EXCHANGE
ARMY & AIR FORCE EXCHANGE SERVICE

PZ-RE (C)

Solicitation Number: GNFR-FC-CMP-23-18141
Fort Campbell, KY – Burger King Image Update
Project Number: 2146-22-000017

All Prospective Offerors:

You are invited to submit a proposal based on the requirements in the attached solicitation number GNFR-FC-CMP-23-18141. This solicitation is issued by the Army and Air Force Exchange Service which is an instrumentality of the United States Government. The cost of the project is estimated to be in the range between $500,000.00 and $1,000,000.00. The construction period will be 90 calendar days.

You are encouraged to carefully review the entire solicitation package. A site visit is not required before submitting a proposal; however if you would like to visit the site you must contact Stephen Shaw, General Manager of the Fort Campbell Exchange, at telephone number 270 439-1846 or via email at shawss@aafes.com.

Please pay particular attention to section 3.A.61.d in the Agreement Document which covers minority and female participation goals established for federally involved and non-federally involved construction work.

Any questions you may have after comparing the plans and specifications to the existing site conditions should be submitted in writing to GRACE PEREZ-MARTINEZ at martinezg@aafes.com no later than COB on 28 February 2023.

In order for your proposal to be considered, please follow the procedures noted below.

NOTICE: The Agreement Document included in this solicitation will not be signed by either party until contract award. No signed Agreement Document will be accepted. This document is included as a part of the solicitation for your review of the terms and conditions only. Please return only the following documents:

1) COMPLETED PROPOSAL RESPONSE FORM.

2) COMPLETED FINANCIAL AND TECHNICAL CAPABILITY DATA SHEET IN ITS ENTIRETY. PLEASE PROVIDE VALID EMAIL ADDRESSES AND POINTS OF CONTACT FOR EACH REFERENCE ON THIS FORM.

3) COMPLETED BAA/TAA CONSTRUCTION FORM

4) A PROPOSAL BOND FROM A SURETY LISTED ON THE US TREASURY CIRCULAR 570.

5) THE COMPANY SUBMITTING THE MOST ADVANTAGEOUS OFFER TO THE EXCHANGE WILL BE REQUIRED TO PROVIDE THE EXCHANGE WITH A W9 SIGNED BY A PRINCIPAL OF THE COMPANY, AND A BLANK INVOICE & COMPANY LETTERHEAD.

This solicitation is subject to the requirements of NDAA 2019, Section 889 "John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law No: 115-232)" which can be found at this link https://www.congress.gov/bill/115th-congress/house-bill/5515/text. The clause titled "2019 NDAA Section 889 Representations" operates as a representation of compliance when a resulting contract is signed. Any exception to this clause may prohibit the Exchange from doing business with the offeror.

Your proposal package must be sent via email to martinezg@aafes.com before 15 March 2023 at 2:00PM / 1400 CST.

The complete solicitation package is for you to retain in your files.

If your proposal falls within the competitive range, you will be required to complete a detailed breakdown of your offer in a format to be provided by the contracting officer. The contracting officer's evaluation of proposals and check of financial and technical references may require up to 30 calendar days. No information will be available until this is completed. **Please do not call the contracting officer or local Exchange office for results. You will be advised of results** when proposal evaluations are completed and an award is made.

If you receive a Notice of Contract Award, then performance and payment bonds, proof of insurance, and the Electronic Payment Authorization Form will be required at the pre-construction meeting. Bond requirements are covered in section 8 of the Proposal Response Form and insurance requirements are set out in section 3.A paragraph 13 as well as section 3.B of the Agreement Document.

Sincerely,

Encl
Solicitation No. GNFR-FC-CMP-23-18141

GRACE PEREZ-MARTINEZ
Contracting Officer

SCOPE AND LOCATION OF WORK: Fort Campbell, Kentucky – Burger King Image Update. This project will re-modifiy existing exterior materials, including brick, stucco, doors, windows, lighting and asphalt shingle roofing as required for new exterior design elements PN: 2146-22-000017 Technical questions must be e-mailed to GRACE PEREZ-MARTINEZ not later than close of business 28 February 2023
COMMENCEMENT AND COMPLETION OF WORK The Contractor will commence work within 10 calendar days after the date of receipt of Notice to Proceed, shall prosecute work diligently, and shall complete the work within 90 calendar days after date of receipt of Notice to Proceed. The time for completion Includes final clean-up of premises.

Proposals are solicited for performing all work in strict accordance with the drawings, specifications, schedules and exhibits listed herein. Instructions to offerors for preparation of proposals are contained in the Instructions to Offerors and Conditions of Proposals/Awards. Offerors are cautioned to carefully review the

Full Name & Business Address of Offeror *(Street, City, State & Zip Code or Country)*	*Telephone Number*	*Email Address*
Printed Name and Title	*Signature of Person Authorized to Sign Proposal*	*Date*
Taxpayer Id Number	*Duns Number*	

instructions, and all requirements of the solicitation. **Proposals will be received until 1400, local time** on 15 March 2023.

PROPOSAL (To Be Completed by Offeror)

OFFEROR REPRESENTATION

1. That it operates as an ___ Individual ___ Partnership ___ Corporation, incorporated in the State or Country of _____.
2. That it ___ is ___ is not a minority business enterprise.
3. That it ___ is ___ is not a woman-owned business.
4. That an owner or officer of the firm or the firm or a related firm:
   a. ___ has ___ has not been convicted of a felony related to a business transaction
   b. ___ has ___ has not been suspended or debarred
5. In reference to 2019 National Defense Authorization Act (NDAA), Section 889, the Offeror represents that it:
   a. ___will ___ will not provide prohibited telecommunications and video surveillance equipment or services to the Government in the performance of any contract, subcontract, or other contractual instrument.

b. ___does ___ does not and will not use prohibited telecommunications and video surveillance equipment or services, or use any equipment, system, or service that uses prohibited telecommunications equipment or services.

6. That the person signing this proposal is an individual having the authority to obligate the firm contractually.
7. That the information provided is full, accurate and complete. For breach of this warranty, the Exchange may terminate for default any contract resulting from this solicitation and all other Exchange contracts.

In compliance with the above, the undersigned agrees, if this proposal is accepted, to furnish all requirements and perform the work for which the proposal is submitted, at the price(s) and upon the terms and conditions contained in the solicitation and in the proposal. The option period for acceptance of this proposal shall be **60 calendar days** after the date for receipt of proposals established above.

The offeror must furnish the following itemized work division cost breakdown, and a breakdown of total labor and total material, with the proposal or furnish it if and when required by the contracting officer.

COST BREAKDOWN					
Project	Burger King Image Update	Project Number	2146-22-000017	Total SF	
Location	Fort Campbell, Kentucky	Estimate Date		$ / SF	
				Total Days	
Contractor					
Offeror #					
	(GC MUST ENTER P/OH %)		Profit	____%	
			Overhead	____%	

	COST SUMMARY	Material	Labor	Total Cost
1000	Division 1 - General Requirements			
2000	Division 2 - Sitework			
3000	Division 3 - Concrete			
4000	Division 4 - Masonry			
5000	Division 5 - Metals			
6000	Division 6 - Wood And Plastics			
7000	Division 7 - Thermal And Moisture Protection			
8000	Division 8 - Doors And Windows			
9000	Division 9 - Finishes			
10000	Division 10 - Specialties			
11000	Division 11 - Equipment			
12000	Division 12 - Furnishes			
13000	Division 13 - Special Construction			
14000	Division 14 - Conveying Systems			
15000	Division 15 - Mechanical			
16000	Division 16 - Electrical			
	Division 14 Thru 20 - Not Used			
21000	Division 21 - Fire Suppression			
22000	Division 22 - Plumbing			
23000	Division 23 - HVAC			
	Divisions 24 Thru 25 - Not Used			
26000	Division 26 - Electrical			
27000	Division 27 - Not Used			
28000	Division 28 - Fire Alarm/Life Safety System			
	Divisions 29 Thru 30 - Not Used			
31000	Earthwork			
32000	Exterior Improvements			
33000	Utilities			
	34 Thru 49 - Not Used	Material	Labor	Lump Sum
	TOTALS			

If you are the successful offeror and are awarded this contract, your awarded contract Lump Sum Amount will be shared with the unsuccessful offerors that propose on this solicitation.

1) Definitions

a) The term "minority business" means a business concern (1) which is at least 51 percent owned by minority group members; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more minority group members, and (2) whose management and daily business operations are controlled by one or more such minority group members. For purposes of this definition, minority group members include Black Americans, Hispanic Americans, Asian-Pacific Americans, Asian-Indian Americans, and Native Americans (such as American Indians, Eskimos, Aleuts and Native Hawaiians).

b) The term "women-owned business" means that is at least 51 percent owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" in this context means being actively involved in the day-to-day management.

2) Proposal Preparation

a) General: All proposals are subject to the Instructions to Offerors and Conditions of Proposals/Awards, the General Provisions, and such other provisions, representations, certifications, drawings and specifications as are attached or incorporated herein by reference. Offerors are expected to examine the General Provisions, Exhibits, Drawings and Specifications and all instructions. Failure to do so will be at the offeror's risk. Offerors are encouraged to contact the Contracting Officer regarding any question which may arise concerning this solicitation. Offerors should visit the site and take other steps as may be reasonably necessary to ascertain the nature and location of the work, and the general and local conditions which can affect the work or the cost thereof. Failure to do so will not relieve the offerors from the responsibility of estimating properly the difficulty or cost of successfully performing the work. The Exchange assumes no responsibility for any understanding or representation concerning conditions made by any of its employees or agents prior to the execution of the contract, unless included in the solicitation and related documents. it is understood that the contract finally awarded contains the whole agreement of the parties. information regarding this solicitation furnished any prospective offeror will be furnished all prospective offerors.

b) Data: Each offeror shall enter all data and furnish all information required by the solicitation on the Exchange forms provided. Failure to do so may result in a proposal being considered nonresponsive and therefore excluded from consideration for award.

c) Computation of Time: Time, if stated as number of days, will include Sundays and Holidays.

d) Authorized Signature: The person signing the proposal must be an officer of the firm having authority to obligate the firm contractually.

e) Unless otherwise authorized by the solicitation, any alteration to the terms and conditions contained in the solicitation may render offeror's proposal non-responsive.

3) Submission

a) Proposals and modifications, if any, must be sent by email reply to the Contracting Officer using the same subject as the request. Proposals may be modified by email notice provided it is received before the time and date set for receipt of proposals.

b) Complete, sign and return the Proposal Response Form, along with a completed and signed Financial and Technical Capability Data sheet.

c) Solicitations may provide that a price, or prices, be submitted on one or more projects, on one or more items of work, on one or more additive or deductive items of work, or on any combination of projects or items. Where the solicitation explicitly requires proposals to be submitted on all projects or items listed, failure to do so will render the proposal nonresponsive.

4) Late Proposals

The Exchange reserves the right to consider proposals or modifications received late, but before award is made, should such action be to the Exchange's advantage.

5) Withdrawal

Proposals may be withdrawn by written notice received at any time prior to award.

6) No Proposal

If your company does not submit a proposal, please let us know your company will not be responding and business reasons why.

7) Qualifications Of Proposed Contractor(S)

Before a proposal is considered for award, the offerors may be requested by the contracting officer to submit a statement regarding his previous experience in performing comparable work, his business and technical organization, financial resources and facilities to be used in performing the work. Proposals will not be considered if submitted by military personnel on active duty, civil service employees of the U.S. Government, or the Exchange employees.

8) Evaluation

Award of contract(s) will be based on evaluation of the following:

a) Responsiveness of the offeror to all requirements of the solicitation.

b) Competitiveness of the proposal prices including any options exercised at time of award.

c) Responsibility of the offeror as relates to qualifications set forth in paragraph 8 above and capability to perform the resulting contract.

9) Acceptance

a) This is a negotiated contract. There will not be a public opening. The Exchange may accept, within the time specified therein, any timely proposal whether or not there are negotiations subsequent to this receipt. Subsequent negotiations, if any, shall not constitute a rejection or counter offer on the part of the Exchange.

b) The Exchange reserves the right to reject any or all proposals and to waive informalities and minor irregularities in proposals received.

c) It is contemplated that a contract will be awarded to that responsive, responsible offeror whose proposal is most advantageous to the Exchange, price and other factors considered. The Exchange reserves the right to conduct further negotiations with any or all, responsive, responsible offerors.

d) Award may be made by acceptance of the most favorable proposal received without further negotiation. Initial proposals submitted in response to the solicitation should therefore set forth the most favorable terms.

10) Bond Requirements

a) If total lump sum cost proposal exceeds $25,000 or if otherwise required herein, a proposal bond is required to be submitted in the penal sum of 20% of the proposal amount. Failure to furnish the proposal bond by the time and date set for receipt of proposals in the amount set forth in the solicitation may be cause for rejection of the proposal. The proposal bond shall be in the form of a firm commitment executed on EXCHANGE FORM 4450-045, "Proposal Bond."

b) Proposal Bonds will be returned (1) to unsuccessful offerors as soon as practical after award of contract to the successful offeror, and (2) to the successful offeror on execution of such further contractual documents or bonds as may be required by the solicitation.

c) Performance and payment bond are required for all the Exchange construction contracts which exceed $25,000. Both bonds shall be executed by the contractor as principal and be with a reputable bonding company, acceptable to the Exchange, as surety. The Performance Bond will be executed on EXCHANGE FORM 4400-041 and in the penal sum of one hundred percent (100%) of the contract price. The Payment Bond will be executed on EXCHANGE FORM 4400-040 and in the penal sum of one hundred percent (100%) of the contract price. The contract price means the award of the contract. If the contract price increases, an additional amount equal to 100 percent of the Increase is required for both bonds. If the apparent successful offeror fails to furnish the required bonds within the time stated herein, no contract shall be awarded to the firm and their proposal bond will be forfeited.

d) The rights and remedies of the Exchange provided in this clause are in addition to other rights and remedies provided by law under this contract.

e) The bonds shall be supported by corporate sureties whose names appear on the Department of the Treasury's Listing of Approved Sureties (Department Circular 570). Other types of security are not acceptable.

11) Award

The Contractor shall be required to submit payment and performance bonds within ten (10) days from the date of contract award or the Exchange may terminate the Contract for default and Contractor's proposal bond may be forfeited. Mailing or otherwise furnishing a copy of this form signed by the offeror and the contracting officer to the successful offeror within the time for acceptance, all conditions having been complied with, shall result in a binding contract, without further action by either party. This form, with all exhibits, shall constitute the complete contract. The Contractor shall not proceed with performance of contract until receipt of Notice to Proceed. Any work performed prior to receipt of Notice to Proceed will be at the Contractor's risk. Upon receipt of required payment and performance bonds and any other required documents, the contracting officer will execute the Notice to Proceed.

12) Certificate Of Independent Proposal Determination

Offeror certifies that this proposal is made without consultation, communication, or agreement, for the purpose of restricting competition, and this proposal has not been disclosed and will not be disclosed prior to award.

13) Proprietary Information

The Exchange will not be bound by any language in an offer purporting to limit the Exchanges' right to use or disclose an offer or any part of an offer because of proprietary information in it unless the contracting officer specifically agrees in writing to such limitations.

14) Construction Cost Estimate Breakdown Spreadsheet:

General contractors who have submitted proposals in response to an Exchange solicitation and are considered to be in the competitive range may be asked to prepare and submit a cost breakdown spreadsheet. If a construction contract is awarded, the spreadsheet will be used as a basis to negotiate change orders throughout the construction performance period.

15) Copies of Documents Furnished:

After contract award, and for construction purposes only, the General Contractor will be provided with a record set of drawings and specifications and a reproducible set of drawings and specifications. Additional copies will be the responsibility of the General Contractor.

ARMY AND AIR FORCE EXCHANGE SERVICE

FINANCIAL AND TECHNICAL CAPABILITY DATA SHEET

PERSONS AUTHORIZED TO COMMIT FIRM CONTRACTUALLY

COMPLETE BUSINESS NAME AND ADDRESS		
NAME	TITLE	HOW LONG IN PRESENT BUSINESS
NAME	TITLE	HOW LONG IN PRESENT BUSINESS

BANK AND BOND REFERENCES

BANK NAME	TELEPHONE NUMBER (Include Area Code)	
ADDRESS	Email/Fax No.	
CONTACT	Amt of Current Loan ACCOUNT NUMBER	AVG. MO. BAL.
BANK NAME	TELEPHONE NUMBER (Include Area Code)	
ADDRESS	Email Fax No.	
CONTACT	Amt of Current Loans ACCOUNT NUMBER	AVG. MO. BAL.
LOCAL SURETY AGENT	TELEPHONE NUMBER (Include Area Code)	
ADDRESS	Email/Fax No.	
CONTACT		

CREDIT REFERENCES FOR SOPPLIES AND EQUIPMENT

FIRM NAME	TELEPHONE NUMBER (Include Area Code)
ADDRESS	Email/Fax No.
CONTACT	
FIRM NAME	TELEPHONE NUMBER {Include Area Code)
ADDRESS	Email/Fax No.
CONTACT	
FIRM NAME	TELEPHONE NUMBER (Include Area Code)
ADDRESS	Email/Fax No.
CONTACT	

Relationship with the Government: Is the owner or any official of the firm currently an employee of the Federal Government, the Army and Air Force Exchange Service, or an active duty with any branch of the active military service, or an immediate family member residing in the same household of such personnel, or retired officer of the Army or Air Force?

___YES ___NO

CONSTRUCTION EXPERIENCE (See Reverse)

SIGNATURE OF OFFEROR

AAFES FORM 4200-45 (REV SEP 09)

EXPERIENCE: Identify below current and completed construction projects for the past two (2) years for both Federal Government and Civilian Enterprises. As appropriate, Experience to include New, Ground Up Construction of a Retail Box and/or Phased Approach Retail Construction where facility remains open and operational for duration of construction.

NOTE: Include area code on all telephone numbers.

PROJECT	OWNER *(Complete Address & Telephone No.) Email	ARCHITECT (Complete Address & Telephone No.) Email/Fax No.	CONTRACT AMOUNT	PROJECTS OPEN %COMPLETED	PROJECT COMPLETED DATE COMPLETED	%OF WORK DONE WITH OWN FORCES

(NOTE: USE BLANK PAGES FOR ADDITIONAL EXPERIENCE TO TOTAL 2 YEARS.)

(REVERSE AAFES FORM 4200-45)

ARMY AND AIR FORCE EXCHANGE SERVICE **PROPOSAL BOND** (SEE INSTRUCTIONS ON REVERSE)	DATE BOND EXECUTED (MUST NOT BE LATER THAN DATE SET FOR RECEIPT OF PROPOSALS)
PRINCIPAL (Legal Name and Business Address)	TYPE OF ORGANIZATION ("X" ONE) ☐ INDIVIDUAL ☐ PARTNERSHIP ☐ JOINT VENTURE ☐ CORPORATION
	STATE OF INCORPORATION
SURETY(IES) (Name(s) and Business Address(es)	

PENAL SUM OF BOND					PROPOSAL DATE	SOLICITATION NUMBER
PERCENT OF PROPOSAL PRICE: %	AMOUNT NOT TO EXCEED					
	MILLION(s)	THOUSAND(s)	HUNDRED(s)	CENTS		

OBLIGATION: We, the Principal and Surety(ies) are firmly bound to the Army and Air Force Exchange Service (hereinafter called Exchange) and the United States of America in the above penal sum. For the payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors jointly and severally. However, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us. For all other purposes, each Surety binds itself, jointly and severally with the Principal, for the payment of the sum shown opposite the name of the Surety. If no limit of liability is indicated, the limit of liability is the full amount of the penal sum.

CONDITIONS: The Principal has submitted the proposal identified above.

THEREFORE: The above obligation is void if the Principal - (a) upon receipt of the "Notice of Intent to Award" within the period specified in the proposal [sixty (60) days if no period is specified], executes the further contractual documents and gives the bond(s) required by the terms of the proposal within the time specified [ten (10) days if no period is specified]; or (b) in the event of failure to execute such further contractual documents and give such bonds, pay Exchange for cost of procuring the work which exceeds the amount of the proposal.

Each Surety executing this instrument agrees that its obligation is not impaired by any extension(s) of the time for acceptance of the proposal that the Principal may grant to Exchange. Notice to the Surety(ies) of extension(s) are waived. However, waiver of the notice applies only to extensions aggregating not more than sixty (60) calendar days in addition to the period originally allowed for acceptance of the proposal.

WITNESS: The Principal and Surety(ies) executed this proposal bond and affixed their seals on the above date.

PRINCIPAL			
SIGNATURE(s)	1. (Seal)	2. (Seal)	CORPORATE SEAL
TYPED NAME(s) & TITLE(s)	1.	2.	

CORPORATE SURETY				
NAME AND ADDRESS		STATE OF INC	LIABILITY LIMIT	CORPORATE SEAL
SIGNATURE(s)	1.	2.		
TYPED NAME(s) AND TITLE(s)	1.	2.		

EXCHANGE FORM 4450-045 (REV MAY 19) (Prev Editions Obsolete) EOP 65-01

INSTRUCTIONS

1. The full legal name and business address of the Principal shall be inserted in the space designated "Principal" on the face of this form. The bond shall be signed by an authorized person. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of his authority must be furnished.

2. The penal sum of the bond may be expressed as a percentage of the proposal price, if desired. In such cases, a maximum dollar limitation may be stipulated (e.g., 20% of the proposal price but the amount not to exceed___dollars). The penal sum of the bond may not be less than 20% of the proposal price.

3. Corporation executing the bond as sureties must be among those appearing on the Treasury Department's list of approved sureties and must be acting within the limitations set forth therein.

4. Corporations executing the bond shall affix their corporate seals.

5. The name of each person signing this performance bond should be typed in the space provided.

ARMY AND AIR FORCE EXCHANGE SERVICE **PERFORMANCE BOND**	BOND NUMBER	DATE BOND EXECUTED ☐ ☐ ☐ ☐
PRINCIPAL (Legal Name and Business Address)		TYPE OF ORGANIZATION ("X" ONE) INDIVIDUAL ☐ PARTNERSHIP ☐ JOINT VENTURE ☐ CORPORATION ☐ STATE OF INCORPORATION
SURETY(IES) (Name(s) and Business Address(es))		PENAL SUM OF BOND MILLION(s) / THOUSAND(s) / HUNDRED(s) / CENT(s) CONTRACT DATE / CONTRACT NO.

KNOW ALL MEN BY THESE PRESENTS, That we, the Principal and Surety(ies) hereto, are firmly bound to the Army & Air Force Exchange Service and the United States of America in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, and successors jointly and severally: Provided, That, where the Sureties are corporations acting as co-sureties, we the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered into the contract identified above;

NOW, THEREFORE, if the Principal shall:

(a) Perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Army & Air Force Exchange Service with or without notice to the Surety(ies), and during the life of any guaranty required under the contract, and shall also perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety(ies) being hereby waived; and

(b) If the said contract is subject to the Miller Act, as amended (40 U.S.C. 270a-270e), pay to the United States of America the full amount of the taxes imposed by the United States of America which are collected, deducted, or withheld from wages paid by the Principal in carrying out the construction contract with respect to which this bond is furnished; then the above obligation shall be void and of no effect.

IN WITNESS WHEREOF, the Principal and Surety(ies) have executed this performance bond and have affixed their seals on the date set forth above.

PRINCIPAL

SIGNATURE(s)	1. (Seal)	2. (Seal)	CORPORATE SEAL
TYPED NAME(s) & TITLE(s)	1.	2.	

CORPORATE SURETY

NAME & ADDRESS		STATE OF INC	LIABILITY LIMIT	CORPORATE SEAL
SIGNATURE(s)	1.	2.		
TYPED NAME(s) & TITLE(s)	1.	2.		

EXCHANGE FORM 4400-041 (REV MAY 13) (Prev Editions Obsolete)

INSTRUCTIONS

1. The full legal name and business address of the Principal shall be inserted in the space designated "Principal" on the face of this form. The bond shall be signed by an authorized person. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of his authority must be furnished.

2. Corporations executing the bond as sureties must be among those appearing on the Treasury Department's list of approved sureties and must be acting within the limitations set forth therein.

3. Corporations executing the bond shall affix their corporate seals.

4. The name of each person signing this performance bond will be typed in the space provided.

ARMY AND AIR FORCE EXCHANGE SERVICE **PAYMENT BOND** (SEE INSTRUCTIONS ON REVERSE)	DATE BOND EXECUTED	BOND NUMBER

PRINCIPAL (Legal Name and Business Address)	TYPE OF ORGANIZATION ("X" ONE) INDIVIDUAL PARTNERSHIP JOINT VENTURE CORPORATION STATE OF INCORPORATION

SURETY(IES) (Name(s) and Business Address(es))	PENAL SUM OF BOND			
	MILLION(s)	THOUSAND(s)	HUNDRED(s)	CENT(s)
	CONTRACT DATE		CONTRACT NO.	

KNOW ALL MEN BY THESE PRESENTS, that we, the Principal and Surety(ies) hereto, are firmly bound to the Army & Air Force Exchange Service and the United States of America in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, and successors jointly and severally: Provided, that, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered into the contract identified above; NOW THEREFORE, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety(ies) being hereby waived, then the above obligation shall be void and of no effect.

IN WITNESS WHEREOF, the Principal and Surety(ies) have executed this payment bond and have affixed their seals on the date set forth above.

PRINCIPAL

SIGNATURE(s)	1. **(Seal)**	2. **(Seal)**	**CORPORATE SEAL**
TYPED NAME(s) & TITLE(s)	1.	2.	

CORPORATE SURETY

NAME & ADDRESS		**STATE OF INC**	**LIABILITY LIMIT**	
SIGNATURE(s)	**1.**	**2.**		CORPORATE SEAL
TYPED NAME(s) & TITLE(s)	**1.**	**2.**		

BUY AMERICAN ACT / TRADE AGREEMENTS ACT /
CARIBBEAN BASIN ECONOMIC RECOVERY ACT

To the extent that this solicitation and any resulting contract requires the purchase by the Exchange of non-resale items for use within the United States and/or outside of the United States, preference will be given to:
Domestic end products,
Domestic construction material,
U.S.-made end products,
Designated country end products, and
Caribbean Basin country end products,
in accordance with the:
Buy American Acct, 41 U.S.C. 10a – 10d;
Executive Order 10582, as amended:
Executive Order 13881;
Executive Order 14005;
Trade Agreements Act of 1979, 19 U.S.C. 2511, et seq.;
Caribbean Basin Economic Recovery Act, 19 U.S.C. 2701, et seq.

CERTIFICATION:
The Offeror hereby certifies that each end-product offered in response to this solicitation, EXCEPT THOSE LISTED BELOW are Buy American Act / Trade Agreement Act (BAA/TAA) compliant:

LIST OF END PRODUCTS WHICH ARE **NOT** BAA or TAA COMPLIANT

LINE ITEM NUMBER	COUNTRY OF ORIGIN

(For additional line items, attach a supplemental listing)

If the above listing is left blank, Offeror is certifying that all products offered are BAA/TAA compliant.

CERTIFICATION:

Offeror's Signature: _____

Date: _____

ARMY AND AIR FORCE EXCHANGE SERVICE

CONTRACT FOR

Burger King Image Update

At Fort Campbell, Kentucky

CONTRACT#: GNFR-FC-CMP-23-18141

PN: 2146-22-000017

CHRISTIAN VILLAMIN, Contracting Officer

3911 S. Walton Walker Blvd.
Dallas, Texas 75236

ONLY AN EXCHANGE CONTRACTING OFFICER HAS THE AUTHORITY TO BIND THE ARMY AND AIR FORCE EXCHANGE SERVICE TO THIS CONTRACT, ALTERATIONS, AND AMENDMENTS. ALL TERMS TO THE CONTRACT, ALTERATIONS, AND AMENDMENTS MUST BE IN WRITING AND MADE PART OF THIS CONTRACT. THE CONTRACTING OFFICER MAY MAKE UNILATERAL AMENDMENTS TO THE CONTRACT TO INCORPORATE ADMINISTRATIVE CHANGES THAT DO NOT AFFECT THE RIGHTS OR OBLIGATIONS OF THE PARTIES.

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1. INTRODUCTION

A. Parties

This Contract is entered into by and between the Army and Air Force Exchange Service (The Exchange) and AAFES SOURCING EVENT. If the Contractor is comprised of more than one legal entity, each such entity shall be jointly and severally liable for the obligations of Contractor.

B. Legal Status

The Army and Air Force Exchange Service (the Exchange), including its activities, offices, and individual facilities, is an integral part of the Departments of the Army and Air Force, and an instrumentality of the United States Government. Exchange Contracts are United States Contracts; however, they do not obligate appropriated funds of the United States. Exchange procurement policy is established by applicable directives and instructions promulgated by the Department of Defense. The Federal Acquisition Regulation does not apply to the Exchange.

C. Business Description

The Exchange operates retail facilities on military installations all over the world. The facilities include direct operated big box retail outlets, convenience stores with gasoline, fast food operations (Contractor operated name brand and non-name brand), and Contractor-run commodity and service concession operations. The Exchange also operates an ecommerce website that sells goods and services to eligible patrons and honorably discharged veterans of the United States military.

D. Type of Contract

This Contract is to provide Burger King Image Update at Fort Campbell, Kentucky. The Contract will commence upon Notice to Proceed and will end 90 calendar days from the date of commencement. A detailed description of the requirement is in Section 2A of this Contract.

E. Restrictions

Contractor will operate at an Exchange facility. Since the Exchange is an instrumentality of the United States Government, there are certain restrictions on Contractor's activities. Specifically, Contractor will not represent itself to be an agent or representative of the Exchange, another instrumentality, or an agency of the United States. All Contractor advertisements that refer to the Exchange or military exchanges will contain a statement that the advertisement was neither paid for nor sponsored, in whole or in part, by the Exchange, the military exchange system, or the United States Government.

2. SPECIFICATIONS

A. Detail Description of Goods or Services

This Contract is to provide Construction service for Burger King Image Update.

The Drawings and Specifications Numbered 2146-22-000014 Dated 6 February 2023 are attached and incorporated into this contract.

B. Cost Break-down

COST BREAKDOWN					
Project	Burger King Image Update	Project Number	2146-22-000017	Total SF	
Location	Fort Campbell, KY	Estimate Date		$ / SF	
				Total Days	
Contractor	Offeror #				
	(GC MUST ENTER P/OH %)		Profit	____%	
			Overhead	____%	
	COST SUMMARY		**Material**	**Labor**	**Total Cost**
1000	Division 1 - General Requirements				
2000	Division 2 - Sitework				
3000	Division 3 - Concrete				
4000	Division 4 - Masonry				
5000	Division 5 - Metals				
6000	Division 6 - Wood And Plastics				
7000	Division 7 - Thermal And Moisture Protection				
8000	Division 8 - Doors And Windows				
9000	Division 9 - Finishes				
10000	Division 10 - Specialties				
11000	Division 11 - Equipment				
12000	Division 12 - Furnishes				
13000	Division 13 - Special Construction				
14000	Division 14 - Conveying Systems				
15000	Division 15 - Mechanical				
16000	Division 16 - Electrical				
	Division 14 Thru 20 - Not Used				
21000	Division 21 - Fire Suppression				
22000	Division 22 - Plumbing				
23000	Division 23 - Hvac				
	Divisions 24 Thru 25 - Not Used				
26000	Division 26 - Electrical				
27000	Division 27 - Not Used				
28000	Division 28 - Fire Alarm/Life Safety System				
	Divisions 29 Thru 30 - Not Used				
31000	Earthwork				
32000	Exterior Improvements				
33000	Utilities				
	34 Thru 49 - Not Used		**Materials**	**Labor**	**Lump Sum**
	TOTALS				

3. TERMS AND CONDITIONS

A. General Provisions

1) Notices

All notices, consents, waivers, and other communications under this Contract must be in writing and will be deemed to have been duly given when (a) delivered by hand (with written confirmation of receipt), (b) sent by email (with confirmation of receipt), (c) sent by an overnight delivery service (with confirmation of receipt), or (d) sent by certified or registered mail, return receipt requested, to the designated Contracting Officer and to the Contractor's representative identified below (or to such other persons and addresses as a party may designate by written notice to the other party).

Contractor:
AAFES SOURCING EVENT,

The Exchange:
Attn: CHRISTIAN VILLAMIN
3911 S. Walton Walker Blvd.
Dallas, Texas, 75236
villaminc@aafes.com

2) Order of Precedence

In the event of an inconsistency or conflict between or among the provisions of this Contract, the inconsistency or conflict shall be resolved by giving precedence to the various provisions in the following order as applicable: (a) cover page and section one; (b) section two; (c) section three; (d) other sections; (e) any attached exhibits.

3) Procurement Integrity, Gratuities and Contingent Fees

a) By submission of an offer or performance of this contract, the offeror or contractor certifies with respect to this Exchange purchase action:

1. that no discussion, offer or promise of future employment or business opportunity has nor will be made to the Exchange civilian or military personnel who personally and substantially participated in the purchase action;
2. that no offer, promise or gift of any gratuity, entertainment, money, or other thing of value has nor will be made to any Exchange civilian or military personnel or any other employee of the United States Government or member of their family or household;
3. that no information proprietary to other offerors or other purchasing information (offeror list, prices offered, technical evaluations or rankings, etc.) is sought or obtained until it is available to the public under the Exchange procedures.
4. that no person or selling agency has been employed or retained to secure this contract for a commission, percentage, brokerage or contingent fee except bona fide employees or bona fide established commercial selling agencies retained by the contractor for the purpose of securing business.

b) Contractor certifies that no gratuities (entertainment, gifts, money, kickbacks or other thing of value) were nor will be solicited or accepted by the contractor, or any contractor representative, from

any subcontractor or subcontractor representative, for the purpose of obtaining or rewarding favorable treatment in connection with this contract or any subcontract under it.

c) Contractor will report in writing to the Director, Loss Prevention Directorate, any possible violation of this clause when there are reasonable grounds to believe a violation may have occurred. The contractor will cooperate fully with any federal agency investigation of a possible violation of this clause.

d) For breach of any of these certifications, the Exchange may terminate this contract for default, and/or deduct from amounts due under this or other contracts, or charge contractor for, the total value of any contingent fee, gratuity or kickback or other loss to the Exchange arising out of the breach.

4) Officials Not to Benefit

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

5) Contractor Personnel and Representatives

a) This agreement does not create an employment or joint employer relationship between an employee of the Contractor and the Exchange. Contractor is the sole employer of its employees. Personnel employed by Contractor under this contract are not employees of the Exchange. The Exchange affirmatively disclaims control over the terms and working conditions of the Contractor's employees, including but not limited to the ability to hire, fire, discipline, train, set work hours, taxes, determine compensation and benefits, and exercising day-to-day supervision.

b) Contractor is responsible for compliance with labor, employment and tax laws, and will accept liability for breach of applicable labor, employment and tax laws and terms of this contract. In the event of a breach by Contractor related to this provision, Contractor agrees to indemnify the Exchange.

c) Contractor will discontinue using any individual in Exchange facilities upon contracting officer's written notice that the individual is not acceptable for performance under this contract. Contractor will not use any such person to perform other Exchange contracts without the prior written consent of the contracting officer. These requirements are not requests by the Exchange for the termination of the individual's employment with Contractor, but a requirement only under the Contract not to use any such individual under this contract, other Exchange contracts or work in Exchange facilities without prior written consent.

d) Contractor personnel will abide by applicable laws, regulations and military command directives and conduct themselves so as not to reflect discredit on the Exchange.

e) Contractor will not represent himself/herself to be an agent or representative of the Exchange, another instrumentality, or an agency of the United States.

6) Composition of Contractor

If the contractor hereunder is comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder.

7) Assignment

The Assignment of Claims Acts, 31 U.S.C. 3727 and 41 U.S.C. 6305, are not applicable to amounts due under Exchange contracts. Contractor may not assign its rights or delegate its obligations under this contract, and the Exchange will neither consent to, nor recognize, any purported assignment. Contractor may request permission from the contracting officer to have contract payments forwarded to a third party.

8) Permits and Responsibilities

The contractor shall, without additional expense to the Exchange, be responsible for obtaining any necessary licenses and permits, and for complying with applicable Federal, state, foreign and municipal laws, codes and regulations, in connection with the prosecution of the work. The contractor shall be similarly responsible for all damages to persons or property that occur as a result of the contractor's fault or negligence. The contractor shall take proper safety and health precautions to protect the work, the workers, the public and the property of others. The contractor shall also be responsible for all materials

delivered and work performed until completion and acceptance of the entire construction work, except for any completed unit of work which may have been accepted under the contract.

9) Federal, State, Local and Foreign Taxes

a) The responsibility for determining the applicability of any taxes imposed on the performance of this contract or any subcontract hereunder rests with the contractor. The contract price includes all applicable federal, state and local taxes and customs duties. Some state or local laws or regulations exempt purchases of materials or supplies incorporated into or used in the performance of federal contracts. The contract price does not include any tax for which an exemption exists at the time of contract award.

b) Nevertheless, with respect to any Federal excise tax or duty on the transactions or property covered by this contract, if a statute, a court decision, written ruling or regulation takes effect after the contract date, and

1. results in the contractor being required to pay or bear the burden of any such Federal excise tax or duty or increase in the rate thereof which would not otherwise have been payable on such transactions or property, the contract price shall be increased by the amount of such tax or duty or rate increase, provided the contractor warrants in writing no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price as a contingency reserve or otherwise; or

2. results in the contractor not being required to pay or bear the burden of, or in obtaining a refund or drawback of, any such Federal excise tax or duty which would otherwise have been payable on such transactions or property or which was the basis of an increase in the contract price, the contract price shall be decreased by the amount of the relief, refund or drawback, or that amount shall be paid to the Exchange, as directed by the contracting officer. The contract price shall be similarly decreased if the contractor, through his fault or negligence or his failure to follow instructions of the contracting officer, is required to pay or bear the burden of, or does not obtain a refund or drawback of, any such Federal excise tax or duty.

c) Subparagraphs "a" and "b" above shall not be applicable to social security taxes or to any other employment tax.

d) Except as otherwise provided in this contract, the contract price includes all applicable foreign taxes and duties. The contractor warrants that the contract price does not include any tax or duty which the government of the United States and the government of the country wherein the contract is to be performed has agreed shall not be applicable to purchasing of goods and services by the U.S. forces. Should the prices in this contract include any such tax or if after the date of this contract, contractor be exempted from any tax or duty included in the price of goods and/or services provided for in this contract, the contract price shall be decreased by the amount of such tax or duty.

e) No adjustment of less than $100 shall be made in the contract price pursuant to this clause.

f) As used in this clause, the term "contract date" means the actual contract date. As to additional supplies or services purchased by modification of this contract, the term "contract date" means the date of such modification.

g) Unless there does not exist any reasonable basis to sustain an exemption, the Exchange upon the request of the contractor shall, without further liability, furnish evidence appropriate to establish exemption from any Federal, state, foreign or local tax; provided that, evidence appropriate to establish exemption from any Federal excise tax or duty which may give rise to either an increase or decrease in the contract price will be furnished only at the discretion of the Exchange.

h) The contractor shall promptly notify the contracting officer of matters which will result in either an increase or decrease in the contract price, and shall take action with respect thereto as directed by the contracting officer.

10) Inconsistencies

To the extent of any inconsistency between the General Provisions and any specifications or other provisions, the General Provisions shall control.

11) Indemnify and Hold Harmless

a) Contractor will indemnify, hold harmless and defend the Exchange and all other United States agencies and Instrumentalities, their agents, representatives, employees and customers from any and all suits, judgments and claims, including those established by or pursuant to court decisions, to international agreements, or duly promulgated United States Government regulations and all charges and expenses incident thereto which arise out of the following:

1. The alleged or established violation or infringement of any patent, copyright or trademark rights asserted by any third party with regard to items or services provided by contractor;

2. The loss, damage, or injury alleged or established to have arisen out of or in connection with items or services provided by contractor, to the extent contractor can be held liable for such loss, damage, or injury in accordance with applicable federal and state law.

b) Contractor is hereby notified that injury and damage claims against the Exchange based on alleged negligence must be brought under applicable federal law, including the Federal Tort Claims Act. The Exchange will give contractor notice of such claims relating to items or services provided by contractor. In the event of litigation, the Exchange is defended by the Department of Justice.

12) Examination Of Records

a) This clause applies if the amount of the contract exceeds $10,000 and the contract was entered into by means of negotiation. The contractor agrees that the contracting officer or his duly authorized representative will have the right to examine and audit the books and records of the contractor directly pertaining to the contract during the period of the contract and until the expiration of three years after the final payment under the contract. The contractor agrees to include this clause in all subcontracts that exceed $10,000.

b) General Accountability Office" may be substituted for "contracting officer or his duly authorized representative" when the prospective contractor does not accept the standard wording of the examination clause.

c) Contracts awarded to foreign contractors may exclude the examination clause when its use is precluded by the laws of the country involved, subject to the approval of the servicing Exchange General Counsel (Exchange HQ and Exchange Europe). Contract files will be in such circumstances be documented to show the basis for exclusion of the clause.

13) Insurance

a) Contractor agrees to purchase and maintain at contractor's expense from an insurance company or companies acceptable to the Exchange the insurance coverage listed herein for the period of this contract, and furnish a certificate of insurance evidencing such insurance to be in effect, no later than ten days after award of contract (and indicating on the certificate of insurance that, in the event of modification, cancellation or nonrenewal, the Exchange will be given 30 days prior notice). All liability insurance contracts shall name the United States and the Exchange as additional insured with respect to claims, demands and expenses arising out of or in connection with any loss, damage or injury resulting from acts or omissions of contractor, its agents, representatives or employees. The certificate of insurance must show the United States and the Exchange as additional insured for all liability coverage shown below. This insurance policy will be written on an "occurrence" basis and will include contractual liability. A policy written on a "claims made" basis is not acceptable. Commercial General Liability Insurance with minimum limits as follows:

	CONTRACT VALUE LESS THAN $1M	CONTRACT VALUE $1M OR MORE

Any one occurrence, Bodily Injury and Property Damage Combined	$100,000	$1,000,000
Property & Completed Operations, Per Occurrence	$100,000	$1,000,000
General Aggregate Limit, Per Project	$100,000	$2,000,000

b) The contractor shall obtain Builder's Risk Insurance against the perils of fire, lightening, windstorm, hail, explosion, collapse, riot, civil commotion, smoke aircraft, land vehicles, vandalism, and malicious mischief in an amount of insurance equal at all times to the replacement value of materials delivered and labor performed. The policy shall be insured jointly in the names of the contractor and the Exchange.

c) The contractor also agrees to purchase from sources referred to in clause "a" above the following insurance coverage with limits complying with state or military installation requirements, whichever is greater, where the contract is performed:

1. Worker's Compensation and Employer's Liability Insurance.
2. Worker's Compensation Insurance [Defense Base Act (DBA)]: The Contractor shall (i) provide to Contractor employees/personnel, before commencing performance under this contract, such workers' compensation insurance or security as the Defense Base Act (42 U.S.C. 1651, et seq.) requires and (ii) continue to maintain it until performance is completed. The Contractor shall insert, in all subcontracts under this contract to which the Defense Base Act applies, a clause similar to this clause (including this sentence) imposing upon those subcontractors this requirement to comply with the Defense Base Act.
3. Automobile Bodily Injury and Property Damage Liability for vehicles operated in performance of this contract by the contractor's agents or employees on the military installation, whether or not owned by the contractor.

d) Contractor agrees to require that all subcontractors will purchase and maintain, at their expense in insurance company or companies acceptable to the Exchange, the following insurance and furnish the Exchange with certificates of insurance, evidencing that required coverage is in effect, no later than 10 days after award of contract and that not less than 30 days prior written notice will be given the Exchange in the event of modification, cancellation, or nonrenewal.

e) Worker's Compensation and Employer's Liability Insurance with minimum limits specified in subparagraph "a" above. Commercial General Liability Insurance with minimum limits specified in subparagraph "a" above. This insurance policy will be written on an "occurrence" basis. A policy written on a "claims made" basis is not acceptable.

f) Worker's Compensation Insurance [Defense Base Act (DBA)]: as specified in subparagraph "a" above.

g) Automobile Bodily Injury and Property Damage Liability Insurance as specified in subparagraph "a" above.

14) Additional Security

If any surety upon any bond furnished in connection with this contract becomes unacceptable to the Exchange, or if any such surety fails to furnish reports as to its financial condition from time to time as requested by the Exchange, or if the contract price is increased to such an extent that the penal sum of any bond becomes inadequate in the opinion of the contracting officer, the contractor shall promptly furnish such additional security as may be required from time to time to protect the interests of the Exchange or of persons supplying labor or materials in the prosecution of the work contemplated by this contract.

15) Conditions Affecting the Work

The contractor shall be responsible for having taken steps reasonably necessary to ascertain the nature and location of the work, and the general and local conditions, which can affect the work or the cost

thereof. Any failure by the contractor to do so will not relieve the contractor from responsibility for successfully performing the work without additional expense to the Exchange. The Exchange assumes no responsibility for any understanding or representations concerning conditions made by any of its officers or agents prior to the execution of this contract, unless such understanding or representations by the Exchange are expressly stated in the contract.

16) Site Investigation

The contractor acknowledges that the contractor has investigated and is satisfied as to the conditions affecting the work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, river stages, tides or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the work. The contractor further acknowledges that the contractor is satisfied as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Exchange, as well as from information presented by the drawings and specifications made a part of this contract. Any failure by the contractor to become familiar with the available information will not relieve the contractor from responsibility for estimating properly the difficulty or cost of successfully performing the work. The Exchange assumes no responsibility for any conclusions or interpretations made by the contractor on the basis of the information made available by the Exchange and/or military installation / base. In no event shall failure to inspect the site constitute grounds for a claim after contract award.

17) Differing Site Conditions

a) The contractor shall promptly, and before such conditions are disturbed, notify the contracting officer in writing of: (1) subsurface or latent physical conditions at the site differing materially from those indicated in this contract; or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this contract. The contracting officer shall promptly investigate the conditions, and if the contracting officer finds that such conditions do materially so differ and cause an increase or decrease in the contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly.

b) No claim of the contractor under this clause shall be allowed unless the contractor has given the notice required in subparagraph "a" above; provided, however, the time prescribed therefore may be extended by the contracting officer.

c) No claim by the contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.

18) Specifications And Drawings

a) The contractor shall keep at the work site a current copy of the drawings and specifications and shall at all times give the contracting officer access thereto. Anything mentioned in the specifications and not shown on the drawings or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. Figures marked on drawings shall in general be followed in preference to scale measurements. Large scale drawings shall, in general, govern small scale drawings. The contractor shall compare all drawings and verify before laying out the work and will be responsible for any errors which might have been avoided thereby. Further, the contractor shall check all drawings, figures and specifications immediately upon their receipt. In any case of discrepancy in the figures, drawings or specifications, the matter shall be promptly submitted to the contracting officer, who shall promptly make a determination in writing. Any adjustment by contractor without such a determination shall be at the contractor’s risk and expense. The contracting officer shall furnish from time to time such

detail drawings and other information as the contracting officer may consider necessary, unless otherwise provided.

b) Omissions from the drawings or specifications or mis-description of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the contractor from performing such omitted or mis-described details of work, but they will be performed as if fully and correctly set forth and described in the drawings and specifications.

c) In addition to the requirements of subparagraph "a" above, contractor hereby acknowledges receipt of all plans, drawings and specifications identified as Exhibits to this contract. Contractor agrees and admits that the said plans, drawings and specifications and particulars are sufficient for their intended purpose without any additional extra work, other than the work set forth thereby or necessarily inferred to be done from the general nature and tendency of the plans and descriptions. Plans and drawings remain the property of the Exchange and shall be returned upon completion of the work. Contractor shall not deviate from the drawings or specifications, or execute any extra work of any kind whatsoever, unless the same be authorized in writing by the contracting officer.

d) The contractor shall submit to the contracting officer for approval, with such promptness as to cause no delay in the contractor's own work or in that of any other contractor, copies of all shop or installation drawings and schedules required for the work of the various trades called for under the various headings of the specifications. Unless otherwise stipulated in the specifications, six copies of each such shop or installation drawing and schedule will be submitted. These drawings and schedules shall be complete and detailed. The contractor shall make any and all corrections required by the contracting officer, file with the contracting officer four corrected copies and furnish such other copies as may be needed. If the contractor considers any corrections indicated on the drawings to constitute a change to the contract drawings or specifications, notice as required under the clause entitled "Changes" will be given to the contracting officer. The contracting officer's approval of such drawings or schedules shall not be construed as a complete check, but will indicate only that the general method of construction and detailing is satisfactory. Approval of such drawings will not relieve the contractor of responsibility for the dimensions and design of adequate connections, details and satisfactory construction of all work.

e) During the progress of the job, the contractor shall keep a careful record at the job site of all changes and corrections from the details shown on the drawings. The contractor shall enter such changes and corrections on contract drawings promptly, but in no case later than on a weekly basis. The record drawings shall indicate, in addition to all changes and corrections, the actual location of all subsurface utility lines in order that the location of these lines and the appurtenances may be determined in the event the surface openings or indicators become covered or obscured. The record drawings shall show by offset dimensions two permanently fixed surface features at the end of each run including each change in direction. The average depth below the surface of each run shall also be recorded. At the time of beneficial occupancy of each structure or facility involved under this contract, the contractor shall submit to the contracting officer as-built prints showing the aforementioned data. If the contractor fails to maintain the record drawings as required herein, the contracting officer will deduct from the monthly progress payment an amount representing the estimated monthly cost of maintaining the record drawings and will continue deduction of the 10% retainage even after completion of the contract. In addition, final payment with respect to separately placed facilities or the contract as a whole will be withheld until proper as-built drawings have been furnished to the contracting officer.

f) Shop drawings for construction means drawings, submitted to the Exchange by the contractor, subcontractor or any lower tier subcontractor pursuant to a construction contract, showing in detail, (1) the proposed fabrication and assembly of structural elements and (2) the installation (i.e. form, fit and attachment details) of materials or equipment. The Exchange may duplicate, use and disclose in any manner and for any purpose shop drawings delivered under this contract. The subparagraph "f" shall be included in all subcontracts hereunder at any tier.

19) Base Lines and Grades

The contractor shall lay out the contractor's work from base lines and grades established by the Exchange and shall be responsible for all measurements in connection therewith. The contractor shall, at the contractor's own expense, furnish all stakes, templates, platforms, equipment and ranges and labor that may be required in setting and cutting, or laying out any part of the work. The contractor will be held responsible for the proper execution of the work to such lines and grades as may be established or indicated by the contracting officer, and all stakes or other marks thus established shall be preserved by the contractor until their removal is authorized by the contracting officer. The contracting officer will furnish, on request from the contractor, all location and limit marks reasonably necessary for the conduct of the work.

20) Performance Of Work by Contractor

The Contractor shall perform on the site, and with its own organization, work equivalent to at least 15 percent of the total amount of work to be performed under the contract. This percentage can be a combination of direct labor and materials cost excluding job-site supervision and overhead. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Exchange.

21) Contractor Supervision

a) At all times during construction, the contractor will have a qualified competent full-time job superintendent acceptable to the contracting officer on the job site. This superintendent will be granted full authority to act for the contractor in areas relating to performance of the contract by the contractor's and subcontractors' forces.

b) In addition to the superintendent, on contracts that exceed $1,500,000; the contractor will have one or more foremen from the contractor's own work force, as the number of trades working may dictate.

c) If the contractor fails to provide the project management as required by this clause the contracting officer may make a determination of the dollar value of the management and deduct this amount from the contract.

22) Materials and Workmanship

a) Unless otherwise specifically provided in this contract, all equipment, material and articles incorporated in the work covered by this contract are to be new and of the most suitable grade for the purpose intended. Unless otherwise specifically provided in this contract, reference to any equipment, material, article or patented process, by trade name, make or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition, and the contractor may, at the contractor's option, use any equipment, material, article, or process which, in the judgment of the contracting officer is equal to that named. The contractor shall furnish to the contracting officer for approval the name of the manufacturer, the model number and other identifying data and information respecting the performance, capacity, nature and rating of the machinery and mechanical and other equipment which the contractor contemplates incorporating in the work. When required by this contract or when called for by the contracting officer, the contractor shall furnish the contracting officer for approval, full information concerning the material or articles which the contractor contemplates incorporating the work. When so directed, samples shall be submitted for approval at the contractor's expense, with all shipping charges prepaid. Machinery, equipment, material and articles installed are used without required approval shall be at the risk of subsequent rejection.

b) Contractor shall not incorporate in the work any salvaged material except upon prior written approval of the contracting officer. If salvage material is accumulated during construction or installation, contractor shall adequately store and safeguard the same and shall not remove such material from the premises or site of the work without prior written consent of the contracting officer. Contractor

shall not acquire title to any such salvaged material except by prior written consent of the contracting officer.

c) Contractor warrants that no materials imported or produced with Economic Cooperation Act or Mutual Security Act funds in the country where the work is located will be used or incorporated in the construction work.

d) All work under this contract shall be performed in a skillful and workmanlike manner. The contracting officer may, in writing, require the contractor to remove from the work any employee the contracting officer deems incompetent, careless, undesirable for security reasons, or otherwise objectionable.

e) The contractor has sole responsibility for all such material and workmanship to include the restoration of any damaged work. The Exchange does not waive the right to require the fulfillment of all of the terms of the contract. Risk of loss shall be borne by the contractor until such time as the project is accepted by the Exchange.

23) Availability And Use of Utility Services

a) To the extent that work is being performed on a government facility or installation, the government will make available to the contractor, from existing outlets and supplies, all reasonably required amounts of utilities. The specifications of this contract will stipulate whether or not there will be a charge for utilities.

b) Where there is a charge for utilities used in performing work on a government facility or installation, each utility shall be paid for by the contractor at prevailing rates charged to the government. For those situations where the utility is produced by the government, the contractor will pay reasonable rates determined by the contracting officer.

c) The contractor shall carefully conserve utilities furnished from government sources. The contractor, at the contractor's own expense and in a workmanship manner satisfactory to the contracting officer, shall install and maintain all necessary temporary connections and distribution lines and, if necessary to determine charges, all meters required to measure the amount of each utility used; and shall remove the same prior to final acceptance of the construction.

24) Operation and Storage Areas

a) All operations of the contractor (including storage of materials) upon government premises shall be confined to areas authorized or approved by the contracting officer. No unauthorized or unwarranted entry upon, passage through, or storage or disposal of materials shall be made upon government premises. Government premises adjacent to the construction will be made available for use by the contractor without cost whenever such use will not interfere with other government uses or purposes.

b) Temporary buildings (storage sheds, shops, office, etc.) may be erected by the contractor upon government premises only with the approval of the contracting officer and shall be built with labor and materials furnished by the contractor without expense to the Exchange and will be removed at the contractor's expense upon the completion of the work. With the written consent of the contracting officer, such buildings and utilities may be abandoned and need not be removed.

c) The contractor shall, under directives prescribed by the contracting officer, use only established roadways or construct and use such temporary roadways as may be authorized by the contracting officer. Where materials are transported in the prosecution of the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State or local law or regulation. When it is necessary to cross curbing or sidewalks, protection against damage shall be provided by the contractor, and any damaged roads, curbing or sidewalks shall be repaired by, or at the expense of, the contractor.

25) Cleaning Up

The contractor shall at all times keep the project boundary / construction area, including storage areas used by contractor, adjoining premises, driveways and streets, free from accumulations of waste material

or rubbish, rank growth of grass and weeds. Prior to completion of the work, remove any rubbish, tools, scaffolding, equipment and materials not the property of the Exchange from and about the premises. Upon completion of the construction, the contractor shall leave the work and premises in a clean, neat and workmanlike condition satisfactory to the contracting officer. If contractor does not attend to such cleaning promptly upon request, Exchange may cause such cleaning to be done by others and charge the cost to contractor.

26) Protection Of Material and Work

The contractor shall at all times take care to protect and preserve all materials, supplies and equipment of every description and all work performed. All reasonable requests of the contracting officer to enclose or specially protect such property will be complied with. If, as determined by the contracting officer, material, equipment, supplies and work performed are not adequately protected by the contractor, such property may be protected by the Exchange and the cost thereof charged to the contractor or deducted from any payments due to the contractor.

27) Protection Of Existing Vegetation, Structure, Utilities and Improvements

a) The contractor will preserve and protect all existing vegetation such as trees, shrubs and grass on or adjacent to the site of work which is not to be removed and which does not unreasonably interfere with the construction work. The contractor will be responsible for unauthorized cutting or damaging of trees and shrubs, including damage due to careless operation of equipment, stockpiling of materials, or tracking of grass areas by equipment. The contractor will be liable for or may be required to replace at its own expense all vegetation not protected and preserved as required herein that may be destroyed or damaged.

b) The contractor will protect from damage all existing improvements or utilities at or near the site of the work, and on adjacent property of a third party, and will repair or restore any damage to such facilities resulting from acts or omissions of contractor, the contractor's agents, employees, subcontractors or representatives. If the contractor fails or refuses to repair any such damage promptly, the contracting officer may have the necessary work performed and charge the cost thereof to the contractor.

28) Accident Prevention

a) In order to provide safety controls for protection to the life and health of employees and other persons; for prevention of damage to property, materials, supplies and equipment; and for avoidance of work interruptions in the performance of this contract, the contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation and will also take or cause to be taken such additional measures as the contracting officer may determine to be reasonably necessary for the purpose.

b) The contractor will maintain an accurate record of and will immediately report to the contracting officer in the manner and on the forms prescribed by the contracting officer, exposure data and all accidents resulting in death, traumatic injury, occupational disease and/or damage to property, materials, supplies and equipment incident to work performed under this contract.

c) The contracting officer will notify the contractor of any noncompliance with the foregoing provisions and the action to be taken. The contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the contractor or contractor's representative at the site of the work, shall be deemed sufficient for the purpose. If the contractor fails or refuses to comply promptly, the contracting officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop order shall be made the subject of claim for extension of time or for excess costs or damages by the contractor.

d) Compliance with the provisions of this clause by subcontractors will be the responsibility of the contractor.

e) Prior to commencement of the work, the contractor will meet in conference with representatives of the contracting officer to discuss and develop mutual understandings relative to administration of the overall safety program.

29) Schedule and Progress

a) The contractor shall within five days or within such time as determined by the contracting officer, after date of commencement of work, prepare and submit to the contracting officer for approval, a practicable schedule showing the order in which the contractor proposes to carry on the work, the date on which the contractor will start the several salient features (including purchasing of materials, plant and equipment) and the contemplated dates for completing the same. The contractor shall submit to the contracting officer at the end of each week a brief written report of the percentage of work accomplished for each work element during that week, or at such other intervals of time as may be established by the contracting officer. If the contractor fails to submit the required progress schedule(s) and progress reports, the contracting officer may withhold approval of progress payment estimates until such time as the contractor submits required schedules and reports.

b) The contractor shall furnish sufficient work forces, construction plant, and equipment and shall work such hours, including night shifts, overtime operations, and Sunday and holiday work, as may be necessary to ensure the prosecution of the work in accordance with the approved progress schedule. If, in the opinion of the contracting officer, the contractor falls behind the progress schedule, the contractor shall take such steps as may be necessary to improve the contractor's progress, and the contracting officer may require the contractor to increase the number of shifts, and/or overtime operations, days of work and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained, all without additional costs to the Exchange.

c) Failure of the contractor to comply with the requirements of the contracting officer under this provision shall be grounds for determination by the contracting officer that the contractor is not prosecuting the work with such diligence as will ensure completion within the time specified. Upon such determination, the contracting officer may terminate the contractor's rights to proceed under the clause of this contract entitled "Termination for Default--Damages for Delay--Time Extensions."

30) Inspection And Acceptance

a) *Definition.* "Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.

b) The contractor shall, (1) maintain an adequate inspection system and perform such inspections as will assure that the work performed under the contract conforms to contract requirements, and (2) maintain and make available to the Exchange adequate records of such inspections.

c) Exchange inspections and tests are for the sole benefit of the Exchange and do not—

1. Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;
2. Constitute or imply acceptance; or
3. Affect the continuing rights of the Exchange after acceptance of the completed work under this clause.

d) The work will be conducted under the general direction of the contracting officer and is subject to inspection and test by the contracting officer's appointed inspectors at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract. No inspector is authorized to change any provision of the specifications without written authorization of the contracting officer, nor shall the presence or absence of an inspector relieve the contractor from any requirements of the contract. The Exchange shall have the right to reject defective material and workmanship and require its correction and replacement. Contractor shall without charge, correct rejected workmanship and replace rejected material with proper material. Contractor shall promptly segregate and

remove rejected material from the premises. If the contractor fails to proceed at once with replacement of rejected material and/or the correction of defective workmanship, the Exchange may, (1) by contract or otherwise, replace such material and/or correct such workmanship and charge the cost thereof to the contractor, or (2) terminate the contractor's right to proceed as provided for in Clause 41 herein and the contractor and the surety being liable for any damage to the same extent as provided in said Clause 41 for termination thereunder.

e) The contractor shall furnish promptly, without additional charge, all facilities, labor and materials reasonably needed for performing such safe and convenient inspections and tests that may be required by the contracting officer. All inspections and tests by the Exchange shall be performed in such manner as to not unnecessarily to delay the work. Special, full size, and performance tests shall be performed as described in this contract. The contractor shall be charged with any additional cost of inspection when materials and workmanship are not ready at the time inspection is requested by the contracting officer or when reinspection or retest is necessitated by prior rejection. If, however, such work is found to meet the requirements of the contract, that actual cost of additional services necessarily involved in the examination and reconstruction plus 10% shall be allowed the contractor. Additionally, if completion of the work has been delayed, the contractor shall request and be granted a suitable extension of time on account of the additional work involved.

f) Upon completion of the work, contractor shall notify the Exchange. Upon receipt of such notice, the Exchange shall have a reasonable time within which to inspect the work for compliance with the plans, specifications and drawings. Such inspection may, at request of contractor, be accomplished in conjunction with contractor's representatives. Upon completion of the inspection, the Exchange shall execute a certificate of inspection and acceptance. The certificate shall expressly state any exceptions covering incomplete or deficient work.

g) Acceptance shall be final and conclusive except as regards to latent defects, departures from specific requirements of the contract, and the specifications and drawings made a part thereof, fraud, or such gross mistakes as amounts to fraud. Nothing contained in this paragraph shall in any way restrict the Exchange's rights under any warranty.

31) Other Contracts

The Exchange may undertake or award other contracts for additional work, and the contractor shall fully cooperate with such other contractors and Exchange or government employees and carefully adapt scheduling and performing the work under this contract to accommodate the additional work as may be directed by the contracting officer. The contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or by Exchange or government employees.

32) Exchange-Furnished Property

a) The Exchange shall deliver to the contractor, for use in connection with and under the terms of this contract, the property described as Exchange-Furnished property in the Schedule or Specifications, together with such related data and information as the contractor may request and as may reasonably be required for the intended use of such property (hereinafter referred to as "Exchange-furnished property"). The delivery or performance dates for the supplies or services to be furnished by the contractor under this contract are based upon the expectation that Exchange furnished property suitable for use (except for such property furnished "as is") will be delivered to the contractor at the times stated in the Schedule of Specifications or, if not so stated, in sufficient time to enable the contractor to meet such delivery or performance dates. In the event that Exchange-furnished property is not delivered to the contractor by such time or times, the contracting officer shall, upon timely written request made by the contractor, make a determination of the delay, if any, occasioned the contractor thereby, and shall equitably adjust the delivery or performance dates or the contract price, or both, and any other contractual provision affected by any such delay, in accordance with the procedures provided for in the clause of this contract entitled "Changes." Except for Exchange-furnished property furnished "as is," in the event the Exchange-furnished property is received by the contractor in a condition not suitable for the intended use

the contractor shall, upon receipt hereof, notify the contracting officer of such fact and, as directed by the contracting officer, either (1) return such property at Exchange' expense or otherwise dispose of the property, or (2) effect repair or modifications. Upon the completion of "(1)" or "(2)" above, the contracting officer upon written request of the contractor shall equitably adjust the delivery or performance dates or the contract price, or both, and any other contractual provision affected by the rejection or disposition, or the repair or modification, in accordance with the procedures provided for in the clause of this contract entitled "Changes." The foregoing provisions for adjustment are exclusive and the Exchange shall not be liable to suit for breach of contract by reason of any delay in delivery of Exchange-furnished property or delivery of such property in a condition not suitable for its intended use.

b) Changes in Exchange-Furnished Property.

1. By notice in writing, the contracting officer may, (a) increase / decrease the property provided or to be provided by the Exchange under this contract, or (b) substitute other Exchange-owned property for property to be provided by the Exchange, or to be acquired by the contractor for the Exchange, under this contract. The contractor shall promptly take such action as the contracting officer may direct with respect to the removal, shipping or disposal of property covered by such notice.

2. In the event of any increase / decrease in or substitution of property pursuant to subparagraph "b (l)" above, or any withdrawal of authority to use property provided under any other contract or lease, which property Exchange has agreed in the Schedule or Specifications, to make available for the performance of this contract, the contracting officer, upon written request of the contractor, shall equitably adjust such contractual provisions as may be affected by the increase / decrease, substitution or withdrawal, in accordance with the procedures provided for in the "Changes" clause of this contract.

c) Title. Title to all property furnished by the Exchange shall remain in the Exchange. In order to define the obligations of the parties under this clause, title to each item of facilities, special test equipment and special tooling (other than that subject to a "Special Tooling" clause) acquired by the contractor for the Exchange pursuant to this contract shall pass to and vest in the Exchange when its use in the performance of this contract commences, or upon payment therefore by the Exchange, whichever is earlier, whether or not title previously vested. All Exchange-furnished property, together with all property acquired by the contractor title to which vests in the Exchange under this paragraph, is subject to the provisions of this clause and is hereinafter collectively referred to as "Exchange property." Title to Exchange property shall not be affected by the incorporation or attachment thereof to any property not owned by the Exchange, nor shall such Exchange property, or any part thereof, be or become a fixture or lose its identity as personal property by being attached to any real property.

d) Use of Exchange Property. Exchange property shall, unless otherwise provided herein or approved by the contracting officer, be used only for the performance of this contract.

e) Risk of Loss. Unless otherwise provided in this contract, the contractor assumes the risk of, and shall be responsible for, any loss of or damage to Exchange property provided under this contract upon its delivery to the contractor or upon passage of title thereto to the Exchange as provided in subparagraph "c" hereof, except for reasonable wear and tear and except to the extent that such property is consumed in the performance of this contract.

f) Access. The Exchange and any persons designated by it, shall at all reasonable times have access to the premises wherein any Exchange property is located, for the purpose of inspecting the Exchange's property.

g) Restoration of Contractor's Premises. Unless otherwise provided herein, the Exchange is not responsible for restoration of the contractor’s premises and the Exchange:

1. may abandon any Exchange property in place, and thereupon all obligations of the Exchange regarding such abandoned property shall cease; and

2. shall not be under any duty or obligation to restore or rehabilitate, or to pay the costs of the restoration or rehabilitation of the contractor's plant or any portion thereof which is affected by the abandonment or removal of any Exchange property.

33) Changes

a) The contracting officer may, at any time, without notice to the sureties, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including but not limited to changes:

1. in the specifications (including drawings and designs);
2. in the method or manner of performance of the work;
3. in Exchange-furnished facilities, equipment, materials, services or site; or
4. directing acceleration in the performance of the work.

b) Any other written order or an oral order (which terms as used in this subparagraph "b" shall include direction, instruction, interpretation or determination) from the contracting officer, which causes any such change, shall be treated as a change order under this clause, provided that the contractor gives the contracting officer written notice stating the date, circumstances, and source of the order and that the contractor regards the order as a change order.

c) Except as herein provided, no order, statement or conduct of the contracting officer shall be treated as a change under this clause or entitle the contractor to an equitable adjustment hereunder.

d) If any change under this clause causes an increase or decrease in the contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Exchange is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

e) The Contractor must assert its right to an adjustment under this clause within 30 days after (1) receipt of a written change order under subparagraph “a” of this clause or (2) the furnishing of a written notice under subparagraph “b” of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Contracting Officer. The statement of proposal for adjustment may be included in the notice under subparagraph “b” of this clause.

f) No proposal by the contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.

34) Pricing of Adjustments

a) Pursuant to the clause entitled "changes" herein, when the contracting officer directs the contractor to perform changes that result in an increase in the cost to the contractor, the contracting officer will make an appropriate adjustment to the contract price. In no event shall any delays or extensions of time (other than suspensions of work covered by Clause 44) be construed as a reason or justification for payment of extra compensation to the contractor except as provided by this clause. The adjusted amount will only include reimbursement of actual and verifiable DIRECT (labor, material, supplies, major equipment rental, taxes, worker's compensation insurance for non-overhead personnel and payment bond premiums) cost directly attributable to the change, plus the indirect (overhead/profit) cost percentage factors below. Indirect costs will be reimbursed according to the nature, extent, and complexity of the work involved, but in no case will reimbursement exceed the following:

1. Percentage allowed:

	OVERHEAD	PROFIT	COMMISSION

To the contractor on work performed by other than his own forces	None	None	8%
To the contractor and/or the subcontractors for that portion of the work performed with THEIR RESPECTIVE FORCES	10%	8%	None

2. The above allowable percentages for indirect costs cover profit, commission and all home office and field Overhead (including but not limited to extended and unabsorbed overhead) expenses; insurance; (all except worker's compensation for non-overhead personnel); field and office supervisors, assistants and staff; field offices and storage or work shelters; small tools, estimating, engineering, coordination, expediting, purchasing, detailing, legal, accounting, data processing or other administrative expenses shop drawings, permits, and all other job burdens incidental to the trade.

3. No more than three (3) of the above percentages will be allowed on any change regardless of the number of subcontractor tiers involved. That is, the markup on work subcontracted will be limited to one (1) overhead and one (1) profit percentage in addition to the general contractor's commission. Commission is defined to include all field and office overhead and profit of the general contractor. Subcontractors are not allowed to take a commission, overhead or profit on work subcontracted by them.

4. On changes involving a net decrease in total contract price, the overhead, profit, and commission to be deducted will be negotiated based on the circumstances. Profit shall not be allowed the contractor for services that have not been delivered by a subcontractor.

5. For changes that involve an extension of time the contracting officer may consider alternative equitable adjustments for extended field conditions.

b) Itemized breakdowns will normally not be required for changes under $2,500 and not involving time extensions. The Exchange reserves the right to require cost breakdowns below $2,500 if deemed necessary by the contracting officer. The contractor will submit an itemized breakdown for each change that will include, but is not limited to, the following

1. Material and supplies - quantities and unit prices.
2. Equipment (refer to "e" below).
3. Labor costs - by trade.
4. Taxes - except Social Security Taxes.
5. Overhead.
6. Profit.
7. Commission.

c) If the proposal includes a time extension, a justification therefore shall also be furnished.

d) Any amount claimed for subcontracts shall be supported by a similar price breakdown.

e) The rates payable for equipment will not exceed the rates established in the Corps of Engineer's manual titled: "Construction Equipment Ownership and Operating Expenses Schedule" current edition for the region in which the work occurs.

35) Amendments

This contract may not be amended orally. Any amendment must be accomplished with the same formalities as are required for the execution of this contract.

36) Notification Of Debarment/Suspension Status

The Contractor shall provide immediate notice to the Contracting Officer in the event of being suspended, debarred or declared ineligible by any other Federal Department or agency, or upon receipt of a notice of proposed debarment from another Federal Department or agency during the performance of this contract.

37) Disputes

a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 7101-7109). Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

b) "Claim" as used in this clause means a written demand or written assertion by one of the contracting parties seeking the payment of money in a sum certain or other relief arising under or relating to this contract. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Contract Disputes Act.

c) A claim by the contractor shall be made in writing and, unless otherwise stated in this contract, submitted within six years after accrual of the claim to the contracting officer for a written decision. A claim by the Exchange against the contractor shall be made by a written decision by the contracting officer.

d) For contractor claims exceeding $100,000, the contractor shall submit with the claim, a signed certification that:

1. The claim is made in good faith;
2. Supporting data are accurate and complete to the best of the contractor's knowledge and belief, and
3. The amount requested accurately reflects the contract adjustment for which the contractor believes the Exchange is liable.

e) The claim must be executed by an individual with authority to bind the contractor.

f) The contracting officer will mail, or otherwise furnish, a written decision in response to a contractor claim, within the time periods specified by law. Such decision will be final and conclusive unless:

1. Within 90 calendar days from the date of contractor's receipt of the final decision, the contractor appeals the decision to the Armed Services Board of Contract appeals (ASBCA), or
2. Within 12 months from the date of contractor's receipt of the final decision, the contractor brings an action in the United States Court of Federal Claims.

g) Pending final resolution on any request for relief, claim, appeal, or action arising under or relating to this contract, contractor will proceed diligently with the performance of this contract and will comply with the contracting officer's decisions.

h) Submission of false claims to the Exchange is a violation of federal law and may result in civil and/or criminal penalties. If contractor cannot support all or part of its claim as a result of fraud or misrepresentation of fact, then in addition to other remedies or penalties provided for by law, contractor will pay the Exchange an amount equal to the unsupported part of the claim and all of the Exchange's costs attributable to reviewing that part of the claim.

38) Termination For Default-Damages for Delay-Time Extensions

a) If the contractor breaches any provision of this contract or refuses or fails to prosecute the work, or any separable part thereof, with such diligence as will ensure its completion within time specified in this contract, or any extensions thereof, or fails to complete said work within such time, the Exchange may, by written notice to the contractor, terminate the contractor’s right to proceed with the work or such part of the work as to which there has been delay. In such event, the Exchange may take over the work and prosecute the same to completion, by contract or otherwise, and may take possession of and utilize in completing the work such materials, appliances and plant as may be on the site of the work and necessary therefore. Whether or not the contractor's right to proceed with the work is terminated, the contractor and the contractor's sureties shall be liable for any damage to the Exchange resulting from the contractor's refusal or failure to complete the work within the specified time. Such damages will consist of, but not be limited to:

1. Loss of net profit on programmed retail sales for the period of time delayed beyond contract completion date.
2. Inspection costs for period of time delayed beyond contract completion date.

3. Travel and per diem costs of the Exchange employees for inspection visits beyond contract completion date.

4. Cost incurred for rescheduling delivery of Exchange-furnished equipment; i.e., storage costs incurred, moving charges incurred and/or increased cost of equipment due to delayed purchasing.

b) If fixed and agreed liquidated damages are provided in the contract and if the Exchange so terminates the contractor's right to proceed, the resulting damage will consist of such liquidated damages until such reasonable time as may be required for final completion of the work together with any increased costs occasioned by the Exchange in completing the work.

c) If fixed and agreed liquidated damages are provided in the contract and if the Exchange does not so terminate the contractor's right to proceed, the resulting damage will consist of such liquidated damages until the work is completed or accepted.

d) The contractor's right to proceed shall not be so terminated nor the contractor charged with the resulting damage if:

1. The delay in the completion of the work arises from unforeseeable causes beyond the control and without the fault or negligence of the contractor, including but not restricted to, acts of God, acts of the public enemy, acts of the U.S. Government in either its sovereign or contractual capacity, act of the Exchange, acts of another contractor in performance of a contract with the Exchange or the U.S. Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather, or delays of subcontractors or suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of both the contractor and such subcontractors or suppliers at any tier; and

2. The contractor, within 10 days from the beginning of any such delay (unless the contracting officer grants a further period of time before the date of final payment under the contract), notifies the contracting officer in writing of the causes of delay. The contracting officer shall ascertain the facts and the extent of the delay and extend the time for completing the work when, in the contracting officer’s judgment, the findings of fact justifies such an extension, and the contracting officer’s findings of fact shall be final and conclusive on the parties, subject only to appeal as provided in the "Disputes" clause of this contract.

e) If, after notice of termination of the contractor's right to proceed under the provisions of this clause, it is determined for any reason that the contractor was not in default under the provisions of this clause, or that the delay was excusable under the provisions of this clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to the "Termination for Convenience of the Exchange" clause of this contract.

f) The rights and remedies of the Exchange provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

39) Liquidated Damages

If the contractor fails to complete the work within the time specified in the contract, the contractor shall pay the Exchange liquidated damages pursuant to the clause titled, “Termination for Default – Damages for Delay – Time Extension”, the sum of $400 for each day of delay.

40) Nonwaiver of Defaults

Any failure by the Exchange at any time to enforce or require strict performance of any terms or conditions of this contract shall not constitute waiver thereof and shall not affect or impair such terms or conditions in any way or the Exchange's right at any time to avail itself of such remedies as it may have for any breach or breaches of such terms or conditions.

41) Termination For Convenience of The Exchange

a) The performance of work under this contract may be terminated by the Exchange in accordance with this clause in whole, or from time to time in part, whenever the contracting officer shall determine that such termination is in the best interest of the Exchange. Any such termination shall be affected by delivery to the contractor of a Notice of Termination specifying the extent to which

performance of work under the contract is terminated, and the date upon which such termination becomes effective.

b) After receipt of a Notice of Termination, and except as otherwise directed by the contracting officer, the contractor shall:

1. stop work under the contract on the date and to the extent specified in the Notice of Termination;

2. place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of such portion of work under the contract as is not terminated;

3. terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the Notice of Termination;

4. assign to the Exchange, in the manner, at the times, and to the extent directed by the contracting officer, all of the right, title and interest of the contractor under the orders and subcontracts so terminated, in which case the Exchange shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;

5. with approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

6. transfer title to and deliver to the Exchange, in the manner, at the times, and to the extent, if any, as directed by the contracting officer (a) the fabricated or unfabricated parts, work in process, completed work, supplies and other material produced as a part of, or acquired in connection with the performance of, the work terminated by the Notice of Termination, and (b) the completed or partially completed plans, drawings, information, and other property which, if the contract had been completed, would have been required to be furnished to the Exchange;

7. use its best efforts to sell, in the manner, at the times, to the extent, and at the price or prices directed or authorized by the contracting officer, any property of the types referred to in subparagraph "b (6)" above, provided, however, that the contractor:

a. shall not be required to extend credit to any purchaser

b. may acquire any such property under the conditions prescribed by and at a price or prices approved by the contracting officer; and provided further that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the Exchange to the contractor under this contract or shall otherwise be credited to the price or cost of the work covered by this contract or paid in such other manner as the contracting officer may direct;

8. complete performance of such part of the work as shall not have been terminated by the Notice of Termination; and

9. take such action as may be necessary, or as the contracting officer may direct, for the protection and preservation of the property related to this contract which is in the possession of the contractor and in which the Exchange has or may acquire an interest.

c) After receipt of a Notice of Termination, the contractor shall submit a termination claim to the contracting officer, in the form and with the certification prescribed by the contracting officer. Such claim shall be submitted promptly but in no event later than one year from the effective date of termination, unless one or more extensions in writing are granted by the contracting officer, upon request of the contractor made in writing within such one-year period or authorized extension thereof. However, if the contracting officer determines that the facts justify such action, the contracting officer may receive and act upon any such termination claim at any time after such one-year period of any extension thereof. Upon failure of the contractor to submit its termination claim within the time allowed, the contracting officer may determine, on the basis of information available, the amount, if any, due to the contractor by reason of the termination and shall thereupon pay to the contractor the amount so determined.

d) Subject to the provisions of subparagraph "c, " the contractor and the contracting officer may agree upon the whole or any part of the amount or amounts to be paid to the contractor by reason of

a total or partial termination of work pursuant to this clause, which amount or amounts may include a reasonable allowance for profit on work done: provided, that such agreed amount or amounts, exclusive of settlement costs, shall not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the contract price of work not terminated. The contract shall be amended accordingly, and the contractor shall be paid the agreed amount. Nothing in subparagraph "e" of this clause, prescribing the amount to be paid to the contractor in the event of failure of the contractor and the contracting officer to agree upon the whole amount to be paid to the contractor by reason of the termination of work pursuant to this clause, shall be deemed to limit, restrict, or otherwise determine or affect the amount or amounts which may be agreed upon to be paid to the contractor pursuant to this subparagraph "d."

e) In the event of the failure of the contractor and the contracting officer to agree, as provided in subparagraph "d", upon the whole amount to be paid to the contractor by reason of the termination of work pursuant to this clause, the Exchange, but without duplication of any amounts agreed upon in accordance with subparagraph "d", shall pay to the contractor the following amounts:

1. with respect to all contract work performed prior to the effective date of the Notice of Termination, the total (without duplication of any items) of:

a. the cost of such work; except that part of the cost of work which is attributable to overhead (including bonding and insurance costs) will not exceed 12% of the total of this amount.

b. the cost of settling and paying claims arising out of the termination of work under subcontracts or orders as provided in subparagraph "b(5)" above, exclusive of the amounts paid or payable on account of supplies or materials delivered or services furnished by the subcontractor prior to the effective date of the Notice of Termination of work under this contract, which amounts shall be included in the cost on account of which payment is made under subdivision "(a)" above; and a sum, as profit on subdivision "(a)" above, equal to two percent of that part of the cost determined under subdivision "(a)" which represents the cost of articles or materials delivered to the site but not yet incorporated in the project, as of the effective date of the Notice of Termination, plus a sum equal to eight percent of the balance of the amount determined under subdivision "(a)" above, except that the total of such sums shall not exceed six percent of the total of the cost of the work as determined under "(a)" above; however, no profit shall be allowed on that part of the cost of the work, if any, that represents any charges for interest or borrowing; and finally, if it appears that the contractor would have sustained a loss on the entire contract had it been completed, no profit shall be included or allowed under this subdivision "(c)" and an appropriate adjustment shall be made reducing the amount of settlement to reflect the indicated rate of loss; and

2. the reasonable cost of preservation and protection of property incurred pursuant to subparagraph "b (9)", hereof; and any other reasonable cost incidental to termination of work under this contract, including expense incidental to the determination of the amount due to the contractor as the result of the termination of work under this contract. The total sum to be paid to the contractor under subparagraph "e (1)" above shall not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the contract price of work not terminated.

3. Except for normal spoilage, and except to the extent that the Exchange shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the contractor as provided in subparagraph "e)1", the fair value, as determined by the contracting officer, of property which is destroyed, lost, stolen or damaged so as to become undeliverable to the Exchange, or to a buyer pursuant to subparagraph "b)7".

f) The contractor shall have the right of appeal under the clause of this contract entitled "Disputes," from any determination made by the contracting officer under subparagraphs "c", "e" or "h" hereof, except that if the contractor has failed to submit a claim within the time provided in subparagraphs "c" or "h" hereof and has failed to request extension of such time the contractor shall have no such right of appeal. In any case where the contracting officer has made a determination of the amount due under

subparagraphs "c", "e" or "h" hereof, the Exchange shall pay to the contractor the following: (1) if there is no right of appeal hereunder or if no timely appeal has been taken, the amount so determined by the contracting officer; or (2) if an appeal has been taken, the amount finally determined on such appeal.

g) In arriving at the amount due the contractor under this clause there shall be deducted: (1) all unliquidated partial or progress payments or other unliquidated payments on account theretofore made to the contractor, applicable to the termination portion of this contract; (2) any claim which the Exchange may have against the contractor in connection with this contract; and (3) the agreed price for, or the proceeds of sale of, any materials, supplies or other things acquired by the contractor or sold, pursuant to the provisions of this clause, and not otherwise recovered by or credited to the Exchange.

h) If the termination hereunder be partial, the contractor may file with the contracting officer a claim for an equitable adjustment of the price or prices specified in the contract relating to the continued portion of the contract (the portion not terminated by the Notice of Termination), and such equitable adjustment as may be agreed upon shall be made in such price or prices. Any claim by the contractor for an equitable adjustment under this clause must be asserted within 90 days from the effective date of the termination notice, unless an extension is granted in writing by the contracting officer.

i) The Exchange may from time to time, under such terms and conditions as it may prescribe, make partial payments and payments on account against cost incurred by the contractor in connection with the terminated portion of this contract whenever in the opinion of the contracting officer the aggregate of such payments shall be within the amount to which the contractor will be entitled hereunder. If the total of such payments is in excess of the amount finally agreed or determined to be due under this clause, such excess shall be payable by the contractor to the Exchange upon demand, together with interest computed at the rate of ten percent per annum, for the period from the date such excess payment is received by the contractor to the date on which such excess is repaid to the Exchange; provided, however, that no interest shall be charged with respect to any such excess payment attributable to a reduction in the contractor's claim by reason of retention or other disposition of termination inventory until 10 days after the date of such retention or disposition, or such later date as determined by the contracting officer by the reason of the circumstances.

j) Costs claims, agreed to, or determined pursuant to subparagraphs "c", "d", "e" and "h" hereto, shall be in accordance with Part 31 of the Federal Acquisition Regulation (FAR) as in effect on the date of this contract.

k) Unless otherwise provided for in this contract, or by applicable statute, the contractor shall, from the effective date of termination until the expiration of three years after final settlement under this contract, preserve and make available to the Exchange at all reasonable times at the office of the contractor, but without charge to the Exchange, all his books, records, documents and other evidence bearing on the costs and expenses of the contractor under this contract and relating to the work terminated hereunder, or, to the extent approved by the contracting officer, photographs, microphotographs or other authentic reproductions thereof.

42) Suspension Of Work

a) The contracting officer may order the contractor in writing to suspend, delay or interrupt all or any part of the work for such period of time as the contracting officer may determine to be appropriate for the convenience of the Exchange.

b) If the performance of work is suspended, delayed, or interrupted by an act of the contracting officer for an unreasonable period of time or by the contracting officer's failures to act within a reasonable time or constructive suspension which results in an increase in the specified construction period, an adjustment will be made for any increase in the cost of performance of this contract (excluding profit as set forth herein). However, no adjustment will be made under this clause for any suspension, delay or interruption to the extent (1) that performance would have been so suspended, delayed or interrupted by any other cause, including the fault or negligence of the contractor, or (2) for which an adjustment is provided for or excluded under any other provision of this contract.

c) The amount payable for home office overhead will not exceed the amount established by the following formula:

Amount of contract at award X (4%) _____ Performance period specified in contract at time of award	= Per Calendar Day home office overhead rate

d) The amount payable for field overhead will be based on the actual payrolls, costs of equipment made idle (the rate will not exceed rates established in the current version of the Corps of Engineers' manual titled "Construction Equipment Ownership and Operating Expenses Schedule") and by actual invoices reflecting cost. No overhead figure will be paid for small tools. If work is suspended, delayed, or interrupted in part the extended overhead will be prorated by the contracting officer based on the actual versus the planned progress considering the reason for suspension.

43) Payments

a) Payment By Electronic Funds Transfer (Oct 98). The following will apply for all payments made by the Exchange to the contractor under the terms of this contract.

1. Method of payment.

a. All payments by the Exchange under this contract shall be made by electronic funds transfer (EFT). The term ``EFT'' refers to the funds transfer and may also include the payment information transfer.

b. If the Exchange is unable to release payment by EFT, the Contractor agrees to either

(1) accept payment by check or some other mutually agreeable method of payment, or

(2) request the Exchange to extend the payment due date until such time as the Exchange can make payment by EFT.

2. The Exchange shall make payment to the Contractor using the EFT information provided by the contractor. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to Exchange, not less than thirty days prior to the effective date.

3. If the Contractor's EFT information in the Exchange database is incorrect the Exchange need not make payment to the Contractor under this contract until correct EFT information is entered into the Exchange database; and any invoice shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract.

4. If the Contractor has identified multiple payment receiving points in the Exchange database, and the Contractor has not Notified the Exchange of the payment receiving point applicable to this contract, the Exchange shall make payment to the first payment receiving point listed in the Exchange database.

5. The payment or disbursing office shall forward to the Contractor available payment information. The Exchange shall send the payment information to the remittance address contained in the Exchange database.

b) Progress Payments.

1. A contractor may submit no more than one request for progress payments each month. The original request must be sent to the contracting officer, and complete copies of the request, with all supporting documentation, must simultaneously be provided to the Exchange agents (specified by the contracting officer to perform contract surveillance, (e.g., on-site A/E inspector and A/E's home office), and to the contractor's surety(s) for contracts over $25,000.

2. To be considered proper for payment purposes, each progress payment request must: (a) be submitted on the American Institute of Architects (AIA) Application and Certificate of

Payment/Forms G702 and G702A, unless other forms are authorized in writing by the contracting officer. The monthly payment request must include the information specified on the authorized forms and must always include a breakdown of the total contract price, showing the price for each principal category of work and the percentage of completion of each category as of the date of payment request. Reasonable quantities of approved material delivered to the site for incorporation into the project may be considered in submitting a request for progress payment. The Exchange reserves the right to reject such material after payment is made for it in the event the material does not conform to contract requirements. If the contractor submits a request which includes material delivered to the site and if the Exchange pays (less retainage) for the material, title to 100% of the material included in the request will pass to the Exchange. Preparatory work and material delivered off-site cannot be considered in submitting a request for progress payment, unless the contracting officer gives the contractor written permission; (b) contain the complete mailing address where payment is to be sent, and the name, title, and phone number of the contractor's authorized representative; AND contain the following certification, signed by the contractor's authorized representative:

“I hereby certify, to the best of my knowledge and belief, that-
the amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;
payments to subcontractors and suppliers have been made from any previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of the Prompt Payment Act, Chapter 39, Title 31, United States Code; and
this request for payment does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.”
(Signature, Name, Title, and Date)

3. The contracting officer, or others on behalf of the contracting officer, may request additional information or evidence verifying the contractor's payment request before determining that a payment request is proper.

4. Any request for progress or final payment which is determined to be improper by the contracting officer will be mailed or otherwise returned to the contractor within 7 calendar days after receipt, with a statement identifying the defects in the request. In the event the Exchange takes more than 7 calendar days to return an improper request, the number of days available to the Exchange to make timely payment after it has received a corrected, proper request will be reduced by the number of calendar days over 7 which it took the Exchange to return the improper request.

5. Upon receipt of a proper request for progress payment, that is, a request which meets all procedural/format requirements set forth above, the contractor is entitled to receive a progress payment (less retainage) in accordance with the provisions in the Date of Payment paragraphs below. Nevertheless, even if a payment request is procedurally proper, the amount of any progress payment made as a result of a proper request is discretionary with the contracting officer, based upon the contracting officer’s reasonable evaluation of the quantity of work performed by the contractor, whether such work on the contact up to that point meets contract requirements, and other relevant factors. After receiving a procedurally proper request for progress payment, the contracting officer may determine to pay only that portion of the amount requested as should appropriately be paid.

a. The contracting officer may consider information from any source available in determining whether a request is proper and the amount which should be paid. If the contractor's

surety(s) fails to object to the contractor's request for progress payment within 7 calendar days, this will be construed as agreement by the surety(s) that the request accurately reflects progress on the job.

b. The contracting officer's determination to make payment pursuant to a request for progress payment does not release the contractor from the obligation to comply with all contract terms, nor does it imply "acceptance" of the work in terms of contract performance.

c) Retainage. Ten percent will be withheld as retainage from any net amount which the contracting officer determines is appropriate for a progress payment. The contracting officer may increase retainage if it appears the Exchange may have a claim against the contractor arising under the contract, pending final resolution or a contracting officer's final decision. When the work is substantially complete, the contracting officer may, at the contracting officer's discretion, retain any amount required for the protection of the Exchange and shall release the balance.

d) Final Payment. Final payment will be made after:

1. completion of all contract performance, including all punch list items;

2. submission of all manuals, warranties, as-built drawings, and other required submissions in acceptable form, as required by the contract specifications;

3. final inspection and acceptance by the Exchange; and

4. submission of a proper request for final payment with appropriate release of all claims against the U.S. Government and the Exchange arising under the contract, other than claims that have been filed in writing with the contracting officer and that are specifically excepted by the contractor from release. A proper request for final payment must meet the requirements set out above in paragraph a. for requests for progress payments and contain an additional certification that the requirements set our above in paragraph c. (l) through (3) have been met.

e) Date of Payment. Payment of progress payments and final payment will be made no later than 30 calendar days after receipt by the contracting officer of a proper request, as set out in the above paragraphs. The date of payment is the date on the check issued in payment or the date an electronic transfer is made.

f) Interest.

1. The Exchange will pay interest to the contractor as required by the Prompt Payment Act if the contractor complies with the above paragraphs but payment is made later than 30 days after receipt of a proper request for payment, provided that no interest is payable under the Prompt Payment Act for periods of time when there is a disagreement between the Exchange and the contractor over issues concerning compliance with the terms of the contract.

2. When interest is owed under the Prompt Payment Act, it will accrue beginning the day after the due date through the payment date, or until one year, or until the contractor files a proper certified claim under the Disputes Clause of the contract, whichever occurs first.

g) Unearned Amounts Paid to Contractor.

1. Contractor will pay interest to the Exchange as specified in the Prompt Payment Act for amounts requested and paid under the contract provisions, when the payment requested and paid exceeded the amount which the contractor was authorized to request under the contract.

2. Interest will be payable from the date of the Exchange payment until the overpayment is received from contractor, payment is made by the Exchange of a reduced amount reflecting the erroneous request for payment by contractor, or the contract performance deficiency is corrected, if appropriate.

h) Required Subcontract Clauses

1. Contractor agrees to include in each of its subcontracts for property or services, entered into for the purpose of performing this Exchange contract, the following subcontract clauses, as further specified in the Prompt Payment Act, 31 U.S.C. 3901, et seq., as amended:

a. a payment clause which obligates the contractor to pay all subcontractors, including materialmen, for satisfactory performance not later than 7 calendar days after receipt of

payment from the Exchange out of such amounts as are paid to the contractor under this Exchange contract;

b. an interest penalty clause which obligates the contractor to pay to each subcontractor an interest penalty for each payment not made in accordance with the payment clause for the time period and at the rate specified in the Prompt Payment Act; and

c. a clause requiring each subcontractor to include, in each of its subcontracts, payment and interest penalty clauses conforming to the same standards referenced in subsections a and b above and to require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor.

2. The Prompt Payment Act requires the Exchange to require the contractor to comply with additional requirements as set forth in the Act. Contractor promises to comply with these requirements, which include but are not limited to:

a. providing specified notices and requiring its subcontractors to provide such notices when payment is to be withheld by the contractor from a subcontractor or by a subcontractor from a lower-tier subcontractor;

b. providing specified notices and taking action, to include payment of interest to the Exchange, in the event that the contractor receives an unauthorized payment, as when the contractor receives payment for work which it later determines was not in accordance with the contract terms.

3. Nothing in this contract shall be deemed to entitle subcontractors, materialmen, or lower-tier subcontractors or materialmen to rights as third-party beneficiaries of the contract between the Exchange and the prime contractor. Exchange will incur no liability to subcontractors or materialmen of any tier in the event that the Exchange fails to pay the prime contractor, the prime contractor fails to pay subcontractors or materialmen, or subcontractors fail to pay lower-tier subcontractors or materialmen in accordance with the subcontract clauses required in paragraph g above.

44) Use And Possession Prior To Completion

a) Use and Possession Prior to Completion. The Exchange shall have the right to take possession of or use any completed or partially completed part of the work. Prior to such possession or use, the contracting officer shall furnish the contractor an itemized list of work remaining to be performed or corrected on such portions of the project as are to be possessed or used by the Exchange, provided that failure to list any item of work shall not relieve the contractor of responsibility for compliance with the terms of the contract. Such possession or use shall not be deemed an acceptance of any work under the contract.

b) While the Exchange has such possession or use, the contractor, notwithstanding the provisions of the clause of this contract entitled "Permits and Responsibilities," shall be relieved of the responsibility for the loss or damage to the work resulting from the Exchange's possession or use. If such prior possession or use by the Exchange delays the progress of the work, or causes additional expense to the contractor, an equitable adjustment in the contract price or the time of completion will be made and the contract shall be modified in writing accordingly.

45) Drug-Free Workplace

Contractor agrees to make a good faith effort to establish and maintain a drug-free workplace in connection with the performance of this contract. Consistent with the size and organization of its workforce, contractor may wish to consider taking the following or other appropriate actions in establishing a drug-free workplace: publicizing a drug-free workplace policy; initiating an employee drug awareness program or encouraging participation in existing community/installation programs; informing employees of the general availability of drug counseling programs.

46) Warranty Of Construction

a) In addition to any other warranties set out elsewhere in this contract, the contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect of equipment, material or design furnished, or workmanship performed by the contractor or any of

its subcontractors or suppliers at any tier. Such warranty shall continue for a period of one year from the date of final acceptance of the work, but with respect to any part of the work which the Exchange takes possession of prior to final acceptance, such warranty shall continue for a period of one year from the date the Exchange takes possession. Under this warranty, the contractor shall remedy at contractor's own expense any such failure to conform or any such defect. In addition, the contractor shall remedy at contractor's own expense any damage to Exchange or government owned or controlled real or personal property, when that damage is the result of the contractor's failure to conform to the contract requirements or any such defect of equipment, material, workmanship, or design. The contractor shall also restore any work damaged in fulfilling the terms of this clause. The contractor's warranty with respect to work repaired or replaced hereunder will run for one year from the date of such repair or replacement.

b) The Exchange shall notify the contractor in writing within a reasonable time after the discovery of any failure, defect, or damage.

c) Should the contractor fail to remedy any failure, defect, or damage described in subparagraph "a" above within a reasonable time after receipt of notice thereof, the Exchange shall have the right to replace, repair, or otherwise remedy such failure, defect, or damage at the contractor's expense.

d) In addition to the other rights and remedies provided by this clause, all subcontractors', manufacturers', and suppliers' warranties, express or implied, respecting any work and materials, shall at the direction of Exchange, be enforced by the contractor for the benefit of the Exchange. In such case if the contractor's warranty under subparagraph "a" above has expired, any suit directed by the Exchange to enforce a subcontractor's, manufacturer's or supplier's warranty shall be at the expense of the Exchange. The contractor shall obtain any warranties which the subcontractors, manufacturers or suppliers would give in normal commercial practice.

e) If directed by the contracting officer, the contractor shall require any such warranties to be executed in writing to either the Exchange or the government.

f) Notwithstanding any other provision of this clause, unless such a defect is caused by the negligence of the contractor or its subcontractors or suppliers at any tier, the contractor shall not be liable for the repair of any defects of material or design furnished by the Exchange nor for the repair of any damage which results from any such defect in Exchange-furnished material or design.

g) The warranty specified herein shall not limit the Exchange's right under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistake, or fraud.

h) Defects in design or manufacture of equipment specified by the Exchange on a "brand name and model" basis, shall not be included in this warranty. The contractor shall require any subcontractors, manufacturers or suppliers thereof to execute their warranties in writing directly to either the Exchange or the government as directed by the contracting officer.

47) Davis-Bacon Act

(Applicable to contracts in excess of $2,000 for construction within the United States)

a) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section l (b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of subparagraph "g." of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds or programs which cover the particular weekly period, are deemed to be constructively

made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed without regard to skill, except as provided in the clause entitled "Apprentices and Trainees." Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

b) The contracting officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

1. The work to be performed by the classification requested is not performed by a classification in the wage determination; and

2. The classification is utilized in the area by the construction industry; and

3. The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

c) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator of the Wage and Hour Division, or an authorized representative, will approve, modify or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30- day period that additional time is necessary.

d) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer to the Administrator for determination. The Administrator of the Wage and Hour Division, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs "c" or "d" of this clause, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

f) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

g) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

h) All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

i) By entering into this contract, the contractor certifies that neither he nor she nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded government contracts by virtue of the Davis-Bacon Act (29 CFR 5. 12(a)(1)). No part of this contract shall be

subcontracted to any person or firm ineligible for award of a government contract by virtue of the Davis-Bacon Act (29 CFR 5. 12(a)(1)). The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

j) Subparagraphs "a" through "i" of this clause shall apply to this contract to the extent that it is (1) a prime contract with the government subject to the Davis-Bacon Act, or (2) a subcontract also subject to the Davis-Bacon Act under such prime contract.

48) Contract Work Hours and Safety Standards Act - Overtime Compensation

(Applicable to contracts in excess of $2,000 for work performed in the United States, any U.S. territory, or the District of Columbia.)

This contract, to the extent that it is of the character to which the Contract Work Hours and Safety Standards Act (40 USC 327) applies, is subject to all applicable provisions of the Act and the regulations of the Secretary of Labor thereunder (29 CFR, Part 5).

a) Overtime Requirements: No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics will require or permit any such laborer or mechanic in any workweek to work in excess of 40 hours in such workweek on work subject to the provisions of the Contract Work Hours and Safety Standards Act unless such laborer or mechanic receives such compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of 40 hours in such workweek.

b) Violation; Liability for Unpaid Wages; Liquidated Damages: In the event of any violations of provisions of paragraph “a”, the contractor and any subcontractor responsible therefore will be liable to any affected employee for the unpaid wages. In addition, such contractor or subcontractor will be liable to the United States for liquidated damages. Such liquidated damages will be computed with respect to each individual laborer or mechanic, employed in violation of the provisions set forth in subparagraph "a", in the sum of $10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of the standard workweek of 40 hours with payment of the overtime wages required by paragraph “a.”

c) Withholding for Unpaid Wages and Liquidated Damages: The contracting officer will withhold from the contractor, from any monies payable on account of work performed by the contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of paragraph “b.”

d) Subcontracts: The contractor will insert paragraphs “a” through “d” of this provision in all subcontracts and will require their inclusion in all subcontracts of any tier.

e) Records: The contractor will maintain payroll records containing the information specified in 29 CFR 516.2(a). Such records will be preserved for 3 years from the completion of the contract.

49) Apprentices And Trainees

(Applicable to contracts in excess of $2,000 for construction within the United States)

a) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to an individual registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In

addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. When a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman's hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman's hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination of the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c) The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

50) Compliance With Copeland Act Requirements

(Applicable to contracts in excess of $2,000 for construction within the United States.)
The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

51) Payrolls And Basic Records

(Applicable to contracts in excess of $2,000 for construction within the United States)

a) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, the worker’s correct classification, hourly rates of wages paid (including rates of

contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section (b) 2(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under subparagraph "g" of the clause entitled "Davis-Bacon Act" that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section l (b) 2(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprenticeships and trainees, and the ratios and wage rates prescribed in the applicable programs.

b) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting officer if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the contracting officer. The payrolls submitted shall set out accurately all of the information required to be maintained under subparagraph "a" of this clause. The information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents, Government Printing Office. The contractor is responsible for the submission of copies of payrolls by all subcontractors.

c) Each payroll submitted shall be accomplished by a "Statement of Compliance," signed by the contractor or subcontractor or the contractor’s agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

1. That the payroll for the payroll period contains the information required to be maintained under subparagraph "a" of this clause and that such information is correct and complete;

2. That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR Part 3;

3. That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

d) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph "c" of this clause.

e) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

f) The contractor or subcontractor shall make the records required under paragraph "a" of this clause available for inspection, copying, or transcription by the contracting officer or the Department of Labor or their authorized representatives. The contractor and subcontractor shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the contracting officer may, after written notice to the contractor, take such action as may be necessary to cause suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

52) Withholding

(Applicable to contracts in excess of $2,000 for construction within the United States)
The contracting officer shall or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting officer may, after written notice to the prime contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

53) Subcontracts

(Applicable to contracts in excess of $2,000 for construction within the United States)

a) Within seven days after the award of any subcontract either by the contractor or his subcontractor, the contractor shall deliver to the contracting officer a statement setting forth the name and address of the subcontractor and a summary description of the work subcontracted. The contractor shall at the same time furnish a statement signed by the subcontractor acknowledging inclusion in his subcontract of the clauses of this contract entitled "Davis-Bacon Act," "Contract Work Hours and Safety Standards Act--Overtime Compensation, Apprentices and Trainees," "Payrolls and Basic Records," "Compliance With Copeland Act Requirements," "Withholding," "Subcontracts," "Contract Termination-Debarment" and "Disputes Concerning Labor Standards." The contractor or subcontractor shall insert these clauses and such other clauses as the contracting officer may by appropriate instructions require in any subcontracts. A clause requiring the subcontractors to include these clauses in any lower tier subcontracts is also required. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited above.

b) Required Subcontract Conditions. Contractor shall provide in all subcontracts in addition to those heretofore required, the following terms and conditions:

1. That all material and labor will be paid for by contractor only and not the Exchange;
2. Subcontractor will not attempt to hold Exchange liable in the event contractor defaults;
3. Subcontractor will not place in lien and waives a lien on all material and labor furnished to contractor and incorporated in the work on Exchange or government premises.

c) Nothing contained in this contract shall create any contractual relation between the subcontractor and the Exchange.

54) Contract Termination-Debarment

(Applicable to contracts in excess of $2,000 for construction within the United States.)
A breach of the contract clauses entitled "Davis-Bacon Act," "Contract Work Hours and Safety Standards Act-Overtime Compensation," "Apprentices and Trainees, Payrolls and Basic Records," may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

55) Disputes Concerning Labor Standards

(Applicable to contracts in excess of $2,000 for construction within the United States)
Disputes arising out of the labor standards provisions of the contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any contractor subcontractors) and the Exchange, the U.S. Department of Labor or the employees or their representatives.

56) Convict Labor

In connection with the performance of work under this contract, the contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, September 10, 1985 (18 USC 4082 [c] [2]) and Executive Order 11755, December 29, 1973, as amended by Executive Order 12608, September 9, 1987, and as further amended by Executive Order 12943, December 13, 1994.

57) Affirmative Action for Individuals with Disabilities

If the contract or the total of all orders issued during a calendar year equals or exceeds $10,000 and is not otherwise exempt, the contractor agrees to comply with the regulations of the Department of Labor and the Affirmative Action clause as set forth in Title 41, Code of Federal Regulation, Part 60-741, which are incorporated herein by reference.

58) Affirmative Action for Disabled Veterans And Veterans Of The Vietnam Era

If this contract equals or exceeds $25,000 and is not otherwise exempt, the contractor agrees to comply with the regulations of the Department of Labor and the Office of Federal Contract Compliance Program, and the Affirmative Action clause as set out in Title 41, Code of Federal Regulations, Part 60-250, which are incorporated herein by reference.

59) Notice To Prospective Subcontractors of Requirement For Certifications Of Nonsegregated Facilities

A Certification of Nonsegregated Facilities must be submitted prior to the award of a subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually or annually). (NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.)

60) Equal Opportunity

(Within this clause the United States is defined as the 50 states, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island)

a) If this contract exceeds $10,000 and is for work performed within the United States or exceeds $10,000 and is for work performed outside the United States and recruitment of workers within the United States is involved, during the performance of this contract, the contractor agrees as follows:

1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include but not be limited to the following: Employment, upgrading, demotion or transfer, recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation; selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this Equal Opportunity clause.

2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

3. The contractor will send to each labor union or representative of workers with which the contractor has a collective bargaining agreement or other contract or understanding a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this Equal Opportunity clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967, and of the rules, regulations and relevant orders of the Secretary of Labor.

5. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967, and by the rules, regulations and orders of the Secretary of Labor or pursuant thereto, and will permit access to the contractor's books, records and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

6. In the event of the contractor's noncompliance with the Equal Opportunity clause of this contract or with any of said rules, regulations or orders, this contract may be canceled, terminated or suspended in whole or in part, and the contractor may be declared ineligible for further government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.

7. The contractor will include the provisions of paragraphs "(1)" through "(7)" in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

b) Certification of Equal Employment Compliance. By acceptance of this contract, the contractor certifies that, to the best of its knowledge and belief up to the contract date, no written notice such as a show cause letter, a letter indicating probable cause or any other formal written notification citing specific deficiencies, has been recalled by the contractor from any Federal Government agency or representative thereof that the contractor or any of its divisions or affiliates or known first-tier subcontractors is in violation of any of the provisions of Executive Order 11246 of September 24, 1965, Executive Order 11375 of October 13, 1967, or rules and regulations of the Secretary of Labor (41 CFR, Chapter 60) and specifically as to not having an acceptable affirmative action compliance program or being in noncompliance with any other aspect of the Equal Employment Opportunity Program. It is further certified and agreed that should there be any change in the status of circumstances certified to above the contract date of any extension thereof the contracting officer cognizant of this contract will be notified promptly.

c) Contractor Certification of Nonsegregated Facilities. (Applicable to contracts exceeding $10,000 which are not exempt under Clause "a" above.) By acceptance of this contract, the contractor certifies that the contractor does not and will not maintain or provide for the contractor's employees any segregated facilities, and that the contractor will not permit employees to perform their services at any location, under the contractor's control, where segregated facilities are maintained. The contractor agrees that a breach of this certification is a violation of the Equal Opportunity clause of this contract. As used herein, the term "segregated facilities" means any waiting rooms, work areas, rest rooms, wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, religion, color, age or national origin, because of habit, local custom or otherwise. Contractor further agrees (except where subcontractors have similarly certified for specific time periods) to obtain identical certifications from proposed subcontractors prior to award of subcontracts exceeding $10,000 which are not exempt from the provisions of Equal Opportunity clauses, that the contractor will retain such

certificates; and that the contractor will provide the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods): NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES(SEP 91). A Certification of Nonsegregated Facilities must be submitted prior to the award of a subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually or annually). (NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.)

61) Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order-11246)

a) As used in these specifications:

1. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

2. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor or any person to whom the Director delegates authority;

3. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. "Minority" includes:

a. Black Americans (all persons having origins in any of the Black African racial groups not of Hispanic origin);

b. Hispanic Americans (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin; regardless of race);

c. Asian-Indian Americans (United States citizens whose origins are in India, Pakistan or Bangladesh).

d. Asian-Pacific Americans (United States citizens whose origins are in Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the U.S. Trust territory of the Pacific islands, the Northern Mariana Islands, Laos, Cambodia or Taiwan).

e. Native Americans (American Indians, Eskimos, Aleuts and native Hawaiians).

b) Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitation from which this contract resulted.

c) If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

d) The contractor shall implement the specific affirmative action standard provided in paragraphs "g (l)" through "g (16)" of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area

where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

e) Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

f) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

g) The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

1. Ensure and maintain a working environment free of harassment, intimidation and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents and other on-site supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

2. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of organizations' responses.

3. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the contractor may have taken.

4. Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or woman sent by the contractor, or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.

5. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources complied under "g (2)" above.

6. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

7. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed and disposition of the subject matter.

8. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to the discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.

9. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations such as the above, describing the openings, screening procedures and tests to be used in the selection process.

10. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.

11. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

12. Conduct, at least annually, an inventory and evaluation, at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

13. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations under these specifications are being carried out.

14. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

15. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

16. Conduct a review, at least annually, of all supervisors' adherence to and performance under the contractor's EEO policies and affirmative action obligations.

h) Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations "g (l)" through "g (l6)". The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under "g (1)" through "g (16)" of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.

i) A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goal for women generally, the contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

j) The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.

k) The contractor shall not enter into any subcontract with any person or firm debarred from government contracts pursuant to Executive Order 11246.

l) The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who falls to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended. (Para l FAR)

m) The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action stops, at least as extensive as those standards prescribed in paragraph "g" of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

n) The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the government and to keep records. Records shall at least include for each employee, the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper or laborer); dates of changes in statue, hours worked per week in the indicated trade, rate of pay and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

o) Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

62) Notice To Exchange of Labor Disputes

a) Whenever the contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the contractor shall immediately give notice thereof, including all relevant information with respect thereto, to the contracting officer.

b) The contractor agrees to insert the substance of this clause, including this paragraph "b" in any subcontract hereunder, except that each such subcontract shall provide that in the event its timely performance is delayed or threatened by actual or potential labor disputes, the subcontractor shall immediately notify the next higher tier subcontractor or prime contractor, as appropriate, of all relevant information with respect to such dispute.

63) Representatives

Contractor is fully responsible for the actions of all employees and contracted representatives. Books and records of contracted representatives are subject to examination and audit under the examination of records clause of the contract.

64) Restrictions On Purchases of Foreign Goods

a) Unless advance written approval of the contracting officer is obtained, the contractor shall not acquire, for use in the performance of this contract, any supplies or services originating from sources within or that were located in or transported from or through countries whose products are banned from importation into the United States under regulations of the Office of Foreign Assets Control, Department of the Treasury.

b) The contractor agrees to insert the provisions of this clause in all subcontracts hereunder.

65) Contractor's General Environmental Compliance

Contractor (and any subcontractor, agent or representative) shall comply with all applicable Federal, State, and local laws and regulations providing for environmental protection and pollution control and abatement. These include but are not limited to: the Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation and Liability Act, Toxic Substances Control Act, Federal Insecticide Fungicide and Rodenticide Act, Coastal Zone Management Act, Endangered Species Act, National Historic Preservation Act, Safe Drinking Water Act, Emergency Planning and Community Right-to-Know Act, Oil Pollution Act, Archeological Resources Protection Act, and Pollution Prevention Act. Contractor has the duty to determine for itself where such laws and regulations apply. Although the Contractor may request assistance from the Contracting Officer in delineating applicable environmental laws and regulations, Contractor has an independent responsibility to make its own determination and to do so in a timely fashion.

66) Fines Or Penalties for Environmental Non-Compliance

The Contractor shall be responsible for paying any fines or penalties assessed against the Exchange or the installation or the Army or Air Force for environmental violations resulting from acts or omissions of the contractor or its employees, subcontractors, or agents. This obligation is in addition to any fines or penalties that may be assessed against the contractor for the same conduct. Contractor may either reimburse these fines or penalties through the Contracting Officer, or with the consent of the installation environmental management office, conveyed through the Contracting Officer, the Contractor may pay such fines or penalties directly to the regulatory agency or agencies concerned.

67) Contractor’s Liability for Environmental Damages

Contractor agrees to hold harmless and indemnify the Exchange and the installation (which includes the Army, Air Force, or other Department of Defense component, as appropriate) for any and all damages of any kind resulting from environmentally harmful activities by the contractor, contractor's employees or agents or subcontractors. "Damages" includes but is not limited to personal injury, property damage (including diminution of value), or death, environmental restoration and response costs, natural resource damages, expert witness and attorney's fees, and reimbursement of any and all expenses incurred to obtain permits as a result of Contractor's failure to identify or obtain permits for itself or the Exchange or the installation.

68) Federal Compliance with Right-To-Know And Pollution Prevention Laws

Contractor will, upon request, provide the installation with information it may need to comply with Right-to-Know and pollution Prevention laws and relevant Executive Orders. Such information may include Material Safety Data Sheets or amounts of chemicals used, stored or disposed of.

69) Recycled Materials

Materials used in this contract shall be, to the greatest extent practicable and consistent with financial prudence, made of recycled materials or of materials that are recyclable.

70) Asbestos

Construction material containing asbestos will not be used.

71) Polychlorinated Biphenyl S (PCBs)

PCBs will not be used or included in this project.

72) Lead-Based Paint

Lead-based paint will not be used.

73) Ozone-Depleting Substances

a) Nothing in this contract shall be deemed to require the use of a Class I ozone-depleting substance. Should contractor believe such use is required, contractor shall obtain a written determination from the contracting officer before procuring or using such substance. Should contractor believe the contract requires the use of Class II ozone depleting substances, contractor shall call this to the attention of the contracting officer in writing and propose use of any suitable, environmentally preferable products known to the contractor before procuring or using any Class II ozone depleting substance. Subsection (d), below, is intended to apply only after the provisions of this subsection (a) are met.

b) “Class I substance”, as used in this clause, means any substance designated as class I by the Environmental Protection Agency (EPA)(40 CFR Part 82), including but not limited to chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform.

c) "Class II substance," as used in this clause, means any substance designated as class II by EPA (40 CFR Part 82), including but not limited to, hydrochlorofluorocarbons.

d) As required by 42 USC 7671j(b), c, and (d) and 40 CFR Part 82, Subpart E, the Contractor shall label products which contain class I or class II ozone-depleting substances or are manufactured with a process that uses class I or class II ozone-depleting substances, or containers of class I or class II ozone-depleting substances, as follows:

WARNING
Contains (or manufactured with, if applicable)_____ *_____, (a) substance(s) which harm(s) public health and the environment by destroying ozone in the upper atmosphere.” *The Contractor shall insert the name of the substance(s).

e) The contractor shall comply with the applicable requirements of Sections 608 and 609 of the Clean Air Act (42 USC 7671g, National Recycling and Emission Reduction Program and 7671h, Servicing of Motor Vehicle Air Conditioners) as each or all apply to the contract.

74) Contaminated Soil or Groundwater

Unless otherwise specified elsewhere in this contract, site has been inspected and is, consistent with best professional judgment, free of environmental contamination or pollution. However, unexpected conditions can always arise. Contractor or subcontractor personnel may encounter soil or groundwater that is suspected to be contaminated, either because of odors, colors, free liquids, or other suspicious conditions. Should this occur, contractor will cease further site-disturbing activity and immediately notify the base environmental office, and take necessary initial measures to protect workers, the site, and other personnel.

75) Unexploded Munitions

No munitions or munitions-related materials are known or expected to be present on site. However, should suspected munitions-type material be encountered, contractor will cease further site-disturbing activity and immediately notify the installation environmental office and receive advice before disturbing the questionable material.

76) Unexpected Artifacts or Relics

Should contractor employees in the course of site preparation or other work on this contract find unexpected historic or archeological remains, such as bones, arrow points, pottery remnants, foundations, or other evidence of previous uses of the site, contractor will cease further site-disturbing activity and immediately notify the installation environmental office and the contracting officer.

77) Choice Of Law and Forum

This Contract will be interpreted in accordance with the applicable federal laws of the United States. Disputes will be resolved in the applicable federal forum in the United States.

78) Privacy Act

a) The Contractor agrees to:

1. Comply with the Privacy Act of 1974 (the Act) and Department of Defense rules and regulations issued under the Act in the design, development, or operation of any system of records on individuals to accomplish an agency function when the contract specifically identifies --

a. The systems of records; and

b. The design, development, or operation work that the contractor is to perform;

2. Include the Privacy Act notification contained in this contract in every solicitation and resulting subcontract and in every subcontract awarded without a solicitation, when the work statement in the proposed subcontract requires the redesign, development, or operation of a system of records on individuals that is subject to the Act; and

3. Include this clause, including this subparagraph (3), in all subcontracts awarded under this contract which requires the design, development, or operation of such a system of records.

b) In the event of violations of the Act, a civil action may be brought against the Exchange when the violation concerns the design, development, or operation of a system of records on individuals to accomplish an Exchange function, and criminal penalties may be imposed upon the officers or employees of the Exchange when the violation concerns the operation of a system of records on individuals to accomplish an Exchange function. For purposes of the Act, when the contract is for the operation of a system of records on individuals to accomplish an Exchange function, the Contractor is considered to be an employee of the Exchange.

c) "Operation of a system of records," as used in this clause, means performance of any of the activities associated with maintaining the system of records, including the collection, use, and dissemination of records.

d) "Record," as used in this clause, means any item, collection, or grouping of information about an individual that is maintained by an agency, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and that contains the person's name, or the identifying number, symbol, or other identifying particular assigned to the individual, such as a fingerprint or voiceprint or a photograph.

e) "System of records on individuals," as used in this clause, means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.

f) The system or systems of records identified for this contract is/are: The system of records refers to information collected, compiled, and/or utilized to build a customer database for potential and/or current/follow-on services. Instruments used to collect information in written or electronic formats include, but are not limited to, application for services, verification of credit rating, customer inquiries/comments, data for invoicing current customers, change of address notifications, information used for marketing purposes, etc.

g) Subcontracting/outsourcing customer data outside CONUS is not acceptable for DoD Operational Security (OPSEC) purposes.

79) Advertisements

Contractor will not represent, in any manner, expressly or by implication, that products purchased under this contract are approved or endorsed by any element of the United States, including the Exchange. All contractor advertisements that refer to the Exchange or military exchanges will contain a statement that the advertisement was neither paid for nor sponsored, in whole, or in part, by the Exchange, the military exchange system, or the United States Government.

80) Personal Identity Verification of Contractor Personnel

This clause is to provide guidance concerning compliance with Homeland Security Presidential Directive (HSPD) 12 and Policy for Common Identification Standard for Contractors and Subcontractors when contract performance requires routine physical access to a Federally controlled facility and/or routine access to a Federally controlled information system. As processes and procedures could change over time, go to http://www.shopmyexchange.com , click on, “Doing Business”, click on the “Authorization to Enter

Military Installations" for the most up-to-date instructions. Questions should be directed to the Exchange HQ Chief of Staff, Force Protection (CS-FP) or your Contracting Officer.

a) After contract award and prior to performance on any Federal installation, the contractor shall comply with the local installation's personal identity verification procedures identified by that installation which implements HSPD-12 policy for a Common Identification Standard for Federal Employees and Contractors.

1. If the contractor employee is to work at only one site, the Exchange's contractors must follow local installation guidelines and directives concerning identification, access, and security requirements. These guidelines may vary from one installation to another and it is the contractor's responsibility to seek guidance concerning these issues from the Exchange Service Business Manager or General Manager.

2. If the contractor or their employees will access sensitive data or go to multiple DoD or access to multiple non-DoD facilities on a recurring basis for a period of 6 months or more (CONUS or OCONUS), they must obtain a Common Access Card (CAC) and will be required to submit a clearance package to CS-FP, no less than 30 days in advance of needed access. Authorization must be received from CS-FP before contractors can be issued a CAC card. CAC card will be issued after a thorough background check which includes the completion of a FBI fingerprint check with favorable results and submission of a National Agency Check with inquiries to the Office of Personnel Management (OPM) or a DoD determined equivalent investigation, you will then be directed to the nearest military installation where the card can be obtained.

b) The contractor shall insert this clause in all subcontracts when the subcontractor is required to have routine physical access to a Federally controlled facility and/or routine access to a Federally controlled information system.

c) The contractor is responsible for securing and returning to the issuing office all identification cards issued under these procedures (1) for all employees at the end of the contract; and (2) for individual employees no longer employed or no longer assigned to perform the Exchange contract.

d) As a reminder, any costs associated with the clearance process are the responsibility of the contractor.

81) Combating Trafficking In Persons

a) Definitions. As used in this clause—

1. "Coercion" means—

a. Threats of serious harm to or physical restraint against any person;

b. Any scheme, plan, or pattern intended to cause a person to believe that failure to perform an act would result in serious harm to or physical restraint against any person; or

c. The abuse or threatened abuse of the legal process.

d. Withholding any documents (e.g. passports, visas, IDs, etc.) that prevents or restricts the person to move freely. "Commercial sex act" means any sex act on account of which anything of value is given to or received by any person. "Debt bondage" means the status or condition of a debtor arising from a pledge by the debtor of his or her personal services or of those of a person under his or her control as a security for debt, if the value of those services as reasonably assessed is not applied toward the liquidation of the debt or the length and nature of those services are not respectively limited and defined.

2. "Employee" means an employee of the Contractor directly engaged in the performance of work under the contract who has other than a minimal impact or involvement in contract performance.

3. "Forced labor" means knowingly providing or obtaining the labor or services of a person—

a. By threats of serious harm to, or physical restraint against, that person or another person;

b. By means of any scheme, plan, or pattern intended to cause the person to believe that, if the person did not perform such labor or services, that person or another person would suffer serious harm or physical restraint; or

c. By means of the abuse or threatened abuse of law or the legal process.

4. “Involuntary servitude” includes a condition of servitude induced by means of—

a. Any scheme, plan, or pattern intended to cause a person to believe that, if the person did not enter into or continue in such conditions, that person or another person would suffer serious harm or physical restraint; or

b. The abuse or threatened abuse of the legal process.

5. “Severe forms of trafficking in persons” means----

a. Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or

b. The recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

6. “Sex trafficking” means the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act.

b) Policy. The United States Government and the Army and Air Force Exchange Service has adopted a zero-tolerance policy regarding trafficking in persons. Contractors and contractor employees shall not—

1. Engage in severe forms of trafficking in persons during the period of performance of the contract;

2. Procure commercial sex acts during the period of performance of the contract; or

3. Use forced labor in the performance of the contract.

c) Contractor requirements. The Contractor shall-----

1. Notify its employees of—

a. The United States Government's and the Army and Air Force Exchange Services’ zero tolerance policy described in paragraph (b) of this clause; and

b. The actions that will be taken against employees for violations of this policy. Such actions may include, but are not limited to, removal from the contract, reduction in benefits, or termination of employment; and

2. Take appropriate action, up to and including termination, against employees or subcontractors that violate the policy in paragraph (b) of this clause.

d) Notification. The Contractor shall inform the Contracting Officer immediately of—

1. Any information it receives from any source (including host country law enforcement) that alleges a contractor employee, subcontractor, or subcontractor employee has engaged in conduct that violates this policy; and

2. Any actions taken against Contractor employees, subcontractors, or subcontractor employees pursuant to this clause.

e) Remedies. In addition to other remedies available to the Army and Air Force Exchange Service, the Contractor's failure to comply with the requirements of paragraphs (c), (d), or (f) of this clause may result in—

1. Requiring the Contractor to remove a contractor employee or employees from the performance of the contract;

2. Requiring the Contractor to terminate a subcontract;

3. Suspension of contract or fee payments;

4. Loss of award fee, consistent with the award fee plan, for the performance period in which the Army and Air Force Exchange Service determined Contractor non-compliance;

5. Termination of the contract for default or cause, in accordance with the termination clause of this contract; or

6. Suspension or debarment.

f) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (f), in all subcontracts.

g) Mitigating Factor. The Contracting Officer may consider whether the Contactor had a Trafficking in Persons awareness program at the time of the violation as a mitigating factor when determining remedies. Additional information about Trafficking in Persons and examples of awareness programs can be found at the website for the Department of State's Office to Monitor and Combat Trafficking in Persons at http://www.state.gov/g/tip.

82) Green Clause

The Exchange encourages contractors/vendors to embrace, establish and promote environmentally "Green Initiatives". We look to the contractor to accomplish this by:

a) Where possible, utilize environmentally friendly products.

b) Where possible, promote energy-efficiency and water conservation.

c) Where possible eliminate/reduce the production or generation of hazardous waste and the need for special material processing (including special handling, storage, treatment and disposal)

83) Increasing the Minimum Wage for Federal Contractors

(For Contracts covered by the SCA or DBA, applicable at the thresholds specified in those statutes or the FLSA, exceed the micro-purchase threshold) Executive Order 14026 – Increasing the Minimum Wage for Federal Contractors, and its implementing regulations, including the applicable contract clause, are incorporated by reference into this Contract as if fully set forth in this Contract. The full text of the contract clause in Appendix A to Part 23 is located at: https://www.federalregister.gov/d/2021-25317/p-1027.

84) Establishing Paid Sick Leave for Contractors

(Applicable to construction contracts/orders in excess of $2,000.) Executive Order 13706 - Establishing Paid Sick Leave for Federal Contractors, and its implementing regulations, including the applicable contract clause, are incorporated by reference into this contract as if fully set forth in this contract. The full text of the contract clause in Appendix A to 29 CFR Part 13 is published at https://www.gpo.gov/fdsys/pkg/FR-2016-09-30/pdf/2016-22964.pdf#page=126.

85) Exchange Contractor Performance Evaluations

The Exchange depends on the professional services of our General Contractors (GC) and Architecture and Engineering (A/E) firms to build $200M worth of new construction and renovation work annually. To maintain a competent and dependable pool of superior performing contractors, Exchange project managers and contracting officers will evaluate how well our A/E and GC companies have performed and use this information to determine eligibility for future contract awards. The basic evaluation A/E evaluation criteria includes but is not limited to how well did the firm stay within project cost parameters, schedule, were Value Engineering Change Proposals submitted, and were there errors or omissions. The basic evaluation GC evaluation criteria includes but is not limited to how well did the construction contractor stay within proposed costs and schedule, were Value Engineering Change Proposals or other cost saving measures submitted, the quality of construction, and ability to manage the project effectively. Once a rating has been completed by the PM and CO the contractor will be asked for his/her input and the result will be maintained by the Exchange. Before future contract awards are made the Exchange will refer to these past performance ratings to ensure only quality contractors are considered for award or invited to respond to our request for proposals.

86) Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

a) The Offeror's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

b) The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for Minority Participation for Each Trade Per Year	Goals for Female Participation for Each Trade Per Year
Until further notice/ completion of contract	**18.2%**	**6.9%**

c) These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the cover area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

d) The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The fours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employee minorities and women evenly on each of its projects. The transfer of minority, female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

e) The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

f) As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is located in Christian County, Kentucky and is a Standard Metropolitan Statistical Area (SMSA).

87) Fire Protection

a) The Contractor shall at all times maintain good housekeeping practices to reduce the risk of fire damage and/or injury to workmen. All scrap materials, rubbish and trash shall be removed daily from in and about the building and shall not be permitted to be scattered on adjacent property.

b) Suitable storage space shall be provided for storing flammable materials and paints; no storage will be permitted in a building. Excess flammable liquids being used inside the building shall be kept in closed metal container.

c) The Contractor shall notify the Installation Fire Department whenever electric or gas welding or cutting is to be done. A fire extinguisher shall be available at each location where cutting or welding is being performed. Where electric or gas welding or cutting work is done, interposed shields or non-combustible material shall be used to protect against fire damage due to sparks and hot metal.

d) The Contractor shall provide fire extinguishers in accordance with the recommendations of NFPA Bulletin Nos.10 and 241. However, in all cases, a minimum of four fire extinguishers shall be available.

e) It is the Contractor's responsibility to notify the Installation Fire Department prior to deactivation of a fire alarm/protection system. When this approval is granted, the system shall be disconnected in such a manner that it can be restored back to service as soon as possible or at the end of Contractor's duty day. At no time shall a fire alarm system be left out of service overnight.

88) 2019 NDAA Section 889 Representations

Reference is made to Section 889 of Public Law 115-232 also known as the John S. McCain National Defense Authorization Act for Fiscal Year 2019: Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment (the 2019 NDAA). By virtue of its execution of the Contract or the commencement of performance pursuant to the Contract, Contractor represents, warrants and covenants as follows:

a) Contractor during performance of the Contract, will not provide telecommunications and video surveillance equipment or services prohibited in Section 889(a)(1)(A) of the 2019 NDAA (Section A);

b) During the performance of the Contract, will not provide telecommunications and video, in accordance with Section 889(a)(1)(B) of the 2019 NDAA (Section B), does not and will not use the prohibited telecommunications and video surveillance equipment or services, or use any equipment, system, or service that uses prohibited telecommunications equipment or services as a substantial or essential component of any system; unless the contracting officer has determined that a waiver applies. If during the performance of the Contract, Contractor identifies Contractor's use of telecommunications and video surveillance equipment or services, prohibited in Section A and Section B as a substantial or essential component of any system, or as critical technology as part of any system, or Contractor is notified of such by a subcontractor at any tier, Contractor shall notify the Contracting Officer within three business (3) days.

4. U.S. DEPT OF LABOR WAGE DETERMINATION

U.S. DEPARTMENT OF LABOR WAGE DETERMINATION LISTING				
Wage Determination No.	**Revision No.**	**Last Revision Date**	**Applicable Locality**	**Applicable County**
KY20230089	**1**	**13 January 2023**	**Fort Campbell, KY**	**Christian County**
SEE THE ACTUAL U.S. DOL WAGE DETERMINATION WEBSITE FOR COMPLETE DETERMINATION DOCUMENTS BY STATE AND COUNTY.				
https://sam.gov/search/?index=wd&page=1&pageSize=25&sort=-modifiedDate&sfm%5Bstatus%5D%5Bis_active%5D=true				

Instructions for Concessionaire/Contractor to access the wage determination(s) listed above.

a) Note the specific wage determination number listed in the section in the box above titled "Wage Determination No.".

b) Click on the link at the bottom of the box above which will take you to the government Wage Determination website.

c) Enter the wage determination number in the box titled "Wage Determination Number" under the "Filter By" section, then press the "Enter" button on your keyboard.

d) Click on the blue hyperlink to the Wage Determination in the Search Results to open/review the full wage determination document. There are options to download a softcopy of the document as well as to print a hardcopy.

If, for any reason Concessionaire/Contractor cannot obtain the wage determination directly from the DOL website, Concessionaire/Contractor shall request a copy from the Contracting Officer and notify the Contracting Officer of the reason they were not able to obtain the wage determination.

5. SIGNATURES

Contractor signature below certifies that the entity, its subsidiaries, affiliates, or any of its principals is not suspended, debarred, or otherwise prohibited from contracting with ANY governmental entity. Signature further certifies that the person signing below has full authority to bind the entity and the entity understands and accepts that if it is discovered at any time that any of the information provided is false, misleading, and/or incomplete, then the Exchange will have the right to immediately terminate the Contract.

AAFES SOURCING EVENT		**Exchange**	
Name		**Name**	**CHRISTIAN VILLAMIN**
Signature		**Signature**	
Title		**Title**	**Contracting Officer**
Date		**Date**	

DEPARTMENT OF LABOR WAGE RATE

1. All work performed under this contract is subject to the following Department of Labor Wage Rate Decision:

NUMBER	DATE	PAGES
KY20230089	13 January 2023	12

Subsequent modifications issued by the Department of Labor and as published in the Federal Register on a date prior to the date set for receipt of proposals will be incorporated into the contract by unilateral amendment. With submission of a proposal, the offeror agrees to comply with any such modifications published prior to the date set for receipt of proposals without adjustments in the offeror's cost proposal.

"General Decision Number: KY20230089 01/13/2023

Superseded General Decision Number: KY20220089

State: Kentucky

Construction Type: Building

County: Christian County in Kentucky.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at

after January 30, 2022:	least $16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2023
1	01/13/2023

BOIL0040-001 01/01/2021

	Rates	Fringes
BOILERMAKER	$ 37.60	27.49

ENGI0181-053 06/01/2021

	Rates	Fringes
POWER EQUIPMENT OPERATOR (Crane)	$ 34.99	17.85

CRANES WITH BOOM 150 FEET & OVER, INCLUDING JIB, SHALL RECEIVE $.75 ABOVE THE WAGE RATE; 250 FEET AND OVER, INCLUDING JIB, SHALL RECEIVE $1.50 ABOVE THE WAGE RATE. ALL CRANES WITH PILING LEADS WILL RECEIVE $.50 ABOVE THE WAGE, REGARDLESS OF BOOM LENGTH.

ENGI0181-054 06/01/2021

	Rates	Fringes
POWER EQUIPMENT OPERATOR (Drill)	$ 33.90	17.85

ENGI0181-079 06/01/2021

	Rates	Fringes
POWER EQUIPMENT OPERATOR (Loader)	$ 33.90	17.85

ENGI0181-080 06/01/2021

	Rates	Fringes
POWER EQUIPMENT OPERATOR (Forklift)	$ 33.90	17.85

ENGI0181-093 06/01/2021

	Rates	Fringes
POWER EQUIPMENT OPERATOR (Oiler)	$ 28.48	17.85

IRON0044-017 06/01/2021

	Rates	Fringes
IRONWORKER, ORNAMENTAL	$ 31.32	21,60

LABO0561-009 04/01/2022

	Rates	Fringes
LABORER (Mason Tender - Brick)	$ 26.39	17.55

LABO1445-002 06/01/2022

	Rates	Fringes
LABORER (Power Tool Operator)	$ 28.70	19.62

PAIN0156-004 05/11/2021

	Rates	Fringes
PAINTER: Spray	$ 27.55	18.10+A

FOOTNOTE A:
All Structures over 40? $0.75/ hour above base wage
All Structures over 75? $1.50/ hour above base wage
All Structures over 100? $2.50/ hour above base wage

PLUM0184-006 07/01/2021

	Rates	Fringes
PLUMBER	$ 37.16	19.03

PLUM0633-001 07/01/2022

	Rates	Fringes
PIPEFITTER	$ 33.97	19.30

ROOF0106-010 04/01/2020

	Rates	Fringes
ROOFER	$ 30.70	17.12

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* SFKY0669-002 01/01/2023

	Rates	Fringes
SPRINKLER FITTER	$ 39.52	23.17

SHEE0020-001 07/01/2014

	Rates	Fringes
SHEET METAL WORKER (HVAC Duct		

Installation Only).....	$ 29.45	19.29

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* UAVG-KY-0019 01/01/2019

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	$ 28.60	16.62

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* SUKY2015-028 06/02/2015

	Rates	Fringes
BRICKLAYER.....	$ 25.09	10.05
CARPENTER (Form Work Only).....	$ 25.20	7.12
CARPENTER, Excludes Form Work....	$ 21.68	7.20
CEMENT MASON/CONCRETE FINISHER...	$ 20.56	9.56
ELECTRICIAN.....	$ 30.50	9.21
IRONWORKER, REINFORCING.....	$ 27.31	16.86
IRONWORKER, STRUCTURAL.....	$ 25.41	7.63
LABORER: Common or General.....	$ 18.04	0.00
LABORER: Mason Tender - Cement/Concrete.....	$ 19.85	9.87
LABORER: Pipelayer.....	$ 15.00 **	4.08
OPERATOR: Backhoe/Excavator/Trackhoe.....	$ 28.01	7.59

OPERATOR: Bulldozer.....$ 24.51 12.72

OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....$ 22.52 4.00

OPERATOR: Roller.....$ 23.60 12.65

PAINTER (Brush and Roller).....$ 17.45 0.34

SHEET METAL WORKER, Excludes HVAC Duct Installation.....$ 36.24 6.89

TILE FINISHER.....$ 15.42 ** 7.24

TILE SETTER.....$ 20.96 0.00

TRUCK DRIVER: Dump Truck.....$ 23.60 8.03

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 ($16.20) or 13658 ($12.15). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours

they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were

prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described

in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

EXCHANGE REPRESENTATIVE:

GENERAL CONTRACTOR:

QUORUM ARCHITECTS:

ARMY AIR FORCE EXCHANGE SERVICE

IMAGE UPGRADE:

BURGER KING

BLDG #5705
FT. CAMPBELL, KY

ABBREVIATIONS

ACC	ACCESSIBLE
ACT	ACOUSTICAL CEILING TILE
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
ALUM	ALUMINUM
APPROX	APPROXIMATE
BLKG	BLOCKING
BOB	BOTTOM OF BEAM
BLDG	BUILDING
CAB	CABINET
CLG	CEILING
CLR	CLEAR/CLEARANCE
CMU	CONCRETE MASONRY UNIT
CTR	CENTER
C.L.	CENTER LINE
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CT	CERAMIC TILE
CW	COLD WATER
DEG	DEGREES
DTL	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DN	DOWN
DWG(S)	DRAWING(S)
EA	EACH
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION
ELEC	ELECTRICAL
EQUIP	EQUIPMENT
EQ	EQUAL
EXIST	EXISTING
EXP	EXPOSED
EXT	EXTERIOR
FC	FIXTURE CONTRACTOR
FFE	FINISH FLOOR ELEV
FOC	FACE OF CABINET
FOG	FACE OF GLAZING
FOS	FACE OF STUD
FRP	FIBERGLASS REINFORCED PANEL
FIO	FURNISHED & INSTALLED BY OWNER
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR
FLR	FLOOR
FS	FLOOR SINK
FT	FOOT/FEET
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GWB	GYPSUM WALL BOARD
HC	HOLLOW CORE
HDR	HEADER
HDWD	HARDWOOD
HDWR	HARDWARE
HM	HOLLOW METAL
HORZ	HORIZONTAL
HR	HOUR
HVAC	HEATING VENTILATING AIR CONDITIONING
HW	HOT WATER
ID	INSIDE DIAMETER
IF	INSIDE/INTERIOR FACE
INSUL	INSULATION
INFO	INFORMATION
JC	JOB CAPTAIN
LC	LICENSEE
LL	LANDLORD
MAX	MAXIMUM
MECH	MECHANICAL
MC	MECHANICAL CONTRACTOR
MEP	MECHANICAL, ELECTRICAL & PLUMBING
MFG	MANUFACTURER
MIN	MINIMUM
MLDG	MOULDING
MTL	METAL
NAT	NATURAL
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OA	OVER ALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OPNG	OPENING
PC	PLUMBING CONTRACTOR
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PM	PROJECT MANAGER
PT	PAINT
QT	QUARRY TILE
R	RADIUS
REF	REFERENCE
REQ'D)	REQUIRE(D)
REV	REVISED/REVISION
SC	SOLID CORE
SHT	SHEET
SIM	SIMILAR
SOL	SOLID
SPECS	SPECIFICATION(S)
SQ	SQUARE
SF	SQUARE FEET
SS	STAINLESS STEEL
STL	STEEL
STOR	STORAGE
SUSP	SUSPENDED
TEL	TELEPHONE
TEMP	TEMPORARY
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITE TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
WH	WATER HEATER
WD	WOOD
EF/CI	EXCHANGE FURNISHED/ CONTRACTOR INSTALLED
EF/EI	EXCHANGE FURNISHED/ EXCHANGE INSTALLED
CF/CI	CONTRACTOR FURNISHED/ CONTRACTOR INSTALLED
OCU	ORDER CONFIRMATION UNIT

GENERAL NOTES

1. GENERAL CONTRACTOR SHALL FIELD SURVEY THE LOCATION AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE AAFES AND ARCHITECT. ALL PROSPECTIVE GENERAL CONTRACTORS HAVE THE OPPORTUNITY TO SCHEDULE A SITE VISIT PRIOR TO BIDDING. CONTACT THE CONTRACTING OFFICER AND AAFES PROJECT MANAGER TO SCHEDULE DATE AND TIME OF SITE VISIT.
2. GENERAL CONTRACTOR SHALL COMPLETE ALL WORK AS INDICATED ON THESE PLANS, UNLESS OTHERWISE NOTED. CONTACT THE POST DDIV TO OBTAIN ALL AVAILABLE AS-BUILT DRAWINGS BEFORE THE BEGINNING OF CONSTRUCTION.
3. GENERAL CONTRACTOR SHALL OBTAIN PERMITS, APPROVALS, INSPECTIONS, CERTIFICATE FOR COMPLIANCE AND CERTIFICATE OF OCCUPANCY AS REQUIRED, UNLESS OTHERWISE NOTED. SEE NOTE 18.
4. GENERAL CONTRACTOR SHALL CHECK IN WITH AND COORDINATE ALL WORK WITH THE BASE DPW PROJECT MANAGER AND POST ENVIRONMENTAL.
5. GENERAL CONTRACTOR SHALL PROVIDE TEMPORARY CONSTRUCTION BARRICADES AND TEMPORARY POWER, LIGHT AND TELEPHONE IN ACCORDANCE WITH ALL REQUIREMENTS OF BASE / POST. GENERAL CONTRACTOR SHALL REMOVE ALL OF THESE ITEMS AT THE COMPLETION OF WORK. CONTRACTOR SHALL PROVIDE A TEMPORARY CONSTRUCTION FENCE AROUND ENTIRE PROJECT SITE.
6. GENERAL CONTRACTOR SHALL HAVE ENTIRE PROJECT SITE CLEANED UPON COMPLETION OF WORK BY A PROFESSIONAL CLEANING SERVICE. CONTRACTOR SHALL CLEAN AND SECURE ENTIRE PROJECT SITE ON A DAILY BASIS.
7. GENERAL CONTRACTOR SHALL MAINTAIN ON SITE AT ALL TIMES, ALL APPROVED & AS-BUILT DRAWINGS INCLUDING REVISIONS AND ADDENDA.
8. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY & OSHA PRECAUTIONS AND BASE SAFETY REQUIREMENTS DURING CONSTRUCTION.
9. GENERAL CONTRACTOR SHALL COMPLETE ALL WORK IN A NEAT AND PROFESSIONAL MANNER.
10. GENERAL CONTRACTOR SHALL PROVIDE A ONE (1) YEAR WARRANTY ON ALL WORK AND MATERIALS FROM DATE OF ACCEPTANCE BY AAFES. (ALSO SEE MECHANICAL SPECIFICATIONS FOR ADDITIONAL WARRANTY REQUIREMENTS,) GENERAL CONTRACTOR'S WARRANTY MUST ALSO INCLUDE LABOR WHEN MANUFACTURER'S WARRANTY IS "PARTS ONLY."
11. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE RECEIPT OF ALL AAFES SUPPLIED MATERIALS AND EQUIPMENT. GENERAL CONTRACTOR SHALL NOTIFY AAFES IF ANY MATERIALS OR EQUIPMENT HAS NOT ARRIVED AT THE JOB SITE IN A TIMELY MANNER. ALL SHIPMENTS SHALL BE INSPECTED UPON ARRIVAL FOR DAMAGES, SHORTAGES AND INCORRECT MATERIALS. ALL PROBLEMS SHALL BE REPORTED TO AAFES' PURCHASING DEPARTMENT IMMEDIATELY. GENERAL CONTRACTOR SHALL NOTIFY THE CARRIER IMMEDIATELY OF ALL DAMAGES AND/ORSHORTAGES AND OBTAIN A RECEIPT FOR SUCH. AT THE COMPLETION OF THE PROJECT, GENERAL CONTRACTOR SHALL NOTIFY OWNER'S PURCHASING DEPARTMENT OF ANY SURPLUS EQUIPMENT FOR PROPER DISPOSITION.
12. CONTRACTOR PERSONNEL SHALL HAVE VALID, CURRENT I.D.'s. EVERY VEHICLE OF THE CONTRACTOR SHALL OBTAIN A BASE PASS.
13. GENERAL CONTRACTOR SHALL COORDINATE ALL TRADES NECESSARY TO COMPLETE THE WORK OUTLINED IN THESE DOCUMENTS.
14. AT THE COMPLETION OF THE PROJECT, GENERAL CONTRACTOR SHALL PROVIDE ONE (1) EXTRA CARTON OF EACH CEILING TILE AND CERAMIC TILE USED.
15. DUE TO THE NATURE OF THE WORK, ALL DIMENSIONS SHOWN SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO BEGINNING CONSTRUCTION. SHOP DRAWINGS SHALL BE SUBMITTED TO ARCHITECT FOR APPROVAL PRIOR TO FABRICATION OR INSTALLATION OF ANY ITEM. FAILURE TO ADHERE TO THIS PROCEDURE SHALL PLACE FULL RESPONSIBILITY FOR ANY ERRORS DIRECTLY UPON THE CONTRACTOR.
16. ARCHITECT WILL NOT HAVE CONTROL OVER OR CHARGE OF AND WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, SINCE THESE ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY. ARCHITECT WILL NOT BE RESPONSIBLE FOR CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE ARCHITECT WILL NOT HAVE CONTROL OR CHARGE OF AND WILL NOT BE RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.
17. THERE ARE UNDERGROUND UTILITIES ON THE SITE NEAR OR IN THE AREA OF NEW CONSTRUCTION. CONTRACTOR TO OBTAIN AN APPROVED DIGGING PERMIT (AF FORM 103) PRIOR TO ANY SITE WORK. GENRAL CONTRACTOR TO CALL THE CES AND AAFES PM BEFORE STARTING ANY WORK.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING COMMUNICATIONS FACILITIES AND WILL BE RESPONSIBLE FOR REPAIR OF DAMAGED FACILITIES AT NO COST TO THE GOVERNMENT. IF ANY COMMUNICATIONS CABLES SHOULD BE DAMAGED, CALL THE BASE COMMUNICATION SQUADRON, POST DPW, AND AAFES PM.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THEIR OWN TELEPHONE SERVICE DURING CONSTRUCTION AT NO COST TO THE GOVERNMENT.
20. ALL DISCIPLINES (ARCHITECTURAL, ELECTRICAL, MECHANICAL, PLUMBING, FIRE SAFETY, ETC) HAVE INFORMATION THROUGHOUT THE ENTIRE SET OF DOCUMENTS (DRAWINGS AND SPECIFICATIONS).
21. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVISION AND INSTALLATION OF ALL WORK REQUIRED TO INSTALL ALL ITEMS AND WORK REGARDLESS OF LOCATION IN THE DRAWINGS OR SPECIFICATION IN WHICH THE INFORMATION IS INCLUDED.
22. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVISION AND WORK INDICATED IN THESE DRAWINGS UNLESS SPECIFICALLY NOTED FOR THESE ITEMS AND WORK TO BE PROVIDED OR INSTALLED BY OTHERS.
23. THE GENERAL CONTRACTOR IS ALSO RESPONSIBLE FOR ALL DEMOLITION, CUTTING, PATCHING, OR RESTORATION OF EXISTING MATERIALS REQUIRED TO INSTALL ALL ITEMS AND WORK INDICATED IN THE DOCUMENTS WHETHER OR NOT DEMOLITION IS INDICATED TO INSTALL THESE ITEMS AND WORK.
24. REFER TO SCI DRAWINGS IN THE SPECIFICATION, MEP DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL LIGHTING INFORMATION.
25. REFER TO SCI DRAWINGS FOR FLOOR AND WALL FINISHES AND LAYOUT U.N.O.
26. GC TO BE RESPONSIBLE FOR STORAGE, CLEANING OF EQUIPMENT TO BE REUSED.

SCOPE OF WORK

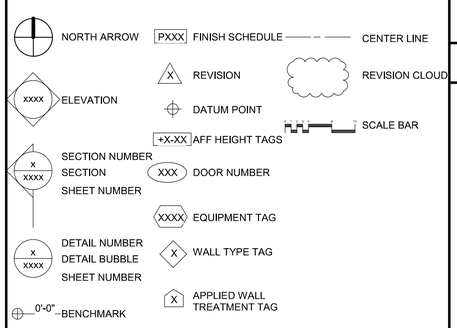
A. SCOPE OF IMPROVEMENTS FOR THE **SITE** INCLUDE
1. ADDITION OF DUAL DRIVE THROUGH - NEW PAVING, CURBS, LANDSCAPING, EQUIPMENT, ETC.
2. EXISTING MENU BOARDS ARE CURRENT AND WILL NOT BE REPLACED
3. NEW HEIGHT SENSOR BAR AND OCU CANOPY TO REPLACE THE EXISTING ITEMS WITH CURRENT GARDEN GRILL IMAGE.
4. NEW POLE MOUNTED SIGNAGE ON EXISTING FOUNDATIONS CONNECTED TO EXISTING POWER.
5. NEW DRIVE THROUGH DIRECTIONAL SIGNAGE ON EXISTING FOUNDATIONS CONNECTED TO EXISTING POWER.
6. SEAL AND RESTRIPE ENTIRE PARKING LOT.
7. TRASH ENCLOSURE REFINISHED TO MATCH NEW MATERIALS AND FINISHES.
8. PAINT BOLLARDS.

B. SCOPE OF IMPROVEMENTS FOR THE **EXTERIOR** INCLUDE:
1. REMODEL EXTERIOR TO NEW BURGER KING STANDARDS.
2. INSTALLATION OF NEW BURGER KING DESIGN STANDARD FINISHES ON THE EXTERIOR. CONSTRUCT / MODIFY EXISTING TOWER AND INSTALL NICHIHA FINISH. PAINT TO MATCH CURRENT SPECIFICATIONS.
3. REPLACE DOOR HARDWARE IF IT DOES NOT COMPLY WITH CURRENT BK STANDARDS.
4. REPLACEMENT OF THE EXISTING METAL AWNINGS AND ASSOCIATED LIGHTING WITH NEW FLAT CANOPIES AND LIGHTING.
5. NEW BUILDING SIGNAGE TO MATCH BURGER KING DESIGN STANDARDS.
6. PAINT ENTIRE DUMPSTER ENCLOSURE AND INSTALL NEW WOOD GATES ON EXISTING FRAME.
7. REPAIR OR REPLACEMENT OF RED LED LIGHT BANDS.
8. UPGRADE EXTERIOR LIGHTING WITH LED FIXTURES.

C. SCOPE OF IMPROVEMENTS FOR THE **DINING AREA** INCLUDE:
1. UPGRADE OF EXISTING FINISHES TO NEW BURGER KING STANDARD. REFER TO SCI DRAWINGS.
2. UPGRADE OF EXISTING SEATING AND FIXTURES TO NEW BURGER KING STANDARD. REFER TO SCI DRAWINGS.
3. UPGRADE OF EXISTING LIGHTING TO LED FIXTURES.
4. CEILING TREATMENT. REFER TO SCI DRAWINGS.
5. UPGRADE OF EXISTING FLOOR AND TILE TO NEW BURGER KING STANDARD. REF. SCI DRAWINGS.
6. REPLACE OR RELAMINATE EXISTING DOORS.
7. SUPPLY AND RETURN AIR DIFFUSERS / GRILLES TO BE REPLACED WITH NEW.
8. NEW LED EXIT LIGHTING AND EMERGENCY LIGHTING TO BE ADDED THROUGHOUT FACILITY.
9. PROVIDE POWER AND CABLE CONNECTIONS FOR FLAT TV IN DINING ROOM.

D. SCOPE OF IMPROVEMENTS FOR THE **SERVING AREA** AND SUPPORT AREA INCLUDE:
1. UPGRADE OF SERVING COUNTER TO NEW BURGER KING STANDARD.
2. REPLACEMENT OF SELECTED EQUIPMENT. EQUIPMENT IS TO REMIAN U.N.O.
3. POSSIBLE REPLACEMENT OF FLOOR TILE GROUT AND GROUT SEAL IN THE KITCHEN.
4. REPLACE OR RELAMINATE EXISTING DOORS. DOORS ARE TO REMAIN U.N.O.
5. SUPPLY AND RETURN AIR DIFFUSERS / GRILLES TO BE REPLACED WITH NEW.
6. NEW LED EXIT LIGHTING AND EMERGENCY LIGHTING TO BE ADDED THROUGHOUT FACILITY.
7. BRING NON ADA COMPLIANT TOILETS INTO COMPLIANCE.
8. EXISTING ANSUL SYSTEM TO REMAIN.
9. EXISTING GREASE INTERCEPTOR TO REMAIN.
10. EXISTING ELECTRICAL PANELS AND EQUIPMENT TO BE REUSED.
11. MECHANICAL: REPLACE BROILER HOOD FAN.

ARCHITECTURAL SYMBOLS



PROJECT TEAM

AAFES PROJECT MANAGER

NAME	SEUN OLATUNBOSUN
ADDRESS	3911 S. WALTON WALKER BLVD., DALLAS, TEXAS 75236-1598
PHONE	(214) 729-3637
EMAIL	olatunbosunom@aafes.com

ARCHITECT

NAME	QUORUM ARCHITECTS, INC.
ADDRESS	825 W. VICKERY BLVD. SUITE 100 FORT WORTH, TX 76104
CONTACT	DAVID LEE, AIA
PHONE	(817) 738-8095
FAX	(817) 738-9524

MEP ENGINEER

NAME	CONWAY-DUNCAN ENGINEERS
ADDRESS	3015 S FORT AVE, STE. D SPRINGFIELD MO 65807
CONTACT	CHRIS DUNCAN & KEVIN CONWAY
PHONE	(417) 881-1586 C: (417) 429-2037
eMAIL	kconway@conwayduncan.com cduncan@conwayduncan.com

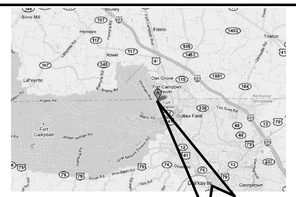
CIVIL

NAME	BAIRD, HAMPTON & BROWN, INC.
ADDRESS	6300 RIDGLEA PL # 700 FORT WORTH, TX 76116
CONTACT	BILL BAIRD
PHONE	(817) 338 - 1277
eMAIL	bbaird@bhbinc.com

APPLICABLE CODES

A. The general building code used for design of this project is the IBC (International Building Code) 2018. This code governs architecture, structure, mechanical, plumbing, civil, electrical and accessibility. This code should be used in conjunction with the following codes and standards:
1. NFPA (National Fire Protection Agency) 101-2018 – Life Safety Code
2. DoD UFC (Unified Services Criteria) as it applies to Exchange projects, including Force Protection issues.
3. NEC (National Electrical Code) 2017 and NFPA 70 – 2014 for design of electrical systems and support
4. IMC (International Mechanical Code) 2018, NFPA 90A – 2012 and NFPA 90B – 2012 for design of mechanical systems and support.
5. IPC (International Plumbing Code) 2018 for design of plumbing systems and support
6. IFGC (International Fuel Gas Code) 2018 and NFPA 54 – 2012 for design of natural gas utility lines
7. ADAAG (Americans with Disabilities Act Accessibilty Guidelines) for the implementation of design elements for the promotion of accessibility in the use of the project
8. Comply with all applicable Federal, State and local laws and regulations providing for environmental protection and pollution control.
9. Include the List of Required References and Technical Manuals as listed in AAFES Design Criteria Manual
10. Interior Environment and ventilation shall be designed per IES/ASHRAE standard 62-2010
11. Energy Conservation shall be designed for IES/ASHRAE standard 90.1.89 (DoD UFC 3-400-01, 05 July, 2002)

SITE LOCATION



VICINITY MAP

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FT. CAMPBELL	RESPONSIBILITY SCHEDULE						02/06/2023
	GC		EXCHANGE		EXCHANGE...		
BURGER KING	FURNISHED	INSTALLED	FURNISHED	INSTALLED	FURNISHED	INSTALLED	REMARKS
GENERAL REQUIREMENTS	X	X					SPEC, DIVISION 1
EXISTING CONDITIONS &...	X	X					SPEC, DIVISION 2
SITE DEMOLITION	X	X					PER DOCUMENTS
SITE CONSTRUCTION	X	X					PER DOCUMENTS
REMOVE SITE SIGNAGE	X	X					PER DOCUMENTS
NEW SITE SIGNAGE	X	X					GC TO PROVIDE...
NEW DRIVE-THRU SIGNAGE	X	X					
DRIVE-THRU DIGITAL MENU...	X	X					GC TO PROVIDE...
DRIVE-THRU LOOP DETECTOR		X			X		
ACCESSIBLE TOILET SIGNAGE		X			X		
NEW CONCRETE WALL &...	X	X					
PARKING LOT STRIPING	X	X					
LANDSCAPE INSTALL & TRIM	X	X					
NEW DRIVE-THRU WINDOWS	X	X					
REMOVE & STORE EXISTING...	X	X					PER DOCUMENTS
KITCHEN EQUIPMENT		X	X				
PLUMBING, HVAC, ELECTRICAL	X	X					PER DOCUMENTS
NEW INTERIOR LIGHTING							PER DOCUMENTS
AWNINGS & CANOPIES	X	X					
DATA WIRING & EQUIPMENT			X	X			PER DOCUMENTS
FURNITURE REMOVAL & DISPOSAL		X					
FURNITURE INSTALLATION		X	X				

EXCHANGE

quorum
Design. Spaces. People.
825 W. Vickery Blvd. #100
Fort Worth, Texas 76104
ph. (817) 738-8095
fx. (817) 738-9524
www.qarch.com

REGISTERED ARCHITECT DAVID J. LEE 10989 STATE OF TEXAS

David Lee. Digitally signed by David J. Lee Date: 2023.02.07 17:10:51-06'00'

DATE	REVISION NO. & DESCRIPTION	BY
10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY: JD, MP, TM
CHECKED BY: GL
CONSTRUCTION TYPE: II-B
STORE TYPE: RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
TITLE SHEET

DATE: 02/06/2023
AAFES Project Number: 2146-22-017
SCALE: 12" = 1'-0"
PROJECT NUMBER 22203
SHEET: G-001

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203 GENERAL CONDITIONS
203.1 General.
203.7 Detention and Correctional Facilities. In detention and correctional facilities, common use areas that are used only by inmates or detainees and security personnel and that do not serve holding cells or housing cells required to comply with 232, shall not be required to comply with these requirements or to be on an accessible route.

203.12 Animal Containment Areas. Animal containment areas that are not for public use shall not be required to comply with these requirements or to be on an accessible route.

204 PROTRUDING OBJECTS
204.1 General. Protruding objects on circulation paths shall comply with 307.

205 OPERABLE PARTS
205.1 General. Operable parts on accessible elements, accessible routs, and in accessible rooms and spaces shall comply with 309.

206 ACCESSIBLE ROUTES
206.1 General. Accessible routes shall be provided in accordance with 206 and shall comply with Chapter 4.

206.2. Where Required. Accessible routes shall be provided where required by 206.2.

206.2.1 Site Arrival Points. At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalk; and public transportation stops to the accessible building or facility entrance they serve.

206.2.2 Within a Site. At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.

206.2.3 Multi-Story Buildings and Facilities. At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities.

302 FLOOR OR GROUND SURFACES
302.1 General. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302.2 Carpet. Carpet or carpet tile shall be securely attached and shall have a firm sucshion, pad or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texute. Pile height shall be 1/2 inch (13mm) maximum. Exposed edges of capet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.

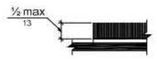

Figure 302.2 Carpet Pile Height

302.3 Openings. Openings in floor or ground surfaces shall not allow passage of a sphere more than 1/2" (13mm) diameter except as allowed in 407.4.3, 409.4.3, 410.4, 810.5.3, and 810.10. Elongated openings shall be placed so that the long dimension is perpendicular to the dominate direction of travel.

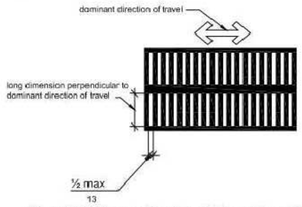

Figure 302.3 Elongated Openings in Floor or Ground Surfaces

303 CHANGES IN LEVEL
303.1 General. Where changes in level are permitted in floor or ground surfaces, they shall comply with 303.

303.2 Vertical Changes in level of 1/4 inch high maximum shall be permitted to be vertical.

Figure 303.2 Vertical Change in Level

303.3 Beveled. Changes in level between 1/4 inch high minimum and 1/2 inch high maximum shall be beveled with a slope not steeper than 1:2.

Figure 303.3 Beveled Change in Level

303.4 Ramps. Changes in level greater than 1/2 inch high shall be ramped, and shall comply with 405 or 406.

304 TURNING SPACE
304.1 General . Turning space shall comply with 304.

304.2 Floor or Ground Surfaces. Floor or ground surfaces of a turning space shall comply with 302. Changes in level are not permitted.

304.3 Size. Turning space shall comply with 304.3.1 or 304.3.2.

304.3.1 Circular Space. The turning space shall be a space of 60 inches diameter minimum. The space shall be permitted to include knee and toe clearance complying with 306.

304.3.2 T-Shaped Space. The turning space shall be a T-shaped space within a 60 inch square minimum iwth arms and base 36 inches wide minimum. Each arm of the T shall be clear of obstruction 12 inches minimum in each direction and the base shall be clear of obstructions 24 inches minimum. The space shall be permitted to include knee and toe clearance complying with 306 only at the end of either the base or one arm.

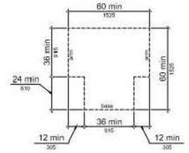

Figure 304.3.2 T-Shaped Turning Space

304.4. Door Swings. Doors shall be permitted to swing into turning spaces.

308 REACH RANGES
308.2 Forward Reach.

308.2.1 Unobstructed. Where a forward reach is unobstructed, the high forward reach shall be 48 inches maximum and the low forward reach shall be 15 inches minimum above the finish floor or ground.

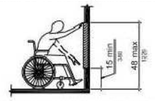

Figure 308.2.1 Unobstructed Forward Reach.

308.2.2 Obstructed High Reach. Where a high forward reach is over an obstruction, the clear floor space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The forward reach shall be 48 inches maximum where the reach depth is 20 inches maximum. Where the reach depth exceeds 20 inches, the high forward reach shall be 44 inches maximum and the reach depth shall be 25 inches.

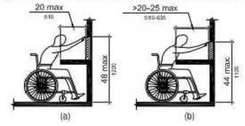

Figure 308.2.2 Obstructed High Forward Reach

308.3.2 Obstructed High Reach. Where a clear floor or ground space allows a parallel approach to an element and high side reach is over an obstruction, the height of the obstruction shall be 34 inches maximum and the depth of the obstruction shall be 24 inches maximum. The high side reach shall be 48 inches maximum for a reach depth of 10 inches maximum. Where the reach depth exceeds 10 inches, the high side reach shall be 48 inches for a reach depth of 24 inches maximum.

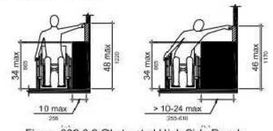

Figure 308.3.2 Obstructed High Side Reach

404 DOORS, DOORWAYS, AND GATES: SEE G004 FOR DIAGRAMS
404.1 General. Doors, doorways and gates that are on party of the accessible.

A. Front approach, pull side - 60" min. width & 18" min. beside strike edge
   Front approach, push side - 48" min. width & 0" beside strike edge
   (12" beside strike edge if door has both a closer and a latch)
B. Hinge side approach, pull side - 60" min. width; 36" min. beside strike edge
   or, - 54" min. width: 42" min. beside strike edge
   Hinge side approach push side - 42" min. width & 22" min. beside hinge edge
   (48" min. width if door has both a closer and a latch)
C. Latch side approach pull side - 48" min. width & 24" min. beside strike edge
   (54" min. width if door has a closer)
   Latch side approach push side - 42" min. width & 24" min. beside strike edge
   (48" min. width if door has a closer)

404.2.11 Vision Lights. Doors, gates, and side lights adjacent to doors or gates, containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one glazed panel located 43 inches maximum above the finish floor.

405 RAMPS
405.1 Ramps on accessible routes shall comply with 405
405.2 Slope. Ramps runs shall have a running slope not steeper than 1:12.

Table 405.2 Maximum Ramp Slope and rise for Existing Site, Building, and Facilities

405.5.3 Cross Slope. Cross slope of ramps run shall not be steeper than 1:48.

405.5 Clear Width. The clear width of a ramp run and where handrails are provided the clear width between handrails shall be 36 inches minimum.

405.6 Rise. The rise for any ramp run shall be 30 inches maximum.

405.7 Landings. Ramps shall have landing at the top and the bottom of each ramp run. Landings shall comply with 405.7.

405.7.1 Slope. Landings shall comply with 302. Changes in level are not permitted. Slopes not steeper than 1:48 shall be permitted.

405.8 Handrails. Ramp run with a rise greater than 6 inches shall have handrails complying with 505.

405.9 Edge Protection. Edge protection complying with 405.9.1 or 405.9.2 shall be provided on each side of ramps runs and at each side of ramp landings.

405.9.1 Extended Floor or Ground Surface. The floor or ground surface of the ramp run or landing shall extend 12 inches minimum beyond the inside face of a handrail complying with 505.

Figure 405.9.1 Extended Floor or Ground Surface Edge Protection

405.9.2 Curb or Barrier. A curb or barrier shall be provided that prevents the passage of a 4 inch diameter sphere, where any portion of the sphere is within 4 inches of the finished floor or ground surface.
Figure 405.9.2 Curb or Barrier Edge Protection

405.10 Wet Conditions. Landings subject to wet conditions shall be designed to prevent the accumulation of water.

406 CURB RAMPS

406.1 General. Curb ramps on accessible routes shall comply with 406, 405.2 and through 405.5 and 405.10.

406.2 Counter Slope. Counter slopes of adjoining gutters and road surfaces immediately adjacent to curb ramp shall not be steeper than 1:20. The adjacent surfaces at transitions at curb ramp to walks, gutters, and streets shall be at the same level.

406.3 Sides of Curb Ramps. Where provided, curb ramps flares shall not be steeper than 1:10.

406.4 Landings. Landings shall be provided at the tops of curb ramps. The landing clear length shall be 36 inches minimum. The landing clear width shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing.
Exception: In alterations, where there is no landing at the top of curb ramps, curb ramp flares shall be provided and shall not be steeper than 1:12.

501 GENERAL
501.1 Scope. The provisions of Chapter 5 shall apply where required by Chapter 2 or where referenced by a requirement in this document

502.1 General. Car and van parking spaces shall comply with 502. Where parking spaces are marked with lines width measurements of parking spaces and access aisles shall be made from the centerline of the markings.

502.2 Vehicle Spaces. Car parking spaces shall be 96 inches wide minimum and van spaces shall be 132 inches wide minimum, shall be marked to defin the width and shall have an adjacent access aisle complying with 502.3

Exception: Van parking spaces shall be permitted to be 96 inches wide minimum where the access aisle is 96 inches wide minimum.

502.3 Access Aisle. Access aisles serving parking spaces shall comply with 502.3. Access aisles shall adjoin an accessible route. Two parking spaces shall be permitted to share a common access aisle.

Advisory 502.3 Access Aisle. Accessible routes must connect parking spaces to accessible entrances. In parking facilities where the accessible route must cross vehicular traffic lanes, marked crossings enhance pedestrian safety, particularly for people using wheelchairs and other mobility aids. Where possible, it is preferable that the accessible route not pass behind parked vehicles.

Figure 502.3 Parking Spaces Access Aisle

502.3.1 Width. Access aisles serving car and van parking spaces shall be 60 inches wide minimum.

502.3.2 Length. Access aisles shall extend the full length of the parking spaces they serve.

502.3.3 Marking. Access aisles shall be marked so as to discourage parking in them.

502.3.4 Location. Access aisles shall not overlap the vehicular way. Access aisles shall be permitted to be placed on either side of the parking space, except for angles van parking spaces which shall have access aisles located on the passenger side of the parking space.

502.4 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are no permitted.

Exception: Slopes not steeper than 1:48 shall be permitted.

502.5 Vertical Clearance. Parking spaces for vans and access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches minimum.

502.6 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying in 702.7.2.1. Signs identifying van parking spaces shall contain the designation 'van accessible.' Signs shall be 60 inches minimum above the finish floor or ground surface measured to the bottom of the sign.

502.7 Relationship to Accessible Routes. Parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent accessible routes.

505 HANDRAILS
505.1 General. Handrails provided along walking surfaces complying with 403m required at ramps complying with 405, and required at stairs complying with 504 shall comply with 505.

Advisory 505.1 General. Handrails are required on ramp runs with a rise greater than 6 inches and on certain stairways - 504. Handrails are not required on walking surfaces with running slopes less than 1:20. However, handrails are required to comply with 505 when they are provided on walking surfaces with running slopes less than 1:20 - 403.6. Sections 505.2, 505.3, and 505.10 do not apply to handrails provided on walking surfaces with running slopes less than 1:20 as these sections only reference requirements for ramps and stairs.

505.2 Where Required. Handrails shall be provided on both sides of stairs and ramps.

Exception: In assembly areas, handrails shalll not be required on both sides of aisle ramps where a handrail is provided at either side or with the aisle width.

505.3 Continuity. Handrails shall be continuous within the full length of each stair flight or ramp run.. Inside handrails on switchback or dogleg stairs and ramps shall be continuous between flights or runs.

505.4 Height. Top of gripping surfaces of handrails shall be 34 inches minimum and 38 inches maximum vertically above walking surfaces, stair nosing, and ramp surfaces. Handrails shall be consistent height abe walking surfaces, stair nosings, and ramp surfaces.

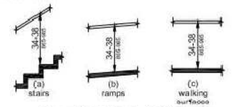

Figure 505.4 Handrail Height

505.5 Clearance. Clearance between handrails gripping surfaces and adjacent surfaces shall be 1 1/2 inches minimum.

505.6 Gripping Surface. Handrail gripping surfaces shall be continuous along their length and shall not be obstructed along their tops and sides. The bottoms of handrail gripping surfaces shall not be obstructed along their tops or sides. The bottoms of handrails gripping surfaces shall not be obstructed for more than 20 percent of their length. Where provided, horizontal projections shall occur 1-1/2 inches minimum below the bottom of the handrail gripping surface.

NOTE: NOT ALL CONDITIONS MAY APPLY TO THIS PROJECT.

EXCHANGE

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David Lee
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DATE	REVISION NO. & DESCRIPTION	BY
10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
ACCESSIBILITY GUIDELINES (ADA)

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE:	
PROJECT NUMBER	22203
SHEET:	G-002

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602 DRINKING FOUNTAINS
602.1 General. Drinking fountains shall comply with 307 and 602.

602.2 Clear Floor Space. Units shall have a clear floor or ground space complying with 305 positioned for a forward approach and centered on the unit. Knee and toe clearance complying with 306 shall be provided.

602.3 Operable Parts. Operable parts shall comply with 309.

602.4 Spout Height. Spout outlets shall be 36 inches maximum above the finish floor or ground.

602.5 Spout Location. The spout shall be located 15 inches minimum from the vertical support and 5 inches maximum from the front edge of the unit, including bumpers.

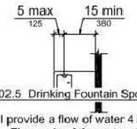

Figure 602.5 Drinking Fountain Spout Location

602.6 Water Flow. The spout shall provide a flow of water 4 inches high minimum and shall be located 5 inches maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are lcoated less than 3 inches of the front of the unit, the angle of the water stream shall be 30 degrees maximum. Where spouts are located between 3 inches and 5 inches maximum from the front of the unit, the agle of the water stream shall be 15 degrees maximum.

602.7 Drinking Fountains for Standing Persons. Spout outlets of drinking fountains for standing persons shall be 38 inches minimum and 43 inches maximum above the finish floor or ground.

603 Toilet and Bathing Rooms
603.1 General. Toilet and bathing rooms shall comply with 603.

603.2 Clearances. Clearances shall comply with 603.2.

603.2.1 Turning Space. Turning space complying with 304 shall be provided within the room.

603.2.2 Overlap. Required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap.

603.2.3 Door Swing. Door shall not swing into the clear floor space or clearance required for any fixture. Doors shall be permitted to swing into the required turning space.

Exceptions:
1. Doors to a toilet room or bathing room for a single occupant accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space or clearance provided the swing of the door can be a reversed to comply with 603.2.3.
2. Where the toilet room or bating room is for individual use and a clear floor space complying with 306.3 is provided with the room beyond the arc of the door swing, doors shall be permitted to swing into the clear floor space or clearance required for any fixture.

603.3 Mirrors. Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches maximum above the finish floor or ground. Mirrors not located above lavatories or counter tops shall be installed with the bottom edge of the reflecting surface at 35 inches maximum above the finish floor or ground.

603.4 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches minimum and 48 inches maximum above the finish floor.

604 Water Closets and Toilet Compartments
604.2 Location. The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches minimum to 18 inches maximum from the side wall or partition, except that the water closet shall be 17 inches minimum and 19 inches maximum from the side wall or partition in ambulatory accessible toilet compartment specified in 604.8.2. What closets shall be arranged or a left-hand or right-hand approach.

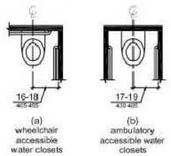

Figure 604.2 Water Closet Location

604.3.1 Size. Clearance around the water closet shall be 60 inches minimum measured from the side wall and 56 inches minimum measured from the perpendicular form the rear wall.

Figure 604.3.1 Size of Clearance at Water Closets

604.3.2 Overlap. The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, shelves, accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstruction shall be located with the required water closet clearance.

604.4 Seats. The seat height of a water closet above finish floor shall be 17 inches minimum and 19 inches maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

604.5 Grab Bars. Grab bars for water closets shall comply with 609. Grab bars shall be provided on the side wall closest to the water closet and on the rear wall.

Advisory 605.4 Grab Bars Exception 2. Reinforcement must be sufficient to permit the installation of rear & side wall grab bars to fully meet all accessibility requirements including, but not limited to required length, installation height, and structural strength.

604.5.1 Side Wall. The side wall grab bar shall be 42 inches long minimum, located 12 inches maximum from the rear wall and extending 54 inches minimum from the rear wall.
doors shall not swing into the minimum required compartment areas.

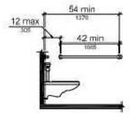

Figure 604.5.1 Side Wall Grab Bar at Water Closets

604.5.2 Rear Wall. The rear wall grab bar shall be 36 inches long minimum and extend from the centerline of the water closet 12 inches minimum on one side and 24 inches minimum on the other side.

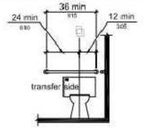

Figure 604.5.2 Rear Wall Grab Bar at Water Closets

604.6 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309. Flush controls shall be located on the open side of the water closets except in ambulatory accessible compartments complying with 604.8.2.

604.7 Dispensers. Toilet paper dispensers shall comply with 309.4 and shall be 7 inches minimum and 9 inches maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 15 inches minimum and 48 inches maximum above the finish floor and shall not be located behind grab bars. Dispensers shall not be a type that controls delivery or that does not allow continuous paper floor.
the toilet paper dispenser must be 48 inches maximum above the finish floor and the top of the gripping

Advisory 604.7 Dispensers. If toilet paper dispensers are installed above the side wall grab bar, the outlet of surface of the grab bar must be 33 inches minimum and 36 maximum above the finish floor.

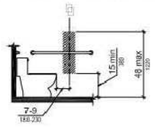

Figure 604.7 Dispenser Outlet Location

604.8 Toilet Compartments. Wheelchair accessible toilet compartments shall meet the requirements of 604.8.1 and 604.8.3 Compartments containing more than one plumbing fixture shall comply with 603. Ambulatory accessible compartments shall comply with 604.8.2 and 604.8.3.

604.8.1 Size. Wheelchair accessible compartments shall be 60 inches wide minimum measured perpendicular to the side wall and 56 inches deep minimum for floor mounted water closets measured perpendicular to the rear wall. Wheelchair accessible compartments for children's use shall be 60 inches wide minimum measured perpendicular to the side wall, and 59 inches deep minimum for the wall hung and floor mounted water closets measured perpendicular to the rear wall.

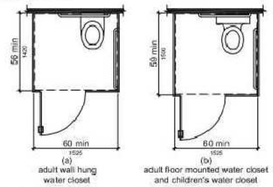

Figure 604.8.1.1 Size of Wheelchair Accessible Toilet Compartment

604.8.1.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404 except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches minimum. Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door shall be 4 inches maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches maximum from the front partition. The door shall be self-closing. A door pull complying with 404.27 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment areas.

604.8.1.3 Approach. Compartments shall be arranged for left-hand or right-hand approach to the water closet.

604.8.1.4 Toe Clearance. The front partition and at least one side partition shall provide a toe clearance of 9 inches minimum above the finish floor and 6 inches deep minimum beyond the compartment-side face of the partition, exclusive of partition support members. Compartments for children's use shall provide a toe clearance of 12 inches minimum above finish floor.

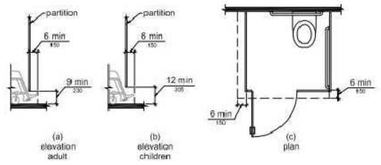

Figure 604.8.1.4 Wheelchair Accessible Toilet Compartment Toe Clearance

604.8.1.5 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.4.1 shall be provided and shall be located on the wall closest to the water closet. In addition, a rear-wall grab bar complying with 604.5.2 shall be provided.

604.8.2 Ambulatory Accessible Compartments. Ambulatory accessible compartments shall comply with 604.8.2

604.8.2.1 Size. Ambulatory accessible compartments shall have a depth of 60 inches minimum and a width of 35 inches minimum and 37 inches maximum.

604.8.2.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404, except that if the approach is to the latch side of the compartment door, clearance between the door aide of the compartment and any obstruction shall be 42 inches minimum. The door shall be self-closing. A door pull complying with 404.2.7 shall be places on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

604.8.2.3 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided on both sides of compartment.

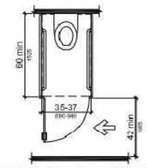

Figure 604.8.2 Ambulatory Accessible Toilet Compartment

604.8.3 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches minimum and 48 inches maximum above the finish floor.

604.9.1 Location. The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 12 inches minimum and 18 inches maximum and 19 inches maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Compartments shall be arranged for left-hand or right-hand approach to the water closet.

604.9.2 Clearance. Clearance around a water closet shall comply with 604.3

604.9.3. Height. The height of water closets shall be 11 inches minimum and 17 inches maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

604.9.4. Grab bars. Grab bars for water closets shall comply with 604.5.

604.9.5 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.2 and 309.4 and shall be installed 36 inches maximum above finish floor. Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with 604.8.2.

604.9.6 Dispensers. Toilet paper dispensers shall comply with 309.4 and shall be 7 inches minimum and 9 inches maximum m in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 14 inches minimum and 19 inches maximum above the finish floor. There shall be a clearance of 1 1/2 inches minimum below the grab bar. Dispensers shall not be a type that controls delivery or that does not allow continuous paper flow.

605 Urinals

605.2 Height and Depth. Urinals shall be the stall-type or the wall-hung type with the rim 17 inches maximum above the finish floor or ground. Urinals shall be 13 1/2 inches deep minimum measured from the outer face of the urinal rim to the back of the fixture.

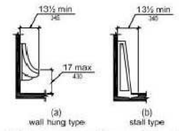

Figure 605.2 Height and Depth of Urinals

605.3 Clear Floor Space. A clear floor space or ground space complying with 305 positioned for forward approach shall be provided.

605.4 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.

606 Lavatories and Sinks

606.2 Clear Floor Space. A clear floor space complying with 305, positioned for a forward approach and knee and toe clearance complying with 306 shall be provided.

606.3 Height. Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches maximum above the finish floor or ground.

606.4 Faucets. Controls for the faucets shall comply with 309. Hand-operated metering faucets shall remain open for 10 seconds minimum.

606.5 Exposed Pipes and Surfaces. Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces.

608 Shower Compartments

608.2 Size and Clearances for Shower Compartments. Shower compartments shall have sizes and clearances complying with 608.2.

608.2.1 Transfer Type Shower Compartments. Transfer type shower compartments shall be 36 inches by 36 inches clear inside dimensions measured at the center points of opposing sides and shall have a 36 inch wide minimum entry on the face of the shower compartment. Clearance of 36 inches wide minimum by 48 inches long minimum measure from the control wall shall be provided.

Figure 608.2.1 Transfer Type Shower Compartments Size and Clearance

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STATE OF TEXAS

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10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
ACCESSIBILITY
GUIDELINES (ADA)

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE:	SHEET: G-003
PROJECT NUMBER	22203

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608.2.2 Standard Roll-in Type Shower Compartments. Standard roll-in type shower compartments shall be 30 inches wide minimum by 60 inches deep minimum clear inside dimensions measured at center points of opposing sides and shall have a 60 inches wide minimum entry on the face of the shower compartment.

608.2.2.1 Clearance. A 30 inch wide minimum by 60 inch long minimum clearance shall be provided adjacent to the open face of the shower compartment.

608.3.1 Transfer Type Shower Compartments. In transfer type compartments, grab bars shall be provided across the control wall and back wall to a point 18 inches from the control wall.

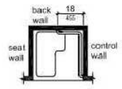


Figure 608.3.1 Grab Bars for Transfer Type Shower

608.4 Seats. A folding or non-folding seat shall be provided in transfer type shower compartments. Seats shall comply with 610.

608.5 Controls. Controls, faucets, and shower spray units shall comply with 309.4.

608.5.1. Transfer Type Shower Compartments. In transfer type shower compartments, the controls, faucets, and shower spray unit shall be installed on the side wall opposite the seat 38 inches minimum and 48 inches maximum above the shower floor and shall be located on the control wall 15 inches maximum from the centerline of the seat toward the shower opening.

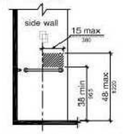


Figure 608.5.1 Transfer Type Shower Compartment Control Location

608.6 Shower Spray Unit and Water. A shower spray unit with a hose 59 inches long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided. The shower spray unit shall have an on/off control with a non-positive shut-off. If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars. Shower spray units shall deliver water that is 120 degrees maximum.

Advisory 608.6 Shower Spray Unit and Water. Ensure that hand-held shower spray units are capable of delivering water pressure substantially equivalent to fixed shower heads.

608.7 Thresholds. Thresholds in roll-in type shower shall be 1/2 inch high maximum with 303. In transfer type shower compartments, thresholds 1/2 inch high maximum shall be beveled, rounded, or vertical.

608.8 Shower Enclosures. Enclosures for shower compartments shall not obstruct controls, faucets, and shower spray units or obstruct transfer from wheelchairs onto shower seats.

610 Seats

610.3 Shower Compartment Seats. Where a seat is provided in a standard roll-in shower compartment, it shall be a folding type, shall be installed on the side wall adjacent to the controls, and shall extend from the back wall to a point within 3 inches of the compartment entry. Where a seat is provided in an alternate roll-in type shower compartment, it shall be a folding type, shall be installed on the front wall opposite the back wall , and shall extend from the adjacent side wall to a point within 3 inches of the compartment entry. In transfer-type showers, the seat shall extend from the back wall to a point within 3 inches of the compartment entry. The top of the seat shall be 17 inches minimum and 19 inches maximum above the bathroom finish floor. Seats shall comply with 610.3.1 or 610.3.2.

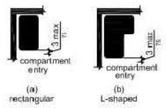


Figure 610.3 Extent of Seat

703 Signs

703.1 General. Signs shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.

703.2 Raised Characters. Raised characters shall comply with 703.2 and shall be duplicated in braille complying with 703.3. Raised characters shall be installed in accordance with 703.4.

703.2.1 Depth. Raised characters shall be 1/32 inch minimum above their background.

703.2.2 Case. Characters shall be upper case.

703.2.3 Style. Characters shall be sans serif. Characters shall not be italic, oblique, script, highly decorative or of other unusual forms.

703.2.4 Character Proportions. Characters shall be selected from fonts where the width of the uppercase letter 'O' is 55 percent minimum and 110 percent maximum of the height of the uppercase letter 'I'.

703.2.5 Character Height. Character height measured vertically from the baseline of the character shall be 5/8 inch minimum and 2 inches maximum based on the height of the uppercase letter 'I'

703.2.6 Stroke Thickness. Stroke thickness of the uppercase letter 'I' shall be 15 percent maximum of the height of the character.

703.2.7 Character Spacing. Character spacing shall be measured between the two closest points of adjacent raised characters with in a message, excluding work spaces. Where characters have a rectangular cross section, spacing between individual raised characters have other cross sections, spacing between individual raised characters shall be 1/16 inch minimum and 4 times the raised character stroke width maximum at the base of the cross sections, and 1/8 inch minimum and 4 times the raised character stroke width maximum at the top of the cross sections. Characters shall be separated from raised borders and decorative elements 3/8 inch minimum.

703.2.8 Line Spacing. Spacing between the baselines and separate lines of raised characters within a message shall be 135 percent minimum and 170 percent maximum of the raised character height.

703.3 Braille. Braille shall be contracted (Grade 2) and shall comply with 703.3 and 703.4.

703.3.1 Dimensions and Capitalization. Braille dots shall have a domed or rounded shape and shall comply with Table 703.3.1. The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms. Refer to Table 703.3.1 Braille Dimensions.

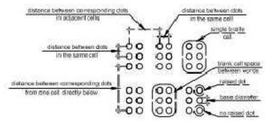


Figure 703.3.1 Braille Measurement

703.3.2 Position. Braille shall be positioned below the corresponding text. If text is multi-lines, braille shall be placed below the entire text. Braille shall be separated 3/8 inch minimum from any other tactile characters and 3/8 inch minimum from raised boarders and decorative elements.

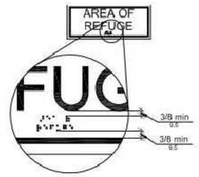


Figure 703.3.2 Position of Braille

703.4 Installation Height and Location. Signs with tactile characters shall comply with 703.4.

703.4.1 Height Above Finish Floor or Ground. Tactile characters on signs shall be located 48 inches minimum above the finish floor or ground surface, measured from the baseline of the lowest tactile character and 60 inches maximum above the finish floor or ground surface, measured from the baseline of the highest tactile character.

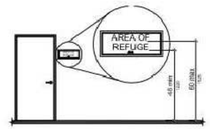


Figure 703.4.1 Height of Tactile Characters Above Finish Floor or Ground

703.4.2 Location. Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a tactile sign is provided at double doors with two active leafs, the sign shall be located to the right side of the double doors. Where there is no wall space at the latch side of a single door or at the right side of the double doors, signs shall be lcoated on the nearest adjacent wall. Signs containing tactile characters shall be located so tha ta clear floor space of 18 inches minimum by 18 inches minimum, centered on the tactile characters, is provided beyond the arch of any door swing between the closed position and 45 degree open position.

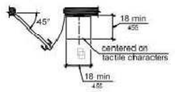


Figure 703.4.2 Location of Tactile Signs at Doors

703.5 Visual Characters. Visual characters shall comply with 703.5.

703.5.1 Finish and Contrast. Characters and their background shall have a non-glare finish. Characters shall contract with their background with wither light characters on a dark background or dark characters on a light background.

703.5.2 Case. Characters shall be uppercase or lowercase of both.

703.5.6 Height From Finish Floor or Ground. Visual characters shall be 40 inches minimum above the finish floor or ground.

703.6 Pictograms. Pictograms shall comply with 703.6.

703.6.1 Pictogram Field. Pictograms shall have a field height of 6 inches minimum. Characters and braille shall not be located in the pictogram field.

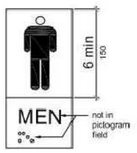


Figure 703.6.1 Pictogram Field

703.6.3 Pictograms shall have text descriptors located directly below the pictogram field. Descriptors shall comply with 703.2, 703.3 and 703.7.

703.7.2 Symbols

703.7.2.1 International Symbol of Accessibility. The International Symbol of Accessibility shall comply with Figure 703.7.2.1

Figure 703.7.2.1 International Symbol of Accessibility

705 Detectable Warnings

803 Dressing, Fitting, and Locker Rooms

803.2 Turning Space. Turning space complying with 304 shall be provided within the room.

803.3 Door Swing. Doors shall not swing into the room unless a clear floor or ground space complying with 305.3 is provided beyond the arc of the door swing.

803.4 Benches. A bench complying with 903 shall be provided within the room.

803.5 Coat Hooks and Shelves. Coat hooks provided within the room shall be located within one of the reach ranges specified in 308. Shelves shall be 40 inches minimum and 48 inches maximum above the finish floor or ground.

903 Benches

903.2 Clear Floor or Ground Space. Clear floor or ground space complying with 305 shall be provided and shall be positioned at the end of the bench seat and parallel to the short axis of the bench.

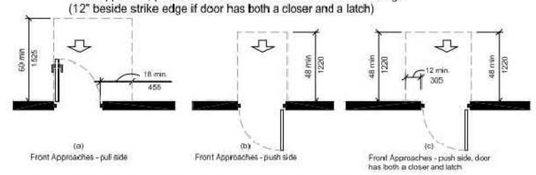
903.3 Size. Benches shall have seats that are 42 inches long minimum and 20 inches deep minimum and 24 inches deep maximum.

903.4 Back Support. The bench shall provide for back support or shall be affixed to the wall. Back support shall be 42 inches longs minimum and shall extend to a point 2 inches maximum above the seat surface to a point 18 inches minimum above the seat surface. Back support shall be 2 1/2 inches from the rear edge of the seat measured horizontally.

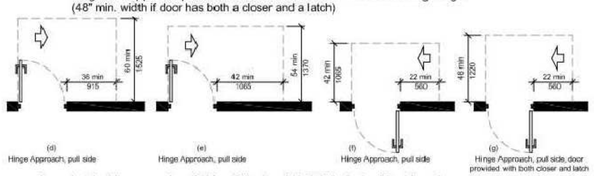
404 DOORS, DOORWAYS, AND GATES

404.1 General. Doors, doorways and gates that are part of the accessible route shall comply with 404.

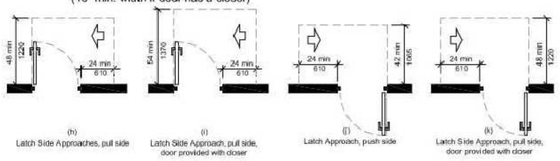
A. Front approach, pull side - 60" min. width & 18" min. beside strike edge
Front approach, push side - 48" min. width & 0" beside strike edge
(12" beside strike edge if door has both a closer and a latch)



B. Hinge side approach, pull side - 60" min. width; 36" min. beside strike edge
or, - 54" min. width: 42" min. beside strike edge
Hinge side approach push side - 42" min. width & 22" min. beside hinge edge
(48" min. width if door has both a closer and a latch)



C. Latch side approach pull side - 48" min. width & 24" min. beside strike edge
(54" min. width if door has a closer)
Latch side approach push side - 42" min. width & 24" min. beside strike edge
(48" min. width if door has a closer)



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David Lee

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11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
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CONSTRUCTION TYPE:	II-B
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EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
ACCESSIBILITY GUIDELINES (ADA)

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE:	
PROJECT NUMBER	22203
SHEET:	G-004

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DIRECTORY OF MANUFACTURERS AND SUPPLIERS

This list is intended to assist the contractor in sourcing building materials and products. In many cases, approved Burger King materials and products may be purchased directly from these sources at a national accounts price. For a complete listing of approved manufacturers, see plans and specifications, and visit RSI's eRedbook.

UPDATE: 5-20-2022

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PINE HALL BRICK CO.
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TBEANE@PINEHALLBRICK.COM

EVOLUTION BRICK
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SACRAMENTO, CA 95827 ERIN LYNCH
916-206-7831

BORAL STONE
(MANUFACTURED STACKED STONE) 1370 GRAND AVENUE, SUITE B
SAN MARCOS, CA 92078 SUSAN KING (413) 207-7285
Susan.King@boral.com culturedstone@boral.com

DIVISION 5 - METALS

ADDISON STEEL (STRUCTURAL STEEL) ADDISON, IL
256-747-1554

DIVISION 6 - WOODS, COMPOSITES

REDBUILT TRUSSES
(PRE-FABRICATED ENGINEERED TRUSSES)
Delaware, OH 43015
JARVIS JACKSON 740-368-4229
jjackson@redbuilt.com

DIVISION 7 - THERMAL MOISTURE PROTECTION

DURO-LAST ROOFING (FLAT ROOFING)
525 MORLEY DRIVE
SAGINAW, MI 48601
nationalaccounts@duro-last.com 800-432-9331

BASF CORPORATION (POLYURETHANE ROOFING SYSTEMS) 1703 CROSS POINT AVE
HOUSTON, TX 77054
ANDREW FOPPE (980) 218-1894
andrew.foppe@basf.com

BERRIDGE ROOFING (METAL ROOF) TYLER HALL
SAN ANTONIO, TX. 210-650-7047

TAMKO ROOFING PRODUCTS (FLAT ROOFING)
P.O. BOX 1404 JOPLIN, MO. 64802 800-641-4691

FIRESTONE METAL PRODUCTS (METAL ROOF)
250 WEST 96TH STREET INDIANAPOLIS, IN 46260 YUSUKE KOREEDA: 615-345-9991
koreedayusuke@firestonebp.com

G.A.F.
(FLAT ROOF) 1361 ALPS ROAD
WAYNE, NJ. 07470
(201) 628-3000 800-766-3411

NICHIHA USA LLC (FIBERCEMENT PANELS)
6465 EAST JOHNS CROSSING, SUITE 250
JOHNS CREEK, GA 30097
NICHIHA CUSTOMER SERVICE (770) 805-9466
BK@NICHIHA.COM

DIVISION 8 - DOORS AND WINDOWS

QUIKSERV
(DRIVE-THRU WINDOWS & AIR CURTAINS)
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800-388-8307
BRIAN MCCLOSKEY...

MARLITE
(RESTROOM PARTITIONS, ALUMINUM FRAMES & DOORS, DOOR HARDWARE, (HINGES, LOCKS, ETC)
202 HARGER STREET
DOVER, NH 44622 800-377-1221...

READY ACCESS
(DRIVE THRU WINDOWS & AIR CURTAINS)
1815 ARTHUR DRIVE WEST
CHICAGO, IL. 60185
KELLY MCGOLDRICK: 800-621-5045 EXT 113
kelly@ready-access.com

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JASPER, GA 30143...

HAMILTON PARKER COMPANY
(HOLLOW METAL FRAMES & DOORS, WOOD DOORS, HARDWARE (HINGES, LOCKS, ETC)
1865 LEONARD AVENUE
COLUMBUS, OH 43219
JIM CAMPBELL 614-358-7806...

3M COMMERCIAL CORE DIVISION (WINDOW FILM)
3M CENTER ST. PAUL, MN
JOE CIAMPI: 704-771-2449 OR 800-328-0033
jjciampi@mmm.com

FINGERSAFE USA, INC.
(FINGER IN JAMB SAFETY - PLAYGROUNDS)
115 WEST OGLETHORPE AVENUE SAVANNAH, GA 31401
orders@fingersafe.com
MEAGAN KUJAWSKI 912-234-6120...

DIVISION 9 - FINISHES

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ARMSTRONG STRATEGIC ACCOUNTS
(CEILING TILE)
CHERYL SMITH 252-214-4426
cbsmith@armstrongceilings.com
OR ARMSTRONG STRATEGIC ACCOUNTS
(800) 442-4212
armstrongesa@armstrongceilings.com

USG INTERIORS (CEILING TILE)
JOHN FUNES 312.436.5841 JFUNES@USG.COM
NOTE: USE PROGRAM QUOTE # 00103139 TO RECEIVE NATIONAL BKC PRICING

DIVISION 10 - SPECIALTIES

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(RESTROOM ACCESSORIES, TOILET PARTITIONS & HARDWARE, BABY CHANGING TABLES & HIGHCHAIRS)
CONTACT:
HAINES, JONES, & CADBURY (HJC)
RESTROOM REMODELS COMPANY
HAMILTON PARKER

SPROVERI'S CUSTOM COUNTERS (CORIAN VANITY SINKS)
55 LAURA DRIVE
ADDISON, IL 60101 CONTACT:
HAINES, JONES, & CADBURY (HJC)
RESTROOM REMODELS COMPANY

HAINES, JONES, AND CADBURY (HJC)
(RESTROOM PLUMBING & ACCESSORIES, TOLIET PARTITIONS, CORIAN SINKS, WATER HEATERS, HIGH CHAIRS)
310 SW 24TH STREET BENTONVILLE, AR...

RESTROOM REMODELS COMPANY
(RESTROOM PLUMBING & ACCESSORIES, CORIAN SINKS) 15 HAMMATT STREET
IPSWICH, MA 01938
Kristyn Maciel 978-525-0008
kris@restroomremodels.com

AMERICAN STANDARD (RESTROOM ACCESSORIES) 1 CENTENNIAL AVENUE
PISCATAWAY, NJ. 08854 CONTACT:
HAINES, JONES, & CADBURY (HJC)
RESTROOM REMODELS COMPANY
HAMILTON PARKER

HAMILTON PARKER COMPANY
(RESTROOM PLUMBING & ACCESSORIES, HIGH CHAIRS) 1865 LEONARD AVENUE
COLUMBUS, OH 43219
JIM CAMPBELL 614-358-7806
jimcampbell@hamiltonparker.com

SAN JAMAR
(KITCHEN PAPER TOWEL DISPENSORS & SUPPLIES) 555 KOOPMAN LANE
ELKHORN, WI. CONTACT: FRANKE, INC.
H&K INTERNATIONAL QUALSERV SOLUTIONS

WORLD DRYER, CO (HAND DRYERS)
CONTACT:
HAINES, JONES, & CADBURY (HJC)
RESTROOM REMODELS COMPANY
HAMILTON PARKER

H&K INTERNATIONAL
(STAINLESS STEEL BATHROOM SINKS) 2200 SKYLINE DRIVE
MESQUITE, TX 75149
HEATHER VALVERDE 214-818-3521
heather.valverde@hki.com

ZURN INDUSTRIES (PLUMBING FIXTURES)
CONTACT:
HAINES, JONES, AND CADBURY
or RESTROOM REMODELS COMPANY

Customer 1st LLC (SAFES)
8899 EAST DAILY ROAD, SUITE #51
PEKIN, IN 47165
MIKE MARCOSA -877-768-9970
mike@customer1stsafes.com

ECOLAB FOOD SAFETY SPECIALTIES INC,
DBA DAYDOTS (FIRST AID KITS)
201 EAST JOHN CARPENTER FREEWAY
IRVING, TX 75062
ANNA MALHIS 800-321-3687
customercare@daydots.com

DIVISION 10 - SIGNS & CANOPIES

ALLEN INDUSTRIES, INC (CANOPIES AND SIGNS) 11351 49TH STREET NORTH
CLEARWATER, FL 33762 ALAN BRYANT
336-317-0195
Alan.Bryant@allenindustries.com

LEKTRON, INC
(LED PARAPET LIGHT BANDS) 4111 S. 74th E. Ave.
TULSA, OK. 74145
ERIC PYLE 918-622-4978
BurgerKing@LektronInc.com

ENTERA SIGNS (CANOPIES AND SIGNS) 1200 ENTERA DRIVE PANAMA CITY, FL. 32401
MATT CZAJKOWSKI 850-691-9652
matt.czajkowski@enterabranding.com

CUMMINGS SIGNS, INC (CANOPIES AND SIGNS) 105 DALTON PLACE WAY KNOXVILLE, TN 37912 JOEL EFFLER 615-872-5483
joel.effler@cummingssigns.com

NRS - NATIONAL READERBOARD SUPPLY
(READERBOARD LETTERS & SUPPLIES) 160 PAHLONE PARKWAY
PONCHA SPRINGS, CO 81242
Patrick Case 800-243-6676
Sales@nationalreaderboard.com

FEDERAL HEATH SIGN CO (CANOPIES AND SIGNS) 12704 DUPONT CIRCLE
TAMPA FL 33626
FIONA PAUL 813-855-4415
fpaul@federalheath.com

DAKTRONICS, INC (DIGITAL READERBOARD)
210 DAKTRONICS DRIVE
BROOKINGS, SD 57006
GREG BREYFOGLE 407-310-3695
Greg.Breyfogle@daktronics.com

OPTEC DISPLAYS, INC (DIGITAL READERBOARD) 1700 SOUTH DESOTO PLACE
ONTARIO, CA 91768
Chad Engstrom (626)252-8333
cengstrom@optec.com

DIVISION 15 - MECHANICAL

RINNAI
(INSTANT WATER HEATERS)
RINNAI NATIONAL ACCOUNT PRICING THROUGH HAINES, JONES, & CADBURY
bk@hjcinc.com OR 800-459-7099

RHEEM
(WATER HEATERS)
RHEEM NATIONAL ACCOUNT PRICING THROUGH HAINES, JONES, & CADBURY
bk@hjcinc.com OR 800-459-7099

3M FOOD SERVICE (WATER FILTERS) 3M CENTER
BLDG. 223-2N-20
ST. PAUL, MN. 55144-1000 DAVID RADCLIFF
518-281-7754
dpradliff@mmm.com foodservice@mmm.com

ECOLAB
(WATER FILTERS)
1801 RIVERBEAND WEST DRIVE FORT WORTH, TX 76118
AL POWELL 816-206-2513
al.powell@ecolab.com

TRANE
(AIR CONDITIONING UNITS, RTU's/SPLIT SYSTEMS CONTROLS)
2884 CORPORATE WAY
MIRAMAR, FL. 33025
CHRIS ST. JOHN 407-325-7123...

FRANKE, INC.
(BROILER AND FRYER VENTILATION HOODS) 800 AVIATION PARKWAY
SMYRNA, TN 37086 800-877-5718
fs-bkparts.us@franke.com

H&K INTERNATIONAL
(BROILER AND FRYER VENTILATION HOODS) 2200 SKYLINE DRIVE
MESQUITE, TX 75149
HEATHER VALVERDE 214-818-3521
heather.valverde@hki.com

EVERPURE, INC (WATER FILTERS)
1040 MUIRFIELD DRIVE HANOVER PARK, IL. 60133 SEAN TEAL 630-306-0296
sean.teal@pentair.com

SELECTO SCIENTIFIC, INC (WATER FILTERS)
3980 LAKEFIELD COURT
SUWANEE, GA. 30024
CUSTOMER SERVICE (800)635-4017 x3

ANTUNES (WATER FILTERS)
180 KEHOE BOULEVARD CAROL STREAM, IL 60188 SUSAN SUTTER 630-784-3447
susan.sutter@antunes.com

CARRIER CORPORATION (AIR CONDITIONING) 6304 CARRIER PARKWAY
SYRACUSE, NY. 13221
KEN REVILLA 954-218-0070
Ken.revilla@carrier..com

LOREN COOK CO (EXHAUST FANS) 2015 E. DALE
SPRINGFIELD, MO 65803-4637 BRENT FULLERTON 417-869-6474
bfullerton@lorencook.com

AMEREX CORPORATION (FIRE PROTECTION SYSTEMS) 7595 GADSDEN HIGHWAY
TRUSSVILLE, AL 35173-0081
JAMES KNOWLES 205-655-5721
james.knowles@amerex-fire.com
www.amerex-fire.com

GAYLORD INDUSTRIES, INC
(BROILER AND FRYER VENTILATION HOODS) 10900 SOUTHWEST AVERY STREET
TUALATIN, OR, 97062
ROB CARMICHAEL 770-265-2562
Rob.Carmichael@gaylordventilation.com

DIVISION 16 - ELECTRICAL

SECURITY LIGHTING SYSTEMS
(FULL STORE PACKAGE LIGHTING FOR INTERIOR/EXTERIOR BUILDING & SITE LIGHTS, SURVEYS AND PHOTOMETRICS)
2100 GOLF ROAD, SUITE 460
ROLLING MEADOWS, IL. 60008...

HERMITAGE LIGHTING NATIONAL ACCOUNTS (MASTER LIGHTING CONSOLIDATOR, SURVEYS AND PHOTOMETRICS)
3640 TROUSDALE DRIVE
NASHVILLE, TN. 37204...

LSI INDUSTRIES INC.
(INTERIOR AND EXTERIOR LIGHTING, SURVEYS AND PHOTOMETRICS)
10000 ALLIANCE ROAD
CINCINNATI, OH. 45242
BOB LUCAS 480-368-9399 OR 602-740-9894...

CREE LIGHTING
(INTERIOR AND EXTERIOR LIGHTING, SURVEYS AND PHOTOMETRICS)
9201 WASHINGTON AVENUE
RACINE, WI 53406
ELVIR SULJIC 262-884-3332...

KONTECHUSA
(INTERIOR AND EXTERIOR BUILDING LIGHTING) 18045 ROLAND STREET
CITY OF INDUSTRY, CA 91748 (866) 236-8701
Miguel Martinez (626)622-1325
mmartinez@kontechusa.com

MOSS RETAIL AND ENVIRONMENTS (GRAPHICS)
2643 WEST CHICAGO AVE CHICAGO, IL 60622
bk@mossinc.com
Scott Metzger 847.238.4245 smetzger@mossinc.com

ENERGYWISE SOULUTIONS, LLC
(MASTER LIGHTING CONSOLIDATOR, SURVEYS AND PHOTOMETRICS)
8550 UNITED PLAZA BOULEVARD, SUITE 702
BATON ROUGE, LA 70809
JENNIFER WADDICK 877-225-1336...

VAOPTO, LLC
(INTERIOR AND EXTERIOR BUILDING LIGHTING) 5178 WEST PATRICK LANE
LAS VEGAS, NV 89188 Linda Xu (702)517-5789
linda@vaopto.com

HILL PHOENIX POWER SYSTEMS DIVISION (FACTORY INTEGRATED SWITCH GEAR) 8166 INDUSTRIAL BLVD
COVINGTON, GA. 30014
dfr-info@doverfoodretail.com 770-285-3264

LSI INDUSTRIES (GRAPHICS)
10000 ALLIANCE ROAD
CINCINNATI, OH. 45242
BOB LUCAS 480-368-9399 OR 602-740-9894
Bob.Lucas@LSI-INDUSTRIES.com

EQUIPMENT, PLAYGROUNDS AND DÉCOR

SICOM (XENIAL)
(POS, IDMB&ODMB HARDWARE/SOFTWARE, SPEED OF SERVICE TIMER, KITCHEN MINDER -CHEF)
4434 MEADOW DRIVE
DOYLESTOWN, PA, 18901
bksales@sicom.com
MICHAEL SCHWARTZ 215-489-2500 EXT 2249
michael.schwartz@xenial.com

Samsung/LSI
(INTERIOR & OUTDOOR DIGITAL MENU BOARD SCREENS) 10000 ALLIANCE ROAD
CINCINNATI, OH 45242
DAVID WATFORD 850-826-4602
d.watford@sea.samsung.com

LG ELECTRONICS
(INTERIOR & OUTDOOR DIGITAL MENU BOARD SCREENS) 10000 MILLBROOK DRIVE
LINCOLNSHIRE, IL 60069 MICHAEL HA
847-941-8855
michael1.ha@lge.com

HM ELECTRONICS, INC (HME) (DRIVE THRU HEADSETS) 14110 STOWE DRIVE
POWAY, CA. 92064 STEVE LEE 858-848-3704
SLee@hme.com

QUALSERV SOLUTIONS
(KITCHEN EQUIPMENT CONSOLIDATOR, SMALLWARES) 7400 SOUTH 28th STREET
FORT SMITH, AR. 72908
BRITTANY GOODWIN (479)646-8386 x335
BGoodwin@qualservsolutions.com

H & K INTERNATIONAL
(KITCHEN EQUIPMENT CONSOLIDATOR, SMALLWARES, HOODS)
2200 SKYLINE DR
DALLAS, TX 75223
HEATHER VALVERDE 561-626-1020...

TRIMARK USA
(KITCHEN EQUIPMENT CONSOLIDATOR, SMALLWARES FOR AAFES ORDERS ONLY)
2601 HOPE CHURCH ROAD WINSTON-SALEM, NC 27103 BILLY HIGH 336-354-4262
billy.high@trimarkusa.com

FRYMASTER CORPORATION (FRYERS)
8700 LINE AVE
SHREVEPORT, LA 71106 JOAN SALAH
813-504-9262
Joan.Salah@welbilt.com

INTERNATIONAL COLD STORAGE (ICS)
(WALK-IN COOLERS / FREEZERS, DRY STORAGE COMPARTMENTS)
215 EAST 13th STREET ANDOVER, KS. 67002
LYNNE CLATTERBUCK 316-218-4126
Lynne.clatterbuck@icsco.com

MANITOWOC ICE (ICE MACHINES)
2110 SOUTH 26TH STREET MANITOWOC, WI 54221 JOAN SALAH 813-504-9262
Joan.Salah@welbilt.com

HOSHIZAKI AMERICA (ICE MACHINES)
618 HIGHWAY 74 SOUTH PEACHTREE CITY, GA 30269
ANGIE WARREN (770)487-2331 x11329
adwarren@hoshizaki.com

PLAY SYSTEMS/SII (SUPERIOR PLAY SYSTEMS) (PLAYGROUND MANUFACTURER)
1050 COLUMBIA DR.
CARROLLTON, GA 30717 SHAN MCGUIRE
678-390-1915
https://superiorplay.com/

STRATACACHE
(CONTROLLERS FOR INTERIOR MENU BOARDS AND OUTDOOR DIGITAL MENU BOARDS)
40 North Main Street Dayton Ohio 45423
KEVIN FENTON (678)427-3139
kfenton@stratacache.com

PANASONIC
(DRIVE THRU HEADSETS)
2 RIVERVIEW PLAZA, 6TH FLOOR NEWARK, NJ 07102
THERESA MURPHY 201-492-0925
theresa.murphy@us.panasonic.com

3M FOOD SERVICE BUSINESS (DRIVE THRU HEADSETS)
3M CENTER BLDG. 223-2N-20
ST. PAUL, MN. 55144-1000 JOE CIAMPI:
704-771-2449
jjciampi@mmm.com

FRANKE
(KITCHEN EQUIPMENT CONSOLIDATOR, SMALLWARES, HOODS)
800 AVIATION PARKWAY
SMYRNA, TN. 37086
CUSTOMER SERVICE: 800-877-5178...

DUKE MANUFACTURING
(BROILERS & PRODUCT HOLDING UNITS) 2305 NORTH BROADWAY
ST. LOUIS MO. 63102
RICK GARRIGA 306-606-2084
rgarriga@dukemfg.com

NIECO CORPORATION (BROILERS)
7950 CAMERON DRIVE
WINDSOR, CA 95492 GUIDO NAVA 630-303-6824
gnava@nieco.com

PITCO FRIALATOR (FRYERS)
10 FERRY STREET
CONCORD, NH. 03301
MARK MCCABE: 603-230-5509
MMeCabe@pitco.com

LANCER CORP. (BEVERAGE SYSTEM) 6655 LANCER BLVD
SAN ANTONIO, TX. 78219
GREG EDWARDS: 817-692-5094
greg.edwards@lancercorp.com

CORNELIUS, INC. (BEVERAGE SYSTEM)
101 BROADWAY STREET WEST OSSEO, MN 55369
ROSS DAVIS: 630-659-8690
ross.davis@cornelius.com

TAYLOR ULTIMATE SERVICES, INC (SHAKE MACHINE, FROZEN BEVERAGE MACHINE) 1780 NORTH COMMERCE PKWY
WESTON, FL. 33326
RJ PIEDRA: 954-217-9100
raul@taylorus.com

KOLPAK, A WELBILT COMPANY (WALK-IN COOLERS / FREEZERS) 952 KISSWICH MANOR LANE BALDWIN, MO 63011
JOAN SALAH 813-504-9262
Joan.Salah@welbilt.com

SCOTSMAN ICE SYSTEMS (ICE MACHINES)
775 CORPORATE WOODS PARKWAY VERNON HILLS, IL 60061
Evolution Team (800)726-8762 x15204
team.resolution@scotsman-ice.com

SOFT PLAY, LLC
(PLAYGROUND MANUFACTURER, SAFETY SURFACING, NON-CONTAINED PLAY EQUIPMENT)
13620 EAST REESE BLVD. SUITE 300
HUNTERSVILLE, NC. 28078 BROCK HODGE...

BMC USA LLC
(INTERIOR & EXTERIOR DÉCOR)
2655 SOUTH LE JEUNE ROAD, SUITE 905
CORAL GABLES, FL 33134
EMILIO MARTINEZ FERNÁNDEZ
emiliomartinez@bmcec.com

CASABLANCA DESIGN GROUP (DECOR)
811 PICKENS INDUSTRIAL DRIVE MARIETTA, GA 30026
JOHN HARRISON 770-423-9575
John.Harrison@cdg.com

CHARTER HOUSE INC. (INTERIOR & EXTERIOR DÉCOR) 4660 136 AVENUE
HOLLAND, MI. 49424 800-314-7659
KEITH LEBERT 248-996-0315
keith.lebert@charter-house.com

ELKAY SYSTEMS (FORMERLY ISI) (DECOR)
241 NORTH BROADWAY, SUITE 600
MILWAUKEE, WI 53202
CHRISTINA GUTIERREZ 414.847.0709
christina.gutierrez@elkay.com

FCC COMMERCIAL FURNITURE (INTERIOR & EXTERIOR DÉCOR) 8452 OLD HWY. 99 NORTH
ROSEBURG, OR. 97470 PRESTON O'HARA
800-322-7328 EXT 284
preston.ohara@fccfurn.com

FACILITY CONCEPTS, INC (FCI) (DECOR)
7676 ZIONSVILLE ROAD
INDIANAPOLIS, IN 46268 (800)915-8890
customerservice@fcius.com KEN WEAVER
kweaver@fcius.com

SEATING CONCEPTS (DECOR)
125 CONNELL STREET
ROCKDALE, IL. 60436 (815)730-7980
ZACH DEPYSSLER
zdepyssler@seating-concepts.com

NAUTICAL FURNISHINGS, LLC (LIMITED DÉCOR ITEMS)
60 NW 60TH STREET
FT. LAUDERDALE, FL 33309 MICHAEL HOGLUND: 954-771-1100
mhoglund@nauticalfurnishings.com

APA COLOR GRAPHICS
(LIMITED DECOR ITEMS & GRAPHICS) 2929 PACIFIC DRIVE
NORCROSS, GA 800.543.5775
CHUCK BOGEL 404.355.1355
chuck@apacolorgraphics.com

VGS, INC (GRAPHICS)
1696 MABRY MILL DRIVE, SW NORTH CANTON, OH 44709
BURGERKING@VGS-INC.COM (800)201-0301 x1

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EXCHANGE

quorum
Design. Spaces. People.
825 W. Vickery Blvd. #100
Fort Worth, Texas 76104
ph. (817) 738-8095
fx. (817) 738-9524
www.qarch.com

REGISTERED ARCHITECT DAVID J. LEE 10989 STATE OF TEXAS

David Lee. Digitally signed by David J. Lee Date: 2023.02.07 17:12:14-06'00'

DATE	REVISION NO. & DESCRIPTION	BY
10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

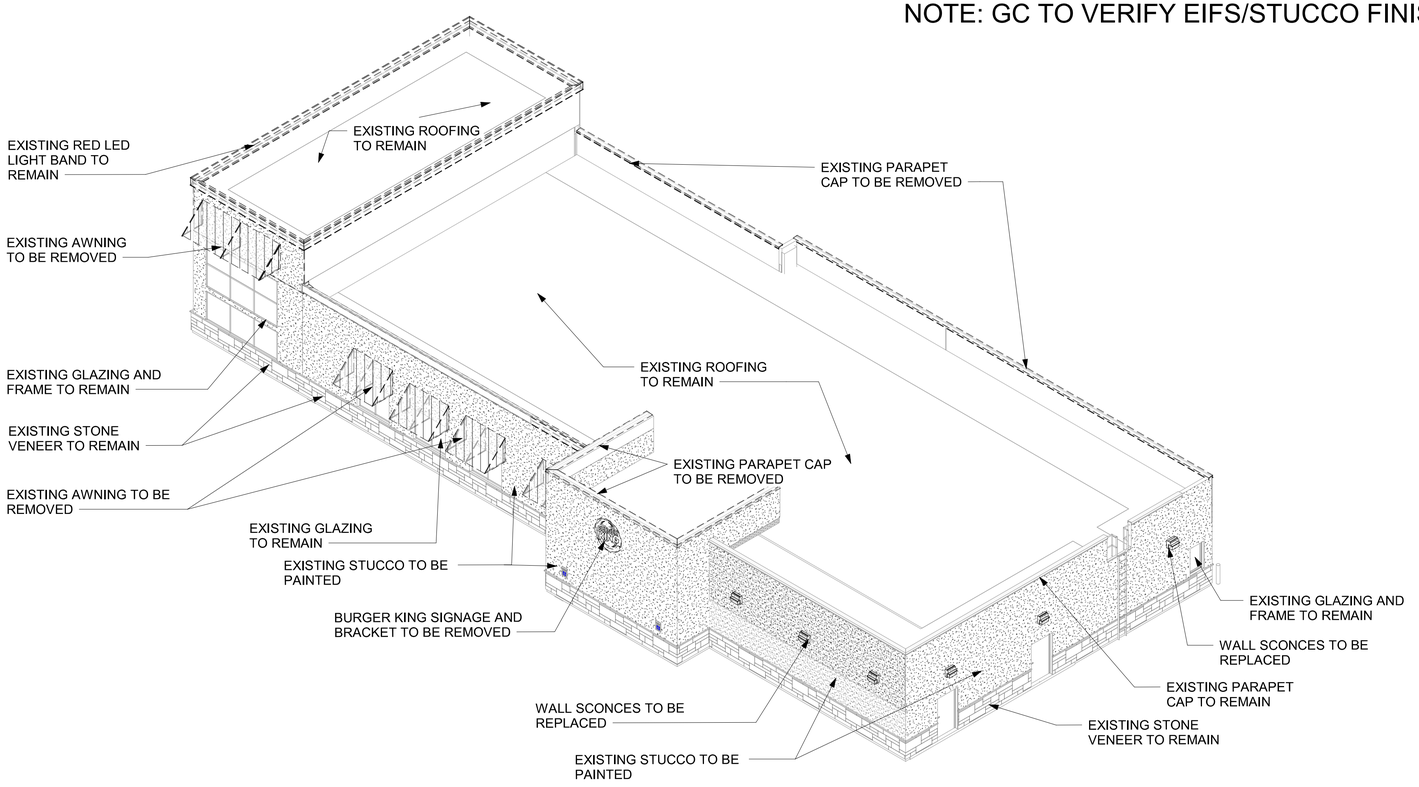
PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
MANUFACTURES & SUPPLIERS

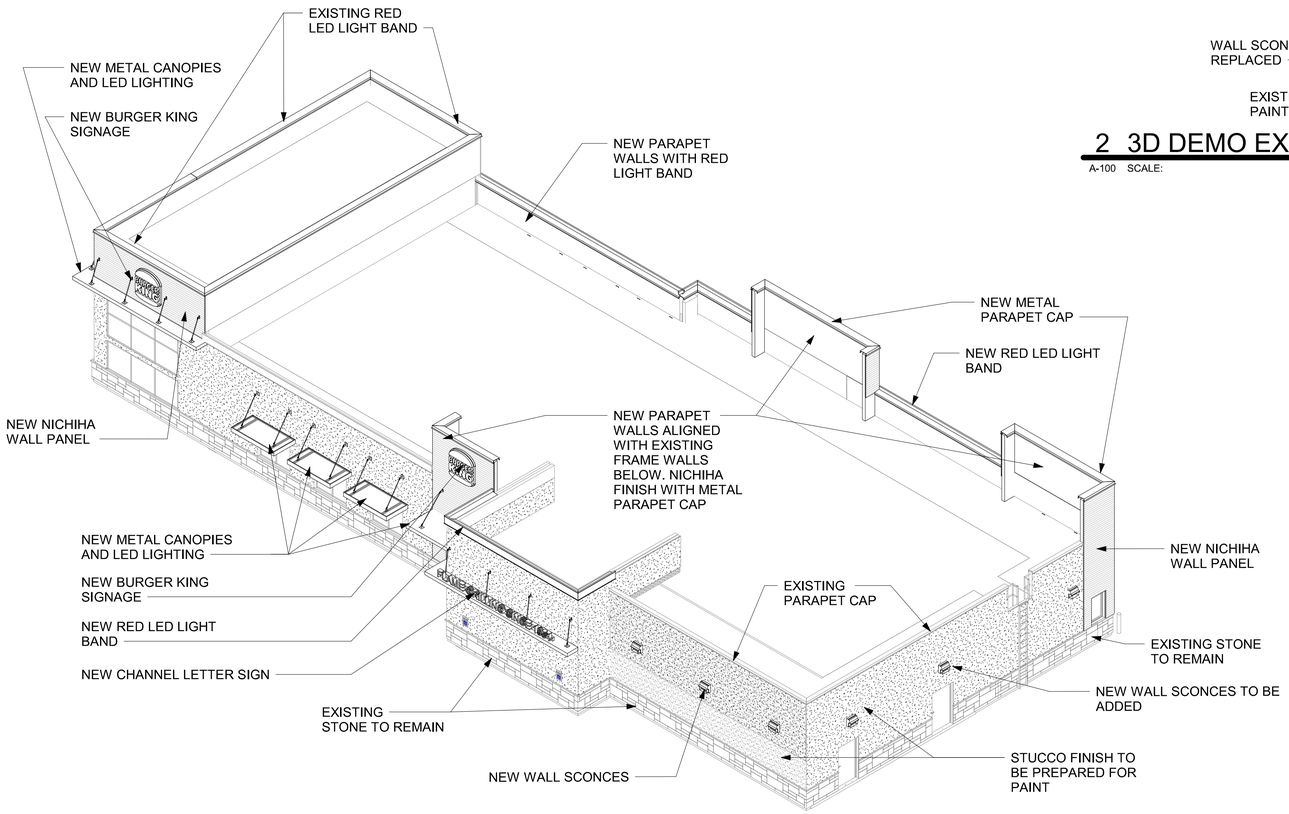
DATE: 02/06/2023
AAFES Project Number: 2146-22-017
SCALE:
SHEET: G-005
PROJECT NUMBER 22203

NOTE: GC TO VERIFY EIFS/STUCCO FINISH.



2 3D DEMO EXTERIOR

A-100 SCALE:



1 3D NEW EXTRIOR

A-100 SCALE:

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EXCHANGE

quorum
Design. Spaces. People.
825 W. Vickery Blvd. #100
Fort Worth, Texas 76104
ph. (817) 738-8095
fx. (817) 738-9524
www.qarch.com

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SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

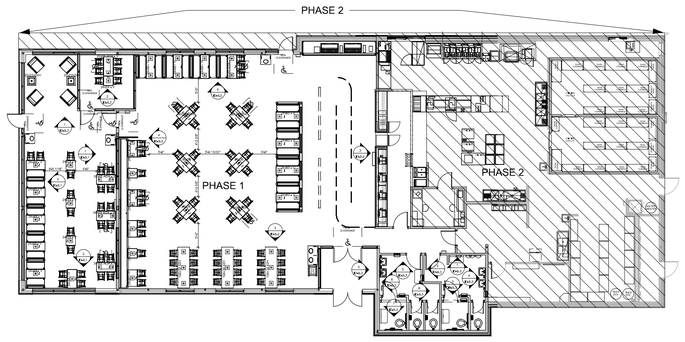
EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
3D VIEWS

DATE: 02/06/2023
AAFES Project Number: 2146-22-017
SCALE:
SHEET: A-100
PROJECT NUMBER 22203



2 PHASING FLOOR PLAN

AS-101 SCALE: 1/16" = 1'-0"

PHASING PLAN

PHASING 1 (KITCHEN & DRIVE THROUGH TO REMAIN OPERATIONAL)

1. DEMOLITION & CONSTRUCTION OF FINISHES IN THE DINING AREA, VESTIBULE, DRINK STATION, AND SERVICE COUNTER.
2. ALL EXTERIOR MODIFICATIONS EXCEPT DRIVE THROUGH SIDE.

PHASING 2

1. DUAL DRIVE THROUGH ADDITION AND ALL SITE ITEMS.
2. DRIVE THROUGH SIDE BUILDING MODIFICATIONS.
3. KITCHEN EQUIPMENT, FITTING, FURNITURE, ETC. REMOVAL AND STORAGE TO REPLACE TILE GROUT.
4. KITCHEN SUPPORT AREA TILE:
   A. REFER TO DRAWINGS FOR SCOPE OF TILE & GROUT REPAIR / REPLACEMENT.
   B. REINSTALL EQUIPMENT, FITTING, AND FURNITURE.

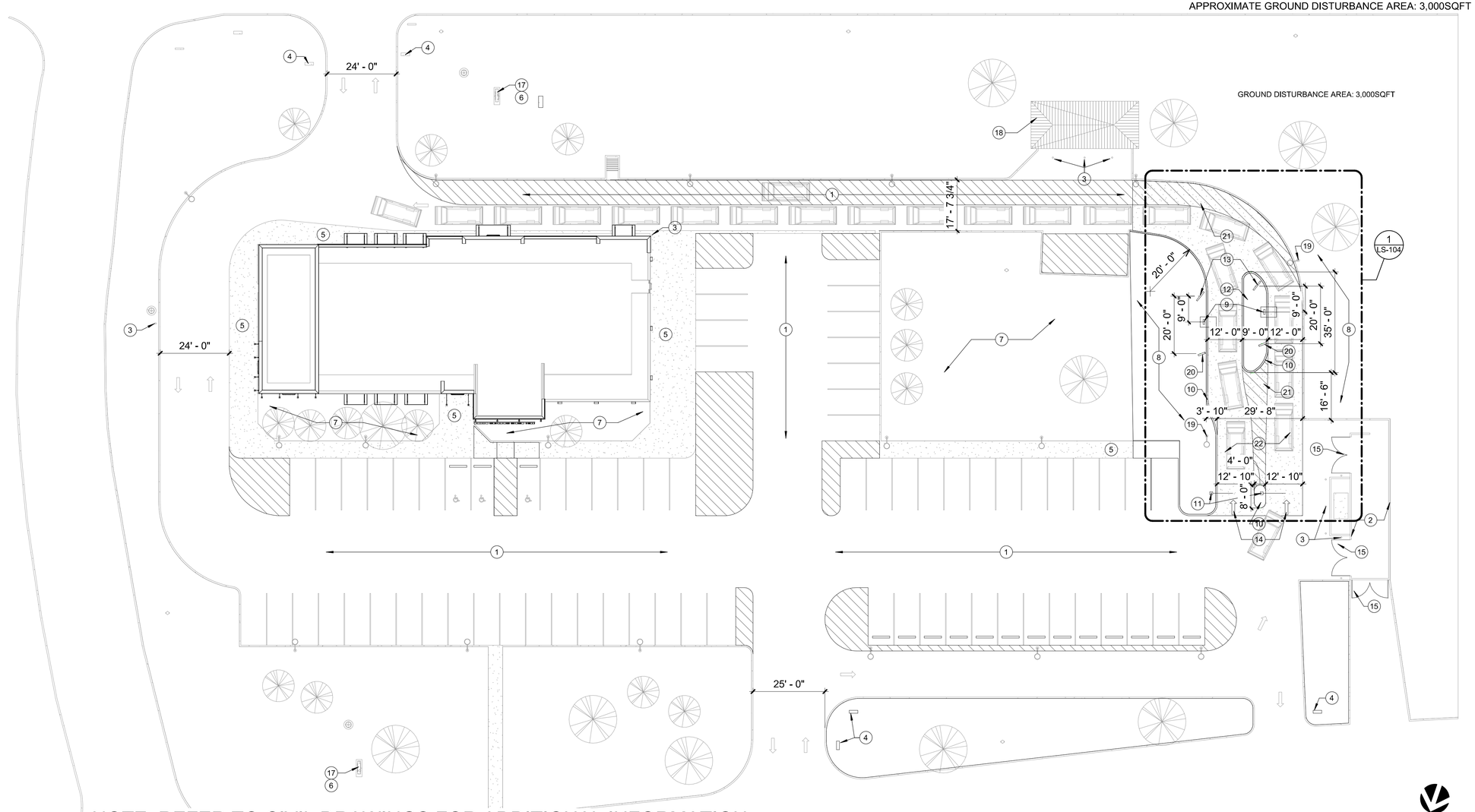
SITE PLAN NOTES

KEYNOTES DESIGNATED BY: (X)

1 EXISTING PARKING LOT PAVING. SEAL AND RESTRIPE.
2 TRASH ENCLOSURE REFINISHED TO MATCH NEW BUILDING MATERIALS AND FINISHES.
3 ALL EXISTING BOLLARDS TO BE PAINTED BLACK.
4 CLEAN AND PREPARE DIRECTIONAL SIGNAGE FRAMES FOR NEW PAINT FINISH - METAL TO BE PAINTED BLACK. NEW SIGN FACE - REFER TO 1/AS103.
5 PATCH/ REPAIR/ REPLACE AND CLEAN ALL SURROUNDING AREAS THAT ARE AFFECTED BY NEW AND DEMO CONSTRUCTION TYPICAL. EXISTING SIDEWALK TO REMAIN.
6 PROVIDE NEW STUCCO FINISH AT BASE OF EXISTING MONUMENT SIGN. MATCH BUILDING.
7 EXISTING LANDSCAPE AND IRRIGATION SYSTEM TO REMAIN.
8 EXISTING LANDSCAPE AND IRRIGATION SYSTEM TO BE REWORKED FOR NEW DRIVE-THRU LANE.
9 NEW OCU CANOPY. (AAFES TO PURCHASE/GC TO INSTALL) GC TO COORDINATE ALL PREP WORK WITH MANUFACTURER. REFER TO 4/AS102.
10 NEW CURB. REF. CIVIL.
11 NEW BK GARDEN GRILL CLEARANCE BAR. REFER TO 1/AS103
12 NEW LANE DIVIDER TO BE ADDED.
13 INSTALL NEW DIGITAL MENU BOARD. POWER AND DATA REQUIRED.
14 NEW DIRECTIONAL ARROWS TO BE PAINTED. REFER TO 2/AS103.
15 REPAIR, CLEAN , AND PREPARE DUMPSTER ENCLOSURE DOORS FOR NEW PAINT FINISH. PAINT TO MATCH NEW BUILDING FINISH.
17 EXISTING MONUMENT SIGN TO REMAIN. MAINTAIN POWER AND CONDUIT. REPLACE EXISTING BK SIGN FACE.
18 EXISTING BUILDING TO BE PAINTED TO MATCH BK BUILDING NEW FINISH.
19 EXISTING LIGHT POLE TO REMAIN.
20 MENU PREVIEW BOARD. REF. AS-102
21 NEW DRIVE THROUGH STRIPING.
22 NEW DRIVE THROUGH PAVING. REF. CIVIL.

CANOPIES, BUILDING SIGNAGE, AND SITE SIGNAGE ARE EXCHANGE FURNISHED, CONTRACTOR INSTALLED.

APPROXIMATE GROUND DISTURBANCE AREA: 3,000SQFT



1 SITE PLAN

AS-101 SCALE: 1" = 20'-0"

NOTE: REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.

EXCHANGE

quorum
Design. Spaces. People.
825 W. Vickery Blvd. #100
Fort Worth, Texas 76104
ph. (817) 738-8095
fx. (817) 738-9524
www.qarch.com

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David Lee. Digitally signed by David J. Lee Date: 2023.02.07 17:12:53-06'00'

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SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

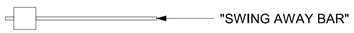
PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

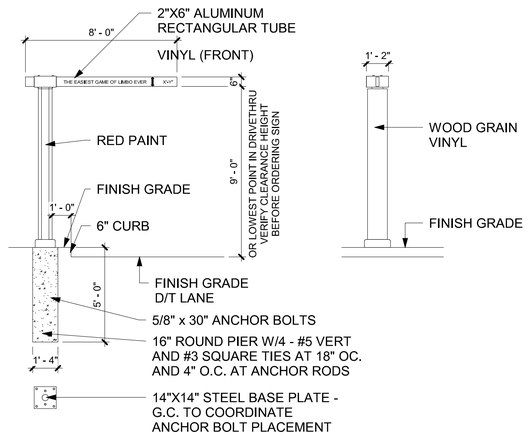
DRAWING TITLE:
SITE PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: AS-101
PROJECT NUMBER 22203	

2/7/2023 3:47:30 PM



TOP VIEW



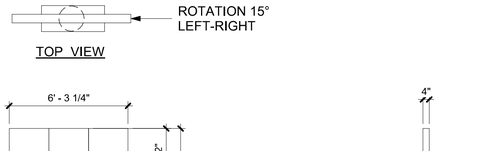
FRONT ELEVATION RIGHT SIDE ELEVATION

GENERAL CONTRACTOR RESPONSIBILITIES:

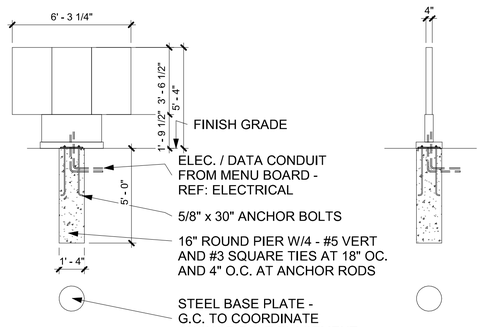
1. COORDINATE EXCAVATION OF SIGN FOUNDATIONS WITH SIGN SUPPLIER.
2. PROVIDE POWER TO ALL SIGN LOCATIONS AS REQUIRED.
3. MAKE FINAL ELECTRICAL CONNECTIONS TO EACH SIGN.
4. COMPLETE SIGN INSTALLATION.

1 CLEARANCE SIGN DETAILS

AS-102 SCALE: 1/4" = 1'-0"



TOP VIEW



FRONT ELEVATION RIGHT SIDE ELEVATION

GENERAL CONTRACTOR RESPONSIBILITIES:

1. GC TO PROVIDE HDMI AND DATA CABLING - COORDINATE WITH VENDOR
2. COORDINATE EXCAVATION OF SIGN FOUNDATIONS WITH SIGN SUPPLIER.
3. PROVIDE POWER TO ALL SIGN LOCATIONS AS REQUIRED.
4. MAKE FINAL ELECTRICAL CONNECTIONS TO EACH SIGN.
5. COMPLETE SIGN INSTALLATION.

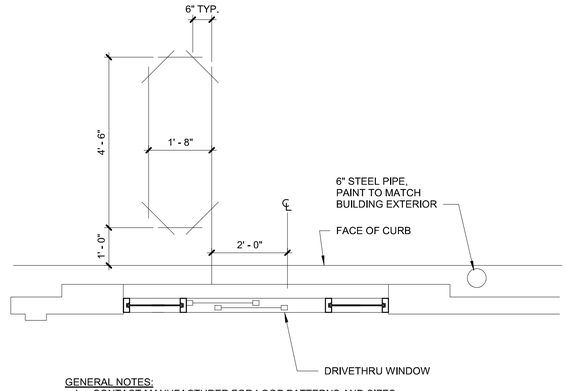
3 DIGITAL MENU BOARD DETAILS

AS-102 SCALE: 1/4" = 1'-0"

GENERAL SITE NOTES

NOTE:

1. GENERAL CONTRACTOR TO USE EXISTING MONUMENT SIGN CABINET AND REPLACE MONUMENT SIGN FACES ONLY.
2. GENERAL CONTRACTOR TO REPLACE SITE DIRECTIONAL SIGN TOPS ONLY AND USE EXISTING FOUNDATIONS.

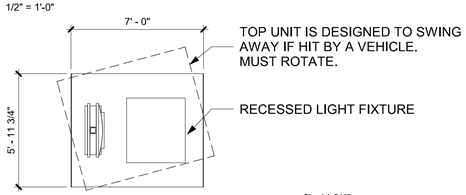


GENERAL NOTES:

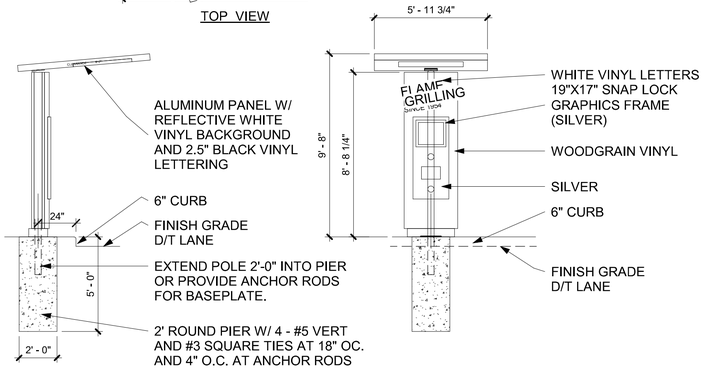
1. CONTACT MANUFACTURER FOR LOOP PATTERNS AND SIZES.
2. MITER CORNERS OF SAW CUT TO PREVENT SHARP TURNS WHICH COULD CUT THE WIRE INSULATION
3. DETECTOR LOOPS ARE REQUIRED AT DRIVETHRU ORDER CONFIRMATION UNIT AND AT PICKUP DRIVETHRU WINDOW. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS
4. FOR TECHNICAL ASSISTANCE AND PARTS, CONTACT 3M SOUND PRODUCT (800) 328-0033 OR HM ELECTRONICS (800) 909-6604
5. GENERAL CONTRACTOR TO PROVIDE AND INSTALL PREFAB DETECTOR LOOP AT ALL LOCATIONS.
6. PREFAB DETECTOR LOOP IS TO BE FURNISHED BY AAFES AND INSTALLED BY GENERAL CONTRACTOR.

2 PREFAB DETECTOR LOOP

AS-102 SCALE: 1/2" = 1'-0"



TOP VIEW



1. 120 VOLT 20 AMP ELECTRICAL SUPPLY TO SIGN
2. GC TO PROVIDE HDMI AND DATA CABLING - COORDINATE WITH VENDOR.
3. VERIFY LOWEST POINT IN D/T LANE BEFORE ORDERING SIGN

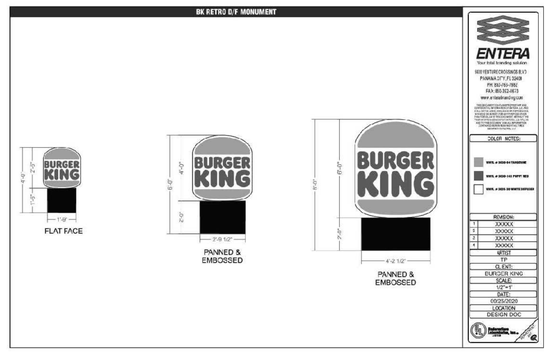
SIDE ELEVATION FRONT ELEVATION

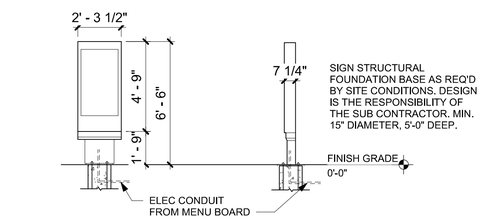
GENERAL CONTRACTOR RESPONSIBILITIES:

1. GC TO PROVIDE HDMI AND DATA CABLING - COORDINATE WITH VENDOR
2. COORDINATE EXCAVATION OF SIGN FOUNDATIONS WITH SIGN SUPPLIER.
3. PROVIDE POWER TO ALL SIGN LOCATIONS AS REQUIRED.
4. MAKE FINAL ELECTRICAL CONNECTIONS TO EACH SIGN.
5. COMPLETE SIGN INSTALLATION.

4 ORDER CONFIRMATION UNIT

AS-102 SCALE: 1/4" = 1'-0"

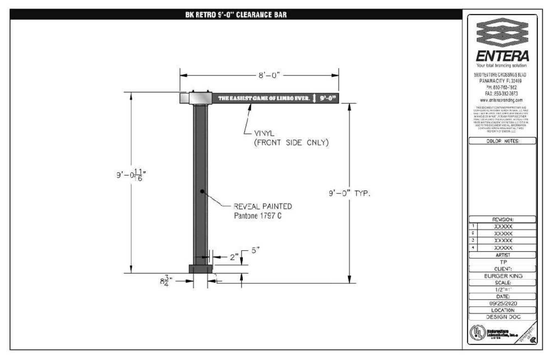


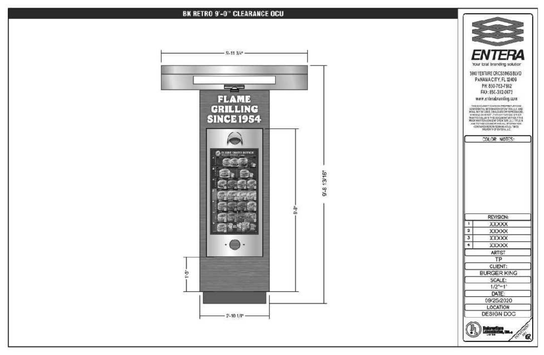


FRONT ELEVATION RIGHT ELEVATION

5 PREVIEW BOARD DETAILS

AS-102 SCALE: 1/4" = 1'-0"





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David Lee. Digitally signed by David J. Lee Date: 2023.02.07 17:13:10-06'00'

DATE	REVISION NO. & DESCRIPTION	BY
10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

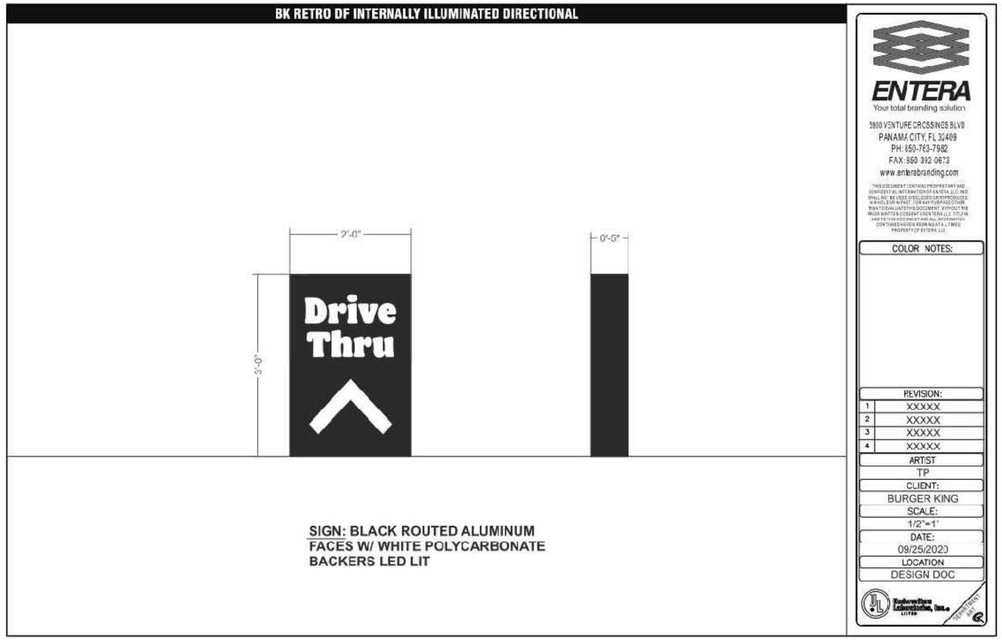
PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
SITE DETAILS

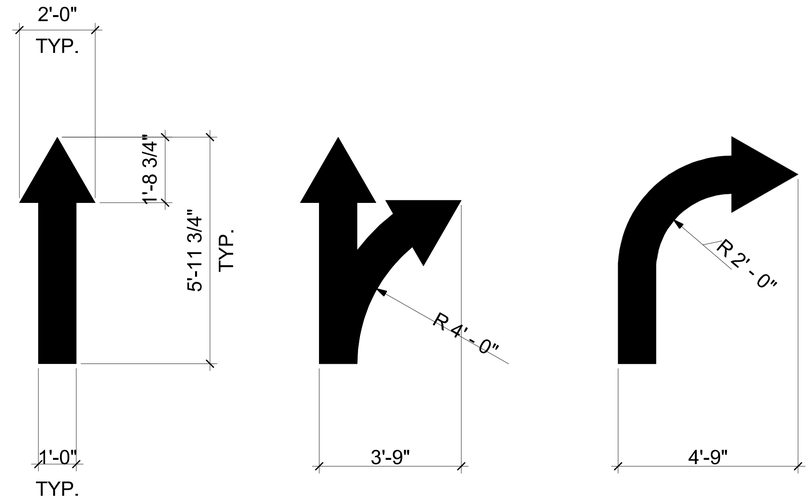
DATE: 02/06/2023
AAFES Project Number: 2146-22-017
SCALE: As indicated
SHEET: AS-102
PROJECT NUMBER 22203

2/7/2023 3:47:31 PM



NEW DIRECTIONAL SIGNAGE

DIRECTIONAL SIGNAGE



GENERAL CONTRACTOR RESPONSIBILITIES:

1. PROVIDE ALL INFORMATION INCLUDING DRAWINGS AND LOCATIONS REQUIRED FOR REVIEW AND APPROVAL.

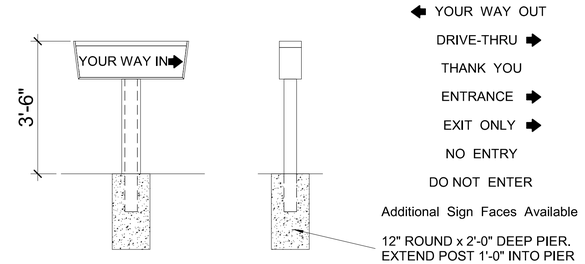
2. REMOVE EXISTING PAINTED ARROWS FROM PAVEMENT.

3. PAINT ARROWS AT DESIGNATED LOCATIONS.

2 PAINTED ARROWS DETAILS

AS-103 SCALE: 1/2" = 1'-0"

NEW DIRECTIONAL SIGNAGE TO BE MOUNTED OVER EXISTING SIGN POLE



ELEVATION

TYPICAL EXISTING SIGNAGE
SIDE ELEVATION

GENERAL CONTRACTOR RESPONSIBILITIES:

1. COORDINATE EXCAVATION OF SIGN FOUNDATIONS WITH SIGN SUPPLIER.
2. PROVIDE POWER TO ALL SIGN LOCATIONS AS REQUIRED.
3. MAKE FINAL ELECTRICAL CONNECTIONS TO EACH SIGN.
4. COMPLETE SIGN INSTALLATION.

1 TYPICAL EXISTING DIRECTIONAL SIGNAGE DETAILS

AS-103 SCALE: 1/2" = 1'-0"

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11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
SITE DETAILS

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: 1/2" = 1'-0"	SHEET: AS-103
PROJECT NUMBER 22203	

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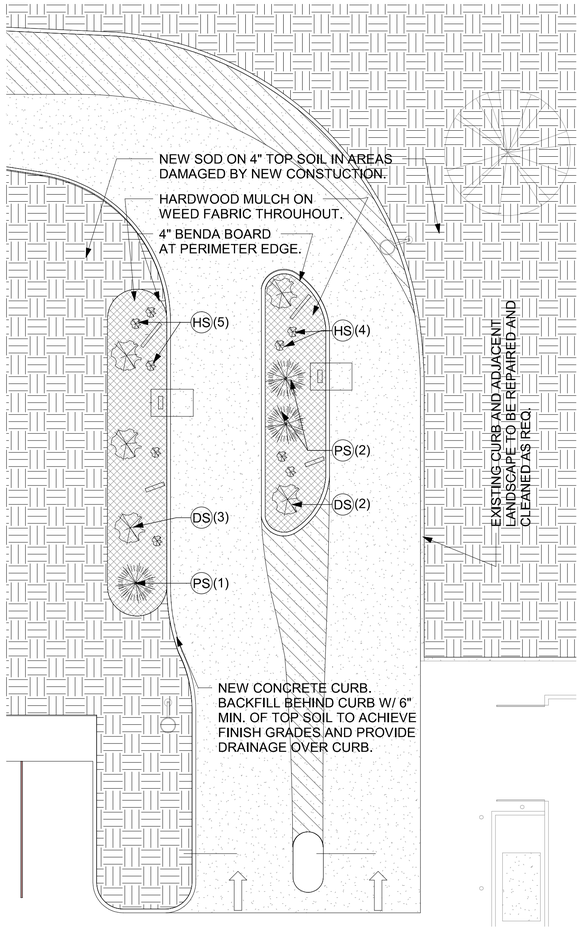

1 DRIVE-THRU LANDSCAPING

LS-104 SCALE: 1" = 10'-0"

GENERAL LANDSCAPE NOTES

1. INSTALL 4" LAYER OF SHREDDED HARDWOOD MULCH TO ALL PLANTING BEDS.
2. INSTALL 4" BENDA BOARD EDGING BETWEEN ALL SHRUB BEDS AND GRASS AREAS.
3. REPLACE BRICK EDGING WITH NEW 4 INCH BENDA BOARD EDGING.
4. SHRUB BEDS TO HAVE 12 INCHES OF PREPARED PLANTING MIX (75% IMPORT TOPSOIL, 15% COMPOSTED AMENDMENT, 10% WASHED SAND).
5. SHREDDED HARDWOOD MULCH MUST BE CONTAIN LONG STRANDS ALONG WITH DOUBLE SHRED FINER MATERIAL OBTAINED FROM A LOCAL SOURCE.
6. INSTALL 4 INCHES OF CLEAN TOPSOIL IN ALL AREAS OF THE SITE DISTURBED BY GRADING AND CONSTRUCTION OPERATIONS. TOPSOIL SHALL BE FREE FROM STICKS, DEBRIS, AND ROCKS LARGER THAN 2 INCHES IN DIAMETER AND HAVE AN ORGANIC MATTER LEVEL OF 3 PERCENT MINIMUM AND A pH RANGE BETWEEN 5.5 AND 7.4 PERCENT. PROVIDE SOIL TEST ANALYSIS FROM A SOIL TEST LABORATORY SHOWING SOIL MAKEUP AND ORGANIC PERCENTAGE.
7. GENERAL CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF ALL UNDERGROUND ELECTRICAL CONDUIT, TELECOM LINES, AND UTILITES PRIOR TO DIGGING AND ADJUST THE PLANS ACCORDINGLY.

PLANT LEGEND

HS — (IVY) HEDERA SPECIES (1 GALLON)

PS — PITTO SPORUM SPECIES (3' -6')

DS — DWARF SHRUB SPECIES (2 GALLON)

HATCH LEGEND

4" OF TOP SOIL AND SOD TO MATCH EXISTING

HARWOOD MULCH ON WEED FABRIC THROUGHOUT

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11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
LANDSCAPING PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: LS-104
PROJECT NUMBER 22203	

2/7/2023 3:47:38 PM

FLOOR PLAN DEMOLITION NOTES

KEYNOTES DESIGNATED BY: (X)

1 EXISTING DRIVE-THROUGH WINDOWS TO BE REMOVED.
2 EXISTING EXTERIOR FINISHES TO REMAIN.
3 EXISTING LADDER TO REMAIN.
4 EXISTING QUEUE RAIL TO BE REMOVED. PATCH / REPAIR FLOOR AND PREP FOR NEW FINISHES.
5 COUNTER CONSTRUCTION TO REMAIN. REMOVE COUNTERTOP. PREPARE EXISTING STRUCTURE FOR NEW COUNTERTOP.
6 EXISTING DRINK STATION DOORS TO BE REPLACED.
7 EXISTING PARTITION WALL TO BE REMOVED.
8 EXISTING ALUMINUM STOREFRONT DOOR TO REMAIN
9 ALL EXISTING SEATING TO BE REMOVED. REFERENCE SCI.
10 EXISTING RESTROOM FIXTURES AND ACCESSORIES TO BE REMOVED.
11 DOOR LAMINATE TO BE REMOVED AND REPLACED. REFERENCE SCI.
12 EXISTING EQUIPMENT TO REMAIN UNLESS NOTED OTHERWISE.
13 EXISTING FLOOR TILE AND BASE TO BE REMOVED.
14 EXISTING KITCHEN FLOOR TILE TO REMAIN. DAMAGED AND MISMATCHED TILE TO BE REPLACED. BID 25% TILE REPLACEMENT AND 25% GROUT REPLACEMENT.
15 RESTROOM WALL, FLOOR, CEILING FINISHES TO BE REMOVED.
16 EXISTING EXTERIOR DOOR TO REMAIN.
17 CLEAN AND PREPARE WALLS FOR NEW FINISH.
18 EXISTING WALL TO BE REMOVED. REFER TO A101 AND A401 FOR UPDATED RESTROOM LAYOUT.
19 EXISTING SODA DISPENSERS AND ICE MAKERS TO BE REPLACED.
20 EXISTING TV TO BE SAVED, STORED AND REINSTALLATION.
21 CLEAN AND PREPARE MENU BULKHEAD FOR NEW FINISH.

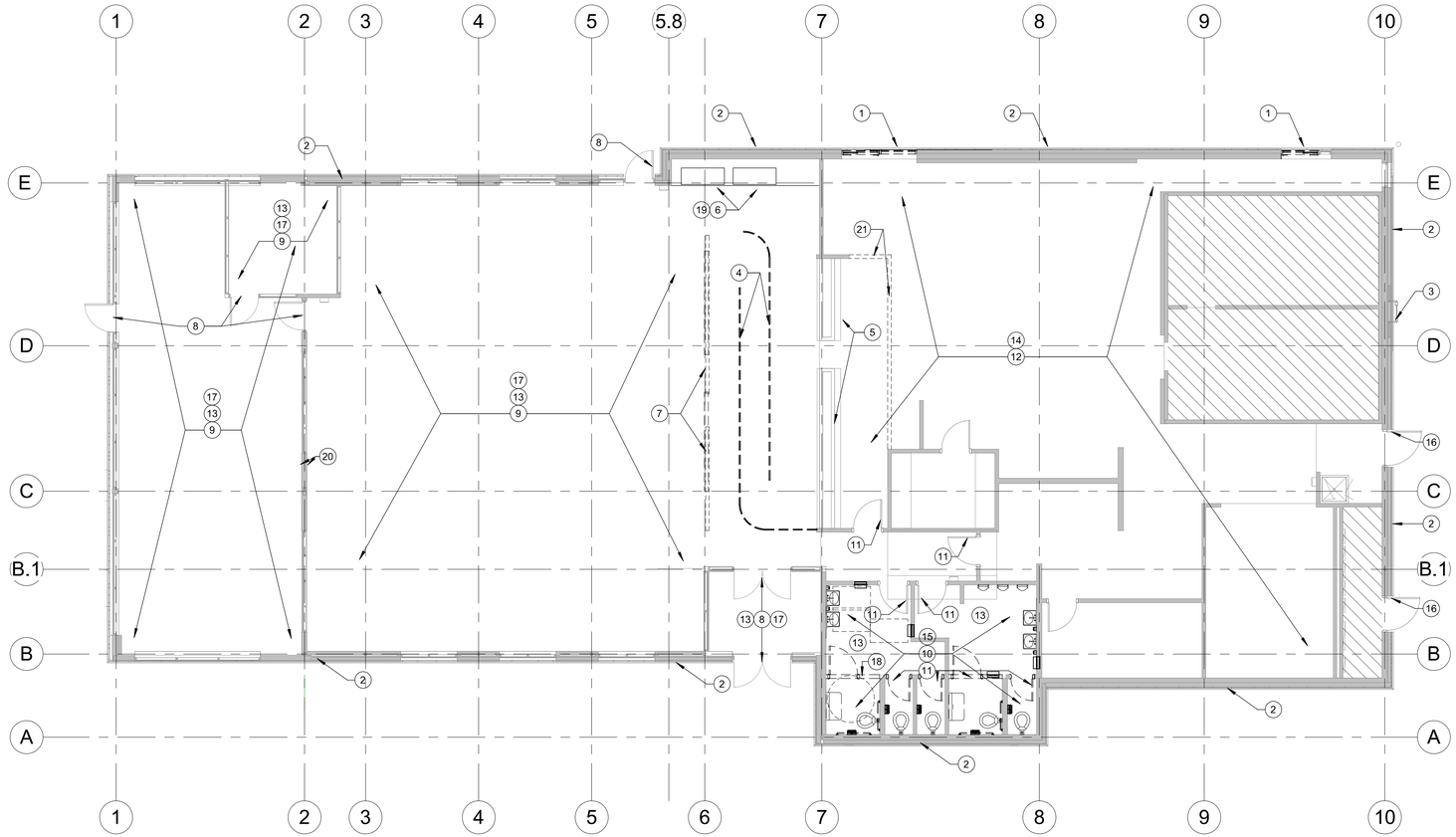
NOTE:
G.C. IS TO REMOVE ALL EQUIPMENT INDICATED FOR DEMOLITION AS COORDINATED WITH THE CONTRACTING OFFICER.

WALL TYPES LEGEND

NO WORK ZONE.

EXISTING FRAMED PARTITION TO REMAIN UNLESS OTHERWISE NOTED. PATCH / CLEAN AND REPAIR AREA AFFECTED AS REQUIRED.

EXISTING TO BE REMOVED.



1 DEMO FLOOR PLAN

AD-101 SCALE: 1/8" = 1'-0"

GENERAL DEMOLITION NOTES

1. EXISTING CEILING, LIGHT FIXTURES, HVAC GRILLES, GRID ETC. TO BE REPLACED TYPICAL. REFER TO DRAWINGS FOR EXTENT OF NEW WORK.
2. TEMPORARY BARRICADE TO BE INSTALLED AS REQUIRED DURING CONSTRUCTION. BARRICADE TO BE 3 5/8" METAL STUDS AT 16" O.C. WITH 1/2" PAINTED GYP. BD. ON DINING ROOM SIDE TO CEILING. PROVIDE PLASTIC SHEET ENCLOSURE TO SEPARATE NEW CONSTRUCTION FROM KITCHEN AS REQUIRED BY BASE REQUIREMENTS.
3. WHERE NEW WORK OR INSTALLATION OF NEW WORK DISPLACES OR DAMAGES THE REMAINING EXISTING FINISH THE CONTRACTOR SHALL REPAIR OR REPLACE THE EXISTING FINISH TO NEW CONDITION AT NO COST TO THE OWNER.
4. WHERE EXISTING EQUIPMENT AND/OR PLUMBING FIXTURE ARE TO BE REMOVED CAP OFF EXISTING UTILITIES WHICH WILL NOT BE REUSED EITHER 6" BELOW TOP OF SLAB OR WITHIN WALL. PATCH FLOOR, WALL OR CEILING AS NOTED ON PLAN.
6. EXISTING FOOD OPERATIONS MAY CONTINUE DURING COURSE OF WORK AS PERMITTED BY CONSTRUCTION SCHEDULE & PHASING. COORDINATE AND SCHEDULE WORK WITH CONTRACTING OFFICER TO MINIMIZE POSSIBLE INTERRUPTIONS TO OPERATIONS.
7. ALL EXISTING EQUIPMENT INDICATED TO REMAIN. SUCH AS POWER, GAS, WATER, AND PLUMBING IS TO REMAIN. REFER TO MEP DRAWINGS.
8. ALL MISC, TRASH, BENCHES, AND TABLE AT OUTSIDE AREA TO BE SALVAGED AND RELOCATED AS PER OWNER.
9. GENERAL CONTRACTOR MUST MARK (TAG) ALL EXISTING DATA LINE IN THE BUILDING AND DO NOT CUT. COIL AND LEAVE EXISTING DATA LINE ABOVE THE CEILING.
10. AAFES HAS FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT.
11. GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVAL, STORAGE, RESETTING, AND FINAL CONNECTIONS OF ALL EQUIPMENT.

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11/22/2022	95% SUBMITTAL	JD, MP
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SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
DEMOLITION PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: AD-101
PROJECT NUMBER 22203	

2/7/2023 3:47:18 PM

REFLECTED CEILING PLAN DEMOLITION NOTES

KEYNOTES DESIGNATED BY: (X)

1 EXISTING ACOUSTICAL CEILING GRID AND TILE TO BE REMOVED. REF. SCI.
2 EXISTING HVAC GRILLES TO BE REMOVED.
3 EXISTING GYPSUM CEILING TO REMAIN. REF. SCI. PATCH AS REQUIRED FOR NEW LIGHTS.
4 EXISTING LIGHT FIXTURES TO BE REMOVED.
5 EXISTING PENDANT LIGHT FIXTURES TO BE REMOVED.
6 EXTERIOR CANOPY AND LIGHTING FIXTURES TO BE REMOVED.
7 EXTERIOR SCONCE LIGHTING TO BE REMOVED.
8 EXIT SIGNS TO BE REMOVED FOR REPLACEMENT.
9 EXISTING BK SIGNAGE AND BRACKETS TO BE REMOVED.
10 EXISTING 1X4 FIXTURE TO BE REMOVED.

WALL TYPES LEGEND

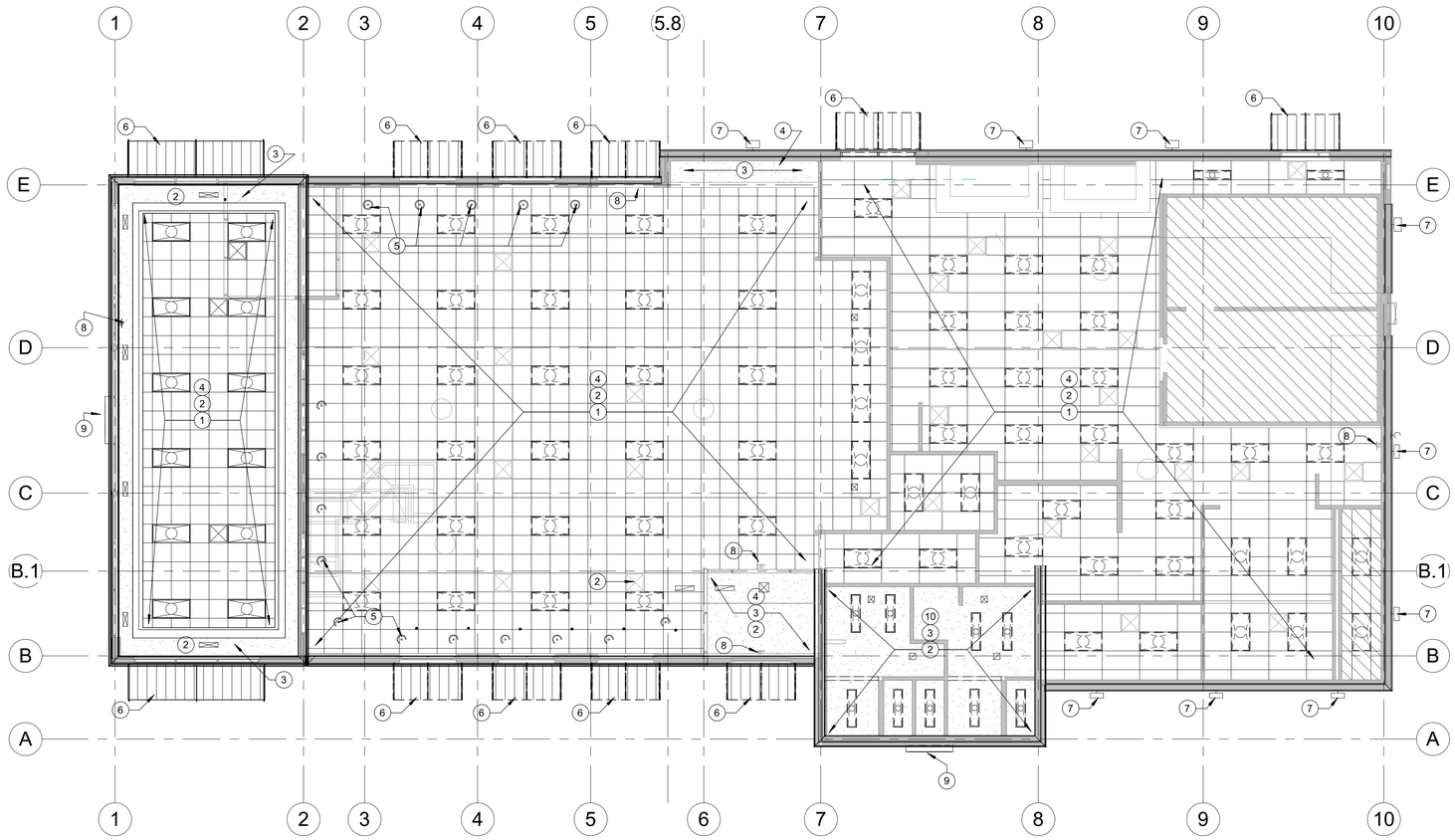
NO WORK ZONE.

EXISTING FRAMED PARTITION TO REMAIN UNLESS OTHERWISE NOTED. PATCH / CLEAN AND REPAIR AREA AFFECTED AS REQUIRED.

EXISTING TO BE REMOVED.

GENERAL DEMOLITION NOTES

1. EXISTING CEILING, GRID, LIGHTING, AND HVAC GRILLES TO BE REPLACED IN DINING ROOM AND KITCHEN. REFER TO DRAWINGS FOR EXTENT OF NEW WORK.
2. TEMPORARY BARRICADE TO BE INSTALLED AS REQUIRED DURING CONSTRUCTION. BARRICADE TO BE 3 5/8" METAL STUDS AT 16" O.C. WITH 1/2" PAINTED GYP. BD. ON DINING ROOM SIDE TO CEILING. PROVIDE PLASTIC SHEET ENCLOSURE TO SEPARATE NEW CONSTRUCTION FROM KITCHEN AS REQUIRED BY BASE REQUIREMENTS.
3. WHERE NEW WORK OR INSTALLATION OF NEW WORK DISPLACES OR DAMAGES THE REMAINING EXISTING FINISH THE CONTRACTOR SHALL REPAIR OR REPLACE THE EXISTING FINISH TO NEW CONDITION AT NO COST TO THE OWNER.
4. WHERE EXISTING EQUIPMENT AND/OR PLUMBING FIXTURES ARE TO BE REMOVED CAP OFF EXISTING UTILITIES WHICH WILL NOT BE REUSED EITHER 6" BELOW TOP OF SLAB OR WITHIN WALL. PATCH FLOOR, WALL OR CEILING AS NOTED ON PLANS.
5. EXISTING FOOD OPERATIONS WILL CONTINUE DURING COURSE OF WORK AS PERMITTED BY CONSTRUCTION SCHEDULE & PHASING. COORDINATE AND SCHEDULE WORK WITH CONTRACTING OFFICER TO MINIMIZE POSSIBLE INTERRUPTIONS TO OPERATIONS.
6. LIGHTING BALLASTS REQUIRING REMOVAL MUST BE DISPOSED OF IAW SECT 01 13 00, 1.22A OF PROJECT MANUAL.
7. CONTRACTORS NEED TO TURN IN RECYCLABLE MATERIAL TO THE RECYCLING CENTER.



DEMOLITON REFLECTED CEILING PLAN

1

AD-102 SCALE: 1/8" = 1'-0"

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David Lee

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11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
REFLECTED CEILING DEMO PLAN

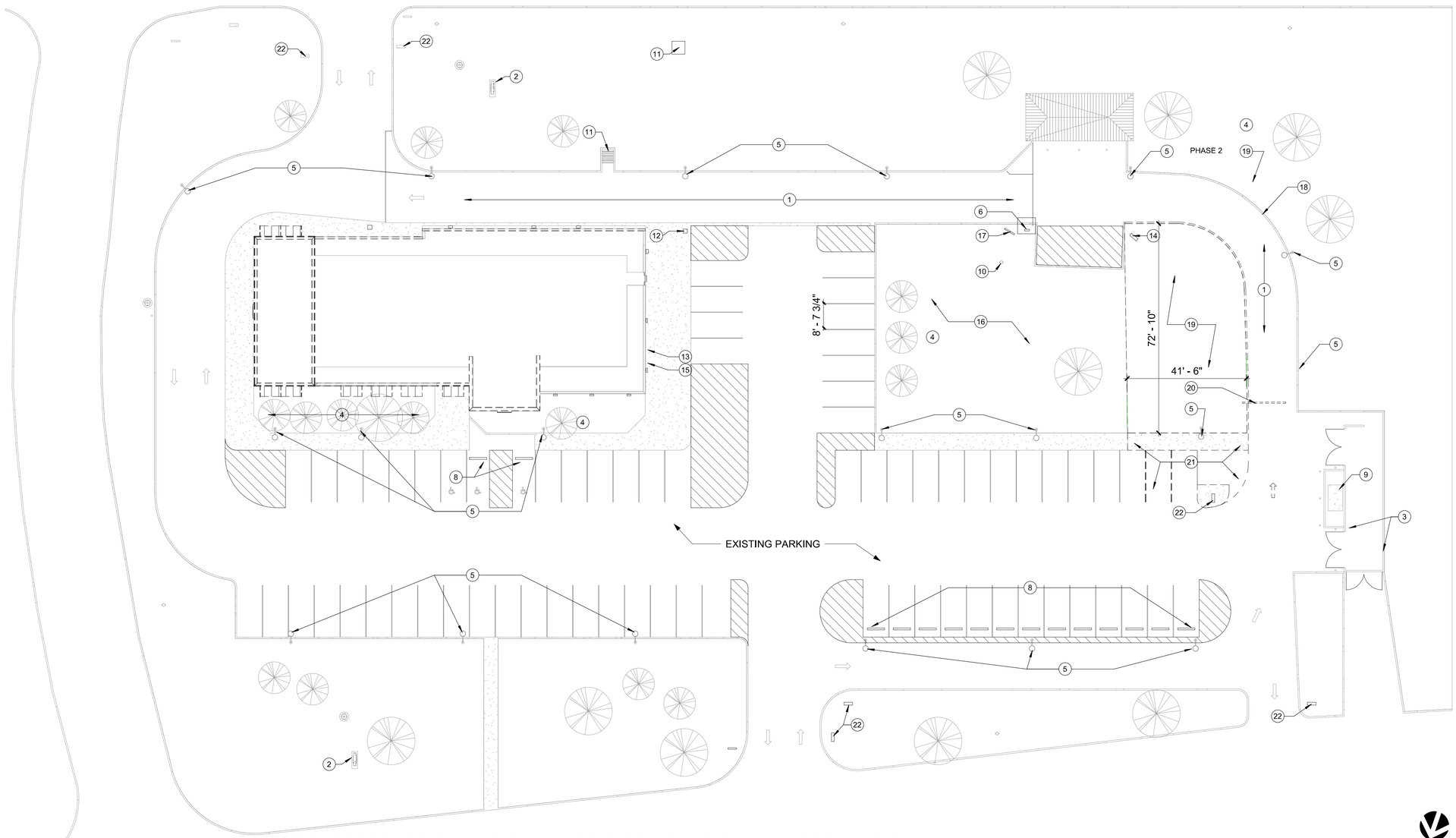
DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: AD-102
PROJECT NUMBER 22203	

2/7/2023 3:47:20 PM

DEMOLITION SITE PLAN NOTES

KEYNOTES DESIGNATED BY: (X)

1 EXISTING DRIVE-THROUGH PAVING TO REMAIN.
2 EXISTING MONUMENT SIGN TO REMAIN. MAINTAIN POWER AND CONDUIT. REPLACE EXISTING BK SIGN FACE.
3 EXISTING CMU DUMPSTER ENCLOSURE TO REMAIN.
4 EXISTING TREES TO REMAIN.
5 EXISTING LIGHT POLE TO REMAIN.
6 EXISTING OCU CANOPY TO BE REMOVED.
8 EXISTING WHEEL STOPS TO REMAIN.
9 EXISTING GREASE TRAP TO REMAIN.
10 EXISTING POWER POLE TO REMAIN.
11 EXISTING CATCH BASIN TO REMAIN.
12 EXISTING TRASH RECEPTACLE TO REMAIN.
13 EXISTING GAS METER TO REMAIN.
14 EXISITING PREVIEW BOARD AND FOOTING TO BE REMOVED.
15 EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT.
16 EXISTING LANDSCAPE AND IRRIGATION SYSTEM TO REMAIN.
17 EXISTING MENU BOARD TO BE REMOVED.
18 EXISTING CURB TO BE REMOVED.
19 EXISTING LANDSCAPE AND IRRIGATION SYSTEM TO BE REMOVED.
20 EXISTING CLEARANCE BAR TO BE REMOVED.
21 EXISTING FLATWORK AND SIDEWALK TO BE REMOVED.
22 CLEAN AND PREPARE DIRECTIONAL SIGNAGE CABINATES / POLES "BLACK" PAINT-90-353. NEW SIGN FACE. KEEP EXISTING FOUNDATION.



1 DEMOLITION SITE PLAN NC

NOTE: REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.

AD-103 SCALE: 1" = 20'-0"

2/7/2023 3:47:22 PM

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REGISTERED ARCHITECT DAVID J. LEE #0989 STATE OF TEXAS

David Lee. Digitally signed by David J. Lee Date: 2023.02.07 17:15:15-06'00'

DATE	REVISION NO. & DESCRIPTION	BY
10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
DEMOLITION SITE PLAN

DATE: 02/06/2023
AAFES Project Number: 2146-22-017
SCALE: 1" = 20'-0"
PROJECT NUMBER 22203
SHEET: AD-103

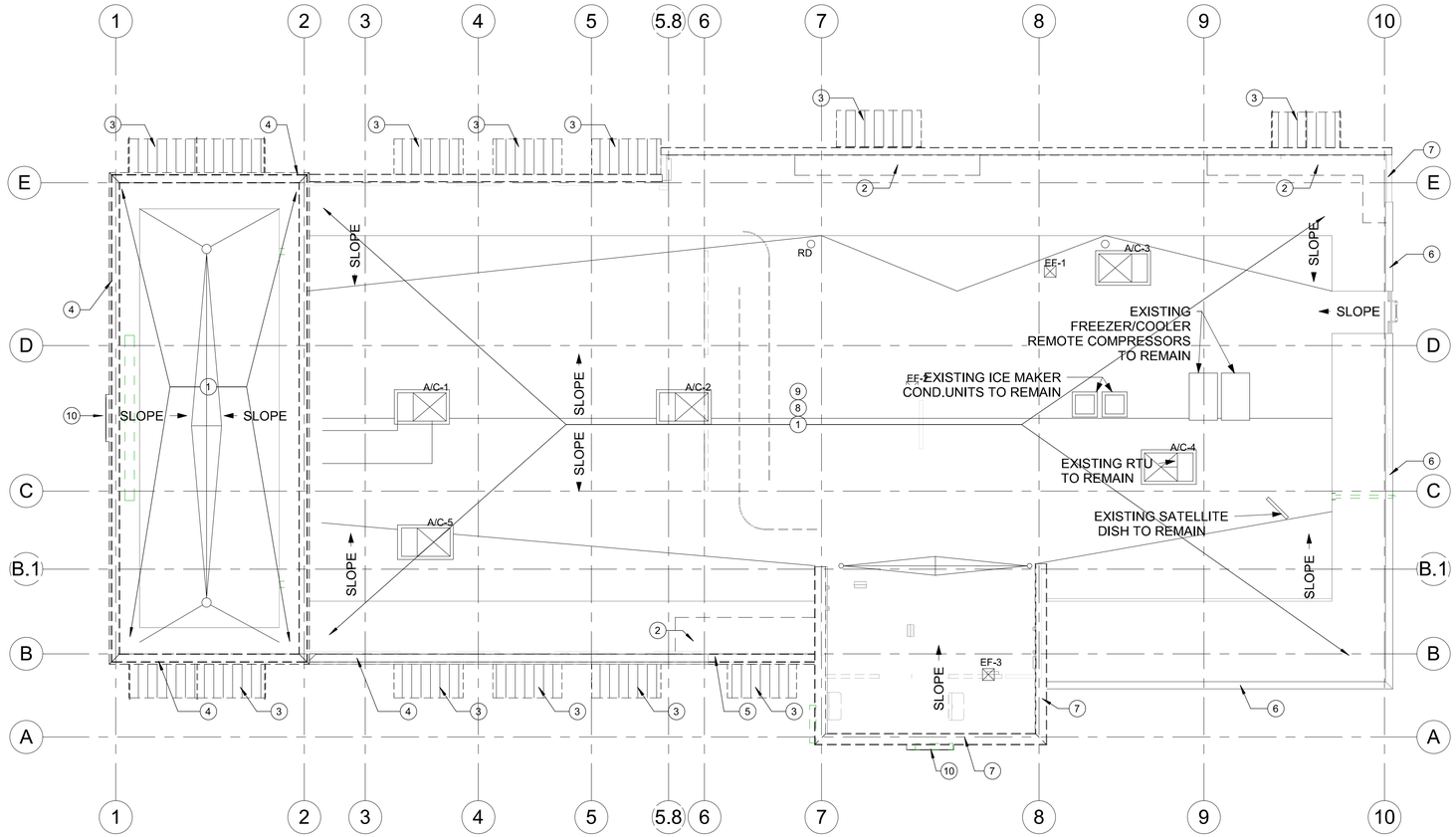
ROOF PLAN DEMOLITION NOTES

KEYNOTES DESIGNATED BY: (X)

1 EXISTING LOW SLOPE ROOF TO REMAIN.
2 EXISTING ROOF TO BE REPAIRED AND REPLACED WHERE ACCESS IS REQUIRED.
3 EXISTING METAL AWNING TO BE REMOVED.
4 EXISTING RED LIGHT BAND TO REMAIN.
5 EXISTING RED LIGHT BAND TO BE REMOVED.
6 EXISTING METAL COPING TO REMAIN.
7 EXISTING METAL COPING TO BE REMOVED.
8 EXISTING ROOF DRAINS TO REMAIN.
9 EXISTING MECHANICAL ROOF EQUIPMENT TO REMAIN.
10 EXISTING BK SIGN TO BE REMOVED.

GENERAL ROOF DEMO NOTES

1. EXISTING ROOF INSULATION TO REMAIN AS PRACTICABLE VERIFY ALL SLOPES.
2. ANY UNDERLYING EXISTING DAMAGE TO THE ROOF, EQUIPMENT, OR CURBS SHALL BE IMMEDIATELY REPORTED TO THE G.C.
3. ALL REMOVAL OF STRUCTURAL COMPONENTS TO BE REMOVED WITH CARE AND VERIFIED PRIOR TO REMOVAL ANY DISCREPANCY SHALL BE IMMEDIATELY REPORTED TO THE G.C.
4. CONTRACTOR TO INSPECT EXISTING ROOF FOR LEAKS AND DAMAGE AND REPORT FINDINGS TO AAFES CONTRACT OFFICER AND PROJECT MANAGER.



1 EXISTING ROOF PLAN

AD-200 SCALE: 1/8" = 1'-0"

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REGISTERED ARCHITECT
DAVID J. LEE
10989
STATE OF TEXAS

David Lee
Digitally signed by David J. Lee
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SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
DEMO ROOF PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: 1/8" = 1'-0"	SHEET: AD-200
PROJECT NUMBER 22203	

ELEVATION DEMO NOTES

KEYNOTES DESIGNATED BY: (X)

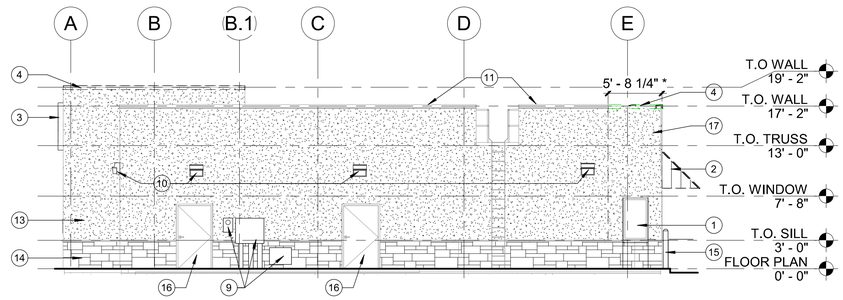
1 EXISTING STOREFRONT WINDOWS TO REMAIN.
2 EXISTING METAL AWNINGS AND LIGHTING TO BE REMOVED.
3 EXISTING BK SIGNAGE AND BRACKETS TO BE REMOVED.
4 EXISTING PARAPET CAP TO BE REMOVED.
5 EXISTING RED LIGHT BAND TO BE REMOVED.
6 EXISTING BUILDING NUMBER SIGNAGE TO BE REMOVED AND STORED.
7 EXISTING DRIVE-THRU WINDOWS TO BE REMOVED.
8 EXISTING STOREFRONT DOORS TO REMAIN.
9 EXISTING ELECTRICAL AND GAS SUPPORT EQUIPMENT TO REMAIN.
10 EXISTING EXTERIOR SCONCE LIGHTING TO BE REMOVED.
11 EXISTING PARAPET CAP TO REMAIN.
12 EXISTING RED LIGHT BAND TO REMAIN.
13 EXISTING EIFS STUCCO.
14 EXISTING STONE VENEER TO REMAIN
15 PAINT EXISTING BOLLARD BLACK.
16 EXISTING DOOR AND FRAME TO REMAIN.
17 REMOVE EXISTING STUCCO/EIFS FINISH.

DEMOLITION LEGEND

EXISTING TO REMAIN REFERENCE AD 101 FOR DEMO PLAN

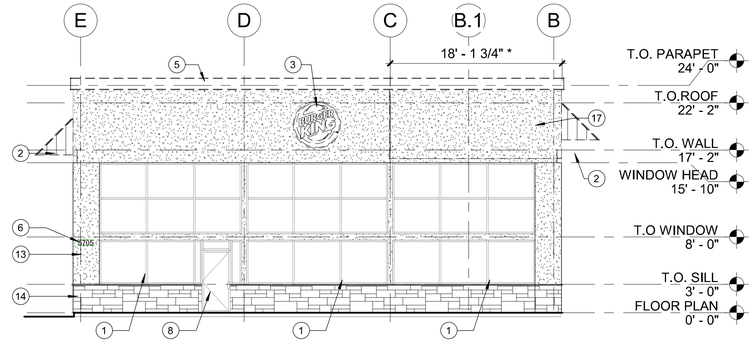
EXISTING TO BE REMOVED REFERENCE AD 101 FOR DEMO PLAN

* INDICATES APPROXIMATE AREA OF STUCCO REMOVAL FOR NICHIHA



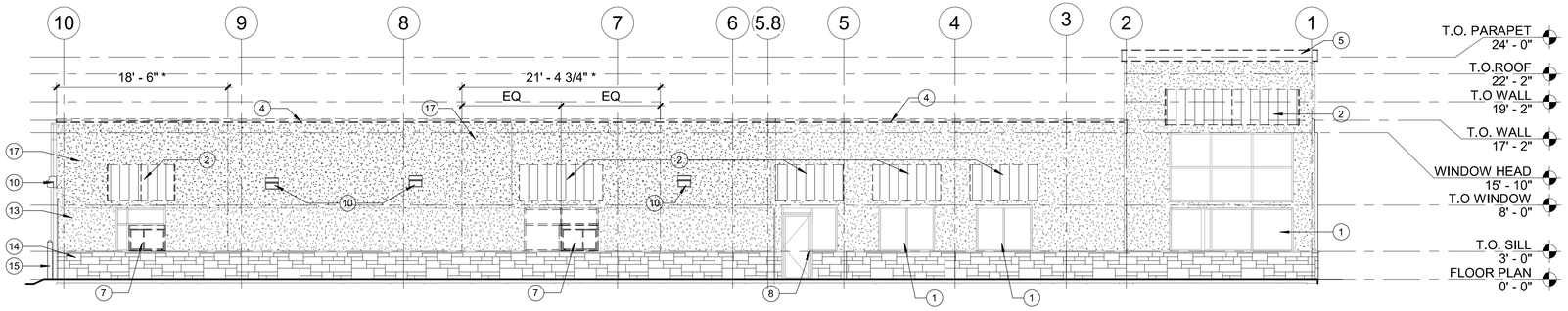
3 DEMO REAR ELEVATION

AD-201 SCALE: 1/8" = 1'-0"



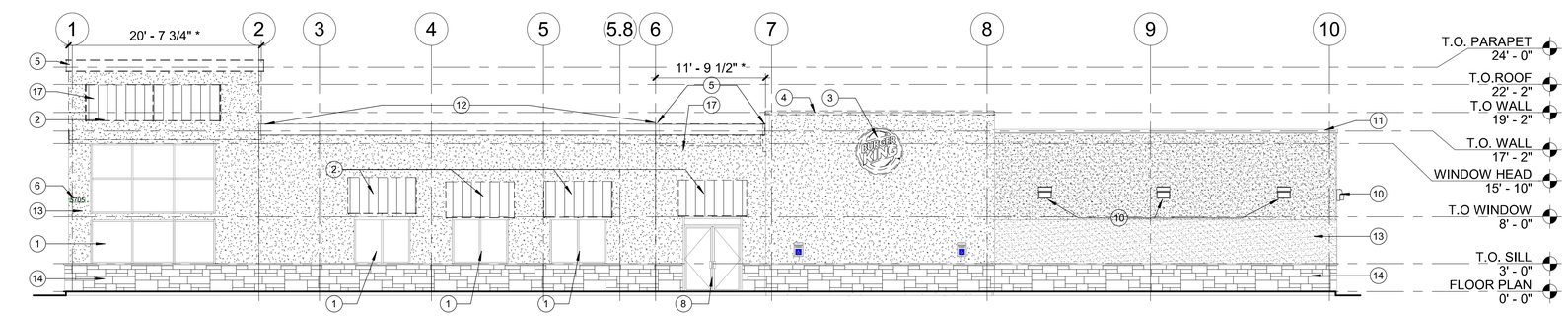
4 DEMO FRONT ELEVATION

AD-201 SCALE: 1/8" = 1'-0"



2 DEMO DRIVE THROUGH ELEVATION

AD-201 SCALE: 1/8" = 1'-0"



1 DEMO MAIN ENTRY ELEVATION

AD-201 SCALE: 1/8" = 1'-0"

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REGISTERED ARCHITECT DAVID J. LEE 70989 STATE OF TEXAS

David Lee. Digitally signed by David J. Lee Date: 2023.02.07 17:15:48-06'00'

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02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
DEMO ELEVATIONS

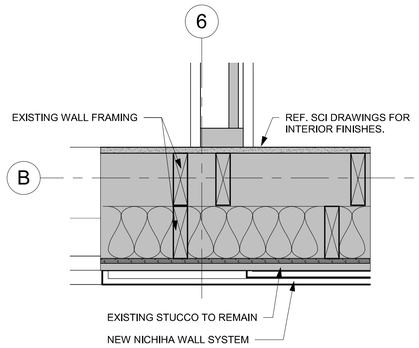
DATE: 02/06/2023
AAFES Project Number: 2146-22-017
SCALE: 1/8" = 1'-0"
PROJECT NUMBER 22203
SHEET: AD-201

WALL TYPES LEGEND

NO WORK ZONE.

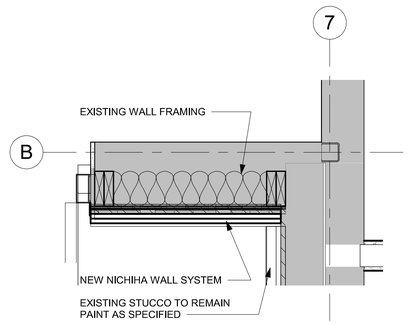
EXISTING FRAMED PARTITION TO REMAIN UNLESS OTHERWISE NOTED. PATCH / CLEAN AND REPAIR AREA AFFECTED AS REQUIRED.

OUTLINE OF OVERHEAD WALL



3 PLAN DETAIL

A-101 SCALE: 1 1/2" = 1'-0"



2 PLAN DETAIL

A-101 SCALE: 1" = 1'-0"

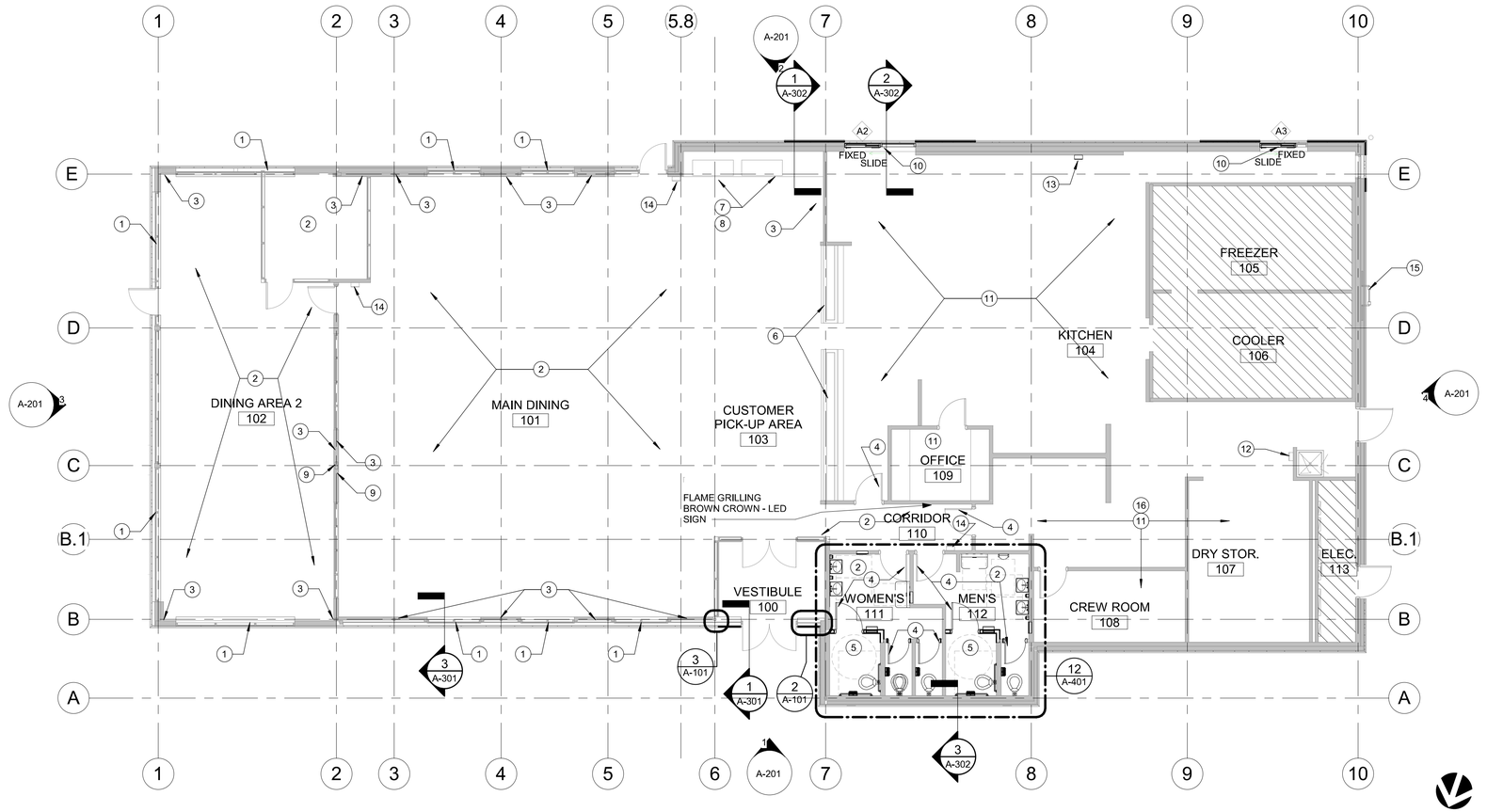
FLOOR PLAN NOTES

KEYNOTES DESIGNATED BY: (X)

1 CLEAN EXISTING WINDOWS & REPAIR TO LIKE NEW CONDITION.
2 EXISTING FLOOR TILE TO BE REPLACED. REFER TO SCI.
3 CLEAN AND PREPARE WALLS FOR NEW PAINT FINISH. REFER TO SCI DRAWINGS.
4 DOOR LAMINATE TO BE REPLACED. REFER TO SCI DRAWINGS.
5 NEW RESTROOM FINISHES. REFER TO SCI DRAWINGS.
6 COUNTER CONSTRUCTION TO REMAIN. REMOVE COUNTERTOP AND PREPARE REMAINING STRUCTURE FOR NECOUNTERTOP. EF/CI.
7 REPLACE DOORS ON DRINK STATION TO SCI DRAWINGS.
8 EXISTING DRINKING FOUNTAINS AND ICE MAKER TO BE REPLACED. EF/CI.
9 EXISTING TV. REMOVE AND REINSTALL LOCATE EXISTING POWER & DATA TO 6'0" AFF.
10 EXISTING DRIVE-THROUGH WINDOWS TO BE REPLACED.
11 EXISTING KICHEN FLOOR TILE TO REMAIN. PATCH, REPAIR AND CLEAN AS NEEDED. BID 25% REPLACEMENT.
12 EXISTING FEC CLASS K.
13 EXISTING FE CLASS K.
14 EXISTING FEC CLASS A.
15 EXISTING LADDER TO BE PAINTED BLACK.
16 EXISTING EQUIPMENT TO REMAIN. UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. PROTECT EXISTING CONSTRUCTION AS REQUIRED AND FINISH PER PLANS.
2. REFER TO ENGINEERING SHEETS FOR EXTENT OF MECHANICAL, ELECTRICAL AND PLUMBING WORK.
4. REFER TO A101A FOR EXISTING FIRE EXTINGUISHER LOCATIONS.
5. PATCH AND REPAIR EXISTING WALLS AS REQUIRED TO RECEIVE NEW FINISHES AND MAINTAIN INTEGRITY OF WALL. FINISH AS SHOWN ON DETAIL SHEETS.
6. REFER TO SCI FOR FINISH, AND SIGNAGE INFORMATION.
7. REFER TO SCI DOOR SCHEDULE FOR NEW AND EXISTING DOOR INFORMATION.
8. REMOVE WALL MOUNTED EQUIPMENT AND REINSTALL AS REQUIRED AFTER INSTALLING WALL FINISHES.
9. GENERAL CONTRACTOR TO STORE ALL SALVAGED AND REUSED EQUIPMENT FOR REINSTALLATION AS INDICATED IN THE NEW FIXTURE PLAN.
10. ALL ITEMS, FINISHES, EQUIPMENT, MILLWORK ETC. ARE CONTRACTOR FURNISHED/CONTRACTOR INSTALLED (CF/CI) UNLESS NOTED OTHERWISE.
11. INTERIOR FINISHES TO BE SPECIFIED BY SEATING CONCEPT INC. G.C. TO SUPPLY AND INSTALL ALL FINISHES.



1 FLOOR PLAN

A-101 SCALE: 1/8" = 1'-0"

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REGISTERED ARCHITECT DAVID J. LEE 30989 STATE OF TEXAS

David Lee

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Date: 2023.02.07 17:16:08-06'00'

DATE	REVISION NO. & DESCRIPTION	BY
10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

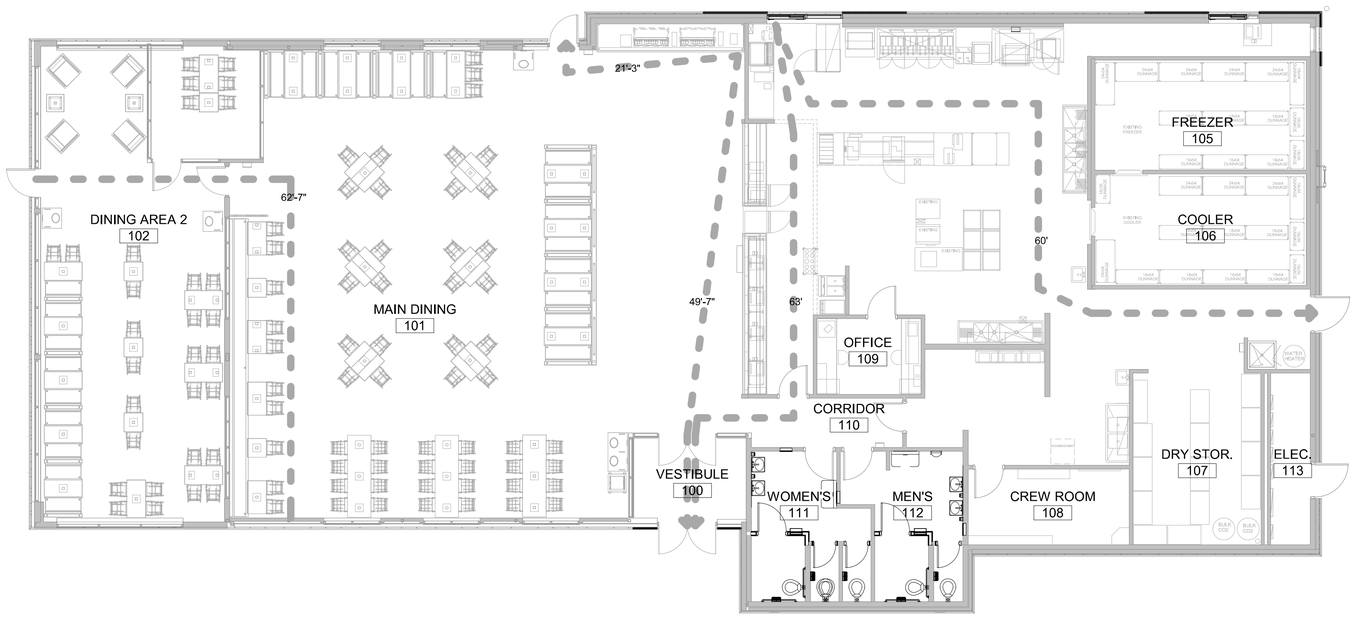
DRAWING TITLE:
FLOOR PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: A-101
PROJECT NUMBER 22203	

BUILDING INFORMATION	
BUILDING AREA:	ALLOWABLE: 9,500 SQFT ACTUAL: 7,579 SQFT
OCCUPANCY:	A-2
CONSTRUCTION TYPE:	II-B
EXITING:	
OCCUPANTS:	263 DINING 19 KITCHEN / AUXILIARY 282 TOTAL OCCUPANTS
MAX TRAVEL DISTANCE: (1016.2)	75' NOT SPINKLED
MAX COMMON PATH:	63'
EXITS:	4
EXIT SIZING (1005.3) EXIT WIDTH REQUIRED: .20 X 263 = 53" REQUIRED	(2) 3' - 0" DOORS (1) 6' - 0" DOORS + (1) 6' - 0" DOORS 15'-1 3/4" TOTAL PROVIDED
PARKING:	
PARKING:	71 EXISTING PARKING SPOTS
ADA PARKING REQ:	3 REQUIRED

NOTE: THIS BUILDING IS NON-SPRINKLED

PLUMBING FIXTURE COUNT	
OCCUPANCY: A-2	
WATER CLOSETS:	MEN: 1/75 = 2 REQ. - 3 PROV. WOMEN: 1/75 = 2 REQ. - 3 PROV.
LAVATORIES:	MEN: 1/200 = 1 REQ. - 2 PROV. WOMEN: 1/200 = 1 REQ. - 2 PROV.
DRINKING FOUNTAIN:	NA
SERVICE SINK:	1 PROVIDED



1 LIFE SAFETY PLAN

A-101A SCALE: 1/8" = 1'-0"

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DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
LIFE SAFETY PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: A-101A
PROJECT NUMBER 22203	

WALL TYPES LEGEND

NO WORK ZONE.

EXISTING TO BE REMOVED

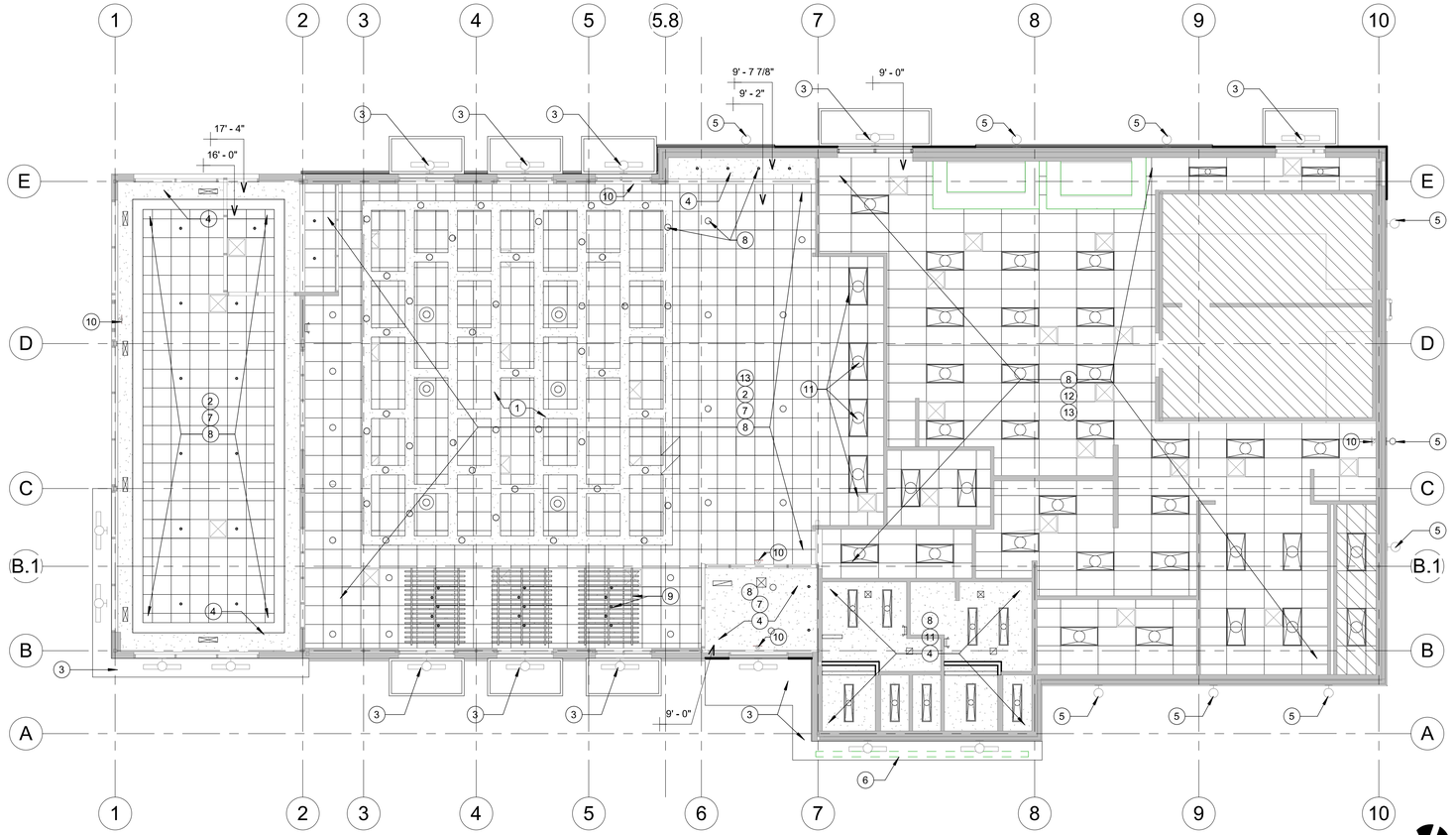
GENERAL NOTES

1. REFER TO SCI DRAWINGS FOR LOCATIONS AND TYPES OF LIGHT FIXTURES. ALL EXTERIOR AND INTERIOR LIGHTING FIXTURES TO HAVE LED LIGHT BULBS
2. FIRE DEPARTMENT CONNECTION AND FIRE ALARM PANEL BOX TO REMAIN THE SAME AND PAINT RED. THESE ITEMS MUST REMAIN AS THEY ARE AND THE FDC CANNOT BE PAINTED AT THE BRASS FITTINGS. THE BACKGROUND OF THE FDC MUST HAVE THE CIRCULAR IDENTIFICATION PLATE BEHIND AGAINST THE WALL.
3. TRELLIS TO BE RELOCATED AS NEEDED TO CLEAR SPRINKLER HEADS. CONTRACTOR TO VERIFY LOCATION OF EXISTING FIRE SRINKLER HEADS WITH NEW TRELLIS. EXTENDING AND/OR RELOCATION OF HEADS TO BE REVIEWED.

REFLECTED CEILING PLAN NOTES

KEYNOTES DESIGNATED BY: (X)

1 NEW TRELLIS SUSPENDED CEILIING TO BE INSTALLED IN DINING ROOM. REF. SCI DRAWINGS.
2 NEW ACOUSTICAL CEILING GRID AND TILE TO BE INSTALLED. REF. SCI DRAWINGS.
3 NEW METAL CANOPY WITH LIGHTING TO BE INSTALLED. CANOPY EF/CI. HEATING CF/CI.
4 EXISTING GYP. BD. CEILING. PATCH/ AND REPAIR AS REQUIRED FOR NEW FINISH & LIGHTING.
5 EXISTING SCONCE LIGHTS TO BE REPLACED WITH NEW LED FIXTURES. REF. ELECTRICAL.
6 NEW "FLAME GRILLING SINCE 1954" SIGN CHANNEL LETTERS MOUNTED TO A 3" HIGH RAISED ALUMINUM CHANNEL RACEWAY WITH LED REMOTE ILLUMINATION.
7 NEW LED LIGHTING FIXTURES. REF. SCI DRAWINGS. AND ELECTRICAL DRAWINGS.
8 NEW HVAC GRILLES TO BE INSTALLED.
9 NEW PERGOLA WITH LED LIGHTING. REFER TO SCI DOCUMENTS.
10 NEW EMERGENCY EXIT SIGNAGE.
11 NEW MATCHING SIZE LED LIGHTING FIXTURES
12 NEW LED LIGHT FIXTURES. REFER TO ELECTRCAL DRAWINGS.
13 NEW ACOUSTICAL CEILING AND TILE.



1 NEW REFLECTED CEILING PLAN

A-102 SCALE: 1/8" = 1'-0"

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SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
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CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
REFLECTED CEILING PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: A-102
PROJECT NUMBER 22203	

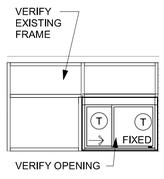
BURGER KING EQUIPMENT SCHEDULE

QTY.	ITEM NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	FURNISH / INSTALL A	B	C	D	E	F
2	B1	BEVERAGE ICE DISPENSER - 12 HEAD (DINING)	LANCER	85-4562H-123-BKC		●				
2		635lb ICE MAKER, CUBE STYLE	MANITOWOC	IB-0624YC		●				
1	B2	ICE MACHINE - 30 INCH	MANITOWOC	ICE BACK KITCHEN		●				
1		ICE BIN - 30 INCH	MANITOWOC	SY-0854A		●				
1	B2.1	STAINLESS STEEL SERVICE CHASE FOR ICE LINES	FAB	M13234		●				
2	B3	14 LINE BUNDLE TUBING 100 FT	LANCER CORP	08-0403-01		●				
2	B4	BNB RACKS				●				
1	B5	LARGE KITCHEN ICE MACHINE				●				
1	B6	DRIVE THRU ICE/BEVERAGE DISPENSER				●				
1	B7	POWER SOAK SINK				●				
1	B8	SHAKE MACHINE	TAYLOR C606			●				
1	B9	4 BANK FRYER								●
1	B10	MAIN BOARD VERTICAL UNIT				●				
1	B11	MEAT FREEZER WELL	BK-FRZ-50			●				

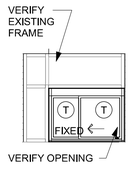
NOTE
VERIFY EXISTING EQUIPMENT, INTENT TO MATCH EXISTING.

FURNISH / INSTALL LEGEND
A = DECOR TO FURNISH & INSTALL THROUGH G.C.
B = EXCHANGE TO FURNISH - G.C. TO INSTALL
C = G.C. TO FURNISH - G.C. TO INSTALL
D = MECH. CONTRACTOR FURNISHED & INSTALLED
E = EXISTING
F = EXCHANGE TO FURNISH - EXCHANGE TO INSTALL

(T) = 1" INSULATED TEMPERED GLASS LOW E UNLESS NOTED OTHERWISE



WINDOW A2
SELF CLOSING DRIVE-THROUGH WINDOW
QUICK SERVE MODEL #SC4030
48"W X 36"H



WINDOW A3
SELF CLOSING DRIVE-THROUGH WINDOW
QUICK SERVE MODEL #SC4030
48"W X 36"H

WINDOW TYPES

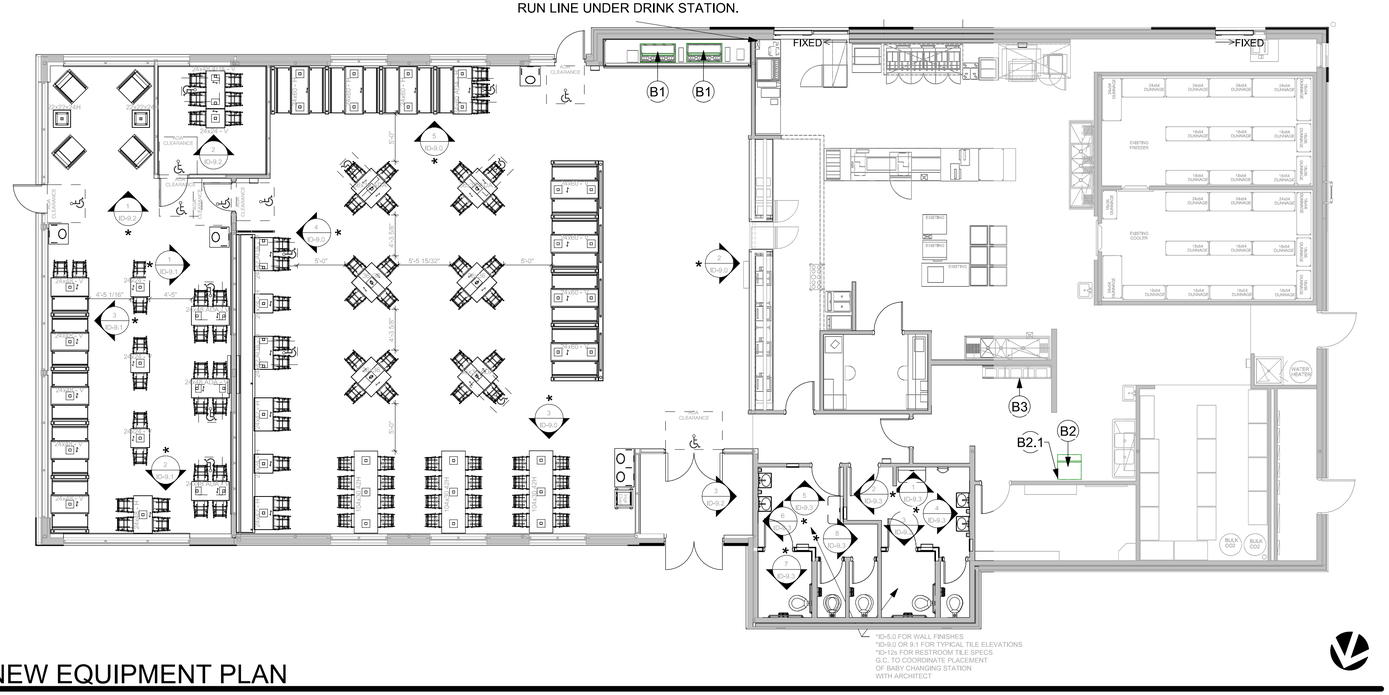
GENERAL NOTES

1. ALL FURNISHINGS TO BE FURNISHED BY EXCHANGE VENDOR / INSTALLED BY GENERAL CONTRACTOR.
2. GENERAL CONTRACTOR TO REMOVE AND STORE ALL EQUIPMENT AS NEEDED FOR THE TILE AND GROUT REPAIR. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO MOVE THE EQUIPMENT AND CONNECT AFTER RENOVATION TO THE KITCHEN AREA.
4. EXCHANGE TO PROVIDE SEATING PACKAGE TO GENERAL CONTRACTOR.
5. GENERAL CONTRACTOR TO MAKE GROMMETS IN COUNTERTOP AS DIRECTED BY AAFES PM FOR POINT OF SALES (POS) EQUIPMENT.
6. ALL EXISTING EQUIPMENT IN KITCHEN IS TO BE REMOVED, STORED AND REINSTALLED AFTER TILE/GROUT REPAIR. ALL SUPPORTING UTILITIES SUCH AS POWER, GAS, WATER, AND PLUMBING IS TO REMAIN. REFER TO MEP DRAWINGS.

* REFER TO SCI DRAWINGS.

AAFES WILL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION OF THE FOLLOWING:
1. HEAD SETS
2. STOCK MENU SYSTEM
3. POS SYSTEMS
4. COMPUTER EQUIPMENT

ICE MACHINE REFRIGERATION LINES TO BE LOCATED IN CHASE. RUN LINE UNDER DRINK STATION.



A1 NEW EQUIPMENT PLAN

A-103 SCALE: 1/8" = 1'-0"

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REGISTERED ARCHITECT DAVID J. LEE 10989 STATE OF TEXAS

Digitally signed by David J. Lee
Date: 2023.02.07 17:16:54-06'00'

DATE	REVISION NO. & DESCRIPTION	BY
10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

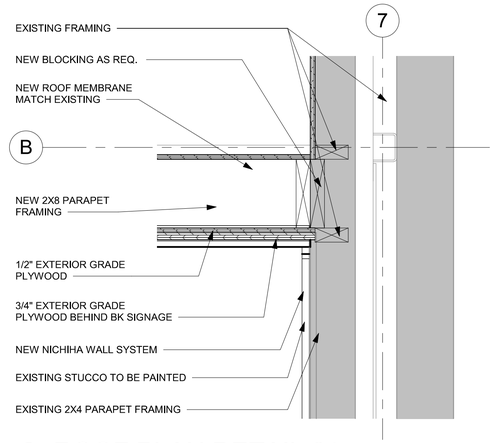
PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
NEW EQUIPMENT PLAN

DATE: 02/06/2023
AAFES Project Number: 2146-22-017
SCALE: As indicated
SHEET: A-103
PROJECT NUMBER 22203

2/7/2023 3:46:55 PM



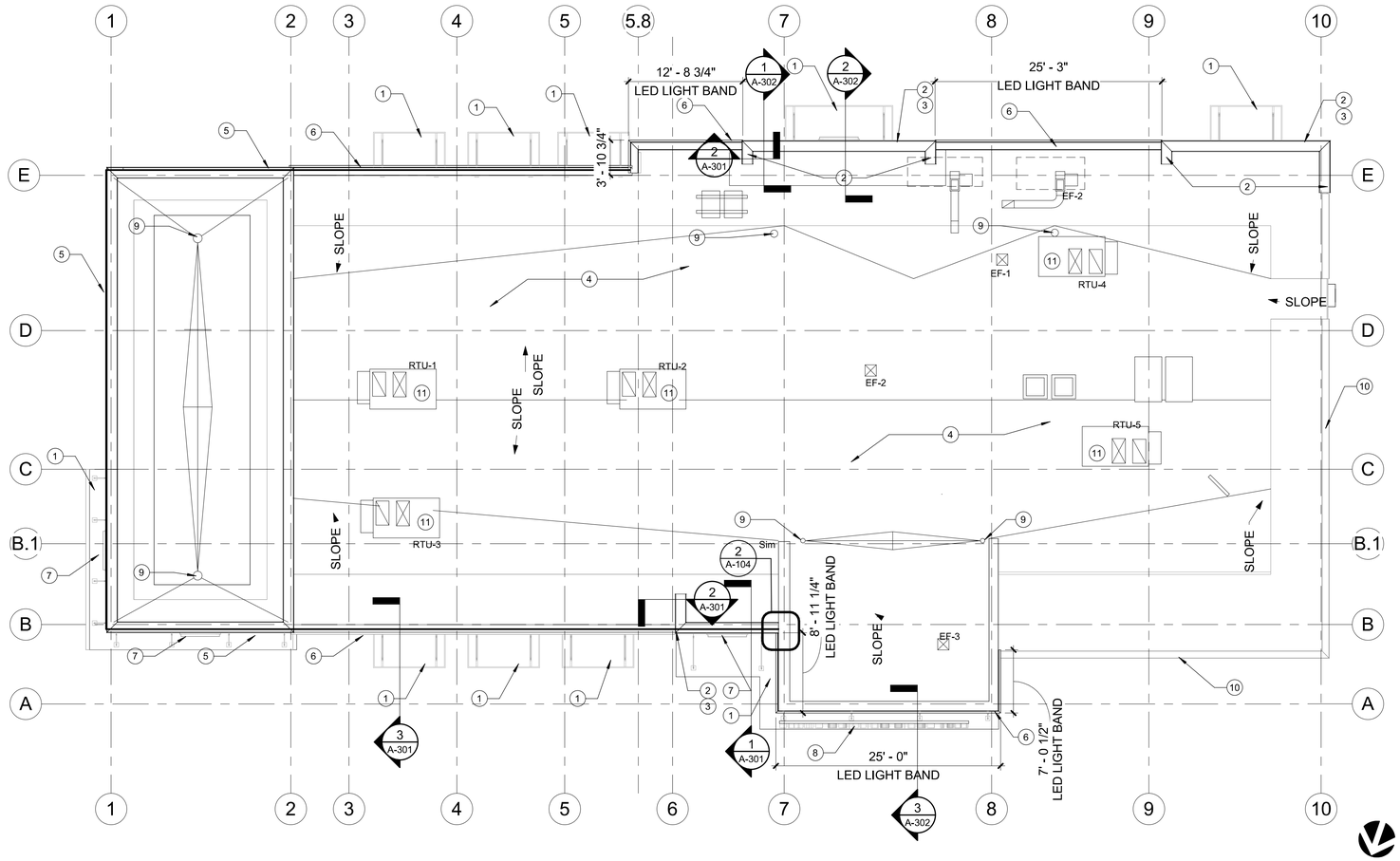
2 ROOF PLAN DETAIL 01

A-104 SCALE: 1 1/2" = 1'-0"

ROOF PLAN NOTES

KEYNOTES DESIGNATED BY: (X)

1 NEW METAL CANOPY. SUPPLIED AND INSTALLED BY GC.
2 NEW PARAPET BUILT ON EXISTING PARAPET . REF. A201, A301 AND A302.
3 NEW METAL PARAPET CAP.
4 EXISTING ROOFING AND FLASHING TO REMAIN.
5 EXISTING RED LIGHT BAND TO REMAIN.
6 NEW RED LIGHT BAND.
7 NEW EXTERIOR BURGER KING SIGNAGE.
8 NEW "FLAME GRILLING SINCE 1954" SIGN CHANNEL LETTERS MOUNTED TO A 3" HIGH RAISED ALUMINUM CHANNEL RACEWAY WITH LED REMOTE ILLUMINATION.
9 EXISTING ROOF DRAIN
10 EXISTING PARAPET CAP TO REMAIN.
11 EXISTING ROOFTOP HVAC UNITS TO REMAIN.



1 NEW ROOF PLAN

A-104 SCALE: 1/8" = 1'-0"

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DAVID J. LEE
STATE OF TEXAS
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02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

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CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

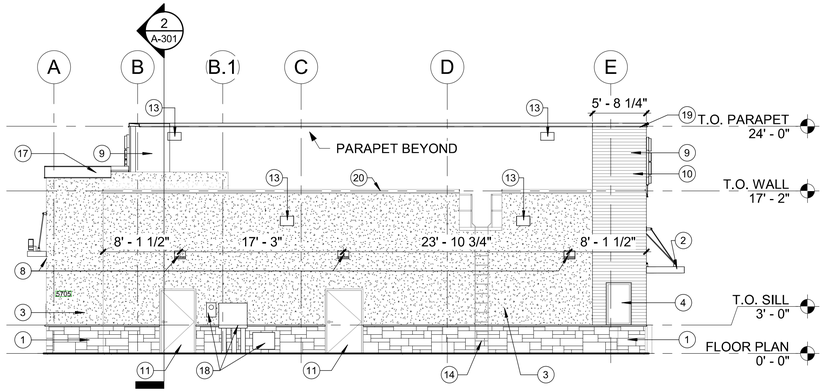
EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

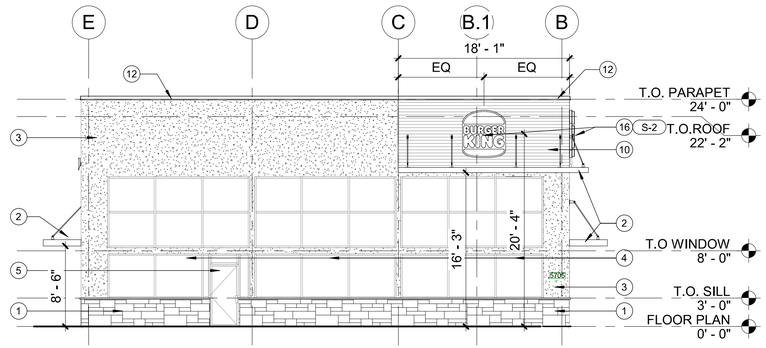
DRAWING TITLE:
ROOF PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: A-104
PROJECT NUMBER 22203	



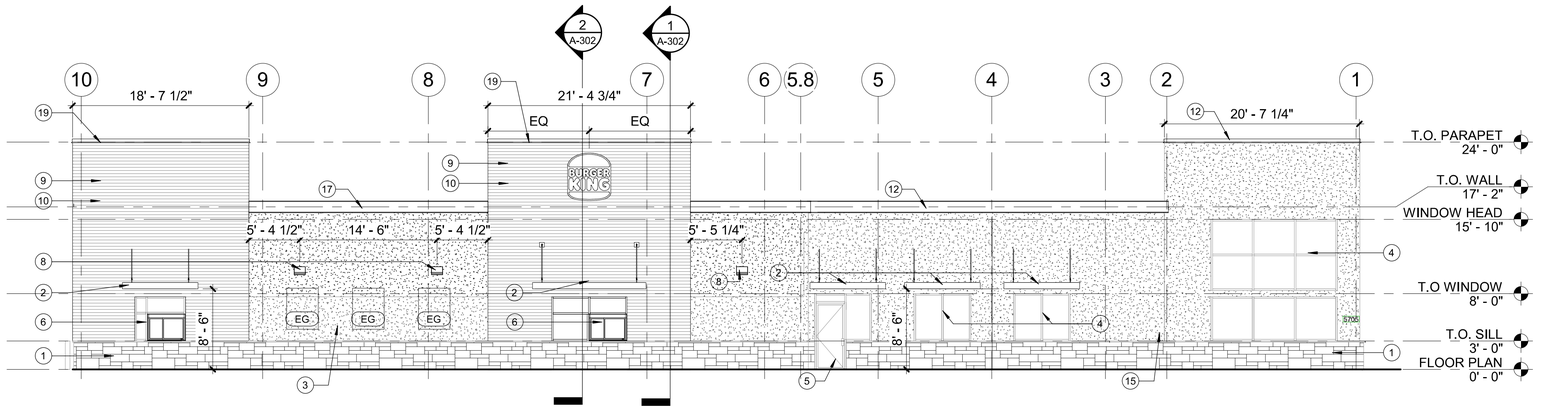
4 REAR ELEVATION

A-201 SCALE: 1/8" = 1'-0"



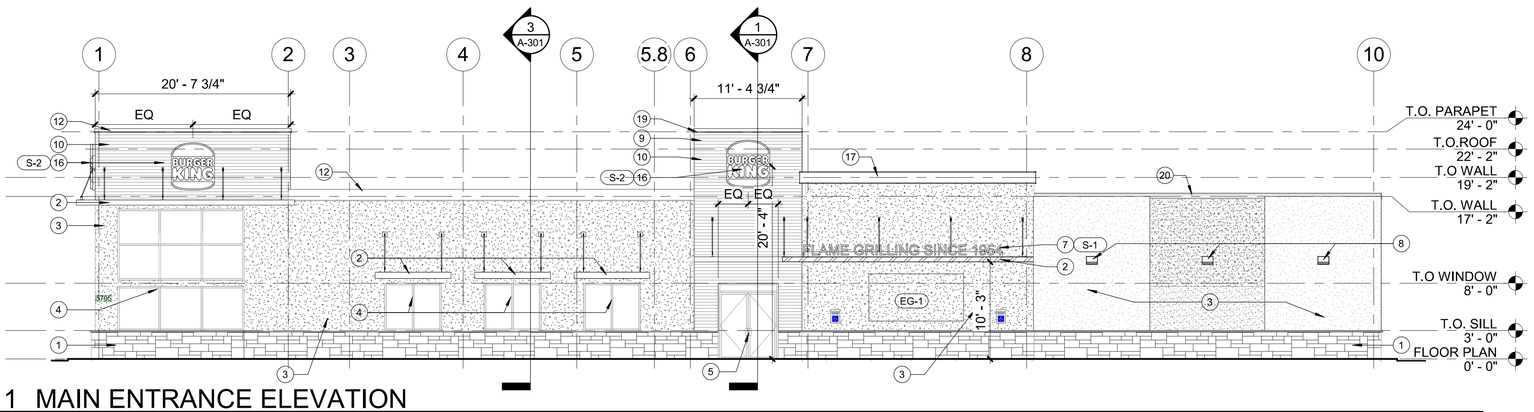
3 FRONT ELEVATION

A-201 SCALE: 1/8" = 1'-0"



2 DRIVE-THRU ELEVATION

A-201 SCALE: 1/8" = 1'-0"



1 MAIN ENTRANCE ELEVATION

A-201 SCALE: 1/8" = 1'-0"

NOTE: GENERAL CONTRACTOR TO SUBMIT SAMPLES OF ALL EXTERIOR FINISHES AND GROUTS TO ARCHITECT AND DPW FOR FINAL APPROVAL

EXTERIOR SIGNAGE

(S-1) FLAME GRILLING SINCE 54'

(S-2) BURGER KING SIGN

EXTERIOR GRAPHICS

(EG) EXTERIOR GRAPHIC - 40"X52"

(EG-1) EXTERIOR BILLBOARD GRAPHIC (1)

ELEVATION NOTES

KEYNOTES DESIGNATED BY: (X)

1 EXISTING STONE VENEER TO REMAIN
2 NEW METAL CANOPY WITH LED SOFFIT LIGHTING. CI/CF [MP 3G]
3 EXISTING EXTERIOR STUCCO FINISH, PAINT AS SPECIFIED [EP 2G]
4 EXISTING EXTERIOR WINDOWS AND STOREFRONT TO REMAIN
5 EXISTING ALUMINUM STOREFRONT DOOR TO REMAIN
6 NEW DRIVE-THRU WINDOWS
7 NEW "FLAME GRILLING SINCE 1954" SIGN CHANNEL LETTERS MOUNTED TO A 3" HIGH RAISED ALUMINUM CHANNEL RACEWAY WITH LED REMOTE ILLUMINATION. AF/CI. REFER TO ELECTRICAL DRAWINGS. (S-1)
8 NEW LED EXTERIOR LIGHTING - SILVER
9 NEW PARAPET WALL.
10 NEW EXTERIOR NICHIHA WALL SYSTEM. TERMINATING AT STONE WATER TABLE [EF 9G]
11 EXISTING DOOR AND FRAME TO REMAIN PATCH CLEAN AND REPAIR FOR NEW PAINT [EP 4G]
12 EXISTING RED LIGHT BAND ANCHORED TO PARAPET TO REMAIN
13 EXISTING SCUPPER AT HI/LOW PARAPET TO REMAIN PAINT AS SPECIFIED [EP 2G]
14 EXISTING LADDER TO BE PAINTED BLACK. [EP 2G]
15 NOT USED.
16 NEW BK SIGNAGE. EF/CI. PROVIDE BLOCKING AS REQUIRED.
17 NEW RED LED LIGHT BAND. METAL COPING BELOW METAL BAND TO BE PAINTED [MC 2G]
18 EXISTING ELECTRICAL AND GAS SUPPORT EQUIPMENT TO REMAIN
19 NEW METAL PARAPET CAP PAINT AS SPECIFIED [MC 3G]
20 EXISTING METAL PARAPET CAP TO REMAIN PAINT AS SPECIFIED [MC 1G]

FINISH LEGEND

REFER TO SHEET A202 FOR EXTERIOR FINISHES.

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REGISTERED ARCHITECT
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STATE OF TEXAS

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CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
EXTERIOR ELEVATIONS

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: A-201
PROJECT NUMBER 22203	

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BURGER KING - 20/20 GARDEN GRILL EXTERIOR

EXTERIOR MATERIALS & FINISH SCHEDULE (not all specs are used on every project)

08/25/22

CODE	IMAGE	MATERIAL	LOCATION	MANUFACTURER	DESCRIPTION			ADDITIONAL INFORMATION
					PRODUCT	COLOR	DIMENSION	
EB-1G		EXTERIOR BRICK	BRICK WAINSCOAT THROUGHOUT THE BUILDING	EVOLUTION BRICK	MOD / QS TUMBLED (FULL BRICK)	OLDE MILLSBORO		**NOTE: USE WITH EGR-3G** Contact: Gabe Powers phone: (502) 558-4612
					(THIN BRICK)	SIERRA TUMBLED		
				PINE HALL BRICK	FACE BRICK	OLD IRVINGTON O/S		Contact: Theresa Beane phone: (800) 334-8689 email: tbeane@pinehallbrick.com
				H.C. MUDDOX BRICK	THIN BRICK	BK WEST COAST BLEND		Contact: Erin Lynch phone: (916) 206-7831
EF-1G		EXTERIOR FINISH - STUCCO, STO, FIBER CEMENT SIDING PANELS	THROUGHOUT BUILDING	STO OR APPROVED EQUAL	STO POWERWALL STUCCO SYSTEM TEXTURE: FINE SAND OR STO THERM CI EIFS SYSTEM	COLOR TO MATCH EP-2G PPG "DESERT DUNE"		Contact: Tim Salerno, STO Corp phone: (407) 466-5371
				NICHIHA FIBER CEMENT	NICHIHA TUFFBLOCK	PREPAINTED TO MATCH EP-2G - PPG "DESERT DUNE" STACKED BOND PATTERN	18" X 6"	Contact: Nichiha Customer Service phone: (770) 805-9466 email: BK@nichiha.com **VERTICAL APPLICATIONS ONLY (NOT FOR USE ON SOFFITS)**
EF-4G		EXTERIOR FINISH STUCCO		STO OR APPROVED EQUAL	STO POWERWALL STUCCO SYSTEM	COLOR TO MATCH EP-4G		Contact: Tim Salerno, STO Corp phone: (407) 466-5371
EF-9G		EXTERIOR FINISH FIBER CEMENT	EXTERIOR ARCHONS	NICHIHA FIBER CEMENT	VINTAGE WOOD	"CEDAR EPC762F"	18" X 10'	Contact: Nichiha Customer Service phone: (770) 805-9466 email: BK@nichiha.com **INSTALL PER MANUFACTURER'S SPECIFICATIONS. VERTICAL SEAMS SHALL BE MINIMIZED. ALL SPANS OF 10' OR MORE SHALL HAVE VERTICAL SEAMS ALIGNED IN THE CENTER OF THE ARCHON. SEAMS TO BE CAULKED WITH EC-1G OR USE "H-MOLD" FACTORY TRIMS. ALL TRIMS SHALL BE FACTORY PAINTED TO MATCH PANELS.** **VERTICAL APPLICATIONS ONLY (NOT FOR USE ON SOFFITS)**
TR-1G		ALUMINUM TRIMS						
EC-1G		EXTERIOR CAULK		ADSEAL PRODUCTS	ADSEAL 458-63	"VINTAGE WOOD CEDAR"		**NOTE: USE WITH EF-9G** Contact: Matt Klinge, ADFAST phone: (314) 753-0964 email: matt.klinge@adfastcorp.com
EP-2G		PAINT	GENERAL	PPG	**PRIMER:** 17-921 **PAINT:** 6-2045XI	"DESERT DUNE" 1023-4, former "TANNERS TAUPE" PPG1023-4		Contact: Daniel J Huber phone: (713) 702-3636 email: daniel.huber@ppg.com
				SHERWIN-WILLIAMS	**PRIMER:** Loxon Concrete & Masonry A24W300 **PAINT:** Superpaint Ext Satin A89 Series Satin	"TAUPE TONE" SW 7633		Contact: Glenn Remler, Architectural Account Executive phone: (954) 547-1217 email: Glenn.J.Remler@Sherwin.com
EP-4G			WAINSCOT	PPG	**PRIMER:** 17-921 **PAINT:** 6-2045XI	"GRANITE" 1022-6 , former "MONTERREY CLIFFS" 10YY 14/080		Contact: Daniel J Huber phone: (713) 702-3636 email: daniel.huber@ppg.com
				SHERWIN-WILLIAMS	**PRIMER:** Loxon Concrete & Masonry A24W300 **PAINT:** Superpaint Ext Satin A89 Series Satin	"HOMESTEAD BROWN" SW 7515		Contact: Glenn Remler, Architectural Account Executive phone: (954) 547-1217 email: Glenn.J.Remler@Sherwin.com
EXT 1G			POLES & POLE SIGN	PPG	**PRIMER:** 90-712 **PAINT:** 90-353	"BLACK"		Contact: Daniel J Huber phone: (713) 702-3636 email: daniel.huber@ppg.com
				SHERWIN-WILLIAMS	**PRIMER:** Pro Industrial Pro-Cryl Primer B66-310 **PAINT:** Pro Industrial High Performance Acrylic B66-600 Gloss	FACTORY FINISH BLACK		Contact: Glenn Remler, Architectural Account Executive phone: (954) 547-1217 email: Glenn.J.Remler@Sherwin.com
EXT-2G			SIGNS	PPG	**PRIMER:** 90-712 **PAINT:** 90-375	Tint to match PPG 1006-6 "DECONSTRUCTION"		Contact: Daniel J Huber phone: (713) 702-3636 email: daniel.huber@ppg.com
				SHERWIN-WILLIAMS	**PRIMER:** Pro Industrial Pro-Cryl Primer B66-310 **PAINT:** Pro Industrial High Performance Acrylic B66-600 Gloss	FACTORY FINISH TO MATCH SW 6075 "GARRET GRAY"		Contact: Glenn Remler, Architectural Account Executive phone: (954) 547-1217 email: Glenn.J.Remler@Sherwin.com
EGR-3G		GROUT	BRICK	MAPEI		#5 "CHAMOIS"		**NOTE: USE WITH EB-1G**
EGR-4G		GROUT	CERAMIC TILE	CUSTOM BUILDING PRODUCTS	POLYBLEND SANDED	#335 "WINTER GRAY"		**NOTE: USE WITH ECT-1G** ***** FOR SETTING MATERIALS USE COMPLETE CONTACT RAPID SET** ***** SEAL GROUT WITH AQUAMIX SEALERS CHOICE GOLD**
EGR-9G		GROUT	INLINE RESTAURANTS ONLY CERAMIC TILE	LATICRETE	POLYBLEND SANDED	#66 "CHESTNUT BROWN"		**NOTE: USE WITH ECT-18G** Contact: Kirby Davis, Laticrete phone: (203) 671-7210 ***** CONTRACTOR TO ALLOW 1/16" MAX FOR GROUT JOINT** ***** FOR SETTING MATERIALS USE COMPLETE CONTACT RAPID SET** ***** SEAL GROUT WITH AQUAMIX SEALERS CHOICE GOLD**

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SOLICITATION ISSUE

DRAWN BY: JD, MP, TM
CHECKED BY: GL
CONSTRUCTION TYPE: II-B
STORE TYPE: RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
EXTERIOR FINISH SCHEDULE

DATE: 02/06/2023
AAFES Project Number: 2146-22-017
SCALE:
SHEET: A-202
PROJECT NUMBER 22203

MC-1G		METAL COPING	TOP OF LIGHT BAND WALL CAP	W.P. HICKMAN SYSTEMS, INC.	PERMA SNAP PLUS	A-30 "SILVERSMITH"		Contact: W.P. Hickman Company phone: (828)676-1700 website: ww.wph.com
MC-2G		METAL COPING	BELOW LIGHT BAND		PERMA SNAP PLUS	FACTORY FINISH TO MATCH EP-2G PPG "TANNERS TAUPE"		
MC-3G		METAL COPING	TOP OF ARCHON		PERMA SNAP PLUS	TO BE PAINTED TO MATCH EP-8G PPG "CEDAR"		
MP-1G		PARAPET	PARAPET LIGHT BAND	LEKTRON *SEE APPROVED SIGN SUPPLIERS	LED LIGHT BAND		*SEE PLANS	Contact: Kevin Rubottom, LEKTRON phone: (800) 634-4059 or (918) 622-4978 email: KRubottom@lektroninc.com
MP-3G		METAL CANOPY	ABOVE DOORS AND WINDOWS	*SEE APPROVED CANOPY SUPPLIERS	CUSTOM METAL CANOPY	COLOR: CLEAR ANODIZED	*SEE PLANS	
EB-1AG (ALTERNATE FOR EB-1G)		EXTERIOR FINISH FIBER CEMENT BRICK PANELS	GENERAL	NICHIHA FIBER CEMENT	NICHIHA CANYON BRICK PANELS	"SHALE BROWN" (STAGGERED JOINTS) UNPAINTED IF NO OTHER BRICK IS PRESENT. REMODELS: IF THERE IS EXISTING BRICK, PAINT TO MATCH EP-4G)	18" X 6'	Contact: Nichiha Customer Service phone: (770) 805-9466 email: BK@nichiha.com **INSTALL PER MANUFACTURER'S SPECIFICATIONS** **VERTICAL APPLICATIONS ONLY (NOT FOR USE ON SOFFITS)**
EF-8G (ALTERNATE FOR EF-9G)		EXTERIOR FINISH STONE	EXTERIOR SIGN ARCHONS	BORAL STONE PRODUCTS	COUNTRY LEDGESTONE	"ASPEN"		Contact: Susan King phone: 800-255-1727 email: culturedstone@boral.com, Susan.King@boral.com
CT-36RY (ALTERNATE FOR EF-9G)		PORCELAIN TILE	EXTERIOR SIGN ARCHONS	TRANSCERAMICA	WOOD TEXTURED PORCELAIN TILES	"Mulberry Color"	48" x 6" X 8 mm (3/8")	**BY EXCEPTION FOR REMODELS ONLY**
GR-20RY		GROUT	EXTERIOR SIGN ARCHONS	MAPEI	GROUT (TO USE WITH CT-36RY)	"05 Chamois"		**BY EXCEPTION FOR REMODELS ONLY**
EP-6G		EXTERIOR PAINT	LOGO SIGN CABINETS & BURGER KING CHANNEL LETTER CABINETS	PPG	**PRIMER:** 6-212 **PAINT:** 6-230	"STEPPING STONE" 1010-4 , former "BURGER KING SILVER" Custom Formula		**FOR REMODELS ONLY. NOT FOR USE ON ROOFS.**
				SHERWIN-WILLIAMS	**PRIMER:** Kem Bond HS B50A28 **PAINT:** Silver Brite B59S11	FACTORY FINISH SILVER		**FOR REMODELS ONLY. NOT FOR USE ON ROOFS.**
EP-6AG			EXISTING MANSARD ROOFS, SHINGLES & BARREL TILE	PPG	**PRIMER:** 17-921 PAINT: 90-1110	"DOVER GRAY" 1001-1 , former "GRYMMYS GREY" 00NN 20/000		**BY EXCEPTION FOR REMODELS ONLY**
				SHERWIN-WILLIAMS	**PRIMER:** Pro Industrial Pro-Cryl Primer B66-310 **PAINT:** Pro Industrial High Performance Acrylic B66-660 Eggshell	"WESTCHESTER GRAY" SW 2849		**BY EXCEPTION FOR REMODELS ONLY**
EP-6BG			EXISTING STANDING SEAM METAL ROOF	PPG	**PRIMER:** 90-712 **PAINT:** 90-1110	"GRAY STONE" 1009-4 , former "MARCH WIND"		**BY EXCEPTION FOR REMODELS ONLY**
				SHERWIN-WILLIAMS	**PRIMER:** Pro Industrial Pro-Cryl Primer B66-310 **PAINT:** Pro Industrial High Performance Acrylic B66-660 Eggshell	"MARCH WIND" Custom Formula		**BY EXCEPTION FOR REMODELS ONLY**
EP-8BG			METAL COPING AT ARCHON TOWERS	PPG	**PRIMER:** 17-921 **PAINT:** 6-2045XI	"CARAVEL BROWN" 1079-6 , former "CEDAR" Custom Formula		Contact: Daniel J Huber phone: (713) 702-3636 email: daniel.huber@ppg.com
				SHERWIN-WILLIAMS	**PRIMER:** Pro Industrial Pro-Cryl Primer B66-310 **PAINT:** Pro Industrial High Performance Acrylic B66-650 Semi-Gloss	"CEDAR" Custom Formula		Contact: Glenn Remler, Architectural Account Executive phone: (954) 547-1217 email: Glenn.J.Remler@Sherwin.com

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EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

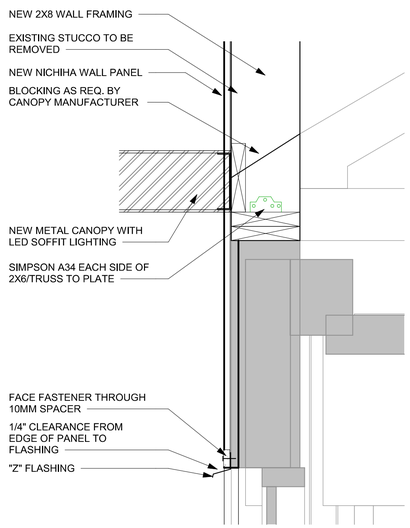
FT. CAMPBELL, KY

DRAWING TITLE:
EXTERIOR FINISH SCHEDULE

DATE: 02/06/2023
AAFES Project Number: 2146-22-017
SCALE:
SHEET: A-203
PROJECT NUMBER 22203

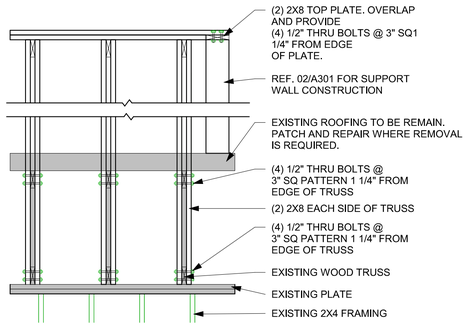
GENERAL CONSTRUCTION NOTES

1. ALL NEW WOOD CONSTUCTION TO BE FIRE TREATED.
2. PROVIDE ROOFING MEMBRANE AND FLASHING AT BACK OF EXISTING PATCH/ CLEAN AND REPLACE ALL SUBSTRATES AS NEEDED.



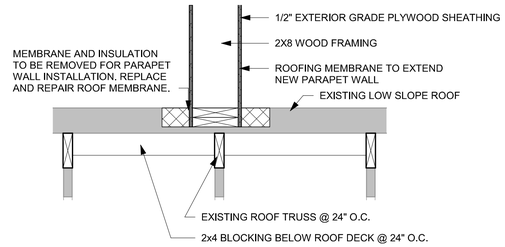
8 SECTION DETAIL

A-301 SCALE: 1 1/2" = 1'-0"



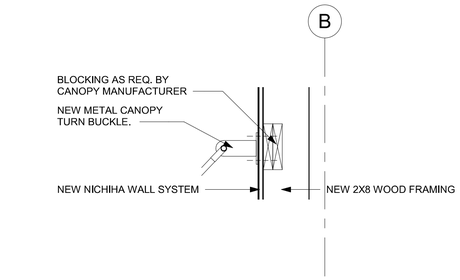
7 SECTION DETAIL

A-301 SCALE: 1/2" = 1'-0"



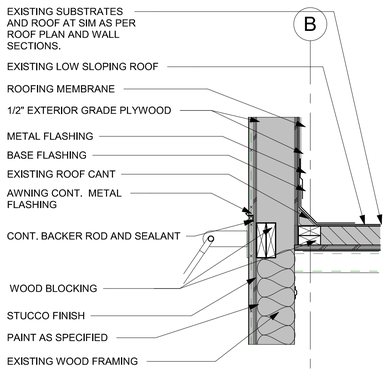
6 SECTION DETAIL

A-301 SCALE: 1" = 1'-0"



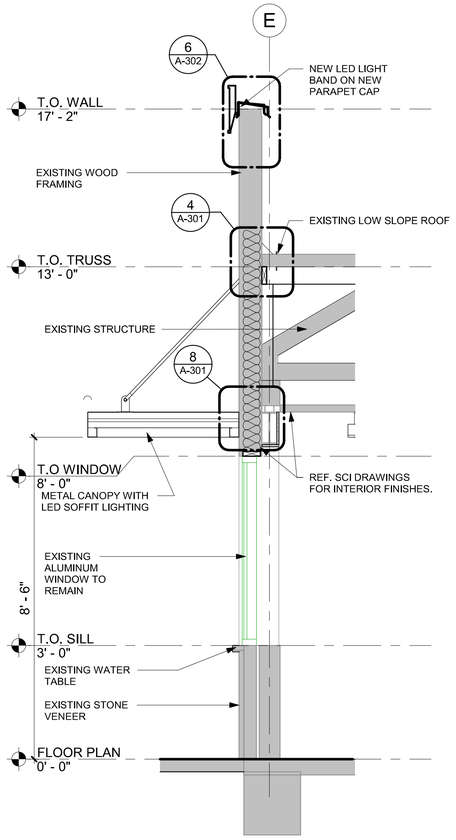
5 SECTION DETAIL

A-301 SCALE: 1" = 1'-0"



4 SECTION DETAIL

A-301 SCALE: 1" = 1'-0"



3 WALL SECTION

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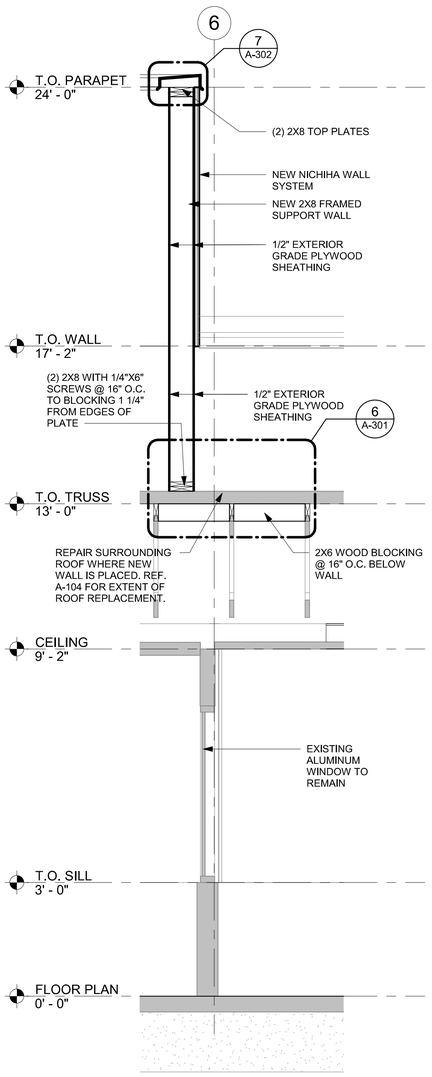

2 WALL SECTION

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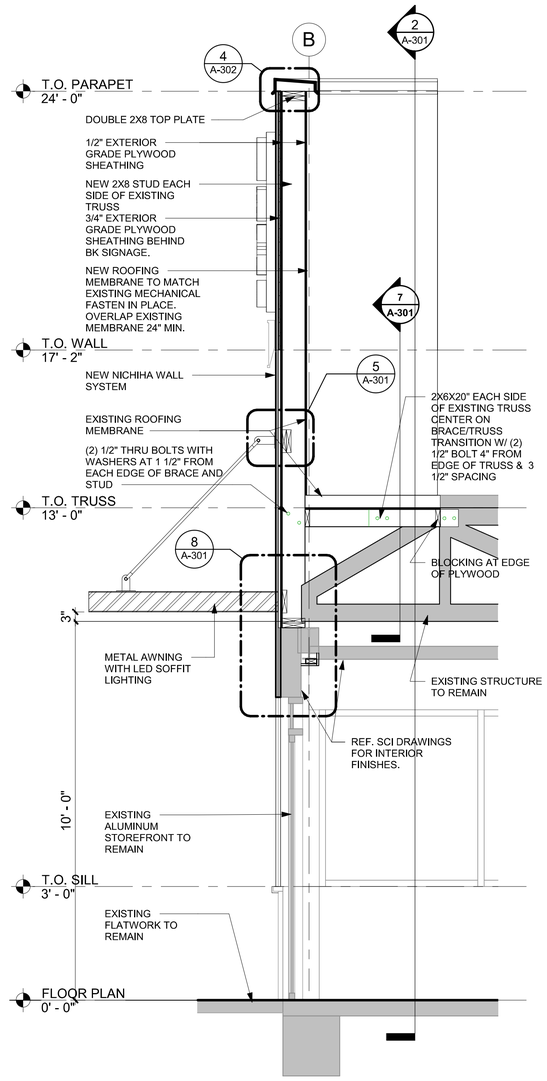

1 WALL SECTION

A-301 SCALE: 1/2" = 1'-0"

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REGISTERED ARCHITECT DAVID J. LEE 10989 STATE OF TEXAS

David Lee. Digitally signed by David J. Lee Date: 2023.02.07 17:18:18-06'00'

DATE	REVISION NO. & DESCRIPTION	BY
10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

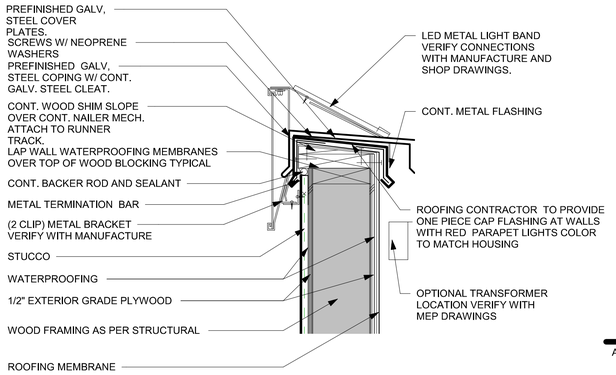
PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
NEW WALL SECTIONS

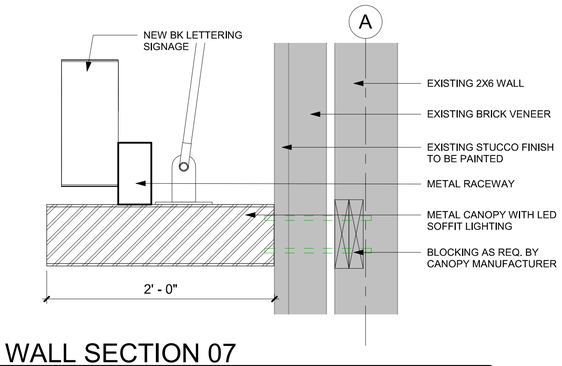
DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: A-301
PROJECT NUMBER 22203	

2/7/2023 3:47:08 PM



6 WALL SECTION DETAIL 08

A-302 SCALE: 1 1/2" = 1'-0"



5 WALL SECTION 07

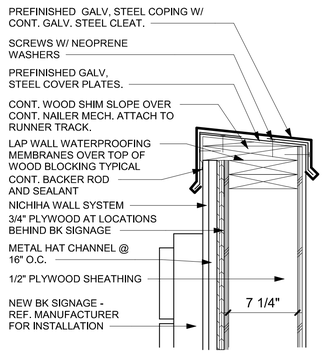
A-302 SCALE: 1 1/2" = 1'-0"

GENERAL CONSTRUCTION NOTES

1. ALL NEW WOOD CONSTUCTION TO BE FIRE TREATED.
2. PROVIDE ROOFING MEMBRANE AND FLASHING AT BACK OF EXISTING PATCH/ CLEAN AND REPLACE ALL SUBSTRATES AS NEEDED.

7 WALL SECTION DETAIL 04

A-302 SCALE: 1 1/2" = 1'-0"



4 WALL SECTION DETAIL 09

A-302 SCALE: 1 1/2" = 1'-0"

3 WALL SECTION 06

A-302 SCALE: 1/2" = 1'-0"

2 WALL SECTION 04

A-302 SCALE: 1/2" = 1'-0"

1 WALL SECTION 05

A-302 SCALE: 1/2" = 1'-0"

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REGISTERED ARCHITECT DAVID J. LEE 10989 STATE OF TEXAS

David Lee. Digitally signed by David J. Lee Date: 2023.02.07 17:18:35-06'00'

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SOLICITATION ISSUE

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STORE TYPE:	RESTAURANT

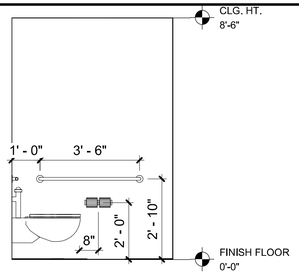
EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

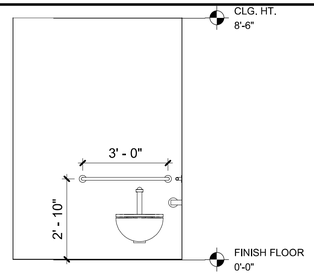
DRAWING TITLE:
NEW WALL SECTIONS

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: A-302
PROJECT NUMBER 22203	



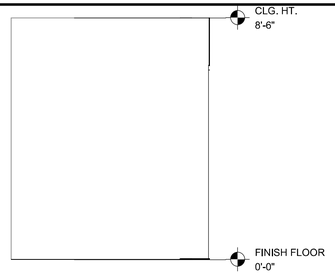
11 WOMENS ELEVATION 7

A-401 SCALE: 3/8" = 1'-0"



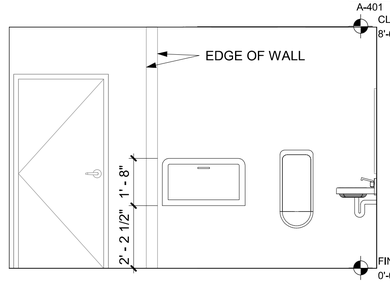
10 WOMENS ELEVATION 6

A-401 SCALE: 3/8" = 1'-0"



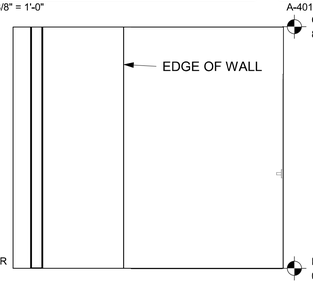
9 WOMENS ELEVATION 5

A-401 SCALE: 3/8" = 1'-0"



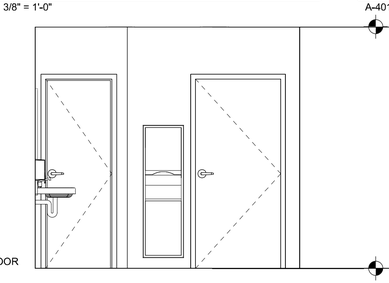
8 MENS ELEVATION 4

A-401 SCALE: 3/8" = 1'-0"



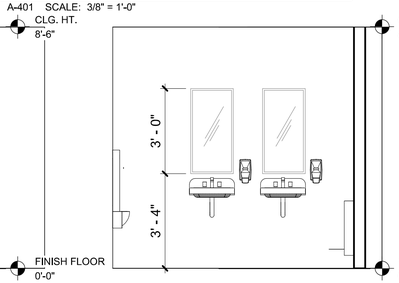
7 MENS ELEVATION 3

A-401 SCALE: 3/8" = 1'-0"



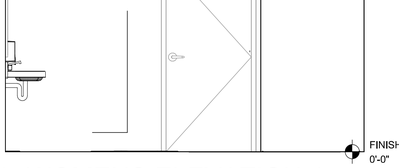
6 MENS ELEVATION 2

A-401 SCALE: 3/8" = 1'-0"



5 MENS ELEVATION 1

A-401 SCALE: 3/8" = 1'-0"



4 WOMENS ELEVATION 4

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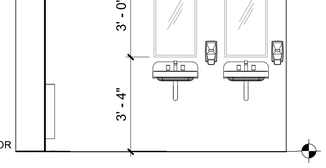

3 WOMENS ELEVATION 3

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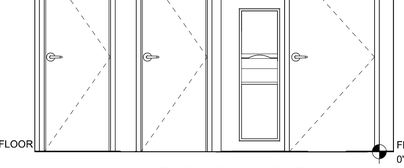
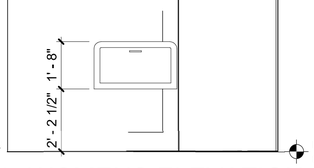


2 WOMENS ELEVATION 2

A-401 SCALE: 3/8" = 1'-0"



1 WOMENS ELEVATION 1

A-401 SCALE: 3/8" = 1'-0"

REFER TO SCI DRAWINGS FOR INTERIOR FINISHES

ENLARGED PLAN NOTES

1. CLEAN AND PREPARE WALLS FOR NEW TILE FINISH. SEE ROOM FINISH SCHEDULE & SCI DRAWINGS.
2. CLEAN AND PREPARE CEILING FOR NEW PAINT FINISH. SEE ROOM FINISH SCHEDULE & SCI DRAWINGS.
3. EXISTING PLUMBING FIXTURES TO BE REMOVED AND REPLACED WITH NEW.
4. GENERAL CONTRACTOR TO PROVIDE AND INSTALL ALL RESTROOM FINISHES AND ACCESSORIES.
4. NEW DOOR HARDWARE. REF. SCI DRAWINGS.
5. DOORS WITH NEW WOOD VENEER APPLIED. REF. SCI DRAWINGS.

ACCESSORY SCHEDULE

- T1 GRAB BAR - 250 LBF. MINIMUM, (33" MIN.-36" MAX. MOUNTING HEIGHT) BOBRICK WASHROOM EQUIPMENT, INC. PROVIDE THE REQUIRED QUANTITY AS SHOWN ON THE DRAWINGS. THE BARS SHALL BE 1 1/2" DIAMETER AND SHALL BE MOUNTED WITH 1 1/2" CLEARANCE FROM THE WALL.
- T2 WALL-MOUNTED HAND SOAP DISPENSER (36" A.F.F. MAXIMUM MOUNTING HEIGHT). BOBRICK WASHROOM EQUIPMENT, INC., MODEL B02112 OR APPROVED EQUIVALENT.
- T3 MIRROR (BOTTOM AT 40" A.F.F. MAXIMUM MOUNTING HEIGHT) BOBRICK WASHROOM EQUIPMENT, INC., MODEL B-165-1836 (18"x 36") OR APPROVED EQUIVALENT. STAINLESS STEEL CHANNEL FRAME MIRROR WITH THEFT-RESISTANT SCREWS.
- T4 TOILET PAPER DISPENSER (19" A.F.F. MINIMUM MOUNTING HEIGHT TO CENTERLINE) 9" TWIN JUMBO MODEL #58250 BY NORTH AMERICAN CORPORATION.
- T5 PAPER TOWEL DISPENSER/ WASTE RECEPTACLE
- T6 WALL MOUNTED CHANGING STATION

WALL TYPE LEGEND

EXISTING FRAMED PARTITION TO REMAIN UNLESS OTHERWISE NOTED. PATCH / CLEAN AND REPAIR AREA AFFECTED AS REQUIRED.

NEW CONSTRUCTION

GRAB BARS:

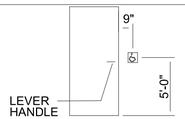
BOBRICK B490 W/256 SERIES ANCHOR PLATES
(1) 42" LONG 1 1/2" DIA.
(1) 36" LONG 1 1/2" DIA.

MOUNT GRAB BARS AS REQ'D. TO SUPPORT 250 lb. LOAD.

GENERAL CONTRACTOR SHALL LOCATE TOILET PAPER HOLDER ON NEAR SIDE WALL 12' IN FRONT OF TOILET SEAT AT MIN. 24" A.F.F.

ALL FIXTURES AND MOUNTING HEIGHTS TO COMPLY WITH STATE HANDICAP REQUIREMENTS REFER TO SHEET G-002 AND G-003

REFER TO DECOR CONCEPTS INTERIOR ELEVATIONS FOR WALL FINISH



ACCESSIBILITY SIGNS

ANSI APPROVED
E.S. PLASTIC
NEMA RATED
SELF EXTINGUISHING
ADHESIVE MOUNTED

HANDICAP SIGNAGE

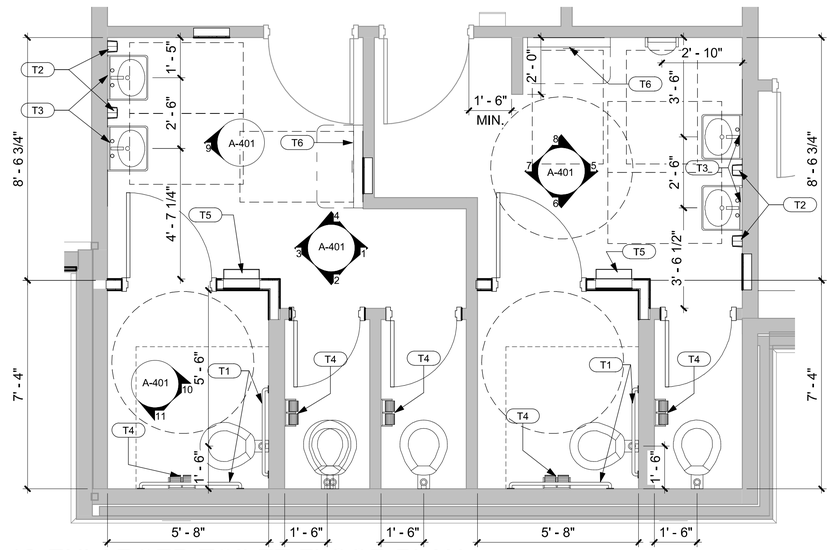
TOILET FIXTURE & ACCESSORY MOUNTING HEIGHTS:
REF: G-002 & G-003

1. LAVATORY - 34" (FROM FLOOR TO RIM) WITH 29" MIN. KNEE SPACE REQUIRED.
2. URINALS - 24" (FROM FLOOR TO TOP OF RIM) - HANDICAPPED - 17" (FROM FLOOR TO TOP OF RIM)
3. WATER CLOSETS - 15" (FLOOR TO TOP OF SEAT) - HANDICAPPED - 17" TO 19" (FROM FLOOR TO TOP OF SEAT)

MOUNTING HEIGHTS NOTES

ALL SIGNAGE SHALL CONFORM WITH ADA ACCESSIBILITY GUIDELINES:

1. LETTERS AND NUMERALS MUST BE RAISED 1/32" FROM SIGN SURFACE.
2. CHARACTER HEIGHT MUST BE AT LEAST 5/8" BUT NOT EXCEED 2".
3. TYPE STYLE FOR LETTERS AND NUMBERS SHALL BE SANS SERIF OR SIMPLE SERIF.
4. WORDS AND NUMBERS MUST BE CONVERTED INTO GRADE 2 BRAILLE, AND BE APPLIED TO SIGN DIRECTLY BELOW TEXT.
5. PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW PICTOGRAM.
5. REFER TO SHEET A-601 FOR DOOR SCHEDULE



12 ENLARGED TOILET FLOOR PLAN

A-401 SCALE: 3/8" = 1'-0"

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Digitally signed by David J. Lee
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EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
ENLARGED TOILET PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: As indicated	SHEET: A-401
PROJECT NUMBER 22203	

PIPING SCHEDULE

SYSTEM	PIPING SIZE	PIPING TYPE	PIPING ASTM	FITTINGS MATERIAL	FITTINGS TYPE	FIELD TEST PRESSURE (PSI)	FIELD TEST TIME (HOURS)	INSULATION	REMARKS
DOMESTIC WATER ABOVE GRADE (NOT IN PLENUM) (USE ONE OF THE FOLLOWING)	ALL	TYPE L HARD DRAWN COPPER	B88	WROUGHT COPPER	SJ	100	1	1/2" FG 1/2" CE	--
	ALL	PEX	F877	BRONZE	EX	100	1	1/2" CE	1
SOIL, WASTE & VENT BELOW GRADE (USE ONE OF THE FOLLOWING)	ALL	DWV PVC	2665	PVC	SW,DF	10 FT WC	2	NOT REQUIRED	--
	ALL	CAST IRON SOIL PIPE	A74	CAST IRON	HS	10 FT WC	2	NOT REQUIRED	--
SOIL, WASTE & VENT ABOVE GRADE (NOT IN PLENUM) (USE ONE OF THE FOLLOWING)	ALL	DWV PVC	2665	PVC	SW,DF	10 FT WC	2	NOT REQUIRED	--
	ALL	CAST IRON SOIL PIPE	A74	CAST IRON	NH	10 FT WC	2	NOT REQUIRED	--
KITCHEN WASTE PIPING	ALL	CAST IRON SOIL PIPE	A74	CAST IRON	HS	10 FT WC	2	NOT REQUIRED	--

ABBREVIATIONS

CE: CLOSED-CELL ELASTOMERIC (SEE BELOW)
DF: DRAINAGE FITTING
EX: PROPEX EXPANDER TYPE FITTINGS
FG: FIBERGLASS (SEE BELOW)
HS: HUB AND SPIGOT COMPRESSION JOINT
NH: NO HUB GASKET TYPE COUPLING
MJ: GASKETED MECHANICAL JOINT
MT: MALLEABLE-IRON THREADED
MW: MALLEABLE-IRON WELDED
RG: BELL & SPIGOT WITH RUBBER GASKETED JOINTS
SJ: 95-5 TIN-ANTIMONY SOLDER JOINT
SW: SOLVENT WELD

HANGERS & SUPPORTS:

HANGAR RODS SHALL CONFORM TO THE FOLLOWING:

PIPE SIZE	ROD DIAMETER
UP TO 2"	3/8"
2-1/2" TO 5"	1/2"
6" TO 10"	5/8"

TRAPEZE HANGER RODS SHALL BE OF SUFFICIENT SIZE TO CARRY WEIGHT OF TRAPEZE CHANNEL, PIPING AND CONTENTS, INSULATION SUPPORTS AND AN ADDITIONAL 200 LB. LOAD.

SUPPORT VERTICAL PIPING AT EVERY FLOOR.

MAXIMUM SPACING OF HANGERS AND SUPPORTS FOR STEEL, COPPER AND CAST IRON

PIPE SIZE	SPACING
1/2"	4'-0"
3/4" TO 1"	6'-0"
1-1/4" AND LARGER	8'-0"

MAXIMUM SPACING OF HANGERS AND SUPPORTS FOR PVC

PIPE SIZE	SPACING
1/2" TO 2"	4'-0"
2" AND LAGER	6'-0"

GENERAL NOTES

1. PEX TUBING SHALL BE SUPPORTED EVERY 30". ONLY SUPPORTS SPECIFICALLY MANUFACTURED FOR SUPPORT OF PLASTIC TUBING ARE ALLOWED. TUBING SHOULD BE FREE TO MOVE WITHIN THE SUPPORT.
2. ALL PIPING SHALL BE SUPPORTED AT EVERY JOINT/FITTING.
3. WIRE OR PERFORATED STRAP IRON HANGERS, EXPANSION ANCHORS, AND POWER ACTUATED FASTENERS WILL NOT BE PERMITTED.

REMARKS

1. EXPOSED PIPING SHALL BE COPPER UNLESS OTHERWISE NOTED. EXCEPTION: MECHANICAL ROOMS.

INSULATION

APPROVED MANUFACTURERS: CERTAINTEED, KNAUF INSULATION JOHNS MANVILLE, OWENS CORNING ARMACELL, AEROFLEX

FIBERGLASS: MINIMUM 3½ POUNDS PER CUBIC FOOT DENSITY. FIBERGLASS FACTORY MOLDED OR SPUN PIPE INSULATION WITH A "K" FACTOR OF 0.24 AT 75F. MEAN TEMPERATURE AND A FACTORY APPLIED FIRE RETARDANT SELF SEALING VAPOR BARRIER "ASJ" JACKET. BUTT ALL JOINTS FIRMLY TOGETHER. COVER JOINTS WITH 3" BUTT STRIPS. SMOOTHLY SECURE ALL JACKET LAPS AND JOINTS STRIPS WITH ADHESIVE. SELF-SEALING LAPS SHALL BE APPLIED ACCORDING TO MANUFACTURERS' RECOMMENDATIONS. ENDS OF PIPE INSULATION SHALL BE SEALED OFF WITH A VAPOR BARRIER COATING AT ALL FITTINGS AND VALVES AND AT INTERVALS OF 21' ON CONTINUOUS RUNS.

CLOSED-CELL ELASTOMERIC INSULATION: IN TUBULAR FORM EQUAL TO ARMACELL "AP ARMAFLEX". SELF-SEALING PIPE INSULATION SUCH AS ARMACELL "AP ARMAFLEX SS" IS NOT ALLOWED. BUTT ALL JOINTS FIRMLY TOGETHER AND SEAL WITH ARMAFLEX 520 BLV ADHESIVE.

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL NO.	ACCESSORIES	PIPING REQUIREMENTS WASTE	VENT	SUPPLY	REMARKS	APPROVED MANUFACTURERS
HWCF	WATER CLOSET HANDICAP ACCESSIBLE FLUSH VALVE TYPE (FLOOR MOUNT)	TOTO	CT705L	ZURN #ZEMS6000AV-IS-WS1-YK SENSOR OPERATED HARD WIRED FLUSH VALVE WITH SOLID RING PIPE SUPPORT, CHURCH #3155SSC WHITE OPEN FRONT SEAT COMPLETE WITH BOLT CAPS AND JAY R. SMITH WATER CLOSET CARRIER	4"	2"	1"	1.6 GALLONS PER FLUSH	WATER CLOSET: AMERICAN STANDARD, ZURN, KOHLER, CRANE FLUSH VALVE: AMERICAN STANDARD, CHICAGO FAUCET, SLOAN, TOTO SEAT: AMERICAN STANDARD, KOHLER, TOTO
WCF	WATER CLOSET FLUSH VALVE TYPE (FLOOR MOUNT)	TOTO	CT705	ZURN #ZEMS6000AV-IS-WS1-YK SENSOR OPERATED HARD WIRED FLUSH VALVE WITH SOLID RING PIPE SUPPORT, CHURCH #3155SSC WHITE OPEN FRONT SEAT COMPLETE WITH BOLT CAPS AND JAY R. SMITH WATER CLOSET CARRIER	4"	2"	1"	1.6 GALLONS PER FLUSH	WATER CLOSET: AMERICAN STANDARD, ZURN, KOHLER, CRANE FLUSH VALVE: AMERICAN STANDARD, CHICAGO FAUCET, SLOAN, TOTO SEAT: AMERICAN STANDARD, KOHLER, TOTO
LAV	HANDICAP ACCESSIBLE LAVATORY (WALL MOUNTED)	TOTO	LT307.4-01	AMERICAN STANDARD INNSBROOK SELECTRONIC #605B.205 SENSOR OPERATED HARD WIRED CENTERSET FAUCET WITH GRID DRAIN, JAY R. SMITH #0710 FLOOR MOUNTED LAVATORY SUPPORTS AND TRUEBRO #2018-TO-L LAV SHIELD	2"	1-1/2"	1/2"	MOUNT FLUSH TO WALL, INCLUDE POWER KIT PK00.HAC & MIXING VALVE 605XTMV1070 WITH FAUCET	LAVATORY: AMERICAN STANDARD, ZURN, KOHLER, CRANE FAUCET: DELTA, MOEN, T&S BRASS, ZURN, KOHLER
URN	URINAL (WALL MOUNT)	TOTO	UT447	ZURN #ZEMS6003AV-IS-1-WS1-YK SENSOR OPERATED HARD WIRED FLUSH VALVE WITH SOLID RING PIPE SUPPORT AND JAY R. SMITH #0710 FLOOR MOUNTED URINAL SUPPORTS	2"	1-1/2"	3/4"	1.0 GALLONS PER FLUSH	URINAL: AMERICAN STANDARD, ZURN, KOHLER, CRANE FLUSH VALVE: CHICAGO FAUCET, SLOAN, TOTO

NOTES:
1. COORDINATE THE ROUGH-IN OF ALL PLUMBING FIXTURES WITH THE ARCHITECTURAL PLANS.
2. PROVIDE SERVICE VALVES ON ALL SUPPLY FIXTURES.

VALVE SCHEDULE

FUNCTION	SIZE	TYPE	MANUFACTURER MODEL#	MATERIAL	ASTM	END CONNECTIONS	PRESSURE RATING (PSI)	REMARKS	APPROVED MANUFACTURERS
ISOLATION (DOMESTIC WATER)	1/2" - 2"	BALL QUARTER TURN	--	BRASS/BRONZE	B62	EX,SJ	150	--	APOLLO, CRANE, MILWAUKEE VALVE, NIBCO, WATTS
	2-1/2" - 6"	BUTTERFLY QUARTER TURN	--	EPOXY COATED DUCTILE IRON	A536	MJ	200	1	APOLLO,CRANE, GRINNELL, MILWAUKEE VALVE, NIBCO, WATTS
ANGLE STOP	1/4" - 1/2"	BALL QUARTER TURN	--	BRASS/BRONZE	B62	EX,SJ	125	--	BRASSCRAFT, NIBCO

APPROVED MANUFACTURERS

1. BELL & GOSSETT, CRANE, GRINNELL, KEYSTONE, MILWAUKEE VALVE, NIBCO, STOCKHAM, UPONOR, VICTAULIC, WATTS

GENERAL NOTES

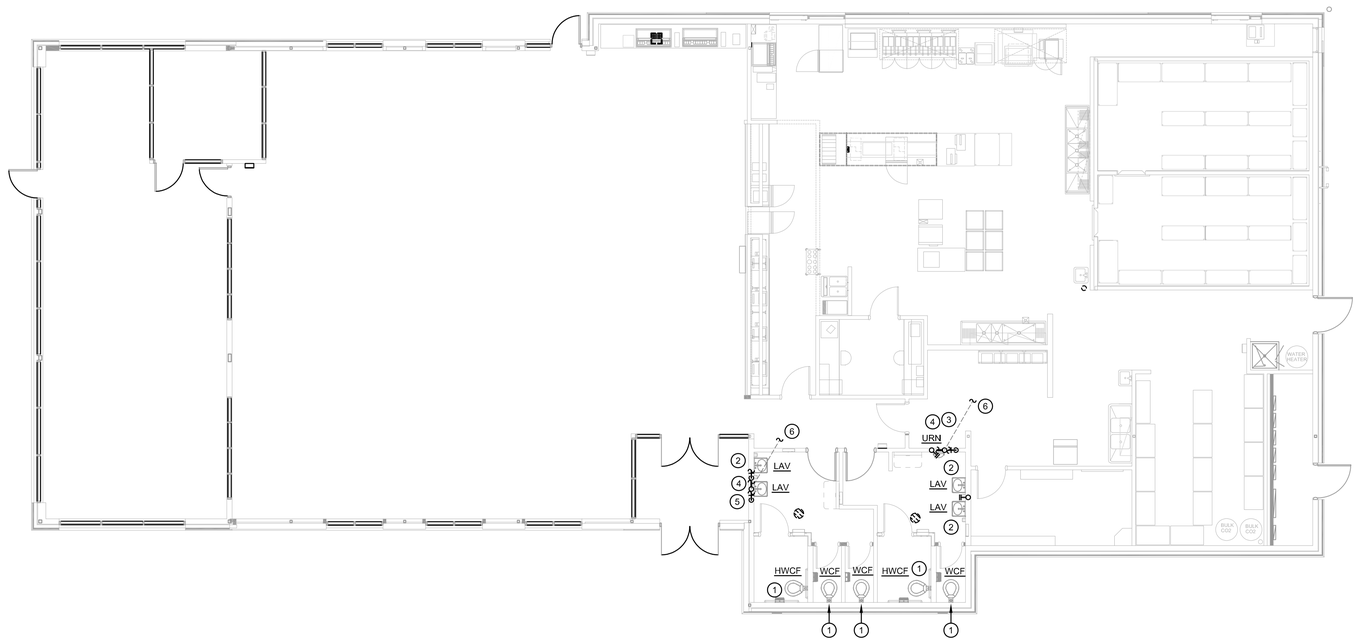
1. ALL VALVES USED FOR POTABLE WATER APPLICATIONS SHALL BE APPROVED FOR USE AS SUCH AND BE LABELED LEAD FREE.
2. INSULATE ALL VALVES TO SPECIFICATION LISTED FOR ASSOCIATED PIPING SYSTEM.
3. MULTI-TURN ANGLE STOPS ARE NOT ALLOWED.
4. VALVE SHALL BE SAME SIZE AS UPSTREAM PIPE UNLESS OTHERWISE NOTED.

REMARKS

1. DISC MATERIAL TO BE ASTM A395 ALUMINUM BRONZE WITH ONE PIECE 418 STAINLESS STEEL SHAFT AND LOCKING LEVER.
2. INSTALL VALVE A MINIMUM OF (10) PIPE DIAMETERS DOWNSTREAM FROM ANY FITTING OR PUMP AND AT LEAST (2) PIPE DIAMETERS UPSTREAM.
3. PROVIDE WITH QUARTER TURN BALL VALVES, BALL VALVE TEST COCKS, BRONZE STRAINER AND AIR GAP. PIPE DRAIN AS INDICATED ON DRAWINGS.
4. PROVIDE LEVER HANDLE FOR INTERIOR APPLICATIONS AND FLAT OR SQUARE HEAD FOR EXTERIOR APPLICATIONS.
5. VALVE SHALL BEAR AGA STAMP

ABBREVIATIONS:

EX: PROPEX EXPANDER TYPE FITTINGS
MJ: GASKETED MECHANICAL JOINT
NP: NPT
SJ: 95-5 TIN-ANTIMONY SOLDER JOINT



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

KEY NOTES

INDICATED BY SYMBOLS (1), (2), ETC.

1. REPLACE WATER CLOSET. RECONNECT TO WASTE AND SUPPLY.
2. REPLACE LAVATORY. RECONNECT TO WASTE AND SUPPLY.
3. CONNECT TO NEAREST DOMESTIC COLD WATER LINE 1/2" OR LARGER.
4. CONNECT TO NEAREST SANITARY WASTE LINE 2" OR LARGER.
5. CONNECT TO NEAREST DOMESTIC COLD & HOT WATER LINES 1/2" OR LARGER.
6. TIE INTO NEAREST VENT SYSTEM.

GENERAL NOTES

1. ALL PLUMBING WORK SHALL COMPLY WITH THE 2018 EDITION OF THE INTERNATIONAL PLUMBING CODE.
2. DRAWING IS DIAGRAMMATIC AND IS NOT TO BE SCALED. REFER TO ARCHITECTURAL PLANS AND FIELD CONDITIONS FOR DIMENSIONS.
3. SEE SPECIFICATIONS FOR PIPING, VALVE AND INSULATION REQUIREMENTS.
4. PLUMBING FIXTURES ARE TO BE FURNISHED COMPLETE WITH ALL NECESSARY STOPS, TRAPS, TAILPIECES, TRIM, ETC.
5. PROVIDE WATER HAMMER ARRESTERS ON THE SUPPLY PIPING (CW & HW) WHERE INDICATED ON THE PLAN. ARRESTERS SHALL BE SIOUX CHIEF MODEL 652-A OR EQUAL. INSTALL ARRESTERS PER THE MANUFACTURERS RECOMMENDATIONS. THE ARRESTERS SHALL BE RATED FOR INSTALLATION IN CONCEALED LOCATIONS. CAPPED AIR CHAMBERS ARE NOT ALLOWED.
6. ALL HOT AND COLD WATER SUPPLY PIPING CONNECTION TO FIXTURES ARE TO BE 1/2", UNLESS NOTED OTHERWISE.
7. THE CONTRACTOR SHALL COORDINATE WITH ALL OTHER CONTRACTORS AND SUBCONTRACTORS IN LAYING OUT AND INSTALLING HIS WORK. COORDINATION DOES NOT MEAN "I WAS HERE FIRST".
8. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING A COMPLETE AND OPERABLE SYSTEM IN ACCORDANCE WITH THE INTENT OF THE PLANS, WHETHER OR NOT EVERY ELEMENT THEREOF IS SPECIFICALLY CALLED OUT.
9. ALL FLOOR DRAINS, FLOOR SINKS AND INTERIOR CLEANOUTS SHALL BE INSTALLED FLUSH WITH FINISHED FLOOR COVERING. FLOOR SHALL NOT BE SLOPED TO DRAIN UNLESS SPECIFICALLY INDICATED ON THE PLANS.

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STATE OF MISSOURI
CHRISTOPHER RAY DUNCAN
NUMBER PE-2005021661
ENGINEER
02/07/23

DATE	REVISION NO. & DESCRIPTION	BY
10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

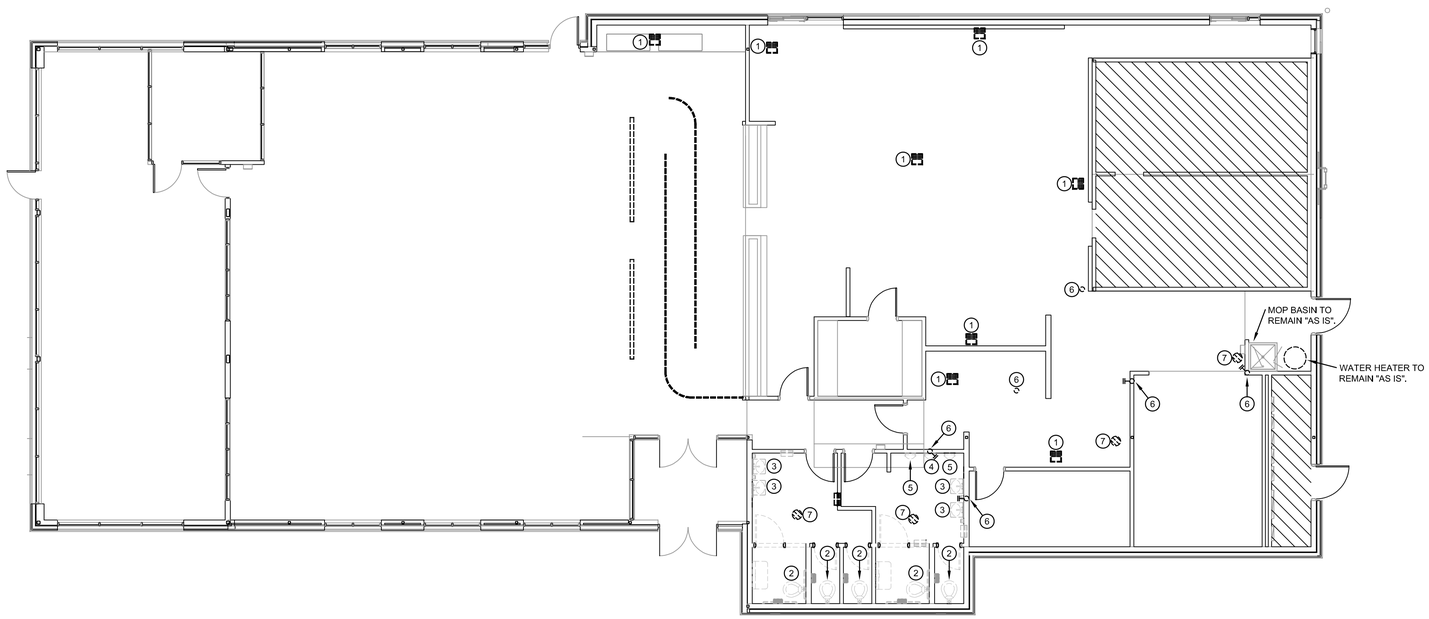
DRAWING TITLE:
PLUMBING PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: 1/4" = 1'-0"	SHEET: P-101
PROJECT NUMBER 22203	

KEY NOTES

INDICATED BY SYMBOLS (1), (2), ETC.

1. FLOOR SINK TO REMAIN. CLEAN OR REPAIR AS REQUIRED.
2. REMOVE WATER CLOSET. PRESERVE WASTE AND SUPPLY CONNECTIONS FOR FUTURE WATER CLOSET.
3. REMOVE LAVATORY. PRESERVE WASTE AND SUPPLY CONNECTIONS FOR FUTURE LAVATORY.
4. REMOVE URINAL. PRESERVE WASTE AND SUPPLY CONNECTIONS FOR FUTURE URINAL.
5. REMOVE URINAL, ASSOCIATED WASTE PIPING TO BELOW SLAB, AND SUPPLY PIPING BACK TO MAIN AND CAP. PATCH SLAB AND WALL TO MATCH EXISTING.
6. CLEANOUT TO REMAIN. CLEAN OR REPAIR AS REQUIRED.
7. FLOOR DRAIN TO REMAIN. CLEAN OR REPAIR AS REQUIRED.



DEMO PLUMBING PLAN
SCALE: 1/8" = 1'-0"

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SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
PLUMBING DEMOLITION PLAN

DATE: 02/06/2023
AAFES Project Number: 2146-22-017
SCALE: 1/4" = 1'-0"
PROJECT NUMBER 22203
SHEET: PD-101

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HVAC AIR DEVICES & DUCTWORK

- SUPPLY AIR DEVICE (4-WAY)
- SUPPLY AIR DEVICE (3-WAY)
- SUPPLY AIR DEVICE (2-WAY)
- RETURN/EXHAUST AIR DEVICE
- EXISTING SUPPLY AIR DEVICE
- EXISTING RETURN AIR DEVICE
- SIDEWALL AIR DEVICE
- TYPE-(X) / SIZE (TYP) — AIR DEVICE TAG WITH MARK NUMBER FLOW, SIZE AND (MATCHING DEVICES)
- SUPPLY DUCT UP
- SUPPLY DUCT DOWN
- RETURN/EXHAUST DUCT UP
- RETURN/EXHAUST DUCT DOWN
- WxH — RECTANGULAR DUCT WIDTHxHEIGHT
- DIAØ — ROUND DUCT (SPIRAL)
- EXISTING DUCTWORK
- DIAØ — ROUND DUCT (SNAP-LOCK)
- ROUND DUCT TAKEOFF WITH MANUAL DAMPER
- TAG-ID — EQUIPMENT TAG W/EQUIPMENT TYPE AND IDENTIFICATION NUMBER

HVAC SENSORS & SYMBOLS

- T — THERMOSTAT
- TS — TEMPERATURE SENSOR
- TC — TEMPERATURE CONTROLLER
- H — HUMIDITY SENSOR
- CO2 — CARBON DIOXIDE SENSOR
- CO2 — CARBON DIOXIDE SENSOR - DUCT MOUNT
- CO — CARBON MONOXIDE SENSOR
- R — REFRIGERANT PIPING
- CONDENSATE PIPING
- BALANCING DAMPER
- MOTORIZED DAMPER W/ADJUSTABLE STOP
- FIRE DAMPER
- SMOKE DAMPER
- FIRE/SMOKE DAMPER
- ZONE DAMPER
- BYPASS DAMPER
- MECHANICAL EQUIPMENT
- MECHANICAL EQUIPMENT ON ROOF

ELECTRICAL SWITCHES

MOUNT AT 48" ABOVE FINISH FLOOR (AFF) UNLESS OTHERWISE NOTED. WHEN MOUNTED IN MASONRY, SWITCH MOUNTING HEIGHT SHALL ALIGN WITH MASONRY COURSING NEAREST TO 48" (MID-POINT) AFF, BUT SHALL NOT BE HIGHER THAN 48" (MID-POINT) AFF.

- S — SINGLE POLE SWITCH
- S2 — DOUBLE POLE SWITCH
- S3 — THREE-WAY SWITCH
- S4 — FOUR-WAY SWITCH
- SDM — DIMMER SWITCH
- SM — MOTOR RATED SWITCH
- SK — KEYED SWITCH
- S2K — 2-POLE KEYED SWITCH
- S3K — 3-WAY KEYED SWITCH
- ST — TIME SWITCH
- SP — PILOT LIGHT SWITCH
- OS — WALL BOX OCCUPANCY SENSOR
- OS — OCCUPANCY SENSOR - CEILING MOUNTED
- OS — OCCUPANCY SENSOR - WALL MOUNTED
- PC — PHOTOELECTRIC CONTROL (PEC)

RECEPTACLES

UNLESS IN FLOOR BOX, MOUNT AT HEIGHT SCHEDULED ABOVE FINISH FLOOR (AFF). WHEN MOUNTED IN MASONRY, RECEPTACLE MOUNTING HEIGHT SHALL ALIGN WITH MASONRY COURSING NEAREST TO SCHEDULED HEIGHT, BUT SHALL NOT BE LOWER THAN 16" (MID-POINT) AFF.

- A — RECEPTACLE-REFER TO RECEPTACLE SCHEDULE
- A 2 — QUADRUPLEX RECEPTACLE-REFER TO RECEPTACLE SCHEDULE
- RECEPTACLE IN FLOOR BOX, REFER TO KEYED NOTES ON PLAN
- QUAD. RECEPTACLE IN FLOOR BOX, REFER TO KEYED NOTES ON PLAN
- X-XX — SPECIAL RECEPTACLE, NUMERIC 'X-XX' INDICATES NEMA CONFIGURATION

EQUIPMENT

INSTALL EQUIPMENT TO COMPLY WITH WORKING SPACE REQUIREMENTS LISTED IN ARTICLE 110 OF THE NATIONAL ELECTRICAL CODE.

- LOAD CENTER, PANELBOARD, SWITCHBOARD, OR MOTOR CONTROL CENTER
- xx/xx — DISCONNECT SWITCH WITH AMPACITY AND NUMBER OF POLES INDICATED
- J — JUNCTION BOX
- D — DIRECT EQUIPMENT CONNECTION
- D — ELECTRIC HAND DRYER
- XX — MOTOR LOAD:
  - EF - EXHAUST FAN
  - P - PUMP
  - OHD - OVERHEAD DOOR
  - RTU - ROOFTOP UNIT
  - AHU - AIR HANDLING UNIT
  - CU - CONDENSING UNIT
  - CF - CEILING FAN
- XX — PUSHBUTTON OPERATOR:
  - EMS - EMERGENCY STOP
  - DAW - DOOR ACTUATOR - WALL MOUNTED
  - DAP - DOOR ACTUATOR - PEDESTAL MOUNTED
  - PTE - EMERGENCY PUSH TO EXIT
- MOTOR STARTER
- TRx — TRANSFORMER
- PP-XX — CIRCUIT HOMERUN
- UGE — UNDERGROUND ELECTRIC
- OHE — OVERHEAD ELECTRIC
- UGT — UNDERGROUND TELEPHONE
- OHT — OVERHEAD TELEPHONE

COMMUNICATION OUTLET ROUGH-IN

UNLESS IN FLOORBOX OR OTHERWISE NOTED, MOUNT AT 18" ABOVE FINISH FLOOR (AFF). WHEN MOUNTED IN MASONRY, OUTLET MOUNTING HEIGHT SHALL ALIGN WITH MASONRY COURSING NEAREST TO SCHEDULED HEIGHT, BUT SHALL NOT BE LOWER THAN 16" (MID-POINT) AFF.

PROVIDE A 4" SQUARE JUNCTION BOX AND 3/4" CONDUIT WITH DE-BURRED ENDS, INCLUDING 90° SWEEP, INTO ACCESSIBLE CEILING SPACE. FOR SINGLE-GANG OUTLETS IN FRAMED WALLS, PROVIDE A SINGLE-GANG PLASTER RING.

- SINGLE-GANG OUTLET
- COMBINATION TELEPHONE/DATA OUTLET
- D — DATA OUTLET
- TV — TELEVISION OUTLET BOX
- TELEPHONE/DATA OUTLET IN RECESSED FLOOR BOX
- IC — INTERCOM OUTLET BOX
- S — INTERCOM SPEAKER
- C — CLOCK -SINGLE FACE
- C D — CLOCK - DOUBLE FACE

FIRE ALARM

COMPLY WITH REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) FOR CEILING-MOUNTING AND/OR WALL-MOUNTING HEIGHTS OF FIRE ALARM DEVICES.

- S — SMOKE DETECTOR
- S CO — COMBINATION SMOKE & CARBON MONOXIDE DETECTOR
- H — HEAT DETECTOR
- CEILING-MOUNTED STROBE
- WALL-MOUNTED STROBE
- F — WALL-MOUNTED HORN/SPEAKER WITH STROBE
- F CLG — CEILING-MOUNTED HORN/SPEAKER WITH STROBE
- F — WALL-MOUNTED HORN/SPEAKER
- TS — TAMPER SWITCH
- FS — FLOW SWITCH
- M — MAGNETIC DOOR HOLDER
- M — MAGNETIC DOOR HOLDER - WALL MOUNTED
- F — MANUAL PULL STATION
- FACP — FIRE ALARM CONTROL PANEL
- FARA — FIRE ALARM REMOTE ANNUNCIATOR
- S D — DUCT SMOKE DETECTOR
- H D — DUCT HEAT DETECTOR

LIGHT FIXTURES

- LAY-IN/RECESSED 24" X 48" OR 24" X 24" FLUORESCENT OR LED LIGHT
- SURFACE 24" X 48" OR 24" X 24" FLUORESCENT OR LED LIGHT
- STRIP, SUSPENDED, OR SURFACE MOUNT LIGHT
- INDUSTRIAL FLUORESCENT OR LED LIGHT
- DOWNLIGHT/CAN LIGHT OR WALL WASH LIGHT
- WALL MOUNTED LIGHT
- PENDANT LIGHT
- EXIT LIGHT, DIRECTIONAL EXIT LIGHT, OR EXIT/EMERGENCY LIGHT
- DUAL HEAD EMERGENCY LIGHT OR REMOTE HEAD

PIPE LABELS

- WS — WATER SERVICE
- CW — COLD WATER
- HW — HOT WATER
- HWR — HOT WATER RETURN
- C — BUILDING WASTE/SEWER
- KW — KITCHEN WASTE
- V — VENT
- SD — STORM DRAIN
- OD — OVERFLOW DRAIN
- G — GAS
- HPG — HIGH PRESSURE GAS
- CA — COMPRESSED AIR
- VAC — VACUUM
- FW — FILTERED WATER
- EXISTING PIPE
- PIPE BELOW GRADE

VALVES & FITTINGS

- BALL VALVE
- CIRCUIT BALANCING VALVE
- PRESSURE REDUCING VALVE
- CHECK VALVE
- DOUBLE CHECK VALVE
- CAP
- EQUIPMENT CONNECTION
- ELBOW UP
- ELBOW DOWN
- TEE
- ELBOW
- TEE UP
- TEE DOWN
- WATER HAMMER ARRESTOR
- PIPING CONTINUATION

PLUMBING SYMBOLS

- RPBP — REDUCED PRESSURE BACKFLOW PREVENTER
- FD — FLOOR DRAIN - ROUND STAINED
- FD — FLOOR DRAIN - SQUARE STAINED
- CO — CLEANOUT
- COEX — OUTDOOR CLEANOUT
- WCO — WALL CLEANOUT
- FLOOR SINK
- RD — ROOF DRAIN
- OD — OVERFLOW DRAIN
- R — GAS PRESSURE REGULATOR
- M M — GAS METER

FIRE PROTECTION

- FS — FLOW SWITCH
- SIAMESE FIRE DEPT. CONN.
- BACKFLOW PREVENTER
- SH — SPRINKLER HEAD
- HOSE — HOSE CABINET
- VCAB — VALVE CABINET

GENERAL MEP SYMBOLS & ABBREVIATIONS

- 1 — PLAN KEY NOTE IDENTIFIER
- DENOTES "CONNECT TO EXISTING"
- X / XX — DETAIL REFERENCE IDENTIFIER
- KEY — PLAN REVISION IDENTIFIER

AC	ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
BC	BELOW COUNTER
BOF	BOTTOM OF FIXTURE
CF	CEILING FAN
CLG	CEILING
COF	CENTER OF FIXTURE
CW	COLD WATER
CU	CONDENSING UNIT
EM	EMERGENCY
EF	EXHAUST FAN
FACP	FIRE ALARM CONTROL PANEL
FCU	FAN COIL UNIT
FW	FILTERED WATER
GFI	GROUND FAULT INTERRUPTER
GH	BASKETBALL GOAL HOIST
HOR	HORIZONTAL
HP	HEAT PUMP
HW	HOT WATER
HWR	HOT WATER RETURN
MFG	MANUFACTURER
NIC	NOT IN CONTRACT
NL	NON-SWITCHED NIGHT LIGHT
NTS	NOT TO SCALE
OF/CI	OWNER FURNISHED, CONTRACTOR INSTALLED
OHD	OVERHEAD DOOR
P	PUMP
RE	REFER TO, REFERENCE
RTU	ROOF TOP UNIT
SF	SUPPLY FAN
SS	SANITARY SEWER
TL	TWISTLOCK
TOF	TOP OF FIXTURE
TP	TAMPER PROOF
TW	TEMPERED WATER
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
V	VENT
VTR	VENT THROUGH ROOF
WP	WEATHER PROOF
WS	WATER SERVICE

SECURITY

- SECURITY/CCTV CAMERA
- B — DOOR BUZZER
- B — DOOR BELL/CHIME
- CR — CARD READER
- DL — ELECTRIC DOOR LOCK
- DL M — MAGNETIC DOOR LOCK
- K — ACCESS KEYPAD
- M — MOTION SENSOR
- TG — GLASS BREAK SENSOR

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02/07/23

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SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
SYMBOLS LEGEND

DATE: 02/06/2023

AAFES Project Number: 2146-22-017

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

SHEET: PME-101

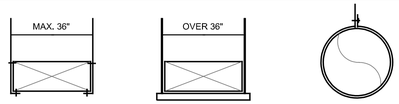
PROJECT NUMBER 22203

DUCT CONSTRUCTION SCHEDULE

ROUND DUCT CONSTRUCTION MINIMUM METAL GAUGES

DIAMETER	LONGITUDINAL SEAM	SPIRAL SEAM	FITTINGS	HANGER STRAP
THROUGH 12" 13" THROUGH 30"	26 GAUGE 24 GAUGE	P/2 ≤ 30" P/2 ≤ 72"		1"x22 GAUGE 1x18 GAUGE

DUCT HANGER CONSTRUCTION AND SPACING REQUIREMENTS



HANGER STRAPS FASTEN TO STRUCTURE MAXIMUM 10' CENTERS

ROUND DUCTWORK

CONCEALED INSIDE THE CONDITIONED SPACE (ABOVE CEILING, IN CHASE, PLENUM, ETC.)
SUPPLY & OUTDOOR AIR: WRAP DUCTWORK WITH 1.5" THICK, 0.75 LB/CU FT DENSITY DUCT WRAP (R=5.1) EQUAL TO OWENS CORNING "SOFTR" DUCT WRAP. FLEXIBLE DUCT SHALL HAVE AN EQUAL OR GREATER R-VALUE.

GENERAL REQUIREMENTS

1. CONSTRUCTION: ALL DUCTWORK AND HANGERS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS. DUCT DIMENSIONS SHOWN ON THE PLANS ARE THE INSIDE CLEAR DIMENSIONS. UNLESS INDICATED OTHERWISE, ALL DUCTWORK SHALL BE GALVANIZED STEEL.
2. SEALANT: ALL DUCT JOINTS AND SEAMS SHALL BE SEALED WITH A WATER-BASED BRUSH ON DUCT SEALER EQUAL TO UNITED MCGILL DUCT SEALER.
3. TAPE: TAPE SHALL BE UL LISTED ALUMINUM DUCT TAPE.
4. FLEXIBLE DUCTWORK: DUCT SHALL BE UL LISTED CLASS 1 PRE-INSULATED FLEX DUCT. FLEXIBLE DUCTWORK SHALL BE CONSTRUCTED WITH AN ACOUSTICAL TRANSPARENT CPE FABRIC SUPPORTED BY A GALVANIZED STEEL MECHANICALLY LOCKED HELIX. WIRE HELIX TYPE CORE SUPPORT NOT ACCEPTABLE. INSULATION SHALL BE COVERED WITH A REINFORCED ALUMINUM PIGMENTED VAPOR BARRIER. FLEXIBLE DUCT TO BE "FLEXMASTER USA" TYPE 8M ONLY, OR SUBMIT A SAMPLE TO THE ENGINEER FOR AN ALTERNATE APPROVED EQUAL. FLEXIBLE DUCT SHALL BE USED FOR FINAL CONNECTION TO AIR DEVICE AND SHALL NOT EXCEED 6'-0" IN LENGTH.

FAN SCHEDULE

MARK	DESCRIPTION	MFR.	MODEL #	AIRFLOW (CFM)	DESIGN SP (IN. WC.)	RPM (MAX)	SONES	DRIVE TYPE	MOTOR HP/(W)	ELEC. (V/PH)	WEIGHT (LB.)	CONTROL	ACCESSORIES	REMARKS
EF-1	ROOF MTD. GREASE EXHAUST FAN	COOK	120 CPS S 120 CPS CL1	1,100	1.85	2,172	--	BELT	1.0	208/1	--	SEE REMARKS	DS,HK,VRC,GC	--

GENERAL NOTES
1. APPROVED MANUFACTURERS: COOK, GREENHECK

REMARKS
1. UTILIZE EXISTING KITCHEN HOOD CONTROLS.
2. USE EXISTING ROOF CURB.

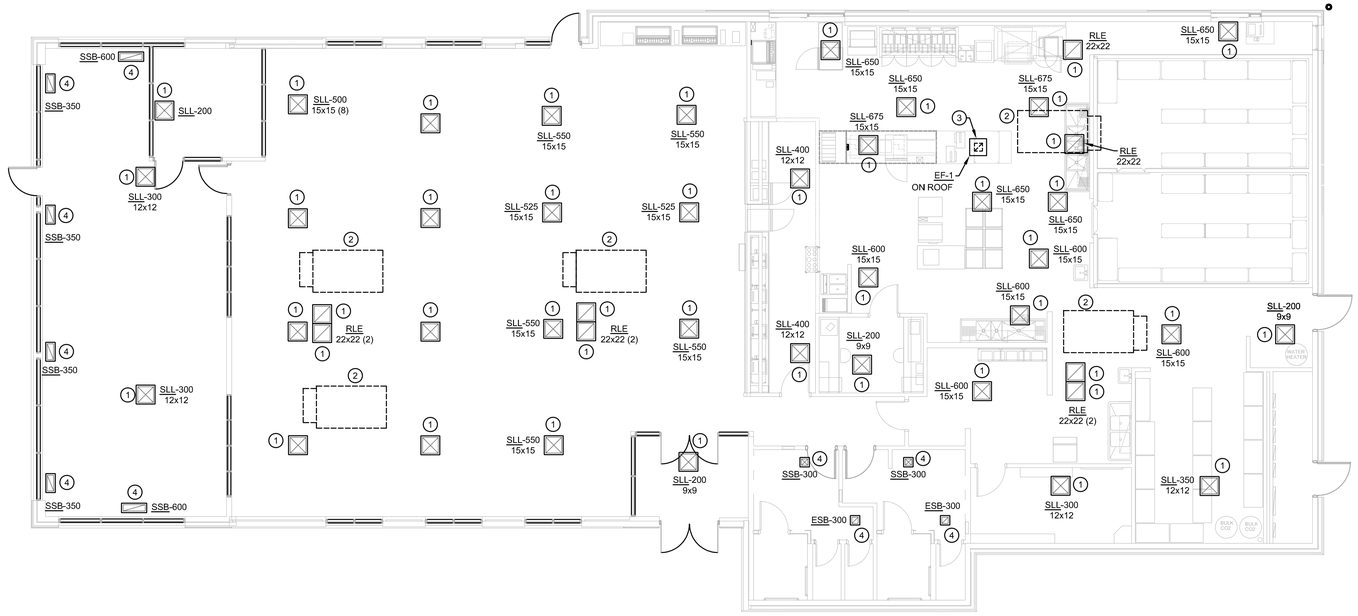
ABBREVIATIONS
DS: FACTORY INSTALLED DISCONNECT SWITCH
HK: HINGE KIT
GC: GREASE CUP

AIR DEVICE SCHEDULE

MARK	DESCRIPTION	MFR.	MODEL #	FUNCTION	MOUNTING	DAMPER	MATERIAL	FINISH	REMARKS
SLL	LOUVERED RECT. DIFFUSER-SQUARE NECK	KRUEGER	5SH	SUPPLY	LAY-IN	YES	ALUMINUM	WHITE	--
SSB	DOUBLE DEFLECTION GRILLE	KRUEGER	5885	SUPPLY	SURFACE	YES	ALUMINUM	WHITE	VB,BS
RLE	EGG-CRATE GRILLE	KRUEGER	EGC5	RETURN	LAY-IN	NO	STEEL	WHITE	--
ESB	FIXED GRILLE	KRUEGER	S585	EXHAUST	SURFACE	YES	ALUMINUM	WHITE	HB,BS,BD35

GENERAL NOTES
1. APPROVED MANUFACTURERS: KRUEGER, ANEMOSTAT, PRICE, TITUS, CARNES, TUTTLE AND BAILEY, NAILOR
2. PROVIDE SQUARE TO ROUND ADAPTERS AS REQUIRED.
3. LAY-IN DIFFUSER NECK SIZES SHALL BE AS SHOWN ON THE PLANS. DIFFUSER PANEL SIZE SHALL BE 24x24 UNLESS OTHERWISE NOTED.
4. LAY-IN DIFFUSER THROWS ARE TO BE AS SHOWN ON THE PLANS. REFER TO THE HVAC LEGEND FOR DIFFUSER THROW DESIGNATIONS.
5. DAMPERS SHALL BE THE OPPOSED BLADE TYPE.
6. GRILLE/DIFFUSER DAMPERS ARE INTENDED FOR USE BY THE TENANT AND ARE NOT TO BE USED FOR INITIAL BALANCING.

ABBREVIATIONS
BD35: 35° BLADE DEFLECTION
BS: 1/2" BLADE SPACING
HB: HORIZONTAL FRONT BLADES
VB: VERTICAL FRONT BLADES



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

PROJECT NORTH

KEY NOTES

INDICATED BY SYMBOLS (1), (2), ETC.

1. REPLACE AIR DEVICE IN THIS LOCATION AND CONNECT TO EXISTING BRANCH DUCTWORK.
2. ROOF TOP UNIT TO REMAIN "AS IS".
3. REMOVE EXISTING GREASE EXHAUST FAN ON ROOF AND INSTALL NEW FAN ON EXITING CURB. UTILIZE EXISTING POWER AND CONTROL CONNECTIONS. CLEAN AND REPAIR GREASE DUCT AS REQUIRED AND CONNECT TO NEW FAN.
4. REPLACE AIR DEVICE IN THIS LOCATION AND CONNECT TO EXISTING BRANCH DUCTWORK. MATCH EXISTING GRILLE AND NECK SIZE.

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2018 EDITION OF THE INTERNATIONAL MECHANICAL CODE.
2. DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL PLANS OR FIELD MEASUREMENTS FOR DIMENSIONS.
3. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCING ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
4. THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS WORK WITH THE WORK OF OTHER SUBCONTRACTORS OF THE PROJECT. COORDINATION DOES NOT MEAN "I WAS HERE FIRST".
5. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL DEVICES REQUIRED TO ACHIEVE THE SEQUENCE OF OPERATIONS. SEE SPECIFICATIONS FOR CONTROL SYSTEM DEVICE REQUIREMENTS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING A COMPLETE AND FUNCTIONAL SYSTEM IN ACCORDANCE WITH THE INTENT OF THE PLANS, WHETHER OR NOT EVERY ELEMENT THEREOF IS SPECIFICALLY CALLED OUT.
7. THE CONTRACTOR SHALL SCHEDULE AND EXECUTE ALL WORK WITH REGARD TO THE OWNER'S USE OF THE BUILDING DURING PERIOD OF CONSTRUCTION. VERIFY ALL POSSIBLE SCHEDULING CONFLICTS WITH THE OWNER'S REPRESENTATIVE.
8. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE COMPLETE SET OF PLANS FOR WORK PERTAINING TO HIS DISCIPLINE.
9. THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED HVAC EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE ELECTRICAL REQUIREMENTS OF THE HVAC EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT OTHER THAN THE SPECIFIED EQUIPMENT BEING FURNISHED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

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SPRINGFIELD | MISSOURI | 65806
P: 417.881.1586
MISSOURI COA: E-2014013301

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STATE OF MISSOURI
CHRISTOPHER RAY DUNCAN
NUMBER PE-2005021661
ENGINEER
02/07/23

DATE	REVISION NO. & DESCRIPTION	BY
10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
HVAC PLAN

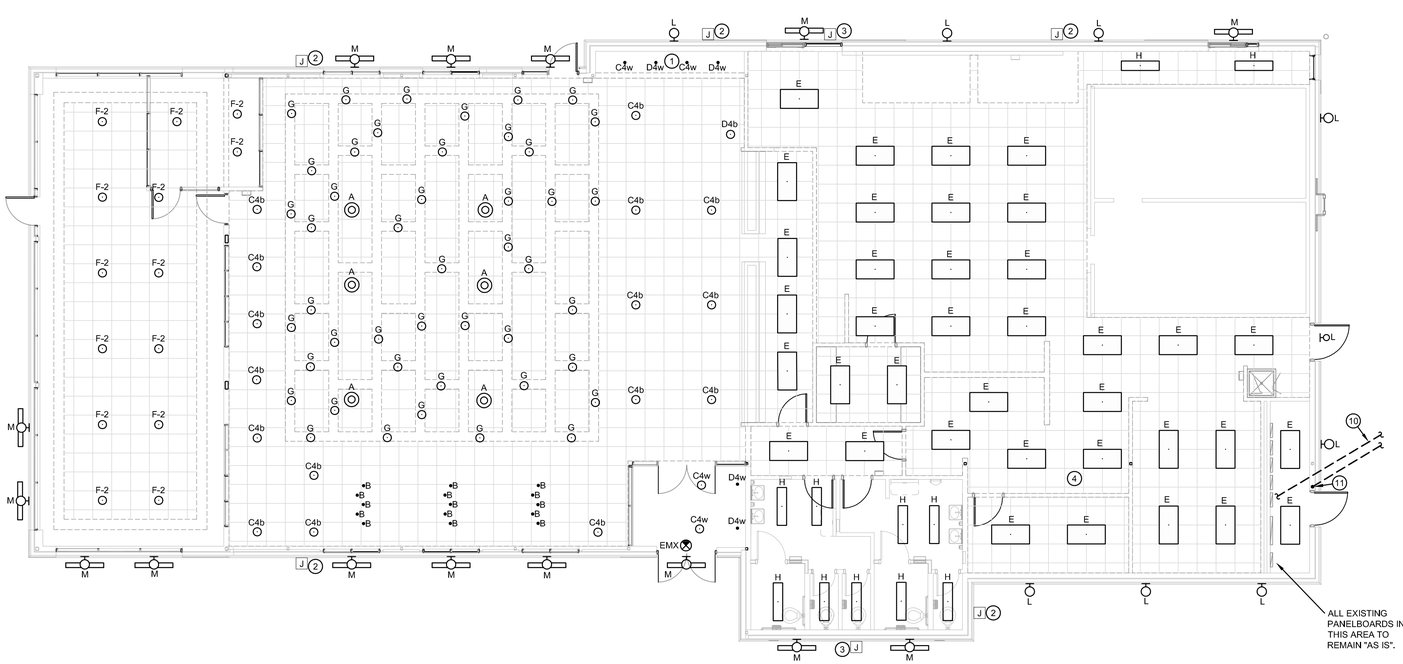
DATE: 02/06/2023
AAFES Project Number: 2146-22-017
SCALE: 1/4" = 1'-0"
SHEET: M-101
PROJECT NUMBER 22203

LIGHT FIXTURE SCHEDULE

MARK	MANUFACTURER	CATALOG NUMBER	FINISH	MOUNTING	TYPE	VOLTS	WATTS	LAMPS	NOTE
A	NAUTICAL	BK304 & SP30S-18-60D-927-03	STEEL	SURFACE	LED	120	10	INTEGRAL TO FIXTURE	1,6
B	NAUTICAL	BK305 & LED 8W EDISON	BLACK	SURFACE	LED	120	6	INTEGRAL TO FIXTURE	1,6
C4b	JUNO	SP36671-BLTRM	WHITE	RECESSED	LED	120	15	INTEGRAL TO FIXTURE	2
C4w	JUNO	SP36671-WHTRM	WHITE	RECESSED	LED	120	15	INTEGRAL TO FIXTURE	2
D4b	JUNO	SP36671G2/39C BL RFD44875	WHITE	RECESSED	LED	120	12.5	INTEGRAL TO FIXTURE	2
D4w	JUNO	SP36671G2/ 39 WWH	WHITE	RECESSED	LED	120	12.5	INTEGRAL TO FIXTURE	2
E	CREE	C-TR-FP24-50L-40K-WH	WHITE	RECESSED	LED	120	42	INTEGRAL TO FIXTURE	3
F-2	SELECTED BY OWNER	--	--	--	LED	120	--	INTEGRAL TO FIXTURE	--
G	JUNO	SP34378B-9-F1-SSN	BLACK	RECESSED	LED	120	10	INTEGRAL TO FIXTURE	2,6
H	CREE	C-TRFP14-37L-40K-WH	WHITE	RECESSED	LED	120	42	INTEGRAL TO FIXTURE	3
L	LSI	GSR 5L UD UNV 50K8 BK	BRONZE	WALL SURFACE	LED	120	39	INTEGRAL TO FIXTURE	4
M	KONTECH	KON-DVP-182-14-JY	WHITE	SURFACE	LED	120	40	INTEGRAL TO FIXTURE	5
EMX	CREE	C-EE-A-EX-2LDF-RED-BB	WHITE	SURFACE	LED	120	11	INTEGRAL TO FIXTURE	3

NOTES
1. CONTACT MICHAEL HOGLUND AT 954-771-1100 OR mhoglund@nauticalfurnishings.com
2. CONTACT BRETT KINZLER AT 847-813-8350 OR brett.kinzler@acuitybrands.com.
3. CONTACT ELVIR SULJIC AT 262-884-3332 OR esuljic@creelighting.com
4. CONTACT MIKE CONNOLLY AT 404-297-3708 OR mike.connolly@lsicorp.com
5. CONTACT DAVE VAN DER BEEK AT 727-919-1816 OR davidv2009@att.net
6. SUPPLIED BY SCI, INSTALLED BY CONTRACTOR.

NOTE: CONNECT ALL NEW LIGHTING FIXTURES TO NEAREST EXISTING BRANCH CIRCUIT MADE AVAILABLE THROUGH DEMOLITION.



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

KEY NOTES

INDICATED BY SYMBOLS (1), (2), ETC.

1. RECONNECT NEW DRINK STATIONS TO EXISTING POWER CONNECTIONS IN THIS AREA.
2. PROVIDE JUNCTION BOX FOR LED LIGHT BAND. CONFIRM LOCATION AND MOUNTING HEIGHT WITH OWNER AND ARCHITECT PRIOR TO BEGINNING WORK. JUNCTION BOX TO BE CIRCUITED ON EXISTING BRANCH CIRCUITRY SERVING LIGHT FIXTURES.
3. PROVIDE JUNCTION BOX FOR BUILDING MOUNTED SIGNAGE. CONFIRM LOCATION WITH OWNER PRIOR TO BEGINNING WORK. CONNECT TO NEAREST EXISTING BRANCH CIRCUIT.
4. RECONNECT NEW ICE MAKER TO EXISTING POWER CONNECTION IN THIS AREA.

GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE.
2. DRAWINGS ARE DIAGRAMMATIC AND ARE NOT TO BE SCALED. REFER TO THE ARCHITECTURAL PLANS AND FIELD CONDITIONS FOR DIMENSIONS.
3. ALL CONDUCTORS SHALL BE COPPER.
4. ALL WIRING SHALL BE IN CONDUIT. CONDUIT SHALL BE AS CALLED FOR ON PLANS OR WHERE PLANS DO NOT INDICATE, CONDUIT SHALL BE AS CALLED FOR IN SPECIFICATIONS.
5. ALL WIRING IN FINISHED SPACES SHALL BE CONCEALED, UNLESS NOTED OTHERWISE.
6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING A COMPLETE AND OPERABLE SYSTEM IN ACCORDANCE WITH THE INTENT OF THE PLANS WHETHER OR NOT EVERY ELEMENT THEREOF IS SPECIFICALLY CALLED OUT.
7. COORDINATE ALL WORK WITH OTHER TRADES TO AVOID CONFLICTS.
8. FIELD VERIFY THE EXISTING CONDITIONS AND MAKE ALLOWANCES FOR THE SAME.
9. VERIFY ALL ELECTRICAL SERVICE REQUIREMENTS WITH THE UTILITY COMPANY AND INCLUDE ALL WORK IN THE BID.
10. POWER FOR DRIVE-THRU SIGNAGE, UTILIZE SPARE 20A/1P BREAKER IN PANEL 'A'. CONFIRM REQUIREMENTS WITH EQUIPMENT INSTALLER.
11. PROVIDE 2" CONDUIT FOR DATA FOR MENU BOARD. STUB-UP INTO BUILDING AND ROUTE TO NEAREST ACCESSIBLE CEILING SPACE WITH PULL STRING FOR COMMUNICATIONS WIRING. CONFIRM REQUIREMENTS AND LOCATION WITH EQUIPMENT INSTALLER.

ELECTRICAL DEMOLITION

1. REMOVE ALL EXISTING FIXTURES, DEVICES, EQUIPMENT AND ASSOCIATED WIRING IN CONFLICT WITH CONSTRUCTION.
2. FIELD VERIFY THE EXISTING CONDITIONS AND MAKE ALLOWANCES FOR SAME.
3. EXISTING OUTLET BOXES AND CONDUIT MAY BE USED AS LOCATION PERMITS.
4. PATCH AND REPAIR WHERE REQUIRED BY REMOVAL OF EXISTING ELECTRICAL ITEMS.

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STATE OF MISSOURI
KEVIN NOELL CONWAY
NUMBER PE-2010270
PROFESSIONAL ENGINEER
02/07/23

DATE	REVISION NO. & DESCRIPTION	BY
10/14/2022	35% SUBMITTAL	JD, MP
11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

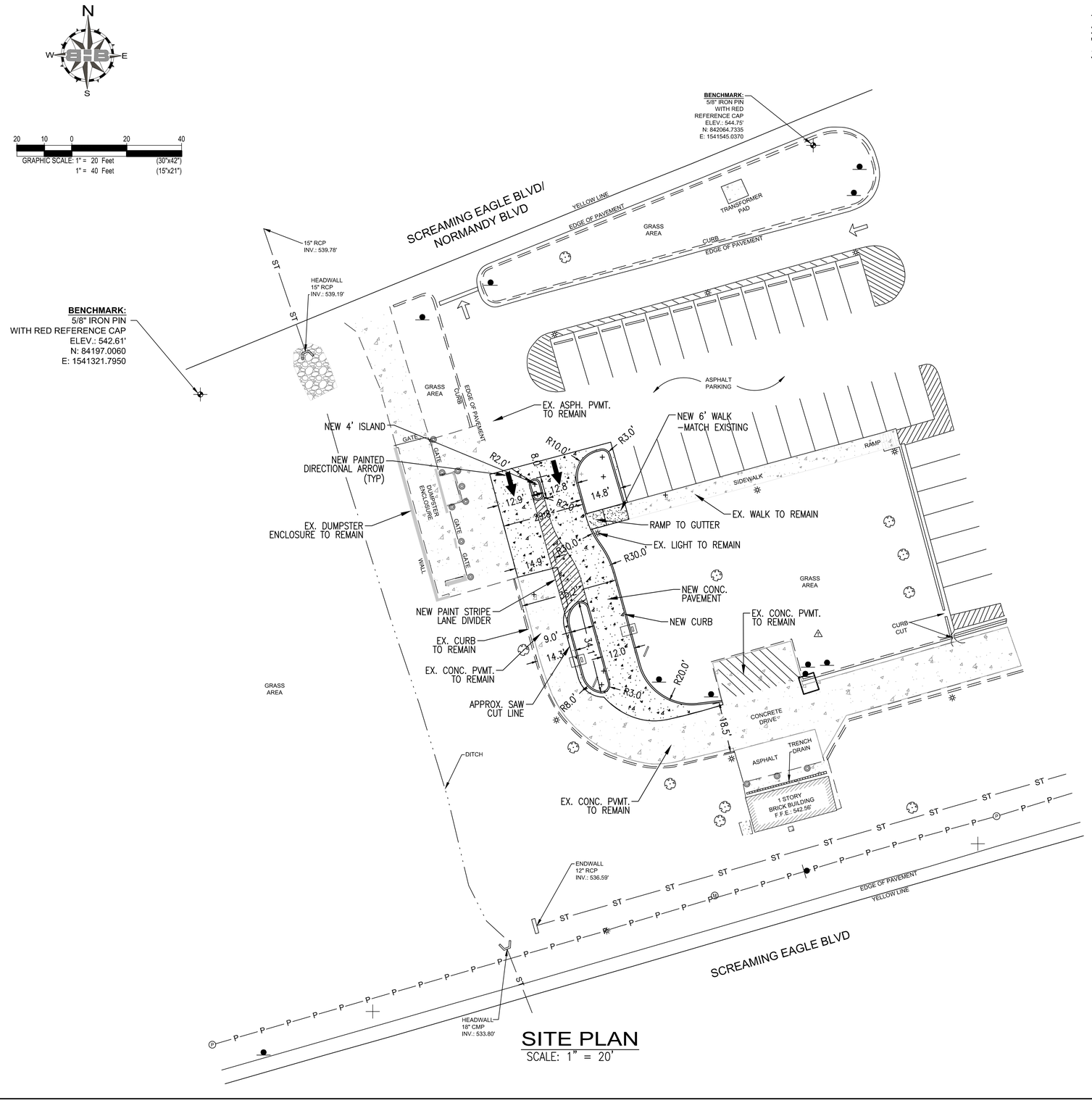
EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
ELECTRICAL PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: 1/4" = 1'-0"	SHEET: E-101
PROJECT NUMBER 22203	



SITE PLAN
SCALE: 1" = 20'

GENERAL NOTES:

1. ALL REMOVALS SHALL BE TO NEAT SAW CUT LINE.
2. CONTRACTOR SHALL PROVIDE SIGNAGE DURING CONSTRUCTION STATING "DRIVE-THRU CLOSED FOR CONSTRUCTION".
3. SEE ARCHITECTURAL SITE PLAN FOR ADDITIONAL INFORMATION RE.

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02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
SITE PLAN/
DIMENSIONAL CONTROL

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: AS SHOWN	SHEET: C-001
PROJECT NUMBER 22203	

STATE OF TEXAS
JOHN W. BAIRD, JR.
42645
REGISTERED
PROFESSIONAL ENGINEER

02/06/2023

BAIRD, HAMPTON & BROWN
engineering & surveying
project
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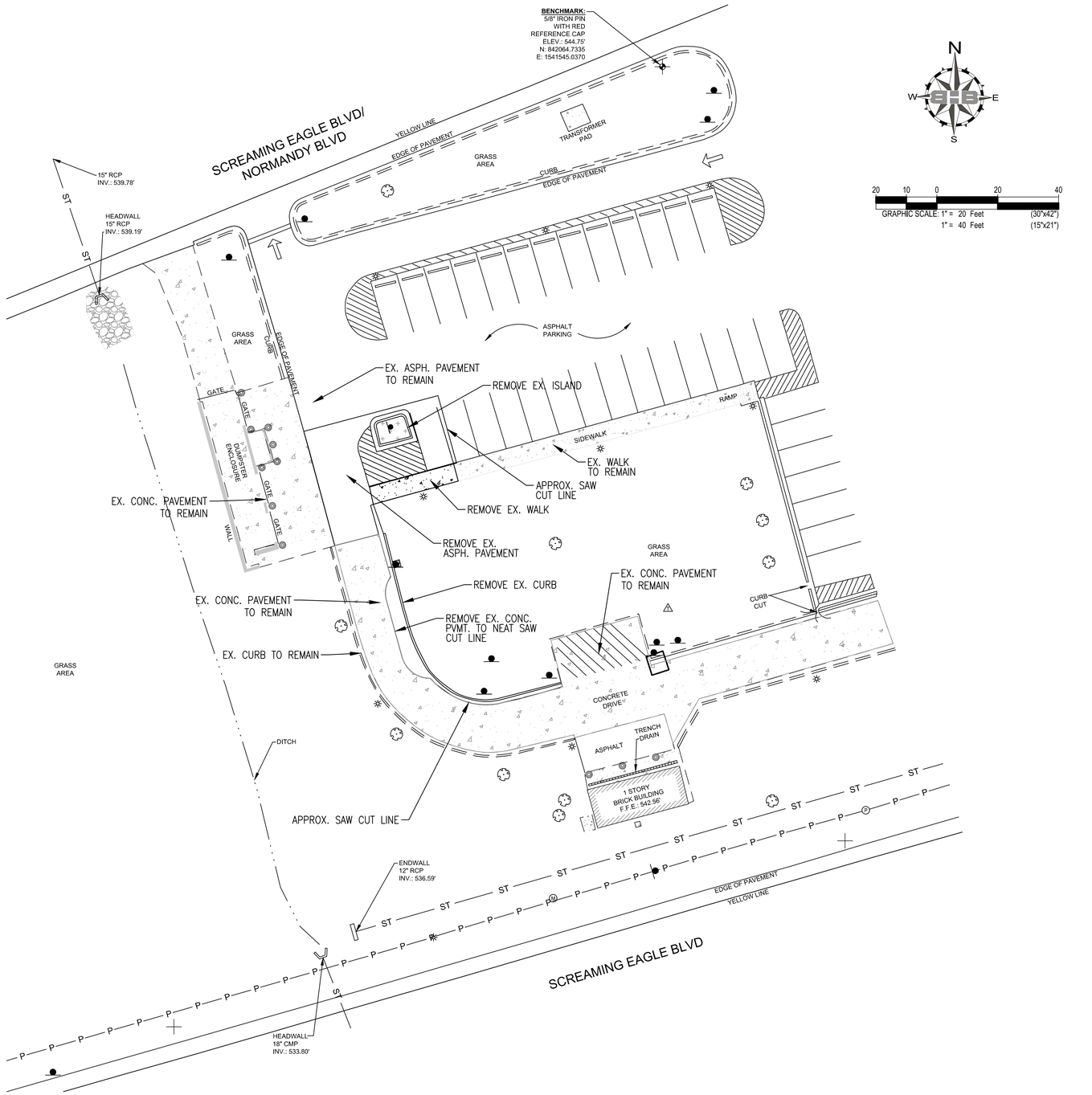
6300 Ridglea Place, Suite 700 | Fort Worth, TX 76116
(817)338-1277 | mail@bhbinc.com | TBPE Firm #44 | TBPLS Firm #10011300



DEMOLITION SITE PLAN

SCALE: 1" = 20'

GENERAL NOTES:

1. ALL REMOVALS SHALL BE TO NEAT SAW CUT LINE.
2. CONTRACTOR SHALL PROVIDE SIGNAGE DURING CONSTRUCTION STATING "DRIVE-THRU CLOSED FOR CONSTRUCTION".

02/06/2023

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11/22/2022	95% SUBMITTAL	JD, MP
02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

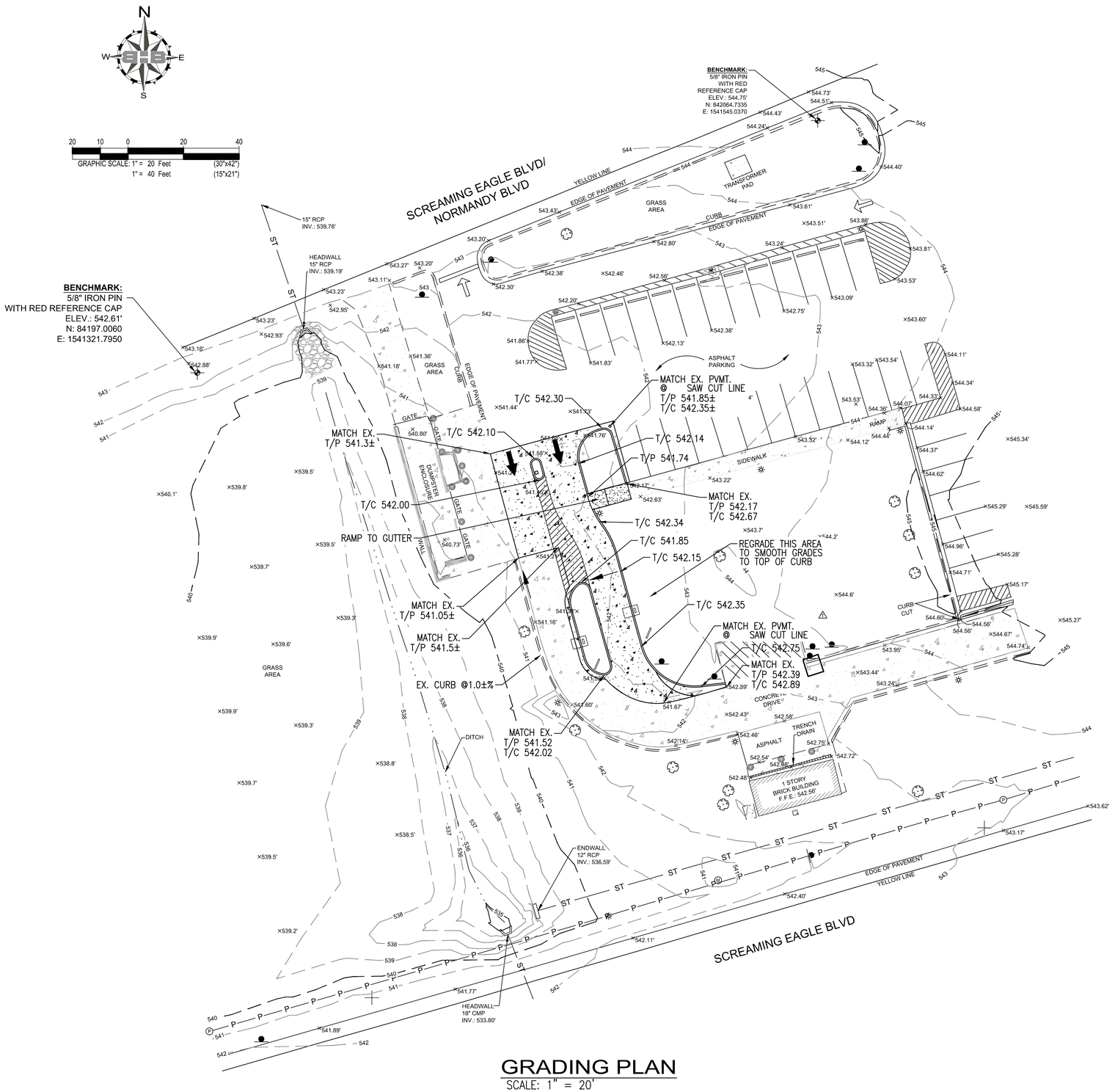
EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
DEMOLITION PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: AS SHOWN	SHEET: C-002
PROJECT NUMBER 22203	



GRADING PLAN
SCALE: 1" = 20'

02/06/2023

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02/06/2023	SOLICITATION ISSUE	TM, MP

SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

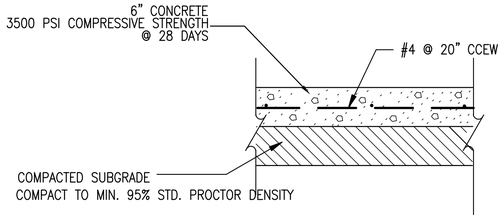
EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

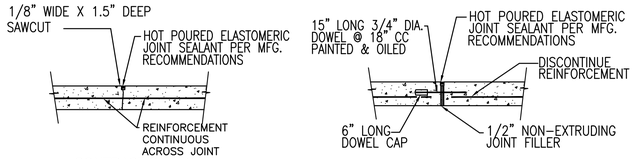
DRAWING TITLE:
GRADING PLAN

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: AS SHOWN	SHEET: C-003
PROJECT NUMBER 22203	



CONCRETE PAVEMENT

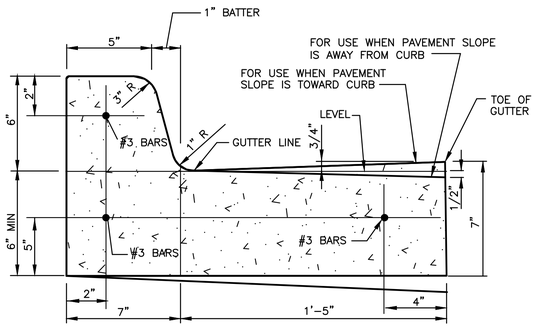
NO SCALE



1. PROVIDE CONTRACTION JOINTS @ 12'± GRID SPACING OR AS SHOWN.
2. PROVIDE EXPANSION JOINTS @ 100' MAX SPACING OR AS SHOWN.
3. CONSTRUCTION JOINTS SHALL BE PLACED AT CONTRACTION OR EXPANSION JOINT LOCATIONS AND DOWELED & SEALED PER JOINT TYPE.
4. PROVIDE 15" LONG X 3/4" DIA. DOWEL SIMILAR TO EXPANSION JOINT

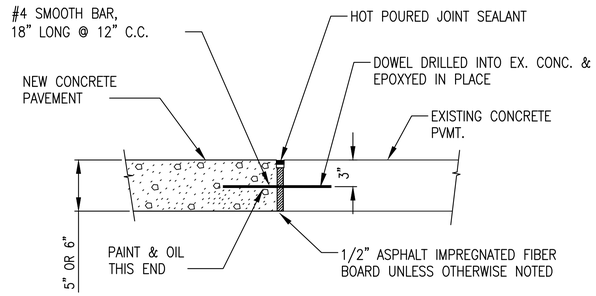
CONCRETE PAVEMENT JOINTS

NO SCALE



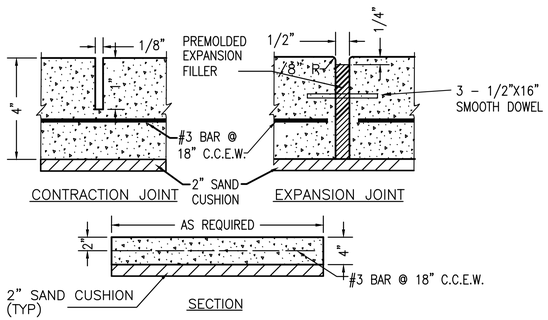
CONCRETE CURB & GUTTER

NO SCALE



JUNCTURE OF NEW AND EXISTING CONCRETE PAVEMENT

NOT TO SCALE



SIDEWALK & JOINT DETAILS

NO SCALE

1. PROVIDE TRANSVERSE CONTRACTION JOINTS AT INTERVALS NOT EXCEEDING SIDEWALK WIDTH. PROVIDE CENTERLINE CONTRACTION JOINTS IN SIDEWALKS WIDER THAN 8'-0". SPACING OF CENTERLINE CONTRACTION JOINTS SHALL NOT EXCEED 6'-0".
2. PROVIDE EXPANSION JOINTS AT INTERVALS NOT EXCEEDING 42'-0" ON CENTER. ALIGN EXPANSION JOINTS WITH CURB & GUTTER EXPANSION JOINTS WHERE APPLICABLE.
3. FOR ALL WALKS PROVIDE CROSS SLOPE OF 2% IN DIRECTION OF DRAINAGE. PRIOR TO PLACING CONCRETE ON ALL HANDICAPPED ROUTES, VERIFY CROSS SLOPE TO ENSURE 2% (MAX.) -- GREATER THAN 2% IS NOT ALLOWABLE.
4. CONCRETE FOR SIDEWALKS SHALL BE MIN. 3000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
5. EXPANSION JOINT AT JUNCTURE OF SIDEWALK AT SLABS AND CURBS SHALL BE SEALED WITH ELASTOMERIC JOINT SEALANT.

02/06/2023

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SOLICITATION ISSUE

DRAWN BY:	JD, MP, TM
CHECKED BY:	GL
CONSTRUCTION TYPE:	II-B
STORE TYPE:	RESTAURANT

EXCHANGE
ARMY AIR FORCE EXCHANGE SERVICE

PROJECT:
IMAGE UPGRADE:
BURGER KING
BLDG #5705

FT. CAMPBELL, KY

DRAWING TITLE:
DETAILS

DATE:	02/06/2023
AAFES Project Number:	2146-22-017
SCALE: AS SHOWN	SHEET: C-004
PROJECT NUMBER 22203	

INFORMATION BY OTHERS

Project Contacts:

Please contact one of the following Seating Concepts team members to address any concerns you may have:

Project Managers: 815.730.7980
Cheri Salamon x 2224
Kerry Studer x 2223
Aimee Pader x 2249

Interior Design: 815.730.7980
Samantha Uthe - Director x 2251
Tyler Rodgers x 2211
Nicole Jenkins x 2218
Marivel Garcia x 2216

125 Connell Ave. Rockdale, IL 60436

Decor Package:

* Burger King - Garden Grill
    * All designs must be approved by Burger King Corporate

General Notes and Information:

General Notes

1. Do not scale off plans. Call SCI to verify any questionable dimensions - 815.730.7980

2. Dimensions are for design intent only.

3. SCI has prepared these pages as accurately as possible with the information provided. The owner understands that adjustments to the final locations of equipment and/or furniture placement may be required at the owner's expense due to discrepancies based on actual job site dimensions and conditions.

4. Refer to architectural drawings for complete and accurate dimensions of building structure.

5. These documents are the property of SCI.

6. These documents may not be copied, reproduced, used, or implemented in any way, without the consent of SCI.

7. SCI is not responsible for deviations, changes, additions, or deletions not reviewed and approved in advance by SCI.

Construction

1. The GC shall verify all dimensions and conditions on the job site and notify SCI of all discrepancies prior to starting work.

2. GC is to review SCI plans against the architectural drawing set they are using on site. GC shall notify SCI immediately if they notice discrepancies.

3. Dimensions marked to Verify must be verified and the measurements recorded to SCI. Failure to communicate verified dimensions to SCI could result in a delay of decor fabrication and possible delay of shipment.

4. GC to locate thermostats and sensors and move accordingly so they do not interfere with decor.

5. GC to refer to elevations for typical wall finishes.

Finish Specification & Ordering of Materials

1. GC to order by complete specification, including series, item number and color. Any discrepancies should be communicated to SCI immediately.

2. Changes to finishes as requested by owner after materials are ordered may result in owner assuming restocking fees or other additional costs associated with a re-selection.

Ceiling

1. GC must coordinate all existing HVAC and lighting with interior decor.

Electrical

1. All electrical outlets are located 18" A.F.F. unless otherwise noted.

2. Pendants are to be centered over table top once final installation of seating is complete.

Installation

1. GC is to inspect SCI product upon delivery. Notice of damage must be given within 24 hours of delivery. Any damage noted after this time period will become the responsibility of the GC and will be repaired or replaced at the GC's expense.

2. GC is responsible to protect product during and after installation. SCI will not be responsible for product replacement due to misuse by others during and/or after installation.

3. GC to refer to installation pages included in the installation instructions packet sent with the decor.

4. GC is responsible to insure appropriate installation of metalwork as required for table tops designated as ADA compliant.

Sheet Schedule

ID-1.0	Cover
ID-2.0	3D Views
ID-3.0	Seating Layout
ID-4.0	Furniture Finish Layout
ID-5.0	Wall Finish Layout
ID-6.0	Graphic Layout
ID-7.0	Flooring Layout
ID-8.0	Pendant, Soffit, Ceiling Layout
ID-8.1	Pergola Details

Sheet Schedule

ID-9.0	Interior Elevations
ID-9.1	Interior Elevations
ID-9.2	Interior Elevations
ID-9.3	Interior Elevations
ID-9.4	Furniture Elevations
ID-10.0	SCI Specifications
ID-10.1	SCI Specifications

Sheet Schedule

ID-10.2	SCI Specifications
ID-10.3	SCI Specifications
ID-11.0	GC Specifications
ID-12.0	Interior Building Specifications
ID-12.1	Interior Building Specifications
ID-12.2	Interior Building Specifications
ID-12.3	Interior Building Specifications
ID-12.4	Interior Building Specifications
ID-13.0	Interior Lighting Specifications
ID-14.0	Unistrut Layout
ID-15.0	Graphic Details
ID-15.1	Graphic Electrical Requirements

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TEMPLATE UPDATED: 9-21-2022

SCI CREATE CUSTOM SPACE

125 Connell Ave
Rockdale, IL 60436
T: 815.730.7980

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Fr. Campbell, KY | Screaming Eagle Blvd. | Store #: 5705

Burger King | Garden Grill | AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY	
DATE	DESCRIPTION
10/27/2022	PROJECT START DATE

DATE: 10/21/22

Cover

ID-1.0

11x17 SHEETS

INFORMATION BY OTHERS

1 3D 3D Render
12" = 1'-0"

SCI
CREATE CUSTOM SPACE
125 Connell Ave
Rockdale, IL 60436
T: 815.730.7980

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Fr. Campbell, KY
Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/2022 | PROJECT START DATE

DATE: 10/21/22

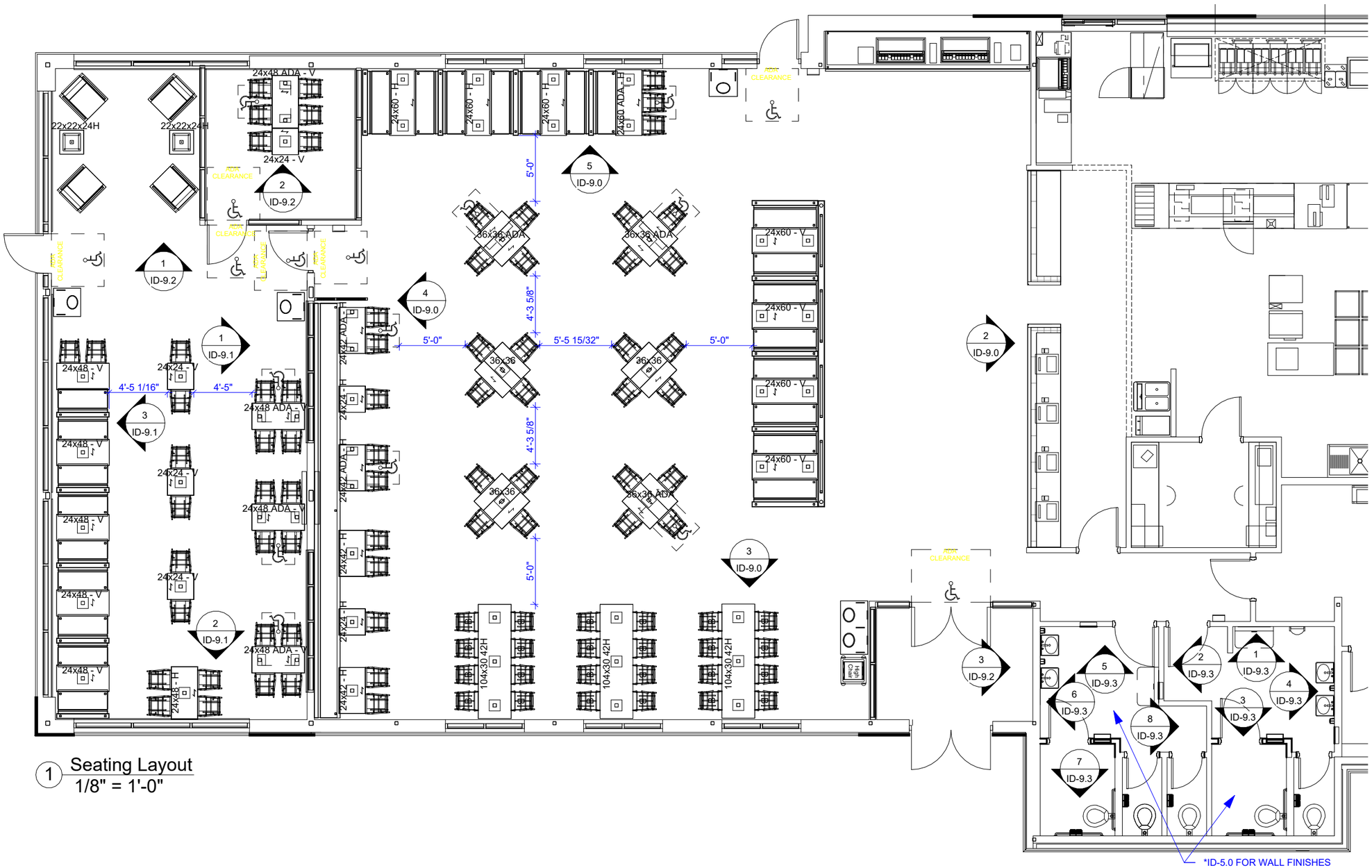
BURGER KING

3D Views

ID-2.0

11x17 SHEETS

INFORMATION BY OTHERS



1 Seating Layout
1/8" = 1'-0"

*ID-5.0 FOR WALL FINISHES
*ID-9.0 OR 9.1 FOR TYPICAL TILE ELEVATIONS
*ID-12s FOR RESTROOM TILE SPECS
G.C. TO COORDINATE PLACEMENT
OF BABY CHANGING STATION
WITH ARCHITECT

Seating and Table Schedule

Table Type	Table Quanity	Seat Total	ADA Total
2 Top	6	12	0.6
4 Top	20	80	4
6 Top	8	48	2.4
8 Top	3	24	1.2
Single	4	4	0.2
Grand total: 41		168	8.4

PLEASE BE MINDFUL OF THE TRI-LAM ADA TABLES. THE CENTER POST IS OFFSET TO ALLOW FOR ADA CLEARANCE. SEE CORE DRILL PACKAGE THAT SHIPS WITH THE FURNITURE PACKAGE FOR PROPER POST POSITION.

SCI CREATE CUSTOM SPACE

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Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
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DATE: 10/21/22

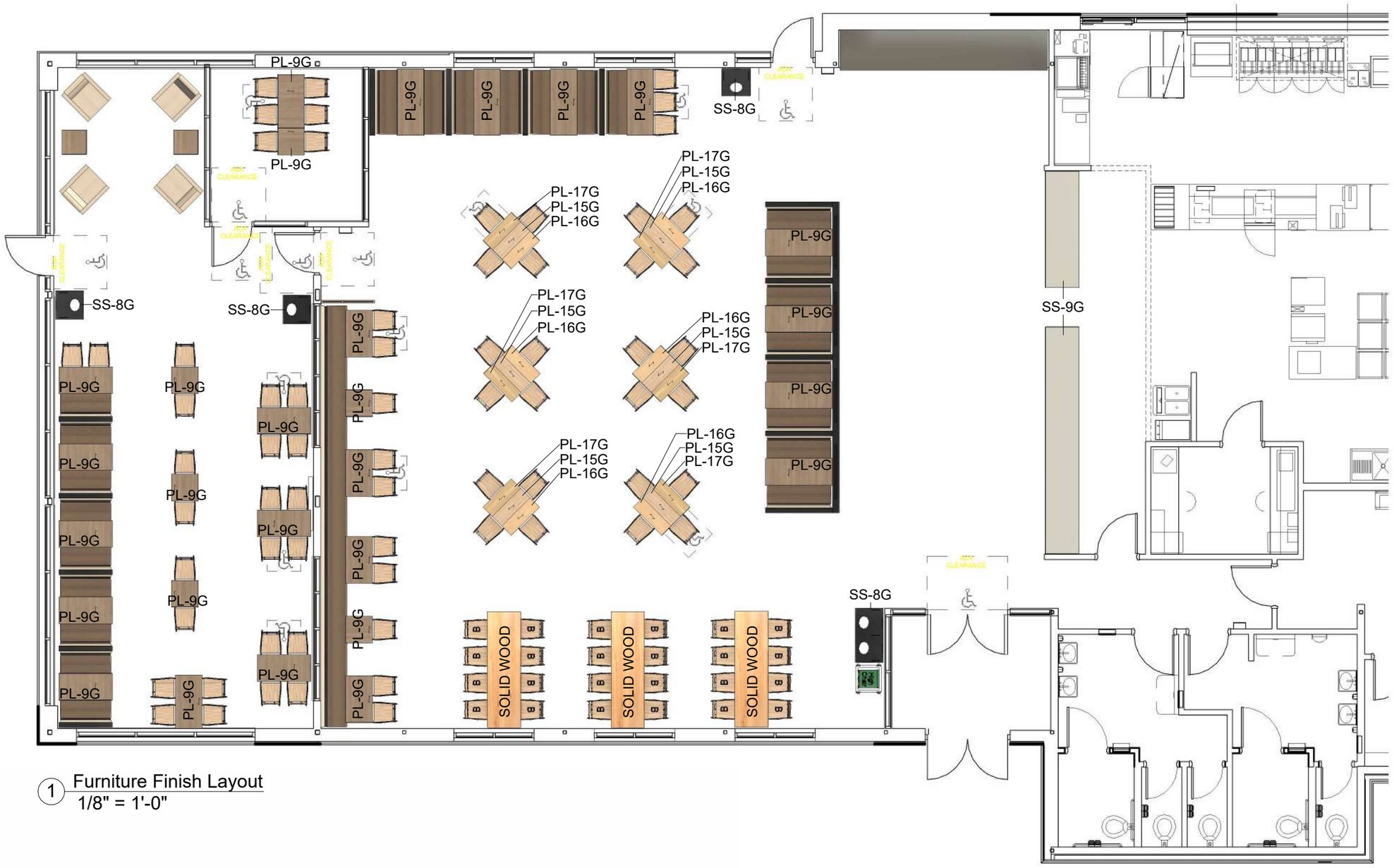
BURGER KING

Seating Layout

ID-3.0

11x17 SHEETS

INFORMATION BY OTHERS



1 Furniture Finish Layout
1/8" = 1'-0"

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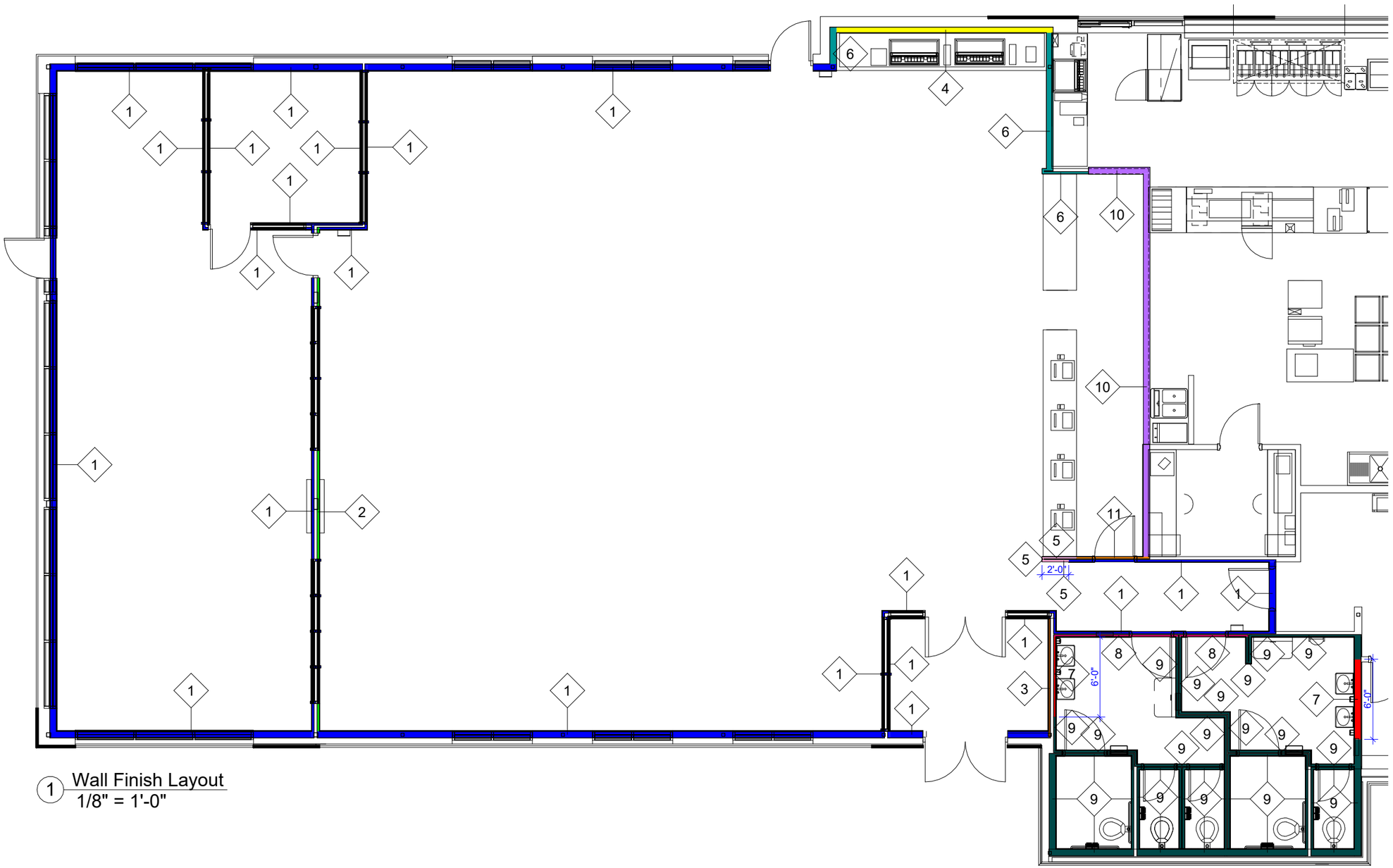
BURGER KING

Furniture Finish Layout

ID-4.0

11x17 SHEETS

INFORMATION BY OTHERS



1 Wall Finish Layout
1/8" = 1'-0"

1 — P-15G, SS-8G, WP-2G,CT-26G

2 — BR-2G, SS-8G, WP-2G,CT-26G Behind Settee

3 — BR-2G,CT-26G

4 — CT-25G - 24X24 @ DS Back Wall

5 — CT-27G - 12X24

6 — CT-28G - 6X24

7 — CT-30G - 24X12 Vertical @ Bathroom Wall Accent

8 — CT-27G, TR-1G, CT-27G Base @ Bathroom Wall

9 — CT-28G, TR-1G, CT-27G Base @ Bathroom Wall

10 — CT-31G @ Menu Board and BOH Wall

11 — PL-18G, CT-11G @ Kitchen Wall
Door: PL-18G
Door Frame: P-16G

Wall Finish Legend
1/4" = 1'-0"

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BURGER KING

Wall Finish Layout

ID-5.0

11x17 SHEETS

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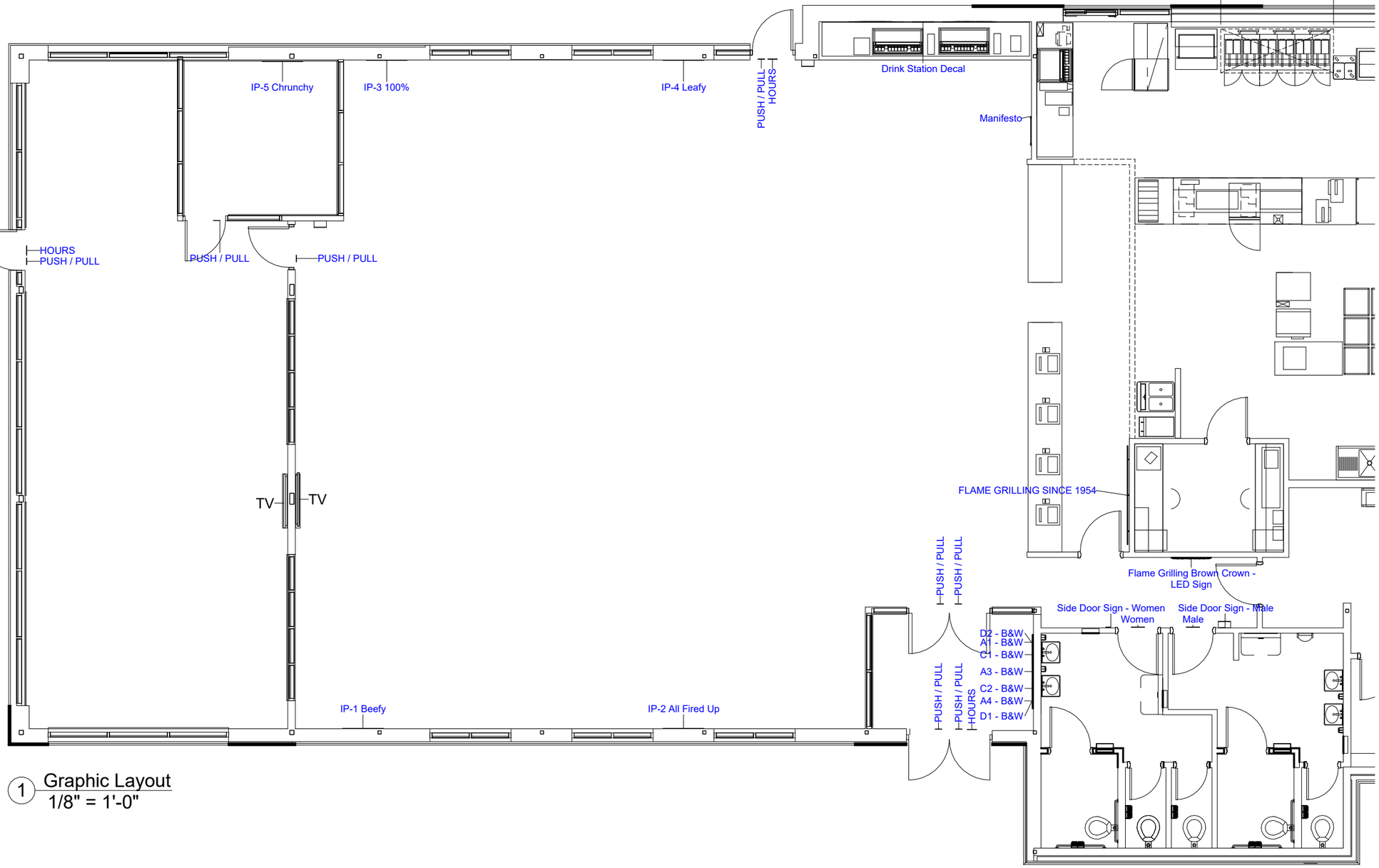

1 Graphic Layout
1/8" = 1'-0"

Graphic Schedule

Family	Model	Supplied By	Count
Graphic - Drink Station	DS Decal	SCI	1
Graphic - Heritage Art - B&W - A1	A1	SCI	1
Graphic - Heritage Art - B&W - A3	A3	SCI	1
Graphic - Heritage Art - B&W - A4	A4	SCI	1
Graphic - Heritage Art - B&W - C1	C1	SCI	1
Graphic - Heritage Art - B&W - C2	C2	SCI	1
Graphic - Heritage Art - B&W - D1	D1	SCI	1
Graphic - Heritage Art - B&W - D2	D2	SCI	1
Graphic - Ingredient Posters - 36x48	1 - Beefy	SCI	1
Graphic - Ingredient Posters - 36x48	2 - All Fired Up	SCI	1
Graphic - Ingredient Posters - 36x48	3 - 100%	SCI	1
Graphic - Ingredient Posters - 36x48	4 - Leafy	SCI	1
Graphic - Ingredient Posters - 36x48	5 - Chrunchy	SCI	1

Graphic Schedule

Family	Model	Supplied By	Count
Graphic - Manifesto	Manifesto	SCI	1
Graphic - Metal - Flame Grilling Since 1954		SCI	1
Graphic - Way Finding - Hours Door Decal	Hours	SCI	3
Graphic - Way Finding - Push Pull Door Decal	Push / Pull	SCI	8
Graphic - Way Finding - Restroom Door	Male	SCI	1
Graphic - Way Finding - Restroom Door	Women	SCI	1
Graphic - Way Finding - Restroom Side Door Sign	Male	SCI	1
Graphic - Way Finding - Restroom Side Door Sign	Women	SCI	1

LED Electrical Sign Schedule

Family	Supplied By	Count
Graphic - LED Sign - Flame Grilling Brown Crown	SCI	1

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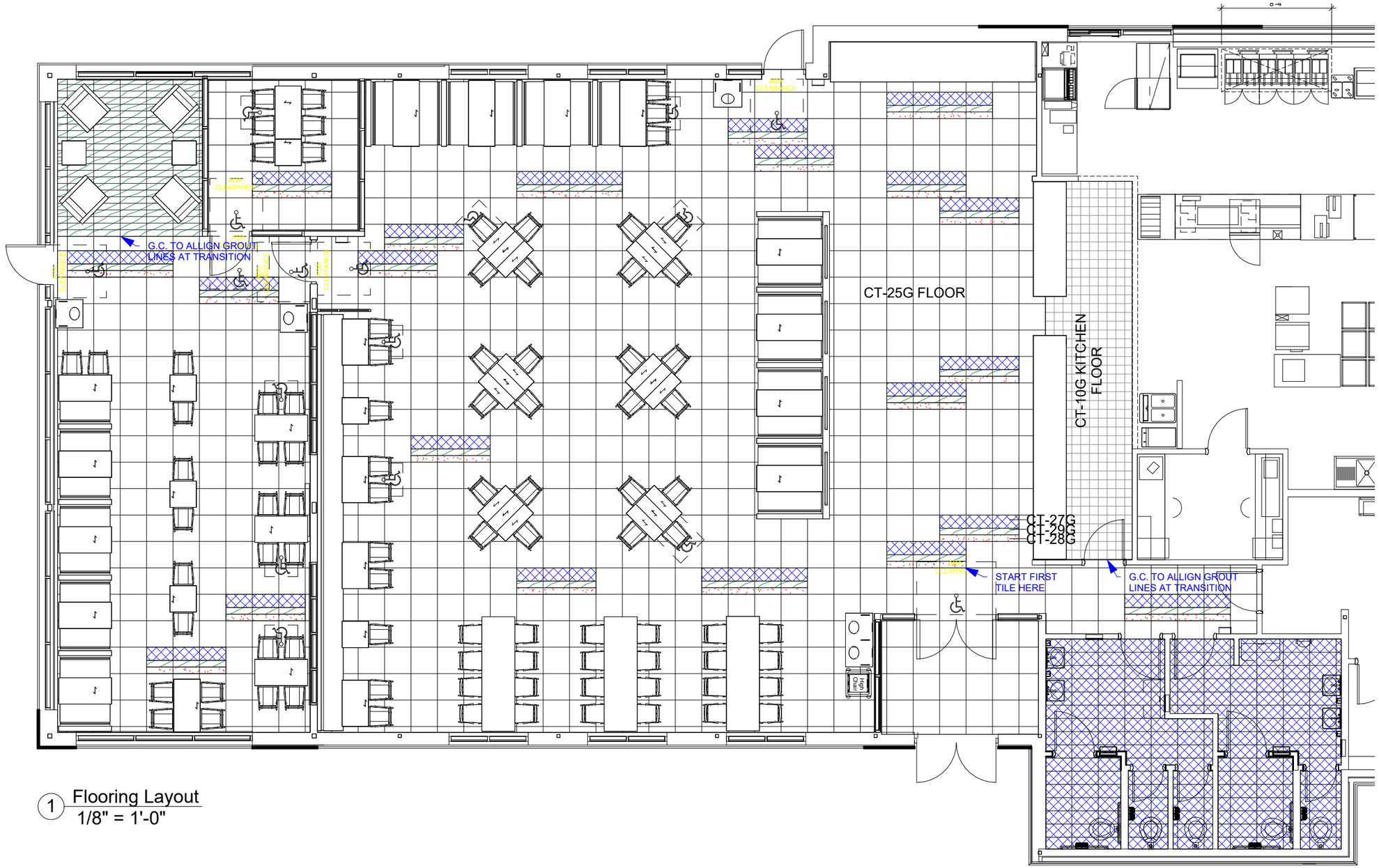
Graphic Layout

ID-6.0

11x17 SHEETS

INFORMATION BY OTHERS



1 Flooring Layout
1/8" = 1'-0"

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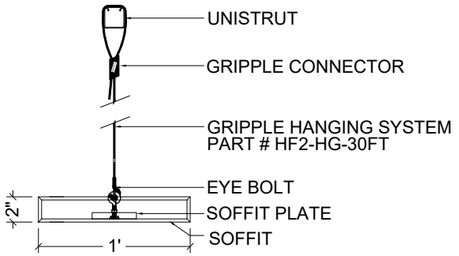
BURGER KING

Flooring Layout

ID-7.0

11x17 SHEETS



Soffit - Trellis / Pergola Schedule

Type Image	Family	Type	Count	Linear Foot
	Soffit - Low Profile Trellis	Beam	35	428'-7 7/16"
	Soffit - Pergola - Large	Low Profile	3	0"
Grand total: 38				428'-7 7/16"

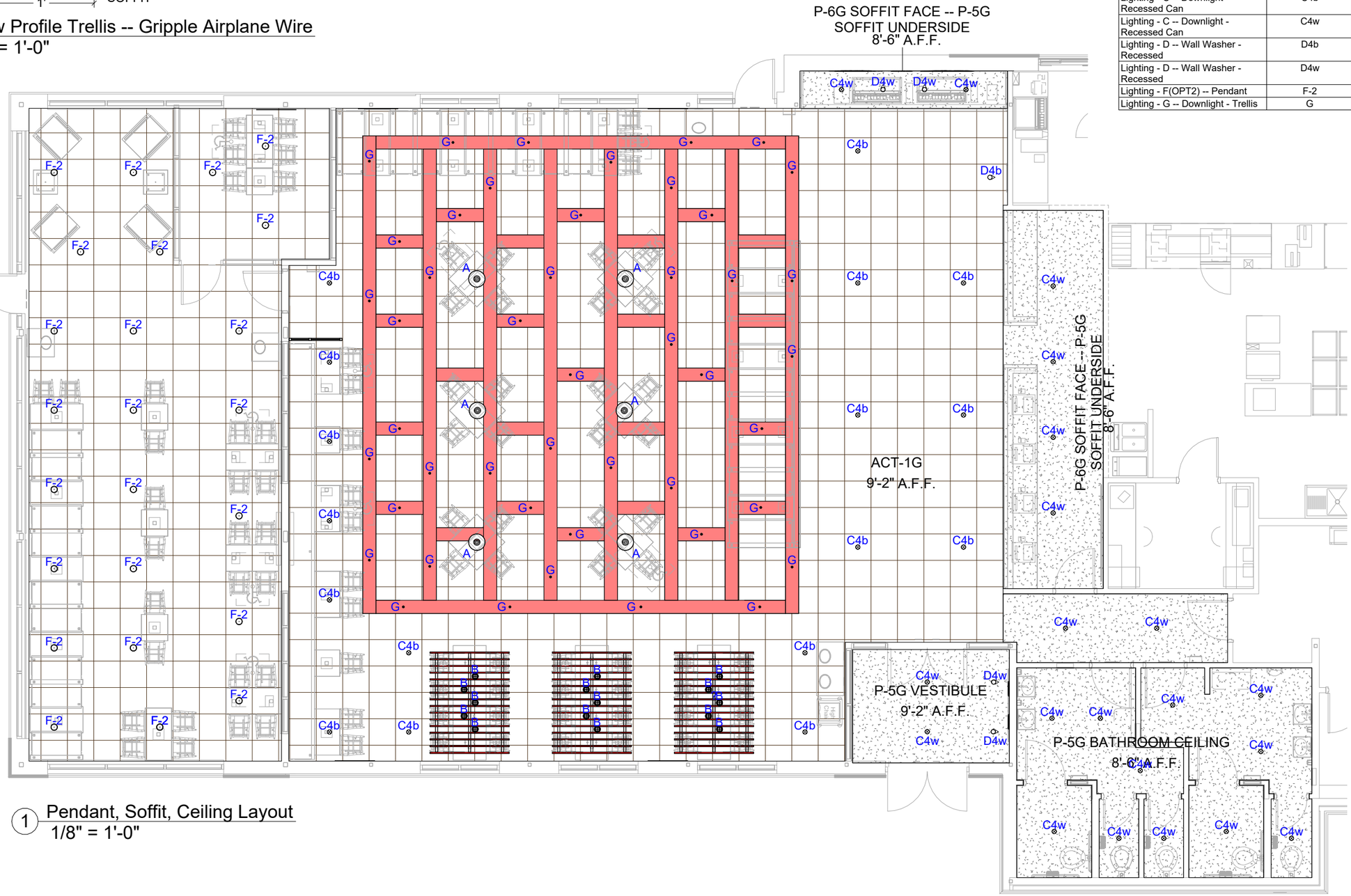
** MOUNTING LOCATION OF PERGOLA SOFFIT TO BE CENTERED OVER TABLE - SEE DRAWING**
** ALL OUTLETS AT TABLES ARE ON CENTER OF TABLE POST. PLEASE VERIFY AGAINST CORE DRILL PLAN**
BOTTOM OF "A" PENDANT TO BE HUNG AT 78" AFF
BOTTOM OF "B" PENDANTS TO BE HUNG PER CALLOUTS ON ID-8.1

**** ALL GENERAL LIGHTING TO BE COORDINATED BY GC WITH ARCHITECT OF RECORD TO MEET REQUIRED LIGHTING LEVELS****

Lighting Schedule

Family	Lighting Call Out	Supplied By	Count
Group - B -- Pendant Cage			3
Lighting - A -- Pendant	A	SCI	6
Lighting - B -- Pendant Cage	B	SCI	15
Lighting - C -- Downlight - Recessed Can	C4b	Owner	17
Lighting - C -- Downlight - Recessed Can	C4w	Owner	21
Lighting - D -- Wall Washer - Recessed	D4b	Owner	1
Lighting - D -- Wall Washer - Recessed	D4w	Owner	4
Lighting - F(OPT2) -- Pendant	F-2	Owner	25
Lighting - G -- Downlight - Trellis	G	SCI	46

2 Low Profile Trellis -- Gripple Airplane Wire
1" = 1'-0"



1 Pendant, Soffit, Ceiling Layout
1/8" = 1'-0"

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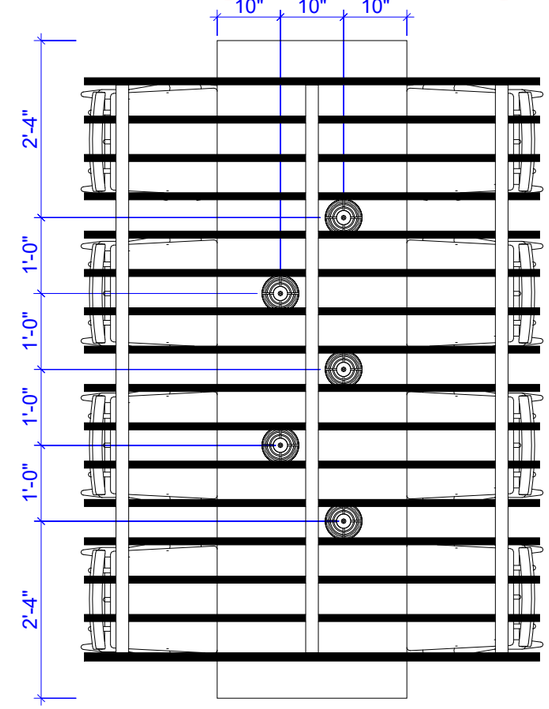
Pendant, Soffit, Ceiling Layout

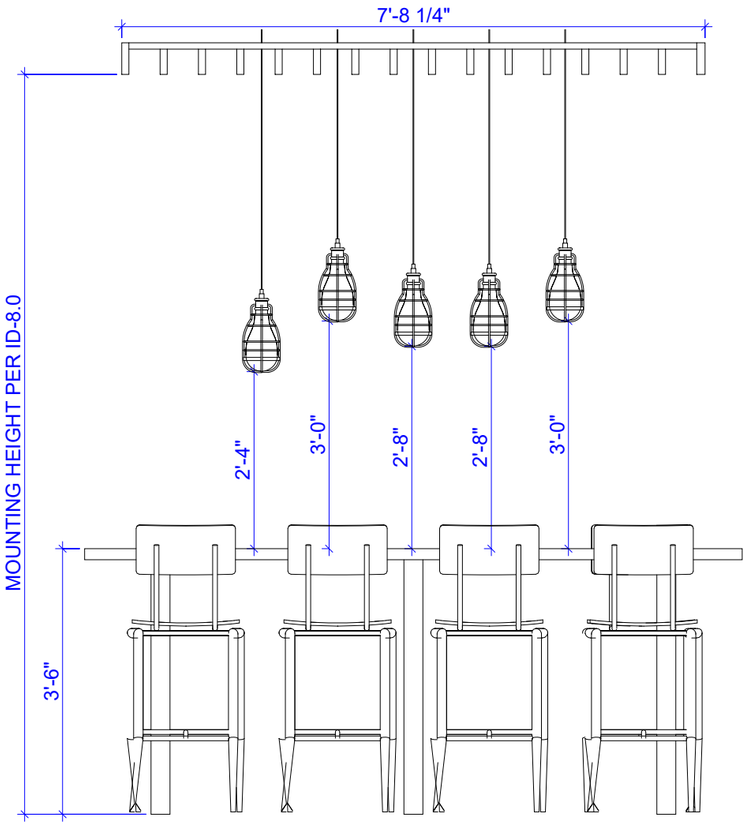
ID-8.0

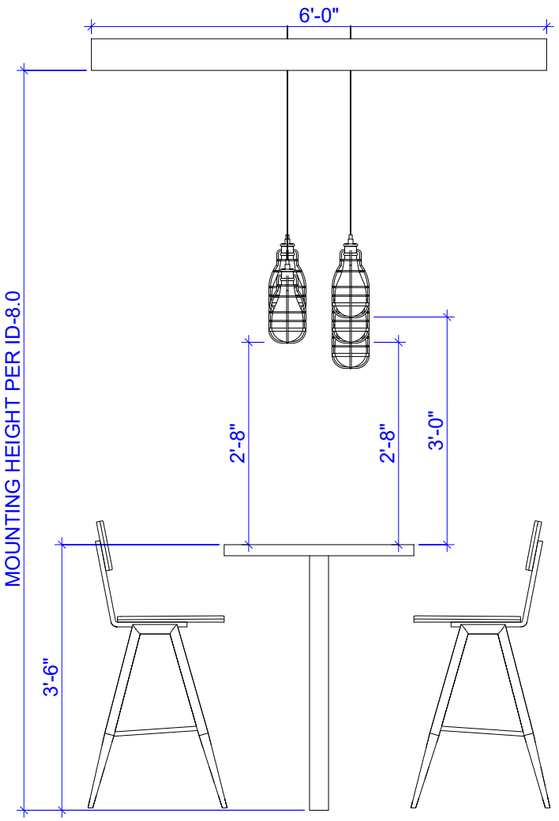
11x17 SHEETS

INFORMATION BY OTHERS

1 Pergola Details
1/2" = 1'-0"







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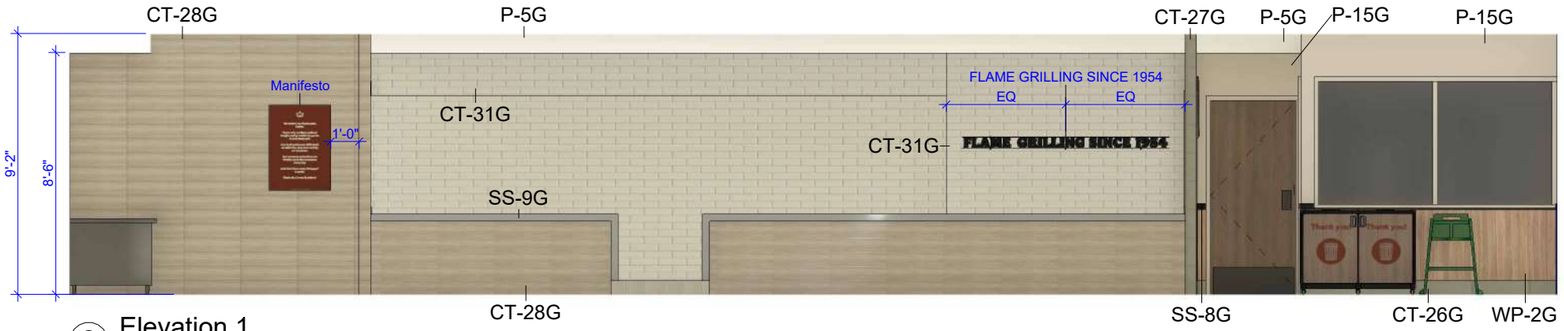
BURGER KING

Pergola Details

ID-8.1

11x17 SHEETS

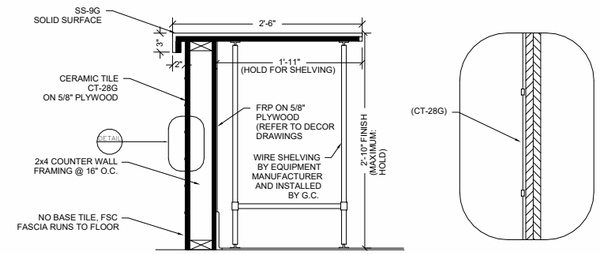
PROVIDE TR-4G DRYWALL REVEAL BEAD BETWEEN P-15G & P-6G WHEN APPLICABLE



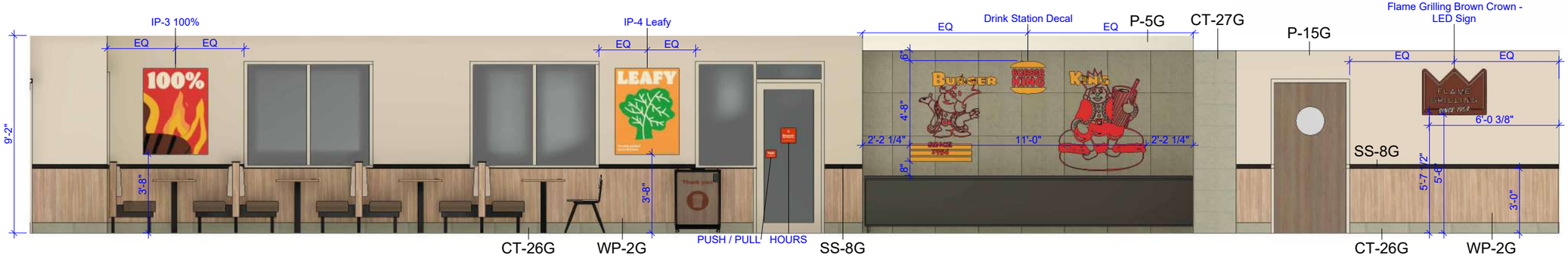
2 Elevation 1
3/16" = 1'-0"

3 Elevation 2
3/16" = 1'-0"

4 Elevation 3
3/16" = 1'-0"



1 FSC Detail
1/2" = 1'-0"



5 Elevation 4
3/16" = 1'-0"

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BURGER KING

Interior Elevations

ID-9.0

11x17 SHEETS

INFORMATION BY OTHERS

1 Elevation 5
3/16" = 1'-0"

2 Elevation 6
3/16" = 1'-0"

3 Elevation 7
3/16" = 1'-0"

PROVIDE TR-4G DRYWALL REVEAL BEAD BETWEEN P-15G & P-6G WHEN APPLICABLE

SCI CREATE CUSTOM SPACE

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BURGER KING

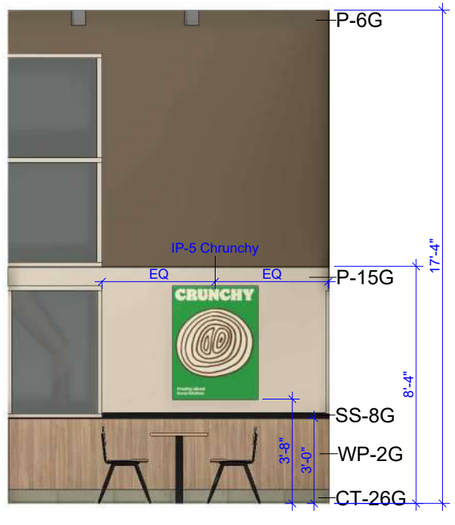
Interior Elevations

ID-9.1

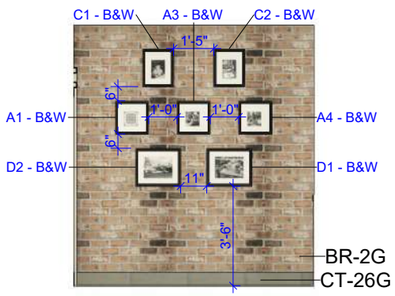
11x17 SHEETS

INFORMATION BY OTHERS

1 Elevation 8
3/16" = 1'-0"



2 Elevation 9
3/16" = 1'-0"



3 Elevation 10 - Vestibule
3/16" = 1'-0"

PROVIDE TR-4G DRYWALL REVEAL BEAD BETWEEN P-15G & P-6G WHEN APPLICABLE

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DATE: 10/21/22

BURGER KING

Interior Elevations

ID-9.2

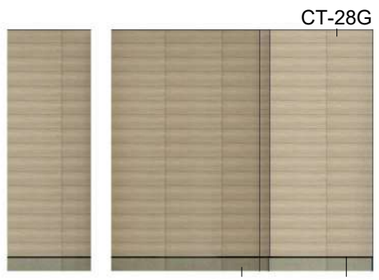
11x17 SHEETS

INFORMATION BY OTHERS

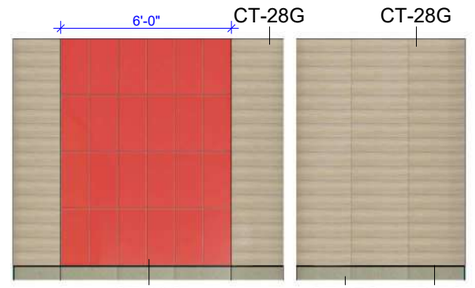
PROVIDE TR-4G DRYWALL REVEAL BEAD BETWEEN P-15G & P-6G WHEN APPLICABLE

1 Restroom Elevation - M1
3/16" = 1'-0"

2 Restroom Elevation - M2
3/16" = 1'-0"

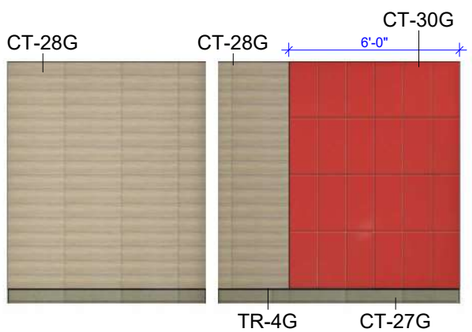


3 Restroom Elevation - M3
3/16" = 1'-0"

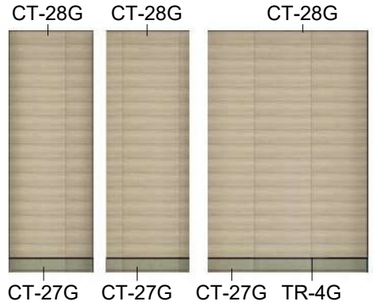


4 Restroom Elevation - M4
3/16" = 1'-0"

5 Restroom Elevation - W1
3/16" = 1'-0"



6 Restroom Elevation - W2
3/16" = 1'-0"



7 Restroom Elevation - W3
3/16" = 1'-0"

8 Restroom Elevation - W4
3/16" = 1'-0"

TYPICAL RESTROOM TILE ELEVATIONS.
TILE IS INSTALLED TO THE FLOOR.

G.C. TO COORDINATE LOCATION AND MOUNTING HEIGHT OF BABY CHANGING STATION WITH ARCHITECT

BKC RECCOMMENDS USE OF RECESSED CHANGING STATION DUE TO RESTROOM SIZE

G.C. TO COORDINATE WITH CD PLANS FOR ALL PLUMBING FIXTURES AND ACCESSORIES IN COMPLIANCE WITH ADA

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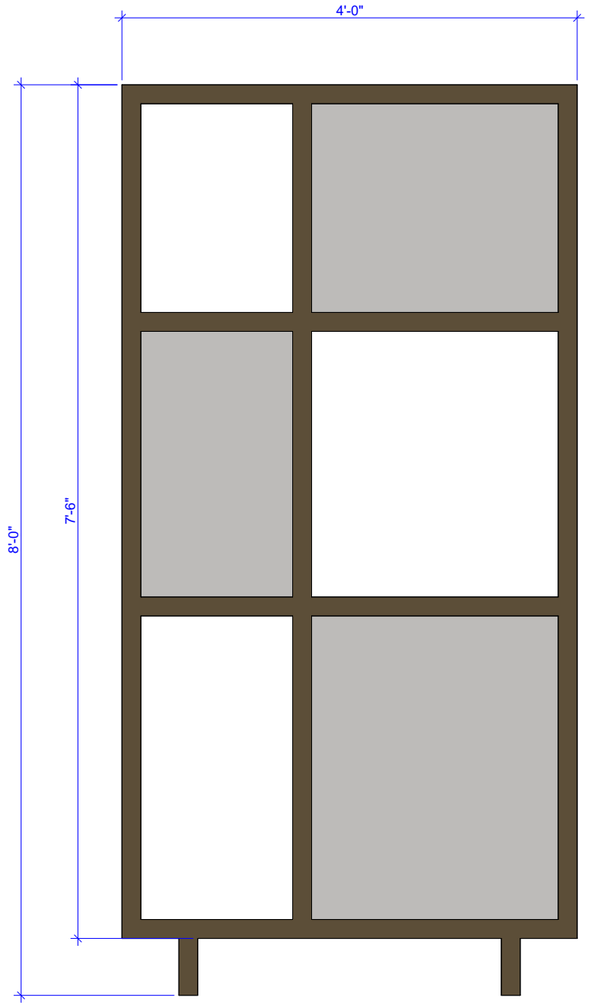
BURGER KING

Interior Elevations

ID-9.3

11x17 SHEETS

INFORMATION BY OTHERS



1 Elevation Front
3/4" = 1'-0"

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BURGER KING

Furniture Elevations

ID-9.4

11x17 SHEETS

SCI Specs - Tables / Bases

Type Image	Count	Family	Model	Description	Manufacturer	PartNum
	3	Table - Wood - Community	104x30 42H	SOLID WOOD TOP NAUTICAL FURNISHINGS, LLC. CONTACT: MICHAEL HOGLUND (954) 771-1100 MHOGLUND@NAUTICALFURNISHINGS.COM	SCI	BK-GG-COMTBL-30-104
	1	Table - S-200 - Tri-Lam	36x36 ADA	EDGE STYLE: S200 12" LAMINATE: PL-16G NEVAMAR - SANTA ROSA PLUM TREE WZ2001T 12" LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T 12" LAMINATE: PL-17G NEVAMAR - CARAMEL MACCHIATO WF0013T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-36-36-SQ-ADA-V1-TRI-MUL
	1	Table - S-200 - Tri-Lam	36x36 ADA	EDGE STYLE: S200 12" LAMINATE: PL-16G NEVAMAR - SANTA ROSA PLUM TREE WZ2001T 12" LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T 12" LAMINATE: PL-17G NEVAMAR - CARAMEL MACCHIATO WF0013T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-36-36-SQ-ADA-V2-TRI-LP-MUL
	1	Table - S-200 - Tri-Lam	36x36 ADA	EDGE STYLE: S200 12" LAMINATE: PL-16G NEVAMAR - SANTA ROSA PLUM TREE WZ2001T 12" LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T 12" LAMINATE: PL-17G NEVAMAR - CARAMEL MACCHIATO WF0013T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-36-36-SQ-ADA-V3-TRI-MUL
	3	Table - S-200 - Tri-Lam	36x36	EDGE STYLE: S200 12" LAMINATE: PL-16G NEVAMAR - SANTA ROSA PLUM TREE WZ2001T 12" LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T 12" LAMINATE: PL-17G NEVAMAR - CARAMEL MACCHIATO WF0013T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-36-36-SQ-V1-TRI-MUL
	6	Table - S-200 - PL-9G	<varies>	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-24-SQ-VOO-MUL
	2	Table - S-200 - PL-9G	24x42 - H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-42-SQ-VOO-MUL
	2	Table - S-200 - PL-9G	24x42 ADA - H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-42-SQ-VOO-MUL-ADA
	1	Table - S-200 - PL-9G	24x48 - H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-48-SQ-VOO-MUL
	3	Table - S-200 - PL-9G	24x60 - H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-60-SQ-VOO-MUL
	1	Table - S-200 - PL-9G	24x60 ADA - H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-60-SQ-VOO-MUL-ADA

INFORMATION BY OTHERS

SCI
CREATE CUSTOM SPACE

125 Connell Ave
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T: 815.730.7980

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Fr. Campbell, KY
Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/2022 | PROJECT START DATE

DATE: 10/21/22

SCI Specifications

ID-10.0

11x17 SHEETS

INFORMATION BY OTHERS

SCI Specs - Tables / Bases

Type Image	Count	Family	Model	Description	Manufacturer	PartNum
	5	Table - S-200 - PL-9G	24x48 - V	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24G-48-SQ-VOO-MUL
	4	Table - S-200 - PL-9G	24x48 ADA - V	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24G-48-SQ-VOO-MUL-ADA
	4	Table - S-200 - PL-9G	24x60 - V	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24G-60-SQ-VOO-MUL
	2	Table - Occasional - S-200 - 22x22 - PL-9G	22x22 24H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E 16"X16" FREE STANDING SQUARE BASE: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-OCC-22-22-VOO-BLA-MAT
	24	Table - Community - Purse Hook	Purse Hook	FINISH: ANTIQUE BRONZE	SCI	BK-GG-PURSE-HOOK
	8	Glide - OTO Glide		BURGER KING GARDEN GRILL - (1) ON THE LEVEL UPGRADED TABLE BASE SELF LEVELER GLIDE	SCI	BK-GG-GLD-OTL
	36	Base - GG Square Base - GI	SQ-30H-GI	FINISH: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-TTGP-30H-3S-BLA-MAT
	9	Base - GG Square Base - GI	SQ-42H-GI	FINISH: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-TTGP-42H-3S-BLA-MAT
	12	Base - GG Square Base - GI	SQ-30H-OFF-GI	FINISH: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-TTGP-OFF-30H-3S-BLA-MAT

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Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/2022 | PROJECT START DATE

DATE: 10/21/22

SCI Specifications

ID-10.1

11x17 SHEETS

SCI Specs - Seating

Type Image	Count	Family	Model	Description	Manufacturer	PartNum
	24	Barstool - Laminate	BS	STYLE: ISABEL BARSTOOL - LAMINATED PL-15G NEVAMAR - MACCHIATO WF0011T TWENTY FOUR 7 GLOBAL SOLUTIONS CONTACT: BARRY WOON (323) 319-2722 BARRY.WOON@TWENTYFOUR7-GLOBAL.COM	SCI	BK-GG-BS-LAM
	4	Booth - Double	48" UPH	STYLE: 40"H GARDEN GRILL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 UPHOLSTERED SEAT PAD: UPH-7G MAHARAM - LARIAT - TAUPE 010 WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50 BOOTH WALL EDGING: REHAU FLEX EDGE BAND - 15/16" x 3mm BOOTH EDGING MATCHES NEVAMAR - MACCHIATO WF0011T	SCI	BK-GG-1-DB-40H48L-18S-US-PKG-1
	6	Booth - Double	60" UPH	STYLE: 40"H GARDEN GRILL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 UPHOLSTERED SEAT PAD: UPH-7G MAHARAM - LARIAT - TAUPE 010 WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50 BOOTH WALL EDGING: REHAU FLEX EDGE BAND - 15/16" x 3mm BOOTH EDGING MATCHES NEVAMAR - MACCHIATO WF0011T	SCI	BK-GG-1-DB-40H60L-18S-US-PKG-1
	1	Booth - Single	48" UPH	STYLE: 40"H GARDEN GRILL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 UPHOLSTERED SEAT PAD: UPH-7G MAHARAM - LARIAT - TAUPE 010 WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50 BOOTH WALL EDGING: REHAU FLEX EDGE BAND - 15/16" x 3mm BOOTH EDGING MATCHES NEVAMAR - MACCHIATO WF0011T	SCI	BK-GG-1-SB-40H48L-18S-US-PKG-1
	1	Booth - Single	60" FG	STYLE: 40"H GARDEN GRILL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 FIBERGLASS SEAT: FG-7G - TAUPE - FV964-NP530 - ABRASION RESISTANT WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50 BOOTH WALL EDGING: REHAU FLEX EDGE BAND - 15/16" x 3mm BOOTH EDGING MATCHES NEVAMAR - MACCHIATO WF0011T	SCI	BK-GG-1-SB-40H60L-18S-FG-PKG-1
	2	Booth - Single	60" UPH	STYLE: 40"H GARDEN GRILL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 UPHOLSTERED SEAT PAD: UPH-7G MAHARAM - LARIAT - TAUPE 010 WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50 BOOTH WALL EDGING: REHAU FLEX EDGE BAND - 15/16" x 3mm BOOTH EDGING MATCHES NEVAMAR - MACCHIATO WF0011T	SCI	BK-GG-1-SB-40H60L-18S-US-PKG-1
	67	Chair - Laminate	Laminate	STYLE: ISABEL CHAIR - LAMINATED PL-15G NEVAMAR - MACCHIATO WF0011T TWENTY FOUR 7 GLOBAL SOLUTIONS CONTACT: BARRY WOON (323) 319-2722 BARRY.WOON@TWENTYFOUR7-GLOBAL.COM	SCI	BK-GG-CH-LAM
	4	Lounge Chair - Grove - UPH-10	Grove	STYLE: GROVE WITH ARMS UPHOLSTERY: UPH-10G MAHARAM - LARIAT - OYSTER 007 POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-GRO-LOUNGE-ARM-CH-OYS-BLA-MAT
	1	Wall Bench Settee - Upholstered Seat	15"H x LF	STYLE: GARDEN GRILL -- 15"H BACK PAD ATTACHED TO EXISTING WALL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 UPHOLSTERED SEAT PAD: UPH-7G MAHARAM - LARIAT - TAUPE 010 BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-1-WBS-40H-18S-US-BP15H-PKG-1

INFORMATION BY OTHERS

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Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/2022 | PROJECT START DATE

DATE: 10/21/22

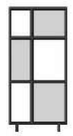
BURGER KING

SCI Specifications

ID-10.2

11x17 SHEETS

SCI Specs - Casework

Type Image	Count	Family	Type	Description	Linear Foot	Manufacturer	PartNum
	1	Customer Service Counter Solid Surface - Wing on Left	By SCI	SOLID SURFACE TOP:SS-9G AVONITE F1-7885 BK SMOKE 3" FRONT DROP, WATER FALL LEFT SIDE	19'-0 5/8"	SCI	BK-GG-CSC-SS-1-EE-LF-WF1L-3FD-1.25RD-3RSP-SMO
	1	Customer Service Counter Solid Surface - Wing on Right	By SCI	SOLID SURFACE TOP:SS-9G AVONITE F1-7885 BK SMOKE 3" FRONT DROP, WATER FALL LEFT SIDE	10'-9 1/2"	SCI	BK-GG-CSC-SS-1-EE-LF-WF1R-3FD-1.25RD-3LSP-SMO
	1	Divider Wall - GG - Custom Length	Custom Length x 40H	STYLE: 40"H GARDEN GRILL WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	23'-3"	SCI	BK-GG-1-DW-GI-40H-SS-MAC-DN
	4	Divider Wall - Metal Bar Rail	48"L	STYLE: 48"L X 7"H GARDEN GRILL POWDERCOATED RAIL: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	0"	SCI	BK-GG-UBAR-48L7H-BLA-MAT
	1	Screen - Option A - Metal - 4'-0" -- GG	4'-0" L	FULL HEIGHT DIVIDER SCREEN - METAL POWDER COATED FRAME: TIGER DRYLAC -038/60080 STATUARY BRONZE PERFEORATED METAL PANEL: TIGER DRYLAC -038/60080 STATUARY BRONZE	8'-0"	SCI	
	2	Solid Surface Adhesive Kit	Solid Surface Adhesive Kit		0"	SCI	BK-GG-SS-ADH-BK-SMOKE
	1	Trash - Double	Thank You - Thank You	STYLE: GARDEN GRILL SOUTH SIDE BASE CABINET FINISH: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK T-MOLD EDGING: BLACK GRAPHIC BY GRAPHICS VENDOR	0"	SCI	BK-GG-SSD-D-35BO-CAS-SS-VOO-HDT-BLA-MAT-DN-TYG
	3	Trash - Single	Thank You!	STYLE: GARDEN GRILL SOUTH SIDE BASE CABINET FINISH: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK T-MOLD EDGING: BLACK GRAPHIC BY GRAPHICS VENDOR	0"	SCI	BK-GG-SSD-S-35BO-CAS-SS-VOO-HDT-BLA-MAT-DN-TYG

MILLWORK

FRONT SERVICE COUNTER TOP
SOLID SURFACE TOP:**SS-9G** AVONITE F1-7885 BK SMOKE
3" FRONT DROP

WAINSCOT
WP-2G GENERAL WAINSCOT:
CIM - Z-LOCK SYSTEM - NEVAMAR - MACCHIATO - CONTACT: DAMIEN ALLEN 706-253-4795
MARLITE - ALLURE PANEL - NEVAMAR - WF001 MACCHIATO XGRN

CHAIR RAIL AND WINDOW SILLS
SS-8G CORIAN - DEEP NOCTURNE
CONTACT: RANDY HOUSTON (404) 274-3047

INFORMATION BY OTHERS

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Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DESCRIPTION	DATE
PROJECT START DATE	10/21/2022

DATE: 10/21/22

BURGER KING

SCI Specifications
ID-10.0

11x17 SHEETS

GENERAL CONTRACTOR SPECIFICATIONS

MILLWORK

FRONT COUNTER FASCIA

**** SEE ELEVATIONS FOR TILE CONFIGURATION**
CT-28G - GRANITI FIANDRE - LARCH US - FRENCH WOOD - IRG 0624123 6"X24"
TILE CONTACT: JAN DETER (714) 309-9551
GROUT: **GR-17G**
SAND BLASTED BURGER KING LOGO BY NAUTICAL FURNISHINGS
NAUTICAL FURNISHINGS, LLC.
CONTACT: MICHAEL HOGLUND (954) 771-1100
MHOGLUND@NAUTICALFURNISHINGS.COM

CEILING EQUIPMENT

UNISTRUT FOR HANGING TRELLIS - PERGOLA SOFFITS

SUPPORT SYSTEM: P-6G SLATE BROWN
TO BE INSTALLED & PURCHASED BY G.C. PRIOR TO DECOR SHIPPING

ELECTRICAL EQUIPMENT

TELEVISION

FLAT PANEL TELEVISION
G.C TO PROVIDE ELECTRICAND CABLE FOR TV

LIGHTING

ADDITIONAL LIGHTING - NON DECORATIVE

SEE ID-6.1 FOR LIGHTING LAYOUT
SEE ID-12.0 FOR LIGHTING SPECIFICATIONS
*COORDINATE WITH ARCHITECT ON RECORD FOR EXACT LIGHTING PLACEMENT

RESTROOM EQUIPMENT

BABY CHANGING STATION

KOALA KARE
MODEL: KB 110-SSRE
FINISH: STAINLESS STEEL RECESS
37"WX23"HX15" EXTENSIONS OPENING
MOUNTING HEIGHT: 34" AFF

OPTIONAL:
KOALA KARE
MODEL: KB200-05
FINISH: POLYPORPYLENE AND UNIBODY STEEL CHASSIS
MOUNT HORIZONTAL BABY CHANGING STATION
MOUNTING HEIGHT: 35" AFF

KITCHEN EQUIPMENT

DRINK STATION CABINET

MANUFACTURED STONE TOP: MS-1G SILESTONE - VOLVANO TEXTURE - GREY EXPO,
3" FRONT DROP
OR
STAINLESS STEEL
OR
SOLID SURFACE TOP: SS-9G - AVONITE - BK SMOKE F1-7885
CABINET LAMINATE: PL-18G NEVAMAR - CAFE SIENNA

MISCELLANEOUS EQUIPMENT

ORDER KIOSKS (IF APPLICABLE)

BABY / TODDLER HIGH CHAIRS

INFORMATION BY OTHERS

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DESIGNER: Nicole Jenkins

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10/21/2022 | PROJECT START DATE

DATE: 10/21/22

GC Specifications

ID-11.0

11x17 SHEETS

BURGER KING- 20/20 GARDEN GRILL INTERIOR
INTERIOR MATERIALS & FINISH SCHEDULE **TO BE USED WITH 20/20 GARDEN GRILL GUIDELINES DOC.

9.20.22

CODE	MATERIAL	LOCATION	MANUFACTURER	DESCRIPTION			ADDITIONAL INFORMATION
				PRODUCT	COLOR	DIMENSION	
DECORATIVE FLOOR & WALL TILES							
CT-25G	CERAMIC TILE	FIELD FLOOR TILE, BEVERAGE STATION BACK WALL	GRANITE FIANDRE / TRANSCERAMICA	TCG2424027SQ	SIMPLY GRAY HONED	24" x 24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EUROWEST	X600292X8	URBAN GRAY HONED	24" x 24"	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EMSER	I99UPTOGR2424	UPTOWN CUSTOM GRAY # 15 (RECTIFIED)	24" x 24"	CONTACT: CRISTINA DUNBAR (713)462-2411 BURGERKING@EMSER.COM NOTE: USE WITH GR-15G (1/16" THICK)
			DALTILE	N627BK24241PK	N627 ROYAL GREY	24" x 24"	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-15G (1/16" THICK)
CT-26G	CERAMIC TILE	BASE TILE (MAIN DINING)	GRANITE FIANDRE / TRANSCERAMICA	TCG1224027SQ	SIMPLY GRAY HONED	6" x 24" (CUT TILE)	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EUROWEST	X630292X8	URBAN GRAY HONED	6" x 24" (CUT TILE)	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EMSER	CUT BASE TILE (FROM 12" X 24")	UPTOWN CUSTOM GRAY # 15 (RECTIFIED)	6" x 24" (CUT TILE)	CONTACT: CRISTINA DUNBAR (323) 650-2200 BURGERKING@EMSER.COM NOTE: 4 WEEKS LEAD TIME CUT BASE TILE IF PURCHASE DIRECTLY FROM EMSER NOTE: USE WITH GR-15G (1/16" THICK)
			DALTILE	CUT BASE TILE N627BK12241PK	N627 ROYAL GREY	6" x 24" (CUT TILE)	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-15G (1/16" THICK)
CT-27G	CERAMIC TILE	FSC SIDE WALL, RESTROOM ACCENT WALL AND FLOOR	GRANITE FIANDRE / TRANSCERAMICA	TCG1224027SQ	SIMPLY GRAY HONED	12" x 24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EUROWEST	X630292X8	URBAN GRAY HONED	12" x 24"	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EMSER	I99UPTOG12424	UPTOWN CUSTOM GRAY # 15 (RECTIFIED)	12" x 24"	CONTACT: CRISTINA DUNBAR (323) 650-2200 BURGERKING@EMSER.COM NOTE: USE WITH GR-15G (1/16" THICK)
			DALTILE	N627BK12241PK	N627 ROYAL GREY (RECTIFIED)	12" x 24"	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-15G (1/16" THICK)
CT-28G	CERAMIC TILE	DINING, ACCENT TILE LIGHT WOOD, KNEE WALL AND FSC SIDE WALL WAINSCOT TILE (STACKED BOND)	GRANITE FIANDRE / TRANSCERAMICA	Larch US (french wood) IRG 0624123	WOOD TILE (RECTIFIED)	6" x 24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G @ FLOOR (1/16" THICK) NOTE: USE WITH GR-17G @ DINING WALLS ONLY (1/16" THICK)
			EUROWEST	TCL Larch US (french wood)	WOOD TILE (RECTIFIED)	6" x 24"	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G @ FLOOR (1/16" THICK) NOTE: USE WITH GR-17G @ DINING WALLS ONLY (1/16" THICK)
			EMSER	F19POCOOAO624P14	DEREVO BEIGE WOOD TILE (RECTIFIED)	6" x 24"	CONTACT: CRISTINA DUNBAR (713)462-2411 BURGERKING@EMSER.COM NOTE: USE WITH GR-15G @ FLOOR (1/16" THICK) NOTE: USE WITH GR-17G @ DINING WALLS ONLY (1/16" THICK)
			DALTILE	N625BK6241PK	N626 GRAY WOOD	6" X 24"	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-15G @ FLOOR (1/16" THICK) NOTE: USE WITH GR-17G @ DINING WALLS ONLY (1/16" THICK)

INFORMATION BY OTHERS

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Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
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10/21/2022 | PROJECT START DATE

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Interior Building Specifications

ID-12.0

11x17 SHEETS

BURGER KING- 20/20 GARDEN GRILL INTERIOR
INTERIOR MATERIALS & FINISH SCHEDULE **TO BE USED WITH 20/20 GARDEN GRILL GUIDELINES DOC.

9.20.22

CODE	MATERIAL	LOCATION	MANUFACTURER	DESCRIPTION			ADDITIONAL INFORMATION
				PRODUCT	COLOR	DIMENSION	
DECORATIVE FLOOR & WALL TILES							
CT-29G	CERAMIC TILE	DINING, ACCENT DARK WOOD	GRANITE FIANDRE / TRANSCERAMICA	Elm US (french wood) IRG 0624122	WOOD TILE	6" x 24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EUROWEST	TCL Elm US (french wood)	WOOD TILE	6" x 24"	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EMSER	F19POCOGRO624P14	DEREVO GRAY WOOD TILE (RECTIFIED)	6" x 24"	CONTACT: CRISTINA DUNBAR (713)462-2411 BURGERKING@EMSER.COM NOTE: USE WITH GR-15G (1/16" THICK)
			DALTILE	N626BK6241PK	N625 BROWN WOOD	6" X 24"	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-15G @ FLOOR (1/16" THICK) NOTE: USE WITH GR-17G @ DINING WALLS ONLY (1/16" THICK)
CT-30G	CERAMIC TILE	RESTROOM WALL ACCENT RED TILE	GRANITE FIANDRE / TRANSCERAMICA	SENSIBLE STONE ED5052	SIGN RED NATURAL	12" x 24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EUROWEST	TCL SENSIBLE STONE	SIGN RED NATURAL	12" x 24"	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G (1/16" THICK)
CT-31G	CERAMIC TILE	SERVICE AREA, FOOD PREP, MENUBOARD, BEVERAGE STATION BACK WALL OPTION	CERAMIC TECHNICS	SASSUOLO STONE TONES	WHITE GLOSSY SUBWAY TILE	3"x12" SUBWAY TILE	CONTACT: LYDIA KURTH (954) 520-4283 LKURTH@CERAMIC TECHNICS NOTE: USE WITH GR-18G (1/8" THICK)
			GRANITE FIANDRE / TRANSCERAMICA	1318GLOSSWHT1	WHITE GLOSSY SUBWAY TILE	3"x12" SUBWAY TILE	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-18G (1/8" THICK)
			EUROWEST	TCG1318	WHITE GLOSSY SUBWAY TILE	3"x12" SUBWAY TILE	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-18G (1/8" THICK)
			EMSER	F14CATCICO312P	WHITE GLOSSY SUBWAY TILE	3"x12" SUBWAY TILE	CONTACT: CRISTINA DUNBAR (713)462-2411 BURGERKING@EMSER.COM NOTE: USE WITH GR-18G (1/8" THICK)
			DALTILE	WL N524BK3121P2	N524 WHITE	3"x12" SUBWAY TILE	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-18G (1/8" THICK)
CT-35G	CERAMIC TILE	OUTDOOR TERRACE FLOOR	TRANSCERAMICA	QUARTZITE	ALPESR11	24"x24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-6G (1/8" THICK)
FLOOR & WALL FINISHES AT DINING, RESTROOMS & BACK OF HOUSE BACK OF HOUSE FLOOR & WALL TILE							
CT-10G	QUARRY TILE	BACK OF HOUSE	GRANITE FIANDRE / TRANSCERAMICA	TCG1212142	CAPITOL GRAY TX	12" X 12"	CONTACT: CYNTHIA MENA (561) 946-9533 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-6G (1/8" THICK)
CT-11G	QUARRY TILE BASE	BACK OF HOUSE COVE BASE	GRANITE FIANDRE / TRANSCERAMICA	TCG612C142- BASE TCG60C142-CORNER	CAPITOL GRAY TX	6" X 12 6"X 1"	CONTACT: CYNTHIA MENA (561) 946-9533 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-6G (1/8" THICK)
CT-32G	CERAMIC TILE	OUTDOOR TERRACE FLOOR	TRANSCERAMICA	QUARTZITE	ALPES R11	24' X 24"	CONTACT: CYNTHIA MENA (561) 946-9533 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-6G (1/8" THICK)
FRP-1G	FIBERGLASS REINFORCED PANEL	BACK OF HOUSE	MARLITE	FRP SYMMETRIX 204561B (4'X8") 204551 (4'X10") WHITE/ BLK CORE NO TOP COAT (GRAY SCORE LINE)	A916 G312	4'x8' 4'x10'	CONTACT: CUSTOMER SERVICE (330) 343-6621 ANITA CRAIG (423) 506-6335 ACRAIG@MARLITE.COM NOTE: USE WITH TR-3G

INFORMATION BY OTHERS

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Fr. Campbell, KY
Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/2022 | PROJECT START DATE

DATE: 10/21/22

Interior Building Specifications

ID-12.1

11x17 SHEETS

BURGER KING- 20/20 GARDEN GRILL INTERIOR
INTERIOR MATERIALS & FINISH SCHEDULE **TO BE USED WITH 20/20 GARDEN GRILL GUIDELINES DOC.

9.20.22

CODE	MATERIAL	LOCATION	MANUFACTURER	DESCRIPTION			ADDITIONAL INFORMATION
				PRODUCT	COLOR	DIMENSION	
TRIMS							
TR-1G	EDGE PROFILE	OUTSIDE CORNERS OF WALL TILE & BASE TILE TRIM AT RESTROOM	SCHLUTER	QUADEC Q100AT	SATIN NICKEL ANODIZED ALUMINUM	3/8"	CONTACT: ROSANNA RUIZ (786) 858-0010 RRUIZ@SCHLUTER.COM NOTE: GC TO COORDINATE HEIGHT AS REQUIRED BASED UPON TILE THICKNESS AND SETTING SYSTEM
TR-2G	COVE BASE PROFILE	GENERAL RESTROOM		DILEX-AHK100AT	SATIN NICKEL ANODIZED ALUMINUM	3/8"	
TR-3G	SYMMETRIX TRIMS	BACK OF HOUSE	MARLITE	OUTSIDE CORNER 205569B	FRPMOLD BK NICKEL ANODIZED A560 O/C	7/16" EXPOSED EDGE / 8' LONG	
				INSIDE CORNER 205568B	FRPMOLD BK NICKEL ANODIZED A560 O/C	7/16" EXPOSED EDGE / 8' LONG	
				EDGE 205571B	FRPMOLD BK NICKEL ANODIZED A560 O/C	7/16" EXPOSED EDGE / 8' LONG	
TR-4G	DRYWALL REVEAL BEAD	DRYWALL REVEAL BELOW TRUSSES. RETWEEN PAINT TRANSITION P-15G & P-6G	TRIM-TEX	AS5110S	ARCHITECTURAL SILVER	1/2" X 1/2"	CONTACT: LOCAL SUPPLIER
TS-1G	TRANSITION STRIP	CERAMIC TILE TO CERAMIC TILE	SCHLUTER	TRANSITION PROFILES FOR FLOORS	SCHIENE (RADIUS) AE 100 - R, SATIN ANODIZED ALUMINUM	3/8" - 10MM	CONTACT: ROSANNA RUIZ (786) 858-0010 - RRUIZ@SCHLUTER.COM NOTE: GC TO COORDINATE HEIGHT AS REQUIRED BASED UPON TILE THICKNESS AND SETTING SYSTEM
OUTDOOR TERRACE FLOOR							
CT-32G	CERAMIC TILE	OUTDOOR TERRACE FLOOR	CERAMICS TECHNICS	QUARTZITE	ALPES R11	24" x 24"	CONTACT: LYDIA KURTH (954) 520-4283 LKURTH@CERAMIC TECHNICS NOTE: USE WITH GR-6G (1/8" THICK)
GROUT							
GR-6G	GROUT	BACK OF HOUSE	LATICRETE	SPECTRALOCK 2000 IG	# 45 "RAVEN" (1/16" TH)		CONTACT: LOCAL SUPPLIER - KIRBY DAVIS (203) 671-7210 NOTE: USE WITH CT-10G, CT-11G & CT-35G LATICRETE HYDROBAN for waterproofing
			CUSTOM BUILDING PRODUCTS	CEG-IG INDUSTRIAL GRADE 100% SOLIDS EPOXY GROUT	#370 DOVE GRAY (1/16" TH)		CONTACT: LOCAL SUPPLER - LARRY MAURA (561) 543-6558 LAZARO.MAURA@CBPMAIL.NET NOTE: USE WITH CT-10G, CT-11G & CT-35G
GR-15G	GROUT	FIELD FLOOR TILE, BASE TILE, WAINSCOT TILE, BEVERAGE STATION WALL	CUSTOM BUILDING PRODUCTS	FUSION PRO SINGLE COMPONENT GROUT	# 335 WINTER GRAY (1/16" TH)		CONTACT: LOCAL SUPPLER - LARRY MAURA (561) 543-6558 LAZARO.MAURA@CBPMAIL.NET ***PROLITE® PREMIUM LARGE FORMAT TILE MORTAR -RAPID SETTING
			LATICRETE	PERMACOLOR	#60 DUSTY GRAY (1/16" TH)		CONTACT: CONTACT: LOCAL SUPPLIER - KIRBY DAVIS (203) 671-7210
GR-17G	GROUT	DINING, ACCENT TILE LIGHT WOOD	CUSTOM BUILDING PRODUCTS	FUSION PRO SINGLE COMPONENT GROUT	#145 LIGHT SMOKE (1/16" TH)		CONTACT: LOCAL SUPPLER - LARRY MAURA (561) 543-6558 LAZARO.MAURA@CBPMAIL.NET ***PROLITE® PREMIUM LARGE FORMAT TILE MORTAR -RAPID SETTING NOTE: USE WITH CT-28G @ WALLS ONLY
			LATICRETE	PERMACOLOR	#56 DESERT KHAKI (1/16" TH)		CONTACT: LOCAL SUPPLIER - KIRBY DAVIS (203) 671-7210 NOTE: USE WITH CT-28G @ WALLS ONLY
GR-18G	GROUT	SERVICE AREA WALL TILE, MENU BOARD, BEVERAGE STATION WALL	CUSTOM BUILDING PRODUCTS	FUSION PRO SINGLE COMPONENT GROUT	#543 DRIFTWOOD (1/8" TH)		CONTACT: LOCAL SUPPLER - LARRY MAURA (561) 543-6558 LAZARO.MAURA@CBPMAIL.NET NOTE: USE WITH CT-31G
			LATICRETE	PERMACOLOR	#78 STERLING SILVER (1/8" TH)		CONTACT: LOCAL SUPPLIER - KIRBY DAVIS (203) 671-7210 NOTE: USE WITH CT-31G
ACOUSTICAL CEILING							
ACT-1G	ACOUSTICAL CEILING TILE	DINING	ARMSTRONG	CORTEGA #770	PANEL COLOR: SEPIA EDGE: ANGLED TEGULAR 15/16 GRID: PRELUDE 15/16" EXPOSED TEE GRID COLOR: SEPIA	2' x 2' x 5/8"	CONTACT: LOUIS J. JOHN (407) 697-6768 LJJOHN@ARMSTRONGCEILINGS.COM ARMSTRONG STRATEGIC ACCOUNTS: (800) 442-4212 ARMSTRONGCSA@ARMSTRONGCEILINGS.COM
ACT-2G	ACOUSTICAL CEILING TILE	BACK OF HOUSE		#BP672 KITCHEN ZONE	PANEL COLOR: WHITE GRID: PRELUDE 15/16" EXPOSED TEE GRID COLOR: WHITE	2' x 4' x 1/2"	
ACT-2G	ACOUSTICAL CEILING TILE	BACK OF HOUSE	USG INTERIORS	SHEETROCK BRAND LAY-IN CEILING PANEL CLIMAPLUS #3270	PANEL COLOR: WHITE GRID: Donn DX/DXL GRID COLOR: WHITE	2' x 4' x 1/2"	CONTACT: JOHN FUNES (312) 436-5841 JFUNES@USG.COM
ACT-3G	ACOUSTICAL CEILING TILE	PLAYGROUND	ARMSTRONG	FINE FISSURED #1732	WHITE GRID: 2 x2 ANGLED TEGULAR 15/16 GRID COLOR: WHITE	2' X 2' X 3/4"	CONTACT: LOUIS J. JOHN (407) 697-6768 LJJOHN@ARMSTRONGCEILINGS.COM ARMSTRONG STRATEGIC ACCOUNTS: (800) 442-4212 ARMSTRONGCSA@ARMSTRONGCEILINGS.COM
ACT-3G UPGRADE	ACOUSTICAL CEILING TILE	PLAYGROUND		FINE FISSURED #1732	ADOBE GRID: 2 x2 ANGLED TEGULAR 15/16 GRID COLOR: ADOBE	2' X 2' X 3/4"	
ACT-3G	ACOUSTICAL CEILING TILE	PLAYGROUND	USG INTERIORS	WHITE RADAR CLIMA PLUS #2210	PANEL COLOR: WHITE GRID: Donn DX/DXL GRID COLOR: WHITE	2' X 2' X 3/4"	CONTACT: JOHN FUNES (312) 436-5841 JFUNES@USG.COM NOTE: USE PROGRAM QUOTE # 00103139 TO RECEIVE BK PRICING
ACT-3G UPGRADE	ACOUSTICAL CEILING TILE	PLAYGROUND		TAUPE RADAR CLIMA PLUS #2210	PANEL COLOR: TAUPE GRID: Donn DX/DXL GRID COLOR: TAUPE	2' X 2' X 3/4"	

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Burger King | Garden Grill | AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/2022 | PROJECT START DATE

DATE: 10/21/22

Interior Building Specifications

ID-12.2

11x17 SHEETS

BURGER KING- 20/20 GARDEN GRILL INTERIOR

INTERIOR MATERIALS & FINISH SCHEDULE **TO BE USED WITH 20/20 GARDEN GRILL GUIDELINES DOC.

9.20.22

CODE	MATERIAL	LOCATION	MANUFACTURER	DESCRIPTION			ADDITIONAL INFORMATION
				PRODUCT	COLOR	DIMENSION	
WALL FINISHES / PAINT							
BR-2G	FACE BRICK	GENERAL DINING/ ACCENT WALLS	PINEHALL BRICK	THIN BRICK (Use WITH EGR-1G)	OLD IRVINGTON	7-5/8" x 3-5/8" x 1/2"	CONTACT: PRESTON STEELE (PSTEELE@PINEHALLBRICK.COM (336)-399-7703) NOTE: USE WITH EGR-1G
			EVOLUTION BRICK	THIN BRICK (Use WITH EGR-1G)	"Olde Hillsboro" Mod/QS Tumbled (Full Brick) "Sierra Tumbled" (Thin Brick)	7-5/8" x 3-5/8" x 1/2"	CONTACT: GABE POWERS (502) 558-4612 gabe@evolutionbrick.com NOTE: USE WITH EGR-1G
EGR-1G	BRICK MORTAR	GENERAL DINING/ ACCENT WALLS	LEHIGH HANSON	(USE WITH BR-2G)	Ohio River Masonry Sand B-12C / C-244		CONTACT: GABE POWERS (502) 558-4612 GABE@EVOLUTIONBRICK.COM NOTE: USE WITH BR-2G
			ARGOS US		LITE BUFF		CONTACT: DONNIE HOWARD (919) 390-4962 DONNIE.HOWARD@ARGOS-US.COM NOTE: USE WITH BR-2G
P-4G	PAINT	INTERIOR DOOR FRAMES	PPG	PRIMER: 90-712 PITT TECH PAINT: 6-1510XI SPEEDHIDE INT/EXT WB ALKYD SEMI-GLOSS	ASHEN PPG1023-3		CONTACT: LOCAL SUPPLIER PPG REPRESENTATIVE: DANIEL J HUBER (713) 702-3636 DANIEL.HUBER@PPG.COM
P-5G	PAINT	INTERIOR UNDERSIDE OF CORRIDOR SOFFIT AND RESTROOM CEILING		PRIMER: 6-4900XI SPEEDHIDE ZERO INT LATEX SATIN PAINT: PPG 6-4310XI SPEEDHIDE ZERO INT ZERO VOC LATEX EGGSHELL	WHITE ON WHITE 30GY 88-014		
P-6G	PAINT	EXPOSED DECKING AND BAR JOISTS WALLS OVER SOFFIT		PRIMER: 17-921 - SEAL GRIP PAINT: PPG 6-417 SPEEDHIDE ZERO INT ZERO VOC LATEX EGGSHELL	CABIN FEVER PPG 1021-7		
P-15G	PAINT	INTERIOR WALLS		PRIMER: 6-2 PAINT: PPG 6-411	ASHEN PPG 1023-3		
P-16G	PAINT	INTERIOR SERVICE AREA DOOR FRAME		PRIMER: PAINT:	CAFÉ SIENNA		
P-17G	PAINT	HVAC AIR RETURN & REGISTERS LOCATED AT ACT-1G		PRIMER: 90-712 PITT TECH PAINT: 6-1540XI SPEEDHIDE INT/EXT WB ALKYD SEMI-GLOSS	GRANITE PPG 1022-6		
P-4G	PAINT	INTERIOR DOOR FRAMES	SHERWIN-WILLIAMS	PRIMER: ProCryl B66-310 PAINT: Pro Industrial WB Urethane Alkyd Enamel B53-1150 Semi-Gloss	BUNGALOW BEIGE SW 7511		CONTACT: LOCAL SUPPLIER SHERWIN WILLIAMS REPRESENTATIVE: GLENN J. REMLER (954) 547-1217 GLENN.J.REMLER@SHERWIN.COM
P-5G	PAINT	INTERIOR UNDERSIDE OF CORRIDOR SOFFIT AND RESTROOM CEILING		PRIMER: PM 200 0 VOC B28W2600 PAINT: PM 200 0 VOC B20W2600 Eggshell	EXTRA WHITE SW 7006		
P-6G	PAINT	EXPOSED DECKING AND BAR JOISTS		PRIMER: Multi Surface Acrylic B66-560 PAINT: Multi Surface Acrylic B66-560 Eggshell	WELL-BRED BROWN SW 7027		
P-15G	PAINT	INTERIOR WALLS/ SOFFIT		PRIMER: PM 200 0 VOC B28W2600 PAINT: PM 200 0 VOC B20W2600 Eggshell	BUNGALOW BEIGE SW 7511		
P-16G	PAINT	INTERIOR SERVICE AREA DOOR FRAME		PRIMER: ProCryl B66-310 PAINT: Pro Industrial WB Urethane Alkyd Enamel B53-1150 Semi-Gloss	GG ORANGE CUSTOM COLOR		
P-17G	PAINT	HVAC AIR RETURN & REGISTERS LOCATED AT ACT-1G		PRIMER: ProCryl B66-310 PAINT: Pro Industrial WB Urethane Alkyd Enamel B53-1150 Semi-Gloss	SEPIA CUSTOM COLOR		
WP-2G	WALL PANEL SYSTEM	GENERAL WAINSCOTING	MARLITE	ALLURE PANEL	Nevamar WF001 Macchiato X-Grain	8' x 4' Panels	CONTACT: CUSTOMER SERVICE (330) 343-6621 ANITA CRAIG (423) 506-6335 ACRAIG@MARLITE.COM
			CIM	ZLOCK	Nevamar WF001 Macchiato X-Grain	8' x 4' Panels	CONTACT: AUSTIN HOLAN (706)253-4761 AUSTIN@CIMGBIZ.COM

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Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE: 10/21/2022
DESCRIPTION: PROJECT START DATE

DATE: 10/21/22

Interior Building Specifications

ID-12.3

11x17 SHEETS

INFORMATION BY OTHERS

BURGER KING- 20/20 GARDEN GRILL INTERIOR
INTERIOR MATERIALS & FINISH SCHEDULE **TO BE USED WITH 20/20 GARDEN GRILL GUIDELINES DOC.

9.20.22

CODE	MATERIAL	LOCATION	MANUFACTURER	DESCRIPTION			ADDITIONAL INFORMATION
				PRODUCT	COLOR	DIMENSION	
FABRICS							
UPH-7G	UPHOLSTERY	SEATING (Booth/Settee) SEAT PADS	MAHARAM	LARIAT 440401	010 TAUPE		CONTACT: ZANDY RODON (404) 909-8444 ZRODON@MAHARAM.COM
UPH-10G	UPHOLSTERY	SEATING (Booth/Settee) BACK PADS & LOUNGE CHAIR		LARIAT 440401	007 OYSTER		
UPH-14G	UPHOLSTERY	LOUNGE CHAIR "COLLECTION OPTION"	CF STINSON	CASSIDY	CAS82 HOSTA		CONTACT: GLENN STINSON (248) 299-3800 GSTINSON@CFSTINSON.COM
METALS							
MF-1G	METAL FINISH POWDER COAT	FIXTURES AS NOTED	PER VENDOR		BLACKENED STEEL		PER VENDOR
MF-2G	METAL FINISH ALUMINUM	FIXTURES AS NOTED	PER VENDOR		FLAT BLACK ANODIZED		PER VENDOR
MF-3G	METAL FINISH ALUMINUM	SLAT PERGOLA SUPPORTS	PER VENDOR	POWDER COATED BROWN	MATCH P-6G (SLATE BROWN)		PER VENDOR
MF-4G	METAL FINISH ALUMINUM	DIVIDER SCREEN & SAUCE BAR	PER VENDOR	POWDER COATED	STATUARY BRONZE		PER VENDOR
SPECIALTY FINISHES AND TRIMS							
PL-9G	PLASTIC LAMINATE	PERMITER TABLES, DOORS, TRASH UNIT, RESTROOM DOORS & PARTITIONS	NEVAMAR	WK0017T	VERNERABLE OLD OAK		CONTACT: CUSTOMER SERVICE (877)726-6526 JOHN TRULOCK (JOHN_TRULOCK@PANOLAM.COM (407) 618-3732)
PL-15G	PLASTIC LAMINATE	TABLES / BOOTHS		WF0011T	MACCHIATO		
PL-16G	PLASTIC LAMINATE	TABLES		WZ2001T	SANTA ROSA PLUM TREE		
PL-17G	PLASTIC LAMINATE	TABLES		WF0013-T	CARAMEL MACCHIATO SUEDE		
PL-18G	PLASTIC LAMINATE	BEVERAGE STATION CABINET DOORS/ INNER SIDE OF WOOD SLAT PERGOLA/ INTERIOR SERVICE AREA ACCENT WALL & DOOR		SO3300 SD	CAFÉ SIENA		
PL-19G	PLASTIC LAMINATE	BOOTH BASE	PIONITE	SE101S	BLACK		
WS-1G	WOOD STAIN	SHELVING LOUNGE AREA	PER VENDOR	BALTIC BIRCH	CLEAR COATED		LOCAL DISTRIBUTOR
WS-2G	WOOD STAIN	COMMUNITY TABLE/ SAUCE BAR	PER VENDOR	WHITE OAK	CLEAR COATED		LOCAL DISTRIBUTOR
WS-3G	WOOD STAIN	TRELLIS SOFFIT	PER VENDOR	STAINED POPLAR WOOD	MATCH NEVAMAR SANTA ROSA PLUM TREE		LOCAL DISTRIBUTOR
SL-1G	SURF(X) 3D LAMINATE	TRELLIS SOFFIT	OMNOVA SOLUTIONS	SURF(X) 3D LAMINATES ON SUNTRAIT	ALMOND CHERRY	12 MIL (0.12)	CONTACT: CHERI RUKAVINA (404)971-8119 CHERI.RUKAVINA@OMNOVA.COM
MEB-1G	MULTIPLEX EDGE BAND	TABLES (STANDARD TABLE THICKNESS)	REHAU	PREMUIM EDGE BAND #52E MULTIPLEX		1-5/16" THICK	CONTACT: MEG HUIZENGA (616) 666-7932 MEG.HUIZENGA@REHAU.COM
MEB-2G	MULTIPLEX EDGE BAND	BOOTH EDGE PROTECTION	REHAU	NEVAMAR MACCHIATO CP41002	MATCH PL-15G (MACCHIATO)		
SOLID SURFACES							
SS-8G	SOLID SURFACE	FIXTURES AS NOTED TOP CAP/ SILL	DUPONT	CORIAN	DEEP NOCTURNE	30" x 144" x 1/2" THICKNESS	CONTACT: IDA SISIC (404) 444-3965 IDA.SISIC@DUPONT.COM
SS-9G	SOLID SURFACE	FSC / BEVERAGE COUNTER TOP (ALTERNATE TO MS-1G)	AVONITE	CUSTOM COLOR BK SMOKE	#7885	30" x 144" x 1/2" THICKNESS	CONTACT: BOB DAHL (BDAHL@ARISTECHSURFACES.COM (423) 290-4805)
			US SURFACES	LIVINGSTONE	STORM		CONTACT: ED ROGERS (505) 710-3999 EDR@USSURFACES.COM
MS-1G	MANUFACTURED STONE	FSC / BEVERAGE COUNTER TOP	SILESTONE	QUARTZ, VOLCANO TEXTURE	GREY EXPO	3/4" THICK	CONTACT: JENNIFER RYAN (305)-398-5700 JENNIFERR@COSENTINO.COM
			US SURFACES	VADARA	BRUSHED CEMENT	2 CM THICK	CONTACT: ED ROGERS (505) 710-3999 EDR@USSURFACES.COM
RESIN PANEL							
R-1G	RESIN	FSC SMOOTHIE SCREENS	3-FORM	PUNCH 021	VELLUM F04 FINISH FRONT & BACK	3/8" THICK	CONTACT: JULIANA SHARKEY (JULIANA.SHARKEY@3FORM.COM (954) 579-6545)

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Interior Building Specifications
ID-12.4

11x17 SHEETS

* Low Profile Trellis / Pergola Design

INFORMATION BY OTHERS

BURGER KING 20/20 GARDEN GRILL INTERIOR

INTERIOR LIGHT FIXTURE SCHEDULE

1.5.22

LOW PROFILE TRELLIS

TYPE		VENDOR	CATALOG NO./NEW PART NO.	WATTAGE	COLOR TEMP	REMARKS
A		NAUTICAL	BK304 & SP30S-18-60D-927-03 LED EDISON STYLE 10 WATT	10	2700	SHAKER PENDANT LAMP
A1		NAUTICAL	BKGG-A2 CUSTOM PENDANT LIGHT RED LED CLEAR ANTIQUE STYLE 6 WATT	10	2700	RED PENDANT LIGHT
A2		NAUTICAL	BK-LT-11			GREEN CAST GUARD WAREHOUSE LIGHT
B		NAUTICAL	BK305 & LED 8W EDISON INCANDESCENT LED CLEAR ANTIQUE STYLE 6 WATT	6	2700K	BRONZE CAGE PENDANT LIGHT
B1		NAUTICAL	BK305 & LED 8W EDISON INCANDESCENT LED CLEAR ANTIQUE STYLE 6 WATT	6	2700K	BRONZE CAGE WALL SCONCE LIGHT
C4w		JUNO	SP36671-WHTRM	15	3000	1. 4" DIAMETER, WHITE, RECESSED DOWN LIGHT 2. TO BE USED WITH GWB CEILING
		CREE	CR4T-790L-27K-E26GU24	9.5	2700	
		ENERGYWISE	EWMLEDDL4IN	11	2700	
		SECURITY	LB4A 6L 30K 9 WH / IBXQL	9	3000	
C4b		JUNO	SP36671-BLTRM			1. 4" DIAMETER, BLACK, RECESSED DOWN LIGHT 2. TO BE USED WITH ACOUSTICAL CEILING TILES
		CREE	CR4T-690L-27K-E26GU24-/ CR4T-TRMBKBB-1	9.5	2700	
D4w		JUNO	SP36671G2 / 39 WWH	12.5	3000	1. 4" DIAMETER, WHITE, RECESSED DOWN LIGHT WALL WASHER 2. TO BE USED WITH GWB CEILING
		SECURITY	LBE4A 6L 30K 9 WH / IBXQL	9	3000	
D4b		JUNO	SP36671G2 / 39C BL RFD44875	12.5	3000	1. 4" DIAMETER, BLACK, RECESSED DOWN LIGHT WALL WASHER 2. TO BE USED WITH ACOUSTICAL CEILING TILES
E		JUNO	R600L3KNBZ	10	2700	TRACK LIGHT
G		JUNO	SP34378B-9-F1-SSN	10	3000	2" DIAMETER DOWN LIGHT, SATIN NICKEL FINISH
		ZANIBONI	D2LUNA20930A3CSNP0BK0P	9	3000	
G1		JUNO	SP34378A-930-F1-SN	10	3000	2" DIAMETER WALL WASHER, SATIN NICKEL FINISH
		ZANIBONI	D2LUN2O0930A3CSNP0BK0D	9	3000	

BURGER KING 20/20 GARDEN GRILL INTERIOR

INTERIOR LIGHT FIXTURE SCHEDULE

1.5.22

LOW PROFILE TRELLIS

TYPE		VENDOR	CATALOG N0./NEW PART NO.	WATTAGE	COLOR TEMP	REMARKS
I		CREE	C-TR-FP24-50L-40K-WH	42	4000	1. TO BE USED IN KITCHEN 2. 2x4 RECESSED
		SECURITY	LJT24-40-MLG-FSA-12-EU-C388	45	4000	
		LSI	SFP24 LED 50 UE DIM 40	50	4000	
		VAOPTO	VO-PL-2NW4-60	60	4100	
		ENERGYWISE	EWMLFP24EP4841	48	4100	
J		CREE	C-TR-FP14-37L-40K-WH	42	3500	1. FOR REMODELS ONLY 2. TO BE USED IN RESTROOMS 3. 1x4 RECESSED
		SECURITY	LJT14-35LWG-FSA12-EDU-C388	27	3500	
		LSI	SFP14 LED 40 UE DIM 35 FK14	40	3500	
		VAOPTO	VO-PL-1XWW4-50	50	3000	
		ENERGYWISE	EWMLFP14EP3535	35	3500	
PG		CREE	C-TR-FP22-31L-40K-WH	32	3500	1. TO BE USED IN LAYGROUND 2. 2x2 RECESSED
		SECURITY	LJT22-35MLG-FSA12 EU	35	3500	
		LSI	SFP22 LED 30 UE DIM 35 FK22	30	3500	
		VAOPTO	VO-PL-2XWW2-36	36	3000	
		ENERGYWISE	EWMLFP22EP3535	36	3500	
EM		CREE	C-EE-A-EMG-2L-88-REM-WH	11		EMERGENCY LIGHT
		SECURITY	CU2	1	3000	
		LSI	LTEMWH	(2) 1 LED		
		VAOPTO	VO-EM	2	5000	
		ENERGYWISE	EWCU2	1	3000	
EMX		CREE	C-EE-A-EX-2LDF-RED-BB	11		EXIT / EMERGENCY LIGHT
		SECURITY	CCRRC	4		
		LSI	LPRXRUWHLD11RL	(2) 1 LED		
		VAOPTO	VO-EMX-R1	2	5000	
		ENERGYWISE	EWCCR	4	3000	
WIB		CREE	WS4C-60L-LFA-50K-8-UL	55	5300	TO BE USED IN WALK IN BOX ONLY
		SECURITY	LXEM4-50ML-RFA-EU	53	5000	
		LSI	EGA5LRAUNV850	52	5300	
		VAOPTO	VO-TF-14W	32	5000	
		ENERGYWISE	EWMLED-LSV2XT8USE4806	36		
O		CREE	LS4-25L-35K-10V	23	3500	PLAYGROUND PENDANT LIGHT
O1		CREE	LS8-80L-35K-10V	88	3500	PLAYGROUND PENDANT LIGHT
T		TOOSHLIGHTS	MASTER FORMAT 26 55 10 LIGHTE: FULL COLOR, RBG LEDs POWER: POWER OVER ETHERNET (POE), LOWVOLTAGE DC. USE CAT 5 OR CAT 6, SHIELDED CABLE.	88	3500	RESTROOM WALL MOUNTED OCCUPANCY INDICATOR LIGHT

CONTACT INFORMATION

CREE	HERMITAGE	ENERGYWISE	JUNO / ACUITY BRANDS	SECURITY LIGHTING	NAUTICAL FURNISHINGS	LSI	VaOpto	ZANIBONI LIGHTING
ELVIR SULJIC	"MASTER CONSOLIDATOR"	JENNIFER WADDICK	BRETT D KINZLER	WHITNEY WATSON	MICHAEL HOGLUND	MIKE CONNOLLY	LINDA XU	JENNIFER MORRIS
262-884-3332	WYATT CULVER	877-225-1336	o847-813-8350 m 847-312-1578	630-550-9320	954-771-1100	404-927-3708	702-517-5789	727-213-0410
esuljic@creelighting.com	615-843-3379 wculver@gohermitage.com	jennifer@energywisemail.com	brett.kinzler@acuitybrands.com	quotations@securitylighting.com	mhoglund@nauticalfurnishings.com	mike.connolly@lsicorp.com	linda@vaopto.com	southeastusa@zaniboniligting.com

NOTES

1. NOT ALL LIGHT FIXTURES TYPES SHOWN ON SCHEDULE MAY BE USED ON THIS PROJECT. REFER TO LIGHTING PLAN FOR PROJECT SPECIFIC TYPES AND QUANTITIES.
2. PENDANT FIXTURES "A" MUST BE CENTERED OVER TABLE TOPS. COORDINATE WITH DÉCOR DRAWINGS.
3. EXCEPT FOR DROPPED CEILING OPTION, ALL LIGHT FIXTURES IN DINING ROOM AREA & RESTROOM CORRIDOR ARE TO BE SUPPORTED FROM EXPOSED ROOF TRUSSES.
4. CONTRACTOR TO NOTIFY LIGHTING SUPPLIER OF THE FOLLOWING: FIXTURE TYPES "C" AND "D" WILL BE REQUIRED TO BE LENS AT THE LOCATIONS OVER THE SERVICE AREA AND OVER THE SELF-SERVE DRINK AREA. FIXTURE TYPE "I" WILL REQUIRE A LENS OR TUBE GUARD AT THOSE LOCATIONS.

SCI
CREATE CUSTOM SPACE
125 Connell Ave
Rockdale, IL 60436
T: 815.730.7980

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Fr. Campbell, KY
Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/2022 | PROJECT START DATE

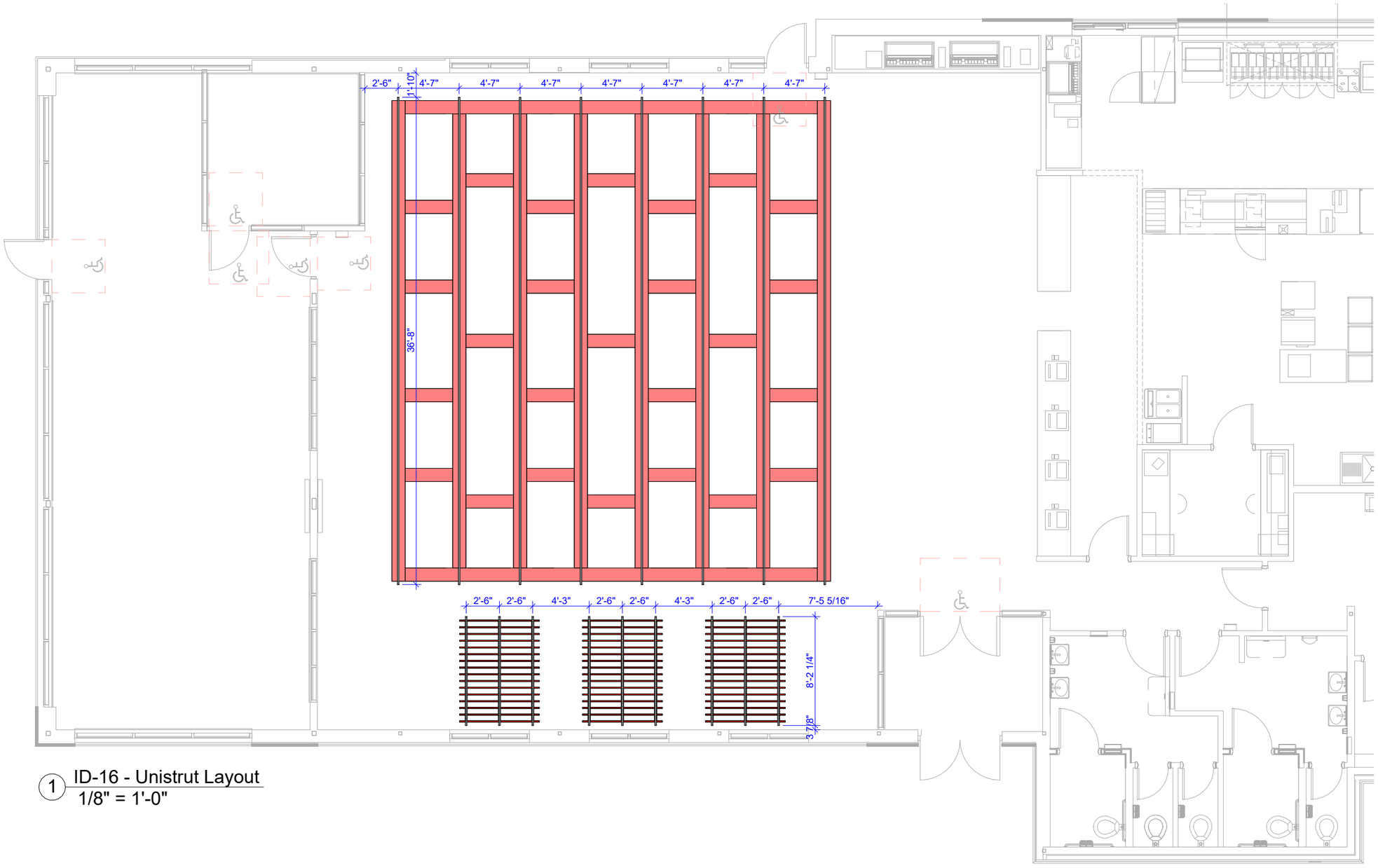
DATE: 10/21/22

Interior Lighting Specifications

ID-13.0

11x17 SHEETS

**G.C. IS RESPONSIBLE FOR PURCHASE & INSTALLATION OF THE UNISTRUT SYSTEM PRIOR TO ARRIVAL OF DECOR.
SCI WILL PROVIDE INSTALLATION INSTRUCTIONS PRIOR TO DECOR SHIPPING.**



1 ID-16 - Unistrut Layout
1/8" = 1'-0"

INFORMATION BY OTHERS

Unistrut Schedule	
Type	Unistrut Count
10'-0" Lengths	41

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CREATE CUSTOM SPACE
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Rockdale, IL 60436
T: 815.730.7980

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Fr. Campbell, KY
Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY	DESCRIPTION
DATE	PROJECT START DATE
10/21/2022	

DATE: 10/21/22

Unistrut Layout

ID-14.0

11x17 SHEETS

20/20 GARDEN GRILL ARTWORK & WAYFINDING SIGNAGE

INFORMATION BY OTHERS

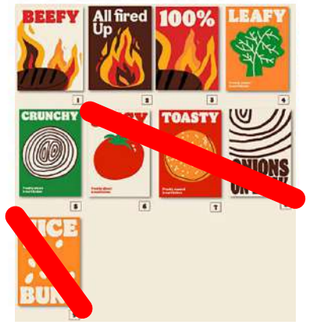
COLLAGE WALL

HOME OF THE WHOPPER SIGN OPT 1, WITH INGREDIENT POSTERS

HOME OF THE WHOPPER SIGN OPT 2

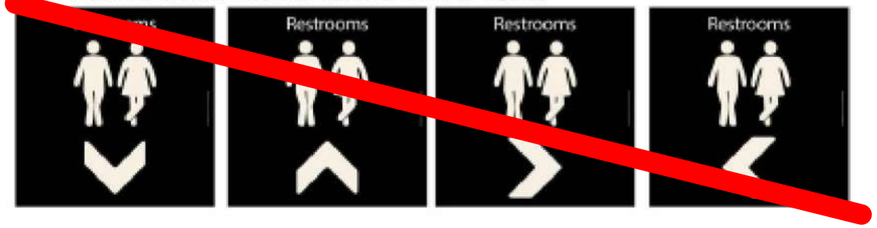
LOUNGE WALL SHELVES

INGREDIENT POSTERS



WAYFINDING RESTROOM PLAQUES

WAYFINDING DIRECTIONAL RESTROOM PLAQUES



WAYFINDING ADA RESTROOM SIGNS

HOURS OF OPERATION ENTRY DECAL

HOURS OF OPERATION EXIT DECAL

CREW MEMBERS MUST WASH HANDS SIGN

NO SMOKING SIGN

NO SMOKING DECAL

DOOR PUSH DECAL

DOOR PULL DECAL

DRINK STATION VINYL DECALS

THE KING IS CALLING... RESTROOM DECAL

TRASH UNIT DECALS

TRAY RETURN DECAL

FLAME GRILLING SINCE 1954 BROWN CROWN LIT SIGN

MANIFESTO PANEL

FRESHLY SLICED ONIONS... KITCHEN DECAL

FLAME GRILLING SINCE 1954 METAL SIGN

WI-FI SIGN

SCI
CREATE CUSTOM SPACE

125 Connell Ave
Rockdale, IL 60436
T: 815.730.7980

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Fr. Campbell, KY
Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

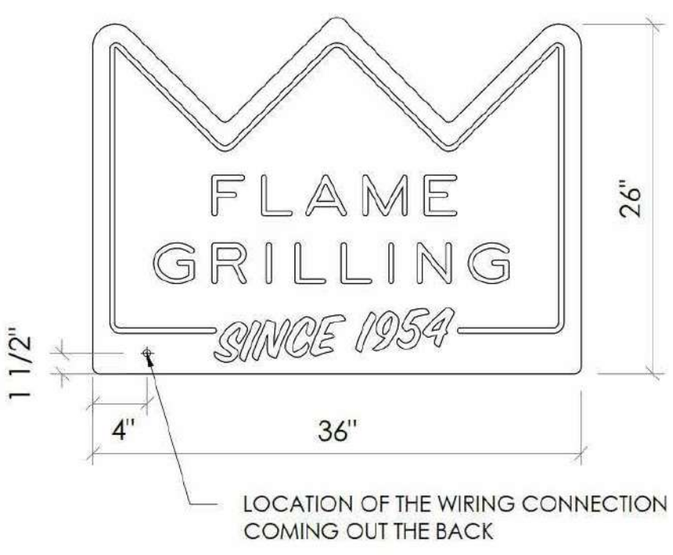
REVISION HISTORY
DATE | DESCRIPTION
10/21/2022 | PROJECT START DATE

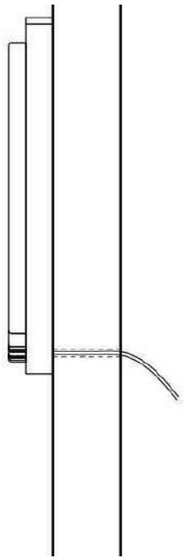
DATE: 10/21/22

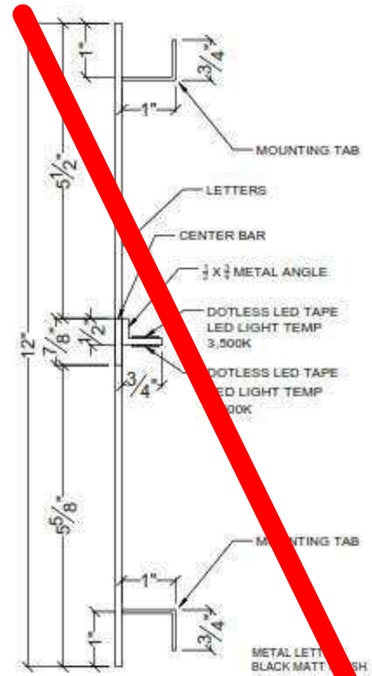
Graphic Details
ID-15.0

11x17 SHEETS

INFORMATION BY OTHERS







NOTE:
THE SIGN WILL HAVE A LOW VOLTAGE WIRE WHICH IS LOCATED BEHIND THE "H" AND NEEDS TO RUN THROUGH THE WALL UP TO THE CEILING AREA (REMOTE LOCATION) WHERE THE WIRE CAN CONNECT TO THE TRANSFORMER.

LOCATION OF THE ELECTRICAL

9'-0"

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Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY	DESCRIPTION
DATE	
10/21/2022	PROJECT START DATE

DATE: 10/21/22

Graphic Electrical Requirements

ID-15.1

11x17 SHEETS

EXCHANGE

IMAGE UPGRADE: BURGER KING

FORT CAMPBELL, KY

AAFES Project No: 2146-22-017
Quorum Project No. 22203
06 FEBRUARY 2023

PROJECT MANUAL

SOLICITATION ISSUE

Architect

quorum
ARCHITECTURE · INTERIOR DESIGN
825 W. Vickery Blvd., Suite 100
Fort Worth, Texas 76104
(817) 738-8095

MEP Engineer

CONWAY DUNCAN, INC.
3015 SOUTH FORT AVENUE | SUITE D
SPRINGFIELD | MISSOURI | 65807
417 881 1586 | 417 881 8390 fax
www.conwayduncan.com

VOLUME 1

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

00 00 001 EXCHANGE CEO LETTER ON ASBESTOS AND LEAD BASED PAINT

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01 10 18 EXCHANGE FURNISHED CONTRACTOR INSTALLED EQUIPMENT
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01 10 60.1 SAMPLE SAFETY PLAN
01 10 60.2 SAMPLE CONSTRUCTION HAZARD PLAN
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01 78 23 OPERATING AND MAINTENANCE DATA
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03 30 00 CONCRETE

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04 80 40 THIN BRICK / PANEL BRICK VENEER

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05 50 00 METAL FABRICATIONS

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07 24 00 EXTERIOR INSULATION AND FINISH SYSTEMS - EIFS
07 42 43 COMPOSITE WALL PANELS
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DIVISION 8 – OPENINGS-NOT USED

DIVISION 9 – FINISHES

09 30 00 TILING
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DIVISION 10 – SPECIALTIES

10 14 00 PLASTIC SIGNS
10 73 16 FLAT SOFFIT CANTILEVERED CANOPY

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M.E.P. SPECIFICATIONS

Image Upgrade: Burger King, Fort Campbell, KY
Exchange Project No: 2146-22-017
Quorum Project No. 22203

February 6, 2023

ENGINEER

Conway Duncan, Inc.
600 West College Street, Suite 102
Springfield, Missouri 65806
Phone: 417.881.1586

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ADDITIONAL INFORMATION BY OTHERS

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CANOPY INFORMATION.

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VOLUME III

EXISTING FACILITY PHOTOGRAPHS

NOTE: THESE PHOTOGRAPHS ARE FOR INFORMATION ONLY AND NOT INTENDED TO REPLACE A PRE-BID SURVEY TRIP AS REQUIRED BY OTHER SECTIONS OF THE CONTRACT DOCUMENTS.

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EXCHANGE
ARMY & AIR FORCE EXCHANGE SERVICE
P.O. Box 650202
Dallas, TX 75236-0202
(214) 312-4011

Director/CEO Letter No. 17 24 April 2017

SUBJECT: Asbestos and Lead Based Paint (LBP) Abatement

All Exchange Associates

1. Asbestos is a hazardous air pollutant and a hazardous substance. Improper handling and disposal of asbestos exposes the Exchange to fines, penalties and the indefinite liability for future cleanup at any site where asbestos is disposed. Additionally, asbestos is regulated by the Occupational Safety and Health Act (OSHA) to protect workers. The following policy is intended to ensure proper minimization of the risks associated with asbestos, as well as protection of all concerned.

2. Asbestos was used extensively in military buildings and in equipment as fireproofing and fire retardant material through at least the 1970s. Military construction from World War II onward used asbestos extensively for its fire protection qualities. Exchange buildings from that period constructed to military standards also included extensive asbestos material. Even today, small amounts of asbestos are often found in roofing materials, floor tile and glue or mastic for floor coverings. Since asbestos remains legal for many uses today, no building, regardless of age, is certain to be free of asbestos.

3. The Exchange must include the cost of asbestos removal in renovation projects where asbestos is disturbed but could have otherwise be left in place. With this in mind, asbestos-related work by the Exchange must be done with great care.

4. The Exchange is also responsible for LBP encountered in renovation projects. All such work must use care for protection of human health and the environment, as outlined in the procedures attached.

5. It is the policy of the Exchange that if asbestos or LBP is suspected, a preconstruction survey by qualified experts will be accomplished and documented. All reasonable efforts will be made to avoid disturbing asbestos and LBP and minimize what must be disturbed. The Exchange will ensure that all applicable laws and regulations are carefully followed when dealing with asbestos or LBP.

6. All projects will follow rules, regulations and best management practices concerning protection of the health of project workers, Exchange patrons and associates, and others that may be involved in the abatement process. The specific guidance in the attached will be followed for all renovation projects.

This rescinds Director/CEO Letter 16-17 dated 14 March 2016.

Attachment

THOMAS C. SHULL
Director/CEO

SPECIFIC GUIDANCE TO BE FOLLOWED FOR ALL EXCHANGE RENOVATION PROJECTS

All work will be in accordance with applicable federal, state and local laws and regulations. All work will be consistent with applicable requirements of the base/post asbestos management plan, giving due deference to the base or post as owner of the building and of the asbestos or lead based paint being abated.

A. ASBESTOS

Definition: "qualified expert" or "qualified personnel" shall mean a person who has the requisite training and accreditation as an inspector, project designer, supervisor or worker (as applicable in context) as set out in the US Environmental Protection Agency (EPA) Model Accreditation program, including the equivalent training and certification required by state programs for the site of the work.

1. All projects involving renovation when asbestos is suspected must have a survey of the work area by a qualified expert and meet all applicable environmental and safety requirements. Samples will be taken as necessary, including chain of custody documentation, and will be analyzed in accredited laboratories using required and appropriate test methods. If a pre-existing survey by base, post or the Exchange is used to meet this requirement, then it must be approved as currently adequate by a qualified expert.

2. All contract specifications for asbestos surveys and for abatement must be drafted or approved by qualified experts.

- Specifications will comply with all applicable environmental laws and regulations as well as all applicable health and safety regulations. These include, but are not limited to, the Clean Air Act; Toxic Substances Control Act; CERCLA; and the OSHA.

3. Abatement projects will follow all normal project requirements, such as post or base environmental approvals.

4. All work must be done by experienced, qualified contractor personnel with qualified supervisory personnel.

a. Contractor must demonstrate at least five years' experience in asbestos abatement work for renovations or demolitions in projects of similar scope to the subject of the contract.

b. Contractor must demonstrate a clean record of no violations of state or federal environmental, health or safety violations in the last five years.

c. Contactor must provide adequate insurance coverage for claims that may occur before the expiration of any applicable statute of limitations. The Exchange Finance and Accounting Directorate will approve the insurance coverage as to policy and amount, considering all relevant factors and in consultation with Exchange General Counsel and Exchange Real Estate (RE) Environmental or other expert consultants, if needed.

d. Contractor must submit a final report to the Exchange on abatement work done, including required certifications, protective measures used, monitoring results, work logs, worker health and training records, summaries of any problems encountered during the job that might raise safety or health concerns, any disposal of materials containing asbestos and any other deliverables under the contract.

5. All appropriate work site measures must be taken to ensure the health and safety of abatement workers, Exchange customers, Exchange associates and the general public.

6. All work must be documented with appropriate records including daily logs, sample and monitoring results, and photographs of protective measures and work underway.

7. Disposal of asbestos waste from abatement projects will be done by the base or post. Reimbursement of disposal costs will be included in project costs if base or post funds are certified not sufficient or not available. At a minimum the base or post must always designate the disposal site and sign the disposal manifest as owner, with documentation of the disposal site designation and manifest kept in the Exchange Asbestos Abatement file on the project as set out in paragraph 9 below on retention of records.

8. Asbestos abatement for renovations at Exchange facilities not on an installation controlled by the Army, Air Force or Navy, such as Exchange Headquarters or a distribution facility, will follow the same procedures as on bases and posts. Since disposal of asbestos must be done by the Exchange, the following will apply:

a. If disposal can be done economically through the worldwide Memorandum of Agreement between the Exchange and the Defense Logistics Agency-Disposition Services (DLA-DS), then use DLA-DS to dispose of asbestos debris.

b. If disposal is by the Exchange, then the disposal site will be selected by the Exchange after a due diligence investigation of the disposal site is conducted by the Exchange contracting officer. This investigation will include financial and operational responsibility of the site operator, disclosure by the contractor of all environmental, safety issues within the last five years, such as citations, notices of violation or other enforcement actions by the United States, EPA or OSHA, or state or local equivalent regulatory authorities. Contractor must also disclose all pending legal proceedings related to asbestos abatement or disposal, against the contractor or contractor's employees. The same responsibility determination will apply to transporters of asbestos if contracted directly by the Exchange.

9. All abatement projects will have a qualified supervisory expert who is independent of the abatement contractor and under direct contract with the Exchange or a fully qualified Exchange associate who must:

a. Review and approve surveys and specifications prior to contract solicitation.

b. Review abatement contractor work plans (including monitoring plans), site protective measures, worker training records, worker personal protective equipment and monitoring equipment prior to start of abatement work.

c. Adequately oversee all stages of work, including independent air monitoring, where appropriate, and having authority to recommend or require immediate work stoppage and suggest corrective action.

d. Reviews and recommend whether contractor records and submittals should be approved by the Exchange contracting officer or if additional documentation is required.

e. Submit a review of abatement contractor's final report for the Exchange on abatement work done, concurring with report, or noting any errors and recommending any appropriate corrective action to cure the report errors.

f. Have certification as an asbestos supervisor and designer.

10. The Exchange will retain all essential asbestos records for at least 30 years, including surveys, laboratory reports, contractor close-out reports, copies of insurance policies and disposal records. These surveys will be submitted by contractors in electronic format and will be retained by the Exchange RE Directorate in electronic format. All recordkeeping requirements of the applicable federal, state and local regulators, if different, will also be followed by contractors and by Exchange associates involved in surveys or abatement. The Exchange will coordinate all records with the building owner.

B. LEAD BASED PAINT

1. LBP can be a health hazard to workers and others who may come in contact with it, and to the environment at disposal sites. It is federally regulated under the Resource Conservation and Recovery Act (RCRA), CERCLA or the Superfund and OSHA, as well as many applicable state programs on hazardous and solid waste.

2. For each renovation project a qualified person shall review the facility and its history of construction and renovation if LBP is suspected.

a. For projects in which there is an A-E of record, if lead paint is not suspected, the A-E shall state so in writing for the project file and the project can precede with a note to the renovation contractor the LBP is not expected to be present. However, stop work and notify the contracting office of the need to take appropriate action if it is discovered or suspected on the work site.

b. If the A-E believes there is a reasonable possibility that LBP is present in the intended work area, the A-E will provide specifications and statement of work or work plan to remove or abate such lead paint as necessary for the renovation project. These work plans will fully comply with OSHA, particularly 29 CFR 1926.62, RCRA, other applicable state and federal regulations, and follow industry best practices.

PART 1 - GENERAL

1.01 STATEMENT OF WORK

A. Scope:
The work covered by these specifications consists of furnishing all supervision, labor, equipment, materials necessary to perform all operations required to perform an Image Upgrade to an existing Burger King all in accordance with these specifications and the applicable drawings, and subject to the terms and conditions of the contract the contract.

B. Location:
The work to be performed is located at 5705 Screaming Eagle Blvd, Fort Campbell, KY 42223

C. Principal Features
The work to be performed in connection with this project includes, but is not limited to the following:

1. The project consists of all materials and labors to upgrade the existing Burger King according to the latest "Garden Grill' Burger King standards as approved by Burger King and the EXCHANGE with a limited scope.
2. BUILDING EXTERIOR AND SITE
    a. Modify existing exterior materials, including brick, stucco, doors, windows, lighting and as required for new exterior design elements.
    b. Site work around the building, including paving and landscape:New Dual Drive Through configuration.
        i. Remove and install new existing clearance bar, directional signage, and OCU canopy in the Dual Drive Through configuration
        ii. Remove existing digital menu board and reinstall in new Dual Drive through.
        iii. Install a new digital menu board and reinstall in new Dual Drive through.
        iv. Trash enclosure refinished to match new building materials and finishes.
        v. Seal and stripe parking lot.
        vi. Paint bollards.
    c. Construct Entry tower and install Nichiha finish.
    d. Construct 'Towers' over Drive-through windows with Nichiha finish
    e. Paint to match current specifications.
    f. Replace awnings with canopies.
    g. Upgrade exterior lighting to LED fixtures.
    h. Replace Building Signage with new current standard signage.
3. BUILDING INTERIOR:
    a. Replace all light fixtures, including emergency lighting and exit signage.
    b. Replace all finishes in the dining room. -SCI specified
    c. Kitchen equipment is existing and is to remain unless determined otherwise noted.
    d. Replace all furniture (Seating Concepts design).
    e. Renovate existing toilet rooms, including new plumbing fixtures. Use existing plumbing supply and sanitary lines, vents, etc. as possible.
    f. Bring non ADA compliant toilets into compliance.
    g. Existing vent hoods and exhaust fans to remain.
    h. Existing Ansul system to remain.
    i. Existing grease interceptor to remain.
    j. Existing electrical panels and equipment to be reused.
    k. Replace or re-laminate interior doors

l. Ceiling treatment: Replace ceilings and install a suspended trellis and pergola SCI specified.

1.02 SPECIAL POST REQUIREMENTS

A. Construction performed only during building's operational hours - 0630 A.M. to 1730 P.M.

B. No streets will be blocked without Post headquarters approval.

C. Contractor shall immediately clean up any debris tracked on to the Base streets resulting from this construction operation.

D. Construction areas including equipment storage areas shall be kept clean and neat.

E. No burning is permitted on the Post.

F. All permits and work shall be coordinated with the base CES, Fire Department, and privatized utilities to align with project scheduling.

1.03 LAYING OUT WORK

A. Dimensions and elevations indicated in layout of work shall be verified by the Contractor. Discrepancies between Drawings, specifications, and Conditions shall be referred to the Contracting Officer in writing for adjustment before work affected is performed. Failure to make such notifications shall place responsibility upon the Contractor to carry out work in a satisfactory and workmanlike manner.

B. The Contractor shall be held responsible for the location and elevation of all the construction contemplated by the construction documents.

C. **Prior to commencing work, the Contractor shall carefully compare and check all Architectural, Structural, Mechanical, and Electrical drawings, each with the other, that in any way affect the locations of elevation of the work to be executed by him, and should any discrepancy be found, he shall immediately report the same to the Contracting Officer for verifications and adjustment. Any duplication of work made necessary by failure or neglect on the Contractor's part to comply with this function shall be done at his sole expense.**

D. Field Dimensions:
The drawings accompanying these specifications indicate generally the design and arrangement of all apparatus, fixtures, accessories, etc. necessary to complete the work required. The exact location or arrangement of equipment is subject to minor changes necessitated by field conditions and shall be made as required without additional cost to EXCHANGE. Measurements shall be verified by actual observations at the construction site, and the Contractor shall be responsible for all work fitting into place in a satisfactory and workmanlike manner meeting the approval of the Contracting Officer. The General Contractor is to obtain all As-Built drawings from the Directorate of Public Works (DPW)

1.04 EXISTING OVERHEAD OR UNDERGROUND WORK

A. Carefully check the site where this project is to be erected and observe any overhead wires and equipment. Any such work shall be moved, replaced, or protected, as required, whether or not shown or specified.

B. Attention is directed to the existence of pipe and other underground improvements which are shown on the drawings. All reasonable precautions shall be taken to preserve and protect all such improvements shown on the drawings.

C. The foundation of this facility is a structural slab on grade. Proper precautions should be taken to avoid damage to reinforcement during drilling and/or cutting operations. Refer to the drawings for notes and requirements.

D. Locations of underground lines, shown on the drawings, are based on the best available sources, but are to be regarded as approximate only. Exercise extreme care in locating and identifying these lines before excavating in adjacent areas. **Prior to commencing work, the contractor will verify all underground utilities and compare to the Contract Documents. Any discrepancy will be noted and brought to the attention of the Contracting Officer and Architect. Method of verification is up to the Contractor.**

1.05 INTERRUPTION OF EXISTING UTILITIES SERVICES

A. The Contractor shall perform the work under this Contract with a minimum of outage time for all utilities. Interruption shall be approved by the DPW and (if applicable) the appropriate party (privatized utility, fire department, etc.). In some cases, the Contractor may be required to perform the work while the existing utility is in service. The existing utility services may be interrupted only when approved by the Contracting Officer and Base DPW. When it is necessary to interrupt the existing utilities, the Contractor shall notify the Exchange Contracting Officer and Base DPW Representative in writing at least 14 days in advance of the time he desires the existing service to be interrupted. The interruption time shall be kept to a minimum. Depending upon the activities at the facility which require continuous service from the existing utility, an interruption may not be subject to schedule at the time desired by the Contractor. In such cases the interruption may have to be scheduled at a time of minimum requirement of demand for the utility. The amount of time requested by the Contractor for interruption of existing utility services shall be as approved by the Contracting Officer.

1.06 EXCAVATION

A. Prior to commencing any excavation work the Contractor shall obtain a valid Excavation Permit, from the DPW Engineering Office. It shall be the Contractor's responsibility to obtain the necessary signatures and coordination for the permit. Forms shall be obtained from Facilities Engineering.

B. Contractor should anticipate that approval of digging permits could take 4 calendar weeks or longer depending on the current workload. Contractor should coordinate with the installation prior to starting work to verify current planning times for obtaining digging permits.

1.07 WELDING PERMIT

A. Prior to commencing any welding, the Contractor shall obtain a welding permit from the Fort Campbell Fire Department. Further information will be passed at the preconstruction conference.

1.08 BARRICADES AND WARNING DEVICES

A. The Contractor shall provide barricades and warning/lighting devices, in accordance with Manual for Uniform Traffic Control Devices by Department of Transportation, latest Edition, at all points of excavation and construction in vehicle traffic areas.

1.09 PROTECTION FOR OPEN FLAME DEVICES

A. When open flame and/or spark producing devices, i.e., acetylene oxygen welding equipment, electric arc welding, etc., are employed for job accomplishment, the following procedures are mandatory:
1. Inspect all surroundings and equipment to ensure that combustible substances are not present in any area where contact of metal at a temperature above the flashpoint of any compound is possible.
2. Ensure that no open containers or spills of combustible substances are present.
3. Ensure that ignition is not possible by conduction, convection, radiation, or dispersion of molten metal.
4. Proper protection equipment and practices will be used, i.e., fireproof blankets, wetting of surrounding area, removal o combustible materials where practicable, earth filled backing and portable fire extinguishers of proper type on hand.
5. Contractor shall provide a working, serviceable, inspected fire extinguisher and this shall be located close by and accessible to this work at all times during construction.

1.10 FIRE PROTECTION

A. The Contractor shall at all times maintain good housekeeping practices to reduce the risk of fire damage. All scrap materials, rubbish, and trash shall be removed daily from in and about the building and shall not be permitted to be scattered on adjacent property.

B. Suitable storage space shall be provided 50 feet minimum outside the building area for storing flammable materials and paints; no storage will be permitted in the building. Excess flammable liquids being used inside the building shall be kept in closed metal containers and removed from the building during unused periods.

C. A contractor shall provide a fire extinguisher at each location where cutting and welding is being performed. Where electric or gas welding or cutting is done, interposed shields of incombustible material shall be used to protect against fire damage due to sparks and hot metal. When temporary heating devices are used, a watchman shall be present to cover periods when other workmen are not on the premises.

D. The Contractor shall provide fire extinguishers in accordance with the recommendations of NFPA Nos. 10 and 241. However, in all cases a minimum of four fire extinguishers shall be available for each building.

E. Fire Codes: The Contractor shall obey all requirements of the National Fire Codes, Air Force Fire Regulations and Post Fire Regulations, as they relate to the work on Post.

1.11 WORK BY OTHERS

A. Work not included: Except for such auxiliary work as is shown or specified or is necessary as a part of the construction, the following work is not included in the Contract:
1. Any work shown but marked "NOT IN CONTRACT" (N.I.C.).
2. Any work indicated to be furnished and installed by the Exchange.
3. Any work indicated to be furnished and installed by Exchange Vendors or Concessionaires.

B. **NOTE: This does not relieve the General Contractor from coordination with either the Owner or Vendor for the delivery and final testing and hookup of items supplied/installed by others.**

1.12 EXCHANGE FURNISHED AND INSTALLED EQUIPMENT (EF/EI)

A. See Specification Section 01 10 17-EXCHANGE FURNISHED AND INSTALLED EQUIPMENT

1.13 EXCHANGE FURNISHED-CONTRACTOR INSTALLED EQUIPMENT (EF/CI)

A. See Specification Section 01 10 18- EXCHANGE FURNISHED CONTRACTOR INSTALLED EQUIPMENT

1.14 LINING OF JOINTS IN FINISH MATERIALS

A. It shall be the responsibility of the Contractor to make certain in the installation of jointed floor, wall, and ceiling materials that:
   1. The joints line through in a straight line and in both directions wherever possible.
   2. The joints relate to all openings and breaks in the structure and be symmetrically placed wherever possible. This includes heating registers, light fixtures, equipment, etc.
   3. If, because of the non-related sizes of the various materials and locations of openings, etc., it is not possible to accomplish the above, the Contractor shall meet with the Contracting Officer to determine the most satisfactory arrangement. The Contractor shall establish center lines for all trades.

1.15 INTEGRATING WORK

A. All streets, buildings, and other improvements shall be protected from damage.

B. Contractor's operations shall be confined to the immediate vicinity of the project work and shall not in any way interfere with or obstruct the ingress or egress to and from street or adjacent property.

C. If new work is to be connected to existing work, special care shall be exercised not to disturb or damage the existing work more than necessary. All damaged work shall be replaced, repaired, and restored to its original condition at no cost to the Exchange Service.

D. The General Contractor is to bring all existing substrates to a straight, plumb, square and level condition before installing new finishes.

1.16 HEADROOM UNDER PIPES

A. All horizontal runs of plumbing and heating pipes and/or electrical conduit suspended from ceilings shall provide for a maximum headroom clearance, but in no case shall this clearance be less than 6'-8" without written consent from the Contracting Officer. Where piping or conduit is left exposed within a room, the same shall run true to plumb, horizontal or intended planes. Where possible, uniform margins are to be maintained between parallel lines, and/or adjacent wall, floor, or ceiling surfaces. A clearance of 15’-6” is required where shelving is to be installed.

1.18 PATCHING GOVERNMENT-OWNED FACILITIES

A. Government-owned structures, facilities, streets, curbs, walks, etc., that are damaged or removed due to required excavations or other construction work, shall be patched, repaired or replaced, and be left in their original state of repair by the Contractor, to the satisfaction of the Contracting Officer and of authorities having jurisdiction thereover.

1.19 LOCATION OF EQUIPMENT AND PIPING

A. Drawings showing location of equipment, piping, ductwork, etc., are diagrammatic and job conditions shall not always permit their installation in the exact location shown. Verify the exact location with the Contracting Officer or on-site investigation techniques.

B. When this situation occurs, it shall be brought to the Contracting Officer's attention immediately and the relocation determined in a joint conference. The Contractor will be held responsible for the relocating of any items without first obtaining the Contracting Officer's approval. He shall remove and relocate such items at his own expense if so directed by the Contracting Officer.

1.20 OVERLOADING

A. The Contractor shall be responsible for overloading any part or parts of structures beyond their safe calculated carrying capacities by placing of materials, equipment, tools, machinery, or any other item thereon. No loads shall be placed on floors or roofs before they have attained their permanent and safe strength.

1.21 STANDARDS

A. Any material specified by reference to the number, symbol, or title of a specific standard such as Commercial Standard, a Federal Specification, a trade association standard, or other similar standard shall comply with the requirements in the latest revision thereof, and any amendment or supplement thereto, in effect on the date of invitation for proposals, except as limited to type, class, or grade, or modified in such reference, and except as otherwise indicated.

B. The standard referred to, except as modified in the specifications, shall have full force and effect as though printed in these specifications. These standards are not furnished to bidders for the reason that the manufacturers and trades involved are assumed to be familiar with their requirements.
   1. Where Federal Specifications are referred to as a measure of quality and standard, they refer to Federal Specifications established by the Procurement Division of the United States Government and are available from the Superintendent of Documents, U.S. Government Printing Office.
   2. Where Federal Specification numbers are used, they refer to the latest edition including amendments thereto.
   3. Where Commercial Standards are referred to as a measure of quality, standard, and method of fabrication, they refer to Commercial Standards issued by the U.S. Department of Commerce.
   4. Where A.S.T.M. Serial Numbers are used, they refer to the latest specifications, standards specifications, standards methods, or standard method of testing issued by the American Society for Testing and Materials.

1.22 CERTIFICATE OF CONFORMANCE

A. Except where tests and/or inspections in connection with structural materials are specified or required by applicable laws, rules, and regulations, manufacturer's certificate covering conformance with the requirements of the above-mentioned Federal Specifications and Commercial Standards may be acceptable in lieu of such items. Such certificates shall be furnished to the Contracting Officer for all items so specified.

1.23 OCCUPANCY BY EXCHANGE

A. EXCHANGE shall reserve the right and privilege of partial occupancy during and prior to the absolute completion of the total work. Access shall be allowed at all times to EXCHANGE and its own Contractors in the endeavor.

1.24 TESTS AND REPORTS

A. See Specification Section 01 40 00 QUALITY CONTROL.

1.25 REFERENCES

A. All references to the word "Government" in the specifications shall mean Army and Air Force Exchange Service (EXCHANGE).
B. Wherever the word "provide" is used in the Contract Documents as a directive, it shall be interpreted as meaning "provide and install completely and ready for use".
C. Definitions:
1. Vendor: Person or persons selling any material item.
2. Post or Facility: Location on which Exchange is being remodeled.
3. Concessionaire: Person who is directly responsible for the lease of and operation of the concessions such as Beauty Shop, Barber Shop, and Laundry/Dry Cleaners.
4. Architect-Engineer: That person or firm responsible for preparing the working drawings and specifications.
Quorum Architects, Inc.
825 W Vickery Blvd, Suite 100
Fort Worth, Texas 76104
817-738-8095
5. EXCHANGE: Army and Air Force Exchange Service.
6. Inspection Agency: Project Inspector contracted by EXCHANGE.

1.26 HAZARDOUS MATERIALS

A. **Removal or disposal of hazardous materials or asbestos is not included in this contract. If the Contractor encounters such materials, he shall immediately notify the Contracting Officer.**

1.27 SUBMISSION OF PHOTOGRAPHS

A. Contractor shall submit to the Contracting Officer photographs taken on or about the first and fifteenth of every month, showing the general conditions of the work as viewed from each area or Phase currently under construction. Photographs (digital photos, minimum of twenty (20) 1600 x 1200 standard images) must accompany each Application for Payment. Each image shall be identified by date taken, project title, and EXCHANGE Project Number, location and direction taken. The Contractor may also submit a video of the above requirements as an option to photographs.

1.28 PROJECT LOG

A. The Contractor shall prepare and keep a daily log listing Activities, Weather conditions, Visitors, Fixture arrivals, Subcontractors, vendors and personnel on site, RFI's submitted and received, safety issues (including daily briefs), and other items that occur onsite. This log shall be available and presented to the Contracting Officer or representative upon request.

B. This log is to be available to the DPW Representative upon request.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

PART 1 – GENERAL

1.1 EXCHANGE FURNISHED AND INSTALLED PROPERTY (EF/EI)

A. Property: Property is indicated on the drawings.

B. Schedule: Contractor shall schedule early completion of designated areas for beneficial occupancy by EXCHANGE usage prior to completion of entire project.

C. EXCHANGE will furnish and install equipment as indicated on the Fixture Plan in the drawings.

D. Contractor's Duties:

1. Provide access for EXCHANGE personnel.
2. Coordinate work and cooperate with the installers of the property so that installation can be accomplished in accordance with construction schedule.
3. Provide mechanical and electrical connections to equipment and building systems where indicated on the drawings and in the specification.
4. Provide security of designated areas.
5. **Schedule equipment delivery dates and installation times to coordinate with the overall schedule. Provide EXCHANGE advance notice so equipment can be ordered on time.**

E. EXCHANGE Duties:

1. Inspect designated area prior to use and issue statement of acceptance of area for installation of property.
2. Make final mechanical and electrical connections between property and building systems where indicated on the drawings and/or in the specifications.
3. Provide custodial services for designated areas during use after beneficial occupancy.

1.2 DELIVERY DATE CHANGES

A. Requests by Contractor to change designated delivery dates shall be made in writing at least 30 days in advance of the designated delivery date. If the Contractor is not ready to accept delivery of EXCHANGE furnished property the Contractor shall be responsible for storage and redelivery cost. Should EXCHANGE be unable to effect the change, or should the Contractor fail to submit his request within the time stated above, the Contractor's obligation under this contract and as stated herein shall not be relieved and further, the Contractor will have no basis upon which he can file a claim under these conditions.

1.3 EXCHANGE ACTIVITIES AFFECTING PROGRESS OF WORK:

A. Vendor Area: Schedule date of installation of fixtures and possession of these areas 30 days prior to completion of project.

B. Construction in each area at date scheduled for its use and possession by EXCHANGE shall be sufficiently complete, in accordance with Contract Documents, so EXCHANGE may occupy the area for the use for which it is intended. Comply with Contract Clauses titled inspection of Construction, and Use and Possession Prior to Completion.

1.4 MATERIALS AND EQUIPMENT (EF/EI):

A. Equipment or material to be furnished and installed by EXCHANGE and/or Vendor is as follows and as indicated on the Drawings:
1. Food Service Equipment
2. Check-out Fixtures and POS.
3. Interior graphic, signage and storefront signage.
4. Office furniture.
5. Storage shelving.
6. Satellite Dish.
7. Telephone system equipment.
8. Security equipment.
9. Other items as specified on the Drawings.

1.5 ACCEPTANCE OF AREAS FOR BENEFICIAL OCCUPANCY

A. Inspection: Prior to acceptance by EXCHANGE of an area for beneficial occupancy, the Contracting Officer will conduct an inspection of the specific area. A list of deficiencies will be provided to the Contractor.

B. Acceptance: If the Contracting Officer determines the specific area is sufficiently complete for beneficial occupancy by EXCHANGE, the area will be accepted in writing with the exception of the deficiencies listed. The deficiencies listed shall be completed or corrected prior to final acceptance at the completion of the project.

C. Damage: Damage resulting from EXCHANGE's use will not be considered the Contractor's responsibility.

D. Refer to clause entitled "Final Inspection and Acceptance" of the EXCHANGE "General Provisions".

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 FINAL CONNECTIONS:

A. **ALL** final utility connections to and testing of EXCHANGE furnished and installed equipment shall be made by the Contractor as part of the construction contract. The GC shall construct all openings, furnish and install required sleeves and conduit, and furnish and install all reinforcing, miscellaneous supports, angles, plates, anchors, and bolts necessary to secure EXCHANGE-furnished equipment in place.

B. The Contractor shall provide for and cooperate with personnel installing EXCHANGE furnished materials and equipment, should overlap of work occur.

END OF SECTION

PART 1 – GENERAL

1.1 EXCHANGE FURNISHED/CONTRACTOR INSTALLED EQUIPMENT (EF/CI)

A. EXCHANGE furnished/Contractor installed equipment shall be handled in accordance with the "Army and Air Force Exchange Service General Provisions" clause entitled "EXCHANGE Furnished Property".

B. EXCHANGE Furnished Equipment: EXCHANGE will furnish the equipment indicated for installation by the Contractor, as follows:
1. EXCHANGE Furnished/Contractor Installed Items:
   a. Storefront signage
   b. All other items as indicated on the Drawings

C. Contractor's Duties:
1. Designate required delivery date for each product. Notify the Contracting Officer in writing at least 30 days in advance of the date that EXCHANGE furnished equipment and furnishings will be needed.
2. The equipment will be received at the job site by a representative of the EXCHANGE who will jointly, with the Contractor, verify condition and quantities. The representative will then effect receipted transfer of custody of the equipment to the Contractor.
3. Unload, handle, store (on-site), protect, uncrate, assemble, install set in final position, align, join, level, and make all utility connections to all items of equipment. Installation shall be performed in accordance with the specifications, equipment plans, and schedules shown on the Drawings and the rough-in drawings provided by EXCHANGE.
4. Construct all openings, furnish and install required sleeves and furnish and install all reinforcing, miscellaneous supports, angles, plates, anchors, and bolts necessary to secure EXCHANGE furnished equipment in place.
5. Repair or replace items damaged as a result of Contractor's operations.
6. Apply finish indicated, if any.
7. The installation shall be complete in all respects, including mechanical and electrical hook ups, and put into good operating condition.
8. Provide and install furring strips as required for installation of clipless wall system.

D. EXCHANGE Duties:
1. Deliver all EXCHANGE furnished items to the job site. EXCHANGE will schedule delivery dates with supplier in accordance with Progress Chart.
2. Provide Contractor with installation drawings and instructions.

1.2 DELIVERY

A. Contractor shall unload, handle, store, protect, uncrate, assemble, set in final position, align, join, and level all Exchange-Furnished material, and shall make all utility connections thereto. EXCHANGE will provide supervision for installation of the material.

B. The material will be received at the job site by a representative of the local EXCHANGE who, together with the Contractor, will jointly verify conditions and quantities. The representative of the local EXCHANGE will then affect receipted transfer of custody of the material to the Contractor. Material damaged by or during construction operations shall be replaced at no additional cost to EXCHANGE.

1.3 FAILURE TO VERIFY

A. Failure to execute above required verification shall not relieve the Contractor of responsibility for proper installation of the material, which shall be installed without additional cost to EXCHANGE.

1.4 DELIVERY DATE CHANGES

A. Requests by Contractor to change designated delivery dates shall be made in writing at least 30 days in advance of the designated delivery date. If the Contractor is not ready to accept delivery of EXCHANGE furnished equipment the Contractor shall be responsible for storage and delivery cost. Should EXCHANGE be unable to effect the change, or should the Contractor fail to submit his request within the time stated above, the Contractor's obligation under his contract and as stated herein shall not be relieved and further, the Contractor will have no basis upon which he can file a claim under these conditions.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 INSTALLATION

A. The GC shall construct all openings, furnish and install required sleeves and conduit, and furnish and install all reinforcing, miscellaneous supports, angles, plates, anchors, and bolts necessary to secure EXCHANGE-furnished equipment in place. All final electrical connections to EXCHANGE furnished equipment shall be made by the Contractor as part of the Construction Contract.

END OF SECTION

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Contractor required health and safety plan.
   1. Contractor is responsible for reading the Risk Assessment Plan and following the directions therein.
   2. Contractor must maintain OSHA permissible exposure limits related by the risk assessment: That is, 25 ppm (170 mg/cubic meter) during any 8 hour work shift for a 40-hour week

B. Sample Construction Hazard Plan.

C. Sample Safety Plan.

1.2 RELATED SECTIONS

A. Submittals - Section 01 33 00 (Construction Hazard Plan, Job Safety and Health Plan, Emergency Response Plan).

B. Record Documents - Section 01 78 39.

C. Environmental Protection – Section 01 35 43

1.3 REFERENCES

A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
   1. OSHA 1910 R.E.G. - 29CFR, OSHA 1910.120
   2. U.S. Army Corps of Engineers Publication. – EM 385-1-1: Safety and Health Requirements Manual (Most current version).

1.4 SUBMITTALS

A. Submittals for EXCHANGE approval - The following items shall be submitted for EXCHANGE approval:
   1. Designation of Safety Representative: The Contractor shall designate in writing a qualified employee OSHA Trained under 1910.120 responsible for the overall supervision of all accident prevention activities. Duties shall include ensuring applicable safety requirements are incorporated into work methods and inspecting the job site to ensure that safety measures and instructions are actually being applied. This person shall be on site at all times that work is in progress.
   2. The Contractor shall be trained/certified in OSHA 1910.120 procedures. All other employees performing site work will meet OSHA 1910 training requirements for their job capacity.

B. Submittals for Information Only - The following items shall be Contractor certified:
   1. Job Hazard Analysis: Contractor shall develop a job hazard analysis for presentation at the pre-construction conference. The Contractor's job hazard analysis shall list potential hazards that could arise during the course of the work.

2. Job Safety and Health Plan.
   a. The Contractor shall develop a Job Safety and Health Plan for presentation at the Pre-construction conference. The Contractor's Safety Plan shall make whatever provisions are necessary to conduct his work in accordance with current OSHA standards.
   b. The safety and health plan must specifically address the excavation portion of construction and will be specific to perchloroethylene (tetrachloroethylene) (PCE), and incorporate decontamination procedures for personnel and equipment, continuous vapor monitoring, a prohibition against eating in proximity to the site, and a prohibition against the smoking of tobacco products in the proximity to the site.
   c. The following are minimum requirements for the health and safety plan:
      1. The Contractor is responsible for all compounds and degradation products addressed by the Risk Assessment Plan.
      2. Specialized Designs: Specialized designs will be provided when the situation requires. Examples of such designs include, but are not limited to, vapor barriers in areas of known vapor hazard.
      3. Safety Plans: Safety Plans will be the responsibility of the Contractor for construction areas identified by the installation and/or EXCHANGE as areas of known hazards only. These plans are required by 29 CFR 1910 and are the responsibility of the Contractor. This requirement will be coordinated through the Health and Safety Program of the military installation by the Contractor.
      4. Minimum Requirements for the Health and Safety Plan are as follows:
         (a) Must be kept on site, and must be written.
         (b) Will contain a hazard analysis (safety and health risk) for each site task and operation (to be supplied by the installation).
         (c) Will include employee training (per paragraph (3) of 1910.120).
         (d) Will include personal protective equipment to be used by employees for each of the site tasks and operations (paragraph (g) (5) of 1910.120).
         (e) Will include provision for medical surveillance (paragraph (f) of 1910.120).
         (f) Will include the frequency and types of air monitoring, personal monitoring, environmental sampling techniques, instruments to be used (their maintenance and calibration).
         (g) Will include a site control program (per paragraph (d) of 1910.120) to be coordinated with the installation.
         (h) Will include a decontamination procedure (per paragraph (k) of 1910.120).
         (i) Will include an emergency response plan (per paragraph (1) of 1910.120).
         (j) Will include a confined space entry procedure (per 1910.146, 147 or program equivalent).
         (k) Will include provision for spill containment (per paragraph (j) of 1910.120).
         (l) Will include pre-entry briefings (prior to each site task activity) for all employees involved in the task, supervision, or emergency response.
         (m) Written verification of adherence to the "plan" by a Safety and Health Supervisor is required (the supervisor

must meet the 1910.120 training requirements for supervisors).

(n) Deficiencies will be corrected immediately upon discovery and after consultation with the EXCHANGE Contracting Officer and Installation Safety Office.

d. Hazard Response Plan: The unplanned or non-predicted discovery of such hazards as transite pipe, contaminated soils, and other possible hazards will be addressed within an Emergency Response Plan (EMR) by all contractors. This requirement will be coordinated through the Health and Safety Program of the military installation by the contractor (sample provided).

e. Material Safety Data Sheets will be maintained at the site for all hazardous materials in use.

1.5 MONTHLY SAFETY MEETINGS

A. The Installation will schedule subsequent safety meetings with Contractor and subcontractor personnel on a monthly basis. The Owner's representative and installation will attend periodically. Minutes of safety meetings shall be prepared and signed by the Contractor. Concurrence signed by Inspection Section and the original submitted to the Contracting Officer for inclusion in the contract file.

1.6 ACCIDENT REPORTING AND RECORD KEEPING

A. Accident reporting and record keeping shall be in accordance with Base requirements. Telephonic reports of injuries or property damage will be made as soon as possible after the incident and will be followed by a copy of an Accident Report.

1.7 LIFE OF CONTRACT REQUIREMENTS

A. The Contractor shall comply with all provisions of this section during the life of the contract.

1.8 HEAD PROTECTION (HARD HATS)

A. All work sites under this contract are designated Hard Hat Areas. The Contractor shall post the area and shall ensure that all personnel, vendors and visitors use hard hats while within the limits of the work site.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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SAMPLE
SAFETY PLAN

1. APPLICABLE PUBLICATIONS: The publications listed below form a part of this specification and are referred to in the text by the basic designation only.

1.1 US ARMY CORPS OF ENGINEERS:

EM 385-1-1 U.S. Army Corps of Engineers Safety and Health Requirements Manual

1.2 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA):

NFPA 70-1993 National Electric Code (NEC)

1.3 SOCIETY OF AUTOMOTIVE ENGINEERS (SAE):

J 994-85 Alarm, Backup, Electric-Performance, Test, and Application, Recommended Practice.

2. GENERAL: Work safety is of paramount importance. The Contractor shall comply with the Contract Clause in the Solicitation entitled ACCIDENT PREVENTION, including the U.S. Army Corps of Engineers Safety and Health Requirements Manual referred to therein in addition to the provisions of this specification.

3. SAFETY PROGRAM: The U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, and all subsequent revisions to in the Contract Clause ACCIDENT PREVENTION of this contract, are hereby supplemented as follows:

A. The Contractor shall designate an employee responsible for overall supervision of accident prevention activities. Such duties shall include:

1. Assuring applicable safety requirements are incorporated in work methods
2. Inspecting the work to ensure that safety measure and instructions are actually applied.

The proposed safety supervisor's name and qualifications shall be submitted in writing for approval to the Contracting Officer's Representative. This individual must have prior experience as a safety engineer or be able to demonstrate his/her familiarity and understanding of the safety requirements over a prescribed trial period. The safety engineer shall have the authority to act on behalf of the Contractor's general management to take whatever action is necessary to assure compliance with safety requirements. The safety supervisor is required to be on the site when work is being performed.

B. Prior to commencement of any work at a job site, a preconstruction safety meeting shall be held between the Contractor and the Corps of Engineers Area/Resident Engineer to discuss the Contractor's safety program and in particular to review the following submittals:

1. Contracts Accident Prevention Plan: An acceptable accident prevention plan, written by the prime contractor for the specific work and implementing in detail the pertinent requirements of EM 385-1-1, shall be submitted for Government approval.

2. Activity Phase Hazard Analysis Plan: Prior to beginning each major phase of work, an activity hazard analysis (phase plan) shall be prepared by the Contractor for that phase of work and submitted to the Contracting Officer's Representative for approval. A phase is defined as an operation involving a type of work presenting hazards not experienced in previous operations or where a new subcontractor or work crew is to perform work. The analysis shall address the hazards for each activity performed in the phase and shall present the procedures and safeguards necessary to eliminate the hazards or reduce the risk of an acceptable level.

C. Subsequent jobsite safety meetings shall be held as follows:

1. A safety meeting shall be held at least once a month for all supervisors on the project to review past activities, to plan ahead for new or changed operations and to establish safe working procedures to anticipate hazards. An outline report of each monthly meeting shall be submitted to the Contracting Officer's Representative.

2. At least one safety meeting shall be conducted weekly, or whenever new crews begin work, by the appropriate field supervisors or foreman for all workers. An outline report of the meeting giving date, time, attendance, subjects discussed and who conducted it shall be maintained and copies furnished the designated authority on request.

4. ACCIDENTS: Chargeable accidents are to be investigated by both Contractor personnel and the Contracting Officer.

4.1 ACCIDENT REPORTING, ENG FORM 3394: Section I, paragraph 01.D, of EM 385-1-1 and the Contract Clause entitled ACCIDENT PREVITION are amended as follows: The prime Contractor shall report on Eng Form 3394, supplied by the Contracting Officer, all injuries to his employees or subcontractors that result in lost time and all damage to property and/or equipment in excess of $2,000 per incident. Verbal notification of such accident shall be made to the Contracting Officer within 72 hours following such accidents. The written report shall include the following:

A. A description of the circumstances leading up to the accident, the cause of the accident, and corrective measures taken to prevent recurrence.

B. A description of the injury and name and location of the medical facility giving examination and treatment.

C. A statement as to whether or not the employee was permitted to return to work after examination and treatment by the doctor, and if not, an estimate or statement of the number of days lost from work. If there have been days lost from work, state whether or not the employee has been re-examined and declared fit to resume work as of the date of the report.

4.2 OSHA Requirements:

4.2.1 OSHA Log: A copy of the Contractors' OSHA Log of Injuries shall be forwarded monthly to the Contracting Officer.

A. The Contractor shall comply with all provisions of this section during the life of the contract.

4.2.2 OSHA Inspections: Contractors shall immediately notify the Contracting Officer when an OSHA Compliance Official (Federal or State Representative) presents his/her credentials and informs the Contractor that the workplace will be inspected for OSHA compliance. Contractors shall also notify the Contracting Officer upon determination that an exit interview will taken place upon completion of an OSHA inspection. (NABSA).

5. SUBMITTALS FOR GOVERNMENT APPROVAL: Submittals shall be in accordance with Section 01 33 00 CONTRACTOR SUBMITTAL PROCEDURES. All required submittals of items specified in this section shall be for information only, except for those items including, but not limited to, the following which shall be submitted for Government approval:

A. Written designation of safety representative.

B. Written project specific accident prevention plan.

C. Written activity phase hazard analysis plan.

END OF SAMPLE SAFETY PLAN

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SAMPLE

CONSTRUCTION HAZARD PLAN

TO BE ACCOMPLISHED BY THE GENERAL CONTRACTOR FOR CONSTRUCTION AND POSTED IN ALL CONSTRUCTION TRAILERS

SHOULD AN UNPREDICTED DISCOVERY OF A HAZARDOUS MATERIAL OR CONDITION BE MADE DURING CONSTRUCTION THE FOLLOWING SEQUENCE OF ACTIONS IS REQUIRED WHEN THERE IS NO IMMEDIATE THREAT TO LIFE OR PROPERTY

ITEM	FIRST ACTION	NOTIFY	TELEPHONE #
Transite Pipe	Crease Activity in area of discovery	1. BCE 2. AAFES Contracting Officer and/or CME/CES/DPW 3. AAFES Environmental Engineer when Unable to Contact 1,2	
Contaminated Soil	Crease Activity in area of discovery cover with plastic	Same as above	
Buried Munitions	Crease Activity	Same as above	
UST	Same as above	Same as above	

Other
Should there be an immediate threat to life or property, the emergency response plan for the installation, which is to be on file at the construction side, is to be followed in every detail. An example of this procedure is the rupture of a fuel line, liquid or natural gas.

END OF SAMPLE CONSTRUCTION HAZARD PLAN

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PART 1 – GENERAL

1.1 REQUIREMENTS INCLUDED

A. Reference Standards.

B. Licenses and Permits

C. Safety.

D. Fire Safety.

E. Affirmative Procurement Program

F. Industrial Ventilation

G. Use of Ionizing Radiation (IR).

H. Use of Lasers.

I. Use of Radioactive Materials

J. Use of Radio Frequency (RF) Radiation.

K. Use of Ultraviolet (UV) Radiation.

L. Protection of Nesting Birds

M. Historical or Cultural Artifacts

N. Ozone Depleting Substances.

O. Lead Base Paint.

P. Cleaning & Debris Control

Q. Nuisance Dumping & Polluting Activities

R. Stormwater Pollution Prevention

S. Excavation at IRP Sites

T. Contaminated Soil

U. Suspected Hazardous Materials

V. Oil-Filled or Impregnated Electrical Components

W. Hazardous Waste Testing

X. Hazardous Material Inventory

Y. Spill Response and Reporting

Z. Waste Disposal and Environmental Protection.

1.2 REFERENCE STANDARDS

A. Federal, State and Local Codes and Ordinances take precedence over these Specifications and Drawings where conflicts occur, unless the Drawings or Specifications call for more stringent requirements. Notify the Contracting Officer in writing of conflicts.

B. Comply with all applicable laws, building and construction codes, OSHA Safety and Health Regulations and applicable requirements of any governmental agency under whose jurisdiction this Work is being performed.

C. Obtain a copy of standards referenced in the various Specification Sections. Maintain a copy at the jobsite during execution of Work to which the standard applies.

D. Construction that is not governed by the contract specifications will be governed by the more stringent provisions of the latest published edition or statute adopted edition, of the following applicable codes, regulations and standards.

ADA	Americans With Disabilities Act Accessibility Guidelines
AFR	Air Force Regulations
ASME	American Society of Mechanical Engineers
CFR	Code of Federal Regulations
FAR	Federal Acquisition Regulations
IBC	International Building Code
IMC	International Mechanical Code
IPC	International Plumbing Code
NEC	National Electrical Code
NFPA	National Fire Code
OSHA	Occupational Safety and Health Act

Other applicable codes and standards as applicable or as referenced by the individual specification Sections.

1.3 LICENSES AND PERMITS

A. The Contractor shall obtain and maintain current for the duration of this Contract, all required Federal, State and local licenses and permits. All associated fees and taxes shall be paid by the Contractor without additional cost to the Government.

B. Obtain from base security all required vehicle and entry permits.

C. Obtain from the Base CES/DPW all required permits. Current permit requirements shall be provided to the Contractor at the preconstruction conference.

1.4 SAFETY

A. Comply with all Federal and State regulations concerning safety of personnel and equipment. All Contractor personnel shall wear hard hats and steel toe safety shoes while on the project site. In addition, all personnel shall wear hearing protection (ear muffs or ear plugs) when inside the power plant, excluding office areas, restrooms, break rooms and other "quiet" areas

B. Ensure that lock out, tag out procedures are established and used as directed by 29 CFR 1910.145. Comply with the lock out, tag out procedures in use by CH&PP personnel. Ensure that contractor's personnel on site are trained on the government's procedures.

C. Comply with all safety, traffic and protection requirements in effect on FORT CAMPBELL, KY. Government will brief the Contractor on these requirements at the preconstruction conference.

D. Work areas in this Project may be classified as "permit-required confined spaces" or "non-permit required confined spaces." The Contractor's Certified Industrial Hygienist will determine the confined space status of the Project areas. Regulations and procedures for entry into "permit-required confined spaces" are contained in 29 CFR 1910.146 and 8 AAC 61.010.14. The Contractor is responsible for ensuring the safety of his employees in confined spaces according to these regulations.

E. Confined Space Permit:
1. Provisions for confined space are outlined in 29CFR 1910.146 and ANSIZ117.1 1989 and shall be followed throughout Project.
2. FORT CAMPBELL, KY Contact for information regarding confined Space issues is Ground Safety. However, the Contractor shall process any permits required for confined space through his own safety Manager and Permit Space Program.

F. Provide safety barriers around open excavations, openings in floors and other hazards created by the Contractor's activities.

G. The Contracting Officer may direct the Contractor to cease activities which, in their opinion, are unsafe.

1.5 FIRE SAFETY

A. Comply with all fire safety and protection requirements in effect on FORT CAMPBELL, KY. Government will brief the Contractor on these requirements at the preconstruction conference.

B. Prior to beginning any welding, use of open flame device, or any activity that produces sparks, obtain a "hot work permit" from FORT CAMPBELL, KY Fire Department. The permit shall be **renewed each day** welding or open flame devices will be used.

C. If the contract work requires numerous days of hot work, the Contractor may elect to have one of his on-site personnel designated as a Permit Authorizing Individual (PAI). The Contractor's PAI may issue hot work permits at the work site, thus avoiding the requirement for daily permits issued by the Fire Department.

D. The Contractor's PAI shall be the on-site superintendent, a foreman, the Contractor's Safety Manager, or other individual with sufficient knowledge and experience to recognize unsafe work practices or conditions and having authority to stop work immediately if such unsafe practices or conditions are observed. To be designated as a PAI, a person must schedule and successfully complete PAI certification training offered

by the Base Fire Department. PAI certification training is estimated to last 60 to 90 minutes.

E. Fire Department personnel may periodically visit the site to ensure the Contractor is complying with fire safety requirements. A PAI's certification may be revoked if the PAI has failed to issue permits on days when hot work is performed, or if unsafe practices or conditions are observed.

F. Questions concerning these requirements may be directed to Fire Chief, FORT CAMPBELL, KY, phone number will be handed out at the Preconstruction Conference.

G. The Contractor shall notify the Fire Department a minimum of 48 hours before, and again immediately prior to, temporarily closing any street or paved building access, interrupting water service to any fire hydrant or interrupting the operation of any fire detection, alarm or suppression system. The fire Department shall be immediately notified upon reopening closed areas, restoration of water service to any fire hydrant, or reactivation of any detection, alarm or suppression system. This notification requirement is in addition to other contract requirements.

H. Provide a 10 lb, ABC fire extinguisher at all work areas.

I. Report a fire: Dial 911.

1.6 AFFIRMATIVE PROCUREMENT PROGRAM

A. These standards apply to all new construction, demolition, rehabilitation, alteration, modification, repair, and maintenance of existing facilities.

B. In an effort to comply with the affirmative procurement requirements of Section 6002 of the Resource Conservation Recovery Act (RCRA) and Executive Order 13101, the government strongly promotes the use of the recycled and recovered materials and products identified in the Environmental Protection Agency's Comprehensive Procurement Guidelines.

C. Recycled and recovered materials and products must be considered first before any other materials and products will be accepted. Recycled and recovered materials and products must be used throughout the project unless they either do not meet the requirements of this specification, delay the progress of the work, or are cost prohibitive.

D. Examples of these materials and products are detailed below. These are recommended quantities and represent minimum compliance. The actual requirement is to use the maximum amount of recycled material possible, while meeting the performance specifications.

Type	Material	Recycled Material	%
Insulation	Rock wool	Slag	75
	Fiberglass	Glass cullet	20-25
	Loose fill & spray on (cellulose)	Postconsumer paper	75
	Perlite composition board	Postconsumer paper	23
	Plastic rigid foam	Recovered material	9
	Foam-in place	Recovered material	5
	Glass fiber reinforced	Recovered material	6
	Phenolic rigid foam	Recovered material	5
Wall Board	Structural fiberboard		80-100
	Laminated paperboard	Postconsumer paper	100
Carpet	Polyester carpet face fiber	Excludes severe wear applications	25-100
	Playground surfaces	Rubber or plastic	90-100
	Running tracks	Rubber or plastic	90-100
Cement/Concrete	Concrete & cement	Coal fly ash	15-35
	Concrete & cement	Ground granulated blast furnace (GGBF)	25-50
Flooring/Patio	Patio blocks	Plastic or plastic blends	90-100
	Patio blocks	Rubber or rubber blends	90-100
	Floor tiles	Rubber	90-100
	Floor tiles	Plastic	90-100
Landscaping	Paper based hydraulic mulch	Postconsumer paper	100
	Wood based hydraulic mulch	Recoverd wood and/or paper	100
	Compost		100

1.7 INDUSTRIAL VENTILATION

A. Contact the Contracting Officer 10 working days prior to any industrial ventilation systems (systems which control a hazard) being evaluated for acceptance. Advance notification is required by Bioenvironmental Engineering (BE) to allow performance or observation of tests of any new or renovated system prior to initial startup to verify the system will control the hazard. BE will be present for tests of fan speed and rotation, fan motor load, and air flow in all hoods or branches.

1.8 USE OF IONIZING RADIATION (IR)

A. Submit a written request for approval at least 30 calendar days before commencement of activities which require the use of IR generating devices.

B. Submit request to the Base Radiation Safety Officer (RSO) with a courtesy copy to the Contracting Officer. Request shall include:

1. Description/Characteristics:
   a. X-ray unit manufacturer
   b. Model number
   c. Serial number
   d. Maximum kVp, mA, Sec
   e. Ionizing radiation source/emitter (electron tube)
2. The part of the EXCHANGE contract describing work to be done at the base and the inclusive dates of such work.

3. An acknowledgment that the RSO may make initial and periodic checks to ensure the Contractor is following applicable radiological health and safety practices which prevent unnecessary exposures to Post or Base personnel.

1.9 USE OF LASERS

A. Submit a written request for approval at least 30 calendar days before commencement of activities which require the use of a laser.

B. Submit request to the RSO with a courtesy copy to the Contracting Officer. Request shall include:
1. Description/Characteristics:
a. Manufacturer.
b. Model.
c. Number of same units.
d. Serial number(s).
e. Laser medium.
f. Mode of operation (i.e. continuous wave (CW), single pulse, multiple pulse).
g. Maximum exposure time (train length).
h. Ime (sec) & wave length.
i. Energy/pulse (J) or CW power (W).
j. Pulse repetition frequency.
k. Pulse width.
l. Beam diameter (at 1/e point).
m. Beam divergence (at 1/e point).
2. The part of the EXCHANGE contract describing work to be done and the inclusive dates of such work.
3. An acknowledgment that the RSO may make initial and periodic checks to ensure the contractor is following applicable radiological health and safety practices which prevent unnecessary exposures to Post or Base personnel.

1.10 USE OF RADIOACTIVE MATERIALS (RAM):

A. Prior to bringing RAM onto FORT CAMPBELL, KY property, is not allowed.

1.11 USE OF RADIO FREQUENCY (RF) RADIATION

A. Prior to using equipment generating RF Radiation in excess of seven watts peak power and a frequency of 1000 MHz or greater on FORT CAMPBELL, KY must submit a written request for approval at least 30 calendar days before commencement of activities which require the use of the RF generating device.

B. Submit request to the RSO, with a courtesy copy to the Contracting Officer. Submittal shall include:
1. Description.
2. Nomenclature.
3. Location of emitters.
4. Quantity.
5. Frequency (Mhz).
6. Pulse width (microsec.).
7. Pulse repetition freq. (pps).
8. Peak power (kW).
9. Antenna size (feet--horizontal/vertical).
10. Antenna band width (degrees-- horizontal/vertical).
11. Antenna gain (dB).

12. Scan rate (rpm).

C. The part of the EXCHANGE contract describing work to be done at the base and the inclusive dates of such work.

D. An acknowledgment that the RSO may make initial and periodic checks to ensure the Contractor is following applicable radiological health and safety practices which prevent unnecessary exposures to Post or Base personnel.

1.12 USE OF ULTRAVIOLET (UV) RADIATION

A. Submit a written request for approval at least 30 calendar days before commencement of activities which require the use of UV generating devices on FORT CAMPBELL, KY.

B. Submit request to the RSO, with a courtesy copy to the Contracting Officer. Request shall include:
1. The part of the EXCHANGE contract describing work to be done at the base and the inclusive dates of such work.
2. An acknowledgment that the RSO may make initial and periodic checks to ensure the Contractor is following applicable radiological health and safety practices which prevent unnecessary exposures to Post or Base personnel.

1.13 PROTECTION OF NESTING BIRDS

A. Federal law prohibits disturbing bird nests containing eggs or birds too young to fly. Harassment of birds to force them to abandon an occupied nest is also illegal. If the Contractor removes nests or harasses birds in violation of federal and state law, the Contractor is responsible for any charges filed by U.S. Fish and Wildlife Service or State of Tennessee and is the liable party.

B. If an occupied bird nest is discovered, the contractor shall cease activities in the vicinity of the bird nest until the young birds are able to fly and leave the nest under their own power.

C. Cliff swallow nests are usually the greatest threat to construction projects. As a general rule, cliff swallows can begin nest construction any time between 10 May and 21 July.

D. The Government is responsible for removing new nests in the vicinity of the work area prior to Notice to Proceed.

E. The Contractor shall be responsible for control of new nest construction after issuance of NTP. The contractor shall survey the work area **daily** for new nest construction. To avoid project delays, the contractor shall remove all nests discovered before the nests have been completed and occupied.

F. The contractor shall be responsible for any increased cost or delay resulting from a nest constructed and occupied in the work area after NTP has been issued.

1.14 DISCOVERY OF HISTORICAL OR CULTURAL ARTIFACTS

A. Should any historical artifacts or cultural resources be unearthed, stop excavating and immediately notify the Contracting Officer.

1.15 OZONE DEPLETING SUBSTANCES

A. No ozone depleting substances (refrigerants or any other compounds) shall be used in any capacity on this project unless specifically approved by the HazMart.

1.16 LEAD BASE PAINT

A. No paint with a lead content of 0.06 percent or greater shall be used in any capacity on this project unless specifically approved by the HazMart.

1.17 CLEANING AND DEBRIS CONTROL

A. During the term of this Contract, the Contractor shall remove any materials and equipment that are not required for the completion of the work as promptly as possible. All debris shall be removed from the site and legally disposed. The Contractor shall take particular care to eliminate any hazards created by his operations.

B. The Contractor is responsible for any damage caused by his debris without additional cost to the Government.

C. The Contractor shall maintain at all times during his work at this Project Site a strict windblown debris control program. This program shall ensure no windblown debris or other debris from his work shall contaminate or interfere with any access to or operation of any facility or any parking area, road or street.

1.18 NUISANCE DUMPING AND POLLUTING ACTIVITIES

A. Polluting, dumping, or discharging of any harmful, nuisance, or regulated materials (such as concrete truck washout, vehicle maintenance fluids, residue from saw cutting operations, solid waste or hazardous substances) into building drains, site drains, streams, waterways, holding ponds or to the ground surface is not permitted. The contractor shall be responsible for any and all damages resulting from dumping or discharges. Further, the Contractor shall conduct activities in such a fashion to avoid creating any legal nuisance, including but not limited to, suppression of noise and dust, control of erosion, and implementation of other measures as necessary to minimize off site impacts of work activities.

B. Fugitive Dust emissions (airborne dust generated by vehicles operating on unpaved surfaces, transfer or transport of dust producing materials, etc.) shall be controlled at the construction site, along haul routes and at staging areas. Water spraying shall be conducted as necessary to minimize fugitive dust generation.

1.19 STORMWATER POLLUTION PREVENTION

A. Prior to clearing, grading or excavating, the Contractor shall obtain a Storm Water Pollution Prevention (SWPP) permit from the _____ Department of Health and a National Pollution Discharge Elimination System (NPDES) permit from the Environmental Protection Agency (EPA). Submit the SWPP Plan to the Contracting Officer for review and approval prior to submitting the plan to NDDOH. Ensure SWPP Plan includes Best management Practices. Additional permits may be required and shall be the responsibility of the Contractor

B. If contaminated ground water is encountered, the contractor must notify FORT CAMPBELL, KY immediately via the 24/7 spill phone

1.20 CONTAMINATED SOIL

A. If unexpected contaminated soil is encountered while performing work, stop work immediately and contact the Contracting officer. Do not resume work until approved by the Contracting Officer.

1.21 SUSPECTED HAZARDOUS MATERIALS

A. Any suspect hazardous materials encountered during demolition or construction shall immediately be brought to the attention of the Contracting Officer's representative. Work shall not resume until the Contracting Officer is satisfied that the materials are not hazardous. Should they be found to be hazardous, the contractor shall immediately take steps to contain the material, so further damage and contamination does not occur. The contractor shall then submit a proposal for removal.

1.22 OIL-FILLED OR IMPREGNATED ELECTRICAL COMPONENTS

A. Notify (Post or Base Environmental Safety Office and phone number) before demolition or installation of any oil-filled electrical equipment (for example: transformers and regulators). All transformers (both PCB and non-PCB-containing) and light ballasts (unless labeled "No PCBs") shall be disposed through the FORT CAMPBELL, KY Hazardous Material and Waste Handling facility.

1.23 HAZARDOUS WASTE TESTING

A. The Contractor shall subject a representative sample of each type of hazardous waste, or potentially hazardous waste, generated to TCLP (Toxic Characteristic Leaching Procedure) testing. Sampling and testing for appropriate metals, and volatile and semi-volatile chemicals shall be performed by an independent test agency that is regularly engaged in the sampling and testing of hazardous materials and waste. Provide the test results to Post or Base Hazardous Waste Facility before transferring the waste to the facility. Refer to the attached Waste Disposal and Borrow Pit Worksheet for additional hazardous waste handling requirements.

1.24 HAZARDOUS MATERIAL INVENTORY

A. Contractor must submit an inventory of all hazardous materials to be used to include quantities. Inventory must be updated at completion of the project to indicate quantities used, spilled, and disposed of, etc.

B. The Contractor shall provide the Hazardous Materials Pharmacy (HazMart) a list and quantity of all hazardous materials that the Contractor intends to bring onto Government property. The Contractor shall provide the HazMart with copies of all MSDSs and an inventory for each Hazardous chemical listed in OSHA Hazard Communication Standard 29 CFR 1910.1200 intended to be used. Each MSDS shall be on file prior to use of the chemical, and shall be maintained for all chemicals. Once the hazardous material is used, its quantity of use shall be reported to the HazMart along with the disposition of the container.

C. Submit a completed Hazardous and Related Material Identification Form, and an MSDS for all materials listed on the form and brought on Base, to the (office and phone).

D. If hazardous materials are not in their original container, the container containing the substance must be labeled.

1.25 SPILL RESPONSE AND REPORTING

A. Spills of hazardous waste, hazardous materials or non-regulated substances such as oils, antifreeze, grease, latex paint, hydraulic fluid, etc. shall immediately be reported to FORT CAMPBELL, KY for reporting purposes to local, state and federal agencies and proper clean-up action. If a spill occurs after normal working hours, or on a weekend or

holiday, report spills to the FORT CAMPBELL, KY Fire Department and request they contact FORT CAMPBELL, KY Duty Officer.

B. The contractor is encouraged to have a supply of absorbent pads on-site to aid in immediate clean-up of smaller spills, such as oil, coolant or hydraulic fluid leaks from vehicles or equipment.

C. Spill notification placards are to be placed on the job site (CES or DPW) will provide format and required locations prior to construction.

D. The contractor shall develop a spill plan. The format for the plan will be provided by (CES or DPW) prior to construction.

1.26 WASTE DISPOSAL AND ENVIRONMENTAL PROTECTION

A. The Contractor shall comply, and ensure that all subcontractors comply, with all Federal, State, local laws, and regulations, ordinances and standards related to environmental pollution control and abatement in effect and the specific requirements stated elsewhere in the Contract Documents.

B. All hazardous wastes as defined in 40 CFR, Part 261, shall be collected and disposed of in accordance with 40 CFR, Parts 260-268, The Contractor is responsible for properly storing, marking, labeling, securing and transporting hazardous wastes. All hazardous wastes shall be collected in contractor furnished DOT/UN approved containers and taken to FORT CAMPBELL, KY Hazardous Waste Facility for disposal. Call the Hazardous Waste Facility prior to transporting wastes to the facility to coordinate delivery of the waste materials. The Contractor shall not store hazardous waste on base for more than 30 days.

C. Any previously unidentified suspected hazardous materials encountered during performance of the work of the contract shall immediately be brought to the attention of the Contracting Officer.

D. All general construction wastes, other than those specifically allowed, or required, to be disposed of on-base shall be legally disposed at an off-base sanitary landfill.

E. Comply with the requirements of “01 74 19 - Construction Waste Management And Disposal” immediately following this Section.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION 01 13 00

PART 1 – GENERAL

A. The Contractor shall obtain all permits required by federal, state and local laws for the construction activities involved. The Contractor shall perform all work in such a manner as to minimize the polluting of air, water or land and shall, within reasonable limits, control noise and the disposal of solid waste materials, as well as other pollutants. The Contractor shall ensure that all construction, repair, maintenance operations and practices and waste disposal performed under this contract shall be in strict compliance with all applicable city, county, state and federal environmental laws and regulations.

1. Hazardous and Non-hazardous Waste Disposal: There are known existing sources of hazardous waste involved with this project. If the Contractor generates or discovers suspected hazardous waste it shall be brought to the immediate attention of the Contracting Officer for review and direction on how to proceed with handling and disposal. As part of the proposed implementation above and prior to on-site construction, the Contractor shall submit for approval, a plan for storing, characterizing and disposing of hazardous and non-hazardous waste materials resulting from the work under this contract. Waste includes, but is not limited to, paint waste, paint equipment cleaners and used paint containers. If any waste material is dumped in unauthorized areas, the Contractor shall remove the materials and restore the area to the condition of the adjacent undisturbed areas. Where directed and approved by the Contracting Officer, contaminated ground shall be excavated, characterized, stored, disposed of and replaced with suitable fill material at the expense of the Contractor. All waste disposal shall be in strict accordance with local, state and federal requirements and regulations. Waste paint, paint equipment cleaners and used paint containers shall be disposed of off base by the Contractor, at the Contractors' expense. Any soil contaminated through spillage shall be removed and disposed of in accordance with the requirements specified herein. Soil that is required to be removed shall be replaced by similar soil approved by the Contracting Officer.
2.

END OF SECTION

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PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Requirements and limitations for cutting and patching of Work.

1.2 RELATED SECTIONS

A. Section 01 10 00 – Summary.

B. Section 01 33 00 – Submittal Procedure

C. Individual Product Specification Sections:
1. Cutting and patching incidental to work of the section.
2. Advance notification to other sections of openings required in work of those sections.
3. Limitations on cutting structural members.

1.3 SUBMITTALS

A. Submit written request in advance of cutting or alteration which affects:
1. Structural integrity of any element of Project.
2. Integrity of weather exposed or moisture resistant element.
3. Efficiency, maintenance, or safety of any operational element.
4. Visual qualities of sight exposed elements.
5. Work of EXCHANGE or separate contractor.

B. Include in request:
1. Identification of Project.
2. Location and description of affected Work.
3. Necessity for cutting or alteration.
4. Description of proposed Work and Products to be used.
5. Alternatives to cutting and patching.
6. Effect on work of EXCHANGE or separate contractor.
7. Written permission of affected separate contractor.
8. Date and time work will be executed.

PART 2 – PRODUCTS

2.1 MATERIALS

A. Primary Products: Those required for original installation.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching.

B. After uncovering existing Work, assess conditions affecting performance of work.

C. Beginning of cutting or patching means acceptance of existing conditions.

3.2 PREPARATION

A. Provide temporary supports to ensure structural integrity of the Work. Provide devices and methods to protect other portions of Project from damage.

B. Provide protection from elements for areas which may be exposed by uncovering work.

3.3 CUTTING

A. Execute cutting and fitting to complete the Work.

B. Uncover work to install improperly sequenced work.

C. Remove and replace defective or non-conforming work.

D. Remove samples of installed work for testing when requested.

E. Provide openings in the Work for penetration of mechanical and electrical work.

F. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.

G. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.

3.4 PATCHING

A. Execute patching to complement adjacent Work.

B. Fit Products together to integrate with other Work.

C. Execute work by methods to avoid damage to other Work, and which will provide appropriate surfaces to receive patching and finishing.

D. Employ original installer to perform patching for weather exposed and moisture resistant elements, and sight-exposed surfaces.

E. Restore work with new Products in accordance with requirements of Contract Documents.

F. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

G. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material, to full thickness of the penetrated element.

H. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.

END OF SECTION

PART 1 - GENERAL

1.1 ACTION SUBMITTALS

A. Documentation:
1. Justification.
2. Coordination information.
3. Detailed comparison.
4. Product Data.
5. Samples.
6. Certificates and qualification data.
7. List of similar installations.
8. Material test reports.
9. Research reports.
10. Detailed comparison of Contractor's construction schedule.
11. Cost information.
12. Contractor's certification.
13. Contractor's waiver of rights to additional payment or time.

1.2 CONTRACTING OFFICERS APPROVAL

A. The contract is based on materials and methods described in the contract document.

B. The Contracting Officer will consider proposals for substitution of materials, equipment and methods only when such proposals are accompanied by full and complete technical data and all other information required by the Contracting Officer to evaluate the proposed substitution.

C. Do not substitute materials or equipment, unless such substitution has been specifically approved for this Work by the Contracting Officer.

D. **Requests for substitution must be made no less than 10 days prior to proposal closing date. No further substitutions will be permitted after contract award.**

E. Where the phrase “or equal” or “or equal as approved in advance by the Contracting Officer” occurs in the Contract Documents, do not assume that material and equipment will be approved as equal by the Contracting Officer unless the item has been specifically approved for this work by the Contracting Officer.

F. The decision of the Contracting Officer shall be final.

1.3 SUBSTITUTIONS FOLLOWING AWARD OF CONTRACT

A. Substitutions for Cause: Not later than 15 days prior to time required for preparation and review of submittals. The submittal must include a justification explaining the rational for the requested substitution.

B. **Substitutions for Convenience: Not allowed after contract award**.

1.4 AVAILABILITY OF SPECIFIED ITEMS

A. Verify prior to bidding that all specified items will be available in time for installation during orderly and timely progress of the Work.

B. In the event specified item or items will not be so available, notify the Contracting Officer 10-days prior to receipt of proposals.

C. Costs of delays because of non-availability of specified items, when such delays could have been avoided by the Contractor, will be back-charged as necessary and shall not be borne by EXCHANGE.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

PART 1 - GENERAL

1.1 REQUESTS FOR INFORMATION (RFIs)

A. RFI Forms: Software-generated form acceptable to Architect and EXCHANGE Project Manager.
   1. The Architects use a web based construction management tool which is the preferred vehicle for RFI submittals.

B. Architect's Action: Allow seven (7) working days for Architect's response for each RFI.

C. RFI Log: Maintain a tabular log of RFIs. Submit log weekly.

1.2 PRECONSTRUCTION MEETING

A. The Contracting Officer and/or Contracting Officer's representative will schedule and preside at preconstruction meeting.

B. Attendance Required:
   1. Contracting Officers and/or Contracting Officer's representative and other Headquarters EXCHANGE representatives.
   2. Local and regional EXCHANGE representatives.
   3. Installation representative (Engineering, Fire Marshall, Security, etc.)
   4. Contractor
   5. Major Sub-contractors

C. Agenda:
   1. Execution of Notice to Proceed.
   2. Distribution of Contract Documents.
   3. Submission of list of sub-contractors.
   4. Review of EXCHANGE checklist of contract requirements.
   5. Discussion of Schedule.
   6. Discussion of critical sequencing.
   7. Designation of responsible personnel.
   8. Processing of field decisions and change orders.
   9. Submission of applications for payment.
   10. Submittal of shop drawings.
   11. Procedures for maintaining record documents.
   12. Fire and safety procedures.
   13. Security procedures.
   14. Accident prevention and reports.
   15. Housekeeping procedures.
   16. Use of premises:
      a. Office and storage locations.
      b. Personnel parking.
   17. Major equipment deliveries.
   18. Other issues pertinent to completing the contract.

D. Meeting minutes: Minutes will be taken by the A/E and distributed to EXCHANGE, Contractor, and Installation Engineer.

1.3 PROGRESS MEETINGS

A. The contractor shall schedule and preside at monthly progress meetings.

B. The contractor shall make arrangements for meetings, prepare agenda with copies for participants.

C. Location of Meetings: Construction office, or as directed in the notice.

D. Attendance Required:
1. Contractor's project manager.
2. Contractor's superintendent.
3. Major sub-contractors and suppliers.
4. EXCHANGE representative (EXCHANGE' option).
5. Architect and/or Engineers

E. Agenda:
1. Review minutes of previous meetings.
2. Review of work progress.
3. Field observations, problems and decisions.
4. Identification of problems which impede planned progress.
5. Review of submittals schedule and status of submittals.
6. Review of off-site fabrication and delivery schedules.
7. Maintenance of progress schedule.
8. Corrective measures to regain projected schedules.
9. Coordination of projected progress.
10. Maintenance of quality and work standards.
11. Effect of proposed changes on progress schedule and coordination.
12. Other business relating to work.

F. Meeting Minutes: A/E shall record meeting minutes, and distribute copies to the participants (including the EXCHANGE Contracting Officer, within five (5) business days of the meeting.

1.4 PROJECT MEETINGS

A. The Contractor shall schedule and preside at other project meetings when required.

B. Pre-installation Conferences: Conduct a pre-installation conference at Project site before each construction activity that requires coordination with other construction.
1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect and EXCHANGE' Commissioning Authority of scheduled meeting dates.
2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
   a. Contract Documents.
   b. Options.
   c. Related RFIs.
   d. Related Change Orders.
   e. Purchases.
   f. Deliveries.
   g. Submittals.
   h. NOT USED
   i. Review of mockups.
   j. Possible conflicts.
   k. Compatibility requirements.

l. Time schedules.
m. Weather limitations.
n. Manufacturer's written instructions.
o. Warranty requirements.
p. Compatibility of materials.
q. Acceptability of substrates.
r. Temporary facilities and controls.
s. Space and access limitations.
t. Regulations of authorities having jurisdiction.
u. Testing and inspecting requirements.
v. Installation procedures.
w. Coordination with other work.
x. Required performance results.
y. Protection of adjacent work.
z. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

C. Coordination Meetings: At weekly intervals, or as requested by the Contracting Officer, in addition to specific meetings held for other purposes.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

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PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Format

B. Content

C. Revisions to schedules

D. Submittals

1.2 RELATED SECTIONS

A. General Provisions of the EXCHANGE Contract for Construction, Article entitled: "Schedule and Progress"

B. Section 01 10 00 – Summary of Project

C. Section 01 33 00 – Submittals

1.4 GENERAL

A. The Contractor-prepared progress chart shall serve as a guide in managing the construction progress.

B. In preparing this system, the scheduling of construction shall be the responsibility of the Contractor.

C. **The schedules shall be prepared using the Critical Path Method (CPM).**

1.4 FORMAT

A. Prepare schedules as a horizontal bar chart with separate bar for each major portion of work or operation, identifying first workday of each week.

B. The format shall be such to enable the Contracting Officer to evaluate the reasonableness of the proposed schedule and to determine if the actual construction is on schedule.

1.5 CONTENT

A. Show complete sequence of construction by activity with dates for beginning and completion of each element of construction.

B. Identify each item by specification section number.

C. Show accumulated percentage of completion of each item and total percentage of Work completed as of the first day of each month.

D. Indicate delivery dates for EXCHANGE furnished products.

1.6 REVISIONS TO SCHEDULES

A. Indicate progress of each activity to date of submittal and projected completion date of each activity.

B. Identify activities modified since previous submittal, major changes in scope and other identifiable changes which could affect the schedule.

C. Provide narrative report with each submittal describing work accomplished during the previous period, the work scheduled for the next period, anticipated problem areas and delays and impact on the schedule. Report corrective action taken or proposed.

1.7 SUBMITTALS

A. Submit a preliminary schedule through the Contracting Officer defining the Contractor's proposed operations for the first sixty (60) of the contract within ten (10) days after date of Notice to Proceed. Indicate the Contractor's general approach for the balance of the project. Include the cost of the activities expected to be completed or partially completed before submission and approval of the complete progress schedule.

B. Upon approval of the preliminary schedule by the Contracting Officer and within thirty (10) calendar days after the Notice to Proceed, the Contractor shall submit the complete Progress Schedule.

C. **Submit revised Progress Schedules with each monthly Application for Payment**.

D. Submit the number of opaque reproductions which Contractor requires plus four (4) copies which will be retained by Contracting Officer.

1.8 DISTRIBUTION

A. Distribute copies of reviewed schedules to project site file, subcontractors, suppliers and other concerned parties.

B. Instruct recipients to promptly report in writing, problems anticipated by projections indicated in schedules.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Submittal procedures.

B. Construction progress schedules.

C. Shop Drawings.

D. Samples.

E. Product Data.

F. Certificates.

1.2 RELATED SECTIONS

A. Section 01 10 00 – Summary of Project.

B. Section 01 32 00 – Construction Progress Schedules

C. Section 01 78 39 – Project Record Documents.

1.3 SUBMITTAL PROCEDURES

A. Transmit each submittal with EXCHANGE Form 4450-48, Shop Drawings and Material Approval Submittal.

B. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.

C. Identify Project, Contractor, subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate.

D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and Contract Documents.

E. Schedule submittals to expedite the Project. Transmit submittals to Contracting Officer. Coordinate submission of related items.

F. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work. Failure to identify such variations will not relieve the Contractor of the responsibility for completing the work in full accordance with the Contract Documents even though such submittals are approved by the Contracting Officer.

G. Prior to approval of the material/product submitted, the contractor shall include with the submittal a written certification that the material/product contains no asbestos. This certificate is mandatory before approval will be issued.

H. Provide space for Contractor and Contracting Officer review stamps.

I. When revised for resubmission, identify all changes made since previous submission.

J. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.

K. The Architect uses a Web-Based construction management software which is the preferred vehicle for Submittal.

1.4 CONSTRUCTION PROGRESS SCHEDULES

A. Submit preliminary Progress Schedule within ten (10) days of the Notice to Proceed.

B. Submit complete (final) Progress Schedule within thirty (30) days of the Notice to Proceed.

C. Submit monthly revisions of Progress Schedule.

D. Refer to Section 01 32 00 - Construction Progress Documentation, for submittal information.

1.5 SHOP DRAWINGS

A. Shop Drawings For Review:
1. Submitted to Contracting Officer/Architect for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
2. Shop drawings shall be prepared by a qualified detailer.
3. Minimum sheet size for shop drawings shall be 8 1/2" x 11".
4. After review, and distribute copies in accordance with Submittal Procedures article above and for record documents purposes described in Section 01 77 00 - Project Closeout.

B. Shop Drawings For Project Close-out:
1. Submitted for the EXCHANGE's benefit during and after project completion.

C. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
1. Submit the number of opaque reproductions which Contractor requires, plus three (four on structural, mechanical, and electrical submittals) copies which will be retained by Contracting Officer.

1.6 SAMPLES

A. Samples For Review:
1. Submitted to Contracting Officer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
2. After review, produce duplicates and distribute in accordance with Submittal Procedures article above and for record documents purposes described in Section 01 77 00 - Project Closeout.

B. Samples For Information:
1. Submitted for the Contracting Officer's knowledge as project administrator or for EXCHANGE.

C. Samples For Selection:
   1. Submitted to Contracting Officer for aesthetic, color, or finish selection.
   2. Submit samples of finishes from the full range of manufacturers' standard colors, or in custom colors (if so stated in the product specification section), textures, and patterns for Contracting Officer selection.
   3. After review, distribute in accordance with Submittal Procedures article above and for record documents purposes described in Section 01 77 00 - Project Closeout.

D. Submit samples to illustrate functional and aesthetic characteristics of the Product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

E. Include identification on each sample, with full Project information.

F. Submit the number of samples specified in individual specification sections; two of which will be retained by Contracting Officer.

G. Reviewed samples which may be used in the Work are indicated in individual specification sections.

H. Coordinate sample submittals with respective shop drawings.

1.7 PRODUCT DATA

A. Submit Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, specifications, illustrations, and other descriptive data.

B. Product data that relates to shop drawings or samples must be submitted with the respective shop drawings or samples.

1.8 CERTIFICATES

A. When specified in individual specification sections, submit certification by the manufacturer, installation/application subcontractor, or the Contractor to Contracting Officer, in quantities specified for Product Data.

B. Certify that material or Product conforms to or exceeds specified requirements. Submit supporting reference data, test results, affidavits, and/or certifications as appropriate.

C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect/Engineer.

1.9 LIMITATIONS AND CONTRACTOR'S RESPONSIBILITIES

A. Submittals will be reviewed for the limited purpose of checking for conformance with the design concept and the information shown in the drawing and specifications. These reviews shall not include review of the accuracy for completeness of details. A review shall not indicate that the reviewer has checked the entire system of which the reviewed item is a component. The reviewer shall not be required to review partial submissions.

1.10 REQUIRED SUBMITTALS

A. Section 01 10 13 SUMMARY OF WORK
   1. Photographs: Contractor shall submit to the Contracting Officer photographs taken on or about the first and fifteenth of every month, showing the general conditions of the work as viewed from each area or Phase currently under construction
   2. Daily Log: The Contractor shall prepare and keep a daily log listing Activities, Weather conditions, Visitors, Fixture arrivals, Subcontractors, vendors and personnel on site, RFI's submitted and received, safety issues (including daily briefs), and other items that occur onsite.

B. SECTION 01 10 60 SAFETY POLICIES AND PROCEDURES
   1. Job Hazard Analysis
   2. Job Safety and Health Plan

C. SECTION 01 25 00 SUBSTITUTION PROCEDURES (post contract award)
   Documentation:
   1. Justification.
   2. Coordination information.
   3. Detailed comparison.
   4. Product Data.
   5. Samples.
   6. Certificates and qualification data.
   7. List of similar installations.
   8. Material test reports.
   9. Research reports.
   10. Detailed comparison of Contractor's construction schedule.
   11. Cost information.
   12. Contractor's certification.
   13. Contractor's waiver of rights to additional payment or time.

D. SECTION 01 32 00 CONSTRUCTION PROGRESS DOCUMENTATION
   The Contractor-prepared progress chart shall serve as a guide in managing the construction progress, be prepared using the Critical Path Method (CPM). Submit a preliminary schedule through the Contracting Officer defining the Contractor's proposed operations for the first sixty (60) of the contract within ten (10) days after date of Notice to Proceed. Upon approval of the preliminary schedule by the Contracting Officer and within thirty (10) calendar days after the Notice to Proceed, the Contractor shall submit the complete Progress Schedule, Submit revised Progress Schedules with each monthly Application for Payment.

E. SECTION 01 35 43 ENVIRONMENTAL PROTECTION
   Installation certification for clean construction debris to be removed from exchange project site.

F. SECTION 01 50 00 TEMPORARY FACILITIES AND CONTROLS
   1. Site Plan
   2. Erosion- and Sedimentation-Control Plan:
   3. Fire-Safety Program:
   4. Moisture-Protection Plan
   5. Dust- and HVAC-Control Plan

G. SECTION 01 65 00 STARTING OF SYSTEMS
   1. Testing and Balancing report

H. SECTION 01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL
   1. Waste Management Plan
   2. Waste Reduction Progress Reports
   3. Waste Reduction Calculations
   4. Records of Donations
   5. Records of Sales
   6. Recycling and Processing Facility Records
   7. Landfill and Incinerator Disposal Records
   8. Statement of Refrigerant Recovery

I. SECTION 01 77 00 PROJECT CLOSEOUT
   1. Operation and maintenance manuals
   2. DD form 1354
   3. Warranty and extended warranties

J. SECTION 01 78 39 PROJECT RECORD DOCUMENTS
   1. Record documents
   2. Record field data
   3. Record electronic file documents
   4. System acceptance testing

K. SECTION 02 41 16 SELECTIVE DEMOLITION
   1. Schedule of selective demolition activities

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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PART 1- GENERAL

1.01 CONTRACT TIME LIMIT

A. The Contractor shall allow for the impact of normal weather in his planned contract performance.

1.02 TIME EXTENSIONS

A. Time extensions for weather may be granted for weather in excess of normal that impacts ongoing activities on the site that have successive following activities that must be completed in a required sequence for completion of project within the specified performance period. These would be generally labeled as Critical Path Activities when that type of schedule is used.

B. Contractor shall not request additional time to complete the project because of delay occurring on Saturdays, Sundays or holidays

C. Any request for a time extension for weather must include:
   1. Weather data from Military Installation or National Weather Services.
   2. Impact on ongoing Activities.
   3. Relation of those activities to completion of the project.

D. Anticipated Normal Weather Days: The time estimated by the Contractor for completion of the entire work ready for use shall include the number of calendar days, for anticipated delays due to normal weather conditions. No time extension for delays due to weather will be allowed until and unless such delays exceed the time included for normal weather delays on a monthly basis. In case of claims for extension of time because of abnormal inclement weather, such extension of time shall be granted only when the contractor proves in a manner acceptable to the Contracting Officer, that such abnormal inclement weather prevented the execution of major items of work on normal working days for that month and attached the critical path for completion. A weather table reflecting the meteorological data from the local area is provided herein and will be used to determine contract time extensions due to abnormally inclement weather. For the purpose of this contract, “abnormal inclement weather” will be interpreted as the number of days in excess of the normal on which rainfall exceeds 0.01 inch or snow/ice pellets exceed 1.0 inch. Extension of time to complete the project will be based on actual working days. No extension of time will be allowed for extreme temperatures unless the installation of a material is specified to be installed within tolerance. Extensions will then only be granted if conditions identified above are followed.

E. Contractor time extensions due to adverse weather conditions may be granted if the extension in days is due to adverse weather conditions not reasonably anticipated based upon national weather service projections that actually affect the critical path for project completion. All requests for extensions must be submitted monthly for the previous month's work and accompany the scheduled Pay Application. **Any days not requested in this manner will not be considered.**

WEATHER TABLE

MONTH	**AVERAGE DAYS** RAIN (1)	**INCHES RAINFALL (2)**	**SNOW / ICE PELLETS (3)**
JANUARY	10.6	4.08	1.3
FEBRUARY`	9.7	4.36	1.2
MARCH	11.6	5.12	0.2
APRIL	11.2	4.38	0
MAY	11.5	5.15	0
JUNE	10.3	3.76	0
JULY	9.4	4.05	0
AUGUST	7.5	3.33	0
SEPTEMBER	8.4	3.47	0
OCTOBER	8.2	3.28	0
NOVEMBER	10.8	4.83	0.1
DECEMBER	10.8	5.11	.5
ANNUALLY	**120**	**50.92**	**3.3**

(1) Average normal number of days rainfall: 0.01” or more

(2) Average normal precipitation

(3) 1.0 inch or more

* Less than one-half inch

This table is based on information recorded Hopkinsville, KY, covering a period of 69 years. Latitude 36 degrees 51’ N, Longitude 87 degrees, 32’ W

PART 2- PRODUCTS

1.01 NOT USED.

PART 3 - EXECUTION

1.01 NOT USED.

END OF SECTION

PART 1 – GENERAL

1.1 SECTION INCLUDES (Scope)

A. The work covered by this section consists of furnishing all labor, materials, and equipment and performing all work required for the prevention of environmental degradation during and as a result of construction operations under this contract. These requirements are in addition to any environmental protection requirements elsewhere in these specifications. For the purpose of this specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents, not naturally occurring at the site, which adversely affect human health or welfare; unfavorably alter ecological balances important to human life; affect other species of importance to humans; or degrade the utility of the environment for aesthetic and recreational purposes. The control of environmental pollution by the contractor requires consideration of air, water, and land, and involves noise control, solid waste management and management of radiant energy and radioactive materials, as well as other pollutants. This section also requires the protection of cultural and historic resources.

B. Contractor shall coordinate the work of this section with the work called for under the various Earthwork and Utilities sections.

1.2 CONTRACTOR'S GENERAL ENVIRONMENTAL COMPLIANCE OBLIGATIONS.
Work under this contract is to be performed on a government facility. All environmental rules applying to contractor operations elsewhere will also apply on the government facility. Contractor (and any subcontractor, agent or representative) shall comply with all Applicable Federal, State, and local laws and regulations providing for environmental protection and pollution control and abatement. These include but are not limited to: the Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation and Liability Act, Toxic Substances Control Act, Federal Insecticide Fungicide and Rodenticide Act, Coastal Zone Management Act, Endangered Species Act, National Historic Preservation Act, Safe Drinking Water Act, Emergency Planning and Community Right-to-Know Act, Oil Pollution Act, Archeological Resources Protection Act, and Pollution Prevention Act. Contractor has the duty to determine for itself where such laws and regulations apply. Although the Contractor may request assistance from the Contracting Officer in delineating applicable environmental laws and regulations, Contractor has an independent responsibility to make its own determination and to do so in a timely fashion.

1.3 FINES OR PENALTIES FOR ENVIRONMENTAL NON-COMPLIANCE.
The Contractor shall be responsible for paying any fines or penalties assessed against EXCHANGE or the installation or the Army or the Air Force for violations of environmental laws or regulations resulting from acts or omissions of the contractor or its employees, subcontractors, or agents. This obligation is in addition to any fines or penalties that may be assessed against the contractor for the same conduct. Contractor may either reimburse these fines or penalties through the Contracting Officer, or with the consent of the Contracting Officer, the Contractor may pay such fines or penalties directly to the regulatory agency or agencies concerned.

1.4 CONTRACTOR'S LIABILITY FOR ENVIRONMENTAL DAMAGES
Contractor agrees to hold harmless and indemnify EXCHANGE (which includes the Army, Air Force, or other Department of Defense component, as appropriate) for any and all damages of any kind resulting from environmentally harmful activities by the contractor, contractor's employees or agents or subcontractors. "Damages" includes but is not limited to personal injury, property damage (including diminution of value), or death, environmental restoration and response costs, natural resource damages, expert witness and attorney's fees, and reimbursement of any and all expenses incurred to obtain permits as a result of Contractor's failure to identify or obtain permits for itself or EXCHANGE.

1.5 CONTACTS WITH ENVIRONMENTAL REGULATORY OFFICIALS.
Contractor shall immediately advise the Contracting Officer and the installation environmental office of the content of all contacts with federal, state, or local environmental regulators, before, during, and after the performance of this contract concerning the performance of this contract.

PART 2 – PERMITS

2.1 PERMITS FOR EQUIPMENT USED BY CONTRACTOR IN PERFORMING EXCHANGE CONTRACTS.
For equipment used in the performance of this contract, Contractor shall obtain in Contractor's name and at no additional expense to EXCHANGE, all permits, coordination, certifications or other regulatory authorization necessary to perform and complete the work required by this contract under applicable environmental laws and regulations. “Applicable environmental laws and regulations" includes but is not limited to: the Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Toxic Substances Control Act, Federal Insecticide Fungicide and Rodenticide Act, Coastal Zone Management Act, Endangered Species Act, National Historic Preservation Act, Safe Drinking Water Act, Emergency Planning and Community Right-to-Know Act, Oil Pollution Act, and Pollution Prevention Act and State, County, and Local laws and regulations on the same subjects.

2.2 PERMITS NEEDED FOR CONSTRUCTION, EXCAVATION, MODIFICATION, RENOVATION, DEMOLITION, INSTALLATION, OR OTHER ALTERATION OF BUILDINGS, STRUCTURES, EQUIPMENT, INSTALLATIONS, REAL PROPERTY OR SYSTEMS
Contractor shall identify all Federal, State, County, or local, permits, coordination, certifications or other regulatory authorization requirements under all applicable environmental laws and regulations as defined in (a.) above. Contractor shall then prepare and submit in draft all applicable permit applications, coordination, notices, or other required filings, together with all supporting data to the contracting officer for review. Permit applications or notifications or other documents that must be submitted by EXCHANGE will be submitted by EXCHANGE, and any documents that must be submitted by the contractor will be returned after review to the contractor for submission. No work requiring permit or other written authorization shall proceed before the Contractor has the permit or authorization or a copy thereof in its possession.

PART 3 – MATERIALS

3.1 RECYCLED MATERIALS.
Materials used in this contract shall be, to the greatest extent practicable and consistent with financial prudence, made of recycled materials or of materials that are recyclable. Where construction debris such as concrete or asphalt or wood can be recycled, this alternative will be considered.

3.2 ASBESTOS

Asbestos will not be used or included in this project.

3.3 POLYCHLORINATED BIPHENYL'S (PCBs)

PCBs will not be used or included in this project.

3.4 LEAD-BASED PAINT

Lead-based paint will not be used included in this project.

3.5 OZONE-DEPLETING SUBSTANCES.

A. "Class I substance," as used in this clause, means any substance designated as class I by the Environmental Protection Agency (EPA)(40 CFR Part 82), including but not limited to chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform.

B. "Class II substance," as used in this clause, means any substance designated as class II by EPA (40 CFR Part 82), including but not limited to, hydrochlorofluorocarbons.

C. As required by 42 USC 7671j(b), c, and (d) and 40 CFR Part 82, Subpart E, the Contractor shall label products which contain class I or class II ozone-depleting substances or are manufactured with a process that uses class I or class II ozone-depleting substances, or containers of class I or class II ozone-depleting substances, as follows:

"WARNING: Contains (or manufactured with, if applicable) _____*_____, (a) substance(s) which harm(s) public health and the environment by destroying ozone in the upper atmosphere."
*The Contractor shall insert the name of the substance(s).

D. The contractor shall comply with the applicable requirements of Sections 608 and 609 of the Clean Air Act (42 USC 7671g, National Recycling and Emission Reduction Program and 7671h, Servicing of Motor Vehicle Air Conditioners) as each or both apply to the contract.

3.6 PESTICIDES

Except as may be specified elsewhere in this contract, Contractor will not use or apply pesticides (such as herbicides or weed-killers, insecticides, or rodenticides) without the specific written prior approval of the Contracting Officer.

PART 4 – EXECUTION (WORK PRACTICES)

4.1 GENERAL: SITE DISTURBANCE DURING CONSTRUCTION ACTIVITIES.

Contractor shall use industry-recognized best management practices to avoid creation of fugitive dust emissions and to avoid and control storm water runoff from the construction site and any temporary roads that may be used for access to it. Water sprinkling may be used to control dust. Contractor shall perform all work under this contract in such a manner that no pollutants of any kind are released into ditches, storm drains, streams, lakes, or other surface waters on or connected to the site.

4.2 PROTECTION OF WATER RESOURCES

A. General: The General Contractor shall not pollute storm drainage, streams, lakes, or reservoirs with fuels, oils, bitumens, calcium chloride, acids,

construction wastes or other harmful materials or pollutants. It is the responsibility of the General Contractor to determine and comply with all applicable federal, state, regional, municipal, and other regulations.

B. Spillage: The General Contractor shall take special measures to prevent chemicals, fuels, oils, greases, bituminous materials, waste washings, herbicides, cement, and surface drainage from entering public waters. In the event of a spill, the contractor must make all required notifications to federal, state or local authorities and will notify the Contracting Officer immediately.

C. Washing and Curing Water: Water used in aggregate processing, concrete curing, foundation, and concrete lift clean-up and other waste water shall not be allowed to enter the storm drainage system.

4.3 PROTECTION OF LAND RESOURCES

A. General: It is intended that the land resources within the project boundaries and outside the limits of permanent work performed under this contract be preserved in their present condition or be restored to a condition after completion of construction that will appear to the natural and not detract from the appearance of the project. The General Contractor shall limit his construction activities to areas defined by the Drawings or Specifications.

B. Prevention of Landscape Defacement: Except in areas marked on the plans to be cleared, the General Contractor shall not deface, remove, cut, injure or destroy trees or shrubs without specific written authority. Trees designated to be saved shall be protected from either excavation or filling within the root zone. No ropes, cables, or guys shall be fastened or attached to any existing trees for anchorage unless specifically authorized by the Contracting Officer. The General Contractor shall in any event be responsible for any damage resulting from such use.

C. Restoration of Landscape Damage: Any trees or other landscape features scarred or damaged by the General Contractor's equipment or operations shall be restored as nearly as possible to the original condition at the General Contractor's expense. The Contracting Officer will decide what method of restoration shall be used, and whether damaged trees shall be treated and healed or removed and disposed of under requirements for clearing and grubbing (Section 31 10 00). All scars made on trees not designated on the plans to be removed by equipment construction operations, or by the removal of limbs larger than 1-inch in diameter shall be coated immediately with an approved tree wound dressing. All trimming or pruning shall be performed in an approved manner by experienced landscape personnel. Tree trimming with axes shall not be permitted. Trees that are to remain, either within or outside established clearing limits, that are subsequently damaged by the General Contractor and are beyond saving in the opinion of the Contracting Officer, shall be immediately removed and replaced with a nursery-grown tree of the same species.

4.4 CONTROL OF AIR EMISSIONS.

Contractor's actions shall conform to all federal, state, and local requirements for the control of air emissions during work under this contract. Trucks leaving the site will be brushed or washed to remove all practicable amounts of dust or other material that may become airborne. Contractor will ensure that all internal construction vehicles and equipment used will have the lowest practicable emissions characteristics and be maintained in optimum operating condition for the reduction of air emissions. Where use

of electric motors instead of internal combustion engines is feasible, electric motors will be used during construction.

PART 5 – POLLUTION PREVENTION AND WASTE DISPOSAL

5.1 POLLUTION PREVENTION

The contractor should use prior planning to find those materials that will minimize the creation of waste in general and hazardous waste in particular. Recycling should be considered and implemented at every practicable stage of the project.

5.2 WASTE DISPOSAL

A. Pollution Prevention: The contractor should use prior planning to find those materials and work practices that will minimize the creation of waste in general and hazardous waste in particular.

B. Hazardous Waste Generation, Handling, and Disposal. Work done under this contract is to be performed on a government facility. According to rules and procedures of the United States Environmental Protection Agency, the federal facility is required to have a generator identification number under the Resource Conservation and Recovery Act (RCRA) and to be responsible for wastes (as defined under RCRA) produced, managed, stored, disposed on, or transported from the facility. Accordingly, Contractor will, to the greatest extent practicable, use materials, processes, and techniques that will avoid the creation of hazardous waste. Contractor shall prepare and follow a written waste management and disposal plan for all hazardous wastes generated on the site. Prior to generation of any hazardous wastes, contractor will coordinate planned activities regarding hazardous materials and hazardous waste with the Contracting Officer. Contractor shall submit a written waste management plan, through the contracting officer, to installation environmental office. Contractor shall follow this plan once it has been approved by the contracting officer. Under no circumstances will contractor bring onto the site hazardous waste that has been generated elsewhere. All hazardous waste will be properly disposed of by the Contractor in accordance with all federal, state, and local requirements.

C. Disposal of Non-RCRA Wastes.
All non-hazardous wastes generated on the site as a result of this contract must be disposed of properly, in accordance with all federal, state and local requirements. Materials will be recycled whenever practicable. Prior to creation of such wastes, the contractor shall submit to the installation environmental management function, through the Contracting Officer, a plan for disposal of wastes. Such plan shall include the types of waste to be created, how they shall be stored, managed and disposed. Contractor shall follow this plan once it has been approved by the installation and contracting officer. Such wastes will not be created until approved by the Contracting Officer.

D. Construction Debris.

1. Debris from demolition of existing structures will ordinarily be removed to a location on the installation, as designated by the installation authorities.
2. If a location on the installation is not available, other sections in this contract may require the contractor to remove clean construction debris from the site to a location of the contractor's choosing off the installation. (Site soil or other site media are not covered by this paragraph.) Debris will be recycled or disposed of in accordance with all applicable federal, state and local rules. Such debris must be free of all contamination, including but not limited to, lead paint, asbestos, and insecticides. Prior to removal of any construction debris, that debris must be certified by the installation to be free of contamination and of no value to the

United States, and this certification must be provided to the contracting officer. To expedite work, this may be accomplished by a telecopier or other suitable electronic means, however, the original certification form must be provided to the contracting officer. No form is prescribed for this certification so long as all necessary information is provided and the document is signed by an authorized installation representative. However, an example is provided at **page 7** and this form may be used. All construction debris removed from the installation must be covered by a certification. The contractor must arrange with the installation POC whether all debris will be covered by one certification or if several certifications will be required.

E. Consolidated Waste Disposal Plans: Contractor may, at contractor's option, submit for approval as specified above one consolidated plan for handling hazardous and non-hazardous wastes.

F. Earthwork and Removal of Potentially Contaminated Media:

1. Unless otherwise specified elsewhere in this contract, the site has been inspected and is, consistent with best professional judgment, free of environmental contamination or pollution. However, work under this contract will be performed on a military installation, where the history of prior military and industrial activities is not necessarily completely known. The following provisions prohibit the removal from the installation of soil or other materials found on site and are included, in an abundance of caution, for the protection of EXCHANGE, the installation, and the contractor.
2. Notwithstanding any other clause in this contract, including but not limited to all standard site work general provisions (02010-02900); no media by-product resulting from site preparation, construction or excavation shall be moved off the post, base, or installation where the construction is occurring. If the construction is off the post, base or installation, no media by-product shall be moved off the construction site.
3. The contractor shall: (1) leave the media in place at the site, subject to appropriate erosion control; or (2) haul the media to and place it at a location on the installation that has been designated either in this contract or in writing by the contracting officer; and (3) if unforeseen difficulties arise, such as excessive quantity of media is generated, the contractor shall advise the contracting officer and shall not remove media from the site without written authorization from the contracting officer.

DEFINITIONS

Media - Any soil, water, or air, moved, disturbed or released from a site.

The terms hazardous, waste, pollutant, contaminate, substance have the same meanings and usage here as they commonly do in CERCLA, RCRA, FWPCA, CAA, TSCA, and SDWA respectively."

INSTALLATION CERTIFICATION FOR CLEAN CONSTRUCTION DEBRIS TO BE REMOVED FROM EXCHANGE PROJECT SITE

As representative of _____ (insert name of installation), I am authorized to certify, and hereby do so certify, that the construction debris to be removed from the EXCHANGE project site at

_____

(Describe project and list address, for example Main Exchange Project, 111 Road A, X installation) has been inspected and is of no value to the United States and is free of all contamination, including but not limited to: lead paint, asbestos, PCBs, and pesticides.

CERTIFICATION:

Signed: _____ Date: _____

Printed Name, Rank or Grade, and Duty Title: _____

ORIGINAL OF THIS FORM MUST BE PROVIDED TO CONTRACTING OFFICER

PART 6 – UNEXPECTED SITE CONDITIONS

6.1 CONTAMINATED SOIL OR GROUNDWATER.
Unless otherwise specified elsewhere in this contract, site has been inspected and is, consistent with best professional judgment, free of environmental contamination or pollution. However, unexpected conditions can always arise. Contractor or subcontractor personnel may encounter soil or groundwater that is suspected to be contaminated, either because of odors, colors, free liquids, unexpected construction debris, or other suspicious conditions. Should this occur, contractor will immediately notify the Contracting Officer and the installation environmental office and take necessary initial measures to protect workers, the site, and other personnel.

6.2 UNEXPECTED ARTIFACTS OR RELICS
Should contractor employees in the course of site preparation or other work on this contract find unexpected historic or archeological remains, such as bones, arrow points, pottery remnants, foundations, or other evidence of previous uses of the site, contractor will cease further site-disturbing activity and immediately notify the Contracting Officer and installation environmental office.

END OF SECTION

PART 1 – GENERAL

1.1 REQUIREMENTS INCLUDED

A. The Contractor shall establish a quality control system to perform sufficient inspection and tests of all items of work, including that of his subcontractor(s) to insure conformation to applicable specifications and drawings with respect to the materials, workmanship, construction, finish and functional performance. Tests of materials and/or special inspections will be made, when required by these specifications, by applicable law, rules and regulations in accordance with respective Sections of the specifications. Where required, the Contractor shall employ and pay for the services of an independent agency to perform specific services and testing. Examples of such services are tests of fill materials, concrete materials, concrete mix design, asphalt concrete laboratory testing of materials proposed and calculations for asphalt concrete mixtures, etc.

B. The Contractor shall arrange and pay for all services and testing which are not specifically indicated to be provided by EXCHANGE.

C. If a material is not required to be field tested, the Contracting Officer may require the supplier to furnish with each delivery of such material, a certificate bearing legal signature of said supplier, stating that such material complies with specification requirements.

D. If any work or material requiring tests and inspections is executed, enclosed or covered before tests are made, or test reports distributed, then the Contractor shall, at his own expense, uncover such part of this work or material and keep it uncovered until such tests and inspections have been made and test reports distributed. If work or material so tested and inspected shall not be found to conform to the requirements of the Construction Documents, it shall be deemed and construed to be defective materials or faulty workmanship and the Contractor, at his own expense, shall replace work or material removed and repair all work disturbed thereby.

1.2 EXCHANGE RESPONSIBILITY

A. EXCHANGE will employ and pay for the services of an Independent Testing Agency to perform specified quality control testing during construction indicated in the following sections:
   1. Testing Adjusting and Balancing for HVAC: Section 23 05 93.

1.3 CONTRACTORS RESPONSIBILITY

A. Cooperate with the Contracting Officer and laboratory personnel and provide access to work an to manufacturer’s operations. Provide samples of materials to be tested, in required quantities. Furnish casual labor and facilities required to provide access to work to be tested; to obtain and handle samples at the site; to facilitate inspections and tests; and for laboratory’s exclusive use for storage and curing of test samples. Notify laboratory sufficiently in advance of operations to allow for its assignment of personnel and scheduling of tests.

B. The use of EXCHANGE’ or Contractor’s independent testing services shall in no way relieve the Contractor of his responsibility to furnish materials and construction in full compliance with the plans and specifications.

C. The Contractor shall coordinate with both EXCHANGE and his own testing laboratories so that the work will be inspected and tested according to contract requirements. This coordinately includes notification of when tests should be taken, easy access to the work, and general cooperation in every way to insure proper control of the work.

D. Upon completion of the project the Contractor shall submit a signed certificate stating tests for this work were made in accordance with provisions of these specifications and, further, all such tests and reports made were reported as required. This certificate shall list all tests and dates when work was completed.

1.4 AGENCY RESPONSIBILITIES

A. Test samples of mixes submitted by Contractor.

B. Provide qualified personnel at site. Cooperate with Contracting Officer and Contractor in performance of services.

C. Perform specified sampling and testing of Products in accordance with specified standards.

D. Ascertain compliance of materials and mixes with requirements of Contract Documents.

E. Promptly notify Contracting Officer, and Contractor of observed irregularities or non-conformance of Work or Products.

F. Perform additional tests required by Contracting Officer.

G. Provide Contracting Officer with three (3) copies of each written test report, and the Contractor each with one copy of each test report. Each report shall include:
1. Date issued.
2. Project title and number.
3. Testing Laboratory name, address and telephone number.
4. Name and signature of laboratory inspector.
5. Date and time of sampling or inspection.
6. Record of temperature.
7. Date of test.
8. Identification of product and specification section.
9. Location of sample or test in the project.
10. Type of inspection or test.
11. Results of tests and compliance with Contract Documents.
12. Interpretation of test results, when requested by the Contracting Officer.

H. Upon completion of the project, the testing agency shall prepare a certificate, certified in the presence of a Notary Public, stating testing for this work was conducted in accordance with the provisions of these specifications, and further, all tests and reports were provided for this job were reported as required.

1.5 LIMITS ON TESTING AUTHORITY

A. Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.

B. Agency or laboratory may not approve or accept any portion of the Work.

C. Agency or laboratory may not assume any duties of Contractor.

D. Agency or laboratory has no authority to stop the Work.

1.6 RELATED REQUIREMENTS

A. Required Submittals Section 01 33 00.

B. Related requirements and tests specified in Division 2 through 33.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

B. Related Requirements:
1. Section 01 10 00 "Summary" for work restrictions and limitations on utility interruptions.
2. NOT USED

1.3 USE CHARGES

A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, occupants of Project, testing agencies, and authorities having jurisdiction

B. Sewer Service: Pay sewer-service use charges for sewer usage by all entities for construction operations.

C. Water Service: Pay water-service use charges for water used by all entities for construction operations.

D. Electric Power Service: Pay electric-power-service use charges for electricity used by all entities for construction operations.

E. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

F. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.4 INFORMATIONAL SUBMITTALS

A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

B. Erosion- and Sedimentation-Control Plan: Show compliance with requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.

C. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.

D. Moisture-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage. Describe delivery, handling, and storage provisions for materials subject to water absorption or water damage.
1. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water-damaged Work.
2. Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and terrazzo grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.

E. Dust- and HVAC-Control Plan: Submit coordination drawing and narrative that indicates the dust- and HVAC-control measures proposed for use, proposed locations, and proposed time frame for their operation. Identify further options if proposed measures are later determined to be inadequate. Include the following:
1. Locations of dust-control partitions at each phase of work.
2. HVAC system isolation schematic drawing.
3. Location of proposed air-filtration system discharge.
4. Waste handling procedures.
5. Other dust-control measures.

1.5 QUALITY ASSURANCE

A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

C. Accessible Temporary Egress: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines.

1.6 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCT

2.1 MATERIALS

A. Chain-Link Fencing: Minimum 2-inch , 0.148-inch-thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch-OD line posts and 2-7/8-inch-OD corner and pull posts, with 1-5/8-inch-OD top rails.

B. Portable Chain-Link Fencing: Minimum 2-inch, 0.148-inch-thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch-OD line posts and 2-7/8-inch- OD corner and pull posts, with 1-5/8-inch-OD top and bottom rails. Provide galvanized-steel bases for supporting posts.

C. Wood Enclosure Fence: Plywood, **6 feet** high, framed with four 2-by-4-inch rails, with preservative-treated wood posts spaced not more than 8 feet apart.

D. Polyethylene Sheet: Reinforced, fire-resistive sheet, 10-miLminimum thickness, with flame-spread rating of 15 or less per ASTM E 84 and passing NFPA 701 Test Method 2.

E. Dust-Control Adhesive-Surface Walk-off Mats: Provide mats minimum 36 by 60 inches.

F. Insulation: Un-faced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.
   1. Store combustible materials apart from building.

2.2 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
   1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
   2. Heating Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
   3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return-air grille in system and remove at end of construction and clean HVAC system as required in Section 01 77 00 "Closeout Procedures".

C. Air-Filtration Units: Primary and secondary HEPA-filter-equipped portable units with four-stage filtration. Provide single switch for emergency shutoff. Configure to run continuously.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
   1. Locate facilities to limit site disturbance as specified in Section 01 10 00 "Summary."

B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

A. General: Install temporary service or connect to existing service.
   1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.

B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
   1. Connect temporary sewers as directed by authorities having jurisdiction.

C. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.

D. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.

E. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
   1. Toilets: Use of Owner's existing toilet facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.

F. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

G. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.
   1. Prior to commencing work, isolate the HVAC system in area where work is to be performed according to coordination drawings.
      a. Disconnect supply and return ductwork in work area from HVAC systems servicing occupied areas.
      b. Maintain negative air pressure within work area using HEPA-equipped air-filtration units, starting with commencement of temporary partition construction, and continuing until removal of temporary partitions is complete.
   2. Maintain dust partitions during the Work. Use vacuum collection attachments on dust-producing equipment. Isolate limited work within occupied areas using portable dust-containment devices.
   3. Perform daily construction cleanup and final cleanup using approved, HEPA-filter-equipped vacuum equipment.

H. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.
   1. Provide dehumidification systems when required to reduce substrate moisture levels to level required to allow installation or application of finishes.

I. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.

J. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
   1. Install electric power service overhead or underground unless otherwise indicated.
   2. Connect temporary service to Owner's existing power source, as directed by Owner.

K. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
2. Install lighting for Project identification sign.

L. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install one telephone line(s) for each field office.
1. Provide additional telephone lines for the following:
   a. Provide a dedicated telephone line for each facsimile machine in each field office.
2. Telephone numbers.
   a. Police and fire departments.
   b. Ambulance service.
   c. Contractor's home office.
   d. Contractor's emergency after-hours telephone number.
   e. Architect's office.
   f. Engineers' offices.
   g. Owner's office.
   h. Principal subcontractors' field and home offices.
3. Provide superintendent with cellular telephone or portable two-way radio for use when away from field office.

3.3 SUPPORT FACILITIES INSTALLATION

A. General: Comply with the following:
1. Provide construction for temporary offices, shops, and sheds located within construction area or within 30 feet of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241.
2. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

B. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations. Locate temporary roads and paved areas as indicated on Drawings.
1. Provide dust-control treatment that is nonpolluting and non-tracking. Reapply treatment as required to minimize dust.

C. Temporary Use of Permanent Roads and Paved Areas: Locate temporary roads and paved areas in same location as permanent roads and paved areas. Construct and maintain temporary roads and paved areas adequate for construction operations. Extend temporary roads and paved areas, within construction limits indicated, as necessary for construction operations.
1. Coordinate elevations of temporary roads and paved areas with permanent roads and paved areas.
2. Recondition base after temporary use, including removing contaminated material, regrading, proof rolling, compacting, and testing.

D. Traffic Controls: Comply with requirements of authorities having jurisdiction.
1. Protect existing site improvements to remain including curbs, pavement, and utilities.
2. Maintain access for fire-fighting equipment and access to fire hydrants.

E. Parking: Provide temporary or use designated areas of Owner's existing parking areas, if available and approved by the Exchange for construction personnel.

F. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
   1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
   2. Remove snow and ice as required to minimize accumulations.

G. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.
   1. Identification Signs: Provide Project identification signs as indicated on Drawings.
   2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.
      a. Provide temporary, directional signs for construction personnel and visitors.
   3. Maintain and touchup signs so they are legible at all times.

H. Waste Disposal Facilities: Comply with requirements specified in Section 01 74 19 "Construction Waste Management and Disposal."

I. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 01 13 10 "Waste Disposal."

J. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
   1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

K. Temporary Elevator Use: Use of elevators is not permitted.

L. Existing Elevator Use: Use of Owner's existing elevators will be permitted, provided elevators are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore elevators to condition existing before initial use, including replacing worn cables, guide shoes, and similar items of limited life.
   1. Do not load elevators beyond their rated weight capacity.
   2. Provide protective coverings, barriers, devices, signs, or other procedures to protect elevator car and entrance doors and frame. If, despite such protection, elevators become damaged, engage elevator Installer to restore damaged work so no evidence remains of correction work. Return items that cannot be refinished in field to the shop, make required repairs and refinish entire unit, or provide new units as required.

M. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate.

N. Existing Stair Usage: Use of Owner's existing stairs will be permitted, provided stairs are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore stairs to condition existing before initial use.
   1. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If stairs become damaged, restore damaged areas so no evidence remains of correction work.

O. Temporary Use of Permanent Stairs: Use of new stairs for construction traffic will be permitted, provided stairs are protected and finishes restored to new condition at time of Substantial Completion.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.

B. Environmental Protection: Provide protection, operate temporary facilities and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
   1. Comply with work restrictions specified in Section 01 10 00 "Summary."

C. Temporary Erosion and Sedimentation Control: Comply with requirements of 2003 EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent and requirements specified in Section 31 10 00 "Site Clearing."

D. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings requirements of 2003 EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.
   1. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree- or plant- protection zones.
   2. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
   3. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from Project site during the course of Project.
   4. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

E. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.

F. Tree and Plant Protection: Comply with requirements specified

G. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

H. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using environmentally safe materials.

I. Site Enclosure Fence: Prior to commencing earthwork, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
   1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations or as indicated on Drawings.
   2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to Owner.

J. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day.

K. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

L. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.

M. Covered Walkway: Erect protective, covered walkway for passage of individuals through or adjacent to Project site. Coordinate with entrance gates, other facilities, and obstructions. Comply with regulations of authorities having jurisdiction and requirements indicated on Drawings.
1. Construct covered walkways using scaffold or shoring framing.
2. Provide overhead decking, protective enclosure walls, handrails, barricades, warning signs, exit signs, lights, safe and well-drained walkways, and similar provisions for protection and safe passage.
3. Paint and maintain appearance of walkway for duration of the Work.

N. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
1. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.

O. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner and tenants from fumes and noise.
1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant-treated plywood on construction operations side.
2. Construct dustproof partitions with two layers of 6-mil polyethylene sheet on each side. Cover floor with two layers of 6-mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant-treated plywood.
    a. Construct vestibule and airlock at each entrance through temporary partition with not less than 48 inches between doors. Maintain water-dampened foot mats in vestibule.
3. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
4. Insulate partitions to control noise transmission to occupied areas.
5. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required.
6. Protect air-handling equipment.
7. Provide walk-off mats at each entrance through temporary partition.

P. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.
1. Prohibit smoking in construction areas.
2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.

3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.5 MOISTURE AND MOLD CONTROL

A. Contractor's Moisture-Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.

B. Exposed Construction Phase: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
1. Protect porous materials from water damage.
2. Protect stored and installed material from flowing or standing water.
3. Keep porous and organic materials from coming into prolonged contact with concrete.
4. Remove standing water from decks.
5. Keep deck openings covered or dammed.

C. Partially Enclosed Construction Phase: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
2. Keep interior spaces reasonably clean and protected from water damage.
3. Periodically collect and remove waste containing cellulose or other organic matter.
4. Discard or replace water-damaged material.
5. Do not install material that is wet.
6. Discard, replace, or clean stored or installed material that begins to grow mold.
7. Perform work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.

D. Controlled Construction Phase of Construction: After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
1. Control moisture and humidity inside building by maintaining effective dry-in conditions.
2. Use permanent HVAC system to control humidity.
3. Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits.
   a. Hygroscopic materials that may support mold growth, including wood and gypsum-based products, that become wet during the course of construction and remain wet for 48 hours are considered defective.
b. Measure moisture content of materials that have been exposed to moisture during construction operations or after installation. Record readings beginning at time of exposure and continuing daily for 48 hours. Identify materials containing moisture levels higher than allowed. Report findings in writing to Architect.
c. Remove materials that cannot be completely restored to their manufactured moisture level within 48 hours.

3.6 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal.
   1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

C. Operate Project-identification-sign lighting daily from dusk until 12:00 midnight.

D. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

E. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
   1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
   2. Remove temporary roads and paved areas not intended for or acceptable for integration into permanent construction. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.
   3. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 01 77 00 "Closeout Procedures."

END OF SECTION

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Temporary Utilities: Electricity, lighting, heat, ventilation, telephone service, water and sanitary facilities.

1.2 RELATED SECTIONS

A. Section 01 59 00 – Field Offices and Sheds.

B. Section 01 77 00 – Project Closeout.

1.3 TEMPORARY ELECTRIC

A. The contractor shall furnish and install a complete, temporary electric service for construction needs throughout the construction period.
   1. The temporary electric service shall originate from within the existing building. The electrical contractor shall be responsible for furnishing and installing all fused cutouts, conductors, disconnects, and miscellaneous hardware.
   2. The temporary electric service shall be a 120/208 volt, 3 phase, 4 wire, 200 amp service for construction operations.
   3. Provide power centers, located such that all points of the construction area can be reached with extension cords no more than 100 feet long. Provide 20 amp, 120 and 208 volt grounded outlets, for use by all trades, each protected by a circuit breaker.
   4. The Contractor will not be charged for a reasonable amount of electricity consumed. The contractor shall maintain strict conservation measures to prevent wasteful use of electricity.
   5. Use of electric resistance heating devices is not permitted.
   6. Unusually heavy electric loads, such as electric welding equipment, and other equipment with special power requirements shall not be connected to the existing system.

B. Provide and maintain incandescent lighting for construction operations to achieve a minimum lighting level of five (5) foot candles.
   1. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.
   2. Provide guarded lighting sockets and lamps. Use 100 watt lamps, minimum. Maintain 110 volts in lighting system.
   3. Maintain lighting and provide routine repairs.
   4. Permanent building lighting may be utilized during final stages of construction.

C. Field Offices and Sheds: Provide electric service to the field office(s) and shed(s) to meet the requirements listed in Section 01 59 00 - Field Offices and Sheds.

D. Standards: the temporary electric service shall comply with the National Electric Code. Extension cords used by any and all trades, shall be UL approved. No temporary power is to come from the building.

1.4 TEMPORARY HEATING

A. General: The Contractor shall provide, install and maintain temporary heat in the construction areas throughout the construction period to facilitate the progress of work, protect work against cold, dampness, condensation, and to provide suitable ambient temperatures and humidity levels for proper installation and curing of materials.

B. Requirements: The Contractor shall provide and maintain temporary heat meeting the following requirements:
   1. As required under each individual specification section for proper placement, setting, and curling of materials.
   2. Maintain a minimum temperature of 40 degrees F. For twenty four (24) hours a day during placing, setting, and curing of cementations materials.
   3. Maintain a minimum temperature of 50 degrees F., or as required under each individual specification section, for twenty four (24) hours a day, seven (7) days prior to, and during installation of all finish materials, including but not limited to: resilient flooring and base, carpet, paint and wall covering, tile work, acoustic ceilings, and all finish woodwork.
   4. Maintain a minimum temperature of 65 degrees F. For twenty four (24) hours a day from the time of placement until beneficial occupancy, for installation all finish materials, including but not limited to: resilient flooring and base, carpet, paint and wall covering, tile work, acoustic ceilings and all finish woodwork.

C. The Contractor may use the existing permanent heating system for temporary heat during construction, supplemented by temporary equipment if needed, under the following conditions:
   1. Use of the existing permanent equipment does not spread hazardous or objectionable dust, fumes, mists, vapors, gases or odors into areas occupied by EXCHANGE or other Personnel or customers.
   2. Use of the existing permanent equipment does not damage or cause excessive wear to the equipment.
   3. The Contractor shall provide and pay for operation, maintenance, and replacement of filters and worn or damaged parts on the equipment used.

D. The Contractor will not be charged for a reasonable amount of fuel or energy used by the existing permanent equipment. The Contractor shall maintain strict conservation measures to prevent waste of fuel or energy.

E. The Contractor shall pay for the fuel consumed by temporary heating devices.

F. Temporary equipment using electric resistance heating is not permitted.

1.6 TEMPORARY COOLING

A. The Contractor may utilize the existing cooling system, extend and supplement with temporary cooling devices as needed to maintain specified conditions for construction operations.

B. The Contractor will not be charged for a reasonable amount of fuel or energy consumed by the existing system. The Contractor shall maintain strict conservation measures to prevent waste of fuel or energy.

1.7 TEMPORARY VENTILATION

A. The Contractor shall provide adequate ventilation to:
   1. Aid in curing installed materials.
   2. Dispersal of humidity.
   3. Ventilation of temporary sanitary facilities.
   4. Prevent hazardous accumulations of dust, fumes, mists, vapors, or gases in areas occupied during construction.

B. The Contractor may use the existing, permanent ventilating equipment, supplemented by temporary equipment, if required, under the following conditions:
   1. Use of the existing, permanent equipment does not spread hazardous or objectionable dust, fumes, mists, vapors, gases, or odors into areas of the building occupied by EXCHANGE personnel or customers.
   2. Use of the existing, permanent equipment does not cause damage to equipment.
   3. The Contractor shall provide and pay for operation, maintenance, and replacement of filters and worn or damaged parts on the equipment used.

1.9 TEMPORARY WATER SERVICE

A. Connect to existing water source for construction operations at time of project mobilization.

B. The Contractor will not be charged for a reasonable amount of water consumed for construction purposes. The Contractor shall maintain strict conservation measures to prevent waste of water.

C. Extend branch piping with outlets located so water is available by hoses with threaded connections. Provide temporary pipe insulation to prevent freezing.

1.10 TEMPORARY SANITARY FACILITIES

A. Provide and maintain required facilities and enclosures. Existing facility use is not permitted. Provide at time of project mobilization.

B. Furnish, install, and maintain adequate portable chemical toilets for use by construction personnel.

C. Provide regular maintenance service to maintain clean and sanitary conditions.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
   1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.

B. Temporary Barriers: Provide floor-to-ceiling dustproof barriers to limit dust and dirt migration and to separate areas occupied by EXCHANGE and tenants from fumes and noise.
   1. Dust Barrier: Where dust barriers are required, provide a single layer of 6 mil fire resistant clear polyethylene fiberglass reinforced sheet as manufactured by Griffolyn, or equal. Tape all joints and provide fire resistive treated 2 x 4 wood or metal stud top and bottom runners and verticals 4 foot o.c. with polyethylene sheet wrapped and taped to the runners.
   2. Opaque Dust Barrier: Where dust barriers are required and where indicated for long duration separation of construction operations from EXCHANGE and tenant spaces, provide braced metal stud framing covered on construction side with 6 mil fire resistant clear polyethylene fiberglass reinforced sheet as manufactured by Griffolyn, or equal. Tape all joints and perimeter. Provide ½ inch gypsum board, fire taped on the EXCHANGE/tenant side from floor to ceiling. Provide R-11 batt insulation for thermal

separation from unconditioned construction areas and noise reduction adjacent to sales, food service or office areas.

3. Secure Weather-tight Barrier: Where a secure weather-tight barrier is required and where a temporary exit enclosure through surrounding and overhead construction is indicated, provide braced metal stud framing covered on construction side with ½ inch plywood. Provide ½ inch gypsum board, fire-taped on the EXCHANGE/public side on entire enclosure. Provide R-11 batt insulation for thermal separation from the exterior, unconditioned construction areas and noise reduction adjacent to sales, food service or office areas. Panelize framing for ease of removal and relocation.
   a. Construct vestibule at each access through the barrier with 1-3/4 inch solid core wood doors with ¾" wood frames spaced not less than 6 feet apart. Doors shall be hinged with latches and provided with double high security padlocks in accordance with EXCHANGE security. Maintain water dampened or adhesive surfaced foot mats in vestibules.
   b. At temporary exits, provide individual 1-3/4 inch solid core wood doors with ¾ inch wood frames at each end of the enclosure swinging in the direction of exit. Provide hinges, exit devices and closers. Exit devices to always be operable in the direction of exiting and locked on the opposite side.

C. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
   1. Prohibit smoking in construction areas.
   2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
   3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

END OF SECTION

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Temporary field offices and sheds.

B. Maintenance and cleaning.

C. Removal.

1.2 RELATED SECTIONS

A. Section 01 10 00 – Summary.

B. Section 01 50 10 – Temporary Utilities.

PART 2 – PRODUCTS

2.1 MATERIALS, EQUIPMENT, FURNISHINGS

A. Materials, Equipment, Furnishings: Serviceable, new or used, adequate for required purpose.

2.2 CONSTRUCTION

A. Portable or mobile buildings, or buildings constructed with floors raised above ground, securely fixed to foundations, with steps and landings at entrance doors.

B. Construction: Structurally sound, secure, weather tight enclosures for office and storage spaces. Maintain during progress of Work; remove at completion of Work.

C. Temperature Transmission Resistance of Floors, Walls, and Ceilings: Compatible with occupancy and storage requirements.

D. Exterior Materials: Weather resistant, finished in one color acceptable to Contracting Officer.

E. Interior Materials in Offices: Sheet type materials for walls and ceilings, pre-finished or painted; resilient floors and bases.

F. Lighting for Offices: 50 ft-C (538 lx) at desk top height, exterior lighting at entrance doors.

G. Fire Extinguishers: One 10# standard dry chemical (ABC) type fire extinguisher at each office and each storage area.

H. Interior Materials in Storage Sheds: As required to provide specified conditions for storage of products.

2.3 ENVIRONMENTAL CONTROL

A. Heating, Cooling, and Ventilating for Offices: Automatic equipment to maintain 68 degrees F (20 degrees C) heating and 76 degrees F (23 degrees C) cooling.

B. Storage Spaces: Heating and ventilation as needed to maintain Products in accordance with Contract Documents; adequate lighting for maintenance and inspection of Products.

2.4 STORAGE AREAS AND SHEDS

A. Size to storage requirements for products of individual Sections, allowing for access and orderly provision for maintenance and for inspection of products.

PART 3 – EXECUTION

3.1 PREPARATION

A. Fill and grade sites for temporary structures to provide drainage away from buildings.

3.2 INSTALLATION

A. Install office spaces ready for occupancy 15 days after date of Notice to Proceed.

B. Employee Residential Occupancy: Not permitted on Installation property.

3.3 MAINTENANCE AND CLEANING

A. Weekly cleaning services for offices; periodic cleaning and maintenance for office and storage areas.

B. Maintain approach walks free of mud, water, and snow.

3.4 REMOVAL

A. At completion of Work remove buildings, foundations, utility services, and debris. Restore areas.

END OF SECTION

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Starting Systems.

B. Demonstration and instructions.

C. Testing, adjusting and balancing.

1.2 RELATED SECTIONS

A. Section 01 40 00 - Quality Requirements: Manufacturers field reports.

B. Section 01 77 00 – Closeout Procedures: System operation and maintenance data and extra materials.

C. Section 23 05 93 - Testing and Balancing: System Commissioning.

1.3 STARTING SYSTEMS

A. Coordinate schedule for start-up of various equipment and systems.

B. Notify Contracting Officer seven (7) working days prior to start-up of each item.

C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions which may cause damage.

D. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.

E. Verify that wiring and support components for equipment are complete and tested.

F. Execute start-up under supervision of applicable manufacturer's representative and/or Contractors' personnel in accordance with manufacturers' instructions.

G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.

H. Submit a written report in accordance with Section 01 33 00 that equipment or system has been properly installed and is functioning correctly.

1.4 DEMONSTRATION AND INSTRUCTIONS

A. Demonstrate operation and maintenance of products to EXCHANGE and Facility personnel two weeks prior to date of final inspection.

B. Demonstrate project equipment by a qualified representative who is knowledgeable about the project.

C. For equipment of systems requiring seasonal operation, perform demonstration for other season within six months.

D. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with AFFES/Installation personnel in detail to explain all aspects of operation and maintenance.

E. Demonstrate start-up, operation, control adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed time at designated location.

F. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

G. The amount of time required for instruction on each item of equipment and system is that specified in individual sections.

1.5 TESTING, ADJUSTING AND BALANCING

A. EXCHANGE will appoint, employ, and pay for services of an independent firm to perform testing, adjusting, and balancing.

B. The independent firm will perform services specified in Section 23 05 93.

C. Reports will be submitted by the independent firm to the Contracting Officer indicating observations and results of tests and indicating compliance or non-compliance with the requirements of the Contract Documents.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SUGGESTED INSTRUCTIONS FOR PREPARING DD FORM 1354
(TRANSFER AND ACCEPTANCE OF MILITARY REAL PROPERTY)

1. The page number and the total number of pages comprising each transfer shall be shown in the space provided at the top right-hand part of the form.

2. When two or more pages are required, Items 27 through 29 shall be completed only on the final page. In such cases, the bottom portion of the form shall be torn off of all pages, except the final page, at the line above Items 27 and 28.

ITEM 1 - Self – explanatory

ITEM 2 - Primarily for Navy use, the district number will be assigned by area or district public works office in accordance with coding pattern set forth in NAVEXOS P-1570, par. 3805-7, Item 6. For Army use, enter appropriate Army Engineer district where construction is performed and/or from which the transfer is made. For transfer of construction to the Air Force, enter appropriate Army Engineer district or the district number assigned by area, or Naval district public works office from which the construction transfer is made.

ITEM 4 - For Navy use only, see NAVEXOS P-1570, par. 3805-7, Item 5.

ITEM 5 - Enter date of preparation.

ITEM 6 – For Army use, enter appropriate Army job and directive number. For Air Force use, enter base job number, as appropriate, when form is used for transfer within the Air Force.

ITEM 7 – For Army use, or for transfer of construction to the Air Force, enter separate series of numbers, by fiscal year, for each installation to which real property is transferred; e.g., for FY 1962 show 62-1, 62-2, etc. For Navy use, this serial number will be assigned by respective area or district public works office and will represent the numerical sequence of submissions by respective contract number.

ITEM 8 – Insert appropriate contract

number. ITEM 9 – Self-explanatory.

ITEM 10 – 12: Instructions for Items 2,3 and 4 apply. (not applicable for Air For Use.)

ITEM 13 – For Navy use only. Insert the accounting number assigned to or used by the activity named in accordance with Item 9. See NAVEXOS P-1570, par. 3805-7, Item 10.

ITEM 14 – For Navy use only. Insert the accounting number assigned to the activity performing the official property accounting for the activity shown in Item 9. See NAVCompt Manual, Vol. 2, Chapter 5, for accounting numbers.

ITEM 15 – Insert an “X” in the appropriate box of block (A) to indicate whether the transfer involves new construction, existing facilities or capital improvements to existing facilities. If the “other” category is used, explain in remarks, Item 31. Additionally, insert an “X” in the appropriate box of block (B) to indicate whether transfer is being made at time of beneficial occupancy, physical completion or financial completion (with respect to new construction). If the “other” category is used, explain in remarks, Item 31.

ITEM 16 – Enter the code number assigned to identify the project with the appropriate construction authorization

law. ITEM 17 – Each single entry will be identified as an item number and this item number will be shown in this

column.

ITEM 18 – 19: Category Code and Description. Enter the category code and description (see DoD Instruction 4165.3 (reference) or attachment 1 to enclosure 1 to DoD Instruction 4165.14 (reference (b)) that appropriately describes the primary use for which the facility (buildings, structures, utilities) is designed. Not more than one category code (Item 18) will be listed as a line item (Item 17).

ITEM 20 – Number of Units in terms of buildings or other structures.

ITEM 21 – Type – enter type of construction; i.e., “P” for permanent, “S” for semipermanent or “T” for temporary.

ITEM 22 – Enter the unit of measure abbreviation, such as “SF” for square feet, etc. (see attachment 2 to enclosure 1 to DoD Instruction 4165.14 (reference (b)).

ITEM 23 – Enter total quantity as described In Item 22.

ITEM 24 –Indicate by item number, category code, and description the appropriate cost. In those instances where a document is prepared which lists items carrying costs which, in some cases, may be final and in others may be preliminary, each cost figure by line item will carry an alphabetical suffix of (P) for preliminary or (F) for final.

ITEM 25 – 31: Self-explanatory.

SEE ATTACHED FORM

ITEMS FOR DD FORM 1354

CATEGORY CODES: VERIFY FOR ARMY FACILITIES AND AIR FORCE FACILITIES OF THE SAME DESCRIPTION • • • (ABBREVIATION-NOMENCLATURE)

*	DESCRIPTION:	ARMY		AIR FORCE	
	SHOPPING CENTER:	(EXCH MAIN RETL)	: 740-53	(EXCH SALES STORE)	740111
	SHOPPETTE	(EXCHANGE BRANCH)	:740-50	(EXCH BRANCH)	740382
	CLASS SIX	(CLASS VI)	:740-84	(BSE PACKAGE STORE)	740269
	CAR CARE CENTER	(EXCH SVC STA)	:740-52	(EXCH SVC STN)	740383
	BURGER KING	(POST RESTAURANT)	:740-64	(EXCH CAFE SNK BAR)	722345

CATEGORY CODE DESCRIPTION COST

1. BUILDING SQUARE FOOTAGE:

A.RETAIL AREAS:_____SF B. ADMIN/EMPLOYEE AREA_____SF
C. MPA:_____SF D. SERVICES ACTIVITIES:_____SF
E. FOOD ACTIVITIES_____SF. F. MALL/PUBLIC TOILETS:_____SF
G. MERCH. EQUIP. RM_____SF H. TOTAL BLDG:_____SF

2. BUILDING $ _____
(TOTAL CONTRACT PRICE LESS THE SUM OF THE FOLLOWING)

3. HEATING, VENTILATION & AIR CONDITIONING SYSTEM $ _____

TOTAL:_____TONS

(AR)826-11	OVER 100 TONS	(AC PL OV 110 TN)
(AF)826123	OVER 100 TONS	(A/C PLT OVET 100 TN)
(AR)826-12	26-100 TONS	(AC PL-26-100 TN)
(AF)826122	25-100 TONS	(A/C PLT 25<100 TN)
(AR)826-13	6-25 TONS	(AC PL 6-25- TN)
(AF)890121	5-25 TONS	(A/C PL 5 TO 25 TN)

4. FIRE PROTECTION SYSTEM (FIRE ALARM SYS)

AUTOMATIC SPRINKLER SYSTEM $_____
(AR)880-50 (AUTO SPNLKR SYS)
(AF)880221 (AUTO FR DTECTN SYS)
TOTAL:NUMBER OF HEADS_____
FOAM FIRE SPRINKLER SYSTEM
(AR)880-60 (AUTO SPNKLR SYS) $_____
(AF)980235 (DRY CHEM SYS)
TOTAL:NUMBER OF HEADS_____

(AR)843-11 FIRE HYDRANTS $_____
(AF)843315 (FR HYDR)

5. UNDERGROUND ELECTRICAL SYSTEM (INCLUDE. METER $_____
(AR)812-42 UNGD ELEC DISTR)
(AF) (SEC DISTR LNE UG)
(AF)890181 (UTIL LNE DUCTS)
TOTAL SERVICE TO BUILDING:_____L.F OF____IN. CONDUIT
AND_____CONDUCTOR

CATEGORY CODE	DESCRIPTION	COST

6. ELECTRICAL TRANSFORMER $_____
(AR)813-60 (TRANSFORMER)
(AF)812225 (PRIM DISTR LNE UG)
PAD MOUNTED TRANSFORMER_____KVA

7. NATURAL GAS LINE TO BUILDING (INC. METER) $_____
(AR)824-10 (GAS PIPE LIBE)
(AF)824464 (GAS MAINS)
TOTAL SERVICE TO BUILDING:_____L.F. OF_____IN. PIPE
(MATERIAL:_____)

8. UNDERGROUND TELEPHONE $_____
(AR)..... (UNDG TELEPHONE)
(AF)135583 (TEL DUCT FCLTY)
(AF)890181 (UTIL LNE DUCTS)
TOTAL SERVICE TO BUILDING:_____L.F. OF_____IN. CONDUIT

9. SANITARY SEWER SYSTEM $_____
(AR)832-10 (SANITARY SEWER)
(AF)932267 (SAN SEWAGE MAIN)
TOTAL SERVICE TO BUILDING:_____L.F. OF_____IN. PIPE
(MATERIAL:_____)

10. GREASE INTERCEPTOR $_____
(AR)833-90 (LOCAL DESCRIPTION)
CAPACITY_____GALLONS

11. STORM SEWER SYSTEM

(AR)871-10 (STORM SEWER)
(AF)871183 (STRM DRN DSPL)
TOTAL SERVICE TO BUILDING:_____L.F. OF_____IN. PIPE
(MATERIAL:_____) TOTAL NUMBER OF DROP INLETS:_____

12. DOMESTIC WATER SYSTEM $_____
(AR)842-10 (WATER PIPE LN P)
(AF)842245 (WTR DISTR MAINS)
TOTAL SERVICE TO BUILDING :_____L.F. OF_____IN. PIPE
(MATERIAL:_____) (INCLUDING METER & BACK FLOW PREVENTER)

13. LANDSCAPE IRRIGATION SYSTEM $_____
(INCLUDING METER & BACK FLOW PREVENTER)
(AR)871-30 (IRRIGATION FAC)
TOTAL NUMBET OF HEADS_____

14. DUMPSTER ENCLOSURE $_____

(AR)833-12 (REFUSE COLL BLD)
TOTAL AREA:_____S.F.

CATEGORY CODE	DESCRIPTION	COST

15. PAVING (NON ORGANIZATION VEHICLE PARKING) $_____
(AR)852-15 (NON ORG VEH PRK)
(AF)852262 (VEH PKING N/ORGN)
TOTAL ASPHALT PAVING:_____S.Y. OF_____IN. THICK W/_____IN.
_____BASE MATERIAL
TOTAL CONCRETE PAVING:_____S.Y. OF_____IN. THICK W/_____IN.
_____BASE MATERIAL

16. CONCRETE WALKS, SLABS & PADS $_____
(AR)852-20 (SIDEWALK)
(AF)852289 (SIDEWALK) PEDESTRIAN TRAFFIC
TOTAL AREA:_____S.F. (EXCLUDING PAVER TILES)

17. CONCRETE CURBS & GUTTERS $_____
(AR)851-10 (ROADS PAVED)
(AF)851143 (CURBS & GUTTERS)
TOTAL AREA:_____L.F.

18. EXTERIOR SITE LIGHTING (EXT LIGHTING) $_____
(AR)812-30 (EXT LIGHTING)
(AF)812926 (EXTERIOR AREA LTG)
TOTAL NUMBER OF POLES_____

19. LANDSCAPING (RELATED LAND IMPROV NB) $_____
(AR)871-75 (RELATED LAND INPROV NB)

20. GASOLINE DISPENSING SYSTEMS $_____
(AR)411-90 (LOCAL DESCRIPTION)
UNDERGROUND STORAGE TANKS:
NUMBER OF TANKS:_____SIZE:_____GALLONS
NUMBER OF DISPENSERS:_____
NUMBER OF HOSES:_____
CANOPY SIZE:_____SF $_____
KIOSKS: NUMBER_____MGFR_____COST $ _____

21. CHAIN LINK FENCING (FENCE OR WALLS) $_____
(AR)872-10 (FENCE OR WALLS)
(AF)872248 (FENCE INTERIOR)
TOTAL LINEAR FEET:_____L.F.

22. TOTAL CONSTRUCTION COSTS: $_____

DD FORM 1354 (CONTINUED)

ADDITIONAL INFORMATION REQUIRED

MECHANICAL SYSTEMS

H.V.A.C. UNITS

#	MANUFACTURER	MODEL #	CAPACITY	SERIAL #
1.				
2.				
3.				
4.				

EXHAUST FANS

#	MANUFACTURER	MODEL #	CAPACITY	SERIAL #
1.				
2.				
3.				
4.				

SUPPLY FANS

#	MANUFACTURER	MODEL #	CAPACITY	SERIAL #
1.				
2.				
3.				
4.				

CHILLER
BOILER
HEAT PUMP
ROOFTOP A/C UNITS
DOCK LEVELERS
DOCK SHELTERS

ELECTRICAL
DISTRIBUTION PANELS / LIGHT FIXTURES

ITEM NO	MANUFACTURER	MODEL NUMBER	QUANTITY	DESCRIPTION

PLUMBING

#	MANUFACTURER	MODEL #	CAPACITY	SERIAL # ___
WATER HEATER				
WATER CLOSET				
WATER CLOSET (H.C.)				
URINAL				
LAVATORY				
LAVATORY (H.C.)				
FLOOR SINKS(___#)				
FLOOR DRAINS(___#)				
MOP SINK				
ROOF DRAINS (___#)				

ADDITIONAL INFORMATION REQUIRED

FIRE PROTECTION SYSTEMS FOR FOOD ACTIVITIES

ANSUL CHEMICAL FIRE SUPPRESSION SYSTEM
TYPE OF SYSTEM:_____
TOTAL NUMBER OF:
HEADS_____AUTOMAN RELEASE_____
REMOTE MANUAL PULL STATIONS_____
SNAP ACTION ASSEMBLIES_____
MECHANICAL GAS SHUTOFF VALVES_____'

ITEMS REQUIRED IN CLOSE OUT DOCUMENTS

1. GENERAL CONTRACTOR'S TESTING / TRAINING REPORTS:
   A. TEST AND BALANCE REPORT ON MECHANICAL SYSTEMS
   B. CERTIFICATION OF GROUNDING (RESISTANCE) POWER TRANSMISSION
   C. INSTRUCTION / TRAINING SESSIONS ON ALL MECH/ELEC/EQUIPMENT (INCLUDING PARTICIPANTS' ROSTER)
2. GENERAL CONTRACTOR'S WARRANTY
3. ROOF(S) WARRANTY
4. ELECTRIC WARRANTY
5. HVAC WARRANTY
6. TERMITE PROTECTION GUARANTEE
7. GENERAL CONTRACTOR'S STATEMENT ON "NO ASBESTOS BEARING MATERIALS" USED IN CONSTRUCTION

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Progress Cleaning.

B. Final Cleaning.

1.2 RELATED SECTIONS

A. General Provisions of the Contract.

B. Section 01 10 00 – Summary.

C. Section 01 14 50 – Cutting and Patching.

D. Section 01 50 00 – Temporary Facilities and Controls.

E. Individual Specification Sections – Cleaning Requirements.

1.3 SAFETY REQUIREMENTS

A. Standards: Maintain project in accordance with the following safety and insurance standards:
   1. The Corps of Engineers Manual, EM 385-1-1, latest edition, entitled: "General Safety Requirements", as referred to in General Provisions, Paragraph: Accident Prevention.

B. O.S.H.A. Standards:
   1. The Contractor shall be required to comply with OSHA Requirements in 29 CFR 1926 and 29 CFR in 1910. The OSHA Standards are subject to change, and such changes may affect the Contractor in his performance under the contract. It is the Contractor's responsibility to know such changes, effective dates of changes, and comply with all requirements.

C. Hazards Control:
   1. Store volatile wastes in covered metal containers and remove from premises daily.
   2. Prevent accumulation of wastes which create hazardous conditions.
   3. Provide adequate ventilation during the use of volatile or noxious substances.

D. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
   1. Do not burn or bury rubbish and waste materials on the installation.
   2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
   3. Do not dispose of wastes into streams or waterways.

PART 2 – PRODUCTS

2.1 MATERIALS

A. Use only cleaning materials recommended by the manufacturer of the surface to be cleaned.

B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 – EXECUTION

3.1 PROGRESS CLEANING

A. Execute cleaning to ensure that the building, grounds, and public properties are maintained free from accumulations of waste materials and rubbish.

B. Maintain site in a clean and orderly condition.

C. Wet down dry materials and rubbish to lay dust and prevent blowing dust.

D. Remove waste materials, debris, and rubbish from site and legally dispose of at public or private dumping areas off of Government property.

E. Vacuum clean interior building areas when ready to receive finish painting, and continue cleaning to eliminate dust.

F. Handle materials in a controlled manner with as few handlings as possible; do not drop or throw materials from heights. Open free-fall chutes are not permitted.

G. Schedule cleaning operations so that dust and other contaminants resulting from the cleaning process will not fall on wet, newly painted surfaces

A. Employ professional cleaners for final cleaning.

B. In preparation for substantial completion or occupancy, conduct final inspection of sight-exposed interior and exterior surfaces and of concealed spaces.

C. Remove grease, dust, dirt, stains, temporary labels, fingerprints, and other foreign materials from sight-exposed interior and exterior finished surfaces; polish surfaces so designated to shine; finish vacuum carpeted and soft surfaces.

D. Repair, patch, and touch-up marred surfaces to specified finish, to match adjacent surfaces.

E. Clean debris from roofs, gutters, downspouts, and drainage systems.

F. Broom clean paved surfaces; rake clean other surfaces of grounds.

G. Clean all glass.

H. Replace air conditioning filters if units were operated during construction.

I. Clean ducts, blowers, and coils, if air H.V.A.C. units were operated without filters during construction.

J. Maintain cleaning until project, or portion thereof, is occupied by EXCHANGE.

3.2 FINAL CLEANING

A. Employ professional cleaners for final cleaning.

B. In preparation for substantial completion or occupancy, conduct final inspection of sight-exposed interior and exterior surfaces and of concealed spaces.

C. Remove grease, dust, dirt, stains, temporary labels, fingerprints, and other foreign materials from sight-exposed interior and exterior finished surfaces; polish surfaces so designated to shine; finish vacuum carpeted and soft surfaces.

D. Repair, patch, and touch-up marred surfaces to specified finish, to match adjacent surfaces.

E. Clean debris from roofs, gutters, downspouts, and drainage systems.

F. Broom clean paved surfaces; rake clean other surfaces of grounds.

G. Clean all glass.

H. Replace air conditioning filters if units were operated during construction.

II. Clean ducts, blowers, and coils, if air H.V.A.C. units were operated without filters during construction.

J. Maintain cleaning until project, or portion thereof, is occupied by EXCHANGE.

END OF SECTION

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes administrative and procedural requirements for the following:
   1. Salvaging nonhazardous demolition and construction waste.
   2. Recycling nonhazardous demolition and construction waste.
   3. Disposing of nonhazardous demolition and construction waste.

B. Related Requirements:
   1. Division 01 Section "Multiple Contract Summary" for coordination of responsibilities for waste management.
   2. Division 02 Section "Selective Structure Demolition" for disposition of waste resulting from partial demolition of buildings, structures, and site improvements.

1.3 DEFINITIONS

A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.

B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.

C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.

D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.

F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.4 PERFORMANCE REQUIREMENTS

A. General: Achieve end-of-Project rates for salvage/recycling of 50 percent by weight of total non-hazardous solid waste generated by the Work. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials, including the following:
   1. Demolition Waste:
      a. Asphalt paving.
      b. Concrete.
      c. Concrete reinforcing steel.
      d. Brick.
      e. Concrete masonry units.
      f. Wood studs.

g. Wood joists.
h. Plywood and oriented strand board.
i. Wood paneling.
j. Wood trim.
k. Structural and miscellaneous steel.
l. Rough hardware.
m. Roofing.
n. Insulation.
o. Doors and frames.
p. Door hardware.
q. Windows.
r. Glazing.
s. Metal studs.
t. Gypsum board.
u. Acoustical tile and panels.
v. Carpet.
w. Carpet pad.
x. Demountable partitions.
y. Equipment.
z. Cabinets.
aa. Plumbing fixtures.
bb. Piping.
cc. Supports and hangers.
dd. Valves.
ee. Sprinklers.
ff. Mechanical equipment.
gg. Refrigerants.
hh. Electrical conduit.
ii. Copper wiring.
jj. Lighting fixtures.
kk. Lamps.
ll. Ballasts.
mm. Electrical devices.
nn. Switchgear and panelboards.
oo. Transformers.

2. Construction Waste:
   a. Masonry and CMU.
   b. Lumber.
   c. Wood sheet materials.
   d. Wood trim.
   e. Metals.
   f. Roofing.
   g. Insulation.
   h. Carpet and pad.
   i. Gypsum board.
   j. Piping.
   k. Electrical conduit.
   l. Packaging: Regardless of salvage/recycle goal indicated in "General" Paragraph above, salvage or recycle 100 percent of the following uncontaminated packaging materials:
      1) Paper.
      2) Cardboard.
      3) Boxes.
      4) Plastic sheet and film.
      5) Polystyrene packaging.
      6) Wood crates.

7) Plastic pails.

1.5 ACTION SUBMITTALS

A. Waste Management Plan: Submit plan within 14 days of date established for the Notice to Proceed.

1.6 INFORMATIONAL SUBMITTALS

A. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit report. Use Form CWM-7 for construction waste and Form CWM-8 for demolition waste.
1. Material category.
2. Generation point of waste.
3. Total quantity of waste in tons (tonnes).
4. Quantity of waste salvaged, both estimated and actual in tons (tonnes).
5. Quantity of waste recycled, both estimated and actual in tons (tonnes).
6. Total quantity of waste recovered (salvaged plus recycled) in tons (tonnes).
7. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.

B. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.

C. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.

D. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.

E. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

F. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

G. LEED Submittal: LEED letter template for Credit MR 2, signed by Contractor, tabulating total waste material, quantities diverted and means by which it is diverted, and statement that requirements for the credit have been met.

H. Qualification Data: For waste management coordinator and refrigerant recovery technician.

I. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.

1.7 QUALITY ASSURANCE

A. Waste Management Coordinator Qualifications: Experienced firm, with a record of successful waste management coordination of projects with similar requirements, that employs a LEED-Accredited Professional, certified by the USGBC, as waste management coordinator. Waste management coordinator may also serve as LEED coordinator.

B. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.

C. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.

D. Waste Management Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to waste management including, but not limited to, the following:
   1. Review and discuss waste management plan including responsibilities of waste management coordinator.
   2. Review requirements for documenting quantities of each type of waste and its disposition.
   3. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
   4. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
   5. Review waste management requirements for each trade.

1.8 WASTE MANAGEMENT PLAN

A. General: Develop a waste management plan according to ASTM E 1609 and requirements in this Section. Plan shall consist of waste identification, waste reduction work plan, and cost/revenue analysis. Distinguish between demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.

B. Waste Identification: Indicate anticipated types and quantities of demolition site-clearing and construction waste generated by the Work. Use Form CWM-1 for construction waste and Form CWM-2 for demolition waste. Include estimated quantities and assumptions for estimates.

C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Use Form CWM-3 for construction waste and Form CWM-4 for demolition waste. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
   1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
   2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
   3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
   4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.

5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location where materials separation will be performed.

D. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Use Form CWM-5 for construction waste and Form CWM-6 for demolition waste. Include the following:
1. Total quantity of waste.
2. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste.
3. Total cost of disposal (with no waste management).
4. Revenue from salvaged materials.
5. Revenue from recycled materials.
6. Savings in hauling and tipping fees by donating materials.
7. Savings in hauling and tipping fees that are avoided.
8. Handling and transportation costs. Include cost of collection containers for each type of waste.
9. Net additional cost or net savings from waste management plan.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 PLAN IMPLEMENTATION

A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.

B. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan.

C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work.
1. Distribute waste management plan to everyone concerned within three days of submittal return.
2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.

D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.

E. Waste Management in Historic Zones or Areas: Hauling equipment and other materials shall be of sizes that clear surfaces within historic spaces, areas, rooms, and openings, by 12 inches (300 mm) or more.

3.2 SALVAGING DEMOLITION WASTE

A. Salvaged Items for Reuse in the Work: Salvage items for reuse and handle as follows:
   1. Clean salvaged items.
   2. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
   3. Store items in a secure area until installation.
   4. Protect items from damage during transport and storage.
   5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.

B. Salvaged Items for Sale and Donation: Not permitted on Project site.

C. Salvaged Items for Owner's Use: Salvage items for Owner's use and handle as follows:
   1. Clean salvaged items.
   2. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
   3. Store items in a secure area until delivery to Owner.
   4. Transport items to Owner's storage area designated by Owner.
   5. Protect items from damage during transport and storage.

D. Doors and Hardware: Brace open end of door frames. Except for removing door closers, leave door hardware attached to doors.

E. Equipment: Drain tanks, piping, and fixtures. Seal openings with caps or plugs. Protect equipment from exposure to weather.

F. Plumbing Fixtures: Separate by type and size.

G. Lighting Fixtures: Separate lamps by type and protect from breakage.

H. Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, panelboards, circuit breakers, and other devices by type.

3.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

A. General: Recycle paper and beverage containers used by on-site workers.

B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall be shared equally by Owner and Contractor.

C. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.

D. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
   1. Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
      a. Inspect containers and bins for contamination and remove contaminated materials if found.

2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
4. Store components off the ground and protect from the weather.
5. Remove recyclable waste from Owner's property and transport to recycling receiver or processor.

3.4 RECYCLING DEMOLITION WASTE

A. Asphalt Paving: Grind asphalt to maximum 4-inch (100-mm) size.
1. Crush asphaltic concrete paving and screen to comply with requirements in Division 31 Section "Earth Moving" for use as general fill.

B. Asphalt Paving: Break up and transport paving to asphalt-recycling facility.

C. Concrete: Remove reinforcement and other metals from concrete and sort with other metals.
1. Pulverize concrete to maximum 4-inch (100-mm) size.
2. Crush concrete and screen to comply with requirements in Division 31 Section "Earth Moving" for use as satisfactory soil for fill or subbase.

D. Masonry: Remove metal reinforcement, anchors, and ties from masonry and sort with other metals.
1. Pulverize masonry to maximum 1-inch (25-mm) size.
   a. Crush masonry and screen to comply with requirements in Division 31 Section "Earth Moving" for use as general fill satisfactory soil for fill or subbase.
2. Clean and stack undamaged, whole masonry units on wood pallets.

E. Wood Materials: Sort and stack members according to size, type, and length. Separate lumber, engineered wood products, panel products, and treated wood materials.

F. Metals: Separate metals by type.
1. Structural Steel: Stack members according to size, type of member, and length.
2. Remove and dispose of bolts, nuts, washers, and other rough hardware.

G. Asphalt Shingle Roofing: Separate organic and glass-fiber asphalt shingles and felts. Remove and dispose of nails, staples, and accessories.

H. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.

I. Acoustical Ceiling Panels and Tile: Stack large clean pieces on wood pallets and store in a dry location.

J. Metal Suspension System: Separate metal members including trim, and other metals from acoustical panels and tile and sort with other metals.

K. Carpet and Pad: Roll large pieces tightly after removing debris, trash, adhesive, and tack strips.
1. Store clean, dry carpet and pad in a closed container or trailer provided by Carpet Reclamation Agency or carpet recycler.

L. Carpet Tile: Remove debris, trash, and adhesive.
   1. Stack tile on pallet and store clean, dry carpet in a closed container or trailer provided by Carpet Reclamation Agency or carpet recycler.

M. Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers, and other components by type and size.

N. Conduit: Reduce conduit to straight lengths and store by type and size.

3.5 RECYCLING CONSTRUCTION WASTE

A. Packaging:
   1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
   2. Polystyrene Packaging: Separate and bag materials.
   3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
   4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.

B. Wood Materials:
   1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
   2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.

C. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location.
   1. Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

3.6 DISPOSAL OF WASTE

A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
   1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
   2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Burning: Do not burn waste materials.

C. Burning: Burning of waste materials is permitted only at designated areas on Owner's property, provided required permits are obtained. Provide full-time monitoring for burning materials until fires are extinguished.

D. Disposal: Remove waste materials and dispose of at designated spoil areas on Owner's property.

E. Disposal: Remove waste materials from Owner's property and legally dispose of them.

3.7 ATTACHMENTS

A. Form CWM-1 for construction waste identification.

B. Form CWM-2 for demolition waste identification.

C. Form CWM-3 for construction waste reduction work plan.

D. Form CWM-4 for demolition waste reduction work plan.

E. Form CWM-5 cost/revenue analysis of construction waste reduction work plan.

F. Form CWM-6 cost/revenue analysis of demolition waste reduction work plan.

G. Form CWM-7 for construction waste

H. Form CWM-8 for demolition waste.

END OF SECTION

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PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Substantial Completion.

B. Final Inspections.

C. Closeout Submittals.
1. Operation and Maintenance Manuals.
2. Operation and Maintenance Instruction.

1.2 RELATED SECTIONS

A. General Provisions of the Contract: Final Acceptance and Payment.

B. Section 01 33 00 – Submittal Procedures.

C. Section 01 71 00 – Cleaning.

D. Section 01 65 00 – Starting of Systems.

E. Section 01 78 39 – Project Record Documents.

1.3 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting inspection, complete the following.
1. Contractor's list of incomplete items (punch list) prepared.
a. Submit PDF electronic file.
b. Submit paper copies.
2. Owner advised of pending insurance changeover.
3. Warranties, maintenance service agreements, and similar documents submitted.
4. Releases, occupancy permits, and operating certificates submitted.
5. Project Record Documents submitted.
6. Tools, spare parts, and extra materials delivered.
7. Final changeover of locks performed.
8. Startup testing completed.
9. Test/adjust/balance records submitted.
10. Temporary facilities removed.
11. Owner advised of heat and utility changeover.
12. Changeover information for use, operation, and maintenance submitted.
13. Owner's personnel instructed in operation, adjustment, and maintenance of equipment and systems, including demonstration and training videotapes submitted.

B. Contractor:
1. Submit written certification to Contracting Officer that project, or designated portion of Project, is substantially complete.
2. Submit list of major items to be completed or corrected.

C. Contracting Officer will make an inspection after receipt of certification.

D. Should Contracting Officer consider that work is substantially complete:
1. Contractor shall prepare, and submit to Contracting Officer, a list of items to be completed or corrected, as determined by the inspection.

2. Contracting Officer will prepare and issue a Certificate of Substantial Completion, containing:
   a. Date of Substantial Completion.
   b. Contractor's list of items to be completed or corrected, verified, and amended by Contracting Officer.
   c. The time within which Contractor shall complete or correct work of listed items.
   d. Time and date EXCHANGE will assume possession of work or designated portion thereof.
   e. Responsibilities of EXCHANGE and Contractor for:
      (1) Utilities.
      (2) Operation of mechanical, electrical, and other systems.
      (3) Maintenance and cleaning.
      (4) Security.
   f. Signatures of:
      (1) Contracting Officer.
      (2) Contractor.
3. EXCHANGE occupancy of project or designated portion of project:
   a. Contractor shall:
      (1) Perform final cleaning in accordance with Section 01 71 00.
   b. EXCHANGE will occupy project, under provisions stated in Certificate of Substantial Completion.
4. Contractor: Complete work listed for completion or correction, within designated time.

E. Should Contracting Officer consider that work is not substantially complete:
1. He shall immediately notify Contractor, in writing, stating reasons.
2. Contractor: Complete work, and send second written notice to contracting officer, certifying that project, or designated portion of project, is substantially complete.
3. Contracting Officer will reinspect work.

1.4 FINAL INSPECTION

A. Contractor shall submit written certification that:
1. Contract documents have been reviewed.
2. Project has been inspected for compliance with contract documents.
3. Work has been completed in accordance with Contract Documents.
4. Equipment and systems have been tested in presence of Facility Representatives and are operational.
5. Project is completed and ready for final inspection.

B. Contracting Officer will make final inspection after receipt of certification.

C. Should the Contracting Officer consider that work is finally complete in accordance with requirements of contract documents, he shall request contractor to make project closeout submittals.

D. Should the Contracting Officer consider that work is not finally complete:
1. He shall notify contractor, in writing, stating reasons.
2. Contractor shall take immediate steps to remedy the stated deficiencies, and send second written notice to the Contracting Officer certifying that work is complete.
3. The Contracting Officer will reinspect work.

1.5 PROJECT RECORD DOCUMENTS

A. Project Record Documents: Specified requirements of Section 01 78 39.

B. Copies of all O&M Manuals, warranties and final as-built project drawings shall be provided to the Base Engineer – Fort Campbell Civil Engineering Squadron for distribution to the appropriate maintenance shops and base archives. These plans shall be provided for review by the Base Engineer prior to contract closeout. Provide all documents in both hard copy and electronic copies to include AutoCAD drawings.

1.6 OPERATION AND MAINTENANCE MANUALS

A. Submit data bound in 8-1/2 x 11 inch text pages, three D side ring binders with durable plastic covers.

B. Prepare binder cover with printed title "Operation and Maintenance Manuals", title of project, and subject matter of binder when multiple binders are required.

C. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.

D. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, typed on 20 pound white paper, in three parts as follows:
   1. Part 1: Directory, listing names, addresses, and telephone numbers of Contractor, Subcontractors, and major equipment suppliers.
   2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
      a. Significant design criteria.
      b. List of equipment.
      c. Parts list for each component.
      d. Operating instructions.
      e. Value chart.
      f. Maintenance instructions for equipment and systems.
      g. Maintenance instructions for finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
   3. Part 3: Project documents and certificates, including the following:
      a. Shop drawings and product data.
      b. Air and water balance reports.
      c. Certificates.
      d. Photocopies of warranties.
      e. Training Sessions attendance roster.
      f. Warrantees.

E. Submit six (6) copies of the operation and maintenance manuals to the Contracting Officer.

1.7 OPERATION AND MAINTENANCE INSTRUCTION

A. The Contractor shall provide, at his expense, manufacturer's representatives to completely check out all mechanical and electrical systems and items covered by the drawings and specifications. This requirement shall be scheduled just prior to, and during the initial start up. After all systems are functioning properly, the representatives shall instruct Facility Maintenance Personnel in the proper operation and maintenance of each item. In addition to instructions given at the project, the Facility Maintenance Personnel shall be given a classroom instruction course on operation and maintenance of the systems. Training sessions shall be limited to four (4) continuous hours where practical. Schedule additional four (4) hour sessions as required.

1.8 DD FORM 1354

A. Preparation of DD Form 1354 "Transfer and Acceptance of Military Real Property": At the conclusion of the project the Contractor will compile and furnish to the Contracting Officer certain costs and quantity data of materials and systems furnished and installed. A list of items for which the costs and quantity data are required will be furnished to the Contractor. Such information will be returned to the Contracting Officer within 10 days from the receipt of the list. Form is attached at the end of Division 1.

1.9 WARRANTY AND EXTENDED WARRANTIES

A. Upon completion of project, prior to final payment, guarantees required by technical divisions of Specifications shall be properly executed in quadruplicate by subcontractors and submitted to Contracting Officer. Delivery of guarantees shall not relieve contractor from any obligation assumed under contract.

B. Submit guarantee covering entire project for one year. In addition, where separate guarantees, for certain portions of work, are for longer periods, General Contractor's guarantee shall be extended to cover such longer periods.

B. Guarantees shall become valid and operative upon issuance of Certificate of Inspection and Acceptance by EXCHANGE. Guarantees shall not apply to work where damage is a result of abuse, neglect by EXCHANGE, or his successor(s) in interest.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Substantial Completion.

B. Final Inspections.

C. Closeout Submittals.
1. Operation and Maintenance Manuals.
2. Operation and Maintenance Instruction.

1.2 RELATED SECTIONS

A. General Provisions of the Contract: Final Acceptance and Payment.

B. Section 01 33 00 – Submittal Procedures.

C. Section 01 71 00 – Cleaning.

D. Section 01 65 00 – Starting of Systems.

E. Section 01 78 39 – Project Record Documents.

1.3 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting inspection, complete the following.
1. Contractor's list of incomplete items (punch list) prepared.
a. Submit PDF electronic file.
b. Submit paper copies.
2. Owner advised of pending insurance changeover.
3. Warranties, maintenance service agreements, and similar documents submitted.
4. Releases, occupancy permits, and operating certificates submitted.
5. Project Record Documents submitted.
6. Tools, spare parts, and extra materials delivered.
7. Final changeover of locks performed.
8. Startup testing completed.
9. Test/adjust/balance records submitted.
10. Temporary facilities removed.
11. Owner advised of heat and utility changeover.
12. Changeover information for use, operation, and maintenance submitted.
13. Owner's personnel instructed in operation, adjustment, and maintenance of equipment and systems, including demonstration and training videotapes submitted.

B. Contractor:
1. Submit written certification to Contracting Officer that project, or designated portion of Project, is substantially complete.
2. Submit list of major items to be completed or corrected.

C. Contracting Officer will make an inspection after receipt of certification.

D. Should Contracting Officer consider that work is substantially complete:
1. Contractor shall prepare, and submit to Contracting Officer, a list of items to be completed or corrected, as determined by the inspection.

2. Contracting Officer will prepare and issue a Certificate of Substantial Completion, containing:
   a. Date of Substantial Completion.
   b. Contractor's list of items to be completed or corrected, verified, and amended by Contracting Officer.
   c. The time within which Contractor shall complete or correct work of listed items.
   d. Time and date EXCHANGE will assume possession of work or designated portion thereof.
   e. Responsibilities of EXCHANGE and Contractor for:
      (1) Utilities.
      (2) Operation of mechanical, electrical, and other systems.
      (3) Maintenance and cleaning.
      (4) Security.
   f. Signatures of:
      (1) Contracting Officer.
      (2) Contractor.
3. EXCHANGE occupancy of project or designated portion of project:
   a. Contractor shall:
      (1) Perform final cleaning in accordance with Section 01 71 00.
   b. EXCHANGE will occupy project, under provisions stated in Certificate of Substantial Completion.
4. Contractor: Complete work listed for completion or correction, within designated time.

E. Should Contracting Officer consider that work is not substantially complete:
1. He shall immediately notify Contractor, in writing, stating reasons.
2. Contractor: Complete work, and send second written notice to contracting officer, certifying that project, or designated portion of project, is substantially complete.
3. Contracting Officer will reinspect work.

1.4 FINAL INSPECTION

A. Contractor shall submit written certification that:
1. Contract documents have been reviewed.
2. Project has been inspected for compliance with contract documents.
3. Work has been completed in accordance with Contract Documents.
4. Equipment and systems have been tested in presence of Facility Representatives and are operational.
5. Project is completed and ready for final inspection.

B. Contracting Officer will make final inspection after receipt of certification.

C. Should the Contracting Officer consider that work is finally complete in accordance with requirements of contract documents, he shall request contractor to make project closeout submittals.

D. Should the Contracting Officer consider that work is not finally complete:
1. He shall notify contractor, in writing, stating reasons.
2. Contractor shall take immediate steps to remedy the stated deficiencies, and send second written notice to the Contracting Officer certifying that work is complete.
3. The Contracting Officer will reinspect work.

1.5 PROJECT RECORD DOCUMENTS

A. Project Record Documents: Specified requirements of Section 01 78 39.

B. Copies of all O&M Manuals, warranties and final as-built project drawings shall be provided to the Base Engineer – Fort Campbell Civil Engineering Squadron for distribution to the appropriate maintenance shops and base archives. These plans shall be provided for review by the Base Engineer prior to contract closeout. Provide all documents in both hard copy and electronic copies to include AutoCAD drawings.

1.6 OPERATION AND MAINTENANCE MANUALS

A. Submit data bound in 8-1/2 x 11 inch text pages, three D side ring binders with durable plastic covers.

B. Prepare binder cover with printed title "Operation and Maintenance Manuals", title of project, and subject matter of binder when multiple binders are required.

C. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.

D. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, typed on 20 pound white paper, in three parts as follows:
   1. Part 1: Directory, listing names, addresses, and telephone numbers of Contractor, Subcontractors, and major equipment suppliers.
   2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
      a. Significant design criteria.
      b. List of equipment.
      c. Parts list for each component.
      d. Operating instructions.
      e. Value chart.
      f. Maintenance instructions for equipment and systems.
      g. Maintenance instructions for finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
   3. Part 3: Project documents and certificates, including the following:
      a. Shop drawings and product data.
      b. Air and water balance reports.
      c. Certificates.
      d. Photocopies of warranties.
      e. Training Sessions attendance roster.
      f. Warrantees.

E. Submit six (6) copies of the operation and maintenance manuals to the Contracting Officer.

1.7 OPERATION AND MAINTENANCE INSTRUCTION

A. The Contractor shall provide, at his expense, manufacturer's representatives to completely check out all mechanical and electrical systems and items covered by the drawings and specifications. This requirement shall be scheduled just prior to, and during the initial start up. After all systems are functioning properly, the representatives shall instruct Facility Maintenance Personnel in the proper operation and maintenance of each item. In addition to instructions given at the project, the Facility Maintenance Personnel shall be given a classroom instruction course on operation and maintenance of the systems. Training sessions shall be limited to four (4) continuous hours where practical. Schedule additional four (4) hour sessions as required.

1.8 DD FORM 1354

A. Preparation of DD Form 1354 "Transfer and Acceptance of Military Real Property": At the conclusion of the project the Contractor will compile and furnish to the Contracting Officer certain costs and quantity data of materials and systems furnished and installed. A list of items for which the costs and quantity data are required will be furnished to the Contractor. Such information will be returned to the Contracting Officer within 10 days from the receipt of the list. Form is attached at the end of Division 1.

1.9 WARRANTY AND EXTENDED WARRANTIES

A. Upon completion of project, prior to final payment, guarantees required by technical divisions of Specifications shall be properly executed in quadruplicate by subcontractors and submitted to Contracting Officer. Delivery of guarantees shall not relieve contractor from any obligation assumed under contract.

B. Submit guarantee covering entire project for one year. In addition, where separate guarantees, for certain portions of work, are for longer periods, General Contractor's guarantee shall be extended to cover such longer periods.

B. Guarantees shall become valid and operative upon issuance of Certificate of Inspection and Acceptance by EXCHANGE. Guarantees shall not apply to work where damage is a result of abuse, neglect by EXCHANGE, or his successor(s) in interest.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

PART 1 - GENERAL

1.01. Summary:

A. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under the Contract.
   1. Prepare operating and maintenance, and warranty data as specified in this Section and as referenced in other pertinent sections of Specifications.

B. Instruct facility's personnel in the maintenance of products and in the operation of equipment and systems.

C. Related requirements specified in other Sections:
   1. Shop Drawings, Product Data and Samples: Division 1.
   2. Warranties and Bonds: Section 01 78 36.
   3. Project Record Documents: Section 01 78 39.

1.02. Form of Submittals:

A. Prepare data in the form of an instructional manual for use by facility's personnel.

B. Format:
   1. Size: 8-1/2"x 11".
   2. Paper: 20 pound, minimum, white, for typed pages.
   3. Text: manufacturer's printed data, or neatly typewritten.
   4. Drawings:
      a. Provide reinforced punched binder tab, bind in with text.
      b. Fold larger drawings to the size of the text pages.
   5. Provide fly-leaf for each separate product, or each piece of operating equipment.
      a. Provide typed description of product, major component parts of equipment, and warranty data.
      b. Provide indexed tabs.
   6. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE DATA".
      a. List:
         (1) Title of Project
         (2) Name of Contractor

C. Binders:
   1. Commercial quality three-ring binders with durable and cleanable plastic covers.
   2. Maximum ring size: 3 inches.
   3. When multiple binders are used, correlate the data into related consistent groupings. Mark binders in sequence.

D. Automatic Controls Drawings: Submit one printed copy and one electronic media copy in Microstation format.

1.03 Content of Manual:

A. Table of Contents:
   1. Neatly typewritten table of contents for each volume. Base table of contents of Operating and Maintenance Data on table of contents of these specifications.

B. Product Data:
   1. Include only those sheets which are pertinent to the specific product.
   2. Annotate each sheet to:
      a. Clearly identify the specific product or part installed.
      b. Clearly identify the data applicable to the installation.
      c. Delete references to inapplicable information.
   3. List, with each product, the name, address and telephone number of:
      a. Subcontractor, including name of responsible principal, address and telephone number.
      b. Maintenance contractor, as appropriate.
      c. Identify the area of responsibility of each.
      d. Local source of supply for parts and replacement.

C. Drawings:
   1. Supplement product data with drawings as necessary to clearly illustrate:
      a. Relations of component parts of equipment and systems.
      b. Control and flow diagrams.
   2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
   3. Do not use Project Record Documents as maintenance drawings.

D. Written text, as required to supplement product data for the particular installation.
   1. Organize in a consistent format under separate headings for different procedures.
   2. Provide a logical sequence of instructions for each procedure.

E. Mechanical and Electrical Systems:
   1. The booklet shall contain a complete description of each system in the building as hereinafter outlined.
      a. Description of Electrical System:
      b. Manufacturer's catalog data and parts list on each piece of service entrance equipment and each electrical sub panel in the building.
      c. Manufacturer's catalog data, cuts and parts list of all lighting fixtures and show in which rooms they were installed.
      d. Manufacturer's catalog data, cuts, parts list and wiring diagrams on each piece of fire alarm system, sound system, program system, clock and bell system and all other systems. Data shall include 2 sets of drawings of circuitry by installer.
      e. Provide four sets of drawings to include riser diagrams, panel schedules with directory of circuits and any revisions from Contract Drawings.

F. Description of Plumbing System:
   1. Manufacturer's catalog data and parts list on each piece of plumbing equipment furnished.
   2. Maintenance and lubrication instructions must be on letterhead of the manufacturer of the equipment.

G. Description of Heating and Air Conditioning System:
   1. Complete manufacturer's catalog data, cuts, parts list and wiring diagrams on each piece of heating and air conditioning equipment furnished.

2. Manufacturer's catalog data, cuts, parts list and diagrams on each type of temperature control. Data shall include 2 sets of temperature control diagrams.
3. Maintenance and lubrication instructions of each piece of equipment furnished; instructions must be on the letterhead of the manufacturer of the equipment.
4. Manufacturer's Warranty Data and information.

H. Finish Schedule:
1. Provide a copy of the room finish schedule. Schedule shall identify each room by name and number, identify each type finish and color of floors, base, wainscot, walls, ceiling, and all other finishes. Where applicable, pattern or design identification numbers shall be included.

1.04. Submittal Schedule:

A. General:
1. Prepare 2 copies of the Operating and Maintenance Data Booklet and deliver 2 copies of the booklet to the Contracting Officer.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION (Not Applicable).

END OF SECTION

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PART 1 - GENERAL

1.01 Description:

A. Compile specified warranties and bonds and submit to Contracting Officer. Warranties to commence no earlier than the date of Substantial Completion.

1.02. Submittals:

A. Assemble warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors.

B. Provide two original signed copies of each submittal.

C. Make submittals within ten days after date of Substantial Completion, prior to final request for payment.

1.03. Format:

A. Size: 8-1/2" x 11", punch sheets for 3-ring binder. Fold larger sheets to fit into binder. Paper to be 20 pound, minimum, white, for typed pages.

B. Cover: Identify each packet with typed title "Warranties and Bonds". List the title of the project and name of Contactor on the cover.

C. Binders: Commercial quality, 3 ring with durable and cleanable plastic covers.

D. Table of Contents: Neatly typewritten table of contents for each volume. Base the table of contents of Warranties and Bonds on the table of contents of these specifications.

E. Contents:

1) Product of work item.
2) Firm of origination of warranty, with name of Principal, address and telephone number.
3) Scope
4) Date of beginning of warranty, bond or service and maintenance contract.
5) Provide information for facility's personnel including:
   a. Proper procedure in case of failure
   b. Instances which might affect the validity of the warranty or bond.
6) Contractor, name of responsible principal, address and telephone number.

END OF SECTION

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PART 1 – GENERAL

1.1 DESCRIPTION

A. Submittals: Section 01 33 00 – Submittal Procedures.

1.2 RECORD FIELD DATA

A. General: Maintain at job site, **two** complete sets of Contract Documents. During construction, both sets shall be marked to show all deviations in actual construction from the Contract Documents.
   1. Red Markers: Indicate all additions.
   2. Green Markers: Indicate all deletions.

B. Record Documents: The drawings shall show, but no be limited to, the following information:
   1. Locations and description of any utility lines and other installations of any kind or description known to exist within the construction area. Include dimensions and/or survey coordinates to permanent features.
   2. Locations and dimensions of any changes within the building or structure and the accurate location and dimension of all underground utilities and facilities.
   3. Correct grade or alignment of roads, structures and utilities if any changes were made from Contract Drawings.
   4. Correct elevations if changes were made in site grading.
   5. Changes in details of design or additional information obtained from shop drawings prepared or furnished by the Contractor including, but not limited to:
      a. Fabrication erection
      b. Installation and placing details
      c. Pipe sizes
      d. Insulation materials
      e. Equipment pad dimensions
   6. Topography and grades of all drainage.
   7. All changes or modifications from the original design.
   8. Where contract drawings or specifications allow options, only the option actually used in the construction shall be shown on the Record Drawings. The option not used shall be deleted.

C. Record Field Data: All deviations shall be shown in the same general detail utilized in the Contract Documents. Marking of the documents shall continue throughout construction to keep the documents up to date.
   1. Additional Data: **The Contractor shall maintain the following:**
      a. Full size marked-up drawings.
      b. Survey notes
      c. Sketches
      d. Nameplate data
      e. Pricing information
      f. Description and serial number of all equipment
   2. Record field data shall be available for inspection by the Contracting Officer whenever requested and shall be jointly inspected for accuracy and completeness by the Contracting Officer and Contractor. Failure to keep record field data current shall be sufficient justification to withhold a retained percentage from the monthly Application for Payment.

D. Submittal of Record Field Data:
   1. Submit two sets to the Contracting Officer a minimum of 20 calendar days prior to the date of final inspection.

2. The Contractor shall make all corrections identified during Contractor Officer review and resubmit corrected data within ten (10) calendar days of receipt.
3. When data is accepted as complete, one set of documents will be returned to the Contractor for completion of the Record Documents.

1.3 RECORD ELECTRONIC FILE DOCUMENTS

A. Electronic File Format: No earlier than 30 days after award, the Contracting Officer will provide one set of AutoCAD electronic file format contract drawings to be used for preparation of Record Drawings.
   1. Media: ISO – 9660 CD
   2. The Contractor shall verify usability of AutoCAD files and notify the Contracting Officer of any discrepancies within 30 calendar days of receipt. Any discrepancies will be corrected and files returned to the Contractor.
   3. The Contractor shall incorporate all deviations from the original Contract Documents as recorded in the approved “Record Field Data” as indicated in Paragraph 1.2.C above.
   4. The Contractor shall also incorporate all written modifications to the Contract Documents which were issued by amendment or contract modification.
   5. All revisions and changes shall be incorporated:
      a. Items marked deleted shall be deleted.
      b. Clouds around new items shall be removed.

B. Electronic File Submittal: Submit a complete set of Record Drawings in AutoCAD electronic file format no later than 30 days after final acceptance. The Record Drawings shall be done in equal quality to the originals, including line work, line weights, lettering and symbols. Identify each drawing with the word “RECORD” in block letters at least 3/8” high above the title block. The date of completion and the words “Revised Record” shall be placed in the revision block above the latest revision notation.
   1. Format: AutoCAD Release 2010 ‘DWG’ format. All support files required to display or plot the files in the same manner as they were developed shall be delivered along with the files, including but not limited to:
      a. Font files
      b. Menu files
      c. Plotter setup
      d. Referenced files

   2. Layering: Conform to AIA Standard Document, “CAD Layer Guidelines,” latest version. An explanatory list of which layer is used at which drawing and an explanatory list of all layers which do not conform to the standard AIA CAD Layer Guidelines including any user definable fields permitted by the guidelines shall be provided with each submittal.

   3. Electronic File Deliverable Media: ISO 9660 Format CD-ROM. Submit three (3) complete sets of disks and one complete set of full size reproducible prints taken from the disks. Each disk shall have a clearly marked label stating the Contractor’s firm name, project name and location, submittal type (record) and date. Each submittal shall be accompanied by a hard copy transmittal sheet that contains the above information along with tabulated information about each file as shown below:

Electronic File Name	Plate Number	Drawing Title

      a. Include electronic version of the table.

   4. Submit one copy of the CD-Rom and one set of full-size Mylar reproducibles of the drawings to (Building Records staff person) at (Post or Base).

1.4 SUBMITTAL OF FINAL RECORD DRAWINGS

A. Complete and return the final record documents and the approved preliminary record documents to the Contracting Officer within 30 calendar days of final acceptance.
   1. All drawings from the original contract documents shall be included, including drawings where no changes were made.
   2. The drawings will be returned to the Contractor if corrections are necessary.
   3. The Contractor shall make all corrections and shall return the drawings to the Contracting Officer within seven (7) calendar days of receipt.

B. Copies of all O&M Manuals, warranties and final as-built project drawings shall be provided to the Base Engineer – Chief, Civil Engineering Squadron for distribution to the appropriate maintenance shops and base archives. These plans shall be provided for review by the Base Engineer prior to contract closeout. Provide all documents in both hard copy and electronic copies to include AutoCAD drawings.

1.5 RECORD DOCUMENT COST

A. All costs incurred by the Contractor in the proportion and furnishing of record documents, including electronic file format, shall be included in the contract price and no separate payment will be made for this work.
   1. Approval and acceptance of the final record documents shall be accomplished before final payment is made to the Contractor.

1.6 SYSTEM ACCEPTANCE TESTING

A. Provide one set of marked-up record drawings at the time of system acceptance testing. These record drawings shall be in addition to the submittal of marked-up record drawings specified elsewhere in the contract.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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PART 1 - SITE VISITATION

1. 1 Offerors shall visit the site of work, existing buildings, review any available existing drawings, and all conditions affecting the work of this project.

1.2 Offerors desiring access to existing buildings shall contact the Contracting Officer for appointments.

PART 2 - VERIFICATION

2.1 Prior to commencement of work, verify all existing conditions, control points, principal lines and elevations, presence of underground utilities, at or related to the site and existing buildings, and examine all adjacent facilities upon which the work is in any way dependent. In the event of any inconsistency or conflict, between existing conditions and the bidding documents, immediate notice of such inconsistency or conflict shall be given to the Contracting Officer. Do not undertake any phase of the work affected by such inconsistency or conflict, pending the issuance of instructions by the Contracting Officer.

2.2 Elevations of existing grades, floors, tops of walls, parapets, beams and locations of existing columns, walls and the like are based on drawings of the existing building furnished by the Owner. The Contracting Officer assumes no responsibility for the accuracy of the information on existing drawings. It is the intent of the Contract Drawings to integrate new work with existing work and the Contractor shall verify actual conditions.

2.3 Provide protections necessary to prevent damage to existing buildings, improvements, landscaping and trees, parking, streets walks, etc. to remain in place. Restore damaged buildings, improvements, etc. to their original conditions as acceptable to the Owner, at no cost to the Owner.

PART 3 - EXISTING CONDITIONS

3.1 Existing buildings must be kept functioning during the construction period. Existing utilities cannot be disconnected until new ones have been installed and completely tested and approved. Existing functioning utilities cannot be interrupted without written approval from the Owner. Give two (2) weeks written notice to the Contracting Officer prior to planned interruption of any existing functioning utilities. Contracting Officer will then schedule with Contractor for date and time of shutdown. Due to the need for continuous operation of the facility, Contracting Officer does not guarantee scheduled shutdowns.

3.2 Notify the Contracting Officer when working in areas where utility lines might be encountered.

END OF SECTION

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PART 1 – GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes the following:
1. Removal of selected interior finishes in areas to be modernized.
2. Patching and repairs.
3. Salvage existing items to be reused or recycled.

B. Related Sections: The following Sections contain requirements that relate to this Section:
1. Division 1 Section 01 10 13 "Summary of Work" for use of the building and phasing requirements.
2. Division 1 Section 01 50 00 "Temporary Facilities and Controls" for temporary utilities, temporary construction and support facilities, temporary security and protection facilities, and environmental protection measures for selective demolition operations.
3. Division 1 Section 01 13 10 Waste Disposal
4. NOT USED .
5. Division 22 Sections for cutting, patching, or relocating Plumbing items.
6. Division 23 Sections for cutting, patching, or relocating HVAC items.
7. Division 26 Sections for cutting, patching, or relocating Electrical items.
8. NOT USED

1.3 DEFINITIONS

A. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain EXCHANGE property.

B. Remove and Salvage: Items indicated to be removed and salvaged remain EXCHANGE property. Remove, clean, and pack or crate items to protect against damage. Identify contents of containers and deliver to EXCHANGE' designated storage area.

C. Remove and Reinstall: Remove items indicated; clean, service, and otherwise prepare them for reuse; store and protect against damage. Reinstall items in the same locations or in locations indicated.

D. Existing to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the Contracting Officer, items may be removed to a suitable, protected storage location during selective demolition and then cleaned and reinstalled in their original locations.

1.4 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain EXCHANGE property, demolished materials shall become the Contractor's property and shall be removed from the site and legal disposed of off Installation.

1.5 SUBMITTALS

A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections, for information only, unless otherwise indicated.

B. Schedule of selective demolition activities indicating the following:
1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity.
2. Interruption of utility services.
3. Coordination for shutoff, capping, and continuation of utility services.
4. Detailed sequence of selective demolition and removal work to ensure uninterrupted progress of EXCHANGE' on-site operations.
5. Coordination of EXCHANGE' continuing occupancy of portions of existing building and of EXCHANGE' partial occupancy of completed Work.
6. Locations of temporary partitions and means of egress.

C. Photographs or videotape, sufficiently detailed, of existing conditions of adjoining construction and site improvements that might be misconstrued as damage caused by selective demolition operations.

D. Record drawings at Project close-out according to Division 1 Section 01 77 00 "Closeout Procedures."
1. Identify and accurately locate capped utilities and other subsurface structural, electrical, or mechanical conditions.

1.6 PROJECT CONDITIONS

A. EXCHANGE will occupy portions of the building immediately adjacent to selective demolition area. Conduct selective demolition so that EXCHANGE' operations will not be disrupted. Provide not less than 72 hours' notice to EXCHANGE of activities that will affect EXCHANGE' operations.

B. EXCHANGE assumes no responsibility for actual condition of buildings to be selectively demolished.
1. Conditions existing at time of inspection for bidding purpose will be maintained by EXCHANGE as far as practical.

C. Hazardous Materials: Refer to Division 1, Section 01 13 00 Safety Regulations And Codes. Asbestos and lead paint MAY BE present in areas of demolition. Demolition (monitoring), removal and disposal must comply with all state and federal codes and requirements of the specifications.

D. Provide secure temporary closure at exterior wall openings where existing infills are removed or new openings created.

E. Where existing opening infills in the are scheduled for demolition, maintain interior wall furring and finishes.

PART 2 – PRODUCTS

2.1 REPAIR MATERIALS

A. Use repair materials identical to existing materials.
   1. Where identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
   2. Use materials whose installed performance equals or surpasses that of existing materials.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Verify that utilities have been disconnected and capped.

B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.

C. When unanticipated mechanical, electrical, or structural elements that conflict with the intended function or design are encountered, investigate and measure the nature and extent of the conflict. Promptly submit a written report to the Contracting Officer.

D. Survey the condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during selective demolition.

E. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 UTILITY SERVICES

A. Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
   1. Do not interrupt existing utilities serving occupied or operating facilities, except when authorized in writing by EXCHANGE and authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to EXCHANGE and to governing authorities.
      a. Provide not less than 72 hours' notice to EXCHANGE if shutdown of service is required during changeover.

B. Utility Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services serving building to be selectively demolished.
   1. Arrange to shut off indicated utilities with utility companies.
   2. Where utility services are required to be removed, relocated, or abandoned, provide bypass connections to maintain continuity of service to other parts of the building before proceeding with selective demolition.
   3. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal the remaining portion of pipe or conduit after bypassing.

C. Utility Requirements: Refer to Divisions 21, 22, 23, and 26 Sections for shutting off, disconnecting, removing, and sealing or capping utility services. Do not start selective demolition work until utility disconnecting and sealing have been completed and verified in writing.

3.3 PREPARATION

A. Drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with selective demolition operations.

B. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.
   1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from EXCHANGE and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.

C. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around selective demolition area.
   1. Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction.
   2. Protect existing site improvements, appurtenances, and landscaping to remain.
   3. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.
   4. Provide temporary weather protection, during interval between demolition and removal of existing construction, on exterior surfaces and new construction to ensure that no water leakage or damage occurs to structure or interior areas.
   5. Protect walls, ceilings, floors, and other existing finish work that are to remain and are exposed during selective demolition operations.
   6. Cover and protect furniture, furnishings, and equipment that have not been removed.

D. Erect and maintain dustproof partitions and temporary enclosures to limit dust and dirt migration and to separate areas from fumes and noise.
   1. Construct dustproof partitions of not less than nominal 4-inch (100-mm) studs, 5/8-inch (16-mm) gypsum wallboard with joints taped on occupied side, and 1/2-inch (13-mm) fire-retardant plywood on the demolition side.
   2. Insulate partition to provide noise protection to occupied areas.
   3. Seal joints and perimeter. Equip partitions with dustproof doors and security locks.
   4. Protect air-handling equipment.
   5. Weatherstrip openings.

E. Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of building to be selectively demolished.
   1. Strengthen or add new supports when required during progress of selective demolition.

3.4 POLLUTION CONTROLS

A. Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.
   1. Do not use water when it may damage existing construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.

B. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
   1. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level.

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

3.5 SELECTIVE DEMOLITION

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

B. Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain, using power-driven masonry saw or hand tools; do not use power-driven impact tools.

C. Break up and remove concrete slabs on grade, unless otherwise shown to remain.

D. Remove resilient floor coverings and adhesive according to recommendations of the Resilient Floor Covering Institute's (RFCI) "Recommended Work Practices for the Removal of Resilient Floor Coverings" and Addendum.
   1. Remove residual adhesive and prepare substrate for new floor coverings by one of the methods recommended by RFCI.

E. Remove air-conditioning equipment without releasing refrigerants.

3.6 PATCHING AND REPAIRS

A. Promptly patch and repair holes and damaged surfaces caused to adjacent construction by selective demolition operations.

B. Patching is specified in Division 1 Section "Cutting and Patching."

C. Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.

D. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction to remain in a manner that eliminates evidence of patching and refinishing.

E. Patch and repair floor and wall surfaces in the new space where demolished walls or partitions extend one finished area into another. Provide a flush and even surface of uniform color and appearance.
1. Closely match texture and finish of existing adjacent surface.
2. Patch with durable seams that are as invisible as possible. Comply with specified tolerances.
3. Where patching smooth painted surfaces, extend final paint coat over entire unbroken surface containing the patch after the surface has received primer and second coat.
4. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
5. Inspect and test patched areas to demonstrate integrity of the installation, where feasible.

F. Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

3.7 DISPOSAL OF DEMOLISHED MATERIALS

A. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.

B. Burning: Do not burn demolished materials.

C. Disposal: Refer to Section 01 13 10 WASTE DISPOSAL. Transport demolished materials off EXCHANGE' property and legally dispose of them. Dispose all contaminated materials to an approved disposal site.

3.8 CLEANING

A. Sweep the building broom clean on completion of selective demolition operation.

B. Change filters on air-handling equipment on completion of selective demolition operations.

END OF SECTION

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section specifies cast-in place concrete, including formwork, reinforcing, mix design, placement procedures, and finishes.

B. Related Sections:
1. Division 03 Section "Architectural Concrete" for general building applications of specialty finished formed concrete.
2. Section 01 40 00-Quality Requirements

1.3 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.

B. Product Data: For proprietary materials and items, including reinforcement and forming accessories, admixtures, patching compounds, waterstops, joint systems, curing compounds, dry-shake finish materials, and others as requested by Contracting Officer.

C. Shop drawings for reinforcement for fabrication, bending, and placement of concrete reinforcement. Comply with ACI SP-66 (88), "ACI Detailing Manual", showing bar schedules, stirrup spacing, diagrams of bent bars, and arrangement of concrete reinforcement. Include special reinforcement required for openings through concrete structures. All wall reinforcement must be shown in elevation.

D. Samples of materials as requested by Contracting Officer, including names, sources, and descriptions.

E. Laboratory test reports for concrete materials and mix design test.

F. Materials certificates in lieu of materials laboratory test reports when permitted by Contracting Officer. Materials certificates shall be signed by manufacturer and Contractor, certifying that each material item complies with or exceeds specified requirements. Provide certification from admixture manufacturers that chloride content complies with specification requirements.

1.4 QUALITY ASSURANCE

A. Codes and Standards: Comply with provisions of the following codes, specifications, and standards, except where more stringent requirements are shown or specified:
1. ACI 318, "Building Code Requirements for Reinforced Concrete."
2. Concrete Reinforcing Steel Institute (CRSI) "Manual of Standard Practice."
3. ACI 301 "Specifications for Structural Concrete for Buildings".

B. **CONTRACTOR** will engage and pay a testing lab to control testing during construction described by Item 3.16 below.

C. Materials and installed work may require testing and retesting at any time during progress of work. Tests, including retesting of rejected materials for installed work, shall be done at the Exchange's expense. Allow free access to material stockpiles and facilities.

PART 2 – PRODUCTS

2.1 FORM MATERIALS - NOT USED

2.2 REINFORCING MATERIALS

A. Reinforcing Bars: ASTM A 615, Grade 60, deformed for #4 and larger bars. ASTM A 615, Grade 40, deformed for #3 bars.

B. Steel Wire: ASTM A 82, plain, cold-drawn steel.

C. Welded Wire Fabric: ASTM A 185, welded steel wire fabric. Furnish in flat sheets not rolls.

D. Supports for Reinforcement: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire fabric in place. Use wire bar-type supports complying with CRSI specifications.
1. For slabs-on-grade, use supports with sand plates or horizontal runners where base material will not support chair legs.

E. Recycled Content of Steel Products: NOT USED.

F. New reinforcing to match existing reinforcing.

G. Dowels required at new/existing concrete construction joints

2.3 CONCRETE MATERIALS

A. Portland Cement: ASTM C 150, Type I.
1. Use one brand of cement throughout project.

B. Normal-Weight Aggregates: ASTM C 33 and as herein specified. Provide aggregates from a single source for exposed concrete.
1. For exposed exterior surfaces, do not use fine or coarse aggregates containing spalling-causing deleterious substances.
2. Local aggregates not complying with ASTM C 33 but that special tests or actual service have shown to produce concrete of adequate strength and durability may be used when acceptable to Contracting Officer.

C. Water: Potable.

D. Admixtures, General: Provide admixtures for concrete that contain no more than 0.1 percent chloride ions. Calcium chloride is not acceptable. Provide admixture manufacturer's written certification that chlorideion content complies with specific requirements. Any admixture used MUST be submitted by the General Contractor, reviewed and approved by the Structural Engineer before use.

E. Air-Entraining Admixture: ASTM C 260, certified by manufacturer to be compatible with other required admixtures.
1. Products: Subject to compliance with requirements, provide one of the following:
   a. "Air-Tite", Cormix.
   b. "Air-Mix" or "Perma-Air", Euclid Chemical Co.
   c. "Darex AEA" or "Daravair", W.R. Grace & Co.
   d. "MB-VR" or "Micro-Air", Master Builders, Inc.
   e. "Sealtight AEA", W.R. Meadows, Inc.
   f. "Sika AER", Sika Corp.

F. Water-Reducing Admixture: ASTM C 494, Type A.
1. Products: Subject to compliance with requirements, provide one of the following:
a. "Chemtard", ChemMasters Corp.
b. "PSI N", Cormix.
c. "Eucon WR-75", Euclid Chemical Co.
d. "WRDA", W.R. Grace & Co.
e. "Pozzolith Normal" or "Polyheed", Master Builders, Inc.
f. "Prokrete-N", Prokrete Industries.
g. "Plastocrete 161", Sika Corp.

G. High-Range Water-Reducing Admixture (Super Plasticizer): ASTM C 494, Type F or Type G.
1. Products: Subject to compliance with requirements, provide one of the following:
a. "Super P", Anti-Hydro Co., Inc.
b. "PSI Super", Cormix.
c. "Eucon 37", Euclid Chemical Co.
d. "WRDA 19" or "Daracem", W.R. Grace & Co.
e. "Rheobuild", Master Builders, Inc.
f. "PSP", Prokrete Industries.
g. "Sikament 300", Sika Corp.

H. Water-Reducing, Accelerating Admixture: ASTM C 494, Type E.
1. Products: Subject to compliance with requirements, provide one of the following:
a. "Q-Set", Conspec Marketing & Manufacturing Co.
b. "Gilco Accelerator", Cormix.
c. "Accelguard 80", Euclid Chemical Co.
d. "Daraset", W.R. Grace & Co.
e. "Pozzutec 20", Master Builders, Inc.

I. Water-Reducing, Retarding Admixture: ASTM C 494, Type D.
1. Products: Subject to compliance with requirements, provide one of the following:
a. "PSI-R Plus", Cormix.
b. "Eucon Retarder 75", Euclid Chemical Co.
c. "Daratard-17", W.R. Grace & Co.
d. "Pozzolith R", Master Builders, Inc.
e. "Protard", Prokrete Industries.
f. "Plastiment", Sika Corporation.

2.4 RELATED MATERIALS

A. Moisture-Retaining Cover: One of the following, complying with ASTM C 171.
1. Waterproof paper.
2. Polyethylene film.
3. Polyethylene-coated burlap.

B. Cure and Seal Compound: Typical concrete slab liquid membrane forming curing compound to be "Ashford Formula", Concrete Distribution, Inc., 1203 W. Spring Creek Place, Springville UT 84663 (801-489-5663) approximately 200 square feet per gallon in locations not receiving polished concrete floor finish.

2.5 PROPORTIONING AND DESIGN OF MIXES

A. Prepare design mixes for each type and strength of concrete by either laboratory trial batch or field experience methods as specified in ACI 301. If trial batch method used, use an independent testing facility acceptable to Contracting Officer for preparing and reporting

proposed mix designs. The testing facility shall not be the same as used for field quality control testing.

B. Slabs on Grade: It is the intent of the design that slabs on grade receive special attention for mix design. The submitted slab mix design is to incorporate proportioning to minimize paste content (minimize total water content) and provide a well-graded aggregate with maximum aggregate size (1" preferred). Gap graded mixes with primarily ¾" aggregate and sand will not be allowed.

C. Submit written reports to Contracting Officer for each proposed mix for each class of concrete at least 15 days prior to start of Work. Do not begin concrete production until proposed mix designs have been reviewed by Contracting Officer.

D. Design mixes to provide normal weight concrete properties as indicated on the structural drawings and schedules.

E. Adjustment to Concrete Mixes: Mix design adjustments may be requested by Contractor when characteristics of materials, job conditions, weather, test results, or other circumstances warrant, as accepted by Contracting Officer. Laboratory test data for revised mix design and strength results must be submitted to and accepted by Contracting Officer before using in Work.

2.6 ADMIXTURES

A. Use water-reducing admixture or high-range water-reducing admixture (superplasticizer) in concrete, as required, for placement and workability.

B. Use nonchloride accelerating admixture in concrete slabs placed at ambient temperatures below 50 deg F (10 deg C).

C. Use high-range water-reducing admixture (HRWR) in pumped concrete, concrete for industrial slabs, architectural concrete, parking structure slabs, concrete required to be watertight, and concrete with water/cement ratios below 0.50.

D. Use air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having total air content with a tolerance of plus or minus 1-1/2 percent within the following limits:
1. 5% - 7% as indicated on the drawings.
2. Other concrete (not exposed to freezing, thawing, or hydraulic pressure) or to receive a surface hardener: 2 percent to 4 percent air.

E. Use admixtures for water reduction and set control in strict compliance with manufacturer's directions.

F. Slump Limits: See General Structural Notes on drawings.

2.7 CONCRETE MIXING

A. Ready-Mixed Concrete: Comply with requirements of ASTM C 94, and as specified.
1. When air temperature is between 85 deg F (30 deg C) and 90 deg F (32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes, and when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

2.8 REPAIR MATERIALS

A. Repair Underlayment Beneath Floor Finishes: **Not Used**

B. Repair Topping: Traffic-bearing, cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/4 inch (6 mm).
   1. Cement Binder: ASTM C 150, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
   2. Primer: Product of topping manufacturer recommended for substrate, conditions and application.
   3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3 to 6 mm) or coarse sand as recommended by topping manufacturer.
   4. Compressive Strength: Not less than 5700 psi (39 MPa) at 28 days when tested according to ASTM C 109/C 109M.

2.9 CONCRETE TYPES (EXTERIOR): NOT USED

PART 3 – EXECUTION

3.1 GENERAL

A. Coordinate the installation of joint materials and vapor retarders with placement of forms and reinforcing steel.

3.2 FORMS - NOT USED

3.3 PLACING REINFORCEMENT

A. General: Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars," for details and methods of reinforcement placement and supports and as herein specified.
   1. Avoiding cutting or puncturing vapor retarder during reinforcement placement and concreting operations.

B. Clean reinforcement of loose rust and mill scale, earth, ice, and other materials that reduce or destroy bond with concrete.

C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcing by metal chairs, runners, bolsters, spacers, and hangers, as approved by Contracting Officer.

D. Place reinforcement to maintain at least minimum coverages for concrete protection. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement operations. Set wire ties so ends are directed into concrete, not toward exposed concrete surfaces.

E. Install welded wire fabric in as long lengths as practicable. Lap adjoining pieces at least one full mesh and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

3.4 JOINTS

A. Construction Joints: Locate and install construction joints as indicated on the drawings or, if not indicated, locate so as not to impair strength and appearance of the structure, as acceptable to Contracting Officer.

B. Provide keyways at least 1-1/2 inches deep in construction joints in walls and slabs and between walls and footings. Accepted bulkheads designed for this purpose may be used for slabs.

C. Place construction joints perpendicular to main reinforcement. Continue reinforcement across construction joints except as indicated otherwise. Do not continue reinforcement through sides of strip placements.

D. Use bonding agent on existing concrete surfaces that will be joined with fresh concrete.

E. Isolation Joints in Slabs-on-Ground: Construct isolation joints in slabs-on-ground at points of contact between slabs-on-ground and vertical surfaces, such as column pedestals, foundation walls, grade beams, and elsewhere, as indicated.
1. Joint filler and sealant materials are specified in Division 7 Section "Joint Sealants."

F. Contraction (Control) Joints in Slabs-on-Ground: Construct contraction joints in slabs-on-ground to form panels of patterns as shown. Use saw cuts 1/8 inch wide by one-fourth slab depth.
1. Contraction joints in unexposed floor slabs may be formed by saw cuts as soon as possible after slab finishing as may be safely done without dislodging aggregate. Joints MUST be made within 6 hours of finishing floors, and in no case shall cuts be made later than 12 hours from placement.
2. Apply joint sealant to all exposed contraction joints. Color selected to match adjacent surface. Joint sealant material is specified in Division 7 Section "Joint Sealants."

3.5 INSTALLATION OF EMBEDDED ITEMS

A. General: Set and build into work anchorage devices and other embedded items required for other work that is attached to or supported by cast-in-place concrete. Use setting drawings, diagrams, instructions, and directions provided by suppliers of items to be attached thereto.

B. Forms for Slabs: NOT USED

3.6 VAPOR RETARDERS

A. Vapor Retarder: match and seal to the existing underslab vapor retarder

3.7 PREPARATION OF FORM SURFACES - NOT USED

3.8 CONCRETE PLACEMENT

A. Inspection: Before placing concrete, inspect and complete formwork installation, reinforcing steel, and items to be embedded or cast in. Notify other crafts to permit installation of their work; cooperate with other trades in setting such work.

B. General: Comply with ACI 304, "Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete," and as herein specified.

C. Deposit concrete continuously or in layers of such thickness that no concrete will be placed on concrete that has hardened sufficiently to cause the formation of seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as specified. Deposit concrete to avoid segregation at its final location.

D. Placing Concrete in Forms: Deposit concrete in forms in horizontal layers no deeper than 24 inches and in a manner to avoid inclined construction joints. Where placement consists of several layers, place each layer while preceding layer is still plastic to avoid cold joints.
1. Consolidate placed concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping. Use equipment and procedures for consolidation of concrete in accordance with ACI 309.
2. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations not farther than visible effectiveness of the machine. Place vibrators to rapidly penetrate placed layer and at least 6 inches into

preceding layer. Do not insert vibrators into lower layers of concrete that have begun to set. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing segregation of mix.

E. Placing Concrete Slabs: Deposit and consolidate concrete slabs in a continuous operation, within limits of construction joints, until the placing of a panel or section is completed.
1. Consolidate concrete during placing operations so that concrete is thoroughly worked around reinforcement and other embedded items and into corners.
2. Bring slab surfaces to correct level with a straightedge and strike off. Use bull floats or darbies to smooth surface free of humps or hollows. Do not disturb slab surfaces prior to beginning finishing operations.
3. Maintain reinforcing in proper position on chairs during concrete placement.

F. Hot-Weather Placing: When hot weather conditions exist that would seriously impair quality and strength of concrete, place concrete in compliance with ACI 305 and as herein specified.
1. Cool ingredients before mixing to maintain concrete temperature at time of placement below 90 deg F (32 deg C). Mixing water may be chilled or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Use of liquid nitrogen to cool concrete is Contractor's option.
2. Cover reinforcing steel with water-soaked burlap if it becomes too hot, so that steel temperature will not exceed the ambient air temperature immediately before embedment in concrete.
3. Fog spray forms, reinforcing steel, and subgrade just before placing concrete.
4. Use water-reducing retarding admixture when required by high temperatures, low humidity, or other adverse placing conditions, when acceptable to Contracting Officer.

G. Cold-Weather Placing: Comply with provisions of ACI 306 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
1. When air temperature has fallen to or is expected to fall below 40 deg F (4 deg C), uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F (10 deg C) and not more than 80 deg F (27 deg C) at point of placement.
   a. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
   b. Do not use calcium chloride, salt, and other materials containing antifreeze agents or chemical accelerators unless otherwise accepted in mix designs.

3.9 FINISH OF FORMED SURFACES - NOT USED

3.10 MONOLITHIC SLAB FINISHES-

A. Match adjacent, existing slab finishes for new slab pour.

3.11 CONCRETE CURING AND PROTECTION

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. In hot, dry, and windy weather protect concrete from rapid moisture loss before and during finishing operations with an evaporation-control material. Apply in accordance with manufacturer's instructions after screeding and bull floating, but before power floating and troweling.

B. Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting, keep continuously moist for not less than 7 days.

C. Curing Unformed Surfaces: Cure unformed surfaces, such as slabs, floor topping, and other flat surfaces, by application of appropriate curing method.

F. Final cure concrete surfaces to receive liquid floor hardener or finish flooring by use of moisture-retaining cover, unless otherwise directed.

3.12 REMOVAL OF FORMS - NOT USED

3.13 REUSE OF FORMS - NOT

3.14 MISCELLANEOUS CONCRETE ITEMS

A. Filling In: Fill in holes and openings left in concrete structures for passage of work by other trades, unless otherwise shown or directed, after work of other trades is in place. Mix, place, and cure concrete as herein specified, to blend with in-place construction. Provide other miscellaneous concrete filling shown or required to complete work.

3.15 CONCRETE SURFACE REPAIRS

A. Patching Defective Areas: Repair and patch defective areas with cement mortar immediately after removal of forms, when acceptable to Contracting Officer.
   1. Cut out honeycomb, rock pockets, and voids over 1/4 inch in any dimension, and holes left by tie rods and bolts down to solid concrete but in no case to a depth less than 1 inch. Make edges of cuts perpendicular to the concrete surface. Thoroughly clean, dampen with water, and brush-coat the area to be patched with specified bonding agent. Place patching mortar before bonding compound has dried.
   2. For exposed-to-view surfaces, blend white Portland cement and standard Portland cement so that, when dry, patching mortar will match surrounding color. Provide test areas at inconspicuous location to verify mixture and color match before proceeding with patching. Compact mortar in place and strike-off slightly higher than surrounding surface.

B. Repair of Formed Surfaces: - NOT USED
.

C. Repair of Unformed Surfaces: Test unformed surfaces, such as monolithic slabs, for smoothness and verify surface plane to tolerances specified for each surface and finish. Correct low and high areas as herein specified. Test unformed surfaces sloped to drain for trueness of slope and smoothness by using a template having the required slope.
   1. Repair finished unformed surfaces that contain defects that affect the concrete's durability. Surface defects, as such, include crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through nonreinforced sections regardless of width, spalling, popouts, honeycombs, rock pockets, and other objectionable conditions.
   2. Correct high areas in unformed surfaces by grinding after concrete has cured at least 14 days.
   3. Correct low areas in unformed surfaces during or immediately after completion of surface finishing operations by cutting out low areas and replacing with patching compound. Finish repaired areas to blend into adjacent concrete. Proprietary underlayment compounds may be used when acceptable to Contracting Officer.
   4. Repair defective areas, except random cracks and single holes not exceeding 1 inch in diameter, by cutting out and replacing with fresh concrete. Remove defective areas to sound concrete with clean, square cuts and expose reinforcing steel with at least 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding compound. Mix patching concrete of same materials to provide concrete of same type or class as original concrete. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
   5. Correct low areas in existing slab by scarifying surface, priming and finishing with patching compound blended into adjacent concrete.

D. Repair methods not specified above may be used, subject to acceptance of Contracting Officer.

3.16 QUALITY CONTROL TESTING DURING CONSTRUCTION

A. General: CONTRACTOR will employ a testing laboratory to perform tests and to submit test reports.

B. Sampling and testing for quality control during concrete placement may include the following, as directed by Contracting Officer.

C. Sampling Fresh Concrete: ASTM C 172, except modified for slump to comply with ASTM C 94.
   1. Slump: ASTM C 143; one test at point of discharge for each day's pour of each type of concrete; additional tests when concrete consistency seems to have changed.
   2. Air Content: ASTM C 173, volumetric method for lightweight or normal weight concrete; ASTM C 231, pressure method for normal weight concrete; one for each day's pour of each type of air-entrained concrete.
   3. Concrete Temperature: Test hourly when air temperature is 40 deg F (4 deg C) and below, when 80 deg F (27 deg C) and above, and each time a set of compression test specimens is made.
   4. Compression Test Specimen: ASTM C 31; one set of four standard cylinders for each compressive-strength test, unless otherwise directed. Mold and store cylinders for laboratory-cured test specimens except when field-cure test specimens are required.
   5. Compressive-Strength Tests: ASTM C 39; at least one set for each day's pour, or not less than once for each 150 cubic yards of concrete, or not less than once for each 5,000 s.f. of surface area for slabs or walls; one specimen tested at 7 days, two specimens tested at 28 days, and one specimen retained in reserve for later testing if required.
      a. When frequency of testing will provide fewer than five strength tests for a given class of concrete, conduct testing from at least five randomly selected batches or from each batch if fewer than five are used.
      b. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, evaluate current operations and provide corrective procedures for protecting and curing the in-place concrete.
      c. Strength level of concrete will be considered satisfactory if averages of sets of three consecutive strength test results equal or exceed specified compressive strength, and no individual strength test result falls below specified compressive strength by more than 500 psi.

D. Test results will be reported in writing to Contracting Officer, Structural Engineer, ready-mix producer, and Contractor within 24 hours after tests. Reports of compressive strength tests shall contain the Project identification name and number, date of concrete placement, name of concrete testing service, concrete type and class, location of concrete batch in structure, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7-day tests and 28-day tests.

E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted but shall not be used as the sole basis for acceptance or rejection.

F. Additional Tests: The testing service will make additional tests of in-place concrete when test results indicate specified concrete strengths and other characteristics have not been attained in the structure, as directed by Contracting Officer. Testing service may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42, or by other methods as directed. Contractor shall pay for such tests when unacceptable concrete is verified.

END OF SECTION

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PART 1 – GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.

1.02 WORK INCLUDED

A. Thin brick veneer masonry, accessories and installation

1.03 RELATED WORK

A. Section 04 05 13 – Mortar and grout.

B. Section 07 62 00 - Metal Flashing And Trim.

C. Section 07 92 00 - Joint Sealants

1.04 REFERENCES

A. 2013 TCNA Handbook for Ceramic Tile Installation, 50th Anniversary Edition, Tile Council of North

B. America, Inc., Anderson, SC, 2013.

C. ASTM International, Annual Book of ASTM Standards, West Conshohocken, PA, 2013. Vol 4.01

D. ASTM C847, Standard Specification for Metal Lath

E. ASTM C270, Standard Specification for Mortar for Unit Masonry

F. ASTM C1088, Standard Specification for Thin Veneer Brick Units Made From Clay or Shale

G. ASTM C1325, Standard Specification for Non-Asbestos FIber-Mat Reinforced Cementitious Backer Units

H. Building Code Requirements for Masonry Structures (TMS 402-13/ACI 530-13/ASCE 5-13), The Masonry Society, Boulder, CO, 2013.

I. FSC Tech Matters, “Guide to Attaching Exterior Wall Coverings through Foam Sheathing to Wood or Steel Wall Framing,” Foam Sheathing Coalition (of the American Chemistry Council), Washington, DC, December 4, 2012, http://fsc.americanchemistry.com/Building-Code/Installation-of-Cladding/Guide-toAttaching-Exterior-Wall-Coverings.pdf7

1.05 SUBMITTALS

A. Submit following in accordance with Section 01 33 00.
1. Product Data: Submit for all specified products. Include all applicable physical and performance data.
2. Samples: Submit 4 samples of thin brick/panel brick veneer units to illustrate color, texture, and size range of each type unit.

3. Manufacturer's detailed installation instructions.

1.06 FIELD SAMPLES

A. General: Comply with Section 01400.

B. Sample Installation: Construct thin brick mock up panel on site as located by Architect and Owner, 3 feet by 4 feet panel size, including sub-framing, substrate surfaces, fasteners, adhesive bonding, joint work, moisture barrier, grout color, expansion joints and control joints.
   1. Obtain Architect's approval before beginning work. Protect and retain sample as a basis on which the quality of the work will be judged. Do not remove until Substantial Completion.
   2. Accepted Field Sample: May not remain as part of completed Work.

1.07 QUALITY ASSURANCE

A. Installer: Experienced in similar types of work of similar scope and be able to furnish list of previous jobs and references if requested by Architect.

B. Expansion Joints: Provide expansion joints as indicated on Drawings or, if not indicated, install at frequency and in accordance with details and as recommended by manufacturer. Confirm locations and frequency with Architect before beginning work.

C. Certifications:
   1. Provide written documentation that products have met or exceeded at least one of the following certifications for a minimum of 10 years:

1.08 PROJECT CONDITIONS

A. Environmental Requirements:
   1. Minimum air temperature of 40 degrees F (4 degrees C) prior to, during, and for 48 hours after completion of work; and
   2. Cold Weather Requirements: IMIAC (International Masonry Industry All-Weather Council) - Recommended Practices and Guide Specifications for Cold Weather Masonry Construction.

1.09 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, handle, and protect materials in accordance with Section 01600.
   1. Store mortar materials on pallets in dry place.
   2. Protect materials from rain, moisture, and freezing temperatures.
   3. Store manufactured thin brick/panel brick veneer above ground on level platforms, which allow air circulation under stacked units
   4. Handle units on pallets or flatbed barrows.

1.10 WARRANTY

A. Special Warranty: Prepare and submit in accordance with Section 01700.
   1. Provide a 20-year warranty against manufacturing defects in manufactured thin brick/panel brick veneer products.

PART 2 – PRODUCTS

2.01 ACCEPTABLE THIN BRICK/PANEL BRICK VENEER PRODUCT

A. Subject to compliance with requirements, provide the following product:
1. Evolution Brick as manufactured by Best Panel, 126 Old HWY 60 East, Hardinsburg, KY 40143, Phone: 270-788-3535
2. Contact Greg Powers, 502-558-4612
   a. Color: Sierra Tumbled

3. Kiln fired thin brick veneer, composed of following materials:
   a. Clay, shale, fire clay, sand or mixtures thereof, kiln fired to fusion to produce clay masonry units per ASTM C1088, Type TBS (Standard) and TBA brick
4. Durability: ASTM C1088, Grade Exterior.
5. Freeze and Thawing: No breakage and not greater than 0.5% loss in dry weight when tested in accordance with ASTM C1088.
6. Thin brick veneer size: 7 ½ (L) inches by 2 ¼ (H) inches by ½ thick.

A. Thin brick veneer special shapes: Corner units.

2.03 BRICK VENEER ACCESSORIES

A. Adhesive: Exterior, waterproof, synthetic rubber base adhesive, complying with APA AFG-01, as recommended by manufacturer.

B. Mortar: A rich mixture of the following materials, mixed in accordance with the manufacturers detailed installation instructions for tuck pointing thin brick veneer joints.
1. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color to match existing mortar.
2. Hydrated Lime: ASTM C 207, Type S.
3. Aggregate for Mortar: ASTM C 144.
   a. For mortar that is exposed to view, use washed aggregate consisting of natural sand or crushed stone.
   b. White-Mortar Aggregates: Natural white sand or crushed white stone.
   c. Colored-Mortar Aggregates: Natural sand or crushed stone of color necessary to produce required mortar color.
4. Mortar Pigments: Natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes. Use only pigments with a record of satisfactory performance in masonry mortar.
5. Water: Potable.
6. Thoroughly mix grout ingredients in quantities needed for immediate use. Mix grout to ASTM C 270, Type S proportions.

C. Mortar Mixes:
1. Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures, unless otherwise indicated.
2. Limit cementitious materials in mortar to Portland cement and lime.
3. Pigmented Mortar: Use colored cement product or select and proportion pigments with other ingredients to produce color required. Do not add pigments to colored cement products.
   a. Pigments shall not exceed 10 percent of Portland cement by weight.
   b. Mix to match existing mortar.

D. Joint Sealant: Refer to Section 07 92 00.

E. Fasteners: Coated 1-1/2 inch nails, staples, or screws of type and for spacing as recommended by thin brick veneer manufacturer for loads encountered.

F. Cleaner: Nonacid cleaner as recommended by thin brick veneer manufacturer.

PART 3 – EXECUTION

3.01 EXAMINATION AND PREPARATION

A. Examination:
1. Verify that field conditions are acceptable and are ready to receive work in accordance with the manufacturers written installation instructions.
2. Verify that built-in items are in proper location and ready for roughing into masonry work.
3. Consult Architect if deficiencies exist. Correct deficiencies in accordance with requirements of thin brick veneer manufacturer's written installation instructions.

B. Protect surrounding area from possible damage during installation work.

C. Initiating installation constitutes Installer's acceptance of substrates.

3.02 INSTALLATION

A. Evolution Brick Pieces and Corners Unit Application:
1. Exterior: Cover the wall substrate with Interior/Exterior adhesive or mortar per manufacturer's recommended written installation instructions.
2. Place thin brick veneer pieces in position level, with 3/8 inch joint spacing, plumb with surrounding units. Apply firm pressure to bed the unit solidly in the adhesive or mortar base.
   a. Bond Pattern: Running bond, or as indicated on the Drawings.
   b. Install outside corner return units with short and long lengths alternated.
   c. Plan work to minimize jobsite cutting. Perform necessary cutting with proper tools to provide uniform edges; take care to prevent breaking unit corners or edges.

B. Jointing:
1. Allow adhesive to set and cure in accordance with the manufacturers' instructions for individual thin brick veneer units.
2. Install mortar to thin brick veneer joints using a tuck pointing tool, metal tipped mortar bag or a grout setting machine in accordance with the manufacturers written installation instructions.
   a. Fill joints completely with mortar.
   b. Remove excess mortar; do not allow mortar to dry on face of units.
   c. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness, unless otherwise indicated.
   d. Clean and finish joints in accordance with manufacturer's instructions.

C. Control Joints: Size in accordance with Section 07920 for sealant performance, but in no case larger than adjacent mortar joints in exposed thin brick veneer units.

D. Expansion Joints: Provide where indicated on Drawings or as recommended by system manufacturer.

3.03 ADJUSTING

A. Cutting and Fitting: Cut and fit for chases, pipes, conduit, sleeves, and grounds. Cooperate with other sections of work to provide correct size, shape, and location.

3.04 CLEANING AND SEALING

A. Cleaning:
1. Remove excess mortar and smears using brush or steel wool.
2. Replace defective mortar. Match adjacent work.
3. Clean soiled surfaces with non-acidic solution, acceptable to the thin brick veneer manufacturer, which will not harm masonry or adjacent materials.
4. Leave surfaces thoroughly clean and free of mortar and other soiling.
5. Use nonmetallic tools in cleaning operations.

END OF SECTION

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PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.

1.02 WORK INCLUDED:

A. Provide miscellaneous metals, shop fabricated, and manufactured in accordance with the schedule.
B. Primer.

1.03 RELATED WORK:

A. Section 09 91 23 – Interior Painting

1.04 REFERENCES:

A. ASTM A36 - Structural Steel.

B. ASTM B26 - Cast Aluminum.

C. ASTM A53 - Steel Pipe, Hot Dipped, Zinc Coated Welded and Seamless.

D. ASTM 500 - Steel Tubing, Cold-formed, Welded and Seamless.

E. FS TT-P-86 – Paint, Ready-Mixed.

F. AWS D1.1 - Structural welding Code.

1.05 SUBMITTALS:

A. Submit shop drawings under provisions of Section 01 33 00 indicating in detail sizes, material, and gauge, methods of securing and anchoring and finish.
1. Include erection drawings, elevations, and details where applicable.
2. Indicate welded connections using standard AWS welding symbols.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. Miscellaneous Structural Steel: ASTM A36.

B. Cast Aluminum: ASTM B26.

C. Steel Pipe: ASTM 53, Standard Weight.

D. Steel Tubing: ASTM A500, Grade B.

E. Fasteners: Bolts, nuts, washers, screws, expansion shields, suitable for intended use.

F. Shop Primer for Ferrous Metal: Fast-curing, lead-free, abrasion-resistant, rust-inhibitive primer selected for compatibility with substrates and with types of alkyd-type finish paint systems indicated, and for capability to provide a sound foundation from field-applied topcoats despite prolonged exposure; complying with performance requirements only of FS TT-P-86, Types I, II, and III.

2.02 SCHEDULE OF ITEMS:

A. Anchors: Unless specifically excluded, provide all sleeves, inserts, and bolts required in conjunction with items of work included under this section and under other trades where necessary for securing work in place. Sizes, kinds, and spacing of bolts and/or anchors not indicated or specified shall be as directed. Installation of anchors for other trades shall be the responsibility of the respective trades.

B. Miscellaneous Plates and Shapes: Provide items that do not form a part of the structural steel frame work, such as lintels, angles and plates, miscellaneous mountings, and framing as needed to complete the work. Fabricate miscellaneous items from ASTM A36 steel.

C. Supports for Millwork: Steel brackets for certain items of millwork as indicated on the drawings shall be fabricated from 1" x 1" 11 gage steel tubing with 1/8 inch thick steel plate anchors welded-on at 45 degree angles and punched for 1/4 inch anchors. All welds shall be ground smooth.

PART 3 - EXECUTION

3.01 GENERAL:

A. Verify all measurements and take necessary field measurements before fabrication. Weld in accordance with AWS Code D1.1. Furnish exposed fasteners on compatible materials, matching color and finish, and harmonizing with the service where applied. Include materials and parts necessary to complete each item. Provide necessary miscellaneous bolts and anchors, supports, braces, and connections. Fabricate or match the necessary rebates, lugs, and brackets to permit neat and substantial assembly. Punch or drill holes for bolts and screws. Use concealed fasteners where practicable. Form weather-exposed joints to exclude water.

3.02 WORKMANSHIP:

A. Form miscellaneous metalwork to shape and size required with sharp lines and angles and true curves. Drill and punch in proper alignment and to match well at mated parts. Weld continuously, except where tack welding is permitted. Make exposed welds continuous and grind smooth. Smoothly finish exposed surfaces of work in place. Cope or miter corner joints. Set work accurately to established lines and elevations and fasten securely.

3.03 SHOP PAINTED:

A. All ferrous metals, except those portions embedded in concrete, shall receive a shop coat of the material specified.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
1. Gypsum sheathing
2. Plywood wall surfacing.
3. Wood grounds, nailers, and blocking.
4. Wood furring.
5. Building wrap.
6. Plywood wainscot.

B. Related Sections: The following Sections contain requirements that relate to this Section:
1. Division 6 Section "Interior Architectural Woodwork" for interior woodwork specially fabricated for this Project.
2. Division 9 Section 09 22 16 “Non-Load-Bearing Steel Framing”
3. Division 9 Section 09 29 00 “Gypsum Board”

1.2 DEFINITIONS

A. Rough carpentry includes carpentry work not specified as part of other Sections and generally not exposed, unless otherwise specified.

1.3 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.

B. LEED Submittals:
1. Certificates for Credit MR 6, Credit MR 7: Chain-of-custody certificates indicating that products specified to be made from certified wood comply with forest certification requirements. Include documentation that manufacturer is certified for chain of custody by an FSC-accredited certification body. Include statement indicating cost for each certified wood product.
2. Product Data for Credit IEQ 4.1: For adhesives, documentation including printed statement of VOC content.
3. Product Data for Credit IEQ 4.4: For composite wood products, documentation indicating that product contains no urea formaldehyde.
4. Laboratory Test Reports for Credit IEQ 4: For adhesives and composite wood products, documentation indicating that products comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

C. Wood treatment data as follows including chemical treatment manufacturer's instructions for handling, storing, installation, and finishing of treated material:
1. For each type of preservative treated wood product include certification by treating plant stating type of preservative solution and pressure process used, net amount of preservative retained, and compliance with applicable standards.
2. For water-borne treated products include statement that moisture content of treated materials was reduced to levels indicated prior to shipment to project site.
3. For fire-retardant-treated wood products include certification by treating plant that treated material complies with specified standard and other requirements.
4. Material test reports from qualified independent testing laboratory indicating and interpreting test results relative to compliance of fire-retardant-treated wood products with requirements indicated.
5. Warranty of chemical treatment manufacturer for each type of treatment.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Delivery and Storage: Keep materials under cover and dry. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber as well as plywood and other panels; provide for air circulation within and around stacks and under temporary coverings including polyethylene and similar materials.
   1. For lumber and plywood pressure treated with waterborne chemicals, place spacers between each bundle to provide air circulation.

PART 2 - PRODUCTS

2.1 LUMBER, GENERAL

A. Lumber Standards: Furnish lumber manufactured to comply with PS 20 "American Softwood Lumber Standard" and with applicable grading rules of inspection agencies certified by American Lumber Standards Committee's (ALSC) Board of Review.

B. Inspection Agencies: Inspection agencies and the abbreviations used to reference them with lumber grades and species include the following:
   1. RIS - Redwood Inspection Service.
   2. NLGA - National Lumber Grades Authority (Canadian).
   3. SPIB - Southern Pine Inspection Bureau.
   4. WCLIB - West Coast Lumber Inspection Bureau.
   5. WWPA - Western Wood Products Association.

C. Grade Stamps: Provide lumber with each piece factory-marked with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.
   1. For exposed lumber furnish pieces with grade stamps applied to ends or back of each piece; or omit grade stamps entirely and provide certificates of grade compliance issued by inspection agency.

D. Nominal sizes are indicated, except as shown by detail dimensions. Provide actual sizes as required by PS 20, for moisture content specified for each use.
   1. Provide dressed lumber, S4S, unless otherwise indicated.
   2. Provide seasoned lumber with 19 percent maximum moisture content at time of dressing and shipment for sizes 2 inches or less in nominal thickness, unless otherwise indicated.

2.2 MISCELLANEOUS LUMBER

A. General: Provide lumber for support or attachment of other construction including cant strips, bucks, nailers, blocking, furring, grounds, stripping, and similar members.

B. Fabricate miscellaneous lumber from dimension lumber of sizes indicated and into shapes shown.

C. Moisture content: 19 percent maximum for lumber items not specified to receive wood preservative treatment.

D. Grade: "Standard" grade light-framing-size lumber of any species or board-size lumber as required. "No. 3 Common" or "Standard" grade boards per WCLIB or WWPA rules or "No. 2 Boards" per SPIB rules.

2.3 CONSTRUCTION PANELS

A. Construction Panel Standards: Comply with PS 1 "U.S. Product Standard for Construction and Industrial Plywood" for plywood construction panels and, for products not manufactured under PS 1 provisions, with APA PRP-108.

B. Trademark: Furnish construction panels that are each factory-marked with APA trademark evidencing compliance with grade requirements.

C. Size and Grade: 4x8x5/8" APA A-C plugged exposure 1.

2.4 CONSTRUCTION PANELS FOR BACKING

A. Plywood Backing Panels: For mounting electrical or telephone equipment, provide fire-retardant-treated plywood panels with grade designation, APA C-D PLUGGED EXPOSURE 1, in thickness indicated, or, if not otherwise indicated, not less than 15/32 inch.

2.5 FASTENERS

A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
   1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with a hot-dip zinc coating per ASTM A 153 or of AISI Type 304 stainless steel.

B. Nails, Wire, Brads, and Staples: FS FF-N-105.

C. Power Driven Fasteners: National Evaluation Report NER-272.

D. Wood Screws: ANSI B18.6.1.

E. Lag Bolts: ANSI B18.2.1.

F. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and where indicated, flat washers.

2.6 PRESERVATIVE WOOD TREATMENT BY PRESSURE PROCESS

A. General: Where lumber or plywood is indicated as preservative-treated wood or is specified herein to be treated, comply with applicable requirements of AWPA Standards C2 (Lumber) and C9 (Plywood). Mark each treated item with the AWPB or SPIB Quality Mark Requirements.

B. Pressure-treat above-ground items with water-borne preservatives to a minimum retention of 0.25 pcf. For interior uses, after treatment, kiln-dry lumber and plywood to a maximum moisture content, respectively, of 19 percent and 15 percent. Treat indicated items and the following:
   1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
   2. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.
   3. Wood framing members less than 18 inches above grade.
   4. Wood floor plates installed over concrete slabs directly in contact with earth.

C. Pressure-treat wood members in contact with the ground or fresh water with water-borne preservatives to a minimum retention of 0.40 pcf.

D. Complete fabrication of treated items prior to treatment, where possible. If cut after treatment, coat cut surfaces to comply with AWPA M4. Inspect each piece of lumber or plywood after drying and discard damaged or defective pieces.

E. Fire-Retardant-Treated Plywood
1. General: Where fire-retardant-treated materials are indicated, use materials complying with requirements in this article that are acceptable to authorities having jurisdiction and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.
2. Fire-Retardant-Treated Plywood by Pressure Process: Products with a flame-spread index of 25 or less when tested according to ASTM E 84, and with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet (3.2 m) beyond the centerline of the burners at any time during the test.
    a. Use treatment that does not promote corrosion of metal fasteners.
    b. Exterior Type: Treated materials shall comply with requirements specified above for fire-retardant-treated plywood by pressure process after being subjected to accelerated weathering according to ASTM D 2898. Use for exterior locations and where indicated.
    c. Interior Type A: Treated materials shall have a moisture content of 28 percent or less when tested according to ASTM D 3201 at 92 percent relative humidity. Use where exterior type is not indicated.
    d. Design Value Adjustment Factors: Treated lumber plywood shall be tested according ASTM D 5516 and design value adjustment factors shall be calculated according to ASTM D 6305. Span ratings after treatment shall be not less than span ratings specified. For roof sheathing and where high-temperature fire-retardant treatment is indicated, span ratings for temperatures up to 170 deg F (76 deg C) shall be not less than span ratings specified.
3. Kiln-dry material after treatment to a maximum moisture content of 15 percent. Do not use material that is warped or does not comply with requirements for untreated material.
4. Identify fire-retardant-treated plywood with appropriate classification marking of qualified testing agency.
5. Application:
    a. Concealed Blocking

2.8 BUILDING WRAP

A. Building Wrap: Air-retarder sheeting made from polyolefins; cross-laminated films, woven strands, or spun-bonded fibers; coated or uncoated; with or without perforations; and complying with ASTM E 1677, Type I.
1. Thickness: Not less than 3 mils (0.08 mm).
2. Permeance: Not less than 10 perms (575 ng/Pa x s x sq. m).
3. Flame-Spread Index: 25 or less per ASTM E 84.
4. Allowable Exposure Time: Not less than three months.
5. Products:
    a. Celotex Corporation (The); Building Products Division.
    b. DuPont (E. I. du Pont de Nemours and Company).
    c. Parsec, Inc.
    d. Raven Industries, Inc.
    e. Reemay, Inc.
    f. Simplex Products.
    g. Sto-Cote Products, Inc.
    h. Tenneco Building Products.

B. Building Wrap Tape: Pressure-sensitive plastic tape recommended by building wrap manufacturer for sealing joints and penetrations in building wrap.

2.9 PLYWOOD WAINSCOT

A. Plywood Wainscot: For wall protection in stock rooms, car care area and other areas indicated on the drawings:
1. APA C-D plywood.
2. Exposure 1.
3. 5/8” thick.
4. Paint ready.
5. Size: 4’ x 8’.
6. Mounted vertically to achieve 8’-0” height of wainscoting.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Discard units of material with defects that impair quality of rough carpentry construction and that are too small to use in fabricating rough carpentry with minimum joints or optimum joint arrangement.

B. Set rough carpentry to required levels and lines, with members plumb and true to line and cut and fitted.

C. Fit rough carpentry to other construction; scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, grounds, and similar supports to allow attachment of other construction.

D. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated.

E. Countersink nail heads on exposed carpentry work and fill holes.

F. Use common wire nails, unless otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting of wood; predrill as required.

3.2 WOOD GROUNDS, NAILERS, BLOCKING, AND SLEEPERS

A. Install wood grounds, nailers, blocking, and sleepers where shown and where required for screeding or attachment of other work. Form to shapes as shown and cut as required for true line and level of work to be attached. Coordinate location with other work involved.

B. Attach to substrates as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise indicated. Build into masonry during installation of masonry work. Where possible, anchor to formwork before concrete placement.

3.3 GYPSUM SHEATHING

A. General: Install gypsum board sheathing where shown. Fasten to exterior face of stud framing for exterior walls. Keep perimeter fasteners 3/8 inch from edges and ends of board units. Fit boards tightly against each other and around openings.

B. Install 2-foot by 8-foot sheathing horizontally with long edges at right angles to studs. Abut ends of boards over centers of studs and stagger end joints of adjacent boards not less than one stud spacing, two where possible. Screw to each support to comply with manufacturer's recommended spacing, but install not less than 4 fasteners per each 2-foot width per stud if

framing is diagonally braced, or not less than 7 fasteners per 2-foot width per stud if not braced.

C. Install 4-foot by 8-foot or longer sheathing vertically with long edges parallel to, and centered over, studs. Install solid wood blocking where end joints do not bear against framing sills or plates. Screw to each support to comply with manufacturer's recommended spacing, but space fasteners not more than 4 inches o.c. around perimeter at edge and end supports and 8 inches o.c. at intermediate supports.

3.4 BUILDING WRAP

A. Cover all gypsum sheathing with building wrap as follows:

1. Apply building wrap as indicated in manufacturer’s instructions. Apply horizontally with 2-inch overlap and 6-inch end lap. Fasten to sheathing with corrosion resistant staples.

END OF SECTION

PART 1 - GENERAL

1.1 QUALITY ASSURANCE

A. Comply with applicable requirements of "Architectural Woodwork Quality Standards" published by the Architectural Woodwork Institute (AWI), except as otherwise indicated.

B. Installer Qualifications: Arrange for installation of architectural of woodwork by a firm which can demonstrate successful experience in installing architectural woodwork items similar in type and quality to those required for this project.

1.2 WORK INCLUDED

A. Millwork and trim.

B. Installation of vendor supplied casework.

1.3 RELATED WORK

A. Section 06 10 53 – Misc. Rough Carpentry.

B. Section 09 91 23 – Interior Painting.

1.4 SUBMITTALS

A. Product Data: Submit manufacturer's product data for each product and process specified as work of this section and incorporated into items of architectural woodwork during fabrication, finishing, and installation.

B. Quality Certification: Submit woodwork Manufacturer's (Fabricator's) certification, stating that fabricated woodwork complies with quality grades and other requirements indicated.

C. Shop Drawings: Submit shop drawing showing location of each item, dimensioned plans and elevations, large scale details, attachment devices and other components.

D. Samples: Submit the following samples:
1. Plastic laminate, 8" x 10" for each type, color pattern, and surface finish.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Protect woodwork and plastics during transit, delivery, storage and handling to prevent damage, soiling and deterioration.

1.6 PROJECT CONDITIONS

A. Maintain temperature and humidity in installation area as required to maintain moisture content of installed woodwork within a 1.0 percent tolerance of optimum moisture content, from date of installation through remainder of construction period. Require Woodwork Manufacturer to establish optimum moisture content and required temperature and humidity conditions.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering high pressure decorative laminates and/or solid surfacing which may be incorporated in the work include; but are not limited to, the following:
   1. DuPont Corian
   2. Formica Corp.
   3. Nevamar Corp.
   4. Wilsonart Corp.

2.2 FABRICATION, GENERAL

A. Wood Moisture Content: Comply with requirements of referenced quality standard for moisture content of lumber at time of fabrication and for relative humidity conditions in the installation areas.

B. Fabricate woodwork to dimensions, profiles, and details indicated with openings and mortises precut, where possible, to receive hardware and items and work.
   1. Ease edges to a 1/16" radius, for corners of laminate clad cabinets.
   2. Provide base, wall and full height units with drawer fronts, doors and fixed panels overlaying and concealing frames and sides of cabinet bodies.

C. Pre-Cut Openings: Fabricate architectural woodwork with precut openings, where possible, to receive hardware, appliances, plumbing fixtures, electrical work and similar items. Locate openings accurately and use templates or roughing-in diagrams for proper size and shape. Smooth edges of cutoffs and, where located in countertops and similar exposures seal edges of cutouts with an opaque water-resistant coating to match adjacent laminate.

D. Measurements: Before proceeding with fabrication of woodwork required to be fitted to other construction, obtain field measurements and verify dimensions and shop drawing details as required for accurate fit.

2.3 ARCHITECTURAL MILLWORK

A. General: Except as otherwise indicated, comply with the following requirements for architectural woodwork not specifically indicated as prefabricated or prefinished standard products.

B. Wood Moisture Content: Provide kiln-dried (KD) lumber with an average moisture content range of 6% to 11%. Maintain temperature and relative humidity during fabrication, storage and finishing operations so that moisture content values for woodwork at time of installation do not exceed the following:
   1. Interior Wood Finish: 5%-10% for mild regions (as defined by AWI).

C. Interior Wood for Transparent Finish:
   1. Solid Wood: Rift-sawn Red Oak.
   2. Plywood: Rift-sawn Red Oak.

D. Veneer Matching: To be determined by Fabricator, for best visual effect, depending upon flitch width and grain character. Refer questions about best visual effect to the Contracting Officer for resolution as work progresses.

E. Plastic Laminate: Comply with NEMA LD-3 for type, thickness, color, pattern and finish indicated for each application, or if not indicated, as selected by Architect from manufacturer's standard products.

F. Quality Standards: For following types of architectural woodwork; comply with indicated standards as applicable.
   1. Standing and Running Trim: AWI Section 300.
   2. Shelving: AWI Section 600.
   3. Miscellaneous Work: ASI Section 700.

G. Design and Construction Features: Comply with details shown for profile and construction of architectural wood work; and, where not otherwise shown, comply with applicable Quality Standards, with alternate details as Fabricator's opinion.

H. Pre-Cut Openings: Fabricate architectural woodwork with pre-cut openings, where possible, to receive hardware, appliances, plumbing fixtures, electrical work and similar items. Locate openings accurately and use templates or roughing-in diagrams for proper size and shape. Smooth edges of cutoffs and, where located in countertops and similar exposures seal edges of cutouts with a water-resistant coating.

I. Measurements: Before proceeding with fabrication of woodwork required to be fitted to other construction, obtain field measurements and verify dimensions and shop drawing details as required for accurate fit.

2.04 FASTENERS AND ANCHORS

A. Screws: Select material, type, size and finish required for each use. Comply with FS FF-S-111 for applicable requirements.
   1. For metal framing supports, provide screws as recommended by metal framing manufacturer.

B. Nails: Select material, type, size and finish required for each use. Comply with FS FF-N-105 for applicable requirements.

C. Anchors: Select material, type, size and finish required by each substrate for secure anchorage. Provide non-ferrous metal or hot-dip galvanized anchors and inserts for exterior installations and elsewhere as required for corrosion-resistance. Provide toothed steel or lead expansion bolt devices for drilled-in-place anchors. Furnish inserts and anchors, as required, to be set into concrete or masonry work for subsequent woodwork anchorage.

PART 3 - EXECUTION

3.1 WORKMANSHIP

A. Interior woodwork shall have a fine, smooth finish, and be free from machine or tool marks, abrasions and raised grain on exposed surfaces.

B. Joints shall be tight and so formed as to concealed shrinkage. Shop joints shall be glued under pressure.

C. Set wood finish straight, plumb or level, in true alignment, with closely fitted joints, and rigidly fastened in place. Nailing and fastening shall be concealed where possible and exposed nail heads shall be set for puttying.

3.2 MILLWORK

A. The minimum standard for millwork construction shall be Custom Grade conforming to AWI Section 400 and as specified. The type of construction shall be reveal overly with a face frame.

B. Definitions:
   1. Exposed portions of cabinets shall include all surfaces visible when doors are closed. All visible members in open cases shall be considered as exposed portions.
   2. Semi-exposed portions of cabinets shall include these members behind opaque doors, such as shelves, divisions, and interior faces of ends, cabinet backs and bottoms.
   3. Concealed portions of cabinets shall include sleepers, web frames and other surfaces not usually visible after installation.

C. Exposed surfaces and edges shall be free from defects; face material shall be closely matched and joined, and no raw plywood edges shall show on finished work. Where plywood edges occur, they shall be edged with material of same grade and species as the finish wood of the remainder of the work.

D. All exposed surfaces shall be sanded to even smooth surfaces ready for hand finishing.

E. All light fixtures, electric outlets, telephone outlets, etc., to be furnished and installed by the Electrical Contractor. Cutouts for these items to be made by millwork contractor. Millwork contractor to install removable panels at knee spaces where indicated on drawings in order that working space be accessible to Electrical Contractor.

F. All plumbing fixtures in connection with this section shall be furnished and installed by the Mechanical contractor. Cutouts to be made by millwork contractor.

G. Surfaces and edges that are to receive plastic laminate finish shall have a smooth, clean surface free from defects.

H. All work shall be shop assembled insofar as practicable. Work shall be delivered, ready for erection, with ample allowances for scribing, cutting and fitting. Units shall be accurately located, erected plumb, level, square and in correct alignment and proper elevation with other work.

3.3 MISCELLANEOUS WOOD AND PLASTIC ITEMS:

A. Miscellaneous wood and plastic items shall be provided where indicated on the drawings. Use materials as specified under Part 2 - Products. Install all items straight, without twist, and securely fastened in place.

3.4 PREPARATION

A. Condition woodwork to average prevailing humidity conditions in installation areas prior to installing.

B. Deliver concrete inserts and similar anchoring devices to be built into substrates, well in advance of time substrates are to be built.

C. Prior to installation of architectural woodwork, examine shop-fabricated work for completion, and complete work as required, including back priming and removal of packing.

3.5 INSTALLATION:

A. Install woodwork plumb, level, true and straight with no distortions. Shim as required using

concealed shims. Install to a tolerance of 1/8" in 8'-0" for plumb and level (including tops); and with no variations in flushness of adjoining surfaces.

B. Scribe and cut woodwork to fit adjoining work, and refinish cut surfaces or repair damaged finish at cuts.

C. Pressure Treated Wood: Handle, store, and install pressure treated wood in compliance with recommendations of chemical treatment manufacturer including those for adhesives, where required for installation.

D. Anchor woodwork to anchors or blocking built-in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation. Except where prefinished matching fasteners heads are required, use find finishing nails for exposed nailing, countersunk and filled flush with woodwork, and matching final finish where transparent finish is indicated.

E. Tops: Anchor securely to base units and other support systems as indicated.

F. Finish hardware shall be installed without injuring other work and so that hardware works exactly as intended.

3.6 ADJUSTMENT, CLEANING, FINISHING, AND PROTECTION:

A. Repair damaged and defective woodwork where possible to eliminate defects functionally and visually; where not possible to repair replace woodwork. Adjust joinery for uniform appearance.

B. Clean woodwork on exposed and semi-exposed surfaces. Touch-up shop-applied finishes to restore damaged or soiled areas.

C. Complete the finishing work specified as work of this section, to whatever extent not completed at shop or prior to installation of woodwork.

D. Provide final protection and maintain conditions, in a manner acceptable to Fabricator and Installer, which ensures architectural woodwork being without damage or deterioration at time of substantial completion.

END OF SECTION

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PART I - GENERAL

1.01. SECTION INCLUDES

A. Exterior, panelized fiber cement cladding system and accessories to complete a drained and back-ventilated rainscreen.

B. Interior fiber cement panelized cladding system and accessories.

1.02 RELATED SECTIONS

A. Section 05 40 00 – Cold Formed Metal Framing

B. Section 06 10 00 - Rough Carpentry

C. Section 07 62 00 – Metal Flashing and Trim

D. Section 07 92 00 – Caulking and Sealant

1.03 REFERENCES

A. American Architectural Manufacturers Association (AAMA):
   1. AAMA 509-14 – Voluntary Test and Classification Method of Drained and Back Ventilated Rain Screen Wall Cladding Systems.

B. ASTM International (ASTM):
   1. ASTM C 518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
   2. ASTM C 1185 - Standard Test Methods for Sampling and Testing Non-Asbestos Fiber Cement.
      a. ASTM C 1186 – Standard Specification for Flat Fiber-Cement Sheets.
   3. ASTM E-84 - Standard Test for Surface Burning Characteristics of Building Materials.
   4. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
   5. ASTM E 228 - Standard Test Method for Linear Thermal Expansion of Solid Materials with a Vitreous Silica Dilatometer.
   6. ASTM E 330 - Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
   7. ASTM E 331 - Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.

C. National Fire Protection Association (NFPA):
   1. NFPA 285 - Fire Test Method for Exterior Wall Assemblies Containing Combustible Material.
   2. NFPA 268 – Ignition Resistance of Exterior Wall Assemblies.

1.04 SUBMITTALS

A. Submit under provisions of Section 01 33 00.

B. Product Data: Submit manufacturer’s product description, storage and handling requirements, and installation instructions.

C. Product Test Reports and Code Compliance: Documents demonstrating product compliance with local building code, such as test reports or Evaluation Reports from qualified, independent testing agencies.

D. Manufacturer's Details: Submit drawings including plans, sections, showing installation details that demonstrate product dimensions, edge/termination conditions/treatments, compression and control joints, corners, openings, and penetrations.

E. Submit samples of each product type proposed for use if requested by architect.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications:
   1. All fiber cement panels specified in this section must be supplied by a manufacturer with a minimum of 10 years of experience in fabricating and supplying fiber cement cladding systems.
      a. Products covered under this section are to be manufactured in an ISO 9001 certified facility.
   2. Provide technical and design support as needed regarding installation requirements and warranty compliance provisions.

B. Installer Qualifications: All products listed in this section are to be installed by a single installer trained by manufacturer or representative.

C. Mock-Up Wall: Provide a mock-up wall as evaluation tool for product and installation workmanship.

D. Pre-Installation Meetings: Prior to beginning installation, conduct conference to verify and discuss substrate conditions, manufacturer's installation instructions and warranty requirements, and project requirements.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Panels must be stored flat and kept dry before installation. A waterproof cover over panels and accessories should be used at all times prior to installation. Do not stack pallets more than two high. Refer to the information included on each pallet.

B. If panels are exposed to water or water vapor prior to installation, allow to completely dry before installing. Failure to do so may result in panel shrinkage at ship lap joints, and such action may void warranty.

C. Panels MUST be carried on edge. Do not carry or lift panels flat. Improper handling may cause cracking or panel damage.

D. Direct contact between the panels and the ground should be avoided at all times. It is necessary to keep panels clean during installation process.

1.07 WARRANTY

A. Provide manufacturer's 15-year warranty against manufactured defects in fiber cement panels. Additional five-year extension available when refinished in year 14-15.

B. Provide manufacturer's 15-year warranty against manufactured defects in panel finish.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. Acceptable Manufacturer: Nichiha Corporation. Nichiha USA, Inc., Manufacturer's Representative: Matt Stephenson, National Brands Manager – Restaurants, M: 770.789.8228, O: 770.805.9466, mstephenson@nichiha.com , www.nichiha.com
   1. Basis of Design Product: Nichiha Vintage Wood
      a. Profile color: Cedar
      b. Accessory/Component Options:
         i. Manufactured Corners with 3-1/2" returns.
         ii. Aluminum trim options: Corner Key – Pre-finished to match wall panel, J-Mold, Open Joint,
            1. Finish: Pre-finished to match wall panel
         iii. Essential Flashing System: Starter, Overhang.
            1. Finish: pre-finished to match wall panel.
      c. Dimensions - AWP-303018" Long x 10" W.
      d. Panel Thickness: 16 mm (5/8").
      e. Weight: 57.32 lbs. per panel.
      f. Coverage: 14.81 sq. ft. per panel.
      g. Factory sealed on six [6] sides.
   2. Substitutions: Not permitted.

2.02 COMPOSITE PANELS

A. composite wall panel systems: provide factory-formed and -assembled, composite wall panels fabricated from a pressed, stamped, and autoclaved mix of Portland cement, fly ash, silica, recycled rejects, and wood fiber bundles; formed into profile for installation method indicated. Include attachment assembly components and accessories required for weathertight system.
   1. basis-of-design product: subject to compliance with requirements, provide Nichiha architectural wall panels;

B. Moderately textured, wood plank composite wall panels Vintage wood , number EF762. Ref drawings for locations.
   1. Panel thickness: 5/8 inch
   2. Panel: factory sealed on all six sides.
   3. Profiles: wood plank texture as indicated on drawings as indicated on drawings.
   4. color: Cedar.
   5. Accessory components: manufactured corners as indicated on drawings.

2.03 MATERIALS

A. Fiber-cement panels manufactured from a pressed, stamped, and autoclaved mix of Portland cement, fly ash, silica, recycled rejects, and wood fiber bundles.

B. Panel surface pre-finished and machine applied.

C. Panels profiled along 3030mm edges so that the long joints between the installed panels are ship-lapped.

D. Factory-applied sealant gasket added to top panel edge; all 3030mm edge joints contain a factory sealant.

2.04 PERFORMANCE REQUIREMENTS:

A. Fiber Cement Cladding – Must comply with ASTM C-1186, Type A, Grade II requirements:
1. Wet Flexural Strength: Result: 1418 psi, Lower Limit: 1015 psi.
2. Water Tightness: No water droplets observed on any specimen.
3. Freeze-thaw: No damage or defects observed.
4. Warm Water: No evidence of cracking, delamination, swelling, or other defects observed.
5. Heat-Rain: No crazing, cracking, or other deleterious effects, surface or joint changes observed in any specimen.

B. Mean Coefficient of Linear Thermal Expansion (ASTM E-228): Max 1.0*10^-5 in./in. F.

C. Surface Burning (CAN-ULC S102/ASTM E-84): Flame Spread: 0, Smoke Developed: 0.

D. Wind Load (ASTM E-330): Contact manufacturer for ultimate test pressure data corresponding to framing type, dimensions, fastener type, and attachment clips. Project engineer(s) must determine Zone 4 and 5 design pressures based on project specifics.
1. Minimum lateral deflection: L/120.

E. Water Penetration (ASTM E-331): No water leakage observed into wall cavity.

F. Steady-State Heat Flux and Thermal Transmission Properties Test (ASTM C-518): 16mm thick panel thermal resistance R Value of 0.47.

G. Fire Resistant (ASTM E-119): The wall assembly must successfully endure 60-minute fire exposure without developing excessive unexposed surface temperature or allowing flaming on the unexposed side of the assembly.

H. Ignition Resistance (NFPA 268): No sustained flaming of panels, assembly when subjected to a minimum radiant heat flux of 12.5 kW/m2 ± 5% in the presence of a pilot ignition source for a 20-minute period.

I. Drained and Back Ventilated Rainscreen (AAMA 509-14): System classifications: W1, V1

2.05 INSTALLATION COMPONENTS

A. Ultimate Clip System:
1. Starter Track:
a. Horizontal Panel Installations - FA 700 – 3,030mm (l) galvalume coated steel.
b. ~~Vertical Panel Installations (AWP-3030 only) – FA 710T – 3,030mm (l) galvalume.~~ (NOTE: Vertical Panel not used on this project)
2. Panel Clips: JEL 778 “Ultimate Clip II” (10mm rainscreen for 16mm AWP) – Zinc-Aluminum-Magnesium alloy coated steel.
a. Joint Tab Attachments (included) – used at all AWP-1818 panel to panel vertical joints – NOT used with AWP-3030 installations.
b. Corner Clips: JE 777C (10mm rainscreen for 5/8” AWP Manufactured Corners) -- Zinc-Aluminum-Magnesium alloy coated steel.
3. Single Flange Sealant Backer – FHK 1015 R (10mm) – 6.5’ (l) fluorine coated galvalume.
4. Double Flange Sealant Backer – FH 1015 R (10mm) – 10’ (l) fluorine coated galvalume.
5. Corrugated Spacer – FS 1005 (5mm), FS 1010 (10mm) – 4’ (l).

B. Aluminum Trim (optional): Paint as specified in finish schedule.

C. Essential Flashing System (optional):
   1. Starter – main segments (3,030mm), inside corners, outside corners
   2. Overhang – main segments (3,030mm), inside corners, outside corners, joint clips

D. Fasteners: Corrosion resistant fasteners, such as hot-dipped galvanized screws appropriate to local building codes and practices must be used. Use Stainless Steel fasteners in high humidity and high-moisture regions. Panel manufacturer is not liable for corrosion resistance of fasteners. Do not use aluminum fasteners, staples or fasteners that are not rated or designed for intended use. See manufacturer's instructions for appropriate fasteners for construction method used.

E. Flashing: Flash all areas specified in manufacturer's instructions. Do not use raw aluminum flashing. Flashing must be galvanized, anodized, or PVC coated.

F. Sealant: Sealant shall comply with ASTM C920, Class 35.
   1. Sealant for Nichiha panels shal be Adseal 458 'Vintage Wood Cedar'

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verification of Conditions:
   1. Fiber-cement panels can be installed over braced wood, steel studs and sheathing including plywood, OSB, plastic foam or fiberboard sheathing.
   2. Allowable stud spacing: 16" o.c. maximum.
   3. A weather resistive barrier is required when installing fiber cement panels. Use an approved weather resistive barrier (WRB) as defined by the 2015 IBC or IRC. Refer to local building codes.
   4. Appropriate metal flashing should be used to prevent moisture penetration around all doors, windows, wall bottoms, material transitions and penetrations. Refer to local building codes for best practices.

B. Examine site to ensure substrate conditions are within alignment tolerances for proper installation.

C. Do not begin installation until unacceptable conditions have been corrected.

D. Do not install panels or components that appear to be damaged or defective. Do not install wet panels.

3.02 TOLERANCE

A. Wall surface plane must be plumb and level within +/- ¼ inch in 20 feet in any direction.
   1. One layer of Nichiha 5mm (~3/16") Spacer may be used as shim.

3.03 INSTALLATION

A. General: Install products in accordance with the latest installation guidelines of the manufacturer and all applicable building codes and other laws, rules, regulations and ordinances. Review all manufacturer installation, maintenance instructions, and other applicable documents before installation.

B. Quality Control

1. Consult with your local dealer or Nichiha Technical Department before installing any Nichiha fiber cement product on a building higher than 45 feet or three stories or for conditions not matching prescribed standard installation guide requirements and methods. Special installation conditions may be required via a Technical Review and Special Applications Form (SAF) process.
2. Vertical Control/Expansion Joints are required within 2-10 feet of outside corners finished with metal trim and approximately every 30 feet thereafter.
3. Horizontal/Compression Joints are required for multi-story installations of AWP. Locate joints at floor lines. Joints are flashed minimum ½" breaks. Do not caulk. Refer to installation guide(s).
   a. Wood framed buildings of three or more floors require a compression joint at each floor.
   b. Steel framed buildings (including reinforced concrete core with LGMF exterior walls) of more than three floors (or 45 feet) require a compression joint every 25 feet at a floor line.

C. Panel Cutting
1. Always cut fiber cement panels outside or in a well-ventilated area. Do not cut the products in an enclosed area.
2. Always wear safety glasses and NIOSH/OSHA approved respirator whenever cutting, drilling, sawing, sanding or abrading the products. Refer to manufacturer SDS for more information.
3. Use a dust-reducing circular saw with a diamond-tipped or carbide-tipped blade.
   a. Recommended circular saw: Makita 7-1/4" Circular Saw with Dust Collector (#5057KB).
   b. Recommended blade: Tenryu Board-Pro Plus PCD Blade (#BP-18505).
   c. Shears (electric or pneumatic) or jig saw can be used for complicated cuttings, such as service openings, curves, radii and scrollwork.
4. Silica Dust Warning: Fiber cement products may contain some amounts of crystalline silica, a naturally occurring, potentially hazardous mineral when airborne in dust form. Consult product SDS or visit https://www.osha.gov/dsg/topics/silicacrystalline/.

3.04 CLEANING AND MAINTENANCE

A. Review manufacturer guidelines for detailed care instructions.

END OF SECTION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including general and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.

1.02 WORK INCLUDED

A. Furnishing of and paying for all materials, labor, equipment, licenses, taxes, and other items required for execution and completion of all work under this Section.

B. The work described in this section of the specifications includes, but is not limited to the following:
1. Concealed sheet metal flashing at exterior doors.
2. Fastening hardware such as nails, screws, reglet wedge blocks, etc.
3. Parapet Cap Flashing (Pre-finished color as scheduled)

1.03 RELATED WORK

A. The following items of related work are specified and included in other sections of these specifications:
1. Rough Carpentry, Section 06100.
2. Caulking and Sealants, Section 07920.
3. Mechanical and Plumbing, Division 15.

1.04 SUBMITTALS

A. Shop Drawings: Submit shop drawings for all metal flashing and trim. Submitted shop drawings shall include, but shall not be limited to the following:
1. Method of attachment.
2. Dimensioned drawings of all metal flashing at windows, exterior grilles and doors.
3. Exterior parapet walls.

B. Samples: Submit manufacturer's literature of all materials specified herein to Contracting Officer for approval in accordance with requirements described herein.

1.04 GENERAL REQUIREMENTS

A. Proper Surfaces: Surfaces to which roofing and sheet metal are to be applied shall be even, smooth, sound, thoroughly clean and dry, and free from all defects that might affect the application.

B. Accessories: All accessories or other items essential to the completeness of the metal flashing installation, though not specified, shall be provided. All such items, unless otherwise indicated on drawings or specified, shall be of same material as the item to which applied. Nails, screws and bolts shall be of the types best suited for the purpose intended and shall be of a composition that is compatible with the metal to which it will contact.

C. Dissimilar Materials: Where sheet metal abuts or members into adjacent dissimilar materials, the juncture shall be executed in a manner that will prevent electrolysis between the two materials.

D. Workmanship: Except as otherwise indicated on drawings or specified, the workmanship of metal flashing work, method of forming joints, anchoring, cleating, provisions for expansion, etc. shall conform to the standard details and recommendations of the

following:

1. Architectural Sheet Metal Manual, latest edition as published by the Sheet Metal and Air Conditioning Contractors National Association, Inc.
2. ASTM.

PART 2 - PRODUCTS

2.01 FLASHING AND SHEET METAL MATERIALS:
NOTE: All exposed to view coping trim, downspouts, fascia and similar metals shall be pre-finished.

A. All Sheet Metal Flashing and sheet metal accessories:

Zinc-coated Steel: Commercial quality with 0.20% copper, ASTM A 526 except ASTM A 527 for lock-forming, G90 hot-dip galvanized, mill phosphatized for painting; 0.0359""thick (20 gauge) except as otherwise indicated.

B. Misc. Materials and Accessories:

Solder: For use with steel or copper, provide 50 – 50/tin/lead solder (ASTM B 32), with rosin flux.

C. Fasteners: Same as metal as flashing/sheet metal or, other noncorrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with material being fastened.

D. Bituminous Coating: FS TT-C-494 or SSPC – Paint 12, solvent type bituminous mastic, nominally free of sulfur, compounded for 15-mil dry film thickness per coat.

E. Mastic Sealant: Polyisobutylene; non-Hardening, non-Skinning, nondrying, non-migrating sealant.

F. Elastomeric Sealant: Generic type recommended by manufacturer of metal and fabricator of components being sealed; comply with FS TT-S-0027, TT-S-00230, or TT-S-001543.

G. Adhesives: Type recommended by flashing sheet manufacturer for waterproof/weather seaming and adhesive application of flashing sheet.

H. Reglets: Metal or plastic units of type and profile indicated, compatible with flashing indicated, noncorrosive.

I. Metal Accessories: Provide sheet metal clips, straps, anchoring devices and similar accessory units as required for installation of work, matching or compatible with material being installed, noncorrosive, size and gauge required for performance.

J. Roofing Cement: ASTM D 2822, asphaltic.

2.02 FABRICATED UNITS

A. General Metal Fabrication: Shop-fabricate work to greatest extent possible. Comply with details shown, and with applicable requirements of SMACNA “Architectural Sheet Metal Manual” and other recognized industry practices. Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of the work.

PART 3 - EXECUTION

3.01 FABRICATION

A. All metal flashing and trim work shall be fabricated in strict accordance with the detailed drawings and with best trade practices. Ends of fabricated sheets shall be fastened to make joints watertight and still provide for expansion and contraction. Lines and angles shall be sharp and true. Plane surfaces shall be free from waves and buckles.

3.02 CONDITION OF SURFACES

A. Inspect all surfaces to metal accessories are to be installed. Do not install metal work unless such surfaces are sound, dry, clean and free of defects which might be deleterious to the metal work. Report any unacceptable conditions to the Contracting Officer in writing before commencing work.

3.03 DELIVERY AND STORAGE

A. Delivery of materials to the site shall be made in unopened cartons with the name of the manufacturer clearly visible on the carton.

B. Materials shall be stored in a safe, dry place.

3.04 INSTALLATION

A. Pitch-Pockets, flashing, and other flashing shall be installed in strict accordance with trade practices. Completed installation shall be true to line with shapes undistorted, not damaged, and with properly shaped angles. Provide expansion joints and other means for relieving stresses from expansion and contraction of the material.

3.05 GUARANTEE

A. All materials and workmanship provided by this section shall be guaranteed free of defects for a period of two (2) years from date of acceptance. Any defects arising within this period shall be promptly corrected without additional cost.

END OF SECTION

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PART 1 – GENERAL

1.1 SUMMARY

A. This Section includes joint sealants for the following locations:
   1. Exterior joints in vertical surfaces and nontraffic horizontal surfaces as indicated below:
      a. Control joints in masonry walls.
      b. Control and expansion joints in cast-in-place concrete.
      c. Perimeter joints between adjacent materials and frames of doors and windows.
      d. Other joints as indicated.
   2. Exterior joints in horizontal traffic surfaces as indicated below:
      a. Control, expansion, and isolation joints in cast-in-place concrete slabs.
      b. Other joints as indicated.
   3. Interior joints in vertical surfaces and horizontal nontraffic surfaces as indicated below:
      a. Control and expansion joints on exposed interior surfaces of exterior walls.
      b. Perimeter joints of exterior openings where indicated.
      c. Tile control and expansion joints.
      d. Perimeter joints between interior wall surfaces and frames of interior doors.
      e. Perimeter joints of plumbing fixtures.
      f. Other joints as indicated.
   4. Interior joints in horizontal traffic surfaces as indicated below:
      a. Control and expansion joints in cast-in-place concrete slabs.
      b. Other joints as indicated.

B. Related Sections: The following Sections contain requirements that relate to this Section:
   1. Division 7 Section "Flashing and Sheet Metal" for sealing joints related to flashing and sheet metal for roofing.
   2. Division 8 "Glass and Glazing" for sealants used in glazing.
   3. Division 9 Section "Gypsum Drywall" for sealing concealed perimeter joints of gypsum board partitions to reduce sound transmission.
   4. Division 9 Section "Acoustical Ceilings" for sealing edge moldings at perimeter of acoustical ceilings.
   5. Division 9 Section "Tile" for sealing tile joints.

1.2 SYSTEM PERFORMANCE REQUIREMENTS

A. Provide elastomeric joint sealants that have been produced and installed to establish and to maintain watertight and airtight continuous seals without causing staining or deterioration of joint substrates.

B. Provide joint sealants for interior applications that have been produced and installed to establish and maintain airtight continuous seals that are water resistant and cause no staining or deterioration of joint substrates.

1.3 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.

B. Product data from manufacturers for each joint sealant product required.

C. Certification by joint sealant manufacturer that sealants plus the primers and cleaners required for sealant installation comply with local regulations controlling use of volatile organic compounds.

D. Samples for initial selection purposes in form of manufacturer's standard bead samples, consisting of strips of actual products showing full range of colors available, for each product exposed to view.

E. Certificates from manufacturers of joint sealants attesting that their products comply with specification requirements and are suitable for the use indicated.

F. Product test reports for each type of joint sealants indicated, evidencing compliance with requirements specified.

1.4 QUALITY ASSURANCE

A. Single Source Responsibility for Joint Sealant Materials: Obtain joint sealant materials from a single manufacturer for each different product required.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to Project site in original unopened containers or bundles with labels indicating manufacturer, product name and designation, color, expiration period for use, pot life, curing time, and mixing instructions for multicomponent materials.

B. Store and handle materials in compliance with manufacturer's recommendations to prevent their deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.

1.6 PROJECT CONDITIONS

A. Environmental Conditions: Do not proceed with installation of joint sealants under the following conditions:
1. When ambient and substrate temperature conditions are outside the limits permitted by joint sealant manufacturer.
2. When joint substrates are wet.

B. Joint Width Conditions: Do not proceed with installation of joint sealants where joint widths are less than allowed by joint sealant manufacturer for application indicated.

C. Joint Substrate Conditions: Do not proceed with installation of joint sealants until contaminants capable of interfering with their adhesion are removed from joint substrates.

1.7 SEQUENCING AND SCHEDULING

A. Sequence installation of joint sealants to occur not less than 21 nor more than 30 days after completion of waterproofing, unless otherwise indicated.

PART 2 – PRODUCTS

2.1 MATERIALS, GENERAL

A. Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.

B. Colors: Provide color of exposed joint sealants to comply with the following:
1. Provide selections made by Contracting Officer from manufacturer's full range of standard colors for products of type indicated.

2.2 ELASTOMERIC JOINT SEALANTS

A. Elastomeric Sealant Standard: Provide manufacturer's standard chemically curing elastomeric sealants that comply with ASTM C 920 and other requirements indicated on each Elastomeric Joint Sealant Data Sheet at end of this Section, including those requirements referencing ASTM C 920 classifications for Type, Grade, Class, and Uses.

B. Exterior joints in vertical surfaces and nontraffic horizontal surfaces.
1. Multi-Part Nonsag Urethane Sealant: Use NT, Type M, Grade NS, Class 25 and complying with uses NT M,A and as applicable to joint substrates indicated, O.
2. One-Part Nonsag Polysulfide Sealant: Type S, Grade NS, Class 25, uses NT, M, G, A and as applicable to joint substrates indicated, O.

C. Exterior and interior joints in horizontal traffic surfaces.
1. Multi-Part Pourable Urethane Sealant: Use T, Type M, Grade P, Class 25 and complying with requirements for uses T, M, G, A and as applicable to joint substrates indicated, O.

D. Interior joints in vertical surfaces and horizontal nontraffic surfaces:
1. One-Part Mildew-Resistant Silicone Sealant: Type S; Grade NS; Class 25; Uses NT, G, A, and, as applicable to nonporous joint substrates indicated, O; formulated with fungicide; intended for sealing interior joints with nonporous substrates and subject to in-service exposure to conditions of high humidity and temperature extremes.

E. Available Products: Subject to compliance with requirements, elastomeric sealants which may be incorporated in the Work included, but are not limited to, the following:
1. One-Part Nonsag Polysulfide Sealant:
   a. "Chem-Calk 100"; Bostik Construction Products Div.
   b. "PRC Rubber Caulk 7000" Product Research & Chemical Corp.
   c. "GC-9 Sythacalk"; Pecora Corp.
   d. "Sonolastic Two-Part"; Sonneborn Building Products Div., Rexnord Chemical Products, Inc.
2. One-Part Mildew-Resistant Silicone Sealant:
   a. "Dow-Corning 786"; Dow Corning Corp.
   b. "SCS 1702 Sanitary"; General Electric Co.
   c. "863 #345 White"; Pecora Corp.
   d. "Rhodorsil 6B White"; Rhone-Poulenc Inc.
   e. "Proglaze White"; Tremco Corp.
   f. "OmniPlus"; Sonneborn Building Products Div., Rexnord Chemical Products Inc.
3. Multi-Part Nonsag Urethane Sealant for Use NT:
   a. "Chem-Calk 500"; Bostik Construction Products Div.
   b. "Dualthane"; W.R. Meadows.
   c. "Dynatrol II"; Pecora Corp.
   d. "Sonolastic NP 2"; Sonneborn Building Products Div., Rexnord Chemical Products Inc.
   e. "Dymeric"; Tremco Inc.
4. Multi-Part, Pourable, Urethane Sealant for Use T:
   a. "Chem-Calk 500"; Bostik Construction Products Div.
   b. "Pourthane"; W.R. Meadows, Inc.
   c. "NR-200 Urexpan"; Pecora Corp.
   d. "SonolasticPaving Joint Sealer"; Sonneborn Building Products Div., Rexnord Chemical Products Inc.
   e. "THC-900"; Tremco Inc.

2.3 LATEX JOINT SEALANTS

A. Interior joints in gypsum wall board and woodwork.

B. General: Provide manufacturer's standard one-part, nonsag, mildew-resistant, paintable latex sealant of formulation indicated that is recommended for exposed applications on interior and protected exterior locations and that accommodates indicated percentage change in joint width existing at time of installation without failing either adhesively or cohesively.

C. Acrylic-Emulsion Sealant: Provide product complying with ASTM C 834 that accommodates joint movement of not more than 5 percent in both extension and compression for a total of 10 percent.

D. Silicone Emulsion Sealant: Provide product complying with ASTM C 834 and, except for weight loss measured per ASTM C 792, with ASTM C 920 that accommodates joint movement of not more than 25 percent in both extension and compression for a total of 50 percent.

E. Products: Subject to compliance with requirements, provide one of the following:
1. Acrylic-Emulsion Sealant:
   a. "AC-20," Pecora Corp.
   b. "Sonolac," Sonneborn Building Products Div., ChemRex, Inc.
   c. "Tremco Acrylic Latex 834," Tremco, Inc.
2. Silicone-Emulsion Sealant: "Trade Mate Paintable Glazing Sealant," Dow Corning Corp.

2.4 ACOUSTICAL JOINT SEALANTS

A. Acoustical Sealant: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834 and the following requirements:
1. Product is effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies per ASTM E 90.
2. Product has flame spread and smoke developed ratings of less than 25 per ASTM E 84.

B. Acoustical Sealant for Concealed Joints: Manufacturer's standard, nondrying, nonhardening, nonskinning, nonstaining, gunnable, synthetic rubber sealant recommended for sealing interior concealed joints to reduce transmission of airborne sound.

C. Products: Subject to compliance with requirements, provide one of the following:
1. Acoustical Sealant:
   a. "SHEETROCK Acoustical Sealant," United States Gypsum Co.
   b. "AC-20 FTR Acoustical and Insulation Sealant," Pecora Corp.
2. Acoustical Sealant for Concealed Joints:
   a. "BA-98," Pecora Corp.
   b. "Tremco Acoustical Sealant," Tremco, Inc.

2.5 JOINT SEALANT BACKING

A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

B. Plastic Foam Joint Fillers: Preformed, compressible, resilient, nonstaining, nonwaxing, nonextruding strips of flexible plastic foam of material indicated below and of size, shape, and density to control sealant depth and otherwise contribute to producing optimum sealant performance:

1. Open-cell polyurethane foam.
2. Closed-cell polyethylene foam, nonabsorbent to liquid water and gas, nonoutgassing in unruptured state.
3. Any material indicated above.

C. Bond-Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

2.6 MISCELLANEOUS MATERIALS

A. Primer: Material recommended by joint sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint sealant-substrate tests and field tests.

B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming in any way joint substrates and adjacent nonporous surfaces, and formulated to promote optimum adhesion of sealants with joint substrates.

C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint sealant performance. Do not proceed with installation of joint sealants until unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with recommendations of joint sealant manufacturer and the following requirements:
1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
2. Clean concrete, masonry, unglazed surfaces of ceramic tile, and similar porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air.
3. Remove laitance and form release agents from concrete.
4. Clean metal, glass, porcelain enamel, glazed surfaces of ceramic tile, and other nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.

B. Joint Priming: Prime joint substrates where indicated or where recommended by joint sealant manufacturer based on preconstruction joint sealant-substrate tests or prior experience. Apply primer to comply with joint sealant manufacturer's recommendations. Confine primers to areas of joint sealant bond; do not allow spillage or migration onto adjoining surfaces.

C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

A. General: Comply with joint sealant manufacturer's printed installation instructions applicable to products and applications indicated, except where more stringent requirements apply.

B. Sealant Installation Standard: Comply with recommendations of ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

C. Acoustical Sealant Application Standard: Comply with recommendations of ASTM C 919 for use of joint sealants in acoustical applications as applicable to materials, applications, and conditions indicated.

D. Installation of Sealant Backings: Install sealant backings to comply with the following requirements:
   1. Install joint fillers of type indicated to provide support of sealants during application and at position required to produce the cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
      a. Do not leave gaps between ends of joint fillers.
      b. Do not stretch, twist, puncture, or tear joint fillers.
      c. Remove absorbent joint fillers that have become wet prior to sealant application and replace with dry material.
   2. Install bond breaker tape between sealants where backer rods are not used between sealants and joint fillers or back of joints.

E. Installation of Sealants: Install sealants by proven techniques that result in sealants directly contacting and fully wetting joint substrates, completely filling recesses provided for each joint configuration, and providing uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability. Install sealants at the same time sealant backings are installed.

F. Tooling of Nonsag Sealants: Immediately after sealant application and prior to time skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated, to eliminate air pockets, and to ensure contact and adhesion of sealant with sides of joint. Remove excess sealants from surfaces adjacent to joint. Do not use tooling agents that discolor sealants or adjacent surfaces or are not approved by sealant manufacturer.
   1. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.

3.4 CLEANING

A. Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods and with cleaning materials approved by manufacturers of joint sealants and of products in which joints occur.

3.5 PROTECTION

A. Protect joint sealants during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that they are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so that and installations with repaired areas are indistinguishable from original work.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes porcelain and ceramic tile products on walls and floors in toilet rooms. Substrates include cementitious backer board and concrete masonry at walls and at floors, concrete slabs-on-grade and suspended concrete slabs. Materials include the following:
   1. Porcelain tile.
   2. Glazed wall tile.
   3. Elastomeric Joint Sealant in tile fields.
   4. Tile cleaner and sealer.
   5. Mortar & Grout.

B. Related Sections include the following:
   1. Division 3 Section "Cast-In-Place Concrete" for slab finishes specified for tile over concrete substrates.

1.2 PERFORMANCE REQUIREMENTS

A. Static Coefficient of Friction: For tile installed on walkway surfaces, provide products with the following values as determined by testing identical products per ASTM C 1028:
   1. Level Surfaces: Minimum 0.6.

1.3 SUBMITTALS

A. Product Data: For each type of tile, mortar, grout, and other products specified.

B. Grout Samples for Initial Selection: Manufacturer's color charts consisting of actual sections of grout showing the full range of colors available for each type of grout indicated.

C. Samples for Verification: Of each item listed below, prepared on Samples of size and construction indicated. Where products involve normal color and texture variations, include Sample sets showing the full range of variations expected.
   1. Each type and composition of tile and for each color and texture required, at least 12 inches (300 mm) square, mounted on braced cementitious backer units, and with grouted joints using product complying with specified requirements and approved for completed work in color or colors selected by Architect.
   2. Full-size units of each type of trim and accessory for each color required.
   3. Stone thresholds in 6-inch (150-mm) lengths.
   4. Metal edge strips in 6-inch (150-mm) lengths.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced installer who has completed tile installations similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.

B. Source Limitations for Tile: Obtain each color, grade, finish, type, composition, and variety of tile from one source with resources to provide products from the same production run for each contiguous area of consistent quality in appearance and physical properties without delaying the Work.

C. Source Limitations for Setting and Grouting Materials: Obtain ingredients of a uniform quality for each mortar, adhesive, and grout component from a single manufacturer and each aggregate from one source or producer.

D. Source Limitations for Other Products: Obtain each of the following products specified in this Section from one source and by a single manufacturer for each product:
1. Cementitious backer units.
2. Joint sealants.
3. Waterproofing.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirement of ANSI A137.1 for labeling sealed tile packages.

B. Prevent damage or contamination to materials by water, freezing, foreign matter, and other causes.

1.6 PROJECT CONDITIONS

A. Environmental Limitations: Do not install tile until construction in spaces is completed and ambient temperature and humidity conditions are being maintained to comply with referenced standards and manufacturer's written instructions.

1.7 EXTRA MATERIALS

A. Deliver extra materials to Owner. Furnish extra materials described below that match products installed, are packaged with protective covering for storage, and are identified with labels describing contents.
1. Tile and Trim Units: Furnish quantity of full-size units equal to 3 percent of amount installed, for each type, composition, color, pattern, and size indicated.
2. Obtain a written receipt from the Owner’s Representative, to include in Closeout Documents.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products: Basis of Specification is Dal Tile Company and Crossville Ceramics products indicated in the ceramic tile installation schedules and in the Finishes Legends located on individual drawing sheets.

B. Manufacturers: Subject to compliance with requirements, and properties of the specified products, including color selection, products by the following will be considered if submitted before Bids are received in accordance with the Instructions to Bidders:
1. Tile Products: as specified on the drawings.
2. Tile-Setting and -Grouting Materials:
   a. American Olean Tile Company.
   b. Custom Building Products.
   c. Dal-Tile Corporation.
   d. DAP, Inc.
   e. Laticrete International, Inc.

2.2 PRODUCTS, GENERAL

A. ANSI Ceramic Tile Standard: Provide tile that complies with ANSI A137.1, "Specifications for Ceramic Tile," for types, compositions, and other characteristics indicated.
   1. Provide tile complying with Standard Grade requirements, unless otherwise indicated.

B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI standards referenced in "Setting Materials" and "Grouting Materials" articles.

C. Colors, Textures, and Patterns: Where manufacturer's standard products are indicated for tile, grout, and other products requiring selection of colors, surface textures, patterns, and other appearance characteristics, provide specific products or materials complying with the following requirements:
   1. Match colors, textures, and patterns indicated by referencing manufacturer's standard designations for these characteristics.
   2. Provide tile trim and accessories as indicated in the Schedule.

D. Factory Blending: For tile exhibiting color variations within the ranges selected during Sample submittals, blend tile in the factory and package so tile units taken from one package show the same range in colors as those taken from other packages and match approved Samples.

E. Mounting: Where factory-mounted tile is required, provide back- or edge-mounted tile assemblies as standard with manufacturer, unless another mounting method is indicated.

2.3 TILE PRODUCTS

A. Porcelain Floor Tile: Provide flat tile complying with the following requirements:
   1. See Finishes Legend and Schedule on individual drawing sheets for description and location.

B. Glazed Wall Tile: Provide flat tile complying with the following requirements:
   1. See Finishes Legend and Schedule on individual drawing sheets for description and location.

C. Trim Units: Provide tile trim units to match characteristics of adjoining flat tile and to comply with the following requirements:
   1. Size: As indicated, coordinated with sizes and coursing of adjoining flat tile where applicable.
   2. Shapes: As indicated on the Drawings or if not indicated, as follows, selected from manufacturer's standard shapes:
      a. Provide coved base at unglazed floor tile.
      b. Wainscot Cap for Thin-Set Mortar Installations: Surface bullnose.
      c. External Corners for Thin-Set Mortar Installations: Surface bullnose/metal corner trim as indicated in Finish Legends and on drawing sheets.
      d. Internal Corners: Field-butted square corners, except with coved base and cap angle pieces designed to member with stretcher shapes.
      e. Tapered Transition Tile: Shape designed to effect transition between thickness of tile floor and adjoining floor finishes of different thickness, tapered to provide a reduction in thickness from 1/2 to 1/4 inch (12.7 to 6.35 mm) across nominal 4-inch (100-mm) dimension.

2.4 SETTING MATERIALS

A. Portland Cement Mortar Installation Materials: Provide materials complying with ANSI A108.1A and as specified below:
   1. Latex additive (water emulsion) described below, serving as replacement for part or all of gaging water, of type specifically recommended by latex additive manufacturer for use with job-mixed Portland Cement and aggregate mortar bed.
      a. Latex Additive: Manufacturer's standard.

B. Latex-Portland Cement Mortar: ANSI A118.4, composed as follows:
   1. Prepackaged Dry-Mortar Mix: Factory-prepared mixture of Portland Cement; dry, redispersible, ethylene vinyl acetate additive; and other ingredients to which only water needs to be added at Project site.
      a. For wall applications, provide nonsagging, latex-portland cement mortar complying with ANSI A118.4 for mortar of this type defined in Section F-2.1.2.

2.5 GROUTING MATERIALS

A. Latex-Portland Cement Grout: ANSI A118.6 for materials described in Section H-2.4, composed as follows:
   1. Factory-Prepared, Dry-Grout Mixture: Factory-prepared mixture of portland cement; dry, redispersible, ethylene vinyl acetate additive; and other ingredients to produce the following:
      a. Unsanded grout mixture for joints 1/8 inch (3.2 mm) and narrower.
      b. Color: See Finish Schedule.

B. Quarry Tile Floor Grout: Two-component, chemical resistant, non-saging epoxy grout which is water cleanable; grout shall comply with ANSI A118.3. Colors to match existing. The following manufacturers and products are approved:
   1. Laticrete International “Latapoxy SP-100 Stainless Epoxy Grout (Series 700)”.
   2. Mapei, Inc. “Kerapoxy 400 100% Solids Epoxy Grout”.
   3. Bostik Construction Products “Hydroment Colo-Poxy”.
   4. Custom Building Products “100% Solids Epoxy Grout”.

2.6 ELASTOMERIC SEALANTS

A. General: Provide manufacturer's standard chemically curing, elastomeric sealants of base polymer and characteristics indicated that comply with applicable requirements of Division 7 Section "Joint Sealants."

B. One-Part, Mildew-Resistant Silicone Sealant: ASTM C 920; Type S; Grade NS; Class 25; Uses NT, G, A, and, as applicable to nonporous joint substrates indicated, O; formulated with fungicide, intended for sealing interior ceramic tile joints and other nonporous substrates that are subject to in-service exposures of high humidity and temperature extremes.
   1. Provide at joints of ceramic wall tile and ceiling surface, around pipe penetrations, plumbing fixtures and trim.
   2. Provide at perimeter of toilet room accessories such as grab bars, towel bars, paper and soap dispensers provided on or within walls in accordance with UBC, 1997 Edition, Section 807.1.2

C. Multipart, Pourable Urethane Sealant for Use T: ASTM C 920; Type M; Grade P; Class 25; Uses T, M, A, and, as applicable to joint substrates indicated, O.
   1. Provide at control joints in floors where indicated, or if not indicated, over control joints in substrates and at 30-feet maximum spacing.

D. Products: Subject to compliance with requirements, provide one of the following:
   1. One-Part, Mildew-Resistant Silicone Sealants:
      a. Dow Corning 786; Dow Corning Corporation.
      b. Sanitary 1700; GE Silicones.
      c. Pecora 898 Sanitary Silicone Sealant; Pecora Corp.
      d. Rhodorsil 6B White; Rhone-Poulenc, Inc.
      e. Tremsil 600 White; Tremco, Inc.
   2. Multipart, Pourable Urethane Sealants:
      a. Chem-Calk 550; Bostik.
      b. Vulkem 245; Mameco International, Inc.
      c. NR-200 Urexpan; Pecora Corp.
      d. THC-900; Tremco, Inc.

2.7 MISCELLANEOUS MATERIALS

A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland-cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.

B. Cementitious Backer Units: ANSI A118.9 or ASTM C1325 ½ inch (12.7 mm) thick.

C. Metal Edge Strips: White-zinc-alloy terrazzo strips, 1/8 inch (3.2 mm) wide at top edge with integral provision for anchorage to mortar bed or substrate, unless otherwise indicated.

D. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.

E. Tile Sealer: Aqua Mix “Sealer’s Choice 15 Gold.”
   1. Description: No-sheen, water-based penetrations sealer.
   2. Application: Two coats in accordance with manufacturer’s recommendations.

2.8 MIXING MORTARS AND GROUT

A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.

B. Add materials, water, and additives in accurate proportions.

C. Obtain and use type of mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of installed tile.
   1. Verify that substrates for setting tile are firm; dry; clean; free from oil, waxy films, and curing compounds; and within flatness tolerances required by referenced ANSI A108 series of tile installation standards for installations indicated.

2. Verify that installation of grounds, anchors, recessed frames, electrical and mechanical units of work, and similar items located in or behind tile has been completed before installing tile.
3. Verify that joints and cracks in tile substrates are coordinated with tile joint locations; if not coordinated, adjust latter in consultation with Architect.

B. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Remove coatings, including curing compounds, and other substances that contain soap, wax, oil, or silicone and are incompatible with tile-setting materials by using a terrazzo or concrete grinder, a drum sander, or a polishing machine equipped with a heavy-duty wire brush.

B. Provide concrete substrates for tile floors installed with dry-set or latex-portland cement mortars that comply with flatness tolerances specified in referenced ANSI A108 series of tile installation standards for installations indicated.
1. Use trowelable leveling and patching compounds per tile-setting material manufacturer's written instructions to fill cracks, holes, and depressions.
2. Remove protrusions, bumps, and ridges by sanding or grinding.

C. Blending: For tile exhibiting color variations within the ranges selected during Sample submittals, verify that tile has been blended in the factory and packaged so tile units taken from one package show the same range in colors as those taken from other packages and match approved Samples. If not factory blended, either return to manufacturer or blend tiles at Project site before installing.

3.3 INSTALLATION, GENERAL

A. ANSI Tile Installation Standards: Comply with parts of ANSI A108 series of tile installation standards in "Specifications for Installation of Ceramic Tile" that apply to types of setting and grouting materials and to methods indicated in ceramic tile installation schedules.

B. TCA Installation Guidelines: TCA's "Handbook for Ceramic Tile Installation." Comply with TCA installation methods indicated in ceramic tile installation schedules.

C. Extend tile work into recesses and under or behind equipment and fixtures to form a complete covering without interruptions, unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.

D. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.

E. Jointing Pattern: Lay tile in grid pattern, unless otherwise indicated. Align joints when adjoining tiles on floor, base, walls, and trim are the same size. Lay out tile work and center tile fields in both directions in each space or on each wall area. Adjust to minimize tile cutting. Provide uniform joint widths, unless otherwise indicated.
1. For tile mounted in sheets, make joints between tile sheets the same width as joints within tile sheets so joints between sheets are not apparent in finished work.

F. Lay out tile wainscots (if indicated) to next full tile beyond dimensions indicated.

G. Expansion Joints: Locate expansion joints and other sealant-filled joints, including control, contraction, and isolation joints, where indicated during installation of setting materials, mortar beds, and tile. Do not saw-cut joints after installing tiles.
1. Locate joints in tile surfaces directly above joints in concrete substrates.
2. Prepare joints and apply sealants to comply with requirements of Division 7 Section "Joint Sealants."

H. Grout tile to comply with the requirements of the following tile installation standards:
1. For ceramic tile grouts (sand-portland cement, dry-set, commercial Portland Cement, and latex-Portland Cement grouts), comply with ANSI A108.10.

3.4 FLOOR TILE INSTALLATION

A. General: Install tile to comply with requirements in the Ceramic Tile Floor Installation Schedule, including those referencing TCA installation methods and ANSI A108 series of tile installation standards.

B. Joint Widths: Install tile on floors with the following joint widths:
1. Porcelain Tile: 1/4 inch.

C. Metal Edge Strips: Install at locations indicated or where exposed edge of tile flooring meets carpet, wood, or other flooring that finishes flush with top of tile.

3.5 WALL TILE INSTALLATION

A. Install types of tile designated for wall installations to comply with requirements in the Ceramic Tile Wall Installation Schedule, including those referencing TCA installation methods and ANSI setting-bed standards.

B. Joint Widths: Install tile on walls with the following joint widths:
1. Glazed Wall Tile: 1/16 inch.
2. Porcelain “SlimLite” Panels: 1/16”.

C. Exterior Corner Trim: Install at locations where tile wraps exterior corners to finished height of tile. Product as indicated in Finish Legend on individual drawing sheets.

3.6 CLEANING AND PROTECTING

A. Cleaning: On completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.
1. Remove latex-portland cement grout residue from tile as soon as possible.
2. Unglazed tile may be cleaned with acid solutions only when permitted by tile and grout manufacturer's written instructions, but no sooner than 10 days after installation. Protect metal surfaces, cast iron, and vitreous plumbing fixtures from effects of acid cleaning. Flush surface with clean water before and after cleaning.

B. Finished Tile Work: Leave finished installation clean and free of cracked, chipped, broken, unbonded, and otherwise defective tile work.

C. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer that ensure tile is without damage or deterioration at the time of Substantial Completion.

1. When recommended by tile manufacturer, apply a protective coat of neutral protective cleaner to completed tile walls and floors. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage, and wear.
2. Prohibit foot and wheel traffic from tiled floors for at least 7 days after grouting is completed.

D. Before final inspection, remove protective coverings and rinse neutral cleaner from tile surfaces.

3.7 CERAMIC TILE INSTALLATION SCHEDULE

A. Ceramic Tile Floor Installation. Comply with the following:
1. Tile Type: Porcelain tile over concrete slabs. Provide products according to the Finishes Legend on individual drawing sheet.
2. Provide according to TCA Installation Method F113, Thinset.
   a. Latex Portland Cement mortar, ANSI A118.4.
   b. Latex Portland Cement grout, ANSI A118.6.

B. Ceramic Wall Tile over Cementitious Backer Units: Comply with the following:
1. Tile Type: Ceramic wall tile. Provide products according to the Finishes Legend on individual drawing sheets.
2. Provide according to TCA Installation Method W244.
   a. Latex Portland cement mortar, ANSI A118.4.
   b. Latex Portland cement grout, ANSI A118.6.
   c.

END OF SECTION

1.1 SUMMARY

A. This Section includes surface preparation, painting and finishing of exposed interior and exterior items and surfaces as defined in the Master Painters Institute (MPI) Architectural Painting Manual and the following:
   1. Surface preparation, priming and finish coats specified in this Section are in addition to shop-priming and surface treatment specified under other Sections.
   2. Special Preparation and repainting of existing surfaces.

B. Related Sections: The following Sections contain requirements that relate to this Section:
   1. Division 7 Section "Sealants" for caulking of interior joints at or adjacent to surfaces to be painted.
   2. Division 5 Section, "Metal Fabrications" for shop-priming ferrous metal.
   3. Division 8 Section, "Steel Door and Frames" for shop-priming steel doors and frames.

C. Paint exposed surfaces whether or not colors are designed in schedules, except where a surface or material is specifically indicated not to be painted or is to remain natural. Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces. If color or finish is not designated, the Architect will select from standard colors or finishes available.
   1. Painting includes field-painting exposed bare and covered pipes and ducts, hangers, exposed steel and iron work and primed metal surfaces of mechanical and electrical equipment.
   2. In general, conduit, ducts, piping and like material exposed in a room or area scheduled to be painted shall be painted, same color as the adjacent surface unless otherwise indicated.
   3. Painting includes field natural finishing of wood doors.

D. Painting is not required on prefinished items (except as noted), finished metal surfaces, concealed surfaces, operating parts and labels.
   1. Prefinished items not to be painted include the following factory-finished components:
      a. Acoustic materials.
      b. Plastic laminated architectural casework.
      c. Finished mechanical and electrical equipment.
      d. Light fixtures.
      e. Switchgear.
      f. Distribution cabinets.
      g. Prefinished toilet compartments.
   2. Concealed surfaces not to be painted include wall or ceiling surfaces in inaccessible areas.
   3. Finished metal surfaces not to be painted include:
      a. Anodized aluminum
      b. Stainless steel and Chromium plate.
      c. Copper, bronze and brass
   4. Operating parts not to be painted include moving parts of operating equipment such as the following:
      a. Valve and damper operators
      b. Linkages
      c. Sensing devices
      d. Motor and fan shafts

5. Labels: Do not paint over Underwriters Laboratories, Factory Mutual or other code-required labels or equipment name, identification, performance rating or nomenclature plates.

1.2 SUBMITTALS

A. General: Submit the following in accordance with Conditions of the Contract and Division 1 Specification Sections.

B. Product data for each paint system specified, including block fillers and primers.
1. Provide the manufacturer's technical information including label analysis and instructions for handling, storage and application of each material proposed for use.
2. List each material and cross-reference the specific coating, finish system and application. Identify each material by the manufacturer's catalog number and general classification.
3. Submit Material Safety Data Sheets to Owner's Representative at least two weeks before material is delivered to the site.

C. Samples for Verification Purposes: Provide samples of each color and material to be applied, with texture to simulate actual conditions on representative samples of the actual substrate.
1. Provide stepped samples, defining each separate coat, including block fillers and primers. Use representative colors when preparing samples for review. Resubmit until required sheen, color and texture are achieved.
2. Provide a list of material and application for each coat of each sample. Label each sample as to location and application.
3. Submit samples on the following substrates for the Architect's review of color and texture only.
   a. Gypsum Board: Submit two 8-inch-square samples for each color and finish.
   b. Painted Wood: Submit two 12-inch square samples of each color and material on hardboard.
   c. Natural Finish Wood: Submit two 12-inch-square samples of each color and material on wood of species indicated for finish.
   d. Ferrous Metal: Submit two 4-inch-square samples of flat metal and two 8-inch-long samples of solid metal for each color and finish.

1.3 QUALITY ASSURANCE

A. Applicator Qualifications: Engage an experienced applicator who has completed painting system applications similar in material and extent to those indicated for the Project that have resulted in a construction record of successful in-service performance.

B. Single-Source Responsibility: Provide primers and other undercoat paint produced by same manufacturer as finish coats. Use only thinners approved by paint manufacturer, and use only within recommended limits.

C. Coordination of Work: Review other sections of these specifications in which prime paints are to be provided to ensure compatibility of total coatings system for various substrates. Upon request from other trades, furnish information or characteristics of finish materials provided for use, to ensure compatible prime coats are used.

D. Paint Grade: 'Premium' as defined by the MPI.

E. Employ only qualified journeymen in this painting and decorating work; apprentices may be employed on the project to work under the direction of qualified journeymen.

F. Conform to the standards contained in the Master Painters Institute Architectural Painting Specification Manual, latest edition (hereafter referred to as MPI Painting Specification Manual) for all painting products including preparation and application of materials. MPI Painting Specification Manual as issued by the local MPI Accredited Quality assurance Association having jurisdiction.

G. All paint manufacturers and products used shall be as listed under the "Approved Products" section of the MPI Architectural Painting Specification Manual.

1.4 BENCHMARK SAMPLES (MOCK-UPS)

A. Provide a full-coat benchmark finish sample for each interior and exterior coating and color required. Comply with procedures specified in PDCA P5. Duplicate finish of approved sample Submittals.
   1. Architect will select one surface to represent surfaces and conditions for application of each type of coating and color.
      a. Wall Surfaces: Provide samples on at least 100 sq. ft. of each new and existing wall.
   2. Apply benchmark samples, according to requirements for the completed Work. Provide required sheen, color and texture on each surface.
      a. After finishes are accepted, Architect will use the surface to evaluate coating systems of a similar nature.
   3. Final approval of colors will be from benchmark samples.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver materials to the job site in the manufacturer's original, unopened packaged and containers bearing manufacturer's name and label, and the following information:
   1. Product name or title of material.
   2. Product description (generic classification or binder type)
   3. Manufacturer's stock number and date of manufacture.
   4. Contents by volume, for pigment and vehicle constituents.
   5. Thinning instructions.
   6. Application instructions.
   7. Color name and number.

B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain containers used in storage in a clean condition, free of foreign materials and residue.
   1. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing and application.

1.6 JOB CONDITIONS

A. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 deg F (10 deg C) and 90 deg F (32 deg C).

B. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperature are between 45 deg F (7 deg C) and 95 deg F (35 deg C).

C. Do not apply paint in snow, rain, fog or mist; or when the relative humidity exceeds 85 percent; or at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.
1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by the manufacturer during application and drying periods.

D. Do not proceed with any work under this Section unless a lighting level of a minimum of 15 candlepower per square foot is provided on the surfaces to be finished.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. All materials (primers, paints, coatings, varnishes, stains, lacquers, fillers, thinners, solvents, etc.) shall be in accordance with the MPI Architectural Painting Specification Manual “Approved Product” listing and shall be from a single manufacturer for each system used.

B. Other paint materials such as linseed oil, shellac, etc. shall be the highest quality product of an approved manufacturer listed in the MPI Architectural Painting Specification Manual and shall be compatible with other coating materials as required.

C. All materials and paints shall be lead and mercury free and shall have low VOC content where possible.

D. Manufacturer: Provide products according to the manufacturer and product identification listed in the paint schedules below. Subject to conformance with requirements and properties of the products listed, products of the following manufacturers will be considered.
1. Benjamin Moore & Co. (Moore)
2. Columbia Paint Co. (Columbia)
3. Fuller (Fuller)
4. Parker Paint Mfg. Company (Parker)
5. PPG Industries, Pittsburgh Paints (PPG)
6. Rodda Paint Co. (Rodda)
7. The Sherwin-Williams Company (S-W)

2.2 PAINT MATERIALS, GENERAL

A. Material Compatibility: Provide block fillers, primers, finish coat materials and related materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by the manufacturer based on testing and field experience.

B. Material Quality: Provide the manufacturer's product as specified. Paint material containers not displaying manufacturer's product identification shall not be brought to the job site.

C. Paints shall comply with Green Seal Standard GS-11 points.

D. Chemical Components of Field-Applied Interior Paints and Coatings: Provide products that comply with the following limits for VOC content, exclusive of colorants added to a tint base, when calculated according to 40 CFR 59, Subpart D (EPA Method 24) and the following chemical restrictions; these requirements do not apply to primers or finishes that are applied in a fabrication or finishing shop:
   1. Flat Paints and Coatings: VOC not more than 50 g/L.
   2. Non-Flat Paints and Coatings: VOC not more than 150 g/L.
   3. Anti-Corrosive Coatings: VOC not more than 250 g/L.
   4. Varnishes and Sanding Sealers: VOC not more than 350 g/L.
   5. Stains: VOC not more than 250 g/L.
   6. Aromatic Compounds: Paints and coatings shall not contain more than 1.0 percent by weight total aromatic compounds (hydrocarbon compounds containing one or more benzene rings).
   7. Restricted Components: Paints and coatings shall not contain any of the following:
      a. Acrolein.
      b. Acrylonitrile.
      c. Antimony.
      d. Benzene.
      e. Butyl benzyl phthalate.
      f. Cadmium.
      g. Di (2-ethylhexyl) phthalate.
      h. Di-n-butyl phthalate.
      i. Di-n-octyl phthalate.
      j. 1, 2-dicholorbenzene.
      k. Diethyl phthalate.
      l. Dimethyl phthalate.
      m. Ethylbenzene.
      n. Formaldehyde.

2.3 COLOR SCHEDULE

A. Where colors are identified by product names and numbers, provide perfect color match to the listed colors. See "P" numbers in the Finishes Legend and Finish Schedule and the finish chart on the exterior elevation drawing.

2.4 GLOSS

A. MPI Gloss and Sheet Standards are now as follows:

		Gloss @ 60°	Sheen @ 85°
1.	Gloss Level 1: A traditional matte finish – flat	Max. 5 units	Max. 10 units
2.	Gloss Level 2: A high side sheen flat – ‘a velvet-like’ finish	10 – 35 units	Max. 10 units
3.	Gloss Level 3: A traditional ‘eggshell-like’ finish	10 – 25 units	10 – 35 units
4.	Gloss Level 4: A ‘satin-like’ finish	20 – 35 units	Min. 35 units
5.	Gloss Level 5: A traditional semi-gloss	35 – 70 units	
6.	Gloss Level 6: A traditional gloss	70 – 85 units	
7.	Gloss Level 7: A high gloss	More than 85 units	

2.5 PAINT SCHEDULE

A. Interior Surfaces: Paint interior surfaces in accordance with the following MPI Architectural Painting Specification Manual requirements:
   1. Concrete Horizontal Surfaces: Exposed floors.
      a. INT.3.2G: Concrete Floor Sealer (water-based).
   2. Metal Fabrications: For steel exposed to view.

a. INT 5.1B: High performance acrylic (Gloss Level 5) finish.

3. Galvanized Metal: Doors, frames, miscellaneous steel, pipes, ducts, etc.
   a. INT 5.3B: High performance acrylic (Gloss Level 5) finish.
4. Dressed Lumber: Including trim, casings, etc.
   a. INT 6.3A: Latex (Gloss Level 3) finish.
5. Gypsum Board: Gypsum wallboard, drywall, “sheet rock type material,” etc.
   a. INT 9.2B: High performance acrylic (Gloss Level 3, except in Toilet Rooms, Custodial Rooms, IDF Rooms, Tech. Closets and Electrical Room where Level 5 is required. Gloss Level 2 at ceilings except for Gloss Level 5 where Gloss Level 5 is required on walls) finish.
6. Concrete Masonry Units:
   a. Int 4.2.D: High Performance Architectural Latex; (gloss level 3) finish.

B. Exterior Surfaces: Paint exterior surfaces in accordance with the following MPI Architectural Painting Specification Manual requirements:
   1. Existing Metal Awning: For steel exposed to view.
      a. Sherwin Williams, Macropoxy 646-100 (Fast Cure Epoxy), Color as specified on drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions under which painting will be performed for compliance with paint application requirements. Surfaces receiving paint must be thoroughly dry before paint is applied.
   1. Do not begin to apply paint until unsatisfactory conditions have been corrected.
   2. Start of painting will be construed as the Applicator's acceptance of surfaces and conditions within a particular area.

3.2 PREPARATION

A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures and similar items already installed that are not to be painted, or provide surface-applied protection prior to surface preparation and painting. Remove these items, if necessary, to completely paint the items and adjacent surfaces. Following completion of painting operations in each space or area, have items reinstalled by workers skilled in the trades involved.

B. Cleaning: Before applying paint or other surface treatment, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease prior to cleaning. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.

C. Surface Preparation: Clean and prepare surfaces to be painted according to the manufacturer's instructions for each particular substrate condition and as specified.
   1. Provide barrier coats over incompatible primers or remove and reprime. Notify Architect in writing about anticipated problems using the specified finish-coat material with substrates primed by others.

2. Wood: Clean surfaces of dirt, oil and other foreign substances with scrapers, mineral spirits and sandpaper as required. Sand surfaces exposed to view smooth and dust off.
   a. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer before applying primer. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
   b. Prime, stain or seal wood to be painted immediately upon delivery. Prime edges, ends, faces, undersides and backsides of wood including cabinets, trim, counters, cases and paneling.
   c. When transparent finish is required, backprime with spar varnish.
   d. Backprime paneling on interior partitions where masonry, plaster or other wet wall construction occurs on backside.
   e. Seal tops, bottoms and cutouts of primed or unprimed wood doors with a heavy coat of varnish, primer or sealer immediately upon delivery.
3. Ferrous Metals: Clean ungalvanized ferrous metal surfaces that have not been shop-coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of the Steel Structures Painting Council (SSPC).
   a. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by the paint manufacturer, and touch up with the same primer as the shop coat.
4. Galvanized Surfaces: Clean galvanized surfaces with nonpetroleum-based solvents so that the surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.
5. Cementitious Materials: Prepare concrete, cement plaster and reinforced concrete panel surfaces to be painted. Remove efflorescence, chalk, dust, dirt, grease, oils and release agents. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation.
   a. Use abrasive blast-cleaning methods if recommended by the coating manufacturer.
   b. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish coating to blister and burn, correct this condition before coating application. Do not paint surfaces where moisture content exceeds that permitted in the manufacturer's printed directions.

3.3 ADDITIONAL REQUIREMENTS FOR EXISTING SURFACES SCHEDULED FOR REPAINT

A. General: Reference is made to the MPI Architectural Painting Specification Manual for the terminology used to describe the existing conditions. This information is not intended to permit or encourage the Bidder/Contractor to forgo site visits and inspections to determine actual conditions before the Contract is awarded.

B. Existing Metal Awning: Refer to manufacturer’s recommendations for cleaning and surface preparation of existing metal surfaces.

3.4 MATERIALS PREPARATION

A. General: Carefully mix and prepare paint materials according to manufacturer's directions.
   1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials or residue.
   2. Stir material before application to produce a mixture of uniform density; stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.
   3. Use only thinners approved by the paint manufacturer and only within recommended limits.

B. Tinting: Tint each undercoat a lighter shade to facilitate identification of each coat where multiple coats of the same material are applied. Tint undercoats to match the color of the finish coat, but provide sufficient differences in shade of undercoats to distinguish each separate coat.

3.5 APPLICATION

A. General: Apply paint according to manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.

B. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces or conditions detrimental to formation of a durable paint film.
   1. Paint surface treatments and finishes are indicated in the schedules.
   2. Provide finish coats that are compatible with primers used.
   3. The number of coats and the film thickness required are the same regardless of the application method. Do not apply succeeding coats until the previous coats has cured as recommended by the manufacturer. Sand between applications where sanding is required to produce a smooth even surface according to the manufacturer's directions.
   4. Apply additional coats if undercoats, stains or other conditions show through final coat of paint until paint film is of uniform finish, color and appearance. Give special attention to ensure that surfaces, including edges, corners, crevices, welds and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
   5. The term exposed surfaces includes areas visible when permanent or built-in fixtures, convector covers, covers for finned tube radiation, grilles and similar components are in place. Extend coating in these areas, as required, to maintain the system integrity and provide desired protection.
   6. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before the final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
   7. Paint interior surfaces of ducts, where visible through registers or grilles, with a flat, nonspecular black paint.
   8. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
   9. Omit primer on metal surfaces that have been shop-primed and touch-up painted.
   10. Paint unfinished wood cleats, underside of casework, desk tops and similar items.

C. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
   1. Allow sufficient time between successive coats to permit proper drying. Do not recoat until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.

D. Application Procedures: Apply paints and coatings by brush, roller, spray or other applicators according to the manufacturer's directions and requirements of the surface to be painted.
   1. Brushes: Use brushes best suited for the material applied.
   2. Rollers: Use rollers of carpet, velvet back or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
   3. Spray Equipment: Use airless spray equipment with orifice size and recommended by the manufacturer for the material and texture required.

E. Minimum Coating Thickness: Apply materials no thinner than the manufacturer's recommended spreading rate. Provide the total dry film thickness of not less than 4.0 mils for the entire system of prime and finish coats for three coat work, or 2.5 mils where two coat work is specified.

F. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime-coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

G. Stipple Enamel Finish: Roll and redistribute paint to an even and fine texture. Leave no evidence of rolling such as laps, irregularity in texture, skid marks or other surface imperfections.

H. Pigmented (Opaque) Finishes: Completely cover to provide a smooth, opaque surface of uniform finish, color, appearance and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness or other surface imperfections will not be acceptable.

I. Transparent (Clear) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, cloudiness, color irregularity, runs, brush marks, orange peel, nail holes or other surface imperfections.
   1. Provide satin finish for final coats.

J. Completed Work: Match approved samples for color, texture and coverage. Remove, refinish or repaint work not complying with specified requirements.

3.6 CLEANING

A. Cleanup: At the end of each work day, remove empty cans, rags, rubbish and other discarded paint materials from the site.
   1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.

3.7 PROTECTION

A. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing and repainting as acceptable to the Architect.

B. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.
   1. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

END OF SECTION

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.

1. The Contract Documents as defined in Section 01 10 00 – Summary of Work, apply to the Work of this Section.

2. Section 01 25 00 – Substitution Request Form.

1.02 SCOPE

A. Furnish all material, labor and engineering services necessary to program facility and to fabricate and install signage.

1.04 REFERENCES

A. Signs and their installation shall comply with applicable provisions of the latest edition of the following standards and with requirements of authorities having jurisdiction:

1. ADAAG – Americans with Disabilities Act Accessibility Guidelines; US Architectural and Transportation Barriers Compliance Board.

2. International Code Council/American National Standards Institute A117.1-Standard on Accessible and Usable Buildings Facilities.

3. 2012 Texas Accessibility Standards of the Architectural Business Act Article 9102 Texas Civil Statutes.

4. National Fire Protection Association 101 Life Safety Code.

1.05 SUBMITTALS

A. Signage schedule in manufacturer's format for verification of text/copy.

B. Approval drawings showing materials, construction detail, lay-out, copy, size and mounting methods.

C. Sample of two sign types for verification of materials, color, pattern, overall quality, and for adherence to drawings and requirements indicated.

1.06 QUALIFICATIONS

A. Manufacturer specializing in manufacturing the products specified in this section with minimum five years experience. Obtain signs from one source and a single manufacturer.

1.07 WARRANTY

A. Provide manufacturer’s warranty against defects in materials or workmanship for minimum 5 years.

PART 2 – PRODUCTS

2.01 MANUFACTURER

A. Signage shall be Fusion 04 as manufactured by Takeform Architectural Graphics, One Mahar Way, Medina, NY 14103, 1.800.528.1398 or Architect approved equal.

B. Substitutions: Section 01600.

2.02 SIGN STANDARDS

A. Typography

1. Type style: Refer to Drawings. Copy shall be a true, clean, accurate reproduction of typeface(s) specified. Upper and lower case or all caps as indicated in Sign Type drawings and Signage Schedule. Letter spacing to be normal and interline spacing shall be set by manufacturer.

2. Arrows, symbols and logo art: To be provided in style, sizes, colors and spacing to match existing.

3. Grade II Braille utilizing perfectly round, clear insertion beads.

B. Color and Finishes

1. Typography: Match Existing

2. Message Background: Confirm actual wording and spelling of each sign with architect during submittals.

3. Finishes are to meet current Federal ADA and any State requirements, including TDLR for Texas.

2.03 SIGNS

A. Architectural Signage System

1. The signage shall incorporate a decorative laminate face with applied graphics including all tactile requirements in adherence to TAS/ADA specifications.

2. All signs, including work station and room ID's, overheads and flag mounts, directionals and directories shall have a matching appearance and constructed utilizing the same manufacturing process to assure a consistent look throughout.

B. Materials

1. Sign face shall be 1/16" (nominal) standard grade, high pressure surface laminate. A painted sign face shall not be acceptable.

2. Tactile lettering shall be precision machined, raised 1/32", matte PETG and subsurface colored for scratch resistance.

3. Sign and backer edge shall be treated with a hot wax seal for moisture integrity.

C. Standard Colors

1. Face/background color – Submit standard offerings for review.

2. Standard tactile colors shall match manufacturer's ADA/TAS standard color selection.

D. Construction

1. The signage shall be capable of accepting paper or acetate inserts to allow changing and updating as required. Insert components shall have a 0.080” thickness non-glare acrylic window and shall be inlayed flush to sign face for a smooth, seamless appearance.

2. The signage shall, with the exception of directories and directionals, be a uniform 8½" width to facilitate inserts printed on standard width paper.

3. The signage contractor shall provide and install all signage inserts and provide software templates to Owner as part of close-out documents.

4. Manufacturer shall provide a template containing layout, font, color, artwork and trim lines to allow Owner to produce inserts on laser or ink jet printer. The template shall be in an Acrobat or Word format (.pdf).

5. The signage shall include modules allowing for inserts, notice holders, occupancy sliders, marker, magnetic, and cork pin boards. All modules shall be flush to sign face for a smooth, seamless appearance.

6. The laminates (front and back) shall be pressure laminated and precision machined together to a 90-degree angle. Edges shall be smooth, void of chips, burrs, sharp edges and marks.

7. The signage shall utilize an acrylic sphere for Grade II Braille inserted directly into a scratch resistant, high pressure laminate sign face. Braille dots are to be pressure fit in high tolerance drilled holes.

8. Braille dots shall meet 2012 TAS, Section 703.3.

9. The signage shall utilize a water based adhesive. The adhesive shall be nonhazardous and shall allow for flexing and deflection of the adhered components due to changes in temperature and moisture without bond failure.

10. All signs shall be provided with appropriate mounting hardware. Hardware shall be finished and architectural in appearance and suitable for the mounting surface.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Verify that substrate surfaces are ready to receive work.

3.02 INSTALLATION

A. Install in accordance with manufacturer’s instructions. Installation shall be performed by manufacturer's personnel trained and certified in manufacturer's methods and procedures.

B. Install signs after doors and surfaces are finished, in locations scheduled.

C. Position sign 2 inches from latch side of door at 48" A.F.F. minimum to 60” A.F.F. maximum to

lettering, in compliance with accessibility standards. Install all signage in accordance to 2012 TAS.

D. Locate sign on wall surface, level.

E. Installer to conduct a pre-installation survey prior to manufacturing to verify message schedule copy and sign location. Each location shall be noted using low tack vinyl. Full scale renderings of directions and directionals shall also be provided. Any location discrepancy or message issues shall be submitted to architect for review.

F. Signs shall be level, plumb, and at heights indicated with sign surfaces free from defects.

G. If any signs are placed on transparent surfaces such as a sidelight, provide a corresponding laminate back on the inside of the room with the same profile and size to conceal adhesive mounting strips.

H. Upon completion of the work, signage contractor shall remove unused or discarded materials, containers and debris from the site.

3.03 SCHEDULES

A. Provide Takeform Fusion 04, signage at all toilet rooms. Locate 1 unisex handicap graphic sign at each respective toilet room door. Locate 1 men and 1 women at each respective toilet rooms

B. Provide exterior signage in accordance with the local fire Marshall requirements for Fire Riser equipment, FDC, Haz Mat, Gas, and other related required locations.

C. Confirm actual wording and spelling of each sign with architect during submittals.

3.04 STANDARDS MANUAL

A. Manufacturer shall provide a comprehensive Standards Manual in both a paper and PDF format. The manual shall include all renderings, drawings, location plan, message schedule, insert templates, mounting detail, and reorder information.

END OF SECTION

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Furnish and install extruded aluminum overhead hanger rod style canopies.

1.2 RELATED REQUIIREMENTS

A. Flashing of various designs may be required. Supplied by the installer.

B. Determine wall construction, make-up and thickness.

C. Ensure adequate wall condition to carry canopy loads where required.

D. Consider water drainage away from canopy where necessary.

E. Any necessary removal or relocation of existing structures, obstructions or materials.

1.3 QUALITY ASSURANCE

A. Products meeting these specifications established standard of quality required as manufactured by Mapes Industries, Inc. Lincoln, Nebraska (888) 273-1132.

1.4 FIELD MEASUREMENT

A. Confirm dimensions prior to preparation of shop drawings when possible.

B. If requested, supply manufacturer's standard literature and specifications for canopies.

C. Submit shop drawings showing structural component locations/positions, material dimensions and details of construction and assembly.

1.5 PERFORMANCE REQUIREMENTS

A. Canopy must conform to local building codes.

B. Determine if specific load requirements have been established for canopies and if stamped calculations are required for location in which canopy is installed.

1.6 SUBMITTALS

A. See Section 01 33 00 - Submittal Procedures, for submittal procedures.

B. Product Data: Provide data on canopy covering, color fastness, joining methods, attachment devices to framing system, and other critical elements.

C. Shop Drawings: Indicate awning profiles, sizes, connection attachments, anchorage, size and type of fasteners, graphic images, patterns, and accessories.

D. Samples, sheet metal roofing, fascia and other visible elements: Submit 12 x 12 inch (300 x 300 mm) sample of items with representative joining detail, transition pieces, and attachment devices to framing system.

E. Samples, Framing: Submit two samples, 8 inches (200 mm) long of framing members, elbow; prefinished.

1.7 DELIVER, STORAGE, HANDLING

A. Deliver and store all canopy components in protected areas.

1.8

PART 2 – PRODUCTS

2.1 MANUFACTURER

A. Approved Manufacturers:
   a. Allen Industries, Inc (Canopies And Signs)
      11351 49th Street North Clearwater, Fl 33762
      Contact: Alan Bryant 336-317-0195
      Alan.Bryant@Allenindustries.Com.
   b. Entera Signs (Canopies And Signs)
      1200 Entera Drive Panama City, Fl. 32401
      Contact: Matt Czajkowski 850-691-9652
      Matt.Czajkowski@Enterabranding.Com
   c. Cummings Signs, Inc (Canopies And Signs)
      105 Dalton Place Way Knoxville, Tn 37912
      Contact: Joel Effler 615-872-5483
      Joel.Effler@Cummingssigns.Com
   d. Federal Heath Sign Co (Canopies And Signs)
      12704 Dupont Circle Tampa Fl 33626
      Contact: Fiona Paul 813-855-441
      FPaul@FederalHeath.com

B. Substitutions: See Section 01 25 00 – Substitution Procedures.

2.2 MATERIALS

A. Decking and fascia shall be extruded aluminum, alloy 6063-T6.

B. Decking Shall be 3” Extruded flat soffit .078” Decking

C. Hanger rods and attachment hardware shall be powder coated to match canopy.

D. Fascia shall be standard 10” extruded “C” style (minimum .125 aluminum).

2.3 FINISHES

A. Finish type to be Class II Colored Anodized- refer to drawings for color

2.4 FABRICATION

A. All connections shall be mechanically assembled utilizing 3/16” fasteners with a minimum shear stress of 350 lb. Pre-welded or factory-welded connections are not acceptable.

B. Decking shall be designed with interlocking extruded aluminum members with mechanical fasteners field applied to provide structural integrity for the completed assembly.

C. Concealed drainage. Water shall drain from covered surfaces into integral fascia gutter and directed to either the front for front drainage or to the rear for ground level discharge via one or more designated downspouts.

PART 3 – EXECUTION

3.1 INSPECTION

A. Confirm that surrounding area is ready for the canopy installation.

B. Installer shall confirm dimensions and elevations to be as shown on drawings provided by Mapes Industries.

C. Erection shall be performed by an approved installer and scheduled after all concrete, masonry and roofing in the area is completed.

3.2 INSTALLATION

A. Installation shall be in strict accordance with manufacturer's shop drawings. Particular attention should be given to protecting the finish during handling and erection.

3.3 CLEANING

A. After installation, entire system shall be left in a clean condition

END OF SECTION

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M.E.P. SPECIFICATIONS

Image Upgrade: Burger King, Fort Campbell, KY
Exchange Project No: 2146-22-017
Quorum Project No. 22203

February 6, 2023

ENGINEER

Conway Duncan, Inc.
600 West College Street, Suite 102
Springfield, Missouri 65806
Phone: 417.881.1586

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The following shall apply to this Section

1. Drawings.
2. General Provisions of the Contract.
3. Solicitation Documents.
4. General Conditions.
5. Supplementary Conditions.

1.2 WORK INCLUDES

A. The work to be performed under this Division shall include all labor, materials, equipment, transportation, construction plant, and facilities necessary to provide a complete and operable system. The Contractor shall examine all Drawings and all Sections of the Specifications and shall be responsible for ascertaining to what extent other Drawings and Sections affect the work herein specified.

1.3 CODES, REGULATIONS, AND STANDARDS

A. All work must be performed in accordance with the requirements of local, county, state and national codes and regulations including the requirements of the current edition of the following:

1. International Building Code (IBC).
2. International Fuel Gas Code (IFGC).
3. International Mechanical Code (IMC).
4. International Energy Conservation Code (IECC).
5. International Plumbing Code (IPC).
6. National Electrical Code (NEC).
7. Occupational Safety and Health Administration (OSHA) Act of 1970.
8. National Fire Protection Association (NFPA) 13, 14, 17/17A, 72, 72E, 54, 96, 101
9. For work not specifically listed above, use codes and standards of the NFPA.

B. All equipment, apparatus and systems shall be rated, tested, fabricated and/or installed in accordance with the applicable industry standard mentioned. The following list will serve to clarify abbreviations that appear in other sections of this specification:

1. AABC Associated Air Balance Council.
2. ADC Air Diffusion Council.
3. AGA American Gas Association.
4. AMCA Air Moving and Conditioning Association.
5. ANSI American National Standards Institute.
6. ARI Air Conditioning and Refrigeration Institute.
7. ASE Association of Safety Engineers.
8. ASHRAE American Society of Heating, Refrigerating and Air Conditioning Engineers.
9. ASME American Society of Mechanical Engineers.
10. ASSE American Society of Sanitary Engineering.
11. ASTM American Society for Testing and Materials.
12. AWWA American Water Works Association.

13. EPA Environmental Protection Agency.
14. FM Factory Mutual.
15. FS Federal Specifications.
16. IBR Institute of Boiler and Radiator Manufacturers.
17. IEEE Institute of Electrical and Electronics Engineers.
18. MCAA Mechanical Contractors' Association of America.
19. NEBB National Environmental Balancing Bureau.
20. NEMA National Electrical Manufacturers Association.
21. NFPA National Fire Protection Association.
22. NSC National Safety Council.
23. NSF National Sanitation Foundation.
24. SBI Steel Boiler Institute Industry.
25. SMACNA Sheet Metal and Air Conditioning Contractors National Association.
26. UL Underwriters' Laboratories.
27. USCFCCCHR University of Southern California Foundation for Cross Connection Control and Hydraulic Research.

1.4 SUBMITTALS

A. As soon as possible and within thirty (30) days after the award of the contract and before beginning the fabrication of any material or the installation of any equipment, a complete schedule of the materials and equipment proposed for installation shall be submitted to the Engineer for approval. This schedule shall include manufacturers' names, catalog data, diagrams, drawings and other descriptive data as required or requested by the Engineer.

B. All items of materials and equipment used for the project shall be submitted.

C. Submittals shall be assembled in an orderly manner and shall include a title page with space for the Engineer's approval stamp and remarks. It shall also contain a concise listing of all items being submitted. Submit five (5) copies as follows: Architect (for records); Engineer (for records); Owner (for records); and two (2) copies for Contractor's use.

D. Asbestos Free Material/Product: Prior to approval of the material/product to be used, the manufacturer/supplier shall furnish the Engineer with written certification that the material/product contains no asbestos. This certificate is mandatory before approval will be issued. Submittals furnished without the asbestos-free certification will be returned to the Contractor with no action taken until such certification is provided.

1.5 SUBSTITUTION OF EQUIPMENT

A. All proposed substitutions for specified products on this project require approval in advance of bidding. Approval will not be granted after award of contract. See Substitution Request Form in the bidding documents at the beginning of these specifications for the appropriate approval form. If no form is found, submit by mail, or hand-carried on contractor's or supplier's letterhead. DO NOT FAX. Substitutions must be submitted for review at least five (5) working days prior to the bid date to be considered.

B. It is incumbent on the Contractor to submit technical data that will fully establish the equality of the proposed substitute equipment with that listed and evidence to substantiate the availability of the required repair and maintenance service. Each request for substitution shall be accompanied by the following information for each piece of equipment:

1. Statement indicating that this substituted equipment will not increase the contract cost nor extend the completion date.
2. Manufacturer's name and model number.
3. Catalog cut sheets, diagrams and other data published by the manufacturer with the particular model identified and the pertinent design data for that model highlighted or underlined for easy reference.
4. Each request for substitution shall also include the following information relating to service maintenance and repair:

    a. Name, address and telephone number of nearest factory authorized technical representative.
    b. Name, address and telephone number of firm(s) qualified to perform preventive maintenance, minor or major repairs in the locale of the project.
    c. Name, address and telephone number of firm(s) from whom spare parts and major components are available.
    d. Building name and address, and the name, address and telephone number of its owner's representative where equipment of the same manufacturer as requested for substitution has been installed and in operation for two or more years. Two or more such installations shall be listed and the location should be in the vicinity of the proposed project.

C. In the event of Engineer's approval of a substitution of equipment, the requesting entity will be notified by telephonic message, email, or FAX by the Engineer (or authorized representative), and/or by the issuance of an amendment to the contract documents incorporating the equipment by name and model number.

1.6 CONTRACT DRAWINGS

A. The layout shown on the Contract Drawings is necessarily diagrammatic but shall be followed as closely as actual construction and as other work will allow. The dimensions of work as shown on the Contract Drawings are not as-built dimensions. No measurements shall be scaled from the drawings and used as definite dimensions for laying out or fitting work in place.

B. The layout of manufactured equipment as shown on the drawings shall be checked and the exact location shall be determined from the dimensions of equipment shop drawings approved by the Engineer.

1.7 DEFINITIONS

A. FURNISH: The term furnish means supply and deliver to the Project Site, ready for unloading, unpacking, assembly, installation and similar operations.

B. INSTALL: The term install describes operations at the Project Site including the actual unloading, unpacking, assembly, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations.

C. PROVIDE: The term provides means to furnish and install, complete and ready for intended use.

1.8 MAINTENANCE MANUAL AND OPERATING INSTRUCTIONS

A. Upon completion of the work, Contractors shall provide the Engineer with two copies of maintenance manuals for all equipment furnished and installed under his work.

B. Manuals shall be in substantial 3-ring binders with project name and number inscribed on face and hinged back. Manuals shall include roster of all training session attendees. The manuals shall, however, first be approved by the Engineer. The manuals shall include, but not be limited to manufacturer's lubricating and operating instructions and parts list and serial numbers for all operating machinery, including drive information, and motor horsepower, amperage, and voltage readings on all phases, valve chart, sequence of operation, index following the order listed in the specifications, warranties in the name of the Installation, and a list of manufacturers, service firms and subcontractors names and telephone numbers.

C. Training attendance rosters for each training session shall be included in manuals. Roster will identify training subject, date, attendees name, job title, and telephone number.

D. All switches, controls, and safety devices shall be clearly and permanently marked with embossed or printed plates as to purpose and as to operation and shall be tested in the presence of the Owner designated representative to ensure that he understands their function and purpose.

E. Upon completion of the work, Contractors shall put the systems into service. Contractors shall be entirely responsible for the equipment during all testing operations including the lubricating and turning on and off of such apparatus.

1.9 PROJECT RECORD AND CLOSEOUT DOCUMENTS

A. In addition to the requirements specified in Division 1, indicate the following installed conditions:

1. Ductwork mains and branches, size and location, for both exterior and interior; locations of dampers and other control devices; filters, boxes, and terminal units requiring periodic maintenance or repair.
2. Mains and branches of piping systems, with valves and control devices located and numbered, concealed unions located, and with items requiring maintenance located (i.e., traps, strainers, expansion compensators, tanks, etc.).

B. Equipment locations (exposed and concealed), dimensioned from prominent building lines.

C. Approved substitutions, Contract Modifications, and actual equipment and materials installed.

D. Contract Modifications, actual equipment and materials installed.

1.10 PRODUCT DELIVERY STORAGE AND HANDLING

A. Follow manufacturer's directions in delivery, storage, protection and handling of all equipment and materials.

B. Deliver and store equipment and materials to the site in original containers, suitably sheltered from the elements and mechanical injury, but readily accessible for inspection until installed.

C. Items subject to moisture damage shall be stored in dry, heated spaces.

D. Ascertain, from examination of architectural drawings, whether any special temporary access openings in the building(s) will be required for admission of apparatus furnished under this Division.

E. Heavy machinery, equipment and heavy parts thereof shall be brought into building or onto premise by a machinery moving concern acceptable to Engineer.

F. Machinery movers shall not rig, tie to, or rest weight upon any building member of any part of building premises or make use of any stairway until specific permission is obtained from Engineer.

G. Permission to rig to or in any way make use of any part of building premises shall not relieve Installer of responsibility for any damage resulting from, or because of said rigging or use.

1.11 GUARANTEES AND WARRANTIES

A. Submit to the Owner, two copies of all warranties and guarantees specified in the General Conditions, Supplementary Conditions, the individual sections of the specifications, or as provided by the various subcontractors and material suppliers. All such documents shall show the name and location of the project and the name of the purchaser.

B. The Contractor shall provide to the Owner a non-prorated guarantee of all materials and workmanship for a period of not less than one year from the date of the Owner's final certificate.

C. The Contractor shall be responsible for enforcing all special or extended guarantees required in individual sections of the specifications that might be provided by various subcontractors or material suppliers.

D. Acceptance of the work under this Division shall be subject to the conditions that all installed systems, equipment, apparatus, and appliances included in the work shall operate and perform as designed, and as selected with respect to efficiency, capacity and quietness and shall operate and perform without producing objectionable noise within occupied areas of the building.

E. Acceptance of the work shall also be subject to the conditions that any time within one year after date of final payment, any defective part of the work resulting from the supply of faulty workmanship or material shall be immediately amended, repaired or replaced as a part of the contract work without cost to the Owner.

F. This guarantee shall be extended to include the capacity and integrated performance of the component parts of the various systems in strict accordance with the true intent and purpose of the specification. The contractor shall conduct such tests as are herein specified or as may be required by the Engineer to demonstrate the capacity and performance ability of the various systems to maintain specified conditions

1.12 PROTECTION

A. Keep pipe openings closed by means of plugs or caps to prevent entrance of foreign matter, and cover all fixtures, equipment and apparatus as required to protect them against dirt, water, chemical or mechanical damage both before and after installation.

B. Fixtures, equipment or apparatus damaged prior to final acceptance of work shall be restored to original condition or replaced by Installer.

C. Equipment shall be inherently safe and moving parts shall be covered with guards which meet OSHA requirements.

D. Provide protective guards for devices such as or similar to thermostats, valves, and switches which are so located as to be readily subject to tampering, accidental damage, or vandalism.

PART 2 - PRODUCTS

2.1 HANGERS, SUPPORTS AND INSERTS

A. Hangers and supports shall conform to the recommendations of Standard Practice SP.58 of the Manufacturers' Standardization Society of the Valve and Fitting Industry.

B. All hangers for insulated piping shall be oversized to allow the insulation to run through the hanger uninterrupted. Insulation shall be protected from crushing by sheet metal shields.

C. Where several pipes occur at the same elevation, trapeze type hangers may be used. Trapeze hangers shall be made of 2" x 2" structural steel angles with legs down. All copper tubing supports shall be copper plated or insulated from dissimilar materials.

D. Hanger rods shall conform to the following:

Pipe Size	Rod Diameter
Up to 2"	3/8"
2½" to 5"	1/2"

Trapeze hanger rods shall be of sufficient size to carry weight of trapeze channel, piping and contents, insulation supports and an additional 200 lb. load.

E. Wire or perforated strap iron hangers, expansion anchors, and power actuated fasteners will not be permitted.

2.2 SLEEVES

A. Provide pipe sleeves for all penetrations of piping through walls.

B. Floor sleeves (for floors above grade) shall be standard weight galvanized steel pipe or PVC pipe with bottom set flush with surface below and top extending 1" above finished floor (3" in mechanical equipment rooms). Seal around pipe and pipe sleeve with fire resistant waterproofing caulking materials.

C. Wall sleeves for exterior foundation walls shall be cast iron fabricated sleeves flush with wall inside and outside. Caulk with oakum and lead wool or otherwise adequately waterproof opening between pipe and sleeve.

D. Wall sleeves for masonry walls shall be standard weight galvanized steel pipe flush with all surfaces.

E. Wall sleeves for interior partitions and ceilings shall be 20 gauge galvanized steel with lock joints.

F. Sleeves for piping that is to be insulated shall be large enough to allow insulation to pass through the sleeve.

G. Pack the space between the interior surface of all sleeves and pipes or pipe insulation with fire resistant sound and waterproofing caulking materials.

2.3 ESCUTCHEONS

A. Provide set-screw chrome plated escutcheons (not friction-dependent) on all exposed pipe or pipe insulation passing through or into finished walls, partitions, ceiling and floors. Escutcheons at insulated pipes shall be large enough to encircle insulation without penetrating vapor barrier or jacket.

2.4 INDUSTRIAL TYPE THERMOMETERS

A. Industrial type thermometers shall be the adjustable angle type with 9" case and a minimum stem length of 6" insertion in piping.

B. Casing shall be cast aluminum with double strength glass, white face with dark graduations.

C. Element shall be a red reading organic liquid filled tube and brass stem.

D. Provide separable brass sockets for all thermometers in piping systems. Provide extension sockets when installed in insulated piping.

2.5 PRESSURE GAUGES

A. Ranges of gauges shall be two times indicated operating pressure or 5 PSIG above relief valve setting. Verify ranges on shop drawings.

B. Gauges shall be 4½" dial gauges encased in an aluminum die-cast housing with a threaded access cover and glass crystal. The gauge body shall be water and dust tight with back flange.

C. Movements shall be rotary geared stainless steel with Grade “A” phosphor bronze Bourdon tube rated from 30" vacuum to 1000 PSIG maximum. Accuracy shall be within 1% of the scale range.

2.6 AUXILIARY DEVICES

A. Each trade providing equipment requiring automatic control or remote control shall provide all proper pilot devices to perform the particular duty specified for the driven equipment. In no case shall safety devices be bypassed.

B. Coordinate automatic control work and the work of Division 26.

2.7 CONDUIT AND WIRING

A. Wiring systems provided under Division 22 shall be as specified in Division 26.

B. All electrical terminals shall be labeled.

C. Provide wiring diagrams inside each cabinet.

D. Conduit shall comply with all requirements of Division 26.

E. Final connections to equipment shall be flexible.

PART 3 - EXECUTION

3.1 JOINTING OF PIPING

A. Threads shall be full and clean cut, and ends of pipe shall be reamed. When screwed joints are assembled, the male thread shall be thoroughly coated with appropriate thread compound to serve as a joint sealer and as a prime coat of paint for the exposed threads (Teflon tape may be used at Contractor's option). Care shall be taken to keep all other foreign matter from entering the interior of the piping. Each section of pipe and all fittings shall be carefully inspected for dirt, grease, or other foreign matter on the inside and where necessary they shall be properly cleaned before assembly.

B. Soldered or brazed joints made with fittings having pre-inserted rings of solder or brazing alloy shall have the tube and fittings cleaned bright and fluxed. The joint shall be heated sufficiently to make a tight connection. Tubes and fittings without such rings, shall be cleaned bright, fluxed and heated until the solder is drawn into the joint by capillarity and the connection is tight. Flux shall be water soluble binder flux. In potable water systems, the use of solder and flux exceeding 0.2 percent lead content is prohibited.

3.2 EXPANSION AND CONTRACTION

A. Provisions shall be made for expansion and contraction in all piping. Piping shall be installed in a manner such that joints will not develop leaks. All expansion shall be taken up by swing-connections, and the Contractor shall be responsible for the installation of these connections whether or not they are shown on the Drawings with specific means for relieving expansion and contraction. Slip-type expansion joints shall not be used. Particular care must be exercised at branches on underground piping to allow free movement at branch connection to main.

3.3 INSTALLATION OF PIPING

A. Piping shall be installed on long continuous lengths, with a minimum number of joints. Joints, where necessary shall be carefully made to insure against leakage.

B. All piping shall be firmly supported using hangers, brackets and braces to prevent sagging and/or lateral movement. All hangers, brackets, and other supports shall be securely fastened to the construction as may be required and in a manner acceptable to the Engineer. All piping shall be installed to maintain maximum head room. Nothing shall be suspended from the roof deck.

C. Arrangement of all piping shall be as shown on plans. It is especially necessary that all mains be installed with view to accessibility in case of repair and location of pipe lines and spacing between same shall be so made that there will be no conflict between pipe lines by the several trades.

D. Contractor shall give careful consideration to clearances and locations of lines and type of fittings used to obtain these clearances. Provide maximum headroom in all cases. Piping shall be installed parallel to building walls and at a height so as not to obstruct any portion of a window, light fixture, doorway, pipe tunnel or passageway. Ascertain from the drawings heights of all suspended ceilings, size of all pipe shafts in which piping is to be concealed, and location and size of structural members in and adjacent to all pipe shafts.

E. Where interferences develop in the field, Contractor shall offset or reroute piping as required to clear such interferences. In all cases consult architectural drawings for exact location of pipe spaces, ceiling heights, or other architectural details before installing piping.

F. Under no circumstances shall the size of piping shown on the drawings be changed without written approval of the Engineer.

G. Provide eccentric reducers where required for proper drainage or venting of horizontal pipe lines. Reducing fittings shall be used for all changes of pipe size and bushings shall not, under any circumstances, be used.

H. Unions or flanges are to be installed on the equipment side of all valves in pipe connections from mains to equipment, to enable equipment to be drained and disconnected without necessitating the draining of mains.

I. Valves must be arranged for easy access and be within easy reach and the piping shall be arranged to accomplish this.

3.4 WELDING

A. When welding is to be performed, precautionary measures must be taken to prevent fire. Provide water barrels and fire buckets or 2½ gal., water pump extinguisher, in close proximity to welding work. All piping shall be shop-fabricated to the greatest extent practicable.

B. Welded joints shall be made by the oxy-acetylene or electric process in accordance with Code for Pressure Piping ANSI B31.l.

C. Filler metal for the oxy-acetylene welding process shall conform to the American Society for Testing and Materials Specification for Iron and Steel Gas-Welding Rods, ASTM Designation A251-46T, Classification GA60. Filler metals for the metallic arc welding process shall conform to the American Society for Testing and Materials Specification for Mild Steel Arc-Welding Electrodes, ASTM Designation A233-58T. Classification of electrodes shall be one of the following: E6010, E6015, E7016, E7018.

D. Welds shall be of the single vee butt type for which the pipe shall be mill leveled to 45□ to within 1/16" of the inside wall surface.

E. The abutting ends of the joints shall be separated before welding to permit complete fusion to the bottom without overlapping, tacked in two or more points to maintain alignment, and welded. All welding shall be continuous around the pipe.

F. Welds shall be of sound weld metal, thoroughly fused into the ends of the pipe and to the bottom of the vee, and shall be built up in excess of the pipe wall to give a reinforcement of one-quarter (¼) the pipe wall thickness and in such a manner that one weld metal will present a gradual increase in thickness from the surface of the pipe to the center of the weld. The minimum width of the weld shall be 2½ times the pipe wall thickness.

G. The fillet welds for flanges of fittings shall be fused into the pipe and plate for a minimum distance of 1½ times the pipe wall thickness and shall be built up to present a minimum throat thickness of depth of weld of 1¼ times the pipe wall thickness.

H. Welding ells shall be used at all turns in welded pipe lines; no mitered ells will be approved.

I. Where welded mains are 3" in size or larger and branches are 2" in size and smaller, branch connections shall be made up with “Thread-O-Lets” as manufactured by Bonney Forge, Tube Turns or Tube Line, Inc. Welding tees or Weld-O-Lets shall be used for all other branch connection, unless specifically agreed otherwise with the Engineer for a specific case.

J. Welded piping shall be subject to a hydrostatic test of not less than 100 psi, or of 1½ times the working pressure whichever is the greater at which pressure all welded joints shall be hammered with a three pound hammer, the blows being struck with a sufficient force to jar the pipe and joint, but not so hard as to injure the piping. All welds must pass this test without showing leaks or any defects.

K. Welding shall be done with high quality modern welding equipment by competent operators, and in a thorough, first class, workmanlike manner. Preparation, fabrication welding and installation shall be in accordance with ANSI B31.3 - 1962.

L. The Contractor shall be required to furnish proof of the competency of each welding operator, and shall at the request of the Engineer, have all or any of such welding operators pass a standard qualification test such as A.S.M.E., A.W.S. or Hartford Insurance Company procedure and tests.

3.5 HANGERS, SUPPORTS AND INSERTS

A. Provide all hangers, supports, bracing, inserts, beams, anchors, guides, sleeves and miscellaneous steel for the proper support, alignment, expansion and contraction of piping and equipment.

B. Hanger supports shall be securely fastened to structural members by approved beam clamps and clips, concrete inserts, anchors, or other appropriate methods agreed upon with the Engineer.

C. Maximum spacing of hangers and supports for steel and copper piping shall be as follows:

Pipe Size	Spacing
½" thru 1¼"	Not over 6'-0"
l½" and up	Not over 8'-0"

D. Cast iron or bell and spigot piping shall be supported at every joint.

E. Additional hangers and supports shall be provided to minimize undesirable stress on valve bodies, other fittings and equipment.

F. Provide all supplemental angles, channels and plates of adequate sizes where bracing or supports are required for piping between structural members.

3.6 OPENINGS IN CONSTRUCTION

A. All cutting or provision of openings that may be necessary for the installation of this work shall be done by the Contractor, and all patching and repairing shall be done by workmen competent in the trade required. The Contractor shall be responsible for arranging the work so that minimum cutting will be required.

3.7 VALVES

A. Install ball valves with the stem above body in accessible position.

B. The necessary valves shall be installed within the systems to provide required shut-off and flow control service and to allow isolation for inspection, maintenance and repair of each piece of equipment, fixture and branch service loop.

C. Each valve shall be installed so that it is easily accessible for operation, visual inspection and preventative maintenance.

3.8 THERMOMETERS AND GAUGES

A. Thermometers and Gauges: Install thermometers and gauges in piping systems and duct systems as shown. Thermometers and gauges for each major equipment item shall be readily readable from one position while standing on floor or through the ceiling access panel. Gauges shall not be installed until systems are cleaned.

3.9 CLEANING THE PIPING SYSTEMS

A. Before pipe covering is applied and final tests are made, flush the water piping systems thoroughly to remove grit, sand, oil, etc., for as long a time as is required to thoroughly clean the apparatus and piping. Make the required temporary connections for this purpose.

B. Care must be taken not to get dirt, grease, etc., upon the floors or walls. Any damage done shall be promptly repaired.

C. After the period of these operations, any defects or damages that may have developed in the equipment and apparatus as a result of the cleaning process or the operation of the system shall be made good, and the apparatus put in first class working order.

END OF SECTION

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The following shall apply to this Section:

1. Drawings.
2. General Provisions of the Contract.
3. Solicitation Documents.
4. General Conditions.
5. Supplementary Conditions.

1.2 WORK INCLUDES

A. Provide all materials, equipment, apparatus, services, methods, tools, labor, transportation, etc., required to complete the insulation of the mechanical systems shown on the drawings and specified.

B. Piping requiring insulation:

1. Domestic water piping (hot water, hot water return, cold water)

C. Painting and identification shall be provided by the Contractor providing the items to be insulated. Factory sizing on outer jacketing of insulation shall be provided under this section suitable for specified finish coat of paint or identification.

1.3 SUBMITTALS

A. Submit schedule listing each type of insulation, insulation thickness, density, “K” factor, type of jacket, etc., and the service or type of work that the insulation is to apply.

1.4 CODES AND STANDARDS

A. Where applicable, the Fire Hazard Classification of the materials herein specified shall be listed and inspected by Underwriters’ Laboratories, Inc. The flame spread rating, fuel contributed and smoke developed as shown in the listing shall be determined by ASTM E84 “Method of Tests for Surface Burning Characteristics of Building Materials”. Each product shall bear the label of Underwriters’ Laboratories. All products used on this project shall be classified as “non-combustible” in International Building Code or NFPA National Fire Code.

1.5 DEFINITION

A. The term “piping” as used in this section of the specifications shall include pipe, fittings, valves, specialties, strainers, flanges, unions, run-outs, final connections, etc.

1.6 PROTECTION

A. Protect insulation against dirt, water, chemical or mechanical damage before, during and after installation. Any such insulation or covering damaged prior to final acceptance of the work shall be satisfactorily repaired or replaced.

B. Provide sturdy metal guards on all duct and pipe (whether insulated or not) subject to damage from normal maintenance operations and personnel.

PART 2 - PRODUCTS

2.1 PIPING AND EQUIPMENT INSULATION

A. "Fiberglass": Minimum 3½ pounds per cubic foot density, fiberglass factory molded or spun pipe insulation with a "K" factor of 0.24 at 75□F. mean temperature and a factory applied fire retardant self-sealing vapor barrier "ASJ" jacket. At the Contractor's option, closed-cell elastomeric insulation in tubular form equal to Armacell "AP Armaflex" may be used in lieu of fiberglass insulation. Self-sealing pipe insulation such as Armacell "AP Armaflex SS" is not allowed.

B. "Foamglas": Insulation equal to Pittsburgh Corning Foamglass. The insulation shall be jacketed with Pittsburgh Corning Pittwrap SS jacketing or equal.

2.2 ADHESIVES, LAGGING, AND SEALERS

A. Adhesives, lagging and sealers shall be as recommended by the insulation manufacturers. Where applicable, they shall include an anti-vermin and fungicidal agent and shall be non-toxic and non-flammable.

2.3 PVC PRE-MOLDED FITTING AND VALVE COVERS

A. Pre-molded fitting and valve covers shall be factory made of one-piece polyvinyl chloride. Covers shall overlap the adjoining pipe insulation.

2.4 ACCEPTABLE MANUFACTURERS

A. Fiberglass Insulation
   1. CertainTeed
   2. Knauf Insulation
   3. Johns Manville
   4. Owens Corning

B. Flexible Elastomeric Foam Insulation
   1. Armacell
   2. Aeroflex

C. Adhesives, Lagging, and Sealers
   1. Foster
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D. PVC Pre-Molded Fitting and Valve Covers
   1. Insul-Coustic
   2. Johns Manville
   3. CertainTeed

PART 3 - EXECUTION

3.1 PREPARATION/GENERAL REQUIREMENTS

A. Insulation work shall be performed by competent workers regularly employed by insulating contractors.

B. Install insulation in full accordance with the manufacturer's recommendations, including provisions for cementing joints and insulating fittings.

C. Clean thoroughly to remove rust, plaster, and dirt before insulation is applied. Insulation shall be applied on clean dry surfaces only. Piping shall have been tested and approved before covering.

D. Exposed insulated ducts and piping shall be provided with a finish of an adequate surface for a final coat of paint. Pre-sized jackets, aluminum, vinyl and other pre-finished jackets are acceptable as installed, however, canvas and similar material shall be filled and sealed or dipped if necessary to provide a good surface for painting.

E. At Contractor's option, canvas jacket may be replaced by glass cloth. Vapor barriers on cold surfaces and piping must be continuous through sleeves, hangers, supports, etc. Stapling of vapor barrier jackets will not be permitted.

F. Insulation is not required on vertical down spouts (within the building) except at vertical piping leaders to roof drains.

G. Provide saddles, shields, metal protectors and other appurtenances necessary to prevent crushing of insulation at hangers, rollers, supports and anchors. Provide rigid insulation blocks at saddles.

3.2 PIPING INSULATION

A. Insulate all above-ground piping systems, except gas piping and sprinkler piping, with piping insulation of specified thicknesses.

Type of System or Pipe	Insulation Thickness
1. Domestic cold water piping, domestic hot water piping, tempered water piping: *fiberglass, flexible elastomeric foam insulation*	½"

B. Installation of insulation shall be as follows:

1. Insulate all hydronic lines with the materials specified above. Install insulation neatly and securely.
2. Pipe: Butt all joints firmly together. Cover joints with 3" butt strips. Smoothly secure all jacket laps and joints strips with adhesive. Self-sealing laps shall be applied according to manufacturers' recommendations. Ends of pipe insulation shall be sealed off with a vapor barrier coating at all fittings and valves and at intervals of 21' on continuous runs.
3. Fittings and Valves: Insulate with molded fiberglass fittings, foamed plastic insulation, segments of pipe covering, or firmly compressed foil faced fiberglass blankets. Vapor seal by applying a layer of open weave glass cloth embedded between two coats of vapor barrier mastic.

END OF SECTION

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The following shall apply to this Section:

1. Drawings.
2. General Provisions of the Contract.
3. Solicitation Documents.
4. General Conditions.
5. Supplementary Conditions.

1.2 WORK INCLUDES

A. All plumbing fixtures, including supply and waste fittings, stops, trim, brackets, carriers, etc. specified, shown on the drawings and required for a complete installation.

B. All piping, fittings, valves, trim, stops, etc. specified, shown on the drawings and required for rough-in and final connection to owner-furnished equipment.

1.3 SUBMITTALS

A. Submit shop drawings in accordance with Section 220500 – COMMON WORK RESULTS FOR PLUMBING for the following:

1. Plumbing fixtures and trim.
2. Chair carriers.

1.4 QUALITY ASSURANCE

A. Codes and Standards: Comply with current edition of the following:

1. Vitreous china fixture, NBS-CS-CS20.
2. Enameled iron fixtures, NBS-CS-CS77.
3. Plumbing fixtures (land use), FS-WW-P-541.

B. No plumbing fixture, special equipment, device or piping shall be installed which will provide cross connection or interconnection between potable water system and polluted water or sewage system so as to make possible backflow or back siphonage of sewage or polluted water into the potable water supply system.

C. Where possibility of back siphonage exists, water supplied to fixture shall be introduced through a suitable vacuum breaker installed at code minimum height.

D. The water system of electric water coolers shall be manufactured of pure copper components only (completely lead free material). The water ways shall not contain any internal plating or coatings. All joints shall be made using silver solder brazing alloy. No lead or soft solder shall be used.

PART 2 - PRODUCTS

2.1 PLUMBING FIXTURES AND TRIM

A. All fixtures shall be vitreous china, acid resisting enamel cast iron or stainless steel as specified complete with brass piping, fittings, supplies, stops, flush pipes, trim and brackets. Exposed brass piping and fittings shall be chrome plated.

B. Where manufacturer's numbers for a complete assembly are called for, such assembly shall be modified as specified in this section.

C. Fixtures shall have water, drain, waste, soil, vent, and other connections as called for. Each water connection fixture shall have an air gap or vacuum breaker as required by local and state departments of health. Water connection sizes are minimum and must be increased to correspond to manufacturer's standards.

D. Carriers for wall hung fixtures shall be selected for the particular fixture, piping arrangement and building conditions prevailing at each location.

E. Where lavatories without legs are specified, each shall be supported on a chair type carrier with concealed arms.

F. Special sinks, where wall hung, shall have equivalent chair carriers specifically designed for the fixture.

G. Fixture Carriers:

1. Lavatories shall be supported by floor mounted carriers.
2. Lavatory carriers shall be Jay R. Smith 700 Series (floor mounted) or approved equal, selected to match fixtures.

2.2 ACCEPTABLE MANUFACTURERS

A. Brass

1. American Standard.
2. Chicago Faucet.
3. Delta.
4. Gerber Commercial.
5. Moen Commercial.
6. T & S Brass.
7. Zurn.

B. Electric Water Coolers

1. Elkay.
2. Halsey-Taylor.
3. Oasis.

C. Flush Valves

1. Chicago Faucet.
2. Sloan.
3. Toto.
4. Zurn.

D. Mop Service Basins

1. Fiat.
2. Williams.

E. Seats

1. Beneke.
2. Church.
3. Olsonite.

F. Sinks

1. Elkay.
2. Just.
3. Moen.
4. Zurn.

G. Valves

1. Ames.
2. Apollo.
3. ASCO.
4. Febco.
5. Keystone.
6. Magnetrol.
7. Stockham.
8. Watts.

H. Water Closet Fixtures & Lavatories

1. American Standard.
2. Crane.
3. Eljer.
4. Gerber Commercial.
5. Kohler.
6. Toto.
7. Zurn.

PART 3 - EXECUTION

3.1 PLUMBING FIXTURES AND TRIM

A. All fixtures shall be set firm and true, connected to all piping services ready for use. Fixtures shall be installed per manufacturer’s recommendations.

B. Fixtures intended for accessibility to the handicapped or to meet ADA requirements shall be installed at recommended heights and with appropriate clearances. Report any conflicts or discrepancies to the Engineer. Flush valve and flush tank handles in handicap accessible spaces shall be located on the wide side of the space.

C. Sinks and lavatories for handicapped access shall be installed with offset tailpieces and insulated traps.

3.2 OWNER FURNISHED EQUIPMENT

A. Provide rough-ins and final connections to all Owner furnished equipment including shut off valves, piping, traps, etc. necessary to connect equipment after it has been installed in place.

B. Install all faucets, sinks drains, tailpieces, overflows, traps, etc. furnished loose with all Owner furnished equipment.

C. All exposed piping readily visible for Owner furnished equipment shall be chrome plated red brass pipe and fittings. Braces for support of exposed piping shall be chrome plated.

D. Pending installation of Owner furnished equipment, all service lines shall be suitably capped, plugged and protected. All water lines shall be valved.

E. Furnish vacuum breakers, pressure regulators solenoid valves, traps, piping, etc. as required for installation of equipment.

END OF SECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

1. Drawings.
2. General Provisions of the Contract.
3. Solicitation Documents.
4. General Conditions.
5. Supplementary Conditions.

1.2 WORK INCLUDES

A. The work to be performed under this Division shall include all labor, materials, equipment, transportation, construction plant, and facilities necessary to provide a complete and operable system. The Contractor shall examine all Drawings and all Sections of the Specifications and shall be responsible for ascertaining to what extent other Drawings and Sections affect the work herein specified.

1.3 CODES, REGULATIONS, AND STANDARDS

A. All work must be performed in accordance with the requirements of local, county, state and national codes and regulations including the requirements of the current edition of the following:

1. International Building Code (IBC).
2. International Fuel Gas Code (IFGC).
3. International Mechanical Code (IMC).
4. International Energy Conservation Code (IECC).
5. International Plumbing Code (IPC).
6. National Electrical Code (NEC).
7. Occupational Safety and Health Administration (OSHA) Act of 1970.
8. National Fire Protection Association (NFPA) 13, 14, 17/17A, 72, 72E, 54, 96, 101
9. For work not specifically listed above, use codes and standards of the NFPA.

B. All equipment, apparatus and systems shall be rated, tested, fabricated and/or installed in accordance with the applicable industry standard mentioned. The following list will serve to clarify abbreviations that appear in other sections of this specification:

1. AABC Associated Air Balance Council.
2. ADC Air Diffusion Council.
3. AGA American Gas Association.
4. AMCA Air Moving and Conditioning Association.
5. ANSI American National Standards Institute.
6. ARI Air Conditioning and Refrigeration Institute.
7. ASE Association of Safety Engineers.
8. ASHRAE American Society of Heating, Refrigerating and Air Conditioning Engineers.
9. ASME American Society of Mechanical Engineers.
10. ASSE American Society of Sanitary Engineering.
11. ASTM American Society for Testing and Materials.
12. AWWA American Water Works Association.
13. EPA Environmental Protection Agency.
14. FM Factory Mutual.
15. FS Federal Specifications.

16. IBR Institute of Boiler and Radiator Manufacturers.
17. IEEE Institute of Electrical and Electronics Engineers.
18. MCAA Mechanical Contractors' Association of America.
19. NEBB National Environmental Balancing Bureau.
20. NEMA National Electrical Manufacturers Association.
21. NFPA National Fire Protection Association.
22. NSC National Safety Council.
23. NSF National Sanitation Foundation.
24. SBI Steel Boiler Institute Industry.
25. SMACNA Sheet Metal and Air Conditioning Contractors National Association.
26. UL Underwriters' Laboratories.
27. USCFCCCHR University of Southern California Foundation for Cross Connection Control and Hydraulic Research.

1.4 SUBMITTALS

A. As soon as possible and within thirty (30) days after the award of the contract and before beginning the fabrication of any material or the installation of any equipment, a complete schedule of the materials and equipment proposed for installation shall be submitted to the Engineer for approval. This schedule shall include manufacturers' names, catalog data, diagrams, drawings and other descriptive data as required or requested by the Engineer.

B. All items of materials and equipment used for the project shall be submitted.

C. Submittals shall be assembled in an orderly manner and shall include a title page with space for the Engineer's approval stamp and remarks. It shall also contain a concise listing of all items being submitted. Submit five (5) copies as follows: Architect (for records); Engineer (for records); Owner (for records); and two (2) copies for Contractor's use.

D. Asbestos Free Material/Product: Prior to approval of the material/product to be used, the manufacturer/supplier shall furnish the Engineer with written certification that the material/product contains no asbestos. This certificate is mandatory before approval will be issued. Submittals furnished without the asbestos-free certification will be returned to the Contractor with no action taken until such certification is provided.

1.5 SUBSTITUTION OF EQUIPMENT

A. All proposed substitutions for specified products on this project require approval in advance of bidding. Approval will not be granted after award of contract. See Substitution Request Form in the bidding documents at the beginning of these specifications for the appropriate approval form. If no form is found, submit by mail, or hand-carried on contractor's or supplier's letterhead. DO NOT FAX. Substitutions must be submitted for review at least five (5) working days prior to the bid date to be considered.

B. It is incumbent on the Contractor to submit technical data that will fully establish the equality of the proposed substitute equipment with that listed and evidence to substantiate the availability of the required repair and maintenance service. Each request for substitution shall be accompanied by the following information for each piece of equipment:

1. Statement indicating that this substituted equipment will not increase the contract cost nor extend the completion date.
2. Manufacturer's name and model number.

3. Catalog cut sheets, diagrams and other data published by the manufacturer with the particular model identified and the pertinent design data for that model highlighted or underlined for easy reference.
4. Each request for substitution shall also include the following information relating to service maintenance and repair:

    a. Name, address and telephone number of nearest factory authorized technical representative.
    b. Name, address and telephone number of firm(s) qualified to perform preventive maintenance, minor or major repairs in the locale of the project.
    c. Name, address and telephone number of firm(s) from whom spare parts and major components are available.
    d. Building name and address, and the name, address and telephone number of its owner's representative where equipment of the same manufacturer as requested for substitution has been installed and in operation for two or more years. Two or more such installations shall be listed and the location should be in the vicinity of the proposed project.

C. In the event of Engineer's approval of a substitution of equipment, the requesting entity will be notified by telephonic message, email, or FAX by the Engineer (or authorized representative), and/or by the issuance of an amendment to the contract documents incorporating the equipment by name and model number.

1.6 CONTRACT DRAWINGS

A. The layout shown on the Contract Drawings is necessarily diagrammatic but shall be followed as closely as actual construction and as other work will allow. The dimensions of work as shown on the Contract Drawings are not as-built dimensions. No measurements shall be scaled from the drawings and used as definite dimensions for laying out or fitting work in place.

B. The layout of manufactured equipment as shown on the drawings shall be checked and the exact location shall be determined from the dimensions of equipment shop drawings approved by the Engineer.

1.7 DEFINITIONS

A. FURNISH: The term furnish means supply and deliver to the Project Site, ready for unloading, unpacking, assembly, installation and similar operations.

B. INSTALL: The term install describes operations at the Project Site including the actual unloading, unpacking, assembly, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations.

C. PROVIDE: The term provides means to furnish and install, complete and ready for intended use.

1.8 MAINTENANCE MANUAL AND OPERATING INSTRUCTIONS

A. Upon completion of the work, Contractors shall provide the Engineer with two copies of maintenance manuals for all equipment furnished and installed under his work.

B. Manuals shall be in substantial 3-ring binders with project name and number inscribed on face and hinged back. Manuals shall include roster of all training session attendees. The manuals

shall, however, first be approved by the Engineer. The manuals shall include, but not be limited to manufacturer's lubricating and operating instructions and parts list and serial numbers for all operating machinery, including drive information, and motor horsepower, amperage, and voltage readings on all phases, valve chart, sequence of operation, index following the order listed in the specifications, warranties in the name of the Installation, and a list of manufacturers, service firms and subcontractors names and telephone numbers.

C. Training attendance rosters for each training session shall be included in manuals. Roster will identify training subject, date, attendees name, job title, and telephone number.

D. All switches, controls, and safety devices shall be clearly and permanently marked with embossed or printed plates as to purpose and as to operation and shall be tested in the presence of the Owner designated representative to ensure that he understands their function and purpose.

E. Upon completion of the work, Contractors shall put the systems into service. Contractors shall be entirely responsible for the equipment during all testing operations including the lubricating and turning on and off of such apparatus.

1.9 PROJECT RECORD AND CLOSEOUT DOCUMENTS

A. In addition to the requirements specified in Division 1, indicate the following installed conditions:

1. Ductwork mains and branches, size and location, for both exterior and interior; locations of dampers and other control devices; filters, boxes, and terminal units requiring periodic maintenance or repair.
2. Mains and branches of piping systems, with valves and control devices located and numbered, concealed unions located, and with items requiring maintenance located (i.e., traps, strainers, expansion compensators, tanks, etc.).

B. Equipment locations (exposed and concealed), dimensioned from prominent building lines.

C. Approved substitutions, Contract Modifications, and actual equipment and materials installed.

D. Contract Modifications, actual equipment and materials installed.

1.10 PRODUCT DELIVERY STORAGE AND HANDLING

A. Follow manufacturer's directions in delivery, storage, protection and handling of all equipment and materials.

B. Deliver and store equipment and materials to the site in original containers, suitably sheltered from the elements and mechanical injury, but readily accessible for inspection until installed.

C. Items subject to moisture damage shall be stored in dry, heated spaces.

D. Ascertain, from examination of architectural drawings, whether any special temporary access openings in the building(s) will be required for admission of apparatus furnished under this Division.

E. Heavy machinery, equipment and heavy parts thereof shall be brought into building or onto premise by a machinery moving concern acceptable to Engineer.

F. Machinery movers shall not rig, tie to, or rest weight upon any building member of any part of building premises or make use of any stairway until specific permission is obtained from Engineer.

G. Permission to rig to or in any way make use of any part of building premises shall not relieve Installer of responsibility for any damage resulting from, or because of, said rigging or use.

1.11 GUARANTEES AND WARRANTIES

A. Submit to the Owner, two copies of all warranties and guarantees specified in the General Conditions, Supplementary Conditions, the individual sections of the specifications, or as provided by the various subcontractors and material suppliers. All such documents shall show the name and location of the project and the name of the purchaser.

B. The Contractor shall provide to the Owner a non-prorated guarantee of all materials and workmanship for a period of not less than one year from the date of the Owner's final certificate.

C. The Contractor shall be responsible for enforcing all special or extended guarantees required in individual sections of the specifications that might be provided by various subcontractors or material suppliers.

D. Acceptance of the work under this Division shall be subject to the conditions that all installed systems, equipment, apparatus, and appliances included in the work shall operate and perform as designed, and as selected with respect to efficiency, capacity and quietness and shall operate and perform without producing objectionable noise within occupied areas of the building.

E. Acceptance of the work shall also be subject to the conditions that any time within one year after date of final payment, any defective part of the work resulting from the supply of faulty workmanship or material shall be immediately amended, repaired or replaced as a part of the contract work without cost to the Owner.

F. This guarantee shall be extended to include the capacity and integrated performance of the component parts of the various systems in strict accordance with the true intent and purpose of the specification. The contractor shall conduct such tests as are herein specified or as may be required by the Engineer to demonstrate the capacity and performance ability of the various systems to maintain specified conditions

1.12 PROTECTION

A. Keep pipe openings closed by means of plugs or caps to prevent entrance of foreign matter, and cover all fixtures, equipment and apparatus as required to protect them against dirt, water, chemical or mechanical damage both before and after installation.

B. Fixtures, equipment or apparatus damaged prior to final acceptance of work shall be restored to original condition or replaced by Installer.

C. Equipment shall be inherently safe and moving parts shall be covered with guards which meet OSHA requirements.

D. Provide protective guards for devices such as or similar to thermostats, valves, and switches which are so located as to be readily subject to tampering, accidental damage, or vandalism.

PART 2 - PRODUCTS

2.1 MOTORS

A. For each item of equipment requiring electric drive, provide a motor having starting and running characteristics consistent with torque and speed requirements of the driven machinery.

B. Motors shall be of ample size to operate continuously at their proper load and speed without causing noise, vibration or temperature rise in excess of their rating.

C. Motors shall be of sufficient size as to be non-overloading throughout entire capacity range of the driven equipment.

D. Motors ½ HP and smaller shall be designed for 120 volts, single phase, 60 hertz operation, and shall have the following: capacitor start and run, 40EC continuous temperature rise, open-drip-proof, permanently lubricated sealed bearings.

E. Motors ¾ HP and larger shall be suitable for voltage as specified under Division 26; 3 phase, 60 hertz operation, shall be squirrel cage type NEMA design B, low current in-rush and normal starting torque, quiet operating, 40EC. continuous rise and shall be equipped with permanently lubricated sealed bearings, unless otherwise specified.

F. Efficiency: All motors as available shall be “Energy Efficient”, provide motors with higher efficiency than “average standard industry motors”, in accordance with IEEE Standard 112, test method B.

2.2 STARTERS

A. Where possible, motor starters shall be integral to the equipment being supplied and of the same manufacturer as specified under Division 26.

B. Unless otherwise noted, separately mounted motor starters will be provided under Division 26.

C. Starter heater coil sizes shall be determined by motor nameplate.

D. Motor starter control circuits and devices shall be 24 volt, 60 hertz unless indicated otherwise on the plans.

E. Contactors shall be similar to starters.

F. Automatically started equipment shall have starter with hand-off-auto switch. Manually operated electrical equipment shall have start-stop buttons, unless otherwise indicated on drawings.

G. Coordinate with work under Division 26 to ensure proper motor starting and circuit protection is provided in compliance with code requirements.

H. Assume responsibility for compliance with code requirements where groups of motors require circuit protection per NEC. Article 430.

I. Provide auxiliary contacts where required for interlocking, intermittent starting, pilot control, remote control, motor shut-down and safety features.

2.3 AUXILIARY DEVICES

A. Each trade providing equipment requiring automatic control or remote control shall provide all proper pilot devices to perform the particular duty specified for the driven equipment. In no case shall safety devices be bypassed.

B. Coordinate automatic control work and the work of Division 26.

2.4 CONDUIT AND WIRING

A. Wiring systems provided under Division 23 shall be as specified in Division 26.

B. All electrical terminals shall be labeled.

C. Provide wiring diagrams inside each cabinet.

D. Conduit shall comply with all requirements of Division 26.

E. Final connections to equipment shall be flexible.

PART 3 - EXECUTION

3.1 OPENINGS IN CONSTRUCTION

A. All cutting or provision of openings that may be necessary for the installation of this work shall be done by the Contractor, and all patching and repairing shall be done by workmen competent in the trade required. The Contractor shall be responsible for arranging the work so that minimum cutting will be required.

3.2 VALVES

A. Install ball valves with the stem above body in accessible position.

B. The necessary valves shall be installed within the systems to provide required shut-off and flow control service and to allow isolation for inspection, maintenance and repair of each piece of equipment, fixture and branch service loop.

C. Each valve shall be installed so that it is easily accessible for operation, visual inspection and preventative maintenance.

3.3 MOTORS

A. Unattached electric motors (motors furnished loose with equipment) shall be set by the Contractor. Motors shall be leveled and aligned on bases and foundation pads in strict accordance with the manufacturer’s instructions and their recommended tolerances before any electrical connections are made. After all connections have been made and just prior to placing each motor in operation, levels and alignment shall be re-checked. All necessary adjustments shall be made to assure that the thrust is balanced, that shaft rotates freely when turned by hand. All final connections to motor shall be made under Division 26.

END OF SECTION

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The following shall apply to this Section

1. Drawings.
2. General Provisions of the Contract.
3. Solicitation Documents.
4. General Conditions.
5. Supplementary Conditions.

1.2 WORK INCLUDES

A. HVAC system test and balance by an independent agency.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TESTING, ADJUSTING, AND BALANCING OF HVAC SYSTEMS (NEBB OR AABC CERTIFIED)

A. This Agency shall be certified by the National Environmental Balancing Bureau (NEBB) or by the American Air Balance Council (AABC). Five (5) copies of the final balancing report shall be submitted on applicable NEBB Reporting Forms for review. Each individual final reporting form submitted shall bear the name of the person who recorded the data and the seal of the supervisor of the performing firm. Identification of all types of instruments used and their last dates of calibration shall be submitted with the final report.

B. HVAC systems will be tested and balanced by an independent agency retained by the Contractor.

C. The independent air/hydronic testing and balancing agency (TAB) shall perform the balancing and testing of the HVAC in accordance with the procedures of AABC or NEBB to analyze, balance, adjust and test air and water moving equipment, air and water distribution system including kitchen exhaust hood system.

D. The Contractor shall put all heating, ventilating and air conditioning systems and equipment into operation and shall continue the operation of same during each working day of testing and balance and shall place the automatic temperature control system in satisfactory operation before the TAB agency shall begin work.

E. Prior to the final acceptance of the HVAC system by the Engineer, the Contractor shall allow the TAB agency to schedule this work in cooperation with other trades involved and comply with the completion date of the project.

F. The Contractor shall make available to the TAB agency a complete copy of shop drawing submittal data on mechanical equipment including performance curves (fans and air distribution devices, etc.) necessary to test and balance the HVAC system.

G. The Contractor shall schedule the following necessary personnel:

1. Automatic Temperature Control Manufacturer's Service Representative to set adjustments of automatic operated damper and devices to operate as specified, and/or noted, including setting of all controls for proper calibrations.

2. Mechanics - To operate, adjust, replace or repair the HVAC equipment that is found requiring any change/replacement in the pulleys, belts, dampers, valves, etc., of Contractor's furnished and installed equipment.

3. Electrician - To assist in any problems resulting from any of the power or control wiring installation, including replacement of starters, and heater elements.

4. The Contractor shall make any changes in pulleys, belts and dampers or the addition of dampers as required for correct balance of the system as recommended by TAB agency, at no cost to Owner.

H. The Contractor shall make all necessary corrections within 48 hours upon notification of TAB agency of the deficiencies requiring adjustment, (piece-meal correction is not acceptable) and within 10 working days for items that require replacement or installation.

I. The Contractor shall leave all strainers clean and all air filters replaced prior to the start of testing and balancing activity.

J. If the Contractor had scheduled the TAB agency to perform the work and the HVAC systems are not ready to be tested and balanced, any additional cost required to extend the TAB work shall be at the Contractor's expense.

END OF SECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The following shall apply to this Section:

1. Drawings.
2. General Provisions of the Contract.
3. Solicitation Documents.
4. General Conditions.
5. Supplementary Conditions.

1.2 WORK INCLUDES

A. Provide factory fabricated exhaust fans as specified and as shown on the drawings.

1.3 SUBMITTALS

A. Product Data: Submit the following:

1. Construction details, material descriptions, dimensions of individual components and profiles, and finishes for fans.
2. Rated capacities, operating characteristics, and furnished specialties and accessories.
3. Certified fan performance curves with system operating conditions indicated.
4. Certified fan sound-power ratings.
5. Motor ratings and electrical characteristics, plus motor and electrical accessories.
6. Material thickness and finishes, including color charts.
7. Dampers, including housings, linkages, and operators.
8. Prefabricated roof curbs.
9. Fan speed controllers.

1.4 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For HVAC power ventilators to include in normal and emergency operation and maintenance manuals.

1.5 QUALITY ASSURANCE

A. Units shall be factory assembled and tested. Fan ratings to be based on current AMCA Standards.

B. Roof exhaust fans shall bear AMCA seal.

PART 2 - PRODUCTS

2.1 ROOF MOUNTED FANS

A. Each fan housing shall have a permanently attached engraved aluminum nameplate indicating the fan manufacturer and model number.

B. Fan Wheels: Direct or belt driven, as scheduled. The fan shall be constructed of aluminum and balanced in accordance with AMCA Standard 204-96.

C. Fan Motors & Drives: Motors shall be the heavy-duty type with permanently lubricated sealed ball bearings. Disconnect switches shall be factory mounted and out of the airstream. Fan bearings shall be the heavy duty, regreasable ball type in a cast iron housing. The minimum L50 bearing life shall be 200,000 hours. The drive assembly shall be mounted to a 14 gauge steel channel isolated with rubber-in-shear vibration isolators. Where belt drives are scheduled, they shall be adjustable.

2.2 ACCEPTABLE MANUFACTURERS

A. Cook

B. Greenheck

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install all fans per manufacturer's recommendation and instructions.

B. Care shall be taken with installation of exhaust fans to prevent damage. Any fan dented or damaged in any other way during construction shall be repaired or replaced.

END OF SECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes the following types of air devices:

1. Diffusers
2. Registers
3. Grilles

B. Related Requirements:

1. Section 233300 "Air Duct Accessories" for fire and smoke dampers and volume-control dampers not integral to diffusers.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Data Sheet: Indicate materials of construction, finish, and mounting details; and performance data including throw and drop, static-pressure drop, and noise ratings.
2. Air Device Schedule: Indicate drawing designation, manufacturer, model number, size, and accessories furnished.

PART 2 - PRODUCTS

2.1 SOURCE QUALITY CONTROL

A. Verification of Performance: Rate diffusers according to ASHRAE 70, "Method of Testing for Rating the Performance of Air Outlets and Inlets."

2.2 OUTLETS AND INLETS

A. Air Devices:

1. Provide factory fabricated air devices as specified and as shown on drawings.
2. Air devices shall be of the size indicated on the drawings.
3. Registers and grilles shall have vanes slanted to prevent direct sight into grille, unless otherwise indicated.
4. Provide anti-smudge rings on all ceiling diffusers located in gypsum board and lay-in ceilings where ceiling height permits.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas where air devices are installed for compliance with requirements for installation tolerances and other conditions affecting performance of equipment.

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

3.2 INSTALLATION

A. Install air devices level and plumb.

B. Outlets and Inlets Locations: Drawings indicate general arrangement of ducts, fittings, and accessories. Air outlet and inlet locations have been indicated to achieve design requirements for air volume, noise criteria, airflow pattern, throw, and pressure drop. Make final locations where indicated, as much as practical. For air devices installed in lay-in ceiling panels, locate units in the center of panel. Where architectural features or other items conflict with installation, notify Architect for a determination of final location.

C. Install wall-mounted air devices at elevation indicated on Plans. If no elevation is indicated, contact Engineer.

D. Install duct-mounted air devices at angle indicated. If no angle is indicated, contact Engineer.

E. Install air devices with airtight connections to ducts and to allow service and maintenance of dampers, air extractors, and fire dampers.

F. Paint whatever is visible through grilles in customer contact and office areas flat black.

3.3 ADJUSTING

A. After installation, adjust air devices to air patterns and flow indicated, or as directed, before starting air balancing.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Delegated Design: Design supports for multiple raceways, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.

1. Design supports for multiple raceways capable of supporting combined weight of supported systems and its contents.
2. Design equipment supports capable of supporting combined operating weight of supported equipment and connected systems and components.
3. Rated Strength: Adequate in tension, shear, and pullout force to resist maximum loads calculated or imposed for this Project, with a minimum structural safety factor of five times the applied force.

B. Submittals:

1. Product Data: For sleeve seals.
2. Shop Drawings: For hangers and supports. Show fabrication and installation details.

C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

D. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 RACEWAYS

A. Raceways:

1. EMT: ANSI C80.3, zinc-coated steel, with setscrew or compression fittings.
2. Raceway Fittings: Specifically designed for raceway type used in Project.

B. Raceway colors:

1. Normal Power - Yellow label, EMT.
2. Critical Power - Green w/ black striped label, EMT.
3. Life Safety Power - Red w/ black striped label, EMT.
4. Equipment Power - Orange label, EMT.
5. Fire Alarm – White label, red conduit, EMT.
6. Communications - Cyan Label, EMT.
7. Security - Blue label, EMT.

C. Raceway Labels: For raceways carrying circuits at 600-volt or less, Labels shall be self-adhesive polyvinyl that is resistant to tearing, oil, dust, high temperature. Labels shall list system, voltage, equipment identification, and circuit number(s).

D. Placement of Labels

1. Place labels at the source, at each transition, and no more than every 40 feet on race-ways.
2. Place labels on both sides of a floor penetration.
3. Place at least one (1) label in each room through which the system's raceway or bus duct is routed.
4. Place one (1) label per pull box and/or enclosure.
5. Place one (1) label per 40 foot length of horizontal bus duct.
6. Place one (1) label per item of electrical equipment.
7. Place two (2) labels per transfer switch minimum.
8. Place one (1) label per transformer to indicate the identification number shown on the drawings. Identify the power source on the line side and the secondary load served.
9. A minimum of one (1) label shall be placed on raceway, boxes and equipment that are designated for future use. Identify electrical source and designate as "spare".
10. If equipment requires multiple labels due to more than one system being feed, the labels shall be applied to locations on the equipment directly related to the applicable system.
11. Place labels on both sides of a wall penetration, except where contained within a room that is 15-feet wide or smaller. In this case only provide one label per room.

2.2 CONDUCTORS AND CABLES

A. Conductors:

1. Conductors shall be annealed copper, and comply with NEMA WC 70 and UL 83 (2008).
2. Minimum wire size shall be No. 12 AWG for power and lighting circuits; No. 10 AWG for current transformer secondary circuits; No. 14 AWG for potential transformer, relaying, and control circuits; No. 16 AWG for annunciator circuits; and No. 19 AWG for alarm circuits.
3. Conductors manufactured more than 12 months prior to date of delivery to site shall not be used.
4. No. 10 AWG and Smaller: Solid copper.
5. Conductors, Larger Than No. 10 AWG: Stranded copper.
6. Insulation: Thermoplastic, rated at 75 deg C minimum.
7. Wire Connectors and Splices: Units of size, ampacity rating, material, type, and class suitable for service indicated.

2.3 GROUNDING MATERIALS

A. Conductors: Solid for No. 8 AWG and smaller, and stranded for No. 6 AWG and larger unless otherwise indicated.

1. Insulated Conductors: Copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.
2. Bare, Solid-Copper Conductors: Comply with ASTM B 3.
3. Bare, Stranded-Copper Conductors: Comply with ASTM B 8.

B. Ground Rods: Not applicable.

C. Bolted Connectors for Conductors and Pipes: Copper or copper alloy, bolted pressure-type, with at least two bolts with clamp-type pipe connectors sized for pipe.

D. Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.

2.4 ELECTRICAL IDENTIFICATION MATERIALS

A. Raceway Identification Materials: Self-adhesive, color-coding vinyl tape; flexible, preprinted, self-adhesive vinyl.

B. Conductor Identification Materials: Color-Coding Conductor Tape: Self-adhesive vinyl tape 1 to 2 inches wide.

C. Tape Markers for Wire: Vinyl or vinyl-cloth, self-adhesive, wraparound type with circuit identification legend machine printed by thermal transfer or equivalent process.

D. Self-Adhesive Warning Labels: Factory printed, multicolor, pressure-sensitive adhesive labels, configured for display on front cover, door, or other access to equipment unless otherwise indicated.

E. Metal-Backed, Butyrate Warning Signs: Weather-resistant, non-fading, preprinted, cellulose-acetate butyrate signs with 0.0396-inch galvanized-steel backing; and with colors, legend, and size required for application.

F. Equipment Identification Labels: Engraved, laminated acrylic or melamine label; punched or drilled for screw mounting. White letters on a dark-gray background; red letters for emergency systems.

G. Fasteners: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.

2.5 SUPPORT AND ANCHORAGE COMPONENTS

A. Steel Slotted Support Systems: Comply with MFMA-4, factory-fabricated components for field assembly, and provide finish suitable for the environment in which installed.

1. Channel Dimensions: Selected for structural loading.

B. Raceway and Cable Supports: As described in NECA 1.

C. Conduit and Cable Support Devices: Steel and malleable-iron hangers, clamps, and fittings.

D. Support for Conductors in Vertical Conduit: Factory-fabricated assembly consisting of threaded malleable-iron body and insulating wedging.

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

F. Mounting, Anchoring, and Attachment Components:

1. Powder-Actuated Fasteners: Threaded-steel stud.
2. Mechanical-Expansion Anchors: Insert-wedge-type, zinc-coated steel, for use in hardened Portland cement concrete.
3. Concrete Inserts: Steel or malleable-iron, slotted-support-system units similar to MSS Type 18; complying with MFMA-3 or MSS SP-58.

4. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.
5. Through Bolts: Structural type, hex head, high strength; complying with ASTM A 325.
6. Toggle Bolts: All-steel springhead type.
7. Hanger Rods: Threaded steel.

2.6 SLEEVES FOR RACEWAYS AND CABLES

A. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.

B. Cast-Iron Pipe Sleeves: Cast or fabricated "wall pipe," equivalent to ductile-iron pressure pipe, with plain ends and integral water stop unless otherwise indicated.

C. Sleeves for Rectangular Openings: Galvanized-steel sheet.

D. Sleeve Seals: Modular sealing device, designed for field assembly, to fill annular space between sleeve and raceway or cable.

1. Sealing Elements: EPDM interlocking links shaped to fit surface of cable or conduit. Include type and number required for material and size of raceway or cable.
2. Pressure Plates: Carbon steel. Include two for each sealing element.
3. Connecting Bolts and Nuts: Carbon steel with corrosion-resistant coating of length required to secure pressure plates to sealing elements. Include one for each sealing element.

2.7 GROUT

A. Nonmetallic, Shrinkage-Resistant Grout: ASTM C 1107, factory-packaged, nonmetallic aggregate grout, noncorrosive, non-staining, mixed with water to consistency suitable for application and a 30-minute working time.

PART 3 - EXECUTION

3.1 GENERAL ELECTRICAL EQUIPMENT INSTALLATION REQUIREMENTS

A. Install electrical equipment to allow maximum possible headroom unless specific mounting heights that reduce headroom are indicated.

B. Install electrical equipment to provide for ease of disconnecting the equipment with minimum interference to other installations.

C. Install electrical equipment to allow right of way for piping and conduit installed at required slope.

D. Install electrical equipment to ensure that connecting raceways, cables, wireways, cable trays, and busways are clear of obstructions and of the working and access space of other equipment.

E. Install required supporting devices and set sleeves in cast-in-place concrete, masonry walls, and other structural components as they are constructed.

F. Coordinate location of access panels and doors for electrical items that are behind finished surfaces or otherwise concealed. Comply with requirements in Division 08 Section "Access Doors and Frames."

G. Install sleeve and sleeve seals of type and number required for sealing electrical service penetrations of exterior walls.

H. Comply with NECA 1.

I. Make final connections to all equipment furnished by others.

3.2 RACEWAY AND CABLE INSTALLATION

A. Indoor Raceways Applications:

1. Exposed or Concealed: EMT.
2. Connection to Vibrating Equipment: FMC; in wet or damp locations, use LFMC.
3. Damp or Wet Locations: IMC.
4. Boxes and Enclosures: Metallic, NEMA 250, Type 1, unless otherwise indicated.

B. Conceal raceways and cables, unless otherwise indicated, within finished walls, ceilings, and floors.

C. Install raceways and cables at least 6 inches away from parallel runs of flues and steam or hot-water pipes. Locate horizontal raceway runs above water and steam piping.

D. Install raceways embedded in slabs in middle third of slab thickness where practical, and leave at least 1-inch- thick concrete cover.

1. Secure raceways to reinforcing rods to prevent sagging or shifting during concrete placement.
2. Space raceways laterally to prevent voids in concrete.
3. Install conduit larger than 1-inch trade size, parallel to or at right angles to main reinforcement. Where conduit is at right angles to reinforcement, place conduit close to slab support.
4. Transition from nonmetallic tubing to Schedule 80 nonmetallic conduit, rigid steel conduit, or IMC before rising above floor.

E. Raceways Embedded in Slabs:

1. Run conduit larger than 1-inch trade size, parallel or at right angles to main reinforcement. Where at right angles to reinforcement, place conduit close to slab support.
2. Arrange raceways to cross building expansion joints at right angles with expansion fittings.

F. Install pull wires in empty raceways.

G. Connect motors and equipment subject to vibration, noise transmission, or movement with a 72-inch maximum length of flexible conduit.

H. Install raceways and cables conceal within finished walls, ceilings, and floors unless otherwise indicated.

I. Install raceways and cables at least 6 inches away from parallel runs of flues and steam or hot-water pipes. Locate horizontal raceway runs above water and steam piping.

3.3 WIRING METHODS

A. Exposed Feeders, Branch Circuits, and Class 1 Control Circuits, Including in Crawlspaces: Type THHN-THWN, single conductors in raceway.

B. Feeders and Branch Circuits Concealed in Ceilings, Walls, Partitions, and Crawlspaces: Type THHN-THWN, single conductors in raceway.

C. Feeders and Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and underground: Type THHN-THWN, single conductors in raceway.

D. Cord Drops and Portable Appliance Connections: Type SO, hard service cord with stainless-steel, wire-mesh, and strain relief device at terminations to suit application.

E. Class 2 Control Circuits: Type THHN-THWN, in raceway.

3.4 GROUNDING

A. Underground Grounding Conductors: Install bare copper conductor, No. 2/0 AWG minimum. Bury at least 24 inches below grade.

B. Pipe and Equipment Grounding Conductor Terminations: Bolted.

C. Underground Connections: Welded.

D. Connections to Structural Steel: Bolted.

E. Install grounding conductors routed along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.

F. Install ground rods driven into ground until tops are 2 inches below finished floor or final grade unless otherwise indicated.

G. Make connections without exposing steel or damaging coating if any.

H. Install bonding straps and jumpers in locations accessible for inspection and maintenance, except where routed through short lengths of conduit.

I. Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.

J. Bond to equipment mounted on vibration isolation hangers and supports so vibration is not transmitted to rigidly mounted equipment.

K. Grounding and Bonding for Piping:

1. Metal Water Service Pipe: Install insulated copper grounding conductors, in conduit, from building's main service equipment, or grounding bus, to main metal water service entrances to building. Connect grounding conductors to main metal water service pipes, using a bolted clamp connector or by bolting a lug-type connector to a pipe flange, using

one of the lug bolts of the flange. Where a dielectric main water fitting is installed, connect grounding conductor on street side of fitting. Bond metal grounding conductor conduit or sleeve to conductor at each end.

2. Water Meter Piping: Use braided-type bonding jumpers to electrically bypass water meters. Connect to pipe with a bolted connector.
3. Bond each aboveground portion of gas piping system downstream from equipment shutoff valve.

L. Test completed grounding system at each location where a maximum ground-resistance level is specified, at service disconnect enclosure grounding terminal, and at ground test wells.

1. Measure ground resistance not less than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.
2. Perform tests by fall-of-potential method according to IEEE 81.
3. Report measured ground resistances that exceed the following values:

    a. Power and Lighting Equipment or System with Capacity 500 kVA and Less: 10 ohms.
    b. Power and Lighting Equipment or System with Capacity 500 to 1000 kVA: 5 ohms.
    c. Power Distribution Units or Panelboards Serving Electronic Equipment: 3 ohm(s).

4. Excessive Ground Resistance: If resistance to ground exceeds specified values, notify Architect promptly and include recommendations to reduce ground resistance. Recommend to the Architect, and execute means to reduce measured ground resistances exceeding 25 ohms.

3.5 IDENTIFICATION

A. Accessible Raceways and Cables of Auxiliary Systems: Identify the following systems with color-coded, self-adhesive color coding tape-in bands:

1. Fire-Alarm System: Red.
2. Security System: Blue and yellow.
3. Telecommunication System: Green and yellow.

B. Power-Circuit Conductor Identification: For No. 3 AWG conductors and larger, at each location where observable, identify phase using color-coding conductor tape.

C. Locations of Underground Lines: Identify with underground-line warning tape for power, lighting, communication, and control wiring.

D. Warning Labels for Enclosures for Power and Lighting: Comply with 29 CFR 1910.145; identify system voltage with black letters on an orange background. Apply to exterior of door, cover, or other access.

E. Equipment Identification Labels:

1. Labeling Instructions:

a. Indoor Equipment: Self-adhesive, engraved, laminated acrylic or melamine label. Provide a single line of text with 1/2-inch- high letters on 1-1/2-inch- high label; where two lines of text are required, use labels 2 inches high.
b. Outdoor Equipment: Engraved, laminated acrylic or melamine label, drilled for screw attachment.
c. Elevated Components: Increase sizes of labels and legend to those appropriate for viewing from the floor.

2. Equipment to Be Labeled:

a. Panelboards, electrical cabinets, and enclosures.
b. Electrical switchgear and switchboards.
c. Transformers.
d. Motor-control centers.
e. Disconnect switches.
f. Enclosed circuit breakers.
g. Motor starters.
h. Push-button stations.
i. Power transfer equipment.
j. Contactors.
k. Terminals, racks, and patch panels for voice and data communication and for signal and control functions.

F. Verify identity of each item before installing identification products.

G. Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment.

H. Attach nonadhesive signs and plastic labels with screws and auxiliary hardware appropriate to the location and substrate.

I. Install system identification color banding for raceways and cables at 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.

J. Color-Coding for Phase and Voltage Level Identification, 600 V and Less: Ungrounded conductors.

1. Colors for 208/120-V Circuits:

a. Phase A: Black.
b. Phase B: Red.
c. Phase C: Blue.
d. Neutral: White

2. Colors for 480/277-V Circuits:

a. Phase A: Brown.
b. Phase B: Orange.
c. Phase C: Yellow.
d. Neutral: Grey

3. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches from terminal points.

K. Underground-Line Warning Tape: Continuous underground-line warning tape directly above line at 6 to 8 inches below finished grade.

3.6 INSTALLATION OF HANGERS AND SUPPORTS

A. Fasten hangers and supports securely in place, with provisions for thermal and structural movement. Install with concealed fasteners unless otherwise indicated.

B. Separate dissimilar metals and metal products from contact with wood or cementitious materials, by painting each metal surface in area of contact with a bituminous coating or by other permanent separation.

C. Raceway Support Methods: In addition to methods described in NECA 1, EMT IMC and RMC may be supported by openings through structure members, as permitted in NFPA 70.

D. Multiple Raceways or Cables: Install on trapeze-type supports fabricated with steel slotted channel.

E. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lb.

F. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods, unless otherwise indicated or required by Code:

1. To Wood: Fasten with lag screws or through bolts.
2. To New Concrete: Bolt to concrete inserts.
3. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
4. To Existing Concrete: Expansion anchor fasteners.
5. To Steel: Beam clamps (MSS Type 19, 21, 23, 25, or 27) complying with MSS SP-69 Spring-tension clamps.
6. To Light Steel: Sheet metal screws.
7. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount on slotted-channel racks attached to substrate.

G. Drill holes for expansion anchors in concrete at locations and to depths that avoid reinforcing bars.

3.7 SLEEVE AND SLEEVE-SEALS INSTALLATION

A. Concrete Slabs and Walls: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.

B. Cut sleeves to length for mounting flush with both wall surfaces.

C. Extend sleeves installed in floors 2 inches above finished floor level.

D. Size pipe sleeves to provide 1/4-inch annular clear space between sleeve and cable unless sleeve seal is to be installed.

E. Seal space outside of sleeves with grout for penetrations of concrete and masonry and with approved joint compound for gypsum board assemblies.

F. Interior Penetrations of Non-Fire-Rated Walls and Floors: Seal annular space between sleeve and cable, using joint sealant appropriate for size, depth, and location of joint according to Division 07 Section "Joint Sealants."

G. Roof-Penetration Sleeves: Seal penetration of individual cables with flexible boot-type flashing units applied in coordination with roofing work.

H. Aboveground Exterior-Wall Penetrations: Seal penetrations using sleeves and mechanical sleeve seals. Size sleeves to allow for 1-inch annular clear space between pipe and sleeve for installing mechanical sleeve seals.

I. Underground Exterior-Wall Penetrations: Install cast-iron "wall pipes" for sleeves. Size sleeves to allow for 1-inch annular clear space between cable and sleeve for installing mechanical sleeve seals.

3.8 FIRESTOPPING

A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly. Comply with requirements in Division 07 Section "Penetration Firestopping."

END OF SECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes the following:

1. Building wires and cables rated 600 V and less.
2. Connectors, splices, and terminations rated 600 V and less.
3. Sleeves and sleeve seals for cables.

1.3 DEFINITIONS

A. EPDM: ethylene propylene diene terpolymer rubber.

1.4 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

B. Comply with NFPA 70.

1.5 COORDINATION

A. Set sleeves in cast-in-place concrete, masonry walls, and other structural components as they are constructed.

PART 2 - PRODUCTS

2.1 CONDUCTORS AND CABLES

A. Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Alcan Products Corporation; Alcan Cable Division
2. American Insulated Wire Corp.; a Leviton Company
3. General Cable Corporation
4. Senator Wire & Cable Company
5. Southwire Company

B. Copper and Aluminum Conductors: Comply with NEMA WC 70.

C. Conductor Insulation: Comply with NEMA WC 70 for Types THW, THHN-THWN, XHHW, UF, USE, and SO. Provide as applicable for Work installation requirements and conditions.

D. Multi-conductor Cable: Comply with NEMA WC 70 for Type AC armored cable, Type MC metal-clad cable, Type MI mineral-insulated/metal-sheathed cable, Type NM nonmetallic-sheathed cable, Type USE, and Type SO. Provide with ground wire, as applicable for Work installation requirements and conditions.

2.2 CONNECTORS AND SPLICES

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. AFC Cable Systems, Inc.
2. Hubbell Power Systems, Inc.
3. O-Z/Gedney; EGS Electrical Group LLC.
4. 3M; Electrical Products Division.
5. Tyco Electronics Corp.

C. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

2.3 SLEEVES FOR CABLES

A. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.

B. Cast-Iron Pipe Sleeves: Cast or fabricated "wall pipe," equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop, unless otherwise indicated.

C. Sleeves for Rectangular Openings: Galvanized sheet steel with minimum 0.052- or 0.138-inch thickness as indicated and of length to suit application.

D. Coordinate sleeve selection and application with selection and application of firestopping specified in Division 07 Section "Penetration Firestopping."

2.4 SLEEVE SEALS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Advance Products & Systems, Inc.
2. Calpico, Inc.
3. Metraflex Co.
4. Pipeline Seal and Insulator, Inc.

B. Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and cable.

1. Sealing Elements: EPDM interlocking links shaped to fit surface of cable or conduit. Include type and number required for material and size of raceway or cable.
2. Pressure Plates: Carbon steel. Include two for each sealing element.

3. Connecting Bolts and Nuts: Carbon steel with corrosion-resistant coating of length required to secure pressure plates to sealing elements. Include one for each sealing element.

PART 3 - EXECUTION

3.1 CONDUCTOR MATERIAL APPLICATIONS

A. Feeders: Copper or aluminum for service entrance conductors. Copper for distribution feeders and branch circuits. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

B. Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

3.2 CONDUCTOR INSULATION AND MULTI-CONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

A. Service Entrance: Type THHN-THWN, single conductors in raceway.

B. Exposed Feeders: Type THHN-THWN, single conductors in raceway.

C. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspaces: Type THHN-THWN, single conductors in raceway.

D. Feeders Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN-THWN, single conductors in raceway.

E. Exposed Branch Circuits, Including in Crawlspaces: Type THHN-THWN, single conductors in raceway.

F. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-THWN, single conductors in raceway. Metal-clad cable, Type MC, is allowed for portions of Branch Circuits not including connection from source panelboard and first connected device or fixture. Metal-clad cable, Type MC, is not allowed for dedicated Branch Circuits.

G. Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN-THWN, single conductors in raceway.

H. Class 1 Control Circuits: Type THHN-THWN, in raceway.

I. Class 2 Control Circuits: Type THHN-THWN, in raceway.

3.3 INSTALLATION OF CONDUCTORS AND CABLES

A. Conceal cables in finished walls, ceilings, and floors, unless otherwise indicated.

B. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.

C. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips that will not damage cables or raceway.

D. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.

E. Support cables according to Division 26 Section "Hangers and Supports for Electrical Systems."

F. Identify and color-code conductors and cables according to Division 26 Section "Identification for Electrical Systems."

3.4 CONNECTIONS

A. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

B. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.

1. Use oxide inhibitor in each splice and tap conductor for aluminum conductors.

C. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches of slack.

3.5 SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Coordinate sleeve selection and application with selection and application of firestopping specified in Division 07 Section "Penetration Firestopping."

B. Concrete Slabs and Walls: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.

C. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.

D. Rectangular Sleeve Minimum Metal Thickness:

1. For sleeve rectangle perimeter less than 50 inches and no side greater than 16 inches, thickness shall be 0.052 inch.
2. For sleeve rectangle perimeter equal to, or greater than, 50 inches and one or more sides equal to, or greater than, 16 inches, thickness shall be 0.138 inch.

E. Fire-Rated Assemblies: Install sleeves for penetrations of fire-rated floor and wall assemblies unless openings compatible with firestop system used are fabricated during construction of floor or wall.

F. Cut sleeves to length for mounting flush with both wall surfaces.

G. Extend sleeves installed in floors 2 inches above finished floor level.

H. Size pipe sleeves to provide 1/4-inch annular clear space between sleeve and cable unless sleeve seal is to be installed.

I. Seal space outside of sleeves with grout for penetrations of concrete and masonry, and with approved joint compound for gypsum board assemblies.

J. Interior Penetrations of Non-Fire-Rated Walls and Floors: Seal annular space between sleeve and cable, using joint sealant appropriate for size, depth, and location of joint according to Division 07 Section "Joint Sealants."

K. Fire-Rated-Assembly Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at cable penetrations. Install sleeves and seal with firestop materials according to Division 07 Section "Penetration Firestopping."

L. Roof-Penetration Sleeves: Seal penetration of individual cables with flexible boot-type flashing units applied in coordination with roofing work.

M. Aboveground Exterior-Wall Penetrations: Seal penetrations using sleeves and mechanical sleeve seals. Size sleeves to allow for 1-inch annular clear space between pipe and sleeve for installing mechanical sleeve seals.

N. Underground Exterior-Wall Penetrations: Install cast-iron "wall pipes" for sleeves. Size sleeves to allow for 1-inch annular clear space between cable and sleeve for installing mechanical sleeve seals.

3.6 SLEEVE-SEAL INSTALLATION

A. Install to seal underground exterior-wall penetrations.

B. Use type and number of sealing elements recommended by manufacturer for cable material and size. Position cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

3.7 FIRESTOPPING

A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly according to Division 07 Section "Penetration Firestopping."

END OF SECTION

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes methods and materials for grounding systems and equipment.

1.3 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

B. Comply with UL 467 for grounding and bonding materials and equipment.

PART 2 - PRODUCTS

2.1 CONDUCTORS

A. Insulated Conductors: Copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.

B. Bare Copper Conductors:

1. Solid Conductors: ASTM B 3.
2. Stranded Conductors: ASTM B 8.
3. Bonding Cable: 28 kcmil, 14 strands of No. 17 AWG conductor, 1/4 inch in diameter.
4. Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.
5. Bonding Jumper: Copper tape, braided conductors, terminated with copper ferrules; 1-5/8 inches wide and 1/16 inch thick.

C. Grounding Bus: Rectangular bars of annealed copper, 1/4 by 2 inches in cross section, unless otherwise indicated; with insulators.

2.2 CONNECTORS

A. Listed and labeled by a nationally recognized testing laboratory acceptable to authorities having jurisdiction for applications in which used, and for specific types, sizes, and combinations of conductors and other items connected.

B. Bolted Connectors for Conductors and Pipes: Copper or copper alloy, bolted pressure-type, with at least two bolts.

1. Pipe Connectors: Clamp type, sized for pipe.

C. Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.

PART 3 - EXECUTION

3.1 APPLICATIONS

A. Conductors: Install solid conductor for No. 8 AWG and smaller, and stranded conductors for No. 6 AWG and larger, unless otherwise indicated.

B. Grounding Bus: Install in electrical and telephone equipment rooms, in rooms housing service equipment, and elsewhere as indicated.

1. Install bus on insulated spacers, 1-inch (minimum) from wall, and 6 inches above finished floor, unless otherwise indicated.
2. Where indicated on both sides of doorways, route bus up to top of door frame, across top of doorway, down to specified height above floor, and connect to horizontal bus.

C. Conductor Terminations and Connections:

1. Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.

3.2 EQUIPMENT GROUNDING

A. Install insulated equipment grounding conductors with all feeders and branch circuits.

3.3 INSTALLATION

A. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance, except where routed through short lengths of conduit.

1. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install so vibration is not transmitted to rigidly mounted equipment.

3.4 FIELD QUALITY CONTROL

A. Perform the following tests and inspections and prepare test reports:

1. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.

2. Test completed grounding system at service disconnect enclosure(s).

a. Measure ground resistance not less than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.

B. Report measured ground resistances that exceed 25 ohms.

C. Excessive Ground Resistance: If resistance to ground exceeds specified values, notify Architect promptly and include recommendations to reduce ground resistance.

END OF SECTION

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes the following:

1. Hangers and supports for electrical equipment and systems.
2. Construction requirements for concrete bases.

1.3 DEFINITIONS

A. EMT: Electrical metallic tubing.

B. IMC: Intermediate metal conduit.

C. RMC: Rigid metal conduit.

1.4 COORDINATION

A. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Division 03.

B. Coordinate installation of roof curbs, equipment supports, and roof penetrations. These items are specified in Division 07 Section "Roof Accessories."

PART 2 - PRODUCTS

2.1 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS

A. Steel Slotted Support Systems: Comply with MFMA-4, factory-fabricated components for field assembly.

1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

a. Allied Tube & Conduit.
b. Cooper B-Line, Inc.; a division of Cooper Industries.
c. ERICO International Corporation.
d. GS Metals Corp.
e. Thomas & Betts Corporation.
f. Unistrut; Tyco International, Ltd.
g. Wesanco, Inc.

2. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.

3. Nonmetallic Coatings: Manufacturer's standard PVC, polyurethane, or polyester coating applied according to MFMA-4.
4. Painted Coatings: Manufacturer's standard painted coating applied according to MFMA-4.
5. Channel Dimensions: Selected for applicable load criteria.

B. Nonmetallic Slotted Support Systems: Structural-grade, factory-formed, glass-fiber-resin channels and angles with 9/16-inch- diameter holes at a maximum of 8 inches o.c., in at least 1 surface.

1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

    a. Allied Tube & Conduit.
    b. Cooper B-Line, Inc.; a division of Cooper Industries.
    c. Fabco Plastics Wholesale Limited.
    d. Seasafe, Inc.

2. Fittings and Accessories: Products of channel and angle manufacturer and designed for use with those items.
3. Fitting and Accessory Materials: Same as channels and angles
4. Rated Strength: Selected to suit applicable load criteria.

C. Raceway and Cable Supports: As described in NECA 1 and NECA 101.

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

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

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

G. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:

1. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened portland cement concrete, steel, or wood, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.

    a. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

        1) Hilti Inc.
        2) ITW Ramset/Red Head; a division of Illinois Tool Works, Inc.
        3) MKT Fastening, LLC.
        4) Simpson Strong-Tie Co., Inc.; Masterset Fastening Systems Unit.

2. Mechanical-Expansion Anchors: Insert-wedge-type, zinc-coated steel, for use in hardened portland cement concrete with tension, shear, and pullout capacities appropriate for supported loads and building materials in which used.

    a. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

        1) Cooper B-Line, Inc.; a division of Cooper Industries.
        2) Empire Tool and Manufacturing Co., Inc.
        3) Hilti Inc.
        4) ITW Ramset/Red Head; a division of Illinois Tool Works, Inc.
        5) MKT Fastening, LLC.

3. Concrete Inserts: Steel or malleable-iron, slotted support system units similar to MSS Type 18; complying with MFMA-4 or MSS SP-58.
4. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.
5. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
6. Toggle Bolts: All-steel springhead type.
7. Hanger Rods: Threaded steel.

2.2 FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES

A. Description: Welded or bolted, structural-steel shapes, shop or field fabricated to fit dimensions of supported equipment.

PART 3 - EXECUTION

3.1 APPLICATION

A. Comply with NECA 1 and NECA 101 for application of hangers and supports for electrical equipment and systems except if requirements in this Section are stricter.

B. Maximum Support Spacing and Minimum Hanger Rod Size for Raceway: Space supports for EMT, IMC, and RMC as required by NFPA 70. Minimum rod size shall be 1/4 inch in diameter.

C. Multiple Raceways or Cables: Install trapeze-type supports fabricated with steel slotted or other support system, sized so capacity can be increased by at least 25 percent in future without exceeding specified design load limits.

    1. Secure raceways and cables to these supports with two-bolt conduit clamps.

D. Spring-steel clamps designed for supporting single conduits without bolts may be used for 1-1/2-inch and smaller raceways serving branch circuits and communication systems above suspended ceilings and for fastening raceways to trapeze supports.

3.2 SUPPORT INSTALLATION

A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this Article.

B. Raceway Support Methods: In addition to methods described in NECA 1, EMT, IMC, and RMC may be supported by openings through structure members, as permitted in NFPA 70.

C. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lb.

D. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:

1. To Wood: Fasten with lag screws or through bolts.
2. To New Concrete: Bolt to concrete inserts.
3. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
4. To Existing Concrete: Expansion anchor fasteners.
5. Instead of expansion anchors, powder-actuated driven threaded studs provided with lock washers and nuts may be used in existing standard-weight concrete 4 inches thick or greater. Do not use for anchorage to lightweight-aggregate concrete or for slabs less than 4 inches thick.
6. To Steel: Welded threaded studs complying with AWS D1.1/D1.1M, with lock washers and nuts.
7. To Light Steel: Sheet metal screws.
8. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices on slotted-channel racks attached to substrate.

E. Drill holes for expansion anchors in concrete at locations and to depths that avoid reinforcing bars.

3.3 INSTALLATION OF FABRICATED METAL SUPPORTS

A. Comply with installation requirements in Division 05 Section "Metal Fabrications" for site-fabricated metal supports.

B. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor electrical materials and equipment.

C. Field Welding: Comply with AWS D1.1/D1.1M.

3.4 CONCRETE BASES

A. Construct concrete bases of dimensions indicated but not less than 4 inches larger in both directions than supported unit, and so anchors will be a minimum of 10 bolt diameters from edge of the base.

B. Use 3000-psi, 28-day compressive-strength concrete. Concrete materials, reinforcement, and placement requirements are specified in Division 03 Section "Cast-in-Place Concrete".

C. Anchor equipment to concrete base.

1. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
2. Install anchor bolts to elevations required for proper attachment to supported equipment.
3. Install anchor bolts according to anchor-bolt manufacturer's written instructions.

3.5 PAINTING

A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for shop painting. Comply with SSPC-PA 1 requirements for touching up field-painted surfaces.

1. Apply paint by brush or spray to provide minimum dry film thickness of 2.0 mils.

B. Touchup: Comply with requirements in Division 09 painting Sections for cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint on miscellaneous metal.

C. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

END OF SECTION

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PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Submit Product Data

PART 2 - PRODUCTS

2.1 RACEWAYS

A. Conduit:

1. Steel Rigid Metal: Comply with ANSI C80.1, FS-WW-C-581 and UL-6.
2. Intermediate Metal: Comply with ANSI C80.1, FS-WW-C-581 and UL-6.
3. Steel Flexible Metal: Comply with FS-WW-C-566 and UL-1.
4. Steel Liquidtight Flexible: Comply with FS-WW-C-566 and UL-1.
5. Rigid Nonmetallic: Comply with NEMA TC-2, PVC, Schedule 40.

B. Tubing:

1. Steel Electrical Metallic (EMT): Comply with ANSI C80.3, FS-WW-C-563 and UL 797.

C. Surface metallic raceway:

1. Comply with UL E4376 and E41751.
2. Branch circuit wiring - one or two piece raceway as required by wire quantity. Color ivory.
3. Combination power and/or low potential services - .050" thickness, two-piece raceway 1¾" H x 4¾" W. Provide divider, fitting, and all device-mounting hardware.

D. Power/Communications Pole shall be two-compartment 2¼" X 2¼" steel, .036" thickness. Adjustable base with entrance end fitting and ceiling trim. Color shall be ivory.

2.2 FITTINGS

A. Rigid and IMC Conduit fittings and conduit bodies:

1. Comply with ANSI C80.4, ANSI/NEMA FB 1, threaded type.
2. Locknuts; steel or malleable iron.
3. Bushings; insulating or insulated throat type.

4. Couplings; threaded or gland compression malleable iron type. Set screw or indenter type not acceptable.

5. UL listed hazardous location fittings (with sealing compound).

B. Electrical Metallic Tubing fittings and conduit bodies:

1. Couplings and Connectors; steel compression type or zinc die cast set screw type. Comply with ANSI/NEMA FB 1.

C. Flexible conduit fittings and conduit bodies:

1. Connectors; malleable iron, threadless, squeeze clamp type for nonjacketed conduit.

2. Connectors; steel or malleable iron compression type with insulated throat and “O” ring assembly for liquidtight conduit.

3. Comply with ANSI/NEMA FB 1.

D. Nonmetallic conduit fittings and conduit bodies:

1. Comply with NEMA TC 3.

2.3 CONDUIT SEALING

A. Fire Seal: Seal penetrations of fire-rated walls, floors or ceilings by raceways for compliance with NEC 300-21. Fill void around raceway. Use heavy wall steel pipe sleeves, anchored to building construction and finished plumb with wall, ceiling or floor lines.

B. Thermal Seal:

1. Seal penetrations of thermally insulated equipment (such as walk-in coolers or freezers) or rooms to prevent heat transfer. Exterior of raceway with fiberglass. Interior of raceway at entry to equipment or room with explosion-proof seal fittings filled with U.L. listed sealing compounds.

C. Water Seal:

1. Seal penetrations of perimeter walls or floors below grade to prevent entry of water. Use materials compatible with wall or floor construction and reviewed by Engineer’s Representative. Use pre-manufactured fittings.

2. Seal penetrations of roof with flashings compatible with roof design and reviewed by Roofing System Manufacturer and Engineer’s Representative.

D. Hazardous Location Seal:

1. Install conduit sealing fitting on conduits entering the hazardous location. Fill fittings with sealing compound.

2. Install conduit sealing fittings on conduits entering devices within the hazardous location.

2.4 RACEWAY SUPPORTING DEVICES

A. Suspended conduits less than 1 inch.

1. For exposed construction, provide strap type hangers supported from beam clamps or threaded rods.

2. For conduits suspended above ceilings, anchor to building structural steel. When span exceeds NEC limits, provide channel steel between framing members. Tie wiring of conduit to air ducts, or other piping not permitted. Plumber's perforated strap not permitted.

B. Suspended Conduit 1" or larger.

1. Provide threaded rod with "U" type hangers for single conduit.

2. Provide trapeze hanger assemblies with Unistrut P-1000, Husky HP-200 or Kindorf B-901 and threaded rod for two or more conduits. Anchor conduits to hanger assembly with split pipe clamps.

3. Anchor threaded rod to inserts in concrete or beam clamp on steel structure.

C. Surface Mounted Conduit:

1. Provide one-hole galvanized steel straps for conduits one inch or less manufactured by Appleton, Steel City or RACO. Provide clampbacks on exterior walls below grade or in wet areas.

2. For conduit larger than one inch and all exterior surfaces, use malleable iron pipe straps.

3. For multiple conduits, provide channel anchored to wall with conduit attached to channel with split pipe clamps.

D. Surface Metallic Raceways

1. Provide two-hole straps matching raceway.

E. Anchoring:

1. Hollow Masonry: Toggle bolts or spider type expansion anchors.

2. Solid Masonry: Lead expansion anchors or preset anchors.

3. Concrete: Self-drilling anchor or powder driven studs.

4. Metal: Machine screws, bolts or welded studs.

5. Wood: Wood screws.

2.5 BOXES

A. Pull Boxes and Junction Boxes:

1. Comply with NEC - 370, UL 50 and ANSI/NEMA OS 1; galvanized steel.

2. Flush mounted boxes: Overlapping cover with flush head retaining screws, prime-coated.

3. Surface mounted boxes: Screw-on or hinged cover. Provide silicon bronze standard retaining screws.

4. Boxes in finished areas: Constructed of 14 gauge steel minimum, galvanized or prime coated.

5. Boxes greater than 144 square inches: Shall be constructed of 1½" x 1½" x ¼" galvanized angle covered with 10 gauge galvanized sheet steel riveted or bolted with hinged cover of 11 gauge galvanized steel.

6. Boxes larger than 12" in any dimension: hinged enclosure.

7. Exterior Below Grade: Non-metallic, sand-gravel polymer base fiberglass reinforced.

B. Outlet Boxes:

1. Hot dipped galvanized, 1.25 oz. per sq. ft., sherardized or cadmium plated. Conform to UL 514.

2. Interior boxes: Sheet steel with conduit knockouts, attached lugs for locating. ANSI/NEMA OS 1.

3. Exterior boxes or exposed interior in wet/damp locations: Cast aluminum, deep type, corrosion proof fasteners, watertight, gasketed, threaded hubs.

4. For suspended or surface mounted fixtures:

   a. 4" octagonal or square according to devices used. Minimum 1½" deep. Furnished with fixture studs. Installed with ¾" minimum depth plaster rings on suspended ceilings. 4" octagonal or square for all exposed conduit work with fixture extension pan or deep fixture canopy to enclose the box.

   b. Fixtures listed for thru-way wiring may be used as such without an outlet box.

5. For recessed fixtures:

   a. 4" octagonal or square. Minimum 1½" deep. Complete with blank cover.

   b. Fixtures listed for thru-way wiring may be used as such without an outlet box.

6. Switch and Receptacle Boxes:

   a. Wall: 4" square for up to two devices. Single gang with 18 cubic inch minimum capacity for one device. Solid gang boxes for two devices. Complete with 1" minimum depth tile ring where used in exposed tile, paneled walls. Complete with 1" minimum depth plaster ring where used in plastered walls. Install with ½" raised galvanized device covers where used for exposed conduit work. Provide concrete-tight masonry boxes in poured concrete or CMU walls.

C. Conduit Bodies:

1. Galvanized cast metal of type, shape and size to fit location.

2. Constructed with threaded conduit ends, removable cover, corrosion resistant screws.

D. Floor Boxes

1. Single Service Floor Boxes.

a. Deep, cast iron with leveling legs meeting U.L. 714 and Fed. Spec. W-C-583b.

b. Rectangular, multi-gang compartmental type, semi-adjustable, cast iron, deep.

c. Brass flanges and covers.

1) 1½" x 1½" duplex threaded cover for duplex power receptacles.

2) 2_" x ¾" combination threaded cover for telephone outlets and other signal outlets. Provide 2_" threaded brass split nozzle for cable protection.

2. Multi-service Floor Boxes:

a. Floor boxes shall be multiple services and shall be activated with services recessed.

b. Floor box unit shall be constructed of a cast-iron base, a steel cover-plate, and steel wiring compartment cover to allow wiring feed-thru from one compartment to another.

1) Cast-iron base shall be .188" min.

2) Cover-plate shall be galvanized steel (14 ga.).

3) Steel receptacle brackets shall be .062" min.

c. Box construction shall be as required by UL 514A.

d. Entire cover-plate shall be removable for unrestricted access to all connector locknuts inside base.

e. Unit shall contain 4 wiring compartments (enclosed and/or non-enclosed).

f. Total box volume shall be 215 cu. in. and shall be broken down as follows:

1) 2 compartments - 27 cu. in. each.

2) 2 compartments - 36 cu. in. each.

g. Size and quantity of threaded conduit openings shall be as follows:

1) 2 - 27 cu. in. compartments - one ¾".

2) 2 - 36 cu. in. compartments - two 1¼" and one ¾".

h. Hand access area shall be no less than 38 sq. in.

i. Unit shall provide for minimum of 1_" pre-pour adjustment and ¾" post-pour adjustment.

j. Floor box unit shall be capable of being activated in either the flush or recessed mode.

k. Recessed activations shall provide no less than 2 wire/cable egress points. These shall include wire management blocks to adequately control wire/cables.

l. Activation units shall be as selected by the Engineer.

2.6 ACCEPTABLE MANUFACTURERS (CONDUIT)

A. Raceways

1. Allied Tube and Conduit.
2. Anaconda.
3. B-line.
4. Carlon.
5. Certain-Teed Corp.
6. Electri-Flex.
7. ETP.
8. International Metal Hose.
9. Jones & Laughlin Steel.
10. Republic Steel.
11. Robintech.
12. Steelduct Conduit Products.
13. Square D.
14. Triangle.
15. Walker.
16. Wheatland Tube.
17. Wiremold.
18. Youngstown Steel.

B. Fittings

1. Carlon.
2. Crouse-Hinds.
3. Killark.
4. O.Z./Gedney.
5. RACO.
6. Steel City.

C. Conduit Sealing

1. Chase Technology-CTC, PR-855.
2. Dow Corning - Silicone RTV foam 3-6548.
3. Nelson - Flameseal.
4. T & B - Flamesafe.
5. 3M - Fire Barrier.

D. Conduit Supporting Devices

1. Crouse-Hinds.
2. Midwest Electric.
3. Minerallac.
4. T & B.

E. Boxes

1. Appleton Electric Co.
2. Crouse-Hinds Co.
3. General Electric Co.
4. Hoffman Co.
5. Hubbell.
6. Killark Electric Mfg. Co.
7. O.Z./Gedney Co.
8. Pyle-National.
9. RACO.
10. Square D.
11. Steel City.
12. Thomas & Betts Co.
13. Walker.
14. Quazite.

PART 3 - EXECUTION

3.1 INTERFERENCES

A. Coordinate work with other trades so that interference between piping, equipment, structural and electrical work will be avoided.

B. When interference develops, Engineer's Representative will decide which equipment will be relocated; regardless of which apparatus was installed first.

3.2 CONDUIT SIZING, ARRANGEMENT, AND SUPPORT

A. In general, conduit shall be concealed within walls, ceilings, and floors. Conduit in spaces such as electrical/mechanical equipment rooms may be exposed.

B. Size conduit for conductor type installed; ½" minimum size unless noted otherwise.

C. Arrange conduit to maintain headroom and present a neat appearance.

D. Route exposed conduit and conduit above accessible ceilings parallel and perpendicular to walls and adjacent piping.

E. Maintain minimum 6" clearance between conduit and uninsulated piping. Maintain 12" clearance between conduit and heat sources such as flues, steam pipes, and heating appliances.

F. Arrange conduit supports to prevent distortion of alignment by wire pulling operations. Fasten conduit using galvanized straps, lay-in adjustable hangers, clevis hangers, or bolted split stamped galvanized hangers.

G. Group conduit in parallel runs where practical and use conduit rack constructed of steel channel with conduit straps or clamps. Provide space for 25% additional conduit.

H. Do not fasten conduit with wire or perforated pipe straps. Remove all wire used for temporary conduit support during construction, before conductors are pulled.

I. DO NOT SUPPORT ANY CONDUITS, BOXES OR ANY OTHER ELECTRICAL WORK DIRECTLY FROM UNDERSIDE OF ROOF DECK WITHOUT WRITTEN CONSENT OF THE ENGINEER.

J. DO NOT SUPPORT ANY CONDUIT FROM THE CEILING GRID OR THE CEILING GRID SUPPORT WIRES.

3.3 CONDUIT INSTALLATION

A. All conduits in finished spaces shall be concealed unless otherwise noted.

B. Cut conduit square using a saw or pipe cutter; de-burr cut ends.

C. Bring conduit to the shoulder of fittings and couplings and fasten securely.

D. Use conduit hubs or sealing locknuts for fastening conduit to cast boxes, and for fastening conduit to sheet metal boxes in damp or wet locations.

E. Install no more than the equivalent of four 90° bends between boxes. (Two 90° bends for telephone conduits, data conduits, and sound system conduit).

F. Use conduit bodies to make sharp changes in direction, as around beams.

G. Use hydraulic one-shot conduit bender or factory elbows for bends in conduit larger than 2" size.

H. Avoid moisture traps where possible; where unavoidable, provide junction box with drain fitting at conduit low point.

I. Use suitable conduit caps to protect installed conduit against entrance of dirt and moisture.

J. Provide #12 AWG insulated conductor or nylon pull string in empty conduit, except sleeves and nipples.

K. Provide UL listed expansion-deflection joints where conduit crosses building expansion or seismic joints.

L. Where conduit penetrates fire-rated walls and floors, provide mechanical fire-stop fittings with UL listed fire rating equal to wall or floor rating, or, at contractor’s option, seal opening around conduit in accord with paragraph 2.03.

M. Route conduit through roof openings for piping and ductwork where possible. Provide flashing making waterproof joints where conduits pass through roof or roofing membrane.

N. Maximum Size Conduit in floor slabs: ¾". Do not route conduits to cross each other in slabs. Run larger conduits below floor slabs or above ceilings.

O. Thermally seal conduit where conduits leave heated area and enter unheated area. See 2.03.

P. Wipe plastic conduit clean and dry before joining. Apply full even coat of cement to entire area that will be inserted into fitting. Let joint cure for 20 minutes minimum.

3.4 CONDUIT INSTALLATION SCHEDULE

A. Underground Installations: Rigid steel conduit. Plastic-coated rigid steel conduit. Schedule 40 PVC conduit.

B. Installations In or Under Concrete Slab: Schedule 40 PVC conduit.

C. In Slab above Grade: Schedule 40 PVC conduits.

D. Exposed Outdoor Locations: Rigid steel conduit. Intermediate metal conduit.

E. Interior Locations Above Floor Slabs: Rigid steel conduit. Intermediate metal conduit. Electrical metallic tubing.

F. Where nonmetallic conduits is used in or below slab or underground, continue the conduit runs above slab or grade using IMC or rigid steel conduit.

G. Provide a green insulated equipment grounding conductor in all feeder and branch circuit raceways. Size conductor according to NEC Article 250.

H. Connections to ballasted lighting fixtures: Flexible Metallic Conduit, UL listed Fixture Whip or Type MC Cable. Provide green insulated equipment grounding conductor. Length not to exceed 6’.

I. Connections to food service equipment, equipment in exterior locations or equipment in wet locations: Liquidtight flexible conduit. Provide green insulated equipment grounding conductor. Length not to exceed 4’.

J. Connection to motors, compressors or equipment with motors: Flexible Metallic Conduit. Provide green insulated equipment grounding conductor. Length not to exceed 4’.

K. Hazardous Locations: Intermediate metal conduit. Rigid steel conduit.

L. Interior exposed locations in finished spaces: surface metallic raceway system.

3.5 INSTALLATION OF BOXES

A. Provide knockout closures to cap unused knockout holes where blanks have been removed.

B. Support all boxes independently of conduit except for cast boxes connected to two rigid conduits both supported within 12" of box.

C. Floor Boxes:

1. Confirm exact placement with related work before installing. Set level and flush with finish floor. Securely anchor box to avoid movement during concrete pour.

2. Securely anchor to floor box.

D. Outlet Boxes:

1. Flush mount outlet boxes in areas other than mechanical rooms, electrical rooms, and above removable ceilings.

2. Do not install boxes back-to-back in same wall. Provide at least 6" separation where possible.

3. Masonry Walls:

   a. Adjust position of outlets in finished masonry walls to suit masonry course lines.

   b. Coordinate cutting of walls to achieve neat openings for boxes.

   c. Locate boxes in walls so that only corner need be cut from masonry units.

   d. Use only concrete tight masonry boxes in all masonry walls.

4. Use multiple gang boxes where more than one device is mounted together. Do not use sectional boxes. Provide barriers to separate different voltage systems.

5. For boxes mounted in exterior walls, make sure insulation is behind outlet boxes. Do not damage insulation.

6. For outlets mounted above counters, benches, or backsplashes, coordinate location and mounting heights with units. Where boxes are mounted on sidewalls at counters and lavatories, hold boxes to front of counter or lavatory for handicapped accessibility.

7. Adjust outlet mounting height to agree with specified location for equipment served.

8. Position outlets to locate luminaires as shown on reflected ceiling drawings.

9. Position outlets and junction boxes in inaccessible ceilings areas within 6" of luminaire; accessible through luminaire ceiling opening.

10. Provide recessed boxes in finished areas; secure to interior wall and partition studs, allow for surface finish thickness. Use stamped steel stud hangers in hollow stud wall, and adjustable steel channel fasteners for flush ceiling boxes.

11. Align wall-mounted outlet boxes for switches, thermostats, and similar devices.

12. Provide cast boxes for exterior locations and wet locations.

E. Pull and Junction Boxes:

1. Locate above accessible ceilings or in unfinished areas.

2. Support independent of conduit.

F. HVAC Control Device Boxes:

1. Coordinate quantity, location and size required with HVAC/temperature controls contractor.

G. Provide covers for all boxes.

END OF SECTION

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes the following:

1. Identification for conductors.
2. Equipment identification labels.

1.3 QUALITY ASSURANCE

A. Comply with ANSI A13.1 and ANSI C2.

B. Comply with NFPA 70.

C. Comply with 29 CFR 1910.145.

1.4 COORDINATION

A. Coordinate identification names, abbreviations, colors, and other features with requirements in the Contract Documents, Shop Drawings, manufacturer's wiring diagrams, and the Operation and Maintenance Manual, and with those required by codes, standards, and 29 CFR 1910.145. Use consistent designations throughout Project.

B. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied.

C. Coordinate installation of identifying devices with location of access panels and doors.

D. Install identifying devices before installing acoustical ceilings and similar concealment.

PART 2 - PRODUCTS

2.1 EQUIPMENT IDENTIFICATION LABELS

A. Self-Adhesive, Engraved, Laminated Acrylic or Melamine Label: Adhesive backed, with white letters on a dark-gray background. Minimum letter height shall be 3/8 inch.

PART 3 - EXECUTION

3.1 APPLICATION

A. Equipment Identification Labels: On each unit of equipment, install unique designation label that is consistent with wiring diagrams, schedules, and Operation and Maintenance Manual. Apply labels to disconnect switches and protection equipment, central or master units, control

panels, control stations, terminal cabinets, and racks of each system. Systems include power, lighting, control, communication, signal, monitoring, and alarm systems unless equipment is provided with its own identification.

1. Labeling Instructions:

    a. Indoor Equipment: Self-adhesive, engraved, laminated acrylic or melamine label. Unless otherwise indicated, provide a single line of text with 1/2-inch-high letters on 1-1/2-inch- high label; where 2 lines of text are required, use labels 2 inches high.
    b. Outdoor Equipment: Engraved, melamine label 4 inches high.
    c. Elevated Components: Increase sizes of labels and letters to those appropriate for viewing from the floor.

2. Equipment to Be Labeled:

    a. Panelboards, electrical cabinets, and enclosures.
    b. Access doors and panels for concealed electrical items.
    c. Emergency system boxes and enclosures.
    d. Disconnect switches.
    e. Enclosed circuit breakers.
    f. Power transfer equipment.
    g. Contactors.
    h. Power-generating units.
    i. Fire-alarm control panel.

3.2 INSTALLATION

A. Verify identity of each item before installing identification products.

B. Location: Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment.

C. Apply identification devices to surfaces that require finish after completing finish work.

D. Self-Adhesive Identification Products: Clean surfaces before application, using materials and methods recommended by manufacturer of identification device.

E. Color-Coding for Phase Identification, 600 V and Less: Use the colors listed below for ungrounded service, feeder, and branch-circuit conductors.

1. Color shall be factory applied.

2. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches from terminal points and in boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Submit Product Date

PART 2 - PRODUCTS

2.1 WALL SWITCHES

A. Heavy duty, 20a, 120-277 v., quiet type, back and side wired, toggle handle. Color - Ivory. Hubbell #CS1201 series or equal.

B. Dimmer Switches: Equal to Lutron Nova Series.

1. Provide incandescent dimmers rated for load controlled.

2. Provide fluorescent dimmers rated to control the load shown on drawings. Dimmers shall be compatible with the dimming ballasts furnished.

3. Provide multi-gang cover plates where dimmers are ganged.

2.2 RECEPTACLES

A. Duplex:

1. Flush, straight blade, 3 wire grounding, specification grade, 20 ampere, 125 v. NEMA 5-20R, designed for split feed.

2. Hubbell #CR5362 or equal.

3. Color: Ivory.

B. Ground Fault Circuit Interrupter:

1. Specification grade feed through type capable of protecting downstream receptacles on same circuit, grounding type, UL class A-Group 1, 20 amp 125 v.

2. Solid State ground fault sensing and signaling, 5 ma. trip level.

3. Color: Ivory.

4. Hubbell GF5362 or equal.

C. Tamper Resistant Duplex Receptacle

1. Hubbell #BR201TR.

2. Color: Ivory.

D. Special purpose devices shall be of amperage rating and configuration for equipment served.

E. Isolated ground:

1. Single or duplex, 3-wire, heavy duty specification grade, 20 amp.

2. Color: orange.

3. Hubbell IG5362 or equal.

F. Telephone:

1. Hubbell CX14I for single, or equal.

2. Hubbell CX244I for duplex, or equal.

2.3 DEVICE PLATES

A. Materials:

1. Finished Spaces: .04" thick, type 302, satin finished stainless steel.

2. Weatherproof; Cast metal, gasketed. Provide spring-loaded gasketed door for receptacles.

3. Surface Devices in Unfinished Areas: Galvanized steel.

B. Use plates manufactured by device manufacturer.

C. Provide factory engraving on device plates in food service areas and for momentary contact switches controlling contactors.

2.4 OCCUPANCY SENSOR SWITCHES

A. Passive infrared wall switch. Thirty second to thirty minute time delay. Front press “AUTO/OFF” switch, manual override “ON” key.

B. Voltage and load rating to match condition.

C. Color: Ivory.

D. Hubbell WS Series, or equal.

2.5 ACCEPTABLE MANUFACTURERS

A. Hubbell.
B. Leviton.
C. Pass & Seymour.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install wall switches with OFF position down.

B. Install convenience receptacles with grounding pole on top when mounted vertically or with grounding pole on left when mounted horizontally.

C. Install plates on all switch, and receptacle outlets. Install blank plates on all unused boxes.

D. Install devices and plates flush and level.

E. Seal all connections on GFCI with seal coat compound and wrap with two layers tape.

END OF SECTION

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes the following:

1. Interior lighting fixtures.
2. Emergency lighting fixtures.
3. Exit lighting fixtures.

1.3 DEFINITIONS

A. CCT: Correlated color temperature.

B. CRI: Color-rendering index.

C. IP: International Protection or Ingress Protection Rating.

D. LED: Light-Emitting diode.

E. Lumen: Measured output of lamp, luminaire, or both.

F. Luminaire: Complete lighting fixture, including lamp, reflector, and housing.

G. RCR: Room cavity ratio.

1.4 SUBMITTALS

A. Product Data: For each type of lighting fixture, arranged in order of fixture designation. Include data on features, accessories, finishes, and the following:

1. Physical description of lighting fixture including dimensions.
2. Data on features, accessories, and finishes.
3. Lamp life, output (lumens, CCT, and CRI), and energy efficiency data
4. Emergency lighting units including battery and charger.
5. Controller.

B. Shop Drawings: Show details of nonstandard or custom lighting fixtures. Indicate dimensions, weights, methods of field assembly, components, features, and accessories.

C. Sample Warranty.

1.5 QUALITY ASSURANCE

A. Comply with NFPA 70.

1.6 COORDINATION

A. Coordinate layout and installation of lighting fixtures and suspension system with other construction that penetrates ceilings or is supported by them, including HVAC equipment, fire-suppression system, and partition assemblies.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. As scheduled on the drawings.

2.2 EXIT SIGNS

A. Description: Comply with UL 924; for sign colors, visibility, luminance, and lettering size, comply with authorities having jurisdiction.

2.3 LIGHTING FIXTURE SUPPORT COMPONENTS

A. Comply with Division 26 Section "Hangers and Supports for Electrical Systems" for channel- and angle-iron supports and nonmetallic channel and angle supports.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Lighting fixtures: Set level, plumb, and square with ceilings and walls. Install lamps in each fixture.

B. Support for Lighting Fixtures in or on Grid-Type Suspended Ceilings: Use grid as a support element.

1. Install a minimum of four ceiling support system rods or wires for each fixture. Locate not more than 6 inches from lighting fixture corners.
2. Support Clips: Fasten to lighting fixtures and to ceiling grid members at or near each fixture corner with clips that are UL listed for the application.
3. Fixtures of Sizes Less Than Ceiling Grid: Install as indicated on reflected ceiling plans or center in acoustical panel, and support fixtures independently with at least two 3/4-inch metal channels spanning and secured to ceiling tees.
4. Install at least one independent support rod or wire from structure to a tab on lighting fixture. Wire or rod shall have breaking strength of the weight of fixture at a safety factor of 3.

C. Suspended Lighting Fixture Support:

1. Pendants and Rods: Where longer than 48 inches, brace to limit swinging.
2. Stem-Mounted, Single-Unit Fixtures: Suspend with twin-stem hangers.
3. Continuous Rows: Use tubing or stem for wiring at one point and tubing or rod for suspension for each unit length of fixture chassis, including one at each end.

3.2 FIELD QUALITY CONTROL

A. Test for Emergency Lighting: Interrupt power supply to demonstrate proper operation. Verify transfer from normal power to battery and retransfer to normal.

B. Prepare a written report of tests, inspections, observations, and verifications indicating and interpreting results. If adjustments are made to lighting system, retest to demonstrate compliance with standards.

END OF SECTION

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes the following:

1. Exterior luminaires.
2. Poles and accessories.

B. Related Sections include the following:

1. Division 26 Section "Interior Lighting" for exterior luminaires normally mounted on exterior surfaces of buildings.

1.3 DEFINITIONS

A. CRI: Color-rendering index.

B. HID: High-intensity discharge.

C. Luminaire: Complete lighting fixture.

D. Pole: Luminaire support structure, including tower used for large area illumination.

E. Standard: Same definition as "Pole" above.

1.4 STRUCTURAL ANALYSIS CRITERIA FOR POLE SELECTION

A. Dead Load: Weight of luminaire and its horizontal and vertical supports, lowering devices, and supporting structure, applied as stated in AASHTO LTS-4.

B. Live Load: Single load of 500 lbf, distributed as stated in AASHTO LTS-4.

C. Ice Load: Load of 3 lbf/sq. ft., applied as stated in AASHTO LTS-4.

D. Wind Load: Pressure of wind on pole and luminaire, calculated and applied as stated in AASHTO LTS-4.

1. Wind speed for calculating wind load for poles 50 feet or less in height is 70 mph.

1.5 SUBMITTALS

A. Product Data: For each luminaire, pole, and support component, arranged in order of lighting unit designation. Include data on features, accessories, finishes, and the following:

1. Physical description of luminaire, including materials, dimensions, effective projected area, and verification of indicated parameters.
2. Luminaire materials.
3. Materials, dimensions, and finishes of poles.

B. Warranty: Special warranty specified in this Section.

1.6 QUALITY ASSURANCE

A. Comply with NFPA 70.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store poles on decay-resistant-treated skids at least 12 inches above grade and vegetation. Support poles to prevent distortion and arrange to provide free air circulation.

B. Retain factory-applied pole wrappings on metal poles until right before pole installation. For poles with nonmetallic finishes, handle with web fabric straps.

1.8 WARRANTY

A. Manufacturer's standard form in which manufacturer agrees to repair or replace products that fail in materials or workmanship; that corrode; or that fade, stain, perforate, erode, or chalk due to effects of weather or solar radiation within specified warranty period. Manufacturer may exclude lightning damage, hail damage, vandalism, abuse, or unauthorized repairs or alterations from special warranty coverage.

1. Warranty Period for Luminaires: Five years from date of Substantial Completion.
2. Warranty Period for Metal Corrosion: Five years from date of Substantial Completion.
3. Warranty Period for Color Retention: Five years from date of Substantial Completion.
4. Warranty Period for Poles: Repair or replace lighting poles and standards that fail in finish, materials, and workmanship within manufacturer's standard warranty period, but not less than five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. As scheduled on the drawings:

2.2 LUMINAIRES, GENERAL REQUIREMENTS

A. Luminaires shall comply with UL 1598 and be listed and labeled for installation in wet locations by an NRTL acceptable to authorities having jurisdiction.

B. Comply with IESNA RP-8 for parameters of lateral light distribution patterns indicated for luminaires.

C. Metal Parts: Free of burrs and sharp corners and edges.

D. Sheet Metal Components: Corrosion-resistant aluminum, unless otherwise indicated. Form and support to prevent warping and sagging.

E. Housings: Rigidly formed, weather- and light-tight enclosures that will not warp, sag, or deform in use. Provide filter/breather for enclosed luminaires.

F. Doors, Frames, and Other Internal Access: Smooth operating, free of light leakage under operating conditions, and designed to permit relamping without use of tools. Designed to prevent doors, frames, lenses, diffusers, and other components from falling accidentally during relamping and when secured in operating position. Doors shall be removable for cleaning or replacing lenses.

G. Exposed Hardware Material: Stainless steel.

H. Plastic Parts: High resistance to yellowing and other changes due to aging, exposure to heat, and UV radiation.

I. Light Shields: Metal baffles, factory installed and field adjustable, arranged to block light distribution to indicated portion of normally illuminated area or field.

J. Lenses and Refractors Gaskets: Use heat- and aging-resistant resilient gaskets to seal and cushion lenses and refractors in luminaire doors.

K. Luminaire Finish: Manufacturer's standard paint applied to factory-assembled and -tested luminaire before shipping. Where indicated, match finish process and color of pole or support materials.

2.3 STEEL POLES

A. Poles: Comply with ASTM A 500, Grade B, carbon steel with a minimum yield of 46,000 psig; 1-piece construction up to 40 feet in height with access handhole in pole wall.

PART 3 - EXECUTION

3.1 LUMINAIRE INSTALLATION

A. Fasten luminaire to indicated structural supports.

1. Use fastening methods and materials selected to resist seismic forces defined for the application and approved by manufacturer.

3.2 POLE INSTALLATION

A. Align pole foundations and poles for optimum directional alignment of luminaires and their mounting provisions on the pole.

B. Concrete Pole Foundations: Set anchor bolts according to anchor-bolt templates furnished by pole manufacturer. Concrete materials, installation, and finishing requirements are specified in Division 03 Section "Cast-in-Place Concrete."

C. Raise and set poles using web fabric slings (not chain or cable).

3.3 CORROSION PREVENTION

A. Steel Conduits: Comply with Division 26 Section "Raceway and Boxes for Electrical Systems." In concrete foundations, wrap conduit with 0.010-inch thick, pipe-wrapping plastic tape applied with a 50 percent overlap.

3.4 GROUNDING

A. Ground metal poles and support structures according to Division 26 Section "Grounding and Bonding for Electrical Systems."

1. Install grounding conductor pigtail in the base for connecting luminaire to grounding system.

3.5 FIELD QUALITY CONTROL

A. Inspect each installed fixture for damage. Replace damaged fixtures and components.

B. Illumination Observations: Verify normal operation of lighting units after installing luminaires and energizing circuits with normal power source.

1. Verify operation of photoelectric controls.

C. Prepare a written report of tests, inspections, observations, and verifications indicating and interpreting results. If adjustments are made to lighting system, retest to demonstrate compliance with standards.

END OF SECTION

VOLUME II

ADDITIONAL INFORMATION BY OTHERS

SEATING CONCEPTS DESIGN SHEETS

CANOPY INFORMATION.

SCI

CREATE CUSTOM SPACE

Project Contacts:

Please contact one of the following Seating Concepts team members to address any concerns you may have:

Project Managers: 815.730.7980
Cheri Salamon x 2224
Kerry Studer x 2223
Aimee Pader x 2249

Interior Design: 815.730.7980
Samantha Uthe - Director x 2251
Tyler Rodgers x 2211
Nicole Jenkins x 2218
Marivel Garcia x 2216

125 Connell Ave. Rockdale, IL 60436

Decor Package:

* Burger King - Garden Grill
    * All designs must be approved by Burger King Corporate

General Notes and Information:

General Notes

1. Do not scale off plans. Call SCI to verify any questionable dimensions - 815.730.7980

2. Dimensions are for design intent only.

3. SCI has prepared these pages as accurately as possible with the information provided. The owner understands that adjustments to the final locations of equipment and/or furniture placement may be required at the owner's expense due to discrepancies based on actual job site dimensions and conditions.

4. Refer to architectural drawings for complete and accurate dimensions of building structure.

5. These documents are the property of SCI.

6. These documents may not be copied, reproduced, used, or implemented in any way, without the consent of SCI.

7. SCI is not responsible for deviations, changes, additions, or deletions not reviewed and approved in advance by SCI.

Construction

1. The GC shall verify all dimensions and conditions on the job site and notify SCI of all discrepancies prior to starting work.

2. GC is to review SCI plans against the architectural drawing set they are using on site. GC shall notify SCI immediately if they notice discrepancies.

3. Dimensions marked to Verify must be verified and the measurements recorded to SCI. Failure to communicate verified dimensions to SCI could result in a delay of decor fabrication and possible delay of shipment.

4. GC to locate thermostats and sensors and move accordingly so they do not interfere with decor.

5. GC to refer to elevations for typical wall finishes.

Finish Specification & Ordering of Materials

1. GC to order by complete specification, including series, item number and color. Any discrepancies should be communicated to SCI immediately.

2. Changes to finishes as requested by owner after materials are ordered may result in owner assuming restocking fees or other additional costs associated with a re-selection.

Ceiling

1. GC must coordinate all existing HVAC and lighting with interior decor.

Electrical

1. All electrical outlets are located 18" A.F.F. unless otherwise noted.

2. Pendants are to be centered over table top once final installation of seating is complete.

Installation

1. GC is to inspect SCI product upon delivery. Notice of damage must be given within 24 hours of delivery. Any damage noted after this time period will become the responsibility of the GC and will be repaired or replaced at the GC's expense.

2. GC is responsible to protect product during and after installation. SCI will not be responsible for product replacement due to misuse by others during and/or after installation.

3. GC to refer to installation pages included in the installation instructions packet sent with the decor.

4. GC is responsible to insure appropriate installation of metalwork as required for table tops designated as ADA compliant.

Sheet Schedule

ID-1.0 Cover
ID-2.0 3D Views
ID-3.0 Seating Layout
ID-4.0 Furniture Finish Layout
ID-5.0 Wall Finish Layout
ID-6.0 Graphic Layout
ID-7.0 Flooring Layout
ID-8.0 Pendant, Soffit, Ceiling Layout
ID-8.1 Pergola Details

Sheet Schedule

ID-9.0 Interior Elevations
ID-9.1 Interior Elevations
ID-9.2 Interior Elevations
ID-9.3 Interior Elevations
ID-9.4 Furniture Elevations
ID-10.0 SCI Specifications
ID-10.1 SCI Specifications

Sheet Schedule

ID-10.2 SCI Specifications
ID-10.3 SCI Specifications
ID-11.0 GC Specifications
ID-12.0 Interior Building Specifications
ID-12.1 Interior Building Specifications
ID-12.2 Interior Building Specifications
ID-12.3 Interior Building Specifications
ID-12.4 Interior Building Specifications
ID-13.0 Interior Lighting Specifications
ID-14.0 Unistrut Layout
ID-15.0 Graphic Details
ID-15.1 Graphic Electrical Requirements

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TEMPLATE UPDATED: 9-21-2022

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Fr. Campbell, KY
Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE DESCRIPTION
10/21/22 PRICE SET UPDATE

DATE: 10/21/22

BURGER KING

Cover

ID-1.0

11x17 SHEETS

1 3D 3D Render
12" = 1'-0"

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REVISION HISTORY
DATE | DESCRIPTION
10/21/22 | PRICE SET UPDATE

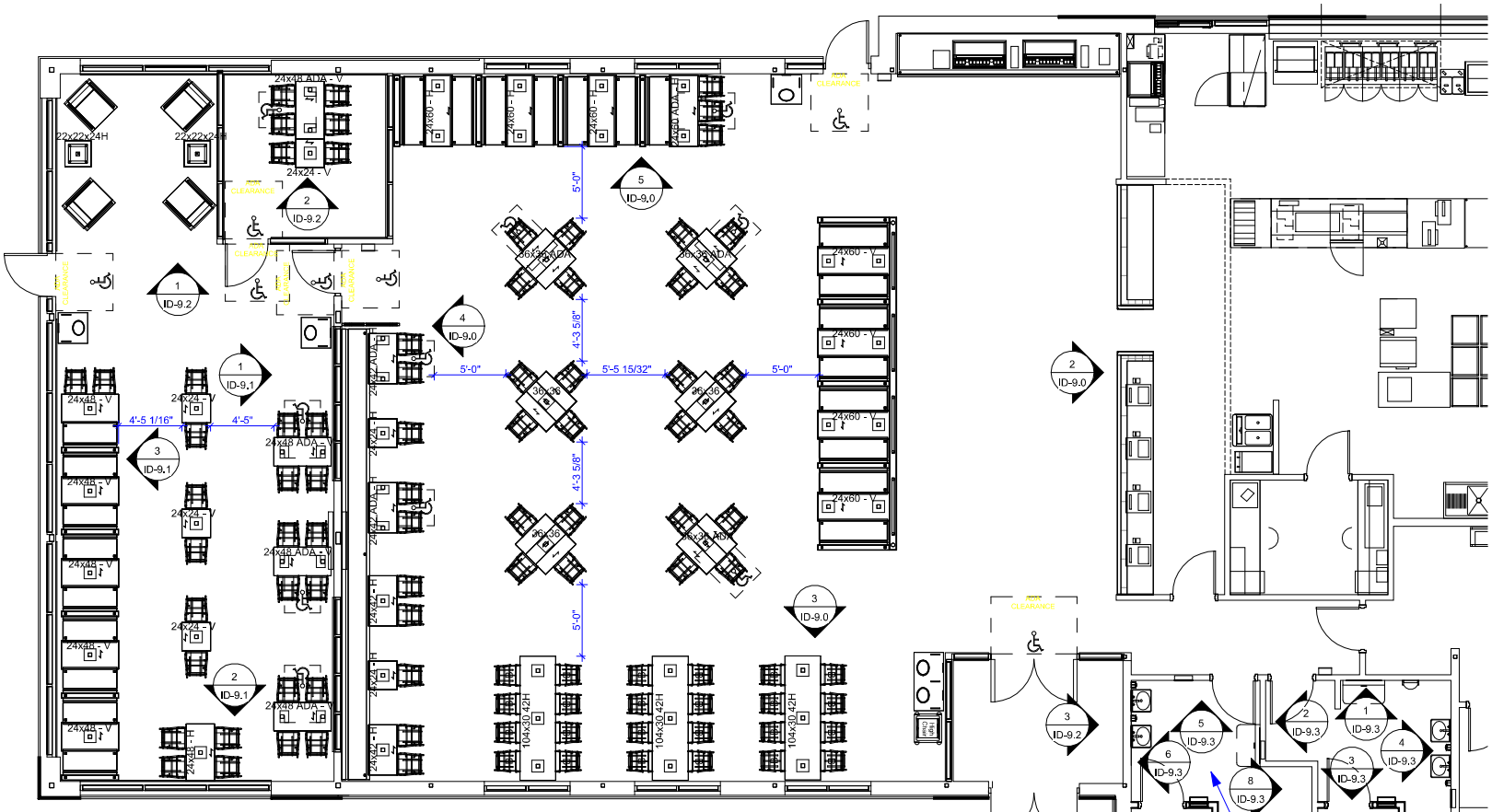
DATE: 10/21/22

BURGER KING

3D Views

ID-2.0

11x17 SHEETS



1 Seating Layout
1/8" = 1'-0"

Seating and Table Schedule			
Table Type	Table Quanity	Seat Total	ADA Total
2 Top	6	12	0.6
4 Top	20	80	4
6 Top	8	48	2.4
8 Top	3	24	1.2
Single	4	4	0.2
Grand total: 41		168	8.4

PLEASE BE MINDFUL OF THE TRI-LAM ADA TABLES. THE CENTER POST IS OFFSET TO ALLOW FOR ADA CLEARANCE. SEE CORE DRILL PACKAGE THAT SHIPS WITH THE FURNITURE PACKAGE FOR PROPER POST POSITION.

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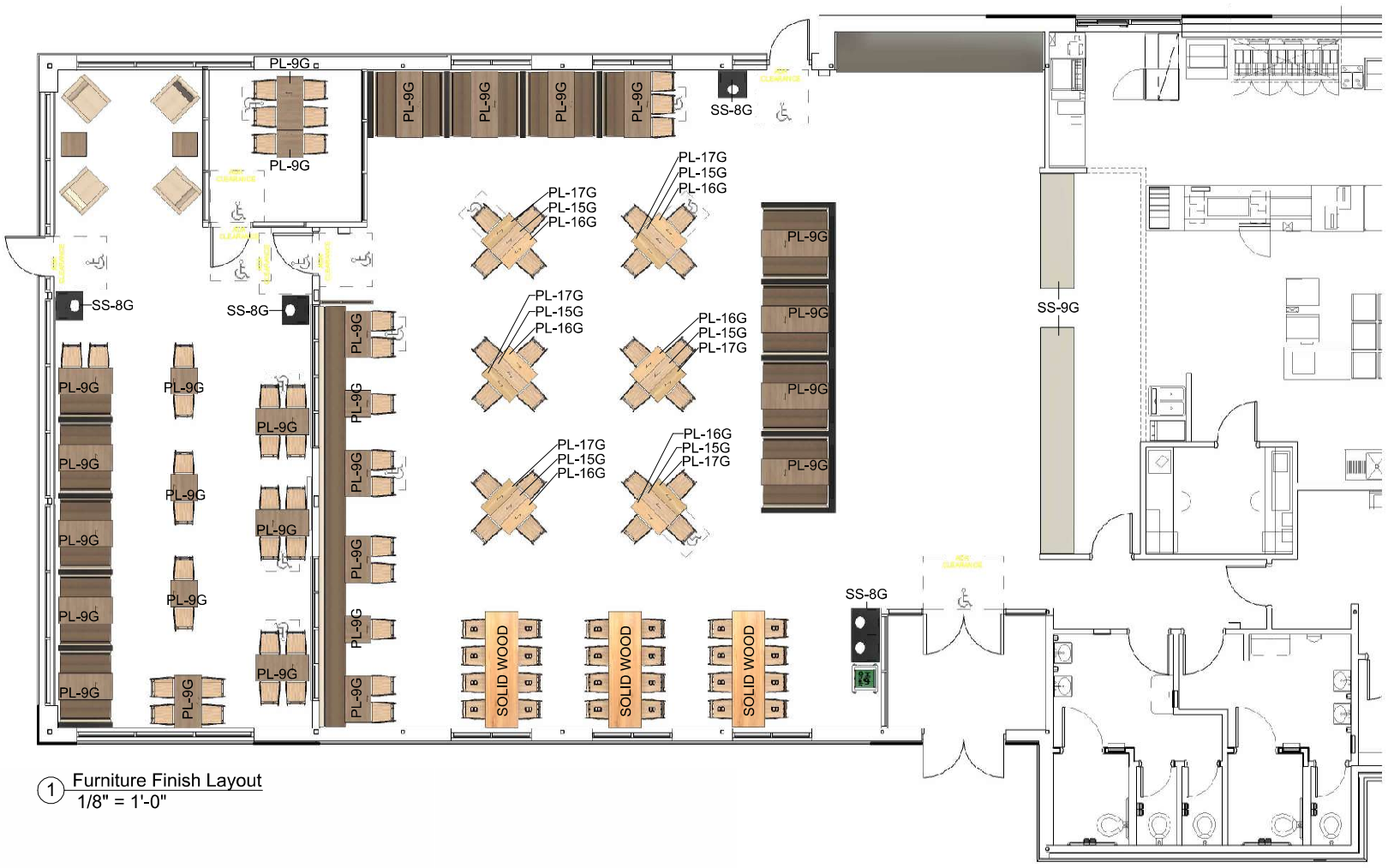
DATE | DESCRIPTION
10/21/22 | PROJECT UPDATE

DATE: 10/21/22

Seating Layout

ID-3.0

11x17 SHEETS



1 Furniture Finish Layout
1/8" = 1'-0"

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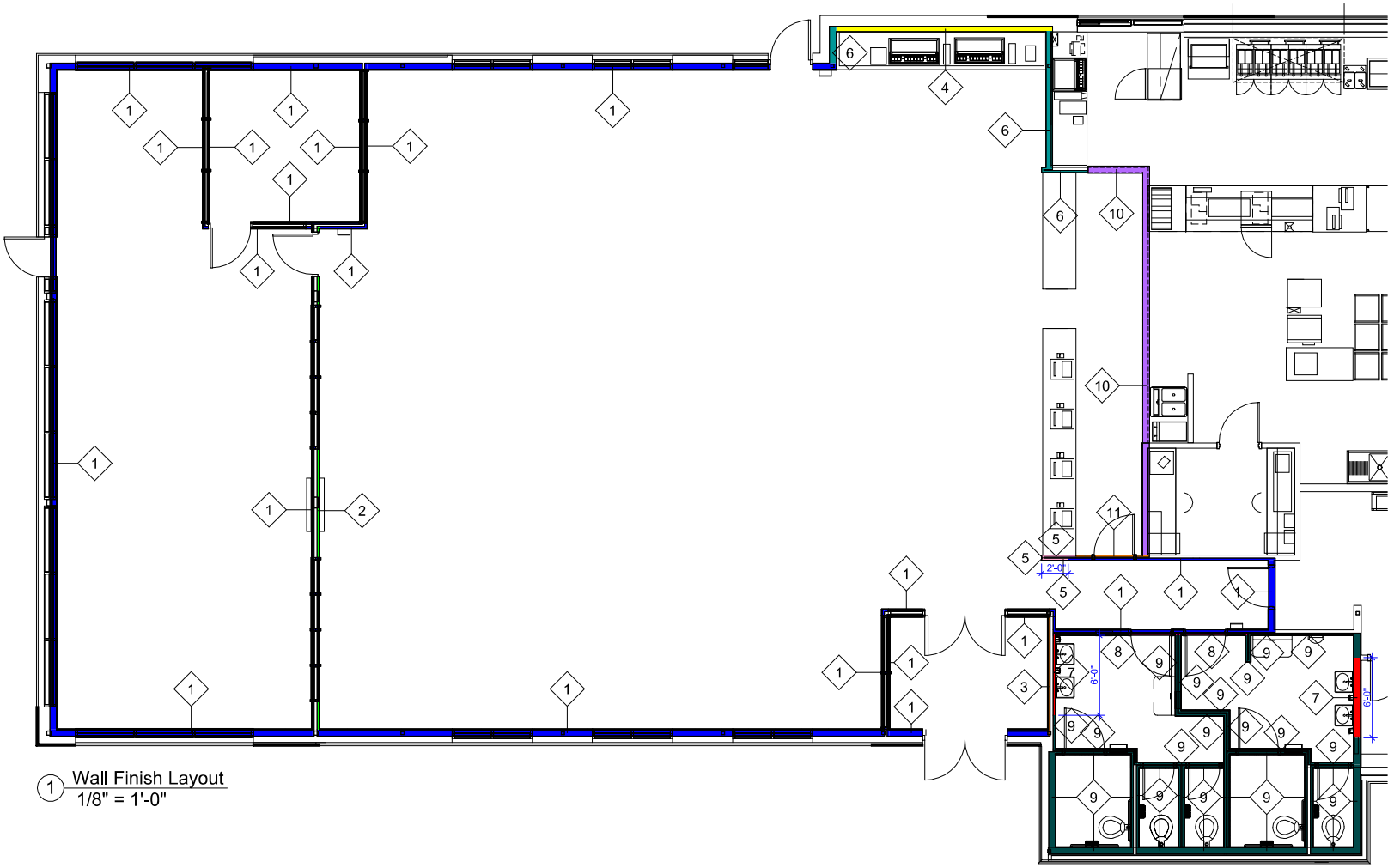
DATE	DESCRIPTION	
10/21/22	PROJECT UPDATE	

DATE: 10/21/22

Furniture Finish Layout

ID-4.0

11x17 SHEETS



1 Wall Finish Layout
1/8" = 1'-0"

1 P-15G, SS-8G, WP-2G,CT-26G
2 BR-2G, SS-8G, WP-2G,CT-26G Behind Settee
3 BR-2G,CT-26G
4 CT-25G - 24X24 @ DS Back Wall
5 CT-27G - 12X24
6 CT-28G - 6X24
7 CT-30G - 24X12 Vertical @ Bathroom Wall Accent
8 CT-27G, TR-1G, CT-27G Base @ Bathroom Wall
9 CT-28G, TR-1G, CT-27G Base @ Bathroom Wall
10 CT-31G @ Menu Board and BOH Wall
11 PL-18G, CT-11G @ Kitchen Wall
Door: PL-18G
Door Frame: P-16G

Wall Finish Legend
1/4" = 1'-0"

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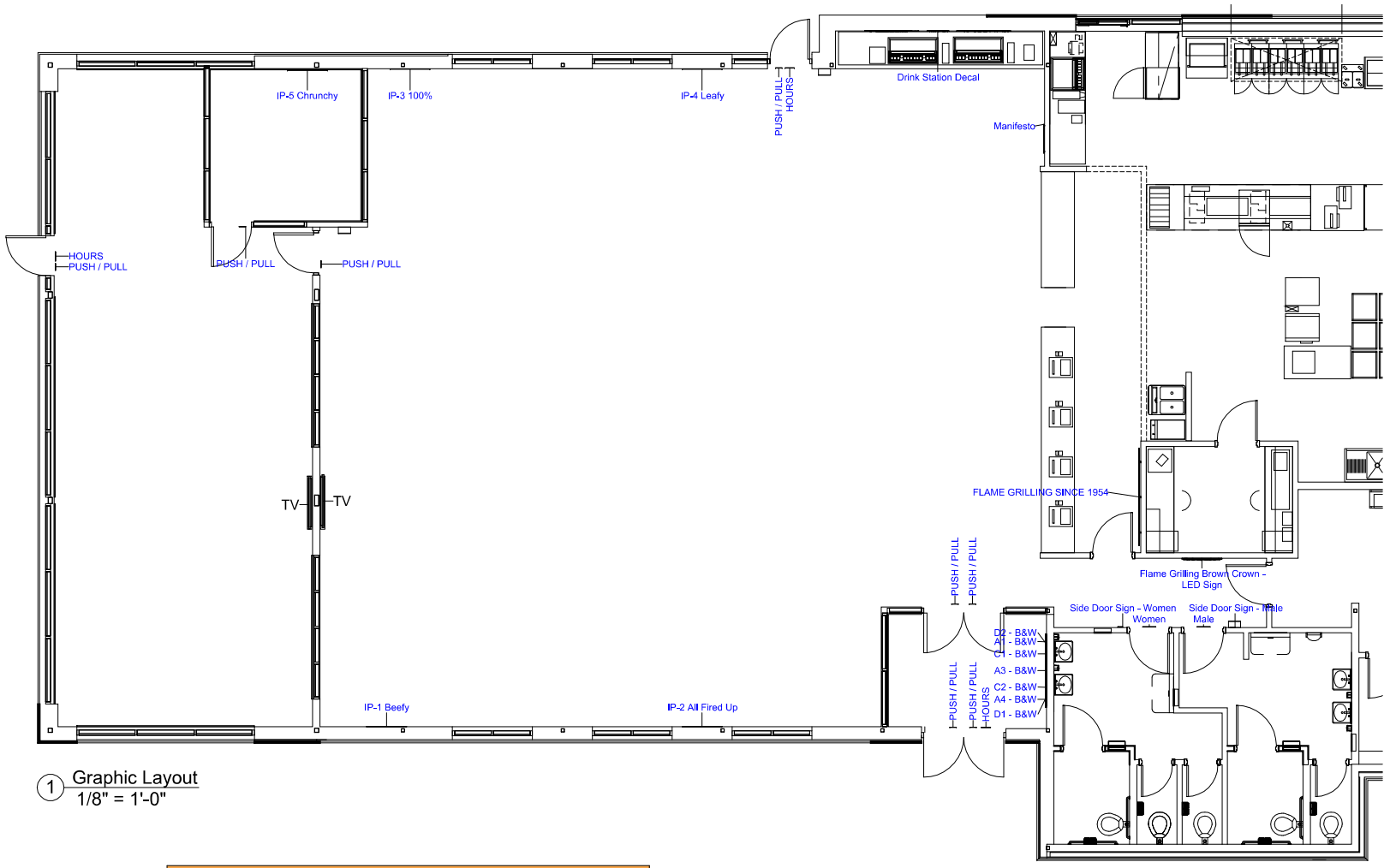
REVISION HISTORY
DATE DESCRIPTION
10/21/22 PRICE SET UPDATE

DATE: 10/21/22

Wall Finish Layout
ID-5.0

11x17 SHEETS



1 Graphic Layout
1/8" = 1'-0"

Graphic Schedule			
Family	Model	Supplied By	Count
Graphic - Drink Station	DS Decal	SCI	1
Graphic - Heritage Art - B&W - A1	A1	SCI	1
Graphic - Heritage Art - B&W - A3	A3	SCI	1
Graphic - Heritage Art - B&W - A4	A4	SCI	1
Graphic - Heritage Art - B&W - C1	C1	SCI	1
Graphic - Heritage Art - B&W - C2	C2	SCI	1
Graphic - Heritage Art - B&W - D1	D1	SCI	1
Graphic - Heritage Art - B&W - D2	D2	SCI	1
Graphic - Ingredient Posters - 36x48	1 - Beefy	SCI	1
Graphic - Ingredient Posters - 36x48	2 - All Fired Up	SCI	1
Graphic - Ingredient Posters - 36x48	3 - 100%	SCI	1
Graphic - Ingredient Posters - 36x48	4 - Leafy	SCI	1
Graphic - Ingredient Posters - 36x48	5 - Chrunchy	SCI	1

Graphic Schedule			
Family	Model	Supplied By	Count
Graphic - Manifesto	Manifesto	SCI	1
Graphic - Metal - Flame Grilling Since 1954		SCI	1
Graphic - Way Finding - Hours Door Decal	Hours	SCI	3
Graphic - Way Finding - Push Pull Door Decal	Push / Pull	SCI	8
Graphic - Way Finding - Restroom Door	Male	SCI	1
Graphic - Way Finding - Restroom Door	Women	SCI	1
Graphic - Way Finding - Restroom Side Door Sign	Male	SCI	1
Graphic - Way Finding - Restroom Side Door Sign	Women	SCI	1

LED Electrical Sign Schedule		
Family	Supplied By	Count
Graphic - LED Sign - Flame Grilling Brown Crown	SCI	1

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DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/22 | PRICING SET UPDATE

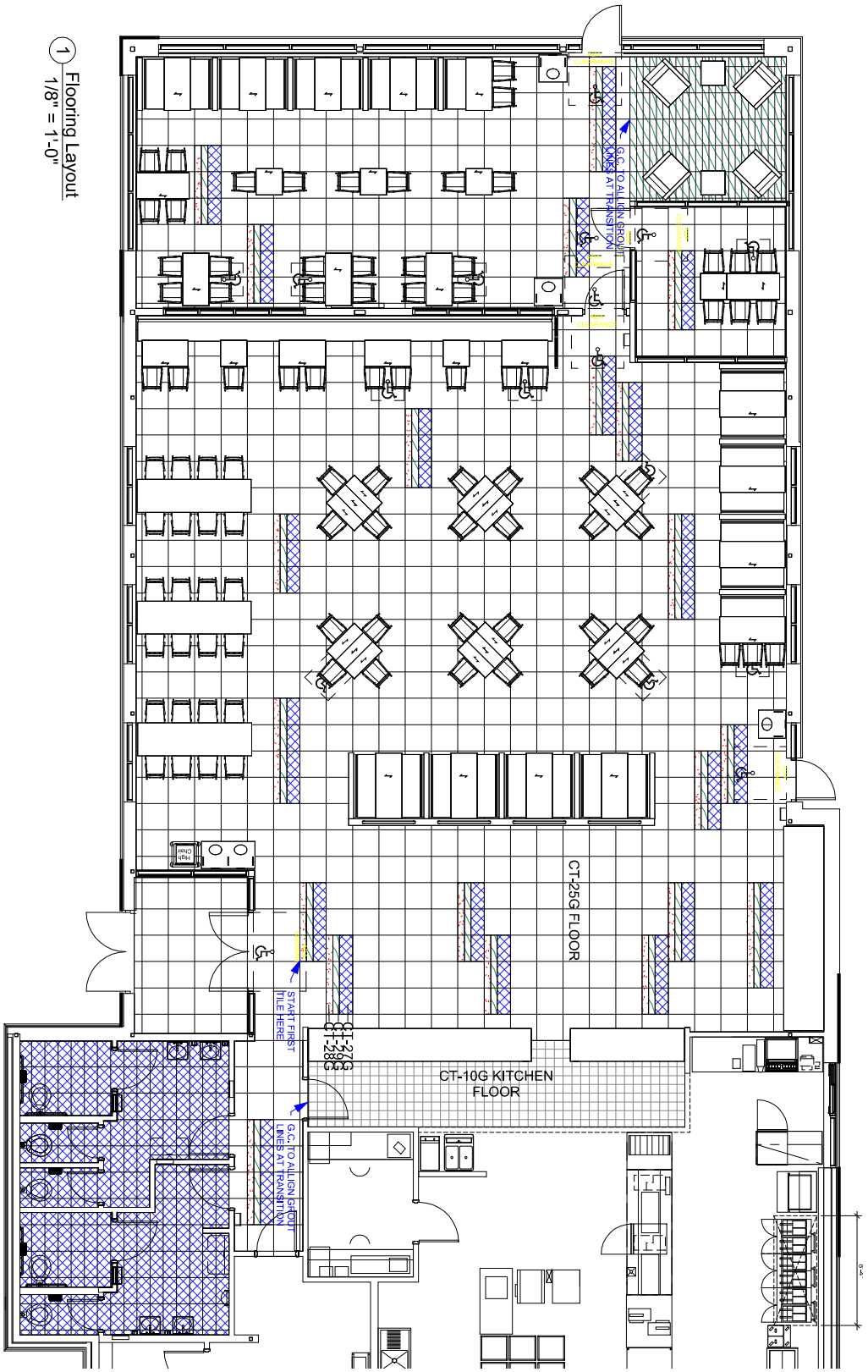
DATE: 10/21/22

Graphic Layout

ID-6.0

11x17 SHEETS

1 Flooring Layout
1/8" = 1'-0"



11x17 SHEETS	ID-7.0 Flooring Layout	BURGER KING	DATE 10/21/22	REVISION HISTORY DATE: 10/21/2022 DESCRIPTION: PROJECT START DATE	DESIGNER: Nicole Jenkins	Burger King Garden Grill AAFES	Fr. Campbell, KY Screaming Eagle Blvd. Store #: 5705

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SCI
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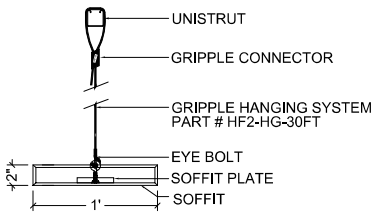


2 Low Profile Trellis – Gripple Airplane Wire
1" = 1'-0"

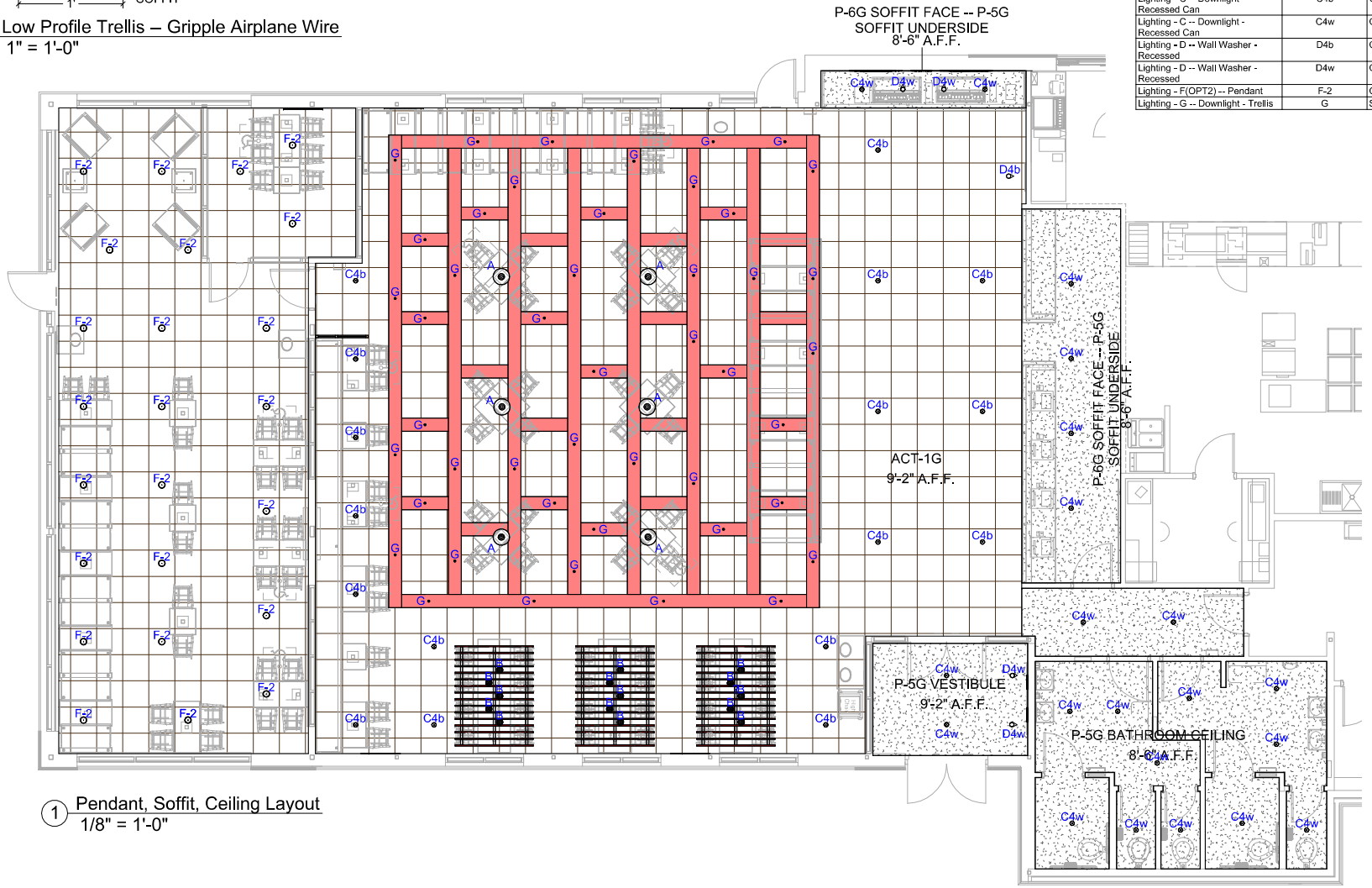
Soffit - Trellis / Pergola Schedule

Type Image	Family	Type	Count	Linear Foot
	Soffit - Low Profile Trellis	Beam	35	428'-7 7/16"
	Soffit - Pergola - Large	Low Profile	3	0"
Grand total: 38				428'-7 7/16"

** MOUNTING LOCATION OF PERGOLA SOFFIT TO BE CENTERED OVER TABLE - SEE DRAWING**
** ALL OUTLETS AT TABLES ARE ON CENTER OF TABLE POST. PLEASE VERIFY AGAINST CORE DRILL PLAN**
BOTTOM OF "A" PENDANT TO BE HUNG AT 78" AFF
BOTTOM OF "B" PENDANTS TO BE HUNG PER CALLOUTS ON ID-8.1
** ALL GENERAL LIGHTING TO BE COORDINATED BY GC WITH ARCHITECT OF RECORD TO MEET REQUIRED LIGHTING LEVELS**

Lighting Schedule

Family	Lighting Call Out	Supplied By	Count
Group - B – Pendant Cage			3
Lighting - A – Pendant	A	SCI	6
Lighting - B – Pendant Cage	B	SCI	15
Lighting - C -- Downlight - Recessed Can	C4b	Owner	17
Lighting - C -- Downlight - Recessed Can	C4w	Owner	21
Lighting - D -- Wall Washer - Recessed	D4b	Owner	1
Lighting - D -- Wall Washer - Recessed	D4w	Owner	4
Lighting - F(OPT2) -- Pendant	F-2	Owner	25
Lighting - G -- Downlight - Trellis	G	SCI	46



1 Pendant, Soffit, Ceiling Layout
1/8" = 1'-0"

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Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/22 | PROJECT SPECIFICATE

DATE: 10/21/22

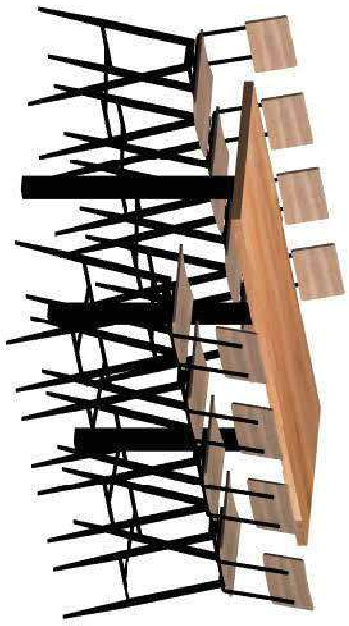
BURGER KING

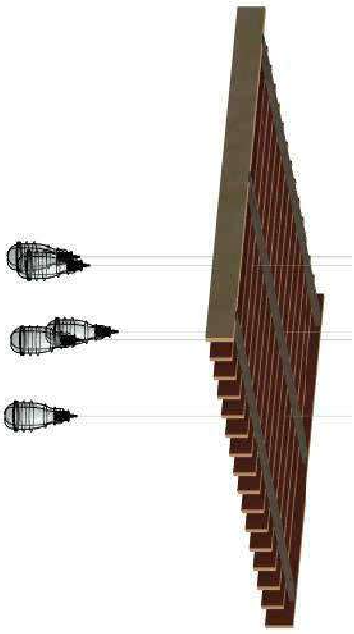
Pendant, Soffit, Ceiling Layout

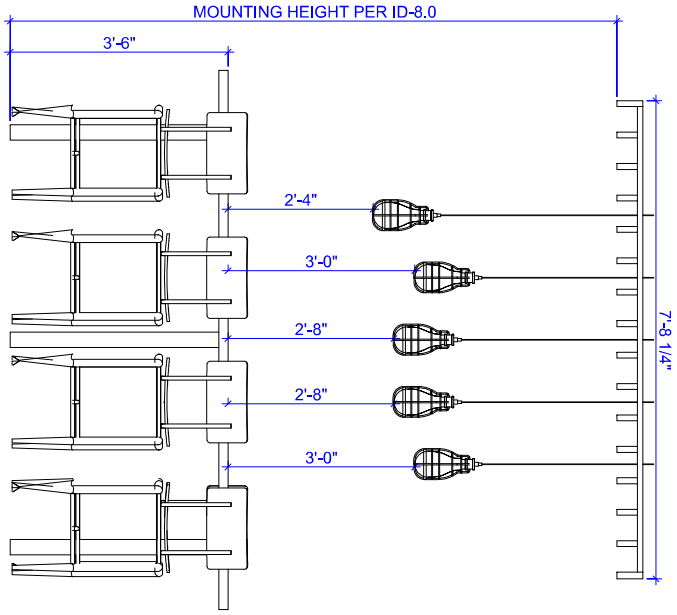
ID-8.0

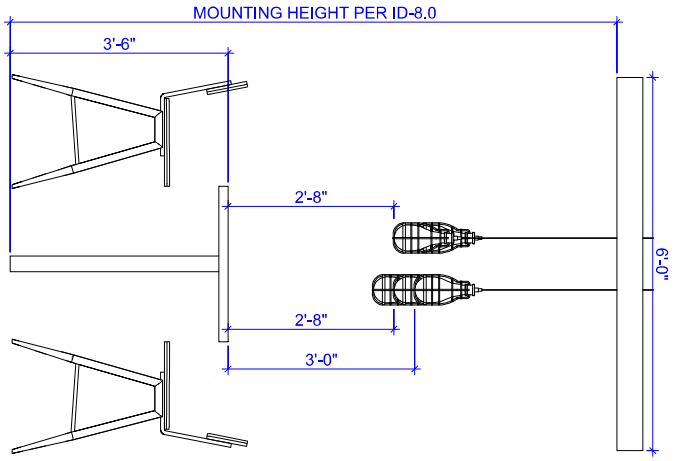
11x17 SHEETS

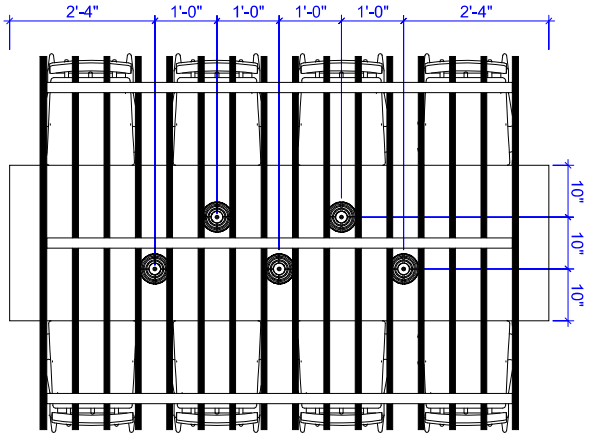
1 Pergola Details
1/2" = 1'-0"











11x17 SHEETS

ID-8.1

Pergola Details

BURGER KING

DATE: 10/21/22

REVISION HISTORY	
DATE	DESCRIPTION
10/21/2022	PROJECT START DATE

DESIGNER: Nicole Jenkins

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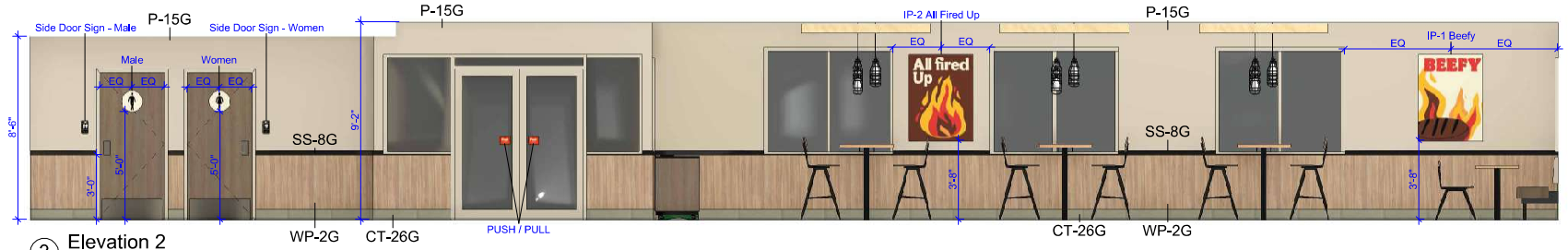
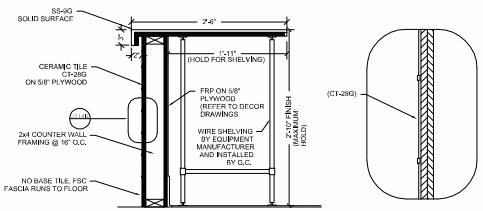
2 Elevation 1
3/16" = 1'-0"

PROVIDE TR-4G DRYWALL REVEAL BEAD BETWEEN P-15G & P-6G WHEN APPLICABLE

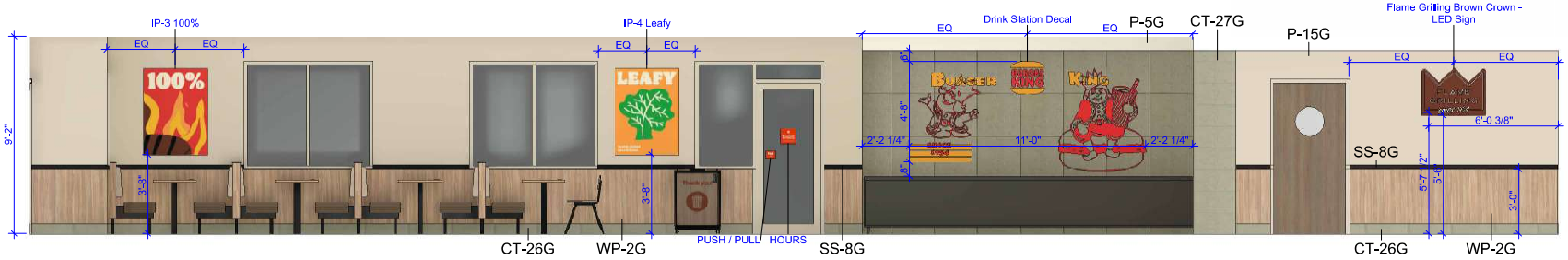


3 Elevation 2
3/16" = 1'-0"

4 Elevation 3
3/16" = 1'-0"



1 FSC Detail
1/2" = 1'-0"



5 Elevation 4
3/16" = 1'-0"

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REVISION HISTORY		
NO.	DATE	DESCRIPTION
1	10/21/22	PRICING SET UPDATE

DATE: 10/21/22

BURGER KING

Interior Elevations

ID-9.0

11x17 SHEETS

1 Elevation 5
3/16" = 1'-0"

2 Elevation 6
3/16" = 1'-0"

3 Elevation 7
3/16" = 1'-0"

PROVIDE TR-4G DRYWALL REVEAL BEAD BETWEEN P-15G & P-6G WHEN APPLICABLE

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DATE | DESCRIPTION
10/21/22 | PRICING / PERMIT

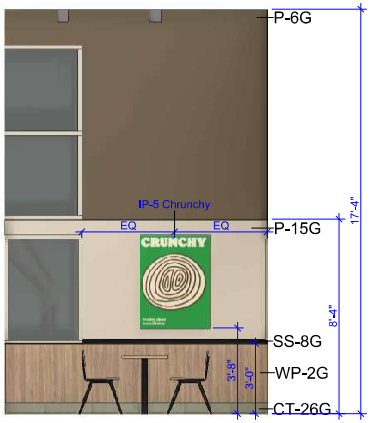
DATE: 10/21/22

Interior Elevations

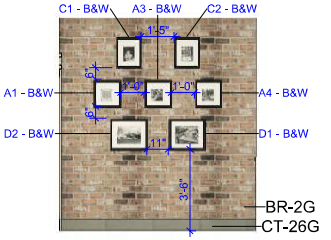
ID-9.1

11x17 SHEETS

1 Elevation 8
3/16" = 1'-0"



2 Elevation 9
3/16" = 1'-0"



3 Elevation 10 - Vestibule
3/16" = 1'-0"

PROVIDE TR-4G DRYWALL REVEAL BEAD BETWEEN P-15G & P-6G WHEN APPLICABLE

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REVISION HISTORY
DESCRIPTION
DATE
PROJECT UPDATE
10/21/22

DATE: 10/21/22

Interior Elevations

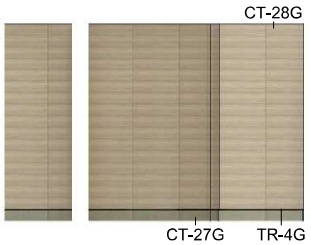
ID-9.2

11x17 SHEETS

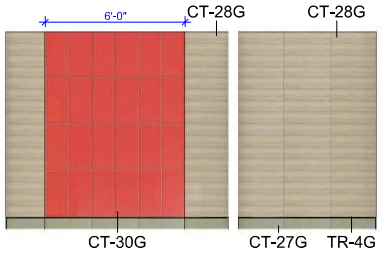
PROVIDE TR-4G
DRYWALL REVEAL BEAD
BETWEEN P-15G & P-6G
WHEN APPLICABLE

1 Restroom Elevation - M1
3/16" = 1'-0"

2 Restroom Elevation - M2
3/16" = 1'-0"

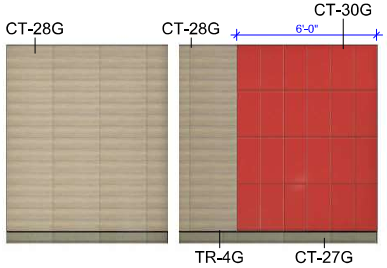


3 Restroom Elevation - M3
3/16" = 1'-0"

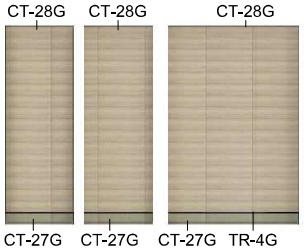


4 Restroom Elevation - M4
3/16" = 1'-0"

5 Restroom Elevation - W1
3/16" = 1'-0"



6 Restroom Elevation - W2
3/16" = 1'-0"



7 Restroom Elevation - W3
3/16" = 1'-0"

8 Restroom Elevation - W4
3/16" = 1'-0"

TYPICAL RESTROOM TILE ELEVATIONS.
TILE IS INSTALLED TO THE FLOOR.

G.C. TO COORDINATE LOCATION AND MOUNTING HEIGHT OF BABY CHANGING STATION WITH ARCHITECT

BKC RECCOMMENDS USE OF RECESSED CHANGING STATION DUE TO RESTROOM SIZE

G.C. TO COORDINATE WITH CD PLANS FOR ALL PLUMBING FIXTURES AND ACCESSORIES IN COMPLIANCE WITH ADA

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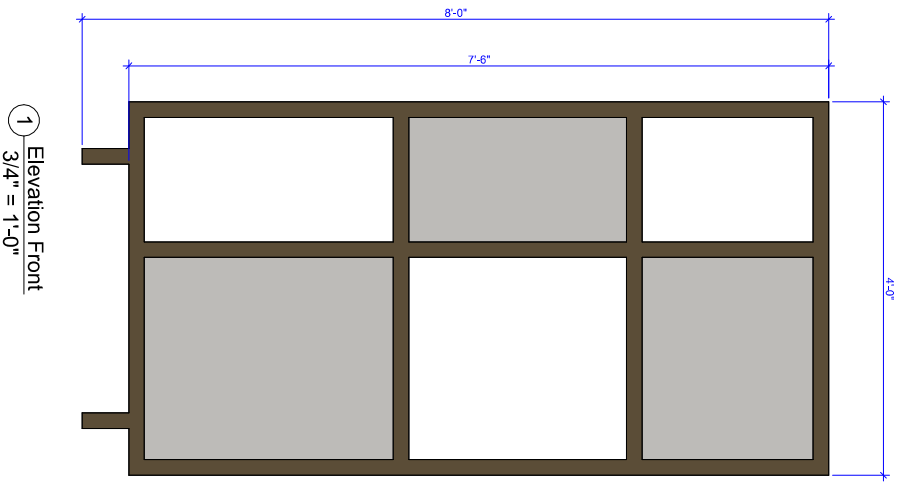
10/21/22 | PRICING SET/LATE

DATE: 10/21/22

Interior Elevations

ID-9.3

11x17 SHEETS



1 Elevation Front
3/4" = 1'-0"

11x17 SHEETS

ID-9.4

Furniture Elevations

DATE 10/21/22

REVISION HISTORY	
DATE	DESCRIPTION
10/21/2022	PROJECT START DATE

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SCI Specs - Tables / Bases

Type Image	Count	Family	Model	Description	Manufacturer	PartNum
	3	Table - Wood - Community	104x30 42H	SOLID WOOD TOP NAUTICAL FURNISHINGS, LLC. CONTACT: MICHAEL HOGLUND (954) 771-1100 MHOGLUND@NAUTICALFURNISHINGS.COM	SCI	BK-GG-COMTBL-30-104
	1	Table - S-200 - Tri-Lam	36x36 ADA	EDGE STYLE: S200 12" LAMINATE: PL-16G NEVAMAR - SANTA ROSA PLUM TREE WZ2001T 12" LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T 12" LAMINATE: PL-17G NEVAMAR - CARAMEL MACCHIATO WF0013T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-36-36-SQ-ADA-V1-TRI-MUL
	1	Table - S-200 - Tri-Lam	36x36 ADA	EDGE STYLE: S200 12" LAMINATE: PL-16G NEVAMAR - SANTA ROSA PLUM TREE WZ2001T 12" LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T 12" LAMINATE: PL-17G NEVAMAR - CARAMEL MACCHIATO WF0013T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-36-36-SQ-ADA-V2-TRI-LP-MUL
	1	Table - S-200 - Tri-Lam	36x36 ADA	EDGE STYLE: S200 12" LAMINATE: PL-16G NEVAMAR - SANTA ROSA PLUM TREE WZ2001T 12" LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T 12" LAMINATE: PL-17G NEVAMAR - CARAMEL MACCHIATO WF0013T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-36-36-SQ-ADA-V3-TRI-MUL
	3	Table - S-200 - Tri-Lam	36x36	EDGE STYLE: S200 12" LAMINATE: PL-16G NEVAMAR - SANTA ROSA PLUM TREE WZ2001T 12" LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T 12" LAMINATE: PL-17G NEVAMAR - CARAMEL MACCHIATO WF0013T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-36-36-SQ-V1-TRI-MUL
	6	Table - S-200 - PL-9G	<varies>	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-24-SQ-VOO-MUL
	2	Table - S-200 - PL-9G	24x42 - H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-42-SQ-VOO-MUL
	2	Table - S-200 - PL-9G	24x42 ADA - H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-42-SQ-VOO-MUL-ADA
	1	Table - S-200 - PL-9G	24x48 - H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-48-SQ-VOO-MUL
	3	Table - S-200 - PL-9G	24x60 - H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-60-SQ-VOO-MUL
	1	Table - S-200 - PL-9G	24x60 ADA - H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24-60-SQ-VOO-MUL-ADA

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DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/22 | PRICING UPDATE

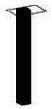
DATE: 10/21/22

SCI Specifications

ID-10.0

11x17 SHEETS

SCI Specs - Tables / Bases

Type Image	Count	Family	Model	Description	Manufacturer	PartNum
	5	Table - S-200 - PL-9G	24x48 - V	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24G-48-SQ-VOO-MUL
	4	Table - S-200 - PL-9G	24x48 ADA - V	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24G-48-SQ-VOO-MUL-ADA
	4	Table - S-200 - PL-9G	24x60 - V	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E	SCI	BK-GG-S200-24G-60-SQ-VOO-MUL
	2	Table - Occasional - S-200 - 22x22 - PL-9G	22x22 24H	EDGE STYLE: S200 LAMINATE: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T PREMIUM TABLE EDGE: REHAU - MULTIPLEX #592E 16"X16" FREE STANDING SQUARE BASE: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-OCC-22-22-VOO-BLA-MAT
	24	Table - Community - Purse Hook	Purse Hook	FINISH: ANTIQUE BRONZE	SCI	BK-GG-PURSE-HOOK
	8	Glide - OTO Glide		BURGER KING GARDEN GRILL - (1) ON THE LEVEL UPGRADED TABLE BASE SELF LEVELER GLIDE	SCI	BK-GG-GLD-OTL
	36	Base - GG Square Base - GI	SQ-30H-GI	FINISH: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-TTGP-30H-3S-BLA-MAT
	9	Base - GG Square Base - GI	SQ-42H-GI	FINISH: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-TTGP-42H-3S-BLA-MAT
	12	Base - GG Square Base - GI	SQ-30H-OFF-GI	FINISH: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-TTGP-OFF-30H-3S-BLA-MAT

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DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/22 | PROJECT UPDATE

DATE: 10/21/22

SCI Specifications

ID-10.1

11x17 SHEETS

SCI Specs - Seating

Type Image	Count	Family	Model	Description	Manufacturer	PartNum
	24	Barstool - Laminate	BS	STYLE: ISABEL BARSTOOL - LAMINATED PL-15G NEVAMAR - MACCHIATO WF0011T TWENTY FOUR 7 GLOBAL SOLUTIONS CONTACT: BARRY WOON (323) 319-2722 BARRY.WOON@TWENTYFOUR7-GLOBAL.COM	SCI	BK-GG-BS-LAM
	4	Booth - Double	48" UPH	STYLE: 40"H GARDEN GRILL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 UPHOLSTERED SEAT PAD: UPH-7G MAHARAM - LARIAT - TAUPE 010 WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50 BOOTH WALL EDGING: REHAU FLEX EDGE BAND - 15/16" x 3mm BOOTH EDGING MATCHES NEVAMAR - MACCHIATO WF0011T	SCI	BK-GG-1-DB-40H48L-18S-US-PKG-1
	6	Booth - Double	60" UPH	STYLE: 40"H GARDEN GRILL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 UPHOLSTERED SEAT PAD: UPH-7G MAHARAM - LARIAT - TAUPE 010 WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50 BOOTH WALL EDGING: REHAU FLEX EDGE BAND - 15/16" x 3mm BOOTH EDGING MATCHES NEVAMAR - MACCHIATO WF0011T	SCI	BK-GG-1-DB-40H60L-18S-US-PKG-1
	1	Booth - Single	48" UPH	STYLE: 40"H GARDEN GRILL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 UPHOLSTERED SEAT PAD: UPH-7G MAHARAM - LARIAT - TAUPE 010 WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50 BOOTH WALL EDGING: REHAU FLEX EDGE BAND - 15/16" x 3mm BOOTH EDGING MATCHES NEVAMAR - MACCHIATO WF0011T	SCI	BK-GG-1-SB-40H48L-18S-US-PKG-1
	1	Booth - Single	60" FG	STYLE: 40"H GARDEN GRILL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 FIBERGLASS SEAT: FG-7G - TAUPE - FV964-NP530 - ABRASION RESISTANT WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50 BOOTH WALL EDGING: REHAU FLEX EDGE BAND - 15/16" x 3mm BOOTH EDGING MATCHES NEVAMAR - MACCHIATO WF0011T	SCI	BK-GG-1-SB-40H60L-18S-FG-PKG-1
	2	Booth - Single	60" UPH	STYLE: 40"H GARDEN GRILL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 UPHOLSTERED SEAT PAD: UPH-7G MAHARAM - LARIAT - TAUPE 010 WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50 BOOTH WALL EDGING: REHAU FLEX EDGE BAND - 15/16" x 3mm BOOTH EDGING MATCHES NEVAMAR - MACCHIATO WF0011T	SCI	BK-GG-1-SB-40H60L-18S-US-PKG-1
	67	Chair - Laminate	Laminate	STYLE: ISABEL CHAIR - LAMINATED PL-15G NEVAMAR - MACCHIATO WF0011T TWENTY FOUR 7 GLOBAL SOLUTIONS CONTACT: BARRY WOON (323) 319-2722 BARRY.WOON@TWENTYFOUR7-GLOBAL.COM	SCI	BK-GG-CH-LAM
	4	Lounge Chair - Grove - UPH-10	Grove	STYLE: GROVE WITH ARMS UPHOLSTERY: UPH-10G MAHARAM - LARIAT - OYSTER 007 POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-GRO-LOUNGE-ARM-CH-OYS-BLA-MAT
	1	Wall Bench Settee - Upholstered Seat	15"H x LF	STYLE: GARDEN GRILL – 15"H BACK PAD ATTACHED TO EXISTING WALL UPHOLSTERED BACK PAD: UPH-10G MAHARAM - LARIAT - OYSTER 007 UPHOLSTERED SEAT PAD: UPH-7G MAHARAM - LARIAT - TAUPE 010 BASE BOX LAMINATE: PL-19G PIONITE - BLACK SE101S POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	SCI	BK-GG-1-WBS-40H-18S-US-BP15H-PKG-1

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Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

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DATE | DESCRIPTION
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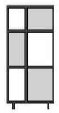
DATE: 10/21/22

BURGER KING

SCI Specifications
ID-10.2
11x17 SHEETS

SCI Specs - Casework

Type Image	Count	Family	Type	Description	Linear Foot	Manufacturer	PartNum
	1	Customer Service Counter Solid Surface - Wing on Left	By SCI	SOLID SURFACE TOP:SS-9G AVONITE F1-7885 BK SMOKE 3" FRONT DROP, WATER FALL LEFT SIDE	19'-0 5/8"	SCI	BK-GG-CSC-SS-1-EE-LF-WF1L-3FD-1.25RD-3RS P-SMO
	1	Customer Service Counter Solid Surface - Wing on Right	By SCI	SOLID SURFACE TOP:SS-9G AVONITE F1-7885 BK SMOKE 3" FRONT DROP, WATER FALL LEFT SIDE	10'-9 1/2"	SCI	BK-GG-CSC-SS-1-EE-LF-WF1R-3FD-1.25RD-3LS P-SMO
	1	Divider Wall - GG - Custom Length	Custom Length x 40H	STYLE: 40"H GARDEN GRILL WALL LAMINATE: PL-15G NEVAMAR - MACCHIATO WF0011T SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK POWDERCOATED LEGS: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	23'-3"	SCI	BK-GG-1-DW-GI-40H-SS-MAC-DN
	4	Divider Wall - Metal Bar Rail	48"L	STYLE: 48"L X 7"H GARDEN GRILL POWDERCOATED RAIL: SHERWIN WILLIAMS BLACK MATTE PBS4-C0009-C50	0"	SCI	BK-GG-UBAR-48L7H-BLA-MAT
	1	Screen - Option A - Metal - 4'-0" – GG	4'-0" L	FULL HEIGHT DIVIDER SCREEN - METAL POWDER COATED FRAME: TIGER DRYLAC -038/60080 STATUARY BRONZE PERFEORATED METAL PANEL: TIGER DRYLAC -038/60080 STATUARY BRONZE	8'-0"	SCI	
	2	Solid Surface Adhesive Kit	Solid Surface Adhesive Kit		0"	SCI	BK-GG-SS-ADH-BK-SMOKE
	1	Trash - Double	Thank You - Thank You	STYLE: GARDEN GRILL SOUTH SIDE BASE CABINET FINISH: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK T-MOLD EDGING: BLACK GRAPHIC BY GRAPHICS VENDOR	0"	SCI	BK-GG-SSD-D-35BO-CAS-SS-VOO-HDT-BLA-MA T-DN-TYG
	3	Trash - Single	Thank You!	STYLE: GARDEN GRILL SOUTH SIDE BASE CABINET FINISH: PL-9G NEVAMAR - VENERABLE OLD OAK WK0017T SOLID SURFACE TOP CAP: SS-8G CORIAN - DEEP NOCTURNE 1/2" THICK T-MOLD EDGING: BLACK GRAPHIC BY GRAPHICS VENDOR	0"	SCI	BK-GG-SSD-S-35BO-CAS-SS-VOO-HDT-BLA-MA T-DN-TYG

MILLWORK

FRONT SERVICE COUNTER TOP
SOLID SURFACE TOP:**SS-9G** AVONITE F1-7885 BK SMOKE
3" FRONT DROP

WAINSCOT
WP-2G GENERAL WAINSCOT:
CIM - Z-LOCK SYSTEM - NEVAMAR - MACCHIATO - CONTACT: DAMIEN ALLEN 706-253-4795
MARLITE - ALLURE PANEL - NEVAMAR - WF001 MACCHIATO XGRN

CHAIR RAIL AND WINDOW SILLS
SS-8G CORIAN - DEEP NOCTURNE
CONTACT: RANDY HOUSTON (404) 274-3047

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Burger King
Garden Grill
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SCI Specifications
ID-10.0
11x17 SHEETS

GENERAL CONTRACTOR SPECIFICATIONS

MILLWORK

FRONT COUNTER FASCIA

**** SEE ELEVATIONS FOR TILE CONFIGURATION**
CT-28G - GRANITI FIANDRE - LARCH US - FRENCH WOOD - IRG 0624123 6"X24"
TILE CONTACT: JAN DETER (714) 309-9551
GROUT: **GR-17G**
SAND BLASTED BURGER KING LOGO BY NAUTICAL FURNISHINGS
NAUTICAL FURNISHINGS, LLC.
CONTACT: MICHAEL HOGLUND (954) 771-1100
MHOGLUND@NAUTICALFURNISHINGS.COM

CEILING EQUIPMENT

UNISTRUT FOR HANGING TRELLIS - PERGOLA SOFFITS

SUPPORT SYSTEM: P-6G SLATE BROWN
TO BE INSTALLED & PURCHASED BY G.C. PRIOR TO DECOR SHIPPING

ELECTRICAL EQUIPMENT

TELEVISION

FLAT PANEL TELEVISION
G.C TO PROVIDE ELECTRICAND CABLE FOR TV

LIGHTING

ADDITIONAL LIGHTING - NON DECORATIVE

SEE ID-6.1 FOR LIGHTING LAYOUT
SEE ID-12.0 FOR LIGHTING SPECIFICATIONS
*COORDINATE WITH ARCHITECT ON RECORD FOR EXACT LIGHTING PLACEMENT

RESTROOM EQUIPMENT

BABY CHANGING STATION

KOALA KARE
MODEL: KB 110-SSRE
FINISH: STAINLESS STEEL RECESS
37"WX23"HX15" EXTENSIONS OPENING
MOUNTING HEIGHT: 34" AFF

OPTIONAL:
KOALA KARE
MODEL: KB200-05
FINISH: POLYPORPYLENE AND UNIBODY STEEL CHASSIS
MOUNT HORIZONTAL BABY CHANGING STATION
MOUNTING HEIGHT: 35" AFF

KITCHEN EQUIPMENT

DRINK STATION CABINET

MANUFACTURED STONE TOP: MS-1G SILESTONE - VOLVANO TEXTURE - GREY EXPO, 3" FRONT DROP
OR
STAINLESS STEEL
OR
SOLID SURFACE TOP: SS-9G - AVONITE - BK SMOKE F1-7885
CABINET LAMINATE: PL-18G NEVAMAR - CAFE SIENNA

MISCELLANEOUS EQUIPMENT

ORDER KIOSKS (IF APPLICABLE)

BABY / TODDLER HIGH CHAIRS

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GC Specifications

ID-11.0

11x17 SHEETS

BURGER KING- 20/20 GARDEN GRILL INTERIOR

INTERIOR MATERIALS & FINISH SCHEDULE **TO BE USED WITH 20/20 GARDEN GRILL GUIDELINES DOC.

9.20.22

CODE	MATERIAL	LOCATION	MANUFACTURER	DESCRIPTION			ADDITIONAL INFORMATION
				PRODUCT	COLOR	DIMENSION	
DECORATIVE FLOOR & WALL TILES							
CT-25G	CERAMIC TILE	FIELD FLOOR TILE, BEVERAGE STATION BACK WALL	GRANITE FIANDRE / TRANSCERAMICA	TCG2424027SQ	SIMPLY GRAY HONED	24" x 24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EUROWEST	X600292X8	URBAN GRAY HONED	24" x 24"	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EMSER	I99UPTOGR2424	UPTOWN CUSTOM GRAY # 15 (RECTIFIED)	24" x 24"	CONTACT: CRISTINA DUNBAR (713)462-2411 BURGERKING@EMSER.COM NOTE: USE WITH GR-15G (1/16" THICK)
			DALTILE	N627BK24241PK	N627 ROYAL GREY	24" x 24"	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-15G (1/16" THICK)
CT-26G	CERAMIC TILE	BASE TILE (MAIN DINING)	GRANITE FIANDRE / TRANSCERAMICA	TCG1224027SQ	SIMPLY GRAY HONED	6" x 24" (CUT TILE)	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EUROWEST	X630292X8	URBAN GRAY HONED	6" x 24" (CUT TILE)	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EMSER	CUT BASE TILE (FROM 12" X 24")	UPTOWN CUSTOM GRAY # 15 (RECTIFIED)	6" x 24" (CUT TILE)	CONTACT: CRISTINA DUNBAR (323) 650-2200 BURGERKING@EMSER.COM NOTE: 4 WEEKS LEAD TIME CUT BASE TILE IF PURCHASE DIRECTLY FROM EMSER NOTE: USE WITH GR-15G (1/16" THICK)
			DALTILE	CUT BASE TILE N627BK12241PK	N627 ROYAL GREY	6" x 24" (CUT TILE)	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-15G (1/16" THICK)
CT-27G	CERAMIC TILE	FSC SIDE WALL, RESTROOM ACCENT WALL AND FLOOR	GRANITE FIANDRE / TRANSCERAMICA	TCG1224027SQ	SIMPLY GRAY HONED	12" x 24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EUROWEST	X630292X8	URBAN GRAY HONED	12" x 24"	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EMSER	I99UPTOG12424	UPTOWN CUSTOM GRAY # 15 (RECTIFIED)	12" x 24"	CONTACT: CRISTINA DUNBAR (323) 650-2200 BURGERKING@EMSER.COM NOTE: USE WITH GR-15G (1/16" THICK)
			DALTILE	N627BK12241PK	N627 ROYAL GREY (RECTIFIED)	12" x 24"	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-15G (1/16" THICK)
CT-28G	CERAMIC TILE	DINING, ACCENT TILE LIGHT WOOD, KNEE WALL AND FSC SIDE WALL WAINSCOT TILE (STACKED BOND)	GRANITE FIANDRE / TRANSCERAMICA	Larch US (french wood) IRG 0624123	WOOD TILE (RECTIFIED)	6" x 24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G @ FLOOR (1/16" THICK) NOTE: USE WITH GR-17G @ DINING WALLS ONLY (1/16" THICK)
			EUROWEST	TCL Larch US (french wood)	WOOD TILE (RECTIFIED)	6" x 24"	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G @ FLOOR (1/16" THICK) NOTE: USE WITH GR-17G @ DINING WALLS ONLY (1/16" THICK)
			EMSER	F19POCOOAO624P14	DEREVO BEIGE WOOD TILE (RECTIFIED)	6" x 24"	CONTACT: CRISTINA DUNBAR (713)462-2411 BURGERKING@EMSER.COM NOTE: USE WITH GR-15G @ FLOOR (1/16" THICK) NOTE: USE WITH GR-17G @ DINING WALLS ONLY (1/16" THICK)
			DALTILE	N625BK6241PK	N626 GRAY WOOD	6" X 24"	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-15G @ FLOOR (1/16" THICK) NOTE: USE WITH GR-17G @ DINING WALLS ONLY (1/16" THICK)

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DESIGNER: Nicole Jenkins

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Interior Building Specifications

ID-12.0

11x17 SHEETS

BURGER KING- 20/20 GARDEN GRILL INTERIOR

INTERIOR MATERIALS & FINISH SCHEDULE **TO BE USED WITH 20/20 GARDEN GRILL GUIDELINES DOC.

9.20.22

CODE	MATERIAL	LOCATION	MANUFACTURER	DESCRIPTION			ADDITIONAL INFORMATION
				PRODUCT	COLOR	DIMENSION	
DECORATIVE FLOOR & WALL TILES							
CT-29G	CERAMIC TILE	DINING, ACCENT DARK WOOD	GRANITE FIANDRE / TRANSCERAMICA	Elm US (french wood) IRG 0624122	WOOD TILE	6" x 24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EUROWEST	TCL Elm US (french wood)	WOOD TILE	6" x 24"	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EMSER	F19POCOGRO624P14	DEREVO GRAY WOOD TILE (RECTIFIED)	6" x 24"	CONTACT: CRISTINA DUNBAR (713)462-2411 BURGERKING@EMSER.COM NOTE: USE WITH GR-15G (1/16" THICK)
			DALTILE	N626BK6241PK	N625 BROWN WOOD	6" X 24"	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-15G @ FLOOR (1/16" THICK) NOTE: USE WITH GR-17G @ DINING WALLS ONLY (1/16" THICK)
CT-30G	CERAMIC TILE	RESTROOM WALL ACCENT RED TILE	GRANITE FIANDRE / TRANSCERAMICA	SENSIBLE STONE ED5052	SIGN RED NATURAL	12" x 24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-15G (1/16" THICK)
			EUROWEST	TCL SENSIBLE STONE	SIGN RED NATURAL	12" x 24"	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-15G (1/16" THICK)
CT-31G	CERAMIC TILE	SERVICE AREA, FOOD PREP, MENUBOARD, BEVERAGE STATION BACK WALL OPTION	CERAMIC TECHNICS	SASSUOLO STONE TONES	WHITE GLOSSY SUBWAY TILE	3"x12" SUBWAY TILE	CONTACT: LYDIA KURTH (954) 520-4283 LKURTH@CERAMIC TECHNICS NOTE: USE WITH GR-18G (1/8" THICK)
			GRANITE FIANDRE / TRANSCERAMICA	1318GLOSSWHT1	WHITE GLOSSY SUBWAY TILE	3"x12" SUBWAY TILE	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-18G (1/8" THICK)
			EUROWEST	TCG1318	WHITE GLOSSY SUBWAY TILE	3"x12" SUBWAY TILE	CONTACT: JOY KLEIN (813)334-3302 BK@EUROWEST.COM NOTE: USE WITH GR-18G (1/8" THICK)
			EMSER	F14CATCICO312P	WHITE GLOSSY SUBWAY TILE	3"x12" SUBWAY TILE	CONTACT: CRISTINA DUNBAR (713)462-2411 BURGERKING@EMSER.COM NOTE: USE WITH GR-18G (1/8" THICK)
			DALTILE	WL N524BK3121P2	N524 WHITE	3"x12" SUBWAY TILE	CONTACT: ALEXANDRA STEFAN alexandra.stefan@daltile.com NATIONAL.ACCOUNTS@DALTILE.COM (877) 556-5728 NOTE: USE WITH GR-18G (1/8" THICK)
CT-35G	CERAMIC TILE	OUTDOOR TERRACE FLOOR	TRANSCERAMICA	QUARTZITE	ALPESR11	24"x24"	CONTACT: NOREEN SCHERTLER (312) 342-4689 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-6G (1/8" THICK)
FLOOR & WALL FINISHES AT DINING, RESTROOMS & BACK OF HOUSE BACK OF HOUSE FLOOR & WALL TILE							
CT-10G	QUARRY TILE	BACK OF HOUSE	GRANITE FIANDRE / TRANSCERAMICA	TCG1212142	CAPITOL GRAY TX	12" X 12"	CONTACT: CYNTHIA MENA (561) 946-9533 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-6G (1/8" THICK)
CT-11G	QUARRY TILE BASE	BACK OF HOUSE COVE BASE	GRANITE FIANDRE / TRANSCERAMICA	TCG612C142- BASE TCG60C142-CORNER	CAPITOL GRAY TX	6" X 12 6"X 1"	CONTACT: CYNTHIA MENA (561) 946-9533 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-6G (1/8" THICK)
CT-32G	CERAMIC TILE	OUTDOOR TERRACE FLOOR	TRANSCERAMICA	QUARTZITE	ALPES R11	24' X 24"	CONTACT: CYNTHIA MENA (561) 946-9533 BK@TRANSCERAMICA.COM NOTE: USE WITH GR-6G (1/8" THICK)
FRP-1G	FIBERGLASS REINFORCED PANEL	BACK OF HOUSE	MARLITE	FRP SYMMETRIX 204561B (4'X8") 204551 (4'X10") WHITE/ BLK CORE NO TOP COAT (GRAY SCORE LINE)	A916 G312	4'x8' 4'x10'	CONTACT: CUSTOMER SERVICE (330) 343-6621 ANITA CRAIG (423) 506-6335 ACRAIG@MARLITE.COM NOTE: USE WITH TR-3G

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Interior Building Specifications

ID-12.1

11x17 SHEETS

BURGER KING- 20/20 GARDEN GRILL INTERIOR

INTERIOR MATERIALS & FINISH SCHEDULE **TO BE USED WITH 20/20 GARDEN GRILL GUIDELINES DOC.

9.20.22

CODE	MATERIAL	LOCATION	MANUFACTURER	DESCRIPTION			ADDITIONAL INFORMATION
				PRODUCT	COLOR	DIMENSION	
TRIMS							
TR-1G	EDGE PROFILE	OUTSIDE CORNERS OF WALL TILE & BASE TILE TRIM AT RESTROOM	SCHLUTER	QUADEC Q100AT	SATIN NICKEL ANODIZED ALUMINUM	3/8"	CONTACT: ROSANNA RUIZ (786) 858-0010 RRUIZ@SCHLUTER.COM NOTE: GC TO COORDINATE HEIGHT AS REQUIRED BASED UPON TILE THICKNESS AND SETTING SYSTEM
TR-2G	COVE BASE PROFILE	GENERAL RESTROOM		DILEX-AHK100AT	SATIN NICKEL ANODIZED ALUMINUM	3/8"	
TR-3G	SYMMETRIX TRIMS	BACK OF HOUSE	MARLITE	OUTSIDE CORNER 205569B	FRPMOLD BK NICKEL ANODIZED A560 O/C	7/16" EXPOSED EDGE / 8' LONG	
				INSIDE CORNER 205568B	FRPMOLD BK NICKEL ANODIZED A560 O/C	7/16" EXPOSED EDGE / 8' LONG	
				EDGE 205571B	FRPMOLD BK NICKEL ANODIZED A560 O/C	7/16" EXPOSED EDGE / 8' LONG	
TR-4G	DRYWALL REVEAL BEAD	DRYWALL REVEAL BELOW TRUSSES, RETWEEN PAINT TRANSITION P-15G & P-6G	TRIM-TEX	AS5110S	ARCHITECTURAL SILVER	1/2" X 1/2"	CONTACT: LOCAL SUPPLIER
TS-1G	TRANSITION STRIP	CERAMIC TILE TO CERAMIC TILE	SCHLUTER	TRANSITION PROFILES FOR FLOORS	SCHIENE (RADIUS) AE 100 - R, SATIN ANODIZED ALUMINUM	3/8" - 10MM	CONTACT: ROSANNA RUIZ (786) 858-0010 - RRUIZ@SCHLUTER.COM NOTE: GC TO COORDINATE HEIGHT AS REQUIRED BASED UPON TILE THICKNESS AND SETTING SYSTEM
OUTDOOR TERRACE FLOOR							
CT-32G	CERAMIC TILE	OUTDOOR TERRACE FLOOR	CERAMICS TECHNICS	QUARTZITE	ALPES R11	24" x 24"	CONTACT: LYDIA KURTH (954) 520-4283 LKURTH@CERAMIC TECHNICS NOTE: USE WITH GR-6G (1/8" THICK)
GROUT							
GR-6G	GROUT	BACK OF HOUSE	LATICRETE	SPECTRALOCK 2000 IG	# 45 "RAVEN" (1/16" TH)		CONTACT: LOCAL SUPPLIER - KIRBY DAVIS (203) 671-7210 NOTE: USE WITH CT-10G, CT-11G & CT-35G LATICRETE HYDROBAN for waterproofing
			CUSTOM BUILDING PRODUCTS	CEG-IG INDUSTRIAL GRADE 100% SOLIDS EPOXY GROUT	#370 DOVE GRAY (1/16" TH)		CONTACT: LOCAL SUPPLER - LARRY MAURA (561) 543-6558 LAZARO.MAURA@CBPMAIL.NET NOTE: USE WITH CT-10G, CT-11G & CT-35G
GR-15G	GROUT	FIELD FLOOR TILE, BASE TILE, WAINSCOT TILE, BEVERAGE STATION WALL	CUSTOM BUILDING PRODUCTS	FUSION PRO SINGLE COMPONENT GROUT	# 335 WINTER GRAY (1/16" TH)		CONTACT: LOCAL SUPPLER - LARRY MAURA (561) 543-6558 LAZARO.MAURA@CBPMAIL.NET ***PROLITE® PREMIUM LARGE FORMAT TILE MORTAR -RAPID SETTING
			LATICRETE	PERMACOLOR	#60 DUSTY GRAY (1/16" TH)		CONTACT: CONTACT: LOCAL SUPPLIER - KIRBY DAVIS (203) 671-7210
GR-17G	GROUT	DINING, ACCENT TILE LIGHT WOOD	CUSTOM BUILDING PRODUCTS	FUSION PRO SINGLE COMPONENT GROUT	#145 LIGHT SMOKE (1/16" TH)		CONTACT: LOCAL SUPPLER - LARRY MAURA (561) 543-6558 LAZARO.MAURA@CBPMAIL.NET ***PROLITE® PREMIUM LARGE FORMAT TILE MORTAR -RAPID SETTING NOTE: USE WITH CT-28G @ WALLS ONLY
			LATICRETE	PERMACOLOR	#56 DESERT KHAKI (1/16" TH)		CONTACT: LOCAL SUPPLIER - KIRBY DAVIS (203) 671-7210 NOTE: USE WITH CT-28G @ WALLS ONLY
GR-18G	GROUT	SERVICE AREA WALL TILE, MENU BOARD, BEVERAGE STATION WALL	CUSTOM BUILDING PRODUCTS	FUSION PRO SINGLE COMPONENT GROUT	#543 DRIFTWOOD (1/8" TH)		CONTACT: LOCAL SUPPLER - LARRY MAURA (561) 543-6558 LAZARO.MAURA@CBPMAIL.NET NOTE: USE WITH CT-31G
			LATICRETE	PERMACOLOR	#78 STERLING SILVER (1/8" TH)		CONTACT: LOCAL SUPPLIER - KIRBY DAVIS (203) 671-7210 NOTE: USE WITH CT-31G
ACOUSTICAL CEILING							
ACT-1G	ACOUSTICAL CEILING TILE	DINING	ARMSTRONG	CORTEGA #770	PANEL COLOR: SEPIA EDGE: ANGLED TEGULAR 15/16 GRID: PRELUDE 15/16" EXPOSED TEE GRID COLOR: SEPIA	2' x 2' x 5/8"	CONTACT: LOUIS J. JOHN (407) 697-6768 LJJOHN@ARMSTRONGCEILINGS.COM ARMSTRONG STRATEGIC ACCOUNTS: (800) 442-4212 ARMSTRONGCSA@ARMSTRONGCEILINGS.COM
ACT-2G	ACOUSTICAL CEILING TILE	BACK OF HOUSE		#BP672 KITCHEN ZONE	PANEL COLOR: WHITE GRID: PRELUDE 15/16" EXPOSED TEE GRID COLOR: WHITE	2' x 4' x 1/2"	
ACT-2G	ACOUSTICAL CEILING TILE	BACK OF HOUSE	USG INTERIORS	SHEETROCK BRAND LAY-IN CEILING PANEL CLIMAPLUS #3270	PANEL COLOR: WHITE GRID: Donn DX/DXL GRID COLOR: WHITE	2' x 4' x 1/2"	CONTACT: JOHN FUNES (312) 436-5841 JFUNES@USG.COM
ACT-3G	ACOUSTICAL CEILING TILE	PLAYGROUND	ARMSTRONG	FINE FISSURED #1732	WHITE GRID: 2 x2 ANGLED TEGULAR 15/16 GRID COLOR: WHITE	2' X 2' X 3/4"	CONTACT: LOUIS J. JOHN (407) 697-6768 LJJOHN@ARMSTRONGCEILINGS.COM ARMSTRONG STRATEGIC ACCOUNTS: (800) 442-4212 ARMSTRONGCSA@ARMSTRONGCEILINGS.COM
ACT-3G UPGRADE	ACOUSTICAL CEILING TILE	PLAYGROUND		FINE FISSURED #1732	ADOBE GRID: 2 x2 ANGLED TEGULAR 15/16 GRID COLOR: ADOBE	2' X 2' X 3/4"	
ACT-3G	ACOUSTICAL CEILING TILE	PLAYGROUND	USG INTERIORS	WHITE RADAR CLIMA PLUS #2210	PANEL COLOR: WHITE GRID: Donn DX/DXL GRID COLOR: WHITE	2' X 2' X 3/4"	CONTACT: JOHN FUNES (312) 436-5841 JFUNES@USG.COM
ACT-3G UPGRADE	ACOUSTICAL CEILING TILE	PLAYGROUND		TAUPE RADAR CLIMA PLUS #2210	PANEL COLOR: TAUPE GRID: Donn DX/DXL GRID COLOR: TAUPE	2' X 2' X 3/4"	NOTE: USE PROGRAM QUOTE # 00103139 TO RECEIVE BK PRICING

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Fr. Campbell, KY
Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE: DESCRIPTION
10/21/22: PRICING UPDATE

DATE: 10/21/22

Interior Building Specifications

ID-12.2

11x17 SHEETS

BURGER KING- 20/20 GARDEN GRILL INTERIOR

INTERIOR MATERIALS & FINISH SCHEDULE **TO BE USED WITH 20/20 GARDEN GRILL GUIDELINES DOC.

9.20.22

CODE	MATERIAL	LOCATION	MANUFACTURER	DESCRIPTION			ADDITIONAL INFORMATION
				PRODUCT	COLOR	DIMENSION	
WALL FINISHES / PAINT							
BR-2G	FACE BRICK	GENERAL DINING/ ACCENT WALLS	PINEHALL BRICK	THIN BRICK (Use WITH EGR-1G)	OLD IRVINGTON	7-5/8" x 3-5/8" x 1/2"	CONTACT: PRESTON STEELE (PSTEELE@PINEHALLBRICK.COM (336)-399-7703) NOTE: USE WITH EGR-1G
			EVOLUTION BRICK	THIN BRICK (Use WITH EGR-1G)	"Olde Hillsboro" Mod/QS Tumbled (Full Brick) "Sierra Tumbled" (Thin Brick)	7-5/8" x 3-5/8" x 1/2"	CONTACT: GABE POWERS (502) 558-4612 gabe@evolutionbrick.com NOTE: USE WITH EGR-1G
EGR-1G	BRICK MORTAR	GENERAL DINING/ ACCENT WALLS	LEHIGH HANSON	(USE WITH BR-2G)	Ohio River Masonry Sand B-12C / C-244		CONTACT: GABE POWERS (502) 558-4612 GABE@EVOLUTIONBRICK.COM NOTE: USE WITH BR-2G
			ARGOS US		LITE BUFF		CONTACT: DONNIE HOWARD (919) 390-4962 DONNIE.HOWARD@ARGOS-US.COM NOTE: USE WITH BR-2G
P-4G	PAINT	INTERIOR DOOR FRAMES	PPG	PRIMER: 90-712 PITT TECH PAINT: 6-1510XI SPEEDHIDE INT/EXT WB ALKYD SEMI-GLOSS	ASHEN PPG1023-3		CONTACT: LOCAL SUPPLIER PPG REPRESENTATIVE: DANIEL J HUBER (713) 702-3636 DANIEL.HUBER@PPG.COM
P-5G	PAINT	INTERIOR UNDERSIDE OF CORRIDOR SOFFIT AND RESTROOM CEILING		PRIMER: 6-4900XI SPEEDHIDE ZERO INT LATEX SATIN PAINT: PPG 6-4310XI SPEEDHIDE ZERO INT ZERO VOC LATEX EGGSHELL	WHITE ON WHITE 30GY 88-014		
P-6G	PAINT	EXPOSED DECKING AND BAR JOISTS WALLS OVER SOFFIT		PRIMER: 17-921 - SEAL GRIP PAINT: PPG 6-417 SPEEDHIDE ZERO INT ZERO VOC LATEX EGGSHELL	CABIN FEVER PPG 1021-7		
P-15G	PAINT	INTERIOR WALLS		PRIMER: 6-2 PAINT: PPG 6-411	ASHEN PPG 1023-3		
P-16G	PAINT	INTERIOR SERVICE AREA DOOR FRAME		PRIMER: PAINT:	CAFÉ SIENNA		
P-17G	PAINT	HVAC AIR RETURN & REGISTERS LOCATED AT ACT-1G		PRIMER: 90-712 PITT TECH PAINT: 6-1540XI SPEEDHIDE INT/EXT WB ALKYD SEMI-GLOSS	GRANITE PPG 1022-6		
P-4G	PAINT	INTERIOR DOOR FRAMES	SHERWIN-WILLIAMS	PRIMER: ProCryl B66-310 PAINT: Pro Industrial WB Urethane Alkyd Enamel B53-1150 Semi-Gloss	BUNGALOW BEIGE SW 7511		CONTACT: LOCAL SUPPLIER SHERWIN WILLIAMS REPRESENTATIVE: GLENN J. REMLER (954) 547-1217 GLENN.J.REMLER@SHERWIN.COM
P-5G	PAINT	INTERIOR UNDERSIDE OF CORRIDOR SOFFIT AND RESTROOM CEILING		PRIMER: PM 200 0 VOC B28W2600 PAINT: PM 200 0 VOC B20W2600 Eggshell	EXTRA WHITE SW 7006		
P-6G	PAINT	EXPOSED DECKING AND BAR JOISTS		PRIMER: Multi Surface Acrylic B66-560 PAINT: Multi Surface Acrylic B66-560 Eggshell	WELL-BRED BROWN SW 7027		
P-15G	PAINT	INTERIOR WALLS/ SOFFIT		PRIMER: PM 200 0 VOC B28W2600 PAINT: PM 200 0 VOC B20W2600 Eggshell	BUNGALOW BEIGE SW 7511		
P-16G	PAINT	INTERIOR SERVICE AREA DOOR FRAME		PRIMER: ProCryl B66-310 PAINT: Pro Industrial WB Urethane Alkyd Enamel B53-1150 Semi-Gloss	GG ORANGE CUSTOM COLOR		
P-17G	PAINT	HVAC AIR RETURN & REGISTERS LOCATED AT ACT-1G		PRIMER: ProCryl B66-310 PAINT: Pro Industrial WB Urethane Alkyd Enamel B53-1150 Semi-Gloss	SEPIA CUSTOM COLOR		
WP-2G	WALL PANEL SYSTEM	GENERAL WAINSCOTING	MARLITE	ALLURE PANEL	Nevamar WF001 Macchiato X-Grain	8' x 4' Panels	CONTACT: CUSTOMER SERVICE (330) 343-6621 ANITA CRAIG (423) 506-6335 ACRAIG@MARLITE.COM
			CIM	ZLOCK	Nevamar WF001 Macchiato X-Grain	8' x 4' Panels	CONTACT: AUSTIN HOLAN (706)253-4761 AUSTIN@CIMGBIZ.COM

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Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE: DESCRIPTION
10/21/22: PRICE SET UPDATE

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Interior Building Specifications

ID-12.3

11x17 SHEETS

BURGER KING- 20/20 GARDEN GRILL INTERIOR

INTERIOR MATERIALS & FINISH SCHEDULE **TO BE USED WITH 20/20 GARDEN GRILL GUIDELINES DOC.

9.20.22

CODE	MATERIAL	LOCATION	MANUFACTURER	DESCRIPTION			ADDITIONAL INFORMATION
				PRODUCT	COLOR	DIMENSION	
FABRICS							
UPH-7G	UPHOLSTERY	SEATING (Booth/Settee) SEAT PADS	MAHARAM	LARIAT 440401	010 TAUPE		CONTACT: ZANDY RODON (404) 909-8444 ZRODON@MAHARAM.COM
UPH-10G	UPHOLSTERY	SEATING (Booth/Settee) BACK PADS & LOUNGE CHAIR		LARIAT 440401	007 OYSTER		
UPH-14G	UPHOLSTERY	LOUNGE CHAIR "COLLECTION OPTION"	CF STINSON	CASSIDY	CAS82 HOSTA		CONTACT: GLENN STINSON (248) 299-3800 GSTINSON@CFSTINSON.COM
METALS							
MF-1G	METAL FINISH POWDER COAT	FIXTURES AS NOTED	PER VENDOR		BLACKENED STEEL		PER VENDOR
MF-2G	METAL FINISH ALUMINUM	FIXTURES AS NOTED	PER VENDOR		FLAT BLACK ANODIZED		PER VENDOR
MF-3G	METAL FINISH ALUMINUM	SLAT PERGOLA SUPPORTS	PER VENDOR	POWDER COATED BROWN	MATCH P-6G (SLATE BROWN)		PER VENDOR
MF-4G	METAL FINISH ALUMINUM	DIVIDER SCREEN & SAUCE BAR	PER VENDOR	POWDER COATED	STATUARY BRONZE		PER VENDOR
SPECIALTY FINISHES AND TRIMS							
PL-9G	PLASTIC LAMINATE	PERMITER TABLES, DOORS, TRASH UNIT, RESTROOM DOORS & PARTITIONS	NEVAMAR	WK0017T	VERNERABLE OLD OAK		CONTACT: CUSTOMER SERVICE (877)726-6526 JOHN TRULOCK (JOHN_TRULOCK@PANOLAM.COM (407) 618-3732)
PL-15G	PLASTIC LAMINATE	TABLES / BOOTHS		WF0011T	MACCHIATO		
PL-16G	PLASTIC LAMINATE	TABLES		WZ2001T	SANTA ROSA PLUM TREE		
PL-17G	PLASTIC LAMINATE	TABLES		WF0013-T	CARAMEL MACCHIATO SUEDE		
PL-18G	PLASTIC LAMINATE	BEVERAGE STATION CABINET DOORS/ INNER SIDE OF WOOD SLAT PERGOLA/ INTERIOR SERVICE AREA ACCENT WALL & DOOR		SO3300 SD	CAFÉ SIENA		
PL-19G	PLASTIC LAMINATE	BOOTH BASE	PIONITE	SE101S	BLACK		
WS-1G	WOOD STAIN	SHELVING LOUNGE AREA	PER VENDOR	BALTIC BIRCH	CLEAR COATED		LOCAL DISTRIBUTOR
WS-2G	WOOD STAIN	COMMUNITY TABLE/ SAUCE BAR	PER VENDOR	WHITE OAK	CLEAR COATED		LOCAL DISTRIBUTOR
WS-3G	WOOD STAIN	TRELLIS SOFFIT	PER VENDOR	STAINED POPLAR WOOD	MATCH NEVAMAR SANTA ROSA PLUM TREE		LOCAL DISTRIBUTOR
SL-1G	SURF(X) 3D LAMINATE	TRELLIS SOFFIT	OMNOVA SOLUTIONS	SURF(X) 3D LAMINATES ON SUNTRAIT	ALMOND CHERRY	12 MIL (0.12)	CONTACT: CHERI RUKAVINA (404)971-8119 CHERI.RUKAVINA@OMNOVA.COM
MEB-1G	MULTIPLEX EDGE BAND	TABLES (STANDARD TABLE THICKNESS)	REHAU	PREMUIM EDGE BAND #52E MULTIPLEX		1-5/16" THICK	CONTACT: MEG HUIZENGA (616) 666-7932 MEG.HUIZENGA@REHAU.COM
MEB-2G	MULTIPLEX EDGE BAND	BOOTH EDGE PROTECTION	REHAU	NEVAMAR MACCHIATO CP41002	MATCH PL-15G (MACCHIATO)		
SOLID SURFACES							
SS-8G	SOLID SURFACE	FIXTURES AS NOTED TOP CAP/ SILL	DUPONT	CORIAN	DEEP NOCTURNE	30" x 144" x 1/2" THICKNESS	CONTACT: IDA SISIC (404) 444-3965 IDA.SISIC@DUPONT.COM
SS-9G	SOLID SURFACE	FSC / BEVERAGE COUNTER TOP (ALTERNATE TO MS-1G)	AVONITE	CUSTOM COLOR BK SMOKE	#7885	30" x 144" x 1/2" THICKNESS	CONTACT: BOB DAHL (BDAHL@ARISTECHSURFACES.COM (423) 290-4805)
			US SURFACES	LIVINGSTONE	STORM		CONTACT: ED ROGERS (505) 710-3999 EDR@USSURFACES.COM
MS-1G	MANUFACTURED STONE	FSC / BEVERAGE COUNTER TOP	SILESTONE	QUARTZ, VOLCANO TEXTURE	GREY EXPO	3/4" THICK	CONTACT: JENNIFER RYAN (305)-398-5700 JENNIFERR@COSENTINO.COM
			US SURFACES	VADARA	BRUSHED CEMENT	2 CM THICK	CONTACT: ED ROGERS (505) 710-3999 EDR@USSURFACES.COM
RESIN PANEL							
R-1G	RESIN	FSC SMOOTHIE SCREENS	3-FORM	PUNCH 021	VELLUM F04 FINISH FRONT & BACK	3/8" THICK	CONTACT: JULIANA SHARKEY (JULIANA.SHARKEY@3FORM.COM (954) 579-6545)

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Store #: 5705

Burger King
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DESIGNER: Nicole Jenkins

REVISION HISTORY
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10/21/22 PRICE SET UPDATE

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Interior Building Specifications

ID-12.4

11x17 SHEETS

* Low Profile Trellis / Pergola Design

BURGER KING 20/20 GARDEN GRILL INTERIOR

INTERIOR LIGHT FIXTURE SCHEDULE

1.5.22

LOW PROFILE TRELLIS

TYPE		VENDOR	CATALOG NO./NEW PART NO.	WATTAGE	COLOR TEMP	REMARKS
A		NAUTICAL	BK304 & SP30S-18-60D-927-03 LED EDISON STYLE 10 WATT	10	2700	SHAKER PENDANT LAMP
A1		NAUTICAL	BKGG-A2 CUSTOM PENDANT LIGHT RED LED CLEAR ANTIQUE STYLE 6 WATT	10	2700	RED PENDANT LIGHT
A2		NAUTICAL	BK-LT-11			GREEN CAST GUARD WAREHOUSE LIGHT
B		NAUTICAL	BK305 & LED 8W EDISON INCANDESCENT LED CLEAR ANTIQUE STYLE 6 WATT	6	2700K	BRONZE CAGE PENDANT LIGHT
B1		NAUTICAL	BK305 & LED 8W EDISON INCANDESCENT LED CLEAR ANTIQUE STYLE 6 WATT	6	2700K	BRONZE CAGE WALL SCONCE LIGHT
C4w		JUNO	SP36671-WHTRM	15	3000	1. 4" DIAMETER, WHITE, RECESSED DOWN LIGHT 2. TO BE USED WITH GWB CEILING
		CREE	CR4T-790L-27K-E26GU24	9.5	2700	
		ENERGYWISE	EWMLEDDL4IN	11	2700	
		SECURITY	LB4A 6L 30K 9 WH / IBXQL	9	3000	
C4b		JUNO	SP36671-BLTRM			1. 4" DIAMETER, BLACK, RECESSED DOWN LIGHT 2. TO BE USED WITH ACOUSTICAL CEILING TILES
		CREE	CR4T-690L-27K-E26GU24-/ CR4T-TRMBKBB-1	9.5	2700	
D4w		JUNO	SP36671G2 / 39 WWH	12.5	3000	1. 4" DIAMETER, WHITE, RECESSED DOWN LIGHT WALL WASHER 2. TO BE USED WITH GWB CEILING
		SECURITY	LBE4A 6L 30K 9 WH / IBXQL	9	3000	
D4b		JUNO	SP36671G2 / 39C BL RFD44875	12.5	3000	1. 4" DIAMETER, BLACK, RECESSED DOWN LIGHT WALL WASHER 2. TO BE USED WITH ACOUSTICAL CEILING TILES
E		JUNO	R600L3KNBZ	10	2700	TRACK LIGHT
G		JUNO	SP34378B-9-F1-SSN	10	3000	2" DIAMETER DOWN LIGHT, SATIN NICKEL FINISH
		ZANIBONI	D2LUNA20930A3CSNP0BK0P	9	3000	
G1		JUNO	SP34378A-930-F1-SN	10	3000	2" DIAMETER WALL WASHER, SATIN NICKEL FINISH
		ZANIBONI	D2LUN2O0930A3CSNP0BK0D	9	3000	

BURGER KING 20/20 GARDEN GRILL INTERIOR

INTERIOR LIGHT FIXTURE SCHEDULE

1.5.22

LOW PROFILE TRELLIS

TYPE		VENDOR	CATALOG N0./NEW PART NO.	WATTAGE	COLOR TEMP	REMARKS
I		CREE	C-TR-FP24-50L-40K-WH	42	4000	1. TO BE USED IN KITCHEN 2. 2x4 RECESSED
		SECURITY	LJT24-40-MLG-FSA-12-EU-C388	45	4000	
		LSI	SFP24 LED 50 UE DIM 40	50	4000	
		VAOPTO	VO-PL-2NW4-60	60	4100	
		ENERGYWISE	EWMLFP24EP4841	48	4100	
J		CREE	C-TR-FP14-37L-40K-WH	42	3500	1. FOR REMODELS ONLY 2. TO BE USED IN RESTROOMS 3. 1x4 RECESSED
		SECURITY	LJT14-35LWG-FSA12-EDU-C388	27	3500	
		LSI	SFP14 LED 40 UE DIM 35 FK14	40	3500	
		VAOPTO	VO-PL-1XWW4-50	50	3000	
		ENERGYWISE	EWMLFP14EP3535	35	3500	
PG		CREE	C-TR-FP22-31L-40K-WH	32	3500	1. TO BE USED IN LAYGROUND 2. 2x2 RECESSED
		SECURITY	LJT22-35MLG-FSA12 EU	35	3500	
		LSI	SFP22 LED 30 UE DIM 35 FK22	30	3500	
		VAOPTO	VO-PL-2XWW2-36	36	3000	
		ENERGYWISE	EWMLFP22EP3535	36	3500	
EM		CREE	C-EE-A-EMG-2L-88-REM-WH	11		EMERGENCY LIGHT
		SECURITY	CU2	1	3000	
		LSI	LTEMWH	(2) 1 LED		
		VAOPTO	VO-EM	2	5000	
		ENERGYWISE	EWCU2	1	3000	
EMX		CREE	C-EE-A-EX-2LDF-RED-BB	11		EXIT / EMERGENCY LIGHT
		SECURITY	CCRRC	4		
		LSI	LPRXRUWHLD11RL	(2) 1 LED		
		VAOPTO	VO-EMX-R1	2	5000	
		ENERGYWISE	EWCCR	4	3000	
WIB		CREE	WS4C-60L-LFA-50K-8-UL	55	5300	TO BE USED IN WALK IN BOX ONLY
		SECURITY	LXEM4-50ML-RFA-EU	53	5000	
		LSI	EGA5LRAUNV850	52	5300	
		VAOPTO	VO-TF-14W	32	5000	
		ENERGYWISE	EWMLED-LSV2XT8USE4806	36		
O		CREE	LS4-25L-35K-10V	23	3500	PLAYGROUND PENDANT LIGHT
O1		CREE	LS8-80L-35K-10V	88	3500	PLAYGROUND PENDANT LIGHT
T		TOOSHLIGHTS	MASTER FORMAT 26 55 10 LIGHTE: FULL COLOR, RBG LEDs POWER: POWER OVER ETHERNET (POE), LOWVOLTAGE DC. USE CAT 5 OR CAT 6, SHIELDED CABLE.	88	3500	RESTROOM WALL MOUNTED OCCUPANCY INDICATOR LIGHT

CONTACT INFORMATION

CREE	HERMITAGE	ENERGYWISE	JUNO / ACUITY BRANDS	SECURITY LIGHTING	NAUTICAL FURNISHINGS	LSI	VaOpto	ZANIBONI LIGHTING
ELVIR SULJIC	"MASTER CONSOLIDATOR"	JENNIFER WADDICK	BRETT D KINZLER	WHITNEY WATSON	MICHAEL HOGLUND	MIKE CONNOLLY	LINDA XU	JENNIFER MORRIS
262-884-3332	WYATT CULVER	877-225-1336	o847-813-8350 m 847-312-1578	630-550-9320	954-771-1100	404-927-3708	702-517-5789	727-213-0410
esuljic@creelighting.com	615-843-3379	jennifer@energywisemail.com	brett.kinzler@acuitybrands.com	quotations@securitylighting.com	mhoglund@nauticalfurnishings.com	mike.connolly@lsicorp.com	linda@vaopto.com	southeastusa@zaniboni lighting.com
	wculver@gohermitage.com							

NOTES

1. NOT ALL LIGHT FIXTURES TYPES SHOWN ON SCHEDULE MAY BE USED ON THIS PROJECT. REFER TO LIGHTING PLAN FOR PROJECT SPECIFIC TYPES AND QUANTITIES.
2. PENDANT FIXTURES "A" MUST BE CENTERED OVER TABLE TOPS. COORDINATE WITH DÉCOR DRAWINGS.
3. EXCEPT FOR DROPPED CEILING OPTION, ALL LIGHT FIXTURES IN DINING ROOM AREA & RESTROOM CORRIDOR ARE TO BE SUPPORTED FROM EXPOSED ROOF TRUSSES.
4. CONTRACTOR TO NOTIFY LIGHTING SUPPLIER OF THE FOLLOWING: FIXTURE TYPES "C" AND "D" WILL BE REQUIRED TO BE LENS AT THE LOCATIONS OVER THE SERVICE AREA AND OVER THE SELF-SERVE DRINK AREA. FIXTURE TYPE "I" WILL REQUIRE A LENS OR TUBE GUARD AT THOSE LOCATIONS.

SCI CREATE CUSTOM SPACE
125 Connell Ave
Rockdale, IL 60436
T: 815.730.7980

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Fr. Campbell, KY
Screaming Eagle Blvd.
Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE | DESCRIPTION
10/21/22 | PROJECT UPDATE

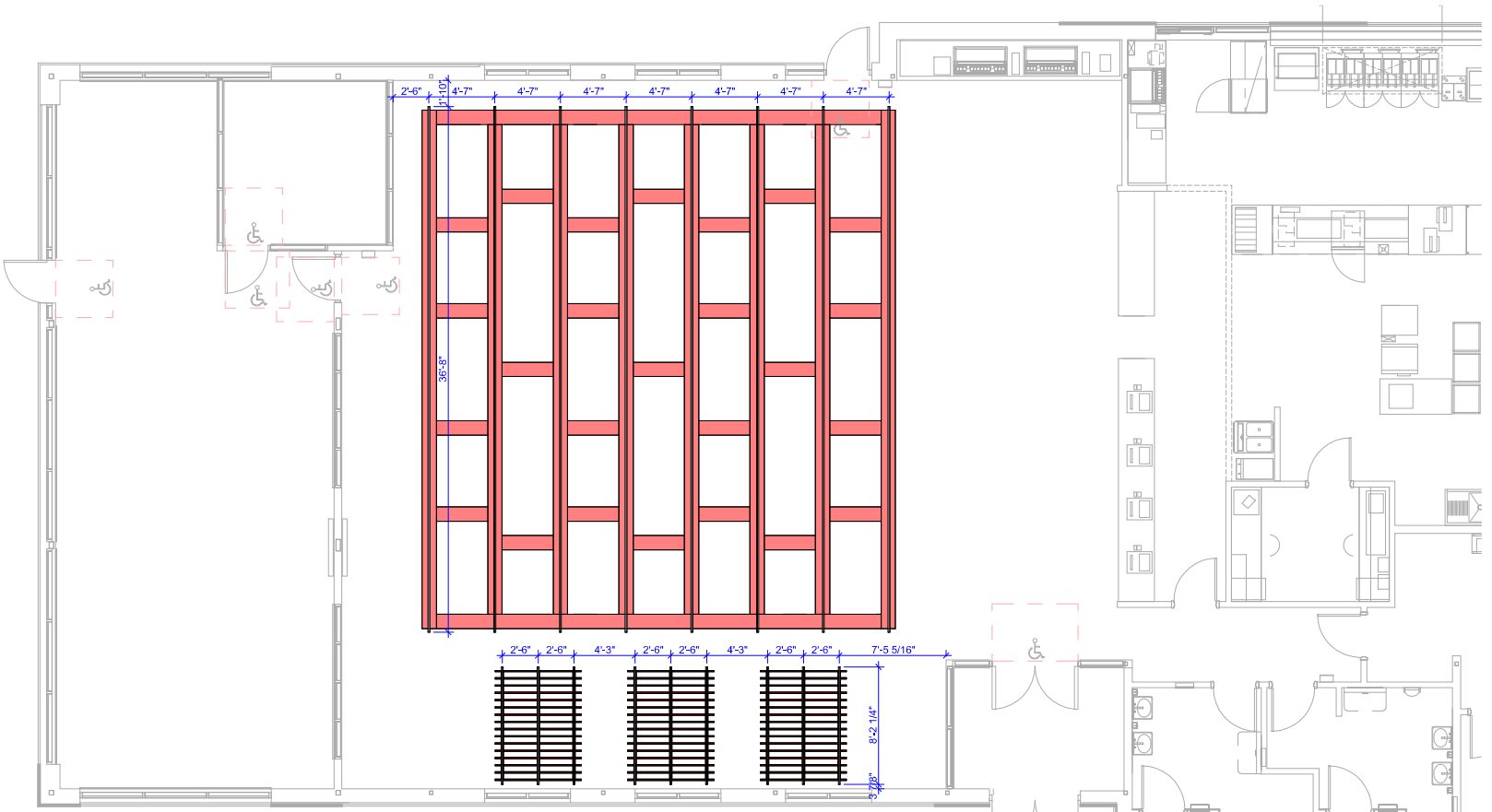
DATE: 10/21/22

Interior Lighting Specifications

ID-13.0

11x17 SHEETS

**G.C. IS RESPONSIBLE FOR PURCHASE & INSTALLATION OF THE UNISTRUT SYSTEM PRIOR TO ARRIVAL OF DECOR.
SCI WILL PROVIDE INSTALLATION INSTRUCTIONS PRIOR TO DECOR SHIPPING.**



1 ID-16 - Unistrut Layout
1/8" = 1'-0"

Unistrut Schedule	
Type	Unistrut Count
10'-0" Lengths	41

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DESIGNER: Nicole Jenkins

REVISION HISTORY		
DATE	DESCRIPTION	
10/21/22	PRICING UPDATE	

DATE: 10/21/22

Unistrut Layout

ID-14.0

11x17 SHEETS

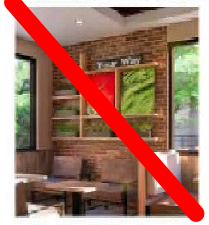
20/20 GARDEN GRILL ARTWORK & WAYFINDING SIGNAGE

COLLAGE WALL

HOME OF THE WHOPPER SIGN OPT 1, WITH INGREDIENT POSTERS

HOME OF THE WHOPPER SIGN OPT 2

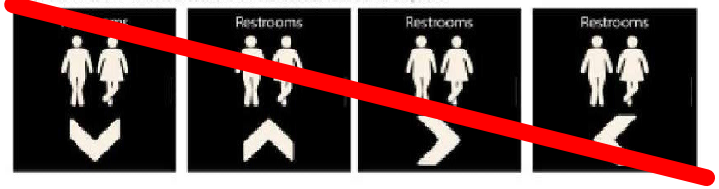
LOUNGE WALL SHELVES



INGREDIENT POSTERS

WAYFINDING RESTROOM PLAQUES

WAYFINDING DIRECTIONAL RESTROOM PLAQUES



WAYFINDING ADA RESTROOM SIGNS

HOURS OF OPERATION ENTRY DECAL

HOURS OF OPERATION EXIT DECAL

CREW MEMBERS MUST WASH HANDS SIGN

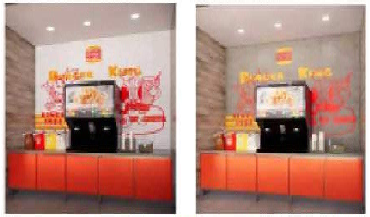
NO SMOKING SIGN

NO SMOKING DECAL

DOOR PUSH DECAL

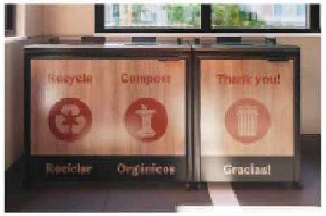
DOOR PULL DECAL

DRINK STATION VINYL DECALS

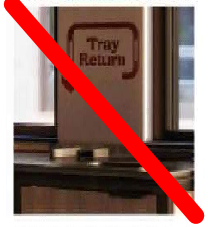


THE KING IS CALLING... RESTROOM DECAL

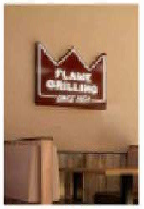
TRASH UNIT DECALS



TRAY RETURN DECAL



FLAME GRILLING SINCE 1954 BROWN CROWN LIT SIGN



MANIFESTO PANEL

FRESHLY SLICED ONIONS... KITCHEN DECAL

FLAME GRILLING SINCE 1954 METAL SIGN

WI-FI SIGN

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Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

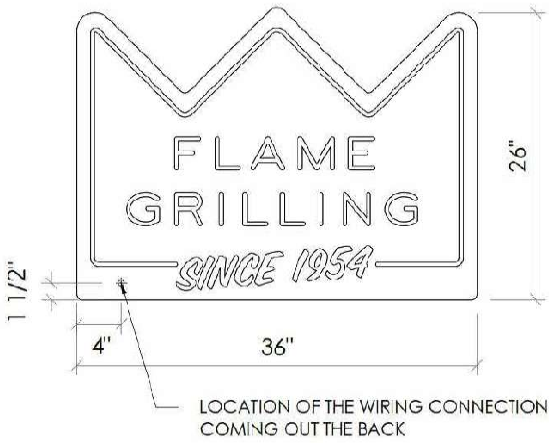
REVISION HISTORY
DATE | DESCRIPTION
10/21/22 | PRICING SET UPDATE

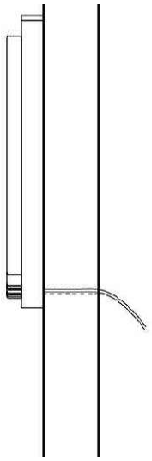
DATE: 10/21/22

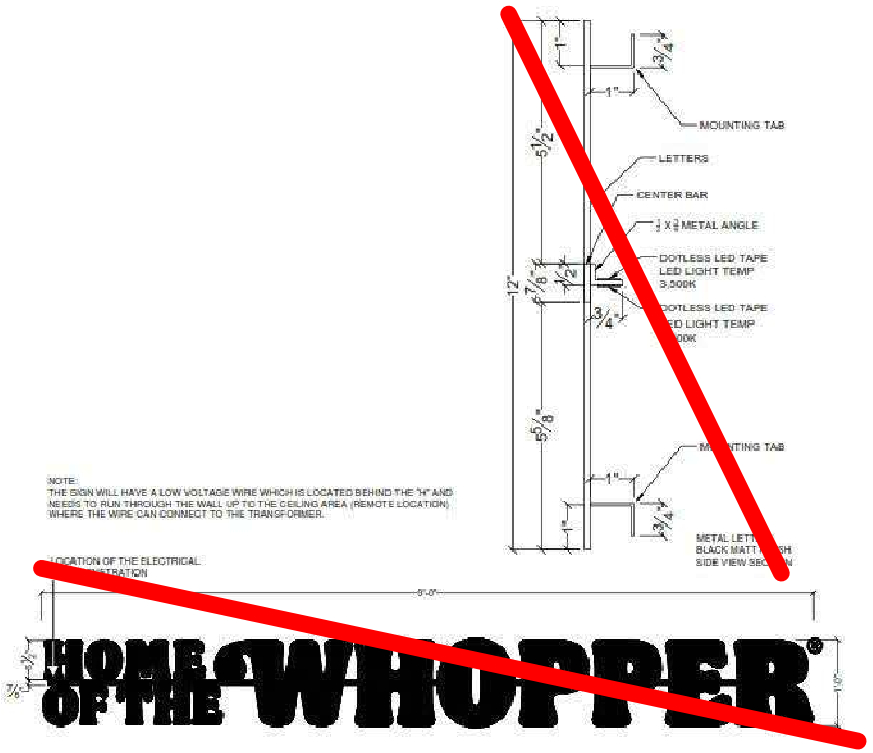
Graphic Details

ID-15.0

11x17 SHEETS







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Store #: 5705

Burger King
Garden Grill
AAFES

DESIGNER: Nicole Jenkins

REVISION HISTORY
DATE: DESCRIPTION
10/21/22: PROJECT INITIATE

DATE: 10/21/22

BURGER KING

Graphic Electrical Requirements

ID-15.1

11x17 SHEETS

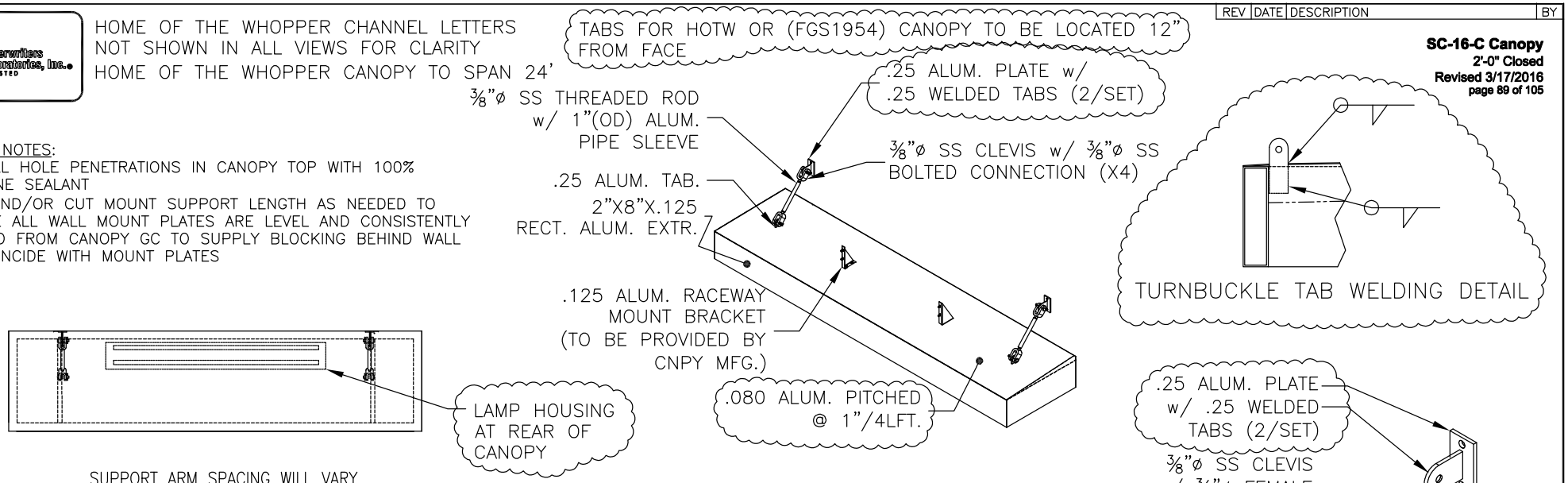
REV	DATE	DESCRIPTION	BY

SC-16-C Canopy
2'-0" Closed
Revised 3/17/2016

Underwriters Laboratories, Inc. LISTED

HOME OF THE WHOPPER CHANNEL LETTERS
NOT SHOWN IN ALL VIEWS FOR CLARITY
HOME OF THE WHOPPER CANOPY TO SPAN 24'

GENERAL NOTES:
CAULK ALL HOLE PENETRATIONS IN CANOPY TOP WITH 100% SILICONE SEALANT
ADJUST AND/OR CUT MOUNT SUPPORT LENGTH AS NEEDED TO INSURE ALL WALL MOUNT PLATES ARE LEVEL AND CONSISTENTLY SPACED FROM CANOPY GC TO SUPPLY BLOCKING BEHIND WALL TO COINCIDE WITH MOUNT PLATES



COLOR NOTE:
PAINTED BRUSHED ALUM. SILVER

Note: BURGER KING® or BURGER KING® Buns and Crescent Logo to use "®" for all locations globally. All other marks will use "TM".
BURGER KING® In the U.S. use the ® trademark symbol. The Burger King® trademark may not be registered in all countries. See "Legal Standards" for more information. For registration updates, please contact the legal department in Miami (305) 378-3080.

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Project Information
BURGER KING
Custom Exterior Signage Systems
File Burger King Design Doc RFP #1 Design – Date. 12/6/2011

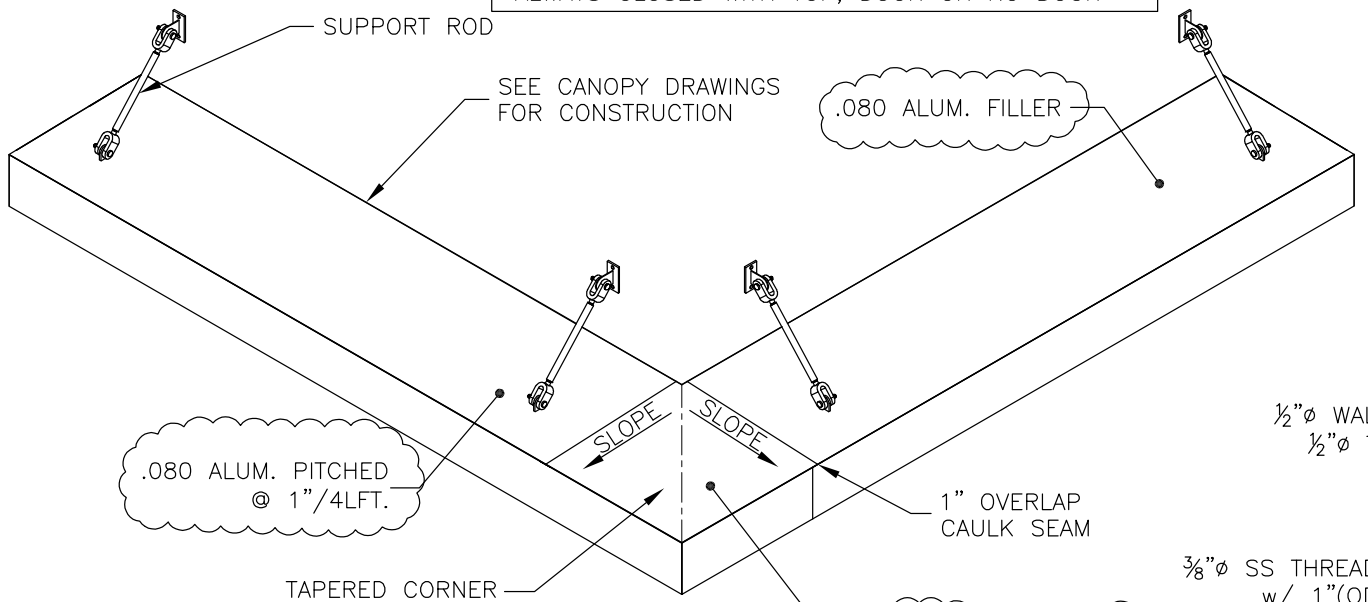
Client Review Status
Burger King requires that an "☑ Approved" drawing be obtained from the client prior to any production release or production release revision.
☐ Approved
☐ Revise & Resubmit
Name
Title
Date

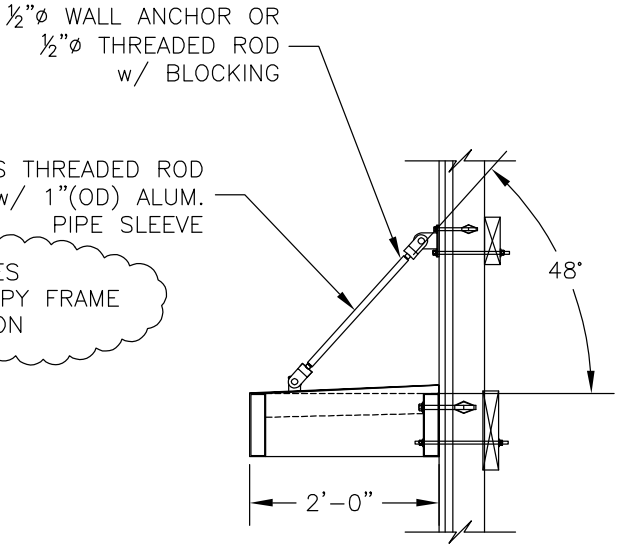
REV	DATE	DESCRIPTION	BY

Underwriters Laboratories, Inc.® LISTED

SC-16-C Canopy
Tapered Corner Canopy Detail
Revised 1/4/2016

NOTES:
–LENGTH VARIES DUE TO BUILDING SPECIFICATIONS
–MUST INSTALL ON RED AREA ONLY, NOT ON BLACK
–CORNER ARCHON CANOPIES ARE ALL 2'–0'' & ALWAYS CLOSED WITH TOP, DOOR OR NO DOOR





GENERAL AND INSTALL NOTES:
INSTALL TAPERED CORNER SUCCEEDING CANOPY INSTALLATION IN FIELD
CAULK ALL HOLE PENETRATIONS IN CANOPY TOP WITH 100% SILICONE SEALANT
ADJUST AND/OR CUT MOUNT SUPPORT LENGTH AS NEEDED TO INSURE CONSISTENT ANGLE FOR ALL CANOPY SUPPORT ARMS
ALL CANOPY WALL MOUNT PLATES TO BE LEVEL AND CONSISTENTLY SPACED FROM CANOPY
CANOPY MOUNT BLOCKING BY GC SHOULD BE CONSISTENTLY SPACED ON BUILDING TO INSURE PROPER AND CONSISTENT ANGLE OF CANOPY SUPPORT ROD

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Project Information
BURGER KING
Custom Exterior Signage Systems
File Burger King Design Doc RFP #1 Design -- Date. 12/5/2011

Client Review Status
Burger King requires that an "☑ Approved" drawing be obtained from the client prior to any production release or production release revision.

☐ Approved
☐ Revise & Resubmit

Name
Title Date

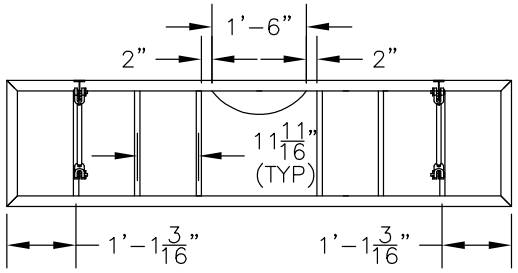
REV	DATE	DESCRIPTION	BY

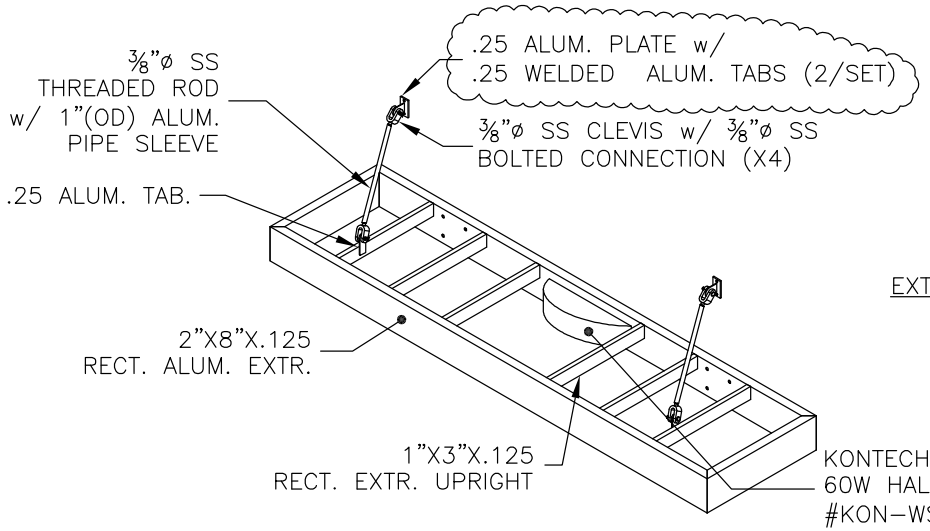
BY EXCEPTION ONLY

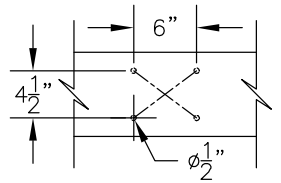
TABS TO BE LOCATED 6" FROM FACE EXCEPT HOME OF THE WHOPPER

SC-16-C Canopy
2'-0" Open
Revised 2/19/2016

GENERAL NOTES:
ADJUST AND/OR CUT MOUNT SUPPORT LENGTH AS NEEDED TO INSURE ALL WALL MOUNT PLATES ARE LEVEL AND CONSISTENTLY SPACED FROM CANOPY GC TO SUPPLY BLOCKING BEHIND WALL TO COINCIDE WITH MOUNT PLATES

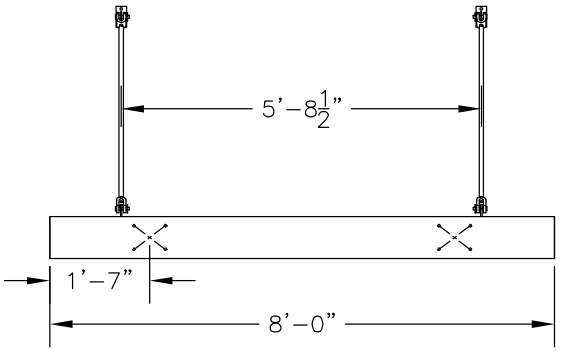


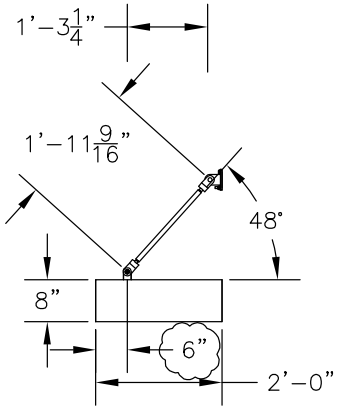


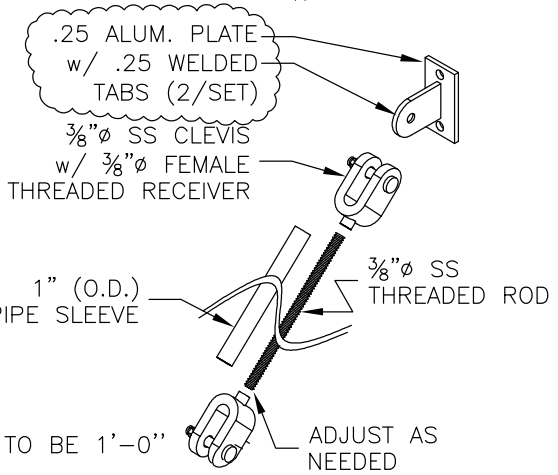


EXTR. WALL MOUNT HOLE PATTERN
SCALED: 2X

KONTECH USA LLC
60W HALF MOON WALL SCONCE
#KON-WS-60-XX
*See eRedbook for add'l suppliers







COLOR NOTE:
PAINTED BRUSHED ALUM. SILVER

NOTE:
FOR CANOPIES OVER 8'-0'' IN LENGTH, MAX SPACING OF INTERNAL BRACING TO BE 1'-0''

Note: BURGER KING® or BURGER KING® Buns and Crescent Logo to use "®" for all locations globally. All other marks will use "TM".
BURGER KING ® in the U.S. use the ® trademark symbol. The Burger King ® trademark may not be registered in all countries. See "Legal Standards" for more information. For registration updates, please contact the legal department in Miami (305) 378-3080.

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Project Information
BURGER KING
Custom Exterior Signage Systems
File Burger King Design Doc RFP #1 Design -- Date. 12/5/2011

Client Review Status
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☐ Approved
☐ Revise & Resubmit

Name
Title Date

REV	DATE	DESCRIPTION	BY

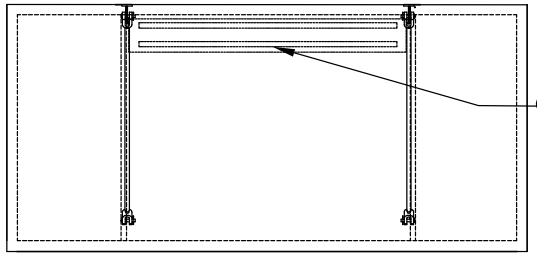
Underwriters Laboratories, Inc. LISTED

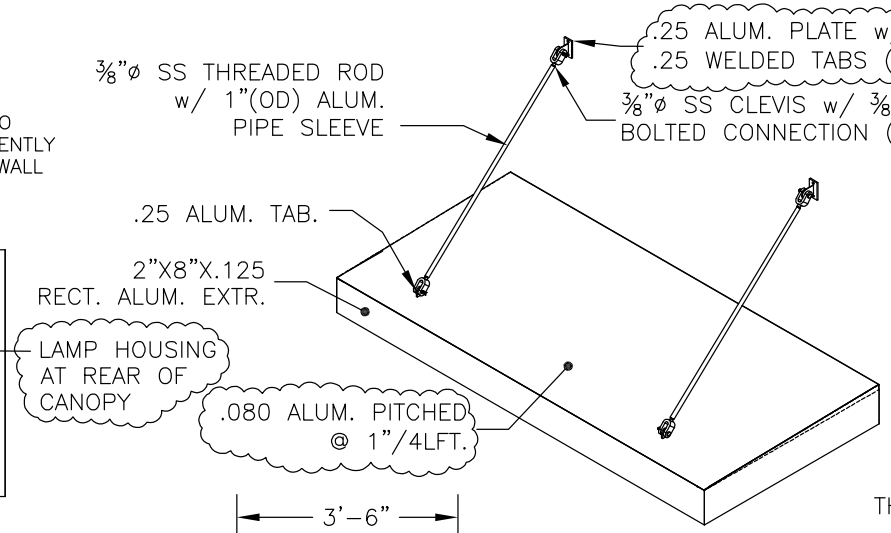
FOR HIGH SNOW AREAS **ONLY** ADD $1\frac{1}{2}$"X$1\frac{1}{2}$" ALUM ANGLE FLASHING

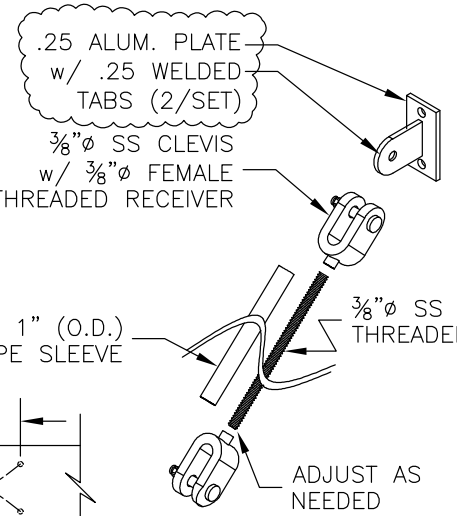
TABS TO BE LOCATED 6" FROM FACE EXCEPT HOME OF THE WHOPPER

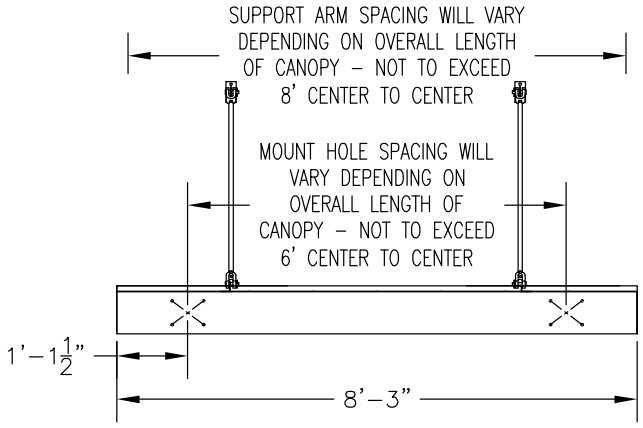
SC-16-C Canopy
4'-0" Closed
Revised 2/19/2016

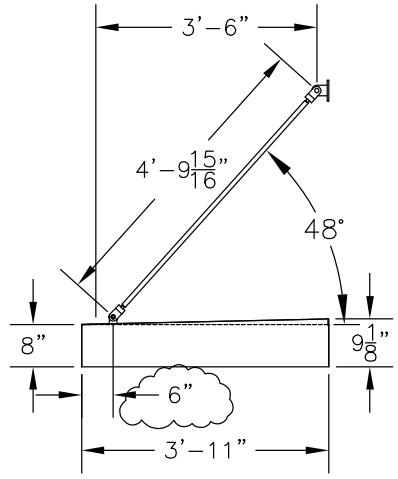
GENERAL NOTES:
CAULK ALL HOLE PENETRATIONS IN CANOPY TOP WITH 100% SILICONE SEALANT
ADJUST AND/OR CUT MOUNT SUPPORT LENGTH AS NEEDED TO INSURE ALL WALL MOUNT PLATES ARE LEVEL AND CONSISTENTLY SPACED FROM CANOPY GC TO SUPPLY BLOCKING BEHIND WALL TO COINCIDE WITH MOUNT PLATES

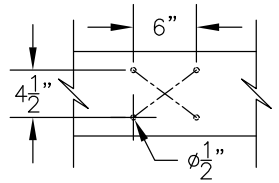












EXTR. WALL MOUNT HOLE PATTERN
SCALED: 2X

COLOR NOTE:
PAINTED BRUSHED ALUM. SILVER

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Project Information
BURGER KING
Custom Exterior Signage Systems
File Burger King Design Doc RFP #1 Design – Date. 12/8/2011

Client Review Status
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☐ Revise & Resubmit
Name
Title
Date

VOLUME III

EXISTING FACILITY PHOTOGRAPHS

NOTE: THESE PHOTOGRAPHS ARE FOR INFORMATION ONLY AND NOT INTENDED TO REPLACE A PRE-BID SURVEY TRIP AS REQUIRED BY OTHER SECTIONS OF THE CONTRACT DOCUMENTS.

ORDER HERE
2022. 9. 20 2:50

2022. 9. 20 2:51

2022. 9. 20 2:39

2022 9 20 2:50

2022. 9. 20 2:51

2022. 9. 20 2:39

CLEARANCE 8'-6"
2022 9 20 2 49

2022. 9. 20 2:51

2022 9 20 2 39

SAVE
10%
EVERYDAY!
2022 9 20 2 40

2022 9 20 2 40

2022 9 20 2 46

BURGER KING
2022 9 20 2:40

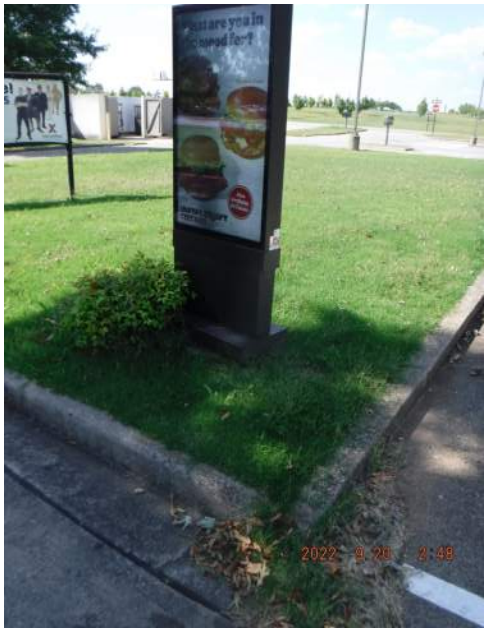
2022 9 20 2 40

DRIVE
THRU
BURGER KING
2022 9 20 2 43

BURGER KING
2022 9 20 2 40

2022 9 20 2 40

2022 9 20 2 42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2022. 9. 20 2:47

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BURGER KING

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BURGER KING
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BURGER KING
2022 9 20 2 43

2022. 9 20 2 45

ICE
$1.00
2022. 9. 20 3:00

BURGER KING
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BURGER KING
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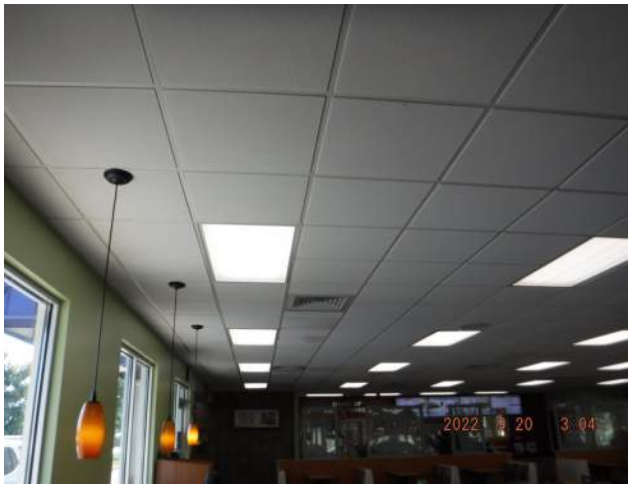

thirsty
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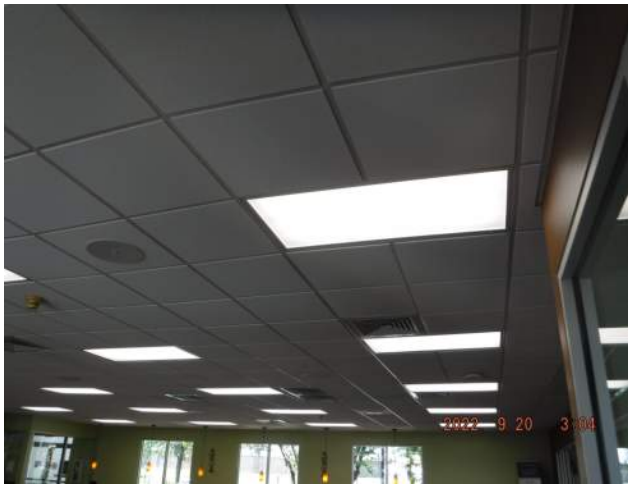
UNLOCK SECRET DEALS
2022. 9.20 3:05

HOME OF THE WHOPPER
2022. 9.20 3:06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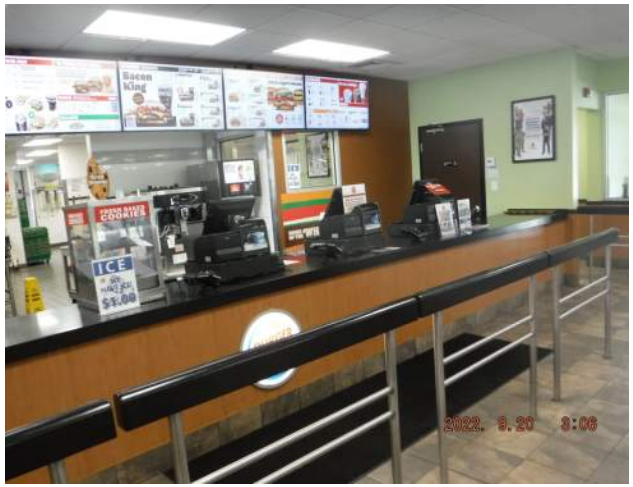
Bacon King
ICE
$5.00
2022. 9.20 3:06

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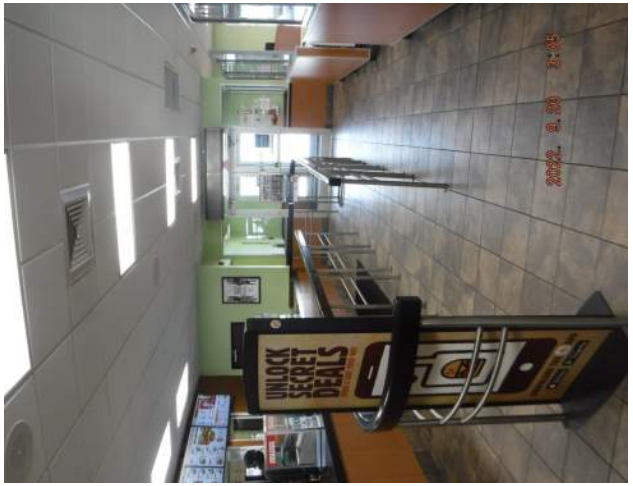
UNLOCK SECRET DEALS

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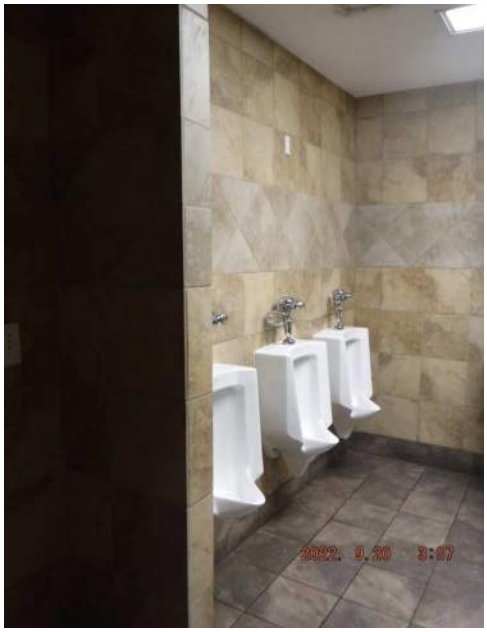
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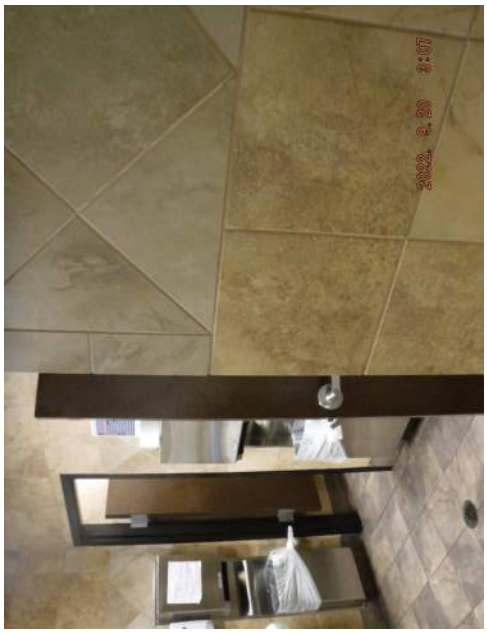
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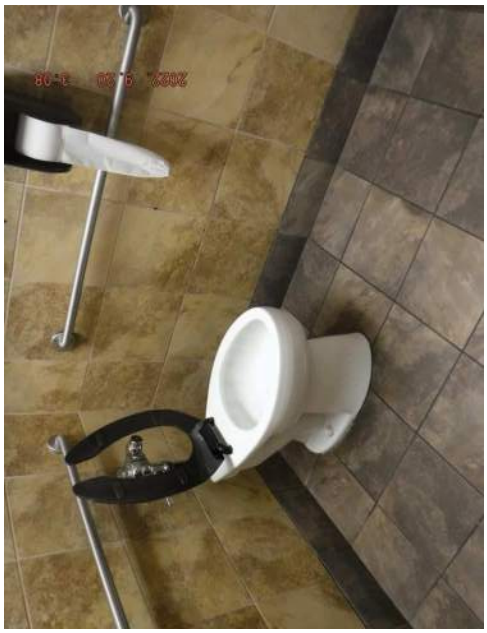

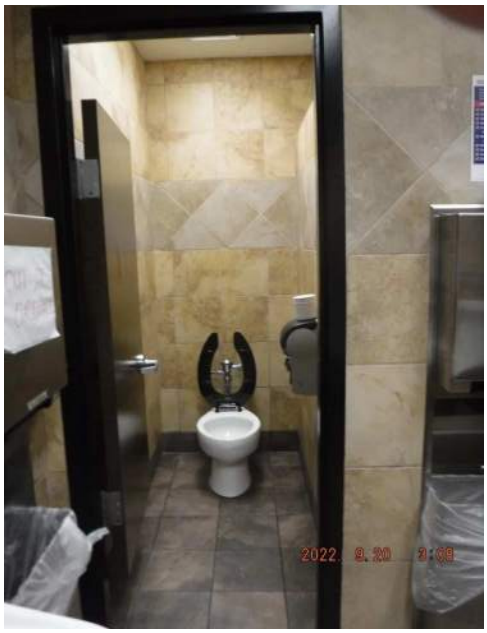
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