November 4, 2022

SUBJECT: FAP Route 649 (IL 17)

Project STP-MUEH(694) Section (1B-D)BR,P Marshall County Contract No. 68F08

Item No. 27, November 18, 2022 Letting

Addendum A

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

- 1. Revised page ii of the Table of Contents to the Special Provisions.
- 2. Revised pages 1, 5-6, 10-11, 13-16, and 31 of the Special Provisions.
- 3. Added pages 173-175 to the Special Provisions.

Prime contractors must utilize the enclosed material when preparing their bid and must include any changes to the Schedule of Prices in their bid.

Very truly yours,

Jack A. Elston, P.E.

Bureau Chief, Design and Environment

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STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2022, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of FAP Route 649 (IL 17), Project STP-MUEH(694), Section (1B-D)BR,P, Marshall County, Contract No. 68F08 and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

This project is located at Illinois Route 17 (FAP 649) at the Illinois Route 17 bridge (Structure No. 062-0003) over the Illinois River in Lacon, in Marshall County.

DESCRIPTION OF PROJECT

This project consists of the repair and rehabilitation of Structure No. 062-0003. The project includes bridge deck scarification, microsilica concrete overlay, pier protection repairs, structural steel repairs and strengthening, painting, roadway lighting, navigational lighting, bridge drainage improvements, and related collateral work necessary to complete the project.

DATE OF COMPLETION (PLUS WORKING DAYS)

Effective March 1, 1990 Revised August 3, 2018

The Contractor shall schedule his operations so as to complete all work, except as specified below, and open all the roadway to traffic on or before **November 3**, **2023**. The Contractor shall note that this completion date is based on an expedited work schedule. The Contractor will be allowed **30 working days**, after the November 3, 2023 completion date, to complete punchlist and the following items: Marina parking lot resurfacing and restoration, **removal of Contractor's safe span**, **navigational lighting**, **and any miscellaneous electrical**.

Contractor Access: At road closure locations where Type III Barricades are installed in a manner that will not allow Contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each work day may be relocated, when approved by the Engineer, in the manner shown on Highway Standard 701901 for Road Closed to Through Traffic. "Road Closed" signs (R11-2), supplemented by "Except Authorized Vehicles" signs (R3-I101), shall be mounted on both the near-right and far-left barricade(s). At the end of each work day the barricades shall be returned to their in-line positions. This work will be included in the cost of the contract, and no extra compensation will be allowed.

Traffic Control Notes and Working Restrictions

- 1. The contractor shall notify the IDOT Resident Engineer two (2) weeks prior to commencement of this construction project.
- The bridge closure shall be from Saturday, <u>March 18, 2023</u> through Friday, <u>November 3, 2023</u>. See Special Provisions for incentive/Disincentive included herein.
- 3. No daytime lane closures or permanent lane closures with temporary signals shall be allowed during the allowable working days after the <u>November 3, 2023</u> opening date.
- 4. Daily lane closures will be permitted prior to the March 18, 2023 closure date for measuring and inspecting <u>only</u>. One attenuator truck will be required in the closed lane for the daytime lane closure and shall not be paid for separately, but shall be considered included in the cost of the contract.

INCENTIVE/DISINCENTIVE FOR REHABILITATION ON S.N. 062-0003

The Contractor will be allowed a bridge closure from Saturday March 18, 2023 through Friday November 3, 2023 for the IL 17 river bridge over the Illinois River in Lacon. The Contractor shall schedule his/her operations so as to complete all work, except as specified below, and open all the roadway to traffic within the allowed closure. The Contractor shall note that this completion date is based on an expedited work schedule. The Contractor will be allowed 30 working days after the November 3, 2023, completion date to complete the marina parking lot improvements, removal of Contractor's safe span, navigational lighting, and any miscellaneous electrical.

<u>Failure to Complete the Work on Time</u>: Should the Contractor fail to complete the work on or before the specified date of completion or within such extended time allowed by the Department, the Contractor shall be liable to the Department in the amount of \$15,000 not as a penalty but as liquidated and ascertained damages for each calendar day beyond the November 3, 2023 completion date or extended time as may be allowed. Such damages may be deducted by the Department from the monies due to the Contractor. Working days shall be governed by the provision of Article 108.09 of the Standard Specifications.

In fixing the damages as set out herein, the desire is to establish a certain mode of calculation for the work because the Departments actual loss, in the event of delay, cannot be predetermined, would be difficult of ascertainment, and a matter of argument and unprofitable litigation. This mode is an equitable rule for measurement of the Departments actual loss and fairly takes into account the loss of use of the roadway if the project is delayed in completion. The Department shall not be required to provide any actual losses to recover these liquidated damages provided herein, as these damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later. Liquidated damages will not be assessed for any day less than twenty-four hours.

<u>Incentive Payment Plan</u>: The nature of this project is such that the use of this roadway cannot be safely and efficiently used until all specified work is complete. On this basis, the Contractor shall be entitled to an Incentive Payment for the completion of all work as set forth by the date of completion.

The Incentive Payment shall be paid at a rate of \$15,000 per calendar day for each day of early completion. The maximum payment under this incentive play will be limited to 14 calendar days.

A calendar day is every day on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later. No payment will be paid for any day less than twenty-four hours.

Should the Contractor be delayed in the commencement, prosecution, or completion of the work for any reason, there shall be no extension of the incentive payment calculation days even though there may be granted an extension of time for completion of the work unless significant extra work is added to the contract by the Department. No Incentive Payment will be made if the Contractor fails to complete the work before the specified date of completion or within such extended time allowed by the Department. Failure of the Contractor to complete all work as required by the contract before the November 3, 2023, completion date, shall release and discharge the State, the Department and all of its officers, agents and employees form an and all claims and demands for the payment of any incentive amount of damages arising from the refusal to pay any incentive amount.

If the contract is part of a combination award, no Incentive Payment shall commence on this contract which is part of the combination until all work on contracts which are part of the combination award has been completed.

DETOUR SIGNING

<u>Description</u>: This work shall consist of installing and maintaining the required traffic control signs and devices as shown in the plans.

<u>Construction Requirements</u>: Work shall be done according to Sections 701, 720, and 1106 of the Standard Specifications and there Illinois Manual of Uniform Traffic Control Devices where applicable and as directed by the Engineer or herein specified.

The Contractor shall be responsible for the proper location, installation, condition, and maintenance of all traffic control devices. All signs and barricades utilized for the proposed detour(s) shall be new or like new condition.

This item includes all signs, changeable message signs, barricades, pavement markings, traffic cones, warning lights, drums, flaggers, and other traffic control devices required for the type of operation being performed. This pay item may also include any additional detour signing as required by the Engineer.

Components to be removed shall be removed in such a manner as to leave the remaining structural components undamaged and in proper condition for the use contemplated. Any damage to the portions remaining in service shall be repaired or replaced. Repairs or replacement shall be made as directed by the Engineer. The removed portions shall be disposed of according to Article 202.03 of the Standard Specifications. Temporary Shoring and Cribbing shall be installed and approved by the Engineer before beginning any steel removal operations.

Burning of existing rivets or bolts will only be allowed near steel surfaces which are to be removed and discarded. Burning of existing rivets or bolts will not be allowed for members to remain in place and members that are to be removed and reinstalled at a later date. When burning of rivets or bolts is not allowed the head of the rivet or bolt shall be sheared off and the shank driven or drilled out. Extreme care shall be taken while removing the rivets or bolts so as not to damage the existing structural steel which is to remain. Unless noted otherwise on the plans, the cost of rivet and bolt removal shall be included in this item. All damage to existing members, which are to remain, shall be repaired or the member replaced to the satisfaction of the Engineer. Repair or replacement of damaged members shall be at the Contractor's expense and at no additional cost to the Department.

This work also includes the removal of existing shear studs to allow placement of stringer splice plates. Any studs interfering with placement of the new stringer splice plate shall be completely removed and any weld metal shall be ground smooth and flush to the stringer base metal.

<u>Method of Measurement.</u> Structural steel removal will not be measured, payment will be based upon the pounds of structural steel removal shown on the plans. The removal quantities shown are estimated from existing plans and do not include the weights of bolts, nuts, washers, studs, weld material or existing steel sections to be removed and re-installed.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per Pound for STRUCTURAL STEEL REMOVAL.

New structural steel placed in areas where STRUCTURAL STEEL REMOVAL is used will be paid for at the contract unit price per Pound for FURNISHING AND ERECTING STRUCTURAL STEEL.

JACKING AND CRIBBING

<u>Description</u>: This item shall consist of furnishing all material, equipment and labor for installation and subsequent removal of jacking support systems complete, including jacks, support beams, shims and all necessary cribbing to be used while performing the reconstruction of the pier caps for the proposed light pole bases at piers 1, 3, 8 and 10.

<u>Construction</u>: Traffic shall be removed from the structure to be jacked prior to commencing jacking operations. Traffic shall be kept off the structure until all pier cap reconstruction work has been completed and all jacking support systems and cribbing have been fully removed.

The superstructure, or portions thereof, shall be raised in such a manner as to avoid distortion or damage to any of its members. Differential jacking height shall not exceed 1/8 inch transversely between adjacent beams or 1/4 inch longitudinally between adjacent supports. The actual raising of the superstructure shall be kept to the minimum height required to complete the pier cap reconstruction, as shown on the plans.

Jacking and cribbing details with calculations shall be submitted to the Engineer for approval prior to starting any jacking procedures. The Contractor's jacking plans shall be prepared and sealed by an Illinois Licensed Structural Engineer. Approval of the Contractor's Jacking and Cribbing plan by the Engineer shall in no way relieve the Contractor of responsibility for the safety of the operation or for damage to the structure.

At any time during the bridge raising operations, the Engineer may require the Contractor to provide additional supports or measures to furnish an added degree of safety. The Contractor shall provide such additional supports or measures at no extra cost to the Department.

The Contractor shall be responsible for restoring to their original condition, prior to jacking, the adjacent ground surface, pavement, bridge deck, pier columns or pier caps disturbed by the cribbing system or associated footings or foundations.

The Contractor shall assume all responsibility and be liable for any damage caused by improper supports for the jacking and cribbing system and for any damage to existing utility, lighting or navigation lighting conduits suspended under the bridge or attached to, or embedded in, the piers. Neither added precautions nor the failure of the Engineer to order additional protection will in any way relieve the Contractor of sole responsibility for the safety of lives, equipment, and the structure.

<u>Method of Measurement:</u> This work will be measured for payment in units of Each, for each beam that is jacked.

<u>Basis of Payment:</u> This work, as herein specified, will be paid for at the contract unit price per Each for JACKING AND CRIBBING at the locations specified, which price shall be payment for all work and materials required at each location.

Hydrodemolition Equipment – Hydrodemolition equipment for removing concrete shall be calibrated, and shall use water according to Section 1002.

CONSTRUCTION REQUIREMENTS

Construction shall be according to the following.

(a) Concrete Removal

The Contractor shall provide ladders or other appropriate equipment for the Engineer to mark the removal areas. The repair perimeter shall be sawed a depth of 1/2 in. (13 mm) or less, as required to avoid cutting the reinforcement. Any cut reinforcement shall be repaired or replaced at the expense of the Contractor. The areas to be repaired shall have all loose, unsound concrete removed completely using chipping hammers, hydrodemolition equipment, or other methods approved by the Engineer. The concrete removal shall extend along the reinforcement bar until the reinforcement is free of bond inhibiting corrosion. Reinforcement bar with 50 percent or more exposed shall be undercut to a depth of 3/4 in. (19 mm) or the diameter of the reinforcement bar, whichever is greater.

If sound concrete is encountered before existing reinforcement bars are exposed, further removal of concrete shall not be performed unless the minimum repair depth is not met, or plan details indicate minimum concrete removal limits.

The repair depth shall be a minimum of 1 in. (25 mm) unless indicated otherwise in the plans. The substrate profile shall be \pm 1/16 in. (\pm 1.5 mm). The perimeter of the repair area shall have a vertical face.

The Contractor shall have a maximum of <u>14 calendar days</u> to complete each repair location once concrete removal has started for the repair.

The plan details for repairing the top 7 feet of the south columns of piers 5 and 6 indicate an estimated profile for encountering sound concrete. It is estimated that the region of unsound concrete may extend 2 inches under the existing bearing plates and that the depth of unsound concrete will progressively decrease as the concrete removal progresses from the top of the column towards the base of the repair detail. If during the concrete removal process it appears that the removal depth will exceed the anticipated depths described herein and shown in the plans, the Contractor shall suspend concrete removal operations and the Bureau of Bridges and Structures shall be contacted for further disposition.

All concrete removed as part of the concrete repair operation shall be disposed of according to Article 202.03.

(b) Surface Preparation

Prior to placing the concrete, the Contractor shall prepare the repair area and exposed reinforcement by blast cleaning. The blast cleaning shall provide a surface that is free of oil, dirt, and loose material.

All existing concrete that will be in contact with the new concrete shall have a rough surface. Care shall be taken to ensure the sawcut face is roughened by blast cleaning.

Concrete placement shall be done within <u>3 calendar days</u> of the surface preparation, or the repair area shall be prepared again.

(c) Reinforcement

Exposed reinforcement bars shall be cleaned of concrete and corrosion by blast cleaning. After cleaning, all exposed reinforcement shall be carefully evaluated to determine if replacement or additional reinforcement bars are required.

Reinforcing bars that have been cut or have lost 25 percent or more of their original cross-sectional area shall be supplemented by new in kind reinforcement bars. New bars shall be lapped a minimum of 32 bar diameters to existing bars. A mechanical bar splicer shall be used when it is not feasible to provide the minimum bar lap. No welding of bars shall be performed.

Intersecting reinforcement bars shall be tightly secured to each other using 0.006 in. (1.6 mm) or heavier gauge tie wire and shall be adequately supported to minimize movement during concrete placement or application of shotcrete.

(d) Repair Methods

All repair areas shall be inspected and approved by the Engineer, and a representative from the concrete manufacturer, prior to placement of the concrete.

Falsework shall be according to Article 503.05 and forms shall be according to Article 503.06 unless specified otherwise by the concrete manufacturer. Formwork shall provide a smooth and uniform concrete finish and shall approximately match the existing concrete structure. Formwork shall be mortar tight and closely fitted where they adjoin the existing concrete surface to prevent leakage.

Apply primer to the existing concrete surfaces in accordance with the concrete manufacturer's recommendations. Mix, place, and cure the concrete in accordance with the manufacturer's recommendations. Do not place materials if weather or surface conditions are such that the material cannot be properly handled, placed, and cured within the manufacturer's requirements. A representative for the concrete manufacturer shall be onsite during the concrete placement.

The surfaces of the completed repair shall be finished according to Article 503.15.

(e) Inspection of Completed Work.

The Contractor shall provide ladders or other appropriate equipment for the Engineer to inspect the repaired areas. After curing but no sooner than 28 days after placement of concrete, the repair shall be examined for defects such as cracks, voids, and delaminations. Sounding for delaminations will be done with a hammer or by other methods determined by the Engineer. Any discovered defects shall be repaired at the Contractor's expense. The Contractor shall coordinate with the concrete manufacturer and submit a repair for the defect to the Engineer for review and approval.

<u>Method of Measurement</u>. This work will be measured for payment in place for the required amount of concrete and the volume computed in cubic foot.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per cubic foot for CONCRETE STRUCTURE REPAIR.

With the exception of the reinforcement quantity indicated in the plans or reinforcement damaged by the Contractor during removal, the furnishing and installation of supplemental reinforcement bars or mechanical bar splicers will be paid according to Article 109.04.

Concrete removal will not be measured for separate payment but shall be included in the cost of CONCRETE STRUCTURE REPAIR.

COLUMN TENSIONED STRANDS

<u>Description</u>. This item shall consist of furnishing and installing tensioned strands at the locations shown in the plans. This work shall also include coring holes in existing concrete to facilitate installation of the tensioned strands and grouting the ends of the cored holes closed after the tensioned strands have been installed.

<u>Materials.</u> The tensioned strands shall consist of greased and sheathed strands and twisted ring anchors as manufactured by DYWIDAG-Systems International or an approved equal.

Tensioned strands shall be high strength, low relaxation 7-wire strand, Grade 270, in accordance with ASTM A416. The nominal strand diameter shall be 0.6 inches and the nominal cross-sectional area shall be 0.217 sq. in. Strands shall be fully coated by an organic corrosion inhibitor and then encapsulated by a seamless polypropylene UV stabilized sheath. Exposed portions of the strands shall be coated and sealed with an approved material that is suitable for long term outdoor exposure.

Coupling device shall be galvanized according to AASHTO M232.

Grout shall be chosen from the Department's Qualified Product List of Nonshrink Grouts.

<u>Submittals.</u> The contractor shall submit manufacturer's information for the strands and components, showing material data, and installation procedures to the Engineer for approval prior to ordering materials. Submitted information shall include a description of materials for use in providing environmental protection, and procedures for its installation. Submittal for sheathing shall note UV stabilization attribute for product(s) selected. Submittal of coating selected to seal elements of the assembly shall indicate applicability for outdoor exposure.

CONSTRUCTION REQUIREMENTS

The Contractor shall mark the location of the cored holes on the existing pier according to the layout shown in the plans. Efforts have been made to try and locate the cored holes a sufficient distance from existing reinforcement according to information in the existing plans. The Contractor shall locate existing reinforcement bars using rebar detection equipment to ensure existing reinforcement bars will not be damaged during coring. Any discovered conflicts shall be reported to the Bureau of Bridges and Structures for further disposition. After suitable hole locations have been determined, holes shall be cored to the diameter shown in the plans.

After the Concrete Structure Repair is complete and cured according to the manufacturer's directions, install the column tensioned strands. Stress each strand per the manufacturer's directions to 47.5 kips. Apply corrosion protection coating specified by the manufacturer after the stressing is complete.

The cored holes shall be filled with non-shrink grout to the depth specified in the plans after the strands have been stressed.

Method of Measurement and Basis of Payment. This work will be paid for at the contract unit price Each for COLUMN TENSIONED STRANDS. Payment shall constitute full compensation for all materials, labor, tools, equipment, and incidentals necessary to complete the work. Rebar detection, coring holes, and grouting the holes will not be measured for separate payment but shall be included in the cost of COLUMN TENSIONED STRANDS.

CAULKING OF STRUCTURAL STEEL CONNECTIONS

<u>Description</u>. This work shall consist of removing existing joint sealant and installing new joint sealant around existing connection plates and at areas of pack rust around built-up plate members in conjunction with bridge painting activities.

<u>Materials</u>. Joint sealant shall be an approved polyurethane sealant according to Article 1050.04 of the Standard Specifications. The joint sealant shall be supplied in caulk tubes. The sealant shall be compatible with the proposed paint system and shall be submitted to the Engineer for approval prior to use.

<u>Construction</u>. Areas to be sealed shall include all connections along the lower chord of the truss, all truss connections within 10 feet of expansion joints and intermediate relief joints, all connections on vertical and diagonal truss members within the proposed painting limits, and any other locations as directed by the engineer. Lattice and stay plate connections on the lower chord, verticals, and diagonals may be omitted if not pack rusted. All caulking shall be performed according to the product data sheets. Caulk shall be applied after the topcoat of paint is dry to the touch. After the caulk has dried as per the manufacturer's recommendations, a stripe coat of topcoat paint shall be applied to all areas of caulking. Alternatively, the caulk may be applied between the application of the intermediate and topcoats of paint.

All members required to be caulked shall be caulked around the top and sides of the members. The bottom shall be left uncaulked to allow for drainage.

Locations where pack rust has been removed, leaving a gap between the two surfaces greater than 1/4 inch in depth shall be filled with a closed cell backer rod in accordance with the caulking manufacturer's recommendations prior to the application of the caulk.

<u>Method Measurement</u>. Caulking will be measured for payment in gallons used to the nearest 0.1 gallon. Empty caulk tubes shall be provided to the Engineer and the pay quantity shall be determined based on the number of tubes used and the volume per tube.

<u>Basis of Payment</u>. Caulking will be paid for at the contract unit price per Gallon for CAULKING STRUCTURAL STEEL CONNECTIONS.

LUMINAIRE MOUNTING BRACKET - SPECIAL

This work shall be in accordance with Sections 830 and 1069 of the Standard Specifications except as modified herein.

The Contractor shall furnish either a 1 ft. twin-tenon luminaire bracket oriented at 90 degrees or a 1-ft. single luminaire bracket and install it on a proposed tenon mounted light pole at the locations as shown in the plans.

The proposed bracket shall accommodate the installation of one or two LED roadway luminaires.

The bracket shall be fabricated from 2 in. (50 mm) schedule 40 pipe 30,000 psi (208,000 kPa) minimum yield strength and be fully galvanized.

The Contractor shall install the bracket level and install a minimum of three set screws with at least one set screw drilled through the luminaire bracket into the light pole to prevent the bracket from rotating.

The contractor shall supply all materials required to install the luminaire bracket as a part of this pay item.

<u>Basis of Payment</u>: This work shall be paid for at the contract unit price per Each for LUMINAIRE MOUNTING BRACKET – SPECIAL which price shall be payment in full for all labor, equipment, and materials required to furnish and install the luminaire bracket described above, complete.

STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS

Effective: March 6, 2009 Revised October 5, 2015

<u>Description.</u> This item shall consist of preparing and submitting, to the Engineer for approval, Structural Assessment Reports (SARs) for proposed work on structure(s) or portions thereof. Unless noted otherwise, a SAR shall be required when the Contractor's means and methods apply loads to the structure or change its structural behavior. A SAR shall be submitted and approved prior to beginning the work covered by that SAR. Separate portions of the work may be covered by separate SARs which may be submitted at different times or as dictated by the Contractor's schedule.

Existing Conditions. An Existing Structure Information Package (ESIP) will be provided by the Department to the Contractor upon request. This package will typically include existing or "AsBuilt" plans, and the latest National Bridge Inspection Standards (NBIS) inspection report. The availability of structural information from the Department is solely for the convenience and information of the Contractor and shall not relieve the Contractor of the duty to make, and the risk of making, examinations and investigations as required to assess conditions affecting the work. Any data furnished in the ESIP is for information only and does not constitute a part of the Contract. The Department makes no representation or warranty, express or implied, as to the information conveyed or as to any interpretations made from the data.

Removal SARs. A SAR for removal of existing structures, or portions thereof, shall demonstrate that the Contractor's proposed means and methods to accomplish the work do not compromise the structural adequacy of the bridge, or portions thereof that are to remain in service, at any time during the work activities being performed. Each phase of the operation shall be accounted for, as well as the existing condition of the structure.

Construction SARs. A SAR for new construction or for construction utilizing existing components shall demonstrate that the Contractor's proposed means and methods to accomplish the work do not compromise the structural adequacy of the bridge or portions thereof at any time during the work activities being performed. For construction activities applying less than 10 tons (9 metric tons) of total combined weight of equipment and stockpiled materials on the structure at any one time, a SAR submittal shall not be required provided the Contractor submits written verification to the Engineer stating the applied loads do not exceed this threshold. The verification shall be submitted prior to the start of the activity. This SAR exemption shall not relieve the Contractor from responsibility for the structure. A SAR shall be submitted in all cases where the existing structure is posted for less than legal loads or the Contract plans indicate a live load restriction is in place.

Requirements

a) General. All work specified shall be performed according to the Contract plans, Special Provisions and/or Standard Specifications governing that work.

Submittals for falsework and forming for concrete construction shall be according to Articles 503.05 and 503.06 and does not require a SAR. Moving construction equipment across a structure, or portions thereof, open to traffic shall be addressed according to Article 107.16 and does not require a SAR. Operating equipment on an in-service structure and/or using a portion of an in-service structure as a work platform shall require a SAR and Article 107.16 shall not apply.

Added November 4, 2022

The Contractor may move vehicles across the existing bridge without a SAR after closure and prior to removal of any portion of the structure provided:

- The vehicles satisfy the requirements of Section 15-111 of the Illinois Vehicle Code (described in the IDOT document "Understanding the Illinois Size & Weight Laws") or of the Federal Highway Administration document "Bridge Formula Weights" (available at: http://www.ops.fhwa.dot.gov/freight/publications/brdg_frm_wghts/index.htm)
- The Contractor submits written verification to the Engineer stating the vehicles meet these
 requirements. The verification shall be submitted prior to allowing the vehicles on the
 structure.

This SAR exemption shall not relieve the Contractor from responsibility for the structure. This SAR exemption shall not be allowed where the existing structure is posted for less than legal loads or the Contract plans indicate a live load restriction is in place. No stockpiling of material is allowed under this exemption.

All SARs shall detail the procedures and sequencing necessary to complete the work in a safe and controlled manner. When appropriate, supporting design calculations shall be provided verifying the following:

- The effects of the applied loads do not exceed the capacity at Operating level for any
 portions of the structure being utilized in the demolition of the structure provided those
 portions are not to be reused.
- The effects of the applied loads do not exceed the capacity at Inventory level for new construction or for portions of the existing structure that are to be reused.
- The condition of the structure and/or members has been considered.

See AASHTO Manual for Bridge Evaluation for further information on determining the available capacities at the Operating and Inventory levels.

b) Confidential Documents. Due to the sensitivity of the inspection reports and bridge condition reports to bridge security, the following confidentiality statement applies to these reports:

"Reports used by the Contractor and the contents thereof are the property of the Department, and are subject to the control of the Department in accordance with State and Federal law. The distribution, dissemination, disclosure, duplication or release of these reports or the content thereof in any manner, form or format without the express permission of the keeper of this record is prohibited. The owner is the official keeper of these records, except for state owned bridges, where the official keeper of these records is the Regional Engineer."

c) Submittals. The Contractor shall be pre-approved to prepare SAR(s) or shall retain the services of a pre-qualified engineering firm to provide these services. Pre-approval of the Contractor will be determined by the Illinois Department of Transportation and will allow SAR(s) preparation by the Contractor unless otherwise noted on the plans. For engineering firms, pre-qualification shall be according to the Department in the category of "Highway Bridges-Typical" unless otherwise noted on the plans. Firms involved in any part of the project (plan development or project management) will not be eligible to provide these services. Evidence of pre-approval/pre-qualification shall be submitted with all SAR(s). The SAR(s) shall be prepared and sealed by an Illinois Licensed Structural Engineer. The Contractor shall submit SAR(s), complete with working drawings and supporting design calculations, to the Engineer for approval, at least 30 calendar days prior to start of that portion of the work.

At a minimum a Structural Assessment Report shall include the following:

- 1. A plan outlining the procedures and sequence for the work, including staging when applicable.
- 2. A demolition plan (when removal is included as an item of work in the contract) including details of the proposed methods of removal.
- 3. A beam erection plan (when beam erection is included as an item of work in the contract) including details of the proposed methods of erection.
- 4. Pertinent specifications for equipment used during the work activity.
- 5. The allowable positions for that equipment during the work activity.
- 6. The allowable positions and magnitudes of stockpiled materials and/or spoils, if planned to be located on the structure.
- 7. Design and details for temporary shoring and/or bracing, if required by the Contractor's means and methods.

Approval or acceptance of a Structural Assessment Report shall not relieve the Contractor of any responsibility for the successful completion of the work.

Revisions to the Contractor's means and methods resulting in no increased load effects to the structure, as determined by the Contractor's Structural Engineer, shall not require a SAR resubmittal. However, the Contractor's Structural Engineer shall submit to the Engineer written verification that there is no increased load effect. The written verification shall specify the revisions and shall be submitted prior to the start of the revised activities.

The Contractor shall be responsible for following the approved SAR related to the work involved.

Method of Measurement. Structural Assessment Reports will not be measured for payment.

<u>Basis of payment.</u> Structural Assessment Reports will not be paid for separately but shall be considered as included in the contract unit price(s) for the work item(s) specified.

Added November 4, 2022