# KYTC Bridge Superstructure Standard Flowsheet

TEAM KENTUCKY®
TRANSPORTATION CABINET

Will you be using Steel or Concrete Box Beams on your Bridge?

**No**

A slab bridge superstructure uses solid mass concrete and steel reinforcement to provide a span over the stream.

Std. Dwg. BDP-013

**Yes**

**Concrete Box Beams**

Box beams can be used with a 5" composite slab or with no slab in a non-composite beam.
See Applicable Standard Drawings (Circle All that apply)

| | |
|---|---|
| BDP-001 | Box Beam General Notes and References |
| BDP-002 | Box Beam Bearing Details |
| BDP-003 | Box Beam Miscellaneous Details |
| BDP-004 | Box Beam Tension Rod Details |
| BDP-005 | Railing System Type II Details |
| BDP-006 | Box Beam B12 and CB12 Details |
| BDP-007 | Box Beam B17 and CB17 Details |
| BDP-008 | Box Beam B21 and CB21 Details |
| BDP-009 | Box Beam B27 and CB27 Details |
| BDP-010 | Box Beam B33 and CB33 Details |
| BDP-011 | Box Beam B42 Details |
| BDP-012 | Box Beam CB42 Details |

**Steel Beams**

Steel Grid Deck or Slab with <9" overhang

8" Slab with >9" overhang

Or would like to reduce beam size/cost as much as possible.

Use the Composite Steel Beam Standard Drawings

| | |
|---|---|
| BSB-101 | Composite Steel Beam General Notes |
| BSB-102 | Composite Steel Beam Tables |
| BSB-103 | Composite Steel Beam Slab Details |
| BSB-104 | Composite Steel Beam Framing Plan |
| BSB-105 | Rolled Steel Diaphragm Details |

Use the Non-composite Steel Beam Standards

Applicable Standard Drawings

| | |
|---|---|
| BSB-002 | KYHL-93 Beam Standards |
| BSB-003 | Slab and End Diaphragm Details |
| BSB-004 | Rolled Steel Diaphragm Details |
| BSB-005 | Rolled Steel Diaphragm Details |
| BSB-006 | Rolled Steel Diaphragm Details |

# KYTC Bridge Substructure Standard Flowsheet

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Is Solid Bedrock Visible in Streambed or Verified by other means (drilling, sounding) Within 16ft of Bridge Deck Surface. (Boulders, loose rock slabs are not considered Solid Rock)

No

If no solid bedrock elevation is known, Bridge must be founded on Piling and End Bents.
See the following Standard Drawings:
BSE-001
BSE-002
BSE-003
BSE-004.
If proposed bridge width does not meet the standard, submit detailed sketches showing proposed cap dimensions, piling spacing, etc.

Yes

If solid bedrock elevation is known, Bridge should be founded on Spread Footings embedded 1'-2' into solid bedrock.
See the following Standard Drawings:
BSA-001 to BSA-060