

PROJECT MANUAL
September 25, 2023

MHA-05-B-2023
NEW OFFICES FOR HCV AT THE GM&O BUILDING
MOBILE HOUSING AUTHORITY
110 Beauregard Street, Mobile, AL 36602

ASA NO.: 2023-45

FOR
MOBILE HOUSING AUTHORITY
PO BOX 1345, MOBILE, AL 36633-1345
151 SOUTH CLAIBORNE STREET, MOBILE, AL 36602

BID DATE: October 9, 2023
10:00 am, local time



**allred
stolarski
architects**

Allred Stolarski Architects
711 Church Street
Ocean Springs, MS 39564

605 Bel Air Blvd., Suite 11
Mobile, AL 36606

INDEX TO SPECIFICATIONS

INVITATION FOR BID	
TITLE SHEET	
BID FORM (PHA) (Updated)	1/3
INSURANCE COVERAGE CHECKLIST	1/1
PROFILE OF FIRM FORM	1/2
NON-COLLUSIVE AFFIDAVIT OF PRIME BIDDER	1/1
NON-COLLUSIVE AFFIDAVIT OF SUB-CONTRACTOR	1/1
PREVIOUS PARTICIPATION CERTIFICATION AND INSTRUCTIONS	1/4
INSTRUCTIONS TO BIDDERS FOR CONTRACTS PUBLIC AND INDIAN HOUSING PROGRAMS	1/4
GENERAL CONDITIONS FOR CONSTRUCTION CONTRACTS PUBLIC HOUSING PROGRAMS	1/19
SUPPLEMENTAL CONDITIONS TO FORM 5370 GENERAL CONDITIONS FOR CONSTRUCTION	1/4
REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF BIDDERS-PUBLIC AND INDIAN HOUSING PROGRAMS	1/3
DIVISION 1 GENERAL REQUIREMENTS	1/11
02110 SELECTIVE DEMOLITION	1/2
05410 METAL STUD SYSTEMS	1/2
06100 ROUGH CARPENTRY	1/3
06200 FINISH CARPENTRY	1/6
07200 BATT INSULATION	1/2
07900 JOINT SEALANTS	1/3
08100 HOLLOW METAL WORK	1/2
08140 FLUSH WOOD DOORS	1/5
08700 FINISH HARDWARE	1/7
08800 GLAZING	1/2
09250 GYPSUM WALLBOARD	1/5
09500 ACOUSTICAL CEILING SYSTEMS	1/2
09600 TILE CARPETING	1/3
09900 PAINTING	1/4

10522	FIRE EXTINGUISHERS, CABINETS & ACCESS.	1 /3
12241	MANUAL ROLLER SHADES	1 /5
16000	BASIC ELECTRICAL REQUIREMENTS	1/7
16100	WORK IN EXISTING FACILITIES	1/3

INVITATION FOR BID

Mobile Housing Authority (“MHA”) has issued the following Invitation for Bid (“IFB”) and is soliciting bids from qualified firms interested in providing services in response to the following IFB.

New Offices for HCV at the GM&O Building. (MHA-05-B-2023) – Mobile Housing Authority is soliciting bids from qualified firms interested in providing for New Offices for the HCV at the GM&O Building.

All work shall be performed in accordance with the Drawings and Specifications prepared by the Architect: Allred Stolarski Architects.

Bids will be opened and read publicly at the aforementioned time.

Bid Submission Due Date for the IFB Listed: October 9, 2023 at 10:00A.M., CST

Bids will be submitted at Mobile Housing Authority, Real Properties Building, 1555-B Eagle Drive, Mobile, Alabama 36605.

A Bid packet may be downloaded at procurement.mobilehousing.org. All communications regarding the IFB shall be in writing.

All bidders must submit any questions electronically to MHA at procurement.mobilehousing.org on or before the submission deadline date.

1.1 Communications

All communications regarding this IFB shall be in writing and must be submitted through MHA’s procurement website.

NOTICE: Unauthorized contact regarding this IFB with other employees of MHA may result in disqualification from this procurement action.

All procurement actions facilitated by MHA will be conducted in an open, transparent and competitive manner. MHA supports solicitation of proposals and bids from all markets and gives qualified businesses, including those that are owned by minorities, women, small business enterprises, and Section 3 opportunities to do business with MHA as Contractors and Subcontractors.

Each bid is subject to the budget and fiscal provisions under which MHA operates and award of any contract(s) and/or subsequent task order(s) will be subject to funding availability and MHA’s determination of its needs.

MOBILE HOUSING AUTHORITY

BY: Michael E. Pierce, Chief Executive Officer

MHA

Mobile Housing Authority

Accommodate | Illuminate | Elevate

TDD/TTY 1-800-545-1833, EXTENSION 824

www.mobilehousing.org

SOLICITATION TYPE:	Invitation for Bid (“IFB”)
SOLICITATION IDENTIFICATION NUMBER:	MHA-05-B-2023
SOLICITATION TITLE:	New Offices for the HCV at the GM&O Building
ISSUE DATE:	September 25, 2023
CLARIFICATION INQUIRIES METHOD OF SUBMISSION:	http://procurement.mobilehousing.org
CLARIFICATION QUESTIONS & INQUIRIES DEADLINE:	October 4, 2023, by 2:00 P.M., CST
PRE-BID MEETING\ LOCATION	September 29, 2023, @ 10:00 A.M.. CST GM&O Building 110 Beauregard St. Mobile, AL 36602
BID DUE DATE AND TIME	October 9, 2023, by 10:00 A.M., CST
METHOD OF SUBMISSION	Interested bidders shall furnish (1) original bid Package in a sealed envelope clearly marked "New Offices for HCV at the GM&O Building." Attention: Tuwana Williams, Purchasing Agent"

BID FORM (PHA) Updated
Michael Pierce, Chief Executive Officer
Mobile Housing Authority
PO Box 1345, Mobile, AL 36633-1345

Date: _____
From: _____ (Full Name)
_____ (Full Address)
_____ (Telephone)

**Re: MHA-05-B-2023
NEW OFFICES FOR THE HCV AT THE GM&O BUILDING
MOBILE HOUSING AUTHORITY**

1. BASE BID:

Having examined the Place of Work and all matters referred to in the Instructions to Bidders, Bid Documents, and Contract Documents prepared by the Housing Authority, for the above mentioned project, we the undersigned, hereby offer to enter into a Contract to perform the work in the quantities described and outlined in the Scope of Work

My **Base Bid** for the indicated scope of work is: \$ _____ *(Numerical)*
\$ _____
_____ *(In Words)*

We propose that it will take Sixty (60) days to complete the project described above.

2. ALTERNATE (s):

Deductive Alternate – Field verify existing emergency lighting conditions. Provide emergency lighting fixtures if existing emergency is not functional. Connect emergency fixture to existing nearby circuit. Suspend at level of existing suspended light fixtures. Provide junction box and rigid support as required.

My **Alternate** for the indicated scope of work is: \$ _____ *(Numerical)*
\$ _____
_____ *(In Words)*

3. ACCEPTANCE:

The offer shall be open to acceptance and is irrevocable for sixty (60) days from the bid closing date.

If this bid is accepted by the Owner within the time period stated above, we will:

1. Execute the Agreement within seven (7) days of Receipt of Notice of Award.
2. Provide assurance of completion prior to execution of the Agreement.
3. Commence work with seven (7) days after written Notice to Proceed is issued.

3. ADDENDA:

The following addenda have been received. The modifications to the Contract Documents noted therein have been considered and all costs there to, are included in the Bid Price.

No. _____ Dated: _____ No. _____ Dated: _____

4. REQUIREMENTS, (PROVIDED IN PACKAGE)

- Provide Bid Guarantee of not less than 5% of the Bid amount See clause 9 of HUD Form 5369 "Instructions to Bidders for Contracts" Certifications and Other Statements of Bidders", for specifics.
- Provide a list of Subcontractors (to be returned completed, with Bid Submittal).
- Provide Previous Participation Certificate. (To be returned completed with Bid Submittal). See HUD Form 5369-A, Clause 12 for Specifics.
- Review General Conditions of the Contract for Construction
- Provide Supplemental Conditions and sign agreement.
- Provide completed "Non-Collusive Affidavit", see Clause 1 of "Representations, Certifications and Other Statements of Bidders" for specifics A blank Non-Collusive Affidavit is provided in the Bid Package.
- Provide completed HUD Form 5369-A "Representations, Certifications and Other Statements of Bidders". (to be returned completed, with Bid Submittal)
- Review Instructions to Bidders for Contracts for Public & Indian Housing Programs. (HUD-5369)

5. REQUIREMENTS TO BE FILED BY SUCCESSFUL BIDDER PRIOR TO EXECUTION OF AGREEMENT.

- Provide a Schedule of Values indicating the major areas of the Work on each area of the Work.
- Be Licensed and Bonded in the City and/or County in which the Work is to be performed.
- Provide proof of insurance as required in HUD Form 5370, Clause 36 at \$1,000,000 General Liability and \$1,000,000 Automobile Liability, and Workers Compensation.
- Obtain and pay Federal, State, County or other permits or fees required by law to complete the project.
- Performance & Payment Bond: Upon award of the contract, the successful bidder shall execute separate, "Performance & Payment Bonds". Each in the amount of 100% of the total bid price.
- Provide Assurance of Completion, if awarded the Contract. See clause 10 of HUD Form 5369.

6. Bid Form Signatures:

The Corporate Seal of

(Bidder – please print the full name of your Proprietorship, Partnership, or Corporation)

Was hereto affixed in the presence of:

(Authorized Signing Officer)

(Title)

(Authorized Signing Officer)

(Title)

(Address)

(Phone Number)

MOBILE HOUSING AUTHORITY

INSURANCE COVERAGE CHECKLIST

TO THE PROPOSER:

Please list the amount of insurance coverage that your firm currently carries.

INSURANCE COVERAGES	LIMITS	NAME OF CO.
1.0 Workers Compensation	_____	_____
2.0 Employers Liability	_____	_____
3.0 General Liability	_____	_____
4.0 Automobile Liability	_____	_____
5.0 Ind. Contractor Liability	_____	_____
6.0 Personal Injury	_____	_____
7.0 Professional Liability	_____	_____

Please provide a contact person and phone number for each type of insurance carried by your firm.

PROPOSER'S STATEMENT

I understand the insurance requirements and will comply in full if awarded the contract.

Signature Date

Name (Printed or typed)

PROFILE OF FIRM FORM

- (1) Prime ____ Sub-contractor ____ (This form must be completed by and for each).
- (2) Name of Firm: _____ Telephone: _____ Fax: _____
- (3) Street Address, City, State, Zip: _____
- (4) Please attached a brief biography/resume of the company, including the following information:
 (a) Year Firm Established; (b) Year Firm Established in [JURISDICTION]; (c) Former Name and Year Established (if applicable); (d) Name of Parent Company and Date Acquired (if applicable).

(5) Identify Principals/Partners in Firm:

NAME	TITLE	% OF OWNERSHIP

(6) Identify the individual(s) that will act as project manager and any other supervisory personnel that will work on project. (Do not duplicate any resumes required above):

NAME	TITLE

(7) Proposer Diversity Statement: You must circle all of the following that apply to the ownership of this firm and enter where provided the correct percentage (%) of ownership of each:

- | | | | |
|---|---|---|---|
| <input type="checkbox"/> Caucasian
American (Male)
_____% | <input type="checkbox"/> Public-Held
Corporation
_____% | <input type="checkbox"/> Government
Agency
_____% | <input type="checkbox"/> Non-Profit
Organization
_____% |
|---|---|---|---|

Resident- (RBE), Minority- (MBE), or Woman-Owned (WBE) Business Enterprise (Qualifies by virtue of 51% or more ownership and active management by one or more of the following:

- | | | | | | | |
|--|--|---|---|--|---|---|
| <input type="checkbox"/> Resident-
Owned*
_____% | <input type="checkbox"/> African
American
_____% | <input type="checkbox"/> **Native
American
_____% | <input type="checkbox"/> Hispanic
American
_____% | <input type="checkbox"/> Asian/Pacific
American
_____% | <input type="checkbox"/> Hasidic
Jew
_____% | <input type="checkbox"/> Asian/Indian
American
_____% |
|--|--|---|---|--|---|---|

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Woman-Owned
(MBE)
_____% | <input type="checkbox"/> Woman-Owned
(Caucasian)
_____% | <input type="checkbox"/> Disabled
Veteran
_____% | <input type="checkbox"/> Other (Specify):
_____% |
|---|---|--|---|

WMBE Certification Number: _____

Certified by (Agency): _____

(NOTE: A CERTIFICATION/NUMBER NOT REQUIRED TO PROPOSE - ENTER IF AVAILABLE)

Signature	Date	Printed Name	Company
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PROFILE OF FIRM FORM

- (8) Federal Tax ID No.: _____
- (9) [APPROPRIATE JURISDICTION] Business License No.: _____
- (10) State of _____ License Type and No.: _____
- (11) Worker's Compensation Insurance Carrier: _____
Policy No.: _____ Expiration Date: _____
- (12) General Liability Insurance Carrier: _____
Policy No. _____ Expiration Date: _____
- (13) Professional Liability Insurance Carrier: _____
Policy No. _____ Expiration Date: _____
- (14) Debarred Statement: Has this firm, or any principal(s) ever been debarred from providing any services by the Federal Government, any state government, the State of _____, or any local government agency within or without the State of _____? Yes No
If "Yes," please attach a full detailed explanation, including dates, circumstances and current status.
- (15) Disclosure Statement: Does this firm or any principals thereof have any current, past personal or professional relationship with any Commissioner or Officer of the HA? Yes No
If "Yes," please attach a full detailed explanation, including dates, circumstances and current status.
- (16) Non-Collusive Affidavit: The undersigned party submitting this proposal hereby certifies that such proposal is genuine and not collusive and that said proposer entity has not colluded, conspired, connived or agreed, directly or indirectly, with any proposer or person, to put in a sham proposal or to refrain from proposing, and has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference, with any person, to fix the proposal price of affiant or of any other proposer, to fix overhead, profit or cost element of said proposal price, or that of any other proposer or to secure any advantage against the HA or any person interested in the proposed contract; and that all statements in said proposal are true.
- (17) Verification Statement: The undersigned proposer hereby states that by completing and submitting this form he/she is verifying that all information provided herein is, to the best of his/her knowledge, true and accurate, and agrees that if the HA discovers that any information entered herein is false, that shall entitle the HA to not consider nor make award or to cancel any award with the undersigned party.

Signature **Date** **Printed Name** **Company**

NON-COLLUSIVE AFFIDAVIT OF PRIME BIDDER

State of: _____

County of: _____

_____, being first duly sworn, deposes and says that:

- (1) He is _____ of _____
(Owner, Partner, Representative, Agent) (Company)
The Bidder that has submitted the attached bid;
- (2) He is full informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representative, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid had been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against Mobile Housing Authority, or any person interested in the proposed Contract; and
- (5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agent, representative, owners, employees, or parties in interest, including this affiant.

Signed: _____

Print Name: _____

Title: _____

Subscribed and sworn to before me this: _____ Day _____ Month _____ Year

Notary Public (signature)

My Commission expires: _____

NON-COLLUSIVE AFFIDAVIT OF SUBCONTRACTOR

State of: _____

County of: _____

_____, being first duly sworn, deposes and says that:

- (1) He is _____ of _____
(Owner, Partner, Representative, Agent) (Company)
The Bidder that has submitted the attached bid;
- (2) He is full informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representative, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid had been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against Mobile Housing Authority, or any person interested in the proposed Contract; and
- (5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agent, representative, owners, employees, or parties in interest, including this affiant.

Signed: _____

Print Name: _____

Title: _____

Subscribed and sworn to before me this: _____ Day _____ Month _____ Year

Notary Public (signature)

My Commission expires: _____

Previous Participation Certification

U.S. Department of Housing and Urban Development
Office of Housing/Federal Housing Commissioner

U.S. Department of Agriculture
Farmers Home Administration

OMB Approval No. 2502-0118
(exp. 9/30/2009)

Part I To be completed by Principals of Multifamily Projects. See Instructions Reason for Submitting Certification

For HUD HQ/FmHA use only

1. Agency Name and City where the application is filed

2. Project Name, Project Number, City and Zip Code contained in the application

3. Loan or Contract Amount

4. Number of Units or Beds

5. Section of Act

6. Type of Project (check one)

Existing

Rehabilitation

Proposed (New)

List of All Proposed Principal Participants

7. Names and Addresses of All Known Principals and Affiliates (people, businesses & organizations) proposing to participate in the project described above. (list names alphabetically; last, first, middle initial)

8. Role of Each Principal in Project

9. Expected % Ownership Interest in Project

10. Social Security or IRS Employer Number

Certifications: I (meaning the individual who signs as well as the corporations, partnerships or other parties listed above who certify) hereby apply to HUD or USDA-FmHA, as the case may be, for approval to participate as a principal in the role and project listed above based upon my following previous participation record and this Certification.

I certify that all the statements made by me are true, complete and correct to the best of my knowledge and belief and are made in good faith, including the data contained in Schedule A and Exhibits signed by me and attached to this form.

Warning: HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010, 1012; 31 U.S.C. 3729, 3802)

I further certify that:

1. Schedule A contains a listing of every assisted or insured project of HUD, USDA-FmHA and State and local government housing finance agencies in which I have been or am now a principal.

2. For the period beginning 10 years prior to the date of this certification, and except as shown by me on the certification.

- a. No mortgage on a project listed by me has ever been in default, assigned to the Government or foreclosed, nor has mortgage relief by the mortgagee been given;
- b. I have not experienced defaults or noncompliances under any Conventional Contract or Turnkey Contract of Sale in connection with a public housing project;
- c. To the best of my knowledge, there are no unresolved findings raised as a result of HUD audits, management reviews or other Governmental investigations concerning me or my projects;
- d. There has not been a suspension or termination of payments under any HUD assistance contract in which I have had a legal or beneficial interest;
- e. I have not been convicted of a felony and am not presently, to my knowledge, the subject of a complaint or indictment charging a felony.

(A felony is defined as any offense punishable by imprisonment for a term exceeding one year, but does not include any offense classified as a misdemeanor under the laws of a State and punishable by imprisonment of two years or less);

- f. I have not been suspended, debarred or otherwise restricted by any Department or Agency of the Federal Government or of a State Government from doing business with such Department or Agency.
 - g. I have not defaulted on an obligation covered by a surety or performance bond and have not been the subject of a claim under an employee fidelity bond.
3. **All** the names of the parties, known to me to be principals in this project(s) in which I propose to participate, are listed above.
4. I am not a HUD/FmHA employee or a member of a HUD/FmHA employee's immediate household as defined in Standards of Ethical Conduct for Employees of the Executive Branch in 5 C.F.R. Part 2635 (57 FR 35006) and HUD's Standard of Conduct in 24 C.F.R. Part O and

USDA's Standard of Conduct in 7 C.F.R. Part O Subpart B.

- 5. I am not a principal participant in an assisted or insured project as of this date on which construction has stopped for a period in excess of 20 days or which has been substantially completed for more than 90 days and documents for closing, including final cost certification have not been filed with HUD or FmHA.
- 6. To my knowledge I have not been found by HUD or FmHA to be in noncompliance with any applicable civil rights laws.
- 7. I am not a Member of Congress or a Resident Commissioner nor otherwise prohibited or limited by law from contracting with the Government of the United States of America.
- 8. Statements above (if any) to which I cannot certify have been deleted by striking through the words with a pen. I have initialed each deletion (if any) and have attached a true and accurate signed statement (if applicable) to explain the facts and circumstances which I think helps to qualify me as a responsible principal for participation in this project.

Typed or Printed Name of Principal	Signature of Principal	Certification Date (mm/dd/yyyy)	Area Code and Telephone No.

This form was prepared by (Please print name)

Area Code and Telephone No.

Schedule A: List of Previous Projects and Section 8 Contracts. By my name below is the complete list of my previous projects and my participation history as a principal; in Multifamily Housing programs of HUD/FmHA, State, and Local Housing Finance Agencies. **Note:** Read and follow the instruction sheet carefully. Abbreviate where possible. Make full disclosure. Add extra sheets if you need more space. Double check for accuracy. If you have no previous projects write, by your name, "**No previous participation, First Experience.**"

1. List each Principal's Name (list in alphabetical order, last name first)	2. List Previous Projects (give the I.D. number, project name, city location, & government agency involved if other than HUD)	3. List Principals' Role(s) (indicate dates participated, and if fee or identity of interest participant)	4. Status of Loan (current, defaulted, assigned, or foreclosed)	5. Was Project ever in Default, during your participation?		6. Last Mgmt. and/or Physical Inspctr Rating
				Yes	No If "Yes," explain	

Part II – For HUD Internal Processing Only

Received and checked by me for accuracy and completeness; recommend approval or transferral to Headquarters as checked below:

Date (mm/dd/yyyy)	Telephone Number and Area Code	<input type="checkbox"/> A. No adverse information; form HUD-2530 approval is recommended.	<input type="checkbox"/> C. Disclosure or Certification problem
Staff	Processing and Control	<input type="checkbox"/> B. Name match in system	<input type="checkbox"/> D. Other, our memorandum is attached.
Supervisor	Director of Housing / Director, Multifamily Division	Approved <input type="checkbox"/> Yes <input type="checkbox"/> No	Date (mm/dd/yyyy)

Instructions for Completing the Previous Participation Certificate, form HUD-2530

Carefully read these instructions and the applicable regulations. A copy of those regulations published at 24 C.F.R. 200.210 to 200.245 can be obtained from the Multifamily Housing Representative at any HUD Office. Type or print neatly in ink when filling out this form. Mark answers in all blocks of the form. If the form is not filled completely, it will delay approval of your application.

Attach extra sheets as you need them. Be sure to indicate "Continued on Attachments" wherever appropriate. Sign each additional page that you attach if it refers to you or your record. If you have many projects to list (20 or more) and expect to be applying frequently for participation in HUD projects, you should consider filing a Master List. See Master List instructions below under "Instructions for Completing Schedule A."

Carefully read the certification before you sign it. Any questions regarding the form or how to complete it can be answered by your HUD Office Multifamily Housing Representative.

Purpose: This form provides HUD with a certified report of all previous participation in HUD multifamily housing projects by those parties making application. The information requested in this form is used by HUD to determine if you meet the standards established to ensure that all principal participants in HUD projects will honor their legal, financial and contractual obligations and are acceptable risks from the underwriting standpoint of an insurer, lender or governmental agency. HUD requires that you certify your record of previous participation in HUD/USDA-FmHA, State and Local Housing Finance Agency projects by completing and signing this form, before your project application or participation can be approved.

HUD approval of your certification is a necessary precondition for your participation in the project and in the capacity that you propose. If you do not file this certification, do not furnish the information requested accurately, or do not meet established standards, HUD will not approve your certification.

Note that approval of your certification does not obligate HUD to approve your project application, and it does not satisfy all other HUD program requirements relative to your qualifications.

Who Must Sign and File Form HUD-2530:

Form HUD-2530 must be completed and signed by all parties applying to become principal participants in HUD multifamily housing projects, including those who have no previous participation. The form must be signed and filed by all principals and their affiliates who propose participating in the HUD project. Use a separate form for each role in the project unless there is an identity of interest.

Principals include all individuals, joint ventures, partnerships, corporations, trusts, non-profit organizations, any other public or private entity, that will participate in the proposed project as a sponsor, owner, prime contractor, turnkey developer, managing agent, nursing home administrator or operator, packager, or consultant. Architects and attorneys who have any interest in the project other than an arms length fee arrangement for professional services are also considered principals by HUD.

In the case of partnerships, all general partners regardless of their percentage interest and limited partners having a 25 percent or more interest in the partnership are considered principals. In the case of public or private corporations or governmental entities, principals include the president, vice president, secretary, treasurer and all other executive officers who are directly responsible to the board of directors, or any equivalent governing body, as well as all directors and each stockholder having a 10 percent or more interest in the corporation.

Affiliates are defined as any person or business concern that directly or indirectly controls the policy of a principal or has the power to do so. A holding or parent corporation would be an example of an affiliate if one of its subsidiaries is a principal.

Exception for Corporations – All principals and affiliates must personally sign the certificate except in the following situation. When a corporation is a principal, all of its officers, directors, trustees and stockholders with 10 percent or more of the common (voting) stock need not sign personally if they all have the same record to report. The officer who is authorized to sign for the corporation or agency will list the names and title of those who elect not to sign. However, any person who has a record of participation in HUD projects that is separate from that of his or her organization must report that activity on this form and sign his or her name. The objective is full disclosure.

Exemptions – The names of the following parties do not need to be listed on form HUD-2530: Public Housing Agencies, tenants, owners of less than five condominium or cooperative units and all others whose interests were acquired by inheritance or court order.

Where and When Form HUD-2530 Must Be Filed: The original of this form must be submitted to the HUD Office where your project application will be processed at the same time you file your initial project application. This form must be filed with applications for projects, or when otherwise required in the situations listed below:

- Projects to be financed with mortgages insured under the National Housing Act (FHA).
- Projects to be financed according to Section 202 of the Housing Act of 1959 (Elderly and Handicapped).
- Projects in which 20 percent or more of the units are to receive a subsidy as described in 24 C.F.R. 200.213.
- Purchase of a project subject to a mortgage insured or held by the Secretary of HUD.
- Purchase of a Secretary-owned project.
- Proposed substitution or addition of a principal, or principal participation in a different capacity from that previously approved for the same project.
- Proposed acquisition by an existing limited partner of an additional interest in a project resulting in a total interest of 25 percent or more, or proposed acquisition by a corporate stockholder of an additional interest in a project resulting in a total interest of 10 percent or more.
- Projects with U.S.D.A., Farmers Home Administration, or with state or local government housing finance agencies that include rental assistance under Section 8 of the Housing Act of 1937. For projects of this type, form HUD-2530 should be filed with the appropriate applications directly to those agencies.

Review of Adverse Determination: If approval of your participation in a HUD project is denied, withheld, or conditionally granted on the basis of your record of previous participation, you will be notified by the HUD Office. You may request reconsideration by the HUD Review Committee. Alternatively, you may request a hearing before a Hearing Officer. Either request must be made in writing within 30 days from your receipt of the notice of determination.

If you do request reconsideration by the Review Committee and the reconsideration results in an adverse determination, you may then request a hearing before a Hearing Officer. The Hearing Officer will issue a report to the Review Committee. You will be notified of the final ruling by certified mail.

Specific Line Instructions:

Reason for submitting this Certification: e.g., refinance, management, change in ownership, transfer of physical assets, etc.

Block 1: Fill in the name of the agency to which you are applying. For example: HUD Office, Farmers Home Administration District office, or the name of a State or local housing finance agency. Below that, fill in the name of the city where the office is located.

Block 2: Fill in the name of the project, such as "Greenwood Apts." If the name has not yet been selected, write "Name unknown." Below that, enter the HUD contract or project identification number, the Farmers Home Administration project number, or the State or local housing finance agency project or contract number. Include all project or contract identification numbers that are relevant to the project. Also enter the name of the city in which the project is located, and the ZIP Code of the site location.

Block 3: Fill in the dollar amount requested in the proposed mortgage, or the annual amount of rental assistance requested.

Block 4: Fill in the number of apartment units proposed, such as "40 units." For hospital projects or nursing homes, fill in the number of beds proposed, such as "100 beds."

Block 5: Fill in the section of the Housing Act under which the application is filed.

Block 7: Definitions of all those who are considered principals and affiliates are given above in the section titled "Who Must Sign and File...."

Block 8: Beside the name of each principal, fill in the role that each will perform. The following are possible roles that the principals may perform: Sponsor, Owner, Prime Contractor, Turnkey Developer, Managing Agent, Packager, Consultant, General Partner, Limited Partner (include percentage), Executive Officer, Director, Trustee, Major Stockholder, or Nursing Home Administrator. Beside the name of each affiliate, write the name of the person or firm of affiliation, such as "Affiliate of Smith Construction Co."

Block 9: Fill in the percentage of ownership in the proposed project that each principal is expected to have. Also specify if the participant is a general or limited partner. Beside the name of those parties who will not be owners, write "None."

Block 10: Fill in the Social Security Number or IRS employer number of every party listed, including affiliates.

Instructions for Completing Schedule A:

Be sure that Schedule A is filled-in completely, accurately and the certification is properly dated and signed, because it will serve as a legal record of your previous experience. All Multifamily Housing projects involving HUD/FmHA, and State and local Housing Finance Agencies in which you have previously participated **must** be listed. Applicants are reminded that previous participation pertains to the individual principal within an entity as well as the entity itself. A newly formed company may not have previous participation, but the principals within the company may have had extensive participation and disclosure of that activity is required. To avoid duplication of disclosure, list the project and then the entities or individuals involved in that project. You may use the name or a number code to denote the entity or individual that participated. The number code can then be used in column 3 to denote role.

Column 2 List the project or contract identification of each previous project. **All previous projects must be included or your certification cannot be processed.** Include the name of all projects, the cities in which they are located and the government agency (HUD, USDA-FmHA or State or local housing finance agency) that was involved. At the end of your list of projects, draw a straight line across the page to separate your record of projects from that of others signing this form who have a different record to report.

Column 3 List the role(s) of your participation, dates participated, and if fee or identity of interest with owners.

Column 4 Indicate the current status of the loan. Except for current loans, the date associated with the status is required. Loans under a workout arrangement are considered assigned. An explanation of the circumstances surrounding the status is required for all non-current loans.

Column 5 Explain any project defaults during your participation.

Column 6 Enter the latest Management and/or Physical Inspection Review rating. If either of the ratings are below average, the report issued by HUD is required to be submitted along with the applicant's explanation of the circumstances surrounding the rating.

No Previous Record: Even if you have never participated in a HUD project before, you must complete form HUD-2530. If you have no record of previous projects to list, fill in your name in column 1 of Schedule A, and write across the form by your name – "No previous participation, first experience."

Master List System: If you expect to file this form frequently and you have a long list of previous projects to report on Schedule A, you should consider filing a Master List. By doing so, you will avoid having to list all your previous projects each time you file a new application.

To make a Master List, use form HUD-2530. On page 1, in block 1, enter (in capital letters) the words "Master List." In blocks 2 through 6 enter in "N.A." meaning Not Applicable. Complete blocks 7 through 10.

In the box below the statement of certification, fill in the names of all parties who wish to file a Master List together (type or print neatly). Beside each name, every party must sign the form. In the box titled "Proposed Role," fill in "N.A." Also, fill in the date you sign the form

and provide a telephone number where you can be reached during the day. No determinations will be made on these certificates.

File one copy of the Master List with each HUD Office where you do business and mail one copy to the following address:

**HUD-2530 Master List
Participation and Compliance
Division – Housing
U.S. Department of Housing and
Urban Development
451 Seventh Street, S.W.
Washington, D.C. 20410**

Once you have filed a Master List, you do not need to complete Schedule A when you submit form HUD-2530. Instead, write the name of the participant in column 1 of Schedule A and beside that write "See Master List on file." Also give the date that appears on the Master List that you submitted. Below that, report all changes and additions that have occurred since that date. Be sure to include any mortgage defaults, assignments or foreclosures not listed previously.

If you have withdrawn from a project since the date the Master List was filed, be sure to name the project. Give the project identification number, the month and year your participation began and/or ended.

Certification:

After you have completed all other parts of form HUD-2530, including Schedule A, read the Certification carefully. In the box below the statement of certification, fill in the name of all principals and affiliates (type or print neatly). Beside the name of each principal and affiliate, each party must sign the form, with the exception in some cases of individuals associated with a corporation (see "Exception for Corporations" in the section of the instructions titled "Who Must Sign and File form

HUD-2530"). Beside each signature, fill in the role of each party (the same as shown in block 8). In addition, each person who signs the form should fill in the date that he or she signs, as well as providing a telephone number where he or she can be reached during business hours. By providing a telephone number where you can be reached, you will help to prevent any possible delay caused by mailing and processing time in the event HUD has any questions.

If you cannot certify and sign the certification as it is printed because some statements do not correctly describe your record, use a pen and strike through those parts that differ with your record, then sign and certify to that remaining part which does describe you or your record.

Attach a signed letter, note or an explanation of the items you have struck out on the certification and report the facts of your correct record. Item A(2)(e) relates to felony convictions within the past 10 years. If you have been convicted of a felony within 10 years, strike out all of A(2)(e) on the certificate and attach your statement giving your explanation. A felony conviction will not necessarily cause your participation to be disapproved unless there is a criminal record or other evidence that your previous conduct or method of doing business has been such that your participation in the project would make it an unacceptable risk from the underwriting standpoint of an insurer, lender or governmental agency.

The Department of Housing and Urban Development (HUD) is authorized to collect this information by law (42 U.S.C. 3535(d) and 24 C.F.R. 200.217) and by regulation at 24 CFR 200.210. This information is needed so that principals applying to participate in multifamily programs can become HUD-approved participants. The information you provide will enable HUD to evaluate your record with respect to established standards of performance, responsibility and eligibility. Without prior approval, a principal may not participate in a proposed or existing multifamily project. HUD uses this information to evaluate whether or not principals pose an unsatisfactory underwriting risk. The information is used to evaluate the potential principals and approve only individuals and organizations who will honor their legal, financial and contractual obligations.

Privacy Act Statement: The Housing and Community Development Act of 1987, 42 U.S.C. 3543 requires persons applying for a Federally-insured or guaranteed loan to furnish his/her Social Security Number (SSN). HUD must have your SSN for identification of your records. HUD may use your SSN for automated processing of your records and to make requests for information about you and your previous records with other public agencies and private sector sources. HUD may disclose certain information to Federal, State and local agencies when relevant to civil, criminal, or regulatory investigations and prosecutions. It will not be otherwise disclosed or released outside of HUD, except as required and permitted by law. You must provide all of the information requested in this application, including your SSN.

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This agency may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB control number.

A response is mandatory. Failure to provide any of the information will result in your disapproval for participation in this HUD program.

**U.S. Department of Housing and
Urban Development**
Office of Public and Indian Housing

**Instructions to Bidders for Contracts
Public and Indian Housing Programs**

Instructions to Bidders for Contracts

Public and Indian Housing Programs

Table of Contents

Clause	Page
1. Bid Preparation and Submission	1
2. Explanations and Interpretations to Prospective Bidders	1
3. Amendments to Invitations for Bids	1
4. Responsibility of Prospective Contractor	1
5. Late Submissions, Modifications, and Withdrawal of Bids	1
6. Bid Opening	2
7. Service of Protest	2
8. Contract Award	2
9. Bid Guarantee	3
10. Assurance of Completion	3
11. Preconstruction Conference	3
12. Indian Preference Requirements	3

1. Bid Preparation and Submission

(a) Bidders are expected to examine the specifications, drawings, all instructions, and, if applicable, the construction site (see also the contract clause entitled **Site Investigation and Conditions Affecting the Work** of the *General Conditions of the Contract for Construction*). Failure to do so will be at the bidders' risk.

(b) All bids must be submitted on the forms provided by the Public Housing Agency/Indian Housing Authority (PHA/IHA). Bidders shall furnish all the information required by the solicitation. Bids must be signed and the bidder's name typed or printed on the bid sheet and each continuation sheet which requires the entry of information by the bidder. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent shall be accompanied by evidence of that agent's authority. (Bidders should retain a copy of their bid for their records.)

(c) Bidders must submit as part of their bid a completed form HUD-5369-A, "Representations, Certifications, and Other Statements of Bidders."

(d) All bid documents shall be sealed in an envelope which shall be clearly marked with the words "Bid Documents," the Invitation for Bids (IFB) number, any project or other identifying number, the bidder's name, and the date and time for receipt of bids.

(e) If this solicitation requires bidding on all items, failure to do so will disqualify the bid. If bidding on all items is not required, bidders should insert the words "No Bid" in the space provided for any item on which no price is submitted.

(f) Unless expressly authorized elsewhere in this solicitation, alternate bids will not be considered.

(g) Unless expressly authorized elsewhere in this solicitation, bids submitted by telegraph or facsimile (fax) machines will not be considered.

(h) If the proposed contract is for a Mutual Help project (as described in 24 CFR Part 905, Subpart E) that involves Mutual Help contributions of work, material, or equipment, supplemental information regarding the bid advertisement is provided as an attachment to this solicitation.

2. Explanations and Interpretations to Prospective Bidders

(a) Any prospective bidder desiring an explanation or interpretation of the solicitation, specifications, drawings, etc., must request it at least 7 days before the scheduled time for bid opening. Requests may be oral or written. Oral requests must be confirmed in writing. The only oral clarifications that will be provided will be those clearly related to solicitation procedures, i.e., not substantive technical information. No other oral explanation or interpretation will be provided. Any information given a prospective bidder concerning this solicitation will be furnished promptly to all other prospective bidders as a written amendment to the solicitation, if that information is necessary in submitting bids, or if the lack of it would be prejudicial to other prospective bidders.

(b) Any information obtained by, or provided to, a bidder other than by formal amendment to the solicitation shall not constitute a change to the solicitation.

3. Amendments to Invitations for Bids

(a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

(b) Bidders shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date on the bid form, or (3) by letter, telegram, or facsimile, if those methods are authorized in the solicitation. The PHA/IHA must receive acknowledgement by the time and at the place specified for receipt of bids. Bids which fail to acknowledge the bidder's receipt of any amendment will result in the rejection of the bid if the amendment(s) contained information which substantively changed the PHA's/IHA's requirements.

(c) Amendments will be on file in the offices of the PHA/IHA and the Architect at least 7 days before bid opening.

4. Responsibility of Prospective Contractor

(a) The PHA/IHA will award contracts only to responsible prospective contractors who have the ability to perform successfully under the terms and conditions of the proposed contract. In determining the responsibility of a bidder, the PHA/IHA will consider such matters as the bidder's:

- (1) Integrity;
- (2) Compliance with public policy;
- (3) Record of past performance; and
- (4) Financial and technical resources (including construction and technical equipment).

(b) Before a bid is considered for award, the bidder may be requested by the PHA/IHA to submit a statement or other documentation regarding any of the items in paragraph (a) above. Failure by the bidder to provide such additional information shall render the bidder nonresponsible and ineligible for award.

5. Late Submissions, Modifications, and Withdrawal of Bids

(a) Any bid received at the place designated in the solicitation after the exact time specified for receipt will not be considered unless it is received before award is made and it:

(1) Was sent by registered or certified mail not later than the fifth calendar day before the date specified for receipt of offers (e.g., an offer submitted in response to a solicitation requiring receipt of offers by the 20th of the month must have been mailed by the 15th);

(2) Was sent by mail, or if authorized by the solicitation, was sent by telegram or via facsimile, and it is determined by the PHA/IHA that the late receipt was due solely to mishandling by the PHA/IHA after receipt at the PHA/IHA; or

(3) Was sent by U.S. Postal Service Express Mail Next Day Service - Post Office to Addressee, not later than 5:00 p.m. at the place of mailing two working days prior to the date specified for receipt of proposals. The term "working days" excludes weekends and observed holidays.

(b) Any modification or withdrawal of a bid is subject to the same conditions as in paragraph (a) of this provision.

(c) The only acceptable evidence to establish the date of mailing of a late bid, modification, or withdrawal sent either by registered or certified mail is the U.S. or Canadian Postal Service postmark both on the envelope or wrapper and on the original receipt from the U.S. or Canadian Postal Service. Both postmarks must show a legible date or the bid, modification, or withdrawal shall be processed as if mailed late. "Postmark" means a printed, stamped, or otherwise placed impression (exclusive of a postage meter machine impression) that is readily identifiable without further action as having been supplied and affixed by employees of the U.S. or Canadian Postal Service on the date of mailing. Therefore, bidders should request the postal clerk to place a hand cancellation bull's-eye postmark on both the receipt and the envelope or wrapper.

(d) The only acceptable evidence to establish the time of receipt at the PHA/IHA is the time/date stamp of PHA/IHA on the proposal wrapper or other documentary evidence of receipt maintained by the PHA/IHA.

(e) The only acceptable evidence to establish the date of mailing of a late bid, modification, or withdrawal sent by Express Mail Next Day Service-Post Office to Addressee is the date entered by the post office receiving clerk on the "Express Mail Next Day Service-Post Office to Addressee" label and the postmark on both the envelope or wrapper and on the original receipt from the U.S. Postal Service. "Postmark" has the same meaning as defined in paragraph (c) of this provision, excluding postmarks of the Canadian Postal Service. Therefore, bidders should request the postal clerk to place a legible hand cancellation bull's eye postmark on both the receipt and Failure by a bidder to acknowledge receipt of the envelope or wrapper.

(f) Notwithstanding paragraph (a) of this provision, a late modification of an otherwise successful bid that makes its terms more favorable to the PHA/IHA will be considered at any time it is received and may be accepted.

(g) Bids may be withdrawn by written notice, or if authorized by this solicitation, by telegram (including mailgram) or facsimile machine transmission received at any time before the exact time set for opening of bids; provided that written confirmation of telegraphic or facsimile withdrawals over the signature of the bidder is mailed and postmarked prior to the specified bid opening time. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for opening of bids, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid.

6. Bid Opening

All bids received by the date and time of receipt specified in the solicitation will be publicly opened and read. The time and place of opening will be as specified in the solicitation. Bidders and other interested persons may be present.

7. Service of Protest

(a) Definitions. As used in this provision:

"Interested party" means an actual or prospective bidder whose direct economic interest would be affected by the award of the contract.

"Protest" means a written objection by an interested party to this solicitation or to a proposed or actual award of a contract pursuant to this solicitation.

(b) Protests shall be served on the Contracting Officer by obtaining written and dated acknowledgement from —

[Contracting Officer designate the official or location where a protest may be served on the Contracting Officer]

(c) All protests shall be resolved in accordance with the PHA's/IHA's protest policy and procedures, copies of which are maintained at the PHA/IHA.

8. Contract Award

(a) The PHA/IHA will evaluate bids in response to this solicitation without discussions and will award a contract to the responsible bidder whose bid, conforming to the solicitation, will be most advantageous to the PHA/IHA considering only price and any price-related factors specified in the solicitation.

(b) If the apparent low bid received in response to this solicitation exceeds the PHA's/IHA's available funding for the proposed contract work, the PHA/IHA may either accept separately priced items (see 8(e) below) or use the following procedure to determine contract award. The PHA/IHA shall apply in turn to each bid (proceeding in order from the apparent low bid to the high bid) each of the separately priced bid deductible items, if any, in their priority order set forth in this solicitation. If upon the application of the first deductible item to all initial bids, a new low bid is within the PHA's/IHA's available funding, then award shall be made to that bidder. If no bid is within the available funding amount, then the PHA/IHA shall apply the second deductible item. The PHA/IHA shall continue this process until an evaluated low bid, if any, is within the PHA's/IHA's available funding. If upon the application of all deductibles, no bid is within the PHA's/IHA's available funding, or if the solicitation does not request separately priced deductibles, the PHA/IHA shall follow its written policy and procedures in making any award under this solicitation.

(c) In the case of tie low bids, award shall be made in accordance with the PHA's/IHA's written policy and procedures.

(d) The PHA/IHA may reject any and all bids, accept other than the lowest bid (e.g., the apparent low bid is unreasonably low), and waive informalities or minor irregularities in bids received, in accordance with the PHA's/IHA's written policy and procedures.

(e) Unless precluded elsewhere in the solicitation, the PHA/IHA may accept any item or combination of items bid.

(f) The PHA/IHA may reject any bid as nonresponsive if it is materially unbalanced as to the prices for the various items of work to be performed. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.

(g) A written award shall be furnished to the successful bidder within the period for acceptance specified in the bid and shall result in a binding contract without further action by either party.

9. Bid Guarantee (applicable to construction and equipment contracts exceeding \$25,000)

All bids must be accompanied by a negotiable bid guarantee which shall not be less than five percent (5%) of the amount of the bid. The bid guarantee may be a certified check, bank draft, U.S. Government Bonds at par value, or a bid bond secured by a surety company acceptable to the U.S. Government and authorized to do business in the state where the work is to be performed. In the case where the work under the contract will be performed on an Indian reservation area, the bid guarantee may also be an irrevocable Letter of Credit (see provision 10, Assurance of Completion, below). Certified checks and bank drafts must be made payable to the order of the PHA/IHA. The bid guarantee shall insure the execution of the contract and the furnishing of a method of assurance of completion by the successful bidder as required by the solicitation. Failure to submit a bid guarantee with the bid shall result in the rejection of the bid. Bid guarantees submitted by unsuccessful bidders will be returned as soon as practicable after bid opening.

10. Assurance of Completion

(a) Unless otherwise provided in State law, the successful bidder shall furnish an assurance of completion prior to the execution of any contract under this solicitation. This assurance may be [Contracting Officer check applicable items] —

[] (1) a performance and payment bond in a penal sum of 100 percent of the contract price; or, as may be required or permitted by State law;

[] (2) separate performance and payment bonds, each for 50 percent or more of the contract price;

[] (3) a 20 percent cash escrow;

[] (4) a 25 percent irrevocable letter of credit; or,

[] (5) an irrevocable letter of credit for 10 percent of the total contract price with a monitoring and disbursements agreement with the IHA (applicable only to contracts awarded by an IHA under the Indian Housing Program).

(b) Bonds must be obtained from guarantee or surety companies acceptable to the U.S. Government and authorized to do business in the state where the work is to be performed. Individual sureties will not be considered. U.S. Treasury Circular Number 570, published annually in the Federal Register, lists companies approved to act as sureties on bonds securing Government contracts, the maximum underwriting limits on each contract bonded, and the States in which the company is licensed to do business. Use of companies listed in this circular is mandatory. Copies of the circular may be downloaded on the U.S. Department of Treasury website <http://www.fms.treas.gov/c570/index.html>, or ordered for a minimum fee by contacting the Government Printing Office at (202) 512-2168.

(c) Each bond shall clearly state the rate of premium and the total amount of premium charged. The current power of attorney for the person who signs for the surety company must be attached to the bond. The effective date of the power of attorney shall not precede the date of the bond. The effective date of the bond shall be on or after the execution date of the contract.

(d) Failure by the successful bidder to obtain the required assurance of completion within the time specified, or within such extended period as the PHA/IHA may grant based upon reasons determined adequate by the PHA/IHA, shall render the bidder ineligible for award. The PHA/IHA may then either award the contract to the next lowest responsible bidder or solicit new bids. The PHA/IHA may retain the ineligible bidder's bid guarantee.

11. Preconstruction Conference (applicable to construction contracts)

After award of a contract under this solicitation and prior to the start of work, the successful bidder will be required to attend a preconstruction conference with representatives of the PHA/IHA and its architect/engineer, and other interested parties convened by the PHA/IHA. The conference will serve to acquaint the participants with the general plan of the construction operation and all other requirements of the contract (e.g., Equal Employment Opportunity, Labor Standards). The PHA/IHA will provide the successful bidder with the date, time, and place of the conference.

12. Indian Preference Requirements (applicable only if this solicitation is for a contract to be performed on a project for an Indian Housing Authority)

(a) HUD has determined that the contract awarded under this solicitation is subject to the requirements of section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e(b)). Section 7(b) requires that any contract or subcontract entered into for the benefit of Indians shall require that, to the greatest extent feasible

(1) Preferences and opportunities for training and employment (other than core crew positions; see paragraph (h) below) in connection with the administration of such contracts or subcontracts be given to qualified "Indians." The Act defines "Indians" to mean persons who are members of an Indian tribe and defines "Indian tribe" to mean any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians; and,

(2) Preference in the award of contracts or subcontracts in connection with the administration of contracts be given to Indian organizations and to Indian-owned economic enterprises, as defined in section 3 of the Indian Financing Act of 1974 (25 U.S.C. 1452). That Act defines "economic enterprise" to mean any Indian-owned commercial, industrial, or business activity established or organized for the purpose of profit, except that the Indian ownership must constitute not less than 51 percent of the enterprise; "Indian organization" to mean the governing body of any Indian tribe or entity established or recognized by such governing body; "Indian" to mean any person who is a member of any tribe, band, group, pueblo, or community which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs and any "Native" as defined in the Alaska Native Claims Settlement Act; and Indian "tribe" to mean any Indian tribe, band, group, pueblo, or community including Native villages and Native groups (including

corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs.

(b) (1) The successful Contractor under this solicitation shall comply with the requirements of this provision in awarding all subcontracts under the contract and in providing training and employment opportunities.

(2) A finding by the IHA that the contractor, either (i) awarded a subcontract without using the procedure required by the IHA, (ii) falsely represented that subcontracts would be awarded to Indian enterprises or organizations; or, (iii) failed to comply with the contractor's employment and training preference bid statement shall be grounds for termination of the contract or for the assessment of penalties or other remedies.

(c) If specified elsewhere in this solicitation, the IHA may restrict the solicitation to qualified Indian-owned enterprises and Indian organizations. If two or more (or a greater number as specified elsewhere in the solicitation) qualified Indian-owned enterprises or organizations submit responsive bids, award shall be made to the qualified enterprise or organization with the lowest responsive bid. If fewer than the minimum required number of qualified Indian-owned enterprises or organizations submit responsive bids, the IHA shall reject all bids and readvertise the solicitation in accordance with paragraph (d) below.

(d) If the IHA prefers not to restrict the solicitation as described in paragraph (c) above, or if after having restricted a solicitation an insufficient number of qualified Indian enterprises or organizations submit bids, the IHA may advertise for bids from non-Indian as well as Indian-owned enterprises and Indian organizations. Award shall be made to the qualified Indian enterprise or organization with the lowest responsive bid if that bid is -

(1) Within the maximum HUD-approved budget amount established for the specific project or activity for which bids are being solicited; and

(2) No more than the percentage specified in 24 CFR 905.175(c) higher than the total bid price of the lowest responsive bid from any qualified bidder. If no responsive bid by a qualified Indian-owned economic enterprise or organization is within the stated range of the total bid price of the lowest responsive bid from any qualified enterprise, award shall be made to the bidder with the lowest bid.

(e) Bidders seeking to qualify for preference in contracting or subcontracting shall submit proof of Indian ownership with their bids. Proof of Indian ownership shall include but not be limited to:

(1) Certification by a tribe or other evidence that the bidder is an Indian. The IHA shall accept the certification of a tribe that an individual is a member.

(2) Evidence such as stock ownership, structure, management, control, financing and salary or profit sharing arrangements of the enterprise.

(f) (1) All bidders must submit with their bids a statement describing how they will provide Indian preference in the award of subcontracts. The specific requirements of that statement and the factors to be used by the IHA in determining the statement's adequacy are included as an attachment to this solicitation. Any bid that fails to include the required statement shall be rejected as nonresponsive. The IHA may require that comparable statements be provided by subcontractors to the successful Contractor, and may require the Contractor to reject any bid or proposal by a subcontractor that fails to include the statement.

(2) Bidders and prospective subcontractors shall submit a certification (supported by credible evidence) to the IHA in any instance where the bidder or subcontractor believes it is infeasible to provide Indian preference in subcontracting. The acceptance or rejection by the IHA of the certification shall be final. Rejection shall disqualify the bid from further consideration.

(g) All bidders must submit with their bids a statement detailing their employment and training opportunities and their plans to provide preference to Indians in implementing the contract; and the number or percentage of Indians anticipated to be employed and trained. Comparable statements from all proposed subcontractors must be submitted. The criteria to be used by the IHA in determining the statement(s)'s adequacy are included as an attachment to this solicitation. Any bid that fails to include the required statement(s), or that includes a statement that does not meet minimum standards required by the IHA shall be rejected as nonresponsive.

(h) Core crew employees. A core crew employee is an individual who is a bona fide employee of the contractor at the time the bid is submitted; or an individual who was not employed by the bidder at the time the bid was submitted, but who is regularly employed by the bidder in a supervisory or other key skilled position when work is available. Bidders shall submit with their bids a list of all core crew employees.

(i) Preference in contracting, subcontracting, employment, and training shall apply not only on-site, on the reservation, or within the IHA's jurisdiction, but also to contracts with firms that operate outside these areas (e.g., employment in modular or manufactured housing construction facilities).

(j) Bidders should contact the IHA to determine if any additional local preference requirements are applicable to this solicitation.

(k) The IHA [] does [] does not [Contracting Officer check applicable box] maintain lists of Indian-owned economic enterprises and Indian organizations by specialty (e.g., plumbing, electrical, foundations), which are available to bidders to assist them in meeting their responsibility to provide preference in connection with the administration of contracts and subcontracts.

General Conditions for Construction Contracts - Public Housing Programs

U.S. Department of Housing and Urban Development
Office of Public and Indian Housing
OMB Approval No. 2577-0157 (exp. 1/31/2017)

Applicability. This form is applicable to any construction/development contract greater than \$100,000.

This form includes those clauses required by OMB's common rule on grantee procurement, implemented at HUD in 24 CFR 85.36, and those requirements set forth in Section 3 of the Housing and Urban Development Act of 1968 and its amendment by the Housing and Community Development Act of 1992, implemented by HUD at 24 CFR Part 135. The form is required for construction contracts awarded by Public Housing Agencies (PHAs).

The form is used by Housing Authorities in solicitations to provide necessary contract clauses. If the form were not used, HAs would be unable to enforce their contracts.

Public reporting burden for this collection of information is estimated to average 1.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Responses to the collection of information are required to obtain a benefit or to retain a benefit.

The information requested does not lend itself to confidentiality.

HUD may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB number.

Clause		Page	Clause		Page
1.	Definitions	2	Administrative Requirements		
2.	Contractor's Responsibility for Work	2	25.	Contract Period	9
3.	Architect's Duties, Responsibilities and Authority	2	26.	Order of Precedence	9
4.	Other Contracts	3	27.	Payments	9
Construction Requirements			28.	Contract Modifications	10
5.	Preconstruction Conference and Notice to Proceed	3	29.	Changes	10
6.	Construction Progress Schedule	3	30.	Suspension of Work	11
7.	Site Investigation and Conditions Affecting the Work	3	31.	Disputes	11
8.	Differing Site Conditions	4	32.	Default	11
9.	Specifications and Drawings for Construction	4	33.	Liquidated	12
10.	As-Built Drawings	5	34.	Termination of Convenience	12
11.	Material and Workmanship	5	35.	Assignment of Contract	12
12.	Permits and Codes	5	36.	Insurance	12
13.	Health, Safety, and Accident Prevention	6	37.	Subcontracts	13
14.	Temporary Buildings and Transportation Materials	6	38.	Subcontracting with Small and Minority Firms, Women's Business Enterprise, and Labor Surplus Area Firms	13
15.	Availability and Use of Utility Services	6	39.	Equal Employment Opportunity	13
16.	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	6	40.	Employment, Training, and Contracting Opportunities for Low-Income Persons, Section 3 of the Housing and Urban Development Act of 1968	14
17.	Temporary Buildings and Transportation Materials	7	41.	Interest of Members of Congress	15
18.	Clean Air and Water	7	42.	Interest of Members, Officers, or Employees and Former Members, Officers, or Employees	15
19.	Energy Efficiency	7	43.	Limitations on Payments Made to Influence	15
20.	Inspection and Acceptance of Construction	7	44.	Royalties and Patents	15
21.	Use and Possession Prior to Completion	8	45.	Examination and Retention of Contractor's Records	15
22.	Warranty of Title	8	46.	Labor Standards-Davis-Bacon and Related Acts	15
23.	Warranty of Construction	8	47.	Non-Federal Prevailing Wage Rates	19
24.	Prohibition Against Liens	9	48.	Procurement of Recovered Materials	19

1. Definitions

- (a) "Architect" means the person or other entity engaged by the PHA to perform architectural, engineering, design, and other services related to the work as provided for in the contract. When a PHA uses an engineer to act in this capacity, the terms "architect" and "engineer" shall be synonymous. The Architect shall serve as a technical representative of the Contracting Officer. The Architect's authority is as set forth elsewhere in this contract.
 - (b) "Contract" means the contract entered into between the PHA and the Contractor. It includes the forms of Bid, the Bid Bond, the Performance and Payment Bond or Bonds or other assurance of completion, the Certifications, Representations, and Other Statements of Bidders (form HUD-5370), these General Conditions of the Contract for Construction (form HUD-5370), the applicable wage rate determinations from the U.S. Department of Labor, any special conditions included elsewhere in the contract, the specifications, and drawings. It includes all formal changes to any of those documents by addendum, change order, or other modification.
 - (c) "Contracting Officer" means the person delegated the authority by the PHA to enter into, administer, and/or terminate this contract and designated as such in writing to the Contractor. The term includes any successor Contracting Officer and any duly authorized representative of the Contracting Officer also designated in writing. The Contracting Officer shall be deemed the authorized agent of the PHA in all dealings with the Contractor.
 - (d) "Contractor" means the person or other entity entering into the contract with the PHA to perform all of the work required under the contract.
 - (e) "Drawings" means the drawings enumerated in the schedule of drawings contained in the Specifications and as described in the contract clause entitled Specifications and Drawings for Construction herein.
 - (f) "HUD" means the United States of America acting through the Department of Housing and Urban Development including the Secretary, or any other person designated to act on its behalf. HUD has agreed, subject to the provisions of an Annual Contributions Contract (ACC), to provide financial assistance to the PHA, which includes assistance in financing the work to be performed under this contract. As defined elsewhere in these General Conditions or the contract documents, the determination of HUD may be required to authorize changes in the work or for release of funds to the PHA for payment to the Contractor. Notwithstanding HUD's role, nothing in this contract shall be construed to create any contractual relationship between the Contractor and HUD.
 - (g) "Project" means the entire project, whether construction or rehabilitation, the work for which is provided for in whole or in part under this contract.
 - (h) "PHA" means the Public Housing Agency organized under applicable state laws which is a party to this contract.
 - (j) "Specifications" means the written description of the technical requirements for construction and includes the criteria and tests for determining whether the requirements are met.
 - (l) "Work" means materials, workmanship, and manufacture and fabrication of components.
- (a) The Contractor shall furnish all necessary labor, materials, tools, equipment, and transportation necessary for performance of the work. The Contractor shall also furnish all necessary water, heat, light, and power not made available to the Contractor by the PHA pursuant to the clause entitled Availability and Use of Utility Services herein.
 - (b) The Contractor shall perform on the site, and with its own organization, work equivalent to at least [] (12 percent unless otherwise indicated) of the total amount of work to be performed under the order. This percentage may be reduced by a supplemental agreement to this order 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 PHA.
 - (c) At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the work site a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.
 - (d) The Contractor shall be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence, and shall take proper safety and health precautions to protect the work, the workers, the public, and the property of others. The Contractor shall hold and save the PHA, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.
 - (e) The Contractor shall lay out the work from base lines and bench marks indicated on the drawings and be responsible for all lines, levels, and measurements of all work executed under the contract. The Contractor shall verify the figures before laying out the work and will be held responsible for any error resulting from its failure to do so.
 - (f) The Contractor shall confine all operations (including storage of materials) on PHA premises to areas authorized or approved by the Contracting Officer.
 - (g) The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. After completing the work and before final inspection, the Contractor shall (1) remove from the premises all scaffolding, equipment, tools, and materials (including rejected materials) that are not the property of the PHA and all rubbish caused by its work; (2) leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer; (3) perform all specified tests; and, (4) deliver the installation in complete and operating condition.
 - (h) The Contractor's responsibility will terminate when all work has been completed, the final inspection made, and the work accepted by the Contracting Officer. The Contractor will then be released from further obligation except as required by the warranties specified elsewhere in the contract.

3. Architect's Duties, Responsibilities, and Authority

- (a) The Architect for this contract, and any successor, shall be designated in writing by the Contracting Officer.

2. Contractor's Responsibility for Work

- (b) The Architect shall serve as the Contracting Officer's technical representative with respect to architectural, engineering, and design matters related to the work performed under the contract. The Architect may provide direction on contract performance. Such direction shall be within the scope of the contract and may not be of a nature which: (1) institutes additional work outside the scope of the contract; (2) constitutes a change as defined in the Changes clause herein; (3) causes an increase or decrease in the cost of the contract; (4) alters the Construction Progress Schedule; or (5) changes any of the other express terms or conditions of the contract.
- (c) The Architect's duties and responsibilities may include but shall not be limited to:
- (1) Making periodic visits to the work site, and on the basis of his/her on-site inspections, issuing written reports to the PHA which shall include all observed deficiencies. The Architect shall file a copy of the report with the Contractor's designated representative at the site;
 - (2) Making modifications in drawings and technical specifications and assisting the Contracting Officer in the preparation of change orders and other contract modifications for issuance by the Contracting Officer;
 - (3) Reviewing and making recommendations with respect to - (i) the Contractor's construction progress schedules; (ii) the Contractor's shop and detailed drawings; (iii) the machinery, mechanical and other equipment and materials or other articles proposed for use by the Contractor; and, (iv) the Contractor's price breakdown and progress payment estimates; and,
 - (4) Assisting in inspections, signing Certificates of Completion, and making recommendations with respect to acceptance of work completed under the contract.

4. Other Contracts

The PHA may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with PHA employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by PHA employees

Construction Requirements

5. Pre-construction Conference and Notice to Proceed

- (a) Within ten calendar days of contract execution, and prior to the commencement of work, the Contractor shall attend a preconstruction conference with representatives of the PHA, its Architect, and other interested parties convened by the PHA. The conference will serve to acquaint the participants with the general plan of the construction operation and all other requirements of the contract. The PHA will provide the Contractor with the date, time, and place of the conference.
- (b) The contractor shall begin work upon receipt of a written Notice to Proceed from the Contracting Officer or designee. The Contractor shall not begin work prior to receiving such notice.

6. Construction Progress Schedule

- (a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring labor, materials, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments or take other remedies under the contract until the Contractor submits the required schedule.
- (b) The Contractor shall enter the actual progress on the chart as required by the Contracting Officer, and immediately deliver three copies of the annotated schedule to the Contracting Officer. If the Contracting Officer determines, upon the basis of inspection conducted pursuant to the clause entitled Inspection and Acceptance of Construction, herein that the Contractor is not meeting the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the PHA. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, 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.
- (c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the Contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the Default clause of this contract.

7. Site Investigation and Conditions Affecting the Work

- (a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to, (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and roads; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself 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 PHA, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the PHA.
- (b) The PHA assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the PHA. Nor does the PHA assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

8. Differing Site Conditions

- (a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or (2) unknown physical conditions at the site(s), of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.
- (b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. Work shall not proceed at the affected site, except at the Contractor's risk, until the Contracting Officer has provided written instructions to the Contractor. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, the Contractor shall file a claim in writing to the PHA within ten days after receipt of such instructions and, in any event, before proceeding with the work. An equitable adjustment in the contract price, the delivery schedule, or both shall be made under this clause and the contract modified in writing accordingly.
- (c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.
- (d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.
- (b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by", or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.
- (c) Where "shown" "indicated", "detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place" that is "furnished and installed".
- (d) "Shop drawings" means drawings, submitted to the PHA by the Contractor, subcontractor, or any lower tier subcontractor, 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 of equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the work required by the contract. The PHA may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.
- (e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with other contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the PHA's reasons therefore. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.
- (f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Architect approves any such variation and the Contracting Officer concurs, the Contracting Officer shall issue an appropriate modification to the contract, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.
- (g) It shall be the responsibility of the Contractor to make timely requests of the PHA for such large scale and full size drawings, color schemes, and other additional information, not already in his possession, which shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The Contracting Officer shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

9. Specifications and Drawings for Construction

- (a) The Contractor shall keep on the work site a 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. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be

required in the planning and production of the work. Such requests may be submitted as the need arises, but each such request shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay.

- (h) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the PHA and one set will be returned to the Contractor. As required by the Contracting Officer, the Contractor, upon completing the work under this contract, shall furnish a complete set of all shop drawings as finally approved. These drawings shall show all changes and revisions made up to the time the work is completed and accepted.
- (i) This clause shall be included in all subcontracts at any tier. It shall be the responsibility of the Contractor to ensure that all shop drawings prepared by subcontractors are submitted to the Contracting Officer.

10. As-Built Drawings

- (a) "As-built drawings," as used in this clause, means drawings submitted by the Contractor or subcontractor at any tier to show the construction of a particular structure or work as actually completed under the contract. "As-built drawings" shall be synonymous with "Record drawings."
- (b) As required by the Contracting Officer, the Contractor shall provide the Contracting Officer accurate information to be used in the preparation of permanent as-built drawings. For this purpose, the Contractor shall record on one set of contract drawings all changes from the installations originally indicated, and record final locations of underground lines by depth from finish grade and by accurate horizontal offset distances to permanent surface improvements such as buildings, curbs, or edges of walks.
- (c) This clause shall be included in all subcontracts at any tier. It shall be the responsibility of the Contractor to ensure that all as-built drawings prepared by subcontractors are submitted to the Contracting Officer.

11. Material and Workmanship

- (a) All equipment, material, and articles furnished under this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the contract to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of, and as approved by the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.
- (b) Approval of equipment and materials.
 - (1) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the

machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

- (2) When required by the specifications or the Contracting Officer, the Contractor shall submit appropriately marked samples (and certificates related to them) for approval at the Contractor's expense, with all shipping charges prepaid. The Contractor shall label, or otherwise properly mark on the container, the material or product represented, its place of origin, the name of the producer, the Contractor's name, and the identification of the construction project for which the material or product is intended to be used.
- (3) Certificates shall be submitted in triplicate, describing each sample submitted for approval and certifying that the material, equipment or accessory complies with contract requirements. The certificates shall include the name and brand of the product, name of manufacturer, and the location where produced.
- (4) Approval of a sample shall not constitute a waiver of the PHA right to demand full compliance with contract requirements. Materials, equipment and accessories may be rejected for cause even though samples have been approved.
- (5) Wherever materials are required to comply with recognized standards or specifications, such specifications shall be accepted as establishing the technical qualities and testing methods, but shall not govern the number of tests required to be made nor modify other contract requirements. The Contracting Officer may require laboratory test reports on items submitted for approval or may approve materials on the basis of data submitted in certificates with samples. Check tests will be made on materials delivered for use only as frequently as the Contracting Officer determines necessary to insure compliance of materials with the specifications. The Contractor will assume all costs of retesting materials which fail to meet contract requirements and/or testing materials offered in substitution for those found deficient.
- (6) After approval, samples will be kept in the Project office until completion of work. They may be built into the work after a substantial quantity of the materials they represent has been built in and accepted.
- (c) Requirements concerning lead-based paint. The Contractor shall comply with the requirements concerning lead-based paint contained in the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846) as implemented by 24 CFR Part 35.

12. Permits and Codes

- (a) The Contractor shall give all notices and comply with all applicable laws, ordinances, codes, rules and regulations. Notwithstanding the requirement of the Contractor to comply with the drawings and specifications in the contract, all work installed shall comply with all applicable codes and regulations as amended by any

waivers. Before installing the work, the Contractor shall examine the drawings and the specifications for compliance with applicable codes and regulations bearing on the work and shall immediately report any discrepancy it may discover to the Contracting Officer. Where the requirements of the drawings and specifications fail to comply with the applicable code or regulation, the Contracting Officer shall modify the contract by change order pursuant to the clause entitled Changes herein to conform to the code or regulation.

- (b) The Contractor shall secure and pay for all permits, fees, and licenses necessary for the proper execution and completion of the work. Where the PHA can arrange for the issuance of all or part of these permits, fees and licenses, without cost to the Contractor, the contract amount shall be reduced accordingly.

13. Health, Safety, and Accident Prevention

- (a) In performing this contract, the Contractor shall:
 - (1) Ensure that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his/her health and/or safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation;
 - (2) Protect the lives, health, and safety of other persons;
 - (3) Prevent damage to property, materials, supplies, and equipment; and,
 - (4) Avoid work interruptions.
- (b) For these purposes, the Contractor shall:
 - (1) Comply with regulations and standards issued by the Secretary of Labor at 29 CFR Part 1926. Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96), 40 U.S.C. 3701 et seq.; and
 - (2) Include the terms of this clause in every subcontract so that such terms will be binding on each subcontractor.
- (c) The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this contract resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment, and shall report this data in the manner prescribed by 29 CFR Part 1904.
- (d) The Contracting Officer shall notify the Contractor of any noncompliance with these requirements and of the corrective action required. This notice, when delivered to the Contractor or the Contractor's representative at the site of the work, shall be deemed sufficient notice of the noncompliance and corrective action required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to take corrective action promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not base any claim or request for equitable adjustment for additional time or money on any stop order issued under these circumstances.
- (e) The Contractor shall be responsible for its subcontractors' compliance with the provisions of this clause. The Contractor shall take such action with respect to any subcontract as the PHA, the Secretary of Housing and Urban Development, or the Secretary of Labor shall direct as a means of enforcing such provisions.

14. Temporary Heating

The Contractor shall provide and pay for temporary heating, covering, and enclosures necessary to properly protect all work and materials against damage by dampness and cold, to dry out the work, and to facilitate the completion of the work. Any permanent heating equipment used shall be turned over to the PHA in the condition and at the time required by the specifications.

15. Availability and Use of Utility Services

- (a) The PHA shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the PHA or, where the utility is produced by the PHA, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.
- (b) The Contractor, at its expense and in a manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by the PHA, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

16. Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements

- (a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed under this contract, and which do not unreasonably interfere with the work required under this contract.
- (b) The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during performance of this contract, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.
- (c) The Contractor shall protect from damage all existing improvements and utilities (1) at or near the work site and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. Prior to disturbing the ground at the construction site, the Contractor shall ensure that all underground utility lines are clearly marked.
- (d) The Contractor shall shore up, brace, underpin, secure, and protect as necessary all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be affected by the excavations or other operations connected with the construction of the project.
- (e) Any equipment temporarily removed as a result of work under this contract shall be protected, cleaned, and replaced in the same condition as at the time of award of this contract.

- (f) New work which connects to existing work shall correspond in all respects with that to which it connects and/or be similar to existing work unless otherwise required by the specifications.
- (g) No structural members shall be altered or in any way weakened without the written authorization of the Contracting Officer, unless such work is clearly specified in the plans or specifications.
- (h) If the removal of the existing work exposes discolored or unfinished surfaces, or work out of alignment, such surfaces shall be refinished, or the material replaced as necessary to make the continuous work uniform and harmonious. This, however, shall not be construed to require the refinishing or reconstruction of dissimilar finishes previously exposed, or finished surfaces in good condition, but in different planes or on different levels when brought together by the removal of intervening work, unless such refinishing or reconstruction is specified in the plans or specifications.
- (i) The Contractor shall give all required notices to any adjoining or adjacent property owner or other party before the commencement of any work.
- (j) The Contractor shall indemnify and save harmless the PHA from any damages on account of settlement or the loss of lateral support of adjoining property, any damages from changes in topography affecting drainage, and from all loss or expense and all damages for which the PHA may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.
- (k) The Contractor shall repair any damage to vegetation, structures, equipment, utilities, or improvements, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

17. Temporary Buildings and Transportation of Materials

- (a) Temporary buildings (e.g., storage sheds, shops, offices, sanitary facilities) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the PHA. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.
- (b) The Contractor shall, as directed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting 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 curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

18. Clean Air and Water

The contractor shall comply with the Clean Air Act, as amended, 42 USC 7401 et seq., the Federal Water Pollution Control Water Act, as amended, 33 U.S.C. 1251 et seq., and standards issued pursuant thereto in the facilities in which this contract is to be performed.

19. Energy Efficiency

The Contractor shall comply with mandatory standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub.L. 94-163) for the State in which the work under the contract is performed.

20. Inspection and Acceptance of Construction

- (a) Definitions. As used in this clause -
 - (1) "Acceptance" means the act of an authorized representative of the PHA by which the PHA approves and assumes ownership of the work performed under this contract. Acceptance may be partial or complete.
 - (2) "Inspection" means examining and testing the work performed under the contract (including, when appropriate, raw materials, equipment, components, and intermediate assemblies) to determine whether it conforms to contract requirements.
 - (3) "Testing" means that element of inspection that determines the properties or elements, including functional operation of materials, equipment, or their components, by the application of established scientific principles and procedures.
- (b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. All work is subject to PHA inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.
- (c) PHA inspections and tests are for the sole benefit of the PHA and do not: (1) relieve the Contractor of responsibility for providing adequate quality control measures; (2) relieve the Contractor of responsibility for loss or damage of the material before acceptance; (3) constitute or imply acceptance; or, (4) affect the continuing rights of the PHA after acceptance of the completed work under paragraph (j) below.
- (d) The presence or absence of the PHA inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specifications without the Contracting Officer's written authorization. All instructions and approvals with respect to the work shall be given to the Contractor by the Contracting Officer.
- (e) The Contractor shall promptly furnish, without additional charge, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The PHA may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The PHA shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

- (f) The PHA may conduct routine inspections of the construction site on a daily basis.
- (g) The Contractor shall, without charge, replace or correct work found by the PHA not to conform to contract requirements, unless the PHA decides that it is in its interest to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.
- (h) If the Contractor does not promptly replace or correct rejected work, the PHA may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor, or (2) terminate for default the Contractor's right to proceed.
- (i) If any work requiring inspection is covered up without approval of the PHA, it must, if requested by the Contracting Officer, be uncovered at the expense of the Contractor. If at any time before final acceptance of the entire work, the PHA considers it necessary or advisable, to examine work already completed by removing or tearing it out, the Contractor, shall on request, promptly furnish all necessary facilities, labor, and material. If such work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray all the expenses of the examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the contract, the Contracting Officer shall make an equitable adjustment to cover the cost of the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.
- (j) The Contractor shall notify the Contracting Officer, in writing, as to the date when in its opinion all or a designated portion of the work will be substantially completed and ready for inspection. If the Architect determines that the state of preparedness is as represented, the PHA will promptly arrange for the inspection. Unless otherwise specified in the contract, the PHA shall accept, as soon as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines and designates can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the PHA's right under any warranty or guarantee.

21. Use and Possession Prior to Completion

- (a) The PHA shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the PHA intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The PHA's possession or use shall not be deemed an acceptance of any work under the contract.
- (b) While the PHA has such possession or use, the Contractor shall be relieved of the responsibility for (1) the loss of or damage to the work resulting from the PHA's possession or use, notwithstanding the terms of the clause entitled Permits and Codes herein; (2) all maintenance costs on the areas occupied; and, (3) furnishing heat, light, power, and water used in the areas

occupied without proper remuneration therefore. If prior possession or use by the PHA delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

22. Warranty of Title

The Contractor warrants good title to all materials, supplies, and equipment incorporated in the work and agrees to deliver the premises together with all improvements thereon free from any claims, liens or charges, and agrees further that neither it nor any other person, firm or corporation shall have any right to a lien upon the premises or anything appurtenant thereto.

23. Warranty of Construction

- (a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (j) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or workmanship performed by the Contractor or any subcontractor or supplier at any tier. This warranty shall continue for a period of 1 Year (one year unless otherwise indicated) from the date of final acceptance of the work. If the PHA takes possession of any part of the work before final acceptance, this warranty shall continue for a period of (one year unless otherwise indicated) from the date that the PHA takes possession.
- (b) The Contractor shall remedy, at the Contractor's expense, any failure to conform, or any defect. In addition, the Contractor shall remedy, at the Contractor's expense, any damage to PHA-owned or controlled real or personal property when the damage is the result of—
 - (1) The Contractor's failure to conform to contract requirements; or
 - (2) Any defects of equipment, material, workmanship or design furnished by the Contractor.
- (c) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for (one year unless otherwise indicated) from the date of repair or replacement.
- (d) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect or damage.
- (e) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the PHA shall have the right to replace, repair or otherwise remedy the failure, defect, or damage at the Contractor's expense.
- (f) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall:
 - (1) Obtain all warranties that would be given in normal commercial practice;
 - (2) Require all warranties to be executed in writing, for the benefit of the PHA; and,
 - (3) Enforce all warranties for the benefit of the PHA.
- (g) In the event the Contractor's warranty under paragraph (a) of this clause has expired, the PHA may bring suit at its own expense to enforce a subcontractor's, manufacturer's or supplier's warranty.

- (h) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defect of material or design furnished by the PHA nor for the repair of any damage that results from any defect in PHA furnished material or design.
- (i) Notwithstanding any provisions herein to the contrary, the establishment of the time periods in paragraphs (a) and (c) above relate only to the specific obligation of the Contractor to correct the work, and have no relationship to the time within which its obligation to comply with the contract may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to its obligation other than specifically to correct the work.
- (j) This warranty shall not limit the PHA's rights under the Inspection and Acceptance of Construction clause of this contract with respect to latent defects, gross mistakes or fraud.

24. Prohibition Against Liens

The Contractor is prohibited from placing a lien on the PHA's property. This prohibition shall apply to all subcontractors at any tier and all materials suppliers.

Administrative Requirements

25. Contract Period

The Contractor shall complete all work required on this contract within See bid docs calendar days of the effective date of the contract, or within the time schedule established in the notice to proceed issued by the Contracting Officer.

26. Order of Provisions

In the event of a conflict between these General Conditions and the Specifications, the General Conditions shall prevail. In the event of a conflict between the contract and any applicable state or local law or regulation, the state or local law or regulation shall prevail; provided that such state or local law or regulation does not conflict with, or is less restrictive than applicable federal law, regulation, or Executive Order. In the event of such a conflict, applicable federal law, regulation, and Executive Order shall prevail.

27. Payments

- (a) The PHA shall pay the Contractor the price as provided in this contract.
- (b) The PHA shall make progress payments approximately every 30 days as the work proceeds, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer. The PHA may, subject to written determination and approval of the Contracting Officer, make more frequent payments to contractors which are qualified small businesses.
- (c) Before the first progress payment under this contract, the Contractor shall furnish, in such detail as requested by the Contracting Officer, a breakdown of the total contract price showing the amount included therein for each principal category of the work, which shall substantiate the payment amount requested in order to provide a

basis for determining progress payments. The breakdown shall be approved by the Contracting Officer and must be acceptable to HUD. If the contract covers more than one project, the Contractor shall furnish a separate breakdown for each. The values and quantities employed in making up this breakdown are for determining the amount of progress payments and shall not be construed as a basis for additions to or deductions from the contract price. The Contractor shall prorate its overhead and profit over the construction period of the contract.

- (d) The Contractor shall submit, on forms provided by the PHA, periodic estimates showing the value of the work performed during each period based upon the approved breakdown of the contract price. Such estimates shall be submitted not later than 30 days days in advance of the date set for payment and are subject to correction and revision as required. The estimates must be approved by the Contracting Officer with the concurrence of the Architect prior to payment. If the contract covers more than one project, the Contractor shall furnish a separate progress payment estimate for each.
- (e) Along with each request for progress payments and the required estimates, the Contractor shall furnish the following certification, or payment shall not be made: I hereby certify, to the best of my knowledge and belief, that:
 - (1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;
 - (2) Payments to subcontractors and suppliers have been made from 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,
 - (3) This request for progress payments 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.

Name:

Title:

Date:

- (f) Except as otherwise provided in State law, the PHA shall retain ten (10) percent of the amount of progress payments until completion and acceptance of all work under the contract; except, that if upon completion of 50 percent of the work, the Contracting Officer, after consulting with the Architect, determines that the Contractor's performance and progress are satisfactory, the PHA may make the remaining payments in full for the work subsequently completed. If the Contracting Officer subsequently determines that the Contractor's performance and progress are unsatisfactory, the PHA shall reinstate the ten (10) percent (or other percentage as provided in State law) retainage until such time as the Contracting Officer determines that performance and progress are satisfactory.
- (g) The Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration when computing progress payments.

Material delivered to the Contractor at locations other than the site may also be taken into consideration if the Contractor furnishes satisfactory evidence that (1) it has acquired title to such material; (2) the material is properly stored in a bonded warehouse, storage yard, or similar suitable place as may be approved by the Contracting Officer; (3) the material is insured to cover its full value; and (4) the material will be used to perform this contract. Before any progress payment which includes delivered material is made, the Contractor shall furnish such documentation as the Contracting Officer may require to assure the protection of the PHA's interest in such materials. The Contractor shall remain responsible for such stored material notwithstanding the transfer of title to the PHA.

- (h) All material and work covered by progress payments made shall, at the time of payment become the sole property of the PHA, but this shall not be construed as (1) relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or, (2) waiving the right of the PHA to require the fulfillment of all of the terms of the contract. In the event the work of the Contractor has been damaged by other contractors or persons other than employees of the PHA in the course of their employment, the Contractor shall restore such damaged work without cost to the PHA and to seek redress for its damage only from those who directly caused it.
- (i) The PHA shall make the final payment due the Contractor under this contract after (1) completion and final acceptance of all work; and (2) presentation of release of all claims against the PHA arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. Each such exception shall embrace no more than one claim, the basis and scope of which shall be clearly defined. The amounts for such excepted claims shall not be included in the request for final payment. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned.
- (j) Prior to making any payment, the Contracting Officer may require the Contractor to furnish receipts or other evidence of payment from all persons performing work and supplying material to the Contractor, if the Contracting Officer determines such evidence is necessary to substantiate claimed costs.
- (k) The PHA shall not; (1) determine or adjust any claims for payment or disputes arising there under between the Contractor and its subcontractors or material suppliers; or, (2) withhold any moneys for the protection of the subcontractors or material suppliers. The failure or refusal of the PHA to withhold moneys from the Contractor shall in no wise impair the obligations of any surety or sureties under any bonds furnished under this contract.

28. Contract Modifications

- (a) Only the Contracting Officer has authority to modify any term or condition of this contract. Any contract modification shall be authorized in writing.
- (b) The Contracting Officer may modify the contract unilaterally (1) pursuant to a specific authorization stated in a contract clause (e.g., Changes); or (2) for administrative matters which do not change the rights or

responsibilities of the parties (e.g., change in the PHA address). All other contract modifications shall be in the form of supplemental agreements signed by the Contractor and the Contracting Officer.

- (c) When a proposed modification requires the approval of HUD prior to its issuance (e.g., a change order that exceeds the PHA's approved threshold), such modification shall not be effective until the required approval is received by the PHA.

29. 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 changes:
 - (1) In the specifications (including drawings and designs);
 - (2) In the method or manner of performance of the work;
 - (3) PHA-furnished facilities, equipment, materials, services, or site; or,
 - (4) Directing the acceleration in the performance of the work.
- (b) Any other written order or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating (1) the date, circumstances and source of the order and (2) that the Contractor regards the order as a change order.
- (c) Except as provided in this clause, 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.
- (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 such 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 proposal for any change under paragraph (b) above shall be allowed for any costs incurred more than 20 days (5 days for oral orders) before the Contractor gives written notice as required. In the case of defective specifications for which the PHA 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 paragraph (a) of this clause, or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting a written statement describing the general nature and the amount of the proposal. If the facts justify it, the Contracting Officer may extend the period for submission. The proposal may be included in the notice required under paragraph (b) above. No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.
- (f) The Contractor's written proposal for equitable adjustment shall be submitted in the form of a lump sum proposal supported with an itemized breakdown of all increases and decreases in the contract in at least the following details:

- (1) Direct Costs. Materials (list individual items, the quantity and unit cost of each, and the aggregate cost); Transportation and delivery costs associated with materials; Labor breakdowns by hours or unit costs (identified with specific work to be performed); Construction equipment exclusively necessary for the change; Costs of preparation and/ or revision to shop drawings resulting from the change; Worker's Compensation and Public Liability Insurance; Employment taxes under FICA and FUTA; and, Bond Costs when size of change warrants revision.
- (2) Indirect Costs. Indirect costs may include overhead, general and administrative expenses, and fringe benefits not normally treated as direct costs.
- (3) Profit. The amount of profit shall be negotiated and may vary according to the nature, extent, and complexity of the work required by the change. The allowability of the direct and indirect costs shall be determined in accordance with the Contract Cost Principles and Procedures for Commercial Firms in Part 31 of the Federal Acquisition Regulation (48 CFR 1-31), as implemented by HUD Handbook 2210.18, in effect on the date of this contract. The Contractor shall not be allowed a profit on the profit received by any subcontractor. Equitable adjustments for deleted work shall include a credit for profit and may include a credit for indirect costs. On proposals covering both increases and decreases in the amount of the contract, the application of indirect costs and profit shall be on the net-change in direct costs for the Contractor or subcontractor performing the work.
- (g) The Contractor shall include in the proposal its request for time extension (if any), and shall include sufficient information and dates to demonstrate whether and to what extent the change will delay the completion of the contract in its entirety.
- (h) The Contracting Officer shall act on proposals within 30 days after their receipt, or notify the Contractor of the date when such action will be taken.
- (i) Failure to reach an agreement on any proposal shall be a dispute under the clause entitled Disputes herein. Nothing in this clause, however, shall excuse the Contractor from proceeding with the contract as changed.
- (j) Except in an emergency endangering life or property, no change shall be made by the Contractor without a prior order from the Contracting Officer.

30. 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 of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the PHA.
- (b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified (or within a reasonable time if not specified) in this contract an adjustment shall be made for any increase in the cost of performance of the contract (excluding profit) necessarily caused by such unreasonable suspension, delay, or interruption and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have

been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor or for which any equitable adjustment is provided for or excluded under any other provision of this contract.

- (c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order); and, (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

31. Disputes

- (a) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract. A claim arising under the contract, unlike a claim relating to the contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim. The submission may be converted to a claim by complying with the requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- (b) Except for disputes arising under the clauses entitled Labor Standards - Davis Bacon and Related Acts, herein, all disputes arising under or relating to this contract, including any claims for damages for the alleged breach thereof which are not disposed of by agreement, shall be resolved under this clause.
- (c) All claims by the Contractor shall be made in writing and submitted to the Contracting Officer for a written decision. A claim by the PHA against the Contractor shall be subject to a written decision by the Contracting Officer.
- (d) The Contracting Officer shall, within 60 (unless otherwise indicated) days after receipt of the request, decide the claim or notify the Contractor of the date by which the decision will be made.
- (e) The Contracting Officer's decision shall be final unless the Contractor (1) appeals in writing to a higher level in the PHA in accordance with the PHA's policy and procedures, (2) refers the appeal to an independent mediator or arbitrator, or (3) files suit in a court of competent jurisdiction. Such appeal must be made within (30 unless otherwise indicated) days after receipt of the Contracting Officer's decision.
- (f) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

32. Default

- (a) If the Contractor refuses or fails to prosecute the work, or any separable part thereof, with the diligence that will insure its completion within the time specified in this contract, or any extension thereof, or fails to complete said work within this time, the Contracting Officer may, by written notice to the Contractor, terminate the right to

proceed with the work (or separable part of the work) that has been delayed. In this event, the PHA may take over the work and complete it, by contract or otherwise, and may take possession of and use any materials, equipment, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the PHA resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the PHA in completing the work.

- (b) The Contractor's right to proceed shall not be terminated or the Contractor charged with damages under this clause if—
- (1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (i) acts of God, or of the public enemy, (ii) acts of the PHA or other governmental entity in either its sovereign or contractual capacity, (iii) acts of another contractor in the performance of a contract with the PHA, (iv) fires, (v) floods, (vi) epidemics, (vii) quarantine restrictions, (viii) strikes, (ix) freight embargoes, (x) unusually severe weather, or (xi) delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and
 - (2) The Contractor, within days (10 days unless otherwise indicated) from the beginning of such delay (unless extended by the Contracting Officer) notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of the delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, time for completing the work shall be extended by written modification to the contract. The findings of the Contracting Officer shall be reduced to a written decision which shall be subject to the provisions of the Disputes clause of this contract.
- (c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been for convenience of the PHA.

33. Liquidated Damages

- (a) If the Contractor fails to complete the work within the time specified in the contract, or any extension, as specified in the clause entitled Default of this contract, the Contractor shall pay to the PHA as liquidated damages, the sum of \$ 150.00 per day [Contracting Officer insert amount] for each day of delay. If different completion dates are specified in the contract for separate parts or stages of the work, the amount of liquidated damages shall be assessed on those parts or stages which are delayed. To the extent that the Contractor's delay or nonperformance is excused under another clause in this contract, liquidated damages shall not be due the PHA. The Contractor remains liable for damages caused other than by delay.
- (b) If the PHA terminates the Contractor's right to proceed, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final

completion of the work together with any increased costs occasioned the PHA in completing the work.

- (c) If the PHA does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the work is completed or accepted.

34. Termination for Convenience

- (a) The Contracting Officer may terminate this contract in whole, or in part, whenever the Contracting Officer determines that such termination is in the best interest of the PHA. Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which the performance of the work under the contract is terminated, and the date upon which such termination becomes effective.
- (b) If the performance of the work is terminated, either in whole or in part, the PHA shall be liable to the Contractor for reasonable and proper costs resulting from such termination upon the receipt by the PHA of a properly presented claim setting out in detail: (1) the total cost of the work performed to date of termination less the total amount of contract payments made to the Contractor; (2) the cost (including reasonable profit) of settling and paying claims under subcontracts and material orders for work performed and materials and supplies delivered to the site, payment for which has not been made by the PHA to the Contractor or by the Contractor to the subcontractor or supplier; (3) the cost of preserving and protecting the work already performed until the PHA or assignee takes possession thereof or assumes responsibility therefore; (4) the actual or estimated cost of legal and accounting services reasonably necessary to prepare and present the termination claim to the PHA; and (5) an amount constituting a reasonable profit on the value of the work performed by the Contractor.
- (c) The Contracting Officer will act on the Contractor's claim within days (60 days unless otherwise indicated) of receipt of the Contractor's claim.
- (d) Any disputes with regard to this clause are expressly made subject to the provisions of the Disputes clause of this contract.

35. Assignment of Contract

The Contractor shall not assign or transfer any interest in this contract; except that claims for monies due or to become due from the PHA under the contract may be assigned to a bank, trust company, or other financial institution. Such assignments of claims shall only be made with the written concurrence of the Contracting Officer. If the Contractor is a partnership, this contract shall inure to the benefit of the surviving or remaining member(s) of such partnership as approved by the Contracting Officer.

36. Insurance

- (a) Before commencing work, the Contractor and each subcontractor shall furnish the PHA with certificates of insurance showing the following insurance is in force and will insure all operations under the Contract:
- (1) Workers' Compensation, in accordance with state or Territorial Workers' Compensation laws.
 - (2) Commercial General Liability with a combined single limit for bodily injury and property damage of not less than \$ 1,000,000.00 [Contracting Officer insert amount]

per occurrence to protect the Contractor and each subcontractor against claims for bodily injury or death and damage to the property of others. This shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability under (3) below. If the Contractor has a made" policy, then the following additional requirements apply: the policy must provide a "retroactive date" which must be on or before the execution date of the Contract; and the extended reporting period may not be less than five years following the completion date of the Contract.

- (3) Automobile Liability on owned and non-owned motor vehicles used on the site(s) or in connection therewith for a combined single limit for bodily injury and property damage of not less than \$ 1,000,000.00 [Contracting Officer insert amount] per occurrence.
- (b) Before commencing work, the Contractor shall furnish the PHA with a certificate of insurance evidencing that Builder's Risk (fire and extended coverage) Insurance on all work in place and/or materials stored at the building site(s), including foundations and building equipment, is in force. The Builder's Risk Insurance shall be for the benefit of the Contractor and the PHA as their interests may appear and each shall be named in the policy or policies as an insured. The Contractor in installing equipment supplied by the PHA shall carry insurance on such equipment from the time the Contractor takes possession thereof until the Contract work is accepted by the PHA. The Builder's Risk Insurance need not be carried on excavations, piers, footings, or foundations until such time as work on the superstructure is started. It need not be carried on landscape work. Policies shall furnish coverage at all times for the full cash value of all completed construction, as well as materials in place and/or stored at the site(s), whether or not partial payment has been made by the PHA. The Contractor may terminate this insurance on buildings as of the date taken over for occupancy by the PHA. The Contractor is not required to carry Builder's Risk Insurance for modernization work which does not involve structural alterations or additions and where the PHA's existing fire and extended coverage policy can be endorsed to include such work.
- (c) All insurance shall be carried with companies which are financially responsible and admitted to do business in the State in which the project is located. If any such insurance is due to expire during the construction period, the Contractor (including subcontractors, as applicable) shall not permit the coverage to lapse and shall furnish evidence of coverage to the Contracting Officer. All certificates of insurance, as evidence of coverage, shall provide that no coverage may be canceled or non-renewed by the insurance company until at least 30 days prior written notice has been given to the Contracting Officer.

37. Subcontracts

- (a) Definitions. As used in this contract -
- (1) "Subcontract" means any contract, purchase order, or other purchase agreement, including modifications and change orders to the foregoing, entered into by a subcontractor to furnish supplies, materials, equipment, and services for the performance of the prime contract or a subcontract.

(2) "Subcontractor" means any supplier, vendor, or firm that furnishes supplies, materials, equipment, or services to or for the Contractor or another subcontractor.

- (b) The Contractor shall not enter into any subcontract with any subcontractor who has been temporarily denied participation in a HUD program or who has been suspended or debarred from participating in contracting programs by any agency of the United States Government or of the state in which the work under this contract is to be performed.
- (c) The Contractor shall be as fully responsible for the acts or omissions of its subcontractors, and of persons either directly or indirectly employed by them as for the acts or omissions of persons directly employed by the Contractor.
- (d) The Contractor shall insert appropriate clauses in all subcontracts to bind subcontractors to the terms and conditions of this contract insofar as they are applicable to the work of subcontractors.
- (e) Nothing contained in this contract shall create any contractual relationship between any subcontractor and the PHA or between the subcontractor and HUD.

38. Subcontracting with Small and Minority Firms, Women's Business Enterprise, and Labor Surplus Area Firms

The Contractor shall take the following steps to ensure that, whenever possible, subcontracts are awarded to small business firms, minority firms, women's business enterprises, and labor surplus area firms:

- (a) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- (b) Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;
- (c) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;
- (d) Establishing delivery schedules, where the requirements of the contract permit, which encourage participation by small and minority businesses and women's business enterprises; and
- (e) Using the services and assistance of the U.S. Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce, and State and local governmental small business agencies.

39. Equal Employment Opportunity

During the performance of this contract, the Contractor agrees as follows:

- (a) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or handicap.
- (b) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, or handicap. Such action shall include, but not be limited to, (1) employment, (2) upgrading, (3) demotion, (4) transfer, (5) recruitment or recruitment advertising, (6) layoff or termination, (7) rates of pay or other forms of compensation, and (8) selection for training, including apprenticeship.

- (c) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.
- (d) The Contractor shall, 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, national origin, or handicap.
- (e) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.
- (f) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.
- (g) The Contractor shall furnish all information and reports required by Executive Order 11246, as amended, Section 503 of the Rehabilitation Act of 1973, as amended, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto. The Contractor shall permit access to its books, records, and accounts by the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (h) In the event of a determination that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts, or Federally assisted construction contracts under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended, the rules, regulations, and orders of the Secretary of Labor, or as otherwise provided by law.
- (i) The Contractor shall include the terms and conditions of this clause in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor. The Contractor shall take such action with respect to any subcontract or purchase order as the Secretary of Housing and Urban Development or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.
- (j) Compliance with the requirements of this clause shall be to the maximum extent consistent with, but not in derogation of, compliance with section 7(b) of the Indian Self-Determination and Education Assistance Act and the Indian Preference clause of this contract.

40. Employment, Training, and Contracting Opportunities for Low-Income Persons, Section 3 of the Housing and Urban Development Act of 1968.

- (a) The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- (b) The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the Part 135 regulations.
- (c) The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- (d) The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 135.
- (e) The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR Part 135.
- (f) Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- (g) With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

41. Interest of Members of Congress

No member of or delegate to the Congress of the United States of America shall be admitted to any share or part of this contract or to any benefit that may arise therefrom.

42. Interest of Members, Officers, or Employees and Former Members, Officers, or Employees

No member, officer, or employee of the PHA, no member of the governing body of the locality in which the project is situated, no member of the governing body of the locality in which the PHA was activated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the project, shall, during his or her tenure, or for one year thereafter, have any interest, direct or indirect, in this contract or the proceeds thereof.

43. Limitations on Payments made to Influence Certain Federal Financial Transactions

- (a) The Contractor agrees to comply with Section 1352 of Title 31, United States Code which prohibits the use of Federal appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.
- (b) The Contractor further agrees to comply with the requirement of the Act to furnish a disclosure (OMB Standard Form LLL, Disclosure of Lobbying Activities) if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

44. Royalties and Patents

The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringement of any patent rights and shall save the PHA harmless from loss on account thereof; except that the PHA shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified and the Contractor has no reason to believe that the specified design, process, or product is an infringement. If, however, the Contractor has reason to believe that any design, process or product specified is an infringement of a patent, the Contractor shall promptly notify the Contracting Officer. Failure to give such notice shall make the Contractor responsible for resultant loss.

45. Examination and Retention of Contractor's Records

- (a) The PHA, HUD, or Comptroller General of the United States, or any of their duly authorized representatives shall, until 3 years after final payment under this contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this contract for the purpose of making audit, examination, excerpts, and transcriptions.
- (b) The Contractor agrees to include in first-tier subcontracts under this contract a clause substantially the same as paragraph (a) above. "Subcontract," as used in this clause, excludes purchase orders not exceeding \$10,000.
- (c) The periods of access and examination in paragraphs (a) and (b) above for records relating to (1) appeals under the Disputes clause of this contract, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which the PHA, HUD, or Comptroller General or any of their duly authorized representatives has taken exception shall continue until disposition of such appeals, litigation, claims, or exceptions.

46. Labor Standards - Davis-Bacon and Related Acts

If the total amount of this contract exceeds \$2,000, the Federal labor standards set forth in the clause below shall apply to the development or construction work to be performed under the contract.

- (a) Minimum Wages.
 - (1) All laborers and mechanics employed under this contract in the development or construction of the project(s) involved 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 the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(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 29 CFR 5.5(a)(1)(iv); 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 regular 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 in the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). 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. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall

be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- (2) (i) Any class of laborers or mechanics, including helpers, 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. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met: (A) The work to be performed by the classification requested is not performed by a classification in the wage determination; and (B) The classification is utilized in the area by the construction industry; and (C) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (ii) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee 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 HUD or its designee to the Administrator of the Wage and Hour Division, Employee Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.
- (iii) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.
- (iv) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (a)(2)(ii) or (iii) 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 classification.
- (3) 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.
- (4) 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 the 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.

- (b) Withholding of funds. HUD or its designee shall, upon its own action 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 in the construction or development of the project, all or part of the wages required by the contract, HUD or its designee may, after written notice to the Contractor, 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. HUD or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due.
- (c) Payrolls and basic records.
- (1) 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 in the construction or development of the project. Such records shall contain the name, address, and social security number of each such worker, his or her 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 1(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 29 CFR 5.5(a)(1)(iv), that the wages of any laborer or mechanic include the amount of costs reasonably anticipated in providing benefits under a plan or program described in section 1(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 apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- (2) (i) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under subparagraph (c)(1) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The Contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1214-0149.)
- (ii) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (A) That the payroll for the payroll period contains the information required to be maintained under paragraph (c) (1) of this clause and that such information is correct and complete;
- (B) 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 29 CFR Part 3; and
- (C) 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.
- (iii) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirements for submission of the "Statement of Compliance" required by subparagraph (c)(2)(ii) of this clause.
- (iv) 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 3729 of Title 31 of the United States Code.
- (3) The Contractor or subcontractor shall make the records required under subparagraph (c)(1) available for inspection, copying, or transcription by authorized representatives of HUD or its designee, the Contracting Officer, or the Department of Labor and 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, HUD or its designee may, after written notice to the Contractor, take such action as may be necessary to cause the 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.

- (d) (1) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship and Training, Employer and Labor Services (OATELS), or with a State Apprenticeship Agency recognized by OATELS, 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 OATELS 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 in this paragraph, 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. Where 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 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 of the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, 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.
- (2) Trainees. 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 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 in 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 in 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 in 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 in the wage determination for 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.

- (3) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.
- (e) Compliance with Copeland Act requirements. The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.
- (f) Contract termination; debarment. A breach of this contract clause may be grounds for termination of the contract and for debarment as a Contractor and a subcontractor as provided in 29 CFR 5.12.
- (g) Compliance with Davis-Bacon and related Act requirements. 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.
- (h) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this clause 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 of its subcontractors) and the PHA, HUD, the U.S. Department of Labor, or the employees or their representatives.
- (i) Certification of eligibility.
 - (1) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

- (2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a United States Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - (3) The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.
- (j) Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.
- (1) 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, including watchmen and guards, shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.
 - (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions set forth in subparagraph (j)(1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic (including watchmen and guards) employed in violation of the provisions set forth in subparagraph (j)(1) of this clause, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by provisions set forth in subparagraph (j)(1) of this clause.
 - (3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any Federal contract with the same prime Contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may 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 set forth in subparagraph (j)(2) of this clause.
- (k) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts all the provisions contained in this clause, and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all these provisions.

47. Non-Federal Prevailing Wage Rates

- (a) Any prevailing wage rate (including basic hourly rate and any fringe benefits), determined under State or tribal law to be prevailing, with respect to any employee in any trade or position employed under the contract, is inapplicable to the contract and shall not be enforced against the Contractor or any subcontractor, with respect to employees engaged under the contract whenever such non-Federal prevailing wage rate exceeds:
 - (1) The applicable wage rate determined by the Secretary of Labor pursuant to the Davis-Bacon Act (40 U.S.C. 3141 et seq.) to be prevailing in the locality with respect to such trade;
- (b) An applicable apprentice wage rate based thereon specified in an apprenticeship program registered with the U.S. Department of Labor (DOL) or a DOL-recognized State Apprenticeship Agency; or
- (c) An applicable trainee wage rate based thereon specified in a DOL-certified trainee program.

48. Procurement of Recovered Materials.

- (a) In accordance with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, the Contractor shall procure items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition. The Contractor shall procure items designated in the EPA guidelines that contain the highest percentage of recovered materials practicable unless the Contractor determines that such items: (1) are not reasonably available in a reasonable period of time; (2) fail to meet reasonable performance standards, which shall be determined on the basis of the guidelines of the National Institute of Standards and Technology, if applicable to the item; or (3) are only available at an unreasonable price.
- (b) Paragraph (a) of this clause shall apply to items purchased under this contract where: (1) the Contractor purchases in excess of \$10,000 of the item under this contract; or (2) during the preceding Federal fiscal year, the Contractor: (i) purchased any amount of the items for use under a contract that was funded with Federal appropriations and was with a Federal agency or a State agency or agency of a political subdivision of a State; and (ii) purchased a total of in excess of \$10,000 of the item both under and outside that contract.

**Supplemental Conditions to Form 5370
General Conditions for Construction**

Additional requirements:

Additionally, the Housing Authority adds the following contract requirements:

1. Default

a. The Housing Authority may declare the Contractor in default by written notice thereof to the Contractor, and terminate the whole or any part of this Contract for any of the following reasons:

- Failure to begin work within the time specified in the Contract or as otherwise specified.
- Failure to perform the work with sufficient labor, equipment, or material to insure the completion of the specified work in accordance with the Contract terms.
- Unsatisfactory performance of the work.
- Failure or refusal to remove material, or remove and replace any work rejected as defective or unsatisfactory.
- Discontinue work without prior approval.
- Failure to resume work, which has been discontinued, within a reasonable time after notice to do so.
- Insolvency or bankruptcy.
- Failure or refusal within 10 days after payment by the Housing Authority or upon written notice by the Contracting Officer, to make payment or show why payment should not be made, of any amounts due for materials furnished, labor supplied or performed, for equipment rentals, or for utility services rendered.
- Failure to protect, to repair, or to make good any damage or injury to property.
- Failure to accept the responsibility of or abiding by the terms set forth for obtaining / returning a Master Key.
- Breach of any provision of this Contract

b. In the event that the Housing Authority terminates this Contract in whole or in part as provided in Subparagraph a. above, the Housing Authority may procure, upon such terms and in such manner as it determines, services similar or identical to those terminated, and the Contractor shall be liable to the Housing Authority for any excess costs reasonably incurred for such similar or identical services included within the terminated part of the Contract.

c. If the Contract is terminated as provided in Subparagraph a. above, the Housing Authority, in addition to any other rights provided in this paragraph, may require the Contractor to transfer title and deliver immediately to the Housing Authority in the manner and to the extent directed by the Contracting Officer, such partially completed work, including, where applicable, reports, working papers and other documentation, as the Contracting

Officer has specifically produced or specifically acquired for the performance of such part of the Contract that has been terminated. Except as provided below, payment for partially completed work including where applicable, reports and working papers, delivered to and accepted by the Housing Authority shall be in an amount agreed upon by the Contractor and the Contracting Officer. The Housing Authority may withhold from amounts otherwise due the Contractor for such completed or partially completed works, such sums as the Contracting Officer determines to be necessary to protect the Housing Authority against loss.

d. The Housing Authority's failure to exercise any rights or remedies provided in this paragraph shall not be construed to be a waiver by the Housing Authority of its rights and remedies in regard to the event of default or any succeeding event of default.

2. **Assign Ability and Subcontracting**

- Subject to the terms and conditions of this Contract, this Contract shall be binding upon the parties and their respective successors and assigns.
- The Contractor shall not subcontract with any person or entity to perform all or any part of the work to be performed under this Contract without the prior written consent of the Contracting Officer, **which consent may be withheld at the discretion of the Contracting Officer.**
- The Contractor may not assign, in whole or in part, this contract or its rights, duties, obligations or responsibilities hereunder without prior written consent of the Contracting Officer, **which consent may be withheld at the discretion of the Contracting Officer.**
- The Contractor may not, without the consent of the Contracting Officer, assign its rights to payment to be received under the Contract.
- Any assignment consented to by the Contracting Officer shall be evidenced by written assignment agreement, pledge, or other transfer of any ownership interest in the Contractor provided, however, that the terms and conditions of the Contract and to assume the duties, obligations, and responsibilities being assigned.
- A change of name by the Contractor, following which the Contractor's federal identification number remains unchanged, shall not be considered to be as assignment hereunder. The Contractor shall give the Contracting Officer written notice of such change of name.

3. **Housing Authority Approval of Subcontracts:**

Any proposed subcontracts shall be disclosed in Contractor's bid submission. Contractor shall furnish such written information as Housing Authority may require concerning the proposed subcontractor, together with the proposed subcontractor's Non-Collusion

Affidavit in the form prescribed by the Housing Authority within 5 days of the HB's request for such information. Any objection shall be expressed in writing by the HB within 10 days after receipt.

The Housing Authority may, without claim for the extra cost by the Contractor, disapprove any subcontractor for cause on the basis of its own determination or because of the fact that the proposed subcontractors is listed ineligible to receive awards of contracts from the United States on a list or list furnished by HUD.

Nothing contained in the contract shall create any contractual relation between any subcontractor and the Housing Authority.

Any amendment to this contract shall not invalidate the contract, nor shall it relieve or release the Contractor from any guaranty given by him pursuant to the contract provisions, or relieve the Contractor from any other obligations of the contract. All Contract Modifications (aka change order) for monetary reasons, the Profit shall not exceed 10% and the Overhead shall not exceed 5%. All such work shall be executed under the conditions of the contract for an amount agreed to by the Housing Authority and the Contractor.

4. **Withholding for damages**

The Housing Authority may withhold, or cause to be withheld, from any monies payable for acceptable work performed by the Contractor or subcontractor, damages or need for rework caused by the Contractor or subcontractor, or other claims against the contractor or subcontractor such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor.

5. **Hold Harmless**

It is understood and agreed that Contractor shall be deemed and considered an independent contractor in respect to the work covered by this agreement, and shall assume all risk and responsibility for casualties of every description in connection with the work which can be attributed either directly or indirectly to the contractor. Contractor itself, its successors, assigns, heir, executors and administrators, agrees to indemnify, defend and save harmless the Housing Authority, all of its Officers and subordinates, (1) from all suits and actions of every nature brought against the Housing Authority or any of them for or on account of any damage or loss sustained by the Housing Authority, and does agree to pay any and all such damages including costs of litigation and counsel fees whether defended by Housing Authority or Contractor, during course of this Contract.

6. **Taxes, Industrial Laws and Benefits.**

In all matters relating to this contract, the contractor shall be acting as an independent contractor. Neither the contractor nor any of the persons furnishing materials or performing work or services which are required by this contract are employees of the

Housing Authority within the meaning of or the application of any federal, or state unemployment insurance law, or other social security, or any workmen's compensation, industrial accident law, or other industrial or labor laws. At its own expense, the contractor shall comply with such laws and assume all obligations imposed by anyone or more of such laws with respect to this contract. In addition, contractor shall be liable for the payment of all federal, state and local taxes, and any special assessments.

7. **Tenant Claims for Damage**

Contractors working in occupied units are responsible for any damage of property incurred to any resident and the Housing Authority. If during the course of this contract, a claim for damage is made by a resident of the Housing Authority, caused by any agent, employee or subcontractor, the Contractor shall answer said claim in writing within 30 days of receipt of said claim; Contractor is to forward a copy to the Housing Authority stating what action if any was taken.

8. **No Waiver of Conditions**

Failure of the Housing Authority to insist on strict performance shall not constitute a waiver of any of the provisions of this contract or waiver of any default of the Contractor.

9. **Automobile Liability**

Section 36 - Insurance of the General Conditions for Contract for Construction sub section (3) is too amended to (any auto) rather than owned and non-owned motor vehicles. A Binder is not acceptable, unless it is accompanied with a copy of a paid invoice, all policies are to have a policy number and expiration date, personal car insurance policy's are not acceptable, all insurance submitted is to be on the standard ACORD form, and all contractor's are to have an in-force policy prior to beginning work.

I, _____ acting as a signing officer of _____ do hereby acknowledge that I have received a copy of these supplemental conditions.

**U.S. Department of Housing
and Urban Development**
Office of Public and Indian Housing

**Representations, Certifications,
and Other Statements of Bidders**
Public and Indian Housing Programs

Representations, Certifications, and Other Statements of Bidders

Public and Indian Housing Programs

Table of Contents

Clause	Page
1. Certificate of Independent Price Determination	1
2. Contingent Fee Representation and Agreement	1
3. Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions	1
4. Organizational Conflicts of Interest Certification	2
5. Bidder's Certification of Eligibility	2
6. Minimum Bid Acceptance Period	2
7. Small, Minority, Women-Owned Business Concern Representation	2
8. Indian-Owned Economic Enterprise and Indian Organization Representation	2
9. Certification of Eligibility Under the Davis-Bacon Act	3
10. Certification of Nonsegregated Facilities	3
11. Clean Air and Water Certification	3
12. Previous Participation Certificate	3
13. Bidder's Signature	3

1. Certificate of Independent Price Determination

(a) The bidder certifies that--

(1) The prices in this bid have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other bidder or competitor relating to (i) those prices, (ii) the intention to submit a bid, or (iii) the methods or factors used to calculate the prices offered;

(2) The prices in this bid have not been and will not be knowingly disclosed by the bidder, directly or indirectly, to any other bidder or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a competitive proposal solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the bidder to induce any other concern to submit or not to submit a bid for the purpose of restricting competition.

(b) Each signature on the bid is considered to be a certification by the signatory that the signatory--

(1) Is the person in the bidder's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above; or

(2) (i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above.

_____ [insert full name of person(s) in the bidder's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the bidder's organization];

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and

(iii) As an agent, has not personally participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above.

(c) If the bidder deletes or modifies subparagraph (a)2 above, the bidder must furnish with its bid a signed statement setting forth in detail the circumstances of the disclosure.

[] [Contracting Officer check if following paragraph is applicable]

(d) Non-collusive affidavit. (applicable to contracts for construction and equipment exceeding \$50,000)

(1) Each bidder shall execute, in the form provided by the PHA/IHA, an affidavit to the effect that he/she has not colluded with any other person, firm or corporation in regard to any bid submitted in response to this solicitation. If the successful bidder did not submit the affidavit with his/her bid, he/she must submit it within three (3) working days of bid opening. Failure to submit the affidavit by that date may render the bid nonresponsive. No contract award will be made without a properly executed affidavit.

(2) A fully executed "Non-collusive Affidavit" [] is, [] is not included with the bid.

2. Contingent Fee Representation and Agreement

(a) Definitions. As used in this provision:

"Bona fide employee" means a person, employed by a bidder and subject to the bidder's supervision and control as to time, place, and manner of performance, who neither exerts, nor proposes to exert improper influence to solicit or obtain contracts nor holds out as being able to obtain any contract(s) through improper influence.

"Improper influence" means any influence that induces or tends to induce a PHA/IHA employee or officer to give consideration or to act regarding a PHA/IHA contract on any basis other than the merits of the matter.

(b) The bidder represents and certifies as part of its bid that, except for full-time bona fide employees working solely for the bidder, the bidder:

(1) [] has, [] has not employed or retained any person or company to solicit or obtain this contract; and

(2) [] has, [] has not paid or agreed to pay to any person or company employed or retained to solicit or obtain this contract any commission, percentage, brokerage, or other fee contingent upon or resulting from the award of this contract.

(c) If the answer to either (a)(1) or (a)(2) above is affirmative, the bidder shall make an immediate and full written disclosure to the PHA/IHA Contracting Officer.

(d) Any misrepresentation by the bidder shall give the PHA/IHA the right to (1) terminate the contract; (2) at its discretion, deduct from contract payments the amount of any commission, percentage, brokerage, or other contingent fee; or (3) take other remedy pursuant to the contract.

3. Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions (applicable to contracts exceeding \$100,000)

(a) The definitions and prohibitions contained in Section 1352 of title 31, United States Code, are hereby incorporated by reference in paragraph (b) of this certification.

(b) The bidder, by signing its bid, hereby certifies to the best of his or her knowledge and belief as of December 23, 1989 that:

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of a contract resulting from this solicitation;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the bidder shall complete and submit, with its bid, OMB standard form LLL, "Disclosure of Lobbying Activities;" and

(3) He or she will include the language of this certification in all subcontracts at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(d) Indian tribes (except those chartered by States) and Indian organizations as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) are exempt from the requirements of this provision.

4. Organizational Conflicts of Interest Certification

The bidder certifies that to the best of its knowledge and belief and except as otherwise disclosed, he or she does not have any organizational conflict of interest which is defined as a situation in which the nature of work to be performed under this proposed contract and the bidder's organizational, financial, contractual, or other interests may, without some restriction on future activities:

- (a) Result in an unfair competitive advantage to the bidder; or,
- (b) Impair the bidder's objectivity in performing the contract work.

[] In the absence of any actual or apparent conflict, I hereby certify that to the best of my knowledge and belief, no actual or apparent conflict of interest exists with regard to my possible performance of this procurement.

5. Bidder's Certification of Eligibility

(a) By the submission of this bid, the bidder certifies that to the best of its knowledge and belief, neither it, nor any person or firm which has an interest in the bidder's firm, nor any of the bidder's subcontractors, is ineligible to:

(1) Be awarded contracts by any agency of the United States Government, HUD, or the State in which this contract is to be performed; or,

(2) Participate in HUD programs pursuant to 24 CFR Part 24.

(b) The certification in paragraph (a) above is a material representation of fact upon which reliance was placed when making award. If it is later determined that the bidder knowingly rendered an erroneous certification, the contract may be terminated for default, and the bidder may be debarred or suspended from participation in HUD programs and other Federal contract programs.

6. Minimum Bid Acceptance Period

(a) "Acceptance period," as used in this provision, means the number of calendar days available to the PHA/IHA for awarding a contract from the date specified in this solicitation for receipt of bids.

(b) This provision supersedes any language pertaining to the acceptance period that may appear elsewhere in this solicitation.

(c) The PHA/IHA requires a minimum acceptance period of [Contracting Officer insert time period] calendar days.

(d) In the space provided immediately below, bidders may specify a longer acceptance period than the PHA's/IHA's minimum requirement. The bidder allows the following acceptance period: calendar days.

(e) A bid allowing less than the PHA's/IHA's minimum acceptance period will be rejected.

(f) The bidder agrees to execute all that it has undertaken to do, in compliance with its bid, if that bid is accepted in writing within (1) the acceptance period stated in paragraph (c) above or (2) any longer acceptance period stated in paragraph (d) above.

7. Small, Minority, Women-Owned Business Concern Representation

The bidder represents and certifies as part of its bid/ offer that it --

(a) [] is, [] is not a small business concern. "Small business concern," as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding, and qualified as a small business under the criteria and size standards in 13 CFR 121.

(b) [] is, [] is not a women-owned business enterprise. "Women-owned business enterprise," as used in this provision, means a business that is at least 51 percent owned by a woman or women who are U.S. citizens and who also control and operate the business.

(c) [] is, [] is not a minority business enterprise. "Minority business enterprise," as used in this provision, means a business which is at least 51 percent owned or controlled by one or more minority group members or, in the case of a publicly owned business, at least 51 percent of its voting stock is owned by one or more minority group members, and whose management and daily operations are controlled by one or more such individuals. For the purpose of this definition, minority group members are:

(Check the block applicable to you)

- | | |
|------------------------|------------------------------|
| [] Black Americans | [] Asian Pacific Americans |
| [] Hispanic Americans | [] Asian Indian Americans |
| [] Native Americans | [] Hasidic Jewish Americans |

8. Indian-Owned Economic Enterprise and Indian Organization Representation (applicable only if this solicitation is for a contract to be performed on a project for an Indian Housing Authority)

The bidder represents and certifies that it:

(a) [] is, [] is not an Indian-owned economic enterprise. "Economic enterprise," as used in this provision, means any commercial, industrial, or business activity established or organized for the purpose of profit, which is at least 51 percent Indian owned. "Indian," as used in this provision, means any person who is a member of any tribe, band, group, pueblo, or community which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs and any "Native" as defined in the Alaska Native Claims Settlement Act.

(b) [] is, [] is not an Indian organization. "Indian organization," as used in this provision, means the governing body of any Indian tribe or entity established or recognized by such governing body. Indian "tribe" means any Indian tribe, band, group, pueblo, or

community including Native villages and Native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs.

9. Certification of Eligibility Under the Davis-Bacon Act (applicable to construction contracts exceeding \$2,000)

(a) By the submission of this bid, the bidder certifies that neither it nor any person or firm who has an interest in the bidder's firm is a person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of the contract resulting from this solicitation shall be subcontracted to any person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.

10. Certification of Nonsegregated Facilities (applicable to contracts exceeding \$10,000)

(a) The bidder's attention is called to the clause entitled **Equal Employment Opportunity** of the General Conditions of the Contract for Construction.

(b) "Segregated facilities," as used in this provision, means any waiting rooms, work areas, rest rooms and 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, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise.

(c) By the submission of this bid, the bidder certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The bidder agrees that a breach of this certification is a violation of the Equal Employment Opportunity clause in the contract.

(d) The bidder further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) prior to entering into subcontracts which exceed \$10,000 and are not exempt from the requirements of the Equal Employment Opportunity clause, it will:

- (1) Obtain identical certifications from the proposed subcontractors;
- (2) Retain the certifications in its files; and
- (3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

Notice to Prospective Subcontractors of Requirement for Certifications of Nonsegregated Facilities

A Certification of Nonsegregated Facilities must be submitted before the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Employment Opportunity clause of the prime contract. 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 bids is prescribed in 18 U.S.C. 1001.

11. Clean Air and Water Certification (applicable to contracts exceeding \$100,000)

The bidder certifies that:

(a) Any facility to be used in the performance of this contract [] is, [] is not listed on the Environmental Protection Agency List of Violating Facilities:

(b) The bidder will immediately notify the PHA/IHA Contracting Officer, before award, of the receipt of any communication from the Administrator, or a designee, of the Environmental Protection Agency, indicating that any facility that the bidder proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and,

(c) The bidder will include a certification substantially the same as this certification, including this paragraph (c), in every nonexempt subcontract.

12. Previous Participation Certificate (applicable to construction and equipment contracts exceeding \$50,000)

(a) The bidder shall complete and submit with his/her bid the Form HUD-2530, "Previous Participation Certificate." If the successful bidder does not submit the certificate with his/her bid, he/she must submit it within three (3) working days of bid opening. Failure to submit the certificate by that date may render the bid nonresponsive. No contract award will be made without a properly executed certificate.

(b) A fully executed "Previous Participation Certificate" [] is, [] is not included with the bid.

13. Bidder's Signature

The bidder hereby certifies that the information contained in these certifications and representations is accurate, complete, and current.

(Signature and Date)

(Typed or Printed Name)

(Title)

(Company Name)

(Company Address)

DIVISION 1 GENERAL REQUIREMENTS

01.000 REQUIREMENTS

.001 EXTENT

- A. Requirements of GENERAL CONDITIONS, DIVISION 0, BIDDING REQUIREMENTS AND MODIFICATIONS TO GENERAL CONDITIONS, and ADDENDA, if issued, shall apply to work under all Divisions of the Contract.
- B. Separation of these Specifications into Divisions and Sections is for convenience only and is not intended to establish limits of work.
- C. Contractor shall inform himself fully of the conditions relating to the construction of the project. Failure to do so will not relieve the Contractor of his obligation to furnish all material and labor necessary to carry out the provisions of this contract, as indicated by these Specifications and Drawings.

01.020 SUMMARY OF THE WORK

.011 WORK UNDER THIS CONTRACT

- A. Description of Project - Work consists of New Offices for the HCV at the GM&O Building, Mobile Housing Authority, as shown on the Drawings and in accordance with these Specifications.
- B. Work shall include all scope, as shown on the Plans and described in the Specifications.

.012 ACCESS

- A. All Contractors and sub-contractors shall use the ingress and egress roads designated for movement of materials, workmen, etc.

.013 WORK BY OTHERS

- A. Work or Equipment indicated on Plans as N.I.C. (Not In Contract) shall be furnished and installed by others.
- B. The Owner reserves the right for his own forces to perform (or to further contract) additional work during the course of this Project. This Work shall be coordinated with the General Contractor.

.020 OWNER

- A. Wherever the term "Owner" is used in the Specifications, it refers to Mobile Housing Authority.
- B. All papers required to be delivered to the Owner shall, unless otherwise directed in writing, be delivered to the Architect.
- C. All verbal and written communications shall be delivered thru the Architect.

.030

COMMENCEMENT

A. The Contractor is required to begin work under this Contract within 10 days after date of written Notice to Proceed issued by the Architect, and to complete work within the time stipulated in the proposal form. Beginning of work shall mean actual physical work on the site.

.040

BENEFICIAL OCCUPANCY BY OWNER

A. If the Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion thereof, such occupancy shall be considered beneficial occupancy and shall not constitute Substantial Completion. Consent of the Contractor to such occupancy or use shall not be unreasonably withheld. Note that the building will be occupied throughout the duration of the project.

01.200

PROJECT MEETINGS

.201

EXTENT

A. Preconstruction Conference - Contractor shall arrange for a Conference on the job site, between representatives of the Owner, the Architect, the Sub-Contractors, the Superintendent for the project and himself prior to any construction work. Purpose of conference shall be to establish the Construction sequence, time schedule, and the limits of use of the areas surrounding the project.

01.300

SUBMITTALS

01.310

CONSTRUCTION SCHEDULE

.311

GENERAL

- A. Submit All Shop Drawings, Product Data and Samples required by the Contract Documents, within eight weeks after "Notice to Proceed."
- B. Related Requirements in Other Parts of the Project Manual:
 - 1. Definitions, and Additional Responsibilities of Parties: Conditions of the Contract.
- C. Contractor shall submit for approval a shop drawing submittal log listing all items to be submitted including Section No. and Item No. This must be provided prior to the approval of any shop drawings.
- D. Contractor shall submit a written phasing plan prior to beginning construction. This phasing plan must be approved by the Owner/Architect prior to start of work. Any necessary amendments must be presented in written form and approved prior to work in areas affected by the amendment.

.312

SHOP DRAWINGS

- A. Drawings shall be presented in a clear and thorough manner.
 - 1. Details shall be identified by reference to sheet and detail, schedule or room numbers shown on Contract Drawings.
 - 2. Any material which is not fully distinguishable because of poor quality reproduction will be discarded and the Contractor shall resubmit this material at his expense.
- B. Minimum sheet sizes: 8-1/2" x 11"
- C. No shop drawings shall be accepted by the architect until same has been field checked and coordinated by the Contractor to insure that the item or items covered can be installed as detailed on the shop drawings, and that said item or items fully meets the requirements of the plans and specifications. All such shop drawings shall bear the stamp of approval of the Contractor before submission to the Architect. Where shop drawings are approved as noted by the Contractor, such notes shall be prominently displayed on each copy, in a uniform and legible manner. If such notes require extensive revision to the shop drawings, same shall not be submitted to the Architect until they fully display the item or items detailed and meeting the requirements of the plans and the specifications.
- D. Reproductions of the contract documents will not be accepted as shop drawings. All shop drawings must be drawings developed by the supplier and shall show all details, sections, anchorage, etc., which may be needed to give a clear indication of that material's relation to the project.
- E. It shall be the responsibility of the Contractor to check all dimensions to insure that the item or items covered can be installed as detailed and are the quality, etc., called for in the specification or on the drawings.

.313

PRODUCT DATA

- A. Preparation
 - 1. Clearly mark each copy to identify pertinent products or models.
 - 2. Show performance characteristics and capacities.
 - 3. Show dimensions and clearances required.
 - 4. Show wiring or piping diagrams and controls.
- B. Manufacturer's standard schematic drawings and diagrams:
 - 1. Modify drawings and diagrams to delete information which is not applicable to the Work.
 - 2. Supplement standard information to provide information specifically applicable to the Work.

.314

SAMPLES

- A. Office samples shall be of sufficient size and quantity to clearly illustrate:
 - 1. Functional characteristics of the product, with integrally related parted and attachment devices.

2. Full range of color, texture and pattern.
- B. Field samples and mock-ups:
 1. Contractor shall erect, at the Project Site, at a location acceptable to the Architect/Engineer.
 2. Size or area: That specified in the respective specification section.
 3. Fabricate each sample and mock-up complete and finished.
 4. Remove mock-ups at conclusion of Work or when acceptable to the Architect/Engineer.

.315 **CONTRACTOR RESPONSIBILITIES**

- A. Review shop drawings, product data and samples prior to submission.
- B. Determine and verify:
 1. Field measurements.
 2. Field construction criteria.
 3. Catalog numbers and similar data.
 4. Conformance with Specifications.
- C. Coordinate each submittal with requirements of the Work and of the Contract Documents.
- D. Notify the Architect/Engineer in writing, at time of submission, of any deviations in the submittals from requirements of the Contract Documents.
- E. Begin no fabrication or work which requires submittals until return of submittals with Architect/Engineer approval.

.316 **SUBMISSION REQUIREMENTS**

- A. Make submittals promptly, and in such sequence as to cause no delay in the Work or in the work of any other Contractor.
 1. Contractor shall notify material and equipment manufacturer or supplier of this project's timetable for construction and of the importance to make submittals at the earliest possible time during the project to avoid delays.
- B. Number of submittals required:
 1. Shop Drawings and Product Data: Submit eight copies for the following parties:
 - 1 Architect
 - 1 Engineer
 - 1 Owner
 - 1 Supplier
 - 1 Sub Contractor
 - 1 General Contractor
 - 2 Closeout Documents
 2. Samples: Submit the number stated in each specification section.
- C. Submittals shall contain:
 1. The date of submission and the dates of any previous submissions.
 2. The Project title and number.
 3. Contract identification.

4. The names of:
 - a. Contractor
 - b. Supplier
 - c. Manufacturer
5. Identification of the product, with the specification section number.
6. Field dimensions, clearly identified as such.
7. Relation to adjacent or critical features of the Work or materials.
8. Applicable standards, such as ASTM or Federal Specifications numbers.
9. Identification of divisions from Contract Documents.
10. Identification of revisions on re-submittals.
11. An 8" x 3" blank space for Contractor and Architect/Engineer stamps.
12. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the Work and of Contract Documents.
13. If submittal is a substitution, provide in accordance with requirements of Section 01600 Product Requirements.

.317

RE-SUBMISSION REQUIREMENTS

- A. Make any corrections or changes in the submittals required by the Architect/Engineer and resubmit until approved.
- B. Shop Drawings and Product Data:
 1. Revise initial drawings or data, and resubmit as specified for the initial submittal.
 2. Indicate any changes which have been made other than those requested by the Architect/Engineer.
- C. Samples: Submit new samples as required for initial submittal.
- D. If submittal is stamped "APPROVED AS NOTED" with the Contractor's review, fabrication on order may proceed in order to expedite work. Once corrections are made on submittal by manufacturer or supplier, provide corrected copy to Architect and Engineer.

.318

DISTRIBUTION

- A. Distribute reproductions of Shop Drawings and copies of Product Data which carry the Architect/Engineer stamp of approval to:
 1. Job site file.
 2. Record Documents file.
 3. Other affected contractors.
 4. Subcontractors.
 5. Supplier or Fabricator.
- B. Distribute samples which carry the Architect/Engineer stamp of approval as directed by the Architect/Engineer.
- C. Retain two copies for Contract Closeout.

.319

ARCHITECT/ENGINEER DUTIES

- A. Review submittals with reasonable promptness and in accord with schedule. The Architect/Engineer will review shop drawings for conformance with the information given and the design concept expressed in the Contract Drawings only and will not bear the responsibility of any phase of the Contractor's liability in relation to shop drawings and their approval and/or corrections. The Architect's review of the Contractor's submittals/shop drawings shall not relieve the Contractor of his obligations and entire responsibility for the performance of the work in full accordance with the requirements of the contract.
- B. Affix stamp and initials or signature, and indicate requirements for resubmittal, approval of submittal, or review of submittal for design.
- C. Return submittals to Contractor for distribution or for re-submission.

01.350

LAYOUT

.351

EXTENT

- A. Before commencing any work, the Contractor shall verify all grades, levels, and dimensions as indicated on the Drawings. He shall report errors or inconsistencies in them to the Architect before commencing work.
- B. All lines, grades, levels and bench marks shall be established and maintained by the Contractor, who shall be responsible for them.

01.360

SCHEDULE OF VALUES

.361

EXTENT

- A. Before beginning work, the Contractor shall submit a Breakdown of Cost covering in detail all phases of the work.

01.400

QUALITY CONTROL

.401

EXTENT

- A. Manufacturer's Directions
 - 1. All manufactured articles, materials and equipment shall be applied, installed, connected, erected, used cleaned and conditioned as directed by the manufacturer, unless herein specified to the contrary.
 - 2. Furnish copies of all printed directions to the Architect.

.402

TESTING LABORATORY SERVICES

- A. The Contractor shall employ and pay for the services of an independent laboratory to perform specified services. Employment of a testing laboratory shall in no way relieve the contractor of his obligation to perform the work in accordance with the Contract.

- B. The Architect must approve the testing agency.
- C. Refer to each individual specification section for specific inspection, sampling and testing requirements.
- D. All test reports, in addition to those sent to the Contractor, shall be sent directly to the Architect and applicable Engineer from the testing laboratory.

01.500 TEMPORARY FACILITIES AND CONTROLS

.510 TEMPORARY TOILETS

- A. The General Contractor shall provide and maintain sanitary temporary toilets for all employees, subject to any and all Sanitary Codes having jurisdiction. The temporary toilets shall be enclosed and weatherproof and kept in sanitary condition at all times. They must be located at points approved by the Owner.

.512 TEMPORARY UTILITIES

- A. The Contractor must make arrangements to provide his own water and power. Temporary services shall be removed at completion of the project. Permanent utilities shall not be used during this Project except with the written permission of the Owner.

.513 DRINKING WATER

- A. The General Contractor shall furnish and provide drinking water facilities for all workmen on the job. This shall include icing when required, paper cups, etc., all maintained in a sanitary condition.

.514 SPECIAL CONTROLS

- A. Workmen who may, because of improper conduct, become objectionable, will be promptly removed by the Contractor at the request of the Owner or the Architect.
- B. Dress of workmen shall at all times be complete with shirts and pants while on job.
- C. No burning of trash or rubbish shall be allowed on site.

.515 BARRIERS AND SECURITY

- A. Protective devices such as signs, lights and signals shall be utilized night and day for safety of public and workmen. Partition along the canal area.
- B. The Owner will not be responsible for the protection and/or safety of the Contractor's work, materials and/or equipment.
- C. Contractor may provide security guards at his own discretion.

.516 CONSTRUCTION AIDS

- A. Scaffolding shall be provided by Contractor for the work, both interior and exterior, for construction of walls, ceilings, etc. Build or furnish and

maintain scaffolding in accordance with all laws and regulations in effect.

.517 TEMPORARY FIELD OFFICES

A. Field office for use of Contractor, Sub-Contractors, Architect and Owner shall be provided by Contractor. Office shall be weatherproof, contain adequate ventilation, telephone, heat and racks for drawings. Locate office where directed by Architect and remove when directed by Architect.

01.600 MATERIAL AND EQUIPMENT

.601 EXTENT

A. Where a specific material is specified by name. The materials mentioned by name shall form the basis of the Contract. No substitutions under such clauses shall be made without authority in writing from the Architect.

.602 ASBESTOS CONTAINING MATERIALS

- A. There shall be NO asbestos containing materials used in the construction of this Project. In the event a material which is specified contains asbestos, the Contractor shall recommend a non-asbestos substitute to the Architect for approval. Substitution of material shall be at no additional cost to the Owner.
- B. The Contractor shall provide written certification to the Owner that no asbestos containing material was used during the construction of this Project.

01.700 PROJECT CLOSEOUT

.710 CLEANING UP

- A. Clean up shall be performed continuously during working days to keep building and premises free from accumulation of waste materials and rubbish.
- B. At completion of the work, remove all waste, rubbish and unused surplus materials from and about the building and site, as well as tools, construction equipment and leave building broom clean.
- C. Also see specific cleaning requirements hereinafter required in these Specifications.
- D. Just prior to final inspection, remove all dust, dirt and stains from finished surfaces and leave the work ready for occupancy.

.715 GUARANTEES, BONDS AND AFFIDAVITS

A. Submitted by the Contractor to the Architect for transmittal to the Owner and shall be, but not limited to, the following:

1. Certification that all work, including that of sub-contractors, has been completed in accordance with requirements of the Contract Documents.
2. Copies of warranties, guarantees and bonds required by these Specifications.
3. Contractor's one-year guarantee that all defects in materials and workmanship will be remedied by Contractor without additional cost to Owner.
4. Written certification that no asbestos containing material was used during the Construction of this Project.
5. Consent for Final Payment from the Contractor's Surety Company.

.730 PROJECT RECORD DRAWINGS

- A. Contractor shall furnish two complete sets of final project record drawings to Architect prior to final payment. Architect shall furnish two copies of blue line prints to contractor for indicating in red pencil all changes made in actual construction. The actual final location of all piping, drains, cleanouts, appurtenances and equipment shall be indicated thereon by Contractor.

.740 FINAL INSPECTION

- A. After receipt of written notice that the work is ready for final inspection and acceptance and receipt of the final application for payment, the Architect will make such inspection and furnish the Contractor with a check list of any items found incomplete or not in conformance with the Contract Documents. The Contractor shall remedy such defects within 30 days of his receipt of the list and the Architect will make (1) subsequent inspection of the work. Should correction not be made within the allotted 30 days and should additional inspections of the work be required due to failure of the Contractor to remedy defects listed, the Contractor shall pay to the Owner the sum of \$250.00 for each subsequent trip. When the Architect finds the work acceptable under the Contract Documents and the Contract fully performed, he will issue the final Certificate for Payment stating that to the best of his knowledge, information and belief, and on the basis of his observations, the work has been completed in accordance with the terms and conditions of the Contract Documents, and that the entire balance found to be due to the Contractor, and noted in said final Certificate, is due and payable.

01.800 TIME FOR SUBSTANTIAL COMPLETION AND LIQUIDATED DAMAGES

.801 TIME FOR SUBSTANTIAL COMPLETION

- A. The Contractor shall complete all work under the contract agreement, including all alternate proposals which are made a part of the contract agreement within the Contract Time indicated on the Form of Proposal.

.802

LIQUIDATED DAMAGES

- A. The Contractor shall substantially complete all work under the Contract Agreement, including all Alternate Proposals which are made a part of the Contract Agreement, on or before the date so stipulated on the Form of Bid Proposal. If all work required by this contract agreement is not substantially completed within this specified time for substantial completion, the Contractor shall pay to the Owner, or shall agree to the Owner's withholding from monies due him, liquidated damages in the amount of One Hundred Fifty Dollars and NO/100 (\$150.00) per day, for each consecutive calendar day following the contract substantial completion date that the work remains incomplete, Saturdays, Sundays, and holidays included.
- B. The intent of this requirement is not to penalize the Contractor, but it is to offset damages which the Owner will experience if the project is not completed on the specified date.

01.850

ALLOWANCES:

.851

- A. General: All Allowances are to be included in each Base Bid as scheduled below.
 - 1. Purchase products under allowance as directed by Architect or as specified herein.
 - 2. The amount of all specified allowances shall include:
 - a. Net cost of product(s)
 - b. Delivery to site
 - c. Installation
 - d. Labor
 - e. Equipment Rental
 - 3. Changes utilizing contingency funds shall not include costs for overhead, profit, bonds, insurance and/or taxes as these will be included in the Base Bid amount.
 - 4. At close-out of Contract, funds remaining in Allowance will be credited to owner by Change Order. In addition to the balance of the allowance all applicable costs for overhead, profit, bond, insurance and taxes will be added to the allowance change order credit. Overhead amounts that can be clearly documented as being expended over the course of the project will be excluded from this added amount to the allowance credit.
- B. Contractor shall provide a contingency allowance of Twenty Thousand Dollars (\$20,000.00) in their bid.
 - 1. Contractor shall solicit a minimum of three (3) quotes for additional material or work to be performed under the Contingency Allowance.
 - 2. Use of contingency allowance shall be specifically authorized in writing upon approved of authorized Owner Representative. A final accounting of contingent funds used will be made by issuance of a change order at the end of the project. At close of project, funds

remaining in Contingency Allowance will be credited to owner by Change Order.

END OF DIVISION

DIVISION 1-11/11

SECTION 02.110 SELECTIVE BUILDING DEMOLITION

PART 1 GENERAL

1.01 EXISTING CONDITIONS AND SCOPE

- A. All contractors shall visit the building to determine the existing conditions and review the items of work required to be removed for the planned and specified new construction work.
- B. The Contractor shall coordinate demolition work with designated officials to insure total safety.
- C. Contractor shall remove existing construction as indicated or required, and execute all demolition in such a manner as to not damage the existing adjacent structures or materials which are to remain.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.01 PROTECTION OF EXISTING FACILITIES

- A. All structures, materials, or equipment of any kind now on the site that do not interfere with the performance of new work hereunder shall be left in place (except as indicated on the Drawings), shall remain the property of the Owner, and shall be protected against injury as directed.

3.02 INTENT

- A. It is the intent of this specification that all required building demolition work be fully and completely performed, and all work be accomplished in a neat and workmanlike manner.

3.03 EXISTING CONDITIONS

- A. Contractor shall protect all active utility lines. Any damage during this contract, to existing utility lines serving the existing building to remain, shall be properly repaired and reactivated at no expense to the Owner.

3.04 SALVAGED MATERIALS AND EQUIPMENT

- A. All existing equipment and materials shall remain the property of the Owner. Care must be taken to avoid damage to existing equipment and materials being relocated or stored. Items that are damaged during demolition shall be repaired and brought back to their original state.

3.05 PREVENTION OF NOXIOUS CONDITIONS

- A. Demolition and construction methods shall be as dust-free and noise-free as is possible. Damage to the Owner's operations or equipment can impose liquidated damages on the Contractor, based on expense in loss of production and repair or replacement of equipment.

- B. In certain areas the contractor will be required to install dust partitions. partitions shall be wood stud and plywood construction with 6 mil polyethylene sandwiched between the studs and the plywood. Dust partitions shall extend from the floor slab to the concrete floor deck above.
- C. Wet down materials during removal to prevent dust from rising. All rubbish, debris and expendable items resulting from demolition work shall be removed from the premises as it accumulates and disposed of at an off-site location by the Contractor.

3.06

SAFETY CODES AND STANDARDS

- A. The Contractors shall conduct all operations in such a manner as not to jeopardize life or property. He shall brace, shore, barricade or protect all areas where he is working, and shall provide all necessary railing, dust curtains, baffle walls, or other devices as needed for construction and protection of life and property.

END OF SECTION

SECTION 05.410 METAL STUD SYSTEM

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Hollow Metal Frames: Section 08.100
- B. Gypsum Wallboard: Section 09.250
- C. Electrical: Division 16

PART 2 PRODUCTS

2.01 MATERIAL

- A. All framing materials shall be cold-formed galvanized steel C-studs as per ASTM C 645. Minimum yield strength of 40 ksi for studs and floor tracks, and 33 ksi for top tracks.
- B. Flange size 1 1/4"; web depth 3 5/8", except as noted.
- C. All interior wall studs shall be 20 gauge.
- D. All floor tracks shall be 18 gauge.
- E. All top tracks shall be runner, of gauge to match studs.
- F. Horizontal bracing shall be 1-1/2" cold rolled channels secured with screw attached 1-1/2" x 2" x 16 gauge clip angles cut to length 1/4" less than stated width.
- G. All fasteners shall be cadmium plated.

PART 3 EXECUTION

3.01 ERECTION

- A. Align runners accurately to the layout, and securely anchor to floor and overhead structure with power driven fasteners as per manufacturer's recommendations.
- B. Position studs vertically in runners and space no greater than 16" on center. Securely anchor each stud to runners with four screws, two at top and two at bottom with one screw in each flange. Studs may not be spliced. At corners and intersection stud walls, provide at least three studs for attaching interior and exterior facings.
- C. Install horizontal bracing in all stud walls, not to exceed 4'-0" on center vertically. Insert channels through stud web holes and secure with screw attached clip angles at each stud. Horizontal bracing shall prevent stud rotation.
- D. For wall openings larger than a single door, assemble lintels from two boxed joist sections and fasten to double jamb studs. Install required web stiffeners before assembling headers. Cut sills and headers from studs or runners and install in all openings. Securely attach sills and headers to supporting studs on each side of openings and install cut to length studs as jack studs or cripples between runners.

- E. During installation, insulate interior of doubled sections used for jamb studs, lintels, headers or wall intersections/corners which will not be accessible for insulating after erection.
- F. All damaged floor tracks and wall studs must be repaired and/or replaced prior to acceptance.

END OF SECTION

SECTION 06.100 ROUGH CARPENTRY

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 DESCRIPTION OF WORK
- A. Definition: Rough carpentry includes carpentry work not specified as part of other sections and which is generally not exposed, except as otherwise indicated. Types of work in this section include rough carpentry for:
1. Wood nailers and blocking.
 2. Other rough carpentry indicated.
- 1.03 SUBMITTALS
- A. Wood Treatment Data: For water-borne preservatives, provide certification that moisture content of treated materials was reduced to a maximum of 19% prior to shipment to project site.
- 1.04 PRODUCT HANDLING: Delivery and Storage - Keep materials dry at all times. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber and provide air circulation within stacks.
- 1.05 JOB CONDITIONS: Coordination - Fit carpentry work to other work; scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, and similar supports to allow proper attachment of other work.

PART 2 PRODUCTS

- 2.01 WOOD PRODUCT QUALITY STANDARDS
- A. Lumber Standards: Comply with PS 20.
- B. Plywood Standard: Comply with PS 1 or APA Performance Standards.
- C. Factory mark each piece of lumber with type, grade, mill and grading agency.
- 2.02 MATERIALS
- A. Lumber, General
1. Nominal sizes are indicated, except as shown by detail dimension. Provide actual sizes as required by PS 20, for moisture content specified for each use.
 - a. Provide dressed lumber, S4S, unless otherwise indicated.
 - b. Provide seasoned lumber with 19% maximum moisture content at time of dressing and delivery.

- B. Miscellaneous Lumber
 - 1. Provide wood for support or attachment of other work including bucks, nailers, blocking, furring, stripping and similar members. Provide lumber of sizes shown or specified worked into shapes shown.
 - 2. Grade: Standard or No. 2 Southern Pine.
- C. Miscellaneous Materials
 - 1. Fasteners and Anchorages: Provide size, type, material and finish as indicated and as recommended by applicable standards, complying with applicable Federal Specifications for nail, staples, screws, bolts, nuts, washers and anchoring devices.
 - a. Where rough carpentry work is exposed to weather, provide fasteners and anchorages with a hot-dip zinc coating (ASTM A153).
 - b. Use screws and glue to attach sub-flooring to wood framing.

2.03 WOOD TREATMENT

- A. All interior wood blocking is to be fire retardant wood.

PART 3 EXECUTION

3.01 INSTALLATION

- A. General Requirements
 - 1. Discard units of material with defects which might impair quality of work, and units which are too small to use in fabricating work with minimum joints or optimum joint arrangement.
 - 2. Framing lumber and other rough carpentry shall be fitted closely, set accurately to the required lines and levels and shall be secured in place in a rigid and substantial manner.
 - 3. All framing and support members, not indicated or specified, shall be provided as necessary for the proper completion of the work.
 - 4. Spiking, nailing and bolting shall be done in an approved manner; spikes, nails and bolts shall be of the proper size, and care shall be used so as not to split the members. Members shall be drilled accurately for bolting; and for nailing where necessary to avoid splitting. Suitable washers shall be provided under bolt heads, and nuts and bolts shall be drawn up tight.
 - 5. Provide framing to support all edges of covering material.
- B. Wood Nailers, and Blocking
 - 1. Provide wherever shown and where required for attachment of other work. Form to shapes as shown or required and cut as required for true line and level of work to be attached. Coordinate location with other work involved.

2. Attach to substrates as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise shown. Build into masonry during installation of masonry work. Where possible anchor to formwork before concrete placement.

END OF SECTION

SECTION 06.200 FINISH CARPENTRY

PART 1 GENERAL

- 1.01 RELATED DOCUMENTS: Drawings and General Provisions for the Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.
- 1.02 RELATED WORK SPECIFIED ELSEWHERE
- A. Metal Stud System 05.410
 - B. Rough Carpentry 06.100
 - C. Electrical Division 16
- 1.03 DESCRIPTION OF WORK
- A. Definition: Finish carpentry includes carpentry and millwork which is exposed to view, is non-structural, and which is not specified as part of other sections. Types of finish carpentry work in this section include:
 - 1. Plastic laminate cabinets.
 - 2. Plastic laminate countertops.
 - 3. Painted wood running trim
 - B. Coordinate millwork installation with security products.
 - C. Installation of Finish Hardware: see Door Schedule on Drawings, Section 08.700 in the Specifications.
 - D. Rough carpentry is specified in Section 06.100.
- 1.04 REFERENCES
- A. Quality standards - except as otherwise shown or specified, comply with specified provisions of the following:
 - 1. Architectural Woodwork Institute (AWI) "Quality Standards".
 - 2. Architectural Woodwork Institute (AWI) "Architectural Casework Details".
 - 3. Architectural Woodwork Institute (AWI) "Guide to Wood Species".
- 1.05 SUBMITTALS
- A. Shop drawings
 - 1. Submit digital copy; which will be returned with reviewed notations prior to commencement of work under this section.
 - 2. Indicate plans and elevations, materials, surface grain directions, profiles, assembly methods, joint details, fastening methods, accessories, hardware, compliance with specified fire-retardant treatments, preservative treatments, and schedule of finishes.
 - B. Finish samples: Submit two chains of the manufacturer's standard samples, indicating colors, sheens and patterns.
- 1.06 QUALITY ASSURANCE

- A. Perform work in accordance with Custom Grade quality, except as noted otherwise.
- B. Work in this section shall comply with the specified Grade of Work and Sections of the current edition of the AWI Quality Standards Illustrated, as noted and except as noted otherwise.

1.07 QUALIFICATIONS

- A. Contractors and their personnel engaged in the work shall be able to demonstrate successful experience with work of comparable extent, complexity and quality to that shown and specified.
- B. Manufacturers who are members in good standing of the Architectural Woodwork Institute (AWI), and are familiar with this Standard.

1.08 DELIVERY, STORAGE AND HANDLING

- A. Do not deliver or install woodwork until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Protect work from moisture damage according to QSI, Section 1700, Installation.

1.09 JOB CONDITIONS

- A. Conditioning: Installer shall advise contractor of temperature and humidity requirements for woodwork installation areas. Do not install woodwork until required temperature and relative humidity have been stabilized and will be maintained in installation areas.
- B. 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. The fabricator of woodwork shall determine optimum moisture content and required temperature and humidity condition.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers who are members in good standing of the Architectural Woodwork Institute (AWI).
- B. Approved manufacturers.
 - 1. Formica Corporation
 - 2. Wilsonart International
 - 3. Nevamar Decorative Surfaces

2.02 BASIC MATERIALS AND FABRICATION METHODS

- A. General: Except as otherwise indicated, comply with following requirements:
- B. Wood Moisture Content: Provide kiln-dried (KD) lumber with an average 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:
- C. Interior Wood for Opaque Finish (Softwood)
 - 1. Solid Wood: Yellow-Poplar, or any softwood rated "good" or "excellent" for paint finishing in AWI "Guide to Wood Species" and meeting requirements for specified woodwork grades.
 - 2. Softwood Board:
 - a. WD-1: Yellow-Poplar, or any softwood rated "good" or "excellent", size and profile as drawn. Locate per finish schedule.
 - 3. Medium-Density Fiberboard: 3/4" thick ANSI A208.2, Grade MD, made with binder containing no urea formaldehyde.
 - 4. Softwood Plywood: 3/4" thick. Plywood: APA Group 2, Exposure 1 or 2, Grade A on exposed faces, Grade D or better on concealed faces (such as backs of shelving units against wall). Use moisture resistant plywood at sink bases and countertops near sinks.
- D. Interior wood for clear finish
 - 1. Hardwood & Plywood (stained cabinets): Face grade AA, plain sliced, American Black Cherry, book matched. Hardwood frame and edging shall be of same species. Use for all exposed and semi-exposed areas. Stain and clear sealant shall be per Section 09 90 00.
 - 2. Hardwood Board:
 - a. WD-2: Face grade AA, plain sliced American Black Cherry, size and profile as drawn. Locate per Finish Schedule.
 - 3. Wainscot panels: Grade AA-American Black Cherry, plain sliced, book matched, sizes and profiles as drawn. Stain and sealant per Section 09 90 00. Locate per Finish Schedule
- D. Plastic Laminate: Comply with NEMA LD-3, type, thickness as indicated below for each application.
- E. Quality Standards: For following types of architectural woodwork; comply with indicated standards as applicable:
 - 1. Architectural Cabinets (Casework) and Countertops: AWI Section 400.
 - 2. Shelving: Shelving Units - AWI Section 400B.
- F. Design and Construction Features: Comply with details shown for profile and construction of architectural woodwork; and, where not otherwise shown, comply with applicable Quality Standards, with alternate details as fabricator's option.
- G. Pre-Cut Opening: Fabricate architectural woodwork with pre-cut openings, where possible, to receive hardware, electrical work and similar items. Locate openings accurately and use templates or

roughing-in diagrams for proper size and shape. Smooth edges of cutoffs.

- H. Measures: Before proceeding with fabrication of wood-work required to be fitted to other construction, obtain measurements and verify dimensions and shop drawing details as required for accurate fit. Where sequence of measuring substrates before fabrication would delay the project, proceed with fabrication (without field measurements) and provide ample borders and edges to allow for subsequent scribing and trimming of woodwork for accurate fit.

2.03

INTERIOR ARCHITECTURAL WOODWORK

A. Architectural Cabinets, Laminate Clad

1. Grade: Custom Grade. Medium Density Fiberboard base cabinets, doors, drawers and drawer faces. Plywood countertops. Use exterior type plywood for tops which contain a sink or lavatory).
2. Design: As indicated. Flush overlay reveal style as per AWI Architectural Casework Details.

B. Plastic Laminate Surfacing

1. High-pressure plastic laminate, for exposed surfaces shall meet NEMA LD3-2000 standards including thickness as listed:
 - a. Horizontal Grade: 1/16" thick, to be used for all exposed horizontal surfaces.
 - b. Vertical Grade Surfaces: 1/32" thick, to be used for all exposed vertical surfaces
 - c. CLS Cabinet Liner; .020" thick, to be used to balance all finished (laminated) surfaces
 - d. Colors to be selected from manufacturers standard offerings

C. Architectural Cabinets, Stained Hardwood

1. Grade: AWI Premium Grade. Plywood boxes, shelves, drawer sides with hardwood edging on exposed ends. Hardwood doors, drawer fronts, and face frame.
2. Design: As indicated. Flush overlay (face frame) reveal style as per AWI Architectural Casework Details. Match grain in sequence horizontally across cabinets.
3. Countertops for stained hardwood cabinets shall be quartz solid surfacing. See Section 06.650

2.04

CABINET HARDWARE AND ACCESSORY MATERIALS:

- A. General: Provide cabinet hardware and accessory materials associated with Finish Carpentry, unless otherwise specified.
- B. Hardware Standards: Except as otherwise indicated, comply with ANSI A156.9 "American National Standard for Cabinet Hardware".
 1. Quality Level: Type 2 (institutional), unless otherwise indicated.
- C. Hinges: Frameless Concealed Hinges (European Type), BHMA A156.9, B01602, self-closing.

- D. Wire Pulls: [4-1/4" Angled Bar Pulls - DP54A \(SSS\)](#) by Doug Mockett & Company, Back mounted.
- E. Drawer Slides: Side mounted; full-extension type; zinc-plated steel ball-bearing slides.
- F. Door Locks: BHMA A156.11, E07121. Install per drawings.
- G. Drawer Locks: BHMA A156.11, E07041. Install per drawings.
- H. Shelf Supports: Where shelving is indicated as "adjustable shelf standards", provide Hafele standard, 25mm, silver anodized aluminum finish or equal. Include metal shelf supports in matching finish.
- I. Round Grommets: as scheduled
 - 1. Final locations to be approved by architect in field prior to install.
- J. Exposed Hardware Finishes: For exposed hardware, provide finish that complies with BHMA A156.18 for BHMA finish number indicated.
 - 1. Oil Rubbed Bronze: US10B.
- K. Adhesives, General: Use adhesives specifically made for the applications, and as recommended by the laminate manufacturer. Do not use adhesives that contain urea formaldehyde.

2.05 ROUGH HARDWARE

- A. Provide all necessary nails, screws and other hardware to properly secure members in place. Use finish or casing nails and trim head screws as appropriate where exposed.

2.06 FABRICATION

- A. Fabricate to Custom Quality Standards, except where otherwise noted.
- B. Shop prepare and identify components of assemblies for matching during site assembly.
- C. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.
- D. Cabinet style: Reveal overlay, except where noted otherwise.
- E. Underside wall cabinet finish style commensurate with the cabinet style specified above: Type C.
- F. Cabinet shelf thickness: 3/4" thick if ≤ 30 "; 1' thick if > 30 ".
- G. Drawer body requirements:
 - 1. Sides, Front and Back: 1/2" thick, 7 ply hardwood veneer core, no voids.
 - 2. Bottoms: 1/4" thick, veneer core product, B face hardwood veneer. Bottom shall be set into sides, front and back with a 1/4" deep groove and a minimum 3/8" standing shoulder.
- H. Adjustable shelf techniques
 - 1. Recessed flush, metal shelf standards with metal clips.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify adequacy of backing and support framing.
- B. Verify mechanical, electrical, and building items affecting work of this section are in place and ready to receive this work.

3.02 PREPARATION

- A. Condition woodwork to average prevailing humidity conditions in installation areas prior to installing.
- B. Prior to installation of Finish Carpentry, examine shop fabricated work for completion, and complete work as required, including removal of packing.

3.03 INSTALLATION

- A. Install work in accordance with Custom Grade, Section 1700, QSI.
- B. Securely install the work plumb, level, true and straight with no distortions. Shim as required using concealed shims.
- C. Scribe and cut work to fit adjoining work.
- D. Anchor woodwork to anchors or blocking built-in or directly attached to substrates. Secure with countersunk, concealed fasteners and blind nailing as required for a complete installation. Use fine finishing nails at wood substrate for exposed fastening, countersunk and filled flush with woodwork, and matching final finish where transparent finish is indicated.
- E. Architectural Cabinets: Install without distortion so that doors and drawers will fit openings properly and be accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete the installation of hardware and accessory items as indicated.
- F. Countertops: Anchor securely to base units and other support systems as indicated.
- G. Caulk space between backsplash and wall with sealant recommended by the laminate manufacturer. Color shall match plastic laminate.

3.04 ADJUSTMENT, CLEANING, FINISHING AND PROTECTION

- A. Repair damaged and defective work wherever possible to eliminate defects functionally and visually; where not possible to repair properly, replace work. Adjust joinery for uniform appearance.
- B. Clean hardware, lubricate and make final adjustments for proper operation.
- C. Clean work on exposed and semi-exposed surfaces.
- D. Refer to the Division 9 Sections for finishing of installed woodwork.
- E. Protection: Installer of Finish Carpentry shall advise Contractor of final protection and maintained conditions necessary to ensure that work will be without damage or deterioration at time of acceptance.

END OF SECTION

SECTION 07.200 BATT INSULATION

- PART 1 GENERAL
- 1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including Division 1 Specification sections, apply to work of this Section.
- 1.02 DESCRIPTION OF WORK
- A. Applications of insulation specified in this section include:
1. In all new walls and above all new ceilings.
 2. Above existing ceilings per drawings
- 1.03 PRODUCT HANDLING
- A. General Protection: Do not allow insulation materials to become wet, soiled, or covered with ice or snow. Comply with manufacturer's recommendations for handling, storage and protection during installation.
- PART 2 PRODUCTS
- 2.01 MATERIALS
- A. Above interior ceilings: Unfaced fiberglass batts, equal to Sonobatts by Owens Corning, complying with ASTM C655, Type 1 and ASTM E136, Flame Spread 10 and Smoke Developed 10 as per ASTM E84. 6" thick.
- B. In interior metal stud/gypsum board partitions: Sound Attenuation batt insulation, unfaced complying with ASTM C665, Type 1 and ASTM E136, Flame Spread 10 and Smoke Developed 10 as per ASTM E84. 3-1/2" thick.
- PART 3 EXECUTION
- 3.01 INSPECTION: Installer must examine substrate and conditions under which insulation work is to be performed and must notify Contractor in writing of unsatisfactory conditions. Do not proceed with insulation work until unsatisfactory conditions have been corrected in a manner acceptable to installer.
- 3.02 INSTALLATION
- A. General
1. Comply with manufacturer's instructions for particular conditions of installation in each case. If printed instructions are not available or do not apply to project conditions, consult manufacturer's technical representative for specific recommendations before proceeding with work.

- B. Interior Ceiling Insulation
 - 1. Install batts on top of ceiling tiles. Provide 24"x48" piece to top of light fixtures in accordance with U.L. assembly #P265 or P268.
- C. Interior metal stud/gypsum board partitions
 - 1. Position to fit snugly between webs of metal studs.
 - 2. Stuff all cracks around doors.

END OF SECTION

SECTION 07.900 JOINT SEALANTS

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 and all sections.
- 1.02 DESCRIPTION OF WORK
- A. The extent of each form and type of joint sealer is indicated on drawings and by provisions of this section.
 - B. The applications for joint sealers as work of this section include the following:
 - 1. Interior wall control joints in non-fire rated walls.
 - 2. Joints between metal door and window frames and adjacent construction.
 - 3. Other locations indicated or required to properly seal buildings.
- 1.03 JOB CONDITIONS: Weather Conditions - Do not proceed with installation of liquid sealants under favorable weather conditions. Install elastomeric sealants when temperature is in lower third of temperature range recommended by manufacturer for installation.
- 1.04 SUBMITTALS
- A. Product Literature: Submit product data sheets and the manufacturer's installation instructions. If two or more different sealants are to be in physical contact with each other, obtain from each manufacturer confirmation that its product is compatible with the proposed and adjacent products, including any other products which may be used by other sub-contractors. Include primer literature with the submittal document unless the manufacturer's sealant submittal specifically eliminates the need for a primer.
If a stain type primer is required for the sealant selected, such information shall be specifically included on submittal documents calling attention to the need for such staining type primer and noting the planned precautions to prevent exposed stain residue.
 - 1. Include Safety Data Sheets as specified in Section 01340, for sealants.
 - B. Color Samples: Submit manufacturer's standard color chart. Upon request, submit cured samples of each chosen color for verification of actual color to be installed.
- 1.05 PRODUCT DELIVERY AND STORAGE
- A. Deliver in manufacturer's original unopened container, clearly identifying each product specified, relating it to the product literature submitted.

- B. Store in accordance with manufacturer's recommendation, with proper precautions concerning shelf life, temperature, humidity, and similar storage factors to ensure the fitness of the material when installed.

PART 2 PRODUCTS

2.01 MATERIALS

- A. General Sealer Performance Requirements: Provide colors indicated or, if not otherwise indicated, as selected by Architect from manufacturer's standard colors. Select materials for compatibility with joint surfaces and other indicated exposures, and except as otherwise indicated, select modulus of elasticity and hardness or grade recommended by manufacturer for each application indicated.
- B. General Interior Caulk: equal to 950A Siliconized Acrylic Latex Caulk by Sherwin-Williams.
- C. Miscellaneous Materials
 1. Joint Primer/Sealer: Provide type of joint primer/sealer recommended by sealant manufacturer for joint surfaces to be primed or sealed.
 2. Sealant Backer Rod: Compressible rod stock of open or closed cell polyethylene or polyurethane as recommended by sealant manufacturer for compatibility with sealant.
 3. Bond Breaker Tape: An acceptable polyethylene or similar type bond breaker tape used to prevent three-sided adhesion in locations where backer rod cannot be used.

PART 3 EXECUTION

- 3.01 MANUFACTURER'S INSTRUCTIONS: Comply with manufacturer's printed instructions, except where more stringent requirements are shown or specified, and except where manufacturer's technical representative directs otherwise.

3.02 INSPECTION

- A. Inspect substrate surface to assure that no bond breaker materials contaminate the surface to which the sealant is to adhere and to ensure that unsound substrates are repaired. Installation of sealant shall be evidence of acceptance of the substrate.
- B. Verify joint dimensions prior to installation of the sealant to ensure that all dimensions are within tolerance established in the manufacturer's literature. Unacceptable variations shall be called to the Architects attention for resolution prior to installing any material.

3.03 JOINT PREPARATION

- A. Clean joint surfaces immediately before installation of sealant or caulking compound. Remove dirt, insecure coatings, moisture and

other substances which could interfere with bond of sealant or caulking compound. Etch concrete and masonry joint surfaces as recommended by sealant manufacturer.

- B. Prime or seal joint surfaces where indicated, and where not indicated if recommended by sealant manufacturer, prior to installation of any backer rod or bond breaker tape. Do not allow primer/sealer to spill or migrate onto adjoining surfaces.

3.04 INSTALLATION

- A. Set joint filler units full depth of joint or position in joint to coordinate with other work, including installation of backer rods and sealants. Do not leave voids or gaps between ends of joint filler units.
- B. Install sealant backer rod for liquid elastomeric sealants, except where shown to be omitted or recommended to be omitted by sealant manufacturer for application indicated in which case a bond breaker tape shall be used to prevent 3-sided adhesion. Apply backer rod using blunt or rounded tools which will ensure a uniform depth without puncturing the material. Use a rod oversized a minimum of 33% for closed cell and 50% for open cell, unless otherwise required by the manufacturer.
- C. Employ only proven installation techniques, which will ensure that sealants are deposited in uniform, continuous ribbons without gaps or air pockets, with complete "wetting" of joint bond surfaces equally on opposite sides. Except as otherwise indicated, fill sealant rabbet to a slightly concave surface, slightly below adjoining surfaces, with a smooth, even finish.
- D. Install sealant to depths as shown or, if not shown, as recommended by sealant manufacturer but within the following general limitations, measured at center (thin) section of bead.
 - 1. For normal moving joints sealed with elastomeric sealants but not subject to traffic, fill joints to a depth equal to 50% of joint width, but neither more than 1/2" deep nor less than 1/4" deep.
 - 2. For joints sealed with non-elastomeric sealants, fill joints to a depth in range of 75% to 125% of joint width.
- E. Spillage: Do not allow sealants or compounds to overflow or spill onto adjoining surfaces or to migrate into voids of adjoining surfaces. Clean adjoining surfaces by whatever means may be necessary to eliminate evidence of spillage.

- 3.05 CURE AND PROTECTION: Cure sealants and caulking compounds in compliance with manufacturer's instructions and recommendations to obtain high early bond strength, internal cohesive strength and surface durability.

END OF SECTION

JOINT SEALANTS
07900-3/3

SECTION 08.100 HOLLOW METAL WORK

PART 1 GENERAL

1.01 DESCRIPTION

- A. Related Work Specified Elsewhere
 - 1. Metal Stud System 05.410
 - 2. Gypsum Wallboard 09.250
 - 2. Painting 09.900

1.02 QUALITY ASSURANCE

- A. Acceptable Manufacturers
 - 1. Steelcraft Manufacturing Co.
 - 2. Amweld
 - 3. Ceco
 - 4. Curries
 - 5. Fenestra

1.03 SUBMITTALS

- A. Shop Drawings
 - 1. Show details of frame construction for hardware, and identify with Door Schedule by symbol, size, type.

PART 2 PRODUCTS

2.01 CONSTRUCTION

- A. Refer to Drawings for size, configuration, etc., of all frames. Frames shall be gauge as indicated on the Drawings.
 - 1. Finish shall be one (1) coat of baked-on rust resistant primer on all sides. Frames shall be cleaned, bonderized and primed, in manufacturer's standard color.
 - 2. All frames shall be flush welded assembly with reinforced plates behind each miter and with recessed plates to receive lock, butts and door closers. Punch strike jamb side for three rubber bumpers. All welded joints shall be welded and ground smooth. Provide additional concealed reinforcing as required for all hardware. See 08.700 for Hardware.
 - 3. Templates of hardware will be furnished by the hardware manufacturer. Metal bucks are to be properly prepared for receiving hardware to be recessed in buck.
 - 4. Provide standard "T" anchors to secure bucks in masonry walls. Provide metal stud anchors in metal stud walls. Six (6) anchors per frame. Submit data on anchors.

PART 3 EXECUTION

- 3.01 INSPECTION
 - A. Verify that frames are installed as required for proper installation of doors.
 - B. Do not install doors in frames which would hinder the operation of the doors.

- 3.02 INSTALLATION
 - A. Fitting and machining
 - 1. Fit and machine frames for hardware to clearances and tolerances allowable.
 - B. Installation of frames
 - 1. Follow manufacturer's written instructions for all installation work.
 - 2. Bottom of door frames shall be flush with top of concrete floor and shall be securely anchored into concrete with bolts, or "Ramset" rivets, or approved equal. Provide clips on frames for anchorage.
 - 3. Frames shall be cleaned of all rust and scale and touched up with rust inhibitor primer after setting and before painting, allowing no exposed steel surfaces to show unprimed.

- 3.03 ADJUST AND CLEAN
 - A. Replace frames that are damaged during installation.

END OF SECTION

SECTION 08.140 FLUSH WOOD DOORS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Solid-core doors.
 - 2. Factory fitting flush wood doors to frames and factory machining for hardware.
- B. Related Sections include the following:
 - 1. Section 06.200 Finish Carpentry
 - 2. Section 08.100 Hollow Metal Work
 - 3. Section 08.700 Finish Hardware
 - 4. Section 08.800 Glazing

1.03 SUBMITTALS

- A. Product Data: For each type of door. Include details of core and edge construction, trim for openings, and louvers.
 - 1. Include factory-finishing specifications.
- B. Shop Drawings: Indicate location, size, and hand of each door; elevation of each kind of door; construction details not covered in Product Data; location and extent of hardware blocking; and other pertinent data.
 - 1. Indicate fire ratings for fire doors.
- C. Samples for Initial Selection: Color charts consisting of actual materials in small sections for the following:
 - 1. Faces of factory-finished doors with transparent finish. Show the full range of colors available for stained finishes.
- D. Samples for Verification: As follows:
 - 1. Corner sections of doors approximately 8 by 10 inches (200 by 250 mm) with door faces and edgings representing the typical range of color and grain for each species of veneer and solid lumber required. Finish sample with same materials proposed for factory-finished doors.

1.04 QUALITY ASSURANCE

- A. Source Limitations: Obtain flush wood doors through one source from a single manufacturer.
- B. Quality Standard: Comply with the following standard:

1. NWWDA Quality Standard: NWWDA I.S.1-A, "Architectural Wood Flush Doors."
 2. AWI Quality Standard: AWI's "Architectural Woodwork Quality Standards" for grade of door, core, construction, finish, and other requirements.
- C. Manufacture shall be a member of AWI.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Protect doors during transit, storage, and handling to prevent damage, soiling, and deterioration. Comply with requirements of referenced standard and manufacturer's written instructions.
1. Comply with WIC Technical Bulletin 420-R for delivery, storage, and handling of doors.
- B. Mark each door with individual opening numbers used on Shop Drawings. Use removable tags or concealed markings.

1.06 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install doors until conditions for temperature and relative humidity have been stabilized and will be maintained in storage and installation areas during the remainder of the construction period to comply with requirements of the referenced quality standard for Project's geographical location.

1.07 WARRANTY

- A. General Warranty: Door manufacturer's warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Door Manufacturer's Warranty: Submit written agreement on door manufacturer's standard form, signed by manufacturer, Installer, and Contractor, agreeing to repair or replace defective doors that have warped (bow, cup, or twist) more than 1/4 inch in a 42-by-84-inch section or that show telegraphing of core construction in face veneers exceeding 0.01 inch in a 3-inch span, or do not comply with tolerances in referenced quality standard.
1. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.
 2. Warranty shall be in effect during the following period of time after the date of Substantial Completion:
 - a. Solid-Core Interior Doors: Life of installation.

PART 2

PRODUCTS

- 2.01 MANUFACTURERS
- 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. Flush Wood Doors
 - a. VT Industries
 - b. Oshkosh Architectural Door Co.
 - c. Masonite Architectural
 - 2. Basis of Design:
 - Cendura Series, Mohawk by Masonite Architectural
- 2.02 DOOR CONSTRUCTION, GENERAL
- A. Doors for Transparent Finish: Comply with the following requirements:
 - 1. WDMA Quality Standard: Custom
 - 2. WDMA Performance Level: Heavy Duty
 - 3. Faces: Paint Grade Birch
 - 4. Vertical Edges: Finger-Jointed Softwood/Mill Option low density hardwood.
 - 5. Horizontal Edges: Structural Composite Lumber
 - 6. Core: Wood based particle board
 - 7. Construction: Five plies. Stiles and rails are bonded to core, and then entire unit is abrasive planed before veneering.
 - 8. Thickness: 1-3/4"
- 2.03 SOLID-CORE DOORS
- A. Particleboard Cores: Comply with the following requirements:
 - 1. Particleboard: ANSI A208.1, Grade LD-1.
 - 2. Blocking: Provide wood blocking at particleboard-core doors as follows:
 - a. 5-inch top-rail blocking, at doors indicated to have closers.
 - b. 5-inch bottom-rail blocking, at exterior doors and doors indicated to have kick, mop, or armor plates.
 - c. 5-inch midrail blocking, at doors indicated to have exit devices.
- 2.04 LIGHT FRAMES
- A. Wood Frames for Light Openings: As follows:
 - 1. Wood Species: Same species as door faces.
 - 2. Profile: Flush rectangular beads.
- 2.05 FABRICATION
- A. Fabricate flush wood doors in sizes indicated for Project site fitting.

1. Comply with clearance requirements of referenced quality standard for fitting. Comply with requirements of NFPA 80 for fire-rated doors.
- B. Factory machine doors for hardware that is not surface applied. Locate hardware to comply with DHI-WDHS-3. Comply with final hardware schedules, door frame Shop Drawings, DHI A115-W series standards, and hardware templates.
 1. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before factory machining.
 2. Metal Astragals: Premachine astragals and formed-steel edges for hardware for pairs of fire-rated doors.
- C. Openings: Cut and trim openings through doors to comply with applicable requirements of referenced standards for kind(s) of door(s) required.
 1. Light Openings: Trim openings with moldings of material and profile indicated.
 2. Flash top of outswinging doors (with manufacturer's standard metal flashing).

2.07 FACTORY FINISHING

- A. General: Comply with referenced quality standard's requirements for factory finishing.
- B. Finish wood doors at factory.
- C. Transparent Finish: Comply with requirements indicated for grade, finish system, staining effect, and sheen.
 1. Finish: Manufacturer's standard finish with performance requirements comparable to AWI System TR-6 conversion varnish.
 2. Staining: As selected by Architect from manufacturer's full range of colors.
 3. Effect: Open-grain finish.
 4. Sheen: Semigloss.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine installed door frames before hanging doors.
 1. Verify that frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with plumb jambs and level heads.
 2. Reject doors with defects.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Hardware: For installation, see Division 8 Section "Door Hardware."

- B. Manufacturer's Written Instructions: Install wood doors to comply with manufacturer's written instructions, referenced quality standard, and as indicated.
 - 1. Bevel non-fire-rated doors 1/8 inch in 2 inches at lock and hinge edges.
- C. Job-Fit Doors: Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted with fire-rated doors. Machine doors for hardware. Seal cut surfaces after fitting and machining.
 - 1. Fitting Clearances for Non-Fire-Rated Doors: Provide 1/8 inch at jambs and heads, 1/16 inch per leaf at meeting stiles for pairs of doors, and 1/8 inch from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide 1/4-inch clearance from bottom of door to top of threshold.
 - 2. Bevel non-fire-rated doors 1/8 inch in 2 inches at lock and hinge edges.
- D. Factory-Finished Doors: Restore finish before installation, if fitting or machining is required at Project site.

3.03

ADJUSTING AND PROTECTING

- A. Operation: Rehang or replace doors that do not swing or operate freely.
- B. Finished Doors: Refinish or replace doors damaged during installation.
- C. Protect doors as recommended by door manufacturer to ensure that wood doors are without damage or deterioration at the time of Substantial Completion.

END OF SECTION

SECTION 08.700 FINISH HARDWARE

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. The Work under this section consists of furnishing all Finish Hardware necessary to complete the work in accordance with the Plans and Specifications. This Contractor shall verify all quantities, types, or sizes required. In the event that any necessary items of hardware are not found herein, the Contractor shall notify the Architect in writing 10 days prior to bid date. No additional cost to the Architect or Owner shall be accepted after the contract is awarded based on the Plans and Specifications at the time of the General Contract Bid.

1.02 WORK INCLUDED

- A. Hardware for all swinging doors.
- B. Rekeying information for all interior building doors not otherwise in the project.

1.03 RELATED SECTIONS

- A. Section 06.200 Finish Carpentry
- B. Section 08.100 Hollow Metal Work
- C. Section 08.140 Flush Wood Doors

1.04 CODES, REFERENCES, AND STANDARDS

- A. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
 - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
 - 2. ICC/IBC - International Building Code.
 - 3. NFPA 70 - National Electrical Code.
 - 4. NFPA 80 - Fire Doors and Windows.
 - 5. NFPA 101 - Life Safety Code.
 - 6. NFPA 105 - Installation of Smoke Door Assemblies.
 - 7. UL/ULC and CSA C22.2 – Standards for Automatic Door Operators Used on Fire and Smoke Barrier Doors and Systems of Doors.
 - 8. International Building Codes, with Local Amendments.
- B. Standards: All hardware specified herein shall comply with the following industry standards:
 - 1. ANSI/BHMA Certified Product Standards - A156 Series
 - 2. UL10C – Positive Pressure Fire Tests of Door Assemblies

1.05 SUBMITTALS

- A. The Contractor shall prepare and submit to the Architect for approval six (6) copies of this finish hardware schedule. The Schedule is to be submitted in the "Vertical Style" with items as required. No item shall have doors or hardware listed that have a different type or size. Before

any materials are ordered the finish hardware supplier shall have an approved schedule with all keying information.

- B. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

1.06 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.
- C. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.07 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

- D. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.
 - 1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
 - 2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.
- E. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.
- F. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
 - 1. Function of building, purpose of each area and degree of security required.
 - 2. Plans for existing and future key system expansion.
 - 3. Requirements for key control storage and software.
 - 4. Installation of permanent keys, cylinder cores and software.
 - 5. Address and requirements for delivery of keys.
- G. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
 - 1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
 - 2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
 - 3. Review sequence of operation narratives for each unique access controlled opening.
 - 4. Review and finalize construction schedule and verify availability of materials.
 - 5. Review the required inspecting, testing, commissioning, and demonstration procedures
- H. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

1.08

SAMPLES

- A. The Architect reserves the right to request physical samples of any product being proposed for use on this project. If such a sample is required, and is approved for use on the project the Architect will forward all samples to the contractor for use on the project.

1.09 DELIVERY AND STORAGE

- A. The Hardware Supplier shall not deliver Finish Hardware to the job site. The hardware shall be received at the Supplier's place of business at which time all items shall be properly marked and identified with the Hardware Schedule. The hardware supplier shall deliver Finish Hardware to the job site in one complete shipment.
- B. The Finish Hardware shall be stored in a clean, dry room off the floor on temporary shelving provided by the General Contractor. If requested, the hardware supplier shall assist the General Contractor in placing the hardware on the shelves in a manner that will help assure proper hardware installation.

1.10 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
 - 1. Structural failures including excessive deflection, cracking, or breakage.
 - 2. Faulty operation of the hardware.
 - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - 4. Electrical component defects and failures within the systems operation.
- C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.
- D. Special Warranty Periods:
 - 1. Ten years for mortise locks and latches.
 - 2. Five years for exit hardware.
 - 3. Twenty five years for manual surface door closer bodies.

1.11 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

1.12 INSPECTIONS

- A. Upon the request of the Architect, a qualified representative from the Hardware supplier shall accompany the Architect's representative to inspect the installation of all Finish Hardware supplied under this section. If errors in installation are present, it will be brought to the Contractor's attention for correction.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Items listed herein are taken from the following manufacturer's catalogs:
 - 1. McKinney
 - 2. Yale
 - 3. Trimco
 - 4. Glynn Johnson
 - 6. Pemko
- B. Items listed as allowable substitutions and approved by the Architect will be accepted.
- C. Finish of product, except as noted in the Hardware sets, shall be as follows:
 - 1. Butts, 652.
 - 2. Locksets, 626.
 - 3. Closers, holders, and brackets, painted SB.
- D. Hinges
 - 1. All interior door hinges shall be equal to Hager BB1279.
 - 2. All hinges shall be 4-1/2 x 4-1/2 unless noted otherwise.
- E. Locksets shall be Yale Series with AUR. Allowable substitutes are Corbin ML2200 Series with NSR trim, Sargent 18- 8100 Series with LNG trim and Yale 8700 FL Series with AUR trim. Locksets shall be compatible with Yale interchangeable cores. Finishes shall be 626.
- F. Keying
 - 1. All cylinders and locks shall have Yale interchangeable cores keyed as directed by Architect and Owner to the existing systems.
 - (3) keys per lock
 - (3) submasters per suite
 - (3) masters per floor
 - (3) grand masters per buildingProvide construction cores during the work.
 - 2. Furnish keys as needed by the Owner.

- 3. Cylinders in aluminum door openings shall have 613 finish. Cylinders in other door openings shall have 626 finish.
- G. Closers shall be Yale 3301 BF Series, with adjustable delayed action closing. Power adjustments shall be set for Barrier Free range.
- H. Stops
 - 1. Interior stops shall be floor type W1210RP by Trimco or approved equal when door will not swing into wall or where overhead stop is specified. Balance of stops shall be W1276CCS by Trimco or equal.
- I. Silencers shall be Glynn Johnson GJ64 or approved equal.
- J. Door Seals shall be Pemko
- K. Door Push Plates and Pulls
 - 1. Push/Pull Plates: Minimum .05-inch-thick, size as indicated below, with beveled edges, secured with exposed screws unless otherwise noted.
 - 2. Push plates shall be equal to Trimco 1001-3 Push Plate, 4"x16"
 - 3. Pull plates shall be equal to Trimco 1017-3B 4"x16", 8" CTC, 3/4" dia pull.
- L. Coordinate power and rough-in requirements for all access control systems with Electrical drawings and specifications.

2.02 HARDWARE SETS

- A. The Hardware Sets herein are a list of the type, sizes, materials, and functions required. In the event a door or doors appears on the Drawings, and is not listed in this section, a set number shall be used, which is similar to other doors of the same type and area of use.

GENERAL NOTE: All strikes to be furnished with a wrought box.

HARDWARE SETS:

Set -1

3	hinges	McKinney TA2714 4 1/2" x 4 1/2" x 26D
1	lockset	Yale AUR 8807 x 26D
1	wall bumper	Rockwood 409 x 26D
3	silencers	Rockwood 608

PART 3 EXECUTION

3.01 HARDWARE LOCATIONS

- A. Mounting heights to be in accordance with the Door and Hardware Institute's and Builders Hardware Manufacturing Association's recommended locations.
- B. Hands of doors to be scheduled by each opening on the hardware schedule.

3.02 INSTALLATION METHODS AND WORKMANSHIP

- A. The hardware installer shall be qualified and experienced in the installation of finish hardware.
- B. The hardware installer shall be qualified and experienced in interpreting the plans, the door schedule and the hardware schedule to assure that the correct hardware is installed on the correct opening.
- C. All instruction material and adjusting tools that come packed with the finish hardware shall be turned over to the Owner's representative.

END OF SECTION

SECTION 08.800 GLAZING

PART 1 GENERAL

1.01 EXTENT

- A. This work includes all glass, glazing and other related items necessary to complete project indicated by Drawings.
- B. Deliver glass to site with manufacturer's labels attached to each piece, showing thickness, quality and type. Do not remove labels until glass has been approved, in place.
- C. Deliver putty, glazing compound, clips and other glazing items to site in manufacturer's original packages or containers.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Glass as herein specified shall be products of the following manufacturers or approved equal:
 - 1. Pilkington
 - 2. PPG
 - 3. Oldcastle Building Envelope
 - 4. Ray-Bar Engineering Corporation
- B. Glazing Systems shall be as follows:
 - 1. Interior Glass in Non-rated Doors: 1/4" thick, clear, tempered glass.
- C. Glazing Sealant shall be equal to Dow Corning 795 Silicone Building Sealant. Color shall be selected by the Architect from manufacturer's standard colors.
- D. Setting blocks of sheet lead or neoprene.
- E. Glazing Compound: DAP Flexiglaze "1231" or approved equal.
 - 1. For lights exceeding six feet in any run dimension use DAP Flexiseal one-part polysulfide sealant.
- F. Neoprene Glazing Bead: As recommended by aluminum door and storefront manufacturer.

PART 3 EXECUTION

3.01 GLAZING

- A. Install all glass and panels in accordance with manufacturer's printed recommendations and/or Installation of Flat Glass as published by Flat Glass Jobbers Association.

3.02 CLEANING AND BREAKAGE

- A. At completion of work leave all glass and panels in clean condition to satisfaction of the Architect.

- B. Furnish protection for material after it is in place. Remove broken, chipped or substandard material and replace at no cost to the Owner.
- C. Glazing compound for glazed wood and hollow metal doors shall conform to ASTM Specification D-37, shall be set and back puttied with white glazing compound. Glass larger than 24" in any direction shall be set on lead blocks.
- D. Glazing stops for interior doors shall be furnished with the doors and installed as recommended by the manufacturer.

3.03

GUARANTEE

- A. Any leaks or defective work shall be immediately corrected by the manufacturer and this sub-contractor or the General Contractor, at no expense to the Owner.

END OF SECTION

SECTION 09.250 GYPSUM WALLBOARD

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Metal Stud System 05.410
- B. Rough Carpentry 06.100
- C. Acoustical Ceilings 09.500
- D. Electrical Division 16

1.02 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Delivery and Handling

- 1. Deliver materials to the project site with manufacturer's labels intact and legible; handle materials with care to prevent damage.
- 2. Deliver fire-rated materials bearing testing agency label and required fire classification numbers.

B. Storage

- 1. Store materials inside under cover, stack flat, off floor, in dry area.
- 2. Stack wallboard so that long lengths are not over short lengths.
- 3. Avoid overloading floor system.

1.03 JOB CONDITIONS

A. Environmental Conditions

- 1. Temperature: During cold weather, in areas receiving wallboard installation, maintain temperature range between 55 degrees F to 70 degrees F. for 24 hours before, during and after gypsum wallboard and joint treatment application.
- 2. Ventilation:
 - a. Provide ventilation during and following adhesives and joint treatment applications.
 - b. Use temporary air circulators in enclosed areas lacking natural ventilation.
 - c. Protect installed materials from drafts during hot, dry weather.

B. Protection: Protect adjacent surfaces against damage and stains.

1.03 SUBMITTALS

- A. Manufacturer's literature: Submit for review to Architect.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Gypsum Board:

- 1. Georgia-Pacific
- 2. US Gypsum Company (USG)
- 3. CertainTeed Gypsum
- 4. Temple-Inland Corporation

2.02

MATERIALS

- A. Gypsum Wallboard
 - 1. Fire-Rated Board (general use): ASTM C 36, Type X
 - a. Thickness: 5/8"
 - b. Edges: Tapered (SW)
- B. Trim, corner beads, edge moldings, control joints, etc., shall be by U.S.G.
- C. Fasteners
 - 1. Screws
 - a. Self-drilling, self-tapping, bugle head, for use with power driven tool.
 - (1) Type S for wallboard to sheetmetal application.
 - (2) Type W for wallboard to wood application.
 - b. Length
 - (1) Single layer or base layer application:
 - (a) Type W: 1-1/2 in.
 - (b) Type S: 1-1/2 in.
 - (2) Face layer of two-layer application:
 - (a) Type W: 1-5/8"
 - (b) Type S: 1-5/8"
- D. Joint Treatment Materials
 - 1. Joint Tape
 - a. ASTM C 475, all perforated tape.
 - 2. Joint compound
 - a. ASTM C 475, all-purpose joint compound.
- E. Laminating Adhesive
 - 1. Manufacturer's recommendation for laminating wallboard.
 - 2. ASTM C 557

PART 3

EXECUTION

3.01

INSPECTION

- A. Check framing for accurate spacing and alignment.
- B. Verify that spacing of installed framing does not exceed maximum allowable for thickness of wallboard to be used.
- C. Verify that frames are set for thickness of wallboard to be used.
- D. Do not proceed with installation of wallboard until deficiencies are corrected and surfaces to receive wallboard are acceptable.
- E. Protrusions of framing, twisted framing members, or unaligned members must be repaired before installation of wallboard is started.

3.02

APPLICATION

- A. General
 - 1. Use wallboard of maximum lengths to minimize end joints. Stagger end joints when they occur. Locate end joints as far as possible

from center of wall or ceiling. Abut wallboards without forcing. Neatly fit ends and edges of wallboard. Do not place butt ends against tapered edges. Support ends and edges of wallboard panels on framing or furring members.

- B. All trim pieces shall be applied in strict accordance with the manufacturer's recommendations.
- C. Control joints, for expansion control, shall be placed not to exceed 30 feet on center. Exact locations shall be coordinated with the Architect.
- D. Over Framing
 - 1. Walls
 - a. Apply wallboard vertically.
 - b. Stagger end joints to occur on different framing members on opposite sides of partition.
 - c. Back block end joints.
 - 2. Mechanical fasteners
 - a. Screws
 - (1) Attach single layer of wallboard to metal framing with type "S" screws. Minimum edge clearance from mechanical fasteners: 3/8 in. Stagger mechanical fasteners opposite each other on adjacent ends or edges. Sand abutting ends or edges over support surface. Space screws 12 in. o.c. along supports and ceilings. Space screws 12" o.c. along ends and edges and field of wallboard at walls. Drive screws with positive clutch electric screwdriver.
 - 3. Adhesive application
 - a. Apply adhesive in a continuous 1/4" high bead to within 6" of ends of framing member to provide 1/16" thickness of adhesive over entire support. Apply serpentine or zigzag adhesive bead pattern with 8 in. repeat pattern on supports where two pieces of wallboard meet. Apply no adhesives to members such as bridging or diagonal bracing into which no supplemental fasteners will be driven. Place wallboards within 15 minutes after adhesive bead is supplied and fasten immediately with mechanical fasteners.
- E. Accessories
 - 1. Trim
 - a. Use same fasteners to anchor trim accessory flanges as required to fasten gypsum board to supports, unless otherwise recommended by trim manufacturer.
 - b. Install metal corner beads at external corners and "reveals" in locations as indicated on the Drawings or as specified herein.
 - (1) Install metal casing bead trim whenever edge of gypsum board would otherwise be exposed or semi-exposed, unless a "reveal" product is called for on Drawings.
 - 2. Control Joints

- a. Install control joints at locations indicated, or if not indicated, at spacings and locations required by "GA-216, Application and Finishing of Gypsum Panel Products", and as specified herein. Locations shall be approved by Architect prior to installation for visual effect.
 - (1) Install control joints at junction of gypsum board partitions with walls or partitions of other finish material.
 - (2) A control joint shall be installed where a partition, wall, or ceiling traverses a construction joint (expansion, seismic, or building control element) in the base building structure.
 - (3) Control joints shall be installed where a wall or partition runs in an uninterrupted straight plane exceeding 30 linear feet.
 - (4) Control joints in interior ceilings shall be installed so that linear dimensions between control joints do not exceed 30 linear feet.
 - (5) Where gypsum board is vertically continuous, as at stairwells, provide horizontal control joints at each floor level.
 - (6) A control joint or intermediate blocking shall be installed where ceiling framing members change direction.
 - (7) Where a control joint occurs in an acoustical or fire-rated system, blocking shall be provided behind the control joint by using a backing material of 5/8 in. type X Mold and Mildew resistant gypsum board as specified herein, mineral fiber, or other tested equivalent.

3.03 ADJUST AND CLEAN

A. Nail pops

- 1. Repair nail pops by driving new screw approximately 1-1/2 in. from nail pop and reseal.
- 2. When face paper is punctured drive new screw approximately 1-1/2 in. from defective fastening and remove defective fastening.
- 3. Fill damaged surface with compound.

B. Ridging

- 1. Do not repair ridging until condition has fully developed: approximately six months after installation or one heating season.
- 2. Sand ridges to reinforcing tape without cutting through tape.
- 3. Fill concave areas on both sides of ridge with topping compound.
- 4. After fill is dry, blend in topping compound over repaired are.

C. Fill cracks with compound and finish smooth and flush.

3.04 FINISHING

- A. Tape and float in accordance with the manufacturer's written recommendations.

- B. Finish all wallboard complete to bottom to assure straight backing for wall base application.
- C. Filling and finishing depressions
 - 1. Apply joint compound as first coat to fastener depressions. Apply at least two additional coats of compound after first coat is dry. Leave filled and finished depressions level with lane of surface.
- D. Finishing beads and trim
 - 1. First fill coat
 - a. Apply joint compound to bead and trim. Feather out from ground to plane of the surface. Dry compound prior to application of second fill coat.
 - 2. Second Fill Coat
 - a. Apply joint compound in same manner as first fill coat. Extend beyond first coat onto face of wallboard. Dry compound prior to application of finish coat.
 - 3. Finish Coat
 - a. Apply joint compound to bead and trim. Extend beyond second fill coat. Further finish coat from ground to plane of surface. Sand finish coat to provide flat surface ready for decoration.
- E. Texture
 - 1. Contractor shall apply a uniform, light "orange peel" texture to walls. Architect shall approve a sample prior to application.

END OF SECTION

SECTION 09.500 ACOUSTICAL CEILING SYSTEMS

PART 1 GENERAL

1.01 EXTENT

- A. Includes all suspended acoustical ceiling panels, and ceiling suspension systems.

1.02 SUBMITTALS

- A. Samples
 - 1. Submit full size samples of acoustical material to illustrate range of appearance.
 - 2. Submit one full size sample of each suspension system member, moldings, and hangers.
- B. Manufacturer's literature: Submit for review to Architect, the manufacturer's recommendation for installation of suspension system.

1.03 PRODUCT DELIVERY AND STORAGE

- A. Deliver materials in original, unopened, protective packaging, with manufacturer's labels, indicating brand name, pattern, size and thickness.
- B. Store cartons open at each end.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Suspension Systems
 - 1. SAT-1: 24" x 24"
- B. Main and cross members
 - 1. SAT-1:
 - a. Main Tee-Heavy Duty DXT by USG Donn Brand
 - b. 1" Cross Tee-DXT by USG Donn Brand
- C. Rough Suspension
 - 1. Wire ties: 12-gauge, galvanized annealed steel wire for suspension system.
- D. Acoustical Ceiling Units
 - 1. SAT-1: USG MARS High NRC/High CAC Panels, 2'x2'X3/4" edge - FLB, No 86985 by USG
- E. MOLDING
 - 1. All molding required for a complete installation shall be provided by the same manufacturer as the Suspension system.

PART 3 EXECUTION

3.01 CONDITION OF SURFACES

- A. Examine surfaces scheduled to receive suspended acoustical units for unevenness, irregularities, and dampness that would affect quality and execution of work.
- B. Mark access provisions as to size and location before beginning installation.

3.02

INSTALLATION

A. Rough Suspension

1. Hangers

- a. Hanger clips shall be installed as recommended by manufacturer.
- b. Space hanger wires 4 ft. on center, each direction.
- c. Install additional hangers at ends of each suspension member 6 in. from vertical surfaces.
- d. Install additional hangers near midpoint of cross tee on each side of light fixtures.
- e. Do not splay wires more than 5 in. in a 4 ft. vertical drop.
- f. Wrap wire a minimum of three times horizontally, turning end upward.

- 2. Install carrying channels with leveling clips to main structure for indirect hung suspension system.

3. Main and cross runners

- a. Space main runners at 24" on center, at right angle to carrying channel.
 - (1) Level and square to adjacent walls.
 - (2) Wire clip to channels at all intersections.
- b. Space cross runners at 2 ft. and 1 ft. on center, depending on system called for.

4. Wall molding

- a. Install wall molding at intersection of suspended ceiling and vertical surfaces where suspension grid is exposed.
- b. Miter corners where wall moldings intersect or install corner caps.
- c. Attach to vertical surface with mechanical fasteners.

B. Acoustical Units

- 1. Install in level plane in straight line courses.
- 2. Place materials to bear all around on suspension members.

3.03

CLEANING

- A. Clean soiled or discolored unit surfaces after installation.
- B. Touch up scratches, abrasions, voids, and other defects in painted surfaces.
- C. Remove and replace damaged, or improperly installed units.

END OF SECTION

SECTION 09 0000 TILE CARPETING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Carpet tile, fully adhered and installed in aluminum frame as a walk off mat.
- B. Resilient Textile Flooring (RTF) for direct glue installation.

1.02 RELATED REQUIREMENTS

- A. Section 01 7400 - Cleaning.
- B. Section 03 5413 – Gypsum Cement Self Leveling Underlayment
- C. Section 09 6500 - Resilient Flooring: Termination edging of adjacent floor finish.

1.03 REFERENCE STANDARDS

- A. ASTM D2859 - Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials; Current Edition.
- B. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials; Current Edition.
- C. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source; Current Edition.
- D. CRI 104 - Standard for Installation of Commercial Textile Floorcovering Materials; Carpet and Rug Institute; Current Edition.
- E. CRI (GLP) - Green Label Plus Testing Program - Certified Products; Current Edition.
- F. NFPA 253 - Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source; Current Edition.

1.04 SUBMITTALS

- A. See Section 01 3323 - Shop Drawings, Product Data and Samples for submittal procedures.
- B. Shop Drawings: Indicate layout of joints and orientation of patterns.
- C. Product Data: Provide data on specified products, describing physical and performance characteristics; sizes, patterns, colors available, and method of installation.
- D. Samples: Submit two tiles illustrating color and pattern design for each material color selected.
- E. Manufacturer's Installation Instructions: Indicate special procedures.
- F. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing specified carpet tile with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in installing carpet tile with minimum three years documented experience and approved by carpet tile manufacturer.

1.06 FIELD CONDITIONS

- A. Store materials in area of installation for minimum period of 24 hours prior to installation.

- 1.07 EXTRA MATERIALS
A. See Section 01 7700 – Contract Closeout.
B. Provide 5 unopened boxes of carpet tiles of each color and pattern selected.
- PART 2 PRODUCTS
- 2.01 MANUFACTURERS
A. Tile Carpeting
1. Tarkett; <https://commercial.tarkett.com>
2. Masland; www.maslandcarpets.com.
3. EF Contract; www.efcontractflooring.com
4. Substitutions: See Section 01 6000 - Substitutions and Product Options.
- 2.02 MATERIALS
A. Tile Carpeting: Tufted Fusion bonded, manufactured in one color dye lot.
1. Product: As scheduled on Drawings
2. Tile Size: As scheduled on Drawings
3. Color: As scheduled on Drawings
4. Pattern: As scheduled on Drawings
5. Thickness: .213" inch (5.4 mm), nominal
6. Surface Burning Characteristics: Flame spread/Smoke developed index of 0 / 25, maximum, when tested in accordance with ASTM E 84.
7. Critical Radiant Flux: Minimum of 0.22 watts/sq cm, when tested in accordance with ASTM E648 or NFPA 253.
8. Surface Flammability Ignition: Pass ASTM D2859 (the "pill test").
9. Maximum Electrostatic Charge: 3 Kv. at 20 percent relative humidity.
10. Primary Backing Material: Compact Vinyl, Fiberglass stabilized.
11. Total Weight: 143.03 oz/sq yd (4850 g/sq m).
- 2.03 ACCESSORIES
A. Subfloor Filler: White premix latex; type recommended by flooring material manufacturer.
B. Recessed Mat Framing: Extruded aluminum, clear anodized color.
C. Adhesives: Acceptable to material manufacturer, compatible with materials being adhered; maximum VOC of 50 g/L; CRI Green Label certified.
- PART 3 EXECUTION
- 3.01 EXAMINATION
A. Verify that subfloor surfaces are smooth and flat within tolerances specified for that type of work and are ready to receive carpet tile.
B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive carpet tile.
C. Verify that subfloor surfaces are dust-free and free of substances that could impair bonding of adhesive materials to subfloor surfaces.
D. Verify that concrete sub-floor surfaces are ready for carpet tile installation by testing for moisture emission rate and alkalinity; obtain instructions if test results are not within limits recommended by carpet tile manufacturer and adhesive materials manufacturer.
E. Verify that required floor-mounted utilities are in correct location.

- 3.02 PREPARATION
- A. Remove subfloor ridges and bumps. Fill minor or local low spots, cracks, joints, holes, and other defects with subfloor filler.
 - B. Apply, trowel, and float filler to achieve smooth, flat, hard surface. Prohibit traffic until filler is cured.
 - C. Vacuum clean substrate.
- 3.03 INSTALLATION
- A. Starting installation constitutes acceptance of subfloor conditions.
 - B. Install carpet tile in accordance with manufacturer's instructions.
 - C. Install RTF in accordance with manufacturer's instructions and CRI 104.
 - D. Blend RTF Tiles from different cartons to ensure minimal variation in color match.
 - E. Cut tile clean. Fit RTF tight to intersection with vertical surfaces without gaps.
 - F. Lay carpet tile in quarter turn pattern, with pile direction alternating to next unit, set aligned as indicated on shop drawings.
 - G. Locate change of color or pattern between rooms under door centerline.
 - H. Fully adhere RTF tile to substrate.
 - I. Trim RTF tile neatly at walls and around interruptions.
 - J. Complete installation of edge strips, concealing exposed edges.
 - K. Subfloor Surfaces: Verify that substrates are ready for flooring installation by testing for moisture and alkalinity (pH).
 - 1. Obtain instructions if test results are not within limits recommended by flooring manufacturer and adhesive materials manufacturer.
- 3.04 CLEANING
- A. Remove excess adhesive without damage, from floor, base, and wall surfaces.
 - B. Clean and vacuum RTF surfaces.

END OF SECTION

SECTION 09.900 PAINTING

PART 1 GENERAL

1.01 EXTENT

- A. This work includes all painting and related items required and necessary to complete project indicated by drawings, including all general construction, mechanical, electrical, heating, ventilating, and air conditioning work exposed to view.
- B. See schedule for number of coats and types of paint required for surfaces.
- C. This Contractor must inspect all surfaces for imperfection and correct before painting begins.

1.02 QUALITY ASSURANCE

- A. All paint shall be delivered to site in manufacturer's sealed containers. Each container shall be labeled by the manufacturer. Labels give manufacturer's name, brand, type of paint, color of paint and instructions for reducing. Thinning shall be done only in accordance with directions of manufacturer. Job mixing or job tinting may be done only when approved by the Architect.
- B. Fungus control shall be such that organic coatings shall show no fungus growth when tested as specified in Federal Test Method Standard No. 141, Method 6271.1.

1.03 COLORS AND SAMPLES

- A. Paint colors shall be as selected by the Owner. Before any work is done the Architect shall furnish the Contractor with color schedule showing where the various colors apply. The Contractor shall then prepare samples as required until the colors and textures are approved.

PART 2 PRODUCTS

2.01 PAINT MATERIALS

- A. Paint materials shall be Premium line products as manufactured by Sherwin-Williams, Benjamin Moore Paint Co., Glidden, Devoe, Fuller O'Brien, Pratt & Lambert, Pittsburgh, or approved equal. Devoe trade name is used hereinafter for convenience only.
- B. Materials such as linseed oil, shellac, turpentine, and mineral spirits shall be of highest quality, have identifying labels, and shall be used as recommended by paint manufacturer.

2.02 SCHEDULE OF PAINTING

- A. The kinds and number of coats required on the various surfaces shall be equal to the following:(*denotes coats applied to existing painted surfaces)
1. Interior Metal
 - a. First Coat: Touch up shop coat, or 1 coat Mirrolac Rust Penetrating Primer 13101
 - *b. Second Coat: Velour Interior Alkyd Semi-Gloss Enamel 26XX
 - *c. Third Coat: Velour Interior Alkyd Semi-Gloss Enamel 26XX
 2. Interior Gypsum Board Wall - Painted
 - a. First Coat: Regency Paint & Primer in One/ 100% Acrylic, eggshell, with Texture Added (if required to match existing texture).
 - *b. Second Coat: Regency Paint & Primer in One/ 100% Acrylic, eggshell.
 - *c. Third Coat: Regency Paint & Primer in One/ 100% Acrylic, eggshell.
 3. Interior Wood - Painted
 - a. First Coat: Velour Interior Alkyd Enamel Undercoat 8801
 - *b. Second Coat: Velour Interior Alkyd Semi-Gloss Enamel 26XX
 - *c. Third Coat: Velour Interior Alkyd Semi-Gloss Enamel 26XX
 4. Interior Exposed Mechanical and Electrical.
 - a. See #1. Interior Metal, above.
 5. Interior Epoxy
 - a. First Coat Regency Paint & Primer in One/100% acrylic
 - b. Second Coat: Corotech Waterborne Acrylic Epoxy, V450, HPP Industrial
 - c. Second Coat: Corotech Waterborne Acrylic Epoxy, V450, HPP Industrial

PART 3 EXECUTION

3.01 SURFACE INSPECTION

- A. Examine surfaces scheduled to receive paint and finishes for conditions that will adversely affect execution, permanence or quality of work and which cannot be put into an acceptable condition through preparatory work as included in Article 3.02, PREPARATION OF SURFACES.
- B. Do not proceed with surface preparation or coating application until conditions are suitable.

3.02 PREPARATION OF SURFACES

- A. General
 1. The painting contractor shall be wholly responsible for the quality of his work, and is not to commence any part of it until surface is in proper condition as required by the paint manufacturer.
 2. If the painting contractor considers any surface unsuitable for proper finishing, he is to notify the Architect of this fact in writing.

- He is not to apply any material until corrective measures have been taken, or the Architect has instructed him to proceed.
3. All surfaces are to be clean; if for any reason the surface cannot be cleaned, this condition shall be promptly reported to the General Contractor and the Architect.
 4. If the painting contractor has been instructed by the General Contractor to begin painting under conditions or circumstances he believes could result in poor performance and early failure of the coatings, he shall request a decision in writing from the Architect.
 5. The prime coat should be applied soon after surface preparation has been completed, to prevent contamination of the substrate.
- B. New Ferrous Metal - Interior
1. All metal surfaces shall be washed with solvent to remove extraneous dirt, grease or oil before painting.
 2. Where shop coat is abraded and rust has developed, remove by sanding and spot prime immediately.
 3. All new galvanized iron surfaces must be aggressively cleaned with mineral spirits, then primed with galvanized metal primer.
- C. New Gypsum Board - Interior
1. All surfaces must be free of sanding dust and joint treatment cement should be thoroughly dry.
 2. Damaged or defective surfaces are to be repaired by spackling or by other appropriate measures.
 3. Steel corner beading is to be coated with primer-sealer before applying water thinned coatings.
- D. New Wood - Interior
1. Surfaces to Be Painted
 - a. All surfaces shall be dry and sanded smooth and free of loose dirt, dust or grit.
 - b. Putty all nail holes, cracks and blemishes after under-coater has been applied. Knots are to be coated with primer/sealer before overall coat of primer is applied.
 - c. All coats must be thoroughly dry before applying succeeding coats, and lightly sanded between coats.
 - d. Avoid general use of shellac as an undercoat.
 - e. After fitting by the carpenter, top and bottom of all doors must be primed the same as the face of the doors.

3.03

APPLICATION

A. General Requirements

1. Do not apply initial coating until moisture content of surface is within limitations recommended by paint manufacturer.
 - a. Test with moisture meter.
2. Apply paint, enamel, stain, varnish and epoxy coating with suitable brushes, rollers, or spraying equipment.

- a. Rate of application shall not exceed that as recommended by product manufacturer for the surface involved.
- b. Keep brushes, rollers, spraying equipment clean, dry, free from contaminants and suitable for the finish required.
3. Comply with recommendation of product manufacturer for drying time between succeeding coats.
4. Paint on gypsum board shall match texture of other painted gypsum board in the building.
5. Vary slightly the color of successive coats.
6. Sand and dust between each coat to remove defects visible from a distance of 5 feet.
7. Finish coats shall be smooth, free of brush marks, streaks, laps or pile up of materials, and skipped or missed areas.
8. Inspection
 - a. Do not apply additional coats until completed coat has been inspected by the Architect.
 - b. Only inspected coats of paint will be considered in determining number of coats applied.
 - c. Finished metal surfaces shall be free of skips, voids, or pinholes in any coat when tested with a low voltage detector.
9. Leave all parts of surfaces clean and true to details with no undue amount of paint in corners and depressions.
10. Make edges of paint adjoining other materials or colors clean and sharp with no overlapping.
11. Apply primer on all work before glazing.
12. Change colors at corner of stop under door where colors differ between adjoining spaces or rooms and where door frames match wall colors.
13. Refinish whole wall where portion of finish has been damaged or is not acceptable.

3.04

CLEANING

- A. Touch up and restore finish where damaged.
- B. Remove spilled, splashed, or splattered paint from all surfaces.
- C. Do not mar surface finish of item being cleaned.
- D. Leave storage space clean and in condition required for equivalent spaces in project.

END OF SECTION

SECTION 10.522 FIRE EXTINGUISHERS, CABINETS, AND ACCESSORIES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Fire extinguisher cabinets.
 - 2. Fire extinguishers.

1.03 SUBMITTALS

- A. General: Submit the following according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product data for cabinets include rough-in dimensions, details showing mounting methods, relationships of box and trim to surrounding construction, door hardware, cabinet type and materials, trim style, door construction, panel style, and materials.

1.04 QUALITY ASSURANCE

- A. Single-Source Responsibility: Obtain cabinets from one source from a single manufacturer.
- B. Coordination: Verify that cabinets are sized to accommodate type and capacity of extinguishers indicated.
- C. UL-Listed Products: Fire extinguishers shall be UL listed with UL listing mark for type, rating, and classification of extinguisher.
- D. FM-Listed Products: Fire extinguishers approved by Factory Mutual Research Corporation for type, rating, and classification of extinguisher with FM marking.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in 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. Amerex Corporations.
 - 2. J.L. Industries.
 - 3. Larsen's Manufacturing Co.

2.02

CABINETS

- A. Construction: Manufacturer's standard box, with trim, frame, door, and hardware to suit cabinet type, trim style, and door style indicated. Weld joints and grind smooth. Miter and weld perimeter door frames.
- B. Fire-Rated Cabinets: UL listed with UL listing mark with fire-resistance rating of wall where it is installed.
- C. Cabinet Type: Suitable for containing the following:
 - 1. Fire extinguisher.
- D. Cabinet Mounting: Suitable for the following mounting conditions:
 - 1. Semi-recessed: Cabinet box (tub) partially recessed in walls of shallow depth. Locate where noted on Drawings.
 - 2. Surface-Mounted: Cabinet box (tub) mounted on finished surface of wall with tub fully exposed. Locate where noted on Drawings.
- E. Trim Style: Fabricate trim in one piece with corners mitered, welded, and ground smooth.
 - 1. Exposed Trim: One-piece combination trim and perimeter door frame overlapping surrounding wall surface with exposed trim face and wall return at outer edge (backbend). Rounded edges.
 - a. Trim Metal: Of same metal and finish as door.
- F. Door Material and Construction: Manufacturer's standard door construction, of material indicated, coordinated with cabinet types and trim styles selected.
 - 1. Aluminum: Manufacturer's standard flush, hollow aluminum door construction.
- G. Identify fire extinguisher in cabinet with FIRE EXTINGUISHER lettering applied to door. Provide lettering to comply with authorities having jurisdiction for letter style, color, size, spacing and location.
 - 1. Application Process: Silk screen.
- H. Identify bracket-mounted extinguishers with FIRE EXTINGUISHER in red letter decals applied to wall surface. Use letter size, style, and location as selected by Architect.
- I. Door Style: Manufacturer's standard design.
 - 1. Solid Panel: Full flush opaque panel of material indicated.
 - a. Silk-screen lettering or design.

2.03

FINISHES FOR CABINETS, GENERAL

- A. Comply with NAAMM "Metal Finishes Manual" for recommendations relative to applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying temporary strippable protective covering prior to shipping.

2.04

ALUMINUM CABINET FINISHES

- A. Finish designations prefixed by AA conform to the system established by the Aluminum Association for designating aluminum finishes.

- B. Class II Clear Anodized Finish: AA-M12C22A31 (Mechanical Finish: as fabricated, non-specular; Chemical Finish: etched, medium matte; Anodic Coating: Class II Architectural, clear film thicker than 0.4 mil).

2.05 FIRE EXTINGUISHERS

- A. All extinguishers shall be multipurpose dry chemical type.
- B. All fire extinguishers shall be 10 lb. Capacity.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine rough-in for cabinets to verify locations prior to cabinet installation.
- B. Examine walls and partitions for thickness and framing for cabinets to verify cabinet depth and mounting prior to cabinet installation. Do not proceed until unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Install one cabinet and fire extinguisher in all locations marked with FEC on Floor Plans.
- B. Install one bracket and fire extinguisher in all locations marked with FE on Floor Plans.

END OF SECTION

SECTION 12.241 MANUAL ROLLER SHADES

PART 1 GENERAL

1.01 SUMMARY

- A. This Section includes roller shades and motorized shade operators and all accessories for a complete installation.
- B. Related Sections include the following:
 - 1. Division 16 Sections for electrical service and connections for motor operators, controls, limit switches, and other powered devices and for system disconnect switches for motorized shade operation.

1.02 SUBMITTALS

- A. Product Data: For each type of product indicated. Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions.
- B. Shop Drawings: Show location and extent of roller shades. Include elevations, sections, details, and dimensions not shown in Product Data. Show installation details, mountings, attachments to other work, operational clearances, and relationship to adjoining work.
- C. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:
 - 1. Attachment to building structure.
 - 2. Shade mounting assembly and attachment.
 - 3. Minimum Drawing Scale: 1/8 inch = 1 foot.
- D. Samples for Initial Selection: For each colored component of each type of shade indicated. Include similar Samples of accessories involving color selection.
- E. Qualification Data: For Installer.
- F. Maintenance Data: For roller shades to include in maintenance manuals. Include the following:
 - 1. Methods for maintaining roller shades and finishes.
 - 2. Precautions about cleaning materials and methods that could be detrimental to fabrics, finishes, and performance.
 - 3. Operating hardware.

1.03 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator of products.
- B. Product Standard: Provide roller shades complying with WCMA A 100.1.
- C. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

- 1.04 DELIVERY, STORAGE, AND HANDLING
- A. Deliver shades in factory packages, marked with manufacturer and product name, and location of installation using same designations indicated on Drawings and in a window treatment schedule.

- 1.05 PROJECT CONDITIONS
- A. Environmental Limitations: Do not install roller shades until construction and wet and dirty finish work in spaces, including painting, is complete and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
 - B. Field Measurements: Where roller shades are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operable glazed units' operation hardware throughout the entire operating range. Notify Architect of discrepancies. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

- 1.06 WARRANTY
- A. Provide manufacturer's standard warranty covering 2 year parts and labor and 8 years limited parts warranty to repair and replace defective equipment.

- 1.07 MAINTENANCE
- A. Make ordering of new equipment for expansions, replacements, and spare parts available to a qualified dealer or installer.
 - B. Make replacement parts available for minimum of ten years from date of manufacture.
 - C. Provide factory direct technical support hotline 24 hours per day, 7 days per week.
 - D. Provide on-site service support within 24 hours anywhere in continental United States.
 - E. Offer renewable service contract on yearly basis, to include parts, factory labor, and annual training visits. Make service contracts available up to ten years after date of system commissioning.

PART 2 PRODUCTS

- 2.01 MANUFACTURERS
- A. Draper
 - B. Lutron Electronics Co.
 - C. Nysan Shading Systems

- 2.02 ROLLER SHADES
- A. Provide "Manual FlexShade" as manufactured by Draper, Inc.
 - B. Shade Band Material: Vinyl-coated fiberglass.

1. Fabric Widths: As indicated on Drawings schedule.
 2. Pattern/Style: European-Style Mesh Fabrics "M" Screen
 3. Fabric Content: PVC coated fiberglass yarn woven mesh. 11.9 oz. per sq. yd.
 4. Colors: As selected by Architect from manufacturer's full range.
 5. Material Solar-Optical Properties: 3% openness.
 6. Bottom Hem: Straight.
 7. Trim: As indicated by manufacturer's designation for style and color.
- C. Rollers: Electrogalvanized or epoxy primed steel or extruded-aluminum tube of diameter and wall thickness required to support and fit internal components of operating system and the weight and width of shade band material without sagging; designed to be easily removable from support brackets; with manufacturer's standard method for attaching shade material. Provide capacity for one roller shade band(s) per roller, unless otherwise indicated on Drawings. Wherever possible provide one single roller shade per window, as indicated on Drawings. Units ship fully assembled. If more than one shade is required for any window wall, position the "joint" to occur at the middle of a window mullion.
- D. Mounting Brackets: Galvanized or zinc-plated steel.
- E. Bottom Bar: Steel or extruded aluminum, with plastic or metal capped ends. Provide concealed, by pocket of shade material, internal-type bottom bar with concealed weight bar as required for smooth, properly balanced shade operation.
- F. Mounting: Jamb, as indicated on Drawings, mounting permitting easy removal and replacement without damaging roller shade or adjacent surfaces and finishes.
1. Provide fascia/headbox cover. 3/4" at surface mount locations (manual).
- G. Hold-Down Brackets and Hooks or Pins: Manufacturer's standard for anchoring roller shade bottom in place and keeping shade band material taut.
- H. Shade Operation: Manual Operation at all locations.
- I. Roller Shade Widths / Sizes: Coordinate all shade widths with the architect prior to commencement of work.

2.03

ROLLER SHADE FABRICATION

- A. Product Description: Roller shade consisting of a roller, a means of supporting the roller, a flexible sheet or band of material carried by the roller, a means of attaching the material to the roller, a bottom bar, and an operating mechanism that lifts and lowers the shade.
- B. Concealed Components: Non-corrodible or corrosion-resistant-coated materials. Lifting Mechanism: With permanently lubricated moving parts.
- C. Unit Sizes: Obtain units fabricated in sizes to fill window and other openings as follows, measured at 74°. Width and length as indicated, with terminations between shades of end-to-end installations at

centerlines of mullion or other defined vertical separations between openings.

- D. Installation Brackets: Designed for easy removal and reinstallation of shade, for supporting roller, and operating hardware and for hardware position and shade mounting method indicated.
- E. Installation Fasteners: No fewer than two fasteners per bracket, fabricated from metal non-corrosive to shade hardware and adjoining construction; type designed for securing to supporting substrate; and supporting shades and accessories under conditions of normal use.
- F. Color-Coated Finish: For metal components exposed to view, apply manufacturer's standard baked finish complying with manufacturer's written instructions for surface preparation including pretreatment, application, baking, and minimum dry film thickness.
- G. Colors of Metal and Plastic Components Exposed to View: As selected by Architect from manufacturer's full range.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Install roller shades level, plumb, and aligned with adjacent units according to manufacturer's written instructions, and located so shade band is not closer than 2 inches to interior face of glass. Allow clearances for window operation hardware.

3.03 ADJUSTING

- A. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

3.04 CLEANING AND PROTECTION

- A. Clean roller shade surfaces after installation, according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, to ensure that roller shades are without damage or deterioration at time of Substantial Completion.
- C. Replace damaged roller shades that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.

END OF SECTION

MANUAL ROLLER SHADES

12241-4/4

SECTION 1600 ELECTRICAL

PART 1 GENERAL

1.01 GENERAL

- A. The General and/or Special Conditions Sections are a part of this specification and the Contractor shall consult them in detail for instructions pertaining to this work. Section 16 is sub-divided for convenience only.

1.02 SCOPE

- A. Furnishing of all labor, material, equipment, supplies, and services necessary to construct and install the complete electrical systems as shown on the drawings and specified herein. Work shall include but is not necessarily limited to the following items:
1. Grounding
 2. Lighting and controls
 3. Demolition
 4. Telecommunications
 5. Interior Distribution/Branch Circuits
 6. Equipment Connections

1.03 JOB CONDITIONS

- A. Site Inspections: Before submitting proposals, each bidder should visit the site and fully familiarize himself with all job conditions and shall be fully informed as to the extent of his work. No consideration will be given after bid opening date for alleged misunderstanding as to the requirements of work involved in connecting to the utilities, as to requirements of materials to be furnished, or as to the extent of demolition required.
- B. Existing Conditions: All utilities, existing systems, and conditions shown on the plans as existing are approximate, and the Contractor shall verify all details of the project before any work is started.
- C. Scheduled Interruptions: Planned interruptions of utilities service, to any facility affected by this contract, shall be carefully coordinated and approved by the Architect at least ten (10) days in advance of the requested interruption. The Contractor shall not interrupt services until specific approval has been granted by the Architect. The request shall indicate services to be affected, date and time of interruption and duration of outage. Request for interruption of service will not be approved until all equipment and material required for the completion of that particular phase of work are on the job site. The work may have to be scheduled after normal working hours.
- D. Maintaining Service: Any existing service (or operating system) which must be interrupted for any length of time shall be supplied

with a temporary service as necessary for continuation of the normal operation of this facility.

- E. Removal of Existing Work: Where noted or indicated on the drawings, or specified herein, existing electrical materials and equipment shall be removed from the building. All materials designated to be removed by the Contractor, not to be salvaged and given to the Owner or required to be reinstalled, including scrap, shall become the property of the Contractor, and shall be promptly removed from the site. Existing items required to be removed temporarily in order to properly install new work shall be replaced in a satisfactory manner upon completion.

1.04 TEMPORARY POWER

- A. Furnish and maintain temporary wiring system for light and power for use during construction by all trades. Use solidly grounded system. Limit over-current protection to 20 amperes on No. 12 conductors. Coordinate all requirements for temporary power with the serving utility and pay for all charges incurred while furnishing power for construction. Verify whether charges for electrical power consumption are specified in Division One; if so, payment of bills for power consumption are not included under this section.
- B. Accidental Interruptions: All excavation and/or remodeling work required shall be performed with care so as not to interrupt other existing services (water, gas, electrical, sewer, sprinklers, etc.). If accidental utility interruption resulting from work performed by the Contractor occurs, service shall be immediately restored to its original condition without delay, by and at the expense of the Contractor, using skilled workmen of the trade required.

1.05 CODES, PERMITS AND INSPECTIONS

- A. The installation shall comply with all local, state, and federal laws and ordinances applicable to electrical installation and with the regulations of the latest published edition of the National Electrical Code (N.E.C.) where such regulations do not conflict with those laws and ordinances. The Contractor shall obtain and pay for all permits and inspection fees, and after completion of the work, shall furnish the Architect a certificate of final inspection and approval from the applicable local inspection authorities. Any charges by a utility (Power, Telephone, Cable TV, etc.) for providing service as shown shall be included in the bid and paid by the Contractor. The installation shall comply with:
 1. International Building Code 2021
 2. International Fire Code 2021
 3. NFPA 70-2020, National Electrical Code
 4. NFPA 72-2019, National Fire Alarm and Signaling Code

1.06 DRAWINGS AND SPECIFICATIONS

- A. The drawings and these specifications are complimentary each to the other. What is called for by one shall be as binding as if called for by both. Where the drawings and/or specifications differ as to quantity or quality, the greater quantity or higher quality shall be provided. Omissions from the drawings and specifications of details of work which are evidently necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the Contractor from performing such work. In any case of discrepancy in the figures or catalog numbers, the matter shall be submitted to the Architect, who shall promptly make a determination in writing. Any adjustment by the Contractor shall be at the Contractor's own risk and expense. Electrical drawings are diagrammatic only. Do not scale these drawings. All equipment shall be installed in accordance with manufacturer's recommendations and any conflicting data shall be verified before bidding.

1.07 STANDARDS OF MATERIALS AND WORKMANSHIP

- A. Materials: All materials shall be new and shall be listed and approved by the Underwriters' Laboratories, Inc., in every case where a standard has been established for a particular type of material in question. All work shall be executed in a workmanlike manner and shall present a neat appearance.
- B. Prior Approvals: Equipment and materials of the same type or classification and used for the same purpose, shall be products of the same manufacturer. It is the intention of these specifications to indicate a standard of performance and quality for all materials incorporated in this work. Manufacturer's names and catalog numbers are used to designate the item of equipment or material as a means of establishing grade and quality. Where several manufacturers are named, only those named manufacturers' products will be considered and the Contractor's bid shall be on their products. The first named of several manufacturers is the manufacturer whose product was used in engineering the project. Other named manufacturers, although acceptable as manufacturers, shall guarantee that their product will perform as specified and will meet space requirements. Where performance characteristics of such equipment differs from the equipment scheduled on the drawings, the engineer shall reserve the right to reject it. Where use of such equipment requires different quantity or arrangement of foundations, supports, ductwork, piping, wiring, conduit and any other equipment. The Contractor shall furnish said changes and additions and pay all costs for all changes to the work and the work of others affected by using such equipment.

- C. For approval of products other than those specified, bidders shall submit to the Architect, a request in writing, at least ten (10) days prior to bid date. Requests received after this time will not be reviewed or considered regardless of cause. Requests shall clearly define and describe the product for which approval is requested. Requests shall be accompanied by manufacturer's literature, specifications, drawings, cuts, performance data, model numbers, list of references or other information necessary to completely describe the item. Approval will be in the form of an Addendum to the specifications issued to all prospective Prime Contract Bidders on record. The Addendum will indicate the additional products which are approved for this project.
- D. If a bidder proposes to use substitute materials or equipment for the following items, he shall obtain a minimum of ten (10) days before Bid "Prior Approval" or longer as described in "Instructions to Bidders" for the items indicated below:
 - 1. Low Voltage Switchboards
 - 2. Lighting controls.
 - 3. Dry type transformers.
 - 4. Panelboards.
 - 5. Safety switches.
 - 6. Lighting fixtures.
 - 7. Emergency battery units.
 - 8. Fire alarm system.
 - 9. Intercom/Clock
- E. Approval on other items shall be handled in the normal manner, as described in "Instructions to Bidders", under the heading "Approval of Materials", preferably before receipt of bids.
- F. Substitutions: Reference to a particular product by manufacturer, trade name, or catalog number establishes the quality standards of material and equipment required for this installation and is not intended to exclude products equal in quality and similar design. The Architect reserves the sole right to decide the equality of materials proposed for use in lieu of these specified. It shall be the Contractor's responsibility to furnish the information and data sufficient to establish the quality and utility of the items in question, including furnishing samples if required.
- G. Shop Drawings: The Contractor shall submit a list of items proposed for use. He shall also submit catalog data and shop drawings on proposed systems and their components, panelboards, safety switches, starters and contactors, transformers, lighting fixtures, and wiring devices. Where substitutions alter the design or space requirements, the Contractor shall defray all items of cost for the revised design and construction including costs to all allied trades involved. Data shall be submitted within ten (10) calendar days after the contract is awarded. Provide six (6) copies of shop drawings

unless a greater number of copies is required by the General Conditions. Each submittal data section shall be covered with an index sheet listing Contractor, Sub-Contractor, Project Name, and an index to the enclosed submittals.

- H. Each major section of submittals such as power, equipment, lighting equipment, fire alarm, etc., shall be secured in a booklet or stapled with a covering index which lists the following information:
 - 1. General contractor with phone number and project manager.
 - 2. Subcontractor with phone number and project manager.
 - 3. Supplier of equipment with phone number and person responsible for this project.
 - 4. Index of each item covered in submittal and model number as proposed in the attached.
 - 5. Any deviation from contract documents shall be specifically noted on submittal cover index and boldly on specific submittal sheet.

1.08

TYPE OF PERMANENT ELECTRICAL SERVICE

- A. The new electrical service is 208 volts, 3-phase, 4 -wire. Contractor shall verify all details of electrical service with the serving utility company prior to bid.
- B. Operating and Maintenance Manuals: At completion of the work, furnish three (3) copies of written operation instructions which shall include manufacturer's descriptive bulletins, operating and maintenance manuals and parts lists of all equipment installed. Also include in such instructions, the specified size and capacity ratings of all equipment installed. Each set of instructions shall be assembled into a suitable loose-leaf type binder and presented to the Architect for delivery to the Owner.
- C. Record Drawings: Maintain one extra set of black-line, white print drawings for use as Record drawings. Records shall be kept daily, using colored pencil. As the work is completed, relevant information shall be transferred to a reproducible set, and copies made to be given to the Architect.
- D. Comply with the following for all work specified in Division Sixteen. As-built information shall be shown to scale, using standard symbols listed in the legend. As a minimum, show the following:
 - 1. Location of stub-outs, dimensioned from permanent building lines.
 - 2. Location and depth of under-slab and in-slab raceways.
 - 3. All routing of raceways.
 - 4. Corrected panelboard and equipment schedules.
 - 5. Corrected circuit numbers as they appear on panelboard directories.
 - 6. Corrected motor horsepower and full load amperages.

7. Number, size, type of insulation, and number of wires in each conduit or multi-conductor cable whether in conduit or exposed.
8. Location of junction boxes and splices.
9. Location of access panels.

1.09 INTERFACE WITH OTHER CONTRACTS

- A. It shall be the responsibility of the Contractor to cooperate with all other crafts working on this project. All cutting, trenching, backfill, and structural removals to permit entry of the electrical system components shall be done by this Contractor. All patching and finishing shall be done by the General Contractor.
- B. It shall be the responsibility of the Electrical Contractor to coordinate, provide, and install the overcurrent protection devices, wire, and conduit as required for the specific mechanical equipment installed.
- C. It shall be the responsibility of the Contractor to cooperate with all other crafts working on this project to ensure there are not pipes, ductwork or other foreign systems as described in the latest version of the NEC within the working space or the dedicated space for the electrical equipment. All piping, ductwork or other foreign systems as described in the latest version of the NEC located above the dedicated space shall have shields or other protection as approved by the NEC.

1.10 EQUIPMENT FURNISHED UNDER OTHER SECTIONS

- A. This Contractor shall furnish and install complete electrical roughing-in and connection to all equipment furnished under other sections as indicated on drawings. All such equipment shall be set in place as work of other sections.
- B. The Electrical Contractor is to provide and install all components, wire, conduit, boxes, etc. to interlock the exhaust fans with the HVAC equipment as required.
- C. The Electrical Contractor is to provide and install the required device boxes for the HVAC controls. A raceway, 3/4" conduit minimum, is to be provided and installed from the device location to the accessible space above the ceiling or as appropriate for the application. Line voltage thermostats are to be installed by the Electrical Contractor. Exact requirements for control wiring, conduit, boxes, etc. shall be coordinated with the mechanical contractor and mechanical documents prior to bid.

1.11 EQUIPMENT CONNECTIONS

- A. In general, provide electrical power and control systems connections to all equipment shown on drawings. Included are wiring raceways, disconnects, starters, and other devices shown. Excluded are

devices furnished integrally with the manufacturer's package and work specified in other sections of these specifications.

1.12

GROUNDING

- A. Provide grounding and bonding systems in strict accordance with the latest published edition of N.E.C., except where more stringent requirements are specified herein. Inter-connection of neutral and ground is not permitted except at service entrance equipment or as required for a separately derived system. Install grounding conductors to permit shortest and most direct path to ground. Inaccessible joints are not to be made in grounding conductors. Where grounding conductors are in raceway, bond conductor and raceway at both ends. Grounding and bonding fittings used shall be UL listed and be compatible with metals used in system. Sheet metal type straps are not acceptable.
- B. Service entrance ground shall consist of driven electrodes, ground ring, building steel, water pipe electrodes, concrete encased electrode, rod and pipe electrodes, or plate electrodes as available. The driven electrodes, building steel, water pipe electrodes, and concrete encased electrodes are the minimum requirements. Unless otherwise shown on drawings, each driven electrode shall consist of one 3/4 inch diameter 10 ft. long copperweld steel rod. Rod made of wrought iron may be used in lieu of copperweld at option of contractor. Water pipe connection shall be made to a minimum one inch diameter metallic cold water pipe. Extend grounding conductor to main telephone equipment space. Interconnect conduits entering and leaving service entrance equipment using grounding bushing and copper conductor.
- C. A green insulated ground conductor shall be run in all branch circuit and feeder conduit with phase and/or neutral conductors. Ground conductor shall be sized per NEC or as noted on drawings. Minimum size #12 AWG. Conduit box to device strap or yoke screw connection is not sufficient. Provide an insulated grounding jumper for receptacle circuits.
- D. The Electrical Contractor shall test and provide written certification of final ground system; including test method, equipment model and serial numbers, and final measurements at each point. The ground electrode system must be less than 25 ohms.

1.13

GUARANTEE AND SERVICE

- A. Upon completion of all tests and acceptance, the Contractor shall furnish the Owner of a written guarantee covering the electrical work done for a period of one (1) year from date of acceptance. Guarantee includes equipment capacity and performance ratings specified without excessive noise levels. Upon notice from the Architect or the Owner, the Contractor shall, during the guarantee

period, rectify and replace any defective material or workmanship and repair any damage caused thereby without additional cost.

PART 2 PRODUCTS

2.01 GENERAL

- A. All equipment and materials shall have ratings established by the recognized independent agency or laboratory. The Contractor shall apply the items used on the project within the ratings and subject to any stipulations or exceptions established by the independent agency or laboratory. Use of equipment or materials in applications beyond that certified by the agency or beyond that recommended by the manufacturer shall be cause for removal and replacement of such misapplied items.

2.02 LOW VOLTAGE SWITCHBOARD

- A. General - The Contractor shall furnish and install, where indicated, a free-standing, dead-front type low-voltage distribution switchboard, utilizing group mounted circuit protective devices as specified herein, and as shown on the contract drawings. The low-voltage distribution switchboards and all components shall be designed, manufactured and tested in accordance with the latest applicable following standards:
1. NEMA PB-2
 2. UL Standard 891.
- The manufacturer of the assembly shall be the manufacturer of the circuit protective devices within the assembly. The low-voltage switchboard shall be UL labeled.
- B. Ratings - The assembly shall be rated to withstand mechanical forces exerted during short-circuit conditions when connected directly to a power source having available fault current as shown on the drawings. Voltage rating to be as indicated on the drawings.
- C. Construction
1. Switchboard shall consist of the required number of vertical sections bolted together to form a rigid assembly. The sides and rear shall be covered with removable bolt-on covers. All edges of front covers or hinged front panels shall be formed. Provide adequate ventilation within the enclosure.
 2. All sections of the switchboard shall be rear aligned with depth as shown on the drawings. All protective devices shall be group mounted. Devices shall be front removable and load connections front accessible enabling switchboard to be mounted against a wall.
 3. The assembly shall be provided with adequate lifting means.

4. The switchboard shall be equal to Cutler-Hammer type Westinghouse Pow-R-Line C utilizing the components herein specified and as shown on the drawings.
 5. The switchboard shall be suitable for use as service entrance equipment and be labeled in accordance with UL requirements.
 6. The switchboard shall be capable of metering requirements as indicated on the drawings.
- D. Bus
1. All bus bars shall be silver-plated copper. Bus sizing shall be based on NEMA standard temperature rise criteria of 65 degrees C over a 40 degrees C ambient (outside the enclosure).
 2. Provide a full capacity neutral bus.
 3. A copper ground bus (minimum 1/4 x 2 inch), shall be furnished firmly secured to each vertical section structure and shall extend the entire length of the switchboard.
 4. All hardware used on conductors shall be high-tensile strength and zinc-plated. All bus joints shall be provided with conical spring-type washers.
- E. Wiring/Terminations
1. Small wiring, necessary fuse blocks and terminal blocks within the switchboard shall be furnished as required. Control components mounted within the assembly, such as fuse blocks, relays, pushbuttons, switches, etc., shall be suitably marked for identification corresponding to appropriate designations on manufacturer's wiring diagrams.
 2. Mechanical-type terminals shall be provided for all line and load terminations suitable for copper cable rated for 75 degrees C of the size as indicated on the drawings.
 3. Lugs shall be provided in the incoming line section for connection of the main grounding conductor. Additional lugs for connection of other grounding conductors shall be provided as indicated on the drawings.
- F. Circuit Breakers - Where indicated, provide circuit breakers UL listed for application at 100% of their continuous ampere rating in their intended enclosure.
- G. Nameplates
1. Engraved nameplates, mounted on the face of the assembly, shall be furnished for all main and feeder circuits as indicated on the drawings. Nameplates shall be laminated plastic, black characters on white background. Characters shall be 3/16-inch high, minimum. Nameplates shall give item designation and circuit number as well as frame ampere size and appropriate trip rating. Furnish master nameplate giving switchboard designation, voltage ampere rating, short-circuit rating, manufacturer's name, general order number, and item number.

2. Control components mounted within the assembly, such as fuse blocks, relays, pushbuttons, switches, etc., shall be suitably marked for identification corresponding to appropriate designations on manufacturer's wiring diagrams.
- H. Finish - All exterior and interior steel surfaces of the switchboard shall be properly cleaned and provided with a rust-inhibiting phosphatized coating. Color and finish of the switchboard shall be ANSI 61 light gray.

2.03

PANELBOARDS

- A. General: Furnish and install circuit breaker lighting and appliance panelboards where shown on the drawings and as indicated in the panelboards schedule. Panelboards shall comply with the following industry standard:
1. NEMA Standard PB-1
 2. UL Standards: Cabinets and Boxes -UL50; Panelboards - UL 67
 3. National Electric Code
 4. Panelboards shall be labeled as suitable for use as service equipment in accordance with Article 408 of the National Electrical Code.
- B. Box: The panel box shall not be less than 20 inches wide and fabricated from galvanized or galvanized steel. Box shall have adjustment screws to provide easy alignment for flush mounted applications. Removable end walls to be blank with no KO's. Panelboard box is to have separate UL label and minimum wire bending and gutter requirements to meet the NEC and UL standards. Wiring gutters shall be completely free of any part of trim clamp to prevent damaging wire insulation.
- C. Interior Type S3: All interiors shall be completely factory assembled. The design of the interior should permit replacement of circuit breakers without disturbing adjacent units and without machine drilling or tapping. Bus bars and breaker branch bus shall be of 98% conductivity copper. Bus sequence shall start at the top left phase bus of the interior for both top and bottom fed panels. Panelboard bus structure and main breaker or main lugs shall have current ratings as shown on the plans or as indicated in panel schedule. Such ratings shall be established by heat rise test in accordance with Standard UL 67. Bus bars shall be supported by glass filled polyester type insulators. All bolts used to connect current carrying parts together shall be case hardened, thread-forming type and be accessible for tightening from the front of the panel. Provide an individual circuit number button with an embossed number next to each breaker or provision. Stick on numbers are unacceptable.
- D. Dead front to be provided with flange for easy attachment of trim. Incoming cable lugs shall be grouped at one end to separate them from the load side cables. Neutral bussing shall have a lug for each

outgoing branch requiring a neutral connection. For easy wiring and shortest cable run possible, load side neutral connection lugs to be split with each side taking 50% of load neutral connections. The interior shall be provided with wing nuts for securing to box without tools.

- E. All computer isolation panels shall have 200% neutral bus.
- F. Fas-Latch Trim: The panel trim shall be surface or flush as indicated on the drawings. It shall be fabricated from cold rolled steel, painted with an ANSI-61 light gray finish and equipped with concealed hinges, flush lock and a holder for circuit directory card. Trim shall have two separate supports designed to engage the box flange to stabilize and secure the trim during installation. Trim screws to be located behind the lockable door for tamper resistance. No external screws on trims will be allowed. Trims shall be hinged to box.
- G. Description: The panelboards shall be Sentron type for use on systems as indicated on each panelboard schedule. The panelboard enclosures shall be NEMA Type 1 construction for top or bottom cable entrance and suitable for surface or flush mounting unless otherwise noted on panelboard schedules. Panels shall be interchanged from top or bottom feeds.
- H. Short circuit rating shall be as indicated on panel schedule.
- I. Provide main lug only or main circuit breaker panel boards as shown on panelboard schedules. Also provide branch and subfeed circuit breakers of the quantity, trip rating and number of poles as shown on schedules. All panels shall accept additional feed thru lugs or subfeed breaker without modification to bus.
- J. Molded case circuit breakers shall be thermal magnetic, quick make, quick break, trip free. Multi-pole breakers shall be common trip. All breakers shall be equipped with antiturn solderless, pressure type connectors. All provisions shall be located at the bottom of the panelboard and be fully bussed complete with all necessary mounting hardware less the breaker. No plug in breakers will be allowed.
- K. All panels shall be fully rated. No series rating of breakers is acceptable.
- L. Provide subfeed lugs, feed through lugs, handle blocking devices, pad locking devices, shunt trips and ground bus bars as shown on schedules.
- M. Panelboards shall be manufactured by Siemens, General Electric or Square D or prior approved.

2.04

NAMEPLATES

- A. Each new panel shall have an external micarta engraved nameplate. Disconnect switches, starters or similar devices shall have a micarta

engraved nameplate mechanically affixed (no glue) indicating the load served and the location, such as "A/C 2" or "A/C 3 above ceiling". Letters shall be 1/4" black on a white background. Panels shall be designated in this manner.

"Panel A
120/208 Volts
3 Phase, 4 Wire"

2.05 DIRECTORIES

- A. For panelboards, install typewritten directories, listing each branch circuit, identifying space and equipment it controls. Label panels, disconnect switches, pushbuttons, motor starters, and time clocks with identification shown on plans using engraved nameplates, identify main and switches ahead of mains, noting equipment they serve.

2.06 DISCONNECT SWITCHES

- A. Furnish heavy duty disconnect switches. Switches shall be a product of the same manufacturer as panelboards, using a quick-make, quick-break mechanism. Enclosure shall be Nema type conforming to area in which it is installed. Shop drawings include manufacturer's catalog data and physical dimensions for each size switch.

2.07 FUSES

- A. Furnish fuses for fusible equipment. Supply one (1) set of 3-spare fuses for each size used. Provide spare fuse cabinet. Fuses specified are coordinated and shall be manufactured by Bussman. Chase-Shawmut and Little Fuse will be approved provided shop drawing submittal demonstrates selective coordination.

2.08 RACEWAY AND FITTINGS

- A. Rigid Metal Conduit - Shall have threaded fittings, galvanized steel or threadless compression galvanized steel or threadless compression cadmium plated malleable iron. Fittings shall be rain tight/concrete tight.
- B. Electrical Metallic Tubing (EMT) - Material of steel or malleable iron is acceptable. Couplings and connectors shall be concrete and rain tight, with connectors having insulated throats. Use gland and ring compression type couplings and connectors for conduit sizes 2" and smaller. Use set screw type couplings with four set screws each for conduit sizes over 2". Use set screws of casehardened steel with hex head and cup point to firmly seat in wall of conduit for positive grounding. Indent type connectors or couplings are prohibited. Die-cast or pressure-cast zinc-alloy fittings or fittings made of "pot metal" are prohibited.

- C. Rigid Non-Metallic Conduit - shall have polyvinyl chloride (PVC) fittings suited for the purpose and joined together by a method approved for the purpose. Schedule 80 conduit sections may be joined together with threaded fitting connectors.
- D. Flexible Metal Conduit - fittings shall be zinc plated steel or cadmium plated malleable iron screw type with insulated throat and angular wedge fitting between convolutions of conduit.
- E. Liquidtight Flexible Metal Conduit - fittings shall be cadmium plated, malleable iron or steel with compression type steel ferrule and neoprene gasket sealing rings, with insulated throat.
- F. Conduits installed concealed in earth fill, concrete or, solid masonry structures shall be PVC 40. PVC shall not be installed in any exposed locations. All exposed exterior conduits shall be GRS. Any GRS installed below grade or in concrete shall have bitumastic applied prior to installation.
- G. Conduits used for connection to recessed lighting fixtures shall be FLEX. Conduits for connection to motors or vibrating equipment shall be LQFLEX not less than 18" long and not over 60" long. All flexible conduits are to be secured at a minimum of every three feet using approved methods.
- H. Conduits run concealed in the hollow space of non-masonry walls or, above suspended/hard ceilings shall be EMT. Exposed conduits shall be run at right angles to or parallel with building lines and exposed structure. In all cases, conduit runs shall be grouped together where possible and shall be supported from the building structure, not from any suspended ceiling support system.
- I. PVC 80 shall be used only as indicated on the drawings and shall be UL listed as sunlight resistant. Install conduits passing through building sidewalls or through beams below grade with expansion/deflection fittings. Install expansion fittings where conduit crosses an expansion joint. Where conduit penetrates damp-proofing membranes, cut the membrane carefully around the conduit and seal the joint with pressure sensitive tape.
- J. All conduit bends are to be made with a device made for the application. All conduit runs are to be parallel or perpendicular to the building structure. Conduit offsets are to be utilized at junction boxes and device boxes and a strap placed on conduit at the point nearest the box for support.
- K. Support raceways securely with pipe straps, wall brackets, conduit hangers or ceiling trapeze. Fastenings shall be by wood screws or screw type nails to wood, by toggle bolts to concrete block, expansion bolts on concrete or brick, and beam clamp types on steel or bar joists. Raceways shall not be fastened to suspended ceiling supports but must have independent support from the structure. Supporting devices shall be of materials having corrosion protection at least equal to the raceway. A support shall be provided as close

as practical to, and not exceeding 18" from an unsupported box or from change of direction. In horizontal runs, this support may be omitted if the box is independently supported and the box connection is not made with chase nipple or threadless box connector. In vertical runs, load produced by weight of the raceway and conductors shall not be carried by the raceway terminal, but must be carried entirely by conduit supports. Install conduit supports in strict accordance with the following table, except as required by support for boxes and changes in direction:

MAXIMUM SUPPORT TRADE SIZE	LOCATION OF RUNS	SPACING
1/2, 3/4	Exposed, Horizontal	7 feet
1 and larger	Exposed, Horizontal	10 feet
All sizes	Concealed, Horizontal	10 feet
1/2, 3/4	Exposed, Vertical	7 feet
1, 1-1/4	Exposed, Vertical	8 feet
1-1/2 and larger	Exposed, Vertical	10 feet
All sizes	Concealed, Vertical	10 feet

- L. For conduit runs that are not sized on drawings, the maximum conduit fill shall be computed using the requirements for Type THW conductors although the actual wiring is with Type THWN or other type of conductors having smaller cross-sections. This requirement is made to provide spare conduit capacity.
- M. Install all required sleeves for conduits passing through concrete slabs. Fire proof space between conduit and sleeve after installation using of mineral wool as required. All fire wall penetrations are to be sealed with a U. L. approved method. Any penetrations of the roof membrane must be sealed by a certified roofing contractor using an approved method.
- N. Expansion Joints:
 1. Conduits 3" and larger, that are secured to the building structure on opposite sides of a building expansion joint, required expansion and deflection couplings. Install couplings in accordance with the manufacturer's recommendations.
 2. Provide conduits smaller than 3" with junction boxes on both sides of the expansions joint. Connect conduits to junction boxes with sufficient slack of flexible conduit to produce 5" vertical drop midway between ends. Flexible conduit shall have a green copper ground-bonding jumper installed. In lieu of this flexible conduit, expansion and deflection couplings as specified above for three inches and larger conduits are acceptable.
 3. Expansion fittings shall be provided for raceways to compensate for thermal expansion and contraction in conduit runs 200ft or

greater and at building expansion joints. Bonding jumpers shall be provided for electrical continuity of the raceway system at the expansion fittings.

O. Conductors:

1. All conductors shall be installed in conduit. Conductors for building wiring shall have THHN/THWN, 600-volt insulation and shall be soft-drawn copper of standard American Wire Gauge (AWG) size. Minimum size shall be No. 12. 20-amp branch circuits more than 100 feet in length shall be upsized to No. 10. Provide individual neutral conductors for all single-pole branch circuits. Tied breaker handles are not acceptable. All wire No. 8 and larger shall be stranded. All branch circuits No. 10 and smaller shall be wired with color-coded wire with the same color used for a system throughout the building. Power feeders and branch circuits larger than No. 10 shall either be fully color coded or shall have black insulation and be similarly color coded with tape or paint in all junction boxes and panels. Where tape or paint is used to identify conductors, apply at all terminations, junction boxes, pull boxes and wireways. Apply tape, butt lapped, or paint for a minimum distance of 2" and, where applied to ends of conductors, start at cut end of the conductor insulation. Tape shall not cover manufacturers conductors shall be color coded or labeled as necessary for clear identification. Color coding of all conductors shall be as follows:

Grounding	Bare or Green
120/208 volt Three Phase (wye) Phase Conductors:	A-Black, B-Red, C-Blue Neutral: White
277/480 volt Three Phase (wye) Phase Conductors:	A-Brown, B-Orange, C-Yellow Neutral: Natural Grey

2. All circuits are to be run with a neutral conductor: No shared neutral conductors are allowed.
3. Suitable bushings, shields or fittings having smooth rounded edges shall be provided where conductors pass between wire ways, through partitions, around bends, between wire ways and cabinets or junction boxes, and at other locations where necessary to prevent abrasion of the insulation of the conductors. As a clarification, this also applies to conduits stubbed into the ceiling.

2.08

JUNCTION AND PULL BOXES

- A. Junction and pull boxes shall meet requirements of National Electrical Code. Standard manufactured boxes shall be listed by Underwriters' Laboratories, Inc. Where custom designed and fabricated boxes are needed, they shall meet the construction standards of Underwriters' Laboratories, Inc. and the N.E.C.
- B. Junction and pull boxes shall be installed where required by National Electrical Code and where necessary to facilitate pulling of wire or cable. Considerations are sizes of wire and cable, number of bends in raceway, and conductor support requirements in vertical raceways. Maximum distance between terminations at junction or pull boxes, cabinets, or other points of termination shall not exceed 250 feet for straight horizontal runs. This length shall be decreased 50 feet for each 90 degree bend. All junction boxes shall be independently and rigidly supported from the building structure. Junction box type shall conform to the area in which it is installed (i.e. wet location areas shall be moisture resistant type junction boxes).
- C. Junction boxes and associated conduit for Fire Alarm shall be painted red. Junction boxes for low voltage controls, communication, technology, etc. shall be permanently marked indicating use.

2.09

OUTLETS

- A. Outlet boxes shall be one piece or projection welded, galvanized stamped steel for gang sizes required. Where several devices are located on drawings in the same general location, use multi-gang boxes. Sectional boxes are not acceptable. Boxes shall be sized in accordance with National Electrical Code. Boxes required for communications systems, mechanical control devices, etc., shall be installed under this section of the specifications. Verify outlet box locations and sizes required for systems other than electrical power from shop and manufacturer's drawings, and install outlets as per those requirements.
- B. Boxes for wall and ceiling outlets shall finish flush and straight. Wall outlets in exposed concrete block, masonry, and tile walls shall be installed with extra deep square corner boxes or with standard boxes and square cornered tile wall covers so that conduit offsets are not required. Openings in concrete blocks or masonry walls shall be saw cut with an opening tolerance of 1/8" on all sides, the opening shall have bottom of box at nearest masonry joint to dimension indicated. For other wall finishes, boxes shall be installed with plaster or device type covers as required. No outlets shall be installed back-to-back. Where outlets occur in stud walls back to back on opposite sides, they shall be isolated by a solid stud between them or shall have a 24" separation. For boxes installed in a fire rated barrier, a U.L. approved putty pad shall be installed as required.

2.10

WIRING DEVICES

- A. Colors: Wiring device and plate colors shall be selected by Architect.
- B. Receptacles: Duplex receptacles shall be specification grade, 20 amps, 125 volts with grounding terminal. The receptacles are to be rigidly secured independent of device plate and such that the device plate secures to the device as the design specifies.
- C. Switches: Standard flush tumbler switches shall be specification grade, 20 amps, 120/277 volts A-C only, single pole, three-way or four-way as shown, single throw with screw terminals arranged for side wiring. The switches are to be rigidly secured independent of device plate and such that the device plate secures to the device as the design specifies.
- D. Device Plates: Shall be of the specification grade high impact resistant, stainless steel plates. The nominal thickness is to be .070". Color to match device.
- E. Ground Fault Receptacles: Furnish and install receptacles with ground fault circuit interrupters as indicated on plans. Receptacles shall be NEMA 5-20R configuration with 120V ac 20 amperes circuit rating. All receptacles shall be such depth as to permit mounting in outlet boxes 1-1/2" or greater in depth without the use of spacers. Units shall have line and load terminals such that connection to load terminals will provide ground fault protection for other receptacles. All receptacles shall accept standard duplex wall plates. All receptacles shall be noise suppressed and shall be UL listed. Any device located within 76" of a source of water is to be GFCI protected.
- F. All devices are to be installed such that devices do not move when in normal use. The device plate shall not be used to secure device in place.

2.11

LIGHTING FIXTURES

- A. Provide wired, cleaned, and with lamps specified, all fixtures designated on drawings. Contractor shall verify the ceiling construction for correct trim and support arrangement of lighting fixtures; corrosion resistant plaster frames are required in plaster ceilings. Shop drawing submittals shall consist of properly identified copies of manufacturer's catalog pages showing all features and accessories specified.
- B. Secure mounting and support of all lighting fixtures shall be accomplished under this section of these specifications. Lighting fixtures shall be installed plumb, square, and level with the ceiling, wall, and in alignment with adjacent lighting fixtures. Mounting heights indicated shall be to the bottom of the fixture for ceiling-mounted fixtures and to center of fixture for wall-mounted fixtures. Lay-in troffer fixtures shall be supported with a minimum of 4 ceiling support wires per fixture and not more than 6 inches from each

corner of the fixture. For fixtures smaller in size than the ceiling grid, provide a minimum of four wires per fixture. Do not support fixtures by ceiling acoustical panels. All concealed fixture mounting accessories shall be securely tied to structure. Flexible connections to fixtures shall not exceed 6 feet in length. Fixtures shall be solidly grounded to raceway system.

- C. In areas where the reflected ceiling plan is shown, all work shall be in conformance with this plan. If the ceiling grid is installed other than shown on the electrical plan, it shall be the responsibility of the installer of the lighting fixtures to call this fact immediately to the attention of the Architect and Contractor, and work shall not proceed until Architect's decision in the matter is obtained.
- D. Fluorescent ballasts shall be electronic type, class A noise rating, class P safety standards, high power factor greater than .98, programmed start, auto restart, 10% total harmonic distortion or less, 42 kHz – 54 kHz hertz ballast frequency, .85 or greater ballast factor, less than 1.7 lamp current crest factor, meeting the requirements of ANSI/IEEE C62.41 & C82.11, FCC Part 18 (RFI & EMI), CBM, UL, Public Law No. 100-357, and NAECA. All ballasts shall include internal fusing. Ballast shall be compatible for use with energy saving lamps. For outdoor applications, ballast shall be rated for zero degrees Fahrenheit starting temperature.
- E. High Intensity Discharge (HID) lamp ballasts shall be high power factor type greater than .98, protected by in-line fuse, UL 1029, UL class P, ANSI C82.4, 15% total harmonic distortion or less, 100 kHz – 200 kHz ballast frequency, end-of-life detection and shutdown. Ballasts in fixtures for interior spaces shall be encapsulated in a Class H potting compound to provide a Class A noise rating. Ballasts in fixtures installed outdoors shall be weatherproof. Provide 0 degrees Fahrenheit starting temperature for HID below 250W. Provide -20 degrees Fahrenheit starting for HID 250W and above.
- F. LED drivers shall be highly efficient, class A noise rating, 0.9 or greater power factor, power supplies rated for the wattage requirements of the fixture. THD at full load shall be <10% at 120v and <20% at 277v. <3% line regulation, <1W stand-by power. LED power up time to be <1 sec. Load regulation <5%. Provide over voltage protection, non-latching output short circuit protection, current reduction LED load temperature protection. Ambient operating temperature range -30 degrees Celsius to 50 degrees Celsius at 85% non-condensing relative humidity. Driver shall meet ANSI C62.41 Cat.A 2.5kv transient protection. Power supply shall be field programmable with 1mA resolution. Programmer shall not require the power supply to be powered up or connected to AC line voltage while programming. Provide integrated configurable LED thermal protection. Drivers shall be universal voltage input. Power supply

shall be UL Class 2. LED dimming drivers shall provide continuous flicker-free dimming from 100%-1%.

- G. All lamps shall be the product of one manufacturer and shall be as manufactured by General Electric Osram/Sylvania, or Phillips. HPS lamps shall comply with the current published ANSI standards.

2.12 TELEPHONE SYSTEM

- A. The Contractor shall furnish and install PVC 40, EMT, boxes, etc. as appropriate, for telephone cables. All turns shall be made with no more than two (2) bends to a run. All telephone conduit is to have bushings provided at both terminated ends. The electrical contractor shall consult the local telephone company for complete rules and regulations and the telephone conduit shall be installed according to these rules.

2.13 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Protections: Take necessary precautions to protect all material, equipment, apparatus, and work from damage. Failure to do so to the satisfaction of the Architect will be sufficient cause for the rejection of the material, equipment, or work in question. Contractor is responsible for the safety and good condition of the materials installed until final acceptance by the Owner.
- B. Cleaning: Conduit openings shall be capped or plugged during installation. Fixtures and equipment shall be tightly covered and protected against dirt, moisture, chemical, and mechanical injury. At the completion of the work, the fixtures, material and equipment shall be thoroughly cleaned and delivered in condition satisfactory to the Architect.

PART 3 EXECUTION

3.01 EXCAVATION, TRENCHING AND BACKFILLING

- A. Trenches for all underground conduits shall be excavated to the required depth. The bottom of trenches shall be tamped hard. Before backfilling the excavation shall be cleaned of trash and debris. Backfill shall consist of excavation or borrow of sand, gravel, or other approved material free of trash, lumber, sawdust or other debris. Backfill shall be placed in 9" thick moistured and hand or machine tamped layers. Backfill shall be brought to suitable elevation above ground to provide for anticipated settlement and shrinkage. All paving broken up shall be repaired and returned to the original condition.

3.02 PAINTING

- A. Contractor shall touch-up or refinish all items of electrical equipment furnished with a factory finish coat of paint and which may have been damaged regardless of cause.

3.03 TESTING AND BALANCING

- A. Balance all single-phase loads connected to all panelboards to ensure an approximate equal division on these loads on main power supply serving building. All tests shall be made in accordance with the latest standards of the IEEE and the NEC. The installation shall be tested for performance, grounds and insulation resistance. "Megger" type instruments shall be used. Contractor shall perform circuit continuity and operational tests on all equipment furnished or connected by Contractor. The tests shall be made prior to final inspection. The Contractor shall provide all testing equipment and all costs shall be borne by him. Written reports shall be made of all tests. These reports shall be turned over to the Architect at time of final inspection. All faults shall be corrected immediately.

3.04 CLEANING UP

- A. The Contractor shall remove all oil, grease, or other stains resulting from his work performed in the building or the exterior thereof.

3.05 WARRANTY AND MAINTENANCE

- A. The Electrical Systems and associated materials shall be covered by the warranty for a period of one year. All materials, installation, and workmanship shall be warranted during the warranty period. That is, any item will be repaired at no charge for any defects for one year after the date of acceptance.

END OF SECTION

SECTION 16 100
WORK IN EXISTING
FACILITIES

PART 1 - GENERAL

1.01 SUMMARY

- A. Provisions of Division 01 apply to this section

1.02 Section Includes: This section provides electrical requirements for demolition or rework of existing systems. Work shall include all existing electrical including auxiliary systems. Coordinate with owner and General Contractor for removal and rework of all electrical systems.

1.03 DEMOLITION OF EXISTING ELECTRICAL SYSTEMS

- A. In demolished building, remove all electrical equipment including but not limited to: Light fixtures, panelboards, switches, receptacles, auxiliary system devices, telephone outlets, life safety devices, and fire alarm; unless otherwise noted. Remove existing branch circuits, conduits, wiring, junction boxes, hangers, fittings, etc. serving equipment to be removed. Abandon conduits concealed in concrete, but remove conductors. Leave existing branch circuits and feeders which run through reworked areas and serve existing equipment to remain in service, continuous and uninterrupted. Repair, reterminate, re-support, etc., any damaged circuits.
- B. Where below grade conduits are abandoned, cut off 6" minimum below grade, grout or back fill over and finish smooth to match adjacent flooring or grade.

1.04 CUTTING, PATCHING, AND REPAIRING (IF REQUIRED)

- A. Electrical contractor shall coordinate with General Contractor for all cutting, patching, and repairing. Electrical contractor shall perform all cutting or allow general contractor to perform cutting in a professional manner. Flooring and walls shall be cut in straight lines and parallel or perpendicular to walls. Electrical contractor shall coordinate and notify General Contractor of all cutting prior to bid and shall be responsible for any costs associated with cutting, patching, and repairing.
- B. Do not pierce or cut any existing walls below grade.
- C. Do not cut any structural walls or structural members, unless receiving approval in writing from the architect and structural engineer.
- D. All new work shall match and be comparable to existing conditions or new adjacent finishes. Architect and engineer reserve the right to reject any unsuitable work.

1.05 ELECTRICAL SYSTEMS

- A. Electrical, low voltage, systems wiring, life safety, etc. in areas outside of work area shall remain in service at all times. Provide and install necessary temporary wiring as required to maintain continuity of all electrical systems outside of the work area.
- B. Where service interruptions are required, obtain approval for interruption in writing from Owner 10 days prior to interruption. Include schedule of work to be performed and the time required to accomplish work in request for interruption. Work during service interruptions may be required after normal working hours. Include premium

(overtime) time labor in bid. No service interruptions shall occur until written approval is granted from the owner.

1.06 MATERIAL TO BE REMOVED/SALVAGED

- A. Where noted, salvaged materials are to be reused. Clean any reused materials prior to reinstalling and at the completion of the project.
- B. When materials are demolished and shown to be removed, the owner has the right to retain any desired/salvageable materials.
- C. Discard or remove from site any materials not retained by the owner.

PART 2 - PRODUCTS (not applicable)

PART 3 - EXECUTION

3.01 GENERAL REQUIREMENTS

- A. Advise the general contractor or architect before starting the Work of this Division.
- B. Demolished or Salvaged materials, if applicable, removed from buildings shall be removed from the Project site as required by the general contractor.

3.02 CLEANUP

- A. Remove rubbish, debris and waste materials and legally dispose of off the Project site.

END OF SECTION