

**KANSAS CITY
PUBLIC LIBRARY
PARKING GARAGE**

**STRUCTURAL REPAIRS
10TH STREET BETWEEN WYANDOTTE AND BALTIMORE
KANSAS CITY, MO 64105**

PROJECT MANUAL AND SPECIFICATIONS

FOR

**THE KANSAS CITY PUBLIC LIBRARY
1410 WEST 10TH ST.
KANSAS CITY, MO 64105**

June 23, 2025

N&S Job #2018-1891

**Bid Due/Opening Date: Monday, July 21st @ 2:00 PM
Norton and Schmidt Consulting Engineers, LLC
311 E. 11th Ave.
North Kansas City, MO 64116**

**R. GRANT RUSSELL, P.E.
NORTON & SCHMIDT PRINCIPAL ENGINEER**

I hereby certify that these plans and specifications were prepared by me or under my direct supervision and that I am a fully Registered Engineer under the laws of the State of Missouri.

Date: 06/23/2025

Registration Number: 2015017048

**KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS**

N&S JOB: 2018-1891

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DIVISION 00 BIDDING REQUIREMENTS AND CONTRACT DOCUMENTS

0010.00 INVITATION TO BID

0010.01 The Owner will receive sealed Bids for:

**THE KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS**

**10TH STREET BETWEEN WYANDOTTE AND BALTIMORE
KANSAS CITY, MO 64105**

All Bids shall be received no later than 2:00 p.m. (local time), Monday, July 21, 2025. Bid packages shall be emailed to grant.russell@nortonschmidt.com. Bids shall be opened shortly thereafter. Bids shall be opened publicly. The Owner reserves the right to accept any bid or to reject any or all bids. Bidder shall provide all bid documents in PDF format.

0010.02 Bids will be for a single contract including:

Providing all materials, labor, equipment, supervision and services required to make repairs to the Kansas City Public Library Parking Garage. These repairs should be performed in accordance with the Plans and Specifications prepared by Norton & Schmidt Consulting Engineers, LLC, dated June 23, 2025.

0010.03 The Owner is:

**THE KANSAS CITY PUBLIC LIBRARY
1410 WEST 10TH ST.
KANSAS CITY, MO 64105**

0010.04 The Engineer is:

**NORTON & SCHMIDT CONSULTING ENGINEERS, LLC
311 E. 11TH AVE.
NORTH KANSAS CITY, MO 64116
TELEPHONE: (816) 421-4232**

PRINCIPAL ENGINEER: GRANT RUSSELL, GRANT.RUSSELL@NORTONSCHMIDT.COM

0010.05 Complete sets of the Contract Documents may be obtained via email request.

0010.06 The Owner reserves the right to modify the Bid Quantities stated on the Bid Form. The Contract price shall be adjusted based on the unit prices stated on the Bid Form.

0011.00 INSTRUCTIONS TO BIDDERS

0011.01 Defined Terms

- A. The contract between the Owner and the Contractor shall be AIA A105-2017. A sample is attached.

0011.02 Examination of Contract Documents and Site

- A. A prebid meeting shall be held at the job site per the date below. Assemble on the fourth floor of the parking garage near the elevator.
- B. Bidders shall carefully examine the Contract Documents and the site to obtain first hand knowledge of existing conditions. No subsequent extras will be allowed due to any claim or lack of knowledge for conditions which can be determined by examining the site and the Contract Documents.
- C. Contractor examination of this facility is available between the hours of 7:30 a.m. and 7:00 p.m. on weekdays or any time on weekends.
- D. The submission of the Bid shall constitute a warranty by the Bidder that:
 - 1. The Bidder and all subcontractors intend to use have carefully and thoroughly reviewed the Contract Documents and have found them complete and free from ambiguities and sufficient for the purpose intended; further that,
 - 2. The Bidder and all workers, employees and subcontractors he intends to use are skilled and experienced in the type of construction represented by the Contract Documents bid upon; further that,
 - 3. Neither the Bidder nor any of their employees, agents, intended suppliers or Subcontractors have relied on any verbal representations allegedly authorized or unauthorized from the Owner, his employees or agents including the Engineer or consultants, in assembling the Bid figure; and further that,
 - 4. The Bid figure is based solely on the Contract Documents, including properly issued written Addenda, and not upon any other written or oral representation.

0011.03 Interpretations

- A. All questions about the meaning or intent of the Contract Documents shall be submitted to the Project Engineer in writing. Replies will be issued by Addenda mailed or delivered to all prime bidders of record, and also posted on the Kansas City Public Library's website at <https://www.kclibrary.org/public-notice>. Questions received less than five (5) days prior to the date for opening of Bids will not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- B. Any Addendum issued during the time of Bidding shall be covered by the Bid and shall become a part of the Contract Documents. All Addenda used in determining Contractor's Bid shall be acknowledged on the Bid Form.

0011.04 Preparation of Bids

- A. Bids must be made in the form given in this Project Manual. No oral, telephonic or telegraphic Bids will be considered. Bids shall be signed by the Bidder, giving his full name and business address. State whether Bidder is an individual, a partnership or corporation.

B. Each Bidder must fill in all blanks on Bid Forms and quote on all alternates. The entire Bid shall be without interlineation, alteration or erasure.

C. Each Bidder shall submit along with bid a financial report of the company.

0011.05 Schedule

A. The proposed project schedule for this project is as follows:

Project Published for Bidding	June 23, 2025
Pre-bid Meeting	July 8, 2025 at 10:00 AM CST
Questions Due	July 14, 2025 by 12:00 Noon CST
Answers/Addendum Due	July 15, 2025 COB
Bid Due	July 21, 2025 by 2:00 PM CST
Public Bid Opening	July 21, 2025 at 2:00 PM CST
Substantial Completion	November 3, 2025

This schedule is tentative and is subject to change for reasons including but not limited to changes in deadlines by the Owner.

B. The number of days for the completion of work (the Contract Time) shall be as stated in the Contractor's bid form and will be included in the executed agreement. Anticipated start date is on or after July 31, 2025. A schedule shall be submitted to the owner and engineer designating the next weeks work areas.

0011.06 Performance Bond and Labor and Material Payment Bond

A. The bidder to whom the award is made will be required to furnish a performance bond and labor and material payment bond in accordance with the general conditions. The bidder shall deliver said bonds to the company within fifteen (15) days after Notice of Award.

B. Bidder shall include the premiums for bonds in his bid; the bond forms shall be as indicated in this project manual. Bonds must be dated the same date as the agreement.

0011.07 Insurance

The Bidder to whom the award is made will be required to furnish the Owner with insurance coverages as set forth in the General and Supplementary Conditions. Bidder shall include all premiums for insurance in his Bid.

0011.08 Subcontractor Listing

Bidders shall list the names of Subcontractors as required on the Bid Form. Only one subcontractor shall be listed per category.

0011.09 Bid Bond

A. The bidder will be required to furnish a bid bond. The bidder shall deliver said bond along with bid submittal. See Section 0014.02, Bid Bond. The amount of the bid bond shall be ten (10) percent of the bid as estimated by the Contractor after his review of the project and scope of work.

- B. The bid bond form is bound herewith and forms a part of this project manual. The bid bond must be dated the same date as bid form.

0011.10 Requirements for Signing Bids

- A. Bids by corporations must be executed in the corporate name by the president, a vice-president or other corporate officer (accompanied by evidence of authority to sign), and the corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and the state of incorporation shall be shown below the signature.
- B. Bids by partnerships must be executed in the partnership name and signed by a partner. The partner's title must appear under his signature and the official address of the partnership must be shown below the signature.
- C. Bids not signed by individuals making them must have attached thereto a power of attorney evidencing authority to sign the Bid in the name of the person for whom it is signed.
- D. All names must be typed or printed below the signature.

0011.11 Contract Price

- A. Approximate quantities are listed on the Bid Form which, at the indicated unit prices, formulate the basis of award. The contract price shall consist of the actual quantities at the corresponding unit prices shown on the Bid Form.
- B. The Kansas City Public Library is a tax-exempt entity. Bids should not include federal, state, or local taxes.

0011.12 Scope of Bidding

The intent of the Drawings and Specifications is to describe a complete scope of work for this project. The base bid work items and alternate work items are intended to represent the entire work covered by these Drawings and Specifications.

0011.13 Minority Business Enterprises (MBE) & Women's Business Enterprises (WBE)

The Owner has a project goal of 16% of the contract price for MBE and 5% of the contract price for WBE. The Owner reserves the right to determine whether a bidder has demonstrated a good faith effort to comply with the MBE and WBE goals and reserves the right to initiate discussion/negotiation regarding Supplier Diversity participation with the bidder deemed most responsive.

Good Faith efforts are efforts that a bidder actively seeking to meet the participation goals can reasonably be expected to make, such as:

1. Advertised opportunities to participate in the contract in sufficient time to allow participation.
2. Notified a reasonable number of diverse firms of opportunities in sufficient time to allow participation.
3. Attempted to identify portions of the work for qualified, certified diverse firms.
4. Conferred with qualified, certified diverse firms and explained the scope and requirements of potential work, not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities.

Supplier Diversity Form must be signed and returned with proposal when diverse firms are utilized. You must attach a copy of the certificate from the certifying agency and return with your bid package.

Request for Waiver with Good Faith Efforts documentation must be completed and returned with your bid package when diverse firms are not utilized.

0011.14 Prevailing Labor Wage. This contract shall be governed by the Missouri Department of Labor, Annual Wage Order No. 29 rate sheet dated 3/22. See Section 17.1 of the sample AIA A105-2017 contract included in the contract documents.

0014.00 FORMS FOR BIDDING

0014.01 Bid Form

Bids shall be made on the following Bid Form in accordance with the Instructions to the Bidders, Section 0011.00.

0014.02 Bid Bond Form

A Bid Bond shall be furnished on AIA Document A310 in an amount of ten percent (10%) of the Contractor's estimate of the total contract amount.

KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS

BF-1
June 23, 2025

FORM OF BID

Kansas City Public Library
1410 West 10th St.
Kansas City, Missouri
Attention: Jerry Houchins
Operations Manager

Contractor

Contact

Phone #

Email

By submission of the attached proposal, we certify that we have examined the site of the project or have otherwise satisfied ourselves as to the existing conditions, size of areas, etc., as provided on the drawings and in the specifications for the Kansas City Public Library Parking Garage Structural Repairs.

We propose to furnish all materials, labor, tools and equipment, and to accomplish the work as specified.

BASE BID

\$

AW301

\$

AW302

\$

ADDENDA

The Contractor acknowledges receipt and the consequent review of the following Addenda covering revisions to the drawings and/or specifications, and the cost, if any, of such revisions has been included in the price herein before quoted:

Addendum No.
Addendum No.
Addendum No.
Addendum No.

Date
Date
Date
Date

**KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS**

**BF-2
June 23, 2025**

“FORCE ACCOUNT” – It is anticipated that there may be some work not included in the item list covered under this specification. Because of this potential, a “Force Account” shall be initialized by the Owner to which this work may be charged. Any amount remaining in the account at the end of the project shall not be due the Contractor but rather shall be deducted from the contract sum by way of a change order. Work under this account shall only be performed after written authorization has been received from Owner’s Representatives.

At the end of the project, any such additional work for which written authorization has been received will be included in a change order initiated by the Contractor and approved by the Owner, and such change order, with copies of the written authorization attached, shall be submitted to the Owner for acceptance.

DESCRIPTION OF ABBREVIATIONS

Sq.Ft	=	Square Feet
Ln.Ft.	=	Linear Feet
Cu.Yd.	=	Cubic Yard
Ea.	=	Each
A/R	=	As Required
N/A	=	Not Applicable
Lbs.	=	Pounds
R/R	=	Remove & Replace
TFAW	=	Total For All Work

Notes:

- 1) All work areas are to be enclosed with red/orange vinyl fencing supported by traffic barrels or other vertical supports properly weighted with sand (or sand bags) or other means acceptable to the owner's representative and the Engineer. The fencing system shall be capable of resisting normal winds common to the Kansas City metro area.
- 2) All holes through the supported slab shall be covered with secured plywood and framing capable of supporting a minimum load of 40 psf during the period that the contractor is not on-site or the area is unattended by the contractor's personnel.
- 3) The Contractor shall notify the Engineer and Owner (or Owner's representative) a minimum of twenty-four (24) hours prior to the time of required inspections and/or quantity verifications and shall make the work available for inspection and/or verification by Engineer and Owner at anytime during the project.

**KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS**

**BF-3
June 23, 2025**

<u>WORK ITEM</u>	<u>UNIT DESCRIPTION</u>	<u>UNITS</u>	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>EXTENSION</u>
<u>BASE BID WORK ITEMS</u>					
W100	Mobilization	<u>Ea.</u>	<u>1</u>	<u>***</u>	
W200	Bonds				
W201	Bid bond (normally no cost)	<u>Ea.</u>	<u>1</u>	<u>***</u>	
W202	Performance bond labor and material payment bond (base bid only)	<u>Ea.</u>	<u>1</u>	<u>***</u>	
W300	Membrane/Joints				
W301	Add a traffic bearing waterproofing membrane to the top level	<u>Sq.Ft.</u>	<u>17,800</u>		
W302	Restripe parking stalls after membrane installation	<u>Ea.</u>	<u>1</u>	<u>TFAW</u>	
W303	Double Tee Joint Sealant: R/R existing joint sealant - quantity to be determined before removal. Any sealant damaged by membrane preparation shall be replaced by contractor at no additional cost to owner	<u>Ln.Ft.</u>	<u>700</u>		
W304	Partial depth concrete patching: 12" strip on both sides of double tee joints (0" - 3")	<u>Sq.Ft.</u>	<u>100</u>		
W500	Concrete Patching				
W501	Ceiling repairs: partial depth (0" - 2") gunite or trowel applied	<u>Sq.Ft.</u>	<u>50</u>		

KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS

BF-4
June 23, 2025

WORK ITEM	UNIT DESCRIPTION	UNITS	QUANTITY	UNIT COST	EXTENSION
W800	Force Account	Ea.	1	***	\$10,000.00
TOTAL FOR BASE BID WORK ITEMS (ENTER HERE AND ON PAGE 1)					
NUMERIC DOLLAR AMOUNT					
WRITTEN DOLLAR AMOUNT					

ALTERNATE WORK ITEMS

AW301	Add a traffic bearing waterproofing membrane to the top level	Sq.Ft.	6,200		
AW302	Restripe parking stalls after membrane installation	Ea.	1	TFAW	

KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS

BF-5
June 23, 2025

The attached list of Subcontractors and material suppliers will be used by the undersigned for this contract. If the work is to be done by the Contractor, so state. List only one per category.

<u>TYPE OF WORK</u>	<u>MANUFACTURER /SUPPLIER</u>	<u>INSTALLER</u>	<u>VALUE (\$) OF BASE BID SUBCONTRACTOR WORK</u>
(other)			
(other)			

**KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS**

**BF-6
June 23, 2025**

REQUIRED INFORMATION - GENERAL CONDITIONS

The Contractor shall enter the percent of mark-up for overhead and profit if he/she is requested to perform work beyond the the base bid and any selected alternates on a time and materials basis.

Overhead	<div></div>	%
Profit	<div></div>	%

KANSAS CITY PUBLIC LIBRARY PARKING GARAGE

BF-7

ON THIS SHEET, THE CONTRACTOR WILL PROVIDE A COMPLETE BREAKDOWN OF MOBILIZATION COSTS:

**KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS**

**BF-8
June 23, 2025**

Signature

Name and Title (Typed)

Company (Typed)

Address (Typed)

Telephone (Typed)

(Date and Certification signature by Notary Public is required)

State of _____

Subscribed to before me this _____ day

County of _____

of _____, 20_____.

Notary Public:

Signature: _____

Printed Name: _____

My Commission Expires:

Seal

SUPPLIER DIVERSITY FORM

This completed form must be submitted by a bidder who intends to utilize diverse firms. Please print or type all requested information.

1. Project: _____
2. Name of Bidder/Offeror: _____
3. Diverse firm intended for utilization (if more than one, please complete this form for each firm):

Firm Name: _____

Address: _____

City/State/Zip: _____

Telephone: _____ E-mail Address: _____

Name of President/CEO: _____
4. Describe the scope of work to be performed on this project by the above listed diverse firm: _____

5. Total dollar amount of project: \$ _____

Total dollar amount of project to be performed by diverse firm: \$ _____

List percentage of total project by business enterprise:
_____% Minority Business Enterprise (MBE)
_____% Women Business Enterprise (WBE)
6. ***You must attach a copy of the certificate from the certifying agency, and return with your bid package.***
7. Both the Bidder/Offeror and the participating diverse firm must sign this form.

Bidder/Offeror

Diverse Firm President/CEO

Signature

Signature

Date

Date

**REQUEST FOR WAIVER OF SUPPLIER DIVERSITY PARTICIPATION
AND
DOCUMENTATION OF GOOD FAITH EFFORTS**

This form must be submitted by Bidders/Offerors when diverse firms are not utilized, and will be used to evaluate the extent to which a good faith effort has been made.

Project: _____

Bidder/Offeror: _____

I, _____, of lawful age and upon my oath state as follows:

1. I am the duly authorized representative of the above listed Bidder/Offeror and am authorized to request this waiver on its behalf.
2. I request that a waiver or exemption be granted from the recommended Supplier Diversity goals on the above referenced project.
3. The following is a detailed summary of the reason(s) for this request:

SUPPORTING DOCUMENTATION OF GOOD FAITH EFFORTS

1. Identify efforts undertaken by your firm to recruit potential diverse firms for various aspects of this project:
2. Note specific efforts made to contact in writing those diverse firms capable of and likely to participate in this project:

3. Describe steps taken by your firm to divide this project into areas that a diverse firm would be capable of performing:

4. What efforts were taken to negotiate with prospective diverse firms? Include names, addresses, and telephone numbers of diverse firms contacted, and a description of the information given regarding plans and specifications for the assigned work:

5. List the reasons for rejecting the diverse firms identified in question 4:

6. Describe the efforts made to assist a diverse firm in overcoming any requirements such firm may not have met:

Bidder/Offeror

Signature

Date

DRAFT AIA® Document A105™ – 2017

Standard Short Form of Agreement Between Owner and Contractor

AGREEMENT made as of the « » day of « » in the year « Two Thousand Nineteen »
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

« Kansas City Urban Public Library District »
« 14 W. 10th Street »
« Kansas City, Missouri 64105 »
« »

and the Contractor:
(Name, legal status, address and other information)

« »
« »
« »
« »

for the following Project:
(Name, location and detailed description)

« Kansas City Public Library Parking Garage »
« 14 W. 10th Street »
« Kansas City, Missouri 64105 »

« The parking garage is located across Baltimore Avenue from the Library's Central Library location at 14 W. 10th Street, Kansas City, MO 64105. »

The Engineer:
(Name, legal status, address and other information)

« Norton & Schmidt Consulting Engineers, LLC »
« 311 E. 11th Avenue »
« North Kansas City, MO 64116 »
« »

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS: The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

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ARTICLE 1 THE CONTRACT DOCUMENTS

The Contractor shall complete the Work described in the Contract Documents for the Project. The Contract Documents consist of

- .1 this Agreement signed by the Owner and Contractor, referred to in this Agreement as either "Agreement" or "Contract";
- .2 the drawings and specifications prepared by the Engineer, dated « », and enumerated as follows:

Drawings:

Number	Title	Date

Specifications:

Section	Title	Pages

- .3 addenda prepared by the Engineer as follows:

Number	Date	Pages

- .4 written orders for changes in the Work, pursuant to Article 10, issued after execution of this Agreement; and
- .5 other documents, if any, identified as follows:

- « 1 Exhibit 1: Affidavit of Compliance
- .2 Exhibit 2: Affidavit of Work Authorization
- .3 Exhibit 3: Specifications Table of Contents»

ARTICLE 2 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 2.1 The Contract Time is the number of calendar days available to the Contractor to substantially complete the Work.

§ 2.2 Date of Commencement:

The date of commencement shall be upon the Owner's written notice to proceed.

« »

§ 2.3 Substantial Completion:

Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion, as defined in Section 12.5, of the entire Work:
(Check the appropriate box and complete the necessary information.)

[☒] Not later than « Seventy » (« 70 ») calendar days from the date of commencement.

[☐] By the following date: « »

ARTICLE 3 CONTRACT SUM

§ 3.1 The Contract Sum shall include all items and services necessary for the proper execution and completion of the Work. Subject to additions and deductions in accordance with Article 10, the Contract Sum is:

« » (\$ « »)

§ 3.2 For purposes of payment, the Contract Sum includes the following values related to portions of the Work:
(Itemize the Contract Sum among the major portions of the Work.)

Portion of the Work

Value

§ 3.3 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and hereby accepted by the Owner:

(Identify the accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

« »

§ 3.4 Allowances, if any, included in the Contract Sum are as follows:
(Identify each allowance.)

Item

Price

§ 3.5 Unit prices, if any, are as follows:

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)
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ARTICLE 4 PAYMENTS

§ 4.1 Based on Contractor's Applications for Payment certified or verified by the Engineer, and submitted with all supporting documentation and waivers required by this Agreement, the Owner shall pay the Contractor, in accordance with Article 12. For each payment made prior to Substantial Completion of the Work, the Owner may withhold retainage in the amount of 10% from the payment otherwise due.

« »

§ 4.2 Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate below.

(Insert rate of interest agreed upon, if any.)

« Ten percent (10%) simple interest per annum » « »

ARTICLE 5 INSURANCE

§ 5.1 The Contractor shall maintain the following types and limits of insurance until the expiration of the period for correction of Work as set forth in Section 14.2, subject to the terms and conditions set forth in this Section 5.1:

§ 5.1.1 Commercial General Liability insurance for the Project, written on an occurrence form, with policy limits of not less than « One Million Dollars » (\$ « 1,000,000 ») each occurrence, « Two Million Dollars » (\$ « 2,000,000 ») general aggregate, and « Two Million Dollars » (\$ « 2,000,000 ») aggregate for products-completed operations hazard.

§ 5.1.2 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Contractor, with policy limits of not less than « One Million Dollars » (\$ « 1,000,000 ») per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance, and use of those motor vehicles along with any other statutorily required automobile coverage.

§ 5.1.3 The Contractor may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided that such primary and excess or umbrella insurance policies result in the same or greater coverage as those required under Section 5.1.1 and 5.1.2, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require exhaustion of the underlying limits only through the actual payment by the underlying insurers.

§ 5.1.4 Workers' Compensation at statutory limits.

§ 5.1.5 Employers' Liability with policy limits not less than « One Million Dollars » (\$ « 1,000,000 ») each accident, « One Million Dollars » (\$ « 1,000,000 ») each employee, and « One Million Dollars » (\$ « 1,000,000 ») policy limit.

§ 5.1.6 The Contractor shall provide builder's risk insurance to cover the total value of the entire Project on a replacement cost basis.

§ 5.1.7 Other Insurance Provided by the Contractor

(List below any other insurance coverage to be provided by the Contractor and any applicable limits.)

Coverage

Limits

§ 5.2 Intentionally omitted.

§ 5.3 The Contractor shall obtain an endorsement to its Commercial General Liability insurance policy to provide coverage for the Contractor's obligations under Section 8.12. Liability insurance coverage required by this Agreement shall include all major divisions of coverage and be on a comprehensive basis including:

- .1 Premises - operations, X - C - U - Required.
- .2 Independent Contractor's Protective.
- .3 Products and Completed Operations.
- .4 Personal Injury Liability with employment exclusion deleted.
- .5 Contractual.
- .6 Owned, non-owned and hired motor vehicle.
- .7 Broad Form Property Damage including completed operations.
- .8 Endorsement for per project aggregate.

§ 5.4 Prior to commencement of the Work, Contractor shall furnish to the Owner Certificates of Insurance evidencing insurance coverages not less than the limits indicated above. Owner, Engineer, Engineer's consultants, SP Plus Corporation, and agents and employees of any of them shall be named as additional insureds on the General (and Umbrella Liability, if any) and Automobile Liability Policies of insurance. Certificates of Insurance shall show the additional insureds, where required, and shall provide that the insurance policy will not be canceled without thirty (30) days prior written notice to the Owner. The Contractor shall require its Subcontractors to furnish such certificates as well verifying that the Owner, Engineer, Engineer's consultants, SP Plus Corporation, and agents and employees of any of them are named as additional insureds on all policies required of Subcontractors. The maintenance in full current force and effect of such forms and amounts of insurance required by this Agreement shall be a condition precedent to the Contractor's enforcement of any rights under this Agreement.

§ 5.5 Contractor waives all rights against Owner, Engineer, Engineer's consultants, SP Plus Corporation, and agents and employees of any of them, for recovery of damages under Contractor's insurance policies required by this Agreement.

ARTICLE 6 GENERAL PROVISIONS

§ 6.1 The Contract

The Contract represents the entire and integrated agreement between the parties and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a written modification in accordance with Article 10.

§ 6.2 The Work

The term "Work" means the construction and services required by the Contract Documents, and reasonably inferable therefrom, and includes all other labor, materials, equipment, and services provided, or to be provided, by the Contractor to fulfill the Contractor's obligations.

§ 6.3 Intent

The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all.

§ 6.4 Ownership and Use of Engineer's's Drawings, Specifications and Other Documents

Documents prepared by the Engineer are instruments of the Engineer's service for use solely with respect to this Project. Ownership of the instruments of the Engineer's service is governed by the agreement entered between the Owner and Engineer. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the instruments of Engineer's service. The Contractor, subcontractors, sub-subcontractors, and suppliers are authorized to use and reproduce the instruments of service solely and exclusively for execution of the Work. The instruments of service may not be used for other Projects or for additions to this Project outside the scope of the Work without the specific written consent of the Engineer.

§ 6.5 Intentionally omitted.

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ARTICLE 7 OWNER

§ 7.1 Information and Services Required of the Owner

§ 7.1.1 If requested by the Contractor, and reasonably necessary to perform the Work, the Owner shall furnish all necessary surveys and a legal description of the site. Information furnished by the Owner, if any, regarding surveys, subsurface investigation reports, soil borings, and other material of a similar nature is for general information only and is not a guarantee of the completeness or accuracy of such information, unless specifically noted otherwise herein. Contractor shall verify all existing grades, conditions and dimensions of existing physical conditions and structures and shall report any inconsistencies in writing to the Engineer. Contractor shall establish all lines and levels required to execute the Work and shall bear all costs involved, and shall be responsible for their accuracy and maintenance.

§ 7.1.2 Except for permits and fees under Section 8.7.1 that are the responsibility of the Contractor, the Owner shall obtain and pay for other necessary permits, fees, approvals, easements, assessments, and charges.

§ 7.1.3 Intentionally omitted.

§ 7.2 Owner's Right to Stop the Work

If the Contractor fails to correct Work which is not in accordance with the Contract Documents, the Owner may direct the Contractor in writing to stop the Work until the correction is made.

§ 7.3 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies, correct such deficiencies. In such case, the Contract Sum shall be adjusted to deduct the cost of correction from payments due the Contractor. In no event shall Owner have control over, charge of, or any responsibility for construction means, methods, techniques, sequences or procedures or for the safety precautions and programs in connection with the Work, notwithstanding any of the rights and authority granted Owner in Contract Documents.

§ 7.4 Owner's Right to Perform Construction and to Award Separate Contracts

§ 7.4.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project.

§ 7.4.2 The Contractor shall coordinate and cooperate with the Owner's own forces and separate contractors employed by the Owner.

ARTICLE 8 CONTRACTOR

§ 8.1 Review of Contract Documents and Field Conditions by Contractor

§ 8.1.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 8.1.2 The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by the Owner. Before commencing activities, the Contractor shall (1) take field measurements and verify field conditions; (2) carefully compare this and other information known to the Contractor with the Contract Documents; and (3) promptly report errors, inconsistencies, or omissions discovered to the Engineer. Additionally, Contractor shall evaluate and satisfy itself as to the conditions and limitations under which the Work is to be performed, including, without limitation, (1) the location, conditions, layout and nature of the Project site and surrounding areas, (2) generally prevailing climatic conditions, (3) anticipated labor supply and costs, (4) availability and cost of materials, tools and equipment and (5) other similar issues. Owner assumes no responsibility or liability for the physical condition or safety of the Project site or any improvements located on the Project site. The Owner shall not be required to make any adjustment in either the Contract Sum or Contract Time in connection with any failure by Contractor to comply with these requirements.

§ 8.1.3 The exactness of grades, elevations, dimensions, or locations given in any Drawings, or the work installed by other contractors, if any, is not guaranteed by the Owner. Contractor shall, therefore, satisfy itself as to the accuracy of all grades, elevations, dimensions and locations. In all cases of interconnection of its Work with existing or other work, Contractor shall verify at the site all dimensions relating to such existing or other work. Any errors due to

Contractor's failure to so verify all such grades, elevations, dimensions or locations shall be promptly rectified by Contractor without any additional cost to Owner.

§ 8.2 Contractor's Construction Schedule

The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Engineer's information a Contractor's construction schedule for the Work.

§ 8.3 Supervision and Construction Procedures

§ 8.3.1 The Contractor shall supervise and direct the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures, for coordinating all portions of the Work, and for providing a safe place for the performance of the Work. Owner assumes no responsibility or liability for the safety of the Project site or any improvements located on the Project site.

§ 8.3.2 The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner, through the Engineer, the names of subcontractors or suppliers for each portion of the Work. The Contractor shall not contract with any subcontractor or supplier to whom the Owner or Engineer have made a timely and reasonable objection.

§ 8.4 Labor and Materials

§ 8.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work.

§ 8.4.2 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract Work. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

§ 8.5 Warranty

The Contractor warrants to the Owner and Engineer that: (1) materials and equipment furnished under the Contract will be new and of good quality unless otherwise required or permitted by the Contract Documents; (2) the Work will be free from defects not inherent in the quality required or permitted; and (3) the Work will conform to the requirements of the Contract Documents. Any material or equipment warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 12.5.

§ 8.6 Taxes

The Owner, as a public entity, is entitled to sales tax exemption and Contractor shall not include the cost of sales tax in the Contract Sum. The Owner shall furnish a certificate of tax exemption to the Contractor for use exclusively on this Project.

§ 8.7 Permits, Fees and Notices

§ 8.7.1 The Contractor shall obtain and pay for the building permit and other permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work.

§ 8.7.2 The Contractor shall comply with and give notices required by agencies having jurisdiction over the Work. If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs. The Contractor shall promptly notify the Engineer in writing of any known inconsistencies in the Contract Documents with such governmental laws, rules, and regulations.

§ 8.8 Submittals

The Contractor shall promptly review, approve in writing, and submit to the Engineer shop drawings, product data, samples, and similar submittals required by the Contract Documents. Shop drawings, product data, samples, and similar submittals are not Contract Documents.

§ 8.9 Use of Site

The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits, the Contract Documents, and the Owner.

§ 8.10 Cutting and Patching

The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. The Contractor shall be responsible for any damage caused to adjacent property by the Contractor, its Subcontractors or Suppliers during the course of their Work on the Project.

§ 8.11 Cleaning Up

The Contractor shall keep the premises and surrounding area free from accumulation of debris and trash related to the Work. If the Contractor fails to clean up within twenty-four (24) hours from written notice from Owner, the Owner may do so and shall be entitled to reimbursement from the Contractor, the cost of which shall be deducted from the Contractor's next following Application for Payment. At the completion of the Work, the Contractor shall remove its tools, construction equipment, machinery, and surplus material; and shall properly dispose of waste materials.

§ 8.12 Indemnification

To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the Owner, Engineer, Engineer's consultants, SP Plus Corporation, and agents and employees of any of them (collectively, the "Indemnitees" plural or "Indemnitee" singular) from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, to the extent caused by the negligent, intentional or wrongful acts or omissions of the Contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. The Contractor's obligations under this Section 8.12 shall survive any termination of this Agreement or completion of the Project. In claims against any Indemnitee indemnified under this Section 8.12 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the defense, indemnity and hold harmless obligations under this Section 8.12 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts. Contractor shall include in its subcontracts for the Project the requirement that the Subcontractors defend, indemnify and hold harmless the Indemnitees for any claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work.

ARTICLE 9 ENGINEER

§ 9.1 The Engineer will provide administration of the Contract as described in the Contract Documents, and the Agreement between Owner and Engineer. The Engineer will have authority to act on behalf of the Owner only to the extent provided in the Agreement between Owner and Engineer.

§ 9.2 The Engineer will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the Work.

§ 9.3 The Engineer will not have control over or charge of, and will not be responsible for, construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility. The Engineer will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents.

§ 9.4 Based on the Engineer's observations and evaluations of the Contractor's Applications for Payment, the Engineer will review and certify or verify the amounts due the Contractor.

§ 9.5 The Engineer has authority to reject Work that does not conform to the Contract Documents.

§ 9.6 To the extent required by the Contract Documents, the Engineer will promptly review and approve or take appropriate action upon Contractor's submittals, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 9.7 On written request from either the Owner or Contractor, the Engineer will promptly interpret and decide matters concerning performance under, and requirements of, the Contract Documents.

§ 9.8 Interpretations and decisions of the Engineer will be consistent with the intent of, and reasonably inferable from the Contract Documents, and will be in writing or in the form of drawings.

§ 9.9 The Engineer's duties, responsibilities, and limits of authority as described in the Contract Documents shall not be changed without written consent of the Owner, Contractor, and Engineer. Consent shall not be unreasonably withheld.

ARTICLE 10 CHANGES IN THE WORK

§ 10.1 Changes in the Work may be accomplished after execution of the Contract. The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, with the Contract Sum and Contract Time being adjusted accordingly. Such changes in the Work shall be authorized by written Change Order signed by the Owner and Contractor, or by written Construction Change Directive signed by the Owner, and any change in the Contract Sum or the Contract Time shall be accomplished only by Change Order or Construction Change Directive. Accordingly, no course of conduct or dealings between the parties, nor express or implied acceptance of additions, deletions, or other revisions to the Work, and no claim that the Owner has been unjustly enriched by any additions, deletions, or other revisions to the Work, whether or not there is, in fact, any unjust enrichment, shall be the basis of any claim to an increase in any amounts due under the Contract Documents or a change in any time period provided for in the Contract Documents. Upon issuance of a Change Order or Construction Change Directive, the Contractor shall proceed promptly with such changes in the Work, unless otherwise provided in the Change Order or Construction Change Directive.

§ 10.2 Upon the written approval of the Owner, the Engineer will have the authority to order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. Such authorization or order shall be in writing and shall be binding on the Contractor. The Contractor shall proceed with such minor changes promptly, provided that if the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Owner and shall not proceed to implement the change in the Work.

§ 10.3 If concealed or unknown physical conditions are encountered at the site that differ materially from those indicated in the Contract Documents or from those conditions ordinarily found to exist, the Contract Sum, Contract Time, or both, may be subject to equitable adjustment.

§ 10.4 Adjustments in the Contract Sum and Contract Time resulting from a change in the Work shall be determined by mutual agreement of the Contractor and Owner or, in the case of a Construction Change Directive signed only by the Owner, by the Contractor's actual cost of labor, material, equipment, and reasonable overhead and profit, unless the parties agree on another method for determining the cost or credit. Pending final determination of the total cost of a Construction Change Directive, the Contractor may request payment for Work completed pursuant to the Construction Change Directive. The Engineer or Owner will make an interim determination of the amount of payment due for purposes of certifying the Contractor's monthly Application for Payment. When the Owner and Contractor agree on adjustments to the Contract Sum and Contract Time arising from a Construction Change Directive, the Contractor will prepare a Change Order

ARTICLE 11 TIME

§ 11.1 Time limits stated in the Contract Documents are of the essence of the Contract.

§ 11.2 If the Contractor is delayed at any time in progress of the Work by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, or other causes beyond the Contractor's control, the Contract Time shall be subject to equitable adjustment.

§ 11.3 Costs caused by delays or by improperly timed activities or defective construction shall be borne by the responsible party.

ARTICLE 12 PAYMENTS AND COMPLETION

§ 12.1 Contract Sum

The Contract Sum stated in this Agreement, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 12.2 Applications for Payment

§ 12.2.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Engineer and Owner an itemized Application for Payment for Work completed in accordance with the values stated in this Agreement. The Application shall be supported by data substantiating the Contractor's right to payment as the Owner or Engineer may reasonably require. Payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment stored, and protected from damage, off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage and transportation to the site for such materials and equipment stored off the site. Contractor shall submit with each application for progress payment a release and lien waiver in form and content satisfactory to the Owner by which the Contractor (and its subcontractors and suppliers, if required by Owner) shall waive and release and defend and indemnify the Owner, the real property and improvements on which the Project is located from any and all demands and claims for payment, and any and all lien claims and lien rights, with respect to any and all labor, equipment and materials furnished to the Project by Contractor and/or its employees, subcontractors and suppliers up through and including the date of the release and lien waiver. It is understood and agreed that Contractor's submittal of such release and lien waiver shall be an absolute condition precedent to Owner's obligation to issue any progress payment to Contractor on the Project.

§ 12.2.2 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment, all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or other encumbrances adverse to the Owner's interests.

§ 12.3 Certificates for Payment

The Engineer will, within a reasonable time after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment, or other verification of an Application for Payment acceptable to Owner, in the full amount of the Application for Payment; (2) issue to the Owner a Certificate for Payment, or other verification of an Application for Payment acceptable to Owner, for such amount as the Engineer determines is properly due, and notify the Owner in writing of the Engineer's reasons for withholding certification in part; or (3) withhold certification of the entire Application for Payment, and notify the Owner of the Engineer's reason for withholding certification in whole.

§ 12.4 Progress Payments

§ 12.4.1 Not later than 30 days after the Engineer has issued a Certificate for Payment, or other verification of an Application for Payment acceptable to Owner, the Owner shall make payment to the Contractor of the amount certified or otherwise verified by the Engineer.

§ 12.4.2 The Contractor shall promptly pay each subcontractor and supplier, upon receipt of payment from the Owner, an amount determined in accordance with the terms of the applicable subcontracts and purchase orders. The Contractor agrees that monies received for the performance of this Agreement shall be used first for payment of labor, material, equipment, supplies and services entering into the Work under this Agreement, and said monies shall not be diverted to satisfy obligations of the Contractor on other contracts until all obligations under or in connection with this Agreement are satisfied in full. In the event that any Subcontractor or material supplier to the Contractor files a mechanic's lien against the Project, or property on which the Project is located, Contractor shall discharge such lien within ten (10) days. If not so discharged, the Owner may withhold one hundred fifty percent (150%) of the amount of the lien to protect the Owner until such lien is released and satisfied. The Owner reserves the right to pay off such lien if it appears after due investigation that the money is owed by the Contractor, and to deduct such sum plus associated legal fees from the remaining Contract Sum.

§ 12.4.3 Neither the Owner nor the Engineer shall have responsibility for payments to a subcontractor or supplier.

§ 12.4.4 A Certificate for Payment or other verification of an Application for Payment acceptable to Owner, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not

in accordance with the requirements of the Contract Documents. In taking action on the Contractor's Applications for Payment, the Owner and Engineer shall be entitled to rely on the accuracy and completeness of the information furnished by the Contractor and shall not be deemed to represent that the Owner or Engineer has made a detailed examination, audit or arithmetic verification of the documentation submitted by the Contractor; that the Owner or Engineer has made exhaustive or continuous on-site inspections; or that the Owner or Engineer has made examinations to ascertain how or for what purposes the Contractor has used amounts previously paid on account of the Agreement.

§ 12.5 Substantial Completion

§ 12.5.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use, provided, however, that, as a condition precedent to Substantial Completion, the Owner has received all certificates of occupancy and any other permits, approvals, licenses, and other documents from any governmental authority having jurisdiction necessary for the beneficial occupancy of the Project and whose procurement is the responsibility of the Contractor.

§ 12.5.2 When the Contractor believes that the Work or designated portion thereof is substantially complete, it will notify the Engineer and the Engineer will make an inspection to determine whether the Work is substantially complete, and will perform any further punch list review necessary of items of Work remaining to be completed. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 12.6 Final Completion and Final Payment

§ 12.6.1 Upon receipt of a final Application for Payment, the Engineer will inspect the Work. When the Engineer finds the Work acceptable and the Contract fully performed, the Engineer will promptly issue a final Certificate for Payment, or other verification of the final Application for Payment acceptable to Owner.

§ 12.6.2 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when:

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work and to satisfy other requirements in the Contract Documents, if any, which extend beyond final payment;
- .2 Contractor has assembled and delivered to Owner final release and lien waivers from the Contractor (and its subcontractors and suppliers, if required by Owner), and all warranties, operations and maintenance manuals, record drawings and other close-out documents required by the Contract Documents; and
- .4 a final Certificate for Payment has been issued by the Engineer; and
- .5 a final Certificate of Occupancy has been issued for the Project, if required; and
- .6 AIA Documents G706 and G706A are executed, if required by Owner; and
- .7 all punch list items have been completed to the satisfaction of Owner; and
- .8 Owner has received fully executed copies of **Exhibit 1**, Affidavit of Compliance, from Contractor and all Subcontractors.

Not later than 30 days after all the above conditions have been satisfied, the Owner shall make the final payment to the Contractor.

§ 12.6.3 Acceptance of final payment by the Contractor, a subcontractor or supplier shall constitute a waiver of all claims by that payee against the Owner arising out of or related to the Project, except those claims previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 13 PROTECTION OF PERSONS AND PROPERTY

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs, including all those required by law in connection with performance of the Contract. The Contractor shall take reasonable precautions to prevent damage, injury, or loss to employees on the Work and other persons who may be affected thereby, the Work and materials and equipment to be incorporated therein, and other property at the site or adjacent thereto. The Contractor shall promptly remedy damage and loss to property caused in whole or in part by the Contractor, or by anyone for whose acts the Contractor may be liable.

ARTICLE 14 CORRECTION OF WORK

§ 14.1 The Contractor shall promptly correct Work rejected by the Engineer as failing to conform to the requirements of the Contract Documents. The Contractor shall bear the cost of correcting such rejected Work, including the costs of uncovering, replacement, and additional testing. If prior to the date of Substantial Completion the Contractor, a subcontractor, or anyone for whom either is responsible uses or damages any portion of the Work or existing improvements at the location of the Project, the Contractor shall cause such item to be restored to "like new" condition at no expense to the Owner.

§ 14.2 In addition to the Contractor's other obligations, including warranties, under the Contract, the Contractor shall, for a period of three years after Substantial Completion, correct Work not conforming to the requirements of the Contract Documents. The three (3) year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work. Nothing contained in this Section 14.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents, nor relieve the Contractor of liability for defects which are first noticed more than three (3) years from Substantial Completion. Establishment of the three-year period for correction of Work as described in this Section 14.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 14.3 If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with Section 7.3.

ARTICLE 15 MISCELLANEOUS PROVISIONS

§ 15.1 Assignment of Contract

Neither party to the Contract shall assign the Contract as a whole without written consent of the other.

§ 15.2 Tests and Inspections

§ 15.2.1 At the appropriate times, the Contractor shall arrange and bear cost of tests, inspections, and approvals of portions of the Work required by the Contract Documents or by laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities.

§ 15.2.2 If the Engineer requires additional testing, the Contractor shall perform those tests.

§ 15.2.3 The Owner shall bear cost of tests, inspections, or approvals that do not become requirements until after the Contract is executed. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 15.3 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules.

ARTICLE 16 TERMINATION OF THE CONTRACT

§ 16.1 Termination by the Contractor

If the Owner fails to make payment properly due as provided in Section 12.4.1 for a period of thirty days, the Contractor may, upon seven additional days' written notice to the Owner and Engineer, suspend Work until payment is made. If the suspension lasts more than sixty (60) days, the Contractor may, on seven (7) additional days' written notice, terminate the Contract and recover from the Owner payment for Work properly executed.

§ 16.2 Termination by the Owner for Cause

§ 16.2.1 The Owner may terminate the Contract if the Contractor

- .1 refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the subcontractors;

- .3 disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 is otherwise guilty of breach of a provision of the Contract Documents.

§ 16.2.2 When any of the above reasons exist, the Owner may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may

- .1 take possession of the site and of all materials thereon owned by the Contractor, and
- .2 finish the Work by whatever reasonable method the Owner may deem expedient.

§ 16.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 16.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 16.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner. This obligation for payment shall survive termination of the Contract.

§ 16.3 Termination by the Owner for Convenience

The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work properly executed. If any termination for cause by Owner is determined to be wrongful, it shall be deemed a termination for convenience under this provision.

ARTICLE 17 OTHER TERMS AND CONDITIONS

(Insert any other terms or conditions below.)

« § 17.1 Contractor shall pay all workers performing work under the Contract not less than the prevailing hourly rate of wages, as set out in the wage order attached to and made part of the Specifications for the Work under the Contract. The Owner may, at any time, request and inspect the Contractor's payrolls for the Project to verify compliance with prevailing wage laws and regulations. Any change in the prevailing hourly rate of wages or court decision shall not be the basis of any Claim by the Contractor. The Contractor shall forfeit a penalty to the contracting public body of One Hundred Dollars (\$100.00) per day (or portion of a day) for each worker that is paid less than the prevailing rate for any Work done under the Contract by the Contractor or by any of its Subcontractors.

§ 17.2 The Contractor and all of its Subcontractors must require all on-site employees to complete the ten-hour construction safety training program required under Section 292.675, RSMo., unless such employee has previously completed the program and has documentation evidencing completion. The contractor shall forfeit as a penalty to the contracting public body two thousand five hundred dollars plus one hundred dollars for each employee employed by the contractor or subcontractor, for each calendar day, or portion thereof, such employee is employed without the required training.

§ 17.3 The Contractor and all its Subcontractors shall file with the Owner an Affidavit of Compliance, in the form attached as Exhibit 1, verifying compliance with all requirements of the prevailing wage law. Such Affidavit of Compliance from the Contractor and each of its Subcontractors shall be a condition precedent to the Contractor's right to final payment.

§ 17.4 Pursuant to State of Missouri's RSMO 285.530(1), no business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri. The Contractor shall comply with the provisions of Section 285.525 through 285.550 of the State of Missouri Statutes and execute the notarized affidavit attached hereto as Exhibit 2, Affidavit of Work Authorization. Execution of Exhibit 2 by the Contractor shall be a condition precedent to the Contractor's exercise or enforcement of any rights under this Agreement and payment of any sums due and owing the Contractor by the Owner

§ 17.5 Claims by the Contractor must be initiated within ten (10) days after occurrence of the event giving rise to such Claim or within ten (10) days after the Contractor first recognizes the condition giving rise to the Claim, whichever is later. Claims must be initiated by written notice to the Owner. Claims not timely made, in writing, by the Contractor shall be deemed to have been abandoned and waived. The acceptance and consideration of any Claim out of time by

the Owner shall not create any precedent or "course of dealing" between the Owner and the Contractor, nor shall it waive the Owner's right to insist on strict adherence by the Contractor to the Contract claims procedures.

§ 17.6 Pending final resolution of a Claim, except as otherwise agreed in writing, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 17.7 MEDIATION

§ 17.7.1 Any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 17.7.2 The Owner and Contractor shall endeavor to resolve claims, disputes and other matters in question between them by mediation. A request for mediation shall be made in writing and delivered to the other party to the Agreement. The request may be made concurrently with the filing of a complaint or other appropriate demand for binding dispute resolution but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of sixty (60) days from the date of filing, unless stayed for a longer period by agreement of the parties or court order.

§ 17.7.3 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 17.7.4 If the parties do not resolve a dispute through mediation pursuant to this Section 17.7, the method of binding dispute resolution shall be litigation in a court of competent jurisdiction. Exclusive jurisdiction and venue for any legal action to enforce any provision of this Agreement shall be in a court situated in Jackson County, Missouri.

§ 17.8 SUBCONTRACTORS

§ 17.8.1 A "Subcontractor" is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site.

§ 17.8.2 Unless otherwise stated in the Contract Documents, as soon as practicable after award of the Contract, the Contractor shall notify the Owner and Engineer, in writing, of the Subcontractors proposed for each principal portion of the Work. The Contractor shall not contract with any Subcontractor to whom the Owner or Engineer has made reasonable written objection within ten (10) days after receipt of the Contractor's list of Subcontractors. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 17.8.3 Contracts between the Contractor and Subcontractors shall: (1) to the extent of the Work to be performed by the Subcontractor, require each Subcontractor to be bound to the Contractor by the terms of the Contract Documents and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by the Contract Documents, assumes toward the Owner and Engineer; and (2) allow the Subcontractor the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by these Contract Documents, has against the Owner.

§ 17.9 The Contractor shall furnish payment and performance bonds in the amount of at least one hundred percent (100%) of the Contract Sum, or such greater amount as required by law, covering faithful performance of the Contract and payment of obligations arising thereunder. No payments shall be due until the Contractor furnishes fully executed original bonds to the Owner in a form and amount acceptable to Owner. The payment bond furnished by Contractor shall be conditioned for the payment of any and all materials, incorporated, consumed or used in connection with the Work, and all insurance premiums, both for compensation, and for all other kinds of insurance, said Work, and for all labor performed in such Work whether by subcontractor or otherwise. Such bond shall comply with applicable laws, including Section 107.170 of the State of Missouri Statutes. Owner shall have the right to require the Contractor to furnish such other bonds as set forth in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract, or as reasonably required by the Owner after execution of the Contract and subject to agreement on a Change Order or issuance of a Construction Change Directive.

§ 17.10 Either party's failure in any one or more instances to insist upon strict performance of any of the terms and conditions of this Agreement or to exercise any right herein conferred shall not be construed as a waiver or relinquishment of that right or of such party's right to assert or rely upon the terms and conditions of this Agreement. Any express waiver of a term of this Agreement shall not be binding and effective unless made in writing and properly executed by the waiving party.

§ 17.11 The rights and remedies of the parties with respect to failure of the other party to comply with the terms of this Agreement are not exclusive. The exercise thereof shall not constitute an election of remedies, and the aggrieved party shall in all events be entitled to seek whatever additional remedies may be available in law, in equity or otherwise.

§ 17.12 The invalidity or unenforceability of any provision of this Agreement that is not fundamental to the nature of the contract shall not affect the validity or enforceability of any other provision. Any such invalid or unenforceable provision shall be deemed severed from this Agreement, and the remainder of the Agreement shall be construed and enforced as if this Agreement did not contain that particular provision to the extent of its invalidity or unenforceability.

§ 17.13 This Agreement may be executed in counterparts, each of which shall be deemed to be an original, and all of which together will constitute one and the same document. An electronic transmission in .pdf format of a signed counterpart of this Agreement will be sufficient to bind the party or parties to whose signature(s) appear(s) thereon.

§ 17.14 This Agreement contains the entire agreement among the parties with respect to the subject matter hereof, and supersedes all prior and contemporaneous agreements and understandings, inducements, or conditions, express or implied, oral or written. The express terms hereof control and supersede any course of performance or usage of the trade inconsistent with any of the terms hereof.

§ 17.15 This Agreement may not be modified or amended other than by an agreement in writing signed by both of the parties.»

This Agreement entered into as of the day and year first written above.

(If required by law, insert cancellation period, disclosures or other warning statements above the signatures.)

« »

Kansas City Public Library District

OWNER (Signature)

« »« »

(Printed name and title)

CONTRACTOR (Signature)

« »« »

(Printed name and title)

LICENSE NO.:

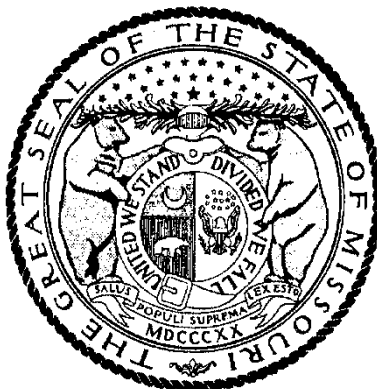
JURISDICTION:

EXHIBIT 1

Missouri

Division of Labor Standards

WAGE AND HOUR SECTION



MICHAEL L. PARSON, Governor

Annual Wage Order No. 29

Section 048
JACKSON COUNTY

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by

Todd Smith, Director
Division of Labor Standards

Filed With Secretary of State: March 10, 2022

Last Date Objections May Be Filed: April 11, 2022

Prepared by Missouri Department of Labor and Industrial Relations

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	\$67.05
Boilermaker	\$37.33*
Bricklayer	\$59.20
Carpenter	\$60.21
Lather	
Linoleum Layer	
Millwright	
Pile Driver	
Cement Mason	\$54.35
Plasterer	
Communications Technician	\$58.66
Electrician (Inside Wireman)	\$66.21
Electrician Outside Lineman	\$64.01
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Elevator Constructor	\$37.33*
Glazier	\$56.84
Ironworker	\$66.35
Laborer	\$49.04
General Laborer	
First Semi-Skilled	
Second Semi-Skilled	
Mason	\$54.39
Marble Mason	
Marble Finisher	
Terrazzo Worker	
Terrazzo Finisher	
Tile Setter	
Tile Finisher	
Operating Engineer	\$60.71
Group I	
Group II	
Group III	
Group III-A	
Group IV	
Group V	
Painter	\$50.15
Plumber	\$74.12
Pipe Fitter	
Roofer	\$57.93
Sheet Metal Worker	\$71.70
Sprinkler Fitter	\$61.32
Truck Driver	\$47.50
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

**The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title as defined in Section 290.210 RSMo.

Heavy Construction Rates for
JACKSON County

Section 048

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	\$60.95
Millwright	
Pile Driver	
Electrician (Outside Lineman)	\$84.43
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Laborer	\$49.28
General Laborer	
Skilled Laborer	
Operating Engineer	\$58.78
Group I	
Group II	
Group III	
Group IV	
Truck Driver	\$50.64
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate Sheet.

*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

**The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title as defined in Section 290.210 RSMo.

OVERTIME and HOLIDAYS

OVERTIME

For all work performed on a Sunday or a holiday, not less than twice (2x) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work.

For all overtime work performed, not less than one and one-half (1½) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work or contractual obligation. For purposes of this subdivision, "**overtime work**" shall include work that exceeds ten hours in one day and work in excess of forty hours in one calendar week; and

A thirty-minute lunch period on each calendar day shall be allowed for each worker on a public works project, provided that such time shall not be considered as time worked.

HOLIDAYS

January first;
The last Monday in May;
July fourth;
The first Monday in September;
November eleventh;
The fourth Thursday in November; and
December twenty-fifth;

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.



AFFIDAVIT

COMPLIANCE WITH THE PREVAILING WAGE LAW

I, _____, upon being duly sworn upon my oath state that: (1) I am the
(Name)

_____ of _____; (2) all requirements of
(Title) (Name of Company)

§§ 290.210 to 290.340, RSMo, pertaining to the payment of wages to workers employed on public works projects have been fully satisfied with regard to this company's work on _____;
(Name of Project)

(3) I have reviewed and am familiar with the prevailing wage rules in 8 CSR 30-3.010 to 8 CSR 30-3.060; (4) based upon my knowledge of these rules, including the occupational titles set out in 8 CSR 30-3.060, I have completed full and accurate records clearly indicating (a) the names, occupations, and crafts of every worker employed by this company in connection with this project together with an accurate record of the number of hours worked by each worker and the actual wages paid for each class or type of work performed, (b) the payroll deductions that have been made for each worker, and (c) the amounts paid to provide fringe benefits, if any, for each worker; (5) the amounts paid to provide fringe benefits, if any, were irrevocably made to a fund, plan, or program on behalf of the workers; (6) these payroll records are kept and have been provided for inspection to the authorized representative of the contracting public body and will be available, as often as may be necessary, to such body and the Missouri Department of Labor and Industrial Relations; (7) such records shall not be destroyed or removed from the state for one year following the completion of this company's work on this project; and (8) there has been no exception to the full and complete compliance with the provisions and requirements of Annual Wage Order No. _____ Section _____ issued by the Missouri Division of Labor Standards and applicable to this project located in _____ County, Missouri, and completed on the ____ day of _____, _____.

The matters stated herein are true to the best of my information, knowledge, and belief. I acknowledge that the falsification of any information set out above may subject me to criminal prosecution pursuant to §§290.340, 570.090, 575.040, 575.050, or 575.060, RSMo.

Signature

Subscribed and sworn to me this ____ day of _____, _____.

My commission expires _____, _____.

Notary Public

Receipt by Authorized Public Representative

Exhibit 2

AFFIDAVIT OF WORK AUTHORIZATION

I, _____, of lawful age and being first duly sworn my oath, state as follows to the Kansas City Public Library, a political subdivision of the State of Missouri:

1. In accordance with R.S.Mo. § 285.530(2) _____
("Contractor") is enrolled and will continue to participate in a federal work authorization program in respect to employees that will work in connection with the contracted service parking garage repairs (the "Project") for the duration of the contract.

2. I also affirm that Contractor does not and will not knowingly employ any person who is an unauthorized alien in connection with the contracted services related to the Project for the duration of the contract, if awarded.

3. Furthermore, I also affirm that all subcontractors working on this contract for services to the Kansas City Public Library shall affirmatively state in writing in their contracts with Contractor that they are not in violation of R.S.Mo. § 285.530(1), and shall not thereafter be in violation. Alternatively, the subcontractor shall submit to the Contractor a sworn affidavit under penalty of perjury attesting that all employees are lawfully present in the United States.

FURTHER AFFIANT SAYETH NAUGHT.

(Signature)

Dated: _____

STATE OF _____)
) ss.
COUNTY OF _____)

Subscribed and sworn to before me this ____ day of _____, 20__.

Exhibit 2

AFFIDAVIT OF WORK AUTHORIZATION

I, _____, of lawful age and being first duly sworn my oath, state as follows to the Kansas City Public Library, a political subdivision of the State of Missouri:

1. In accordance with R.S.Mo. § 285.530(2) _____
("Contractor") is enrolled and will continue to participate in a federal work authorization program in respect to employees that will work in connection with the contracted service parking garage repairs (the "Project") for the duration of the contract.

2. I also affirm that Contractor does not and will not knowingly employ any person who is an unauthorized alien in connection with the contracted services related to the Project for the duration of the contract, if awarded.

3. Furthermore, I also affirm that all subcontractors working on this contract for services to the Kansas City Public Library shall affirmatively state in writing in their contracts with Contractor that they are not in violation of R.S.Mo. § 285.530(1), and shall not thereafter be in violation. Alternatively, the subcontractor shall submit to the Contractor a sworn affidavit under penalty of perjury attesting that all employees are lawfully present in the United States.

FURTHER AFFIANT SAYETH NAUGHT.

(Signature)

Dated: _____

STATE OF _____)
) ss.
COUNTY OF _____)

Subscribed and sworn to before me this ____ day of _____, 20__.

DRAFT AIA® Document A105™ - 2017

Standard Short Form of Agreement Between Owner and Contractor

AGREEMENT made as of the « » day of « » in the year « Two Thousand Nineteen »
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

« »
« »
« »
« Kansas City Urban Public Library District »
« 14 W. 10th Street »
« Kansas City, Missouri 64105 »
« »

and the Contractor:
(Name, legal status, address and other information)

« »
« »
« »
« »

for the following Project:
(Name, location and detailed description)

« »
« »
« »
The Architect:
« Kansas City Public Library Parking Garage »
« 14 W. 10th Street »
« Kansas City, Missouri 64105 »
« The parking garage is located across Baltimore Avenue from the Library's Central Library location at 14 W. 10th Street, Kansas City, MO 64105. »

The Engineer:
(Name, legal status, address and other information)

« »
« »
« »
« Norton & Schmidt Consulting Engineers, LLC »
« 311 E. 11th Avenue »
« North Kansas City, MO 64116 »
« »

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS: The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

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2	DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
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8	CONTRACTOR
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11	TIME
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ARTICLE 1 THE CONTRACT DOCUMENTS

The Contractor shall complete the Work described in the Contract Documents for the Project. The Contract Documents consist of

1. this Agreement signed by the Owner and Contractor; referred to in this Agreement as either "Agreement" or "Contract";
2. the drawings and specifications prepared by the ArchitectEngineer, dated « », and enumerated as follows:

Drawings:

Number	Title	Date

Specifications:

Section	Title	Pages

3. addenda prepared by the ArchitectEngineer as follows:

Number	Date	Pages

- 4 written orders for changes in the Work, pursuant to Article 10, issued after execution of this Agreement; and
- 5 other documents, if any, identified as follows:

« »
 1 Exhibit 1: Affidavit of Compliance
 2 Exhibit 2: Affidavit of Work Authorization
 3 Exhibit 3: Specifications Table of Contents»

ARTICLE 2 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 2.1 The Contract Time is the number of calendar days available to the Contractor to substantially complete the Work.

§ 2.2 Date of Commencement:

Unless otherwise set forth below, the date of commencement shall be the date of this Agreement upon the Owner's written notice to proceed.

(Insert the date of commencement if other than the date of this Agreement.)

« »

§ 2.3 Substantial Completion:

Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion, as defined in Section 12.5, of the entire Work:

(Check the appropriate box and complete the necessary information.)

[☒] Not later than « » (« Seventy » (« 70 ») calendar days from the date of commencement.

[☐] By the following date: « »

ARTICLE 3 CONTRACT SUM

§ 3.1 The Contract Sum shall include all items and services necessary for the proper execution and completion of the Work. Subject to additions and deductions in accordance with Article 10, the Contract Sum is:

« » (\$ « ») (\$ « »)

§ 3.2 For purposes of payment, the Contract Sum includes the following values related to portions of the Work:
 (Itemize the Contract Sum among the major portions of the Work.)

Portion of the Work	Value

§ 3.3 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and hereby accepted by the Owner:

(Identify the accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

« »

§ 3.4 Allowances, if any, included in the Contract Sum are as follows:
 (Identify each allowance.)

Item	Price

§ 3.5 Unit prices, if any, are as follows:

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)
------	-----------------------	-------------------------

ARTICLE 4 PAYMENTS

§ 4.1 Based on Contractor's Applications for Payment certified or verified by the Architect/Engineer, and submitted with all supporting documentation and waivers required by this Agreement, the Owner shall pay the Contractor, in accordance with Article 12, as follows: For each payment made prior to Substantial Completion of the Work, the Owner may withhold retainage in the amount of 10% from the payment otherwise due.
(Insert below timing for payments and provisions for withholding retainage, if any.)

« »

§ 4.2 Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate below, or in the absence thereof, at the legal rate prevailing at the place of the Project.
(Insert rate of interest agreed upon, if any.)

« » %Ten percent (10%) simple interest per annum « »

ARTICLE 5 INSURANCE

§ 5.1 The Contractor shall maintain the following types and limits of insurance until the expiration of the period for correction of Work as set forth in Section 14.2, subject to the terms and conditions set forth in this Section 5.1:

§ 5.1.1 Commercial General Liability insurance for the Project, written on an occurrence form, with policy limits of not less than « » (\$ «One Million Dollars» (\$ « 1,000,000 ») each occurrence, « » (\$ «Two Million Dollars» (\$ « 2,000,000 ») general aggregate, and « » (\$ «Two Million Dollars» (\$ « 2,000,000 ») aggregate for products-completed operations hazard.

§ 5.1.2 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Contractor, with policy limits of not less than « » (\$ «One Million Dollars» (\$ « 1,000,000 ») per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance, and use of those motor vehicles along with any other statutorily required automobile coverage.

§ 5.1.3 The Contractor may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided that such primary and excess or umbrella insurance policies result in the same or greater coverage as those required under Section 5.1.1 and 5.1.2, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require exhaustion of the underlying limits only through the actual payment by the underlying insurers.

§ 5.1.4 Workers' Compensation at statutory limits.

§ 5.1.5 Employers' Liability with policy limits not less than « » (\$ «One Million Dollars» (\$ « 1,000,000 ») each accident, « » (\$ «One Million Dollars» (\$ « 1,000,000 ») each employee, and « » (\$ «One Million Dollars» (\$ « 1,000,000 ») policy limit.

§ 5.1.6 The Contractor shall provide builder's risk insurance to cover the total value of the entire Project on a replacement cost basis.

§ 5.1.7 Other Insurance Provided by the Contractor

(List below any other insurance coverage to be provided by the Contractor and any applicable limits.)

Coverage	Limits
----------	--------

~~§ 5.2 The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance and shall provide property insurance to cover the value of the Owner's property. The Contractor is entitled to receive an increase in the Contract Sum equal to the insurance proceeds related to a loss for damage to the Work covered by the Owner's property insurance.~~

~~§ 5.2 Intentionally omitted.~~

~~§ 5.3 The Contractor shall obtain an endorsement to its Commercial General Liability insurance policy to provide coverage for the Contractor's obligations under Section 8.12. Liability insurance coverage required by this Agreement shall include all major divisions of coverage and be on a comprehensive basis including:~~

~~§ 5.4 Prior to commencement of the Work, each party shall provide certificates of insurance showing their respective coverages.~~

~~§ 5.5 Unless specifically precluded by the Owner's property insurance policy, the Owner and Contractor waive all rights against (1) each other and any of their subcontractors, suppliers, agents, and employees, each of the other, and (2) the Architect, Architect's consultants, and any of their agents and employees, for damages caused by fire or other causes of loss to the extent those losses are covered by property insurance or other insurance applicable to the Project, except such rights as they have to the proceeds of such insurance.~~

- ~~.1 Premises - operations, X - C - U - Required.~~
- ~~.2 Independent Contractor's Protective.~~
- ~~.3 Products and Completed Operations.~~
- ~~.4 Personal Injury Liability with employment exclusion deleted.~~
- ~~.5 Contractual.~~
- ~~.6 Owned, non-owned and hired motor vehicle.~~
- ~~.7 Broad Form Property Damage including completed operations.~~
- ~~.8 Endorsement for per project aggregate.~~

~~§ 5.4 Prior to commencement of the Work, Contractor shall furnish to the Owner Certificates of Insurance evidencing insurance coverages not less than the limits indicated above. Owner, Engineer, Engineer's consultants, SP Plus Corporation, and agents and employees of any of them shall be named as additional insureds on the General (and Umbrella Liability, if any) and Automobile Liability Policies of insurance. Certificates of Insurance shall show the additional insureds, where required, and shall provide that the insurance policy will not be canceled without thirty (30) days prior written notice to the Owner. The Contractor shall require its Subcontractors to furnish such certificates as well verifying that the Owner, Engineer, Engineer's consultants, SP Plus Corporation, and agents and employees of any of them are named as additional insureds on all policies required of Subcontractors. The maintenance in full current force and effect of such forms and amounts of insurance required by this Agreement shall be a condition precedent to the Contractor's enforcement of any rights under this Agreement.~~

~~§ 5.5 Contractor waives all rights against Owner, Engineer, Engineer's consultants, SP Plus Corporation, and agents and employees of any of them, for recovery of damages under Contractor's insurance policies required by this Agreement.~~

ARTICLE 6 GENERAL PROVISIONS

§ 6.1 The Contract

The Contract represents the entire and integrated agreement between the parties and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a written modification in accordance with Article 10.

§ 6.2 The Work

The term "Work" means the construction and services required by the Contract Documents, and reasonably inferable therefrom, and includes all other labor, materials, equipment, and services provided, or to be provided, by the Contractor to fulfill the Contractor's obligations.

§ 6.3 Intent

The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all.

§ 6.4 Ownership and Use of ~~Architect's/Engineer's~~ Drawings, Specifications and Other Documents

Documents prepared by the ~~Architect/Engineer~~ are instruments of the ~~Architect's/Engineer's~~ service for use solely with respect to this Project. ~~The Architect/Ownership of the instruments of the Engineer's service is governed by the agreement entered between the Owner and Engineer. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall retain all common law, statutory, and other reserved rights, including the not own or claim a copyright in the instruments of Engineer's service.~~ The Contractor, subcontractors, sub-subcontractors, and suppliers are authorized to use and reproduce the instruments of service solely and exclusively for execution of the Work. The instruments of service may not be used for other Projects or for additions to this Project outside the scope of the Work without the specific written consent of the ~~Architect/Engineer~~.

§ 6.5 ~~Electronic Notice~~Intentionally omitted.

~~Written notice under this Agreement may be given by one party to the other by email as set forth below. (Insert requirements for delivering written notice by email such as name, title, and email address of the recipient, and whether and how the system will be required to generate a read receipt for the transmission.)~~

« »

ARTICLE 7 OWNER

§ 7.1 Information and Services Required of the Owner

~~§ 7.1.1 If requested by the Contractor, the Owner shall furnish all necessary surveys and a legal description of the site.~~

~~§ 7.1.1 If requested by the Contractor, and reasonably necessary to perform the Work, the Owner shall furnish all necessary surveys and a legal description of the site. Information furnished by the Owner, if any, regarding surveys, subsurface investigation reports, soil borings, and other material of a similar nature is for general information only and is not a guarantee of the completeness or accuracy of such information, unless specifically noted otherwise herein. Contractor shall verify all existing grades, conditions and dimensions of existing physical conditions and structures and shall report any inconsistencies in writing to the Engineer. Contractor shall establish all lines and levels required to execute the Work and shall bear all costs involved, and shall be responsible for their accuracy and maintenance.~~

~~§ 7.1.2 Except for permits and fees under Section 8.7.1 that are the responsibility of the Contractor, the Owner shall obtain and pay for other necessary permits, fees, approvals, easements, assessments, and charges.~~

~~§ 7.1.3 Prior to commencement of the Work, at the written request of the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence.~~

~~§ 7.1.3 Intentionally omitted.~~

§ 7.2 Owner's Right to Stop the Work

If the Contractor fails to correct Work which is not in accordance with the Contract Documents, the Owner may direct the Contractor in writing to stop the Work until the correction is made.

§ 7.3 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies, correct such deficiencies. ~~In such case, the Architect may withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the cost of correction, provided the actions of the Owner and amounts charged to the Contractor were approved by the Architect. In such case, the Contract Sum shall be adjusted to deduct the cost of correction from payments due the Contractor. In no event shall Owner have control over, charge of, or any responsibility for construction means, methods, techniques, sequences or procedures or for the safety~~

precautions and programs in connection with the Work, notwithstanding any of the rights and authority granted Owner in Contract Documents.

§ 7.4 Owner's Right to Perform Construction and to Award Separate Contracts

§ 7.4.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project.

§ 7.4.2 The Contractor shall coordinate and cooperate with the Owner's own forces and separate contractors employed by the Owner.

ARTICLE 8 CONTRACTOR

§ 8.1 Review of Contract Documents and Field Conditions by Contractor

§ 8.1.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 8.1.2 The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by the Owner. Before commencing activities, the Contractor shall (1) take field measurements and verify field conditions; (2) carefully compare this and other information known to the Contractor with the Contract Documents; and (3) promptly report errors, inconsistencies, or omissions discovered to the Architect/Engineer. Additionally, Contractor shall evaluate and satisfy itself as to the conditions and limitations under which the Work is to be performed, including, without limitation, (1) the location, conditions, layout and nature of the Project site and surrounding areas, (2) generally prevailing climatic conditions, (3) anticipated labor supply and costs, (4) availability and cost of materials, tools and equipment and (5) other similar issues. Owner assumes no responsibility or liability for the physical condition or safety of the Project site or any improvements located on the Project site. The Owner shall not be required to make any adjustment in either the Contract Sum or Contract Time in connection with any failure by Contractor to comply with these requirements.

§ 8.1.3 The exactness of grades, elevations, dimensions, or locations given in any Drawings, or the work installed by other contractors, if any, is not guaranteed by the Owner. Contractor shall, therefore, satisfy itself as to the accuracy of all grades, elevations, dimensions and locations. In all cases of interconnection of its Work with existing or other work, Contractor shall verify at the site all dimensions relating to such existing or other work. Any errors due to Contractor's failure to so verify all such grades, elevations, dimensions or locations shall be promptly rectified by Contractor without any additional cost to Owner.

§ 8.2 Contractor's Construction Schedule

The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Architect's/Engineer's information a Contractor's construction schedule for the Work.

§ 8.3 Supervision and Construction Procedures

§ 8.3.1 The Contractor shall supervise and direct the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work, and for providing a safe place for the performance of the Work. Owner assumes no responsibility or liability for the safety of the Project site or any improvements located on the Project site.

§ 8.3.2 The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner, through the Architect/Engineer, the names of subcontractors or suppliers for each portion of the Work. The Contractor shall not contract with any subcontractor or supplier to whom the Owner or Architect/Engineer have made a timely and reasonable objection.

§ 8.4 Labor and Materials

§ 8.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work.

§ 8.5 Warranty

§ 8.6 Taxes

The Owner, as a public entity, is entitled to sales tax exemption and Contractor shall not include the cost of sales tax in the Contract Sum. The Owner shall furnish a certificate of tax exemption to the Contractor for use exclusively on this Project.

§ 8.7.1 The Contractor shall obtain and pay for the building permit and other permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work.

§ 8.8 Submittals

§ 8.9 Use of Site

§ 8.10 Cutting and Patching

§ 8.11 Cleaning Up

§ 8.12 Indemnification

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intentional or wrongful acts or omissions of the Contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. The Contractor's obligations under this Section 8.12 shall survive any termination of this Agreement or completion of the Project. In claims against any Indemnatee indemnified under this Section 8.12 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the defense, indemnity and hold harmless obligations under this Section 8.12 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts. Contractor shall include in its subcontracts for the Project the requirement that the Subcontractors defend, indemnify and hold harmless the Indemnitees for any claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work.

ARTICLE 9 ARCHITECT/ENGINEER

§ 9.1 The Architect/Engineer will provide administration of the Contract as described in the Contract Documents, and the Agreement between Owner and Engineer. The Architect/Engineer will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents/Agreement between Owner and Engineer.

§ 9.2 The Architect/Engineer will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the Work.

§ 9.3 The Architect/Engineer will not have control over or charge of, and will not be responsible for, construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility. The Architect/Engineer will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents.

§ 9.4 Based on the Architect's/Engineer's observations and evaluations of the Contractor's Applications for Payment, the Architect/Engineer will review and certify or verify the amounts due the Contractor.

§ 9.5 The Architect/Engineer has authority to reject Work that does not conform to the Contract Documents.

~~§ 9.6 The Architect~~ § 9.6 To the extent required by the Contract Documents, the Engineer will promptly review and approve or take appropriate action upon Contractor's submittals, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 9.7 On written request from either the Owner or Contractor, the Architect/Engineer will promptly interpret and decide matters concerning performance under, and requirements of, the Contract Documents.

§ 9.8 Interpretations and decisions of the Architect/Engineer will be consistent with the intent of, and reasonably inferable from the Contract Documents, and will be in writing or in the form of drawings. ~~When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either and will not be liable for results of interpretations or decisions rendered in good faith.~~

§ 9.9 The Architect's/Engineer's duties, responsibilities, and limits of authority as described in the Contract Documents shall not be changed without written consent of the Owner, Contractor, and Architect/Engineer. Consent shall not be unreasonably withheld.

ARTICLE 10 CHANGES IN THE WORK

~~§ 10.1~~ § 10.1 Changes in the Work may be accomplished after execution of the Contract. The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract, consisting of additions, deletions, or other revisions, and with the Contract Sum and Contract Time ~~shall be being~~ adjusted accordingly, ~~in writing. If Such changes in the Work shall be authorized by written Change Order signed by the Owner and Contractor cannot agree to a change in, or by written Construction Change Directive signed by the Owner, and any change in the Contract Sum, or the Owner/Contract Time shall pay be accomplished only by Change Order or Construction Change Directive. Accordingly, no course of conduct or dealings between the parties, nor express or implied acceptance of additions, deletions, or other revisions to the Work, and no claim that the Owner has been unjustly enriched by any additions, deletions, or other revisions to the Work, whether or not there is, in fact, any unjust~~

enrichment, shall be the basis of any claim to an increase in any amounts due under the Contract Documents or a change in any time period provided for in the Contract Documents. Upon issuance of a Change Order or Construction Change Directive, the Contractor ~~its actual cost plus reasonable overhead and profit shall proceed promptly with such changes in the Work, unless otherwise provided in the Change Order or Construction Change Directive.~~

~~§ 10.2 The Architect may authorize or~~ **§ 10.2** Upon the written approval of the Owner, the Engineer will have the authority to order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. Such authorization or order shall be in writing and shall be binding on the ~~Owner and~~ Contractor. The Contractor shall proceed with such minor changes promptly, ~~provided that if the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Owner and shall not proceed to implement the change in the Work.~~

§ 10.3 If concealed or unknown physical conditions are encountered at the site that differ materially from those indicated in the Contract Documents or from those conditions ordinarily found to exist, the Contract Sum ~~and~~ Contract Time ~~shall, or both, may~~ be subject to equitable adjustment.

§ 10.4 Adjustments in the Contract Sum and Contract Time resulting from a change in the Work shall be determined by mutual agreement of the Contractor and Owner or, in the case of a Construction Change Directive signed only by the Owner, by the Contractor's actual cost of labor, material, equipment, and reasonable overhead and profit, unless the parties agree on another method for determining the cost or credit. Pending final determination of the total cost of a Construction Change Directive, the Contractor may request payment for Work completed pursuant to the Construction Change Directive. The Engineer or Owner will make an interim determination of the amount of payment due for purposes of certifying the Contractor's monthly Application for Payment. When the Owner and Contractor agree on adjustments to the Contract Sum and Contract Time arising from a Construction Change Directive, the Contractor will prepare a Change Order

ARTICLE 11 TIME

§ 11.1 Time limits stated in the Contract Documents are of the essence of the Contract.

§ 11.2 If the Contractor is delayed at any time in progress of the Work by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, or other causes beyond the Contractor's control, the Contract Time shall be subject to equitable adjustment.

§ 11.3 Costs caused by delays or by improperly timed activities or defective construction shall be borne by the responsible party.

ARTICLE 12 PAYMENTS AND COMPLETION

§ 12.1 Contract Sum

The Contract Sum stated in this Agreement, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 12.2 Applications for Payment

§ 12.2.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the ~~Architect~~ **Engineer and Owner** an itemized Application for Payment for Work completed in accordance with the values stated in this Agreement. The Application shall be supported by data substantiating the Contractor's right to payment as the Owner or ~~Architect~~ **Engineer** may reasonably require, ~~such as evidence of payments made to, and waivers of liens from, subcontractors and suppliers.~~ Payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment stored, and protected from damage, off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage and transportation to the site for such materials and equipment stored off the site. Contractor shall submit with each application for progress payment a release and lien waiver in form and content satisfactory to the Owner by which the Contractor (and its subcontractors and suppliers, if required by Owner) shall waive and release and defend and indemnify the Owner, the real property and improvements on which the Project is located from any and all demands

and claims for payment, and any and all lien claims and lien rights, with respect to any and all labor, equipment and materials furnished to the Project by Contractor and/or its employees, subcontractors and suppliers up through and including the date of the release and lien waiver. It is understood and agreed that Contractor's submittal of such release and lien waiver shall be an absolute condition precedent to Owner's obligation to issue any progress payment to Contractor on the Project.

§ 12.2.2 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment, all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or other encumbrances adverse to the Owner's interests.

§ 12.3 Certificates for Payment

The Architect/Engineer will, within seven days a reasonable time after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment, or other verification of an Application for Payment acceptable to Owner, in the full amount of the Application for Payment, with a copy to the Contractor; (2) issue to the Owner a Certificate for Payment, or other verification of an Application for Payment acceptable to Owner, for such amount as the Architect/Engineer determines is properly due, and notify the Contractor and Owner in writing of the Architect's/Engineer's reasons for withholding certification in part; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's/Engineer's reason for withholding certification in whole. If certification or notification is not made within such seven-day period, the Contractor may, upon seven additional days' written notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time and the Contract Sum shall be equitably adjusted due to the delay.

§ 12.4 Progress Payments

§ 12.4.1 After Not later than 30 days after the Architect/Engineer has issued a Certificate for Payment, or other verification of an Application for Payment acceptable to Owner, the Owner shall make payment into the manner provided in Contractor of the Contract Documents amount certified or otherwise verified by the Engineer.

§ 12.4.2 The Contractor shall promptly pay each subcontractor and supplier, upon receipt of payment from the Owner, an amount determined in accordance with the terms of the applicable subcontracts and purchase orders. The Contractor agrees that monies received for the performance of this Agreement shall be used first for payment of labor, material, equipment, supplies and services entering into the Work under this Agreement, and said monies shall not be diverted to satisfy obligations of the Contractor on other contracts until all obligations under or in connection with this Agreement are satisfied in full. In the event that any Subcontractor or material supplier to the Contractor files a mechanic's lien against the Project, or property on which the Project is located, Contractor shall discharge such lien within ten (10) days. If not so discharged, the Owner may withhold one hundred fifty percent (150%) of the amount of the lien to protect the Owner until such lien is released and satisfied. The Owner reserves the right to pay off such lien if it appears after due investigation that the money is owed by the Contractor, and to deduct such sum plus associated legal fees from the remaining Contract Sum.

§ 12.4.3 Neither the Owner nor the Architect/Engineer shall have responsibility for payments to a subcontractor or supplier.

§ 12.4.4 A Certificate for Payment or other verification of an Application for Payment acceptable to Owner, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the requirements of the Contract Documents. In taking action on the Contractor's Applications for Payment, the Owner and Engineer shall be entitled to rely on the accuracy and completeness of the information furnished by the Contractor and shall not be deemed to represent that the Owner or Engineer has made a detailed examination, audit or arithmetic verification of the documentation submitted by the Contractor; that the Owner or Engineer has made exhaustive or continuous on-site inspections; or that the Owner or Engineer has made examinations to ascertain how or for what purposes the Contractor has used amounts previously paid on account of the Agreement.

§ 12.5 Substantial Completion

§ 12.5.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for

its intended use, provided, however, that, as a condition precedent to Substantial Completion, the Owner has received all certificates of occupancy and any other permits, approvals, licenses, and other documents from any governmental authority having jurisdiction necessary for the beneficial occupancy of the Project and whose procurement is the responsibility of the Contractor.

§ 12.5.2 When the Contractor believes that the Work or designated portion thereof is substantially complete, it will notify the Architect/Engineer and the Architect/Engineer will make an inspection to determine whether the Work is substantially complete. When the Architect determines that the Work is substantially complete, the Architect shall prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion, establish the responsibilities of the Owner, and Contractor, and fix the time within which the Contractor shall finish all will perform any further punch list review necessary of items on the list accompanying the Certificate of Work remaining to be completed. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 12.6 Final Completion and Final Payment

§ 12.6.1 Upon receipt of a final Application for Payment, the Architect/Engineer will inspect the Work. When the Architect/Engineer finds the Work acceptable and the Contract fully performed, the Architect/Engineer will promptly issue a final Certificate for Payment, or other verification of the final Application for Payment acceptable to Owner.

§ 12.6.2 Final payment, constituting the entire unpaid balance of the Contract Sum, shall not become due until the made by the Owner to the Contractor submits to the Architect releases when:

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work and waivers of liens, and data establishing to satisfy other requirements in the Contract Documents, if any, which extend beyond final payment or;
- .2 Contractor has assembled and delivered to Owner final release and lien waivers from the Contractor (and its subcontractors and suppliers, if required by Owner), and all warranties, operations and maintenance manuals, record drawings and other close-out documents required by the Contract Documents; and
- .4 a final Certificate for Payment has been issued by the Engineer; and
- .5 a final Certificate of Occupancy has been issued for the Project, if required; and
- .6 AIA Documents G706 and G706A are executed, if required by Owner; and
- .7 all punch list items have been completed to the satisfaction of obligations, such as receipts, claims, security interests, or encumbrances arising out of the Contract Owner; and
- .8 Owner has received fully executed copies of Exhibit 1, Affidavit of Compliance, from Contractor and all Subcontractors.

Not later than 30 days after all the above conditions have been satisfied, the Owner shall make the final payment to the Contractor.

§ 12.6.3 Acceptance of final payment by the Contractor, a subcontractor or supplier shall constitute a waiver of all claims by that payee against the Owner arising out of or related to the Project, except those claims previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 13 PROTECTION OF PERSONS AND PROPERTY

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs, including all those required by law in connection with performance of the Contract. The Contractor shall take reasonable precautions to prevent damage, injury, or loss to employees on the Work and other persons who may be affected thereby, the Work and materials and equipment to be incorporated therein, and other property at the site or adjacent thereto. The Contractor shall promptly remedy damage and loss to property caused in whole or in part by the Contractor, or by anyone for whose acts the Contractor may be liable.

ARTICLE 14 CORRECTION OF WORK

§ 14.1 The Contractor shall promptly correct Work rejected by the Architect/Engineer as failing to conform to the requirements of the Contract Documents. The Contractor shall bear the cost of correcting such rejected Work, including the costs of uncovering, replacement, and additional testing. If prior to the date of Substantial Completion the Contractor, a subcontractor, or anyone for whom either is responsible uses or damages any portion of the Work or

existing improvements at the location of the Project, the Contractor shall cause such item to be restored to "like new" condition at no expense to the Owner.

§ 14.2 In addition to the Contractor's other obligations, including warranties, under the Contract, the Contractor shall, for a period of ~~one year~~three years after Substantial Completion, correct ~~work~~Work not conforming to the requirements of the Contract Documents. The three (3) year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work. Nothing contained in this Section 14.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents, nor relieve the Contractor of liability for defects which are first noticed more than three (3) years from Substantial Completion. Establishment of the three-year period for correction of Work as described in this Section 14.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 14.3 If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with Section 7.3.

ARTICLE 15 MISCELLANEOUS PROVISIONS

§ 15.1 Assignment of Contract

Neither party to the Contract shall assign the Contract as a whole without written consent of the other.

§ 15.2 Tests and Inspections

§ 15.2.1 At the appropriate times, the Contractor shall arrange and bear cost of tests, inspections, and approvals of portions of the Work required by the Contract Documents or by laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities.

§ 15.2.2 If the ~~Architect~~Engineer requires additional testing, the Contractor shall perform those tests.

§ 15.2.3 The Owner shall bear cost of tests, inspections, or approvals that do not become requirements until after the Contract is executed. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 15.3 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules.

ARTICLE 16 TERMINATION OF THE CONTRACT

§ 16.1 Termination by the Contractor

If the ~~Work is stopped under~~Owner fails to make payment properly due as provided in Section 12.34.1 for a period of ~~14~~thirty days ~~through no fault of the Contractor,~~ the Contractor may, upon seven additional days' written notice to the Owner and ~~Architect~~Engineer, ~~suspend Work until payment is made. If the suspension lasts more than sixty (60) days,~~ the Contractor may, on seven (7) additional days' written notice, terminate the Contract and recover from the Owner payment for Work properly executed including reasonable overhead and profit, and costs incurred by reason of such termination.

§ 16.2 Termination by the Owner for Cause

§ 16.2.1 The Owner may terminate the Contract if the Contractor

- .1 ~~repeatedly~~ refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the subcontractors;
- .3 ~~repeatedly~~ disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 is otherwise guilty of ~~substantial~~ breach of a provision of the Contract Documents.

§ 16.2.2 When any of the above reasons exist, the Owner, ~~after consultation with the Architect,~~ may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may

- .1 take possession of the site and of all materials thereon owned by the Contractor, and
- .2 finish the Work by whatever reasonable method the Owner may deem expedient.

§ 16.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 16.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 16.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner. This obligation for payment shall survive termination of the Contract.

§ 16.3 Termination by the Owner for Convenience

The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. ~~The In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work properly executed, and costs incurred. If any termination for cause by reason of such termination, along with reasonable overhead and profit on the Work not executed Owner is determined to be wrongful, it shall be deemed a termination for convenience under this provision.~~

ARTICLE 17 OTHER TERMS AND CONDITIONS

(Insert any other terms or conditions below.)

§ 17.1 Contractor shall pay all workers performing work under the Contract not less than the prevailing hourly rate of wages, as set out in the wage order attached to and made part of the Specifications for the Work under the Contract. The Owner may, at any time, request and inspect the Contractor's payrolls for the Project to verify compliance with prevailing wage laws and regulations. Any change in the prevailing hourly rate of wages or court decision shall not be the basis of any Claim by the Contractor. The Contractor shall forfeit a penalty to the contracting public body of One Hundred Dollars (\$100.00) per day (or portion of a day) for each worker that is paid less than the prevailing rate for any Work done under the Contract by the Contractor or by any of its Subcontractors.

§ 17.2 The Contractor and all of its Subcontractors must require all on-site employees to complete the ten-hour construction safety training program required under Section 292.675, RSMo., unless such employee has previously completed the program and has documentation evidencing completion. The contractor shall forfeit as a penalty to the contracting public body two thousand five hundred dollars plus one hundred dollars for each employee employed by the contractor or subcontractor, for each calendar day, or portion thereof, such employee is employed without the required training.

§ 17.3 The Contractor and all its Subcontractors shall file with the Owner an Affidavit of Compliance, in the form attached as Exhibit 1, verifying compliance with all requirements of the prevailing wage law. Such Affidavit of Compliance from the Contractor and each of its Subcontractors shall be a condition precedent to the Contractor's right to final payment.

§ 17.4 Pursuant to State of Missouri's RSMO 285.530(1), no business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri. The Contractor shall comply with the provisions of Section 285.525 through 285.550 of the State of Missouri Statutes and execute the notarized affidavit attached hereto as Exhibit 2, Affidavit of Work Authorization. Execution of Exhibit 2 by the Contractor shall be a condition precedent to the Contractor's exercise or enforcement of any rights under this Agreement and payment of any sums due and owing the Contractor by the Owner.

§ 17.5 Claims by the Contractor must be initiated within ten (10) days after occurrence of the event giving rise to such Claim or within ten (10) days after the Contractor first recognizes the condition giving rise to the Claim, whichever is later. Claims must be initiated by written notice to the Owner. Claims not timely made, in writing, by the Contractor shall be deemed to have been abandoned and waived. The acceptance and consideration of any Claim out of time by the Owner shall not create any precedent or "course of dealing" between the Owner and the Contractor, nor shall it waive the Owner's right to insist on strict adherence by the Contractor to the Contract claims procedures.

§ 17.6 Pending final resolution of a Claim, except as otherwise agreed in writing, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 17.7 MEDIATION

§ 17.7.1 Any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 17.7.2 The Owner and Contractor shall endeavor to resolve claims, disputes and other matters in question between them by mediation. A request for mediation shall be made in writing and delivered to the other party to the Agreement. The request may be made concurrently with the filing of a complaint or other appropriate demand for binding dispute resolution but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of sixty (60) days from the date of filing, unless stayed for a longer period by agreement of the parties or court order.

§ 17.7.3 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 17.7.4 If the parties do not resolve a dispute through mediation pursuant to this Section 17.7, the method of binding dispute resolution shall be litigation in a court of competent jurisdiction. Exclusive jurisdiction and venue for any legal action to enforce any provision of this Agreement shall be in a court situated in Jackson County, Missouri.

§ 17.8 SUBCONTRACTORS

§ 17.8.1 A "Subcontractor" is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site.

§ 17.8.2 Unless otherwise stated in the Contract Documents, as soon as practicable after award of the Contract, the Contractor shall notify the Owner and Engineer, in writing, of the Subcontractors proposed for each principal portion of the Work. The Contractor shall not contract with any Subcontractor to whom the Owner or Engineer has made reasonable written objection within ten (10) days after receipt of the Contractor's list of Subcontractors. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 17.8.3 Contracts between the Contractor and Subcontractors shall: (1) to the extent of the Work to be performed by the Subcontractor, require each Subcontractor to be bound to the Contractor by the terms of the Contract Documents and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by the Contract Documents, assumes toward the Owner and Engineer; and (2) allow the Subcontractor the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by these Contract Documents, has against the Owner.

§ 17.9 The Contractor shall furnish payment and performance bonds in the amount of at least one hundred percent (100%) of the Contract Sum, or such greater amount as required by law, covering faithful performance of the Contract and payment of obligations arising thereunder. No payments shall be due until the Contractor furnishes fully executed original bonds to the Owner in a form and amount acceptable to Owner. The payment bond furnished by Contractor shall be conditioned for the payment of any and all materials, incorporated, consumed or used in connection with the Work, and all insurance premiums, both for compensation, and for all other kinds of insurance, said Work, and for all labor performed in such Work whether by subcontractor or otherwise. Such bond shall comply with applicable laws, including Section 107.170 of the State of Missouri Statutes. Owner shall have the right to require the Contractor to furnish such other bonds as set forth in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract, or as reasonably required by the Owner after execution of the Contract and subject to agreement on a Change Order or issuance of a Construction Change Directive.

§ 17.10 Either party's failure in any one or more instances to insist upon strict performance of any of the terms and conditions of this Agreement or to exercise any right herein conferred shall not be construed as a waiver or relinquishment of that right or of such party's right to assert or rely upon the terms and conditions of this Agreement. Any express waiver of a term of this Agreement shall not be binding and effective unless made in writing and properly executed by the waiving party.

§ 17.11 The rights and remedies of the parties with respect to failure of the other party to comply with the terms of this Agreement are not exclusive. The exercise thereof shall not constitute an election of remedies, and the aggrieved party shall in all events be entitled to seek whatever additional remedies may be available in law, in equity or otherwise.

§ 17.12 The invalidity or unenforceability of any provision of this Agreement that is not fundamental to the nature of the contract shall not affect the validity or enforceability of any other provision. Any such invalid or unenforceable provision shall be deemed severed from this Agreement, and the remainder of the Agreement shall be construed and enforced as if this Agreement did not contain that particular provision to the extent of its invalidity or unenforceability.

§ 17.13 This Agreement may be executed in counterparts, each of which shall be deemed to be an original, and all of which together will constitute one and the same document. An electronic transmission in .pdf format of a signed counterpart of this Agreement will be sufficient to bind the party or parties to whose signature(s) appear(s) thereon.

§ 17.14 This Agreement contains the entire agreement among the parties with respect to the subject matter hereof, and supersedes all prior and contemporaneous agreements and understandings, inducements, or conditions, express or implied, oral or written. The express terms hereof control and supersede any course of performance or usage of the trade inconsistent with any of the terms hereof.

§ 17.15 This Agreement may not be modified or amended other than by an agreement in writing signed by both of the parties.»

This Agreement entered into as of the day and year first written above.

(If required by law, insert cancellation period, disclosures or other warning statements above the signatures.)

« »

Kansas City Public Library District

OWNER (Signature)

« »« »

(Printed name and title)

CONTRACTOR (Signature)

« »« »

(Printed name and title)

LICENSE NO.:

JURISDICTION:

**KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS**

**N&S JOB: 2018-1891
GF-1**

GUARANTEE
THREE (3) YEARS

We, _____ as general Contractor, and
See Page GF2 as subcontractor, for Kansas City Public Library Parking Garage Structural Repairs do
hereby jointly and severally guarantee that for a period of THREE (3) YEARS from _____
the above project will remain free from all defects in workmanship and materials, and that it will comply
with all the specific requirements of the specifications and other contract documents governing the work
under our contract for the above project.

It is further understood and agreed between ourselves that if, after due inspection, the Engineer, or his
successor, as provided in the general conditions of said contract documents, shall declare in writing that
by reason of this guarantee, the replacement of any of the above work is, in his opinion, necessary, we
will remove such defective work and replace it with new work meeting all requirements of the contract
and will bear all costs of supplying such new work, and installing and finishing same, and will assume all
costs for replacing other work damaged by the removal and replacement of any of the work covered by
this guarantee, also all costs for freight, drayage and demurrage, and all labor in connection therewith.
Such decisions as the Engineer shall render in connection with this guarantee shall be subject to
arbitration as provided for in the general conditions of the contract documents.

Anything to the contrary herein notwithstanding, Contractor and/or subcontractor shall at all times be and
remain liable to Owner for any work done or materials used that does not strictly conform to the
requirements of the plans and specifications.

In the event Contractor and/or subcontractor fails or refuses to honor any of its obligations hereunder
immediately after receipt of written notice, Contractor and/or subcontractor shall indemnify and hold
harmless Owner from any cost or expense whatsoever, including, but not limited to, attorney's fees
(including, but not limited to, any such fees or expenses necessary to enforce this "Guarantee" through
legal action or otherwise), occasioned by contractors and/or subcontractors refusal or failure to so perform
his (its) obligations hereunder. Notice hereunder shall be deemed as received four (4) calendar days after
said written notice has been posted, registered or certified mail, prepaid, return receipt requested,
addressed to Contractor or subcontractor's last known address or to such address as Contractor or
subcontractor may from time to time furnish Owner and/or any known assignee, in writing.

This guarantee shall be binding upon general Contractor and each subcontractor and their respective
successors, assigns, legal representatives and heirs, and shall inure to the benefit of Owner, his successors,
assigns, legal representatives and heirs.

State of _____
County of _____

Name of Contractor

Subscribed before me this _____
day of _____.

By: _____
Signature of Officer or Partners

Notary Public
My commission expires _____

Title of Officer
Date: _____

N&S JOB: 2018-1891
GF-2

[illegible]

**KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS**

**N&S JOB: 2018-1891
MA-1**

Date

R. Grant Russell, P.E.
Norton & Schmidt Consulting Engineers, L.L.C.
311 E. 11th Ave.
North Kansas City, MO 64116
Office: (816) 421-4232
Fax: (816) 421-1956

**RE: KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS**

JOB #2018-1891

SUBJECT: Initial Manufacturer's Assurance Letter

Dear Mr. Russell:

This letter is to certify that as a qualified representative for (*product manufacturer's name*), I have reviewed the use for which the product is intended to be used on the referenced project and has determined that the product being used is suitable for that use.

Additionally, I will make sufficient periodic site visits during the preparation as well as the installation verify that the contractor's preparation and installation procedures are being followed in accordance with the manufacturer's recommendations and specifications.

Upon completion of the installation, I will send the final manufacturer's assurance letter as provided in the specifications to Norton & Schmidt.

Cordially,

**KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS**

**N&S JOB: 2018-1891
MA-2**

Date

R. Grant Russell, P.E.
Norton & Schmidt Consulting Engineers, L.L.C.
311 E. 11th Ave.
North Kansas City, MO 64116
Office: (816) 421-4232
Fax: (816) 421-1956

**RE: KANSAS CITY PUBLIC LIBRARY PARKING GARAGE
STRUCTURAL REPAIRS**

JOB #2018-1891

SUBJECT: Final Manufacturer's Assurance Letter

Dear Mr. Russell:

This letter is provided as formal certification that (*individual representative's name*) who represents (*product manufacturer's name*) has reviewed the use for which the product is intended to be used on the referenced project and has determined that the product being used is suitable for that use. Additionally, I have visited the referenced project site on a sufficient number of times to verify that the contractor's preparation and installation procedures are being followed in accordance with the manufacturer's recommendations and specifications.

Cordially,

DIVISION 01 GENERAL REQUIREMENTS

0101.00 DESCRIPTION OF WORK

0101.01 Scope of Work

- A. The work to be performed under this contract consists of furnishing all labor, materials, equipment, supervision and incidentals necessary for completing the repairs and restoration of the parking facility located in the City of Kansas City.
- B. Work required shall be limited to the work items as enumerated on the bid form.
- C. The quantities associated with Work Items have been estimated by the Engineer and are subject to field measurements. It shall be understood that where additional work items are described, but not specifically located and/or shown on the drawings, the Contractor shall be responsible for locating and marking areas to be repaired.
- D. Final payment shall be made on the basis of actual approved work performed as measured in place and the unit prices provided by the Contractor in the bid form.**
- E. A unit price is the amount stated in the proposal form or subsequently agreed upon by the Owner and the Contractor as a price per unit of measurement for addition or deduction of materials or services as described in the Contract Documents. Unit prices shall include costs of labor, materials, services, overhead and profit, bonds, insurance, and other costs to cover the completed work. Additions or deductions in the work authorized to be carried out and paid or deducted from payment and omitted from the work shall be executed in accordance with the applicable sections of the Specifications.

0101.02 Construction Program and Coordination

- A. It shall be the full responsibility of the Contractor to coordinate, schedule and expedite all phases of the work and give sufficient notice of his work schedule to the Owner and all trades so that they may have ample time to install their work.
- B. The Parking Facility will not be closed to the public during the duration of the project. Signs and barricades necessary to inform the public of closing and traffic flow modifications shall be provided by the Owner. Sign wording and placement shall be established by the Owner's representative.
- C. During the construction period, meetings will be held among the Owner, the Engineer, and the Contractor. Representatives of the Contractor and those subcontractors and materials suppliers who have been notified shall attend each meeting. Each representative in attendance shall be vested with executive authority to speak and make decisions for the company or firm he represents. Meetings may be scheduled for regular intervals or as the needs of the project dictate. Either the Owner, project administrator, Engineer, or the Contractor may request such a meeting, but the Owner will be notified of all such requests at least 48 hours prior to the meeting taking place. The project administrator will publish a meeting agenda and will issue copies to all parties prior to the meeting. The

project administrator will record minutes of all progress meetings and will distribute copies to the Owner and all present within 48 hours of the meeting.

0101.03 Work by Others

The Owner may have other work within the parking facility occurring at the same time as this project. This Contractor shall cooperate at all times with the Owner to ensure that all work proceeds without delay to scheduled completion.

0101.04 Contractor use of Premises

Contractor's use of premises shall not interfere with operation of same. Elevators shall not be used for transfer of materials or equipment unless approved in writing by the Owner. Contractor to note existing height clearance and weight (50 psf) restriction unless written authorization is provided by the Engineer.

0101.05 Owner Occupancy

Owner shall continue to occupy and operate the parking facility and office building during the duration of this project.

0101.06 Log

The Contractor shall furnish and keep one (1) logbook at the Project Site. He/She shall enter into this log each day the weather conditions, the temperature general information as to the progress of the project, materials received, amount of concrete placed that day, tests made, inspections made by other authorities, and all visitors to the Project Site. One (1) copy of the current log shall be submitted to the Engineer upon request

0150.00 TEMPORARY FACILITIES AND CONTROLS

Limited storage space is available for overnight and weekend storage of Contractor's lockboxes and materials. In general, storage will be confined to the specific work areas or an area agreed upon by the Owner and Contractor. The Contractor shall obtain approval of storage areas from the Owner. The Contractor shall be responsible for parking for its employees.

0150.01 Security Provisions

The Contractor shall be responsible for the security of this project. It shall be his responsibility to construct and maintain pedestrian walkways, barricades, screens, railings and fences in strict accordance with all applicable codes for protection of pedestrians.

0150.02 Temporary Opening Protection:

Contractor shall be responsible for temporary barricades and/or floor coverings to be installed before the contractor leaves the site. Vertical openings (walls, stairs, corridors, etc.) shall be barricaded off with plywood 48" high with intermediate supports able to withstand a 150 lb horizontal load. Horizontal openings shall be covered with ¾" minimum thickness plywood with tapered edges fastened to the floor with 4 tapcons

minimum. Any protrusions from the temporary barricades (nails, edges, etc.) shall be addressed to eliminate any potential hazardous conditions.

- 150.03 Temporary Water. The Owner shall provide and pay for all water used for construction purposes. The Contractor shall provide and maintain necessary temporary connections to the source of temporary supply.
- 150.04 Temporary Electric. The Contractor shall provide a generator for any electrical power required for the various work items.
- 150.05 Temporary Telephone. The Contractor shall provide on-site telephone access at all times. Cell phones are acceptable.
- 150.06 Temporary Sanitary Facilities. The Contractor shall provide and maintain sanitary facilities at the site. Facilities and locations are subject to approval by the Owner and the Engineer. The Contractor shall obtain and pay for any applicable permit. Contractor's personnel shall not use public toilet facilities or tenant toilet facilities in the library. Workmen shall only use temporary facilities provided by the Contractor.

0164.00 SUBSTITUTIONS

- 0164.01 Whenever the proposal of substitute materials, equipment or process is permitted by the specifications, the proposed substitute materials, equipment or process shall be submitted in accordance with the General Conditions.
- 0164.02 After the start of construction, the proposal of substitute materials, equipment or process shall be considered only for one or more of the following reasons:
 - A. The manufacturer of production of the specified materials, equipment or process has been discontinued.
 - B. The specified materials, equipment or process is not available in sufficient quantity or quantities to complete the work. Failure of the Contractor to award subcontracts in sufficient time, or failure of the Contractor and/or the subcontractor involved to place orders for materials, equipment or process so as to insure delivery or execution without delaying the work shall not establish cause for approval of substitutions.
 - C. Delays beyond the control of the Contractor such as, but not limited to, strikes, lockouts, storms, fires or earthquakes, which preclude the procurement and delivery of material or equipment for the project.
 - D. Advancement of the delivery date, provided this advances the overall progress of the work.
 - E. Reduction in cost, provided that the Owner receives the full benefit of such reduction in cost by a corresponding modification to the contract price. The Contractor shall fully substantiate such credits given the Owner by making available to the Owner copies of all proposals, invoices, subcontracts or other documents related to the cost of the substitution.
 - F. Improvement of quality or function of the material, equipment or process.

0164.03 After the start of the construction, any proposed substitute material, equipment or process shall be subject to the following conditions:

- A. The proposed substitute materials, equipment or process shall be submitted in accordance with the General Conditions and Supplementary Conditions.
- B. The request for a substitution must be made early enough to allow ample lead-time for the Engineer's review, preparation of the shop drawings and submittals, fabrication and delivery, without delaying the work.
- C. Substitutions shall be approved by the Engineer only with the Owner's consent.

The Owner shall provide and pay for all water used for construction purposes. The Contractor shall provide and maintain necessary temporary connections to the source of temporary supply.

0202.00 RESPONSIBILITIES OF THE CONTRACTOR

0202.01 The Contractor shall not shut off any utility, fire protection system or life safety system without obtaining written permission from Owner 48 hours prior.

0202.02 The Contractor shall take all reasonable precautions to prevent damage to the Owner's property which is affected by construction. Specifically, he shall secure the property to prevent theft and vandalism, he shall provide temporary heat when necessary until acceptance by the Owner's insurance carriers and shall provide adequate fire equipment at the site. Furthermore, he shall protect the property from all types of water damage, and shall provide adequate pumping and snow removal equipment when necessary.

0202.03 The execution of the underlying contract does not create an agency relationship between the Contractor and the Owner for any other purpose than is specifically set forth in the contract documents, and particularly no such agency relationship is created for purposes of the Contractor's and subcontractor's compliance with the OSHA Standards.

0202.04 The Contractor shall notify the Engineer and Owner (or Owner's representative) a minimum of twenty-four (24) hours prior to the time of required inspections and/or quantity verifications.

0202.05 Contractor shall give the Engineer timely notice of readiness of the work for all inspections, tests or approvals. If any such work required is to be inspected, tested or approved is covered without written approval of the Engineer, it must, if requested by the Engineer, be uncovered for observation, and such uncovering shall be at Contractor's expense unless Contractor has given Engineer timely notice of his intention to cover such work and Engineer has not acted within forty-eight (48) hours in response to such notice. Neither observations by Engineer nor inspections, tests or approvals by persons other than Contractor shall relieve the Contractor from his obligation to perform the work in accordance with the requirements of the contract documents.

0202.06 If any work is covered contrary to the request of the Engineer, it must, if required by the Engineer, be uncovered for our observation and replaced at the Contractor's expense.

0202.07 If any other work has been covered which the Engineer has not specifically requested to observe prior to being covered, the Engineer may request to see such work and it shall be uncovered by the Contractor. If such work be found in accordance with the contract documents, the cost of uncovering and replacement shall, by appropriate change order, be charged to Owner. If such Contractor shall pay such costs unless it be found that this condition was caused by a separate Contractor employed by the Owner, and in that event the Owner shall be responsible for the payment of such costs.

0202.08 After contract execution, Contractor shall provide initial schedule and map of phasing areas for the duration of the project. Once the project starts, Contractor shall provide weekly schedule and map updates. Contractor shall provide at one week notice before blocking off additional areas or changing the areas to be blocked off.

0203.00 CODES AND STANDARDS

0203.01 Reference to standard specifications of any technical society, organizations, or associations, or to codes of local or state authorities, shall mean the latest standard, code, specifications, or tentative specifications and adopted and published at the date of taking bids, unless specifically stated otherwise.

The General Conditions, Supplementary Conditions of this Specification form a part of this Division.

DIVISION W BASE BID WORK ITEMS

ITEM NO. DESCRIPTION

W100 MOBILIZATION / PERMITS

This work consists of obtaining and assembling all equipment, materials, supplies, manpower and other essentials and incidentals necessary to perform the work defined in this contract at the construction site.

The contractor shall also include in the mobilization the cost for all necessary permits, approvals and fees that will be required to perform the work.

W200 BONDS

W201 Bid Bond

This item consists of the Contractor providing a Bid Bond to be submitted with his bid on this project. Bid bond to be ten (10%) percent of bid.

W202 Performance Bond and Labor and Materials Payment Bond

This item consists of providing a performance bond and a labor and materials payment bond by the Contractor as outlined in the contract forms and bonds section of the specification for this project. Contractor shall provide performance bond labor and material payment bond for base bid only.

W301-W302 PREPARE AND INSTALL TRAFFIC BEARING WATERPROOFING MEMBRANE.

1) Scope of Work

This work consists of furnishing all labor, materials, equipment, supervision and incidentals necessary to prepare the existing surface and install a traffic bearing waterproofing membrane system on the top level of the parking facility. See Sikalastic Traffic Systems Applicator Manual for additional information.

2) Preparation

A. Prior to bidding, a representative of the membrane manufacturer shall examine the site and determine the appropriate surface preparation requirements. These requirements shall be submitted with the bid documents.

B. Surface must be clean and sound which, in all cases, requires some form of preparation. Substrate must be prepared in accordance with manufacturer's printed instructions.

C. Effectively remove concrete laitance by steel shot or grit blasting (acid etching is not an acceptable method of surface preparation).

- D. Contractor shall pre-fill surface irregularities, holes, “pop outs” and minor spalls, per manufacturer’s recommendations.
- E. Route and caulk miscellaneous cracks as required by the membrane manufacturer.
 - 1. Materials:
 - a. “Sikaflex-2C w/ Sikaflex Primer #429” as manufactured by Sika Corporation, Lyndhurst, New Jersey.
 - 2. Procedures:
 - a. Routing shall be performed by a mechanical device that has positive mechanical control over depth and alignment of cut. Hand held power grinders with abrasive disks shall not be used.
 - b. The Contractor shall clean all joints in accordance with sealant manufacturer’s written instructions.
 - c. The Contractor shall install joint sealant in accordance with manufacturer’s instructions and recommendations, and Section 0791.00.
 - d. Material manufacturer and installer shall be required to provide a letter of acceptance of joint configuration and material installation.

3) Materials

- A. Membrane: Sika – Sikalastic 720/745 Textured
 - 1. System Configuration for Full Waterproofing Membrane - Parking Garage
 - Primer: Sikalastic Primer
Apply per manufacturer’s recommendations
 - Detail Coat: Sikalastic 720 Base
Apply to achieve 23 mils WFT (not including primer)
Apply detail coat 4” wide over cracks greater than 1/16” and joints up to 1”
 - Base Coat: Sikalastic 720 Base Coat
Apply membrane to achieve 23 mils WFT
 - Intermediate & Top Coat: Sikalastic 745 Textured
Apply wear course to achieve 16 mils WFT each

4) Application

- A. Contractor shall install traffic bearing waterproofing membrane system per manufacturer's written instructions and recommendations and in accordance with Section 07900 of the specification.

W303 RESTRIPE GARAGE AFTER MEMBRANE INSTALLATION

1) Scope of Work

This work consists of furnishing all labor, materials, equipment, supervision and incidentals necessary to prepare floor and curb surfaces to receive yellow traffic paint as directed by the engineer. The painting shall match the existing layout.

2) Materials

- A. Paint for striping shall be yellow and shall be compatible with the membrane and surface sealer.

3) Procedures

- A. Paint per manufacturer's written recommendations and specifications.

W304 REMOVE AND REPLACE EXISTING JOINT SEALANT

1) Scope of Work

This work consists of furnishing all labor, materials, equipment, supervision and incidentals necessary to remove and replace the existing joint sealant on the top deck. A SIKA representative will approve of all sealant to be coated over.

2) Materials

- A. Sealant material shall be as specified in Section 07900.

3) Procedure

- A. Routing shall be performed by a mechanical device that has positive mechanical control over depth and alignment of cut. Hand held power grinders with abrasive disks shall not be used.
- B. The Contractor shall clean all joints in accordance with sealant manufacturer's written instructions.
- C. The Contractor shall install joint sealant in accordance with manufacturer's instructions and recommendations, and Section 07900.
- D. Material manufacturer and installer shall be required to provide a letter of acceptance of joint configuration and material installation.

W305 CONCRETE TOPPING SLAB REPAIRS

1) Scope of Work

This work consists of furnishing all labor, materials, equipment, supervision and incidentals necessary to locate existing spalls, remove delaminated concrete and concrete around corroded reinforcing steel to a maximum depth of 3", and prepare the cavities (including sandblasting and forming where required) for the installation of patching material to restore the floor slab to original surface condition and appearance. See appendix pages for additional information.

2) Materials

- A. Patching material shall be concrete aggregate blend as is specified in section 0370.00 with aggregate as specified in section 0308.00.
- B. Epoxy coated reinforcing steel and epoxy coated Welded Wire Fabric shall be as specified in section 0320.00 & 0321.00.
- C. Epoxy coating materials for existing reinforcing shall be as specified in Section 0203.09.
- D. Epoxy for dowels shall be Sika AnchorFix 2 epoxy tie.

3) Procedure

- A. The Contractor shall locate work areas 12" from the ends of the double tees and mark their boundaries with paint as specified in Section 0203.03 and in coordination with the engineer. Contractor shall saw cut (3/4" deep maximum) around the perimeter (boundary), being careful not to cut the reinforcing steel, prior to initiating concrete removal
- B. The procedure for delaminated, spalled, and unsound concrete removal shall be specified in Section 0203.04 through 0203.08. Closely spaced repair areas may be combined at the Engineer's discretion.
- C. The Engineer will inspect all cavities for condition according to Section 0203.05.
- D. All steel exposed with cavities shall be cleaned to bare metal by sandblasting as specified in Section 0203.07, and damaged reinforcement replaced as specified in Section 0203.06.
- E. The Contractor shall prepare cavities for patch placement as specified in Section 0203.08.
- F. For all patches greater than 2 square feet, the contractor shall provide #3 x 12" long dowels at a min. of 18" on center on each side of the patch (2 min. per side). Drill dowels 4" minimum into the existing patch and epoxy.
- G. The Contractor shall install new epoxy coated 6x6-W2.9xW2.9 welded wire fabric in each cavity. The cost for this welded wire fabric shall be included in this work item.

- H. The Contractor shall apply two (2) coats of epoxy to all existing exposed reinforcing as specified in Section 0203.09.
- I. The contractor shall apply slurry as specified in Section 0370.07 to cavity bottom and sides prior to patch placement.
- J. The Contractor shall install patches in accordance with Section 0370.07 and 0370.08.
- K. The contractor shall maintain all of the existing joints in the structure, including but not limited to the joints between the double T flanges and the two joints at the beams (one on each side).

W501 PRECAST DOUBLE-TEE CONCRETE CEILING REPAIRS (0" – 2")

1) Scope of Work

This work consists of furnishing all labor, materials, equipment, supervision and incidentals necessary to remove deteriorated concrete (full depth of double-tee flange) and prepare the cavities (including sandblasting) for the installation of gunite or trowel applied patch. See appendix pages for additional information.

2) Materials

- A. Pressure applied concrete material shall be as specified in Section 0371.00. Pressure applied concrete shall be used for all repairs associated with this work item.
- B. Epoxy coating materials for existing reinforcing shall be as specified in Section 0203.09.
- C. Epoxy coated reinforcing steel and epoxy coated Welded Wire Fabric shall be as specified in section 0320.00 & 0321.00.

3) Procedure

- A. The Contractor shall locate work areas and mark their boundaries with paint as specified in Section 0203.03 and in coordination with the engineer.
- B. The procedure for delaminated, spalled, and unsound concrete removal shall be specified in Section 0203.04 through 0203.08. Closely spaced repair areas may be combined at the Engineer's discretion.
- C. The Engineer will inspect all cavities for condition according to Section 0203.05.
- D. All steel exposed with cavities shall be cleaned to bare metal by sandblasting as specified in Section 0203.07, and damaged reinforcement replaced as specified in Section 0203.06.
- E. The Contractor shall prepare cavities for patch placement as specified in Section 0203.08.

- F. The Contractor shall then apply one (1) coat of epoxy to all exposed reinforcing as specified in Section 0203.09.
- G. The Contractor shall install patches in accordance with Section 0371.00 or Section 0372.00. Note: The contractor shall maintain all of the existing joints between concrete elements and shall not join two separate elements together with patch material.
- H. During the repair operation, the Contractor shall be responsible to ensure that the adjacent concrete surfaces are not damaged or discolored. Contractor shall be responsible to mask off adjacent surfaces prior to applying gunite. Any excess overspray and/or debris shall be cleaned up at the Contractor's expense. Surrounding concrete surfaces shall be left in the same condition as was found prior to initiation of repair.
- I. The contractor shall maintain all of the existing joints in the structure, including but not limited to the joints between the double T flanges and the two joints at the beams (one on each side).

W800

FORCE ACCOUNT

It is anticipated that there may be some work not included in the item list covered under this specification. Because of this potential, a "Force Account" shall be initiated by the Owner to which this work may be charged. Any amount remaining in the account at the end of the project shall not be due Contractor but rather shall be deducted from the contract sum by way of a change order. Work under this account shall only be performed after written authorization has been received from Owner's Representatives.

At the end of the project, any such additional work for which written authorization has been received will be included in a change order initiated by the Contractor and approved by the Owner, and such change order, with copies of written authorization attached, shall be submitted to the Owner for acceptance.

AW302

3) Materials

A. Membrane: Sika – Sikalastic 720/745 Textured

1. System Configuration for Full Waterproofing Membrane - Parking Garage

Primer: Sikalastic Primer

Apply per manufacturer's recommendations

Detail Coat: Sikalastic 720 Base

Apply to achieve 23 mils WFT (not including primer)

Apply detail coat 4" wide over cracks greater than 1/16" and joints up to 1"

Base Coat: Sikalastic 720 Base Coat

Apply membrane to achieve 23 mils WFT

Intermediate & Top Coat: Sikalastic 745 Textured

Apply wear course to achieve 16 mils WFT in drive lanes – parking stall to parking stall

Top Coat: Sikalastic 745 Textured

Apply wear course to achieve 18 mils WFT in parking stalls

4) Application

A. Contractor shall install traffic bearing waterproofing membrane system per manufacturer's written instructions and recommendations and in accordance with Section 07900 of the specification.

SECTION 02200 - CONCRETE SURFACE PREPARATION

0202.00 GENERAL

- 0202.01 The General Conditions, Supplementary Conditions and the requirements of Division 01 of this Specification form a part of this Division.

0203.00 SURFACE PREPARATION FOR PATCHING

- 0203.01 Scope of Work

The work required under this Division includes providing all labor, materials, equipment and supervision necessary to locate and remove all delaminated concrete and prepare the cavities created by said removal to receive patching material. Also included in this work the preparation and sandblasting of existing surface spalls and potholes to receive patching material.

- 0203.02 Definitions

A. Delaminations

Delaminations are fracture planes, "internal cracks" within concrete. Typically these fractures are parallel to the face of a member and vary in depth.

B. Spalls

Spalls or potholes, cavities or voids in floor slabs, pan joists, beams, columns and walls. They are usually the result of a "delamination" migrating to the face of a concrete member. When the fracture delamination finally breaks away, resulting in a spall.

C. Unsound Concrete

Unsound concrete is concrete that has incipient fractures present beneath existing delaminated or spalled surfaces, is honeycombed, is friable or punky and/or is deteriorated from freeze/thaw action.

- 0203.03 Location and Marking of Work Areas

- A. 1) Floor slab delaminations shall be located by sounding the surface with a hammer, or dragging a chain.
- 2) When a delaminated area is struck, a distinct hollow sound will be heard.
- 3) The contractor shall sound all designated floors for delaminations.
- B. 1) Wall, beam, column and ceiling delaminations shall be located by sounding the appropriate member with a hammer or rod.

- 2) Cracks, usually horizontal in orientation along beam faces, and vertical in orientation near corners of columns are also reliable indicators of delaminated concrete.
- 3) The contractor shall only sound beams, columns and ceiling that show evidence of cracking and/or salt and water staining.
- C. Delaminated areas once located by the contractor will be further sounded to define their limits. These limits or "boundaries" once defined shall be marked with chalk or paint.
- D. The contractor shall locate spalls and delaminations by visual inspection and mark their boundaries with chalk or paint.

0203.04 Concrete Removal and Cavity Preparation

- A. Delaminated, spalled and unsound concrete areas shall have their boundaries marked. Patch areas may be irregular polygons. Contractor shall sawcut around perimeter of all floor delaminations prior to removal.
- B. All concrete shall be removed from within the marked boundary to a minimum depth of 3/4" using 15 to 30 pound chipping hammers equipped with chisel point bits. If delaminations exist beyond the minimum removal depth, then chipping shall continue until all unsound and delaminated concrete has been removed from the cavity. (Larger hammers may be utilized only with approval of the Engineer).
- C. Where embedded reinforcement is exposed by concrete removal, extra caution shall be exercised to avoid damaging it during removal of additional unsound concrete. If bond between exposed reinforcing bars and adjacent concrete is impaired by removal operations, then additional removal around and beyond the perimeter of the reinforcement for a minimum of 3/4" along the entire length affected shall be required.
- D. If rust is present on embedded reinforcement where it enters sound concrete, then additional removal of concrete along and beneath the reinforcement is required. Such additional removal shall continue until bare reinforcement is exposed. If rust persists beyond the removal limits, the Engineer shall be advised and will direct further removal.

0203.05 Inspection of the Cavity Surfaces and Exposed Reinforcing

- A. After removal is complete but prior to final cleaning, the cavity and all exposed reinforcement shall be inspected by the Engineer. The inspection shall include sounding the exposed concrete to determine completeness of delamination removal, examination of dressed edges to verify depth and vertical edge of cut, and uniformity of excavation to insure compliance with minimum limits specified (Section 0203.04). Where the Engineer finds unsatisfactory cavity preparation, the Engineer will direct the contractor to perform additional removal.

- B. The Engineer shall inspect all embedded reinforcement exposed within the cavity for defect due to corrosion or damage resulting from the contractor's removal operations. Replacement of damaged or defective reinforcement shall be performed according to Section 0203.06 and as directed by the Engineer.
- C. After inspections are complete and all preparation approved, the Engineer and contractor shall measure and document removal and replacement quantities for payment.

0203.06 Repair of Reinforcement in Work Area

A. Mild Steel

All embedded reinforcement exposed during surface preparation which has lost more than 25 percent (20 percent if two (2) or more consecutive parallel bars are affected) of the original cross sectional area due to corrosion shall be considered defective. All exposed reinforcing bars which have lost section due to excessive chipping hammer application or other improper handling by the contractor, to the extent specified above, shall be considered damaged. Damaged and defective reinforcement shall be supplemented by additional reinforcement as described below.

- 1) Concrete removal required for repairs of Defective reinforcement shall be paid for at the unit price bid. Supplemental reinforcement required for repair shall also be paid for at the unit price bid.
- 2) Costs for concrete removal required to repair damaged reinforcement shall be borne by the contractor. Supplemental reinforcement required for repair shall also be paid by the contractor.
- 3) Loose reinforcement, which cannot be adequately secured by wire ties to bonded reinforcement, shall have anchors installed to secure loose reinforcement to the original deck. The Engineer shall determine adequacy of wire ties and approve other anchoring devices prior to their use.
- 4) Supplemental reinforcement shall be of a diameter equal to original. Larger diameter reinforcing steel may be approved at Engineer's discretion. Supplemental reinforcement should extend 30 bar diameters beyond the damaged portion of the reinforcement and be secured using wire ties incidental to surface preparation and no extras will be allowed for this work. Mild steel shall be ASTM A614, Grade 60 steel shall be installed in accordance with Section 0320.00.
- 5) Concrete shall be removed to provide a 1/2" minimum clearance on all sides of exposed reinforcement. Reinforcement exposed during surface preparations should be made secure to the original deck prior to patch placement. Concrete cover shall be placed to a minimum depth of 1-1/4"

over all new and existing floor reinforcement. This cover may be reduced to 3/4" with Engineer's approval.

0203.07 Cleaning of Reinforcement Within Delamination and Spall Cavities

Exposed steel shall be cleaned of rust and laitance to bare metal by sandblasting. Cleaning shall be completed immediately before patch placement to insure that the base metal is not exposed to the elements and further rusting for extended periods of time.

0203.08 Preparation of Cavity for Patch Placement

- A. Cavities will be examined prior to commencement of patching operations. Sounding the surface shall be part of the examination. Any delamination noted during the sounding will be removed as specified in Section 0203.04.
- B. Cavities shall be sandblasted to remove all laitance from the concrete surface. Air blasting is required as a final step to remove sand and dust. All debris shall be removed from the site prior to commencement of patching. Sandblasting for 0203.07 may be done in conjunction with 0203.08.

0203.09 Coating of Reinforcing with Epoxy

- A. After the cavities and any exposed reinforcing have been cleaned as state in Sections 0203.07 and 0203.08, the exposed reinforcing shall receive two (2) coats of epoxy prior to concrete placement.
- B. The epoxy specified for use shall be one of the following:
 - 1. "Masterprotect P 8100 AP Rebar Primer" one-component zinc-rich epoxy primer manufactured by BASF, Shakopee, Minnesota.
 - 2. "Zinc Clad XI" water based inorganic zinc-rich coating manufactured by Sherwin Williams, Cleveland, Ohio.
 - 3. "Sika Armatec 10 ZR" one-component, moisture-cured primer modified with zinc manufactured by Sika Corporation, Lyndhurst, New Jersey.

SECTION 03300 - CONCRETE

0302.00 GENERAL

0302.01 The General Conditions, Supplementary Conditions and the requirements of Division 01 of this Specification form a part of this Division.

0302.02 Codes, Specifications and Standards

- A. Specifications for Structural Concrete for Buildings (ACI 301), by the American Concrete Institute, herein referred to as ACI 301, are included in total as specifications for this structure except as otherwise specified herein. The Contractor shall have a copy of the ACI standard on the project at all times.
- B. Comply with the provisions of the following codes, specifications and standards except where more stringent requirements are shown on the drawings or specified herein.
 - 1) "Building Code Requirements for Reinforced Concrete, (ACI 318), American Concrete Institute, herein referred to as ACI 318.
 - 2) "Recommended Practice for Concrete Formwork" (ACI 347), American Concrete Institute.
 - 3) "Recommended Practice for Cold Weather Concreting", (ACI 306), American Concrete Institute.
 - 4) "Hot Weather Concreting" reported by ACI Committee, 305 (ACI 305).
 - 5) "Manual of Standard Practice" MS-2-77, Concrete Reinforcing Steel Institute.
 - 6) "Structural Welding Code - Reinforcing Steel", (AWS D1.4), American Welding Society.
 - 7) "Guide for Concrete Floor & Slab Construction" (ACI 302.1), American Concrete Institute.

0303.00 SCOPE OF WORK

0303.01 Items

The work required under this Division shall include all materials, labor, equipment and services necessary to furnish and install in accordance with the Drawings and Specifications all items listed, but not limited to: Concrete repair work as detailed on the drawings, and as described herein, including: Reinforcement repair and securing, Guniting, epoxy-injection repair work, and cast-in-place concrete.

0304.00 WORK NOT INCLUDED

0304.01 Items

The following items of related work are specified and included in other Divisions of this Specification and in general consist of those items listed, but not limited to:

Concrete surface preparation, penetrating concrete sealer, crack filling, installation of sealants, flashing, caulking and coatings.

0305.00 SHOP DRAWINGS

0305.01 Requirements

Shop drawings shall conform to the requirements of the General Conditions, Article 16, Shop Drawings and Samples, of this Specification, and as herein specified for other sections for other sections of this Division.

0306.00 UNIFORMITY

0306.01 To minimize irregularities in appearance and/or color, the cement, aggregates, admixtures and water for each type of concrete construction exposed to view in the complete project shall be selected to match closely the existing surfaces.

0308.00 AGGREGATES

0308.01 Mortar Aggregate Blend

Fine aggregates shall meet all requirements of ASTM C33, "Standard Specification for Concrete Aggregates" for air-entrained concrete with respect to soundness and control of deleterious materials. Graduation limits shall be as follows:

Sieve Size	% Passing
1/2"	100
#4	60-65
#8	40-45
#16	20-30
#30	15-25
#50	5-20
#100	0-10

This blend as listed shall constitute the total aggregate for use with mortars. No additional sand or coarse aggregate shall be included.

Alternate graduations based on local availability may be submitted for approval.

- 0308.02 Course aggregates shall consist of a gravel or crushed stone conforming to the requirements of ASTM C33, including grading and control of deleterious materials.

Graduation requirements shall be as specified by ASTM C33, Table 2 for aggregate size number 7 («" to #4) as follows:

Sieve Size	% Passing
3/4"	100
1/2"	90-100
3/8"	40-70
#4	0-15
#8	0-5

Concrete shall be produced using an approximately 1:1 ratio by volume of sand and concrete aggregate listed above.

0310.00 CONCRETE FORMWORK (ACI 301, Chapter 4)

Formwork for beams, joists, slabs, and other parts that support the weight of concrete shall remain in place until the concrete has reached 50 percent of the 28-day strength.

0320.00 CONCRETE REINFORCEMENT

- 0320.01 Scope of Work

The work in this Section includes providing all materials, labor, equipment and supervision to fabricate and install all mild steel reinforcement as shown on the drawings.

- 0320.02 Fabrication

- A. Fabricate reinforcing bars to conform to required shapes and dimensions, with fabrication tolerances complying with CRSI "Manual of Standard Practice".

In case of fabricating errors, do not re-bend or straighten reinforcement in a manner that will injure or weaken the material.

- B. Bends in reinforcing are standard 90-degree bends unless noted otherwise.

- C. Reinforcement with any of the following defects will be rejected:

- 1) Bar lengths, depths, and bends exceeding CRSI fabrication tolerances.
- 2) Bends or kinks not indicated on drawings or final shop drawings.
- 3) Bars with reduced cross-section due to excessive rusting or other cause.
- 4) Bars without grade marks.

- D. Welded wire fabric shall be flat stock (sheets). No rolled welded wire fabric will be approved for use on the site. Damaged or deformed WWF shall be replaced before placement of concrete.

0320.06 Chairs and Accessories

Provide stainless steel or epoxy coated or plastic tipped chairs and other non-corrosive accessories in contact with the formwork or exposed concrete unless otherwise approved by the Engineer. "Pulling up" the reinforcement is not acceptable.

0320.07 Inspection

Field Inspection

Examine the conditions under which concrete reinforcement is to be placed and immediately notify the Engineer in writing of unsatisfactory conditions, as required in the General Conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner. All reinforcing shall be inspected and accepted by the Engineer prior to concrete placement.

0320.08 Installation of Reinforcement

- A. Comply with ACI 301, Chapter 5 for placing reinforcement.

- B. Splices

- 1) Provide standard reinforcement splices by lapping ends, placing bars in contact, and tying tightly with wire. Comply with requirements of ACI 318 for minimum lap of spliced bars.
- 2) Welded tension splices of reinforcing steel where specifically required.
 - a. Exercise care that no reduction of the cross sectional area of the steel reinforcement occurs.
 - b. Use full penetration butt welds by the electric arc method or CADWELD (C-SERIES) splice unless otherwise shown.
 - c. For welded splices, use only welders who have passed the AWS Standard qualification tests within the previous year.
 - d. For CADWELD splices, perform splicing in strict accordance with manufacturer's requirements and instructions.
 - e. Weld splices to develop 125 percent of the specified yield strength of the bars, or of the smaller bar in transition splices.
 - f. Clean bars of oil, grease, dirt and other foreign substances and flame-dry before welding.

- g. Preheat bars before welding.
 - h. Stagger splices in adjacent bars.
 - i. Prepare ends of bars in compliance with AWS D1.4.
 - j. Any other welding of reinforcing steel is prohibited without prior written authorization by the Engineer.
- 3) Compression splices of reinforcing steel where required mechanically coupled or welded splices in accordance with ACI 318, Chapter 12.

0321.00 EPOXY COATED REINFORCEMENT

0321.01 Scope of Work

This work consists of furnishing all labor, materials, equipment, supervision and incidentals necessary to provide and install all concrete reinforcing as epoxy-coated reinforcing.

0321.02 Materials

Epoxy Coated Reinforcement

Epoxy coating shall be applied by the electrostatic spray method and shall be in strict compliance with ASTM A775 and as follows:

- 1. Manufacturer's certification of coating is required.
- 2. Patching materials as required for field touch-up shall be furnished by the manufacturer and shall conform to ASTM A775, ANNEX A1.
- 3. Surface preparation of reinforcing bars to be coated shall be blast cleaned to near-white metal in accordance with Steel Structures Painting Council Specification SSPC-S10.
- 4. Testing for thickness, adhesion, and continuity of coating shall comply with ASTM A775, paragraph 8.2.

0321.03 Installation

- A. Coating damage due to handling, shipping, and placing need not be repaired when damaged area is 0.1 square inch or smaller. Damaged areas larger than 0.1 square inch shall be repaired as herein specified. Maximum amount of damage including repaired and unrepaired areas shall not exceed two percent of surface area.
- B. When required, repair damaged epoxy coating with patching material conforming to ASTM A775. Repair in accordance with patching material manufacturer's recommendations.

- C. Do not field bend epoxy-coated reinforcement.
- D. Epoxy-coated reinforcement shall be fastened with nylon-epoxy, or plastic-coated wire or equivalent.
- E. Bar supports for use with epoxy coated reinforcement shall have epoxy-coated feet. Proprietary combination bar clips and spreaders used in wall with epoxy-coated reinforcement shall be made of corrosion resistant material.
- F. Epoxy-coated reinforcement cut in field shall have ends of reinforcement coated shall be made of corrosion resistant material.
- G. Fading of color of coating shall not be cause for rejection.
- H. When required, mechanical connections shall be installed in accordance with the splice device manufacturer's recommendations. After installing mechanical connections on epoxy-coated reinforcement, coating damage shall be repaired as herein specified. All parts of mechanical connections used on coated bars, including steel splice sleeves, bolts and nuts shall be coated with the same material used for repair of coating damage.
- I. Do not weld epoxy-coated reinforcing without approval of the Engineer. Adequate ventilation must be provided if welding is approved.
- J. All reinforcing shall be inspected and accepted by the Engineer prior to concrete placement.

0370.00 CONCRETE MORTAR AND CONCRETE

0370.01 Application

- A. Concrete shall be used to patch curbs, stairs, walls, walkways. All concrete proportioning, production and placement shall be performed in accordance with this specification. Work shall not proceed until the Engineer has approved the mix design.

0370.02 Cements

Portland cement shall be Type 1, ASTM C150.

0370.03 Admixtures

Except for air entraining agent and super plasticizer, admixtures shall not be used unless authorized by the Engineer in writing. Fly ash (ASTM C618) shall not exceed 20% of the combined total cementitious weight.

0370.04 Aggregates

Aggregates shall meet the requirements of ASTM C33. Maximum size of aggregate shall be 3/4" for concrete.

0370.05 Selection of Proportions

The selection of concrete proportions shall be in accordance with ACTI 301, Article 3.8. Before any concrete is placed for the project, the Contractor shall submit to the Engineer data showing the method used for determining the proposed concrete mix design, including fine and course aggregate graduations, proportions, proportions of all ingredients, water cement ration, slump, air content, 28-day cylinder breaks and other required data for each different concrete type specified. The mix design shall meet the following minimum requirements.

MIX DESIGN

REQUIREMENTS	CONCRETE
Compressive Strength (28-day)	4000 psi
Water/Cement Ratio	0.25-0.40
Air Content	6%+1%
Cement Content (minimum)	565 lb/cy
Maximum Size of Aggregate	1/2"
Field added plasticizer to obtain slump	6"+1"
Aggregate	Granite

0370.06 Production of Concrete

- A. Job mixed concrete: Mix in accordance with the application requirements of Chapter 7 of ACI Specification 301.
- B. Ready mix concrete of ASTM Specification C94 subject to the requirements of this specification.

0370.07 Patch Installation - Flatwork

- A. The cavity surface shall be clean and "Surface Saturated dry" prior to commencement of patch or overlay installation. Preparation of the cavity to receive new mortar or concrete shall be in accordance with Section 0203.00.

- B. A bonding grout consisting of equal parts by volume of sand and cement (Type I, ASTM C150) with sufficient water to achieve the consistency of stiff "pancake batter" shall be applied to cavities on the floor. The slurry shall be applied to all exposed cavity surfaces. Apply evenly to a uniform thickness 1/16" minimum to 1/8" maximum throughout. Grout shall not be allowed to dry or dust to prior to placement of the patch of overlay materials.

If patching or overlayment is delayed, the first coat of grout may be retempered with a second to prevent drying. If the second coat dries, the cavity shall not be patched until it has been recleaned and prepared as specified in Section 0203.08. Grout shall not be applied to more cavities than can be patched or overlaid within 1/2 hour by available manpower.

- C. The properly proportioned and mixed concrete mortar or concrete shall be placed and struck off approximately even with the adjacent existing surfaces. The surface shall then be consolidated and finished match adjacent existing surfaces with vibrating screeds. When bleed water has left the surface, apply a course broom texture. Protection and temperature requirements shall be per ACI 301, Chapter 8.
- D. Install tooled control joint as directed by the engineer to control shrinkage cracking.
- E. Do not place concrete when the temperature of the surrounding patch area is less than 45 degrees F. or when mix temperature is about 90 degrees F. unless the following conditions are met:
1. Place concrete only when the temperature is about 40 degrees F and rising and expected to be above 45 degrees F for at least eight hours.
 2. When the above conditions are not met, concrete may be poured only if insulation and/or heating enclosures are provided in accordance with ACI 306, "Recommended Practice for Cold Weather Concreting", and approved by the Engineer.
 3. If mix temperatures exceed 90 degrees F., ACI 305, "Hot Weather Concreting", requirements shall be met.
- F. ADDITION OF "EXTRA WATER" to the concrete mix at the job site **SHALL NOT BE PERMITTED**. Withholding of water at the plant from the approved mix design shall only be acceptable if approved in writing by the Engineer in advance.
- G. **DO NOT DUST SLABS WITH CEMENT TO REMOVE EXCESS WATER.**

0370.08 Curing

Mortar and concrete shall be cured according to the following minimum requirements.

1. The surface shall be covered with a single layer of clean, wet burlap as soon as the surface will support it without deformation. Cover the wet burlap with a layer of polyethylene. Keep the burlap wet and in place for 24 hours. Remove the polyethylene after 24 hours.
2. The burlap shall then be allowed to dry slowly for an additional 24 to 48 hours.
3. Remove the burlap and allow the concrete to air dry an additional 48 hours.
4. Curing time shall be extended, as the Engineer directs, as the curing temperature falls below 50 degrees F.

0370.09 Testing

A. Concrete

Standard 6"x12" cylinders will be fabricated, cured and tested in accordance with ACI 301, except as noted in this specification. Four (4) cylinders will be made for each 10 cubic yards of concrete batched. Cylinders shall be field cured for one (1) day minimum then transported to the testing laboratory where they shall be moist cured per ASTM C31. One (1) cylinder will be tested at 7 days and two (2) at 28 days. Compressive strength at 7 days shall be 3,200 psi minimum. One (1) additional cylinder shall be maintained as an extra cylinder for additional testing at the discretion of the Engineer.

B. Mortar

Cylinders 3" in diameter by 6" long will pre fabricated, cured and tested in accordance with ACI 301. Six cylinders will be made for each 10 cubic yards of mortar prepared. Cylinders shall be field cured for (1) day minimum then transported to the testing laboratory where they shall be cured in air at 73 degrees F, 50 percent relative humidity. Two cylinders will be tested at 3 days, two at 7 days, and two at 28 days. Compressive strength at 3 days shall be 2000-psi minimum and compressive strength shall be 4000-psi minimum at 28 days. Two additional cylinders shall be fabricated for each 20 cubic yards of mortar prepared. These shall be cured until needed.

0371.00 PRESSURE APPLIED CONCRETE MATERIALS

0371.01 General Conditions

The General Conditions, supplementary conditions and requirements of Division 01 of this Specification form a part of this Division.

0371.02 Codes, Specifications and Standards

Specifications for materials, proportioning, and application of shotcrete: (Gunitite) (ACI 506), by the American Concrete Institute, is included in total as Specification for this structure except as otherwise specified herein. The Contractor shall have a copy of this ACI Standard on the project at all times.

0371.03 Preparation of Surfaces

After the removal of delaminated, spalled, and unsound concrete, all concrete surfaces to receive gunitite shall be thoroughly cleaned by sandblasting or waterblasting. Sandblasting or waterblasting shall be done by experienced workmen using approved equipment and suitable sandblasting and waterblasting materials. Prior to receiving gunitite, all surfaces shall be cleaned of dust and debris, using compressed air and water. Concrete shall be thoroughly wetted down before application of gunitite, but shall not be so wet as to overcome suction. Free water shall not remain on the surface to be gunitited, nor shall be so dry that there is excessive absorption of moisture from the gunitite.

0371.04 Form Work

Form shall be adequately braced to ensure against excessive vibration. Forms shall be built so as to permit the escape of air and rebound and to facilitate the placing of gunitite. Wall intersections shall be formed in such a manner as to afford a minimum loss of time in guniting the intersection. This may be accomplished by installation of short removable bulkheads at these points. Freestanding columns may be formed on three (3) sides or two (2) adjacent sides, whichever is practicable. Pilasters may be formed on two (2) opposite sides. Forms for beams and pan joists may be constructed of a soffit and one (1) side or a segmented soffit and of one (1) side to permit gunitite placement in supported layers. Two (2) sided beam and joist forms without soffit shall also be permitted. Shores shall be provided below the soffit in such a manner that no deflection of the forms will occur under the load to be superimposed. Sufficient time shall be allowed other crafts for installation of equipment or materials, which must be fastened to the forms. Form surfaces shall be cleaned prior to application of gunitite.

0371.05 Materials

A. Cement Sikacem 103 or 133 (Bagged Shotcrete)

Only Portland cements of American manufacture's complying with the current issue of "Standard Specifications for Portland Cement", ASTM C150 shall be used. Type I or II Portland cement shall be used.

B. Sand

Fine aggregate shall consist of washed sand (Missouri River sand prohibited) and shall be hard, dense, durable, clean, sharp and graded evenly from fine to course in accordance with the "Standard Specifications for Concrete Aggregates", ASTM Designation: C33. It shall be free from organic matter and shall not contain more than five percent by weight of deleterious substances.

LIMITS OF GRADING OF FINE AGGREGATES

SIEVE SIZE	PERCENT BY WEIGHT
Passing a 3/8"	100
Passing a #4	95-100
Passing a #8	80-100
Passing a #16	50-85
Passing a #30	25-60
Passing a #50	10-30
Passing a #100	2-10

For proper placement of gunite, sand should contain between three percent and six percent moisture by weight. Sand and cement proportion may be corrected to provide for bulk due to sand moisture content. Percentage of bulking can be easily determined in the field, using a process based on the theory that 100 percent surface saturation by water will develop a material density equal to that of loose dry sand. To run this test simply fill any vertical sided watertight container level full of sand and fill container with water.

Physically measure the settlement of the sand and calculate the percent of shrinkage to vertical depth of the container.

C. Water

Water used for dehydration at the nozzle shall be fit for drinking and shall be maintained at a uniform pressure, which shall be at least 15 pounds per square inch above air pressure at the nozzle.

0371.06 Proportions of Mix

- A. Unless otherwise specified, all gunite shall be mixed in the proportions of 1 part of cement to 4 parts of sand based on dry loose volume.
- B. "Fibermesh" fibers as manufactured by Fibermesh, Inc., 4019 Industry Drive, Chattanooga, TN 37416, shall be used in all gunite as specified and in strict accordance with the manufacture's recommendations as to the type and amount. The fiber manufacturer or approved distributor shall provide the services of a qualified employee for a pre-job meeting and initial job start-up. Only fibers designed and manufactured specifically for use in gunite for virgin polypropylene and so certified by the manufacturer shall be acceptable (fibermesh shall be used in conjunction with supplementary reinforcement not in lieu of supplementary reinforcement).

0371.07 Placing of Gunite

Whenever possible, except when enclosing reinforcing steel, the nozzle shall be held at right angles to the gunite surface at a distance of 2½ to 3½ feet. When enclosing steel, the nozzle shall be held so as to direct the material around the bars. A nozzleman's helper equipped with an air jet shall attend the nozzleman and blow out all rebound, sand, etc., which may have lodged on the forms, steel or gunite. Gunite material shall emerge from

the nozzle in a steady, uninterrupted flow. Hydration shall be thorough and uniform without the use of excessive water. In shooting walls, columns and beams, application shall begin at the bottom and shall completely embed the reinforcement. The limit of the thickness and the height has been exceeded when the material begins to sag.

In shorting formed slabs, the nozzle shall be held at a slight angle to the work so that rebound is blown onto the completed portion from where it shall be removed. The air jet shall be constantly employed to keep the area placement free of rebound and all loose material. Wherever possible, slabs shall be completed in one operation.

Reinforcement shall be cleaned of any previously deposited gunite, which might prevent property bond to reinforcement. Sufficient time shall be allowed between layers for the material to set. Before setting has taken place and before placing any succeeding layer, laitance shall be removed by sandblasting. Surfaces shall be damp at all times.

Rebound pockets, sags or other defects shall be carefully cut out and replaced with new gunite or hand-patched in a manner satisfactory to the Engineer.

0371.08 Finishing

Upon reaching the thickness and planes outlined by forms, the surface shall be rodded to true lines. Upon completion of rodding, ground wires may be removed. If possible, the finish coat shall be applied so that gunite is not shot over the finished work. If possible, exposed surfaces shall be finished to straight and true lines. Finish shall be as indicated: Wood Float-granular texture.

0371.09 Curing

Gunite shall be damp cured for at least seven (7) days after placing or by property application of an approved sealing compound. It shall be mandatory for the gunite Contractor to perform the curing operation. No gunite shall be placed during freezing weather except when protective measures are taken as with ordinary concrete work. Gunite shall not be placed against frosted surfaces.

0371.10 Gunite Quality

The minimum ultimate 28-day compressive strength shall be 4,000 psi (based on a normal 1:4 mix). The representative of the Engineer may require (by verbal directive) two test samples of gunite each day as a material control. Test samples shall represent the quality of gunite being placed in the structure, and if there is more than one crew or nozzleman on the work, test samples shall be made by each nozzleman in rotation so that the samples shall represent the quality of gunite being placed by each nozzleman, all as determined by the representative of the Engineer. Each sample shall be dated, given a number, the name of the nozzleman making the sample and the point in the structure represented by the sample.

The gunite Contractor shall furnish, at his own expense, wood forms as appropriate to provide samples, which are made in same fashion as the gunite work being performed.

The test samples of gunite shall be made with same air pressure, nozzle tip and hydration as the gunite in the structure at the point where the sample was made.

At the end of 24 hours after samples are made, the samples shall be stored in the testing laboratories under air-cured conditions.

Separate tests of gunite samples taken at the place and time shall be made at the ages of three (3) days, fourteen (14) and twenty-eight (28) days and shall be used for correlative purposes only. Compressive strength of structural gunite in place shall be determined by cores as specified below.

0371.11 Core Tests

A minimum of three (3) cores from the samples shall be taken for each 15 cubic yards or fraction thereof, of structural gunite deposited. Cores shall be obtained from wood forms as appropriate to provide samples, which are made in the same fashion as the gunite work being performed and tested in accordance with ASTM C42. Two (2) cores shall be removed and tested at a gunite age of three (3) days, fourteen (14) days and the other one (1) core at a gunite age of 28 days.

Fourteen (14) day cores shall develop a minimum strength of 2750 psi. Twenty-eight (28) day cores shall develop a minimum strength of 4,000 psi. If gunite cores show deficient strength, additional cores shall be taken at the Contractor's expense from adjacent areas. Two (2) cores shall be required for each deficient core. Should either additional core prove deficient in fourteen (14) day cores, on approval of the Engineer, the Contractor may proceed with the work on his own responsibility until the 28-day cores are tested.

Where conditions preclude at the possibility of obtaining cores from the gunite in place, the Engineer may approve cores taken from a representative test panel made at the same time and under the same conditions as the structural gunite.

0371.12 Eligible gunite contractors (subcontractors) and workmen.

- A. The Contractor, to be eligible as a bidder, must have had at least five (5) years experience in gunite construction and must list at least ten (10) significant structural gunite installations which he has constructed and which on investigation, have been found to be completed in a satisfactory manner. Bidders with limited experience are advised that very close scrutiny will be given to all phases of this work. Unsatisfactory work will be immediately rejected. The Contractor is cautioned against attempting to substitute for specific equipment, items, which have not been previously approved, and items, which may not meet all requirements of design and quality. Inferior equipment will not be accepted.
- B. Only foremen, nozzlemen, gunmen and rodmen with at least five (5) years of structural experience shall be employed with satisfactory written evidence of such experience shall be furnished for the Engineer for his representative upon demand.

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0372.00 TROWEL APPLIED REPAIR

0372.01 General Conditions

The General Conditions, supplementary conditions and requirements of Division 01 of this Specification form a part of this Division.

0371.02 Preparation of Surfaces

Reference Suppliers Product Data Sheet

0371.03 Materials

“SikaQuick VOH” fast setting, one component, cementitious vertical and overhead repair mortar manufactured by Sika Corporation, Lyndhurst, New Jersey.

0398.00 EPOXY INJECTION SYSTEMS – NOT USED

SECTION 07900 – CAULKING AND SEALANT

THE REQUIREMENTS as set forth in the headings of General Conditions, Supplementary Conditions and Division 1, General Requirements shall apply to this branch of the work.

1. GENERAL

1.01 Scope: Provide all labor, materials and tools as required to caulk all joints as noted and as required by the drawings and necessary to render the joint watertight. Areas requiring caulking or sealant, but not limited to are:

- .1 Masonry wall joints
- .2 Sheet metal flashing joints
- .5 Concrete slab joints
- .6 All other caulking, unless specified elsewhere.

1.02 Submittals

- .1 Spec data sheets for all materials as listed below and used in the completion of the work.
- .2 Color samples.

2. MATERIALS

2.01 Exterior Sealant shall be Sikalastic 2C NS EZ mix, Sikasil 295, Sikasil 728 NS, SikaHyflex 150, Dow Corning “795”, Tremco “Spectrum” 1”, Sonneborn Sonnelastic 150, Sonneborn Sonnelastic NP II, or approved equal. Colors as selected by Owner.

- Metal to Metal: Dow Corning 795, Sikasil 295
- Metal to Masonry Sonneborn NP2, Sikalastic 2C NS EZ Mix
- Metal to Glass Dow Corning 795, Sikasil 295
- Concrete to Masonry Sonneborn NP2, Sikasil 2C NS EZ Mix
- Concrete to Concrete Sonneborn NP2, Sikasil 2C NS EZ Mix
- Granite to Granite Sikasil 728 NS
- Granite to Concrete Sikasil 728 NS

2.04 Primer shall be non-staining, material as recommended by the manufacturer.

2.05 Metal Gutter sealant shall be Dow Corning 799.

2.06 Compressible Filler (Backer Rod) as required for back-up shall be closed cell polyethylene foam rod.

2.08 Weep Cord: Tiger brand sash cord as manufactured by Samson, # 8, ¼ inch diameter.

2.09 Bond breaker tape shall be polyethylene tape or other plastic tape as recommended by sealant manufacturer.

3. INSTALLATION

- 3.01 Surface Preparation: Surfaces must be structurally sound, fully cured, dry, clean, free of dirt, loose particles, oil, grease, asphalt, tar, paint, wax, rust, water-proofings, curing and parting compounds and membrane materials.
1. Concrete, Stone and Other Masonry: Clean by grinding, sandblasting or wire brushing to expose a sound surface free of contamination and laitance. The cleaning method selected by the Contractor shall not chip, spall or in any other way damage adjacent surfaces. The Contractor shall notify the engineer if damage to the surface is unavoidable due to an unsound substrate at the existing surface.
 2. Wood: New and weathered wood must be clean and sound. Scrape away loose paint to bare wood. Any coating that cannot be removed must be tested to verify adhesion of sealant or determine an appropriate primer.
 3. Metal: Remove scale, rust, and coatings from metal to expose a bright white surface. Remove protective coatings as well as any chemical residue or film. Aluminum window frames are frequently coated with a clear lacquer that must be removed before application. Any coating that cannot be removed must be tested to verify adhesion of sealant or determine an appropriate primer. Remove any other protective coatings or finishes that could interfere with adhesion.
- 3.02 Perform adhesion testing where recommended by the sealant manufacturer
- 3.03 Surrounding surfaces shall be protected with masking tape and paper to prevent staining and marking.
- 3.04 Caulking compound shall be forced into joints and worked to remove all air pockets. Surface shall be tooled to a concave shape with a smooth, even finish. Width to depth ratios shall be as recommended by the manufacturer. Excess material on adjacent surface shall be removed.
- 3.05 Caulking and sealant work shall be done in strict accordance with manufacturer's instructions regarding care and handling of materials, cleaning of surfaces, backing materials, and care during curing.
- 3.06 Where there is not adequate room for the expanded foam rod, a bond breaker tape shall be used in accord with the manufacturer's instructions.
- 3.07 Remove soap residue from beads.
- 3.08 Surfaces to receive caulking material (general purpose) and/or polyurethane sealant shall be thoroughly prepared to receive the caulking material and the Contractor shall be responsible for the preparation and bonding of caulking material to any foreign material.

END OF SECTION

PRODUCT DATA SHEET

Sikalastic®-720 Base

TWO-COMPONENT, FAST-CURING, SOLVENT-FREE, CRACK-BRIDGING, ELASTOMERIC POLYURETHANE BASE COAT

PRODUCT DESCRIPTION

Sikalastic®-720 Base is a two-component, aromatic, chemically cured, elastomeric polyurethane coating intended for use as the waterproofing base coat under polyurethane or epoxy wearing surfaces for pedestrian and vehicular traffic bearing applications, and as the waterproofing base coat under a separate wearing course such as concrete or asphalt pavement, and tile in a setting bed.

USES

Sikalastic®-720 Base may only be used by experienced professionals.

- Multi-story parking garages
- Parking decks and ramps
- Foot bridges and walkways
- Mechanical rooms
- Stadiums and arena
- Plaza and rooftop decks
- Balconies
- Roofing Flood Coat when mixed with approved aggregate

CHARACTERISTICS / ADVANTAGES

- Low odor and fast turnaround
- Excellent crack-bridging properties and flexibility, even at low temperatures
- Resistant to water and de-icing salts
- Alkaline resistant

PRODUCT INFORMATION

Packaging	20 gal. kit - four 5 gal. pails (net 4 gal. each) Part A and four 1 gal. cans Part B
Appearance / Color	Gray/White
Shelf Life	12 months in original, unopened containers
Storage Conditions	Store dry at 40–95 °F (4–35 °C). Condition material to 65–85 °F (18–30 °C) before using.

Solid content by volume	100 %	(ASTM D-2697)
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Volatile organic compound (VOC) content	See Product Safety Data Sheet
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TECHNICAL INFORMATION

Shore A Hardness	80 +/- 5 (75 °F (24 °C) and 50 % R.H.)	(ASTM D-2240)
Tensile Strength	2500 +/- 100 psi (75 °F (24 °C) and 50 % R.H.)	(ASTM D-412)
Elongation at Break	800 +/- 50 % (75 °F (24 °C) and 50 % R.H.)	(ASTM D-412)
Tear Strength	300 +/- 25 pli (75 °F (24 °C) and 50 % R.H.)	(Die C, ASTM D-624)
Chemical Resistance	Resistant to de-icing salts, and alkaline concrete and cementitious mortars/tile adhesives.	

APPLICATION INFORMATION

Coverage	70 ft ² /gal. at 23 wet mils (23 dry mils)
Pot Life	10–15 minutes

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

LIMITATIONS

- To avoid dew point conditions during application, relative humidity must be no more than 95 % and substrate temperature must be at least 5 °F (3 °C) above measured dew point temperatures.
- Maximum moisture content of substrate: 4 % by weight with Sikalastic® Primer, Sikalastic® FTP Primer, Sikalastic® PF LoVOC Primer and 6 % by weight with Sikalastic® FTP LoVOC Primer, Sikalastic® MT Primer.
- Minimum ambient and substrate temperature during application and curing of material is 40 °F (4 °C); maximum is 90 °F (32 °C). Frequent monitoring of ambient and substrate temperature should always be done when applying polyurethane coatings. Note that low temperatures and low humidity will slow down the cure, and high temperatures and high humidity will accelerate it.
- Do not store materials outdoors exposed to sunlight for prolonged periods.
- Do not thin with solvents.
- Minimum age of concrete must be 21–28 days, depending on curing and drying conditions.
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various Sika product solutions). Surface irregularities may reflect through the cured system.
- Do not apply to a porous or damp surface where moisture vapor transmission will occur during application and cure.
- Substrate must be dry prior to application. Do not apply to a frosted, wet or damp surface. Do not proceed if rain is imminent within 8–12 hours of application. Allow sufficient time for the substrate to dry after rain or inclement weather as there is the potential for bonding problems.
- When applying over existing coatings compatibility and adhesion testing is recommended.
- On grade, lightweight concrete, asphalt pavement, and applications where chained or studded tires may be used should not be coated with Sikalastic® traffic systems.
- Unvented metal pan decks or decks containing between-slab membranes require further technical evaluation and priming with a moisture-blocking primer - contact Sika regarding recommendations.
- Waterproofing applications under overburden, including concrete pavement, asphalt pavement, and tile in a cementitious setting bed, require further technical evaluation - contact Sika regarding recommendations.
- Do not subject to continuous immersion or ponding water.
- Sikalastic®-720 Base is not UV stable and must be top coated or protected by a separate wearing course.
- Sikalastic®-720 Base must be kept clean and recoated within 24 hours. If this window is exceeded, contact Sika for recommendations.
- Mockups to verify application methods and substrate conditions as well as desired skid resistance and aesthetics are highly recommended.
- Cracks or ruptures which develop in the structure after the waterproofing traffic system has been installed will

not be bridged by the waterproofing traffic system and need to be repaired according to the recommended standard crack treatment details per this PDS.

- When using Sikalastic®-720 Base as a Roofing Flood Coat contact Sika or your local Tech Field Service Rep prior to application.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surface must be clean, dry, and sound with an open texture. Remove dust, laitance, grease, curing compounds, bond inhibiting impregnations, waxes, and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to the application.

Concrete - Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by blast cleaning or equivalent mechanical means (CSP 3-4 per ICRI guidelines).

Plywood - Should be clean and smooth, APA and exterior grade, not less than 1/2" thick, and spaced and supported according to APA guidelines. Joints should be sealed with Sikaflex® sealant and detailed and may need embedded fabric reinforcement.

Metal - Should be thoroughly cleaned by grinding or blast cleaning.

Priming

Primer Selection - Determine maximum moisture content of concrete substrate by weight with a TrameX CME or CMExpert type concrete moisture meter.

Sikalastic® Primer – For concrete decks with a maximum moisture content of 4 % by weight, apply Sikalastic® Primer with a flat squeegee or phenolic resin core roller at approximately 250 - 300 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Sikalastic® Primer is not suitable for metal substrates. Refer to separate primer data sheet for additional information.

Sikalastic® FTP Primer – For concrete decks with a maximum moisture content of 4 % by weight, and for

weathered plywood decks, apply Sikalastic® FTP Primer with a flat squeegee or phenolic resin core roller at approximately 300 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Sikalastic® FTP Primer is not suitable for metal substrates. Refer to separate primer data sheet for additional information.

Sikalastic® PF Lo-VOC Primer - For concrete and plywood decks with a porous or rough surface, and for metal flanges and penetrations, use Sikalastic® PF Lo-VOC Primer. For exterior exposed concrete decks with a maximum moisture content of 4 % by weight, interior protected concrete decks with a maximum moisture content of 5 % by weight, and plywood decks, apply Sikalastic® PF Lo-VOC Primer with a flat squeegee or phenolic resin core roller at approximately 200 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. For exterior exposed concrete decks with a maximum moisture content of 5 % by weight, two applications of Sikalastic® PF Lo-VOC Primer are required. Refer to separate primer data sheet for additional information.

Sikalastic® FTP LoVOC Primer - For concrete with a maximum moisture content of 5 % by weight, and for metal flanges and penetrations, apply Sikalastic® FTP LoVOC Primer with a flat squeegee or roller at approximately 175 sf/gal. For concrete decks with a maximum moisture content of 6% by weight, apply two applications of Sikalastic® FTP LoVOC Primer with a flat squeegee or phenolic resin roller at approximately 175 - 220 sf/gal per application. Work primer well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Refer to separate primer data sheet for additional information.

Sikalastic® MT Primer - For concrete with a maximum moisture content of 5 % by weight, and for metal flanges and penetrations, apply Sikalastic® MT Primer with a flat squeegee or roller at approximately 175 sf/gal. For concrete decks with a maximum moisture content of 6% by weight, apply two applications of Sikalastic® MT Primer with a flat squeegee or phenolic resin roller at approximately 175 sf/gal per application. Work primer well into the substrate to ensure adequate penetration and sealing and puddles are avoided. Refer to separate primer data sheet for additional information.

Sikalastic® Recoat Primer – For existing polyurethane coatings, incidental exposed concrete deck areas, and as an interlaminar primer, apply Sikalastic® Recoat Primer with a flat squeegee or phenolic resin core roller at approximately 300 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Sikalastic® Recoat Primer is not suitable for metal substrates. Refer to separate primer data sheet for additional information.

Sikalastic® EP Primer/Sealer - For Wood (timber, plywood), Metal (aluminum, galvanized, cast iron,

Product Data Sheet

Sikalastic®-720 Base

October 2021, Version 01.07

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copper, lead, brass, stainless steel, steel, zinc), and for existing asphaltic gravel roofs prior to Flood Coat application. Apply by brush or phenolic resin core roller at the recommended rate, 100-250 sf/gal depending on the substrate. Correct amount of primer will saturate the substrate and leave a slight film on the substrate top surface. Apply evenly without puddling. Refer to separate primer data sheet for additional information

Detailing

Non-structural cracks up to 1/16" - Apply a detail coat of Sikalastic®-720 Base at 23 wet mils, 4" wide, centered over the crack. Allow to become tack free before over coating.

Cracks and joints over 1/16" up to 1 inch - Rout and seal with Sikaflex® sealant and allow to cure. Apply a detail coat of Sikalastic®-720 Base at 23 wet mils, 4" wide, centered over the crack. Allow to become tack free before over coating.

Joints over 1 inch - Should be treated as expansion joints and brought up through the Sikalastic®-720 Base waterproofing membrane and sealed with Sikaflex® sealant.

Fabric Reinforcement – An optional 3" or 6" wide Sikalastic Flexitape Heavy fabric strip may be embedded within the base coat. Flexitape width shall be chosen such that a minimum of 1" tape is embedded on either side of the crack/joint. Apply additional coating as required to fully embed the Flexitape in the coating.

Panelized Joints - Panelized joints that are restrained across the joint and without differential movement may be sealed and the deck coating, including detail coat, applied over the joint.

NOTE: movement within panelized joints may cause deterioration of the aggregated wear coat, in which case the joints should be treated as expansion joints and brought up through the Sikalastic Traffic System and sealed with Sikaflex® sealant. For additional questions please contact Sika Technical Services.

Expansion Joints - Should be extended through System.

MIXING

Premix Part A and Part B components using a mechanical mixer (Jiffy) at slow speed to obtain uniform

color, making sure to scrape the solids from the bottom and sides of the pail. Pour part B into Part A slowly and while mixing scrape the side of the container, Mix the combined material thoroughly until a homogenous mixture and uniform color is obtained (typically 3 minutes). Use care not to allow the entrapment of air into the mixture.

APPLICATION

Apply at the recommended coverage rate (see appropriate System Guide) using a notched squeegee or trowel, and backroll using a phenolic resin core roller. Extend base coat over entire area including previously detailed cracks and joints. Allow coating to cure a minimum of 3–4 hours at 70 °F and 50 % R.H. or until tack free before top coating.

When used under an overburden system an additional coat of Sikalastic®-720 Base, fully broadcast, is required, allow coating to cure for a minimum of 36 hours before installing separate overburden.

Removal

Remove liquid coating immediately with dry cloth. Once cured, coating can only be removed by mechanical means.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and

to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

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Product Data Sheet

Sikalastic®-720 Base
October 2021, Version 01.07
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Sikalastic-720Base-en-US-(10-2021)-1-7.pdf



PRODUCT DATA SHEET

Sikalastic®-745 Textured

Two-component, integrally textured, aliphatic, fast-curing, solvent-free, traffic bearing wear and top coat

PRODUCT DESCRIPTION

Sikalastic®-745 Textured is a two-component, aliphatic, chemically cured, elastomeric polyurethane coating intended for use as the traffic bearing wear and top coat over polyurethane waterproofing membrane for pedestrian and vehicular traffic bearing applications, and as a protective top coat over polyurethane waterproofing membrane under a separate wearing course such as concrete or asphalt pavement, and tile in a setting bed.

USES

Sikalastic®-745 Textured may only be used by experienced professionals.

- Multi-story parking garages
- Parking decks and ramps
- Foot bridges and walkways
- Mechanical rooms
- Stadiums and arena
- Plaza and rooftop decks
- Balconies

CHARACTERISTICS / ADVANTAGES

- Low odor and fast turnaround
- Excellent crack-bridging properties and flexibility, even at low temperatures
- Resistant to water and de-icing salts
- Alkaline resistant
- Range of standard colors

PRODUCT INFORMATION

Packaging	17.6 gal. kit - four 5 gal. pails (net 4 gal. each) Part A and four 1 gal. cans (net 0.4 gal. each) Part B
Shelf Life	12 months in original, unopened containers
Storage Conditions	Store dry at 40–95 °F (4–35 °C). Condition material to 65–85 °F (18–30 °C) before using.
Appearance / Color	Gray, Charcoal and Tan; custom colors available

Solid content by volume	100 %	(ASTM D-2697)
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Volatile organic compound (VOC) content	See Product Safety Data Sheet
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TECHNICAL INFORMATION

Shore A Hardness	85 +/- 5 (75 °F (24 °C) and 50 % R.H.)	(ASTM D-2240)
Tensile Strength	3200 +/- 300 psi (75 °F (24 °C) and 50 % R.H.)	(ASTM D-412)
Elongation at Break	450 +/- 45 % (75 °F (24 °C) and 50 % R.H.)	(ASTM D-412)
Tear Strength	300 +/- 30 pli (75 °F (24 °C) and 50 % R.H.)	(Die C, ASTM D-624)
Chemical Resistance	Resistant to de-icing salts, and alkaline concrete and cementitious mortars/tile adhesives.	

APPLICATION INFORMATION

Coverage	80 sf/gal. at 14 wet mils (14 dry mils) 70 sf/gal. at 16 wet mils (16 dry mils) 62 sf/gal. at 18 wet mils (18 dry mils)	
	Coverage rates provided are intended to achieve required wet film thickness under optimal conditions. Additional material may be required depending on substrate surface roughness and porosity, material, substrate and air temperatures, and other site-dependent factors. This will result in a lower coverage rate.	
Pot Life	20–30 minutes	

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

LIMITATIONS

- To avoid dew point conditions during application, relative humidity must be no more than 95 % and substrate temperature must be at least 5 °F (3 °C) above measured dew point temperatures.
- Maximum moisture content of substrate: 4 % by weight with Sikalastic® Primer, Sikalastic® FTP primer and 6 % by weight with Sikalastic® FTP LoVOC Primer or Sikalastic® MT primer.
- Minimum ambient and substrate temperature during application and curing of material is 50 °F (10 °C); maximum is 90 °F (32 °C). Frequent monitoring of ambient and substrate temperature should always be done when applying polyurethane coatings. Note that low temperatures and low humidity will slow down the cure, and high temperatures and high humidity will accelerate it.
- Do not store materials outdoors exposed to sunlight for prolonged periods.
- Do not thin with solvents.
- Use properly graded, oven dried aggregates only.
- Minimum age of concrete must be 21–28 days, depending on curing and drying conditions.
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various Sika product solutions). Surface irregularities may reflect through the cured system.
- Do not apply to a porous or damp surface where moisture vapor transmission will occur during application and cure.
- Substrate must be dry prior to application. Do not apply to a frosted, wet or damp surface. Do not proceed if rain is imminent within 8–12 hours of application. Allow sufficient time for the substrate to dry after rain or inclement weather as there is the potential for bonding problems.
- When applying over existing coatings compatibility and adhesion testing is recommended.
- Opening to traffic or installation of separate wearing course prior to final cure may result in loss of aggregate, or permanent staining and subsequent premature failure.
- Vehicle fluids and some high performance tires can stain the coating. Fluid spills should be removed promptly as the coating can in some cases be damaged from prolonged exposure.

- On grade, lightweight concrete, asphalt pavement, or insulated split slab applications, or applications where chained or studded tires may be used, must not be coated with Sikalastic Traffic Systems without Sika technical review. Contact Sika Technical Services for recommendations.
- Unvented metal pan decks or decks containing between-slab membranes require further technical evaluation and priming with a moisture-blocking primer - contact Sika regarding recommendations.
- Waterproofing applications under overburden, including concrete pavement, asphalt pavement, and tile in a cementitious setting bed, require further technical evaluation - contact Sika regarding recommendations.
- Do not subject to continuous immersion.
- Base coat must be kept clean and recoated within 24 hours for two-component base coat, and 72 hours for single component base coat. If this window is exceeded, contact Sika for recommendations.
- Mockups to verify application methods and substrate conditions as well as desired skid resistance and aesthetics are highly recommended.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

SURFACE PREPARATION

Surface must be clean, dry and sound with an open texture. Remove dust, laitance, grease, curing compounds, bond inhibiting impregnations, waxes, and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to the application.

Sikalastic® 720 Waterproofing Base Coat - Coating should be cured and tack free.

Existing Coatings - Should be cleaned and mechanically abraded to provide a contaminant free, open textured surface. Solvent wipe as allowed by state and local regulations. Use Recoat Primer.

MIXING

Thoroughly premix Part A using a mechanical mixer (Jiffy) at slow speed to obtain uniform color and mixture, making sure to scrape the solids and the aggregate from the bottom and sides of the pail. The aggregate should be evenly diffused in the resin. Pour part B into Part A slowly and while mixing scrape the side of the container, Mix the combined material thoroughly until a homogenous mixture and uniform color is obtained (typically 3 minutes). Use care not to allow the entrapment of air into the mixture.

APPLICATION

Wear coat: Apply at the recommended coverage rate 16 mils wet (70 sf/gal) using a 1/8" or 3/16" notched squeegee or trowel, and backroll using nap roller 3/8" to uniformly backroll prior to applying topcoat. It should be backrolled two times, one perpendicular to the other.

Top coat: Apply at the recommended coverage rate 16 mils wet (70 sf/gal) using a 1/8" or 3/16" notched squeegee or trowel, and backroll using nap roller 3/8" to uniformly backroll. The Top coat should be backrolled two times, one perpendicular to the other. Allow coating to cure a minimum of 4 hours at 70 °F and 50 % R.H.; coating must be tack free before overcoating. Allow coating to cure for a minimum of 36 hours before opening to vehicular traffic

Removal

Remove liquid coating immediately with dry cloth. Once cured, coating can only be removed by mechanical

means.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

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Product Data Sheet

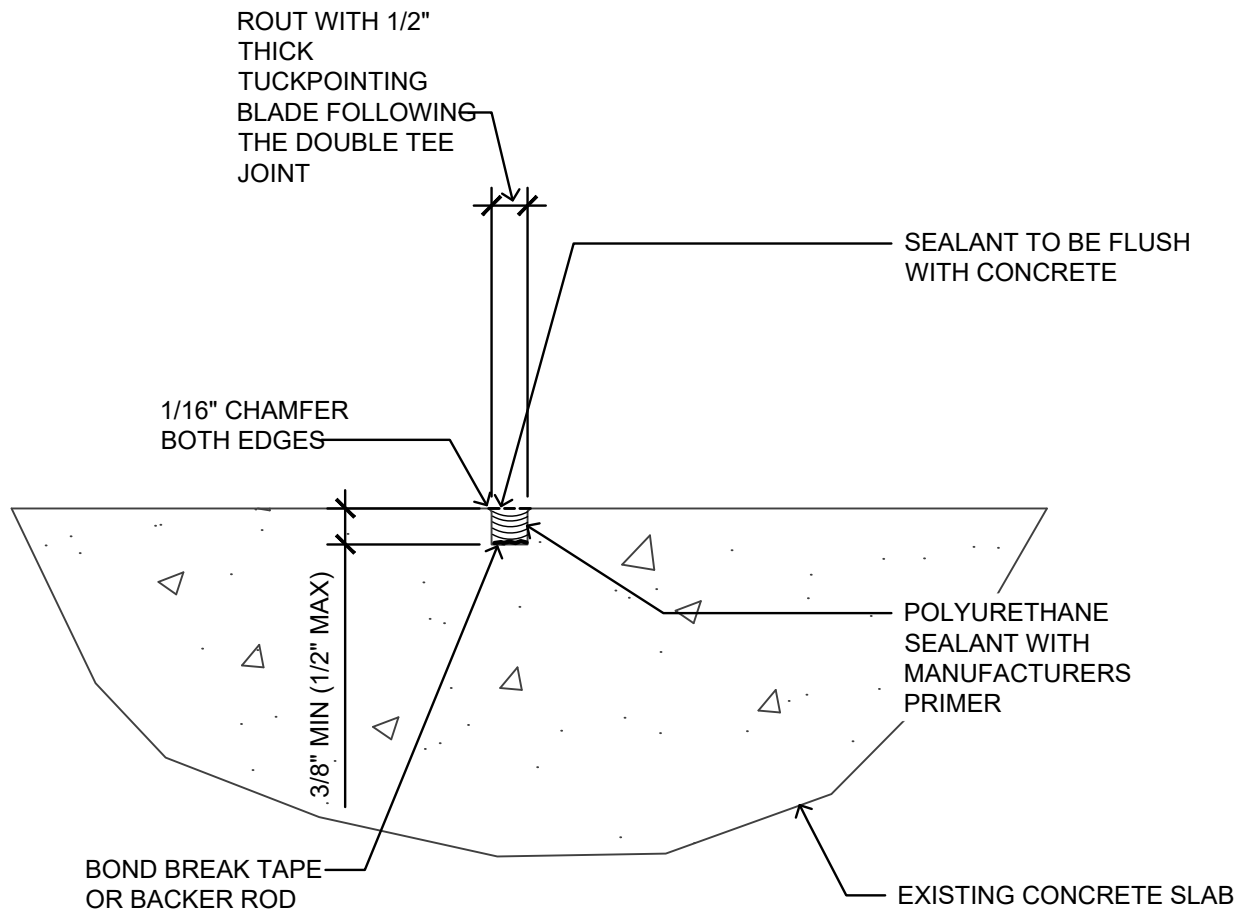
Sikalastic®-745 Textured
March 2022, Version 01.05
020812040020000098

Sikalastic-745Textured-en-US-(03-2022)-1-5.pdf



NOTE:

AFTER ROUTING, THE CAVITY SHALL BE BRUSHED WITH A STAINLESS STEEL BRUSH AND BLOWN CLEAN WITH COMPRESSED AIR WITH DIRECTIONAL NOZZLE (120 PSI MIN). INSTALL BOND BREAKER TAPE AT BOTTOM OF CAVITY, BRUSH ON PRIMER TO BOTH SIDES OF CAVITY, AND INSTALL SEALANT.



DOUBLE TEE JOINT SEALANT

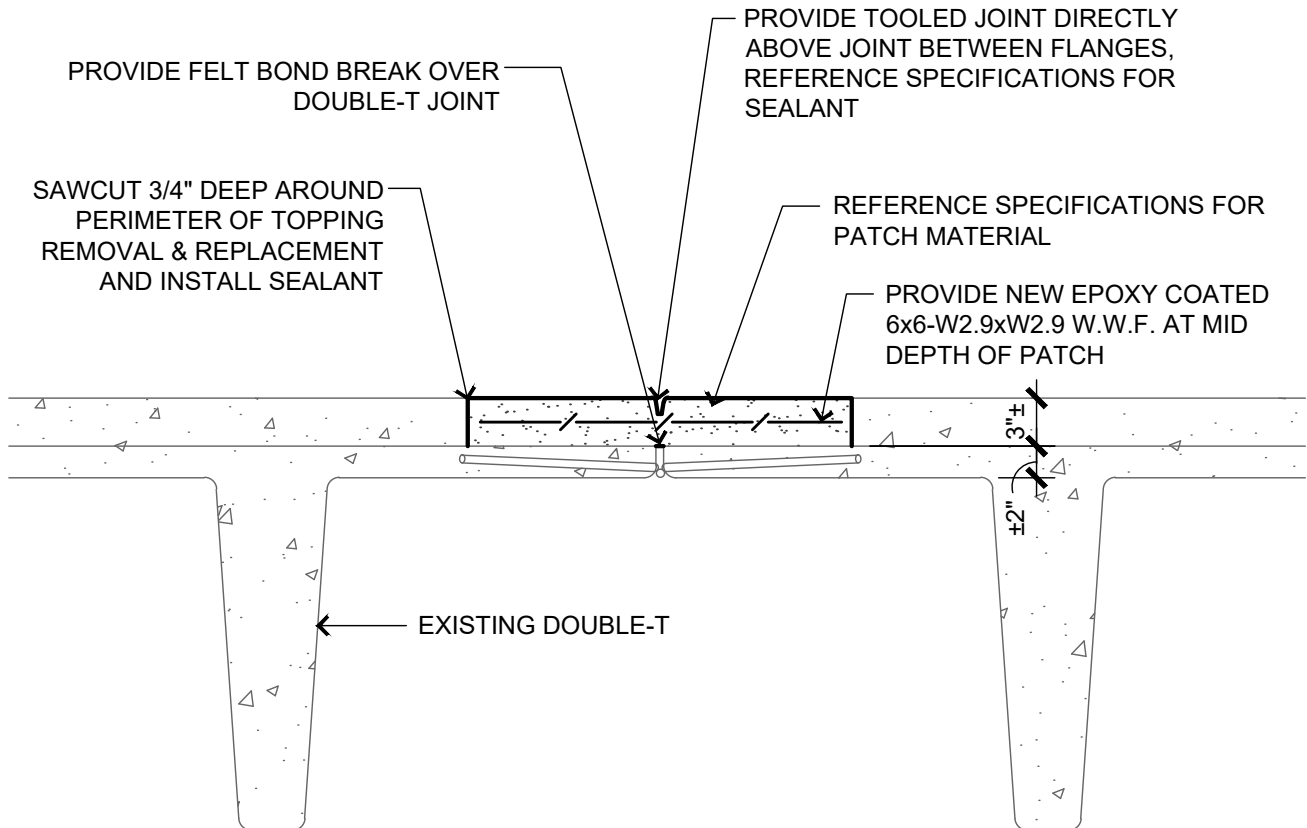
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W304



NOTE: WHERE TOPPING REMOVAL EXPOSES EXISTING, DOUBLE-T CONNECTIONS, SANDBLAST CONNECTIONS TO CLEAN BARE METAL & EPOXY PAINT, RE: SPECIFICATION DIVISION 02 FOR ADDITIONAL INFORMATION

PARTIAL DEPTH TOPPING REPAIR

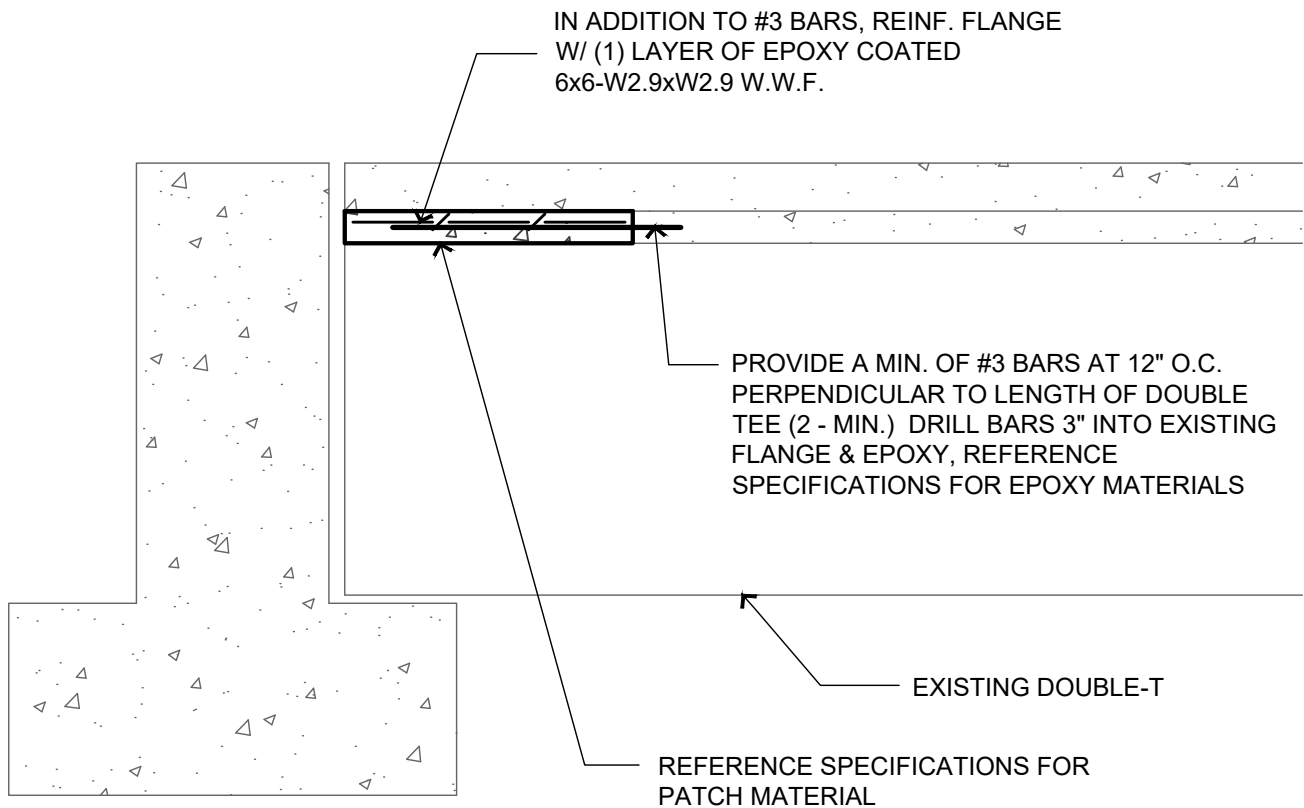
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W305



DOUBLE TEE FLANGE CEILING REPAIR

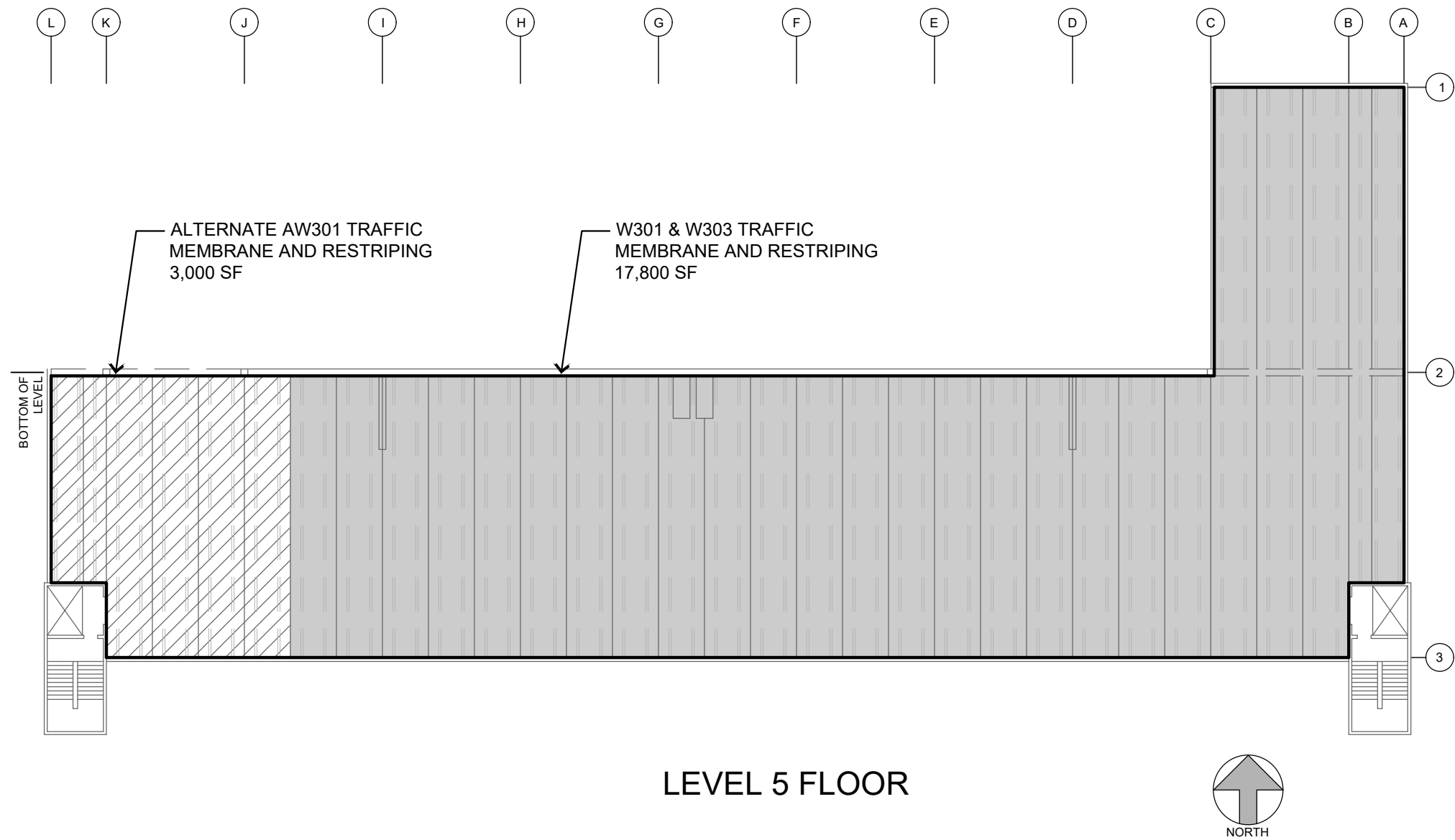
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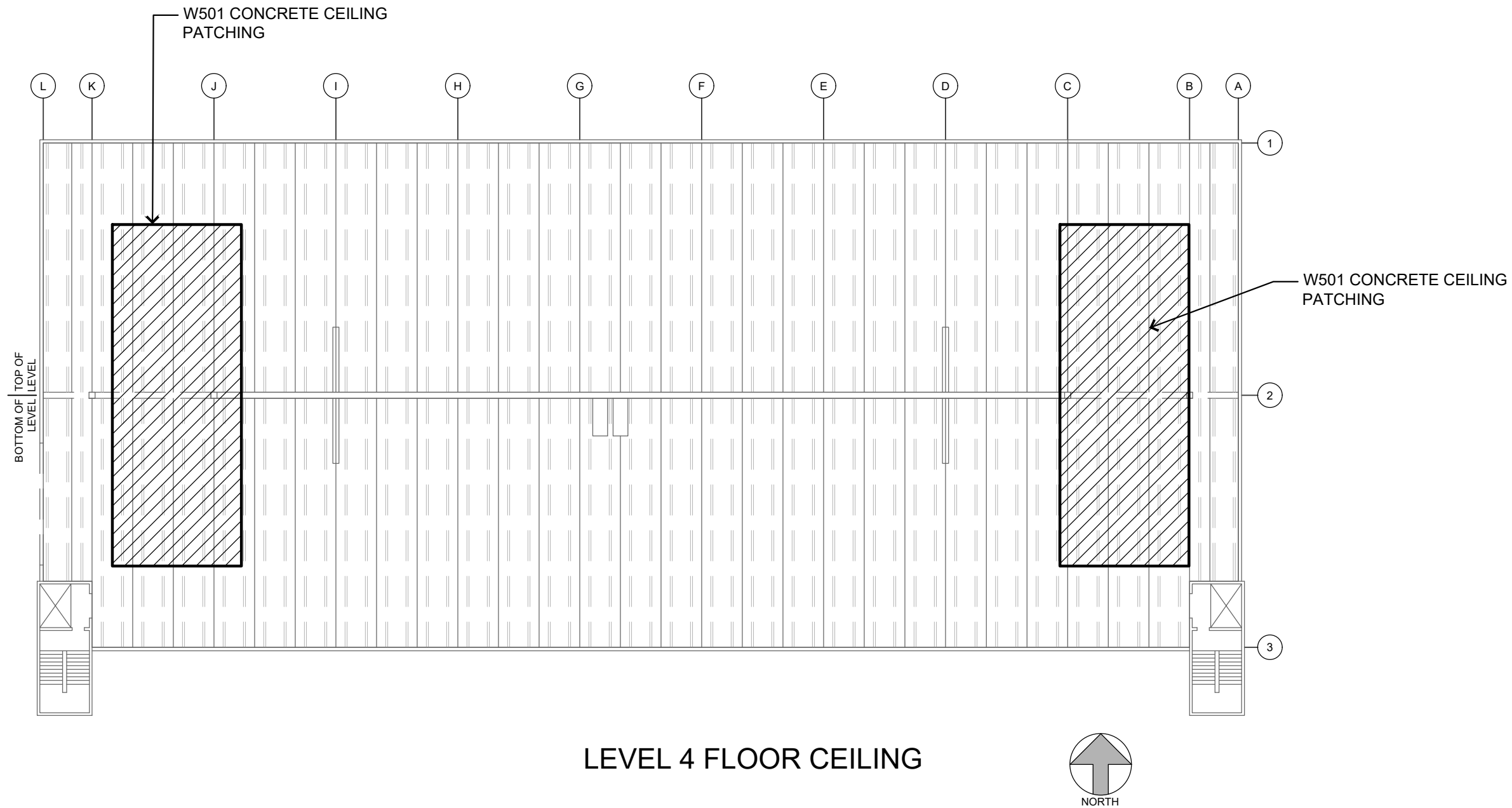
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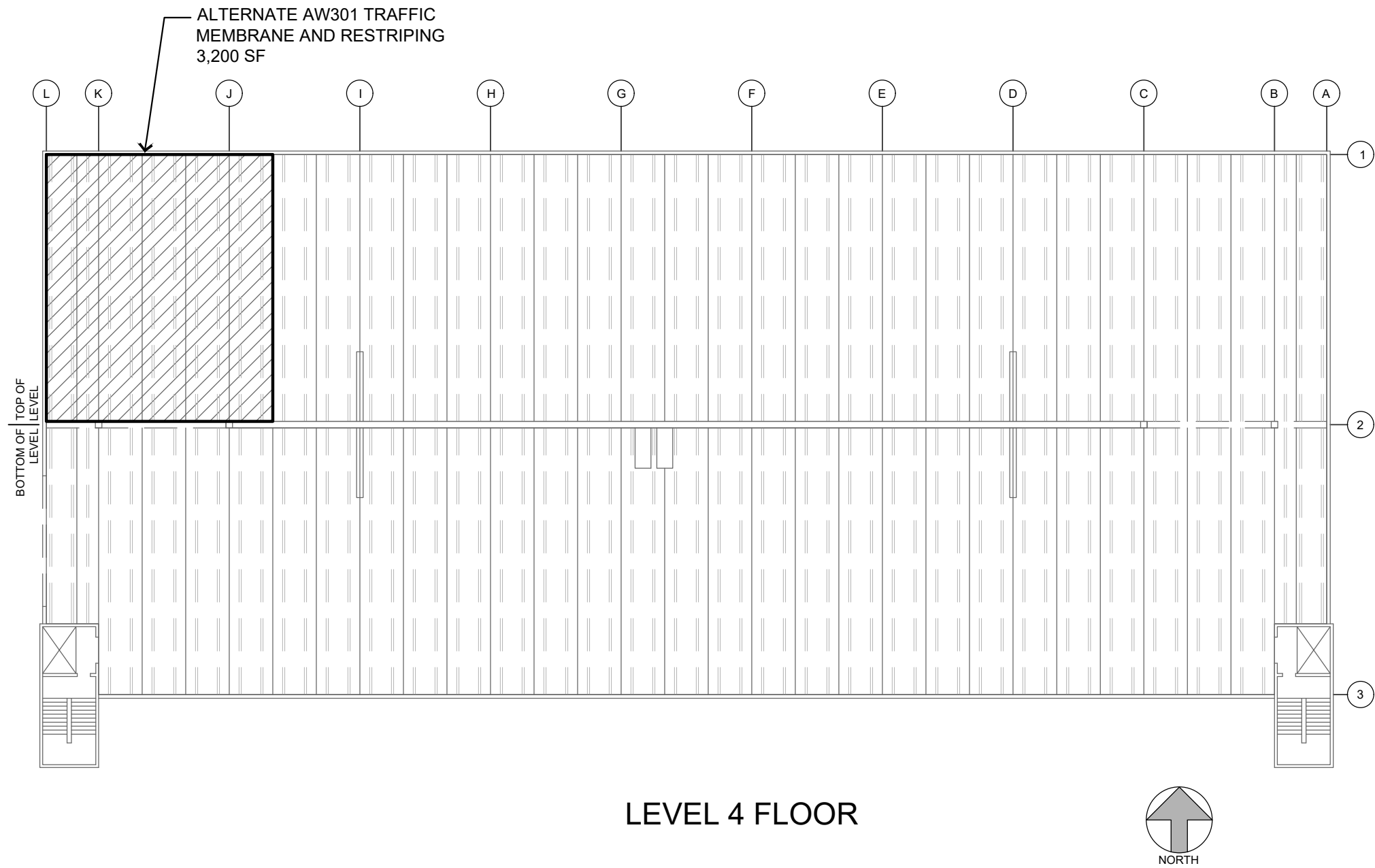
S1



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STRUCTURAL REPAIRS
1410 WEST 10TH STREET
KANSAS CITY, MISSOURI

DATE: 06/23/2025

S2



LEVEL 4 FLOOR

KANSAS CITY PUBLIC LIBRARY
STRUCTURAL REPAIRS
1410 WEST 10TH STREET
KANSAS CITY, MISSOURI

DATE: 06/23/2025

S3