



KANSAS CITY KANSAS PUBLIC SCHOOLS / USD 500

PURCHASING OFFICE | 2010 N. 59TH STREET | ROOM 370 \ KANSAS CITY, KS 66104

WEB SITE: WWW.KCKPS.ORG/PURCHASING

EXTERIOR WALL REPAIR CENTRAL MIDDLE SCHOOL

BID NO:	IFB 20-012	ISSUE DATE:	MAY 27, 2020
----------------	-------------------	--------------------	---------------------

Kansas City Kansas Public Schools will receive sealed bids, on this form at the Purchasing Office, 2010 N. 59th Street, Room 370, Kansas City, KS 66104 until **2:30 PM., June 4, 2020**, at which time bids received will be publicly opened and read, all in accordance with bid instructions, specifications and/or bid conditions attached hereto or as shown below.

Contact/Technical Contact:

Wayne C. Correll, Purchasing Manager | (913) 279-2270 | email: wayne.correll@kckps.org

BID INSTRUCTIONS:

FAXED BIDS WILL NOT BE ACCEPTED / EMAILED BIDS WILL NOT BE ACCEPTED.

Per attached specifications listed in this invitation to bid. Bidders must specify unit price on services/rates/deliverables on the Bid Form or bid may be determined to be non-responsive.

Kansas City Kansas Public Schools is temporarily accepting bids via email. No Faxed Bids will be accepted.

Until further notice, the Purchasing Office of the Kansas City Kansas Public Schools is closed to the public as a result of the COVID-19 crisis. All public bid openings will be conducted via video conference call.

During this time all bids are to be submitted via UPS, FedEx or emailed to wayne.correll@kckps.org. All bids submitted must be received by the Purchasing Office by the specific bid closing date and time of 2:00PM Central Time. If emailed, it is the responsibility of the 'bidder' to ensure the bid date and time is met. FedEx and UPS currently deliver directly to the Central Office of the Kansas City Kansas Public Schools. Bids are not considered received until they are date and time stamped in the Purchasing Office. The Purchasing Office will not be responsible for late deliveries.

For questions regarding confirmation that your bid has been received by the Purchasing Office, please email Wayne Correll at wayne.correll@kckps.org.

The Public Bid Opening for this solicitation shall be opened in public via Zoom Video Conference Call at the hour stated in the notice at the below number:

KCKPS Purchasing Department is inviting you to a scheduled Zoom meeting.

Topic: Bid Opening IFB 20-012 Exterior Wall Repair Central Middle School

Time: Jun 4, 2020 02:30 PM Central Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/82400091554?pwd=NHIHb3R5OWVVMUG00czUxUnFGTmRLdz09>

Meeting ID: 824 0009 1554

Password: 411650

One tap mobile

+13462487799,,82400091554# US (Houston)

+16699006833,,82400091554# US (San Jose)

Dial by your location

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

+1 301 715 8592 US (Germantown)

Meeting ID: 824 0009 1554

Find your local number: <https://us02web.zoom.us/j/kpayLSskt>

A bid tabulation will be provided in response to an emailed request to wayne.correll@kckps.org.

Per attached specifications listed in this invitation to bid. Bidders must specify unit price on services/rates/deliverables on the Bid Form or bid may be determined to be non-responsive.

- Pricing shall be FOB Kansas City, KS (All freight and fuel charges must be included in the bid price).
- Award will be to ONE Contractor.
- The District reserves the right to reject any or all bids, to waive any informalities, irregularities or technical defects in bids, and unless otherwise specified by the District to accept any item or groups of items in the bid, as may be in the best interest of the District.
- Time (days, weeks, etc.) required for delivery is a significant consideration with respect to this award process. The time required for delivery must be indicated in the space provided or your bid may be found non-responsive and may not be considered.
- Bid shall include copies of pertinent warranty information pertaining to the product or service offered. The bidder agrees that equipment furnished under any resultant purchase order issued by Kansas City Kansas Public Schools and Engineering Diagnostics, LLC shall be covered by commercial warranties the contractor gives to any customer for such supplies. All warranty information and certificates shall be furnished and become the property of the District upon delivery and acceptance of said items and/or the contractor must honor services and all rights and remedies stated in the warranties.
- All items are new manufacture unless otherwise specifically stated in this bid.

- All products must have passed the first line quality standard as set by the manufacturer and no seconds, blemished articles or items having defective workmanship are included.
- Bid may not be considered if a service charge, minimum dollar or minimum quantity order is applied.
- The outcome of this bid will be posted on the District's Purchasing site www.kckps.org/purchasing under Awards Section and will include a bid tabulation/summary.
- Bidder shall acknowledge all addenda for this bid and include the form acknowledgements with their bid.

INCLEMENT WEATHER OR EMERGENCY

IF THERE IS A BUILDING CLOSING THE DAY OF THE OPENING OF PROPOSALS DUE TO INCLEMENT WEATHER OR AN EMERGENCY, THE OPENING OF PROPOSALS WILL OCCUR AT 2:00PM (CENTRAL) THE NEXT BUSINESS DAY THE DISTRICT IS OPEN.

See Attachment A for Additional Terms & Conditions

EXTERIOR WALL REPAIR CENTRAL MIDDLE SCHOOL

The Kansas City Kansas Public Schools Facilities Department is accepting sealed bids from qualified contractors to provide labor and materials for the following work:

Scope of Work

The Work consists of remedial waterproofing:

- Remedial exterior masonry repair.
- Through-wall flashing installation.
- Selective masonry repointing.
- Other Work shown in the Drawings.

The Work summarized above is provided as a convenience and may not be inclusive of all specified work.

Any measurements and areas shown/indicated in this solicitation are approximations, and not guaranteed to be 100% accurate. Each bidder is responsible for making an on-site measurement of the area to be serviced, in order to determine exact requirements.

All work is to be completed prior to December 31, 2020.

Location of the Work

Central middle School
925 Ivandale Street
Kansas City, KS 66101

Pre-Bid Meeting

A pre-bid meeting will be held at **9:00 AM** on **May 27, 2020**.

The Pre-bid meeting will be held at:

Central Middle School

925 Ivandale Street
Kansas City, KS 66101

A "walk-thru" to all review of the project area will follow the Pre-Bid meeting. Attendance at the Pre-Bid Meeting is recommended, but not mandatory.

Bid Security

Bid Bond: Bid security shall be submitted with each bid in the amount of five percent (5%) of the bid amount. No bids may be withdrawn for a period of sixty (60) days after opening of bids. Owner reserves the right to reject any and all bids and to waive informalities and irregularities.

Payment & Performance Bond: Bidder agrees to furnish a Payment & Performance Bond, in the amount of 100% (one hundred percent) of total contract value after receipt of contract.

Prevailing Wage

Prevailing Wage IS NOT required.

Time of Completion

Successful bidder shall begin the Work on receipt of the Notice to Proceed and shall complete the Work (Substantial Completion) no later than **December 31, 2020**.

Liquidated Damages

Completion of this project before December 31, 2020 is imperative. At the District's sole discretion, liquidated damages in the amount of Two-Hundred-Fifty Dollars (\$250.00) per calendar day will be assessed against the Contract if the project is not completed by the date indicated.

Clean-Up

The Contractor will keep the premises free from accumulations of debris and waste materials caused by its employees in performance of the work. At completion of the project, Contractor shall remove all crating, packaging, waste and debris from the building and the site, and all tools, scaffolding and surplus materials, and shall leave the building and site "broom clean" or its equivalent.

Permits, Codes and Ordinances

Each Contractor shall file and pay for required permits affecting its work (if applicable). Each contractor shall conform to applicable codes and ordinances, including OSHA requirements.

Damage to District Property

Contractor at its own expense shall promptly remedy and repair all damages or loss to any property caused in whole or part by its employees, subcontractor(s), supplier or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable.

No Smoking: The District adheres to the mandatory “No Smoking” policy on school premises and/or at school functions. All bidders shall comply with this “No Smoking” policy.

**SECTION 011102
SUMMARY OF WORK**



PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Central Middle School is a public school building located in Kansas City, Kansas. The building is clad with clay brick, natural stone, exposed concrete, aluminum-glass windows in punched openings.
- B. The Work consists of remedial waterproofing:
 - 1. Waterproofing of the two light court slabs.
 - 2. Other Work shown in the Drawings.
- C. The Work summarized in this Section 011102 is provided as a convenience and may not be inclusive of all specified work.
- D. Reference the Drawings for graphical depiction of the locations where Work is to be completed and the relationship and orientation of components. The purpose of the Drawings is to show the finished configuration of the Work, and not the intermediate steps, means, and methods in executing the Work. The Drawings show typical details, and are not intended to show complete details in every respect.
- E. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.

1.02 WORK INCLUDED

- A. **Base Bid** - Furnish materials, labor, equipment, and services necessary for and incidental to the execution and completion of the following Work:

Base Bid Repair Item	Section	Description
1	027411	Demolition. Provide the following: demolition of the existing built-up roofing and associated roof materials at both light courts; scarification of the existing concrete slab to a minimum depth of 1/8-inch; removal of the existing skylight framing at the north light court; removal of associated materials.

2	045211 and 079201	Structural Slab Repair. Provide the following: visually observe and sound all supported light court floor slabs to identify locations where the existing floor slab concrete is scaled/spalled/delaminated; remove sound and unsound topping slab concrete to expose sound concrete and a minimum of 3/4-inch behind exposed reinforcement; clean exposed reinforcement and metal with abrasive blast to a SSPC-SP6 commercial blast cleaning; coat all exposed reinforcement and other metals with anti-corrosion coating; patch concrete, concrete finish, and concrete curing.
3	027411 and 037411	Bonded Concrete Topping. Provide the following: removal all existing waterproofing membranes and coatings; shot blast or abrasive blast all floor, curb, and wall surfaces to be covered with concrete; provide bonded topping slab concrete and concrete curing.
4	079011	Crack Repair. Provide the following at random slab cracks and joints: saw cut/grind concrete floor cracks to crack repair profile; grind the sealant bond surfaces to remove previous sealant and other materials that can adversely affected the new sealant performance; sealant.
5	075711 and 079011	Slab Waterproofing. Provide the following where shown on the drawings: remove all existing sealants; shot blast or abrasive blast all surfaces to be coated; new joint sealant in all joints in the area to be coated; and waterproofing membrane. Provide water vapor retarder on slab-on-grade shown in Plan 2/1 and waterproofing membrane.
6	027411 and 037411	Structural Slab Soffit Repair. Provide the following: visual observation and sounding of the structural slab soffit to identify locations where the beam concrete is spalled/delaminated/distressed, removal of sound and unsound concrete to expose sound concrete and a minimum of 3/4-inch behind exposed reinforcement; cleaning of exposed reinforcement and other metal with abrasive blast to a SSPC-SP6 commercial blast cleaning; coating all exposed metal with anti-corrosion coating; providing new reinforcement, providing forms/formwork, patch concrete, concrete finish, concrete curing, removal of forms/formwork.
7	027411 and 037411	Scale Repair. Provide the following: visual observation and sounding of the structural slab with a chain-drag or similar device to identify locations where the slab concrete is scaled/delaminated/spalled; removal of sound and unsound concrete to expose sound concrete and a minimum depth of 1-inch; cleaning of exposed reinforcement and other metal with abrasive blast to a SSPC-SP6 commercial blast cleaning; coating all exposed reinforcement and other metals with anti-corrosion coating; patch concrete, concrete finish, and concrete curing.

1.03 COMMENTARY

- A. Where used in these Specifications, "Commentary" provides supplemental, non-mandatory information to assist Contractor to interpret these Specifications. Commentary is set off from the text of the specifications by a box, and is not part of the Contract Documents.

1.04 GENERAL REQUIREMENTS

- A. The Sections of Division 1 – General Requirements govern the execution of all Sections of the Specifications.
- B. Commencing the Work of each Section implies that Contractor has inspected and accepts the existing conditions, and that all pertinent RFIs have been answered sufficiently in accordance with Section 014301.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

**SECTION 013001
ADMINISTRATIVE REQUIREMENTS**

PART 1 - GENERAL

1.01 MEETINGS AND COMMUNICATION

- A. Attend all meetings called by Property Contact or Engineer. Contractor's representative at meetings shall have authority to bind Contractor, Subcontractors and suppliers to revisions, modifications, and decisions agreed upon.
- B. Advise Engineer at least 24 hours in advance of progress meetings regarding items to be added to the agenda.
- C. Meetings will be scheduled a minimum of 48 hours in advance, unless agreed otherwise by all attendees.
- D. Initiate no communication (including meetings or telephone calls) directly with Owner or Property Contact, except where specifically required by these Specifications or regarding safety or an emergency. Engineer is the designated administrator of the Contract Documents, and shall be contacted prior to other parties for communication other than coordination of the Work.
- E. By inviting Contractor to Bid the Work, Engineer, Property Contact, and Owner each authorize the Contractor to contact them by telephone, fax, and e-mail concerning this Project (subject to the restrictions outlined above). Similarly, by accepting the invitation to Bid the Work, Contractor authorizes Engineer, Property Contact, and Owner to contact Contractor by telephone, fax, and e-mail concerning this Project. No further authorization will be required to comply with "do not call" laws or similar rule.
- F. Immediately notify Engineer and Property Contact if anyone becomes injured at the site.
- G. Some project communication will use electronic mail. Maintain an e-mail account during the Project.

1.02 COORDINATION, SEQUENCING, AND SCHEDULING

- A. Coordinate the Work with Property Contact and conduct work in a manner to minimize inconvenience to tenants and management and to expedite the Work.
- B. Building Operating Hours are defined as 7:00 a.m. to 6:00 p.m. Monday through Friday. Notify Property Contact at least 48 hours in advance to coordinate Work to be performed outside of Building Operating Hours ("After-Hours").
- C. Schedule work within 30 feet of the air intakes to be performed when the fans are shut down. Coordinate schedule with Property Contact.
- D. Notify Property Contact at least 48 hours in advance of areas that may be required to be restricted from public access, including parking spaces.
- E. Provide sufficient and adequate materials, personnel, and equipment to facilitate rapid completion of the Work without undue delays.

- F. Coordinate scheduling, submittals, and Work of the various Sections of the Specifications to ensure efficient and orderly sequence of installation of interdependent construction elements.
- G. Coordinate and schedule phases of the Work of the Contract Documents with Property Contact, Engineer, Subcontractors, material suppliers and other parties as necessary to ensure the smooth and orderly transition of separate phases and to meet the schedule and requirements of Owner.
- H. Perform routine work each day in a consistent manner, so that tenants and building management can predict the times that noise or other inconveniences are likely to occur.
 - 1. Unless otherwise agreed by both Owner and Contractor, the standard for acceptable noise levels during Building Operating Hours will be the ability to carry on a clear 2-way conversation using a telephone handset (not speaker phone) in the interior office space closest to the work area.
- I. To avoid conflict of operations or delay in completion of the Work, Engineer may provide Contractor with non-binding recommendations pertaining to the methods, sequencing, and priority of the operations, without taking responsibility for the execution or results thereof. Engineer will not be responsible for nor have control or charge over the acts or omissions of Contractor; Contractor shall remain solely liable for performance.

1.03 STORAGE

- A. Supply temporary, secure storage required for equipment and materials for the duration of the project. Coordinate location of temporary storage with Property Contact.
- B. Coordinate location of temporary storage with Property Contact.
- C. Coordinate delivery of materials with Property Contact. Do not use building's loading dock without permission from Property Contact.
- D. Any materials or equipment remaining on site, including in designated storage area, after Final Completion (or earlier contract termination) become the property of the Owner, without requiring a bill of sale nor notification to Contractor.

1.04 PARKING

- A. Park in Property Contact designated spaces.
- B. Do not leave Contractor vehicles on site overnight without the Property Contact's consent.

1.05 TRASH DISPOSAL

- A. Do not use Owner's trash disposal systems. Provide a dumpster at the site where indicated by Property Contact.
- B. Coordinate pick-up and drop-off of dumpster with Property Contact.
- C. Remove from the site materials that overfill the dumpster.

1.06 CHANGES TO SCOPE OF WORK

- A. The Specifications and Drawings reflect existing conditions to the best of Owner's and Engineer's knowledge. Should minor conditions be encountered which are not exactly as indicated, Contractor shall make modifications to the scope of work as required at no additional cost to Owner.
- B. To achieve satisfactory performance from the Work, it may be necessary to conduct unanticipated minor work items encountered during the course of the Work. On behalf of Owner, Engineer will suggest additional work items as appropriate. No Change Orders for additional payment will be considered for additional work items unless they represent a substantial change to the scope of Work.
- C. For substantial changes, promptly submit a Change Proposal, including changes in scope, price, or time. Change Proposal pricing shall be broken out and calculated as follows:
 - 1. Contractor's direct costs (including Subcontractors, material, labor, and equipment).
 - 2. Overhead and profit (combined factor), per the Bid Form.
 - 3. Cost of bonds, applied to the sum of the above items.
 - 4. Applicable tax.

Commentary - Non-Mandatory Information: Proposed changes to the Contract Price or Contract Time that are not submitted by Contractor in a timely manner will not be considered by Owner. Owner is NOT obligated to compensate Contractor for work performed by Contractor that is beyond the scope of fully executed Contract Documents, Changer Orders, and/or Work Change Directives. See the General Conditions for a full discussion of these requirements.

1.07 WEATHER CONDITIONS

- A. Do not proceed with the Work under adverse weather conditions, immediately after rainfall (for water-sensitive products), or when climatic conditions are outside manufacturers' recommended limitations for installation. Proceed with the Work only when weather forecasts are favorable for proper development of the performance characteristics of the materials.
- B. Anticipate and include in the Contract Time adequate lost time due to adverse weather conditions that are normal for the site during the planned construction season.
- C. At Contractor's discretion, Contractor may designate a Weather Day for a calendar day on which any of the following occur:
 - 1. The chance of rainfall at the site is forecast in advance to be 40 percent or greater.
 - 2. Rainfall occurs at the site.
 - 3. Rainfall on a previous calendar day has not evaporated completely, and wet substrates impair the proper execution of the Work.

4. The ambient temperature is above or below manufacturers' recommended limitations for installation of materials.
 5. The wind speed at the site exceeds 25 miles per hour for more than 1 hour.
- D. At Contractor's discretion, Contractor may perform non-sensitive work at the site on a Weather Day. However, Engineer will not monitor the Work on a day designated by Contractor as a Weather Day.
- E. Submit requests for Contract Time extensions due to inclement weather as they occur; do not wait until the end of the project. Submit with requests sufficient supporting documentation for Engineer to determine the legitimacy of Contractor's claim, including at a minimum:
1. Contractor's log of forecasted and actual weather conditions at the site; and
 2. One of the following:

The weather report section of a local daily newspaper, maintained in good condition.

Printed weather data downloaded from a governmental or recognized news agency Internet site.

Commentary - Non-Mandatory Information: The intent of these weather provisions is to define when a reasonable person would expect Contractor to work on the site. Working in inclement weather can be hazardous and can jeopardize the integrity of the Work. Contractor's proposed Contract Time should include a reasonable number of Weather Days, based on prevailing local conditions. If the actual designated Weather Days exceed the prevailing local conditions, then the Contract Time can be extended; but it is Contractor's burden to substantiate a claim for increased Contract Time.

1.08 PROTECTION

- A. Provide barricades and signs in accordance with Section 015001.
- B. Protect building, property, equipment, roads, approaches, parking areas, loading dock areas, sidewalks, vehicles, and landscaping from damage due to the Work, including contamination, soiling, staining, or defacing.
- C. Protect installed work, and provide special protection if specified in individual technical specification Sections.
- D. Take precautions to avoid damaging roof membranes, protection mats, base flashings, and lightning protection systems.
 1. Use existing walkways at all times. Avoid walking on the roof membrane or ballast (gravel) when possible.
 2. Dispose of trash and debris promptly and properly. Do not allow it to remain on the roof.
 3. Provide 3/4-inch protection board (plywood) under equipment to prevent equipment from compressing roof insulation or damaging roof membrane. If the equipment is on wheels and will be rolled across the roof, remove

gravel and provide 3/4-inch plywood strips to create a path for the wheels to travel.

4. Avoid twisting equipment base pads or wheels on roof membrane or protection mat.
- E. Protect workers from radiation, including rooftop microwave antennas, in accordance with OSHA regulations and ANSI standards, and FCC regulations published in 47 CFR 1.1307(b).
 1. Discuss with Property Contact special rules or policies for this property regarding radiation protection.
 2. Do not move or disturb rooftop antennas. Inform Property Contact if antennas need to be relocated to perform the Work.

1.09 DAMAGE

- A. Conduct, and record electronically a pre-job damage survey of the site. Submit with Pre-Construction Submittals.
- B. Immediately report to Property Contact and Engineer damage caused by Contractor.
- C. Accept responsibility for damage as having been caused by performance of the Work that is:
 1. Not reported by Contractor to the Property Contact in the pre-job damage survey as specified above,
 2. And discovered and reported to Contractor prior to Final Completion.
- D. Accept responsibility for damage to interior finishes and personal property caused by water infiltration during the project, from Contractor's first mobilization to the site until Final Completion, except for leak locations identified during the pre-job damage survey or in Owner's logs (if any). Immediately report water infiltration discovered to Engineer and the Property Contact.
- E. At Owner's discretion, for damage caused by performance of the Work:
 1. Repair damage at no cost to Owner, and to the pre-job condition to Owner's satisfaction. Solicit specifications from Engineer for repair of damage prior to implementing repairs.
 2. Reimburse Owner for cost of repairs performed by others.
- F. Engage a specialty subcontractor to repair and certify lightning protection system if damaged during the Work.

Commentary - Non-Mandatory Information: Common claims for damage caused by a contractor include roof membrane and base flashing distress from scaffolding; broken lightning protection components; broken glass; damaged landscaping and trees; and carpet soiling near roof access paths. Because Contractor is liable for damage discovered after the commencement of Work and not reported to the Property Contact, it is essential to perform a pre-job condition survey. A video taped survey is a useful and practical way to perform this task.

1.10 CIVILITY

- A. Ensure that personnel remain reasonably quiet during Building Operating Hours. Except in emergency, do not shout from elevated locations.
- B. Recreational radios are not allowed on the site.
- C. No profanity, alcoholic beverages, or intoxication are permitted on the site.
- D. Congregate only in areas designated by Property Contact for personnel breaks and meals.
- E. Smoking is allowed only in designated areas outside at ground level, at least 25 feet from building entrances. Discard cigarette butts into designated receptacles. No other type of smoking than cigarettes is allowed anywhere on the property.
- F. Do not drink beverages (other than built-in drinking fountains) provided at the site for tenants and their guests.

1.11 OBSTRUCTIONS

- A. The Work is specified to be completed behind obstructions. At no additional cost to Owner, remove and reinstall obstructions which interfere with the completion of the work, including building signage, electrical outlets, hose bibs, vents, lighting, speakers, security devices, lightning protection system components, or similar obstructions.
- B. Ensure that components are properly reinstalled. Anticipate and include in the Contract Time and Contract Price necessary subcontractor, engineering, design, or consulting services for reinstallation of components.
 - 1. Engage a specialty subcontractor to repair and certify lightning protection system if removed during the Work.

1.12 CODES, ORDINANCES, FEES

- A. Perform Work in strict accordance with applicable codes and ordinances of regulatory agencies having jurisdiction over this Work or this Site.
- B. Obtain and pay for construction-related permits, including building permits, traffic lane or sidewalk closure permits, or utility taps and hook-ups if required. No additional compensation or increase in Contract Time will be made for the permit process.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 GENERAL

- A. Independently verify dimensions shown on Drawings or these Specifications. Notify Engineer of discrepancies before commencing Work, ordering materials, or fabricating parts.

- B. It is the intent of these Specifications to transfer all risk to Contractor for the following issues. No Change Order will be considered for an increase in the Contract Price or Contract Time for these issues.
1. The amount of joint widening actually necessary to achieve the minimum joint widths specified.
 2. Dimensional variations from place to place on the building, or between actual field dimensions and those indicated in these Specifications and Drawings.
 3. Consequences of moisture in or on substrates. Perform testing as necessary to determine whether moisture will interfere with the Work.
 4. Adhesion to existing coatings, if not removed as part of surface preparation. Remove questionable existing coatings.
 5. Unexpected consequences that arise directly from Contractor's substitutions (i.e., not including consequences that also would have arisen from the specified materials and/or methods), whether or not substitutions were approved by Owner or Engineer.
 6. Providing an installation complete in every respect. In the event that additional details or special construction are required to complete the Work, Contractor shall furnish and install material and equipment usually furnished with systems or required to complete the installation. Where used in these Bidding Documents, unless specifically stated otherwise, the terms "provide", "furnish", and "install" each require procuring, delivering to the site, fabrication as necessary, and installing the materials, products, or components listed.

END OF SECTION

SECTION 013301
SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Submit complete sets of submittals required by all Sections of these Specifications.
- B. Revise and update submittals as necessary to account for changed or substituted materials used on the Project.

1.02 GENERAL

- A. Submittals processed by Engineer do not become Contract Documents. The purpose of submittals is to establish a reporting procedure for Engineer to monitor Contractor's compliance with the Contract Documents. If deviations, discrepancies, or conflicts between submittals and the Contract Documents are discovered (before or after processing by Engineer), the Contract Documents shall control.
- B. Review of submittals by Engineer or Owner does not relieve Contractor from responsibility for compliance with the Contract Documents, or for errors that may exist in submitted information.
- C. Carefully review and coordinate all aspects of each item being submitted. Verify that each item and its appropriate submittal conform in all respects with the specified requirements.
- D. Owner will pay for Engineer's first review and, if necessary, 1 subsequent review of each submittal. The cost of additional reviews, if required, may be back-charged to Contractor at Engineer's prevailing unit rates and deducted from payments to be made to Contractor.

1.03 SCHEDULING

- A. Make submittals far enough in advance of scheduled dates of commencement, execution or installation to provide time required for reviews, for securing necessary approvals, for possible revisions and re-submittals, and for placing orders and securing delivery.
 - 1. In scheduling, allow at least 1 calendar week for review by Engineer following receipt of Submittals.
 - 2. In scheduling, allow at least 2 calendar weeks for color selection(s) by Owner; see also Section 016001.
- B. Make revisions when required by Owner and/or Engineer and resubmit for review within 3 days after receipt. If submittals are rejected, submit corrected submittals before commencing portions of the Work related to those submittals.
- C. Accept responsibility for delays resulting from incomplete or rejected submittals.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 SUBMITTAL PREPARATION

- A. Number consecutively and clearly identify submittals, including the Specification Section requiring each submittal. Show identification on at least the first page of each submittal, and elsewhere as necessary for positive identification of the submittal.
 - 1. If Engineer provides Contractor a blank submittal log at the commencement of the Contract Time, use the submittal numbering system shown on the log. A log may be provided as a convenience to Contractor; the log may not be inclusive of all required submittals.
- B. Submit **1 copy** of each submittal item specified in all Sections of the Specifications, unless indicated otherwise.
- C. Issue each submittal **on single-sided 8-1/2-inch by 11-inch copy paper**, wherever practicable.
- D. Accompany each submittal package with a letter of transmittal listing the submittals included, and describing information required for identification and checking.
- E. Where contents of submitted literature from manufacturers includes data not pertinent to the submittal, clearly show which portions of the contents are being submitted for review (for example, circle selected part numbers in tables with multiple part numbers).
- F. Partial submittals may be rejected for non-compliance with the Contract Documents.
- G. Review comments of the Engineer will be shown on the original submittal. Engineer will make and distribute necessary additional copies. Each submittal will be processed as follows and recorded on Engineer's copy of the submittal log:
 - 1. "No corrections noted" – forwarded to Owner without modification, with Engineer's recommendation for approval.
 - 2. "Make corrections noted" – forwarded to Owner with Engineer's modifications, with Engineer's recommendation for approval as modified.
 - 3. "Revise and resubmit" – rejected by Engineer and returned to Contractor for specific revisions.
 - 4. "Not acceptable; see remarks" – rejected by Engineer and returned to Contractor due to substantial non-compliance.

3.02 PRE-CONSTRUCTION SUBMITTALS

- A. Submit "Pre-Construction Submittals" in 1 complete set at least 1 week before the pre-construction meeting, or as otherwise specified.

- B. Contractor may temporarily mobilize to the site to perform preliminary tests and mock-ups after approval of insurance submittals, but may not commence production Work until Pre-Construction Submittals have been approved.
- C. For each material intended to be used, submit:
1. Latest edition of pertinent manufacturer's published literature, including installation instructions and manufacturer's written recommendations for maintenance.
 2. Samples of materials, where practicable.
 3. Color charts for Owner's preliminary color selection; see Section 016001.
 4. Latest edition of material safety data sheets (MSDS).
 - a) Contractor's agreeing to fulfill this request for submittal of MSDS, as evidenced by the executed Contract Documents, shall constitute a representation by Contractor that Contractor is familiar with the safe use and handling of the products intended to be used; therefore, Contractor is encouraged to study the MSDS and provide copies to persons that may be affected by the products.
 - b) Maintain a copy of the approved submittal MSDS at the site, in the binder specified in Section 014301, readily accessible in case of emergency.
 - c) **DO NOT BRING ANY MATERIALS OR PRODUCTS TO THE SITE UNTIL RECEIVING APPROVAL OF THE SUBMITTED MSDS.**
- D. Submit a letter from each manufacturer (1 letter for all of their products submitted is sufficient) stating that:
1. They have reviewed these Specifications and Drawings.
 2. Their products are suitable for the intended purpose.
 3. Their products comply with applicable regulations for volatile organic compounds (VOCs).
 4. They will visit the site periodically to observe compliance with their installation requirements.
 5. They will issue a guarantee in accordance with the requirements of these Specifications.
 6. Contractor is an acceptable applicator or installer of manufacturer's guaranteed system as herein specified.
 7. Their products are compatible with materials that they will contact, as disclosed in these Specifications and Drawings, including materials not produced by that manufacturer.
- E. Submit shop drawings for details that will deviate from Drawings; for which no detail is provided in Drawings; or which are required by other Sections of these

Specifications.

1. Make shop drawings accurately to a scale sufficiently large to show pertinent aspects of the item, preferably using isometric views.
2. Where practicable, submit shop drawings on 8-1/2 -inch by 11-inch copy paper. If necessary, increase size to 11-inch by 17-inch copy paper. If necessary submit shop drawings over 11 inches by 17 inches in triplicate blue line or black line prints of each sheet.

F. Submit the following additional items:

1. Permits required by the local municipality. Contractor is solely responsible for obtaining necessary permits.
 - a) If Contractor believes that no permits are required, Contractor shall submit a notarized letter stating that, to the best of Contractor's knowledge, no permits are required.
2. Insurance certificates issued to Owner by Contractor's insurance carrier listing coverages. Certificates shall include:
 - a) Contractually required Additional Insureds.
 - b) Coverage amounts not less than those specified.
 - c) Waivers of subrogation.
 - d) Promise to provide a minimum of 30 days written notification before cancellation or material change in coverage (i.e., strike the common but unacceptable phrase "endeavor to").
3. Preliminary project schedule, in accordance with Section 013001.
 - a) Include itemized list of proposed mock-ups, and schedule for completing them.
4. The Binder specified in Section 014301, for review; the binder will be returned for use during the Work.
5. Emergency action plan, including:
 - a) Emergency contact names and phone numbers for:
 - i. Contractor's office and key personnel.
 - ii. Subcontractors' office and key personnel.
 - iii. Supplier of scaffolding or other major equipment, if rented.
 - iv. Engineer's personnel (obtain from Engineer).
 - v. Owner's personnel (obtain from Owner).
6. Barricading plan, in accordance with Section 015001.
7. Pre-job damage survey video, in accordance with Section 013001.
8. Other items required in other Sections of these Specifications or the

General or Supplementary Conditions.

3.03 POST-CONSTRUCTION SUBMITTALS

- A. Submit "Post-Construction Submittals" at demobilization.
 - 1. Request for Designation of Final Completion, with completed (initialed) punch-list.
 - 2. Record Documents showing work performed, batch numbers used, and deviations from Contract Documents.

3.04 FINAL SUBMITTALS

- A. Submit Final Submittals as soon as they are available (which may be after the Contract Time has expired). These submittals need not be issued together, but as soon as each is available.
 - 1. Completed manufacturers' guarantees, with no deviations from the approved blank copies submitted with Pre-Construction Submittals.
- B. If 90 days after Substantial Completion the Final Submittals have not been received by Engineer, Engineer may elect one of the following options, at Engineer's sole discretion:
 - 1. Designate Final Completion if documents within Contractor's control have been submitted (i.e., not including manufacturers' guarantees).
 - 2. Close out the Project without processing Contractor's Application for Payment for retainage (i.e., Contractor forfeits retainage, not as a penalty, but as reimbursement to Owner for the additional necessary coordination services performed by Engineer).

3.05 PROPOSED SUBSTITUTIONS

- A. If a product was erroneously specified, discontinued, or otherwise not available or suitable, submit a Request for Information rather than a substitution request; Engineer will provide supplemental design information. Otherwise, it is intended that the Work shall be completed with the products specified. Further, it is essential to obtain competitive bids based on the same products and procedures.
- B. Proposed substitutions may be considered during construction if one of the following applies:
 - 1. There is a compelling reason that benefits the Owner, such as cost savings, superior availability, or anticipated improved performance; or
 - 2. If no product was specified in the Bidding Documents to fulfill a particular requirement, or was specified by reference standards or description only, then products submitted meeting the specified requirements will be considered.
- C. Requests for substitutions accompanied by insufficient data will not be considered. No substitution will be considered unless request includes information required in the General Conditions and:

1. CSI Substitution Request Form 13.1A.
 2. A complete description of the proposed substitution.
 3. The name of the material or equipment for which it is to be substituted
 4. Drawings, cuts, samples, performance and test data, and other data or information necessary for a complete evaluation.
 5. The proposed increase or decrease in the Contract Time and Contract Price.
- D. Submission of a proposed substitution shall constitute a representation by Contractor that Contractor has investigated the proposed product and determined that it meets or exceeds the requirements of the specified product.
1. See also the discussion of Contractor's liability for unexpected consequences of substitutions in Section 013001.
- E. If proposed substitutions are not accepted in writing by Engineer or Owner, the Work shall be completed with the products and procedures specified for the Contract Price and within the Contract Time.

END OF SECTION

SECTION 014301
QUALITY ASSURANCE

PART 1 - GENERAL

1.01 DESIGN INTENT

- A. Engineer designed the Work conveyed in these Contract Documents for Owner's benefit. These Contract Documents are between Owner and Contractor only. Nothing contained in these Contract Documents shall create a contractual relationship with Engineer. Contractor acknowledges that Engineer owes Contractor no duty.
- B. Owner and Contractor acknowledge that the normal design process continues throughout construction, as issues arise. *therefore*, communication with Engineer during construction is essential, and Engineer welcomes Contractor's comments, ideas, and questions.
- C. Contractor shall issue Requests for Information (RFIs) to Engineer in a timely manner, in writing (preferably by electronic mail).
 - 1. Number each RFI.
 - 2. Indicate the latest date by which a response is needed so as not to delay the Work. Allow at least 2 business days after receipt for a response (complex issues may require longer to research).
 - 3. Maintain a log of RFIs showing the status of each.
 - 4. If practicable, include a proposed solution to each issue raised in an RFI.

1.02 CONTRACTOR

- A. Maintain an effective quality assurance program, independent of activities by Owner, Engineer, or manufacturers. Contractor may not rely on Owner's monitoring nor on Engineer's monitoring (which is performed on behalf of Owner) as a substitute for performing Contractor's own quality assurance program.
- B. Accept sole responsibility for the quality of the Work.
- C. Provide copies of these Specifications and Drawings to subcontractors and manufacturers.
- D. Notify Engineer orally, followed in writing, of conditions that Contractor believes will yield unsatisfactory performance, or of items of non-conformity between these Specifications and manufacturers' recommendations or instructions, or of discovered errors or omissions. Failure to submit written notification shall be construed as a representation by Contractor that the Contract Documents are acceptable to Contractor, that they are sufficient in scope and detail to indicate and convey understanding of terms and conditions for performance and furnishing of the Work, and that Contractor reasonably believes the Work will perform as intended.

- E. Maintain a 3-ring binder at the site during the project. Update binder at least once per week and allow Engineer to review during site visits. Maintain the following information and divisions:
1. A fully executed copy of the Contract Documents, including specifications and Drawings.
 2. Change Orders, Work Change Directives, and Field Orders.
 3. Correspondence between Contractor, Engineer and/or Owner.
 4. Meeting minutes.
 5. Site visit reports.
 6. Schedules.
 7. Daily logs of work completed and materials used, including batch numbers.
 8. Complaint log, listing complaints received from any party of any nature, and the actions taken and resolution, with dates.

1.03 SCHEDULE

- A. Submit initial schedule before mobilizing to the site to commence the Work. Submit an updated schedule each time the previously submitted schedule becomes inaccurate, but no less often than with each application for payment.

1.04 MONITORING AND DEFECTIVE WORK

- A. Engineer intends to periodically monitor the Work for general compliance with the design intent and with the Contract Documents, and to observe the progress and status of the Work.
- B. If Engineer is not kept adequately informed of Contractor's schedule and therefore has to repeat a site visit or wait an undue amount of time at the site to observe particular steps in the execution of the Work, the cost of the wasted time may be back-charged to Contractor at Engineer's prevailing unit rates and deducted from payments to be made to Contractor.
- C. Provide access for Engineer to observe Work in progress and completed Work.
1. Unless Contractor submits requirements for Engineer to use Contractor's access equipment (such as forms or training) prior to executing the Contract Documents, then no such requirements will be enforceable.
 2. Engineer intends to spend an average of 6 man-hours per week per Contractor crew on site evaluating the Work with Contractor during Contractor's regular working hours. During these site visits, Contractor's productivity may be interrupted.
- D. Engineer will make a hand-written report of each site visit. If requested by Engineer, Contractor's Superintendent shall sign each report to acknowledge that he has reviewed it, whether or not he agrees with the information reported.

- E. Engineer will provide periodic reports of activities and Defective Work items in a timely manner to Owner and Contractor. However, Defective Work shall be corrected when it is reported (subject to the Owner's discretion as outlined below), regardless of whether the report is timely.
 - 1. If Engineer or Owner does not discover or report a Defective Work item, that item shall not be considered accepted.
 - 2. Erroneous approval by Engineer or Owner of Work shall not be binding if that Work is later discovered to be Defective.
 - 3. Once reported to Contractor, Defective Work items shall be considered to require correction (subject to the Owner's discretion as outlined below) until they are actually corrected, regardless whether they are mentioned again.
- F. Notify Engineer at least 48 hours before concealing completed work. Work concealed before approval by Owner or Engineer shall be considered Defective and shall be uncovered at Contractor's expense.
- G. When a portion of the Work is designated by Engineer or Owner as Defective, Contractor shall correct the Defective Work with no increase in the Contract Time or Contract Price.
- H. When a portion of the Work is designated by Engineer or Owner as Defective, Contractor shall promptly investigate the extent to which similar work has the same conditions. All similar work shall be considered Defective until the full extent of the defective conditions are documented by Contractor to Owner's satisfaction.

1.05 MANUFACTURER'S REPRESENTATIVE

- A. Ensure that manufacturers' representatives perform site visits at the beginning, regularly during, and at Substantial Completion of the Work.
- B. Notify Engineer of manufacturers' representatives planned site visits in a timely manner so that Engineer can coordinate his site visits to correspond. Ensure that manufacturers visit the site only after notifying Engineer.
- C. Provide to Engineer copies of correspondence obtained from manufacturers pertinent to the Work promptly after correspondence is received.

<p>Commentary - Non-Mandatory Information: It is in the best interest of all parties that manufacturers are fully involved in the project, to ensure the successful use of their products. Therefore, submittals are required to demonstrate that the manufacturers are familiar with the project, and it is required that they visit the site as often as possible. It is the Contractor's responsibility to ensure manufacturers' involvement.</p>

1.06 CREW QUALIFICATIONS

- A. Contractor's personnel shall have a minimum of 5 years documented experience performing similar work satisfactorily.

- B. Each person performing work on this project shall be individually pre-qualified as follows:
 - 1. Conduct a mock-up of the Work that individual will perform during production, as specified below.

1.07 MOCK-UPS

- A. Perform a mock-up of each portion of the Work within 7 days after the Contract Time commences to run, and at least 7 days prior to commencing production work of that type.
 - 1. Submit a proposed schedule for commencing mock-ups for items not commenced within these times, even for those items for which mock-ups or production work cannot possibly, reasonably, or obviously be commenced within these times. Include the proposed location where each product combination will be applied.
 - 2. Coordinate schedule with Engineer at least 48 hours in advance of performing mock-ups.
 - 3. Ensure that a manufacturer's technical representative is on site to observe the mock-ups.
- B. Select areas to perform the mock-ups that are:
 - 1. Representative of the majority of the typical work on the project.
 - 2. Readily accessible by Property Contact for review.
 - 3. In inconspicuous locations.
- C. The first work performed of each type may be designated as the mock-up, and, if accepted, may remain as part of the Work.
 - 1. Until mock-up is approved, perform no additional work of that type.
 - 2. Perform the mock-ups using the same materials, preparation and application procedures to be used in the production work. The mock-ups shall reflect the proposed color, texture, and workmanship expected during the work.
 - 3. On behalf of Owner, Engineer will approve or reject mock-ups. If accepted, the mock-ups will establish the standards for the quality, appearance, products, and procedures of the Work.
 - 4. Approval of mock-ups does not constitute waiver of any provisions of the Contract Documents unless such deviations are specifically approved in writing.
- D. Allow the mock-ups to remain undisturbed during the Work as a standard for judging completed work.
- E. Remove and replace rejected mock-ups at no additional cost to Owner.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

**SECTION 015001
TEMPORARY FACILITIES AND CONTROLS**

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Provide or coordinate with Property Contact the use of temporary power, water, barriers and other construction facilities.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 TEMPORARY POWER SERVICE

- A. Connect to existing power service. Do not disrupt Owner's need for continuous power service by connecting to service or by consumption of power.
- B. Owner will pay cost of energy used. Exercise appropriate measures to conserve energy.
- C. Owner will provide supplemental electrical power service for Contractor's use at no cost to Contractor only if requested by Contractor in a written submittal accompanying Bid.
 - 1. If Contractor fails to request additional electrical power service with Bid and Owner's existing power service is insufficient for Contractor's needs, Contractor shall provide permanent additional electrical service connections by a licensed electrical contractor at no cost to Owner, or provide gasoline powered electric generators.
- D. Provide arc-fault and ground fault circuit interrupters on power cords (AFCI and GFCI).

3.02 TEMPORARY WATER SERVICE

- A. Connect to existing water source for construction operations.
- B. Owner will pay cost of water used. Exercise appropriate measures to conserve water.

3.03 TEMPORARY FIRE PROTECTION

- A. Maintain a minimum of 1 30-pound Type ABC Dry Chemical fire extinguisher at each work site.

3.04 BARRICADING

- A. Provide barricades, walk-through sidewalk covers, fences, netting, and signs sufficient to:
 - 1. Completely protect persons and property below and adjacent to work areas, and control traffic from exterior walls out to curbs (and beyond if necessary) so that the public is not exposed to hazards from the work.

2. Prevent unauthorized entry into work areas.
 3. Allow tenants and visitors to safely access the building.
- B. Do not close off or make building entrances or exits inaccessible, nor block open doors or hatches, unless approved in advance by Property Contact.
 - C. Provide signs, professionally printed in large black letters on a bright background color, reading “no parking”, “workers above”, etc., as necessary to supplement the barricades.
 - D. Barricades may be previously used or rental equipment, but shall be constructed with reasonable quality, with straight and plumb lines. Ensure that materials and workmanship are commensurate with the building being protected. Paint barricades to match building or as required by Owner to minimize aesthetic detraction.
 - E. Submit a plan-view drawing showing the proposed barricading.

Commentary - Non-Mandatory Information: As stated elsewhere in the Contract Documents, the Contractor is solely responsible for site safety, including protecting the public. Because the project involves remedial construction on an occupied building, public access must be maintained during the Work, but in a controlled manner. The exact manner of protecting the public is not specified because it is the Contractor’s responsibility. The Contractor must provide barricades to prevent pedestrians from accessing unprotected areas. Fences may be used to direct pedestrians to covered areas.

3.05 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary equipment, facilities and materials, prior to Substantial Completion.
- B. Clean and repair damage caused by installation or use of temporary services and connections.
- C. Restore existing facilities used during construction to pre-construction condition.

END OF SECTION

SECTION 016001
PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Provisions for the quality and handling of materials.

1.02 QUALITY ASSURANCE

- A. Provide best available type of the products specified. If there is a cost associated with different variants of specified products, include in Contract Price the most expensive type.
- B. Comply with the Contract Documents and referenced standards as minimum requirements.
- C. Ensure that materials are new (not surplus), first quality (not rejected from other projects or “seconds”), and delivered to site in the manufacturer's original, unopened, and properly labeled containers.
- D. Ensure that product labels indicate the manufacturer's name; name and type of material; color; mixing and installation instructions; and curing time, if applicable.
- E. Ensure that containers of those materials having a critical shelf life bear the date material was packaged or the expiration date of the material. Remove from site material for which the normal shelf life has expired.
- F. Maintain containers in a clean condition, free of foreign materials and residue.
- G. Do not re-use materials or components removed from existing structure, except as specifically required or allowed by Contract Documents.

1.03 DELIVERY

- A. Transport products by appropriate methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging.
- B. Provide equipment and personnel to handle products by appropriate methods to prevent soiling or damage.
- C. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.

1.04 STORAGE

- A. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.
- B. Neatly arrange the products in storage to provide access for inspection. Periodically inspect products to ensure that they are undamaged and maintained under required conditions.

1.05 COLOR SELECTION

- A. For each material or product requiring color selection, submit standard color chip fan or manufacturer's applicable color charts.
 - 1. Submit 1 directly to Owner, to expedite selection.
 - 2. Maintain an identical duplicate, and submit another identical duplicate to Engineer at the same time, to facilitate communication.
- B. For paints and coatings:
 - 1. Owner will select up to 4 Preliminary Colors for each substrate.
 - 2. Provide 8-1/2-by-11-inch drawdown card for each Preliminary Color selected by Owner. Include pigment formula label on the front (coated side) of each drawdown card.
 - 3. If Owner rejects all of the Preliminary Colors for substrate, repeat the process above until Owner selects Test Colors.
 - 4. Owner will select up to 2 Test Colors for application on mock-up areas.
 - 5. Apply a mock-up of each Test Color. Each mock-up shall be a minimum of 2-feet by 2-feet.
- C. For sealants and other products:
 - 1. Owner will select up to 4 Test Colors for each substrate for application on mock-up areas.
 - 2. Apply a mock-up of each Test Color. Each mock-up shall be a minimum of 2 feet long.
- D. Owner will select Final Colors from mock-ups. Owner's approval will be for appearance only, and shall not constitute approval of the mock-up for any other purpose.
- E. If Owner rejects all of the Test Colors for substrate, repeat this process until Final Colors are approved.
- F. Contractor will be entitled to a commensurate Contract Time extension for each repeat process if Contractor provides detailed records documenting the delay. No increase in Contract Price will be considered unless the Owner fails to select Final Colors reasonably efficiently and Contractor obtains approval before incurring additional costs.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

**SECTION 017401
CLEANING AND WASTE MANAGEMENT**

PART 1 - GENERAL

1.01 HOUSEKEEPING

- A. Provide required personnel, equipment, and materials needed to maintain the site in a clean condition throughout the project duration. Except as may be specifically provided otherwise in the Contract Documents, “clean” shall be construed to mean the level of cleanliness generally provided by skilled cleaners using commercial quality maintenance equipment and materials.
- B. Use only cleaning materials and equipment that are compatible with the surface being cleaned, as recommended by the manufacturer of the materials.
- C. Provide adequate storage for items awaiting removal from the site, with appropriate measures for fire safety and the ecology of the surrounding area.
- D. Do not store flammable or odor-causing materials or rubbish overnight or near air intakes for building.
- E. Do not allow rubbish to accumulate or to remain on the premises or site beyond a reasonable length of time. Remove trash daily from the work area.
- F. Do not drop or throw rubbish or waste from one level to another.
- G. Immediately after unpacking materials, collect and remove from the premises packing case lumber or other packing materials, wrappings and other like flammable wastes.
- H. Assume sole responsibility for leaving Work, including that performed by subcontractors or vendors, in a clean and proper condition, satisfactory to Owner.
- I. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution regulations.
 - 1. Do not burn or bury rubbish or waste materials on the site.
 - 2. Do not dispose of volatile wastes, such as mineral spirits, oil, or paint thinner, in storm or sanitary drains.
 - 3. Do not dispose of wastes into streams or waterways.

1.02 FINAL CLEANING

- A. Remove marks, stains, fingerprints, and soil or dirt from painted, decorated, and stained work, ceiling and wall surfaces, window frames and glass, doors, and clean as required to leave in first class condition.
- B. Sweep and/or vacuum surfaces clean prior to final payment.
- C. Upon completion of the work, thoroughly clean the site and surrounding grounds, and remove and dispose of trash and rubbish left in the course of the work.
- D. As Work progresses, remove construction soiling from windows on each zone.

- E. After completion of remedial work, employ professional window washers to clean windows to that degree typically performed on a Class A building.
 - 1. Perform a mock-up to test cleaning products and methods on glass. Obtain Property Contact's approval of final cleaning result on mock-up before proceeding with remainder of building.
 - 2. Verify acceptable final cleaning by viewing through glass from interior. Clean to match standard approved during mock-up.
- F. Property Contact will be the sole judge of acceptability of final cleaning of windows.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 027411
LOCATING, MARKING AND REMOVING CONCRETE, OBSERVING CONCRETE
REMOVAL AREA, AND SHORING

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. Works consists of furnishing all labor, materials and equipment to locate, mark and remove deteriorated concrete and providing shoring.

PART 2 - PRODUCTS

- A. Not Used

PART 3 - EXECUTION

- B. General

1. Delaminated and Spalled Concrete Deteriorated Areas: Delaminated areas are defined as concrete members with fracture planes parallel to the member's surface. Spalled areas exhibit cracked and loose concrete, is friable or honeycombed.
2. Locate deteriorated areas by dragging a chain drag device over the surface, striking the surface with a hammer and by visual examination. Deteriorated areas produce a "hollow" sound when sounded with a chain drag device or hammer. Sound visually identified deteriorated areas to determine the extent of deterioration.
3. Marking Deteriorated Areas: Mark the boundaries of the identified deteriorated areas. Use water insoluble spray paint for floor surfaces. Use yellow chalk for all other surfaces. Engineer may resound/visually examine marked area to verify all marked areas and may mark additional areas. Furnish marking material is incidental to the Work.
4. Up to maximum 30-pound pneumatic hammers may be used for full depth slab removal, up to 15-pound hammers may be used for topping slab removal. Remove concrete around floor reinforcement, column beam, and soffit concrete removal using a maximum 15-pound pneumatic hammer.
5. Observing Concrete Removal Area: After initial concrete removal is complete Engineer will sound/visually examine concrete removal area and mark additional concrete for removal if required. Engineer shall sound/examine areas after completion of additional concrete removals and mark additional concrete removal if required.
6. Shoring. Provide temporary shoring consisting of metal shores capable of supporting a minimum of 20,000 pounds at the shore's installed height. Erect and maintain shoring as recommended by the shoring equipment manufacturer and applicable governmental regulations. Remove shoring at the conclusion of the repair.

END OF SECTION

SECTION 037411 CONCRETE

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. See Section 011102.

1.02 QUALITY ASSURANCE

- A. Contractor's personnel shall have a minimum of five years experience installing the materials specified in this section.
- B. Perform work in accordance with American Concrete Institute's "Standard Specification for Structural Concrete" ACI 301.

PART 2 - PRODUCTS

2.01 CONCRETE MATERIALS

- A. Aggregate: Normal-weight, complying with ASTM C 33. Provide aggregate from a single source. Coarse aggregate to be size indicated crushed limestone or granite. Fine aggregate to be natural sand. Aggregate shall contain no more than 0.01 percent chloride ions. Verify that all aggregates are not susceptible to detrimental freeze-thaw deterioration, alkali-silica reaction, or other deleterious reactions when combined with other concrete constituents. Provide written confirmation of non-reactive aggregate quality. Coarse and fine aggregate shall comply with Kansas Department of Transportation specifications regarding durability and ASR requirements.
- B. Water: Potable and free of deleterious materials.
- D. Air-Entraining Admixture: complying with ASTM C 260.
- E. Low-Range Water-Reducing Admixture: complying with ASTM C 494, Type A.
- F. High-Range Water-Reducing Admixture (Superplasticizer) if required: complying with ASTM C 494, Type F or Type G.
- G. Calcium chloride, thiocyanates, or admixtures containing more than 0.2 percent chloride ions are not permitted.

2.02 CONCRETE

- A. Prepare design mix concrete by either laboratory trial batch or field experience methods as specified in ACI 301. If trial batch method is used, use an independent testing facility acceptable to Engineer for preparing and reporting proposed mix designs. Include cost of mix designs and trial batches in the Work.

- B. Submit written reports to Engineer for proposed concrete mixes at least 7 days prior to start of concrete placement. Do not begin concrete production until Engineer has reviewed mixes.
- C. For each class of concrete, design mix to provide concrete with the following properties:
- D. Bonded Concrete Overlay
 - 1. Minimum 28-day compressive strength 4,000 PSI
 - 2. Minimum cement content 658 LB/CY
 - 3. Maximum water/cementitious material ratio 0.40
 - 4. Air content 6.0% (minus 1% to plus 2%)
 - 5. Slump at point of discharge with addition of water reducer 2 to 4 inches
 - 6. Temperature at point of discharge 50-90 degrees F
 - 7. Maximum chloride ion content by weight 0.15%
 - 8. Coarse aggregate 3/8-inch nominal scale
 - 9. Polypropylene Fibers 1.0 pounds per cubic yard
- D. When characteristics of materials, job conditions, weather, test results, or other circumstances warrant, minor mix design adjustments may be requested by Contractor at no additional cost to Owner and as accepted by Engineer. It shall be the option of the Engineer to require laboratory test data for revised mix design and strength results at no additional cost to Owner.
- E. Use high-range water-reducing admixture (superplasticizer) in concrete as required for placement and workability.

2.03 REINFORCING MATERIALS

- A. Reinforcing Bars: ASTM A 615, Grade 60.
- B. Polypropylene Fibers: ASTM C 1116 Fibermesh 150 Fibermesh by Propex.
- C. Provide supports for reinforcement including bolsters, chairs, spacers and other devices for spacing, supporting and fastening reinforcing bars and welded wire fabric in place. Use wire bar type supports complying with CRSI recommendations.
- D. Provide supports with legs that are plastic coated (CRSI, Class 1).

2.04 FORMS FOR EXPOSED CONCRETE

- A. Unless otherwise indicated, construct formwork for exposed concrete surfaces with plywood, metal, metal-framed plywood faced, or other acceptable panel-type materials or foam type product intended for concrete forming, to provide continuous, straight, smooth, exposed surfaces to match existing finish/texture of

existing formed surfaces. Furnish forms in largest practicable sizes to minimize number of joints.

- B. Provide form material with sufficient thickness to withstand pressure of newly-placed patching material without bow or deflection.

2.05 RELATED MATERIALS

- A. Packaged concrete: Minor floor repair SikaQuick EZ Patch or equivalent approved by Engineer, minimum 1-day compressive strength 5,000 psi. Minimum 28-day compressive strength 6,000 psi, extend repair mortar with mortar manufacturer aggregate as recommended by manufacturer.
- B. Soffit repair SikaTop -123 Plus or equivalent approved by Engineer minimum, minimum 28-day compressive strength 5,000 psi.
- C. Absorptive cover: Burlap cloth, weighing approximately 9 oz. per square yard, complying with AASHTO M-182, Class 2, washed to remove sizing.
- D. Moisture-retaining cover: Provide one of the following, complying with ASTM C 171: waterproof paper; polyethylene film; polyethylene-coated burlap.
- E. Curing Compound: Liquid-type membrane-forming curing compound complying with ASTM C 309, Type 1-D, Class A. Do not use curing compounds where coatings and other surface treatments may be applied unless the curing compound is removed by abrasive or shotblast.
- F. Reinforcement Adhesive: HIT HY 200 Injection Adhesive by Hilti or equivalent approved by Engineer.
- G. Form-Release Agents: Provide commercial formulation form-coating compounds that will not bond with, stain, or adversely affect concrete or patch material surfaces and will not impair subsequent treatments of concrete surfaces.
- H. Bonding Grout
 - 1. Bonded Overlay; Provide bonding grout consisting of cement, sand, and water proportioned similar to the bonded overlay concrete and mixed to a paste consistency.

PART 3 - EXECUTION

3.01 GENERAL

- A. Inspect floors and soffits for spalled and delaminated concrete. Mark locations of concrete spalls and delaminations.
- B. Ensure that adequate shoring is provided prior to concrete removal.

3.02 PATCH PREPARATION

- A. Use mechanical means to break out and remove deteriorated, loose, and delaminated concrete.

- B. Remove concrete in patch area until sound concrete substrate is obtained. Extend removal along bars to locations where bar is free of corrosion and well bonded to surrounding concrete.
- C. Abrasive blast patch area, provide minimum 20 percent exposure of coarse aggregate, remove loose concrete, dirt and other deleterious materials. Ensure that patch substrate is free of all laitance, dirt, dust, grease, efflorescence, paint, or other foreign material that can impair new patch bond.
- D. Ensure that patch substrate has a minimum 1/4 surface roughness.
- E. Sawcut patch edges a maximum of 1/2 inch or less as necessary to avoid cutting reinforcing steel.
- F. Measure patch area and record patch locations for Engineer's review.

3.03 FORMWORK

- A. Design, erect, support, brace and maintain formwork to support vertical and lateral loads that might be applied until cured patching material can support such loads.
- B. Take responsibility for design, engineering, and construction of formwork. Design formwork to be readily removable without impact, shock or damage to cast-in-place concrete surfaces and adjacent materials.
- C. Construct formwork to sizes, shapes, lines to match existing construction lines and grades as closely as practical, and to obtain accurate alignment, location, grade, level and plumb work in finished structures.
- D. Solidly butt joints and provide backup at joints to reduce cement paste leakage.
- E. Fabricate formwork for easy removal without hammering or prying against patching material surfaces. Provide crush plates or wrecking plates where stripping may damage cast concrete surfaces.
- F. Chamfer exposed corners and edges, using wood, metal, PVC or rubber chamfer strips fabricated to produce uniform smooth lines and tight edge joints where existing construction edges are chamfered.
- G. Thoroughly clean formwork and adjacent surfaces to receive patching material. Remove chips, wood, sawdust, dirt or other debris just before patching material is placed. Retighten formwork and bracing after patching material placement to reduce mortar leaks and maintain proper alignment.

3.04 FORMWORK PREPARATION

- A. Coat contact surfaces of formwork with a form-release agent before placing reinforcement. Thin form-release agent only with thinning agent of type, in amount, and under conditions of form-release agent manufacturer's directions. Do not allow excess form-release agent to accumulate in formwork or to come into contact with concrete surfaces against which fresh patching material will be placed.

3.05 BONDED CONCRETE TOPPING SUBSTRATE PREPARATION

- A. Shot blast, abrasive blast, and/or waterblast substrate to remove a minimum of 1/8-inch of concrete and to achieve minimum 1/8-inch amplitude. Follow scarification with clean water blast to remove residual aggregate and fines adhered to substrate.
- B. If water blast is used, contain and treat water run-off resulting from waterblast operations. Do not allow water runoff to enter building or Owner's storm/sanitary system without proper pretreatment that removes the majority of suspended solids; pretreatment subject to approval of the Engineer.

3.06 PLACING CONCRETE

- A. Before placing concrete, inspect and complete formwork installation, reinforcing steel, and items to be embedded or cast-in. Notify other crafts to permit installation of their work; cooperate with other trades in setting such work.
- B. Comply with ACI 304R "Guide for Measuring, Mixing, Transporting, and Placing Concrete."
 - 1. Deposit concrete continuously or in layers of such thickness that no concrete will be placed on concrete which has hardened sufficiently to form seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as herein specified.
 - 2. Deposit concrete as nearly as practicable to its final location to avoid segregation.
- B. Prepare area for patching material placement. Remove all dust, debris, and deleterious materials, then dampen repair area with water prior to placing patching material. Maintain existing concrete in damp condition. Remove standing water in repair area before placing patching material.
- D. Slab Repair Areas: Prepare area for concrete placement. Remove all dust, debris, and deleterious materials, then dampen repair area with water prior to placing concrete. Maintain existing concrete in damp condition. Remove standing water in repair area before placing concrete. Deposit and consolidate concrete by internal vibration in a continuous operation, within limits of construction joints, until the placing is completed. Provide rough broom finish for subsequent overlay.
- E. Consolidate concrete during placing operations so that concrete is thoroughly worked around reinforcement and other embedded items and into corners.
- F. Maintain reinforcing in proper position during concrete placement operations. Support pump hoses so that they do not displace reinforcement.
- G. Cold weather placing: comply with ACI 306.1 "Standard Specifications for Cold Weather Concreting."

1. Protect concrete work from physical damage or reduced strength which could be caused by frost, freezing actions, or low temperatures.
- H. When air temperature has fallen to or is expected to fall below 40°F within 12 hours, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50°F and not more than 80°F at point of placement.
1. Use isolation or heat enclosures to protect the concrete during placing and curing.
 2. Extend curing time during cold weather as directed by Engineer.
 3. Do not use frozen materials, or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
 4. Do not use calcium chloride, salt and other materials containing antifreeze agents or chemical accelerators, unless otherwise accepted in mix designs.
- I. Hot Weather Placing. When hot weather conditions exist, place concrete in compliance with ACI 305.
1. "Hot weather" exists when any combination of high air temperature, low relative humidity and wind velocity produces a rate of evaporation approaching 0.2 lb./sq.ft./hr., which in turn may impair the quality of fresh or hardened concrete. The rate of evaporation may be established by using Figure 2.1.5 in ACI 305 "Hot Weather Concreting".
 2. Cool ingredients before mixing to maintain maximum concrete temperature at time of placement below 90°F. Mixing water may be chilled, or chopped ice may be used to control temperature provided water equivalent of ice is included in total amount of mixing water; or use liquid nitrogen to cool concrete.
 3. Cover reinforcing steel with water-soaked burlap if it becomes too hot, so that steel temperature will not exceed the ambient air temperature immediately before embedment in concrete.

3.02 BONDED TOPPING SLAB PLACEMENT

- A. Dampen (not saturated) substrate with potable water. Immediately ahead of concrete placement, provide bonding grout spread then broomed into substrate, do not allow grout to dry. Remove dried grout and prepare substrate to clean condition in the event grout partially or fully dries prior to concrete placement.
- B. Place concrete then strike-off slightly above final elevation. Consolidate concrete with vibrating screed or vibrators designed to consolidate the thickness of concrete placed. Consolidate concrete to 98 percent of the concrete's unit weight. Consolidation equipment is subject to approval of the Engineer.
- C. Deposited concrete near its final position as possible; place concrete in continuous operation and terminate only at bulkheads or designated control joint.

- D. Adjust overlay concrete slump to prevent sloughing or uneven/rough concrete surface.
- E. Provide float or light broom surface transverse to traffic direction; broom finish subject to approval of Owner and membrane manufacturer.

3.03 CURING AND PROTECTING CONCRETE

- A. Protect freshly placed patching material from premature drying and excessive cold or hot temperatures.
- B. Start overlay moisture-curing immediately after finishing. Cover patching material surfaces with absorptive cover; thoroughly saturate cover with water and keep continuously wet. Place absorptive cover to provide coverage of patching material surfaces and edges, with 4-inch lap over adjacent absorptive covers. Place moisture-retaining cover over absorptive cover. Maintain moisture curing for a minimum of 48 hours, then air dry for 48 hours. Excess shrinkage cracks that occur following the initial 48- hour curing period will be considered as evidence of defective concrete and shall be replaced by Contractor
- C. Cure formed patching material surfaces, including undersides of beams, supported slabs and other similar surfaces, by moisture-curing with formwork in place for full curing period or until formwork is removed. If formwork is removed before the end of the full curing period, continue curing by applying a liquid membrane-forming curing compound, where appropriate. Apply in accordance with manufacturer's instructions.
- D. Prepackaged Patching material: Cure by moist cure for a minimum of 7 days.

3.04 REMOVING FORMWORK

- A. Formwork not supporting weight of patching material, such as sides walls and similar parts of the work, may be removed when patching material is sufficiently hard to not be damaged by form removal operations, provided curing and protection operations are maintained.
- B. Formwork supporting weight of patching material and other structural elements may not be removed until patching material has attained 3,000 psi compressive strength or as approved by Engineer.
- C. Formwork facing material may be removed 4 days after placement, only if shores and other vertical supports have been arranged to permit removal of formwork facing material without loosening or disturbing shores and supports.

3.05 PACKAGED CONCRETE

- A. Prepare substrate according to manufacturer's directions ensuring that surface is free of dust, dirt, oil and grease and other debris or residues that may adversely affect the bond of the packaged concrete to the existing concrete substrates.
- B. Mix, apply and cure packaged concrete according to manufacturer's directions.

- C. Do not add water or retemper to the patching material after original proportioning and mixing.

3.06 RELATED MATERIALS INSTALLATION

- A. Provide and install related materials according to manufacturer's recommendations.

3.07 MINIMUM TENSILE BOND OF PATCH AND TOPPING SLAB CONCRETE

- A. Notwithstanding the above, provide patch and overlay substrate preparation, and concrete placement and curing to achieve a minimum of 125 psi tensile bond strength of the new-to-existing concrete when tested in accordance with ACI C1583.

END OF SECTION

SECTION 075711

TRAFFIC BEARING MEMBRANE (WATERPROOFING MEMBRANE)

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. See section 011102.
- B. Furnish all materials, labor, equipment, and services necessary for and incidental to the installation of a vehicular traffic bearing membrane and wear course intended for weather exposure and vehicular traffic, including filling of voids, surface imperfections, bug holes, including non-moving joints and rough areas of substrate, with coating manufacturer-approved material and grinding off high spots, ridges and fins on concrete surface are incidental to the coating Work, providing cove sealant at horizontal-to-vertical transitions, all joints and substrate penetrations, and where otherwise required by membrane manufacturer is incidental to the coating application Work. Extend waterproofing membrane vertically minimum 4 inches up wall, columns, light pole bases, and other vertical surfaces. Included in this Work is abrasive blasting to remove scaled surfaces to sound concrete and filling scaled areas with membrane manufacturer materials.
- C. Furnish all materials, labor, equipment, and services necessary for repair of minor shallow scale areas using the leveling slurry method.

1.02 RELATED WORK

- A. Section 079011 – Sealant Installation: Installation of cove sealant and replacement of crack and joint sealant prior to traffic bearing membrane application.

1.03 SUBMITTALS

- A. Installer Qualifications: if required, submit copy of "Certificate of License" issued to installer by manufacturer. Submit installer resume listing previous projects of installer where membrane system to be provided for this project was installed. Provide previous project: location, size, owner name, contact person and phone number, membrane system installed, installation date, and copy of membrane warranty.
- B. Material Certificates: Provide material certificates, signed by manufacturer, certifying that the membrane used on this project meets all physical and performance properties published by the manufacturer at the time of installation and that the membrane is compatible and provide acceptable bond to the with surface applied vapor reduction system.
- C. Certificates: Submit a certified statement stating that all areas and surfaces have been inspected by the manufacturer and found satisfactory to receive the

membrane. Application of the membrane products will be construed by Owner as Contractor acceptance of substrate and substrate preparation.

1.04 QUALITY ASSURANCE

A. Mock-up installations:

1. Furnish and install one mock-up area of membrane (minimum 5 feet wide by 5 feet long) at least 10 days prior to beginning production work. Perform substrate preparation and install membrane using the same procedures for the project and in areas representative of the scope of work. Provide mock-ups at both existing membrane and concrete substrates. Ensure that mock-up is representative of both the parking stall areas and double texture areas. The mock-up will serve as the standard of workmanship required for the entire coating application.
2. The owner will inspect the mock-up area for color and texture (aggregate loading).
3. Perform adhesion tests in the presence of the membrane manufacturer representative that are recommended by membrane manufacturer at all membrane mock-up areas to verify satisfactory new membrane adhesion to substrates.
4. The engineer may also test the mock-up areas for tensile adhesion strength by direct tensile pull testing. Engineer's failure to test mock-up or production areas does not relinquish contractor's responsibilities. The minimum acceptable tensile adhesion strength is 200 psi. Failure of the concrete or the test adhesive below 200 psi may indicate an invalid test, as determined by engineer. All invalid tests will be retested. Failure of concrete or test adhesive above 200 psi is considered acceptable. Approved mock-up installation may remain intact throughout the project.

PART 2 - PRODUCTS

2.01 TRAFFIC BEARING MEMBRANE

- A. Acceptable membrane manufacturers:
1. Coating system: Auto-Gard E ® by Neogard. Provide manufacturer's standard black membrane color as selected by Owner. Provide coating system according to the schedule below:
 - a) Primer followed by elastomeric membrane base coat Neogard 70410 polyurethane coating at a rate of 60 sf/gal (20 dry mils) extend base coat over cracks and control joints which have received detail treatment. Follow with wear surface Neogard 70714/70715 (clear) epoxy at a rate of 100 sf/gal (16 dry mils) and aggregate seeded to refusal applied in multiple coats. Follow with lock coat Neogard FC7540/7964 at a rate of 100 sf/gal (14 dry mils).
 - b) Aggregate: Provide #3 flint aggregate. Owner reserves the right to vary the aggregate loading at no additional cost to the Owner. Aggregate loading may be changed for reasons, including but not limited to, improving slip resistance of coated surfaces
 - c) Primer: As recommended by membrane manufacturer for conditions.
 - d) All other materials: supplied by Neogard.
- B. Other acceptable membrane manufacturers are Sika, Tremco, and Lyntal; provide other manufacturer system similar to the above subject to Engineer approval.

2.02 MISCELLANEOUS MATERIALS

- A. Aggregate: Provide granite, quartz, silicon carbide, or other weather resistant mineral with hardness of not less than 6.5 (Moh's scale) recommended by membrane manufacturer. Owner reserves the right to vary the aggregate loading at no additional cost to the Owner. Aggregate loading may be changed for cause, including but not limited to, improving slip resistance of coated surfaces.
- B. Primer: As recommended by membrane manufacturer for conditions.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Proceed with traffic bearing membrane work only after the substrate construction and preparation work has been completed, including installation and testing of the surface applied vapor reduction system.

- B. Comply with membrane manufacturer's instructions for cleaning and preparation of substrates to receive traffic bearing membrane system. Cleaning and preparation of surfaces to receive the membrane is included in the Work. Provide shotblast machine, using appropriate sized steel shot, equipped with a self-contained vacuum system to remove shot and resulting dust. Provide abrasive blast in those areas where shot blasting cannot be performed due to space limitations. Schedule first cleaning operation so that the manufacturer's representative and Engineer can be present to establish an acceptable level of surface cleaning and preparation.
 - 1. Ensure that substrate has a surface roughness profile of at least CSP 3 to 5 (Concrete Surface Profile on scale developed by the International Concrete Repair Institute) and that all substrate contaminants that can impair membrane performance and adhesion are removed.
- C. Perform substrate concrete patching, and crack routing and sealing work prior to commencing with the membrane application. Ensure that concrete patches have acceptable moisture content as recommended by membrane manufacturer, perform field testing to verify acceptable concrete patch moisture content.
- D. Shotblast scarify and clean all substrates to remove concrete/grout laitance, grease, oil, dirt, dust, debris, and materials deleterious to the new waterproofing membrane's performance and adhesion. Use size of steel shotblast and travel speed appropriate for the substrate and cleaning efficacy and as recommended by membrane manufacturer. Use abrasive blast per membrane manufacturer's recommendations where shotblast equipment is inappropriate.
- E. Allow surface to dry prior to application of membrane. Test surface dryness as required by membrane manufacturer.
- F. Fill voids, surface imperfections, bug holes, including non-moving joints and rough areas of substrate, with sand-filled epoxy mortar, or other manufacturer-approved material in manner recommended by membrane manufacturer. Form sealant coves at horizontal/vertical transitions and penetrations of substrate as recommended by membrane manufacturer; remove all existing sealant at coves.
- G. Grind off high spots, ridges and fins on concrete surface to receive coating system.
- H. Where the traffic bearing membrane system is applied over the surface applied vapor reduction system, provide cleaning and primer recommended by membrane manufacturer, perform field adhesion tests as required to verify adequate adhesion of traffic bearing membrane system to the vapor reduction system and vapor reduction system to substrate.

3.02 PROTECTION OF SURROUNDING AREAS

- A. Traffic Control: Allow no traffic in areas during application and until surface has cured, including protection after cure against damage.
- B. Apply temporary protection of completed decking as required.

3.03 MEMBRANE INSTALLATION

- A. General: Comply with manufacturer's instructions for installation of system. Apply membrane liquids by spraying, squeegeeing, brushing, or rolling to provide uniform thickness.
 - 1. Start installation of deck covering only in presence of manufacturer's technical representative where terms of warranty require inspection and acceptance of installation as it proceeds.
 - 2. Match finished work to approved mock-ups including: uniform thickness, sheen, color, and texture; and free from defects detrimental to appearance or performance.
 - 3. Slip resistance; provide minimum static coefficient of friction of final membrane surface profile/texture of 0.6 at level areas and 0.8 at inclined areas (wet and dry conditions).
- B. Detail visible hairline cracks (less than 1/16 inch) by applying membrane manufacturer recommended base coat material as recoded by manufacturer. Coat over a minimum distance of 2 inches on each side of cracks and joints. Rout and seal larger cracks as specified elsewhere in these Specifications. Allow detail coat to cure prior to proceeding with the remainder of the membrane work.
- C. Prime exposed concrete and existing traffic bearing waterproofing membrane as recommended by the manufacturer. Provide new membrane in multiple coats. Apply primer, base coat, wearing surface coat, and double-texturing at application rates required by membrane manufacturer.
- D. Provide new membrane in multiple coats. Apply base coat, wearing surface coat and double-texturing at application rates required by membrane manufacturer but not less than noted below. Apply coating and aggregate in sequence recommended by coating manufacturer.
- E. Broadcast aggregate evenly in membrane coats at application rates required by membrane manufacturer but not less than noted above.
- F. When aggregate is applied, remove excess aggregate after each coating layer has dried.
- G. After coating has dried, paint floor graphics and parking stalls. Match original paint color, graphics, and parking stall layout, unless directed otherwise by Owner.

3.04 FIELD QUALITY CONTROL

- A. Perform cut test to ensure specified dry film thickness as prescribed below:
 - 1. Membrane Coat: Three cut tests of completed membrane coat every 5,000 square feet minimum three tests and every day material is applied.
 - 2. Perform cut test in Engineer-selected areas. Obtain minimum 1/2" x 1/2" sample. Do not alter sample thickness during cut test. Repair all cut test

areas with system materials to specified system material thickness at no additional cost to Owner.

- B. If any of the three samples of any cut test for membrane coat are less than the specified thickness, recoat affected areas at no additional cost to Owner. Perform three additional cut tests as described above and recoat if necessary, until all three samples meet the specified thickness. Perform cut test of completed membrane coat prior to installation of wear coat.

END OF SECTION

SECTION 075711
SEALANT INSTALLATION AND REPLACEMENT

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. See Section 011102.
- B. Furnish all materials, labor, equipment, and services necessary for and incidental to the execution and completion of the following:
 - 1. Replace sealant in concrete-to-concrete floor slab joints and routed cracks.
 - 2. Provide sealant in concrete-to-concrete floor slab joints as required.

1.02 QUALITY ASSURANCE

- A. Use only applicators who are SWRI-trained and certified.
- B. Perform all work in accordance with technical publications of SWRI. Ensure that sealant manufacturer's representative regularly inspects joints for proper application of sealant.
- C. Perform field adhesion testing on all substrates immediately after receiving notice to proceed. Allow in Contract Time adequate time for curing and testing adhesion prior to commencement of production work. Perform testing in accordance with ASTM C1521.

PART 2 - PRODUCTS

2.01 SEALANT AND PRIMER

- A. All floor slab and wall joints, and sealant in contact with traffic bearing membrane: Sonneborn NP-1 or sealant recommended by the traffic bearing membrane manufacturer.
- B. Primer: **Use primer on all substrates receiving new sealant unless field adhesion testing indicates that they are not needed.**
 - 1. For Sonneborn NP-1 use Sonneborn 773 or 766 primers.
 - 2. Other primers may need to be substituted; test multiple primers during mock-up to obtain optimum adhesion.

2.02 ACCESSORIES

- A. Backer rod: Sonneborn Soft Backer Rod or ITP Soft Type Backer Rod: soft, reticulated closed-cell polyethylene foam with closed-cell skin. Provide a range of sizes to ensure that installed backer rod is compressed 25 percent of joint width.
- B. Bond-breaker tape: pressure sensitive adhesive polyethylene tape, as recommended by sealant manufacturer.
- C. Masking Tape: Non-staining, non-absorbent, compatible; high-temperature, if

necessary.

- D. Solvent, for joint cleaning: non-corrosive, non-staining type recommended by sealant manufacturer; compatible with joint forming materials. Check the quality of each batch of solvent by wiping on a mirror to ensure that no residue is left after drying.
- E. Cloth: 100 percent cotton, lint-free cloth.
 - 1. One acceptable source is Dallas Wiping Materials, Inc., (800) 522-8875.
- F. Brush (for primer application): Natural fiber-bristled.

Commentary - Non-Mandatory Information: It is very important to provide cleaning cloths, brushes, and solvent that are not contaminated with trace amounts of hydrocarbons, which can interfere with sealant bond. For example, polyester fabric rags or plastic-bristle brushes can dissolve and be deposited on the substrate by cleaning solvents. Therefore, 100 percent cotton cloth is specified, and each batch of solvent must be tested for purity.

PART 3 - EXECUTION

3.01 GENERAL

- A. Verify sealant and primer compatibility (non-reactive) and adhesion to all substrates.
- B. Commencing installation of sealant implies that Contractor has inspected and accepts the existing conditions. Notify Engineer of:
 - 1. any non-compatible materials adjacent to sealant and do not proceed until resolved.
 - 2. any loose substrate components that move during sealant installation or replacement.
- C. Remove, clean, prime, and back no more area than can be sealed in the same day. Take precautions to protect building interior from infiltration through open joints that cannot be completed due to unanticipated changes in the weather.
- D. Protect exterior of building, landscaping, ground, and adjacent personal and real property from damage, staining, and discoloring.
- E. Complete any necessary repair work to substrates before commencing sealant work.

3.02 PREPARATION AND GRINDING

- A. Remove existing sealant from all specified joints. Remove existing sealant residue or exudate adhered to joint faces, free of contamination and laitance.
- B. Grind joints with power grinders to clean substrate. Grind edges to a smooth, clean, uniform width and profile.

3.03 CLEANING

- A. Follow sealant manufacturer's instructions for cleaning.

- B. Wear protective clothing while using solvent. Do not allow solvent to contact human skin.
- C. Clean joint faces with a clean cloth and solvent approved by the sealant manufacturer. Remove all dirt, grease, loose materials, water and other foreign matter that might impair adhesion of sealant.
- D. Do not contaminate solvent source container. Dispense a small amount into a separate container, keep lid on source container, and apply from the separate container.
- E. Apply solvent using a clean cloth. Remove solvent with a second clean cloth. Continue wiping with new clean cloths until cloths come away clean.

3.04 PRIMING

- A. Apply primer to all substrates to receive sealant. Strictly adhere to sealant manufacturer's instructions for primer application.
- B. Do not contaminate primer source container. Dispense a small amount into a separate squirt bottle. Keep lid on source container, and apply primer from the separate container. Discard primer left in separate container at end of day.
- C. Wear protective clothing while using primer, which contains solvent. Do not allow primer to contact human skin.
- D. Apply primer using a clean cloth or paintbrush.
- E. Do not over-apply primer. Avoid primer drips, runs, skips, or voids.
- F. **Wipe off primer with a second clean cloth.**
- G. Follow manufacturer's recommendations for primer flash- or dry-time prior to sealant application. Re-prime joints that are not sealed the same day that they are primed.

3.05 JOINT SHAPE AND SIZE

- A. Form joint shape and size in accordance with sealant manufacturer's published recommendations, ASTM standards, and where shown on Drawings. Use butt-joint profile wherever practicable; use fillet (cove) joint profile where minimum joint dimensions cannot be achieved with butt-joint profile.
- B. Butt joints:
 - 1. Supply each crew with multiple diameters of backer rod to accommodate varying joint widths. Examine each joint and size backer rod to achieve required depth and compression. Do not twist multiple pieces of backer rod together; use appropriately sized backer rod.
 - 2. Use longest pieces of backer rod practicable to reduce the number of discontinuities in the backer rod. Make cuts using **scissors**; do not tear backer rod.
 - 3. Butt ends of backer rod tightly together at necessary cuts. Establish and maintain a consistent procedure for backing at intersections. Bending

backer rod around joint corners is not acceptable.

4. Use bond-breaker tape if joint depth cannot accommodate backer rod.
 5. Use a depth guide to ensure that depth of backer rod remains uniform, with no sudden changes in depth, so that cured sealant depth approximates one half the width of the joint. In all joints, ensure that the depth remains within the following tolerances:
 - a) Depth of sealant at center of joint shall not exceed width of joint; and
 - b) Maximum sealant depth at center of joint shall not exceed 1/2 inch; and
 - c) Minimum sealant depth across any section shall be at least 1/4 inch.
 6. Replace backer rod that becomes wet; do not seal over wet backer rod.
 7. Apply sealant with appropriate equipment and pressure to ensure penetration of sealant into required joint depth.
 8. Push sealant ahead of nozzle and slightly overfill joints to avoid air voids.
 9. Immediately dry tool sealant beads smooth and slightly **concave**.
- C. Fillet (cove) joints:
1. Maintain at least 1/4-inch adhesion “bite” on each substrate.
 2. Maintain a nominal 1/4-inch (absolute minimum 1/8-inch) “throat” thickness, measured as shown on Drawings.
 3. Examine joint dimensions and size backer rod to achieve required depth. Use bond-breaker tape in joints too small for backer rod.
 4. Use longest pieces of backer rod practicable to reduce the number of discontinuities in the backer rod. Butt ends tightly together at necessary cuts.
 5. Push sealant ahead of nozzle and slightly overfill joints to avoid air voids.
 6. Dry tool sealants smooth and **triangular**. Do not tool concave; avoid feather-edging sealant.
- D. Ensure that sealant does not mix with solvent in application equipment (bulk-loader guns). If guns are cleaned with solvent after each use, allow guns to thoroughly air dry before reloading.
- E. After dry tooling, joints may be wet-tooled (“slicked”) with clean, potable water; do not use any lubricant, solvent, or detergent.
- F. After final tooling, do not disturb sealant until sealant is fully cured. Ensure that sealant is full smooth bead, and free of ridges, wrinkles, sags, air pockets and embedded impurities.

Commentary - Non-Mandatory Information: Dimensional control is critical to the durability

of sealant joints. Therefore, it is important to establish procedures during the mock-ups for backing each type of joint. Maintaining the dimensional tolerances will be strictly enforced.

3.06 CLEAN-UP

- A. Remove masking tape immediately after tooling.
- B. Scrape excess sealant off face of substrates with a single edge razor immediately after tooling and before curing; or, if more effective, after curing.
- C. Clean building surfaces, grounds, or adjacent property soiled by work of this Section.

3.07 PROTECTION OF FINISHED WORK

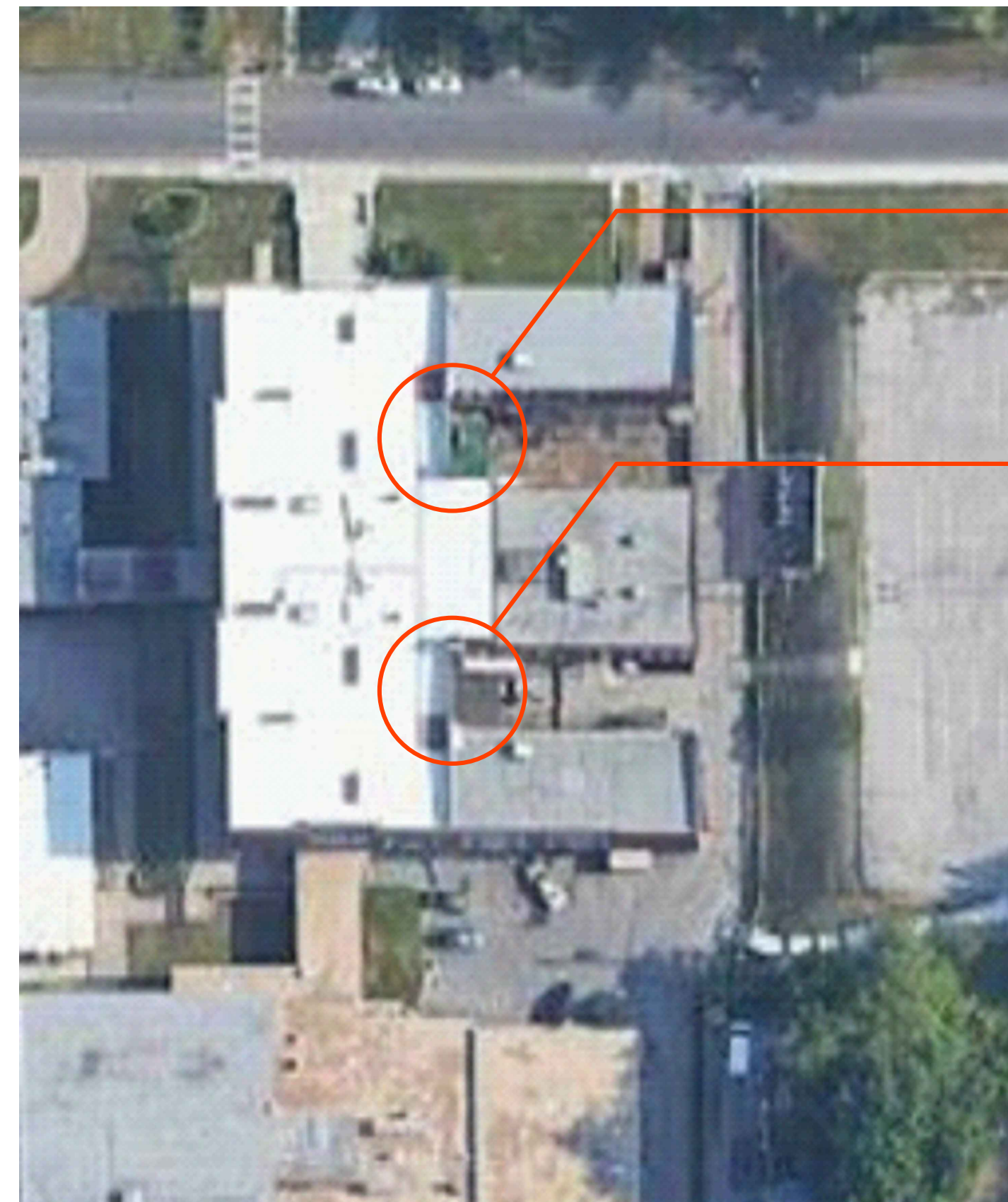
- A. Protect sealant installation from damage, rain, or irrigation water until curing is completed.

3.08 REJECTION CRITERIA

- A. The Work may be rejected for any non-compliance with these Contract Documents, including the referenced industry standards and manufacturer's recommendations. In particular, the following Rejection Criteria are listed for Contractor's convenience; this list may not be exhaustive or comprehensive:
 - 1. Poor sealant adhesion.
 - 2. Poor sealant cure.
 - 3. Foreign materials on substrate in adhesion "bite" area of joint.
 - 4. Lack of priming or excess priming.
 - 5. Sealant depth too deep, too shallow, or non-uniform.
 - 6. Joint too narrow.
 - 7. 3-sided adhesion, or bond-breaker not full width of joint.
 - 8. Poor aesthetic appearance of finished joints, including ridges, wrinkles, sags, air pockets, or embedded impurities.

END OF SECTION

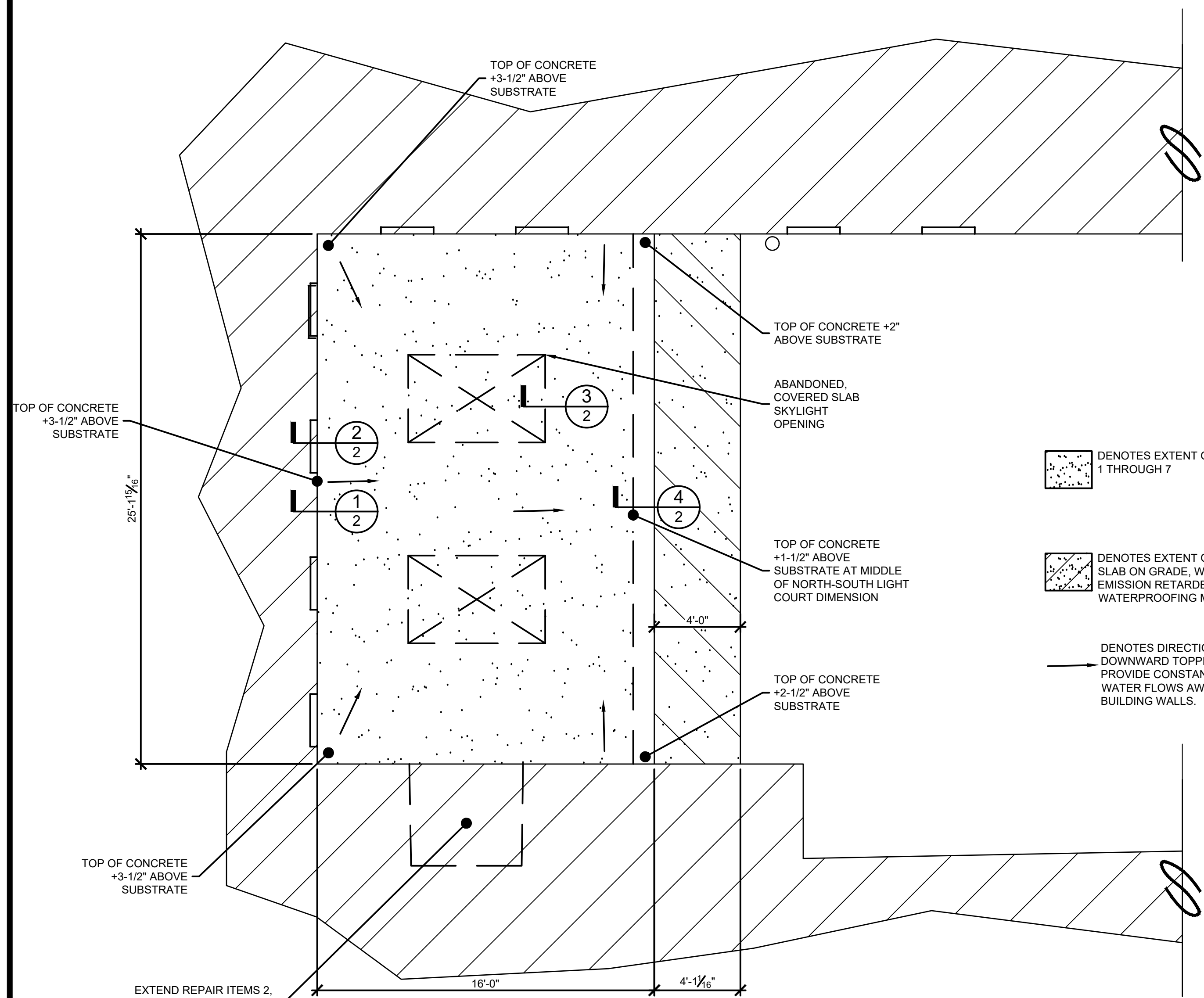
BASE BID REPAIR ITEM	SECTION	DESCRIPTION
1	027411	Demolition. Provide the following: demolition of the existing built-up roofing and associated roof materials at both light courts; scarification of the existing concrete slab to a minimum depth of 1/8-inch; removal of the existing skylight framing at the north light court; removal of associated materials.
2	045211 and 079201	Structural Slab Repair. Provide the following: visually observe and sound all supported light court floor slabs to identify locations where the existing floor slab concrete is scaled/spalled/delaminated; remove sound and unsound topping slab concrete to expose sound concrete and a minimum of 3/4-inch behind exposed reinforcement; clean exposed reinforcement and metal with abrasive blast to a SSPC-SP6 commercial blast cleaning; coat all exposed reinforcement and other metals with anti-corrosion coating; patch concrete, concrete finish, and concrete curing.
3	027411 and 037411	Bonded Concrete Topping. Provide the following: removal all existing waterproofing membranes and coatings; shot blast or abrasive blast all floor, curb, and wall surfaces to be covered with concrete; provide bonded topping slab concrete and concrete curing.
4	079011	Crack Repair. Provide the following at random slab cracks and joints: saw cut/grind concrete floor cracks to crack repair profile; grind the sealant bond surfaces to remove previous sealant and other materials that can adversely affected the new sealant performance; sealant.
5	075711 and 079011	Slab Waterproofing. Provide the following where shown on the drawings: remove all existing sealants; shot blast or abrasive blast all surfaces to be coated; new joint sealant in all joints in the area to be coated; and waterproofing membrane. Provide water vapor retarder on slab-on-grade shown in Plan 2/1 and waterproofing membrane.
6	027411 and 037411	Structural Slab Soffit Repair. Provide the following: visual observation and sounding of the structural slab soffit to identify locations where the beam concrete is spalled/delaminated/distressed, removal of sound and unsound concrete to expose sound concrete and a minimum of 3/4-inch behind exposed reinforcement; cleaning of exposed reinforcement and other metal with abrasive blast to a SSPC-SP6 commercial blast cleaning; coating all exposed metal with anti-corrosion coating; providing new reinforcement, providing forms/formwork, patch concrete, concrete finish, concrete curing, removal of forms/formwork.
7	027411 and 037411	Scale Repair. Provide the following: visual observation and sounding of the structural slab with a chain-drag or similar device to identify locations where the slab concrete is scaled/delaminated/spalled; removal of sound and unsound concrete to expose sound concrete and a minimum depth of 1-inch; cleaning of exposed reinforcement and other metal with abrasive blast to a SSPC-SP6 commercial blast cleaning; coating all exposed reinforcement and other metals with anti-corrosion coating; patch concrete, concrete finish, and concrete curing.



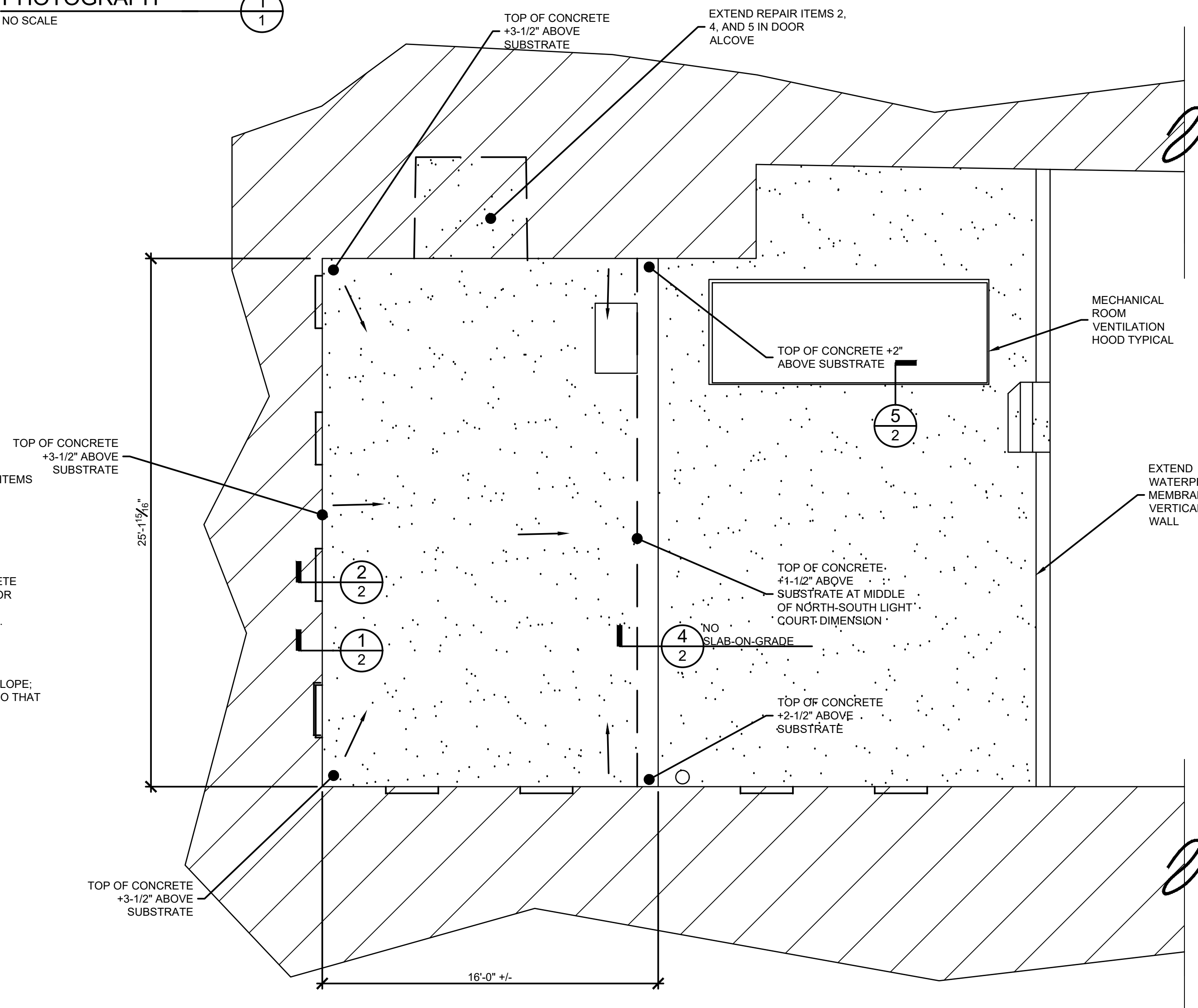
PHOTOGRAPH 1
NO SCALE

GENERAL NOTES

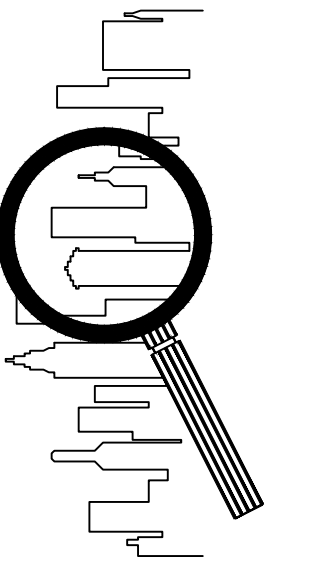
1. THESE NOTES SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND THE DRAWINGS. IN THE EVENT OF A CONFLICT, NOTIFY THE ENGINEER FOR CLARIFICATION.
2. BEFORE EXECUTING ANYTHING HEREIN SHOWN, EXAMINE ACTUAL JOB CONDITIONS. REPORT ANY DISCREPANCY, DIMENSIONAL OR OTHERWISE, BETWEEN DRAWINGS AND ANY OTHER ERROR, OMISSION, OR DIFFICULTY AFFECTING THE WORK TO THE ENGINEER FOR REVIEW PRIOR TO BIDDING. FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE DRAWINGS PRIOR TO BIDDING.
3. ANY CONDITION ENCOUNTERED IN THE EXISTING STRUCTURAL SYSTEM WHICH IS DIFFERENT FROM THAT INDICATED IN DRAWINGS OR WHICH MIGHT CREATE A FAILURE OR HAZARD SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.
4. THE EXISTING CONDITIONS INDICATED ON THE DRAWINGS ARE BASED ON SURVEYS MADE BY THE CONSULTANT(S) AS WELL AS ON MATERIAL PROVIDED BY THE OWNER AND NO CLAIM IS MADE AS TO ITS ABSOLUTE COMPLETENESS AND/OR ACCURACY.
5. ALL DETAILS AND SECTIONS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.
6. THE PHOTOGRAPHS PROVIDED MAY NOT BE A COMPLETELY ACCURATE DEPICTION OF EXISTING BUILDING CONDITIONS AND CONFIGURATIONS. FIELD VERIFY EXISTING BUILDING CONDITIONS AND CONFIGURATIONS PRIOR TO BIDDING, NOTIFY ENGINEER OF DISCREPANCIES FOR REVIEW.
7. REMOVE AND REINSTALL TO MATCH PRECONSTRUCTION CONDITIONS ALL ANCILLARY ITEMS THAT MAY IMPEDE THE WORK (I.E. DOWNSPOUTS, CONDUIT, SIGNS, AND OTHER SIMILAR ITEMS) THAT MAY BE PRESENT. EXTEND THE REPAIR TO NATURAL BREAK POINTS SUCH AS CORNERS, VERTICAL AND HORIZONTAL JOINTS, CHANGE OF MATERIALS/FINISHES AND SIMILAR CONDITIONS.



PARTIAL PLAN
NORTH LIGHT COURT 2
NOT TO SCALE



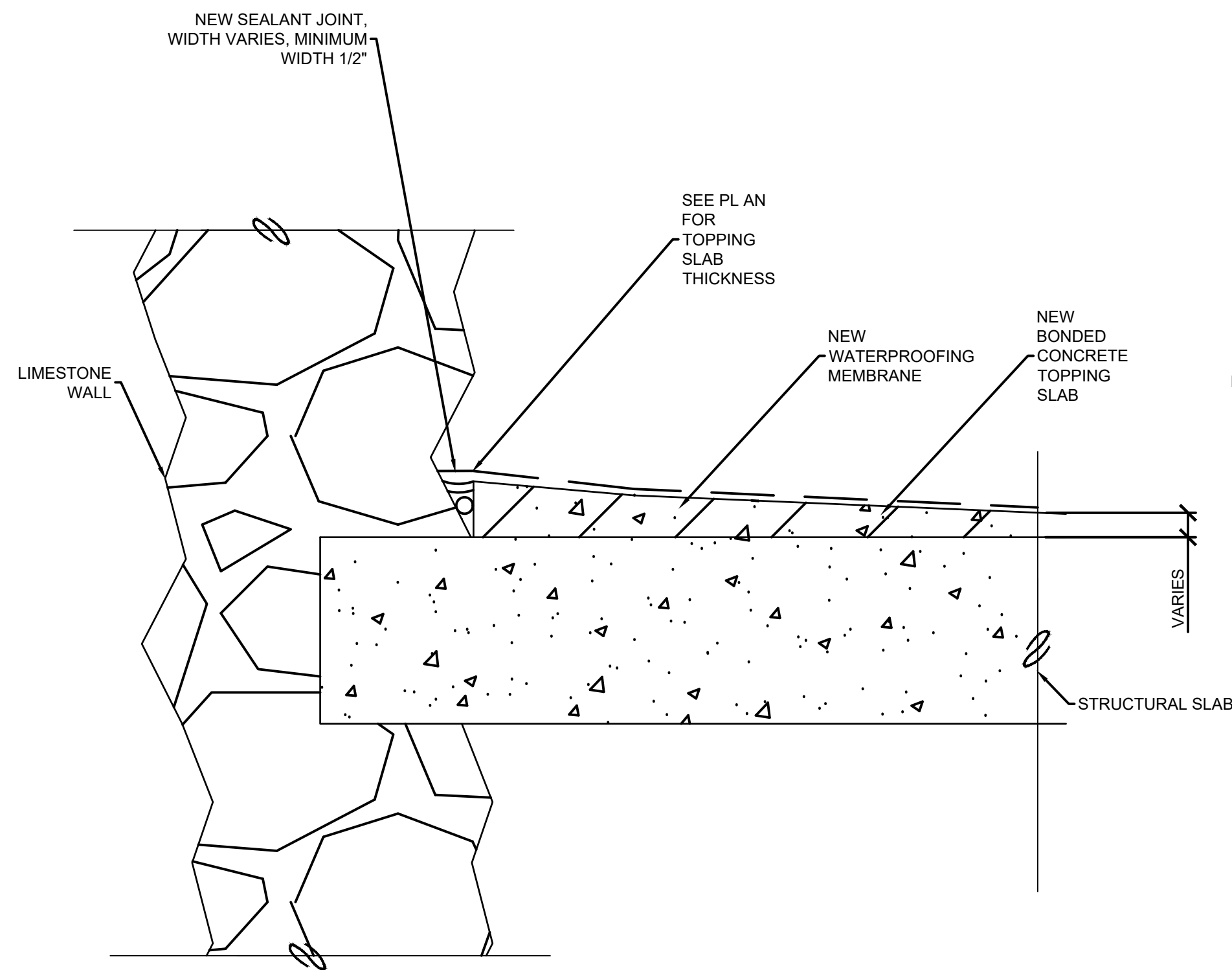
PARTIAL PLAN
SOUTH LIGHT COURT 3
NOT TO SCALE



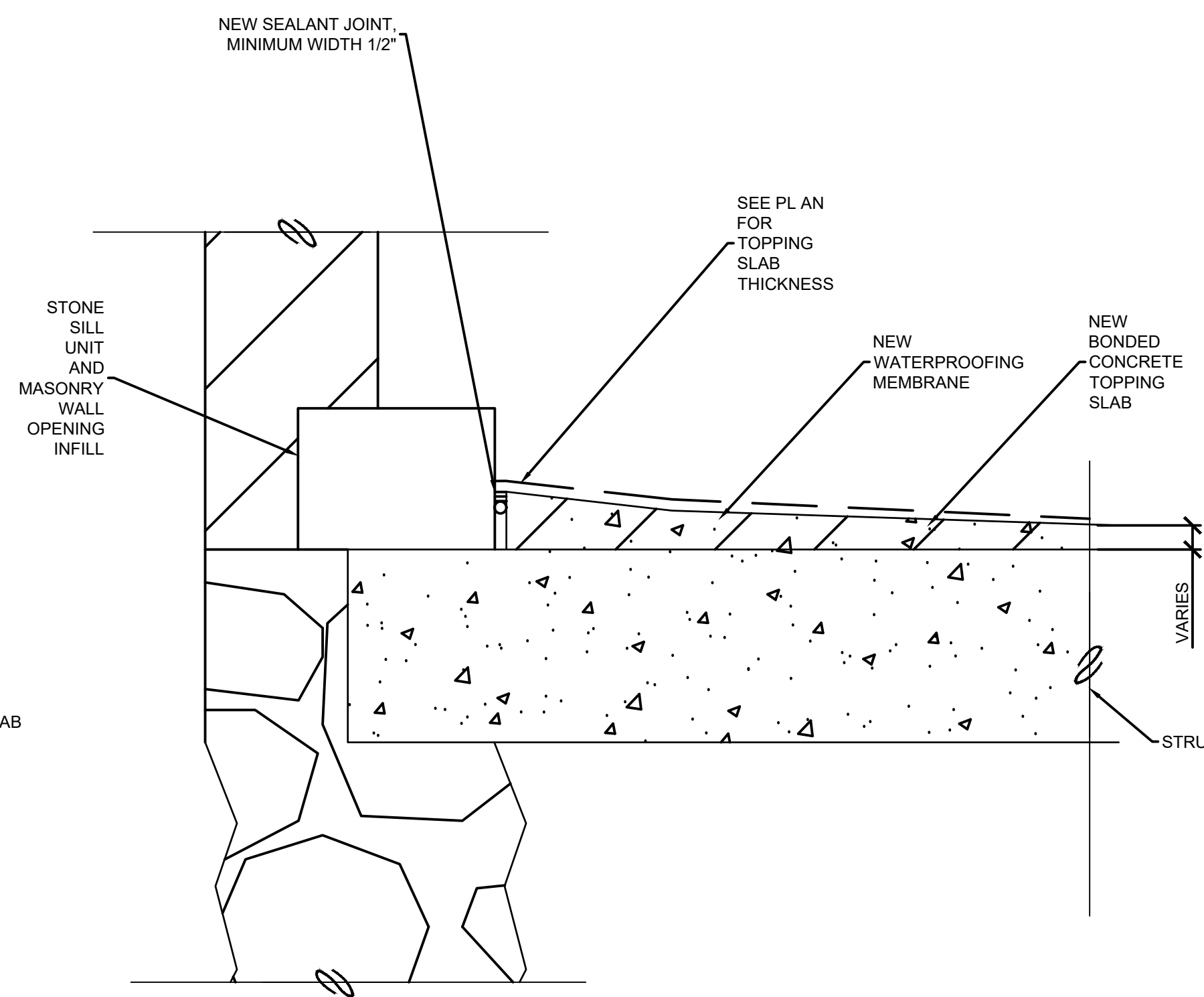
DRAWN BY: tc DATE: 5-11-20
CHECKED BY: eb DATE: 5-11-20
FILENAME:

REVISIONS:

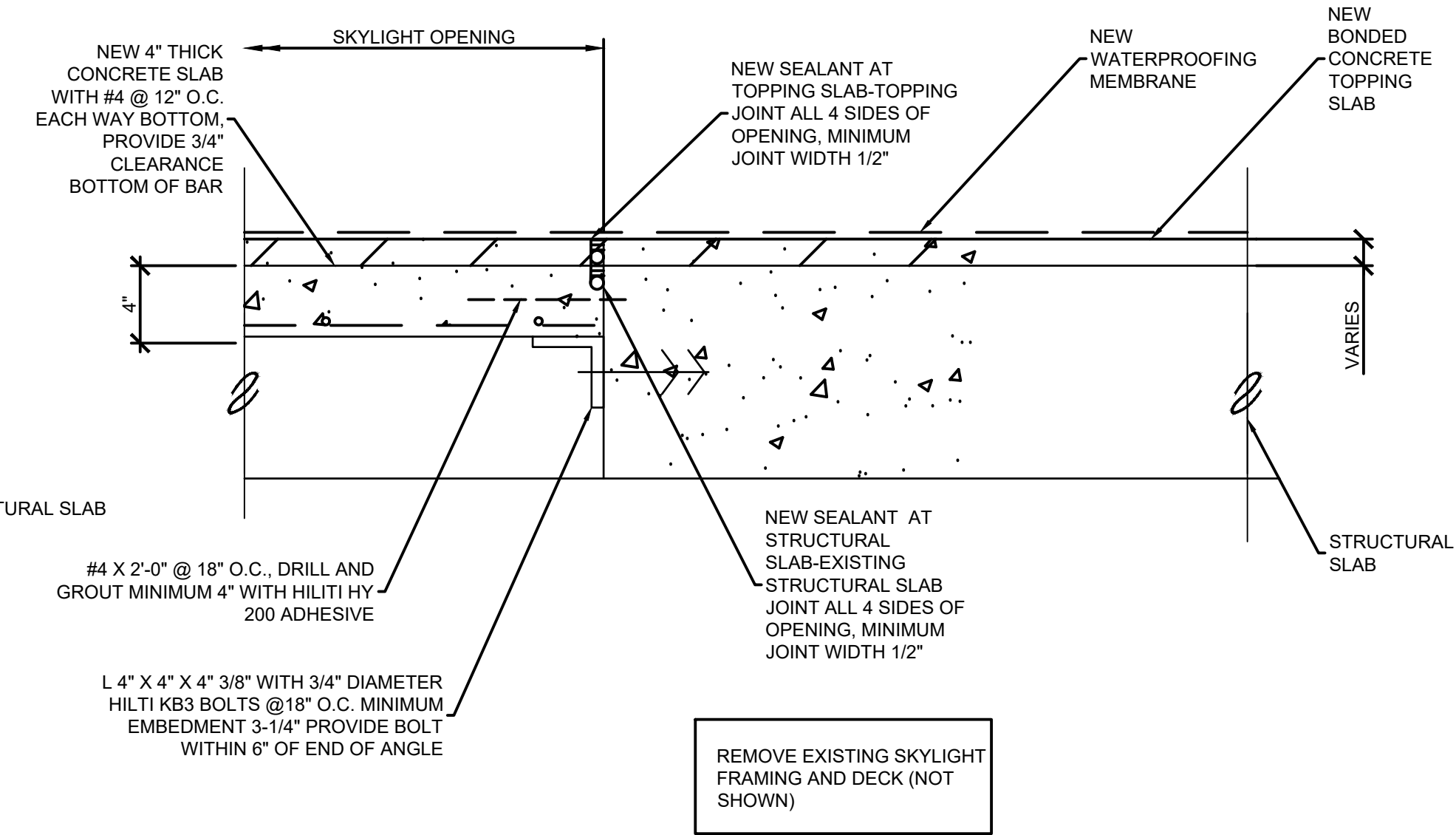
Δ	
Δ	
Δ	
Δ	



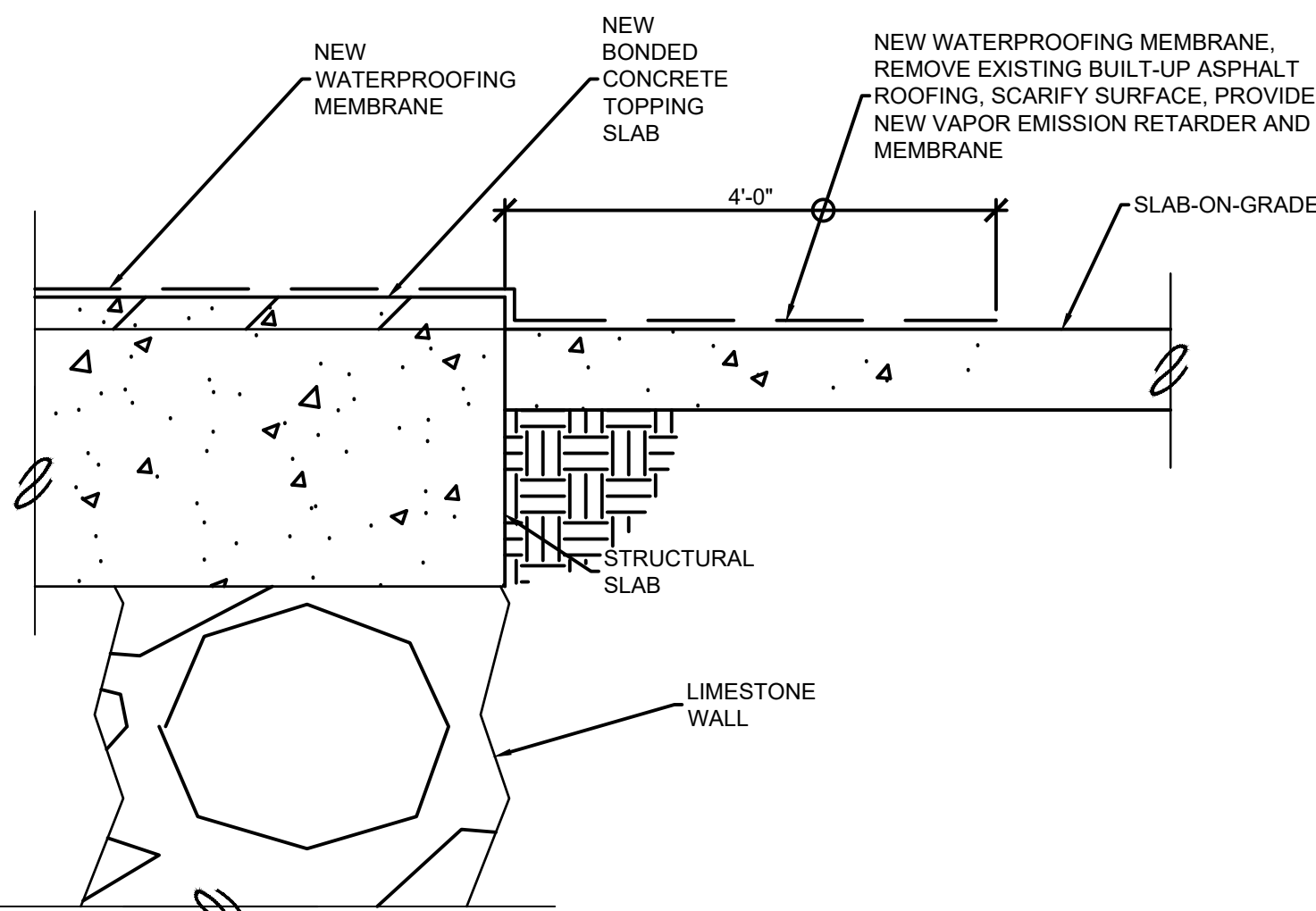
SECTION 1
NOT TO SCALE



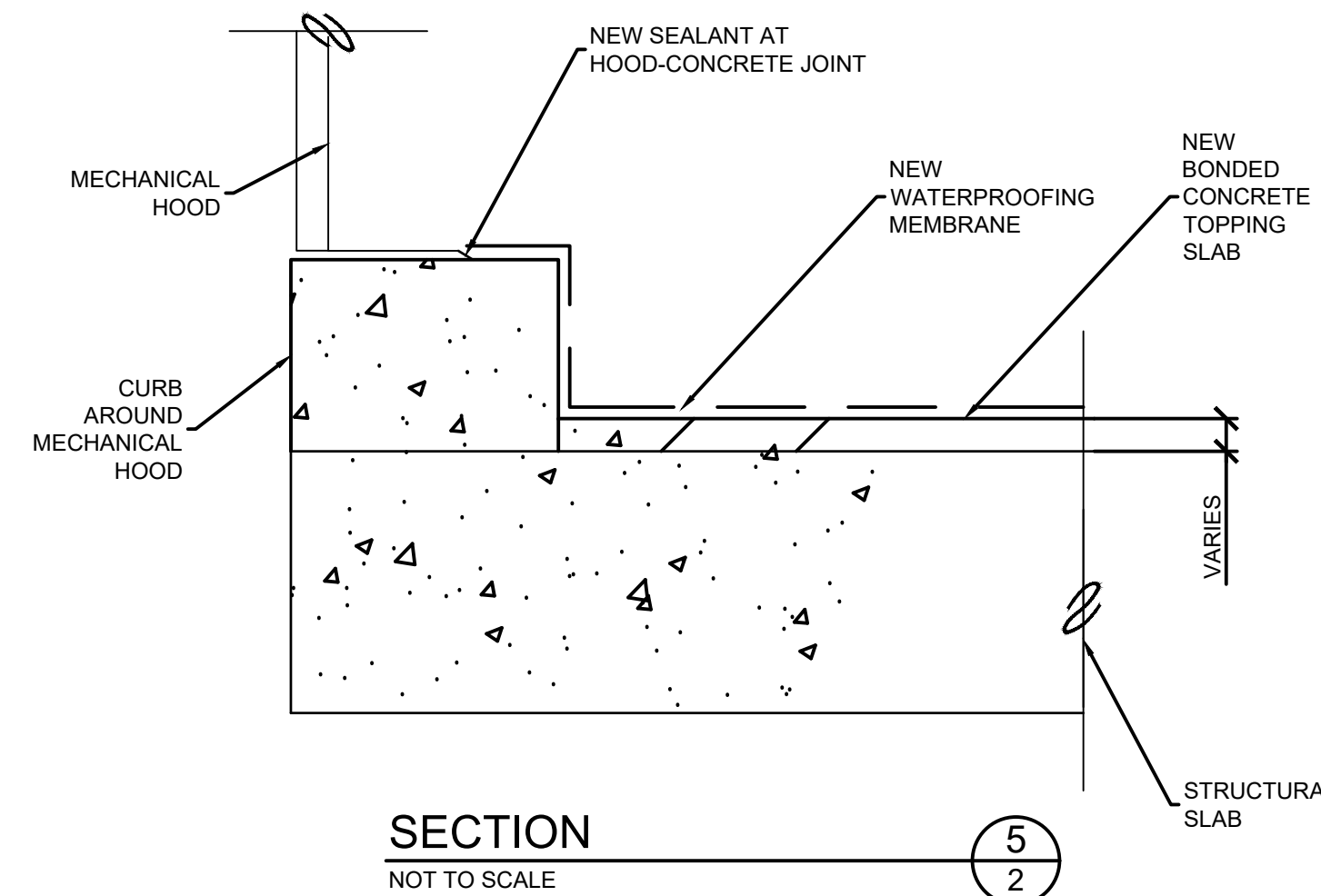
SECTION 2
NOT TO SCALE



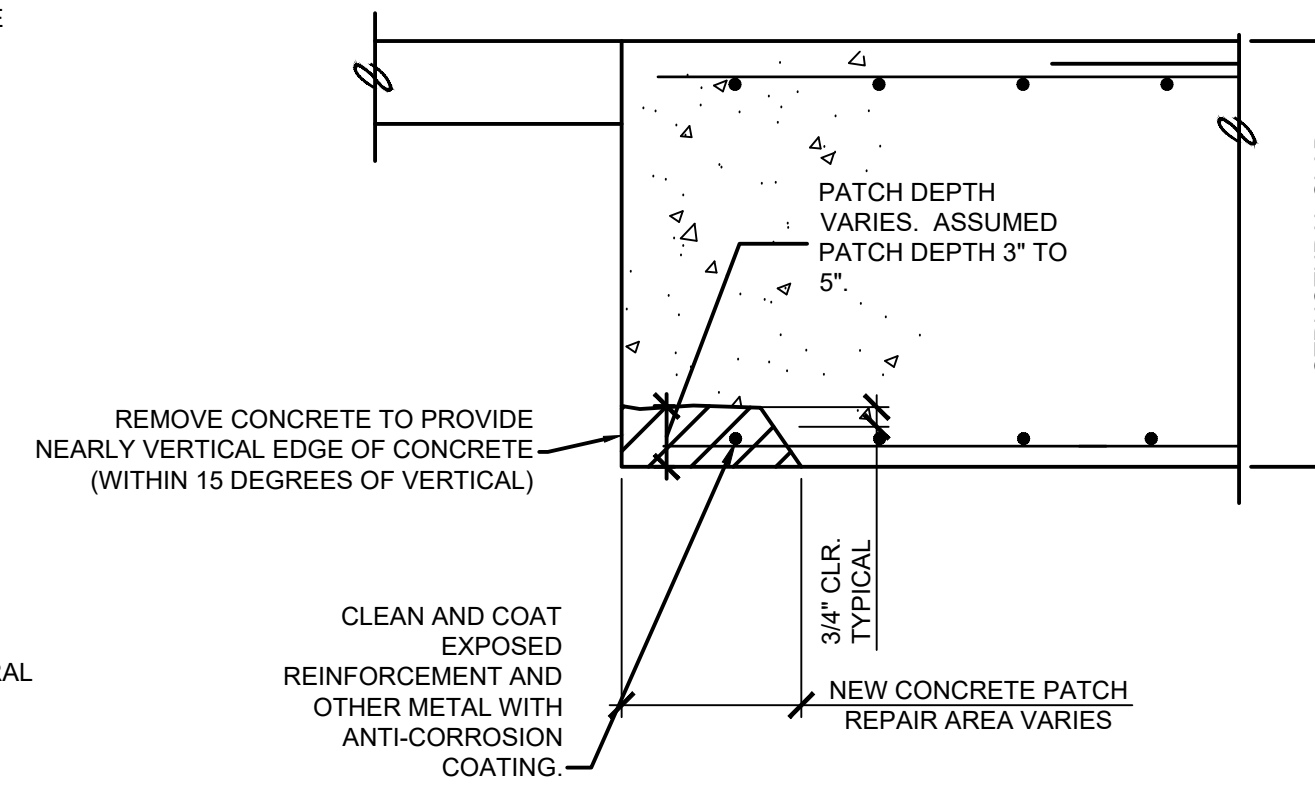
SECTION 3
NOT TO SCALE



SECTION 4
NOT TO SCALE

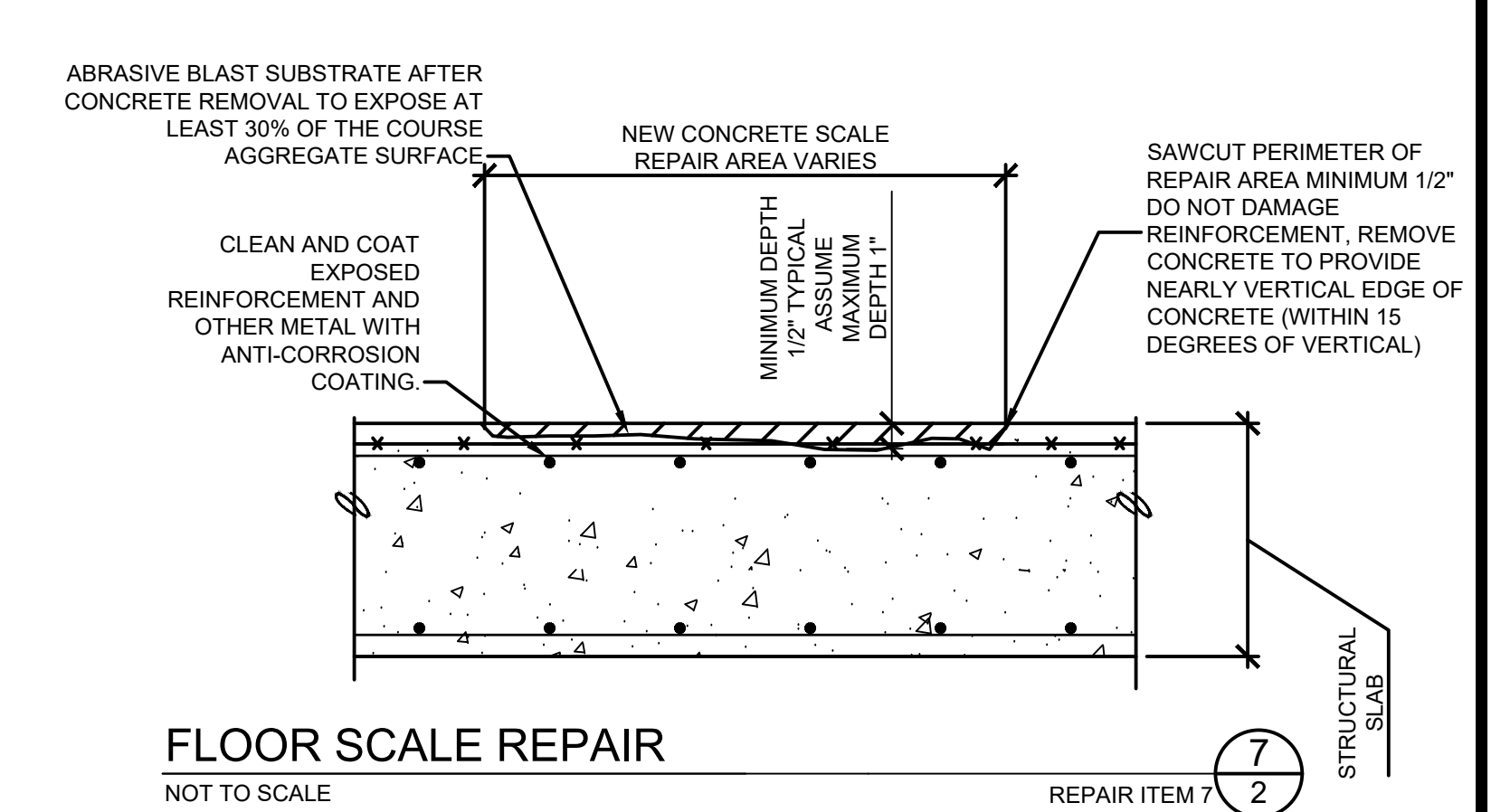


SECTION 5
NOT TO SCALE



SECTION 6
NOT TO SCALE
REPAIR ITEM 6

- DETAIL NOTES:
- REMOVE DETERIORATED, AND NON-DETERIORATED CONCRETE AS REQUIRED, TO EXPOSE SOUND CONCRETE. REMOVE CONCRETE 3/4" MINIMUM AROUND REINFORCEMENT. PATCH REPAIR AREA WITH SHOTCRETE CONCRETE. FINISH CONCRETE TO MATCH ADJACENT FINISH AND ELEVATION. MAINTAIN 1-1/2" MINIMUM CONCRETE PATCH DEPTH.
 - EXISTING REINFORCEMENT SHOWN IS ILLUSTRATIVE ONLY. ACTUAL REINFORCEMENT LOCATION WILL BE DIFFERENT.



SECTION 7
NOT TO SCALE
REPAIR ITEM 7

- DETAIL NOTES:
- REMOVE DETERIORATED, AND NON-DETERIORATED CONCRETE AS REQUIRED, TO EXPOSE SOUND CONCRETE. REMOVE CONCRETE 1/2" MINIMUM. PATCH REPAIR AREA WITH PACKAGED REPAIR MATERIALS. FINISH REPAIR MATERIALS TO MATCH ADJACENT FINISH AND ELEVATION.
 - SHOWN IS ILLUSTRATIVE ONLY. ACTUAL REINFORCEMENT LOCATION WILL BE DIFFERENT.



DRAWN BY: ic DATE: 5-11-20
CHECKED BY: eb DATE: 5-11-20
FILENAME:

REVISIONS:
Δ
Δ
Δ
Δ

SHEET NO. 2

BID FORM

By signing this bid form, the vendor certifies the forms being offered meets or exceeds all requirements and conditions of the bid, special provisions and specifications. In compliance with the above and subject to all the conditions hereof, the undersigned offers and agrees to furnish all items upon which prices are quoted, at the price set opposite each item.

The undersigned certifies that no Federal, State, County or Municipal tax is included in the above quoted prices and that none will be added. Public schools are TAX EXEMPT. Exemption certificates will be provided upon request.

Bid Form – All Work		
Base Bid – (to include all labor, materials and other costs)	\$	
Bid Value Written Out		
Number of Days After Receipt of Order to Start Project		Days
Number of Days to Complete Project		Days

The Lump Sum written out immediately above governs this Bid. For comparative purposes and as the basis for future add/deduct negotiations, also list individual prices for the following work items. The total of these items must equal the Lump Sum above, and should accurately reflect the apportionment of the Bid, including overhead, profit, and taxes.

Where given, use the quantities provided for bidding; if provided quantities are later determined to be inaccurate, an equitable adjustment will be made in the Contract Price by multiplying Bidder's unit rate price times the actual quantity performed; no other pricing will be considered for changes in the Contract Price. If a quantity is not provided, Bidder shall make an independent study to estimate the actual quantity; no Change Order will be considered to correct inaccurate quantities estimated by Bidder.

Repair Item	Base Bid - Descriptions	Unit	Unit Price	Quantity	Extended Price
1	Demolition	Lump Sum	\$	NA	\$
2	Structural Slab Repair	Sq. Ft.	\$ <small>Per Sq. Ft.</small>	NA	\$
3	Bonded Concrete Topping	Lump Sum	\$	NA	\$
4	Crack Repair	Lin. Ft.	\$ <small>Per Lin. Ft.</small>	40 Lin. Ft.	\$
5	Slab Waterproofing	Lump Sum	\$	NA	\$
6	Structural Slab Soffit Repair	Sq. Ft.	\$ <small>Per Sq. Ft.</small>	NA	\$
7	Scale Repair	Sq. Ft.	\$ <small>Per Sq. Ft.</small>	NA	\$
8	Construction Performance and Payment Bonds	Lump Sum	\$	Lump Sum	\$

Designations		If Yes, Please Identify Certified Designation
MBE/WBE/Other Certification Is your firm certified MBE/WBE or Other? (Circle One)>>	Yes / No	

WE HEREBY AGREE TO FURNISH THE ITEMS ON WHICH PRICES ARE QUOTED ABOVE IN ACCORDANCE WITH ALL TERMS AND CONDITIONS PREVIOUSLY LISTED AND ANY ATTACHED SPECIFICATIONS.

BY: _____ DATE: _____
 TITLE: _____ FIRM: _____
 PHONE: _____ EMAIL: _____

ATTACHMENT A – USD 500 STANDARD TERMS AND CONDITIONS

1. SCOPE: The following terms and conditions shall prevail unless otherwise modified by U.S.D. 500 within this bid document. U.S.D. 500 reserves the right to reject any bid which takes exception to these terms and conditions.
2. DEFINITIONS AS USED HEREIN:
 - a. The term "bid request" means a solicitation of a formal sealed bid.
 - b. The term "bid" means the price offered by the bidder.
 - c. The term "bidder" means the offeror or Contractor.
 - d. The term "U.S.D. 500" means Unified School District No. 500.
 - e. The term "Board of Education" or "BOE" means the governing body of Unified School District No.500
3. COMPLETING BID: Bids must be submitted ONLY on the form provided in this bid document. All information must be legible. Any and all corrections and /or erasures must be initialed. Each bid sheet must be signed by the authorized bidder and required information must be provided.
4. CONFIDENTIALITY OF BID INFORMATION: Each bid must be sealed and submitted in or under cover of the enclosed envelope to provide confidentiality of the bid information prior to the bid opening. Supporting documents and/or descriptive literature may be submitted with the bid or in a separate envelope marked "Literature for Bid (Number)." Do NOT indicate bid prices on literature. All bids and supporting bid documents become public information after the bid opening and are available for inspection by the general public in accordance with the Kansas Open Records Act.
5. ACCURACY OF BID: Each bid is publicly opened and is made part of the public record of U.S.D. 500. Therefore, it is necessary that any and all information presented is accurate and/or will be that by which the bidder will complete the contract. If there is a discrepancy between the unit price and extended total, the unit price will prevail.
6. EXAMINATION OF INSTRUCTIONS, CONDITIONS AND/OR SPECIFICATIONS: Bidders shall thoroughly examine and be familiar with all instructions, conditions, and/or specifications. The failure of a Bidder to receive or examine any form, attachments, addendum or other document, or visit to the site when required in order to acquaint the Bidder with existing conditions, shall in no way relieve the Bidder from obligations concerning the bid or the contract. The submission of a bid shall be taken as prima facie evidence of compliance.
7. VERBAL STATEMENTS OF STAFF: Bidders shall not rely upon any oral statements or conversations they may have with District employees, agents, or representatives regarding the solicitation, whether at the Pre-Bid Conference or otherwise. All questions must be submitted by bidders in writing and shall be answered by the District in a written addendum to the solicitation.
8. SUBMISSION OF BID: Bids are to be sealed and submitted to the Purchasing Department Office, 2010 North 59th Street, Room 370, Kansas City, Kansas, 66104, prior to the date and time indicated on the cover sheet.
9. ADDENDA: All changes in connection with this bid will be issued by the Purchasing Office in the form of a written addendum. Signed acknowledgement of receipt of each addendum must be submitted with the bid. It is the responsibility of bidders to review the District website regularly for updates.
10. LATE BIDS AND MODIFICATION OR WITHDRAWALS: Bids received after the deadline designated in this bid document shall not be considered and shall be returned unopened.
11. BIDS BINDING: All bids submitted shall be binding upon the bidder if accepted by U.S.D. 500 within sixty (60) calendar days after the bid opening.
12. EQUIVALENT BIDS: When brand or trade names are used in the bid invitation, it is for the purpose of item identification and to establish standards for quality, style and features. Bids on equivalent items of substantially the same quality, style and features are invited unless items are marked "No Substitute." Equivalent bids must be accompanied by descriptive literature and/ or samples may be required and shall be supplied at no charge to the school district.
13. NEW MATERIALS, SUPPLIES AND EQUIPMENT: Unless otherwise specified, all materials, supplies or equipment offered by a bidder shall be new, unused, of recent manufacture, first class in every respect, and suitable for their intended purpose. All equipment shall be assembled and fully serviced, ready for operation when delivered.
14. WARRANTY: Supplies or services furnished as a result of this bid shall be covered by the most favorable commercial warranties, expressed or implied, that the bidder and/or manufacturer gives to any customer. The rights and remedies provided herein are in addition to and do not limit any rights afforded to U.S.D. 500 by any other clause of this bid reserves the right to request from bidders a separate manufacturer certification of all statements made in the Proposal.
15. METHOD OF AWARD AND NOTIFICATION: Bids will be analyzed and the award made to the lowest and best, responsive and responsible bidder(s) whose bid conforms to the specifications and whose bid is considered to be the best value in the opinion of U.S.D. 500.
16. U.S.D. 500 reserves the right to reject any or all bids and any part of a bid: to waive informalities, technical defects, and minor irregularities in bids received: and to award the bid on an item by item basis by specified groups of items or to consider bids submitted on an "all or nothing "basis if the bid is clearly designed as such or when it is determined to be in the best interest of U.S.D. 500.
17. OFFER/ACCEPTANCE: The signed bid shall be considered an offer on the part of the bidder: such offer shall be deemed accepted ONLY upon the issuance by U.S.D. 500 of a valid Purchase Order or other contractual documents.
18. DELIVERY TERMS: All deliveries shall be F.O.B. Destination and all freight charges shall be included in the bid price.
19. DAMAGED AND/OR LATE SHIPMENTS: U.S.D 500 has no obligation to accept damaged shipments and reserves the right to return at the Contractor's expense damaged merchandise even though the damage was not apparent or discovered until after receipt of

the items. The Contractor is responsible to notify U.S.D. 500 Purchasing Office of any late or delayed shipments. U.S.D. 500 reserves the right to cancel all or any part of an order if the shipment is not made as promised.

20. CREDIT TERMS: Bidder shall indicate all discounts for full and/or prompt payment. Discounts shall be considered as a cost factor in the determination of award, except discounts offered for payment within less than ten (10) calendar days. Discounts offered shall be computed from date of receipt of correct invoice or receipt and acceptance of products, whichever is later.
 21. SELLER'S INVOICE: Invoices shall be prepared and submitted in duplicate to address shown on the Purchase Order. Invoices shall contain the following information: Purchase Order number, contract number, item number, description of supplies or services, sizes, unit of measure, quantity, unit price and extended totals.
 22. TAX EXEMPT: U.S.D. 500 is exempt from Federal, State and local taxes by KS-FZLEKBLQ. Sites of all transactions under the order(s) that shall be derived from this bid request shall be deemed to have been accomplished within the State of Kansas.
 23. SAFETY: All practices, materials, supplies and equipment shall comply with the federal Occupational Safety and Health Act, as well as any pertinent Federal, State and/or local safety or environmental codes.
 24. DISCLAIMER OR LIABILITY: U.S.D. 500 will not hold harmless or indemnify any bidder for any liability whatsoever.
 25. TERMINATION RIGHTS: KCKPS shall have the right to terminate/cancel the Agreement for its convenience and without penalty upon thirty (30) days prior written notice to the Contractor.
 26. HOLD HARMLESS: The Contractor agrees to protect, defend, indemnify and hold the Board of Education, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings or causes of action of every kind and character in connection with or arising directly or indirectly out of this agreement and/or the performance hereof. Without limiting the generality of the foregoing, any and all such claims, etc., relating to personal injury, infringement of any patent trademark, copyright (or application for any thereof) or of any other tangible or intangible personal or property right, or actual or alleged violation of any applicable statute, ordinance, administrative order, rule or regulation, or decree of any court, shall be included in the indemnity hereunder. The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, etc., at his/her sole expense and agrees to bear all other costs and expenses related thereto, even if such claim is groundless, false or fraudulent.
- NO MUTUAL INDEMNIFICATION:
K.S.A.72-8201a: Contracts; indemnification or hold harmless provisions, void.
- (a) It is the public policy of the state of Kansas that all contracts entered into by the board of education of a school district, or any officers or employees thereof acting on behalf of the board, provide that the school district and board of education shall be responsible solely for the district's or board's actions or failure to act under a contract.
 - (b) The board of education of a school district or any officers or employees thereof acting on behalf of the board shall not have the authority to enter into a contract under which the school district or board agrees to, or is required to, indemnify or hold harmless against damages, injury or death resulting from the actions or failure to act on the part of any party to a contract other than the board or district.
 - (c) The provisions of any contract entered into in violation of this section shall be contrary to the public policy of the state of Kansas and shall be void and unenforceable.
27. INSURANCE: Upon receipt of award, Contractor shall provide Certificate of Insurance as required within three (3) days after notification issued by the Purchasing Department.
 - A. The following general insurance requirements apply to any and all work under this contract by all Contractors and subcontractors of any tier.
 - (1) Any and all insurance required by this contract with each and any and all insurance required by this contract shall be maintained during the entire length of this contract, including any extensions thereto, and until all work has been completed to the satisfaction of the Kansas City Kansas Public Schools. Any and all insurance must be on an occurrence basis.
 - (2) No Contractor or subcontractor shall commence work under a contract until all insurance requirements contained within the solicitation have been complied with and until evidence of all insurance requirements in each and every contract with each and every subcontractor of any tier and shall require the same to comply with all such requirements.
 - (3) The Kansas City Kansas Public Schools and Engineering Diagnostics, LLC shall be covered as an Additional Insured under any and all insurance required by this contract. Confirmation of this shall appear on all certificates of insurance and on any and all applicable policies. The title of the awarded contract shall also appear on any and all applicable policies.
 - (4) The Kansas City Kansas Public Schools shall be given no less than thirty (30) days' written notice of cancellation. The Kansas City Kansas Public Schools shall be given not less than thirty (30) days' prior written notice of material changes of any insurance required under this contract. The Kansas City Kansas Public Schools shall be given written notice of renewal of coverage not less than thirty (30) days prior to the expiration of any particular policy.
 - (5) Each and every agent shall warrant when signing the certificate of insurance that he is acting as an authorized representative on behalf of the companies affording insurance coverage under the contract and that he is licensed by the State of Kansas to conduct insurance business in the State of Kansas and that the companies affording insurance coverage are currently licensed by the State of Kansas and are currently in good standing with the Commissioner of Insurance for the State of Kansas.
 - (6) Any and all companies providing insurance required by this contract shall meet the minimum financial security requirements as set forth below. The rating for each company must be indicated on the certificate of insurance.

For all contracts, regardless of risk, companies providing insurance under this contract must have a current:

- (a) Best's Rating not less than A, and
- (b) Best's Financial Size Category not less than Class VII

(7) In the event the Contractor neglects, refuses, or fails to provide insurance required by the contract documents, or if such insurance is canceled for any reason, Kansas City Kansas Public Schools shall have the right, but not the duty, to procure the same, and the cost thereof shall be deducted from monies then due or thereafter to become due to the Contractor or Kansas City Kansas Public Schools shall have the right to cancel the contract.

B. Worker's Compensation and Employer's Liability Insurance

The Contractor shall procure and maintain Worker's Compensation and Employer's Liability Insurance in the following limits. Such insurance is to cover each and every employee who is or may be engaged in work under this contract.

Worker's Compensation.....Statutory

Employer's Liability

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

C. Comprehensive General Liability Insurance

The Contractor shall procure and maintain Comprehensive Insurance in an amount not less than \$1,000,000 for bodily injury and property damage combined single limit. The following specific extensions of coverage shall be provided and indicated on the certificate of insurance:

- (1) Comprehensive Form
- (2) Contractual Insurance
- (3) Personal Injury
- (4) Broad Form Property Damage
- (5) Premises – Operations
- (6) Completed Operations

This coverage shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability under this contract. Policy coverage must be on an occurrence basis.

D. Automobile Liability Insurance

The Contractor shall procure and maintain Automobile Liability Insurance in an amount not less than \$1,000,000 for bodily injury and property damage combined single limit. The following extensions of coverage shall be provided and indicated on the certificate of insurance.

- (1) Comprehensive Form
- (2) Owned, Hired, Leased and non-owned vehicles

If the Contractor does not own any vehicles in the corporate name, non-owned vehicles coverage shall apply and must be endorsed on either the Contractor's personal automobile policy or the Comprehensive General Liability coverage required under this contract.

E. Commercial Crime insurance (when applicable)

The Contractor shall procure and maintain Commercial Crime/Fidelity insurance in an amount not less than \$1,000,000.00, including coverage for theft or loss of KCKPS property.

28. LAW GOVERNING: All contractual agreements shall be subject to, governed by, and construed according to the laws of the State of Kansas.

29. ANTI-DISCRIMINATION CLAUSE: No bidder on this request shall in any way, directly or indirectly, discriminate against any person because of age, race, color handicap, sex, national origin, or religious creed.

30. BID BOND/PERFORMANCE BOND (Applicable ONLY to Construction/Remodel/Repair Projects, Unless Waived by the District).

A. Each proposal must be accompanied by a certified or cashier's check, or a bid bond in the amount of five percent (5%) of the Contractor's total bid.

B. A Performance Bond and a Material and Labor Payment Bond in amounts equal to one hundred percent (100%) of the contract price shall be furnished by the successful bidder. Bonds shall be issued by a surety acceptable to the Board.

C. NO BID BOND OR PERFORMANCE BOND IS REQUIRED FOR SERVICES

31. DISQUALIFICATION:

A. The Director of Purchasing may, at her/his sole discretion, disqualify a bidder for one or any combination of the following reasons:

- 1. Bidder's product does not meet the specifications or bid conditions of the solicitation;
- 2. Bidder's tendered bid is not received on the District's bid form;
- 3. Bidder's tendered bid is not signed;
- 4. Required bid bond is not furnished at time of bid opening;
- 5. Failure to comply with bid instructions, terms and conditions that are judged to be essential to the competitive process and in the best interests of the District.

B. Disqualification of bidders on future bids may be considered for any one or combination of the following reasons:

- 1. Refusal of the bidder to complete a contract or bid;

2. Bidder's past history of late deliveries or partial/incomplete shipments,
 3. Bidder's products or services have proven unreliable, unworkable or have not accomplished the result requested in the District's specifications.
32. SUPPLIER DIVERSITY: The Kansas City Kansas Public Schools encourages supplier diversity and participation of MBE/WBE/DBE designated businesses. However, such participation will not result in any selection or scoring advantage in the bid evaluation process.
33. CONTRACTUAL PROVISIONS ATTACHMENT: The Provisions found in Contractual Provisions Attachment (Form DA-146a, Rev. 06-12), which is attached hereto, are hereby incorporated in this contract and made a part thereof."
34. INCLEMENT WEATHER/EMERGENCY POLICY
IF THERE IS A SCHOOL OR BUILDING CLOSURE THE DAY OF THE SCHEDULED BID OPENING, DUE TO INCLEMENT WEATHER OR AN EMERGENCY, THE BID OPENING WILL OCCUR AT 2:00PM (CENTRAL) THE NEXT BUSINESS DAY THAT THE DISTRICT IS OPEN.