



**ROCKFORD BOARD OF EDUCATION  
INVITATION FOR BID ON SUPPLIES, MATERIALS, EQUIPMENT OR SERVICES  
FOR SCHOOL DISTRICT NO. 205  
ROCKFORD, ILLINOIS**

**IFB No. 17-11 Bloom Elementary School Cafeteria Addition and Renovation**

**DATE: Monday, September 12, 2016**

**RE: ADDENDUM NO. 1**

---

To All Bidders:

Attached are modifications, clarifications and/or corrections for the Project Manual and are hereby made a part of the contract documents. Please attach this addendum to the Project Manual(s) in your possession. Please note the receipt of this addendum on the bid form. Bidders shall review changes to all portions of this work as changes to one portion may affect the work of another.

**If you plan to hand deliver your IFB submission on the due date, please note you must check in on the 3rd floor prior to coming to the 6th floor. Please allow time for this as late submission will not be accepted.**

Refer all questions relative to the business aspect, Instructions to Bidders, Special Conditions, and questions concerning the technical aspect of the documents to the Purchasing Process Manager by email at [tamara.pugh@rps205.com](mailto:tamara.pugh@rps205.com).



4615 E. State Street Suite 206 Rockford Illinois 61108  
815 / 397-3330

## **ADDENDUM NO. 1**

Date: September 12, 2016

Project: **17-11 Bloom Elementary School Cafeteria Addition & Renovation**  
Project Number: IFB No. 17-11

To: All Bidders

This addendum is issued to modify, clarify, or correct the original Project Manual and/or Drawings for Bloom Elementary School Cafeteria Addition & Renovation and is hereby made a part of the contract documents. Please attach this addendum to the Project Manual(s) in your possession. Please note the receipt of this addendum on the bid form. Bidders shall review changes to all portions of this work as changes to one portion may affect the work of another.

### **Changes to the Project Manual for Bloom Elementary School Cafeteria Addition & Renovation.**

#### **Section 114000 – Foodservice Equipment**

- a) Changes to page 14 As indicated by bold print and underlined item.
- b) Changes to page 15 As indicated by bold print and underlined item.
- c) Food Service Equipment purchased by RPS refer to items 9, 14, 33, 41 & 42
- d) Appendix 4 - Walk in floor details adjusted to 6" of insulation in lieu of what is showed on plans

### **Changes to the Project Construction Documents for Bloom Elementary School Cafeteria Addition & Renovation.**

- 1. Sheet M3.00 Mechanical Schedules ( See attached sheet )
- 2. S2O - Sheet FS101 dated 09-12-2016 ( See attached sheet )
- 3. S2O - Sheet FS101E dated 09-12-2016 ( See attached sheet )
- 4. S2O – Sheet FS101M dated 09-12-2016 ( See attached sheet )
- 5. S2O – Sheet FS103C dated 09-12-2016 ( See attached sheet )

**BN-RFI: 01 - Specification & Construction Drawing:**

**REQUEST:**

In extracting and naming the plans we found discrepancies in the Sheet Index. I have attached my scribble notes from the sheets I used as I went through them. (I hope you can read my mark-ups).

In the specifications section 012600 – under Contract Modification Procedures: Change Order Procedures: we have 5 sheets and the Table of Contents lists 7.

**RESPONSE:**

- a) See attached revised sheet index addressing these items (Dated 09-12-16)**
- b) Change order procedure has 5 sheets and not 7 as listed in table of contents**

**BN-RFI: 02 - Specification:**

**REQUEST:**

Good morning Tamara,

I have noticed the General Contractors posting for building the Bloom School project. In reviewing the posted documents, it appears that commissioning services are required.

Will the commissioning agent be contracted directly to the General Contractor (under this current posted solicitation) or will it be separately procured directly to Rockford in a later solicitation?

There is a mandatory prebid meeting tomorrow afternoon and I plan to attend if the commissioning services are contracted under the GC (this solicitation). If not, it appears that my attendance would not be required.

Thank you kindly for addressing this question. Have a nice day,

**RESPONSE:**

**Project 17-11 Bloom Elementary School Cafeteria Addition & Renovation does not require commissioning by code, omit all reference from specification section.**

- a) 01300 Submittal Procedures**
- b) 017823 Operation & Maintenance Data**

**OSA, LLC**

**Engineering Services / Building Commissioning/ LEED Consultants**

MEP Consultant

- a) Letter Dated 08-25-2016  
Refer to attached Letter from OAS - Addressing drawings items and misc. items that were brought up during the Pre-bid Meeting on September 7th 2016
- b) Refer to attached revised OAS drawings sheet M3.00 addressing added to the scope of work by RPS.

**See the following attachments**

- a) Pre-Bid meeting notes dated 09-07-2016. Addendum #1
- b) Pre-Bid Sign-In Sheet dated 09-07-2016 Addendum #1
- c) Revised Drawing Index sheet dated 09-12-2016 Addendum #1

OSA, LLC

Engineering Services / Building Commissioning/ LEED Consultants  
MEP Consultant

- a) Attached Letter from OAS dated 04-04-2016
- b) Attached Letter from OAS dated 04-05-2016

S2O Kitchen Consultants

- a) Section 114000 – Foodservice Equipment dated 09-12-2016
- b) S2O - Sheet FS101 dated 09-12-2016 ( See attached sheet )
- c) S2O - SheetFS101E dated 09-12-2016 ( See attached sheet )
- d) S2O – Sheet FS101M dated 09-12-2016 ( See attached sheet )
- e) S2O – Sheet FS103C dated 09-12-2016 ( See attached sheet )

End of Addendum #1

## MINUTES OF THE MEETING

Date: Wednesday, September 7<sup>th</sup> 2016

Time: 2:30 PM

Location: Bloom Elementary School

PROJECT NAME: IFB No. 17-11 Bloom Elementary School Cafeteria Addition and Renovation.

Attendees: See Attached List

Meeting Purpose: Mandatory Pre-Bid Meeting

### ITEMS DISCUSSED

1. Question- Regarding commissioning for the bloom School Project.  
**Response- Commissioning is not required for IFB No. 17-11 Bloom Elementary School Cafeteria Addition and Renovation. Disregard as called for in specification sections.**
2. Question – Regarding cost of submittal Exchange.  
**Response – Please contact Mr. Glenn Van Treeck at S/E at 515-393-2471**  
Email: [glenn.vantreeck@oracle.com](mailto:glenn.vantreeck@oracle.com)
3. Question – Regarding Additional walk through  
**Response - Set for Wednesday 14<sup>th</sup> at 3:00 pm.**
4. Question – Regarding RRWRD IC Permit Process, Application fee? Connection fee  
**Response – Refer to sheet C01, under Sanitary Sewer Notes#2. Application fee by general contractor, connection fee by RPS.**
5. Additional Information stated as part of Pre-bid Meeting notes.
  - a) Abatement work to be completed during the phase two of this project.
  - b) Called inspection list as indicated in Division 014000 (I-13)
  - c) Testing under owner testing agency B&F and State of Illinois
  - d) Close Out Procedure Refer to division 11770 coordination with BHFx
  - e) New lift scope of work will be in phase two of this project, We will not be turning this area over to G.C. in phase one as per my statement in Pre-bid Meeting.
6. Additional Civil Information stated as part of Pre-bid Meeting notes.
  - a. A revised construction fencing layout will be indicated on Addendum #2 Civil drawings
  - b. A revised grease separator location drawing will be indicated on Addendum #2 Civil drawings
  - c. A revised sidewalk layout will be indicated on Addendum #2 Civil drawings
  - d. A revised cast iron sanitary layout will be indicated for under building location on Addendum #2 Civil drawings
  - e. **Note Addendum #2 will be forward to RPS on Wednesday of this week**

The above summation is our interpretation of the items discussed and the decisions reached at the above referenced meeting. Any persons desiring to add to or correct the minutes are requested to put their comments in writing within ten days otherwise the minutes will stand as written.

Mark Kehely, Project Manager  
Hagney Architects, LLC

cc: All those present



4615 E. State Street Suite 206 Rockford Illinois 61108  
815 / 397-3330

Date: September 7, 2016

**IFB No. 17-11 Bloom Elementary School Cafeteria Addition and Renovation.**

**PRE-BID MEETING CONDUCTED ON, WEDNESDAY, SEPTEMBER 7, 2016 AT 2:30 P.M. (CDST), AT BLOOM ELEMENTARY SCHOOL, 2912 BRENDENWOOD ROAD, ROCKFORD, IL 61107 BY OWNER'S REPRESENTATIVE. MEET IN THE LOBBY.**

**IFB Opening: Wednesday, September 21, 2016 at 2:00 p.m., Rockford Board of Education, 3rd floor Conference Room 2, 501 Seventh St., Rockford, IL 61104.**

Pre-Bid Date & Time: Wednesday Sept. 7<sup>th</sup> 2016 @ 2:30 pm

1. Read RPS 205 pre-bid conference opening statement
2. All questions are to be emailed to Tamara Pugh with RPS 205 at [Tamara.pugh@rps205.com](mailto:Tamara.pugh@rps205.com).
3. Contractors, subcontractors & suppliers are not to contact Hagney Architects or OAS, LLC.
4. Reviewed bid form check list – noted a project schedule shall be included with the bid form as well as AIA A305 qualification statement & bid bond. A performance & payment bond will be required for contractor that receives project award.
5. Reviewed & described Phase One & Phase Two
6. Review & describe Alternates A-1, Alternate A-2, Alternate M-1 & Alternate M-2
7. Unit price for removal & replacement of unsuitable soils. Contractor to include an allowance of 200 cubic yard in the base bid price.

8. Reviewed project schedule requirements.

	Cafeteria Addition / Interior Renovation at Bloom Elementary School
Contract Award:	Sept. 27th, 2016
Phase One -Commence Work on:	Oct. 10th, 2016
Phase One Substantial Completion	May 15th, 2017
Phase One New Cafeteria & Kitchen - Owner Occupancy	May 29th, 2017
Phase Two- Commence Work on Vertical Lifts , Gym Renovation , Bathrooms, Alternate A-1, A-2,M-1 & M-2	June 6th, 2017
Substantial Completion	August 1st, 2017
Owner Occupancy	August 8th, 2017
Final Completion:	August 8th, 2017

9. Contractors were advise of addendum #1 issuance
10. ROE permits are obtained by RPS 205. Contactor to complete the RRWRD IC permit application and pay for application. All other utilities cost are by RPS 205
11. Contractors were reminded to use the substitution request form included in the bid documents.
12. Project overview provided by James Dobyns with Rockford Public Schools, Mark Kehely with Hagney Architects & Keith O'Higgins OAS LLC.
13. Utilities can be utilized by contractor at no cost. Temporary electric service to be limited to 100 AMPS
14. Contractors were notified they need to conform to the City of Rockford noise ordinance.
15. Contractors were informed all hazardous material will be abated by others.
16. Testing – contractors shall coordinate testing requirements with owner's testing agency.
17. Contractors were informed of the criminal history and background check requirements
18. Contractors were informed of the "called inspection" requirements and coordination requirements
19. Post award requirements include: performance & payment bond, schedule of values, project schedule& labor rate schedule
20. A walk through was conducted. Contractors were shown the various areas of work. The meeting concluded after the walk through.

Next scheduled walk though is \_\_\_\_\_, 2016 @ 3:00 PM. This walk through is not mandatory.

Prepared by: Mark Kehely Hagney Architects

## PRE-BID CONFERENCE OPENING STATEMENT

Welcome to the mandatory pre-bid conference for IFB 17-11 Bloom Elementary School Additions and Renovations for the Rockford Public Schools.

The purpose of this meeting is to receive input, comments, questions, clarifications and suggested changes relative to this solicitation. As a reminder, the only acceptable changes to the Bid/RFP are formal Addendums published by the RPS Purchasing department. Additionally, the Addendum may address other issues identified by the School District.

The goal of today's meeting is to increase your knowledge of the solicitation as it is written and provide an information mechanism in which you may advise the School District of any changes it should make. Consequently, any changes you wish the Rockford Public Schools to consider must be submitted in writing to the Purchasing department before the deadline as expressed in the solicitation.

We will try to answer as many of the questions as possible. If we cannot answer a question today, we will defer that answer to the published Addendum. Additionally, minutes from this pre-bid conference will be published in the Addendum.

- Bid Opening is scheduled for Wednesday, Sept. 21, 2016 at 2:00 pm Rockford Board of Education, 6th floor Conference Room. Late bids will not be accepted. Faxed or emailed bids will not be accepted.
- Board Approval 27, 2016
- Bid RFI Procedures - Email Only - All correspondence during the bid process **MUST** be sent to Tamara Pugh, Purchasing Process Manager at [tamara.pugh@rps205.com](mailto:tamara.pugh@rps205.com). Last RFI will be accepted until Sept 16th at 12 pm. Last addendum will be issued by Sept 19<sup>th</sup> at 12 pm.
- Addendums will be emailed to all attendees at the pre-bid conference, posted on the RPS website, Demand Star and the 3 printing companies.
- PLEASE reference the **REQUIRED FORMS CHECK LIST** for all documents that must be submitted with your bid offer form. All forms must be properly completed, signed and submitted or your bid will be deemed non-responsive. 5% Bid bond for the Base bid to be included.

Project Manager for summary of the project.



# ROCKFORD PUBLIC SCHOOLS 17-11 Bloom Elementary School Additions and Renovations

## Pre-Bid Meeting Sign-In Sheet

Wednesday September 7, 2016 at 2:30 p.m.



### PRE-BID MEETING SIGN-IN SHEET

IFB # 17-11 Bloom Elementary School Additions and Renovations

Wednesday September 7, 2016 2:30 pm (CDST)

	Printed Name	Company Name	Company Address	Telephone	E-mail
1	STUBS SCHMELKE	SCHMELKE CONSTRUCTION CO.	315 HATHAWAY AVE LOCKFORD IL 61104	815-399-7600	STUBSE SCHMELKE CONSTRUCTION, CO.
2	CHAD PAULIS				CHAD FE SCHMELKE CONSTRUCTION, CO
3	BARRY LERSON	LEASON-LEASON BLDG	5612 INDUSTRIAL AVE LOUISIANA, IL	815-633-1773	Baryell Builders, Inc
4	MARK KELLEY	HUGHES ASSOCIATES			
5	LARRY ARNOLD	OAS, LLC			
6	JAMES BOBYNS	RPS		815-298-6967	james.bobyns@rps205.com
7	LIVRA LUDWIG	SSR Commissioning	1155 S. Naperville Wheaton, IL	312-656-3609	ludwig@ssr-inc.com

**ROCKFORD PUBLIC SCHOOLS**  
**17-11 Bloom Elementary School Additions and Renovations**

Pre-Bid Meeting Sign-In Sheet  
 Wednesday September 7, 2016 at 2:30 p.m.

8	JOHN LARSON	SPECIAL POWER	1226 18 <sup>th</sup> AVE RKFD 61104	815-962-1216	JOHN @ SPECIALPOWER.COM
	Printed Name	Company Name	Company Address	Telephone	E-mail
1	JAKE DYKSTRA	CORD CONSTRUCTION COMPANY	1322 EAST STATE STREET ROCKFORD, IL 61104	815/965-6630	DYKSTRA@ CORDCONSTRUCTION.COM
2	JOHN BICARD	CORD	1322 EAST STATE	815 965 6630	bicard @ cordconstruction.com
3	John Rudolph	Rockford Structures	10514 N. 2nd ST. Rockford, IL.	815-633-6161	Cnrdpny11@Gmail.c
4	JIM STEENMAN	STEENMAN	2420 20th ST ROCKFORD IL 61108	815-398-2420	jim@steenman.com
5	KEVIN GUGLIVZZA	SCANDROLL	855 N. MADISON ST. RKFD IL 61107	815 9624037	KEVING@SCANDROLL .COM
6					
7					
8					
18					
19					

# DRAWING INDEX

## GENERAL

G1.00	COVER SHEET, PROJECT TEAM
G1.01	ABBREVIATIONS, SYMBOLS, AND SHEET INDEX
G1.02.1	CODE COMPLIANCE LOWER LEVEL PLAN
G1.02.2	CODE COMPLIANCE UPPER LEVEL PLAN
G1.02.3	CODE COMPLIANCE 2009 IBC

## CIVIL

C01	CIVIL GENERAL NOTES
C02	CIVIL GENERAL NOTES
C03	EXITING CONDITION / REMODELING PLAN
C04	LAYOUT UTILITY PLAN
C05	GRADING EROSION / CONTROLS PLAN
C06	DETAILS
C07	DETAILS
C08	DETAILS

## ARCHITECTURAL DEMOLITION

AD1.0.0	ARCH. DEMOLITION LOWER LEVEL PLAN
AD1.0.1	ARCH. DEMOLITION LOWER LEVEL PLAN
AD1.0.2	ARCH. DEMOLITION UPPER FIRST FLOOR PLAN

## ARCHITECTURAL

A1.0.0	OVERALL FIRST FLOOR & LIFT REFERENCE PLANS
A1.0.1	ENLARGED FLOOR PLAN LAYOUT
A1.0.2	ENLARGED GYM FLOOR PLAN
A1.0.3	ENLARGED UPPER FLOOR LIFT PLAN
A1.0.4	ROOF PLAN & DETAILS

A2.1.1	DOOR SCHEDULES, DOOR DETAILS
A2.1.2	WALL PARTITION & ALUM. DOOR DETAILS

A3.0.0	EXTERIOR CAFETERIA ELEVATIONS
A3.1.1	CAFETERIA BUILDING SECTIONS
A3.2.0	CAF. WALL SECTIONS, SHEET ONE
A3.2.1	CAF. WALL SECTIONS, SHEET TWO
A3.2.2	CAF. WALL SECTIONS, SHEET THREE
A3.2.3	CAF. WALL SECTIONS, SHEET FOUR
A3.2.4	CAF. WALL SECTIONS, SHEET FIVE
A3.2.5	CAF. WALL SECTIONS, SHEET SIX
A3.2.6	LIFT WALL SECTIONS

<b>ARCHITECTURAL (CONT...)</b>	
A4.1.1	TOILET ELEVATIONS, SCHEDULES, & MOUNTING HEIGHTS
A5.1.1	INTERIOR ELEVATIONS
A6.0.0	LOWER LEVEL REFLECTED CEILING PLAN
A6.1.0	OVERALL REFLECTED CEILING PLAN
A6.1.1	SHEET OMITTED
A8.1.1	GYM FLOOR FINISH PLAN & ROOM FINISH SCHEDULE
<b>STRUCTURAL</b>	
S1.0	GENERAL NOTES
S1.1	LEGEND AND ABBREVIATIONS
S2.0	FOUNDATION PLAN
S2.1	ROOF FRAMING PLAN
S3.0	FOUNDATION DETAILS
S3.1	SHEET OMITTED
S4.0	FRAMING DETAILS
S4.1	FRAMING DETAILS
<b>MECHANICAL</b>	
M0.01	DEMOLITION PARTIAL FIRST FLOOR PLAN - MECHANICAL
M0.02	DEMOLITION UPPER LEVEL FLOOR PLAN - MECHANICAL
M1.01	NEW WORK PARTIAL FIRST FLOOR PLAN - MECHANICAL
M1.02	NEW WORK UPPER LEVEL FLOOR PLAN - MECHANICAL
M2.01	ROOF PLAN - MECHANICAL
M3.0.0	MECHANICAL SCHEDULES
M4.01	MECHANICAL DETAILS
M4.02	MECHANICAL DETAILS
M5.01	MECHANICAL SYMBOLS, ABBREVIATIONS, & NOTES
M5.02	MECHANICAL GENRAL NOTES
<b>ELECTRICAL</b>	
E0.10	DEMOLITION PARTIAL FIRST FLOOR PLAN - ELECTRICAL
E0.20	DEMOLITION UPPER LEVEL FLOOR PLAN - ELECTRICAL
E1.10	NEW WORK FIRST FLOOR PLAN - LIGHTING - ELECTRICAL
E2.10	NEW WORK FIRST FLOOR PLAN - POWER - ELECTRICAL
E2.20	NEW WORK UPPER FLOOR & ROOF PLAN - POWER - ELECTRICAL
E3.10	NEW WORK FIRST FLOOR PLAN - LOW VOLTAGE SYSTEM - ELEC.
E4.10	ENLARGED KITCHEN PLAN - POWER - ELECTRICAL
E5.00	ELECTRICAL SCHEDULES

## ELECTRICAL (CONTIN.)

E6.00	DETAILS & DIAGRAMS - ELECTRICAL
E6.10	DETAILS - ELECTRICAL
E7.00	ELECTRICAL ABBREVIATIONS AND SYMBOLS
E7.10	NOTES - ELECTRICAL

## PLUMBING

P0.10	DEMOLITION PARTIAL FIRST FLOOR PLAN - PLUMBING
P1.11	NEW WORK FIRST FLOOR PLAN - SANITARY - PLUMBING
P1.12	NEW WORK FIRST FLOOR PLAN - WATER - PLUMBING
P1.13	NEW WORK FIRST FLOOR KITCHEN PLAN - PLUMBING
P1.14	NEW WORK FIRST FLOOR TOILET ROOM PLAN - PLUMBING
P1.31	NEW WORK ROOF PLAN - STORM PLUMBING
P3.00	PLUMBING SYMBOLS, ABBREVIATIONS, & NOTES
P4.00	PLUMBING DETAILS

## FOOD SERVICE

FS101	FOOD SERVICE EQUIPMENT PLAN AND SCHEDULE
FS101E	FOOD SERVICE ELECTRICAL SPOT PLAN & LOAD SCHEDULE
FS101F	FOODSHIELD DETAILS- ITEM #35.1
FS101H	EXHAUST HOOD DETAILS- ITEM #26
FS101M	FOOD SERVICE MECHANICAL SPOT PLAN & LOAD SCHEDULE
FS101SC	FOOD SERVICE SPECIAL CONDITIONS PLAN



**Engineering Services / Building Commissioning / LEED Consultants**

Bloom Elementary School Cafeteria Addition Project

Date: August 25, 2016

Addendum Items:

**A. Specifications**

1. 23 09 23 – Direct Digital Control System for HVAC
  - a. Paragraph 1.3A – Revise to read as follows: “Building automation system shall be an extension of the existing Tridium JACE based LON/BACnet control system.”
2. 23 09 93 – Sequence of Operations for HVAC Controls
  - a. Paragraph 3.1B – Revise to the first sentence to read as follows: “Temperature control system shall be web-based and communicate seamlessly, via LON/BACnet over the district’s Ethernet LAN/WAN.”
3. 23 09 95 – Variable Frequency Speed Control
  - a. Paragraph 3.1A – Revise to the first sentence to read as follows: “The manufacturer shall provide start-up of the VFD’s and its optional circuits by a factory certified service technician who is experienced in start-up and repair services.”
4. 23 09 23 – Direct–Digital Control System for HVAC
  - a. Paragraph 1.3A – Revise to read as follows: “Building automation system shall be an extension of the existing Tridium JACE based LON/BACnet control system.”
5. 27 14 43 – Data and Voice Cabling
  - a. Paragraph 1.4F1 – Delete “Category 5E and/or”.
  - b. Paragraph 1.4F1a – Delete “Category 5E and/or”.
  - c. Paragraph 1.4F2 – Delete in its entirety.
  - d. Paragraph 2.3A2 – Delete in its entirety.
  - e. Paragraph 2.3A3 – Replace “FDDI” with “Interlock Armored OM3”, replace “OFNR” with “OFNP”.
  - f. Paragraph 2.3A3a – Add Belden as an acceptable manufacturer.
  - g. Paragraph 2.3B – Delete in its entirety.
  - h. Paragraph 2.3C1b – Add Belden as an acceptable manufacturer.
  - i. Paragraph 2.3C1c – Delete in its entirety.
  - j. Paragraph 2.3C1b – Add Belden as an acceptable manufacturer.
  - k. Paragraph 2.3C2c – Replace “Cat-5e” with “Cat-6”.
  - l. Paragraph 2.3D1 – Delete in its entirety, and replace with the following:



## Engineering Services / Building Commissioning / LEED Consultants

1. Wall Mounted Intermediate Distribution Frame (IDF) Network Server Rack:
  - a. Network Cabinet: Wall mounted, triple segmented for front and rear access, window front door style, 400 lbs. load capacity, 19" rack-style rails, 26" nom. Depth, 26 rack units, door locks, powder coat black finish.
    - 1) Basis of Design: Hubbell #HSQ4826
    - 2) Acceptable Manufacturers: Chatsworth Products, Inc. (CPI), Hoffman
  - m. Paragraph 2.3E1a1) – Add Ortronics, Belden, Hubbell as acceptable manufacturers.
  - n. Paragraph 2.3E1b1) – Add Ortronics, Belden, Hubbell as acceptable manufacturers.
  - o. Paragraph 2.3E2a thru c – Delete in their entirety, and replace with the following:
    - a. Provide adapter panels to match those listed below, and connect to existing fiber system within MDF cabinet.
  - p. Paragraph 2.3E3a – Delete in its entirety.
  - q. Paragraph 2.3E3b – Replace "SC" with "LC", delete "/single", delete "Three panels utilized with each cabinet".
  - r. Paragraph 2.3E3c – Delete wording, and replace with "Splice Cassette Panels:"
  - s. Paragraph 2.3E3c1) – Add Belden as an acceptable manufacturer.
  - t. Paragraph 2.3H through 2.3K – Delete in its entirety.
6. 28 13 00 – Access Control System Extension
  - a. Paragraph 3.4 – Revise to read as follows: "3.4 Testing"
7. 28 13 00 – Access Control System Extension
  - a. Paragraph 3.4A – Revise to the first sentence to read as follows: "The Contractor shall be responsible for testing of the installation in accordance with all applicable documents in the Contract set."

### B. Drawings:

1. Sheet M1.01 New Work Partial First Floor Plans – Mechanical
  - a. At column lines C and 1.5 add the following note:  
"Provide an 18" high platform curb and pipe curb, per details, for the cooler and freezer condensing units. (Typ. 2)." See food service and architectural drawings for exact unit locations.
2. Sheet M1.02 New Work Upper Floor Plan – Mechanical
  - b. Existing Closet, Northwest of Main Office, provide wall mount high bay unit (CCU-1) and remote condensing unit (CU-2) per the schedule add to Sheet M3.00. Provide an 18" high platform curb and pipe curb, per details. Provide ref. piping to/from CCU-1 and CU-2. Size/route per manufactures recommendations. Provide 1" condensate from CCU-1 to floor drain in boiler room located on first floor. Field verify routing.
3. Sheet M3.00 – Schedules – Mechanical
  - a. Make-up Air Unit Schedule: Delete note 14 from schedule.
  - b. Heating/Cooling Rooftop Unit Schedule: Delete notes 6 and 18 from schedule.



### Engineering Services / Building Commissioning / LEED Consultants

- c. Variable Refrigerant Flow & Condensing Unit Schedule: Revise Model Number, Efficiency, MCA and MOCP for CU-1 to "PURY-P72", "23.1", "24.0" and "35" respectively.
  - d. Variable Refrigerant Flow & Condensing Unit Schedule: Revise note 1 to read as follows. "1. Provide disconnect switch for each VRF unit."
  - e. Add network room high bay unit (CCU-1) and remote condensing unit (CU-2) per added schedule. See attached revised sheet M3.00.
4. Sheet E1.10 – New Work First Floor Plan – Lighting – Electrical
- a. Add box around two Toilet Rooms and PTO Storage and add the following note: "ARCHITECTURAL ALTERNATE A-1"
5. Sheet E2.20 – New Work Upper Floor and Roof Plan – Electrical
- a. Indicate existing MDF cabinet location, within closet immediately to the right of the right stairs (nearest main office). Add Keynote #2, which reads:  
"Provide new fiber optic patch panel within existing MDF cabinet and terminate 6-strand fiber optic cable from new IDF cabinet, such that new IDF cabinet is properly integrated with the building's telecommunications system. Coordinate requirements with owner's I.T. representative(s)."
  - b. Delete a portion of the note located in the center of the gym, which states:  
"Note: All new conduits in or crossing gym to be above bottom chord of structure."  
The remainder of the note is to remain.
  - c. Add box around EF-3 and add the following note: "ARCHITECTURAL ALTERNATE A-1"
6. Sheet E3.10 – New Work First Floor Plan – Low Voltage Systems – Electrical
- a. Access door to Stor/Jan 013 shall be card access controlled, with all components to match other card access doors, and as indicated on Sheet E6.10, Detail #3.
  - b. Provide new wall mounted IDF cabinet on wall common to gym. Add Keynote #8, which reads:  
"Provide new wall mounted IDF cabinet, mounted at 7'-0" AFF to bottom of cabinet. Provide new 48-port patch panel, and run all cat. 6E cabling and terminate to this patch panel, unless noted otherwise. Run 6-strand fiber optic cable from new IDF cabinet to existing MDF cabinet, located on upper floor. See Sheet E2.20 for location."
  - c. Relocate manual pull station and audio/visual device from glass wall adjacent to Cafeteria 012 northwest double doors to wall common to kitchen.
  - d. Kitchen 015 – Delete the smoke detector above the desk, and add a heat detector in the same location.
  - e. Add General Electrical Note #4, which reads:  
"Run new cat. 6E cabling from each data jack to new IDF cabinet in STOR/JAN 013."
  - f. Add the fire alarm system symbol of "RA" within a hexagon, representing a "Remote Test/Indicator for Duct Detector".





**Engineering Services / Building Commissioning / LEED Consultants**



7. Sheet P0.10 - Demolition First Floor Plan – Plumbing
  - a. Contractor to remove all existing Kitchen Equipment and coordinate salvage along with pick up with RPSD 205.
8. Sheet P1.12 - New Work First Floor Plan – Water – Plumbing
  - a. Revise Keyed Note 4 and any notes on the sheet referring to CW piping running through Existing Gym 020 to run up to ceiling – not up to ceiling joists. Ceiling not being removed. Piping to run down to above ceiling of new addition, through Storage Room 014, and then to Kitchen 015.
9. Sheet P1.13 – New Work First Floor Kitchen Plan – Plumbing
  - a. Add Keyed Note 6 to install new gas water heater, GWH-1, on 4 inch high concrete equipment pad, independent of building structural framing members.
  - b. Water Softener is to be new.
  - c. Provide Double Check Valve at Pre-Rinse Sink.
  - d. Floor Trough, item number 16, is supplied by RPSD 205 and installed by Contractor.
10. Sheet P1.14 – New Work First Floor Toilet Room Plan – Plumbing
  - a. Revise Keyed Note 8 and any notes on the sheet referring to CW piping running through Existing Gym 020 to run up to ceiling – not up to ceiling joists. Ceiling not being removed.
  - b. Lavatory L-1 has a TMV on the HW supply called out on the sheet (Typ. 4). The temperature setting for the TMV is 110 deg. F max.

Sincerely,









Larry L. Arnold, P.E., LEED AP, CBCP


**O'Higgins and Arnold Sustainability, LLC**  
**769 Heartland Dr., Unit A**  
**Sugar Grove, IL. 60554**

HEATING / COOLING ROOFTOP UNIT SCHEDULE																																																		
GENERAL DATA							DIMENSIONAL DATA (N.)			SUPPLY FAN DATA							NATURAL GAS HEATING CAPACITY DATA							COOLING CAPACITY DATA							EXHAUST FAN DATA							ELECTRICAL DATA				FILTERS		NOTES						
TAG	LOCATION	AREA SERVED	MANUFACTURER	MODEL NUMBER	SYSTEM TYPE	UNIT TYPE	APPROX. WEIGHT (LB.)	LENGTH	WIDTH	HEIGHT	CFM	MIN ODA	ESP (IN.)	DRIVE TYPE	MTR RPM	MTR HP	MTR VOLT	MTR PH	MTR BHP	INPUT (MBH)	OUTPUT (MBH)	NO. OF BURNERS	NO. OF STAGES	GAS CONN.	EAT (°F)	LAT (°F)	NOMINAL TONNAGE	ODT DB (°F)	REFRIG TYPE	COMP. TYPE	NO. OF COMP.	EAT DB (°F)	EAT WB (°F)	LAT DB (°F)	LAT WB (°F)	CFM	ESP (IN.)	DRIVE TYPE	MTR RPM	MTR HP	MTR VOLT	MTR PH	MTR BHP		MCA	MOCP	VOLT	PH	QTY	FV (FPM)
101	ROOF	CAFETERIA 012	AMON	RN-018	PACKAGED ROOFTOP	DX CLING/GAS HEAT	2,900	138	101	60	6,000	1,400	1.70	BELT	1,317	7.5	208	3	3.95	405	328	-	-	3/4"	55.2	105.8	18.0	95.0	R-410A	SCROLL	2	79.7	65.4	53.1	53.0	6,000	0.50	BELT	1,415	3.0	208	3	2.26	97	110	208	3	6	312.0	1 THRU 19
NOTES:																																																		
1. PROVIDE ENTHALPHY 0-100% ECONOMIZER										8. PROVIDE FULL MODULATING HIGH HEAT STAINLESS STEEL HEAT EXCHANGER, 10:1 TURNDOWN.										15. PROVIDE VARIABLE CAPACITY COMPRESSORS.																														
2. PROVIDE HAL GUARD										9. PROVIDE HINGED DOOR ACCESS PANELS										16. PROVIDE LOW LEAK O.A. DAMPER.																														
3. PROVIDE 18" HIGH INSULATED ROOF CURB										10. PROVIDE CONTROL INTERFACE TO OWNERS BAS/ACE PANEL TO ALLOW MONITORING/CONTROL.										17. PROVIDE AUTO-RECYCLE TIMER.																														
4. PROVIDE MODULATING POWER EXHAUST W/AFD.										11. STAINLESS STEEL DRAIN PAN.										18. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.																														
5. PROVIDE LOW AMBIENT CONTROLS TO 35° F										12. PROVIDE SUPPLY AND RETURN/EXHAUST FAN VFD'S (ABB OR DANFOSS).																																								
7. PROVIDE WALL MOUNTED T-STAY										13. PROVIDE CO2 SENSOR.																																								
										14. PROVIDE DOUBLE WALL CONSTRUCTION.																																								

BRANCH CIRCUIT CONTROLLER							
GENERAL DATA					ELECTRICAL DATA		
TAG	LOCATION	MODEL NO.	MANUFACTURER	QUANTITY	VOLT	PH	MCA
	CEILING	CMB-P105NU	MITSUBISHI CITY MULTI	1	208	1	0.44

NOTES:

MECHANICAL/ELECTRICAL COORDINATION SCHEDULE									
<b>NOTES:</b> 1. DEVICES TO BE FURNISHED BY THE ELECTRICAL CONTRACTOR (MARKED "E"), OR MECHANICAL CONTRACTOR (MARKED "M"). 2. ALL CONDUIT AND WIRING FOR TEMPERATURE CONTROL AND EQUIPMENT INTERLOCK SHALL BE BY BAS CONTRACTOR. OTHER CONTROLS AND CONTROL CONDUIT/WIRING BY TRADE FURNISHING RESPECTIVE EQUIPMENT. 3. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE AND REVIEW THE ELECTRICAL CHARACTERISTICS, AMPACITY, AND OTHER REQUIREMENTS OF COMPONENTS BEFORE INSTALLATION OF WORK. ALL OTHER CONTRACTORS SHALL ADVISE ELECTRICAL CONTRACTOR OF ANY MOTOR/DEVICE CHANGES. 4. ALL LOAD STARTERS SHALL INCLUDE HOA SWITCH, CONTROL TRANSFORMER, AND ONE N.O. AND ONE N.C. AUXILIARY CONTACTS. ALL SINGLE PHASE EXHAUST FAN CONTROL SWITCHES SHALL HAVE IDENTIFICATION NAMEPLATE AND PILOT LIGHT. 5. SEE SPECIFICATIONS AND DRAWINGS FOR UNIT TYPES AND LOCATIONS OF DEVICES SCHEDULED BELOW.									
EQUIP. TAG	EQUIPMENT DESCRIPTION	UNIT MOUNTED DEVICES				REMOTE OR LOOSE DEVICES			REMARKS
		STARTER	DISCONNECT	OVERCURRENT PROTECTION	SINGLE POINT CONNECTION	STARTER	DISCONNECT	OVERCURRENT PROTECTION	
	AIR COOLED CONDENSING UNIT	—	—	—	YES	—	E	E	
	ELECTRIC CABINET UNIT HEATER	—	M	—	—	—	—	E	
	EXHAUST FAN SINGLE PHASE	—	M	—	—	—	—	E	REFER TO EXHAUST FAN SCHEDULE ON MECHANICAL DRAWINGS FOR CONTROL REQUIREMENTS, M.O.D. POWER WIRING BY BAS CONTRACTOR.
	EXHAUST FAN THREE PHASE	—	—	—	YES	E	E	E	REFER TO EXHAUST FAN SCHEDULE ON MECHANICAL DRAWINGS FOR CONTROL REQUIREMENTS, M.O.D. POWER WIRING BY BAS CONTRACTOR.
	VARIABLE REFRIGERANT FLOW UNIT	M	M	—	—	—	—	E	
	VARIABLE REFRIGERANT FLOW BOX	—	M	—	—	—	—	E	
	MAKE UP AIR UNIT	M	—	—	—	—	E	E	VARIABLE FREQUENCY DRIVE(S) ON SUPPLY AND/OR RETURN/EXHAUST FANS ARE FACTORY MOUNTED.
	ROOFTOP UNIT	M	—	—	YES	—	E	E	VARIABLE FREQUENCY DRIVE(S) ON SUPPLY AND/OR RETURN/EXHAUST FANS ARE FACTORY MOUNTED.
<b>NOTES:</b> 1. VERIFY FINAL LOADS AND REQUIREMENTS OF ALL EQUIPMENT WITH FINAL MECHANICAL DRAWINGS.									

COMPUTER ROOM COOLING UNIT																											
TAG	INDOOR SECTION DATA																	OUTDOOR UNIT							NOTES		
	GENERAL DATA					CAPACITY DATA		AIR FLOW DATA			FAN MOTOR DATA		FILTER DATA		TOTAL ELECTRICAL DATA		DIMENSIONAL DATA		TAG	REFRIGERANT TYPE	REFRIGERANT WEIGHT	TYPE	CAPACITY (MBH)	AMBIENT AIR (°F)		TOTAL ELECTRICAL DATA	
	MANUFACTURER	MODEL NUMBER	AREA SERVED	LOCATION	TYPE	TOTAL MBH	SENSIBLE MBH	CFM	EAT DB (°F)	EAT WB (°F)	VOLT/PH	HP	TYPE	AREA (SQFT.)	FLA	VOLT/PH	LxWxD (IN.)	MOCP								VOLT/PH	
	MITSUBISHI ELECTRIC	PKA-A12	DATA CLOSET	DATA CLOSET	WALL MOUNTED	12	---	320	80	67	208/1	---	1" TA	---	0.33	208/1	36x12x10		CU-2	R410A	2 LBS, 14 OZ.	DC INVERTER	12	95	15	208/1	1,2,3,4,5,6,7

NOTES:

1. PROVIDE CONDENSATE PUMP AND COND. FLOAT ALARM AND SHUT DOWN.

2. PROVIDE DISCONNECT SWITCH.


3. PROVIDE REMOTE THERMOSTAT.

4. PROVIDE PLATFORM CURB FOR CONDENSING UNIT FOR ROOF INSTALLATION.

5. PROVIDE CONTROL INTERFACE TO OWNERS BAS/JASE PANEL TO ALLOW MONITORING/CONTROL.

6. PROVIDE ADVANCED WIND BAFFLE TO ALLOW OPERATION TO -20 DEG. F.

7. INSTALL INDOOR/OUTDOOR UNITS PER MANUFACTURERS' REQUIREMENTS/RECOMMENDATIONS.



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

## SECTION 114000 – FOODSERVICE EQUIPMENT

### PART 1 – GENERAL

#### 1.01 SUMMARY

##### 1.01 OR INCLUDES

- 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.
- C. 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.

#### 1.02 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. Prepare separate electrical and mechanical dimensioned rough-in drawings at 1/4" = 1'-0" (1:50) showing exact point of penetration of floors, walls, and ceilings for all services required to operate the equipment that the Contractor shall furnish, including the requirements for Contractor supplied and installed refrigerant and beverage piping line runs. These drawings shall also show exact locations of final connections to equipment. Indicate 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.

- 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.

☐ ☐ ☐ **ALIT ASS RANCE**

- 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.).
- 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.

☐ ☐ ☐ **DELIVER 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 ☐ **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 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".

#### ☐ **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 doorjamb, windows, etc., for the purpose of moving the equipment to its proper location. Any removal and rebuilding of walls, partitions, doorjamb, 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.

**WARRANTIES 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 warranted 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 1. PRODUCTS**

**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. 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.
- D. 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.
- E. 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.

<u>GAUGE</u>	<u>THICKNESS</u>	<u>GAUGE</u>	<u>THICKNESS</u>
#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)

- F. 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.



## **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 1/4" (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 surface), 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 Administration'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 1/4" (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 chip, flake, or blister.
- **□INIS□ES**
- 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.

#### **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 interruptible 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 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 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.

#### □□□ **PRODUCT SPECIFICATIONS**

Refer to Part 4 for complete itemized product specifications.

#### **PART 4 ELECTRICAL**

##### □□□ **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 1/2" (13mm) Armstrong armaflex or equal cellular type insulation. Provide metal pipe sleeves where piping passes through a wall, ceiling, or floor. Fill space around the tubing 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. Fully insulate and seal penetrations through walk-in cooler or freezer structures to be vapor tight to prevent condensation within any light fixtures, switch boxes, junction boxes, or any other fittings. Fully seal refrigeration and drain lines and provide escutcheon plates.
- 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.



#### **REFRIGERATION**

- 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 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.
- K. 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.

□□□ **CLEAN**□□P

- 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.

□□□ **START**□□P **AND TESTING**

- 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.

- 

dd d C r r



[illegible]

Conduit for wiring shall penetrate top of box and be exposed 6" high.

Automatic door closer

1/8" thick aluminum tread plate for 48" high wainscoting exposed exterior.

(1) Extra LED light fixtures per compartment Lights shall have an efficacy of no less than 40 lumens per watt.

Floorless unit with screeds to sit on insulated floor by GC. See FS101SC for insulated floor details by GC.

Matching trim strips and enclosure panels as required to adjacent walls and ceiling.

Provide roof mounted, complete refrigeration system. (verify location of system, air-cooled)

Unit shall meet or exceed all 2009 Federal mandates.

---

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)

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.

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 |

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

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).

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.

Orbus controller with variable speed EC motor(s) to be factory mounted and tested, located on condensing unit.

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.

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).

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.

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.

**Standard Requirements**

**ITEM #03.1 EVAPORATOR COIL-COOLER**

Manufacturer: Thermo Cool  
Model: Custom

Included in item # 03

**ITEM #03.2 COMPRESSOR-COOLER-OUTDOOR ROOF MOUNT**

Manufacturer: Thermo Cool  
Model: Custom

Included with item # 03

**ITEM #04.1 EVAPORATOR COIL -FREEZER**

Manufacturer: Thermo Cool  
Model: Custom

Included in item # 04

**ITEM #04.2 COMPRESSOR - FREEZER-OUTDOOR ROOF MOUNT**

Manufacturer: Thermo Cool  
Model: Custom

Included in item # 04

**ITEM #05 DESK**

NIKEC - This is not in the kitchen equipment contract and is shown here for informational purposes only. General Contractor to confirm all required utilities are provided

**ITEM #06 FILE CABINET**

NIKEC - This is not in the kitchen equipment contract and is shown here for informational purposes only. General Contractor to confirm all required utilities are provided

**ITEM #07 HAND SINK**

Manufacturer: Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI  
Model: HSA-10-1FK

Hand Sink, wall mount, 13-1/2" Wide x 9-3/4" front-to-back x 6-3/4" deep bowl, 304 stainless steel construction, splash mounted faucet, single knee pedal, skirt, basket drain, deep-drawn seamless design-positive drain, inverted "V" edge, NSF  
Right and Left end splash

**PURCHASED RPS**

**PURCHASED RPS**

[illegible]

**PURCHASED RPS**

## 114000-18

Manufacturer: Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI  
Model: CDTR-48-14/3

Clean Dishtable, straight design, 48"W x 30"D x 43-1/2"H, right-to-left operation, 14/304 stainless steel top, 8"H backsplash, stainless steel hat channels, raised rolled edges on front & side, stainless steel legs & crossbracing, adjustable metal feet, NSF

All welded construction

□□□□□ □□□□□ □□□ □d r□□□□□

**P□RC□ASED □□ RPS**

ITEM #15 SHELVING, WALL-MOUNTED

Manufacturer: Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI

Model: WS1236-14/3

Wall Shelf, 12" x 36" 14/304 stainless steel, 1 1/2" roll on front, 1 1/2" upturn on rear & ends, stainless steel mounting brackets stud welded to shelf, NSF

**P□RC□ASED □□ RPS**

ITEM #16 THREE (3) COMPARTMENT SINK

Manufacturer: Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI

Model: FN2860-3-24-14/3

Sink, three compartment, stainless steel, with 24" left & right-hand drainboards, 28" front-to-back x 20"W compartment, 14"D, with 10"H splash, stainless steel open frame base, boxed crossrails, 2 set of faucet holes, 34" high, 14/304 stainless steel, NSF

S/S Bullet feet

All welded construction

**P□RC□ASED □□ RPS**

ITEM #17 FAUCET

Manufacturer: Fisher

Model: 13277

Faucet, wall/backsplash mount, 8" C.C., 14" long swing spout, 1/2" inlets

Shipped loose to plumber to install on site

**P□RC□ASED □□ RPS**

ITEM #18 LEVER WASTE

Manufacturer: Fisher

Model: 22322

DrainKing Waste Valve, flat strainer, overflow body, 14 x 16 tube & elbow, 12 GPM drain rate, cast red brass body

Shipped loose to plumber to install on site

**P□RC□ASED □□ RPS**

ITEM #19 SPARE NUMBER

ITEM #20                      SHELVING, WALL-MOUNTED

Manufacturer:              Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI

Model:                      WS12114-14/3

Wall Shelf, 12" x 114" 14/304 stainless steel, 1 1/2" roll on front, 1 1/2" upturn on rear & ends, stainless steel mounting brackets stud welded to shelf, NSF

**P ☐ RC ☐ AS ☐ ED   ☐ ☐ RPS**

ITEM #21                      TABLE, PREP /SINK

Manufacturer:              Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI

Model:                      SMPT3090

Marine Prep Table, 90"W x 30"D x 34" H, 14/304 stainless steel top with box marine edge, (2) 24" x 18" x 12" sink bowls, splash mount T&S faucet on 8" centers, 10" high backsplash, 1/2" thick poly cutting board with set of slides welded to outside of unit, NSF approved drawer, gusset with Uni-Lok® design, heavy gauge 304 undershelf, 1-5/8" dia. stainless steel feet with flanged adjustable feet, NSF

All welded construction

ITEM #22                      SHELVING, WALL-MOUNTED

Manufacturer:              Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI

Model:                      WS1290-14/3

Wall Shelf, 12" x 90" 14/304 stainless steel, 1 1/2" roll on front, 1 1/2" upturn on rear & ends, stainless steel mounting brackets stud welded to shelf, NSF

**P ☐ RC ☐ AS ☐ ED   ☐ ☐ RPS**

ITEM #23-25                      SPARE NUMBER

ITEM #26                      EXHAUST HOOD

Manufacturer:              Captive Air, Streivor, Halton

Model:                      EXHAUST HOOD

12'-0"L x 60"D plus fire cabinet on end per plan

See plans for location and placement of item with reference to adjoining equipment. Furnish and install per Manufacturer's standard specifications and the following:

Install in the location as shown on drawings. It is the responsibility of the Installer to verify all clearances and stand offs from the hood to limited combustibles and/or combustibles. Hood must be installed in accordance with the Manufacturer's specifications. Canopy Hoods to be installed a minimum of 78in. off finished floor and level. ADA requires 80in. minimum off above the finished floor.

Hood to be U.L. listed #710, N.S.F. approved and built in compliance to the prevailing NFPA Standard #96.

The Hood assembly to be size and shape per the drawings with 3in stand off in the back. The hood (exposed and unexposed) shall be fabricated from Type 201 18 gauge stainless steel or heavier. All exposed surfaces to be fabricated from Type 201 stainless steel with a #4 finish. All exposed welds to be ground smooth and polished to a #4 finish.

Exhaust airflow volume and static pressure at the duct collar(s) shall not exceed those shown on the drawings.

Stainless steel matching enclosure panels from the top of the Hood to the finished ceiling to be

furnished by KEC. (Verify ceiling height with plan.)

KEC shall provide 20 gauge stainless steel wall sheathing to extend from the top of the floor base to the bottom of the rear edge of the hood, the full length of the hood and extending to the side walls where so installed. Sheathing shall be maximum practical size and trimmed with Component Hardware joining and end strips. Pre-cut holes for utilities to minimize field cutting. All holes to be trimmed with chrome-plated escutcheon plates. Finish to match exhaust hood.

See FS101H for additional details

**ITEM #27**                      **FIRE SUPPRESSION SYSTEM**

Manufacturer:              Ansul Fire Protection  
Model:                      R102

Furnish and install a complete, fully operational wet chemical automatic fire extinguishing system to provide surface, duct and plenum protection in conformance with NFPA-96 and local code requirements. All exposed components shall be chrome plated. Field installation of system shall done by a trained and authorized distributor. No exposed piping is acceptable with the exception of appliance drops (if applicable). Appliance drops shall be chrome-plated or stainless steel. Furnish mechanical gas shut-off valves (verify size) and provide to Plumber on site for installation. Located in cabinet on left of exhaust hood, Item #26.

System shall be complete in all respects, including remote manual activation device, mechanical gas solenoid valve, and provision for connection to a remote notification device.

**ITEM #29**                      **COMBI OVEN**

Manufacturer:              Alto-Shaam  
Model:                      CTP7-20G

Combitherm® CT PROformance™ Combi Oven/Steamer, gas, boiler-free, countertop, (7) 18" x 26" full size sheet or (14) 12" x 20" full size hotel pan (1/1 GN) capacity, PROtouch control with steam/convection/combi and retherm cooking modes, programmable cool-down, SafeVent™ steam venting, single point removable probe, CombiClean PLUS™ with (5) cleaning levels, (2) side racks with (7) non-tilt support rails, CoolTouch3™ glass window, door hinged right, high efficiency LED lighting, stainless steel construction, adjustable stainless steel legs, 98,000 BTU, EcoSmart®, cULus, CE, UL ANSI/NSF 4, IP X5, Gastec, ENERGY STAR®

Dormont Quick Disconnect Kit, for all gas ovens

Dormont Quick Disconnect kit for water connection

Mobile stand for single unit

**P□RC□ASED □□ RPS**

**ITEM 29.1**                      **WATER FILTER**

Manufacturer:              Dormont Manufacturing  
Model:                      Dormont QTSTM MAX-4L-1M

Watts Hydro-Safe® QT Steam Max Filtration System, five-stage filtration system, 4.5 gpm (3) 0.5 micron carbon block filter, 5 micron sediment pre-filter reduces scale, sand, silt, sediment, rust, chlorine taste and odor, remote filter housing with OneFlow scale control, 66,000 gallons (2) 1/2" NPT brass ball valves, flush kit, polypropylene filter housing mounted on powder coated steel bracket, inlet and outlet pressure gauges

For use w/ item #29. Shipped loose to plumber to install on site.

**P□RC□ASED □□ RPS**





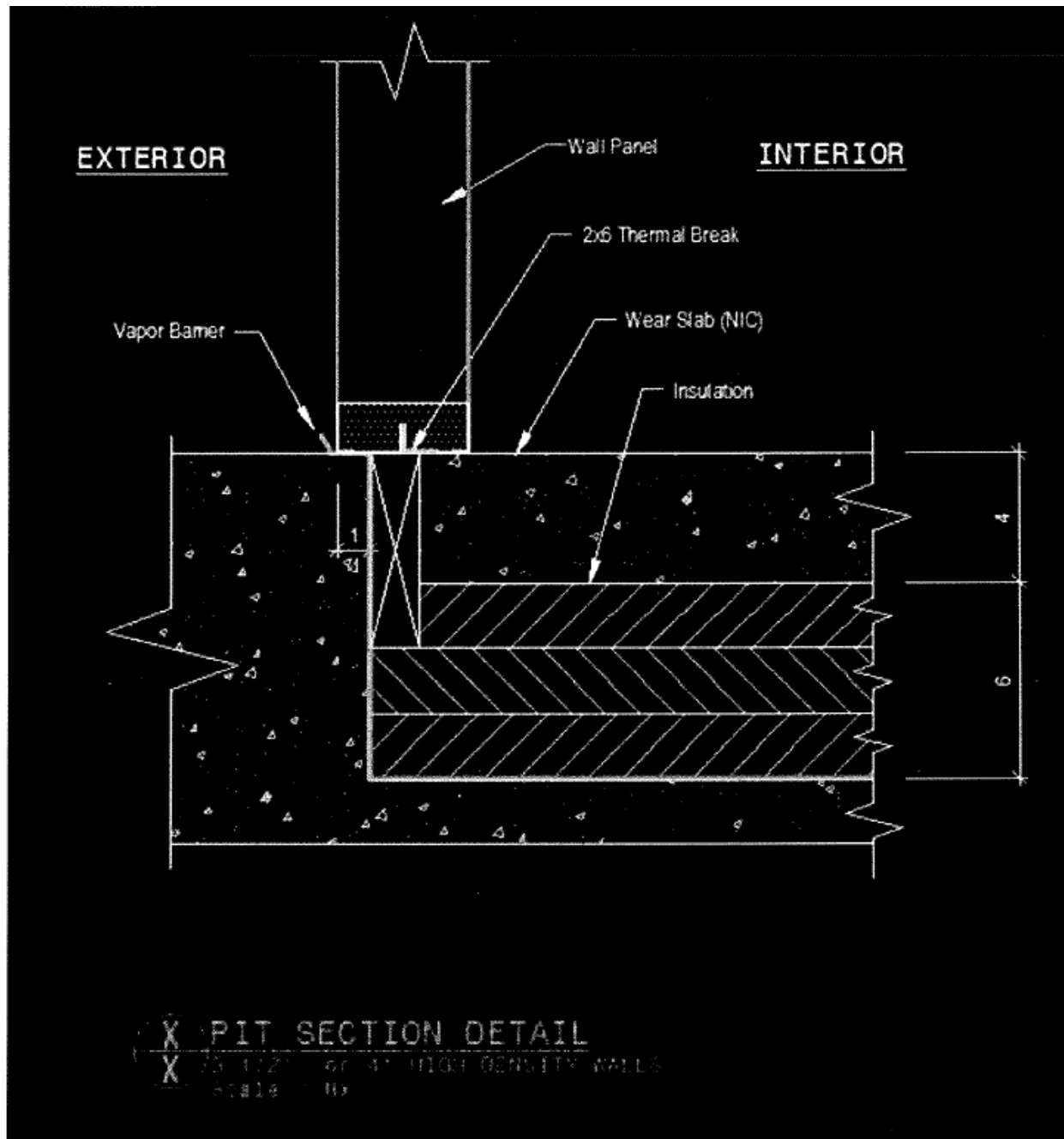
5" Caster standard: EZ Roll Heavy Duty Poly, (2) rigid, (2) swivel with brakes

Hot/Cold Drop-In Unit, top mount, (2) pan, remote mountable panel with on-off switch, hot/cold toggle with indicator lights for hot or cold, thermostatic temperature rotary knob control in hot mode, preset cold control, automatic manifold drain, 300 series stainless well & flange, galvanized

114000-24

END OF SPECIFICATIONS

## APPENDIX – ALUMINUM FLOOR DETAIL



**The following Kitchen equipment is to be purchased by RPS**

**ITEM #01 PLASTIC SHELVING UNIT**

Manufacturer: Cambro

Model: CSU

Camshelving® Starter Unit, width and length x 64"H, 4 shelf, includes: solid bottom shelf, four posts, 2 sets of post connectors, traverses & vented shelf plates, speckled gray, NSF

**ITEM #02 DUNNAGE RACK**

Manufacturer: Cambro

Model: DRS

S-Series Dunnage Rack, slotted top, 3000 lb. load capacity, 21"W x length per plan x 12"H, polypropylene, one-piece, seamless double wall construction, 4" square legs, speckled gray, NSF

**ITEM #05 DESK**

NIKEC - This is not in the kitchen equipment contract and is shown here for informational purposes only. General Contractor to confirm all required utilities are provided

**ITEM #06 FILE CABINET**

NIKEC - This is not in the kitchen equipment contract and is shown here for informational purposes only. General Contractor to confirm all required utilities are provided

**ITEM #07 HAND SINK**

Manufacturer: Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI

Model: HSA-10-1FK

Hand Sink, wall mount, 13-1/2" Wide x 9-3/4" front-to-back x 6-3/4" deep bowl, 304 stainless steel construction, splash mounted faucet, single knee pedal, skirt, basket drain, deep-drawn seamless design-positive drain, inverted "V" edge, NSF

Right and Left end splash

Faucet/Drain – shipped loose to plumber to install on site.

Soap & paper towel dispensers provided by Owner to be installed by KEC

**ITEM #08 PREP REFRIGERATOR**

Manufacturer: Continental

Model: UC27

Under counter Refrigerator, 27 11/16" wide, one-section, stainless steel top, (1) field rehingable door, stainless steel front, aluminum sides & interior, 3 5/8" casters, rear mounted self-contained refrigeration, 1/5 hp

**ITEM #12 PRE-RINSE-SPLASH/WALL MOUNT**

Manufacturer: Fisher

Model: 2210-WB

Pre-Rinse Assembly, 8" adjustable centers, wall-mounted mixing valve, with spring action flexible gooseneck, with spray head (1.15 gallons per minute @ 60 PSI), with wall bracket.

Shipped loose to plumber to install on site

**ITEM #14 CLEAN DISHTABLE**

Manufacturer: Eagle Group

Model: CDTR-48-14/3

Clean Dishtable, straight design, 48"W x 30"D x 43-1/2"H, right-to-left operation, 14/304 stainless steel top, 8"H backsplash, stainless steel hat channels, raised rolled edges on front & side, stainless

steel legs & crossbracing, adjustable metal feet, NSF

All welded construction

□□□□ □□□□ □□ □□dr□□□□

ITEM #15 SHELVING, WALL-MOUNTED

Manufacturer: Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI

Model: WS1236-14/3

Wall Shelf, 12" x 36" 14/304 stainless steel, 1 1/2" roll on front, 1 1/2" upturn on rear & ends, stainless steel mounting brackets stud welded to shelf, NSF

ITEM #16 THREE (3) COMPARTMENT SINK

Manufacturer: Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI

Model: FN2860-3-24-14/3

Sink, three compartment, stainless steel, with 24" left & right-hand drainboards, 28" front-to-back x 20"W compartment, 14"D, with 10"H splash, stainless steel open frame base, boxed crossrails, 2 set of faucet holes, 34" high, 14/304 stainless steel, NSF

S/S Bullet feet

All welded construction

ITEM #17 FAUCET

Manufacturer: Fisher

Model: 13277

Faucet, wall/backsplash mount, 8" C.C., 14" long swing spout, 1/2" inlets

Shipped loose to plumber to install on site

ITEM #18 LEVER WASTE

Manufacturer: Fisher

Model: 22322

DrainKing Waste Valve, flat strainer, overflow body, 14 x 16 tube & elbow, 12 GPM drain rate, cast red brass body

Shipped loose to plumber to install on site

ITEM #19 SPARE NUMBER

ITEM #20 SHELVING, WALL-MOUNTED

Manufacturer: Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI

Model: WS12114-14/3

Wall Shelf, 12" x 114" 14/304 stainless steel, 1 1/2" roll on front, 1 1/2" upturn on rear & ends, stainless steel mounting brackets stud welded to shelf, NSF

ITEM #22 SHELVING, WALL-MOUNTED

Manufacturer: Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI

Model: WS1290-14/3

Wall Shelf, 12" x 90" 14/304 stainless steel, 1 1/2" roll on front, 1 1/2" upturn on rear & ends, stainless steel mounting brackets stud welded to shelf, NSF

ITEM #29                      COMBI OVEN

Manufacturer:              Alto-Shaam

Model:                      CTP7-20G

Combitherm® CT PROformance™ Combi Oven/Steamer, gas, boiler-free, countertop, (7) 18" x 26" full size sheet or (14) 12" x 20" full size hotel pan (1/1 GN) capacity, PROtouch control with steam/convection/combi and retherm cooking modes, programmable cool-down, SafeVent™ steam venting, single point removable probe, CombiClean PLUS™ with (5) cleaning levels, (2) side racks with (7) non-tilt support rails, CoolTouch3™ glass window, door hinged right, high efficiency LED lighting, stainless steel construction, adjustable stainless steel legs, 98,000 BTU, EcoSmart®, cULus, CE, UL ANSI/NSF 4, IP X5, Gastec, ENERGY STAR®

Dormont Quick Disconnect Kit, for all gas ovens

Dormont Quick Disconnect kit for water connection

Mobile stand for single unit

ITEM 29.1                      WATER FILTER

Manufacturer:              Dormont Manufacturing

Model:                      Dormont QTSTM MAX-4L-1M

Watts Hydro-Safe® QT Steam Max Filtration System, five-stage filtration system, 4.5 gpm (3) 0.5 micron carbon block filter, 5 micron sediment pre-filter reduces scale, sand, silt, sediment, rust, chlorine taste and odor, remote filter housing with OneFlow scale control, 66,000 gallons (2) 1/2" NPT brass ball valves, flush kit, polypropylene filter housing mounted on powder coated steel bracket, inlet and outlet pressure gauges

For use w/ item #29. Shipped loose to plumber to install on site.

ITEM #30                      TILTING SKILLET, GAS

Manufacturer:              Cleveland Range

Model:                      SGL30TR

DuraPan™ Tilting Skillet, gas, 30-gallon capacity, modular open base, standard with electric tilt mechanism, stainless steel construction, includes spring-assisted cover, gallon markings and electronic spark ignition, food strainer, stainless steel level adjustable feet, CE, NSF

Double Pantry Faucet with, 3/4" swing spout & bracket

48" flexible gas hose, with quick disconnect & restraining device

ITEM #31                      CONVECTION OVEN

Manufacturer:              Blodgett Oven

Model:                      DFG100XCEL SINGLE

Xcel Convection Oven, gas, single-deck, standard depth, capacity (5) 18" x 26" pans per compartment, 2-speed fan, porcelain interior liner with coved corners, EZ slide rack, porcelain crumb tray, interior lights, stainless steel front, sides & top, glass doors with removable interior glass windows, flue connector, 80,000 BTU, cETL, NSF

Mobile stand for single unit

48" flexible gas hose, with quick disconnect & restraining device

ITEM #33                      MOBILE WORK TABLE

Manufacturer:              Eagle Group or equal by Advance Tabco, Nationwide, or Universal Stainless or IEI

Model:                      T3060SE

Work Table, 30"W x 60"D x 34"H, 14/304 stainless steel top with square turndown ends, Uni-Lok® gusset system, 18 gauge stainless steel undershelf, (4) 1-5/8" diameter heavy gauge stainless steel legs, NSF

Square edge table, front and rear

[illegible]

5" Caster standard: EZ Roll Heavy Duty Poly, (2) rigid, (2) swivel with brakes

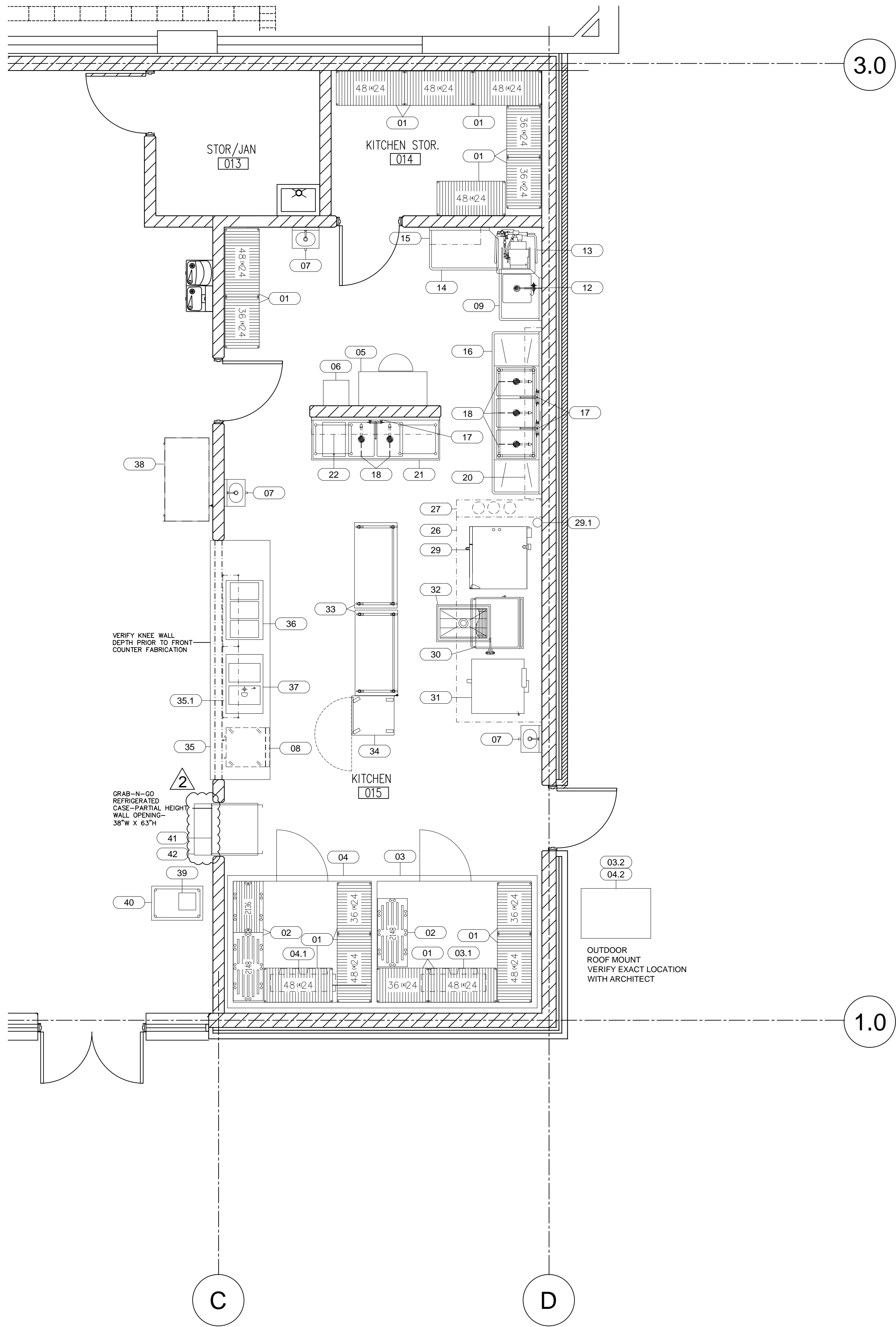
Table Casters, 5" diameter, set of (4), (2) swivel & (2) braked, 250 lb weight capacity per  
caster, poly cart washable with polymer tread

**A d d r e s s**



FILE- C:\Users\Admin\Dropbox (S2O Consultants Inc)\S2O Consultants Inc (2)\Projects\2015\Klein Sdeaj 2015\Rockford Schools Corion  
PLOTTER: 8/12/2016 1:44:54 PM  
(© 2016 Hagney Architects)

**S2O**  
S<sub>2</sub>O Consultants, Inc.  
530 N Wood #C  
Chicago, IL 60622  
224-717-1999



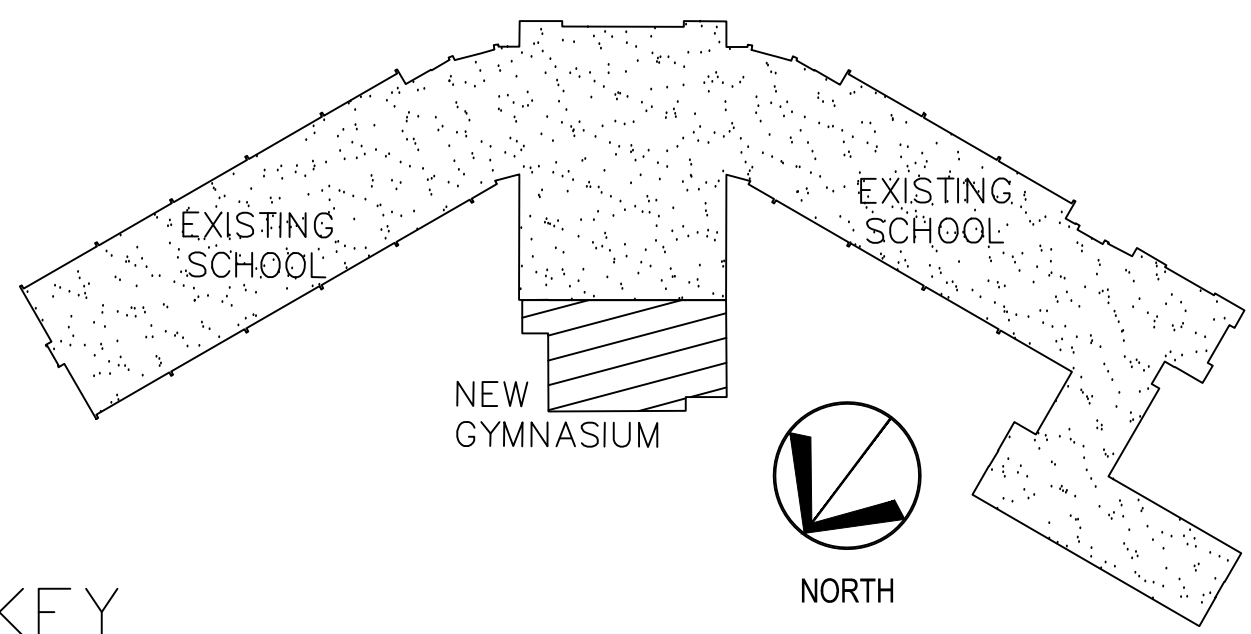
EQUIPMENT SCHEDULE				
ITEM NO	QTY	EQUIPMENT CATEGORY	EQUIPMENT REMARKS	ITEM NO
01	15	SHELVING UNIT	PROVIDED BY RPS, INSTALLED BY GC	01
02	3	RACK, DUNNAGE	PROVIDED BY RPS, INSTALLED BY GC	02
03	1	WALK-IN COOLER		03
03.1	1	EVAPORATOR COIL		03.1
03.2	1	COMPRESSOR		03.2
04	1	WALK-IN FREEZER		04
04.1	1	EVAPORATOR COIL - WALK-IN FREEZER		04.1
04.2	1	COMPRESSOR - WALK-IN FREEZER		04.2
05	1	DESK	NIKEC	05
06	1	FILE CABINET	NIKEC	06
07	3	SINK, HAND, WALL MOUNT	PROVIDED BY RPS, INSTALLED BY GC	07
08	1	PREP REFRIGERATOR	PROVIDED BY RPS, INSTALLED BY GC	08
09	1	SOILED DISHTABLE		09
10-11	1	SPARE NUMBER		10-11
12	1	PRE-RINSE FAUCET, WALL MOUNT	PROVIDED BY RPS, INSTALLED BY GC	12
13	1	WAREWASHER, DOOR TYPE, HIGH TEMP		13
14	1	CLEAN DISHTABLE	PROVIDED BY RPS, INSTALLED BY GC	14
15	1	SHELF, WALL MOUNT	PROVIDED BY RPS, INSTALLED BY GC	15
16	1	SINK, SCULLERY, 3 COMPARTMENTS	PROVIDED BY RPS, INSTALLED BY GC	16
17	3	FAUCET, BACKSPASH MOUNT	PROVIDED BY RPS, INSTALLED BY GC	17
18	5	DRAIN, LEVER HANDLE, W/ OVERFLOW	PROVIDED BY RPS, INSTALLED BY GC	18
19	1	SPARE NUMBER		19
20	1	SHELF, WALL MOUNT	PROVIDED BY RPS, INSTALLED BY GC	20
21	1	TABLE, PREP W/ SINK		21
22	1	SHELF, WALL MOUNT	PROVIDED BY RPS, INSTALLED BY GC	22
23-25	1	SPARE NUMBER		23-25
26	1	EXHAUST HOOD		26
27	1	FIRE SUPPRESSION SYSTEM		27
28	1	SPARE NUMBER		28
29	1	OVEN-STEAMER, COMBINATION, BOILERLESS, GAS	PROVIDED BY RPS, INSTALLED BY GC	29
29.1	1	WATER FILTRATION SYSTEM, STEAMERS AND COMBI OVENS	PROVIDED BY RPS, INSTALLED BY GC	29.1
30	1	TILT SKILLET	PROVIDED BY RPS, INSTALLED BY GC	30
31	1	OVEN, CONVECTION, GAS	PROVIDED BY RPS, INSTALLED BY GC	31
32	1	FLOOR TROUGH	NIKEC BY OWNER, INSTALLED BY GC	32
33	2	MOBILE WORKTABLE	PROVIDED BY RPS, INSTALLED BY GC	33
34	1	HOLDING CABINET, HUMIDIFIED HEATED	PROVIDED BY RPS, INSTALLED BY GC	34
35	1	FRONT COUNTER		35
35.1	1	FOODSHIELD		35.1
36	1	DROP-IN, HOT WELLS		36
37	1	DROP-IN, HOT/COLD UNIT		37
38	1	MILK COOLER	NIKEC- BY VENDOR	38
39	1	POS	NIKEC	39
40	1	MOBILE WORKTABLE	PROVIDED BY RPS, INSTALLED BY GC	40
41	1	REFRIGERATED SELF-SERVICE CASE		41
42	1	WORK TABLE	PROVIDED BY RPS, INSTALLED BY GC	42

DISCLAIMER

THIS DRAWING IS PREPARED FOR THE USE OF THE DESIGN TEAM IN PREPARING THEIR RESPECTIVE DOCUMENTS; AND FOR BIDDING OF THE FOOD SERVICE EQUIPMENT. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION AND FOR ROUGHING IN OF SERVICES. DIMENSIONED ROUGHING IN DRAWINGS WILL BE PREPARED BY THE KITCHEN EQUIPMENT CONTRACTOR.

GENERAL NOTES

1. ANY DISCREPANCIES BETWEEN THESE PLANS, WRITTEN SPECIFICATIONS, BUILDING, HEALTH OR OTHER LOCAL CODE REQUIREMENTS THAT MAY AFFECT THE DESIGN INTENT, INSTALLATION, FABRICATION OR OVERALL WORK IN ANY WAY SHALL BE BROUGHT TO THE ATTENTION OF THE FOODSERVICE CONSULTANT BY WAY OF THE GENERAL CONTRACTOR AND/OR ARCHITECT.
2. KITCHEN EQUIPMENT CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT SHOWN ON PLANS AND MENTIONED IN THE WRITTEN SPECIFICATIONS, DISCREPANCIES IN QUANTITIES, ITEMS SHOWN ON PLAN BUT NOT MENTIONED IN THE WRITTEN SPECIFICATIONS OR VISA-VERSA SHALL BE BROUGHT TO THE ATTENTION OF THE FOODSERVICE CONSULTANT BY WAY OF THE GENERAL CONTRACTOR AND/OR ARCHITECT.
3. GENERAL CONTRACTOR SHALL PROVIDE A MEANS TO EVACUATE HEAT GENERATED BY FOODSERVICE EQUIPMENT WITHIN ENCLOSED SPACE(S).
4. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL BLOCKING IN WALLS FOR MOUNTING WALL SHELVES, POT RACKS, DISPLAY CASES, HOSE REEL(S), HAND SINKS, CONTROL PANELS, ETC. AS SHOWN ON PLAN(S).
5. KITCHEN EQUIPMENT CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS.



BLOOM ELEMENTARY SCHOOL  
ROCKFORD PUBLIC SCHOOL  
ROCKFORD, ILLINOIS

FOODSERVICE EQUIPMENT PLAN & SCHEDULE

SHEET NO.  
FS101

HAGNEY JOB NO. C1822  
© 2016 Hagney Architects LLC

NO.	DATE	DESCRIPTION	ISSUANCE
1	08.04.16	Issue for Bid & Permit	
2	09.12.16	Addendum #1	

HAGNEY  
ARCHITECTS  
LLC

Architecture, Planning, & Interior Design  
4615 E. State St. Suite 206  
Rockford, Illinois 61108  
P: 815.397.3330  
F: 815.397.0243  
E: Business@HagneyArchitects.com  
www.HagneyArchitects.com

PROFESSIONAL SEAL

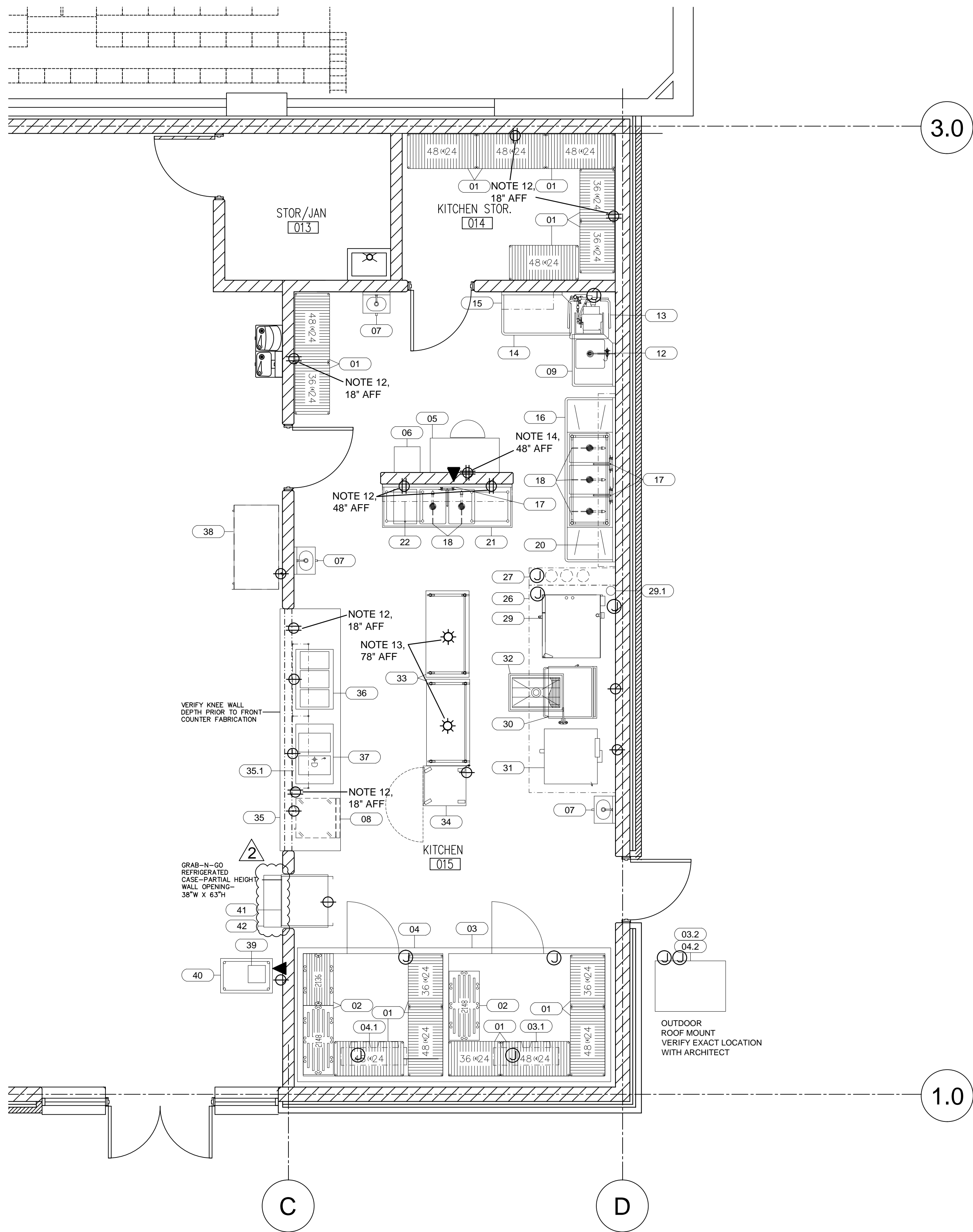
EXPIRATION DATE

DATE	08.04.16
DRAWN	
CHECKED	
APPROVED	



FILE - C:\Users\Admin\Dropbox (S2O Consultants Inc)\S2O Consultants Inc (2)\Projects\2015\Kristin Sdeaj 2015\Rockford Schools Carbon  
C:\Users\Admin\Dropbox (S2O Consultants Inc)\S2O Consultants Inc (2)\Projects\2015\Kristin Sdeaj 2015\Rockford Schools Carbon  
PLOTTER: 8/17/2016 14:54 PM  
(© 2016 Hagney Architects)

S<sub>2</sub>O  
S<sub>2</sub>O Consultants, Inc.  
530 N Wood #C  
Chicago, IL 60622  
224-717-1999



**DISCLAIMER**

THIS DRAWING IS PREPARED FOR THE USE OF THE DESIGN TEAM IN PREPARING THEIR RESPECTIVE DOCUMENTS; AND FOR BIDDING OF THE FOOD SERVICE EQUIPMENT. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION AND FOR ROUGHING IN OF SERVICES. DIMENSIONED ROUGHING IN DRAWINGS WILL BE PREPARED BY THE KITCHEN EQUIPMENT CONTRACTOR.

**GENERAL NOTES**

1. ANY DISCREPANCIES BETWEEN THESE PLANS, WRITTEN SPECIFICATIONS, BUILDING, HEALTH OR OTHER LOCAL CODE REQUIREMENTS THAT MAY AFFECT THE DESIGN INTENT, INSTALLATION, FABRICATION OR OVERALL WORK IN ANY WAY SHALL BE BROUGHT TO THE ATTENTION OF THE FOODSERVICE CONSULTANT BY WAY OF THE GENERAL CONTRACTOR AND/OR ARCHITECT.
2. KITCHEN EQUIPMENT CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT SHOWN ON PLANS AND MENTIONED IN THE WRITTEN SPECIFICATIONS. DISCREPANCIES IN QUANTITIES, ITEMS SHOWN ON PLAN BUT NOT MENTIONED IN THE WRITTEN SPECIFICATIONS OR VISA-VERSA SHALL BE BROUGHT TO THE ATTENTION OF THE FOODSERVICE CONSULTANT BY WAY OF THE GENERAL CONTRACTOR AND/OR ARCHITECT.
3. GENERAL CONTRACTOR SHALL PROVIDE A MEANS TO EVACUATE HEAT GENERATED BY FOODSERVICE EQUIPMENT WITHIN ENCLOSED SPACE(S).
4. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL BLOCKING IN WALLS FOR MOUNTING WALL SHELVES, POT RACKS, DISPLAY CASES, HOSE REEL(S), HAND SINKS, CONTROL PANELS, ETC. AS SHOWN ON PLAN(S).
5. KITCHEN EQUIPMENT CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS.

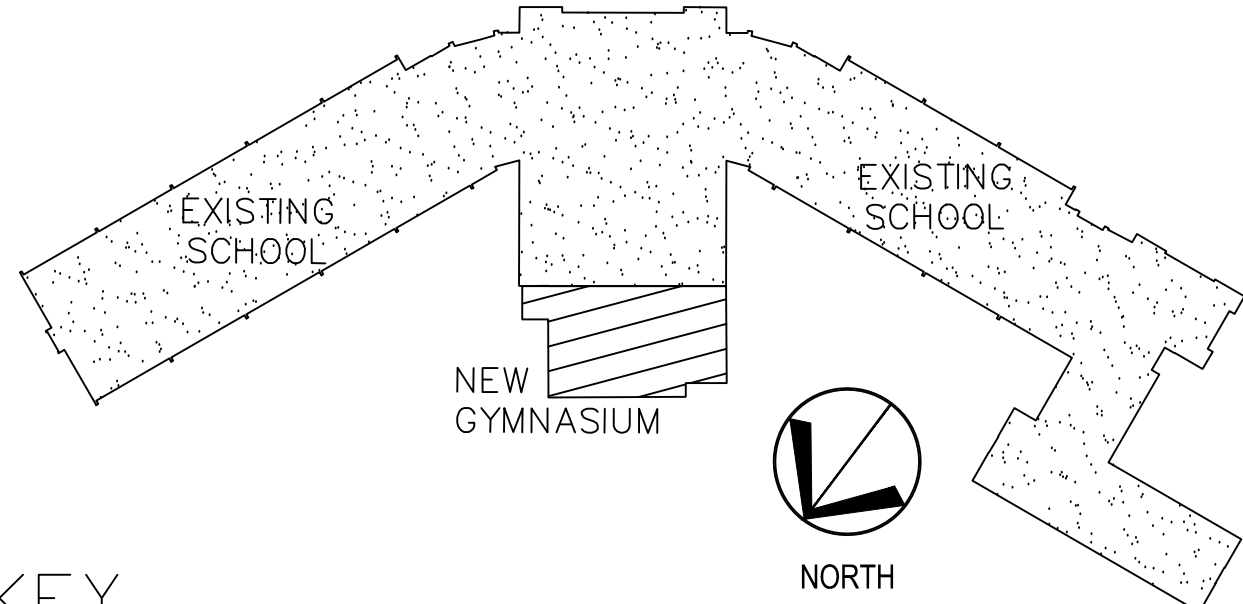
**ELECTRICAL NOTES**

TO BE PROVIDED BY ELECTRICAL CONTRACTOR

1. DRAWING SHOWS CONNECTION POINTS ON EQUIPMENT. ROUGH-IN POINTS ARE NOT THE SAME AND ALLOWANCES SHALL BE MADE FOR DISCONNECTS, ACCESS, ETC. ALL ROUGH-INS AND CONNECTIONS SHALL BE PER APPLICABLE CODE.
2. DRAWING SHOWS REQUIREMENTS FOR FOOD SERVICE EQUIPMENT ONLY; SEE ELECTRIC DRAWINGS FOR ADDITIONAL INFORMATION.
3. ALL CONDUITS, BOXES, ETC. SHALL BE CONCEALED WITHIN WALLS AND STUBBED OUT AS CLOSE AS POSSIBLE TO THE CONNECTION POINT. DO NOT RUN EXPOSED ON THE WALL.
4. CONDUIT EXPOSED ABOVE THE WORKING SURFACE OF THE EQUIPMENT SHALL BE STAINLESS STEEL, CHROME PLATED, OR SHROUDED IN A STAINLESS STEEL COVER.
5. ALL ELECTRICAL SERVICES UNDER A TYPE I EXHAUST HOOD MUST BE FED FROM A BREAKER PANEL WITH SHUNT TRIP PROTECTION INTERWIRED WITH THE EXTINGUISHING SYSTEM.
6. THE EXTINGUISHING SYSTEM REQUIRES AN EMPTY J-BOX AT THE EXIT FROM THE HAZARD AREA FOR INSTALLATION OF THE REMOTE PULL. REMOTE PULL TO BE FURNISHED AND INSTALLED AS PART OF THE EXTINGUISHING SYSTEM PACKAGE.
7. INTERCONNECT EXTINGUISHING SYSTEM TO SHUNT TRIP BREAKERS AND REMOTE NOTIFICATION, PER REQUIREMENTS OF NFPA 96.
8. PROVIDE FIVE (5) #12 THHN WIRES FROM THE COMPRESSOR LOCATION TO THE EVAPORATOR COIL. (FREEZER SYSTEMS ONLY)
9. CASH REGISTERS AND SIMILAR COMPUTERIZED POINT-OF-SALE EQUIPMENT REQUIRE CLEAN, ISOLATED SERVICE.
10. PROVIDE EMPTY EMT BETWEEN CASH REGISTERS, POINT-OF-SALE UNITS AND CENTRAL LOCATION.
11. ELECTRICAL SOLENOID VALVE FOR THE GAS LINE WILL BE FURNISHED AND INSTALLED BY THE KITCHEN EQUIPMENT CONTRACTOR. THIS VALVE WILL BE FURNISHED WITH A MOMENTARY POWER INTERRUPTION DEVICE AS MANUFACTURED BY POWER GUARD TECHNOLOGIES, OR EQUAL.
12. PROVIDE DUPLEX CONVENIENCE OUTLET (DCO), 120/1, 20 AMPS AT HEIGHT INDICATED.
13. PROVIDE PENDANT RECEPTACLE, 120/1, 20 AMPS, AT 78" ABOVE THE FINISHED FLOOR.
14. PROVIDE DOUBLE DUPLEX CONVENIENCE OUTLET (DCO), 120/1, 20 AMPS AT HEIGHT INDICATED.

ELECTRICAL LOAD SCHEDULE											
ITEM NO	QTY	EQUIPMENT CATEGORY	EQUIPMENT REMARKS	AMPS	HP	KW	VOLTS	PHASE	DIRECT PLUG	NEMA	ELECTRICAL AFF (IN)
03	1	WALK-IN COOLER		16.0			120	1	X		48
03.1	1	EVAPORATOR COIL		16.0			208	1	X		96
03.2	1	COMPRESSOR			0.5		208	1	X		96
04	1	WALK-IN FREEZER		16.0			120	1	X		48
04.1	1	EVAPORATOR COIL - WALK-IN FREEZER		16.0			208	1	X		96
04.2	1	COMPRESSOR - WALK-IN FREEZER			1.5		208	3	X		96
05	1	DESK	NIKEC	16.0			120	1	X	5-20P	48
08	1	PREP REFRIGERATOR	PROVIDED BY RPS, INSTALLED BY GC	6.0	0.2		120	1	X	5-20P	12
13	1	WAREWASHER, DOOR TYPE, HIGH TEMP		45.4			208	3	X		12.75
21	1	TABLE, PREP W/ SINK		(2)16			120	1	X	5-20P	36
26	1	EXHAUST HOOD		16.0			120	1	X		86
27	1	FIRE SUPPRESSION SYSTEM		10.0			120	1	X		96
29	1	OVEN-STEAMER, COMBINATION, BOILERLESS, GAS	PROVIDED BY RPS, INSTALLED BY GC	6.8		0.8	120	1	X		36
30	1	TILT SKILLET	PROVIDED BY RPS, INSTALLED BY GC	1.8			120	1	X	5-20P	21.25
31	1	OVEN, CONVECTION, GAS	PROVIDED BY RPS, INSTALLED BY GC	10.0	0.75		120	1	X	5-15P	46
33	2	MOBILE WORKTABLE	PROVIDED BY RPS, INSTALLED BY GC	16.0			120	1	X	5-20P	CEILING
34	1	HOLDING CABINET, HUMIDIFIED HEATED	PROVIDED BY RPS, INSTALLED BY GC	19.8			120	1	X	5-20P	48
35	1	FRONT COUNTER		(2)16			120	1	X	5-20P	18
36	1	DROP-IN, HOT WELLS		15.6		1.9	120	1	X	5-20P	16
37	1	DROP-IN, HOT/COLD UNIT		11.2			120	1	X	5-20P	18
38	1	MILK COOLER	NIKEC- BY VENDOR	6.3	0.33		115	1	X	5-20P	12
39	1	POS	NIKEC	16.0			120	1	X	5-20P	34
41	1	REFRIGERATED SELF-SERVICE CASE		14.0			120	1	X	5-20P	

ELECTRICAL SYMBOLS	
\$	SWITCH
\$3	3 WAY SWITCH
⊕	SINGLE OUTLET 110 V.
⊕⊕	DUPLEX OUTLET 110 V.
⊕⊕⊕	DOUBLE DUPLEX OUTLET 110 V.
⊕⊕⊕	CEILING MOUNT FIXTURE
⊕⊕⊕	JUNCTION BOX
⊕⊕⊕	PHONE OUTLET
⊕⊕⊕	DATA OUTLET
⊕⊕⊕	POWER FEED JUMPER
⊕⊕⊕	FLOURECENT LIGHT (SIZE OF FIXTURE VARIES)



ISSUANCE	
NO.	DATE
1	08.04.16
2	09.12.16

**HAGNEY ARCHITECTS LLC**  
Architecture, Planning, & Interior Design  
4615 E. State St. Suite 206  
Rockford, Illinois 61108  
P: 815.397.3330  
F: 815.397.0243  
E: Business@HagneyArchitects.com  
www.HagneyArchitects.com

PROFESSIONAL SEAL
EXPIRATION DATE
DATE
DRAWN
CHECKED
APPROVED

BLOOM ELEMENTARY SCHOOL  
ROCKFORD PUBLIC SCHOOL  
ROCKFORD, ILLINOIS

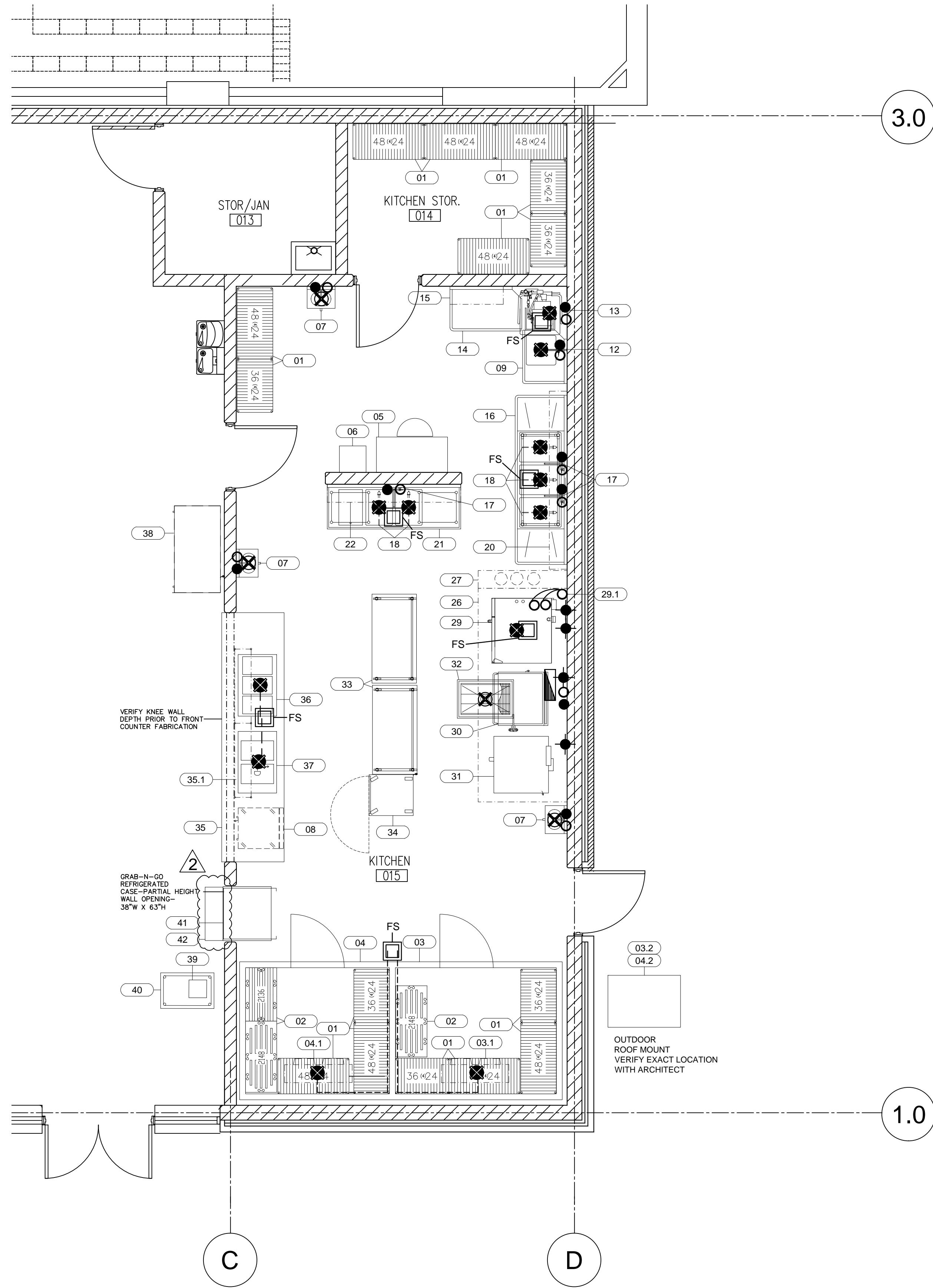
SHEET NO.  
**FS101E**  
HAGNEY JOB NO. C1822  
© 2016 Hagney Architects LLC

FOODSERVICE ELECTRICAL SPOT PLAN & LOAD SCHEDULE



FILE: C:\Users\Admin\Dropbox (S2O Consultants Inc)\S2O Consultants Inc (2)\Projects\2015\Kirtin Sadej 2015\Rockford Schools Carbon  
PLOTTER: 8/17/2016 14:54 PM  
(© 2016 Hagney Architects)

**S<sub>2</sub>O**  
S<sub>2</sub>O Consultants, Inc.  
530 N Wood #C  
Chicago, IL 60622  
224-717-1999



#### DISCLAIMER

THIS DRAWING IS PREPARED FOR THE USE OF THE DESIGN TEAM IN PREPARING THEIR RESPECTIVE DOCUMENTS, AND FOR BIDDING OF THE FOOD SERVICE EQUIPMENT. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION AND FOR ROUGHING IN OF SERVICES. DIMENSIONED ROUGHING IN DRAWINGS WILL BE PREPARED BY THE KITCHEN EQUIPMENT CONTRACTOR.

#### GENERAL NOTES

1. ANY DISCREPANCIES BETWEEN THESE PLANS, WRITTEN SPECIFICATIONS, BUILDING, HEALTH OR OTHER LOCAL CODE REQUIREMENTS THAT MAY AFFECT THE DESIGN INTENT, INSTALLATION, FABRICATION OR OVERALL WORK IN ANY WAY SHALL BE BROUGHT TO THE ATTENTION OF THE FOODSERVICE CONSULTANT BY WAY OF THE GENERAL CONTRACTOR AND/OR ARCHITECT.
2. KITCHEN EQUIPMENT CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT SHOWN ON PLANS AND MENTIONED IN THE WRITTEN SPECIFICATIONS. DISCREPANCIES IN QUANTITIES, ITEMS SHOWN ON PLAN BUT NOT MENTIONED IN THE WRITTEN SPECIFICATIONS OR VISA-VERSA SHALL BE BROUGHT TO THE ATTENTION OF THE FOODSERVICE CONSULTANT BY WAY OF THE GENERAL CONTRACTOR AND/OR ARCHITECT.
3. GENERAL CONTRACTOR SHALL PROVIDE A MEANS TO EVACUATE HEAT GENERATED BY FOODSERVICE EQUIPMENT WITHIN ENCLOSED SPACE(S).
4. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL BLOCKING IN WALLS FOR MOUNTING WALL SHELVES, POT RACKS, DISPLAY CASES, HOSE REEL(S), HAND SINKS, CONTROL PANELS, ETC. AS SHOWN ON PLAN(S).
5. KITCHEN EQUIPMENT CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS.

#### MECHANICAL NOTES

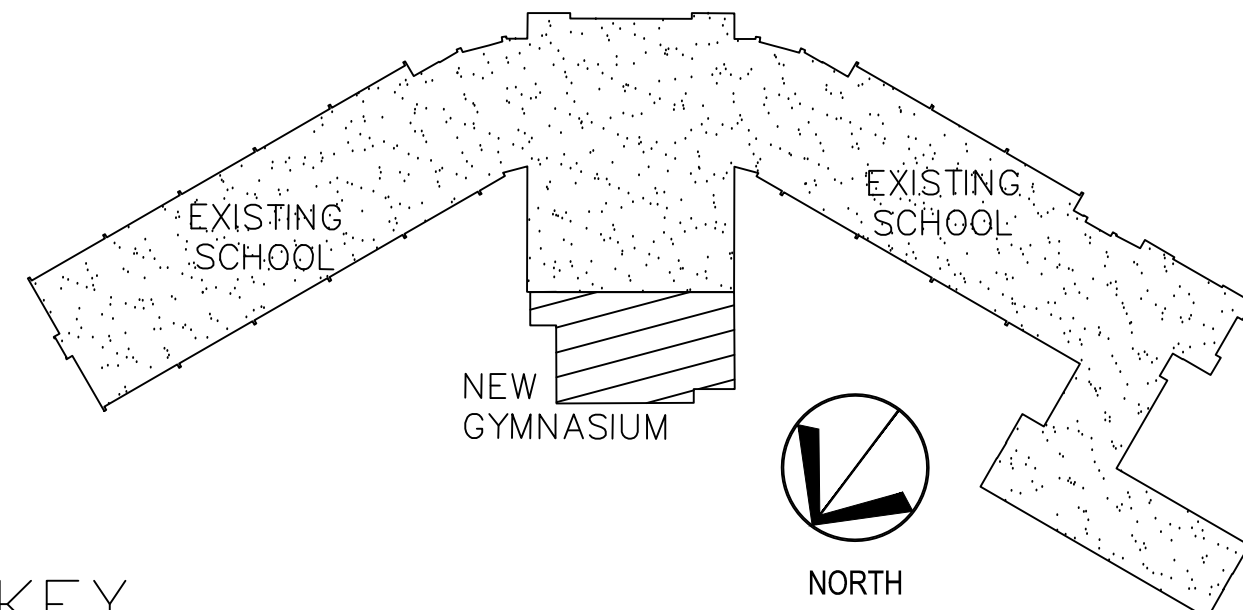
THESE NOTES APPLY TO THE WORK OF THE MECHANICAL AND PLUMBING TRADES.

1. DRAWING SHOWS CONNECTION POINTS ON EQUIPMENT. ROUGH-IN POINTS ARE NOT THE SAME AND ALLOWANCES SHALL BE MADE FOR VALVES, STOPS, ACCESS, ETC. ALL ROUGH-INS AND CONNECTIONS SHALL BE PER APPLICABLE CODE.
2. DRAWING SHOWS REQUIREMENTS FOR FOOD SERVICE EQUIPMENT ONLY; SEE MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
3. ALL PIPE, FITTINGS, ETC. SHALL BE CONCEALED WITHIN WALLS AND STUBBED OUT AS CLOSE AS POSSIBLE TO THE CONNECTION POINT. DO NOT RUN EXPOSED ON THE WALL.
4. PIPING EXPOSED ABOVE THE WORKING SURFACE OF THE EQUIPMENT SHALL BE STAINLESS STEEL, CHROME PLATED, OR SHROUDED IN A STAINLESS STEEL COVER.
5. ALL PIPING SHALL BE AT LEAST 6" ABOVE THE FLOOR TO ALLOW FOR EASE OF CLEANING.
6. TYPE I HOODS REQUIRE WELDED DUCTWORK PER CODE.
7. NOT USED.
8. TYPE I DUCTS SHALL BE PROVIDED WITH FIRE EXTINGUISHING PER CODE.
9. KITCHEN EQUIPMENT CONTRACTOR WILL FURNISH MECHANICAL OR ELECTRICAL SOLENOID GAS VALVES LOOSE FOR FIELD INSTALLATION.
10. WE RECOMMEND CENTRAL GREASE TRAPS EXTERNAL OF THE BUILDING CODE OR FOOD-SERVICE SPACE. IF THIS IS NOT POSSIBLE, THEN RECESSED, POINT-OF-USE GREASE TRAPS ARE PERMITTED; COORDINATE LOCATION WITH KITCHEN DESIGNER.
11. REFRIGERATED EQUIPMENT IS DESIGNED FOR OPERATION IN AN AMBIENT TEMPERATURE NOT EXCEEDING 100 DEGREES FAHRENHEIT. AIR COOLED EQUIPMENT REQUIRES VENTILATION AT 1,000 CFM PER HORSEPOWER; WATER-COOLED EQUIPMENT REQUIRES COOLING WATER AT 70 DEGREES FAHRENHEIT AT THE RATE OF 1.5 GPM PER HORSEPOWER.

#### MECHANICAL SYMBOLS

- HOT WATER
- COLD WATER
- INDIRECT WASTE
- DIRECT WASTE
- GAS CONNECTION
- COOLING WATER TOWER
- COOLING WATER TOWER RETURN
- STEAM SUPPLY
- CONDENSATE RETURN
- FLOOR SINK
- FUNNEL FLOOR DRAIN
- AREA FLOOR DRAIN
- COMPRESSED AIR
- REFRIGERATION LINE
- EXHAUST DUCT
- SUPPLY DUCT
- WATER FILTER INTERCONNECT

MECHANICAL LOADE SCHEDULE												
ITEM NO	QTY	EQUIPMENT CATEGORY	EQUIPMENT REMARKS	COLD WATER SIZE (IN)	COLD WATER AFF (IN)	HOT WATER SIZE (IN)	HOT WATER AFF (IN)	DIRECT DRAIN SIZE (IN)	DIRECT DRAIN AFF (IN)	INDIR DRAIN SIZE (IN)	PLUMBING REMARKS	GAS SIZE (IN)
03.1	1	EVAPORATOR COIL								1	FS REQ'D	
04.1	1	EVAPORATOR COIL - WALK-IN FREEZER								1	FS REQ'D	
07	3	SINK, HAND, WALL MOUNT	PROVIDED BY RPS, INSTALLED BY GC	0.5	34	0.5	34	1	24			
09	1	SOILED DISHTABLE		0.5	30	0.5	30			1.5	FS REQ'D	
12	1	PRE-RINSE FAUCET, WALL MOUNT	PROVIDED BY RPS, INSTALLED BY GC	0.5	40	0.5	40					
13	1	WAREWASHER, DOOR TYPE, HIGH TEMP		0.5	73.25	0.5	42.25			1.5	FS REQ'D	
16	1	SINK, SCULLERY, 3 COMPARTMENTS	PROVIDED BY RPS, INSTALLED BY GC	0.5	39.5	0.5	39.5			(3)1.5	FS REQ'D	
17	3	FAUCET, BACKSPASH MOUNT	PROVIDED BY RPS, INSTALLED BY GC	0.5	40	0.5	40					
18	5	DRAIN, LEVER HANDLE, W/ OVERFLOW	PROVIDED BY RPS, INSTALLED BY GC							2	FS REQ'D	
26	1	EXHAUST HOOD		0.75						1.5	FS REQ'D	0.75
29	1	OVEN-STEAMER, COMBINATION, BOILERLESS, GAS	PROVIDED BY RPS, INSTALLED BY GC	0.75								98
29.1	1	WATER FILTRATION SYSTEM, STEAMERS AND COMBI OVENS	PROVIDED BY RPS, INSTALLED BY GC								FOR USE W/ ITEM #29	
30	1	TILT SKILLET	PROVIDED BY RPS, INSTALLED BY GC	0.5	26.5	0.5	26.5					0.75
31	1	OVEN, CONVECTION, GAS	PROVIDED BY RPS, INSTALLED BY GC									80
32	1	FLOOR TROUGH	NKEC BY OWNER, INSTALLED BY GC					4	-1			
36	1	DROP-IN, HOT WELLS								1	FS REQ'D	
37	1	DROP-IN, HOT/COLD UNIT								0.5	FS REQ'D	



KEY  
PLAN NOT TO SCALE

ISSUANCE

NO.	DATE	DESCRIPTION
1	08.04.16	Issue for Bid & Permit
2	09.12.16	Addendum #1

**HAGNEY**  
ARCHITECTS  
LLC

Architecture, Planning, & Interior Design  
4615 E. State St. Suite 206  
Rockford, Illinois 61108  
P: 815.397.3330  
F: 815.397.0243  
E: Business@HagneyArchitects.com  
www.HagneyArchitects.com

PROFESSIONAL SEAL

EXPIRATION DATE

DATE	08.04.16
DRAWN	
CHECKED	
APPROVED	

BLOOM ELEMENTARY SCHOOL  
ROCKFORD PUBLIC SCHOOL  
ROCKFORD, ILLINOIS

FOODSERVICE MECHANICAL SPOT PLAN & LOAD SCHEDULE

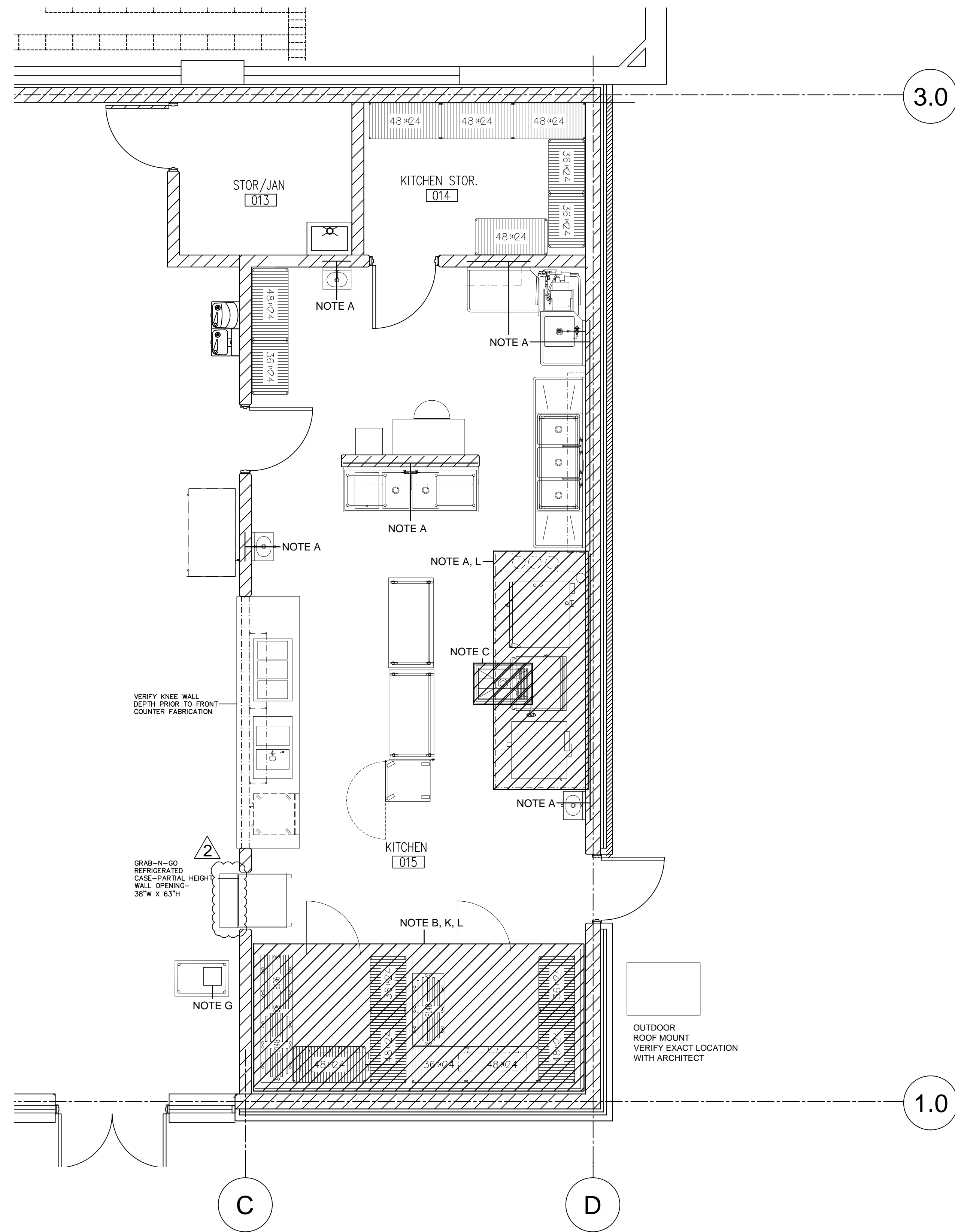
SHEET NO.

FS101M

HAGNEY JOB NO. C1822

© 2016 Hagney Architects LLC





#### DISCLAIMER

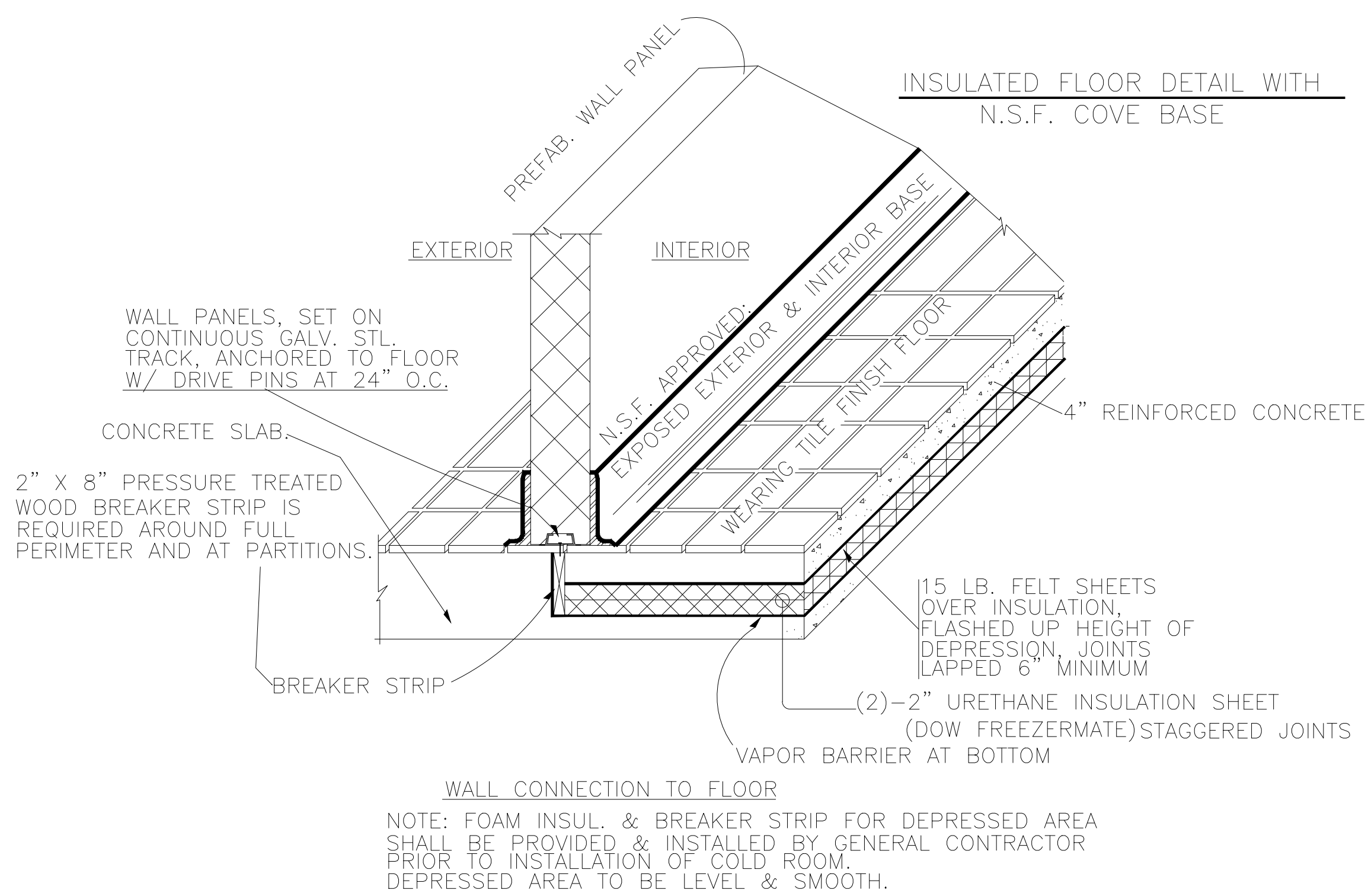
THIS DRAWING IS PREPARED FOR THE USE OF THE DESIGN TEAM IN PREPARING THEIR RESPECTIVE DOCUMENTS; AND FOR BIDDING OF THE FOOD SERVICE EQUIPMENT. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION AND FOR ROUGHING IN OF SERVICES. DIMENSIONED ROUGHING IN DRAWINGS WILL BE PREPARED BY THE KITCHEN EQUIPMENT CONTRACTOR.

#### GENERAL NOTES

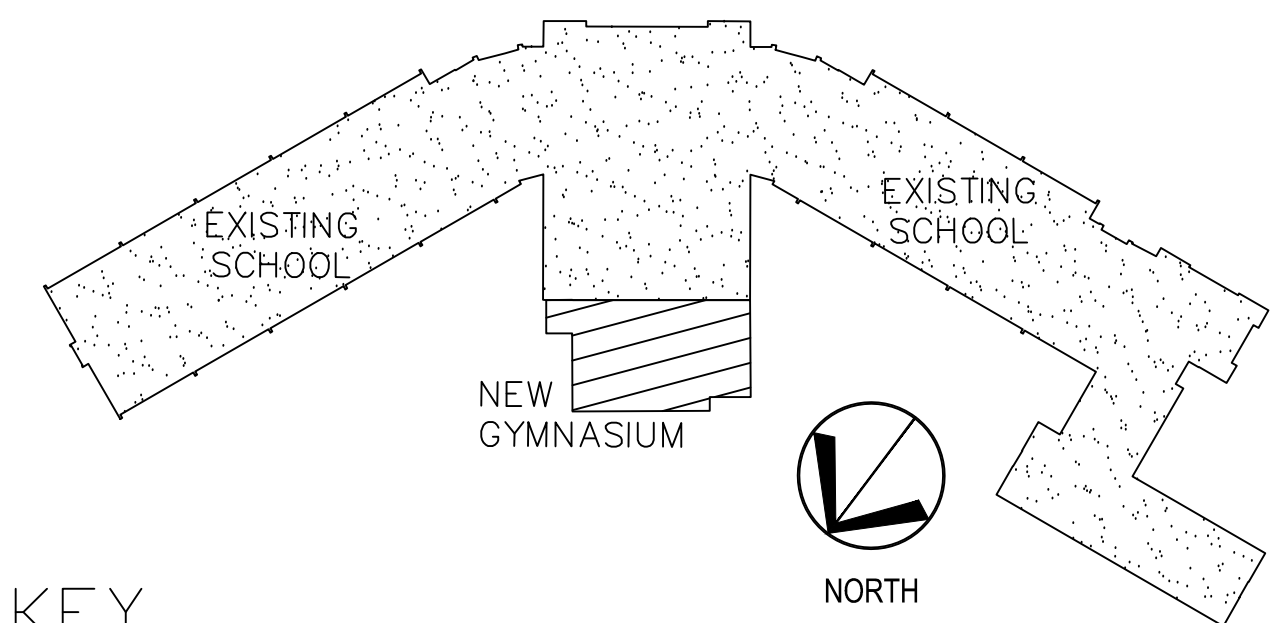
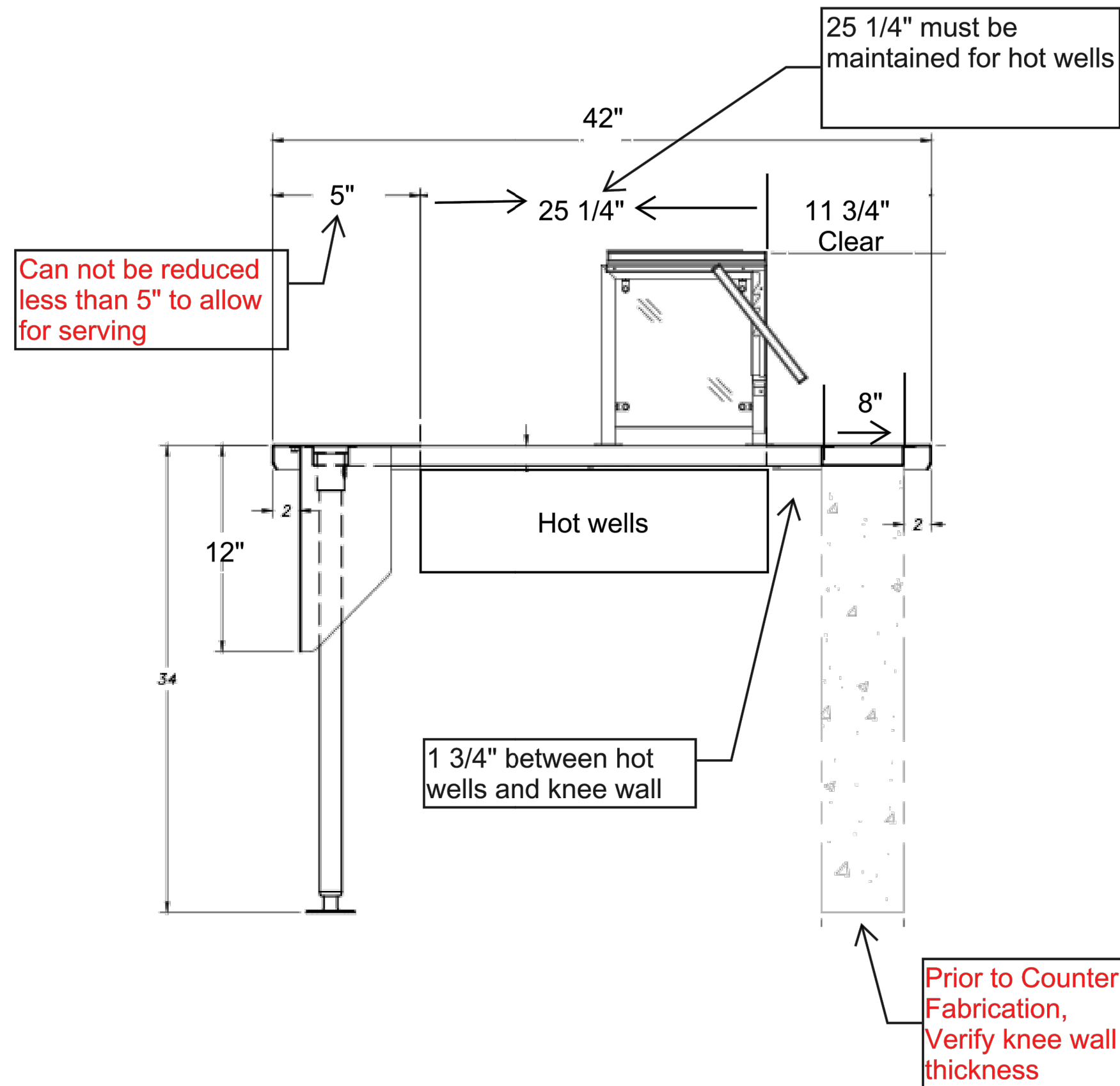
1. ANY DISCREPANCIES BETWEEN THESE PLANS, WRITTEN SPECIFICATIONS, BUILDING, HEALTH OR OTHER LOCAL CODE REQUIREMENTS THAT MAY AFFECT THE DESIGN INTENT, INSTALLATION, FABRICATION OR OVERALL WORK IN ANY WAY SHALL BE BROUGHT TO THE ATTENTION OF THE FOODSERVICE CONSULTANT BY WAY OF THE GENERAL CONTRACTOR AND/OR ARCHITECT.
2. KITCHEN EQUIPMENT CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT SHOWN ON PLANS AND MENTIONED IN THE WRITTEN SPECIFICATIONS. DISCREPANCIES IN QUANTITIES, ITEMS SHOWN ON PLAN BUT NOT MENTIONED IN THE WRITTEN SPECIFICATIONS OR VISA-VERSA SHALL BE BROUGHT TO THE ATTENTION OF THE FOODSERVICE CONSULTANT BY WAY OF THE GENERAL CONTRACTOR AND/OR ARCHITECT.
3. GENERAL CONTRACTOR SHALL PROVIDE A MEANS TO EVACUATE HEAT GENERATED BY FOODSERVICE EQUIPMENT WITHIN ENCLOSED SPACE(S).
4. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL BLOCKING IN WALLS FOR MOUNTING WALL SHELVES, POT RACKS, DISPLAY CASES, HOSE REEL(S), HAND SINKS, CONTROL PANELS, ETC. AS SHOWN ON PLAN(S).
5. KITCHEN EQUIPMENT CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS.

#### SPECIAL CONDITIONS NOTES

- A. REINFORCE WALLS AND CEILING AS REQUIRED TO SUPPORT EQUIPMENT (DOES NOT APPLY TO MASONRY WALLS).
- B. DEPRESS AND INSULATE SLAB AT WALKIN COOLERS AND FREEZERS
- C. DEPRESS AND/OR BLOCK OUT SLAB FOR TROUGH DRAINS.
- D-F. NOT USED.
- G. PROVIDE 1" EMPTY EMT FOR INTERWIRING OF CASH REGISTERS, POINT-OF-SALE SYSTEMS AND SIMILAR EQUIPMENT TO CENTRAL POINT.
- H-J. NOT USED.
- K. OMIT FINISHED FLOOR BELOW WALKIN.
- L. OMIT FINISHED CEILING AT EXHAUST HOODS AND OVER WALKINS.



Bloom Front Counter Detail



BLOOM ELEMENTARY SCHOOL  
ROCKFORD PUBLIC SCHOOL  
ROCKFORD, ILLINOIS

FOODSERVICE SPECIAL CONDITIONS PLAN

SHEET NO.  
FS101SC

HAGNEY JOB NO. C1822  
© 2016 Hagney Architects LLC

ISSUANCE  
NO. DATE DESCRIPTION

1 08.04.16 Issue for Bid & Permit  
2 09.12.16 Addendum #1

HAGNEY  
ARCHITECTS  
LLC

Architecture, Planning, & Interior Design  
4615 E. State St. Suite 206  
Rockford, Illinois 61108  
P: 815.397.3330  
F: 815.397.0243  
E: Business@HagneyArchitects.com  
www.HagneyArchitects.com

PROFESSIONAL SEAL

EXPIRATION DATE

DATE  
DRAWN  
CHECKED  
APPROVED

08.04.16  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_