

**CITY OF BURLINGTON
REQUEST FOR PROPOSALS**

Burlington Police Department Exterior Canopy Renovation

Date of Issuance:	June 5, 2024
Issued by:	City of Burlington Department of Parks, Recreation & Waterfront
Site Visit:	By appointment
Questions Due:	June 21, 2024 12:00 PM
Answers Posted:	June 25, 2024 12:00 PM
Proposal Due Date:	July 1, 2024 12:00 PM
Point of Contact:	Kim Bleakley, Central Facilities Manager Parks, Recreation & Waterfront 645 Pine Street, Burlington, Vermont 05401 802.557.7082 kbleakley@burlingtonvt.gov

I. PROJECT BACKGROUND

The City of Burlington is seeking a contractor to renovate the front exterior canopy at One North Avenue in Burlington Vermont. Drawings and specifications are included as professionally designed by G4 Design Studios.

II. SCOPE OF WORK

This project consists of a full exterior renovation of the front canopy of the building. See exhibit A for architectural bid set and exhibit B for project manual and specifications.

This project will happen while the building is occupied and must stay open to employees and the public during work. Contractor parking and staging areas must be coordinated with the City. All products and finishes must be approved by the City. The City will file for any necessary zoning and building permits, while the selected contractor will be responsible for any trade permits. This project is exterior, however, if any interior work needs to take place the contractor will need to submit any necessary information for fingerprint checks to be done by the Burlington Police Department at no cost to the contractor.

III. RESPONSE FORMAT

Bidders are encouraged to be concise. All documents shall be in .pdf format. All proposals must include, and are limited, to the following:

1. Proposed scope of work. Responses should provide a straightforward and concise description of the respondent's capabilities to satisfy the requirements of this request.
2. Completed contractor proposal form (Exhibit C) signed by an authorized representative for the firm or company.
3. A description of your firm's history and experience with providing similar construction work, and a work history of up to three (3) related projects showing for each:
 - a. Name, address, and phone number for each client.
 - b. Brief project description.
4. Location of the office from which the management of the project will take place.
5. Signed and notarized Livable Wage, Outsourcing, and Union Deterrence Ordinance Certifications (Exhibits F-H).

Certificate of insurance with the City named as an additional insured with coverage limits in accordance with the Burlington Standard Contract Conditions (Exhibit E).

IV. CONTRACTOR SELECTION

A. Criteria: Proposals shall be evaluated based on the criteria listed below:

1. Priority assigned to the project and current workload of the firm, with particular reference to the personnel and other resources proposed, as capacity to complete the work in an efficient timeframe will be critical;
2. Past performance record and relevant experience;
3. Approach to project to complete in timeline;
4. Quality of work, timeliness, and experience, and;
5. Financial responsibility of the firm. *

Each General Contractor shall respond to the above evaluation criteria in a concise and easily identifiable manner. This information will be utilized in the final selection.

*The firm must agree to carry professional liability insurance including errors and omissions in an amount not less than \$1,000,000. (See additional insurance requirements in Exhibit E: Burlington Standard Contract Conditions.)

B. Evaluation Criteria Assigned Weight:

1. Total Project Cost: 40%

2. Qualifications: 40%

3. Schedule: 20%

TOTAL WEIGHT: 100%

Proposals will be reviewed and evaluated by City staff based on the information provided. Additional information may be requested prior to final selection.

- C. Rejection of Proposals: The City reserves the right to reject any or all proposals, to negotiate with one or more parties, or to award the contract in the City's best interests, including proposed contractor's schedule. The City reserves the right to re-advertise for additional proposals and to extend the deadline for submission of the proposals.

No proposal will be considered accepted until all necessary City authorizations, including those required by Board of Finance and City Council if necessary, have been received and an agreement is executed by both parties.

V. **SUBMISSIONS**

A. Deadline for Receipt of Proposals: All proposals in response to this Request for Proposals (RFP) must be received by the point of contact no later than 12:00 p.m. on the above due date. The proposal shall be marked "BPD Canopy Renovation." Late proposals will not be accepted under any circumstances. Electronic proposals are preferred as long as they are received by the point of contact by the required deadline. It is the responsibility of the entity submitting replies and proposals to ensure that the point of contact has received a completed proposal by the required deadline.

B. Answers to Questions and Revisions to Request for Proposal: Any revisions, addendums, and answers to questions received by the question deadline will be sent to contractor who directly received this RFP via email. In addition, revisions will be posted on the City's RFP web page, <http://burlingtonvt.gov/RFP/>. It is advised that contractors sign up for the GovDelivery notification so that they will be notified of any changes to the RFP page.

C.

Point of Contact:

Kim Bleakley,
Central Facilities Manager
Department of Parks, Recreation & Waterfront
kbleakley@burlingtonvt.gov
(802) 557-7982

VI. EXHIBITS

- A. Exhibit A: Architectural Bid Set
- B. Exhibit B: Project Manual and Specifications
- C. Exhibit C: Contractor Proposal Form
- D. Exhibit D: **Draft** Contract For Review Only
- E. Exhibit E: Burlington Standard Contract Conditions
- F. Exhibit F: Burlington Livable Wage Ordinance Certification
- G. Exhibit G: Burlington Outsourcing Ordinance Certification
- H. Exhibit H: Burlington Union Deterrence Ordinance Certification

Bid documents include this main body of the request for proposals and all exhibits.

VII. CONTRACTING

The contractor must qualify as an independent contractor and, prior to being awarded a contract, must apply for registration with the Vermont Secretary of State's Office to do business in the State of Vermont, if not already so registered. The registration form may be obtained from the Vermont Secretary of State, 128 State Street, Montpelier, VT 05633-1101, PH: 802-828-2363, Toll-free: 800-439-8683; Vermont Relay Service – 711; web site: <https://www.sec.state.vt.us/>. The contract will not be executed until the consultant is registered with the Secretary of State's Office.

Prior to beginning any work, the consultant shall obtain Insurance Coverage in accordance with the Burlington Contract Conditions (Exhibit E in this RFP). The certificate of insurance coverage shall be documented on forms acceptable to the City.

VIII. AGREEMENT REQUIREMENTS

The selected consultant will be required to execute a contract with the City on the terms and conditions required by the City, including but not limited to those in the Burlington Contract Conditions (Exhibit E) and the attached Draft Agreement. No proposal will be considered accepted until all necessary City authorizations—including those required by Board of Finance and City Council if necessary—have been received and an agreement is executed by both parties.

IX. LIMITATIONS OF LIABILITY

The City assumes no responsibility or liability for the response to this Request for Proposals.

X. COSTS ASSOCIATED WITH PROPOSAL

Any costs incurred by any person or entity in preparing, submitting, or presenting a proposal are the sole responsibility of that person or entity, including any requests for additional information or interviews. The City will not reimburse any person or entity for any costs incurred prior to the issuance of the contract.

XI. INDEMNIFICATION

Any party responding to this Request for Proposals is acting in an independent capacity and not as an officer or employee of the City. Any party responding to this Request for Proposals will be

required to indemnify, defend, and hold harmless the City, its officers, and employees from all liability and any claims, suits, expenses, losses, judgments, and damages arising as a result of the responding party's acts and/or omissions in or related to the response.

XII. REJECTION OF PROPOSALS

The City reserves the right to reject any or all proposals, to negotiate with one or more parties, or to award the contract to the proposal the City deems will meet its best interests, even if that proposal is not the lowest bid. The City reserves the right to re-advertise for additional proposals and to extend the deadline for submission of the proposals. This Request for Proposals in no way obligates the City to award a contract.

XIII. OWNERSHIP OF DOCUMENTS

Any materials submitted to the City in response to this Request for Proposals shall become the property of the City unless another arrangement is made by written agreement between the City and the responding party. The responding party may retain copies of the original documents.

XIV. DUTY TO INFORM CITY OF BID DOCUMENT ERRORS

If a bidder knows, suspects, or has reasonable cause to believe, that an error or omission exists in any bid documents, including but not limited to unit prices and rate calculations, the bidder shall immediately give the City written notice thereof. Contractor shall not cause or permit any work to be conducted that may related to the error or omission without first receiving written acknowledgment from the City that City representatives understand the possible error or omission and have approved the requested modifications to the bid or contract documents or that the contractor may proceed without any modification being made to the bid or contract documents.

XV. PUBLIC RECORDS

Any and all records submitted to the City, whether electronic, paper, or otherwise recorded, are subject to the Vermont Public Records Act. The determination of how those records must be handled is solely within the purview of City. All records the responding party considers to be trade secrets, as that term is defined by subsection 317(c)(9) of the Vermont Public Records Act, or that the responding party otherwise seeks to have the City consider as exempt must be identified clearly and specifically at the time of submission. It is not sufficient to merely state generally that a proposal is proprietary, contains a trade secret, or is otherwise exempt. Particular records, pages, and sections which are believed to be exempt must be specifically identified as such and must be separated from other records with a convincing explanation and rationale sufficient to justify each exemption from release consistent with Section 317 of Title 1 of the Vermont Statutes Annotated.

XVI. PUBLIC HEALTH EMERGENCIES

Bidders are advised that public health emergencies, as declared by the City, the State of Vermont, or the Federal Government, including the current pandemic of Novel Coronavirus (COVID-19), may introduce significant uncertainty into the project, including disruption of timelines or revised practices. Contractors shall consider public health emergencies as they develop project schedules and advance the work.

If a public health emergency is declared, the City will not be responsible for any delays related to the sequence of operations or any expenses or losses incurred as a result of any delays. Any delays related to public emergencies, including the current pandemic of Novel Coronavirus (COVID-19), will be excusable, but will not be compensable.



BURLINGTON POLICE DEPARTMENT - CANOPY RENOVATION

Burlington, Vermont

Issued for Bid - January 04, 2023

PROJECT TEAM

OWNER	ARCHITECT	STRUCTURAL ENGINEER	ELECTRICAL CONTRACTOR
BURLINGTON POLICE DEPARTMENT 1 NORTH AVE BURLINGTON, VT 05401 802-658-2704	G4 DESIGN STUDIOS, LLC 77 COLLEGE STREET. BURLINGTON, VT 05401 802-578-3070 Marc Dowling, NCARB	CONCEPTS: in STRUCTURES (CIS) 1 MAIN STREET, SUITE 310 BURLINGTON, VT 05401 802-324-8937 (C) 802-540-3030 (O) Roland VanDyke, PE	STANDARD ELECTRICAL CONSTRUCTION INC. 55 LEROY RD #15, WILLISTON, VT 05495 (802)309-1174 Phil Greaves

- A-0.0 COVER
- A-1.0 BPD CANOPY PLANS, ELEVS & DTLS
- A-1.1 BPD CANOPY SECTION DETAILS
- E1.0 ELECTRICAL PLANS, NOTES & DETAILS

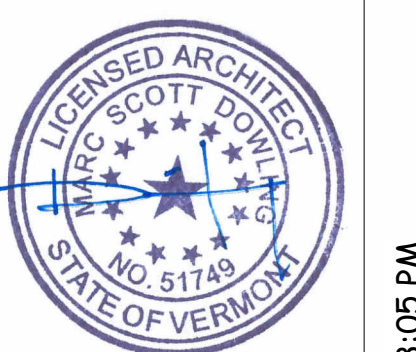
THIS DRAWING IS THE PROPERTY OF G4 DESIGN STUDIOS, LLC AND IS NOT TO BE COPIED, REPRODUCED, OR THE CONTENT THEREOF USED, IN WHOLE OR IN PART, WITHOUT THE PRIOR WRITTEN CONSENT OF STEVE GUILD



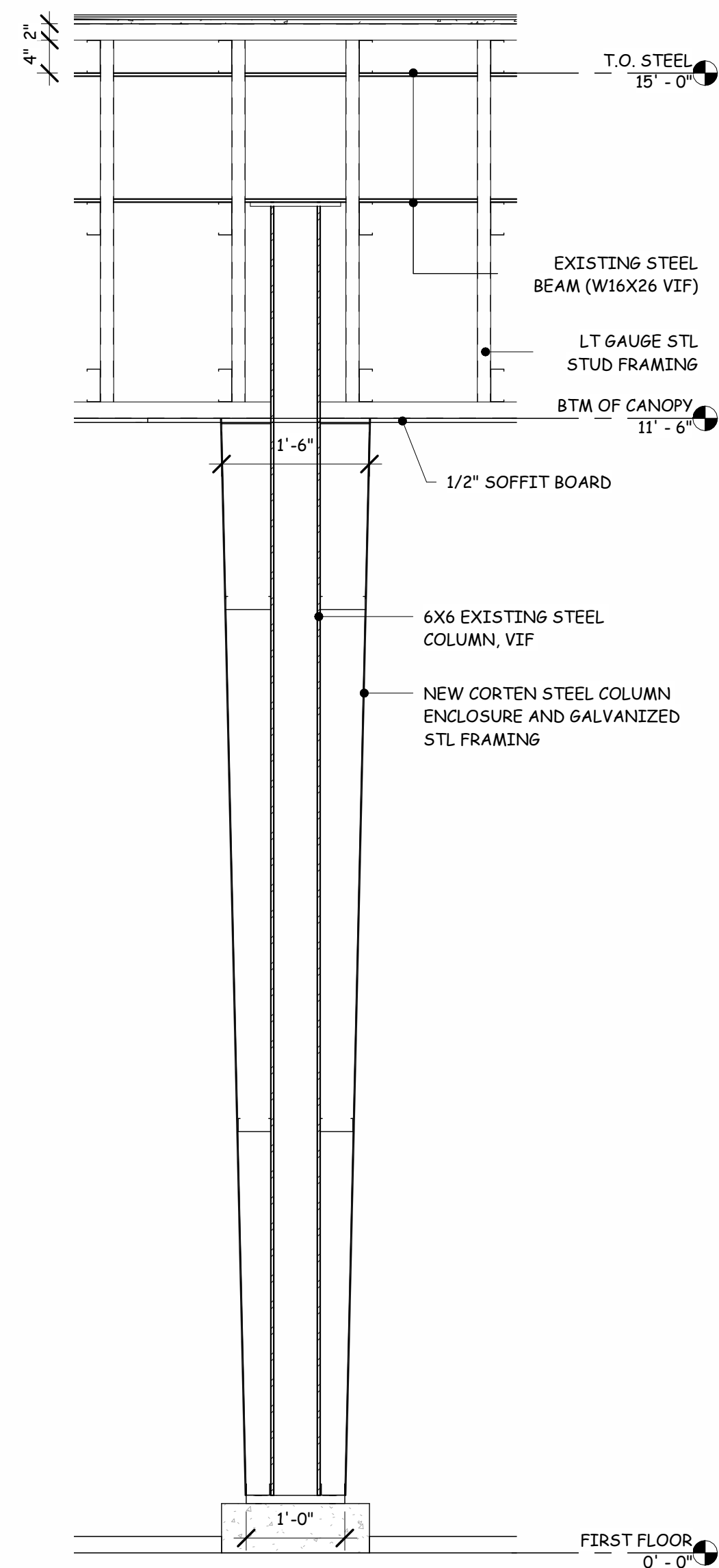
BURLINGTON POLICE STATION
CANOPY RENOVATIONS
One North Ave, Burlington, VT 05401

SCALE:
DATE: 01/04/2024
DRAWN BY: MD
CHECKED BY: G4
PROJECT: BPD CANOPY

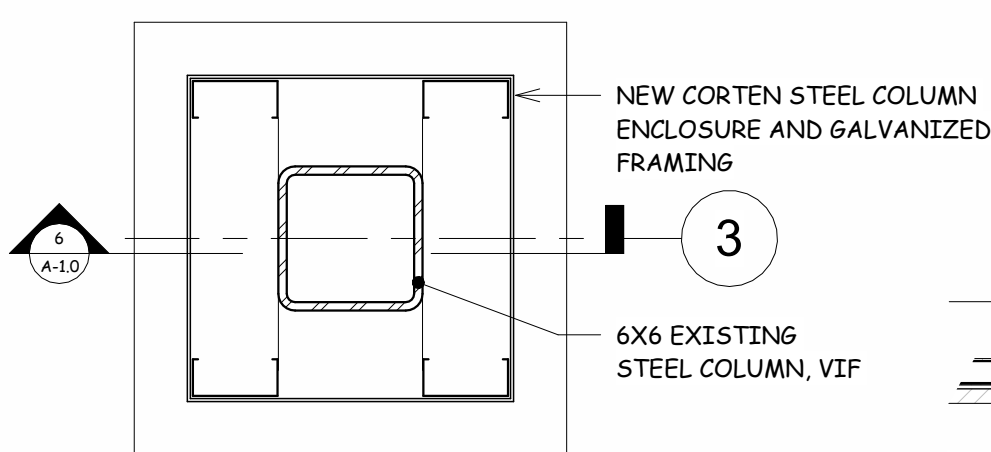
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COVER



A-0.0



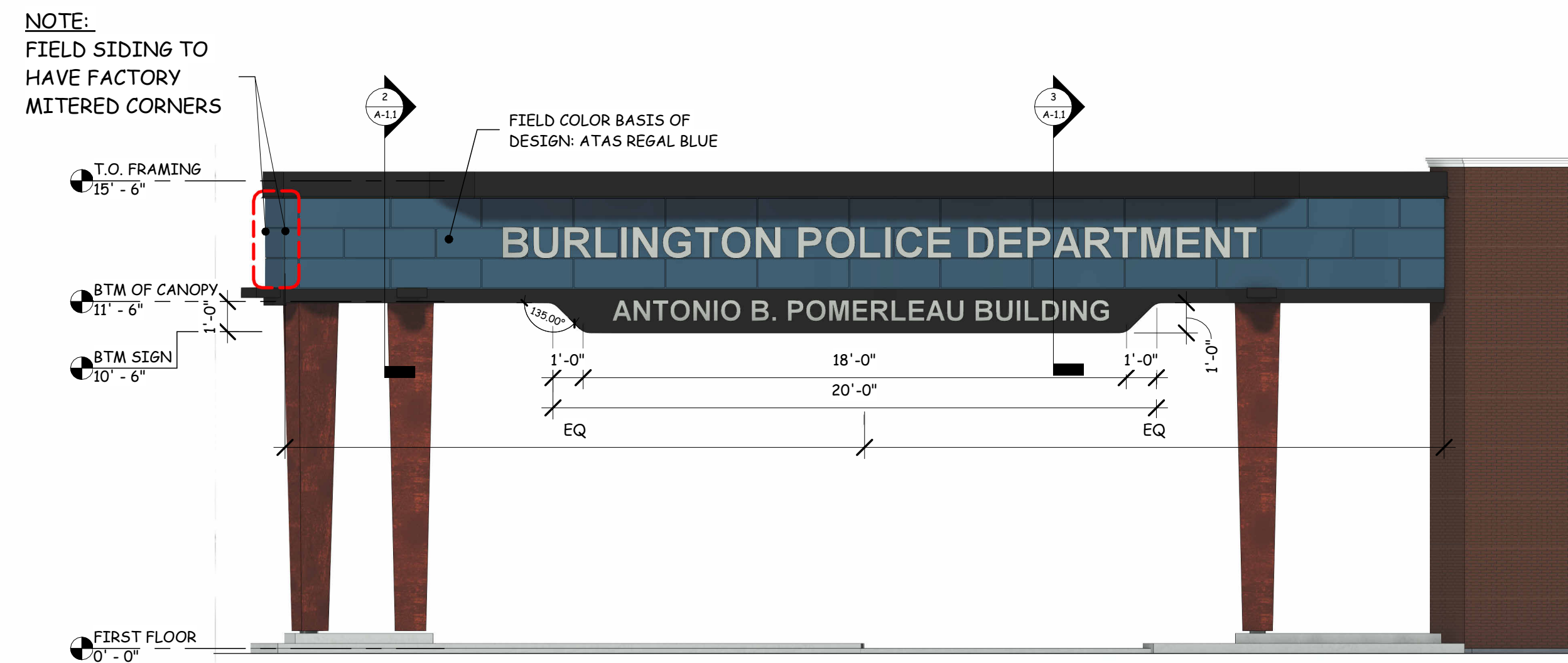
6 SECTION @ COLUMN
3/4" = 1'-0"



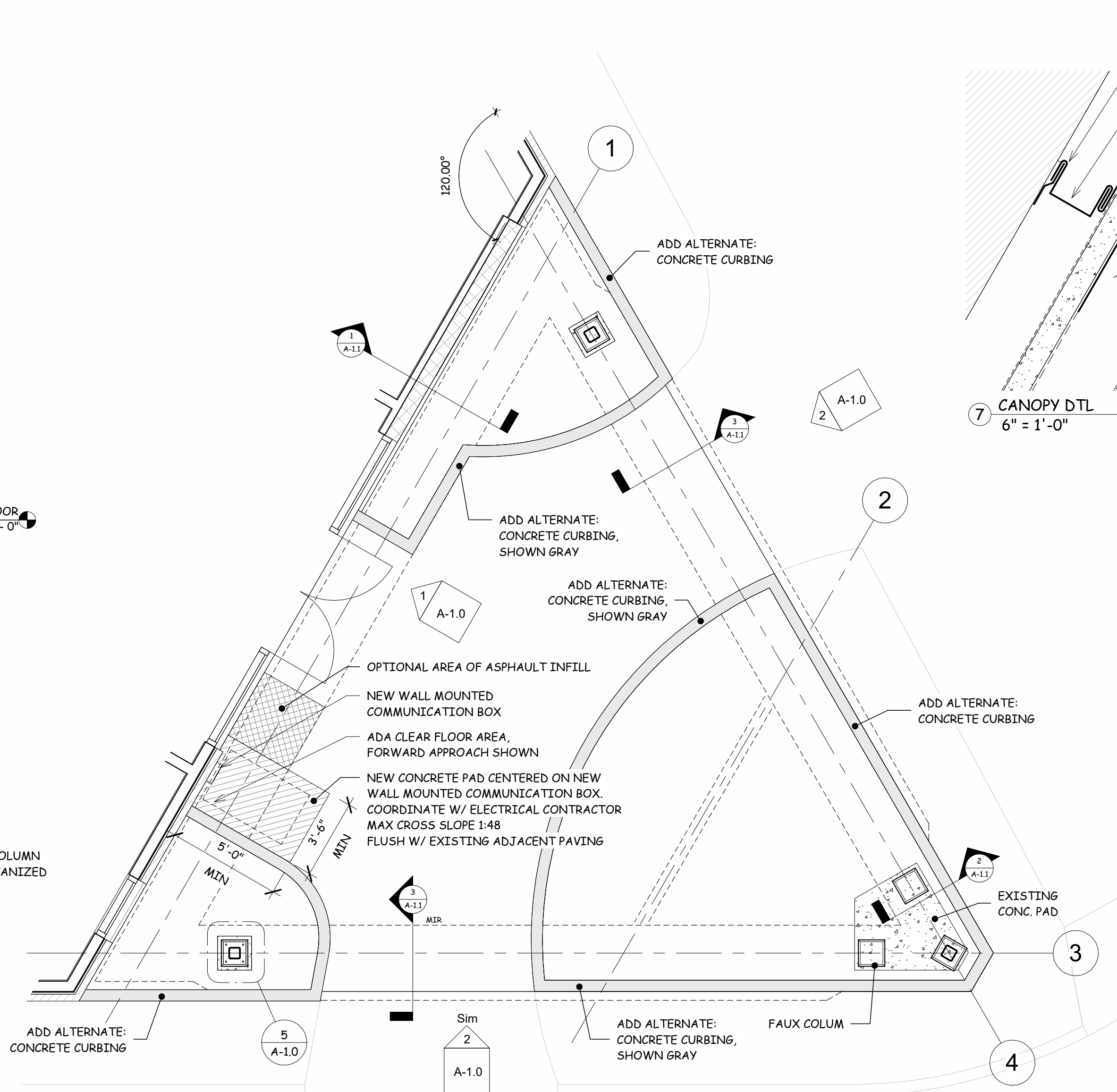
5 PLAN @ COLUMN
1 1/2" = 1'-0"



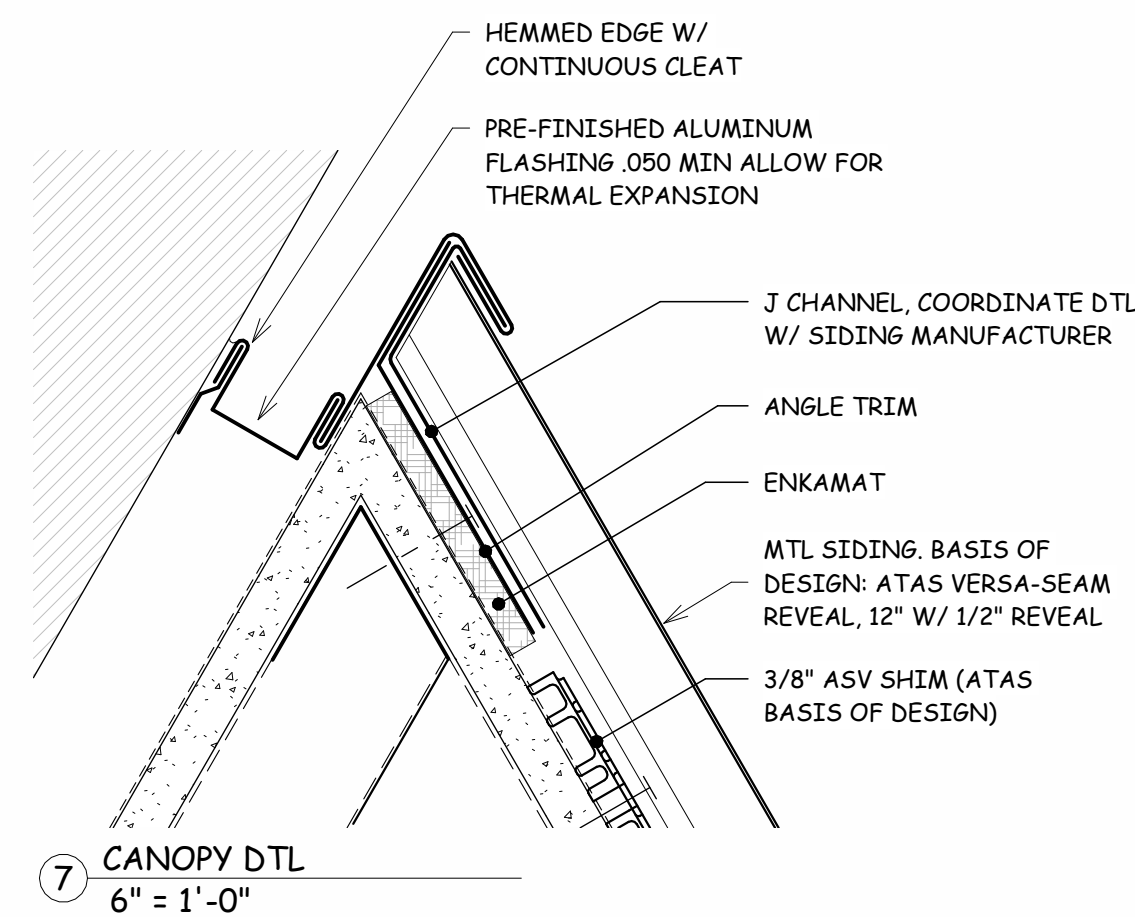
1 ENTRY ELEVATION
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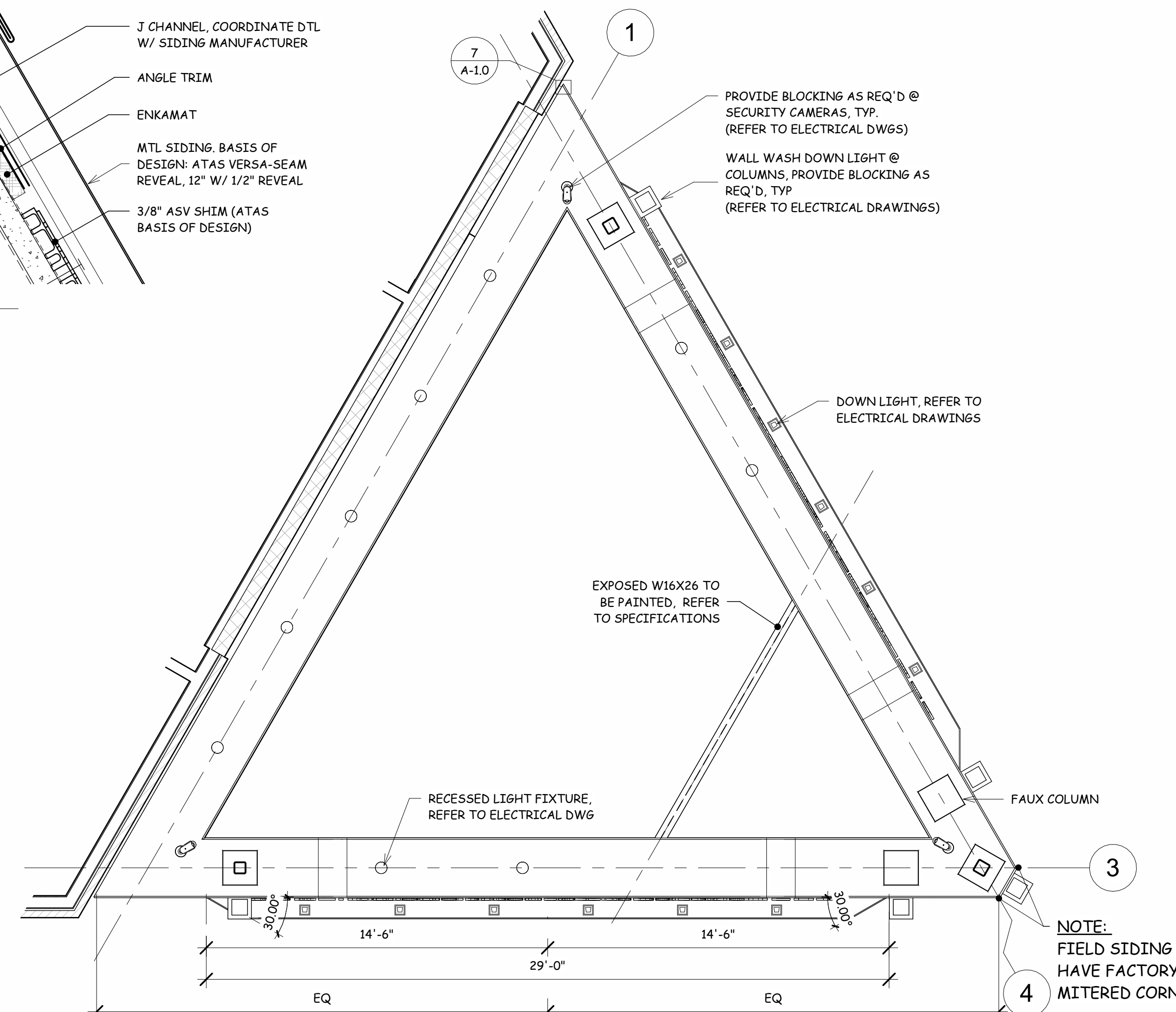
2 EAST ELEVATION
1/4" = 1'-0"



3 FIRST FLOOR PLAN
1/4" = 1'-0"



7 CANOPY DTL
6" = 1'-0"



4 CANOPY RCP
1/4" = 1'-0"

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BURLINGTON POLICE STATION
CANOPY RENOVATIONS
One North Ave., Burlington, VT 05401

SCALE: As indicated
DATE: 01/04/2024
DRAWN BY: MD
CHECKED BY: G4
PROJECT: BPD CANOPY

SHEET TITLE:
BPD CANOPY
PLANS, ELEVS
& DTLS



A-1.0

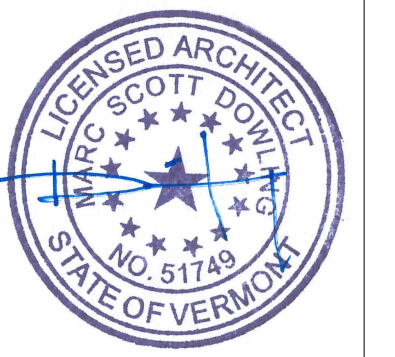
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BURLINGTON POLICE STATION
CANOPY RENOVATIONS
 One North Ave, Burlington, VT 05401

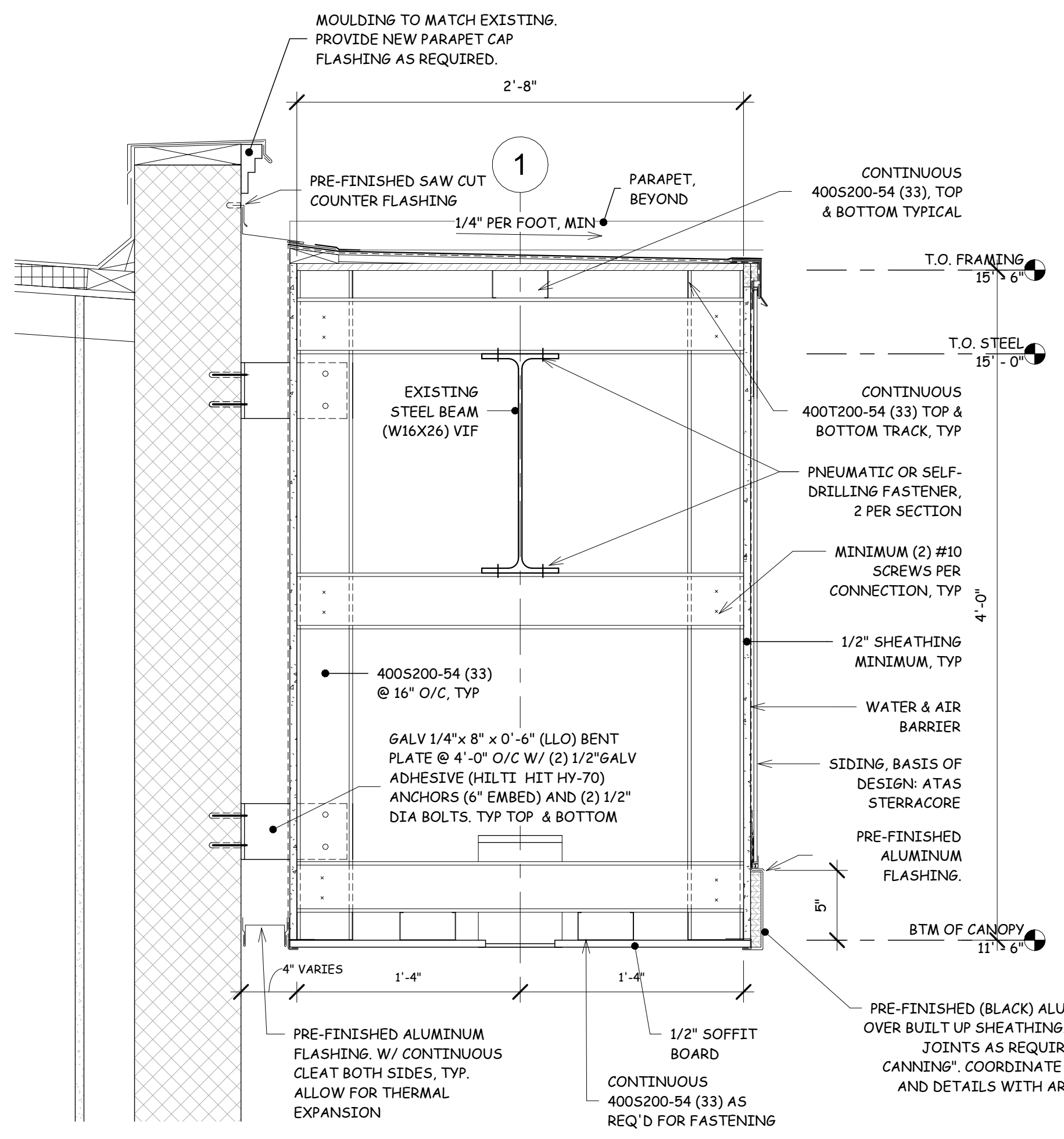
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 DRAWN BY: MD
 CHECKED BY: G4
 PROJECT: BPD CANOPY

SHEET TITLE:
BPD CANOPY SECTION DETAILS

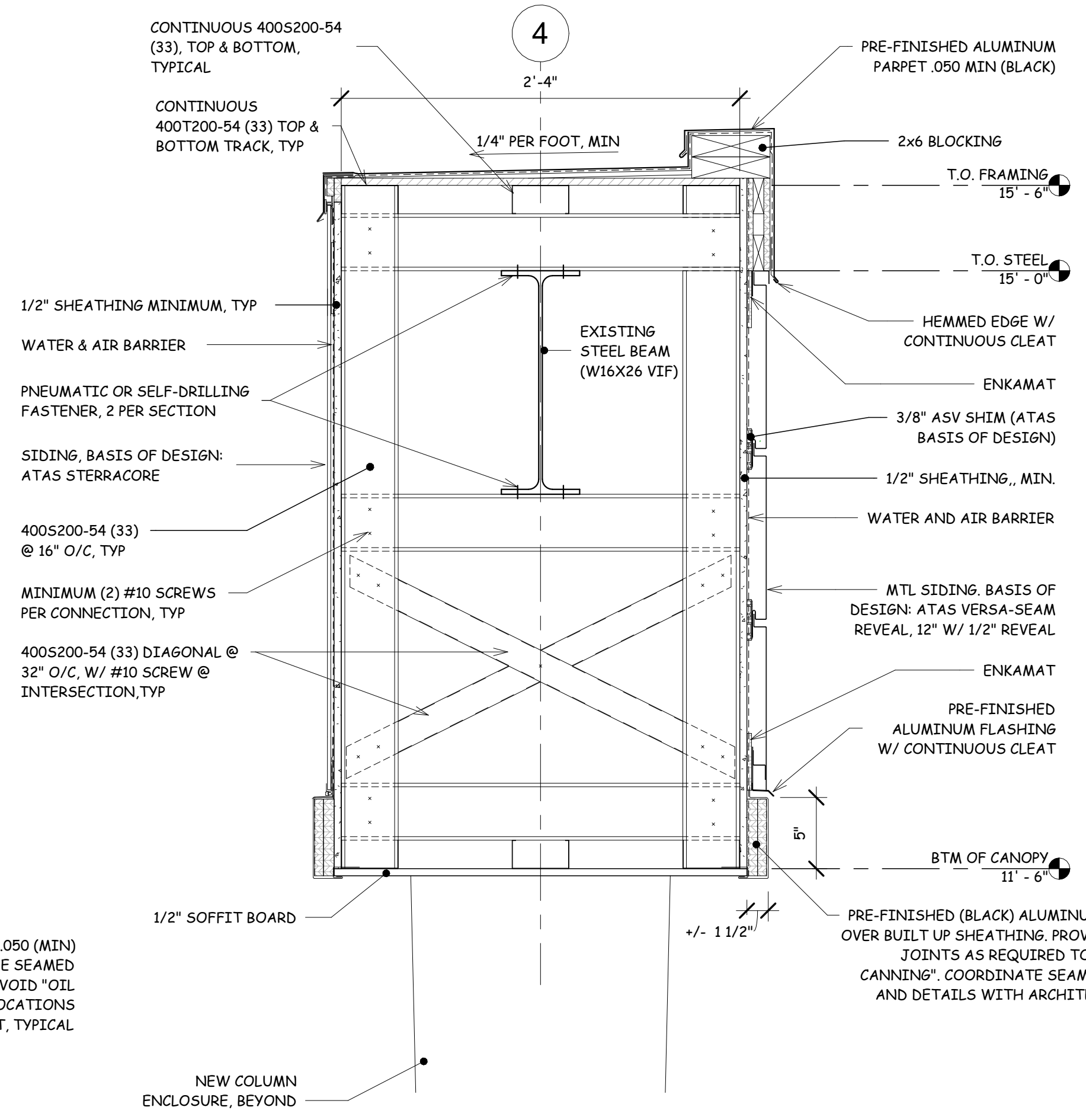


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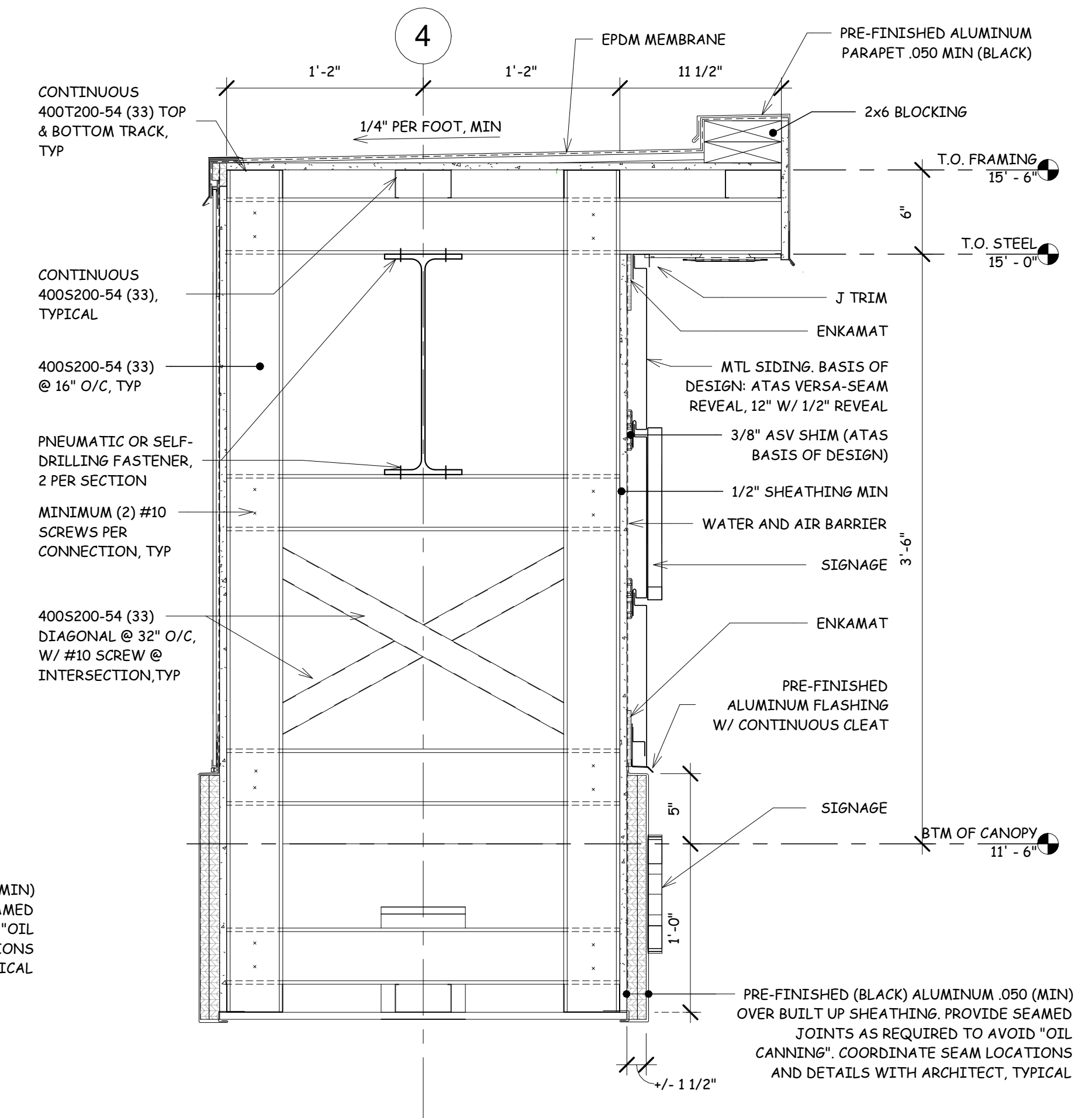
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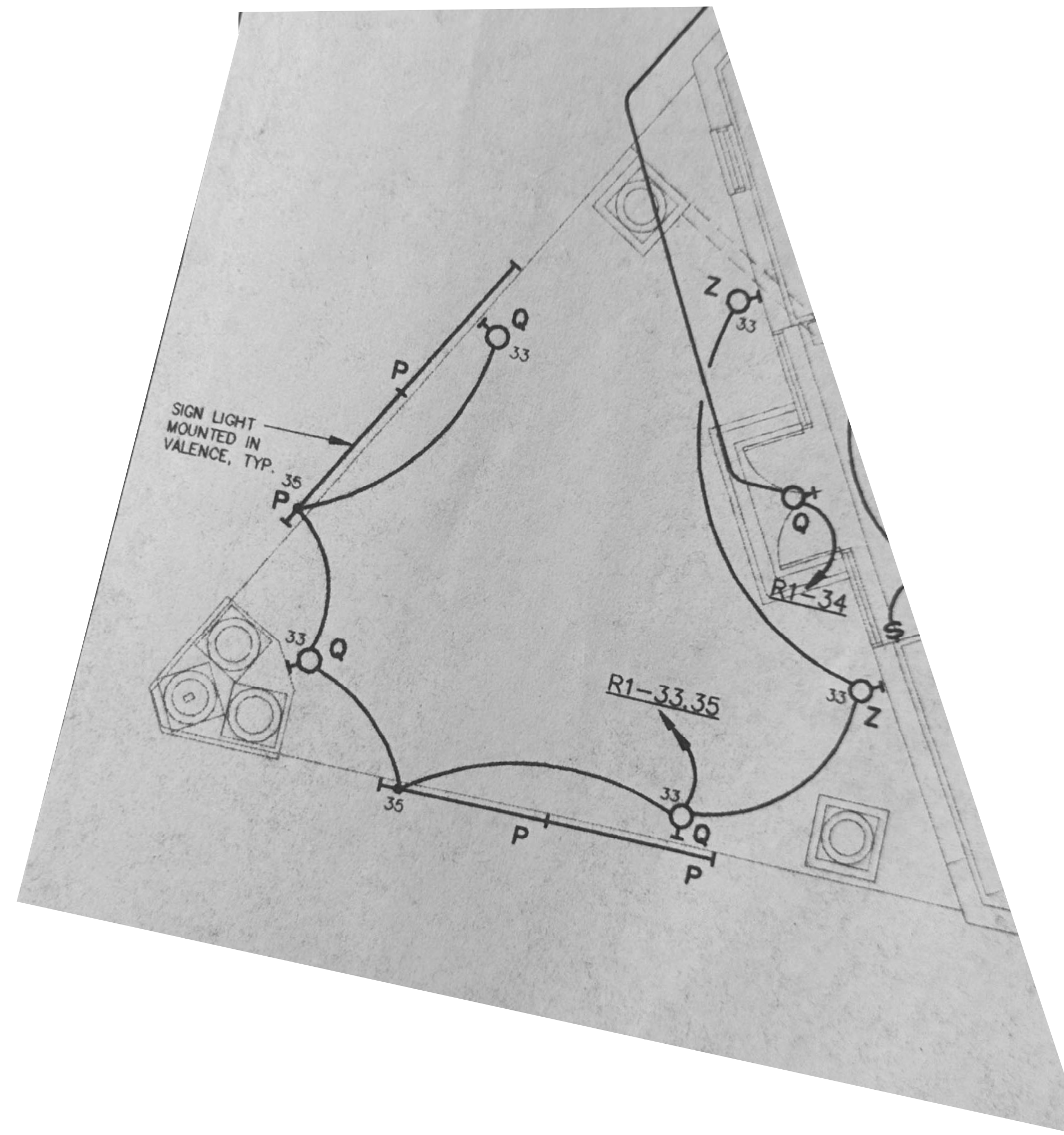
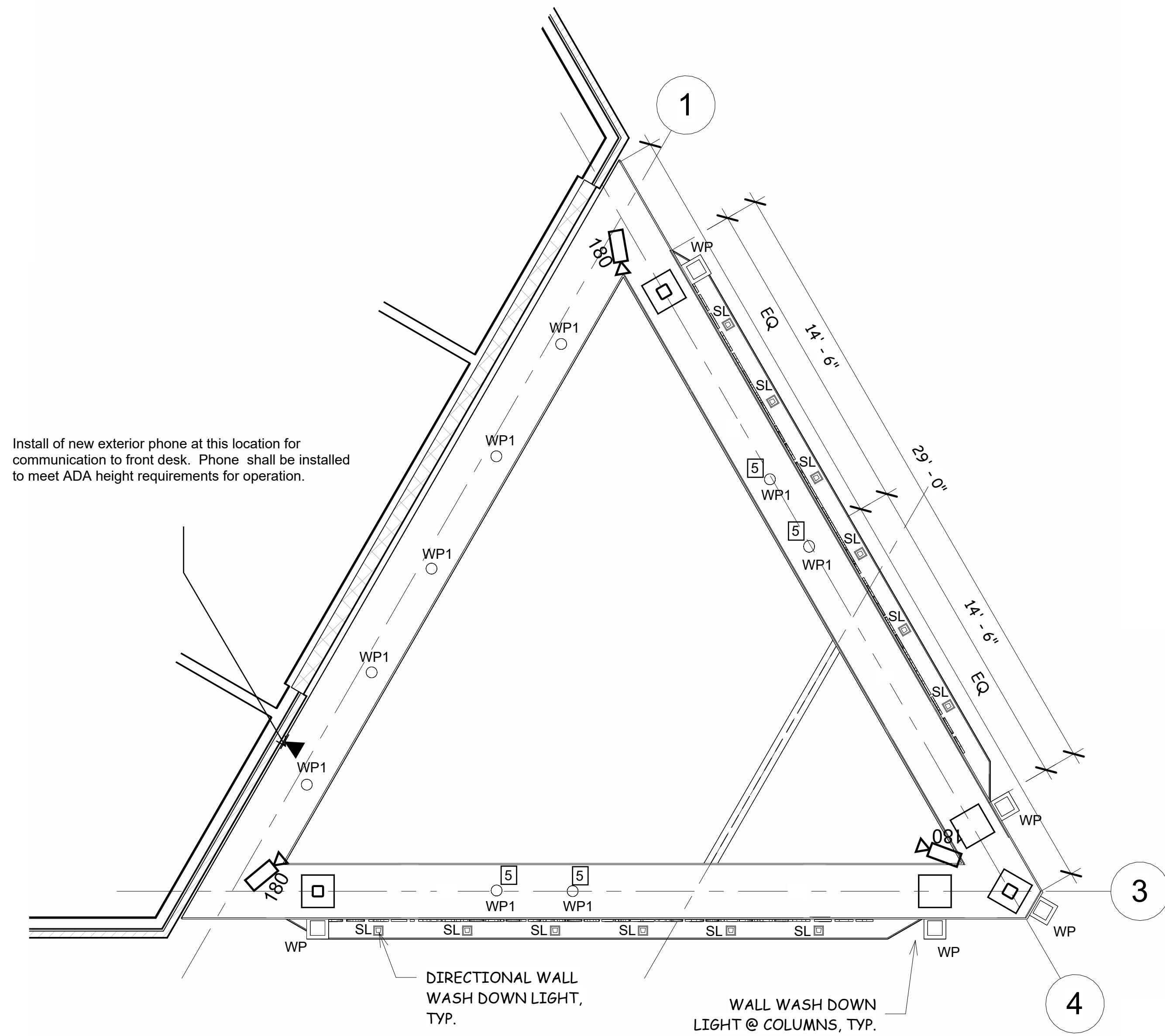
1 SECTION @ ENTRY'
 1 1/2" = 1'-0"



2 TYPICAL SECTION'
 1 1/2" = 1'-0"



3 SECTION @ SIGNAGE'
 1 1/2" = 1'-0"



R1											
DESCRIPTION	WIRE	COND.	KVA			BRKR.			KVA		
RECEPT.	2#12,1#2G	1/2"	A	B	C	20/1	1	2	20/1	1.1	1.1
			1.3			3	4			1.1	
			1.1			5	8			1.4	
			1.3			7	8				
			1.1			9	10				
						11	12			1.1	
MODULAR FURNITURE						13	14		1.0		
						15	16		1.0		
			1.0		1.0	17	18		1.0		
RECEPT.						19	20		1.0		
RECEPT.						21	22		1.0		
RECEPT.						23	24		1.0		
RECEPT.						25	26		1.3		
RECEPT.						27	28		1.3		
LIGHTING						29	30		1.3		
LITG. CANOPY NORTH						31	32		1.6		
LITG. CANOPY SOUTH	2#8,1#12G	1"				33	34		1.2		
SIGN LIGHTS	2#10,1#2G	3/4"				35	36		1.0		
SPARE						37	38				
						39	40				
						41	42				
TOTALS											
TOTAL DESIGNED LOAD:			32.0 KVA			88.8			AMPS		

GENERAL NOTES:

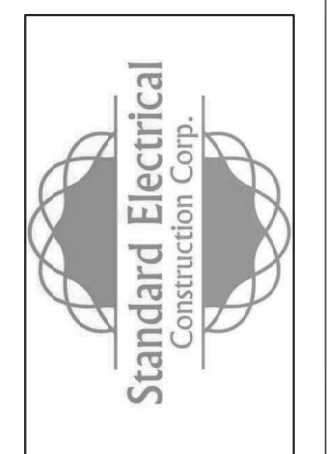
- All sign wall wash sign lighting Type SL, Ckt #35 to match existing conditions.
- All new down lights at columns Type WP and walkway fixture Type WP1, Ckt #33, to match existing conditions.
- Remove all existing lighting, cut/cap and remove back to source if not reused for new installation.
 - Existing wall sconces at main entry, type "Z" to be removed. Cap existing wiring and blank off existing boxes.
- Down lights at columns shall be mounted at centerline of vertical column, with bottom of fixture +2" from bottom of canopy.
 - Light shall be installed on siding block or to siding itself if light does not sit in siding gap.
- WP1 lights to be mounted to light entry sidewalks. Lights shall be installed to light sidewalk. Exact location to be verified on site for best light output on sidewalk.
- All new exterior lighting to be controlled from new exterior lighting time clock, Intermatic DT Series (2) ckt or equal.
- Camera locations/counts subject to change by owner needs. Cameras provided, installed, and programmed by Royal Group.
 - Cabling for cameras shall be (1) pink CAT6 back to camera head end cabinet.
 - Cables to be terminated on field end with RJ45 connector for final connections by Royal Group.

Type	DESCRIPTION	ELECTRICAL LIGHTING DEVICE SCHEDULE				NOTES
		LAMP DATA		BASIS OF DESIGN		
		WATTAGE	COLOR TEMPERATURE	MANUFACTURER	MODEL OR SERIES	
WP	KAXW LED Wall Luminaire	29W	5K	KAXW	KAXWLED P1 50K R3 MVOLT PIR1FC3V DBLXD	Or Equal upon approval
WP1	Juno Podz LED Downlight Series	15.2W	5K, 1200L	JUNO	JPDZ6 SQDC ALO10 SWW5WD w/ Black Trim	with New Construction frame. Or Equal upon approval
SL	Juno Podz LED Downlight Series	8.1W	5K, 700L	JUNO	JPDZ4 SQDC ALO10 SWW3WD w/ Black Trim	with New Construction frame. Or Equal upon approval

EXISTING CONDITIONS:

- Existing lighting circuitry taken from as built drawings provided by BPD. Confirmation of circuitry done on site prior to commencement of work.
- Existing panel schedule above also provided.
- Lighting circuits and controls to be reused for new lighting. Rework of existing circuitry and wiring as needed to meet new lighting layout.

Revision	
No.	
Date	



**Burlington Police Station
Canopy Renovations**
One North Ave, Burlington, VT 05401

Project #:	
Drawn By:	Phil G.
Checked By:	Phil G.
Approved By:	
Scale:	
Date:	12/9/23
Sheet:	

BPD Canopy

Burlington, Vermont

Project Manual / Specification

G4 Design Studios, LLC

77 College Street

Burlington, Vt 05401

802-497-0895

Issue for Bid

January 4, 2024



SECTION 00 0110 TABLE OF
 CONTENTS

Project: BPD Canopy
 Status:

11/15/2023 – DR1 - DRAFT – Not for Construction
01/04/2024 – IFB – Issue for Bid

PROCUREMENT and CONTRACTING REQUIREMENTS

Latest Date	Status	Table of Contents	
Division 00 - Procurement and Contracting Requirements			
04 Jan. 2024	IFB	00 0110 Table Of Contents	G4
04 Jan. 2024	IFB	00 0310 Available Project Information	G4
Division 01 General Requirements			
04 Jan. 2024	IFB	01 2000 Price and Payment Procedures	G4
04 Jan. 2024	IFB	01 2300 Alternates	G4
04 Jan. 2024	IFB	01 3000 Administrative Requirements	G4
04 Jan. 2024	IFB	01 4000 Quality Requirements	G4
04 Jan. 2024	IFB	01 5000 Temporary Facilities and Controls	G4
04 Jan. 2024	IFB	01 6000 Product Requirements	G4
04 Jan. 2024	IFB	01 6116 Volatile Organic Compound (VOC) Content Restrictions	G4
04 Jan. 2024	IFB	01 7000 Execution and Closeout Requirements	G4
04 Jan. 2024	IFB	01 7419 Construction Waste Management and Disposal	G4
04 Jan. 2024	IFB	01 7610 Temporary Protective Coverings	G4
04 Jan. 2024	IFB	01 7800 Closeout Submittals	G4

SPECIFICATIONS

04 Jan. 2024	IFB	Division 02 Existing Conditions		
		02 4100	Selective Demolition	G4
		Division 03 Concrete - NOT USED		
		Division 04 Masonry - NOT USED		
		Division 05 Metals - NOT USED		
		Division 06 Wood, Plastics, and Composites - NOT USED		
		Division 07 Thermal and Moisture Protection		
04 Jan. 2024	IFB	07 2700	Air Barriers / Sheet Waterproofing Membrane	G4
04 Jan. 2024	IFB	07 4213	Metal Wall Panels	G4
04 Jan. 2024	IFB	07 5300	Elastomeric Membrane Roofing	G4
04 Jan. 2024	IFB	07 6200	Sheet Metal Flashing and Trim	G4
04 Jan. 2024	IFB	07 9100	Preformed Joint Sealants	G4
04 Jan. 2024	IFB	07 9200	Joint Sealants	G4
		Division 08 Openings - NOT USED		
		Division 09 Finishes		
04 Jan. 2024	IFB	09 2116	Gypsum Board Assemblies	G4
04 Jan. 2024	IFB	09 9113	Exterior Painting	G4
04 Jan. 2024	IFB	09 9600	High-Performance Coatings	G4
		Division 09 Finishes		
04 Jan. 2024	IFB	10 1419	Dimensional Letter Signage	G4
		Divisions 11 & Beyond; See Drawings		
		--- END OF 00 0110 TABLE OF CONTENTS ---		

**SECTION 00 3100
AVAILABLE PROJECT INFORMATION**

PART 1 GENERAL

1.01 INFORMATION RELATED TO EXISTING CONDITIONS.

- A. Contractor's Use of Existing Conditions Information: Existing conditions information:
 - 1. Is not part of the Contract Documents.
 - 2. Is not guaranteed by the Owner or Architect to be complete or accurate.
 - 3. Is made available as a courtesy for the Contractor's information.
 - 4. May be used by the Contractor at the Contractor's sole risk and judgment.
- B. Additional Existing Conditions Information obtained by Contractor: The Contractor may obtain additional existing condition information and may perform selective exploratory demolition by making a specific written request to the Owner and obtaining the Owner's preapproval.
- C. Concealed and Unknown Conditions: Comply with the Conditions of the Contract for Construction. The following conditions are not "concealed" or "unknown" for the purposes of claims:
 - 1. Conditions above ceilings.
 - 2. Conditions shown on existing building drawings or record drawings.made available to the contractor.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 00 3100

**SECTION 00 7375
TAX EXEMPTION**

PART 1 GENERAL

1.01 SECTION INCLUDES:

INFORMATION RELATED TO OWNER'S TAX EXEMPTION.

- A. Tax Exemption: the Owner may be tax exempt from payment of sales taxes on materials permanently incorporated into the work.
- B. Records: Provide the Owner with one copy of each purchase order, invoice, and receipt which used the Owner's tax exemption certification number.
- C. Certification required: Upon Contract completion, provide a notarized certification to the Owner stating that all purchases made under the Owner's tax exempt certificate number were legitimate, for this Contract, and entitled to the exemption.
- D. Penalties: pay all penalties assessed by authorities having jurisdiction for the Contractor's improper or illegal use of the Owner's tax exemption certification number.
- E. Upon acceptance of Bid offer, contact Owner for the VT Tax # and/or the Fed EIN #.

END OF SECTION 00 7375

Tax Exemption

**SECTION 01 1417
OCCUPANCY REQUIREMENTS**

OCCUPANCY:

1.01 OCCUPANCY

- A. Owner will occupy the premises 24 hours a day 7 days a week during entire construction period, Coordination is required for the areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits, unless otherwise indicated.

1.02 OWNER OCCUPANCY OF AREA DURING CONSTRUCTION:

- A. Safety
1. Egress: maintain Code complying egress from occupied areas at all times. Egress includes but is not limited to code compliant path of egress, signage, and lighting.
 2. Fire Protection Systems: Maintain existing fire protection systems serving occupied areas, until new systems are functional and approved. Obtain written approval from the Owner and AHJ, before removing existing fire protection system. If required coordinate all fire suppression system shutdowns or drain-downs with the Owner, AHJ, and local Fire Dept. Contractor is to supply a fire watch during shutdowns. Unless a fire watch is established, all systems are to be re-pressurized and active at the end of each day.
 3. Emergency Communication: During emergencies communicate directly with the building occupants to prevent injury and damage.
 4. Comply with the owners security procedures. This facility may have secure areas and/or heightened security protocol.
- B. Occupancy Interruptions
1. Work Hours: Certain contract work may be restricted to hours when the building is least occupied. The requirement of maintaining building occupancy and an atmosphere that permits normal building function should be well understood, and is an important part of this contract. The cost of this accommodation is to be included in the base Contract Amount.
 2. Prepare a work plan that accounts for expected disruption to the functional atmosphere for the building occupancy. This is to include actions that may disturb, or disrupt building occupants. Work with the building owner to schedule this work to cause the least disruption to normal building operations. The work plan is to include Schedule, mitigating actions, contract traffic and circulation, temporary interior partitions, temporary exterior assemblies, and temporary egress. The work plan is to highlight items that may affect building occupant safety.
 3. Review the work plan with owner and architect, prior to beginning contract activity. Revise the work plan as directed. Notify the owners representative and receive approval for each deviation from the work plan.
 4. Allow the building owner(s) and building occupant representative(s), a minimum of 7 days advance written notice of expected occupancy interruptions, which include any actions which may cease normal building operations. These include, but are not limited to, evacuation, disruption of services,(such as Mechanical, Electrical, Plumbing, Fire protection, Tel-data, Communication, etc.), structural system work effecting safety in any way, or environmental aggravations: Chemical (including noxious odor), excessive temperature swings, noise above safe level of occupational noise exposure, as listed by DHHS (NIOSH) Publication Number 98-126. Obtain owners written approval prior to commencing work that may cease normal building operations. Written approval is for time and duration of disruption indicated. Additional written approval is required for time that falls outside of agreed time.

Occupancy Requirements

5. If an unexpected event that causes work interruption is potentially hazardous, protective and corrective action is expected without prior owner authorization, notify owner immediately.
 6. A minimum 72 hours advance notice is required for actions that have the potential to inhibit, interfere or disrupt normal building operations, including but not limited to loud or persistent noise, noticeable vibration, airborne particles, Out of the ordinary vehicles use or traffic, etc.
 7. Unexpected or unintentional interruptions: Know the full extent before, and confirm result of, turning on or off switches, breakers, valves, etc. Thoroughly investigate existing conditions and check for concealed utilities prior to activities which may be damage causing. Check and confirm in a non-destructive way by the use of metal detectors, etc. as required, to gain a full understanding of concealed items. Do not assume all utilities are show, or located in exact locations, on the contract documents.
 8. Notify owner and Architect immediately of accidental damage and/or accidental service interruption. Provide equivalent utilities and restore permanent utilities as soon as possible. All costs associated with unintentional service interruption, are the contractors responsibility, no additional payments will be made related to unintentional service interruptions.
- C. Occupancy Interactions
1. Limit communication with building occupants to brief, cordial exchanges.
 2. Official communication is to be provided to the Owners Representative. It is to be communicated in such a way that allows for feedback and includes confirmation of message received.
 3. If the Contractor is notified that an action is having a disturbing or detrimental effect on building occupants, immediately contact the owners representative and suggest a corrective action to mitigate impact on building occupants. If the owner's rep is not able to be immediately contacted, cease the action, progress with other activities, and maintain project progress. Provide the owner with a written account of the occurrence and corrective action. Corrective action resulting from occupant disturbance shall not constitute a change, nor result in additional fee.
 4. Do not use owner's tools or construction equipment, regardless of permission. Owner is not responsible for any or all losses related to the use of owner's tools or construction equipment.
- D. Professionalism and Job Cleanliness
1. Maintain professional conduct and appearance. Smoking, offensive language, and alcohol use is prohibited on owners property. Certain conduct will be grounds for dismissal, such as fighting, invasion of privacy, sexual harassment, illegal drug use, and endangering the welfare of others.
 2. Confine work storage, traffic, and personnel to areas pre approved by the Owner. Do not damage property outside of work areas.
 3. Existing building is to be in weather tight condition throughout construction period.
 4. Maintain the work area in a neat and orderly condition. Provide protections to restrict work area effects or products from entering areas outside of contract area. Protections may include mats at all doors, temporary partitions, and/or exterior assemblies, filters or coverings at duct return intakes, and other measures as required.

END OF SECTION 01 1417

Occupancy Requirements

**SECTION 01 2000
PRICE AND PAYMENT PROCEDURES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Documentation of changes in Contract Sum and Contract Time.
- C. Change procedures.
- D. Correlation of Contractor submittals based on changes.
- E. Procedures for preparation and submittal of application for final payment.

1.02 SCHEDULE OF VALUES

- A. Use Schedule of Values Form: AIA G703, edition stipulated in the Agreement.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect for approval.
- C. Forms filled out by hand will not be accepted.
- D. Submit Schedule of Values in duplicate within 15 days after date of Owner-Contractor Agreement.
- E. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification section. Identify site mobilization.
- F. Include in each line item, the amount of Allowances specified in this section. For unit cost Allowances, identify quantities taken from Contract Documents multiplied by the unit cost to achieve the total for the item.
- G. Include separately from each line item, a direct proportional amount of Contractor's overhead and profit.
- H. Revise schedule to list approved Change Orders, with each Application For Payment.

1.03 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit at intervals stipulated in the Agreement.
 - 1. If duration is not stipulated in the Agreement, submit applications for payment monthly.
- B. Use Form AIA G702 and Form AIA G703, edition stipulated in the Agreement.
- C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- D. Forms filled out by hand will not be accepted.
- E. For each item, provide a column for listing each of the following:
 - 1. Item Number.
 - 2. Description of work.
 - 3. Scheduled Values.
 - 4. Previous Applications.
 - 5. Work in Place and Stored Materials under this Application.
 - 6. Authorized Change Orders.
 - 7. Total Completed and Stored to Date of Application.
 - 8. Percentage of Completion.
 - 9. Balance to Finish.
 - 10. Retainage.
- F. Execute certification by signature of authorized officer.

- G. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- H. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of work.
- I. Submit one electronic and three hard-copies of each Application for Payment.
- J. Include the following with the application:
 - 1. Transmittal letter as specified for submittals in Section 01 3000.
 - 2. Construction progress schedule, revised and current as specified in Section 01 3000.
 - 3. Current construction photographs specified in Section 01 3000.
 - 4. Partial release of liens from major subcontractors and vendors.
 - 5. Project record documents as specified in Section 01 7800, for review by Owner which will be returned to the Contractor.
 - 6. Affidavits attesting to off-site stored products.
- K. When Architect requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

1.04 MODIFICATION PROCEDURES

- A. Submit name of the individual authorized to receive change documents and who will be responsible for informing others in Contractor's employ or subcontractors of changes to Contract Documents.
- B. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect will issue instructions directly to Contractor.
- C. For other required changes, Architect will issue a document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
 - 1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
 - 2. Promptly execute the change.
- D. For changes for which advance pricing is desired, Architect will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within ____ days.
- E. Contractor may propose a change by submitting a request for change to Architect, describing the proposed change and its full effect on the work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation. Document any requested substitutions in accordance with Section 01 6000.
- F. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
 - 1. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Architect.
 - 2. For pre-determined unit prices and quantities, the amount will based on the fixed unit prices.
 - 3. For change ordered by Architect without a quotation from Contractor, the amount will be determined by Architect based on the Contractor's substantiation of costs as specified for Time and Material work.
- G. Substantiation of Costs: Provide full information required for evaluation.
 - 1. On request, provide the following data:
 - a. Quantities of products, labor, and equipment.

Price and Payment Procedures

- b. Taxes, insurance, and bonds.
- c. Overhead and profit.
- d. Justification for any change in Contract Time.
- e. Credit for deletions from Contract, similarly documented.
2. Support each claim for additional costs with additional information:
 - a. Origin and date of claim.
 - b. Dates and times work was performed, and by whom.
 - c. Time records and wage rates paid.
 - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
3. For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.
- H. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- I. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- J. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- K. Promptly enter changes in Project Record Documents.

1.05 APPLICATION FOR FINAL PAYMENT

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
 1. All closeout procedures specified in Section 01 7000.
 2. Punchlist items completed to owners and architects satisfaction..

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 01 2000

01 2300 - Alternates
BPD Canopy - G4 Design Studios, LLC
Burlington , Vermont

**SECTION 01 2300
ALTERNATES**

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Description of Alternates.

1.02 RELATED REQUIREMENTS

1.03 ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.04 SCHEDULE OF ALTERNATES

A. Alternates: There are no Alternates identified at this time

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 01 2300

Alternates

Jan. 04, 2024

Issue for Bid

Printed: 01-02-2024 9:46:38 PM ; TBD 2346

01 2300

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**SECTION 01 3000
ADMINISTRATIVE REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General administrative requirements.
- B. Electronic document submittal service.
- C. Preconstruction meeting.
- D. Site mobilization meeting.
- E. Progress meetings.
- F. Construction progress schedule.
- G. Progress photographs.
- H. Coordination drawings.
- I. Number of copies of submittals.
- J. Requests for Interpretation (RFI) procedures.
- K. Submittal procedures.

1.02 RELATED REQUIREMENTS

- A. Section 01 6000 - Product Requirements: General product requirements.
- B. Section 01 7000 - Execution and Closeout Requirements: Additional coordination requirements.
- C. Section 01 7800 - Closeout Submittals: Project record documents; operation and maintenance data; warranties and bonds.
- D. Section 01 9113 - General Commissioning Requirements: Additional procedures for submittals relating to commissioning.
 - 1. Where submittals are indicated for review by both Architect and the Commissioning Authority, submit one extra and route to Architect first, for forwarding to the Commissioning Authority.
 - 2. Where submittals are not indicated to be reviewed by Architect, submit directly to the Commissioning Authority; otherwise, the procedures specified in this section apply to commissioning submittals.

1.03 GENERAL ADMINISTRATIVE REQUIREMENTS

- A. Comply with requirements of Section 01 7000 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.
- B. Make the following types of submittals to Architect:
 - 1. Requests for Interpretation (RFI).
 - 2. Requests for substitution.
 - 3. Shop drawings, product data, and samples.
 - 4. Test and inspection reports.
 - 5. Design data.
 - 6. Manufacturer's instructions and field reports.
 - 7. Applications for payment and change order requests.
 - 8. Progress schedules.
 - 9. Coordination drawings.
 - 10. Correction Punch List and Final Correction Punch List for Substantial Completion.
 - 11. Closeout submittals.

1.04 CONTRACTOR'S MANAGEMENT STAFF REQUIREMENTS:

- A. Personnel: Assign individual(s) to these Project rolls:
 - 1. Project Manager.
 - 2. Superintendent and Primary Safety Officer.
 - 3. Assistant Superintendent, Deputy Safety Officer, Installation/MEP Coordinator, and Contractor's Air Barrier System Agent
- B. Experience, Qualifications: At least 10 years' experience with projects similar to this Contract.
- C. Owner and Architect Approval: Required. Submit qualification information and obtain approval prior to staff assignment.
- D. Reassignment or Replacement: If requested by the Owner or Architect at any time during the Contract, replace Contractor's management staff with personnel acceptable to the Owner and Architect. Do not reassign or replace management staff, unless preapproved by the Owner.
- E. On Site: Contractor's Management Staff shall be on site whenever work is in progress.
- F. Work Restrictions: Contractor's Management Staff shall manage, supervise, coordinate, plan, and direct the work.

1.05 PROJECT COORDINATION

- A. Owners Project Coordinator: Owners Project Manager.
- B. Cooperate with the Project Coordinator in allocation of mobilization areas of site; for field offices and sheds, for building/ space access, traffic, and parking facilities.
- C. During construction, coordinate use of site and facilities through the Project Coordinator.
- D. Comply with Project Coordinator's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- E. Comply with instructions of the Project Coordinator for use of temporary utilities and construction facilities.
- F. Coordinate field engineering and layout work under instructions of the Project Coordinator.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 ELECTRONIC DOCUMENT SUBMITTAL SERVICE

- A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF, MS Word, or MS Excel) format, as appropriate to the document, and transmitted via an Internet-based submittal service that receives, logs and stores documents, provides electronic stamping and signatures, and notifies addressees via email.
 - 1. Besides submittals for review, information, and closeout, this procedure applies to Requests for Interpretation (RFIs), progress documentation, contract modification documents (e.g. supplementary instructions, change proposals, change orders), applications for payment, field reports and meeting minutes, Contractor's correction punchlist, and any other document any participant wishes to make part of the project record.
 - 2. Contractor and Architect are required to use this service.
 - 3. It is Contractor's responsibility to submit documents in allowable format.
 - 4. Subcontractors, suppliers, and Architect's consultants are to be permitted to use the service at no extra charge.
 - 5. Users of the service need an email address, internet access, and PDF review software that includes ability to mark up and apply electronic stamps (such as Adobe Acrobat, www.adobe.com, or Bluebeam PDF Revu, www.bluebeam.com), unless such software

- capability is provided by the service provider.
6. Paper document transmittals will not be reviewed; emailed electronic documents will not be reviewed.
 7. All other specified submittal and document transmission procedures apply, except that electronic document requirements do not apply to samples or color selection charts.
- B. Cost: The cost of the service is to be paid by Contractor; include the cost of the service in the Contract Sum.
- C. Submittal Service: The selected service is:
1. Submittal Exchange (tel: 1-800-714-0024): www.submittalexchange.com/#sle.
 2. Or similar servicer as approved by the Owner and Architect.
- D. Training: (If requested, A one, one-hour, web-based training session will be arranged for all participants, with representatives of Architect and Contractor participating; further training is the responsibility of the user of the service.
1. Representatives of Owner are scheduled and included in this training.
- E. Project Closeout: Architect will determine when to terminate the service for the project and is responsible for obtaining archive copies of files for Owner.

3.02 PRECONSTRUCTION MEETING

- A. Architect will schedule a meeting after Notice of Award.
- B. Attendance Required:
1. Owner.
 2. Architect.
 3. Contractor.
- C. Agenda:
1. Execution of Owner-Contractor Agreement.
 2. Submission of executed bonds and insurance certificates.
 3. Distribution of Contract Documents.
 4. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
 5. Designation of personnel representing the parties to Contract, _____ and Architect.
 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 7. Scheduling.
 8. Scheduling activities of a Geotechnical Engineer.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.03 SITE MOBILIZATION MEETING

- A. Schedule meeting at the Project site prior to Contractor occupancy.
- B. Attendance Required:
1. Contractor.
 2. Owner.
 3. Architect.
 4. Contractor's superintendent.
 5. Major subcontractors.
- C. Agenda:
1. Use of premises by Owner and Contractor.
 2. Owner's requirements.
 3. Construction facilities and controls provided by Owner.

Administrative Requirements

4. Temporary utilities provided by Owner.
 5. Survey and building layout.
 6. Security and housekeeping procedures.
 7. Schedules.
 8. Application for payment procedures.
 9. Procedures for testing.
 10. Procedures for maintaining record documents.
 11. Requirements for start-up of equipment.
 12. Inspection and acceptance of equipment put into service during construction period.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.04 PROGRESS MEETINGS - O, A, C MEETINGS (OWNER, ARCHITECT, CONTRACTOR)

- A. Schedule and administer meetings throughout progress of the work at maximum Two week intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required:
1. Contractor.
 2. Owner.
 3. Architect.
 4. Contractor's superintendent.
 5. Major subcontractors.
- D. Agenda:
1. Review minutes of previous meetings.
 2. Review of work progress.
 - a. Review Progress Photos as appropriate.
 3. Field observations, problems, and decisions.
 4. Identification of problems that impede, or will impede, planned progress.
 5. Review of submittals schedule and status of submittals.
 6. Review of RFIs log and status of responses.
 7. Maintenance of progress schedule.
 - a. Review a Minimum two week look-ahead.
 8. Corrective measures to regain projected schedules.
 9. Planned progress during succeeding work period.
 10. Coordination of projected progress.
 11. Maintenance of quality and work standards.
 12. Effect of proposed changes on progress schedule and coordination.
 13. Other business relating to work.
- E. Record minutes and distribute copies within two days after meeting to participants, with electronic / PDF copies to Architect, Owner, participants, and those affected by decisions made.

3.05 CONSTRUCTION PROGRESS SCHEDULE

- A. Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of work, with a general outline for remainder of work.
- B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- C. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.

1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- D. Within 10 days after joint review, submit complete schedule.
- E. Submit updated schedule with each Application for Payment.

3.06 PROGRESS PHOTOGRAPHS

- A. Submit photographs with each application for payment, taken not more than 3 days prior to submission of application for payment.
- B. Maintain one set of all photographs at project site for reference; same copies as submitted, identified as such.
- C. Photography Type: Digital; electronic files.
- D. Provide photographs of site and construction throughout progress of work produced by an experienced photographer, acceptable to Architect.
- E. In addition to periodic, recurring views, take photographs of each of the following events:
- F. Views:
 1. Provide non-aerial photographs from four cardinal views at each specified time, until date of Substantial Completion.
 2. Consult with Architect for instructions on views required.
 3. Provide factual presentation.
 4. Provide correct exposure and focus, high resolution and sharpness, maximum depth of field, and minimum distortion.
- G. Digital Photographs: 24 bit color, minimum resolution of 1024 by 768, in JPG format; provide files unaltered by photo editing software.
 1. Delivery Medium: Via email.
 2. File Naming: Include project identification, date and time of view, and view identification.
 3. PDF File: Assemble all photos into printable pages in PDF format, with 2 to 3 photos per page, each photo labeled with file name; one PDF file per submittal.
 4. Hard Copy: Printed hardcopy (grayscale) of PDF file and point of view sketch.

3.07 COORDINATION

- A. General project coordination procedures.
 1. Coordinate construction operations included in various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections that depend on each other for proper installation, connection, and operation.
 - a. Schedule construction operations in the sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - b. Coordinate installation of different components to assure maximum accessibility for required maintenance, service, and repair.
 - c. Make provisions to accommodate items scheduled for later installation.
 2. All subcontractors shall be responsible for fitting their work in accordance with the Contract Drawings. No subcontractor shall have the preemptive right to lay-out or install his work to effectively preclude the Work of others.
 - a. All subcontractors shall be responsible for fitting their work in the space available. Ceiling heights will not be lowered.
 3. Additional work required to accommodate a trade that failed to coordinate his work will be paid for by the subcontractor who failed to coordinate his work.
 4. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress

of the Work. Such administrative activities include, but are not limited to, the following:

- a. Preparation of schedules.
 - b. Installation and removal of temporary facilities.
 - c. Delivery and processing of submittals.
 - d. Progress meetings.
 - e. Project closeout activities.
- B. Conservation: Coordinate construction operations to assure that operations are carried out with consideration given to conservation of energy, water, and materials.
1. Salvage materials and equipment involved in performance of, but not actually incorporated in, the Work.
- C. Staff Names: Within 15 days of commencement of construction operations, submit a list of the Contractor's principal staff assignments, including the superintendent and other personnel in attendance at the Project Site. Identify individuals and their duties and responsibilities. List their telephone numbers, and list a back-up person and phone number if primary responsible party is unavailable.
1. Post copies of the list in the Project meeting room, the temporary field office
 2. Distribute the list to Owner, and Architect in PDF format

3.08 COORDINATION DRAWINGS

- A. Coordination Drawings: Prepare coordination drawings where careful coordination is needed for installation of products and materials fabricated by separate entities. Prepare coordination drawings where limited space availability necessitates maximum utilization of space for efficient installation of different components.
1. Show the relationship of components shown on separate Shop Drawings.
 2. Indicate required installation sequences.
- B. Copies of the coordination drawings shall be distributed to each subcontractor and subsequently each trade shall locate its work and shall show elevations, sizes, access panels, pipe insulation, junction boxes, and fixture sizes
- C. Layouts shall be examined for conflicts. Conflicts shall be flagged for immediate attention and resolution by the Contractor. Upon resolution of all conflicts, the coordinated drawings shall be stamped 'reviewed' and signed by Contractor and submitted to the Architect, in accordance with this section, marked for "Architect's record only."
1. Review drawings prior to submission to Architect.
- D. General Coordination Provisions:
1. Inspection of Conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
 2. Coordinate temporary enclosures with required inspections and tests to minimize the necessity of uncovering completed construction for that purpose.

3.09 REQUESTS FOR INTERPRETATION / INFORMATION (RFI)

- A. Definition: A request seeking one of the following:
1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in Contract Documents.
 2. A resolution to an issue which has arisen due to field conditions and affects design intent.
- B. Whenever possible, request clarifications at the next appropriate project progress meeting, with response entered into meeting minutes, rendering unnecessary the issuance of a formal RFI.

Administrative Requirements

- C. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
 - 1. Prepare a separate RFI for each specific item.
 - a. Review, coordinate, and comment on requests originating with subcontractors and/or materials suppliers.
 - 2. Prepare using software provided by the Electronic Document Submittal Service.
- D. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.
 - 1. Unacceptable Uses for RFIs: Do not use RFIs to request the following:
 - a. Changes that entail change in Contract Time and Contract Sum (comply with provisions of the Conditions of the Contract).
- E. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.
 - 1. Official Project name and number, and any additional required identifiers established in Contract Documents.
 - 2. Owner's, Architect's, and Contractor's names.
 - 3. Discrete and consecutive RFI number, and descriptive subject/title.
 - 4. Issue date, and requested reply date.
 - 5. Reference to particular Contract Document(s) requiring additional information/interpretation. Identify pertinent drawing and detail number and/or specification section number, title, and paragraph(s).
 - 6. Annotations: Field dimensions and/or description of conditions which have engendered the request.
 - 7. Contractor's suggested resolution: A written and/or a graphic solution, to scale, is required in cases where clarification of coordination issues is involved, for example; routing, clearances, and/or specific locations of work shown diagrammatically in Contract Documents. If applicable, state the likely impact of the suggested resolution on Contract Time or the Contract Sum.
- F. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.
- G. RFI Log: Prepare and maintain a tabular log of RFIs for the duration of the project.
- H. Review Time: Architect will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.
- I. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to Owner.

3.10 SUBMITTAL SCHEDULE

- A. Submit to Architect for review a schedule for submittals in tabular format.
 - 1. Submit at the same time as the preliminary schedule.
 - 2. Coordinate with Contractor's construction schedule and schedule of values.
 - 3. Format schedule to allow tracking of status of submittals throughout duration of construction.
 - 4. Arrange information to include scheduled date for initial submittal, specification number and title, submittal category (for review or for information), description of item of work covered, and role and name of subcontractor.

Administrative Requirements

5. Account for time required for preparation, review, manufacturing, fabrication and delivery when establishing submittal delivery and review deadline dates.
 - a. For assemblies, equipment, systems comprised of multiple components and/or requiring detailed coordination with other work, allow for additional time to make corrections or revisions to initial submittals, and time for their review.
6. Product data.
7. Shop drawings.
8. Samples for selection.
9. Samples for verification.

3.11 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 1. Design data.
 2. Certificates.
 3. Test reports.
 4. Inspection reports.
 5. Manufacturer's instructions.
 6. Manufacturer's field reports.
 7. Other types indicated.
- B. Submit for Architect's knowledge as contract administrator or for Owner.

3.12 SUBMITTALS FOR PROJECT CLOSEOUT

- A. Submit Correction Punch List for Substantial Completion.
 1. Include formal notice of work remaining (with remaining work, cost information and expected completion time) for Architect to commence Substantial Completion documentation (AIA G704).
- B. Submit Final Correction Punch List for Substantial Completion.
- C. When the following are specified in individual sections, submit them at project closeout in compliance with requirements of Section 01 7800 - Closeout Submittals:
 1. Project record documents.
 2. Operation and maintenance data.
 3. Warranties.
 4. Bonds.
 5. Other types as indicated.
- D. Submit for Owner's benefit during and after project completion.

3.13 NUMBER OF COPIES OF SUBMITTALS

- A. Electronic Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.

3.14 SUBMITTAL PROCEDURES

- A. General Requirements:
 1. Use a single transmittal for related items.
 2. Submit separate packages of submittals for review and submittals for information, when included in the same specification section.
 3. Transmit using approved form.
 - a. Use form generated by Electronic Document Submittal Service software.
 4. Sequentially identify each item. For revised submittals use original number and a sequential numerical suffix.
 5. Submittal file naming convention: XX-XXXX (Contract Spec section number) [YYY] (Sequential submittal number for this section) [ZZ] (Revision Code) Description (2 word

description)

- 1) XX-XXXX-[YYY]-[ZZ]-Description:
 - 2) For Example: 03-3000-002-01-Footing Rebar - Would be the second submittal (002) in the 03-3000 Division which happened to be Footing Rebar, the initial submission (01) for this product.
6. Identify: Project; Contractor; subcontractor or supplier; pertinent drawing and detail number; and specification section number and article/paragraph, as appropriate on each copy.
 7. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and Contract Documents.
 - a. Submittals from sources other than the Contractor, or without Contractor's stamp will not be acknowledged, reviewed, or returned.
 8. Deliver each submittal on date noted in submittal schedule, unless an earlier date has been agreed to by all affected parties, and is of the benefit to the project.
 - a. Upload submittals in electronic form to Electronic Document Submittal Service website.
 9. Schedule submittals to expedite the Project, and coordinate submission of related items.
 - a. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
 - b. For sequential reviews involving Architect's consultants, Owner, or another affected party, allow an additional 7 days.
 - c. For sequential reviews involving approval from authorities having jurisdiction (AHJ), in addition to Architect's approval, allow an additional 30 days.
 10. Identify variations from Contract Documents and product or system limitations that may be detrimental to successful performance of the completed work.
 11. Provide space for Contractor and Architect review stamps.
 12. When revised for resubmission, identify all changes made since previous submission.
 13. Distribute reviewed submittals. Instruct parties to promptly report inability to comply with requirements.
 14. Submittals not requested will be recognized, and will be returned "Not Reviewed",
- B. Product Data Procedures:
1. Submit only information required by individual specification sections.
 2. Collect required information into a single submittal.
 3. Submit concurrently with related shop drawing submittal.
 4. Do not submit (Material) Safety Data Sheets for materials or products.
- C. Shop Drawing Procedures:
1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting Contract Documents and coordinating related work.
 2. Use of reproductions of Contract Documents in digital data form to create shop drawings is only permitted as defined in contract documents
 3. Generic, non-project-specific information submitted as shop drawings do not meet the requirements for shop drawings.
- D. Samples Procedures:
1. Transmit related items together as single package.
 2. Identify each item to allow review for applicability in relation to shop drawings showing installation locations.
 3. Include with transmittal high-resolution image files of samples to facilitate electronic review and approval. Provide separate submittal page for each item image.

3.15 SUBMITTAL REVIEW

Administrative Requirements

- A. Submittals for Review: Architect will review each submittal, and approve, or take other appropriate action.
- B. Submittals for Information: Architect will acknowledge receipt and review. See below for actions to be taken.
- C. Architect's actions will be reflected by marking each returned submittal using virtual stamp on electronic submittals.
 - 1. Notations may be made directly on submitted items and/or listed on appended Submittal Review cover sheet.
- D. Architect's and consultants' actions on items submitted for review:
 - 1. Authorizing purchasing, fabrication, delivery, and installation:
 - a. "Approved", or language with same legal meaning.
 - b. "Approved as Noted, Resubmission not required", or language with same legal meaning.
 - 1) At Contractor's option, submit corrected item, with review notations acknowledged and incorporated.
 - c. "Approved as Noted, Resubmit for Record", or language with same legal meaning.
 - 1) Resubmit corrected item, with review notations acknowledged and incorporated. Resubmit separately, or as part of project record documents.
 - 2. Not Authorizing fabrication, delivery, and installation:
- E. Architect's and consultants' actions on items submitted for information:
 - 1. Items for which no action was taken:
 - a. "Received" - to notify the Contractor that the submittal has been received for record only.
 - 2. Items for which action was taken:
 - a. "Reviewed" - no further action is required from Contractor.

END OF SECTION 01 3000

**SECTION 01 4000
QUALITY REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Submittals.
- B. Quality assurance.
- C. References and standards.
- D. Testing and inspection agencies and services.
- E. Contractor's construction-related professional design services.
- F. Control of installation.
- G. Mock-ups.
- H. Tolerances.
- I. Manufacturers' field services.
- J. Defect Assessment.

1.02 RELATED REQUIREMENTS

- A. Section 01 3000 - Administrative Requirements: Submittal procedures.
- B. Section 01 6000 - Product Requirements: Requirements for material and product quality.

1.03 REFERENCE STANDARDS

- A. ASTM C1021 - Standard Practice for Laboratories Engaged in Testing of Building Sealants 2008 (Reapproved 2023).
- B. ASTM C1077 - Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation 2017.
- C. ASTM C1093 - Standard Practice for Accreditation of Testing Agencies for Masonry 2023.
- D. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection 2021.
- E. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing 2021.
- F. ASTM E699 - Standard Specification for Agencies Involved in Testing, Quality Assurance, and Evaluating of Manufactured Building Components 2016.
- G. IAS AC89 - Accreditation Criteria for Testing Laboratories 2021.

1.04 DEFINITIONS

- A. Contractor's Quality Control Plan: Contractor's management plan for executing the Contract for Construction.
- B. Contractor's Professional Design Services: Design of some aspect or portion of the project by party other than the design professional of record. Provide these services as part of the Contract for Construction.
 - 1. Design Services Types Required:
 - a. Construction-Related: Services Contractor needs to provide in order to carry out the Contractor's sole responsibilities for construction means, methods, techniques, sequences, and procedures.

1.05 CONTRACTOR'S CONSTRUCTION-RELATED PROFESSIONAL DESIGN SERVICES

- A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.

Quality Requirements

- B. Provide such engineering design services as may be necessary to plan and safely conduct certain construction operations, pertaining to, but not limited to the following:
 - 1. Temporary sheeting, shoring, or supports.
 - 2. Temporary scaffolding.
 - 3. Temporary bracing.
 - 4. Temporary foundation underpinning.
 - 5. Temporary stairs or steps required for construction access only.
 - 6. Temporary hoist(s) and rigging.

1.06 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Test Reports: After each test/inspection, promptly submit two copies of report to Architect and to Contractor.
 - 1. Include:
 - a. Date issued.
 - b. Project title and number.
 - c. Name of inspector.
 - d. Date and time of sampling or inspection.
 - e. Identification of product and specifications section.
 - f. Location in the Project.
 - g. Type of test/inspection.
 - h. Date of test/inspection.
 - i. Results of test/inspection.
 - j. Compliance with Contract Documents.
 - k. When requested by Architect, provide interpretation of results.
 - 2. Test report submittals are for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.
- C. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.
 - 1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
 - 2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.
- D. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- E. Manufacturer's Field Reports: Submit reports for Architect's benefit as contract administrator or for Owner.
 - 1. Submit report within 30 days of observation to Architect for information.
 - 2. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.

1.07 QUALITY ASSURANCE

- A. Testing Agency Qualifications:
 - 1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.

2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
 3. Qualification Statement: Provide documentation showing testing laboratory is accredited under IAS AC89.
- B. Designer Qualifications: Where professional engineering design services and design data submittals are specifically required of Contractor by Contract Documents, provide services of a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

1.08 REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Comply with reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in any reference document.

1.09 TESTING AND INSPECTION AGENCIES AND SERVICES

- A. As indicated in individual specification sections, Owner or Contractor shall employ and pay for services of an independent testing agency to perform specified testing.
- B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- C. Contractor Employed Agency:
 1. Testing agency: Comply with requirements of ASTM E329, ASTM E543, ASTM E699, ASTM C1021, ASTM C1077, and ASTM C1093.
 2. Laboratory: Authorized to operate in the State in which the Project is located.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have work performed by persons qualified to produce required and specified quality.

- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 MOCK-UPS

- A. Before installing portions of the Work where mock-ups are required, construct mock-ups in location and size indicated for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work. The purpose of mock-up is to demonstrate the proposed range of aesthetic effects and workmanship.
- B. Accepted mock-ups establish the standard of quality the Architect will use to judge the Work.
- C. Integrated Exterior Mock-ups: Construct integrated exterior mock-up as indicated on drawings (or as agreed to by the Owner and Architect). Coordinate installation of exterior envelope materials and products as required in individual Specification Sections. Provide adequate supporting structure for mock-up materials as necessary.
- D. Tests shall be performed under provisions identified in this section and identified in the respective product specification sections.
- E. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
- F. Architect will use accepted mock-ups as a comparison standard for the remaining Work.
- G. Where mock-up has been accepted by Architect and is specified in product specification sections to be removed, protect mock-up throughout construction, remove mock-up and clear area when directed to do so by Architect.

3.03 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

3.04 TESTING AND INSPECTION

- A. See individual specification sections for testing and inspection required.
- B. Testing Agency Duties:
 - 1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
 - 2. Perform specified sampling and testing of products in accordance with specified standards.
 - 3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 4. Promptly notify Architect and Contractor of observed irregularities or non-compliance of Work or products.
 - 5. Perform additional tests and inspections required by Architect.
 - 6. Submit reports of all tests/inspections specified.
- C. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency may not approve or accept any portion of the Work.
 - 3. Agency may not assume any duties of Contractor.
 - 4. Agency has no authority to stop the Work.

Quality Requirements

- D. Contractor Responsibilities:
1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
 3. Provide incidental labor and facilities:
 - a. To provide access to Work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
 - c. To facilitate tests/inspections.
 - d. To provide storage and curing of test samples.
 4. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
 5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
 6. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- E. Re-testing required because of non-compliance with specified requirements shall be performed by the same agency on instructions by Architect.
- F. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

3.05 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship start-up of equipment, test, adjust, and balance equipment, as applicable, and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.06 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not complying with specified requirements.

END OF SECTION 01 4000

**SECTION 01 5000
TEMPORARY FACILITIES AND CONTROLS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary telecommunications services.
- B. Temporary sanitary facilities.
- C. Temporary Controls: Barriers, enclosures, and fencing.
- D. Security requirements.
- E. Vehicular access and parking.
- F. Waste removal facilities and services.
- G. Project identification sign.
- H. Field offices.

1.02 RELATED REQUIREMENTS

- A. Section 01 5213 - Field Offices and Sheds.

1.03 REFERENCE STANDARDS

- A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials 2023c.

1.04 TELECOMMUNICATIONS SERVICES

- A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization.
- B. Telecommunications services shall include:
 - 1. At a minimum: A smart phone or tablet capable of phone calls, internet access and photography.

1.05 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. Maintain daily in clean and sanitary condition.

1.06 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.
- C. Provide protection for plants designated to remain. Replace damaged plants.
- D. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.07 FENCING

- A. Construction: Contractor's option.
- B. Recommended: Provide 6 foot (1.8 m) high fence around construction material storage; equip with vehicular and pedestrian gates with locks.
 - 1. Do not block required exits

1.08 CONSTRUCTION ENCLOSURES

- A. Provide temporary partitions and ceilings as required to separate work areas from Owner-occupied areas, to prevent penetration of dust and moisture into Owner-occupied areas, and to prevent damage to existing materials and equipment.
- B. Construction: Framing and reinforced polyethylene sheet materials with closed joints and sealed edges at intersections with existing surfaces:
 - 1. Maximum flame spread rating of 75 in accordance with ASTM E84.

1.09 SECURITY - SEE SECTION 01 3553

- A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with Owner's security program.

1.10 VEHICULAR ACCESS AND PARKING

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities and Owner.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

1.11 WASTE REMOVAL

- A. See Section 01 7419 - Construction Waste Management and Disposal, for additional requirements.
- B. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- C. Provide containers with lids. Remove trash from site periodically.
- D. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
- E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.12 PROJECT IDENTIFICATION

- A. Coordinate project identification sign with owner, who may dis-allow.
- B. No other signs are allowed without Owner permission except those required by law.

1.13 FIELD OFFICES - SEE SECTION 01 5213

- A. Coordinate field office with Owner,
- B. Office: Weathertight, with lighting, electrical outlets, heating, cooling equipment, and equipped with sturdy furniture, drawing rack, and drawing display table.
- C. Provide space for Project meetings, with table and chairs to accommodate 6 persons.
- D. Locate offices a minimum distance of 30 feet (10 m) from existing and new structures.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 01 5000

Temporary Facilities and Controls

**SECTION 01 6000
PRODUCT REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General product requirements.
- B. Re-use of existing products.
- C. Transportation, handling, storage and protection.
- D. Product option requirements.
- E. Substitution limitations.
- F. Procedures for Owner-supplied products.
- G. Maintenance materials, including extra materials, spare parts, tools, and software.

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary: Lists of products to be removed from existing building.
- B. Section 01 2500 - Substitution Procedures: Substitutions made during procurement and/or construction phases.
- C. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions: Requirements for VOC-restricted product categories.
- D. Section 01 7419 - Construction Waste Management and Disposal: Waste disposal requirements potentially affecting product selection, packaging and substitutions.

1.03 REFERENCE STANDARDS

- A. 16 CFR 260.13 - Guides for the Use of Environmental Marketing Claims; Federal Trade Commission; Recycled Content Current Edition.
- B. EN 15804 - Sustainability of Construction Works - Environmental Product Declarations - Core Rules for the Product Category of Construction Products 2022 (Corrigendum 2021).
- C. ISO 14025 - Environmental Labels and Declarations - Type III Environmental Declarations - Principles and Procedures 2006.
- D. ISO 14040 - Environmental Management - Life Cycle Assessment - Principles and Framework 2006, with Amendment (2020).
- E. ISO 14044 - Environmental Management - Life Cycle Assessment - Requirements and Guidelines 2006, with Amendment (2020).
- F. ISO 21930 - Sustainability in Buildings and Civil Engineering Works — Core Rules for Environmental Product Declarations of Construction Products and Services 2017.

1.04 SUBMITTALS

- A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
 - 1. Submit within 15 days after date of Agreement.
 - 2. For products specified only by reference standards, list applicable reference standards.
- B. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

Product Requirements

- D. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

1.05 QUALITY ASSURANCE

- A. Environmental Product Declaration (EPD): Publicly available, critically reviewed life cycle analysis having at least a cradle-to-gate scope.
1. Good: Product-specific; compliant with ISO 14044.
 2. Better: Industry-wide, generic; compliant with ISO 21930, or with ISO 14044, ISO 14040, ISO 14025, and EN 15804; Type III third-party certification with external verification, in which the manufacturer is recognized as the program operator.
 3. Best: Commercial-product-specific; compliant with ISO 21930, or with ISO 14044, ISO 14040, ISO 14025, and EN 15804; Type III third-party certification with external verification, in which the manufacturer is recognized as the program operator.
 4. Where demonstration of impact reduction below industry average is required, submit both industry-wide and commercial-product-specific declarations; or submit at least 5 declarations for products of the same type by other manufacturers in the same industry.
- B. Health Product Declarations (HPD): Complete, published declaration with full disclosure of known hazards, prepared using one of the HPDC (HPD-OLT) online tools.
- C. Recycled Content: Determine percentage of post-consumer and pre-consumer (post-industrial) content separately, using the guidelines contained in 16 CFR 260.13.
1. Previously used, reused, refurbished, and salvaged products are not considered recycled.
 2. Wood fabricated from timber abandoned in transit to original mill is considered reused, not recycled.
 3. Determine percentage of recycled content of any item by dividing the weight of recycled content in the item by the total weight of materials in the item.
 4. Determine value of recycled content of each item separately, by multiplying the content percentage by the value of the item.
 5. Acceptable Evidence:
 - a. For percentage of recycled content, information from manufacturer.
 - b. For cost, Contractor's cost data.
- D. Reused Products: Materials and equipment previously used in this or other construction, salvaged and refurbished as specified.
1. Wood fabricated from timber abandoned in transit after harvesting is considered reused, not recycled.
 2. Acceptable Evidence: Information about the origin or source, from Contractor or supplier.

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by Contract Documents.
- B. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.
- C. Specific Products to be Reused: The reuse of certain materials and equipment already existing on the project site is required.
1. See drawings for list of items required to be salvaged for reuse and relocation.
 2. If reuse of other existing materials or equipment is desired, submit substitution request.

2.02 NEW PRODUCTS

Product Requirements

- A. Provide new products unless specifically required or permitted by Contract Documents.
- B. Use of products having any of the following characteristics is not permitted:
 - 1. Made using or containing CFC's or HCFC's.
 - 2. Containing lead, cadmium, or asbestos.
- C. Where other criteria are met, Contractor shall give preference to products that:
 - 1. If used on interior, have lower emissions, as defined in Section 01 6116.
 - 2. If wet-applied, have lower VOC content, as defined in Section 01 6116.
 - 3. Have longer documented life span under normal use.
 - 4. Result in less construction waste. See Section 01 7419
 - 5. If made of wood, are made of sustainably harvested wood, wood chips, or wood fiber.
 - 6. Have a published Environmental Product Declaration (EPD).
 - 7. Have a published Health Product Declaration (HPD).

2.03 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

2.04 MAINTENANCE MATERIALS

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver to Project site; obtain receipt prior to final payment.

PART 3 EXECUTION

3.01 SUBSTITUTION LIMITATIONS

- A. See Section 01 2500 - Substitution Procedures.

3.02 OWNER-SUPPLIED PRODUCTS

- A. Owner's Responsibilities:
 - 1. Arrange for and deliver Owner reviewed shop drawings, product data, and samples, to Contractor.
 - 2. Arrange and pay for product delivery to site.
 - 3. On delivery, inspect products jointly with Contractor.
 - 4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
 - 5. Arrange for manufacturers' warranties, inspections, and service.
- B. Contractor's Responsibilities:
 - 1. Review Owner reviewed shop drawings, product data, and samples.
 - 2. Receive and unload products at site; inspect for completeness or damage jointly with Owner.
 - 3. Handle, store, install and finish products.
 - 4. Repair or replace items damaged after receipt.

3.03 TRANSPORTATION AND HANDLING

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.

- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.04 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. See Section 01 7419.
 - 1. Structural Loading Limitations: Handle and store products and materials so as not to exceed static and dynamic load-bearing capacities of project floor and roof areas.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- G. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- H. Comply with manufacturer's warranty conditions, if any.
- I. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- J. Prevent contact with material that may cause corrosion, discoloration, or staining.
- K. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- L. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION 01 6000

**SECTION 01 7000
EXECUTION AND CLOSEOUT REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition.
- C. Pre-installation meetings.
- D. Cutting and patching.
- E. Surveying for laying out the work.
- F. Cleaning and protection.
- G. Starting of systems and equipment.
- H. Demonstration and instruction of Owner personnel.
- I. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.
- J. General requirements for maintenance service.

1.02 RELATED REQUIREMENTS

- A. Section 01 3000 - Administrative Requirements: Submittals procedures, Electronic document submittal service.
- B. Section 01 4000 - Quality Requirements: Testing and inspection procedures.
- C. Section 01 5000 - Temporary Facilities and Controls: Temporary exterior enclosures.
- D. Section 01 5000 - Temporary Facilities and Controls: Temporary interior partitions.
- E. Section 07 8400 - Firestopping.
- F. Individual Product Specification Sections:
 - 1. Advance notification to other sections of openings required in work of those sections.

1.03 REFERENCE STANDARDS

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
 - 1. On request, submit documentation verifying accuracy of survey work.
 - 2. Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in compliance with Contract Documents.
 - 3. Submit surveys and survey logs for the project record.
- C. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate Contractor.
- D. Project Record Documents: Accurately record actual locations of capped and active utilities.

1.05 QUALIFICATIONS

- A. For surveying work, employ a land surveyor registered in the State in which the Project is located and acceptable to Architect. Submit evidence of surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate. Employ only individual(s) trained and experienced in collecting and recording accurate data relevant to ongoing construction activities,

1.06 PROJECT CONDITIONS

- A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.
- C. Perform dewatering activities, as required, for the duration of the project.
- D. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- E. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
 - 1. Provide dust-proof enclosures to prevent entry of dust generated outdoors.
 - 2. Provide dust-proof barriers between construction areas and areas continuing to be occupied by Owner.
- F. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
 - 1. Minimize amount of bare soil exposed at one time.
 - 2. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
 - 3. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- G. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
 - 1. At All Times: Excessively noisy tools and operations will not be tolerated inside the building at any time of day; excessively noisy includes jackhammers.
 - 2. Outdoors: Limit conduct of especially noisy exterior work to the hours of 8 am to 5 pm.
 - 3. Indoors: Limit conduct of especially noisy interior work to the hours of 6 pm to 7 am.
- H. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- I. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

1.07 COORDINATION

- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Notify affected utility companies and comply with their requirements.
- C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and

conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of work of separate sections.
- G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of examination, preparation and installation procedures.
 - 2. Review coordination with related work.

- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.04 LAYING OUT THE WORK

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Architect of any discrepancies discovered.
- C. Contractor shall locate and protect survey control and reference points.
- D. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- E. Promptly report to Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- F. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.
- G. Utilize recognized engineering survey practices.
- H. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
 - 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
 - 2. Grid or axis for structures.
 - 3. Building foundation, column locations, ground floor elevations.
 - 4. Controlling lines and levels required for mechanical and electrical trades.
- I. Periodically verify layouts by same means.
- J. Maintain a complete and accurate log of control and survey work as it progresses.
- K. On completion of foundation walls and major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction and site work.

3.05 GENERAL INSTALLATION REQUIREMENTS

- A. In addition to compliance with regulatory requirements, conduct construction operations in compliance with NFPA 241, including applicable recommendations in Appendix A.
- B. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- C. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- D. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- E. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- F. Make neat transitions between different surfaces, maintaining texture and appearance.

3.06 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as indicated.
 - 2. Report discrepancies to Architect before disturbing existing installation.
 - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions of construction As described elsewhere .

2. Provide sound retardant partitions of construction indicated on drawings in locations indicated on drawings.
- C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
 1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
 2. Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alterations work.
- D. Remove existing work as indicated and as required to accomplish new work.
 1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
 2. Remove items indicated on drawings.
 3. Relocate items indicated on drawings.
 4. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
 5. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- E. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove, relocate, and extend existing systems to accommodate new construction.
 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
 2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
 3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
 - b. Provide temporary connections as required to maintain existing systems in service.
 4. Verify that abandoned services serve only abandoned facilities.
 5. Remove abandoned pipe, ducts, conduits, and equipment , including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- F. Protect existing work to remain.
 1. Prevent movement of structure; provide shoring and bracing if necessary.
 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 3. Repair adjacent construction and finishes damaged during removal work.
- G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
 1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Architect.
 2. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
 3. Where a change of plane of 1/4 inch (6 mm) or more occurs in existing work, submit recommendation for providing a smooth transition for Architect review and request

Execution and Closeout Requirements

instructions.

4. Trim existing wood doors as necessary to clear new floor finish. Refinish trim as required.
- H. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- I. Refinish existing surfaces as indicated:
 1. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
 2. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
- J. Clean existing systems and equipment.
- K. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- L. Do not begin new construction in alterations areas before demolition is complete.
- M. Comply with all other applicable requirements of this section.

3.07 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
 1. Complete the work.
 2. Fit products together to integrate with other work.
 3. Provide openings for penetration of mechanical, electrical, and other services.
 4. Match work that has been cut to adjacent work.
 5. Repair areas adjacent to cuts to required condition.
 6. Repair new work damaged by subsequent work.
 7. Remove samples of installed work for testing when requested.
 8. Remove and replace defective and non-complying work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- G. Restore work with new products in accordance with requirements of Contract Documents.
- H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 8400, to full thickness of the penetrated element.
- J. Patching:
 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 2. Match color, texture, and appearance.

3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.08 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.09 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

3.10 SYSTEM STARTUP

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- C. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- D. Verify that wiring and support components for equipment are complete and tested.
- E. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- F. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- G. Submit a written report that equipment or system has been properly installed and is functioning correctly.

3.11 DEMONSTRATION AND INSTRUCTION

- A. Demonstrate operation and maintenance of products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at equipment location.

- C. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- D. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of Owner's personnel.

3.12 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

3.13 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.
 - 1. Clean areas to be occupied by Owner prior to final completion before Owner occupancy.
- B. Use cleaning materials that are nonhazardous.
- C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- F. Clean filters of operating equipment.
- G. Clean debris from newly installed roofs, gutters, downspouts, scuppers, overflow drains, area drains, and drainage systems.
- H. Clean site; sweep paved areas, rake clean landscaped surfaces.
- I. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.14 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
 - 1. Provide copies to Architect and Owner.
- B. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.
- C. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
- D. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.
- E. Owner will occupy all of the building as specified in Section 01 1000.
- F. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.
- G. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- H. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.

- I. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

3.15 MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

END OF SECTION 01 7000

**SECTION 01 7419
CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL**

PART 1 GENERAL

1.01 WASTE MANAGEMENT REQUIREMENTS

- A. Owner requires that this project generate the least amount of trash and waste possible.
- B. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- C. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- D. Owner may decide to pay for additional recycling, salvage, and/or reuse based on Landfill Alternatives Proposal specified below.
- E. Contractor shall submit periodic Waste Disposal Reports; all landfill disposal, incineration, recycling, salvage, and reuse must be reported regardless of to whom the cost or savings accrues; use the same units of measure on all reports.
- F. Contractor shall develop and follow a Waste Management Plan designed to implement these requirements.
- G. The following sources may be useful in developing the Waste Management Plan:
- H. Methods of trash/waste disposal that are not acceptable are:
 - 1. Burning on the project site.
 - 2. Burying on the project site.
 - 3. Dumping or burying on other property, public or private.
 - 4. Other illegal dumping or burying.
- I. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, state and local requirements, pertaining to legal disposal of all construction and demolition waste materials.

1.02 RELATED REQUIREMENTS

- A. Section 01 3000 - Administrative Requirements: Additional requirements for project meetings, reports, submittal procedures, and project documentation.
- B. Section 01 5000 - Temporary Facilities and Controls: Additional requirements related to trash/waste collection and removal facilities and services.
- C. Section 01 6000 - Product Requirements: Waste prevention requirements related to delivery, storage, and handling.
- D. Section 01 7000 - Execution and Closeout Requirements: Trash/waste prevention procedures related to demolition, cutting and patching, installation, protection, and cleaning.

1.03 DEFINITIONS

- A. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.
- B. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.
- C. Hazardous: Exhibiting the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity or reactivity.
- D. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, or reactivity.

- E. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.
- F. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.
- G. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.
- H. Recycling: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- I. Return: To give back reusable items or unused products to vendors for credit.
- J. Reuse: To reuse a construction waste material in some manner on the project site.
- K. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.
- L. Sediment: Soil and other debris that has been eroded and transported by storm or well production run-off water.
- M. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.
- N. Toxic: Poisonous to humans either immediately or after a long period of exposure.
- O. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- P. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Landfill Alternatives Proposal: Within 10 calendar days after receipt of Notice of Award of Bid, or prior to any trash or waste removal, whichever occurs sooner, submit a projection of trash/waste that will require disposal and alternatives to landfilling, with net costs.
 - 1. Submit to Architect for Owner's review and approval.
 - 2. If Owner wishes to implement any cost alternatives, the Contract Sum will be adjusted as specified elsewhere.
 - 3. Include an analysis of trash/waste to be generated and landfill options as specified for Waste Management Plan described below.
 - 4. Describe as many alternatives to landfilling as possible:
 - a. List each material proposed to be salvaged, reused, or recycled.
 - b. List the proposed local market for each material.
 - c. State the estimated net cost resulting from each alternative, after subtracting revenue from sale of recycled or salvaged materials and landfill tipping fees saved due to diversion of materials from the landfill.
 - 5. Provide alternatives to landfilling for at least the following materials:
 - a. Aluminum and plastic beverage containers.
 - b. Corrugated cardboard.
 - c. Wood pallets.
 - d. Clean dimensional wood.
 - e. Land clearing debris, including brush, branches, logs, and stumps.
 - f. Concrete.
 - g. Bricks.
 - h. Concrete masonry units.
 - i. Asphalt paving.

- j. Metals, including packaging banding, metal studs, sheet metal, structural steel, piping, reinforcing bars, door frames, and other items made of steel, iron, galvanized steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
 - k. Glass.
 - l. Gypsum drywall and plaster.
 - m. Plastic buckets.
 - n. Rigid foam insulation.
 - o. Windows, doors, and door hardware.
 - p. Plumbing fixtures.
 - q. Mechanical and electrical equipment.
 - r. Fluorescent lamps (light bulbs).
- C. Once Owner has determined which of the landfill alternatives addressed in the Proposal above are acceptable, prepare and submit Waste Management Plan; submit within 10 calendar days after notification by Architect.
- D. Waste Management Plan: Include the following information:
- 1. Analysis of the trash and waste projected to be generated during the entire project construction cycle, including types and quantities.
 - 2. Landfill Options: The name, address, and telephone number of the landfill(s) where trash/waste will be disposed of, the applicable landfill tipping fee(s), and the projected cost of disposing of all project trash/waste in the landfill(s).
 - 3. Landfill Alternatives: List all waste materials that will be diverted from landfills by reuse, salvage, or recycling.
 - 4. Meetings: Describe regular meetings to be held to address waste prevention, reduction, recycling, salvage, reuse, and disposal.
 - 5. Materials Handling Procedures: Describe the means by which materials to be diverted from landfills will be protected from contamination and prepared for acceptance by designated facilities; include separation procedures for recyclables, storage, and packaging.
 - 6. Transportation: Identify the destination and means of transportation of materials to be recycled; i.e. whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler.
- E. Waste Disposal Reports: Submit at specified intervals, with details of quantities of trash and waste, means of disposal or reuse, and costs; show both totals to date and since last report.
- 1. Submit updated Report with each Application for Progress Payment; failure to submit Report will delay payment.
 - 2. Submit Report on a form acceptable to Owner.
 - 3. Landfill Disposal: Include the following information:
 - a. Identification of material.
 - b. Amount, in tons or cubic yards (cubic meters), of trash/waste material from the project disposed of in landfills.
 - c. State the identity of landfills, total amount of tipping fees paid to landfill, and total disposal cost.
 - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
 - 4. Incinerator Disposal: Include the following information:
 - a. Identification of material.
 - b. Amount, in tons or cubic yards (cubic meters), of trash/waste material from the project delivered to incinerators.
 - c. State the identity of incinerators, total amount of fees paid to incinerator, and total disposal cost.

- d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
5. Recycled and Salvaged Materials: Include the following information for each:
 - a. Identification of material, including those retrieved by installer for use on other projects.
 - b. Amount, in tons or cubic yards (cubic meters), date removed from the project site, and receiving party.
 - c. Transportation cost, amount paid or received for the material, and the net total cost or savings of salvage or recycling each material.
 - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
 - e. Certification by receiving party that materials will not be disposed of in landfills or by incineration.
6. Material Reused on Project: Include the following information for each:
 - a. Identification of material and how it was used in the project.
 - b. Amount, in tons or cubic yards (cubic meters).
 - c. Include weight tickets as evidence of quantity.
7. Other Disposal Methods: Include information similar to that described above, as appropriate to disposal method.

PART 2 PRODUCTS

2.01 PRODUCT SUBSTITUTIONS

- A. See Section 01 6000 - Product Requirements for substitution submission procedures.
- B. For each proposed product substitution, submit the following information in addition to requirements specified in Section 01 6000:
 1. Relative amount of waste produced, compared to specified product.
 2. Cost savings on waste disposal, compared to specified product, to be deducted from the Contract Sum.
 3. Proposed disposal method for waste product.
 4. Markets for recycled waste product.

PART 3 EXECUTION

3.01 WASTE MANAGEMENT PROCEDURES

- A. See Drawings for items identified to be salvaged from the existing building for relocation in project or for Owner.
- B. See Section 01 3000 for additional requirements for project meetings, reports, submittal procedures, and project documentation.
- C. See Section 01 5000 for additional requirements related to trash/waste collection and removal facilities and services.
- D. See Section 01 6000 for waste prevention requirements related to delivery, storage, and handling.
- E. See Section 01 7000 for trash/waste prevention procedures related to demolition, cutting and patching, installation, protection, and cleaning.

3.02 WASTE MANAGEMENT PLAN IMPLEMENTATION

- A. Manager: Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.
- B. Communication: Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, Owner, and Architect.

- C. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.
- D. Meetings: Discuss trash/waste management goals and issues at project meetings.
 - 1. Prebid meeting.
 - 2. Preconstruction meeting.
 - 3. Regular job-site meetings.
- E. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
 - 1. Provide containers as required.
 - 2. Provide adequate space for pick-up and delivery and convenience to subcontractors.
 - 3. Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.
- F. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.
- G. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- H. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.
- I. Salvage: Set aside, sort, and protect products to be salvaged for reuse off-site.

END OF SECTION 01 7419

**SECTION 01 7600
PROTECTING INSTALLED CONSTRUCTION**

PART 1 - GENERAL

1.01 PROTECTING INSTALLED CONSTRUCTION

- A. RELATED DOCUMENTS:
- B. This section is only a portion of the contract documents. All of the contract documents, including conditions of the contract and Division 1 general requirements, apply to this section. This section applies to all specification sections and work of the contract.
- C. SECTION INCLUDES: GENERAL REQUIREMENTS FOR PROTECTING INSTALLED CONSTRUCTION.
- D. PROTECTING INSTALLED CONSTRUCTION - GENERAL REQUIREMENTS:
 - 1. Protect all installed work from all damage and deterioration.
 - 2. The Contractor is responsible for means, methods, and techniques used.
 - 3. Comply with manufacturer's instructions and recommendations for protection.
 - 4. Protect finished surfaces from soil, stains, scratches, marks, dents, damage, and deterioration.
 - 5. Protect floors from traffic, rolling loads, static loads, drags, scuffs.
 - 6. Protect glass from stains, etching, damage. Keep glass clean.
 - 7. Protect doors, door frames, and door hardware.
 - 8. Protect fibrous, paper faced materials, and water sensitive materials from water and moisture.
 - 9. Protect insulation from moisture, dust, damage, and deterioration.
 - 10. Protect materials from ultraviolet light exceeding manufacturer's recommendations.
- E. ADDITIONAL REQUIREMENTS DURING FIRE PROTECTION SYSTEM INSTALLATION:
 - 1. Coordinate with existing and proposed lighting fixtures.
 - 2. Protect all existing, floor, wall, and ceiling finishes during work.
 - 3. Existing ceilings are to be carefully protected, dismantled, stored, and reinstalled at completion of work.
 - 4. Any existing material that needs to be altered due to fire protection system installation is to be done in a manner consistent with, and produce a similar result of, new construction.
 - 5. Any material that is damaged during fire protection system installation needs to be repaired or replaced with new products matching existing products.
- F. ADDITIONAL REQUIREMENTS FOR PROTECTING ROOFING AND WATERPROOFING:
 - 1. Restrict and control work and traffic over installed roofing and waterproofing.
 - 2. Provide temporary walkways and work platforms as needed.
 - 3. Protect work from solvents, contamination, penetration, damage, and deterioration.
- G. REMEDIATION:
 - 1. Remove and replace all damaged and deteriorated materials including materials which show evidence of biological growth, mold, or mildew.
 - 2. Replace with new work complying with Contract requirements.

END OF SECTION 01 7600

Protecting Installed Construction

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01 7600

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**SECTION 01 7610
TEMPORARY PROTECTIVE COVERINGS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary protective coverings for installed work related to this project.

1.02 RELATED REQUIREMENTS

- A. Section 01 7000 - Execution and Closeout Requirements: Coordination of requirements for materials specified in this section.

1.03 REFERENCE STANDARDS

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes available; and installation instructions.

PART 2 PRODUCTS

2.01 GENERAL

- A. Provide materials that are easily removed without damage to the surfaces covered and with the following characteristics:
 - 1. Water resistant.
 - 2. Vapor permeable.
 - 3. Impact resistant.
 - 4. Slip resistant.

2.02 MATERIALS

- A. Sheet Materials:
 - 1. Plywood, 1/2 inch (13 mm) thick nominal.
- B. Rolled Materials:
 - 1. Self-adhering polyethylene film.
 - 2. Laminated glass fiber reinforced kraft paper.
- C. Corner and Door Jamb Protection Materials:
 - 1. Cardboard, shaped specifically for application.

PART 3 EXECUTION

3.01 PREPARATION

- A. Remove dirt and debris from surfaces to be protected.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Trim or overlap sheet materials to fit area to be covered.
- C. Roll out and cut rolled materials to fit area to be covered.
- D. Tape seams. Avoid taping directly to finished surfaces.
- E. Stretch self-adhering film materials to completely cover surface.
- F. Install door jamb protection to full height of opening.

3.03 REMOVAL

- A. Remove protective coverings prior to Date of Substantial Completion. Reuse or recycle materials if possible.

Temporary Protective Coverings

01 7610 - Temporary Protective Coverings
BPD Canopy - G4 Design Studios, LLC
Burlington , Vermont

END OF SECTION 01 7610

**SECTION 01 7800
CLOSEOUT SUBMITTALS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Project record documents.
- B. Operation and maintenance data.
- C. Materials transparency manual.
- D. Warranties and bonds.

1.02 RELATED REQUIREMENTS

- A. Section 01 3000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- B. Individual Product Sections: Specific requirements for operation and maintenance data.
- C. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect with claim for final Application for Payment.
- B. Operation and Maintenance Data:
 - 1. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
 - 2. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
 - 3. Submit two sets of revised final documents in final form within 10 days after final inspection.
- C. Materials Transparency Manual:
 - 1. Compile and submit a digital and a printed version of information disclosing materials content for interior finishes, furnishings (including workstations), built-in furniture. Meet IWBI (BS) requirements for format and content.
- D. Warranties and Bonds:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
 - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.

Closeout Submittals

6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 1. Manufacturer's name and product model and number.
 2. Product substitutions or alternates utilized.
 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 1. Field changes of dimension and detail.
 2. Details not on original Contract drawings.

3.02 OPERATION AND MAINTENANCE DATA

- A. Source Data: For each product or system, list names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For Each Product, Applied Material, and Finish:
 1. Product data, with catalog number, size, composition, and color and texture designations.
 2. Information for re-ordering custom manufactured products.
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture protection and weather-exposed products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Additional information as specified in individual product specification sections.
- E. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

3.04 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

- A. For Each Item of Equipment and Each System:
 1. Description of unit or system, and component parts.
 2. Identify function, normal operating characteristics, and limiting conditions.
 3. Include performance curves, with engineering data and tests.
 4. Complete nomenclature and model number of replaceable parts.
- B. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and

Closeout Submittals

maintenance of the specific products.

- C. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
- D. Include color coded wiring diagrams as installed.
- E. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- F. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
 - 1. Include HVAC outdoor and exhaust air damper calibration strategy.
 - a. Include provisions which ensure that full closure of dampers can be achieved.
- G. Provide servicing and lubrication schedule, and list of lubricants required.
- H. Include manufacturer's printed operation and maintenance instructions.
- I. Include sequence of operation by controls manufacturer.
- J. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- K. Provide control diagrams by controls manufacturer as installed.
- L. Provide Contractor's coordination drawings, with color coded piping diagrams as installed.
- M. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- N. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- O. Include test and balancing reports.
- P. Additional Requirements: As specified in individual product specification sections.

3.05 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. Binders: Commercial quality, 8-1/2 by 11 inch (216 by 280 mm) three D side ring binders with durable plastic covers; 2 inch (50 mm) maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.
- F. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- G. Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment.
- H. Text: Manufacturer's printed data, or typewritten data on 20 pound paper.

Closeout Submittals

- I. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- J. Arrangement of Contents: Organize each volume in parts as follows:
 - 1. Project Directory.
 - 2. Table of Contents, of all volumes, and of this volume.
 - 3. Operation and Maintenance Data: Arranged by system, then by product category.
 - a. Source data.
 - b. Product data, shop drawings, and other submittals.
 - c. Operation and maintenance data.
 - d. Field quality control data.
 - e. Photocopies of warranties and bonds.

3.06 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Manual: Bind in commercial quality 8-1/2 by 11 inch (216 by 279 mm) three D side ring binders with durable plastic covers.
- F. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and equipment supplier; and name of responsible company principal.
- G. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- H. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.

END OF SECTION 01 7800

**SECTION 02 4100
SELECTIVE DEMOLITION**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Selective demolition of built site elements.
- B. Selective demolition of building elements for alteration purposes.

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary: Limitations on Contractor's use of site and premises.
- B. Section 01 1000 - Summary: Description of items to be salvaged or removed for re-use by Contractor.
- C. Section 01 5000 - Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- D. Section 01 6000 - Product Requirements: Handling and storage of items removed for salvage and relocation.
- E. Section 01 7000 - Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring.
- F. Section 31 2323 - Fill: Fill material for filling holes, pits, and excavations generated as a result of removal operations.

1.03 DEFINITIONS

- A. Remove: Detach or dismantle items from existing construction and dispose of them off site, unless items are indicated to be salvaged or reinstalled.
- B. Remove and Salvage: Detach or dismantle items from existing construction in a manner to prevent damage. Clean, package, label and deliver salvaged items to Owner in ready-for-reuse condition.
- C. Remove and Reinstall: Detach or dismantle items from existing construction in a manner to prevent damage. Clean and prepare for reuse and reinstall where indicated.
- D. Existing to Remain: Designation for existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.

1.04 REFERENCE STANDARDS

- A. 29 CFR 1926 - Safety and Health Regulations for Construction Current Edition.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Site Plan: Indicate:
 - 1. Vegetation to be protected.
 - 2. Areas for temporary construction and field offices.
 - 3. Areas for temporary and permanent placement of removed materials.
- C. Demolition Plan: Submit demolition plan as required by OSHA and local AHJs.
 - 1. Indicate extent of demolition, removal sequencing, bracing and shoring, and location and construction of barricades and fences.
 - 2. Summary of safety procedures.
- D. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.

PART 3 EXECUTION

Selective Demolition

2.01 DEMOLITION

- A. Remove other items indicated, for salvage, relocation, and recycling.
- B. Fill excavations, open pits, and holes in ground areas generated as result of removals, using specified fill; compact fill as specified in Section 31 2200.

2.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Obtain required permits.
 - 2. Comply with applicable requirements of NFPA 241.
 - 3. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
 - 4. Provide, erect, and maintain temporary barriers and security devices.
 - 5. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
 - 6. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
 - 7. Do not close or obstruct roadways or sidewalks without permits from authority having jurisdiction.
 - 8. Conduct operations to minimize obstruction of public and private entrances and exits. Do not obstruct required exits at any time. Protect persons using entrances and exits from removal operations.
 - 9. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon, or limit access to their property.
- B. Do not begin removal until receipt of notification to proceed from Owner.
- C. Protect existing structures and other elements to remain in place and not removed.
 - 1. Provide bracing and shoring.
 - 2. Prevent movement or settlement of adjacent structures.
 - 3. Stop work immediately if adjacent structures appear to be in danger.
- D. Minimize production of dust due to demolition operations. Do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
- E. Hazardous Materials:
 - 1. If hazardous materials are discovered during removal operations, stop work and notify Architect and Owner; hazardous materials include regulated asbestos containing materials, lead, PCBs, and mercury.
 - 2. Hazardous Materials: Comply with 29 CFR 1926 and state and local regulations.
- F. Perform demolition in a manner that maximizes salvage and recycling of materials.
 - 1. Dismantle existing construction and separate materials.
 - 2. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.
- G. Partial Removal of Paving and Curbs: Neatly saw cut at right angle to surface.

2.03 EXISTING UTILITIES

- A. Coordinate work with utility companies. Notify utilities before starting work, comply with their requirements, and obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.

- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
- G. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.

2.04 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Existing construction and utilities indicated on drawings are based on casual field observation and existing record documents only.
 - 1. Verify construction and utility arrangements are as indicated.
 - 2. Report discrepancies to Architect before disturbing existing installation.
 - 3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Separate areas in which demolition is being conducted from areas that remain occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 01 5000 in locations indicated on drawings.
 - 2. Provide sound retardant partitions of construction and in locations indicated on drawings.
- C. Maintain weatherproof exterior building enclosure, except for interruptions required for replacement or modifications; prevent water and humidity damage.
- D. Remove existing work as indicated and required to accomplish new work.
 - 1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction indicated.
 - 2. Remove items indicated on drawings.
- E. Services including, but not limited to, HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications: Remove existing systems and equipment as indicated.
 - 1. Maintain existing active systems to remain in operation, and maintain access to equipment and operational components.
 - 2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - 3. Verify that abandoned services serve only abandoned facilities before removal.
 - 4. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings. Remove back to source of supply where possible, otherwise cap stub and tag with identification.
- F. Protect existing work to remain.
 - 1. Prevent movement of structure. Provide shoring and bracing as required.
 - 2. Perform cutting to accomplish removal work neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
 - 4. Patch to match new work.

2.05 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site. Dispose of in an appropriate and legal manner.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

02 4100 - Selective Demolition
BPD Canopy - G4 Design Studios, LLC
Burlington , Vermont

END OF SECTION 02 4100

Selective Demolition

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SECTION 07 2700
AIR BARRIERS / SHEET WATERPROOFING MEMBRANE

PART 1 GENERAL

1.01 RELATED REQUIREMENTS

- A. Section 09 2116 - Gypsum Board Assemblies: Air barrier under exterior cladding.

1.02 DEFINITIONS

- A. Air Barrier: Airtight barrier made of material that is virtually air impermeable but water vapor permeable, both to amount as specified, with sealed seams and sealed joints to adjacent surfaces.

1.03 REFERENCE STANDARDS

- A. ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection 2021.
- B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials 2023c.
- C. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials 2022a, with Editorial Revision (2023).
- D. ASTM E2178 - Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials 2021a.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide data on material characteristics, performance criteria, and limitations.
- C. Manufacturer's Installation Instructions: Indicate preparation, installation methods, and storage and handling criteria.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in performing the work of this section with minimum three years experience.

1.06 FIELD CONDITIONS

- A. Maintain temperature and humidity recommended by materials manufacturers before, during, and after installation.

PART 2 PRODUCTS

2.01 AIR BARRIER MATERIALS (AIR IMPERMEABLE AND WATER VAPOR IMPERMEABLE)

- A. Air and Vapor Barrier Sheet, Self-Adhered:
 - 1. Air Permeance: 0.004 cfm/sq ft (0.02 L/(s sq m)), maximum, when tested in accordance with ASTM E2178.
 - 2. Water Vapor Permeance: 0.1 perms (5.72 ng/(Pa s sq m)), maximum, when tested in accordance with ASTM E96/E96M using Procedure B - Water Method.
 - 3. Water Penetration Resistance Around Nails: Pass, when tested in accordance with ASTM D1970/D1970M (modified).
 - 4. Ultraviolet (UV) and Weathering Resistance: Approved in writing by manufacturer for up to 30 days of weather exposure.
 - 5. Surface Burning Characteristics: Flame spread index of 25 or less, smoke developed index of 450 or less, Class A when tested in accordance with ASTM E84.
 - 6. Seam and Perimeter Tape: As recommended by sheet manufacturer.
 - 7. Products:

- a. Carlisle Coatings and Waterproofing, Inc; Fire Resist 705 FR-A XLT (Xtra Low Temperature): www.carlisleccw.com/#sle.
- b. Elevate; Enverge Air & Vapor Barrier SA Membrane: www.holcimelevate.com/#sle.
- c. GCP Applied Technologies; Perm-A-Barrier NPS: www.gcpat.com/#sle.
- d. SIGA Cover Inc; SIGA-Majrex 200: www.siga.swiss/global_en/#sle.
- e. Tremco Commercial Sealants & Waterproofing; ExoAir 110: www.tremcosealants.com/#sle.

2.02 ACCESSORIES

- A. Sealants, Tapes, and Accessories for Sealing Air Barrier and Adjacent Substrates: As indicated or in compliance with air barrier manufacturer's installation instructions.
- B. Sealant for Cracks and Joints In Substrates: Resilient elastomeric joint sealant compatible with substrate and air barrier materials.
 1. Application: Apply at 30 to 40 mil, 0.030 to 0.040 inch (0.76 to 1.02 mm), nominal thickness.
 2. Color: Green.
- C. Primer: Liquid applied polymer.
 1. Color: Manufacturers standard.
- D. Thinners and Cleaners: As recommended by material manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces and conditions are ready for work of this section.
- B. Where existing conditions are responsibility of another installer, notify Architect of unsatisfactory conditions.
- C. Do not proceed with this work until unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Remove projections, protruding fasteners, and loose or foreign matter that might interfere with proper installation.
- B. Clean and prime substrate surfaces to receive adhesives and sealants in accordance with manufacturer's installation instructions.

3.03 INSTALLATION

- A. Install materials in accordance with manufacturer's installation instructions.
- B. Air Barriers: Install continuous airtight barrier over surfaces indicated, with sealed seams and with sealed joints to adjacent surfaces.
- C. Apply sealants and adhesives within recommended temperature range in accordance with manufacturer's installation instructions.
- D. Self-Adhered Sheets:
 1. Prepare substrate in accordance with sheet manufacturer's installation instructions; fill and tape joints in substrate and between dissimilar materials.
 2. Lap sheets shingle fashion to shed water and seal laps airtight.
 3. Once sheets are in place, press firmly into substrate with resilient hand roller; ensure that laps are firmly adhered with no gaps or fishmouths.
 4. Use same material, or other material approved by sheet manufacturer, to seal to adjacent substrates, and as flashing.
 5. At wide joints, provide extra flexible membrane allowing joint movement.
- E. Openings and Penetrations in Exterior Air Barriers:

1. Install flashing over sills, covering entire sill frame member, extending at least 5 inches (125 mm) onto air barrier and at least 6 inches (150 mm) up jambs; mechanically fasten stretched edges.
2. At openings with frames having nailing flanges, seal head and jamb flanges using a continuous bead of sealant compressed by flange and cover flanges with sealing tape at least 4 inches (100 mm) wide; do not seal sill flange.
3. At openings with nonflanged frames, seal air barrier to each side of framing at opening using flashing at least 9 inches (230 mm) wide, and covering entire depth of framing.
4. At head of openings, install flashing under air barrier extending at least 2 inches (50 mm) beyond face of jambs; seal air barrier to flashing.
5. At interior face of openings, seal gap between window/door frame and rough framing, using joint sealant over backer rod.
6. Service and Other Penetrations: Form flashing around penetrating item and seal to air barrier surface.

3.04 PROTECTION

- A. Do not leave materials exposed to weather longer than recommended by manufacturer.

END OF SECTION 07 2700

**SECTION 07 4213
METAL WALL PANELS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Complete system of manufactured metal panels for exterior wall panels, soffit panels, and subgirt framing assembly, with related flashings and accessory components.
 - 1. Including Above-Sheathing Ventilation (ASV) system by panel manufacturer.
- B. 1/4 thick A 588 / A 606-4 Weathering Steel (COR-TEN® Steel) Wall Panels / Column enclosures

1.02 RELATED REQUIREMENTS

- A. Section 07 2700 - Air Barriers / Sheet Waterproofing Membrane: Air barrier under wall panels.
- B. Section 07 9200 - Joint Sealants: Sealing joints between metal wall panel system and adjacent construction.
- C. Section 09 2116 - Gypsum Board Assemblies: Wall panel substrate.

1.03 REFERENCE STANDARDS

- A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix) 2022.
- B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2023.

1.04 SUBMITTALS

- A. Product Data - Wall System: Manufacturer's data sheets on each product to be used, including:
 - 1. Physical characteristics of components shown on shop drawings.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation instructions and recommendations.
- B. Shop Drawings: Indicate dimensions, layout, joints, construction details, support clips, and methods of anchorage.
- C. Warranty Documentation for Installation of Building Rainscreen Assembly: Submit installer warranty and ensure that forms have been completed in Owner's name and registered with installer.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in installing products specified in this section with minimum three years of experience.

1.06 MOCK-UPS

- A. Construct mock-up, include panel and soffit system, attachments to building frame, associated vapor retarder and air seal materials, weep drainage system, sealants and seals, and related insulation in mock-up.
- B. Locate as directed by Architect.
- C. Mock-up may remain as part of work.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. See Section 01 7419 - Construction Waste Management and Disposal for packaging waste requirements.
- B. Protect panels from accelerated weathering by removing or venting sheet plastic shipping wrap.

Metal Wall Panels

- C. Store prefinished material off the ground and protected from weather; prevent twisting, bending, or abrasion; provide ventilation; slope metal sheets to ensure proper drainage.
- D. Prevent contact with materials that may cause discoloration or staining of products.

1.08 FIELD CONDITIONS

- A. Do not install wall panels when air temperature or relative humidity are outside manufacturer's limits.

1.09 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Finish Warranty: Provide 20-year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking. Complete forms in Owner's name and register with warrantor.
- C. Special Warranty: Provide 2-year warranty covering water tightness and integrity of seals of metal wall panels. Complete forms in Owner's name and register with warrantor.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Metal Wall Panels - Concealed Fasteners:
 - 1. ATAS International, Inc: www.atas.com/#sle.
 - a. **Basis of Design** (where shown on drawings):
 - 1) ATAS Versa-Seam Reveal 12" w/ 1/2" reveal.
 - 2) ATAS Sterracore
 - 2. Centria, a Nucor Company: www.centria.com/#sle.
 - 3. Construction Metal Products, Inc: www.cmpmetalsystems.com/#sle.
 - 4. Elevate: www.holcimelevate.com/#sle.
 - 5. Englert, Inc: www.englertinc.com/#sle.
 - 6. MBCI: www.mbc.com/#sle.
 - 7. McElroy Metal: www.mcelroymetal.com/#sle.
 - 8. Morin Corporation: www.morincorp.com/#sle.
 - 9. Substitutions: See Section 01 6000 - Product Requirements.
- B. Metal Soffit Panels:
 - 1. Same as Panel Manufacturer

2.02 METAL WALL PANEL SYSTEM

- A. Wall Panel System: Factory fabricated prefinished metal panel system, site assembled.
 - 1. Provide exterior wall panels, soffit panels, and subgirt framing assembly.
 - 2. Design and size components to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of wall.
 - 3. Maximum Allowable Deflection of Panel: $L / 360$ for length(L) of span.
 - 4. Movement: Accommodate movement within system without damage to components or deterioration of seals, movement between system and perimeter components when subject to seasonal temperature cycling; dynamic loading and release of loads; and deflection of structural support framing.
 - 5. Drainage: Provide positive drainage to exterior for moisture entering or condensation occurring within panel system.
 - 6. Fabrication: Formed true to shape, accurate in size, square, and free from distortion or defects; pieces of longest practical lengths.
 - 7. Corners: Factory-fabricated in one continuous piece with minimum 2-inch (51 mm) returns.

Metal Wall Panels

- B. Exterior Wall Panels:
 - 1. Profile: Vertical and horizontal, as indicated; style as indicated.
 - 2. Side Seams: Double-interlocked, tight-fitting, sealed with continuous gaskets.
 - 3. Panel Width: As detailed or as recommended by canopy / panel manufacturer's engineer.
- C. Soffit Panels:
 - 1. Profile: Style as indicated, with venting provided.
- D. Subgirt Framing Assembly:
 - 1. 16 gauge, 0.0598 inch (1.52 mm) min. thick formed non-precoated steel sheet.
 - 2. Profile as indicated; to attach panel system to building.
- E. Internal and External Corners: Same material, thickness, and finish as exterior sheets; profile to suit system; shop cut and factory mitered to required angles.
- F. Expansion Joints: Same material, thickness and finish as exterior sheets; ; manufacturer's standard brake formed type, of profile to suit system.
- G. Trim: Same material, thickness and finish as exterior sheets; brake formed to required profiles.
- H. Anchors: Galvanized steel.

2.03 ABOVE-SHEATHING VENTILATION (ASV) SYSTEM:

- A. ASV Shim - Polyoxymethylene (engineered thermoplastic) spacer shim:
 - 1. **Basis of Design:** ATAS 3/8" ASV Shim
 - 2. <https://www.atas.com/products/sustainability/above-sheathing-ventilation-spacer-shim>
- B. ASV Mat - 95% random open nylon matrix:
 - 1. **Basis of Design:** EnkaMat 7020 ASV
 - 2. <https://www.eastgatesupply.com/products/enkamat-asv-7020-ventilating-mat>

2.04 MATERIALS

- A. Precoated Steel Sheet: Hot-dipped galvanized steel sheet, ASTM A653/A653M, Structural Steel (SS) or Forming Steel (FS), with G90/Z275 coating; continuous coil-coated on exposed surfaces with specified finish coating and on panel back with specified panel back coating.
- B. Select materials with surface flatness, smoothness, and lack of surface blemishes where exposed to view in finished system.

2.05 FINISHES

- A. Exposed Surface Finish: Panel manufacturer's standard polyvinylidene fluoride (PVDF) coating, top coat over epoxy primer.
- B. Panel Backside Finish: Panel manufacturer's standard siliconized polyester wash coat.
- C. Fluoropolymer Coil Coating System: Polyvinylidene fluoride (PVDF) multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent PVDF resin, and at least 80 percent of coil coated metal surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch (0.023 mm); color and gloss as selected by Architect from manufacturer's standard line.
 - 1. Products:
 - a. Arkema, Inc; Kynar 500: www.arkema.com/#sle.
 - b. PPG; Duranar: www.ppgmetalcoatings.com/#sle.
 - c. Sherwin-Williams Company; Fluropon: www.coil.sherwin.com/#sle.
 - d. Substitutions: See Section 01 6000 - Product Requirements.

2.06 ACCESSORIES

- A. Support for Cladding and Continuous Insulation: Thermal clips.

Metal Wall Panels

1. Thermally-broken clips that provide attachment support for girts, angles, channels, and other cladding support framing.
 2. Fasteners: As recommended by clip manufacturer.
- B. Gaskets: Manufacturer's standard type suitable for use with system, permanently resilient; ultraviolet and ozone resistant.
- C. Concealed Sealants: Non-curing butyl sealant or tape sealant, see Section 07 9200
- D. Exposed Sealant: Elastomeric; silicone, polyurethane, or silyl-terminated polyether/polyurethane.
- E. Fasteners: Manufacturer's standard type to suit application; with soft neoprene washers, steel, hot dip galvanized. Fastener cap same color as exterior panel.

2.07 CORTEN COLUMN COVERS - AS SHOWN ON DRAWINGS (ASTM A588 WEATHERING STEEL)

- A. Manufacturers:
1. Western States Decking, Inc; www.cortenroofing.com
 2. Industrial Metal Supply <https://www.industrialmetalsupply.com/corten-sheet/hrp250410hs>
 3. Corten <https://www.corten.com/product/corten-plate-astm-a588/>
- B. ASTM A588 / A 606-4 Weathering Steel:
1. Nominal Thickness: [1/4" thick]
 2. Size as shown on drawings
 3. Panel Accessories: Provide components required for a complete, weather tight panel system including trim, copings, fasciae, mullions, sills, corner units, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items.
 - a. Match material and finish of metal panels unless otherwise indicated.
- C. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that building framing members are ready to receive panels.
- B. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action.

3.02 PREPARATION

- A. Install subgirts perpendicular to panel length, securely fastened to substrates and shimmed and leveled to uniform plane, and spaced at intervals indicated.
- B. Protect surrounding areas and adjacent surfaces from damage during execution of this work.

3.03 INSTALLATION

- A. Install panels on walls and soffits in accordance with manufacturer's instructions.
- B. Protect surfaces in contact with cementitious materials and dissimilar metals with bituminous paint; allow to dry prior to wall panel installation.
- C. Fasten panels to structural supports; aligned, level, and plumb.
- D. Locate joints over supports.
- E. Lap panel ends 2 inches (51 mm), minimum.
- F. Provide expansion and control joints where indicated.
- G. Allocate sufficient space for adequate thermal movement.
- H. Use concealed fasteners unless otherwise indicated by Architect.

Metal Wall Panels

- I. Seal and place gaskets to prevent weather penetration. Maintain neat appearance.

3.04 CORTEN STEEL INSTALLATION

- A. Corten Metal Panel Installation: Install metal panels according to manufacturer's written instructions in orientation, sizes, and locations indicated. Install panels perpendicular to supports unless otherwise indicated. Anchor metal panels and other components of the work securely in place, with provisions for thermal and structural movement.
- B. Allocate sufficient space for adequate thermal movement.

3.05 TOLERANCES

- A. Offset From True Alignment Between Adjacent Members Abutting or In Line: 1/16 inch (1.6 mm), maximum.
- B. Variation from Plane or Location As Indicated on Drawings: 1/4 inch (6.4 mm), maximum.

3.06 CLEANING

- A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.
- B. Remove site cuttings from finish surfaces.
- C. Remove protective material from wall panel surfaces.

3.07 PROTECTION

- A. Protect metal wall panels until completion of project.
- B. Touch-up, repair, or replace damaged wall panels or accessories before Date of Substantial Completion.

END OF SECTION 07 4213

**SECTION 07 5300
ELASTOMERIC MEMBRANE ROOFING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Elastomeric roofing membrane application.
- B. Insulation, tapered as required to achieve minimum slope.
- C. Water and Air Barrier, Vapor retarder.
- D. Deck sheathing.
- E. Cover boards.
- F. Roofing cant strips.

1.02 REFERENCE STANDARDS

- A. ASTM C1396/C1396M - Standard Specification for Gypsum Board 2017.
- B. ASTM D4637/D4637M - Standard Specification for EPDM Sheet Used in Single-Ply Roof Membrane 2015, with Editorial Revision (2022).

1.03 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.
- B. Installer Qualifications: Company specializing in performing the work of this section with minimum three years documented experience.

1.04 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Provide Twenty (20) year manufacturer's material and labor warranty to cover failure to prevent penetration of water.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. EPDM Membrane Materials:
 - 1. Carlisle SynTec Systems; Sure-Tough EPDM: www.carlisle-syntec.com/#sle.
 - 2. Elevate; Low Slope Fire Retardant (LSFR) RubberGard EPDM Membrane: www.holcimelevate.com/#sle.
 - 3. Johns Manville; JM EPDM: www.jm.com/#sle.
- B. Insulation:
 - 1. Manufacturers Recommended Insulation .

2.02 ROOFING - UNBALLASTED APPLICATIONS

- A. Elastomeric Membrane Roofing: One ply membrane, fully adhered, over vapor retarder and insulation.

2.03 ROOFING MEMBRANE AND ASSOCIATED MATERIALS

- A. Membrane: Ethylene-propylene-diene-monomer (EPDM); externally reinforced with fabric; complying with minimum properties of ASTM D4637/D4637M.
 - 1. Thickness: 60 mil, 0.060 inch (1.5 mm), minimum.
 - 2. Sheet Width: 76 inches (1,930 mm), maximum.
 - a. Adhered Application: Limit width to 120 inches (3,048 mm), maximum, when ambient temperatures are less than 40 degrees F (4.4 degress C) for extended period of time during installation.

Elastomeric Membrane Roofing

- B. Seaming Materials: As recommended by membrane manufacturer.
- C. Vapor Retarder: Non-bituminous, foil and fibrous mesh laminate, complying with requirements of fire rating classification; compatible with roofing and insulation materials.
 - 1. Fire-retardant adhesive.
- D. Flexible Flashing Material: Same material as membrane.

2.04 DECK SHEATHING

- A. Deck Sheathing: Gypsum sheathing, ASTM C1396/C1396M, Type X special fire resistant type, paper face, 5/8 inch (15.9 mm) thick.

2.05 ACCESSORIES

- A. Cant Strips: Wood; pressure preservative treated.
- B. Sheathing Adhesive: Noncombustible type, for adhering gypsum sheathing to metal deck.
- C. Insulation Joint Tape: Glass fiber reinforced type as recommended by insulation manufacturer, compatible with roofing materials; 6 inches (152 mm) wide; self adhering.
- D. Insulation Fasteners: Appropriate for purpose intended.
- E. Membrane Adhesive: As recommended by membrane manufacturer.
- F. Insulation Adhesive: As recommended by insulation manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces and site conditions are ready to receive work.
- B. Verify deck is supported and secure.
- C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system.
- D. Verify deck surfaces are dry and free of snow or ice.
- E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and cant strips are in place.

3.02 INSTALLATION - VAPOR RETARDER AND INSULATION, UNDER MEMBRANE

- A. Install vapor retarder to deck surface with adhesive in accordance with manufacturer's instructions.
 - 1. Extend vapor retarder under cant strips and blocking to deck edge.
 - 2. Install flexible flashing from vapor retarder to air seal material of wall construction, lap and seal to provide continuity of the air barrier plane.
- B. Ensure vapor retarder is clean and dry, continuous, and ready for application of insulation.
- C. Lay subsequent layers of insulation with joints staggered minimum 6 inches (152 mm) from joints of preceding layer.
- D. Lay boards with edges in moderate contact without forcing. Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.
- E. Tape joints of insulation in accordance with roofing and insulation manufacturers' instructions.
- F. At roof drains, use factory-tapered boards to slope down to roof drains over a distance of 18 inches (457 mm).
- G. Do not apply more insulation than can be covered with membrane in same day.

3.03 INSTALLATION - MEMBRANE

- A. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.

- B. Shingle joints on sloped substrate in direction of drainage.
- C. Fully Adhered Application: Apply adhesive to substrate at rate per the roofing manufacturers recommended instructions. Fully embed membrane in adhesive except in areas directly over or within 3 inches (76 mm) of expansion joints. Fully adhere one roll before proceeding to adjacent rolls.
- D. Overlap edges and ends and seal seams by contact adhesive, minimum 3 inches (76 mm). Seal permanently waterproof. Apply uniform bead of sealant to joint edge.
- E. At intersections with vertical surfaces:
 - 1. Extend membrane over cant strips and up a minimum of 4 inches (102 mm) onto vertical surfaces.
 - 2. Fully adhere flexible flashing over membrane and up to nailing strips.
- F. Around roof penetrations, seal flanges and flashings with flexible flashing.
- G. Coordinate installation of roof drains and sumps and related flashings.

3.04 PROTECTION

- A. Protect installed roofing and flashings from construction operations.
- B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials.

END OF SECTION 07 5300

**SECTION 07 6200
SHEET METAL FLASHING AND TRIM**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fabricated sheet metal items, including flashings, counterflashings, exterior penetrations, and other items as indicated on drawings.
- B. Sealants for joints within sheet metal fabrications.

1.02 REFERENCE STANDARDS

- A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix) 2022.
- B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2023.
- C. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar 2023.
- D. ASTM B32 - Standard Specification for Solder Metal 2020.
- E. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate 2021a.
- F. ASTM C920 - Standard Specification for Elastomeric Joint Sealants 2018.
- G. ASTM D4586/D4586M - Standard Specification for Asphalt Roof Cement, Asbestos-Free 2007 (Reapproved 2018).
- H. CDA A4050 - Copper in Architecture - Handbook current edition.
- I. SMACNA (ASMM) - Architectural Sheet Metal Manual 2012.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.
- C. Samples: Submit two samples, 4 by 8 inches (102 by 203 mm) in size, illustrating metal finish color.
 - 1. Selected from full range to match the system finishes

1.04 QUALITY ASSURANCE

- A. Perform work in accordance with SMACNA (ASMM) and CDA A4050 requirements and standard details, except as otherwise indicated.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Sheet Metal Flashing and Trim Manufacturers:
 - 1. ALUCOBOND USA: www.alucobondusa.com/#sle.
 - 2. Fairview Architectural LLC: www.fairview-na.com/#sle.
 - 3. Hickman Edge Systems: www.hickmanedgesystems.com/#sle.
 - 4. Petersen Aluminum Corporation: www.pac-clad.com/#sle.
 - 5. Tamlyn: www.tamlyn.com/#sle.
 - 6. Substitutions: See Section 01 6000 - Product Requirements.

2.02 SHEET MATERIALS

Sheet Metal Flashing and Trim

- A. Pre-Finished Galvanized Steel: ASTM A653/A653M, with G90/Z275 zinc coating; minimum 24-gauge, 0.0239-inch (0.61 mm) thick base metal, shop pre-coated with PVDF coating.
 - 1. Polyvinylidene Fluoride (PVDF) Coating: Superior performing organic powder coating, AAMA 2605; multiple coat, thermally cured fluoropolymer finish system.
 - 2. Color: As selected by Architect from manufacturer's full colors.
- B. Pre-Finished Aluminum: ASTM B209/B209M, 3005 alloy, H12 or H14 temper; 18 gauge, 0.040 inch (1.02 mm) thick; plain finish shop pre-coated with silicone modified polyester coating.
 - 1. Fluoroethylene Vinyl Ether (FEVE) Coating: Superior performing organic powder coating, AAMA 2605; base coat with clear top coat of FEVE coatings.
 - 2. Color: As selected by Architect from manufacturer's full colors.
- C. Stainless Steel: ASTM A666, Type 304 alloy, soft temper, 28 gauge, 0.0156 inch (0.40 mm) thick; smooth No. 4 - Brushed finish.

2.03 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Form pieces in longest possible lengths.
- C. Hem exposed edges on underside 1/2 inch (13 mm); miter and seam corners.
- D. Form material with flat lock seams, except where otherwise indicated; at moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
 - 1. Where indicated at end connections between flashing pieces, use butt joints, with concealing backer plates / panels behind..
 - a. Allow for full range of thermal movement.
- E. Fabricate corners from one piece with minimum 18-inch (450 mm) long legs; seam for rigidity, seal with sealant.
- F. Fabricate vertical faces with bottom edge formed outward 1/4 inch (6 mm) and hemmed to form drip.
- G. Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing gravel. Return and brake edges.

2.04 ACCESSORIES

- A. Fasteners: Same material and finish as flashing metal, with soft neoprene washers.
- B. Primer: Zinc chromate type.
- C. Protective Backing Paint: Zinc molybdate alkyd.
- D. Concealed Sealants: Non-curing butyl sealant.
- E. Exposed Sealants: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material.
 - 1. Products:
 - a. Franklin International, Inc; Titebond WeatherMaster Metal Roof Sealant: www.titebond.com/#sle.
- F. Asphalt Roof Cement: ASTM D4586/D4586M, Type I, asbestos-free.
- G. Reglets: Surface-mounted type, galvanized steel; face and ends covered with plastic tape.
- H. Solder: ASTM B32; Sn50 (50/50) type.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.

- B. Verify roofing termination and base flashings are in place, sealed, and secure.

3.02 PREPARATION

- A. When removing the existing sealant from the counterflashing against the historic stone cornice, make sure that the stone is not damaged. Use methods pre-approved by the Architect.
- B. Install starter and edge strips, and cleats before starting installation.
- C. Install surface mounted reglets true to lines and levels, and seal top of reglets with sealant.
- D. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil, 0.015 inch (0.4 mm).

3.03 INSTALLATION

- A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted..
- B. Apply plastic cement compound between metal flashings and felt flashings.
- C. Fit flashings tight in place; make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- D. Exterior Flashing Receivers: Install in accordance with manufacturer's recommendations, and in proper relationship with adjacent construction, and as follows:
 - 1. Secure receiver at perimeter of wall opening with adhesives or fasteners.
 - 2. Place flashing into receiver channel.
 - 3. Secure flashing with receiver clip.
- E. Solder metal joints for full metal surface contact, and after soldering wash metal clean with neutralizing solution and rinse with water.

END OF SECTION 07 6200

**SECTION 07 9100
PREFORMED JOINT SEALS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Precompressed foam seals.
- B. Compression gaskets.
- C. Preformed strip seals.

1.02 RELATED REQUIREMENTS

- A. Section 07 9200 - Joint Sealants: Liquid and mastic joint sealants and their backing materials.

1.03 REFERENCE STANDARDS

- A. UL 2079 - Standard for Tests for Fire Resistance of Building Joint Systems Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Manufacturer's technical data sheets for each product, including chemical composition, movement capability, color availability, limitations on application, and installation instructions.
- C. Color Cards: For color selection.
- D. Samples for Color Selection: 4 inch (102 mm) long pieces of each color available; at least 2 samples of each color.
- E. Manufacturer's Qualification Statement.
- F. Installer's Qualification Statement.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in performing work of the type specified in this section with at least three years of documented experience.

1.06 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Correct defective work within a two year period after Date of Substantial Completion.
- C. Warranty: Include coverage for installed sealers that fail to achieve watertight seal or exhibit loss of adhesion or cohesion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Precompressed Foam Seals:
 - 1. EMSEAL Joint Systems, Ltd: www.emseal.com/#sle.
 - 2. Nystrom, Inc: www.nystrom.com/#sle.
 - 3. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.
 - 4. Substitutions: See Section 01 6000 - Product Requirements.
- B. Preformed Strip Seals:
 - 1. EMSEAL Joint Systems, Ltd: www.emseal.com/#sle.
 - 2. Sika Corporation: www.usa-sika.com/#sle.

Preformed Joint Seals

3. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.
4. Substitutions: See Section 01 6000 - Product Requirements.

2.02 PRECOMPRESSED FOAM SEALS

- A. Precompressed Foam Seal: Comprised of urethane, modified-acrylic impregnated, or closed-cell neoprene foam impregnated with water-repellent, and with self-adhesive faces protected prior to installation by release paper.
 1. Color: To match adjacent material color.
 2. Size as required to provide water-tight seal when installed.
 3. Calculate size according to manufacturer's recommendations.
 4. Measure size of existing joints before selecting seal width.
 5. Provide product recommended by manufacturer for traffic-bearing use.
 6. Applications:
 - a. Exterior wall expansion joints.
 - b. Building facade with seismic constraints.
 7. Manufacturers:
 - a. Basis of Design: EMSEAL Joint Systems, Ltd; DSM System: www.emseal.com/#sle.
 - b. Tremco Commercial Sealants & Waterproofing; ExoAir Eco: www.tremcosealants.com/#sle.
 - c. Watson Bowman Acme Corporation; Wabo InverSeal (IV): www.watsonbowmanacme.com/#sle.
 - d. Willseal LLC; Willseal 150: www.willseal.com/#sle.
 - e. Substitutions: See Section 01 6000 - Product Requirements.
- B. Precompressed Foam Seal, Fire-Retardant Impregnated: Comprised of waterproof silicone faces on each side of fire-retardant impregnated foam sealant.
 1. Color: As selected by Architect.
 2. Size as required to provide water-tight seal when installed.
 3. Calculate size according to manufacturer's recommendations.
 4. Measure size of existing joints before selecting seal width.
 5. Provide product recommended by manufacturer for traffic-bearing use.
 6. Fire-Rating: As indicated on drawings, comply with UL 2079.

2.03 PREFORMED STRIP SEALS

- A. Preformed Strip Seal: Factory formed profile for adhered application to face of joint substrate.
 1. Measure size of existing joints before selecting seal width.
 2. Provide compatible materials for application as recommended by manufacturer.
 3. Applications:
 - a. Door and window perimeter joints.
 4. Manufacturers:
 - a. Dow; DOWSIL 123 Silicone Seal: www.dow.com/#sle.
 - b. Pecora Corporation; Sil-Span Preformed Silicone Profiles: www.pecora.com/#sle.
 - c. Sika Corporation; Sika Silbridge-300: www.usa-sika.com/#sle.
 - d. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.
 - e. Substitutions: See Section 01 6000 - Product Requirements.

2.04 ACCESSORIES

- A. Adhesive: As recommended by seal manufacturer.
- B. Masking Tape: Self-adhesive, nonabsorbent, non-staining, removable without adhesive residue, and compatible with surfaces adjacent to joints and strip seal.
- C. Substrate Cleaner: Non-corrosive, non-staining type recommended by seal manufacturer; compatible with joint forming materials.

Preformed Joint Seals

- D. Primer: Type recommended by seal manufacturer to suit application; non-staining.
- E. Backing Tape: Self-adhesive polyethylene tape with surface that seal will not adhere to.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that joints are ready to receive this work.
- B. Measure joint dimensions and verify that seal products are of the correct size to properly seal the joints.

3.02 PREPARATION

- A. Properly prepare construction components adjacent to the work of this section to prevent damage and disfigurement due to this work.

3.03 INSTALLATION

- A. Install in accordance with manufacturer's written instructions.
- B. Precompressed Foam Seals:
 - 1. Install only when ambient temperature is within recommended application temperature range of adhesive. Consult manufacturer when installing outside this temperature range.
 - 2. Prepare joints and install seals in accordance with manufacturer's written recommendations.
 - 3. Remove loose materials and foreign matter that could impair adhesion of sealant.
 - 4. Do not stretch precompressed seal; avoid joints except at corners, ends, and intersections; install with face 1/8 to 1/4 inch (3 to 6 mm) below adjoining surface.
- C. Preformed Strip Seals:
 - 1. Install when ambient temperature is within recommended application temperature range of adhesive, and consult with manufacturer before installing outside this temperature range.
 - 2. Prepare joints and install seals in accordance with manufacturer's written recommendations.
 - 3. Remove loose materials and foreign matter that could impair adhesion.
 - 4. When installing over existing non-functioning sealant, remove portions of existing installation that protrude beyond surface; install backing tape on surface of existing sealant installation to prevent adhesion of strip seal.

3.04 CLEANING

- A. Clean adjacent soiled surfaces.

3.05 PROTECTION

- A. Protect joints from damage until adhesives have properly cured.

END OF SECTION 07 9100

**SECTION 07 9200
JOINT SEALANTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Nonsag gunnable joint sealants.
- B. Self-leveling pourable joint sealants.
- C. Joint backings and accessories.

1.02 RELATED REQUIREMENTS

- A. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions: Additional requirements for sealants and primers.

1.03 REFERENCE STANDARDS

- A. ASTM C661 - Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer 2015 (Reapproved 2022).
- B. ASTM C794 - Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants 2018 (Reapproved 2022).
- C. ASTM C920 - Standard Specification for Elastomeric Joint Sealants 2018.
- D. ASTM C1087 - Standard Test Method for Determining Compatibility of Liquid-Applied Sealants with Accessories Used in Structural Glazing Systems 2023.
- E. ASTM C1193 - Standard Guide for Use of Joint Sealants 2016 (Reapproved 2023).
- F. ASTM C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants 2022.
- G. ASTM C1311 - Standard Specification for Solvent Release Sealants 2022.
- H. ASTM C1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants 2023.
- I. ASTM C1521 - Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints 2019 (Reapproved 2020).

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Submit manufacturer's technical datasheets for each product to be used; include the following:
 - 1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
 - 2. List of backing materials approved for use with the specific product.
 - 3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
 - 4. Substrates the product should not be used on.
 - 5. Substrates for which use of primer is required.
 - 6. Substrates for which laboratory adhesion and/or compatibility testing is required.
 - 7. Installation instructions, including precautions, limitations, and recommended backing materials and tools.
 - 8. Sample product warranty.
- C. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools.
- D. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.

Joint Sealants

- E. Preconstruction Laboratory Test Reports: Submit at least four weeks prior to start of installation.
- F. Preinstallation Field Adhesion Test Plan: Submit at least two weeks prior to start of installation.
- G. Preinstallation Field Adhesion Test Reports: Submit filled out Preinstallation Field Adhesion Test Reports log within 10 days after completion of tests; include bagged test samples and photographic records.
- H. Installer's qualification statement.
- I. Executed warranty.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in performing the work of this section and with at least three years of documented experience.
- C. Preconstruction Laboratory Testing: Arrange for sealant manufacturer(s) to test each combination of sealant, substrate, backing, and accessories.
 - 1. Adhesion Testing: In accordance with ASTM C794.
 - 2. Compatibility Testing: In accordance with ASTM C1087.
 - 3. Stain Testing: In accordance with ASTM C1248; required only for stone substrates.
 - 4. Allow sufficient time for testing to avoid delaying the work.
 - 5. Deliver sufficient samples to manufacturer for testing.
 - 6. Report manufacturer's recommended corrective measures, if any, including primers or techniques not indicated in product data submittals.
 - 7. Testing is not required if sealant manufacturer provides data showing previous testing, that shows satisfactory adhesion, lack of staining, and compatibility.
- D. Preinstallation Field Adhesion Test Plan: Include destructive field adhesion testing of one sample of each combination of sealant type and substrate, except interior acrylic latex sealants, and include the following for each tested sample.
 - 1. Identification of testing agency.
 - 2. Preinstallation Field Adhesion Test Log Form: Include the following data fields, with known information filled out.
 - a. Test date.
 - b. Copy of test method documents.
 - c. Age of sealant upon date of testing.
 - d. Test results, modeled after the sample form in the test method document.
 - e. Indicate use of photographic record of test.
- E. Field Adhesion Test Procedures:
 - 1. Allow sealants to fully cure as recommended by manufacturer before testing.
 - 2. Have a copy of the test method document available during tests.
 - 3. Record the type of failure that occurred, other information required by test method, and the information required on the Field Quality Control Log.
 - 4. When performing destructive tests, also inspect the opened joint for proper installation characteristics recommended by manufacturer, and report any deficiencies.
 - 5. Deliver the samples removed during destructive tests in separate sealed plastic bags, identified with project, location, test date, and test results, to Owner.
 - 6. If any combination of sealant type and substrate does not show evidence of minimum adhesion or shows cohesion failure before minimum adhesion, report results to Architect.
- F. Destructive Field Adhesion Test: Test for adhesion in accordance with ASTM C1521, using Destructive Tail Procedure.

Joint Sealants

1. Sample: At least 18 inches (457 mm) long.
 2. Minimum Elongation Without Adhesive Failure: Consider the tail at rest, not under any elongation stress; multiply the stated movement capability of the sealant in percent by two; then multiply 1 inch (25.4 mm) by that percentage; if adhesion failure occurs before the 1-inch mark is that distance from the substrate, the test has failed.
 3. If either adhesive or cohesive failure occurs before minimum elongation, take necessary measures to correct conditions and retest; record each modification to products or installation procedures.
- G. Field Adhesion Tests of Joints: Test for adhesion using most appropriate method in accordance with ASTM C1521, or another applicable method as recommended by manufacturer.

1.06 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Manufacturer Warranty: Provide 2-year manufacturer warranty for installed sealants and accessories that fail to achieve a watertight seal, exhibit loss of adhesion or cohesion, or do not cure. Complete forms in Owner's name and register with manufacturer.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Nonsag Sealants:
 1. Bostik Inc: www.bostik-us.com/#sle.
 2. Dow: www.dow.com/#sle.
 3. Henry Company: www.henry.com/#sle.
 4. Hilti, Inc: www.hilti.com/#sle.
 5. Momentive Performance Materials, Inc (formerly GE Silicones): www.momentive.com/#sle.
 6. Pecora Corporation: www.pecora.com/#sle.
 7. Sherwin-Williams Company: www.sherwin-williams.com/#sle.
 8. Sika Corporation: www.usa.sika.com/#sle.
 9. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.
 10. W.R. Meadows, Inc: www.wrmeadows.com/#sle.
 11. Substitutions: See Section 01 6000 - Product Requirements.

2.02 JOINT SEALANT APPLICATIONS

- A. Scope:
 1. Exterior Joints: Seal open joints, whether or not the joint is indicated on drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to:
 - a. Wall expansion and control joints.
 - b. Joints between door, window, and other frames and adjacent construction.
 - c. Joints between different exposed materials.
 - d. Openings below ledge angles in masonry.
 - e. Other joints indicated below.
- B. Exterior Joints: Use nonsag nonstaining silicone sealant, unless otherwise indicated.

2.03 JOINT SEALANTS - GENERAL

- A. Sealants and Primers: Provide products with acceptable levels of volatile organic compound (VOC) content; see Section 01 6116.
- B. Colors: As indicated on drawings. If not shown, to match adjacent surfaces and as approved by Owner or Architect.

Joint Sealants

2.04 NONSAG JOINT SEALANTS

- A. Nonstaining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
 - 1. Movement Capability: Plus and minus 50 percent, minimum.
 - 2. Nonstaining to Porous Stone: Nonstaining to light-colored natural stone when tested in accordance with ASTM C1248.
 - 3. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
 - 4. Color: Match adjacent finished surfaces.
 - 5. Service Temperature Range: Minus 20 to 180 degrees F (Minus 29 to 82 degrees C).
- B. Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
 - 1. Movement Capability: Plus and minus 25 percent, minimum.
 - 2. Hardness Range: 15 to 35, Shore A, when tested in accordance with ASTM C661.
 - 3. Color: Match adjacent finished surfaces.
 - 4. Cure Type: Single component, neutral moisture curing.
- C. Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multi-component; not expected to withstand continuous water immersion or traffic.
 - 1. Movement Capability: Plus and minus 50 percent, minimum.
 - 2. Color: Match adjacent finished surfaces.
 - 3. Products:
 - a. Sika Corporation; Sikaflex-1a: www.usa.sika.com/#sle.
 - b. Sika Corporation; Sikaflex-15 LM: www.usa.sika.com/#sle.
 - c. Sika Corporation; Sikaflex-2c NS: www.usa.sika.com/#sle.
 - d. W. R. Meadows, Inc; POURTHANE NS: www.wrmeadows.com/#sle.
 - e. Substitutions: See Section 01 6000 - Product Requirements.
- D. Polyurethane Sealant for Continuous Water Immersion: ASTM C920, Grade NS, Uses M and A; single or multicomponent; explicitly approved by manufacturer for continuous water immersion; suitable for traffic exposure when recessed below traffic surface.
 - 1. Movement Capability: Plus and minus 35 percent, minimum.
 - 2. Products:
 - a. Sika Corporation; Sikaflex-1a: www.usa.sika.com/#sle.
 - b. Sika Corporation; Sikaflex-2c NS: www.usa.sika.com/#sle.
- E. Noncuring Butyl Sealant: Solvent-based, single component, nonsag, nonskinning, nonhardening, nonbleeding; non-vapor permeable; intended for fully concealed applications.
 - 1. Products:
 - a. Pecora Corporation; Pecora BA-98 Non-Skinning Butyl Sealant: www.pecora.com/#sle.
 - b. Substitutions: See Section 01 6000 - Product Requirements.

2.05 SELF-LEVELING JOINT SEALANTS

- A. Self-Leveling Polyurethane Sealant for Continuous Water Immersion: Polyurethane; ASTM C920, Grade P, Uses M and A; single component; explicitly approved by manufacturer for traffic exposure and continuous water immersion.
 - 1. Movement Capability: Plus and minus 25 percent, minimum.
 - 2. Color: To be selected by Architect from manufacturer's standard range.
 - 3. Products:
 - a. Sika Corporation; Sikaflex-1c SL: www.usa.sika.com/#sle.
 - b. Sika Corporation; Sikaflex-2c SL: www.usa.sika.com/#sle.
 - c. W. R. MEADOWS, Inc; POURTHANE SL: www.wrmeadows.com/#sle.

Joint Sealants

d. Substitutions: See Section 01 6000 - Product Requirements.

2.06 ACCESSORIES

- A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.
 - 1. Type for Joints Not Subject to Pedestrian or Vehicular Traffic: ASTM C1330; Type O - Open Cell Polyurethane.
 - 2. Open Cell: 40 to 50 percent larger in diameter than joint width.
- B. Preformed Extruded Silicone Joint Seal: Pre-cured low-modulus silicone extrusion, in sizes to fit applications indicated on drawings, combined with a neutral-curing liquid silicone sealant for bonding joint seal to substrates.
 - 1. Size: 1 inch (25.4 mm) wide, in rolls 100 feet (30.5 m) long.
 - 2. Thickness: 0.78 inch (19.8 mm), with ridges along outside bottom edges for bonding area.
- C. Preformed Extruded Polyurethane Joint Seal: Medium-modulus, preformed polyurethane extrusion used to bridge joints under elastomeric wall coatings, in sizes to fit applications indicated on drawings, combined with polyurethane sealant for bonding joint seal to substrates.
 - 1. Size: 1-1/2 inch (38 mm) wide, in rolls 100 feet (30.5 m) long.
 - 2. Thickness: 0.051 inch (1.3 mm), with ridges along outside bottom edges for bonding area.
- D. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.
- E. Joint Cleaner: Noncorrosive and nonstaining type, type recommended by sealant manufacturer; compatible with joint forming materials.
- F. Primers: Type recommended by sealant manufacturer to suit application; nonstaining.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that joints are ready to receive work.
- B. Verify that backing materials are compatible with sealants.
- C. Verify that backer rods are of the correct size.
- D. Preinstallation Adhesion Testing: Install a sample for each test location indicated in the test plan.
 - 1. Test each sample as specified in PART 1 under QUALITY ASSURANCE article.
 - 2. Notify Architect of date and time that tests will be performed, at least seven days in advance.
 - 3. Record each test on Preinstallation Adhesion Test Log as indicated.
 - 4. If any sample fails, review products and installation procedures, consult manufacturer, or take other measures that are necessary to ensure adhesion; retest in a different location; if unable to obtain satisfactory adhesion, report to Architect.
 - 5. After completion of tests, remove remaining sample material and prepare joints for new sealant installation.

3.02 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

Joint Sealants

3.03 INSTALLATION

- A. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Provide joint sealant installations complying with ASTM C1193.
- C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.
- D. Install bond breaker backing tape where backer rod cannot be used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- F. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.
- G. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

3.04 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements for additional requirements.
- B. Perform field quality control inspection/testing as specified in PART 1 under QUALITY ASSURANCE article.
- C. Remove and replace failed portions of sealants using same materials and procedures as indicated for original installation.

END OF SECTION 07 9200

**SECTION 09 2116
GYPSUM BOARD ASSEMBLIES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Performance criteria for gypsum board assemblies.
- B. Metal stud wall framing.
- C. Metal channel ceiling framing.
- D. Gypsum sheathing.
- E. Gypsum wallboard.
- F. Joint treatment and accessories.
- G. Water-resistive barrier over exterior wall sheathing.

1.02 REFERENCE STANDARDS

- A. AISI S201 - North American Standard for Cold-Formed Steel Framing - Product Data 2017.
- B. AISI S220 - North American Standard for Cold-Formed Steel Nonstructural Framing 2020.
- C. AISI S240 - North American Standard for Cold-Formed Steel Structural Framing 2015, with Errata (2020).
- D. ASTM A1003/A1003M - Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members 2015.
- E. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes 2021.
- F. ASTM C1007 - Standard Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories 2020.
- G. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board 2017 (Reapproved 2022).
- H. ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products 2020.
- I. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board 2023.
- J. ASTM C954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness 2022.
- K. ASTM C1002 - Standard Specification for Steel Self-Piercing Tapping Screws for Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs 2022.
- L. ASTM C1047 - Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base 2019.
- M. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing 2017.
- N. ASTM C1280 - Standard Specification for Application of Exterior Gypsum Panel Products for Use as Sheathing 2018 (Reapproved 2023).
- O. ASTM C1396/C1396M - Standard Specification for Gypsum Board 2017.
- P. ASTM C1658/C1658M - Standard Specification for Glass Mat Gypsum Panels 2019, with Editorial Revision (2020).
- Q. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber 2021.

Gypsum Board Assemblies

- R. ASTM E1966 - Standard Test Method for Fire-Resistive Joint Systems 2015 (Reapproved 2019).
- S. ASTM G21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi 2015, with Editorial Revision (2021).
- T. GA-216 - Application and Finishing of Gypsum Panel Products 2021.
- U. UL 2079 - Standard for Tests for Fire Resistance of Building Joint Systems Current Edition, Including All Revisions.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Coordination: Coordinate the installation of gypsum board assemblies with size, location, and installation of service utilities.
- B. Sequencing: Install service utilities in an orderly and expeditious manner.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data:
 - 1. Provide data on metal framing, glass mat faced gypsum board, accessories, and joint finishing system.
 - 2. Provide manufacturer's data on partition head to structure connectors, showing compliance with requirements.
- C. Test Reports: For stud framing products that do not comply with AISI S220 or ASTM C754, provide independent laboratory reports showing maximum stud heights at required spacings and deflections.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. See Section 01 7419 - Construction Waste Management and Disposal for packaging waste requirements.
- B. Store gypsum products and accessories indoors and keep above freezing. Elevate boards above floor, on nonwicking supports, in accordance with manufacturer's recommendations.
- C. Store metal products to prevent corrosion.

PART 2 PRODUCTS

2.01 GYPSUM BOARD ASSEMBLIES

- A. Provide completed assemblies complying with ASTM C840 and GA-216.

2.02 METAL FRAMING MATERIALS

- A. Material and Product Requirements Criteria: AISI S201.
- B. Steel Sheet: ASTM A1003/A1003M, subject to the ductility limitations indicated in AISI S220 or equivalent.
 - 1. Structural Grade: As required to meet design criteria.
 - 2. Corrosion Protection Coating Designation: G40, or equivalent in accordance with AISI S220.
- C. Manufacturers - Metal Framing, Connectors, and Accessories:
 - 1. ClarkDietrich: www.clarkdietrich.com/#sle.
 - 2. Jaimes Industries: www.jaimesind.com/#sle.
 - 3. MarinoWARE: www.marinoware.com/#sle.

4. R-stud: www.rstud.com/#sle.
 5. SCAFCO Corporation: www.scafco.com/#sle.
 6. Steel Construction Systems: www.steelconsystems.com/#sle.
 7. Substitutions: See Section 01 6000 - Product Requirements.
- D. Nonstructural Framing System Components: AISI S220; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/120 at 5 psf (L/120 at 240 Pa).
1. Studs: C-shaped with knurled or embossed faces. See drawings for shape and minimum depth.
 2. Runners: U shaped, sized to match studs.
 3. Ceiling Channels: C-shaped. See drawings for shape and minimum depth.
 4. Furring Members: See drawings for shape and minimum depth.
- E. Shaft Wall Studs and Accessories: AISI S220; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 and specified performance requirements.
1. Products:
 - a. Same manufacturer as other framing materials.
- F. Partition Head To Structure Connections: Provide track fastened to structure with legs of sufficient length to accommodate deflection, for friction fit of studs cut short and fastened as indicated on drawings.

2.03 BOARD MATERIALS

- A. Manufacturers - Gypsum-Based Board:
1. American Gypsum Company: www.americangypsum.com/#sle.
 2. CertainTeed Corporation: www.certainteed.com/#sle.
 3. Georgia-Pacific Gypsum: www.gpgypsum.com/#sle.
 4. Gold Bond Building Products, LLC provided by National Gypsum Company: www.goldbondbuilding.com/#sle.
 5. USG Corporation: www.usg.com/#sle.
- B. Exterior Sheathing Board: Sizes to minimize joints in place; ends square cut.
1. Application: Exterior sheathing, unless otherwise indicated.
 2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
 3. Fungal Resistance: No fungal growth when tested in accordance with ASTM G21.
 4. Glass Mat Faced Sheathing: Glass mat faced gypsum substrate as defined in ASTM C1177/C1177M.
 5. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
 6. Core Type: Type X, as indicated.
 7. Regular Board Thickness: 1/2 inch (13 mm).
 8. Edges: Square.
 9. Glass Mat Faced Products:
 - a. American Gypsum Company; M-Glass Exterior Sheathing Type X: www.americangypsum.com/#sle.
 - b. CertainTeed Corporation; GlasRoc Type X Exterior Sheathing: www.certainteed.com/#sle.
 - c. Georgia-Pacific Gypsum; DensGlass Fireguard Sheathing: www.gpgypsum.com/#sle.
 - d. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond eXP Fire-Shield Sheathing: www.goldbondbuilding.com/#sle.
 - e. USG Corporation; Securock Brand UltraLight Glass-Mat Sheathing Firecode X 5/8 in. (15.9 mm): www.usg.com/#sle.

Gypsum Board Assemblies

- f. USG Corporation; Securock ExoAir 430 Panel USGX 5/8 in. (15.9 mm):
www.usg.com/#sle.
 - g. Substitutions: See Section 01 6000 - Product Requirements.
- C. Exterior Soffit Board: Exterior gypsum soffit board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
- 1. Application: Ceilings and soffits in protected exterior areas, unless otherwise indicated.
 - 2. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X.
 - 3. Types: Regular, Type X, and Type C, in locations indicated.
 - 4. Type X Thickness: 5/8 inch (16 mm).
 - 5. Type C Thickness: 5/8 inch (16 mm).
 - 6. Regular Type Thickness: 1/2 inch (13 mm).
 - 7. Edges: Tapered.
 - 8. Products:
 - a. American Gypsum Company; Exterior Soffit Gypsum Wallboard Type X:
www.americangypsum.com/#sle.
 - b. CertainTeed Corporation; 5/8" Soffitboard Type X: www.certainteed.com/#sle.
 - c. Georgia-Pacific Gypsum; ToughRock Fireguard C Soffit Board:
www.gpgypsum.com/#sle.
 - d. Substitutions: See Section 01 6000 - Product Requirements.
- D. Shaftwall and Coreboard: Type X; 1 inch (25 mm) thick by 24 inches (600 mm) wide, beveled long edges, ends square cut.
- 1. Glass Mat Faced Type: Glass mat shaftliner gypsum panel or glass mat coreboard gypsum panel as defined in ASTM C1658/C1658M.
 - 2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
 - 3. Glass Mat Faced Products:
 - a. American Gypsum Company; M-Glass Shaft Liner: www.americangypsum.com/#sle.
 - b. CertainTeed Corporation; GlasRoc Shaftliner Type X: www.certainteed.com/#sle.
 - c. Georgia-Pacific Gypsum; DensGlass Shaftliner (mold-resistant):
www.gpgypsum.com/#sle.
 - d. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond eXP Shaftliner: www.goldbondbuilding.com/#sle.
 - e. USG Corporation; Sheetrock Brand Glass-Mat Liner Panels Mold Tough 1 in. (25.4 mm): www.usg.com/#sle.
 - f. Substitutions: See Section 01 6000 - Product Requirements.

2.04 GYPSUM BOARD ACCESSORIES

- A. Water-Resistive Barrier: As suggested by the canopy / metal panel manufacturer.
- B. Joint Accessories and Other Trim: ASTM C1047, galvanized steel, unless noted otherwise.
 - 1. Wall Mounted Deflection Beads: Flexible gasket and bead with 1-1/8 inch (29 mm) flange.
 - a. Fire-Resistance Rated: 1 hour when joint system tested in accordance with ASTM E1966 or UL 2079.
- C. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.
- D. Screws for Fastening of Gypsum Panel Products to Cold-Formed Steel Studs Less than 0.033 inches (0.84 mm) in Thickness and Wood Members: ASTM C1002; self-piercing tapping screws, corrosion-resistant.
- E. Screws for Fastening of Gypsum Panel Products to Steel Members from 0.033 to 0.112 inch (0.84 to 2.84 mm) in Thickness: ASTM C954; steel drill screws, corrosion-resistant.

Gypsum Board Assemblies

- F. Anchorage to Substrate: Tie wire, nails, screws, and other metal supports, of type and size to suit application; to rigidly secure materials in place.
- G. Exterior Soffit Vents: One piece, perforated, ASTM B221 6063 T5 alloy aluminum, with edge suitable for direct application to gypsum board and manufactured especially for soffit application. Provide continuous vent.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that project conditions are appropriate for work of this section to commence.

3.02 SHAFT WALL INSTALLATION

- A. Shaft Wall Framing: Install in accordance with manufacturer's installation instructions.
 - 1. Install studs at spacing required to meet performance requirements.
- B. Shaft Wall Liner: Cut panels to accurate dimensions and install sequentially between special friction studs.
 - 1. On walls over sixteen feet high, screw-attach studs to runners top and bottom.

3.03 FRAMING INSTALLATION

- A. Metal Framing: Install in accordance with ASTM C1007/AISI S220 and manufacturer's instructions.
- B. Suspended Ceilings and Soffits: Space framing and furring members as indicated.
 - 1. Laterally brace entire suspension system.
 - 2. Install bracing as required at exterior locations to resist wind uplift.
- C. Studs: Space studs at 16 inches on center (at 406 mm on center).
 - 1. Extend partition framing to structure where indicated and to ceiling in other locations.
 - 2. Partitions Terminating at Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions.
 - 3. Partitions Terminating at Structure: Attach extended leg top runner to structure, maintain clearance between top of studs and structure, and brace both flanges of studs with continuous bridging.

3.04 BOARD INSTALLATION

- A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
- B. Fire-Resistance-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing.
- C. Exterior Sheathing: Comply with ASTM C1280. Install sheathing vertically, with edges butted tight and ends occurring over firm bearing.
 - 1. Seal joints, cut edges, and holes with water-resistant sealant.
 - 2. Exterior Sheathing: Immediately after installation, protect from weather by application of water-resistive barrier.
- D. Exterior Soffits: Install exterior soffit board perpendicular to framing, with staggered end joints over framing members or other solid backing.
 - 1. Seal joints, cut edges, and holes with water-resistant sealant.

3.05 INSTALLATION OF TRIM AND ACCESSORIES

- A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
 - 1. Not more than 30 feet (10 meters) apart on walls and ceilings over 50 feet (16 meters) long.
 - 2. At exterior soffits, not more than 30 feet (10 meters) apart in both directions.

- B. Corner Beads: Install at external corners, using longest practical lengths.
- C. Exterior Soffit Vents: Install according to manufacturer's written instructions and in locations indicated on drawings. Provide vent area specified.

3.06 JOINT TREATMENT

- A. Glass Mat Faced Gypsum Board and Exterior Glass Mat Faced Sheathing: Use fiberglass joint tape, embed and finish with setting type joint compound.
- B. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:
 - 1. Level 1: Fire-resistance-rated wall areas above finished ceilings, whether or not accessible in the completed construction.
- C. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
 - 1. Feather coats of joint compound so that camber is maximum 1/32 inch (0.8 mm).

3.07 TOLERANCES

- A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet (3 mm in 3 m) in any direction.

3.08 PROTECTION

- A. Protect installed gypsum board assemblies from subsequent construction operations.

END OF SECTION 09 2116

**SECTION 09 9113
EXTERIOR PAINTING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Field application of paints.
- C. Scope: Finish exterior locations as identified on the drawings
- D. Do Not Paint or Finish the Following Items:
 - 1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
 - 2. Items indicated to receive other finishes.
 - 3. Items indicated to remain unfinished.
 - 4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.
 - 5. Non-metallic roofing and flashing.
 - 6. Stainless steel, anodized aluminum, bronze, terne-coated stainless steel, zinc, and lead.
 - 7. Marble, granite, slate, and other natural stones.
 - 8. Floors, unless specifically indicated.
 - 9. Glass.
 - 10. Concealed pipes, ducts, and conduits.
 - 11. Corten Steel / Weathering Steel

1.02 REFERENCE STANDARDS

- A. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual Current Edition.
- B. SSPC-SP 1 - Solvent Cleaning 2015, with Editorial Revision (2016).
- C. SSPC-SP 2 - Hand Tool Cleaning 2018.
- D. SSPC-SP 6 - Commercial Blast Cleaning 2007.
- E. SSPC-SP 13 - Surface Preparation of Concrete 2018.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide complete list of products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
 - 2. MPI product number (e.g. MPI #47).
 - 3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
- C. Samples: Submit three "In-Place" samples, 8-1/2 by 11 inches (216 by 279 mm) in size, illustrating range of colors available for each finishing product specified.
 - 1. Where sheen is specified, submit samples in only that sheen.
 - 2. Up to three colors 'for approval'.
 - 3. See mock-ups below.

1.04 QUALITY ASSURANCE

- A. All materials, preparation and workmanship for repainting surfaces shall conform to the standards contained in the latest edition of the Master Painters Institute (MPI) Maintenance and

Exterior Painting

Repainting Manual.

- B. All surfaces requiring repainting shall be inspected by the Painting Subcontractor who shall notify the Architect and Contractor in writing of any defects or problems, prior to commencing repainting or after preparation work.

1.05 MOCK-UPS

- A. See In-Place samples in Submittals and here:
 - 1. When requested by the Architect, prepare and paint / or repaint a designated exterior surface area or item to requirements specified herein, with specified paint or coating showing selected colors, gloss / sheen, texture and workmanship to MPI Repainting Manual standards for review and approval. When approved, exterior surface area and/or item shall become acceptable standard of finish quality and workmanship for similar on-site repainting work
- B. See Section 01 4000 - Quality Requirements, for general requirements for mock-up.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.

1.07 FIELD CONDITIONS

- A. Do not apply materials when surface and ambient temperatures are outside the paint product manufacturer's temperature ranges.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Do not apply exterior paint and finishes during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.
- D. Provide lighting level of 80 ft candles (860 lx) measured mid-height at substrate surface.
- E. Take all necessary precautionary and safety measures to prevent fire hazards and spontaneous combustion and to protect the environment from hazard spills. Materials that constitute a fire hazard (paints, solvents, drop clothes, etc.) shall be stored in suitable closed and rated containers and removed from the site on a daily basis.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Provide paints and finishes from the same manufacturer to the greatest extent possible.
 - 1. If a single manufacturer cannot provide specified products, minor exceptions will be permitted provided approval by Architect is obtained using the specified procedures for substitutions.
- B. Paints:
 - 1. PPG Paints: www.ppgpaints.com/#sle.
 - 2. Sherwin-Williams Company: www.sherwin-williams.com/#sle.
 - 3. Benjamin Moore; www.benjaminmoore.com .
- C. Primer Sealers: Same manufacturer as top coats.
- D. Substitutions: See Section 01 6000 - Product Requirements.

Exterior Painting

2.02 PAINTS AND FINISHES - GENERAL

- A. Paints and Finishes: Ready-mixed, unless required to be a field-catalyzed paint.
 - 1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 2. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
 - 3. Supply each paint material in quantity required to complete entire project's work from a single production run.
 - 4. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is described explicitly in manufacturer's product instructions.
- B. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Architect from the manufacturer's full line.
- C. Colors: To be selected from manufacturer's full range of available colors.
 - 1. Selection to be made by Architect after award of contract.
 - 2. Allow for minimum of three colors for each system, unless otherwise indicated, without additional cost to Owner.

2.03 PAINT SYSTEMS - EXTERIOR

- A. Paint E-OP - Exterior Surfaces to be Painted, Unless Otherwise Indicated: Including concrete, concrete masonry units, primed metal, and painted metal.
 - 1. Two top coats and one coat primer.
 - 2. Top Coat(s): Exterior Light Industrial Coating, Water Based; MPI #161, 163, or 164.
 - a. DTM: Direct to Metal (and other surfaces)
 - b. Products:
 - 1) PPG Paints Pitt-Tech Plus DTM Industrial Enamel, 4216 HP Series, Semi-Gloss. (MPI # 163)
 - 2) Sherwin-Williams Pro Industrial DTM Acrylic, Semi-Gloss. (MPI #163)
 - 3) Benjamin Moore Ultra Spec HP D.T.M. Acrylic, Semi-Gloss (MPI #163) .
 - 4) Substitutions: Section 01 6000 - Product Requirements.
- B. Test existing finishes (including painted finishes) for compatibility with subsequent cover materials.
 - 1. Only use materials specifically identified by the paint manufacturer to be compatible with the substrait or existing finish.

2.04 PRIMERS

- A. Primers: Provide the following unless other primer is required or recommended by manufacturer of top coats.
 - 1. Water Based Primer for Galvanized Metal; MPI #134.
 - a. Products:
 - 1) PPG Paints Pitt-Tech Plus DTM Industrial Primer, 4020 PF Series. (MPI #134)
 - 2) Sherwin-Williams DTM Primer/Finish (MPI #134)
 - 3) Sherwin-Williams Pro Industrial Pro-Cryl Universal Primer. (MPI #134)
 - 4) _____.
 - 5) Substitutions: Section 01 6000 - Product Requirements.
 - 2. Rust-Inhibitive Water Based Primer; MPI #107.
 - a. Products:
 - 1) PPG Paints Pitt-Tech Plus DTM Industrial Primer, 4020 PF Series.
 - 2) Sherwin-Williams Pro Industrial Pro-Cryl Universal Primer. (MPI #107)

Exterior Painting

3) Substitutions: Section 01 6000 - Product Requirements.

2.05 ACCESSORY MATERIALS

- A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.
- B. Patching Material: Latex filler.
- C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin application of paints and finishes until substrates have been properly prepared.
- B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
 - 1. Prior to commencement of repainting work, thoroughly examine (and test as required) all exterior conditions and surfaces scheduled to be repainted and report in writing to the Architect and Contractor any conditions or surfaces that will adversely affect work of this section.
 - 2. The degree of surface deterioration (DSD) shall be assessed using the assessment criteria indicated in the MPI Maintenance Repainting Manual. In general, the MPI DSD ratings and descriptions are as follows:

Condition	Description
DSD-0	Sound Surface (may include visual (aesthetic) defects that do not affect film's protective properties).
DSD-1	Slightly Deteriorated Surface (may show fading; gloss reduction, slight surface contamination, minor pin holes scratches, etc.) / Minor cosmetic defects (runs, sags, etc.).
DSD-2	Moderately Deteriorated Surface (small areas of peeling, flaking, slight cracking, staining, etc.).
DSD-3	Severely Deteriorated Surface (heavy peeling, flaking, cracking, checking, scratches, scuffs, abrasion, small holes and gouges).
DSD-4	Substrate Damage (repair or replacement of surface required by others).

- 3. Other than the repair of DSD-1 to DSD-3 defects included under this scope of work, structural and DSD-4 substrate defects discovered prior to and after surface preparation or after first coat of paint shall be made good and sanded by others ready for painting, unless otherwise agreed to by the Owner and painter to be included in this Work.
- 4. No repainting work shall commence until all such DSD-4 adverse conditions and defects have been corrected and surfaces and conditions are acceptable to the Painting Subcontractor. The Painting Subcontractor shall not be responsible for the condition of the substrate or for correcting defects and deficiencies in the substrate, which may adversely affect the painting work except for minimal work normally performed by the Painting Subcontractor and as, indicated herein. It shall always, however, be the responsibility of the Painting Subcontractor to see that surfaces are properly prepared before any paint or coating is applied. It shall also be the Painting Subcontractor's responsibility to paint the surface as specified providing that the owner accepts responsibility for uncorrected DSD-4 substrate conditions.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.
- D. Test shop-applied primer for compatibility with subsequent cover materials.

3.02 PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to application.

Exterior Painting

- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing.
- D. Seal surfaces that might cause bleed through or staining of topcoat.
- E. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- F. Concrete:
 - 1. Remove release agents, curing compounds, efflorescence, and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.
 - 2. Clean surfaces with pressurized water. Use pressure range of 1,500 to 4,000 psi (10,350 to 27,580 kPa) at 6 to 12 inches (150 to 300 mm). Allow to dry.
 - 3. Prepare surface as recommended by top coat manufacturer and according to SSPC-SP 13.
- G. Masonry:
 - 1. Remove efflorescence and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces or if alkalinity of mortar joints exceed that permitted in manufacturer's written instructions. Allow to dry.
 - 2. Prepare surface as recommended by top coat manufacturer.
- H. Exterior Gypsum Board: Fill minor defects with exterior filler compound. Spot prime defects after repair.
- I. Galvanized Surfaces:
 - 1. Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
 - 2. Prepare surface according to SSPC-SP 2.
- J. Ferrous Metal:
 - 1. Solvent clean according to SSPC-SP 1.
 - 2. Remove rust, loose mill scale, and other foreign substances using using methods recommended in writing by paint manufacturer and blast cleaning according to SSPC-SP 6 "Commercial Blast Cleaning". Protect from corrosion until coated.
- K. Remove and securely store all miscellaneous hardware and surface fittings / fastenings (e.g. electrical lights, mechanical louvers, door and window hardware (e.g. hinges, knobs, locks, trim, frame stops) and, removable hazard / instruction labels. from wall and soffit surfaces, doors and frames, prior to repainting and replace upon completion. Carefully clean and replace all such items upon completion of repainting work in each area. Do not use solvent or reactive cleaning agents on items that will mar or remove finishes (e.g. lacquer finishes).
- L. Protect all exterior surfaces and areas, including landscaping, walks, drives, all adjacent building surfaces (including glass, aluminum surfaces, etc.) and equipment and any labels and signage from repainting operations and damage by drop cloths, shields, masking, templates, or other suitable protective means and make good any damage caused by failure to provide such protection.

3.03 APPLICATION

- A. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
- B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- C. Apply each coat to uniform appearance.

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- D. Sand wood and metal surfaces lightly between coats to achieve required finish.
- E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- F. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.05 PROTECTION

- A. Protect finishes until completion of project.
 - 1. Protect all newly repainted exterior surfaces from rain and snow, condensation, contamination, dust, salt spray and freezing temperatures until paint coatings are completely dry. Curing periods shall exceed the manufacturer's recommended minimum time requirements.
 - 2. Erect barriers or screens and post signs to warn, limit or direct traffic away or around work area as required.
- B. Touch-up damaged finishes after Substantial Completion.

3.06 COLOR SCHEDULE

END OF SECTION 09 9113

**SECTION 09 9600
HIGH-PERFORMANCE COATINGS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. High performance coatings.
- B. Surface preparation.

1.02 REFERENCE STANDARDS

- A. AAMA 2605-13, "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels".
- B. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual Current Edition.
- C. SSPC-SP 1 - Solvent Cleaning 2015, with Editorial Revision (2016).
- D. SSPC-SP 2 - Hand Tool Cleaning 2018.
- E. SSPC-SP 11 - Power-Tool Cleaning to Bare Metal 2020.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide complete list of all products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
 - 2. MPI product number (e.g. MPI #47).
 - 3. Cross-reference to specified coating system(s) product is to be used in; include description of each system.
 - 4. Manufacturer's installation instructions.
- C. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
- D. Maintenance Data: Include cleaning procedures and repair and patching techniques.

1.04 QUALITY ASSURANCE

- A. Maintain one copy of each referenced document that applies to application on site.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of coating, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Coating Materials: Store at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.

1.06 FIELD CONDITIONS

- A. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- B. Do not apply exterior coatings during rain or snow, or when relative humidity is outside the humidity ranges required by the coating product manufacturer.

- C. Do not install materials when temperature is below 55 degrees F (13 degrees C) or above 90 degrees F (32 degrees C).
- D. Maintain this temperature range, 24 hours before, during, and 72 hours after installation of coating.
- E. Restrict traffic from area where coating is being applied or is curing.

1.07 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Correct defective Work within a 20 year period after Date of Substantial Completion.
- C. Warranty: Include coverage for bond to substrate.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Provide high performance coating products from the same manufacturer to the greatest extent possible.
 - 1. In the event that a single manufacturer cannot provide specified products, minor exceptions will be permitted provided approval by Architect is obtained using the specified procedures for substitutions.
- B. High-Performance Coatings:
 - 1. Dow: www.dow.com/#sle.
 - 2. PPG Paints: www.ppgpaints.com/#sle.
 - 3. Sherwin-Williams Company: www.protective.sherwin-williams.com/industries/#sle.
 - 4. Tnemec Company, Inc: www.tnemec.com/#sle.
 - 5. Substitutions: Section 01 6000 - Product Requirements.

2.02 HIGH-PERFORMANCE COATINGS

- A. Provide coating systems that meet the following minimum performance criteria, unless more stringent criteria are specified:
 - 1. Gloss and Color Retention: Excellent, when tested in accordance with AAMA 2605.

2.03 TOP COAT MATERIALS

- A. Coatings - General: Provide complete multi-coat systems formulated and recommended by manufacturer for the applications indicated, in the thicknesses indicated; number of coats specified does not include primer or filler coat.
- B. Fluoropolymer Coating 70% PVDF resin:
 - 1. Number of Coats: Two.
 - 2. Product Characteristics:
 - a. Percentage of solids by volume, 70%, minimum.
 - b. Comply with the performance requirements specified above for moderate exposure.
 - 3. Top Coat(s): Air Dry Fluoropolymer, Two Component.
 - a. Sheen: Satin.
 - b. Finish: Metallic.
 - c. Products:
 - 1) Arkema, Inc; Kynar Aquatec: www.arkema.com/#sle.
 - 2) PPG Paints; Corafon ADS: www.ppgpaints.com/#sle.
 - 3) Tnemec Company, Inc; Series 1070V Fluoronar: www.tnemec.com/#sle.
 - 4) Tnemec Company, Inc; Series 1071V Fluoronar: www.tnemec.com/#sle.
 - 5) Substitutions: Section 01 6000 - Product Requirements.
 - 4. Primer: As recommended by coating manufacturer for specific substrate.

2.04 PRIMERS

High-Performance Coatings

- A. Primers: Provide the following unless other primer is required or recommended by coating manufacturer.

2.05 ACCESSORY MATERIALS

- A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of coated surfaces.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Do not begin application of coatings until substrates have been properly prepared.
- C. Verify that substrate surfaces are ready to receive work as instructed by the coating manufacturer. Obtain and follow manufacturer's instructions for examination and testing of substrates.
- D. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- E. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- F. Test shop-applied primer for compatibility with subsequent cover materials.
- G. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
- H. Proceed with coating application only after unacceptable conditions have been corrected.
 - 1. Commencing coating application constitutes Contractor's acceptance of substrates and conditions.

3.02 PREPARATION

- A. Protect adjacent surfaces and materials not receiving coating from spatter and overspray; mask if necessary to provide adequate protection. Repair damage.
- B. Clean surfaces of loose foreign matter.
- C. Remove substances that would bleed through finished coatings. If unremovable, seal surface with shellac.
- D. Remove finish hardware, fixture covers, and accessories and store.
- E. Existing Painted and Sealed Surfaces:
 - 1. Remove loose, flaking, and peeling paint. Feather edge and sand smooth edges of chipped paint.
 - 2. Clean with mixture of trisodium phosphate and water to remove surface grease and foreign matter.
- F. Galvanized Surfaces:
 - 1. Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
 - 2. Prepare surface according to SSPC-SP 2.
- G. Ferrous Metal:
 - 1. Solvent clean according to SSPC-SP 1.
 - 2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item.
 - 3. Remove rust, loose mill scale, and other foreign substances using methods recommended in writing by paint manufacturer and blast cleaning according to SSPC-SP 6 "Commercial Blast Cleaning", and protect from corrosion until coated.

4. In addition, for surfaces to be finished with PVDF, remove tight rust, and shop primer, if any to bare metal using power tools according to SSPC-SP 11 "Power Tool Cleaning to Bare Metal", and protect from corrosion until coated.

3.03 PRIMING

- A. Apply primer to all surfaces, unless specifically not required by coating manufacturer. Apply in accordance with coating manufacturer's instructions.

3.04 COATING APPLICATION

- A. Apply coatings in accordance with manufacturer's written instructions, to thicknesses specified and recommendations in MPI - Architectural Painting and Specification Manual.
- B. Apply in uniform thickness coats, without runs, drips, pinholes, brush marks, or variations in color, texture, or finish. Finish edges, crevices, corners, and other changes in dimension with full coating thickness.

3.05 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements for general requirements for field inspection.

3.06 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.
- B. Clean surfaces immediately of overspray, splatter, and excess material.
- C. After coating has cured, clean and replace finish hardware, fixtures, and fittings previously removed.
- D. See Section 01 7419 - Construction Waste Management and Disposal for additional requirements.

3.07 PROTECTION

- A. Protect finished work from damage.

END OF SECTION 09 9600

**SECTION 10 1419
DIMENSIONAL LETTER SIGNAGE**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Dimensional letter signage.
- B. 'Department Shield' Sign

1.02 REFERENCE STANDARDS

- A. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines current edition.
- B. ADA Standards - 2010 ADA Standards for Accessible Design 2010.
- C. ICC A117.1 - Accessible and Usable Buildings and Facilities 2017.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Manufacturer's product literature for each type of dimensional letter sign, indicating style, font, colors, locations, and overall dimensions of each sign.
- C. Shop Drawings:
 - 1. Include dimensions, locations, elevations, materials, text and graphic layout, and attachment details.
- D. Samples: Submit one sample of each type of dimensional letter sign of size similar to that required for project, indicating sign style, font, and method of attachment.
- E. Manufacturer's Installation Instructions: Include installation templates and attachment devices.
- F. Manufacturer's qualification statement.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Package dimensional letter signs as required to prevent damage before installation.
- B. Store under cover and elevated above grade.
- C. Store tape adhesive at a normal room temperature of 68 to 72 degrees F (20 to 22 degrees C).

1.06 FIELD CONDITIONS

- A. Do not install tape adhesive when ambient temperature is lower than recommended by manufacturer.
- B. Maintain minimum ambient temperature during and after installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Dimensional Letter Signs & 'Department Shield' Sign:
 - 1. Glaeser Signs: www.hglaeser.com - Burlington VT
 - 2. BASIS OF DESIGN: FASTSIGNS International, Inc: www.fastsigns.com/#sle.
 - 3. Design Signs: designsignsvt.com - Essex Junction, VT.

2.02 REGULATORY REQUIREMENTS

- A. Accessibility Requirements: Comply with ADA Standards and ICC A117.1 and applicable building codes, unless otherwise indicated; in the event of conflicting requirements, comply with

Dimensional Letter Signage

the most restrictive requirements.

2.03 DIMENSIONAL LETTERS

- A. Applications: Building identification.
 - 1. Use individual metal letters.
 - 2. Mounting Location: Exterior as indicated on drawings.
 - 3. See Drawings for letter size and count:
 - a. Allow for total of 52 +/- letters, [16] inches ([406] mm) high.
 - b. Allow for total of 50 +/- letters, 8 inches (203 mm) high.
 - 4. See drawings for 'Department Shield' sign diagramatic size and shape
 - a. Receive the exact image from the department before proceeding
 - b. Basis of design : An embossed & painted metal sign
- B. Metal Letters:
 - 1. Material: Stainless steel sheet, fabricated reverse channel.
 - 2. Thickness: Manufacturer's standard for letter size.
 - 3. Letter Height: As indicated on drawings.
 - 4. Text and Typeface:
 - a. Character Font: Helvetica, Arial, or other sans serif font.
 - b. Character Case: Upper case only.
 - 5. Finish: Brushed, satin.
 - 6. Color: As selected.
 - 7. Mounting: Concealed screws.

2.04 ACCESSORIES

- A. Concealed Screws: Noncorroding metal; stainless steel, galvanized steel, chrome plated, or other.
- B. Exposed Screws: Stainless steel.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that substrate surfaces are ready to receive work.
- B. Notify Architect if conditions are not suitable for installation of signs; do not proceed until conditions are satisfactory.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install with horizontal edges level.
- C. Locate dimensional letter signs and 'Department Shield' sign. Mount at heights indicated on drawings and in accordance with ADA Standards and ICC A117.1.
- D. Protect from damage substantial completion signoff; repair or replace damaged items.

END OF SECTION 10 1419

CITY OF BURLINGTON
DRAFT CONSTRUCTION CONTRACT

This Construction Contract (“Contract”) is entered into by and between the City of Burlington, Vermont (“the City”), and [REDACTED] (“Contractor”), a Vermont corporation located at [REDACTED].

Contractor and the City agree to the terms and conditions of this Contract.

1. DEFINITIONS

The following terms shall be construed and interpreted as follows:

- A. “**Contract Documents**” means all the documents identified in Section 7.A.
- B. “**Effective Date**” means the date on which this Contract is approved and signed by the City, as shown on the signature page.
- C. “**Party**” means the City or Contractor, and “**Parties**” means the City and Contractor.
- D. “**Project**” means the [REDACTED].
- E. “**Work**” means the services described in Section 5 (Payment for Services) of this Contract, along with the specifications contained in the Contract Documents as defined in Section 4 (Scope of Work) below.

2. RECITALS

- A. **Authority.** Each Party represents and warrants to the other that the execution and delivery of this Contract and the performance of such Party’s obligations have been duly authorized.
- B. **Consideration.** The Parties acknowledge that the mutual promises and covenants contained herein and other good and valuable consideration are sufficient and adequate to support this Contract.
- C. **Purpose.** The City seeks to employ the Contractor to [REDACTED].

3. EFFECTIVE DATE & TERM

- A. **Effective Date.** This Contract shall not be valid or enforceable until the Effective Date. The City shall not be bound by any provision of this Contract before the Effective Date and shall have no obligation to pay Contractor for any performance or expense incurred before the Effective Date or after the expiration or termination of this Contract.

Commented [TD1]: Instructions for Departmental Staff:

1. Use “track changes.”
2. Fill in highlighted areas, and insert comments to ask questions.
3. Remove highlights, brackets, and template comments.
4. Gather all attachments with Agreement and email package to the Assistant City Attorney your department works with for approval. Email should have the project name in the subject line.
5. Seek approval as necessary
6. Send to consultant/contractor for first signature.
7. Have department head sign second. No other department staff may sign.
8. Email copy of signed contract to the Assistant City Attorney your department works with.
9. After document is signed, upload and ‘tag’ the document in ContractWorks.

*Always feel free to ask your Assistant City Attorney questions at any point in this process.

Commented [TD2]: Note to Departmental Staff: The City may only contract with entities registered with the VT Secretary of State to do business in VT.

City Departmental Staff should check first with the entity that entity is registered with the VT Secretary of State.

The City Attorney’s Office will insert the appropriate information upon review.

Commented [TD3R2]: If the Consultant is a non-VT entity: “. . . a [STATE] corporation located at [ADDRESS], registered with the Secretary of State to do business in Vermont, with a Vermont location at [ADDRESS].”

B. Term. This Contract and the Parties' respective performance shall commence on the Effective Date and expire on final acceptance by the City, unless sooner terminated as provided herein.

4. SCOPE OF WORK

Contractor shall construct the Project in accordance with all the provisions hereof, including with the Contract Documents and the plans, specifications, and technical details on-file with the City and referenced or included in the Notice to Bidders (dated [redacted]), including any addenda thereto), all of which are incorporated herein by this reference as though fully set forth.

5. PAYMENT FOR SERVICES

A. Amount. The City shall pay the Contractor for completion of the Work in accordance with Attachment B (Contractor's Bid Proposal) [or as follows: redacted], subject to the Maximum Limiting Amount in Paragraph C, below.

Contractor agrees to accept this payment as full compensation for performance of all services and expenses incurred under this Agreement.

B. Payment Schedule. The City shall pay the Contractor in the manner and at such times as set forth in the Contract Documents [or as follows: redacted]. The City seeks to make payment within thirty days of receipt of an invoice and any backup documentation requested under subsection D (Invoice) below.

C. Maximum Limiting Amount. The total amount that may be paid to the Contractor for all services and expenses under this Contract shall not exceed the maximum limiting amount of \$[redacted]. The City shall not be liable to Contractor for any amount exceeding the maximum limiting amount without duly authorized written approval.

D. Invoice. Contractor shall submit one copy of each invoice, including rates and a detailed breakdown by task for each individual providing services, and backup documentation for any equipment or other expenses to the following:

[Name, address, phone, email]

The City reserves the right to request supplemental information prior to payment. Contractor shall not be entitled to payment under this Contract without providing sufficient backup documentation satisfactory to the City.

6. SECTION & ATTACHMENT HEADINGS

The article and attachment headings throughout this Contract are for the convenience of City and Contractor and are not intended nor shall they be used to construe the intent of this Contract or any part hereof, or to modify, amplify, or aid in the interpretation or construction of any of the provisions hereof.

7. CONTRACT DOCUMENTS & ORDER OF PRECEDENT

A. Contract Documents. The Contract Documents are hereby adopted, incorporated by reference, and made part of this Contract. The intention of the Contract Documents is to establish the necessary terms, conditions, labor, materials, equipment, and other items necessary for the proper execution and completion of the Work to ensure the intended results.

The following documents constitute the Contract Documents:

- Attachment A: Notice to Bidders** dated [REDACTED]
- Attachment B: Contractor’s Bid Form** [REDACTED]
- Attachment C: Burlington Standard Provisions for Construction Contracts**
- Attachment D: General & Special Conditions**

Commented [ER4]: STAFF- Attach Attachment C-1 to Attachment C. This is extremely important.

Commented [ER5]: Ensure these state a liquidated damages amount somewhere.

Unless otherwise specified or modified by the Contract Documents, the General & Special Conditions hereby incorporate by this reference as though fully set forth the 2024 VTrans Standard Specifications for Construction (or later edition), available here for reference purposes: <https://vtrans.vermont.gov/highway/construct-material/construct-services/pre-contractspecifications/vermont/2024>. Attachment D, including any appendices thereto (the provisions of which apply to this Contract), modifies or supplements the VTrans Standard Specifications for purposes of this Contract.

- Attachment E: Burlington Livable Wage Ordinance Certification**
- Attachment F: Burlington Outsourcing Ordinance Certification**
- Attachment G: Burlington Union Deterrence Ordinance Certification**
- Attachment H: Contractor’s Certificate of Insurance & Endorsements**
- Attachment I: Payment, Performance, and/or Warranty Bonds**

Commented [TD6]: Note to Departmental Staff: Applicable if the total amount of contract(s) exceeds \$15,000 for any 12-month period, including any subcontractors of such contractor or vendor.

Commented [TD7R6]: Note: Livable Wage Certificates:
a. Require a special field in Contract Works to be filled out; and
b. Must be renewed annually, from date of contract signing, if work will continue past one year.

Commented [TD8]: Note to Departmental Staff: Applicable if total amount of contract is \$50,000 or more.

Commented [TD9]: Note to Departmental Staff: Applicable if total amount of contract is \$15,000 or more.

B. Order of Precedent. To the extent a conflict or inconsistency exists between provisions of the Contract Documents relating to indemnification or defense, the provision most protective of the City (and of the State, if this is a state-aid contract) shall apply. In all other cases, this Contract shall govern over the other Contract Documents; plans, technical specifications, and technical details shall govern over other provisions; General & Special Conditions shall control over conflicting provisions of Attachment C; and the remaining Contract Documents shall govern over conflicting provisions of Contractor’s bid.

— Signatures follow on the next page —

SIGNATURE

Persons signing for the Parties hereby swear and affirm that they are authorized to act on behalf of their respective Party and acknowledge that the other Party is relying on their representations to that effect. This Contract may be executed in counterparts, each of which may be deemed an original. This Contract may be executed electronically, and an electronic copy or other facsimile shall be treated as an original.

Contractor
[Name of Contractor]

By: _____

Date: _____

City of Burlington
[Department]

By: _____
[Name]
[Title]

Date: _____

Commented [ER10]: STAFF: PROTECT YOURSELF FROM HAVING YOUR CONTRACT REPUDIATED!

For a Vermont entity, perform a search at the following site: <https://bizfilings.vermont.gov/online/BusinessInquire>, to confirm the entity is authorized to conduct business, and to ascertain its officers.

Similar sites exist for other states' entities.

For a corporation, unless the consultant presents a corporate resolution authorizing the signatory to sign, request the signature of *two* officers, preferably including:

- (1)The president, CEO, chairperson, or any VP; and
- (2)The CFO/treasurer, secretary, COO, or any assistant CFO/treasurer, secretary, or COO.

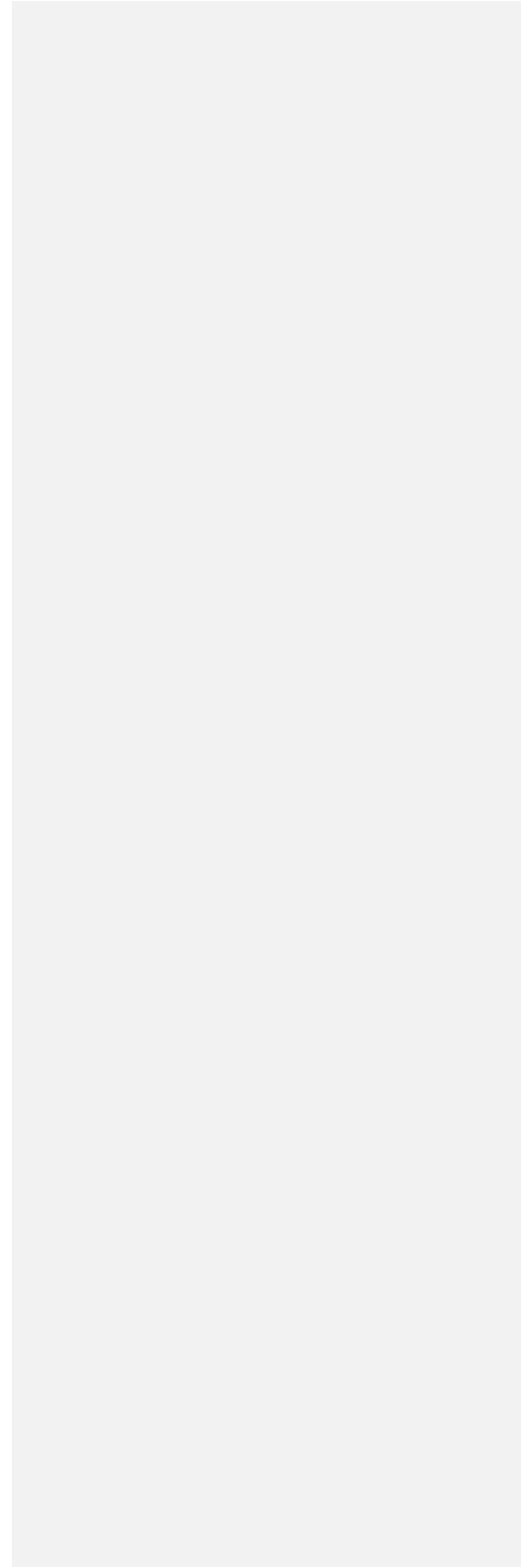
For an LLC, typically a member/manager will sign if there is only one member/manager. Otherwise, at least two members/managers should sign, unless presented with an operating agreement authorizing one person to sign.

For a partnership, at least one general partner must sign.

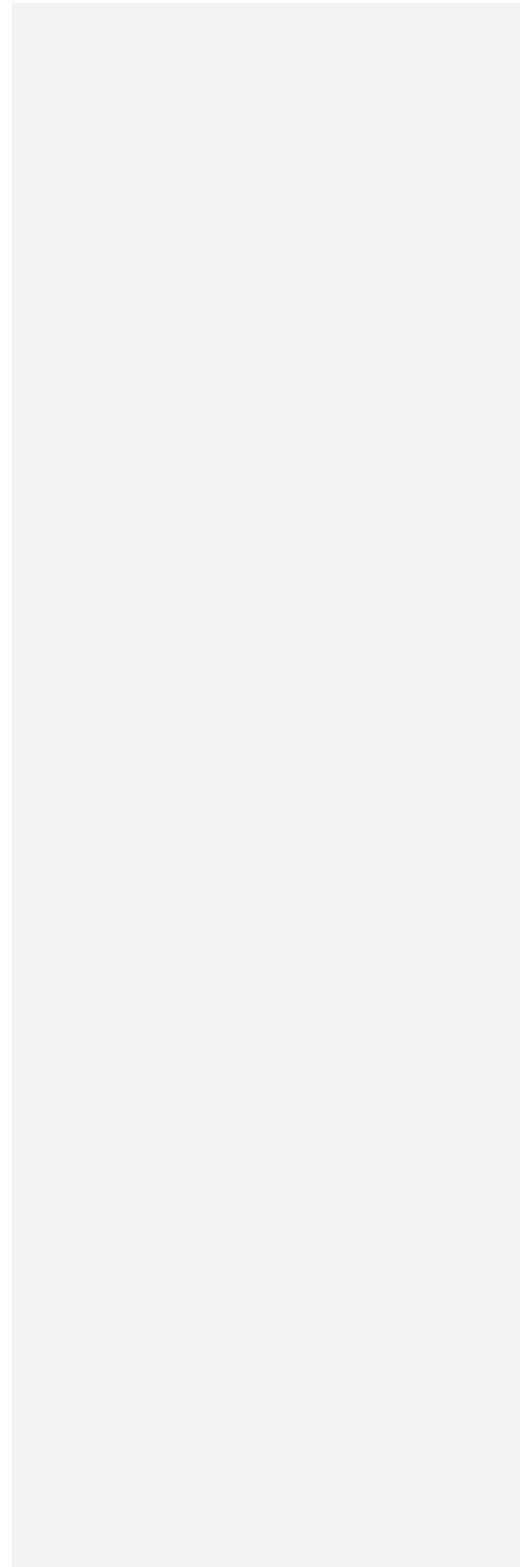
Attachment A:
Notice to Bidders dated []

Commented [ER11]: If on-file, include a reference and explain how a copy may be obtained instead of attaching in full.

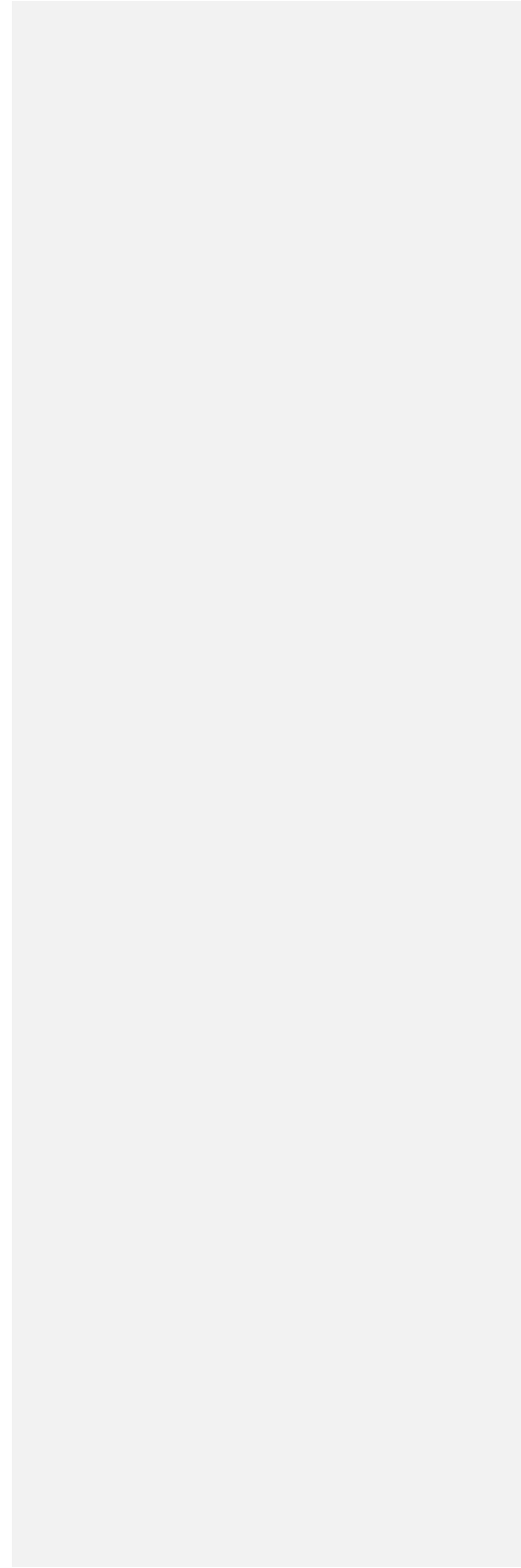
Attachment B:
Contractor's Bid Form dated [REDACTED]



**Attachment C:
Burlington Standard Contract Provisions For Contractors**



**Attachment D:
General & Special Conditions**



**Attachment E:
Burlington Livable Wage Ordinance Certification**

Commented [TD12]: Note to Departmental Staff: Applicable if the total amount of contract(s) *exceeds* \$15,000 for any 12-month period, including any subcontractors of such contractor or vendor.

Commented [TD13]: Note to Departmental Staff: Attach the Certification form *and* then the ordinance language.

This applies to:

- Attachment D: Burlington Livable Wage Ordinance Certification
- Attachment E: Burlington Outsourcing Ordinance Certification
- Attachment F: Burlington Union Deterrence Ordinance Certification

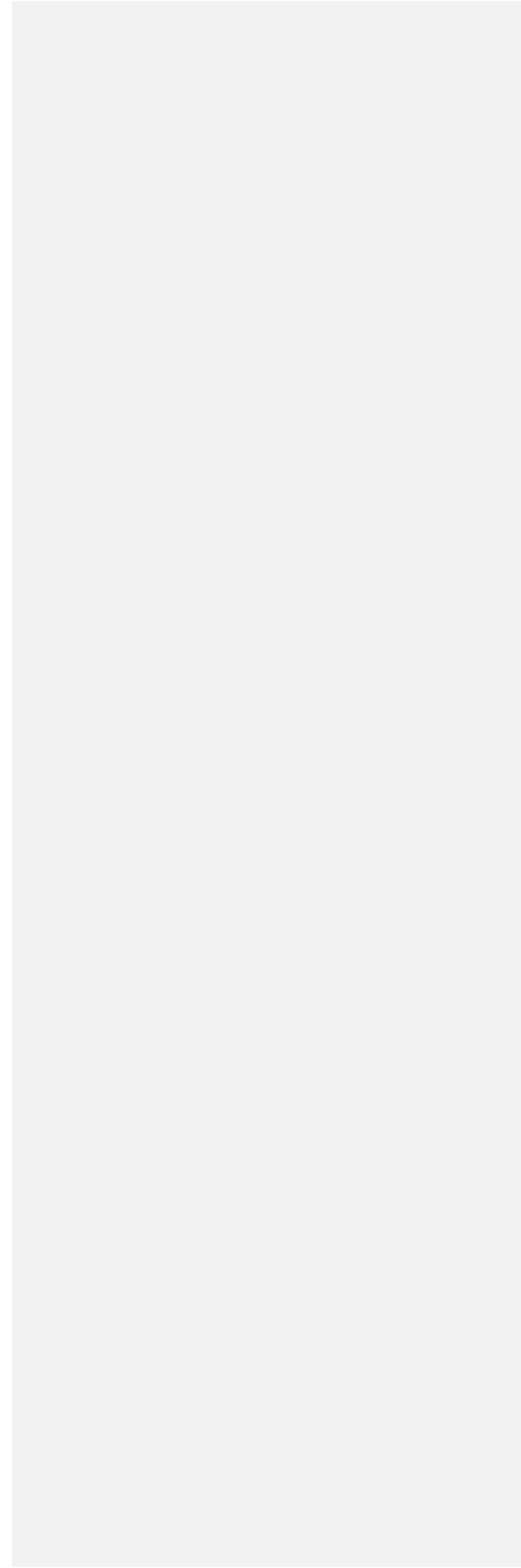
Attachment F:
Burlington Outsourcing Ordinance Certification

Commented [TD14]: Note to Departmental Staff: Applicable if total amount of contract is \$50,000 or more.

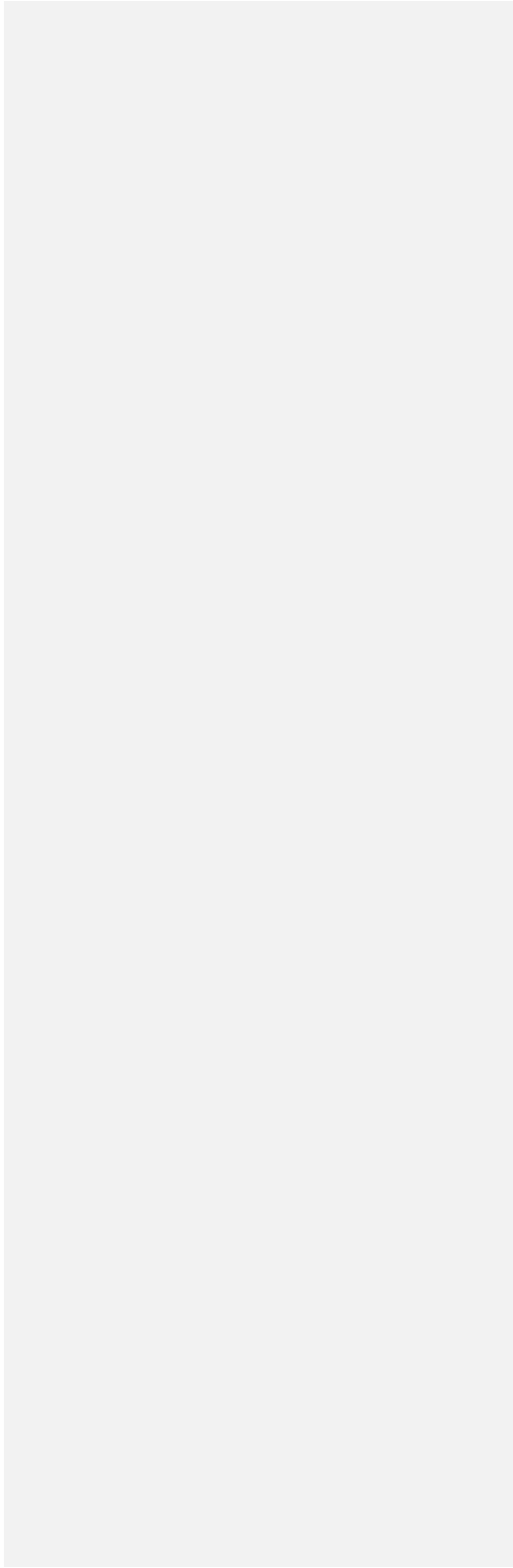
Attachment G:
Burlington Union Deterrence Ordinance Certification

Commented [TD15]: Note to Departmental Staff: Applicable if total amount of contract is \$15,000 or more.

**Attachment H:
Contractor's Certificate of Insurance & Endorsements**



**ATTACHMENT I:
PAYMENT, PERFORMANCE, AND WARRANTY BONDS**



**EXHIBIT E:
DRAFT
BURLINGTON STANDARD CONTRACT CONDITIONS
FOR CONSTRUCTION CONTRACTORS**

1. DEFINITIONS:

- A. The “Contract” shall mean the Contract between Contractor and the City to which these conditions apply and includes this Attachment C.
- B. The “Contractor” shall mean _____.
- C. The “City” shall mean the City of Burlington, Vermont or any of its departments.
- D. The “Effective Date” shall mean the date on which the Contract becomes effective according to its terms, or if no effective date is stated, the date that all parties to it have signed.
- E. The “Parties” shall mean the parties to this Contract.
- F. The “Work” shall mean the services being provided by the Contractor, as provided in the Contract.

2. REGISTRATION: The Contractor agrees to be registered with the Vermont Secretary of State’s office as a business entity doing business in the State of Vermont at all times this contract is effective. This registration must be complete prior to contract execution.

3. INSURANCE & INDEMNIFICATION: The insurance and indemnification provisions set forth in Attachment C-1 are incorporated by this reference as though fully set forth. Any provisions of this Contract for indemnification, defense, release of liability, or warranty, shall survive termination hereof.

4. CONFLICT OF INTEREST: The Contractor shall disclose in writing to the City any actual or potential conflicts of interest or any appearance of a conflict of interest by the Contractor, its employees or agents, or its subcontractors, if any.

5. PERSONNEL REQUIREMENTS AND CONDITIONS: A Contractor shall employ only qualified personnel with responsible authority to supervise the work. The City shall have the right to approve or disapprove key personnel assigned to administer activities related to the Contract.

Except with the approval of the City, during the life of the Contract, the Contractor shall not employ:

- 1. Any City employees who are directly involved with the awarding, administration, monitoring, or performance of the Contract or any project(s) that are the subjects of the Contract.
- 2. Any City employees so involved within one (1) year of termination of employment with the City.

The Contractor warrants that no company or person has been employed or retained (other than a bona fide employee working solely for the Contractor) to solicit or secure this Contract, and

that no company or person has been paid or has a contract with the Contractor to be paid, other than a bona fide employee working solely for the Contractor, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of the Contract. For breach or violation of this warranty, the City shall have the right to annul the Contract, without liability to the City, and to regain all costs incurred by the City in the performance of the Contract.

The City reserves the right to require removal of any person employed by a Contractor from work related to the Contract, for misconduct, incompetence, or negligence, in the opinion of the City, in the due and proper performance of Contractor's duties, or who neglects or refuses to comply with the requirements of the Contract.

6. **PERFORMANCE:** Contractor warrants that performance of Work will conform to the requirements of this Contract. Contractor shall use that degree of ordinary care and reasonable diligence that an experienced and qualified provider of similar services would use acting in like circumstances and experience in such matters and in accordance with the standards, practices and procedures established by Contractor for its own business.
7. **RESPONSIBILITY FOR SUPERVISION:** The Contractor shall assume primary responsibility for general supervision of Contractor employees and any subcontractors for all work performed under the Contract and shall be solely responsible for all procedures, methods of analysis, interpretation, conclusions, and contents of work performed under the Contract. The Contractor shall be responsible to the City for all acts or omissions of its subcontractors and any other person performing work under this Contract.
8. **INSPECTION OF WORK:** The City shall, at all times, have access to the Contractor's work for the purposes of inspection, accounting, and auditing, and the Contractor shall provide whatever access is considered necessary to accomplish such inspections. At any time, the Contractor shall permit the City or representative for the City the opportunity to inspect any plans, drawings, estimates, specifications, or other materials prepared or undertaken by the Contractor pursuant to the Contract, as well as any preparatory work, work-in-progress, or completed work at a field site.

Conferences, visits to a site, or an inspection of the work, may be held at the request of any involved party or by representatives of the City.

9. **UTILITIES & ACCESS:** Whenever a facility or component of a private, public, or cooperatively-owned utility will be affected by any proposed construction, the Contractor will counsel with the City and will enter into any necessary contacts and discussions with the affected owners regarding any requirement necessary for revisions of facilities or existing installations, both above and below ground. Any such installations must be completely and accurately exhibited on any detail sheets or plans. The Contractor shall inform the City, in writing, of any such contacts and the results thereof.

The City shall provide the land and/or construction easements for the land upon which the Work under this Contract is to be done, and will, so far as is convenient, permit the Contractor

to use as much of the land as is required for the erection of temporary construction facilities and storage of materials, together with the right of access to same, but beyond this, the Contractor shall provide at the Contractor's cost and expense any additional land required.

10. PROTECTION OF PROPERTY:

- A. In General: Contractor shall avoid damage, as a result of its operations, to trees, plant life, existing sidewalks, curbs, streets, alleys, pavements, utilities, adjoining property, the work of other contractors, and the property of the City and others. Contractor shall, at its own expense, repair any damage to any property caused by Contractor's operations.
- B. Underpinning and Shoring: Contractor shall become familiar with the requirements of local and state laws applicable to underpinning, shoring and other work affecting adjoining property, and wherever required by law Contractor shall shore up, brace, underpin, secure and protect as may be necessary all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be affected in any way by the excavations or other operations connected with the work to be performed under this Contract.
- C. Damage to Utilities: Contractor shall be responsible for all damage to any utility equipment or structures caused by its acts or omissions to act, whether negligent or otherwise, and shall leave the utility equipment or structures in as good condition as they were in prior to the commencement of operations under this contract. However, any utility equipment or structures damaged as a result of any act, or omission to act, of the contractor may, at the option of the city department, utility company, or other party owning or operating the utility equipment or structures damaged, be repaired by the city department, utility company, or other party, and in that event, the cost of repairs shall be borne by Contractor.

11. PUBLIC RELATIONS: Throughout the performance of the Contract, the Contractor will endeavor to maintain good relations with the public and any affected property owners. Personnel employed by or representing the Contractor shall conduct themselves with propriety. The Contractor agrees to inform property owners and/or tenants, in a timely manner, if there is need for entering upon private property as an agent of the City, in accordance with 19 V.S.A. § 35 and §.503, to accomplish the work under the Contract. The Contractor agrees that any work will be done with minimum damage to the property and disturbance to the owner. Upon request of the Contractor, the City shall furnish a letter of introduction to property owners soliciting their cooperation and explaining that the Contractor is acting as an agent of the City.

12. ACKNOWLEDGEMENTS: Acknowledgment of the City's support must be included in any and all publications, renderings and project publicity, including audio/visual materials developed under this contract.

13. APPEARANCES:

- A. Hearings and Conferences:** The Contractor shall provide services required by the City and necessary for furtherance of any work covered under the Contract. These services shall include appropriate representation at design conferences, public gatherings and hearings, and appearances before any legislative body, commission, board, or court, to justify, explain and defend its contractual services covered under the Contract.

The Contractor shall perform any liaison that the City deems necessary for the furtherance of the work and participate in conferences with the City, at any reasonable time, concerning interpretation and evaluation of all aspects covered under the Contract.

The Contractor further agrees to participate in meetings with the City and any other interested or affected participant, for the purpose of review or resolution of any conflicts pertaining to the Contract.

The Contractor shall be equitably paid for such services and for any reasonable expenses incurred in relation thereto in accordance with the Contract.

- B. Appearance as Witness:** If and when required by the City, the Contractor, or an appropriate representative, shall prepare and appear for any litigation concerning any relevant project or related contract, on behalf of the City. The Contractor shall be equitably paid, to the extent permitted by law, for such services and for any reasonable expenses incurred in relation thereto, in accordance with the Contract.

- 14. RESPONSIBILITY OF COST:** The Contractor shall furnish and pay the cost, including taxes (except tax-exempt entities) and all applicable fees, of all the necessary materials and shall furnish and pay for full time on-site superintendence during any construction activity, labor, tools, equipment, and transportation. The Contractor shall perform all the Work required for the construction of all items listed and itemized under Attachment A (Request for Proposals) and Attachment B (Contractor's Response to Request for Proposals) and in strict accordance with the Contract Documents and any amendments thereto and any approved supplemental plans and specifications. The Contractor agrees to pay all claims for labor, materials, services and supplies and agrees to allow no such charge, including no mechanic's lien, to be fixed on the property of the City.

- 15. PAYMENT PROCEDURES:** The City shall pay or cause to be paid to the Contractor or the Contractor's legal representative payments in accordance with the Contract. When applicable, for the type of payment specified in the Contract, a progress report shall summarize actual costs and any earned portion of fixed fee. All payments will be made in reliance upon the accuracy of all representations made by the Contractor, whether in invoices, progress reports, emails, or other proof of work.

All invoices and correspondence shall indicate the applicable project name, project number and the Contract number. When relevant, the invoice shall further be broken down in detail between projects.

When applicable, for the type of payment specified in the Contract, expenses for meals and travel shall be limited to the current approved in-state rates, as determined by the State of Vermont's labor contract, and need not be receipted. All other expenses are subject to approval by the City and must be accompanied by documentation to substantiate their charges.

No approval given or payment made under the Contract shall be conclusive evidence of the performance of the Contract, either wholly or in part, and no payment shall be construed to be acceptance of defective work or improper materials.

The City agrees to pay the Contractor and the Contractor agrees to accept as full compensation, for performance of all services rendered and expenses encompassed in conformance therewith, the fee specified in the Contract.

16. DUTY TO INFORM CITY OF CONTRACT DOCUMENT ERRORS: If Contractor knows, or has reasonable cause to believe, that a clearly identifiable error or omission exists in the Contract Documents, including but not limited to unit prices and rate calculations, Contractor shall immediately give the City written notice thereof. Contractor shall not cause or permit any Work to be conducted which may relate to the error or omission without first receiving written notice by the City that City representatives understand the possible error or omission and have approved of modifications to the Contract Documents or that Contractor may proceed without any modification being made to Contract Documents.

17. NON-APPROPRIATION: The obligations of the City under this Contract are subject to annual appropriation by the Burlington City Council. If no funds or insufficient funds are appropriated or budgeted to support continuation of payments due under this Contract, the Contract shall terminate automatically on the first day of the fiscal year for which funds have not been appropriated. The Parties understand and agree that the obligations of the City to make payments under this Contract shall constitute a current expense of the City and shall not be construed to be a debt or a pledge of the credit of the City. The decision whether or not to budget and appropriate funds during each fiscal year of the City is within the discretion of the Mayor and City Council of the City. The City shall deliver written notice to Contractor as soon as practicable of any non-appropriation, and Contractor shall not be entitled to any payment or compensation of any kind for work performed after the City has delivered written notice of non-appropriation.

18. CHANGE ORDERS & AMENDMENTS: No changes or amendments to the Contract shall be effective unless documented in writing and signed by authorized representatives of the City and the Contractor. All changes affecting the Project's construction cost, length of time, or modifications of the terms or conditions of the Contract, must be authorized by means of a written Contract Change Order which is mutually agreed to by the City and Contractor. The Contract Change Order will include extra Work, Work for which quantities have been altered from those shown in the Bid Schedule, as well as decreases or increases in the quantities of installed units from those shown in the Bid Schedule because of final measurements. All changes must be recorded on a Contract Change Order (which form is part of these Contract Documents) and fully executed before they can be included in a partial payment estimate.

Changes for Work, quantities, and/or conditions will include any respective time adjustment, if justified. Time adjustments will require an updated Project Schedule with the Change Order.

19. EXTENSION OF TIME: The Contractor agrees to prosecute the work continuously and diligently, and no charges or claims for damages shall be made by the Contractor for delays or hindrances, from any cause whatsoever, during the progress of any portion of services specified in the Contract. The Contractor may request an extension of time for such delays or hindrances, if any.

Time extensions may be granted by amendment only for excusable delays, such as delays beyond the control of the Contractor and without the fault or negligence of the Contractor.

The City may suspend the work or any portion thereof for a period of not more than ninety (90) days at its discretion or such further time as agreed by the Contractor. The Contractor will be allowed an extension of contract time directly attributable to any suspension.

20. PUBLIC HEALTH EMERGENCY:

A. Compliance with Mandates and Guidance: The Contractor is advised that public health emergencies—meaning public health emergencies, as declared by the City, the State of Vermont, or the Federal Government—may introduce significant uncertainty into the project. The Contractor must comply with all local, state, federal orders, directives, regulations, guidance, advisories during a public health emergency. Contractor shall adhere to the below provisions and consider public health emergencies as it develops project schedules and advances the Work.

B. Creation of Public Health Emergency Plan: For any work performed on-site at a City location, the Contractor shall create a public health emergency plan acceptable to the City. The Contractor shall be responsible for following this plan and ensuring that the project or site is stable and in a safe and maintainable condition.

- a. **Public Health Emergency Plan:** The Public Health Emergency Plan will contain:
 - i. Measures to manage risk and mitigate potential impacts to the health and safety of the public, the City and Contractor’s workers;
 - ii. Explicit reference to any health and safety performance standards and mandates provided by the City, the State of Vermont, the Federal government, or other relevant governmental entities;
 - iii. A schedule for possible updates to the plan as standards and mandates change; and
 - iv. Means to adjust the schedule and sequence of work should the emergency change in nature or duration.

b. **Review and Acceptance of Plan:**

- i. Contractor must provide the plan to the City by the Effective Date of this Contract or by one (1) week prior to the commencement of on-site activities, whichever is later.
- ii. The City shall have sole discretion to require changes to the plan.
- iii. The City may revisit the plan at any time to verify compliance with obligations that arise under a state of emergency.

C. Enforcement & Stoppage of Work: Contractor fails to comply with either 1) the approved public health emergency plan, or 2) any local, state, federal orders, directives, regulations, guidance, or advisories during a public health emergency, the City may stop Work under the Contract until such failure is corrected. Such failure to comply shall constitute a breach of the Contract.

Upon stoppage of work, the City may allow Work to resume, at a time determined by the City, under this Contract if such failure to comply is adequately corrected. The City shall have sole discretion in determining if Contractor has adequately corrected its failure to comply with the above.

If Contractor's breach of Contract has not been cured within seven (7) days after notice to stop Work from the City, then City may terminate this Contract, at its discretion.

D. City Liability Relating to Potential Delays: If a public health emergency is declared, the City will not be responsible for any delays related to the sequence of operations or any expenses or losses incurred as a result of any delays. Any delays related to a public health emergency will be excusable, but will not be compensable.

21. FORCE MAJEURE: Neither Party to this Contract shall be liable to the other for any failure or delay of performance of any obligation under this Contract to the extent the failure or delay is caused by acts of God, public health emergencies, epidemics, acts of the public enemy, acts of superior governmental authority, weather conditions, riots, rebellion, sabotage, or any other circumstances for which it is not responsible or which is not under its control ("Force Majeure"). To assert Force Majeure, the nonperforming party must prove that a) it made all reasonable efforts to remove, eliminate, or minimize the cause of delay or damage, b) diligently pursued performance of its obligations, c) substantially fulfilled all obligations that could be fulfilled, and d) timely notified the other part of the likelihood or actual occurrence of a Force Majeure event. If any such causes for delay are of such magnitude as to prevent the complete performance of the Contract within two (2) years of the originally scheduled completion date, either Party may by written notice request to amend or terminate the Contract. The suspension of any obligations under this section shall not cause the term of this Contract to be extended and shall not affect any rights accrued under this Contract prior to the occurrence of the Force Majeure. The Party giving notice of the Force Majeure shall also give notice of its cessation.

22. PAYMENT FOR EXTRA WORK, ADDITIONAL SERVICES OR CHANGES: The City may, in writing, require or agree to changes, or additions to or deletions from the originally contemplated scope of work.

The value of such changes, to the extent not reflected in other payments to the Contractor, shall be incorporated in an amendment and be determined by mutual agreement, by one or more of the following:

1. Fixed Price. By a price that is not subject to any adjustment on the basis of the Contractor's expenses experienced in performing the work. The Contractor is fully responsible for all costs and resulting profit or loss.
2. Rate Schedule. By unit prices designated in the Contract, or by unit prices covered under any subsequent contracts.
3. Actual Cost. By amounts determined on the basis of actual costs incurred, as distinguished from forecasted expenditures.

No changes for which additional fee payment is claimed shall be made unless pursuant to a written order from the City, and no claim for payment shall be valid unless so ordered.

The Contractor agrees to maintain complete and accurate records of all change work, in a form satisfactory to the City. The City reserves the right to audit the records of the Contractor related to any extra work or additional services. Any such services rendered shall be subject, in all other respects, to the terms of the Contract. When changes are so ordered, no additional work shall be performed by the Contractor until a Contract amendment has been fully executed, unless written notice to proceed is issued by the City. Any claim for extension of time that may be necessitated as a result of extra work or additional services and changes shall be given consideration and evaluated insofar as it directly relates to the change.

23. FAILURE TO COMPLY WITH TIME SCHEDULE: If the City is dissatisfied because of slow progress or incompetence in the performance of the Work in accordance with the schedule for completion of the various aspects of construction, the City shall give the Contractor written notice in which the City shall specify in detail the cause of dissatisfaction. Should the Contractor fail or refuse to remedy the matters complained of within five days after the written notice is received by the Contractor, the City shall have the right to take control of the Work and either make good the deficiencies of the Contractor itself or direct the activities of the Contractor in doing so, employing such additional help as the City deems advisable. In such events, the City shall be entitled to collect from the Contractor any expenses in completing the Work. In addition, the City may withhold from the amount payable to the Contractor an amount approximately equal to any interest lost or charges incurred by the City for each calendar day that the Contractor is in default after the time of completion stipulated in the Contract Documents.

24. RETURN OF MATERIALS: Contractor agrees that at the expiration or termination of this Contract, it shall return to City all materials provided to it during its engagement on behalf of

City.

- 25. ACCEPTANCE OF FINAL PAYMENT; RELEASE:** Contractor's acceptance of the final payment shall be a release in full of all claims against the City or its agents arising out of or by reason of the Work. Any payment, however, final or otherwise, shall not release the Contractor or its sureties from any obligations under the Contract Documents or any performance or payment bond.
- 26. OWNERSHIP OF THE WORK:** The Contractor agrees that the ownership of all studies, data sheets, survey notes, subsoil information, drawings, tracings, estimates, specifications, proposals, diagrams, calculations, EDM and other material prepared or collected by the Contractor, hereafter referred to as "instruments of professional service", shall become the property of the City as they are prepared and/or developed in the course of the Contract. The Contractor agrees to allow the City access to all "instruments of professional service" at any time. The Contractor shall not copyright any material originating under the Contract without prior written approval of the City. No publications or publicity of the work, in part or in total, shall be made without the express written agreement of the City, except that Contractor may in general terms use previously developed instruments of professional service to describe its abilities for a project in promotional materials.
- 27. PROPRIETARY RIGHTS:** The Parties under the Contract hereby mutually agree that, if patentable discoveries or inventions should result from work performed by the Contractor under the Contract, all rights accruing from such discoveries or inventions shall be the sole property of the Contractor. The Contractor, however, agrees to and does hereby grant to the City an irrevocable, nonexclusive, non-transferable, and royalty-free license to the manufacture, use, and disposition of any discovery or invention that may be developed as a part of the Work under the Contract.
- 28. PUBLIC RECORDS:** The Contractor understands that any and all records related to and acquired by the City, whether electronic, paper, or otherwise recorded, are subject to the Vermont Public Records Act and that the determination of how those records must be handled is solely within the purview of City. The Contractor shall identify all records that it considers to be trade secrets as that term is defined by subsection 317(c)(9) of the Vermont Public Records Act and shall also identify all other records it considers to be exempt under the Act. It is not sufficient to merely state generally that the record is proprietary or a trade secret or is otherwise exempt. Particular records, pages or section which are believed to be exempt must be specifically identified as such and must be separated from other records with a convincing explanation and rationale sufficient to justify each exemption from release consistent with Section 317 of Title 1 of the Vermont Statutes Annotated.
- 29. RECORDS RETENTION AND ACCESS:** The Contractor agrees to retain, in its files, and to produce to the City—within the time periods requested—all books, documents, electronic data media (EDM), accounting records, and other records produced or acquired by the Contractor in the performance of this Contract which are related to the City, at any time during this Contract and for a period of at least three (3) years after its completion or termination. In addition, if any audit, claim, or litigation is commenced before the expiration of that three (3)

year period, the records shall be retained until all related audits, claims, or litigation are resolved. The Contractor further agrees that the City shall have access to all the above information for the purpose of review and audit during the Contract period and any time within the aforementioned retention period. Copies of all of the above referenced information shall be provided to the City, if requested, in the format in which the records were obtained, created, or maintained, such that their original use and purpose can be achieved. Contractor, subcontractors, or their representatives performing work related to the Contract, are responsible to ensure that all data and information created or stored on EDM is secure and can be duplicated and used if the EDM mechanism is subjected to power outage, obsolescence, or damage.

30. WARRANTY: In addition to any warranty provided by the manufacturer or distributor, Contractor guarantees the Work performed, and all materials or equipment furnished, to be free from defects in material and workmanship for a minimum period of one (1) year from the date of the City's acceptance of completion. The Contractor's warranty is not intended and shall not be interpreted as a limitation upon the City's rights or a waiver of manufacturer and distributor warranties, any subcontractor warranties, or any other warranties provided in connection with the Work.

Contractor, at its own expense, shall make any repairs, or replacement necessary to correct these defects to the satisfaction of the City.

This warranty of material and workmanship applies only:

1. To the property only as long as it remains in the possession of the City.
2. To the Work that has not been subject to accident, misuse, or abuse by someone other than the Contractor.
3. To the Work that has not been modified, altered, defaced, or had repairs made or attempted by someone other than the Contractor.
4. If the Contractor is immediately notified in writing within ten (10) days of first knowledge of the defect by the City.
5. If the Contractor is given the first opportunity to make any repairs, replacements, or corrections to the defective construction at no cost to the City within a reasonable period of time.

Under no circumstances shall Contractor be liable by virtue of this warranty or otherwise for damage to any person or property whatsoever for any special, indirect, secondary or consequential damages of any nature however arising out of the use or inability to use because of the construction defect.

If the Contractor is unable, after receipt of two (2) written notices given to Contractor by the City, to successfully repair or replace the labor, equipment, or materials within six (6) months

of the second notice, then the District's repair and replace warranty shall be deemed to have failed and the City's rights and remedies shall not be limited by the provisions of this section.

31. CONTRACT DISPUTES: In the event of a dispute between the parties to this Contract, each party will continue to perform its obligations unless the Contract is terminated in accordance with these terms.

32. SETTLEMENTS OF MISUNDERSTANDINGS: Neither Party shall file any litigation arising from this Contract without first attempting in good faith to resolve the Parties' dispute through negotiated settlement or mediation; provided, however, that any applicable statute of limitations shall toll during any period in which the Parties are actively and mutually engaged in dispute resolution; and provided further that nothing herein shall prevent either Party from seeking emergency relief in appropriate circumstances from a court of competent jurisdiction.

33. CITY'S OPTION TO TERMINATE: The Contract may be terminated in accordance with the following provisions, which are not exclusive:

A. Termination for Convenience: At any time prior to completion of services specified under the Contract, the City may terminate the Contract for any reason by submitting written notice via certified or registered mail to the Contractor, not less than fifteen (15) days prior to the termination date, of its intention to do so. If the termination is for the City's convenience, payment to the Contractor will be made promptly for the amount of any fees earned to the date of the notice of termination and costs of materials obtained in preparation for Work but not yet installed or delivered, less any payments previously made. However, if a notice of termination is given to a Contractor prior to completion of twenty (20) percent of the estimated services, as set forth in the approved Work Schedule and Progress Report, the Contractor will be reimbursed for that portion of any reasonable and necessary expenses incurred to date of the notice of termination that are in excess of the amount earned under its approved fee to the date of said termination. Such requests for reimbursement shall be supported with factual data and shall be subject to the City's approval. The Contractor shall make no claim for additional compensation against the City by reason of such termination.

B. Termination for Cause:

- i. Breach: Contractor shall be in default if Contractor fails in any manner to fully perform and carry out each and all conditions of this Contract, including, but not limited to, Contractor's failure to begin or to prosecute the Work in a timely manner or to make progress as to endanger performance of this Contract; failure to supply a sufficient number of properly skilled employees or a sufficient quantity of materials of proper quality; failure to perform the Work unsatisfactorily as determined by the City; failure to neglect or refuse to remove materials; or in the event of a breach of warranty with respect to any materials, workmanship, or performance guaranty. Contractor will not be in default for any excusable delays as provided in Sections 18-20.

The City may give Contractor written notice of such default. If Contractor does not cure such default or provide a plan to cure such default which is acceptable to the City within the time permitted by the City, then the City may terminate this contract for cause.

- ii. Dishonest Conduct: If Contractor engages in any dishonest conduct related to the performance or administration of this Contract then the City may immediately terminate this contract.
- iii. Cover: In the event the City terminates this contract as provided in this section, the City may procure, upon such terms and in such manner as the City may deem appropriate, services similar in scope and level of effort to those so terminated, and Contractor shall be liable to the City for all of its costs and damages, including, but not limited to, any excess costs for such services, interest, or other charges the City incurs to cover.
- iv. Rights and Remedies Not Exclusive: The rights and remedies of the City provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

34. GENERAL COMPLIANCE WITH LAWS: The Contractor and any subcontractor approved under this Contract shall comply with all applicable Federal, State and local laws, including but not limited to the Burlington Livable Wage Ordinance, the Non-Outsourcing Ordinance, and the Union-Deterrence Ordinance and shall provide the required certifications attesting to compliance with these ordinances (see attached ordinances and certifications).

35. SAFETY REQUIREMENTS: The Contractor shall comply with all pertinent provisions of the Occupational Safety and Health Administration (OSHA) and any VOSHA (Vermont OSHA) Safety and Health requirements, including the provision and use of appropriate safety equipment and practices.

The Contractor, and not the City, shall be responsible for the safety, efficiency, and adequacy of Contractor's or its subcontractors' plant, appliances, equipment, vehicles, and methods, and for any damages, which may result from their failure or their improper construction, maintenance or operation.

36. CIVIL RIGHTS AND EQUAL EMPLOYMENT OPPORTUNITY: During performance of the Contract, the Contractor will not discriminate against any employee or applicant for employment because of religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status, crime victim status, or genetic information. Contractor, and any subcontractors, shall comply with any Federal, State, or local law, statute, regulation, executive order, or rule that applies to it or the services to be provided under this contract concerning equal employment, fair employment practices, affirmative action, or prohibitions on discrimination or harassment in employment.

37. CHILD SUPPORT PAYMENTS: By signing the Contract, the Contractor certifies, as of the date of signing the Contract, that the Contractor (a) is not under an obligation to pay child support; or (b) is under such an obligation and is in good standing with respect to that obligation; or (c) has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan. If the Contractor is a sole proprietorship, the Contractor's statement applies only to the proprietor. If the Contractor is a partnership, the Contractor's statement applies to all general partners with a permanent residence in Vermont. If the Contractor is a corporation, this provision does not apply.

38. TAX REQUIREMENTS: By signing the Contract, the Contractor certifies, as required by law under 32 VSA, Section 3113, that under the pains and penalties of perjury, the Contractor is in good standing with respect to payment, or in full compliance with a plan to pay, any and all taxes due the State of Vermont as of the date of signature on the Contract.

39. NO GIFTS OR GRATUITIES: The Contractor shall not make any payment or gift or donation of substantial value to any elected official, officer, employee, or agent of the City during the term of this Contract.

40. ASSIGNMENT: Contractor shall not sublet or assign this Work, or any part of it, without the written consent of the City. If any subcontractor is approved, Contractor shall be responsible and liable for all acts or omissions of that subcontractor for any Work performed. If any subcontractor is approved, Contractor shall be responsible to ensure that the subcontractor is paid as agreed and that no lien is placed on any City property.

41. TRANSFERS, SUBLETTING, ASSIGNMENTS, ETC: Contractor shall not assign, sublet, or transfer any interest in the work, covered by this Contract, without prior written consent of the City and further, if any subcontractor participates in any work involving additional services, the estimated extent and cost of the contemplated work must receive prior written consent of the City. The approval or consent to assign or sublet any portion of the work, shall in no way relieve the Contractor of responsibility for the performance of that portion of the work so transferred. The form of the subcontractor's contract shall be as developed by the Contractor and approved by the City. The Contractor shall ensure that insurance coverage exists for any operations to be performed by any subcontractor as specified in the insurance requirements section of this Contract.

The services of the Contractor, to be performed under the Contract, shall not be transferred without written authorization of the City. Any authorized sub-contracts shall contain all of the same provisions contained in and attached to the original Contract with the City.

42. CONTINUING OBLIGATIONS: The Contractor agrees that if because of death, disability, or other occurrences, it becomes impossible to effectively perform its services in compliance with the Contract, neither the Contractor nor its surviving members shall be relieved of their obligations to complete the Contract unless the City agrees to terminate the Contract because it determines that the Contractor is unable to satisfactorily execute the Contract.

43. INTERPRETATION & IMPLEMENTATION: Provisions of the Contract shall be interpreted and implemented in a manner consistent with each other and using procedures that will achieve the intent of both Parties.

44. ARM'S LENGTH: This Contract has been negotiated at arm's length, and any ambiguity in any of its terms or provisions shall be interpreted in accordance with the intent of the Parties and not against or in favor of either the City or Contractor.

45. RELATIONSHIP: The Contractor is an independent contractor and shall act in an independent capacity and not as officers or employees of the City. To that end, the Contractor shall determine the method, details, and means of performing the work, but will comply with all legal requirements in doing so. The Contractor shall provide its own tools, materials, or equipment. The Parties agree that neither the Contractor nor its principal(s) or employees are entitled to any employee benefits from the City. Contractor understands and agrees that it and its principal(s) or employees have no right to claim any benefits under the Burlington Employee Retirement System, the City's worker's compensation benefits, health insurance, dental insurance, life insurance, or any other employee benefit plan offered by the City. The Contractor agrees to execute any certifications or other documents and provide any certificates of insurance required by the City and understands that this Contract is conditioned on its doing so, if requested.

The Contractor understands and agrees that it is responsible for the payment of all taxes on the above sums and that the City will not withhold or pay for Social Security, Medicare, or other taxes or benefits or be responsible for any unemployment benefits.

46. CHOICE OF LAW: Vermont law, and rules and regulations issued pursuant thereto, shall be applied in the interpretation, execution, and enforcement of this Contract, notwithstanding conflicts of law principles. Any provision included or incorporated herein by reference which conflicts with said laws, rules, and regulations shall be null and void. Any provision rendered null and void by operation of this provision shall not invalidate the remainder of this Contract to the extent capable of execution.

47. JURISDICTION: All suits or actions related to this Contract shall be filed and proceedings held in the State of Vermont, notwithstanding any other law.

48. BINDING EFFECT AND CONTINUITY: This Contract shall be binding upon and shall inure to the benefit of the Parties, their respective heirs, successors, representatives, and assigns. If a dispute arises between the Parties, each Party will continue to perform its obligations under this Contract during the resolution of the dispute, until the Contract is terminated in accordance with its terms.

49. SEVERABILITY: The invalidity or unenforceability of any provision of this Contract or the Contract Documents shall not affect the validity or enforceability of any other provision, which shall remain in full force and effect, provided that the Parties can continue to perform their obligations under this Contract in accordance with the intent of this Contract.

50. ENTIRE CONTRACT & AGREEMENT: This Contract, including the Contract Documents, constitutes the entire Contract, agreement, and understanding of the Parties with respect to the subject matter of this Contract. Prior or contemporaneous additions, deletions, or other changes to this Contract shall not have any force or effect whatsoever, unless embodied herein.

51. APPENDICES: The City may attach, to these specifications, appendices containing various forms and typical sample sheets for guidance and assistance to the Contractor in the performance of the work. It is understood, however, that such forms and samples may be modified, altered, and augmented from time to time by the City as occasions may require. It is the responsibility of the Contractor to ensure that they have the latest versions applicable to the Contract.

52. NO THIRD PARTY BENEFICIARIES: This Contract does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. Enforcement of this Contract and all rights and obligations hereunder are reserved solely to the Parties. Any services or benefits which third parties receive as a result of this Contract are incidental to this Contract, and do not create any rights for such third parties.

53. WAIVER: Notwithstanding the passage of time, a Party's failure or delay in exercising any right, power, or privilege under this Contract, whether explicit or by lack of enforcement, shall not operate as a waiver, nor shall any single or partial exercise of any right, power, or privilege preclude any other or further exercise of such right, power, or privilege.

**Exhibit E Part Two
Attachment C-1
Insurance & Indemnification**

INSURANCE: Prior to beginning any work, the Contractor shall obtain the following insurance coverage from an insurance company registered and licensed to do business in the State of Vermont and having an A.M. Best insurance rating of at least A-, financial size category VII or greater (www.ambest.com). The certificate of insurance coverage shall be documented on forms acceptable to the City. Compliance with minimum limits and coverage, evidenced by a certificate of insurance showing policies and carriers that are acceptable to the City, must be received prior to the Effective Date of the Contract. If this Contract extends to more than one year, evidence of continuing coverage must be submitted to the City on an annual basis. Copies of any insurance policies may be required.

The Contractor is responsible to verify and confirm in writing to the City that: (i) all subcontractors must comply with the same insurance requirements as the Contractor; (ii) all work activities related to the Contract shall meet minimum coverage and limits; and (iii) all coverage shall include adequate protection for activities involving hazardous materials.

No warranty is made that the coverage and limits listed herein are adequate to cover and protect the interests of the Contractor for the Contractor's operations. These are solely minimums that have been developed and must be met to protect the interests of the City.

A. Commercial General Liability: With respect to all operations performed by the Contractor, subcontractors, agents or workers, it is the Contractor's responsibility to ensure that commercial general liability insurance coverage, covering bodily injury and property damage, on an occurrence form, provides all major divisions of coverage including, but not limited to:

1. Premises Operations
2. Independent Contractors' Protective
3. Products and Completed Operations
4. Personal Injury Liability
5. Medical Expenses

Coverage limits shall not be less than:

- | | |
|----------------------------------|-------------|
| 1. General Aggregate | \$2,000,000 |
| 2. Products-Completed/Operations | \$2,000,000 |
| 3. Personal & Advertising Injury | \$1,000,000 |
| 4. Each Occurrence | \$1,000,000 |
| 5. Damage to Rented Premises | \$ 250,000 |
| 6. Med. Expense (Any one person) | \$ 5,000 |

B. Workers' Compensation/Employer Liability: With respect to all operations performed, the

Contractor shall carry workers' compensation insurance in accordance with the laws of the State of Vermont and ensure that all subcontractors carry the same workers' compensation insurance for all work performed by them under this contract. Minimum limits for Employer's Liability:

1. Bodily Injury by Accident: \$500,000 each accident
2. Bodily Injury by Disease: \$500,000 policy limit,
\$500,000 each employee

For contracts involving work of any kind or nature on Lake Champlain, Workers' Compensation/Employer's Liability policy shall include a Maritime Endorsement (USL&H).

C. Automobile Liability: The Contractor shall carry commercial automobile liability insurance covering all motor vehicles, including owned, non-owned and hired, used in connection with the Contract. Each policy shall provide coverage with a limit not less than: \$1,000,000 - Combined Single Limit for each occurrence.

D. Professional Liability/Errors & Omissions:

1. General: The Contractor shall carry appropriate professional liability insurance covering errors and omissions made during their performance of contractual duties with the following minimum limits:
 - (a) \$2,000,000 - Annual Aggregate/Policy Limit
 - (b) \$1,000,000 - Per Claim/Occurrence
2. Deductibles: The Contractor is responsible for any and all deductibles.
3. Coverage: The Contractor shall maintain continuous professional liability coverage for the period of the Contract and for a period of five years following substantial completion of construction.

E. [Special Coverages]

- a. Cyber liability, including privacy liability: \$1,000,000
- b. Technology Errors & Omissions Liability: \$1,000,000
- c. Builders' Risk or Installation Floater: Value of project or contract
- d. Garagekeeper's Liability - \$500,000 (minimum)
- e. Sexual Misconduct - \$1,000,000
- f. Employee Dishonesty Coverage, including third party (client) coverage
- g. Marine (protection and indemnity) liability - \$1,000,000
- h. Pollution Liability (Contractor's) – Included or \$1,000,000
- i. Valuable Papers & Records Insurance: The Contractor shall carry valuable papers

insurance in a form and amount sufficient to ensure the restoration or replacement of any plans, drawings, field notes, or other information or data relating to the work, whether supplied by the City or developed by the Contractor, sub-contractor, worker, or agent, in the event of loss, impairment, or destruction. Such coverage shall remain in force until the final plans as well as all related materials have been delivered by the Contractor to, and accepted by, the City. Unless otherwise provided, Valuable Papers and Records Insurance shall provide coverage on an “individual occurrence” basis with limits in the amount of one hundred and fifty thousand dollars (\$150,000) when the insured items are in the Contractor’s possession, and in the amount of forty thousand dollars (\$40,000) regardless of the physical location of the insured items.

F. Umbrella/Excess Liability:

1. \$__,000,000 Each Event Limit
2. \$__,000,000 General Aggregate Limit
3. Umbrella/Excess Liability is excess above Commercial General Liability, Automobile Liability, and Workers’ Compensation/Employer Liability.

All policies shall be endorsed to provide the City thirty (30) days’ notice of cancellation. Each policy (except workers compensation/employers’ liability and errors & omissions/professional liability) shall be endorsed to name the City and its officers, employees, agents, successors, and assigns as additional insureds on a primary, non-contributory basis. Each policy (except errors & omissions/professional liability) shall be endorsed to waive subrogation against the City.

INDEMNIFICATION: Contractor shall hold harmless, indemnify, and defend the City and its officers, employees, agents, successors, and assigns (collectively, the “Indemnitees”) from and against all claims, causes of action, lawsuits, damages, liabilities, liens, penalties, fines, and costs (including attorneys’ fees and costs) of every kind and nature whatsoever (collectively, “Claims”) arising from or relating to this Contract or Contractor’s operations hereunder, excepting any Claims arising from the City’s own gross negligence or willful misconduct. Contractor’s indemnification and defense obligations shall survive termination of this Contract, and Contractor shall ensure that any subcontract for work under this Contract requires the subcontractor to satisfy the same indemnification and defense obligations in favor of the Indemnitees.

ARTICLE VI. LIVABLE WAGES¹

21-80 Findings and purpose.

In enacting this article, the city council states the following findings and purposes:

- (a) Income from full-time work should be sufficient to meet an individual's basic needs;
- (b) The City of Burlington is committed to ensuring that its employees have an opportunity for a decent quality of life and are compensated such that they are not dependent on public assistance to meet their basic needs;
- (c) The City of Burlington is committed, through its contracts with vendors and provision of financial assistance, to encourage the private sector to pay its employees a livable wage and contribute to employee health care benefits;
- (d) The creation of jobs that pay livable wages promotes the prosperity and general welfare of the City of Burlington and its residents, increases consumer spending with local businesses, improves the economic welfare and security of affected employees and reduces expenditures for public assistance;
- (e) It is the intention of the city council in passing this article to provide a minimum level of compensation for employees of the City of Burlington and employees of entities that enter into service contracts or receive financial assistance from the City of Burlington.

(Ord. of 11-19-01; Ord. of 10-21-13)

21-81 Definitions.

As used in this article, the following terms shall be defined as follows:

- (a) *Contractor or vendor* is a person or entity that has a service contract with the City of Burlington where the total amount of the service contract or service contracts exceeds fifteen thousand dollars (\$15,000.00) for any twelve (12) month period, including any subcontractors of such contractor or vendor.
- (b) *Grantee* is a person or entity that is the recipient of financial assistance from the City of Burlington in the form of grants, including any contractors or subgrantees of the grantee, that exceed fifteen thousand dollars (\$15,000.00) for any twelve (12) month period.

(c) *Covered employer* means the City of Burlington, a contractor or vendor or a grantee as defined above. The primary contractor, vendor, or grantee shall be responsible for the compliance of each of its subcontractors (or of each subgrantee) that is a covered employer.

(d) *Covered employee* means an "employee" as defined below, who is employed by a "covered employer," subject to the following:

(1) An employee who is employed by a contractor or vendor is a "covered employee" during the period of time he or she expends on furnishing services under a service contract with the City of Burlington, notwithstanding that the employee may be a temporary or seasonal employee;

(2) An employee who is employed by a grantee who expends at least half of his or her time on activities funded by the City of Burlington is a "covered employee."

(e) *Designated accountability monitor* shall mean a nonprofit corporation which has established and maintains valid nonprofit status under Section [501\(c\)\(3\)](#) of the United States Internal Revenue Code of 1986, as amended, and that is independent of the parties it is monitoring.

(f) *Employee* means a person who is employed on a full-time or part-time regular basis. In addition, commencing with the next fiscal year, a seasonal or temporary employee of the City of Burlington who works ten (10) or more hours per week and has been employed by the City of Burlington for a period of four (4) years shall be considered a covered employee commencing in the fifth year of employment. "Employee" shall not refer to volunteers working without pay or for a nominal stipend, persons working in an approved apprenticeship program, persons who are hired for a prescribed period of six (6) months or less to fulfill the requirements to obtain a professional license as an attorney, persons who are hired through youth employment programs or student workers or interns participating in established educational internship programs.

(g) *Employer-assisted health care* means health care benefits provided by employers for employees (or employees and their dependents) at the employer's cost or at an employer contribution towards the purchase of such health care benefits, provided that the employer cost or contribution consists of at least one dollar and twenty cents (\$1.20) per hour. (Said amount shall be adjusted every two (2) years for inflation, by the chief administrative officer of the city.)

(h) *Livable wage* has the meaning set forth in Section [21-82](#).

(i) *Retaliation* shall mean the denial of any right guaranteed under this article, and any threat, discipline, discharge, demotion, suspension, reduction of hours, or any other adverse action against an employee for exercising any right guaranteed under this article. Retaliation shall also include coercion, intimidation, threat, harassment, or interference in any manner with any investigation, proceeding, or hearing under this article.

(j) *Service contract* means a contract primarily for the furnishing of services to the City of Burlington (as opposed to the purchasing or leasing of goods or property). A contract involving the furnishing of financial products, insurance products, or software, even if that contract also includes some support or other services related to the provision of the products, shall not be considered a service contract.

(Ord. of 11-19-01; Ord. of 10-21-13)

21-82 Livable wages required.

(a) Every covered employer shall pay each and every covered employee at least a livable wage no less than:

(1) For a covered employer that provides employer-assisted health care, the livable wage shall be at least fifteen dollars and thirty-five cents (\$15.35) per hour on the effective date of the amendments to this article.

(2) For a covered employer that does not provide employer-assisted health care, the livable wage shall be at least sixteen dollars and seventy-four cents (\$16.74) per hour on the effective date of the amendments to this article.

(3) Covered employees whose wage compensation consists of more or other than hourly wages, including, but not limited to, tips, commissions, flat fees or bonuses, shall be paid so that the total of all wage compensation will at least equal the livable wage as established under this article.

(b) The amount of the livable wage established in this section shall be adjusted by the chief administrative officer of the city as of July 1 of each year based upon a report of the Joint Fiscal Office of the State of Vermont that describes the basic needs budget for a single person but utilizes a model of two (2) adults residing in a two (2) bedroom living unit in an urban area with the moderate cost food plan. Should there be no such report from the Joint Fiscal Office, the chief administrative officer shall obtain and utilize a basic needs budget that applies a similar methodology. The livable wage rates derived from utilizing a model of two (2) adults residing in a two (2) bedroom living unit in an urban area with a moderate cost food plan shall not become effective until rates meet or exceed the 2010 posted livable wage rates. Prior to May 1 preceding any such adjustment and prior to

May 1 of each calendar year thereafter, the chief administrative officer will provide public notice of this adjustment by posting a written notice in a prominent place in City Hall by sending written notice to the city council and, in the case of covered employers that have requested individual notice and provided contact information to the chief administrative officer, by notice to each such covered employer. However, once a livable wage is applied to an individual employee, no reduction in that employee's pay rate is permissible due to this annual adjustment.

(c) Covered employers shall provide at least twelve (12) compensated days off per year for full-time covered employees, and a proportionate amount for part-time covered employees, for sick leave, vacation, personal, or combined time off leave.

(Ord. of 11-19-01; Ord. of 5-2-11; Ord. of 6-13-11; Ord. of 10-21-13)

21-83 Applicability.

(a) This article shall apply to any service contract or grant, as provided by this article that is awarded or entered into after the effective date of the article. After the effective date of the article, entering into any agreement or an extension, renewal or amendment of any contract or grant as defined herein shall be subject to compliance with this article.

(b) The requirements of this article shall apply during the term of any service contract subject to the article. Covered employers who receive grants shall comply with this article during the period of time the funds awarded by the City of Burlington are being expended by the covered employer.

(Ord. of 11-19-01; Ord. of 10-21-13)

21-84 Enforcement.

(a) Each service contract or grant covered by this article shall contain provisions requiring that the covered employer or grantee submit a written certification, under oath, during each year during the term of the service contract or grant, that the covered employer or grantee (including all of its subcontractors and subgrantees, if any) is in compliance with this article. The failure of a contract to contain such provisions does not excuse a covered employer from its obligations under this article. The covered employer shall agree to post a notice regarding the applicability of this section in any workplace or other location where employees or other persons contracted for employment are working. The covered employer shall agree to provide payroll records or other documentation for itself and any subcontractors or subgrantees, as deemed necessary by the chief

administrative officer of the City of Burlington, within ten (10) business days from receipt of the City of Burlington's request.

(b) The chief administrative officer of the City of Burlington may require that a covered employer submit proof of compliance with this article at any time, including but not limited to:

- (1) Verification of an individual employee's compensation;
- (2) Production of payroll, health insurance enrollment records, or other relevant documentation; or
- (3) Evidence of proper posting of notice.

If a covered employer is not able to provide that information within ten (10) business days of the request, the chief administrative officer may turn the matter over to the city attorney's office for further enforcement proceedings.

(c) The City of Burlington shall appoint a designated accountability monitor that shall have the authority:

- (1) To inform and educate employees of all applicable provisions of this article and other applicable laws, codes, and regulations;
- (2) To create a telephonic and electronic accountability system under this article that shall be available at all times to receive complaints under this article;
- (3) To establish and implement a system for processing employees' complaints under this article, including a system for investigating complaints and determining their initial credibility; and
- (4) To refer credible complaints to the city attorney's office for potential enforcement action under this article.

The designated accountability monitor shall forward to the City of Burlington all credible complaints of violations within ten (10) days of their receipt.

(d) Any covered employee who believes his or her covered employer is not complying with this article may file a complaint in writing with the city attorney's office within one (1) year after the alleged violation. The city attorney's office shall conduct an investigation of the complaint, during which it may require from the covered employer evidence such as may be required to determine whether the covered employer has been compliant, and shall make a finding of compliance or noncompliance within a reasonable time after receiving the

complaint. Prior to ordering any penalty provided in subsection (e), (f), or (g) of this section, the city attorney's office shall give notice to the covered employer. The covered employer may request a hearing within thirty (30) days of receipt of such notice. The hearing shall be conducted by a hearing officer appointed by the city attorney's office, who shall affirm or reverse the finding or the penalty based upon evidence presented by the city attorney's office and the covered employer.

(e) The City of Burlington shall have the right to modify, terminate and/or seek specific performance of any contract or grant with a covered employer from any court of competent jurisdiction, if the covered employer has not complied with this article.

(f) Any covered employer who violates this article may be barred from receiving a contract or grant from the city for a period up to two (2) years from the date of the finding of violation.

(g) A violation of this article shall be a civil offense subject to a civil penalty of from two hundred dollars (\$200.00) to five hundred dollars (\$500.00). All law enforcement officers and any other duly authorized municipal officials are authorized to issue a municipal complaint for a violation of this article. Each day any covered employee is not compensated as required by this article shall constitute a separate violation.

(h) If a complaint is received that implicates any City of Burlington employee in a possible violation of this article, that complaint will be handled through the City's personnel procedures, not through the process outlined in this article.

(i) Any covered employee aggrieved by a violation of this article may bring a civil action in a court of competent jurisdiction against the covered employer within two (2) years after discovery of the alleged violation. The court may award any covered employee who files suit pursuant to this section, as to the relevant period of time, the following:

(1) The difference between the livable wage required under this article and the amount actually paid to the covered employee;

(2) Equitable payment for any compensated days off that were unlawfully denied or were not properly compensated;

(3) Liquidated damages in an amount equal to the amount of back wages and/or compensated days off unlawfully withheld or fifty dollars (\$50.00) for each employee or person whose rights under this article were violated for each day that the violation occurred or continued, whichever is greater;

(4) Reinstatement in employment and/or injunctive relief; and

(5) Reasonable attorneys' fees and costs.

(j) It shall be unlawful for an employer or any other person to interfere with, restrain, or deny the exercise of, or the attempt to exercise, any right protected under this article. No person shall engage in retaliation against an employee or threaten to do so because such employee has exercised rights or is planning to exercise rights protected under this article or has cooperated in any investigation conducted pursuant to this article.

(Ord. of 11-19-01; Ord. of 2-17-04; Ord. of 5-2-11; Ord. of 10-21-13)

21-85 Other provisions.

(a) No covered employer shall reduce the compensation, wages, fringe benefits or leave available to any covered employee in order to pay the livable wage required by this article. Any action in violation of this subsection shall be deemed a violation of this article subject to the remedies of Section [21-84](#).

(b) No covered employer with a current contract, as of the effective date of this provision, with the City of Burlington for the use of property located at the Burlington International Airport may reduce, during the term of that contract, the wages of a covered employee below the livable wage as a result of amendments to this article.

(c) Where pursuant to a contract for services with the city, the contractor or subcontractor incurs a contractual obligation to pay its employees certain wage rates, in no case except as stated in subsection (d) of this section, shall the wage rates paid pursuant to that contract be less than the minimum livable wage paid pursuant to this article.

(d) Notwithstanding subsection (c) of this section, where employees are represented by a bargaining unit or labor union pursuant to rights conferred by state or federal law and a collective bargaining labor agreement is in effect governing the terms and conditions of employment of those employees, this chapter shall not apply to those employees, and the collective bargaining labor agreement shall control.

(e) Covered employers shall inform employees making less than twelve dollars (\$12.00) per hour of their possible right to the Earned Income Tax Credit under federal and state law.

(f) The chief administrative officer of the city shall have the authority to promulgate rules as necessary to administer the provisions of this article, which shall become effective upon approval by the city council.

(Ord. of 11-19-01; Ord. of 10-21-13)

21-86 Exemptions.

An exemption from any requirement of this article may be requested for a period not to exceed two (2) years:

- (a) By a covered employer where payment of the livable wage would cause substantial economic hardship;
and
- (b) By the City of Burlington where application of this article to a particular contract or grant is found to violate specific state or federal statutory, regulatory or constitutional provisions or where granting the exemption would be in the best interests of the City.

A covered employer or grantee granted an exemption under this section may reapply for an exemption upon the expiration of the exemption. Requests for exemption may be granted by majority vote of the city council. All requests for exemption shall be submitted to the chief administrative officer. The finance committee of the City of Burlington shall first consider such request and make a recommendation to the city council. The decision of the city council shall be final.

(Ord. of 11-19-01; Ord. of 10-21-13)

21-87 Severability.

If any part or parts or application of any part of this article is held invalid, such holding shall not affect the validity of the remaining parts of this article.

(Ord. of 11-19-01; Ord. of 10-21-13)

21-88 Annual reporting.

On or before April 15 of each year, the city attorney's office shall submit a report to the city council that provides the following information:

- (a) A list of all covered employers broken down by department;
- (b) A list of all covered employers whose service contract did not contain the language required by this article;
and
- (c) All complaints filed and investigated by the city attorney's office and the results of such investigation.

(Ord. of 10-21-13)

21-89 Effective date.

The amendments to this article shall take effect on January 1, 2014, and shall not be retroactively applied.

(Ord. of 10-21-13)

Certification of Agreement to Comply with the City of Burlington’s Livable Wage Ordinance

I, _____, on behalf of _____ (“the Contractor”), in connection with a contract for _____

services to be provided to the City of Burlington (“the City”), hereby certify, under oath, that the Contractor (and any of its subcontractors or subgrantees under this contract) shall comply with the City’s Livable Wage Ordinance (“LWO”), B.C.O. 21-80 et seq., and that:

- (1) The Contractor shall pay all “covered employees” as defined by the LWO (including covered employees of subcontractors or subgrantees) a livable wage (as determined, or adjusted, annually by the City’s chief administrative officer), and shall provide required paid time off for the term of the contract (*or the duration of the contracted project*);
 - (a) Full-time employees are entitled to 12 days of paid time off per year; and
 - (b) Part-time employees are entitled to 12 days of paid time off per year on a prorated basis;
 - (c) For a covered employer that provides employer assisted health care, the livable wage shall be at least \$17.96 per hour; and
 - (d) For a covered employer that does not provide employer assisted health care, the livable wage shall be at least \$19.15 per hour.
- (2) The Contractor shall post a notice regarding the applicability of the LWO in the workplace or in other locations where covered employees normally work, and where such notice can be readily seen;
- (3) Upon request of the City’s chief administrative officer, the Contractor, for itself and, as applicable, for any of its subcontractors or subgrantees, shall provide payroll records, health insurance enrollment records, and other relevant documentation, as deemed necessary by the chief administrative officer, within ten (10) business days from receipt of the City’s request;
- (4) The Contractor shall cooperate in any investigation conducted pursuant to the LWO by the City’s designated accountability monitors or the City’s Office of City Attorney & Corporate Counsel;
- (5) The Contractor shall not retaliate, nor allow any of its subcontractors or subgrantees to retaliate, against an employee or other person because such employee or person has exercised rights or is planning to exercise rights protected under the LWO, or has cooperated in an investigation conducted pursuant to the LWO;
- (6) The Contractor is required to insert in all subcontracts the requirements of the LWO. The Contractor is liable for violations of the LWO committed by its covered subcontractors.

Date: _____

By: _____

Contractor, or its duly authorized agent

Subscribed and sworn to before me:

Date: _____

Notary Public

ARTICLE VII. OUTSOURCING

21-90 Policy.

It is the policy of the City of Burlington to let service contracts to contractors, subcontractors and vendors who perform work in the United States.

(Ord. of 11-21-05/12-21-05)

21-91 Definitions.

(a) *Contractor or vendor.* A person or entity that has a contract with the City of Burlington primarily for the furnishing of services (as opposed to the purchasing of goods), including any subcontractors of such contractor or vendor.

(b) *Government funded project.* Any contract for services which involves any city funds and the total amount of the contract is fifty thousand dollars (\$50,000.00) or more. Burlington School Department contracts shall not be considered government funded projects under this article.

(c) *Outsourcing.* The assigning or reassigning, directly, or indirectly through subcontracting, of services under a government funded project to workers performing the work outside of the United States.

(Ord. of 11-21-05/12-21-05)

21-92 Implementation.

(a) No contract for a government funded project shall be let to any contractor, subcontractor, or vendor who is outsourcing, or causing the work to be performed outside of the United States or Canada.

(b) Prior to the commencement of work on a government funded project a contractor, subcontractor or vendor shall provide written certification that the services provided under the contract will be performed in the United States or Canada.

(Ord. of 11-21-05/12-21-05)

21-93 Exemption.

An exemption from requirements of this article may be authorized by the chief administrative officer based upon a determination that the services to be performed for the government funded project are not available in the United States or Canada at a reasonable cost. Any such exemption decision by the chief administrative officer

shall be reported to the board of finance in writing within five (5) days. The board of finance may, if it should vote to do so, override the exemption decision if such vote occurs within fourteen (14) days of the date of the chief administrative officer's communication to such board.

(Ord. of 11-21-05/12-21-05)

21-94 Enforcement.

(a) Any contractor, subcontractor or vendor who files false or materially misleading information in connection with an application, certification or request for information pursuant to the provisions of this article or outsources work on a government funded project shall be deemed to be in violation of this article.

(b) A violation of this article shall be a civil offense subject to a civil penalty of from one hundred dollars (\$100.00) to five hundred (\$500.00). All law enforcement officers and any other duly authorized municipal officials are authorized to issue a municipal complaint for a violation of this article. Each day any violation of any provision of this article shall continue shall constitute a separate violation.

(c) The City of Burlington shall have the right to modify, terminate and or seek specific performance of any contract for a government funded project if the contractor, subcontractor or vendor has not complied with this article.

(Ord. of 11-21-05/12-21-05)

21-95—21-99 Reserved.

Certification of Compliance with the City of Burlington's Outsourcing Ordinance

I, _____, on behalf of

_____ (Contractor) and in connection with the

_____ [project], hereby certify under oath that (1) Contractor shall comply with the City of Burlington's Outsourcing Ordinance (Ordinance §§ 21-90 – 21-93); (2) as a condition of entering into this contract or grant, Contractor confirms that the services provided under the above-referenced contract will be performed in the United States or Canada.

Dated at _____, Vermont this ____ day of _____, 20__.

By: _____
Duly Authorized Agent

Subscribed and sworn to before me: _____
Notary

ARTICLE VIII. UNION DETERRENCE

21-100 Policy.

It is the policy of the City of Burlington to limit letting contracts to organizations that provide union deterrence services to other companies.

(Ord. of 3-27-06/4-26-06)

21-101 Definitions.

(a) *Contractor or vendor.* A person or entity that has a contract with the City of Burlington primarily for the furnishing of services (as opposed to the purchasing of goods), including any subcontractors of such contractor or vendor.

(b) *Government funded project.* Any contract for services which involves any City funds and the total amount of the contract is fifteen thousand dollars (\$15,000.00) or more. Burlington School Department contracts shall not be considered government funded projects under this article.

(c) *Union deterrence services.* Services provided by a contractor, subcontractor or vendor that are not restricted to advice concerning what activities by an employer are prohibited and permitted by applicable laws and regulations, but extend beyond such legal advice to encouraging an employer to do any of the following:

- 1) Hold captive audience, (i.e., mandatory) meetings with employees encouraging employees to vote against the union;
- 2) Have supervisors force workers to meet individually with them to discuss the union;
- 3) Imply to employees, whether through written or oral communication, that their employer may have to shut down or lay people off if the union wins the election;
- 4) Discipline or fire workers for union activity;
- 5) Train managers on how to dissuade employees from supporting the union.

(d) *Substantial portion of income.* For the purposes of this article, substantial portion of income shall mean greater than ten (10) percent of annual gross revenues or one hundred thousand dollars (\$100,000.00), whichever is less.

(Ord. of 3-27-06/4-26-06)

21-102 Implementation.

- (a) No contract for a government funded project shall be let to any contractor, subcontractor, or vendor who
- 1) Advises or has advised an employer to conduct any illegal activity in its dealings with a union.
 - 2) Advertises union deterrence services as specialty services;
 - 3) Earns a substantial portion of its income by providing union deterrence services to other companies in order to defeat union organizing efforts.
- (b) Prior to the commencement of work on a government funded project a contractor, subcontractor or vendor shall provide written certification that it has not advised the conduct of any illegal activity, it does not currently, nor will it over the life of the contract provide union deterrence services in violation of this article.

(Ord. of 3-27-06/4-26-06)

21-103 Enforcement.

- (a) Any contractor, subcontractor or vendor who files false or materially misleading information in connection with an application, certification or request for information pursuant to the provisions of this article or provided union deterrence services during the life of a contract for a government funded project shall be deemed to be in violation of this article.
- (b) The City of Burlington shall have the right to modify, terminate and or seek specific performance of any contract for a government funded project if the contractor, subcontractor or vendor has not complied with this article.

(Ord. of 3-27-06/4-26-06)

21-104—21-110 Reserved.

Certification of Compliance with the City of Burlington's
Union Deterrence Ordinance

I, _____, on behalf of _____
(Contractor) and in connection with _____ (City
contract/project/grant), hereby certify under oath that _____
(Contractor) has not advised the conduct of any illegal activity, and it does not currently, nor will
it over the life of the contract advertise or provide union deterrence services in violation of the
City's union deterrence ordinance.

Dated at _____, Vermont this ____ day of _____, 20__.

By: _____
Duly Authorized Agent