MEETING NOTES

Brent Spence Bridge Bridge Type Selection- Project Aesthetic Committee Meeting

Date: January 29, 2010

Location: Northern Kentucky Convention Center, Covington, KY

General Notes on Bridge Concepts

- For cable-stayed bridges, a harp stay cable arrangement paired with the Pratt truss, with stays parallel to the truss diagonals, is preferred.
- The lattice type of double-decked truss is unliked.
- Two legged cable-stayed towers are generally preferred over the threelegged options.

Specific Notes on Bridge Concepts

TRUSS

Concept 1

Similar type truss as the existing bridge except 3 truss planes and 985' main span.

Concept is cluttered and busy; looks like an erector set. It is not distinctive.

Concept 2

Single span of 1007' span length; 3 truss planes

Concept is "worse than Concept 1."

ARCH

Concept 3

Single 1068' span; 3 arch planes; vertical hangers; Vierendeel truss.

Concept will, as Miguel Rosales described, bookend the downtown with tied-arch bridges (the other being the Daniel Carter Beard Bridge), which is good.

The Vierendeel truss will provide better and more open views from looking out of the lower deck.

Concept 4

Same as Concept 3 except that the exterior trusses are inclined inward as basket handles and 1099' span. The basket handle shape of the outer arch ribs is more visually interesting than the vertical ribs.

The bridge fits well into the context of the other bridges.

Concept 5

Same as Concept 4 except that the hangers are truss members-with diagonal members.

The inclined hangers are too busy and cluttered.

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CABLE-STAYED

Concept 6

Two towers; each tower comprised of 3 needle pylons; 1007' main span; harp stay cable arrangement; 3 cable planes; 3 trusses in line with the pylons; trusses are framed into the pylons.

The contrast with the existing Brent Spence Bridge is a positive. The bridge is different from the BSB, but does not "fight" it aesthetically. There was strong agreement on these points.

Concept 7

Same as Concept 6 except the truss diagonals are lined up with cables (Pratt). Same points as for Concept 6. The combination of the Pratt deck truss and the harp (parallel) stay cables is elegant and preferred to the arrangement shown for Concept 6.

Concept 8

Two towers; each tower comprised of 2 A-shaped pylons; 1004' main span; semi-fan stay cable arrangement; 2 cable planes; cables are in pairs; 2 trusses in line with the pylon; trusses are framed into the pylons.

The tower near the Covington bank will require graffiti (and other security) protection consideration. Covington is planning a river trail park which will pass under the bridge. The strength of the dislike for this concept outweighed its limited support. Those who disliked it, strongly disliked it.

Concept 9

Two towers; each tower comprised of 3 needle pylons inclined towards shore; a triangle (check mark) under the truss for aesthetics; 1007' main span; semi-fan stay cable arrangement; 3 cable planes; 3 trusses in line with the pylons; trusses are framed into the pylons.

The inclination of the towers gives a feeling of opening to the communities on each bank.

This concept may look better with two, rather than three, tower legs (and a Pratt/harp truss/stay arrangement)
The "check mark" is a nice detail, and perhaps could be extended higher, even up through the top chord of the double deck truss.

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Concept 10

Two towers; each tower comprised of 3 needle pylons inclined towards shore; 1020' main span; harp stay cable arrangement; 3 cable planes; 3 trusses in line with the pylons; trusses are framed into the pylon; the diagonals of the truss are lined up with cables (Pratt).

The harp stay arrangement is less intrusive than the semifan shown in Concept 9. Concept 10 is better liked than Concept 9.

Concept 11

Two inverted U-shaped towers; 1007' main span; semi-fan stay cable arrangement; 2 cable planes; 2 trusses in line with the pylons; trusses are framed into the pylon.

The arch was done better in St. Louis. These look like croquet wickets.

Concept 12

Single tower with 2 needle columns located on the Ohio bank; 1000' main span and a 700'-800' back span; harp stay cable arrangement.

Concept 12 was well received, but no specific comments were made.

Action Items

As part of the next step in the bridge type selection process, renderings should be made of the 6 selected alternatives from the following additional vantages:

- Coming north on 75/71 from Northern KY.
- Coming south on 75 from downtown (Mill Creek area).
- From the bridge deck itself going both north and south to see what views are offered to motorists on the bridge.
- From Devou Park in KY.
- From one or more high rise offices/condos in either Cincinnati or Covington.