



CALL NO. 311

CONTRACT ID. 082098

JEFFERSON COUNTY

FED/STATE PROJECT NUMBER FD05 056 1747 011-013

LETTING DATE: March 21, 2008

Sealed Bids will be received in the Division of Construction Procurement and/or the Auditorium located on the 1st floor of the Transportation Cabinet Office Building until 10:00 AM EASTERN DAYLIGHT TIME March 21, 2008. Bids will be publicly opened and read at 10:00 AM EASTERN DAYLIGHT TIME.

DEFERRED PAYMENT: The successful bidder on this project may request a work order with an effective date prior to June 15, 2008. The request must be in writing to the Department. A work order issued at the request of the Contractor will be with the distinct understanding that payment for any work performed estimates may be delayed until July 15, 2008. A work order will be issued June 15, 2008, for this project unless the bidder requests an earlier work date.

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 - 082098

ADMINISTRATIVE DISTRICT - 05

PROJECT(S) IDENTIFICATION AND DESCRIPTION:

COUNTY - JEFFERSON

PCN - MP05617470701

FD05 056 1747 011-013

HURSTBOURNE LANE (KY 1747) BEGIN AT TAYLORSVILLE ROAD (MP 11.030) END AT LINN STATION
ROAD (MP 12.290, A DISTANCE OF 1.26 MILES. ASPHALT RESURFACING.

GEOGRAPHIC COORDINATES LATITUDE 38°13'25" LONGITUDE 85°34'41"

AVERAGE DAILY TRAFFIC - 61539

AVERAGE MAINLINE WIDTH - 157.0 FEET

COMPLETION DATE(S):

COMPLETION DATE - September 15, 2008

APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be incorporated into the proposal when the bid is submitted to the Kentucky Department of Highways. Failure to use the correct and most recent bid sheet(s) may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's Highway Bid 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 items created from the web site to prepare a bid proposal for submission to the Department. The bidder must insert the completed bid item sheets printed from the Program into the bidder's proposal and submit 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.

SURFACING AREAS

Mainline surfacing width is estimated to be 60-157 feet.

Total mainline area to be surfaced is estimated to be 63,976 square yards.

Shoulder width is estimated to be 0-11 feet on each side.

Total shoulder area to be surfaced is estimated to be 3,524 square yards.

ASPHALT MIXTURE

The rate of application for all asphalt mixtures shall be estimated at 110 lbs/sy per inch of depth, unless otherwise noted.

INCIDENTAL SURFACING

The quantities established in the proposal include estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, and road and street approaches. These items are to be paved to the limits as shown on Standard Drawing RPM 110 or to the limits as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, the paving of the crossroads shall be to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. These areas are to be surfaced or resurfaced as directed by the Engineer and no direct payment will be allowed for placing and compacting.

FUEL AND ASPHALT PAY ADJUSTMENT

These contract items Lot Pay Adjustment, Asphalt Adjustment and Fuel Adjustment, are for possible future payments. Additional monies may need to be setup with an additional change order if existing contract amount is insufficient to pay all items on the contract. Unit price is \$1.00. Quantity will be actual adjustment after work is completed.

OPTION A

The Contractor is advised that the compaction of asphalt mixtures furnished for driving lanes and ramps, at 25mm (1 inch) or greater, on this project will be accepted according to OPTION A in accordance with Section 402 and Section 403 of the *current Standard Specification*. Joint cores as described in subsection 402.03.02 are required for surface mixtures only. The compaction of all other asphalt mixtures will be accepted by OPTION B.

SPECIAL NOTE FOR LIQUIDATED DAMAGES

Liquidated Damages will be assessed in the amount of \$500 per hour for each hour or part of an hour a lane closure remains in place during periods prohibited by the Traffic Control Plan.

Contrary to section 108.09, liquidated damages will be assessed for the months of December through March.

Contrary to section 108.09, liquidated damages will be assessed regardless of whether seasonal limitations prohibit the Contractor from performing work on the controlling operation.

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

SPECIAL NOTE FOR AWARD OF CONTRACT

Contrary to Section 103.02, the Department may hold the Bid Proposals of any or all bidders for a period not to exceed 90 calendar days for final disposition of award. The Department may hold the Bid Proposal of the lowest bidder longer than 90 calendar days if the bidder concurs.

Contrary to Section 103.04, The Department will hold the Proposal Guaranty of the lowest bidder and the Proposal Guaranty of the second lowest bidder, as determined by the Commissioner, until the Department awards the Contract and executes and approves the Contract and bond of the successful bidder, or until the Department rejects all Bid Proposals. If the Department does not make an award within 90 calendar days, the Department will return all Proposal Guaranties.

Except as provided in this note or elsewhere in the proposal, all other applicable portions of Section 103 apply.

**SPECIAL NOTE TRAFFIC RESPONSE AND INCIDENT
MANAGEMENT ASSISTING THE RIVER CITIES (TRIMARC)**

Existing buried fiber optic cable has been installed within the construction limits of this project as part of the Traffic Response and Incident Management Assisting the River Cities (TRIMARC). Notify the Engineer in writing, a minimum of (2) two weeks, prior to beginning any work.

The Engineer will contact and maintain liaison with the District Traffic Engineer and coordinate any necessary work. Do not perform any excavation or underground activity until the Department locates and marks the cable.

1-3191 trimarccoordination
02/11/04

SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER

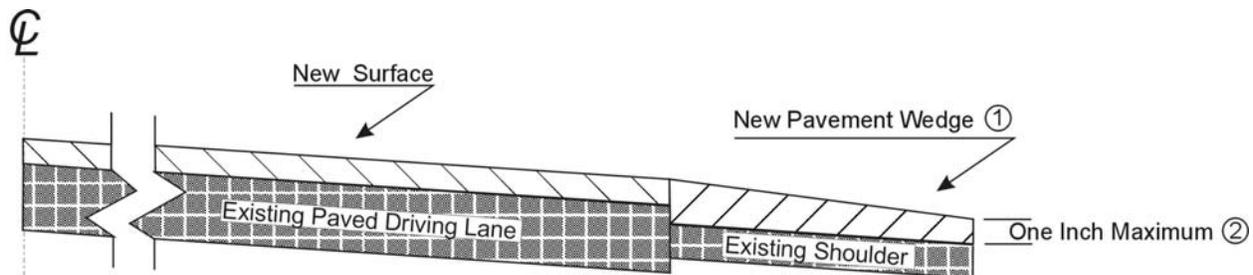
1.0 MATERIALS. Provide an Asphalt Mixture for Pavement Wedge conforming to Section 407 of the Standard Specifications or an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.

2.0 CONSTRUCTION. Place the Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture as a separate operation from the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Section 407.03 and 403.03 of the Standard Specifications, as applicable.

When the Engineer deems it appropriate to pave both the driving lane and the adjoining wedge monolithically, equip the paver with a modified screed. Provide a screed that extends the full width of the wedge being placed and is tapered to produce a wedge.

The wedge may vary in thickness at the edge of the driving lanes. Limit the outside edge thickness of the new paving limits on the wedge to one inch where existing site conditions permit. If an Asphalt Surface Mixture is furnished for the pavement wedge, texture according to Section 403.03.08.

The following sketch is primarily for the computation of quantities; however, the wedge will result in a similar cross-section where sufficient width exists. Do not construct a shoulder for placing the wedge unless specified elsewhere in the Contract.



① Slope varies, but is down from the driving lanes except on outside of some curves where superelevation controls.

② Where existing site conditions permit.

3.0 MEASUREMENT. The Department will measure Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture placed as the pavement wedge according to Section 407.

4.0 PAYMENT. The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures on pavement wedges according to Section 402 of the Standard Specifications. The Department will make payment for the completed and accepted quantities of Asphalt Mixture for Pavement Wedge according to Section 407 of the Standard Specifications.

December 13, 2006

**SPECIAL NOTE FOR
ASPHALT MILLING AND TEXTURING**

Begin paving operations no later than **48 hours** after the commencement of the asphalt milling operation. Continue paving operations continuously until completed. If paving operations are not begun within this time period, liquidated damages will be assessed at the rate prescribed by Section 108.09 of the current Standard Specifications until such time as paving operations are begun.

Contrary to Section 408 of the current Standard Specifications, the material obtained from the milling operations shall become the property of the Department. Deliver this material to the Middletown State Maintenance facility in Jefferson County.

1-3530 milling48hrstategetsmilling
07/21/03

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

The dimensions shown on the typical sections for pavement and shoulder widths and thickness' are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless specified elsewhere in the Proposal.

typical section
05/09/2003

TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the current Standard Specifications and the Standard Drawings, current editions. 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 like new condition, at the beginning of the work and maintained in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

All lanes shall be open to traffic and no work will be allowed between the hours of 6:00 A.M. and 7:00 P.M. Monday through Friday. **Night work will be required on the project.** Minor operations that do not require a lane closure and cause little disruption to traffic may be allowed between the hours of 9:00 A.M. to 3:00 P.M. with written permission from the engineer. The Contractor is advised to take these restrictions into account in his bid. No additional payment will be allowed for any delays to the contractor as a result of these restrictions.

No lane closures will be allowed on the following days or nights:

March 21-23, 2008	Easter Weekend
May 23-26, 2008	Memorial Day Weekend
July 4-6, 2008	Independence Day Weekend
Aug. 29-Sept.1, 2008	Labor Day Weekend

At the discretion of the Engineer, other days and hours may be specified when lane closures will not be allowed.

Maintain a minimum of one traffic lane (mainline) in each direction at all times during construction. The clear lane width shall be 12 Feet, where possible. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, the Contractor shall make provisions for the passage of the bus as quickly as possible.

Do not leave lane closures in place during non-working hours.

SIGNS

Contrary to section 112.04.02, only long term signs (signs 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.

TEMPORARY ENTRANCES/ACCESS TO PROPERTY

The Contractor will not be required to provide continuous access to farms, single family, duplex, or triplex residential properties during working hours; however, provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. The time during which a farm or residential entrance is blocked shall be the minimum length of time required for actual operations, shall not be extended for the Contractor's convenience, and in no case shall exceed six (6) hours. Notify all residents twenty-four hours in advance of any driveway or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.

Except as allowed by the Phasing as specified above, maintain direct access to all side streets and roads, schools, churches, commercial properties and apartments or apartment complexes of four or more units at all times.

Payment will be allowed at the unit price bid for all asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, no direct payment will be allowed for aggregates, excavation and/or embankment needed. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

BARRICADES

Barricades used in lieu of barrels and cones for channelization or delineation will be incidental to Maintain and Control Traffic according to Section 112.04.01. Barricades used to protect pavement removal areas will be bid as each according to Section 112.04.04.

TRAFFIC LOOP INSTALLATION

All items required for lane closures related to this item of work shall be considered incidental to bid item "Maintain and Control Traffic". Install Traffic signal loops as per special notes. The Contractor shall coordinate the placement of the traffic loops with the Traffic Engineer.

THERMOPLASTIC INTERSECTION MARKING

All items required for lane closures related to this item of work shall be considered incidental to bid item "Maintain and Control Traffic". The Contractor shall be required to locate, document, and replace the markings that are existing in the field upon completion of project or as directed by Engineer.

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations to be determined by the Engineer. If work is in progress concurrently in both directions or if more than one lane closure is in place in the same direction of travel, provide additional changeable message signs as directed by the Engineer. Place changeable message signs one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens relocate or provide additional changeable message signs so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of the actual queue. The locations designated may vary as the work progresses. The messages required to be provided shall be designated by the Engineer. In the event of damage or mechanical/electrical failure, the Contractor shall repair or replace the Changeable Message Sign within 24 hours. The Department will measure for payment the maximum number of changeable message signs in concurrent use at the same time on a single day on all sections of the contract. Individual changeable message signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged changeable message signs directed by the Engineer to be replaced due to poor condition or readability will not be measured for payment.

ARROW PANEL

Use arrow panels as shown on the Standard Drawings or as directed by the Engineer. The Department will measure for payment the maximum number of arrow panels in concurrent use at the same time on a single day on all sections of the contract. Individual arrow panels will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged arrow panels directed by the Engineer to be replaced due to poor condition or readability will not be measured for payment. Arrow panels will remain the property of the Contractor after construction is complete.

PAVEMENT MARKINGS

Coordinate the installation of all temporary and permanent striping with the Resident Engineer, and the TEBM for Traffic in the District. If there is a deviation from the existing striping plan, a striping plan for the pavement shall be provided to the Contractor prior to the installation of any temporary or permanent markings.

Do not install temporary pavement striping, permanent pavement striping, and/or thermoplastic or Durable Pavement markings without written permission from the Engineer.

Temporary Striping will be installed as per Section 112 with the following exceptions:

Temporary striping shall include striping of the edgelines.

Temporary or Permanent striping shall be in place before a lane is opened to traffic

If the Contractor's operations or phasing requires temporary markings that must be subsequently removed from the final surface course, an approved "Removable Lane Tape" shall be used. This removable lane tape will not be measured separately. The "removable lane tape", if used, will be measured and paid as temporary striping.

PAVEMENT EDGE DROP-OFFS

A pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation shall not have an elevation difference greater than 1½". Warning signs (MUTCD W8-9 or W8-9A, or W8-11) shall be placed in advance of and at 1500' intervals throughout the drop-off area. Dual posting on both sides of the traveled way shall be required. All transverse transitions between the newly surfaced area and the existing surface areas that traffic may cross shall be wedged with asphalt mixture for leveling and wedging. The wedges shall be removed prior to placement of the final surface course.

Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. Cones may be used in place of plastic drums, panels, and barricades during daylight working hours only. Wedge with asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4 inches - Drop-offs exceeding 4 inches will be allowed only during active operations during the interval between removal of shoulder/traffic islands/medians and the placement of the asphalt base courses in these areas. Place plastic drums, vertical panels or barricades every 40 feet. Drop-offs less than eight feet behind a lane or shoulder closure shall be protected by a asphalt wedge with 3:1 or flatter slope; the wedge shall be removed and the base course placed in the drop-off area as soon as possible.

In lieu of a wedge, drop-offs at lateral trenches may be covered by a 1" thick steel plate when work is not actively in progress at the pavement removal area; the plate shall be anchored to the pavement by any method approved by the Engineer that will prevent it being dislodged by accidental impact. If for any reason, it is necessary to excavate small areas, any holes adjacent to traffic where there exists a possibility that a vehicle may drop a wheel into the holes shall be filled with asphalt or plated. No direct payment will be made for the wedge or steel plates, but shall be incidental to other items of work.

Rev.7/07

DIVISION OF PLANNING

SPECIAL NOTES FOR INSTALLATION OF TRAFFIC COUNTING INDUCTANCE LOOPS AND AXLE SENSORS

I. DESCRIPTION

Except as specified in these notes, perform all work according to the Department's Current Standard Specifications, applicable Special Provisions and Special Notes, Sepia and Standard Drawings, and the drawings elsewhere in this proposal. Article references are to the Standard Specifications.

Furnish all materials, labor, equipment, and incidentals for the following work: (1) Maintain and control traffic; (2) install inductive loops; and (3) all other work required by the Specifications, Standard Drawings, Special Notes and the drawings in the proposal. The details of the project will be supplied in addition to these Special Notes.

II. MATERIALS

The Department will sample and test all materials according to Department's Sampling Manual. Have all materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes. All materials shall be approved prior to being utilized. The Contractor shall submit for approval five (5) copies of descriptive literature, drawings, and any requested design data for the materials he proposes to use. No substitutions for approved materials will be made without the written approval of the Engineer.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Junction Box Type 6 in. x 6 in. x 4 in. The junction box shall have minimum inside dimensions of at least 6 inches high by 6 inches wide by 4 inches deep, made of a UV stabilized nonmetallic material (plastic) or non-rusting metal, and be weatherproof (NEMA 4X enclosure). It shall have a removable replaceable door with a continuous durable weatherproof gasket between the body and overhanging door to ensure a watertight seal. The door shall be hinged with stainless steel screws, hinge(s) and pin(s). The door shall also have a stainless steel padlockable latch on the side opposite the hinge(s). An approved enclosure is the Hubbell-Wiegmann model VJ606HWPL1.

C. Junction Box Type 10 in. x 8 in. x 4 in. The junction box shall have minimum inside dimensions of at least 10 inches high by 8 inches wide by 4.6 inches deep, made of a UV stabilized nonmetallic material (plastic) or non-rusting metal, and be weatherproof (NEMA 4X enclosure). It shall have a removable replaceable door with a continuous durable weatherproof gasket between the body and overhanging door to ensure a watertight seal. The door shall be hinged with stainless steel screws, hinge(s) and pin(s). The door shall also

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have a stainless steel padlockable latch on the side opposite the hinge(s). An approved enclosure is the Hubbell-Wiegmann model VJ1008HWPL1.

D. Junction Box Type A. The junction box Type A shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC Style, or approved equal. It shall have nominal inside dimensions of 13 inches wide by 24 inches long by 18 inches deep with an open bottom. The removable cover shall be attached with a minimum of two 3/8-inch stainless steel hex bolts and washers.

E. Junction Box Type B. The junction box Type B shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC Style, or approved equal. It shall have nominal inside dimensions of 11 inches wide by 18 inches long by 12 inches deep with an open bottom. The removable cover shall be attached with a minimum of two 3/8-inch stainless steel hex bolts and washers.

F. Junction Box Type C. The junction box Type C shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC Style, or approved equal. It shall have nominal inside dimensions of 24 inches wide by 36 inches long by 30 inches deep with an open bottom. The removable cover shall be attached with a minimum of two 3/8-inch stainless steel hex bolts and washers.

G. Cabinet Type G. A controller cabinet Type G shall be constructed of type 5052-H32 sheet aluminum with a minimum thickness of 0.125 inches. The cabinet shall meet or exceed the industry standards set forth by the UL 50 and the National Electrical Manufacturer's Association (NEMA) 3R. The cabinet shall have a dimension of 41 inches high by 25 inches wide by 16 inches deep. The cabinet shall include kits for a back panel and two shelves. The cabinet shall be designed with a sloped top to prevent the accumulation of water on its top surface. The single door opening shall be double flanged on all four sides, hinged on the right side, equipped with a three-point latching mechanism, and include a door restraint. The door shall be equipped with a Corbin tumbler #2 lock. The cabinet shall be equipped with two adjustable "C" mounting channels on both side and back walls to allow for versatile positioning of shelves. Manufacturer's shop drawings shall be submitted demonstrating details of equipment housing and installation. If electrical service is specified, a 120-volt GFCI AC duplex receptacle shall be provided in the cabinet.

An approved source is provided below. Other approved equal cabinets may be furnished if approved by a representative of the Central Office, Division of Planning. To be considered approved equal, the cabinet shall meet the above requirements and match the specified detailed dimensions.

Econolite Control Products.
P.O. Box 6150
3360 E. La Palma
Anaheim, California 92806-2856

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H. Galvanized Steel Cabinet. The cabinet shall be a hinged cover NEMA Type 3R medium enclosure, constructed of 16 or 14 gauge galvanized steel, and have inside dimensions of 20 inches high by 20 inches wide by 8 inches deep. This shall be the standard size that contractors shall place their bids on. The cabinet shall meet the industry standards set forth by the Underwriters Laboratories Inc. (UL) 50 and the National Electrical Manufacturers Association (NEMA). The finish shall consist of an American National Standards Institute (ANSI) 61 gray polyester powder finish inside and out over the galvanized steel. The cabinet shall have the following features:

- Drip shield top and seam-free sides, front, and back, to provide protection in outdoor installations against rain, sleet, and snow.
- 16 gauge galvanized steel continuous stainless steel pin.
- Cover fastened securely with captive plated steel screws.
- Hasp and staple provided for padlocking.
- No gaskets or knockouts.
- Back plate mounted inside the cabinet for terminal strip installation.

An approved source is provided below. Other approved equal cabinets may be furnished if approved by a representative of the Central Office, Division of Planning. To be considered approved equal, the cabinet shall meet the above requirements and match the specified detailed dimensions.

Hoffman Engineering Co.
World Headquarters
900 Ehlen Drive
Anoka, Minnesota 55303-7504

I. Wood Post. The wood post shall be 4 inches by 4 inches by 8 feet long, and is pretreated to conform to the American Wood Preservers' Association (AWPA) C-14. All wood posts shall be sawed on all four sides, having both ends square, and conform to the dimensions specified. The wood post is described in detail in Section 820.01 of the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Current edition.

J. Conduit. Conduit shall be rigid steel waterproofed conduit unless otherwise specified. All conduits shall be galvanized inside and out and shall conform to the Underwriters' Laboratories (UL) requirements for rigid metallic conduit. IMC will not be accepted. Furnish all conduit fittings, bodies, boxes, joints, couplings and mounting hardware.

K. Loop Wire. All loop wire shall be plainly marked in accordance with the provisions of the current editions of the National Electric Code (NEC). The wire shall be 14-gauge single conductor, insulated in polyethylene (PE) with a 0.004-inch thick nylon coating, and enclosed in a 0.030-inch thick PE tube jacket. The wire shall meet the requirements of the International Municipal Signal Association (IMSA) Specification No. 51-7- latest edition. Any other wire shall be of appropriate size and type per the NEC and Section

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834.01 Wiring of the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Current edition.

L. Cable No. 14/1 Pair. Cable No. 14/1 pair or loop lead-in cable shall be 14 AWG, stranded, paired conductors, electrically shielded and shall conform to IMSA 19-2. All cable shall be plainly marked in accordance with the provisions of the National Electric Code.

M. Traffic Loop Encapsulant. The traffic loop encapsulant shall consist of a one-part polyurethane as described in Section 835.06 of the Kentucky Transportation Cabinet, Department of Highways Standard Specifications for Road and Bridge Construction, Current edition.

N. Seeding and Protection. Use seed mixture No. I per Section 212-Erosion Control of the Department's Current Standard Specifications for Road and Bridge Construction book.

O. Electrical Service. The contractor shall initiate a work order for the installation of electrical service to the power site. A representative from the Division of Planning and the local utility company shall be consulted prior to choosing an exact location for the pole. The contractor shall be responsible for clearing the right-of-way for the electrical service drop. The electrical service shall be a minimum 60-ampere, which is capable of supplying 120 volts or 240 volts to the electronics. The installation and materials specified in the construction notes below, shall be made incidental to the bid item established for electrical service. A 120-volt GFCI AC duplex receptacle shall be provided in the cabinet. Contractor is responsible for correct size and type of wire. Contractor is responsible for obtaining any and all electrical inspections, memberships, meter base and any other requirements by the utilities serving the installation and pays all fees required.

P. Piezoelectric Sensors. The sensor shall consist of a metal strip 0.260" wide x 0.063" thick; ± 0.005 " and be furnished in the specified lengths. The sensor shall include a 100-foot electrical coax-cable connected to one end. The coax-cable shall be RG 58 type with an underground/direct burial rated outer jacket. The OD of the cable is 0.187". The nominal capacitance of the cable is 27 pF/ft. Piezo lead-in cables are to be run splice free to their cabinets. Many installations exceed the 100-foot length so the piezo should be ordered with a lead-in of appropriate length. Standard lead-ins can be ordered from 100 to 500 feet in 50-foot increments. The manufacturer should be contacted regarding longer distances.

- 1. Piezoelectric Sensor: Roadtrax BL Class I or Approved Equal.** Furnish Class I Piezoelectric Sensor to be used to collect truck weigh-in-motion data. Class I sensors are typically furnished in 6- or 11-foot lengths. See Notes and Estimate of Quantities for sensor type and length. One installation bracket for every 6 inches of sensor length shall also be supplied.

The vendors listed below are known distributors of the Roadtrax BL Class I sensors. Other approved equal sensors may be furnished if approved by a representative of the

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Central Office, Division of Planning. To be considered approved equal, the sensors shall meet the above requirements and match the specified detailed dimensions.

DIA-L Associates
P. 3302 Aquia Drive
Stafford, VA 22554

Measurement Specialties, Inc.
80 Little Falls Road
Fairfield, NJ 07004

International Road Dynamics, Inc.
702 43rd Street East
Saskatoon, Saskatchewan
Canada, S7K3T9

Grout material shall display fast cure times; tack free in 10 minutes and open to traffic in 40 minutes with full cure within an hour. Material shall have excellent adhesion to concrete and asphalt. It should display excellent chemical resistance, water insensitivity, and thermal stability at high and low temperatures. Ample encapsulation material shall be supplied for each sensor for its proper installation. Approved encapsulation material by the piezo manufacturer includes AS475 Axle Sensor Grout or approved equal. This is a durable two-part resin-based grout suitable for asphalt and concrete applications having the following typical physical properties:

Compressive Strength (psi)	ASTM D638	5000 min.
Water Absorbtion	ASTM D570	0.3% max
Wear Resistance	ASTM D4060	CS10 wheel, 1000 gm load 1000 cycles, 186 mg loss

The vendors listed below are known distributors of the approved grout.

DIA-L Associates
P. 3302 Aquia Drive
Stafford, VA 22554
(540) 659-2264

Measurement Specialties, Inc.
80 Little Falls Road
Fairfield, NJ 07004

PAT Traffic Control Corporation
1665 Orchard Drive
Chambersburg, PA 17201

International Road Dynamics, Inc.
702 43rd Street East
Saskatoon, Saskatchewan
Canada, S7K3T9

III. CONSTRUCTION METHODS

The plans indicate the extent and general arrangement of the installation and are for general guidance. When the contractor deems any modifications of the plans or specifications necessary, details of such changes and the reasons shall be submitted in writing to the Resident Engineer for written approval prior to begin the modified work.

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Once the project has been let and awarded, the Division of Construction shall notify the Division of Planning of the scheduled date for a Pre-Construction meeting so that prior arrangements can be made to attend. This will allow the Division of Planning an opportunity to address their concerns and answer any questions that the contractor may have before beginning the work. Planning shall also be notified two weeks before work pertaining to these specifications begins to ensure their personnel are present during sensor installation and once the work has been completed so that their representative can perform a final inspection. The Division of Construction then reviews Planning's final inspection report and determine whether the work is in compliance with the specifications before awarding payment to the contractor.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Junction Box Type 6" x 6" x 4" or 10" x 8" x 4" (as noted). The contractor shall stub the rigid steel conduit to the junction box so the bottom of the box is approximately 18" above the ground. The junction box shall be located at or beyond the shoulder and mounted on the side of a post approximately 3 feet beyond the guardrail post using banding material or other appropriate mounting hardware with the hinge side up. See Figures 2a and 2b for additional details. Leave approximately 18" of slack lead-in wire coiled inside the junction box. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.

C. Junction Box Type A (or B or C). Install the Junction Box Type A near the edge of pavement and flush with the ground level (see Figure 3). Place roughly 18 inches of No. 57 aggregate underneath the junction box Type B to allow drainage. Extend the loop lead-in wires splice-free to the cabinet. Run the wire from the junction box Type A through the conduit at a minimum depth of 6 inches. Stub the conduit up into the junction box Type A from its base to accommodate the lead-in wires. Leave at least 2 feet of slack lead-in wire coiled inside the junction box Type A. The conduit fittings, backfilling, and aggregate shall be incidental to the junction box Type A. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.

D. Cabinet Type G. Locate the cabinet sufficiently beyond the roadside by determining the minimum clear zones in accordance with the "Roadside Design Guide". Place a concrete foundation of appropriate size for mounting the cabinet. The cabinet shall be mounted on the concrete base such that the bottom of the cabinet is 27" above the ground. The door of the cabinet shall open away from traffic. Fasten the cabinet to the foundation using anchor rods and caulk the gap between the cabinet and the base. Stub rigid conduit up into the cabinet from its base. Install an extra 1 1/4" conduit to be stubbed out in the bottom of the cabinet and run out 2 feet from the concrete base and plugged with duct seal or taped shut with electrical tape toward the roadway for future use. An 8' copper clad ground rod shall be driven into the soil and bonded to the rigid conduit via #4 solid copper wire and ran through the concrete and up into the cabinet. A 3/4" rigid steel conduit shall be stubbed up into the cabinet and run 2 feet up the electrical service pole

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and terminated to a ¾" weatherhead. This conduit shall be run in the same ditch as the electrical service. If electrical service is not provided as an item in the contract, the ¾" rigid steel conduit shall be run out 2 feet from the concrete base and plugged with plumbers putty or taped shut with electrical tape. The location of the plugged end shall be marked with a wooden stake and labeled "¾ in. conduit end" (see Figure 8). A 120-volt, 20-amp GFCI AC duplex receptacle shall be provided in the cabinet.

Leave at least 5 feet of slack lead-in wire in the cabinet. Include the following major items as incidental to the cost of the cabinet: concrete foundation, anchor rods, ground rod, #4 solid copper wire, bonding clamps, and caulking. The Division of Planning will supply additional harnesses and do final connections inside the cabinet. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.

E. Install Base Mount Enclosure. Locate the cabinet sufficiently beyond the roadside by determining the minimum clear zones in accordance with the "Roadside Design Guide". For this project, a base mount Model 170 Controller Cabinet, without anchor bolts, will be State-furnished. The contractor shall construct each cabinet foundation as shown on the plans per the attached Figures 9a and 9b, "Base Mounted 170 Cabinet Detail", (including furnishing and installing anchor bolts). Contractor shall install the cabinet on the concrete base such that the doors of the cabinet open away from traffic (hinges are away from traffic), and shall make all field wiring connections to the sensors, electrical and telephone services (as applicable). Fasten the cabinet to the foundation using anchor rods and caulk the gap between the cabinet and the base. Stub rigid conduit up into the cabinet from its base. Install an extra 1 ¼" conduit to be stubbed out in the bottom of the cabinet and run out 2 feet from the concrete base and plugged with duct seal or taped shut with electrical tape toward the roadway for future use. An 8' copper clad ground rod shall be driven into the soil and bonded to the rigid conduit via #4 solid copper wire and ran through the concrete and up into the cabinet. Two 1" rigid steel conduits shall be stubbed up into the cabinet, one for electrical service and one for telephone service (whether installed at this time or in the future). They shall be run a minimum of 2 feet up the electrical service pole and/or telephone source and terminated to 1" weatherheads. These conduits shall be run in the same ditch if possible. If electrical service is not provided as an item in the contract, the 1" rigid steel conduit shall be run out 2 feet from the concrete base and plugged with plumbers putty or taped shut with electrical tape. The location of the plugged end shall be marked with a wooden stake and labeled "1 in. conduit end". A 120-volt, 20-amp GFCI AC duplex receptacle shall be provided in the cabinet.

Leave at least 6 feet of slack sensor lead-in wire in the cabinet. Include the following major items as incidental to the cost of this bid item: concrete foundation, anchor rods and associated hardware, ground rod, #4 solid copper wire, bonding clamps, caulking, electrical material and connections (if applicable). The Division of Planning will supply the cabinet, additional harnesses and do final sensor connections inside the cabinet. Permanent identification numbers shall be affixed to all wires in each junction box and

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cabinet in order to distinguish between the loops and/or other sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.

F. Galvanized Steel Cabinet. The contractor shall determine the amount of clearance required from the road to the cabinet for each specific station location. The “Roadside Design Guide”, developed by the American Association of State Highway Officials (AASHTO), shall be used as a tool to determine roadside safety based on design and speed limit. The contractor and Planning shall discuss and resolve any conflicts in the Pre-Construction meeting that might arise from following the station descriptions of the Location Table.

Use terminal strips on the back plate with a minimum of eight terminals each and 7/16-inch spacing (center to center) to mount inside the cabinet in order to connect the lead-in wires to the cable assemblies. Use screw type terminal strips to accommodate wire with spade-tongue ends. Allow for at least 20 inches of slack lead-in wire in the cabinet before connecting them to the terminal strip. Wires connected to the terminal strips shall have insulated, solderless, spade tongue terminals of correct wire and stud size. Wires shall be labeled correctly. See Location Drawing and Wiring Table.

Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.

G. Wood Post. Set the treated-wood post 3 feet below the ground and place the backfill material in the hole, compacting until flush with the existing earth. Mount the cabinet to the post using 1/4" x 2 1/2" galvanized lag bolts at the top and bottom of the cabinet. The base of the cabinet shall be 4 feet above ground level. Stub the rigid steel conduit up into the base of the cabinet. Affix the conduit to the post using two conduit straps, a maximum of 18" on-center, and 1/4" x 2 1/2" galvanized lag bolts. Cabinet door shall open facing away from traffic (see Figure 7).

H. Conduit. Rigid steel waterproofed conduit encasement shall be provided for all conductors where conductors run to a junction box or cabinet. All conduit installations shall conform to the provisions of the NEC, except where directed otherwise. Bonded slip joints will be permitted for joining rigid conduit to the junction box or cabinet. Where a standard coupling cannot be used, an approved threaded union coupling shall be used.

All conduit ends shall be reamed to remove burrs and sharp edges. Damaged portions of the galvanized surfaces and untreated threads resulting from field cuts shall be painted with a rust inhibitive paint. Conduit bends shall have a radius of no less than 12 times the nominal diameter of the conduit, unless otherwise shown on the plans.

Conduit that will be subject to regular pressure from traffic shall be laid to a minimum depth of 24 inches below grade. Conduit that will not be subject to regular pressure from traffic shall be laid to a minimum depth of 6 inches below grade. All conduit openings

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shall be waterproofed with a flexible, removable sealant, including those ending in junction boxes and cabinets. This shall be accomplished using duct seal, or plumber's putty, by working it around the wires and then extending it 1 inch into the end of the conduit. After the conduit has been installed and before the backfilling is started, the conduit installation shall be inspected and approved by the Engineer. In backfilling trenches, the backfill material shall be placed and compacted in lifts of 9 inches or less. Any area disturbed as a result of the contractor's operations shall be restored to the satisfaction of the Engineer.

I. Wiring. All wiring shall conform to the provisions of the NEC unless otherwise shown on the plans. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing Figure 1 for sensor numbers to be placed on all lead-ins. All wiring shall be taken to a cabinet or junction box. Leave at least 2 feet of "slack" lead-in wire inside each Type B junction box and steel cabinet, a minimum of 4 feet of wire inside the Type G cabinet and a minimum of 6 feet of wire inside the base mounted Type 170 cabinet.

J. Splicing. Sensor lead-in cable lengths for each sensor shall allow sufficient but not excessive slack for splicing connections. All splices shall conform to the provisions of the NEC unless otherwise shown on the plans. Loop lead-in wire splices to shielded pair cables shall be twisted and soldered. Other splices shall be twisted and soldered or made with mechanical connectors of a type approved by the Engineer. Splices for loop wire shall be protected by either heat shrink tubing or a double spiral wrapping of vinyl electrical tape. For splicing home-run coax cable to the sensor's lead-in cable, the same coax cable, supplied by the manufacturer, shall be used. For coax-cable splices, the contractor shall provide kits (3M Scotchcast 3832 Buried Service Wire Encapsulation Kit or equal) to protect them. All splices are to be made in junction boxes unless approved by a representative of the Division of Planning.

K. Loops. A location table is furnished in the Supplemental Notes, along with an estimate of quantities, to display the approximate location for loop installation in the existing pavement. The contractor and a representative of Planning will verify the precise location on site. The contractor shall be careful to avoid expansion joints and pavement sections where potholes, cracks, or any other roadway flaws exist. This will not only facilitate installation of the equipment, but also will increase the accuracy and service life span of the sensors.

There shall be a minimum of 6 feet between loops in adjacent lanes for 12-foot wide lanes. Unless indicated otherwise, loops in the same lane shall be spaced 16 feet from leading edge to leading edge (see Figure 6). All loop dimensions shall be 6 feet by 6 feet square unless otherwise indicated by the Location Drawing. Center and mark each loop in the lane such that its sides are parallel and perpendicular to the direction of traffic. Make the saw-cut for the loop 1/4-inch wide and at a depth such that the top loop wire is a minimum of 1 inch below the surface of rigid (PCC/Concrete) pavement or 3 inches

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below the surface of asphalt pavement. Drill a 1.5" hole at all four corners of the loop to prevent sharp bends in the wire (see Figure 4).

Make the saw-cut for the home run slot 1/4 inch wide. Since it may contain several lead-in wires, the depth should be such that the top lead-in wire is a minimum of 1 inch below the surface of rigid (concrete) pavement or 3 inches below the surface of bituminous (asphalt) pavement. Depending on the number of road sensors at a particular site, the home run slot will gradually need to be cut deeper as you approach the shoulder in order to maintain the minimum depth for the top lead-in wire and directly enter the buried conduit (6 inch depth).

Clean the mud, debris, water, and loose particles from the slot, roadway and surrounding areas. A high-pressure washer shall be used to wash the area followed by clean (oil free) compressed air.

Measure out the appropriate length of loop lead-in wire to allow slack in the final cabinet or junction box. Insert the loop wire into the loop slot for four rotations (see Figure 5). Push the wire in with a wooden stick, such as a paint stir stick or other blunt wooden object. If the wire insulation is broken, apply heat shrink tubing or a double wrapping of vinyl electrical tape to protect from corrosion. Extend the loop lead-in wire splice-free to the junction box or cabinet. Exceptions to this shall be considered on a case-by-case basis and must be approved by the Engineer. If splices cannot be avoided, every effort shall be made to locate them in a junction box. If loop lead-in cable (Cable No. 14/1 Pair) is specified, loop wires shall be twisted and run to the nearest type Junction Box and the wires twisted and soldered to the lead-in cable. The lead-in cable shall then be run splice free to the cabinet ensuring that extra cable is left in each subsequent junction box that it may be run through as well as the cabinet. All wires and cables shall be labeled in each junction box and cabinet.

Twist each pair of loop lead-in wires, exclusive of shielded coax-cable, with three to five turns per foot before placement into the conduit, junction box, and cabinet. Do not twist different pairs of loop wire together. Once the loop wire is installed in the roadway, apply loop encapsulant by allowing the material to flow slowly into the saw-cut and settle until level with the road surface. Every attempt should be made to alleviate air pockets and low spaces should be refilled. Any excess loop encapsulant shall be cleaned from the roadway via squeegee, etc. to help alleviate tracking. The loop encapsulant shall be incidental to the bid item "Loop Saw Slot and Fill".

Loops shall be cut in the surface asphalt course. They shall not be installed between the intermediate and surface courses, unless approved by the Central Office, Division of Planning Equipment Branch.

All loop inductance readings shall be between 100 and 300 microhenries. The loop inductance between two loops in the same lane shall be within 20 microhenries of each other. Inductance loop conductors shall test free of shorts and unauthorized grounds. Upon completion of the project, all loops must pass an insulation resistance test of at least

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100 million ohms to ground when tested with a 500 Volt direct current potential in a reasonably dry atmosphere between conductors and ground.

L. Electrical Service. A treated-wood service pole, per Section 820 of the Department's Current Standard Specifications, with a 20-foot minimum length and a 6- to 12-inch diameter, or approved equal, is to be furnished by the Contractor. Install the electrical service pole adjacent to the cabinet at a depth of at least 4 feet while maintaining a 12-foot minimum clearance for the electrical service drop. Compact the backfill material to support the electrical service drop without leaning. Install an appropriate pole support guy wire and anchor if necessary. Install rigid conduit up the length of the pole with three separate insulated conductors (No. 4 copper wire) in the conduit and a weatherhead at the top.

Space the conduit straps 30 inches apart and leave 24 inches of cable for the drip loop. Install a meter-base and a disconnect panel with a 20-ampere circuit breaker inside. A 120-volt, 20-amp GFCI AC duplex receptacle shall be provided in the cabinet. A manufactured weatherproof hub connector is required to connect the meter-base to the disconnect panel. Do not use service entrance cable inside the conduit. The conduit from the disconnect panel is required to be at a depth of 6 inches below grade. Install a 5/8-inch by 8-foot ground rod below the finished grade. Extend the ground wire through a separate hole in the disconnect panel and clamp to the ground rod. Install a 1" rigid conduit to 2 feet above ground level and install a weatherhead at the top opening. This conduit shall be run to and stubbed up into the Cabinet. The conduit shall be attached to the pole at a minimum of 2" from ground level and 2" from the weatherhead.

M. Piezoelectric Sensor, Roadtrax BL Class I or Approved Equal. Determine where on the roadway the piezoelectric sensor will be installed. Roadway ruts shall not be in excess of 1/2 inch under a 4-foot straight edge. Install the piezoelectric sensor perpendicular to traffic. Locate the sensor in the lane as shown on the site detail sheet. Eleven-foot length sensors should be centered in the lane. The following is a typical step by step procedure for the installation of a piezoelectric sensor. Refer specifically to the manufacturer's current instructions provided with the sensor prior to installation.

1. Carefully mark the slot to be cut, perpendicular to the flow of traffic. Ensure that the sensors are properly positioned in the lane.
2. It is strongly recommended that a 3/4" wide diamond blade be used for cutting the slot, or that blades be ganged together to get a single 3/4 inch wide cut. The slot shall be wet cut to minimize damage to the road.
3. Cut a slot 3/4 inch wide ($\pm 1/16$ ") by 1" minimum deep. The slot should be 8" longer than the sensor (including the lead attachment). Drop the saw blade an extra 1/2" down on both ends of the sensor. The lead out should be centered on the slot.
4. Cut the home-run slot for the coax-cable 1/4-inch wide and at a depth so that the cable is a minimum of 1 inch below the road surface in rigid pavement (concrete) or 3 inches below the road surface in bituminous (asphalt) pavement.
5. Sweep and wash out all debris left in the slot and ensure it is clean and dry.

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6. Use high pressure water, or water and oil-free compressed air to clean ALL foreign and loose matter out of the slot and within 1 foot on all sides of the slot.
7. Totally remove excess water and debris from roadway and shoulder area. Debris should be disposed of properly.
8. Carefully dry the slot, and within 1 foot on all sides of the slot, using oil-free forced air, torpedo heaters, electric heaters, or natural evaporation, depending on weather conditions. Be very careful not to burn the asphalt if heat is used.
9. Place a strip of duct tape on the pavement along the length of both sides of the sensor slot. Place the 2-4" wide duct tape 1/8" away from the slot.
10. Remove BL sensor from the box. Visually inspect each sensor to ensure it is straight without any twists or curls. Check lead attachment and passive cable for cuts, gaps, cracks and/or bare wire. Verify the correct sensor (type and length) is being installed by checking the data sheet. Verify there is sufficient cable to reach the cabinet.
11. Test the sensor for Capacitance, Dissipation Factor and Resistance, according to the directions enclosed with the sensor. Capacitance and dissipation should be within $\pm 20\%$ of the enclosed data sheet. Resistance (using the 20M setting) should be infinite. Record the sensor serial number and the test results. This information should be stored in the counter cabinet and/or returned to KYTC Planning personnel.
12. Lay the sensor on the tape next to the slot. Ensure that the sensor is straight and flat. Ensure that you are wearing clean protective latex (or equivalent) gloves at all times when handling sensors.
13. Clean sensor with steel wool or emery pad. Wipe down with alcohol and clean lint-free cloth.
14. Place the installation bracket clips on the sensor, about every 6" for the length of the sensor.
15. Bend the end of the sensor downward at a 30° angle. Bend the lead attachment end down at a 15° angle and then 15° back up until level (forming a lazy Z)
16. Place the sensor in the slot, with the brass element $3/8$ " below the road surface along the entire length. The end of the sensor should be at least 2" from the end of the slot and the tip should not touch the bottom of the slot. The top of the plastic installation bracket clips should be $1/8$ " below the surface of the road. The lead attachment should also not touch the bottom or sides of the slot. Ensure the ends of the sensors are pushed down sufficiently per the manufacturer's instructions.
17. Visually inspect the length of the sensor to ensure it is at uniform depth along its length and it is level (not twisted, canted or bent).
18. Block off the ends of the slot using plumbers putty. Ensure that there are adequate "dams" at both ends so that the encapsulation material does not flow out. On the passive cable end, the dam should be about 3-5" past the end of the lead attachment area.
19. The encapsulation material should be placed full depth, overfilled, and allowed to cure 10 minutes before shaving level with the surface. Ensure it fills around and underneath the sensor completely and there is not a trough on top.
20. Remove the tape on the sides of the sensor as soon as the adhesive starts to cure.
21. Carefully remove all the plumbers putty from ends of the sensor.

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22. Route the lead in cable through the slot cut for it, and cover with approved loop sealant.
23. After the encapsulant has hardened, grind the top of the installation using an angle grinder. The profile should be flush with the road surface or with a slight, 1/16" mound. There shall be no concave portion to the mound.
24. Clean up the site. Sealant curing time varies with temperature and humidity. Contractor shall ensure that the complete curing of the encapsulation material has taken place prior to subjecting the sensors to traffic.

After the installation is complete, the minimum output voltages of each piezoelectric sensor shall meet the following: 1.5 Volts (peak) for a 10,000 pound axle and 200 millivolts (peak) for a car axle. The piezoelectric sensor lead-in cable is part of the sensor and can be ordered in different lengths (100' standard). Piezoelectric sensor lead-in cable shall not be spliced.

N. Cleanup and Restoration. The contractor will be responsible for all damage to public and/or private property resulting from his work. Upon completion of the work, restore all disturbed highway features in like kind design and materials. This includes any filling of ruts and leveling ground appropriately. Clean the site and dispose of all waste and debris off the right-of-way at sites obtained by the contractor at no additional cost to the Department. Sow all disturbed earthen areas with Seed Mixture No. I per Section 212.03.03 Permanent Seeding and Protection of the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Current edition.

O. On-Site Inspection. Each contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize themselves with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. The Department will not honor any claims resulting from site conditions.

P. Property Damage. The contractor will be responsible for all damage to public and/or private property resulting from his work.

Q. Caution. Information shown on the plans and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown.

R. Utility Clearance. It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the contractor while relocating their facilities.

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S. Site Inspections. All sensors are to be tested by a member of the Central Office Division of Planning equipment staff after the installation is complete to verify that the station is operating properly. Tests shall demonstrate that the system operates in accordance with the plans and specifications. Inductance loop conductors shall test free of shorts and unauthorized grounds and shall have an insulating resistance of at least 100 megaohms when tested with a 500 volt direct current potential in a reasonably dry atmosphere between conductors and ground. If the sensors do not meet the specifications and/or KYTC's traffic recording equipment does not perform properly because of an improperly functioning sensor, the contractor shall be responsible for the replacement of the faulty sensor(s), as soon as practicable at their total cost.

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IV. BID NOTES AND METHOD OF MEASUREMENT FOR PAYMENT

Only the bid items listed will be measured for payment. All other items required to complete the vehicle detection installation shall be incidental to the other items of work. Payment at the contract unit price shall be full compensation for all materials, labor, equipment and incidentals to furnish and install these items.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Junction Box Type 6" x 6" x 4" (or Type 10" x 8" x 4" if noted). Each type junction box shall include furnishing and installing specified junction box in accordance with the specifications. This item includes connectors, splice sleeves, conduit fittings, mounting materials and any other items required to complete this part of the installation. Incidental to this item is furnishing and installing any specified post (wood, channel, metal, etc.) as required for the installation.

C. Junction Box Type A (B or C). Each type junction box shall include furnishing and installing specified junction box in accordance with the specifications. This item includes concrete (if required), #57 aggregate, conduit fittings and backfilling around the unit.

D. Cabinet Type G (NEMA-3R). Cabinet (each) shall include furnishing and installing a Type G cabinet as specified. This item shall include constructing the concrete base or mounting cabinet to pole, installation of duplex receptacle and connection of all detectors (where applicable). Incidental to this item shall be furnishing, installing electrical service conductors, conduits, fused cutout, ground rods, all internal shelving, brackets, any necessary pole mounting hardware and electrical inspection fees.

E. Install Base Mount Enclosure. Install base mount enclosure (each) shall include installing a State-furnished cabinet or enclosure as specified. This item shall include all materials and labor for constructing the concrete base (or, if specified, mounting cabinet to pole), installation of the cabinet, duplex receptacle and connection of all detectors (where applicable). Incidental to this item shall be furnishing, installing electrical service conductors, conduits, fused cutout, ground rods, telephone service conduits from the cabinet to the telephone company disconnect box, all internal shelving, brackets, anchor bolts, any necessary pole mounting hardware and electrical inspection fees if applicable.

F. Galvanized Steel Cabinet. Cabinet (each) shall include furnishing and installing a galvanized steel cabinet and post(s) as specified on the drawing. This item shall include mounting the cabinet to post and the connection of all detectors. Incidental to this item shall be furnishing and installing conductors, conduit, ground rods, any necessary pole mounting hardware and any electrical inspection fees.

G. Wood Post. Wood post (each) shall include furnishing and installing a wood post as specified. This item includes excavation, concrete (if required), and backfilling around the unit.

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H. Conduit. Conduit shall include furnishing and installing specified conduit in accordance with specifications. This item includes conduit fittings, bodies, boxes, expansion joints, couplings, duct seal, bonding straps and any other necessary hardware. Conduit will be measured in linear feet.

I. Wire (or Cable). Wire or cable shall include furnishing and installing specified wire or cable within conduit, saw slot, or overhead as indicated on the detail sheets. This can include, but is not limited to: loop wire, Cable No. 14/1 Pair, etc. Incidental to this item shall be the labeling of all wires and cables in each junction box, cabinet and splice box; furnishing and installing of splice boots, cable rings or other hardware required for installing cable. Loop wire and cable will be measured in linear feet.

J. Loop Saw Slot and Fill. Loop saw slot and fill shall include sawing, cleaning and filling saw slots for induction loops, lead-in wires, etc. with loop sealant or specified approved material. Sawing and filling slot for wire will be measured in linear feet.

K. Trenching and Backfilling. Trenching and backfilling shall include excavation, backfilling, temporary erosion control, seeding, protection and restoration of disturbed areas to original condition. This item includes concrete, asphalt or approved replacement material for sidewalks, curbs, roadways, etc. (if required). Trenching and backfilling will be measured in linear feet.

L. Electrical Service. Electrical services shall include all related work, labor, materials (e.g. meter, straps, conduit, fittings, wire, etc.) and fees towards furnishing and installing an electrical service, which has passed all required inspections. This will be measured in individual units each.

M. Telephone Service. Telephone services shall include all related work, labor, materials (e.g. meter, straps, conduit, fittings, wire, etc.) and fees towards furnishing and installing a telephone service, which has passed all required inspections. This will be measured in individual units each.

N. Piezoelectric Sensor or Approved Equal. Piezoelectric sensor (each) shall include furnishing and installing a Class I Piezoelectric Sensor in accordance with the specifications. Lead-in wire, splice kits, encapsulation material, grout, testing, and accessories shall be incidental to this bid item.

REFERENCES

1. Kentucky Transportation Cabinet, Department of Highways Standard Specifications for Road and Bridge Construction, Current edition, and Supplemental Specifications.
2. National Electrical Code (NEC), latest edition.
3. International Municipal Signal Association (IMSA) Specification No. 51-7- latest edition.
4. FHWA Manual of Uniform Traffic Control Devices, latest edition.
5. "Roadside Design Guide", developed in 1996 by the American Association of State Highway and Transportation Officials (AASHTO).
6. Kentucky Department of Highways Standard Drawings, current editions, as applicable:

TTC-115	Lane Closure Case II
TTC-135	Shoulder Closure
TTD-100	Miscellaneous Traffic Control Devices (sheet 1)
TTD-105	Miscellaneous Traffic Control Devices (sheet 2)
TTD-110	Post Splicing Detail
TTD-115	Flashing Arrow

7. Kentucky Department of Highways Sepia Drawings:

Silt Fence

Updated: April 11, 2006

GENERAL NOTES
JEFFERSON COUNTY – KY 1747
TRAFFIC DATA COLLECTION STATIONS
STA. 023 (MP 11.18)
STA. A47 (MP 11.65)
STA. A53 (MP 12.06)

GENERAL NOTES:

The Division of Planning needs to re-establish traffic data collection stations within the construction project in Jefferson Co. on KY 1747. The Division of Planning traffic data collection station is to be installed at the following sites:

1. STA. 023 at mile point (MP) 11.18
2. STA. A47 at mile point (MP) 11.65
3. STA. A53 at mile point (MP) 12.06

Contractor will proceed with the installation of traffic sensors once the resurfacing project is completed. Exact site location will be determined in the field. Contractor shall install two (2) loop sensors in each lane.

Contractor shall install a total of twelve (12) loop sensors in the roadway at station 023 as shown in figure 1, and ten (10) loop sensors in the roadway at station A47 as shown in figure 1a, and twelve (12) loop sensors in the roadway at station A53 as shown in figure 1b. The loop lead-in wires will be run splice-free to a cabinet off the shoulder as indicated in the attached drawings. The contractor will provide and use all new materials for this reconstruction.

Installation shall be coordinated with and approved by appropriate Division of Planning staff. Reference “Special Notes for Installation of Traffic Counting Inductance Loops” for materials, construction and installation details and standard details for installation of Traffic Counting Inductive Loops and Axle Sensors. Also see the Standard Details for Installation of Traffic Counting Inductance Loops and Axle Sensors, Location Drawings, Location Table and Estimate of Quantities, in regard to this specific project.

Note:

The Special Notes for Installation of Traffic Counting Inductance Loops and Axle Sensors are generic. Only the sections that pertain to the specified location and the bid items listed in this summary are applicable.

SPECIAL NOTES:

The mile points listed in the proposal are approximate only. The Engineer, in coordination with the Central Office Division of Planning, will designate the exact location at the time of construction. See Site Drawing sheets for more detail as to where each site is to be located.

Notify the Central Office Division of Planning (502-564-7183, Equipment Management Team) a minimum of 14 days prior to beginning work in order for them to have the option to be present during sensor installation. The Engineer will contact and maintain liaison with the District Planning Engineer and the Central Office Division of Planning in order to coordinate the work.

LOCATION TABLE
JEFFERSON COUNTY – KY 1747
TRAFFIC DATA COLLECTION STATIONS
STA. 023 (MP 11.18)
STA. A47 (MP 11.65)
STA. A53 (MP 12.06)

LOCATION TABLE:

STATION	DESCRIPTION	LOOP STATION LIMITS	LOOP LOCATION	LANES	LOOPS	PROJECT MP LIMITS
023	2 Loops per Lane	11.029-11.634	11.18	6	12	
A47	2 Loops per Lane	11.634-11.918	11.65	5	10	
A53	2 Loops per Lane	11.918-12.289	12.06	6	12	

LOOP STATION 023 is located on KY 1747 MP 11.18. This station has six (6) lanes of traffic. Each lane will have a loop-loop configuration of sensors installed as depicted in Figure 1. The contractor shall install the sensors in each lane and run the loop lead-in wires splice-free to the 10”x8”x4” cabinet mounted as depicted in Figure 1. All new materials shall be utilized for this reconstruction except for the wood posts which may be reused.

ESTIMATE OF QUANTITIES:

CODE	DESCRIPTION	UNIT	QUANTITY
4793	1-1/4” RIGID STEEL CONDUIT	LIN FT	48
4820	TRENCHING AND BACKFILLING	LIN FT	40
4830	LOOP WIRE	LIN FT	1720
4895	LOOP SAW SLOT AND FILL	LIN FT	356
20468EC	JUNCTION BOX 10x8x4	EACH	2

LOOP STATION A47 is located on KY 1747 MP 11.65. This station has five (5) lanes of traffic. Each lane will have a loop-loop configuration of sensors installed as depicted in Figure 1a. The contractor shall install the sensors in each lane and run the loop lead-in wires splice-free through the junction box to the 10”x8”x4” cabinets mounted as depicted in Figure 1a. All new materials shall be utilized for this reconstruction except those listed in Figure 1a.

ESTIMATE OF QUANTITIES:

CODE	DESCRIPTION	UNIT	QUANTITY
4793	CONDUIT 1-1/4 INCH	LIN FT	64
4820	TRENCHING AND BACKFILLING	LIN FT	60
4830	LOOP WIRE	LIN FT	1612
4895	LOOP SAW SLOT AND FILL	LIN FT	320
20391ES835	TYPE-A JUNCTION BOX	EACH	1
20468EC	JUNCTION BOX 10x8x4	EACH	1

LOOP STATION A53 is located on KY 1747 MP 12.06. This station has six (6) lanes of traffic. Each lane will have a loop-loop configuration of sensors installed as depicted in Figure 1. The contractor shall install the sensors in each lane and run the loop lead-in wires splice-free to the 10"x8"x4" cabinet mounted on 4"x4" wood posts as depicted in Figure 1. All new materials shall be utilized for this reconstruction.

ESTIMATE OF QUANTITIES:

CODE	DESCRIPTION	UNIT	QUANTITY
4793	1-1/4" RIGID STEEL CONDUIT	LIN FT	48
4820	TRENCHING AND BACKFILLING	LIN FT	40
4830	LOOP WIRE	LIN FT	1720
4895	LOOP SAW SLOT AND FILL	LIN FT	356
20468EC	JUNCTION BOX 10x8x4	EACH	2

Contractor is responsible for the above materials listing. Specifications on materials and installation instructions for loops are found in the Special Notes for Installation of Traffic Counting Inductance Loops and Axle Sensors.

**SPECIAL NOTE FOR AUTOMATIC TRAFFIC RECORDER
INDUCTANCE LOOPS**

Existing traffic counting inductance loops are within the construction limits of this project. Notify the Engineer in writing, a minimum of 14 days prior to beginning any work. Install and test the new loops after milling and leveling and wedging, if applicable, and prior to resurfacing.

The Engineer will contact and maintain liaison with the District Planning Engineer and the Division of Planning in order to coordinate any necessary work.

1-3891 atrplanningloops
07/21/03

SPECIAL NOTES FOR TRAFFIC SIGNAL LOOP DETECTORS

The Contractor is advised there are existing traffic signal loop detectors within the construction limits of the subject project. Notify the Engineer in writing, (2) weeks prior to beginning any work on the project.

The Engineer will contact and maintain liaison with the District Traffic Engineer to coordinate any necessary work.

1-3892 trafficsignalloops
07/21/03

SPECIAL NOTES FOR TRAFFIC SIGNAL LOOP REPLACEMENT

I. DESCRIPTION. Loop replacement shall be performed in accordance with the Department's Standard Specifications (current edition), applicable Standard Drawings, and applicable Special Provisions except as hereafter specified. Article references are to the Standard Specifications.

The Contractor shall furnish all materials, labor, and equipment for the replacement of traffic signal loop(s), and junction boxes (if the contract specifies quantities for this bid item elsewhere), and maintaining and controlling traffic, and all other work specified as part of this contract.

II. MATERIALS. All wire and cable shall be plainly marked in accordance with the provisions of the national electrical code.

Conduit shall be rigid steel. All rigid steel conduit shall be galvanized inside and out and shall conform to the Underwriters' Laboratories requirements for rigid metallic conduit.

Loop wire shall be #14 AWG IMSA Spec 51-7.

Loop lead-in cable shall be #14 AWG stranded, paired conductors, electrically shielded and conforming to IMSA 19-2-1984.

III. CONSTRUCTION. The electrical contractor shall coordinate with the general contractor and inspector to ensure the loops are installed prior to any milling work being performed.

All wiring shall conform to the provisions of the National Electrical Code unless otherwise shown on the details. Where more than one circuit is installed within the same conduit, permanent circuit identification numbers shall be affixed to the wires. All wires shall be permanently labeled within 6 inches of the input file.

Rigid steel conduit encasement shall be provided for all conductors except for overhead installations, where conductors are run inside poles or cabinets and induction loop conductors sealed within pavements. All conduit installations shall conform to the provisions of the National Electrical Code except where directed otherwise. Bonded slip joints will be permitted for joining rigid conduit to junction boxes. Where a standard coupling cannot be used, an approved threaded union coupling shall be used.

All conduit ends shall be reamed to remove burrs and sharp edges. Damaged portions of the galvanized surfaces and untreated threads resulting from field cuts shall be painted with a rust inhibitive paint. Conduit bends shall have a radius of not less than 12 times the nominal diameter of the conduit, unless otherwise shown on the plans. See Typical Grounding Detail.

Conduit which will not be subjected to regular pressure from traffic shall be laid to a depth of not less than 18 inches. At crossings under roadway surfaces and shoulders, the conduit shall be placed at a depth of not less than 24 inches below grade. The contractor will not be permitted to cut any pavement in carrying out conduit installations. After the conduit has been installed and prior to backfilling, the conduit installation shall be inspected and approved by the Engineer.

Contractor shall install underground utility warning tape above the circuit cables as shown on the detail sheets. The tapes shall conform to the APWA-ULCC national color code with black lettering on a red background. The tape shall continuously read "Caution: Electric Line Buried Below" alternating with a 'No Digging' symbol.

The tape shall be durable and colorfast to withstand years of underground burial and easily direct buried. The tape shall be 6" wide and 7 mils (nominal) thick. The tape shall have a minimum tensile strength of 600 lbs./6" width. It shall be color code impregnated with alkali and acid stable, lead-free, organic pigments for direct burial. It shall be ultraviolet colorfast. The tape shall be nondistorting with no elongation.

When backfilling trenches, the backfill material shall be placed and compacted in lifts of 9 inches or less. Any area disturbed as a result of the contractor's operations shall be restored to the satisfaction of the Engineer.

Loop lead-in wire, exclusive of shielded cable, shall be twisted with three to five turns per foot before placement in saw slot, conduit or junction box. Unshielded loop wiring to field terminal connections in cabinet and unshielded loop wiring in loop amplifier connector harness shall also be twisted three to five turns per foot.

Except for the connection of the loop wires to the loop lead-in wires, loops shall be extended splice-free to the controller. Loop wires shown as extended to poles or junction boxes shall be spliced into loop lead-in cable at the poles or boxes. Loop lead-in cable shall be extended splice-free from pole or junction box to controller. Each loop shall have a separate lead-in cable installed. Multiple loops on the same lead-in cable will not be accepted. Splices shall be placed to minimize possibility of water intrusion. The electrical contractor shall coordinate the installation of traffic loops with the paving contractor and the Engineer prior to milling.

Junction boxes shall conform to ANSI/SCTE 77 "Specifications for Underground Enclosure Integrity" for Tier 15. Covers shall have a minimum coefficient of friction of 0.05 in accordance with ASTM C1028, shall be marked "TRAFFIC" and be attached with 3/8 " stainless hex bolts. Junction boxes shall be installed flush with finished grade. See Junction Box Type B detail.

All splices shall be made with butt splices. Butt splices shall be copper and of the correct wire range. Butt splices shall be covered with a 3M Mastic Pad or approved equal and then taped with a 3M brand #33 electrical tape. Mastic pad must cover at least 3 inches past each end of butt splice. Underground splices include splices in junction boxes and

pole bases. Each conductor shall be encased in a separate splice kit. Cost of the splices shall be incidental to the cost of wire or cable. The splicing specification listed here takes precedence over any other splicing specifications listed in the Standard Specifications for Road and Bridge Construction.

Induction loop conductors shall test free of shorts and unauthorized grounds and shall have an insulating resistance of at least 100 megohms when tested with a 500 volt direct current potential in a reasonably dry atmosphere between conductors and ground.

Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a Contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department.

Information provided in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown.

It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities.

The Contractor will be responsible for all damage to public and/or private property resulting from his work. Upon completion of the work, restore all disturbed highway features in like kind design and materials. Clean the site and dispose of all waste and debris off the right-of-way at sites obtained by the Contractor at no additional cost to the Department. Sow all disturbed earthen areas with Seed Mixture No. 1.

IV. MEASUREMENT.

Conduit shall include furnishing and installing specified conduit in accordance with specifications. This item includes conduit fittings, expansion joints, clamps, and weatherheads.

Junction box shall include furnishing and installing specified junction box in accordance with the specifications and shown on the Junction Box Type B detail. This item includes #57 aggregate, backfilling, and the restoration of disturbed areas to the satisfaction of the Engineer.

Trenching and backfilling shall include excavation, backfilling, and the restoration of disturbed areas to the satisfaction of the Engineer. Incidental to this item shall be

furnishing and installing underground utility warning tape as shown on the Depth of Conduit detail.

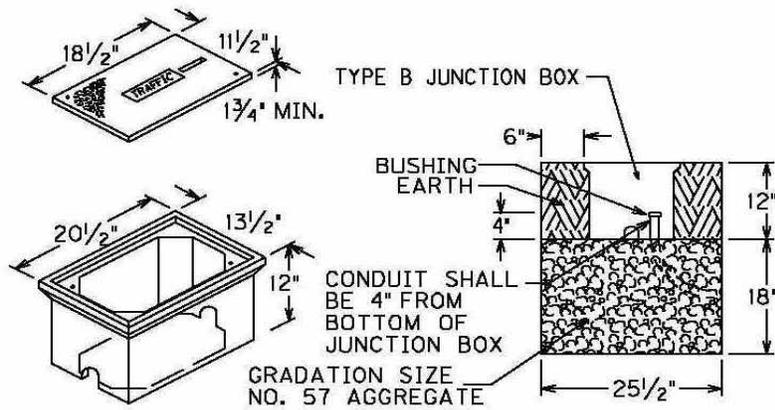
Wire or cable shall include furnishing and installing specified wire or cable within conduit, saw slot, or overhead as required. Incidental to this item shall be furnishing and installing splice boots, cable rings or other hardware required for installing cable. Wire installed in saw slots shall be installed as shown on the Saw Slot detail. The contractor shall install all cable runs splice-free from the controller to each loop wire the cable is feeding. Exceptions to this must be approved by the Engineer. The removal of existing lead-in cable shall be incidental to this item. The removal of existing lead-in cable shall be incidental to this item.

Loop saw slot and fill shall include sawing, cleaning saw slot as well as furnishing and installing loop sealant, backer rod and non-shrink grout as shown on the details. The contractor shall saw according to the dimensions shown on the detail sheets and not cut out any sections of pavement by over-sawing any slot. The 3/4" conduit referenced in the Loop Wire Transition details is incidental to this project and not a separate pay item.

V. PAYMENT. The Department will make payment for completed and accepted quantities under the following:

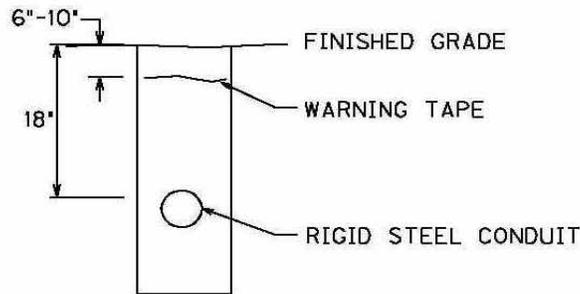
Code	Pay Item	Pay Unit
4793	Conduit 1 1/4"	Linear Foot
4795	Conduit 2"	Linear Foot
4811	Junction Box Type B	Each
4820	Trenching and Backfilling	Linear Foot
4830	Loop Wire	Linear Foot
4850	Cable-No. 14/1 Pair	Linear Foot
4895	Loop Saw Slot and Fill	Linear Foot

Revised: Nov 07

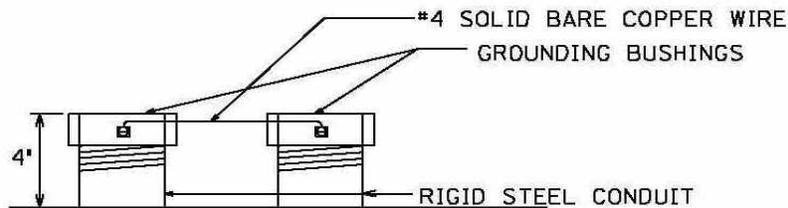


JUNCTION BOXES SHALL CONFORM TO ANSI/SCTE 77 "SPECIFICATIONS FOR UNDERGROUND ENCLOSURE INTEGRITY" FOR TIER 15. COVERS SHALL HAVE A MINIMUM COEFFICIENT OF FRICTION OF 0.05 IN ACCORDANCE WITH ASTM C1028, SHALL BE MARKED "TRAFFIC" AND BE ATTACHED WITH 3/8" STAINLESS HEX BOLTS. JUNCTION BOXES SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.

JUNCTION BOX TYPE B

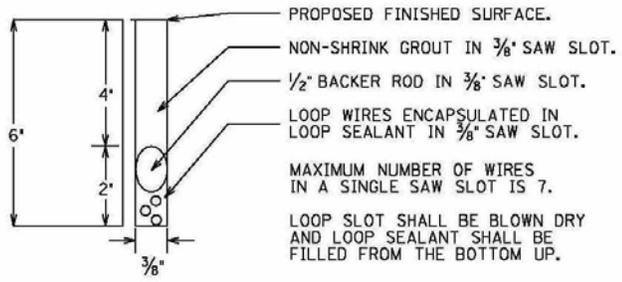


DEPTH OF CONDUIT

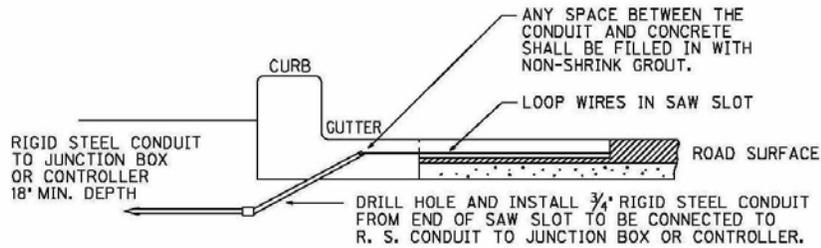


TYPICAL GROUNDING DETAIL

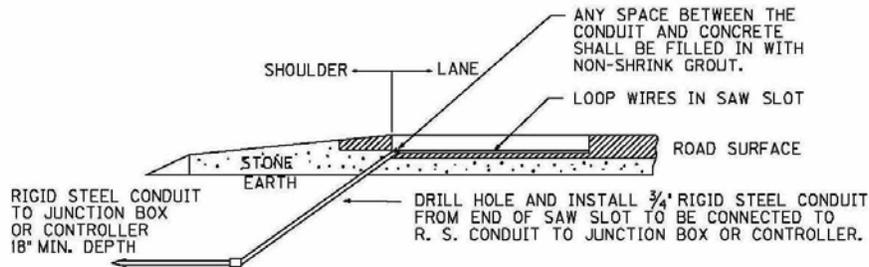
LOOP WIRES SHALL BE ENCAPSULATED WITH LOOP SEALANT PER MANUFACTURER'S INSTRUCTIONS. ALL LOOP SEALANT SHALL BE COVERED WITH A CONTINUOUS LAYER OF BACKER ROD. BACKER ROD SHALL BE INSTALLED SUCH THAT NO VOIDS ARE PRESENT BETWEEN LOOP SEALANT AND BACKER ROD. FILL REMAINING SAW SLOT WITH NON-SHRINK GROUT PER MANUFACTURER'S INSTRUCTIONS.



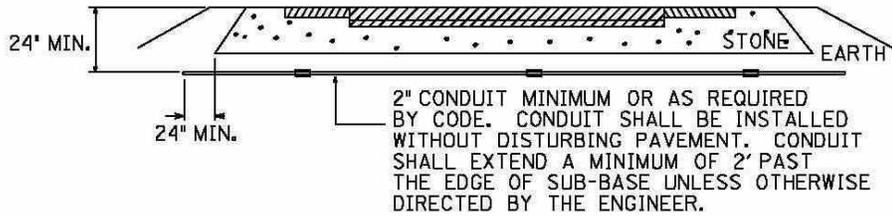
SAW SLOT DETAIL



LOOP WIRE TRANSITION - CONCRETE CURB



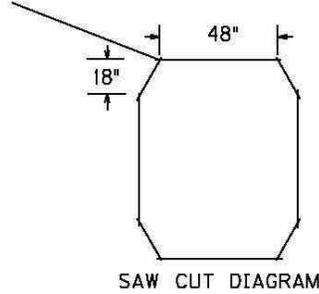
LOOP WIRE TRANSITION - FLAT SHOULDER



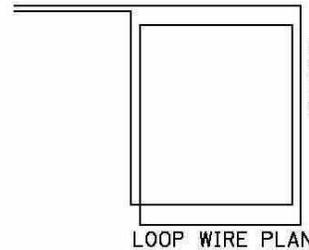
CONDUIT UNDER EXISTING PAVEMENT DETAIL

LOOP LEAD-IN WIRES SHALL BE TWISTED WITH THREE TO FIVE TURNS PER FOOT UNTIL TERMINATED AT FIELD CONNECTIONS IN THE CABINET OR CONNECTED TO SHIELDED CABLE.

TO PULL BOX AND/OR CONTROL BOX



TO PULL BOX AND/OR CONTROL BOX



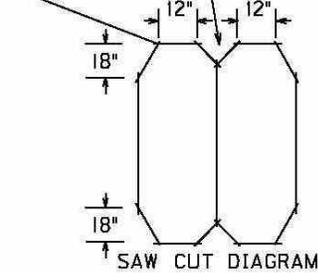
STANDARD LOOP

•ALL 6'x6' LOOPS SHALL BE STANDARD

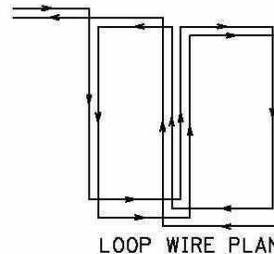
LOOP LEAD-IN WIRES SHALL BE TWISTED WITH THREE TO FIVE TURNS PER FOOT UNTIL TERMINATED AT FIELD CONNECTIONS IN THE CABINET OR CONNECTED TO SHIELDED CABLE.

DO NOT SAW CUT MIDDLE SECTION (TYP.)

TO PULL BOX AND/OR CONTROL BOX

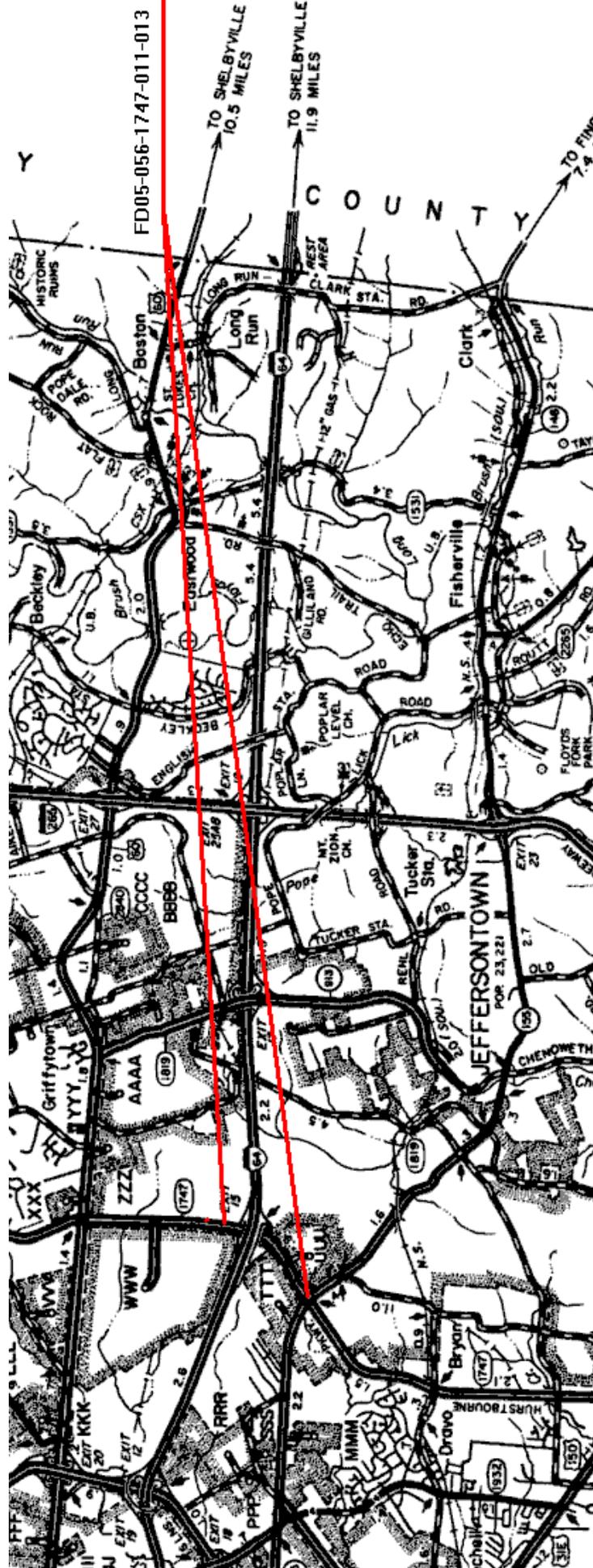


TO PULL BOX AND/OR CONTROL BOX



QUADRAPOLE LOOP

•ALL 6'x30' LOOPS SHALL BE QUADRAPOLE



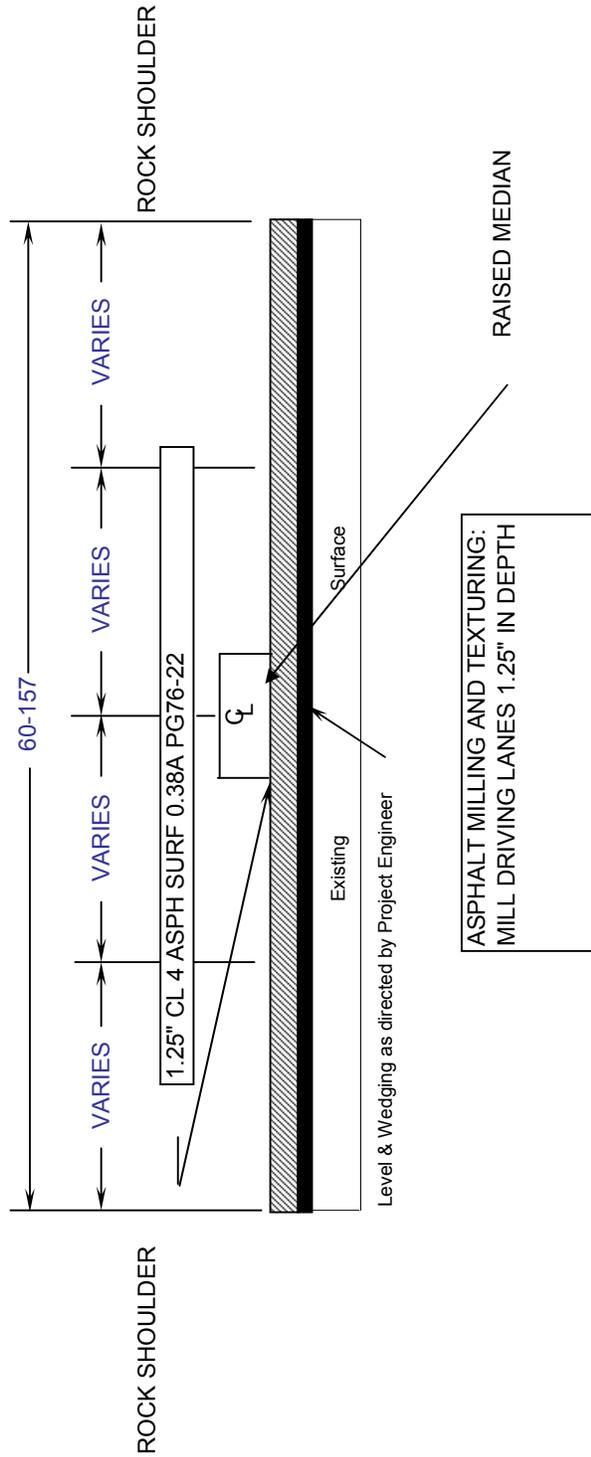
THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY

MPT.	INTERSECTION	X-WALKS STP BARS		CURVE		ARROWS		COMB		"ONLY"		ISLAND		RAILROAD		NOTES
		6 INCH LF	24 INCH LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	
11.254				1												
11.267				1												
11.276	SHOPPING CENTER		48													
11.283	SHOPPING CENTER	200														
11.293	SHOPPING CENTER	200														
11.296			48													
11.298				2												
11.309				2												
11.33				2												
11.349				2												
11.368				2												
11.386				2												
11.405				2												
11.425				2												
11.441				2												
11.451	BUNSEN WAY		48													
11.454	BUNSEN WAY	200														
11.474	BUNSEN WAY	200														
11.476	BUNSEN WAY		72													
11.484				3												
11.511				3												
11.628				36												
11.63	BLUEGRASS PARKWAY	200														
11.65	BLUEGRASS PARKWAY	200														
11.655	BLUEGRASS PARKWAY		60													
11.663				2												
11.68				2												
11.823	I-64 RAMP		36													
11.84	I-64 RAMP		12													
11.85				2												
11.9										2						
11.91				2												
11.922										2						
11.93				2												
11.941										2						
11.951				2												
11.962										2						
11.972				2												
11.98	I-64 RAMP		60													
11.985	TURN LANE I-64		24													
12.1				2												
12.13										1						
12.132				2												
12.138										2						
12.143				2												
12.151			24													
12.165										2						
12.17				3												
12.173			36													
12.246										3						
12.251										2						

TYPICAL SECTION

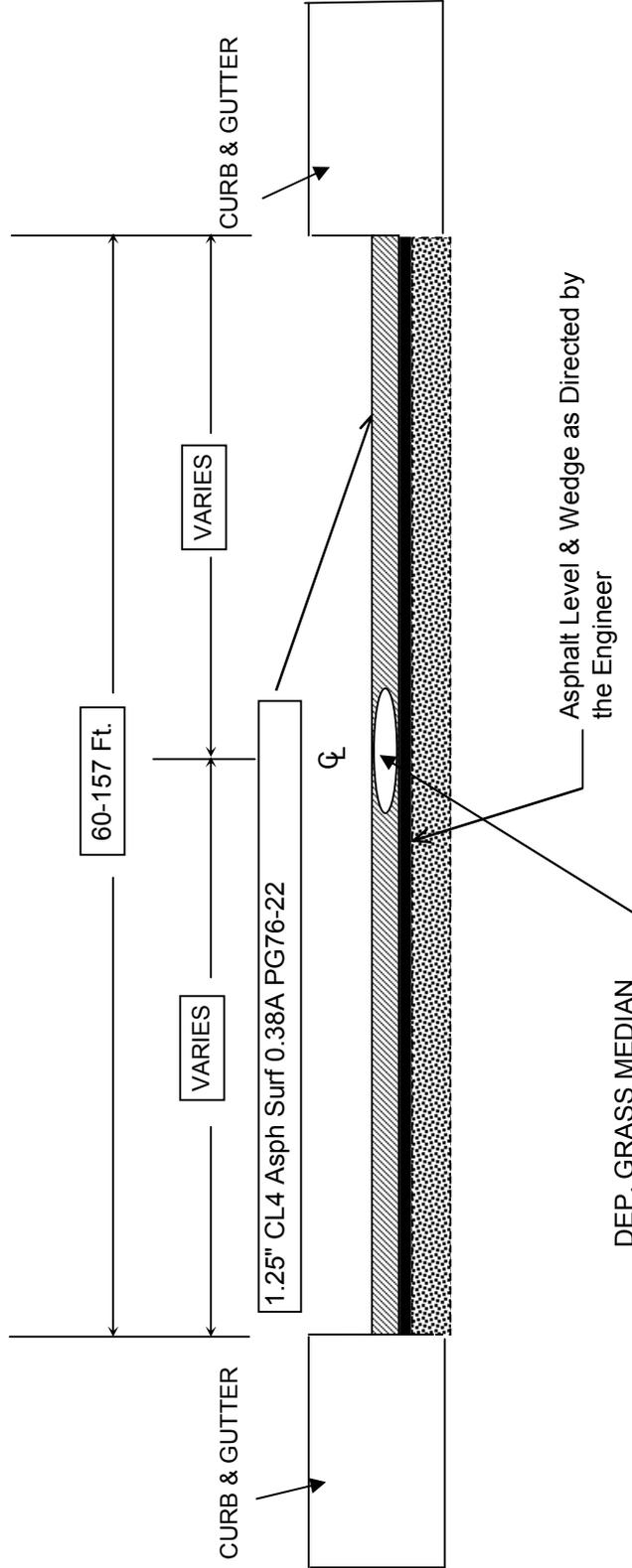
JEFFERSON

FD05-056-1747-011-013
MP 11.030-11.115



TYPICAL SECTION

JEFFERSON COUNTY
FD05-056-1747-011-013
MP 11.115-11.173

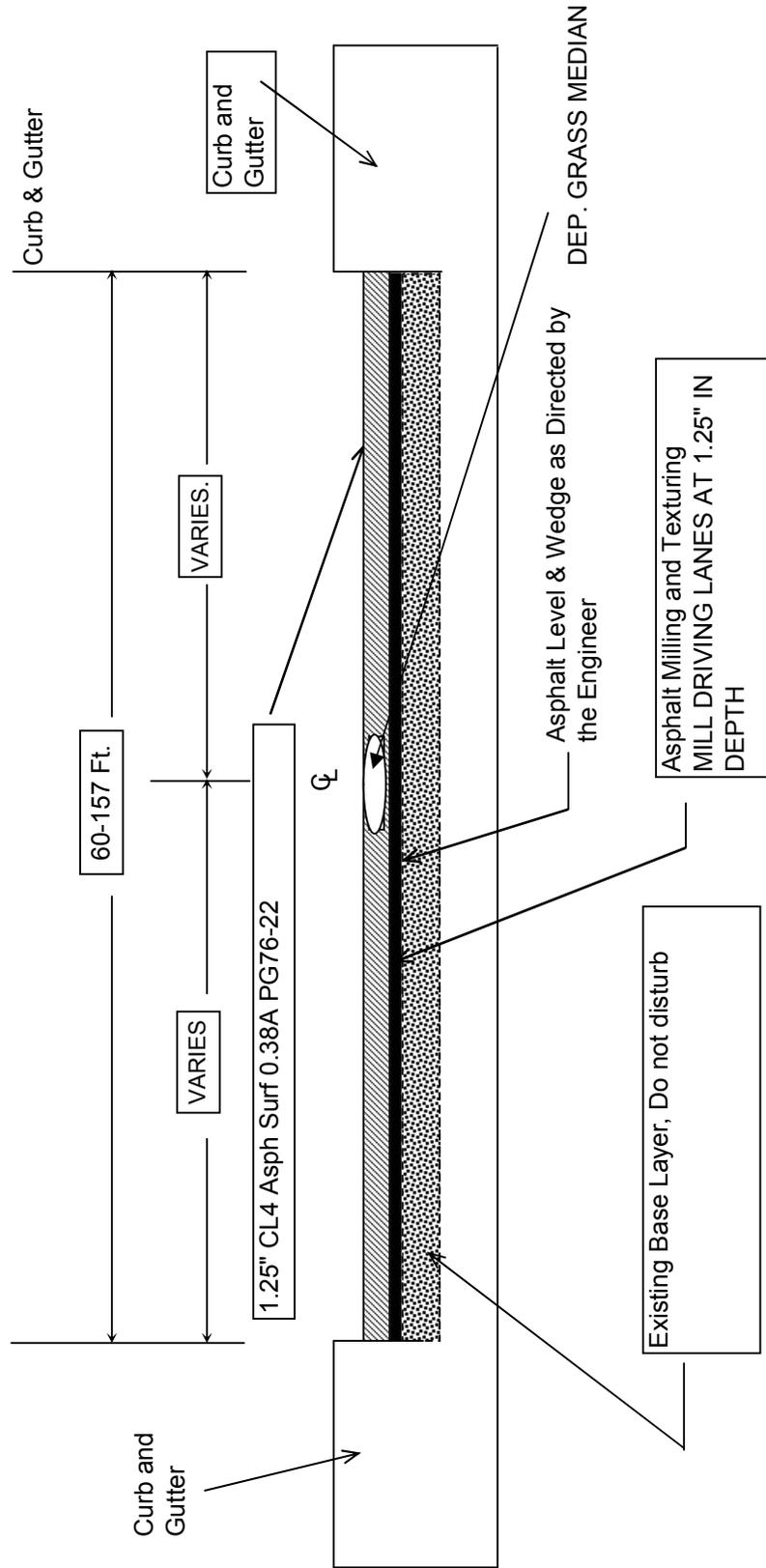


ASPHALT MILLING AND TEXTURING:
MILL DRIVING LANES AT 1.25" IN DEPTH

NOT TO SCALE

TYPICAL SECTION

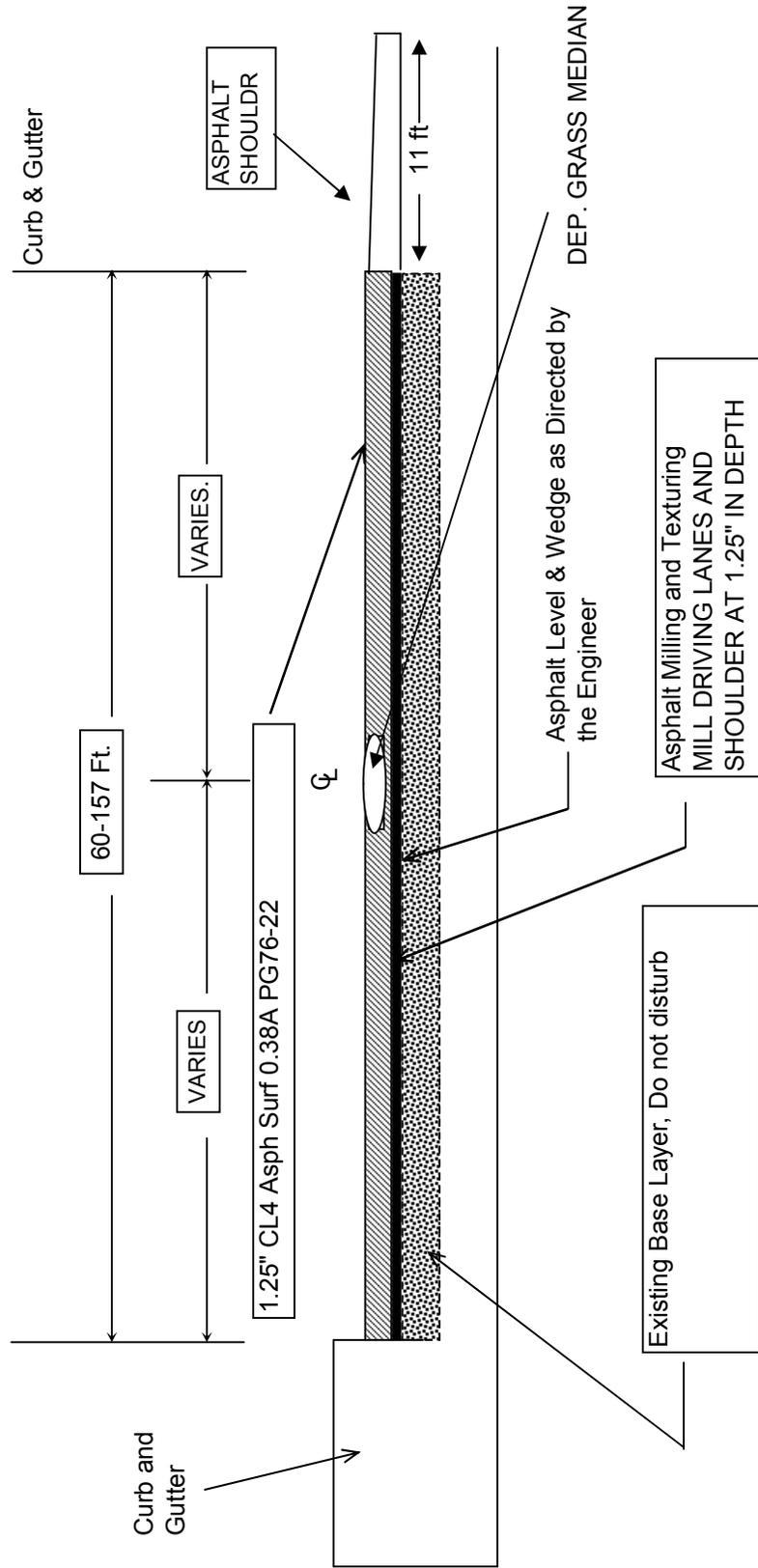
JEFFERSON COUNTY
FD05-056-1747-011-013
MP 11.173-11.476



NOT TO SCALE

TYPICAL SECTION

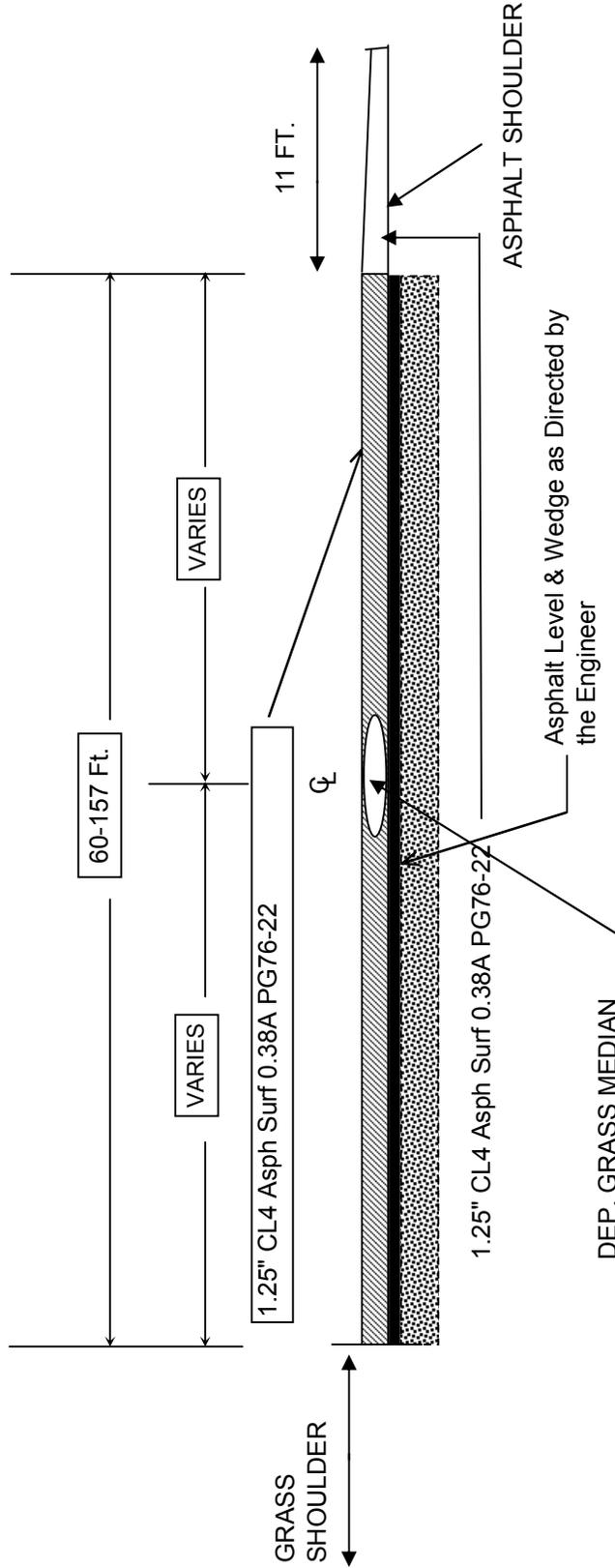
JEFFERSON COUNTY
FD05-056-1747-011-013
MP 11.476-11.511



NOT TO SCALE

TYPICAL SECTION

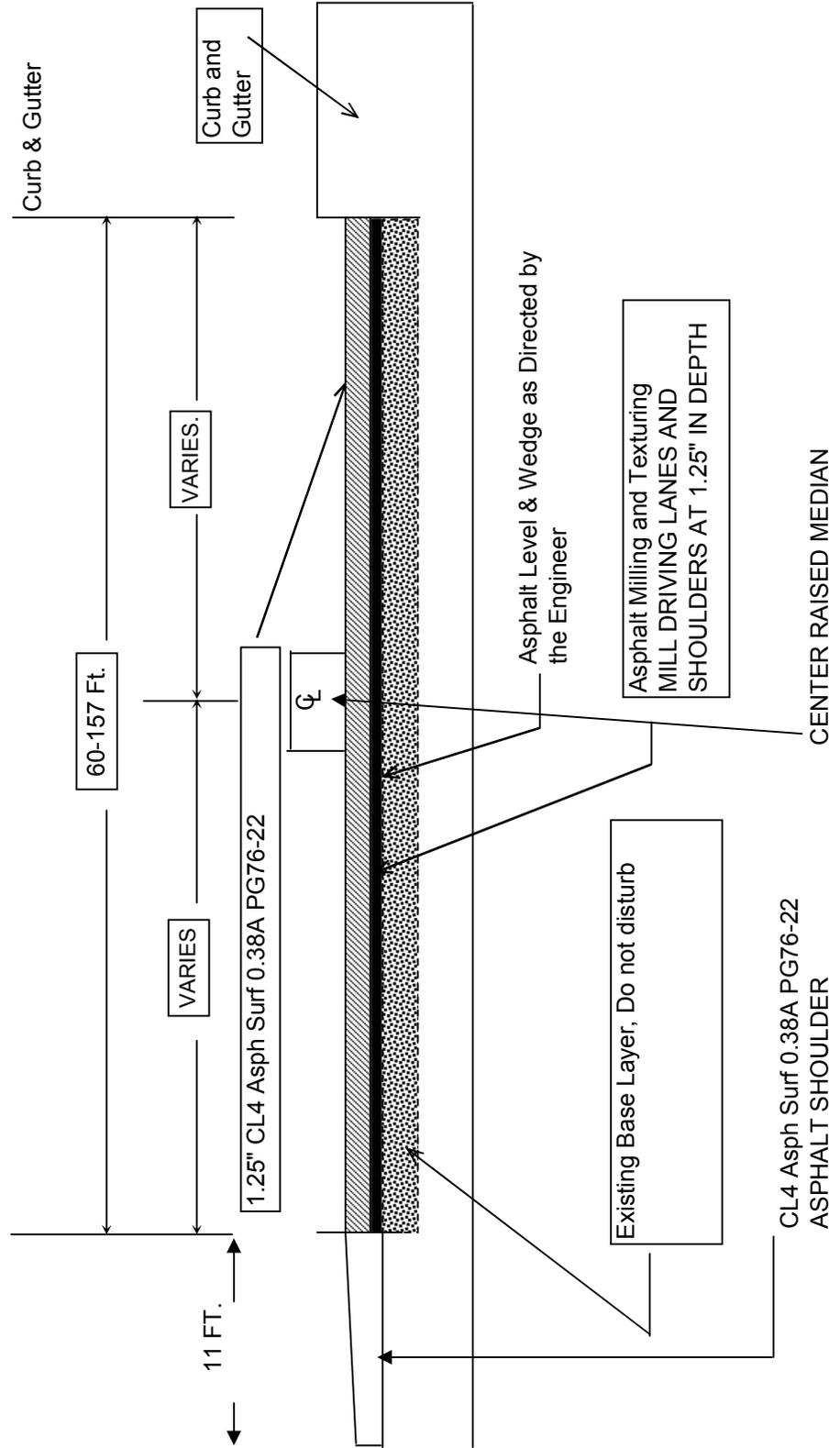
JEFFERSON COUNTY
FD05-056-1747-011-013
MP 11.511-11.630



NOT TO SCALE

TYPICAL SECTION

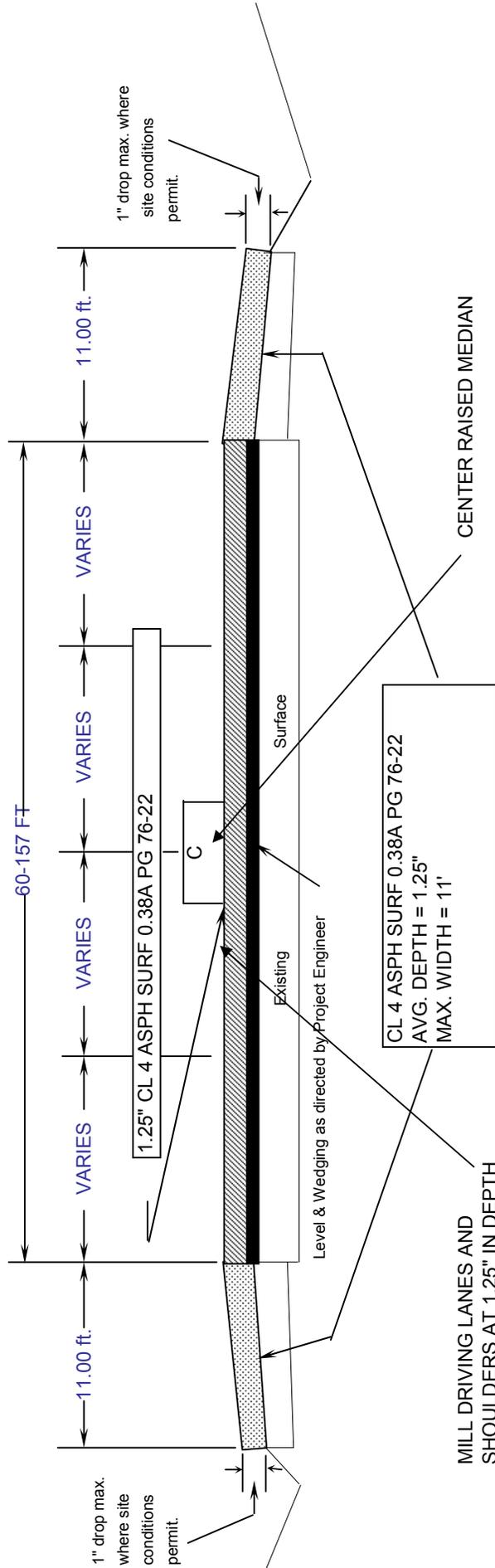
JEFFERSON COUNTY
FD05-056-1747-011-013
MP 11.630-11.794, 11.850-11.995



TYPICAL SECTION

JEFFERSON COUNTY

FD05-056-1747-011-013
MP 11.794-11.995

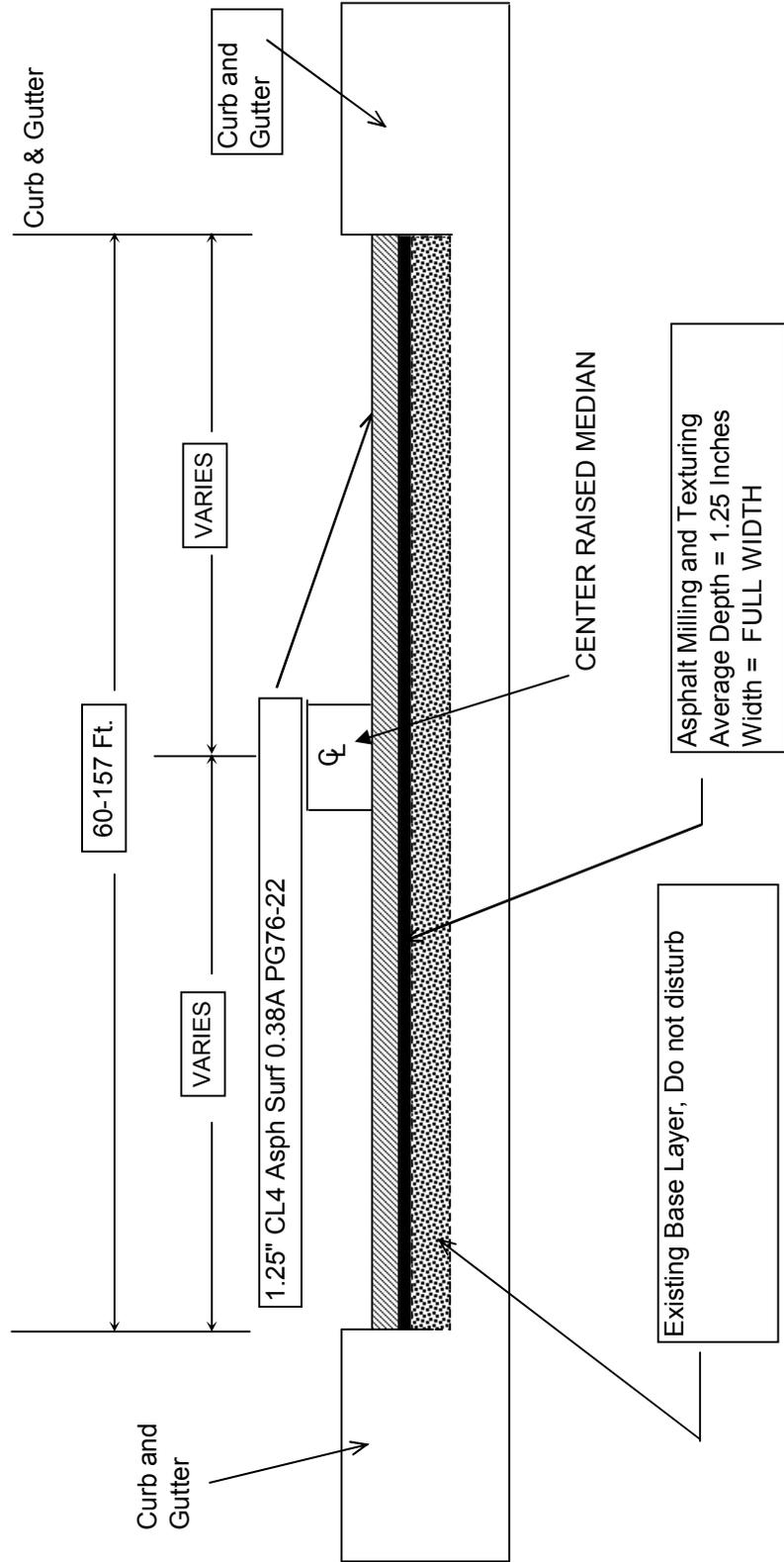


MILL DRIVING LANES AND SHOULDERS AT 1.25" IN DEPTH

NOT TO SCALE

TYPICAL SECTION

JEFFERSON COUNTY
FD05-056-1747-011-013
MP 11.995-12.290



NOT TO SCALE

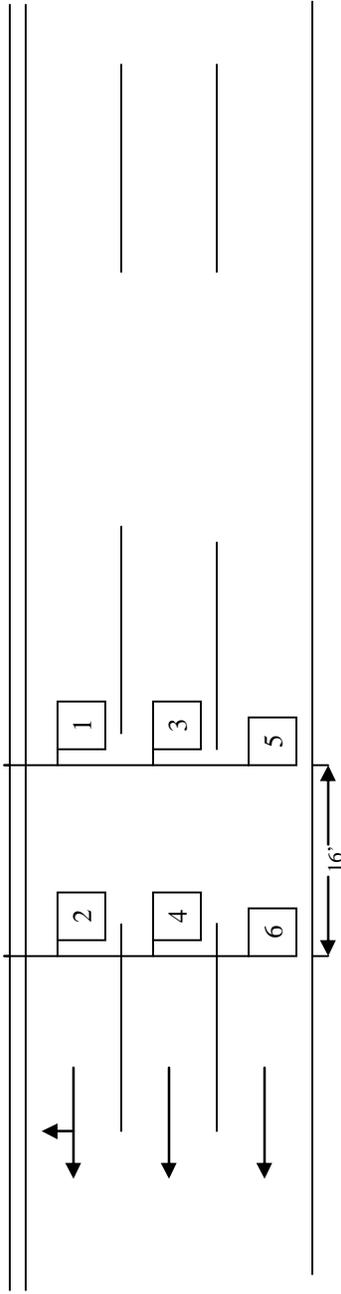
Site Drawing Jefferson Co., KY 1747 Station 023, MP 11.18

North
↓

Figure 1

1-1/4" rigid steel conduit from curb to
10x8x4 cabinet

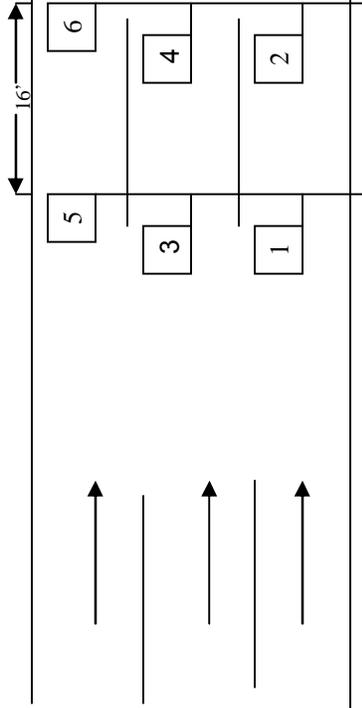
Install new 10x8x4 cabinet.
Remove existing cabinet.



Northbound to
Bunsen Ave.
↓

Grass Median

Southbound to
KY 155
↑



All loops are 6' x 6' square. Loops are
16' from leading edge to leading edge.
Run labeled loop lead-in wires in the
junction box and then into cabinet.
Leave 2' slack in cabinet. Planning
personnel will install the connector
ends.

Install new 10x8x4 cabinet.
Remove existing cabinet.

1-1/4" rigid steel conduit from curb to
10x8x4 cabinet

Not To Scale

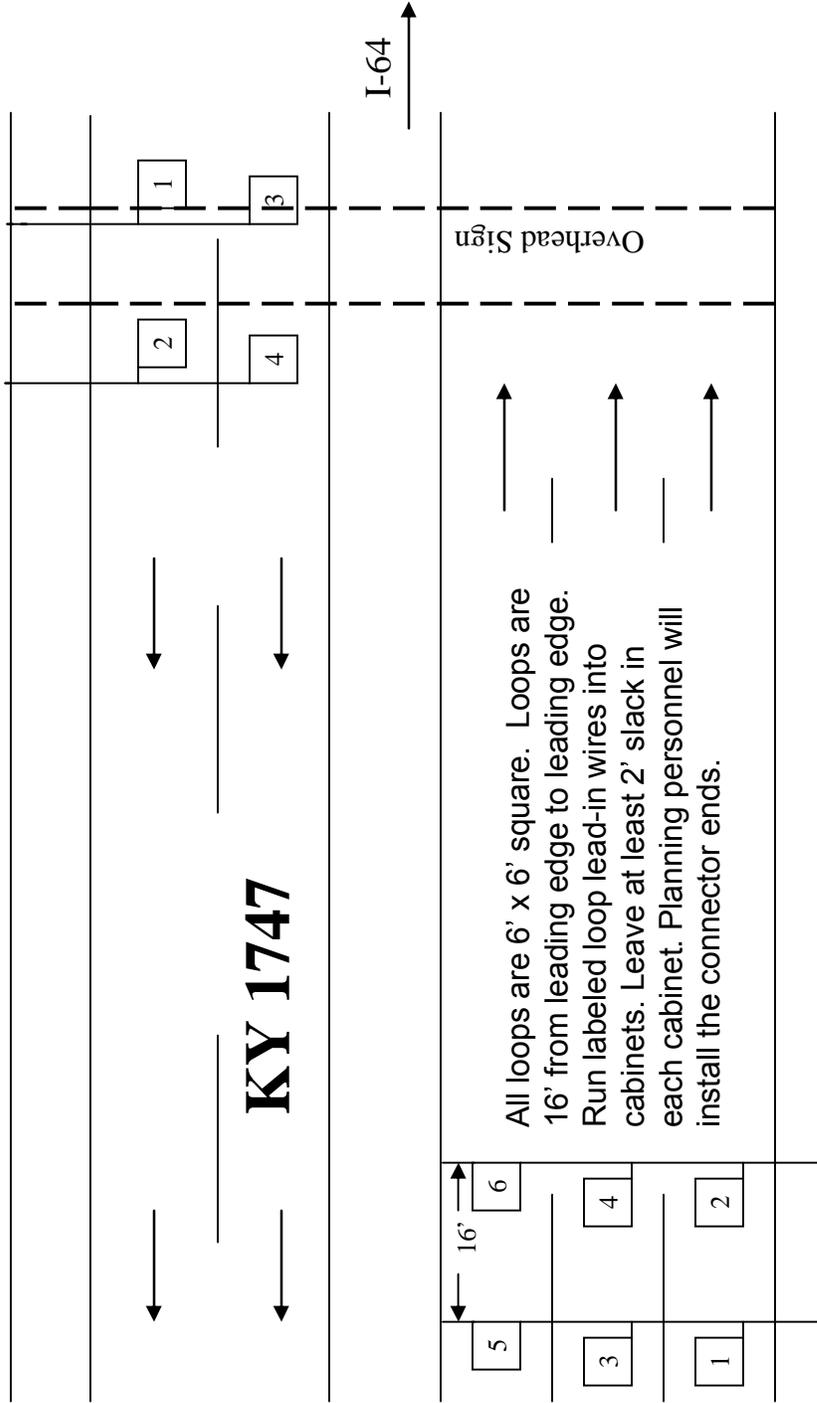
11/29/2007

Site Drawing Jefferson Co., KY 1747 Station A47, MP 11.65

North

Figure 1a

Install new 10"x8"x4" cabinet on concrete sign pillar 2' above ground.
Install new 1-1/4" Rigid Steel Conduit
Install new Type-A junction box



Southbound

KY 1747

Bluegrass Prkwy.

Northbound

All loops are 6' x 6' square. Loops are 16' from leading edge to leading edge. Run labeled loop lead-in wires into cabinets. Leave at least 2' slack in each cabinet. Planning personnel will install the connector ends.

Reuse existing cabinet on guardrail

Install new 2" Rigid Steel Conduit

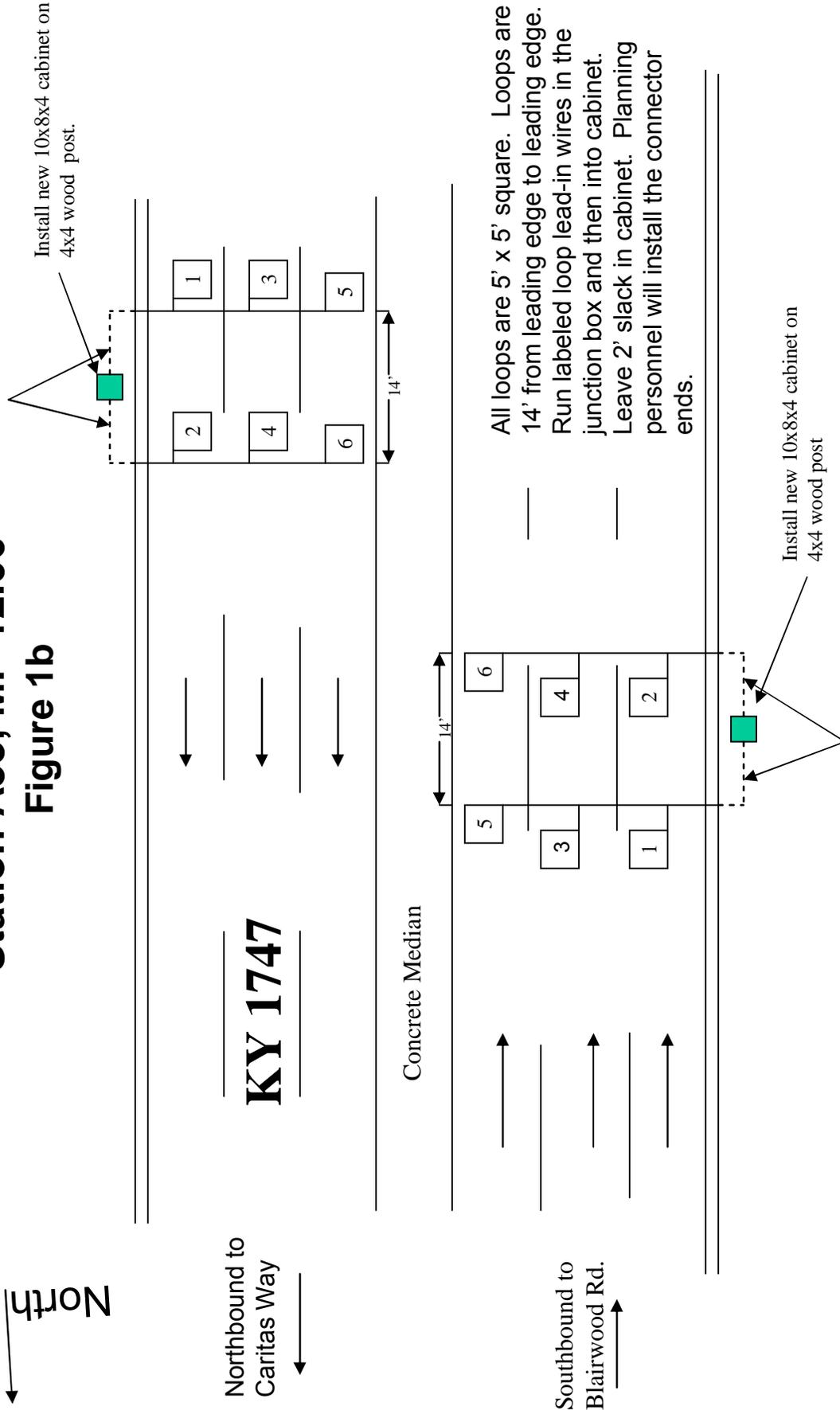
Not To Scale

11/29/2007

Site Drawing Jefferson Co., KY 1747 Station A53, MP 12.06

Figure 1b

1-1/4" rigid steel conduit from curb to 10x8x4 cabinet
Install new 10x8x4 cabinet on 4x4 wood post.



All loops are 5' x 5' square. Loops are 14' from leading edge to leading edge. Run labeled loop lead-in wires in the junction box and then into cabinet. Leave 2' slack in cabinet. Planning personnel will install the connector ends.

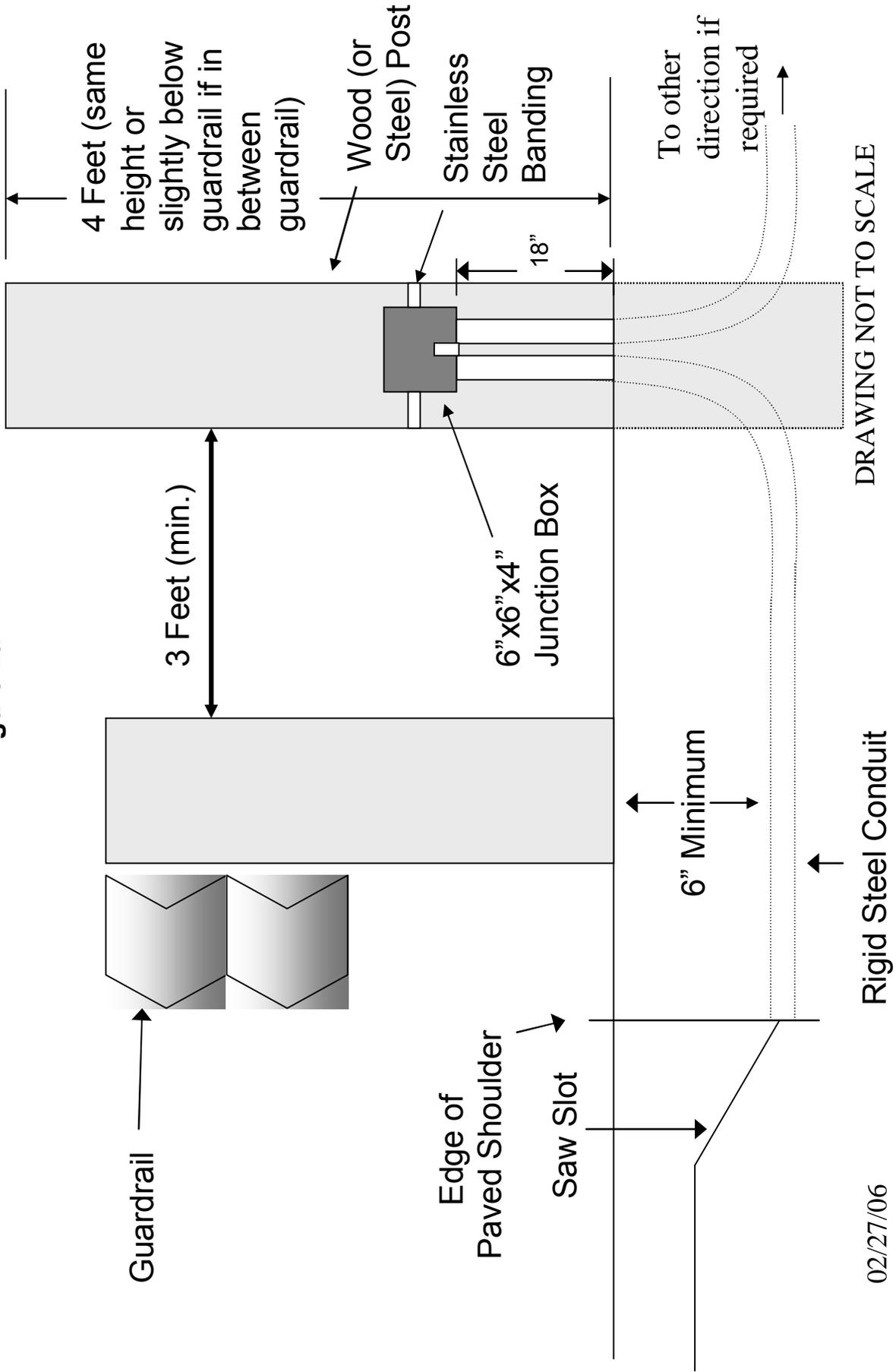
1-1/4" rigid steel conduit from curb to 10x8x4 cabinet
Install new 10x8x4 cabinet on 4x4 wood post

Not To Scale

12/20/2007

Junction Box Type 6" x 6" x 4" Detail

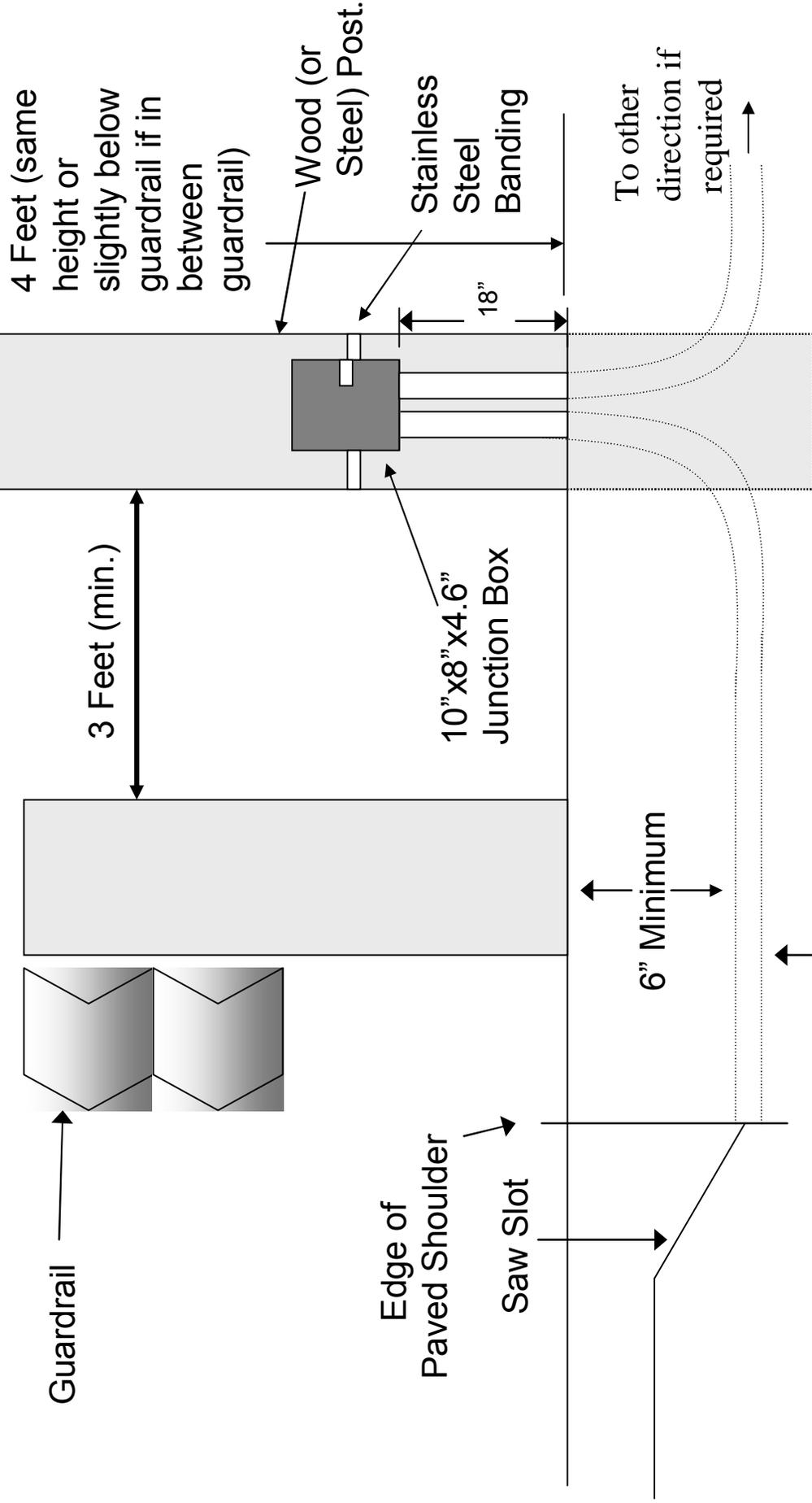
Figure 2a



02/27/06

Junction Box Type 10" x 8" x 4" Detail

Figure 2b



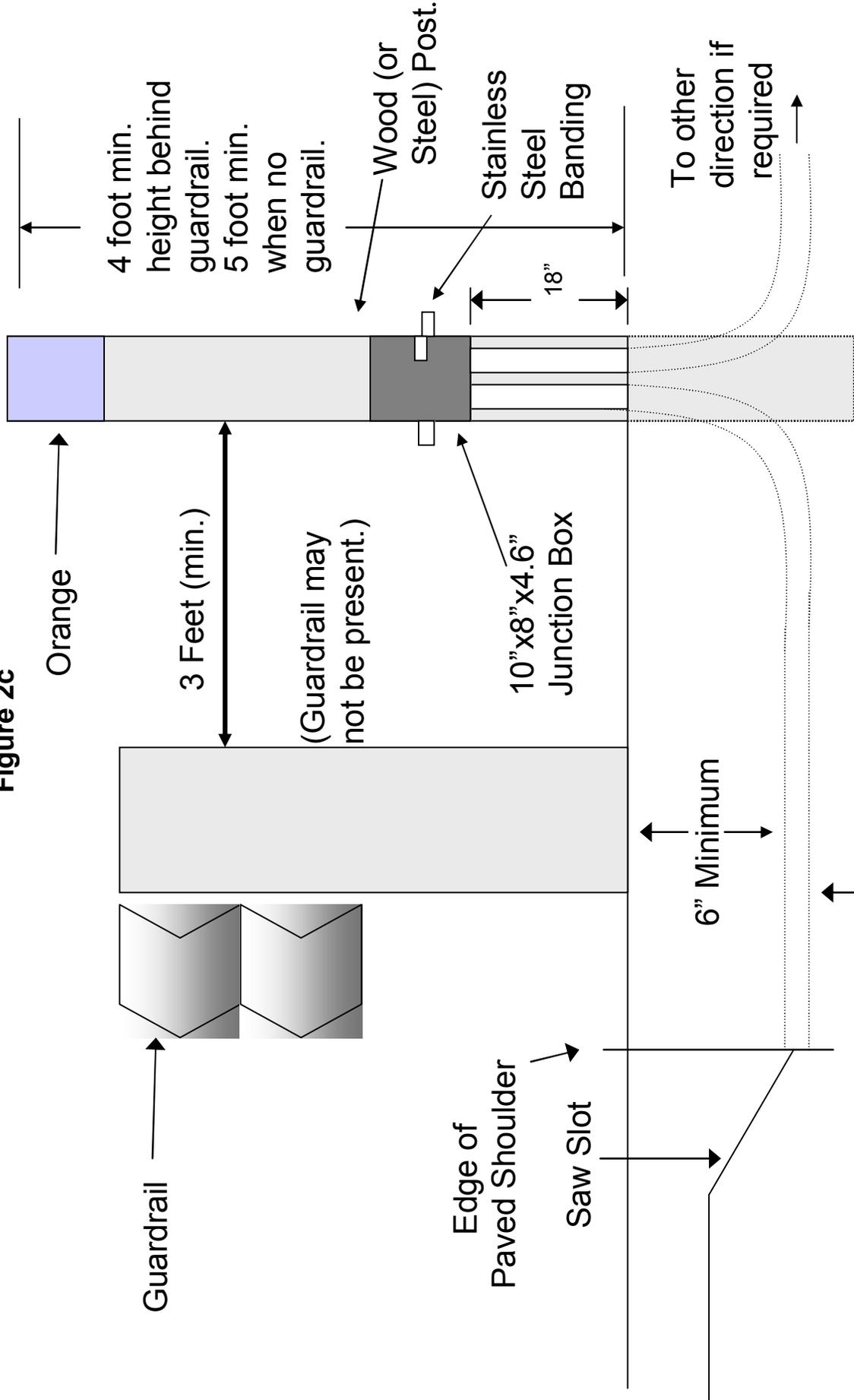
DRAWING NOT TO SCALE

Rigid Steel Conduit

02/27/06

Junction Box Type 10" x 8" x 4" Detail

Figure 2c



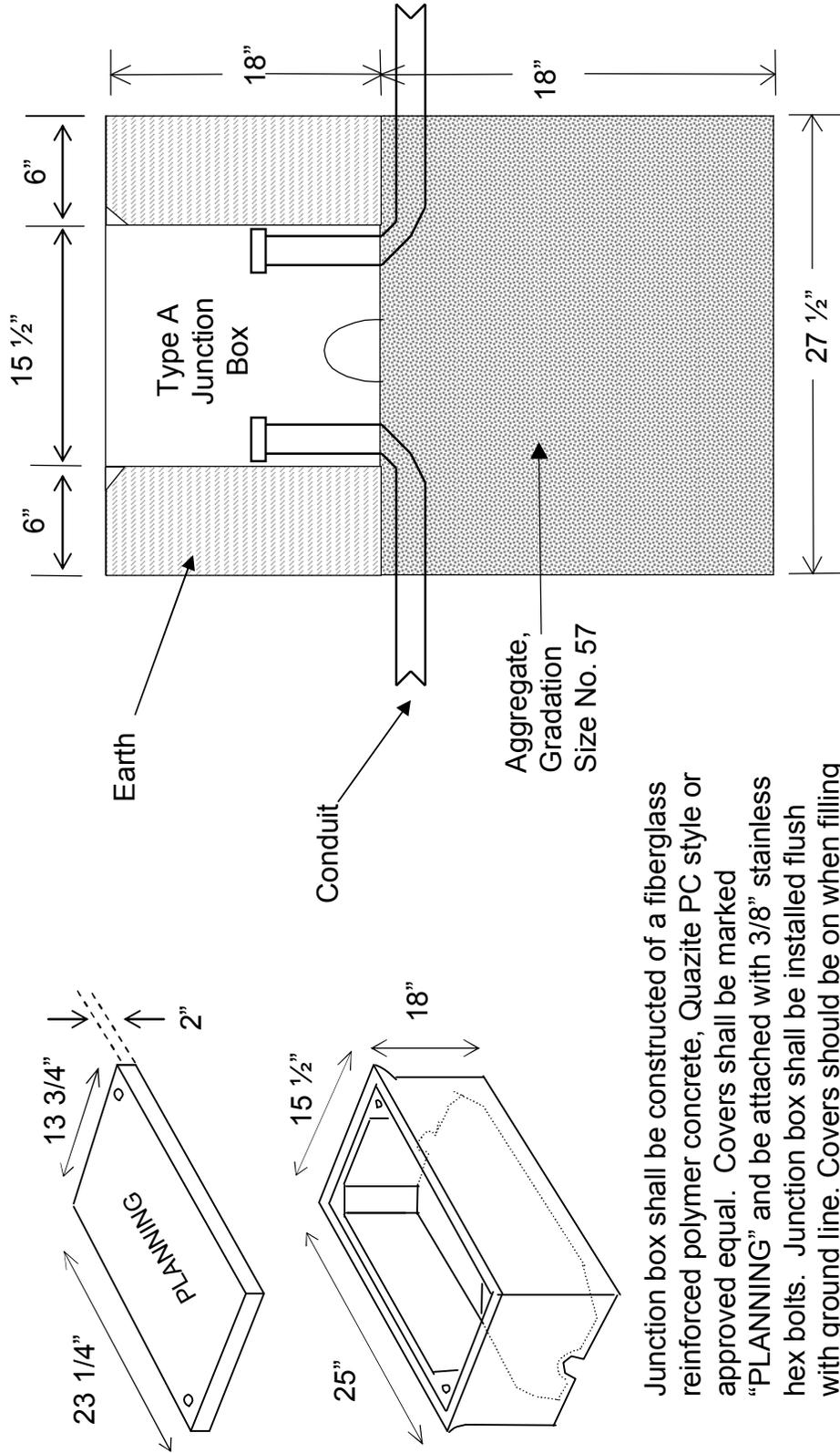
DRAWING NOT TO SCALE

Rigid Steel Conduit

04/21/06

Junction Box Type A Installation

Figure 3a



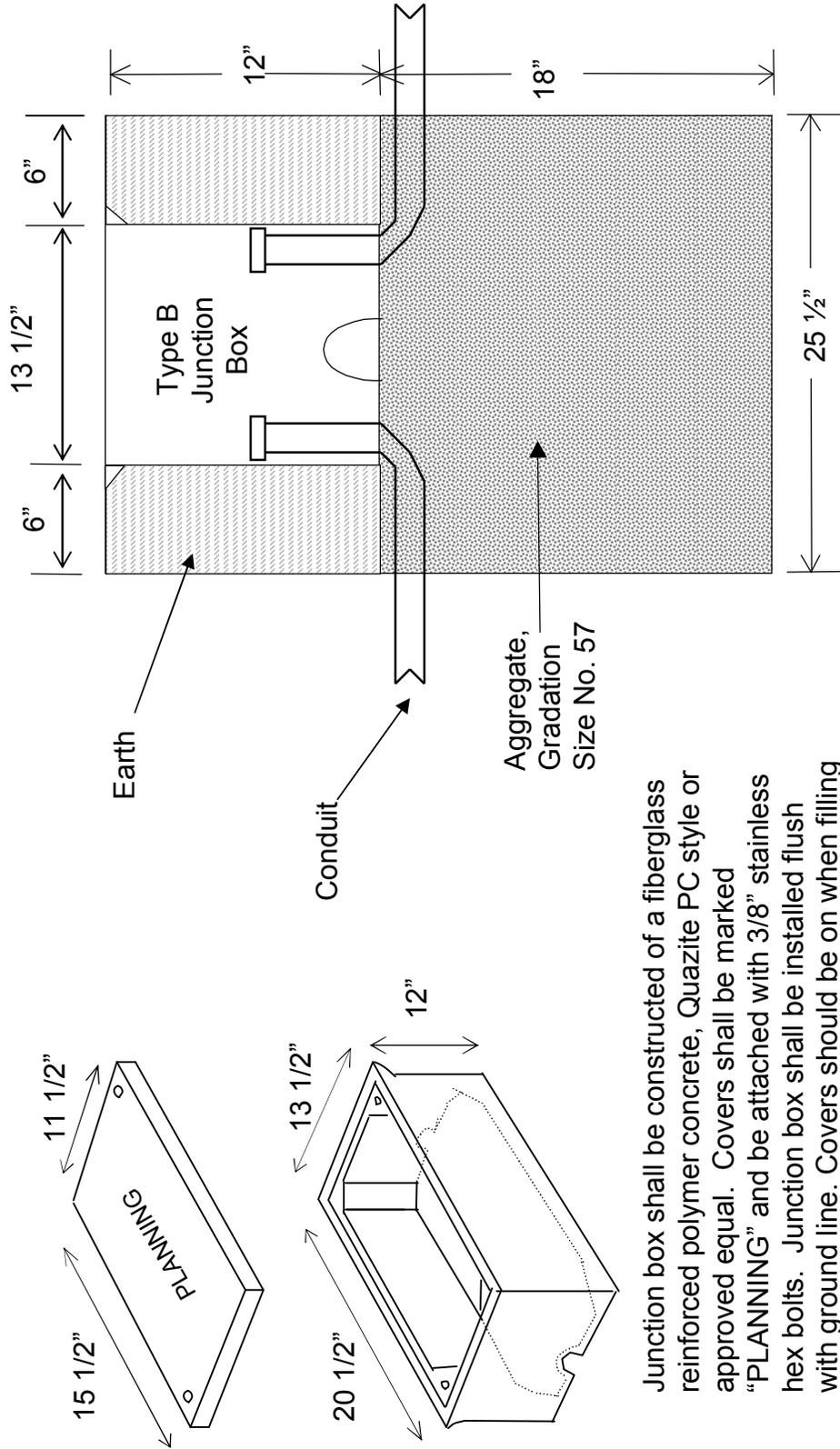
Junction box shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC style or approved equal. Covers shall be marked "PLANNING" and be attached with 3/8" stainless hex bolts. Junction box shall be installed flush with ground line. Covers should be on when filling in around the box.

DRAWING NOT TO SCALE

02/23/06

Junction Box Type B Installation

Figure 3b



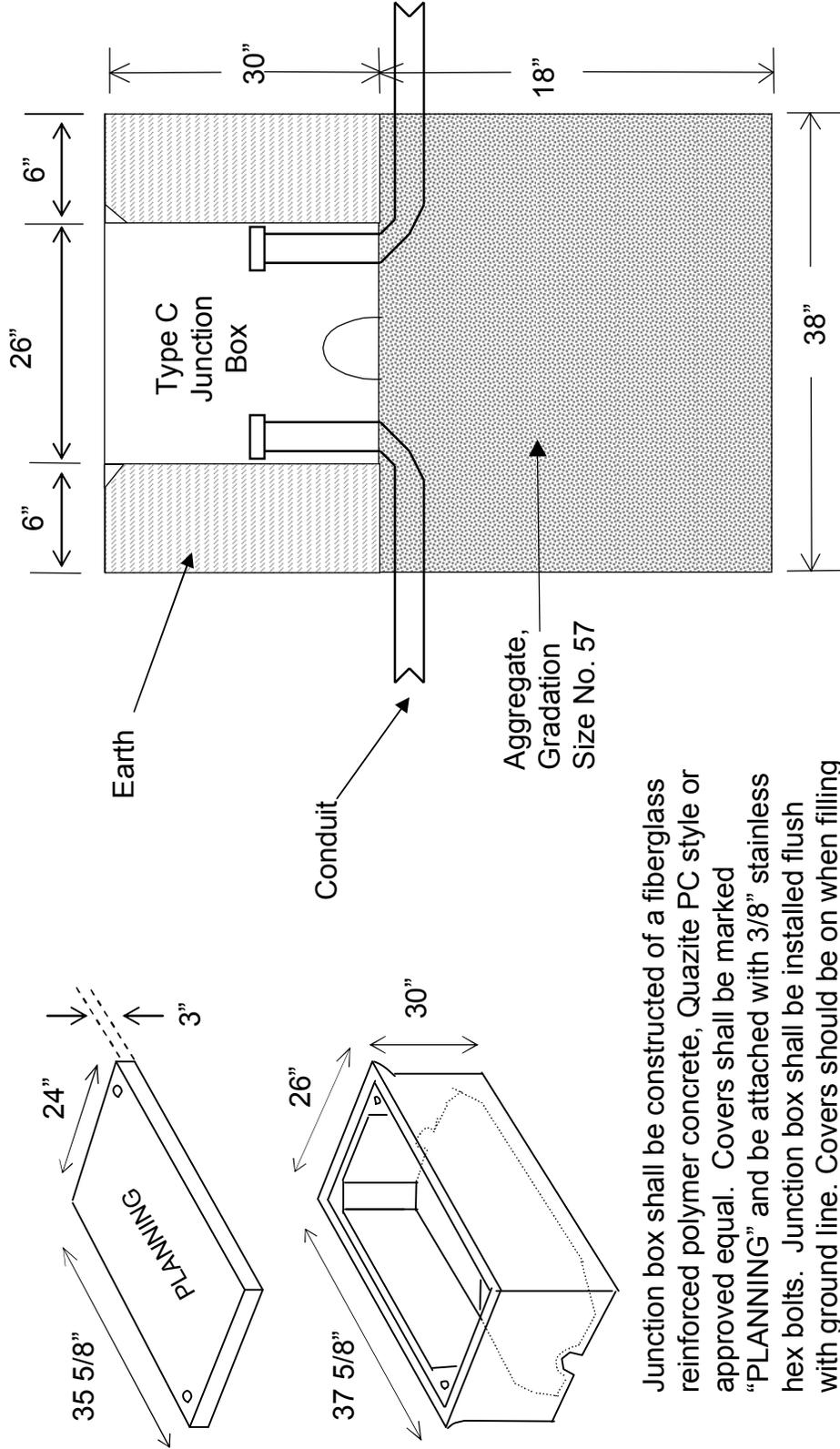
Junction box shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC style or approved equal. Covers shall be marked "PLANNING" and be attached with 3/8" stainless hex bolts. Junction box shall be installed flush with ground line. Covers should be on when filling in around the box.

DRAWING NOT TO SCALE

02/23/06

Junction Box Type C Installation

Figure 3c



Junction box shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC style or approved equal. Covers shall be marked "PLANNING" and be attached with 3/8" stainless hex bolts. Junction box shall be installed flush with ground line. Covers should be on when filling in around the box.

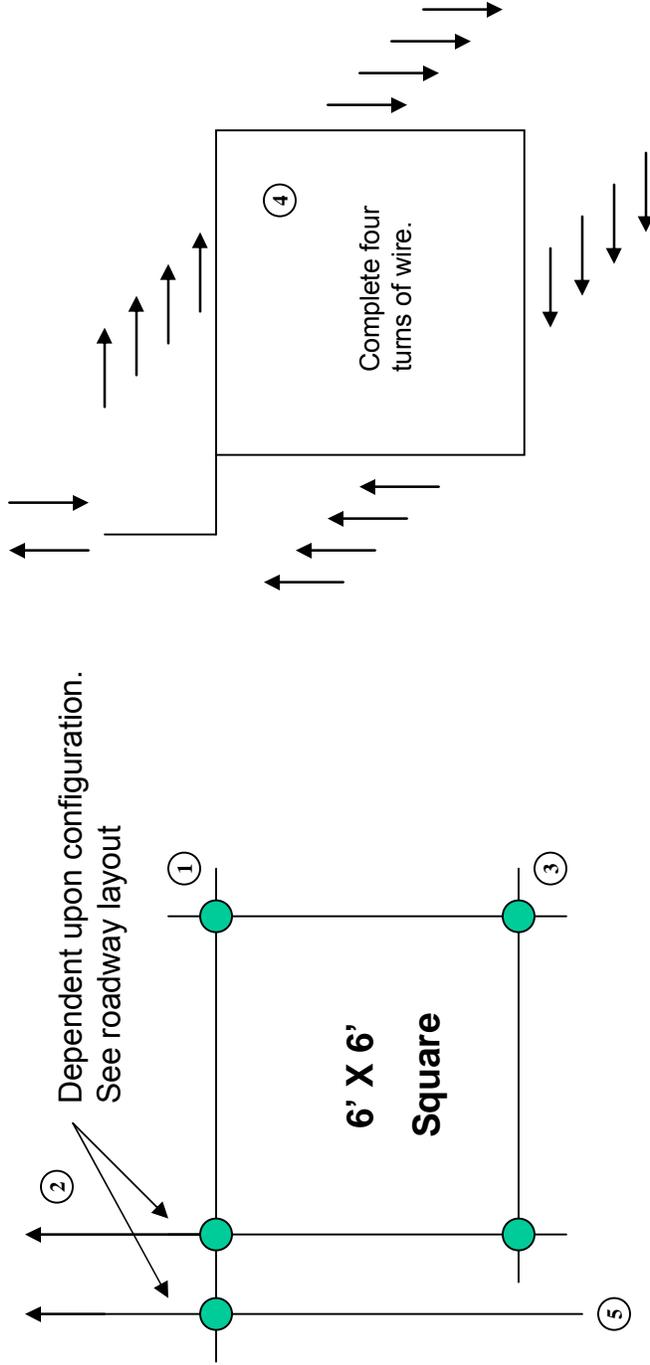
DRAWING NOT TO SCALE

02/23/06

Loop Installation Instructions

Loop Installation in Existing Roadways

Figure 4



Saw Slot Plan

Loop Wiring Plan

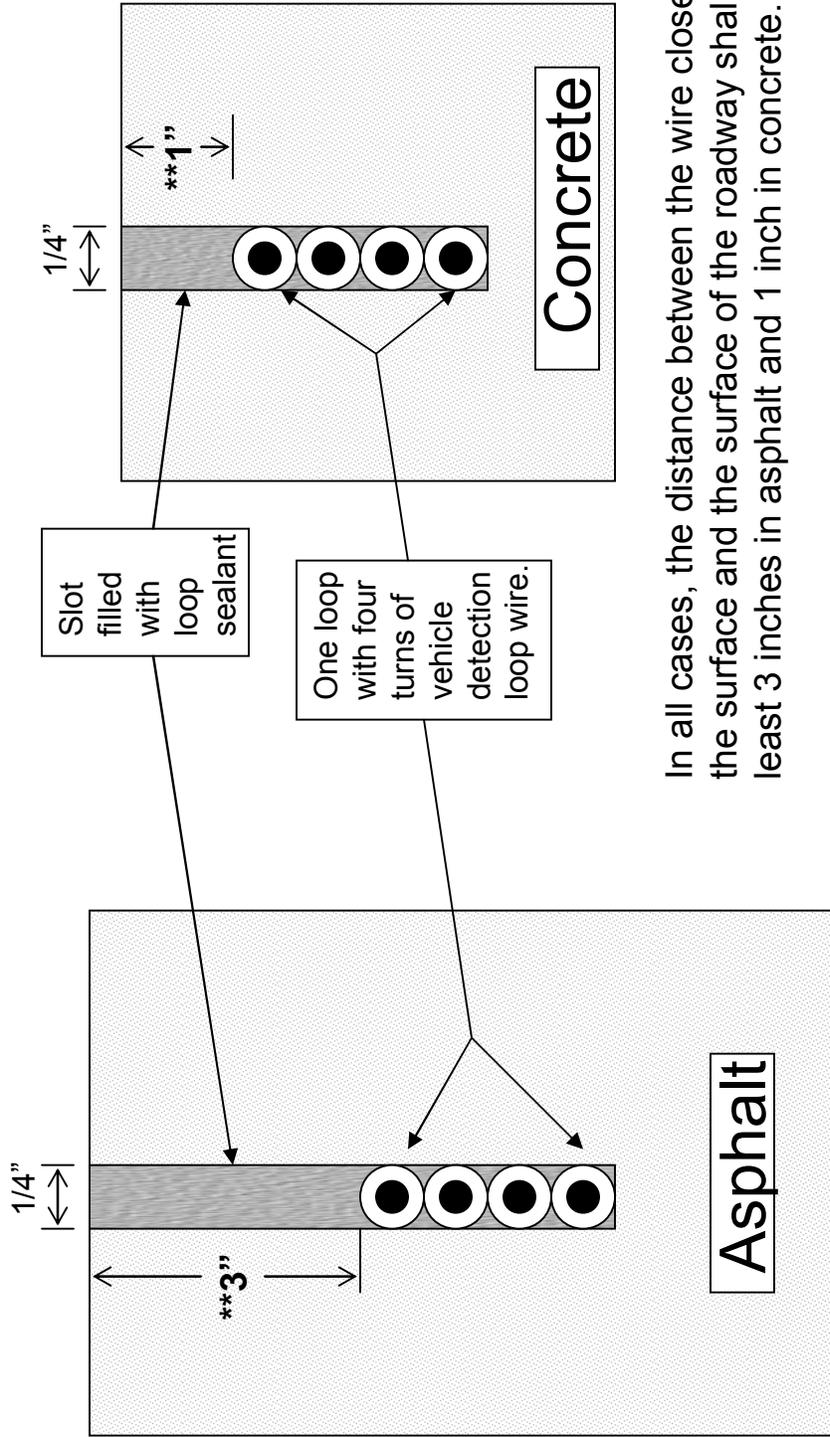
Notes:

- ① Overlap cuts so that slots are full depth at corners.
- ② Configuration is dependent upon loop layout.
- ③ Drill 1.5" hole in each corner to prevent sharp bends in the wire.
- ④ Unless denoted otherwise, all loops are 6' x 6' square, positioned in center of lane with 4 turns of 14 AWG loop wire.
- ⑤ The distance between adjacent loops is 6' for 12' lanes, 5.5' for 11' lanes, etc. It cannot be less than the loop is wide.

04/12/05

Loop Installation in Existing Roadway

Figure 5



In all cases, the distance between the wire closest to the surface and the surface of the roadway shall be at least 3 inches in asphalt and 1 inch in concrete.

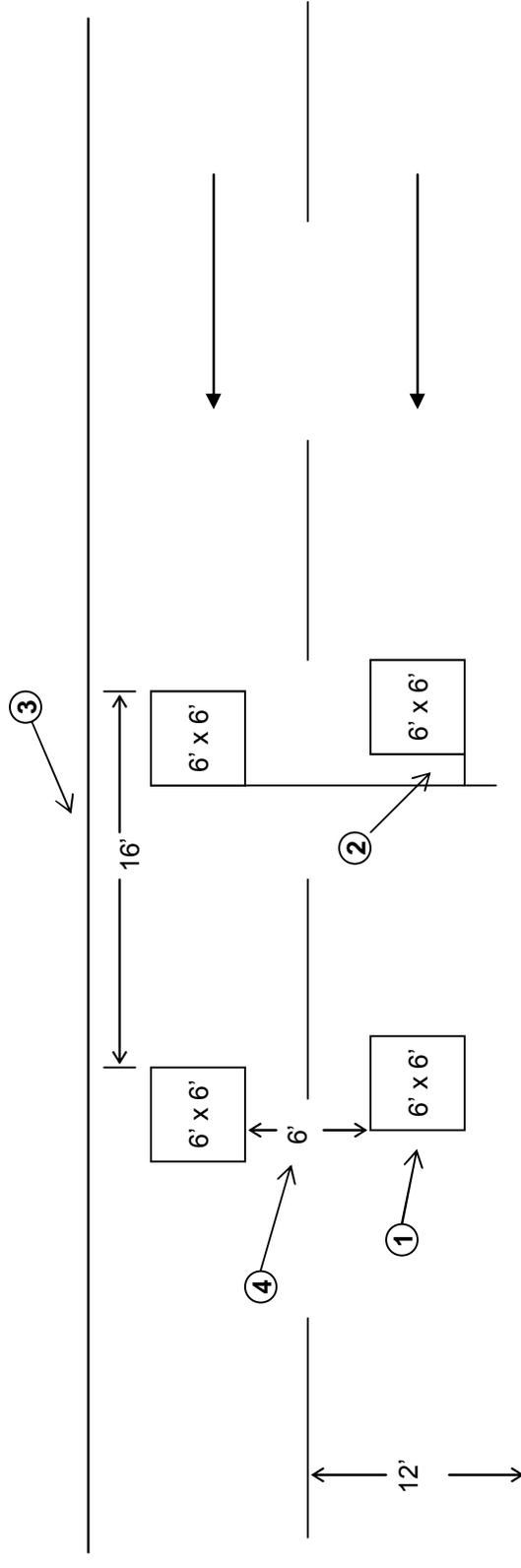
**Saw slot level shall be lowered at edge of roadway to meet the conduit level.

05/10/06

DRAWING NOT TO SCALE

Loop Characteristics

Figure 6

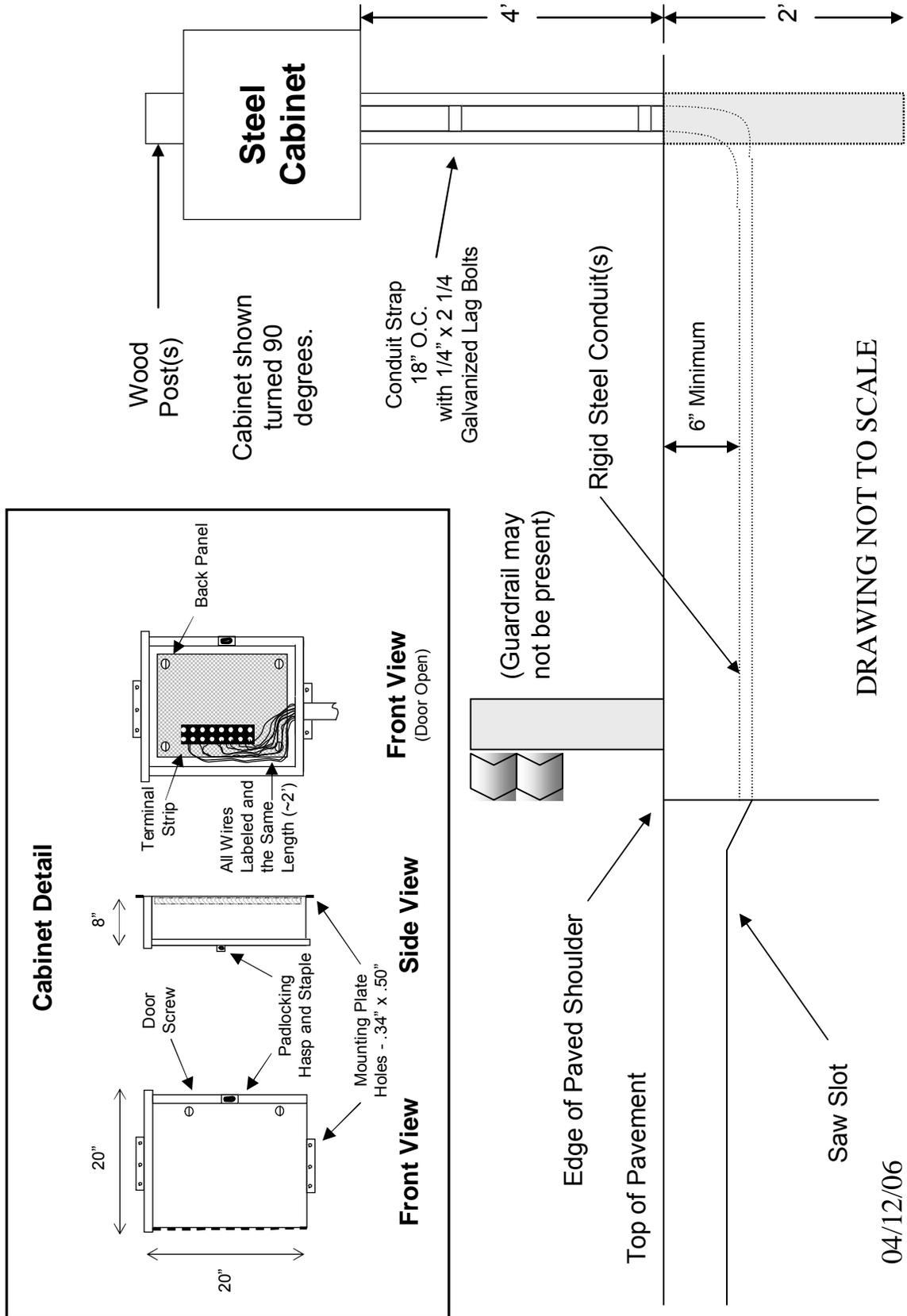


- ① Unless denoted otherwise, all loops are 6' x 6' square, positioned in center of lane with 4 turns of 14 AWG loop wire.
- ② Minimum 12" between loop and lead-ins. Lead-ins should be on the trailing edge of the loop.
- ③ If two loops are installed in a lane, space loops 16' from leading edge to leading edge unless denoted otherwise.
- ④ This distance is typically 6' for 12' lanes, 5.5' for 11' lanes, etc. It cannot be less than the loop is wide.

04/11/05

Galvanized Steel Cabinet and Post Installation

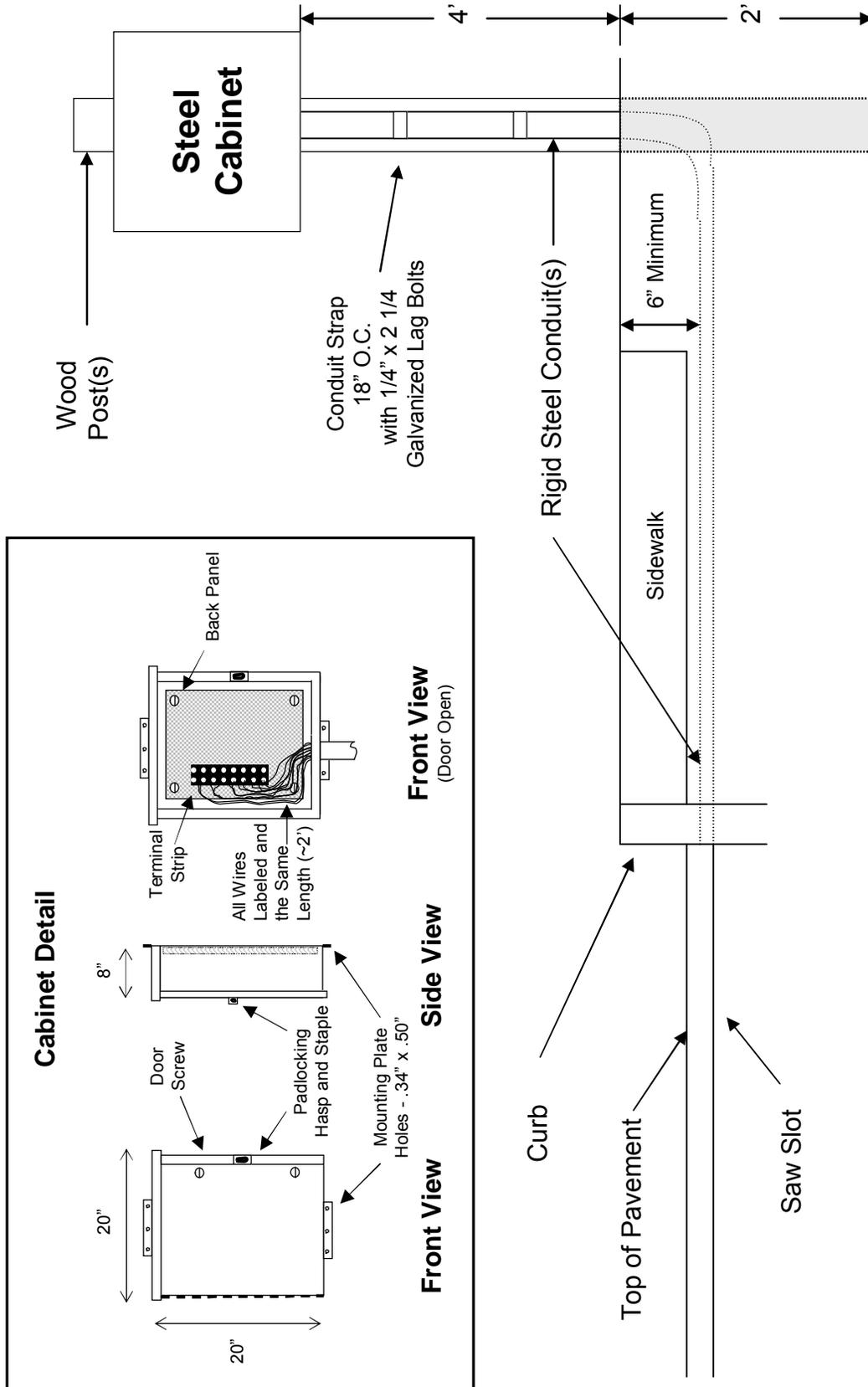
Figure 7a



04/12/06

Galvanized Steel Cabinet and Post Installation

Figure 7b

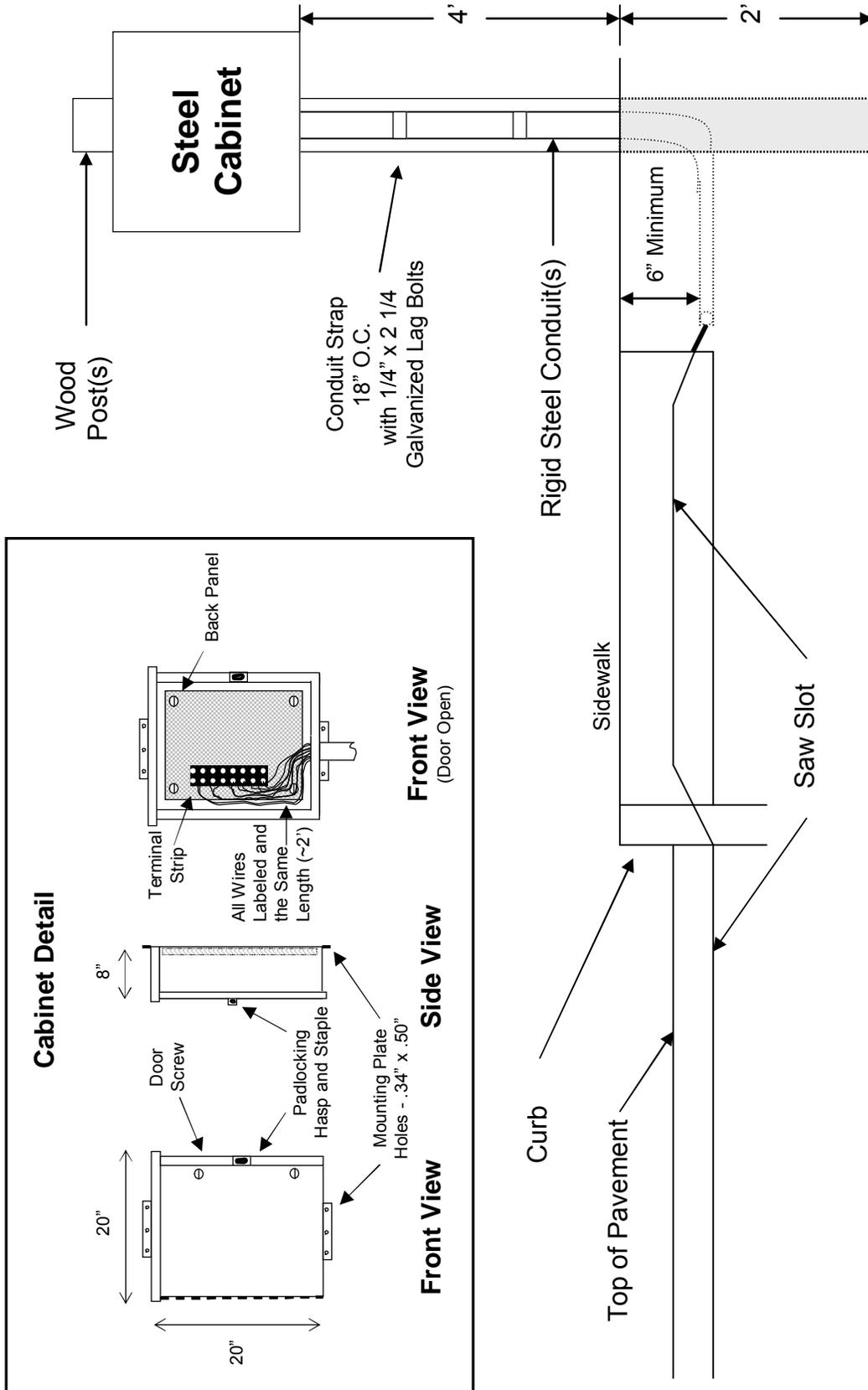


DRAWING NOT TO SCALE

02/25/05

Galvanized Steel Cabinet and Post Installation

Figure 7c

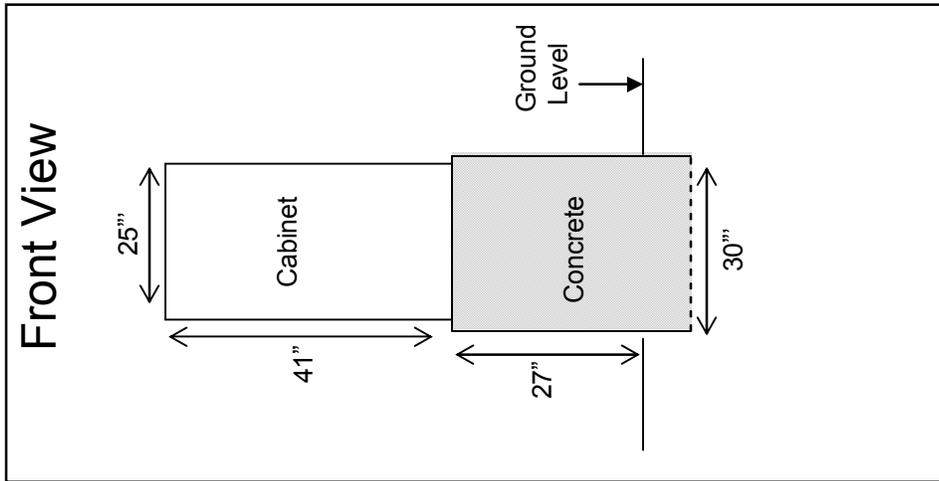
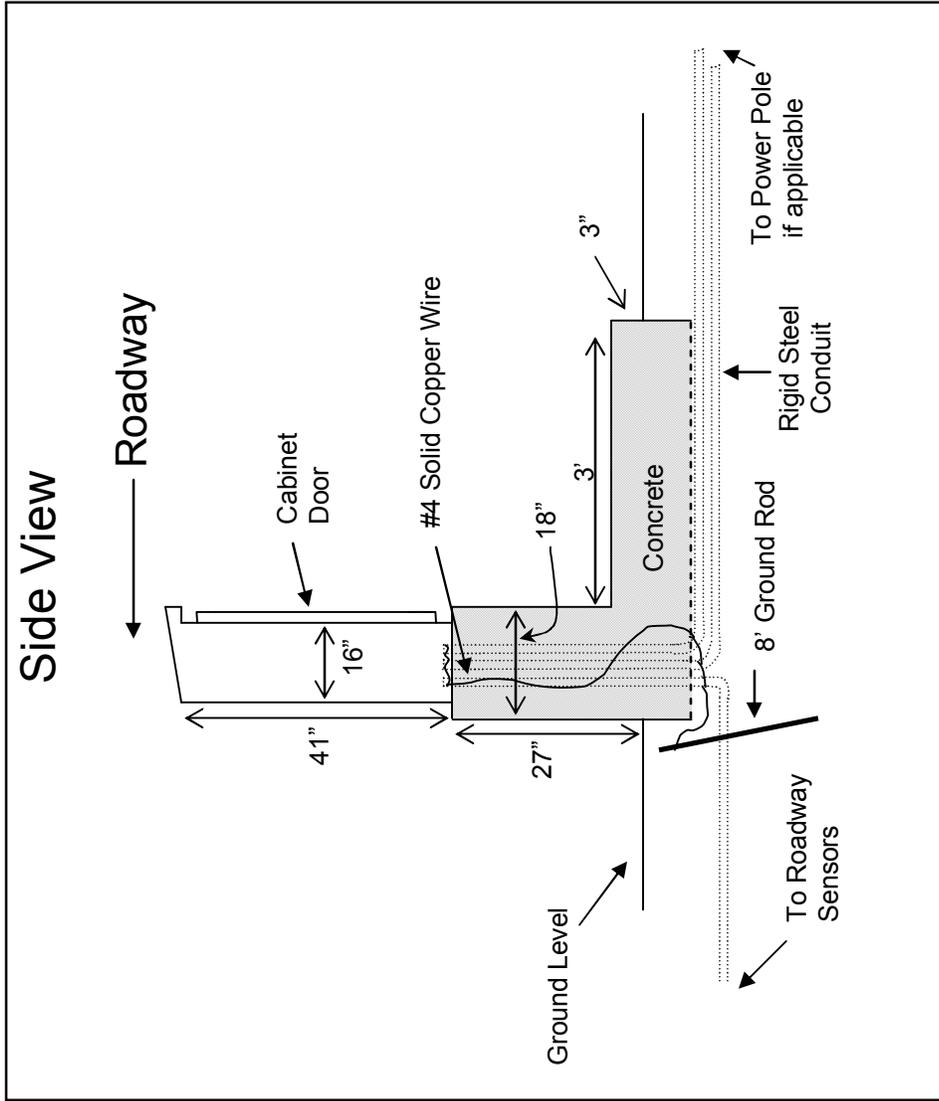


DRAWING NOT TO SCALE

02/08/06

Cabinet Type G

Figure 8

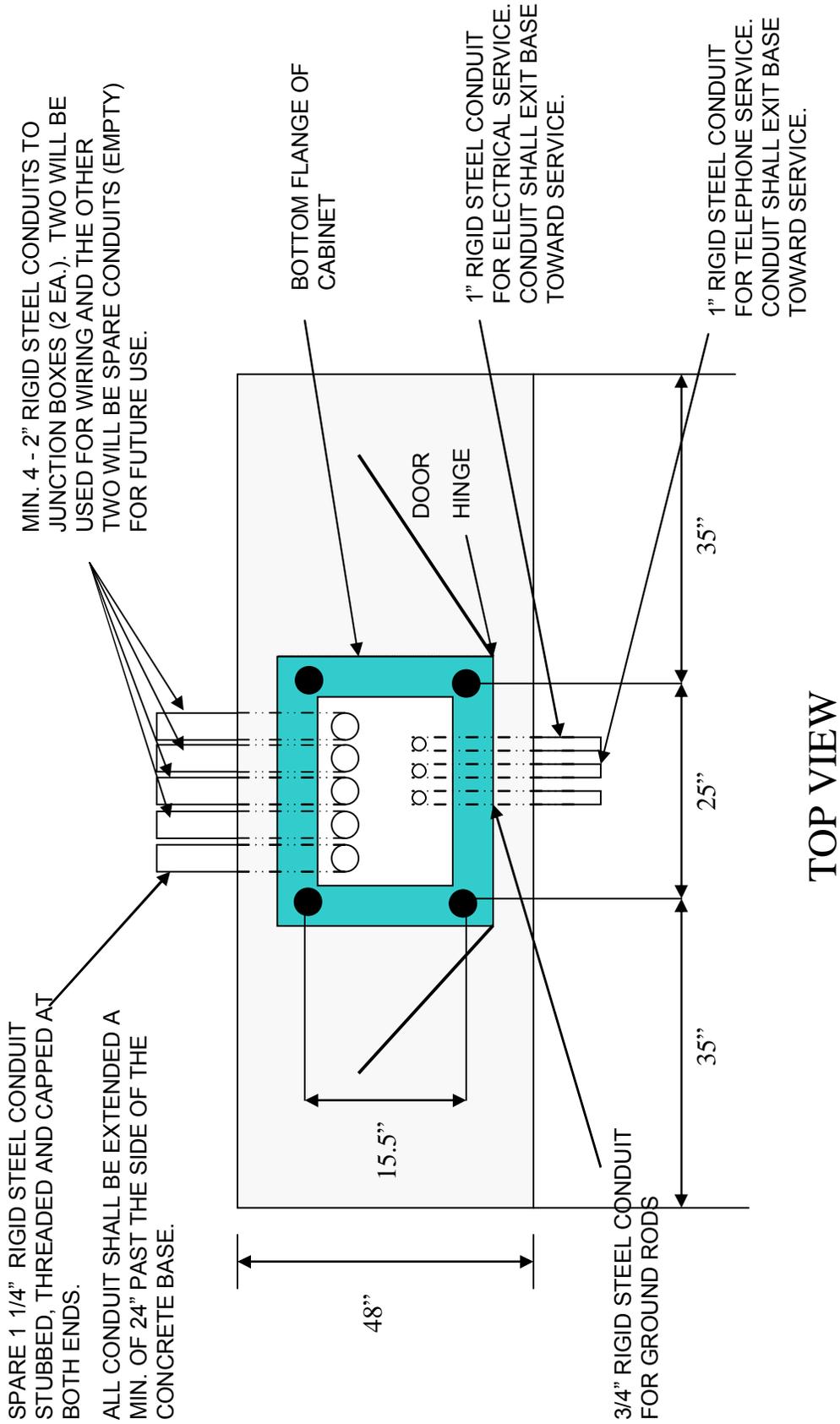


DRAWING NOT TO SCALE

02/15/05

Base Mounted 170 Cabinet Detail

Figure 9a

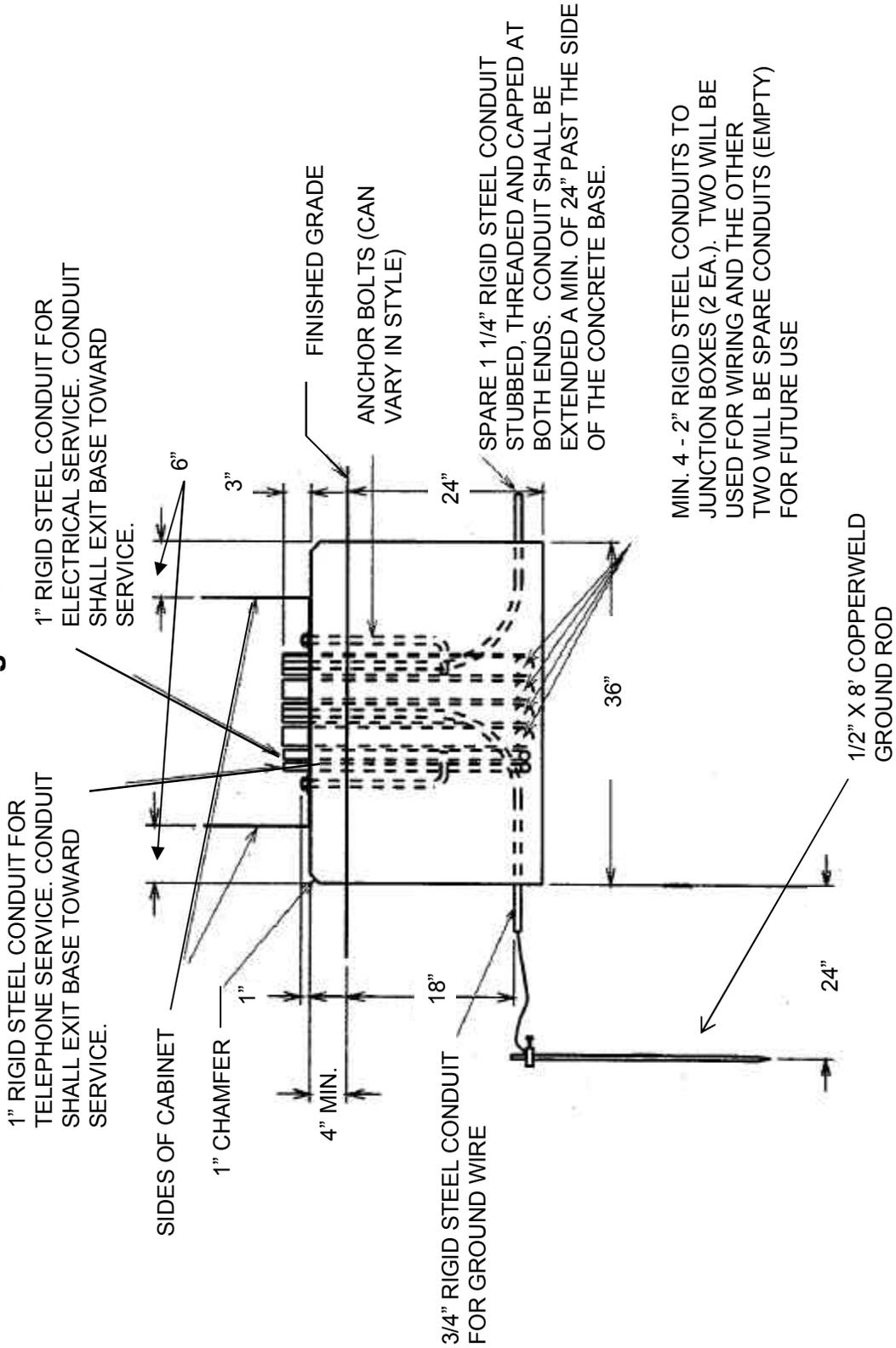


DRAWING NOT TO SCALE

02/15/05

Base Mounted 170 Cabinet Detail

Figure 9b



SIDE VIEW

DRAWING NOT TO SCALE

02/15/05

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*.

Special Notes [SN] and Special Provisions [SP] marked with an asterisk * and listed under Part II of the Table of Contents within this proposal can be referenced in the *Standard Specifications for Road and Bridge Construction, Edition of 2008*. Special Notes and Special Provisions not marked with an asterisk will be attached to this proposal.

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

SUBSECTION:	837.03.01 Composition.		
REVISION:	COMPOSITION Table:		
	Replace		
	Lead Chromate	0.0 max.	4.0 min.
	with		
	Heavy Metals Content	Comply with 40 CFR 261	

STANDARD DRAWINGS THAT APPLY

CURVE WIDENING AND SUPERELEVATION TRANSITIONS.....	RGS-001-06
SUPERELEVATION FOR MULTILANE PAVEMENTS	RGS-002-05
MISCELLANEOUS STANDARDS PART 1	RGX-001-05
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT.....	RPM-110-05
LANE CLOSURE TWO-LANE HIGHWAY CASE I	TTC-100-01
LANE CLOSURE TWO-LANE HIGHWAY CASE II	TTC-105-01
LANE CLOSURE MULTI-LANE HIGHWAY CASE I.....	TTC-115-01
LANE CLOSURE MULTI-LANE HIGHWAY CASE II.....	TTC-120-01
SHOULDER CLOSURE	TTC-135-01
POST SPLICING DETAIL	TTD-110-01
MOBILE OPERATION FOR PAINT STRIPING CASE I	TTS-100-01
MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-105-01
MOBILE OPERATION FOR PAINT STRIPING CASE III.....	TTS-110-01
MOBILE OPERATION FOR PAINT STRIPING CASE IV.....	TTS-115-01

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
<u>CRAFTS:</u>	
Breckinridge County:	
Bricklayers	25.90.....10.70
Bullitt, Carroll, Grayson, Hardin, Henry, Jefferson, Larue, Marion, Meade, Nelson, Oldham, Shelby, Spencer and Trimble Counties:	
Bricklayers	22.93.....8.85
Bracken, Gallatin, Grant, Mason and Robertson Counties:	
Bricklayers	25.86.....9.49
Boyd, Carter, Elliott, Fleming, Greenup, Lewis and Rowan Counties:	
Bricklayers	25.49.....13.86
Anderson, Bath, Bourbon, Boyle, Clark, Fayette, Franklin, Harrison, Jessamine, Madison, Mercer, Montgomery, Nicholas, Owen, Scott, Washington and Woodford Counties:	
Bricklayers	22.93.....8.85
Bricklayers (Layout Men).....	23.18.....8.85
Refractory/Acid Brick/Glass.....	23.43.....8.85
All Counties	
Carpenters:	24.05.....9.77
Divers	36.45.....9.77
Piledrivermen.....	24.30.....9.77
Bracken and Grant Counties:	
Millwrights.....	21.90.....7.92
Anderson, Bath, Bourbon, Boyle, Clark, Fayette, Franklin, Harrison, Jessamine, Madison, Mercer, Montgomery, Nicholas, Owen, Scott and Woodford Counties:	
Millwrights.....	21.75.....12.50
Boyd, Carter, Elliott, Fleming, Greenup, Lewis, Mason, Robertson, and Rowan Counties:	
Millwrights.....	29.25.....12.16
Breckinridge, Bullitt, Carroll, Gallatin, Grayson, Hardin, Henry, Jefferson, Larue, Marion, Meade, Nelson, Oldham, Shelby, Spencer, Trimble and Washington Counties:	
Millwrights.....	23.65.....14.22
Bracken, Gallatin and Grant Counties:	
Electricians.....	24.24.....9.34
Sound Communications:	
CablePuller.....	9.00.....2.64
Installer	18.00.....3.475

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

HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED
-------------------------------------------	-------------------------------------------------

CRAFTS: (continued)

Boyd, Carter, Elliott and Rowan Counties:

Electricians:

Cable Splicers	27.46	16.12
Electricians.....	26.15	16.08

Anderson, Bath, Bourbon, Boyle, Breckinridge, Bullitt, Carroll, Clark, Fayette, Franklin, Grayson, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Madison, Marion, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties:

Electricians.....	25.91	23.5% + 4.55
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Fleming, Greenup, Lewis and Mason Counties:

Electricians.....	28.89.....	11.73
-------------------	------------	-------

Bourbon (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan); Carroll (Eastern third, including the Township of Ghent); Fleming (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksville, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); Mason (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);

Nicholas (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills); Owen (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley); Scott (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall) & Bracken, Gallatin, Grant, Harrison & Robertson Counties:

Ironworkers:

Fence Erector	22.25.....	15.67
Structural.....	24.72.....	15.67

Bourbon (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris); Carroll (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville); Clark (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte); Owen (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill); Scott (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stamping Ground & Woodlake); Anderson, Boyle, Breckinridge, Bullitt, Fayette, Franklin, Grayson, Hardin, Henry, Jefferson,

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

HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED
-------------------------------------------	-------------------------------------------------

CRAFTS: (continued)

Jessamine, Larue, Madison, Marion, Meade, Mercer, Nelson, Oldham, Shelby, Spencer, Trimble, Washington & Woodford Counties:

Ironworkers	23.49.....	15.99
-------------------	------------	-------

Bourbon (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan); Carroll (Eastern third, including the Townships of Ghent); Fleming (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksville, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); Mason (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington); Nicholas (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills); Owen (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley); Scott (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall); Bracken, Gallatin, Grant, Harrison & Robertson Counties:

Ironworkers:

Up to and including 30- mile radius of Hamilton County, Ohio Courthouse.....	25.15.....	14.85
Beyond 30- mile radius of Hamilton County, Ohio Courthouse	25.40.....	14.85

Clark (Eastern third, including Townships of Bloomingdale, Hunt, Indian Fields, Kiddville, Loglick, Rightangele & Thomson); Fleming (Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksville, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); Mason (Eastern third, including Townships of Helena, Marshall, Orangeburg, Plumville & Springdale); Nicholas (Eastern eighth, including the Township of Moorefield Sprout); Bath, Boyd, Carter, Elliott, Greenup, Lewis, Montgomery & Rowan Counties:

Ironworkers:

Zone 1	26.87	15.82
Zone 2	27.27	15.82
Zone 3	28.87	15.82

Zone 1 - Up to 10 mi. radius of union hall, Ashland, KY, 1643 Greenup Avenue;

Zone 2 - 10 to 50 mi. radius of union hall;

Zone 3 - 50 mi. radius and beyond.

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

HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED
<u>CRAFTS:</u> (continued)	
Anderson, Breckinridge, Bullitt, Carroll, Grayson, Hardin, Henry, Jefferson, Larue, Marion, Meade, Nelson, Oldham, Shelby, Spencer, Trimble and Washington Counties:	
Painters:	
Brush & Roller	17.879.07
Spray, Sand Blast, Power Tools, Water Blast & Steam Cleaning	18.629.07
Bracken, Gallatin, Grant, Mason, and Owen Counties:	
Painters:	
(Heavy and Highway Bridges- Guardrails–Lightpoles-Striping):	
Bridge/Equipment Tender and Containment Builder	20.406.30
Brush and Roller	23.006.30
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement	
	24.006.30
Sand Blasting & Water Blasting	23.756.30
Spray	23.506.30
Bath, Bourbon, Boyle, Clark, Fayette, Fleming, Franklin, Harrison, Jessamine, Madison, Mercer, Montgomery, Nicholas, Robertson, Scott and Woodford Counties	
Painters:	
Brush & Roller	21.305.90
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement	
	22.305.90
Sandblasting & Waterblasting	22.055.90
Spray	21.805.90
Bridge/Equipment Tender and/or Containment Builder	18.905.90
Boyd, Carter, Elliott, Greenup, Lewis and Rowan Counties	
Painters:	
Bridges	27.1310.95
All Other Work	24.2310.95

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

HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED
-------------------------------------------	-------------------------------------------------

CRAFTS: (continued)

Breckinridge, Bullitt, Carroll (Western Half), Franklin (Western three-fourths), Grayson, Hardin, Henry, Jefferson, Larue, Marion, Meade, Nelson, Oldham, Shelby, Spencer, Trimble and Washington Counties:

Plumber 29.00 12.17

Boyd, Carter, Elliott, Greenup, Lewis and Rowan Counties:

Plumbers and Steamfitters25.02.....16.99

Bracken, Carroll (Eastern Half), Gallatin, Grant, Mason, Owen and Robertson Counties:

Pipefitters and Plumbers27.9613.13

LABORERS:

Bath, Bourbon, Boyd, Boyle, Bracken, Carter, Clark, Elliott, Fayette, Fleming, Franklin, Gallatin, Grant, Greenup, Harrison, Jessamine, Lewis, Madison, Mason, Mercer, Montgomery, Nicholas, Owen, Robertson, Rowan, Scott, & Woodford Counties:

GROUP 1 - Aging and 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 and Hazardous Waste - Level D, Flagperson, Grade Checker, Hand Digging and Hand Back Filling, Highway Marker Placer, Landscaping Mesh Handler and Placer, Puddler, Railroad, Rip-Rap and Grouter, Right-of-Way Sign, Guard rail and Fence Installer, Signal Person, Sound Barrier Installer, Storm and Sanitary Sewer, Swamper, Truck Spotter and Dumper, and Wrecking of Concrete Forms, General Cleanup.

BASE RATE19.33

FRINGE BENEFITS9.18

Group 2 - Batter Board Man (Sanitary And Storm Sewer), Brickmason Tender, Mortar Mixer Operator, Scaffold Builder, Burner and Welder, Bushammer, Chain Saw Operator, Concrete Saw Operator, Deckhand Scow Man, Dry Cement Handler, Environmental - Nuclear, Radiation, Toxic and Hazardous Waste - Level C, Forklift Operator for Masonary, Form Setter, Green Concrete Cutting, Hand Operated Grouter and Grinder Machine Operator, Jackhammer, Pavement Breaker, Paving Joint Machine, Pipelayer, Plastic Pipe Fusion, Power Driven Georgia Buggy and Wheel Barrow, 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 RATE19.58

FRINGE BENEFITS9.18

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

LABORERS: (continued)

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

BASE RATE19.63
FRINGE BENEFITS9.18

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

BASE RATE20.23
FRINGE BENEFITS9.18

LABORERS:

Anderson, Bullitt, Carroll, Hardin, Henry, Jefferson, Larue, Marion, Meade, Nelson, Oldham, Shelby, Spencer, Trimble & Washington Counties:

GROUP 1 - Aging and 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 and Hazardous Waste - Level D, Flagperson, Grade Checker, Hand Digging and Hand Back Filling, Highway Marker Placer, Landscaping Mesh Handler and Placer, Puddler, Railroad, Rip-Rap and Grouter, Right-of-Way Sign, Guardrail and Fence Installer, Signal Person, Sound Barrier Installer, Storm and Sanitary Sewer, Swamper, Truck Spotter and Dumper, and Wrecking of Concrete Forms, General Cleanup.

BASE RATE19.33
FRINGE BENEFITS9.18

Group 2 - Batter Board Man (Sanitary And Storm Sewer), Brickmason Tender, Mortar Mixer Operator, Scaffold Builder, Burner and Welder, Bushammer, Chain Saw Operator, Concrete Saw Operator, Deckhand Scow Man, Dry Cement Handler, Environmental - Nuclear, Radiation, Toxic and Hazardous Waste - Level C, Forklift Operator for Masonary, Form Setter, Green Concrete Cutting, Hand Operated Grouter and Grinder Machine Operator, Jackhammer, Pavement Breaker, Paving Joint Machine, Pipelayer, Plastic Pipe Fusion, Power Driven Georgia Buggy and Wheel Barrow, 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 RATE19.58
FRINGE BENEFITS9.18

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

LABORERS: (continued)

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

BASE RATE19.63
FRINGE BENEFITS9.18

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

BASE RATE20.23
FRINGE BENEFITS9.18

LABORERS:

Breckinridge & Grayson Counties:

GROUP 1 - Aging and 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 and Hazardous Waste - Level D, Flagperson, Grade Checker, Hand Digging and Hand Back Filling, Highway Marker Placer, Landscaping Mesh Handler and Placer, Puddler, Railroad, Rip-Rap and Grouter, Right-of-Way Sign, Guard rail and Fence Installer, Signal Person, Sound Barrier Installer, Storm and Sanitary Sewer, Swamper, Truck Spotter and Dumper, and Wrecking of Concrete Forms, General Cleanup.

BASE RATE19.88
FRINGE BENEFITS8.63

Group 2 - Batter Board Man (Sanitary And Storm Sewer), Brickmason Tender, Mortar Mixer Operator, Scaffold Builder, Burner and Welder, Bushhammer, Chain Saw Operator, Concrete Saw Operator, Deckhand Scow Man, Dry Cement Handler, Environmental - Nuclear, Radiation, Toxic and Hazardous Waste - Level C, Forklift Operator for Masonary, Form Setter, Green Concrete Cutting, Hand Operated Grouter and Grinder Machine Operator, Jackhammer, Pavement Breaker, Paving Joint Machine, Pipelayer, Plastic Pipe Fusion, Power Driven Georgia Buggy and Wheel Barrow, 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 RATE20.13
FRINGE BENEFITS8.63

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

LABORERS: (continued)

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

BASE RATE20.18
FRINGE BENEFITS8.63

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

BASE RATE20.78
FRINGE BENEFITS8.63

TRUCK DRIVER CLASSIFICATIONS: TEAMSTERS **BASE RATE**

GROUP 1 - Mobile Batch Truck Tender 16.57

GROUP 2 - Greaser, Tire Changer and Mechanic Tender 16.68

GROUP 3 - Single Axle Dump, Flatbed, Semi-trailer or Pole Trailer when used to pull building materials and equipment, Tandem Axle Dump, Distributor, Mixer and Truck Mechanic 16.86

GROUP 4 - Euclid & Other Heavy Earthmoving Equipment & Lowboy, Articulator Cat, 5-Axle Vehicle, Winch & A-Frame when used in transporting materials, Ross Carrier, Forklift when used to transport building materials and Pavement Breaker16.96

FRINGE BENEFITS.....7.34

OPERATING ENGINEERS:

A-Frame Winch Truck, Auto Patrol, Backfiller, Batch 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,

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

OPERATING ENGINEERS: (continued)

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 and Truck Crane, Tunnel Mining Machines, Including Moles, Shields or similar types of Tunnel Mining Equipment.

BASE RATE23.60
FRINGE BENEFITS12.40

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, Fireman & 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 RATE21.18
FRINGE BENEFITS12.40

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

BASE RATE21.56
FRINGE BENEFITS12.40

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 RATE20.92
FRINGE BENEFITS12.40

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

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

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

WELDERS - Receive rate for craft in which welding is incidental.

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

These rates are listed pursuant to Kentucky Determination No. CR-06-III HWY dated July 10, 2007 and/or Federal Decision Number KY20080027 dated February 8, 2008 modification #0 dated February 8, 2008.

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.

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

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.

Steve Waddle, 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

STATEMENT OF INCOMPLETE WORK

STATEMENT OF INCOMPLETED WORK

All active prime contracts must be reported. This includes prime contracts with public and private owners and joint-ventured contracts. The names of the joint venturers must be shown when reporting these projects. A machine or typed listing reporting the status of each contract is acceptable when attached to this report; however, the total amounts on the itemized listing must be reported in the space provided below:

CONTRACT WITH	PROJECT IDENTIFICATION	PRIME CONTRACT AMOUNT	EARNINGS THROUGH LAST APPROVED ESTIMATE	TOTAL AMOUNT OF WORK REMAINING
TOTAL (Attach Summary if not itemized above)		\$	\$	\$

PART VI

BID ITEMS

TRANSPORTATION CABINET

Department of Highways

FRANKFORT, KY 40622

Sheet No: 1

Contract ID: 08-2098

JEFFERSON COUNTY

FD05 056 1747 011-013

Letting: 3/21/08

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
		ROADWAY			.	.
0010	00190	LEVELING & WEDGING PG64-22	531.00	TON	.	.
0020	00342	CL4 ASPH SURF 0.38A PG76-22	4,659.00	TON	.	.
0030	02562	SIGNS	490.00	SQFT	.	.
0040	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS	.	.
0050	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH	.	.
0060	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS	.	.
0070	02677	ASPHALT PAVE MILLING & TEXTURING	4,659.00	TON	.	.
0080	02775	ARROW PANEL	4.00	EACH	.	.
0090	04793	CONDUIT-1 1/4 IN	160.00	LF	.	.
0100	04820	TRENCHING AND BACKFILLING	228.00	LF	.	.
0110	04830	LOOP WIRE	9,720.00	LF	.	.
0120	04895	LOOP SAW SLOT AND FILL	3,198.00	LF	.	.
0130	06510	PAVE STRIPING-TEMP PAINT-4 IN	30,000.00	LF	.	.
0140	06514	PAVE STRIPING-PERM PAINT-4 IN	30,000.00	LF	.	.
0150	06565	PAVE MARKING-THERMO X-WALK-6 IN	1,600.00	LF	.	.
0160	06568	PAVE MARKING-THERMO STOP BAR-24IN	552.00	LF	.	.
0170	06574	PAVE MARKING-PREF THERM CURV ARROW	51.00	EACH	.	.
0180	06576	PAVE MARKING-PREF THERMO ONLY	20.00	EACH	.	.
0190	10000NS	LOT PAY ADJUSTMENT	8,830.00	DOLL	1.0000	8,830.00
0200	10020NS	FUEL ADJUSTMENT	4,624.00	DOLL	1.0000	4,624.00
0210	10030NS	ASPHALT ADJUSTMENT	9,342.00	DOLL	1.0000	9,342.00
0220	20391NS835	JUNCTION BOX TYPE A	1.00	EACH	.	.
0230	20468EC	JUNCTION BOX-10 X 8 X 4	6.00	EACH	.	.
		DEMOBILIZATION			.	.
0240	02569	DEMOBILIZATION	1.00	LS	.	.

TRANSPORTATION CABINET

Department of Highways

FRANKFORT, KY 40622

Sheet No: 2

Contract ID: 08-2098

JEFFERSON COUNTY

FD05 056 1747 011-013

Letting: 3/21/08

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
TOTAL BID						\$.

PART VII
CERTIFICATIONS

PROVISIONS RELATIVE TO SENATE BILL 258 (1994)

During the performance of the contract, the contractor agrees to comply with applicable provisions of:

1. KRS 136 Corporation and Utility Taxes
2. KRS 139 Sale and Use Taxes
3. KRS 141 Income Taxes
4. KRS 337 Wages and Hours
5. KRS 338 Occupational Safety and Health of Employees
6. KRS 341 Unemployment Compensation
7. KRS 342 Workers Compensation

Any final determinations of a violation by the contractor within the previous five (5) years pursuant to the applicable statutes above are revealed as follows:

NON-COLLUSION CERTIFICATION

COMMONWEALTH OF KENTUCKY

COUNTY _____

PROJECT NO. _____

I, _____, _____, under
(Name of officer signing certification) (Title)

penalty of perjury under the laws of the United States, do hereby certify that

(Insert name of Individual, Joint Venture, Co-partnership, or Corporation submitting bid)

its agent, officers or employees have not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding in connection with this proposal.

(Signature)

(Title)

REVISED: 8-23-89

NON-COLLUSION CERTIFICATION

COMMONWEALTH OF KENTUCKY

COUNTY _____

PROJECT NO. _____

I, _____, _____, under
(Name of officer signing certification) (Title)

penalty of perjury under the laws of the United States, do hereby certify that

(Insert name of Individual, Joint Venture, Co-partnership, or Corporation submitting bid)

its agent, officers or employees have not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding in connection with this proposal.

(Signature)

(Title)

REVISED: 8-23-89

CERTIFICATION OF BID PROPOSAL

We (I) propose to furnish all labor, equipment and materials necessary to construct and/or improve the subject project in accordance with the plans, the Transportation Cabinet's Standard Specifications for Road and Bridge Construction, current edition, special provisions, notes applicable to the project as indicated herein and all addenda issued on this project subsequent to purchase of proposal.

We (I) attach a bid proposal guaranty as provided in the special provisions in an amount not less than 5% of the total bid. We agree to execute a contract in accordance with this bid proposal within 15 calendar days after the receipt of the notice of award for the project.

We (I) have examined the site of proposed work, project plans, specifications, special provisions, and notes applicable to the project referred to herein. We understand that the quantities shown herein are estimated quantities subject to increase or decrease as provided in the specifications.

We (I) acknowledge receipt of all addendum(s) (if applicable) and have made the necessary revisions to the bid proposal. We have considered all addendum(s) in the calculation of the submitted bid and applied the updated bid items, which are included.

- No Addendum(s) have been posted

Name of Contracting Firm

BY: _____
Authorized Agent (Signature) Title

Address City State Zip Code

Telephone Number

When two or more organizations bid as a joint venture, enter names of each organization and an authorized agent for each organization must sign above.