



TRANSPORTATION CABINET

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

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Secretary

November 17, 2014

CALL NO. 400
CONTRACT ID NO. 142356
ADDENDUM # 1

Subject: Warren County, 114GR14P090-FD04SPP
Letting November 21, 2014

(1) Revised - Traffic Control Plan - Pages 18-42 of 124

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

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

Sincerely,

A handwritten signature in blue ink that reads "Diana Castle Radcliffe".

Diana Castle Radcliffe
Director
Division of Construction Procurement

DR:ks
Enclosures



An Equal Opportunity Employer M/F/D

**TRAFFIC CONTROL PLAN
FD04SPP 114 0068 002-003
RUSSELLVILLE ROAD @ VETERANS**

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia 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, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Do not erect lane closures during the following days and hours:

6:00 am – 7:00 pm	Sunday through Monday (7 Days)
November 27-28, 2014	Thanksgiving Holiday
December 24-26, 2014	Christmas Holiday
December 31-Jan. 2, 2015	New Year's Holiday
April 3-5, 2015	Easter Weekend
May 23-25, 2015	Memorial Day Weekend
July 3-5, 2015	Independence Day Weekend

On non-holiday weekends, the engineer may permit minor operations that do not require a lane closure and cause little disruption to traffic between the hours of 6:00 am and 7:00 pm.

The Engineer may specify additional days and hours when lane closures will not be allowed.

At locations with three or more lanes, maintain one lane of traffic in each direction at all times during construction. At locations with two lanes, maintain alternating one way traffic during construction. Provide a minimum clear lane width of 11 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

LANE CLOSURES

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

Traffic Control Plan
Russellville Road
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PHASING

PHASE I – During allowable days and hours, alternately close one eastbound lane at time of the western Russellville Road approach to US 231 allowing one through lane of traffic at all times. Mill 5½ inch depth cut as shown on the detail drawing. Backfill the trench with 4 inches of Class 3 Asphalt Base 1.00D PG76-22. Level and wedge and place temporary striping as necessary to reopen the lanes to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Do not perform Phase I and Phase II concurrently.

PHASE II – During allowable days and hours, close the westbound left turn lane and adjacent eastbound lane of the eastern Russellville Road approach to US 231. Mill 5½ inch depth cut as shown on the detail drawing. Backfill the trench with 4 inches of Class 3 Asphalt Base 1.00D PG76-22. Level and wedge and place temporary striping as necessary to reopen the lanes to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Do not perform Phase I and Phase II concurrently.

PHASE III– Maintain traffic on the backfilled areas. Level and wedge as directed by the Engineer until the Engineer determines that the asphalt base courses are adequately stabilized.

PHASE IV – When the Engineer determines the asphalt base is adequately stabilized, install traffic signal loops and place the final Class 3 Asphalt Surface 0.50B PG76-22 over the entire areas to be resurfaced. Place Permanent Striping and reopen the road to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Maintain a minimum of one lane of traffic in each direction during this phase.

PHASE V – Within 24 hours of completion of Phase IV, place Thermoplastic Pavement Markings. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Maintain a minimum of one lane of traffic in each direction during this phase.

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.

Traffic Control Plan
Russellville Road
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CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations 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 Engineer may vary the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, 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. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Changeable Message Signs or for signs the Engineer directs be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

ARROW PANELS

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. 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. The Department will measure individual Arrow Panels only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Arrow Panels or for panels signs the Engineer directs be replaced due to poor condition or readability for payment. Retain possession of the Arrow Panels upon completion of the work.

TEMPORARY ENTRANCES

The Engineer will not require the Contractor 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. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for the Contractor's convenience, and in no case exceeding 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.

Traffic Control Plan
Russellville Road
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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.

The Department will measure asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, the Department will not measure aggregates, excavation, and/or embankment, but shall be incidental to Maintain and Control Traffic. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

TRAFFIC SIGNAL LOOPS

Install traffic signal loops according to the Special Notes for Traffic Signal Loop Replacement, except place the loops in the asphalt base course prior to placing the asphalt surface course. Coordinate the placement of the loops with the Engineer.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used to protect pavement removal areas and road closures in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day at all sites within the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of the work.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Install Temporary Striping according to Section 112 with the following exceptions:

1. Include edge lines in Temporary Striping; and
2. Place Temporary or Permanent Striping before opening a lane to traffic; and
3. If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

Traffic Control Plan
Russellville Road
Page 5 of 5

THERMOPLASTIC INTERSECTION MARKINGS

Consider the locations listed on the summary as approximate only. Prior to milling and/or resurfacing, locate and document the locations of the existing markings. After resurfacing, replace the markings at their approximate existing locations or as directed by Engineer. Place markings not existing prior to resurfacing as directed by the Engineer.

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and unresurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or 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' - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing on coming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the engineer.

**TRAFFIC CONTROL PLAN
FD04SPP 114 231X 002-003
UNIVERSITY DRIVE @ BIG RED WAY**

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia 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, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Do not erect lane closures during the following days and hours:

6:00 am – 7:00 pm

November 22, 2014-May 1, 2015
May 23-25, 2015
July 3-5, 2015

Sunday through Monday (7 Days)

Western Kentucky University Academic Year
Memorial Day Weekend
Independence Day Weekend

On non-holiday weekends, the engineer may permit minor operations that do not require a lane closure and cause little disruption to traffic between the hours of 6:00 am and 7:00 pm.

The Engineer may specify additional days and hours when lane closures will not be allowed.

At locations with three or more lanes, maintain one lane of traffic in each direction at all times during construction. At locations with two lanes, maintain alternating one way traffic during construction. Provide a minimum clear lane width of 11 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

LANE CLOSURES

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

Traffic Control Plan
US 231X
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PHASING

PHASE I – During allowable days and hours, alternately close one northbound lane at a time of the southern University Drive approach to Big Red Way allowing one through lane of traffic at all times. Mill 5½ inch depth cut as shown on the detail drawing. Backfill the trench with 4 inches of Class 3 Asphalt Base 1.00D PG76-22. Level and wedge and place temporary striping as necessary to reopen the lanes to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Do not perform Phase I and Phase II concurrently.

PHASE II – During allowable days and hours, close the southbound through lane and adjacent northbound lane of the northern University Drive approach to Big Red Way.. Mill 5½ inch depth cut as shown on the detail drawing. Backfill the trench with 4 inches of Class 3 Asphalt Base 1.00D PG76-22. Level and wedge and place temporary striping as necessary to reopen the lanes to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Do not perform Phase I and Phase II concurrently.

PHASE III– Maintain traffic on the backfilled areas. Level and wedge as directed by the Engineer until the Engineer determines that the asphalt base courses are adequately stabilized.

PHASE IV – When the Engineer determines the asphalt base is adequately stabilized, install traffic signal loops and place the final Class 3 Asphalt Surface 0.50B PG76-22 over the entire areas to be resurfaced. Place Permanent Striping and reopen the road to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Maintain a minimum of one lane of traffic in each direction during this phase.

PHASE V – Within 24 hours of completion of Phase IV, place Thermoplastic Pavement Markings. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Maintain a minimum of one lane of traffic in each direction during this phase.

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.

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US 231X
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CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations 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 Engineer may vary the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, 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. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Changeable Message Signs or for signs the Engineer directs be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

ARROW PANELS

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. 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. The Department will measure individual Arrow Panels only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Arrow Panels or for panels signs the Engineer directs be replaced due to poor condition or readability for payment. Retain possession of the Arrow Panels upon completion of the work.

TEMPORARY ENTRANCES

The Engineer will not require the Contractor 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. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for the Contractor's convenience, and in no case exceeding 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.

Traffic Control Plan
US 231X
Page 4 of 5

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.

The Department will measure asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, the Department will not measure aggregates, excavation, and/or embankment, but shall be incidental to Maintain and Control Traffic. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

TRAFFIC SIGNAL LOOPS

Install traffic signal loops according to the Special Notes for Traffic Signal Loop Replacement, except place the loops in the asphalt base prior to placing the asphalt surface. Coordinate the placement of the loops with the Engineer.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used to protect pavement removal areas and road closures in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day at all sites within the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of the work.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Install Temporary Striping according to Section 112 with the following exceptions:

1. Include edge lines in Temporary Striping; and
2. Place Temporary or Permanent Striping before opening a lane to traffic; and
3. If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

Traffic Control Plan
US 231X
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THERMOPLASTIC INTERSECTION MARKINGS

Consider the locations listed on the summary as approximate only. Prior to milling and/or resurfacing, locate and document the locations of the existing markings. After resurfacing, replace the markings at their approximate existing locations or as directed by Engineer. Place markings not existing prior to resurfacing as directed by the Engineer.

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and unresurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or 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' - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing on coming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the engineer.

TRAFFIC CONTROL PLAN
FD04SPP 114 0234 010-013
SITE 1 – CEMETERY ROAD @ CUMBERLAND TRACE

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia 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, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Except as specified in Phase I below, do not erect lane closures during the following days and hours:

6:00 am – 7:00 pm	Sunday through Monday (7 Days)
November 27-28, 2014	Thanksgiving Holiday
December 24-26, 2014	Christmas Holiday
December 31-Jan. 2, 2015	New Year's Holiday
April 3-5, 2015	Easter Weekend
May 23-25, 2015	Memorial Day Weekend
July 3-5, 2015	Independence Day Weekend

On non-holiday weekends, the engineer may permit minor operations that do not require a lane closure and cause little disruption to traffic between the hours of 6:00 am and 7:00 pm.

The Engineer may specify additional days and hours when lane closures will not be allowed.

Except as specified in Phase I below, at locations with three or more lanes, maintain one lane of traffic in each direction at all times during construction; at locations with two lanes, maintain alternating one way traffic during construction. Provide a minimum clear lane width of 11 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

LANE CLOSURES

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

Traffic Control Plan
KY 234 Site 1
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PHASING

PHASE I – Select one work shift between the hours of 6:00 PM and 7:00 AM and close Cumberland Trace to through traffic. Close the right through lane and the right turn lane of the Cemetery Road approach to Cumberland Trace. Obtain the Engineer's approval of the selected shift seven (7) calendar days prior to closure. Provide for passage of emergency vehicles in the right lane and shoulder of the Cumberland Trace approach to Cemetery Road. Mill 5½ inch depth cut as shown on the detail drawing. Backfill the trench with 4 inches of Class 3 Asphalt Base 1.00D PG76-22. Level and wedge and place temporary striping as necessary to reopen the lanes to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM on the approved work shift.

PHASE II– Maintain traffic on the backfilled areas. Level and wedge as directed by the Engineer until the Engineer determines that the asphalt base course is adequately stabilized.

PHASE III – When the Engineer determines the asphalt base is adequately stabilized, install traffic signal loops and place the final Class 3 Asphalt Surface 0.50B PG76-22 over the entire area to be resurfaced. Place Permanent Striping and reopen the road to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Maintain a minimum of one lane of traffic in each direction during this phase.

PHASE IV – Within 24 hours of completion of Phase III, place Thermoplastic Pavement Markings. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Maintain a minimum of one lane of traffic in each direction during this phase.

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.

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations 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 Engineer may vary

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KY 234 Site 1
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the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, 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. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Changeable Message Signs or for signs the Engineer directs be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

ARROW PANELS

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TEMPORARY ENTRANCES

The Engineer will not require the Contractor 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. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for the Contractor's convenience, and in no case exceeding 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.

The Department will measure asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, the Department will not measure aggregates, excavation, and/or embankment, but shall be incidental to Maintain and Control Traffic. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

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KY 234 Site 1
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TRAFFIC SIGNAL LOOPS

Install traffic signal loops according to the Special Notes for Traffic Signal Loop Replacement, except place the loops in the asphalt base course prior to placing the asphalt surface. Coordinate the placement of the loops with the Engineer.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used to protect pavement removal areas and road closures in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day at all sites within the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of the work.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Install Temporary Striping according to Section 112 with the following exceptions:

1. Include edge lines in Temporary Striping; and
2. Place Temporary or Permanent Striping before opening a lane to traffic; and
3. If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

THERMOPLASTIC INTERSECTION MARKINGS

Consider the locations listed on the summary as approximate only. Prior to milling and/or resurfacing, locate and document the locations of the existing markings. After resurfacing, replace the markings at their approximate existing locations or as directed by Engineer. Place markings not existing prior to resurfacing as directed by the Engineer.

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KY 234 Site 1
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PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and unresurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or 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' - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing on coming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the engineer.

**TRAFFIC CONTROL PLAN
FD04SPP 114 0234 010-013
SITE 2 – CEMETERY ROAD @ LOVERS LANE**

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia 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, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Do not erect lane closures during the following days and hours:

6:00 am – 7:00 pm	Sunday through Monday (7 Days)
November 27-28, 2014	Thanksgiving Holiday
December 24-26, 2014	Christmas Holiday
December 31-Jan. 2, 2015	New Year's Holiday
April 3-5, 2015	Easter Weekend
May 23-25, 2015	Memorial Day Weekend
July 3-5, 2015	Independence Day Weekend

On non-holiday weekends, the engineer may permit minor operations that do not require a lane closure and cause little disruption to traffic between the hours of 6:00 am and 7:00 pm.

The Engineer may specify additional days and hours when lane closures will not be allowed.

At locations with three or more lanes, maintain one lane of traffic in each direction at all times during construction. At locations with two lanes, maintain alternating one way traffic during construction. Provide a minimum clear lane width of 11 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

LANE CLOSURES

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

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PHASING

PHASE I – During allowable days and hours, close the right through lane and the right turn lane of the Cemetery Road approach to Lovers Lane. Mill 5½ inch depth cut as shown on the detail drawing. Backfill the trench with 4 inches of Class 3 Asphalt Base 1.00D PG76-22. Level and wedge and place temporary striping as necessary to reopen the lanes to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM.

PHASE II– Maintain traffic on the backfilled areas. Level and wedge as directed by the Engineer until the Engineer determines that the asphalt base courses are adequately stabilized.

PHASE III – When the Engineer determines the asphalt base is adequately stabilized, install traffic signal loops and place the final Class 3 Asphalt Surface 0.50B PG76-22 over the entire area to be resurfaced. Place Permanent Striping and reopen the road to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Maintain a minimum of one lane of traffic in each direction during this phase.

PHASE IV – Within 24 hours of completion of Phase III, place Thermoplastic Pavement Markings. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Maintain a minimum of one lane of traffic in each direction during this phase.

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.

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations 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 Engineer may vary the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, 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

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KY 234 Site 2
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of the contract. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Changeable Message Signs or for signs the Engineer directs be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

ARROW PANELS

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. 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. The Department will measure individual Arrow Panels only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Arrow Panels or for panels signs the Engineer directs be replaced due to poor condition or readability for payment. Retain possession of the Arrow Panels upon completion of the work.

TEMPORARY ENTRANCES

The Engineer will not require the Contractor 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. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for the Contractor's convenience, and in no case exceeding 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.

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.

The Department will measure asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, the Department will not measure aggregates, excavation, and/or embankment, but shall be incidental to Maintain and Control Traffic. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

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TRAFFIC SIGNAL LOOPS

Install traffic signal loops according to the Special Notes for Traffic Signal Loop Replacement, except place the loops in the asphalt base prior to placing the asphalt surface. Coordinate the placement of the loops with the Engineer.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used to protect pavement removal areas and road closures in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day at all sites within the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of the work.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Install Temporary Striping according to Section 112 with the following exceptions:

1. Include edge lines in Temporary Striping; and
2. Place Temporary or Permanent Striping before opening a lane to traffic; and
3. If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

THERMOPLASTIC INTERSECTION MARKINGS

Consider the locations listed on the summary as approximate only. Prior to milling and/or resurfacing, locate and document the locations of the existing markings. After resurfacing, replace the markings at their approximate existing locations or as directed by Engineer. Place markings not existing prior to resurfacing as directed by the Engineer.

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PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and unresurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or 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' - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing on coming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the engineer.

**TRAFFIC CONTROL PLAN
FD04SPP 114 0234 010-013
SITE 3 – FAIRVIEW AVENUE AT US 31W BYPASS**

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia 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, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Do not erect lane closures during the following days and hours:

6:00 am – 7:00 pm	Sunday through Monday (7 Days)
November 27-28, 2014	Thanksgiving Holiday
December 24-26, 2014	Christmas Holiday
December 31-Jan. 2, 2015	New Year's Holiday
April 3-5, 2015	Easter Weekend
May 23-25, 2015	Memorial Day Weekend
July 3-5, 2015	Independence Day Weekend

On non-holiday weekends, the engineer may permit minor operations that do not require a lane closure and cause little disruption to traffic between the hours of 6:00 am and 7:00 pm.

The Engineer may specify additional days and hours when lane closures will not be allowed.

At locations with three or more lanes, maintain one lane of traffic in each direction at all times during construction. At locations with two lanes, maintain alternating one way traffic during construction. Provide a minimum clear lane width of 11 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

LANE CLOSURES

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

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PHASING

PHASE I – During allowable days and hours, alternately close one through lane and the left turn lane of the US 31W Bypass west approach to Fairview Avenue allowing one through lane of traffic at all times. Mill 5½ inch depth cut as shown on the detail drawing. Backfill the trench with 4 inches of Class 3 Asphalt Base 1.00D PG76-22. Level and wedge and place temporary striping as necessary to reopen the lanes to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Do not perform Phase I and Phase II concurrently.

PHASE II – During allowable days and hours, alternately close one through lanes of the Fairview Avenue north approach to the US 31W Bypass allowing one through lane of traffic at all times. Mill 5½ inch depth cut as shown on the detail drawing. Backfill the trench with 4 inches of Class 3 Asphalt Base 1.00D PG76-22. Level and wedge and place temporary striping as necessary to reopen the lanes to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Do not perform Phase I and Phase II concurrently.

PHASE III– Maintain traffic on the backfilled areas. Level and wedge as directed by the Engineer until the Engineer determines that the asphalt base courses are adequately stabilized.

PHASE IV – When the Engineer determines the asphalt base is adequately stabilized, install traffic signal loops and place the final Class 3 Asphalt Surface 0.50B PG76-22 over the entire areas to be resurfaced. Place Permanent Striping and reopen the road to traffic. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Maintain a minimum of one lane of traffic in each direction during this phase.

PHASE V – Within 24 hours of completion of Phase IV, place Thermoplastic Pavement Markings. Perform this phase in one continuous operation between the hours of 7:00 PM through 6:00 AM. Maintain a minimum of one lane of traffic in each direction during this phase.

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.

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations 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

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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 Engineer may vary the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, 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. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Changeable Message Signs or for signs the Engineer directs be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

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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.

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TRAFFIC SIGNAL LOOPS

Install traffic signal loops according to the Special Notes for Traffic Signal Loop Replacement. Coordinate the placement of the loops with the Engineer.

BARRICADES

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Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the engineer.