# dBF Associates, Architects

# **SPECIFICATIONS**

# CHARLOTTESVILLE/ALBEMARLE AIRPORT ARFF BUILDING RENOVATION Albemarle County, VA

Charlottesville Albemarle Airport Authority
Albemarle County, VA

**November 4, 2024** 

#2217

# **COVER PAGE**

**PROJECT:** CHARLOTTESVILLE/ALBEMARLE AIRPORT

ARFF BUILDING RENOVATION ALBEMARLE COUNTY, VA.

**OWNER:** CHARLOTTESVILLE ALBEMARLE

AIRPORT AUTHORITY

100 BOWEN LOOP, SUITE 200 CHARLOTTESVILLE, VA. 22911

**ARCHITECT:** dBF ASSOCIATES, ARCHITECTS, INC.

925-B EAST JEFFERSON STREET

P.O. BOX 78

CHARLOTTESVILLE, VA. 22902

(434) 977-2791

(434) 977-0593 (FAX)

**M/E/P ENGINEER:** MEI ENGINEERING, INC.

1592 CF PORS DRIVE

HARRISONBURG, VA. 22802

(540) 432-6272

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# CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY CHARLOTTESVILLE ALBEMARLE AIRPORT

#### INVITATION TO BID

PROJECT DESCRIPTION: AIRCRAFT RESCUE & FIREFIGHTING (ARFF) BUILDING RENOVATIONS BID DUE DATE: Wednesday, December 11, 2024 at 2:00 PM Local Time

Sealed bids will be received by the Charlottesville Albemarle Airport Authority, at 100 Bowen Loop, Suite 200, Charlottesville, VA 22911, until 2:00 PM (local time), on the bid date. On the bid date at 2:00 PM, all bids will be publicly opened and read aloud.

#### ANY BID RECEIVED AFTER THE SPECIFIED TIME WILL NOT BE CONSIDERED.

#### The proposed Work includes the following:

The renovation and remodeling of the first and second floors of the Aircraft Rescue and Firefighting (ARFF) facility.

## **Anticipated Schedule:**

DATE	EVENT
November 6, 2024	Date of issue of the Solicitation
November 13, 2024	Pre-Bid Meeting and Site Visit- 10:30 AM in the rotunda area of the terminal- Attendance is not mandatory.
December 6, 2024	Last day for submitting written inquiries (2:00 PM Eastern Time)
December 11, 2024	Bid Submission Deadline (2:00 P.M. Eastern Time)
December 11, 2024	Bid Evaluations
December 13, 2024	Notice of Intent to Award will be posted on Authority's website
<b>December 23, 2024</b>	Award of Contract
January 10, 2025	Projected - Contract start date

## **Bidder Oualifications:**

Bidder shall be a licensed contractor experienced in the renovations and remodeling of commercial buildings while partially occupied.

A non-mandatory Pre-Bid Conference for this project will be held on Wednesday, November 13, 2024, at 10:30 AM (local time) via Microsoft Teams Video Conferencing AND in-person in the Airport Conference Room, located at 100 Bowen Loop, Suite 200, Charlottesville, VA 22911. Bidders are encouraged to attend in person, or schedule a site visit for a comprehensive tour of the facility. Please email Mr. Jason Devillier, Director of Operations and Maintenance, at jdevillier@gocho.com.

Bidders may request electronic copies of the Contract Documents (proposal forms, specifications, drawings) via e-mail. Inquiries should be directed to the Project architect, Mr. Rick Funk, at <a href="rick@dbfassociates.com">rick@dbfassociates.com</a>. Each Bidder is individually responsible for the careful examination of the site of the proposed Work, the Proposal, Plans, General Provisions, Technical Specifications, Contract Forms, and all requirements of the project. The failure or omission by any Bidder to do so shall in no way relieve any Bidder from any obligation with respect to its bid. The Authority reserves the following rights: to accept or reject any or all bids; and to award the Contract to the most responsive and responsible Bidder whose bid is determined by the Authority to be in its best interest. Any and all proposals as submitted herein are subject to further negotiation at the option of Authority. No contract or agreement of any kind arising out of this proposal

and/or negotiations shall be binding or valid against the Authority, its department, officers, employees, or agents unless such contract or agreement is in writing, has been authorized by the Charlottesville Albemarle Airport Authority, and signed by the Airport Director or his designee.

The Charlottesville-Albemarle Airport Authority, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

# CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY CHARLOTTESVILLE ALBEMARLE AIRPORT

#### INSTRUCTIONS TO BIDDERS

#### I. GENERAL

## A. Compliance with Law

- 1. The Bidder covenants and agrees that he/she and his/her agents and employees will comply with all municipal, state, and federal laws, applicable national and local codes, County rules and regulations applicable to the work to be conducted under this Agreement and that he/she shall obtain all necessary permits, pay all required fees and taxes, and otherwise perform these services in a legal manner. County rules and regulations are available on request. The Bidder is assumed to be familiar with all federal, state, and local laws, ordinances, County rules and regulations that in any manner affect the work. Ignorance on the part of the Bidder will in no way relieve him/her from responsibility.
- 2. Bidder certifies that all material, equipment, etc., contained in his/her proposal meets all OSHA requirements.

#### **B.** General Bond Requirements:

- 1. All bids or proposals for non-transportation-related construction contracts in excess of \$500,000 or transportation-related projects authorized under Article 2 (§ 33.2-208 et seq.) of Chapter 2 of Title 33.2 that are in excess of \$350,000 and partially or wholly funded by the Commonwealth shall be accompanied by a bid bond (proposal guaranty) from a surety company selected by the bidder that is authorized to do business in Virginia, as a guarantee that if the contract is awarded to the bidder, he will enter into the contract for the work mentioned in the bid.
- 2. The Proposal Guaranty shall be as specified; only the Proposal Bond and Surety's Bond Affidavit as bound within these documents or a Cashier's Check is acceptable. Each separate proposal shall be accompanied by a Cashier's Check or Proposal Bond on the form provided herein in the amount of 10 percent (10%) of the total amount bid, made payable to Charlottesville Albemarle Airport Authority. If a Proposal Bond is provided in lieu of a Cashier's Check, it must be accompanied by a valid Power of Attorney indicating that the person signing the bond on behalf of the Surety has full legal authority to do so.
- 3. The amount of such bond or the check of the Bidder whose proposal is accepted shall be forfeited and paid to the Owner as liquidated damages if said Bidder fails to enter into a Contract with the Owner and to furnish the required executed Contracts, Certificates of Insurance and Performance and Payment Bonds within fifteen (15) calendar days after the date of the Notice of Award and Acceptance of the proposal.
- 4. Contract Payment and Performance Bonds shall be as specified; only the Payment and Performance Bonds and Surety's Bond Affidavit as bound within these Contract Documents are acceptable.

## **C.** Insurance Requirements:

1. Insurance requirements shall be as specified in Special Conditions, Section 2, herein.

# II. QUALIFICATION OF BIDDERS

**A.** Qualification of Bidders shall be as described in the Proposal Forms herein.

## III. EXAMINATION OF CONDITIONS AFFECTING WORK

- A. Prior to submitting a proposal, each Bidder shall examine and thoroughly familiarize themselves with all existing conditions, including all applicable laws, codes, ordinances, rules, and regulations that will affect his work. Bidders shall visit the project site, examine the grounds and all existing buildings, utilities, pavements, and systems, and shall ascertain all conditions that will in any manner affect work. Bidders shall ask the Architect/Engineer, in writing, for any additional information deemed necessary for them to be fully informed as to exactly what is to be expected prior to submitting a proposal.
- **B.** The Owner will make available during normal business hours, at its offices, record documents and drawings pertaining to Charlottesville Albemarle Airport. These record documents and drawings shall not be considered a part of the Contract Documents. Record documents and drawings have been maintained by the Owner solely for the Owner's own benefit, and do not necessarily indicate all existing conditions fully or accurately. Bidders shall be solely responsible for all assumptions made in reliance upon record documents and drawings.

## IV. INTERPRETATIONS

A. Each Bidder shall carefully examine the plans and the Contract Documents and all Addenda or other revisions and thoroughly familiarize himself with the detailed requirements prior to submitting a proposal. Should a Bidder find discrepancies or ambiguities in, or omission from, the Contract Documents, or should he/she be in doubt as to their meaning, he/she shall at once, and in any event, not later than seven days prior to receipt of bid, notify the Architect/Engineer in writing who will send written Addenda to all Bidders where necessary. Bidders shall not be entitled to rely upon any oral instructions or interpretations by the Architect/Engineer. All Addenda sent to Bidders will become a part of the Contract Documents. All written technical inquiries shall be directed to DBF Associates, 311 10<sup>th</sup> Street, NE, Charlottesville, VA 22902, Mr. Rick Funk at (434) 981-3721. No allowance will be made after proposals are received for oversight by Bidder.

## V. SUBSTITUTIONS

- **A.** The materials, products and equipment described in the Contract Documents establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution. The Contractor is responsible for assuring that all supplies, Subcontractors, and vendors conform to the Contract requirements.
- No substitution will be considered prior to receipt of bids unless written request for approval has been submitted in the proper format not less than seven (7) days prior to the receipt of bids. The burden of proof of the merit of the proposed substitution is upon the Bidder. The Architect/Engineer's decision of approval or disapproval of a proposed substitution is final.
  - In making requests for substitutions, the Bidder shall list the particular system, product, or material he wishes to substitute, and the justification for such a request. Request submitted shall include any and all adjustments of that and any other work affected thereby.
- **C.** If the Architect/Engineer approves any proposed substitution prior to receipt of bids, such approval will be set forth in an Addenda. Bidders shall not rely on approvals made in any other manner.

**D.** No substitutions will be considered after the receipt of bids except as specifically provided for in the Contract Documents.

## VI. PREPARATION AND SUBMISSION OF PROPOSAL

- **A.** Sealed proposals for the construction of the project generally described will be received until the time and date stated in the "Invitation to Bid."
- **B.** The proposal shall be on the "Proposal Forms" provided; no other forms are acceptable.
- C. Due to the allocation of funds, successful Bidders will be required to provide verified breakdown of costs of work in a manner acceptable to the Architect/Engineer and Owner.
- D. Each proposal submitted shall be placed in a sealed opaque envelope plainly marked with the project numbers, location of airport, and name and business address of the Bidder on the outside. When sent by mail, preferably registered, the sealed proposal, marked as indicated above, shall be enclosed in an additional envelope, and sent by registered mail with return receipt requested. The Owner will in no way be responsible for delays caused by the U.S. Postal service or any other deliverer of the proposal, or for delay caused by any other occurrence. No proposal will be considered unless received on or before the time and at the place designated in the "Invitation to Bid." Proposals received after the specified opening time shall be returned to the Bidder unopened. The envelope shall contain the signed original.
- **E.** The Bidder must submit his/her proposal on the forms furnished by the Owner. All blank spaces in the proposal forms must be correctly filled in where indicated.
- **F.** Proposals shall be submitted as indicated in the "Proposal Form" and shall be signed in ink by an official of the firm submitting the proposal.
- **G.** Erasures or other changes in a proposal shall be explained or noted over the signature of the Bidder.
- **H.** Proposals containing reservations, conditions, omissions, unexplained erasures or alternations, items not required in the bid or irregularities of any kind may be rejected by the Owner.
- **I.** Each proposal shall indicate the full business name and address of the Bidder and shall be signed by him/her with his/her usual signature.
- **J.** A proposal submitted by a partnership shall list the names of all partners and shall be signed in the partnership name by one of the members of the partnership.
- **K.** A proposal submitted by a corporation shall be executed in the legal name of the corporation and signed by the President or Vice President. The name of each person signing the proposal shall be typed or printed below the signature.
- **L.** When requested by the Owner, a Power of Attorney or other satisfactory evidence of the authority of the officer signing on behalf of the corporation shall be furnished for the Owner's records.
- **M.** The Bidder must supply all information required.

# CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY CHARLOTTESVILLE ALBEMARLE AIRPORT

#### **BID FORM**

TO: Charlottesville Albemarle Airport Authority

100 Bowen Loop, Suite 200 Charlottesville, Virginia 22911

**PROJECT:** Aircraft Rescue and Firefighting Facility (ARFF)

## AIRPORT'S REPRESENTATIVE (to be contacted for additional information on this Proposal):

F. Jason Devillier	(434) 973-8342
(Name)	(Telephone Number)
Bidder:	
Bidder's Address:	
Date:	
BIDDER'S REPRESENTATIV	(to be contacted for additional information on this Proposal):
(Name)	(Telephone Number)

#### BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons, or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Contract.

The Bidder further declares that no member of the surety, partner for copartners or a firm, directly or indirectly owns more than five (5) percent of the total assets or capital stock of the bidding entity, nor will directly or indirectly benefit by more than five (5) percent from the profits or emoluments of this Contract. (For purposes of this paragraph, indirect ownership or benefit does not include ownership or benefit by a spouse or minor child.)

The undersigned hereby declares, as Bidder, that this Proposal is made on the behalf of				
		(CO	NTRACTOR)	
and no others without collusion on the part of any person, firm or corporation, that he/she has examined the site of the Work, the Plans, Specifications and Form of Agreement and materials related thereto, and he/she proposes and agrees that if his/her bid as submitted in the attached Proposal schedule be accepted he/she will enter into a Contract to perform all the Work required and to complete the same within the stipulated time; and that the Bidder will accept in full payment therefore the prices named in said Proposal schedule. Said prices are to include, and cover the furnishing of all materials, except as otherwise provided in the Specifications, the performing of all the labor requisite or proper, and the providing of all necessary machinery, tools, apparatus, and other means of construction; and the performance and completion of all the Work in the manner set forth, described, and shown in the Specifications or on the drawings for the Work and in the form of agreement.				
Enclosed herewith is the Proposal Guaranty in the form specified in Section 20 of the General Provisions which is submitted as a guarantee of the good faith of the Proposal. The Bidder agrees that, upon receipt of notice to award, he/she will, within 15 days, execute the Contract in accordance with the Proposal as accepted, and satisfy the Contract bonding and insurance requirements stipulated in Section 30 of the General Provisions; and that upon his/her failure or refusal to do so, the Proposal Guaranty accompanying his/her bid shall be forfeited to and become the property of the OWNER as liquidated damages for such failure or refusal.				
<u>ADDENDA</u>				
The Bidder hereby acknowled	dges that he/she has received the	e following Addenda:		
	Addenda No.	<b>Dated</b>		
<u>TAXES</u>				
The Bidder agrees that any applicable Federal, State and Local sales and use taxes, are included in the stated bid prices. It is the responsibility of the Contractor to determine whether sales taxes are applicable. The Contractor is liable for any applicable taxes which are not included in the stated bid prices.				

The Bidder further declares that he has carefully examined the Specifications and that this Bid is made according to the

provisions and under the terms of the Specifications, which Specifications are hereby made a part of this Bid.

# **BID PRICING**

Having carefully examined the Specifications and Drawings for the Aircraft Rescue and Firefighting Facility Renovations Project Located at Charlottesville-Albemarle Airport in Charlottesville, Virginia as well the premises and conditions affecting the work,proposes to furnish all necessary Superintendence, Labor, Materials, Tools, Equipment, Machinery, Apparatus, and whatever else may be necessary to complete all work covered by this proposal within the time stated, in accordance with the Drawings and Specifications and requirements.				
	Dollars			
(\$)				
SIGNATURE ACKNOWLEDGES THAT: (Check One)				
Bid is in full compliance with the Specifications.				
Signature also acknowledges that Bidder has read the Airport's Puthereof shall apply to this bid.	urchasing Policies and agrees that the provisions			
	(CORPORATE SEAL)			
ATTEST:	BIDDER:			
Signature	Signature			
By:	By:			
Title:	Title:			

# CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY CHARLOTTESVILLE ALBEMARLE AIRPORT

## **BID AFFIDAVIT**

The following affidavit must be executed in order	er that your Proposal may	be considered.	
STATE OF	)		
COUNTY OF	)		
says: That he/she executed the accompanying Prlawful authority so to do, and said Contractor has implied, with any Contractor or Contractors, have or any Proposals, the limiting of the Proposal of Contractors, to other persons of any part of the Contractors, and that he/she has not and will not divide a partnership or other financial interest with him Proposals are opened.	as not directly or indirectly ving for its object the control Contractors, the parceling Contract or any of the subulge the sealed Proposal to	ontractor therein name, y, entered into any agre trolling of the price or a g or farming out to any ject matter of the Propo o any person whomsoey	d, and that he/she had rement, expressed or amount of such Proposal Contractor or osals, or of the profits wer; except those having
Signed:			
Subscribed and sworn to before me this	day of	, 20	·
My Commission Expires:			
	Notary	Public	
			Bond No.

# CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY CHARLOTTESVILLE ALBEMARLE AIRPORT

## **BID GUARANTY**

(Not to be filled in if a Cashier's check is submitted)

KNOW ALL MEN BY THESE PRESENTS: That			
		, as Principal, an	nd firmly bound unto
the Charlottesville Albemarle Airport Authority in	the sum of	. 6 1 1 1 1 1 .	
dollars (\$hereby jointly and severally bind ourselves, our hereby jointly and severally bind ourselves.	), for the paym	nent of which, well and tru	ily to be made, we
nereby jointly and severally bind ourselves, our ne	irs, executors, admin	istrators, successors and a	issigns.
THE CONDITION OF THIS OBLIGATION is suc	ch that if Principal:		
1. Does not withdraw the attached Proposi	al of		
Does not withdraw the attached Proposedollars (\$	) for the impro	ovement of Charlottesville	e Albemarle Airport for
a period of ninety (90) days after the da	te on which the bids	are opened; and	•
<ol> <li>Enters into the written contract and furn Bonds, with Surety or Sureties acceptal (15) days after notice that the said Proposhall be in full force and the full amount Airport Authority as stipulated herein as</li> </ol>	ble to the Charlottes osal is accepted, then at of this Proposal Bo	ville Albemarle Airport A this obligation shall be v and shall be paid to the Ch	Authority, within fifteen oid; otherwise the same
	Signed this	day of	, 20
(PRINCIPAL MUST INDICATE			
WHETHER CORPORATION,			
PARTNERSHIP,			
COMPANY OR INDIVIDUAL)			
	Principal		
THE PERSON SIGNING FOR THE			
PRINCIPAL SHALL, IN HIS/HER OWN			
HANDWRITING, SIGN THE PRINCIPAL'S			
NAME, HIS/HER OWN NAME AND By:	By:		
HIS/HER TITLE. WHERE THE PERSON			
SIGNING FOR A CORPORATION IS	T:41.		
OTHER THAN THE PRESIDENT OR Title	Title		
VICE PRESIDENT, HE/SHE MUST			
FURNISH A CORPORATE RESOLUTION			
SHOWING HIS/HER AUTHORITY TO			
BIND THE CORPORATION.			

(Affix Surety's Corporate Seal)	
S	Surety
SURETY'S I	BOND AFFIDAVIT
CTLA TIPL OF	
STATE OFCOUNTY OF	_) )
BEFORE ME, THE UNDERSIGNED AUTHORITY, po	ersonally appeared
who, being duly sworn, deposes and says that he/she is a properly licensed under the laws of the State of _, and th	duly authorized (resident) (non-resident) insurance agent,
corporate surety bonds under the laws of the Commonwe	, a company authorized to make ealth of Virginia (the "Surety").
Said further certifies that	t as agent or attorney-in-fact for the said Surety, he/she has
signed the attached bond in the sum of	To the e renovations of the Aircraft Rescue and Firefighting Facility.
(U.S. \$) on behalf of	To the
SaidFurther certifies	s that the premium on the said bond is \$
which will be paid in full directly to the Surety or to him	as agent or attorney-in-fact, and included in his/her regular on of said bond and that his/her commission will not be divided
	who is a duly authorized Commonwealth of Virginia.
nsurance agent properly licensed under the laws of the C	Commonwealth of Virginia.
COUNTERSIGNED:	
	SURETY
Virginia Resident Agent	Attorney-in-fact
	·
Address of Resident Agent	Acknowledgement for Attorney-in-fact
	reagement for randine j in radi
	Sworn to and subscribed before me This day of 20 .
	This day of 20

Address of Bond Company	
	Notary Public, State of
Phone Number	
	My Commission Expires:
Fax Number	<u> </u>

# EQUAL EMPLOYMENT OPPORTUNITY (EEO) REPORT STATEMENT as Required by 41 CFR 60-1.7 (b)

The Bidder (proposer) shall complete the following statement by checking the appropriate boxes. Failure to complete these blanks may be grounds for rejection of bid.

1.	The Bidder (proposer) has () has not () developed and has on file at each establishment Affirmative Action Programs pursuant to 41 CFR 60-1.4 and 41 CFR 60-2.					
2.	The Bidder (proposer) has () has not () participated in any previous Contract or Subcontract subject to the Equal Opportunity Clause prescribed by Executive Order 10925, or Executive Order 11114, or Executive Order 11246.					
3.	The Bidder (proposer) has () has not () filed with the Joint Reporting Committee the annual compliance report on Standard Form 100 (EEO-1 Report).					
1.	The Bidder (Proposer) has () has not () submitted all compliance reports in connection with any such Contract due under the application filing requirements; and that representations indicating submission of required compliance reports signed by proposed Subcontractors will be obtained prior to award of subcontracts.					
5.	The Bidder (Proposer) does () does not () employ fifty (50) or more employees.					
	If the Bidder (Proposer) has participated in a previous Contract subject to the equal opportunity clause and has not submitted compliance reports due under applicable filing requirements, the Bidder (Proposer) shall submit a compliance report on Standard From 100, "Employee Information Report EEO-1" prior to the award of Contract.					
	Standard Form 100 is normally furnished to Contractors annually based on a mailing list currently maintained by the Joint Reporting Committee. In the event a Contractor has not received the form, he/she may obtain it by writing to the following address:					
	Joint Reporting Committee 1800 G Street Washington, DC 20506					
	(Name of Bidder)					
	By: Signature*					
	Title:					
	Date:					
	*Must be same signature on Bid Proposal					

# NON-COLLUSION AFFIDAVIT

	STATE OF)				
	COUNTY OF)				
	, being first duly sworn, deposes and says that:				
1.	(S)He is				
2.	(S)He is fully 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 Bidder nor anyone acting on behalf of the Bidder, 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 has 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 the Charlottesville Albemarke Airport Authority Board 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 anyone acting on his/her/its behalf.				
	(Signature)				
	(Title)				
	Subscribed and Sworn to before me of this day of, 20				
	(Notary's Signature)				
	(Notary's Stamped or Printed Name)				
	Notary Public, in and for County,				
	My commission expires:				

## **BIDDER'S QUALIFICATIONS**

Bidders shall be a licensed contractor in the State of Virginia. Additionally, in accordance with Federal Aviation Administration (FAA) General Provision 20-02 Prequalification of Bidders, each bidder shall furnish the owner satisfactory evidence of his/her competency to perform the proposed work. Such evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, a list of equipment that would be available for the work, and a list of key personnel that would be available. In addition, each bidder shall furnish the owner satisfactory evidence of his/her financial responsibility. Such evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the Contractor's last fiscal year. Such statements or reports shall be certified by a public accountant. At the time of submitting such financial statements or reports, the bidder shall further certify whether his/her financial responsibility is approximately the same as stated or reported by the public accountant. If the bidder's financial responsibility has changed, the bidder shall qualify the public accountant's statement or report to reflect his/her (bidder's) true financial condition at the time such qualified statement or report is submitted to the Owner.

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. This bidder may submit any additional information he desires.

1.	Projects applied for:	
2.	Name of Bidder:	
3.	Date Submitted:	
4.	Bid Numbers:	
5.	Date of Opening:	
6.	Submitted by:	
7.	Principal Office Address	
8.	Office Phone:	
9.	(Corporation Only) Date of Incorporation: State: Capitalisation (paid in rash): Virginia Business License Number: Officers President: Vice President: Secretary: Treasurer:	
10.	(Partnership Only) Date of Organization: Type: Partnership Name:	

	Address:					
	Name:					
	A ddmagg.					
	Virginia Business License					
	Number:					
11.	Attach evidence of SCC registration	on, contractors licenses, bu	siness licenses, and FEIN.			
12.	. How many years has your organization been in business as a contractor under your present business name?					
13.	How many years' experience in this	is type of construction wor	k has your organization had?			
	a. As a prime contractor?					
	b. As a sub-contractor?					
14.	If any part of the work is sublet, w $\Box$ (Yes) $\Box$ (No)	ill you require a bond fron	n sub-contractor?			
15.	State approximately the largest am	ount of work you have do	ne in any one calendar year			
	a. As a prime contractor?			_		
	b. As a sub-contractor?			_		
16.	Have you ever failed to complete a  ☐ (Yes) ☐ (No)  If yes, state where and why.	any work awarded to you?				
co	. Have you or any officer or partner ntracting organization?   (Yes) (No)	, ,	r been a partner or officer of so	me other		
	If YES, give the following information Name of Individual	Position Position	Name of Organiz	otion		
	Name of marvidual	FOSILIOII	Name of Organiz	ation		
	18. Have you or has any direct management of your organization in this management of some other defaulted on a contract, either as a (Yes) (No)  If YES, state circumstances (use expression)	ever been a director, office (existing or defunct) organ prime contractor or as a su	nization during a time when suc	otherwise active		

20.	List uncomplete	ed contra	cts with	a construction	value	e over \$2 mil	lion completed held	l by you at present.	
	(Attach addition						<b>F</b>	a of Jon to Prove	
	Contract			<u> </u>		Amount		% Complete	
	_							•	
21	Wile at one the last			. d					
21.	What are the land	Class o		Date		Whom	References		
	Amount	Work	01	Completed	FOI	WHOIH	References		
	Amount	WOIK		Completed			Name:		
							Address:		
							Tel:		
							Email:		
							Name:		
							Address:		
							Tel:		
							Email:		
							Eman.		
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statement	••								
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	ne and signature		1 11111 0	i corporate i va	.1110				
	. A corporation								
	give full corporate name and		Signature		Title				
signature of two (2) officials		G							
	resident or vice								
	nt and secretary		Signati	ıre			Title		
treasure									
_			Signati	ıre			Title		

19. List Contracts with a construction value over \$2 million completed within the last 2 years.

Amount

% Complete

(Attach additional sheets as necessary).

Contract

# CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY CHARLOTTESVILLE ALBEMARLE AIRPORT

## Certification of Offer/Bidder Regarding Tax Delinquency and Felony Convictions

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark (•) in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

#### **Certifications**

- 1) The applicant represents that it is ( ) is not ( ) a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.
- 2) The applicant represents that it is ( ) is not ( ) a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

#### Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA Airports District Office, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

#### **Term Definitions**

Felony conviction: Felony conviction means a conviction within the preceding twenty four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

**Tax Delinquency:** A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

# CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY CHARLOTTESVILLE ALBEMARLE AIRPORT

# PAYMENT BOND

STATE OF) Bond No
COUNTY OF _)
KNOW ALL MEN BY THESE PRESENTS: That,
as principal, hereinafter called Contractor, and,
as Surety, hereinafter called Surety, are held and firmly bound unto the Charlottesville Albemarle Airport Authority as
obligee, hereinafter called the Owner, in the amount ofdollars (\$) for the payment of which Contractor and Surety bind themselves, their heirs,
executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.
WHEREAS, Contractor has by written Agreement dated , 20_, entered into a Contract with Owner for the improvement
of Charlottesville-Albemarle Airport Aircraft Rescue and Firefighting Facility in accordance with all of the Contract
Documents listed in the General Provisions, Section 10 prepared for the Charlottesville Albemarle Airport Authority
which Contract is by reference made a part hereof and is hereinafter referred to as the Contract:
NOW THEREFORE, the condition of the above obligation is such that if the Contractor shall promptly make payments
to all persons supplying labor, material, and supplies used directly or indirectly by the Contractor, or Subcontractor(s),
in the prosecution of the Work provided for in said Contract, then this obligation shall be void, otherwise, the same shall
remain in full force and effect.
The Surety hereby stipulates and agrees that any modification, omission, or addition, in or to the terms of the Contract, including the Plans and Specifications, therefore, shall not affect the obligation of said Surety under this Bond.
Signed and Sealed this _day of _, 20
(PRINCIPAL MUST INDICATE WHETHER CORPORATION, PARTNER-
SHIP, COMPANY, OR INDIVIDUAL)
(Principal)
THE PERSON SIGNING FOR THE PRINCI- PAL SHALL, IN HIS/HER OWN HAND- WRITING, SIGN THE
PRINCIPAL'S NAME
AND HIS/HER TITLE. WHERE THE By: PERSON SIGNING FOR A CORPORATION
IS OTHER THAN THE PRESIDENT Title: OR VICE PRESIDENT, HE/SHE MUST
FURNISH A CORPORATE RESOLUTION SHOWING HIS/HER AUTHORITY TO DIVID THE CORPORATION.
TO BIND THE CORPORATION.

(Affix Surety's Corporate Seal)	Surety
	By:
Date:, 20	
Virginia Resident Agent	
Ву:	
Date:, 20	
(Attach "SURETY'S BOND AFFIDAVIT" on c	opy of form bound in these Specifications)

# CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY BOARD CHARLOTTESVILLE ALBEMARLE AIRPORT

# SURETY'S BOND AFFIDAVIT

# CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY BOARD CHARLOTTESVILLE ALBEMARLE AIRPORT

## PERFORMANCE BOND

STATE OF) Bond No
COUNTY OF _)
KNOW ALL MEN BY THESE PRESENTS: That, as principal, hereinafter called Contractor, and, as Surety, hereinafter called Surety, are held and firmly bound unto the Charlottesville Albemarle Airport Authority as obligee, hereinafter called the Owner, in the amount ofdollars (\$) for the payment of which Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.
WHEREAS, Contractor has by written Agreement dated , 20_, entered into a Contract with Owner for the improvement of Charlottesville-Albemarle Airport in accordance with all of the Contract Documents listed in the General Provisions, Section 10 prepared for the Charlottesville Albemarle Airport Authority, which Contract is by reference made a part hereof and is hereinafter referred to as the Contract, and:
NOW THEREFORE, the condition of the above obligation is such that if the said Contractor shall well and faithfully perform the things agreed by him to be done and performed according to terms of said Contract, then this obligation shall be void, otherwise the same shall remain in full force and effect.
The Contractor shall well and truly perform, carry out and abide by all the terms, conditions and provisions of said Contract and complete the Work therein specified in accordance with the terms thereof and in the event said Contractor fails to perform said Contract as aforesaid, it shall be the duty of the Surety herein to assume responsibility for the performance of said Contract and to complete the Work therein specified in accordance with the terms thereof; and the Surety herein shall and does hereby agree to indemnify the Owner and hold it harmless of, from and against any and all liability, loss, cost, damage or expense including reasonable attorney fees, engineering and architectural fees or other professional services which said Owner may incur or which may accrue or be imposed upon it by reason of any negligence, default, breach and/or misconduct on the part of said Contractor, and his/her agents, servants, Subcontractors and/or employees, in, about, or on account of such work and performance of said Contract and shall repay to and reimburse to the said Owner, promptly upon demand, all sums of money including reasonable attorney's, architect's, engineer's, and other professional services, each and every, reasonably paid out or expended by the said Owner on account of the failure and/or refusal of said Contractor to carry out, do, perform, and/or comply with any of the terms and provisions of said Contract at the time and in the manner therein provided, including, without limitation, the guarantee of the Work specified.
The Surety hereby stipulates and agrees that any modification, omission, or addition, in or to the terms of the Contract Documents shall not affect the obligation of said Surety under this Bond.
Signed and sealed this _day of _ , 20
(PRINCIPAL MUST INDICATE WHETHER CORPORATION, PARTNER-SHIP, COMPANY, OR INDIVIDUAL)

(Principal)	
THE PERSON SIGNING FOR THE PRINCIPA	L SHALL, IN HIS/HER OWN HANDWRITING,
SIGN THE PRINCIPAL'S NAME AND HIS/HI	ER By: TITLE. WHERE THE PERSON SIGNING
FOR A CORPORATION IS OTHER THAN	Title: THE PRESIDENT OR VICE PRESIDENT,
HE/SHE MUST FURNISH A CORPORATE RI	ESOLUTION SHOWING HIS/HER AUTHORITY TO BIND THE
CORPORATION.	
(Affix Surety's Corporate Seal)	
	Surety
	By:
Date:, 20	
Virginia Resident Agent	
By:	
Date:, 20	
(Attach "SURETY'S BOND AFFIDAVIT" on co	ony of form bound in those Specifications
(Auacii SUKLII S DUND AFFIDAVII OII C	opy of form bound in these specifications)

# CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY CHARLOTTESVILLE ALBEMARLE AIRPORT

## SURETY'S BOND AFFIDAVIT

STATE OF)
COUNTY OF _)
BEFORE ME, THE UNDERSIGNED AUTHORITY, personally appeared who, being duly sworn deposes and says that he/she is a duly authorized (resident) (non-resident) insurance agent, properly licensed under the laws of the State of, and the Commonwealth of Virginia, to represent of, a company authorized to make corporate surety bonds under the laws of the Commonwealth of Virginia (the "Surety").
Saidfurther certifies that as agent or attorney-in-fact for the said Surety, he/she has signed the attached bond in the sum ofdollars (U.S. \$_) on behalf of to the Charlottesville Albemarle Airport Authority covering the renovations of the Aircraft Rescue and Firefighting Facility.
Saidfurther certifies that the premium on the said bond is \$ which will be paid in full directly to the Surety or to him as agent or attorney-in-fact, and included in his/her regular commission as agent or attorney-in-fact, for the execution of said bond and that his/her commission will not be divided with anyone except to who is a duly authorized insurance agent properly licensed under the laws of the Commonwealth of Virginia.
COUNTERSIGNED:
SURETY
Virginia Resident AgentAttorney-in-Fact
Address of Resident Agent <u>Acknowledgment for Attorney-in-Fact</u>
Sworn to and subscribed before me this Address of Bond Company day of _,20
Telephone Number: Notary Public, State of
Fax Number: My Commission Expires:

# ADD ALTERNATE SUMMARY

The following is a general description of the Add Alternates referenced in this project. Please refer to the Drawings and Specifications for further information.

Add Alternates are listed below in the order of priority to the Owner and shall be exercised in the order presented. All Bids shall be re-evaluated after each Add Alternate is exercised.

## ADD ALTERNATE #1:

Furnish and install one Acousti-Seal Premier Series paired-panel movable wall panel system, as manufactured by Modernfold or approved equal. Unit shall have roll formed and welded 18 gauge steel frame, high-pressure laminate finish with STC rating of 47 and shall be manually operated.

## CONTRACT DOCUMENT

# CHARLOTTESVILLE-ALBEMARLE AIRPORT AUTHORITY CONTRACT FOR SERVICES: ARFF RENOVATION

This Contract	(hereinafter, the "Agreement") is m	nade between the CHARLO'	TTESVILLE-
ALBEMARL	E AIRPORT AUTHORITY, a poli	itical subdivision of The Con	nmonwealth of
Virginia (herei	inafter, the "Authority"), and	, a Stock Corp	oration with a
place	of	business	at
 FEIN#	, and registered with the Vi	rginia State Corporation Con	mission, SCC
ID#	, (hereinafter, the "Contracto	or"). (Authority and Contra	ctor are each
hereinafter ref	erred to individually as a "Party" or co	ollectively as the "Parties").	

#### **RECITALS:**

**WHEREAS**, in May 2024, the Authority began researching a company that could renovate the existing ARFF building at the Charlottesville Albemarle Airport terminal; and,

**WHEREAS**, following the procurement process in accordance with state regulations, the Authority has determined the Contractor to be fully-qualified to provide the Services; and,

**WHEREAS**, the Contractor submitted a bid and it is attached as **Exhibit "A"** and incorporated herein by reference; and,

WHEREAS, the Authority's engagement of the Contractor is based upon the Contractor's representations to the Authority that it is (i) an organization experienced in the type of services the Authority is engaging the Contractor to perform; (ii) to the extent required by law, the Contractor is authorized and licensed to do business within the Commonwealth of Virginia and the County of Albemarle, Virginia, where the Airport is located; (iii) is qualified, willing and able to perform the Services necessary; and (iv) has the expertise and the ability to provide quality services which will meet the Authority's objectives and requirements, and which will comply with the requirements of all governmental, public and quasi-public authorities and agencies having or asserting jurisdiction over the Services that are the subject of the contract;

# WITNESSETH:

**NOW, THEREFORE**, in consideration of the mutual benefits and premises set forth herein, the parties do hereby set forth their Contract as follows:

# 1. Services:

1.1 <u>Scope of Services:</u> The Contractor shall provide all materials, services and equipment necessary to renovate the Aircraft Rescue and Firefighting Facility in accordance with the provisions of EXHIBIT A (the scope) which is incorporated herein.

1.2 **No Exclusivity:** The Parties expressly acknowledge that this Agreement does not create an exclusive relationship between the Parties. Client is free to engage others to perform services of the same or similar nature to those provided by the Contractor, and the Contractor shall be entitled to offer and provide services to others, solicit other clients and otherwise advertise the services offered by the Contractor.

# 2. Contract Term:

The Term of this Contract shall be for a period one hundred sixty (160) calendar days, commencing on the date of the Notice to Proceed.

# 3. Contract Pricing:

In return for its performance of this Contract in accordance with the terms and conditions herein state, the Contractor shall be compensated to the amount contained in the bid (Exhibit A).

# 4. <u>Independent Contractor:</u>

The Contractor is engaged as an independent contractor to perform the Services that are the subject of this Contract. Contractor is an independent contractor, not an employee of the Authority. The Contractor shall provide the Services under the general direction of the Authority, but the Contractor shall determine the manner and means by which the Services are accomplished. This Agreement does not create a partnership or joint venture, and neither Party is authorized to act as agent or bind the other Party, except as expressly stated in this Agreement. All rights, if any, granted to Client are contractual in nature and are wholly defined by the express written agreement of the Parties and the various terms and conditions of this Agreement.

# 5. <u>Liquidated Damages:</u>

**Failure to complete on time**. For each calendar day as specified in the contract following the construction notice to proceed that any work remains uncompleted after the time noted in the schedule below (including all extensions and adjustments), liquidated damages will be deducted from any money due or to become due the Contractor or their own surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract.

Liquidated Damages Cost	<b>Allowed Construction Time</b>
\$2,500/calendar day	160 Calendar Days

# 6. Termination; disputes:

6.1 <u>Termination:</u> This Contract may be terminated by either Party immediately upon providing written notice of termination (a) in the event of a material breach of this Contract by the other Party, if such breach continues uncured for a period of ten (10) business days after receipt of written notice of such breach; or (b) in the event the other Party shall (i) become

insolvent; (ii) make an assignment for the benefit of creditors; (iii) file a voluntary bankruptcy petition; (iv) acquiesce to any involuntary bankruptcy petition; or (v) be adjudicated bankrupt. Except as otherwise provided in this Agreement, the termination of this Contract shall not affect the obligations of either Party to the other hereunder for any Services performed prior to the termination hereof, including, but not limited to, the payment for such Services by Authority.

- 6.2 <u>Authority Termination for Convenience</u>: At any time the Authority may terminate this Contract for convenience upon providing the Contractor thirty (30) days' prior written notice. In the event of a termination for convenience, the Contractor shall be paid for the Services through the effective date of termination.
- 6.3 Prior to litigation, the Engineer may serve as the Initial Decision Maker. However, the Authority does not agree to binding mediation or arbitration, and reserves the right to pursue any available legal remedies in a court of competent jurisdiction.
- 6.4 Prior to litigation, the parties shall attempt at least, one voluntary mediation and shall share the costs thereof.
- 6.5 Contractual claims shall be submitted for the Authority's consideration in accordance with the procedure set forth in section 2.2-4363 (C) of the Code of Virginia, 1950, as amended.
- 6.6 Any legal action instituted by the Contractor as authorized by 2.2-4364 shall be filed in the Circuit Court for the County of Albemarle, Virginia.

# 7. Contract Persons; Notices:

7.1 Notices: The Authority's designated representative to receive all notices, communications, claims and correspondence pertaining to or required by this Contract is the Chief Executive Officer, or his/her designee ("Authority's Representative"). All notices required by this Contract to be given to the Authority, and all other communications, claims and correspondence shall be sent to the Authority's Representative at the following address: 100 Bowen Loop Suite 200, Charlottesville, VA 22911. Whenever this Contract specifies that a notice will be provided to the Authority, such notice shall be effective when sent to the Authority's Representative. For less formal, day-to-day communications, the Authority's representative may also be contacted by telephone (434-973-8342) or by electronic mail: jdevillier@gocho.com. By written notice given to the Contractor, the Authority may change the name and address of its Representative.

Contractor's designated representative ("Contractor's Repre communications, claims and correspondence pertaining to		/		,
	_ at	the	following	address:
				All
notices, communications, claims and correspondence shall be se	nt to th	e Cont	ractor's repr	esentative
at the address specified above. Whenever this Contract specif	ies that	a noti	ice will be pr	ovided to
the Contractor, such notice shall be effective when sent to the Co	ontracto	or's Re	epresentative	. For less
formal, day-to-day communications, the Contractor's represe	entative	may	also be con	tacted by
telephone By written notice given to Au	uthority	, Cont	ractor may c	hange the
name and address of its Representative.			-	

Written notices required by this Contract shall be considered duly given if the original is: (i) hand-delivered; (ii) delivered by facsimile; or (iii) sent by U.S. Mail, postage prepaid. All notices shall be given to a party's designated representative. Notices hand delivered or delivered by facsimile shall be deemed given as of the next business day following the date of sending. Notices given by U.S. Mail shall be deemed given as of the second business day following the date of posting. Notices sent by Federal Express, United Parcel Service, or other similar services shall be considered hand deliveries.

# 8. Insurance Requirement:

The Contractor shall purchase and maintain, at its expense, the required insurance, if applicable to their activity, as stated under Minimum Insurance Requirements below, from a company or companies authorized to do business in the Commonwealth of Virginia with an

A. M. Best rating of A- or better. Each policy shall contain endorsements entitling the Authority to not less than 30 days prior written notice of any material change, non-renewal, or cancellation of the insurance. Liability coverage shall list the Authority and its officers and employees as additional insureds. An endorsement must be issued by the insurance company and accompany the evidence of coverage provided. These certificates shall be provided to the Owner upon execution of this Contract, then again (without demand by the Owner) on or before the expiration date of any policy.

# Minimum Insurance Requirements:

<u>Workers' Compensation</u> - Statutory Worker's Compensation and Employers' Liability insurance under the Commonwealth of Virginia statutory requirements.

<u>Commercial General Liability</u> - The Contractor shall maintain a general liability policy with a minimum of \$1,000,000 combined single limits.

<u>Automobile Liability</u> - The Contractor shall maintain automobile liability insurance with minimum limits of \$1,000,000 combined single limit.

<u>Professional Liability</u> - The Contractor shall maintain Professional liability coverage with minimum limits of \$1,000,000 per incident.

Employer's Liability - \$1,000,000 per accident for bodily injury or disease.

Umbrella Liability - \$5,000,000 aggregate limit.

Builders Risk-Minimum limit is contract amount.

# **Limited Liability:**

r the Airport Authority be liable to the other
ch as, but not limited to, delay, disruption,
ess of use of the equipment or system, non-
uipment or systems, cost of capital, or cost

# 9. Indemnification:

General Indemnity: The Contractor shall assume, and shall indemnify and hold the Owner harmless from and against all liability, loss, claim, suit, damage, charge, or expense, including without limitation reasonable attorney fees and other legal expenses, which the Owner may suffer, sustain,

incur or in any way be subjected to, on account of the death of or injury to any person (including, without limitation, the Owner's officers, agents, employees, licensees, and invitees) and for damage to, loss of, and destruction of any property whatsoever, which arises out of, results from, any negligent act, negligent omission or willful misconduct of the Contractor and any of the Contractor's subcontractors, employees or other persons for whose acts or omissions the Contractor is held legally liable, in the performance of the Contractor's obligations under this Contract.

# 10. Miscellaneous:

- **10.3** <u>Severability</u>: In the event that any term, provision or condition of this Contract, or the application thereof to any person or circumstances, shall be held by a court of competent jurisdiction to be invalid or unenforceable, the remainder of the Contract, and the application of any term, provision or condition contained herein to any person or circumstances other that those to which it has been held invalid or unenforceable, shall not be affected thereby.
- **10.4** Contract Documents: This contract consists of: (i) the form of this Contract; (ii) the requirements of the Authority's original Invitation to Bid, including all addenda, general and specific conditions, specifications and drawings; and (iii) the offer submitted by the Contractor, together with all modifications thereof, all of which are incorporated by reference.

In the event of any conflict, discrepancy, or inconsistency between any provision(s) of this Contract document and the provision(s) of any other documents which have been incorporated into this Contract document by reference, then the provisions set forth within the text of this Contract document shall govern the parties' agreement.

- **Modification:** This Contract may be modified by the parties during performance, but no modification shall be valid or enforceable unless in writing and signed by each of the parties hereto in the same manner and with the same formality as this Contract. Notwithstanding the foregoing, No fixed price contract may be increased by more than ten percent (10%) or \$25,000 without the advance approval of the Chief Executive Officer or designee, and under no circumstances may the amount of this contract be increased, without adequate consideration, for any purpose (including, but not limited to, relief of the Contractor from the consequences of an error in its bid or offer).
- **10.6 No Assignments:** Contractor shall have no right to assign, in any manner or fashion, any of the rights, privilege or interests accruing to it under this Contract to any other individual or entity, without the prior written consent of the Authority. In the event of an assignment Contractor shall remain fully liable for the performance of all obligations imposed by this Contract unless otherwise agreed, in writing, by the Authority.
- **10.7 Headings:** Section, article and paragraph headings contained within this Contract have been inserted only as a matter of convenience and for reference, and they in no way define, limit or describe the scope or intent of any term, condition or provision of this Contract.
- **10.8** No Waiver of Rights: No failure on the part of the Authority to enforce any of the terms or conditions set forth in this Contract shall be construed as or deemed to be a waiver of the right to enforce such terms or conditions. No waiver by the Authority of any default or failure to perform by Contractor shall be construed as or deemed to be a waiver of any other and/or

subsequent default or failure to perform. The acceptance or payment of any part of this Contract by the Authority of any rights hereunder, including, without limitation, does not prohibit the Authority's right to terminate this Contract.

- **10.9 Binding Effect of Agreement:** The terms, provisions and conditions of this Contract shall bind and inure to the benefit of the respective parties hereto and to their representatives, successors, and (where permitted by this Agreement) their assigns.
- **10.10** Terms and Conditions: The general terms and conditions as outlined in Exhibit B and the Federal Provisions as outlined in Exhibit C are incorporated herein by reference, as if set forth verbatim, as terms and conditions applicable to this Contract.
- **10.11**<u>Drawings and Specifications</u>: The drawings and specifications to be relied upon by Contractor to perform the work contemplated by this Contract are attached as Exhibit B.
- **10.12** Entire Agreement: This Contract, together with any documents, exhibits, schedules or attachments incorporated by reference herein, represents the entire agreement between the parties, and there are no other agreements or understandings between the parties, either verbal or written, which have not been incorporated herein.

**IN WITNESS WHEREOF,** the parties do hereby set forth their signatures, representing that the individuals who affix their signatures hereto have been duly authorized to bind each party to the terms and conditions of the foregoing Contract.

# **CONTRACTOR NAME**

Ву:
Print or type name:
Title:
Date:
CHARLOTTESVILLE-ALBEMARLE AIRPORT AUTHORITY:
By:
Print or type name:
Title:
Date:

# Exhibits (5)

**EXHIBIT "A"** – Bid Forms

**EXHIBIT "B"-** Charlottesville-Albemarle Airport General Terms and Conditions

**EXHIBIT "C"** – Federal Provisions

**EXHIBIT "D"- General Provisions** 

EXHIBIT "E" – Special Provisions

# FEDERAL REQUIRED CONTRACT PROVISIONS FOR NON-AIP CONTRACTS

## A5.3.1 General Clause that is used for Contracts, Lease Agreements, and Transfer Agreements

#### **GENERAL CIVIL RIGHTS PROVISIONS**

In all its activities within the scope of its airport program, the Contractor agrees to comply with pertinent statutes, Executive Orders, and such rules as identified in Title VI List of Pertinent Nondiscrimination Acts and Authorities to ensure that no person shall, on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

#### A5.3.2 Specific Clause that is used for General Contract Agreements

The above provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract.

#### A6.3.1 Title VI Solicitation Notice

#### **Title VI Solicitation Notice:**

The **Charlottesville-Albemarle Airport Authority,** in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, [select businesses, or disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award.

#### A6.4.1 Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

• Title VI of the Civil Rights Act of 1964 (42 USC § 2000d et seq., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);

- 49 CFR part 21 (Non-discrimination in Federally-Assisted programs of the Department of Transportation— Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC§4601) (prohibits
  unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid
  programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 et seq.), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27 (Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance);
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 et seq.) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-259) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "program sor activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990 (42 USC § 12101, et seq) (prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations);
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs [70Fed. Reg. 74087 (2005)];
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681, et seq).

#### **Compliance with Nondiscrimination Requirements:**

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

- 1. **Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- 2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
- 3. Solicitations for Subcontracts, including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the contractor's obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
- 4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. **Sanctions for Noncompliance:** In the event of a Contractor's noncompliance with the non-discrimination provisions of this contract, the Sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
  - a.) Withholding payments to the Contractor under the contract until the Contractor complies; and/or
  - b.) Cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Sponsor or the Federal Aviation Administration 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 by a subcontractor, or supplier because of such direction, the Contractor may request the Sponsor to enter into any litigation to protect the interests of the Sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

#### **A28 DOMESTIC PREFERENCES FOR PROCUREMENTS**

#### **A28.3 MODEL CERTIFICATION CLAUSE**

#### CERTIFICATION REGARDING DOMESTIC PREFERENCES FOR PROCUREMENTS

The Bidder or Offeror certifies by signing and submitting this bid or proposal that, to the greatest extent practicable, the Bidder or Offeror has provided a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including, but not limited to, iron, aluminum, steel, cement, and other manufactured products) in compliance with 2 CFR § 200.322.

A17 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

#### **A17.3 MODEL SOLICITATION CLAUSE**

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, et seq, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

The [Contractor | Consultant] has full responsibility to monitor compliance to the referenced statute or regulation. The [Contractor | Consultant] must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

#### **A20 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970**

#### **A20.3 MODEL CONTRACT CLAUSE**

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (29 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

#### **A14.3 MODEL CERTIFICATION CLAUSE**

# PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to use and procurement of certain telecommunications and video surveillance services or equipment in compliance with the National Defense Authorization Act [Public Law 115-232 § 889(f)(1)].

#### **GENERAL TERMS AND CONDITIONS**

# APPLICABLE TO CONTRACTS BETWEEN THE CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY AND NON-GOVERNMENTAL PARTIES FOR THE PURCHASE OF GOODS AND SERVICES

- 1.) **General Application.** These general terms and conditions apply to all Authority purchases of goods and services, including, without limitation, construction, insurance, and other services. They shall be deemed an integrated part of each contract entered into between the Charlottesville-Albemarle Airport Authority ("Authority") and a non-governmental party. In the event of a conflict between these general terms and conditions and any other provision of a contract between the Authority and a non-governmental party, the provisions of these general terms and conditions shall govern the parties' agreement.
- 2.) Modification of contract pricing. (VA. Code §2.2-4309). No fixed-price contract may be increased by more than twenty-five percent of the amount of the contract or \$50,000, whichever is greater, without the advance written approval of Authority's governing body. In no event may the amount of any contract, without adequate consideration, be increased for any purpose, including, but not limited to, relief of a bidder from the consequences of an error in its bid, proposal or price quote.
- 3.) Energy Forward Pricing Mechanisms. (VA. Code §2.2-4329.1). For the purpose of budget risk reduction, Authority may use forward pricing mechanisms, consistent with Authority's written policies and procedures governing the use of forward pricing mechanisms. Any contract for natural gas, heating oil, propane, diesel fuel, unleaded fuel, and any other energy source, but excluding contracts for the purchase of electricity, may include a forward pricing mechanism which either: (i) Obligates Authority to buy or sell a specified quantity of energy at a future date, at a set price or (ii) Includes an option for the sale or purchase of the contract.
  - Forward pricing mechanism transactions shall be made only under the following conditions:
  - (i) Authority's obligations shall be subject to the availability and annual appropriation of funding;
  - (ii) The quantity of energy affected by the forward pricing mechanism shall not exceed the estimated energy use for Authority for the same period, which shall not exceed 48 months from the trade date of the transaction; and (ii) a separate account shall be established by the contractor for operational energy for the Authority. Contractor shall be required to cooperate and assist Authority with any and all internal and external audit reviews, and with the preparation and submission of annual reports to Authority's internal investment committee.
- 4.) **Modification (extension) of Contract Term** (VA. Code §2.2-4309). Authority may extend the term of an existing contract for services, to allow completion of any work undertaken but not completed during the original term of the contract. Any such extension of time shall be in writing and signed by an authorized representative of the Authority.
- 5.) Annual appropriations condition. For any contracts that cannot or will not be completed within a single fiscal year: notwithstanding anything in this contract to the contrary, beyond the initial fiscal year in which performance is commenced, Authority's obligations are and shall be subject to and expressly conditioned upon the availability and appropriation of public funds by Authority to support continued performance in succeeding fiscal years. When funds are not appropriated or otherwise made available to support continuation of performance in a succeeding fiscal year, the order for goods, or contractor's performance of services, as applicable, shall be canceled and the Contractor shall be reimbursed for the reasonable value of any goods ordered and received, and services completed, prior to the end of the preceding fiscal year.
- 6.) No Discrimination by Authority (VA. Code §2.2-4310). In the solicitation or awarding of contracts, Authority shall not discriminate against a bidder or offeror because of race, religion, color, sex, national origin, age, disability, status as a service disabled veteran, or any other basis prohibited by state law relating to discrimination in employment. THE AUTHORITY DOES NOT DISCRIMINATE AGAINST FAITH-BASED ORGANIZATIONS, and shall comply with the requirements of VA Code §2.2-4343.1, as may be applicable.
- 7.) **No Discrimination by Contractor** (Contracts Over \$10,000) (VA. Code §2.2-4311). During the performance of a contract where contractor's compensation is more than \$10,000, the contractor agrees as follows:
  - a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or other basis prohibited by state law relating to

discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

- b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.
- c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

The contractor will include the provisions of the foregoing paragraphs a, b and c in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

- 8.) **Compliance with Federal Immigration Laws** (VA. Code §2.2-4311.1). The contractor expressly warrants and certifies that it does not, and shall not during the performance of the contract knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.
- 9.) Contractor's Authority to Conduct Business in Virginia (VA. Code §2.2-4311.2). A contractor organized as a stock or non-stock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 or as otherwise required by law. A contractor that enters into a contract with Authority shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50, to be revoked or cancelled at any time during the term of the contract. Authority may void any contract with a business entity for its failure to comply and remain in compliance with the provisions of this paragraph.
- 10.) Drug-Free Workplace Requirement (Contracts Over \$10,000) (VA. Code §2.2-4312). During the performance of a contract where contractor's compensation is more than \$10,000, the contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor. For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a contractor in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.
- 11.) Workers' Compensation Coverage (Construction Contracts) (VA. Code §2.2-4332). No contractor shall perform any work on a Authority construction project unless and until he has obtained, and continues to maintain for the duration of the work, workers' compensation coverage required pursuant to the provisions of Chapter 8 (§ 65.2-800 et seq.) of Title 65.2.
- 12.) **Contractor's License** (Construction Contracts) (VA. Code §54.1-1115). No individual or business entity shall contract for, or bid upon, the construction, removal, repair or improvements to or upon real property owned, controlled or leased by Authority without a state-issued license or certificate, or without the proper class of license as defined in VA. Code § 54.1-1100 for the value of work to be performed.
- 13.) Purchase of building materials, etc., from architect or engineer prohibited (VA. Code §2.2-4374). No building materials, supplies or equipment for any building or structure constructed by or for the Authority shall be sold by or purchased from any person employed as an independent contractor by the Authority to furnish architectural or engineering services, but not construction, for such building or structure, or from any partnership, association or corporation in which such architect or engineer has a personal interest. No building materials, supplies or equipment for any building or structure constructed by or for the Authority shall be sold by or purchased from any person who has provided or is currently providing design services specifying a sole source for such materials, supplies or equipment to be used in the building or structure to the independent contractor employed by the Authority to furnish architectural or engineering services in which such person has a personal interest. For purposes of this paragraph, the term "personal interest" shall have the meaning set forth within VA. Code §2.2-

3101.

- 14.) Bonds and alternate forms of security (VA. Code §§2.2-4337 and -4338). Where any payment or performance bond, with surety, is required, each of the bonds shall be executed by one or more surety companies selected by the contractor that are authorized to do business in Virginia. Each of the bonds shall be filed with Authority.
  - In lieu of a bid, payment, or performance bond, a bidder may furnish a certified check or cash escrow in the face amount required for the bond. If approved by Authority attorney, a bidder may furnish a personal bond, property bond, or bank or savings institution's letter of credit on certain designated funds in the face amount required for a required bid, payment or performance bond. Approval shall be granted only upon a determination that the alternative form of security proffered affords protection to Authority equivalent to a corporate surety's bond.
- 15.) **Required Insurance.** The specific insurance requirements for this contract, if any, ("Required Insurance") have been specifically set forth within the Specifications/Special Terms and Conditions of the procurement documents. All policies of Required Insurance shall be issued by a company authorized to do business within the Commonwealth of Virginia. (See VA. Code§38.2-518).
  - Prior to award, the contractor shall be required to demonstrate that it has obtained the Required Insurance, and that each Required Insurance Policy has been endorsed (i) to name Authority, its officers, employees and agents as additional insured parties, and (ii) to confer rights upon Authority to receive at least 30 days' advance notice of cancellation or nonrenewal. Proof of insurance and required endorsements shall be demonstrated through production of copies of the Required Insurance policies and endorsements, or other evidence satisfactory to Authority. If a standard form insurance certificate is utilized, the insurance certificate must contain the Policy ID number(s) as well as the specific Endorsement Number(s), along with a description of the purpose(s) of the referenced endorsements.
- 16.) Prompt Payment by Authority (VA. Code §§2.2- 4352, 2.2-4353) Authority shall promptly pay for the completed delivered goods or services by the required payment date. The required payment date shall be either: (i) the date on which payment is due under the terms of the contract for the provision of the goods or services; or (ii) if a date is not established by contract, not more than 45 days after goods or services are received or not more than 45 days after the invoice is rendered, whichever is later. Separate payment dates may be specified for contracts under which goods or services are provided in a series of partial executions or deliveries to the extent that the contract provides for separate payment for partial execution or delivery. Unless otherwise provided under the terms of the contract for the provision of goods or services, if Authority fails to pay by the required payment date then Authority shall pay any finance charges assessed by the supplier that shall not exceed one percent per month. In those cases where payment is made by mail, the date of postmark shall be deemed to be the date payment is made.
- 17.) **Contractor's Tax ID** (VA. Code §2.2-4354(2)). Notwithstanding the foregoing, contractor shall have no right to receive payment from Authority unless and until (i) for an individual contractor, the contractor must provide his social security number to the Authority, and (ii) for proprietorships, partnerships, and corporations, any such entity must provide its federal employer identification number to the Authority.
- 18.) Notice of defects or impropriety (VA. Code §2.2-4352). Within 20 days after the receipt of an invoice, or of goods or services, the Authority shall notify the supplier of any defect or impropriety that would prevent payment by the payment date.
- 19.)Interest. Unless otherwise provided under the terms of this contract, interest shall accrue at the rate of one percent per month on amounts owed by Authority to contractor which remain unpaid by the required payment date. (See VA Code §2.2-4354)
  - No interest penalty shall be charged when payment is delayed because of disagreement between Authority and a vendor regarding the quantity, quality or time of delivery of goods or services or the accuracy of any invoice received for the goods or services. The exception from the interest penalty provided by this paragraph shall apply only to that portion of a delayed payment that is actually the subject of the disagreement and shall apply only for the duration of the disagreement.
- 20.) **Retainage (Construction Contracts**) (VA. Code §2.2-4333). In any construction contract that provides for progress payments in installments based upon an estimated percentage of completion, the contractor shall be paid at least 95 percent of the earned sum when payment is due, with no more than 5 percent being retained to ensure faithful

- performance of the contract. All amounts withheld may be included in the final payment. Any subcontract for a public project that provides for similar progress payments shall be subject to the provisions of this section.
- 21.) Escrowed Retainage (Construction Contracts) (VA. Code §2.2-4334). For a construction contract involving \$200,000 or more, for construction of highways, roads, streets, bridges, parking lots, demolition, clearing, grading, excavating, paving, pile driving, miscellaneous drainage structures, and the installation of water, gas, sewer lines and pumping stations, where portions of the contract price are to be retained, the contractor is authorized to elect to utilize an escrowed retainage procedure, via notification submitted with its bid submission.
  - In the event the contractor elects to use the escrow account procedure, the contractor shall execute an escrow form, substantially the same as that used by VDOT, and shall submit the executed escrow form to Authority within 15 calendar days after notification. If the escrow agreement is not submitted within the 15-day period, the contractor shall forfeit his rights to the use of the escrow account procedure. Any designated escrow agent shall be a trust company, bank or savings institution with its principal office located in the Commonwealth. If the construction contract includes payment of interest on retained funds, the contractor shall, exclusive of reasonable circumstances beyond the control of the contractor, be required to pay a penalty specified within the construction contract for each day exceeding the completion date stated in the contract.
- 22.) Payment of subcontractors required (VA. Code §2.2-4354) Within seven days after receipt of amounts paid to the contractor by Authority for work performed by the subcontractor under that contract the contractor shall: (a) pay the subcontractor for the proportionate share of the total payment received from the agency attributable to the work performed by the subcontractor under that contract; or (b) notify the agency and subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment. Contractor shall pay interest to the subcontractor on all amounts owed by the contractor that remain unpaid after seven days following receipt by the contractor of payment from Authority for work performed by the subcontractor under that contract, except for amounts withheld as allowed in (b), above. Unless otherwise provided under the terms of this contract, interest shall accrue at the rate of one percent per month. Contractor shall include in each of its subcontracts a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor. A contractor's obligation to pay an interest charge to a subcontractor pursuant to this payment clause shall not be construed to be an obligation of Authority. No contract modification shall be made for the purpose of providing reimbursement for the interest charge, and no cost reimbursement claim shall include any amount for reimbursement for the interest charge.
- 23.) Contract disputes and claims (VA. Code §2.2- 4363). Written notice of the contractor's intention to file a claim, whether for money or other relief, shall be given at the time of the occurrence or beginning of the work upon which the claim is based. Nothing herein shall preclude a contract from requiring submission of an invoice for final payment within a certain time after completion and acceptance of the work or acceptance of the goods. Pendency of claims shall not delay payment of amounts agreed due in the final payment. Contract claims, whether for money or other relief, shall be submitted in writing to the Authority no later than 60 days after the contractor's receipt of final payment; provided, however, that written notice of the contractor's intention to file a claims shall have been given at the time of the occurrence, or at the beginning of the work, upon which the claim is based. Claims shall be considered by Authority in accordance with VA Code §2.2-4363.

The final decision of Authority shall be final and conclusive unless the contractor appeals within six months of the date of the final decision on the claim by Authority, by instituting legal action as provided in VA Code §2.2-4364.

24.) Trade Secrets; Proprietary Information. Except as provided in VA Code §2.2-4342, all proceedings, records, contracts and other public records relating to procurement transactions shall be open to the inspection of any citizen, or any interested person, firm or corporation, in accordance with the Virginia Freedom of Information Act (VA Code § 2.2-3700 et seq.). Any inspection of procurement transaction records under this section shall be subject to reasonable restrictions to ensure the security and integrity of the records. Trade secrets or proprietary information submitted by a bidder in connection with a procurement transaction or prequalification application shall not be subject to the Virginia Freedom of Information Act (§ 2.2-3700 et seq.); provided that the bidder must (i) invoke the protections of the referenced VA. Code section prior to or upon submission of the data or other materials, (ii) identify the data or other materials to be protected, and (iii) state the reasons why protection is necessary. Each bidder is solely responsible for protecting its trade secrets or proprietary information in

accordance with these instructions.

- 25.) Applicable Law. Any contract resulting from a Authority procurement transaction shall be governed in all aspects by the laws of the Commonwealth of Virginia, without regard to conflict of laws' provisions, and any litigation with respect thereto shall be brought in the Circuit Court for Albemarle County, Virginia, or other court presiding within the territory in which Authority is situated.
- 26.) **No Collusion** (VA. Code §18.2-498.4). Any person offering or agreeing to transact business with Authority may be required to submit a certification that the offer or agreement or any claim resulting therefrom is not the result of, or affected by, any act of collusion with another person engaged in the same line of business or commerce; or any act of fraud punishable under this article.
- 27.) No Waivers of Sovereign or Governmental Immunity. No action or omission of Authority, and no terms, conditions or provisions within any contract resulting from this procurement transaction, shall be deemed or construed as a waiver of any sovereign or governmental immunity to which Authority may be entitled under the laws of the Commonwealth of Virginia, or any applicable federal law.

#### **GENERAL PROVISIONS**

## CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY CHARLOTTESVILLE ALBEMARLE AIRPORT

#### **SECTION 1**

**1. CONTRACT PROVISIONS.** The General Provisions and these Special Provisions are applicable to all divisions and sections of the Contract Documents and Specifications. It shall be the Contractor's responsibility to so inform all parties who should be bound or influenced thereby.

In the event there are discrepancies between the technical specifications, general provisions, and the special provisions, the interpretation most advantageous to the Owner shall apply.

- **2. DESCRIPTION OF WORK.** The proposed Work is described in the Invitation to Bid herein.
- **3. LOCATION OF THE WORK.** The site of the proposed Work is at the Charlottesville Albemarle Airport, Airport Rescue and Firefighting Facility (ARFF).

#### 4. DEFINITIONS.

- **A. ADDENDA**. Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the bidding documents or the Contract Documents.
- **B. BID**. The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work and services to be performed.
- **C. DAY**. Unless otherwise defined shall mean "calendar" day.
- **D. DRAWINGS**. The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by the Architect and are referred to in the Contract Documents.
- **E. ARCHITECT**. The term "Architect" in the Contract Documents means dBF Associates, Architects, P.O. Box 78, Charlottesville, Virginia 22902
- **F. FIELD ORDER**. A written order issued by the Architect which orders minor changes in the work consistent with the intent of the Contract Documents, but which does not involve a change in the Contract Price or the Contract Time.

The Architect may authorize minor changes in the work not involving an adjustment in the contract price or the contract time, which are consistent with the overall intent of the Contract Documents. These may be accomplished by a field order and shall be binding on the Owner, and also on the Contractor who shall perform the change promptly. If the Contractor believes that a field order justifies an increase in the contract price or contract time, the Contractor shall make a claim for Adjustment and Disputes of the General Provisions before doing the Work.

- **G. FURNISH or INSTALL or PROVIDE or SUPPLY**. Unless specifically limited in the context, the word "Furnish" or the word "Install" or the word "Provide" or the word "Supply" or any combination or similar directive or usage thereof, shall mean FURNISHING AND INCORPORATION IN THE WORK including all necessary labor, materials, equipment, and anything necessary to perform the work indicated.
- **H. GOOD REPAIR**. Good repair shall be construed to mean any defect, functional or structural deterioration (except that from ordinary and reasonable use) which appreciably reduces the effectiveness or efficiency of the work or improvement for the purpose intended, or any serious departure from the standards of original construction described in the Contract Documents, shall be remedied by the Contractor. Such remedy will be made without further cost to the Owner, including in part, all damages caused by such defect, deficiency, deterioration, or departure, and by its repair, replacement, or correction.
- I. MAY. Permissive.
- J. REFERENCE TO TRADE OR SUBCONTRACTORS. When only one principal contract exists for all work covered by the Contract Documents, reference to trade or subcontractors in the Contract Documents shall not create any contractual relationship between the Owner and any trade or subcontractor, with whom the principal contractor may subcontract.
- **K. SAMPLES**. Samples are physical examples furnished or constructed by the Contractor to illustrate materials, equipment, workmanship, or finishes, and to establish standards by which the work will be judged.
- L. "SHALL" IMPLIED. In the interest of conciseness, some sentences, statements, and clauses used in the specifications exclude any form of the verb "shall" normally expressed in a verb phrase with verbs such as "furnish", "install", "provide", "perform", "construct", "erect", "comply", "apply", "submit", or similar "verb", but any such sentences, statements, and clauses shall be interpreted to include the applicable form of the phrase "The Contractor shall" and the requirements described therein shall be interpreted as mandatory elements of the Contract.
- M. SHALL. Mandatory.
- **N. SUBCONTRACTOR**. Party supplying labor and material or any labor for work at the site of the project for, and under separate contract or agreement with the Contractor. Nothing contained in the Contract Documents shall create any contractual relationship between the Owner and any subcontractor.
- **O. SUBSTANTIAL COMPLETION**. When the work is sufficiently complete so it may be safely, conveniently, and beneficially utilized by the Owner for all of the purposes for which it was intended.
- **P.** WILL. Mandatory.
- **Q. SEDIMENT**. Soil and other debris that have eroded and have been transported by runoff water or wind.
- **R. SOLID WASTES**. Rubbish, debris, and other discarded solid materials, except hazardous waste as defined in paragraph entitled, "Hazardous Waste," resulting from industrial, commercial, and agricultural operations and from community activities.

- **S. RUBBISH**. Combustible and noncombustible wastes including paper, boxes, glass, crockery, metal, lumber, cans, and bones.
- **T. DEBRIS**. Combustible and noncombustible wastes such as ashes and waste materials resulting from construction or maintenance and repair work, leaves, and tree trimmings.
- U. CHEMICAL WASTES. Salts, acids, alkalis, herbicides, pesticides, and organic chemicals.
- V. SEWAGE. Waste characterized as domestic sanitary sewage.
- W. GARBAGE. Refuse and scraps resulting from consumption of food.
- **X. HAZARDOUS WASTES**. Hazardous substances as defined in 40 CFR 261 or as defined by applicable state and local regulations.
- Y. OILY WASTES. Petroleum products and bituminous materials.
- **Z. HAZARDOUS MATERIALS**. As defined in DOT Regulation 49 CFR 171 and listed in CFR 172
- **AA. HAZARDOUS SUBSTANCES**. As defined in EPA PL 96-510.
- **5. APPLICABLE DRAWINGS.** The drawings applicable to this project are included in the Table of Contents included herein.
- **6. BID REQUIREMENTS.** In addition to those herein before described items to be submitted with the Bidder's Proposal, the bid shall include a list of all Subcontractors the Bidder proposes to use on the Work of this Contract.

After the Sponsor accepts the bid, and such Bidder is awarded a Contract, the successful Bidder may not substitute a Subcontractor listed in the Proposal without the prior written approval of the Owner. Such approval shall be obtained at least ten (10) Calendar Days prior to the date scheduled for that Subcontractor to begin Work.

- 7. REQUIREMENTS OF CONTRACTOR LIABILITY INSURANCE. The Contractor shall procure and maintain at his own expense, during the life of this Contract, liability insurance with limits of coverage not less than the amounts as hereinafter specified. The policies shall be written by reputable companies authorized to do business in the Commonwealth of Virginia, rated no less than A-9 by A.M. BEST. All such insurance shall be subject to the approval of the Owner for adequacy of protection and shall include a provision preventing cancellation without thirty days prior notice to the Owner in writing. At the time of execution of the Contract, the successful Bidder shall furnish the Owner evidence that appropriate insurance has been procured and will be maintained for the life of the Contract liability and compensation insurance.
  - The Contractor will provide protection from claims set forth below which may arise out of or result from the Contractor's performance and furnishing of the Work and the Contractor's other obligations under the Contract as follows:
- 1. Commercial General Liability \$1,000,000 per loss for bodily injury, personal injury and property damage. If a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
- 2. Automobile Liability \$ 1,000,000 per accident for bodily injury and property damage,

- 3. Employer's Liability \$ 1,000,000 per accident for bodily injury or disease.
- 4. Umbrella Liability \$ 5,000,000 aggregate limit.
- 5. Workers' Compensation coverage as required by law.
- 6. Builders Risk-Minimum amount contracted price.
- 7. The Contractor will be required to provide a Certificate of Insurance and a copy of the additional insured endorsement, indicating:
  - Commercial General Liability insurance, including contractual liability, and defense costs outside of policy limits. Contractor's policy will be primary and be on an occurrence basis.
  - Automobile Liability insurance
  - Umbrella Liability insurance
  - Workers' Compensation insurance
  - Builders Risk

In carrying out any of the Contract provisions or in exercising any power or authority granted to the Contractor by this Contract, there shall be no liability upon the Architect, his authorized representatives, or any official of the Owner, either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner. THE CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY THE CHARLOTTESVILLE ALBEMARLE AIRPORT, AND THE ARCHITECT SHALL BE AN ADDITIONAL INSURED AND PROTECTED, IN THE CONTRACTOR'S LIABILITY INSURANCE POLICY, FROM ALL CLAIMS ARISING OUT OF, OR IN CONNECTION WITH, ANY OPERATIONS CONDUCTED IN CONNECTION WITH THIS CONTRACT BY THE CONTRACTOR OR HIS SUBCONTRACTORS.

- **8. PERMITS.** The Contractor shall obtain all applicable Federal, State and municipal permits required, including electrical, mechanical or others as required.
- **9. ACCESS TO THE WORK.** Access to the Work shall be via the access routes designated on the Contract Layout Plan. The Contractor shall identify access routes with suitable signs, barricades, and similar equipment. Access gates shall be locked and secured when not attended by the Contractor. The entire access route and construction site shall be kept free and clean of all debris at all times and maintained in good repair by the Contractor. All damage to the access route caused by the actions of the Contractor or his agents shall be immediately repaired to the satisfaction of the Owner.

No separate payment will be made for complying with the requirements of this paragraph "Access to the Work." No other access to these Work sites will be permitted without written approval of the Architect. Contractor's vehicles and equipment, including vehicles and equipment of the Subcontractors and others coming under the Contractor's control, will not be permitted to traverse other airfield areas or pavements without written approval of the Architect. Contractor's vehicles, equipment and materials may be stored in the area designated. Upon completion of the Work, the storage area shall be cleaned up and returned to its original condition to the satisfaction of the Owner. No separate payment will be made for cleanup and restoration of the storage area. Personal services, such as canteen trucks, will not be permitted beyond this area and drivers of vehicles being operated beyond this area shall be subject to loss of permission to enter the construction site.

#### 10.SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

- (1) Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or any Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- (2) Product data are illustrations, standard schedules, performance charts, instructions,

- brochures, diagrams or other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.
- (3) Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.
- (4) The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the Work or in the Work of the Owner or any other separate Contractor(s), all Shop Drawings, Product Data and Samples required by the Contract Documents.
- (5) By approving and submitting Shop Drawings, Product Data and Samples, the Contractor represents that he has determined and verified all materials, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- (6) The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data or Samples unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submission and the Architect has given written approval of the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the Architect's approval thereof.
- (7) The Contractor shall direct specific attention, in writing, or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than those requested by the Architect on previous submittals.
- (8) No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittals have been approved by the Architect. All such portions of the Work shall be in accordance with approved submittals.
- (9) The Contractor shall not reproduce the Architect's project drawings for Shop Drawing use without written approval of the Architect.
- (10) The Contractor shall submit shop drawings per the individual technical specifications contained herein. Shop Drawings shall be forwarded to the Architect. The Contractor's letter of submittal must conform to the typical Contractor's "Transmittal Letter" which is available from the Architect. Each drawing or part of the brochure shall be listed separately on the letter and identified as indicated thereon. Failure to do this will cause rejection of the submittal. The Architect will return to the Contractor the same transmittal letter, with the Shop Drawing disposition noted thereon along with the drawings or brochures when the review is completed. The Contractor shall forward separate transmittal letters for submitting each group of Shop Drawings common to a Specification Section.
- (II) In checking Shop Drawings prior to submittal, the Contractor is requested to note corrections or comments on the drawings in orange pencil.
- (12) Drawings returned to the Contractor will be stamped "Approved," "Approved as Noted," "Returned for Corrections," or "Not Approved." Drawings stamped "Approved as Noted" need not be returned for further approval if the notations are acceptable to the Contractor

and Subcontractors. Drawings stamped "Returned for Corrections" or "Not Approved" shall require new submission. Comments and corrections by the Architect will be made in red pencil on blue or black line prints and in yellow pencil on white line prints.

(13) Samples shall be submitted to DBF Associates, attention Mr. Richard Funk, AIA and accompanied with the same transmittal letter prescribed for Shop Drawings. Checking by Contractor of samples before transmittal is required the same as for Shop Drawings.

#### 11. PROJECT DOCUMENTATION.

(a) Project Drawings: A field set of Plans and Specifications, supplied by the Contractor, shall remain on the job site at all times and shall be available at all times to the Architect.

The Contractor shall immediately include plainly and conspicuously on the field set of drawings, and at appropriate paragraphs in the specifications, all changes or corrections made by addenda and Change Orders as they are issued.

Approved copies of all shop drawings and other submittals are to be kept on the job site at all times and shall be available at all times to the Architect.

Changes and deviations from the existing conditions shall be submitted in writing for approval prior to installation. In no case shall any unspecified equipment or materials be installed without prior approval by the Architect.

#### (b) Record Documents:

- (1) Definition: Record copies are defined to include those documents or copies relating directly to performance of the Work, which Contractor is required to prepare or maintain for Owner's records, recording the Work as actually performed. In particular, record copies show changes in the Work in relation to way in which shown and specified by original Contract Documents; and show additional information of value to Owner's records, but not indicated by original Contract Documents. Record copies include newly prepared drawings (if any are specified), marked-up copies of Contract drawings, shop drawings, Specifications, addenda and Change Orders, marked-up product data submittals, record samples, field records for variable and concealed conditions such as excavations and foundations, and miscellaneous record information on Work which is otherwise recorded only schematically or not at all.
- (2) Record Drawings: Contractor shall maintain a set of record drawings at the job site. These shall be kept legible and current and shall be available for inspection at all times by the Architect. The Contractor shall show all changes or Work added on these record drawings in a contrasting color.

#### 12. FINAL CLEANING.

- (a) Provide final cleaning of the Work, at time indicated, consisting of cleaning each surface or unit of Work to normal "clean" condition.
- (b) Removal of Protection: Remove temporary protection devices and facilities which were installed during course of the Work to protect previous completed Work during remainder of construction period.

(c) Compliances: Comply with safety standards and governing regulations for cleaning operations. Do not burn waste materials at site, or bury debris or excess materials on Owner's property, or discharge volatile or other harmful or dangerous materials into drainage systems; remove waste materials from site and dispose of in a lawful manner.

Where extra materials of value remaining after completion of associated Work have become Owner's property, dispose of these as directed by owner.

#### GENERAL PROVISIONS

### CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY CHARLOTTESVILLE ALBEMARLE AIRPORT

#### **SECTION 2**

- **1. BID AND CONTRACT ACCEPTANCE**. The Charlottesville Albemarle Airport Authority reserves the following rights: to accept or reject any or all bids; and to award the Contract to the most responsive and responsible Bidder whose bid is determined by the Authority to be in its best interest. Any and all proposals as submitted herein are subject to further negotiation at the option of Authority. Further, any and all agreements arising out of these proposals and negotiations shall not be binding or valid against the Authority, its department, officers, employees, or agents unless fully executed in writing and authorized by the Charlottesville Albemarle Airport Authority.
- 2. PROVISIONS REQUIRED BY LAW DEEMED INSERTED. Each and every provision of law and clause required by law to be inserted in the Contract Documents shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein. If, for any reason, any such provision is not inserted in the Contract, or is not correctly inserted, then upon application of either party, the Contract shall forthwith be physically amended to make such insertion or correction.

#### 3. CORRELATION OF DOCUMENTS.

- **A.** The drawings and specifications are cooperative and supplementary. Portions of the work which can be best be illustrated by the drawings may not be included in the specifications and portions best described by the specifications may not be depicted on the drawings. All items necessary or incidental to completely construct or erect the work shall be furnished, whether called for in the specifications or shown on the drawings. Anything mentioned in the specifications and not shown on the drawings, or anything shown or mentioned on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both.
- **B.** In case of disagreement between the drawings and specifications, or within either document itself, the better quality or greater quantity of work shall be estimated and included in the bid and contract price and the matter drawn to the Architect's attention for decision.
- 4. NOTICE AND SERVICE THEREOF. Where the manner of giving notice is not otherwise provided for in the Contract Documents, any notice to the Contractor from the Owner relative to any part of the Contract shall be in writing and considered delivered and the service thereof completed, when said notice is posted, by certified or registered mail, to the Contractor at the address given in the Contractor's proposal, or at the last business address known to him who gives the notice, or delivered in person to the Contractor or his authorized representative on the site. It is mutually agreed that such notice shall be sufficient and adequate.

#### 5. SUBCONTRACTING.

- **A.** The Contractor may utilize the services of specialty or minority subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty or minority subcontractors.
- **B.** The Owner reserves the right to approve subcontractors for any work. The Contractor, if

- requested by the Owner, shall submit to the Owner the proposed award and such information as the Owner may require concerning any subcontractor.
- **C.** The Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, or under their control, as he is for the acts and omissions of persons directly employed by him.
- **D.** The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the Contract Documents insofar as applicable to the work of subcontractors, and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provision of the Contract Documents.
- **E.** Nothing contained in the Contract Documents shall create any contractual relationships between any subcontractor and the Owner.

#### 6. PROTECTION OF PERSONS.

#### **A.** The Contractor shall:

- (I) At all times protect the lives and health of his employees under the Contract;
- (2) Take all necessary precautions for the safety of all persons on or in the vicinity of the project site.
- (3) Comply with all applicable provisions of Federal, State and Municipal safety laws and building codes.
- (4) Comply with all pertinent provisions of the Manual of Accident Prevention in Construction issued by the Associated General Contractors of America, Inc., latest edition, to prevent accidents or injury to persons on or about or adjacent to the premises where the work is being performed. He shall erect and properly maintain at all times, as required by the conditions and progress of the work, all necessary safeguards for the protection of persons and shall post danger signs warning against the hazards created in part by features of construction such as protruding nails, rod hoists, well holes, falling materials, etc., and he shall designate a responsible member of his organization on the work site whose duty shall be the prevention of accidents;
- (5) Provide for all safeguards for the protection of those having Right-of-Entry during field review and observation of the work.
- **B.** The Contractor shall comply with all provisions of the "Williams-Steiger Occupational Safety and Health Act of 1970" including any amendments thereto and rules and regulations issued pursuant thereto, applicable to the Work and performance of the Contract. Where a State in which work is performed has passed legislation bearing on Occupational Safety and Health, such legislation and amendments thereto, together with rules and regulations issued pursuant thereto, shall be complied with by the Contractor.

#### 7. AUTHORITY OF ARCHITECT.

- **A.** The Architect, through its duly authorized representatives, shall furnish architectural services during construction of the work to the extent provided in the Contract Documents. He shall observe and review the work in the process of construction or erection. Compliance with the Contract Documents shall be the Contractor's responsibility notwithstanding such observation or review. The Architect has authority to recommend suspension of the work to the Owner when it appears such suspension may be necessary to accomplish the proper implementation of the intent of the Contract Documents. The authority to observe, review or recommend suspension of the work, or exercise such other authority as may be granted by the Contract Documents, shall not be construed or interpreted to mean supervision of construction, which is the Contractor's responsibility, nor make the Architect responsible for providing a safe place for the performance of work by the Contractor or by the Contractor's employees, or those of suppliers or subcontractors, or for access, visits, use, work, travel, or occupancy by any other person. The Architect shall also have the authority to reject any work, materials, or equipment which do not conform to the Contract Documents and to decide technical questions which arise in the execution of the work.
- **B.** The Architect shall determine the amount, quality, acceptability, and fitness of the several kinds of work, materials, equipment and supplies which are to be paid for under the Contract and shall decide questions which may arise in relation to said work and its compliance with the Contract Documents. The Architect's estimates and decisions shall be final and conclusive, except as otherwise expressly provided in case any question shall arise between the parties to the Contract relative to the Contract Documents, the determination or decision of the Architect shall be a condition precedent to the right of the Contractor to receive any money or payment for work under the Contract affected in any manner or to any extent by such question.
- **C.** The Architect shall decide the meaning and intent of any portion of the Contract Documents where the same may be found obscure or be in dispute.

#### 8. WARRANTY PERIOD.

- **A.** The Contractor hereby agrees to keep warranty all work constructed under the Contract, and keep in good repair for a minimum period of one (1) year, unless a longer period is otherwise specified in the Contract Documents, from the date of acceptance of all of the work by the Owner. No provision of the Contract documents shall be valid which limits the "Good Repair" period to less than one (1) year from the date of acceptance of all of the work by the Owner. The work may be phased. If the work is phased, each phase of Work completed shall be inspected and approved for use by the Owner but shall not be accepted until all work for all phases is complete and a final inspection for all work has been performed.
- **B.** It is intended that this provision shall apply whether or not a bond is required, as a personal obligation of the Contractor.
- **C.** The obligations of the Contractor as herein provided shall be in addition to and not in limitation of any obligations imposed upon him by special guarantees required by the Contract Documents or otherwise prescribed by law.
- **9. VARIATION FROM ESTIMATED QUANTITIES.** The Contractor may reasonably expect a variation in estimated quantities such that the total payment for the completed work may range from 75 to 125 percent of the total amount of the Contract based on the estimated quantities defined in the

proposal. The Contractor will not be allowed any claims for anticipated profits, for loss of profits, or for any damages because of a difference between the estimate of any item defined in the proposal and the amount of the item actually required or for the elimination of any part of the work. Funds for construction of the work herein contemplated are limited. The Owner reserves the right to eliminate or reduce the items of the proposal or any of the work as may be required to bring the cost of the work within the limits of available funds.

- **10. WATER FOR CONSTRUCTION.** Water used for construction of this project will be furnished by the Contractor. The Contractor shall make the necessary arrangements with the Owner of the source of water for securing and/or transporting such water. No separate payment will be made for water used but the cost thereof shall be included in the various items of the proposal and bid schedule.
- **II. LIGHTS.** The Contractor shall provide, at his own expense, temporary lighting and facilities required for the proper prosecution and inspection of the work.
- 12. COORDINATION WITH OTHERS. In the event other contractors are doing work in the same area simultaneously with this project, the Contractor shall coordinate his proposed construction with that of the other contractors. The Contractor shall notify the Architect of said coordination attempts and the results.
- **13. PROPERTY LINES AND MONUMENTS.** The Contractor shall protect all property corner markers and any other monument, and when any such markers or monuments are in danger of being disturbed, they shall be properly referenced and if disturbed shall be reset at the expense of the Contractor.
- **14. FENCES AND DRAINAGE CHANNELS.** Boundary fences or other improvements removed to permit the installation of the work shall be replaced in the same location and left in a condition as good or better than that in which they were found. Existing fences not to be removed and intersecting with new fencing (fencing outside airport property) shall be connected to the new fencing in a manner acceptable to the fence owner and the Owner and/or Architect.

Where surface drainage channels are disturbed or blocked during construction, they shall be restored to their original condition of grade and cross section after the work of construction is completed.

- **15. AIR POLLUTION.** The Contractor shall comply with all Federal, State and Local Requirements.
- **16. EXISTING UTILITIES AND SERVICE LINES.** The Contractor shall be responsible for the protection of all existing utilities or service lines crossed or exposed by his construction operations. Where existing utilities or service lines are cut, broken or damaged, the Contractor shall replace or repair the utilities or service lines with the same type of original material and construction, or better, at his own cost and expense, with the exception of those items included in the bid schedule.
- 17. RECORDS OF MATERIALS PURCHASED. By a certain time, each month as defined and established at the preconstruction meeting, the Contractor shall furnish to the Architect, duplicate copies of all invoices for materials furnished to be incorporated into the work, plus a statement of all materials previously included on monthly estimates and incorporated into the work during the preceding month. This information is to be used to determine the value of materials on hand to be included in the monthly estimate for periodical payment.
- **18. CONTRACTOR ACCESS TO PROJECT SITE**. The Contractor shall have a specific access route to the project site. This route is shown in the construction drawings. The Contractor shall use this route to bring all equipment and materials in. If the Contractor has a better route that will prevent damage to existing roads or provide safer access to the construction site, the Contractor shall supply a drawing

showing the recommended route to the Owner and Architect for approval at the preconstruction meeting.

- **19. NIGHTTIME WORK.** Work requiring nighttime work and work procedures are shown in the plans and specifications. Night work shall be scheduled five (5) days in advance, with the Owner.
- **20. DUST CONTROL.** The Contractor shall maintain strict dust control per the project plans and specifications contained within.

#### **SPECIAL PROVISIONS**

#### 1.1 PROJECT INFORMATION

- A. Project Identification: Renovation of the Aircraft Rescue and Firefighting Facility
  - 1. Project Location: 100 Bowen Loop, Charlottesville, VA 22911
- B. Owner: Charlottesville Albemarle Airport
  - 1. Owner's Representative: Jason Devillier, Director of Operations, Maintenance and Construction.
- C. Architect: DBF Associates, Architects
  - 1. Architect's Representative: Richard J. Funk, Jr., Vice-President

#### 1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and includes, but is not limited to, the following:
  - 1. This project is for the ARFF Station Renovations and other Work indicated in the Contract Documents.
- B. Type of Contract:
  - 1. Project will be constructed under a single prime contract.

#### 1.3 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Restricted Use of Site: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
- B. Limits on Use of Site: Limit use of Project site to Work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
  - 1. Limits on Use of Site: Confine construction operations to where shown on drawings.
  - 2. Driveways, Walkways and Entrances: Keep driveways, covered drop off area, parking lot, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these

areas for parking or for storage of materials unless indicated on drawings.

- a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
- b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.
- D. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

#### 1.4 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy Project site and existing building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
  - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
  - 2. Notify Owner not less than **72** hours in advance of activities that will affect Owner's operations.

#### 1.5 WORK RESTRICTIONS

- A. On-Site Work Hours: Confirm work hours with Airport prior to scheduling Work. Non-standard work hours (outside of normal 7:00 AM 5:00 PM hours) are not anticipated to be required for the performance of the work.
- B. On-Site Workday Restrictions: Do not perform work resulting in utility shutdowns of the Air Traffic Control Tower (ATCT) Cab. All Utilities in the ATCT Cab are to remain in service for the duration of the project.
- C. Existing Utility or HVAC Interruptions: Do not interrupt utilities serving facilities occupied by Owner or the ATCT. Unless permitted under the following conditions, HVAC shall not be interrupted until:
  - 1. Owner is notified not less than five days in advance of proposed HVAC interruptions.

- D. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to Owner occupancy with Owner.
  - 1. Notify Architect and Owner not less than two days in advance of proposed disruptive operations.
  - 2. Obtain Owner's written permission before proceeding with disruptive operations.
- E. Smoking and Controlled Substance Restrictions: Use of tobacco products, alcoholic beverages, and other controlled substances on Owner's property is not permitted; however, smoking is permitted in designated areas outside of the airport fence.
- F. Employee Identification: Provide identification for Contractor personnel working on Project site. Require personnel to use identification tags or company labeled attire at all times.
- G. Employee Security and Background Checks: Comply with Owner's requirements for screening of Contractor personnel working on Project site.
  - 1. A representative number of employees shall undergo a security background check in accordance with Title 49 CFR Part 1542. Representatives screened should be supervisors, contractor representatives and others selected for the security of personnel and the worksite.
  - 2. Airport ID Badges will be provided by the Airport Authority to those individuals who have successfully completed a background check in accordance with Title 49 CFR Part 1542, at no charge. Lost ID Badges may be replaced at \$50 per lost badge.

#### 1.6 CONTRACT DURATION

- A. The overall contract duration shall be one hundred sixty (160) calendar days. The contract duration may adjusted in consideration of unexpected site conditions, or conditions outside the control of the Owner. An additional 30 days after substantial completion is anticipated for project closeout.
- B. Liquidated damages shall be assessed in the amount of \$2,500 per day after the end of the contract duration, if substantial completion has not been approved.

#### **PROJECT MEETINGS**

#### 1.1 PRECONSTRUCTION MEETING.

- A. The Owner and / or Architect will schedule a preconstruction meeting and organizational meeting prior to the start of construction after the execution of the Owner-Contractor Agreement. The preconstruction meeting will be held at the project site, or an otherwise convenient location. The meeting shall be conducted to review responsibilities and personnel assignments.
- B. Attendees: Authorized representatives of the Owner, Architect and their consultants, the Contractor and its superintendent, major subcontractors, manufacturers, suppliers, and other concerned parties shall attend the meeting. All participants at the meeting shall be familiar with the Project and authorized to conclude matters relating to the work.
- C. Agenda: Discuss items of significance that could affect progress, including the following:
  - 1. Tentative construction schedule.
  - 2. Critical work sequencing.
  - 3. Designation of responsible personnel.
  - 4. Procedures for processing field decisions and Change Orders.
  - 5. Procedures for processing Applications for Payment.
  - 6. Distribution of Contract Documents, if not previously distributed.
  - 7. Submittal of Shop Drawings, Product Data, and Samples.
  - 8. Preparation of record documents.
  - 9. Use of the premises.
  - 10. Parking availability.
  - 11. Office, work, storage areas and temporary facilities.
  - 12. Equipment deliveries and priorities.
  - 13. Safety procedures.
  - 14. First aid.
  - 15. Security.
  - 16. Housekeeping.
  - 17. Working hours.
  - 18. Coordination with work of concurrent and subsequent contracts under other Contractors.
  - 19. Other appropriate topics.
- D. Schedule of Values: The Contractor shall provide an outline or draft copy of the Schedule of Values for initial review. The intent of this submittal is to review the Schedule of Values for organization and content with respect to the construction progress and work requirements, such that the review time of the formal submittal

- may be minimized. No dollar values or other monetary breakdowns are required with this outline.
- E. The Architect shall record the results of the meeting and distribute copies to attendees and other interested parties.

#### 1.2 PROGRESS MEETINGS

- A. The Contractor shall conduct progress meetings at the Project Site at regularly scheduled times on a weekly interval. Notify the Owner and the Architect of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request and in conjunction with any coordination meetings.
- B. Attendees: In addition to representatives of the Owner and the Architect, each subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with the Project and authorized to conclude matters relating to progress.
- C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project.
  - Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
  - 2. Review the present and future needs of each entity present, including the following:
    - a. Interface requirements.
    - b. Time.
    - c. Sequences.
    - d. Status of submittals.
    - e. Deliveries.
    - f. Off-site fabrication problems.
    - g. Access.
    - h. Site utilization.
    - i. Temporary facilities and services.
    - j. Hours of work.
    - k. Hazards and risks.

- I. Housekeeping.
- m. Quality and work standards.
- n. Change Orders.
- o. Documentation of information for payment requests.
- D. Reporting: Contractor shall record minutes of the meeting and distribute to each party present and to parties who should have been present. Contractor shall revise the construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Contractor shall issue the revised schedule to attendees and others who should have been present no later than 3 days after the meeting.

#### SUBSTITUTION PROCEDURES

#### 1.1 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents.
  - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
  - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required to meet other Project requirements but may offer advantage to Contractor or Owner.

#### 1.2 ACTION SUBMITTALS

- A. Substitution Requests: Submit documentation identifying product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request Form: Use form acceptable to Architect.
  - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.
    - b. Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.

- c. Detailed comparison of significant qualities of proposed substitutions with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
- e. Samples, where applicable or requested.
- f. Certificates and qualification data, where applicable or requested.
- g. List of similar installations for completed projects, with project names and addresses as well as names and addresses of architects and owners.
- h. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
- i. Detailed comparison of Contractor's construction schedule using proposed substitutions with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
- j. Cost information, including a proposal of change, if any, in the Contract Sum.
- k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.
- I. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
  - a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
  - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

#### 1.3 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

#### 1.4 PROCEDURES

A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

#### 1.5 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
  - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
    - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    - b. Substitution request is fully documented and properly submitted.
    - c. Requested substitution will not adversely affect Contractor's construction schedule.
    - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
    - e. Requested substitution is compatible with other portions of the Work.
    - f. Requested substitution has been coordinated with other portions of the Work.
    - g. Requested substitution provides specified warranty.
    - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Architect will consider requests for substitution if received within ten (10) days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of Architect.
  - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied,

Architect will return requests without action, except to record noncompliance with these requirements:

- a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
- b. Requested substitution does not require extensive revisions to the Contract Documents.
- c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- d. Substitution request is fully documented and properly submitted.
- e. Requested substitution will not adversely affect Contractor's construction schedule.
- f. Requested substitution has received necessary approvals of authorities having jurisdiction.
- g. Requested substitution is compatible with other portions of the Work.
- h. Requested substitution has been coordinated with other portions of the Work.
- i. Requested substitution provides specified warranty.
- j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

#### CONTRACT MODIFICATION PROCEDURES

#### 1.1 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on Architect's form.

#### 1.2 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
  - 2. Within time specified in Proposal Request or 14 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total

- amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
- b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
- c. Include costs of labor and supervision directly attributable to the change.
- d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- e. Quotation Form: Use forms acceptable to Architect.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
  - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
  - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - 4. Include costs of labor and supervision directly attributable to the change.
  - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  - 6. Comply with requirements in Section 012500 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
  - 7. Proposal Request Form: Use form acceptable to Architect.

#### 1.3 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Work Change Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor.

#### 1.4 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

#### **PAYMENT PROCEDURES**

#### 1.1 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
  - 1. Coordinate line items in the schedule of values with items required to be indicated as separate activities in Contractor's construction schedule.
  - 2. Submit the schedule of values to Architect at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
  - 3. Sub-schedules for Separate Elements of Work: Where the Contractor's construction schedule defines separate elements of the Work, provide sub-schedules showing values coordinated with each element.
  - 4. Provide schedule of values
  - 5. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
  - 6. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
    - a. Differentiate between items stored on-site and items stored off-site.
  - 7. Overhead Costs, Proportional Distribution: Include total cost and proportionate share of general overhead and profit for each line item.
  - 8. Schedule of Values Revisions: Revise the schedule of values when Change Orders or Construction Change Directives result in a change in the Contract Sum. Include at least one separate line item for each Change Order and Construction Change Directive.

#### 1.2 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments, as certified by Architect and paid for by Owner.

- B. Payment Application Times: The date for each progress payment shall be coordinated during the preconstruction meeting.
- C. Payment Application Times: If Payment Application Times are not defined as indicated in Paragraph B above, submit Application for Payment to Architect by a certain day of the month that shall be coordinated with the Owner. The period covered by each Application for Payment is one month, ending on the last day of the month.
  - 1. Submit draft copy of Application for Payment seven days prior to due date for review by Architect.
- D. Application for Payment Forms: Forms approved by the Architect shall be used for application of payment.
- E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect and / or Owner will return incomplete applications without action.
  - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
  - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
  - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
  - 4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.
  - 5. Include a revised construction schedule.
- F. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
  - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment for stored materials.
  - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
  - 3. Provide summary documentation for stored materials indicating the following:
    - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
    - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.

- c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- G. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Architect and/ or Owner by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
  - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- H. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
  - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
  - 2. When an application shows completion of an item, submit conditional final or full waivers.
  - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
  - 4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
- I. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
  - 1. List of subcontractors.
  - 2. Schedule of values.
  - 3. Contractor's construction schedule (preliminary if not final).
  - 4. Products list (preliminary if not final).
  - 5. Schedule of unit prices.
  - 6. Submittal schedule (preliminary if not final).
  - 7. List of Contractor's staff assignments.
  - 8. List of Contractor's principal consultants.
  - 9. Copies of building permits.
  - 10. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
  - 11. Initial progress report.
  - 12. Report of preconstruction meeting.
  - 13. Certificates of insurance and insurance policies.
  - 14. Performance and payment bonds.
  - 15. Data needed to acquire Owner's insurance.
- J. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent

completion for portion of the Work claimed as substantially complete.

- 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
  - a. Complete administrative actions, submittals, and Work preceding this application, as described in the "Closeout Procedures" section.
- 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- K. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
  - 1. Evidence of completion of Project closeout requirements.
  - 2. Certification of completion of final punch list items.
  - 3. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
  - 4. Updated final statement, accounting for final changes to the Contract Sum.
  - 5. Evidence that claims have been settled.
  - 6. Final liquidated damages settlement statement.
  - 7. Proof that taxes, fees, and similar obligations are paid.
  - 8. Waivers and releases.

#### L. RETAINAGE

- 1. Retainage in the amount of ten percent (10%) of the contract amount shall be withheld until the issuance of a certificate of substantial completion, or the receipt of lien free certificates from all subcontractors and suppliers.
- 2. Retainage shall not be considered in lieu of liquidated damages.

#### COORDINATION, SUBMITTALS AND REQUESTS FOR IINFORMATION (RFIs)

#### 1.1 DEFINITIONS

A. RFI: Request for Information. Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

#### 1.2 INFORMATIONAL SUBMITTALS

A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:

- 1. Name, address, telephone number, and email address of entity performing subcontract or supplying products.
- 2. Number and title of related Specification Section(s) covered by subcontract.
- 3. Drawing number and detail references, as appropriate, covered by subcontract.
- B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities, list addresses, cellular telephone numbers, and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.

#### 1.3 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in sequence required to obtain the best results, where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
  - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of Contractor's construction schedule.
  - 2. Preparation of the schedule of values.
  - 3. Installation and removal of temporary facilities and controls.
  - 4. Delivery and processing of submittals.
  - 5. Progress meetings.
  - 6. Preinstallation meetings.
  - 7. Project closeout activities.
  - 8. Startup and adjustment of systems.

# 1.4 REQUEST FOR INFORMATION (RFI)

- A. General: Immediately on discovery of the need for additional information, clarification, or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form acceptable to the architect.
  - 1. Architect will return without response those RFIs submitted to Architect by other entities controlled by Contractor.
  - 2. Coordinate and submit RFIs in a prompt manner to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
  - 1. Project name.
  - 2. Owner name.
  - 3. Owner's Project number.
  - 4. Name of Architect.
  - 5. Architect's Project number.
  - 6. Date.
  - 7. Name of Contractor.
  - 8. RFI number, numbered sequentially.
  - 9. RFI subject.
  - 10. Specification Section number and title and related paragraphs, as appropriate.
  - 11. Drawing number and detail references, as appropriate.
  - 12. Field dimensions and conditions, as appropriate.
  - 13. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  - 14. Contractor's signature.
  - 15. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
    - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: Form template provided.
  - 1. Attachments shall be electronic files in PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow two days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
  - 1. The following Contractor-generated RFIs will be returned without action:

- a. Requests for approval of submittals.
- b. Requests for approval of substitutions.
- c. Requests for approval of Contractor's means and methods.
- d. Requests for coordination information already indicated in the Contract Documents.
- e. Requests for adjustments in the Contract Time or the Contract Sum.
- f. Requests for interpretation of Architect's actions on submittals.
- g. Incomplete RFIs or inaccurately prepared RFIs.
- 2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt by Architect of additional information.
- 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
  - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 5 days of receipt of the RFI response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log each progress meeting. Include the following:
  - 1. Project name.
  - 2. Name and address of Contractor.
  - 3. Name and address of Architect.
  - 4. RFI number, including RFIs that were returned without action or withdrawn.
  - 5. RFI description.
  - 6. Date the RFI was submitted.
  - 7. Date Architect's response was received.
  - 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
  - 9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.
- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within five days if Contractor disagrees with response.

# 1.5 DIGITAL PROJECT MANAGEMENT PROCEDURES

A. Architect's Data Files Not Available: Architect will not provide Architect's digital data files for Contractor's use during construction.

- B. PDF Document Preparation: Where PDFs are required to be submitted to Architect, prepare as follows:
  - 1. Assemble complete submittal package into a single indexed file, incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
  - 2. Name file with submittal number or other unique identifier, including revision identifier.
  - 3. Certifications: Where digitally submitted certificates and certifications are required, provide a digital signature with digital certificate on where indicated.

#### CONSTRUCTION PROGRESS DOCUMENTATION

### 1.1 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction Project. Activities included in a construction schedule consume time and resources.
  - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
  - 2. Predecessor Activity: An activity that precedes another activity in the network.
  - 3. Successor Activity: An activity that follows another activity in the network.
- B. Cost Loading: The allocation of the schedule of values for completing an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum.
- C. CPM: Critical Path Method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine the critical path of Project and when activities can be performed.
- D. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- E. Event: The starting or ending point of an activity.
- F. Float: The measure of leeway in starting and completing an activity.
  - 1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
  - 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
  - 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.

G. Resource Loading: The allocation of manpower and equipment necessary for completing an activity as scheduled.

### 1.2 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
  - 1. Working electronic copy of schedule file.
  - 2. PDF file.
- B. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
- C. Construction Schedule Updating Reports: Submit with Applications for Payment.
- D. Daily Construction Reports: Submit at weekly intervals.
- E. Material Location Reports: Submit at monthly intervals.
- F. Site Condition Reports: Submit at time of discovery of differing conditions.
- G. Unusual Event Reports: Submit at time of unusual event.

# 1.3 COORDINATION

- A. Coordinate Contractor's Construction Schedule with the schedule of values, submittal schedule, progress reports, payment requests, and other required schedules and reports.
  - 1. Secure time commitments for performing critical elements of the Work from entities involved.
  - 2. Coordinate each construction activity in the network with other activities, and schedule them in proper sequence.

### 1.4 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules or program acceptable to the Architect.
- B. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.

- Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Activities: Treat each floor or separate area as a separate numbered activity for each main element of the Work. Comply with the following:
  - 1. Activity Duration: Define activities so no activity is longer than 30 days, unless specifically allowed by Architect.
  - 2. Temporary Facilities: Indicate start and completion dates for the following as applicable:
    - a. Securing of approvals and permits required for performance of the Work.
    - b. Temporary facilities.
    - c. Construction of mock-ups, prototypes and samples.
    - d. Owner interfaces and furnishing of items.
    - e. Interfaces with Separate Contracts.
    - f. Regulatory agency approvals.
    - a. Punch list.
  - 3. Procurement Activities: Include procurement process activities for long lead-time items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
  - 4. Submittal Review Time: Include review and resubmittal times indicated in Section 013300 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with submittal schedule.
  - 5. Startup and Testing Time: Include no fewer than 15 days for startup and testing.
  - 6. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
  - 7. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and Final Completion.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
  - 1. Phasing: Arrange list of activities on schedule by phase.
  - 2. Work Restrictions: Show the effect of the following items on the schedule:
    - a. Coordination with existing construction.
    - b. Limitations of continued occupancies.
    - c. Uninterruptible services.
    - d. Partial occupancy before Substantial Completion.
    - e. Use-of-premises restrictions.

- f. Provisions for future construction.
- g. Seasonal variations.
- h. Environmental control.
- 3. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
  - a. Subcontract awards.
  - b. Submittals.
  - c. Purchases.
  - d. Fabrication.
  - e. Deliveries.
  - f. Installation.
  - g. Tests and inspections.
  - h. Adjusting.
  - i. Startup and placement into final use and operation.
- E. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
  - Unresolved issues.
  - 2. Unanswered Requests for Information.
  - 3. Rejected or unreturned submittals.
  - 4. Notations on returned submittals.
  - 5. Pending modifications affecting the Work and the Contract Time.
- F. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule 3 days before each regularly scheduled progress meeting.
  - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
  - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
  - 3. As the Work progresses, indicate Final Completion percentage for each activity.
- G. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, equipment required to achieve compliance, and date by which recovery will be accomplished.
- H. Distribution: Distribute copies of approved schedule to Architect, Owner, separate

contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.

- 1. Post copies in Project meeting rooms and temporary field offices.
- 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

#### 1.5 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
  - 1. List of subcontractors at Project site.
  - 2. List of separate contractors at Project site.
  - 3. Approximate count of personnel at Project site.
  - 4. Equipment at Project site.
  - 5. Material deliveries.
  - 6. High and low temperatures and general weather conditions, including presence of rain or snow.
  - 7. Testing and inspection.
  - 8. Accidents.
  - 9. Meetings and significant decisions.
  - 10. Unusual events.
  - 11. Stoppages, delays, shortages, and losses.
  - 12. Meter readings and similar recordings.
  - 13. Emergency procedures.
  - 14. Orders and requests of authorities having jurisdiction.
  - 15. Change Orders received and implemented.
  - 16. Construction Change Directives received and implemented.
  - 17. Services connected and disconnected.
  - 18. Equipment or system tests and startups.
  - 19. Partial completions and occupancies.
  - 20. Substantial Completions authorized.

### SUBMITTAL PROCEDURES

#### 1.1 DEFINITIONS

A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."

B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

### 1.2 SUBMITTAL SCHEDULE

- A. Submittal Schedule: Submit, as an action submittal, a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.
  - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
  - 2. Initial Submittal Schedule: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
  - 3. Final Submittal Schedule: Submit concurrently with the first complete submittal of Contractor's construction schedule.
    - a. Submit revised submittal schedule as required to reflect changes in current status and timing for submittals.
  - 4. Format: Arrange the following information in a tabular format:
    - a. Scheduled date for first submittal.
    - b. Specification Section number and title.
    - c. Submittal Category: Action; informational.
    - d. Name of subcontractor.
    - e. Description of the Work covered.
    - f. Scheduled date for Architect's final release or approval.
    - g. Scheduled dates for purchasing.
    - h. Scheduled date of fabrication.
    - i. Scheduled dates for installation.
    - j. Activity or event number.

# 1.3 SUBMITTAL FORMATS

A. Submittal Information: Include the following information in each submittal:

- 1. Project name.
- 2. Date.
- 3. Name of Architect.
- 4. Name of Construction Manager.
- 5. Name of Contractor.
- 6. Name of firm or entity that prepared submittal.
- 7. Names of subcontractor, manufacturer, and supplier.
- 8. Unique submittal number, including revision identifier. Include Specification Section number with sequential alphanumeric identifier and alphanumeric suffix for resubmittals.
- 9. Category and type of submittal.
- 10. Submittal purpose and description.
- 11. Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
- 12. Drawing number and detail references, as appropriate.
- 13. Indication of full or partial submittal.
- 14. Location(s) where product is to be installed, as appropriate.
- 15. Other necessary identification.
- 16. Remarks.
- 17. Signature of transmitter.
- B. Options: Identify options requiring selection by Architect.
- C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Architect on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.
- D. Electronic Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.
- E. Submittals Utilizing Web-Based Project Software: Prepare submittals as PDF files or other format indicated by Project management software.

# 1.4 SUBMITTAL PROCEDURES

- A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
  - 1. Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project management software website. Enter required data in web-based software site to fully identify submittal.

- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
  - 4. Coordinate transmittal of submittals for related parts of the Work specified in different Sections, so processing will not be delayed because of need to review submittals concurrently for coordination.
    - Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
  - 1. Initial Review: Allow 14 calendar days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  - 3. Resubmittal Review: Allow 14 calendar days for review of each resubmittal.
  - 4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 21 calendar days for initial review of each submittal.
  - 5. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow 15 days for review of each submittal. Submittal will be returned to Architect before being returned to Contractor.
    - a. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect.
- D. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
  - 1. Note date and content of previous submittal.

- 2. Note date and content of revision in label or title block, and clearly indicate extent of revision.
- 3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- E. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- F. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

### 1.5 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
  - 1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
  - 2. Mark each copy of each submittal to show which products and options are applicable.
  - 3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Standard color charts.
    - d. Statement of compliance with specified referenced standards.
    - e. Testing by recognized testing agency.
    - f. Application of testing agency labels and seals.
    - g. Notation of coordination requirements.
    - h. Availability and delivery time information.
  - 4. For equipment, include the following in addition to the above, as applicable:
    - a. Wiring diagrams that show factory-installed wiring.
    - b. Printed performance curves.
    - c. Operational range diagrams.
    - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
  - 5. Submit Product Data before Shop Drawings, and before or concurrently with Samples.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed

data.

- 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
  - a. Identification of products.
  - b. Schedules.
  - c. Compliance with specified standards.
  - d. Notation of coordination requirements.
  - e. Notation of dimensions established by field measurement.
  - f. Relationship and attachment to adjoining construction clearly indicated.
  - g. Seal and signature of professional architect if specified.
- 2. Paper Sheet Size: Except for templates, patterns, and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm), but no larger than 30 by 42 inches (750 by 1067 mm).
  - a. Two electronic copies of each submittal. Architect will return one copy.
  - b. Three electronic copies of each submittal. Architect will retain two copies; remainder will be returned.
- C. Samples: Submit Samples for review of type, color, pattern, and texture for a check of these characteristics with other materials.
  - 1. Transmit Samples that contain multiple, related components, such as accessories together in one submittal package.
  - 2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
    - a. Project name and submittal number.
    - b. Generic description of Sample.
    - c. Product name and name of manufacturer.
    - d. Sample source.
    - e. Number and title of applicable Specification Section.
    - f. Specification paragraph number and generic name of each item.
  - 3. Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project software website. Enter required data in web-based software site to fully identify submittal.
  - 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.

- a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
- b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units, showing the full range of colors, textures, and patterns available.
  - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
- 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
  - a. Number of Samples: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned.
    - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
    - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- D. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
  - 1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
  - 2. Manufacturer and product name, and model number if applicable.
  - 3. Number and name of room or space.
  - 4. Location within room or space.
- E. Qualification Data: Prepare written information that demonstrates capabilities and

- experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- F. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.

### G. Certificates:

- 1. Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
- 2. Installer Certificates: Submit written statements on manufacturer's letterhead, certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- 3. Manufacturer Certificates: Submit written statements on manufacturer's letterhead, certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- 4. Material Certificates: Submit written statements on manufacturer's letterhead, certifying that material complies with requirements in the Contract Documents.
- 5. Product Certificates: Submit written statements on manufacturer's letterhead, certifying that product complies with requirements in the Contract Documents.
- 6. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of AWS B2.1/B2.1M on AWS forms. Include names of firms and personnel certified.

#### 1.6 CONTRACTOR'S REVIEW

- A. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Contractor's Approval: Indicate Contractor's approval for each submittal with a uniform approval stamp. Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
  - 1. Architect will not review submittals received from Contractor that do not have Contractor's review and approval.

### 1.7 ARCHITECT'S REVIEW

- A. Action Submittals: Architect will review each submittal, indicate corrections or revisions required, and return.
  - 1. PDF Submittals: Architect will indicate, via markup on each submittal, the appropriate action.
- B. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Architect will return without review submittals received from sources other than Contractor.
- F. Submittals not required by the Contract Documents will be returned by Architect without action.

# 1.8 PROPOSAL / CHANGE ORDER REQUESTS

- A. Request for Proposal (RFP): The Architect will issue a detailed description of proposed changes in the Work that will require adjustment to the Contract Sum or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - Proposal requests issued by the Architect are for information only. Do not consider them as an instruction either to stop work in progress or to execute the proposed change.
  - 2. Unless otherwise indicated in the proposal request, within twenty (20) days of receipt of a proposal request, submit an estimate of cost necessary to execute the change to the Architect for the Owner's review.
    - a. Include a list of quantities of products to be purchased and unit costs, along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
      - b. Itemize labor charges by time and category.

- c. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - d. Indicate overhead and profit charges.
- e. Include a statement indicating the effect the proposed change in the work will have on the Contract Time.
- B. Contractor-Initiated Change Order Requests: When latent or unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to the Architect.
  - 1. Include a statement outlining the reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time.
  - 2. Include a list of quantities of products to be purchased and unit costs along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
  - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - 4. Comply with requirements in Section 01 60 00 PRODUCT REQUIREMENTS and Section 01 25 00-SUBSTITUTION PROCEDURES if the proposed change requires substitution of one product or system for a product or system specified.
  - 5. Change Order Request Form: Use forms provided by the Architect. The Contractor shall maintain a sequential log of all Requests for Change Orders.

### 1.9 ALLOWANCES

- A. Allowance Adjustment: For allowance-cost adjustment, base each Change Order Proposal on the difference between the actual purchase amount and the allowance, multiplied by the final measurement of work-in-place. Where applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
  - 1. Include installation costs in the purchase amount only where indicated as part of the allowance.
  - 2. When requested, prepare explanations and documentation to substantiate the margins claimed.
  - 3. The Owner reserves the right to establish the actual quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or the Contractor's handling, labor, installation, overhead, and profit. Submit claims within twenty (20) days of receipt of the Change Order or Construction Change Directive authorizing work to proceed. The Owner will reject claims submitted later than 20 days.

- 1. Do not include the Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in Contract Documents.
- 2. No change to the Contractor's indirect expense is permitted for selection of higher or lower-priced materials or systems of the same scope and nature as originally indicated.

# 1.10 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: When the Owner and the Contractor are not in total agreement on the terms of a Change Order Proposal Request, the Architect may issue a Construction Change Directive. The Construction Change Directive instructs the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  - 1. The Construction Change Directive will contain a complete description of the change in the work and designate the method to be followed to determine change in the Contract Sum or Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  - 1. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

### 1.11 CHANGE ORDER PROCEDURES

A. Upon the Owner's approval of a Change Order Proposal Request, the Architect will issue a Change Order for signatures of the Owner and the Contractor. Submit claims within twenty (20) days of receipt of the Change Order or Construction Change Directive authorizing work to proceed. The Owner will reject claims submitted later than twenty (20) days.

### 1.8. CHANGE ORDER MARK-UP

- A. The amount of overhead and profit allowed to the Contractor on a contract modification will be as follows:
  - 1. Unit Price If there is a proposed increase or decrease in a scope item that has a Unit Price in the Contract Documents, no additional mark-up will be allowed for overhead, profit, safety, insurance or bonds. In addition, no reduction in overhead and profit will be taken for the scope change.
  - 2. Proposal Basis (Additive) If there is a proposed increase in the scope of work, the Contractor will be allowed a 10% mark-up for overhead and profit for all direct work (work by his/her own forces) and for subcontractors' costs. This mark-up includes overhead, profit, safety and insurance costs. The

- Contractor will be paid for the increase in Bond amount equal to his / her actual bonding rate as stated in the bid form. This is to be added for all scope / cost changes.
- 3. Proposal Basis (Deductive) If there is a proposed decrease in the scope of work, the Contractor will be required to provide a 0% mark-down for overhead and profit for all direct work (work by his / her own forces) and subcontractors' costs. This mark-down includes overhead, profit, safety and insurance costs. The Contractor will provide a deduction for the decrease in Bond amount equal to his / her actual bonding rate as stated in the bid form. This is to be deducted for all scope / cost changes.
- 4. Time & Material (Additive) If there is a proposed increase in the scope of work due to time and material work directed by the Owner, the Contractor will be allowed a 10% mark-up for overhead and profit for all direct work (work by his/her own forces) and subcontractors' costs. This mark-up includes overhead, profit, safety and insurance costs. The Contractor will be paid for the increase in Bond amount equal to his / her actual bonding rate as stated in the bid form. This is to be added for all scope / cost changes.
- B. All Subcontractors will be required to adhere to the same allowable mark-ups / downs as the Contractor. The Contractor is responsible for reviewing and confirming that all Subcontractors have adhered to the allowable mark-ups / downs as stated above.
- C. The Contractor will be required to provide detailed back-up for all costs associated with the scope change. This includes, but is not limited to material invoices from suppliers, hourly wage rate sheets including all fringe benefits, certified payrolls and bonding amount certification from his / her bonding company.
- D. Equipment The Contractor will be paid for all equipment (other than small hand tools) as currently defined by the Illinois Department of Transportation "Schedule of Average Annual Equipment Ownership Expense with Operation Cost." No additional mark-up for overhead and profit will be allowed over and above the costs listed in this book. If equipment is not listed in this book, the Contractor is to provide rental agreement / invoices for the equipment.

#### SECURITY PROCEDURES

# 1.1 REQUIREMENTS INCLUDED

- A. Establish and maintain Project Security Program to:
  - 1. Protect Work, Stored Products, and Construction Equipment against Theft and Vandalism.
  - 2. Protect Premises against entry by Unauthorized Persons.
- B. Protect Owner's operations at Site against Theft, Vandalism, interference or Damage by Contractor's work or employees.

### 1.2 MAINTENANCE OF SECURITY

- A. Initiate Security Program promptly after job mobilization.
- B. Maintain Security Program throughout construction period, until Owner-occupancy or Owner-acceptance precludes the need for Contractor-security.

### 1.3 GENERAL AIRPORT SECURITY REQUIREMENTS

- A. Comply with Airport Security Requirements stipulated below and any other governing requirements of Transportation Security Administration(TSA).
- B. Contractor shall maintain security against unlawful access to "secure areas" of Airport Terminal Building and Airfield Area.
- C. Compliance with specified requirements will not relieve Contractor of responsibility for maintaining proper security, nor shall Contractor construe specified requirements as limiting Contractor's obligation to undertake reasonable action to establish and maintain secure conditions at Project Site.
- D. If Contractor, Subcontractor, or their Workers should breach security requirements, Contractor will be held responsible for Fines and Costs resulting from breach.

2.0 (RESERVED)

### 3.1 CONTRACTOR BADGING

- A. The Contractor is responsible for Owner-issued security badging as follows:
  - 1. The Contractor is responsible for obtaining photo-identification security badges issued by the Owner for each superintendent of each work crew working within the Air Operations Area (AOA) and terminal. The Contractor must obtain Owner-issued security badges for at least one (1) member of each work crew working in separate areas of the AOA and terminal. All Contractor personnel must either obtain and display an Owner-issued security badge or be escorted and under the responsibility of an individual displaying a current Owner-issued security badge. Badges issued for construction will be good for the duration of the project.
  - 2. The Contractor is responsible for completing the required Owner-issued security badge application forms, and for submitting the forms to the Owner for their review as early in the project as possible to avoid construction delays. Forms will be made available by the Owner after award of the project.
  - 3. The Contractor may obtain Owner-issued security badges from the Badging Office at the Airport. The Owner reserves the right to limit the number of security badges issued to the Contractor. The Owner will not charge the Contractor a non-refundable fee for each Owner-issued security badge issued. A non-refundable fee will be charged for lost or destroyed badges.
  - 4. Owner-issued security badges must be worn in an easily visible location on the person issued the badge at all times while working within the AOA and terminal. The badge holder must be familiar with and must obey all security and safety rules and regulations. Owner-issued security badges may be confiscated, and all security rights revoked by the Owner upon the breach of any security or safety regulations at the discretion of the Owner. The holder of an Owner-issued security badge must surrender the badge at the completion of this project, upon transfer or termination of employment, or at any other time at the request of the Owner.
  - 5. Badge holders may only use Owner-issued security badges for access to the AOA and terminal when actively working on this specific project.
  - 6. Any expired or altered badge, or any badge bearing a photograph not matching the

- bearer, must be brought to the attention of the Owner, and will be immediately confiscated by the Owner or the airport police.
- 7. At the completion of this project, the Contractor must return all Owner-issued security badges to the Owner. All Owner-issued security badges must be accounted for and surrendered at the completion of this project. Failure to account for and surrender all Owner-issued security badges will constitute grounds for withholding retainage from the final pay estimate amount.

# 3.2 EXECUTION INTERIOR BARRICADING, MARKING, AND LIGHTING

A. Proper barricading, marking, and lighting of interior construction areas are the responsibility of the Contractor. This will include closing off interior construction areas from public access and properly marking and lighting these areas. Life Safety paths of egress must be continually illuminated and kept clear of all construction materials.

### 3.3 CONSTRUCTION CONTROL

A. A primary and alternate responsible Contractor's representative must be designated by the Contractor. The Contractor's representatives must be available locally on a 24-hour basis. Names of the primary and alternate, including phone number, must be made available to the A/E and the Owner by the Contractor. The Contractor must insure that the names and phone numbers are kept current and made available to the A/E and the Owner.

### 3.4 CONSTRUCTION SAFETY AND SECURITY TECHNIQUES

A. Construction must be planned and conducted throughout this project in such a manner as to maintain safe airport operations. Every effort must be made to reduce the impact of construction activity on overall airport operations. To this end, the Contractor's activities must be conducted in such a manner to preclude, except where absolutely required, open excavations, trenches, ditches, and above ground obstacles such as booms on cranes. The primary responsibility for assuring that safe construction techniques are followed rests with the contractor.

### 1.1 SITE USE PLAN

A. Within ten (10) working days of Contract award, the Contractor shall develop and submit for Owner's approval a site use plan. This plan shall clearly describe the proposed temporary facilities, staging areas, ramps and major traffic ways, hazardous material storage, provisions for site services, safety and security. Changes to the site plan shall be submitted for review and approval five (5) working days prior to effecting the changes.

### 2.0 (Reserved)

# **PROTECTION & ENVIRONMENTAL**

### 3.1 CLEANING PROTECTION

- A. Clean and protect construction in progress and adjoining materials in place, during handling and installation. Apply protective covering where required to assure protection from damage or deterioration at Substantial Completion.
- B. Clean and maintain completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to assure operability without damaging effects.
- C. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

# 3.2 ENVIRONMENTAL PROTECTION

- A. Soil Disposal and / or Borrow: Conduct all soil disposal and / or borrow work in accordance with requirements of local regulatory authorities. Dispose of all excess soil in a legal manner off site.
- B. Solid, Liquid and Gaseous Contaminants: Contractor shall be responsible for the proper disposal of all solid, liquid and gaseous contaminants in accordance with all local codes and regulations, together with the following requirements.
  - 1. Discharge gaseous contaminants so that they will be sufficiently diluted with fresh air to reduce the toxicity to an acceptable level.
  - 2. Liquid contaminants may, subject to local utility standards, be diluted with water to a level of quality acceptable in the local sewer system or shall be contained in approved vessels for disposal at approved sites.

- C. Disposal of Refuse: Remove refuse resulting from construction operations from the site. Contractor may arrange for delivery and position of a refuse container upon coordination with the owner. Burning on the site is not permissible.
- D. Hazardous Waste: All hazardous waste generated by the Contractor and the Contractor's subcontractors during the course of construction shall be stored, transported and disposed of in accordance with 40 CFR 260. The Contractor and his subcontractors shall be responsible for all documentation related to hazardous waste generated as a result of this Contract and that documentation shall be in accordance with 40 CFR 260.

# E. Construction Site Maintenance:

- 1. Store all supplies and equipment on project site so as to preclude mechanical and climatic damage. Maintain site in a neat and orderly manner.
- 2. Contractor shall be responsible for maintaining the temporary structures and construction enclosure (fence) in good repair and visually pleasant. Contractor shall further provide adequate security, supplementing the existing fencing as necessary, to prevent the presence of unauthorized persons on the site and to keep gates secured when not in actual use to ensure the integrity of the barrier as well as for property security
- F. Noise Control: Comply with all applicable state and local laws, ordinances and regulations relative to noise control. Control noise as to not interfere with communications between air traffic control and airport users.

### 3.3 DISPOSAL OF WASTE

- A. Unless otherwise indicated, demolition and construction waste becomes the property of the contractor
- B. Remove waste materials from the project site daily and dispose of in legally acceptable manner.
- C. Remove waste in such a manner as waste will not spill over on surrounding surfaces or in transition from the project site.
- D. Roll-off type dumpsters may be used and positioned on the project site at a location approved by the Owner.

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05500 Miscellaneous Metals

### **DIVISION 6 -- WOOD AND PLASTICS**

06100 Rough Carpentry 06200 Finish Carpentry

06400 Architectural Woodwork and Cabinetry

# **DIVISION 7 -- THERMAL AND MOISTURE PROTECTION**

07200 Building Insulation 07950 Sealants and Caulking

#### **DIVISION 8 -- DOORS AND WINDOWS**

08200Doors and Frames08700Builder's Hardware08800Glass and Glazing

# **DIVISION 9 -- FINISHES**

09250 Gypsum Wallboard 09300 Ceramic Tile

09500 Acoustical Treatment

09600 Carpeting

09650 Resilient Flooring

09900 Painting

# **DIVISION 10 – SPECIALTIES**

10420 Identifying Devices

10800 Toilet and Bath Accessories

### **DIVISION 12 -- FURNISHINGS**

12505 Window Coverings

### **DIVISION 1 – GENERAL REQUIREMENTS**

### 01010 - SUMMARY OR WORK

#### 1. GENERAL

#### 1.1 PROJECT

Charlottesville/Albemarle Airport – ARFF Building Renovation

Albemarle County, Virginia

### 1.2 APPROVAL OF WORKING SURFACES

Any contractor performing Work over the Work of other contractors shall notify the Architect of any unsatisfactory conditions. Beginning of Work by any contractor shall constitute acceptance of the previous Work.

#### 1.3 CHECKING DIMENSIONS AT SITE

Before ordering any materials or fabricating any Work, the Contractor or subcontractor shall verify all measurements of the building and be responsible for the correctness of them. No extras will be allowed for variations from the Drawings in existing conditions or for Work performed under this Contract. Any discrepancies found shall be submitted to the Architect for instructions before proceeding.

### 1.4 CUTTING AND PATCHING

No excessive cutting will be permitted, nor shall any structural members be cut without the approval of the Architect. The General Contractor shall provide all cutting and patching and shall leave all chases and openings straight, true and of proper size in his Work as may be necessary for the proper installation of his and/or others' Work. After such Work has been installed, he shall carefully fit around, close up, repair, patch and point up same as directed to the entire satisfaction of the Architect.

### 1.5 COOPERATION

The General Contractor, all other contractors and all sub-contractors shall coordinate their Work with all adjacent Work and shall cooperate with all other trades so as to facilitate the general progress of the Work. Each trade shall afford all other trades every reasonable opportunity for installation of their Work and storage of their materials.

### 1.6 BUILDING PERMITS

The Contractor shall make application for and pay all associated fees required for subcontractor permits and licenses, and inspections required by law and by authorities having jurisdiction, unless otherwise

indicated. The building permit, tap fees and erosion bond shall be obtained and paid for by the Owner.

### 1.7 TESTING

If required, all geotechnical and special testing will be done by a laboratory selected by the Owner. Cost of this testing shall be paid by the Owner, except that cost of retesting, due to deficient workmanship, shall be paid by the Contractor. All third-party inspections as required by the municipality and the Building Code shall be done by firm(s) selected and contracted by the General Contractor.

#### 1.8 SURVEY AND LAYOUT

A. All surveying and layout work shall be the responsibility of the General Contractor.

### 1.9 ASBESTOS

- A. No friable asbestos work of any nature is included in this Contract.
- B. The Owner will complete removal of all friable asbestos or non-friable asbestos-containing materials before commencement of Work.
- C. If during the construction of this project, work involving friable asbestos is suspected or encountered, the Owner or the Owner's representative shall be notified immediately and the Owner with his own forces or by separate contract shall be responsible for complete investigation, removal, and disposition of the friable asbestos hazard in accordance with applicable laws and regulations.
- If the Contractor claims that delay or additional cost is involved because of such action by the
   Owner, he shall make such claim as provided elsewhere in the Contract Documents.

#### 1.10 BUILDER'S RISK INSURANCE

A. Builder's Risk Insurance for this project shall be furnished and paid for by the General Contractor.

#### 1.11 LIEN RELEASES

A. Lien releases shall be required of the General Contractor for his major subcontractors (not suppliers).

### **END OF SECTION 01010**

### **DIVISION 1 - GENERAL REQUIREMENTS**

### 01070 -- CUTTING AND PATCHING

### 1. **GENERAL**

### 1.1 DESCRIPTION

### A. Work Included:

- This Section establishes general requirements pertaining to cutting fitting, and patching of the
   Work to be performed by the General Contractor, required to:
  - a. Make several parts fit properly.
  - b. Uncover Work to provide for installation, inspection, or both, of ill-timed Work.
  - c. Remove and replace Work not conforming to requirements of the Contract Documents.
  - d. Remove and replace defective Work.

#### B. Request for the Architect's Consent:

- Prior to cutting which affects structural safety, submit written request to the Architect for permission to proceed with cutting.
- 2. Submit written notice to the Architect designating time the Work will be uncovered, to provide for the Architect's observation.

### 2. PRODUCTS

### 2.1 MATERIALS

For replacement of Work removed, use materials which comply with the pertinent Sections of these Specifications.

### 3. **EXECUTION**

#### 3.1 CONDITIONS

#### A. Discrepancies:

 If uncovered conditions are not as anticipated, immediately notify the Architect and secure needed direction. 2. Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved.

# 3.2 PREPARATION PRIOR TO CUTTING

Provide all required protection including, but not necessarily limited to, shoring, and support to maintain structural integrity of the Work.

# **END OF SECTION 01070**

### **DIVISION 1 - GENERAL REQUIREMENTS**

### 01300 -- SUBMITTALS

### 1. **GENERAL**

### 1.1 DESCRIPTION

- A. Submit Shop Drawings, product data and samples required by the Contract Documents. Each section of these Specifications indicates the requirement for, and the type submittal required.
- B. Related Requirements Specified in Other Sections: Section 01720, Project Record Documents.

### 1.2 SHOP DRAWINGS

- A. Shop Drawings Shall:
  - 1. Identify details by reference to sheet and detail numbers shown on Contract Drawings.
  - 2. Be presented in a clear and thorough manner.
- B. Unless otherwise specifically directed by the Architect, make all Shop Drawings accurately to a scale sufficiently large to show all pertinent features of the item and its method of connection to the Work.

### 1.3 PRODUCT DATA

- A. Manufacturer's Standard Schematic Drawings:
  - 1. Modify drawings to delete information which is not applicable to project.
  - Supplement standard information to provide additional information applicable to project.
- B. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data:
  - 1. Clearly mark each copy to identify pertinent materials, products or models.
  - 2. Show dimensions and clearances required.
  - 3. Show performance characteristics and capacities.
  - 4. Show wiring diagrams and controls.

### 1.4 SAMPLES

A. Office Samples:

- 1. Office samples shall be of sufficient size and quantity to clearly illustrate:
  - a. Functional characteristics of product or material, with integral related parts and attachment devices.
  - b. Full range of colors and textures.
- 2. After review, suitable samples may be used in construction of project.
- Field Samples and Mock-ups (when required): Erect at project site at location acceptable to
   Architect.
- C. Unless otherwise specifically directed by the Architect, all samples shall be of the precise article or product proposed to be furnished.

#### 1.5 COLORS

Unless the precise color and pattern is specifically described in the Contract Documents, wherever a choice of color or pattern is available in the specified product, submit accurate color charts and pattern charts to the Architect for his review and selection.

### 1.6 SUBMISSION REQUIREMENTS

- A. Number of Submittals Required:
  - 1. Shop Drawings: Submit one (1) reproducible transparency and one (1) opaque print.
  - 2. Product Data: Submit the six (6) copies, two (2) of which will be retained by the Architect.
  - 3. Samples:
    - a. Submit three (3) samples.
    - Where samples must show a range of color, texture, finish, graining or other similar property, submit three (3) sets of parts, illustrating the full scope of this range.
    - c. One set of "Approved" samples will be retained by the Architect.
- B. Submittals Shall Contain:
  - 1. The date of submission and the dates of any previous submissions.
  - 2. The project title and commission number.
  - 3. The names of:
    - a. Contractor.

- b. Supplier.
- c. Manufacturer.
- 4. Identification of the product with the specification section number.
- 5. Field dimensions, clearly identified as such, to be verified by the Contractor.
- 6. Relation to adjacent or critical features of the Work or materials.
- 7. Applicable standards, such as ASTM or Federal specification numbers.
- 8. Identification of deviations from Contract Documents.
- 9. Identification of revisions on resubmittals.
- 10. An 8" x 3" blank space for Contractor's and Architect's stamps.
- 11. 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.
- All submittals shall be accompanied by a transmittal letter containing project name,
   Contractor's name, number of drawings or samples, titles, and other pertinent data.
- C. Grouping of Submittals: Unless otherwise specifically permitted by the Architect, make all submittals complete containing all associated items; the Architect may reject partial submittals as not complying with the provisions of the Contract Documents.

### 1.7 RESUBMISSION REQUIREMENTS

- A. Make all corrections or changes in the submittals required by the Architect.
- B. Shop Drawings and Product Data:
  - 1. Revise initial drawing or data as indicated and resubmit as specified in 1.6 above.
  - 2. Indicate changes which have been made since the initial submission.
- C. Samples: Submit new samples as required.

### 1.8 DISTRIBUTION

- A. Distribute reproductions of Shop Drawings and copies of product data which carry the Architect's stamp of approval to:
  - 1. Job site file.
  - 2. Record Documents file.

- 3. Other affected contractors.
- 4. Subcontractors.
- 5. Supplier or Fabricator.
- 6. Anyone else deemed necessary by the Contractor.
- 7. Owner's Representative if one is designated.
- B. Distribute samples which carry the Architect's stamp of approval as directed by the Architect.
- C. Responsibility for reproduction of processed submittal data required for distribution rests with the Contractor.
- D. The Contractor pays for prints.

# **END OF SECTION 01300**

#### **DIVISION 1 - GENERAL REQUIREMENTS**

# 01500 -- TEMPORARY FACILITIES AND CONTROLS

#### 1. GENERAL

#### 1.1 DESCRIPTION

- A. Equipment: The equipment furnished by subcontractors shall comply with all requirements of pertinent safety regulations, the chutes, ladders, hoists, planks, and similar items shall be furnished by individual trades in execution of their own portions of the Work.
- B. Utilities: Installation and hook-up of the various utility lines to the existing systems shall be made by the Contractor at locations and in the manner approved by the Architect/Engineer and shall be terminated in an approved manner. No charge will be made for these utilities, but the cost of connections and terminations shall be paid by the Contractor.

#### 2. PRODUCTS

#### 2.1 MATERIALS

- A. Temporary Utilities: Provide all water and electricity required for the performance of the Work. The Contractor can secure the utility without costs except for cost of connection and termination.
- B. Temporary Piping: Furnish and install all necessary temporary piping and, upon completion of the Work, remove all such temporary piping.

### C. Temporary Electricity:

- 1. Furnish and install all necessary temporary wiring and associated equipment.
- Furnish and install area distribution boxes so located that the individual trades may use their
  own construction type extension cords to obtain proper power and artificial lighting at all
  points where required by inspectors and for safety.

### D. Temporary Heat:

 Temporary heat shall be supplied to protect Work and materials from injury due to cold and dampness; during application, setting and curing of plaster work maintaining minimum temperature required, 50 degrees F.; for a period of ten days prior to and during erection

- and/or application of millwork, paint, flooring or other interior finish work maintaining minimum temperature 70 degrees F., until Owner's acceptance of building.
- Contractor shall provide temporary connections to all equipment requiring electrical power in order to provide temporary heat. The Contractor shall remove such temporary connections and equipment when the need for same is concluded.
- E. Telephone: Maintain in the job office a telephone for the use of the Architect and construction personnel. Equip with a buzzer. Maintain service until project is complete. Toll calls shall be paid for by person placing call.
- F. Sanitary Facilities: Furnish and install all required temporary shielded sanitary toilets for use by all personnel. Comply with all minimum requirements of all public agencies having jurisdiction.

  Maintain in a sanitary condition at all times.

#### G. Enclosures:

 General: Furnish, install and maintain for the duration of construction all required scaffolds, tarpaulins, trash chutes, barricades, dustproof partitions, canopies, warning signs, steps, bridges, platforms, and other temporary construction necessary for proper completion of the Work in compliance with all pertinent safety and other regulations.

# 2. Fencing:

- a. Contractor shall be responsible for maintaining the security and safety of the construction site through the installation of adequate fencing.
- Contractor shall provide and maintain a gate at the entry to discourage unauthorized entry.
- c. Fence and gate shall be constructed of chain link or fabric mesh on steel posts and frames, shall not be less than 4'-0" high.
- d. The use of barbed wire will not be permitted.
- e. Contractor is responsible for all materials on the site and shall provide any other fencing which is required for proper protection of the construction site.
- f. Fence shall be erected prior to the beginning of on-site construction operations and shall not be removed until the beginning of finish grading and after the building is secure from unauthorized entry.

- H. Site Restrictions:
  - 1. The following are prohibited:
    - a. Open fires; no debris shall be burned on the site.
    - b. Stoves, salamanders and tar pots.
    - c. Powder actuated devices for clearing obstructions in pipes and conduits.
- I. Hard Hats:
  - Provide ample number of hard hats for representatives of the Owner, Architect and Engineer and for visitors on official business.
- J. Removal: Maintain all temporary facilities and controls as long as needed for the safe and proper completion of the Work. Remove all such temporary facilities and controls as rapidly as progress of the Work will permit.
- K. Project Sign:
  - For construction contracts, the contractor shall supply, erect, and maintain a project sign according to the specifications set forth below and the attached USDA-RD approved sign:
    - a. Size: 4' X 8' X 3/4"
    - b. <u>Material:</u> APA Rated A-B Grade Exterior
    - c. <u>Framing:</u> 2" X 4" nominal on four sides and center cross bracing
    - d. Supports: 4" X 4" X 11' nominal post
    - e. <u>Mounting:</u> Sign is to be mounted to the 4" X 4" post with a 3/8" minimum bolt and nut, four on each side of the sign. Each bolt is to have two washers, one between the sign and the head of the bolt and the other between the post and the nut.
    - f. <u>Erection:</u> 4" X 4" posts are to set three to four feet deep into concrete 12: in diameter.
    - g. <u>Paint:</u> Face: three coats outdoor enamel (sprayed)

Rear: one coat outdoor enamel (sprayed)

- h. <u>Colors:</u> See temporary construction sign, Exhibit A
- i. Lettering: Silk screen enamel. Lettering sizes and positioning will be as illustrated.
- 2. Location and height of sign will be coordinated with the agency responsible for highway or street safety in the area, if any possibility exists for obstruction of traffic's line of sight.

- 3. The project sign will be substantially in accordance with Exhibits A and B, placed in a prominent location, and maintained in good condition until the completion of the project.
- 4. Information for items will be supplied by the engineer/architect.
- 5. Cost of sign, including erection and removal, shall be included in the lump sum or unit price bid.

### **DIVISION 1 - GENERAL REQUIREMENTS**

### 01710 -- CLEANING

### 1. **GENERAL**

### 1.1 DESCRIPTION

- A. Execute cleaning during progress of the Work, and at completion of the Work, as required by General Conditions.
- B. Related Requirements Specified Elsewhere:
  - 1. Section 01010: Summary of the Work.
  - 2. Specification Section for cleaning for specific products or work.

# 2. PRODUCTS

#### 2.1 MATERIALS

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.
- B. Use only those cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

### 3. EXECUTION

### 3.1 GENERAL CLEANING

Execute periodic cleaning to keep the Work, the site and adjacent properties free from accumulations of waste materials, rubbish, and windblown debris resulting from construction operations.

### 3.2 DUST CONTROL

- A. Clean interior spaces prior to the start of finish painting and continue cleaning on an as-needed basis until painting is finished.
- B. Schedule operations so that dust and other contaminants resulting from cleaning process will not fall on wet or newly-coated surfaces.

# 3.3 FINAL CLEANING

- A. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.
- B. Wash and shine glazing and mirrors.
- C. Polish glossy surfaces to a clear shine.
- D. Clean plumbing fixtures.
- E. Wash and wax (2 coats) all new VCT flooring.
- F. Prior to final completion, or Owner occupancy, Contractor shall conduct an inspection of sight-exposed interior surfaces, and all Work areas, to verify that the entire Work is clean.

### **DIVISION 1 - GENERAL REQUIREMENTS**

### 01720 -- PROJECT RECORD DOCUMENTS

### 1. **GENERAL**

### 1.1 DESCRIPTION

### A. Work Included:

- Throughout progress of the Work of the Contract, maintain an accurate record of all changes in the Contract Documents, as described in 3.-3.1 below.
- Upon completion of the Work of this Contract, transfer the recorded changes to a set of Record
   Documents as described below.

# 2. PRODUCTS

#### 2.1 GENERAL

Delegate the responsibility for maintenance of Record Documents to one person on the Contractor's staff.

### 2.2 ACCURACY OF RECORDS

Thoroughly coordinate all changes within the Record Documents, making adequate and proper entries on each page of Specifications and each sheet of Drawings and other documents where such entry is required to properly show the change.

### 2.3 TIMING OF ENTRIES

Make all entries within 24 hours after receipt of information.

### 2.4 PRODUCT HANDLING

Use all means necessary to maintain the job set of Record Documents completely protected from deterioration and from loss and damage until completion of the Work and transfer of the recorded data to the Architect.

#### 3. EXECUTION

### 3.1 MAINTENANCE OF JOB SET

A. Identification: Identify each of the Documents of the Job Set with the title "RECORD DOCUMENTS - JOB

# B. Preservation:

- Considering the Contract completion time, the probable number of occasions upon which the
  job set must be taken out for new entries and for examination, and the conditions under which
  these activities will be performed, devise a suitable method for protecting the job set.
- 2. Do not use the job set for any purpose except entry of new data and for review by the Architect, until start of transfer of data to final Record Documents.
- 3. Maintain the job set at the site of Work as that site is designated by the Architect.
- C. Making Entries on Drawings: Using an erasable colored pencil (not ink or indelible pencil), clearly describe the change by note and by graphic "cloud" around the area or areas affected. In the event of overlapping changes, different colors may be used for each of the changes.
- D. Accuracy of Entries: Use all means necessary, including the proper tools for measurement, to determine actual locations of the installed items.

### 3.2 CHANGES SUBSEQUENT TO ACCEPTANCE

The Contractor shall have no responsibility for recording changes in the Work subsequent to acceptance of the Work by the Owner, except for changes resulting from replacements, repairs, and alterations made by the Contractor as part of his guarantee.

### **DIVISION 3 – CONCRETE**

#### **03300 – CONCRETE**

# 1. GENERAL

#### 1.1 DESCRIPTION

- A. Work Included: Installing new concrete slabs, and patching existing slabs at designated areas.
- B. Related Documents: The general Conditions, Supplementary Conditions and Division 1, General Requirements, are a part of this Section.

# 1.2 STANDARDS

- A. Latest edition of standards of the following organizations:
  - 1. American Concrete Institute (ACI):
    - a. ACI 301 "Specifications for Structural Concrete for Buildings".
    - b. ACI 302 "Guide for Concrete Floor and Slab Construction".
    - c. ACI 304 "Recommended for Measuring, Mixing, Transporting and Placing Concrete".
    - d. ACI 305 "Hot Weather Concreting".
    - e. ACI 306 "Cold Weather Concreting".
    - f. ACI 309 "Recommended Practice for Consolidation of Concrete".
    - g. ACI 311 "Guide for Concrete inspection".
    - h. ACI 318 "Building Code Requirements for Reinforced Concrete".
    - i. ACI 347 "Recommended Practice for Concrete Formwork".
  - 2. American Society for Testing and Materials (ASTM).
  - 3. Concrete Reinforcing Steel Institute (CRSI) "Manual of Standard Practice".

### 1.3 SUBMITTALS

A. Product Data: Submit manufacturer's product data with application and installation instructions for proprietary materials specified.

### B. Shop Drawings:

- 1. Mix Design: Submit mix designs as required by Part 2 of this Section.
- 2. Submit Shop Drawings for concrete designated as "Architectural Concrete" in accordance with specified requirements for architectural concrete finishes.
- C. Certificate of Compliance: Provide materials certificates in lieu of materials laboratory test reports when permitted by the Architect. Materials certificates shall be signed by manufacturer and Contractor, certifying that each material item complies with, or exceeds, specified requirements.

### 1.4 HANDLING AND STORAGE

Protect reinforcement until used. Materials containing ice, rust or hardened cement shall not be used.

### 1.5 QUALITY ASSURANCE

- A. The Contractor is responsible for corrections of concrete work which does not conform to the specified requirements, including strength, tolerances and finishes. Correct deficient concrete as directed by the Architect.
- B. Materials and installed work may require testing and retesting, as directed by the Architect, at any time during progress of work. Allow free access to material stockpiles and facilities. Tests, not specifically indicated to be done at Owner's expense, including retesting of rejected materials and installed work, shall be done at Contractor's expense.

### 2. PRODUCTS

### 2.1 MATERIALS

Materials shall conform to the following:

- A. Portland Cement: ASTM C150 for standard concrete and C175 for air entrained concrete exposed to freezing.
- B. Coarse Aggregate: ASTM C144, crushed stone graded from 1/4" to 1".
- C. Sand: ASTM C33, hard coarse grains free from slab, loam or clay.
- D. Water: Clean, fresh and free from injurious amounts of vegetable matter, alkalies and other salts.
- E. Ready Mixed Concrete: ASTM C94.
- F. Reinforcing Bars: ASTM A615, 616, 617, deformed, clean and free from rust, scale, oil and grease.

- G. Mesh Reinforcement: ASTM A497, welded steel wire mesh 6" X 6", #10 ga.
- H. Expansion Joints: ASTM D544, premolded impregnated fiberboard expansion joint filler, 1/2" thick.
- I. Vapor barrier: 6 mil. polyethylene sheets, Visqueen, Plastisheet, Polyprine or Rex at all new interior slabs.
- J. Rigid Perimeter Insulation: 1" expanded Polystyrene, Styrofoam, Thermco, or Southeastern Foam at all new interior slabs.

### 2.2 STRENGTH AND MIXES

- A. Concrete shall be designed by a recognized testing laboratory to provide the following:
  - 1. For all concrete exposed to freezing and thawing: 3000 psi at age 28 days.
  - 2. For all other (including slabs and footings): 2500 psi at age 28 days.
- B. Certificates of compliance with design mix and proportions shall be submitted for approval.
- C. Concrete shall be plant-mixed in an approve power mixer to ensure uniform distribution of the materials throughout in accordance with the recommendations of the Portland Cement Association.

### 2.3 PERIMETER INSULATION

Rigid insulation board shall be installed around the entire perimeter of all interior floor slabs, against all vertical surfaces for the depth of the slabs extending back under the slab edges not less than 24" and secured in place to prevent displacement during pouring operations.

#### 2.4 EXPANSION JOINTS

Premolded joint filler shall be provided continuously at all points where slabs abut vertical surfaces for the full depth of the slabs and shall be secured in place to prevent displacement during pouring operations. Joint filler is not required where perimeter insulation is installed and is turned vertically for the full depth of the slab.

### 3. EXECUTION

#### 3.1 INSTALLATION

A. Forms for Concrete:

- Design, erect, support, brace and maintain formwork to support vertical and lateral
  loads that might be applied until such loads can be supported by the concrete structure.
  Construct formwork so concrete members and structures are of correct size, shape,
  alignment, elevation and position. Use largest facing members practicable.
- Design formwork shall be readily removable without impact, shock or damage to castin-place concrete surfaces and adjacent materials.
- 3. Construct forms to sizes, shapes, lines and dimensions shown, and to obtain accurate alignment, location, grades, level and plumb work in finished structures. Provide for opening, offsets, sinkages, keyways, inserts and other features required in Work. Use selected materials to obtain required finish. Solidly butt joints and provide back-up at joints to prevent leakage of cement paste.
- 4. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Kerf wood inserts for forming keyways, reglets, recesses, and the like, to prevent swelling and for easy removal.
- Construct forms of materials that will produce concrete surface finishes which are free from honeycombing.
- 6. Construct forms in accordance with ACI Publication SP-4 (ACI 347 "Recommended Practice for Concrete Formwork").
- 7. Inspect and clean forms of dirt, debris, and water before placing concrete.
- 8. Excavate where soil conditions permit to accurate sizes without bracing; side forms of footings may be omitted.
- Maintain forms and shores in place until the concrete has developed ample strength to support construction loads.
- B. Installation of Joints and Embedded Items:
  - Isolation joint filler shall be continuous and full thickness of slab where slab abuts a vertical surface. Tightly seal joints with coal tar pitch or asphalt mastic.
  - 2. Construction Joints:
    - a. Locate and install construction joints so as not to impair the strength and appearance of the structure, as acceptable to the Architect.

- b. Provide keyways at least 1-1/2" deep in all construction joints in walls, slabs and between walls and footings. Accepted bulkheads, designed for this purpose, may be used for slabs.
- Place construction joints perpendicular to the main reinforcement. Continue all reinforcement across construction joints.
- Embedded items: Place sleeves, inserts, anchors and embedded items required for adjoining work or for support prior to placing concrete.

### C. Placing Reinforcement:

- 1. Details of reinforcing shall conform to ACI 315 and CRSI standards.
- 2. Place reinforcement accurately in position. Securely fasten and support to prevent displacement before or during the placing of concrete.
- A thin coating of red rust resulting from short exposure will not be considered objectionable.
- 4. Clean reinforcement of loose rust and mill scale, earth, ice, and other materials which reduce or destroy bond with concrete.
- 5. Install welded wire fabric in as long lengths as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset end laps in adjacent widths to prevent continuous laps in either direction.
- D. Porous Fill: Place clean porous fill over subgrade of surfaces indicated, to compacted depth indicated, evenly rolled and tamped.

### E. Vapor Retarder:

- Lay, over fill, in accordance with manufacturer's recommendations and good practices.
- 2. Seal pipe, conduit, and other projections through slab and vapor retarder with an approved mastic extending approximately 6" on sides of puncture.
- Protect vapor retarder from punctures caused by workmen or equipment during placement of concrete.

### F. Placing Concrete:

 Preplacement Inspection: before placing concrete, Architect and Owner shall inspect and complete the formwork installation, reinforcing steel, and items to be embedded or

- cast-in. Notify other crafts to permit the installation of their work; cooperate with other trades in wetting such work, as required. Thoroughly wet wood forms immediately before placing concrete, as required, where form coatings are not used.
- Coordinate the installation of joint materials and moisture barriers with placement of forms and reinforcing steel.
- Handle and place concrete in accordance with the ACI 304 "Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete".
- 4. Do not place concrete until water and foreign matter have been removed from forms and excavations; until vapor retarder has been placed for floor slabs, and reinforcing, sleeves, pipes, conduits, supports and similar items have been placed and anchored.
- Cold weather concrete work shall be in accordance with ACI Recommendation 306. Hot weather concrete shall be in accordance with ACI Recommendation 305.
- 6. Follow procedures included in Paragraph 8.5 of ACI 301 in bonding new concrete to hardened concrete. Use the specified bonding compound or epoxy adhesive.
- 7. Drop concrete vertically through suitable hopper, chutes or elephant trucks, in uniform horizontal layers not deeper than 24". Avoid building up large piles and consequent segregation by spreading.
- 8. Vibrate concrete mechanically, using type and number as approved by Architect.

  Supplement mechanical vibration with hand tamping as required around pipes, inserts and other obstructions. Proper vibration of concrete and adequate hand spreading at face of forms is required. Do not use vibrators to transport concrete within forms.

  Vibration of forms is prohibited.

### G. Floor Slabs:

- 1. Set isolation joint fillers as indicated or specified.
- Set slab thickness with free-standing screeds of wood or metal. Staking of elevations is not acceptable.
- Place slabs on grade in a "strip-cast" pattern. Control joints or construction joints shall be provided along all column centerlines and as indicated on the Drawings.
- 4. Construction joints may be provided in lieu of control joints at the option of the Contractor. if cut with saw, sawing shall take place as soon as surface is firm enough so as not to be torn or damaged by the blade.

- Consolidate concrete during placing operations so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
- Finish, unless otherwise noted, shall be a light broom finish for all exposed building floor concrete. Strike off to true surface at proper elevations and profiles and before free water has appeared on the surface.
- 7. Do not use dry cement, or mixture of cement and sand, to absorb surface moisture or stiffen mix.
- 8. Level finished floor surfaces to a tolerance of 1/4" in 10' when measured with a 10' straightedge.

#### H. Tests:

- 1. Owner's Agent (Testing Service) shall make test cylinders at time of placing, in accordance with Paragraph 16.3 of ACI 301.
- Arrange with testing laboratory for delivery of adequate supply of empty test cylinders to job and later pick-up of samples ready for testing at testing laboratory.
- 3. If the 28-day tests fail to meet minimum ultimate compressive design strength, concrete shall be considered defective, and cores from selected areas may be taken as directed by the engineer and in accordance with ACI 318. If compressive tests of core specimens fail to meet desired design strength, concrete work shall be assumed to be defective and shall be further tested and, if required, adequately strengthened or removed and replaced in a manner acceptable to the engineer. Costs of coring, testing of work-in-place cores, and all necessary repair pertaining thereto, shall be at the Contractor's expense.

### I. Cold Weather Placing:

- Protect concrete work from physical damage or reduced strength, which could be caused by frost, freezing actions, or low temperatures, in compliance with ACI 306 and as herein specified.
- 2. When air temperature has fallen to or is expected to fall below 40 degrees F., uniformly heat all water and aggregates before mixing as required to obtain a concrete mixture temperature of not less than 50 degrees F., and not more than 80 degrees F. at point of placement.
- 3. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.

4. Do not use calcium chloride, salt and other materials containing antifreeze agents or chemical accelerators.

### J. Hot Weather Placing:

- When hot weather conditions exist that would seriously impair the quality and strength of concrete, place concrete in accordance with ACI 305 and as herein specified.
- Cool ingredients before mixing to maintain concrete temperature at time of placement below 90 degrees F. Mixing water may be chilled or chopped ice may be used to control the concrete temperature, provided the water equivalent of the ice is calculated to the total amount of the mixing.
- Cover reinforcing steel with water-soaked burlap, if it becomes too hot, so that the steel temperature will not exceed the ambient air temperature immediately before embedment in concrete.
- 4. Wet forms thoroughly before placing concrete.

# K. Finish of Formed Surfaces:

Rough Form Finish: For formed concrete surface snot exposed to view in the finished
work or by other construction, unless otherwise indicated. This is the concrete surface
having the texture imparted by the form facing material used, with tie holes and
defective areas repaired and patched, and fins and other projection exceeding 1/4" in
height rubbed down or chipped off.

### L. Floor Slab Finishing:

#### 1. Trowel Finish:

- a. Apply trowel finish to monolithic slab surfaces that are to be exposed to view,
   unless otherwise shown, and slab surfaces that are to be covered with tile
   flooring, paint or other thin film finish coating system.
- After floating, begin first trowel finish operation using a power-driven trowel.
   Begin final troweling when surface produces a ringing sound as trowel is moved over surface.
- c. Vertical Surfaces: Provide smooth form finish surface free of any trowel marks or knot opening imperfections.
- 2. Non-slip Broom Finish (horizontal surfaces): Apply non-slip broom finish to exterior concrete platforms, steps, ramps and elsewhere, as shown on Drawings or in schedules.

Immediately after trowel finishing, slightly roughen concrete surface by brooming with fiber bristle broom perpendicular to main traffic route. Coordinate required final finish with the Architect before application.

#### M. Curing and Protection:

- Follow methods and recommended practice as described in ACI standard's and manufacturer's printed directions in protecting and curing concrete.
- The curing and sealing compound shall be applied on all slabs to receive resilient tile, carpet, or left exposed, immediately after finishing operations are complete. The surface shall be damp with no free water on it. Application shall be with a short nap roller/coater or brush. Professional spray equipment approved by manufacturer may be used. Apply at the rate recommended by the manufacturer. Do not overlap applications. Thick accumulation shall be avoided. Use clear styrene-butadiene type on all exterior slabs, sidewalks and curbs.
- N. Removal of Forms: Remove forms in conformance with local building code and without damage to concrete.

#### O. Miscellaneous Concrete Items:

- Filling In: Fill in holes and openings left in concrete structures for passage of work by
  other trades, unless otherwise shown or directed, after work of other trades is in place.
  Mix, place and cure concrete to blend with in-place construction, as herein specified.
  Provide other miscellaneous concrete filling shown or required to complete work.
- Equipment Bases and Foundations: Provide machine and equipment bases and foundations, as shown on Drawings. Set anchor bolts for machines and equipment to template at correct elevations, complying with certified diagrams or templates of the manufacturer finishing machines and equipment.
- P. Reinforced masonry: Provide concrete grout for reinforced masonry lintels and bond beams where indicated on Drawings and as scheduled. Maintain accurate location of reinforcing steel during concrete placement.

### **DIVISION 4 -- MASONRY**

### 04200 -- UNIT MASONRY

#### 1. GENERAL

#### 1.1 DESCRIPTION

- A. Furnish and install all unit masonry and accessories, including, but not necessarily limited to the following:
  - 1. Infill patching of existing CMU/brick walls.
  - 2. Cleaning all existing brick masonry.
- B. Related Documents: The General Conditions, Supplementary Conditions and Division 1, General Requirements, are a part of this Section.
- C. Coordination: Cooperate with other trades in setting built-in items in masonry walls. tarpaulins which are not vapor retarders and store in a manner to provide protection from contact with soil. Exercise care in handling masonry units to avoid chipping and breakage.

# 3. <u>EXECUTION</u>

### 3.1 GENERAL REQUIREMENTS

A. Do not clean masonry when air temperature is below or expected to go below 40 degrees F. except when permitted by Architect. When masonry work is authorized during temperatures below 40 degrees F., make provisions for heating and drying materials.

Protect completed work in accordance with BIA Technical Notes, Volume 1, No. 1. Do not build upon frozen work. Do not lay masonry units having water film or frost on its surface.

### 3.2 CLEANING

- A. Progress work in as clean a manner as possible; remove excess materials, mortar droppings daily.

  Remove mortar droppings on connecting or adjoining work before final set. Keep edge of scaffolding boards 2" minimum away from face of wall.
- B. Remove and replace masonry units which are loose, chipped, broken, stained, or otherwise damaged or if units do not match adjoining units as intended. Provide new units to match

adjoining units and install in fresh mortar or grout, pointed to eliminate evidence of replacement.

# C. Pointing:

- During the tooling of joints, enlarge any voids or holes, except weep holes, and completely fill with mortar.
- 2. Pointing Schedule: All joints concave.
- Point up all joints at corners, openings and adjacent work to provide a neat, uniform appearance,
   properly prepared for application of caulking or sealant compounds.
- E. Final Cleaning: After mortar is thoroughly set and cured, clean sample wall area of approximately
   20 sq. ft. as follows. Obtain Architect's acceptance of sample cleaning before proceeding to clean rest of masonry work.
  - Dry clean to remove large particles of mortar using wood paddles and scrapers. Use chisel or wire brush if required.
  - 2. Presoak wall by saturating with water and flush off loose mortar and dirt.
  - 3. Scrub down wall with stiff fiber brush and a detergent as specified.
  - 4. Rinse walls, using clean, pressurized water, to neutralize cleaning solution and remove loose material.
  - 5. Acid cleaning of masonry will not be permitted.

### **05500 -- MISCELLANEOUS METALS**

#### 1. GENERAL

### 1.1 DESCRIPTION

- A. Work Included: The extent of miscellaneous metal Work is shown on Drawings and includes, but is not necessarily limited to, rough hardware, miscellaneous steel trim, metal site pipe rails, and applications where framing and supports are not specified in other sections.
- B. Related Work Described Elsewhere: The general provisions of the Contract, including General and Supplementary Conditions and General Requirements apply to the Work specified in this Section.

# 1.2 QUALITY ASSURANCE

# A. Field Measurements:

- Take field measurements prior to preparation of Shop Drawings and fabrication, where possible.
- Do not delay job progress; allow for trimming and fitting wherever taking field measurements before fabrication might delay Work.

### B. Inserts and Anchorages:

- Furnish inserts and anchoring devices which must be set in concrete or built into masonry for installation of miscellaneous metal Work.
- Provide setting drawings, templates, instructions and directions for installation of anchorage devices.
- 3. Coordinate delivery with other Work to avoid delay.

### C. Shop Assembly:

- Preassemble items in shop to greatest extent possible to minimize field splicing and assembly.
- Disassemble units only as necessary for shipping and handling limitations.
   Clearly mark units for reassemble and coordinated installation.

### 1.3 SUBMITTALS

- A. Manufacturer's Data, Miscellaneous Metal:
  - For information only, submit two copies of manufacturer's specifications, anchor
    details and installation instructions for products to be used in the fabrication of
    miscellaneous metal Work, including paint products.
  - Indicate by transmittal that copy of instructions has been distributed to the installer.
- B. Shop Drawings, Miscellaneous Metal:
  - Submit Shop Drawings for fabrication and erection of miscellaneous metal
    assemblies. Include plans and elevations at not less than 1" to 1'-0" scale, and
    include details or sections and connections at not less than 3" to 1'-0" scale.
  - Show anchorage and accessory items. Provide templates for anchor and bolt installation by others.

#### 2. PRODUCTS

#### 2.1 MATERIALS

# A. Ferrous Metals:

- Metal Surfaces: For metal fabrications exposed to view upon completion of the
  work, provide materials selected for their surface flatness, smoothness and
  freedom from surface blemishes. Do not use materials whose exposed surfaces
  exhibit pitting, seam marks, roller marks, rolled trade names, roughness, and for
  steel sheet, variations in flatness exceeding those permitted by reference
  standards for stretcher leveled sheet.
- 2. Steel Plates, Shapes, and Bars: ASTM A 36.
- 3. Rolled Steel Floor Plates: ASTM A 786.
- 4. Steel Tubing:
  - a. Cold Formed Steel Tubing: ASTM A 512.
  - For exterior installations and where indicated, provide tubing with hot dip galvanized coating per ASTM A 53.

- 5. Steel Pipe:
  - a. ASTM A 53.
  - b. Black finish, unless otherwise indicated.
  - Type S, Grade B, standard weight (schedule 40), unless otherwise indicated,
     or another weight required by structural loads.
- 6. Brackets, Flanges and Anchors: Cast or formed metal of the same type, material and finish as supported rails, unless otherwise indicated.
- Concrete Inserts: Threaded or wedge type; galvanized ferrous castings, either
  malleable iron, ASTM A 47, or cast steel, ASTM A 27. Provide bolts, washers, and
  shims as required; hot dip galvanized per ASTM A 153.
- 8. Welding Rods and Bare Electrodes: Select in accordance with AWS specifications for the metal alloy to be welded.
- B. Grout and Anchoring Cement:

a.

- Nonshrink Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with CE CRD-C 621. Provide grout specifically recommended by manufacturer for interior and exterior applications of type specified in this section.
- 2. Erosion Resistant Anchoring Cement: Factory prepackaged, nonshrink, nonstaining, hydraulic controlled expansion cement formulation for mixing with water at project site to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without need for protection by a sealer or waterproof coating and is recommended for exterior use by manufacturer.
- 3. Available Products: Subject to compliance with requirements, products that may be Incorporated in the work include, but are not limited to the following:

Nonshrink Nonmetallic Grouts:	
"Bonsal Construction Grout", W.R. Bonsal Co.	
"Diamond-Crete Grout", Concrete Service Materials	
"Euco N-S Grout", Euclid Chemical Co.	

"Kemset", Chem-Masters Corp.
"Crystex", L&M Construction Chemicals, Inc.
"Masterflow 713", Master Builders
"Sealtight 588 Grout", W.R. Meadows, Inc.
"Sonogrout", Sonneborn Building Products Div., Rexnord Chemical
products, Inc.
"Stoncrete NM1", Stonhard, Inc.
"Five Star Grout", U.S. Grout Corp.
"Vibropruf #11", Lambert Corp.

Erosion Resistant Anchoring cement: "Super Por-Rok", Minwax Construction

### C. Fasteners:

b.

- Provide zinc coated fasteners for exterior use or where built into exterior walls.
   Select fasteners for the type, grade and class required.
- 2. Bolts and Nuts: Regular hexagon head type, ASTM A 307, Grade A.
- 3. Lag Bolts: Square head type, FS FF-B-561.

Products Division.

- 4. Machine Screws: Cadmium plated steel, FS FF-S-92.
- 5. Wood Screws: Flat head carbon steel, FS FF-S-111.
- 6. Plain Washers: Round, carbon steel, FS FF-W-92.
- Drilled-in Expansion Anchors: Expansion anchors complying with FS FF-S-325,
   Group VIII (anchors, expansion, nondrilling), Type I (internally threaded tubular expansion anchor), and machine bolts complying with FS FF-B-575, Grade 5.
- 8. Toggle Bolts: Tumble wing type, FS FF-B-588, type, class and style as required.
- 9. Lock Washers: Helical spring type carbon steel, FS FF-W-84.

### D. Paint:

 Shop Primer for Ferrous Metal: Manufacturer's or fabricator's standard, lead free, universal modified alkyd primer selected for good resistance to normal atmospheric corrosion, for compatibility with finish paint systems indicated, and for capability to provide a sound foundation for field applied topcoats despite

- prolonged exposure complying with performance requirements of FS TT-P-645.
- Galvanizing Repair Paint: High zinc dust content paint for regalvanizing welds in galvanized steel, with dry film containing not less than 94% zinc dust by weight, and complying with DOD-P-21035 or SSPC-Paint-20.
- Bituminous Paint: Cold applied asphalt mastic complying with SSPC Paint 12
  except containing no asbestos fibers.
- 4. Zinc Chromate Primer: FS TT-P-645.

### E. Concrete Fill and Reinforcing Materials:

- Concrete Materials and Properties: Comply with requirements of Division 3 for normal weight, ready-mix concrete with minimum 28-day compressive strength of 2,500 psi, 440 lb. cement per cu. ft. minimum, and W/C ratio of .65 maximum, unless higher strengths indicated.
- 2. Reinforcing Bars: ASTM A 615, Grade 60, unless otherwise indicated.

# F. Handrails and Guardrails:

- 1. Handrail Brackets: Angled steel bars, painted.
- 2. Continuous Handrail/Guardrail: 1-1/2-inch diameter OD steel tube, painted.

# 2.2 FABRICATIONS

### A. General:

- Form metal fabrications from materials of size, thickness, and shapes indicated
  but not less than that needed to comply with performance requirements indicated.
  Work to dimensions indicated or accepted on shop drawings, using proven details
  of fabrication and support. Use type of materials indicated or specified for
  various components of each metal fabrication.
- Form exposed work true to line and level with accurate angles and surfaces and straight, sharp edges.
- 3. Allow for thermal movement resulting from the following maximum change (range) in ambient temperature in the design, fabrication, and installation of installed metal assemblies to prevent buckling, opening up of joints, and overstressing of welds and fasteners. Base design calculations on actual surface temperatures of

- metals due to both solar heat gain and nighttime sky heat loss.
- 4. Temperature Change Range: 100 deg. F.
- 5. Shear and punch metals cleanly and accurately; remove burrs.
- Ease exposed edges to a radius of approximately 1/32" unless otherwise indicated.
   Form bent metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- 7. Weld corners and seams continuously to comply with AWS recommendations and the following:
  - Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - b. Obtain fusion without undercut or overlap.
  - c. Remove welding flux immediately.
  - d. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing and contour of welded surface matches those adjacent.
- 8. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners wherever possible. Use exposed fasteners of type indicated or, if not indicated, Phillips flat head (countersunk) screws or bolts. Locate joints where least conspicuous.
- Provide for anchorage of type indicated; coordinate with supporting structure;
   fabricate and space anchoring devices to provide adequate support for intended use.
- 10. Shop Assembly: Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- Cut, reinforce, drill and tap miscellaneous metal work as indicated to receive finish hardware, screws, and similar items.
- 12. Fabricate joints that will be exposed to weather in a manner to exclude water, or

provide weep holes where water may accumulate.

### B. Rough Hardware:

- Furnish bent or otherwise custom fabricated bolts, plates, anchors, hangers, dowels, and other miscellaneous steel and iron shapes as required for framing and supporting woodwork, and for anchoring or securing woodwork to concrete or other structures. (See Division 6.)
- Fabricate items to sizes, shapes, and dimensions required. Furnish malleable iron
  washers for heads and nuts which bear on wood structural connections; elsewhere, furnish
  steel washers.

### C. Steel Pipe Railings and Handrails:

- Fabricate pipe railing and handrails to comply with requirements indicated for design,
  dimensions, details, finish and member sizes, including wall thickness of pipe, post spacings,
  and anchorage, but not less than that required to support structural loads.
- Interconnect railing and handrail members by butt-welding or welding with internal connectors, at fabricator's option, unless otherwise indicated.
- At tee and cross intersections, notch ends of intersecting members to fit contour of pipe to which end is joined and weld all around.
- 4. Form changes in direction of railing members as follows:
  - a. By radius bends of radius indicated.
  - b. By mitering at elbow bends, where indicated.
  - c. By bending.
  - d. By any method indicated above, applicable to change of direction involved.
- 5. Form simple and compound curves by bending pipe in jigs to produce uniform curvature for each repetitive configuration required. Maintain cylindrical cross section of pipe throughout entire bend without buckling, twisting, cracking or otherwise deforming exposed surfaces of pipe.
- 6. Provide wall returns at ends of wall mounted handrails, unless otherwise indicated.
- Close exposed ends of pipe by welding 3/16-inch thick steel plate in place or by use of
  prefabricated fittings as approved, except where clearance of end of pipe and adjoining wall

- surface is 1/4-inch or less.
- 8. Brackets, Flanges, Fittings and Anchors: Provide wall brackets, end closures, flanges, miscellaneous fittings, and anchors for interconnections of pipe and attachment of railings and handrails to other work. Furnish inserts and other anchorage devices for connecting railings and handrails to concrete or masonry work.
- 9. For railing posts set in concrete, fabricate sleeves from steel pipe not less than 6 inches long and with an inside diameter not less than 1/2-inch greater than the outside diameter of the post, with steel plate closure welded to bottom of sleeve.
- Provide friction fit, removable covers designed to keep sleeves clean and hold top edge of sleeve 1/2-inch below finished surface of concrete.

#### 2.3 STEEL AND IRON FINISHES

#### A. General:

- Galvanizing: For those items indicated for galvanizing, apply zinc coating by the hot dip process in compliance with the following requirements:
  - a. ASTM A 153, for galvanizing iron and steel hardware.
  - b. ASTM A 123 for galvanizing both fabricated and unfabricated iron and steel products made of uncoated, rolled, pressed, and forged shapes, plates, bars, and strip .0299" thick and heavier.
- 2. Preparation for Shop Priming: Prepare uncoated ferrous metal surfaces to comply with minimum requirements indicated below for SSPC surface preparation specifications and environmental exposure conditions of installed metal fabrications:
  - a. Exteriors (SSPC Zone 1B): SSPC-SP6 "Commercial Blast Cleaning"
  - b. Interiors (SSPC Zone 1A): SSPC-SP3 "Power Tool Cleaning"
- 3. Apply shop primer to uncoated surfaces of metal fabrications, except those with galvanized finish or to be embedded in concrete, sprayed on fireproofing, or masonry, unless otherwise indicated. Comply with requirements of SSPC-PA1 "Paint Application Specification No. 1" for shop painting.

# 3. EXECUTION

### 3.1 INSPECTION

- A. Installer must examine the areas and conditions under which miscellaneous metal items are to be installed. Notify the Contractor in writing of conditions detrimental to the proper and timely completion of the Work.
- B. Do not proceed with the Work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

### 3.2 PREPARATION

- A. Furnish setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, such as concrete inserts, anchor bolts and miscellaneous items having integral anchors, which are to be embedded in concrete or masonry construction.
- B. Coordinate delivery of such items to project site.

#### 3.3 INSTALLATION

- A. Setting Loose Bearing Plates:
  - Clean concrete and masonry bearing surfaces of any bond-reducing materials, and roughen to improve bond to surfaces. Clean the bottom surface of bearing plates.
  - Set loose bearing plates on wedges, or other adjustable devices. After the joists have been
    positioned and plumbed, tighten the anchor bolts. Do not remove wedges or shims, but if
    protruding, cut off flush with the edge of the bearing plate before packing with mortar.
  - Pack bedding mortar solidly between bearing surfaces and plates to ensure that no voids remain.
- B. Fastening to In-place Construction: Provide anchorage devices and fasteners where necessary for securing miscellaneous metal items to in-place construction, including threaded fasteners for concrete and masonry inserts, toggle bolts, through-bolts, lag bolts, wood screws and other connectors as required.
- C. Cutting, Fitting, and Placement:
  - 1. Perform cutting, drilling and fitting required for installation of miscellaneous metal items.
  - Set Work accurately in location, alignment and elevation, plumb, level, true and free of rack, measured from established lines and levels.

3. Provide temporary bracing or anchors in formwork for items which are to be built into concrete, masonry or similar construction.

# D. Fitting Exposed Connections:

- Fit exposed connections accurately together to form tight hairline joints. Weld connections
  which are not to be left as exposed joints, but cannot be shop welded because of shipping
  size limitations.
- 2. Grind joints smooth and touch-up shop paint coat.
- 3. Do not weld, cut or abrade the surfaces of exterior units which have been hot-dip galvanized after fabrication, and are intended for bolted or screwed field connections.
- E. Field Welding: Comply with AWS Code for procedures of manual shielded metal-arc welding, appearance and quality of welds made, and methods used in correcting welding Work.
- F. Touch-up Painting:
  - Immediately after erection, clean field welds, bolted connections, and abraded areas of shop
    paint, and paint exposed areas with same material as used for shop painting.
  - 2. Apply by brush or spray to provide a minimum dry film thickness of 2.0 mils.

### **DIVISION 6 - WOOD AND PLASTICS**

# 06100 -- ROUGH CARPENTRY

### 1. GENERAL

#### 1.1 RELATED DOCUMENTS

The General Conditions, Supplementary Conditions and Division 1, General Requirements, are a part of this Section.

#### 1.2 QUALITY ASSURANCE

### A. Grading Rules:

- Grading of lumber of various species shall be in accordance with "American Softwood Lumber Standard" PS 20-70, U.S. Department of Commerce (National Grading Rule, a U.S. Product Standard).
- Grading of plywood shall be in accordance with U.S. Product Standard PS 1-74, U.S.
   Department of Commerce, and shall be identified with the appropriate grade trademark of the American Plywood Association (APA).
- 3. Each piece of yard, structural lumber and plywood shall bear official grade mark of appropriate inspection bureau or association, except for grounds or furring.

#### 1.3 STORAGE AND HANDLING

Stack materials delivered to site off ground and cover to ensure proper ventilation and weather protection. Stack to provide air circulation within stacks.

### 2. PRODUCTS

#### 2.1 MATERIALS

- A. Framing Lumber 2" through 4" Thick: #2 southern yellow pine.
- B. Lumber Size and Moisture Content: Lumber shall be surfaced four sides unless otherwise indicated. Dressed sizes of yard, structural lumber shall be in accordance with national grading rule. Nominal sizes are indicated, except as shown by detail dimensions.

- C. Board, dimension lumber shall be kiln dried with moisture content in accordance with national grading rule but shall not exceed 15% for dimension lumber and board lumber 8" or less in width.
- D. Plywood: Provide the following plywood, dried to a maximum moisture content of 15%, except plywood to be coated with a transparent finish or painted shall be dried to a maximum moisture content of 11%.
  - 1. Interior: Concealed C-D plugged/interior fir.
  - 2. Exterior: Concealed C-D/exterior fir.

### E. Miscellaneous Materials:

- 1. Fasteners and Anchorages:
  - a. Provide fasteners and anchorages of size and type as indicated by applicable
     standards, complying with federal specifications for nails, screws, staples, bolts, nuts,
     washers and anchoring devices.
  - b. Fasteners in treated wood shall be galvanized.
- 2. Building paper shall be asphalt saturated felt, non-perforated, ASTM D226.

### 3. EXECUTION

#### 3.1 INSTALLATION

- A. Fit carpentry work to other work; scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, grounds and similar supports to allow proper attachment of other work.
- B. Set carpentry work accurately to required levels and lines, with members plumb and true and accurately cut and fitted.
- C. Securely attach carpentry work to substrate by anchoring and fastening as shown and as required by recognized standards. Countersink nail heads on exposed carpentry work and fill holes. Use common wire nails, except as otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or

will receive finish materials. Make tight connections between members. Install fasteners without splitting of wood; predrill as required.

#### D. Wood Grounds, Nailers, Blocking and Sleepers:

- Provide wherever shown and where required for screwing or attachment of other work.
   Form to shapes as shown and cut as required for true line and level of work to be attached.
   Coordinate location with other work involved.
- 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.
- Provide permanent grounds of dressed, preservative treated, key-beveled lumber not less than 1-1/2" wide and of thickness required to bring face of ground to exact thickness of finish material involved. Remove temporary grounds when no longer required.

### E. Wood Framing:

- Provide framing members of sizes and on spacings shown, and frame openings as shown.
   Do not splice structural members between supports.
- Firestop concealed spaces with wood blocking not less than 2" thick, if not blocked by other framing members. Provide blocking at each building story level and at ends of joist spans.

### F. Installation of Plywood:

- 1. Comply with recommendations of APA for installation of plywood.
- Install sheathing and subflooring as recommended by APA's "Guide to Plywood Sheathing for Floors, Walls, and Roofs" for spacing of supports or types of substrates involved.

### **DIVISION 6 - WOOD AND PLASTICS**

### 06200 -- FINISH CARPENTRY

#### 1. GENERAL

### 1.1 DESCRIPTION

### A. Work Included:

- Furnish and install all finish carpentry, including but not limited to, interior wood trim and shelving as noted on the Drawings.
- Finish carpentry as used herein means: "All interior and exterior woodwork exposed to view in finished building."

### B. Related Work Described Elsewhere:

- 1. Section 06100: Rough Carpentry.
- 2. Section 06400: Architectural Woodwork.

#### 1.2 QUALITY ASSURANCE

- A. Qualifications of Workmen: For actual cutting and fitting of trim and finish material, provide journeyman finish carpenters who are thoroughly trained and experienced.
- B. Quality Standards: The Quality Standards of the Architectural Woodwork Institute shall apply and by reference are made a part of this Specification.
- C. Quality Grade: Material for all interior and exterior woodwork for paint and clear finish shall conform to the premium grade requirements of the AWI Quality Standards.

### 1.3 PRODUCT HANDLING

- A. Protection: Protect the materials of this Section before, during and after installation and protect the installed Work and materials of all other trades.
- B. Replacements: In the event of damage, immediately make all replacements necessary to the approval of and at no additional cost to the Owner.

### 1.4 SUBMITTALS

### A. Shop Drawings:

1. Submit Shop Drawings for approval in accordance with Specifications.

Shop Drawings shall be furnished for all woodwork, except stock items referred to by
manufacturer's catalog number, and shall be drawn in related and/or dimensional position
with sections shown either full size or 3" scale.

# 2. PRODUCTS

### 2.1 MATERIALS

# A. Wood Species:

- 1. All interior wood for paint finish, including sills, caps, moldings and casings, shall be clear poplar, fir or Ponderosa pine, finger-jointed, in sizes to match the existing trim or as shown on Drawings.
- 2. All interior door metal and wood frames shall be trimmed out as described below.
- 3. All interior wood base shall be standard 1x4 to match existing profiles, with shoe moulding at all vinyl floor surfaces.
- 4. All rod/shelf units shall be 12 inches deep vinyl coated wire units with brackets.
- 5. All casing shall be standard 1x4 to match existing profiles.
- 6. All shoe mold shall be 1/4 round painted wood.
- 7. All new chair rail shall match existing profiles.

# 3. EXECUTION

# 3.1 INSPECTION

- A. Prior to Work, inspect the installed Work of all other trades and verify that all such Work is complete to the point where this installation may properly commence.
- B. Discrepancies: In the event of discrepancy, do not proceed with installation until discrepancies have been resolved.

### 3.2 INSTALLATION

### A. Workmanship:

- 1. All finish carpentry shall produce joints true, tight and well nailed.
- 2. Jointing:
  - Make all joints to conceal shrinkage, miter all exterior corners, cope all interior corners, and miter or scarf all end-to-end joints.

 Install all trim in pieces as long as possible, jointing only where solid support is obtained.

### 3. Fastening:

- a. Install all items straight, true, level, plumb and firmly anchored in place. Where blocking or backing is required, coordinate as necessary with other trades to ensure placement of all required backing and blocking in a timely manner, using proper materials.
- Nail trim with finish nails of proper dimension to hold the member firmly in place without splitting the wood.
- c. On exposed finish work, set all nails for putty.
- d. Install wood base at all resilient floor areas <u>after</u> installation of resilient floor.
- B. Finishing: Sandpaper all finished wood surfaces thoroughly as required to produce a uniformly smooth surface, always sanding in the direction of the grain. No coarse-grained sandpaper mark, hammer mark, or other imperfection will be accepted.

### 3.3 DELIVERY AND STORAGE

The woodwork manufacturer and the General Contractor shall jointly be responsible to make certain that items of woodwork are not delivered until the building and/or storage area is sufficiently dry so that the woodwork will not be damaged by excessive changes in moisture content.

### 3.4 CLEANING

At the end of each working day, thoroughly sweep all surfaces where refuse from this portion of the work has settled.

# **DIVISION 6 -- WOOD AND PLASTICS**

### 06400 -- ARCHITECTURAL WOODWORK

#### 1. GENERAL

### 1.1 DESCRIPTION

Types of architectural woodwork include the following:

- A. Architectural cabinets and millwork including:
  - 1. Laminate cabinets as noted on the Drawings.
  - 2. Laminate post-formed counter tops with integral splashes as noted on the Drawings.
  - 3. Solid-surface Bathroom countertops and splashes.

### B. Related Work:

Section 06200: Finish Carpentry.

#### 1.2 QUALITY ASSURANCE

- A. AWI Quality Standard: Comply with applicable requirements of "Architectural Woodwork Quality Standards" published by the Architectural Woodwork Institute (AWI), except as otherwise indicated.
- B. Coordination: Distribute copies of approved schedule for cabinet hardware to manufacturer of architectural woodwork; coordinate cabinet shop drawings and fabrication with hardware requirements.
- C. Installer Qualifications: Arrange for installation of architectural woodwork by a firm which can demonstrate successful experience in installing architectural woodwork items similar in type and quality to those required for this project.

### 1.3 SUBMITTALS

A. Product Data: Submit manufacturer's product data for each product and process specified as work of this section and incorporated into items of architectural woodwork during fabrication, finishing, and installation.

- B. Quality Certification: Submit woodwork manufacturer's (fabricator's) certification, stating that fabricated woodwork complies with quality grades and other requirements indicated.
- C. Shop Drawings: Submit shop drawings showing location of each item, dimensioned plans and elevations, large scale details, attachment devices and other components.
- D. Submit the following samples:
  - 1. Laminate/solid surface sample for each type, color, pattern and surface finish.
  - 2. Exposed cabinet hardware, one unit of each type and finish.

### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Protect woodwork during transit, delivery, storage and handling to prevent damage, soiling and deterioration.
- B. Do not deliver cabinets until painting, wet work, grinding and similar operations which could damage, soil or deteriorate woodwork have been completed in installation areas. If due to unforeseen circumstances, woodwork must be stored in other than installation areas, store only in areas meeting requirements specified for installation areas.

#### 1.5 PROJECT CONDITIONS

- A. Conditioning: Counter manufacturer and installer shall advise Contractor of temperature and humidity requirements for woodwork installation and storage areas. Do not install 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% tolerance of optimum moisture content, from date of installation through remainder of construction period. Require woodwork manufacturer to establish optimum moisture content and required temperature and humidity conditions.

### 2. PRODUCTS

# 2.1 ACCEPTABLE MANUFACTURERS

A. KraftMaid

B. Advanta "Calilbra II"

### 2.2 FABRICATION

A. Wood Moisture Content: Comply with requirements of referenced quality standard for moisture content of lumber at time of fabrication and for relative humidity conditions in the installation areas.

- B. Fabricate woodwork to dimensions, profiles and details indicated with openings and mortises precut, where possible, to receive hardware and other items and work. Base edges to a 1/16 inch radius, for corners of cabinets and edges of solid wood (lumber) members, unless otherwise indicated.
- C. Complete fabrication, assembly, finishing, hardware application and other work before shipment to project site to maximum extent possible. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming and fitting.
- D. Pre-cut Openings: Fabricate architectural cabinets with pre-cut openings, where possible, to receive hardware, appliances, plumbing fixtures, electrical work and similar items. Locate openings accurately and use templates or roughing-in diagrams for proper size and shape.
  Smooth edges of cutoffs and, where located in countertops and similar exposures, seal edges of cutouts with a water-resistant coating.

### E. Measurements:

- Before proceeding with fabrication of cabinets required to be fitted to other construction, obtain field 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 cabinets for accurate fit.

# 2.3 MATERIALS

- A. Laminate Cabinets:
  - 1. Quality Standard: Comply with AWI Wood Cabinets Specs.
  - 2. Grade: Custom.

- 3. Type of Cabinet Construction: Flush.
- 4. Laminate Cladding: Low pressure decorative laminate complying with NEMA LD 3 and as follows:
  - a. Colors, Patterns and Finishes: Match Architect's sample.
  - b. Laminate Grade for Exposed Surfaces:

Provide melamine composite panels consisting of melamine saturated sheets thermally fused to both sides of medium density fiberboard and complying with the following requirements for type of surface and grade where indicated "melamine".

- (1) Horizontal surfaces other than tops: GP-38.
- (2) Vertical surfaces: GP-28 (0.028" nominal thickness).
- c. Semi-exposed Surfaces: GP-28
- Edges and where indicated elsewhere as "plastic laminate". High pressure laminate,
   GP-50.
- B. Cabinet Hardware and Accessory Materials:
  - General: provide cabinet hardware and accessory materials associated with architectural cabinets.
  - 2. Cabinet Hardware: Provide concealed casework hinges of wrought steel, self-closing type, Stanley 1500 series or equal for all cabinet doors. Provide brass wire "D-Type" pulls with 3" screw hole spacing and 1-5/6" projection at all cabinet doors and drawers. Drawer slides shall be side mount, ball bearing type BHMA B85062, two at each drawer.
  - Hardware Standard: Comply with ANSI/BHMA A156.9 "American National Standard for Cabinet Hardware" for items indicated by reference to BHMA numbers or referenced to this standard.
  - 4. Hardware Finishes: Comply with BHMA code numbers or if not otherwise indicated, provide finishes complying with requirements indicated below:
    - a. Exposed hardware: To be selected by the Architect.
- C. Architectural Counter Tops:
  - 1. Quality Standard: Comply with applicable ASTM standards, Level-1 grade.
  - 2. Type of Top: Post-formed laminate with integral back splash and side splashes.

3. Grade: Custom

## D. Bathroom Counter Tops:

- 1. Quality Standard: Comply with applicable ASTM Standards, Level-1 grade.
- 2. Type of Top: Corian or approved equal.

3. Grade: Custom

4. Thickness: 3 cm

- 5. Edge Treatment: All areas same as material on horizontal surface.
- 6. Splashes: Same as material on horizontal surface.

### 3. EXECUTION

### 3.1 PREPARATION

- A. Preinstallation Meeting: Meet at project site and review coordination and environmental controls required for proper installation and ambient conditioning in areas to receive work. Proceed with cabinet installation only when required ambient conditions can be maintained.
- B. Deliver concrete inserts and similar anchoring devices to be built into substrates well in advance of time substrates are to be built.
- C. Prior to installation of architectural tops, examine shop fabricated work for completion, and complete work as required, including back priming and removal of packing.

## 3.2 INSTALLATION

- A. Tops: Anchor securely to base units and other support systems as indicated.
- B. Wood Storage Shelving: Complete the assembly of units and install in the areas indicated, including hardware and accessories as indicated.

## 3.3 ADJUSTMENT, CLEANING, FINISHING, AND PROTECTION

- A. Repair damaged and defective counters where possible to eliminate defects functionally and visually; where not possible to repair, replace counters. Adjust joinery for uniform appearance.
- B. Clean, lubricate and adjust hardware.
- C. Clean counters on exposed and semi-exposed surfaces. Touch-up shop applied finishes to

restore damaged or soiled areas.

## **DIVISION 7 - THERMAL AND MOISTURE PROTECTION**

## 07200 -- BUILDING INSULATION

## 1. **GENERAL**

## 1.1 DESCRIPTION

- A. Work Included: Furnish and install all building insulation as indicated on the Drawings, including but not necessarily limited to:
  - 1. Interior acoustic wall insulation system.
- B. Related Work Specified Elsewhere:
  - 1. Section 01300: Submittals
  - 2. Section 0611: Rough Carpentry
  - 3. Section 09250: Gypsum Wallboard

### C. Submittals:

 Submit evidence that insulation meets specification requirements and that materials are compatible with specified systems.

## 2. PRODUCTS

## 2.1 MATERIALS

## A. Insulation:

1. Acoustic Interior Wall Insulation: 3-1/2" and 5-1/2" unfaced Sonobatts insulation by Owens Corning or approved equal, between interior partitions as noted on the Drawings.

## 3. EXECUTION

## 3.1 INSPECTION

- A. Prior to Work, inspect the installed Work of all other trades and verify that all such Work is complete to the point where this installation may properly commence.
- B. Upon completion of the installation, visually inspect each insulated area and verify that all insulation is complete and properly installed.

# 3.2 INSTALLATION

- A. Insulation: Install the insulation in strict accordance with the manufacturer's written instructions.
- B. Perimeter Wall Insulation and Acoustical Insulation:
  - 1. Preparation:
    - a. Exterior wall substrate, adjacent materials and insulation batts shall be dry and ready to receive insulation.
    - b. Exterior wall substrate shall be flat and free of fins and irregularities.
  - 2. Installation:
    - a. Install acoustic batts in walls where shown on Drawings.

## **DIVISION 7 - THERMAL AND MOISTURE PROTECTION**

## 07950 -- SEALANTS AND CAULKING

### 1. GENERAL

## 1.1 DESCRIPTION

- A. Work Included: Throughout the Work, caulk and seal all joints where shown on the Drawings, and elsewhere as required, to provide a positive barrier against passage of air and passage of moisture.
- Related Work Described Elsewhere: Adhere strictly to the caulking and sealant notes and details shown on the Drawings.

## 1.2 QUALITY ASSURANCE

- A. Standards: Comply with standards specified in this Section.
- B. Qualifications of Manufacturers: Products used in the Work of this Section shall be produced by manufacturers regularly engaged in manufacture of similar items.
- C. Qualifications of Installers:
  - Proper caulking and proper installation of sealants require that installers be thoroughly trained and experienced in the necessary skills and thoroughly familiar with the specified requirements.
  - For caulking and installation of sealants throughout the Work, use only personnel who
    have been specifically trained in such procedures and who are completely familiar
    with the joint details shown on the Drawings and the installation requirements called
    for in this Section.

## 1.3 SUBMITTALS

### A. Manufacturers' Data:

- 1. Within 2 calendar days after award of the Contract, submit:
  - A complete materials list showing all items proposed to be furnished and installed under this Section.

- Sufficient data to demonstrate that all such materials meet or exceed the specified requirements.
- c. Specifications, installation instructions, and general recommendations from the materials manufacturers showing procedures under which it is proposed that the materials will be installed.
- Upon approval by the Architect, the proposed installation procedures will become the
  basis for inspecting and accepting or rejecting actual installation procedures used on
  the Work.
- B. Samples: Accompanying the submittal required in Paragraph 1.3-A., submit samples of each sealant, each backing material, each primer, and each bond breaker proposed to be used.

#### 1.4 PRODUCT HANDLING

- A. Delivery and Storage: Deliver all materials of this Section to the job site in the original unopened containers with all labels intact and legible at time of use. Store only under conditions recommended by the manufacturers. Do not retain on the job site any material which has exceeded the shelf life recommended by its manufacturer.
- B. Protection: Use all means necessary to protect the materials of this Section before, during and after installation and to protect the Work and materials of all other trades.
- C. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Architect and at no additional cost to the Owner.

## 2. PRODUCTS

### 2.1 MATERIALS

### A. Sealants:

- Except as specifically otherwise directed by the Architect, use only the type of sealants described in this Section.
- Sealants shall be a two-component, rubber-based compound. Each color and each
  class of sealant shall be the product of a single manufacturer selected from the
  following, or shall be equal products as approved in advance by the Architect.
  - a. "Class A" (for nontraffic bearing horizontal surfaces):

- (1) "Novacalk 200 Series" manufactured by Novagard Corp., 835 New York Avenue, Trenton, N.J. 08638.
- (2) "Paramastic" manufactured by Parr, Inc., 18400 Syracuse Avenue, Cleveland, Ohio 44110.
- "Hornflex TG" or "Vertiseal" manufactured by W.R. Grace Co., 6051 W.65th Street, Chicago, Illinois 60638.
- b. "Class B" (for vertical surfaces):
  - (1) "Churchill 3C-50" manufactured by Churchill Chemical Corp., 3137 E.26th Street, Los Angeles, California 90023.
  - "Ultratite 101 Series" manufactured by Essex Chemical Corp., 19451Susana Road, Compton, California 90221.
  - (3) "Rubber Calk 250 Sealant" manufactured by Products Research & Chemical Corp., 5454 San Fernando Road, Glendale, California 91203.
- Wet area caulking, including all water closets, sink bowls and showers, shall be a silicone product.
- 4. Colors:
  - a. Colors for each sealant installation shall be selected by the Architect from standard colors normally available from the specified manufacturers.
  - In concealed installations, and in partially or fully exposed installations
     where so approved by the Architect, standard gray or black sealant may be used.
- B. Primers: Use only those primers which are nonstaining, have been tested for durability on the surfaces to be sealed, and are specifically recommended for this installation by the manufacturer of the sealant used.
- C. Back-up Materials:
  - Use only those back-up materials which are specifically recommended for this
    installation by the manufacturer of the sealant used, and which are nonabsorbent and
    nonstaining.
  - 2. Acceptable Types Include:

- a. Closed-cell resilient urethane or polyvinylchloride foam.
- b. Closed-cell polyethylene foam.
- c. Closed-cell sponge of vinyl or rubber.
- d. Polychloroprene tubes or beads.
- e. Polyisobutylene extrusions.
- f. Oiless dry jute.
- g. Preformed support strips for ceramic tile control joint and expansion joint work shall be polyisobutylene or polychloroprene rubber.
- D. Bond Preventive Materials: Use only one of the following as best suited for the application and as recommended by the manufacturer of the sealant used.
  - Polyethylene tape, pressure-sensitive adhesive, with the adhesive required only to hold tape to the construction materials as indicated.
  - 2. Aluminum foil.
  - 3. Wax paper.
- E. Masking Tape: For masking around joints.
- F. Other Materials: All other materials, not specifically described but required for complete and proper caulking and installation of sealants, shall be first quality of their respective kinds, new, and as selected by the Contractor subject to the approval of the Architect.

## 3. **EXECUTION**

## 3.1 INSPECTION

Examine the areas and conditions under which Work of this Section will be performed. Correct conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.

## 3.2 PREPARATION

### A. Concrete:

- All surfaces in contact with sealant shall be dry, sound and well brushed and wiped free from dust.
- 2. Use solvent to remove oil and grease, wiping the surfaces with clean rags.

- Where surfaces have been treated, remove the surface treatment by use of wire brushing.
- 4. Where backstop is required, insert the approved back-up material in the joint cavity to the depth required.

#### B. Steel Surfaces:

- Steel surfaces in contact with sealant shall be sandblasted or, if sandblasting would not be practical or would damage adjacent finish, the metal shall be scraped or wire brushed to remove mill scale.
- 2. Use solvent to remove oil and grease, wiping the surfaces with clean rags.
- Remove protective coatings on steel by sandblasting or by a solvent that leaves no residue.

## C. Aluminum Surfaces:

- Aluminum surfaces in contact with sealant shall be cleaned of temporary protective coatings, dirt, oil, and grease.
- When masking tape is used for a protective cover, remove the tape just prior to applying the sealant.
- Use only such solvents to remove protective coatings as are recommended for that purpose by the manufacturer of the aluminum work, and which are nonstaining.

## 3.3 INSTALLATION

- A. Installation of Back-up Materials: Use only the back-up material recommended by the manufacturer of the sealant and approved by the Architect for the particular installation, compressing the back-up material 25% to 50% to secure a positive and secure fit. When using back-up of tube or rod stock, avoid lengthwise stretching of the material. Do not twist or braid hose or rod back-up stock.
- B. Priming: Use only the primer recommended by the manufacturer of the sealant and approved by the Architect for the particular installation. Apply the primer in strict accordance with the manufacturer's recommendations as approved by the Architect.
- C. Bond-breaker Installation: Install an approved bond-breaker where recommended by the manufacturer of the sealant and where directed by the Architect, adhering strictly to the

installation recommendations as approved by the Architect.

## D. Installation of Sealants:

- General: Prior to start of installation in each joint, verify the joint type according to the details in the Drawings, and verify that the required proportion of width of joint to depth of joint has been secured.
- Equipment: Apply sealant under pressure with hand or power-actuated gun or other appropriate means. Guns shall have nozzle of proper size and shall provide sufficient pressure to completely fill joints as designed.
- Masking: Thoroughly and completely mask all joints where the appearance of sealant on adjacent surfaces would be objectionable.
- 4. Installation of Sealant: Install the sealant in strict accordance with the manufacturer's recommendations as approved by the Architect, thoroughly filling all joints to the recommended depth.
- 5. Tooling: Tool all joints to the profile shown on the details in the Drawings.

## 3.4 ADJUSTMENT AND CLEANING

- A. Remove masking tape immediately after joints have been tooled.
- B. Clean adjacent surfaces free from sealant as the installation progresses. Use solvent or cleaning agent as recommended by the sealant manufacturer.

## **DIVISION 8 - DOORS AND WINDOWS**

## 08200 -- DOORS AND FRAMES

## 1. **GENERAL**

## 1.1 DESCRIPTION

- A. Work Included:
  - Furnish and install doors as indicated on the Drawings, including, but not necessarily limited to:
    - a. New interior doors and frames (wood/masonite).
    - b. New exterior doors (insulated metal).
    - c. New exterior doors (aluminum storefront).
- B. Related Work Specified Elsewhere:
  - 1. Section 07950: Sealants and Caulking.
  - 2. Section 08100: Metal Frames.
  - 3. Section 08700: Builders Hardware.
  - 4. Section 08800: Glass and Glazing
  - 5. Section 09900: Painting.

## 1.2 QUALITY ASSURANCE

- A. Industry Standards:
  - 1. In addition to complying with the pertinent codes and regulations, comply with:
    - a. NWWDA Industry Standard 1.S-1-86, Sec. 3.7.3B. This standard shall be considered as the minimum.
    - b. NFPA: Standard 80-fire doors and windows.
    - Where provisions of pertinent codes and standards conflict with each other, or this Specification, the most stringent provisions shall govern.
    - d. ANSI A123.1 1967: Steel doors and steel door frames.

### 1.3 SUBMITTALS

- A. Shop Drawings shall detail:
  - 1. Designations, elevations, gauge of metal, hardware reinforcing, location of hardware,

quantities and complete anchorage details, supplemented by suitable data covering frames.

- 2. Detail connections of hollow metal Work to structure.
- Frames too large to ship in one piece, locate and detail field splice joints and indicate
  complete instructions for making field splices joints and indicate complete instructions
  for making field splices.
- 4. <u>Clearly state all pertinent code information</u>: Fire rating (UL class), width, height, thickness.
- Product Data: Submit descriptive literature and recommend installation instructions for each type frame.

### 1.4 PRODUCT DELIVERY, HANDLING AND STORAGE

### A. Delivery:

- 1. Prefinished doors shall be delivered with protective coverings intact.
- 2. Provide packaging as required to protect all metal frames during transportation and storage.

### B. Storage:

- Store doors in well ventilated areas and where not exposed to extreme changes in temperature and humidity.
- 2. Doors shall be stacked on edges, not laid flat.

### 1.5 JOB CONDITIONS

A. Environmental Conditions: When extreme hot or cold weather conditions occur, or are expected to occur, which might detrimentally affect the Work of this Section, employ techniques to guard against such effects.

## 1.6 GUARANTEE

- A. The wood door manufacturer shall furnish a <u>written guarantee</u> for one year of the original installation that all doors will not contain any defects that make them unsuitable for their intended use.
- B. This guarantee shall provide for replacement, rehanging and refinishing of any defective door at no cost to the Owner.
- C. Guarantee shall be furnished promptly upon completion of installation of doors.
- D. The door manufacturer shall also guarantee the original finish of all factory finished metal,

wood and glass doors against cracking, chipping, blistering, flaking or peeling for the life of the original installation.

## 2. PRODUCTS

#### 2.1 MATERIALS

- A. Acceptable Manufacturers: Hollow metal work shall be manufactured by Steelcraft, Republic,
   American Steel Products Corp., Superior Fireproof Door, Pioneer Industries or Allied Steel
   Products, Inc.
- B. Interior and Exterior Doors (sizes as shown on Drawings):
  - Interior doors shall be 1-3/8" particle core solid Masonite prehung 6-panel or flush interior doors to match existing style or equal paint grade with finish. See Door Schedule for openings in doors.
  - 2. Exterior doors shall be insulated metal doors, as noted in the Door Schedule.
  - Exterior storefront systems shall be clear anodized aluminum storefront to match existing storefront profile and glazing.
- C. Weather-stripping All Exterior Doors:
  - 1. Neoprene strips.
  - 2. Approved Manufacturers:
    - a. Pemko.
    - b. National Guard, Inc.
    - c. Or equal.
- D. Exterior Thresholds: Shall be low profile H.C. access threshold with traction grooves in aluminum satin finish (US32D). See Section 08700.
- E. Finish:
  - 1. Hollow metal shall have one coat baked on prime paint.
  - 2. All interior doors shall be painted and have two finish coats.
- F. Class:
  - 1. All doors shall maintain proper fire rating of opening.
  - 2. Doors and frames shall be furnished with UL label for the class of opening specified.

### 3. EXECUTION

### 3.1 INSTALLATION

## A. Surface Conditions:

- Prior to Work, inspect the installed Work of all other trades and verify that all such
   Work is complete to the point where this installation may properly commence.
- 2. In the event of discrepancy, do not proceed with installation until discrepancies have been resolved.

### B. Installation:

- Install all doors in strict accordance with the original design, and the referenced standards, hanging square, plumb and straight with all cut-outs provided.
- Install all finish hardware in strict accordance with the manufacturer's
  recommendations, eliminating all hingebound conditions and making all items smoothly
  operating and firmly anchored into position.
- C. Touching Up: Using fine grained sandpaper, completely eliminate all scratches and abrasions in finished wood surfaces.

### 3.2 GUARANTEE

- A. Guarantee that new wood doors will not contain any defects that make them unsuitable for their intended use. Any warp shall be considered a defect under the terms of this guarantee.
- B. Guarantee shall provide for replacement, rehanging and refinishing of any defective doors at no cost to the Owner.
- C. Guarantee shall be furnished promptly upon completion of installation of doors.
- D. Such guarantee shall not relieve the Contractor from the responsibility of complying with any added requirements specified herein.

## **DIVISION 8 - DOORS AND WINDOWS**

## 08700 -- BUILDERS HARDWARE

## 1. **GENERAL**

## 1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary

Conditions and Division 1, General Requirements of these Specifications, apply to the Work
specified in this Section.

### 1.2 DESCRIPTION OF WORK

- A. Definition: "Builders Hardware" includes items known commercially as builders hardware which are required for swing doors, except special types of unique and non-matching hardware specified in the same section as the door and door frame. Types of items in this section include (but are not necessarily limited to):
  - 1. Hinges
  - 2. Lock cylinders and keys
  - 3. Lock and latch sets
  - 4. Closers
  - 5. Exit devices
  - 6. Door trim units
  - 7. Protection plates
  - 8. Weatherstripping
  - 9. Thresholds
- B. Factory preparation of hollow metal frames for hardware is specified in Section 08100, Metal Frames.

### 1.3 QUALITY ASSURANCE

A. Manufacturer: Obtain each kind of hardware (latch and lock sets, hinges, closer, etc.) from only one manufacturer, although several may be indicated as offering products complying with requirements.

- B. Supplier: Supplier shall be a recognized builder's hardware supplier who is, or employs, an experienced hardware consultant who is available, at reasonable times during the course of the Work, for consultation about project's hardware requirements, to Owner, Architect and Contractor. Final installation shall be inspected by supplier prior to final completion.
- C. Fire Rated Openings: Provide hardware for fire rated openings in compliance with NFPA Standard No. 80 and VUSBC. Provide only hardware which has been tested and listed by U.L. for types and sizes of doors required and complies with requirements of doors and door frame labels.
- D. All entrance locksets shall comply with ANSI A156.2 Series 4000 Grade 2 with knob sets at apartments or lever handles at Leasing Center.
- E. All interior lock and latchsets shall comply with ANSI A156.2 Series 4000 Grade 3 with knob sets at apartment or lever handles at Leasing Center.
- F. All butts (hinges) shall comply with Dept. of Commerce Commercial Standard CS9 65.
- G. Hardware finishes shall comply with Dept. of Commerce "Standard Finishes for Builder Hardware".

#### 1.4 SUBMITTALS

- A. Product Data: Submit manufacturers' technical information for each item of hardware.

  Include whatever information may be necessary to show compliance with requirements and include instructions for installation and for maintenance of operating parts and finish.

  Transmit copy of applicable data to installer.
- B. Hardware Schedule: Submit final hardware schedule in manner indicated below. Hardware Schedules are intended for coordination of Work.
- C. Final Hardware Schedule Content: Based on builders hardware indicated, organize hardware schedule into "hardware sets" indicating complete designations of every item required for each door or opening. Include the following information.
  - 1. Type, style, function, size and finish of each hardware item.
  - 2. Name and manufacturer of each item.
  - 3. Fastenings and other pertinent information.
  - Location of hardware set cross-referenced to indications on Drawings both on floor plans and in door and frame schedule.
  - 5. Explanation of all abbreviations, symbols, codes, etc. contained in schedule.

- 6. Mounting locations for hardware.
- 7. Door and frame sizes and materials.
- 8. Keying information.
- D. Submittal Sequence: Submit initial draft schedule at earliest possible date, particularly where acceptance of hardware schedule must precede fabrication of other Work (e.g., hollow metal frames) which is critical in the project construction schedule. Include with schedule the product data, samples, Shop Drawings of other Work affected by builders hardware, and other information essential to the coordinated review of hardware schedule. Submit final draft of schedule after samples, product data, coordination with Shop Drawings of other Work, delivery schedules, and similar information have been completed and accepted.
- E. Keying Schedule: Submit separate detailed schedule indicating clearly how the Owner's final instructions on keying of locks have been fulfilled. Provide key cabinet with sufficient capacity for keys provided under this Contract and existing keys.
- F. Samples: Prior to submittal of the final hardware schedule and prior to final ordering of builders hardware, submit one sample of each type of exposed hardware unit, finished as required and tagged with full description for coordination with schedule. Samples will be returned to the supplier. Units which are acceptable and remain undamaged through submittal, review and field comparison procedures may, after final check of operation, be used in the Work, within limitations of keying coordination requirements.
- G. Templates: Furnish hardware templates to each fabricator of doors, frames and other Work to be factory-prepared for the installation of hardware. Upon request, check the Shop Drawings of such other Work to confirm that adequate provisions are made for the proper installation of hardware.

## 1.5 PRODUCT HANDLING

- A. Hardware items shall be sorted and packaged into individual hardware sets, per approved hardware schedule, by supplier prior to delivery to installer at project site.
- B. Inventory hardware jointly with representatives of the hardware supplier and the hardware installer until each is satisfied that the count is correct.
- C. Provide secure lock-up for hardware delivered to the project, but not yet installed. Control

handling and installation of hardware items which are not immediately replaceable so that the completion of the Work will not be delayed by hardware losses, both before and after installation.

### 2. PRODUCTS

### 2.1 SCHEDULED HARDWARE

- A. Requirements for design, grade, function, finish, size and other distinctive qualities of each type of builders hardware are indicated in the hardware Schedule at the end of this Section. products are identified by using hardware designation numbers of the following.
- B. Manufacturer's Product Designations: An asterisk (\*) before a manufacturer's name indicates whose product designation is used in the Hardware Schedule for purposes of establishing requirements. Provide either the product designated or the comparable product of one of the other manufacturers which comply with requirements including those specified elsewhere in this Section.
  - 1. Lock Cylinders: Cylindrical Lockset Series 93K by Best Lock Corporation, or equal.
  - 2. Butt and Hinges: \*Stanley hardware Co.; Manufacturing Co.
  - Locks, Levers, Latches and Access. Control Entry Systems: Schlage Light-Commercial grade levers, Keyway Lock and Security Commercial Grade Key Fobs.
  - 4. Closers: L.C.N. (4000 Series).
  - 5. Stops: \*Ives; Rockwood Mfg. Co.
  - 6. Kick Plates: Lindstrom; Ives; \*Rockwood Mfg. Co.
  - 7. Weatherstripping/Thresholds: \*Pemko Mfg. Co.; National Guard Products; Zero Weatherstripping Co.
- C. BHMA numbers are taken from the following AHMA standards; comply with these standards and requirements elsewhere in this Section.
  - Materials and Finishes: BHMA 1301.

### 2.2 MATERIALS AND FABRICATION

### A. General:

1. Hand of Door: The Drawings show the direction of swing or hand of each door leaf.

Furnish each item of hardware for proper installation and operation of the door movement as shown.

### 2. Manufacturer's Name Plate:

- Do not use manufacturer's products which have manufacturer's name or trade
  name displayed in a visible location (omit removable nameplates), except in
  conjunction with required U.L. labels and is otherwise acceptable to the Architect.
- b. Manufacturer's identification will be permitted on rim of lock cylinders only.
- 3. Base Metals: Produce hardware units of the basic metal and forming method indicated, using the manufacturer's standard metal alloy, composition, temper and hardness, but in no case of lesser (commercially recognized) quality than established by the named product for the applicable hardware units. Do not furnish "optional" materials or forming methods for those indicated, except as otherwise specified.
- 4. Fasteners: Manufacture hardware to conform to published templates, generally prepared for machine screw installation. Do not provide hardware which has been prepared for self-tapping sheet metal screws, except as specifically indicated.
- 5. Screws: Furnish screws for installation with each hardware item. Provide Phillips flathead screws except as otherwise indicated. Finish exposed (exposed under any condition) screws to match the hardware finish or, if exposed in surfaces of other Work, to match the finish of other such Work as closely as possible, including "prepared for paint" in surfaces to receive painted finish.
- 6. Concealed Fasteners: provide concealed fasteners for hardware units which are exposed when the door is closed, except to the extent no standard units of the type specified are available with concealed fasteners. Do not use through bolts for installation where the bolt head or the nut on the opposite face is exposed in other Work, except where it is not feasible to adequately reinforce the Work.
- Tools for Maintenance: Furnish a complete set of specialized tools as needed for
   Owner's continued adjustment, maintenance, and removal and replacement of builders
   hardware.
- B. Hinges, Butts and Pivots:

- 1. Templates: Provide only template-produced units.
- 2. Screws: Furnish Phillips fat-head all purpose or machine screws for installation of units. Finish screw heads to match surface of hinges or pivots.
- 3. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
  - a. Steel Hinges: Steel pins.
  - b. Non-ferrous Hinges: Stainless steel pins.
  - c. Tips: Flat button and matching plug, finished to match leaves.
  - d. Number of Hinges: Provide number of hinges indicated but not less than three hinges for door leaf for doors 90" or less in height and one additional hinge for each 30" of additional height.

## C. Lock Cylinders and Keying:

1. Manufacturer: Provide cylinders by Best Lock Corp., or equal.

### 2. General:

- a. Supplier will meet with Owner to finalize keying requirements and obtain final instructions in writing.
- comply with Owner's instructions for master-keying and, except as otherwise indicated, provide individual change key for each lock which is not designated to be keyed alike with a group of related locks.
- c. Provide cylinders with 7-pin removable cores. Provide construction core inserts.
- 3. Metals: Construct lock cylinder parts from brass/bronze, stainless steel or nickel silver.
- 4. Key Material: Provide keys of nickel silver only.
- 5. Key Quantity:
  - a. Furnish three change keys for each lock; five master keys for each master system;
     and five grandmaster keys for each grandmaster system.
  - b. Deliver keys to Owner's representative.

### D. Locks and Latches:

- 1. Lock and Latch Sets:
  - a. Provide ANSI A156.2 Series 4000, Grade 1 type lock and latch sets.
  - b. Design Standard: 35H series---mortise.

- 2. Strike: Provide manufacturer's S3 (ANSI A115.2) wrought box strike for each latch or lock bolt, with curved lip extended to protect frame, finished to match hardware set.
- 3. Lock Throw:
  - a. Provide 5/8" minimum throw of latch and deadbolt used on pairs of doors. Comply with U.L. requirements for throw of bolts on rated fire openings.
  - b. Provide ½" minimum throw on other latch and deadlock bolts.
- E. Closers and Door Control Devices:
  - 1. General: Conforming to ANSI A156.4 Type as indicated, barrier-free accessible units.
  - 2. Overhead Exposed Units:
    - a. Hinge side mounting, parallel arm mounting, without hold-open device.
    - b. Design Standard: L.C.N.
  - 3. Size of Units:
    - Except as otherwise specifically indicated, comply with the manufacturer's
      recommendations for size of door control unit, depending upon size of door, and
      anticipated frequency of use. Verify hand opening with approved door schedule.
    - Shock absorbing door stop assemblies shall be included with closer arm as required by schedule.
  - Access Free Manual Closers: Where manual closers are indicated for doors required to be accessible to the physically handicapped, provide adjustable units complying with ANSI A117.1 provisions for door opening force and delayed action closing.

## F. Door Trim Units:

- 1. Fasteners:
  - a. Provide manufacturer's standard exposed fasteners for door trim units (kick plates and similar units).
  - b. Use either machine screws or self-tapping screw.
- Protection Plates: Fabricate protection plates (armor, kick or mop) not more than 1-1/2"
   on stop side smaller than the door width X the height indicated.
- 3. Metal Plates: Stainless steel, 18 gauge.
- G. Stops:

- Wall Mounted Door Stops: Type and finish scheduled, no screws shall be visible on the face of the bumper (ANSI A156.16, Type L02251).
- Floor Mounted Door Stops: Type and finish scheduled, high profile type for doors that
  have been undercut. Base provided with vertical stud to prevent rotation (ANSI A156.16,
  Type LO2141).

### H. Thresholds:

- 1. Metal: Extruded aluminum; 0.25" for direct tread surfaces.
- 2. Fabrication: Drill and countersink for anchor screws not more than 12" on center and 3" from the ends. Cut to accurate length and cope to door frames. Make all cuts with fine tooth saw or cut and mil smoothly.
- Miter corners to close exposed ends not concealed by door frames. Return edge profile to threshold to face of frame. Provide mechanical hair-line joints with concealed mechanical fastening, or weld joints dressed smooth.

### I. Weatherstripping:

- General: Except as otherwise indicated, provide continuous weatherstripping at each
  edge of every exterior door leaf. Provide type, sizes and profiles shown or scheduled.
  Provide non-corrosive fasteners as recommended by manufacturer for application
  indicated.
- 2. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by manufacturer.
- Weatherstripping at Jambs and Heads: Provide surface applied pressure sensitive
  compression seal of flexible hollow silicone rubber bulb extrusion adhesive applied to
  jamb section. Product shall be U.L. classified as gasketing material for fire doors.
- 4. Weatherstripping at Door Bottoms: provide sweep consisting of extruded aluminum metal housing, 0.062" minimum thickness of main walls and flanges, and solid neoprene sweep seal insert.

### J. Hardware Finishes:

 Provide matching finishes for hardware units at each door or opening, to the greatest extent possible, and except as otherwise indicated. Reduce differences in color and textures as much as commercially possible where the base metal or metal forming process is different for individual units of hardware exposed at the same door or opening. In general, match items to the manufacturer's standard finish for the latch and lock set for color and texture.

- 2. Provide finishes which match those established by BHMA or, if none established, match the finish of existing hardware.
- Provide quality of finish, including thickness of plating or coating (if any), composition, hardness and other qualities complying with manufacturer's standards, but in no case less than specified for the applicable units of hardware by referenced standards.
- 4. The designations used in schedules and elsewhere to indicate hardware finishes are those listed in "Materials & Finishes Standard 1301" by BHMA, including coordination with the traditional U.S. finishes shown by certain manufacturers for their products.

### 3. EXECUTION

#### 3.1 INSPECTION

Hardware supplier shall inspect hardware installation to confirm that doors and frames were properly prepared to receive hardware, and confirm that installed hardware items for each door were items listed in approved hardware sets.

## 3.2 INSTALLATION

- A. Mount hardware units at heights indicated in "Recommended Locations for Builders Hardware for Standard Steel Door and Frames" by the Door and Hardware Institute, except as specifically indicated or required to comply with governing regulations, and except as may be otherwise directed by Architect.
- B. Mount knobs, push and pull plates, and exit devices at standard height above finish floor, with the exception of office doors, unless noted otherwise.
- C. Install each hardware item in compliance with the manufacturer's instructions and recommendations. Wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in another way, coordinate removal, storage and reinstallation or application of surface protections with finishing Work specified in

- Section 09900, "Painting." Do not install surface mounted items until finishes have been completed on the substrate.
- D. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- E. Drill and countersink units which are not factory prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.

### F. Thresholds:

- Comply with threshold manufacturer's instructions which have been reviewed and accepted by the Architect.
- On concrete, masonry and similar substrates, install lead-shield anchors, accurately
  placed to receive machine screw anchors at locations pre-drilled and evenly spaced in
  threshold units (spaced not more than 12" o.c.).
- Screw threshold to substrate with No. 10 or larger screws, of the proper type for permanent anchorage of bronze or stainless steel which will not corrode in contact with threshold metal.

### 3.3 ADJUSTMENT AND CLEANING

A. Adjust and check each operating item of hardware and each door to ensure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly as intended for the application made.

### B. Final Adjustment:

- Wherever hardware installation is made more than one month prior to acceptance or
  occupancy of a space or area, return to the Work during the week prior to acceptance or
  occupancy and make final check and adjustment of all hardware items in such space or
  area.
- Clean operating items as necessary to restore proper function and finish of hardware and doors.
- Adjust door control devices to compensate for final operation of heating and ventilating equipment.

C. Instruct Owner's personnel in proper adjustment and maintenance of hardware finishes during the final adjustment of hardware.

## **DIVISION 8 - DOORS AND WINDOWS**

## 08800 -- GLASS AND GLAZING

## 1. **GENERAL**

## 1.1 DESCRIPTION

- A. Work Included:
  - 1. All glass and glazing as shown and required on Drawings.
  - 2. Glass and glazing -- exterior and interior.
- B. Related Work Specified Elsewhere:
  - Section 08500: Windows and Mirrors.

## 1.2 QUALITY ASSURANCE

- A. Qualifications of Installers: Provide at least one person who shall be thoroughly trained and experienced in the skills required, who shall be completely familiar with the referenced standards and the requirements of this Work, and who shall personally direct all installation performed under this Section.
- B. Referenced Specifications and Standards F.G.M.A.: Glazing Manual.

## 1.3 SUBMITTALS

- A. Product Data:
  - 1. Manufacturer's descriptive literature for glass and glazing materials.
  - 2. Manufacturer's installation recommendations.
- B. Samples:
  - Glass: Two 6" square units of each type required in the project. Identify each unit with indelibly marked label.
  - 2. Sealants: Two long beads, 1/4" to 3/8" diameter. Provide each type and color required in the project. Identify area of use.

### 2. PRODUCTS

## 2.1 MATERIALS

- A. Except as otherwise specified, provide glass from one of the following manufacturers, or approved equal:
  - 1. Libby Owens Ford Co.
  - 2. P.P.G. Industries.
  - 3. A.S.G. Industries.
- B. Glass:
  - Exterior glass at all exterior doors, transoms and sidelights. System shall be 1" insulated glass.
    - a. Outdoor Light: 1/4"
    - b. Indoor Light: 1/4" clear annealed, tempered glass as required by Code.
  - 2. Exterior Windows: 1" insulated glass.
  - 3. Interior Fixed Sidelights: 1/4" tempered safety glass.
  - 4. Interior Fixed Lites in Fire-rated Assembly: 1/4" wire glass.
  - 5. Mirrors: See Drawings and Bathroom Accessories, Section 10800.
  - 6. Interior Fixed Glass: 1/4"tempered safety glass.

## 3. **EXECUTION**

## 3.1 INSPECTION

- A. Prior to Work, inspect the installed Work of all other trades and verify that all such Work is complete to the point where this installation may properly commence.
- B. In the event of discrepancy, do not proceed with installation until discrepancies have been resolved.
- C. Verify all dimensions in field prior to order. No allowance shall be made for incorrect unit sizes.

## 3.2 INSTALLATION

Set all glass in a true plant, tight and straight with proper and adequate clearance, firmly anchored to prevent rattlings and looseness, and with all edges cleanly cut. Do not nip or seam the edges.

### 3.3 ADJUSTMENT AND CLEANING

A. Upon completion of glazing, thoroughly clean all glass surfaces, correct all imperfections and replace all damaged glass.

B. Leave all labels on the glass until it has been inspected and approved, but remove all labels immediately thereafter.

## **DIVISION 9 - FINISHES**

## 09250 -- GYPSUM WALLBOARD

## 1. **GENERAL**

## 1.1 DESCRIPTION

- A. Work Included: Furnish and install gypsum wallboard as indicated on the Drawings including, but not necessarily limited to:
  - 1. Wallboard systems and application.
  - 2. Gypsum board fire protection.
  - 3. Accessories.
- B. Related Work Specified Elsewhere:
  - 1. Section 06100: Rough Carpentry.

## 1.2 QUALITY ASSURANCE

- A. Applicator Qualifications: Provide at least one person who shall be present at all times during execution of this portion of the Work, who shall be thoroughly trained and experienced in the installation and joint treatment for gypsum wallboard, and who shall direct all Work performed under this Section.
- B. Reference Standards:
  - 1. American Society for Testing and Materials (ASTM):
    - a. C36-92 -- Specification for Gypsum Wallboard.

## 1.3 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. Delivery:
  - 1. Deliver materials to the project site with manufacturer's labels intact and legible.
  - 2. Handle materials with care to prevent damage.
- B. Storage:
  - 1. Store materials inside under cover, stack flat, off floor.
  - 2. Stack wallboard so that long lengths are not over short lengths.
  - 3. Avoid overloading floor system.

## 1.4 JOB CONDITIONS

## A. Environment Conditions:

### 1. Ventilation:

- a. Provide ventilation during and following joint treatment application.
- b. Use temporary air circulators in enclosed areas lacking natural ventilation.
- c. Under slow drying conditions, allow additional drying time between coats of joint treatment.
- d. Protect installed materials from drafts during hot, dry weather.
- 2. Protection: Protect adjacent surfaces against damage and stains.

### 2. PRODUCTS

## 2.1 MATERIALS

## A. Gypsum Wallboard:

- Gypsum drywall products shall be as manufactured by Gypsum Company, Celotex Corporation,
   National Gypsum Company or Kaiser Gypsum Company.
- 2. ASTM C36, tapered edges, regular, USG Type SW, unless indicated otherwise.
- 3. 1/2"and 5/8"fire code gypsum board as located on Drawings.
- 4. ½" MR moisture resistant gypsum board at walls in bath and exterior soffits.
- 5. ½' foil-backed at all CMU glue-on locations.

### B. Accessories:

- 1. Joint Tape: ASTM C475, perforated.
- 2. Joint Compound: ASTM C475, Type 1 ready mixed joint compound, and taping and topping joint compound.
- 3. Prefill Joint Compound: ASTM C475, Type 1, powdered joint compound.
- 4. Corner Reinforcement: Galvanized steel, external corner reinforcement with 1-1/4" wide, fine mesh, expanded flanges.
- All accessories shall be zinc alloy of type required for various conditions, including corner beads, control joints, and metal trim as indicated.

- 6. Screw Attachment of Gypsum Board:
  - a. 1-1/2" CR channel.
  - b. 1-1/2" drywall furring channel clip.
  - c. 16-gauge tie wire.
  - d. Screws are Type "S" self-drilling drywall screws.
  - e. 8-gauge hanger wire.
- 7. No nails shall be used for attachments.

## 3. EXECUTION

#### 3.1 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.
- 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.

### 3.2 APPLICATION

- A. General: Install all gypsum wallboard with all necessary fasteners, accessories and sealants as noted on Finish Schedule and indicated on the Drawings. All Work shall be erected in strict accordance with the manufacturer's current printed instructions.
- B. Interior Partitions:
  - Partitions generally shall be erected with studs spaced at 16" o.c. or as indicated, anchored to
    floor and ceiling runners, doubled at openings with head of opening reinforced. Studs shall
    be covered one or both sides as indicated with specified type of wallboard attached as
    recommended by the manufacturer.
  - 2. Partitions where noted or required by code shall extend to construction above.
  - 3. Apply wallboard with long dimensions horizontal.

- 4. When installing wallboard horizontally, attach upper wallboard first.
- 5. Stagger end joints to occur on different framing members on opposite sides of partition.
- 6. Back block end joints.

## C. Fasteners:

- 1. Minimum edge clearance: 3/8".
- 2. Stagger opposite each other on adjacent ends or edges.
- 3. Sand abutting ends or edges over support surface.
- 4. Space 12" on center along supports and ceilings.
- 5. Space 16" on center along ends and edges and field of wallboard at walls.
- D. Filling and Finishing Depressions:
  - 1. Apply joint compound as first coat to depressions.
  - 2. Apply at least two additional coats of compound after first coat is dry.
  - 3. Leave filled and finished depressions level with plane of surface.

## 3.3 ACCESSORY APPLICATION

A. Carefully inspect the Drawings and manufacturer's recommendations for all items required. Install same in strict accordance with manufacturer's recommendations, plumb, level and true to line, firmly attached to supporting members.

## 3.4 PATCHING

Do all cutting, patching and pointing of existing finished surfaces as required for proper installation against adjoining built-in Work of other trades. Point up around trim and other Work. New Work shall match existing Work in texture and finish, flush and smooth.

## 3.5 ADJUSTMENT AND CLEANING

## A. Ridging:

- 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 area and install film covering.

# B. Clean-up:

- At completion of this Work, remove all rubbish, excess materials, scaffolding, tools and other equipment, and leave all floors broom clean.
- 2. Remove all spilled or splashed materials from adjacent surfaces.
- Clean all new and existing Durasan wallboard walls with manufacturer-recommended cleaning solvents.

## **DIVISION 9 - FINISHES**

## 09300 -- TILE

### 1. GENERAL

## 1.1 DESCRIPTION

- A. The Contractors shall furnish and install all tile in areas as shown on the Drawings and Finish

  Schedule and described in these Specifications, including, but not necessarily limited to:
  - 1. New glazed ceramic tile in bathroom and laundry areas, including floor, base and wall..

#### 1.2 QUALITY ASSURANCE

- A. Qualifications of Installers:
  - Provide skilled and experienced tile installers for preparation of substrate and installation of all tile, and the cleaning and sealing of existing tile.
  - In the acceptance or rejection of this tile work, no allowance will be made for lack of skill on the part of installers.
- B. Manufacturer's Recommendations: The manufacturer's recommended methods of installation and cleaning, when approved, shall be the basis for acceptance or rejection of installation and cleaning methods used in this Work.

### 1.3 SUBMITTALS

- A. Materials List: Submit in accordance with the provisions of these Specifications a complete list of all materials proposed to be furnished and installed under this portion of the Work, stating manufacturer's name, colors, and catalog number for each item.
- B. Manufacturer's Recommendations: Accompanying the materials list, submit two copies of the manufacturer's current recommended method of installation for each item.

## 1.4 PRODUCT HANDLING

- A. Protection: Protect all ceramic tile materials before, during and after installation and protect the installed Work and materials of all other trades.
- B. Replacements: In the event of damage, immediately make all repairs and replacements necessary, to the approval of and at no additional cost to the Owner.

## 2. PRODUCTS

## 2.1 MATERIALS

- A. Ceramic Tile (Floor and Wall) and Base:
  - 1. All ceramic floor tile shall be "Keystone" Series 2" X 2" mudset as manufactured by DAL-TILE or approved equal.
  - All ceramic wall tile and base shall be 4" X 4" semigloss thinset, from the Semi-gloss, Matte, or Crystaltex Series, as manufactured by DAL-TILE or approved equal.
  - Colors shall be as selected by Architect. All walls shall have two colors, selected from standard colors.

#### B. Grout:

 All grout shall be epoxy grout as recommended by the manufacturer for the specific location of it's use. Grout color shall be as selected by the Architect or Owner.

### 3. EXECUTION

## 3.1 SURFACE CONDITIONS

- A. Inspection: Prior to Work, inspect the installed Work of all other trades and verify that all such Work is complete to the point where this installation may properly commence.
- B. Discrepancies: In the event of discrepancy, do not proceed with installation until discrepancies have been resolved.

## 3.2 INSTALLATION

A. Install all tile in strict accordance with the original design and the manufacturer's recommendations.

## 3.3 CLEANING AND PROTECTION

## A. Cleaning:

- Upon completion of the installation, immediately remove all surplus grout and mortar from flooring and adjacent surfaces.
- As soon as possible after installation, and in accordance with the timing recommended by the
  manufacturers, clean the entire tile surface using the materials recommended for that purpose
  by the manufacturers of the materials being cleaned.
- Protection: Provide a non-staining paper pathway in direction of foot traffic throughout the new
   Work.

### **DIVISION 9 - FINISHES**

### 09500 -- ACOUSTICAL TREATMENT

#### 1. GENERAL

### 1.1 DESCRIPTION

- A. Work Included: Acoustical ceilings, including suspension systems to match existing.
- B. Description of Systems:
  - All Systems: All systems shall be capable of supporting lighting fixtures, registers, grilles, and acoustical panels and tiles indicated on Drawings.
  - Exposed Grid System: Completely demountable interlockable steel "tees," hung directly from structure above with wires; acoustical panel sizes and types as specified.

### 1.2 QUALITY ASSURANCE

- A. Reference Specifications and Standards:
  - 1. ASTM -- C635 Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
  - ASTM -- Surface Burning Characteristics of Building Materials. Class I for all stairs, Class II
    for all corridors serving stairs.
- B. Allowable Tolerances: Completed acoustical ceilings shall be level within 1/8" in 10'-0".

### 1.3 SUBMITTALS

- A. Samples:
  - 1. Acoustical Units: 12" square units of each type used in the Work.
  - Suspension System: Each component with one sample showing method of assembly for each ceiling type.
- B. Product Data: Manufacturer's literature and manufacturer's recommendations for installation of suspension system.
- C. Maintenance Materials: Furnish extra ceiling tile equal to 1% of each type of acoustical material supplied.

### 1.4 PRODUCT HANDLING

A. Store cartons open at each end to stabilize moisture content and temperature.

B. Do not begin installation until materials required to complete a room or space are on the project site.

## 1.5 PROJECT CONDITIONS

- A. Environmental Requirements:
  - 1. Do not install acoustical materials until "wet" construction has been completed and is "dry."
  - 2. Maintain humidity of 65% to 75% for 24 hours before and during installation of acoustical materials, and for 24 hours after installation.
  - 3. Maintain a uniform temperature in the range of 50 degrees F. to 70 degrees F. prior to and during installation of acoustical materials.

#### 2. PRODUCTS

#### 2.1 MATERIALS

- A. Acoustical Tile:
  - Ceiling tile (24" X 24" X 5/8") standard tiles, by Armstrong or approved equal to match existing. Provide rated material as noted.
  - 2. Ceiling tile (24" X 24" X 15/16") Kitchen Zone #673 ceiling tiles in Kitchen ceiling.
- B. Suspension System:
  - 1. Type: Grid system, by Donn Products, Inc., or equivalent by Chicago Metallic Corp. or Roper-Eastern to match existing.
  - 2. Structural Classification: ASTM C635, intermediate duty system, direct hung.
  - 3. Hanger Wire: Prestraightened 12-gauge galvanized, annealed steel.
  - Grid System: 24-gauge cold-rolled steel, electro-galvanized and factory prepainted with 15/16"
     Prelude Exposed Tee Grid.
    - a. Finish: Factory baked-on, flat white enamel on all exposed surfaces.
  - 5. Wall Moldings:
    - a. 24-gauge cold-rolled steel, electro-galvanized and factory prepainted as specified for grid members.
    - b. Angle shape with a 9/16" wide exposed face.
  - 6. Miscellaneous Materials:
    - a. Hold down clips where required.

- b. As hereinafter specified and as necessary to complete this Work.
- C. The Contractor shall provide the Owner with two boxes of each type of spare tile for future repairs.

### 3. EXECUTION

#### 3.1 INSTALLATION

- A. Suspension Wires:
  - 1. Space suspension wires 48" o.c. maximum.
    - 2. Do not hang suspension wires more than 1 in 6 out of plumb unless counter-sloping wires are provided.
    - 3. Do not attach to or bend wires around interfacing materials such as ductwork.
    - 4. Use trapeze suspension or equivalent devices where obstructions interfere with direct suspension.
- B. Grid Suspension System:
  - 1. Main Tee Members:
    - a. Space main tee members at 4'-0" o.c. for acoustical lay-in panels or as shown on Drawings.
    - b. Support main tee members by hanger wires at 4'-0" o.c. maximum, securing wire through tee with a double wrap with three twists.
    - c. Accurately level all main tee members.
  - 2. Spacing of Cross Tee Members: 2'-0" o.c. perpendicular to main tee members forming a 2 X 4 or 2 X 2 module, or as noted in Drawings.
  - 3. Provide support for all recessed fluorescent lighting fixtures.
  - Attach wall moldings to perimeter wall surfaces with attachment at approximately 24" o.c.
     Miter all inside and outside corners. Butt joints will not be permitted.
  - 5. Lay-in Boards:
    - a. Install acoustical lay-in boards within the exposed tee suspension system.
    - b. Install lay-in boards in moldings with hold-down clips.

## 3.2 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.

### **DIVISION 9 - FINISHES**

### **09600 -- CARPETING**

#### 1. GENERAL

#### 1.1 DESCRIPTION

- A. General Conditions, Supplementary General Conditions, and Division 1 govern work hereunder.
- B. Furnish all labor, materials, and incidentals necessary to remove all existing carpet and pad.
  Furnish and install complete carpeting and carpet accessories where shown on the drawings,
  as specified herein, and as needed for a complete and proper glue-down installation.
- C. All bidders shall quote in conformance with exact specifications in this document. Any proposed substitutions must follow strictly the conditions stated for prior approval and the manufacturer must be listed on the proposal form.

#### 1.2 QUALITY ASSURANCE

Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.

### 1.3 SUBMITTALS

- A. Product Data: Within 45 calendar days after the Contractor has received the Owner's notice to proceed, submit:
  - 1. Materials list of items proposed to be provided under this section.
  - Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
  - Shop drawings showing location of seams and locations and types of carpet metal and accessories.
  - 4. Samples of the full range of colors and patterns of carpet and of exposed accessories available from the proposed manufacturers in the specified qualities.
  - 5. Manufacturer's recommended installation procedures which, when reviewed by the

Architect, will become the basis for accepting or rejecting actual installation procedures used on the work.

#### 1.4 PROPOSED ALTERNATE PRODUCTS

- A. If an installation is proposed, other than the manufacturer and product specified herein, then the following information shall be submitted for approval to the Architect at least 10 days prior to bid date:
  - 1. One 27" x 18" quality/color sample of each coloration. Sample must be labeled with manufacturer's and installer's names.
  - Quality/color samples shall be accompanied by letter to the Architect on the bidder's letterhead, signed by an officer of the firm, certifying that all specifications of samples submitted do meet the material specifications of this document.
  - 3. Complete material specification of data listed under Part 2.
  - 4. A copy of the manufacturer's printed installation manual.
  - 5. All of the above shall be submitted together as one complete package.
- B. Samples submitted will be assumed to be the manufacturer's best obtainable match to the carpet described under Part 2.
- C. No later submittals will be accepted nor will the installer be permitted to resubmit a sample at a later date.

#### 2. PRODUCTS

#### 2.1 MATERIALS

- A. Furnish and install all carpet tile as noted in the Finish Schedule on the Drawings.
  - Carpet Tiles shall be 18" X 36" "Urban Patina Collection" by Mannington, or approved equal.
     Colors (2 colors total) shall be selected by the Owner.
- B. Provide white latex carpet adhesive such as W.W. Henry Company #356, Roberts Co. #41-0504, or an equal approved by the Architect and recommended for the purpose by the manufacturer of the proposed carpet.
- C. Provide seam adhesive such as W.W. Henry Co. #246, Roberts Co. #41-0502, or an equal approved by the Architect and recommended for the purpose by the manufacturer of the proposed carpet.

- At intersection of carpet and floor tile, provide Mercer Plastics Co., Inc., "Custom Edge Carpet Bar
   No. 92", vinyl, or equal in color selected by the Architect.
- E. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

#### 3. EXECUTION

#### 3.1 GENERAL

- A. Just prior to installation, submit a follow-up sample of each type of carpet to the Architect for the purpose of ascertaining that dye colors and patterns have not changed.
- B. The installation contractor shall measure carefully and check all dimensions and other conditions in the field to ensure proper fit in the areas designed. Installation contractor shall be totally responsible for the accuracy of his measurements on total yardage requirements, individual floor yardage requirements, dye lot yardage requirements and roll length requirements to be furnished. No request for carpet or installation extra will be considered due to measurement or take-off errors by the installation contractor.
- C. All carpet shall be delivered to the job site in original mill wrappings with each roll having its register number properly attached.
- D. Material shall be stored in an enclosed and dry area protected from damage and soiling. Location of storage area within building shall be coordinated with General Contractor.
- Installation contractor shall install carpeting as recommended in manufacturer's installation manual.

#### 3.2 SURFACE CONDITIONS

Examine the areas and conditions under which work of this section will be performed. All surfaces shall be thoroughly clean, dry and dust free and meet the requirements of the carpet manufacturer.

### 3.3 SURFACE PREPARATION

- A. Substrate to be level and free from irregularities to assure one constant floor height after carpet is installed, fill low spots and grind high spots as required. Do not proceed until unsatisfactory conditions are corrected. No allowance shall be made for uneven substrate conditions.
- B. The start of carpet installation shall be an indication of acceptance of the surfaces as being

satisfactory for installing carpeting and any subsequent changes due to unsatisfactory conditions shall be made by this contractor at his expense.

### 3.4 INSTALLATION

#### A. General:

- 1. Glue directly to the floor, using no pads and no foam.
- 2. Scribe the carpet accurately to vertical surfaces.
- 3. Align the lines of carpet, as woven, using no fill strips less than 6" wide, laying all carpet in the same direction unless specifically directed otherwise by the Architect.
- B. Thoroughly vacuum carpet prior to final acceptance by the Owner.

#### 3.5 PROTECTION

Provide a heavy non-staining paper of plastic walkway as required over carpeting in direction of traffic, remaining intact until carpeted space is accepted by Owner.

### 3.6 SURPLUS MATERIAL

- A. Allow Owner to inspect and select from scrap carpet remaining after the installation. Bundle, wrap in burlap and deliver to the Owner the carpet scraps selected by him.
- B. Provide one (1) box of replacement tile for each carpet selection for the Owner's use after construction.

### **DIVISION 9 - FINISHES**

### 09650 -- RESILIENT FLOORING

#### 1. GENERAL

### 1.1 DESCRIPTION

- Work Included: Furnish and install all resilient flooring required as indicated in the Finish
   Schedule and on the Drawings, including:
  - 1. 12" X 12" vinyl tile flooring.
  - 2. Luxury vinyl tile (LVT) flooring.
  - Resilient base.

### 1.2 QUALITY ASSURANCE

- A. Qualifications of Installers:
  - Provide skilled and experienced resilient flooring installers for preparation of substrate and installation of resilient flooring and base.
  - In the acceptance or rejection of installed resilient flooring and bases, no allowance will be made for lack of skill on the part of installers.
- B. Manufacturer's Recommendations: The manufacturer's recommended methods of installation, when approved, shall be the basis for acceptance or rejection of installation methods used on this Work.

## 1.3 SUBMITTALS

- A. Materials List: Submit in accordance with the provisions of these Specifications a complete list of all materials proposed to be furnished and installed under this portion of the Work, stating manufacturer's name and catalog number for each item.
- B. Manufacturer's Recommendations: Accompanying the materials list, submit two copies of the manufacturer's current recommended method of installation for each item.

#### 1.4 PRODUCT HANDLING

A. Protection: Protect resilient flooring and base materials before, during and after installation and protect the installed Work and materials of all other trades.

B. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of and at no additional cost to the Owner.

### 2. PRODUCTS

#### 2.1 MATERIALS

- A. VCT: Shall be 12" X 12" X 1/8" vinyl composition tile as manufactured by Armstrong, Tarkett, or approved equal. Color and style as selected by the Owner.
- B. Luxury Vinyl Tile: Shall be "Spacia Collection" by Mannington, 20 mil., or approved equal. Color shall be selected by the Owner.
- C. Adhesive: Adhesive shall be manufacturer approved, equal to S-750 adhesive by Armstrong.
- D. Base: Base shall be 4" vinyl cove style, 1/8" gauge, as noted on the Drawings.
- E. Other Materials: All other materials, including adhesives, not specifically described but required for a complete and proper installation of resilient flooring, shall be only as recommended by the manufacturer of the materials to which it is applied and shall be subject to approval.

#### 3. EXECUTION

## 3.1 INSPECTION

- A. Prior to Work, inspect the surface and the installed Work of all other trades. Verify that all such Work is complete and adequate to the point where this installation may properly commence.
- B. Discrepancies: In the event of discrepancy, do not proceed with installation until discrepancies have been resolved.

#### 3.2 SURFACE PREPARATION

- A. Substrate to be level and free from irregularities to assure one constant floor height after vinyl is installed, fill low spots and grind high spots as required. Do not proceed until unsatisfactory conditions are corrected. No allowances shall be made for uneven substrate conditions.
- B. The start of installation shall be an indication of acceptance of the surfaces as being satisfactory for installing vinyl and any subsequent changes due to unsatisfactory conditions shall be made by this contractor at his expense.

## 3.3 INSTALLATION

Install all resilient flooring in strict accordance with the original design and the manufacturer's recommendations.

## 3.4 CLEANING AND PROTECTION

### A. Cleaning:

- Upon completion of the installation, immediately remove all surplus adhesive from flooring and adjacent surfaces.
- As soon as possible after installation, and in accordance with the timing recommended by the manufacturers, clean the entire resilient flooring surface using the materials recommended for that purpose by the manufacturers of the materials being cleaned.
- B. Protection: Provide a non-staining paper pathway taped to the resilient flooring in direction of foot traffic throughout the Work.
- C. Waxing: After cleaning, provide two (2) coats of wax on all applicable floors.

### 3.5 SURPLUS MATERIAL

Allow Owner to inspect and select from scrap vinyl remaining after the installation. Bundle and deliver to the Owner the remaining vinyl from the ordered bulk amount.

### **DIVISION 9 - FINISHES**

#### **09900 -- PAINTING**

#### 1. GENERAL

### 1.1 DESCRIPTION

#### A. Work Included:

- The purpose of this painting and special coating Specification is to clearly indicate the surfaces to be painted or coated, the types and qualities of paints, or coatings to be applied and the amount of material to be applied for each coat.
- The ability of the paint to wear, weather and retain its appearance is largely dependent on proper surface preparation, manner and technique of application, close adherence to the manufacturer's stated spreading rate and number of coats applied.
- 3. The compliance by the painting Contractor to the minimum wet film requirements will be checked on the project with a wet mil. thickness gauge by the Architect, his representative, or the General Contractor's representative.
- 4. The Work to be done under this Section includes all materials, labor, equipment and services necessary to, and reasonably applicable to, providing and applying all paints, coatings or other related materials called for in this Specification or in the Drawings.
- 5. The Contractor performing this Work shall be fully responsible for having his equipment comply with current OSHA regulations and in supervising his personnel to assure their compliance with respect to operating that equipment safely, and for wearing proper type of eye protection, face masks and respirators, gloves, etc., as required by the product being applied.
- 6. Painting required includes, but is not necessarily limited to, finishing and painting on new interior and exterior surfaces as indicated:
  - a. Gypsum wallboard.
  - b. Interior and exterior metal frames, and doors.
  - c. Interior and exterior wood trim.

- d. Miscellaneous metals, including downspouts, pipes, gutters and handrails.
- e. ALL exterior and interior openings.
- f. CMU units and concrete floors.

### B. Related Work Specified Elsewhere:

- It is the purpose of this Specification to include all surfaces and equipment requiring
  job painting or staining. This includes Work in the following sections, in addition to
  this Section:
  - a. Section 03300: Concrete
  - b. Section 04200: Unit Masonry.
  - c. Section 06200: Finish Carpentry.
  - d. Section 07600: Flashing and Sheet Metal.
  - e. Section 08100: Metal Frames.
  - f. Section 08200: Metal and Wood Doors.
  - g. Section 09250: Gypsum Wallboard.
  - h. Section 1500: Mechanical.
  - i. Section 1600: Electrical.

## 1.2 QUALITY ASSURANCE

- A. Qualifications of Painters and Finishers: Use only qualified journeyman painters for the mixing and application of paint on exposed surfaces. In the acceptance or rejection of applied paint, no allowance will be made for the lack of skill on the part of painters.
- B. Contractor, if required by Architect, shall furnish an affidavit from an executive officer of the paint or coating manufacturer, certifying the materials purchased for this project meet these Specification requirements.
- C. Contractor, if required by the Architect, shall furnish an affidavit from the paint or coating manufacturer's authorized representative certifying Contractor has adequate knowledge and experience in the successful application of paints or coatings specified, or similar to those specified.

#### 1.3 SUBMITTALS

## A. Samples:

- Submit two copies of the full range of colors available in each of the proposed
  products. The Architect will prepare a color schedule with samples for guidance of the
  painter and reserves the right to select, allocate and vary colors on different surfaces
  throughout the building.
- 2. The painting Contractor shall submit for Architect's approval a list of all materials with identifying numbers or codes he proposes to use on this project. This list shall be submitted within 10 days after subcontract award. Architect's approval is required before delivery of any paint, stain, or coating to project site. This will in no way take precedence over Section 1.4-D. on substitutions.

#### B. Job Mock-up:

- A final coat of paint shall not be applied until colors have been approved by the
   Architect. To accomplish this, paint a sample panel of size directed for each color and
   paint type selected.
- The sample panel shall be painted on the surface for which the respective color and
  paint type is intended, and in the number of coats specified, to allow the Architect the
  opportunity to judge the final appearance.
- 3. If approved, the sample panel may be considered as the final finish for that portion of the surface.

### 1.4 PRODUCT DELIVERY, HANDLING, AND STORAGE

A. Delivery: Deliver all paints and materials to the job site in their original, unopened containers with all labels intact and legible at the time of use.

### B. Protection:

- Store only the approved materials at the job site, and store in a suitable and designated area restricted to the storage of paint materials and related equipment.
- Use all means necessary to ensure the safe storage and use of paint materials and the prompt and safe disposal of waste. Comply with the health and fire regulations.
- Use all means necessary to protect paint materials before, during and after application and to protect the installed Work and materials of all other trades.

C. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Architect and at no additional cost to the Owner.

### D. Substitutions:

- The materials or products specified herein and indicated on Drawings or Finish
   Schedules by trade name shall be provided as detailed.
- Contractor shall submit his bid based on specified materials or approved manufacturer listed.
- 3. Equal quality products of other manufacturers will be considered for approval if the request is submitted within 30 days after painting Contract award. This written request must include all necessary supporting information and data for Architect to determine equal quality characteristics. Submit through General Contractor for Architect's approval.
- 4. After architectural approval of material, there shall be no substitutions.

#### 1.5 JOB CONDITIONS

- A. Environment Requirements:
  - Comply with the manufacturer's recommendations as to environmental conditions under which coatings and coating systems can be applied.
  - 2. Do not apply finish in areas where dust is being generated.
- B. Surfaces shall be painted only when they are free from moisture. Receiving surfaces shall be properly dried out before proceeding with the Work. No painting shall be done when temperature is below 50 degrees F., except when specifically directed otherwise in writing by the Architect. Clear sealer shall not be applied when air temperature is less than 70 degrees F.
- C. Cover or otherwise protect finished Work of other trades and surfaces not being painted concurrently, or not to be painted.

## 2. PRODUCTS

#### 2.1 MATERIALS

- A. Except as otherwise specified, materials shall be the products of the following manufacturers:
  - 1. Pittsburgh Plate Glass.

- 2. Sherwin Williams.
- 3. Benjamin Moore and Company.
- 4. Glidden.
- Pratt and Lambert.
- B. Materials selected for coating systems for each type surface shall be the product of a single manufacturer.
- C. Each product shall bear identifying label on the original container with the manufacturer's instruction printed thereon.
- D. All paint materials and equipment shall be compatible in use. Finish coats shall be compatible with prime coats. Prime coats shall be compatible with the surface to be coated. All tools and equipment shall be compatible with the coatings to be applied.

### 2.2 MIXES

- A. Deliver paints and enamels ready-mixed to job site.
- B. Accomplish job mixing and job tinting only when acceptable to the Architect.
- C. Mix only in mixing pails placed in suitably sized non-ferrous or oxide resistant metal pans.
- D. Fungicidal agent when required shall be incorporated into the paint by the manufacturer.
- E. All job site mixing, when allowed, shall be in accordance with the manufacturer's written instructions.
- F. The Contractor must use adequate means and take all precautions to protect floors and other surfaces of this area from damage.
- G. The Contractor must use adequate means and take all precautions to prevent fire, explosions and other damage caused by his materials and equipment.
- H. All rags and paint or solvent must be stored in approved containers at all times.
- All paints, stains and coatings applied shall be in compliance with current Federal and/or local regulations regarding hydrocarbon emissions.

#### 3. EXECUTION

#### 3.1 INSPECTION

A. Prior to the Work of this Section, carefully inspect the installed Work of all other trades and

- verify that all such Work is complete to the point where this installation may properly commence.
- B. Verify that all painting may be installed in accordance with all pertinent codes and regulations, the original design, and the referenced standards.
- C. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.
- D. The painting Contractor and his workmen shall be constantly aware that they are applying the finish surface to this building. Their skill in securing the highest quality appearance for each surface is required.
- E. The application of any paint or coating to the surface shall constitute acceptance of that surface by this Contractor. To avoid this responsibility, he must notify the Architect in writing of surface defects before beginning his material application. An exception to this will be allowed only after application test, or first coat, and Architect is notified in writing before additional material is applied.
- F. All surfaces must be free of contaminants and foreign matter before applying any paint, stain or coating. Removal from painting surfaces of foreign matter and contaminants left by other trades shall be the responsibility of the General Contractor.
- G. The General Contractor shall maintain an ambient temperature not less than 50 degrees F. for 24 hours prior to, and a minimum of 24 hours after, paint, stain or coating application to all interior surfaces.
- H. The Contractor will remove and reinstall, or provide acceptable in-place protection for, all installed hardware, accessories, lighting and electric components, factory finished materials, plumbing fixtures and fittings and any other materials that may become splattered or damaged by the paint or coating materials.
- I. Paints or coatings shall be applied under conditions conducive to good results. It is necessary for this Contractor to honor the individual requirements of each material used, as to digestion time, pot life, application temperature limits, and humidity limits where applicable.
- J. If the Contractor finds that problems are arising in connection with the application of the paint or coating to a surface so as to prevent him from doing a good, workmanlike job, Work on that

- area should be stopped immediately. The supplier of the paint or coating shall then be contacted to rectify the conditions.
- K. Mortar, block, brick, concrete or any other masonry related surface shall not be painted if its moisture content exceeds 12%. If moisture content is between 8% and 12%, prime with an alkali resistant primer in place of specified primer. Large voids in block or masonry should be rubbed, bagged, or troweled to a smooth finish prior to application of block filler.
- L. All pipes, insulated pipes, ductwork and equipment in exposed areas shall be painted.
- M. All doors must be factory primed and have at least two coats of finish enamel paint on top and bottom edges, same material as door face, after doors have been fitted. Doors shall be removed from frame during application.
- N. The painting Contractor shall furnish a minimum of 20-foot candles illumination for all surfaces to be painted, stained or coated.

### 3.2 PREPARATION

#### A. General:

- Prior to all surface preparation and painting operations, completely mask, remove, or
  otherwise adequately protect all hardware, accessories, machined surfaces,
  nameplates, metal ceiling grid, lighting fixtures, finish plates, and similar items in
  contact with painted surfaces but not scheduled to receive paint.
- Spot prime all exposed nails and other metals which are to be painted with emulsion paints, using primer.
- Cleaning: Before applying paint or other surface treatment, thoroughly clean all surfaces involved. Schedule all cleaning and painting so that dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.

### B. Preparation of Metal Surfaces:

- Clean and prime all steel fabrications in the shop. Refer to the individual Sections of these Specifications for shop cleaning and priming of the respective metal items.
- Steel door frames if not acceptably smooth, must be made smooth by filing or sanding before applying any paint or coating.
- 3. Galvanized Metal:

- Clean all surfaces thoroughly with solvent until they are completely free from dirt, oil, and grease.
- b. Thoroughly treat the cleaned surface with phosphoric acid etch.
- Remove all excess etching solution and allow to dry completely before application of paint.
- Ferrous Metal: Remove all rust and mill scale from ferrous metal surfaces requiring exposed finish coat of paint or coating, following Steel Structures Painting Council Specifications SSPC No. 2. After removal, spot prime with a PPG inhibitive primer #6-208.

### C. Preparation of Concrete Surfaces:

- New concrete shall be free from dust, dirt, oil, wax, grease, form release membrane, or other contaminants prior to painting.
- 2. New masonry or concrete shall be smoothed.
- Mildew which may exist on the surface to be painted must be removed and the surface thoroughly sterilized prior to painting.
- New brick and masonry must be aged at least 90 days before application of any paint,
   stain or coating.
- D. Preparation of Gypsum Wallboard Surfaces:
  - 1. Fill narrow, shallow cracks and small holes with spackling compound.
  - 2. Deep Holes:
    - a. Rake deep, wide cracks and deep holes.
    - b. Dampen with clear water.
    - c. Fill with thin layers of patching plaster.
  - 3. Allow patching plaster to completely dry.
  - 4. Sand smooth; do not raise nap of paper on wallboard.
- E. Preparation of Wood and Gypsum Wallboard Surfaces: Must be sanded smooth, and dust removed, before the application of any paint, stain, or coating.

#### 3.3 SCAFFOLDS AND PROTECTION

A. The Contractor must furnish all required ladders, stages, scaffolds, etc., and they must be in

- safe condition, having adequate strength to support maximum work load, and complying with all current OSHA regulations.
- B. Scaffolds, ladders, etc., must not be left where they would interfere with other workmen when not in daily use.
- C. The Contractor must not only protect his work, but also that of other trades.
- D. The Contractor is responsible for removal of all paint or coating splatter, spills, etc. on floors or adjacent colors, material, glass, hardware and other finished surfaces.
- E. The Contractor must leave premises clean and free from all rubbish and accumulated material left from his work.

#### 3.4 APPLICATION

#### A. General Requirements:

- Do not apply initial coat until moisture content of surface is within limitations recommended by paint manufacturer.
- 2. Apply paint with suitable brushes and rollers.
  - Rate of application shall not exceed that as recommended by paint manufacturer for the surface involved.
  - Keep brushes, rollers, and spraying equipment clean, dry, free from contaminants and suitable for the finish required.
- Comply with the recommendation of product manufacturer for drying time between succeeding coats.
- 4. Slightly vary the color of successive coats.
- 5. Sand and dust between each coat to remove defects visible from a distance of five feet.
- Make edges of paint adjoining other materials or colors clean and sharp with no overlapping.
- 7. Apply primer on all Work before glazing.
- 8. Back prime all interior trim.
- When paint or coating is brush applied, each coat must be brushed out uniformly to eliminate laps, skips and excess brush marks.
- 10. When paint or coating is roller applied, proper skill must be used to avoid all signs of

lapping and excess paint lines from edge of roller. When cutting in with a brush is required, these areas must be of the same texture, color and hiding as adjacent areas, to assure good appearance.

- When paint or coating is applied by spray, the Work must be done before the installation of fixtures, hardware, flooring, ceiling and other finish items. If installed, these must be thoroughly protected from the paint or coating. The paint or coating shall be applied only by skilled painters, to assure a uniform finish, with no evidence of poor or improper application.
- 12. Each coat of clear finish or enamel shall be lightly sanded and wiped free of dust before applying the next coat.
- 13. Block filler, when applied to concrete or lightweight block, must in one coat:
  - a. Retain texture of block surface partially filling all voids; OR
  - Smooth the filler on block surface, leaving only slight texture showing after filler is dry.
- 14. Block filler when applied to concrete or lightweight block must in two coats:
  - a. Retain only slight surface texture with no pinholes; OR
  - Retain no block surface texture, only pattern from brush or roller, no pinholes;
     OR
  - c. Smooth the filler with a squeegee to leave the surface film with no pinholes.
- 15. Factory primed interior surfaces must be determined paintable with adequate adhesion of jobsite paints or coatings, or must be treated properly by this Painting Contractor to secure necessary adhesion. Any added coat must be approved by Architect prior to application.
- Each coat of paint or coating shall be inspected by Architect or his representative before next coat is applied. Only after inspection and approval will credit be given for that coat.
- 17. Each coat to be applied uniformly at minimum wet film rate furnished by manufacturer of paint or coating used on project.

- Spot painting to correct soiled or damaged paint surfaces will be allowed only when touch-up spot is blended into surrounding finish and is invisible to normal viewing. Otherwise, re-coat entire section to corners or visible stopping point. Touch-up should be accomplished by same method used in applying the original coating: when sprayed, touch-up with spray; if brushed, use a brush for touch-up; and if rolled, use same texture roller cover as used on the original painting.
- 19. Any repainting authorized after finished job is accepted by the Architect and the General Contractor shall be completed and the time and material charged to the General Contractor.
- 20. Final coat of paint or coating must have visual evidence of solid hiding and uniform appearance.
- 21. There shall be no visible evidence of runs, sags, curtains, or other evidence of poor application.
- Putty, caulk, or spackle shall be applied after surface has been primed and prime is dry.
- 23. Final coat of paint or coating must be applied by brush or roller.

## 3.5 SCHEDULE OF PAINTING

- A. The paints and coatings detailed are based on Pittsburgh Paints Products, except as noted otherwise herein, or approved equal.
- B. Material Schedule:
  - 1. Dry Wall Surfaces:
    - a. Primer: One coat 6-2 Emulsion Sealer 1.0 mils dry/coat.
    - b. Finish: Two coats 80-line Wallhide Latex Wall Paint (eggshell).
  - 2. Dry Wall Surfaces (Bathroom and Kitchen Areas):
    - a. Primer: One coat @ 1.0 mils dry of 6-2 Quick Drying Latex Primer Sealer.
    - b. Finish: One coat @ 4.0 dry mils/coat of Pitt-Glaze Gloss.
  - 3. Concrete Masonry Units (Interior Face):
    - a. Primer: One coat 16-90 Pitt-Glaze Block Filler (fill voids; do not tint).
    - b. Two coats 6-510 Latex Semigloss Enamel @ 1.5-2.0 mils dry (two different

colors).

- 4. Concrete Slab Sealer: Two coats of approved sealer.
- 5. Ferrous Metal Surfaces:
  - a. Interior and Exterior Ferrous Metal (or unless otherwise specified):
    - (1) Primer: One coat, or touch-up of shop coat of 97-684 multiprime primer.
    - (2) Finish: Two coats 6-274 series Int/Ext gloss enamels @ 2.0-2.5 mils dry/coat in colors selected by Architect.
- 6. Interior Wood Trim:
  - a. Painted Base, Chair Rail, Shelving, Casing and Trim: One coat primer and two coats
     6-510 Latex Semi-gloss Enamel 1.5-2.0 MDF/ct.
- 7. Interior Wood Doors:
  - a. Prime and two coats where noted on the Drawings.
  - b. Refer to 3.5.B.6.a. above for all painted doors where noted on the Drawings.
- 8. Exterior Trim:
  - a. Primer: One coat exterior primer.
  - b. Finish: Two coats oil-based semi-gloss.

## **DIVISION 10 - SPECIALTIES**

#### **10420 -- IDENTIFYING DEVICES**

### 1. GENERAL

#### 1.1 DESCRIPTION

- A. Furnish and install all directories, signs and identifying devices, including but not limited to the following:
  - 1. Rest room signs
  - 2. Door signs (12)
- B. An allowance of \$5,000.00 is established to furnish and install all identifying devices, including all delivery costs FOB job site and all applicable taxes.
- C. Written information shall be provided to the Owner by the sign subcontractor at a later date as coordinated by the General Contractor.
- D. Characters and symbols on all signage shall contrast with their background either light characters on a dark background or dark characters on a light background. All interior signage shall include Braille character translations. Use standard Braille conventions for location signage. Sizing and spacing per standard Braille publications is acceptable.

## **DIVISION 10 - SPECIALTIES**

### **10800 -- TOILET AND BATH ACCESSORIES**

### 1. **GENERAL**

### 1.1 DESCRIPTION

- A. Work Included: Furnish and install toilet, bath and bath accessories as indicated and listed in this Section.
- B. Related Work Specified Elsewhere: Section 10150, Toilet and Bath Partitions.

#### 1.2 QUALITY ASSURANCE

- A. Reference Standards:
  - American National Standards Institute (ANSI): Z97.1-1975, Performance Specifications and Methods of Tests for Safety Glazing Materials Used in Buildings.

#### 1.3 SUBMITTALS

- Product Data: Submit descriptive literature and recommended installation instructions for each accessory item specified.
- B. Schedules: Toilet and bath accessories schedule indicating locations, mounting heights, model numbers and warranties.

### 2. PRODUCTS

## 2.1 MATERIALS

- A. Accessories shall be Bobrick, Nutone, or Elkay, as described herein, except as noted, or the equivalent product. Accessory units shall be surface or wall mounted type and furnished with screw type wall plates for projection type accessories. Items shall be designed so fasteners are concealed. Provide the following at the new Baths.
  - 1. Toilet Paper Holder: B-2740
  - 2. Soap Dispenser: B-822 (1 per vanity)
  - 3. Paper Towel Dispenser/Waste Receptacle: B-369
  - 4. Grab Bars: B-6806 in 42", 36", 18" and 12" lengths as noted on the Drawings.

- 5. Janitor's Mop Rack: B-223 X 24
- C. Grab Bars: Grab bars specified above shall be heavy duty 1-1/2" diameter as noted with anchorage to support 250 lbs. sustained load for five minutes. Anchor to walls with concealed mounting, blocking, special anchors and back plates. Provide blocking in walls for grab bars.

#### D. Anchorage:

- 1. All washroom accessories shall be furnished with back plates.
- 2. Certain items shall be attached to metal partitions, see Drawings.
- 3. Toilet Paper Holder: Shall be through-bolted to partition or solid blocking, as required.

#### 3. EXECUTION

#### 3.1 INSPECTION

- A. Prior to the Work of this Section, carefully inspect the installed Work of all other trades and verify that all such Work is complete to the point where this installation may properly commence.
- B. Verify that all toilet and bath accessories may be installed in accordance with all pertinent codes and regulations, the original design, and the referenced standards.
- C. In the event of discrepancy, immediately notify the Architect.
- Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

# 3.2 INSTALLATION

- A. Install all specified equipment at locations and heights indicated on the Drawings or noted herein and in full accordance with the manufacturer's recommendations, anchoring all components firmly in place for long life under hard usage.
- B. Accessories shall be furnished complete with back plates and all fastenings required for rigid and secure attachment to walls to suit materials encountered. Fastenings shall be noncorrosive and concealed unless otherwise noted, through-bolted where possible. Mirrors shall be installed with positive theft-proof devices. Exact location of equipment shall be verified by Architect.

### 3.3 CLEANING

Upon completion of the installation, check all equipment for rigidity and alignment. Clean all items thoroughly and provide proper protection until acceptance of the entire project.

### **DIVISION 12 - FURNISHINGS**

#### 12505 -- WINDOW COVERINGS

#### 1. GENERAL

#### 1.1 DESCRIPTION

Related Requirements: The Conditions of the Contract (General, Supplementary and other
 Conditions) and Division 1, General Requirements are part of this Section.

### 1.2 QUALITY ASSURANCE

All blinds shall be furnished and installed in cooperation with other trades. The General Contractor shall coordinate field measurements and shop drawings with fabrication and installation.

### 1.3 SUBMITTALS

- A. Manufacturer's Product Data: Submit manufacturer's descriptive product data and installation instructions for each type of blind specified.
- B. Shop Drawings: Submit shop drawings indicating the following:
  - 1. Field measured dimensions of openings scheduled to receive blinds.
  - 2. Illustrations of special accessory components not included in manufacturer's product data.
  - 3. Details of head and sill conditions, corner conditions, and conditions between adjacent blind units.
- C. Color Sample: Submit two 6" samples of material indicating full color range and color variation.
- D. Product Sample: Submit one 16" wide fully functional sample blind.

### 2. PRODUCTS

## 2.1 MATERIALS

- A. Manufacturer: Carey-McFall Corp. or equal approved by Architect.
- B. Product: Bali Classics Custom Mini Blind Series 3000, or approved equal.
- C. Product Description:
  - 1. Steel Channel Headrail: 1" H X 1-1/2" D U-shaped channel of 0.024" thick phosphate

- treated steel with rolled edges at top, coated with vinyl primer and polyester baked enamel finish. Operating hardware shall be locked into head channel with no mechanical cleats visible from underside of headrail.
- 2. Enclosed Metal Bottom Rail: Tubular shape, 0.028" thick electro-zinc coated steel, painted with vinyl primer and polyester baked enamel finish coat. Bottom rail shall be roll formed with locking groove to receive dust cover. Molded end caps shall fit snug over ends of bottom rail. Molded plastic retainer shall secure ladder tape to bottom rail.
- 3. Slats: Slats shall be virgin aluminum alloyed for max. strength, flexibility and resistance to internal and external corrosion. Slats shall be nominally 1" wide. A properly formed contour creates the finished crown with corner radii of 3/16" tangent to edge of slat. Slat thickness and ladder support distances shall prevent visible sag or bow even after continued usage in any indoor environment.
- Tilt Rod Support: provides support for tilt rod and shall be low friction thermoplastic.
   Guides ladder and lift cord through bottom of head channel without abrasion or discoloration.
- Ladder Drum: Shall be 0.028" thick electroplated steel with a smooth rolled edge hole
   each side and two locking prongs to hold the braided ladder securely.
- 6. Cord Lock: Shall be of a snap-in design with stainless steel wear guard and a floating locking pin. Cord lock shall be crash-proof that shall lock blind upon release of lift cord.
  Dual cord separators shall prevent cords from twisting or tangling.
- Shaft Type Tilter: Shall be a worm and gear type enclosed in a polycarbonate housing.
   Tilter shall be a snap-in component.
  - a. Tilt Wand: Shall be a clear plastic hollow rod with hexagonal shape measuring approximately 1/4" across the points. Wand shall be attached to the tiller shaft with a spring clip. A color coordinated insert is available for the hollow wand as an option.

- b. Tilt Ring: An optional tilt ring shall be attached to the tilter shaft in lieu of a wand.
- 8. Hexagonal Tilt Rod: Shall be electro-zinc coated solid steel measuring 1/4" at its widest point. Tilt rod shall limit torsional deflection to 6 deg. in a 30" test length with a torque application of one-foot pond.
- 9. Braided ladders (Slat Supports): Shall be of braided polyester yarn which will provide max. strength and flexibility with minimum strength. Horizontal components (rungs) shall be not less than two threads. Distance between end ladder and ends of slats will not exceed 6"; distance between braided ladders shall not exceed 22".
  - a. Braided Ladder Clip: Plated metal clip shall be mechanically clinched to the end of each braided ladder.
- 10. Lift Cord: Shall be braided with polyester jackets and rayon center core and shall be 1.8 mm. Shall be of sufficient length to control the raising or lowering of the blind and be securely anchored to the bottom rail. Lift cord shall be equipped with Bali tassel, or optional ring pull with a 4" cord.
- 11. End Support Brackets: Shall be treated steel with a vinyl primer and polyester baked enamel finish coat to match headrail. Shall incorporate a rivet hinged front cover with safety lip.
- 12. Intermediate Support Brackets: Shall be furnished for blinds over 60" wide. Maximum spacing for intermediate support brackets shall be 48".
- 13. Extension Brackets: Optional extension brackets are available.
- 14. Hold Down Brackets: Optional universal hold down brackets for sill or jamb installations are available.
- 15. Accent Channels: Optional side channels are available in any solid color, except aluminum texture and brushed aluminum.
- 16. End Stiffeners: Shall be electro-plated steel and inserted at each end of handrail to add rigidity. Field adjustable tabs eliminate lateral movement.

## 17. Size Limitations:

- a. Maximum Width: 143 3/4".
- b. Maximum Drop: 240".
- Color: Color of headrail, bottom rail, ladder, cord and plastic accessories shall coordinate with slats. Color shall be approved by the Architect.

## 3. <u>EXECUTION</u>

#### 3.1 INSPECTION

Verify the work in which the blinds will be installed is free of conditions that interfere with blind installations and operations. Begin blind installation only when unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- Install blinds in accordance with manufacturer's installation procedures except as otherwise specified herein.
- B. Install intermediate support brackets and extension brackets as needed to prevent deflection in headrail.
- C. Install blinds with adequate clearance to permit smooth operation of blinds and any sash operators.

  Hold blinds 1/4" clear from each side of window opening on inside mount unless other clearance is indicated.
- D. Set tilt and locking controls. Demonstrate blinds to be in smooth, uniform working order.

# 3.3 CLEANING

- A. Clean soiled blind surfaces with a mild soap solution. Do not use steam, hot water, bleach or any abrasive or solvent-based cleaners. Do not wash metallic colors.
- B. To ensure proper drying, provide adequate ventilation for blinds, remove bottom rail plastic end caps, and tip headrail and bottom rail to drain water.