



CALL NO. 402

CONTRACT ID. 102905

DAVISS - OHIO COUNTIES

FED/STATE PROJECT NUMBER 121GR10M19

DESCRIPTION WESTERN KY PARKWAY TO OWENSBORO

WORK TYPE BRIDGE DECK RESTORATION & WATERPROOFING

PRIMARY COMPLETION DATE 11/15/2010

LETTING DATE: January 22, 2010

Sealed Bids will be received in the Division of Construction Procurement and/or the 1st floor of the Transportation Cabinet Office Building until 10:00 AM EASTERN STANDARD TIME January 22, 2010. Bids will be publicly opened and read at 10:00 AM EASTERN STANDARD TIME.

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

(Check guaranty submitted: Cashier's Check Certified Check Bid Bond)

BID BONDS WHEN SUBMITTED WILL BE RETAINED WITH THE PROPOSAL

DBE General Plan Included

BID

PROPOSAL ISSUED TO: _____

SPECIMEN

Address City State Zip

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PART I
SCOPE OF WORK

CONTRACT ID - 102905

ADMINISTRATIVE DISTRICT - 02

PROJECT(S) IDENTIFICATION AND DESCRIPTION:

COUNTY - DAVIESS, OHIO
121GR10M19

WESTERN KY PARKWAY TO OWENSBORO

COUNTY - DAVIESS

PES - MB03090071001

FE02 030 9007 B00088

WESTERN KY PARKWAY TO OWENSBORO SOUTH FORK OF PANTHER CREEK (MP 62.407). BRIDGE DECK
OVERLAY.

GEOGRAPHIC COORDINATES LATITUDE 37^38'45" LONGITUDE 86^59'55"

COUNTY - DAVIESS

PES - MB03090071002

FE02 030 9007 B00089

WESTERN KY PARKWAY TO OWENSBORO SOUTH FORK OF PANTHER CREEK (MP 62.380). BRIDGE DECK
OVERLAY.

GEOGRAPHIC COORDINATES LATITUDE 37^38'45" LONGITUDE 86^59'55"

COUNTY - DAVIESS

PES - MB03090071003

FE02 030 9007 B00090

WESTERN KY PARKWAY TO OWENSBORO SOUTH FORK OF PANTHER CREEK RELIEF # 2 (MP 62.948).
BRIDGE DECK RESTORATION & WATERPROOFING.

GEOGRAPHIC COORDINATES LATITUDE 37^39'10" LONGITUDE 87^00'10"

COUNTY - OHIO

PES - MB09200691001

FE02 092 0069 B00062

HARTFORD TO SULPHER SPRINGS KY 69 (MP 15.002) OVER NATCHER PARKWAY (MP 47.801) 1 MILE
EAST OF JCT US 231. BRIDGE DECK OVERLAY.

GEOGRAPHIC COORDINATES LATITUDE 37^27'27" LONGITUDE 86^52'56"

COUNTY - OHIO

PES - MB09290071001

FE02 092 9007 B00067

WESTERN KY PARKWAY TO OWENSBORO BRIDGE OVER KY 764 (MP 58.240). BRIDGE DECK OVERLAY.

GEOGRAPHIC COORDINATES LATITUDE 37^35'30" LONGITUDE 86^57'55"

CONTRACT ID - 102905 (CONTINUED)

COMPLETION DATE(S):

COMPLETION DATE - November 15, 2010
APPLIES TO ENTIRE CONTRACT

20 CALENDAR DAYS
APPLIES TO 88R

20 CALENDAR DAYS
APPLIES TO 88L

30 CALENDAR DAYS
APPLIES TO 62N

20 CALENDAR DAYS
APPLIES TO B67R

20 CALENDAR DAYS
APPLIES TO 67L

8 CALENDAR DAYS
APPLIES TO B89R

8 CALENDAR DAYS
APPLIES TO 89L

8 CALENDAR DAYS
APPLIES TO B90R

8 CALENDAR DAYS
APPLIES TO B90

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/contract)

The Bidder must download the bid file located on the web site to prepare a bid packet for submission to the Department. The bidder must include the completed bid packet printed from the Program along with the disk created by said program.

JOINT VENTURE BIDDING

Joint Venture bidding is permissible. However, both companies MUST purchase a bidding proposal. Either proposal may be submitted but must contain the company names and signatures of both parties where required. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor is advised that the Underground Facility Damage Protection Act of 1994, became law January 1, 1995. It is the contractor's responsibility to determine the impact of the act regarding this project, and take all steps necessary to be in compliance with the provision of the act.

01/01/2009

NATIONAL HIGHWAY

This project is on the NATIONAL HIGHWAY SYSTEM.

Special Notes

Bridge Restoration and Waterproofing B67, B62, and B88
Bridge Restoration and Waterproofing B89
Bridge Restoration and Waterproofing B90
Joint Replacement All
Joint Resealing B62
Joint Elimination B88
Wing Wall/Back Wall Repair B88
Approach Pavement B67, B62, and B88
Standard Drawings

**SPECIAL NOTE FOR BRIDGE RESTORATION AND WATERPROOFING
WITH CONCRETE OVERLAYS
B62, B67, AND B88**

- I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Machine preparation of existing slab or remove the existing overlay; (3) Place new concrete overlay and epoxy-sand slurry in accordance with Section 606; (4) Maintain and control traffic; and (5) Any other work specified as part of this contract.

All construction will be in accordance with Section 606 unless otherwise specified.

II. MATERIALS.

A. Latex Concrete. See Section 606.03.17.

B. Class "M" Concrete. Use either "M1" or "M2". See Section 601.

C. Epoxy-Sand Slurry. See Section 606.03.18.

III. CONSTRUCTION.

A. Remove of Existing Overlay. In addition to Section 606.03.03, totally remove the existing concrete overlay by grinding or scarifying the deck to a depth slightly below or equal to the original bridge slab surface. Machine preparation of the existing slab to a depth of at least ¼" below the existing surface is NOT required. When removal of an existing overlay is a pay item, no payment will be allowed for "Machine Preparation of Existing Slab". This work is incidental to the pay item "Removal of Existing Overlay – Square Yard".

E. Surface Texturing. Texture the concrete surface of the overlay in accordance with Section 609.03.10. The minimum thickness of the textured overlay shall be as follows:

Latex Cement Concrete – 1 ¼"

F. Bridge Overlay Approach Pavement. The Contractor shall construct a new asphalt surface for all approaches to each structure in this project. See the "SPECIAL NOTE FOR PLACING BRIDGE OVERLAY APPROACH PAVEMENT".

- IV. MEASUREMENT.** See Section 606.

- V. PAYMENT.** See Section 606.

CRACK TREATMENT AND 3/8" EPOXY-URETHANE WATERPROOFING OVERLAY FOR BRIDGE DECKS B89

1. SCOPE

1.1 This specification describes the **Pre-treatment** and **Overlay** consisting of multiple layers of hybrid polymer systems and a special blend of extremely hard aggregate designed to provide a minimum of a 3/8" thick application for the purpose of complete waterproofing as well as providing a non-skid surface to withstand continuous heavy traffic and extreme changes in weather conditions.

2. MATERIALS

Pre-treatment:

2.1 Hairline cracks and encapsulating steel grid

This two part hybrid polymer shall be free of any fillers, volatile solvents and shall be formulated to provide simple volumetric ratio of two components such as one to one or two to one by volume.

This hybrid polymer system shall be formulated to provide a unique combination of **extremely low viscosity** and **low surface tension** coupled with a built in **affinity for concrete and steel**.

Overlay:

2.2 The two-part epoxy-urethane co-polymer system shall be free of any fillers volatile solvents and shall be formulated to provide simple volumetric mixing ratio of two components such as one to one or two to one by volume.

The epoxy-urethane co-polymer system shall be formulated to provide flexibility in the system without any sacrifice of the hardness, chemical resistance or strength of the epoxy-urethane co-polymer system. Use of external/conventional flexibilizers are not acceptable. Flexibility shall be introduced by interaction of elastomers to chemically link in the process of curing so that the flexibility of the molecule is least affected during the low temperature conditions that are confronted in actual use.

2.3 Material Requirements

2.3.1 Physical Requirements of Cured *Pretreatment for Cracks* System.

When Components A and B are mixed in the appropriate ratio, the cured resin shall conform to the requirements of Table 1. (Test methods are discussed in detail in Item 3 of this specification.)

TABLE 1	
PHYSICAL PROPERTIES OF THE CURED SYSTEM	
Property	Value
Compressive Strength, min. psi	5,000
Tensile Strength, min. psi	2500
Tensile Elongation, percent	25 ± 5
Water Absorption, percent by wt. max.	0.5%
Shore D Hardness, 25°C (77°F).	70 ± 5
Gel Time, minutes	48-52 (100gms)
Adhesion to Concrete	100% failure in concrete
Percent Solids	100

2.3.2 Physical requirements of Epoxy-Urethane Copolymer Overlay System.

When Components A and B are mixed in the appropriate ratio, the cured resin shall conform to the requirements of Table 2. (Test methods are discussed in detail in Item 3 of this specification.)

TABLE 2	
PHYSICAL PROPERTIES OF THE CURED SYSTEM	
Property	Value
Compressive Strength, min. psi	6,000
Tensile Strength, min. psi	2000
Tensile Elongation, percent.	30 ± 10
Water Absorption, percent by wt. max.	0.5%
Shore D Hardness, 25°C (77°F).	70 ± 5
Gel Time, minutes	25 – 31 (100 gms)
Abrasion Resistance, mg., max.	85
Adhesion to Concrete	100% failure in concrete
Flexural Yield Strength, min. psi	5,000
Percent Solids	100

2.3.2.1 Visco-Elastic Properties of Epoxy-Urethane Copolymer system

The modulus of the cured epoxy-urethane system determined by variable temperature Dynamic Mechanical Analysis (DMA) using DMA instruments and according to ASTM D4065-95, shall conform to the following minimum values as given in Table 3.

TABLE 3		
VISCO-ELASTIC PROPERTIES OF THE CURED SYSTEM		
TEMPERATURE	STORAGE MODULUS DYNES/SQ.CM.	LOSS MODULUS DYNES/SQ.CM.
-10°C	1 x 10 ⁹	7 x 10 ⁷
20°C	6 x 10 ⁸	7 x 10 ⁷
50°C	4 x 10 ⁷	2 x 10 ⁷
60°C	1 x 10 ⁷	5 x 10 ⁶
70°C	6 x 10 ⁶	1 x 10 ⁶

The tests shall be conducted at a frequency of 1 Hz with a 0.3% strain in accordance with the guidelines described in the testing equipment manual.

2.3.2.2 Load Bearing Capabilities

The cured epoxy-urethane system must exhibit the following load bearing capacity. At approximately 20% strain, the polymer shall retain at least 85% of its original load bearing strength (tensile stress) as per ASTM D-638.

2.4 Material Provider. The bridge deck restoration system shall be provided by the following manufacturer or an equal from the **approved** material list from Division of Materials: Any change of material must be approved prior to letting.

Pretreatment :MARK-135
Overlay: MARK-163 FLEXOGRID
 as manufactured by **POLY-CARB, INC.**,
 33095 Bainbridge Road
 Solon, Ohio 44139
 (440) 248-1223

2.5 Aggregate

2.5.1 Aggregate used for all layers shall be non-friable, non-polishing, clean and free from surface moisture. It shall be durable and sound and have a proven record of performance in applications of this type. The aggregate shall be 100 percent fractured, thoroughly washed and kiln dried to a maximum moisture content of 0.2 percent by weight, measured in accordance with ASTM C566. The fracture requirements shall be at least one mechanically fractured face and will apply to materials retained on U.S. No. 10 seive. The recommended sources of aggregate are **Washington Stone** or **Oklahoma Flint**.

2.5.2 Aggregate for all layers shall have a minimum Mohs scale hardness of 6.5.

2.5.3 The grading of the aggregate shall conform to the requirements of Table 4.

TABLE 4	
AGGREGATE GRADATION	
Sieve Size	Percent Passing
No. 6	60 - 100
No. 10	0 - 40
No. 20	0 - 10

3. METHOD OF TESTING

3.1 Tests shall be conducted in accordance with the following methods:

3.1.1 Compressive Strength: ASTM C109, *Compressive Strength of Hydraulic Cement Mortars*. The two components of the resin are to be thoroughly mixed in their appropriate ratios. Two volumes of graded silica sand in accordance with ASTM C778 shall be added to one volume of mixed resin. The samples shall then be prepared according to the requirements of ASTM C109 and allowed to cure for 7 days at $23 \pm 2^{\circ}\text{C}$.

3.1.2 Tensile Strength and Elongation: ASTM D638, *Tensile Properties of Plastics*, Specimen Type I or Type II. Samples shall be cured at $23 \pm 2^{\circ}\text{C}$ ($73.4 \pm 3.6^{\circ}\text{F}$) and $50 \pm 5\%$ relative humidity. Speed of testing shall be at 0.5 in./min.

3.1.3 Water Absorption: ASTM D570, *Water Absorption of Plastics*. Sample specimens shall be prepared according to section 4.1 and allowed to cure at $23 \pm 2^{\circ}\text{C}$ ($73.4 \pm 3.6^{\circ}\text{F}$) and $50 \pm 5\%$ relative humidity. Tests are then to be carried out as per section 6.1.

- 3.1.4 Shore D Hardness:** ASTM D2240, *Rubber Property - Durometer Hardness*. Specimen shall be prepared as per ASTM D570 section 4.1 and allowed to cure at $23 \pm 2^{\circ}\text{C}$ ($73.4 \pm 3.6^{\circ}\text{F}$).
- 3.1.5 Gel Time:** The following procedure shall be used to determine gel time. Measure 4 oz. of Part A and 2 oz. of Part B each at 25°C (77°F), into an unwaxed paper cup and record the time and mix immediately. 100 gms of this mixture shall be poured into a 6 oz. unwaxed paper cup and placed on a wooden bench top. Starting twenty minutes from the time recorded above, the mixture shall be probed every two minutes with a small stick until a small ball forms in the center of the container. The total time, including mixing, required for the ball to form shall be regarded as the gel time. The test shall be performed in a room or enclosed area maintained at $25 \pm 2^{\circ}\text{C}$ ($77 \pm 3.6^{\circ}\text{F}$) and $50 \pm 5\%$ relative humidity.
- 3.1.6 Abrasion Resistance:** ASTM C501, *Test Method for Relative Resistance to Wear of Unglazed Ceramic Tile by the Taber Abrader*. Tests shall be done using a CS-17 wheel and a 1,000 gram load for 1,000 cycles.
- 3.1.7 Adhesion to Concrete:** ACI-503-R; Pull Out Test.
- 3.1.8 Flexural Yield Strength:** ASTM D-790.
- 3.1.9 DMA:** ASTM D-4065-95

4 CONSTRUCTION PRACTICE

4.1 Surface Preparation

- 4.1.1** Perform full depth patching in accordance with the requirements of Section 606.03.05. All patching materials shall be in accordance with the requirements of Section 601 and be free of **Magnesium Phosphate**.
- 4.1.2** Patching shall be scheduled so that the bridge can be open to traffic during all non-working hours.
- 4.1.3** Polymer patching system such as **POLY-CARB, Inc.'s MARK-120** is recommended for *shallow* and *partial* depth repair. Completion of Partial Depth Patching including removal of concrete, cleaning, and placing the material will not be measured for payment and shall be considered incidental to **Epoxy-Urethane Waterproofing Overlay**. The pay item includes additional quantity for partial depth patching.
- 4.1.4** The entire **concrete deck** shall be cleaned by **shotblasting** to remove any oil, dirt, rubber or any other potentially detrimental material such as

curing compound and laitances which, in the manufacturer and engineer's opinion, would prevent proper bonding to and curing of the material.

- 4.1.5** In areas that the shotblasting equipment cannot reach (i.e., along curbs and median walls) or cannot remove (linemarking, asphalt, etc.), sandblasting and walk behind grinders are permitted to an extent satisfactory to the manufacturer and engineer. This should be performed prior to the shotblasting whenever applicable and practical.
- 4.1.6** **Steel surfaces** such as expansion joints, sidewalks, steel grids and steel plate to be treated with the restoration system, shall be shot or sand blasted clean to **SSPC-SP-6** standards.
- 4.1.7** The overlay application equipment is allowed to drive on the deck surface during application provided precautions have been taken to insure that the deck surface will not become contaminated. For any reason traffic is to be allowed on the deck after surface preparation, or between layers, a visual inspection by the manufacturer and state engineer will be required to determine if additional surface preparation is needed before applying material.
- 4.1.8** All surfaces to be treated shall be dry at the time of application. Immediately before the application of any liquids, all prepared surfaces shall be cleaned with compressed air (or vacuumed) to remove dust and debris.
- 4.1.9** The application of the system shall not be made when it has rained 24 hours before application or rain is forecast (greater than 50%) within eight hours after application **or as determined by the manufacturer** (fog and high humidity will not impede the application of or affect the performance of the overlay). If waiting for 24 hours is impractical, then the moisture content in concrete substrate shall not exceed 4.5% when measured by an electronic moisture meter. Any exception shall be determined by the moisture content present in the deck which shall not exceed 75% of air entrainment in the mix design.
- 4.1.10** The minimum recommended temperature in which the system shall be applied is 50°F and rising. All applications at temperatures below 50°F shall require prior written approval from the manufacturer.

4.2 Application of Overlay System

4.2.1 **The manufacturer of the epoxy-urethane overlay material shall have a representative on the jobsite at all times** who, upon consultation with the engineer, may suspend any item of work that is suspect and does not meet the requirements of this specification. Resumption of work will occur only after the manufacturer's representative and the engineer are satisfied that appropriate remedial action has been taken by the contractor.

4.2.2 The overlay shall be applied on all deck areas using metering, mixing and distribution machinery **owned and operated by the manufacturer of the epoxy-urethane overlay system.** The application machine shall feature positive displacement volumetric metering pumps controlled by a hydraulic power unit. Components A and B shall be stored in temperature controlled reservoirs capable of maintaining $100^{\circ}\text{F} \pm 10^{\circ}\text{F}$ to insure optimum mixing. Ratio check verification at the pump outlets as well as cycle counting capabilities to monitor output will be standard features. In line mixing shall be motionless so as to not overly shear the material or entrap air in the mix. The machine shall also make maximum use of the working time of the material to insure proper "wetting" of the system by mixing it immediately prior to dispensing onto the deck.

4.2.3 The number of layers (**a minimum of three**) and the application rates of the liquid in the various layers shall be as recommended by the manufacturer in order to achieve an average overlay thickness of 3/8".

4.2.4 **Hand mixing of material is not permitted.**

4.2.5 **Application of Pre-treatment**

Crack Filling (First Layer)

Application of the Liquid: After mechanically measuring and mixing of the components, the liquid shall be evenly distributed on the clean, dry deck surface at the rate/process recommended by the manufacturer. The overlay application equipment may drive on this layer (prior to being cured) when applying the overlay system.

If the overlay application is going to be applied after 6-8 hrs of the pre-treatments application, a medium size coarse silica sand shall be broadcasted evenly into the pre-treatment system (prior to it curing) as directed by the manufacturer.

4.2.6 **Overlay (Second and Third Layers)**

Application of Liquid: Prior to the application, if there exists any excess or loose aggregate from the previous coat, such excess aggregate shall be completely removed by vacuum or with compressed air. After mixing of the components via the mechanical application equipment, the liquid shall be evenly distributed on the clean, dry deck surface at the rate as recommended by the manufacturer.

4.2.7 After the application of the liquid in the second and third coats, the maximum time allowed before broadcasting of the aggregate is as follows:

Above 90°F	10 minutes
80°F to 90°F	15 minutes
70°F to 80°F	20 minutes
60°F to 70°F	25 minutes
50°F to 60°F	35 minutes

4.2.8 No vehicle shall be allowed on the overlay during the curing period.

4.2.9 Broadcasting on decks shall be by truck-mounted equipment capable of dispensing the aggregate onto the deck in a uniform manner as directed or otherwise approved by the manufacturer of the epoxy-urethane overlay.

4.2.10 The aggregate shall be broadcast as described below such that to cover the surface so that no wet spots appear and before the co-polymer begins to gel (see section 4.3.6). The aggregate must be dropped vertically in such a manner that the level of the liquid is not disturbed.

4.2.10.1 In the second and third layers of **FLEXOGRID** (or approved equivalent) liquid aggregate conforming to table 4 shall be broadcast to saturation.

4.2.11 Removal of Excess Aggregate: After the overlay has hardened, removal of all loose and excess aggregate with a power vacuum or other method shall be made prior to the application of subsequent coats.

4.2.12 Joints in the Overlay (i.e., between two adjacent lanes) shall be staggered and overlapped between successive coats so that no ridges will appear.

4.2.13 Traffic may be allowed on the final layer (or in between layers) **after** the resin has cured (as determined by the manufacturer) and after removal of all excess, loose aggregate.

5. STORAGE AND HANDLING

- 5.1 Liquid Material:** All material shall be transported and stored in their original containers inside a dry, temperature controlled facility and maintained at a minimum temperature of 60°F and not to exceed 120°F.
- 5.2 Job Site Storage:** The materials shall be stored on the jobsite in a dry, weather protected facility away from moisture and within the temperature range of 60°F to 90°F. When the materials are transported or stored on the job in the application machine tanks, the material must also be maintained at a temperature of 60°F to 90°F. Outdoor storage is permitted with manufacturers approval.
- 5.3 Handling of Liquid Materials on the Job:** Protective gloves, clothing, and goggles shall be provided to workers and inspectors directly exposed to the material if required. Product safety data sheets shall be provided to all workers and inspectors as obtained from the manufacturer.
- 5.4 Packing Requirement:** All materials must be packaged in strong, substantial containers. The containers shall be identified as Part A and Part B and shall be plainly marked with the name and address of the manufacturer, name of the product, mixing proportions and instructions, lot and batch numbers, date of manufacture, and quantity contained therein.
- 5.5 Aggregate:** All aggregate shall be stored in a dry, moisture-free atmosphere. The aggregate shall be fully protected from any contaminants on the jobsite and shall be stored so as not to be exposed to rain or other moisture sources.

6. SAMPLING AND ACCEPTANCE

- 6.1 Product Acceptance:** The manufacturer of the system shall provide evidence of field performance, lab performance with infrared spectra in order to obtain state approval of the overlay system for use on the project:

6.1.1 Independent Lab Performance

A nationally recognized independent lab must verify that the material:

1. Has the capability of preventing the ingress of essentially all the chloride ions into the concrete at 1" depth when tested according to NCHRP-244 method.
2. Has the capability to de-activate the existing chloride ions present in the concrete specimen so that the corrosion of steel rebars embedded in the concrete stop corroding.

3. When tested as per Tables 1,2 and 3, fully comply with the test results specified for cured system.

6.1.2 Infrared Spectrograph: In addition to the initial certification process each manufacturer shall furnish the state as infrared spectra of each component of system for its permanent record and for individual installation verification.

6.1.3 Field Performance: The selected material must have verifiable satisfactory performance of at least five (5) years in the state of Kentucky and a minimum of twelve (12) years in three neighboring states with comparable weather conditions.

6.2 Certification for Compliance: At the pre-construction conference, the contractor shall notify the state project engineer of the source of material.

6.2.1 Independent Test Lab Report: Test results certified and verified by a nationally recognized independent testing laboratory verifying properties of the cured system as per Table 1, 2 & 3 shall be submitted to the engineer for approval prior to the bid opening. This certification shall be provided on each lot number to be used on the project.

6.2.2 Infrared Spectra: Infrared spectra of each component from each lot number (to be used on the project) shall be submitted with the independent lab certification.

6.2.3 Test Sample for DOT Laboratory: The manufacturer shall furnish at least a one-quart sample of each component from each lot to the DOT laboratory to verify material supplied by the manufacturer. Material shall be taken at job site.

6.3 Performance Acceptance

6.3.1 Thickness Verification: The state shall be notified of the number of gallons used on the project with two notarized statements - one from the contractor and one from the manufacturer. In addition, the contractor shall verify to the State that the overlay is an average of at least 3/8" thick at three random locations agreed upon by the state engineer and material manufacturer representative. If 3/8" average is not achieved, a retest shall be performed in adjoining areas. Thin areas shall be re-coated as described above by the contractor and re-verified at no additional cost to the State. This verification may consist of cores, holes, etc., but in all cases, any destructively tested areas shall be repaired by the contractor before final acceptance by the engineer.

6.3.2 Performance Guarantee: The epoxy-urethane co-polymer manufacturer and the contractor, by acceptance of the work described in this specification, jointly agree to guarantee the wearing surface against all defects incurred during normal traffic use for a period of five (5) years. The guarantee period shall commence on the date of acceptance of the work, usually the date the final layer of the overlay has been applied and cured. The guarantee covers all labor and materials required to satisfactorily repair or replace the wearing surface. Manufacturer will be responsible for integrity of warranty and will be removed from QPL if warranty repair not upheld within timely manner.

7. MEASUREMENT.

- 7.1 **Epoxy-Urethane Waterproofing Overlay.** The Department will measure the square feet of overlay application
- 7.2 **Shotblasting.** The Department will measure **BLAST CLEANING** in Square Yard.
- 7.3 **Full Depth Patching.** The Department will measure “**CONCRETE CLASS M FULL DEPTH PATCHING**” in Cubic Yard.

8. PAYMENT

- 8.1 **Epoxy-Urethane Waterproofing Overlay.** The Department will pay for the measured quantities at the Contract unit bid price for Crack Treatment and Epoxy-Urethane Waterproofing Overlay for Bridge Decks.
- 8.2 **Shotblasting.** The payment at the contract unit price for the pay item “**BLAST CLEANING**” shall include all labor, equipment and material needed to complete the task as described in paragraphs 4.1.4 and 4.1.5.
- 8.3 **Full Depth Patching.** The payment at the contract unit price shall include all labor, equipment and material needed to complete this task. The Department will not measure material removal, forming, blast cleaning, or retying steel reinforcement in the patches and will consider this work incidental to the pay item “**CONCRETE CLASS M FULL DEPTH PATCHING**”.

**SPECIAL NOTE ON BRIDGE REPAIR CONTRACTS
B90**

PENETRATING HEALER SEALER ON BRIDGE DECK AND SIDEWALK

I. DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway’s 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this note, and the attached detail drawings. Section references are to the Standard Specifications.

The Contractor shall prepare and treat the concrete bridge deck and sidewalk with a healer sealer epoxy system in accordance with these specifications in reasonably close conformity with the plans, the manufacturer's recommendations and as directed by the Engineer.

This work consists of: (1) provide all labor, materials and equipment required to prepare, clean and apply a penetrating epoxy healer/sealer system to the concrete bridge decks and sidewalk; and (2) Any other work specified as part of this contract.

The Contractor shall provide to the Engineer written documentation from the epoxy healer/sealer manufacturer that outlines the recommended surface preparation, application techniques, and application rates. The Contractor shall arrange to have a technical representative on site to provide mixing proportions equipment suitability, and safety advice to the Contractor and Engineer. Any conflict with these provisions and representative's advice shall be resolved at the job site. The technical representative shall remain at the job site until such time as he and the Engineer agree that the Contractor is qualified in all aspects of the application of the sealer.

This work item shall not be performed during the period beginning November 1st and ending March 31st.

II. MATERIALS. Select a two component epoxy based healer sealer epoxy system from the following list:

Product	Supplier	Telephone
Bridge Seal	Unitex	800-821-5846
Sikadur 55 SLV	Sika Corporation	800-933-7452

Aggregate Sieve Size	% Passing Max.
4.5mm (#4)	100
2.36mm (#8)	90 - 100
850um (#20)	5 - 15
300um (#50)	0 - 5

The aggregate shall be angular, having less than 0.2 percent moisture, and free of dirt, clay, asphalt, and other foreign or organic materials. Aggregate shall meet the grading limits shown above or per manufacturer’s recommendations and approved by the Engineer.

III. EQUIPMENT. For the epoxy healer sealer, the mixing and application systems shall be capable of accurately blending the epoxy resin and hardening agent, and shall uniformly and accurately apply the epoxy materials at the specified rate to the bridge deck in such a manner as to cover 100 percent of the work area.

The fine aggregate spreader shall be propelled in such a manner as to uniformly and accurately apply dry aggregate to excess onto the applied epoxy material. The vacuum truck shall be self-propelled to remove excess debris and aggregate.

For hand applications, equipment shall consist of calibrated containers, a paddle type mixer, notched squeegees, and stiff bristle brooms, suitable for mixing and applying the epoxy and aggregate.

IV. CONSTRUCTION.

Surface Preparation. Before application of the healer sealer, clean the entire deck surface by shotblasting to remove asphaltic material, oils dirt, rubber curing compounds, paint carbonation, laitance, weak surface mortar and other detrimental materials, which may interfere with the bonding or curing of the healer sealer. The prepared deck surface shall conform to requirements described in the International Concrete Repair Institute Guideline No. 03732, Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays, concrete surface profile 3 (CSP 3). Remove all paint lines. A vacuum or oil-free moisture-free air blast is required to remove all dust and other loose material as directed by the Engineer.

Repair any structurally unsound surfaces, weak sections or spalled areas as directed by the Engineer with a concrete patch material that is compatible with the epoxy sealer system before applying any sealer. Do not apply the healer sealer system on new concrete deck patches until approved by the Engineer. The Department will not measure concrete patching for payment and will consider it incidental to the bid item being patched. Patching and cleaning operations shall be inspected and approved prior to placing the sealer. Any contamination of the deck, or to intermediate courses, after initial cleaning, shall be removed.

There shall be no visible moisture present on the surface of the concrete at the time of application of the epoxy overlay. Conduct moisture testing in accordance with ASTM D4263. A transparent polyethylene sheet (4 mil) shall be taped to the deck. All edges will be sealed with tape that will stick to the concrete substrate. The plastic sheet will be left in place for a minimum of 16 hours to detect the presence of moisture in the deck concrete. Alternate methods to detect moisture must be approved by the Engineer. There shall be no moisture visible on the polyethylene sheet. Compressed air may be used to dry the deck surface providing it is moisture and oil free.

During preparation of the surface, the expansion joints, and any other areas not to be sealed, shall be protected from damage as approved by the Engineer. The protection shall be removed once the epoxy and aggregate has been applied and prior to initial set.

Application. The epoxy manufacturer representative shall be on site during installation to ensure that all preparation and application is done according to their requirements. Apply the healer sealer and aggregate according to the manufacturer's recommendations and as directed by the Engineer. After the healer sealer has attained initial set, remove the excess aggregate, unless otherwise directed by the on site epoxy manufacturers representative. The Contractor shall take all steps necessary to prevent the material from flowing into lanes open to traffic and prevent the sealer from leaking through cracks onto persons, traffic, and property. If deck preparation procedures or

the sealer deface the appearance of bridge components other than the sealed areas, repair those components at no additional cost to the Department.

V. MEASUREMENT and PAYMENT. Payment for this item of work shall be at the contract unit price and payment will be full compensation for the following: (1) provide all labor, materials and equipment required to prepare, clean and apply a penetrating epoxy healer/sealer system to the concrete bridge decks and sidewalk; and (2) Any other work specified as part of this contract and the attached detail drawings.

The completed work as described will be paid for at the contract unit price for the following contract item (pay item):

Contract Item (Pay Item)	Pay Unit
Epoxy Healer/Sealer - Bridge Deck (plinth to plinth)	Square Yard

The Department will consider payment as full compensation for all work required by this note and the attached detail drawings.

SPECIAL NOTE FOR REPLACING EXPANSION DAMS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE ON BRIDGES

I. DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing concrete and expansion device(s) and/or bridge ends; (3) Install armored edges and new concrete as specified and in accordance with the attached detail drawings; (4) Install new joint seals (where required); (5) Maintain and control traffic; and (6) Any other work specified as part of this contract.

II. MATERIALS.

A. Class "M" Concrete. Use either "M1" or "M2". See Section 601.

B. Structural Steel. Use new, commercial grade steel suitable for welding. The Engineer will base acceptance on visual inspection. See Standard Drawing BJE-001, current edition.

C. Stud Anchors. The armored edge stud anchors are ¾" x 6" embedded stud shear connectors conforming to ASTM A108, Grade 1015 (Nelson Studs or equal).

D. Steel Reinforcement. Use Grade 60. See Section 602.

E. Epoxy Bond Coat. See Section 511.

F. Neoprene Joint Sealers (Compression Seals). See Section 807.

III. CONSTRUCTION.

A. Remove Existing Materials. Remove the existing expansion dam/bridge end and specified areas of concrete as shown on the attached sketches. Remove debris and/or expansion joint filler as directed by the Engineer. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Expansion Joint Replacement" or "Armored Edge for Concrete".

Clean and leave all existing steel reinforcement encountered in place.

B. Place New Concrete and Armored Edges. After all specified existing materials have been removed; place new armored edges to match the grade of the proposed overlay or to match the original grade (See attached detail drawings). Place the new Class "M" concrete to the scarified grade and finish to receive the new overlay or place the new Class "M" concrete to the original grade and finish with broom strokes drawn transversely from curb to curb.

All new structural steel shall be cleaned and painted with two coats of commercial primer paint red orange in color, except that surfaces to come in contact with concrete are not to be painted.

Blast clean all areas of existing concrete and structural steel to come in contact with new concrete until free of all laitance and deleterious substances immediately prior to the placement of the Class "M" Concrete. The surface areas of existing concrete to come in contact with the new Class "M" Concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with

- Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible.
- C. Additional Steel Reinforcement.** Furnish for replacement, as directed by the Engineer, 200 linear feet of steel reinforcing bars ½” diameter by 20’ lengths per joint per structure except B62 furnish 400 linear feet of steel reinforcing bars ½” diameter by 20’ lengths per joint. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted. Do not place any additional steel reinforcement above the height of the top row of Nelson Studs on the armored edges. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new Class “M” concrete. Deliver unused bars to the Local County Maintenance Barn. Payment will be made in accordance with Section 602.
 - D. Stage Construction.** Installation of concrete and armored edges in two (or more if specified) stages is necessary. Join the armored edges at or near the centerline of the roadway or lane line, field weld and grind smooth.
 - E. Preformed Neoprene Joint Seal.** Place the preformed joint seal in one continuous, unbroken length. Place neoprene compression seals as recommended by the manufacturer and in accordance with Section 609.03.04 (E), except that shop drawings will not be required.
 - F. Shop Plans.** Shop plans will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.
 - G. Approach and Departure Wedge.** The Contractor shall repair any and all damage to the approach and departure pavement due to this construction. The contractor shall mill existing approach and departure, place wedge, and mechanically compact wedge to the satisfaction of the Engineer prior to allowing traffic back on a section of the new overlay. No additional payment will be allowed for this work, as it will be considered incidental to the pay item “Armored Edge for Concrete”. Minimum dimensions of wedge shall be width of bridge by 3’ by 1.5”

IV MEASUREMENT.

- A. Expansion Joint Replacement - 1 ½", 2".** The Department will measure the quantity in linear feet from gutterline to gutterline along the centerline of the joint.
- B. Armored Edge for Concrete.** The Department will measure the quantity in linear feet from gutterline to gutterline along the face of the bridge end.
- C. Steel Reinforcement.** See Section 602.

V. PAYMENT.

- A. Expansion Joint Replacement - 1 ½", 2"** Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new armored edges, concrete, neoprene joint seal, and all incidental items necessary to complete the work (except the overlay material) within the specified pay limits as specified by this note and as shown on the attached detail drawings.
- B. Armored Edge for Concrete.** Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing

the new armored edges, concrete and all incidental items necessary to complete the work (except the overlay material) within the specified pay limits as specified by this note and as shown on the attached detail drawings.

C. Steel Reinforcement. See Section 602.

The Department will consider payment as full compensation for all work required by this note and the attached detail drawings.

SPECIAL NOTE FOR RESEALING EXPANSION DAMS B62

I. DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing joint seal; (3) Install joint seal as specified (4) Maintain and control traffic; and (5) Any other work specified as part of this contract.

II. MATERIALS.

A. Neoprene Joint Sealers (Compression Seals). See Section 807.

III. CONSTRUCTION.

A. Remove Existing Materials. Remove the existing seal and clean according to section 606.03.11 and as directed by the Engineer. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "JOINT SEALING".

B. Place New Seal. After all specified existing materials have been removed; place new seal in accordance with section 807.03.02 and 609.03.04 from gutter-line to gutter-line including extending through the barrier in one continuous, unbroken length.

C. Shop Plans. Shop plans will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.

IV MEASUREMENT.

A. JOINT SEALING The Department will measure the quantity in linear feet from gutterline to gutter-line along the centerline of the joint. The Department will not measure the portion of the new seal extending through the barriers.

V. PAYMENT.

A. JOINT SEALING (08540) - Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new neoprene joint seal, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown on the attached detail drawings. The portion of the joint seal extending through the barriers will be considered incidental.

SPECIAL NOTE FOR ELIMINATING TRANSVERSE JOINTS ON BRIDGES

I. DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing concrete to eliminate the transverse joint; (3) Install additional steel reinforcement and new concrete as specified and in accordance with the attached detail drawings; (4) Maintain and control traffic; and (5) Any other work specified as part of this contract.

II. MATERIALS.

A. Class "M" Concrete. Use either "M1" or "M2". See Section 601.

B. Steel Reinforcement. Use Grade 60. See Section 602.

C. Epoxy Bond Coat. See Section 511.

III. CONSTRUCTION.

A. Remove Existing Materials. Remove the existing transverse joints, joint filler, and specified areas of concrete as shown on the attached detail drawings or as directed by the Engineer. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Eliminate Transverse Joint".

Clean and leave all existing steel reinforcement encountered in place. Damaged steel reinforcement will be repaired/replaced as directed by the Engineer at no additional cost to the Department.

B. Place New Concrete. After all specified existing materials have been removed, place new Class "M" Concrete to the scarified grade and finish to receive the new overlay as shown on the detail drawings.

On the sidewalk and curb, place the new concrete to original grade as shown on the detail drawings and finish to match the existing curb/sidewalk.

Blast clean all areas of existing concrete and structural steel to come in contact with new concrete until free of all laitance and deleterious substances immediately prior to the placement of the Class "M" Concrete. The surface areas of existing concrete to come in contact with the new Class "M" Concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible.

C. Additional Steel Reinforcement. Furnish for this work, as directed by the Engineer, approximately 200 linear feet of steel reinforcing bars ½" diameter by 20 lengths per and 210 linear feet of steel reinforcing bars ½" diameter by 3' - 6" lengths per joint. Splice these bars to the existing longitudinal reinforcement in the deck and curb/sidewalk in the areas of removed concrete to tie the slabs together as shown on the attached detail drawings. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new Class "M" concrete.

IV MEASUREMENT.

- A. Eliminate Transverse Joint.** The Department will measure the quantity in linear feet from plinth to plinth perpendicular to the centerline of the bridge.
- B. Steel Reinforcement.** See Section 602.

V. PAYMENT.

- A. Eliminate Transverse Joint.** Payment at the contract unit price per linear foot is full compensation for removing and disposing of the specified existing materials, furnishing and installing the concrete, and all incidental items necessary to complete the work (except the overlay material) within the specified pay limits as specified by this note and as shown on the attached detail drawings.
- B. Steel Reinforcement.** See Section 602.

The Department will consider payment as full compensation for all work required by this note and the attached detail drawings.

SPECIAL NOTE FOR BRIDGE WINGWALL/ BACKWALL REPAIR

I. DESCRIPTION.

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawing(s). Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove concrete to limits specified on drawings, wings (will consist of curb, plinth and fascia); (3) Clean concrete surfaces to be repaired; (4) Apply MG-KRETE or an approved equal repair areas according to manufactures specifications; (5) Remove handrail from wing and reinstall handrail end piece on bridge barrier (see attached drawing); (6) Maintain and control traffic; and (7) Any other work specified as part of this contract.

II. MATERIALS.

- A. **MG-KRETE.** See attached notes.
- B. **Aluminum Handrail.** See attached notes.

III. CONSTRUCTION.

- A. **Remove Existing Materials.** Remove concrete from wing wall(plinth, fascia, and curb) with chipping hammers as directed by the Engineer. Remove concrete from area of Back wall as directed by the engineer.
- B. **Repair Concrete.** Replace concrete blast clean all areas of existing concrete and structural steel to come in contact with the MG-Krete until free of all laitance and deleterious substances immediately prior to the placement of the MG-Krete. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible. Provide a smooth transition between existing barrier on bridge and the area of wing not retrofitted. Back Wall Repair will be MG-Krete no option.
- C. **Hand Rail Repair.** Remove handrail from wing. Reuse or reinstall end post on bridge barrier. Drill and dow in 8 inch (7/8 diameter) stainless steel anchor dowels to attach end post to plinth at new location. Contractor may have to remove or relocate posts to allow for end post to be relocated. Reuse existing rail. Excess rail shall become Property of the Department. The contractor will be responsible for delivering it to the closest maintenance barn.

IV. MEASUREMENT.

- A. **WINGWALL Repair.** The Department will measure the quantity as "Each" for "Wingwall Repair".
- B. **Backwall Repair.** The department will measure backwall repair in CUFT ITEM NUMBER 23428EC

V. PAYMENT.

- A. WINGWALL REPAIR.** Payment at the contract unit price per “EACH” is full compensation for removing and disposing of specified existing materials, blast cleaning, applying MG-KRETE, removing handrail and resetting end posts, and all incidental items necessary to complete the work as specified by this note and as shown on the attached detail drawing(s).
- B. BACKWALL REPAIR.** Payment at the contract unit CONCRETE PATCHING REPAIR price per “CUFT” is full compensation for removing and disposing of specified existing materials, blast cleaning, and applying MG-KRETE, the work as specified by this note and as shown on the attached detail drawing(s).

The Department will consider payment as full compensation for all work required by this note and the attached detail drawing(s).

SPECIAL NOTE FOR PLACING BRIDGE OVERLAY APPROACH PAVEMENT

I. DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawing. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Mill the existing approach pavement; (3) Place new asphalt surface; (4) Repair the roadway shoulders, if needed; (5) Maintain and control traffic; and (6) Any other work specified as part of this contract.

II. MATERIALS.

A. Class 3 Asphalt Surface 0.5 PG76-22. This material shall be in accordance with the Standard Specifications.

B. Tack Coat. This material shall be in accordance with the Standard Specifications.

III. CONSTRUCTION.

A. Remove Existing Materials. Remove the existing pavement material to provide for a minimum of 1¼" new pavement surface from the bridge end extending approximately 100 feet into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will tie into the new armored edge and matches the original cross section of the approach. Mill a 3-foot edge key to tie the new surface into the existing surface approximately 100 feet from the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.

Backfill the area of pavement removed for placing the new armored edges with concrete of the same mix design as the overlay (minus the latex) to within 2" +/- of the top of the bridge end. Allow this concrete to wet cure prior to placing the new asphalt surface on it.

B. Produce and Place New Asphalt Surface. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1.5" asphalt surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "Class 3 Asphalt Surface 0.5D PG 76-22". Place the new asphalt surface to the original roadway cross section or as directed by the Engineer.

C. Treatment of Shoulders. On roadways with paved shoulders, the shoulders shall receive identical treatment to the mainline pavement. On roadways with earth or rock shoulders, the Contractor shall attempt to protect the shoulder from damage. Any damage to earth or rock shoulders shall be repaired by the Contractor to the satisfaction of the Department at no additional cost. These repairs may consist of re-grading, re-compacting, and/or placing millings to return the shoulder to its original cross section.

D. Pavement Markings. Pavement striping will be required to match the existing pavement striping. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be paid accordingly.

Raised pavement markers within the limits of the "Bridge Overlay Approach Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

IV. MEASUREMENT.

The Department will measure the quantity in square yards. The Department will measure along the centerline from each end of the structure to the point where the new pavement ties into the existing pavement and across the width of the new pavement perpendicular to the centerline of the roadway.

V. PAYMENT.

Payment at the contract unit price per square yard is full compensation for backfilling at the end of the structure, removing existing pavement markers, mobilization of milling equipment, removing specified existing pavement material, furnishing and installing the asphalt tack coat, producing and placing the new asphalt surface, shoulder treatment, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown on the attached detail drawing.

The Department will consider payment as full compensation for all work required by these notes and detail drawings.

**STANDARD DRAWINGS THAT APPLY
B00033R & L**

MEDIAN CROSSOVER CASE I.....	TTC-140
MEDIAN CROSSOVER CASE I.....	TTC-141
TEMPORARY PAVEMENT MARKER ARRANGEMENTS FOR LANE CLOSURES.....	TTC-160
MISCELLANEOUS TRAFFIC CONTROL DEVICES.....	TTD-100
MISCELLANEOUS TRAFFIC CONTROL DEVICES.....	TTD-105
POST SPLICING DETAIL	TTD-110
ARROW PANEL.....	TTD-115
MOBILE OPERATION FOR PAINT STRIPING CASE IV	TTS-115
BRIDGE RESTORATION AND WATERPROOFING WITH CONCRETE OVERLAYS	BGX-009-04
NEOPRENE EXPANSION DAMS AND ARMORED EDGES.....	BJE-001-11
CURB AND GUTTER, CURBS, AND VALLEY GUTTER	RPM-100-09
GUARDRAIL CONNECTOR TO BRIDGE END TYPE A	RBC-001-08
GUARDRAIL CONNECTOR TO BRIDGE END TYPE A COMPONENTS	RBC-002
GUARDRAIL CONNECTOR TO BRIDGE END TYPE A COMPONENTS	RBC-003-06
GUARDRAIL TERMINAL SECTIONS.....	RBR-010-05

**SPECIAL NOTE FOR CONTRACT COMPLETION DATE AND
LIQUIDATED DAMAGES ON BRIDGE REPAIR CONTRACTS**

I. COMPLETION DATE

The Contractor has the option of selecting the starting date for this Contract. Once selected, notify the department in writing of the date selected at least two weeks prior to beginning work. All work is to be completed not later than November 15, 2010. An allotted number of calendar days are assigned to each structure in this contract as shown below.

<u>STRUCTURE</u>	<u>NUMBER OF CALENDAR DAYS</u>
FE02 092 0069 B00062N	30
FE02 092 9007 B00067R	20
FE02 092 9007 B00067L	20
FE02 030 9007 B00088R	20
FE02 030 9007 B00088L	20
FE02 030 9007 B00089R	8
FE02 030 9007 B00089L	8
FE02 030 9007 B00090R	8
FE02 030 9007 B00090L	8

Contrary to Section 108.07.03, the Engineer will begin charging calendar days for a structure on the day the Contractor starts work or sets up traffic control on that particular structure.

II. LIQUIDATED DAMAGES

Liquidated damages will be assessed to the Contractor in accordance with the Transportation Cabinet, Department of Highway's current Standard Specifications for Road and Bridge Construction, Section 108.09, when either the allotted number of Calendar days or the November 15, 2010 date is exceeded.

Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February, and March when the contract time has expired on any individual bridge or bridges. Contract time will be charged during these months.

All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2008 Standard Specifications, Section 112. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new or used in new condition, at the beginning of the work and maintained in like new condition until completion of the work.

II. TRAFFIC COORDINATOR

Furnish a Traffic Coordinator as per Section 112. The Traffic Coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the Engineer, during the Contractor's operations and at any time a lane closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents.

The Traffic Coordinator shall report all incidents throughout the work zone to the Engineer on the project. The Contractor shall furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

III. SIGNS

Contrary to Section 112.04.02, only long term signs (sign intended to be continuously in place for more than 3 days) will be measured for payment; short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

The contractor is to install warning signs for wide loads in advance of the bridge under the direction of the Engineer. The Department will not measure installation, maintenance, or removal for payment, and will consider these incidentals to Maintain and Control Traffic.

IV. TEMPORARY PAVEMENT STRIPING

Skip lines and/or solid lines through the length of the tapers for lane closures and other striping as directed by the Engineer shall be temporarily covered with 6" black removable tape. Permanent removal of all other pavement striping for traffic control shall be considered incidental to Maintain and Control Traffic. Temporary pavement striping shall be paid only once per course in accordance with Section 112.04.07. The Contractor shall replace any temporary striping that becomes damaged or fails to adhere to the pavement before dark on the day of the notification. Liquidated damages shall be assessed to the Contractor at a rate of \$500 per day for failing to replace temporary striping within this time limit.

V. TEMPORARY TRAFFIC CONTROL UNDER PROJECT BRIDGES

Traffic control on existing roadways located under the project bridges shall be provided when necessary in order to insure the safety of the traveling public. Whenever the danger of falling debris exists, set up temporary lane closures in accordance with Standard Drawing TTC-115 for Natcher Parkway and TTC 110-TTC 105 for KY 764, as approved by the Engineer. A minimum clear lane width of 12 feet shall be maintained at all times during these temporary closures. Traffic control on these roadways shall be maintained only while required for construction activities on the bridge above them and shall be removed as soon as the danger of falling debris has been eliminated. These temporary lane closures and traffic control shall be considered incidental to the pay item "Maintain and Control Traffic".

VI. PROJECT PHASING & CONSTRUCTION PROCEDURES

Maintain one lane of traffic during construction in accordance with Standard Drawing No. TTC-120 for lane closures, and or the attached detail drawing. The channelization devices shown on Standard Drawing TTC-120, use Concrete Barrier wall on the Natcher use "Water Filled Barrier" on KY 69. The minimum clear lane width required is 10'-0" on KY 69 the minimum clear width on the Natcher is 12'.

Lane closures will not be permitted on KY 0069 and William Natcher at the same time except under KY 0069 to protect Natcher Roadway.

VII. BARRIER

Barrier for B67, B90, B89 and B 88 shall meet NCHRP 350 LEVEL 3. Any approved barrier that meets this standard can be used. Payment of the contract unit price per linear foot for "CONCRETE BARRIER WALL TYPE 9T" shall be full compensation for furnishing, installing, maintaining, adjusting alignment as needed, removing the barrier when no longer needed, and all incidental items necessary to complete the work.

Barrier for B62 shall meet NCHRP 350 LEVEL 2. Any approved barrier that meets this standard can be used. Payment of the contract unit price per linear foot for "Water-Filled Barriers" shall be full compensation for furnishing, installing, maintaining, adjusting alignment as needed, removing the barrier when no longer needed, and all incidental items necessary to complete the work. Clean or replace sections of barrier with poor reflectivity or leakage as directed by the Engineer.

Provide one side mounted barrier wall delineator per each section of barrier. See Standard Drawing RBM-020 for types. No direct payment allowed for delineators.

VIII. CONCRETE BARRIER

Provide one side mounted barrier wall delineator per each section of barrier. See Standard Drawing RBM-020 for types. No direct payment allowed for delineators.

IX. CRASH CUSHION / END TREATMENTS

To the satisfaction of the Engineer extend Barrier wall out of the clear zone. If Barrier wall is not extended out of the clear zone to the satisfaction of the engineer provide crash cushions / end treatments for the barrier wall.

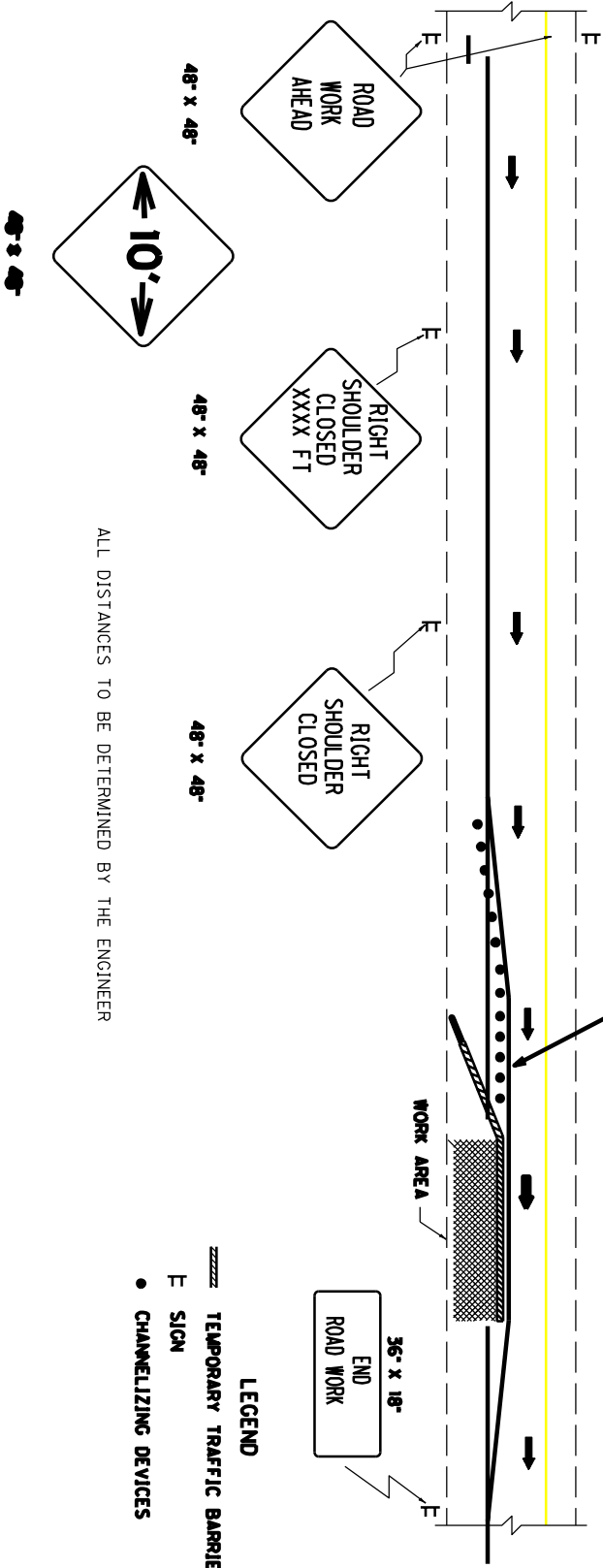
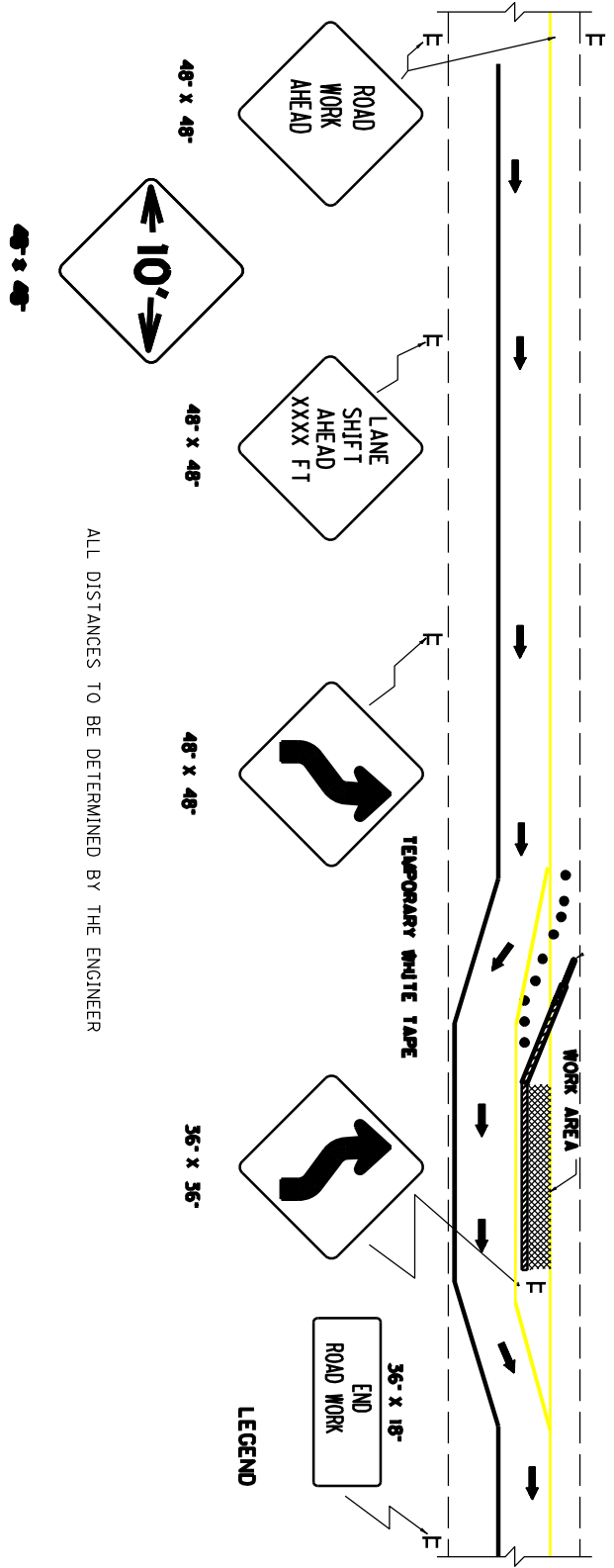
Provide Barrier end treatments that comply with NCHRP 350 LEVEL 3 FOR B 67, B89, B90 and B88.

Provide Barrier end treatments that comply with NCHRP 350 Level 2 FOR B62. Barrier end treatments for B62 is incidental to the Bid Item Water Filled Barrier

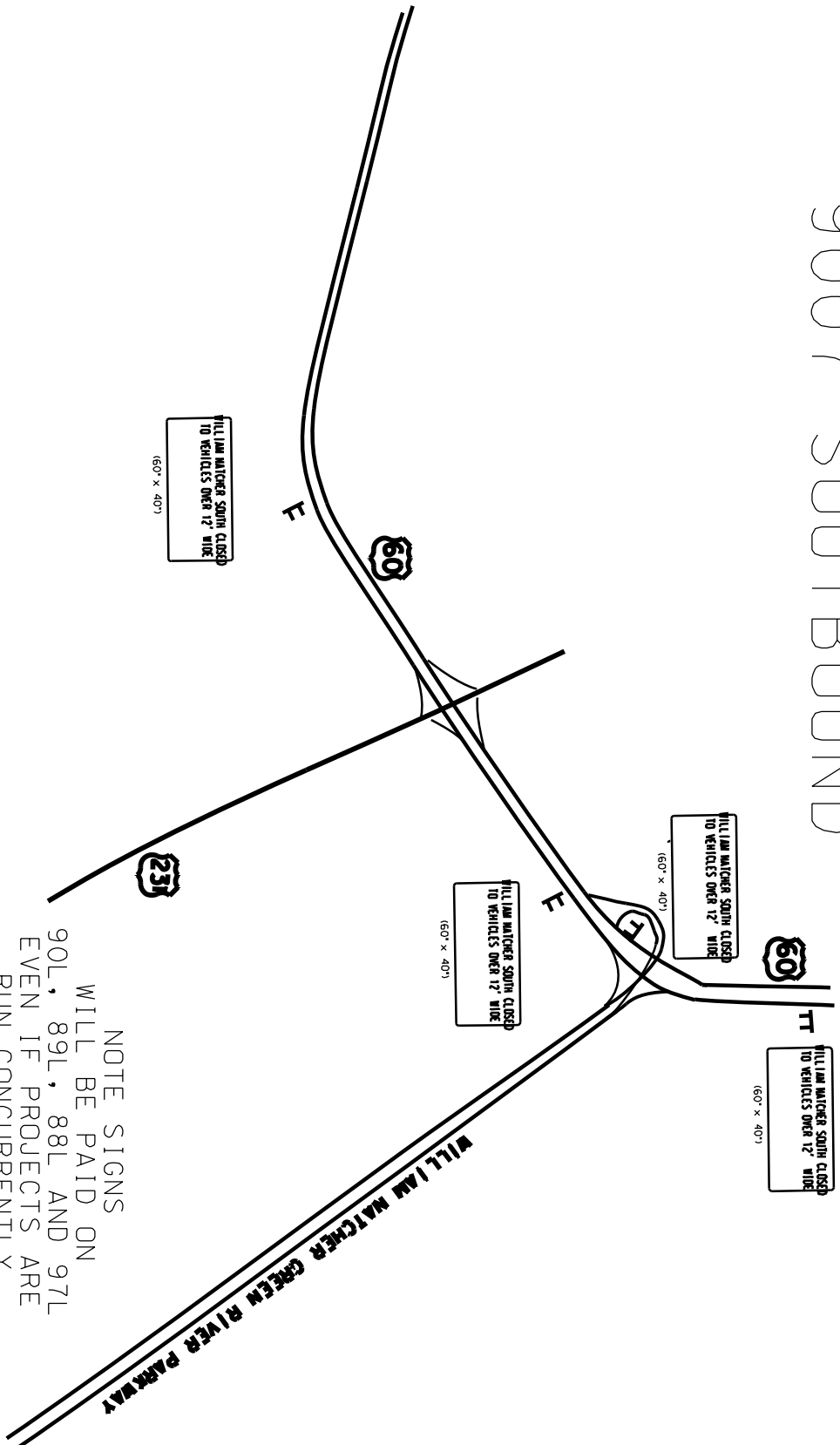
X. VARIABLE MESSAGE SIGNS

Location for Variable Message Signs will be determined by the engineer. VMB will be paid on every northbound structure on the Natcher Parkway

U92 U069 BU0062N

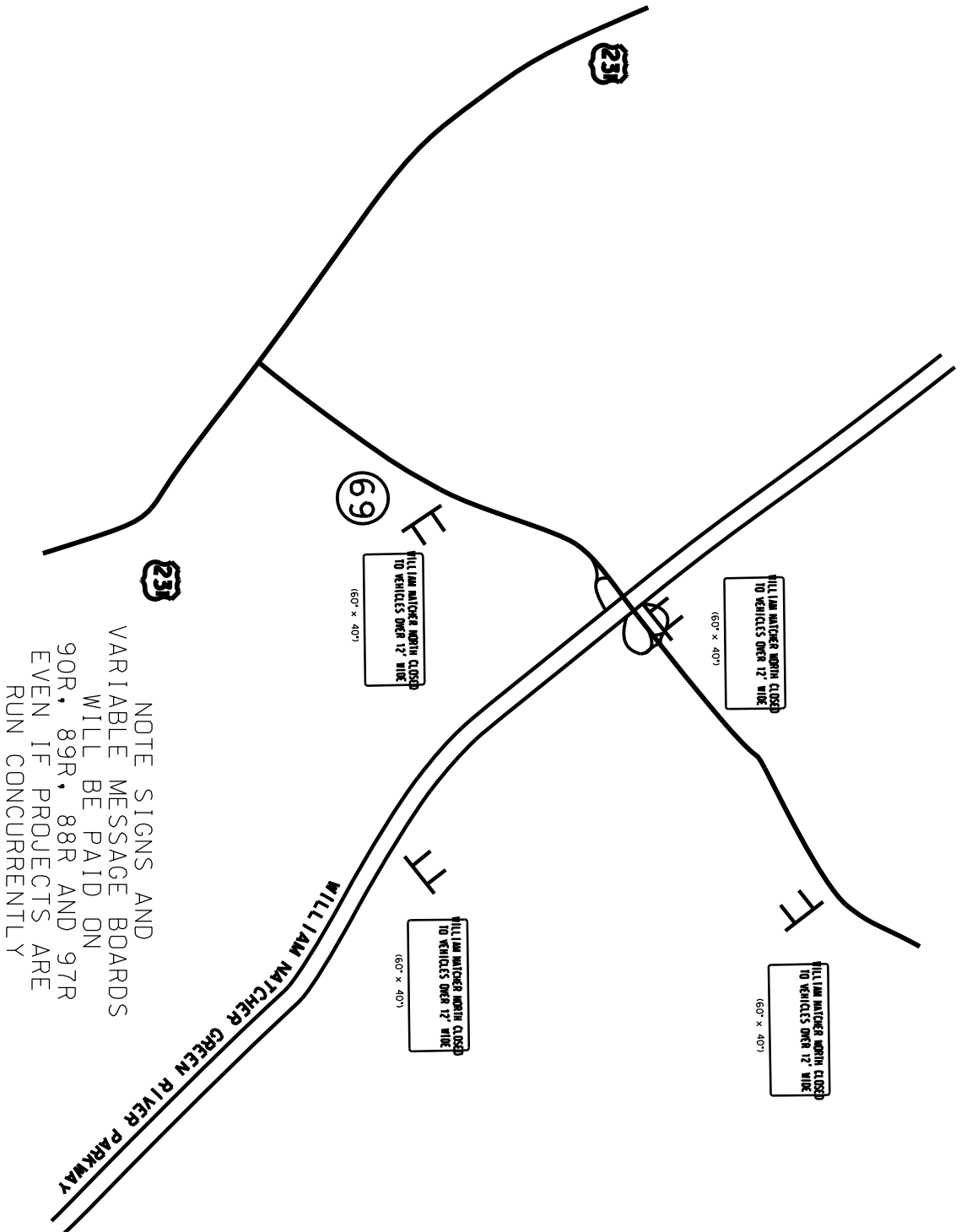


TO BE USED WHEN RESTRICTING 9007 SOUTHBOUND



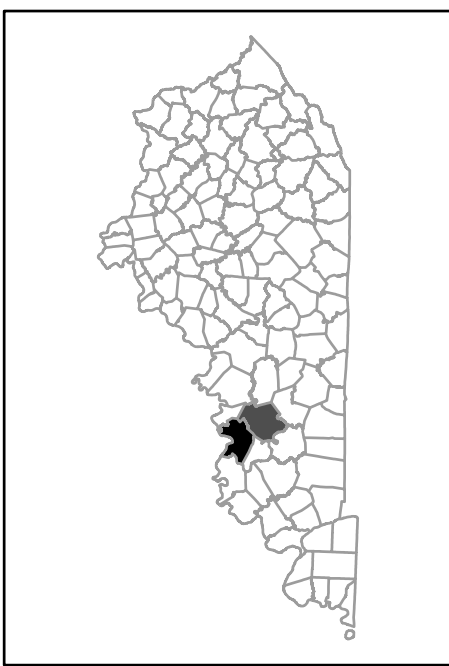
NOTE SIGNS
WILL BE PAID ON
90L, 89L, 88L AND 97L
EVEN IF PROJECTS ARE
RUN CONCURRENTLY

TO BE USED WHEN RESTRICTING
9007 NORTHBOUND



NOTE SIGNS AND
VARIABLE MESSAGE BOARDS
WILL BE PAID ON
90R, 89R, 88R AND 97R
EVEN IF PROJECTS ARE
RUN CONCURRENTLY

DAVISS & OHIO COUNTIES



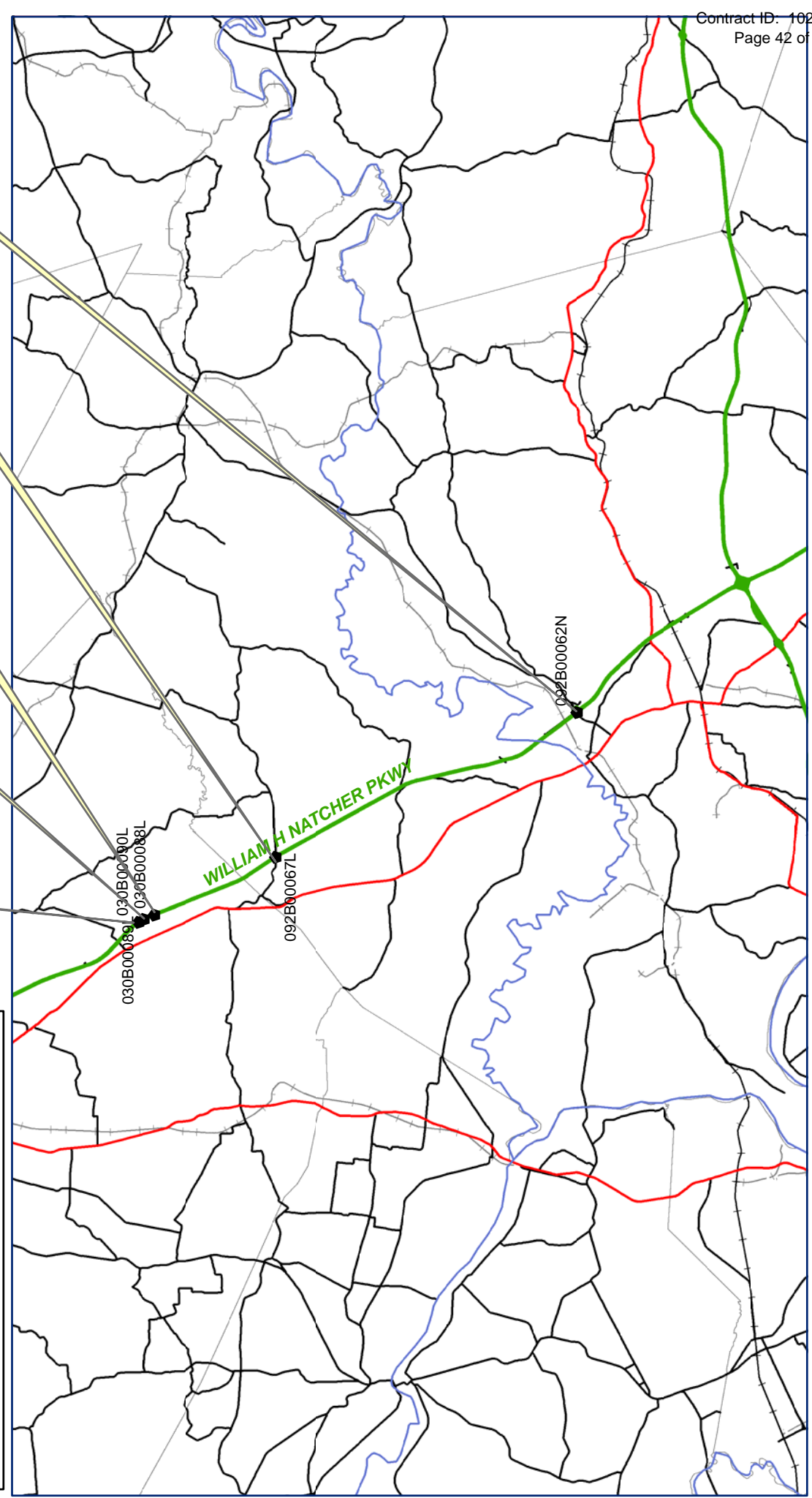
030B00089R & L

030B00090R & L

092B00062N

092B00067R & L

030B00088R & L



030B00089R
030B00090R
030B00088L
030B00089L
030B00090L
030B00088L

WILLIAM H NATCHER PKWY

092B00067L

092B00062N

MATERIAL SUMMARY

CONTRACT ID: 102905

FE02 030 9007 B00088

PES NO: MB03090071001

WESTERN KY PARKWAY TO OWENSBORO SOUTH FORK OF PANTHER CREEK (MP 62.407)

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	02562	SIGNS	267.00	SQFT
0020	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B88R	1.00	LS
0030	02653	LANE CLOSURE	2.00	EACH
0040	02654	TRUCK MOUNTED ATTENUATOR	1.00	EACH
0050	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0060	02775	ARROW PANEL	1.00	EACH
0070	02898	RELOCATE CRASH CUSHION	1.00	EACH
0080	02900	INSTALL TEMP CRASH CUSHION NCHRP 350 LEVEL 3	1.00	EACH
0090	03171	CONCRETE BARRIER WALL TYPE 9T NCHRP 350 LEVEL 3	660.00	LF
0100	03294	EXPAN JOINT REPLACE 1 1/2 IN	110.00	LF
0110	03299	ARMORED EDGE FOR CONCRETE	73.20	LF
0120	03300	ELIMINATE TRANSVERSE JOINT	38.60	LF
0130	03304	BRIDGE OVERLAY APPROACH PAVEMENT	778.00	SQYD
0140	06515	PAVE STRIPING-PERM PAINT-6 IN	850.00	LF
0150	06549	PAVE STRIPING-TEMP REM TAPE-B 8 INCH	650.00	LF
0160	06550	PAVE STRIPING-TEMP REM TAPE-W 6 INCH	2,600.00	LF
0170	06551	PAVE STRIPING-TEMP REM TAPE-Y 6 INCH	2,600.00	LF
0180	08150	STEEL REINFORCEMENT	674.68	LB
0190	08504	EPOXY SAND SLURRY	100.00	SQYD
0200	08526	CONC CLASS M FULL DEPTH PATCH	4.00	CUYD
0210	08534	CONCRETE OVERLAY-LATEX	34.80	CUYD
0220	08549	BLAST CLEANING	635.00	SQYD
0230	08551	MACHINE PREP OF SLAB	533.00	SQYD
0240	20318ES508	RELOCATE CONC BARRIER WALL	660.00	LF
0250	21759NN	REPAIR/PATCH WINGWALL	1.00	EACH
0260	23428EC	CONCRETE PATCHING REPAIR	4.00	CUFT
0270	02569	DEMOBILIZATION	1.00	LS
0280	02562	SIGNS	267.00	SQFT
0290	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B88L	1.00	LS
0300	02653	LANE CLOSURE	2.00	EACH
0310	02654	TRUCK MOUNTED ATTENUATOR	1.00	EACH
0320	02775	ARROW PANEL	1.00	EACH
0330	02898	RELOCATE CRASH CUSHION	1.00	EACH
0340	02900	INSTALL TEMP CRASH CUSHION	1.00	EACH
0350	03171	CONCRETE BARRIER WALL TYPE 9T	660.00	LF
0360	03294	EXPAN JOINT REPLACE 1 1/2 IN	110.00	LF
0370	03299	ARMORED EDGE FOR CONCRETE	73.20	LF
0380	03300	ELIMINATE TRANSVERSE JOINT	38.60	LF
0390	03304	BRIDGE OVERLAY APPROACH PAVEMENT	778.00	SQYD
0400	06515	PAVE STRIPING-PERM PAINT-6 IN	850.00	LF
0410	06549	PAVE STRIPING-TEMP REM TAPE-B 8 INCH	650.00	LF
0420	06550	PAVE STRIPING-TEMP REM TAPE-W 6 INCH	2,600.00	LF
0430	06551	PAVE STRIPING-TEMP REM TAPE-Y	2,600.00	LF
0440	08150	STEEL REINFORCEMENT	674.68	LB

MATERIAL SUMMARY

CONTRACT ID: 102905

0450	08504	EPOXY SAND SLURRY	100.00	SQYD
0460	08526	CONC CLASS M FULL DEPTH PATCH	4.00	CUYD
0470	08534	CONCRETE OVERLAY-LATEX	34.80	CUYD
0480	08549	BLAST CLEANING	635.00	SQYD
0490	08551	MACHINE PREP OF SLAB	533.00	SQYD
0500	20318ES508	RELOCATE CONC BARRIER WALL	660.00	LF
0510	21759NN	REPAIR/PATCH WINGWALL	1.00	EACH
0520	23428EC	CONCRETE PATCHING REPAIR	4.00	CUFT
0530	02569	DEMOBILIZATION	1.00	LS

FE02 030 9007 B00089

PES NO: MB03090071002

WESTERN KY PARKWAY TO OWENSBORO SOUTH FORK OF PANTHER CREEK (MP 62.380)

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	02562	SIGNS	269.00	SQFT
0020	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B89R	1.00	LS
0030	02653	LANE CLOSURE	2.00	EACH
0040	02654	TRUCK MOUNTED ATTENUATOR	1.00	EACH
0050	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0060	02775	ARROW PANEL	1.00	EACH
0070	02898	RELOCATE CRASH CUSHION	1.00	EACH
0080	02900	INSTALL TEMP CRASH CUSHION NCHRP 350 LEVEL 3	1.00	EACH
0090	03171	CONCRETE BARRIER WALL TYPE 9T	460.00	LF
0100	03294	EXPAN JOINT REPLACE 1 1/2 IN	60.00	LF
0110	03299	ARMORED EDGE FOR CONCRETE	60.00	LF
0120	06515	PAVE STRIPING-PERM PAINT-6 IN	350.00	LF
0130	06549	PAVE STRIPING-TEMP REM TAPE-B 8 INCH	650.00	LF
0140	06550	PAVE STRIPING-TEMP REM TAPE-W 6 INCH	2,200.00	LF
0150	06551	PAVE STRIPING-TEMP REM TAPE-Y 6 INCH	2,200.00	LF
0160	08150	STEEL REINFORCEMENT	267.20	LB
0170	08526	CONC CLASS M FULL DEPTH PATCH	2.00	CUYD
0180	08549	BLAST CLEANING	500.00	SQYD
0190	20318ES508	RELOCATE CONC BARRIER WALL NCHRP 350 LEVEL 3	460.00	LF
0200	23331EC	EPOXY-URETHANE WATERPROOFING	4,500.00	SQFT
0210	02569	DEMOBILIZATION	1.00	LS
0220	02562	SIGNS	269.00	SQFT
0230	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B89L	1.00	LS
0240	02653	LANE CLOSURE	2.00	EACH
0250	02654	TRUCK MOUNTED ATTENUATOR	1.00	EACH
0260	02775	ARROW PANEL	1.00	EACH
0270	02898	RELOCATE CRASH CUSHION	1.00	EACH
0280	02900	INSTALL TEMP CRASH CUSHION	1.00	EACH
0290	03171	CONCRETE BARRIER WALL TYPE 9T NCHRP 350 LEVEL 3	460.00	LF
0300	03294	EXPAN JOINT REPLACE 1 1/2 IN	60.00	LF
0310	03299	ARMORED EDGE FOR CONCRETE	60.00	LF
0320	06515	PAVE STRIPING-PERM PAINT-6 IN	350.00	LF
0330	06549	PAVE STRIPING-TEMP REM TAPE-B	650.00	LF
0340	06550	PAVE STRIPING-TEMP REM TAPE-W	2,200.00	LF
0350	06551	PAVE STRIPING-TEMP REM TAPE-Y	2,200.00	LF
0360	08150	STEEL REINFORCEMENT	267.20	LB
0370	08526	CONC CLASS M FULL DEPTH PATCH	2.00	CUYD
0380	08549	BLAST CLEANING	500.00	SQYD
0390	20318ES508	RELOCATE CONC BARRIER WALL	460.00	LF
0400	23331EC	EPOXY-URETHANE WATERPROOFING	4,500.00	SQFT
0410	02569	DEMOBILIZATION	1.00	LS

FE02 030 9007 B00090

PES NO: MB03090071003

WESTERN KY PARKWAY TO OWENSBORO SOUTH FORK OF PANTHER CREEK RELIEF # 2 (MP 62.948)

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	02562	SIGNS	267.00	SQFT
0020	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B90R	1.00	LS
0030	02653	LANE CLOSURE	2.00	EACH
0040	02654	TRUCK MOUNTED ATTENUATOR	1.00	EACH
0050	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0060	02775	ARROW PANEL	1.00	EACH
0070	02898	RELOCATE CRASH CUSHION	1.00	EACH
0080	02900	INSTALL TEMP CRASH CUSHION NCHRP 350 LEVEL 3	1.00	EACH
0090	03171	CONCRETE BARRIER WALL TYPE 9T NCHRP 350 LEVEL 3	460.00	LF
0100	03294	EXPAN JOINT REPLACE 1 1/2 IN	60.00	LF
0110	03299	ARMORED EDGE FOR CONCRETE	60.00	LF
0120	06515	PAVE STRIPING-PERM PAINT-6 IN	350.00	LF
0130	06549	PAVE STRIPING-TEMP REM TAPE-B 8 INCH	650.00	LF
0140	06550	PAVE STRIPING-TEMP REM TAPE-W 6 INCH	2,200.00	LF
0150	06551	PAVE STRIPING-TEMP REM TAPE-Y	2,200.00	LF
0160	08150	STEEL REINFORCEMENT	267.20	LB
0170	20318ES508	RELOCATE CONC BARRIER WALL	460.00	LF
0180	22983EN	EPOXY HEALER-SEALER	500.00	SQYD
0190	02569	DEMobilIZATION	1.00	LS
0200	02562	SIGNS	267.00	SQFT
0210	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B90L	1.00	LS
0220	02653	LANE CLOSURE	2.00	EACH
0230	02654	TRUCK MOUNTED ATTENUATOR	1.00	EACH
0240	02775	ARROW PANEL	1.00	EACH
0250	02898	RELOCATE CRASH CUSHION	1.00	EACH
0260	02900	INSTALL TEMP CRASH CUSHION	1.00	EACH
0270	03171	CONCRETE BARRIER WALL TYPE 9T	460.00	LF
0280	03294	EXPAN JOINT REPLACE 1 1/2 IN	60.00	LF
0290	03299	ARMORED EDGE FOR CONCRETE	60.00	LF
0300	06515	PAVE STRIPING-PERM PAINT-6 IN	350.00	LF
0310	06549	PAVE STRIPING-TEMP REM TAPE-B	650.00	LF
0320	06550	PAVE STRIPING-TEMP REM TAPE-W	2,200.00	LF
0330	06551	PAVE STRIPING-TEMP REM TAPE-Y	2,200.00	LF
0340	08150	STEEL REINFORCEMENT	267.20	LB
0350	20318ES508	RELOCATE CONC BARRIER WALL	460.00	LF
0360	22983EN	EPOXY HEALER-SEALER	500.00	SQYD
0370	02569	DEMobilIZATION	1.00	LS

FE02 092 0069 B00062 PES NO: MB09200691001
 HARTFORD TO SULPHUR SPRINGS KY 69 (MP 15.002) OVER NATCHER PARKWAY (MP 47.801) 1
 MILE EAST OF JCT US 231

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	02004	RELOCATE WATER-FILLED BARRIERS NCHRP 350 LEVEL 2	1,000.00	LF
0020	02005	WATER-FILLED BARRIERS	1,000.00	LF
0030	02562	SIGNS	172.00	SQFT
0040	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B62N	1.00	LS
0050	02654	TRUCK MOUNTED ATTENUATOR	2.00	EACH
0060	03294	EXPAN JOINT REPLACE 1 1/2 IN	96.00	LF
0070	03299	ARMORED EDGE FOR CONCRETE	96.00	LF
0080	03304	BRIDGE OVERLAY APPROACH PAVEMENT	1,067.00	SQYD
0090	06515	PAVE STRIPING-PERM PAINT-6 IN	1,100.00	LF
0100	06550	PAVE STRIPING-TEMP REM TAPE-W 6 INCH	4,000.00	LF
0110	06551	PAVE STRIPING-TEMP REM TAPE-Y 6 INCH	2,000.00	LF
0120	08150	STEEL REINFORCEMENT	534.40	LB
0130	08504	EPOXY SAND SLURRY	270.00	SQYD
0140	08526	CONC CLASS M FULL DEPTH PATCH	8.00	CUYD
0150	08534	CONCRETE OVERLAY-LATEX	80.00	CUYD
0160	08549	BLAST CLEANING	1,610.00	SQYD
0170	08551	MACHINE PREP OF SLAB	1,340.00	SQYD
0180	23386EC	JOINT SEAL REPLACEMENT	283.00	LF
0190	02569	DEMobilIZATION	1.00	LS

FE02 092 9007 B00067 PES NO: MB09290071001
 WESTERN KY PARKWAY TO OWENSBORO BRIDGE OVER KY 764 (MP 58.240)

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	02562	SIGNS	169.00	SQFT
0020	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B67R	1.00	LS
0030	02653	LANE CLOSURE	2.00	EACH
0040	02654	TRUCK MOUNTED ATTENUATOR	1.00	EACH
0050	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0060	02775	ARROW PANEL	1.00	EACH
0070	02898	RELOCATE CRASH CUSHION	1.00	EACH
0080	02900	INSTALL TEMP CRASH CUSHION NCHRP 350 LEVEL 3	1.00	EACH

0090	03171	CONCRETE BARRIER WALL TYPE 9T	660.00	LF
DAVISS - OHIO COUNTIES	121GR10M19	NCHRP 350 LEVEL 3		
0100	03294	EXPAN JOINT REPLACE 1 1/2 IN	72.50	LF
0110	03299	ARMORED EDGE FOR CONCRETE	72.50	LF
0120	03304	BRIDGE OVERLAY APPROACH PAVEMENT	778.00	SQYD
0130	06515	PAVE STRIPING-PERM PAINT-6 IN	850.00	LF
0140	06549	PAVE STRIPING-TEMP REM TAPE-B 8 INCH	650.00	LF
0150	06550	PAVE STRIPING-TEMP REM TAPE-W 6 INCH	2,600.00	LF
0160	06551	PAVE STRIPING-TEMP REM TAPE-Y 6 INCH	2,600.00	LF
0170	08150	STEEL REINFORCEMENT	267.20	LB
0180	08504	EPOXY SAND SLURRY	101.50	SQYD
0190	08526	CONC CLASS M FULL DEPTH PATCH	4.00	CUYD
0200	08534	CONCRETE OVERLAY-LATEX	38.00	CUYD
0210	08549	BLAST CLEANING	638.00	SQYD
0220	08551	MACHINE PREP OF SLAB	537.00	SQYD
0230	20318ES508	RELOCATE CONC BARRIER WALL	660.00	LF
0240	02569	DEMOBILIZATION	1.00	LS
0250	02562	SIGNS	169.00	SQFT
0260	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B67L	1.00	LS
0270	02653	LANE CLOSURE	2.00	EACH
0280	02654	TRUCK MOUNTED ATTENUATOR	1.00	EACH
0290	02775	ARROW PANEL	1.00	EACH
0300	02898	RELOCATE CRASH CUSHION	1.00	EACH
0310	02900	INSTALL TEMP CRASH CUSHION	1.00	EACH
0320	03171	CONCRETE BARRIER WALL TYPE 9T	660.00	LF
0330	03294	EXPAN JOINT REPLACE 1 1/2 IN	72.50	LF
0340	03299	ARMORED EDGE FOR CONCRETE	72.50	LF
0350	03304	BRIDGE OVERLAY APPROACH PAVEMENT	778.00	SQYD
0360	06515	PAVE STRIPING-PERM PAINT-6 IN	850.00	LF
0370	06549	PAVE STRIPING-TEMP REM TAPE-B	650.00	LF
0380	06550	PAVE STRIPING-TEMP REM TAPE-W	2,600.00	LF
0390	06551	PAVE STRIPING-TEMP REM TAPE-Y	2,600.00	LF
0400	08150	STEEL REINFORCEMENT	267.20	LB
0410	08504	EPOXY SAND SLURRY	101.50	SQYD
0420	08526	CONC CLASS M FULL DEPTH PATCH	4.00	CUYD
0430	08534	CONCRETE OVERLAY-LATEX	38.00	CUYD
0440	08549	BLAST CLEANING	638.00	SQYD
0450	08551	MACHINE PREP OF SLAB	537.00	SQYD
0460	20318ES508	RELOCATE CONC BARRIER WALL	660.00	LF
0470	02569	DEMOBILIZATION	1.00	LS

BRIDGE DRAWINGS

Approach Pavement

Davies

Elevation and Typical Section B90
Elevation and Typical Section B89
Armored Edge and Expansion Joint Detail 1.5"
Armored Edge and Expansion Joint-Curb Section

Elevation and Typical Section B88
Armored Edge and Expansion Joint-Curb Section
Armored Edge and Expansion Joint Detail 1.5"
Joint Elimination
Joint Elimination-Curb Section
1.5 Inch Joint Replacement
Wing Repair

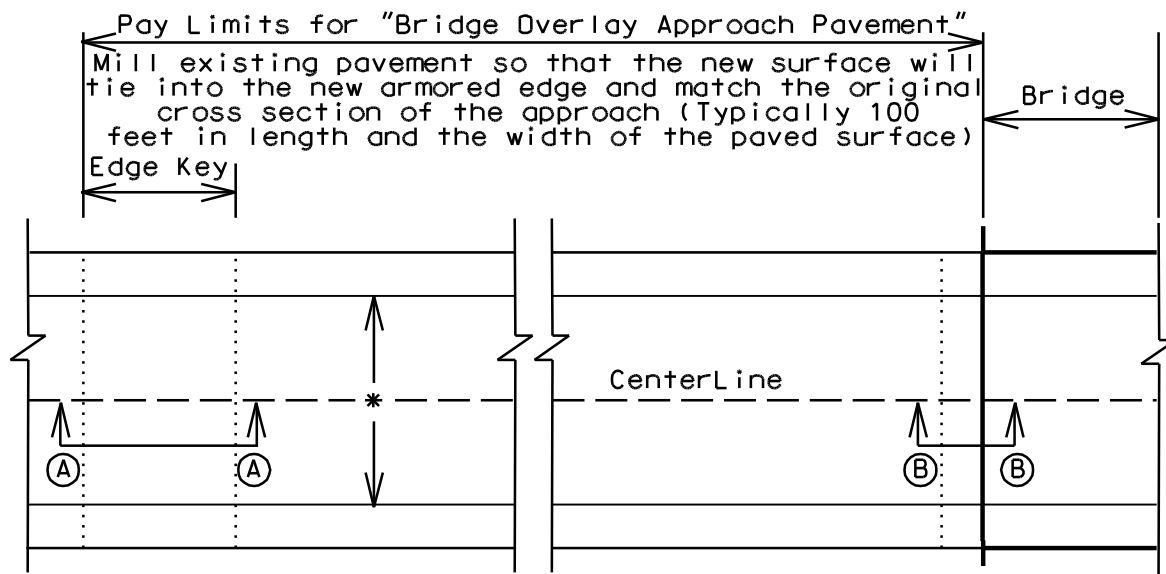
Ohio

Elevation and Typical Section B67
Armored Edge and Expansion Joint 2" DETAIL
Armored Edge and Expansion Joint Curb Section 2 Inch

Elevation and Typical Section B62
Armored Edge and Expansion Joint Curb at Barrier 1.5"
Armored Edge and Expansion Joint Curb at Median 1.5
Armored Edge and Expansion Joint Detail

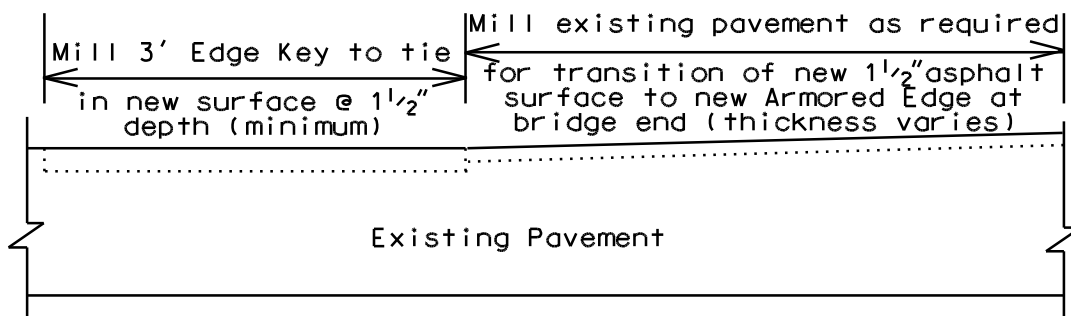
BRIDGE OVERLAY APPROACH PAVEMENT

Not to Scale

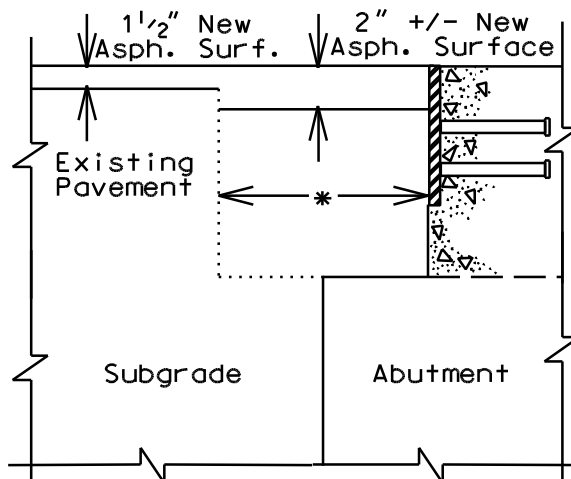


* Pay Limits for "Bridge Overlay Approach Pavement". Measured perpendicular to centerline across width of new surface. To include paved shoulders if applicable.

PLAN VIEW



SECTION A-A



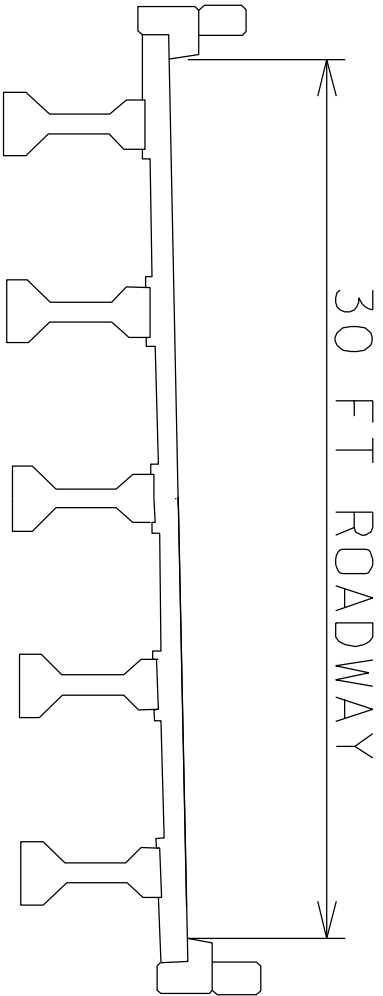
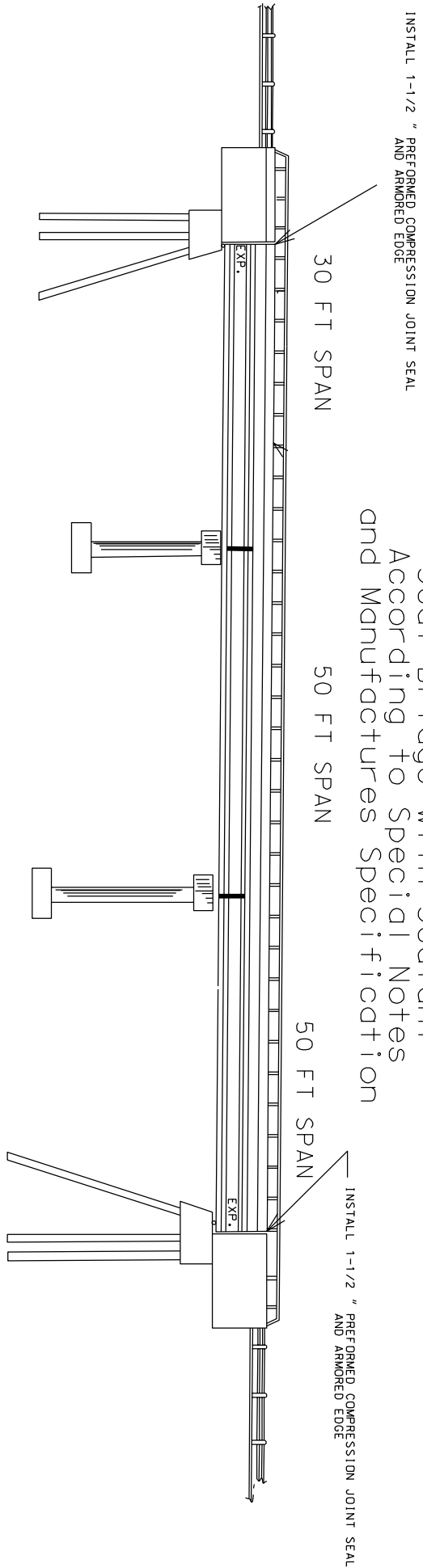
* If determined necessary by the Engineer, 1' +/- to be filled with concrete after form removal @ new armored edge.

SECTION B-B

030 9007 B00090

TWIN PRESTRESSED CONCRETE STRUCTURES
3 SPANS 50'-50'-50'

Seal Bridge with Sealant
According to Special Notes
and Manufactures Specification



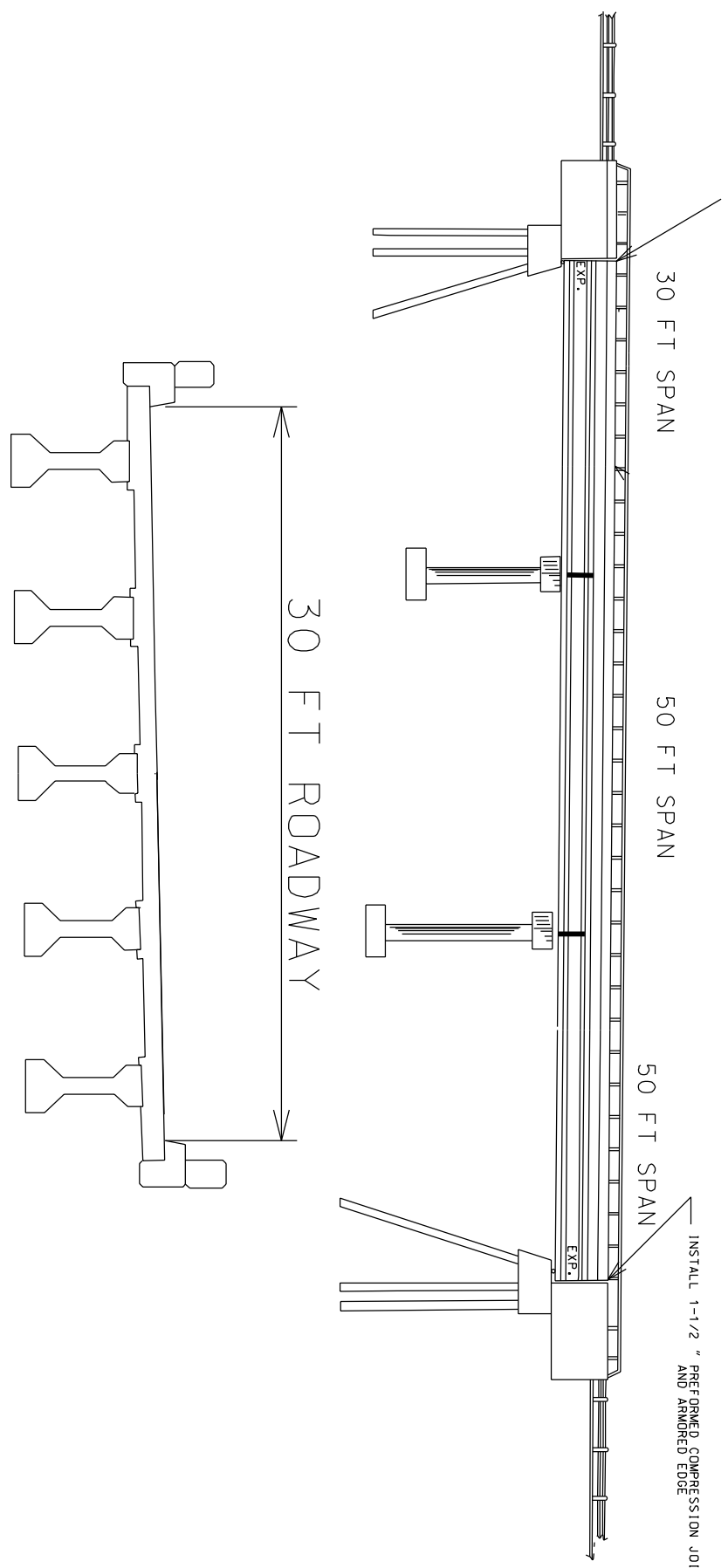
030 9007 B00089

TWIN PRESTRESSED CONCRETE STRUCTURES
3 SPANS 50'-50'-50'

INSTALL 1-1/2" PERFORMED COMPRESSION JOINT SEAL
AND ARMORED EDGE

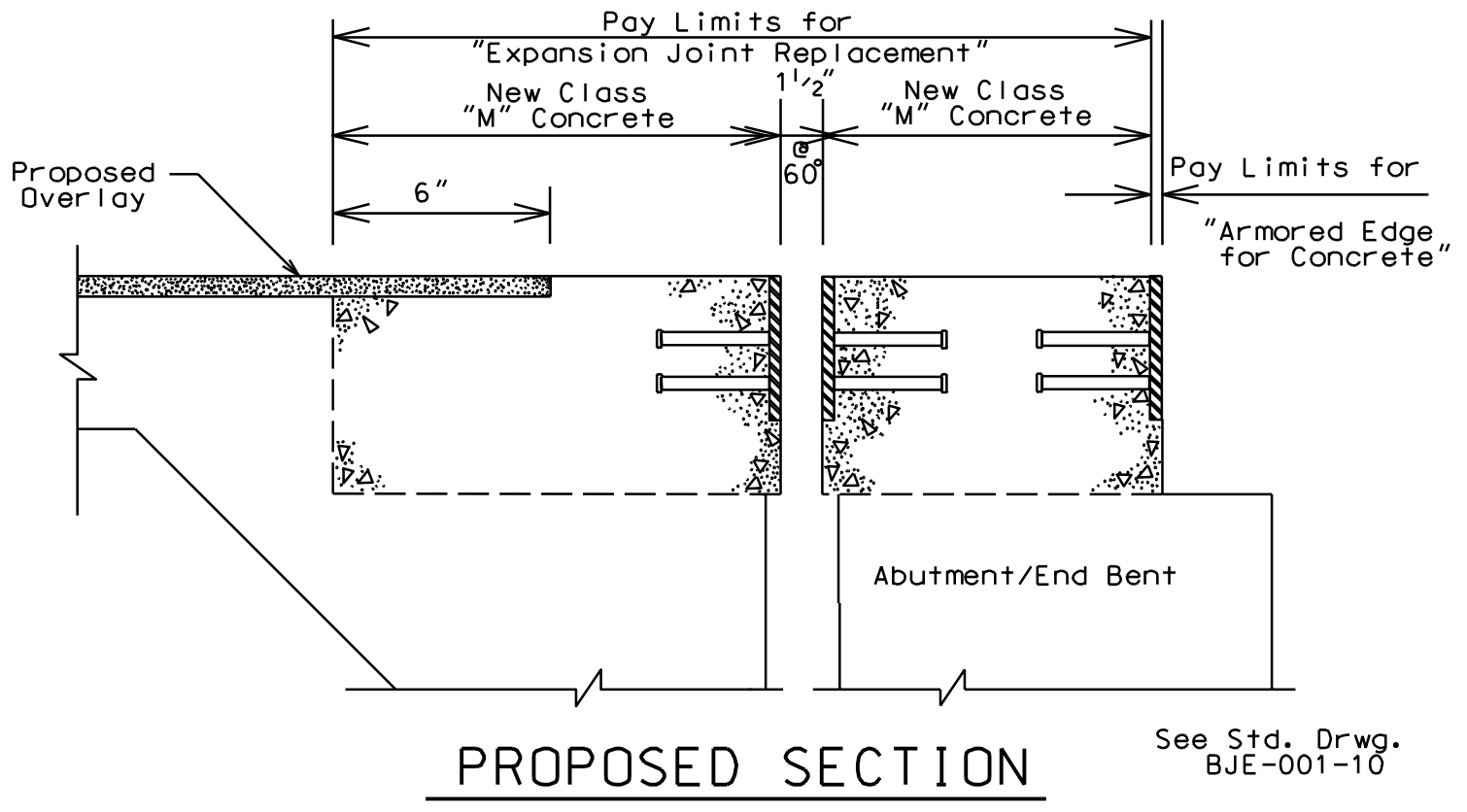
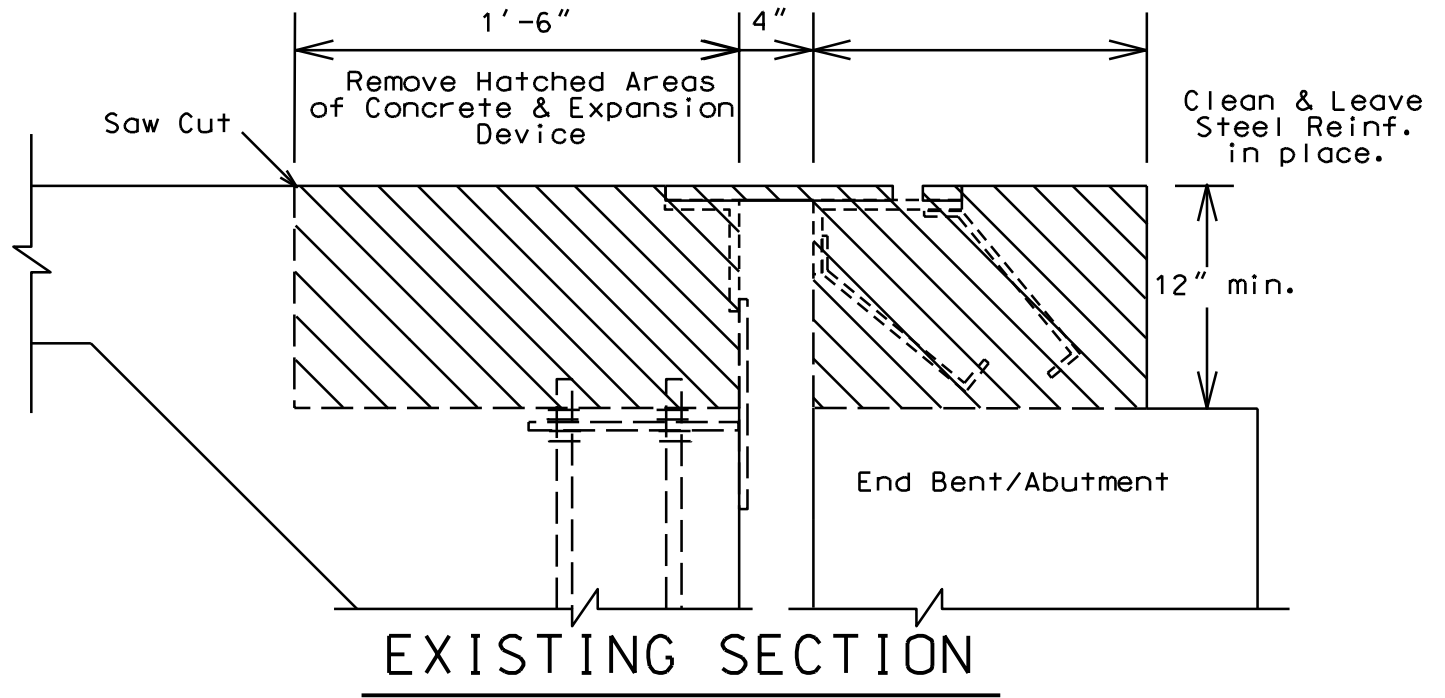
EPOXY OVERLAY

INSTALL 1-1/2" PERFORMED COMPRESSION JOINT SEAL
AND ARMORED EDGE



030B00089
030B00090

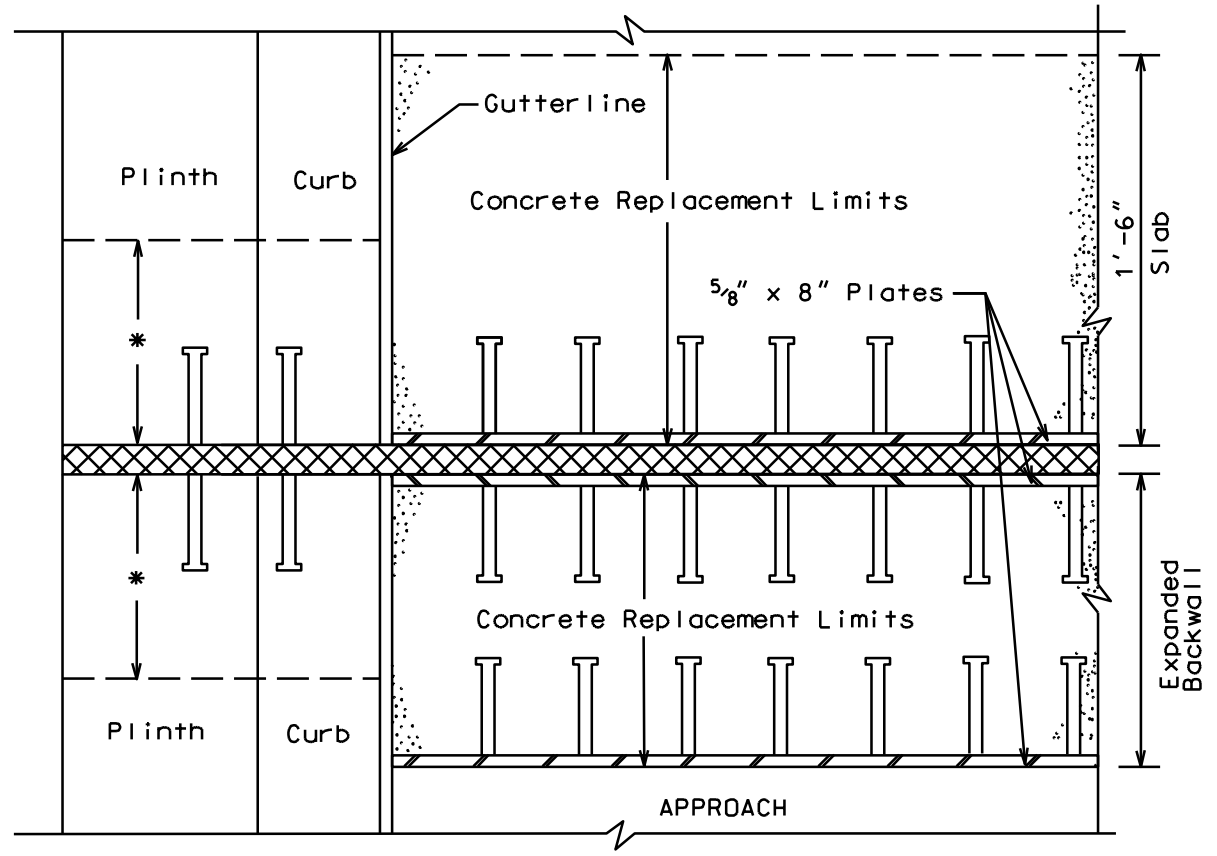
Not to Scale



See Std. Drwg.
BJE-001-10

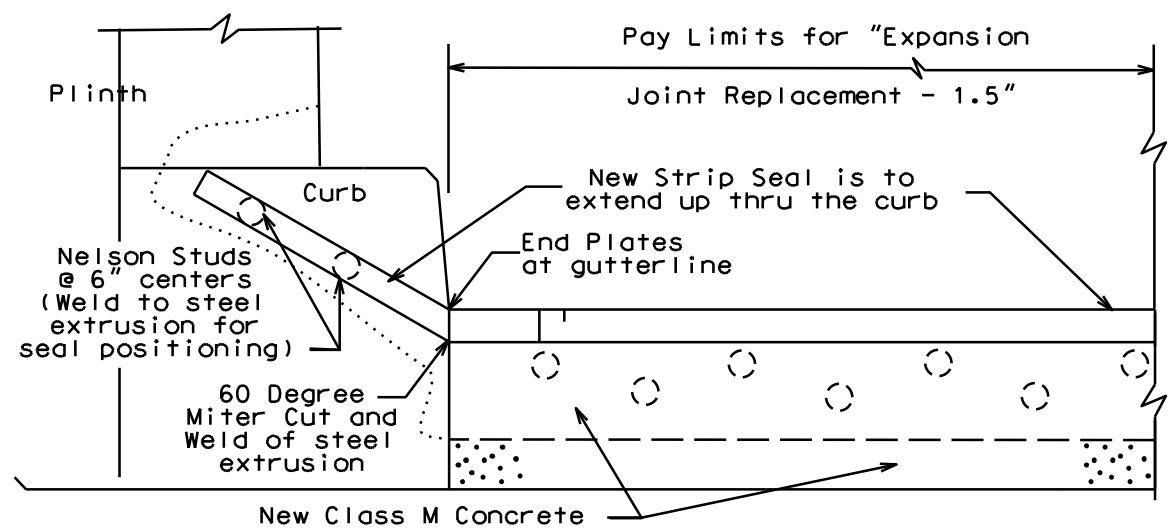
030B00089
030B00090

Not to Scale
CURB SECTION



* Remove and replace curb/plinth as directed by the Engineer to match proposed Expansion Joints (Incidental to "Expansion Joint Replacement").

PLAN VIEW @ CURB

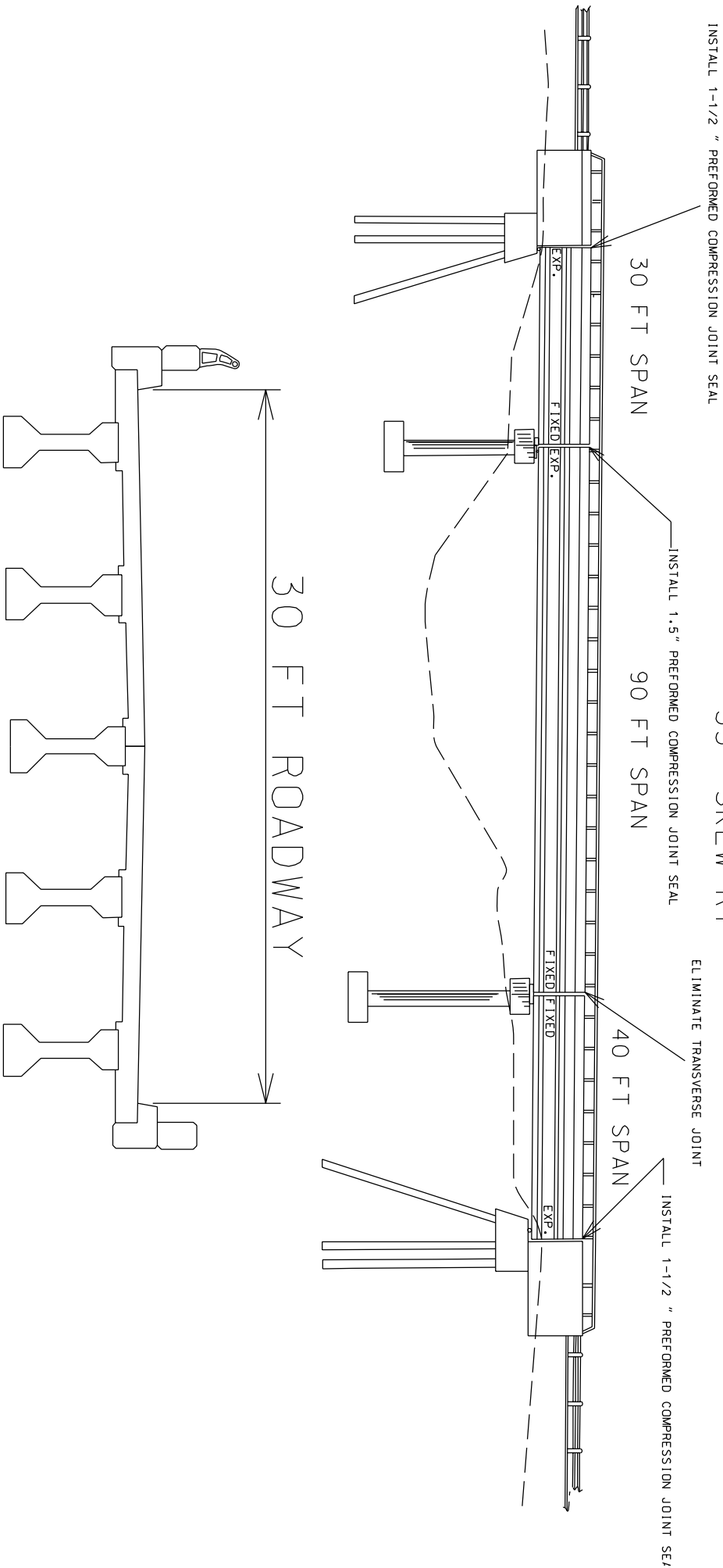


PROPOSED SECTION @ CURB

030 9007 B00088

TWIN PRESTRESSED CONCRETE STRUCTURES
3 SIMPLE SPANS 30'-90'-40'

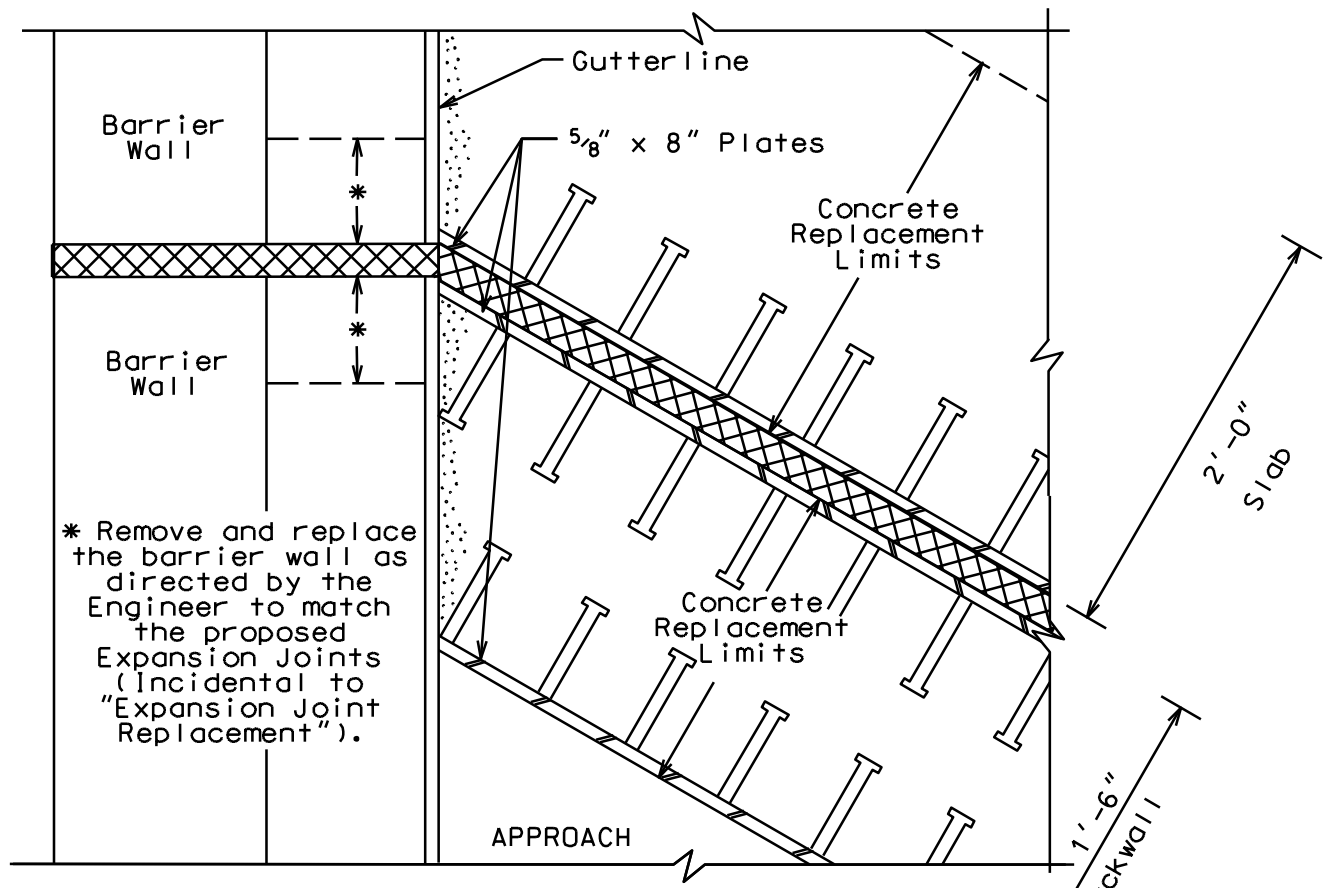
35° SKEW RT



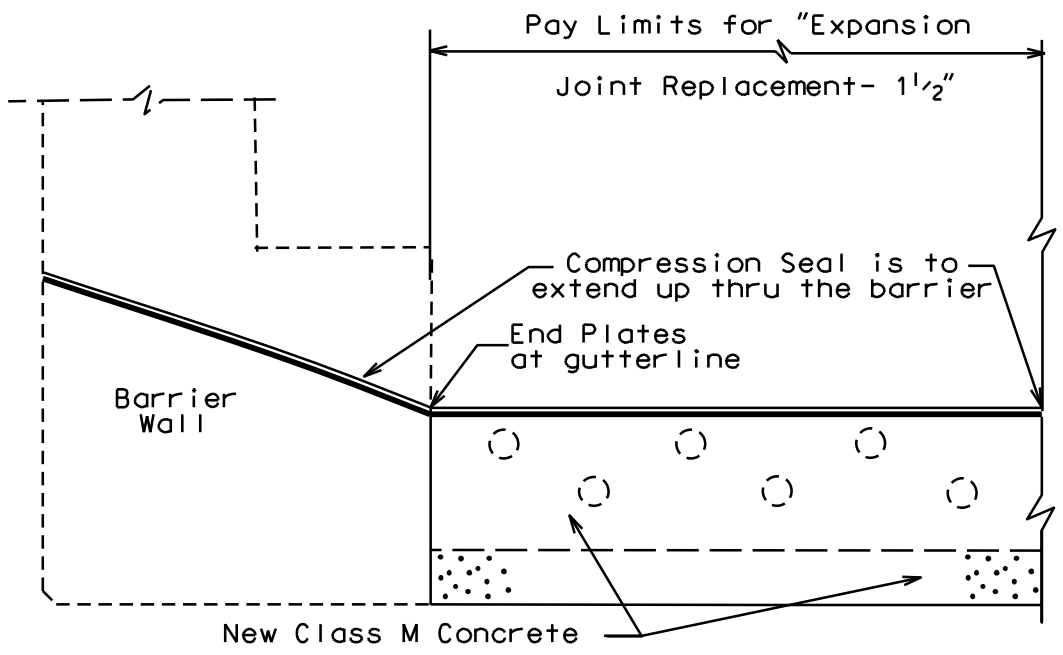
30-9007-B00088

Not to Scale

CURB SECTION



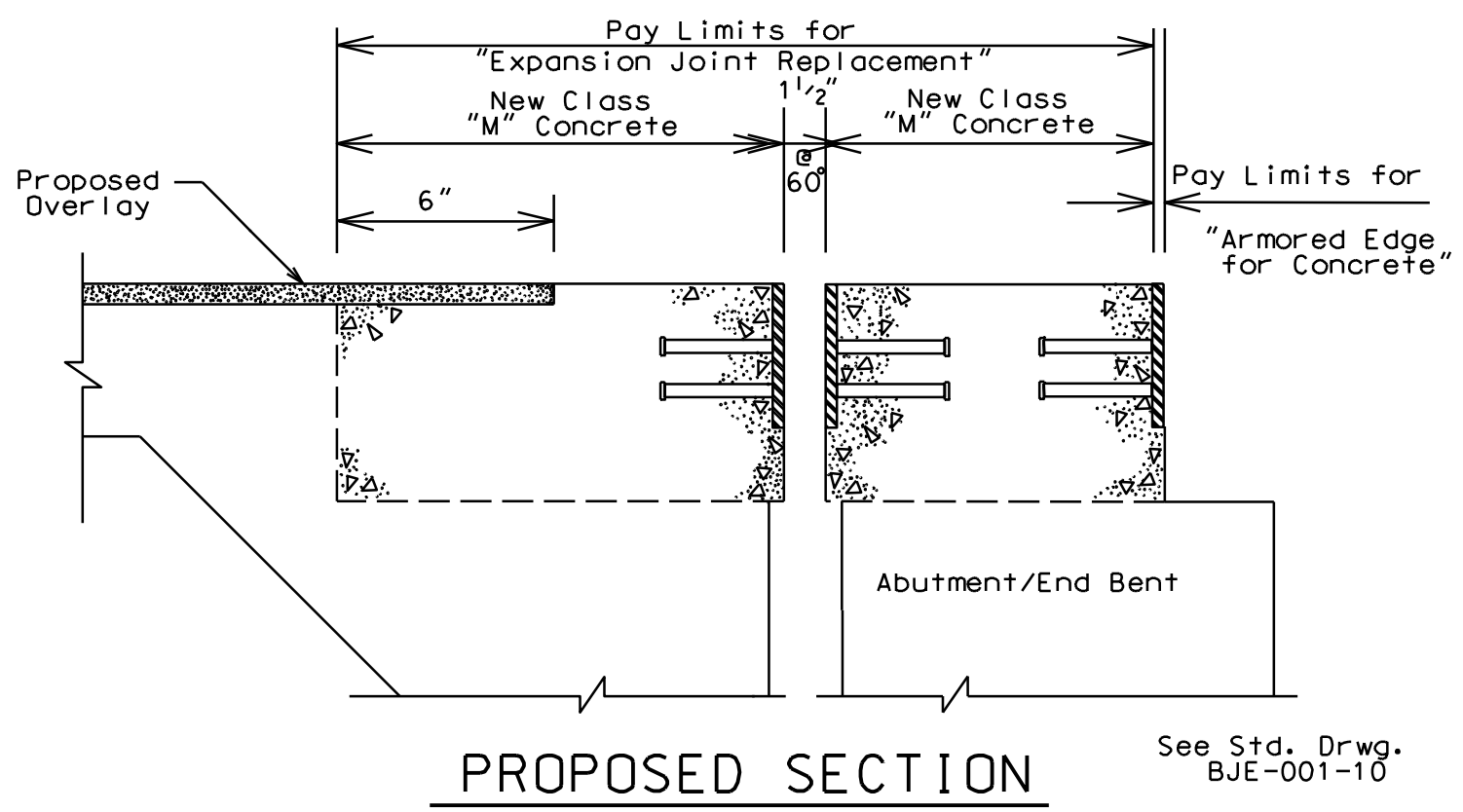
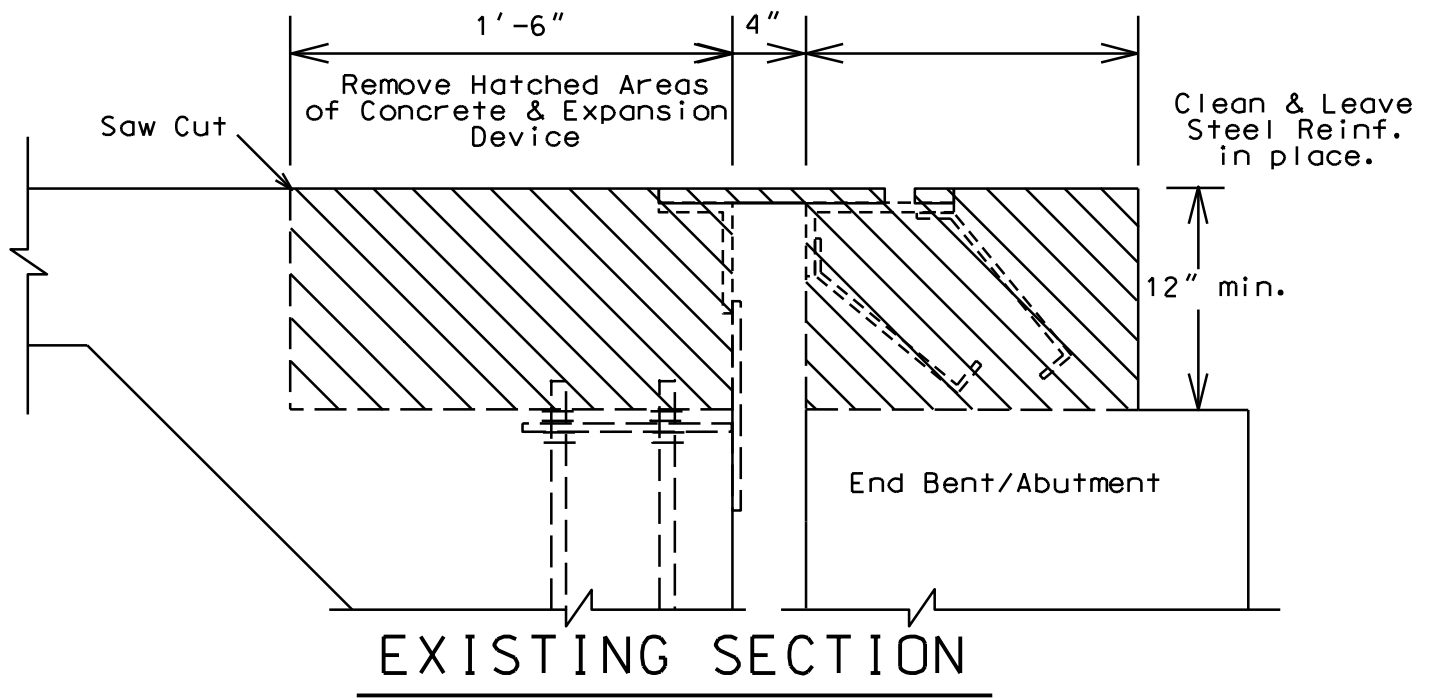
PLAN VIEW @ CURB



PROPOSED SECTION @ CURB

030B00088

Not to Scale



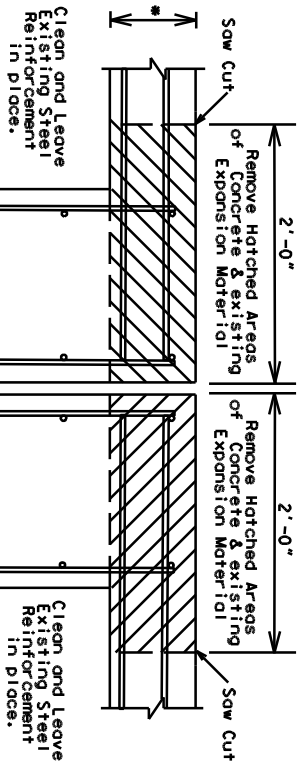
See Std. Drwg.
BJE-001-10

030 9007 B00088

NOT TO SCALE

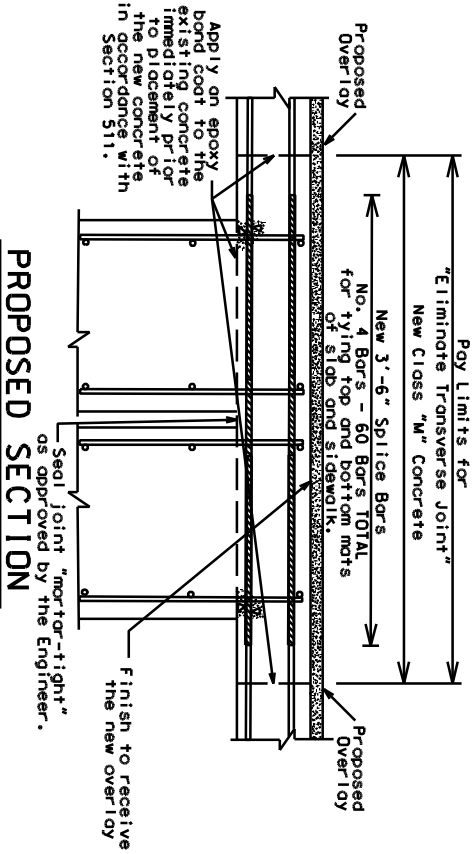
ELIMINATE TRANSVERSE JOINT DETAIL

Pier No. 2



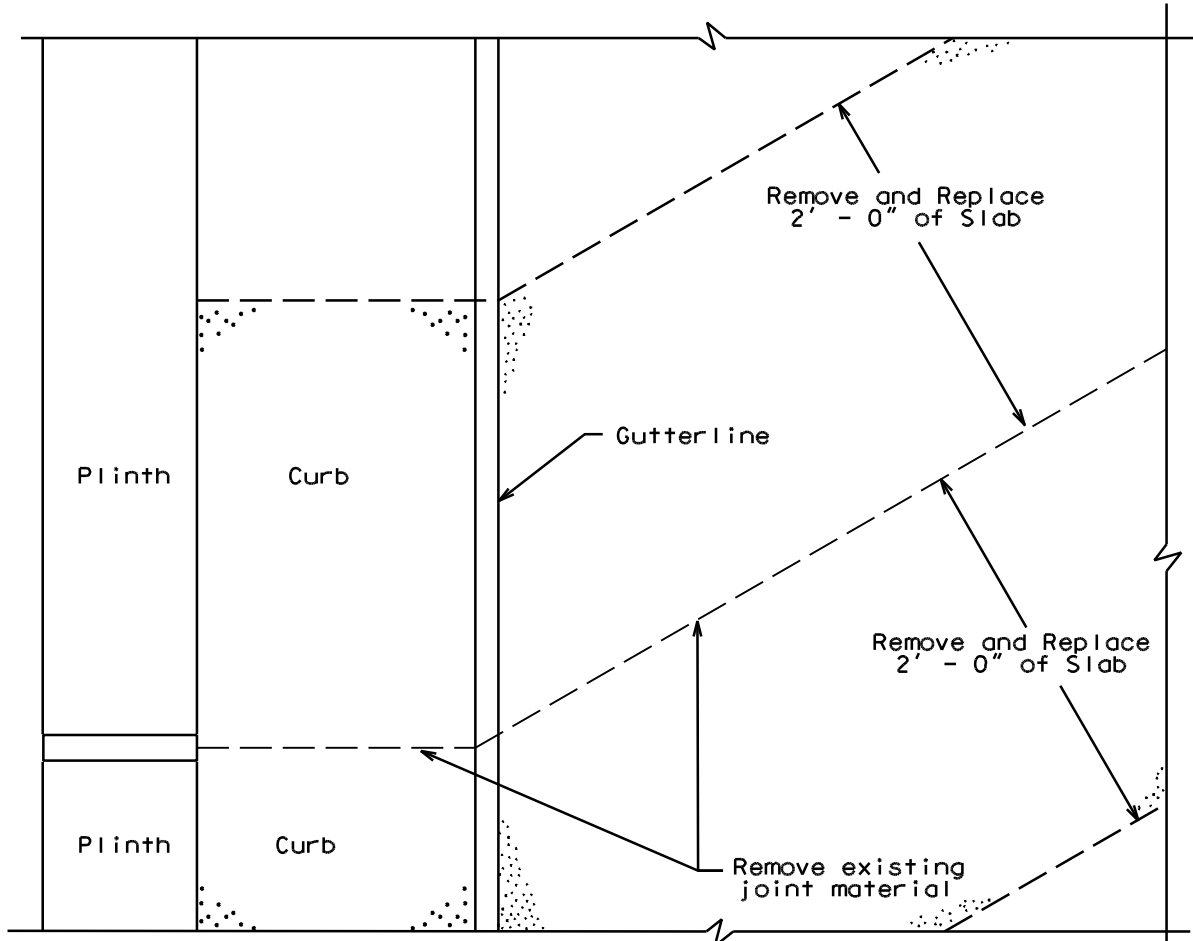
* Approximately 8" (1" original deck + existing overlay)

EXISTING SECTION



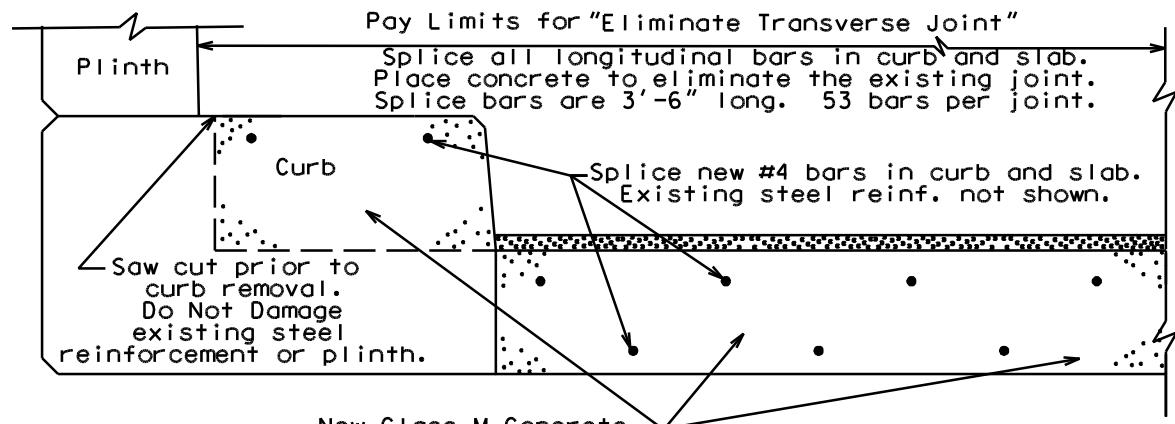
PROPOSED SECTION

Not to Scale
ELIMINATE TRANSVERSE JOINT - CURB SECTION



NOTE: Do Not Disturb existing steel reinforcement or Plinth.

PLAN VIEW @ CURB

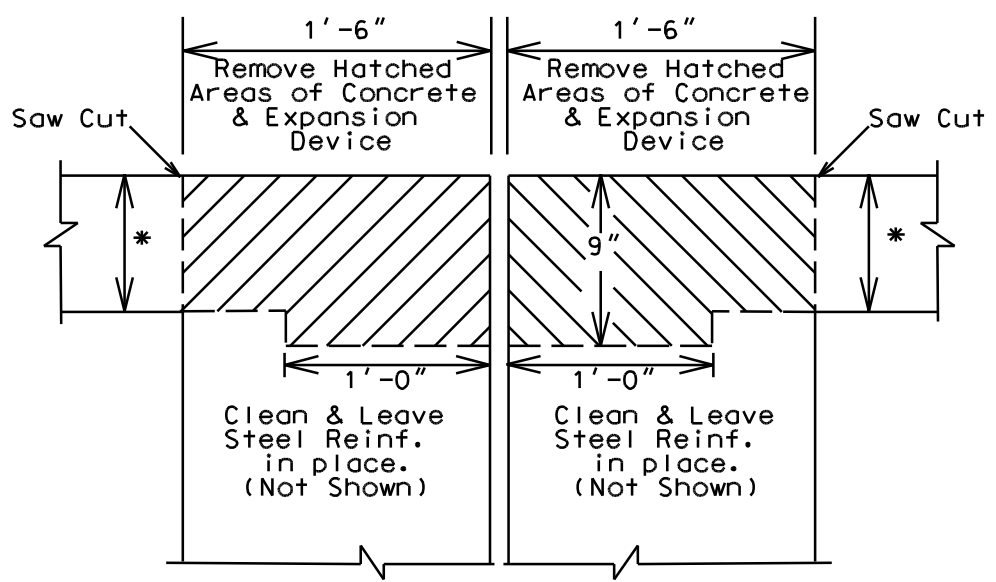


PROPOSED SECTION @ CURB

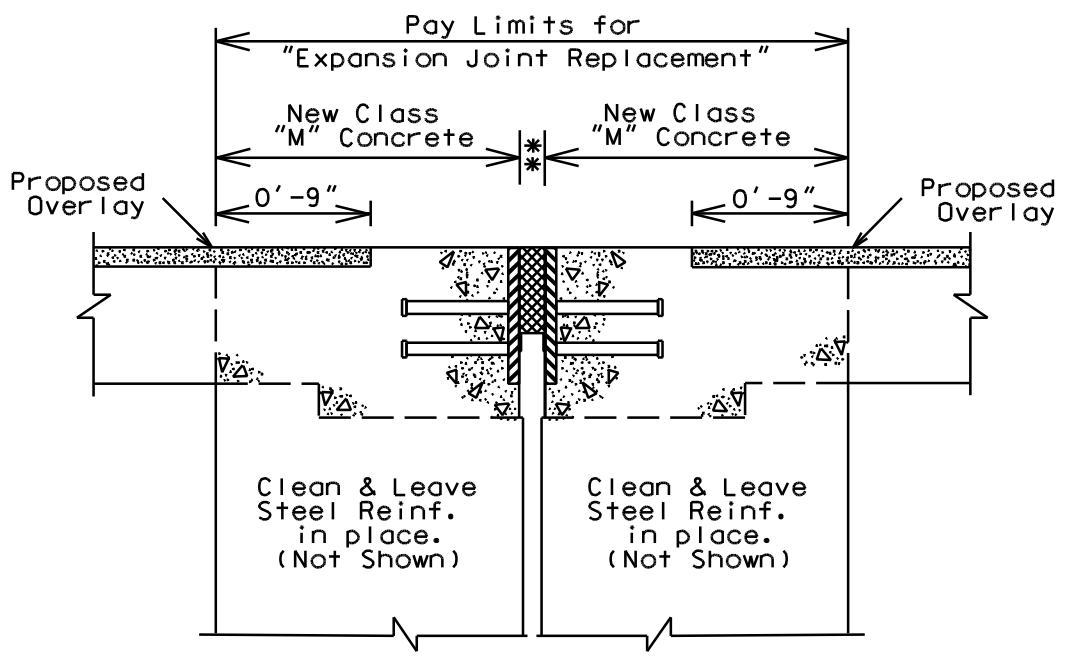
FE02 030-9007-B00088
Not to Scale

EXPANSION DAM DETAIL

Pier No. 1



EXISTING SECTION



* Neoprene Compression Seal : 1 1/2" @ 60°F

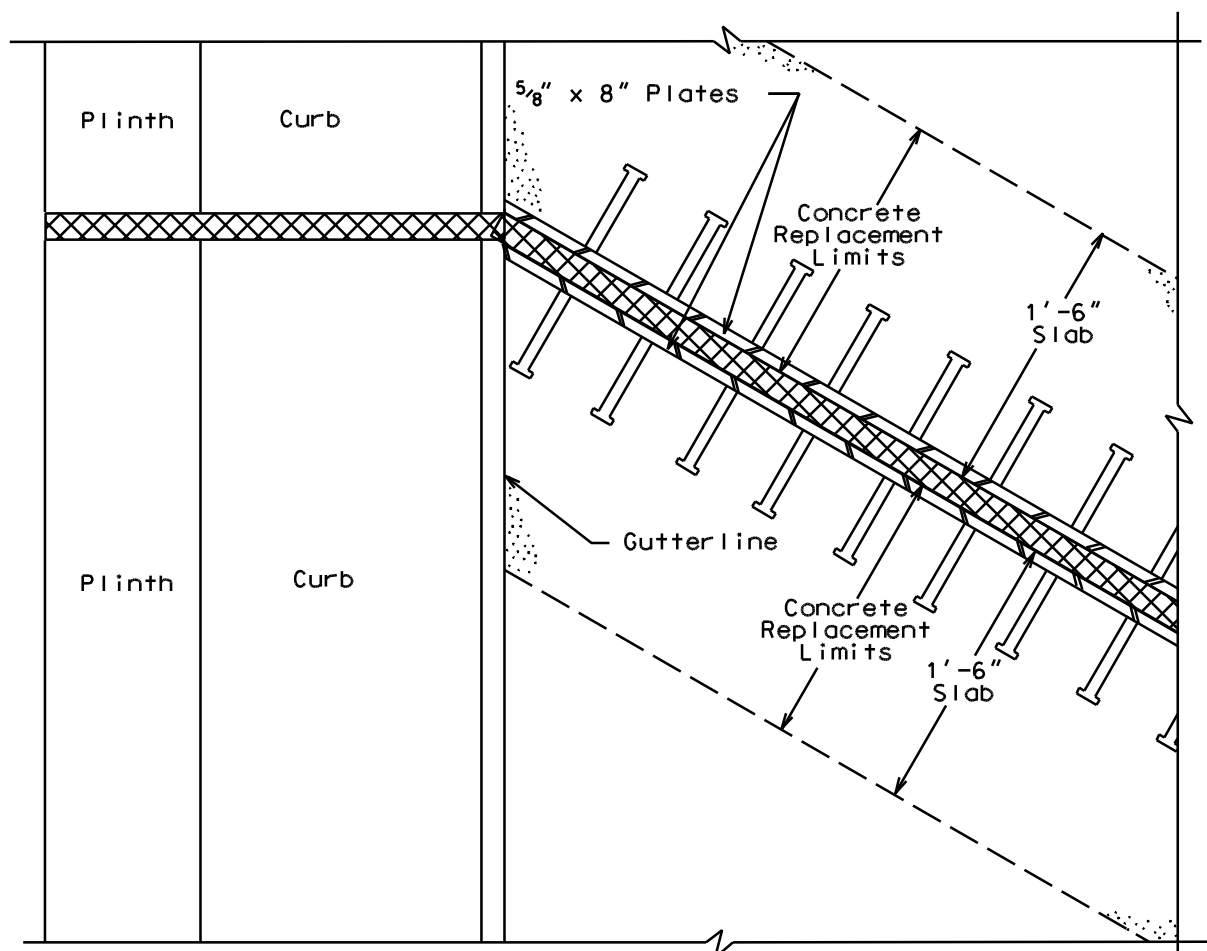
PROPOSED SECTION

See Std. Drwg.
BJE-001-10

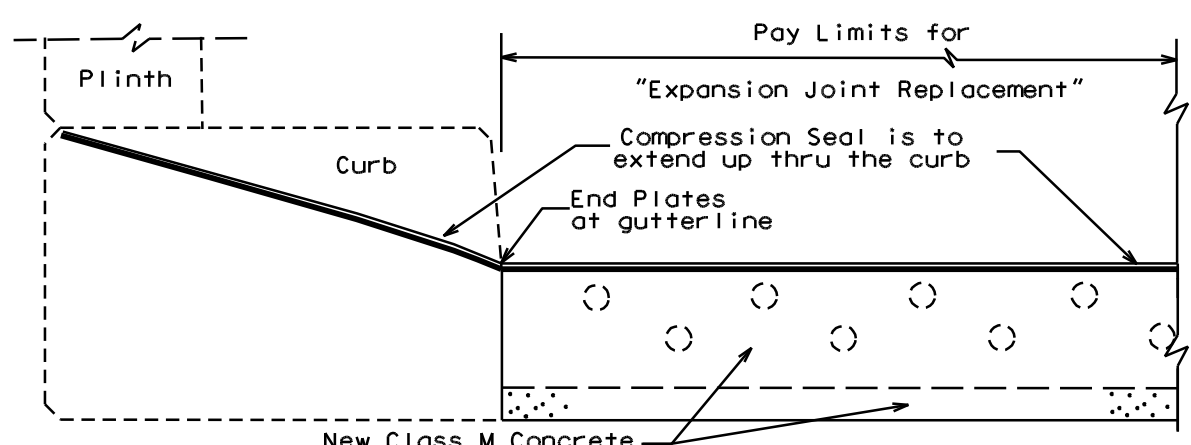
FE02 030 9007 B00088

Not to Scale

CURB SECTION



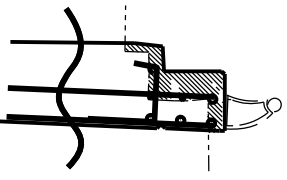
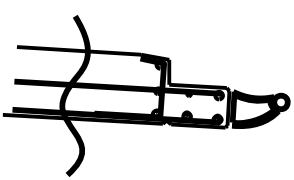
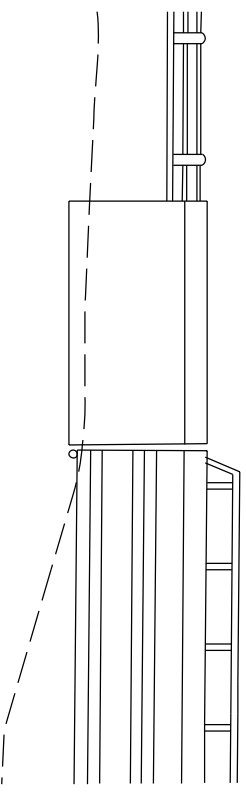
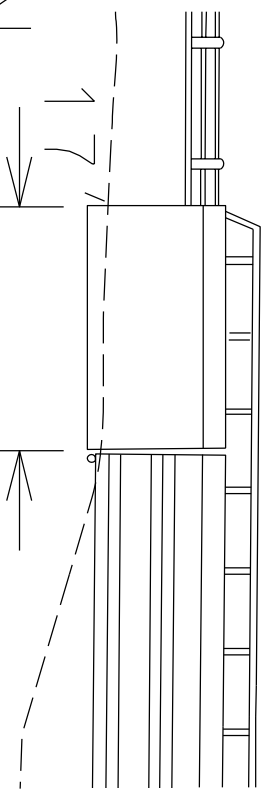
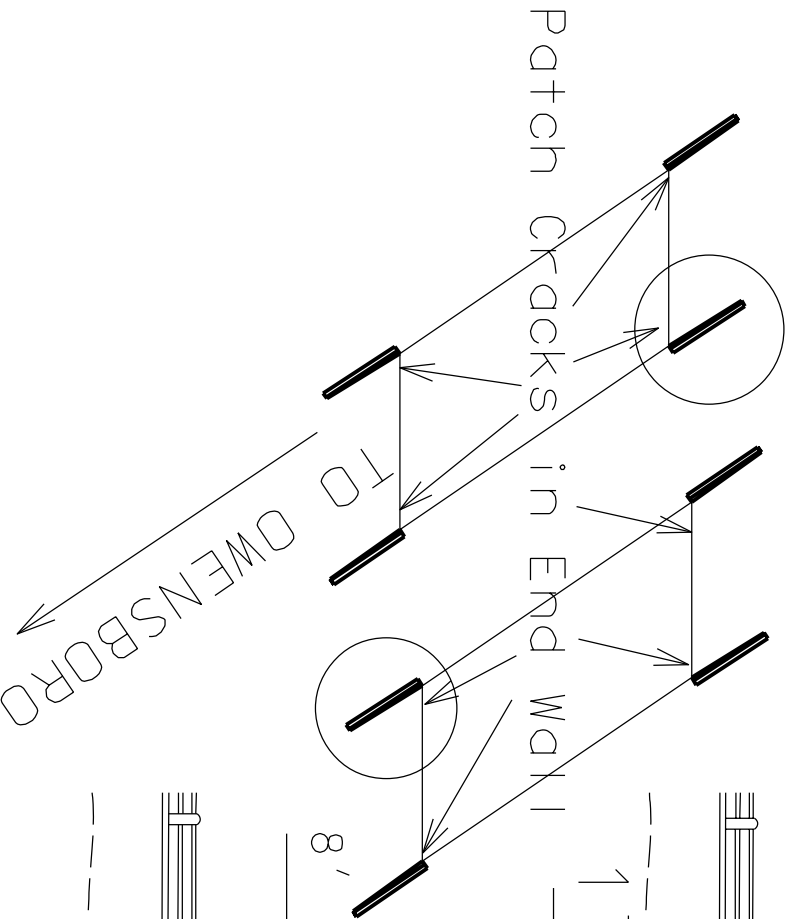
PLAN VIEW @ CURB



PROPOSED SECTION @ CURB

030 9007 B00088

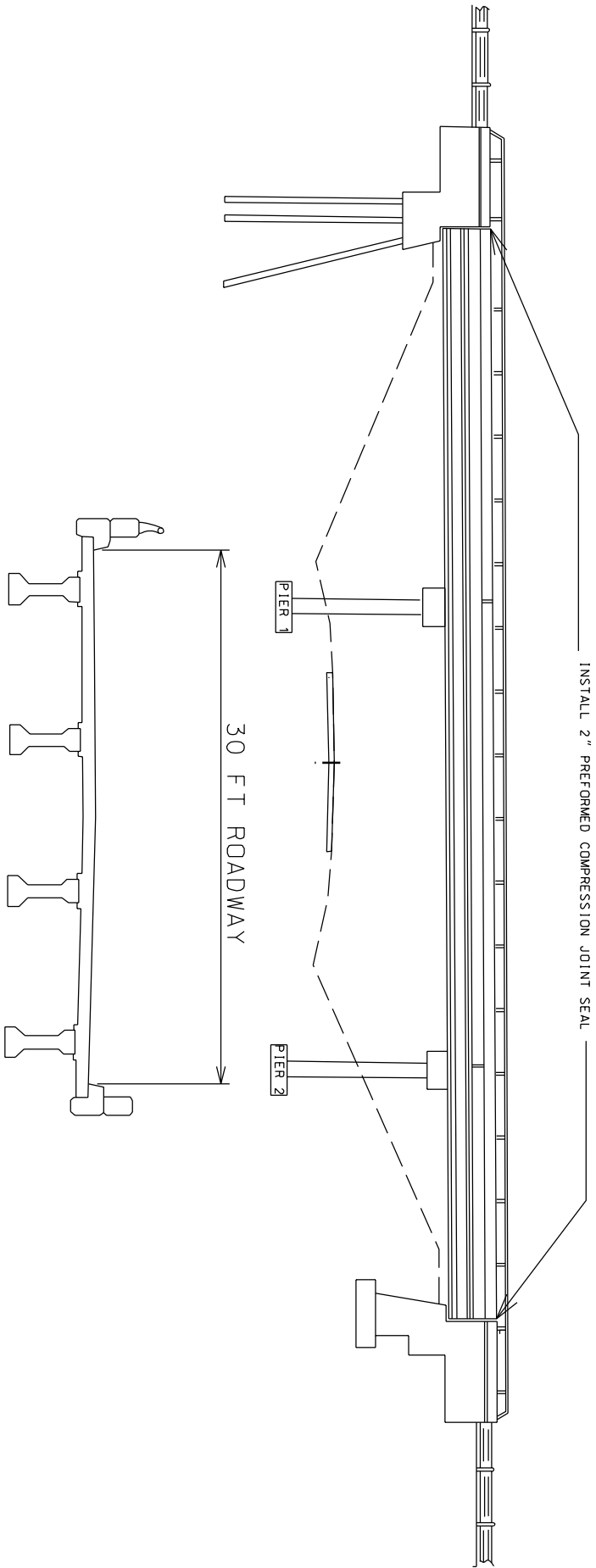
REMOVE RESET HANDRAIL
PATCH WALL TO MATCH
BRIDGE BARRIER



092 9007 B00067

TWIN CONT. PRESTRESSED CONC. STRUCT.
3 SPANS AT 46' 1/2" - 69' - 46' 1/2"

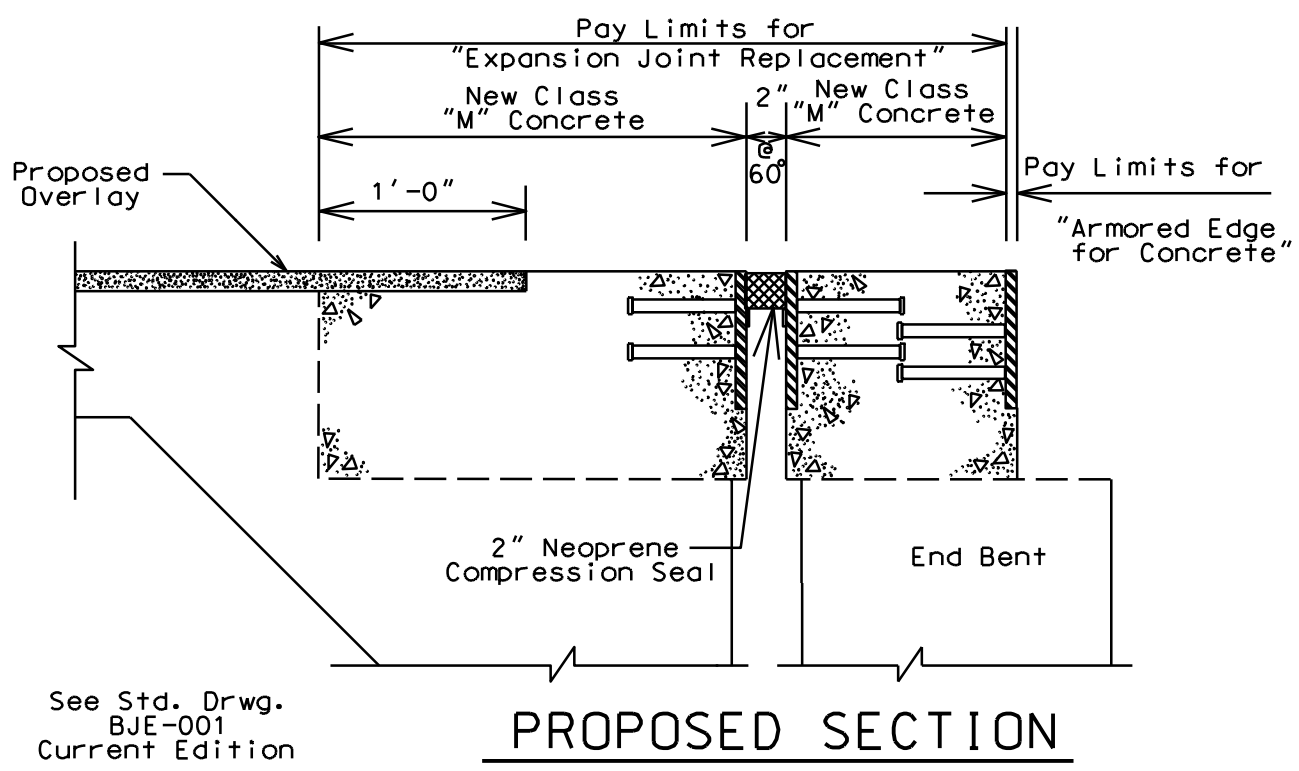
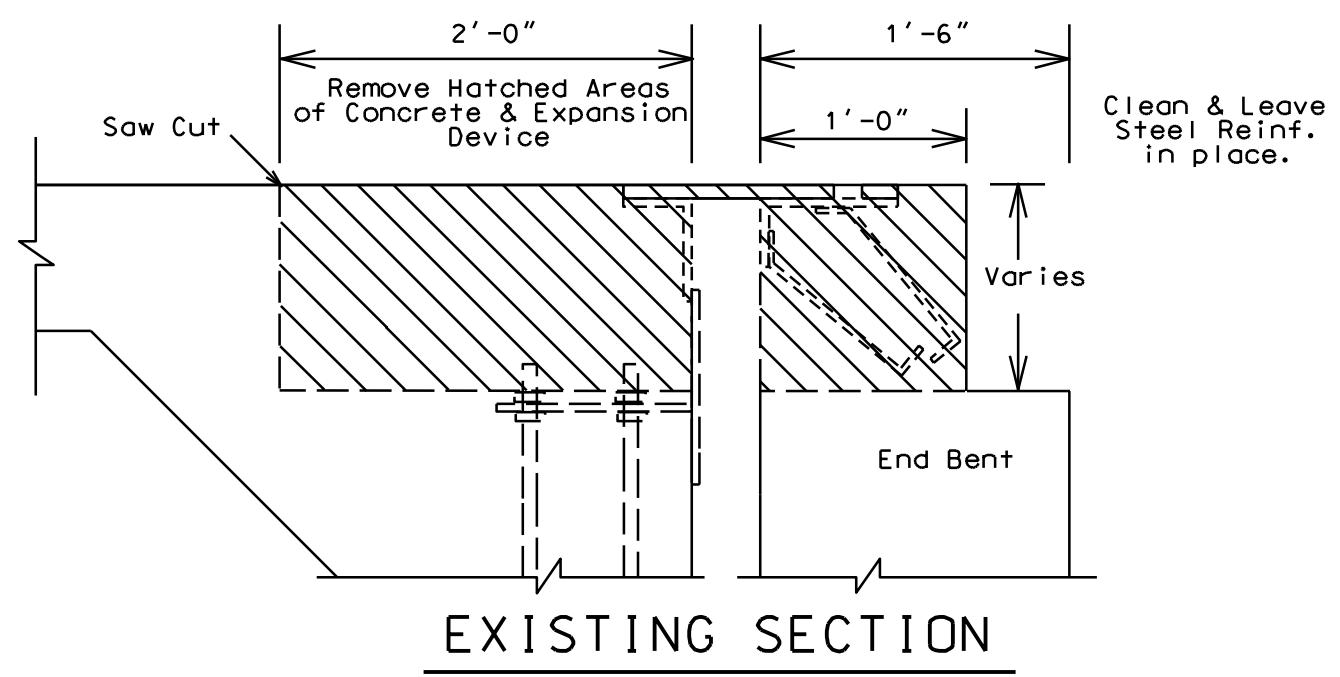
34° SKEW RT



092 9007 B00067

Not to Scale

EXPANSION DAM DETAIL

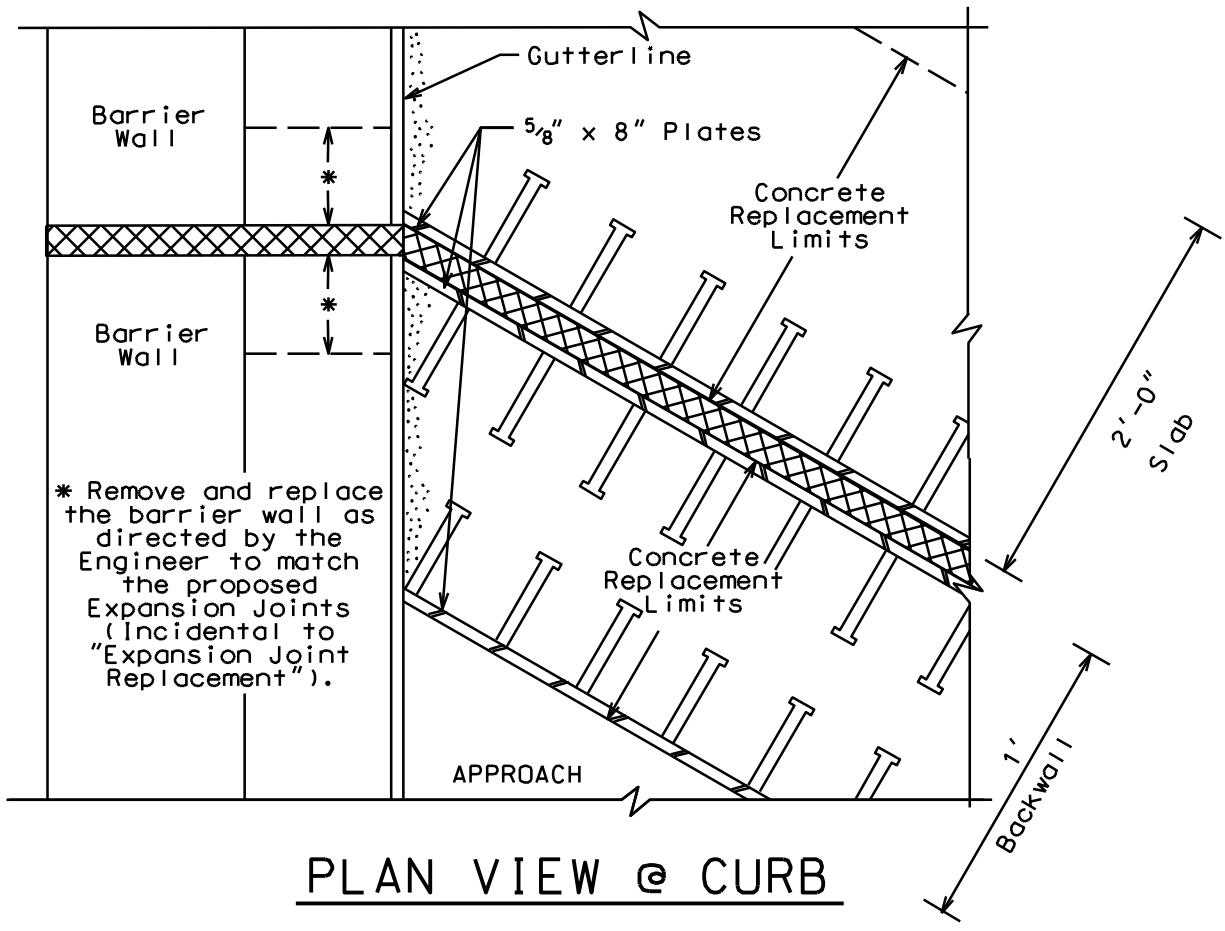


See Std. Drwg.
BJE-001
Current Edition

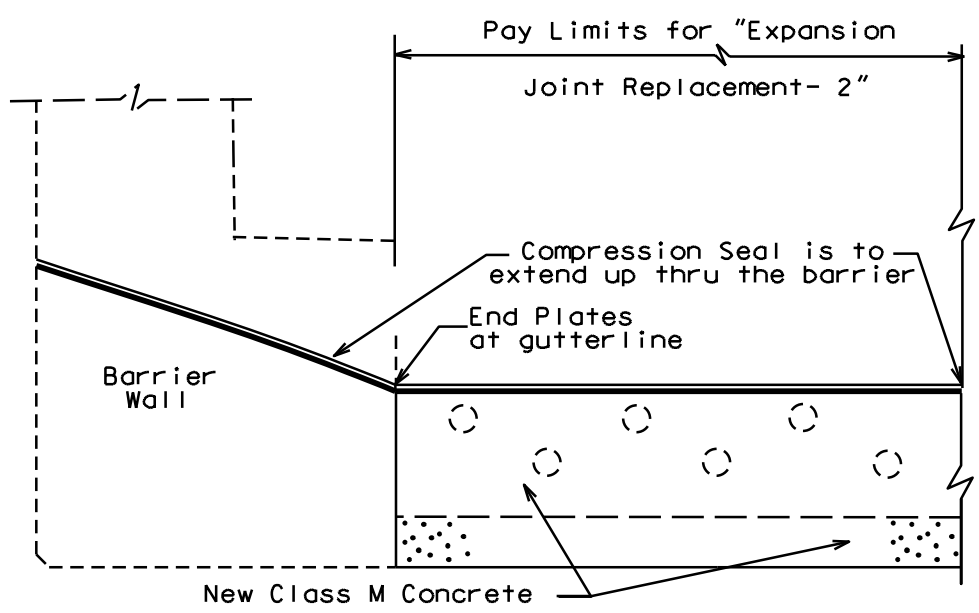
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Not to Scale

CURB SECTION



PLAN VIEW @ CURB



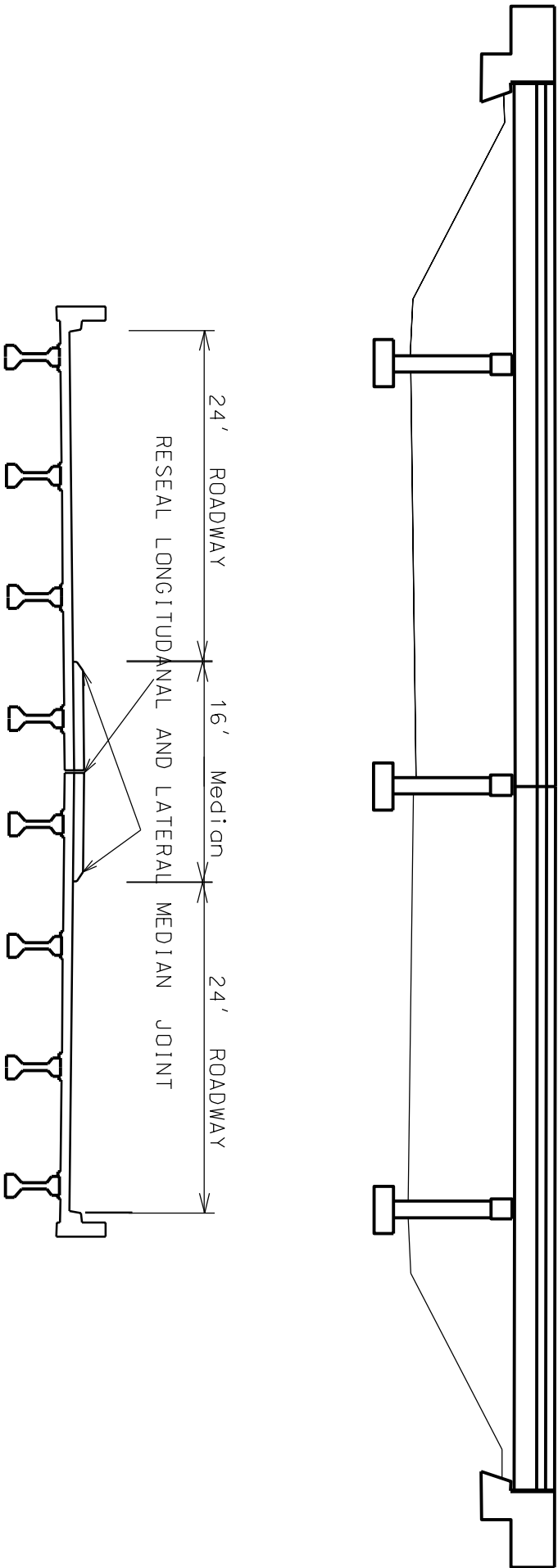
PROPOSED SECTION @ CURB

092 0069 B00062N

PRESTRESSED CONCRETE STRUCTURE
4 SPANS 50' - 75' - 75' - 50'
OVERLAY IN ACCORDANCE WITH 606
BRIDGE END TRANSITIONS
IN ACCORDANCE WITH SECTION
606.03.12 A

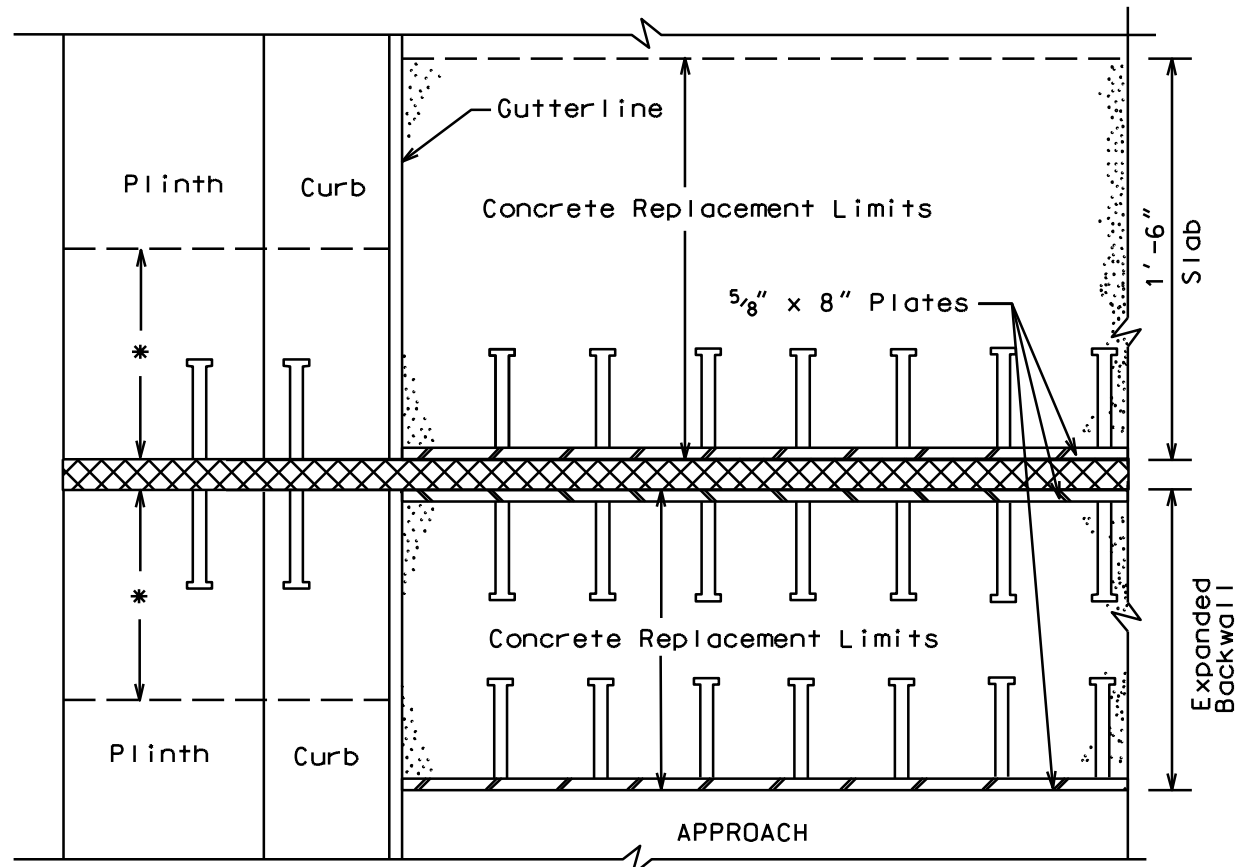
INSTALL 1.5" PREFORMED COMPRESSION JOINT SEAL
INSTALL ARMORED EDGE

INSTALL 1.5" PREFORMED COMPRESSION JOINT SEAL
INSTALL ARMORED EDGE



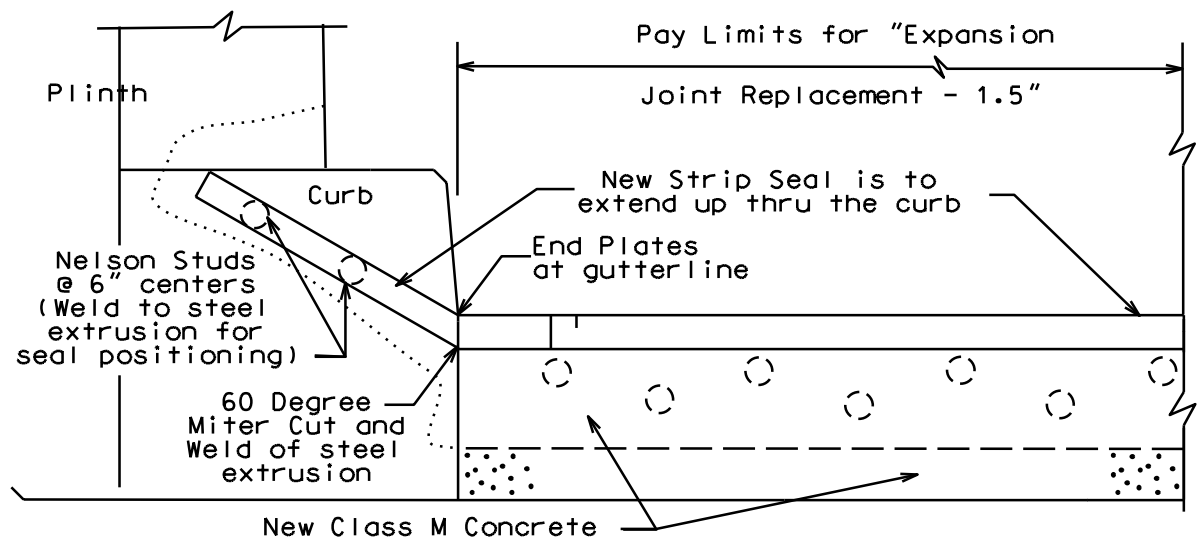
092B00062

Not to Scale CURB SECTION



* Remove and replace curb/plinth as directed by the Engineer to match proposed Expansion Joints (Incidental to "Expansion Joint Replacement").

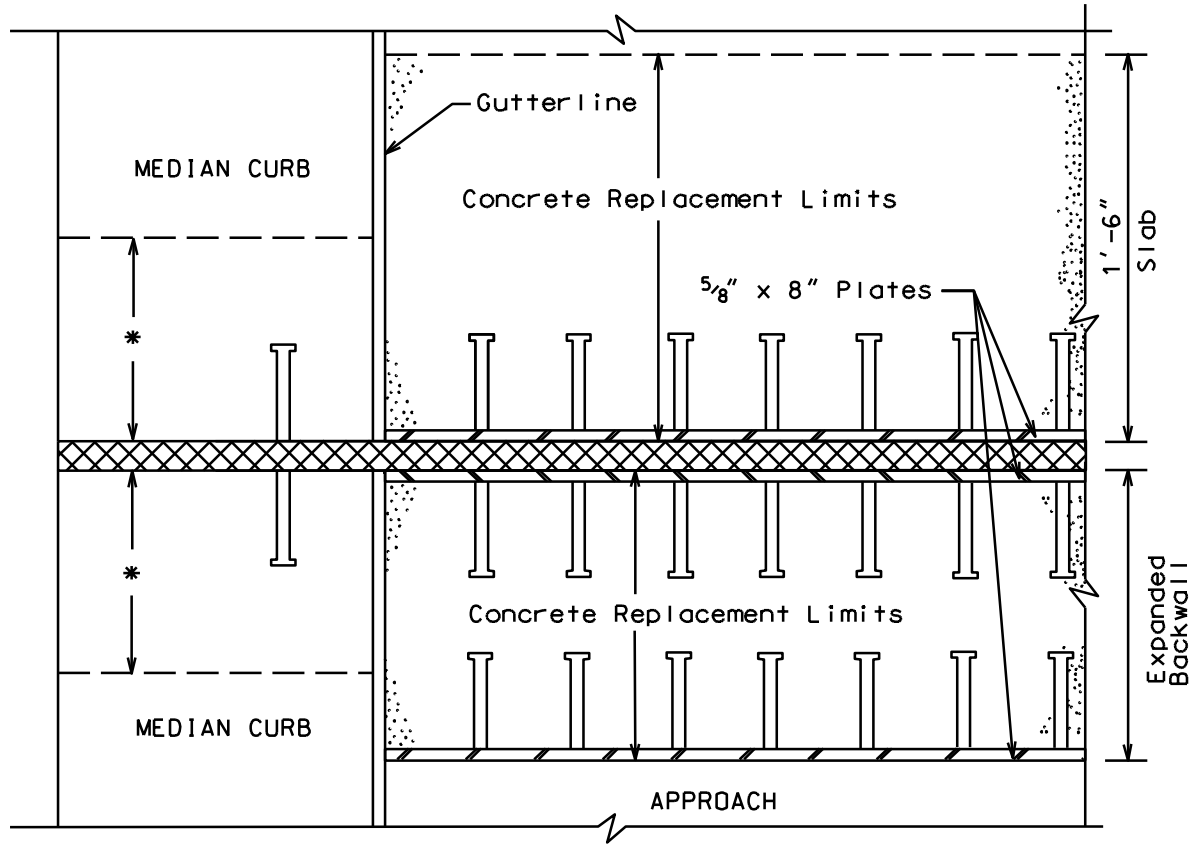
PLAN VIEW @ CURB



PROPOSED SECTION @ CURB

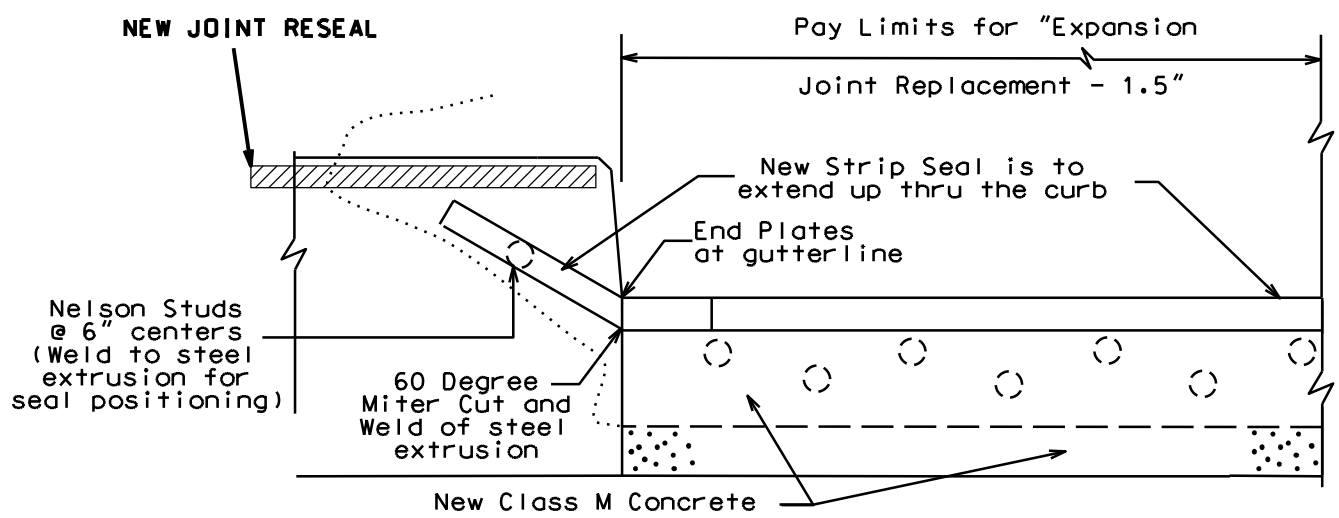
092B00062

Not to Scale CURB SECTION



* Remove and replace curb/plinth as directed by the Engineer to match proposed Expansion Joints (Incidental to "Expansion Joint Replacement").

PLAN VIEW @ CURB

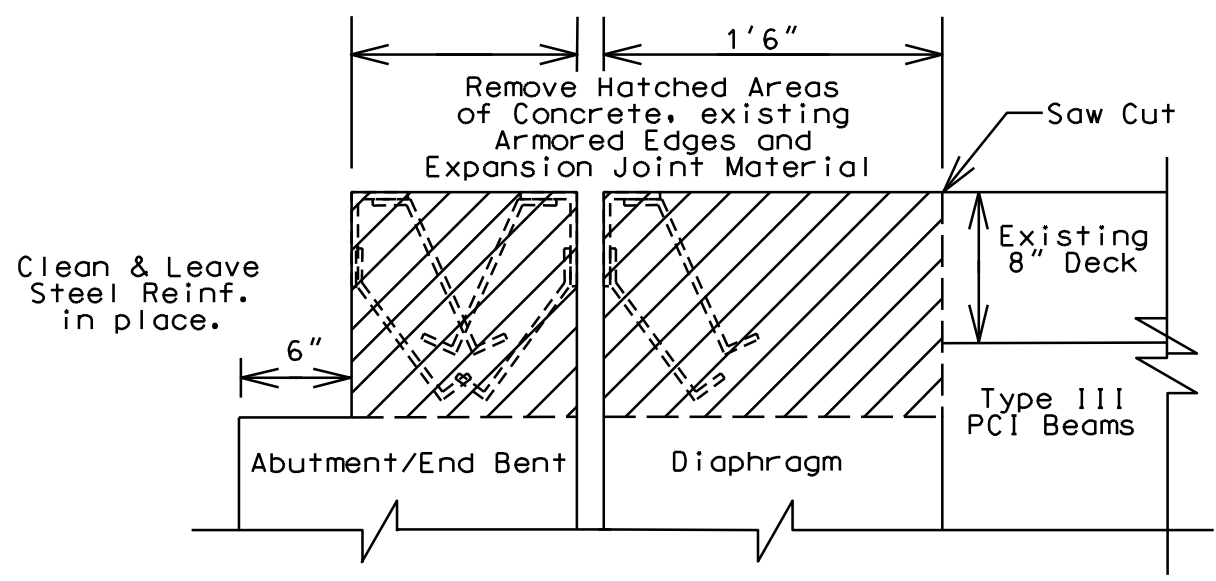


PROPOSED SECTION @ CURB

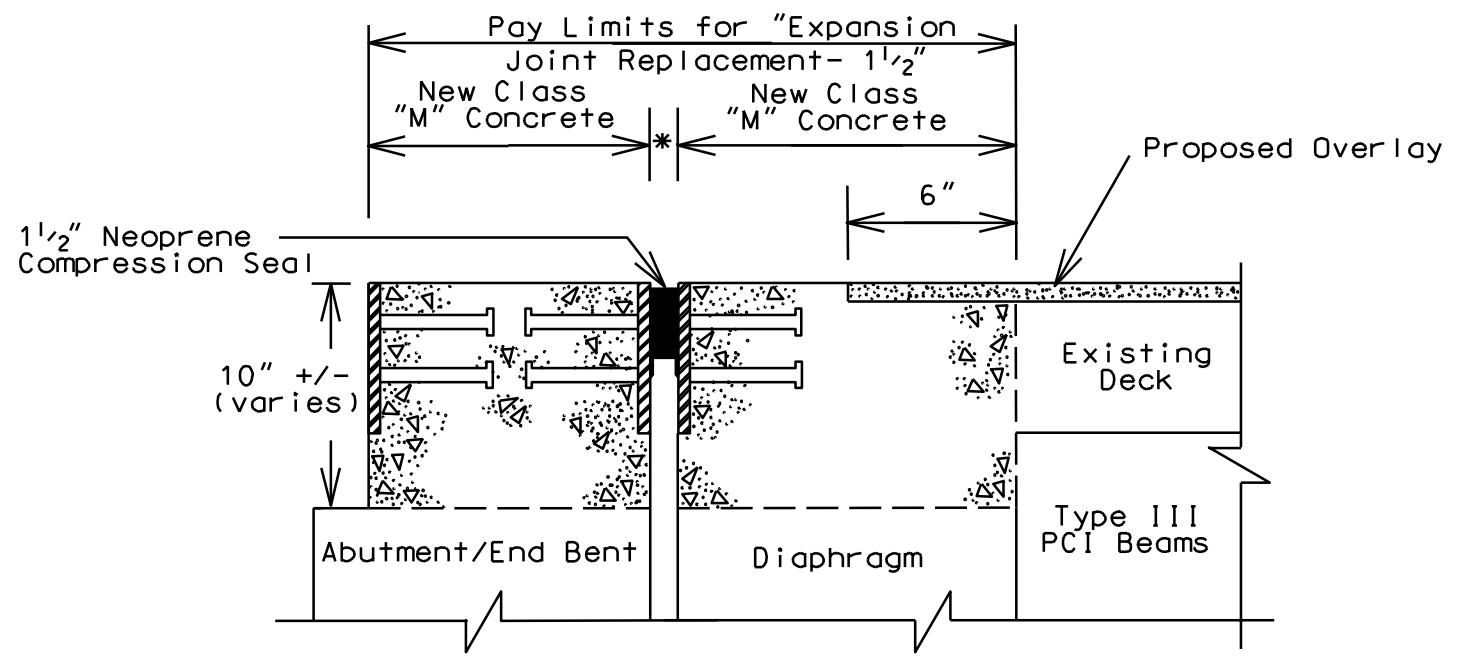
092B00062

Not to Scale

EXPANSION DAM DETAIL



EXISTING SECTION



* 1 1/2" @ 60 F

PROPOSED SECTION

See Standard Drawing
No. BJE-001
Current Edition

PART II
SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to the *Standard Specifications for Road and Bridge Construction, Edition of 2004*, and *Standard Drawings, Edition of 2000* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2008* and *Standard Drawings, Edition of 2003 with the 2008 Revision*.

**Supplemental Specifications to The Standard Specifications
for Road and Bridge Construction, 2008 Edition
(Effective with the January 22, 2010 Letting)**

<p>SUBSECTION: REVISION:</p>	<p>101.02 Abbreviations. Insert the following abbreviation and text into the section:</p> <p>KEPSC Kentucky Erosion Prevention and Sediment Control</p>
<p>SUBSECTION: REVISION:</p>	<p>101.03 Definitions. Replace the definition for Specifications – <i>Special Provisions</i> with the following:</p> <p>Additions and revisions to the Standard and Supplemental Specifications covering conditions peculiar to and individual project.</p>
<p>SUBSECTION: REVISION:</p>	<p>102.07.01 General. Replace the first sentence with the following:</p> <p>Submit the Bid Proposal on forms furnished on the Department internet website (http://transportation.ky.gov/contract/), including the Bid Packet and disk created from the Expedite Bidding Program.</p>
<p>SUBSECTION: REVISION:</p>	<p>102.07.02 Computer Bidding. Replace the first paragraph with the following:</p> <p>Subsequent to ordering a Bid Proposal for a specific project, use the Department’s Expedite Bidding Program on the internet website of the Department of Highways, Division of Construction Procurement (http://transportation.ky.gov/contract/). Download the bid file from the Department’s website to prepare a Bid Proposal for submission to the Department. Include the completed Bid Packet produced by the Expedite Bidding Program and submit it along with the disk created by said program.</p> <p>Replace the second paragraph with the following:</p> <p>In case of a dispute, the printed Bid Proposal and bid item sheets created by the Expedite Bidding Program take precedence over any bid submittal.</p>
<p>SUBSECTION: REVISION:</p>	<p>102.08 Irregular Bid Proposals. Replace point four of the first paragraph with the following:</p> <p>4) fails to submit a disk created from the Expedite Bidding Program.</p> <p>Replace point one of the second paragraph with the following:</p> <p>1) when the Bid Proposal is on a form other than that furnished by the Department or printed from other than the Expedite Bidding Program, or when the form is altered or any part is detached; or</p>
<p>SUBSECTION: REVISION:</p>	<p>102.11 Withdrawal or Revision of Bid Proposals. Replace the paragraph with the following:</p> <p>A bidder may withdraw or revise a Bid Proposal after depositing the Bid Proposal with the Department, provided the Department receives the request for such withdrawal or revision in writing before the time set for opening Bid Proposals.</p>
<p>SUBSECTION: REVISION:</p>	<p>103.02 Award of Contract. Replace the first sentence of the third paragraph with the following:</p> <p>The Department will normally award the Contract within 10 working days after the date of receiving Bid Proposals unless the Department deems it best to hold the Bid Proposals of any or all bidders for a period not to exceed 60 calendar days for final disposition of award.</p>

**Supplemental Specifications to The Standard Specifications
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<p>SUBSECTION: REVISION:</p>	<p>105.12 Final Inspection and Acceptance of Work. Insert the following paragraphs after the first paragraph:</p> <p>Notify the Engineer when all electrical items are complete. A notice of the electrical work completion shall be made in writing to the Contractor. Electrical items will be inspected when the electrical work is complete and are not subject to waiting until the project as a whole has been completed. The Engineer will notify the Division of Traffic Operations within 3 days that all electrical items are complete and ready for a final inspection. A final inspection will be completed within 90 days after the Engineer notifies the Division of Traffic Operations of the electrical work completion.</p> <p>Energize all electrical items prior to notifying the Engineer that all electrical items are complete. Electrical items must remain operational until the Division of Traffic Operations has inspected and accepted the electrical portion of the project. Payment for the electrical service is the responsibility of the Contractor from the time the electrical items are energized until the Division of Traffic Operations has accepted the work.</p> <p>Complete all corrective work within 90 calendar days of receiving the original electrical inspection report. Notify the Engineer when all corrective work is complete. The Engineer will notify the Division of Traffic Operations that the corrective work has been completed and the project is ready for a follow-up inspection. Upon re-inspection, if additional corrective work is required, complete within the same 90 calendar day allowance. The Department will not include time between completion of the corrective work and the follow up electrical inspection(s). The 90 calendar day allowance is cumulative regardless of the number of follow-up electrical inspections required.</p> <p>The Department will assume responsibility for the electrical service on a project once the Division of Traffic Operations gives final acceptance of the electrical items on the project. The Department will also assume routine maintenance of those items. Any damage done to accepted electrical work items by other Contractors shall be the responsibility of the Prime Contractor. The Department will not be responsible for repairing damage done by other contractors during the construction of the remaining project.</p> <p>Failure to complete the electrical corrective work within the 90 calendar day allowance will result in penalties assessed to the project. Penalties will be assessed at ½ the rate of liquidated damages established for the contract.</p> <p>Replace the following in the second sentence of the second paragraph:</p> <p>Replace Section 213 with Section 212.</p> <p>Delete the fifth paragraph from the section.</p>
<p>SUBSECTION: REVISION:</p>	<p>105.13 Claim Resolution Process. Replace the last sentence of the 3. Bullet with the following:</p> <p>If the Contractor did not submit an as-bid schedule at the Pre-Construction Meeting or a written narrative in accordance with Subsection 108.02, the Cabinet will not consider the claim for delay.</p> <p>Delete the last paragraph from the section.</p>
<p>SUBSECTION: REVISION:</p>	<p>106.10 Field Welder Certification Requirements. Insert the following sentence before the first sentence of the first paragraph:</p> <p>All field welding must be performed by a certified welder unless otherwise noted.</p>

**Supplemental Specifications to The Standard Specifications
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SUBSECTION: REVISION:	<p>108.02 Progress Schedule. Insert the following prior to the first paragraph:</p> <p>Specification 108.02 applies to all Cabinet projects except the following project types:</p> <ul style="list-style-type: none">• Right of Way Mowing and/or Litter Removal• Waterborne Paint Striping• Projects that contain Special Provision 82• Projects that contain the Special Note for CPM Scheduling <p>Insert the following paragraph after paragraph two:</p> <p>Working without the submittal of a Written Narrative is violation of this specification and additionally voids the Contractor's right to delay claims.</p> <p>Insert the following paragraph after paragraph six:</p> <p>The submittal of bar chart or Critical Path Method schedule does not relieve the Contractor's requirement to submit a Written Narrative schedule.</p> <p>Insert the following at the beginning of the first paragraph of A) Written Narrative.:</p> <p>Submit the Written Narrative Schedule using form TC 63-50 available at the Division of Construction's website (http://www.transportation.ky.gov/construction/ResCenter/ResCenter.htm).</p> <p>Replace Part A) Written Narrative 1. And 2. with the following:</p> <ol style="list-style-type: none">1. Provide a description that includes how the Contractor will sequence and stage the work, how the Contractor plans to maintain and control traffic being specific and detailed, and what equipment and crew sizes are planned to execute the work.2. Provide a list of project milestones including, if applicable, winter shut-downs, holidays, or special events. The Contractor shall describe how these milestones and other dates effect the prosecution of the work. Also, include start date and completion date milestones for the contract, each project if the contract entails multiple projects, each phase of work, site of work, or segment of work as divided in the project plans, proposal, or as subdivided by the Contractor.
SUBSECTION: REVISION:	<p>110.01 Mobilization. Replace paragraph three with the following:</p> <p>Do not bid an amount for Mobilization that exceeds 5 percent of the sum of the total amounts bid for all items in the Bid Proposal, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives. The Department will automatically adjust any Bid Proposals that are in excess of this amount down to 5 percent to compare Bid Proposals and award the Contract. The Department will award a Contract for the actual amount bid when the amount bid for Mobilization is less than 5 percent, or the Department will award the Contract for the adjusted bid amount of 5 percent when the amount bid for Mobilization is greater than 5 percent. If any errors in unit bid prices for other Contract items in a Contractor's Bid Proposal are discovered after bid opening and such errors reduce the total amount bid for all other items, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives, so that the percent bid for Mobilization is larger than 5 percent, the Department will adjust the amount bid for Mobilization to 5 percent of the sum of the corrected total bid amounts.</p>

**Supplemental Specifications to The Standard Specifications
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<p>SUBSECTION: REVISION:</p>	<p>110.02 Demobilization. Replace the third paragraph with the following:</p> <p>Bid an amount for Demobilization that is a minimum of \$1,000 or 1.5 percent of the sum of the total amounts bid for all other items in the Bid Proposal, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives. The Department will automatically adjust any Bid Proposal that is less than this amount up to \$1,000 or 1.5 percent to compare Bid Proposals and award the Contract. The Department will award a Contract for the actual amount bid when the amount bid for demobilization exceeds 1.5 percent, or the Department will award the Contract for the adjusted bid amount when the amount bid for demobilization is less than the minimum of \$1,000 or less than 1.5 percent of the sum of the total amounts bid for all other items in the Bid Proposal, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives.</p>
<p>SUBSECTION: REVISION:</p>	<p>110.04 Payment. Insert the following paragraph following the demobilization payment schedule (4th paragraph):</p> <p>The Department will withhold an amount equal to \$1,000 for demobilization, regardless of the schedule listed above. The \$1,000 withheld for demobilization will be paid when the final estimate is paid.</p>
<p>SUBSECTION: REVISION:</p>	<p>112.03.01 General Traffic Control. Replace paragraph three with the following:</p> <p>All flaggers shall be trained in current MUTCD flagging procedures. Proof of training must be available for review at the Department's request. Flagging credentials must be current within the last 5 years.</p>
<p>SUBSECTION: PART: REVISION:</p>	<p>112.03.11 Temporary Pavement Markings. B) Placement and Removal of Temporary Striping. Replace the 2nd sentence of the first paragraph with the following:</p> <p>On interstates and parkways, and other roadways approved by the State Highway Engineer, install pavement striping that is 6 inches in width.</p>
<p>SUBSECTION: REVISION:</p>	<p>112.03.12 Project Traffic Coordinator (PTC). Add the following at the end of the subsection:</p> <p>After October 1, 2008 the Department will require the PTC to have successfully completed the applicable qualification courses. Personnel that have not successfully completed the applicable courses by that date will not be considered qualified. Prior to October 1, 2008, conform to Subsection 108.06 A) and ensure the designated PTC has sufficient skill and experience to properly perform the task.</p>
<p>SUBSECTION: REVISION:</p>	<p>112.03.15 Non-Compliance of Maintain and Control of Traffic. Add the following section:</p> <p>112.03.15 Non-Compliance of Maintain and Control of Traffic. It is the Contractor's responsibility to conform to the traffic control requirements in the TCP, Proposal, plan sheets, specifications, and the Manual on Uniform Traffic Control Devices.</p> <p>Unless specified elsewhere in the contract, a penalty will be assessed in the event of non-compliance with Maintain and Control of Traffic requirements. These penalties will be assessed when the Contractor fails to correct a situation or condition of non-compliance with the contract traffic control requirements after being notified by the Engineer. The calculation of accrued penalties for non-compliance will be based upon the date/time of notification by the Engineer.</p> <p>The amount of the penalty assessed for non-compliance will be determined based upon the work zone duration, as defined by the MUTCD, and will be the greatest of the different calculation methods indicated below:</p>

**Supplemental Specifications to The Standard Specifications
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	<p>A) Long-term stationary work that occupies a location more than 3 days.</p> <p>Correct the non-compliant issue within 24 hours from initial notification by the Engineer. If the issue is not corrected within 24 hours from the initial notification, a penalty for non-compliance will be assessed on a daily basis beginning from the initial notification of non-compliance. The Contractor will be assessed a \$1,000 daily penalty or the amount equal to the contract liquidated damages in Section 108.09, whichever of the 2 is greater. The penalty for non-compliance will escalate as follows for continued non-compliance after the initial notification.</p> <p>3 Days after Notification \$1,500 daily penalty or 1.5 times the contract liquidated damages daily charge rate in Section 108.09, whichever is greater.</p> <p>7 Days after Notification \$2,000 daily penalty or double the contract liquidated damages daily charge rate in Section 108.09, whichever is greater.</p> <p>B) Intermediate-term stationary work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than 1 hour.</p> <p>Correct the non-compliant issue within 4 hours from initial notification by the Engineer. If the issue is not corrected within 4 hours from notification, a penalty for non-compliance will be assessed on an hourly basis beginning from the initial notification of non-compliance. The penalty for non-compliance will be assessed at \$200 per hour.</p> <p>C) Short-term stationary is daytime work that occupies a location for more than 1 hour within a single daylight period.</p> <p>Correct the non-compliant issue within 1 hour from initial notification by the Engineer. If the issue is not corrected within 1 hour from notification, a penalty for non-compliance will be assessed on an hourly basis beginning from the initial notification of non-compliance. The penalty for non-compliance will be assessed at \$200 per hour.</p> <p>If the Contractor remains in violation of the Maintain and Control of Traffic requirements, or if the Department determines it to be in the public's interest, work will be suspended in accordance with Section 108.08 until the deficiencies are corrected. The Department reserves the right to correct deficiencies by any means available and charge the Contractor for labor, equipment, and material costs incurred in emergency situations.</p>
<p>SUBSECTION: REVISION:</p>	<p>206.03.02 Embankment Replace the last paragraph with the following:</p> <p>When rock roadbed is specified, construct the upper 2 feet of the embankment according to Subsection 204.03.09 A).</p>

**Supplemental Specifications to The Standard Specifications
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<p>SUBSECTION: REVISION:</p>	<p>213.03.03 Inspection and Maintenance. Insert the following paragraph after the second paragraph:</p> <p>When the Contractor is required to obtain the KPDES permit, it is their responsibility to ensure compliance with the inspection and maintenance requirements of the permit. The Engineer will perform verification inspections a minimum of once per month and within 7 days of a ½ inch or greater rainfall event. The Engineer will document these inspections using Form TC 63-61 A. The Engineer will provide copies of the inspection only when improvements to the BMP's are required. Verification inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit. Initiate corrective action within 24 hours of any noted deficiency and complete the work within 5 days.</p>
<p>SUBSECTION: PART: REVISION:</p>	<p>213.03.05 Temporary Control Measures. E) Temporary Seeding and Protection. Replace the first paragraph with the following:</p> <p>Apply an Annual Rye seed mix at a rate of 100 pounds per acre during the months of March through August. In addition to the Annual Rye, add 10 pounds of German Foxtail-Millet (<i>Setaria italica</i>), when performing temporary seeding during the months of June through August. During the months of September through February, apply Winter Wheat or Rye Grain at a rate of 100 pounds per acre. Obtain the Engineer's approval prior to the application of the seed mixture.</p>
<p>SUBSECTION: PART: REVISION:</p>	<p>213.03.05 Temporary Control Measures. F) Temporary Mulch. Replace the last sentence with the following:</p> <p>Place temporary mulch to an approximate 2-inch loose depth (2 tons per acre) and anchor it into the soil by mechanically crimping it into the soil surface or applying tackifier to provide a protective cover. Regardless of the anchoring method used, ensure the protective cover holds until disturbance is required or permanent controls are in installed.</p>
<p>SUBSECTION: REVISION:</p>	<p>303.05 Payment. Replace the second paragraph of the section with the following:</p> <p>The Department will make payment for Drainage Blanket-Type II (ATDB) according to the Lot Pay Adjustment Schedule for Specialty Mixtures in Section 402.</p>
<p>SUBSECTION: PART: REVISION:</p>	<p>401.02.04 Special Requirements for Dryer Drum Plants. F) Production Quality Control. Replace the first sentence with the following:</p> <p>Stop mixing operations immediately if, at any time, a failure of the automatic electronic weighing system of the aggregate feed, asphalt binder feed, or water injection system control occurs.</p>

**Supplemental Specifications to The Standard Specifications
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<p>SUBSECTION: REVISION:</p>	<p>401.02.04 Special Requirements for Dryer Drum Plants. Add the following:</p> <p>Part G) Water Injection System. Provided each system has prior approval as specified in Subsection 402.01.01, the Department will allow the use of water injection systems for purposes of foaming the asphalt binder and lowering the mixture temperature for production of Warm Mix Asphalt (WMA). Ensure the equipment for water injection meets the following requirements:</p> <ol style="list-style-type: none"> 1) Injection equipment computer controls are automatically coupled to the plants controls (manual operation is not permitted); 2) Injection equipment has variable controls that introduce water ratios based on production rates of mixtures; 3) Injects water into the flow of asphalt binder prior to contacting the aggregate; 4) Provides alarms on the water injection system that operate when the flow of water is interrupted or deviates from the prescribed water rate. 																																																	
<p>SUBSECTION: REVISION:</p>	<p>401.03.01 Preparation of Mixtures. Replace the last sentence of the second paragraph with the following:</p> <p>Do not use asphalt binder while it is foaming in a storage tank.</p>																																																	
<p>SUBSECTION: REVISION:</p>	<p>401.03.01 Preparation of Mixtures. Replace the third paragraph and Mixing and Laying Temperature table with the following:</p> <p>Maintain the temperature of the component materials and asphalt mixture within the ranges listed in the following table:</p> <table border="1" data-bbox="391 1024 1429 1476"> <thead> <tr> <th colspan="4">MIXING AND LAYING TEMPERATURES (°F)</th> </tr> <tr> <th colspan="2">Material</th> <th>Minimum</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td colspan="2">Aggregates</td> <td>240</td> <td>330</td> </tr> <tr> <td colspan="2">Aggregates used with Recycled Asphalt Pavement (RAP)</td> <td>240</td> <td>—</td> </tr> <tr> <td rowspan="2">Asphalt Binders</td> <td>PG 64-22</td> <td>230</td> <td>330</td> </tr> <tr> <td>PG 76-22</td> <td>285</td> <td>350</td> </tr> <tr> <td rowspan="4">Asphalt Mixtures at Plant (Measured in Truck)</td> <td>PG 64-22 HMA</td> <td>250</td> <td>330</td> </tr> <tr> <td>PG 76-22 HMA</td> <td>310</td> <td>350</td> </tr> <tr> <td>PG 64-22 WMA</td> <td>230</td> <td>275</td> </tr> <tr> <td>PG 76-22 WMA</td> <td>250</td> <td>300</td> </tr> <tr> <td rowspan="4">Asphalt Mixtures at Project (Measured in Truck When Discharging)</td> <td>PG 64-22 HMA</td> <td>230</td> <td>330</td> </tr> <tr> <td>PG 76-22 HMA</td> <td>300</td> <td>350</td> </tr> <tr> <td>PG 64-22 WMA</td> <td>210</td> <td>275</td> </tr> <tr> <td>PG 76-22 WMA</td> <td>240</td> <td>300</td> </tr> </tbody> </table>	MIXING AND LAYING TEMPERATURES (°F)				Material		Minimum	Maximum	Aggregates		240	330	Aggregates used with Recycled Asphalt Pavement (RAP)		240	—	Asphalt Binders	PG 64-22	230	330	PG 76-22	285	350	Asphalt Mixtures at Plant (Measured in Truck)	PG 64-22 HMA	250	330	PG 76-22 HMA	310	350	PG 64-22 WMA	230	275	PG 76-22 WMA	250	300	Asphalt Mixtures at Project (Measured in Truck When Discharging)	PG 64-22 HMA	230	330	PG 76-22 HMA	300	350	PG 64-22 WMA	210	275	PG 76-22 WMA	240	300
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<p>SUBSECTION: REVISION:</p>	<p>402.01 Description. Replace the paragraph with the following:</p> <p>Provide the process control and acceptance testing of all classes and types of asphalt mixtures which may be furnished either as hot mix asphalt (HMA) or warm mix asphalt (WMA) produced with water injection systems.</p>																																																	

**Supplemental Specifications to The Standard Specifications
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<p>SUBSECTION REVISION:</p>	<p>402.01.01 Warm Mix Asphalt (WMA) Evaluation and Approval. Add the following subsection:</p> <p>402.01.01 Warm Mix Asphalt (WMA) Evaluation and Approval. The Department will evaluate trial production of WMA by use of a water injection system provided the system is installed according to the manufacturer's requirements and satisfies the requirements of Section 401. Evaluation will include production and placement of WMA to demonstrate adequate mixture quality including volumetric properties and density by Option A as specified in Subsection 402.03.02 D). Do not place WMA for evaluation on Department projects. Provided production and placement operations satisfy the applicable quality levels, the Department will approve WMA production on Department projects using the water injection system as installed on the specific asphalt mixing plant evaluated.</p>												
<p>SUBSECTION REVISION:</p>	<p>402.05.02 Asphalt Mixtures and Mixtures With RAP. Replace Subsection Title as below:</p> <p>402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.</p>												
<p>SUBSECTION REVISION:</p>	<p>402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. Replace the paragraph with the following:</p> <p>The Department will pay for the mixture at the Contract unit bid price and apply a Lot Pay Adjustment for each lot placed based on the degree of compliance with the specified tolerances. Using the appropriate Lot Pay Adjustment Schedule, the Department will assign a pay value for the applicable properties within each subplot and average the subplot pay values to determine the pay value for a given property for each lot. The Department will apply the Lot Pay Adjustment for each lot to a defined unit price of \$50.00 per ton. The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.</p>												
<p>SUBSECTION PART REVISION:</p>	<p>402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. C) Conventional and RAP Mixtures Placed on Shoulders. Replace title with the following:</p> <p>HMA, WMA, and RAP Mixtures Placed on Shoulders.</p>												
<p>SUBSECTION PART REVISION:</p>	<p>402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. D) Conventional and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge. Replace the title with the following:</p> <p>HMA, WMA, and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge.</p>												
<p>SUBSECTION PART TABLES REVISION:</p>	<p>402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. Lot Pay Adjustment Schedule, Compaction Option A, Base and Binder Mixtures VMA Replace the VMA table with the following:</p> <table border="1" data-bbox="755 1581 1117 1797"> <thead> <tr> <th colspan="2" style="text-align: center;">VMA</th> </tr> <tr> <th style="text-align: center;">Pay Value</th> <th style="text-align: center;">Deviation From Minimum</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.00</td> <td style="text-align: center;">• min. VMA</td> </tr> <tr> <td style="text-align: center;">0.95</td> <td style="text-align: center;">0.1-0.5 below min.</td> </tr> <tr> <td style="text-align: center;">0.90</td> <td style="text-align: center;">0.6-1.0 below min.</td> </tr> <tr> <td style="text-align: center;">(1)</td> <td style="text-align: center;">> 1.0 below min.</td> </tr> </tbody> </table>	VMA		Pay Value	Deviation From Minimum	1.00	• min. VMA	0.95	0.1-0.5 below min.	0.90	0.6-1.0 below min.	(1)	> 1.0 below min.
VMA													
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<p>SUBSECTION: PART: TABLES: REVISION:</p>	<p>402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. Lot Pay Adjustment Schedule, Compaction Option A, Surface Mixtures VMA Replace the VMA table with the following:</p> <table border="1" data-bbox="738 390 1102 642"> <thead> <tr> <th colspan="2">VMA</th> </tr> <tr> <th>Pay Value</th> <th>Deviation From Minimum</th> </tr> </thead> <tbody> <tr> <td>1.00</td> <td>• min. VMA</td> </tr> <tr> <td>0.95</td> <td>0.1-0.5 below min.</td> </tr> <tr> <td>0.90</td> <td>0.6-1.0 below min.</td> </tr> <tr> <td>(1)</td> <td>> 1.0 below min.</td> </tr> </tbody> </table>	VMA		Pay Value	Deviation From Minimum	1.00	• min. VMA	0.95	0.1-0.5 below min.	0.90	0.6-1.0 below min.	(1)	> 1.0 below min.													
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<p>SUBSECTION: PART: TABLE: REVISION:</p>	<p>402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. Lot Pay Adjustment Schedule, Compaction Option B Mixtures VMA Replace the VMA table with the following:</p> <table border="1" data-bbox="742 816 1105 1068"> <thead> <tr> <th colspan="2">VMA</th> </tr> <tr> <th>Pay Value</th> <th>Deviation From Minimum</th> </tr> </thead> <tbody> <tr> <td>1.00</td> <td>• min. VMA</td> </tr> <tr> <td>0.95</td> <td>0.1-0.5 below min.</td> </tr> <tr> <td>0.90</td> <td>0.6-1.0 below min.</td> </tr> <tr> <td>(2)</td> <td>> 1.0 below min.</td> </tr> </tbody> </table>	VMA		Pay Value	Deviation From Minimum	1.00	• min. VMA	0.95	0.1-0.5 below min.	0.90	0.6-1.0 below min.	(2)	> 1.0 below min.													
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<p>SUBSECTION: PART: NUMBER: REVISION:</p>	<p>403.03.03 Preparation of Mixture. C) Mix Design Criteria. 1) Preliminary Mix Design. Replace the last two sentences of the paragraph and table with the following:</p> <p>Complete the volumetric mix design at the appropriate number of gyrations as given in the table below for the number of 20-year ESAL's. The Department will define the relationship between ESAL classes, as given in the bid items for Superpave mixtures, and 20-year ESAL ranges as follows:</p> <table border="1" data-bbox="566 1360 1273 1516"> <thead> <tr> <th colspan="2"></th> <th colspan="3">Number of Gyration</th> </tr> <tr> <th>Class</th> <th>ESAL's (millions)</th> <th>$N_{initial}$</th> <th>N_{design}</th> <th>N_{max}</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>< 3.0</td> <td>6</td> <td>50</td> <td>75</td> </tr> <tr> <td>3</td> <td>3.0 to < 30.0</td> <td>7</td> <td>75</td> <td>115</td> </tr> <tr> <td>4</td> <td>≥ 30.0</td> <td>8</td> <td>100</td> <td>160</td> </tr> </tbody> </table>			Number of Gyration			Class	ESAL's (millions)	$N_{initial}$	N_{design}	N_{max}	2	< 3.0	6	50	75	3	3.0 to < 30.0	7	75	115	4	≥ 30.0	8	100	160
		Number of Gyration																								
Class	ESAL's (millions)	$N_{initial}$	N_{design}	N_{max}																						
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3	3.0 to < 30.0	7	75	115																						
4	≥ 30.0	8	100	160																						
<p>SUBSECTION: PART: REVISION:</p>	<p>403.03.09 Leveling and Wedging, and Scratch Course. A) Leveling and Wedging. Replace the first sentence of the first paragraph with the following:</p> <p>Conform to the gradation requirements (control points) of AASHTO M 323 for base, binder, or surface as the Engineer directs.</p>																									
<p>SUBSECTION: PART: REVISION:</p>	<p>403.03.09 Leveling and Wedging, and Scratch Course. B) Scratch Course. Replace the second sentence of the first paragraph with the following:</p> <p>Conform to the gradation requirements (control points) of AASHTO M 323 for base, binder, or surface as the Engineer directs.</p>																									

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SUBSECTION: REVISION:	407.01 DESCRIPTION. Replace the first sentence of the paragraph with the following: Construct a pavement wedge composed of a hot-mixed or warm-mixed asphalt mixture.
SUBSECTION: REVISION:	409.01 DESCRIPTION. Replace the first sentence of the paragraph with the following: Use reclaimed asphalt pavement (RAP) from Department projects or other approved sources in hot mix asphalt (HMA) or warm mix asphalt (WMA) provided mixture requirements are satisfied.
SUBSECTION: REVISION:	410.01 DESCRIPTION. Delete the second sentence of the paragraph.
SUBSECTION: REVISION:	410.03.01 Corrective Work. Replace the last sentence of the paragraph with the following: Provide a final surface comparable to the adjacent pavement that does not require corrective work in respect to texture, appearance, and skid resistance.
SUBSECTION: PART: NUMBER: REVISION:	410.03.02 Ride Quality. B) Requirements. 1) Category A. Replace the last sentence of the first paragraph with the following: At the Department's discretion, a pay deduction of \$1200 per 0.1-lane-mile section may be applied in lieu of corrective work.
SUBSECTION: PART: NUMBER: REVISION:	410.03.02 Ride Quality. B) Requirements. 2) Category B. Replace the second and third sentence of the first paragraph with the following: When the IRI is greater than 90 for a 0.1-mile section, perform corrective work, or remove and replace the pavement to achieve the specified IRI. At the Department's discretion, a pay deduction of \$750 per 0.1-lane-mile section may be applied in lieu of corrective work.
SUBSECTION: REVISION:	410.05 PAYMENT. Add the following sentence to the end of the first paragraph: The sum of the pay value adjustments for ride quality shall not exceed \$0 for the project as a whole.
SUBSECTION: REVISION:	413.05.02 CL3 SMA BASE 1.00D PG76-22. Insert the following sentence between the first and second sentence of the first paragraph: The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.

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<p>SUBSECTION: TABLE: REVISION:</p>	<p>413.05.02 CL3 SMA BASE 1.00D PG 76-22. JOINT DENSITY TABLE Replace the joint density table with the following:</p> <table border="1" data-bbox="696 394 1141 659"> <thead> <tr> <th colspan="2">LANE DENSITY</th> </tr> <tr> <th>Pay Value</th> <th>Test Result (%)</th> </tr> </thead> <tbody> <tr> <td>1.05</td> <td>95.0-96.5</td> </tr> <tr> <td>1.00</td> <td>93.0-94.9</td> </tr> <tr> <td>0.95</td> <td>92.0-92.9 or 96.6-97.0</td> </tr> <tr> <td>0.90</td> <td>91.0-91.9 or 97.1-97.5</td> </tr> <tr> <td>⁽¹⁾</td> <td>< 91.0 or > 97.5</td> </tr> </tbody> </table>	LANE DENSITY		Pay Value	Test Result (%)	1.05	95.0-96.5	1.00	93.0-94.9	0.95	92.0-92.9 or 96.6-97.0	0.90	91.0-91.9 or 97.1-97.5	⁽¹⁾	< 91.0 or > 97.5										
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<p>SUBSECTION: REVISION:</p>	<p>413.05.03 CL3 SMA SURF 0.50A PG76-22 and CL3 SMA SURF 0.38A PG76-22. Insert the following sentence between the first and second sentence of the first paragraph:</p> <p>The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.</p>																								
<p>SUBSECTION: TABLE: REVISION:</p>	<p>413.05.03 CL3 SMA SURF 0.50A PG76-22 and CL3 SMA SURF 0.38A PG76-22. JOINT DENSITY TABLE Replace the joint density table with the following:</p> <table border="1" data-bbox="578 1035 1260 1356"> <thead> <tr> <th colspan="3">DENSITY</th> </tr> <tr> <th>Pay Value</th> <th>Lane Density Test Result (%)</th> <th>Joint Density Test Result (%)</th> </tr> </thead> <tbody> <tr> <td>1.05</td> <td>95.0-96.5</td> <td>92.0-96.0</td> </tr> <tr> <td>1.00</td> <td>93.0-94.9</td> <td>90.0-91.9</td> </tr> <tr> <td>0.95</td> <td>92.0-92.9 or 96.6-97.0</td> <td>89.0-89.9 or 96.1-96.5</td> </tr> <tr> <td>0.90</td> <td>91.0-91.9 or 97.1-97.5</td> <td>88.0-88.9 or 96.6-97.0</td> </tr> <tr> <td>0.75</td> <td>----</td> <td>< 88.0 or > 97.0</td> </tr> <tr> <td>⁽¹⁾</td> <td>< 91.0 or > 97.5</td> <td>----</td> </tr> </tbody> </table>	DENSITY			Pay Value	Lane Density Test Result (%)	Joint Density Test Result (%)	1.05	95.0-96.5	92.0-96.0	1.00	93.0-94.9	90.0-91.9	0.95	92.0-92.9 or 96.6-97.0	89.0-89.9 or 96.1-96.5	0.90	91.0-91.9 or 97.1-97.5	88.0-88.9 or 96.6-97.0	0.75	----	< 88.0 or > 97.0	⁽¹⁾	< 91.0 or > 97.5	----
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<p>SUBSECTION: REVISION:</p>	<p>501.05.02 Ride Quality. Add the following sentence to the end of the first paragraph:</p> <p>The sum of the pay value adjustments for the ride quality shall not exceed \$0 for the project as a whole.</p>																								
<p>SUBSECTION: REVISION:</p>	<p>505.03.04 Detectable Warnings. Replace the first sentence with the following:</p> <p>Install detectable warning pavers at all sidewalk ramps and on all commercial entrances according to the Standard Drawings.</p>																								

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<p>SUBSECTION: REVISION:</p>	<p>505.04.04 Detectable Warnings. Replace the paragraph with the following:</p> <p>The Department will measure the quantity in square feet. All retrofit applications for maintenance projects will require the removal of existing sidewalks to meet the requirements of the standard drawings applicable to the project. The cost associated with the removal of the existing sidewalk will be incidental to the detectable warnings bid item or incidental to the bid item for the construction of the concrete sidewalk unless otherwise noted.</p>						
<p>SUBSECTION: REVISION:</p>	<p>505.05 PAYMENT. Add the following to the bid item table:</p> <table border="1" data-bbox="383 590 1003 653"> <thead> <tr> <th><u>Code</u></th> <th><u>Pay Item</u></th> <th><u>Pay Unit</u></th> </tr> </thead> <tbody> <tr> <td>23158ES505</td> <td>Detectable Warnings</td> <td>Square Foot</td> </tr> </tbody> </table>	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>	23158ES505	Detectable Warnings	Square Foot
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>					
23158ES505	Detectable Warnings	Square Foot					
<p>SUBSECTION: REVISION:</p>	<p>509.01 DESCRIPTION. Replace the second paragraph with the following:</p> <p>The Department may allow the use of similar units that conform to the National Cooperative Highway Research Program (NCHRP) 350 Test Level 3 (TL-3) requirements and the typical features depicted by the Standard Drawings. Obtain the Engineers approval prior to use. Ensure the barrier wall shape, length, material, drain slot dimensions and locations typical features are met and the reported maximum deflection is 3 feet or less from the NCHRP 350 TL-3 for Test 3 – 11 (pickup truck impacting at 60 mph at a 25-degree angle.)</p>						
<p>SUBSECTION: REVISION:</p>	<p>601.03.02 Concrete Producer Responsibilities. Add the following to the first paragraph:</p> <p>If a concrete plant becomes unqualified during a project and there are no other qualified plants in the region, the Department will provide qualified personnel to witness and ensure the producer follows the required specifications. The Department will assess the Contractor a \$100 per hour charge for this service.</p>						
<p>SUBSECTION: REVISION:</p>	<p>606.02.11 Coarse Aggregate. Replace with the following:</p> <p>Conform to Section 805, size No. 8 or 9-M.</p>						
<p>SUBSECTION: REVISION:</p>	<p>609.04.06 Joint Sealing. Replace Subsection 601.04 with the following:</p> <p>Subsection 606.04.08.</p>						
<p>SUBSECTION: REVISION:</p>	<p>609.05 Payment. Replace the Pay Unit for Joint Sealing with the following:</p> <p>See Subsection 606.05.</p>						
<p>SUBSECTION: REVISION:</p>	<p>701.03.06 Initial Backfill. Replace the first sentence of the last paragraph with the following:</p> <p>When the Contract specifies, perform quality control testing to verify compaction according to KM 64-512.</p>						

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<p>SUBSECTION: REVISION:</p>	<p>701.03.08 Testing of Pipe. Replace and rename the subsection with the following:</p> <p>701.03.08 Inspection of Pipe. The engineer will visually inspect all pipe. The Department will require camera/video inspection on a minimum of 50 percent of the linear feet of all installed pipe structures. Conduct camera/video inspection according to KM 64-114. The pipe to be installed under pavement will be selected first. If the total linear feet of pipe under pavement is less than 50 percent of the linear feet of all pipe installed, the Engineer will randomly select installations from the remaining pipe structures on the project to provide for the minimum inspection requirement. The pipe will be selected in complete runs (junction-junction or headwall-headwall) until the total linear feet of pipe to be inspected is at least 50 percent of the total linear feet of all installed pipe on the project.</p> <p>Unless the Engineer directs otherwise, schedule the inspections no sooner than 30 days after completing the installation and completion of earthwork to within 1 foot of the finished subgrade. When final surfacing conflicts with the 30-day minimum, conduct the inspections prior to placement of the final surface. The contractor must ensure that all pipe are free and clear of any debris so that a complete inspection is possible.</p> <p>Notify the Engineer immediately if distresses or locations of improper installation are discovered. When camera testing shows distresses or improper installation in the installed pipe, the Engineer may require additional sections to be tested. Provide the video and report to the Engineer when testing is complete in accordance with KM 64-114.</p> <p>Pipes that exhibit distress or signs of improper installation may necessitate repair or removal as the Engineer directs. These signs include, but are not limited to: deflection, cracking, joint separation, sagging or other interior damage. If corrugated metal or thermoplastic pipes exceed the deflection and installation thresholds indicated in the table below, provide the Department with an evaluation of each location conducted by a Professional Engineer addressing the severity of the deflection, structural integrity, environmental conditions, design service life, and an evaluation of the factor of safety using Section 12, "Buried Structures and Tunnel Liners," of the AASHTO LRFD Bridge Design Specifications. Based on the evaluation, the Department may allow the pipe to remain in place at a reduced unit price as shown in the table below. Provide 5 business days for the Department to review the evaluation. When the pipe shows deflection of 10 percent or greater, remove and replace the pipe. When the camera/video or laser inspection results are called into question, the Department may require direct measurements or mandrel testing.</p> <p>The Cabinet may elect to conduct Quality Assurance verifications of any pipe inspections.</p>						
<p>SUBSECTION: REVISION:</p>	<p>701.04.07 Testing. Replace and rename the subsection with the following:</p> <p>701.04.07 Pipeline Video Inspection. The Department will measure the quantity in linear feet along the pipe invert of the structure inspected. When inspection above the specified 50 percent is performed due to a disagreement or suspicion of additional distresses and the Department is found in error, the Department will measure the quantity as Extra Work according to Subsection 104.03. However, if additional distresses or non-conformance is found, the Department will not measure the additional inspection for payment.</p>						
<p>SUBSECTION: REVISION:</p>	<p>701.05 PAYMENT. Add the following pay item to the list of pay items:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"><u>Code</u></td> <td style="width: 40%;"><u>Pay Item</u></td> <td style="width: 30%;"><u>Pay Unit</u></td> </tr> <tr> <td>23131ER701</td> <td>Pipeline Video Inspection</td> <td>Linear Foot</td> </tr> </table>	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>	23131ER701	Pipeline Video Inspection	Linear Foot
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23131ER701	Pipeline Video Inspection	Linear Foot					

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SUBSECTION: TABLE: REVISION:	<p>701.05 PAYMENT PIPE DEFLECTION DETERMINED BY CAMERA TESTING Replace this table with the following table and note:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2" style="text-align: center;">PIPE DEFLECTION</th> </tr> <tr> <th style="text-align: center;">Amount of Deflection (%)</th> <th style="text-align: center;">Payment</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0.0 to 5.0</td> <td style="text-align: center;">100% of the Unit Bid Price</td> </tr> <tr> <td style="text-align: center;">5.1 to 9.9</td> <td style="text-align: center;">50% of the Unit Bid Price ⁽¹⁾</td> </tr> <tr> <td style="text-align: center;">10 or greater</td> <td style="text-align: center;">Remove and Replace</td> </tr> </tbody> </table> <p>⁽¹⁾ Provide Structural Analysis as indicated above. Based on the structural analysis, pipe may be allowed to remain in place at the reduced unit price.</p>	PIPE DEFLECTION		Amount of Deflection (%)	Payment	0.0 to 5.0	100% of the Unit Bid Price	5.1 to 9.9	50% of the Unit Bid Price ⁽¹⁾	10 or greater	Remove and Replace		
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SUBSECTION: TABLE: REVISION:	<p>701.05 PAYMENT PIPE DEFLECTION DETERMINED BY MANDREL TESTING Delete this table.</p>												
SUBSECTION: REVISION:	<p>713.02.01 Paint. Replace with the following: Conform to Section 842 and Section 846.</p>												
SUBSECTION: REVISION:	<p>713.03 CONSTRUCTION. Replace the first sentence of the second paragraph with the following: On interstates and parkways, and other routes approved by the State Highway Engineer, install pavement striping that is 6 inches in width.</p>												
SUBSECTION: REVISION:	<p>713.03.03 Paint Application. Replace the second paragraph with the following table:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Material</th> <th style="text-align: center;">Paint Application Rate</th> <th style="text-align: center;">Glass Beads Application Rate</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">4 inch waterborne paint</td> <td style="text-align: center;">Min. of 16.5 gallons/mile</td> <td style="text-align: center;">Min. of 6 pounds/gallon</td> </tr> <tr> <td style="text-align: center;">6 inch waterborne paint</td> <td style="text-align: center;">Min. of 24.8 gallons/mile</td> <td style="text-align: center;">Min. of 6 pounds/gallon</td> </tr> <tr> <td style="text-align: center;">6 inch durable waterborne paint</td> <td style="text-align: center;">Min. of 36 gallons/mile</td> <td style="text-align: center;">Min. of 6 pounds/gallon</td> </tr> </tbody> </table>	Material	Paint Application Rate	Glass Beads Application Rate	4 inch waterborne paint	Min. of 16.5 gallons/mile	Min. of 6 pounds/gallon	6 inch waterborne paint	Min. of 24.8 gallons/mile	Min. of 6 pounds/gallon	6 inch durable waterborne paint	Min. of 36 gallons/mile	Min. of 6 pounds/gallon
Material	Paint Application Rate	Glass Beads Application Rate											
4 inch waterborne paint	Min. of 16.5 gallons/mile	Min. of 6 pounds/gallon											
6 inch waterborne paint	Min. of 24.8 gallons/mile	Min. of 6 pounds/gallon											
6 inch durable waterborne paint	Min. of 36 gallons/mile	Min. of 6 pounds/gallon											
SUBSECTION: REVISION:	<p>713.03.04 Marking Removal. Replace the last sentence of the paragraph with the following: Vacuum all marking material and removal debris concurrently with the marking removal operation.</p>												
SUBSECTION: REVISION:	<p>713.05 PAYMENT. Insert the following codes and pay items below the Pavement Striping – Permanent Paint:</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Pay Item</u></th> <th style="text-align: left;"><u>Pay Unit</u></th> </tr> </thead> <tbody> <tr> <td>23159EN</td> <td>Durable Waterborne Marking – 6 IN W</td> <td>Linear Foot</td> </tr> <tr> <td>23160EN</td> <td>Durable Waterborne Marking – 6 IN Y</td> <td>Linear Foot</td> </tr> </tbody> </table>	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>	23159EN	Durable Waterborne Marking – 6 IN W	Linear Foot	23160EN	Durable Waterborne Marking – 6 IN Y	Linear Foot			
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23160EN	Durable Waterborne Marking – 6 IN Y	Linear Foot											
SUBSECTION: REVISION:	<p>714.03 CONSTRUCTION. Insert the following paragraph at the end of the third paragraph: Use Type I Tape for markings on bridge decks, JPC pavement and JPC intersections. Thermoplastic should only be used for markings on asphalt pavement.</p>												

**Supplemental Specifications to The Standard Specifications
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SUBSECTION: REVISION:	714.03.07 Marking Removal. Replace the third sentence of the paragraph with the following: Vacuum all marking material and removal debris concurrently with the marking removal operation.
SUBSECTION: REVISION:	716.01 DESCRIPTION. Insert the following after the first sentence: Energize lighting as soon as it is fully functional and ready for inspection. Ensure that lighting remains operational until the Division of Traffic Operations has provided written acceptance of the electrical work.
SUBSECTION: REVISION:	716.02.01 Roadway Lighting Materials. Replace the third sentence of the paragraph with the following: Submit for material approval an electronic file of descriptive literature, drawings, and any requested design data.
SECTION: REVISION:	717 – THERMOPLASTIC INTERSECTION MARKINGS. Replace the section name with the following: INTERSECTION MARKINGS.
SUBSECTION: REVISION:	717.01 DESCRIPTION: Replace the paragraph with the following: Furnish and install thermoplastic or Type I tape intersection markings (Stop Bars, Crosswalks, Turn Arrows, etc.) Thermoplastic markings may be installed by either a machine applied, screed extrusion process or by applying preformed thermoplastic intersection marking material.
SUBSECTION: REVISION:	717.02 MATERIALS AND EQUIPMENT. Insert the following subsection: 717.02.06 Type I Tape. Conform to Section 836.
SUBSECTION: REVISION:	717.03.03 Application. Insert the following part to the subsection: B) Type I Tape Intersection Markings. Apply according to the manufacturer's recommendations. Cut all tape at pavement joints when applied to concrete surfaces.
SUBSECTION: PART: REVISION:	717.03.05 Proving Period. A) Requirements. Insert the following to this section: 2) Type I Tape. During the proving period, ensure that the pavement marking material shows no signs of failure due to blistering, excessive cracking, bleeding, staining, discoloration, oil content of the pavement materials, drippings, chipping, spalling, poor adhesion to the pavement, loss of retroreflectivity, vehicular damage, and normal wear. Type I Tape is manufactured off site and warranted by the manufacturer to meet certain retroreflective requirements. As long as the material is adequately bonded to the surface and shows no signs of failure due to the other items listed in Subsection 714.03.06 A) 1), retroreflectivity readings will not be required. In the absence of readings, the Department will accept tape based on a nighttime visual observation.

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SUBSECTION: REVISION:	717.03.06 Marking Removal. Replace the third sentence of the paragraph with the following: Vacuum all marking material and removal debris concurrently with the marking removal operation.																																							
SUBSECTION: REVISION:	717.05 PAYMENT. Insert the following bid item codes: <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Pay Unit</u></th> <th style="text-align: left;"><u>Pay Item</u></th> </tr> </thead> <tbody> <tr> <td>06563</td> <td>Pave Marking – R/R X Bucks 16 IN</td> <td>Linear Foot</td> </tr> <tr> <td>20782NS714</td> <td>Pave Marking Thermo – Bike</td> <td>Each</td> </tr> <tr> <td>23251ES717, 23264ES717</td> <td>Pave Mark TY I Tape X-Walk, Size</td> <td>Linear Foot</td> </tr> <tr> <td>23252ES717, 23265ES717</td> <td>Pave Mark TY I Tape Stop Bar, Size</td> <td>Linear Foot</td> </tr> <tr> <td>23253ES717</td> <td>Pave Mark TY I Tape Cross Hatch</td> <td>Square Foot</td> </tr> <tr> <td>23254ES717</td> <td>Pave Mark TY I Tape Dotted Lane Extension</td> <td>Linear Foot</td> </tr> <tr> <td>23255ES717</td> <td>Pave Mark TY I Tape Arrow, Type</td> <td>Each</td> </tr> <tr> <td>23268ES717-23270ES717</td> <td></td> <td></td> </tr> <tr> <td>23256ES717</td> <td>Pave Mark TY I Tape- ONLY</td> <td>Each</td> </tr> <tr> <td>23257ES717</td> <td>Pave Mark TY I Tape- SCHOOL</td> <td>Each</td> </tr> <tr> <td>23266ES717</td> <td>Pave Mark TY 1 Tape R/R X Bucks-16 IN</td> <td>Linear Foot</td> </tr> <tr> <td>23267ES717</td> <td>Pave Mark TY 1 Tape-Bike</td> <td>Each</td> </tr> </tbody> </table>	<u>Code</u>	<u>Pay Unit</u>	<u>Pay Item</u>	06563	Pave Marking – R/R X Bucks 16 IN	Linear Foot	20782NS714	Pave Marking Thermo – Bike	Each	23251ES717, 23264ES717	Pave Mark TY I Tape X-Walk, Size	Linear Foot	23252ES717, 23265ES717	Pave Mark TY I Tape Stop Bar, Size	Linear Foot	23253ES717	Pave Mark TY I Tape Cross Hatch	Square Foot	23254ES717	Pave Mark TY I Tape Dotted Lane Extension	Linear Foot	23255ES717	Pave Mark TY I Tape Arrow, Type	Each	23268ES717-23270ES717			23256ES717	Pave Mark TY I Tape- ONLY	Each	23257ES717	Pave Mark TY I Tape- SCHOOL	Each	23266ES717	Pave Mark TY 1 Tape R/R X Bucks-16 IN	Linear Foot	23267ES717	Pave Mark TY 1 Tape-Bike	Each
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SUBSECTION: REVISION:	805.01 GENERAL. Replace the second paragraph with the following: The Department’s List of Approved Materials includes the Aggregate Source List, the list of Class A and Class B Polish-Resistant Aggregate Sources, and the Concrete Restriction List.																																							
SUBSECTION: REVISION:	805.04 CONCRETE. Replace the “AASHTO T 160” reference in first sentence of the third paragraph with “KM 64-629”																																							
SUBSECTION: TABLE: PART: REVISION:	805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE. AGGREGATE SIZE USE Cement Concrete Structures and Incidental Construction Replace “9-M for Waterproofing Overlays” with “8 or 9-M for Waterproofing Overlays”																																							

Supplemental Specifications to The Standard Specifications for Road and Bridge Construction, 2008 Edition (Effective with the January 22, 2010 Letting)

SUBSECTION: 805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE.
REVISION: Replace the "SIZES OF COARSE AGGREGATES" table in with the following:

SIZES OF COARSE AGGREGATES																	
AMOUNTS FINER THAN EACH LABORATORY SIEVE (SQUARE OPENINGS) PERCENTAGE BY WEIGHT																	
Aggregate Size	Sieve	4 inch	3 1/2 inch	3 inch	2 1/2 inch	2 inch	1 1/2 inch	1 inch	3/4 inch	1/2 inch	3/8 inch	No. 4	No. 8	No. 16	No. 30	No. 100	No. 200
1	3 1/2 inch	100	90-100		25-60		0-15		0-5								
2	2 1/2 inch			100	90-100	35-70	0-15		0-5								
23	2 inch			100		40-90		0-15		0-5							
3	2 inch				100	90-100	35-70	0-15		0-5							
357	2 inch				100	95-100		35-70		10-30		0-5					
4	1 1/2 inch					100	90-100	20-55	0-15		0-5						
467	1 1/2 inch					100	95-100		35-70		10-30	0-5					
5	1 inch					100	90-100	20-55	0-10		0-5						
57	1 inch					100	95-100		25-60		15-40	0-10	0-5				
610	1 inch					100	85-100		40-75								
67	3/4 inch					100	90-100	20-55	0-10		0-5						
68	3/4 inch					100	90-100	30-65	5-25		0-10	0-5					
710	3/4 inch					100	80-100	30-75	0-30								
78	1/2 inch					100	90-100	40-75	5-25	0-10	0-5						
8	3/8 inch					100	85-100	10-30	0-10	0-5							
9-M	3/8 inch					100	75-100	0-25	0-5								
10 ⁽²⁾	No. 4					100		85-100								10-30	
11 ⁽²⁾	No. 4					100		40-90								0-5	
DENSE GRADED AGGREGATE ⁽²⁾	3/4 inch					100		70-100								10-40	4-13
CRUSHED STONE BASE ⁽¹⁾	1 1/2 inch				100		90-100	60-95								5-20	

- ⁽¹⁾ Gradation performed by wet sieve KM 64-620 or AASHTO T 11/T 27.
 - ⁽²⁾ Sizes shown for convenience and are not to be considered as coarse aggregates.
 - ⁽³⁾ Nominal Maximum Size is the largest sieve on the gradation table for an aggregate size on which any material may be retained.
- Note: The Department will allow blending of same source/same type aggregate when precise procedures are used such as cold feed, belt, or equivalent and combining of sizes or types of aggregate using the weigh hopper at concrete plants or controlled feed belts at the pugmill to obtain designated sizes.

**Supplemental Specifications to The Standard Specifications
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<p>SUBSECTION: REVISION:</p>	<p>805.16 SAMPLING AND TESTING. Replace the "AASHTO T 160" method with the "KM 64-629" method for the Concrete Beam Expansion Test. Replace the "ASTM D 3042" method with the "KM 64-625" method for Insoluble Residue.</p>						
<p>SUBSECTION: REVISION:</p>	<p>810.04.01 Coating Requirements. Replace the "Subsection 806.07" references with "Subsection 806.06"</p>						
<p>SUBSECTION: PART: REVISION:</p>	<p>810.06.01 Polyvinyl Chloride (PVC) Pipe. B) Culvert and Entrance Pipe. Replace the title with the following: B) Culvert Pipe, Storm Sewer, and Entrance Pipe.</p>						
<p>SUBSECTION: REVISION:</p>	<p>837.03 APPROVAL. Replace the last sentence with the following: The Department will sample and evaluate for approval each lot of thermoplastic material delivered for use per contract prior to installation of the thermoplastic material. Do not allow the installation of thermoplastic material until it has been approved by the Division of Materials. Allow the Department a minimum of 10 working days to evaluate and approve thermoplastic material.</p>						
<p>SUBSECTION: REVISION:</p>	<p>837.03.01 Composition. COMPOSITION Table: Replace <table border="1" data-bbox="391 995 1292 1026"> <tr> <td>Lead Chromate</td> <td>0.0 max.</td> <td>4.0 min.</td> </tr> </table> with <table border="1" data-bbox="391 1052 1292 1083"> <tr> <td>Heavy Metals Content</td> <td colspan="2">Comply with 40 CFR 261</td> </tr> </table> </p>	Lead Chromate	0.0 max.	4.0 min.	Heavy Metals Content	Comply with 40 CFR 261	
Lead Chromate	0.0 max.	4.0 min.					
Heavy Metals Content	Comply with 40 CFR 261						
<p>SECTION:</p>	<p>DIVISION 800 MATERIAL DETAILS</p>						
<p>REVISION:</p>	<p>Add the following section in Division 800 <p align="center">SECTION 846 – DURABLE WATERBORNE PAINT</p> <p>846.01 DESCRIPTION. This section covers quick-drying durable waterborne pavement striping paint for permanent applications. The paint shall be ready-mixed, one-component, 100% acrylic waterborne striping paint suitable for application on such traffic-bearing surfaces as Portland cement concrete, bituminous cement concrete, asphalt, tar, and previously painted areas of these surfaces.</p> <p>846.02 Approval. Select materials that conform to the composition requirements below. Provide independent analysis data and certification for each formulation stating the total concentration of each heavy metal present, the test method used for each determination, and compliance to 40 CFR 261 for leachable heavy metals content. Submit initial samples for approval before beginning striping operations. The initial sample may be sent from the manufacture of the paint. The Department will randomly sample and evaluate the paint each week that the striping operations are in progress.</p> <p>The non-volatile portion of the vehicle shall be composed of a 100% acrylic polymer as determined by infrared spectral analysis. The acrylic resin used shall be a 100% cross-linking acrylic as evidenced by infrared peaks at wavelengths 1568, 1624, and 1672 cm-1 with intensities equal to those produced by an acrylic resin known to be 100% cross-linking.</p> </p>						

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PAINT COMPOSITION		
Property and Test Method	Yellow	White
Daytime Color (CIELAB) Spectrophotometer using illuminant D65 at 45° illumination and 0° viewing with a 2° observer	L* 81.76 a* 19.79 b* 89.89 Maximum allowable variation 2.0• E*	L* 93.51 a* -1.01 b* 0.70 Maximum allowable variation 2.0• E*
Nighttime Color (CIELAB) Spectrophotometer using illuminant A at 45° illumination and 0° viewing with a 2° observer	L* 86.90 a* 24.80 b* 95.45 Maximum allowable variation 2.0• E*	L* 93.45 a* -0.79 b* 0.43 Maximum allowable variation 2.0• E*
Heavy Metals Content	Comply with 40 CFR 261	Comply with 40 CFR 261
Titanium Dioxide ASTM D 4764	NA	10% by weight of pigment min.
VOC ASTM D 2369 and D 4017	1.25 lb/gal max.	1.25 lb/gal max.
Contrast Ratio (at 15 mils wft)	0.97	0.99

846.02.01 Manufacturers Certification. Provide a certification of analysis for each lot of traffic paint produced stating conformance to the requirements of this section. Report the formulation identification, traffic paint trade name, color, date of manufacturer, total quantity of lot produced, actual quantity of traffic paint represented, sampling method utilized to obtain the samples, and data for each sample tested to represent each lot produced.

846.03 ACCEPTANCE PROCEDURES FOR NON-SPECIFICATION DURABLE WATERBORNE PAVEMENT STRIPING PAINT. When non-specification paint is inadvertently incorporated into the work the Department will accept the material with a reduction in pay. The percentage deduction is cumulative based on its compositional properties, but will not exceed 60 percent. The Department will calculate the payment reduction on the unit bid price for the routes where the non-specification paint was used.

DURABLE WATERBORNE PAVEMENT STRIPING PAINT REDUCTION SCHEDULE						
Non-conforming Property	Resin	Color	Contrast	TiO₂	VOC	Heavy Metals Content
Reduction Rate	60%	10%	10%	10%	60%	60%

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

**TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS**

**LABOR AND WAGE REQUIREMENTS
APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS**

- I. Application
- II. Nondiscrimination of Employees (KRS 344)
- III. Payment of Predetermined Minimum Wages
- IV. Statements and Payrolls

I. APPLICATION

1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.

2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.

3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

II. NONDISCRIMINATION OF EMPLOYEES

**AN ACT OF THE KENTUCKY
GENERAL ASSEMBLY TO PREVENT
DISCRIMINATION IN EMPLOYMENT
KRS CHAPTER 344
EFFECTIVE JUNE 16, 1972**

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual

because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

III. PAYMENT OF PREDETERMINED MINIMUM WAGES

1. These special provisions are supplemented elsewhere in the contract by special provisions which set forth certain predetermined minimum wage rates. The contractor shall pay not less than those rates.

2. The minimum wage determination schedule shall be posted by the contractor, in a manner prescribed by the Department of Highways, at the site of the work in prominent places where it can be easily seen by the workers.

IV. STATEMENTS AND PAYROLLS

1. All contractors and subcontractors affected by the terms of KRS 337.505 to 337.550 shall keep full and accurate payroll records covering all disbursements of wages to their employees to whom they are required to pay not less than the prevailing rate of wages. Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of one (1) year from the date of completion of this contract.

2. The payroll records shall contain the name, address and social security number of each employee, his correct classification, rate of pay, daily and weekly number of hours worked, itemized deductions made and actual wages paid.

3. The contractor shall make his daily records available at the project site for inspection by the State Department of Highways contracting office or his authorized representative.

Periodic investigations shall be conducted as required to assure compliance with the labor provisions of the contract. Interrogation of employees and officials of the contractor shall be permitted during working hours.

Aggrieved workers, Highway Managers, Assistant District Engineers, Resident Engineers and Project Engineers shall report all complaints and violations to the Division of Contract Procurement.

The contractor shall be notified in writing of apparent violations. The contractor may correct the reported violations and notify the Department of Highways of the action taken or may request an informal hearing. The request for hearing shall be in writing within ten (10) days after receipt of the notice of the reported violation. The contractor may submit

records and information which will aid in determining the true facts relating to the reported violations.

Any person or organization aggrieved by the action taken or the findings established as a result of an informal hearing by the Division of Contract Procurement may request a formal hearing.

4. The wages of labor shall be paid in legal tender of the United States, except that this condition will be considered satisfied if payment is made by a negotiable check, on a solvent bank, which may be cashed readily by the employee in the local community for the full amount, without discount or collection charges of any kind. Where checks are used for payments, the contractor shall make all necessary arrangements for them to be cashed and shall give information regarding such arrangements.

5. No fee of any kind shall be asked or accepted by the contractor or any of his agents from any person as a condition of employment on the project.

6. No laborers shall be charged for any tools used in performing their respective duties except for reasonably avoidable loss or damage thereto.

7. Every employee on the work covered by this contract shall be permitted to lodge, board, and trade where and with whom he elects and neither the contractor nor his agents, nor his employees shall directly or indirectly require as a condition of employment that an employee shall lodge, board or trade at a particular place or with a particular person.

8. Every employee on the project covered by this contract shall be an employee of either the prime contractor or an approved subcontractor.

9. No charge shall be made for any transportation furnished by the contractor or his agents to any person employed on the work.

10. No individual shall be employed as a laborer or mechanic on this contract except on a wage basis, but this shall not be construed to prohibit the rental of teams, trucks or other equipment from individuals.

No Covered employee may be employed on the work except in accordance with the classification set forth in the schedule mentioned above; provided, however, that in the event additional classifications are required, application shall be made by the contractor to the Department of Highways and (1) the Department shall request appropriate classifications and rates from the proper agency, or (2) if there is urgent need for additional classification to avoid undue delay in the work, the contractor may employ such workmen at rates deemed comparable to rates established for similar classifications provided he has made written application through the Department of Highways, addressed to the proper agency, for the supplemental rates. The contractor shall retroactively adjust, upon receipt of the supplemental rates schedule, the wages of any employee paid less than the established rate and may adjust the wages of any employee overpaid.

11. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any work-week in which he is employed on such work, to work in excess of eight hours in any calendar day or in excess of forty hours in such work-week unless such laborer or mechanic receives compensation at a rate not less than one and one half times his basic rate of pay for all hours worked in excess of eight hours in any calendar day or in excess of forty hours in such work-week. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. This agreement shall be in writing and shall be executed prior to the employee working in excess of eight (8) hours, but not more than ten (10) hours, in any one (1) calendar day.

12. Payments to the contractor may be suspended or withheld due to failure of the contractor to pay any laborer or

mechanic employed or working on the site of the work, all or part of the wages required under the terms of the contract. The Department may suspend or withhold payments only after the contractor has been given written notice of the alleged violation and the contractor has failed to comply with the wage determination of the Department of Highways.

13. Contractors and subcontractors shall comply with the sections of Kentucky Revised Statutes, Chapter 337 relating to contracts for Public Works.

Revised 2-16-95

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.

KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Kentucky Equal Employment Opportunity Act of 1978

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under ***Vendor Information, Standard Attachments and General Terms*** at the following address:
<https://www.eProcurement.ky.gov>.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **finance.contractcompliance@ky.gov** or by phone at 502-564-2874.

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED
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CRAFTS:

Ballard, Butler, Caldwell, Carlisle, Crittenden, Daviess, Edmonson, Fulton, Graves, Hancock, Henderson, Hickman, Hopkins, Livingston, Lyon, Marshall, McCracken, McLean, Muhlenberg, Ohio, Union & Webster Counties:

Bricklayers.....26.47..... 12.28

Allen, Calloway, Christian, Logan, Simpson, Todd, Trigg & Warren Counties:

Bricklayers.....25.10..... 1.60

All Counties:

Carpenters24.84..... 10.23

Divers.....37.64..... 10.23

Piledrivermen.....25.09..... 10.23

Butler, Edmonson, Logan, Todd & Warren Counties:

Electricians28.30..... 12.55

Allen & Simpson Counties:

Electricians21.60..... 10.33

Ballard, Caldwell, Calloway, Carlisle, Christian, Crittenden, Fulton (Except a 5 mile radius of City Hall in Fulton), Graves, Hickman, Livingston, Lyon, Marshall, McCracken & Trigg Counties:

Electricians:

Electricians28.11..... 25.5% + 5.25

Cable Splicers receive \$.25 per hour additional.

Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Union & Webster Counties:

Electricians:

Electricians:27.73..... 27.85% + 5.34

Heilarc Welding & Cable Splicing27.98..... 27.85% + 5.34

Fulton County (Up to a 5 mile radius of City Hall in Fulton):

Electricians24.50..... 10.26

Cable Splicers25.00..... 10.27

Butler County (Eastern eighth, including the Townships of Decker, Lee & Tilford);

Edmonson County (Northern three-fourths, including the Townships of Asphalt, Bee Spring, Brownsville, Grassland, Huff, Kyrock, Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda, Sunfish & Sweden):

Ironworkers:

Structural; Ornamental; Reinforcing;

Precast Concrete Erectors.....24.78..... 17.04

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED
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CRAFTS: (continued)

Butler County (Townships of Aberdeen, Bancock, Casey, Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport, Monford, Morgantown, Provo, Rochester, and South Hill & Welchs Creek);

Caldwell County (Northeastern third, including the Township of Creswell); Christian County (Northern third, including Townships of Apex, Crofton, Kelly, Mannington and Wynns); Crittenden County (Northeastern half, including the Townships of Grove, Mattoon, Repton, Shady Grove and Tribune); Muhlenberg County (Townships of Bavier, Beech Creek Junction, Benton, Brennen, Browder, Central City, Cleaton, Depoy, Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City, Martwick, McNary, Moorman, Millport, Nelson, Paradise, Powderly, South Carrollton, Tarina and Weir);

Daviess, Hancock, Henderson, Hopkins, McLean, Ohio, Union and Webster Counties:

Ironworkers 25.75 14.475

Butler County (Southern third, including the Townships of Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar Grove and Woodbury);

Christian County (Eastern two-thirds, including the Townships of Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke and Thompsonville);

Edmonson County (Southern fourth, including the Townships of Chalybeate & Rocky Hill);

Muhlenberg County (Southern eighth, including the Townships of Dunnior, Penrod & Rosewood);

Allen, Logan, Simpson, Todd and Warren Counties:

Ironworkers 22.50 9.60

Caldwell County (Southwestern two-thirds, including the Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown, Dulaney, Farmersville, Fredonia, McGowan, Otter Pond and Princeton);

Christian County (Western third, excluding the Townships of Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke and Thompsonville);

Crittenden County (Southwestern half, including the Townships of Crayne, Dycusburg, Frances, Marion, Mexico, Midway, Sheridan and Told);

Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, Lyon, Marshall, McCracken and Trigg Counties:

Ironworkers

Projects with a total contract cost of \$20,000,000.00 or above

..... 25.55 15.54

All other work 24.27 14.48

Allen, Butler, Edmonson, Logan, Simpson & Warren Counties:

Millwrights 24.18 15.64

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED
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CRAFTS: (continued)

Ballard, Caldwell, Calloway, Carlisle, Christian, Crittenden, Fulton, Graves, Hickman, Hopkins, Livingston, Lyon, Marshall, McCracken, Todd & Trigg Counties:

Millwrights:23.48..... 15.06

Daviess, Hancock, Henderson, McLean, Muhlenberg, Ohio, Union & Webster Counties:

Millwrights:23.38..... 14.61

Ballard County:

Painters:

Bridges and Dams29.51..... 12.78

All Other Work.....25.21..... 12.78

Spray, Blast, Steam, High and Hazardous (Including Lead Abatement) and All Epoxy – 1.00 Premium.

Edmonson County:

Painters:

Brush & Roller18.50..... 9.84

Spray, Sandblast, Power Tools,
Waterblast & Steam Cleaning.....19.50..... 9.84

Daviess, Hancock, Henderson, McLean, Ohio, Union & Webster Counties:

Painters:

Bridges, Locks & Dams:

GROUP 125.60..... 10.05

GROUP 225.85..... 10.05

GROUP 326.60..... 10.05

GROUP 427.60..... 10.05

All Other Work:

GROUP 124.45..... 10.05

GROUP 224.70..... 10.05

GROUP 325.45..... 10.05

GROUP 426.45..... 10.05

PAINTER CLASSIFICATIONS

GROUP 1 – Brush & Roller

GROUP 2 – Plasterers

GROUP 3 – Spray; Sandblast; Power Tools; Waterblast; Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch Koate & Coal Tar Epoxy

GROUP 4 – Spray of Mastics, Creosotes, Kwinch Koate & Coal Tar Epoxy

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED
Allen, Butler, Logan, Muhlenberg, Simpson, Todd & Warren Counties:	
Painters:	
<u>Bridges, Locks & Dams</u>	
Brush & Roller	22.058.65
Bridges, Locks & Dams	
Spray; Sandblast; Power Tools; Waterblast & Steam	
Cleaning	23.058.65
All Other Work	
Brush & Roller	17.058.65
All Other Work	
Spray; Sandblast; Power Tools; Waterblast & Steam	
Cleaning	18.058.65
All Other Work – High Time Pay	
Over 35 feet (up to 100 feet) - \$1.00 above base wage	
100 feet and over - \$2.00 above base wage	
During spray painting and sandblasting operations, pot tenders shall receive the same wage rates as the spray painter or nozzle operator	
Caldwell, Calloway, Carlisle, Christian, Crittenden, Fulton, Graves, Hickman, Hopkins, Livingston, Lyon, Marshall, McCracken & Trigg Counties:	
Painters:	
Bridges and Dams.....	24.75 10.55
All Other Work.....	18.50 10.55
Waterblasting units with 3500 PSI and above - \$.50 premium	
Spraypainting and all abrasive blasting - \$1.00 premium	
Work 40 ft. and above ground level - \$1.00 premium	
Allen, Butler, Edmonson, Simpson, Warren Counties:	
Plumber/Steamfitter	30.00 14.17
Ballard, Caldwell, Calloway, Carlisle, Christian, Crittenden, Fulton, Graves, Hickman, Livingston, Lyon, Marshall, McCracken & Trigg Counties:	
Plumbers & Steamfitters	30.43 12.75
Daviess, Hancock, Henderson, Hopkins, Logan, McLean, Muhlenberg, Ohio, Todd, Union & Webster Counties:	
Plumbers & Pipefitters	26.92 11.15
Welders - Receive rate for craft in which welding is incidental.	

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

LABORERS:

Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, Lyon, Marshall and McCracken Counties:

GROUP 1 - Aging & Curing of Concrete, Asbestos Abatement Worker, Asphalt Plant, Asphalt, Batch Truck Dump, Carpenter Tender, Cement Mason Tender, Cleaning of Machines, Concrete, Demolition, Dredging, Environmental -Nuclear Radiation, Toxic & Hazardous Waste - Level D, Flagperson, Grade Checker, Hand Digging & Hand Back Filling, Highway Marker Placer, Landscaping, Mesh Handler & Placer, Puddler, Railroad, Nip-Rap & Grouter, Right-of-Way, Sign, Guard Rail & Fence Installer, Signal Person, Sound Barrier Installer, Storm & Sanitary Sewer, Swamper, Truck Spotter & Dumper & Wrecking of Concrete Forms, General Cleanup.

BASE RATE..... 19.73
FRINGE BENEFITS..... 10.53

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer), Brickmason Tender, Mortar Mixer Operator, Scaffold Builder, Burner & Welder, Bushhammer, Chain Saw Operator, Concrete Saw Operator, Deckhand Scow Man, Dry Cement Handler, Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C, Forklift Operator for Masonary, Form Setter, Green Concrete Cutting, Hand Operated Grouter & Grinder Machine Operator, Jackhammer, Pavement Breaker, Paving Joint Machine, Pipelayer, Plastic Pipe Fusion, Power Driven Georgia Buggy & Wheelbarrow, Power Post Hole Digger, Precast Manhole Setter, Walk-Behind Tamper, Walk-Behind Trencher, Sand Blaster, Concrete Chipper, Surface Grinder, Vibrator Operator and Wagon Driller.

BASE RATE..... 19.98
FRINGE BENEFITS..... 10.53

GROUP 3 - Asphalt Luteman & Raker, Gunnite Nozzleman, Gunnite Operator & Mixer, Grout Pump Operator, Blaster, Side Rail Setter, Rail Paved Ditches, Screw Operator, Tunnel (Free Air), and Water Blaster .

BASE RATE..... 20.03
FRINGE BENEFITS..... 10.53

GROUP 4 - Caisson Worker (Free Air), Cement Finisher, Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B, Miner & Driller (Free Air), Tunnel Blaster and Tunnel Mucker (Free Air), Directional & Horizontal Boring, Air Track Drillers (All Types), Powderman & Blasters, Troxler & Concrete Tester if Laborer is Utilized.

BASE RATE..... 20.63
FRINGE BENEFITS..... 10.53

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

LABORERS:

Allen, Butler, Caldwell, Christian, Daviess, Edmonson, Hancock, Hopkins, Logan, McLean, Muhlenberg, Ohio Simpson, Todd, Trigg and Warren Counties;

GROUP 1 - Aging & Curing of Concrete, Asbestos Abatement Worker, Asphalt Plant, Asphalt, Batch Truck Dump, Carpenter Tender, Cement Mason Tender, Cleaning of Machines, Concrete, Demolition, Dredging, Environmental -Nuclear Radiation, Toxic & Hazardous Waste - Level D, Flagperson, Grade Checker, Hand Digging & Hand Back Filling, Highway Marker Placer, Landscaping, Mesh Handler & Placer, Puddler, Railroad, Nip-Rap & Grouter, Right-of-Way, Sign, Guard Rail & Fence Installer, Signal Person, Sound Barrier Installer, Storm & Sanitary Sewer, Swamper, Truck Spotter & Dumper & Wrecking of Concrete Forms, General Cleanup.

BASE RATE.....20.76
FRINGE BENEFITS.....9.50

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer), BrickMason Tender, Mortar Mixer Operator, Scaffold Builder, Burner & Welder, Bushhammer, Chain Saw Operator, Concrete Saw Operator, Deckhand Scow Man, Dry Cement Handler, Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C, Forklift Operator for Masonary, Form Setter, Green Concrete Cutting, Hand Operated Grouter & Grinder Machine Operator, Jackhammer, Pavement Breaker, Paving Joint Machine, Pipelayer, Plastic Pipe Fusion, Power Driven Georgia Buggy & Wheelbarrow, Power Post Hole Digger, Precast Manhole Setter, Walk-Behind Tamper, Walk-Behind Trencher, Sand Blaster, Concrete Chipper, Surface Grinder, Vibrator Operator and Wagon Driller.

BASE RATE.....21.01
FRINGE BENEFITS.....9.50

GROUP 3 - Asphalt Luteman & Raker, Gunnite Nozzleman, Gunnite Operator & Mixer, Grout Pump Operator, Blaster, Side Rail Setter, Rail Paved Ditches, Screw Operator, Tunnel (Free Air), and Water Blaster .

BASE RATE.....21.06
FRINGE BENEFITS.....9.50

GROUP 4 - Caisson Worker (Free Air), Cement Finisher, Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B, Miner & Driller (Free Air), Tunnel Blaster and Tunnel Mucker (Free Air), Directional & Horizontal Boring, Air Track Drillers (All Types), Powderman & Blasters, Troxler & Concrete Tester if Laborer is Utilized.

BASE RATE.....21.66
FRINGE BENEFITS.....9.50

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

LABORERS:

Crittenden, Henderson, Union and Webster Counties:

GROUP 1 - Aging & Curing of Concrete, Asbestos Abatement Worker, Asphalt Plant, Asphalt, Batch Truck Dump, Carpenter Tender, Cement Mason Tender, Cleaning of Machines, Concrete, Demolition, Dredging, Environmental -Nuclear Radiation, Toxic & Hazardous Waste - Level D, Flagperson, Grade Checker, Hand Digging & Hand Back Filling, Highway Marker Placer, Landscaping, Mesh Handler & Placer, Puddler, Railroad, Nip-Rap & Grouter, Right-of-Way, Sign, Guard Rail & Fence Installer, Signal Person, Sound Barrier Installer, Storm & Sanitary Sewer, Swamper, Truck Spotter & Dumper & Wrecking of Concrete Forms, General Cleanup.

BASE RATE..... 20.01
FRINGE BENEFITS..... 10.25

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer), Brickmason Tender, Mortar Mixer Operator, Scaffold Builder, Burner & Welder, Bushhammer, Chain Saw Operator, Concrete Saw Operator, Deckhand Scow Man, Dry Cement Handler, Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C, Forklift Operator for Masonary, Form Setter, Green Concrete Cutting, Hand Operated Grouter & Grinder Machine Operator, Jackhammer, Pavement Breaker, Paving Joint Machine, Pipelayer, Plastic Pipe Fusion, Power Driven Georgia Buggy & Wheelbarrow, Power Post Hole Digger, Precast Manhole Setter, Walk-Behind Tamper, Walk-Behind Trencher, Sand Blaster, Concrete Chipper, Surface Grinder, Vibrator Operator and Wagon Driller.

BASE RATE..... 20.26
FRINGE BENEFITS..... 10.25

GROUP 3 - Asphalt Luteman & Raker, Gunnite Nozzleman, Gunnite Operator & Mixer, Grout Pump Operator, Blaster, Side Rail Setter, Rail Paved Ditches, Screw Operator, Tunnel (Free Air), and Water Blaster .

BASE RATE..... 20.31
FRINGE BENEFITS..... 10.25

GROUP 4 - Caisson Worker (Free Air), Cement Finisher, Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B, Miner & Driller (Free Air), Tunnel Blaster and Tunnel Mucker (Free Air), Directional & Horizontal Boring, Air Tack Drillers (All Types), Powderman & Blasters, Troxler & Concrete Tester if Laborer is Utilized.

BASE RATE..... 20.91
FRINGE BENEFITS..... 10.25

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

TEAMSTERS:

Truck Drivers:

Allen, Butler, Edmonson, Logan, Simpson & Warren Counties:

Greaser, Tire Changer.

BASE RATE..... 19.04
FRINGE BENEFITS..... 12.02

Truck Mechanic.

BASE RATE..... 19.37
FRINGE BENEFITS..... 12.02

Single Axle Dump, Flat Bed, all Terrain Vehicles when used to haul materials, Semi Trailer or Pole Trailer when used to pull building materials and equipment, Tandem Axle Dump, Driver of Distributors, Mixer all types.

BASE RATE..... 19.44
FRINGE BENEFITS..... 12.02

Winch and A-frame when used in transporting materials, Ross Carrier, Fork Lift when used to transport building materials, Driver on Pavement Breaker.

BASE RATE..... 19.45
FRINGE BENEFITS..... 12.02

Euclid and other Heavy Earth Moving Equipment, Low Boy, Articulator Cat, Five Axle Vehicle.

BASE RATE..... 19.50
FRINGE BENEFITS..... 12.02

Ballard, Calloway, Caldwell, Carlisle, Christian, Crittenden, Fulton, Graves, Hickman, Livingston, Lyon, Marshall, McCracken, Todd & Trigg Counties:
Greaser, Tire Changer.

BASE RATE..... 23.89
FRINGE BENEFITS..... 4.15

Truck Mechanic.

BASE RATE..... 24.12
FRINGE BENEFITS..... 4.15

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

TEAMSTERS: (continue)

Single Axle Dump, Flat Bed, all Terrain Vehicles when used to haul materials, Semi Trailer or Pole Trailer when used to pull building materials and equipment, Tandem Axle Dump, Driver of Distributor, Mixer all types.

BASE RATE..... 24.19
FRINGE BENEFITS..... 4.15

Euclid, other Heavy Earth Moving Equipment, Low Boy, Articulator Cat, Five Axle Vehicle, Winch & A-Frame when used in transporting materials, Ross Carrier.

BASE RATE..... 24.20
FRINGE BENEFITS..... 4.15

Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Union & Webster Counties: Greaser, Tire Changer.

BASE RATE..... 19.23
FRINGE BENEFITS..... 9.20

Truck Mechanic.

BASE RATE..... 19.46
FRINGE BENEFITS..... 9.20

Single Axle Dump, Flat Bed, all Terrain Vehicle when used to haul materials, Semi Trailer or Pole Trailer when used to pull building materials and equipment, Tandem Axle Dump, Driver of Distributors, Mixer all types.

BASE RATE..... 19.53
FRINGE BENEFITS..... 9.20

Euclid and other Heavy Earth Moving Equipment, Low Boy, Articulator Cat, Five Axle Vehicle, Winch & A-Frame when used in transporting materials, Ross Carrier, Fork Lift when used to transport building materials, Driver on Pavement Breaker.

BASE RATE..... 19.54
FRINGE BENEFITS..... 9.20

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

OPERATING ENGINEERS:

A-frame Winch Truck, Auto Patrol, Backfiller, Batcher Plant, Bituminous Paver, Bituminous Transfer Machine, Boom Cat, Bulldozer, Mechanic, Cableway, Carry-All Scoop, Carry Deck Crane, Central Compressor Plant, Clamshell, Concrete Mixer (21 cu. ft. or over), Concrete Paver, Truck Mounted Concrete Pump, Core Drill, Crane, Crusher Plant, Derrick, Derrick Boat, Ditching and Trenching Machine, Dragline, Dredge Operator, Dredge Engineer, Elevating Grader and Loaders, Grade-All, Gurries, Heavy Equipment Robotics Operator/Mechanic, High Lift, Hoe-Type Machine, Hoist (two or more drums), Hoisting Engine (two or more drums), Horizontal Directional Drill Operator, Hydrocrane, Hyster, KeCal Loader, LeTourneau, Locomotive, Mechanic; Mechanically Operated Laser Screed, Mechanic Welder, Mucking Machine, Motor Scraper, Orangepeel Bucket, Piledriver, Power Blade, Pumpcrete, Push Dozer, Rock Spreader attached to equipment, Rotary Drill, Roller (bituminous), Scarifier, Scoopmobile, Shovel, Side Boom, Subgrader, Tailboom, Telescoping type Forklift, Tow or Push boat, Tower Crane (French, German and other types), Tractor Shovel, Truck Crane, Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment.

BASE RATE..... 24.60
FRINGE BENEFITS..... 12.65

Air Compressor (over 900 cu. ft. per min.), Bituminous Mixer, Boom Type Tamping Machine, Bull Float, Concrete Mixer (under 21 cu. ft.), Dredge Engineer, Electric Vibrator, Compactor/Self-Propelled Compactor, Elevator (one drum or buck hoist), Elevator (when used to hoist building material), Finish Machine, Firemen & Hoist (one drum), Flexplane, Forklift (regardless of lift height), Form Grader, Joint Sealing Machine, Outboard Motor Boat, Power Sweeper (riding type), Roller (rock), Ross Carrier, Skid Mounted or Trailer Mounted Concrete Pump, Skid Steer Machine with all attachments, Switchman or Brakeman, Throttle Valve Person, Tractair and Road Widening Trencher, Tractor (50 H.P. or over), Truck Crane Oiler, Tugger, Welding Machine, Well Points, and Whirley Oiler.

BASE RATE..... 22.18
FRINGE BENEFITS..... 12.65

All off road material handling equipment, including Articulating Dump Trucks, Greaser on grease facilities servicing heavy equipment.

BASE RATE..... 22.56
FRINGE BENEFITS..... 12.65

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

OPERATING ENGINEERS: (continued)

Bituminous Distributor, Burlap and Curing Machine, Cement Gun, Concrete Saw, Conveyor, Deckhand Oiler, Grout Pump, Hydraulic Post Driver, Hydro Seeder, Mud Jack, Oiler, Paving Joint Machine, Power Form handling equipment, Pump, Roller (Earth), Steerman, Tamping Machine, Tractor (under 50 H.P.) and Vibrator.

BASE RATE	21.92
FRINGE BENEFITS	12.65

Cranes - with booms 150 ft. and over (including jib), and where the length of the Boom in combination with the length of the piling equals or exceeds 150 ft. - \$1.00 above Group 1 rate.

Employees assigned to work below ground level are to be paid 10% above basic wage rate. This does not apply to open cut work.

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

These rates are listed pursuant to the Kentucky Determination No. CR-09-IHWY dated July 1, 2009 and/or Federal Decision No.KY20080025 dated February 8, 2008, modification #0 dated February 8, 2008, modification #1 dated April 4, 2008, modification #2 dated June 6, 2008, modification #3 dated July 4, 2008, modification #4 dated July 25, 2008, modification #5 dated August 1, 2008, modification #6 dated August 15, 2008, modification #7 dated September 5, 2008, modification #8 dated October 3, 2008, modification #9 dated November 7, 2008, modification #10 dated March 6, 2009, modification #11 dated May 1, 2009, modification #12 dated June 5, 2009, modification #13 dated July 3, 2009, modification # 14 dated July 24, 2009, modification #15 dated August 7, 2009, modification #16 dated September 4, 2009, modification #17 dated September 11, 2009 and modification #18 dated October 16, 2009.

**TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES**

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Ryan Griffith, Director
Division of Construction Procurement
Frankfort, Kentucky 40622

PART IV
INSURANCE

INSURANCE

The Contractor shall carry the following insurance in addition to the insurance required by law:

1. Contractor's Public Liability Insurance not less than \$100,000.00 for damages arising out of bodily injuries to or death to one person. Not less than \$300,000.00 for damages arising out of bodily injuries to or death to two or more persons.
2. Contractor's Property Damages Liability Insurance. Not less than \$100,000.00 for all damages arising out of injury or destruction of property in any one accident. Not less than \$300,000.00 for all damages during the policy period.
3. Contractor's Protective Public Liability and Property Damage Insurance. The contractor shall furnish evidence with respect to operations performed for him by subcontractors that he carries in his own behalf for the above stipulated amounts.
4. The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a. "policy contains no deductible clauses."
 - b. "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
5. WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

PART V
BID ITEMS

CONTRACT ID: 102905
COUNTY: DAVIESS, OHIO
PROPOSAL: 121GR10M19

PAGE: 1
LETTING: 01/22/10
CALL NO: 402

LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
SECTION 0001 BRIDGE						
0010	02004	RELOCATE WATER-FILLED BARRIERS NCHRP 350 LEVEL 2	1,000.000	LF		
0020	02005	WATER-FILLED BARRIERS	1,000.000	LF		
0030	02562	SIGNS	2,116.000	SQFT		
0040	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B62N	(1.00)	LS		
0050	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B67L	(1.00)	LS		
0060	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B67R	(1.00)	LS		
0070	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B88L	(1.00)	LS		
0080	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B88R	(1.00)	LS		
0090	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B89L	(1.00)	LS		
0100	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B89R	(1.00)	LS		
0110	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B90L	(1.00)	LS		
0120	02650	MAINTAIN & CONTROL TRAFFIC APPLIES TO B90R	(1.00)	LS		
0130	02653	LANE CLOSURE	16.000	EACH		
0140	02654	TRUCK MOUNTED ATTENUATOR	10.000	EACH		
0150	02671	PORTABLE CHANGEABLE MESSAGE SIGN	8.000	EACH		
0160	02775	ARROW PANEL	8.000	EACH		
0170	02898	RELOCATE CRASH CUSHION	8.000	EACH		
0180	02900	INSTALL TEMP CRASH CUSHION	4.000	EACH		
0190	02900	INSTALL TEMP CRASH CUSHION NCHRP 350 LEVEL 3	4.000	EACH		
0200	03171	CONCRETE BARRIER WALL TYPE 9T	2,240.000	LF		

CONTRACT ID: 102905
COUNTY: DAVIESS, OHIO
PROPOSAL: 121GR10M19

PAGE: 2
LETTING: 01/22/10
CALL NO: 402

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0210	03171	CONCRETE BARRIER WALL TYPE 9T NCHRP 350 LEVEL 3	2,240.000 LF		
0220	03294	EXPAN JOINT REPLACE 1 1/2 IN	701.000 LF		
0230	03299	ARMORED EDGE FOR CONCRETE	627.400 LF		
0240	03300	ELIMINATE TRANSVERSE JOINT	77.200 LF		
0250	03304	BRIDGE OVERLAY APPROACH PAVEMENT	4,179.000 SQYD		
0260	06515	PAVE STRIPING-PERM PAINT-6 IN	5,900.000 LF		
0270	06549	PAVE STRIPING-TEMP REM TAPE-B	1,950.000 LF		
0280	06549	PAVE STRIPING-TEMP REM TAPE-B 8 INCH	3,250.000 LF		
0290	06550	PAVE STRIPING-TEMP REM TAPE-W	7,000.000 LF		
0300	06550	PAVE STRIPING-TEMP REM TAPE-W 6 INCH	16,200.000 LF		
0310	06551	PAVE STRIPING-TEMP REM TAPE-Y	11,800.000 LF		
0320	06551	PAVE STRIPING-TEMP REM TAPE-Y 6 INCH	9,400.000 LF		
0330	08150	STEEL REINFORCEMENT	3,486.960 LB		
0340	08504	EPOXY SAND SLURRY	673.000 SQYD		
0350	08526	CONC CLASS M FULL DEPTH PATCH	28.000 CUYD		
0360	08534	CONCRETE OVERLAY-LATEX	225.600 CUYD		
0370	08549	BLAST CLEANING	5,156.000 SQYD		
0380	08551	MACHINE PREP OF SLAB	3,480.000 SQYD		
0390	20318ES508	RELOCATE CONC BARRIER WALL	4,020.000 LF		
0400	20318ES508	RELOCATE CONC BARRIER WALL NCHRP 350 LEVEL 3	460.000 LF		
0410	21759NN	REPAIR/PATCH WINGWALL	2.000 EACH		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
0420	22983EN	EPOXY HEALER-SEALER	1,000.000	SQYD		
0430	23331EC	EPOXY-URETHANE WATERPROOFING	9,000.000	SQFT		
0440	23386EC	JOINT SEAL REPLACEMENT	283.000	LF		
0450	23428EC	CONCRETE PATCHING REPAIR	8.000	CUFT		
SECTION 0002 DEMOBILIZATION						
0460	02569	DEMOBILIZATION (AT LEAST 1.5%)		LUMP		
		TOTAL BID				