



US 20 Galena Bypass
 Citizen's Advisory Group



MEETING MINUTES

Date: June 12, 2007 cc: All Participants
 F/803/02.3460.01

Date of Meeting: May 15, 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: May 15, 2007 Citizen's Advisory
 Group (C.A.G.) Meeting

PARTICIPANTS:

<u>NAME</u>	<u>ORGANIZATION/ AFFILIATION</u>	<u>LOCATION</u>
Beth Baranski (BB)	C. A. G. Member	Galena
Jim Boho (JB)	C. A. G. Member	Galena
Charles Fach (CF)	C. A. G. Member	Galena
Bill Fawell (BF)	C. A. G. Member	Galena
Melvin Gratton (MG)	C. A. G. Member	Galena
Bob Johnson (BJ)	C. A. G. Member	Galena
Chris Kirkpatrick (CK)	C. A. G. Member	Galena
David Kriesant (DK)	C. A. G. Member	Galena
Carol Mantey (CM)	C. A. G. Member	Galena
Bill Nybo (BN)	C. A. G. Member	Galena
Valerie Stabenow (VS)	C. A. G. Member	Freeport
Bonnie Garrity (BG)	Guest - International Dark Skies Association	Galena
Suzanne Hollingworth (SH)	Guest - Zoning Administrator	Galena
Andy Lewis (AL)	Guest - City Engineer	Galena

<u>NAME</u>	<u>ORGANIZATION/ AFFILIATION</u>	<u>LOCATION</u>
Scott Kullerstrand (SK)	IDOT Dist 2	Dixon
Jason Nelson (JN)	IDOT Dist 2	Dixon
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 to discuss lighting guidelines of the International Dark-Sky Association, Bridge Structures associated with the Galena Bypass, the Illinois Transportation Enhancement Program, and aesthetic enhancement opportunities along the proposed Bypass. 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).

2. Dark Skies Presentation (Bonnie Garrity)

BG presented the fundamentals of Dark Skies, its importance within Jo Davies County and specifically within the Galena area. BG noted that it is understandable that light fixtures are needed at critical locations along roadway projects, however, it is important not to waste light up into the sky or to trespass laterally beyond the IDOT right-of-way. BG has been in contact with IDOT regarding their lighting policies and practices and is in general agreement with their light pole standards, light fixtures and general design for the Galena Bypass (lighting only at interchanges). BG had additional requests for future planning for the lighting design and they are as follows;

- a. Continue the good lighting practices at IDOT D2 with respect to light poles, fixtures and glare control. These practices adhere to Dark Sky recommendations.
- b. Proposed lighting designs should strive to keep light levels at a minimum acceptable level as identified in lighting guidelines and standards. In addition, Illumination Engineering Society of North America (IESNA) will soon implement categories of light levels that would standardize optimal light levels dependant upon the surrounding area (rural, urban, etc). Once published, IDOT should incorporate these guidelines.
- c. Avoid high mast tower lighting.
- d. IDOT should consider lighting roadway signage from the top of the sign down. Currently signs are lit up from the bottom of the sign up.
- e. IDOT should consider methods to abate existing lighting pollution conditions. Examples include the light fixtures at the turn lane at the River Ridge School, light

fixtures such as the cat's eye fixtures that don't meet glare criteria, or LED lighting at the traffic signal at the west edge of Galena. Specifically if the LED produces 10,000 foot candles, Dark Skies requests that it be reduced down to 3000 foot-candles.

3. Dark Skies Presentation (Bonnie Garrity) Questions

- a. The CAG questioned the type of regulations for a LED Luminaire. SK commented that they follow Institute of Transportation Engineers (ITE) requirements for lighting. They cautioned that there is not much flexibility in these requirements. SK further commented that LED lighting is a brighter light than lamp lighting. It offers advantages with regards to less maintenance and energy efficiency. The CAG requested that IDOT verify if the brightness of LED light levels could be requested to be lowered. IDOT will verify and post a response on the Web Forum.
- b. CM questioned if bridges would be illuminated for this project. No lighting is planned at the bridges. SR indicated that consistent with the commitments identified in the Phase I, only the interchanges will be illuminated.
- c. SK stated that the District has moved away from high mast tower lighting. In addition, IDOT is now moving away from uplighting of signs. This is due to better reflective coatings used on the signage.
- d. AL asked if lighting would be provided for the emergency access near Council Hill Road. SR noted that the Emergency Access is still tentatively planned near Council Hill Road. Once IDOT completes coordination with FHWA, they will move ahead with the design. Teng will add the Emergency Access to the Forum as a new issue. *Postnote: Following the meeting, it was confirmed that lighting is not planned for the Emergency Access facility due to the low volume and restricted usage.*
- e. JB asked for a consensus that BG would act as the CAG liaison with IDOT and Teng for lighting issues, and that she be brought back to the group for any future updates as the lighting design progresses. Consensus was given by the Group.

4. Bridge Types/Design Opportunities Presentation

- a. JH introduced TU to provide a technical review of the bridge locations and the current progress toward determination of probable structure types, and JH introduced TH to follow with a presentation of examples displaying the likely range of aesthetic enhancements which might be applied to these structures.
- b. TU first began with a review of the alignment of the Bypass from north interchange to south interchange, identifying 4 "grade separation" structures, 2 "ravine crossing" structures, and 2 "major structures". For each bridge, general sizes and shapes were discussed with the aid of simple sketches, along with comments on the relative visibility of the bridge and the view from the bridge. For the major structures (Galena River and Stagecoach Trail), additional detail was presented regarding the concepts which are being included / excluded from further study within the context of a formal Bridge Type Study.
- c. TH then discussed the major design opportunities of the bridges as being in the treatment of piers, parapets and pylons. A series of images of existing bridge were

- shown to illustrate various design approaches. TH presented a series of sketches showing possible treatments for piers which included:
- a single shaft "hammer-head" design that included articulated concrete or limestone form-liner at the base;
 - an double-legged pier/arch design with articulated concrete or limestone form-liner at the base;
- d. TH presented a series of sketches showing possible treatments for parapets which included:
- articulated (reveal/panel pattern) solid concrete parapet with pilasters at regular intervals and a painted top rail at some locations;
 - articulated (limestone form liner) solid concrete parapet with pilasters at regular intervals and sections of open steel rail at locations with optimal view potential;
 - articulated (reveal/panel pattern) solid concrete parapet with limestone form liner pilasters at regular intervals and an open steel rail at view locations.
- e. TH presented a series of sketches and photographs showing possible treatments for pylons and discussed the potential for the pylons to be located as an "entry portal" for bridges.

5. Bridge Types/Design Opportunities Questions

- BN requested the difference in costs per each grouping of bridge structures. TU noted that for planning purposes, the following ranges are often used: for modest grade-separation type bridges, from \$100 to \$120 per square foot of bridge deck. For the larger "ravine-crossing" bridges between \$150 and \$170 per square foot of bridge deck. For the very large, "major structures", between \$200 and \$220 per square foot of bridge deck. [Author note: these represent initial construction costs in present (2007) dollars.]
- BN requested the use of a balloon to better visualize the height of the bridge from the ground so as to get a feel for aesthetic features on the bridge. In addition, pictures from that height would help the group visualize what type of view would be achieved on the structure. JH stated that this request appears to speak to the issue of roadways profile, which has already been addressed and approved by the group. *Postnote: Following the C.A.G. Meeting, IDOT/Teng posted a comment on the C.A.G. Web Forum indicating that IDOT would be willing to assist the C.A.G. members by arranging a field visit and providing bridge elevations and crossing locations. For further information, see the C.A.G. Web Forum post dated 5/17/2007.*
- Multiple CAG members requested further exploration of bridge parapets with open rails. JB noted that examples of bridges that previously had open rails which were replaced with concrete parapets have severely restricted once enjoyable views. Overall the open guardrail concept affords somewhat better views from the bridge to the surrounding landscape, it also provides the opportunity to create more visual interest at certain spans of the bridge and it provides the opportunity to introduce color (weathering steel) in contrast to the concrete.

- The use of limestone form-liner or natural limestone was also seen as favorable, though the group cautioned that authenticity was important with respect to the use of materials, and it may be more appropriate to use natural stone in fewer places rather than form-liner throughout.
- VS suggested that a contemporary bridge design may not be appropriate for the corridor. In addition, she had a preference for the arch configurations at both of the major structure locations.
- CAG requested opinions from TH and TU on the design approach for the bridge/elements. TH stated that in his view, there are two different but appropriate ways to think of the bridge design. The first approach is to consider the more rustic nature of the landscape and historic character of Galena and incorporate materials such as locally-quarried limestone with more traditional bridge forms such as arches. The second approach is to consider the bridge as an entirely man-made modern element within the landscape and simplify the design so as to minimize its visual detail using more fluid contemporary forms. This approach looks forward and speaks to the notion of authenticity with respect to the pioneering spirit and conquering new horizons. Several contemporary bridges were cited as models of this approach, including the Tarn Valley Bridge in Millau, France. TU stressed the need to plan for the long term: whatever forms and materials are deployed, they must be of a type that last and can age gracefully in a harsh environment. The concrete and steel railing concepts exhibited in the presentation are generally consistent with these objectives. TU also cautioned against an over-emphasis on view and transparency; the height and length of the major bridges is going to result in a very “exposed” feeling to drivers. On such bridges, a more solid rail or a slightly taller rail may be appropriate.
- CF asked if the bridges should / could be made Earthquake proof? TU responded that the required seismic design levels are unambiguously governed by national codes, and are not generally open to re-interpretation. TU noted that there is no such thing as “earthquake proof” in structures.
- BF and CM questioned the noise impacts between the open and closed rail option. Teng responded that perceptible difference in noise levels would be insignificant over 500 feet from the travel lane.
- BF indicated that noise is still a concern to him and questioned if this issue is open or closed. JB responded that this issue was studied during Phase I and the conclusions were that noise walls would not be required within the area. Subsequently, the last CAG meeting reviewed and agreed to these findings and the CAG voted to a consensus that the issue of noise from the Galena Bypass project was closed.
- Immediately prior to the start of the C.A.G. meeting, BF submitted a letter to IDOT regarding his noise concerns from the Galena Bypass. IDOT will respond to the request as a separate issue.

6. Illinois Transportation Enhancement Program (ITEP) Presentation

JN presented a funding mechanism where additional funds are made available for non-traditional enhancements to transportation projects. The federal government has earmarked 10% of Federal transportation funds to be used for enhancements to roadway or transportation projects. IDOT typically utilizes these funds for non traditional enhancements for streetscapes, landscaping or bike paths that are within the project limits of a roadway project. A slide presentation was shown that helped explain how ITEP funds are utilized throughout the State transportation system. These funds are separate from any aesthetic treatment funds that may be included as part of the Galena Bypass project funding; they constitute an additional, alternative source which the community could consider applying for if appropriate enhancements are identified.

7. Illinois Transportation Enhancement Program Questions

- VS requested a clarification on how the Galena Bypass might use these funds and what particularly could apply for ITEP funds. JN responded that bridge types, form liners for parapets and pier types are items that do not typically qualify for ITEP funding. Rather, these types of aesthetic treatments would be funded by including an aesthetic component in the base funding for the project as part of IDOT's new Context Sensitive Solutions approach to roadway design. Bike path linkages, landscaping, scenic beautification and historic preservation of transportation facilities are examples of projects qualifying for ITEP funds.
- JN suggested that enhancements for the project could be based upon some type of theme for the project. JN encouraged the group to think about how a theme could be used when reviewing aesthetic features to the roadway and bridges and then how secondary enhancement features might apply. The CAG agreed with this suggestion. The concept of a particular emblem that could be repeated along the Bypass received general support.
- CM questioned if special fencing is to be considered along the bypass to ensure that cyclists aren't in danger or to prevent rocks being thrown from the bridges. TU responded that no accommodation for pedestrians or cyclists is being provided in these bridges. The railings / parapets are provided strictly for the safety of motorists on the structures. IDOT concurred that bicycle routes are not allowed for these types of highways (access controlled freeways), and therefore, no bike path can be located along the alignment and ROW. In addition, the Phase I study reviewed bike path opportunities and for various reasons (safety, terrain, costs) were not considered for further review. The parapet design will follow Federal and State standards for design types. However, it is not anticipated that the parapet height needs to be above 2'-10" and in addition, no fence will be required.
- CK suggested purchasing additional mitigation land, conservation easements and land stewardship funds for enhancement opportunities. (Note: For further detail, refer to CK's C.A.G. Web Forum posting from 5/3/2007)
- BB commented that in addition to bridge aesthetics, preferences should be given to providing funding for maintenance for mitigation/conservation areas and bike paths.

- JH recorded the Group's "Enhancement Brainstorming" comments as follows:
 - Develop a consistent design theme.
 - Consider the arch as a design element.
 - Use natural stone in lieu of form liners.
 - Provide open parapets/rails at bridges.
 - Reduce effect of number and size of bridge piers.
 - Consider covered bridges.
 - Increased landscape areas, mitigation areas and scenic easements.
 - Consider a bike path crossing.

7. Open Discussion/Other Items

JB commented that once a topic is closed in the CAG and on the forum, that it will remain closed. These issues should not be re-opened during subsequent CAG meetings.

JB also discussed an issue regarding a previous Phase I meeting with respect to relocating the Devils Ladder Interchange to Tippet Road as recommended by the Phase I Citizens Advisory Council. JB asserted that consensus was not properly recorded with respect to this issue. As the interchange is not part of the Galena Bypass Project, IDOT will investigate and respond separately to JB as appropriate.

8. Meeting Recap/Topics and Date for Next Meeting

JH conducted a meeting recap as follows:

- The Galena Bypass will follow IDOT lighting standards which are aligned to Dark Sky recommendations. IDOT will clarify issues that were brought up. BG will be the CAG liaison for lighting along the Galena Bypass.
- The CAG will continue aesthetic/enhancement discussions on the forum, and further development will help formulate the next CAG meeting topic(s). Emphasis should be given to the "Enhancement Brainstorming" comments outlined above.
- The next C.A.G. meeting was tentatively scheduled for this Summer, mid-to-late July, subject to confirmation.

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