Summary Minutes Of The

AASHTO Bridge Rating and Design Products Meeting

August 2, 2012

Niagara Falls, NY

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<u>General Information – Meeting of the Bridge Products Task Force</u>

Date: Thursday, August 2, 2012

Participants:

AASHTO	Judy Skeen	Project Manager	Bridge Products
BrD/R Task Force	Tim Armbrecht Bryan Silvis Joshua Sletten Dean Teal Amjad Waheed Tom Saad	Illinois DOT Virginia DOT Utah DOT Kansas DOT Ohio DOT FHWA Liaison Midwest Resource Center	Chair Bridge Design (Opis) Bridge Rating (Virtis) Bridge Design (Opis) Bridge Rating (Virtis)
BrD/R Contractor	Jim Duray Herman Lee Krisha Kennelly Geoff Trees	Baker Baker Baker Baker	
Guests	Jay Puckett Brian Goodrich Ron Love Richard Pickings	BridgeTech BridgeTech Bentley BridgeSight	

Notes Taker: Judy Skeen

General Discussion

The meeting began at 8:07 AM Thursday.

No additional items were added to the agenda.

Third-Party Development Discussion

1a. Third Party Developer Presentation
BridgeTech lead the third party developer
discussion with a PowerPoint presentation
outlining the following. Representatives from
Bentley and BridgeSight interjected to reinforce
the information.

Big Picture

- The third party developers are interested in a WIN-WIN-WIN-WIN scenario for Users, AASHTOWare, AASHTO Contractor, and Third Party Developers. The strategy is to ratchet up the bridge software environment to provide the tools the bridge industry needs.
- Longevity and quality of data is needed first and foremost. Long term viability and lower risks are needed. Expanded functionalty is needed to handle 100% of the national bridge inventory. Increased productivity and rapid delivery of enhancements is necessary.
- The bridge community's needs can be addressed through ingenuity and rapid prototyping. We need to optimize our existing assets and find ways to reuse our investments.

Broad Thinking

We need to think beyond numerical engines. We need to also focus on the GUI and reports, for example.

New Horizons

- New numerical functionality
 - Numerical engines (BRASS, LARS, PGSuper, ...)
 - New capabilities with existing engines (P/T concrete, splice girders)

- Unconstrained UI
 - New input methods
 - o New output review
 - New reports
- New results comparison routine (NCHRP 12-50)
- Downstream Operations (cradle to grave processes)
 - o Facilitation (CNC, ...)
 - o Construction (4-D modeling)
 - Material Estimating
 - o Plan generation and detailing
- No Registration
 - A lot can be done without writing to DB (viewers)
 - o Registration for writing on DB

Example Applications

- BRASS-Culvert would likely be implemented
- Post Tension (LEAP, BRASS, others)
- Accelerated Bridge Construction (ABC)
- Small structural applications
 - o Bearing pad
 - o Steel splices
 - Design routines (stiffeners, studs, stirrups, P/S, ...)
- New Reports
- New Data Viewers
- New Fabrication Processes

Suggested Next Steps

- Provide a tool bar/menu for third party developer
 - o Launch in context
 - Access to API to allow reading/writing data
 - Open a custom report
- Develop a simple prototype
- Independent developer review and suggestions
 - o What is possible
- Follow up meeting within six months

Administrative Suggestions



A small action that could help third parties immediately.

- "App Store" concept
- One PO to agency
- AASHTO pays third party
- Fee to AASHTO software
- Same support mechanisms as present for third party software

<u>1b.</u> Group Discussion / Action Items

The Task Force engaged in open discussion with the third party developers and agreed to take responsibility for the action items created.

User Group

2a. Discussion

Software Licensing

- Users approached the Task Force about the possibility of revisiting the licensing arrangement for contractors doing business with multiple states to keep the contractor from having to license separately for each state they do business with.
- Users are also concerned with the length of time it takes licenses to get renewed (annually).
- Users are requesting AASHTO and the Task Force to look for opportunities to refine the licensing process to make it easier and faster to secure the software and renewal keys.
- Michigan would like to find opportunities to track the process of licensing renewals. i.e., license requests, software agreements signed, software delivery (delays in getting AASHTO signatures). Is there an opportunity to get the catalog out earlier given the fact that software renewals can not begin until the catalog is published?
- DOTs should be encouraged to develop a list of contractors eligible for licensing under the special consultant licensing option (at the \$2700 rate) and send to AASHTO to expedite the software renewal process.

- Users have suggested refining the process to allow the supplemental agreement to be completed and submitted at the same time as the initial request is submitted. Is it possible to place the supplemental agreement document on the AASHTOWare website to be populated by the consultant? (AASHTO staff could add the tracking number at a later stage in the process.)
- Does AASHTO have a tracking system to track each step of the software renewal process?
- Idaho is interested in a licensing option for a 5-pack of software.
- The Task Force should consider holding a webinar with the end user designees to discuss potential opportunities for restructuring BrD/R licensing options. Judy has an action item from the Montgomery, AL Task Force Meeting (2012-VO-50) to prepare information on alternate licensing options and the potential financial impact of each. Judy is to present this information during the November Bridge Products Task Force meeting.
- The Task Force should prepare and present information during the 2013 VOBUG on licensing options and what changes were made, if any.
- Several users have asked for a list of consultants in their state. The possibility of making such a list available on the VOBUG web site was discussed. However, we currently do not have ready access to this level of information. Judy has an action item from the Montgomery, AL Task Force Meeting (2012-VO-56) to have enhancements made to the AASHTOWare Manager system to support software licensing at a more detailed level, to include information on which states each consultant is licensing software under.
- The Task Force also discussed the possibility of evaluating the possible effects of raising the licensing fee for special consultant option



contractors. With an increase in the licensing fee, it might be possible to allow them to work for multiple states under a single license.

General

- The members who attended the fundamentals training were pleased with the training provided.
- Caltrans asked if the Task Force would consider funding TAG members to attend the VOBUG in addition to the BrD/R End User Designee(s).
- The users are interested in having the work plans and amendments posted on the VOBUG web site. The Task Force agrees this information can be provided with cost information redacted.
- Judy, Dean and Jim have an action item to get the estimates organized on the SharePoint site.
- Jeff Olsen (Montana) will redo the VOBUG website. VOBUG presentations will be posted on the site. Judy will support Jeff with funding to support their hosting environment.
- Users have requested to receive access to the beta software prior to the VOBUG meeting.

2b. Brainstorming Session

Bryan Silvis presented an Excel spreadsheet summarizing the voting results from the end user designees. The results were discussed and trends examined. Bryan will break the data down further to provide one topic per spreadsheet. The Task Force should consider pursuing low hanging fruit.

The Contractor will provide the location of the mock-ups to simplify the tree in the bridge explorer. The Contractor will remove the cost information from the mock-ups. Bryan Silvis will forward the mock-ups to Greg Kinchen (NMDOT) and end user designees who commented on

bridge tree simplification. Dean Teal will also forward the mock ups to Keith Ramsey (TxDOT) for comment.

Comments on the proposed approach will be solicited. Fifteen of 35 had comments relating to simplification of the bridge explorer tree.

6.4 Release

3a. Beta 3 Update

Beta 3 was provided to the TAG members on July 24. The Beta release was delivered with a 30-day expiration. Currently 35 bugs need to be resolved, some from Beta 2 and a few from Beta 3.

Two items on culverts, one related to a bug in the WisDOT program and the second related to the live load surcharge equation which was added in the new spec. The two new load equations needs to be added to the code. The Contractor will determine the level of effort that will be required to incorporate the changes.

3b. Testing Discussion

Dean Teal will ask the TAG to complete their Beta 3 testing checklist and provide the Task Force with a summary of their incidents that have not yet been resolved by Friday, August 10.

3c. Release Schedule

The Contractor plans to send Beta 4 out on August 14.

3d. Rebranding Status

The current rebranding work plan splits the rebranding tasks into two phases.

3e. Drilled Shaft Status

The drilled shaft design spec is currently being rewritten.



3f. Service Pack

Development of 6.4.1 will be completed in mid-August. The Contractor will test in early September and the software will be forwarded to users for beta testing in mid-September.

Additional bug fixes will also be incorporated into 6.4.1 as well as the engine data BOLB, help topic for support options (incident 11154), implement lump sum loss, 11243 pre-stressed capacity, adjacent vehicle rating database and functionality, section property calculation if not entered by user.

6.5 Status

Significant work has not begun.

<u>Discussion – Action Items from June Meeting</u>

4a. General Preferences Security – VI 11606
The TAG is satisfied with the current check-in check-out security function; however, it may be beneficial to add a warning pop-up box to the bridge explorer to alert users to accept data changes prior to allowing the change to be applied to the data in the database (i.e., when multiple bridges are being viewed in the bridge explorer, changes will be applied to all bridges currently checked out).

4b. Engine Properties Length Limitation for BRASS (BLOB)

Implemented in 6.4.

<u>4c. LRFR Distribution Factors – Multi-Lane v. Single-Lane</u>

Action item to mock up a user control for the case when the single lane distribution factor controls and in some cases the single lane is greater than the multiple lane and vice versa. The decision was made to alternately use the maximum (of single v. multi lane). This solution will alleviate the need to clutter the user interface. This change will be incorporated into 6.4.1.

4d. Rebranding Work Plan See agenda item 3d.

<u>4e. Help Menu – Support Information</u> See agenda item 3f.

4f. Proper Application of LRFD 4.6.2.2.5 (Adj. Vehicle)

The Contractor could not find any published information at AASHTO. The guidance was based on a report by Modjeski & Masters; however, there is no definitive road map for the logic that must be incorporated to support long span trusses and lever rule.

4g. "Allow Plastic" Control Option for Cover Plates

The control option should be considered for LFR and LRFR on the request of Illinois and New York. This will be incorporated in 6.5. This will be billed directly to IL and NY.

4h. 11388 Section Property Calculation if not entered by user

Will be implemented in 6.4.1.

4i. SEI Status

The Quality Attribute Workshop has not yet been scheduled. As a component of the workshop, we will request advice from SEI on options for third party developer integration.

SEI has conveyed that our current architecture is very extensible; however, the extensibility comes at the cost of additional support requirements.

Review Action Item list from this meeting

Judy Skeen read the action items recorded during the meeting.

The meeting was adjourned at 5:20 P.M.

