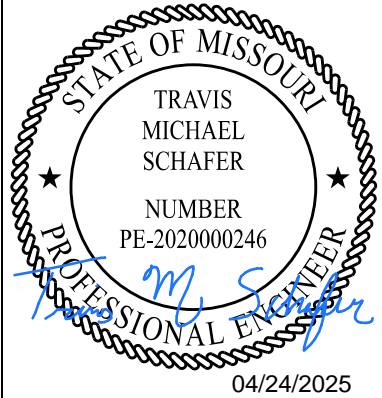


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	<p>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65101 Phone (888) 275-6636</p>
	<p>OLSSON 7301 West 133rd Street Overland Park, KS 66213 Certificate of Authority # 001592 Consultant Phone #913-381-1170</p>
	<p>If a seal is present on this sheet, JSP's has been electronically sealed and dated.</p>
	<p>JOB NO. JKU0404 JACKSON COUNTY, MO DATE PREPARED: 04/09/2025</p>
<p>Only the following items of the Job Special Provisions (Bridge) are authenticated by this seal: All</p>	

A. CONSTRUCTION REQUIREMENTS

1.0 Description. This provision contains general construction requirements for this project.

2.0 Construction Requirements. The plans and the asbestos and lead inspection report for the existing structure(s) and the geotechnical report for the new structure is included in the contract in the bridge electronic deliverables zip file for informational purposes only.

2.1 In order to assure the least traffic interference, the work shall be scheduled so that the bridge closure is for the absolute minimum amount of time required to complete the work. The bridge shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed bridge is opened to traffic.

2.2 Bridge work by contractor forces, including erection, rehabilitation or demolition, shall not be allowed over traffic unless a bridge platform protection system is installed below the work area except for work performed above a deck that is intact. The protection system shall be capable of catching all falling objects such as tools, overhang brackets or materials. Lifting of objects that are heavier than the capacity of the bridge protection system shall not be permitted.

2.3 Provisions shall be made to prevent damage to any existing utilities. Any damage sustained to the utilities as a result of the contractor's operations shall be the responsibility of the contractor. All costs of repair and disruption of service shall be as determined by the utility owners and as approved by the engineer.

3.0 Environmental Contact. Environmental Section may be contacted at the below address or phone number. The Missouri Department of Health may be contacted at (573) 751-6102.

MoDOT - Design Division - Environmental Section
P.O. Box 270
105 W. Capitol Ave., Jefferson City, MO 65102
Telephone: (573) 526-4778

3.1 Approved Smelter and Hazardous Waste Treatment, Storage and Disposal Facility. The following is the approved smelter and hazardous waste treatment, storage and disposal facility:

Doe Run Company - Resource Recycling Division - Buick Facility
Highway KK
Boss, MO 65440
Telephone: (573) 626-4813

4.0 Method of Measurement. No measurement will be made.

5.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

B. DECORATIVE PEDESTRIAN FENCE

1.0 Description. This work shall consist of fabricating and installing a steel decorative pedestrian fence to provide a complete and properly functioning fence system as indicated on the plans and in this specification.

2.0 Performance Requirements.

2.0.1 The fence design shall allow for thermal movement of 1/4 inch per 30 feet of fence, minimum. The fence design shall account for the differential thermal expansion characteristics of the fence and concrete to which it is mounted.

2.0.2 Base plates shall be furnished for mounting posts to top of concrete. Base plate anchors shall be cast into the concrete as shown on the plans.

2.1 Materials. Decorative fence system products shall meet or exceed the following requirements.

2.1.1 Acceptable Manufacturer Systems. The chosen decorative fence system shall be the same for all bridges in this project. Decorative fence system shall meet the performance requirements as stated in this special provision and shall consist of one of the approved decorative fence systems listed on the Bridge Pre-qualified Product Listing.

2.1.2 Visual Condition. Metal free from surface blemishes shall be provided where exposed to view in the finished unit. Exposed-to-view surfaces exhibiting pitting, seam marks, roller marks, stains, discolorations, or other imperfections on finished units are not acceptable.

2.1.3 Surface Coatings. The steel shall be hot-dip galvanized to meet the requirements of ASTM A 653 with a minimum zinc coating weight of 0.90 oz/sf, coating designation G-90. Surface preparation of galvanized surface for the aliphatic polyurethane finish coat shall be in accordance with the product specifications for the finish coat. The exterior of all fence components shall be coated with an aliphatic polyurethane finish coat to provide a total dry film thickness of 4 mils minimum and 6 mils maximum. The color of the finish coat shall be black (Federal Standard #17038).

2.2 Construction Requirements.

2.2.1 Delivery, storage, handling and installation methods shall be per fence manufacturer's recommendations.

2.2.2 Fence posts shall be spaced no greater than the maximum post spacing shown on the plans, plus one-half inch. For installations along sloping grades, the post spacing will be measured along the grade. Separation gaps shall be provided at a minimum of every six panels.

2.2.3 For field assembly, zinc-rich primer shall be applied to thoroughly cover field-cut or field-drilled edges. Two coats of manufacturer supplied finish paint shall be applied to match fence color.

2.3 Warranty. All structural fence components shall be warranted by the manufacturer for a period of ten (10) years from the date of final acceptance by the engineer. Warranty shall cover any defects in material finish, including cracking, peeling, chipping, blistering, or corrosion and necessary labor required to replace or restore such parts.

3.0 Method of Measurement. Measurement shall be made horizontally and to nearest linear foot of fence installed.

4.0 Basis of Payment. Payment for the work described above and on the contract plans, including all material, equipment, labor, and any other incidental work necessary, will be

considered completely covered by the contract unit price for (48in.) Decorative Pedestrian Fence (Structures).

C. MODIFIED ENR DYNAMIC FORMULA

1.0 General.

1.1 The following formula shall be used to determine the ultimate dynamic capacity of piles:

$$P_u = P_{allow} \times FS = \frac{12ehE_h}{s + c} \times \frac{W_r + n^2W_p}{W_r + W_p}$$

where:

- P_u = Ultimate dynamic capacity (pounds)
- P_{allow} = Maximum axial service load (pounds)
- FS = Factor of Safety (4)
- eh = Hammer efficiency = 0.85
- E_h = Hammer energy per blow = $W_r \times h$ for single acting steam or air hammer or open cylinder Diesel hammer.
- s = Penetration of pile per hammer blow (inches)
- c = Average temporary compression (inches). The value of c shall be determined from test pile rebound graphs or as specified by the Engineer.
- W_r = Weight of striking parts of hammer (pounds)
- h = Hammer ram stroke (feet) average during 1 inch of pile penetration
- n = Coefficient of restitution
 - 0.55 for steel cushion on steel piles
 - 0.3 to 0.4 for wood cushion on steel piles
- W_p = Weight being driven (pounds) includes pile and pile follower, anvil, drive cap and adapter as applicable.

1.2 The above formula will be applicable only if:

- (a) The hammer has an unrestricted fall.
- (b) The pile head is not broomed, crushed or splintered.
- (c) There is no appreciable bounce of the hammer after striking the pile.
- (d) The penetration is at a uniform or uniformly decreasing rate.
- (e) Hard rock driving criteria have not been met.

2.0 Method of Measurement. No measurement will be made

3.0 Basis of Payment. Payment for the above described work, including all material, equipment, tools, labor and any other incidental work necessary to complete this item, will be considered completely covered by the contract unit price for Galvanized Structural Steel Piles (14 in.).