## CONTRACT DOCUMENTS AND SPECIFICATIONS

for

## CITY HALL SIGNAGE and LOBBY RENOVATION

Bid Proposal #58-23

Karen S. Conard City Manager
City of Portsmouth, New Hampshire

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## CITY HALL SIGNAGE AND LOBBY RENOVATIONS

## **INVITATION TO BID**

<u>Sealed</u> bid proposals, plainly marked, Bid Proposal #58-23 City Hall Signage and Lobby Renovations on the outside of the mailing envelope as well as the sealed bid envelope, addressed to the Finance/Purchasing Department 3<sup>rd</sup> floor, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire, 03801, will be accepted until <u>Thursday August 10, 2023 at 10:00 a.m.</u> at which time all bids will be publicly opened and read aloud.

The City of Portsmouth is seeking qualified contractors to complete renovations to the lobby, adjacent hallway and Portsmouth Room in City Hall. In addition, contractor will furnish and install room signage as directed by the City.

A <u>mandatory</u> Pre-Bid Meeting and Walk-Through shall be conducted on <u>Wednesday July 26, 2023</u> at <u>10:00 a.m.</u>, located at Portsmouth City Hall, <u>1 Junkins Ave</u>.

Specifications may be obtained from the City's web site under the project name at <a href="https://www.cityofportsmouth.com/finance/purchasing.">www.cityofportsmouth.com/finance/purchasing.</a>

Questions regarding the project may be emailed to the Procurement Coordinator at <a href="mailto:purchasing@cityofportsmouth.com">purchasing@cityofportsmouth.com</a> by <a href="mailto:12:00 p.m.">12:00 p.m.</a> on <a href="mailto:Tuesday August 1, 2023">Tuesday August 1, 2023</a> and will be answered on the City's website, <a href="www.cityofportsmouth.com/finance/purchasing">www.cityofportsmouth.com/finance/purchasing</a> under the project heading, in the form of an addendum posted by <a href="mailto:Thursday August 3, 2023">Thursday August 3, 2023</a> by <a href="mailto:4:30 p.m.">4:30 p.m.</a> Addenda and updates will <a href="MOT">NOT</a> be sent directly to vendors.

The City reserves the right, after bid opening and prior to awarding the contract, to modify the amount of the work if bids exceed budgeted amounts. The City of Portsmouth further reserves the right to reject any or all bids, to waive technical or legal deficiencies, to re- bid, and to accept any bid that it may deem to be in the best interest of the City.

Each Bidder shall furnish a bid security in the amount of ten percent (10%) of the bid. The Bid Security may be in the form of a certified check drawn upon a bank within the State of New Hampshire or a bid bond executed by a surety company authorized to do business in the State of New Hampshire, made payable to the City of Portsmouth, N.H. The Procurement Coordinator may be reached at 603-610-7227 for questions regarding this matter.

#### INSTRUCTIONS TO BIDDERS

#### BIDDING REQUIREMENTS AND CONDITIONS

## 1. Special Notice to Bidders

Appended to these instructions is a complete set of bidding and general contract forms. These forms may be detached and executed for the submittal of bids. The plans, specifications, and other documents designated in the proposal form will be considered as part of the proposal, whether attached or not.

The bidders must submit a statement of bidder's qualifications, if requested, subsequent to bid opening but prior to award.

Addenda to this proposal, if any, including written answers to questions, will be posted on the City of Portsmouth website at <a href="www.cityofportsmouth.com/finance/purchasing">www.cityofportsmouth.com/finance/purchasing</a> under the project heading. Addenda and updates will <a href="NOT">NOT</a> be sent directly to firms. Contractors submitting a proposal should check the web site daily for addenda and updates after the release date. Firms should print out, sign and return addenda with the proposal. Failure to do so may result in disqualification

### 2. Interpretation of Quantities in Bid Schedules

The quantities appearing in the bid schedule are approximate only and are prepared for the comparison of bids. Payment to the contractor will be made only for actual work performed and accepted in accordance with the contract. Any scheduled item of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided, and no claim for loss, anticipated profits or costs incurred in anticipation of work not ultimately performed will be allowed due to such increase or decrease.

## 3. Examination of Plans, Specifications and Site Work

The bidder is expected to carefully examine the site of the proposed work, the plans, standard specifications, supplemental specifications, special provisions and contract forms before submitting a proposal. The submission of a bid shall be considered conclusive evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the contract. It will be conclusive evidence that the bidder has also investigated and is satisfied with the sources of supply for all materials.

Plans, surveys, measurements, dimensions, calculations, estimates and statements as to the condition under which the work is to be performed are believed to be correct, but the contractors must examine for themselves, as no allowance will be made for any errors or inaccuracies that maybe found therein.

#### 4. Familiarity with Laws

The bidder is assumed to have made himself or herself familiar with all federal and state laws and all local by-laws, ordinances and regulations which in any manner affect those engaged or employed on the work or affect the materials or equipment used in the work or affect the conduct of the work, and the bidder, if awarded the contract, shall be obligated to perform the work in conformity with said laws, by-laws, ordinances and regulations notwithstanding its ignorance thereof. If the bidder shall discover any provision in the plans or specifications which is in conflict with any such law, by-law, ordinance or regulation the bidder shall forthwith report it to the engineer in writing.

### 5. Preparation of Proposal

- a) The bidder shall submit its proposal upon the forms furnished by the Owner. The bidder shall specify a lump sum price in figures, for each pay item for which a quantity is given and shall also show the products of the respective prices and quantities written in figures in the column provided for that purpose and the total amount of the proposal obtained by adding the amount of the several items. All words and figures shall be in ink or typed. If a unit price or a lump sum bid already entered by the bidder on the proposal form is to be altered it should be crossed out with ink, the new unit price or lump sum bid entered above or below it and initialed by the bidder, also with ink.
- b) The bidder's proposal must be signed with ink by the individual, by one or more general partners of a partnership, by one or more members or officers of each firm representing a joint venture; by one or more officers of a corporation, by one or more members (if membermanaged) or managers (if manager-managed) of a limited liability company, or by an agent of the contractor legally qualified and acceptable to the owner. If the proposal is made by an individual, his or her name and post office address must be shown, by a partnership the name and post office address of each general and limited partner must be shown; as a joint venture, the name and post office address of each venturer must be shown; by a corporation, the name of the corporation and its business address must be shown, together with the name of the state in which it is incorporated, and the names, titles and business addresses of the president, secretary and treasurer.

## 6. <u>Nonconforming Proposals</u>

Proposals will be considered nonconforming and may be rejected in the Owner's sole discretion for any of the following reasons:

- If the proposal is on a form other than that furnished by the Owner, or if the form is altered or any portion thereof is detached;
- If there are unauthorized additions, conditional or altered bids, or irregularities of any kind which may tend to make the proposal or any portion thereof incomplete, indefinite or ambiguous as to its meaning.
- If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award; or
- If the proposal does not contain a unit price for each pay item listed except in the case of authorized alter pay items.

#### 7. Proposal Guaranty

No proposal will be considered unless accompanied by a bid bond, surety, or similar guaranty of the types and in an amount not less than 10%. All sureties shall be made payable to the "City of Portsmouth." If a bid bond is used by the bidder, it shall be:

- In a form satisfactory to the Owner;
- With a surety company licensed, authorized to do business in, and subject to the jurisdiction of the courts of the State of New Hampshire; and
- Conditioned upon the faithful performance by the principal of the agreements contained in the sub-bid or the general bid.

In the event any irregularities are contained in the proposal guaranty, the bidder will have <u>four business days</u> (not counting the day of opening) to correct any irregularities. The corrected guaranty must be received by <u>4:00 p.m.</u> If irregularities are not corrected to the satisfaction of the Owner, the Owner, in its sole discretion, may rejected the bid.

### 8. <u>Delivery of Proposals</u>

#### BID# 58-23 City Hall Signage and Lobby Renovations

When sent by mail, the sealed proposal shall be addressed to the Owner at the address and in the care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the invitation for bids. Proposals received after the time for opening of the bids will be returned to the bidder, unopened.

## 9. <u>Withdrawal of Proposals</u>

A bidder will be permitted to withdraw his or her proposal unopened after it has been submitted if the Owner receives a request for withdrawal in writing prior to the time specified for opening the proposals.

## 10. Public Opening of Proposals

Proposals will be opened and read publicly at the time and place indicated in the invitation for bids. Bidders, their authorized agents, and other interested parties are invited to be present.

## 11. <u>Disqualification of Bidders</u>

Any or all of the following reasons may be deemed by Owner in its sole discretion as being sufficient for the disqualification of a bidder and the rejection of his proposal:

- More than one proposal for the same work from an individual, firm, or corporation under the same or different name;
- Evidence of collusion among bidders;
- Failure to submit all required information requested in the bid specifications;
- Lack of competency or of adequate machinery, plant or other equipment, as revealed by the statement of bidders qualification or otherwise;
- Uncompleted work which, in the judgment of the owner, might hinder or prevent the prompt completion of additional work if awarded;
- Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts;
- Default or unsatisfactory performance on previous contracts; or
- Such disqualification would be in the best interests of the Owner.

## 12. <u>Material Guaranty and Samples</u>

Before any contract is awarded, the bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all materials to be used in the construction of the work, and the Owner may, in its sole discretion, reject the bid based on the contents of the statement or as a result of the failure of the bidder to submit the statement.

#### AWARD AND EXECUTION OF CONTRACT

## 1. <u>Consideration of Proposals</u>

a) After the proposals are opened and read, they will be compared on the basis of the total price for all sections of work to be charged to perform the work and any such additional considerations as may be identified in the bid documents. The results of such comparisons will be immediately available to the public. In case of a discrepancy between the prices written in words and those written figures, the prices written in words shall govern. In case of a discrepancy between the total shown in the proposal and that obtained by adding the products of the quantities of items and unit bid prices, the latter shall govern.

b) The Owner reserves the right to reject any or all proposals, to waive technicalities or to advertise for new proposals, if, in the sole discretion of the Owner, the best interest of the City of Portsmouth will be promoted thereby.

### 2. Award of Contract

If a contract is to be awarded, the award will be made to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified, in writing, mailed to the address on his or her proposal, that his or her bid has been accepted and that the bidder has been awarded the contract.

The award shall not be considered official until such time that a Purchase Order, fully executed contract or an award letter has been issued by the Finance Director. No presumption of award shall be made by the bidder until such documents are in hand. Verbal notification of award is not considered official. Any action by the bidder to assume otherwise is done so at his/her own risk and the City will not be held liable for any expense incurred by a bidder that has not received an official award.

### 3. Cancellation of Award

The Owner reserves the right to cancel the award of any contract at any time before the execution of such contract by all parties without any liability of the Owner.

### 4. Return of Proposal Guaranty

All proposal guaranties, except those of the three lowest bidders, will be returned upon request following the opening and checking of the proposals. The proposal guaranties of the three lowest bidders will be returned within ten days following the award of the contract if requested.

### 5. Contract Bonds

At the time of the execution of the contract, the successful bidder shall furnish:

• Labor and materials payment bond in the sum equal to 100 percent of the contract amount.

At the time of project completion, the Owner may, in its sole discretion, permit the Contractor to substitute a maintenance bond in lieu of holding retainage for the entire guaranty period. If a bond is furnished it shall meet the following criteria:

• The bond shall be in an amount equal to 20 percent of the contract amount. Such bond shall guarantee the repair of all damage due to faulty materials or workmanship

provided or done by the contractor. The guarantee shall remain in effect for a period of one year after the date of final acceptance of the job by the Owner.

Each bond shall be: (1) in a form satisfactory to the Owner; (2) with a surety company licensed and authorized to do business and with a resident agent designated for services of process in the State of New Hampshire; and (3) conditioned upon the faithful performance by the principal of the agreements contained in the original bid. All premiums for the contract bonds are to be paid by the contractor.

## 6. Execution and Approval of Contract

The successful bidder is required to present all contract bonds, to provide proof of insurance, and to execute the contract within 10 days following receipt of the City's notification of acceptance of the bid. No contract shall be considered as in effect until it has been fully executed by all parties.

#### 7. Failure to Execute Contract

Failure to execute the contract and file an acceptable bond within 10 days after notification of acceptance of bid shall be just cause for the cancellation of the award and the forfeiture of the proposal guarantee which shall become the property of the Owner, not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be re-advertised as the Owner may determine in its sole discretion.

#### 8. Additional Information

Requests for additional information or questions should be sent to the Procurement Coordinator at purchasing@cityofportsmouth.com or 603-610-7227.

#### 9. Reservation of Rights

The City reserves the right, after bid opening and prior to award of the contract, to modify the amount of the work in the event that bids exceed budgeted amounts. The City of Portsmouth further reserves the right to reject any or all bids, to waive technical or legal deficiencies, to rebid, and to accept any bid that it may deem to be in the best interest of the City.

#### **PROPOSAL FORM**

## CITY HALL SIGNAGE and LOBBY RENOVATIONS

### CITY OF PORTSMOUTH, N.H.

To the City of Portsmouth, New Hampshire, herein called the Owner.

The undersigned, as Bidder, herein referred to as singular and masculine declares as follows:

- 1. All interested in the Bid as Principals are named herein;
- 2. This bid is not made jointly, or in conjunction, cooperation or collusion with any other person, firm, corporation, or other legal entity;
- 3. No officer, agent or employee of the Owner is directly or indirectly interested in this Bid;
- 4. The bidder has carefully examined the sites of the proposed work and fully informed and satisfied himself as to the conditions there existing, the character and requirements of the proposed work, the difficulties attendant upon its execution and the accuracy of all estimated quantities stated in this Bid, and the bidder has carefully read and examined the Drawings, Agreement, Specifications and other Contract Documents therein referred to and knows and understands the terms and provisions thereof;
- 5. The bidder understands that the quantities of work calculated in the Bid or indicated on the Drawings or in the Specifications or other Contract Documents are approximate and are subject to increase or decrease or deletion as deemed necessary by the Portsmouth City Engineer. Any such changes will not result in or be justification for any penalty or increase in contract prices; and agrees that, if the Bid is accepted the bidder will contract with the Owner, as provided in the Contract Documents, this Bid Form being part of said Contract Documents, and that the bidder will supply or perform all labor, services, plant, machinery, apparatus, appliances, tools, supplies and all other activities required by the Contract Documents in the manner and within the time therein set forth, and that the bidder will take in full payment therefor the following item prices; and
- 6. It is the intention of this contract that the items listed above describe completely and thoroughly the entirety of the work as shown on the plans and as described in the specifications. All other items required to accomplish the above items are considered to be subsidiary work, unless shown as a pay item.
- 7. This project will be bid by Lump Sum, to wit:

## TOTAL FOR PROJECT AND BASIS OF AWARD

Total in Figures \$	
In Words \$	
The undersigned agrees that for extr	ra work, if any, performed in accordance with the terms and its, the bidder will accept compensation as stipulated therein.
Date	
Company	By:Signature
Business Address	Title:
City, State, Zip Code	Telephone:
The Bidder has received and acknow	vledged Addenda Nothrough
	form and in a sealed envelope, plainly marked on the outside and the Project name as it appears at the top of the Proposal
Email Address:	

## **BID SECURITY BOND**

(This format is provided for convenience, actual Bid Bond is acceptable in lieu of, if
compatible.) KNOW ALL MEN BY THESE PRESENTS, that we the undersigned
, as Principal, and
, as Surety, are hereby
held and firmly bound unto
as liquidated damages for payment of which, well and truly to be made we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.  The condition of this obligation is such that whereas the Principal has submitted to the  A CERTAIN Bid attached hereto and hereby made a part hereof to enter into a contract in writing, hereinafter referred to as the "AGREEMENT" and or "CONTRACT", for

#### NOW THEREFORE,

- (a) If said Bid shall be rejected or withdrawn as provided in the INFORMATION FOR BIDDERS attached hereto or, in the alternative,
- (b) If said Bid shall be accepted and the Principal shall duly execute and deliver the form of AGREEMENT attached hereto and shall furnish the specified bonds for the faithful performance of the AGREEMENT and/or CONTRACT and for the payment for labor and materials furnished for the performance of the AGREEMENT and or CONTRACT,

then this obligation shall be void, otherwise it shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder in no event shall exceed the amount of this obligation.

## **BID SECURITY BOND** (continued)

The Surety, for value received, hereby agrees that the obligation of said surety and its bond shall be in no way impaired or affected by any extensions of the time within such BID may be accepted and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF	, the parties hereto have o	duly executed
this bond on the	day of	, 20
(Name	L.S. e of Principal)	
(SEAL)		
BY		
(Name of Su	urety)	
$\mathbf{p}\mathbf{v}$		

## **STATEMENT OF BIDDER'S QUALIFICATIONS**

Note: This is a required submittal, fill out completely.

All questions must be answered, and the data given must be clear and comprehensive. This statement must be notarized. Add separate sheets if necessary

otate.	ment must be nounzed. The separate sheets if necessary
1.	Name of Bidder
2.	Permanent Main Office Address
3.	Form of Entity
4.	When Organized
5.	Where Organized
6. name	How many years have you been engaged in the contracting business under your present e; also state names and dates of previous firm names, if any.
7. appro	Contracts on hand; (schedule these, showing gross amount of each contract and the eximate anticipated dates of completion).
8.	General character of work performed by your company.
9. so, w	Have you ever failed to complete any work awarded to you?(no)(yes). If where and why?
10.	Have you ever defaulted on a contract?(no)(yes). If so, where and why?
11.	Have you ever failed to complete a project in the time allotment according to the Contract Documents?(no)(yes). If so, where and why?
12.	List the most important contracts recently executed by your company, stating approximate for each, and the month and year completed.
13.	List your major equipment available for this contract.
14. contr	List your key personnel such as project superintendent and foremen available for this ract.

## **STATEMENT OF BIDDERS QUALIFICATIONS** (continued)

15.		st any subcontractonless this work is to					o please	e state).
	`	Demolition	<i>J J</i>	8		,	1	,
	b.	Carpentry						_
		Electrical						_
	d.	Painting						_
	e.	Flooring						_
	f.	OTHER						_
<u>(^</u>	The	e City reserves the	right to appro	ve or reject su	bcont	ractors	for this	project
16.	W	ith what banks do y	you do busines	ss?				
		Do you grant the ((yes)(no).	Owner permis	sion to contac	t this/1	these in	stitutio	ns?
prov: State	fied ideo me	public accountant,	may be requesiness days or	ested by Owner the bid proper	er. If r	equesto	ed, such ejected.	ed by an independent a statements must be Certified Audited endent statements
Date	d at		_this	day of		, 20	_•	
		Name	of Bidder		_			
		BY						
		TITLE						
State	of							
		of						
			being	duly sworn, d	lepose	s and		
COVIC				•	•			
says	ша	t the bidder is(Name	e of Organiza	tion)				_
and a	ansv	wers to the foregoir	ng questions a	nd all stateme	nts co	ntained	l therein	n are true and correct.
	S	worn to before me	thisday	of, 20	)			
		No	tary of Public					
Му	Con	nmission expires						

## **CONTRACT AGREEMENT**

### CITY HALL SIGNAGE AND LOBBY RENOVATIONS

THIS AGREEMENT made as of the	in the year <b>2023</b> , by and
between the City of Portsmouth, New Hampshire (hereinafter	r call the Owner) and
(hereinafter called	d the Contractor),

WITNESSETH; that the Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

**ARTICLE I-** Work - The Contractor shall perform all work as specified or indicated in the Contract Documents for the renovation of the City Hall Lobby and adjacent areas. The Contractor shall provide, at his expense, all labor, materials, equipment and incidentals as may be necessary for the expeditious and proper execution of the Project.

**ARTICLE II** - ENGINEER - The Director of Public Works or his authorized representative will act as City Engineer in connection with completion of the Project in accordance with the Contract Documents.

**ARTICLE III** - CONTRACT TIME - The work shall commence in accordance with the Notice to Proceed. All Work shall be completed prior to **60 calendar days after notice to proceed.** 

**ARTICLE IV** - CONTRACT PRICE Owner shall pay Contractor for performance of the work in accordance with the Contract Documents as shown under item prices in the Bid Proposal.

**ARTICLE V** - PAYMENT - Partial payments will be made in accordance with the Contract Documents. Upon final acceptance of the work and settlement of all claims, Owner shall pay the Contractor the unpaid balance of the Contract Price, subject to additions and deductions provided for in the Contract Documents.

**ARTICLE VI** - RETAINAGE - To insure the proper performance of this Contract, the Owner shall retain certain amounts in the percentage of the Contract Price and for the time specified as provided in the Contract Documents.

**ARTICLE VII** - LIQUIDATED DAMAGES - In event the Contractor fails to successfully execute the work within the specified contract time the Owner shall assess the Contractor liquidated damages in the amount of **ONE HUNDRED DOLLARS** (\$100) for each calendar day beyond the specified completion date for each section of work. Liquidated damages shall be deducted from the Contract Price prior to final payment of the Contractor.

**ARTICLE VIII** – CONTRACT DOCUMENTS – The Contract Documents which comprise the contract between Owner and Contractor are attached hereto and made a part hereof and consist of the following:

- 8.1 This Agreement
- 8.2 Contractor's Bid and Bonds
- 8.3 Notice of Award, Notice to Proceed
- 8.4 Instruction to Bidders
- 8.5 General Requirements, Control of Work, Temporary Facilities, Insurance Requirements, Measurement and Payment
- 8.6 Special Provisions for Building Access During Construction
- 8.7 Standard and Technical Specifications
- 8.8 Drawings

## CDCONTRACT AGREEMENT (continued)

- 8.9 Special Provisions
- 8.10 Storm water Pollution Prevention Plan
- 8.11 Any modifications, including change orders, duly delivered after execution of this Agreement.
- 8.12 Appendices

**ARTICLE IX** – TERMINATION FOR DEFAULT – Should contractor at any time refuse, neglect, or otherwise fail to supply a sufficient number or amount of properly skilled workers, materials, or equipment, or fail in any respect to prosecute the work with promptness and diligence, or fail to perform any of its obligations set forth in the Contract, Owner may, at its election, terminate the employment of Contractor, giving notice to Contractor in writing of such election, and enter on the premises and take possession, for the purpose of completing the work included under this Agreement, of all the materials, tools and appliances belonging to Contractor, and to employ any other persons to finish the work and to provide the materials therefore at the expense of the Contractor.

**ARTICLE X** – INDEMNIFICATION OF OWNER – Contractor shall defend, indemnify and hold harmless Owner and its officials and employees from and against all suits, claims, judgments, awards, losses, costs or expenses (including without limitation attorneys' fees) to the extent arising out of or relating to Contractor's alleged negligence or breach of its obligations or warranties under this Contract. Contractor shall defend all such actions with counsel satisfactory to Owner at its own expense, including attorney's fees, and will satisfy any judgment rendered against Owner in such action.

**ARTICLE XI** – NONDISCRIMINATION – Any entity that enters into a contract for goods or services with the City of Portsmouth or any of its boards, agencies and departments and any recipient of city funds shall:

Implement an employment nondiscrimination policy prohibiting discrimination in hiring, discharging, promoting, or demoting, matters of compensation or any other employment-related decision or benefit on account of actual or perceived race, ethnicity, color, religion, national origin, gender, disability, age, military status, sexual orientation, gender identity, gender expression, or marital or familial status.

Not discriminate in the performance of the contract on account of actual or perceived race, ethnicity, color, religion, national origin, gender, disability, age, military status, sexual orientation, gender identity, gender expression, or marital or familial status.

**ARTICLE XII** – PERMITS – The Contractor shall secure at its own expense, all permits and consents required by law as necessary to perform the work and shall give all notices and pay all fees and otherwise comply with all applicable City, State, and Federal laws, ordinances, rules and regulations.

**ARTICLE XIII** – INSURANCE – The Contractor shall secure and maintain, until acceptance of the work, insurance with limits not less than those specified in the Contract.

#### **ARTICLE XIV** – MISCELLANEOUS –

- A. Neither Owner nor Contractor shall, without the prior written consent of the other, assign, sublet or delegate, in whole or in part, any of its rights or obligations under any of the Contract Documents; and, specifically not assign any monies due, or to become due, without the prior written consent of Owner.
- B. Owner and Contractor each binds himself, his partners, successors, assigns and legal representatives, to the other party hereto in respect to all covenants, agreements and

## BID# 58-23 City Hall Signage and Lobby Renovations

obligations contained in the Contract Documents.

- C. The Contract Documents constitute the entire Agreement between Owner and Contractor and may only be altered amended or repealed by a duly executed written instrument.
- D. The laws of the State of New Hampshire shall govern this Contract without reference to the conflict of law principles thereof.
- E. Venue for any dispute shall be the Rockingham County Superior Court unless the parties otherwise agree.

### BID# 58-23 City Hall Signage and Lobby Renovations

F. Bidder will provide or make available complete bid package to all subcontractors pricing work for the project. No separation of drawings will be allowed during the bidding phase. Bidder is responsible for a complete project delivery, and full coordination of scope with sub contractors.

IN WITNESS WHEREOF, the parties hereunto executed this AGREEMENT the day and year first above written.

	E	BIDDER:
BY:		
TITLE:		
	CITY OF PO	ORTSMOUTH, N.H
BY: Karen	S. Conard	
TITLE: <u>City</u>	Manager	

## NOTICE OF INTENT TO AWARD

Date:
To:
IN AS MUCH as you were the low responsible bidder for work entitled:
CITY HALL LOBBY RENOVATIONS
You are hereby notified that the City intends to award the aforesaid project to you.
Immediately take the necessary steps to execute the Contract and to provide required bonds and proof of insurance within fifteen (15) days from the date of this Notice.
The City reserves the right to revoke this Notice if you fail to take the necessary steps to execute this Contract.
City of Portsmouth, New Hampshire
Judie Belanger, Finance Director

## NOTICE TO PROCEED

DATE:
PROJECT: CITY HALL SIGNAGE AND LOBBY RENOVATIONS
TO:
YOU ARE HEREBY NOTIFIED TO COMMENCE WORK IN ACCORDANCE
WITH THE AGREEMENT DATED,
ALL WORK SHALL BE COMPLETED PRIOR TO MONTH DAY 2023.
CITY OF PORTSMOUTH, N.H.
BY: Peter H. Rice
TITLE: Public Works Director
ACCEPTANCE OF NOTICE
RECEIPT OF THE ABOVE NOTICE TO PROCEED IS HEREBY ACKNOWLEDGED BY
This theday of20
By:
T'41

## **CHANGE ORDER**

Change Order # Owner: CITY OF PO	ORTSMOUTH, N.H	Date of Issuance:		
Contractor:	,			
You are directed to m	nake the following o	changes in the Contract Docu	aments:	
Description:				
Purpose of Change O	rder:			
Attachments:				
CHANGE IN CONT	RACT PRICE	CHANGE IN CONTRAC	T TIME	
Original Contract Price: \$		Original Completion Date:		
Contract Price prior to this Change Order:		Contract Time prior to this Change Order:		
Net Increase of this Change Order:		Net Increase or Decrease of this Change Order:		
Contract Price with all approved Change Orders:		Contract Time with all approved Change Orders:		
RECOMMENDED: APPROVED:		APPROVED:		
by	by	by	by	
PW Director City Finance		City Manager	Contractor	

#### LABOR AND MATERIAL PAYMENT BOND

(This format provided for convenience, actual Labor and Material Bond is acceptable in lieu, if compatible)

Bond Number	
KNOW ALL MEN BY THESE PRESENTS:	
that	
as Principal, hereinafter called Contractor, and Company) a corporation organized and existing under the laws	of the State of (Surety
and authorized to do business in hereinafter called Surety, are held and firmly bound unto the Ci hereinafter called Owner, for the use and benefit of claimants a	ty of Portsmouth, N.H. Obligee,
amount ofD payment whereof Principal and Surety bind themselves, their he successors and assigns, jointly and severally, firmly by these pr	
WHEREAS, Principal has by written agreement dated	entered into a
contract with Owner for with drawings and specifications prepared by the Public Works Road, Portsmouth, N.H. 03801, which contract is by reference hereinafter referred to as the Contract.	

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that the Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract and for the hire of all equipment, tools, and all other things contracted for or used in connection therewith, then this obligation shall be void, otherwise it shall remain in full force and effect, subject however, to the following conditions:

- (1) A claimant is defined as one having a direct contract with the Principal or, with a subcontractor of the Principal for labor, material, equipment, or other things used or reasonably required for use in the performance of the Contract. "Labor and material" shall include but not be limited to that part of water, gas, power, light, heat, oil and gasoline, telephone service or rental of equipment applicable to the Contract.
- (2) The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such a claimant, may sue on this bond for the use of such claimant, prosecute the suit by final judgment for such sum or sums as may be

justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any such suit or any costs or expenses of any such suit, and principal and surety shall jointly and severally indemnify, defend and hold the Owner harmless for any such suit, costs or expenses.

- (3) No suit or action shall be commenced hereunder by any claimant:
- (a) Unless Claimant, other than one having a direct contract with the Principal, shall have given notice to all the following:

The Principal, the Owner and the Surety above named, within six (6) calendar months after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner, and Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the State of New Hampshire save that such service need not be made by a public officer.

- (b) After the expiration of one (1) year following the date on which Principal ceased all work on said contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
- (c) Other than in a State court of competent jurisdiction in and for the county or other political subdivision of the State in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere. (4) The amount of this bond may be reduced by and to the extent of any payment of payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed on record against said improvement, whether or not claim for the amount of such lien by presented under and against this bond.

Signed and sealed this	day	of	, 20	In the presence of:
	BY:	(= 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		<u> </u>
(Witness)		(Principal) (Seal)	)	
(Sympt	v Compony)			
(Suret	y Company)			
(Witness)	BY: _	(Title) (Seal)		<u> </u>

#### Note:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized Officer or Officers.

If this bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his Power of Attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Agreement.

## **MAINTENANCE BOND**

At the Owner's election, a maintenance bond may be substituted for retainage at the completion of the project. If the Owner permits a maintenance bond, it shall be in the amount of **Twenty Percent (20%)** of the contract price with a corporate surety approved by the Owner. Such bond shall be provided at the time of Contract completion and shall guarantee the repair of all damage due to faulty materials or workmanship provided or done by the Contractor. This guarantee shall remain in effect for a period of one year after the date of final acceptance of the job by the Owner.

## **CONTRACTOR'S AFFIDAVIT**

STATE OF:	
COUNTY OF:	
Before me, the undersigned, a(Notary Public, Justice	of the Peace)
in and for said County and State personally appeared, (Individual, Partner, or duly author	rized representative of Corporate)
who, being duly sworn, according to law deposes and sa	ys that the cost of labor, material, and
equipment and outstanding claims and indebtedness of v	whatever nature arising out of the
performance of the Contract between	
CITY OF PORTSMOUTH, NEW HAMPSHIRE and(Contractor)	
of	
Dated:	
has been paid in full for Construction of:	
CITY HALL SIGNAGE AND LOBBY RENOVATION	ONS
	(Individual, Partner, or duly authorized representative of Corporate Contractor)
Sworn to and subscribed before me thisday of20	

# CONTRACTOR'S RELEASE

KNOW ALL MEN BY THESE PRESEN	NTS that
	(Contractor) of
, County of	and State of
	does hereby acknowledge
that_	(Contractor)
has on this day had, and received from the	e CITY OF PORTSMOUTH NEW HAMPSHIRE, final
and completed payment for the Construc	tion of:
CITY HALL SIGNA	GE AND LOBBY RENOVATIONS
NOW THEREFORE, the sai	d
do/does by these presents remise, release Portsmouth, New Hampshire, its success arising from or in connection with the sa- all, and all manners of action and actions dues, duties, sum and sums of money, ac covenants, contracts, agreements, promis claims and demand, whatsoever in law of New Hampshire, its successors and assig its successors and assigns) ever had, now administrators) (it, its successors and assigns)	inistrators) (for itself, its successors and assigns) e, quit-claim and forever discharge the City of ors and assigns, of and from all claims and demands id Contract dated, and of and from e, cause and causes of action and actions, suits, debts, counts, reckonings, bonds, bills, specifications, ses, variances, damages, judgments, extents, executions, of equity, or otherwise, against the City of Portsmouth, ens, which (I, my heirs, executors, or administrators) (it, or have or which (I, my heirs, executors, or igns) hereafter can shall or may have, for, upon or by atsoever; from the beginning of record time to the date of
in withess wilekeor,	Contractor:
	By:
	Its Duly Authorized
print name of witness:	
Dated:	

#### **GENERAL REQUIREMENTS**

#### **SCOPE OF WORK**

#### 1. INTENT OF CONTRACT

The intent of the Contract is to provide for the construction and completion in every detail of the work described. The Contractor shall furnish all labor, materials, equipment, tools, transportation and supplies required to complete the work in accordance with the terms of the Contract. The Contractor shall be required to conform to the intent of the plans and specifications. No extra claims shall be allowed for portions of the work not specifically addressed in the plans and specifications but required to produce a whole and complete project, such work will be considered subsidiary to the bid items.

#### 2. INCIDENTAL WORK

Incidental work items for which separate payment is not measured includes, but is not limited to, the following items:

- a. Mobilization & Demobilization
- b. Clean up
- c. Temporary Facilities
- d. Transportation and disposal of demolition debris and waste materials
- f. Restoration of property
- g. Cooperation with other contractors, abutters and utilities.
- h. Accessories and fasteners or components required to make items paid for under unit prices or lump sum items complete and functional.

### 3. ALTERATION OF PLANS OR OF CHARACTER OF WORK

The Owner reserves the right, without notice to Surety, to make such alterations of the plans or of the character of the work as may be necessary or desirable to complete fully and acceptably the proposed construction; provided that such alterations do not increase or decrease the contract cost. Within these cost limits, the alterations authorized in writing by the Owner shall not impair or affect any provisions of the Contract or bond and such increases or decreases of the quantities as a result from these alterations or deletions of certain items, shall not be the basis of claim for loss or for anticipated profits by the contractor. The contractor shall perform the work as altered at the contract unit price or prices.

### 4. EXTRA WORK ITEMS

Extra work shall be performed by the Contractor in accordance with the specifications and as directed, and will be paid for at a price as provided in the Contract documents or if such pay items are not applicable than at a price negotiated between the contractor and the Owner or at the unit bid price. If the Owner determines that extra work is to be performed, a change order will be issued.

#### 5. CHANGE ORDERS

The Owner reserves the right to issue a formal change order for any increase, decrease, deletion, or addition of work or any increase in contract time or price. The contractor shall be required to sign the change order and it shall be considered as part of the Contract documents.

#### 6. FINAL CLEANING UP

Before acceptance of the work, the contractor shall remove from the site all machinery, equipment, surplus materials, rubbish, temporary buildings, barricades and signs. All parts of the work shall be left in a neat and presentable condition. On all areas used or occupied by the contractor, regardless of the contract limits, the bidder shall clean-up all sites and storage grounds.

The items prescribed herein will not be paid for separately but shall be paid for as part of the total contract price.

### 7. ERRORS AND INCONSISTENCY IN CONTRACT DOCUMENTS

Any provisions in any of the Contract Documents that may be in conflict with the paragraphs in these General Requirements shall be subject to the following order of precedence for interpretation.

- 1. Technical Specifications will govern General Requirements.
- 2. Special Provisions will govern Technical Specifications.
- 3. Plans will govern Special Provisions, Technical Specifications, and General Requirements.

#### **CONTROL OF WORK**

#### 1. AUTHORITY OF ENGINEER

- (a) All work shall be done under supervision of the City Engineer and to his satisfaction. The City Engineer will decide all questions which may arise as to the quality and acceptability of materials furnished and work performed and as to the rate of progress of the work; all questions that may arise as to the interpretation of the plans and specifications; and all questions as to the acceptable fulfillment of the Contract by the Contractor.
- (b) The City Engineer will have the authority to suspend the work wholly or in part for such periods as he may deem necessary due to the failure of the Contractor to correct conditions unsafe for workers or the general public; for failure to carry out provisions of the Contract; for failure to carry out orders; for conditions considered unsuitable for the prosecution of the work, including unfit weather; or for any other condition or reason deemed to be in the public interest. The Contractor shall not be entitled any additional payments arising out of any such suspensions.
- (c) The Owner reserves the right to demand a certificate of compliance for a material or product used on the project. When the certificate of compliance is determined to be unacceptable to the City Engineer the Contractor may be required to provide engineering and testing services to guarantee that the material or product is suitable for use in the project, at its expense (see Sample of Certificate of Compliance).

### 2. PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPES

- (a) The Contractor shall use every precaution to prevent injury or damage to buildings, pavement, wires, poles, or other property of public utilities; trees, shrubbery, crops, and fences along and adjacent to the right-of-way, all underground structures such as pipes and conduits, within or outside of the right-of-way; and the Contractor shall protect and carefully preserve all property marks until an authorized agent has witnessed or otherwise referenced their location.
- (b) The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the project shall have been completed and accepted.
- (c) When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or as a result of the failure to perform work by the Contractor, the Contractor shall restore, at its own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing rebuilding, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.
- (d) If the Contractor fails to repair, rebuild or otherwise restore such property as may be deemed necessary, the Owner, after 48 hours notice, may proceed to do so, and the cost thereof may be deducted from any money due, or which may become due the Contractor under the contract.

## **CONTROL OF WORK** (continued)

- (f) It is the intent of the Parties that the Contractor preserve, to as great an extent as possible, the natural features of the site.
- (g) All facilities, infrastructure and features shall be protected and preserved during construction. Any damaged items shall be repaired or replaced by the contractor at no cost to the owner

#### 3. MAINTENANCE DURING CONSTRUCTION

The Contractor shall maintain the work during construction and until the project is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and workers to ensure that the structure is kept in satisfactory conditions at all times.

### 4. SAFETY PRECAUTIONS

Upon commencement of work, the Contractor shall be responsible for initiating, maintaining and supervising all safety precautions necessary to ensure the safety of employees on the site, other persons who may be affected thereby, including the public, and other property at the site or adjacent thereto.

#### 5. PERMITS

It will be the responsibility of the Contractor to obtain all permits required for the operation of equipment in, or on, all city streets and public ways.

#### 6. BARRICADES, WARNING SIGNS AND TRAFFIC OFFICERS

- (a) The Contractor shall provide, erect and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs and other traffic control devices, and shall take all necessary precautions for the protection of the work and safety of the public. Roadway closed to traffic shall be protected by effective barricades. Obstructions shall be illuminated during hours of darkness. Suitable warning signs shall be provided to control and direct traffic in a proper manner, as approved by the engineer.
- (b) The Contractor will be held responsible for all damage to the work from traffic, pedestrians, animals or any other cause due to lack of adequate controlling devices.
- (c) The Contractor shall provide such police officers as the City Engineer deems necessary for the direction and control of traffic within the site of project.

The work prescribed herein will not be paid for separately but will be paid for as part of the Contract Price unless specifically appearing as a bid item.

## **TEMPORARY FACILITIES**

### 1. STORAGE FACILITIES

- (a) The Contractor shall not store materials or equipment that restricts public access right-of-way beyond the needs of one working day. Equipment and materials shall be stored in an approved location.
- (b) Prior to final acceptance of the work all temporary storage facilities and surplus stored materials shall be removed from the site.

### 2. SANITARY FACILITIES

The Owner shall provide use of the toilet facilities for the workers employed on the work.

### 3. TEMPORARY WATER

The Owner shall provide access to the facility's water to provide the water necessary for this construction operation.

### 4. TEMPORARY ELECTRICITY

The Owner shall provide access to the facility's electrical service to provide power necessary for this project.

#### INSURANCE REQUIREMENTS

Insurance shall be in such form as will protect the Contractor from all claims and liabilities for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this contract whether such operation by himself or by anyone directly or indirectly employed by him.

#### AMOUNT OF INSURANCE

- A) Comprehensive General Liability:
  Bodily injury or Property Damage \$2,000,000
  Per occurrence and general aggregate
- B) Automobile and Truck Liability:
  Bodily Injury or Property Damage \$2,000,000
  Per occurrence and general aggregate

Additionally, the Contractor shall purchase and maintain the following types of insurance:

- A) Workers Comprehensive Insurance coverage sufficient to meet statutory requirements for all people employed by the Contractor to perform work on this project.
- B) Contractual Liability Insurance coverage in the amounts specified above under Comprehensive General Liability.
- C) Product and Completed Operations coverage to be included in the amounts specified above under Comprehensive General Liability.

### **ADDITIONAL INSURED**

All liability policies (including any excess policies used to meet coverage requirements) shall include the City of Portsmouth, New Hampshire as named Additional Insured.

- 1) The contractor's insurance shall be primary in the event of a loss.
- 2) The Additional Insured endorsement must include language specifically stating that the entity is to be covered for all activities performed by, or on behalf of, the contractor, including the City of Portsmouth's general supervision of the contractor.
- 3) City of Portsmouth shall be listed as a Certificate Holder and Additional Insured. The City shall be identified as follows:

City of Portsmouth Attn: Legal Department 1 Junkins Avenue Portsmouth, NH 03801

## **MEASUREMENT AND PAYMENT**

**NOTE:** Invoices are to be sent electronically to the City's Project Manager for review and approval and copied **to dpwinvoices.com** for payment

#### 1. MEASUREMENT OF QUANTITIES

- (a) All work completed under the contract will be measured according to the United States standard measure.
- (b) The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice. Unless otherwise stated all quantities measured for payment shall be computed or adjusted for "in place" conditions.
- (c) Structures will be measured according to lines shown on the plans or as ordered unless otherwise provided for elsewhere in the specifications.
- (d) The term "lump sum" when used as an item of payment will mean complete payment for the work described in the item.
- (e) When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories, so as to provide the item complete and functional. Except as may be otherwise provided, partial payments for lump sum items will be made approximately in proportion to the amount of the work completed on those items.
  - (f) Material wasted without authority will not be included in the final estimate.

#### 2. SCOPE OF PAYMENT

- (a) The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials and for performing all work under the contract in a complete and acceptable manner and for all risk, loss, damage or expense of whatever character arising out of the nature of the work or the prosecution thereof.
- (b) The Contractor shall be liable to the Owner for failure to repair, correct, renew or replace, at his own expense, all damage due or attributable to defects or imperfections in the construction which defects or imperfections may be discovered before or at the time of the final inspection and acceptance of the work.
- (c) No monies, payable under the contract or any part thereof, except the first estimate, shall become due or payable if the Owner so elects, until the Contractor shall satisfy the Owner that the Contractor has fully settled or paid all labor performed or furnished for all equipment hired, including trucks, for all materials used, and for fuels, lubricants, power tools, hardware and supplies purchased by the Contractor and used in carrying out said contract and for labor and parts furnished upon the order of said Contractor for the repair of equipment used in carrying out said contract; and the Owner, if he so elects, may pay any and all such bills, in whole or in part, and deduct the amount of amounts so paid from any partial or final estimate, excepting the first estimate.

#### 3. COMPENSATION FOR ALTERED QUANTITIES

(a) Except as provided for under the particular contract item, when the accepted quantities of

work vary from the quantities in the bid schedule the Contractor shall accept as payment in full, as far as contract items are concerned, at the original contract unit prices for the accepted quantities of work done. No allowance will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the contract items of overhead expense on the part of the Bidder and subsequent loss of expected reimbursements therefore or from any other cause.

(b) Extra work performed will be paid for at the contract bid prices or at the price negotiated between the Owner and the Contractor if the item was not bid upon. If no agreement can be negotiated, the Contractor will accept as payment for extra work, cost plus 15% (overhead and profit). Costs shall be substantiated by invoices and certified payroll.

#### 4. PARTIAL PAYMENTS

Partial payments will be made on a monthly basis during the contract period. From the total amount ascertained as payable, an amount equivalent to ten percent (10%) of the whole will be deducted and retained by the Owner up until fifty percent (50%) completion of the work. Five Percent (5%) of the whole will be deducted and retained by the Owner up until substantial completion. At which point the Contractor can request a reduction down to two percent (2%) in accordance with Final Payment.

### 5. FINAL ACCEPTANCE

Upon due notice from the Contractor of presumptive completion of the entire project, the City Engineer will make an inspection. If all construction provided for and contemplated by the contract is found complete to his satisfaction, this inspection shall constitute the final inspection and the City Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of the final inspection.

If, however, the inspection discloses any work in whole or in part, as being unsatisfactory, the City Engineer will give the Contractor the necessary instructions for correction of such work, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection provided the work has been satisfactorily completed. In such event, the City Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

#### 6. ACCEPTANCE AND FINAL PAYMENT

- (a) When the project has been accepted and upon submission by the Contractor of all required reports, completed forms and certifications, the Owner will review the final estimate of the quantities of the various classes of work performed. The Contractor may be required to certify that all bills for labor and material used under this contract have been paid.
- (b) The Contractor shall file with the Owner any claim that the Contractor may have regarding the final estimate at the same time the Contractor submits the final estimate. Failure to do so shall be a waiver of all such claims and shall be considered as acceptance of the final estimate. From the total amount ascertained as payable, an amount equivalent to ten percent (10%) of the whole will be deducted and retained by the Owner up until fifty percent (50%) completion of the work. Five Percent (5%) of the whole will be deducted and retained by the Owner up until substantial completion. At which point the Contractor can request a reduction

down to two percent (2%) in accordance with Final Payment. This retainage may be waived, at the discretion of the City, provided the required Maintenance Bond has been posted. After approval of the final estimate by the Owner, the Contractor will be paid the entire sum found to be due after

deducting all previous payments and all amounts to be retained or deducted under the provisions of the contract.

(c) All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

## 7. GENERAL GUARANTY AND WARRANTY OF TITLE

- (a) Neither the final certification of payment nor any provision in the contract nor partial or entire use of the improvements embraced in this Contract by the Owner or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express or implied warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of twelve (12) months from the date of final acceptance of the work. The Owner will give notice of defective materials and work with reasonable promptness.
- (b) No material, supplies or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease purchase or other agreement by which an interest therein or in any part thereof is retained by the Seller or supplier. The Contractor shall warrant good title to all

materials, supplies and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Owner free from any claims, liens or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have the right to a lien upon any improvements or appurtenances thereon.

Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this paragraph shall be inserted in all subcontractors and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

#### 8. NO WAIVER OF LEGAL RIGHTS

- (a) Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or be stopped from recovering from the Contractor or his Surety, or both, such overpayment as it may sustain by failure on the part of the Contractor to fulfill his obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.
- (b) The Contractor, without prejudice to the Contract shall be liable to the terms of the Contract, shall be liable to the Owner for latent defects, fraud or such gross mistakes as may amount to fraud, and as regards the Owner's right under any warranty or guaranty.

#### 9. TERMINATION OF CONTRACTOR'S RESPONSIBILITY

Whenever the improvement provided for by the Contract shall have been completely performed on the part of the Contractor and all parts of the work have been released from further obligations except as set forth in his bond and as provided in Section 8 above.

# **TECHNICAL SPECIFICATIONS**

SECTION 02 41 19	SELECTIVE STRUCTURE DEMOLITION
SECTION 03 54 00	CAST UNDERLAYMENT
SECTION 06 10 00	ROUGH CARPENTRY
SECTION 06 20 00	FINISH CARPENTRY & ARCHITECTURAL MILLWORK
SECTION 09 29 50	GYPSUM BOARD ASSEMBLIES
SECTION 09 51 00	ACOUSTICAL PANEL CEILINGS
SECTION 09 54 00	SPECIALTY WOOD CEILINGS
SECTION 09 90 00	PAINTING AND COATING
SECTION 10 40 00	SIGNAGE
SECTION 10 85 00	BUILDING SPECIALTIES
SECTION 23 31 00	HVAC DUCTS AND CASINGS
SECTION 26 05 00	COMMON WORK RESULTS FOR ELECTRICAL
SECTION 26 50 00	LIGHTING

### SECTION 024119 - SELECTIVE STRUCTURE DEMOLITION

### PART 1 - GENERAL

### 1.1 SECTION REQUIREMENTS

- A. Items indicated to be removed and salvaged remain Owner's property. Remove, clean, and deliver to Owner's designated storage area.
- B. Comply with EPA regulations and hauling and disposal regulations of authorities having jurisdiction.
- C. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- D. It is not expected that hazardous materials will be encountered in the Work. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Owner will remove hazardous materials under a separate contract.
- E.Contractor(s) shall follow EPA's Renovation, Repair and Painting Rule(40 CFR745), HUD Lead Safe Housing Rule, NH He-p 1600 rules and regulations and OSHA Lead in Construction 29 CFR 1926.62 & 29 CFR 1910.1025.

### PART 2 - PRODUCTS (Not Applicable)

### **PART 3 - EXECUTION**

# 3.1 DEMOLITION

- A. Maintain services/systems indicated to remain and protect them against damage during selective demolition operations. Before proceeding with demolition, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of the building.
- B. Locate, identify, shut off, disconnect, and cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
- C. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- D. Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain or construction being demolished.
- E. Provide temporary weather protection to prevent water leakage and damage to structure and interior areas.
- F. Protect walls, ceilings, floors, and other existing finish work that are to remain. Erect and maintain dustproof containment partitions as needed. Cover and protect furniture, furnishings, and equipment that have not been removed.

- G. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction.
- H. Promptly remove demolished materials from Owner's property and legally dispose of them. Do not burn demolished materials.
- I. Contractor is responsible for cleaning of all work areas. shall leave the site in neat, clean and safe condition, with all appropriate barricades, fencing, warning signage, etc. securely in place, ready for subsequent work.

#### SECTION 03 54 00 CAST UNDERLAYMENT

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Liquid-applied self-leveling floor underlayment.

### 1.02 REFERENCE STANDARDS

- A. ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or (50-mm) Cube Specimens); 2012.
- B. ASTM C348 Standard Test Method for Flexural Strength of Hydraulic-Cement Mortars; 2014.
- C. ASTM C1708 Standard Test Methods for Self-Leveling Mortars Containing Hydraulic Cements
- D. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.

### 1.03 SUBMITTALS

A. Product Data: Provide manufacturer's data sheets documenting physical characteristics and product limitations of underlayment materials. Include information on surface preparation, environmental limitations, and installation instructions.

# 1.04 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

### 1.05 FIELD CONDITIONS

- A. Do not install underlayment until floor penetrations and peripheral work are complete.
- B. Maintain minimum ambient temperatures of 50 degrees F 24 hours before, during and 72 hours after installation of underlayment.
- C. During the curing process, ventilate spaces to remove excess moisture.

### PART 2 PRODUCTS

### 2.01 MATERIALS

- A. Cementitious Underlayment: Blended cement mix, that when mixed with water in accordance with manufacturer's directions will produce self-leveling underlayment.
  - 1. Compressive Strength, ASTM C1708, C109: Minimum 4000 psi after 28 days.
  - 2. Flexural Strength, ASTM C1708, C348: Minimum 900 psi after 28 days.
  - 3. Tensile Bond Strength, ASTM C1583: 300 PSI
  - 4. Density: 125 lb./cu ft, nominal.
  - 5. Final Set Time: 1-1/2 to 3 hours, maximum.
  - 6. Thickness: Capable of thicknesses from feather edge to maximum 3-1/2 inch.
  - 7. Surface Burning Characteristics, ASTM E84: Flame Spread Index 0, Smoke Developed Index 0
- B. Aggregate: Dry, well graded, washed silica aggregate, approximately 1/8 inch in size and acceptable to underlayment manufacturer.
- C. Water: Potable and not detrimental to underlayment mix materials.
- D. Primer: Manufacturer's recommended type.
- E. Joint and Crack Filler: Latex based filler, as recommended by manufacturer.

### 2.02 MIXING

A. Site mix materials in accordance with manufacturer's instructions.

B. Mix to self-leveling consistency without over-watering.

# PART 3 EXECUTION

# 3.01 EXAMINATION

- A. Verify that underlayment is compatible with scheduled floor covering and adhesives.
- B. Verify that substrate surfaces are clean, dry, unfrozen, do not contain petroleum byproducts, or other compounds detrimental to underlayment material bond to substrate. Do not use acid or mastic removers on any surface. Surfaces shall be 50 degrees F, minimum and 90 degrees F maximum.

### 3.02 CEMENTITIOUS UNDERLAYMENT PREPARATION

- A. Remove substrate surface irregularities. Fill voids and deck joints with filler. Finish smooth.
- B. Vacuum clean surfaces.
- C. Concrete: Mechanically prepare steel troweled concrete to create a textured surface necessary to achieve the best bond; acceptable methods include bead blasting and scarifying. Do not use acid etching.
- D. Close floor openings.
- E. Non-moving Crack Preparation: Thoroughly clean and chase cracks and saw-cuts. Fill with specified product.
- F. Working Cracks: Install expansion contraction joint assemblies or fill with sealants specified for high movement joints as specified in Section 07 90 05 Sealants.
- G. Prime substrate if recommended by the manufacturer in accordance with manufacturer's instructions. Allow to dry.

### 3.03 APPLICATION

- A. Install products in accordance with manufacturer's instructions.
- B. Pump or pour material onto substrate. Do not retemper or add water.
  - 1. Pump, move, and screed while the material is still highly flowable.
  - 2. Be careful not to create cold joints.
  - 3. Wear spiked shoes while working in the wet material to avoid leaving marks.
- C. Place to indicated floor elevation, achieving a minimum 1/8 inch thickness, with top surface level to 1/8 inch in 10 ft.
- D. If a fine, feathered edge is desired, steel trowel the edge after initial set, but before it is completely hard.

#### 3.04 CURING

- A. Once underlayment starts to set, prohibit foot traffic until final set has been reached.
- B. Air cure in accordance with manufacturer's instructions.

# 3.05 FIELD QUALITY CONTROL

A. Field flow tests shall be performed by the Contractor periodically to ensure mix is homogeneous and free from separation.

### 3.06 PROTECTION

- A. Protect against direct sunlight, heat, and wind; prevent rapid drying to avoid shrinkage and cracking.
- B. Do not permit traffic over unprotected floor underlayment surfaces.

# SECTION 06 10 00 ROUGH CARPENTRY

### PART 1 GENERAL

#### 1.01 WORK INCLUDES

- A. Provide all rough carpentry work, as indicated on the Drawings and as specified herein. Rough Carpentry shall include but not be limited to:
  - 1. Concealed blocking.

# 1.02 RELATED WORK

A. Examine Contract Documents for requirements that affect work of this Section

# 1.03 QUALITY ASSURANCE

- A. Materials and workmanship shall conform to governing laws and applicable building code.
- B. Provide lumber and plywood bearing the grade-trademark of the association under the rules or standards of which it was produced. Grade-trademarks shall conform to the rule or standard under which the material is produced, including requirements for qualifications and authority of the inspection organization, usage of authorized identification, and information included in the identification.
  - 1. ASTM D 245 Lumber grades shall be determined in accordance. Grades specified are the minimum acceptable.
  - 2. USDC PS 20 Lumber shall bear the grade mark of an American Lumber Standards Committee, Board of Review-approved agency.
  - 3. Lumber shall bear a mark of mill identification.
  - 4. USDC PS 1 and ANSI A199.1 Plywood shall comply with APA Design/Construction Guide, Residential and Commercial, grading requirements.
  - 5. APA PRP-108 Non-plywood type performance-rated construction panels shall conform.
  - 6. CABO NER-272 Fasteners shall comply.
  - 7. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2010b
  - 8. AWPA U1 Use Category System: User Specification for Treated Wood; American Wood Protection Association; 2010.
  - 9. SPIB (GR) Grading Rules; Southern Pine Inspection Bureau, Inc.; 2002.

### 1.04 SUBMITTALS

- A. Shop Drawings: Submit shop drawings of wood blocking installation and other rough carpentry work in conformance with Factory Mutual wind uplift rated systems. Describe proposed methods of installation and anchorage to structure showing sizes, types, thicknesses, connections of wood blocking and related items including adjoining work by other trades.
- B. Samples: Submit representative samples of all materials for use under this Section.
- C. Product Data: Submit manufacturer's printed product data for each material used. Provide certifications that materials and systems comply with specified requirements.

D. Certificates: Submit certificates of grading, treatment and conformance to specified standards. Certifications shall state date of treatment, conformance with specifications and agency grading of wood.

### 1.05 COORDINATION

- A. Coordinate the work of this Section with the work of other Sections to assure the steady progress of all the work of the Contract.
- B. Field Measurements: Take field measurements before preparation of shop drawings and fabrication. Do not delay progress of the job. If field measurements are not possible prior to fabrication, allow for field cutting and fitting.

# 1.06 PRODUCT DELIVERY AND STORAGE

- A. Materials when delivered to site shall be stacked and stored above the ground under protective coverings or indoors in such manner as to insure proper drainage, ventilation, and protection.
- B. Rough carpentry materials shall be stored on elevated piles to allow for air circulation below and tipped in one direction to effectively drain moisture. Lumber shall be wrapped completely, including bottoms, in waterproof tarps. Tarps shall be tied down to protect against wind blow-off. Should delays in Project be anticipated, lumber shall be stored in covered storage trailers.
- C. Do not leave any newly installed wood blocking exposed. Cover and protect all new wood daily with the new roof systems or other suitable covering approved by the Architect.

### PART 2 PRODUCTS

### 2.01 LUMBER

- A. Provide lumber for miscellaneous wood framing, blocking, cant strips, nailers, etc. for all work of the Project, including, but not limiting to, temporary railings, roofing, flashing, sheet metal work, and the like.
- B. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
  - 1. Factory mark each piece of lumber with grade stamp of grading agency.
  - 2. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
  - 3. Lumber shall be surfaced four sides (S4S) and shall bear the grade and trademark of the association under whose rules it is produced, and a mark of mill identification.
- C. Provide new lumber of consistent size, free of stains and mildew, kiln dried to a maximum moisture content of not more than 19% by weight.
- D. Where exposed or semi-exposed, provide wood members selected for best possible appearance from the grade of stock specified.
- E. Lumber shall be furnished in longest practical lengths with respect to each intended use, and single length pieces shall be used wherever possible.
- F. General Carpentry Material Schedule shall be as follows:

<u>Item</u>	<u>Grade</u>	<u>Species</u>

Lumber 2 in. nominal Construction Grade Spruce – Pine - Fir

thickness or greater

Lumber less than 2 in. Construction Grade Spruce – Pine - Fir

nominal thickness

### 2.02 PRESSURE TREATED LUMBER

A. Pressure treat lumber above ground and in contact with roofing, flashing, sheet metal, masonry, concrete, dampproofing, and waterproofing in conformance with AWPA U1. Provide pressure preservative treated lumber with a minimum net retention of 0.25 pcf. Dry lumber to maximum moisture content of 19% after treatment. Use only waterborne preservatives which conform to AWPA P5. Creosote preservatives are not acceptable.

 Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSCaccredited testing agency, certifying level and type of treatment in accordance with AWPA standards.

# 2.03 MISCELLANEOUS MATERIALS

- A. Inserts, Anchors, and Fasteners: Provide inserts, anchors, anchor bolts, lag bolts, screws, washers, nuts, nails, and other rough hardware. Assist other trades as necessary in the placement of inserts and anchor bolts in concrete and masonry. Furnish full instructions regarding locations, sizes, and other requirements to ensure proper preparation. Provide rough hardware which complies with requirements of the governing laws and codes.
  - 1. Metal and Finish: Stainless steel for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
- B. Rough Hardware: Provide rough hardware items for use at roof and other exterior uses hot-dip galvanized in accordance with ASTM A 153. Provide other concealed items cadmium plated or zinc chromate plated.
- C. Provide hammer drive anchors and fasteners for securing wood framing, blocking or plywood into masonry of sufficient length to penetrate the receiving member a minimum of 1-1/2 in.
- D. Adhesives for Gluing Wood Members to Concrete or Masonry: Formulation complying with ASTM D 3498 that is approved for use indicated by adhesive manufacturer.

# PART 3 EXECUTION

# 3.01 ROUGH CARPENTRY WORK – GENERAL

- A. The Contractor shall be responsible for structural integrity, connections, and anchorage of rough carpentry work. All nailing shall be in accordance with the applicable building code.
- B. Discard units of material which are unsound, warped, bowed, twisted, improperly treated, not adequately seasoned, or too small to fabricate with minimum number of joint or optimum jointing arrangements, or which are of defective quality with respect to surfaces or sizes.
- C. Butt joints in wood shall be flush to provide a smooth, uniform line with no irregularities. Built-up blocking shall have butt joints staggered 4 in. minimum layer to layer. The minimum length of any individual piece of woodwork shall be 12 in. All lengths of woodwork shall have a minimum of four fasteners.

- D. Construct all rough carpentry work plumb, level, and true with tight, close fitting joints, securely attached and braced to surrounding construction, all in a first class workmanlike manner. Counterbore for bolt heads, nuts, and washers where required to avoid interference with other materials.
- E. Wood blockings, nailers, edgings, etc., shall be installed as indicated or specified and shall be furnished in lengths not less than 12 ft., except where shorter lengths are required. Select material sizes to minimize waste.
- F. Attach to substrates as required to support applied loading. Countersink bolts and nuts flush with surfaces.
- G. Repair all damage caused by puncturing of conduits, pipes, ducts, etc. when nailing, drilling or powder driving into concrete or masonry.

### 3.02 FASTENING OF WOODWORK

- A. Wood to masonry connections shall be completed using non-impact drilled anchors through predrilled holes spaced 8 in. on center maximum. Predrill the hole, insert fastener sleeve, and secure in place with nail.
- B. Install plywood on masonry surfaces hammer driven anchors through predrilled holes spaced 12 in. on center along the top and bottom edges. Keep fasteners 3 in. minimum from the board edge. Drive fastener heads flush with surface. Secure plywood to wood substrate with nails at same spacing as hammer driven anchors. Secure plywood to metal studs with screws approved by metal stud manufacturer.
- C. Wood shall be secured to wood substrates and other wood to wood connection with nails spaced 12 in. on center maximum staggered along the centerline of the member being installed. All nail heads must be flush with the top surface.

### 3.03 CLEANING

A. Upon completion of rough carpentry work in any given area, remove all rubbish and debris from the work area and leave in broom clean condition.

### SECTION 06 20 00 FINISH CARPENTRY & ARCHITECTURAL MILLWORK

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Custom woodwork seating bench.

### 1.02 RELATED REQUIREMENTS

A. Section 06 10 00 – Rough Carpentry: Concealed wood blocking.

### 1.03 REFERENCE STANDARDS

- A. ANSI A208.2 American National Standard for Medium Density Fiberboard; 2009.
- B. AWI/AWMAC/WI Architectural Woodwork Standards; 2009.

### 1.04 SUBMITTALS

- A. Product Data: Provide manufacturer's technical information for all fabricated products, and accessories specified herein.
- B. Samples:
  - 1. Submit confirmation samples and color chips for selected wood finish.

# 1.05 QUALITY ASSURANCE

A. Installer Qualifications: An experience Installer who has completed architectural woodwork similar in material, design, and extend to that indicated for this Project and whose work has resulting in construction with a record of successful in-service performance.

### **PART 2 PRODUCTS**

# 2.01 MATERIALS

- A. General: Provide materials that comply with requirements of the AWI quality standard for each type of woodwork and quality grade specified, unless otherwise indicated.
- B. Wood Species for Transparent Finish: Poplar to match Armstrong
- C. Wood Products: Comply with the following:
  - 1. Use poplar for
  - 2. Medium-Density Fiberboard, MDF: ANSI A208.2, Grade MD-21, 48 lb. density.
  - 3. Hardwood Plywood and Face Veneers: HPVA HP-1, Grade A veneers.
    - a. Veneer Core Construction, All Locations Except as Noted: Veneer core plywood, no voids; poplar core veneers.
      - 1) 3/4-Inch Thickness: 7 plies.
      - 2) 1/2-Inch Thickness: 5 plies.

### 2.02 INSTALLATION MATERIALS

- A. Furring, Blocking, Shims, and Hanging Strips: Softwood or hardwood lumber, kiln-dried to less than 15 percent moisture content.
- B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage.

#### 2.03 FABRICATION, GENERAL

- A. Interior Woodwork Grade: Provide materials that comply with requirements of the AWI quality standard for each type of woodwork and quality grade indicated and any additional requirements of this Section. When quality grade is not indicated, provide Custom quality grade.
- B. Wood Moisture Content: Comply with requirements of referenced quality standard for wood moisture content in relation to ambient relative humidity during fabrication and in installation areas.
- C. Fabricate woodwork to dimensions, profiles, and details indicated. Ease edges to radius indicated for the following:
  - 1. Corners of bench and Edges of Solid-Wood (Lumber) Members 3/4 Inch Thick or Less: 1/16 inch (1.5 mm). 2. Edges of Rails and Similar Members More Than 3/4 Inch Thick: 1/8 inch.

### 2.04 WOOD BENCH

- A. Quality Standard: Comply with AWI Section 10 Casework and additional specified requirements for wood cabinets.
- B. Grade: Custom.
- C. Wood Species and Cut for Exposed Surfaces: Select white maple, plain sawn or sliced.
  - 1. 3/4-inch-thick hardwood plywood with hardwood veneer banded front edge.
    - a. Edge Treatment: Solid wood matching face for species and cut; front and back.
    - b. Grain Matching: Run and match grain across width of window/wall, typical.

#### PART 3 EXECUTION

### 3.01 PREPARATION

- A. Condition woodwork to average prevailing humidity conditions in installation areas before installation.
- B. Before installing architectural woodwork, examine shop-fabricated work for completion and complete work as required, including removal of packing and back priming.

#### 3.02 ADJUSTING AND CLEANING

- A. Repair damaged and defective woodwork, where possible, to eliminate functional and visual defects; where not possible to repair, replace woodwork. Adjust joinery for uniform appearance.
- B. Clean, lubricate, and adjust hardware.
- C. Clean woodwork on exposed and semi-exposed surfaces. Touch up shop-applied finishes to restore damaged or soiled areas.

#### 3.03 PROTECTION

A. Provide final protection and maintain conditions in a manner acceptable to fabricator and Installer that ensures that woodwork is without damage or deterioration at time of Substantial Completion.

#### SECTION 09 29 50 GYPSUM BOARD ASSEMBLIES

#### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS

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

#### 1.02 SUMMARY

- A. This Section includes the following:
  - 1. Interior gypsum wallboard.
  - 2. Non-load-bearing steel framing.
  - 3. Patching.
- B. Related Sections include the following:
  - 1. Division 06 Section "Rough Carpentry" for wood blocking.

#### 1.03 DEFINITIONS

A. Gypsum Board Terminology: Refer to ASTM C 11 and GA-505 for definitions of terms for gypsum board assemblies not defined in this Section or in other referenced standards.

#### 1.04 SUBMITTALS

- A. General: Submit in accordance with Division 01 Section "General Requirements."
- B. Product Data: For each type of product indicated.

#### PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply for product selection:
  - 1. Manufacturers: Subject to compliance with requirements, provide products by the manufacturers specified.
  - 2. Products: Subject to compliance with requirements, provide one of the products specified.

# 2.02 STEEL PARTITION FRAMING

- A. Manufacturers:
  - 1. Clark Dietrich Building Systems.
  - 2. Super Stud Building Products, Inc.
- B. Components, General: As follows:
  - 1. Comply with ASTM C 754 for conditions indicated.
  - 2. Steel Sheet Components: Complying with ASTM C 645 requirements for metal and with ASTM A 653/A 653M, G40, hot-dip galvanized zinc coating. Substitute coating not permitted.
- C. Steel Studs and Runners: ASTM C 645.
  - 1. Gauge Equivalent Drywall Framing: For all studs locations, Minimum Design Thickness 0.023 inches.
    - a. Clark Dietrich ProSTUD 20.
    - b. Super Stud The Edge Super 20.
  - 2. Depth: As indicated.

D. Fasteners for Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel framing and furring members to substrates involved; complying with recommendations of gypsum board manufacturers for applications indicated.

#### 2.03 INTERIOR GYPSUM WALLBOARD

- A. Manufacturers:
  - 1. G-P Gypsum Corporation.
  - 2. National Gypsum Company.
  - 3. United States Gypsum Company.
- B. Panel Size: Provide in maximum lengths and widths available that will minimize joints in each area and correspond with support system indicated.
  - a. Gypsum Wallboard, GPDW: ASTM C 36: 1/2 inch Thickness with long edges tapered:

#### 2.04 TRIM ACCESSORIES

- A. Interior Trim: ASTM C 1047, galvanized steel.
  - 1. Shapes:
    - a. Cornerbead: 1-1/4 inch x 1-1/4 inch external corner with 1/8-inch nose bead. Use at outside corners, unless otherwise indicated.
    - b. LC-Bead (Casing): J-shaped casing with 1/16-inch nose bead ground, not less than 30 gage; exposed long flange receives joint compound;.
- B. Aluminum Trim: Extruded accessories of profiles and dimensions to match existing.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Fry Reglet Corp.
    - b. Gordon, Inc.
    - c. MM Systems Corporation.
    - d. Pittcon Industries.
  - 2. Aluminum: Alloy and temper with not less than the strength and durability properties of ASTM B 221, alloy 6063-T5.
  - 3. Finish: Corrosion-resistant primer compatible with joint compound and finish materials specified.
  - 4. Reveal Profile: Match existing width and depth.

# 2.05 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C 475 and the recommendations of both the manufacturers of sheet products and of joint treatment materials for each application indicated.
- B. Joint Tape:
  - 1. Interior Gypsum Wallboard: Paper reinforcing tape. Fiberglass tape not permitted.
- C. Setting-Type Joint Compound: Factory-packaged, job-mixed, chemical-hardening powder products formulated for uses indicated.
  - 1. Provide sandable type for finish coat.
- D. Type of Joint Compound for Interior Gypsum Wallboard: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.
  - 1. Prefilling: At open joints, beveled panel edges, and damaged surface areas, use setting- type taping compound.
  - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.
  - 3. Fill Coat: For second coat, use setting-type, sandable topping compound.
  - 4. Finish Coat: For third coat, use setting-type, sandable topping compound.

#### 2.06 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.
- B. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.
  - 1. Fastening gypsum board to steel members: Type S bugle head.

### PART 3 - EXECUTION

### 3.01 INSTALLING STEEL FRAMING, GENERAL

- A. Installation Standards: ASTM C 754, and ASTM C 840 requirements that apply to framing installation.
- B. Install supplementary framing, blocking, and bracing at terminations in gypsum board assemblies to support fixtures, equipment services, grab bars, toilet accessories, wall mounted door stops or similar construction. Comply with details indicated and with gypsum board manufacturer's written recommendations or, if non available, with United States Gypsum's "Gypsum Construction Handbook."
- C. Isolate steel framing from building structure at locations indicated to prevent transfer of loading imposed by structural movement. Comply with details shown on Drawings.
  - 1. Isolate partition framing and wall furring where it abuts structure, except at floor. Install slip-type joints at head of assemblies that avoid axial loading of assembly and laterally support assembly.
    - a. Install deflection track top runner or deflection brackets to attain lateral support and avoid axial loading.

#### 3.02 APPLYING AND FINISHING PANELS, GENERAL

- A. Gypsum Board Application and Finishing Standards: ASTM C 840 and GA-216, except as specified otherwise.
- B. Install gypsum panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.
- C. Locate edge and end joints over supports. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions.
- D. Attach gypsum panels to steel studs so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.
- E. Attach gypsum panels to framing provided at openings and cutouts.
- F. Space fasteners in gypsum panels according to referenced gypsum board application and finishing standard and manufacturer's written recommendations.
  - 1. Space screws a maximum of 12 inches o.c. for vertical applications.
- G. Remove screws that do not hit studs, supports, or blocking.

# 3.03 INSTALLING TRIM ACCESSORIES

- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- B. Install corner bead at external corners.
- C. Install edge trim where edge of gypsum panels would otherwise be exposed. Provide edge trim type with face

flange formed to receive joint compound, except where other types are indicated.

- 1. Install LC-bead where gypsum panels are tightly abutted to other construction and back flange can be attached to framing or supporting substrate.
- 2. Install L-bead where edge trim can only be installed after gypsum panels are installed.
- 3. Install U-bead where indicated.

#### 3.04 FINISHING GYPSUM BOARD ASSEMBLIES

- A. General: Treat gypsum board joints, interior angles, flanges of corner bead, edge trim, J-bead, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints, beveled edges, and damaged surface areas using setting-type joint compound.
- C. Apply joint tape over gypsum board joints and to flanges of trim accessories as recommended by trim accessory manufacturer.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below, according to ASTM C 840, for locations indicated:
  - 1. Level 4: At panel surfaces that will be exposed to view, unless otherwise indicated.
    - a. Provide skim coat finish where existing resilient wall base is removed.
- E. For Level 4 gypsum board finish, embed tape in joint compound and apply first, fill (second), and finish (third) coats of joint compound over joints, angles, fastener heads, and accessories. Touch up and sand between coats and after last coat as needed to produce a surface free of visual defects and ready for decoration.
  - 1. At tapered edge joints, draw compound down to a level plane, leaving a monolithic surface that is flush with the paper face. Finish coat shall be feathered a minimum of 8 inches beyond both sides of center of joint tape.
  - 2. At end-to-end butt joints, draw compound down to minimize hump created by joint tape application. Finish coat shall be feathered a minimum of 16 inches beyond both sides of center of joint tape.
  - 3. End product shall be a surface that appears level without telegraphing joint locations as high spots when viewed down wall after painting.
  - 4. Finish board to within 1/4 inch of floor, providing full support for resilient wall base without telegraphing joint.
- F. Patching: Inspect existing walls scheduled to be painted for dents, holes, damage and blemishes.

Fill holes, blemishes, and surfaces disturbed by the work with compound to blend with adjacent surfaces. Tape and blend finish into existing gypsum board to a Level 4 finish, so joints are unperceivable after paint finish is applied.

1. At locations where existing wall base is removed and scheduled to receive new wall base, skim coat surface to remove irregularities, making wall surface smooth and level to receive new wall base.

### 3.05 CLEANING AND PROTECTION

A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.

#### SECTION 09 51 00 ACOUSTICAL PANEL CEILINGS

### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS

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

#### 1.02 SUMMARY

- A. This Section includes the following:
  - 1. Acoustical panels.
  - 2. Exposed suspension systems.
- B. Related Sections include the following:
  - 1. Division 23, and 26 Sections for coordination of air handling devices, and luminaires installed in ceiling systems.

#### 1.03 SUBMITTALS

- A. General: Submit in accordance with Division 01 Section "General Requirements."
- B. Product Data: For each type of product indicated.

### 1.04 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: Provide acoustical panel ceilings that comply with the following requirements:
  - 1. Surface-Burning Characteristics: Provide acoustical panels with the following surface- burning characteristics complying with ASTM E 1264 for Class A materials as determined by testing identical products per ASTM E 84:
    - a. Smoke-Developed Index: 450 or less.

### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver acoustical panels, suspension system components, and accessories to Project site in original, unopened packages and store them in a fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes. Store materials flat.
- B. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.
- C. Handle acoustical panels carefully to avoid chipping edges or damaging units in any way.

### 1.06 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install acoustical panel ceilings until wet work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Mechanical, electrical, and other utility service installations above the ceiling plane shall have been completed prior to the installation of the ceilings.

### 1.07 COORDINATION

A. Coordinate layout and installation of acoustical panels and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, and partition assemblies.

# PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

 Products: 2'x2' Armstrong 737C Beveled tegular acoustical ceiling tile - TO MATCH PORTSMOUTH CITY HALL STANDARD

### 2.02 ACOUSTICAL PANELS, GENERAL

- A. Acoustical Panel Standard: Provide manufacturer's standard panels of configuration indicated that comply with ASTM E 1264 classifications as designated by types, patterns, acoustical ratings, and light reflectance, unless otherwise indicated.
  - 1. Mounting Method for Measuring NRC: Type E-400; plenum mounting in which face of test specimen is 15-3/4 inches away from test surface per ASTM E 795.
  - 2. Test Method for Ceiling Attenuation Class (CAC). Where acoustical panel ceilings are specified to have a CAC, provide units identical to those tested per ASTM E 1414 by a qualified testing agency.
- B. Coating-Based Antimicrobial Treatment: Provide acoustical panels with face and back surfaces coated with antimicrobial treatment consisting of manufacturer's standard formulation with fungicide added to inhibit growth of mold and mildew and showing no mold or mildew growth when tested according to ASTM D 3273.

### 2.03 ACOUSTIC PANELS

- A. Acoustic Panel: **Armstrong** 737C Beveled tegular acoustical ceiling tile
  - 1. Size: 24 inches x 24 inches x 5/8-inch thick.
  - 2. Composition: Mineral wool fiber.
  - 3. Surface Finish: Factory-applied latex paint; white.
  - 4. Edge: Beveled tegular.

# 2.04 METAL SUSPENSION SYSTEMS, GENERAL

- A. Metal Suspension System Standard: Provide manufacturer's standard direct-hung metal suspension systems of types, structural classifications, and finishes indicated that comply with applicable requirements in ASTM C 635.
- B. Finishes and Colors, General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes. Provide manufacturer's standard factory-applied finish for type of system indicated.
- C. Attachment Devices: Size for five times the design load indicated in ASTM C 635, Table 1, "Direct Hung," unless otherwise indicated.
- D. Wire Hangers, Braces, and Ties: Provide wires complying with the following requirements:
  - 1. Zinc-Coated Carbon-Steel Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper.
  - 2. Size: Select wire diameter so its stress at three times hanger design load (ASTM C 635, Table 1, "Direct Hung") will be less than yield stress of wire, but provide not less than 0.106-inch-diameter wire.

#### 2.05 METAL SUSPENSION SYSTEMS FOR ACOUSTICAL PANEL CEILINGS

- A. Wide-Face, Capped, Double-Web, Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet, pre-painted, electrolytically zinc coated, or hot-dip galvanized according to ASTM A 653/A 653M, not less than G30 coating designation, with prefinished 15/16inch- wide metal caps on flanges.
  - 1. Structural Classification: Heavy-duty system.
  - 2. End Condition of Cross Runners: Override (stepped) or butt-edge type, as standard with

#### manufacturer.

- 3. Face Design: Flat, flush.
- 4. Cap Material: Steel or aluminum cold-rolled sheet, as standard with manufacturer.
- 5. Cap Finish: Painted white.
- 6. Products:
  - a. Armstrong World Industries, Inc.; Prelude XL Exposed Tee System.

#### 2.06 ACCESSORIES

- A. Provide means of locating valves and other items requiring maintenance or access, which are located concealed above ceiling panels. The identification shall be color coded to match the color coding issued by the University Director of Utilities for heating and plumbing lines.
  - 1. Provide phenolic tags to locate valves and controls above ceiling mechanically attached to ceiling grid.

### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, including structural framing to which acoustical panel ceilings attach or abut, with Installer present, for compliance with requirements specified in this and other Sections that affect ceiling installation and anchorage and with requirements for installation tolerances and other conditions affecting performance of acoustical panel ceilings.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.02 PREPARATION

- A. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders, and comply with dimensions and layout shown on reflected ceiling plans.
- B. Confirm all acoustic tile layout with Architect in field prior to installation of any grid.

# $3.03\,$ INSTALLATION OF SUSPENSION SYSTEMS AND ACOUSTICAL CEILING PANELS, GENERAL

- A. General: Install acoustical panel ceilings to comply with ASTM C 636 requirements indicated, per manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."
- B. Suspend ceiling hangers from building's structural members and as follows:
  - 1. Hangers shall be single lengths of wire without splices; coordinate lengths in deep ceiling cavities.
  - 2. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structure or of ceiling suspension system.
  - 3. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, counter splaying, or other equally effective means.
  - 4. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers at spacings required to support standard suspension system members, install supplemental suspension members and hangers in form of trapezes or equivalent devices. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced standards and publications.
  - 5. Secure wire hangers to ceiling suspension members and to supports above with a minimum of three tight turns. Connect hangers directly either to structures or to inserts, eye screws, or other devices that are secure and appropriate for substrate and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures.
  - 6. Do not support ceilings directly from permanent metal forms or floor deck. Fasten hangers to post installed mechanical or power-actuated fasteners that extend through forms into concrete.
  - 7. Do not attach hangers to steel deck tabs.
  - 8. Space hangers not more than 48 inches o.c. along each member supported directly from hangers, unless

- otherwise indicated; provide hangers not more than 8 inches from ends of each member.
- 9. Exposed pop rivets for grid alignment purposes shall not be permitted.
- C. Suspension system shall be reinforced to support diffusers, light fixtures and any additional members. Install hanger wires to grid at each corner of light fixtures. Coordinate location with electrical and other trades
  - Each individual fixture and attachment with combined weight of 56 pounds or less shall have two 12-gage wire hangers attached at diagonal corners of the fixture. These wires shall be slack. Fixtures and attachments with a combined weight of greater than 56 pounds shall be independently supported from the structure at all four corners.
- D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels.
  - 1. Screw attach moldings to substrate at intervals not more than 16 inches o.c. and not more than 3 inches from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet. Miter corners accurately and connect securely.
  - 2. Do not use exposed fasteners, including pop rivets, on moldings and trim.
- E. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.
- F. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.
  - 1. Arrange directionally patterned acoustical panels to run in the same direction.
  - 2. For reveal-edged panels on suspension system runners, install panels with bottom of reveal in firm contact with top surface of runner flanges.
  - 3. Paint cut edges of panel remaining exposed after installation; match color of exposed panel
  - 4. Surfaces using coating recommended in writing for this purpose by acoustical panel manufacturer.
  - G. Locating Tags: Where valves and controls are located above acoustical ceilings, mechanically attach identification tags to ceiling grid.

### 3.04 CLEANING NEWLY INSTALLED WORK

A. Clean exposed surfaces of acoustical panel ceilings, including trim, edge moldings, and suspension system members. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

#### SECTION 09 54 00 SPECIALTY WOOD CEILINGS

### PART 1 - GENERAL

### 1.01 RELATED DOCUMENTS

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

### 1.02 SUMMARY

- A. This Section includes the following:
  - 1. Non-perforated wood ceiling panels.
  - 2. Acoustical backing
  - 3. Suspension systems
  - 4. Accessories: provide other necessary items include devices for attachment overhead construction, secondary members, splines, splices, connecting clips, wall connectors, wall angles, and other devices required for a complete installation.
  - 5. Supplemental support framing. Provide fully engineered secondary framing as required to meet code, conforming to layout shown in drawings, to support direct-hung wood ceilings suspension system.
- B. Related Sections include the following:
  - 1. Division 09 Section Gypsum Board Assemblies"
  - 2. Division 09 Section "Acoustical Ceilings"
  - 3. Division 23, and 26 Sections for coordination of air handling devices, and luminaires installed in ceiling systems.
- C. This Section covers the general requirements only for Specialty Wood Ceilings as shown on the drawings. The supplying and installation of additional accessory features and other items not specifically mentioned herein, but which are necessary to make a complete installation, shall also be included or clarified accordingly.
- D. Qualification Data:
  - 1. Certificates:
    - a. Data substantiating manufacturer and installer qualifications.
    - b. Certified data attesting fire rated materials comply with specifications.
  - 2. Manufacturer's Instructions: Detailed installation instructions and maintenance data.

#### 1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM)
  - 1. E 84 "Standard Test Method for Surface Burning Characteristics of Building Materials"
  - 2. E 488 "Standard Test Methods for Strength of Anchors in Concrete and Masonry Elements"
  - 3. C 423 "Sound Absorption and Sound Absorption Coefficients by Reverberation Room Method"
  - 4. E 580 "Standard Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Moderate Seismic Restraint"
  - 5. C 635 "Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings"
  - 6. C 636 "Recommended Practice for Installation of Metal Ceiling Suspensions Systems for Acoustical and Lay-in Panels"
  - 7. A 641 "Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire"
  - 8. A 653 "Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip process."

- 9. E 1264 "Classification for Acoustical Ceiling Products"
- 10. E 1477 "Standard Test Method for Luminous Reflectance Factor of Acoustical Materials by Use of Integrating-Sphere Reflectometers"
- 11. D 1044 Practice for Abrasion Resistance
- 12. D 1002 Practice for Adhesion Resistance

#### 1.04 SUBMITTALS

- B. Product Data: Manufacturer's published literature, including specifications.
- C. Product Certification: Manufacturer's certifications that products comply with specified requirements and governing codes including product data, laboratory test reports and research reports showing compliance with specified standards.
- D. Shop Drawings: Submit shop drawings for reflected ceiling plans (RCP's), drawn to scale, and indicating penetrations and ceiling mounted items. Show the following details:
  - 1. Reflected Ceiling Plan(s): Indicating wood ceiling layout, ceiling mounted items and penetrations.
  - 2. Suspension System, Carrier and Component Layout.
  - 3. Details of system assembly and connections to building components.
- E. Samples for Verification: Full-size units (or as specified below) of each type of ceiling assembly indicated; in sets for each color, texture, and pattern specified, showing the full range of variations expected in these characteristics. Submit samples for each type specified.
  - 1. 11" square wood panel units.
  - 2. 11" long samples of each exposed molding or trim.
  - 3. 11" long samples of each suspension component.

### 1.05 QUALITY ASSURANCE

- A. Manufacturer/Installer Qualifications:
  - 1. Provide wood ceiling system components produced by a single manufacturer with a minimum 5 years' experience in actual production of specified products and with resources to provide consistent quality in appearance and physical properties, without delaying the work.
  - 2. Provide suspension system components produced by a single manufacturer to provide compatible components for a complete wood ceiling system installation.
  - 3. Perform installations using a firm with installers having no less than 3 years of successful experience on projects of similar size and requirements.
- B. Regulatory Requirements:
  - 1. Fire Rating Performance Characteristics: Install system to provide a flame spread of 0 25, complying with certified testing to ASTM E 84.
  - 2. Structural Criteria: Install and certify system to comply with structural and wind load requirements of governing codes.
  - 3. Installation Standard for Suspension System: Comply with ASTM C 636.
- C. Mock-Up: Prior to beginning installation erect a mock-up section, where directed, using all system components.
- D. Pre-installation Conference: Conduct a conference, prior to start of installation, to review system requirements, shop drawings, and all coordination needs.

### 1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver system components in manufacturer's original unopened packages, clearly labeled.

- B. Store components in fully enclosed dry space in which HVAC systems are functioning and in continuous operation. Carefully place on skids, to prevent damage from moisture and other construction activities. Panels must remain in cartons until installation, which must be stored in a flat, horizontal position.
- C. Handle components to prevent damage to surfaces and edges, and to prevent distortion, soiling, and other physical damage.

#### 1.07 PROJECT CONDITIONS

- A. Begin system installations only after spaces are enclosed and weather-tight, and after all wet work and overhead work have been completed.
- B. Prior to starting installations, allow materials to reach ambient room temperature and humidity intended to be maintained for occupancy. Natura Wood ceiling panels must reach room temperature and have a stabilized moisture content for a minimum of 72 hours prior to installation. Relative humidity 25% 55% and temperatures 50°F 86°F must be maintained throughout the life of the product.

#### 1.08 WARRANTY

- A. Provide specified manufacturer's warranty against defects in workmanship, discoloration, or other defect considered undesirable by the Owner.
- B. This warranty shall remain in effect for a minimum period of one (1) year from date of initial acceptance.

#### 1.09 MAINTENANCE & EXTRA MATERIALS

- A. Maintenance Instructions: Provide manufacturers standard maintenance and cleaning instructions for finishes provided.
- B. Extra Materials: Furnish extra materials described below that match products installed, are packaged with protective covering for storage, and are identified with labels describing contents. Only typical system components are included with attic stock.
  - 1. Wood Ceiling Pan Units: Full-size units equal to two percent (2%) of amount installed.
  - 2. Ceiling Suspension System Components: Quantity of each grid and exposed component equal to two percent (2%) of amount installed.

### **PART 2 PRODUCTS**

### 2.01 MANUFACTURER

- A. ARMSTRONG Woodworks Grille tegular ceiling
  - 1. Size: 24" x48" panels
  - 2. Finish: : Golden Maple (GGM)
  - 3. Grid: 15/16" PRELUDE GRID BLACK #6723F51L4T5 -
  - 4. Bioacoustical Infill Panel 5823 BLACK

### 2.02 ACCESSORY MATERIALS

- A. Wall Moldings/Trim Manufacturer's standard
- B. Clips: Manufacturer's standard hold-down, security, and seismic clips.

#### **PART 3- EXECUTION**

# 3.01 EXAMINATION

A. Examine substrates and structural framing to which wood panels attach or abut, with Installer present, for compliance with requirements specified in this and other Sections that affect installation and anchorage, and other conditions affecting performance of wood panel ceilings.

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

#### 3.02 PREPARATION

- A. Coordination: Furnish layouts for cast-in-place anchors, clips, and other ceiling anchors whose installation is specified in other Sections.
- B. Measure each ceiling area and establish layout of wood pan units to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width units at borders, and comply with layout shown on reflected ceiling plans.
- C. Survey substrate for wall attachment to assure squareness and proper elevation for wall panel installation.

#### 3.03 INSTALLATION

- A. General: Install wood pan ceilings, per manufacturers shop drawings provided, per manufacturer's written instructions and to comply with publications referenced below.
  - 1. CISCA "Ceiling Systems Handbook."
  - 2. Standard for Ceiling Suspension System Installations ASTM C 636.
  - 3. Standard for Ceiling Suspension Systems Requiring Seismic Restraint ASTM E 580
  - 4. IBC (International Building Code) standard for Seismic Zone for local area.
- B. Suspend ceiling hangers from building's approved structural substrates and as follows:
  - 1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structure or of ceiling suspension system.
  - 2. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, counter-splaying, or other equally effective means.
  - 3. Where width of ducts and other construction within ceiling plenum produce hanger spacings that interfere with location of hangers at spacing required to support standard suspension system members, install supplemental suspension members and hangers in form of trapezes or equivalent devices. Utilize supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced standards and publications.
  - 4. Where used secure wire hangers to ceiling suspension members and to supports above with a minimum of three tight turns. Connect hangers directly either to structures or to inserts, eye screws, or other devices that are secure; that are appropriate for substrate; and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures.
  - 5. Space hangers not more than 48" on-center, along each member supported directly from hangers, unless otherwise indicated; and provide hangers not more than 8" from ends of each member. Supply supporting calculations from licensed Structural Engineer verifying hanger spacing meets all requirements, when spacing exceed those recommended.
  - 6. Level grid to 1/8" in 10 feet from specified elevation(s), square and true.
  - 7. Adjust suspension system runners so they are square (within .5 degree from 90 degrees) and securely interlocked with one another. Remove and replace dented, bent, or kinked members.
- C. Secure bracing wires to ceiling suspension members and to supports acceptable to Architect / Engineer and or inspector. Suspend bracing from building's structural members and / or structural deck, as required for hangers, without attaching to permanent metal forms, steel deck, or steel deck tabs(unless directed otherwise).
- D. Install edge moldings and trim of type indicated at perimeter of ceiling area and where necessary to conceal edges of wood pan. Method of edge trim attachment and design of edge trims to be approved by Architect.
  - 1. Screw attach moldings to substrate at intervals not more than 18" on-center and not more than 6" from ends, leveling with ceding suspension system to a tolerance of 1/8" in 10'. Miter corners accurately and connect securely.
  - 2. Do not use exposed fasteners, including pop rivets, on moldings and trim without prior written approval, or unless detailed otherwise.
- E. Scribe and cut wood panel units for accurate fit at penetrations by other work through ceilings.
- F. Install wood panel units in coordination with suspension system.
  - 1. Fit adjoining units to form flush, tight joints. Scribe and cut units for accurate fit at borders and around

construction penetrating ceiling.

2. Prior to Substantial Completion, clean down the horizontal wood ceiling once.

# 3.04 ADJUST AND CLEAN

- A. Adjust components to provide uniform tolerances.
- B. Replace all ceiling panels that are scratched or otherwise damaged.
- C. Dust or wipe exposed surfaces with a damp cloth. Use non-solvent, non-abrasive commercial type cleaner as needed.

#### SECTION 09 90 00 PAINTING AND COATING

#### PART 1 - GENERAL

### 1.01 RELATED DOCUMENTS

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

### 1.02 SUMMARY

- A. Finish all interior surfaces exposed to view, unless fully factory finished.
  - 1. Walls: Sherwin Williams SW7050 "Useful Gray" (Eggshell finish)
  - 2. Trim: Sherwin Williams SW7005 "Pure White" (Semi-gloss finish)
  - 3. Drywall ceilings and soffits: Sherwin Williams SW7757 "High Reflective White" (Flat finish)
  - 4. Bench:
    - a. Front Recessed Panels: Sherwin Williams SW7005 "Pure White" (Semi-gloss finish)
    - b. Hardwood bench top: Stain to match Armstrong Tegular ceiling and clear finish over.
- B. Related Sections include the following:
  - 1. Division 09 Section "Gypsum Board Assemblies" for surface preparation of new gypsum board.
  - 2. Review all sections for shop primed items requiring field painting.

#### 1.03 DEFINITIONS

- A. General: Standard coating terms defined in ASTM D 16 apply to this Section.
  - 1. Flat refers to a lusterless or matte finish with a gloss range below 15 when measured at an 85-degree meter.
  - 2. Eggshell refers to low-sheen finish with a gloss range between 20 and 35 when measured at a 60-degree meter.
  - 3. Semigloss refers to medium-sheen finish with a gloss range between 35 and 70when measured at a 60-degree meter.

#### 1.04 SUBMITTALS

- A. General: Submit in accordance with Division 01 Section "General Requirements."
- B. Product Data: For each paint system indicated, including block fillers and primers.
  - 1. Material List: An inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
  - 2. Manufacturer's Information: Manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material proposed for use.
  - 3. Include printed statement of VOC content for each product.
- C. Color Mix Code: Paint formulas, including paint base used, for all colors used for Project.

### 1.05 OUALITY ASSURANCE

- A. Applicator Qualifications: Engage an experienced Applicator who has completed painting system applications similar in material, design, and extent to those indicated for this Project, whose work has resulted in applications with a record of successful in-service performance.
- B. Source Limitations: Obtain block fillers, primers and undercoat materials for each coating system from the same manufacturer as the finish coats.
  - 1. After permanent lighting and other environmental services have been activated, apply benchmark samples, according to requirements for the completed Work. Provide required sheen, color, and

texture on each surface.

2. Final approval of colors will be from benchmark samples.

# 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the Project Site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:
  - 1. Product name or title of material.
  - 2. Product description (generic classification or binder type).
  - 3. Manufacturer's stock number and date of manufacture.
  - 4. Contents by volume, for pigment and vehicle constituents.
  - 5. Thinning instructions.
  - 6. Application instructions.
  - 7. Color name and number.
  - 8. VOC content.

### 1.07 PROJECT CONDITIONS

- A. Apply paints only when temperatures of surfaces to be painted and surrounding air are between 45 and 95 deg F.
  - 1. Allow wet surfaces to dry thoroughly and attain temperature and conditions specified before proceeding with or continuing coating operation.

# 1.08 EXTRA MATERIALS

- A. Furnish extra paint materials from the same production run as the materials applied and in the quantities described below. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.
  - 1. Quantity: Furnish Owner with not less than 1 gal. of each material and color applied for Owner's use during move in.

# PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

- A. Manufacturers' Names: Shortened versions (shown in parentheses) of the following manufacturers' names are used in other Part 3 articles:
  - 1. Basis of Design: Sherwin-Williams Co. (S-W).
  - 2. Acceptable Manufacturers:
    - a. Benjamin Moore & Co.
    - b. PPG Architectural Finishes, Inc.

# 2.02 COATINGS MATERIALS, GENERAL

- A. Material Compatibility: Provide block fillers, primers, undercoats, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- B. Material Quality: Provide manufacturer's best quality coating material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
- C. Colors: Provide color selections made by the Architect.
  - 1. Walls: Sherman Williams SW 7050 "Useful Gray" (Eggshell finish)

- 2. Trim and Bench: Sherwin Williams SW 7005 "Pure White" (Semi-gloss finish)
- 3. Drywall ceilings and soffits Sherwin Williams SW7757 "High Reflective White" (Flat finish)

#### PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Applicator and drywall subcontractor present, under which painting will be performed for compliance with paint application requirements.
  - 1. Inspect new walls for dents and imperfections prior to painting. Inspect existing walls for dents, holes, damage, blemishes and imperfections prior to painting. Inspect walls again after primer and first coat of paint applied, with Applicator and drywall subcontractor present. Drywall subcontractor shall touch-up their respective work as follows:
    - a. Touch-up visible gypsum board imperfections before priming of walls.
    - b. Touch-up imperfections found in field of gypsum boards and joints made visible from painting after first finish coat applied.
  - 2. If unacceptable conditions are encountered, prepare written report, endorsed by Applicator, listing conditions detrimental to performance of work.
  - 3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
  - 4. Application of coating indicates Applicator's acceptance of surfaces and conditions within a particular area.
  - 5. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
- B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of specified finish materials to ensure use of compatible primers.
  - 1. Notify Architect about anticipated problems when using the materials specified over substrates primed by others.

### 3.02 PREPARATION

- A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of the item, provide surface- applied protection before surface preparation and painting. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
- B. Cleaning: Before applying paint or other surface treatments, clean substrates of substances that could impair bond of the various coatings. Remove oil and grease before cleaning.
  - 1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
- C. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each substrate condition and as specified.
  - 1. Existing Surfaces, Opaque Finishes: Prepare existing surfaces as follows:
    - a. Thoroughly clean existing surfaces to be recoated to remove dust, dirt, grease, oils, and other surface contaminants that would affect the proper adhesion of the new coatings.
    - b. Prior to sanding, test existing coatings for lead.
    - c. Scrape loose paint from surfaces indicated to be recoated. Sand edges of remaining paint to smooth out surface.
    - d. Existing painted surfaces shall be sanded to fully dull the surface. Perform bond tests on existing painted surface to verify bond before proceeding with paint application.
    - e. On glossy surfaces, glazed surfaces, and tile like surfaces, apply a bonding primer specifically formulated for hard gloss surfaces.

- 2. Wood, New: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sand surfaces exposed to view smooth and dust off.
  - a. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer before applying primer. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
  - b. If transparent finish is required, back prime with spar varnish.
- D. Material Preparation: Mix and prepare paint materials according to manufacturer's written instructions.
  - Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
  - 2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
  - 3. Use only thinners approved by paint manufacturers and only within recommended limits.

### 3.03 APPLICATION

- A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
  - 1. Paint colors, surface treatments, and finishes are indicated in the paint schedules.
  - 2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
  - 3. Provide finish coats that are compatible with primers used and existing coatings.
  - 4. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, grilles, convector covers, covers for finned-tube radiation, and similar components are in place. Extend coatings in these areas, as required, to maintain system integrity and provide desired protection.
  - 5. Paint interior surfaces of ducts with a flat, non specular black paint where visible through registers or grilles.
  - 6. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
  - 7. Finish exterior doors on tops, bottoms, and side edges the same as exterior faces, unless indicated otherwise.
  - 8. Sand lightly between each succeeding enamel or varnish coat.
- B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
  - 1. The number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has cured as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
  - 2. Omit primer over metal surfaces that have been shop primed and touchup painted, unless otherwise indicated.
  - 3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
  - 4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, and does not deform or feel sticky under moderate thumb pressure, and until application of another coat of paint does not cause undercoat to lift or lose adhesion.
- C. Paint all exposed surfaces, except where the paint schedules indicate that a surface or material is not to be painted or is to remain natural. If the paint schedules do not specifically mention an item or a surface, paint the item or surface the same as similar adjacent materials or surfaces whether or not schedules indicate colors. If the schedules do not indicate color or finish, the Architect will select from standard colors and finishes available.
  - 1. Painting includes field painting of exposed bare and covered pipes and ducts (including color-coding), hangers, exposed steel and iron work, and primed metal surfaces of mechanical and electrical equipment at all locations except mechanical and electrical rooms.
- D. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels.
  - 1. Labels: Do not paint over Underwriters Laboratories (UL), Factory Mutual (FM), or other code-required

labels or equipment name, identification, performance rating, or nomenclature plates.

- E. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions. Walls shall have roller finish.
  - 1. Brushes: Use brushes best suited for type of material applied. Use brush of appropriate size for surface or item being painted.
  - 2. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.
- F. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate to achieve dry film thickness per coat indicated. Dry film thicknesses listed in paint schedules are minimum thickness per coat.
- G. Mechanical and Electrical Work: Painting of mechanical, plumbing, fire protection, and electrical work is limited to items exposed in occupied spaces (outside mechanical and electrical rooms).
- H. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.
- I. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- J. Transparent (Clear or Stained) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, runs, cloudiness, color irregularity, brush marks, orange peel, nail holes, or other surface imperfections.
  - 1. Match finish of Armstrong Tegular Ceiling "Golden Maple" Ceiling.
- K. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.

### 3.04 CLEANING

- A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from the Project site.
  - 1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.

# 3.05 PROTECTION

- A. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.
- B. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.
  - At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

# 3.06 INTERIOR COATINGS SCHEDULE

- A. VOC Compliance, General: Provide the manufacturers' formulations for the products specified below that comply with the VOC requirements in paragraph 2.2.C of this Section.
- B. Gypsum Board and Plaster, New and Existing walls:

- 1. Eggshell Acrylic Finish, 2 finish coats over primer.
  - a. Primer, New and Patched Areas: Low-odor, zero VOC, latex-based, interior primer
    - 1) S-W: ProMar 200 Low Zero VOC Interior Latex Primer B28W02600 Series;
  - b. First and Second Coats: Low-odor, zero VOC, eggshell, acrylic-latex-based, interior paint
    - 1) S-W: Sherman Williams SW 7050 "Useful Gray" (Eggshell finish)
- C. Gypsum Board and plaster ceilings and soffits:
  - 1. Flat finish; 2 finish coats over primer.
    - a. Primer, New and Patched Areas: Low-odor, zero VOC, latex-based, interior primer.
      - 1) S-W: ProMar 200 Low Zero VOC Interior Latex Primer B28W02600 Series;
      - First and Second Coats: Low-odor, zero VOC, eggshell, acrylic-latex-based, interior paint
        - 1) S-W: Sherwin Williams SW7757 "High Reflective White"
- D. Wood trim and bench front:

b.

- Semi-gloss; 2 finish coats over primer
  - a. Primer, New and Patched Areas: Low-odor, zero VOC, latex-based, interior primer
    - 1) S-W: ProMar 200 Low Zero VOC Interior Latex Primer B28W02600 Series;
  - b. First and Second Coats: Low-odor, zero VOC, eggshell, acrylic-latex-based, interior paint
    - 1) S-W: Trim and Bench: Sherwin Williams SW 7005 "Pure White"
- E. Bench top: Provide the following natural finishes:
  - 1. Waterborne, Satin-Polyurethane Finish: 3 finish coats of a waterborne, clear-satin varnish over stain.
    - a. Stain Coat: VOC compliant, alkyd-based, penetrating, interior wood stain applied at spreading rate recommended by the manufacturer. Stain color to match Armstrong Tegular Ceiling
      - 1) S-W: Wood Classics Interior Wood Oil Stain, A49-200 Series.
    - b. First, Second and Third Finish Coats: Waterborne, varnish finish applied at spreading rate recommended by the manufacturer.
      - 1) S-W: Minmax Polycrylic.

### SECTION 101400 - SIGNAGE

### PART 1 - GENERAL

### 1.1 SUMMARY

- A. Furnish and Install signage per ATTACHMENT 2 drawings
  - 1. One (1) Directory
  - 2. Seven (7) Blade style room signs
    - a. City Clerk
    - b. Motor vehicle Registration
    - c. Tax Collector
    - d. Economic Development
    - e. School Department
    - f. Water-Sewer Billing Office
    - g. Community Development
  - 3. One (1) standard room sign
    - a. Human Resources

### 1.2 SECTION REQUIREMENTS

A. Submittals: Product Data, Shop Drawings, and Samples.

### PART 2 - PRODUCTS

# 2.1 SIGNS, GENERAL

- A. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines
  - B. Manufacturer: **Welch Sign**, 7 Lincoln Ave, Scarborough ME 04074; 800-635-3506, welchsign.com, or approved equal.

# 2.2 PANEL SIGNS

- A. Interior Panel Signs:
  - 1. Finishes and Colors: As indicated on ATTACHMENT 2 drawings.
  - 2. Tactile Characters: Characters and Grade 2 raster Braille with contrasting colors.

### 2.3 MATERIALS

- A. Aluminum Extrusions: ASTM B 221 (ASTM B 221M), alloy and temper recommended by aluminum producer and finisher, with not less than the strength and durability properties of 6063-T5.
- B. Acrylic Sheet: ASTM D 4802, Category A-1 (cell-cast sheet), Type UVA (UV absorbing).

# PART 3 - EXECUTION

# 3.1 INSTALLATION

A. Locate signs where indicated or directed by Architect. Install signs level, plumb, and at heights indicated, with sign surfaces free from distortion and other defects in appearance.

- B. Wall-Mounted Signs:
  - 1. Magnetic Tape: Mount signs to smooth, nonporous surfaces.

2. Mechanical Fasteners: Use Z Clip and nonremovable mechanical fasteners.

### SECTION 10 85 00 BUILDING SPECIALTIES

### 1.01 RELATED DOCUMENTS

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

### 1.02 SUMMARY

- A. Section Includes:
  - 1. Fabric Wall Panels

#### 1.03 SUBMITTALS

- A. General: Submit in accordance with Division 01 Section "General Requirements."
- B. Product Data: For each type of product indicated.
- C. Samples for Initial Selection:
  - 1. Felt Panels: Actual pieces of specified colors of all felt materials.

### 1.04 WORKMANSHIP

- A. Materials, devices, equipment and apparatus of a patented or of a special nature of manufacture shall be prepared, applied, or installed in strict accordance with the manufacturer's directions.
- B. Work of this Section shall be executed in strict accordance with Drawings and approved Shop Drawings.

### PART 2 - PRODUCTS

# 2.01 FELT WALL PANELING

- A. Product: CARNEGIE XOREL
  - 1. Pattern: FLUX 6557,
  - 2. Color: W80,
  - 3. Backing: UNBACKED

#### PART 3 - EXECUTION

# 3.01 FELT WALL PANELS

- A. All Items specified under this Section shall be installed in strict accordance with manufacturer's recommendations and approved Shop Drawings.
- B. Confirm pattern on site with Owner prior to installation.

### SECTION 233100 - HVAC DUCTS AND CASINGS

#### PART 1 - GENERAL

### 1.1 SECTION REQUIREMENTS

- A. Submittals:
  - 1. Product Data: For each type of product indicated.
- B. PRODUCTS

#### 2.1 PERFORMANCE REQUIREMENTS

- C. Comply with SMACNA's "HVAC Duct Construction Standards Metal and Flexible."
- D. Airstream Surfaces: Surfaces in contact with the airstream shall comply with requirements in ASHRAE 62.1.
- E.Comply with UL 181 for ducts and closures.

#### 2.2 DUCTS

- A. Galvanized-Steel Sheet: ASTM A 653/A 653M, with G60 (Z180) hot-dip galvanized coating.
  - 1.Galvanized Coating Designation: **G60**.
  - 2. Finishes for Surfaces Exposed to View: Mill phosphatized.
- B. Carbon-Steel Sheets: ASTM A 1008/A 1008M; with oiled, matte finish for exposed ducts.
- C. Stainless Steel: ASTM A 480/A 480M, [Type 316] [Type 304], with a No. 2D finish for concealed ducts and No. 4 finish for exposed ducts.
- D. Fibrous-Glass Duct Board: Comply with UL 181, Class 1, 1-inch- (25-mm-) thick, fibrous glass with fire-resistant, reinforced foil-scrim-kraft barrier, and having the air-side surface treated to prevent erosion.
- E. Joint and Seam Tape, and Sealant: Comply with UL 181A.
- F. Rectangular Metal Duct Fabrication: Comply with SMACNA's "HVAC Duct Construction Standards Metal and Flexible."
- G. Fibrous-Glass Duct Fabrication: Comply with SMACNA's "Fibrous Glass Duct Construction Standard."
- H. Fibrous-Glass Liner: Comply with NFPA 90A or NFPA 90B and with NAIMA AH124.
  - 1. Thickness: 1/2 inch ].
  - 2. Airstream surface coated with an antimicrobial erosion-resistant coating.
  - 3. Liner Adhesive: Comply with NFPA 90A or NFPA 90B and with ASTM C 916.
  - 4. Mechanical Fasteners: Galvanized steel suitable for adhesive or mechanical attachment.

### 1.2 ACCESSORIES

A. Flexible Connectors: Flame-retarded or noncombustible fabrics, coatings, and adhesives complying with UL 181, Class 1.

#### PART 2 - EXECUTION

#### 3.1 INSTALLATION

- A. Install ducts according to SMACNA's "HVAC Duct Construction Standards Metal and Flexible" unless otherwise indicated.
- B. Seal ducts to the following seal classes according to SMACNA's "HVAC Duct Construction Standards Metal and Flexible":

- 1. Conditioned Space, Supply-Air Ducts in Pressure Classes 2-Inch wg ((500 Pa)) and Lower: Seal Class C.
- 2. Conditioned Space, Exhaust Ducts: Seal Class B.
- 3. Conditioned Space, Return-Air Ducts: Seal Class C.
- C. Conceal ducts from view in finished and occupied spaces.
- D. Support ducts to comply with SMACNA's "HVAC Duct Construction Standards Metal and Flexible," Ch. 4, "Hangers and Supports."
- E.Install duct accessories according to applicable details in SMACNA's "HVAC Duct Construction Standards Metal and Flexible" for metal ducts and in NAIMA AH116, "Fibrous Glass Duct Construction Standards," for fibrous-glass ducts.

### SECTION 26 05 00 COMMON WORK RESULTS FOR ELECTRICAL

#### PART 1 GENERAL

### 1.01 WORK INCLUDES

- A. The work included under this Section consists of providing all labor, materials, supervision, and construction procedures necessary for the installation of the complete electrical systems required by these specifications and/or shown on the drawings of the contract.
- B. The Contract Drawings are shown in part diagrammatic intended to convey the scope of work, indicating the intended general arrangement of equipment, conduit, and outlets. Follow the drawings in laying out the work and verify spaces for the installation of the materials and equipment based on the dimensions of actual equipment furnished. Whenever a question exists as to the exact intended location of outlets or equipment, obtain instructions from the Architect/Engineer before proceeding with the work.

# 1.02 QUALITY ASSURANCE

A. Provide in accordance with Contract Documents and Specifications, Control of Work section.

### 1.03 SUBMITTALS

- A. Furnish manufacturer's product data, test reports, and materials certifications as required.
- B. Shop Drawings shall be submitted to the General Contractor who shall review and approve them prior to submittal to the Engineer for approval. Shop Drawings shall identify the specific equipment and material being supplied; the quantity being supplied; and all accessories, dimensions, descriptions, mounting and connection details, wiring diagrams, elementary control diagrams, equipment interface diagrams and any other information necessary to determine compliance with the Plans and Specifications. Fabrication and installation shall be in accordance with the approved Shop Drawings.
- C. As-built copies of all Shop Drawings shall be submitted to the Engineer.
- D. Submit copies of reports, permits, and easements necessary for installation, use, and operation.
- E. Submit copies of reports of tests, inspections, and meter readings as specified.

### 1.05 COORDINATION

- A. Coordination, Sequencing, and Scheduling: per Contract Documents and Specifications.
- B. The electrical work shall be coordinated with the Work of other trades to prevent interferences and so that the progress in construction of the building will in no way be retarded.
- C. Coordinate with all local utility companies and make all installations for their services in accordance with all utility company requirements.
- D. Where lighting fixtures and other electrical items are shown in conflict with locations of structural members and mechanical or other equipment, furnish and install all required supports and wiring to clear the encroachment for a complete installation.
- D. Any Work installed contrary to or without acceptance by the Engineer shall be subject to change as directed by the Engineer, and no extra compensation will be allowed to the Contractor for making these changes.

# 1.06 PRODUCT DELIVERY AND STORAGE

- A. Use all means necessary to protect electrical system materials before, during and after installation and to protect the installed Work and materials of all other trades.
- B. In the event of damage, immediately make all repairs and replacements necessary to the acceptance of the Engineer and at no additional cost to the Owner. If any apparatus has been

- subject to possible injury by water, it shall be thoroughly dried out and put through such special tests as directed by the Engineer, at the cost and expense of the Contractor, or shall be replaced by the Contractor at his own expenses.
- C. Protect the Work of other trades. Restore any damage caused to other trades to the condition existing prior to damage at no additional cost to the Owner.
- D. Investigate each space in the building through which equipment must pass to reach its final location. If necessary, the manufacture shall be required to ship his material in sections sized to permit passing through such restricted areas in the building.

### 1.07 MANUFACTURER'S NAMEPLATE

A. Each item of equipment shall have a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place; the nameplate of the distributing agent will not be acceptable.

### **PART 2 PRODUCTS**

### 2.01 MATERIALS

- A. Materials and equipment shall be listed by UL unless it can be demonstrated that no UL standards exist for a specific item or class of equipment.
- B. All other materials, not specifically described but required for a complete and operable electrical installation, shall be new, first quality of their respective kinds, Specification grade or better, and as selected by the Contractor subject to the acceptance by the Engineer.
- C. All materials and equipment furnished and installed on this Project shall meet the most stringent efficiency standards of the local utility to qualify for the maximum rebate.

# 2.02 MATERIAL AND CONSTRUCTION REQUIREMENTS

- A. Unless otherwise shown or specified, all enclosures, motors, wiring and other materials and all construction methods shall conform to the following:
  - 1. Indoor Enclosures, NEMA 1

### 2.03 MISCELLANEOUS MATERIALS

A. Inserts, Anchors, Fasteners, and Hooks: Provide inserts, anchors, anchor bolts, lag bolts, screws, washers, nuts, hooks, and other rough hardware. Assist other trades as necessary in the placement of inserts and anchor bolts in concrete and masonry. Furnish full instructions regarding locations, sizes, and other requirements to ensure proper preparation. Provide rough hardware which complies with requirements of the governing laws and codes.

# 3.01 COORDINATION

### PART 3 EXECUTION

- A. Prior to all 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. Field verify all locations and dimensions to ensure that the equipment will be properly located, readily accessible, and installed in accordance with all pertinent codes and Regulations, the Contract Documents, and the referenced standards.
- C. The Work shall be carefully laid out in advance, and where cutting, drilling, etc., of floors, walls, ceilings, or other surfaces is necessary for the proper installation, this Work shall be carefully done, and any damage to building, piping, or equipment shall be repaired by mechanics of the trades involved at no additional cost to the Owner.
- D. In the event any discrepancies are discovered, immediately notify the Owner's Representative in

writing. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

### 3.02 INSTALLATION

- A. Install all equipment and fixtures in complete accordance with the manufacturer's recommendations and all pertinent codes and Regulations.
- B. Thoroughly inspect all items of equipment and any items dented, scratched, or otherwise damaged in any manner shall be replaced or repaired and painted to match original finish. All items so repaired and refinished shall be brought to the attention of the Engineer for inspection and acceptance.
- C. Coordinate the installation of required supporting devices and sleeves to be set in poured-in place concrete or supported from or on other structural components, as they are constructed.
- D. Sequence, coordinate, and integrate installations of electrical materials and equipment for efficient flow of the Work. Give particular attention to large equipment requiring positioning prior to closing in the building and equipment which must be placed in service before further construction can take place.
- E. Where mounting heights are not detailed or dimensioned, install systems, materials, and equipment to provide the maximum headroom possible.
- F. The final routing of raceways shall be determined by structural conditions, interferences with other trades and by terminal locations on apparatus. The Engineer reserves the right of a reasonable amount of shifting at no extra cost up until time of roughing in the Work.
- G. Where circuits are shown as "home-runs" all necessary fittings and boxes shall be provided for a complete raceway installation.
- H. In general, wiring and raceway systems for security alarm, fire alarm, telephone, and intercommunications systems are not indicated on the Drawings but shall be furnished and installed under this section.
- I. Each lighting and each receptacle circuit shall have its own neutral, dedicated to that circuit. A common neutral for more than one signal phase circuit is not allowed.
- J. The Electrical Contractor shall be responsible for all cutting and patching of holes in building construction which are required for the passage of electrical work. Cutting and patching shall conform to the requirements of Division 08 and, if applicable, Division 09 of these specifications.
- K. Cutting of structural framing, walls, floors, decks and other members intended to withstand stress is not permitted.
- L. Surface mounted panel boxed, junction boxes, conduits, etc., shall be supported by spacers to provide a clearance between wall and equipment.
- M. Upon completion of all installation, lamping, and testing, thoroughly inspect all exposed portions of the electrical installation and completely remove all exposed labels, soils, markings and foreign material.

### 3.03 CLEANING

A. Upon completion of rough electrical work in any given area, remove all rubbish and debris from the work area and leave in broom clean condition.

### SECTION 265000 - LIGHTING

# PART 1 - GENERAL

### 1.1 SECTION REQUIREMENTS

A. Submittals: Product Data for each luminaire, including lamps.

### PART 2 - PRODUCTS

# 2.1 PERFORMANCE REQUIREMENTS

A. Fixtures, Emergency Lighting Units, Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

# 2.2 LIGHTING FIXTURES AND COMPONENTS, GENERAL REQUIREMENTS

A. Recessed Fixtures: Comply with NEMA LE 4 for ceiling compatibility for recessed fixtures.

### 2.3 REQUIREMENTS FOR INDIVIDUAL LIGHTING FIXTURES

# A. Recessed Ceiling LED downlight:

- 1. Basis-of-Design Product: USAI #P4RDF -22L2 -30KS F -WH -NC -120V>
  - a. Type: LED
  - b. Voltage: [120] V ac.
  - c. Mounting: [Recessed ceiling].
  - d. Wattage: 22W
  - e. Beam: Flood
  - f. CRI: 80+
  - g. Color Temperature: 3000k

# B. Recessed Ceiling LED wall washer:

- 1. Basis-of-Design Product: USAI #P4RWF -22L2 -30KS -NC -120V -D21
  - a. Type: LED
  - b. Voltage: [120] V ac.
  - c. Mounting: [Recessed ceiling].
  - d. Wattage: 22W
  - e. Dimming: Forward and Reverse phase
  - f. CRI: 80+
  - g. Color Temperature: 3000k

# C. Multi-cell rectangular downlight for wood ceiling:

- 1. Basis-of-Design Product: USAI #MDG -04 -35KS -50 S -WH -BL -NC -MB UNV -D6E -UA2
  - a. Type: LED
  - b. Voltage: [120] V ac.
  - c. Mounting: [Recessed in wood ceiling].
  - d. Wattage: 22W
  - e. Dimming: Forward and Reverse phase
  - f. CRI: 80+
  - g. Color Temperature: 3000k

# PART 3 - EXECUTION

# 3.1 INSTALLATION

- A. Coordinate ceiling-mounted luminaires with ceiling construction, mechanical work, and security and fire-prevention features mounted in ceiling space and on ceiling.
- B. Lighting Fixtures: Set level, plumb, and square with ceilings and walls. Install lamps in each fixture.
- C. Comply with NFPA 70 for minimum fixture supports.
- D. Seismic Protection: Luminaire attachments to building walls and ceilings shall comply with seismic criteria in Section 260500 "Common Work Results for Electrical."
- E. Adjust aimable lighting fixtures to provide required light intensities.