



**TRANSPORTATION CABINET**

Frankfort, Kentucky 40622  
www.transportation.ky.gov/

**Steven L. Beshear**  
Governor

**Michael W. Hancock, P.E.**  
Secretary

January 25, 2012

CALL NO. 104  
CONTRACT ID NO. 124001  
ADDENDUM # 2

Subject: Knox County, HSIP 0251 (027)  
Letting January 27, 2012

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Proposal revisions are available at <http://transportation.ky.gov/contract/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in blue ink that reads "Ryan Griffith".

Ryan Griffith  
Director  
Division of Construction Procurement

RG:ks  
Enclosures



An Equal Opportunity Employer M/F/D

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**NATIONAL HIGHWAY**

Be advised this project is on the NATIONAL HIGHWAY SYSTEM.

**ASPHALT MIXTURE**

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

**DGA BASE**

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

**INITIAL TREATMENT**

Construct parabolic pavement crown from centerline on 1/4":1' slope as directed by the Engineer.

**FUEL AND ASPHALT PAY ADJUSTMENT**

The Department has included the Contract items Asphalt Adjustment and Fuel Adjustment for possible future payments at an established Contract unit price of \$1.00. The Department will calculate actual adjustment quantities after work is completed. If existing Contract amount is insufficient to pay all items on the contract with the adjustments, the Department will establish additional monies with a change order.

**OPTION B**

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.

## **SPECIAL NOTE FOR TURN LANE CONSTRUCTION**

### **Shoulder Milling/Trenching**

IF TRENCHING IS ACHIEVED BY MEANS OTHER THAN MILLING, SAWCUT THE PAVEMENT 12 INCHES DEEP AND REMOVE THE EXISTING SHOULDER TO CREATE A SMOOTH EDGE PRIOR TO EXCAVATING THE TRENCH.

The unit bid price per square yard for SHOULDER MILLING/TRENCHING shall be full compensation for saw-cutting pavement, excavation, and disposal of material. The excavation and disposal of material shall be as directed by the Engineer. The Engineer shall determine what material to deliver to the KNOX County Barn and what material to use for embankment and shoulders, and what material to waste at sites determined and provide by the Contractor.

The Department will pay SHOULDER MILLING/TRENCHING in square yards. The Department will NOT measure saw cutting for payment. The SAWCUT shall be incidental to the bid item SHOULDER MILLING/TRENCHING. Payment at the contract unit price per square yard shall be full compensation for all labor, materials, equipment, and incidentals for excavating, and disposing of waste, and delivery of approved excavated material to the KNOX County Barn.

Field modifications should be made, at the discretion of the Engineer, to avoid drainage structures. Culvert pipe, connections, and Sloped I/O Type 1 may be required. Payment for CULVERT PIPE and SLOPED BOX I/O TYPE 1 shall cover all incidentals to provide, install, and connect the new drainage structures.

### **RAISED PAVEMENT MARKERS**

Place Type V Mono-Directional (White) RPMs on the newly constructed turn lanes along the solid white turn lane stripe on 40' spacing. Do NOT install/replace any other RPMs on this project.

Markers should not be installed on top of the pavement joint or stripe. Offset markers a minimum of 2" from the pavement joint. Ensure that the finished line of markers is straight with minimal lateral deviation. Markers may be eliminated at the discretion of the Engineer.

### **SHOULDERING**

Shouldering to be done along the proposed turn lane locations. Use excess material from trenching activities to reshape and backup shoulders. Payment for SHOULDERING shall cover all incidentals to provide, place, shape, and compact the trenched material to provide a minimum 1' wide compacted aggregate/earth shoulder.

### **SEEDING AND PROTECTION**

Seed and protect disturbed areas along proposed turn lane locations.

## **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**

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

Easter Weekend – April 6-8

Memorial Weekend – May 25-28

At the discretion of the Engineer, additional 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 11 Feet. 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.

### **LANE CLOSURES**

Lane closures may be left in place during non-working hours for no more than 3 days, at the discretion of the Engineer.

### **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.

## **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.

## **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.

## **TEMPORARY ENTRANCES**

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.

### **TRAFFIC LOOP INSTALLATION, IF APPLICABLE**

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, IF APPLICABLE**

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.

### **PAVEMENT MARKINGS**

Coordinate the installation of all temporary and permanent striping, thermoplastic marking and type V pavement Markers 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 newly surfaced pavement and the existing pavement areas that traffic may cross shall be wedged with asphalt mixture for leveling and wedging. Remove wedges 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.

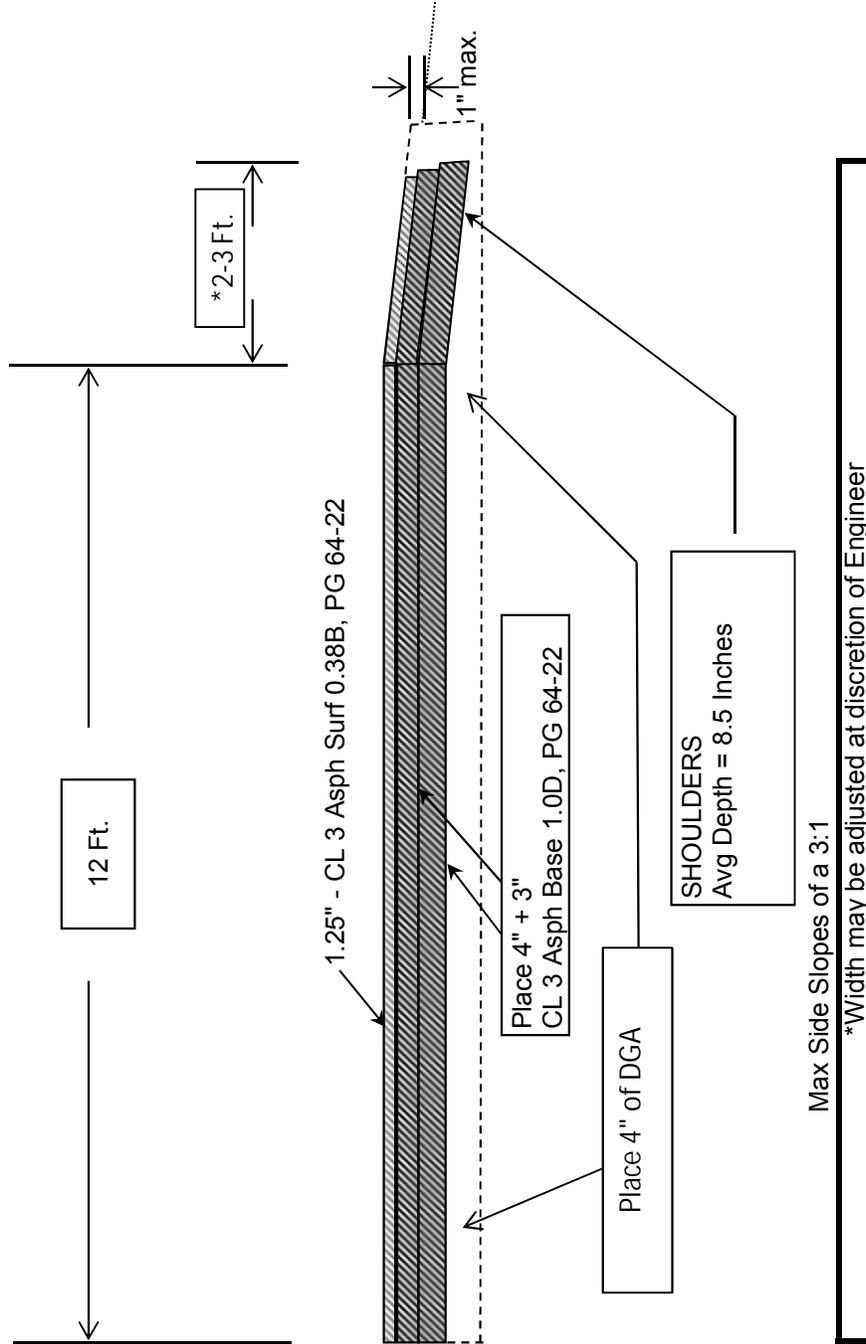
2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. Cones may be used in place of plastic drums, panels, and barricades during daylight working hours. Wedge with asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during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

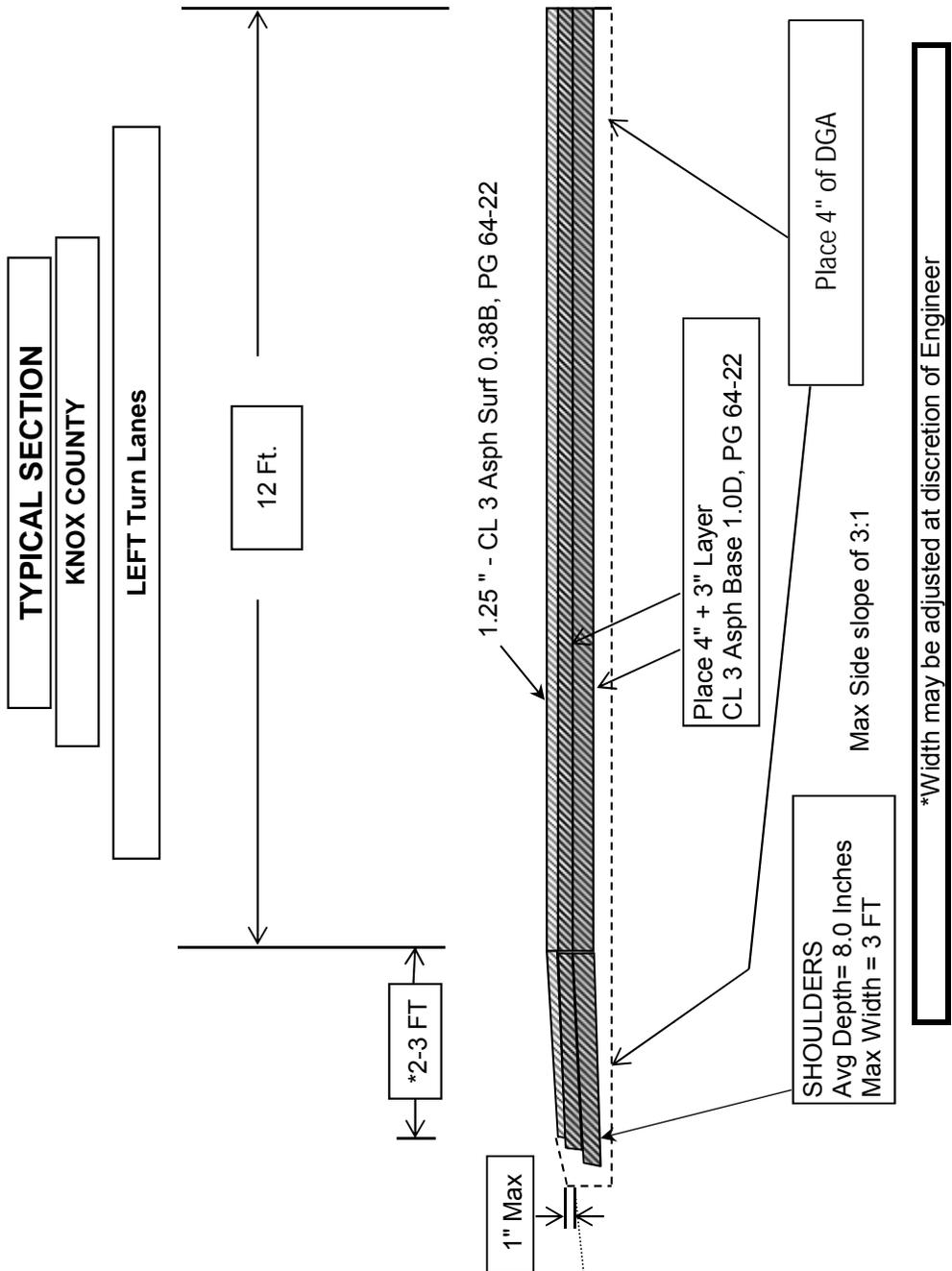
Turn Lane Summary Sheet

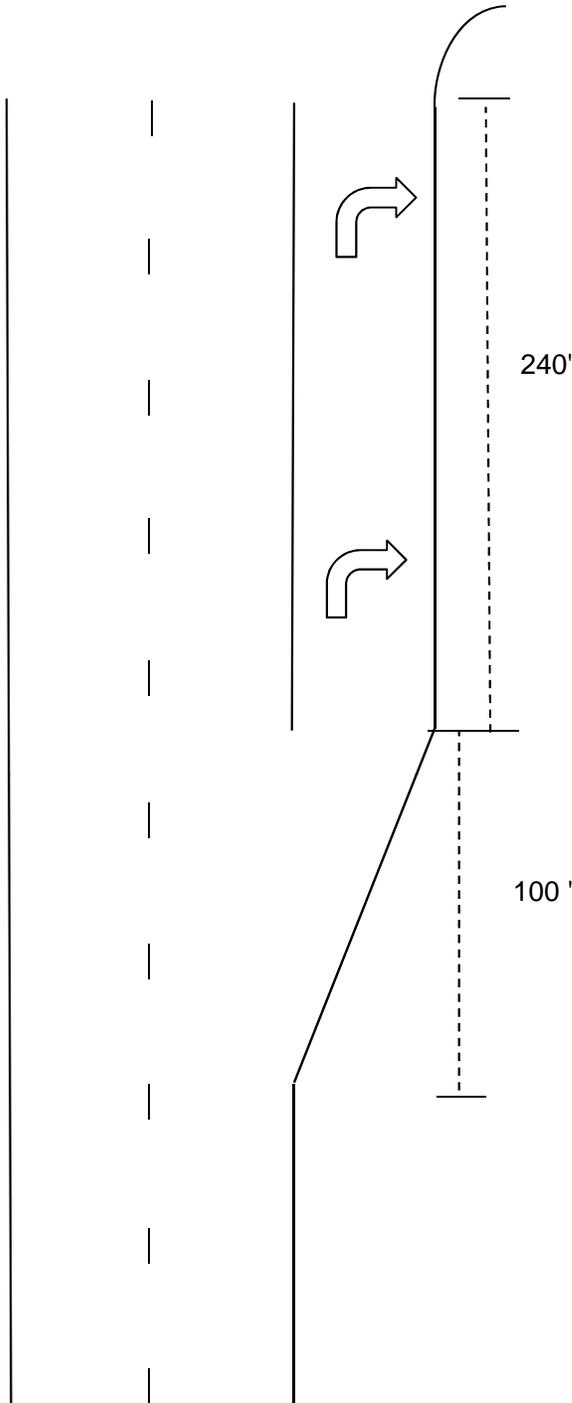
| Milepoint | Direction | Intersection                 | Turn Lane | Storage Length | Taper Length | Shld Trench | Surface | Base | DGA |
|-----------|-----------|------------------------------|-----------|----------------|--------------|-------------|---------|------|-----|
| 8.495     | NB        | Cougar Edge Rd.              | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 8.91      | SB        | Noahville Ln.                | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 9.13      | NB        | Stone Coal Ln.               | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 9.273     | SB        | Poindexter Ln.               | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 9.34      | NB        | Best Western                 | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 13.47     | NB        | California Hollow Rd.        | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 13.956    | NB        | Spurr Oil                    | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 15.421    | NB        | Emanuel Hollow Lp.           | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 19.103    | SB        | W. Rogers Hollow Rd.         | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 20.42     | NB        | Cumberland Gap Medical Plaza | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 21.05     | NB        | Medical Center               | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 21.96     | NB        | Nunley Rd.                   | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 21.96     | SB        | Nunley Rd.                   | Right     | 240            | 100          | 533         | 35      | 205  | 126 |
| 22.69     | NB        | Samaritan Dr.                | Left      | 240            | 100          | 533         | 35      | 205  | 126 |
| 22.69     | SB        | Samaritan Dr.                | Right     | 240            | 100          | 533         | 35      | 205  | 126 |
| 25.3      | SB        | Lynn Camp School Rd.         | Right     | 240            | 100          | 533         | 35      | 205  | 126 |

|                  |                    |                |             |             |
|------------------|--------------------|----------------|-------------|-------------|
| <b>Estimated</b> | <b>Shld Trench</b> | <b>Surface</b> | <b>Base</b> | <b>DGA</b>  |
| <b>Totals =</b>  | <b>8535</b>        | <b>567</b>     | <b>3286</b> | <b>2020</b> |

**TYPICAL SECTION  
KNOX COUNTY  
RIGHT TURNLANE**







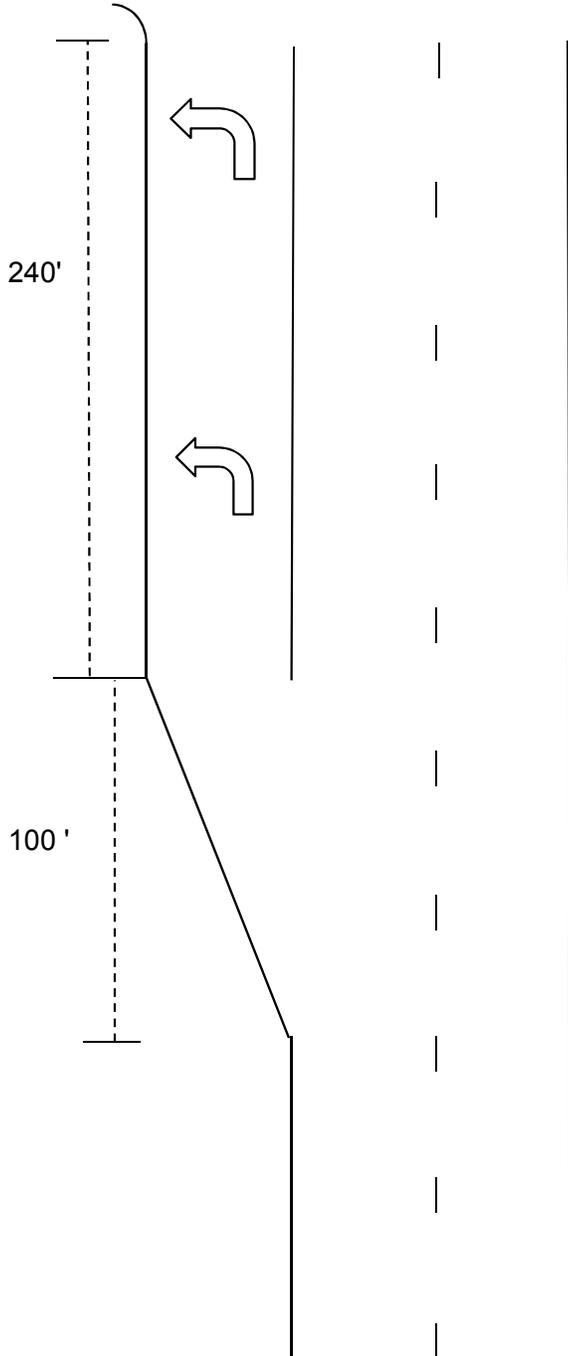
| Shoulder Trenching |        | Pavement |            |
|--------------------|--------|----------|------------|
| Length (ft.) =     | 240    | 1.25     | 0.38B Surf |
| Ave. Width (ft.) = | 15.67  | 3        | 1.0D Base  |
|                    |        | 4        | 1.0D Base  |
| SY =               | 417.87 | 4        | DGA        |

| Roadway Excavation  |        | Pavement |            |
|---------------------|--------|----------|------------|
| Length (ft.) =      | 100    | 1.25     | 0.38B Surf |
| ^Ave. Width (ft.) = | 10.4   | 3        | 1.0D Base  |
|                     |        | 4        | 1.0D Base  |
| SY =                | 115.56 | 4        | DGA        |

^Assumes 5' width at beginning of taper

|                            |              |
|----------------------------|--------------|
| Total Shoulder Trenching = | 533.42 SY/Ea |
|----------------------------|--------------|

Left Turn Lane Typical Layout



| Shoulder Trenching |        | Pavement |            |
|--------------------|--------|----------|------------|
| Length (ft.) =     | 240    | 1.25     | 0.38B Surf |
| Ave. Width (ft.) = | 15.67  | 3        | 1.0D Base  |
|                    |        | 4        | 1.0D Base  |
| SY =               | 417.87 | 4        | DGA        |

| Shoulder Trenching  |        | Pavement |            |
|---------------------|--------|----------|------------|
| Length (ft.) =      | 100    | 1.25     | 0.38B Surf |
| ^Ave. Width (ft.) = | 10.4   | 3        | 1.0D Base  |
|                     |        | 4        | 1.0D Base  |
| SY =                | 115.56 | 4        | DGA        |

^Assumes 5' width at beginning of taper

\*Includes removal of topsoil and vegetation

|                            |        |       |
|----------------------------|--------|-------|
| Total Shoulder Trenching = | 533.42 | SY/Ea |
|----------------------------|--------|-------|

**STANDARD DRAWINGS THAT APPLY**

**ROADWAY  
~ DRAINAGE ~**

**BOX INLETS AND OUTLETS**

SLOPED BOX INLET OR OUTLET TYPE 1 ..... RDB-110-07

**PIPE AND BOX CULVERT AND HEADWALLS**

FOR AQLL PIPE AND BOX CULVERT HEADWALLS (RDH SERIES) SEE HEADWALL SUPPLEMENT

**TYPICAL DRAINAGE INSTALLATIONS**

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS ..... RDI-001-08  
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS ..... RDI-002-03  
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS ..... RDI-003-03  
PIPE BEDDING FOR CULVERTS, ENTRANCE AND STORM SEWER PIPE ..... RDI-020-08  
PIPE BEDDING FOR CULVERTS, ENTRANCE AND STORM SEWER REINFORCED CONC. PIPE..... RDI-021  
PIPE BEDDING, TRENCH CONDITION ..... RDI-025-04  
PIPE BEDDING, TRENCH CONDITION REINFORCED CONC. PIPE..... RDI-026  
COATINGS, LININGS AND PAVINGS FOR NON-STRUCTURAL PLATE PIPE..... RDI-035-01

**MISCELLANEOUS DRAINAGE**

SECURITY DEVICES FOR FRAMES, GRATES AND LIDS ..... RDX-160-05

**~ GENERAL ~**

**MISCELLANEOUS STANDARDS**

MISCELLANEOUS STANDARDS PART 1 ..... RGX-001-05

**TRAFFIC**

**~ TEMPORARY ~**

**TRAFFIC CONTROL**

LANE CLOSURE MULTI-LANE HIGHWAY CASE I ..... TTC-115-01  
SHOULDER CLOSURE ..... TTC-135-01

**DEVICES**

POST SPLICING DETAIL ..... TTD-110-01

**STRIPING OPERATIONS**

MOBILE OPERATION FOR PAINT STRIPING CASE III ..... TTS-110-01  
MOBILE OPERATION FOR PAINT STRIPING CASE IV ..... TTS-115-01

CONTRACT ID: 124001  
COUNTY: KNOX  
PROPOSAL: HSIP 0251 (027)

PAGE: 1  
LETTING: 01/27/12  
CALL NO: 104

| LINE NO                     | ITEM    | DESCRIPTION  | APPROXIMATE QUANTITY | UNIT | UNIT PRICE | AMOUNT   |
|-----------------------------|---------|--|----------------------|------|------------|----------|
| SECTION 0001 ROADWAY        |         |  |                      |      |            |          |
| 0010                        | 00001   | DGA BASE<br>(REVISED: 1-25-12)                     | 2,020.000            | TON  |            |          |
| 0020                        | 00214   | CL3 ASPH BASE 1.00D PG64-22<br>(REVISED: 1-25-12)  | 3,286.000            | TON  |            |          |
| 0030                        | 00388   | CL3 ASPH SURF 0.38B PG64-22<br>(REVISED: 1-25-12)  | 567.000              | TON  |            |          |
| 0031                        | 00461   | CULVERT PIPE-15 IN<br>(ADDED: 1-25-12)             | 20.000               | LF   |            |          |
| 0032                        | 01440   | SLOPED BOX INLET-OUTLET TYPE 1<br>(ADDED: 1-25-12) | 1.000                | EACH |            |          |
| 0060                        | 02562   | SIGNS  | 230.000              | SQFT |            |          |
| 0070                        | 02650   | MAINTAIN & CONTROL TRAFFIC<br>US 25 E              | ( 1.00)              | LS   |            |          |
| 0080                        | 02671   | PORTABLE CHANGEABLE MESSAGE SIGN                   | 2.000                | EACH |            |          |
| 0090                        | 02714   | SHOULDERING<br>(REVISED: 1-25-12)                  | 5,440.000            | LF   |            |          |
| 0100                        | 02775   | ARROW PANEL  | 2.000                | EACH |            |          |
| 0110                        | 05985   | SEEDING AND PROTECTION                             | 2,000.000            | SQYD |            |          |
| 0120                        | 06510   | PAVE STRIPING-TEMP PAINT-4 IN                      | 10,000.000           | LF   |            |          |
| 0130                        | 06514   | PAVE STRIPING-PERM PAINT-4 IN                      | 10,000.000           | LF   |            |          |
| 0140                        | 06574   | PAVE MARKING-THERMO CURV ARROW                     | 54.000               | EACH |            |          |
| 0150                        | 06589   | PAVEMENT MARKER TYPE V-MW                          | 96.000               | EACH |            |          |
| 0160                        | 10020NS | FUEL ADJUSTMENT<br>(REVISED: 1-25-12)              | 5,907.000            | DOLL | 1.00       | 5,907.00 |
| 0170                        | 10030NS | ASPHALT ADJUSTMENT<br>(REVISED: 1-25-12)           | 9,282.000            | DOLL | 1.00       | 9,282.00 |
| 0171                        | 20748ED | SHOULDER MILLING/TRENCHING<br>(ADDED: 1-25-12)     | 8,535.000            | SQYD |            |          |
| SECTION 0002 DEMOBILIZATION |         |  |                      |      |            |          |
| 0180                        | 02569   | DEMOBILIZATION (AT LEAST 1.5%)                     |                      | LUMP |            |          |
| TOTAL BID                   |         |  |                      |      |            |          |