



COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET

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

Matthew G. Bevin
Governor

Greg Thomas
Secretary

May 18, 2018

CALL NO. 347
CONTRACT ID NO. 182088
ADDENDUM # 1

Subject: WOODFORD COUNTY, FD05 120 0062 015-017
Letting May 25, 2018

- (1) Revised - Special Provision for Surfacing Areas - Page 9 of 45
- (2) Added - Special Notes Applicable - Page 10(a) of 45
- (3) Added - Special Note for Trenching- Page 13(a) of 45
- (4) Revised - Special Note for Base Failure Repair- Page 14 of 45
- (5) Revised - Special Note for Existing Blow-Up- Page 15 of 45
- (6) Revised - Traffic Control Plan- Pages 17-19 of 45
- (7) Revised - Milling Summary- Page 22 of 45
- (8) Added - Blowup Repair Summary- Page 22(a) of 45
- (9) Revised - Typical Section- Page 26 of 45
- (10) Added - Typical Section- Page 26(a) of 45
- (11) Revised - Typical Section- Page 27 of 45
- (12) Added - Milling Detail Sheet- Page 27(a) of 45
- (13) Revised - Bridge Detail Sheet- Page 28 of 45
- (14) Added - Special Note for Portable Changeable Message Sign- Pages 1-3 of 3

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

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

Sincerely,

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:mr
Enclosures



An Equal Opportunity Employer M/F/D

DEFERRED PAYMENT: The successful bidder on this project may request a work order with an effective date prior to June 15, 2018. The successful bidder must make the request in writing to the Department. The Department will issue a work order at the request of the contractor with the distinct understanding that payment for any Work Performed Estimates may be delayed until July 15, 2018. Unless the successful bidder requests an earlier work order date, the Department will issue a work order on June 15, 2018 for this project.

SURFACING AREAS

The Department estimates the mainline surfacing width to be 22 feet.

The Department estimates the total mainline area to be surfaced to be 7,800 square yards.

The Department estimates the shoulder width to be 2.0 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 1,300 square yards.

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.

INCIDENTAL SURFACING

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

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 NOTES APPLICABLE
FD05 120 0062 015-017**

PROJECT TERMINI

- Consider the west terminus of the project to be approximate only. The Engineer will determine the exact terminus at the time of construction.
- End paving on the east end of the project at the west end of the South Elkhorn Creek Bridge.

PAVEMENT MARKING

- Stripe edge line around the radius at Moores Mill Road.
- Place two curve arrows in the right turn lane into Moores Mill Road.
- Stripe the full length of the South Elkhorn Creek Bridge at the east end of the project.
- All striping shall be 4" wide.
- Break striping for named roadways.
- Submit striping log to the Engineer prior to start of work.

TRENCHING

- Trench 2 foot wide at locations to be determined by the Engineer at the time of construction.
- Use CL2 ASPH BASE 1.0D PG 64-22 for trenching refill.
- Place the Asphalt Base in 4 inch maximum lifts.

RUMBLE STRIPS

- Place Edge Line Rumble Stripe milepoint 15.910-16.459.
- Place Center Line Rumble Strips milepoint 15.910-16.459.

SPECIAL NOTE FOR TRENCHING
FD05 120 0062 015-017

Trench shoulders as shown on the typical section. Retain possession of materials excavated from the trench. Waste the excavated materials off the right-of-way at sites obtained by the Contractor, at no additional cost to the Department. See Special Note for Waste and Borrow.

The Department will measure "Trenching" in linear feet at the pavement/shoulder edge. Accept payment at the contract unit price per linear foot as full compensation for all labor, materials, equipment and incidentals for excavating the shoulder trench and disposing of waste.

1-3920 trenchingwastematerialoffrw
01/02/2012

**SPECIAL NOTE FOR BASE FAILURE REPAIR
FD05 120 0062 015-017**

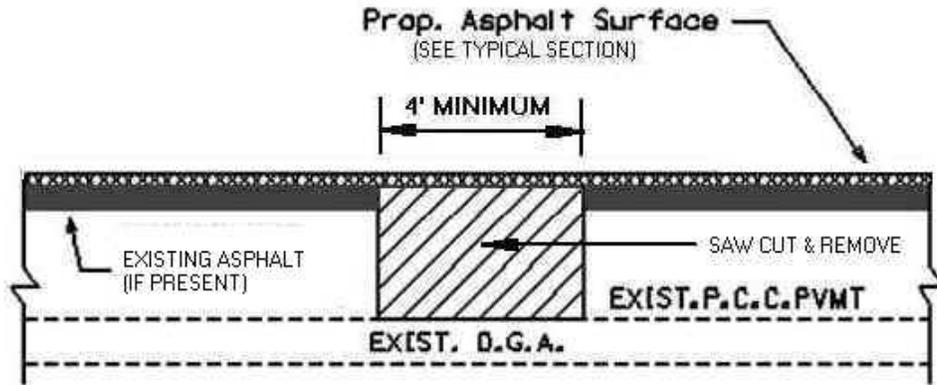
Consider repair locations and dimensions listed on the summary to be approximate only. The Engineer will determine actual repair locations and dimensions at the time of construction. Prior to overall milling and/or leveling and wedging, excavate the designated base failure areas to a depth of eight (8) inches below the existing asphalt pavement surface level. Dispose of the excavated materials at waste sites off the Right-of-Way obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.

Backfill the excavated areas with Class 2 Asphalt Base 1.00D PG6422. Compact the asphalt base to the compaction required in Section 403.03.10. Seal the asphalt base with leveling and wedging. Perform all base failure repairs in such a manner that removal and replacement are completed on the same day. Do this work as one of the Contractor's first operations in order to allow further compaction by traffic. Do not mill or place new asphalt surface over repaired base failure areas until a minimum of 7 calendar days have elapsed after placement of the asphalt base. After a minimum of 7 calendar days and when the Engineer determines the base failure repair areas have sufficiently stabilized, begin milling and/or resurfacing operations. Prior to milling and/or constructing the new asphalt surface, level and wedge any settlement of the repair areas.

The bidder must draw conclusions as to the conditions to be encountered. The Department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation if the materials encountered are not in accord with the classification shown.

Accept payment at the Contract unit prices per square yard for Base Failure repair and per ton for Leveling and Wedging as full compensation for all labor, materials, equipment, and incidentals for removing pavement and disposing of the materials, furnishing and placing asphalt base, leveling and wedging, and all other items necessary to complete the work according to these notes to the satisfaction of the Engineer.

SPECIAL NOTE FOR REPAIR OF EXISTING BLOW-UP
FD05 120 0062 015-017



Consider the locations and dimensions listed on the summary to be approximate only. The Engineer will determine the exact locations and dimensions at the time of construction at the time of construction. Saw cut the existing asphalt and PCC Pavement full depth to allow for the removal of the existing PCC Pavement, down to the existing DGA and back to solid concrete, a minimum of 2 feet either side of the transverse centerline of the blowup. Dispose of removed materials off the Right-of-way at sites obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow). Fill the removed area with Class 2 Asphalt Base 1.00D PG64-22 in lifts not to exceed four (4) inches. Compact the asphalt base to the compaction required by Section 403.03.10. Seal the asphalt base with leveling and wedging. Perform all blow-up repairs in such a manner that removal and replacement are completed on the same day. Complete this work as one of the Contractor's first operations in order to allow further compaction by traffic. Do not mill or place new asphalt surface over repaired blow-up areas until a minimum of 7 calendar days have elapsed after placement of the asphalt base. After a minimum of 7 calendar days and when the Engineer determines the blow-up repair areas have sufficiently stabilized, begin milling and/or resurfacing operations. Prior to milling and/or constructing the new asphalt surface, level and wedge any settlement of the repair areas.

The bidder must draw conclusions as to the conditions to be encountered. The Department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation if the materials encountered are not in accord with the classification shown.

Accept payment at the Contract unit prices per square yard for Repair Existing Blow-Up and per ton for Leveling and Wedging as full compensation for all labor, materials, equipment, and incidentals for saw cutting and removing pavement and disposing of the materials, furnishing and placing asphalt base, leveling and wedging, and all other items necessary to complete the work according to these notes to the satisfaction of the Engineer.

TRAFFIC CONTROL PLAN FDO5 120 0062 015-017

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the 2012 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

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

Maintain alternating one way traffic during construction. Provide a minimum clear lane width of ten (10) 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.

SIGNS

The Engineer may require additional signing and/or traffic control devices in addition to the items shown on the Standard Drawings. Sign posts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. Signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, the Department will measure only long term signs (signs intended to be continuously in place for more than 3 days) for payment. The Department will not measure; short term signs (signs intended to be left in place for 3 days or less) for payment, but shall be incidental to Maintain and Control Traffic. Contrary to Section 112.04.02, the Department will measure individual signs only once for payment, regardless of how many times they are erected or relocated. The Department will not measure replacements for damaged signs directed by the Engineer to be replaced due to poor condition or reflectivity.

CHANGEABLE MESSAGE SIGNS

Traffic Control Plan
FD05 120 0062 015-017
Page 2 of 3

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.

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 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 on all sections of 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 construction.

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 MARKINGS

Traffic Control Plan
FD05 120 0062 015-017
Page 3 of 3

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 exception:

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.

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.

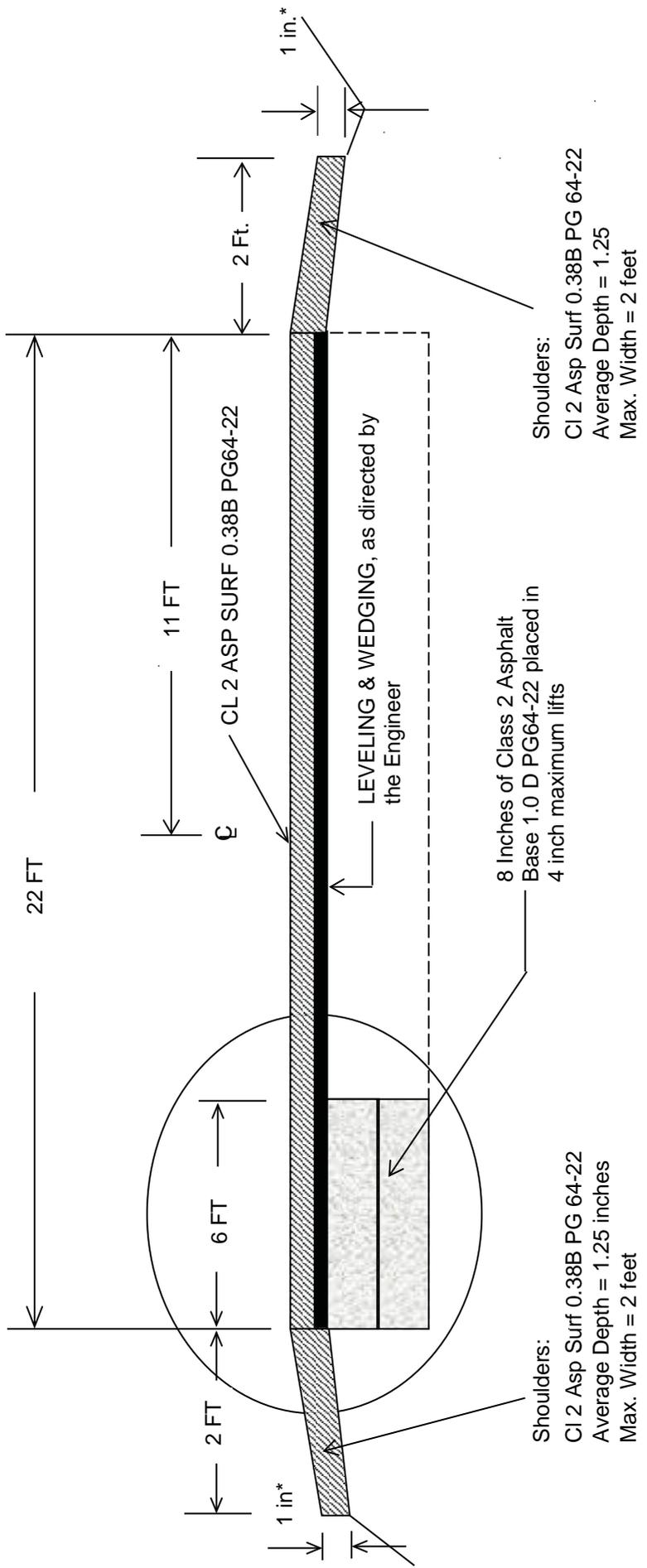
MILLING SUMMARY
FD05 120 0062 015 017

Milepoint	Comment	Length	Width	Avg Depth
15.91	Edge Key	100	26	0.5
15.91	Moore's Mill Turn Lane	300	12	1
15.910	Moore's Mill Road	45	45	1
16.159	Transition	100	26	0.5
	Railroad Bridge	50	26	1
	Transition	100	26	0.5
16.2	Fire Gate 3	40	10	1
16.253	Davistown Road	125	26	1
16.4	Fire Gate 1	40	10	1
16.459	Edge Key	100	26	0.5

BLOWUP REPAIR SUMMARY
FD05 120 0062 015-017

Mile Point	Length	Width
16.030	4	22
16.040	4	22
16.050	4	22
16.060	4	22
16.070	4	22
16.075	4	22
16.110	4	22
16.120	4	22
16.130	4	22
16.210	4	22
16.220	4	22
16.230	4	22
16.310	4	22

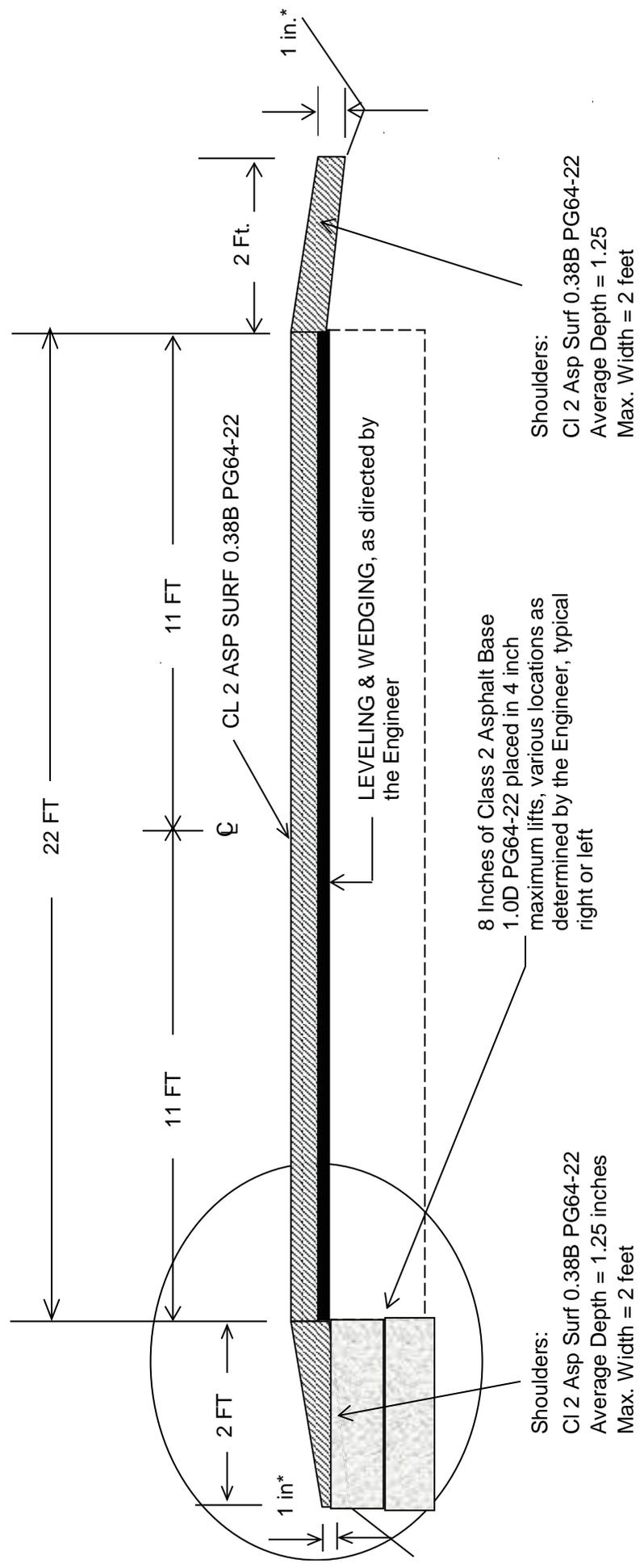
TYPICAL SECTION
FD05 120 0062 015-017
BASE FAILURE REPAIRS



***1 Inch Maximum Drop-Off Where Existing Site Conditions Permit**

NOT TO SCALE

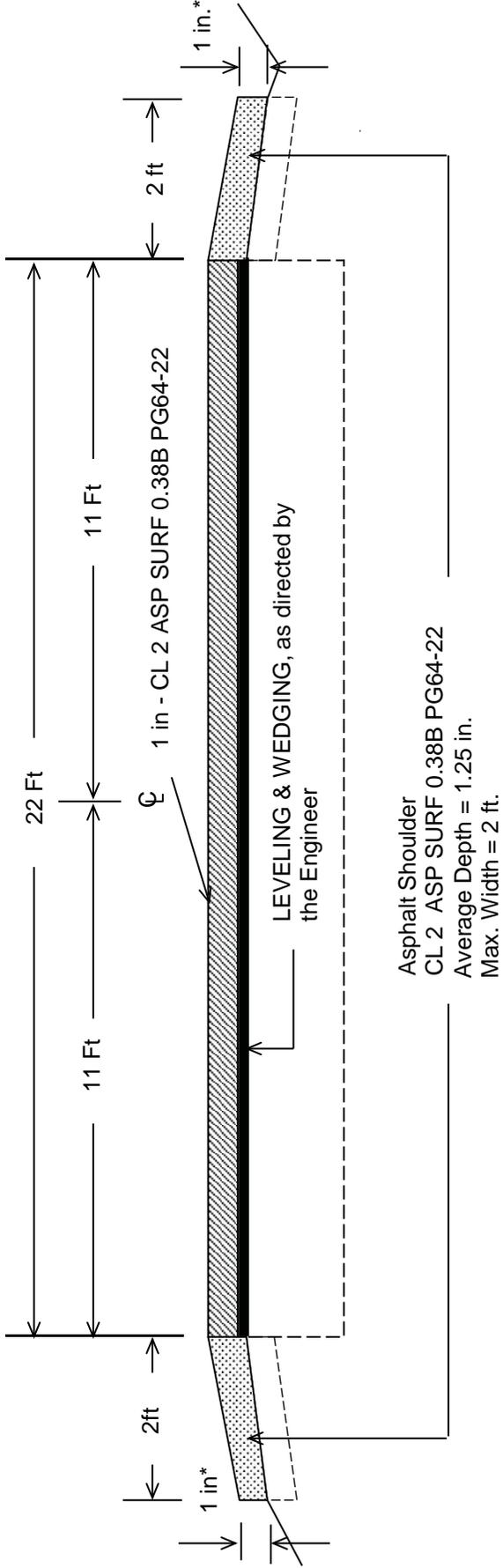
**TYPICAL SECTION
 FD05 120 0062 015-017
 SHOULDER TRENCHING**



***1 Inch Maximum Drop-Off Where Existing Site Conditions Permit**

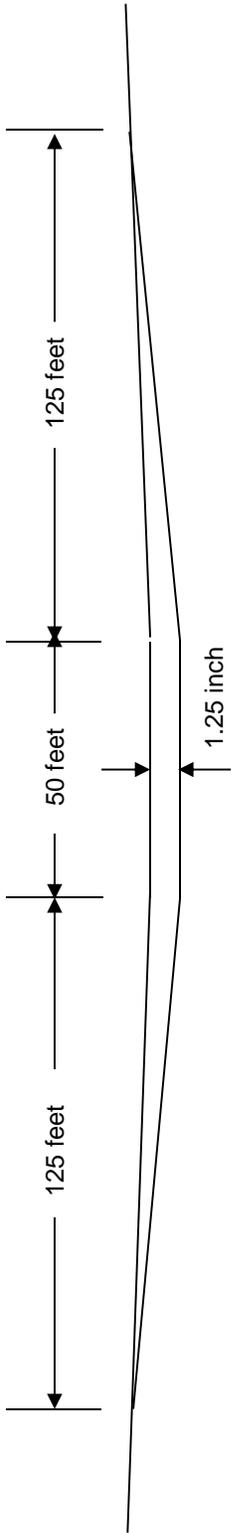
NOT TO SCALE

Typical Section
FD05 120 0062 015-017
Milepoints 15.910-16.459

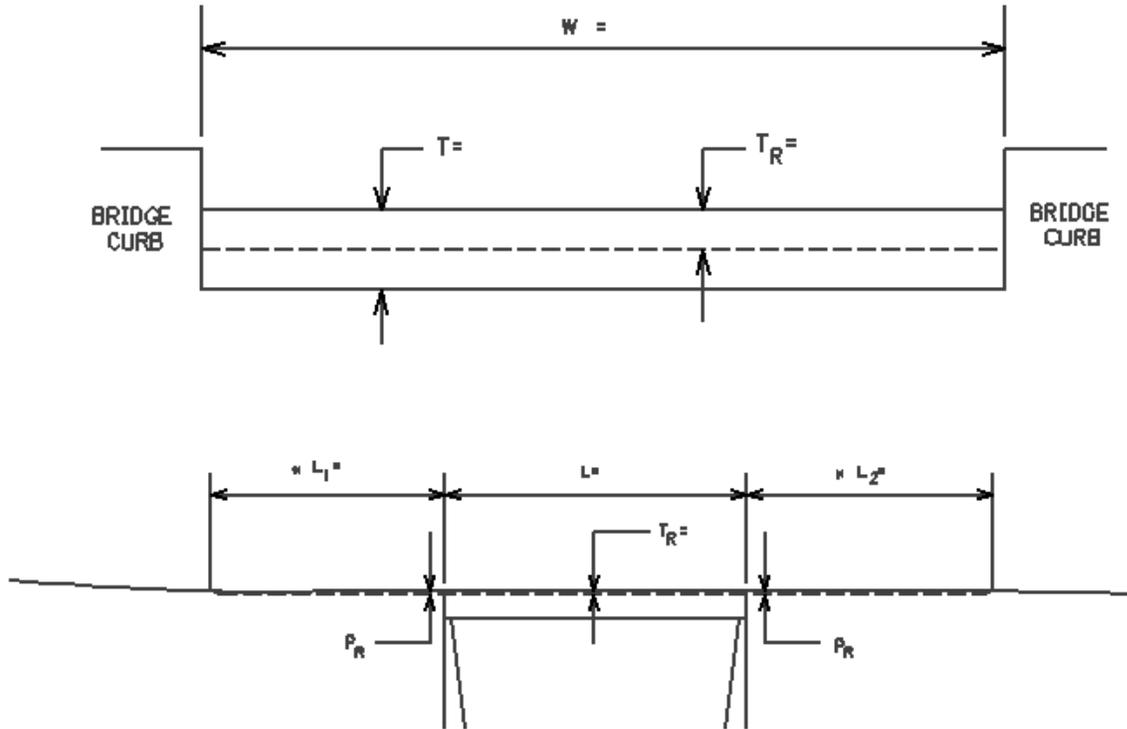


***Where Existing Site Conditions Permit**

**MILLING DETAIL RAILROAD UNDEPASS
FD05 120 0062 015-017
120R00600N @ MILEPOINT 16.159**



**BRIDGE DETAIL FOR PAVING PROJECT
BRIDGE NUMBER 105B00020N
MILEPOINT 16.447**



DIMENSIONS

$W = \underline{26 \text{ ft.}}$

$T = \underline{0}$

$L_1 = \underline{100 \text{ ft.}}$

$L_2 = \underline{0}$

$T_R = \underline{0}$

$L = \underline{127 \text{ ft.}}$

$P_R = \underline{1 \text{ inch}}$

ELEVATION

$W =$ bridge width curb to curb

$T =$ thickness of existing bituminous overlay

L_1 & $L_2 =$ length of approach pavement to be removed

$T_R =$ thickness to be removed and replaced on bridge

$L =$ length of bridge

$P_R =$ thickness to be removed and replaced on pavement

Note: The Engineer will determine lengths L_1 & L_2 by using a transition rate of 100 ft/inch of thickness.

II

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

This Special Note will apply when indicated on the plans or in the proposal.

1.0 DESCRIPTION. Furnish, install, operate, and maintain variable message signs at the locations shown on the plans or designated by the Engineer. Remove and retain possession of variable message signs when they are no longer needed on the project.

2.0 MATERIALS.

2.1 General. Use LED Variable Message Signs Class I, II, or III, as appropriate, from the Department's List of Approved Materials.

Unclassified signs may be submitted for approval by the Engineer. The Engineer may require a daytime and nighttime demonstration. The Engineer will make a final decision within 30 days after all required information is received.

2.2 Sign and Controls. All signs must:

- 1) Provide 3-line messages with each line being 8 characters long and at least 18 inches tall. Each character comprises 35 pixels.
- 2) Provide at least 40 preprogrammed messages available for use at any time. Provide for quick and easy change of the displayed message; editing of the message; and additions of new messages.
- 3) Provide a controller consisting of:
 - a) Keyboard or keypad.
 - b) Readout that mimics the actual sign display. (When LCD or LCD type readout is used, include backlighting and heating or otherwise arrange for viewing in cold temperatures.)
 - c) Non-volatile memory or suitable memory with battery backup for storing pre-programmed messages.
 - d) Logic circuitry to control the sequence of messages and flash rate.
- 4) Provide a serial interface that is capable of supporting complete remote control ability through land line and cellular telephone operation. Include communication software capable of immediately updating the message, providing complete sign status, and allowing message library queries and updates.
- 5) Allow a single person easily to raise the sign to a satisfactory height above the pavement during use, and lower the sign during travel.
- 6) Be Highway Orange on all exterior surfaces of the trailer, supports, and controller cabinet.
- 7) Provide operation in ambient temperatures from -30 to + 120 degrees Fahrenheit during snow, rain and other inclement weather.
- 8) Provide the driver board as part of a module. All modules are interchangeable, and have plug and socket arrangements for disconnection and reconnection. Printed circuit boards associated with driver boards have a conformable coating to protect against moisture.
- 9) Provide a sign case sealed against rain, snow, dust, insects, etc. The lens is UV stabilized clear plastic (polycarbonate, acrylic, or other approved material) angled to prevent glare.
- 10) Provide a flat black UV protected coating on the sign hardware, character PCB, and appropriate lens areas.
- 11) Provide a photocell control to provide automatic dimming.

II

- 12) Allow an on-off flashing sequence at an adjustable rate.
- 13) Provide a sight to aim the message.
- 14) Provide a LED display color of approximately 590 nm amber.
- 15) Provide a controller that is password protected.
- 16) Provide a security device that prevents unauthorized individuals from accessing the controller.
- 17) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

/KEEP/RIGHT/⇒⇒⇒/	/MIN/SPEED/**MPH/
/KEEP/LEFT/⇐⇐⇐/	/ICY/BRIDGE/AHEAD/ /ONE
/LOOSE/GRAVEL/AHEAD/	LANE/BRIDGE/AHEAD/
/RD WORK/NEXT/**MILES/	/ROUGH/ROAD/AHEAD/
/TWO WAY/TRAFFIC/AHEAD/	/MERGING/TRAFFIC/AHEAD/
/PAINT/CREW/AHEAD/	/NEXT/**/MILES/
/REDUCE/SPEED/**MPH/	/HEAVY/TRAFFIC/AHEAD/
/BRIDGE/WORK/**0 FT/	/SPEED/LIMIT/**MPH/
/MAX/SPEED/**MPH/	/BUMP/AHEAD/
/SURVEY/PARTY/AHEAD/	/TWO/WAY/TRAFFIC/

*Insert numerals as directed by the Engineer.
Add other messages during the project when required by the Engineer.

2.3 Power.

- 1) Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.

3.0 CONSTRUCTION. Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. Ensure the message is displayed in either one or 2 phases with each phase having no more than 3 lines of text. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel.

When the sign is not needed, move it outside the clear zone or where the Engineer directs. Variable Message Signs are the property of the Contractor and shall be removed from the project when no longer needed. The Department will not assume ownership of these signs.

4.0 MEASUREMENT. The final quantity of Variable Message Sign will be

11

the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

5.0 PAYMENT. The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs. The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
02671	Portable Changeable Message Sign	Each

Effective June 15, 2012