it shall stop the flow of refrigerant to the cold pan and not turn off the compressor. The compressor shall then pump down and turn off through the action of the pressure control.
3. Each refrigeration item specification is written to provide minimum specifications and scope of work. Refrigeration equipment shall be designed and installed to maintain the following general temperatures unless otherwise specified.

a. Walk-In Refrigerators	1.7°C / 35°F
b. Walk-In Freezers	-23.3°C / -10°F
c. Reach-In Refrigerators	1.7°C / 35°F
d. Reach-In Freezers	-23.3°C / -10°F
e. Undercounter Refrigerators	1.7°C / 35°F
f. Undercounter Freezers	-23.3°C / -10°F
g. Cold Pan	-17.8°C / 0°F
h. Work Rooms	10°C / 50°F

4. Provide electrical and refrigeration components needed by the completed system and complete all refrigeration and control connections of and to said components.

5. Provide evaporator coil defrost system on all walk-in refrigerator and freezer rooms where the refrigeration systems are designed to operate at room temperature of less than 35°F (1.7°C).
6. Verify the requirements of and provide any or all additional refrigeration specialty(s) or component(s) required or recommended by the manufacturer for proper operation under the specific operating conditions and location of each system specified.
7. Verify and provide manufacturer's certification (or certification by manufacturer's authorized agent) that the equipment selection hereinafter specified for each refrigeration system is properly sized and shall meet the operating requirements set forth for each system regarding maintaining specified operating temperature, hours of compressor running time, and system pressures and velocities as recommended by the equipment manufacturer(s).
8. During check-out and initial operation, verify that:
   a. Controls are properly adjusted.
   b. Condensers are equipped with an overload protector.
   c. A competent service mechanic is on site during the first eight (8) hours of operation.
   d. Switches, starters, and controls are identified as to function.
9. Unless otherwise specified, furnish thermometers for walk-in units mounted above the exterior entrance door with suitable length armored capillary tubes to allow the sensing bulbs to be installed in the incoming air stream to the blower coil with runs fastened to the walk-in walls to prevent it from damage. This identical requirement applies to alarm systems when specified.

2.5 PRODUCT SPECIFICATIONS

A. Refer to Part 4 for complete itemized product specifications.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Begin installing the equipment at the time the building is ready to receive the equipment and in accordance with the schedule.

B. Provide a competent foreman or supervisor for erection of equipment and to coordinate with other trades regarding connections, installation, and inspection. Coordinate delivery schedule to ensure adequate openings in the building to receive the equipment.

C. Install refrigeration work in an approved manner, using first quality fittings, controls, valves, etc. Refrigeration items shall be started up, tested, adjusted, and turned over to the Architect in first-class condition and left operating in accordance with the manufacturer's specifications.

D. Set equipment that rests on masonry bases level onto a bed of silicone rubber sealant.

E. Seal equipment that butts to a wall or against other equipment with silicone rubber sealant. Set trim strips or other items requiring fasteners in a bed of silicone rubber sealant and fastened with suitable stainless steel fasteners 48" (1200mm) or less on centers. , surfaces shall be Thoroughly clean and degrease All surfaces prior to the application of sealant.

F. Install and interconnect electrical controls, switches, or other units which are separately furnished for field installation in or on equipment provided, unless otherwise specified.

G. Install and wire refrigeration systems in strict conformance with the manufacturers' instructions and recommendations. Ensure that all refrigeration condensing units are ventilated properly and are accessible for repair, maintenance, and inspection.

H. Hang evaporator coils per the manufacturer's recommendation at the locations as shown on the drawings. Mount units such that the drain pans are pitched to the drain lines. Hang the coils using nylon or other approved non-conductive, non-corrosive fasteners Furnish #12 gauge galvanized steel fish plates of suitable size and shape on the exterior ceiling of the walk-in to spread the weight of the coils adequately. Connect coils to the condensing unit and install to constitute a complete working system capable of maintaining the interior temperatures specified regardless of the heavy usage the walk-in units may receive.

I. Furnish and install a copper or PVC drainline painted silver from each coil outlet to a point 1" (25mm) above the floor drain. Trap drainlines immediately above the floor drain. Provide continuous electrified heater tape for freezer drainlines, coordinate electrical requirements and wiring with electrical division. Insulate drainline after installation.

J. Refrigeration tubing shall be the Type L, ACR hard drawn degreased, sealed copper and shall be installed with horizontal runs sloped 1" per 20 feet (1:240) toward the condensing units. Refrigerant piping shall be properly supported by adjustable hangers spaced and adjusted to the drop required. Where vertical runs of more than 5' (1500mm) occur in the suction line, trap the risers at the bottom. Install piping so that refrigerant or oil cannot drain back into the coils from the suction line.

K. Insulate suction and refrigerant lines with minimum 1" Armstrong armaflex or equal cellular type insulation. Metal pipe sleeves shall be provided where piping passes through a wall, ceiling, or floor. Space around the tubing shall be filled with mastic insulating compound. Install a permanent suction line filter in each compressor suction line with pressure fitting ahead of the filter to facilitate checking of pressure drop through the filter. Penetrations through walk-in cooler or freezer structures shall be fully insulated and sealed to be vapor tight to prevent condensation within any light fixtures, switch boxes, junction boxes, or any other fittings. Refrigeration and drain lines shall be fully sealed and provided with escutcheon plates by the installer.

L. Furnish and completely install a thermostat to control the refrigeration temperatures for each individual compartment.

M. Mount the condensing units on a welded steel rack containing all accessories and components necessary to form a complete condensing unit package. Provide each condensing unit with a factory mounted, pre-wired control panel/disconnect switch complete with circuit breakers, contactors, and time clocks as required.

N. Furnish the refrigeration systems with a one-year refrigeration service contract, covering all parts and labor, with service available seven days per week, 24-hours per day. Provide an option for continuation of the service contract after the first year.. Warrant the refrigeration system for one year and provide the compressors with the manufacturer's extended five-year warranty.

O. Furnish four (4) copies of complete remote refrigeration system control wiring and piping diagrams. Frame one (1) copy in Plexiglas and mount at compressor location or inside the refrigeration system enclosure as appropriate.

P. Coordinate the equipment work with the respective work of other Sections so that electrical and mechanical components built into the equipment will conform and/or adapt to the type, materials, and characteristics of the building components.

Q. Install heated and motor-driven equipment so as to operate efficiently. Provide additional vents, guards, deflectors, and other accessories as needed at no additional cost. Note such additions or modifications on the shop drawings and bring to Architect's attention by special accompanying letter.

3.2 FABRICATION

A. Items of fabricated equipment shall be fabricated in the same factory and shall be similar in construction details, materials, methods, and appearance to similar types of items so fabricated under this contract.

B. Each fabricated item of equipment shall include necessary reinforcing, bracing, and welding with the proper number and spacing of uprights and cross members for strength. Wherever standard sheet sizes will permit, the tops of all tables, shelves, exterior panels of cabinet type fixtures, and doors and drainboards shall be constructed of a single sheet of metal. Except where required to be removable, flat surfaces shall be secured to vertical and horizontal bracing members by welding or other approved means to eliminate buckle, warp, rattle, and wobble. Equipment not braced in a rigid manner and which is subject to rattle and wobble shall be unacceptable, and the Contractor shall add additional bracing in an approved manner to achieve acceptance.

C. Suitable pipe slots shall be provided on fabricated equipment to accommodate service and utility lines and mechanical connections. These slots shall be of proper size and shall be neatly made with turned up edges around to eliminate cutting or defacing of equipment on the job. Cabinet bases shall be provided with an inner panel duct at the ends or rear of the cabinet allowing adequate space to conceal vertical piping. Such work, when performed at the job site, shall be of the same quality as similar work performed in the shop.

D. Exposed surfaces shall be free from bolt and screw heads. When bolts are required, they shall be of the concealed type and be of similar composition as the metal to which they are applied. Where bolt or screw threads on the interior of fixtures are visible or may come into contact with hands or wiping cloths, they shall be capped with a stainless steel acorn nut and stainless steel lock washer.

E. Where screw threads are not visible or readily accessible, they shall be assembled with stainless steel lock washers and nuts. Wherever bolts or screws are welded to the underside of trim or tops, the reverse side of the weld shall be finished uniformly with the adjoining surfaces. Depressions at these points shall not be acceptable.

F. Rivets shall not be permitted in any location.

G. Welding shall be the heliarc method with welding rod of the same composition as the sheets or parts welded. Welds shall be complete, strong, and ductile with excess metal ground off and joints finished smooth to match adjoining surfaces. Welds shall be free of mechanical imperfections such as gas holes, pits, cracks, etc., and shall be continuously welded so that the fixtures shall appear as one piece construction. Butt welds made by spot solder and finished by grinding shall not be acceptable.

1. Spot welds shall have a maximum spacing of 3" (75mm). Tack welds shall be of at least 1/4" (6mm) length of welding material at a maximum space of 4" (100mm) from center to center. Weld spacing at the ends of the channel battens shall not exceed 2" (50mm) centers.
2. In no case shall soldering be accepted.
3. Fixtures shall be shop fabricated of one piece and shipped to the job completely assembled wherever possible. Equipment too large to transport or enter the building as one piece shall be constructed so that the field joints can be welded at the job site.
4. Exposed joints shall be ground flush with adjoining material and finished to harmonize therewith. Whenever material has been depressed by a welding operation, such depression shall be suitably hammered and peened flush with the adjoining surface and, if necessary, again ground to eliminate low spots. In all cases, the grain of rough grinding shall be removed by successive fine polishing operations.
5. Unexposed welded joints on undershelves of tables or counters in stainless steel construction shall be suitably coated at the factory with an approved metallic-based paint.
6. After galvanized steel members have been welded, welds and areas where galvanizing has been damaged shall have a zinc dust coating applied in conformance with U.S. Government Military Specification Number MIL-P-26915.

H. Butt joints and contact joints, wherever they occur, shall be close fitting and shall not require a filler. Wherever break bends occur, they shall be free of undue extrudence and shall not be flaky, scaly, or cracked in appearance; where such breaks do mar the uniform surface appearance of the material, such marks shall be removed by suitable grinding, polishing, and finishing. Wherever sheared edges occur, they shall be free of burrs, fins, and irregular projections and be finished to obviate danger of cutting or laceration when the hand is drawn over them. In no case shall overlapping materials be acceptable where miters or bullnosed corners occur.

I. The grain of polishing shall run in the same direction on horizontal and on vertical surfaces of each item of fabricated equipment except in the case where the finish of the horizontal sections of each shall terminate in a mitered edge. Where sinks and adjacent drainboards are equipped with backsplash, the grain of polishing shall be consistent in direction throughout the length of the backsplash and sink compartment.

J. Component parts, whether fabricated by the Contractor or purchased for building into the fabricated equipment, shall conform to the following.

Bolts, screws, nuts, and washers shall be of steel, except where brass or stainless steel is fastened, in which case they shall be of brass or stainless steel, respectively. Where dissimilar metals are fastened, bolts, screws, nuts, and washers shall be of the higher grade metal. The spacing and extent of bolts and screws shall be such as to ensure suitable fastening and prevent buckling of the metals fastened.

3.3 CLEAN-UP

A. At completion of the installation, clean up, lubricate, and adjust where necessary items of equipment provided and turn them over in first-class condition.

1. Where stainless steel surfaces are disturbed by the installation or fabricating process, such surface shall be finished to match adjoining undisturbed surfaces.

2. At the completion of the installation work, stainless steel shall be gone over with a portable polishing machine and buffed to perfect surfaces. Painted surfaces shall be carefully gone over and retouched as required.

3.4 START-UP AND TESTING AND COMMISSIONING

A. Startup Services: Engage factory-authorized service representatives to perform startup services and to demonstrate and train Owner's maintenance personnel as specified below.

1. Coordinate food service equipment startup with service-utility testing, balancing, and adjustments. Do not operate steam lines before they have been cleaned and sanitized.
2. Remove protective coverings and clean and sanitize equipment, both inside and out, and relamp equipment with integral lighting. Where applicable, comply with manufacturer's written cleaning instructions.
3. Test each equipment item for proper operation. Repair or replace equipment that is defective in operation, including units that operate below required capacity or that operate with excessive noise or vibration.
4. Test refrigeration equipment's ability to maintain specified operating temperature under heavy-use conditions. Repair or replace equipment that does not maintain specified operating temperature.
5. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
6. Test motors and rotating equipment for proper rotation and lubricate moving parts according to manufacturer's written instructions.
7. Test water, drain, gas, steam, oil, refrigerant, and liquid-carrying components for leaks. Repair or replace leaking components.
8. Train Owner's maintenance personnel on procedures and schedules related to startup and shutdown, troubleshooting, servicing, and preventive maintenance for each food service equipment item.
9. Review data in the operation and maintenance manuals. Refer to Division 1 Section "Contract Closeout."
10. Review data in the operation and maintenance manuals. Refer to Division 1 Section "Operation and Maintenance Data."
11. Schedule training with Owner, through Architect, with at least 7 days' advance notice.

3.5 SEISMIC RESTRAINTS

A. Install equipment in these contract documents according to the "SMACNA Guidelines for Seismic Restraint of Kitchen Equipment" in any State, province, or jurisdiction that has legislated this requirement as necessary for acceptance. This shall include:

1. Identifying these items on his submittal drawings, Plans, Elevations, and Sections.
2. Showing required SMACNA methods of restraint on his submittal drawings.
3. Referencing the appropriate detail(s).
4. Obtain regulatory approval for all seismic engineering details.

B. If no SMACNA detail exists for a particular situation, prepare and obtain approval for a special attachment detail:

1. Detail must be prepared by an engineer licensed by the State having jurisdiction over the project and accompanied by the supporting calculations used in the design.

2. Verify that the restraint design is appropriate to the building's structural conditions and the surfaces to which the equipment will be secured.

PART 4 – ITEMIZED PRODUCT SPECIFICATIONS

A. Refer to Section 11 40 10 “Food Service Equipment Schedule”.

END OF SECTION

SECTION 114000 - FOODSERVICE EQUIPMENT SCHEDULE

PART 4 - ITEMIZED PRODUCT SPECIFICATIONS

Comments:

1) *Each item is to be bid as specified. Alternate manufacturers are only allowed if noted in the description of the specific item.*

Item Specifications:

ITEM E-01	Stainless Steel Wall Flashing – WP2	IPC by InPro Corp.

WP2 – Stainless Steel Wall Flashing

Refer to Architectural Finish Plan, sheet A801 for locations and Architectural specification 09 78 13 Stainless Steel Wall Panels. Provide the materials & installation for all panels shown on the plans, elevations and as specified.

ITEM E-02	Trash Container	Rubbermaid

Not included in KEC package. For reference only. See drawings and schedule.

Rubbermaid FG2620 - 19.5" diameter X 22.9" high

Capacity: 20 gallons

Round style with reinforced rims and built-in handles - Plastic construction

Provide "quiet" dolly

Color: Gray

ITEM E-03	Exhaust Hood #1	Caddy

Caddy Model SHBC-C-W-120-ND-60

Acceptable alternate manufacturers limited to MasterAire, Helton, Gaylord, CaptiveAire & Accurex.

Refer to plans & elevations for additional details.

7' -0" long x 8'-0" x 24" high, overall, Hang the leading bottom edge of the hoods at 6'-8" above the finished floor.

All welded, Type 304 Stainless steel construction

With ceiling supply plenum

Provide recessed 2800K color LED lights wired to junction box with switch on wall

Provide Ansul cabinet in locations as shown on plans & shall include a cabinet wall mounted with access door. Ansul pre-pipe only shall be the responsibility of the Kitchen Hood manufacturer and shall be installed at the factory and included in the

hood manufacturer's bid pricing. All other Ansul system related charges including, but not limited to: Final Ansul system piping connections, local Fire Test and Permit charges, and additional jobsite fees, shall be the responsibility of the Kitchen Equipment Contractor

Provide thermostat on duct collar for Ansul System

Provide thermostat in hood to start fans, per IMC Code 2006

18-gauge stainless steel removable enclosure panels from top of hood to underside of building ceiling

20-gauge stainless steel wall flashing, vertical grain and seams from wall curb to 2" above the bottom edge of ventilation behind cooking equipment area

Manufacturer to comply with all state and local codes

Manufacturer to supervise unit installation

ITEM E-03	Fire Suppression System for Hood #1	Caddy

Caddy Model Ansul R-102 – 6 Gallon Fire Suppression System

Acceptable alternate manufacturers limited to MasterAire, Helton, Gaylord, CaptiveAire & Accurex.

System shall provide surface plenum and duct protection for the items of cooking equipment located beneath the exhaust hood, E-03, in accordance with all applicable codes, ordinances, regulations, and the provisions of NFPA 17, 96 and UL300

All system piping, fittings and conduit shall be concealed where possible and, if exposed, shall be stainless steel finish with no exposed threads

System to be interwired with shunt-trip breaker and mechanical gas solenoid valve serving items of cooking equipment beneath the hood to provide for power shut-off in the event of system actuation

System shall be complete with all valves, switches, pilot lights, re-set button, indicator lights, alarm, and time delay

Mechanical Gas Shut-off valve provided loose by KEC for field installation

System located in Exhaust Hood/Fire Suppression Control Cabinet mounted where shown on Plan

Provide recessed remote fire pull station located per Plan between 4' 6" (1350mm) and 5' 0" (1500mm) above finished floor ; Location of fire pull to be verified with local/state codes. (BOCA 93: pull to be minimum of 10' 3" (3,000mm) away from hood)

Manufacturer to comply with all state and local codes

Installation, field inspection, and certification to be performed by factory authorized Ansul agency

ITEM E-03	Exhaust Hood #2	Caddy

Caddy SHBC-C-II-84-ND-60

Acceptable alternate manufacturers limited to MasterAire, Helton, Gaylord, CaptiveAire & Accurex.

Refer to Elevations for further details

6'-5 ¾"" long X 10'-0" wide X 24" high, overall; Hang the leading bottom edge of the hoods at 6'-8" above the finished floor

All-welded, Type 304 all stainless steel construction

With ceiling supply plenum

Provide recessed 2800K color LED lights wired to junction box with switch on wall

Provide Ansul cabinet on per plan, with wall mounted cabinet with access doors. Ansul pre-pipe only shall be the responsibility of the Kitchen Hood manufacturer and shall be installed at the factory and included in the hood manufacturer's bid pricing. All other Ansul system related charges including, but not limited to: Final Ansul system piping connections, local Fire Test and Permit charges, and additional jobsite fees, shall be the responsibility of the Kitchen Equipment Contractor

Provide thermostat on duct collar for Ansul System

Provide thermostat in hood to start fans, per IMC Code 2006

18-gauge stainless steel removable enclosure panels from top of hood to underside of building ceiling

20-gauge stainless steel wall flashing, vertical grain and seams from wall curb to 2" above the bottom edge of ventilation behind cooking equipment area

Manufacturer to comply with all state and local codes

Manufacturer to supervise unit installation

ITEM E-03	Fire Suppression System for Hood #2	Caddy

Caddy Model Ansul R-102 – 6 gallon Fire Suppression System

Acceptable alternate manufacturers limited to MasterAire, Helton, Gaylord, CaptiveAire & Accurex.

System shall provide surface plenum and duct protection for the items of cooking equipment located beneath the exhaust hood, 1.063, in accordance with all applicable codes, ordinances, regulations, and the provisions of NFPA 17, 96 and UL300
All system piping, fittings and conduit shall be concealed where possible and, if exposed, shall be stainless steel finish with no exposed threads

System to be interwired with shunt-trip breaker and mechanical gas solenoid valve serving items of cooking equipment beneath the hood to provide for power shut-off in the event of system actuation

System shall be complete with all valves, switches, pilot lights, re-set button, indicator lights, alarm, and time delay

Mechanical Gas Shut-off valve provided loose by KEC for field installation

System located in Exhaust Hood/Fire Suppression Control Cabinet mounted where shown on Plan

Provide recessed remote fire pull station located per Plan between 4' 6" (1350mm) and 5' 0" (1500mm) above finished floor ; Location of fire pull to be verified with local/state

codes. (BOCA 93: pull to be minimum of 10' 3" (3,000mm) away from hood)

Manufacturer to comply with all state and local codes

Installation, field inspection, and certification to be performed by factory authorized Ansul agency

ITEM E-03	Hood Ventilation Control System	Melink "Intelli-Hood

Melink "Intelli-Hood" III, Supplied for Hood E-03, No. 1 & No. 2.

System to automatically reduce speed of the supply exhaust fan during idle, non-cooking periods to save fan energy and conditioned air for Hoods.

Includes the following components: controls with IH# Hood controller, I/O Processor, Keypad, and variable frequency drives, temperature sensors, optic sensors and cables

Mount I/O processor, keypad and variable frequency drives in cabinet on end of hood, Where shown on Plan

Mount temperature and optic sensors, which monitor the exhaust air temperature and smoke load in hood

IAQ, indoor air quality ventilation monitoring

Provide all sensors, cables and VFD's for a complete operating system

KEC to coordinate with mechanical and electrical trades to install all necessary wiring conduit and fittings necessary for complete operating system to interconnect to exhaust fan

Provide installation and hood start up to calibrate system and train the customer in its operation.

KEC to provide shop drawing for approval prior to ordering

ITEM E-04	HD Range, 48″, 8 Open Burners	Jade

Jade JBR-8-36

Refer to Elevations for further details

Acceptable alternate manufacturers:

Vulcan, Bakers Pride and Southbend will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

Natural gas – 270,000 BTU's total

Eight (8) 12" open burners 30,000 BTU, easy clean cast iron burners

Standard oven base

Two (2) chrome-plated oven racks

¾" rear gas connection with gas pressure regulator

Cap and cover front gas connection

Casters, front two with brakes, 5” dia.

Provide 48” long T&S HG4S swivel gas quick disconnect with restraining cable, sized to fit equipment

ITEM E-05	Three Compartment Sink	Advance Tabco

Advance Tabco or equal – Model FC-1515-15RL

Three compartment sink, bowl size 15” x 15” x 14 inch depth with left and right drain boards

Overall length to be 75 inches

16 gauge 304 stainless steel entire unit.

Include tile edge back splash back & left side, stainless steel legs

Seamless 18 gauge Type 304 stainless steel

Fully coated underside

54” x 18” overall size, bowl size 16” c 16” x 7 ½ “deep

Supply J-35-SSF drains

ITEM E-06	Fryer	Keating

Keating 14 IFM Gas Instant Recovery Fryer

Refer to Elevation for further details

Acceptable alternate manufactures:

Vulcan and Frymaster will be accepted if the exact performance specifications can be

matched. No other manufacturers will be considered or allowed.

Natural gas operated – 79,000 BTU’s, Common Gas manifold

Capacity: 72 pounds Digital electronic timers (2)

Spark ignition

Instant On, Melt Cycle

Interconnect to E-07, filter cabinet

Stainless steel construction

Battery units together

Basket lift

Central filter, safe & easy filter option

Oil capacity 38 lbs.

Thermostat Seal

Cord and plug set for controls

Casters, front two with brakes

Provide T&S HG4S 48” long Swivel Max gas quick disconnect hose with restraining cable, sized to properly fit unit

ITEM E-07	Fry Filter & Dump Station	Keating

Keating SE14-CF filter cabinet & dump

Acceptable alternate manufacturers:

Vulcan and Frymaster will be accepted if the exact performance specifications can be

matched. No other manufacturers will be considered or allowed.

Inter connect filter to E-06 Fryers

14” Fryer Filter and dump station with bagger station top

Stainless steel top and exterior

Provide Model 2LCF splash-mounted Keep Krisp heat lamp measuring 19” long X 6-1/2” wide with two 250-watt bulbs

Rear drain valve with front release, with safety switch

Casters, front two with brakes

Battery unit to fryer, Item E-06

ITEM E-08	Dual Flow Gas Convection Oven - Double	Blodgett

Blodgett Model DFG-100 Dual Flow Gas Oven

Acceptable alternate manufacturers:

Vulcan, Bakers Pride and Southbend will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

Stainless steel front, top & sides, dual pane glass thermal windows in stainless steel frames

Electric spark ignition control system with pressure regulator

Standard SSD – Solid state digital controls with LED display, Cook & Hold and Pulse Plus

48” gas hose with quick disconnect restraining device

Gas Manifold

Draft diverter or draft hood, verify with owner before order

4” low profile casters with locking

ITEM E-09	Reach-In Refrigerator	Continental

Not included in KEC package. For reference only. See drawings and schedule.

Continental Model DL2R, 2 Section Reach-in Refrigerator, 50 cu. Ft.

52” width X 35 3/8” deep X 83-1/4” high

Self-contained refrigeration – top mounted two

sections

Two (2) hinged full-size doors with locks master keyed; hinged as shown on Plan

Provide four (4) epoxy coated additional steel shelves

Digital thermometer, external

Stainless steel exterior, aluminum interior and end panels

4” casters, front two with brakes Cord and plug set

Energy-star rated

ITEM E-10	2 Section Reach In Freezer	Continental

Not included in KEC package. For reference only. See drawings and schedule.

Continental Model DL2F, 2 Section Reach-in Freezer with solid doors, 50 cu. Ft.

52” width X 35 3/8” deep X 83-1/4” high

Self-contained refrigeration – top mounted two

sections

Two (2) hinged full-size doors with locks master keyed; hinged as shown on Plan

Provide four (4) epoxy coated additional steel shelves

Digital thermometer, external

Stainless steel exterior aluminum interior and end panels

4” casters, front two with brakes Cord and plug set

Energy-star rated

ITEM E-11	72 inch Wall Mounted Flat Screen TV

Provided by Owner. Not included in KEC package.

For reference only. See drawings.

ITEM E-12	Professional Series Countertop Induction Range	Vollrath

Not included in KEC package. For reference only. See drawings and schedule.

Vollrath Professional Series Countertop Induction Range

Model 6954301 Single Hob Countertop (US/Canada)

High efficiency, heavy duty commercial countertop induction range

18 gauge, 304 stainless steel with vitro ceramic top

Over heat protection

Small-article detection

Pan auto-detection function

Empty pan shut-off

Size 13 1/8” x 16 ½” x 4”

NEMA 6-20P plug

ITEM E-13	Not Used

ITEM E-14	Work Table	Advance Tabco

Advance Tabco or equal - MS-366 – Standard Series, Flat Top, Undershelf Style

36” x 72” MS series, 16 gauge stainless type 304 top

Shelf 18 gauge stainless steel, adjustable undershelf with leg clamp

Legs – 1 5/8” dia. Tubular stainless steel, 1” adjustable stainless steel bullet feet, galvanized steel gussets

Rolled rim edges on front & back, square side edges

ITEM E-15	Hand Sink	Eagle Group

Eagle Model or equal - HSA-10-8F with splash mounted gooseneck faucet included

14-3/4” X 18-7/8”, overall, with 7-1/2” high backsplash

All-welded stainless steel construction

9-3/4” X 13-1/2” X 6-3/4” deep sink bowl with MicroGard antimicrobial finish on bowl

With splash-mounted heavy duty T&S gooseneck lead-free faucet with low flow aerator, wrist blade handles, “P” trap, tail piece, and basket drain shipped loose for Plumber to install on site

With front stainless steel skirt

Mount on wall where shown on Plan

Note: soap and paper towel dispenser will be provided separately by the Owner and is not part of Kitchen equipment Contractor scope.

Mount on wall where shown on Plan.

ITEM E-16	NU-VU Pro-16 Floor Model Proofer	Nu-Vu

Nu-Vu Pro-16 Floor Model Proofer

Size: 74 1/16” high x 24 5/16” wide x 33 ¾” deep

Stainless Steel exterior, with tempered glass doors, Silicone rubber door gaskets

Manual fill water pan in bottom for humidity

Capacity of 16 full size pans or 32 half size pans

Mechanical controls

Indicator light for thermostat

Separate heat & humidity controls

Heavy Duty Casters

Provide with cord and plug

ITEM E-17	Electric Deck Pizza Oven	Bakers Pride

Bakers Pride 3836 Series, Model EB-2-3836 with two (2) 8 inch decks

55” wide X 43” deep X 66” high, overall

Electric operated

Two (2) 38” wide X 36” deep X 8” high Stainless steel bake decks

Thermostat range from 150˚F to 550˚F

Stainless steel exterior and Legs, fully insulated

ITEM E-18	Work Table	Advance Tabco

Advance Tabco TMS-365 – Standard Series, Flat Top, Open base Style

Coordinate with under table refrigerator for height & clearances.

36” x 60” TMS series, 16 gauge stainless type 304 top

Stretchers – 1 5/8” dia. Tubular stainless steel

Legs – 1 5/8” dia. Tubular stainless steel, 1” adjustable stainless steel bullet feet, galvanized steel gussets

Rolled rim edges on front & back, square side edges

ITEM E-19	Undercounter Refrigerator	MasterBilt

Not included in KEC package. For reference only. See drawings and schedule.

MasterBilt - MBUR-48A Undercounter/Work table Refrigerator, two door unit

48” long X 30” deep X 34” high, ADA

Low profile casters for ADA compliance

Self-contained refrigeration – front breathing two sections,

Stainless steel exterior and interior

Cord and plug set

ITEM E-20	Shelf, Single	Advance Tabco

Advance Tabco OTS-15-48R

One tier of shelves each measuring 48” long X 15” wide with 1-5/8” bullnose front edge and rear turn-up

Constructed of 16-gauge, Type 403 stainless steel Welded

support brackets

Mount toward rear of table, as shown on plans.

KEC to provide shop drawings for review and approval prior to fabrication

ITEM E-21	60 quart Mixer	Hobart

Not included in KEC package. For reference only. See drawings and schedule.

Hobart HL 600

Acceptable alternate manufacturers:

Globe will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed

Capacity: 60 quarts

20-minute smart timer

#12 attachment hub for use with #12 attachments

Stainless steel bowl with guard

Power bowl lift, ergonomic out-swing bowl

Standard Accessory Package: 60-quart stainless steel bowl, “B” flat beater, “D” wire whip, “ED” Dough Hook

Provide the following additional accessories: “I” Heavy Duty Wire Whip, Bowl scraper, Bowl truck and Ingredient Chute

Metallic Gray Hybrid Powder Coat finish

Neoprene footpads

Cord and plug set

ITEM E-22	Mobile Wire Shelving Unit	Wire Shelving

Not included in KEC package. For reference only. See drawings and schedule.

Eagle or equal - “Wire Shelving Starter Units & Add-on units”, Model S5-74-2142S

Shelving unit to consist of five (5) tiers of open wire shelving, stainless steel finish

Fifteen (15) Model S5-74, 42” long X 21” wide units

Provide shelf markers, supply one marker for every shelf, starter or adder.

Four (4) casters, front two with brakes, and bumpers per unit

Mount bottom shelf 10” above the finished floor with the remaining shelves spaced equally apart

KEC shall field verify space requirements for size of shelving unit prior to ordering

ITEM E-23	Three Compartment Sink	Advanced Tabco

Advanced Tabco or equal – Regaline 3 Compartment Sink with 2 drain boards

133” long X 36” wide, overall; all-welded, 14-gauge, Type 304 stainless steel construction; 14” water level, Bowl size 18 x 24. Sink to be supplied with adjustable front & rear cross brace featuring leg casting to secure left to right cross bracing.

Sound deaden top

11” high stainless steel backsplash

With three (3) 24” wide X 18” front to back heavy gauge Type 304 stainless steel sink bowls

With two (2) drain boards pitched toward sink

Provide two (2)T&S heavy duty splash-mounted Big Flo faucets with 12” long swing nozzles and aerators, and three (3) Fisher Drain King rotary drains with overflows and brackets

Stainless steel cross bracing front to back and across rear; stainless steel bullet feet

ITEM E-24	48″ Shelf with Pot Rack, Wall-Mounted	Advance Tabco

Advance Tabco or equal – Shelf with Pot Rack, 48” x 12”, model PS-12-48, wall mounted.

Wall mounted, 4’-0” long X 12” wide,

14-gauge stainless steel construction, secured to wall by means of bolts. (Hardware not provided)

Provide stainless steel, single-prong hooks, one every 12”.

KEC to field measure site conditions for approval prior to ordering.

ITEM E-25	Stainless steel shelving with adjustable chrome posts	Custom Fabricated

Advanced Tabco or equal - Double Deck Model DS-12-72

72” long X 12” wide, DS series,18 gauge type 430 stainless steel

Table-mounted double overshelf, spanned over entire length of table.

Fully adjustable stainless steel shelving, includes 5 chrome posts,

Front & rear rolled edge, sides have square edges.

KEC to provide shop drawing for review and approval prior to fabrication

ITEM E-26	Soiled Dish table – Custom Fabricated	Custom Fabricated

Dishtable, soil straight, left), custom fabricated, with integral sink, faucet & drain

8”-0”” long x 30” wide, all-welded, 14-gauge, Type 304 stainless steel

10 1/2” high stainless steel backsplash and 2” left side splash

8” deep bowl, 20” x 20” size

14-gauge, Type 304 stainless steel cross bracing front to back and across rear

Refer to Plans for additional details for connection to dishwash machine on left.

KEC to field measure site conditions prior to fabrication.

ITEM E-27	Hatco Glow-Ray Infrared Strip Heater	Hatco

Hatco GRH-60 Infrared stainless steel strip heater

High wattage, model required
Stainless steel construction

Coordinate Additional Lead length beyond standard conditions to fit site conditions.

NEMA 5-15P plug

Provide remote control enclosure with infinite control and toggle switch mounted in counter

Mount heat lamp on underside of overshelf

ITEM E-28	Pre-Rinse Faucet Assembly	T&S Brass

T&S Brass Model B-0133-ADF12-B

8” wall mount mixing faucet, quarter turn Eterna Cartridges with spring locks, lever handles, add-on faucet, 12” swing nozzle, 44” flexible Stainless steel hose, 1.42 BPM spray valve, 6” wall & ½’ NPT Female inlets.

In-line check valves

Mount on backsplash of soiled Dishtable, item E26, where shown on Plan

ITEM E-29	Dishwasher, Conveyor Type	Hobart

Hobart CL44eN=-BAS

Acceptable alternate manufacture:

Meiko will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed

Electrically operated, left--to-right operation unit with single tank

Stainless steel construction

Higher than standard chamber

Microprocessor controls with low temperature and dirty water

indicators 15 kw electric tank heat

30 kW electric booster heaters

Table limit switch

Water hammer arrestor

½ inch brass pressure regulator

Provide Model SL30 side loader

With one (1) peg rack and (1) combination

rack Provide drain water tempering kit

Provide single-point connection

ITEM E-30	Dish table, Clean	Advance Tabco

Advance Tabco or equal– Dishtable, clean straight. Model DTC-S30-72R (Spec-line)

6'-0" long X 30" wide X 36" high; all-welded, 14-gauge, Type 304 stainless steel constructed and equipped in accordance with the Plan

Provide 10 1/2" high stainless steel backsplash and right side splash. Stainless steel cross bracing front to back and across rear.

Pitch table to drain into dishwasher, Item E29

KEC to provide shop drawings for approval prior to ordering.

ITEM E-31	NOT USED

ITEM E-32/E33	Walk-In Refrigerator/Freezer with Electric Air Curtain	American Panel

American Panel Multi-Compartment Walk-n

Size as shown on Plan, approximately 11'-1 3/8" wide X 19'-11 1/2" front to back X 8'- 0" above the finished floor, with 4" urethane insulation (Base Bid Cooler) and 7'10" wide x 12'-2 ¾" front to back x 9'-6" above finished floor, with 4" urethane insulation (Base Bid Freezer).

Unit to meet all requirements of Energy Independence and Security Act of 2007

NSF construction – with NO exposed conduit

Install insulated floor on top of existing kitchen floor. Provide 2 inches thick formed in place insulated floor with 1/8" inch diamond aluminum tread plate in the walk in cooler section and 4 inch thick formed in place insulated floor with 1/8" diamond aluminum tread plate in freezer section.

(2) 36 " x 77" flush mount magnetic infitting door with cam-rise hinges, padlockable deadbolt handle (exterior doors only), closer, brushed hardware, fully programmable WALK-IN MONITORING SYSTEM 100 featuring audio/visual temperature alarm with digital thermometer, high & low set points, 115V output, energy saving door frame heater wire, vapor proof light & switch with pilot light.

Walk-In accessories to include;

(1) Heated Pressure Relief Vent, Model 1825 (3" diam.), 120 volt.
(2) Door frame electrical conduit stubbed out roof panel,
(6) Stainless Steel (20 ga.) on Door Only (36" and below),
(2) Extra Hinge,
(2) Vision Window, 14" x 14" heated,
(6) Door Kickplate, 1/10" aluminum treadplate, 36" High, <37" Door,
(2) Foot Treadle,
(316) 48" High Wall Protection (wainscot), 1/8" alum. treadplate,
(6) LED Light Fixture, Cooler & Freezer, 48" 2-lamp (-40°F or higher operating temp.),
(3) Dial Thermometer, 4.5" St. Steel with 15' sensor, (176) Closure Panel to match exterior box finish,
(4) Trim Strips, 3" x 3",to match exterior box finish,
(2) Motion sensor w/ light activator & shut off, coolers & freezers (Kason 1901) up to 20' ceiling ht.,
(3) System 200 W-I Mon. Sys. (repl. Sys. 100), SD Mem. Card Interface, HACCP Compliant & Batt. Back-Up,
(3) Door Manufactured for Tile Application (Verify)
(1) Corner Notch (Without Floor), (19) Roof Support Channel, indoor only,
(15) Roof Support Angle at Partition Wall (w/ Beauty Trim & Fiberglass Allthread).
(2) Floor ramps, interior (24” deep) for up to 42” door.

KEC to provide shop drawing for approval prior to ordering

3.5 HP Hermetic air cooled refrigeration system with an electric evaporation coil, 5 yr. compressor warranty, Condensing Unit Model #AVA2515ZXTXC(2B3145-9) with Evaporator Model # LET120.

2.25 HP hermetic scroll air cooled refrigeration system, include tow standard low profile evaporator coils, 5 yr. compressor warranty, Condensing Unit Model #FFAP-022Z-TFC-072, Evaporator Model # (2) ADT090.

American Panel Top Quick Connect refrigeration system with all controls factory mounted, plumbed and charged.

Pre-charged line sets and electrical whip to be provided. All penetrations factory drilled. Included 90 day mechanical labor service.

Freezer: Hermetic water-cooled refrigeration system, -10° F Freezer, 208/230/60/1, to include an electric defrost evaporator coil, to include 5-Year Compressor Warranty.

Cooler: Hermetic scroll water cooled refrigeration system, 35° F

ITEM E-34	Low Temp Hot Food Holding Cabinets	Cambro

Not included in KEC package. For reference only. See drawings and schedule.

Cambro Hot Cart – Pro Cart Ultra PCUHH (Both compartments hot.)

110 V. Standard USA power cord, NEAM 5 =15A, standard 9 ft. length.

Hold holding cycletw between 150 – 165 F. to maintain food safe temperature.

Adjustable stainless steel rails

Exterior Dimensions: 28” wide x 36 ½” deep x 66” high

Includes standard heavy duty casters with front brakes

Accessories – Rails SSR7 – Seven pairs of rails

ITEM E-35	Solid Phenolic 3-Tier Lockers	NIKEC

Provided by Owner. Not in KEC package.

ITEM E-36	Bulletin Board	NIKEC

Provided by Owner. Not in KEC package.

ITEM E-37	Time Clock	NIKEC

Provided by Owner. Not in KEC package.

ITEM E-38	Ice Bin/Ice Caddy, Mobile	Cambro

Not included in KEC package. For reference only. See drawings and schedule.

Cambro - ICS175L110

Slanted top with sliding lid

Capacity: 175 pounds

Recessed front drain faucet

Color: Black

Casters--two fixed, two swivel and one with brake.

ITEM E-39	Ice Cuber	Scotsman

Not included in KEC package. For reference only. See drawings and schedule.

Scotsman C0830SA-3

Air-cooled Self-contained Cube style ice

Vari-Smart Ultrasonic Ice Level Control

Produces up to 800 pounds of ice in 24-hour period

Stainless steel finish

Interconnect to E-39 Water filter

Model B530S bin accommodating 420 pounds of ice storage, with ice level control, Item E40.

ITEM E-39	Water Filter	Everpure

Not included in KEC package. For reference only. See drawings and schedule.

Everpure EV932973

Triple cartridge

Interconnect to Item E-39, ice machines

Locate water filter in area of ice machines, wall mounted

ITEM E-40	Modular Storage Bin	Scotsman

Not included in KEC package. For reference only. See drawings and schedule.

Scotsman Model B530S Ice Bin, coordinate with item E-39 Ice Cube Machine.

Capacity 420 lbs of ice storage, with ice level control

Metallic finish

Provide KHOIDER – kit, scoop holder, stainless steel

ITEM E-41	Enclosed Base, Beverage Table, faucet	Advance Tabco

Advance Tabco or equal – Enclosed base Beverage Table, Model BEV-30-120L
Left hand sink included, open back on sink.

14 gauge stainless steel, Type 304

Stainless steel legs, adjustable hex foot

Urn trough Drain, 5” x 36”

10 inch back splash, with 2 inch return on 3 sides.

Stainless steel fixed Midshelf, fixed Stainless undershelf

GFI outlet duplex mounted in back splash

Front hinge door & open back on sink

Provide faucet A K-60 faucet to be supplied with table

Drain hose, branch tail pipe, P-trap provided by others

ITEM E-42	Queen Mary Rack	Cres Cor

Not included in KEC package. For reference only. See drawings and schedule.

Crescor – Queen Mary Racks, 271 series, Model 271-51-5927

Acceptable alternate manufacturer:

Lakeside Manufacturing will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed

Rack for transporting plated banquet meals

Provide stainless steel shelves

Heavy duty 8” polyurethane caster, two swivel with brakes

Standard perimeter bumpers

5 shelves with 11” clearance

ITEM E-43	Coffee Brewer	Fetco

Not included in KEC package. For reference only. See drawings and schedule.

Fetco CBS-61H, Model 61016, Handle operated coffee brewer, 3 gallon

21 1/2” wide X 21-3/8” deep X 39-3/4” high

single brewer

Voltage 208, single phase

Capacity: 3 gallon LUXUS Thermal dispenser

Handle Operation

Manual hot water faucet

2 X 3.0 kw heater

Stainless steel finish

Provide one (1) package of paper coffee filters

ITEM E-44	Coffee Dispenser	Fetco

Not included in KEC package. For reference only. See drawings and schedule.

Fetco TPD 30

Capacity: 3 gallon

Flip and hide fill-through lid

Base with built-in handles and drip tray

Provide round drip tray & ring plastic base

Black dispenser faucets

ITEM E-45	Exhaust Hood #3 and #4	Caddy

Caddy Model SHBC-C-W-126.5-ND-60 or approved alternate manufacturer.

Acceptable alternate manufacturers limited to MasterAire, Helton, Gaylord, CaptiveAire & Accurex

Refer to plans & elevations for additional details.

Two 10' -0" long x 7'-0" x 24" high, overall, Hang the leading bottom edge of the hoods at 6'-8" above the finished floor.

All welded, Type 304 Stainless steel construction

With ceiling supply plenum

Provide recessed 2800K color LED lights wired to junction box with switch on wall

Provide Ansul cabinet in location per plan. Ansul pre-pipe only shall be the responsibility of the Kitchen Hood manufacturer and shall be installed at the factory and included in the hood manufacturer's bid pricing. All other Ansul system related charges including, but not limited to: Final Ansul system piping connections, local Fire Test and Permit charges, and additional jobsite fees, shall be the responsibility of the Kitchen Equipment Contractor

Provide thermostat on duct collar for Ansul System

Provide thermostat in hood to start fans, per IMC Code 2006

18-gauge stainless steel removable enclosure panels from top of hood to underside of building ceiling

20-gauge stainless steel wall flashing, vertical grain and seams from wall curb to 2" above the bottom edge of ventilation behind cooking equipment area

Manufacturer to comply with all state and local codes

Manufacturer to supervise unit installation

ITEM E-45	Fire Suppression System	Caddy

Caddy Model Ansul R-102 – 9 Gallon Fire Suppression System,

Hood E45, No. 3 & No. 4.

Acceptable alternate manufacturers limited to MasterAire, Helton, Gaylord, CaptiveAire & Accurex.

System shall provide surface plenum and duct protection for the items of cooking equipment located beneath the exhaust hood, 1.056, in accordance with all applicable codes, ordinances, regulations, and the provisions of NFPA 17, 96 and UL300

All system piping, fittings and conduit shall be concealed where possible and, if exposed, shall be stainless steel finish with no exposed threads

System to be interwired with shunt-trip breaker and mechanical gas solenoid valve serving items of cooking equipment beneath the hood to provide for power shut-off in the event of system actuation

System shall be complete with all valves, switches, pilot lights, re-set button, indicator lights, alarm, and time delay

Mechanical Gas Shut-off valve provided loose by KEC for field installation

System located in Exhaust Hood/Fire Suppression Control Cabinet mounted where shown on Plan

Provide recessed remote fire pull station located per Plan between 4' 6" (1350mm) and 5' 0" (1500mm) above finished floor ; Location of fire pull to be verified with local/state codes. (BOCA 93: pull to be minimum of 10' 3" (3,000mm) away from hood)

Manufacturer to comply with all state and local codes

Installation, field inspection, and certification to be performed by factory authorized Ansul agency

ITEM E-45	Hood Ventilation Control System	Melink “Intelli-Hood

Melink “Intelli-Hood” III, Supplied for Hood E-45, No. 3 & No. 4.

Construct per Melink drawing 3580853, sheets # I1, I2 & I3 and Proposal 72018

System to automatically reduces speed of the supply exhaust fan during idle, non-cooking periods to save fan energy and conditioned air for Hoods 1.056, 1.063, 1.078A&B and 1.106.

Includes the following components: controls with IH# Hood controller, I/O Processor, Keypad, and variable frequency drives, temperature sensors, optic sensors and cables

Mount I/O processor, keypad and variable frequency drives in cabinet on end of hood, #1.056 where shown on Plan

Mount temperature and optic sensors, which monitor the exhaust air temperature and smoke load in hood

IAQ, indoor air quality ventilation monitoring

Provide all sensors, cables and VFD’s for a complete operating system

KEC to coordinate with mechanical and electrical trades to install all necessary wiring conduit and fittings necessary for complete operating system to interconnect to exhaust fan

Provide installation and hood start up to calibrate system and train the customer in its operation.

KEC to provide shop drawing for approval prior to ordering

ITEM E-46	HD Range, 60″, 10 Open Burners, 2 ovens	Jade

Jade JBR-10-2436 60 inch shallow depth heavy duty 10 open burners, 2 ovens

Acceptable alternate manufacturers:

Vulcan, Bakers Pride and Southbend will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed

Natural gas – 360,000 BTU's total

Ten (10) 12" x 12" open burners

Standard oven base, 2 ovens

Two (2) chrome-plated oven racks

Stainless steel high riser

¾" rear gas connection with gas pressure regulator

Cap and cover front gas connection

Casters, front two with brakes

Provide 48" long T&S HG4S swivel gas quick disconnect with restraining cable, sized to fit equipment

ITEM E-47	HD 48″ Shallow Depth Griddle with Oven	Jade

Jade JBR-48G-36 – 48" shallow depth heavy duty Griddle with Oven

Acceptable alternate manufacturers:

Vulcan, Bakers Pride and Southbend will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

Natural gas operated

48" spanned griddle top, standard oven

Thermostatic controls

Stainless steel high riser

¾" rear gas connection with gas pressure regulator

Cap and cover front gas connection

Two (2) chrome-plated oven racks

Six (6) casters, front three with brakes

Provide 48” long T&S HG4S swivel gas quick disconnect with restraining cable, sized to fit equipment

ITEM E-48	36” Char broiler	Jade

Jade JTRH-36B-

Acceptable alternate manufacturers:

Vulcan, Bakers Pride and Southbend will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

Natural gas – 90,000 BTU’s total

Cast iron radiants and grates

Infinite manual controls

Standard oven base

Two (2) chrome-plated oven racks

Stainless steel high riser

Rear gas connection with gas pressure regulator

Cap and cover front gas connection

Casters, front two with brakes

Provide 48” long T&SHG4S swivel Link gas quick disconnect with restraining cable, sized to fit equipment

ITEM E-49	Tilt Skillet	Market Forge

Market Forge Electric tilt skillet, Model 40P-STEM

Acceptable alternate manufacturers:

Vulcan and Southbend will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

40 gallon, closed base skillet

Manual or power tilt capabilities

Double Panty Faucet

2” Draw-off Valve with strainer

Pan support

Verify Electrical Characteristics prior to order.

ITEM E-50	Meat Slicer	Hobart

Not included in KEC package. For reference only. See drawings and schedule.

Hobart HS7 – Slicer

Acceptable alternate manufacturers:

Globe will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

Automatic

13” removable knife with removal ring guard cover

Three (3) stroke lengths and four (4) stroke speeds Heavy duty removable meat grip

Removable ring guard cover

Zero Knife Exposure

Provide product fence

Provide 4.5” legs Cord and plug set

ITEM E-51	30 Gal Electric Tilt Kettle	Market Forge

Market Forge Model FT-30LE Electric 2/3 Electric Jacketed tilting kettle, tri leg

Acceptable alternate manufacturers:

Vulcan and Southbend will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

All stainless steel construction with #4 finish, type 304

Capacity: 30 gallons

Verify electric operation equipment prior to order

Counter balanced Spring assisted hinged cover

Etched gallon markings

Provide 12” double Pantry Faucet, with swing spout & mounting bracket

3” draw-off valve with strainer

ITEM E-52	S/S Fabricated Sink, Two Comp	Advance Tabco

Advance Tabco or equal – FC-2-1818-18RL, 2 compartment sink

Size 72” x 24” overall, 18 x 18 x 14” bowl depth

16 gauge 304 stainless steel

1” adjustable stainless steel bullet feet

Supply 2 sets, K700 removable side splashes

Coordinate with E68 swing faucet & drain, to be provided.

ITEM E-53	Hat and Coat Rack	Bradley

Provided by General Contractor, not in KEC scope.

ITEM E-54	Rubbermaid Ingredient Bin with scoop	Rubbermaid

Not included in KEC package. For reference only. See drawings and schedule.

RubberMaid - ProSave Ingredient Bin with 32 oz. scoop

Model FG360088 White, with 9F77 lid with 32 oz. scoop

400 cups, 125 lbs. flour

ITEM E-55	Slim Jim Trash Container	Rubbermaid

Not included in KEC package. For reference only. See drawings and schedule.

Rubbermaid Model 3540 Slim Jim Container
Size 20” x 11” x 30” high
23 gallon
Color: Light Grey

ITEM E-56	Vac Master Chamber Machine	Vac Master

Not included in KEC package. For reference only. See drawings and schedule.

VAC Master – VP210 – Vac Chamber Machine

Stainless steel body

10 inch seal bar with double seal wire

Heavy duty transparent lid

Digital control panel

Pressure indicator

ITEM E-57	Blast Chiller	Master Bilt

Not included in KEC package. For reference only. See drawings and schedule.

Master Bilt Undercounter Blast Chiller/Freezer, Mode MBCF48/28-4A with casters

Self-contained refrigeration

Undercounter style

Accommodates (5) 12” X 20” X 2-1/2” deep pans

Soft chilling; hard chilling and holding

Solid state electronic controls

Stainless steel exterior and interior

4” diameter casters with brakes

Provide Cord and plug set

ITEM E-58	Rational 202E Combi Oven	Rational

Rational Model 202 E self-cooking center

Acceptable alternate manufacturers:

Alto Shaam and Blodgett will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

42 5/8” wide X 41-1/4” deep X 70-1/8” High

Electrically operated

208V 3 phase/200/189.0/4/0 – field retrofitable to 240V.

Each oven accommodates twenty (20) 18” x 26” sheet pans or forty (40) 12” X 20” steam table pans

Individual programming of 1,200 cooking programs with up to 12 steps each and five (5) programmable proofing stages

Humidity from 86˚F to 575˚F hot air or combination 5-speed fan

Steam generator

2 mobile oven racks

2 Rational care tabs & 2 Rational cleaner tabs without phosphorous

Provide externally attached core temperature probe

Provide sous-vide core temperature probe

Heat shield for left side panel

HACCP data output and software update via integral USB port

Common water connection

Casters, front two with brakes

Provide T&S HW6D 48” long quick disconnect cold water hose with restraining cable, sized to properly fit unit

ITEM E-59	NOT USED

ITEM E-60	Mobile Refrigerated Cart	Cambro

Not included in KEC package. For reference only. See drawings and schedule.

Cambro Refrigerated Cart – Pro Cart Ultra PCUCC (Both compartments cold.)

110 V. Standard USA power cord and plug, NEAM 5 =15A, standard 9 ft. length.

50/60 HZ, 3.26 A

Hold holding cycle between 150 – 165 F. to maintain food safe temperature.

Adjustable stainless steel rails

Exterior Dimensions: 28” wide x 36 ½” deep x 66” high

Accessories – Rails SSR7 – Seven pairs of rails

Provide 6 inch by 2 inch heavy duty casters with front breaks

I ITEM E-61	Wall Mounted Magnetic White Board

Provided by General Contractor. Not in KEC scope.

I ITEM E-61A	Wall Mounted Magnetic White Board

Future purchase. Not in KEC scope.

ITEM E-62	Work Table – 36″ x 72″	Advance Tabco

Advance Tabco - Standard Series work Table with undershelf– MS series, Model 366

16 gauge type 304 stainless steel

Size 36” x 72” x 36” high

18 gauge stainless steel shelf, adjustable bullet feet

ITEM E-63	Retractable Ceiling Mounted Infra-Red Warmer	Cres Cor

CresCor Retractable Ceiling Mounted Infra Red Warmer with lamps

Provided and installed by Electrical Contactor, not in KEC scope.

ITEM E-64	Work Table	Advance Tabco

Advance Tabco or equal - Standard Series work Table with undershelf– MS series, Model MS244

16 gauge type 304 stainless steel

Size 24” x 48” x 36” high

18 gauge stainless steel shelf, adjustable bullet feet

ITEM E-65	NOT USED

ITEM E-66	Two-Tier Wall Shelf	Advance Tabco

Advance Tabco or equal - WS-12-84-16

Two tiers of shelves each measuring 84” long X 12” wide with 1-5/8” bullnose front edge and 1-1/2” rear turn-up

Constructed of 16-gauge, Type 304 satin stainless steel

With welded support brackets

Mount first shelf at 18” above the work surface and the second shelf mounted 12” above that.

KEC to coordinate wall blocking needs and locations with GC.

KEC to provide shop drawings for review and approval prior to fabrication.

ITEM E-67	Work Table	Advance Tabco

Not included in KEC package. For reference only. See drawings and schedule.

Advance Tabco or equal – Open base style, enclosed base work tables, flat top

Model No. EB-SS-246M (with fixed mid shelf)

Flat top with 1 5/8” rolled edge

Provide on locking casters, Model TA-255P 5” Heavy duty, set of 4, 2 with brakes

Size 24’ x 72” x 36” high. 14 gauge stainless steel top, type 304.

ITEM E-68	Advance Tabco 12" swing faucet splash mount	Advance Tabco

Advance Tabco or equal – K-1 12" swing faucet splash mount

12" swing spout, 8 inch water supply

Quarter turn wedge style hadles, color index hot & cold

ITEM E-69	Work Table	Advance Tabco

Advance Tabco or equal - Standard Series work Table, 5" splash with undershelf– KMS series,

Model KMS-303

16 gauge type 304 stainless steel

Size 30" x 36" x 36" high

18 gauge stainless steel shelf, adjustable bullet feet

ITEM E-70	Single Bowl Undermount Sink Kit	Elkay

Elkay or equal – Single bowl, undermount sink, stainless steel

Model EFU131610DBG

304 stainless steel, polished satin, 16 gauge

Sound deadening

Opening size 13 ½" x 16"

Coordinate with millwork fabricator for top.

ITEM E-71	Double Bowl Undermount Sink Kit	Elkay

Elkay or equal - 30/70 Double bowl undermount sink kit

Model EFRU 3219DBG

16 gauge stainless steel, polished satin, type 304 stainless steel

Sound guard, sound deadening

Bowl 1 size 7 ½" x 15 ¾" x 6", Bowl 2 size 21" x 15 ¾" x 8"

Include mounting hardware Part # 54300008

Coordinate with millwork fabricator for top

ITEM E-72	Avado Wall Mount Pot Filler Kitchen Faucet with Lever Handles	Elkay

ELKAY or equal – Avado wall mount pot filler kitchen faucet with lever handles

Model LKAV4091CR

4.0 gpm pressure compensating aerator

Polished chrome finish

ITEM E-73	Field-Convertible Rigid/Swivel Gooseneck Spout	American Standard

American standard or equal – Two handle top mount kitchen faucet

Model Monterrey 6405.170 with 5:” goose neck spout, no spray

5” tubular brass swivel spout, wrist blade handles

1/5 gpm pressure compensating aerator

Polished chrome finish

ITEM E-74	NOT USED

ITEM E-75	Work Table	Advance Tabco

Advance Tabco or equal - Standard Series work Table with open base–

TMS series, Model TMS306

16 gauge type 304 stainless steel

Provide 4 wheel casters, with locking brakes on 2 front.

Size 72” x 30” x 36” high

Stainless steel legs, open base

ITEM E-76	Welded in Hand Sink	Advance Tabco

Advance Tabco or equal – Welded sink into Table (Item E18) as shown on plans in bakery.

Sink size 10” x 14”x 10”, center drain, Model TA-11F

Provide with K-50 faucet & K-6 drain kit. Coordinate drill holes for faucet

All-welded, 14-gauge, Type 304 stainless steel construction; constructed and equipped as shown on Plan.

Sound deaden top

KEC to provide shop drawings for review and approval prior to fabrication.

ITEM E-77	Worktable with Open Base	Advance Tabco

Advance Tabco or equal - Standard Series work Table with open base–

TMS series, Model TMS368

16 gauge type 304 stainless steel

Size 96” x 36” x 36” high

Stainless steel legs, open base

ITEM E-78

Not Used.

ITEM E-79

Not Used.

ITEM E-80

Not Used.

ITEM E-81

Not Used.

ITEM E-82

Not Used.

ITEM E-83	Work Table	Advance Tabco

Advance Tabco or equal - Standard Series work Table with undershelf– MS series, Model MS306

16 gauge type 304 stainless steel

Size 72” x 30” x 36” high

Stainless steel legs, undershelf, no back splash

Provided 4 wheel casters, with 2 locking brakes on front casters

ITEM E-84	Stainless Steel Storage Dish Cabinet	Universal

Universal or equal – 14” x 48” x 36” high, stainless steel storage Dish Cabinet

Model ST-314-48-O, open front, included single shelf inside unit, no doors

Adjustable ABS Bullet Feet

18 gauge stainless steel, type 304

ITEM E-85	Stainless Steel Storage Dish Cabinet	Universal

Universal or equal– 14” x 48” x 36” high, stainless steel storage Dish Cabinet

Model ST-314-36-O, open front, included single shelf inside unit, no doors

Adjustable ABS Bullet Feet

18 gauge stainless steel, type 304

ITEM E-86	Wall-Mount Shelving	Eagle

Eagle or equal - “Wire Wall Shelf kits, Model GWB-1836C, Chrome finish.

Shelving unit to consist of one (1) wire shelf and two (2) stationary wall mounts

Coordinate with General Contractor for wall blocking.

KEC shall field verify space requirements for size of shelving unit prior to ordering

ITEM E-87	Wire Shelving Unit, Mobile	Eagle

Eagle or equal “Wire Shelving Starter Units, Model S5-74-1836S

Shelving unit to consist of five (5) tiers of open wire shelving, Stainless steel finish

Two (2) Model S5-74, 18” long X 36” wide units

Provide shelf markers, supply one marker for every shelf, starter or adder.

Four (4) casters, front two with brakes, and bumpers per unit

Mount bottom shelf 10” above the finished floor with the remaining shelves spaced equally apart

KEC shall field verify space requirements for size of shelving unit prior to ordering

ITEM E-88	Two-Tier Wall Shelf	Advance Tabco WS15-24-16

Not included in KEC package. For reference only. See drawings and schedule.

Advance Tabco or equal - WS-15-24-16

Two tiers of shelves each measuring 24” long X 15” deep with 1-5/8” bullnose front edge and 1-1/2” rear turn-up

Constructed of 16-gauge, Type 304 satin stainless steel

With welded support brackets

Mount first shelf at 18” above the work surface and the second shelf mounted 12” above that.

KEC to coordinate wall blocking needs and locations with GC .

KEC to provide shop drawings for review and approval prior to fabrication

ITEM E-89	Two-Tier Wall Shelf	Advance Tabco

Advance Tabco or equal - WS-15-60-16

Two tiers of shelves each measuring 60” long X 15” wide with 1-5/8” bullnose front edge and 1-1/2” rear turn-up

Constructed of 16-gauge, Type 304 satin stainless steel

With welded support brackets

Mount first shelf at 18” above the work surface and the second shelf mounted 12” above that.

KEC to coordinate wall blocking needs and locations with GC.KEC to

provide shop drawings for review and approval prior to fabrication

ITEM E-90	Walk-In Shelving, Mobile	Eagle

Not included in KEC package. For reference only. See drawings and schedule.

Eagle or equal “Wire Shelving Starter Units, Model S5-74-2436E

Shelving unit to consist of five (5) tiers of open wire shelving, Epoxy with Microguard finish

Two (2) Model S5-74- 2436E, 24” long X 36” wide units

Provide shelf markers, supply one marker for every shelf, starter or adder.

Four (4) casters, front two with brakes, and bumpers per unit

Mount bottom shelf 10” above the finished floor with the remaining shelves spaced equally apart

KEC shall field verify space requirements for size of shelving unit prior to ordering

ITEM E-91	Walk-In Shelving, Mobile	Eagle

Not included in KEC package. For reference only. See drawings and schedule.

Eagle or equal - “Wire Shelving Starter Units, Model S5-74-2448E

Shelving unit to consist of five (5) tiers of open wire shelving, Epoxy with Microguard finish

Two (2) Model S5-74, 24” long X 48” wide units

Provide shelf markers, supply one marker for every shelf, starter or adder.

Four (4) casters, front two with brakes, and bumpers per unit

Mount bottom shelf 10” above the finished floor with the remaining shelves spaced equally apart

KEC shall field verify space requirements for size of shelving unit prior to ordering

ITEM E-92	Walk-In Shelving, Mobile	Eagle

Not included in KEC package. For reference only. See drawings and schedule.

Eagle or equal - "Wire Shelving Starter Units, Model S5-74-2460E

Shelving unit to consist of five (5) tiers of open wire shelving, Epoxy with Microguard finish

Seven (7) Model S5-74, 24" long X 60" wide units

Provide shelf markers, supply one marker for every shelf, starter or adder.

Four (4) casters, front two with brakes, and bumpers per unit

Mount bottom shelf 10" above the finished floor with the remaining shelves spaced equally apart

KEC shall field verify space requirements for size of shelving unit prior to or

ITEM E-93	Walk-In Shelving, Mobile	Eagle

Not included in KEC package. For reference only. See drawings and schedule.

Eagle or equal - "Wire Shelving Starter Units, Model S5-74-2472E

Shelving unit to consist of five (5) tiers of open wire shelving, Epoxy with Microguard finish

Two (2) Model S5-74, 24" long X 72" wide units

Provide shelf markers, supply one marker for every shelf, starter or adder.

One (1) casters, front two with brakes, and bumpers per unit

Mount bottom shelf 10" above the finished floor with the remaining shelves spaced equally apart

KEC shall field verify space requirements for size of shelving unit prior to order.

ITEM E-94	Ventless Combination Oven	Rational

Rational 101E – Self-cooking center

Acceptable alternate manufacturers:

Alto Shaam and Blodgett will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

Capacity ten (10) half-size pans or ten (10) steam table pans

Removable, swiveling hinging rack

LED cooking cabinet and rack lighting

Energy Star

Rear –ventilated triple-pane cooking cabinetry door

Combi-steamer for selective use of steam and hot air, separately, sequentially or combined. Integrated Ethernet & USB port

Individual programming fo at least 1,200 cooking programs with up to 12 steps transferable via USB

Hand shower with automatic retracting system

Size: 33 3/8” x 30 3/8” x 41”

208/v 3 phase, 60 hertz, 52.8 running amps, field retrofitatable to 240V.

Provide Rational Cleaner tabs without phosphorous, Rational Care tabs

See Item E95 for stand

ITEM E-95	Mobile Stand	Rational

Rational Moblie stand for Combi oven, Model UG2 type 61/101 – Mobile

Acceptable alternate manufacturers:

Alto Shaam and Blodgett will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

Article No. 60.30.329

Height 26 5/8”

Intermediate bottom, shelf rails, side panels

4 tandem steering casters, 2 with brakes- metal parts)

To be delivered with fastening kit for mounting the unit on the stand

ITEM E-96	Two Single Cartridge Water Filter	Rational

Rational Model 1900.1154US Single cartridge water filter Item E94.

Acceptable alternate manufacturers:

Alto Shaam and Blodgett will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

ITEM E-97	Ultra Vent Condensation Hood	Rational

Rational Ultra Vent Condensate Hood – Model 61/101E

Acceptable alternate manufacturers:

Alto Shaam and Blodgett will be accepted if the exact performance specifications can be matched. No other manufacturers will be considered or allowed.

Article No. 60.72.327

Recirculating condensation technology in ventless hood captures grease laden air, vapors and steam

120V, single phase, NAC 60 HZ

Provide power cord with NEMA 5-15 plug

Size: 33.62” width x 17.72” height x 48.27” depth

Provide 18” min. clearance above hood

ITEM E-98	Two-Tier Wall Shelf	Advance Tabco

Advance Tabco or equal - WS-15-84-16

Two tiers of shelves each measuring 84” long X 15” wide with 1-5/8” bullnose front edge and 1-1/2” rear turn-up

Constructed of 16-gauge, Type 304 satin stainless steel

With welded support brackets

Mount first shelf at 18” above the work surface and the second shelf mounted 12” above that.

KEC to coordinate wall blocking needs and locations with GC per Detail 7.07

KEC to provide shop drawings for review and approval prior to fabrication

ITEM E-99	Stainless Steel Pot Rack	John Boos

John Boos or equal – Stainless Steel Pot Racks, wall mounted

Model PRW21, double bar rack

Size: 48” x 16” high, with 8 removable stainless steel hooks

16 gauge, type 300 stainless steel, #3 polish finish, satin

Provided mounting hardware

Coordinate with General Contractor for blocking.

ITEM E-100	Hose Reel	T&S Brass

Not included in KEC package. For reference only. See drawings and schedule.

T&S Brass B-1459 or equal

Enclosed

Stainless steel construction

With 30' hose

With Model B-107 spray valve

With vacuum breaker and check valves

ITEM E-101	Front Counter Concept 01	NIKEC

This item is not provided in the Kitchen Equipment Contract and is shown here for information purposes only.

Refer to Elevation 4/A602 for equipment installation details. Provide duplex receptacles recessed into counter, where shown on Plan

ITEM E-102	Dish wash Condensate Hood	Caddy

Caddy Model CH-C-W-60-SD-36

Acceptable alternate manufacturers limited to MasterAir, Helton, Gaylord, CaptiveAire & Accurex.

5'-0" long x 3'-0" front to back x 24" high, hang the leading edge bottom edge of the hoods at 6'8" above the finished floor.

Provide on sliding damper

All-welded, Type 304 all stainless steel construction

With Ceiling supplied plenum

Provide recessed 3000K color LED lights wired to junction box with switch on wall.

18 gauge stainless steel removable enclosure panels from top of hood to underside of building ceiling

20 gauge stainless steel wall flashing, vertical grain and seams from wall to curb to be 2" above the bottom edge of ventilation behind dish washing equipment.

Refer to Plans for equipment installation details.

ITEM E-103	Backless Stool for Student Tables	NIKEC

This item is not provided in the Kitchen Equipment Contract and is shown here for information purposes only.

Refer to Elevation 4/A60

ITEM E-104	Stainless Steel Base Cabinet with Midshelf	Universal

Universal or equal – ST-318-36-0

Size 18" x 36" with adjustable bullet feet

Open front, supply with mid-shelf

18 gauge stainless steel

Includes stainless steel top.

Refer to Elevation for equipment installation details.

ITEM E-105	Stainless steel base cabinet with Midshelf	Advanced

Advanced Tabco or equal – EK-SS-247-M

Size 24” wide x 84” long with 5 inch splash

1 5/8” sanitary rolled edge rim on front, square bend edges on sides

Rear flush panel, mid-shelf interior, center partition if over 36”

18 gauge stainless steel body, 1 ½ inch adjustable feet

Refer to Elevations for equipment installation details.

ITEM E-106	Stainless Steel base cabinet with Midshelf	Advanced

Advanced Tabco or equal – EK-SS-304-M

Size 30” x 36” long with 5 inch splash

1 5/8” sanitary rolled edge rim on front, square bend edges on sides

Rear flush panel, mid-shelf interior, center partition if over 36”

18 gauge stainless steel body, 1 ½ inch adjustable feet

Refer to Elevations for equipment installation details.

ITEM E-107	Stainless Steel enclosed base cabinet with drawers	Advanced

Advanced Tabco or equal – HRDC-308

Size 30” x 96” long with 5 inch splash, drawers & hinge doors

1 5/8” sanitary rolled edge rim on front, square bend edges on sides

Rear flush panel, mid-shelf interior, center partition if over 36”

18 gauge stainless steel body, 1 ½ inch adjustable feet

Refer to Elevations for equipment installation details.

ITEM E-108	Stainless Steel sink base with integral sink, doors below	Custom

Stainless steel sink base with integral sink, doors below.

See item E71 for bowl.

1 5/8” sanitary rolled edge rim on front, square bend edges on sides

Rear flush panel, mid-shelf interior, center partition if over 36”

18 gauge stainless steel body, 1 ½ inch adjustable feet

Refer to Elevations for equipment installation details.
This item is not provided in the Kitchen Equipment Contract and is shown here for information purposes only.

Refer to Elevation 4/A602 for equipment installation details. Provide duplex receptacles recessed into counter, where shown on Plan

ITEM E-109	Stainless Steel sink base with integral sink	Custom

Stainless steel sink base with integral sink, doors below.

See item E73 for bowl.

1 5/8” sanitary rolled edge rim on front, square bend edges on sides

Rear flush panel, mid-shelf interior, center partition if over 36”

18 gauge stainless steel body, 1 ½ inch adjustable feet

Refer to Elevations for equipment installation details.
This item is not provided in the Kitchen Equipment Contract and is shown here for information purposes only.

Refer to Elevation 4/A602 for equipment installation details. Provide duplex receptacles recessed into counter, where shown on Plan

ITEM E-110	Stainless Steel open base work table with mid shelf	Advanced

Advanced Tabco or equal – EB-SS-243-M

Size 24” wide x 36” deep, flat top, mid shelf

1 5/8” sanitary rolled edge rim on front, square bend edges on sides

Rear flush panel, mid-shelf interior, center partition if over 36”

18 gauge stainless steel body, 1 ½ inch adjustable feet

Refer to Elevations for equipment installation details.

This item is not provided in the Kitchen Equipment Contract and is shown here for information purposes only.

Refer to Elevation 4/A602 for equipment installation details. Provide duplex receptacles recessed into counter, where shown on Plan

ITEM E-111	Stainless steel top over under counter refrigerator	Custom

Supply custom fabricated stainless steel top with back splash as shown on drawings.

T1 5/8” sanitary rolled edge rim on front, square bend edges on sides

5 inch high back splash

18 gauge stainless steel body

Refer to Elevations for equipment installation details.

End of Section 11 40 00 – dated December 1, 2017.

SECTION 12 36 16 - METAL COUNTERTOPS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

A. Section includes stainless-steel countertops and sinks.

1.03 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: Include plans, sections, details, and attachments to other work. Detail fabrication and installation, including field joints.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver metal countertops only after casework has been completed in installation areas.

B. Keep finished surfaces covered with polyethylene film or other protective covering during handling and installation.

1.05 FIELD CONDITIONS

A. Field Measurements: Verify actual dimensions of construction to receive metal countertops by field measurements before fabrication.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Stainless-Steel Sheet: ASTM A 240/A 240M, Type 304.

B. Sealant for Countertops: Manufacturer's standard sealant of characteristics indicated below that complies with applicable requirements in Section 07 92 00 "Joint Sealants."

1. Mildew-Resistant Joint Sealant: Mildew resistant, single component, nonsag, neutral curing, silicone.
2. Joint Sealant: Single component, nonsag, neutral curing, silicone; Class 25.
3. Color: Clear.

2.02 STAINLESS-STEEL COUNTERTOPS AND SINKS

A. Countertops: Fabricate from 0.062-inch- (1.59-mm-) thick, stainless-steel sheet. Provide smooth, clean exposed tops and edges in uniform plane, free of defects. Provide front and end overhang of 1 inch (25 mm) over the base cabinets.

1. Joints: Fabricate countertops without field-made joints.
2. Weld shop-made joints.
3. Sound deaden the undersurface with heavy-build mastic coating.
4. Extend the top down to provide a 1-inch- (25-mm-) thick edge with a 1/2-inch (12.7-mm) return flange.
5. Form the backsplash coved to and integral with top surface, with a 1/2-inch- (12.7-mm) thick top edge and 1/2-inch (12.7-mm) return flange.
6. Provide raised (marine) edge around perimeter of tops containing sinks; pitch tops containing sinks two ways to provide drainage without channeling or grooving.
7. Where stainless-steel sinks occur in stainless-steel tops, factory weld into one integral unit.

B. Stainless-Steel Sinks: Fabricate from stainless-steel sheet, not less than 0.050-inch (1.27-mm) nominal thickness. Fabricate with corners rounded and coved to at least 5/8-inch (16-mm) radius. Slope the sink bottoms to outlet without channeling or grooving. Provide continuous butt-welded joints.

1. Provide sizes indicated or manufacturer's closest standard size of equal or greater volume, as approved by Architect.
2. Provide double-wall construction for sink partitions with top edge rounded to at least 1/2-inch (13-mm) diameter.
3. Factory punch holes for fittings.
4. Provide sinks with stainless-steel strainers and tailpieces.
5. Provide sinks with integral rims except where located in stainless-steel countertops.
6. Apply 1/8-inch- (3-mm-) thick coating of heat-resistant, sound-deadening mastic to undersink surfaces.

2.03 STAINLESS-STEEL FINISH

A. Grind and polish surfaces to produce uniform, directional satin finish matching No. 4 finish, with no evidence of welds and free of cross scratches. Run grain with long dimension of each piece. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces clean.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of metal countertops.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. Install metal countertops level, plumb, and true; shim as required, using concealed shims.

B. Field Jointing: Where possible, make field jointing in the same manner as shop jointing; use fasteners recommended by manufacturer. Prepare edges to be joined in shop so Project-site processing of top and edge surfaces is not required. Locate field joints where shown on Shop Drawings.

C. Secure tops to cabinets with Z- or L-type fasteners or equivalent; use two or more fasteners at each front, end, and back.

D. Abut top and edge surfaces in one true plane, with internal supports placed to prevent deflection.

E. Seal junctures of tops, splashes, and walls with mildew-resistant silicone sealant or another permanently elastic sealing compound recommended by countertop material manufacturer.

3.03 CLEANING AND PROTECTION

A. Repair or remove and replace defective work as directed on completion of installation.

B. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish, as approved by Architect.

C. Protection: Provide 6-mil (0.15-mm) plastic or other suitable water-resistant covering over the countertop surfaces. Tape to underside of countertop at a minimum of 48 inches (1220 mm) o.c. Remove protection at Substantial Completion.

END OF SECTION

CSO Architects