

## **TRANSMITTAL MEMORANDUM 99-03**

**TO:** Design Consultants &  
Division of Bridge Design Staff

**FROM:** Stephen E. Goodpaster, P.E.  
Director  
Division of Bridge Design

**DATE:** August 30, 1999

**SUBJECT:** Structure Plans

As most are aware, the Department has elected to revert back to English plans at the earliest possible date. The standard drawings and standard specifications will be published in English only in the early part of 2000. With this in mind, the following guidelines are hereby established:

1. Any structure plans that have not been started and are scheduled for letting after January 1, 2000 shall be detailed in English Units. References shall be made to the English Standard Drawings and Specifications.

When roadway plans are in Metric Units, the stationing for the structures shall be in equivalent English Units. A note (placed on the layout sheet) shall provide an equation to indicate corresponding Metric stations and elevation. An example layout is attached. The designer is encouraged to adjust span lengths to even inches.

Quantities shall be furnished in the units corresponding to the roadway plan quantities.

Any plans that have been started in Metric Units (advanced past Stage I Preliminary) shall be completed in metric. All metric plans let after the issuance of the English Standard Drawings shall incorporate the metric standards as plan sheets (or in the case of box beams, special notes). These sheets may be acquired from Larry Graves of this Division.

English plans shall be detailed in feet and inches and fractions thereof.

Of note, the following changes will be incorporated into the English Standard Drawings:

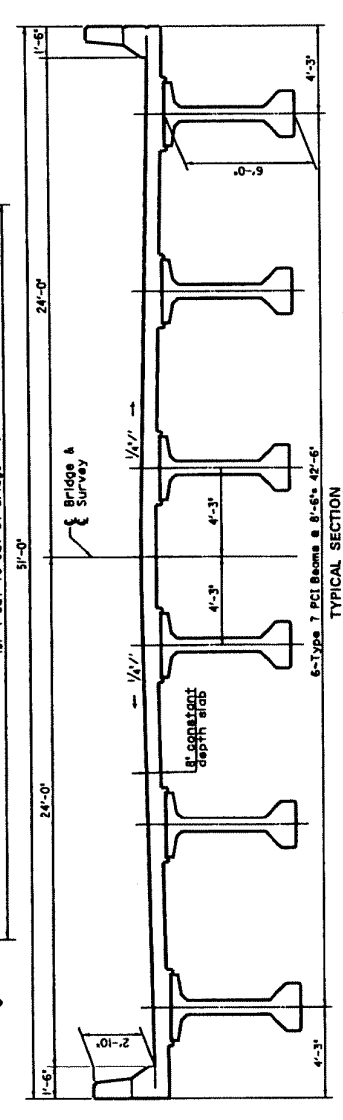
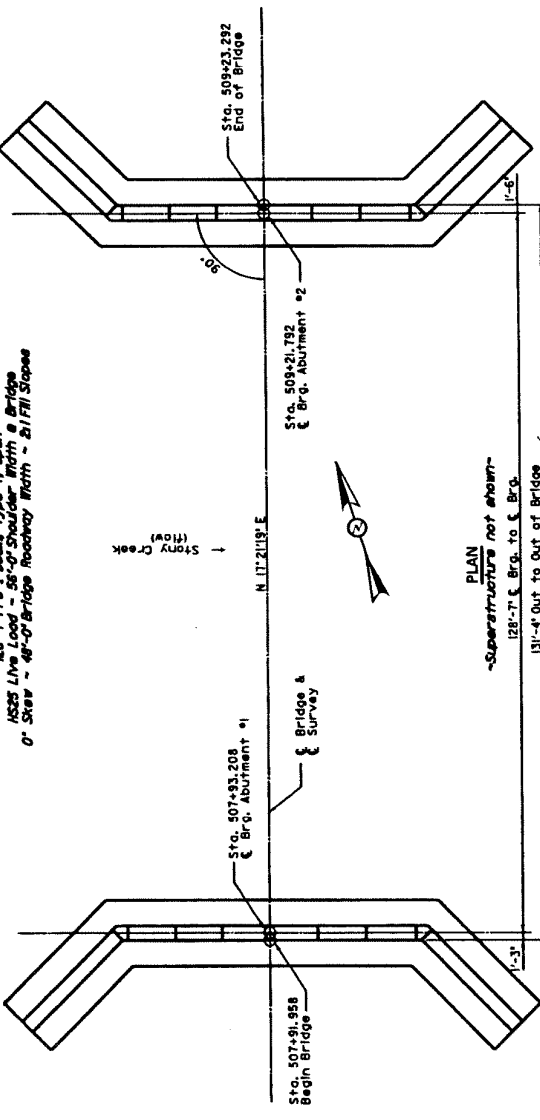
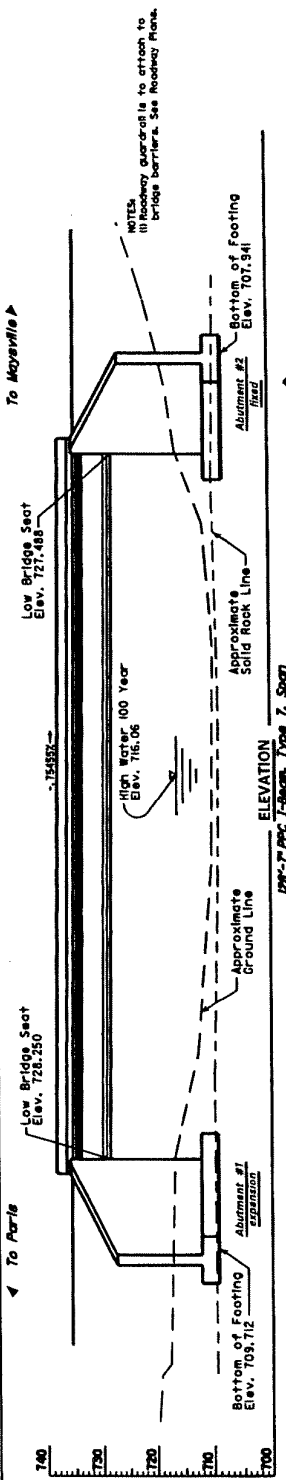
- a) Major changes to the barrier and transitions - The barrier will be 1 foot 6 inches wide and there will be no turnback on the transitions.
- b) Box beams have been redesigned and the span lengths are in 2 foot increments. The curb has been reshaped to match roadway drainage curbs, thus reducing the size of the curbs.

General notes will be written in present tense, first person with active verbs. A copy of the Division's General Note Library for English may be obtained after a scheduled October 1<sup>st</sup> completion date.

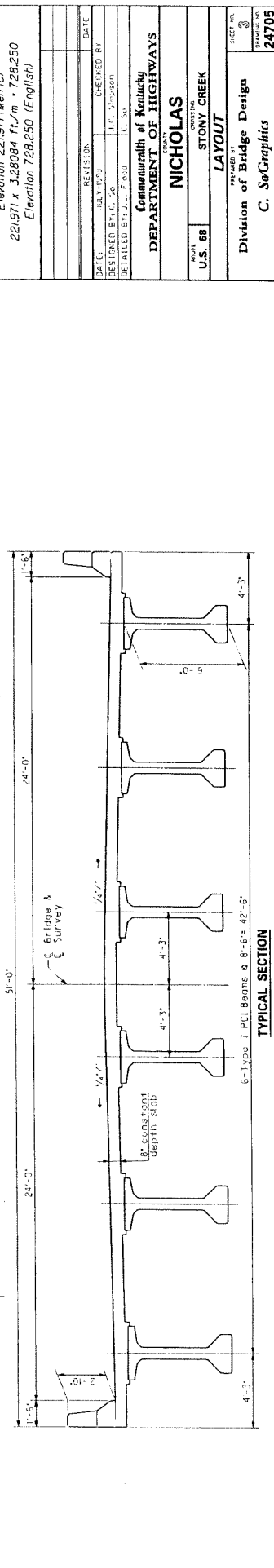
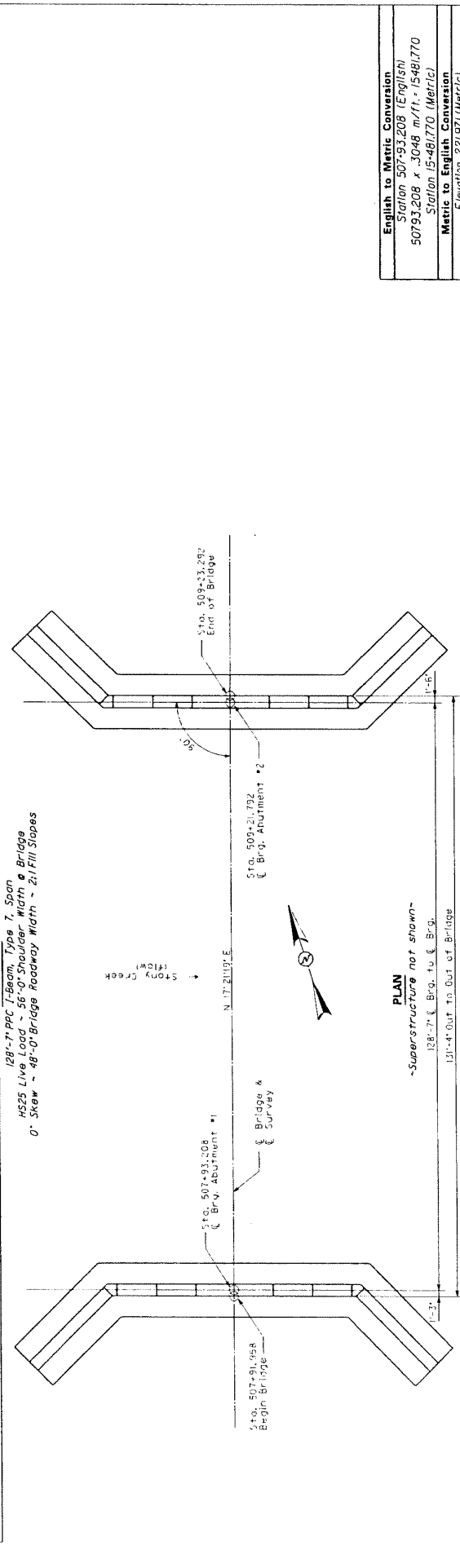
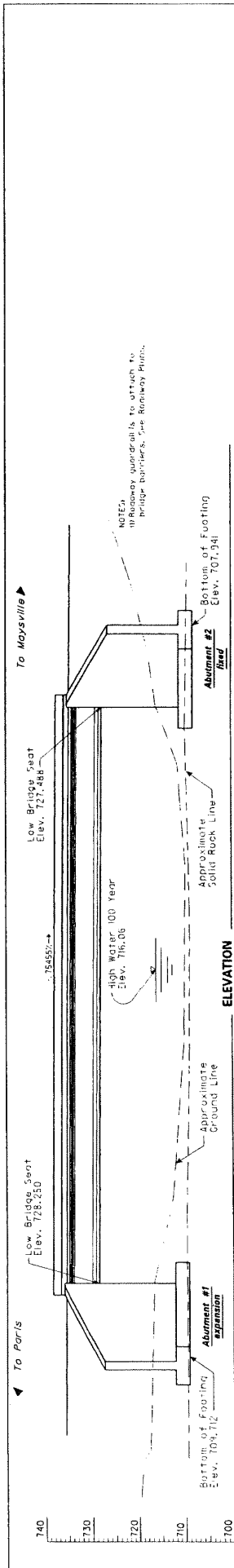
The transition back to English will be confusing and difficult at times, but we must head that way. It is realized that there will be both English and Metric plans for quite some time, but the above guidelines should help ease the transition.

#### Attachments

c: Bill Broyles



English to Metric Conversion	
Station 507+83.208 (English)	50793.208 x .3048 m/ft = 15481.770
Station 19+481.770 (Metric)	19481.770 / 3.28084 ft/m = 728.250
Metric to English Conversion	
Elevation 221.971 (Metric)	221.971 x 3.28084 ft/m = 728.250
Elevation 728.250 (English)	728.250 / 3.28084 = 221.971
DATE: JULY-1999	REVISION
DESIGNED BY: J.C. Flood	CHECKED BY: J.C. Simpson
DEPARTMENT OF HIGHWAYS	COMMUNALTH OF KENTUCKY
NAME: U.S. 68	COUNTY: STONY CREEK
PROJECT NO. 24705	DRAWING NO. 3
Division of Bridge Design	
C. SwGraphics	



**ELEVATION**

128'-7" *PPC* I-beam, Type 7, Span  
 H-25 Live Load ~ 56'-0" Shoulder, Width & Bridge  
 0° Skew ~ 48'-0" Bridge Roadway Width ~ 2:1 Fill Slopes

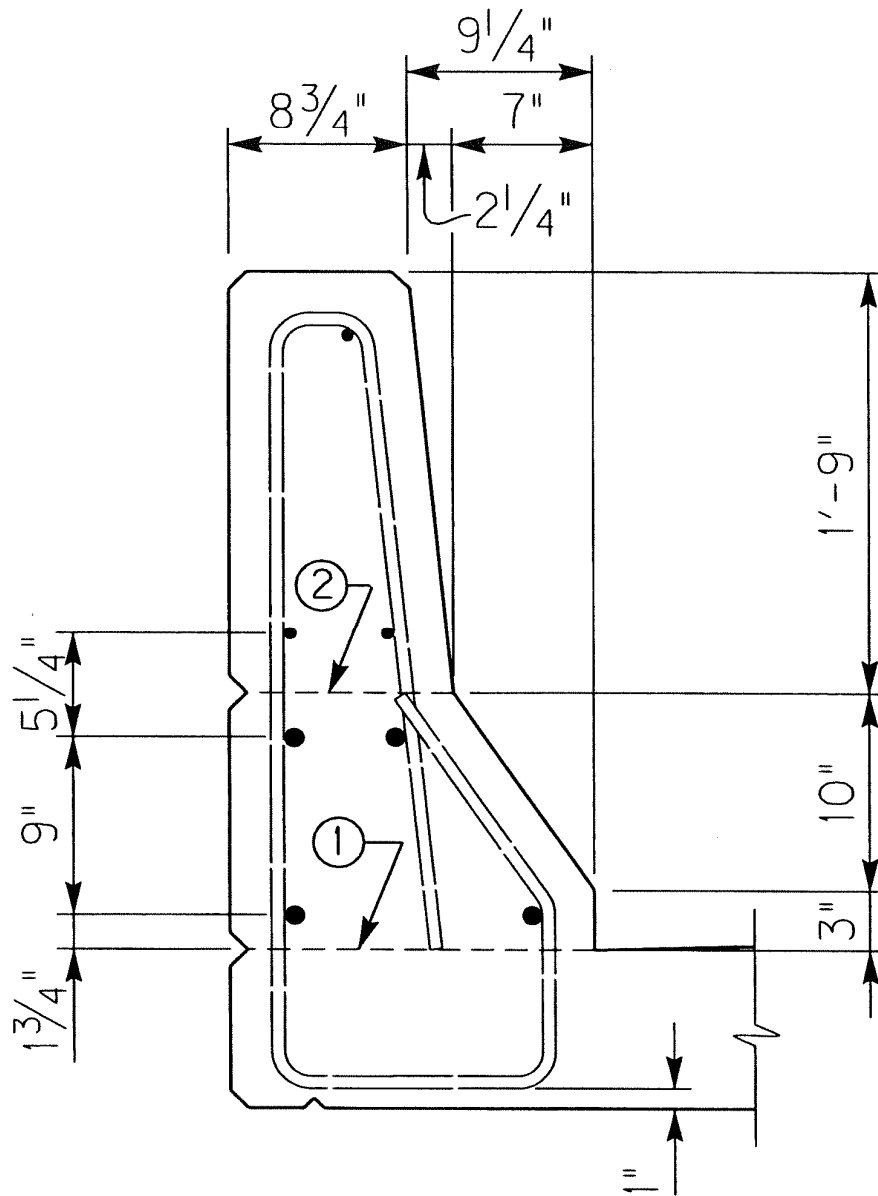
**PLAN**

~Superstructure not shown~  
 128'-7" Br. to Br.  
 121'-4" Out to Out of Bridge

**TYPICAL SECTION**

6-Type 1 PCI Beams & 8'-6" x 42'-6"

<b>English to Metric Conversion</b>	
Station 507+93.208 (Eng)(Sp)	
50793.208 x .3048 m/ft = 15481.770	
Station 15+481.770 (Metric)	
<b>Metric to English Conversion</b>	
Elevation 221.971 (Metric)	
221.971 x 3.28084 ft/m = 728.250	
Elevation 728.250 (English)	
DATE:	REVISION:
DESIGNED BY: L.C. Thompson	CHECKED BY:
DETAILED BY: J.L. Flood	DATE:
Commonwealth of Kentucky	
DEPARTMENT OF HIGHWAYS	
NICHOLAS	
STONY CREEK	
LAYOUT	
U.S. 68	SHEET NO.
Division of Bridge Design	24705
C. SoGraphics	



## **SECTION A-A**

- ① Mandatory roughened construction joint. Concrete above this joint is to be placed after slab has been properly cured.
- ② Permissible construction joint and bottom of  $\frac{1}{4}$ " open joint in top of barrier. "V-Groove" rustication joint is required if construction joint is used.