US 20 Galena Bypass
Citizen's Advisory Group

MEETING MINUTES

Date: August 13, 2007

cc: All Participants
F/203/02.3460.01

Date of Meeting: July 24, 2007

Meeting Place: Ramada Inn, Galena, IL

Project: US 20 (FAP 301) Galena Bypass
IDOT Job No. D-92-025-04
Teng Project No. 02-3460-01

Subject: July 24, 2007 Citizen's Advisory Group (C.A.G.) Meeting

PARTICIPANTS:

NAME	ORGANIZATION/ AFFILIATION	LOCATION
Beth Baranski (BB)	C. A. G. Member	Galena
Jim Boho (JB)	C. A. G. Member	Galena
Charles Fach (CF)	C. A. G. Member	Galena
Frank Gruber (FG)	C. A. G. Member	Galena
Bob Johnson (BJ)	C. A. G. Member	Galena
Chris Kirkpatrick (CK)	C. A. G. Member	Galena
Carol Mantey (CM)	C. A. G. Member	Galena
Joe Mattingley (JM)	C. A. G. Member	Galena
Pete Petersen (PP)	C. A. G. Member	Galena
Valerie Stabenow (VS)	C. A. G. Member	Freeport
Cassandra Rodgers (CR)	IDOT Dist 2	Dixon
Steve Robery (SR)	IDOT Dist-2	Dixon
Mark Dvorak (MD)	Teng and Associates, Inc	Chicago
Joe Hoerner (JH)	Teng and Associates, Inc	Chicago
Tom Hoepf (TH)	Teng and Associates, Inc	Chicago
Todd Ude (TU)	Teng and Associates, Inc	Chicago

This meeting of the Citizen's Advisory Group was held primarily to discuss and arrive at consensus on bridge types and parapet treatments along the Galena Bypass. Continued discussion and prioritization of aesthetic enhancement opportunities along the proposed Bypass

was a secondary reason for the meeting. The following is the summary of items discussed and conclusions reached:

1. Introductions/Roll/Call

   The meeting began with a roll call of all attendees present at 6:00 pm (see participants list above).

   JH outlined the primary meeting objectives as noted above. JH reminded the group that Teng's current work will conclude with roadway grading plans and preliminary concepts for the bridge structures in late 2007 or early 2008. As such, it is important to continue the discussion involving bridge designs that began at the last CAG meeting and for the CAG members to come to a consensus on certain bridge design elements so that the CAG's ideas can be incorporated into Teng's preliminary bridge plans. The next meeting would likely be the last meeting of the CAG under the current design contract and it would be a wrap-up/summary of CAG priorities, consisting of a review of the CAG's involvement to date, and a list of issues that will be carried forward into the future Phase II engineering and public involvement processes.

   JB discussed the need to get more people involved in the CAG as fewer people have been attending in recent months. One option suggested by JB is to hold a sub-committee meeting with the Mayor of Galena and members of the Galena City Council and the JoDaviess County Board. This point was reserved for further discussion by the Group and tabled briefly until after the bridge types and parapet design presentations.

2. Bridge Types

   TH reviewed the three main bridge categories along the Galena Bypass that were initially presented during the 5/15/07 CAG meeting. TH presented visualizations of current concepts for some of the bridges, including open and closed rail designs, to generate discussion about bridge forms and details. Two grade separation structures (the north interchange, and US 20 over Council Hill Road) and the two major bridge structures (Galena River crossing and Stagecoach Trail crossing) were highlighted in this discussion.

   JH noted that the bridge types were previously discussed at the 5/15/2008 CAG Meeting. Limited possibilities for alternative bridge types are available for the smaller bridges due to the standardized nature of these crossings. However, at the Galena River and at Stagecoach Trail, multiple bridge type were investigated due to the opportunities afforded by the scale of the structures. For the Galena River Bridge, the seven initial alternatives presented at the 5/15/07 meeting were pared down to two viable alternatives, a pier and girder design using single-leg hammerhead piers, and a 3-span arch design. For the Stagecoach Trail Bridge, the seven initial options were reduced to three viable options; a pier and girder design using single-leg hammerhead piers, a pier and girder design using two-legged, portal frame piers, and an arch design in which the arch rib is comprised of three chorded "struts".

RJ requested verification that the single pier design was structurally sound and that images presented were accurately depicted. TU affirmed that all bridge solutions presented tonight have been verified for their structural integrity.

CK requested cost comparison between arch type designs versus single or double pier designs. TU noted that the arch design for the Galena River Bridge and the strutted arch for the Stagecoach Trail Bridge were the most cost effective. The single-legged pier design was next and the two legged pier design was the most expensive. However, the cost difference between the two pier/girder designs was minor.

Multiple CAG members questioned if Stagecoach Trail Bridge could be designed as a conventional curved arch rather than a strutted arch. TU explained that a curved arch is possible, but that it would be something of a "forced fit" at this location. Due to the width and height of the valley, the depths to foundation rock, the location of the existing Stagecoach Trail roadway, and the horizontal curve of the proposed US 20, the three spans supported on a strutted arch create the most "natural" form for an arch type supporting structure from an engineering perspective. TU encouraged that CAG members consider the strutted arch configuration as shown, but also to express themselves if their preference is for a curved arch, or a pier and girder form.

BB noted a desire to avoid major impacts to the existing terrain and that she agrees with the overall notion that "form follows function". BB recommended considering each bridge separately due to the varied geologic features and letting the design flow naturally while maintaining authenticity. VS stated that she likes the possibility of the strutted arch concept as the basic design concept, with the ability to add aesthetic enhancements to make this signature bridge most pleasing. VS stated her preference that the Galena River Bridge should follow an arch design. In addition, BB provided examples of other signature bridges through similar terrain (Natchez Trace for arch bridge across a plain, and Salginatobel for arch bridge in a steep valley). BB stressed the need to utilize natural materials at appropriate locations such as near bridge abutments, and that it should be in character with the surrounding landscape (such as provided photo of stacked stone curtain wall concealing a bridge abutment near Spring Green, WI). Further, as an additional aesthetic enhancement BB requests that bike path trails should be revisited in the future to determine if any potential trails that lie perpendicular to the Bypass can be accommodated.

CK asked how smooth can the strutted arch appear when finalized.

TU noted that gentle curvature can readily be introduced to the struts, and that the sharp angle breaks where the spans touch the struts can be softened and rounded somewhat.

CM noted that these structures are of such large scale that it is important to minimize impact to the surrounding landscape.

CF asked if two arches could be placed within the valley. TU noted that due to the geometry that the two arches would be tight and have a form similar to "McDonald's" arches.

JM suggested that a horizontal datum could be determined such that all piers have natural limestone up to a consistent point horizontally.

Multiple CAG members questioned if the dual pier design could have a slight arch between the piers. TU noted that this is possible. Multiple CAG members spoke in favor of adopting a concept (like a dual-legged form) that could be adapted and used consistently across all pier bridges on the bypass.

The CAG reviewed and voted on the following Bridge Type Options:

1. All bridges are single pier design
2. All bridges are dual pier design
3. All brides are dual pier design except the Galena River bridge which would be an arch
4. All bridges are dual pier design except the Galena River bridge which would be an arch and the Stagecoach Trail Bridge which would be a strutted arch
5. All bridges are dual pier design except both the Galena River bridge and the Stagecoach Trail Bridge which would be a strutted arch
6. No Preference
7. Abstain

The initial CAG votes were recorded and accepted as follows:

6 members voted for option #3 (consolidated from 3 members voting for (option 2) and 3 members voting for option #3)
1 member voted for option #4
1 member voted for option #5
1 member voted for option #6 and requested that this vote would follow the option with the majority of votes.
1 member voted for option #7

JB asked TU to confirm that the cost for the arch bridge was less than the cost of the pier girder bridge. TU confirmed this. JB then asked if JM, CK and RJ would change there vote to number 3. All agreed.

The CAG adopted the approach of the Galena River Bridge as a “signature structure” for the Bypass incorporating the three-span arches using dual piers with integral pier arches, and a dual pier with integral pier arches and girder form for all other bridges.

TU noted that for a pier and girder bridge at Stagecoach Trail, the steel girders could be haunched which would introduce a slight arch along the steel girders.

3. Parapets

Three possibilities exist for the parapet design; open rails throughout the length of the bridge, closed parapet throughout the length of the bridge, and a combination of closed parapet and open rail throughout the bridge length.

BJ asked for verification on the railing height. JH confirmed that the railing height is 2'-10" and meets IDOT and Federal standards.

CM asked if the rail height was safe enough for the motoring public, especially for motorcycle drivers. MD stated that the designs presented are governed by, and consistent with, FHWA and IDOT requirements for this structure type, highway classification, and speed limit.

The CAG votes were recorded and accepted as follows:

6 members voted for an open rail design wherever possible
3 members voting for a combination of closed parapet and open rail design
1 member voted for closed parapets with natural stone facing

Teng will proceed with the bridge rail design that will incorporate open rails to the extent possible and practical. However, over emphasis on view and transparency could result in drivers feeling uncomfortable traveling on structures of this height and length. This possibility will also be considered when evaluating the appropriateness of open vs. closed rail design.

4. Other Design Opportunities

TH discussed the other enhancement opportunities for future consideration such the possible uses of formliner or stone cladding, the use of emblems or markers to establish a gateway to the Glacier Shadow Pass.

JM discussed the possibility to install permanent crossovers along the roadway to accommodate future maintenance.

CK discussed the possibility to segment the enhancement opportunities into two categories; one category that includes issues such as land stewardship, bike trails, and landscaping while the other category review enhancement treatments to bridges and the roadway.

JB stressed the desire to involve other members of the community on these decisions. It is important to get feedback from the County Board as well as the Mayor of Galena and the respective aldermen. Therefore, it is recommended that a subcommittee be developed to brief this group of all the initiatives taken upon by the CAG group as well as the possibilities for aesthetic enhancements through the corridor. After the subcommittee meeting, there would be a regular CAG meeting with elected officials as guests to that meeting

CF stressed the need to verify the participation and meeting type allowed when convening the elected officials. Prior to organizing this meeting, the requirements for notification to the public based on convening certain members of the County Board and City Council will be determined
JH also discussed the need for a master list of talking points with respect to additional aesthetic opportunities for distribution prior to the next meeting.

The CAG voted all in favor for the assemblage of a subcommittee with elected officials and then their inclusion as guests to the next CAG meeting. CH will contact the various Aldermen, JB will contact the Mayor of Galena, and will ask BB to contact the County Board members.

CF requested that a visualization be created showing the view from NE to E of the Galena River and Stagecoach Trail bridges combined, as they will appear to a driver traveling EB on the existing bridge of Stagecoach Trail over Galena River.

The CAG expressed a desire for less abstract renderings and visualizations. Either photos of comparable bridges already constructed, or photo-realistic renderings of the proposed bridges "photoshopped" into a picture of the existing site.

5. Open Discussion/Other Items

VS asked how the CAG can help IDOT in securing funds for the second phase of this contract as well as construction. SR indicated that this project is in competition with various other projects throughout the State of Illinois for funding. Ongoing communication with State and US Senators and Representatives regarding the importance of the Galena Bypass may help with securing the additional funding.

JB requested the status of the Emergency Access. SR confirmed that IDOT has initiated required coordination with the FHWA requesting the emergency access lane. In order to receive approval, an Access Justification Report (AJR) will need to be completed and submitted to IDOT Central Office in Springfield and the FHWA. This report is currently being prepared. Additional coordination is necessary with the various Emergency Services servicing the Galena area to secure supporting information) necessary for this report (for example estimates showing how the emergency access lane will result in improved response times). IDOT hopes to complete this coordination by September 2007 and submit the AJR prior to the end of 2007.

6. Meeting Recap

- The CAG expressed a preference for a three span arch structure over the Galena River and a pier/girder structure over Stagecoach Trail and all the other structures on the bypass. They also expressed a preference for incorporating the "arch" theme into the pier/girder structures by haunching the steel girders and/or introducing an aesthetic arch element into a two-legged pier design. A consensus was achieved via vote by CAG members. The members also voted to incorporate open rail design to the extent possible and practical on both the Galena River and Stagecoach Tail structures.
- Teng will continue with the preliminary bridge design incorporating the ideas presented by the CAG.
- The CAG, Teng and IDOT will work to set up a coordination meeting with local officials prior to the next CAG. The purpose of this meeting would be to briefly review the issues that the CAG has been involved with to date and to update them on the status of the project in general, review selected bridge types for the major structures as voted on by the CAG, and seek input from the various local officials with respect to other enhancement opportunities that have been identified by the CAG.
- Teng will explore the possibilities of providing renderings to assist the CAG and the public in general to visualize the major structures over the Galena River and Stagecoach Trail.
- The next C.A.G. meeting is planned for late September /early October contingent upon arranging coordination with local officials as outlined above.

The foregoing is the writer's understanding of the matters discussed and the conclusions reached in summary form. This will become part of the project record and is the basis upon which we will proceed

Very truly yours,

TENG & ASSOCIATES, INC.

Mark Dvorak

Mark Dvorak, PE
Project Engineer