# CITY OF BURLINGTON REQUEST FOR PROPOSALS

Issued: May 20th 2022

**Due: June 7th 2022** 

# I. PROJECT BACKGROUND

The City of Burlington is seeking proposals from qualified contractors to make repairs to the Marketplace Parking Garage in Burlington, VT. The Marketplace Garage is a 1975 post-tension parking facility with 345 parking spaces.

# II. SCOPE OF WORK

The Project consists of horizontal concrete patches, vertical column concrete patch, removal of overhead loose concrete and the application of a high performance coating, removing and resetting of the exterior brick façade near stair A, extensive beam repairs and extensive spandrel beam repairs. The anticipated project schedule is to start construction about July 2022 and complete construction about October 2022.

# III. RESPONSE FORMAT

Sealed Bids for the construction of the Proposed Marketplace Parking Garage – 2022 Repairs will ONLY be received and accepted via online electronic bid service through <a href="https://www.questcdn.com">https://www.questcdn.com</a> until 2:00 p.m. local time on Tuesday, June 7, 2022 at such time proposals will be opened publicly online. Anyone interested in witnessing the public bid opening over the phone or internet is to contact Hoyle Tanner for a link to the open conference call. Please contact Donna Akerley, <a href="mailto:dakerley@hoyletanner.com">dakerley@hoyletanner.com</a>, 603-460-4934 for meeting information at least five (5) days prior to the scheduled bid opening. The 5-day lead time is required in case the bid opening time changes.

Please see exhibit A: Advertisement for bid

Bids shall be on a unit price basis, as indicated in the Bid Form. All technical questions regarding this project shall be directed by email to Ryan McMullen at <a href="mailto:rmcmullen@hoyletanner.com">rmcmullen@hoyletanner.com</a>.

# IV. CONTRACTORS SELECTION

Proposals will be reviewed and evaluated by City staff and Hoyle Tanner based on the information provided in the proposal. The City reserves the right, where it may serve the City's best interest, to request additional information or clarifications. The City reserves the exclusive right to select or reject a Contractor that it deems to be in its best interest to do so. The City will award the project

to the most advantageous proposal from a responsible and responsive bidder. All proposals shall be in full compliance with all applicable requirements of Federal, State and local laws. The City reserves the right to further negotiate the price proposal.

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. EXHIBITS

Exhibit A: Advertisement for Bid

Exhibit B: Marketplace Garage 2022 Repairs Bid Form

**Exhibit C: Technical Specifications** 

Exhibit D: Marketplace Garage Repair Plans

Exhibit E: Draft Contract

Exhibit F: Burlington Standard Contract Conditions

Exhibit G: Burlington Livable Wage Ordinance Certification Exhibit H: Burlington Outsourcing Ordinance Certification

Exhibit I: Burlington Union Deterrence Ordinance Certification

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

# VI. 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 F in this RFP). The certificate of insurance coverage shall be documented on forms acceptable to the City.

# VII. 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 F) and the attached Draft Agreement.

# VIII. <u>LIMITATIONS OF LIABILITY</u>

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

# IX. 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.

# X. 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.

# XI. 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.

# XII. 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.

# XIII. 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.

# XIV. 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.

# XV. 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. Contractor 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.

# Exhibit A: Advertisement for Bid

# SECTION 00111 ADVERTISEMENT FOR BIDS

Proposed Marketplace Parking Garage – 2022 Repairs Burlington, Vermont

Sealed Bids for the construction of the Proposed Marketplace Parking Garage – 2022 Repairs will ONLY be received and accepted via online electronic bid service through <a href="https://www.questcdn.com">https://www.questcdn.com</a> until **2:00 p.m.** local time on **Tuesday, June 7, 2022** at such time will be opened publicly online. Anyone interested in witnessing the public bid opening over the phone or internet is to contact Hoyle Tanner for a link to the open conference call. Please contact **Donna Akerley**, <a href="mailto:dakerley@hoyletanner.com">dakerley@hoyletanner.com</a>, **603-460-4934** for meeting information at least five (5) days prior to the scheduled bid opening. The 5-day lead time is required in case the bid opening time changes.

The Project consists of horizontal concrete patches, vertical column concrete patch, removal of overhead loose concrete and the application of a high performance coating, removing and resetting of the exterior brick façade near stair A, extensive beam repairs and extensive spandrel beam repairs. The engineer's estimate for the work is between \$300,000 and \$500,000. The anticipated project schedule is to start construction about July 2022 and complete construction about October 2022.

Bids shall be on a unit price basis, as indicated in the Bid Form. All technical questions regarding this project shall be directed by email to Ryan McMullen at rmcmullen@hoyletanner.com.

Complete digital Bidding Documents may be obtained after May 20, 2022 at the following website: <a href="https://www.questcdn.com">https://www.questcdn.com</a>. You must set up your free membership under the "Log In" tab before downloading documents. If you need assistance setting up your free membership registration, downloading, or working with this digital project information, please contact QuestCDN.com at (952) 233-1632 or <a href="mailto:info@questcdn.com">info@questcdn.com</a>. You may download the digital Bidding Documents for \$50 by selecting Request on the QuestCDN Page, input the eBidDoc# 8214518.

To bid on this project and be considered a plan holder the Bidder MUST download the digital project bidding documents from QuestCDN and pay the download delivery fee. Neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including Addenda if any, obtained from sources other than QuestCDN.

Bidder shall submit a bid via online electronic bid service through <a href="https://www.questcdn.com">https://www.questcdn.com</a> (See Instructions to Bidders). A non-mandatory pre-bid conference will be held at 1:00 p.m. local time on Tuesday, May 31, 2022 at the project site. Therefore, all interested bidders are encouraged to attend in order to prepare acceptable bid submissions.

Owner: City of Burlington

By: Matt Fitzpatrick, Parking Facilities Manager

# Exhibit B: Marketplace Garage 2022 Repairs Bid Form

ITEM	ITEM DESCRIPTION AND UNIT		ESTIMATED	UNIT PRICE	TOTAL PRICE
NO.	PRICE BID WRITTEN IN WORDS	UNIT	QUANTITY	DOLLARS CTS	DOLLARS CTS
011000.01	MOBILIZATION/DEMOBILIZATION, for the unit price per LS of:	Lump Sum	1		
	Dollars				
	(words)				
	andCents.				
012000.01	TRAFFIC CONTROL, for the unit price per LS of:	Lump Sum	1		
	Dollars (words)				
	andCents.				
030130.01	HORIZONTAL CONCRETE PATCH REPAIR, for the unit price per SF of:	Square Foot	2,000		
	Dollars (words)				
	andCents.				
030130.11	VERTICAL CONCRETE PATCH REPAIR, for the unit price per SF of:	Square Foot	5		
	Dollars (words)				
	andCents.				
034200.01	ELASTOMERIC BEARING PADS, for the unit price per EA of:	Each	2		
	Dollars				
	(words)				
	andCents.				
039301.01	EXTENSIVE STRUCTURAL BEAM REPAIR, for the unit price per EA of:	Each	2		
	Dollars (words)				
	and Cents.				

ITEM NO.	ITEM DESCRIPTION AND UNIT PRICE BID WRITTEN IN WORDS	UNIT	ESTIMATED QUANTITY	<u>UNIT PRICE</u> DOLLARS CTS	TOTAL PRICE DOLLARS CTS
039301.02	EXTENSIVE SPANDREL BEAM REPAIR, for the unit price per EA of:	Each	2		
	Dollars (words)				
	and Cents.				
042200.01	REMOVAL & RESET BRICK FAÇADE, for the unit price per SF of:	Square Foot	300		
	Dollars (words)				
	and Cents.				
079106.01	EXPANSION JOINT SEAL REPLACEMENT, for the unit price per LF of:	Linear Foot	12		
	Dollars (words)				
	and Cents.				
099600.01	HIGH PERFORMANCE COATINGS, for the unit price per SF of:	Square Foot	100		
	Dollars (words)				
	andCents.				
221009.01	PVC PIPING, COUPLINGS AND FITTINGS 3", for the unit price per EA of:	Each	1		
	Dollars (words)				
	andCents.				

Exhibit C: Technical Specifications

# SECTION 011000 MOBILIZATION/DEMOBILIZATION

# PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. This work shall consist of preparatory work and operations including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to and from the project site; for the establishment and removal of all Contractor's field offices, buildings, and other facilities necessary for work on the project; and for all other work and operations that must be performed or costs incurred prior to beginning work and upon completion of Contract items. It shall also include compensation for any costs associated with demobilization, project clean up, establishment of vegetation, and completion of all work that is not associated with acceptance of a specific pay item.

# 1.02 RELATED SECTIONS

A. Division 1 - General Requirements.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

PART 4 MEASUREMENT AND PAYMENT

### 4.01 MEASUREMENT

A. The quantity of Mobilization/Demobilization will be measured for payment at the Contract unit price on a lump sum basis.

#### 4.02 PAYMENT

A. The accepted quantity of Mobilization/Demobilization will be paid for at the Contract lump sum price. Payment will be full compensation for performing the work specified and for furnishing all labor, tools, materials, equipment, and incidentals necessary to complete the work will be paid for at the Contract unit price per lump sum. Partial payments will be made as follows: 50% partial payment with the first payment request for this garage, 40% partial payment following the completion of 20% of the contract, excluding mobilization/demobilization, 10% will be made after the final acceptance date with the final payment request.

Pay Item Pay Unit 011000.01 Lump Sum

# SECTION 012000 TRAFFIC CONTROL

# PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. This work shall consist of establishing and maintaining traffic control measures to protect the traveling public (including bicyclists and pedestrians) and construction operations.

# 1.02 RELATED SECTIONS

- A. Contract Drawings
- B. Section 024119 Selective Demolition
- C. Division 1- General Requirements

# 1.03 REFERENCES

A. Manual on Uniform Traffic Control Devices (MUTCD)

#### 1.04 SUBMITTALS

A. Submit in accordance with Section 01300 - Submittals

Working Drawings: Provide detailed sign package information such as location, type, size and color. Provide typical work zone layout to show delineation between work zones and travel ways. Plans shall indicate the location of spaces that will be taken out of service during each phase of construction. Plans shall be detailed such that traffic patterns are easily identifiable to garage patrons (including entrance/exit directions). Plans shall be submitted a minimum of 1 week prior to the start of each construction phase and will be subject to review from the Owner and Engineer.

# 1.05 QUALITY ASSURANCE

A. Not Used.

# 1.06 DELIVERY, STORAGE, AND HANDLING

A. Traffic control devices shall be kept clean so they are clearly visible at all times.

# 1.07 COORDINATION

A. Contractor shall coordinate all traffic control including but not limited to changes of traffic pattern, reduction of available parking stalls, detours, etc. with the Design Engineer prior to commencement of work.

# PART 2 PRODUCTS

#### 2.01 TRAFFIC CONTROL DEVICES

- A. All traffic control devices shall conform to the requirements of the Contract and the latest edition of the MUTCD.
- B. All signs shall be composed of the same retroreflective material. The Contractor shall conduct inspections of both daytime and nighttime operations daily in order to ensure proper placement and operation of all traffic control devices.

# PART 3 EXECUTION

# 3.01 FIELD ADJUSTMENTS

- A. The traffic control layout shall be adjusted in the field as directed by the Engineer to provide for maximum visibility and usefulness.
- B. Contractor may propose field changes to the traffic control layout with approval of the Engineer.

#### 3.02 PARKING SPACE CLOSURE LIMITS

A. The Contractor shall conduct the work to minimize the number of parking spaces taken out of service that includes areas for material storage, temporary traffic patterns, and contractor vehicles and equipment. At no time shall the Contractor take more than 75 spaces out of service at a time.

# PART 4 MEASUREMENT AND PAYMENT

# 4.01 MEASUREMENT

A. The quantity of Traffic Control to be measured for payment will be on a lump sum basis for providing traffic control in the complete and accepted work.

# 4.02 PAYMENT

A. The accepted quantity of Traffic Control will be paid for at the Contract lump sum price. Payment will be full compensation for preparing, implementing, inspecting, maintaining, modifying, and removing the applicable traffic control plan and specified traffic control devices, and for furnishing all labor, tools, materials, equipment, and incidentals necessary to complete the work. Partial payments will be made as follows: The first 25% of the Contract lump sum price will be paid upon the complete installation of the traffic control devices prior to the start of work. The remaining 75% of the Contract lump sum price will be paid on a prorated basis for the estimated duration of the Contract work remaining. No payment shall be made without approval of the working drawings.

Pay Item 012000.01

Pay Unit Lump Sum

# SECTION 024119 SELECTIVE DEMOLITION

# PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Demolition of selective portions of the existing structure for the completion of Work under this Contract as indicated on the Contract Drawings.
- B. Maintain storm drainage system protection.

# 1.02 RELATED SECTIONS

- A. Contract Drawings
- B. Section 012000 Traffic Control
- C. Section 030130 Maintenance of Concrete
- D. Section 034200 Elastomeric Bearing Pads
- E. Section 039301 Extensive Structural Beam Repair
- F. Section 042200 Concrete Unit Masonry
- G. Section 099600 High Performance Coatings
- H. Division 1 General Requirements.

#### 1.03 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Owner.
- C. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.
- E. Debris: Existing items including but not limited to, spalled concrete, garbage, pigeon droppings, sediment, etc.

#### 1.04 REFERENCES

A. Not Used.

### 1.05 MATERIALS OWNERSHIP

A. Unless otherwise indicated, demolition waste becomes property of Contractor.

- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
  - 1. Carefully remove and salvage in a manner to prevent damage and promptly return to Owner.

# 1.06 SUBMITTALS

- A. Submit in accordance with Section 01300 Submittals.
- B. Proposed Protection Measures: Submit report, including drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control, chemical exposure and for noise control. Indicate proposed locations and construction of barriers. See Section 3.02 for additional requirements
- C. Schedule indicating proposed sequence of operations for selective demolition Work.
- D. Where applicable for specified items submit shoring plan and calculations.
- E. Product Data: Submit Manufacturer's product literature for pressure washing including equipment and detergent if applicable as well as drain protection devices.

# 1.07 PROJECT CONDITIONS

- A. Workers performing concrete removal on PT members (e.g. slab and beams) shall be PTI Level 1 certified. The supervisor of work shall be PTI Level 2 certified.
- B. Conditions existing at time of inspection for bidding purposes will be maintained by Owner as far as practicable.
- C. Storage or sale of removed items on-site is not permitted.
- D. Notify Design Engineer of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- E. Damages: Promptly repair damages caused to adjacent facilities by demolition Work at no cost to Owner.
- F. Hazardous Materials: Hypodermic needles may be present in debris removal.
  - 1. If suspected hazardous materials are encountered, do not disturb; immediately notify the Owner and the Resident Engineer. Hazardous materials will be removed by Owner.
  - 2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.

- 3. Owner will provide material safety data sheets for suspected hazardous materials that are known to be present in buildings and structures to be selectively demolished because of building operations or processes performed there.
- G. Traffic: Phase selective demolition operations and debris removal in a manner to maintain existing traffic patterns. See Technical Specification section 012000 for additional traffic requirements.
- H. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

## 1.08 TESTING

A. Not Used.

#### 1.09 WARRANTY

A. Not used.

# PART 2 PRODUCTS

# 2.01 DRAIN PROTECTION

- A. Contractor shall adequately protect the existing drain system from debris runoff during construction using filters or other approved products:
  - 1. Marsh Mat Storm Inlet Filter.
  - 2. Or approved equal.

Payment shall be considered subsidiary to Item 011000.01 Mobilization/Demobilization.

#### PART 3 EXECUTION

# 3.01 EXAMINATION

- A. Prior to commencement of selective demolition Work, inspect areas in which Work will be performed. At Contractor's option, photograph existing conditions of structure surfaces, equipment or to surrounding properties which could be misconstrued as damage resulting from selective demolition Work; file with the Design Engineer prior to starting Work.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Protect storm drain system from infiltration of construction debris. Maintain filters in clean / operational conditions. Remove all filters at end of construction work in respective drain area.
- D. Existing electrical conduit and wiring is located with the slabs beams, and columns. Contractor shall use extreme caution not to damage the conduit and wiring.

- E. Contractor shall locate Post-Tensioning (PT) strand locations by non-destructive means and pre-mark on slabs and beams where demolition work in the form of chipping or drilling is to occur. Contractor shall coordinate to ensure no drilling or fastening occurs within 6" of strand locations.
- F. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to the Design Engineer.

# 3.02 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with and protection of pedestrian and vehicular traffic both on the level being worked on and the levels above or below that may be impacted.
- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent facilities or Work to remain.
- C. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of existing to remain finished or Work to remain, and to prevent unexpected or uncontrolled movement or collapse of element being demolished.
- D. Protection: Provide temporary barricades and other forms of protection as required to protect the general public from injury due to selective demolition Work.
  - 1. Protect from damage to existing to remain finished Work that is to remain in place and becomes exposed during demolition operations.
  - 2. Construct temporary dustproof partitions where required to separate areas where noisy or extensive dirt or dust operations are performed. Equip partitions with dustproof doors and security locks if required.
  - 3. Remove protection at completion of Work.
  - 4. Post warning signs which are clearly visible.

# 3.03 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
  - 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, to minimize disturbance of adjacent surfaces. Use of chipping hammers heavier than nominal 15-pound class are not permitted. Temporarily cover openings to remain.

- 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
- 4. For steel members, do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
- 5. Maintain adequate ventilation when using cutting torches.
- 6. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
- 7. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- 8. Dispose of demolished items and materials promptly
- B. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Design Engineer, items may be removed to a suitable, protected storage location during selective demolition, cleaned and reinstalled in their original locations after selective demolition operations are complete.
- C. Contractor shall use extreme caution when removing concrete near PT strands and complete chipping in accordance with PT standard methods, shaving the concrete away from strand locations so as to avoid damage to the strands and their sheathing. Note: depth of strand varies, field verify.
- D. If strands are damaged during construction or found with torn sheathing or with corrosion notify the Resident Engineer immediately. If strands are damaged or ruptured due to contractor error they shall be replaced at the Contractor's expense.

# 3.04 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site.
  - 1. Do not allow demolished materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

#### PART 4 **MEASUREMENT AND PAYMENT**

# 4.01 MEASUREMENT

Selective Demolition shall be subsidiary to other items. A.

#### 4.02 **PAYMENT**

A. Selective Demolition shall be subsidiary to other items.

# SECTION 030130 MAINTENANCE OF CONCRETE

# PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. This section describes the patching of horizontal, vertical and overhead surfaces.
- B. Repair existing concrete as shown in the Contract Drawings.
  - 1. Remove deteriorated concrete and subsequently patch with Epoxy Mortar or non-shrink cementitious grout.

### 1.02 RELATED SECTIONS

- A. Contract Drawings.
- B. Section 036423 Pressure Grouting
- C. Section 039301 Extensive Structural Beam Repair
- D. Division 1 General Requirements

# 1.03 REFERENCES

# A. ASTM International (ASTM):

# Repair Mortar:

- 1. C39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
- 2. C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-In. Cube Specimens).
- 3. C138 Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete.
- 4. C191 Standard Test Methods for Time of Setting of Hydraulic Cement by Vicat Needle.
- 5. C348 Standard Test Method for Flexural Strength of Hydraulic-Cement Mortars.
- 6. C496 Standard Test Method for Splitting Tensile Strength of Cylindrical Concrete Specimens.
- 7. C666 Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing (Procedure A).
- 8. C672 Standard Test Method for Scaling Resistance of Concrete Surfaces Exposed to Deicing Chemicals.
- 9. C928 Standard Specification for Packaged, Dry, Rapid-Hardening Cementitious Materials for concrete repairs.
- 10. C1202 Standard Test Method for Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration.

Grout:

- 1. C827 Standard Test Method for Change in Height at Early Ages of Cylindrical Specimens from Cementitious Mixtures.
- 2. C1107 Standard Specification for Packaged Dry, Hydraulic Cement Grout (Nonshrink).

# 1.04 SUBMITTALS

- A. General: Submit in accordance with Section 01300 Submittals.
- B. Product Data: Submit Manufacturer's product literature and installation instructions. Literature to include: Product Data Sheets, and appropriate Material Safety Data Sheets (MSDS).

# 1.05 QUALITY ASSURANCE

A. Reference Section 01400 – Quality Control.

# 1.06 QUALIFICATIONS

- A. Manufacturer:
  - Company specializing in manufacturing products specified in this Section with minimum of five years documented experience. The manufacturer of the specified product shall be ISO 9001/9002 certified and have in existence a recognized ongoing quality assurance program independently audited on a regular basis

#### B. Contractor:

 Minimum three years documented experience in Work of this Section and approved by Manufacturer. Contractor shall maintain qualified personnel who have received product training by a manufacturer's representative.

# 1.07 DELIVERY, STORAGE AND HANDLING

- A. Reference Section 01500 Construction Facilities and Temporary Controls.
- B. Deliver materials to the project site in original, factory sealed, unopened containers/packages bearing the Manufacturer's name and label intact and legible with the following information:
  - 1. Name of material.
  - 2. Manufacturer's stock number and date of manufacture.
  - 3. Material safety data sheet.
- C. Comply with manufacturer's written instructions for minimum and maximum temperature requirements and other conditions for storage.
- D. Reference Section 01600 Material and Equipment.

#### 1.09 WARRANTY

A. Provide a written warranty from the manufacturer against defects of materials for a period of one (1) year, beginning with the dated of substantial completion of the project.

# PART 2 PRODUCTS

### 2.01 MANUFACTURERS

A Source Limitations: For repair products, obtain each color, grade finish, type and variety of product from single source and from single manufacturer with resources to provide products of consistent quality in appearance and physical properties.

#### 2.02 BONDING AGENTS

- A. Follow Manufacturer's Recommendations.
- B. Epoxy Mortar
  - a. Prime the prepared concrete with neat epoxy using brush and or rollers making sure its worked into the pores of the concrete.
- C. Non-shrink cementitious grout
  - a. Mortar Scrub Coat: Mix consisting of 1 part Portland cement and 1 part fine aggregate complying with ASTM C 144 except 100 percent passing a No. 16 (1.18 mm) sieve. For use at non-product specific repair locations only.

# 2.03 EPOXY MORTAR FOR HORIZONTAL REPAIR

- A. Repair materials shall be non-metallic and contain no chloride.
  - a. Sikadur 22, Lo-Mod FS
  - b. Or Approved Equal.

# 2.04 NON-SHRINK CEMENTITIOUS GROUT FOR HORIZONTAL REPAIR

- A. Repair materials shall be non-metallic and contain no chloride.
- B. Normal Set time
  - a. Sika Ouick 1000
  - b. Euclid EucoRepair V100
  - c. Or Approved Equal.
- C. Rapid Set
  - a. Master Emaco T1060
  - b. Or Approved Equal.

# 2.05 NON-SHRINK CEMENTITIOUS GROUT FOR VERTICAL OR OVERHEAD REPAIR

- A. Repair materials shall be non-metallic and contain no chloride.
- B. Normal Set time
  - a. SikaTop 123

- b. Master Emaco W 1501 HCR
- c. Euclid Dural Top Gel
- d. Or Approved Equal.
- C. Rapid Set
  - a. SikaQuick VOH
  - b. Master Emaco N 423RS
  - c. Euclid Duraltop Gel
  - d. Or Approved Equal.

# 2.06 CORROSION INHIBITING ADMIXTURE

- A. Repair materials shall include a corrosion inhibitor. Inhibitors shall be included in the product as delivered or field added during mixing per the manufacturer's recommendations.
- B. Sika FerroGard 901S
- C. Euclid Eucon BCD
- D. BASF Masterlife CI 30
- E. Or approved equal.

# 2.07 STEEL REINFORCEMENT

A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 deformed.

#### PART 3 EXECUTION

#### 3.01 PREPARATION

- A. Concrete Removal
  - Particular care is necessary for concrete removal near PT strands. Reference Specification Section 024119 – Selective Demolition for additional requirements.
  - 2. Prepare repair area by removal of all deteriorated concrete to limits shown on the plans. Repair areas shall be established jointly by Engineer and Contractor.
  - 3. Use of chipping hammers heavier than nominal 15 pound class are not permitted.
  - 4. Follow Manufacturer's instruction for surface preparation.

# 3.02 INSTALLATION

- A. Epoxy Mortar
  - 1. Follow Manufacturer's instructions for installation procedures.
  - 2. While the primer is still wet, trowel or squeegee a resin rich sand epoxy mortar.
  - 3. For patches deeper than 0.5", build up using multiple lifts.
  - 4. After the troweled finish is in place, apply a finish coat using a flat squeegee and rollers.
- B. Non-Shrink Cementitious Grout
  - 1. Follow Manufacturer's instructions for installation procedures.

- 2. Apply scrub coat on dampened existing concrete surfaces.
- 3. For patches deeper than 1" extend with thoroughly washed, dry, sound, non-ASR reactive aggregates per manufacturer's instructions.

# 3.03 PROTECTION

- A. Reference Section 01500 Construction facilities and Temporary Controls.
- B. Precautions should be taken to avoid damage to any surface near the work zone due to mixing and handling of the specified materials

# 3.04 CURING

- A. Grout
  - Begin curing immediately after form removal, cutback, and finishing. Keep grout moist and within its recommended placement temperature range for at least 24 hours after placement or longer if recommended by the Manufacturer. Saturate the grout surface by use of wet burlap, soaker hoses, ponding or other approved means. Provide sunshades as necessary. If drying winds inhibit the ability of a given curing method to keep grout moist, erect wind breaks until wind is no longer a problem or curing is finished.

#### 3.05 CLEANING

A. Reference Section 01700 – Contract Closeout.

# PART 4 MEASUREMENT AND PAYMENT

# 4.01 MEASUREMENT

- A. The quantity of Horizontal Concrete Patch Repair will be measured for payment at the Contract unit price per square foot.
- B. The quantity of Vertical Concrete Patch Repair will be measured for payment at the Contract unit price per square foot.

# 4.02 PAYMENT

A. The accepted quantity of Horizontal Concrete Patch Repair including full compensation for performing the work specified, including locating of PT Strands and existing reinforcing steel, removal of deteriorated concrete, surface preparation as specified, installation of epoxy mortar or non-shrink cementitious grout, satisfactory completion of curing, and the furnishing of all forms, materials, including labor, tools, admixtures, equipment, and

incidentals necessary to complete the work will be paid for at the Contract unit price per square foot.

Pay Item Pay Unit 030130.01 Square Foot

B. The accepted quantity of Vertical Concrete Patch Repair including full compensation for performing the work specified, including sawcutting, removal of deteriorated concrete, surface preparation as specified, installation of grout patch, satisfactory completion of curing, and the furnishing of all forms, materials, including labor, tools, admixtures, equipment, and incidentals necessary to complete the work will be paid for at the Contract unit price per square foot.

Pay Item Pay Unit Square Foot

# **SECTION 030131**

# FRP CONCRETE STRENGTHENING

#### PART 1 GENERAL

# 1.01 SECTION INCLUDES

A. Section includes design and installation of the FRP Reinforcement as indicated on the Drawings on select structural beams.

# 1.02 RELATED SECTIONS

- A. Contract Drawings
- B. Section 030130 Maintenance of Concrete
- C. Section 036423 Pressure Grouting
- D. Section 039301 Extensive Structural Beam Repair
- E. Section 099600 High-Performance Coatings
- F. Division 1 General Requirements

#### 1.03 REFERENCES

- A. Comply with the following reference standards, except where more stringent requirements are indicated on the Drawings or specified herein:
  - 1. American Concrete Institute (ACI)
    - a. ACI 440.2R-08, Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures
    - b. ACI 440R-07, Report on Fiber-Reinforced Polymer (FRP) Reinforcement for Concrete Structures
    - c. ACI 440 R-96, State-of-the-Art Report on Fiber Reinforced Plastic (FRP) Reinforcement for Concrete Structures.
    - d. ACI 503 R, Pull-off test to determine FRP adhesion to concrete substrate.
  - 2. International Concrete Repair Institute (ICRI)
    - a. ICRI Guideline No. 03742, Guide for the Selection of Strengthening Systems for Concrete Structures
    - b. ICRI Guideline No. 03739, Guide to Using In-Situ Tensile Pull-Off Tests to Evaluate Bond of Concrete Surface Materials
  - 3. American Society of Testing and Materials (ASTM) as cited in Part 2.
  - 4. American Society of Civil Engineers (ASCE)
    - a. ASCE 7- Minimum Design Loads for Buildings and Other Structures.

#### 1.04 SUBMITTALS

- A. General: Submit in accordance with Section 01300 Submittals.
- B. Design Calculations: Submit Load and Resistance Factor Design (LRFD) calculations sealed by a Registered Engineer licensed in the State of Vermont showing the proposed product is capable of meeting the design loads as specified on the Contract Documents for applicable ASCE 7 load combinations.

# C. Product Data:

- 1. Submit Manufacturer's product literature and installation instructions.
- 2. Submit complete system details including, but not limited to, FRP Reinforcement, primer, resin, and protective coating.
- 3. Submit appropriate MSDS sheets
- D. Shop Drawings: Details for limits of proposed FRP.

# 1.05 QUALITY ASSURANCE

- A. Reference Section 01400 Quality Control.
- B. The Contractor shall inspect all materials prior to application to assure that they meet specifications and have arrived to the job-site undamaged.
- C. The FRP Reinforcement shall be completely inspected by the contractor during and immediately following application of the composite materials. Conformance with the design drawings, proper alignment of fibers and quality workmanship shall be assured. Entrapped air shall be released or rolled out before the epoxy sets.
- D. After FRP Reinforcement has cured, the contractor shall inspect the all work to check for voids and or debonding. Repairs shall be made as per Section 3.06 Repair of Defects.

# 1.06 QUALIFICATIONS

## A. Manufacturer:

1. Company specializing in manufacturing products specified in this Section with minimum of five years documented experience.

#### B. Contractor:

1. Minimum three years documented experience in Work of this Section and approved by Manufacturer. Contractor shall maintain qualified personnel who have received product training by manufacturer's representative.

# 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to project site in original, factory-sealed, unopened containers bearing manufacturer's name and label intact and legible with following information.
  - 1. Name of material.
  - 2. Manufacturer's stock number and date of manufacture.
  - 3. Material safety data sheet.
- B. FRP Reinforcement shall be stored in a cool dry area away from direct sunlight, flame, moisture, or other hazards.
- C. Reference Section 01600 Material and Equipment.

### 1.08 PROJECT CONDITIONS

- A. Environmental Requirements:
  - 1. Maintain temperature, moisture and humidity recommended by sealant Manufacturer during and after installation.
- B. The Contractor is solely responsible for fume control and shall take necessary precautions against injury to Installer personnel or adjacent building occupants during application of primer and resin, etc. Contractor personnel shall use protective equipment and area shall be well vented to the outside. As a minimum, Installer must take the following precautions:
  - 1. Contractor to locate and protect building air intake during application.
  - 2. Contractor to follow all state, federal, and local safety regulations.
  - 3. Contractor to follow all Manufacturers' safety requirements as indicated on appropriate MSDS sheets.

#### 1.09 WARRANTY

A. Provide a written warranty from the manufacturer against defects of materials for a period of one (1) year, beginning with the dated of substantial completion of the project.

# PART 2 PRODUCTS

# 2.01 MANUFACTURERS AND PRODUCTS

- A. FRP Reinforcement System:
  - 1. Sika Corporation, Inc., SikaWrap Hex 115C
  - 2. Simpson Strong-Tie Company, Inc. product matching SikaWrap Hex 115C Specifications.
  - 3. FYFE, Co. product matching SikaWrap Hex 115C Specifications.
  - 4. Or Approved Equal.

B. Concrete Surface Primers and Fabric Saturants shall be compatible with the selected FRP fabric.

# 2.02 FRP REINFORCEMENT SYSTEMS

A. FRP Reinforcement Fabric shall meet the following minimum requirements:

Property	Requirement	ASTM Test Method
Laminate Tensile Strength	3,775 lbs/layer	D3039
Laminate Tensile Modulus	9.0x10 <sup>6</sup> psi	D3039
Laminate Elongation At Break	0.91%	D3039
Dry Fabric Weight	27 oz/yd <sup>2</sup>	

- B. Surface Primer shall be a two component, 100% solids, moisture tolerant, high modulus, high strength epoxy.
- C. Concrete Surface Primer shall meet the following minimum requirements:

Property	Requirement	ASTM Test Method
Tensile Strength	8,000 psi	D638
Tensile Modulus	250,000 psi	D638
Laminate Elongation At Break	3%	D638
Flexural Strength	11,500 psi	D790
Flexural Modulus	500,000 psi	D790
Heat Deflection Temp. (HDT)	117 F	D648

- D. Saturant resin shall be two component, 100% solids, moisture tolerant, high strength, high modulus epoxy
- E. Fabric Saturant shall meet the following minimum requirements:

Property	Requirement	ASTM Test Method
Tensile Strength	8,000 psi	D638
Tensile Modulus	250,000 psi	D638
Laminate Elongation At Break	3%	D638
Flexural Strength	11,500 psi	D790
Flexural Modulus	500,000 psi	D790
Heat Deflection Temp. (HDT)	120 F	D648

### PART 3 EXECUTION

# 3.01 SURFACE PREPARATION

- A. All concrete surfaces shall be dry and free of surface moisture and frost, and tested by the Contractor to evaluate moisture transmission in accordance with ASTM D4263 "Indicating Moisture in Concrete by the Plastic Sheet Method."
- B. All concrete surfaces shall be sound. All concrete repairs including but not limited to spall repairs and crack repairs shall be cured to manufacturer's instructed duration prior to commencement of FRP repair.
- C. Remove dust, laitance, grease, paint, curing compounds, waxes, impregnations, foreign particles, and other bond inhibiting materials from the surface by blast cleaning or equivalent mechanical means.
- D. All concrete surfaces shall be air blasted and vacuumed clean to a dust free condition.
- E. Concrete surface irregularities less than one inch shall be ground and smoothed and/or filled with an approved repair mortar (See Specification Section 030130) with the addition of 1 part oven dried sand to make an epoxy mortar. Surface irregularities shall be limited to less than 0.04 inches (1 mm). Surface irregularities greater than one inch shall be repaired using an approved cementitious repair mortar (See Specification Section 030130).
- F. External concrete corners shall be rounded to at least a 1/2" radius when perpendicular to fiber orientation and internal corners shall be smoothed by troweling epoxy mortar into the corners.
- G. The adhesive strength of the concrete shall be verified after preparation by random pull-off testing (ACI 503R) at the direction of the Engineer. Minimum tensile strength is 200 psi with concrete substrate failure, or as approved by the Engineer. Contractor responsible for supplying and performing all testing.

# 3.02 INSTALLATION

- A. Mix primer and saturant components in accordance with Manufacturer's instructions.
- B. Apply FRP Reinforcement in accordance with the Manufacturer's instructions.

#### 3.03 CURING

A. Protect finished installation of FRP Reinforcement from rain, sand, dust, etc. using protective sheeting or other barriers. Do not allow protective sheeting to come in contact with finished application. .

B. Curing of finished application shall be a minimum of 24 hours and in order to achieve full strength curing shall be extended for a period of two weeks at an average ambient temperature of 68°F or at manufacturer's recommendations.

#### 3.05 PROTECTION

A. Reference Section 01500 – Construction Facilities and Temporary Controls.

#### 3.06 REPAIR OF DEFECTS

- A. Upon completion of the curing process, the installed system shall be checked for areas where saturant has not penetrated or where saturant has not completely cured. Such areas shall be epoxy injected to re-establish bond subject to the approval of the Project Engineer.
- B. Repair procedures shall be performed in accordance with guidelines established by ACI 440.2R-08 (paragraph 7.2.3) and approved by the Project Engineer. All repairs shall be subject to the same application, curing and quality control specifications as the original work.
  - 1. Small delaminations and voids less than 2 in<sup>2</sup> each are permissible as long as the delaminated area is less than 5% of the total laminate area and there are no more than 10 such delaminations per 10 ft<sup>2</sup>.
  - 2. Medium sized delaminations and voids greater than 2 in² but less than 25 in² may be repaired by epoxy resin injection or ply replacement, depending on the size and number of delaminations and their location. The repair procedure should be determined by the Project Engineer.
  - 3. Larger size delaminations and voids greater than 25 in<sup>2</sup> should be repaired by selectively cutting away the affected sheet and applying an overlapping sheet patch of equivalent plies. The overlap should extend a minimum of 6 in. in all directions.

# 3.07 PROTECTIVE COATINGS

A. Apply protective coating in accordance with Manufacturer's recommendations. And reference Specification Section 099600. Contractor to verify material compatibility and effectiveness for FRP protection.

## PART 4 MEASUREMENT AND PAYMENT

# 4.01 MEASUREMENT

A. Subsidiary to pay item 039301.01 –Extensive Structural Beam Repair

# 4.02 PAYMENT

A. Subsidiary to pay item 039301.01 – Extensive Structural Beam Repair

#### **SECTION 034200**

# **ELASTOMERIC BEARING PADS**

#### PART I GENERAL

#### 1.01 SECTION INCLUDES

A. Installation of new or resetting of existing elastomeric bearings pads for select spandrel beams at stair tower ramps as shown in the Contract Drawings.

# 1.02 RELATED SECTIONS

- A. Contract Drawings
- B. Section 039301 Extensive Structural Beam Repair
- C. Division 1 General Requirements

# 1.03 REFERENCES

- A. American Association of State Highway and Transportation Officials (AASHTO):
  - 1. AASHTO M251 Plain and Laminated Elastomeric Bridge Bearings
- B. American Society for Testing and Materials (ASTM):
  - 1. D395 Standard Test Method for Rubber Property Compression Set.
  - 2. D412 Standard Test Method for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers.
  - 3. D429 Standard Test Method for Rubber Property Adhesion to Rigid Substrates.
  - 4. D518 Standard Test Method for Rubber Deterioration Surface Cracking.
  - 5. D573 Standard Test method for Rubber Deterioration in Air Oven.
  - 6. D1149 Standard Test Method for Rubber Deterioration Surface Ozone Cracking in a Chamber.
  - 7. D2240 Standard Test Method for Rubber Property Durometer Hardness.
  - 8. D4014 Standard Specification for Plain and Steel-Laminated Elastomeric Bearings for Bridges.

# 1.04 DEFINITIONS

A. As used in these Specifications, the word "elastomer" or "elastomeric" means "rubber", the words are interchangeable.

# 1.05 SUBMITTALS

- A. General: Submit in accordance with Section 01300 Submittals.
- B. Product Data: Submit Manufacturer's product literature and installation instructions.

# 1.06 QUALITY ASSURANCE

A. Reference Section 01400 – Quality Control.

# PART 2 PRODUCTS

#### 2.01 MATERIALS

- A. Elastomeric Compound/Elastomer: Virgin crystallization resistant polychloroprene (neoprene) or virgin natural polyisoprene (natural rubber) as the raw polymer. The resulting product shall be free of porous areas, weak sections, bubbles, foreign matter, or other defects affecting serviceability. Grade (Durometer): 60(+-5) measured on ASTM D2240 Durometer Hardness.
- B. Adhesive: Adhesive for the installation of bearing pads to concrete shall be a solvent-free adhesive as appropriate for this particular installation.

### 2.02 FABRICATION

A. Plain elastomeric pads shall be molded individually, or cut from previously molded strips or slabs, or extruded and cut to size. Cutting shall produce a smooth surface. No heating of the elastomer is permitted.

#### PART 3 EXECUTION

#### 3.01 PREPARATION

A. Clean existing beam bearing surface.

# 3.02 INSTALLATION

- A. Install elastomeric bearing pads as shown in the Contract Drawings in accordance with the provided details.
- B. Apply adhesive to clean bearing surface to a minimum thickness of 1/8 inch, and set bearing pads on adhesive bed as indicated.

## PART 4 MEASUREMENT AND PAYMENT

## 4.01 MEASUREMENT

- A. Resetting of existing bearing pads shall be subsidiary to pay item 039301.01 Spandrel beam Extensive Repair.
- B. The quantity of new Elastomeric Bearing Pads shall be measured for payment at the Contract unit price per each.

# 4.02 PAYMENT

- A. Resetting of existing bearing pads shall be subsidiary to pay item 039301.01 Spandrel beam Extensive Repair.
- B. The accepted quantity of Elastomeric Bearing Pads including full compensation for

performing the work specified, including bearing pads, surface preparation, adhesive application and all labor, tools, equipment, and incidentals necessary to complete the work will be paid for at the Contract unit price per each. Shoring and other concrete repairs necessary to complete the work as shown on the plans shall be considered subsidiary to pay item 039301.01.

Pay Item Pay Unit 034200.01 Each

# SECTION 036423 PRESSURE GROUTING

# PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. This section includes patching of deteriorated concrete surfaces as follows:
  - 1. Spalls on the corners of columns.
  - 2. Spalls on the underside face of beams.

# 1.02 RELATED SECTIONS

- A. Contract Drawings.
- B. Section 024119 Selective Demolition
- C. Section 030130 Maintenance of Concrete
- D. Section 039301 Extensive Structural Beam Repair
- E. Division 1- General Requirements

# 1.03 REFERENCES

A. Reference Specification Section 030130 Part 1.03

#### 1.04 SUBMITTALS

- A. General: Submit in accordance with Section 01300 Submittals.
- B. Product Data: Submit Manufacturer's product literature and installation instructions. Literature to include: Product Data Sheets, and appropriate Material Safety Data Sheets (MSDS).

# 1.05 QUALITY ASSURANCE

A. Reference Section 01400 – Quality Control.

# 1.06 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum of five years documented experience. The manufacturer of the specified product shall be ISO 9001/9002 certified and have in existence a recognized ongoing quality assurance program independently audited on a regular basis.
- B. Contractor: Minimum three years documented experience in Work of this Section and approved by Manufacturer. Contractor shall maintain qualified personnel who have received product training by a manufacturer's representative.

#### 1.07 DELIVERY, STORAGE AND HANDLING

- A. Reference Section 01500 Construction Facilities and Temporary Controls.
- B. Deliver materials to the project site in original, factory sealed, unopened containers/packages bearing the Manufacturer's name and label intact and legible with the following information:
  - 1. Name of material.
  - 2. Manufacturer's stock number and date of manufacture.
  - 3. Material safety data sheet.
- C. Comply with manufacturer's written instructions for minimum and maximum temperature requirements and other conditions for storage.
- D. Reference Section 01600 Material and Equipment.

#### 1.08 WARRANTY

A. Provide a written warranty from the manufacturer against defects of materials for a period of one year, beginning with the dated of substantial completion of the project.

#### PART 2 PRODUCTS

#### 2.01 MANUFACTURERS

A. Source Limitations: For repair products, obtain each color, grade finish, type and variety of product from single source and from single manufacturer with resources to provide products of consistent quality in appearance and physical properties.

#### 2.02 BONDING AGENTS

A. See Technical Specification Section 030130 Part 2 for product specifications and information.

#### 2.03 PRESSURE GROUTING EQUIPMENT

A. Pressure grouting equipment shall include a mixer and holdover agitator tanks designed to place grout at pressures up to 50 psi (0.345 MPa). Gauges indicating grouting pressure shall be provided and the mixer shall be equipped with a meter capable of indicating to within 1/10 cubic foot (0.003 m³) the volume of grout placed.

#### 2.04 NON-SHRINK CEMENTITIOUS GROUT

- A. Repair materials shall be non-metallic and contain no chloride.
- B. SikaGrout 212
- C. Master Emaco
- D. Or Approved equal.

#### 2.05 CORROSION INHIBITING ADMIXTURE

- A. Repair materials shall include a corrosion inhibitor. Inhibitors shall be included in the product as delivered or field added during mixing per the manufacturer's recommendations.
- B. Sika FerroGard 901
- C. Euclid Eucon BCD
- D. BASF Masterlife CI 30
- E. Or approved equal.

#### 2.06 STEEL REINFORCEMENT

A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 deformed.

#### PART 3 EXECUTION

#### 3.01 PREPARATION

- A. Concrete Removal
  - 1. Prepare repair area by removal of all deteriorated concrete to a minimum depth of ½" or to sound concrete or to limits shown on the plans. Repair areas shall be established jointly by Engineer and Contractor.
  - 2. Use of chipping hammers heavier than nominal 15-pound class are not permitted.
  - 3. Square cut all repair area edges. Feathered removal edges will not be permitted.
  - 4. Follow Manufacturer's instruction for surface preparation.

#### 3.02 INSTALLATION

- A. Non-Shrink Cementitious Grout:
  - 1. See Technical Specification Section 030130 Part 3.
  - 2. For patches deeper than 2" extend with thoroughly washed, dry, sound, non-ASR reactive aggregates per manufacturer's instructions.
- B. Formwork:
  - 1. Attach formwork to existing concrete in a manner as to not cause undue structural harm. Edges of formwork shall be sealed to prevent leakage.
  - 2. Include vent ports as required by the manufacturer to ensure proper installation and consolidation of repair material.
  - 3. Provide vent port caps when steady flow of repair material is evident.
  - 4. Vibrate forms as recommended by Manufacturer.

#### C. Pressure Grouting:

1. Once started, grouting shall be continuous until completed. In case of a mechanical failure or other stoppage of the work, the grout equipment shall be washed out sufficiently to ensure that fresh only grout is pumped when the work is restarted.

#### 3.03 PROTECTION

- A. Reference Section 01500 Construction facilities and Temporary Controls.
- B. Precautions should be taken to avoid damage to any surface near the work zone due to mixing and handling of the specified materials.

#### 3.04 CURING

A. Begin curing immediately after form removal, cutback, and finishing. Keep grout moist and within its recommended placement temperature range for at least 24 hours after placement or longer if recommended by the Manufacturer. Saturate the grout surface by use clear finish chemical compound, wet burlap, soaker hoses, ponding or other approved means. Provide sunshades as necessary. If drying winds inhibit the ability of a given curing method to keep grout moist, erect wind breaks until wind is no longer a problem or curing is finished.

#### 3.05 CLEANING

A. Reference Section 01700 – Contract Closeout.

#### PART 4 MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

- A. Subsidiary to pay item 030130.11 Vertical Concrete Spall Repair
- B. Subsidiary to pay item 039301.01 Extensive Structural Beam Repair
- C. Subsidiary to pay item 039301.02 Extensive Spandrel Beam Repair

#### 4.02 PAYMENT

- A. Subsidiary to pay item 031030.11 Vertical Concrete Spall Repair
- B. Subsidiary to pay item 039301.01 Extensive Structural Beam Repair
- C. Subsidiary to pay item 039301.02 Extensive Spandrel Beam Repair

#### **END OF SECTION 036423**

#### **SECTION 039301**

#### **EXTENSIVE STRUCTURAL BEAM REPAIR**

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. This section includes extensive structural repairs to beams as indicated on the Contract drawings.
- B. This section includes spandrel beam extensive repairs as indicated on the Contract drawings.

#### 1.02 RELATED SECTIONS

- A. Contract Drawings
- B. Section 024119 Selective Demolition
- C. Section 030130 Maintenance of Concrete
- D. Section 030131 FRP Concrete Strengthening
- E. Section 034200 Elastomeric Bearing Pads
- F. Section 036423 Pressure Grouting
- G. Section 099600 Higher Performance Coatings
- H. Division 1 General Requirements

#### 1.03 REFERENCES

A. Reference Specification Sections from Part 1.02 of this specification.

#### 1.04 SUBMITTALS

- A. General: Submit in accordance with Section 01300 Submittals.
- B. Product Data: Submit Manufacturer's product literature and installation instructions. Literature to include: Product Data Sheets, and appropriate Material Safety Data Sheets (MSDS).
- C. Design Calculations: Submit Load and Resistance Factor Design (LRFD) calculations sealed by a Registered Engineer licensed in the State of Vermont showing the proposed shoring and jacking system is capable of meeting the design loads for applicable ASCE 7 load combinations.
- D. Shop Drawings: Submit working drawings showing the location, size, material and any connection details for temporary shoring or jacking equipment.

#### 1.05 QUALITY ASSURANCE

A. Reference Section 01400 – Quality Control.

#### 1.06 QUALIFICATIONS

A. Reference Specification Sections from Part 1.02 of this specification for applicable qualifications.

#### 1.07 DELIVERY, STORAGE AND HANDLING

- A. Reference Section 01500 Construction Facilities and Temporary Controls.
- B. Reference Specification Sections from Part 1.02 of this specification for applicable qualifications.
- C. Reference Section 01600 Material and Equipment.

#### 1.08 WARRANTY

A. Provide a written warranty from the manufacturer against defects of materials for a period of one (1) year, beginning with the dated of substantial completion of the project.

#### PART 2 PRODUCTS

#### 2.01 MANUFACTURERS

A. Source Limitations: For repair products, obtain each color, grade finish, type and variety of product from single source and from single manufacturer with resources to provide products of consistent quality in appearance and physical properties.

#### 2.02 BONDING AGENTS

A. See Technical Specification Section 030130 Part 2 for product specifications and information.

#### 2.03 NON-SHRINK CEMENTITIOUS GROUT

A. See Technical Specification Section 030130 Part 2 for product specifications and information.

#### 2.04 FRP CONCRETE STRENGTHENING

A. See Technical Specification Section 030131 Part 2 for product specifications and information.

#### 2.05 PRESSURE GROUTING

A. See Technical Specification Section 036423 Part 2 for product specifications and information.

#### PART 3 EXECUTION

#### 3.01 PREPARATION

A. Reference Specification Sections from Part 1.02 of this specification for applicable preparation procedures.

#### 3.02 INSTALLATION

A. Reference Specification Sections from Part 1.02 of this specification for applicable installation procedures.

#### 3.03 PROTECTION

- A. Reference Section 01500 Construction facilities and Temporary Controls.
- B. Precautions should be taken to avoid damage to any surface near the work zone due to mixing and handling of the specified materials.

#### 3.04 CURING

- A. Reference Specification Sections from Part 1.02 of this specification for applicable curing procedures.
- B. Supplemental carbon fiber reinforcing shall not be applied and/or shoring shall not be removed until the concrete repair material has achieved full design strength per the mix design or product information.
- C. High-performance coatings shall not be applied to the beam until FRP has sufficiently cured.

#### 3.05 CLEANING

A. Reference Section 01700 – Contract Closeout.

#### PART 4 MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

- A. The quantity of Extensive Structural Beam Repair, will be measured for payment at the Contract unit price per each.
- B. The quantity of Extensive Spandrel Beam Repair, will be measured for payment at the Contract unit price per each.

#### 4.02 PAYMENT

A. The accepted quantity of Extensive Structural Beam Repair including full compensation for performing the work specified, including, engineering costs, shoring, bracing and jacking, removal of existing deteriorated concrete, surface preparation as specified, concrete spall repairs, concrete crack repair, installation of FRP concrete strengthening and high performance coating, replacement of stair tower ramp bearing pads, satisfactory completion of curing, and the furnishing of all forms, materials, including labor, tools, admixtures, equipment, and incidentals necessary to complete the work will be paid for at the Contract unit price per each.

Pay Item Pay Unit 039301.01 Each

B. The accepted quantity of Spandrel Beam Extensive Repair including full compensation for performing the work specified, including, engineering costs, shoring, bracing and jacking, removal of existing deteriorated concrete, surface preparation as specified, concrete spall repairs, concrete crack repair, installation of FRP concrete strengthening and high performance coating, resetting of the stair tower ramp bearing pads, satisfactory completion of curing, and the furnishing of all forms, materials, including labor, tools, admixtures, equipment, and incidentals necessary to complete the work will be paid for at the Contract unit price per each.

Pay Item Pay Unit 039301.02 Each

**END OF SECTION 039301** 

#### **SECTION 042200**

#### **UNIT MASONRY**

#### PART 1 **GENERAL**

#### 1.01 SECTION INCLUDES

A. Replacement of Damaged Clay Facing Brick, including mortar, reinforcement and anchorage, flashings, and accessories.

#### 1.02 RELATED SECTIONS

- A. Contract Drawings
- B. Section 01200 Traffic Control
- C. Section 024119 Selective Demolition
- D. Section 079200 Joint Sealants
- E. Division 1 General Requirements

#### 1.03 REFERENCES

- A. ACI 530/530.1/ERTA Building Code Requirements and Specification for Masonry Structures and Related Commentaries; American Concrete Institute International; 2011.
- B. ASTM C67 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile; 2013.
- C. ASTM C91/C91M Standard Specification for Masonry Cement; 2012.
- D. ASTM C144 Standard Specification for Aggregate for Masonry Mortar; 2011.
- E. ASTM C150/C150M Standard Specification for Portland Cement; 2012.
- F. ASTM C207 Standard Specification for Hydrated Lime for Masonry Purposes; 2006 (Reapproved 2011).
- G. ASTM C216 Standard Specification for Facing Brick (Solid Masonry Units Made From Clay or Shale); 2014.
- H. ASTM C270 Standard Specification for Mortar for Unit Masonry; 2012.
- I. MSJC (Masonry Standards Joint Committee) Code ACI (American Concrete Institute) 530/ASCE (American Society of Civil Engineers) 5/TMS (The Masonry Society) 402 -Building Code Requirements for Masonry Structures
- J. MSJC (Masonry Standards Joint Committee) Specification ACI (American Concrete Institute) 530.1/ASCE (American Society of Civil Engineers) 6/TMS (The Masonry Society) 602 - Specifications for Masonry Structures.

#### 1.04 SUBMITTALS

- A. Submit in accordance with Section 01300 Submittals.
- B. Product Data: Submit data for masonry units, including color samples, and fabricated wire reinforcement, wall ties, anchors and other accessories.

C. Samples: Submit two sample masonry units to illustrate color, texture and extremes of color range.

#### 1.05 QUALITY ASSURANCE

- A. Reference Section 01400 Quality Control.
- B. Perform Work in accordance with MSJC Code and MSJC Specification.
- C. Comply with provisions of ACI 530/530.1/ERTA, except where exceeded by requirements of the contract documents.

#### 1.06 DELIVERY, STORAGE AND HANDLING

- A. Reference Section 01500 Construction Facilities and Temporary Controls.
- B. Deliver units in an air-dry condition.
- C. Units shall be stored above ground on level platforms protected from damage.
- D. Units shall be covered or protected from inclement weather and shall conform to the moisture content as specified in ASTM C90, when delivered to the job site.
- E. Handle units, either individually or in groups, to keep units whole. Handle masonry units in a manner to maintain sharp edges and undamaged faces.
- F. Replacements: In the event of damage, immediately make all repairs and replacements to the approval of the Design Engineer and at no additional cost to the Owner.

#### 1.07 ENVIRONMENTAL REQUIREMENTS

- A. Hot and Cold Weather Requirements: MSJC Specification.
- B. Do not perform work when the ambient air temperature is below 35 degrees F. Do not build masonry on or with frozen materials. Remove and replace work damaged by freezing at no additional cost to the Owner.
- C. Do not perform work when the ambient temperature is above 99 degrees F in shade and the relative humidity is less than 40 percent, unless work is prevented from drying out for not less than 48 hours after having been installed.
- D. Prevent damage due to wind and wind-blown particles.

#### 1.08 COORDINATION

A. Coordinate masonry work with installation of window and door anchors.

B. Coordinate blockouts when required for product installations (i.e. utility conduits).

#### PART 2 PRODUCTS

#### 2.01 UNIT MASONRY ASSEMBLIES

A. Masonry units shall be supplied by one manufacturer.

#### 2.02 BRICK UNITS

- A. Facing Brick: ASTM C216, Type FBS, Grade SW.
  - 1. Color and texture: To match existing.
  - 2. Nominal size: To match existing.
  - 3. Special shapes: Molded units as required by conditions indicated, unless standard units can be sawn to produce equivalent effect.
  - 4. Compressive strength: To match existing, measured in accordance with ASTM C67.

#### 2.03 MORTAR MATERIALS

- A. Masonry Cement: ASTM C91/C91M, Type N.
  - 1. Colored Mortar: Premixed cement as required to match Architect's color sample.
- B. Portland Cement: ASTM C150/C150M, Type I; color as required to produce approved color sample.
- C. Hydrated Lime: ASTM C207, Type S.
- D. Mortar Aggregate: ASTM C144.
- E. Water: Clean and potable.

#### 2.04 ACCESSORIES

- A. Reinforcement and Anchorage Match Existing type, size, and spacing
- B. Single Wythe Joint Reinforcement: Truss type; [steel wire, hot dip galvanized to ASTM A641 after fabrication, by Dur-O-Wall, or approved equal.
- C. Anchor Bolts: Headed, J-shaped or L-shaped.
- D. Flashings: Repair existing flashing damaged by construction. Replace any flashing which cannot be fully repaired with material and profile to match existing.
- E. Joint Filler: Closed cell polyethylene; oversized 50 percent to joint width; self-expanding.
- F. Joint Sealant: Silicone; ASTM C920, Type S, Grade NS, Class 100. Color to match Mortar.

G. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.

#### 2.05 MORTAR MIXES

- A. Mortar for Unit Masonry: ASTM C270, using the Proportion Specification.
  - 1. Exterior, non-loadbearing masonry: Type N and as required to match existing.
- B. Colored Mortar: Proportion selected pigments and other ingredients to match Architect's sample, without exceeding manufacturer's recommended pigment-to cement ratio.
  - 1. Color to match existing.

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Verify field conditions are acceptable and are ready to receive work.
- B. Verify items provided by other sections of work are properly sized and located.
- C. Verify built-in items are in proper location, and ready for roughing into masonry work.

#### 3.02 PREPARATION

- A. Install staging necessary to complete work.
- B. Install temporary pedestrian traffic control and signage to provide safe passage during work.
- C. Verify existing placement of metal ties.
- D. Furnish temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent support.

#### 3.03 INSTALLATION

- A. Establish lines, levels, and coursing indicated. Protect from displacement.
- B. Cut out damaged and deteriorated masonry with care in a manner to prevent damage to any adjacent remaining materials.
- C. Support structure as necessary in advance of cutting out units.
- D. Cut away loose or unsound adjoining masonry as directed.
- E. Ensure that anchors are correctly located and built in. Offset with new anchors as necessary and match existing metal tie spacing.
- F. Maintain masonry courses to uniform dimension. Form bed and head joints of uniform thickness.

- G. Brick Masonry Units:
  - 1. Bond and Coursing: to match existing
  - 2. Mortar Joints: to match existing

#### H. Placing And Bonding:

- 1. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.
- 2. Buttering corners of joints or excessive furrowing of mortar joints is not permitted.
- 3. Remove excess mortar with water repellent admixture promptly. Do not use acids, sandblasting or high pressure cleaning methods.
- 4. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace.
- 5. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.
- 6. Isolate top joint of masonry partitions from horizontal structural framing members and slabs or decks with compressible joint filler and seal with joint sealant.
- I. Joint Reinforcement and Anchorage General:
  - 1. Maintain existing reinforcement and anchorage. Repair where damaged by construction. Replace sections of reinforcement and anchorage and tie to existing, where full repair is not possible.
- J. Control Joints:
  - 1. Maintain existing control joints
  - 2. Do not continue horizontal joint reinforcement through control joints.

#### 3.04 ERECTION TOLERANCES

- A. Maximum Variation from Unit to Adjacent Unit: 1/16 inch.
- B. Maximum Variation from Plane of Wall: 1/4 inch in ten feet.
- C. Maximum Variation from Plumb: 1/4 inch per story non-cumulative; 1/2 inch in two stories or more.
- D. Maximum Variation from Level Coursing: 1/8 inch in 3 feet and 1/4 inch in 10 feet; 1/2 inch in 30 feet.
- E. Maximum Variation of Joint Thickness: 1/8 inch in 3 feet.

#### 3.05 CLEANING

A. Remove excess mortar and mortar smears as work progresses.

- B. Replace defective mortar. Match adjacent work.
- C. Clean soiled surfaces with cleaning solution.
- D. Use non-metallic tools in cleaning operations.

#### PART 4 MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

A. The quantity of Remove and Reset Brick Façade will be measured for payment at the Contract Unit Price per square foot of vertical wall surface.

#### 4.02 PAYMENT

A. The accepted quantity of Remove and Reset Brick Facade including full compensation for performing the work specified, including brick, ties, mortar, flashing, sealants, removal and resetting of coping, and other accessory materials, and for furnishing all materials, including labor, tools, equipment, the cost of heating materials and protecting against the cold weather, and incidentals necessary to complete the work will be paid for at the Contract unit price per square foot.

Pay Item 042200.01 Remove and Reset Brick Façade Pay Unit Square Foot

**END OF SECTION 042200** 

#### **SECTION 071800**

#### WATERPROOFING MEMBRANE

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. Waterproofing membrane to be installed at locations as shown in the Contract Drawings.

#### 1.02 RELATED SECTIONS

- A. Contract Drawings.
- B. Section 024119 Selective Demolition
- C. Section 030130 Maintenance of Concrete
- D. Division 1 General Requirements.

#### 1.03 REFERENCES

- A. ASTM International (ASTM):
  - 1. D4258 Standard Practice for Surface Cleaning Concrete for Coating.
  - 2. D4259 Standard Practice for Abrading Concrete.
  - 3. D4260 Standard Practice for Liquid and Gelled Acid Etching of Concrete.

#### 1.04 SUBMITTALS

- A. General: Submit in accordance with Section 01300 Submittals
- B. Product Data: Submit Manufacturer's product literature and installation instructions.

#### 1.05 QUALITY ASSURANCE

A. Reference Section 01400 – Quality Control.

#### 1.06 QUALIFICATIONS

- A. Manufacturer:
  - 1. Company specializing in manufacturing products specified in this Section with minimum of five years documented experience.
- B. Contractor:
  - 1. Minimum three years documented experience in Work of this Section and approved by Manufacturer. Contractor shall maintain qualified personnel who have received product training by manufacturer's representative.

#### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the project site in original, factory sealed, unopened containers/packages bearing the Manufacturer's name and label intact and legible with the following information:
  - 1. Name of material.
  - 2. Manufacturer's stock number and date of manufacture.
  - 3. Material safety data sheet.
- B. Reference Section 01600 Material and Equipment.
- C. Store materials at minimum 75 degrees F; prevent damage to containers. Do not store for long periods in direct sunlight.

#### 1.08 PROJECT CONDITIONS

- A. Environmental Requirements:
  - 1. Do not apply coating when surface temperature is less than 40 degrees F or if precipitation is imminent.
  - 2. Do not apply unless surfaces to receive coating are dry.
- B. Regulatory Requirements:
  - 1. Comply with applicable codes, regulations, ordinances, and laws regarding use and application of products that contain volatile organic compounds (VOC).
- C. Coordinate product compatibility with other products specified at application area.

#### 1.09 WARRANTY

A. The expansion joint system shall be warranted for a period of 1 year from the date of project completion.

#### PART 2 PRODUCTS

#### 2.01 MATERIALS

- A. Waterproofing Membrane:
  - 1. Primer: As recommended by coating system Manufacturer.
  - 2. Sheet flashing: Elastomeric material, as recommended by coating Manufacturer.
  - 3. Aggregate: Natural or manufactured sand with a gradation of 16-30 mesh and a minimum 6.5 hardness on Moh's scale. Seed rate shall match the Manufacturer's recommendations for heavy vehicular traffic.
  - 4. Coatings: Polyurethane, color gray.
  - 5. Joint sealer: As recommended by coating system Manufacturer.
  - 6. Extra Heavy Duty application per Manufacturer's instructions.

#### 2.02 MANUFACTURERS

A. Waterproofing Membrane:

- 1. Sika Corporation: Sikalastic 390/391/395 Traffic System
- 2. Neogard: Auto-Gard Aliphatic Traffic System
- 3. Or approved equal
- B. Waterproofing Membrane (Stair Towers)
  - 4. Sika Corporation: Sikalastic 390/391/395 Traffic System
  - 5. Neogard: Auto-Gard (E)
  - 6. Or approved equal

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Before any waterproofing work is started the waterproofing applicator shall thoroughly examine all surfaces for any deficiencies. Should any deficiencies exist, the Design Engineer, Owner, or Contractor shall be notified in writing and corrections made.
- B. Condition of Concrete Surfaces:
  - 1. The concrete surfaces shall be of sound structural grade and shall have a smooth finish, free of fins, ridges, voids or entrained air holes. Rough surfaces shall receive a well adhered parget coat.
  - 2. Concrete shall be cured by water curing method. Any curing compounds must be of the pure sodium silicate type and be approved by the Manufacturer's representative.
  - 3. Concrete shall be cured at least 7 days and shall be sloped for proper drainage.
  - 4. Line striping of concrete shall be completed after application of waterproofing. Coordinate with manufacturer guidelines for curing times
  - 5. Voids, rock pockets and excessively rough surfaces shall be repaired with approved non-shrink grout or ground down to match the unrepaired areas.
  - 6. Surfaces at cold joints shall be on the same plane.

#### 3.02 PREPARATION

- A. Follow Manufacturer's instructions for surface preparation.
- B. Remove all existing membrane.

#### 3.03 INSTALLATION

A. Follow Manufacturer's instruction for installation.

#### 3.04 PROTECTION

A. Reference Section 01500 – Construction Facilities and Temporary Controls.

B. Do not permit traffic over unprotected surfaces until system is completely cured per Manufacturer's recommendations.

#### PART 4 MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

A. Subsidiary to pay item 030130.11 – Vertical Concrete Spall Repair

#### 4.02 PAYMENT

A. Subsidiary to pay item 030130.11 – Vertical Concrete Spall Repair

#### **END OF SECTION 071800**

#### **SECTION 079106**

#### **DECK AND PARKING JOINT SEALS**

#### PART I GENERAL

#### 1.01 SECTION INCLUDES

A. The work shall consist of furnishing and installing expansion joint system in accordance with the details shown on the Contract Drawings and the requirements of the specifications.

#### 1.02 RELATED SECTIONS

- A. Contract Drawings
- B. Section 024119 Selective Demolition
- C. Section 030130 Maintenance of Concrete
- D. Section 079200 Joint Sealants
- E. General Requirements

#### 1.03 REFERENCES

- A. ASTM International (ASTM):
  - 1. ASTM E1399 Cyclic Movement Minimum and Maximum Joint Widths (Plus or minus 50 percent, total 100 percent).
  - 2. ASTM D4060 Abrasion Resistance (Maximum 1 percent weight loss).
  - 3. ASTM C7179 Refractory Plastic
  - 4. ASTM C1135 Tensile Adhesion of Structural Sealants

#### 1.04 SUBMITTALS

- A. Submit in accordance with Section 01300 Submittals.
- B. Standard Drawings: Submit typical expansion joint drawing(s) indicating pertinent dimensions, general construction, joint opening dimensions, details for transitions in plane and directions for continuity of seal through watertight transitions from wall expansion joint to other interfacing expansion joint systems, and product information.
- C. Products Data: Submit Manufacturer's product literature and installation instructions.

#### 1.05 QUALITY ASSURANCE

A. The General Contractor, Engineer, Manufacturer's Representative and Certified Contractor, will conduct a pre-installation project site inspection. The General Contractor shall provide a field report that summarizes the project conditions and

- any remedial action necessary to correct field conditions (substrate, joint size, blockout, vertical offsets, etc.) that may affect expansion joint system performance.
- B. Joint Opening Adjustment the Project Engineer shall provide calculations to the concrete subcontractor to adjust the nominal joint opening the day of the concrete placement.
- C. Reference Section 01400 Quality Control.

#### 1.06 QUALIFICATIONS

#### A. Manufacturer:

1. Company specializing in manufacturing products specified in this Section with minimum of ten years documented experience.

#### B. Contractor:

1. Minimum two years documented experience in Work of this Section and approved by Manufacturer.

#### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to project site in original, factory-sealed, unopened containers bearing manufacturer's name and label intact and legible with following information.
  - 1. Name of material.
  - 2. Manufacturer's stock number and date of manufacture.
  - 3. Material safety data sheet.
- B. Reference Section 01600 Material and Equipment.
- C. Deliver products to site in Manufacturer's original, intact, labeled containers and store under cover in a dry location until installed. Store in accordance with manufacturer's instructions.

#### PART II PRODUCTS

#### 2.01 MATERIAL

- A. Provide precompressed, silicone coated and acrylic impregnated-foam hybrid installed into field-applied epoxy adhesive, with silicone sealant band on joint faces.
- B. The Joint shall be precompressed to less than nominal material size for installation into designed joint size equal to material nominal size.
- C. Adhesive shall an epoxy furnished by the joint seal manufacturer.
- D. Silicone shall be field applied sealant band at the face of the seal to substrate interface furnished by the joint seal manufacturer. This shall be the same material and color as the factory coating.

- E. Products are capable of withstanding temperature of 150 degrees F (65 degrees C) for 3 hours while compressed to minimum of movement capability dimension without evidence of bleeding of impregnation medium from material.
- F. Same material after heat stability test and after cooling to room temperature will self-expand to maximum of movement capability dimension within 24 hours at 68 degrees F (20 degrees C).

#### 2.02 COMPRESSION SEAL SYSTEMS

- A. Acceptable Manufacturers:
  - 1. Sika Emseal DSM System
  - 2. Or approved equal

#### PART III EXECUTION

#### 3.01 PREPARATION

- A. Clean joints thoroughly; remove loose and foreign matter that could impair adhesion or performance.
- B. Follow Manufacturer's instructions for surface preparation.

#### 3.02 INSTALLATION

- A. Follow Manufacturer's instruction for installation and those of the approved shop drawings.
- B. Remove joint seal from precompressed packaging, immediately insert into joint, and allow to expand.
- C. Use temporary retainers if required to maintain joint seals in position until expansion is complete.

#### PART IV MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

A. The quantity of Expansion Joint – Compression Seal will be measured for payment at the Contract unit price per linear foot.

#### 4.02 PAYMENT

A. The accepted quantity of Expansion Joint Seal Replacement including full compensation for detailing, furnishing, handling, transporting, and placing the material specified, including surface preparation, primer, joint system, and furnishing

all labor, tools, equipment, and incidentals necessary to complete the work will be paid for at the Contract unit price per linear foot.

Pay Item Pay Unit

079106.01 – Expansion Joint Seal Replacement Linear Foot

#### **END OF SECTION 079106.01**

#### **SECTION 079200**

#### **JOINT SEALANTS**

#### PART 1 **GENERAL**

#### 1.01 SECTION INCLUDES

- A. Section includes joint backing, precompressed foam sealers, isolation joints, and accessories.
- B. Section includes cast-in-place tooled or routed sealant infills (non-sag).

#### 1.02 RELATED SECTIONS

- A. Contract Drawings
- B. Section 024119 Selective Demolition
- C. Section 030130 Maintenance of Concrete
- D. Section 071800 Waterproofing Membrane
- E. Division 1 General Requirements

#### 1.03 REFERENCES

- A. ASTM International (ASTM):
  - 1. C920 Standard Specification for Elastomeric Joint Sealants.
  - 2. C1193 Standard Guide for Use of Joint Sealants.
  - 3. D1056 Standard Specification for Flexible Cellular Materials Sponge or Expanded Rubber.
  - 4. D1667 Standard Specification for Flexible Cellular Materials Poly (Vinyl Chloride) Foam (Closed-Cell).
  - 5. D2628 Standard Specification for Preformed Polychloroprene Elastomeric Joint Seals for Concrete Pavements.

#### 1.04 SUBMITTALS

- A. General: Submit in accordance with Section 01300 Submittals.
- B. Products Data: Submit Manufacturer's product literature and installation instructions.

#### 1.05 QUALITY ASSURANCE

A. Reference Section 01400 – Quality Control.

#### 1.06 QUALIFICATIONS

- A. Manufacturer:
  - 1. Company specializing in manufacturing products specified in this Section with minimum of five years documented experience.

#### B. Contractor:

1. Minimum three years documented experience in Work of this Section and approved by Manufacturer. Contractor shall maintain qualified personnel who have received product training by manufacturer's representative.

#### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to project site in original, factory-sealed, unopened containers bearing manufacturer's name and label intact and legible with following information.
  - Name of material.
  - 2. Manufacturer's stock number and date of manufacture.
  - 3. Material safety data sheet.
- B. Reference Section 01600 Material and Equipment.

#### 1.08 PROJECT CONDITIONS

- A. Environmental Requirements:
  - 1. Maintain temperature and humidity recommended by sealant Manufacturer during and after installation.
  - 2. Sealants shall only be installed on dry, clean surfaces.

#### PART 2 **PRODUCTS**

#### 2.01 MATERIAL

- A. General Purpose Traffic Bearing Sealant: 2-component, Polyurethane elastomeric sealant complying with ASTM C920, Class A, Type 1.
  - 1. Type 2 (non-sag) shall be used for all cove joints and may be acceptable in other locations with approval by the Design Engineer.

#### 2.02 MANUFACTURERS AND PRODUCTS

- B. Joint Sealant Type 1 (self-leveling):
  - 1. Sika Corporation, Inc., Sikaflex-2c SL
  - 2. D.S. Brown Co. product matching Sika product specifications
  - 3. Or approved equal
- C. Joint Sealant Type 2 (non-sag):
  - 1. Sika Corporation, Inc., Sikaflex-2c NS
  - 2. D.S. Brown Co. product matching Sika product specifications
  - 3. Or approved equal

#### 2.03 ACCESSORIES

A. Primer: Non-staining type, recommended by sealant Manufacturer to suit application.

- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant Manufacturer; compatible with joint forming materials.
- C. Joint Backing: Round foam rod compatible with sealant; ASTM D1056, sponge or expanded rubber oversized 30 to 50 percent larger than joint width.
- D. Bond Breaker: Pressure sensitive tape or fine sand recommended by sealant Manufacturer to suit application.

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Verify substrate surfaces and joint openings are ready to receive work.
- B. Verify joint backing and release tapes are compatible with sealant.

#### 3.02 PREPARATION

- A. Remove existing joint material, including backer rods or other related appurtenances as required. See Technical Specification Sections 024119 for additional information.
- B. Remove loose materials and foreign matter impairing adhesion of sealant.
- C. Clean and prime joints.
- D. Perform preparation in accordance with ASTM C1193.
- E. Protect elements surrounding Work of this section from damage or disfiguration.

#### 3.03 INSTALLATION

- A. Perform installation in accordance with ASTM C1193.
  - 1. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
  - 2. Cut or grind existing edge of control joints to ensure a smooth edge.
- B. Install bond breaker where joint backing is not used.
- C. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- D. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- E. Tool joints concave per detail in the Contract Drawings. Over-filled joints will be rejected and will be replaced by the Contractor at no additional cost to the Owner.

- F. Precompressed Foam Sealant: Do not stretch; avoid joints except at corners, ends, and intersections; install with face 1/8 inch to 1/4 inch below adjoining surface.
- G. Cove Joints: Ensure that sealants are compatible with the existing surface treatment, bare concrete or concrete with waterproofing membrane applied.

#### 3.04 CLEANING

- A. Reference Section 01700 Contract Closeout.
- B. Clean adjacent soiled surfaces.

#### 3.05 PROTECTION

A. Reference Section 01500 – Construction Facilities and Temporary Controls.

#### PART 4 MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

A. Subsidiary to pay item 042200.01 – Remove and Reset Brick Façade

#### 4.02 PAYMENT

A. Subsidiary to pay item 042200.01 – Remove and Reset Brick Façade

#### **END OF SECTION 079200**

#### SECTION 099600 HIGH-PERFORMANCE COATINGS

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. This Section includes surface preparation and the application of high-performance coating systems on:
  - 1. Select concrete spandrel beams and inverted tee beams as indicated on the Contract drawings.

#### 1.02 RELATED SECTIONS

- A. Contract Drawings
- B. Section 024119 Selective Demolition
- C. Section 030130 Maintenance of Concrete
- D. Division 1 General Requirements.

#### 1.03 SUBMITTALS

- A. General: Submit in accordance with Section 01300 Submittals
- B. Product Data: Submit Manufacturer's product literature and installation instructions. Include color chart.

#### 1.04 QUALITY ASSURANCE

A. Reference section 01400 – Quality Control

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the project site in original, factory sealed, unopened containers/packages bearing the Manufacturer's name and label intact and legible with the following information:
  - 1. Name of material.
  - 2. Manufacturer's stock number and date of manufacture.
  - 3. Material safety data sheet.
- B. Reference Section 01600 Material and Equipment.
- C. Store materials at between 50 degrees F and 90 degrees F; prevent damage to containers. Do not store for long periods in direct sunlight.

#### 1.06 PROJECT CONDITIONS

- A. Environmental Requirements:
  - 1. Do not apply coating when surface temperature is less than 45 degrees F or if precipitation is imminent.
  - 2. Do not apply unless surfaces to receive coating are dry.
- B. Regulatory Requirements:
  - 1. Comply with applicable codes, regulations, ordinances, and laws regarding use and application of products that contain volatile organic compounds (VOC).
- C. Coordinate product compatibility with other products specified at application area.

#### PART 2 GENERAL PRODUCTS

#### 2.01 MANUFACTURERS

- A. Exposed Steel Anti-Corrosion Coating
  - 1. Euclid Duralprep A.C.
  - 2. Sika Armatec-110 EpoCem
  - 3. BASF MasterProtect P 8100AP
  - 4. Or approved equal
- B. Concrete Coating for Spandrel Beams and Inverted Tee Beams:
  - 1. Euclid Tammscoat
  - 2. Sika Sikagark 550W Elastocolor
  - 3. BASF MasterProtect HB 400
  - 4. Or approved equal

#### 2.02 HIGH-PERFORMANCE COATINGS, GENERAL

- A. Material Compatibility:
  - Materials for use for anti-corrosion coating and within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  - 2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated. Products shall be of same manufacturer for each coat in a coating system.
- B. Colors: Spandrel Beams and Inverted Tee Beams to match existing concrete color: light grey.

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
  - 1. Concrete: 12 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Proceed with coating application only after unsatisfactory conditions have been corrected.
  - 1. Application of coating indicates acceptance of surfaces and conditions.

#### 3.02 PREPARATION

- A. All loose concrete on the underside of the beams shall be removed prior to surface preparation. Limits of loose concrete to be agreed upon with the Engineer in the Field.
- B. Follow Manufacturer's instructions for surface preparation
- C. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- D. Clean substrates of substances that could impair bond of coatings, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
  - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce coating systems indicated.

#### 3.03 APPLICATION

- A. Follow Manufacturer's instructions for surface preparation.
- B. Apply coatings to produce surface films without cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections. Produce sharp glass lines and color breaks.

#### 3.04 HIGH-PERFORMANCE COATING SCHEDULE

- A. Concrete Substrates, Vertical and Horizontal Surfaces:
  - 1. Follow manufacturer's instructions for products specific for the coating system type.
    - a. Prime Coat: per Manufacturer's instructions
    - b. Intermediate Coat: per Manufacturer's instructions
    - c. Topcoat: per Manufacturer's instructions

#### **PART 4 - MEASUREMENT AND PAYMENT**

#### 4.01 MEASUREMENT

A. The quantity of Concrete Coatings for Inverted Tee and Spandrel Beams, will be measured for payment at the Contract unit price per lump sum. Reference Contract drawings for locations.

#### 4.02 PAYMENT

A. The accepted quantity of Concrete Coatings for Inverted Tee and Spandrel Beams including full compensation for furnishing, handling, transporting, and placing the material specified, including primer, surface preparation, and furnishing all labor, tools, equipment, and incidentals necessary to complete the work will be paid for at the Contract unit price per lump sum. Removal of loose concrete and surface preparation as required by the Manufacturer's instructions shall be subsidiary.

Pay Item Pay Unit 099600.01 SF

**END OF SECTION 099600** 

# SECTION 221009 STORM DRAINAGE PIPING

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. Sawing the broken portion of the existing pipe as indicated on the Contract drawings, connecting a PVC extension pipe to the limits indicated on the Contract drawings.

#### 1.02 RELATED SECTIONS

A. Division 1 - General Requirements.

#### 1.03 SUBMITTALS

- A. General: Submit in accordance with Section 01300 Submittals.
- B. Product Data: Provide for pipe, tube, fittings, and couplings.

#### 1.04 REFERENCE STANDARDS

- A. ASME B31.9 Building Services Piping; The American Society of Mechanical Engineers; 2011 (ANSI/ASME B31.9).
- B. ASTM D2564 Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems; 2012.
- C. ASTM D2665 Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings; 2012.
- D. ASTM D2855 Standard Practice for Making Solvent-Cemented Joints with Poly(Vinyl Chloride) (PVC) Pipe and Fittings; 1996 (Reapproved 2010).
- E. ASTM D3034 Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings; 2008.
- F. ASTM F477 Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe: 2010.
- G. ASTM F708 Standard Practice for Design and Installation of Rigid Pipe Hangers; 1992 (Reapproved 2008).
- H. ICC-ES AC193 Acceptance Criteria for Mechanical Anchors in Concrete Elements; 2013.
- I. ICC-ES AC308 Acceptance Criteria for Post-Installed Adhesive Anchors in Concrete Elements; 2013.
- J. MSS SP-58 Pipe Hangers and Supports Materials, Design, Manufacture, Selection, Application, and Installation; Manufacturers Standardization Society of the Valve and Fittings Industry, Inc.; 2009.

#### 1.05 QUALITY ASSURANCE

- A. Reference Section 01400 Quality Control.
- B. Piping materials shall bear label, stamp, or other markings of specified testing agency.

#### PART 2 PRODUCTS

#### 2.01 PIPING MATERIALS

A. Refer to Part 3 "Piping Applications" Article for applications of pipe, tube, fitting, and joining materials.

#### 2.02 PVC PIPE AND FITTINGS, ABOVE GRADE

- A. Solid-Wall PVC Pipe: ASTM D 2665, Schedule 40, drain, waste, and vent.
  - 1. PVC Joints: Solvent welded, with ASTM D2564 solvent cement.

#### PART 3 EXECUTION

#### 3.01 PIPING APPLICATIONS

- A. Transition and special fittings with pressure ratings at least equal to piping pressure ratings may be used in applications below, unless otherwise indicated.
- B. Use the following piping materials for each size range:
  - 1. NPS 3: Solid Wall PVC Piping, Schedule 40.
  - 2. NPS 4: Solid Wall PVC Piping, Schedule 40.
  - 3. NPS 8: Solid Wall PVC Piping, Schedule 40.

#### 3.02 PIPING INSTALLATION

- A. Install piping per standard practice and Manufacturer's instructions.
- B. Reducing size of drainage piping in direction of flow is prohibited.
- C. Install storm drainage piping at the following minimum slopes, unless otherwise indicated:
  - 1. Horizontal Storm-Drainage Piping: ¼" per 1'-0".

#### 3.03 JOINT CONSTRUCTION

A. PVC Non-pressure Piping Joints: Join piping according to ASTM D 2665.

#### 3.04 CONNECTIONS

A. Connect new drainage piping to sound, existing PVC drainage piping. Use transition fitting to join dissimilar piping materials.

#### 3.05 CLEANING

- A. Clean interior of piping. Remove dirt and debris as work progresses.
- B. Protect drains during remainder of construction period to avoid clogging with dirt and debris and to prevent damage from traffic and construction work.

#### PART 4 MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

A. The quantity of Above Grade PVC Piping, Couplings & Fittings will be measured for payment at the Contract unit price per each.

#### 4.02 PAYMENT

A. The accepted quantity of PVC Piping, Couplings & Fittings will be full compensation for performing the work specified including removal and disposal of all existing deteriorated PVC drainage pipe, extending the existing pipe to the limits shown on the Contract drawings with a new segment of PCV pipe and for furnishing all labor, tools, materials, equipment, and incidentals necessary to complete the work will be paid for at the Contract unit price per each.

Pay Item Pay Unit 221009.01 – PVC Piping, Couplings & Fittings 3" Each

**END OF SECTION 221009** 

Exhibit D: Marketplace Repair Plans

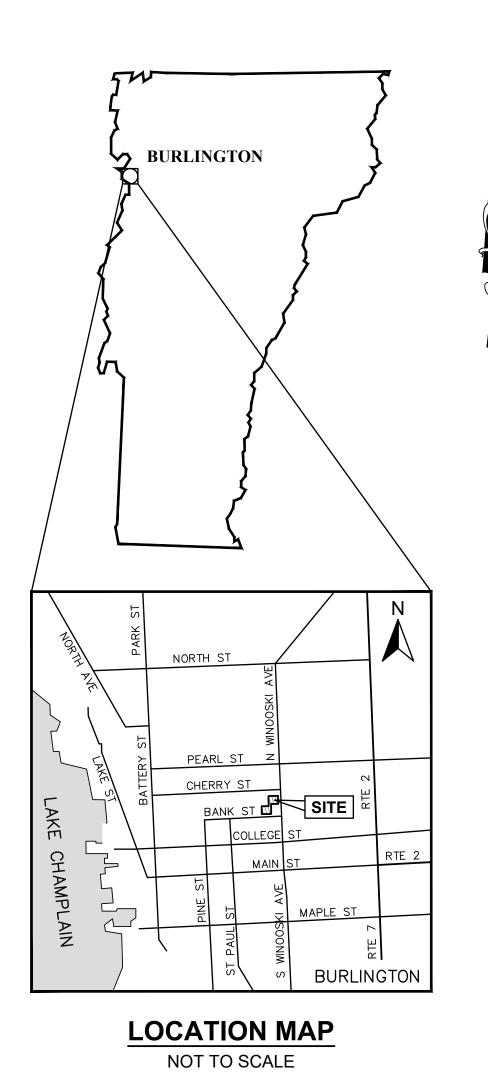
# REPAIR PLANS FOR

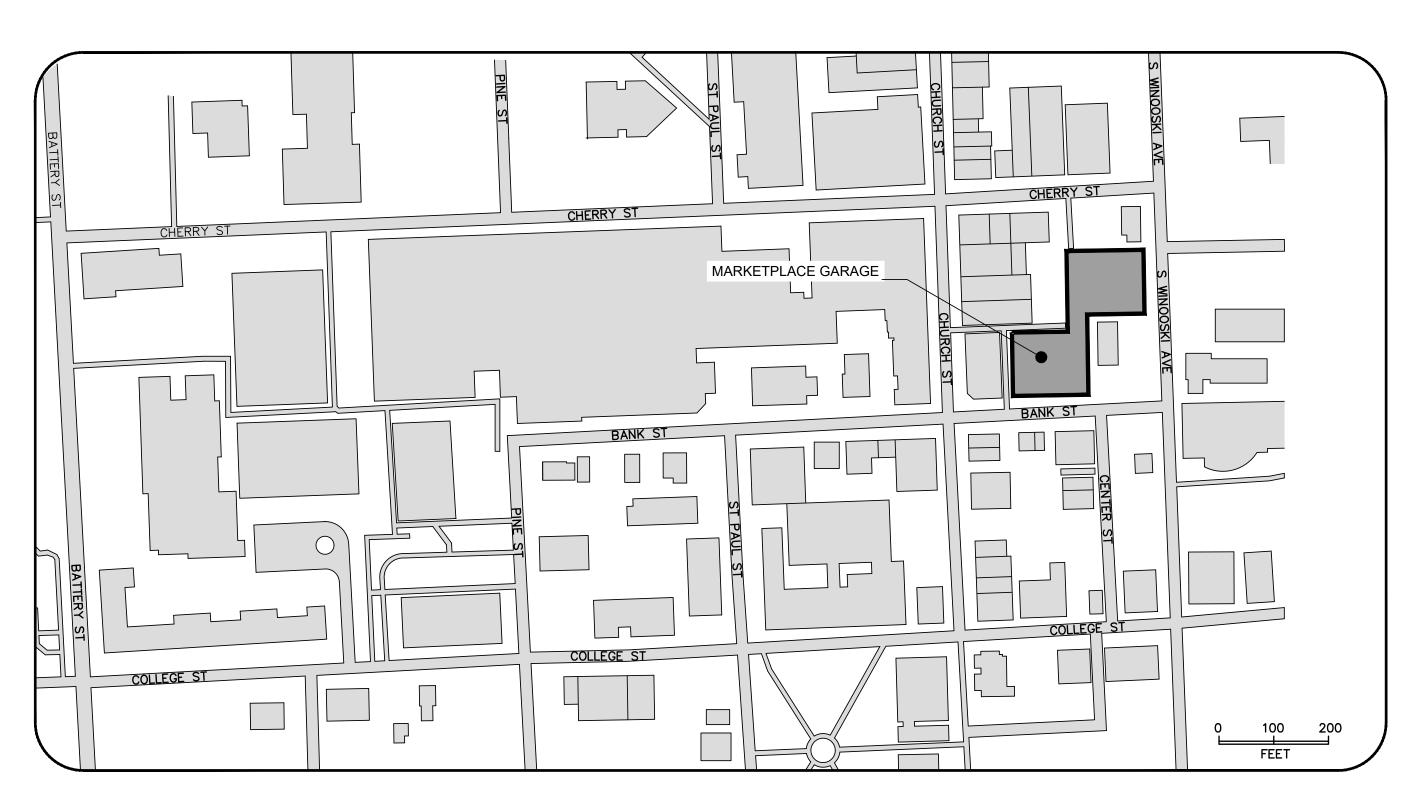
# MARKETPLACE PARKING GARAGE - 2022 REPAIRS BURLINGTON, VT





**MAY**, 2022





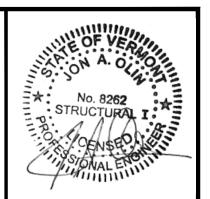
PARKING GARAGE LOCATION

## CLIENT

CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS
645 PINE STREET
BURLINGTON, VT 05401
PN: (802) 863-9094

# LIST OF DRAWINGS

DWG#	SHEET#	DWG NAME
T1.0	1	TITLE SHEET
S0.0	2	STRUCTURAL GENERAL NOTES
S0.1	3	QUANTITIES
S1.0	4	LEVEL 1 STRUCTURAL PLAN
S1.1	5	LEVEL 2 STRUCTURAL PLAN
S1.2	6	LEVEL 3 STRUCTURAL PLAN
S1.3	7	LEVEL 4 STRUCTURAL PLAN
S1.4	8	LEVEL 5 STRUCTURAL PLAN
S2.0	9	CONCRETE REPAIR DETAILS
S2.1	10	CONCRETE REPAIR DETAILS
S2.2	11	EXTENSIVE BEAM REPAIR DETAILS
S2.3	12	EXTENSIVE SPANDREL REPAIR DETAILS
TC1.0	13	TRAFFIC CONTROL PLAN



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HOYLE TANNER

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		CONTRACT PLANS	REV. DESCRIPTION	THIS DOCUMENT IS PREPARED AS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF HOYLE, TANNER. IT MAY NOT BE USED, REPRODUCED, DISSEMINATED OR TRANSFERRED IN ANY MANNER, INCLUDING ELECTRONICALLY FOR ANY OTHER PURPOSE THAN THIS PROJECT, WITHOUT THE WRITTEN PERMISSION OF HOYLE, TANNER.
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DWN BY	X N	SCALE:	AS SHOWN	DATE: MAY, 2022

RKETPLACE PARK 2022 REPA BURLINGTON, VEI

SHEET NO.

T1.0

PROJECT NO. 22.909002

#### GENERAL NOTES

- 1. GENERAL NOTES SHALL APPLY TO ALL DRAWINGS PREPARED BY HOYLE, TANNER & ASSOCIATES (HOYLE TANNER) AND THE WORK THEY CONVEY.
- 2. ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE AND LOCAL CODES, REGULATIONS AND STANDARDS, THE MORE STRINGENT OF WHICH SHALL GOVERN.
- 3. QUALITY CONTROL SUCH AS TESTING, CERTIFICATIONS, AND SUBMITTALS SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS. ADEQUATE TIME SHALL BE GIVEN FOR ENGINEER REVIEW.
- 4. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS AND COORDINATION OF OTHER TRADES.
- 5. THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION AND COMPLIANCE WITH STATE AND FEDERAL REGULATIONS REGARDING SITE SAFETY SHALL SOLELY BE THE CONTRACTOR'S RESPONSIBILITY.
- 6. ALL DIMENSIONS, ELEVATIONS AND CONDITIONS MUST BE VERIFIED BY THE GENERAL CONTRACTOR OR RESPONSIBLE TRADES PRIOR TO COMMENCING WITH THE WORK, FABRICATION OR ORDERING MATERIALS. DO NOT SCALE DRAWINGS, USE DIMENSIONS SHOWN
- 7. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND AS—BUILT CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 8. UNDER NO CIRCUMSTANCES SHALL THE CONSTRUCTION LOAD ON THE STRUCTURE EXCEED THE DESIGN LOAD WITHOUT SPECIFIC WRITTEN PERMISSION FROM THE ENGINEER.
- 9. HOYLE TANNER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT ARISE DUE TO THE FAILURE OF THE CONTRACTOR:
  - TO FOLLOW THESE DRAWINGS AND SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY.
  - TO NOTIFY HOYLE TANNER OF ANY DISCREPANCIES, ERRORS, OMISSIONS OR CONFLICTS AND OBTAIN THEIR GUIDANCE TO RESOLVE.
- 10. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL WASTE BUILDING MATERIAL, CONCRETE, MASONRY, WOOD, DEBRIS AND OTHER MATERIALS NECESSARY FOR THE SATISFACTORY COMPLETION OF THE CONTRACT WORK AND AS REQUIRED BY THE OWNER. CONSTRUCTION DEBRIS SHALL BE DISPOSED OF IN STRICT ACCORDANCE WITH VERMONT LAW. REMOVAL AND DISPOSAL COSTS SHALL BE INCIDENTAL TO THEIR RESPECTIVE PAY ITEMS.
- 11. ALL PORTIONS OF THE STRUCTURE SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
- 12. HEIGHT AND WEIGHT RESTRICTIONS APPLY, CONTRACTOR TO CONFIRM CONSTRUCTION VEHICLE ACCESS WITH ENGINEER PRIOR TO CONSTRUCTION.
- 13. THESE DRAWINGS HAVE BEEN DEVELOPED BASED ON THE 1976 RECORD DRAWINGS. AN ELECTRIC COPY OF THESE DRAWINGS CAN BE PROVIDED TO THE CONTRACTOR UPON NOTICE OF AWARD.
- 14. CONTRACTOR SHALL LOCATE PT STRAND LOCATIONS BY NON-DESTRUCTIVE MEANS AND PRE-MARK ON SLABS AND BEAMS WHERE WORK IS TO OCCUR. CONTRACTOR SHALL COORDINATE THAT NO DRILLING OR FASTENING IS TO OCCUR WITHIN 6" OF STRAND LOCATIONS.
- 15. CONTRACTOR SHALL MAINTAIN ALL MECHANICAL AND ELECTRICAL FUNCTIONS OF THE GARAGE TO BE OPERATIONAL THROUGHOUT CONSTRUCTION, INCLUDING ELECTRICAL SYSTEMS AND DRAINAGE SYSTEMS.

## **DEMOLITION NOTES**

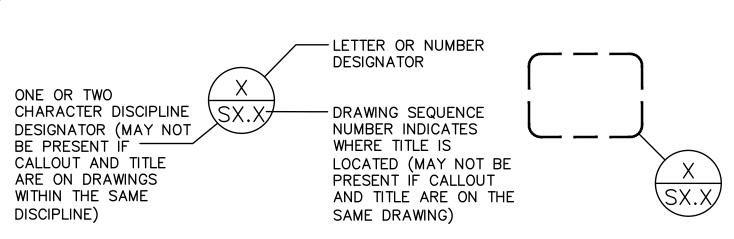
- . CONTRACTOR IS RESPONSIBLE FOR COMPLETING DEMOLITION WORK UTILIZING MEANS AND METHODS TO PROTECT WORKERS, PEDESTRIANS, AND VEHICLES AND PREVENT DAMAGE TO STRUCTURAL MEMBERS.
- 2. DAMAGE ARISING FROM DEMOLITION WORK SHALL BE REPAIRED/REPLACED AS PROPOSED AND SUBMITTED BY CONTRACTOR FOR REVIEW, COMMENT, AND APPROVAL BY THE OWNER AND THE ENGINEER. ALL COSTS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 3. CONTRACTOR SHALL DESCRIBE DEMOLITION METHODS IN THE PRE-CONSTRUCTION MEETING.
- 4. REMOVAL OF EXISTING CONCRETED DISPOSAL IS SUBSIDIARY TO THE RELEVANT PAY ITEMS AS IDENTIFIED IN THE TECHNICAL SPECIFICATIONS.
- 5. REFERENCE SPECIFICATION SECTION 024119 FOR ADDITIONAL DEMOLITION REQUIREMENTS.
- 6. EXISTING ELECTRICAL CONDUIT AND WIRING IS LOCATED IN SLABS, BEAMS, AND COLUMNS. PRIOR TO DEMOLITION, CONTRACTOR SHALL CHECK FOR ELECTRICAL AND PROTECT WHERE NECESSARY.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FALL PROTECTION FOR PEDESTRIAN ZONES BELOW DEMOLITION AND/OR TRAFFIC CONTROL BARRIERS AND CLOSURES TO PROTECT PEDESTRIANS, VEHICLES AND WORKERS. CONTRACTOR SHALL REPRESENT THIS IN THE SUBMITTED SHORING PLAN AND TRAFFIC CONTROL PLAN RESPECTIVELY.

#### TRAFFIC CONTROL NOTES

- 1. THE CONTRACTOR IS REQUIRED TO SUBMIT A PROPOSED TRAFFIC CONTROL PLAN (TCP) TO THE OWNER AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCING THE WORK. THE TCP SHALL INDICATE THE LOCATION OF SPACES THAT WILL BE TAKEN OUT OF SERVICE DURING EACH PHASE OF CONSTRUCTION. A DETAILED LIST OF ALL TRAFFIC CONTROL SIGNS AND BARRIERS TO BE USED SHALL BE INCLUDED IN THE TCP.
- 2. THE CONSTRUCTION SITE SHALL INCLUDE ADVANCE WARNING AND GUIDANCE SIGNS. GUIDANCE SIGNS SHALL BE SHOWN ON THE TCP AND SHALL PROVIDE WAYFINDING DIRECTION FOR VEHICULAR AND PEDESTRIAN TRAFFIC.
- 3. THE CONTRACTOR SHALL PHASE THE CONSTRUCTION ACTIVITIES TO MAINTAIN EXISTING TRAFFIC PATTERNS WITHIN THE GARAGE AND MINIMIZE DISRUPTION TO THE GARAGE PATRONS. TRAFFIC CONTROL SHALL INCLUDE ADVANCE NOTIFICATION OF PARKING STALL CLOSURES (1 WEEK MINIMUM) WITH PLACARDS (SUPPLIED BY CONTRACTOR AND APPROVED BY ENGINEER AND OWNER) PLACED AT STALLS / LEVELS CLEARLY IDENTIFYING WHEN VEHICLES MUST BE MOVED BY. CITY SHALL COORDINATE VEHICLE TOWING AS NECESSARY.
- 4. THE CONTRACTOR SHALL CONDUCT THE WORK TO MINIMIZE THE NUMBER OF PARKING SPACES TAKEN OUT OF SERVICE THAT INCLUDES AREAS FOR MATERIAL STORAGE, TEMPORARY TRAFFIC PATTERNS, AND CONTRACTOR VEHICLES AND EQUIPMENT. 40 SPACES PER LEVEL, AND 80 TOTAL SPACES MAY BE CLOSED AT ONE TIME.
- 5. THE CONTRACTOR SHALL PROVIDE ADEQUATE CLOSURES WITH BARRICADES ABOVE AND BELOW THE WORK AREAS TO PROTECT PEDESTRIANS AND VEHICLES AND PREVENT THEM FROM ENTERING THE WORK ZONE.
- 6. ACCESS SHALL BE MAINTAINED TO ELEVATORS AND STAIR TOWERS AT ALL TIMES, WITH THE EXCEPTION OF THE SPANDREL BEAM REPAIR AT STAIR TOWER B. STAIR TOWER B WILL BE REQUIRED TO BE SHUT DOWN AT ALL LEVELS FOR SHORING AND TO COMPLETE THIS WORK.
- 7. ALL TRAFFIC CONTROL SHALL COMPLY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
- 8. ALL WORK ASSOCIATED WITH VEHICULAR/PEDESTRIAN TRAFFIC CONTROL SHALL BE INCLUDED IN PAY ITEM 012000.01

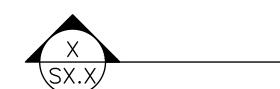
#### **CONCRETE NOTES:**

- 1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
- 2. REFERENCE SPECIFICATION SECTION 033000 FOR CONCRETE MIX AND EXECUTION INFORMATION.
- CONCRETE EXPOSED TO WEATHER OR FREEZING SHALL BE AIR—ENTRAINED. ALL
  CONCRETE SHALL BE CONSIDERED AS CONCRETE EXPOSED TO WEATHER AND FREEZING
  CONDITIONS.
- 4. CONTROLLED CONCRETE SHALL BE USED AND SHALL BE PROPORTIONED, MIXED AND PLACED UNDER SUPERVISION OF AN APPROVED CONCRETE TESTING LABORATORY.
- 5. ALL CONCRETE SURFACES SHALL BE COMPLETELY CLEANED FROM ANY DIRT, TRASH OR OTHER CONTAMINATION TO THE SURFACE BEFORE POURING NEW CONCRETE.



SECTION, DETAIL, AND ELEVATION SYMBOL IDENTIFIERS

DETAIL CALLOUT EXAMPLE

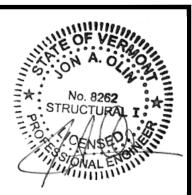


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SECTION CALLOUT EXAMPLE

ELEVATION CALLOUT EXAMPLE

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SHEET 2 OF 13

# ESTIMATE OF QUANTITIES (NOT GUARANTEED)

- 1. THE ESTIMATE OF QUANTITIES SHOWN IS FOR BIDDING PURPOSES ONLY AND HAS BEEN ESTIMATED BASED OFF OF FIELD MEASUREMENTS. WORK NOT SHOWN ON THE TABLE SHALL BE CONSIDERED INCIDENTAL TO RELEVANT ITEMS.
- 2. IN THE EVENT OF CONFLICT BETWEEN QUANTITIES SHOWN HERE AND QUANTITIES ON BID FORM, VALUES ON BID FORM SHALL GOVERN.

011000.01	MOBILIZATION/DEMOBILIZATION	LS	1
012000.01	TRAFFIC CONTROL	LS	1
030130.01	HORIZONTAL CONCRETE REPAIR	SF	2000
030130.11	VERTICAL CONCRETE REPAIR	SF	5
034200.01	ELASTOMERIC BEARING PADS	EA	2
039301.01	EXTENSIVE STRUCTURAL BEAM REPAIR	EA	2
039301.02	EXTENSIVE SPANDREL BEAM REPAIR	EA	2
042200.01	REMOVAL & RESET BRICK FAÇADE	SF	300
079106.01	EXPANSION JOINT SEAL REPLACEMENT	LF	12
099600.01	HIGH PERFORMANCE COATING	SF	100
221009.01	PVC PIPING, COUPLINGS AND FITTINGS 3"	EA	1

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	125 College Street, 4th Floor

**ABREVIATIONS** 

MISC

NF

NO

NS

NTS

OPP

PL, P PAF

PSF

PSI

PΤ

RD

SC SIM SOG

SS STD

STIFF

STL STR

T&B

TEK

TEMP

T/SHELF

T/SLAB T/STL

T/WALL

VER, VERT

UNO

STRUCT

TOC, T/CONC

TOF, T/FTG

SPECS

REINF

REQ, REQD

PREFAB

Ρ

OC, O/C

MISCELLANEOUS

NEAR FACE

NEAR SIDE

ON CENTER OUTSIDE FACE

OPPOSITE

**FASTENER** 

REQUIRED

SIMILAR

STIFFENER

STRAIGHT

STRUCTURAL

TOP AND BOTTOM

TOP OF CONCRETE

STEEL SELF-DRILLING/

SELF-TAPPING SCREW

TOP OF FOOTING

TEMPERATURE

TOP OF SHELF

TOP OF SLAB

TOP OF STEEL

TOP OF WALL

UNLESS NOTED OTHERWISE

VERIFY IN FIELD

WIDE FLANGE

STRUCTURAL STEEL

WELDED WIRE FABRIC

TYPICAL

VERTICAL

WITH

WITHOUT WORK POINT

WEIGHT

STEEL

ROOF DRAIN

SLIP CRITICAL

SLAB-ON-GRADE

SPECIFICATIONS STAINLESS STEEL STANDARD

PLATE

FOOT

NOT TO SCALE

PIER DESIGNATION

POWDER ACTUATED

POUNDS PER SQUARE

POUNDS PER SQUARE

PREFABRICATED

POST TENSIONING

REINFORCING STEEL

NUMBER

ANCHOR BOLT

ARCHITECT

BUILDING

BEAM

BOTTOM

BEARING

CHANNEL

CANTILEVER

CONCRETE

CENTERLINE

CLEAR

COLUMN CONTINUOUS

DIAMETER

DRAWING

**EXISTING** 

EACH

EQUAL

DOWN

DIMENSION

DOUBLE TEE

EACH FACE

ELEVATION

**EQUIPMENT** 

EACH SIDE EACH WAY

**EXPANSION** 

FLOOR DRAIN

FINISH FLOOR

FOUNDATION

GALVANIZED

HORIZONTAL

INSIDE FACE

HEIGHT

INCH

JOINT

**ANGLE** 

POUND

MAXIMUM

MINIMUM

DOUBLE ANGLE

LINEAR FOOT

MECHANICAL

MANUFACTURER

FLOOR

FOOTING

GAGE

FOOT

EDGE OF DECK

FOOTING DESIGNATION

GENERAL CONTRACTOR

HOLLOW STRUCTURAL

KIP (1 KIP = 1,000 LBS)

KIPS PER SQUARE INCH

CUBIC YARD

CAST-IN-PLACE

CONTROL JOINT

CONCRETE MASONRY

CONSTRUCTION JOINT

AND

ARCH

BLDG

ВМ

BOT

BRG

CANT

CONC

CL, & CLR CMU UNIT

CNJ COL CONT CY

DIA, Ø

DIM

DN

DWG

(E), EX, EXIST EA

EL, ELEV

EOD EQ

EQUIP

ES

EW

EXP

FD

FDN

FLR

FT FTG

GALV GC

HSS HT

IN

KSI

LF

MAX

MFR

MIN

MECH

HOR, HORIZ

CIP

CJ

OF VEAM	
* No. 8262 STRUCTURAL I	william.

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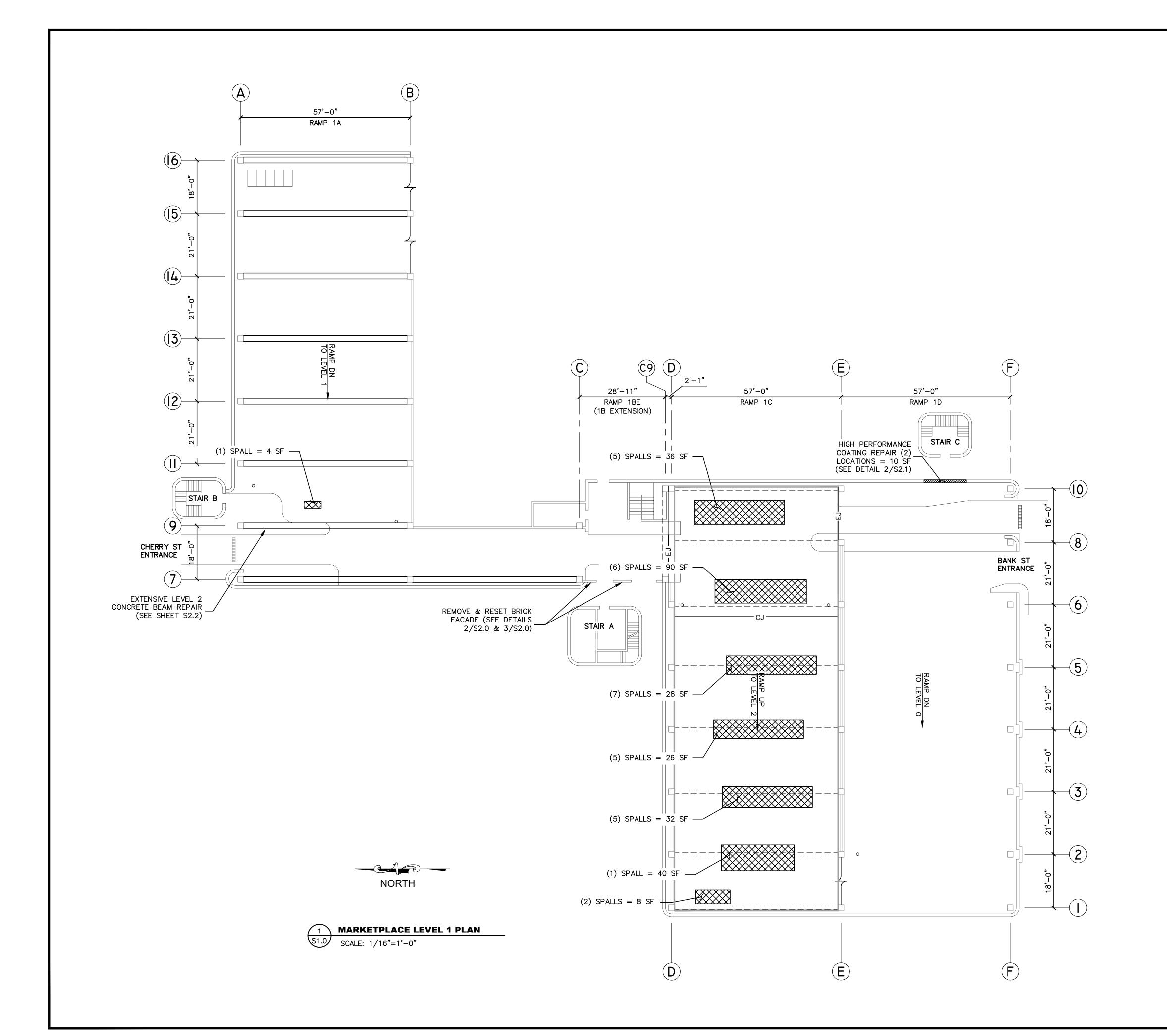
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MARKETPLACE PARKING GARAGE	X V	A M M				
2022 REPAIRS						
BURLINGTON, VERMONT	SCALE:	ننا	0	0 CONTRACT PLANS MAY 2022	2022	
	AS SHOWN		REV.	DESCRIPTION DATE	щ	
QUANTITIES	DATE: MAY, 2022	: 022	THIS PROI TRAI	THIS DOCUMENT IS PREPARED AS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF HOYLE, TANNER. IT MAY NOT BE USED, REPRODUCED, DISSEMINATED OR TRANSFERRED IN ANY MANNER, INCLUDING ELECTRONICALLY FOR ANY OTHER PURPOSE THAN THIS PROJECT, WITHOUT THE WRITTEN PERMISSION OF HOYLE, TANNER.	п к п	

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SHEET 3 OF 13



EXISTING CONCRETE COL.

== EXISTING CONCRETE BEAM BELOW

EXISTING TRENCH DRAIN

• EXISTING FLOOR DRAIN

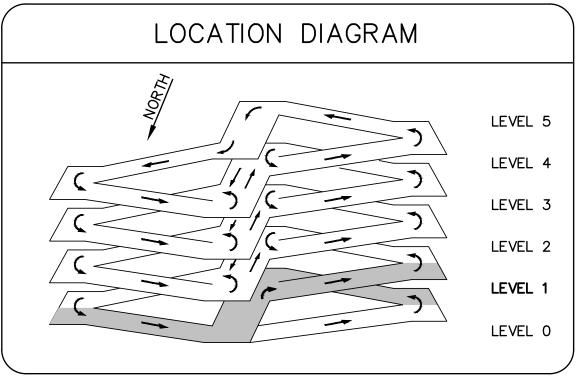
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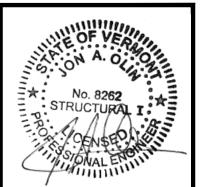
GENERAL AREA OF CONCRETE SPALLS TO BE REPAIRED. PAY ITEM 030130.01 (SEE NOTE 1)

GENERAL AREA OF OVERHEAD AND VERTICAL SPALLS TO BE REPAIRED. PAY ITEM 099600.01

# NOTES

- 1. SPALL AREA SHOWN ON PLANS IS FOR GENERAL LOCATION PURPOSES AND DOES NOT REPRESENT ACTUAL SPALL LIMITS. MULTIPLE INDIVIDUAL SPALL REPAIRS MAY EXIST WITHIN A HATCHED AREA AS SHOWN. COORDINATE WITH RESIDENT ENGINEER TO LOCATE AND IDENTIFY UNSOUND EXISTING PATCHES, JOINT REPLACEMENTS AND NEW SPALL PATCH REPAIRS. REPLACE EXISTING PATCHES AT THE DISCRETION OF THE RESIDENT ENGINEER PER DETAILS 3/S2.1 & 4/S2.1. (PAY ITEM 030130.11 AND 030130.01 RESPECTIVELY)
- 2. LEVEL IDENTIFICATION IS MADE FROM GRIDS 8 & 9
- 3. ALL OVERHEAD REPAIRS ARE VISIBLE FROM THE LEVEL INDICATED ON THE PLAN VIEW. BEAMS SHOWN REPRESENT THE LEVEL ABOVE (E.G. LEVEL 1 PLAN VIEW SHOWS LEVEL 2 BEAMS)





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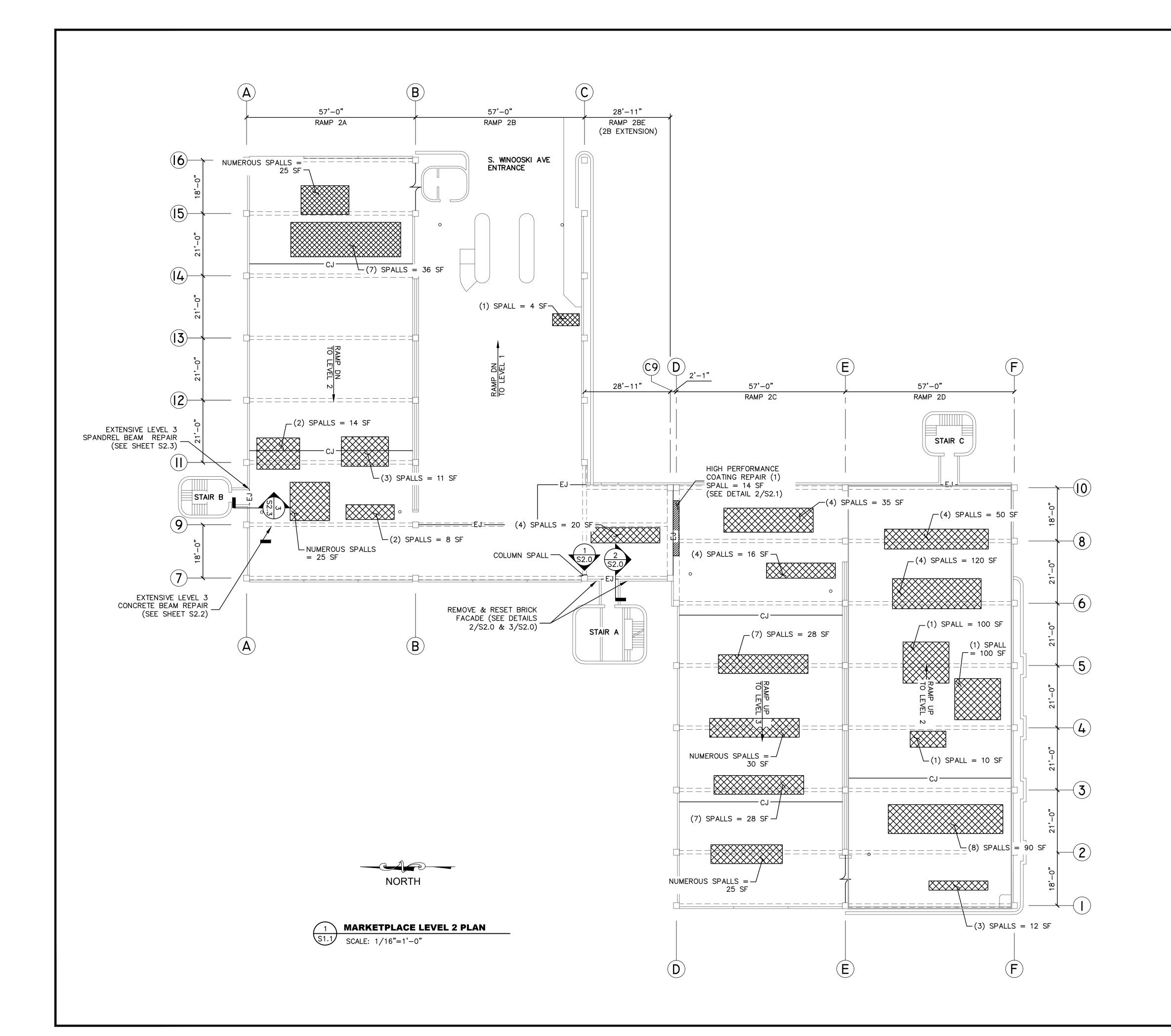
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	MAY, 2022	2022	: <b>†</b>	AN THIS PROJECT, WITHOUT THE WRITTEN PERMISSION OF HOYLE, TANNER.	

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SHEET 4 OF 13



EXISTING CONCRETE COL.

=== EXISTING CONCRETE BEAM BELOW

EXISTING TRENCH DRAIN

EXISTING FLOOR DRAIN

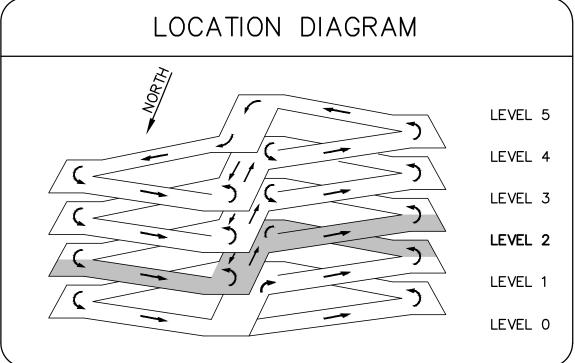
GENERAL AREA OF CONCRETE SPALLS TO BE REPAIRED. PAY ITEM 030130.01 (SEE NOTE 1)

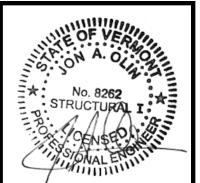
GENERAL AREA OF OVERHEAD AND VERTICAL SPALLS TO BE REPAIRED. PAY ITEM 099600.01

# NOTES

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  MULTIPLE INDIVIDUAL SPALL REPAIRS MAY EXIST WITHIN A HATCHED AREA AS SHOWN. COORDINATE WITH RESIDENT ENGINEER TO LOCATE AND IDENTIFY UNSOUND EXISTING PATCHES, JOINT REPLACEMENTS AND NEW SPALL PATCH REPAIRS. REPLACE EXISTING PATCHES AT THE DISCRETION OF THE RESIDENT ENGINEER PER DETAILS 3/S2.1 & 4/S2.1. (PAY ITEM 030130.11 AND 030130.01 RESPECTIVELY)
- 2. LEVEL IDENTIFICATION IS MADE FROM GRIDS 8 & 9
- 3. ALL OVERHEAD REPAIRS ARE VISIBLE FROM THE LEVEL INDICATED ON THE PLAN VIEW. BEAMS SHOWN REPRESENT THE LEVEL ABOVE (E.G. LEVEL 1 PLAN VIEW SHOWS LEVEL 2 BEAMS)





PRIME, STRUCTURAL

HOYLE TANNER

125 College Street, 4th Floor Burlington, VT 05401 Tel: (802) 860-1331

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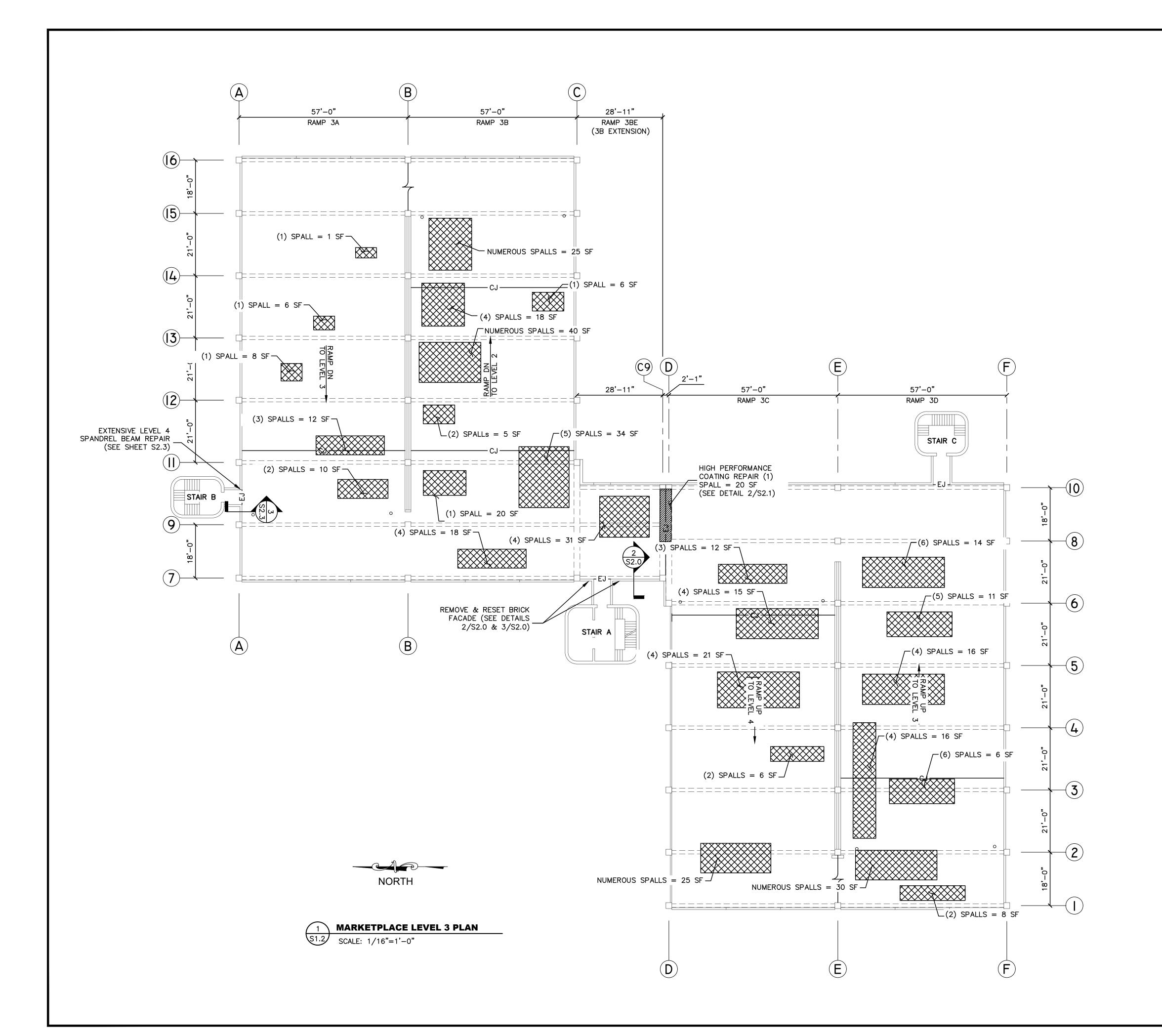
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2022 REPAIRS
BURLINGTON, VERMONT
JAME
LEVEL 2 STRUCTURAL PLAN

SHEET NO.

S1.1

PROJECT NO. 22.909002

SHEET 5 OF 13



EXISTING CONCRETE COL.

EXISTING CONCRETE BEAM BELOW

EXISTING TRENCH DRAIN

EXISTING FLOOR DRAIN

GENERAL AREA OF CONCRETE SPALLS TO BE REPAIRED. PAY ITEM 030130.01 (SEE NOTE 1)

GENERAL AREA OF OVERHEAD AND VERTICAL SPALLS TO BE REPAIRED. PAY ITEM 099600.01

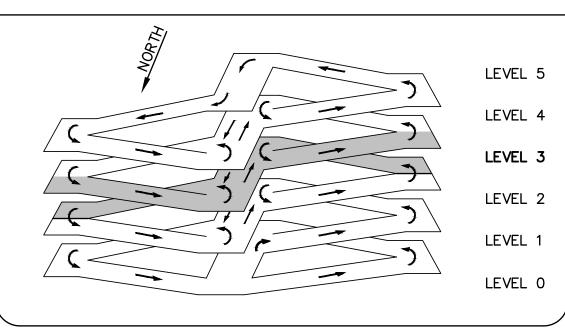
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# LOCATION DIAGRAM





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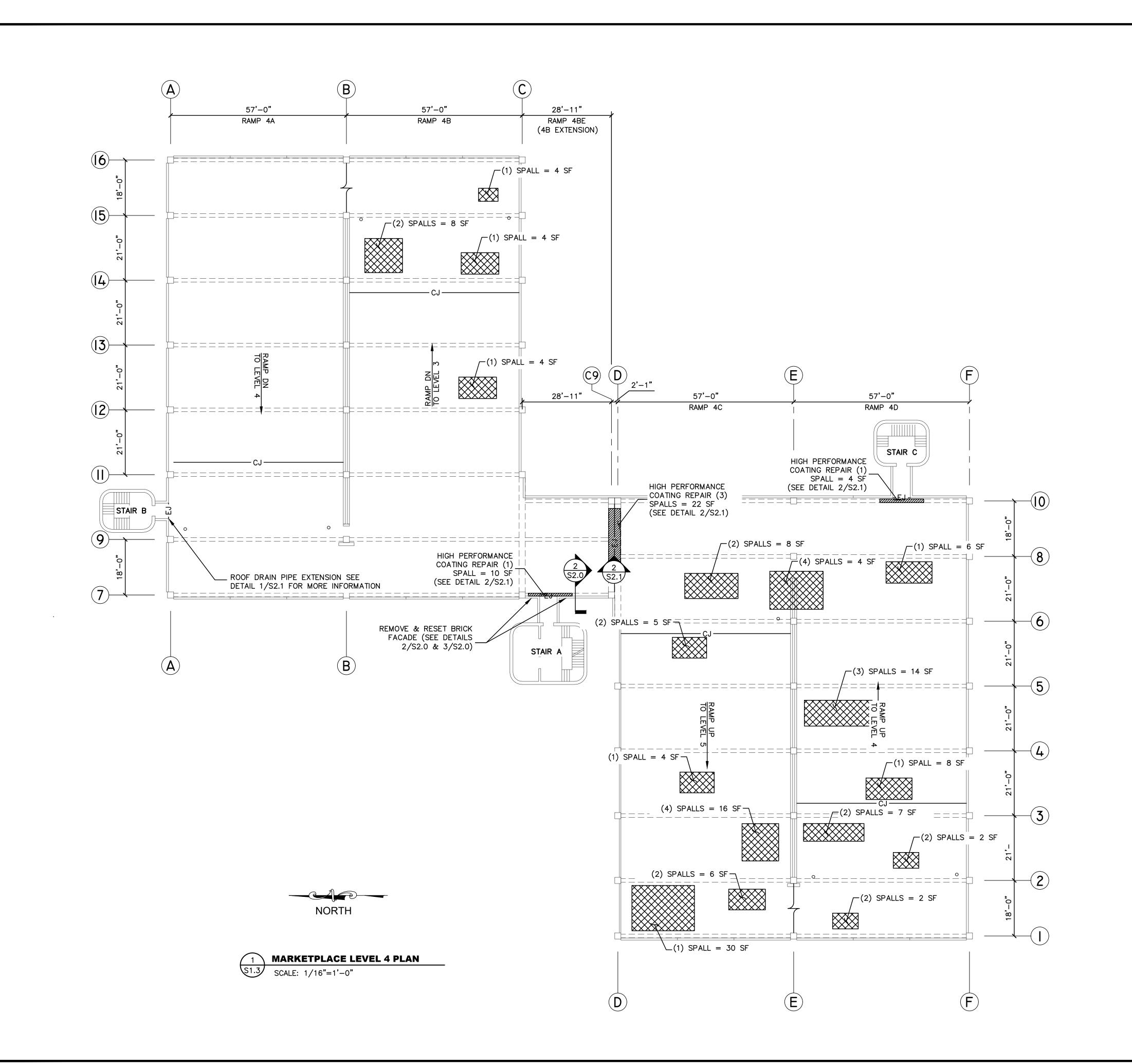
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SHEET NO.

S1 2

PROJECT NO. 22.909002

SHEET 6 OF 13



EXISTING CONCRETE COL.

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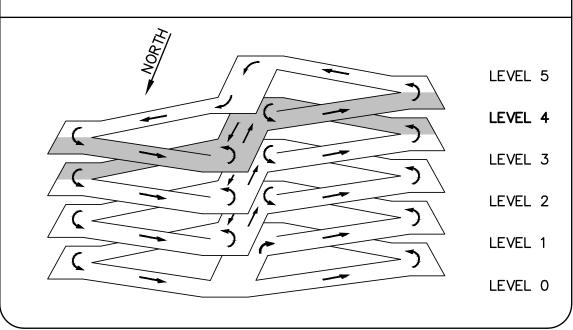
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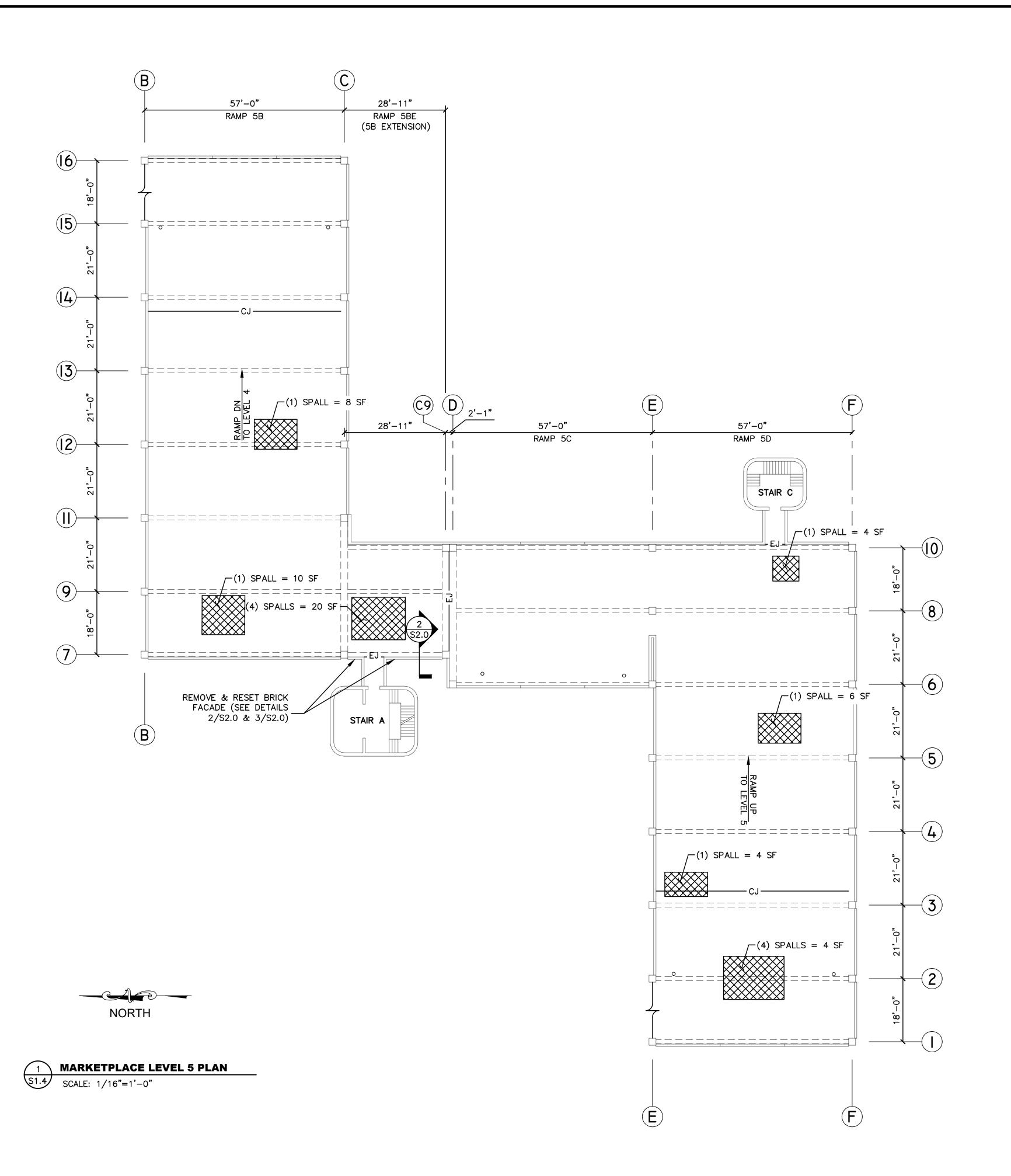
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SHEET NO.

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PROJECT NO. 22.909002

SHEET 7 OF 13



EXISTING CONCRETE COL.

== EXISTING CONCRETE BEAM BELOW

EXISTING TRENCH DRAIN

• EXISTING FLOOR DRAIN

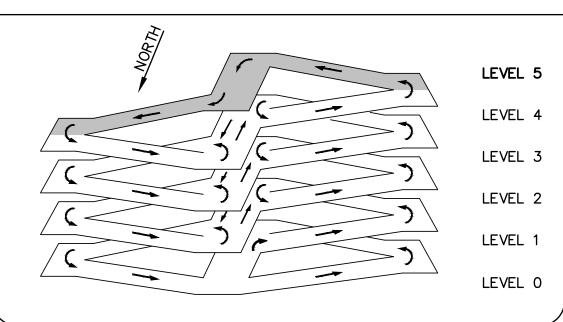
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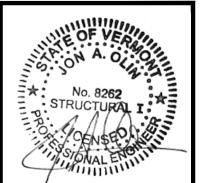
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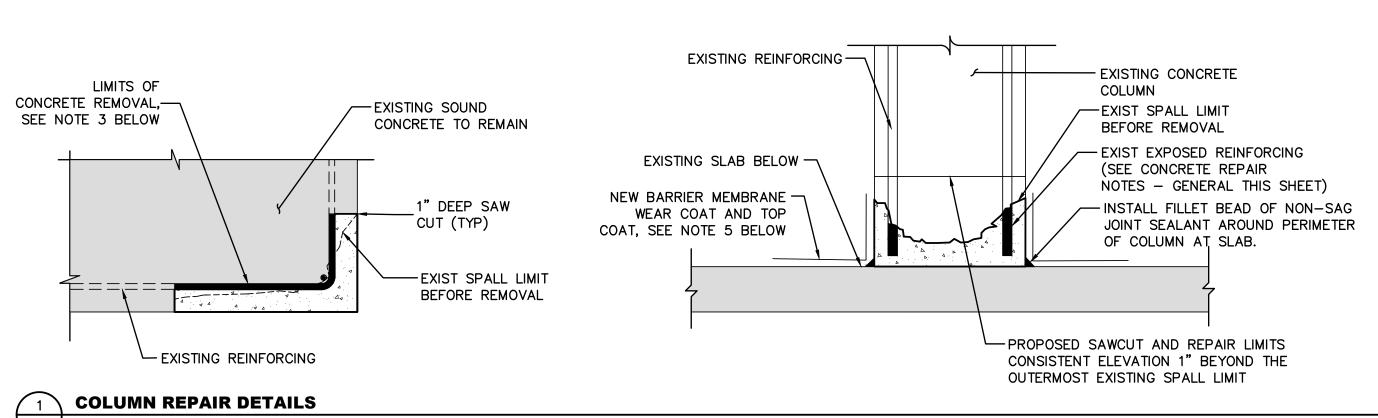
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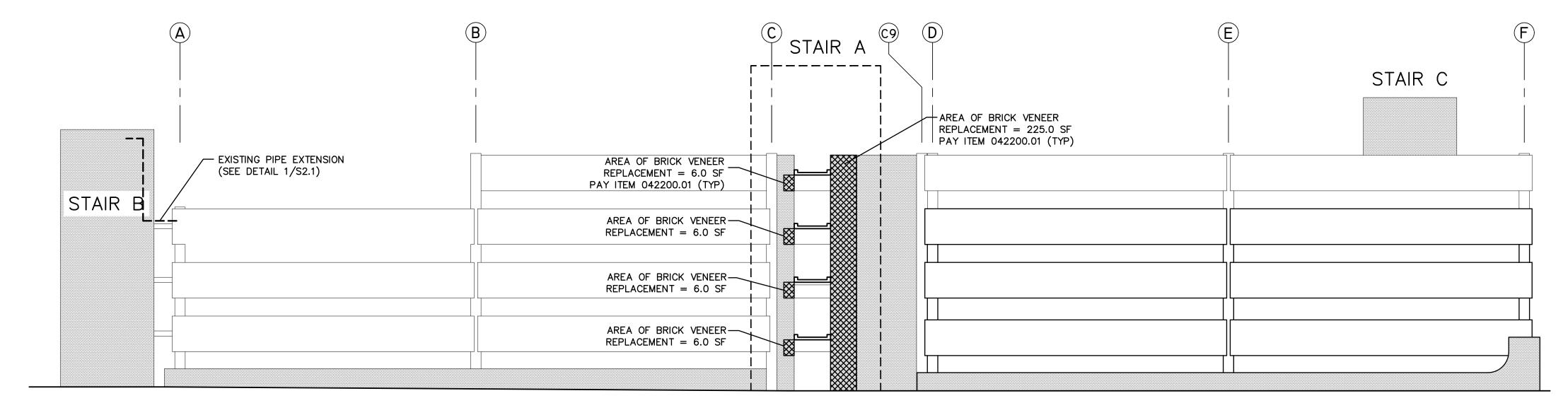


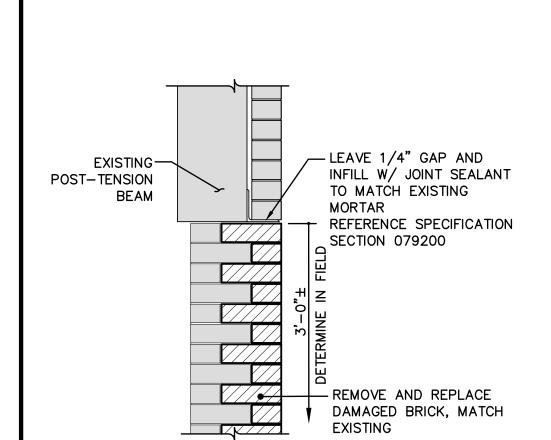


# CONCRETE REPAIR NOTES - GENERAL

- 1. THE CONTRACTOR AND ENGINEER SHALL JOINTLY DETERMINE REPAIR AREAS.
- 2. PREPARE SPALLED AREA BY REMOVING ALL DETERIORATED CONCRETE TO A MINIMUM DEPTH AS SHOWN ON CONCRETE REPAIR DETAILS, FEATHERED REMOVAL EDGES ARE PERMITTED FOR HORIZONTAL PATCH REPAIRS. (REFERENCE 3/S2.1)
- 3. AFTER CONCRETE REMOVAL, THE REPAIR SURFACE SHALL BE BUSH HAMMERED, WIRE WHEEL BRUSHED AND THOROUGHLY CLEANED OF INJURIOUS RUST, CONCRETE, DIRT, GREASE, OR ANY OTHER BOND-INHIBITING MATERIALS.
- 4. PATCH REPAIR AREA WITH AN APPROVED REPAIR MATERIAL. THE CONCRETE REPAIR MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.
- 5. CONTACT STRUCTURAL ENGINEER TO REVIEW EXISTING CONDITION FOR APPROVAL BEFORE INSTALLING PATCH MATERIAL.
- 6. APPLY SCRUB COAT IN ACCORDANCE WITH 030130 SPECIFICATIONS AND GROUT MANUFACTURER'S RECOMMENDATIONS.
- 7. ALL SURFACES TO BE REPAIRED SHALL BE IN A SATURATED SURFACE DRY (SSD) CONDITIONS WITH NO DRIPPING WATER ON THE SURFACE - I.E. SOAK SURFACES WITH CLEAN WATER FOR 15 MINUTES MINIMUM.
- 8. WHERE REINFORCING STEEL IS EXPOSED, CONDUCT OIL-FREE ABRASIVE CLEANING. (TIGHTLY BONDED LIGHT RUST WHICH CANNOT BE REMOVED WITH A WIRE BRUSH IS ACCEPTABLE)

- REFER TO CONCRETE REPAIR NOTES ON THIS SHEET.
- 2. ALL WORK PAID AS ITEM 030130.11
- 3. CONTRACTOR SHALL NOT REMOVE CONCRETE BEYOND THE EXTERIOR REINFORCING CAGE. IF SOUND CONCRETE IS NOT REACHED AT THE EXTERIOR REINFORCING CAGE, CONTACT ENGINEER ON HOW TO PROCEED.
- 4. WHERE REINFORCING STEEL IS EXPOSED, CONDUCT OIL-FREE ABRASIVE CLEANING, (TIGHTLY BONDED LIGHT RUST WHICH CANNOT BE REMOVED WITH A WIRE BRUSH IS ACCEPTABLE.)
- 5. EXTEND BARRIER MEMBRANE 2" BEYOND LIMIT OF REPAIR UP THE FACE OF THE COLUMN AND 12" ALONG THE EXISTING SLAB. (SUBSIDIARY TO 030130.11) (SEE SPECIFICATION 071800.)
- 6. REMOVE LOOSE OR UNSOUND CONCRETE TO REINFORCING CAGE AND CLEAN STEEL ELEMENTS TO SSPC-SP 6 AND COAT WITH AN ANTI-CORROSION
- 7. REFER TO REPAIR DETAILS 4/S2.1, 5/S2.1, & 6/S2.1. REPAIRS SHALL BE INSTALLED BY PRESSURE GROUTING MATERIAL IN PLACE (REFER TO SPECIFICATION 036423).



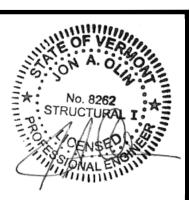


TYPICAL VENEER REPLACEMENT DETAIL

- 1. ALL WORK PAID AS ITEM 042200.01 2. CONTRACTOR TO MAINTAIN ACCESS TO STAIR TOWER A ELEVATOR AT ALL
- 3. VERIFY REMOVAL EXTENTS IN THE FIELD WITH THE ENGINEER.

**WEST ELEVATION** 

1. VERIFY REMOVAL EXTENTS IN THE FIELD WITH THE ENGINEER.



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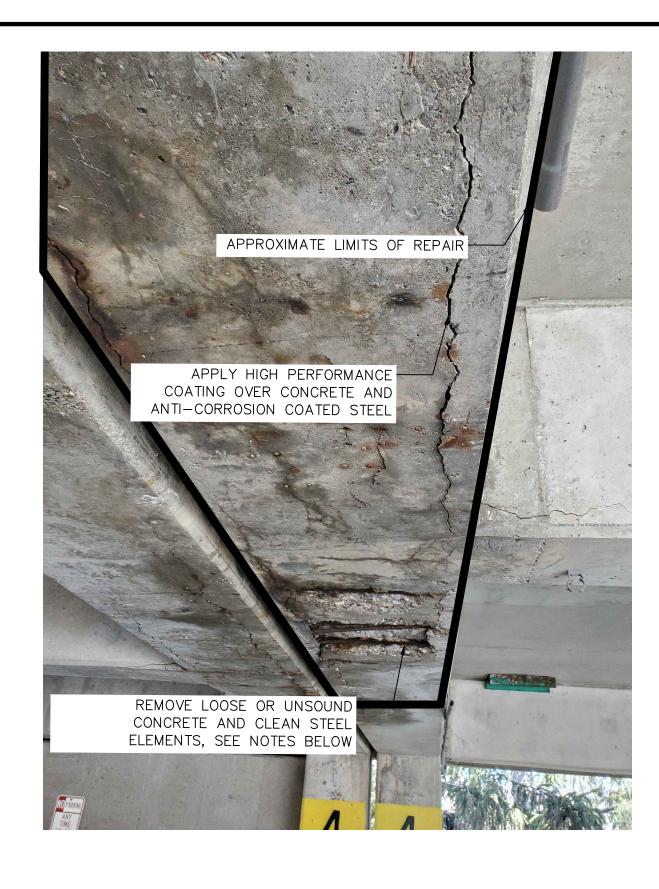
PROJECT NO. 22.90900:

SHEET 9 OF 13





1. PAY ITEM 221009.01





# **OVERHEAD CONCRETE COATINGS**

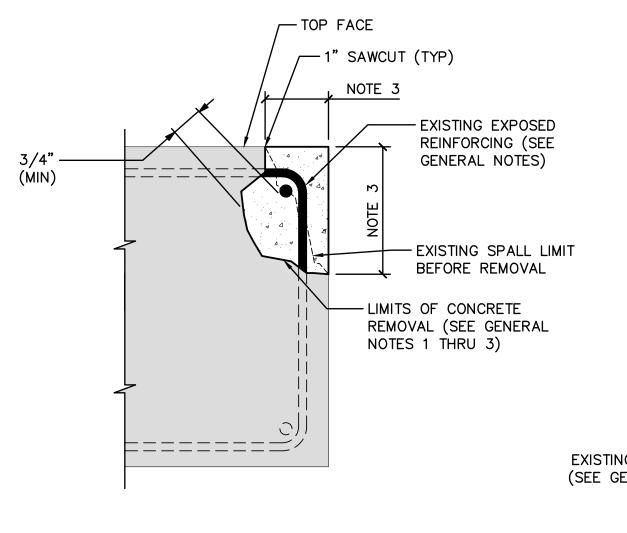
## NOTES:

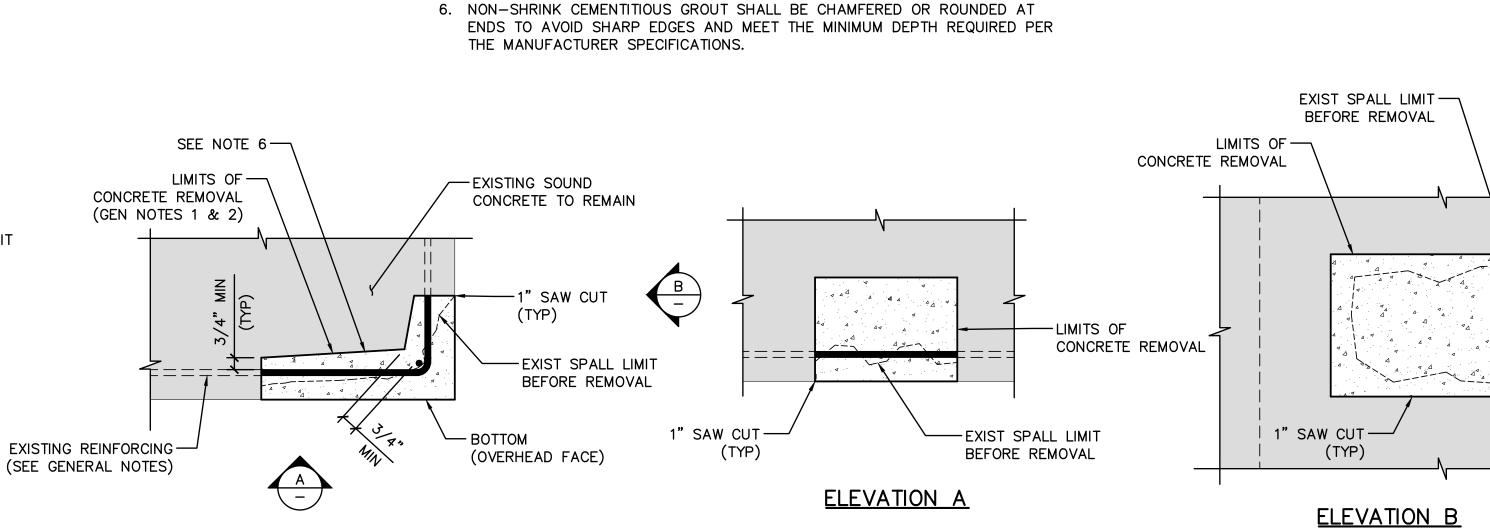
- 1. PAY ITEM 099600.01
- 2. WHERE REINFORCING STEEL IS EXPOSED, CONDUCT OIL-FREE ABRASIVE CLEANING. (TIGHTLY BONDED LIGHT RUST WHICH CANNOT BE REMOVED WITH A
- 3. REMOVAL OF LOOSE CONCRETE, CLEANING OF REINFORCING STEEL, AND SURFACE PREPARATION SHALL BE CONSIDERED SUBSIDIARY TO PAY ITEM





- WIRE BRUSH IS ACCEPTABLE)
- 099600.01





---PATCH WITH NON-SHRINK

LIMIT OF CONCRETE

EXIST UNEXPOSED-

VARIES.

<u>OPTION - EPOXY MORTAR REPAIR</u>

REINFORCING DEPTH

CEMENTITIOUS GROUT,

CONCRETE, SEE NOTE

SEE NOTE 6 BELOW

REMOVE LOOSE

EXIST CONCRETE

REMAIN

2. CONTRACTOR MAY COMPLETE THE HORIZONTAL CONCRETE REPAIRS WITH EITHER

030130. DETAILS FOR HOW THE REPAIRS ARE TO BE DONE BASED ON WHICH

CEMENTITOUS GROUT OR EPOXY MORTAR PER TECHNICAL SPECIFICATION

3. REMOVAL OF CONCRETE SHALL BE DONE WITH LOW IMPACT HAND EQUIPMENT

DAMAGE EXISTING PT STRANDS. JACK HAMMERS WILL NOT BE ALLOWED. 4. IT IS UNDERSTOOD THAT PREFERRED PATCHING METHODS INCLUDE SAWCUTTING

AND HAMMERING FOR FULL REMOVAL OF DAMAGED CONCRETE. FOR THIS PROJECT THE HORIZONTAL REPAIRS ARE INTENDED FOR A 5 YEAR MINIMUM LIFESPAN. THEY ARE NOT INTENDED AS PERMANENT REPAIRS TO THE SLAB. 5. EPOXY MORTAR SHALL BE APPLIED IN 0.5" LIFTS OR PER MANUFACTURERS

INSTRUCTIONS UNTIL FLUSH WITH SURROUNDING CONCRETE.

AND LOW PRESSURE WASHING TECHNIQUES. CARE SHALL BE TAKEN NOT TO

BEYOND SPALL TO

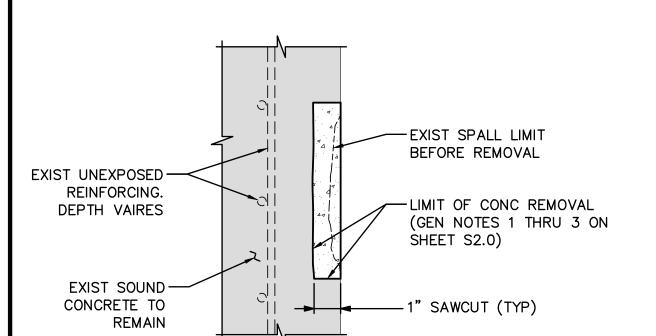
3 BELOW

}========

<u>OPTION - CEMENTITIOUS GROUT REPAIR</u>

MATERIAL IS USED ARE SHOWN ABOVE.

**HORIZONTAL CONCRETE REPAIR** 



# 4 VERTICAL CONCRETE SPALL REPAIR - TYPE I DETAIL

\$2.1 N.T.S.

NOTE:

1. PAY ITEM 030130.11

# 5 TYPE II CONCRETE REPAIR DETAIL (AT CORNERS)

N.T.S.

- 1. FORMING MAY BE REQUIRED ON MULTIPLE FACES.
- 2. SIMILAR FOR HORIZONTAL & VERTICAL REPAIRS EXCEPT WHERE PRESSURE GROUTING IS USED. (SEE DETAIL 6 ON THIS SHEET)
- 3. ALL WORK SHOWN SHALL BE SUBSIDIARY TO PAY ITEMS 030130.11, 039301.01,
- AND 039301.02

# √ 6 \ PRESSURE GROUT REPAIR DETAIL

# 1. ALL WORK SHOWN SHALL BE SUBSIDIARY TO PAY ITEMS 030130.11, 039301.01,

LIMIT OF CONCRETE -

MEET MINIMUM DEPTH -

**SPECIFICATIONS** 

EXIST UNEXPOSED

NOTES:

VARIES.

1. PAY ITEM 030130.01

REINFORCING DEPTH

PER MANUFACTURER

- AND 039301.02 2. REFER TO TYPE II CONCRETE REPAIR NOTES FOR ADDITIONAL REQUIREMENTS.
- 3. VERIFY REMOVAL LIMITS IN THE FIELD WITH THE ENGINEER.
- 4. REFER TO TECHNICAL SPECIFICATION 036423 FOR REPAIR PROCEDURES. 5. EXISTING CONCRETE SURFACE SHALL BE PREPARED SO THERE ARE NO CONFINED AIR POCKETS.

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PATCH WITH EPOXY

REMOVE LOOSE

-EXIST CONCRETE

REMAIN

BEYOND SPALL TO

3 BELOW

MORTAR, SEE NOTE 5

CONCRETE, SEE NOTE

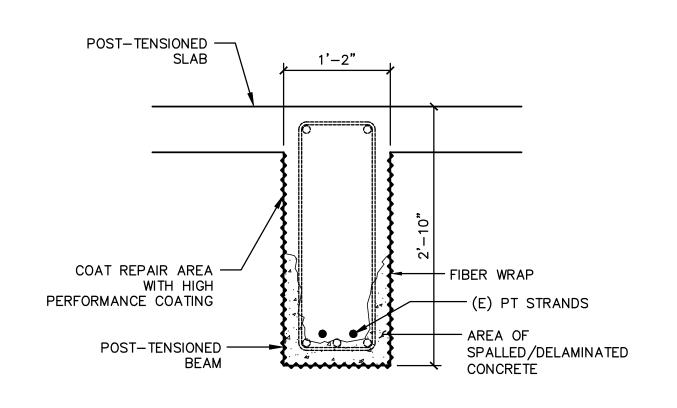
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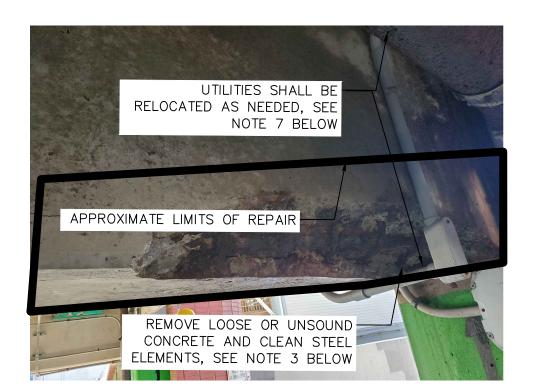
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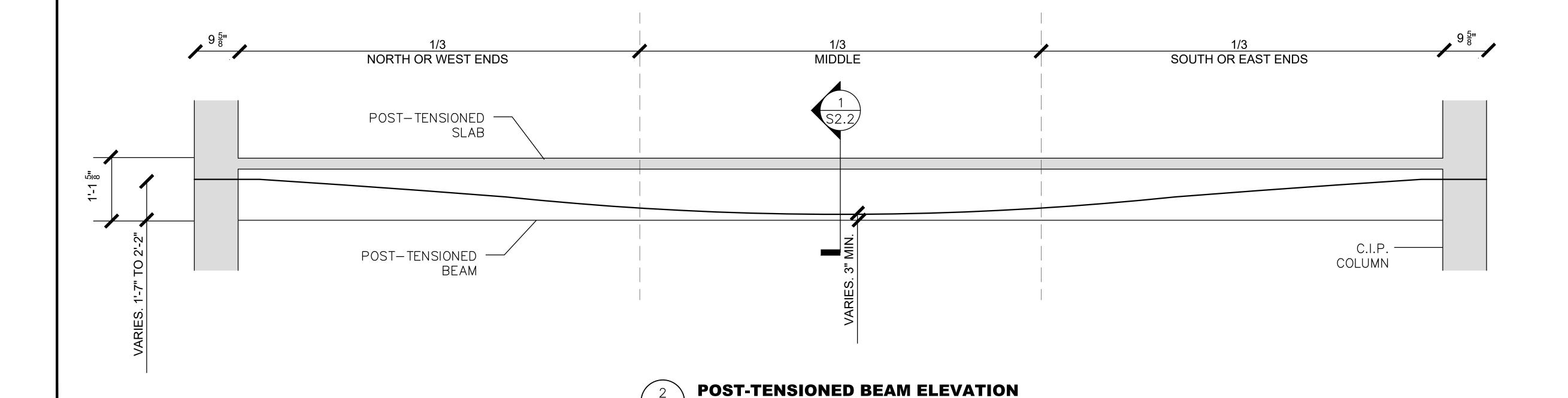
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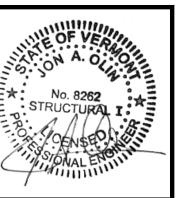
## **EXTENSIVE STRUCTURAL BEAM REPAIR**

# NOTES:

- 1. REFER TO REPAIR DETAILS 4/S2.1, 5/S2.1, 6/S2,1 AND CONCRETE REPAIR NOTES ON SHEET S2.0.
- 2. REMOVAL OF LOOSE CONCRETE, CLEANING OF REINFORCING STEEL, AND SURFACE PREPARATION SHALL BE CONSIDERED SUBSIDIARY TO PAY ITEM 039301.01
- 3. AFTER FIBER WRAP IS INSTALLED, COAT THE REPAIR AREA WITH A HIGH PERFORMANCE COATING SUBSIDIARY TO PAY ITEM 039301.01 (REFERENCE SPECIFICATION 030131 FRP CONCRETE STRENGTHENING).
- 4. REPAIR SHALL BE INSTALLED BY PRESSURE GROUTING MATERIAL IN PLACE (REFERENCE SPECIFICATION 036423).
- REFERENCE SHEET S2.3 FOR SHORING NOTES AND TEMPORARY
- CONDITION (TRAFFIC SHIFTED) END OF BEAM REACTIONS. 6. FOR FRP STRENGTHENING REPAIRS, REFER TO SPECIFICATION SECTION 030131. FRP STRENGTHENING SHALL BE DESIGNED TO CARRY THE FULL DEAD AND LIVE LOAD SHEAR FORCES OF 45.5 KIPS (DL) AND 22.2 KIPS
- (LL). THESE FORCES AS PROVIDED ARE UNFACTORED. 7. THE LOCATION AND NUMBER OF UTILITIES VARY PER LOCATION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND SUBMIT A MAINTENANCE PLAN AND SCHEDULE FOR THE RELOCATED UTILITIES 4 WEEKS PRIOR TO CONSTRUCTION.
- 8. REPAIR SHALL BE INSTALLED BY PRESSURE GROUTING MATERIAL IN
- PLACE (REFERENCE SPECIFICATION 036423). 9. ALL WORK PAID AS ITEM 039301.01.



N.T.S.



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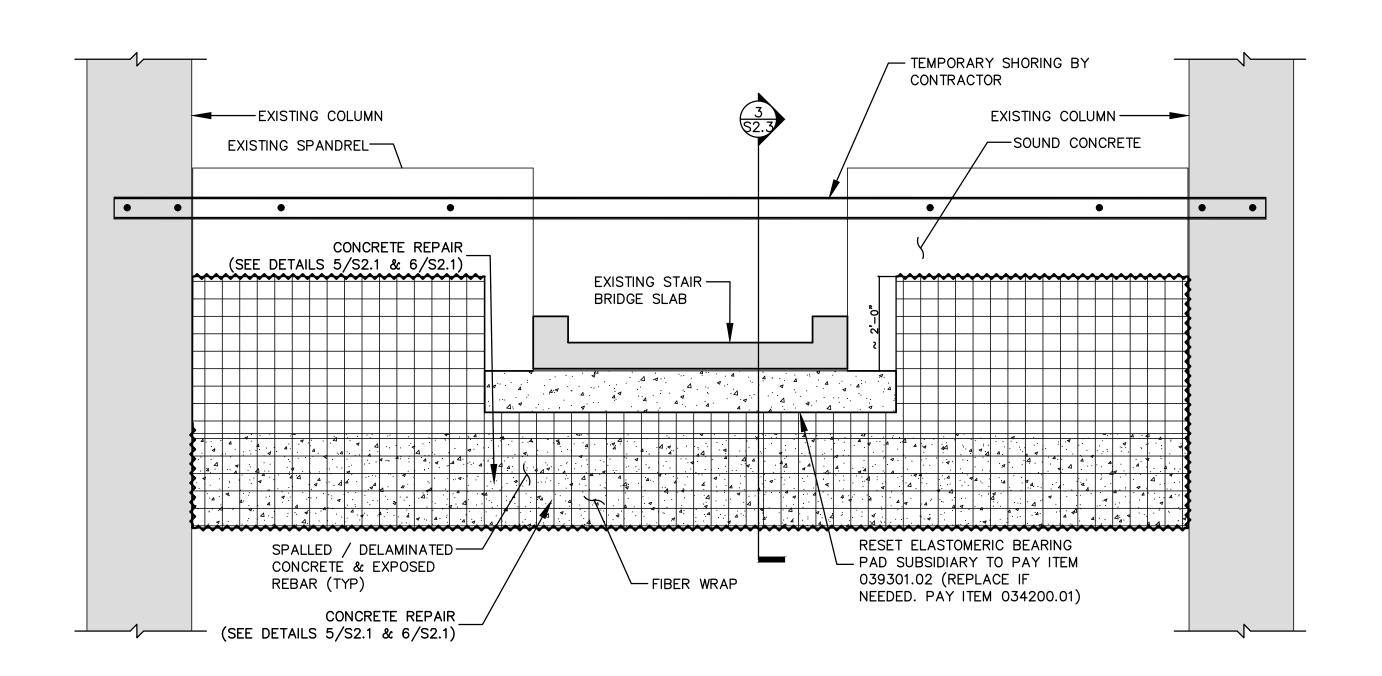
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PARKING GARAGE	S S	A D			
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M REPAIR DETAILS	DATE: MAY, 2022	E: 2022	   宝聚庆夫	THIS DOCUMENT IS PREPARED AS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF HOYLE, TANNER. IT MAY NOT BE USED, REPRODUCED, DISSEMINATED OR TRANSFERRED IN ANY MANNER, INCLUDING ELECTRONICALLY FOR ANY OTHER PURPOSE THAN THIS PROJECT, WITHOUT THE WRITTEN PERMISSION OF HOYLE, TANNER.	분 왕(

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PROJECT NO. 22.909002



TYPICAL EXTENSIVE SPANDREL BEAM REPAIR ELEVATION

1. GARAGE SLAB NOT SHOWN FOR CLARITY.

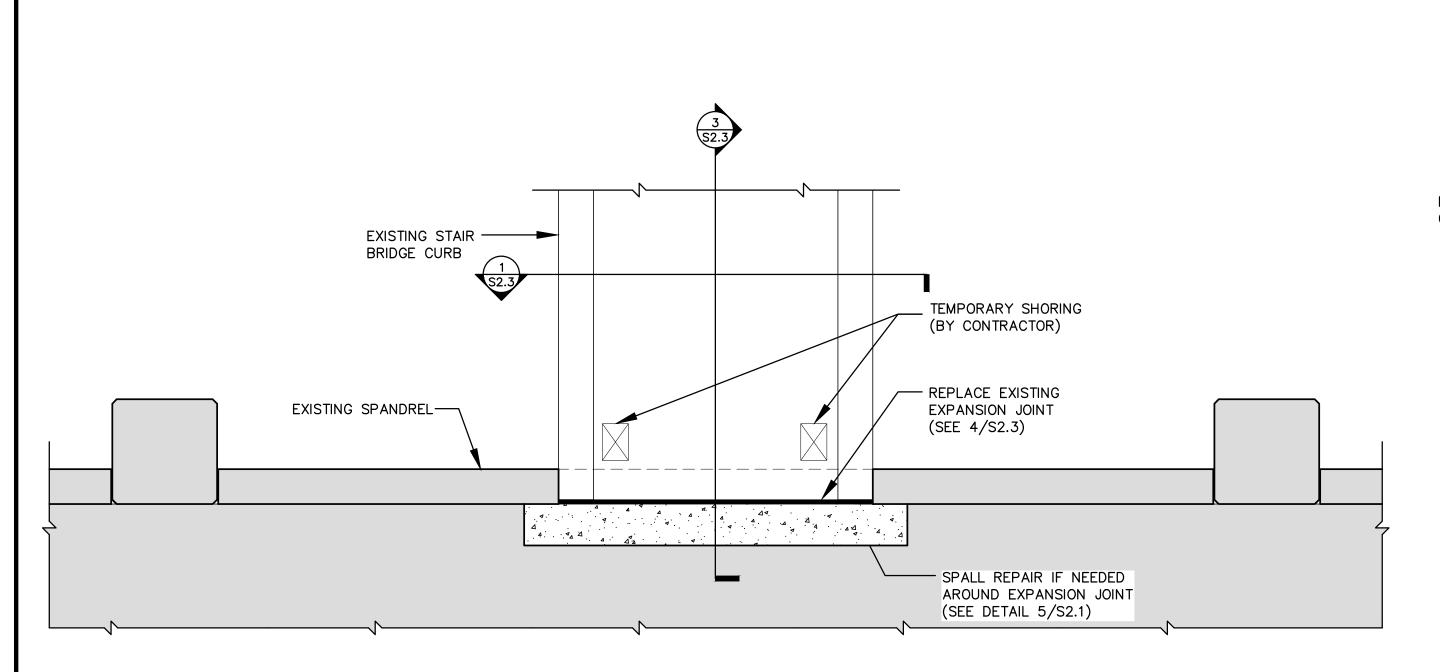
2. PAY ITEM 039301.01

### EXTENSIVE BEAM REPAIR - TEMPORARY SHORING AND BRACING NOTES:

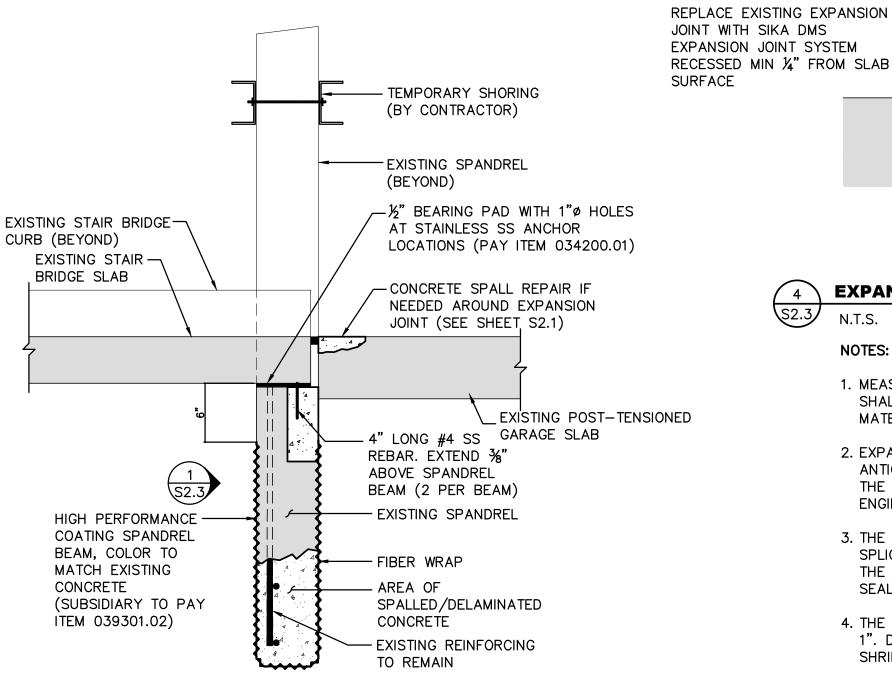
- 1. THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION.
- 2. TEMPORARY JACKING, BRACING AND SHORING REQUIRED TO COMPLETE THE CONCRETE REPAIRS SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF VERMONT.
- 3. TEMPORARY JACKING, BRACING AND SHORING SHALL BE DESIGNED TO RESIST ALL APPLICABLE ASCE 7 LRFD LOAD COMBINATIONS. REFER TO LOAD TABLE FOR RESULTANT DEAD LOAD AND LIVE LOADS, THE FORCES PROVIDED ARE UNFACTORED. VALUES ARE THE TOTAL END REACTION AT THE COLUMN CONNECTION. CALCULATIONS SHALL CONSIDER ANY CONSTRUCTION LOADING AS REQUIRED BY CONTRACTOR.
- 4. SHOP DRAWINGS AND DESIGN CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL A MINIMUM OF FOUR WEEKS PRIOR TO THE COMMENCEMENT OF SHORING OR BRACING WORK.
- 5. THE CONTRACTOR SHALL FIELD VERIFY FLOOR HEIGHTS PRIOR TO SHORING AND
- 6. TRAFFIC CONTROL PLAN SHALL IDENTIFY TRAFFIC SHIFT DURING THIS BEAM REPAIR OPERATION. SHIFTED TRAFFIC ON THE ABOVE FLOOR LEVEL WILL BE LIMITED TO THE OPPOSITE BEAM END AND SHALL NOT EXTEND BEYOND THE BEAM MIDPOINT. REFER TO TRAFFIC CONTROL PLAN FOR ADDITIONAL INFORMATION.
- 7. ALL WORK SHOWN IS SUBSIDIARY TO PAY ITEM 039301.01 OR 039301.02.

EXTENSIVE BEAM REPAIR LO	AD TABLE - TEMPORARY CONI	DITIONS (TRAFFIC SHIFTED)
END REACTION	DEAD LOAD (KIPS)	LIVE LOAD (KIPS)
SPANDREL BEAM	4.5	0.0
P/T BEAM	45.5	5.6

THIS TABLE DOES NOT INCLUDE CONSTRUCTION LOADING.







# **EXTENSIVE SPANDREL BEAM REPAIR DETAIL**

S2.3/

## **NOTES:**

- 1. REFER TO CONCRETE REPAIR NOTES ON SHEET S2.0 AND REPAIR DETAILS 4/S2.1, 5/S2.1, AND 6/S2.1.
- 2. FOR FRP STRENGTHENING REPAIRS, REFER TO SPECIFICATION SECTION 030131. FRP STRENGTHENING SHALL BE DESIGNED TO CARRY THE FULL DEAD AND LIVE LOAD SHEAR FORCES OF 4.5 KIPS (DL) AND 0.2 KIPS (LL). THESE FORCES AS PROVIDED ARE UNFACTORED.
- 3. THE LOCATION AND NUMBER OF UTILITIES VARY PER LOCATION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND SUBMIT A MAINTENANCE PLAN AND SCHEDULE FOR THE RELOCATED UTILITIES 4 WEEKS PRIOR TO CONSTRUCTION. 4. ALL WORK PAID AS ITEM 039301.02.
- 5. REPAIR SHALL BE INSTALLED BY PRESSURE GROUTING MATERIAL IN PLACE (REFERENCE SPECIFICATION 036423).

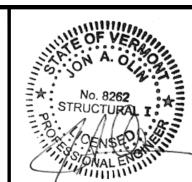
JOINT WITH SIKA DMS EJ @ STAIR TOWERS EXPANSION JOINT SYSTEM RECESSED MIN 1/4" FROM SLAB - EXISTING CONCRETE SURFACE POST-TENSIONED SLAB

# **EXPANSION JOINT REPLACEMENT**

\$2.3 N.T.S.

## NOTES:

- 1. MEASUREMENTS SHOWN BASED ON EXISTING DRAWINGS. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING NEW MATERIALS.
- 2. EXPANSION JOINT OPENING SHALL BE ADJUSTED TO TEMPERATURE ANTICIPATED JUST PRIOR TO POURING DECK BLOCKOUT. FINAL SETTING IN THE FIELD SHALL BE DETERMINED BY THE CONTRACTOR AND RESIDENT ENGINEER.
- 3. THE SEAL SHALL BE FURNISHED IN ONE CONTINUOUS LENGTH. NO SPLICES WILL BE ALLOWED. SEAL SHALL BE INSTALLED IN THE FIELD BY THE CONTRACTOR, IN ACCORDANCE WITH THE MANUFACTURER OF THE SEAL, USING AN APPROVED TOOL THAT WILL NOT DAMAGE THE SEAL.
- 4. THE SEAL SHALL BE DESIGNED FOR A TOTAL FACTORED MOVEMENT OF 1". DESIGN INCLUDES MOVEMENT DUE TO TEMPERATURE, SKEW, SHRINKAGE AND MINIMUM INSTALLATION WIDTH.
- 5. PAY ITEM 079106.01



PRIME, STRUCTURAL



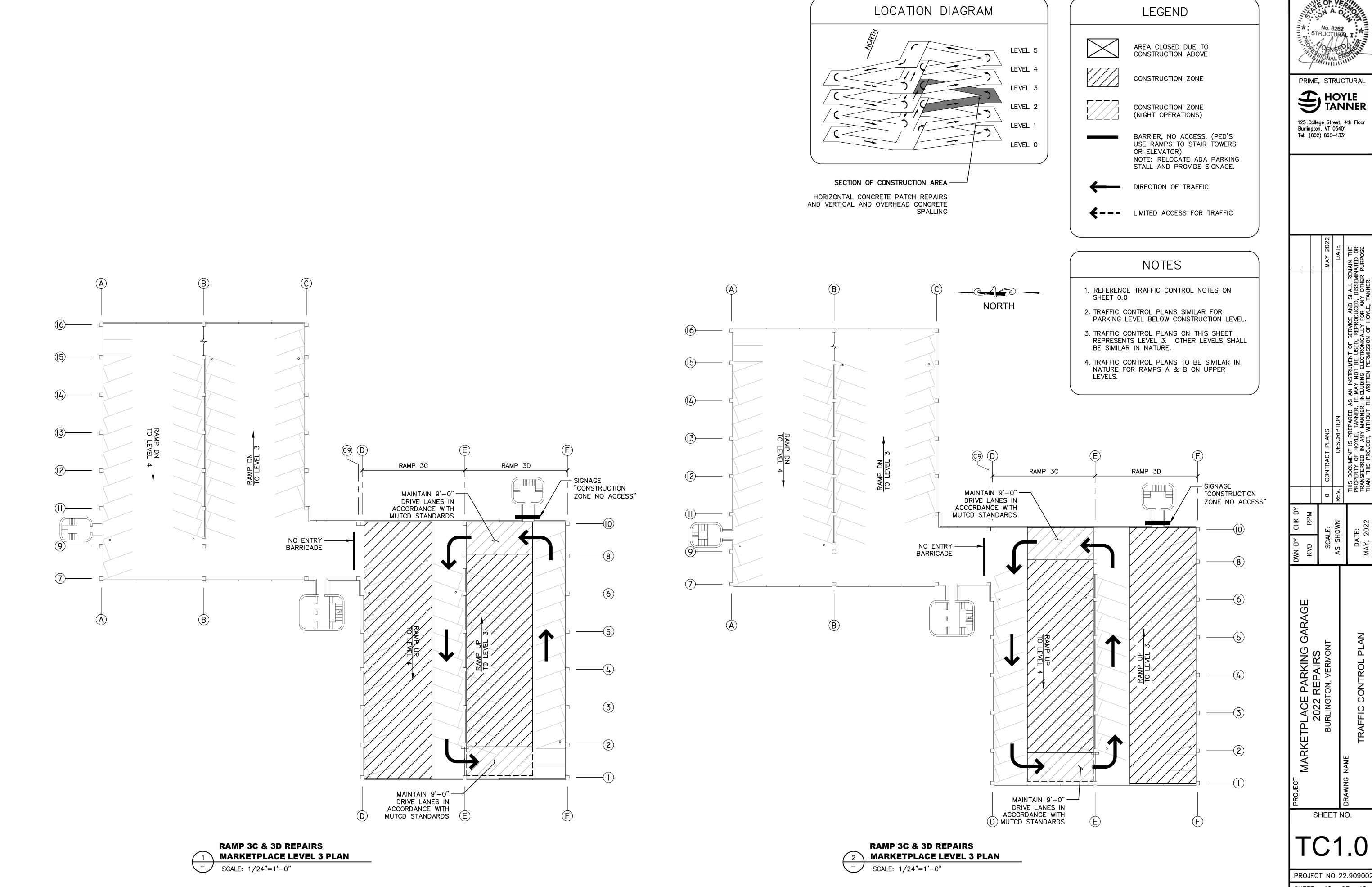
125 College Street, 4th Floor Burlington, VT 05401 Tel: (802) 860-1331

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PROJECT NO. 22.909002 SHEET 12 OF 13



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125 College Street, 4th Floor Burlington, VT 05401 Tel: (802) 860-1331

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SHEET NO.

SHEET 13 OF 13

Exhibit E: Draft Contract

## **CITY OF BURLINGTON DRAFT** CONSTRUCTION CONTRACT

Verr	mont ("the City"), and [] ("Contractor"), a Vermont corporation ted at []
Con	tractor 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 4 (Scope of Work) of this Contract.
	<b>B.</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 [].
	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 deliver of this Contract and the performance of such Party's obligations have been dul authorized.
	<b>B.</b> Consideration. The Parties acknowledge that the mutual promises and covenant contained herein and other good and valuable consideration are sufficient and adequat to support this Contract.
	C. Purpose. The City seeks to employ the Contractor to [].
3	FFFECTIVE DATE & TEDM

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.

**B. Term.** This Contract and the Parties' respective performance shall commence on the Effective Date and expire on or upon the satisfaction of the City, unless sooner terminated as provided herein.

#### 4. SCOPE OF WORK

The Contractor shall perform the services listed in Attachments A (Request for Proposals) and B (Contractor's Response to Request for Proposals).

#### 5. PAYMENT FOR SERVICES

A.	Amo	<b>unt.</b> The Cit	y sł	nall pay the Con	ntractor for cor	npletion of	f the	Work in acc	ordai	nce
	with	Attachment	В	(Contractor's	Response to	Request	for	Proposals)	[or	as
	<mark>follov</mark>	ws:		<mark>]</mark> .						

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

- **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: \_\_\_\_\_]. 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 [Section 1]. 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.

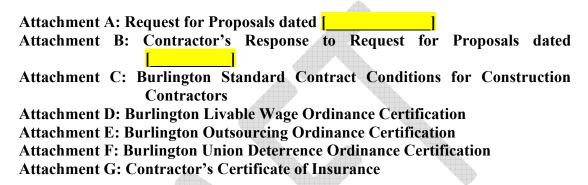
#### 6. SECTION & ATTACHMENT HEADINGS

The article and attachment headings and 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:



- **B. Order of Precedent**. To the extent a conflict or inconsistency exists between the Contract Documents, or provisions therein, then the Contract takes precedent. Any Invitation for Bids, Additional Contract Provisions, and the City Ordinance Certifications shall prevail over any inconsistency with the Contractor's Scope of Work and Cost Proposal.
- **8.** [Reserved]

— 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.

Contractor [Name of Contractor]
By:Name & Signature
Date:

City of Burlington	
City of Burnington	
[Department]	
By:	
[Name]	
[Title]	
Date:	

# Exhibit F: Burlington Standard Contract Conditions

#### 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: 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. The insurance policies shall provide that insurance coverage cannot be canceled or revised without thirty (30) days prior notice to the City. 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. Each policy (with the exception of professional liability and worker's compensation) shall name the City as an additional insured for the possible liabilities resulting from the Contractor's actions or omissions. The liability insurance furnished by the Contractor is primary and non-contributory for all the additional insured.

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 coverage shall include adequate protection for activities involving hazardous materials; and (iii) all work activities related to the Contract shall meet minimum coverage and limits.

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.** General Liability And Property Damage: With respect to all operations performed by the Contractor, subcontractors, agents or workers, it is the Contractor's responsibility to ensure

that general liability insurance coverage, 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: 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

C. <u>Automobile Liability:</u> 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.** Umbrella Liability:

- 1. \$1,000,000 Each Event Limit
- 2. \$1,000,000 General Aggregate Limit
- **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.** <u>In General:</u> 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.** <u>Underpinning and Shoring:</u> 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. <u>Damage to Utilities</u>: 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.** <u>Hearings and Conferences:</u> 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 Contract 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. <u>Fixed Price</u>. 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. <u>Rate Schedule</u>. By unit prices designated in the Contract, or by unit prices covered under any subsequent contracts.
- 3. <u>Actual Cost</u>. 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:** To avoid misunderstandings and litigation, it is mutually agreed by all Parties that the [Head of Department] shall act as referee on all questions arising under the terms of the Contract and that the decision of the [Head of Department] in such cases shall be binding upon both Parties.
- **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. <u>Breach:</u> 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. <u>Dishonest Conduct:</u> 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. <u>Cover:</u> 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. <u>Rights and Remedies Not Exclusive</u>: 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. INDEMNIFICATION:**

- A. Indemnification by Contractor: Except for the gross negligence or willful misconduct by the City, or any of its boards, officers, agents, employees, assigns and successors in interest, contractor undertakes and agrees to defend, indemnify and hold harmless the City and any of its boards, officers, agents, employees, assigns, and Successors in Interest from and against all suits and causes of action, claims, losses, demands and expenses, including, but not limited to, attorney's fees (both in house and outside counsel) and cost of litigation (including all actual litigation costs incurred by the City, including but not limited to, costs of experts and consultants), damages or liability of any nature whatsoever, for death or injury to any person, including Contractor's employees and agents, or damage or destruction of any property of either party hereto or of third parties, arising in any manner by reason of the negligent acts, errors, omissions or willful misconduct incident to the performance of this Contract by Contractor or its subcontractors of any tier.
- **B.** Notice of Claims & City's Right to Participate: If the City, its officers, agents, or employees are notified of any claims asserted against it to which this indemnification provision may apply, the City shall immediately thereafter notify the Contractor in writing that a claim to which the indemnification provision may apply has been filed. Contractor shall immediately retain counsel and otherwise provide a complete defense against the entire

- claim or suit. The City retains the right to participate, at its own expense, in the defense of any claim, and to approve all proposed settlements of clams to which this provision applies.
- C. <u>City's Rights and Remedies</u>: Rights and remedies available to the City under this provision are cumulative of those provided for elsewhere in this Contract and those allowed under the laws of the United States and the State of Vermont.
- **D.** No Indemnification by City: Under no conditions shall the City be obligated to indemnify the Contractor or any third party, nor shall the City be otherwise liable for expenses or reimbursement including attorney's fees, collection costs, or other costs of the Contractor or any third party.
- **40. 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.
- **41. 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.
- **42. 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.

- **43. 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.
- **44. 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.

- **45. 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.
- **46. 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.

- **47. CHOICE OF LAW:** Vermont law, and rules and regulations issued pursuant thereto, shall be applied in the interpretation, execution, and enforcement of this Contract. 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.
- **48. JURISDICTION:** All suits or actions related to this Contract shall be filed and proceedings held in the State of Vermont.
- **49. 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.
- **50. 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.
- **51. 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.

- **52. 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.
- **53. 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.
- **54. WAIVER:** 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 G: Burlington Livable Wage Ordinance

# Burlington's Livable Wage Ordinance

\$15.64

#### WHEN

employer offers employer assisted health insurance

\$16.66

#### WHEN

employer *does not* offer employer assisted health insurance

# and 12 days of paid time off per year\*

\*for full time employees

## **MORE INFORMATION:**

## Which workplaces are covered?

Any employer that gets paid at least \$15,000 by the City of Burlington for services rendered in a 12-month period are covered.

Employers that have a collective bargaining agreement with their employees are exempt.

# What should employees covered by the Livable Wage Ordinance expect?

Livable wages, 12 days paid time off per year for vacation, illness or personal time (pro-rated for part time employees), and adherence to other applicable state and federal laws.

You have the right to file a complaint if you believe your rights under this ordinance have been violated. Employers found to be in violation of the Livable Wage Ordinance may have to pay back wages and fines, and may be at risk of losing contracts with the City of Burlington, depending on the severity of the violation.

# To file a complaint, contact:

Livable Wage Monitor
Call (802) 865-7000, option 1 or
Fmail:

OURLING OF

livablewage@burlingtonvt.org

Livable Wage July 2021 - June 2022

#### ARTICLE VI. LIVABLE WAGES<sup>1</sup>

#### 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 - 2	21-1	13)
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## 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 Com	npliance with the City of B	urlington's Livable Wage Ordinance
Ι,	, on behalf of	("the Contractor") in connection
with a contract for	services that we	provide to the City, hereby certify under
		under this contract) is and will remain in Vage Ordinance, B.C.O. 21-80 et seq., and
employees as defined by employees of subcontrac	Burlington's Livable Wag stors) shall be paid a livab urlington's chief administ	ract or grant, we confirm that all covered ge Ordinance (including the covered le wage (as determined, or adjusted, rative officer) and provided appropriate
( )	0 11	ne Livable Wage Ordinance shall be nere covered employees work;
health insurance enrollment that of any subcontractor	ent records or provide ot	oyee's compensation, produce payroll or ther relevant documentation (including y the chief administrative officer, within y the City;
(4) we will coope Attorney's office pursuar		conducted by the City of Burlington's City
employee or other perso	n because an employee ha gation conducted pursuan	contractor to retaliate) against an as exercised rights or the person has t to this ordinance. etor
	-	
Subscribed and sworn to	before me:	
Date	Notary_	

# Exhibit H: Burlington Outsourcing Ordinance Certificate

#### 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				
Inroie	ect], hereby certify under oath that (1) Contractor shall comply with the City of				
	ourcing Ordinance (Ordinance §§ 21-90 – 21-93); (2) as a condition of entering				
into this contract of	or grant, Contractor confirms that the services provided under the above-				
referenced contrac	et will be performed in the United States or Canada.				
Dated at _	, Vermont this day of, 20				
	Durka Anglia vina I Anama				
	Duly Authorized Agent				
Subscribed	l and sworn to before me:  Notary				

## Exhibit I: Union Deterrence Ordinance Certificate

#### **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.

#### 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.

# <u>Certification of Compliance with the City of Burlington's</u> <u>Union Deterrence Ordinance</u>

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, a	and it does not currently, nor will
it over the life of the contract advertise or provide union deterrer	nce services in violation of the
City's union deterrence ordinance.	
Dated at, Vermont this day of _	, 20
By:	