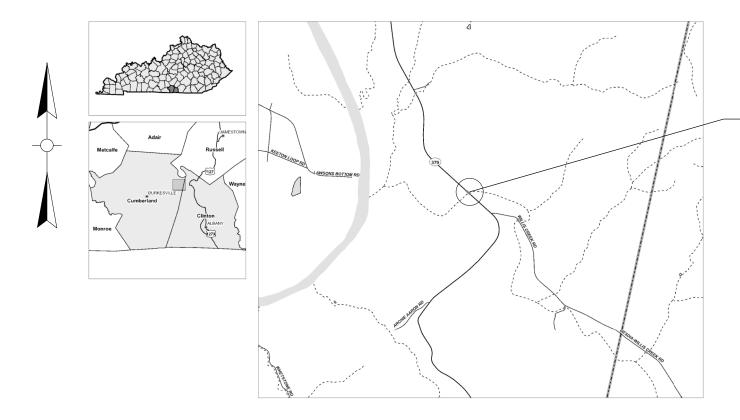
KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS BRIDGE REHABILITATION PLANS



LOCATION MAP

029B00005N KY 379 OVER BIG WILLIS CREEK 36.82944: -85.24333

| heet No. | Description |
|----------|---------------------------|
| S1 | TITLE & LOCATION MAP |
| S2 | GENERAL NOTES |
| S3 | LAYOUT |
| S4 | TYPICAL SECTION |
| S5,S6 | PHASED CONSTRUCTION |
| S7 | END BENT 1 |
| S8 | PIER I |
| S9 | PIER 2 |
| S10 | ABUTMENT 2 |
| S11 | STEEL DETAILS |
| S12 | TEMPORARY DECK DETAILS |
| S13 | DIAPHRAGM DETAILS |
| S14 | DECK DETAILS |
| S15, S16 | CONSTRUCTION ELEVATIONS |
| S17 | BILL OF REINFORCEMENT |
| | |
| | |
| | SPECIAL NOTES |
| Bridge | Overlay Approach Pavement |
| Cleanin | a and Paintina |

INDEX OF SHEETS

Concrete Sealing Epoxy Injection Crack Repair Erosion Prevention and Sediment Control

Structures With Over The Side Drainage Utilities and Rail Certification

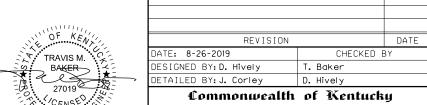
STANDARD DRAWINGS

| KD1-001-12 | rypical dadi di dii filstallations |
|------------|---|
| RBR-001-13 | Steel Beam Guardrail ("W" Beam) |
| RBR-015-06 | Steel Guardrail Posts |
| RBR-055-01 | Delineators for Guardrail |
| RBR-018 | Guardrail System Transition |
| RBR-050-08 | Guardrail End Treatment Type 7 |
| BHS-011 | Railing System Side Mounted MGS Details |
| BBP-001-12 | Elastomeric Bearings Pads for Prestressed Box Beams |
| BGX-006-10 | Stencils for Structures |
| BJE-001-13 | Neoprene Expansion Dams and Armor Edges |
| RBM-120-01 | Box Beam Stiffening of Temporary Concrete Barrier |
| RBR-005-11 | Guardrail Components |
| RBR-010-06 | Guardrail Terminal Sections |
| RBR-016-05 | Timber Guardrail Posts |
| | |
| | |
| | |

SPECIFICATIONS

Standard Specifications for Road and Bridge Construction (Current Editions).

AASHTO LRFD Bridge Construction Specifications with Current Interims.



DEPARTMENT OF HIGHWAYS

CUMBERLAND

KY 379 **BIG WILLIS CREEK**

TITLE & LOCATION MAP

BRIDGE NUMBER

AECOM 029B00005N





A. GENERAL NOTES

SPECIFICATIONS: References to the Specifications are to the current Edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction including any current supplemental Specifications. All references to the AASHTO Specifications are to the current edition of the AASHTO LRFD Bridge Construction Specifications, with

DESIGN LOAD: This superstructure is designed for KY-HL93 Live Load, (i.e. 1.25xAASHTO HL93 live load). This bridge is designed for a future wearing surface of 15 psf.

DESIGN METHOD: All reinforced concrete members are designed to be equivalent or greater than the load and resistance factor design method as specified in the current ${\tt AASHTO}$ Specifications.

<u>ON-SITE INSPECTION</u>: Each Contractor submitting a bid for this work shall make a thorough inspection of the project site prior to submitting a bid and shall be thoroughly familiarized with existing conditions so that work can expeditiously performed after a Contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. All claims resulting from the site conditions will not be honored by the Department of Highways.

<u>VERIFYING FIELD CONDITIONS</u>: Dimensions shown on these Plans are taken from field measurements. The Plan dimensions and details relative to the existing structure are subject to nominal $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$ construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make the necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work. In addition, the overrun and underrun formulas may be applied to appropriate repairs provided that the requirement of Article 104.02.02 of the Standard Specifications is satisfied.

PLANS OF EXISTING STRUCTURE: As an aid to the Contractor, the plans of the existing structure are available from the Division of Maintenance, upon request. The completeness of these drawings is not guaranteed and no responsibility is assumed for their accuracy. The existing drawing number for this structure

CONSTRUCTION LOAD: The Contractor shall abide by the posted bridge limits. Storage of material on the bridge is prohibited.

CONSTRUCTION IDENTIFICATION: The names of the Prime Contractor and the Sub-Contractor shall be imprinted in the concrete with I"letters at a location designated by the Engineer. The Contractor shall furnish all plans, equipment, and labor necessary to do the work for which no direct payment will be

<u>UTILITIES</u>: Before beginning work, locate all existing utilities. Consider location of utilities shown on the drawings to be approximate and for informational purposes only. The Department does not warrant the locations and assumes no responsibility for the accuracy or completeness. The Contractor must make his own determination. Except as shown on the Plans, work around and do not disturb existing utilities.

DAMAGE OUTSIDE CONSTRUCTION LIMITS: Any area used outside the environmentally cleared area shall obtain full environmental approvals prior to use. Once cleared, any area that is disturbed outside of the limits of the construction during the life of the project shall be repaired by the Contractor at his expense, should any damage result from the Contractor's actions.

DAMAGE TO THE STRUCTURE: The Contractor shall bear full responsibility and expense for repair of any and all damage to the structure, should such damage result from the Contractor's actions. The Contractor is completely responsible for the stability of the structure from the time of mobilization until after the bridge has been reopened to normal traffic following completion of all work required in the Contract. After completion of all operations, the structure and site shall be left in a condition that is in accordance with Section 105.12 of the Specifications.

DIMENSIONS: Dimensions are for a normal temperature of 60 degrees fahrenheit. Layout dimensions are horizontal dimensions.

GENERAL NOTES

REMOVE SUPERSTRUCTURE: This pay item for "Remove Superstructure" shall consist of the removal of the bridge deck, curbs/railings, bearings, diaphragmns as noted and partial removal of the abutments and wingwalls as shown in the Plans. Portions of the existing abutments and wingwalls shall remain in place to be reused in the rehabilitated structure. Care shall be exercised not to damage areas of remaining concrete or reinforcing steel during concrete removal operations.

Remove concrete by means of approved pneumatic hammers employing pointed and blunt chisel tools. Hydraulic hoe-ram type hammers will not be permitted. The weight of the hammer shall not be more than 35 pounds for removal within 18 inches of portions to be preserved. Outside the 18 inch limit, the Contractor may use hammers not exceeding 90 pounds upon the approval of the Engineer. Do not place pneumatic hammers in direct contact with reinforcing steel that is to be retained. Care shall be taken to not damage bond to adjacent non-exposed reinforcing steel during concrete removal processes. The perimeter of all areas where concrete is removed shall be tapered at an approximately 45° angle, except that the outer edges of all chipped areas shall be saw cut to minimum depth of linch to prevent feather edging unless otherwise approved by the Engineer. After all concrete has been removed, the repair surface shall be prepared by abrasive blast cleaning. Abrasive blast cleaning shall remove all fractured surface concrete and all traces of any unsound material or contaminants such as oil, grease, dirt, slurry, or any materials which could interfere with the bond of freshly placed concrete. The Contractor shall dispose all removed material off state right of way in an approved site.

WELDING REINFORCEMENT: The welding and welding material shall conform to the "Recommended Practices for Welding Reinforcing Steel", American Welding Society Specifications, Current Edition. No direct payment shall be made for welding or weld material, but the cost of these items shall be included in the unit price bid for the repair being completed.

DISPOSAL OF MATERIALS: All materials and debris removed from or beneath the bridge shall become the property of the Contractor and shall be removed from the right-of-way.

 $\underline{\text{COMPLETION OF THE STRUCTURE}};$ The Contractor is required to complete the structure in accordance with the Plans and Specifications. Material, labor, or construction operations, not otherwise specified, are to be included in the bid item most appropriate for the work involved and otherwise considered incidental to the Contract. This may include cofferdams, shoring, excavations, backfilling, removal of all or parts of the existing structure, phase construction, incidental materials, labor, or anything else required to complete the structure.

BEFORE YOU DIG: The Contractor shall be responsible for all requirements and conformation with the Underground Facility Damage Prevention Act of 1994. The Contractor will be responsible for locating any utilities on this project. II underground utilities shall be located prior to construction. Any utilities disturbed or damaged as a result of the Contractor's operations will be repaired to the satisfaction of the utility owner at the Contractor's expense. The Contractor is advised to call (800) 752-6007 a minimum of two working days prior to excavation for information on the location of some, but not necessarily all underground utilities.

B. GENERAL NOTES REHABILITATION PROJECTS MATERIALS FOR DESIGN SPECIFICATIONS:

For Class "A" Concrete: F'C = 3.500 psiFor Class "AA" Concrete: F'C = 4,000 psi For Class "M" Concrete: F'C = 4,000 psi

For Epoxy Coated Steel

Reinforcement: FY = 60,000 psi

The Specifications, Current Edition, as designated below shall govern the following materials furnished:

Material Specification Grout C110.7

Anchor Dowels A311, Grade 1018 Smooth Steel Rods

CONCRETE: Class "AA" Concrete is to be used throughout the superstructure and in the portions of the substructure above the tops of caps. Class "A" concrete is to be used in the substructure below the caps.

SUPERSTRUCTURE SLAB: The superstructure slab shall be poured continuously from end to end of slab before the concrete is allowed to set.

REINFORCEMENT: Dimensions shown from the face of concrete to bars are to center of bars unless otherwise shown. Spacing of bars is from center to center of bars. Any reinforcing bars designated by suffix "e" in the plans shall be epoxy coated in accordance with section 811.10 of the Standard Specifications. Any reinforcing bars designated by suffix "s" in a Bill of Reinforcement shall be considered a stirrup for purposes of bend diameters.

EXISTING STEEL REINFORCEMENT: The cost of cutting, bending, and cleaning existing steel reinforcement shall be incidental to the repair item being completed.

<u>BEVELED EDGES</u>: Bevel all exposed edges $\frac{3}{4}$ " unless otherwise noted.

STAY-IN-PLACE METAL FORMS: Stay-In-Place Metal Forms may be used on bridge decks under the following additional conditions:

The valleys of forms shall be filled with trimmed styrofoam to eliminate increased dead load from concrete.

The welding shall be performed by a certified welder.

CONCRETE SEALING: Apply concrete sealing in accordance with the Special Note for Concrete Sealing.

PREFORMED CORK EXPANSION JOINT MATERIAL: Preformed Cork Expansion Joint Material shall conform to subsection 807.04.02 (Type II) of the Kentucky Department of Highways Standard Specifications.

JACK AND SUPPORT BRIDGE SPAN: This item includes all costs to design, construct, and remove a jack and temporary support for a beam end while repairs are being completed. The unit bid price of each will be measured for each beam end supported. For each jack and support, the contractor shall determine the necessary loads and prepare and submit for approval a design and plans stamped by a Kentucky licensed PE. All components of the system shall have a factor of safety of 1.5 for all service loads (DL+HS20+Impact) and equipment loads that exceed HS20. The beam end may be jacked a maximum of 1/2" above its existing elevation for completion of the repairs.

SHOP DRAWINGS: The fabricator shall submit all required shop plans, by email to $SHOP_XXXXXXXXXXN@docs.e-Builder.net$, for review. These submissions shall depict the shop plans in .PDF $\,$ format, as either 11"x17" or 22"x36" sheets. Designers will make review comments on these electronic submissions as needed and, if required, shall return them to the fabricator for corrections and resubmittal. Upon acceptable reconciliation of all comments, files shall be sent to the Bridging Kentucky Shop Plan Coordinator for distribution. Only plans submitted directly to the Shop Plan Coordinator will be distributed. Additionally. only plans electronically stamped "Distributed by The Bridging Kentucky Program Team" are to be used for fabrication. While this process does not require the submission of paper copies, the Engineer of Record reserves the right to require such copies on a case by case basis.

When any changes to the design plans are proposed, the shop drawings reflecting these changes shall be submitted through the process above.

Note: The designation in the email XXXXxxxxXN refers to the Bridge ID number which is located on the Title Sheet, Sl of the Bridge Plans. Example: SHOP_042B000191N@docs.e-Builder.net

C. JOINT WATERPROOFING AT ABUTMENTS

The joint between the abutment seats and superstructure and between the abutment wings and superstructure shall be waterproofed as detailed on these Plans.

Mastic Tape used to seal joints shall meet the requirements of ASTM C-877 Type I, II, or III. The joint is to be covered with 12-inch wide mastic tape. Prior to application, the joint surface shall be clean and free of dirt, debris, or deleterious material. Primer, if required by the tape manufacturer, shall be applied for a minimum width of 9" on each side of the ioint.

Mastic Tape shall be either:

EZ-WRAP RUBBER by PRESS-SEAL GASKET CORPORATION,

SEAL WRAP by MAR MAC MANUFACTURING CO. INC., CADILLOC by UP RUBBER CO. INC.

or an approved equivalent.

 $\hbox{\it Mastic Tape shall cover the joint continuously unless otherwise}$ shown in the Plans. Mastic Tape shall be spliced by lapping a minimum of 6" and in accordance with the manufacturer's recommendations with the overlap running downhill.

The cost of this work, including all materials, labor, equipment, tools and incidentals necessary for furnishing and installing Mastic Tape shall be considered incidental to the unit price bid for the Class "AA" Concrete and no separate measurement or payment shall be made.

<u>WELDING SPECIFICATIONS:</u> All welding and welding materials except for reinforcement shall conform to "Joint Specification ANSI/AASHTO/AWS DI.5-2015 Bridge Welding Code". Modification and additions as stated on the Plans shall supersede the Joint

PROHIBITED FIELD WELDING: Except where shown in the Plans, no welding of any nature shall be performed on the load carrying members of the bridge without the written consent of the Director. Division of Bridge Maintenance, and then only in the manner and at the locations designated in the authorization.

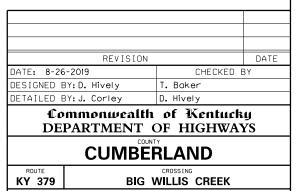
WELDING PROCEDURES: Qualification test of all welding procedures, when required by AWS, shall be completed by the Contractor and approved by the Engineer prior to the final approval of the shop drawings and the start of the fabrication.

WELD SIZES: Unless specified otherwise, use the following fillet weld sizes:

| Material Thickness of | Minimum Size of | | | | |
|---------------------------|-------------------|--|--|--|--|
| Thicker Part Joined (In.) | Fillet Weld (In.) | | | | |
| To 1/4" Inclusive | 1/8" | | | | |
| Over 1/4" to 1/2" | 3/16" | | | | |
| Over 1/2" to 3/4" | 1/4" | | | | |
| Over 3/4" | 5/16" | | | | |

SHEAR CONNECTORS: Provide the necessary length to penetrate at least 2" above bottom of slab. Stud lengths shall not be less than 4". Provide a minimum cover of 2 1/2" from the top of the deck to the top of the shear connector.

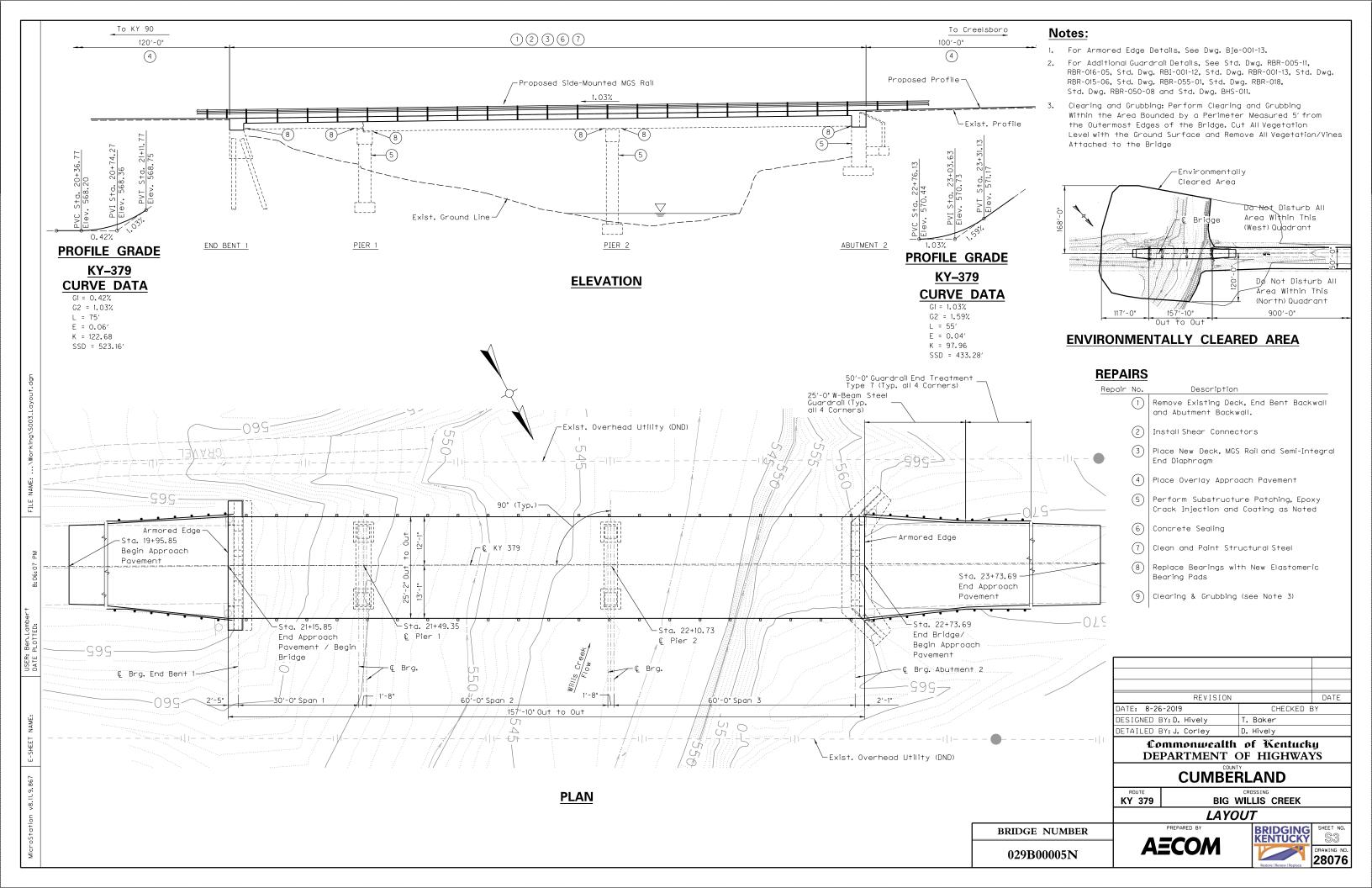
Studs shall be welded in accordance with AWS Specifications. When attaching shear connectors to existing bridge steel, a minimum base metal preheat temperature of 400°F is required. Preheat shall be controlled by the use of temperature indicating crayons.



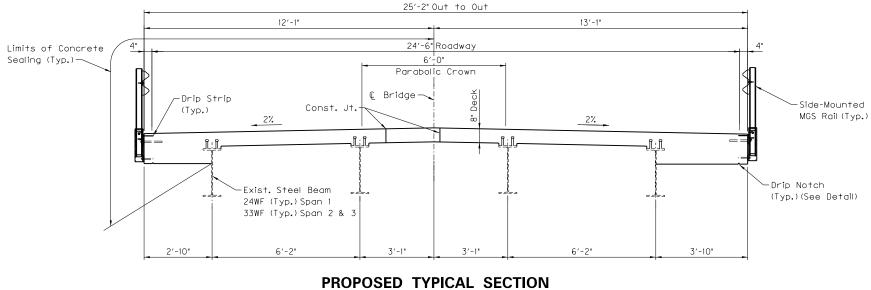
BRIDGE NUMBER







EXISTING TYPICAL SECTION



Deck Reinforcement not Shown, See Notes.

NOTES:

1. For Deck Reinforcement, See Sheets S12 and S14.

© Bridge

1'-0"

- 2. For Phase Construction, See Sheets S5 and S6.
- 3. The Top of all Existing Beams and Other Steel to be in Contact with the New Concrete are to be Cleaned of all Rust and Foreign Matter Before Pouring the Concrete Deck. The Cost of Material and Labor is to be Incidental to "Remove Superstructure".

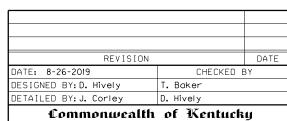
1'-0"

6'-0" Vertical Curve

PARABOLIC CROWN

1'-0"

1'-0"



DEPARTMENT OF HIGHWAYS

CUMBERLAND

ROUTE **KY 379** BIG WILLIS CREEK TYPICAL SECTION

BRIDGE NUMBER

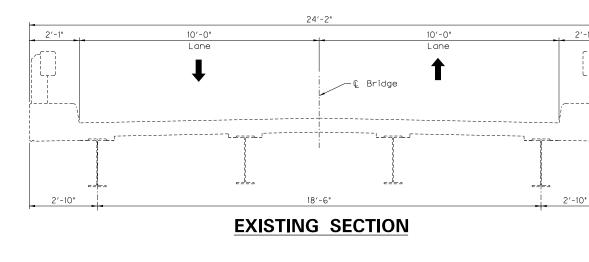
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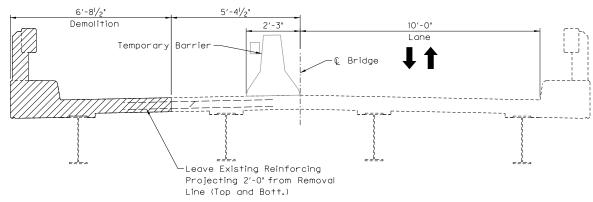
-Profile Grade



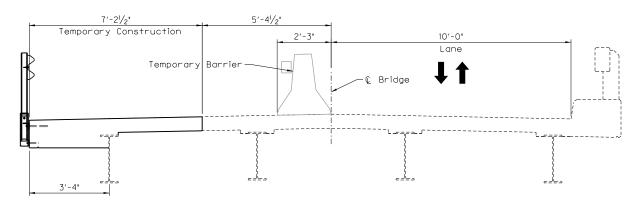
DRAWING NO. **28076**

DRIP NOTCH DETAIL

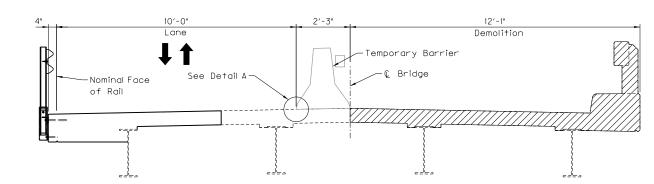




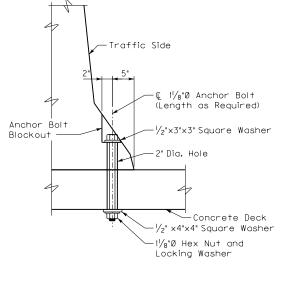
PHASE 1 DEMOLITION



PHASE 1 CONSTRUCTION



PHASE 2 DEMOLITION



DETAIL A

(See Barrier Notes 1-4)

Barrier Notes:

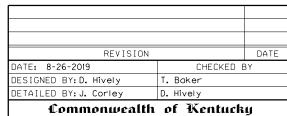
- All bolts, nuts and washers shall conform to Section 813. Nuts must be fully engaged with the anchor bolt.
- 2) Locate anchorage points every 4 feet along the temporary barrier.
- 3) Remove anchors and fill holes prior to opening to traffic with non-shrink grout in accordance with Section 601.03.03.
- 4) The cost of all labor, equipment and materials for the temporary barriers and its anchors shall be incidental to item Maintain & Control Traffic.

NOTES:

- I. Temporary Barrier in all Phases Shall be Per Standard Drawing RBM-120-01.
- 2. Existing Beams to Remain in all Phases of Construction.

LEGEND:





DEPARTMENT OF HIGHWAYS

CUMBERLAND

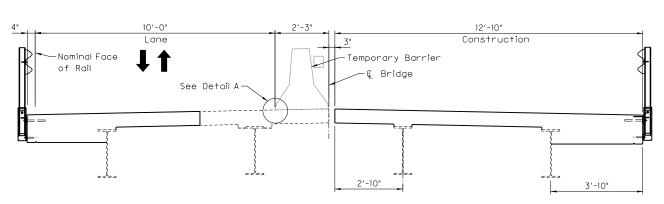
KY 379 **BIG WILLIS CREEK**

PHASED CONSTRUCTION

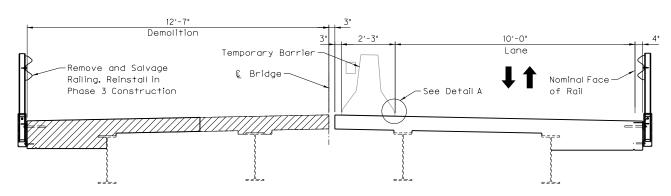
BRIDGE NUMBER



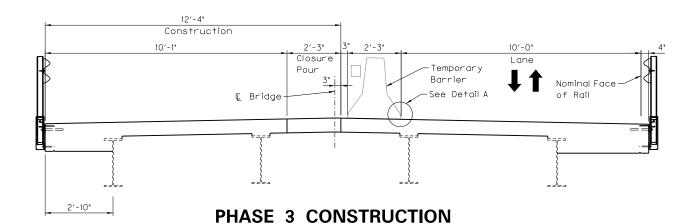


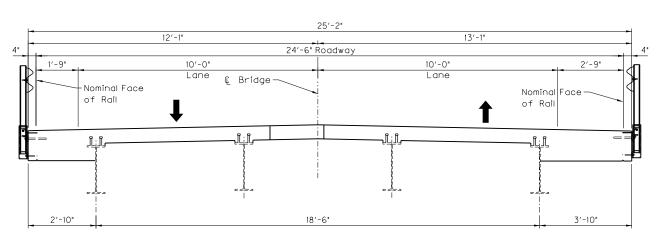


PHASE 2 CONSTRUCTION



PHASE 3 DEMOLITION





FINAL TYPICAL SECTION

LEGEND:



NOTES:

- 1. Temporary Barrier in all Phases Shall be Per Standard Drawing RBM-120-01.
- 2. Existing Beams to Remain in all Phases of Construction.
- 3. For Detail A, See Sheet S5.
- 4. Cost of Removing and Salvaging Railing shall be Incidental to Cost of MGS Rail.

| REVISION | | DATE | | |
|------------------------|--------------|------|--|--|
| DATE: 8-26-2019 | CHECKED B | | | |
| DESIGNED BY: D. Hively | T. Baker | | | |
| DETAILED BY: J. Corley | D. Hively | | | |
| ¢141. | . 6 707 4 4. | | | |

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS

CUMBERLAND

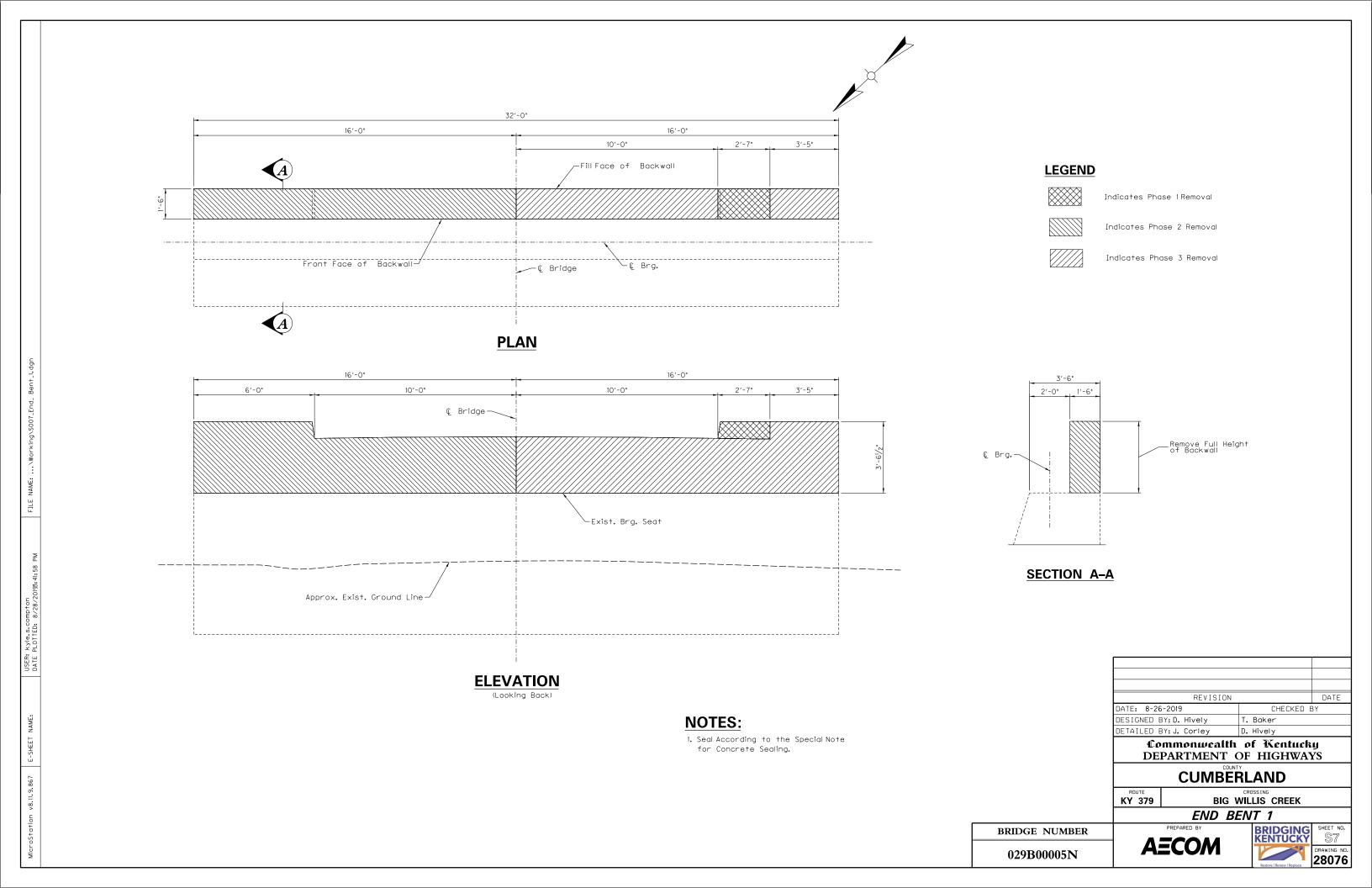
KY 379 BIG WILLIS CREEK

PHASED CONSTRUCTION

BRIDGE NUMBER







ELEVATION

(West Face Shown)

NOTES:

- Epoxy Injection Limits and Locations shown are Approximate. Contractor shall attempt to Complete the Epoxy Injection when the Water Level is low such that the Majority of the Piers are Exposed.
- 2. All cracks shall be Repaired in Accordance with the Special Note for Epoxy Injection Crack Repair.
- 3. Seal Pier According to the Special Note for Concrete Sealing.

LEGEND

-2 Sq. Ft.

-31 Sq. Ft.

-10 LF (East Face) and 10 LF (West Face)

Indicates Concrete Patching Repair

~ In-

Indicates Epoxy Injection Crack Repair

| REVISION | | DATE |
|------------------------|------------|------|
| DATE: 8-26-2019 | CHECKED E | 3 Y |
| DESIGNED BY: D. Hively | T. Baker | |
| DETAILED BY: J. Corley | D. Hively | |
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Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS

CUMBERLAND

KY 379 BIG WILLIS CREEK

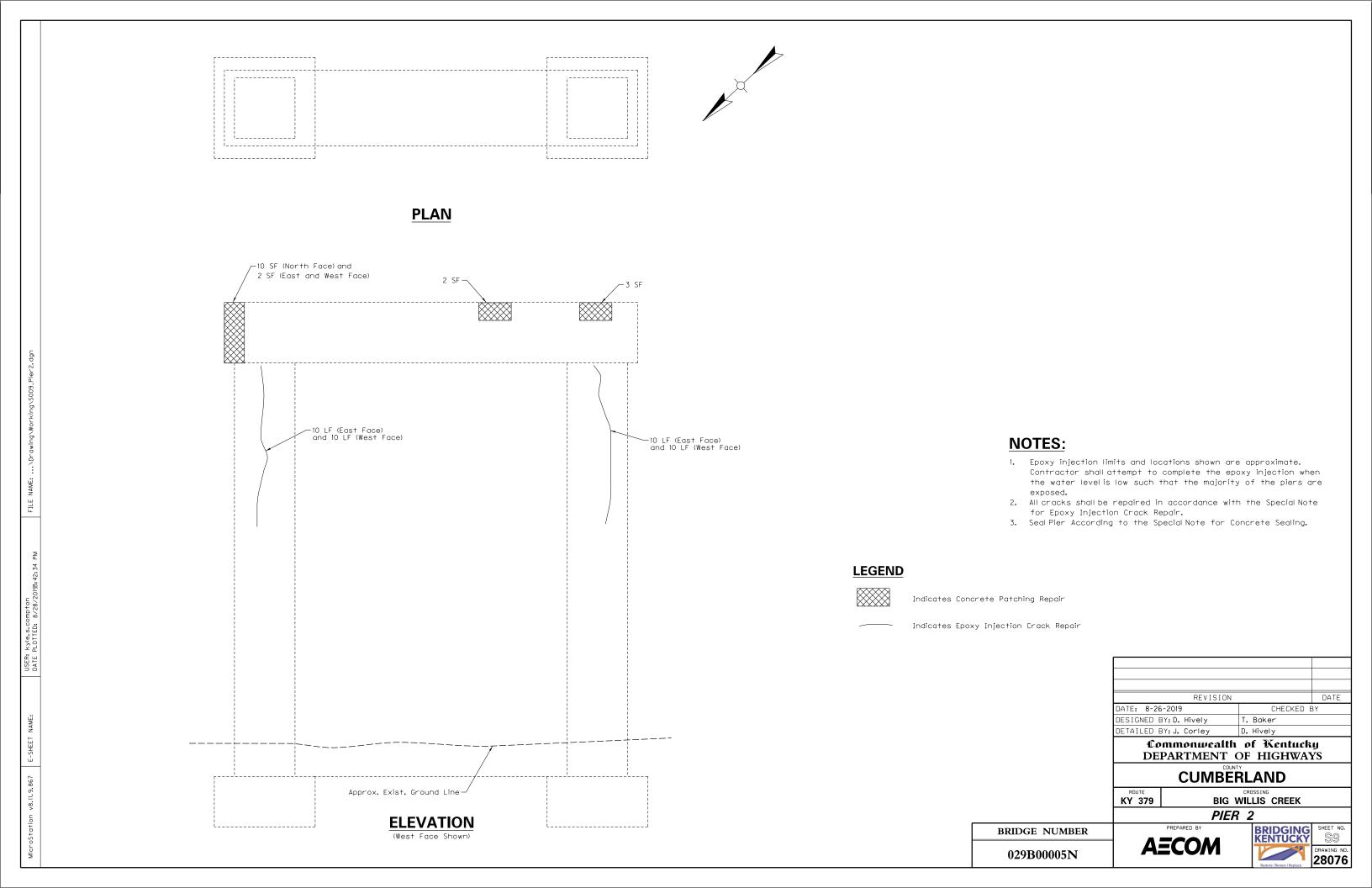
PIER 1

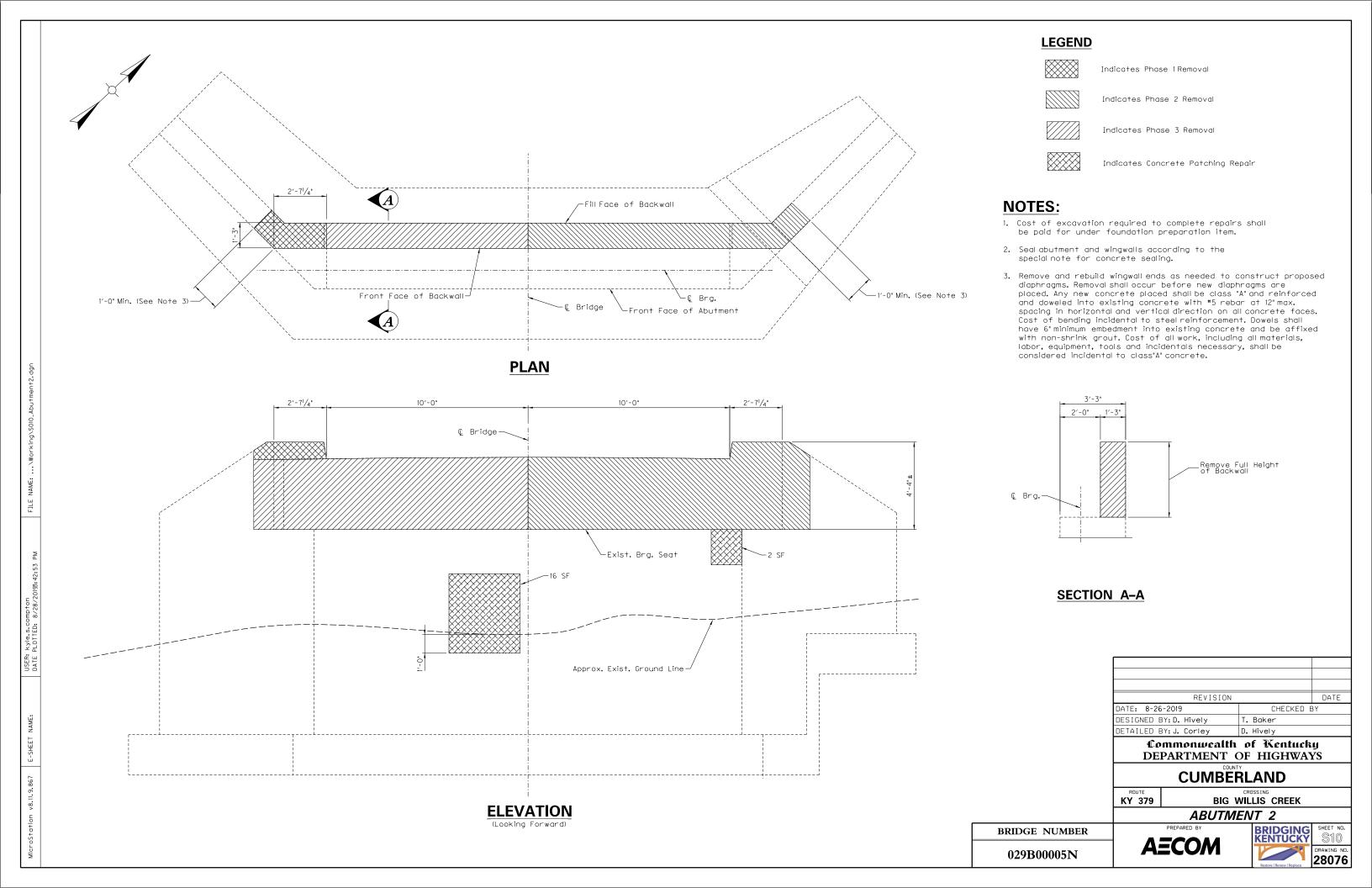
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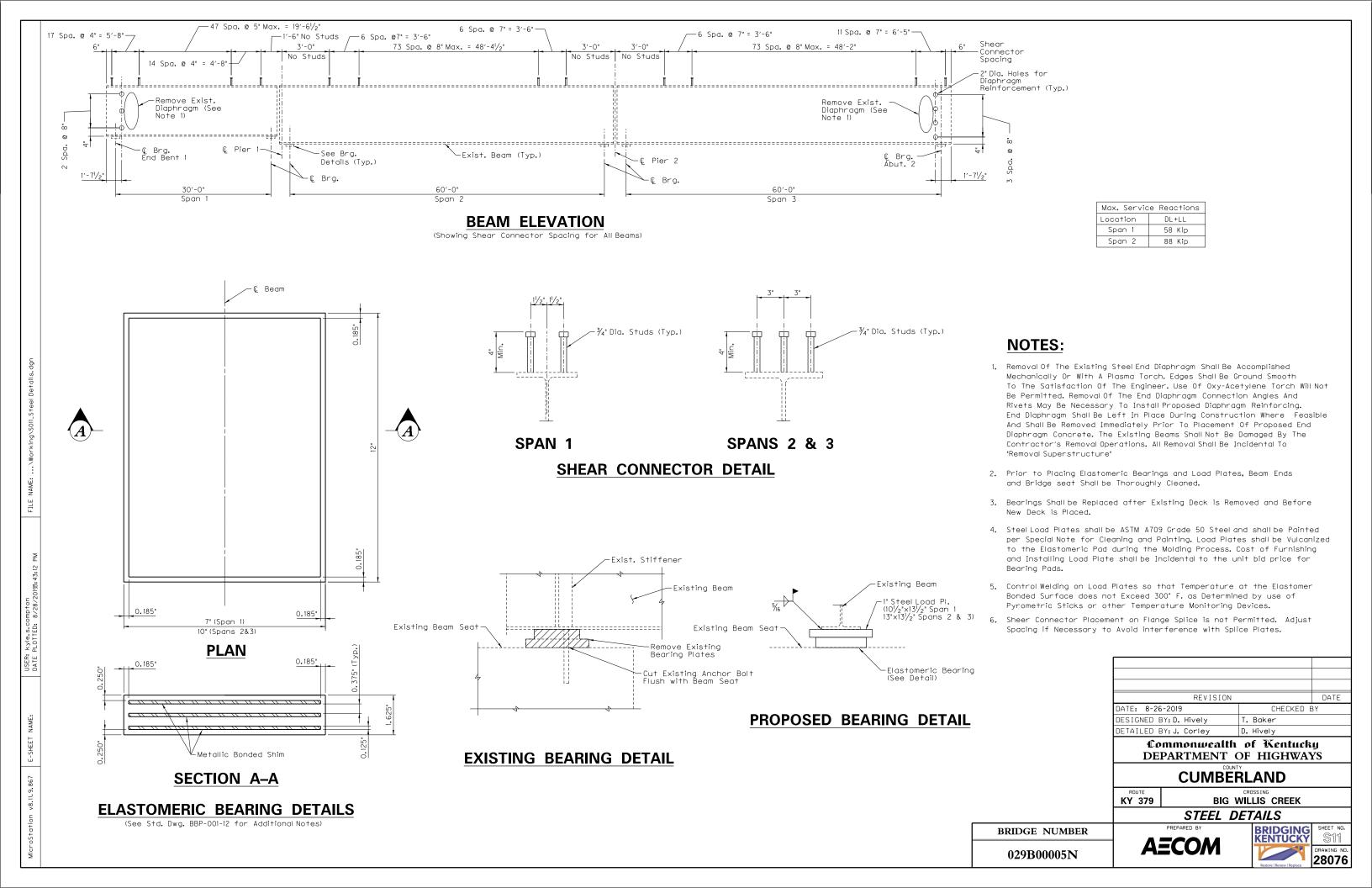
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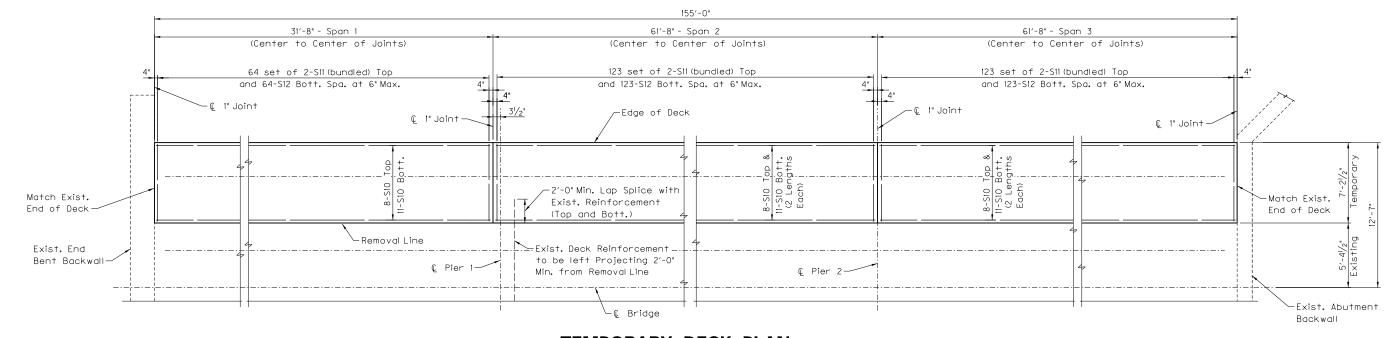
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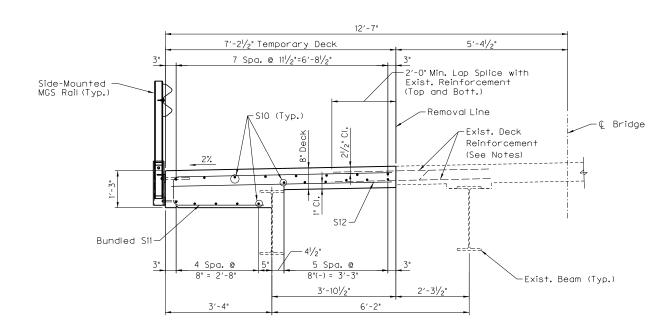






TEMPORARY DECK PLAN

(Phase I Construction) 2'-0" Min. Lap for SIO bars Top and Bott.



TYPICAL SECTION

NOTES:

- I. Temporary Deck Width Shall Be Constructed To Accommodate Traffic During Phase 2 Construction. Temporary Deck Will Be Demolished In Phase 3 Construction. Removal cost shall be Incidental to Removal Super Structure.
- 2. Splice Top And Bottom Transverse Reinforcing With Projecting Existing Deck Reinforcing.
- 3. Top SII Bars Shall Be Placed In 2 Bar Bundles.
- 4. See Sheet S17 for Bill of Reinforcement.

| Camanaguraalth | af Wantuah | |
|------------------------|------------|------|
| DETAILED BY: J. Corley | D. Hively | |
| DESIGNED BY: D. Hively | T. Baker | |
| DATE: 8-26-2019 | CHECKED E | 3 Y |
| REVISION | | DATE |
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Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS

CUMBERLAND

KY 379 BIG WILLIS CREEK

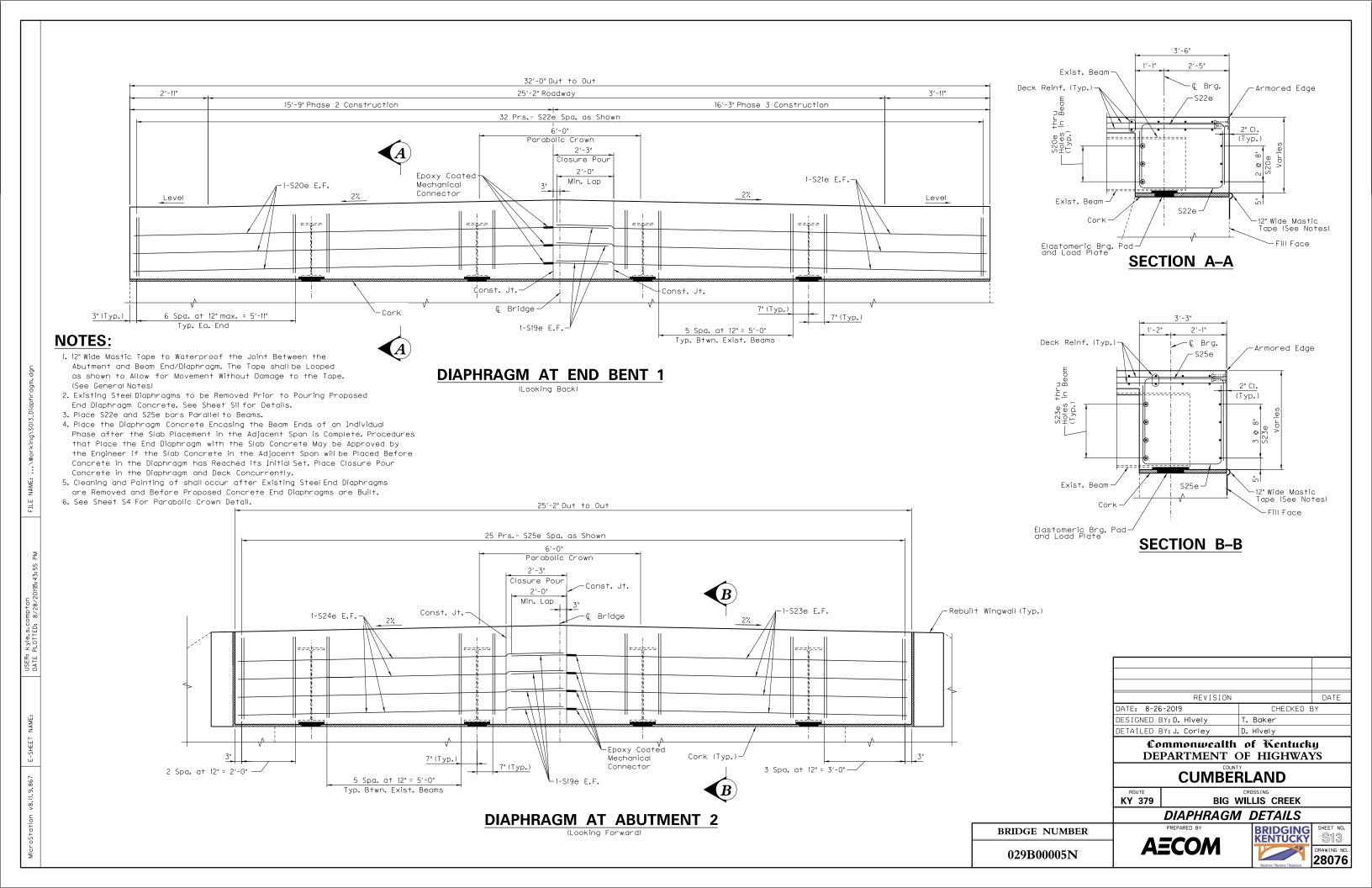
TEMPORARY DECK DETAILS

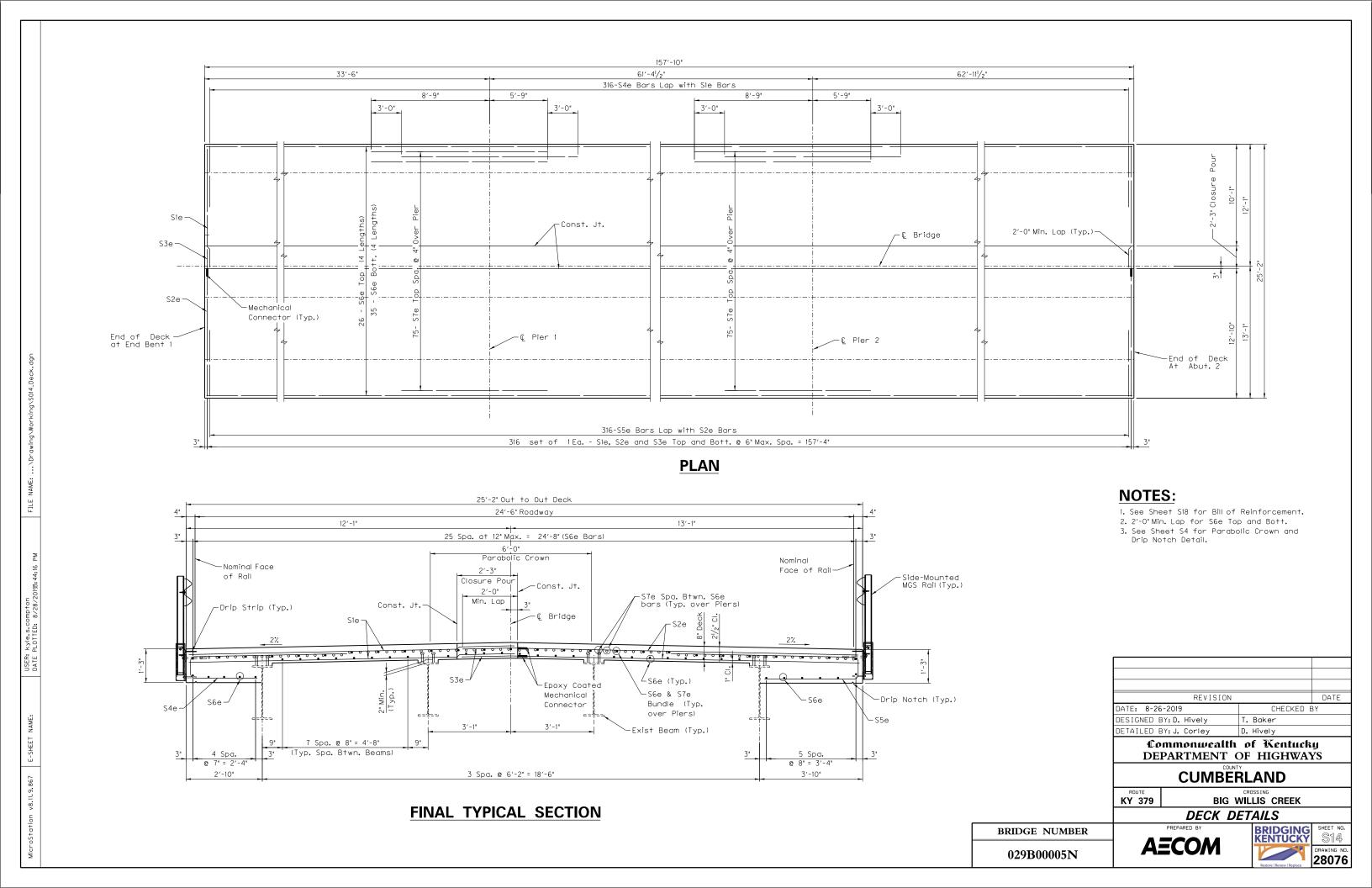
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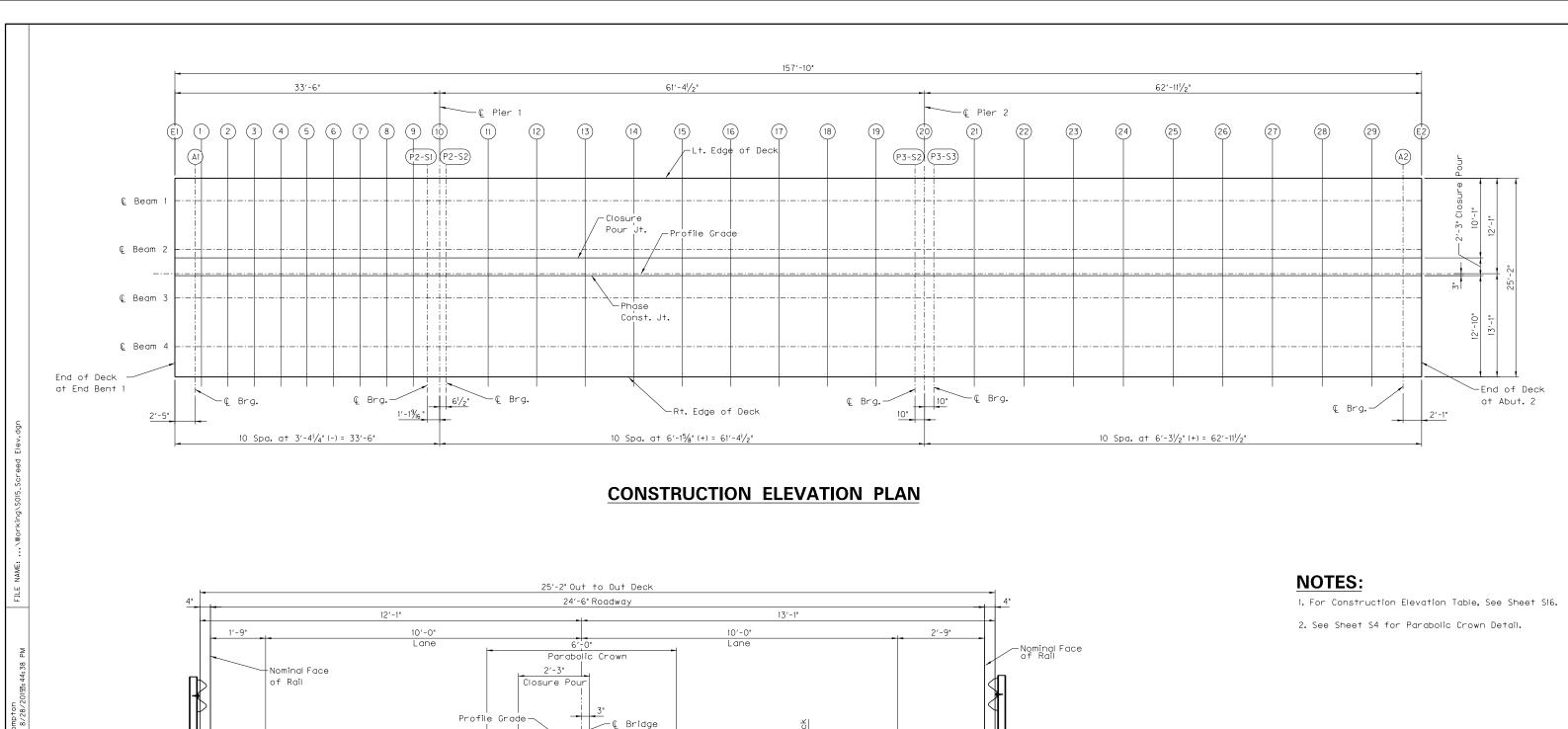
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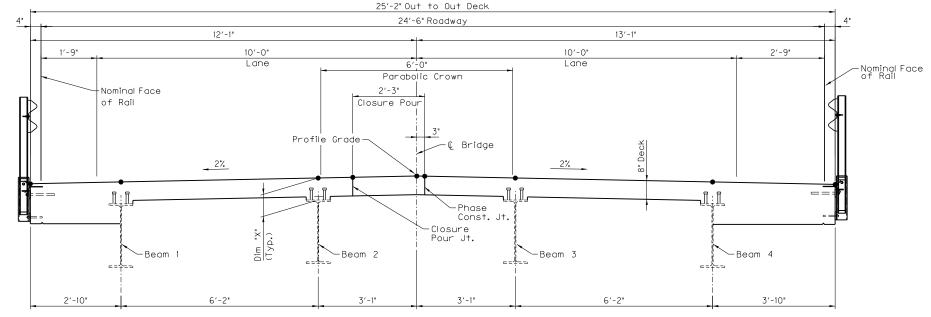
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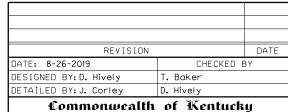






TYPICAL SECTION

• Indicates Points Where Elevations are Given.



DEPARTMENT OF HIGHWAYS

CUMBERLAND

KY 379 BIG WILLIS CREEK

CONSTRUCTION ELEVATIONS

BRIDGE NUMBER
029B00005N





| | | | | | | | | Tah | le of Eleva | tions | | | | | | | | |
|-------|----------|--------------|----------|--------|-------------------|---------|--------|---------|-------------|---|-------------|---------|----------|---------|---------|--------|---------|--------------|
| | | | | | | | | Tab | ic of Lieva | 111111111111111111111111111111111111111 | | | | | | | | |
| | | | Girder 1 | | Girder 1 Girder 2 | | | Profile | | Girder 3 | | | Girder 4 | | | | | |
| | | | Const. | Top of | | Const. | Top of | | Closure | Grade | | Const. | Top of | | Const. | Top of | | |
| Line | Station | Edge of Deck | Elev. | Beam | Dim "X" | Elev. | Beam | Dim "X" | Pour Jt | Line | Ph Const Jt | Elev. | Beam | Dim "X" | Elev. | Beam | Dim "X" | Edge of Deck |
| E1 | 21+15.85 | 568.550 | 568.607 | | | 568.730 | | | 568.749 | 568.762 | 568,762 | 568,730 | | | 568,607 | | | 568.530 |
| A1 | 21+18.26 | 568.575 | 568.632 | | | 568.755 | | | 568.774 | 568.787 | 568.787 | 568.755 | | | 568.632 | | | 568.555 |
| 1 | 21+19.20 | 568.585 | 568.642 | | | 568.765 | | | 568.783 | 568.797 | 568.797 | 568.765 | | | 568.642 | | | 568.565 |
| 2 | 21+22.55 | 568.619 | 568.676 | | | 568.799 | | | 568.818 | 568.831 | 568.831 | 568.799 | | | 568.676 | | | 568.599 |
| 3 | 21+25.90 | 568.654 | 568.711 | | | 568.834 | | | 568.852 | 568.866 | 568.866 | 568.834 | | | 568.711 | | | 568.634 |
| 4 | 21+29.25 | 568.688 | 568.745 | | | 568.868 | | | 568.887 | 568.900 | 568.900 | 568.868 | | | 568.745 | | | 568.668 |
| 5 | 21+32.60 | 568.723 | 568.780 | | | 568.903 | | | 568.921 | 568.935 | 568.935 | 568.903 | | | 568.780 | | | 568.703 |
| 6 | 21+35.95 | 568.757 | 568.814 | | | 568.937 | | | 568.956 | 568.969 | 568.969 | 568.937 | | | 568.814 | | | 568.737 |
| 7 | 21+39.30 | 568.792 | 568.849 | | | 568.972 | | | 568.990 | 569.004 | 569.004 | 568.972 | | | 568.849 | | | 568.772 |
| 8 | 21+42.65 | 568.826 | 568.883 | | | 569.006 | | | 569.025 | 569.038 | 569.038 | 569.006 | | | 568.883 | | | 568.806 |
| 9 | 21+46.00 | 568.861 | 568.918 | | | 569.041 | | | 569.059 | 569.073 | 569.073 | 569.041 | | | 568.918 | | | 568.841 |
| P2-S1 | 21+48.22 | 568.884 | 568.940 | | | 569.064 | | | 569.082 | 569.095 | 569.095 | 569.064 | | | 568.940 | | | 568.864 |
| 10 | 21+49.35 | 568.895 | 568.952 | | | 569.075 | | | 569.094 | 569.107 | 569.107 | 569.075 | | | 568.952 | | | 568.875 |
| P2-S2 | 21+49.89 | 568.901 | 568.958 | | | 569.081 | | | 569.099 | 569.113 | 569.113 | 569.081 | | | 568.958 | | | 568.881 |
| 11 | 21+55.49 | 568.959 | 569.015 | | | 569.139 | | | 569.157 | 569.170 | 569.170 | 569.139 | | | 569.015 | | | 568.939 |
| 12 | 21+61.63 | 569.022 | 569.079 | | | 569.202 | | | 569.220 | 569.234 | 569.234 | 569.202 | | | 569.079 | | | 569.002 |
| 13 | 21+67.76 | 569.085 | 569.142 | | | 569.265 | | | 569.283 | 569.297 | 569.297 | 569.265 | | | 569.142 | | | 569.065 |
| 14 | 21+73.90 | 569.148 | 569.205 | | | 569.328 | | | 569.347 | 569.360 | 569.360 | 569.328 | | | 569.205 | | | 569.128 |
| 15 | 21+80.04 | 569.212 | 569.268 | | | 569.392 | | | 569.410 | 569.423 | 569.423 | 569.392 | | | 569.268 | | | 569.192 |
| 16 | 21+86.18 | 569.275 | 569.331 | | | 569.455 | | | 569.473 | 569.486 | 569.486 | 569.455 | | | 569.331 | | | 569.255 |
| 17 | 21+92.32 | 569.338 | 569.395 | | | 569.518 | | | 569.536 | 569.550 | 569.550 | 569.518 | | | 569.395 | | | 569.318 |
| 18 | 21+98.45 | 569.401 | 569.458 | | | 569.581 | | | 569.600 | 569.613 | 569.613 | 569.581 | | | 569.458 | | | 569.381 |
| 19 | 22+04.59 | 569.464 | 569.521 | | | 569.644 | | | 569.663 | 569.676 | 569.676 | 569.644 | | | 569.521 | | | 569.444 |
| P3-S2 | 22+09.90 | 569.519 | 569.576 | | | 569.699 | | | 569.717 | 569.731 | 569.731 | 569.699 | | | 569.576 | | | 569.499 |
| 20 | 22+10.73 | 569.528 | 569.584 | | | 569.708 | | | 569.726 | 569.739 | 569.739 | 569.708 | | | 569.584 | | | 569.508 |
| P3-S3 | 22+11.56 | 569.536 | 569.593 | | | 569.716 | | | 569.735 | 569.748 | 569.748 | 569.716 | | | 569.593 | | | 569.516 |
| 21 | 22+17.03 | 569.592 | 569.649 | | | 569.772 | | | 569.791 | 569.804 | 569.804 | 569.772 | | | 569.649 | | | 569.572 |
| 22 | 22+23.32 | 569.657 | 569.714 | | | 569.837 | | | 569.856 | 569.869 | 569.869 | 569.837 | | | 569.714 | | | 569.637 |
| 23 | 22+29.62 | 569.722 | 569.779 | | | 569.902 | | | 569.921 | 569.934 | 569.934 | 569.902 | | | 569.779 | | | 569.702 |
| 24 | 22+35.91 | 569.787 | 569.844 | | | 569.967 | | | 569.985 | 569.999 | 569.999 | 569.967 | | | 569.844 | | | 569.767 |
| 25 | 22+42.21 | 569.852 | 569.909 | | | 570.032 | | | 570.050 | 570.064 | 570.064 | 570.032 | | | 569.909 | | | 569.832 |
| 26 | 22+48.51 | 569.917 | 569.973 | | | 570.097 | | | 570.115 | 570.128 | 570.128 | 570.097 | | | 569.973 | | | 569.897 |
| 27 | 22+54.80 | 569.982 | 570.038 | | | 570.162 | | | 570.180 | 570.193 | 570.193 | 570.162 | | | 570.038 | | | 569.962 |
| 28 | 22+61.10 | 570.046 | 570.103 | | | 570.226 | | | 570.245 | 570.258 | 570.258 | 570.226 | | | 570.103 | | | 570.026 |
| 29 | 22+67.39 | 570.111 | 570.168 | | | 570.291 | | | 570.310 | 570.323 | 570.323 | 570.291 | | | 570.168 | | | 570.091 |
| A2 | 22+71.61 | 570.155 | 570.211 | | | 570.335 | | | 570.353 | 570.366 | 570.366 | 570.335 | | | 570.211 | | | 570.135 |
| E2 | 22+73.69 | 570.176 | 570.233 | | | 570.356 | | | 570.374 | 570.388 | 570.388 | 570.356 | | | 570.233 | | | 570.156 |

NOTES FOR ELEVATIONS TAKEN ON BEAMS

Take elevations on top of beam at points indicated by the grid layout. The beam elevations are to be read to three decimals, and entered in tables under "Top of Beam Elevations".

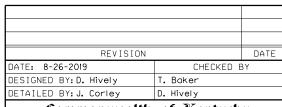
Compute Dimension "X" as follows:

"Construction Elevation" minus "Top of Beam" elevation equals
Dimension "X". Construction Elevations include deflection due to
weight of concrete slab and barrier. In no case shall dimension "X"
values be less than 8" or more than 10". If the elevations of the existing
bridge are such that these criteria cannot be obtained, the profile
grade shall be adjusted. Coordinate adjustment with the Engineer.

For setting templates, measure Dimension 'X' above top of beams for top of template. Do not set template by elevations.

All of the existing concrete for any given phase must be removed before elevations can be taken at the tops of beams.

Phase 3 construction joint elevation shall match the constructed Phase 2 construction joint elevation. The adjustment to the construction joint elevation shall also be applied to other lines in Phase 3 to maintain a constant cross slope.



Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS

CUMBERLAND

KY 379 BIG WILLIS CREEK

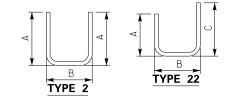
CONSTRUCTION ELEVATIONS

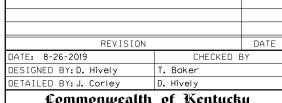
BRIDGE NUMBER





| | | | | | OF KEII | NE OK | | | | |
|------|------|------|-----|------------|--|--------------|--------------|-----------|---------|-------|
| MARK | TYPE | SIZE | NO. | LENGTH | LOCATION | a ET - IN | b ET - IN | C ET - IN | TT-IN | FT- |
| | | | | 1 1 110 | DECK | 1 1 1IN | I I IIN | 1 1 111 | 1 1 110 | ' ' ' |
| Sle | Str. | 5 | 632 | 12 - 2 | | | | | | |
| S2e | Str. | 5 | 632 | | | | | | | |
| S3e | Str. | 5 | 632 | | | | | | | |
| S4e | 22 | 5 | 316 | | | 2-6 | 0 - 10 | 7 - 11 | | |
| S5e | 22 | 5 | 316 | | | | - | 8 - 10 | | |
| S6e | Str. | 5 | 244 | | DECK FT-IN FT-IN | | | | | |
| S7e | Str. | 6 | 150 | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | <u>TEM</u> | PORARY | DEC | <u>K</u> | | | |
| S10 | Str. | 5 | 95 | 31 - 8 | Deck | | | | | |
| S11 | 22 | 5 | 620 | | | 3 - 0 | 0 - 10 | 7-0 | | |
| S12 | Str. | 5 | 310 | | | | 0 .0 | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | D | IAPHRAC | <u>SMS</u> | | | | |
| S19e | Str. | 5 | 6 | 2-0 | END BENT 1 | | | | | |
| S20e | Str. | 5 | 6 | | END BENT 1 | | | | | |
| S21e | Str. | 5 | 6 | | END BENT 1 | | | | | |
| S22e | 2 | 5 | 64 | 8-0 | END BENT 1 | 2-5 | 3-2 | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| S19e | Str. | 5 | 8 | 2-0 | ABUTMENT 2 | | | | | |
| S23e | Str. | 5 | 8 | 12 - 8 | ABUTMENT 2 | | | | | |
| S24e | Str. | 5 | 8 | 12 - 2 | ABUTMENT 2 | | | | | |
| S25e | 2 | 5 | 50 | 9-5 | ABUTMENT 2 | 3 - 3 | 2 - 11 | | | |
| | | | | | | | | | | |





Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS

CUMBERLAND

ROUTE **KY 379** BIG WILLIS CREEK

BILL OF REINFORCEMENT
PREPARED BY
AECOM
BRIDGING
KENTUCKY
PREPARED BY
AECOM

BRIDGE NUMBER



