

# Meeting Minutes - Swan River Bridge SC #1

◇ **Date:** 3/10/2016

**Time:** 1:00 PM

**Attending:**

**Facilitator:** James Freyholtz / Kathy Harris

**Minutes CC:** Attendees, Shane Stack, Wade Salyards

Name	Organization	Phone Number	E-Mail
James Freyholtz	MDT-Missoula District	406-751-2066	<a href="mailto:jfreyholtz@mt.gov">jfreyholtz@mt.gov</a>
Vicki Crnich	MDT Planning	406-444-7653	<a href="mailto:vcrnich@mt.gov">vcrnich@mt.gov</a>
Chris Hardan	MDT Bridge	406-444-9221	<a href="mailto:chardan@mt.gov">chardan@mt.gov</a>
Pam Holmquist	Flathead Co Commissioner		<a href="mailto:pholmquist@flathead.mt.gov">pholmquist@flathead.mt.gov</a>
Dave Prunty	Flathead Co Public Works	406-758-5790	<a href="mailto:dprunty@flathead.mt.gov">dprunty@flathead.mt.gov</a>
Jed Fisher	Flathead Co Parks & Rec		<a href="mailto:jedfisher@flathead.mt.gov">jedfisher@flathead.mt.gov</a>
Walter Kuhn	Citizen Representative	406-837-4550	<a href="mailto:wkuhn@k-mmi.com">wkuhn@k-mmi.com</a>
Paul Mutascio	CFBB	406-261-1049	<a href="mailto:pmutascio@centurytel.net">pmutascio@centurytel.net</a>
Susan Hansen (Phone)	Citizen Representative		<a href="mailto:btfrfly@montanasky.net">btfrfly@montanasky.net</a>
Kathy Harris	KLJ	406-441-5784	<a href="mailto:kathy.harris@kljeng.com">kathy.harris@kljeng.com</a>
Steve Grabill	KLJ	406-441-5783	<a href="mailto:steve.grabill@kljeng.com">steve.grabill@kljeng.com</a>
Russ Lay	KLJ	406-452-8600	<a href="mailto:russ.lay@kljeng.com">russ.lay@kljeng.com</a>

Note: *items in italics* reflect changes after the 3/10 meeting and prior to distribution of the minutes

## Agenda Topics

A Steering Committee (SC) meeting was held on March 10, 2016 at 1:00 in the Kalispell Montana Department of Transportation (MDT) office to initiate project discussions with the Steering Committee, and to receive initial feedback on the purpose and need for the Swan River Bridge. The meeting's slide presentation is included in Attachment A.

1. Welcome and Introductions
  - a. Kathy Harris opened the meeting and attendees made self-introductions, including their perceived reason for participation.
  - b. Dave Prunty noted that Flathead County applied for off-system bridge funding for the Swan River Bridge. The MDT Bridge Bureau scored this bridge as its #1 priority in the state, for off-system bridge funding.
  - c. Chris Hardan said MDT supported a feasibility study, to ensure that the end product meets the needs and expectations of everyone involved to the greatest extent possible.
2. Meeting Purposes
  - a. Kathy explained the purpose for the meeting to inform the SC of the current condition of the bridge; to clarify the feasibility study process; and to receive initial input from the SC on a number of items.

NATIONAL PERSPECTIVE  
REGIONAL EXPERTISE  
TRUSTED ADVISOR

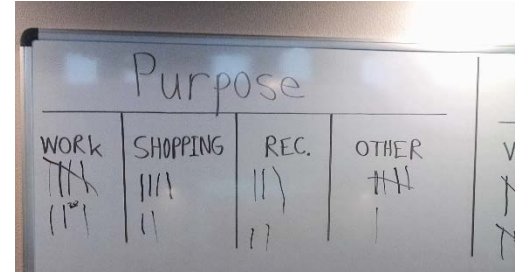


- b. Discussion on applicable design standards:
  - MDT and Flathead County (County) noted that not all roadway standards may be required to be met.
  - Bridge does not currently meet standards in the areas of clearance, loads, traffic and pedestrian facilities, among others.
  - If federal transportation funds are used for bridge changes, ADA standards will need to be met on the bridge itself. This is non-negotiable.
  - Dave offered that Flathead County would be open to improving approaches and may commit road department money for that purpose.
  - Chris clarified that off-system bridge funds would only address bridge improvements and that other funds (County) would be needed for the approaches. For pedestrian walkway to be funded by MDT, it will need to be part of the bridge (not a separate structure).
  - The County re-decked the bridge and walkway in the fall of 2015.
3. Project Schedule. KLJ's project schedule identifies up to seven meetings with the SC, up to four public informational meetings, and has an anticipated study completion date at the end of December 2016.
4. Role of Study Team
  - a. Flathead County is the owner of the Swan River Bridge and the County Commission will receive the final study and make decisions on how to proceed following study recommendations.
  - b. MDT, at the request of Flathead County, is serving as study manager and providing input and guidance for the study.
  - c. KLJ is the consultant responsible for research, analysis and preparation of study materials and documentation. KLJ will also lead the public outreach efforts.
5. Role of Steering Committee (SC)
  - a. Steve Grabill reviewed the role of the SC, which is to provide valuable input and guidance into the overall study process. Steve recommended that the SC should make their participation known to other community members, and that all SC members help get a feel and gather information regarding public sentiment.
  - b. For public outreach, the press will generally be involved and used for advertisement of the public meetings.
  - c. SC questions should be directed to Wade Salyards (MDT Project Manager) and/or Kathy (KLJ Project Manager).

6. SC Discussion on Bridge Use and Feasibility

a. Steve led a white board discussion of the individual SC members use of the Swan River Bridge over the past year. Purposes were listed as either work related, shopping related, recreational or other. Over the past year,

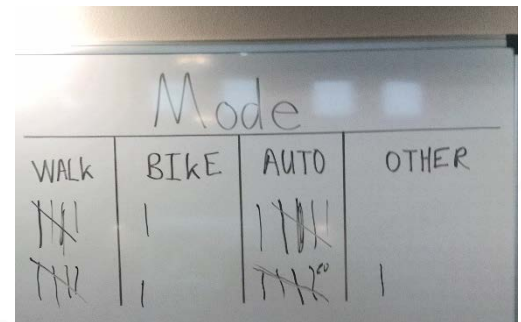
- 8 used the bridge for work-related trips,
- 6 for shopping-related trips,
- 5 for recreational trips,
- 6 for other trip purposes.



Purpose			
WORK	SHOPPING	REC.	OTHER

b. Steve asked SC members to mark their travel modes across the Swan River Bridge over the past year. Modes were listed as walk, bike, auto and other. Over the past year,

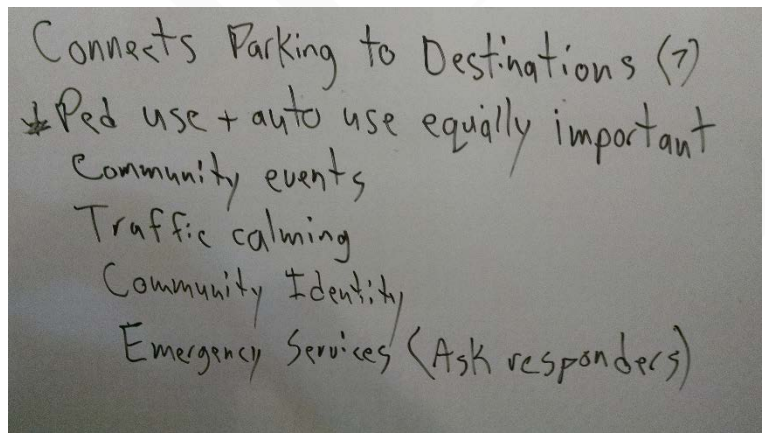
- 8 walked,
- 2 biked,
- 11 drove (auto),
- 1 other (motorcycle).



Mode			
WALK	BIKE	AUTO	OTHER

c. The SC next discussed the overall purpose and need for the Swan River Bridge with the following consistent points for Purpose:

- Connects parking to destinations
- Pedestrian and auto use are equally important
- Community events
- Traffic calming
- Community identity
- Emergency services
- Economic benefits
- Beautiful amenity



Connects Parking to Destinations (?)  
 \* Ped use + auto use equally important  
 Community events  
 Traffic calming  
 Community Identity  
 Emergency Services (Ask responders)



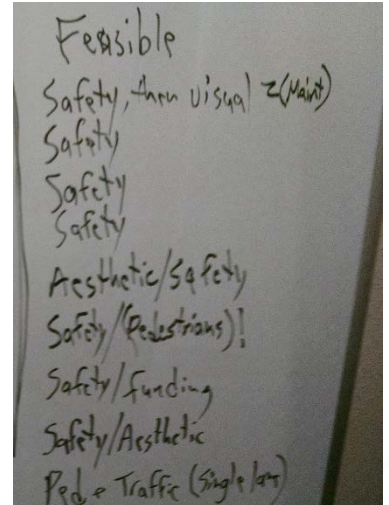
d. SC comments on bridge use included:

- Dave said that maintaining the pedestrian path is more important than adding a 2<sup>nd</sup> lane of vehicular traffic. (Connects parking to destination.)
- The single lane configuration (i.e. one way traffic) provides a “traffic calming” effect.
- The bridge provides a limited amount of emergency vehicle access. Pam requested KLJ get input from emergency services providers.
- The bridge provides a substantial amount of community identity.
- The bridge provides an intangible economic benefit.
- Dave commented that the upper portions of the truss are easy to maintain compared to the stringers, floor beams, bottom chords, and bearings (sub-structure).
- The SC discussed some limitations of the bridge. If load limits were increased, there is concern (more trucks) and benefit (more convenient for local businesses) to freight vehicles using bridge. Dave said that the County would prefer having a load limit for the local freight businesses to use the bridge legally. Chris agreed that MDT wants to increase the load limits if possible.
- The SC discussed that large motorhomes/recreational vehicles are a concern (too big to maneuver bridge or downtown Bigfork) and a benefit (more convenient for tourist to get into/out of Bigfork).
- Jed Fischer inquired if the NRHP listing helps find funding for the project. KLJ will research.
- Sue mentioned that people park and walk to the bridge and it often gets used to provide access to village.

Special events/usage:

- VFW does a Memorial Day march across the bridge.
- Jed said the bridge gets considerable use from Slider Park.
- Paul estimated that there are 7000 to 8000 people at July 4<sup>th</sup> parade, and that the festival of arts brings 3000 to 4000 people over a two day period.
- Bigfork selectively offers shuttle services across the bridge during major events.
- Dave mentioned that the county doesn’t mind allowing road closures across the bridge for events, as long as the organizers fill out the appropriate paperwork and give adequate notice. A wedding was declined to get the bridge closure permit, in part due to the low bridge load rating.

- e. SC members stated their top need for a bridge project to be feasible:
- Dave (1) safety for traveling public (2) economics (3) maintenance
  - Chris (1) safety (2) durability (3) aesthetics
  - Vicky (1) safety
  - James (1) safety
  - Paul (1) aesthetic (2) safety
  - Jed (1) safety (2) peds/kids (3) recreation access
  - Pam (1) safety (2) funding (3) meeting unique Bigfork needs
  - Walter (1) aesthetically pleasing (2) safety
  - Sue (1) pedestrian and traffic needs are met (maintain one-lane bridge).



7. Bridge Design and Load Rating. The load rating is currently set at 3 tons and is expected to decrease with future bridge deterioration. Russ Lay, who completed the most-recent load rating of the Swan River bridge provided the following:
- “Per the AASHTO MBE 6A.8.3 “A Bridge Owner may close a structure at any posting threshold but bridges not capable of carrying a minimum gross live load weight of three tons must be closed.”
8. Historic Bridge Samples. Russ presented samples of historic bridge work, from simple rehabilitation to full bridge replacement.
9. Existing Bridge Status: Russ explained existing bridge deficiencies including vehicular damage to the bridge and the effects of corrosion on the steel bridge components.
10. Feasibility Study Overview
- a. Kathy summarized the study project steps and reports.
  - b. The SC discussed public notification and information on the study.
    - After discussion, all meeting notices need to occur via postal although email and a project webpage will be supplement notification.
    - The mailing list area has several possibilities. To be efficient and limit size to the (likely) affected area, the Big Fork Water and Sewer District was identified



by the SC. *Subsequent discussion with MDT and the County refined this to the RSID area for the Bigfork Stormwater Project.*

- Hard copy (written) notice will be mailed to a smaller area/group but the electronic notifications will be sent to a much larger group.
- c. The SC discussed public meeting locations and stressed that the location needs to be or near Bigfork. *Subsequently, the Lutheran Church will be used for the first meeting.*
- d. Electronic communication is acceptable for all SC communications.

11. Schedule Next/Future Meetings.

- a. Dates were set for upcoming SC meetings and the first public meeting:
  - Wednesday April 6<sup>th</sup> for the SC #2 meeting 1:00 - 4:00 PM.
  - Tuesday April 12<sup>th</sup> for the first public meeting. *(Subsequently confirmed)*
  - Monday May 16<sup>th</sup> SC #3 meeting 1:00 - 4:00 PM.
  - Wednesday June 22<sup>nd</sup> #4 SC meeting 1:00 - 4:00 PM. *(Subsequently this meeting will need to be rescheduled).*
- b. Meeting dates, times and locations will be confirmed via email.

12. Kathy asked SC members to summarize what they learned and what new concerns are, if any.

- a. Dave. funding.
- b. Paul. keep truss, keep solution simple
- c. Pam. Clarify parameters for single lane bridge (width) and ADA (pedestrian access
- d. Walter keep truss, consider an "architectural treatment"

- END -

Attachment A: Slide Presentation

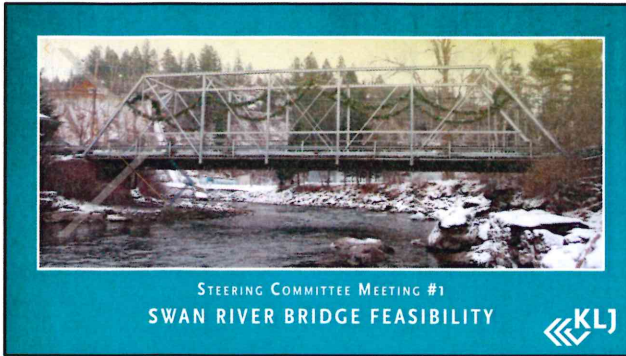
### Next Meeting Information

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**Date:** 4/6/2016  
**Time:** 1:00 - 4:00 PM

**Facilitator:** Wade Salyards/Kathy Harris





### Feasibility Study

**FEASIBLE** (dictionary.com)

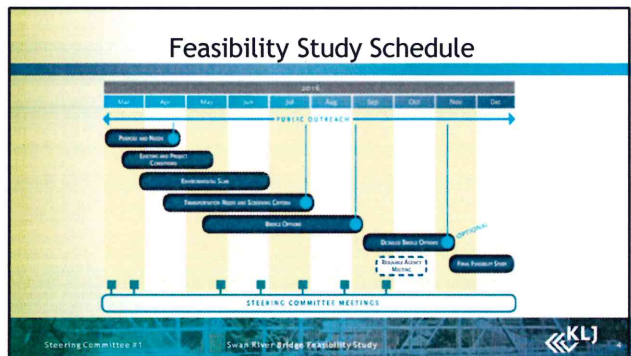
- Capable of begin done, effected, or accomplished
- Probable; likely
- Suitable

Steering Committee #1 Swan River Bridge Feasibility Study KLJ

### Design Standards

- Ensure safety of traveling public
- Consistent/continuity
- Standards not met:
  - Clearance
  - Loads
  - Traffic
  - Pedestrian

Steering Committee #1 Swan River Bridge Feasibility Study KLJ



### Feasibility Study Team

- Flathead County: Bridge Owner
- MDT: Wade Salyards, Project Manager
- KLJ: Consultant for Feasibility Study
  - Project Manger: Kathy Harris
  - Public Outreach: Steve Grabill
  - Bridge Engineer: Russ Lay

Steering Committee #1 Swan River Bridge Feasibility Study KLJ



### Viking & Martinson Bridges: Existing Bridge Repaired

**VIKING BRIDGE**

**Before**



**After**



- Replaced Bottom chord members
- Replaced Truss pins
- New concrete abutments
- Replaced Wood deck & rails

**MARTINSON BRIDGE**

**Before**




**After**




Steering Committee #1 | Swan River Bridges Feasibility Study | KLJ

### Elks Footbridge: Existing Bridge Repaired

**Before**



**After**



- Replaced Abutments and Steel Pier
- Repainted Bridge

Steering Committee #1 | Swan River Bridges Feasibility Study | KLJ

### Phelps Mill: Existing Bridge Repaired

**Before**



**After**



- Replaced Steel caissons
- Replace Truss pins and stringers
- Re-painted Bridge
- Added tension cables instead of railing to maintain bridge appearance

Steering Committee #1 | Swan River Bridges Feasibility Study | KLJ

### Rainbow Bridge: Bridge Replaced

**Before**



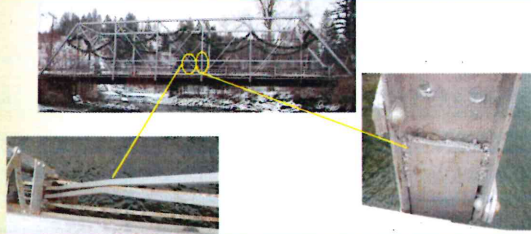
**After**



- Original Bridge was functionally obsolete
- Widened Bridge 16 feet
- Higher road and water clearance

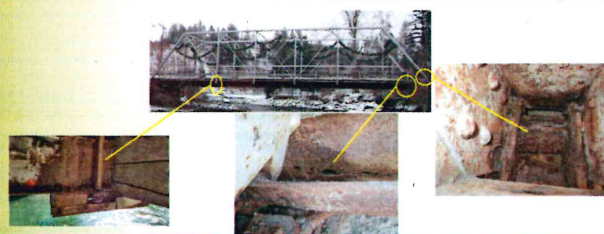
Steering Committee #1 | Swan River Bridges Feasibility Study | KLJ

### Existing Bridge Deficiencies: Vehicular Damage



Steering Committee #1 | Swan River Bridges Feasibility Study | KLJ

### Existing Bridge Deficiencies: Corrosion Damage



Steering Committee #1 | Swan River Bridges Feasibility Study | KLJ



### Feasibility Study Overview

- Public Outreach
- Reports Summarize Findings:
  - Existing and Project Conditions
  - Environmental Overview
  - Transportation and Bridge Need Technical Memo
  - Bridge Concepts Memo
  - Detailed Bridge Concepts Memo
  - Final Report
- Recommendation for County Commission Consideration

Steering Committee #1

Swan River Bridge Feasibility Study



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### Next Meetings?

March	April	May	June	July
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
August	September	October	November	December
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Steering Committee #1

Swan River Bridge Feasibility Study



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### Swan River Bridge: Summary 1st Steering Committee



Summary  
Next Steps



Steering Committee #1

Swan River Bridge Feasibility Study



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# Meeting Minutes - Swan River Bridge SC #2

◇ **Date:** 4/6/2016  
**Time:** 1:00 PM  
**Facilitator:** Wade Salyards / Kathy Harris  
**Minutes CC:** Attendees, Chris Hardan, Walter Kuhn, Steve Grabill, Russ Lay, Shane Stack, Wade Salyards

## Attending:

Name	Organization	Phone Number	E-Mail
James Freyholtz	MDT-Missoula District	406-751-2066	<a href="mailto:jfreholtz@mt.gov">jfreholtz@mt.gov</a>
Bob Vosen	MDT-Kalispell	406-751-2020	<a href="mailto:rvosen@mt.gov">rvosen@mt.gov</a>
Shane Stack	MDT-Missoula District	406-523-5830	<a href="mailto:sstack@mt.gov">sstack@mt.gov</a>
Vicki Crnich	MDT Planning	406-444-7653	<a href="mailto:vcrnich@mt.gov">vcrnich@mt.gov</a>
Wade Salyards	MDT-Project Manager	406-444-0451	<a href="mailto:wsalyards@mt.gov">wsalyards@mt.gov</a>
Pam Holmquist	Flathead Co Commissioner	406-758-5508	<a href="mailto:pholmquist@flathead.mt.gov">pholmquist@flathead.mt.gov</a>
Dave Prunty	Flathead Co Public Works	406-758-5790	<a href="mailto:dprunty@flathead.mt.gov">dprunty@flathead.mt.gov</a>
Jed Fisher	Flathead Co Parks & Rec	406-758-5805	<a href="mailto:jedfisher@flathead.mt.gov">jedfisher@flathead.mt.gov</a>
Walter Kuehn	Citizen Representative	406-837-4550	<a href="mailto:wkuehn@k-mmi.com">wkuehn@k-mmi.com</a>
Paul Mutascio	CFBB	406-261-1049	<a href="mailto:pmutascio@centurytel.net">pmutascio@centurytel.net</a>
Susan Hanson (Phone)	Citizen Representative	406-250-4685	<a href="mailto:btfrfly@montanasky.net">btfrfly@montanasky.net</a>
Kathy Harris	KLJ	406-441-5784	<a href="mailto:kathy.harris@kljeng.com">kathy.harris@kljeng.com</a>
Steve Grabill	KLJ	406-441-5783	<a href="mailto:steve.grabill@kljeng.com">steve.grabill@kljeng.com</a>
Russ Lay	KLJ	406-452-8600	<a href="mailto:russ.lay@kljeng.com">russ.lay@kljeng.com</a>

Note: *items in italics* reflect changes after the 4/6 meeting and prior to distribution of the minutes

## Agenda Topics

The second Steering Committee (SC) meeting was held on April 6, 2016 at 1:00 in the Kalispell Montana Department of Transportation (MDT) office.

1. Old Business:
  - a. Public Outreach and Notification. Kathy Harris reported that, with the County's assistance in supplying the mailing list, an initial letter was mailed to approximately 400 addresses within the Bigfork storm sewer RSID. Less than ten letters have been returned. MDT has also developed a website, with a public comment link.
  - b. Meeting minutes from SC #1 need to correct the spelling for Sliter Park and Bigfork in select locations.

NATIONAL PERSPECTIVE  
 REGIONAL EXPERTISE  
 TRUSTED ADVISOR



2. Text in three Attachments were reviewed/edited in detail. These changes will be used in the upcoming public meeting and in the future “needs” statement. See attachment for revisions to the 3 documents.
  - a. Attachment A: Confirm items a,b,c. omit item d.
  - b. Attachment B: Revised summary of what was heard at first steering committee meeting.
  - c. Attachment C: The 3 areas of need were confirmed and the objective (under each need) were discussed.
3. Steering Committee Comments:
  - a. Sue reemphasized the public meeting needs to reinforce the single lane bridge option
  - b. Paul emphasized the need to explain the bridge is structurally deficient and getting worse.
  - c. Pam noted that funding is currently available-but may not be in future.
4. Schedule Next/Future Meetings.
  - a. SC meetings:
    - Monday May 16<sup>th</sup> SC #3 meeting 1:00 - 4:00 PM.
    - Tuesday July 12<sup>th</sup> #4 SC meeting 1:00 - 4:00 PM
  - b. 1st public meeting
    - Tuesday April 12<sup>th</sup> for the first public meeting.
    - *Kathy should contact Heather Burnham at Chamber of Commerce for Bigfork schedule (for scheduling future public meetings)*

- END -

## Next Meeting Information

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**Date:** 5/16/2016  
**Time:** 1:00 - 4:00 PM

**Facilitator:** Wade Salyards/Kathy Harris

## Attachment A

Issues Driving this Study (why we are here. Defines and Identified Issues driving this Study):

- a) This bridge is categorized as structurally deficient. AASHTO states that ....” bridges not capable of carrying a minimum gross live load weight of three tons must be closed”. Current load limit is three tons.
- b) Bridge load carrying ability will continue to decrease ~~with~~ no change (repair, rehabilitation or replacement). The bridge will fail or will need to be closed by the owner, the County.
- c) MDT has (limited) federal funding available to repair, ~~rehabilitate~~ replace bridges that are not on MDT’s system of roads. This bridge was identified as the highest (off-system) bridge need in the state.
- ~~d) The County Road and Bridge Department is responsible for 836 maintained miles of roads and 75 bridges (plus 25 additional bridges). Funding for major bridge repair/rehab would severely impact the other roads and bridges that Flathead County maintains.~~



## Attachment B

What we heard at Steering Committee #1 & subsequent conversations:

underline indicates the project need origin.

- AESTHETICS
  - Steel truss appearance is critical.
    - Is-The actual steel truss function is not critical, but its appearance is?
    - The color of the paint may be important to some.
    - What isThe limit of rehabilitation to keep the historic nature/appearance will be studied further?
- # LANES:
  - 1 lane width is the project need. 2 lanes (1 for each direction) is typical bridge standard but 1-lane is acceptable
- WEIGHT LIMIT:
  - 3-ton is minimal allowable rating to keep the bridge open
  - Increased loading is not a need will be required for rehabilitation or replacement.  
Increased loading is a concern to community if it results in, but a convenience and could lead to higher speeds/larger vehicles which may be undesirable to some.
  - There is significant risk to the bridge if drivers do not adhere to loading limits, so it is safer (to traveling public) if this bridge meets modern standards.
  - Bridges are now designed for 75 years of operation. Any bridge treatment (repair/rehab/replace) will likely serve the community for the next century. Will this bridge meet future needs for the area?
- PEDESTRIAN:
  - Pedestrian walkway (or other) is needed and is equal to demand for vehicles.
    - Any federal funding will require the walkway meets ADA requirements.
    - Walkway should be separated from vehicles, although the barrier may not be designed to full deflection standards. could be shared with car lanes, but not generally encouraged.....
- SAFETY:
  - Single lane operations is not a major safety concern (based upon records and verbal comments)
  - Load rating is expected to decrease below allowable limits.... as corrosion continues (and walkway loading issues)
- MAINTENANCE
  - The current bridge places this bridge later in county priorities for immediate snow plowing. The local community accepts this prioritization. (after event) is not a critical need (current condition dictates this bridge is late on the list for plowing)
  - Maintenance is a demand upon County resources/staff due to wooden deck, narrow width and above waterway.
    - Cleaning (under structure) is demand and results in corrosion.... future failure issue.

- Future maintenance (replacing steel parts and cleaning) will mean more effort than County typically provides.
- MODE: on the bridge
  - Vehicles-light vehicle typically [insert vehicle type and approximate weight]
  - Pedestrians
  - Bicyclists or freight/delivery operations are not a need, but rather a convenience
  - School usage is not a need
  - Under the bridge: no minimum set but unofficial preference to not lower the bottom of the bridge-to allow for non-motorized water craft (kayaks, paddle boards, etc.).
- TRIP PURPOSE:
  - Shopping
  - Not a commuter (get to work or home) route
  - Supports community/business by linking to parking
  - Emergency Response is not a need, but rather a convenience as responders do not use this route for responding (3/28/16 conversation)

OTHER:

- The wooden deck may not acceptable in a future bridge, due to permitting and clean water requirements. This will be considered in future reports.

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## Attachment C

### Swan River Bridge Needs Statement

The need for Bigfork Swan River Bridge are based upon:

- Existing and projected conditions (under development by KLJ)
- Comment and input from the Steering Committee (input on 3/10/16 with review on 4/6/16)
- Comments from the public (at 4/12/16 meeting and through early input on the project) and.

The needs are meant to reflect Flathead County, MDT and community desires to provide safe vehicle passage and maintain the historic appearance of the 1912 truss bridge. Needs are described below, with objectives listed under each need. Needs are currently based upon input from the Steering Committee and will be modified after public input on April 12.

The bridge currently does not meet current design standards, but the owner (Flathead County) and the Steering Committee concur that, due to the unique nature of this bridge and the community of Bigfork- all design standards do not need to be met.

#### Need 1: Safe Crossing of Swan River.

- a) Provide structurally adequate bridge for typical traffic.

  - a. Desired highway loading HS-20
  - a-b. Feasibility of various options may consider lesser loading (if there is cost and reasonable justification).
  - b. Is there a desire to increase load carrying capacity? (if other items are met)

- b) Future maintenance needs to provide necessary maintenance to maintain load ratings. ~~perpetuate the load capacity (currently 3 T limit)~~.
- c) Pedestrians need to be accommodated. Full accessibility (Americans with Disability Act or ADA requirements) will be needed for any federal funding. The pedestrian walkway should be widened to a comfortable width and should provide channelization or separation from vehicle area on the bridge.

#### Need 2: Maintain historic, truss appearance as it is a vital component of Bigfork identity/character.

- a) Maintain appearance of truss bridge.
- b) The appearance of the ~~W~~walkway ~~?? This~~ does not match the original bridge and is not considered critical to the ~~-is this~~ appearance. ~~-critical?~~

#### Need 3: Provide a minimum of one lane for ~~(light)~~ vehicles AND provide ~~equivalent-adequate~~ pedestrian area.

- a) Provide minimum of one-lane vehicle width.
- b) Provide walkway that is separated from vehicles?

Other Considerations:

- What is historic balance for rehabilitation versus replacement? This should be researched in future Is it visual only? SC comments reflect that the pins and support structure are not critical to the appearance, but the above-road truss structure is critical.
- Would increased loads or widths increase traffic into downtown Bigfork, with potential for more congestion and parking issues?
- County maintenance is normal for superstructure, but substructure is difficult and is the key component to avoid corrosion.
- Address utilities that are currently under the bridge (8" Northwestern Energy gas main) .
- The guardrail protecting the approach to the bridge is currently very tight any may not meet design standards. Future options should address the approach guardrail.



# Meeting Minutes - Swan River Bridge SC #3

◇ **Date:** 5/16/2016  
**Time:** 1:00 PM

**Facilitator:** Wade Salyards / Kathy Harris  
**Minutes CC:** Attendees, Russ Lay

## Attending:

Name	Organization	Phone Number	E-Mail
Ed Toavs	MDT-Missoula District	406-523-5800	<a href="mailto:etoavs@mt.gov">etoavs@mt.gov</a>
Shane Stack	MDT-Missoula District	406-523-5830	<a href="mailto:sstack@mt.gov">sstack@mt.gov</a>
Vicki Crnich (Phone)	MDT Planning	406-444-7653	<a href="mailto:vcrnich@mt.gov">vcrnich@mt.gov</a>
Chris Hardan (Phone)	MDT Bridge	406-444-9221	<a href="mailto:chardan@mt.gov">chardan@mt.gov</a>
Jon Axline (Phone)	MDT Helena Environmental	406-444-6258	<a href="mailto:jaxline@mt.gov">jaxline@mt.gov</a>
Pam Holmquist	Flathead Co Commissioner	406-758-5508	<a href="mailto:pholmquist@flathead.mt.gov">pholmquist@flathead.mt.gov</a>
Dave Prunty	Flathead Co Public Works	406-758-5790	<a href="mailto:dprunty@flathead.mt.gov">dprunty@flathead.mt.gov</a>
Jed Fisher	Flathead Co Parks & Rec	406-758-5805	<a href="mailto:jedfisher@flathead.mt.gov">jedfisher@flathead.mt.gov</a>
Walter Kuhn	Citizen Representative	406-837-4550	<a href="mailto:wkuhn@k-mmi.com">wkuhn@k-mmi.com</a>
Paul Mutascio	CFBB	406-261-1049	<a href="mailto:pmutascio@centurytel.net">pmutascio@centurytel.net</a>
Susan Hansen	Citizen Representative	406-250-4685	<a href="mailto:btfrfly@montanasky.net">btfrfly@montanasky.net</a>
Kathy Harris	KLJ	406-441-5784	<a href="mailto:kathy.harris@kljeng.com">kathy.harris@kljeng.com</a>
Steve Grabill	KLJ	406-441-5783	<a href="mailto:steve.grabill@kljeng.com">steve.grabill@kljeng.com</a>

Note: Action Items are shown below in italics.

## Agenda Topics

The third Steering Committee (SC) meeting was held on May 16, 2016 at 1:00 in the Kalispell Montana Department of Transportation (MDT) office to continue project SC discussions relative to the purpose and need for the Swan River Bridge, and to discuss preliminary criteria (objectives) to be used for bridge concept selection.

- 1) **Discussion on Historic Listing of Swan River Bridge.** Jon Axline, MDT's historian, attended the first portion of the meeting to talk about the historic (NHRP) listing of the bridge. The following summarizes the key discussion points:
  - a) The bridge is a 4f property and would need to go through the Section 106 process.
  - b) The bridge was listed on the Historic Register under:
    - i) Criterion A for historic value to the Bigfork community and its development
    - ii) Criterion C for structural integrity as all original structure features are still intact.
  - c) Jon was unsure when the sidewalk or guardrails were added. He said most historic bridges have guardrail replaced, so retaining the original guardrail was not a significant issue. Jon noted the current guardrail could be considered an historic element as it is at least 50 years old, but is not part of the original structure.



- d) The trusses are the most important feature for the listing.
  - i) Widening of the truss more than a nominal amount (few feet) would be considered an adverse effect on the listing. An adverse effect would need to be mitigated which would require discussions with the County to determine appropriation mitigation.
- e) Jon offered replacement of the following features would likely not affect the historic listing:
  - i) Foundation
  - ii) Stringers/floor system
  - iii) Wooden decking. Wood is preferred but not required and may be replaced by pavement.
  - iv) Steel pin connections. This is a pin-connected truss while current steel trusses are riveted.
    - (1) Dave Prunty noted the County prefers not to be responsible for maintenance of the pins and prefers to omit pins when possible. It was noted that replacement pins could require less maintenance if replaced with a high strength metal.
  - v) Guardrail. Jon offered it would be nice if the guardrail were replaced with a system that appears (visually) more like the original rails.
  - vi) Repair or replacement of damaged members of the bridge (due to vehicle strike)
  - vii) Pedestrian Walkway. Jon said the choice of solutions for the walkway would not impact the historic listing of the current bridge. Paul Mutascio noted it was important to maintain the separation of the walkway from the bridge.
- f) Input on retaining historic listing:
  - i) Replacement of the bridge with a new truss would lose the historic designation.
  - ii) Bridge rehabilitation may not necessarily lose its historic registration. (See section e above).
  - iii) There is no specific percentage threshold of change that dictates loss of listing.
  - iv) Placing the (overhead) truss onto a new concrete structure would likely lose the historic designation, in part as the truss' structural role would be lost.

*Jon was asked to follow up with SHPO on this approach and confirm if the listing would be lost.*
  - v) Sue Hansen restated her thought that the historic listing is important to the community, in part to ensure the County is limited in replacement options for the bridge.
  - vi) Walter Kuehn noted the historic appearance was more important to him than the listing.
  - vii) Pam Holmquist noted the County's concern that the bridge needs to function safely and seeks to avoid a closure of the bridge (due to safety). The County supports the single-lane width but offered slight widening could be acceptable.
  - viii) Paul restated that widening the bridge was getting away from the community desires and the traffic calming effect. He thought the historic designation was important to the extent that it defines what can be built now. Paul supported removing the truss, fixing everything below and reinstalling the truss.
  - ix) Dave noted his concern about replacing the pins and a preference for a concrete deck and pedestrian facility, and to reuse the truss members for visual only. Walter concurred with this approach.
- g) Other discussion:
  - i) The Boulder River Bridge recently lost its historic eligibility when the bridge truss was replaced with a widened bridge. The existing truss was reused to provide an aesthetic overhead truss which was also widened to a double lane (note this distorts the original scale). The mitigation provided documentation through the Historic Engineering Bridge Records.



- ii) Jon said that MDT is considering installing a new truss bridge (in two other locations), similar to the original truss appearance, and using riveted instead of pin connections.
- iii) Jon talked about the historic Dearborn High Bridge. The truss bridge was taken off the foundation and new, high quality steel pins that looked like the old ones were installed. The bridge now functions better and is still listed on the Register. Another good example is the Natural Pier Bridge at Alberton.
- iv) Use of metal from the Kearney Rapids Bridge was discussed. Jon indicated that use of that metal might be a good way to mitigate changes. Kathy stated that substitute metal may have the same corrosion problems as the current bridge or other 100-year old weaknesses.

## 2) Old Business

- a) Review SC Meeting #2 Minutes. There were no comments on the meeting minutes.
- b) Public Meeting Summary.
  - i) A draft summary from the April 12 public meeting was provided for general information. This will be finalized and included in future project reports.
  - ii) The SC felt the public meeting was good and was adequately advertised.
  - iii) KLJ was conducting traffic counts over the past weekend.
  - iv) KLJ is working on the Environmental Scan and has not identified any significant issues yet.

## 3) New Business - Review & Revise Project Needs and Objectives

- a) The previous SC meeting confirmed the Swan River Bridge Needs. Since the last SC meeting, KLJ refined Need 3 (Constructible and Maintainable) based on KLJ's understanding of process needs.
- b) The Needs Statement (now summarized in Table 1 below) highlighted three categories: Provide Safe Crossing of Swan River, Maintain Historic Truss Appearance, and Constructible and Maintainable. The SC discussion, direction and feedback are detailed in Attachment 1.
- c) Within each of these Needs, KLJ suggested objectives (which will become the comparison criteria between bridge options) for SC comment, concurrence, change or removal. A column designating whether each objective was required or desired was also provided. The table also listed the source of each objective, whether they came from MDT, County, SC or Public.



Table 1. Swan River Bridge Needs and Project Objectives - Updated

Need	Required / Desired	Objectives	Source			
			MDT	County	SC	Public
<b>1. Provide Safe Crossing of Swan River</b>						
	R	Provide structurally adequate bridge	X	X	X	X
	R	Provide one-vehicular lane (minimum)	X	X	X	X
	R	Provide pedestrian area (ADA walkway and railing)	X	X	X	X
	R	Increase Load Rating	X	X	X	X
	D	Maintain slow vehicular speeds			X	X
	D	Provide 75 Year Bridge Life	X	X		
	D	Maintain vertical clearance above river			X	
	D	Improve other design standards	X	X	X	X
	D	Improve Guardrail (approach)	X	X		
<b>2. Maintain Historic Truss Appearance</b>						
	R	Maintain historic appearance of overhead truss			X	X
	D	Maintain historic integrity /NHRP listing of bridge			X	
	D	Enhance historic bridge appearance w/ walkway			X	
	D	Keep silver paint color				X
	D	Replicate (existing) overhead truss dimensions				X
<b>3. Constructible and Maintainable</b>						
	R	Funding for rehab or replacement	X	X	X	
	R	Permit-able (construction)	X			
	R	Permit-able-stormwater from bridge	X			
	R	Maintainable by County Road/Bridge Dept.	X	X		
	D	Remove wooden deck	X	X		X
	D	Reduce special maint. needs (snow, paint, etc.)		X		
	D	Reduce bridge degradation into river		X	X	
	D	Avoid right of way acquisition	X	X	X	
	D	Minimize utility costs	X	X	X	

4) Schedule Next/Future Meetings

- a) The next SC meeting will review six preliminary bridge concepts and rate them for each of the project needs and objectives.
- b) Another SC meeting to review bridge alternatives was set for Wednesday, July 27 at 1:00, if needed.
- c) A public meeting is set for the August 16.





## Attachment 1 (dialogue for confirming objectives)

**Need #1: Provide Safe Crossing of Swan River:** Dave recounted a conversation at the public meeting where a citizen thought the bridge should only accommodate pickups, but he responded that the bridge wouldn't be able to handle a fire truck. In his conversation, the resident agreed it was important to increase the load rating. Chris joined the meeting at 3:10. Chris said that with new construction, the bridge would consider seismic activity in design. The decision was made not to include seismic as an objective.

There was a discussion on whether lighting should be included as a project objective. The county did not want to maintain lighting on the bridge. The lighting on the bridge approaches may be upgraded in cooperation with the utility company who maintains the current street lighting and will not be added as a comparative criteria.

Required / Objectives Desired?	Source				Evaluation Criteria
	MDT	County	SC	Public	
<b>Provide Safe Crossing of Swan River</b>					
R	Provide structurally adequate bridge	X	X	X	X
R	Provide one-vehicular lane (minimum)	X	X	X	X
R	Provide pedestrian area (ADA walkway)	X	X	X	X
R	Increase Load Rating	X	X	X	X
D	Maintain slow vehicular speeds			X	X
D	Provide 75 Year Bridge Life	X	X		
D	Maintain vertical clearance above river			X	
D	Improve other design standards	X	X	X	X
<del>D</del>	<del>Provide ped. railing to current standards</del>				X
D	Improve Guardrail (approach)	X	X		
<del>D</del>	<del>LIGHTING</del>				

*Handwritten notes:*  
 - "RAILING" with an arrow pointing to the "Provide ped. railing" row.  
 - "full pool - meet min recreational clearance" with an arrow pointing to the "Maintain vertical clearance" row.  
 - "LIGHTING" written below the "Improve Guardrail" row.



**Need #2: Maintain Historic Truss Appearance:** SC members said the first objective should be “Maintain historic appearance of overhead truss”. Keep “Maintain historic integrity/NHRP Listing of bridge” as a desired project objective. “Keep silver paint color” as a desired project objective. Use “Replicate existing overhead truss dimensions” as a desired project objective.

There was significant discussion on whether the structure would look better with the pedestrian walkway inside the truss, or keeping it outside the truss. No clear outcome of those discussions came as a result.

The “Walkway enhances historic bridge appearance” was added as a desired project objective.

Need	Required / Objectives Desired?	Source				Evaluation Criteria
		MDT	County	SC	Public	
<b>Maintain Historic Truss Appearance</b>						
R	Maintain <sup>historical</sup> appearance of overhead truss			X	X	
D	Maintain historic integrity of bridge					
D	Maintain <u>NHRP Listing</u>					
D	<del>Historical</del> Keep silver paint color			X		
D	Replicate (existing) <sup>oh truss</sup> dimensions			X		
D	WALKWAY ENHANCES HIST BRIDGE APPEARANCE					





**Need #3: Constructible and Maintainable:** Sue asked whether it was known what is fundable. Wade and Ed said there is no way to answer that yet, at least until the bridge options have been developed. Pam discussed that funding may need to be negotiated between MDT and the County. Shane said if the community and the County agree on what should be done, it is much easier for MDT to program it to be funded.

Kathy pointed out that DEQ stormwater and water quality standards would apply. Having stormwater discharge directly into the Swan River from the bridge is not currently permit-able. With a wooden or open deck, the runoff cannot be captured.

All SC members agreed the bridge needed to be maintained by the County Bridge Department and the objective pertaining to county maintenance should therefore be required. The SC felt that “Remove wooden deck” should be a desired objective. The SC wanted the feasibility report to explain why a wood deck does not compare favorably with other deck alternatives.

The SC asked to change “Reduce steel disintegration into river” to “Reduce bridge degradation into river” as a project objective. The SC asked to include “Avoid right of way acquisition” and “minimize utility costs” as desired project objectives.

Need	Required / Objectives Desired?	Source				Evaluation Criteria
		MDT	County	SC	Public	
<b>Constructible and Maintainable</b>						
R	Funding for rehab or replacement	X	X	X		
R	Permit-able (construction)	X				
R	Permit-able-stormwater from bridge	X				
R <del>or D</del>	Maintainable by County Bridge Dept. <i>ROAD / BRIDGE PATH</i>	X	X			
D	<i>AVOID R/W ACQUISITION</i>					
D	<i>MINIMIZE UTILITY COSTS</i>	X	X		X	
D	<del>Keep</del> /Remove wooden deck <i>≈ CO MAINT.</i>					
D	Reduce special maint. needs (snow, paint, etc)		X			
D	Reduce <del>steel disintegration</del> into river <i>BRIDGE DEGRADATION</i>		X	X		

# Meeting Minutes - Swan River Bridge SC #4



Date: 7/27/2016

Facilitator: Wade Salyards / Kathy Harris

Time: 1:00 PM

Minutes CC: Attendees, Steve Grabill, Shane Stack

## Attending:

Name	Organization	Phone Number	E-Mail
Wade Salyards	MDT Consultant Design	406-444-0451	<a href="mailto:wsalyards@mt.gov">wsalyards@mt.gov</a>
Bob Vosen	MDT Missoula	406-751-2020	<a href="mailto:rvosen@mt.gov">rvosen@mt.gov</a>
James Freyholtz	MDT Missoula	406-751-2066	<a href="mailto:jfreyholtz@mt.gov">jfreyholtz@mt.gov</a>
Vicki Crnich	MDT Planning	406-444-7653	<a href="mailto:vcrnich@mt.gov">vcrnich@mt.gov</a>
Chris Hardan (Phone)	MDT Bridge	406-444-9221	<a href="mailto:chardan@mt.gov">chardan@mt.gov</a>
Pam Holmquist	Flathead Co Commissioner	406-758-5508	<a href="mailto:pholmquist@flathead.mt.gov">pholmquist@flathead.mt.gov</a>
Dave Prunty	Flathead Co Public Works	406-758-5790	<a href="mailto:dprunty@flathead.mt.gov">dprunty@flathead.mt.gov</a>
Jed Fisher	Flathead Co Parks & Rec	406-758-5805	<a href="mailto:jedfisher@flathead.mt.gov">jedfisher@flathead.mt.gov</a>
Walter Kuhn	Citizen Representative	406-837-4550	<a href="mailto:wkuhn@k-mmi.com">wkuhn@k-mmi.com</a>
Paul Mutascio	CFBB	406-261-1049	<a href="mailto:pmutascio@centurytel.net">pmutascio@centurytel.net</a>
Susan Hansen	Citizen Representative	406-250-4685	<a href="mailto:btrfly@montanasky.net">btrfly@montanasky.net</a>
Kathy Harris	KLJ	406-441-5784	<a href="mailto:kathy.harris@kljeng.com">kathy.harris@kljeng.com</a>
Russ Lay	KLJ	406-4452-8600	<a href="mailto:russ.lay@kljeng.com">russ.lay@kljeng.com</a>

Note: Action Items are shown below in italics.

## Agenda Topics

The fourth Steering Committee (SC) meeting was held on July 27, 2016 at 1:00 in the Kalispell Montana Department of Transportation (MDT) office to present six bridge concepts and develop the Committee ratings of the previously-approved criteria (for comparing the bridge options).

### 1) Old Business

- a) Review SC Meeting #3 Minutes. There were no comments or changes to the meeting minutes.
- b) Baseline Design and Environmental Document: Two background planning reports have been drafted and are now posted on the project website.
  - i) The Existing and Projected Conditions Report summarizes the bridge and traffic conditions.
  - ii) The E-Scan Report identifies soil and groundwater contamination as future construction issues. Although there will be other environmental steps with a future project, no other significant items were found at this time.
- c) The Transportation/Bridge Needs Memo was submitted to the SC, and had no comments at this time.

2) **New Business - Bridge Option and Screening Matrix.**

- a) **Bridge Options:** Russ Lay described six bridge options listed **Attachment 1**.
  - b) **Screening Matrix:** The SC reviewed and rated the six bridge options, with the qualitative ratings shown in **Attachment 2**. During the discussion, the following changes were made to the Screening Criteria:
    - i) Omit Criteria "Provide Structurally Adequate Bridge" as it is redundant
    - ii) Add a cost comparison (using \$. . . . \$\$\$\$ ratings).
    - iii) The screening criteria for the "enhancement of the historical appearance by the walkway" was difficult to gain consensus and was not completed by the SC.
  - c) During the discussion, the following comments were offered:
    - i) Pam Holmquist noted the County may not support a rehabilitation that utilizes antiquated pin-style truss connections.
    - ii) Dave Prunty restated the County opposition to a wooden deck and pin connections, due to the higher maintenance needs. This will be reflected in the screening ratings.
    - iii) Bob Vosen noted that construction administration costs will be higher for a rehabilitation due to the specialized construction methods and MDT's subsequent need to hire specialized inspection services (resulting in higher costs). The manufacturing of the rehabilitation members (replacement) would likely be a very specialized firm and out of state.
    - iv) The Historical Listing (NRHP) and the need to retain the listing versus the appearance was discussed in detail. The need for a safe, long-term solution that keeps the historic look is greater than the need to keep the listing.
    - v) Paul Mutascio restated the consideration of the economic value that the bridge brings to the local community. The SC felt that this was reflected in the various screening criteria.
  - d) Following the meeting, KLJ offered two recommendations which were sent to the SC via email. The SC agreed that the following two changes should be implemented:
    - i) Omit the Evaluation Criteria "Enhance Historic Bridge Appearance with Walkway".
    - ii) Include Bridge Option 7, which offers a new, one-lane through truss bridge. The ratings will be similar to Option 3 (steel girder bridge with existing truss reattached) except:
      - (1) Clearance above the river is better for Option 7
      - (2) Costs will be range around the middle of the bridge rehab option.
    - iii) KLJ updated the Matrix for these two items and it is shown in the attachments (with gray shading)
- 3) Kent Barnes joined the end of the meeting and offered the following on bridge funding:
- i) Funding requests will be approved by MDT (not federal) based upon the County Commission request for a specific bridge rehabilitation or replacement.

- ii) MDT will consider if the request provides a cost effective design that meets the needs of the community.

#### 4) Schedule Next/Future Meetings

- a) Upcoming Public Meeting.
  - i) The upcoming Public meeting is scheduled for August 16 at 4:30 PM in the Bigfork Elementary School Cafeteria. Kathy will forward the advertisement to the SC. A mailing will be sent out to the community in the next week. The meeting will have a formal presentation and a formal Q&A session.
  - ii) The Bigfork SC members will participate in the presentation to the community.
  - iii) Kathy will coordinate with Dave Prunty if the County will participate in the presentation.
- b) Kathy will reschedule a summary presentation to the County Commission through Dave Prunty.
- c) The next SC meeting will review input received at August Public Meeting, and discuss the two anticipated options to be carried forward for more detailed review.

- END -

#### Next Meeting Information

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**Date:** 10/4/2016

**Facilitator:** Wade Salyards/Kathy Harris

**Time:** 1:00 - 4:00 PM

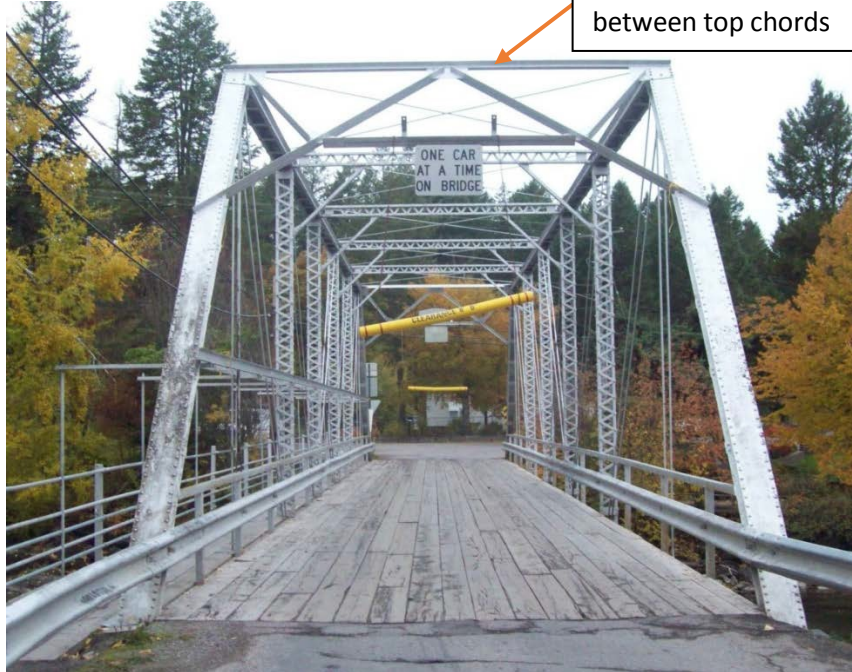


**Attachment 1 to SC Meeting #4: Six bridge options**

**Note: Option 7 is not shown as it was added after meeting**

## Truss Bridge Types

### Through Truss



Horizontal overhead bracing between top chords

**Through Truss:** Truss has overhead horizontal bracing between the top chords of the trusses.

### Pony Truss



No horizontal bracing between top chords

**Pony Truss:** Truss does not have horizontal bracing between the top chords of the trusses.

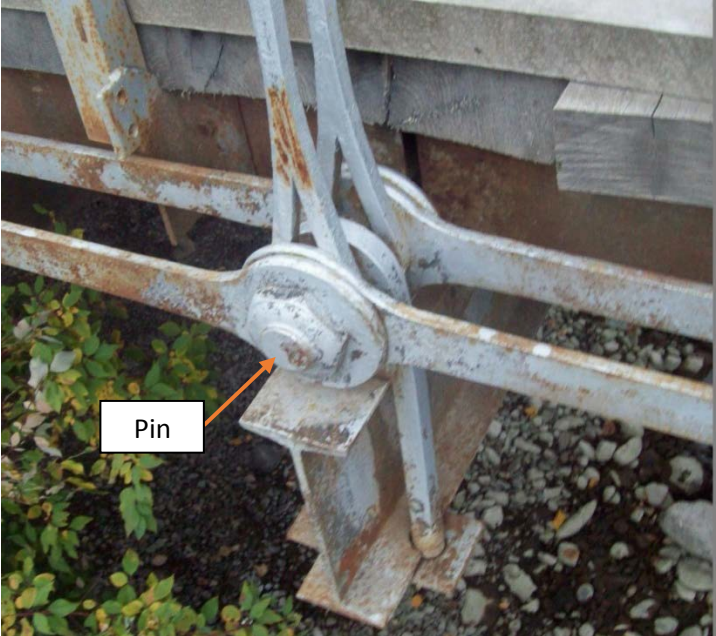
# Truss Connection Types

## Gusset Plate Connection



**Gusset Plate Connection:** All members bolt or rivet into a Gusset Plate.

## Pinned Connection



**Pinned Connection:** All members connect to a steel rod or “pin”.

Note: Pinned connections are an antiquated method of construction and are expensive to reproduce.



# Bridge Options

## Option #1 – No Build



- 1-Lane
  - Through Truss
  - No change in current appearance
- 

## Option #2 – New 1-Lane Pony Truss



Photo courtesy of [www.conteches.com](http://www.conteches.com). Bridge color can vary.

- 1-Lane
- Pony Truss (no overhead bracing)
- Heavier (thicker) bridge members
- Gusset plate connections
- Slightly more massive appearance

### Option #3 – New 1-Lane Steel Girder Bridge with Architectural Trusses



Photo courtesy of [www.historicbridges.org](http://www.historicbridges.org) (modified).

- 1-Lane
  - Steel Girders carry the bridge loads (steel to match truss material)
  - Reuse existing trusses as non-load bearing, “architectural” features
  - Appearance from the river will be thicker where girders add to the thickness of bridge deck
- 

### Option #4 – New 1-Lane Concrete Girder Bridge



- 1-Lane
- Concrete structure (girders, deck, and barriers)
- Modern “typical concrete bridge” appearance and typical design/maintenance. Thicker depth and no overhead feature.



## Option #5 -Rehabilitation with Integral Walkway



- 1-Lane
- Through Truss (with overhead bracing). Replace all steel members below the deck and 75% of the members above the deck
- Wider walkway will be totally rebuilt
- Changes in member size/thickness will be hardly noticeable
- All pinned connections will be rebuilt

---

## Option #6 – New 2-Lane Concrete Girder Bridge with Architectural Trusses




Photo courtesy of MDT.

- 2-Lane
- Concrete Girders carry the bridge loads
- Widen distance between and reuse existing trusses as non-load bearing, “architectural” features
- Appearance from the river will be thicker where girders add to the thickness of bridge deck
- Appearance from road will be wider



**Attachment 2 to SC Meeting #4: Completed Screening Matrix**

#	Description	Screening Criteria 			
		Maintain Historic Truss Appearance			
		Required:	✓		
		Maintain Hist. Appearance	Maintain Hist. Integrity Listing	Keep Silver Paint Color	Replicate (Exs.) OH. Truss Dimensions
1	No Build	●	●	●	●
2	New, 1-Lane, Pony Truss	◐	●	●	◐
3	New, 1-Lane, Steel Girder w/ Arch Truss	◑	●	●	◑
4	New, 1-Lane, Concrete Girder	●	●	○	●
5	Rehabilitation, with Integral Walkway	●	◑	●	◑
6	New, 2-Lane, Concrete Girder w/ Arch Truss	neutral	●	●	●
7	New, 1-Lane, Through Truss	◑	●	●	◑

#	Description	Screening Criteria								
		Constructible and Maintainable								
		Required:	✓	✓	✓	✓				
	Funding for Rehab or Replacement	Permit-able (Construction)	Permit-able-brdg. Stormwater	Ease of Maintenance (By County)	Remove Wooden Deck	Reduce special Maint. Needs	Reduce Brdg. Degradation Into River	Avoid ROW Acquisition	Minimize Utility Cost	
1	No Build	○	○	○	●	●	●	●	●	●
2	New, 1-Lane, Pony Truss	◐	◐	◐	◐	●	◐	◐	◐	○
3	New, 1-Lane, Steel Girder w/ Arch Truss	◐	◐	◐	◐	●	◐	◐	◐	◐
4	New, 1-Lane, Concrete Girder	◐	◐	◐	●	●	◐	◐	◐	○
5	Rehabilitation, with Integral Walkway. No wooden deck.	◐	◐	◐	◐	●	◐	◐	●	◐
6	New, 2-Lane, Concrete Girder w/ Arch Truss	●	◐	◐	◐	●	●	◐	●	●
7	New, 1-Lane, Through Truss	◐	◐	◐	◐	●	◐	◐	◐	○



#	Description	Screening Criteria 							
		Provide Safe Crossing of Swan River							
		Required:	✓	✓	✓				
		Increase Load Rating (HS 15 Min.)	Min. One-Vehicular Lane	ADA Ped Area & Railing	Provide 75 Year Brdg. Life	Maintain Clearance Above River	Maintain Slow Speeds	Improve Other Design Standards	Improve Guardrail (Approach)
1	No Build	●	◐	○	●	●	◐	●	●
2	New, 1-Lane, Pony Truss	●	◐	●	●	◐	◐	◐	●
3	New, 1-Lane, Steel Girder w/ Arch Truss	●	◐	●	●	◐	◐	◐	●
4	New, 1-Lane, Concrete Girder	●	◐	●	●	●	◐	◐	●
5	Rehabilitation, with Integral Walkway	●	◐	●	◐	●	◐	◐	◐
6	New, 2-Lane, Concrete Girder w/ Arch Truss	●	●	●	●	●	◐	●	●
7	New, 1-Lane, Through Truss	●	◐	●	●	◐	◐	◐	●

**Attachment 3 to SC Meeting #4: Option 7 – Example of New, 1-Lane, Through Truss.**



# Meeting Minutes - Swan River Bridge SC #5

Date: 10/12/2016

Time: 1:00 PM

Facilitator: Wade Salyards / Kathy Harris

Minutes CC: Steering Committee, KLJ attendees,  
Wade Salyards

## Attending:

Name	Organization	Phone Number	E-Mail
Wade Salyards	MDT Consultant Design	406-444-0451	<a href="mailto:wsalyards@mt.gov">wsalyards@mt.gov</a>
Shane Stack (Phone)	MDT Missoula	406-523-5830	<a href="mailto:sstack@mt.gov">sstack@mt.gov</a>
Chris Hardan	MDT Bridge	406-444-9221	<a href="mailto:chardan@mt.gov">chardan@mt.gov</a>
Pam Holmquist	Flathead Co Commissioner	406-758-5508	<a href="mailto:pholmquist@flathead.mt.gov">pholmquist@flathead.mt.gov</a>
Jed Fisher	Flathead Co Parks & Rec	406-758-5805	<a href="mailto:jedfisher@flathead.mt.gov">jedfisher@flathead.mt.gov</a>
Walter Kuhn	Citizen Representative	406-837-4550	<a href="mailto:wkuhn@k-mmi.com">wkuhn@k-mmi.com</a>
Paul Mutascio	CFBB, Citizen Representative	406-261-1049	<a href="mailto:pmutascio@centurytel.net">pmutascio@centurytel.net</a>
Susan Hansen	Citizen Representative	406-250-4685	<a href="mailto:btrfly@montanasky.net">btrfly@montanasky.net</a>
Kathy Harris	KLJ	406-441-5784	<a href="mailto:kathy.harris@kljeng.com">kathy.harris@kljeng.com</a>
Russ Lay (Phone)	KLJ	406-452-8600	<a href="mailto:russ.lay@kljeng.com">russ.lay@kljeng.com</a>
Steve Grabill (Phone)	KLJ	406-441-5783	<a href="mailto:Steve.grabill@kljeng.com">Steve.grabill@kljeng.com</a>
William Meyers	Bigfork Resident		

Note: Action Items are shown below in italics.

## Agenda Topics

The fifth Steering Committee (SC) meeting was held on October 4, 2016 at 1:00 in the Kalispell Montana Department of Transportation (MDT) office to summarize the public input received since Public Meeting #2 and discuss next steps in the study process.

- 1) **Welcome and Introductions.** Wade Salyards opened the meeting with self-introductions.
- 2) **General Comments from the Public**
  - a) William "Bill" Meyers of 450 Grand Drive in Bigfork stated that there should be an eighth option, for a two-lane structure with steel girders and reusing the overhead truss. He felt the bridge needed to be replaced and agreed the community wants to maintain the look. He noted that modes of transportation have changed since early 1900's, when this bridge was built and population changes require modernization of the structure to a two-lane.

He was concerned with the ability of the bridge to accommodate emergency service vehicles/fire trucks. He said that during certain events, a one lane bridge would limit the ability to get people into or out of downtown during an emergency or if traffic were blocked



due to a traffic accident. He said he was mostly concerned with safety. He said cost and aesthetics are the next two issues that needed to be addressed. He talked about using either 10 foot or 12 foot lanes. He felt the two-lane option could be built within existing easements. He said Option 3 as a two-lane would be ideal. He felt that speed bumps could be installed to slow traffic down and a 5 mph speed zone should be installed.

County representatives were not in favor of speed bumps due to challenges with winter maintenance. After some further discussion, the meeting continued to cover items from the agenda.

### 3) Old Business

- a) Review SC Meeting #4 Minutes. There were no comments or changes to the meeting minutes.
- b) Review Public Meeting #2-Draft Memo. Kathy Harris summarized input received during and since the August 16, 2016 meeting. The meeting packet included a draft memo summarizing:
  - i) There was no support for four of the options (1,2,4,6).
  - ii) Option 3 received the most support, followed by Option 5 and Option 7.
  - iii) A bulleted list of comments condensed the written comments.
  - iv) There was a question on whether right of way would be required for a two lane option. Kathy responded that without design exceptions, the two lane option would require additional right of way.
  - v) There were no comments or changes to the meeting summary.
- c) The Steering Committee determined that the ratings (screening criteria rankings) should remain as is-and not be changed based on the written and verbal public comments.
- d) Feasibility Study Status - Kathy reviewed the project schedule and status of the feasibility study.

### 4) New Business

- a) **What more data needed for Committee?**
  - i) *KLJ will confirm with the fire chief (Mark Thiry) on the Bigfork Fire Department concerns or issues for the bridge, including response time, routes and one- or two-lane bridge.*
- b) **Bridge Memo #2 - Risk Analysis:** KLJ has been asked to address MDT's new Risk Analysis methodology. Public support will be one of the risks evaluated. KLJ and MDT will prepare the risk analysis and forward the results to the SC (Bridge Memo #2 via email) to obtain SC review and input at the next SC meeting.
- c) **Final Report Preparation:** KLJ will incorporate all information into a final report. It was suggested that the options could be listed in the report in order of preference by the SC.
- d) **Resource Agency Meeting:** A resource agency meeting has been scheduled for October 6, 2016 to discuss and/or identify regulatory or permitting concerns from regulatory agencies.

### 5) Schedule Next/Future Meetings:

- a) The next (sixth) SC meeting will review the Risk Assessment Memo (Bridge Memo #2) and was scheduled for November 16, 2016 in Kalispell. The need for a seventh meeting will be

determined then. The SC could develop their conclusions at this meeting, for presentation to the public.

- b) The SC discussed the merits and venue for another public meeting Pam said it was important to let people know what they are being asked to respond to. The SC discussed narrowing the options presented to the public to three (or a smaller number). Pam stated that the public will want to see approximate costs in today's dollars. The SC discussed the various unknown's and uncertainties for costs and generally supported additional costing information. The next report should incorporate the risk assessment and additional cost information (after the meeting, MDT and KLJ confirmed additional cost information will be focused on two or three options).
  - c) The next public meeting will tentatively be scheduled for the week of November 28, 2016.
    - i) The public needs to hear that the bridge will be shut down for one summer while it is under construction.
  - d) The SC discussed presenting the study results (from the SC) to the County Commission.
    - i) All three County Commissioners should be invited to the next public meeting.
    - ii) The County Commission would prefer a disk (CD) containing the Feasibility Study documents-for their review. If the SC desires, this can include the committee's recommendation or conclusions.
  - e) The County Commission will need to seek action (funding) from MDT for the next steps. MDT discussed the engineering funds could be programmed in the near future with engineering being completed in 2-3 years. Unfortunately, the funding for construction is not currently known.
- 6) General Comments
- a) Bill Meyers reiterated his desire for an Option 8, which essentially was Option 3 as a two-lane bridge facility. He questioned why there was no picture version of the two-lane bridge. Walter Kuehn noted that the local representatives on the Steering Committee support the one-lane bridge. Kathy responded that this was considered from the engineering side. However, at the first and second public meetings, the public resoundingly pushed for the bridge to be a one-lane bridge. Therefore, KLJ decided to not develop a picture representation of the two-lane bridge option.

- END -

## Next Meeting Information

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Date: 11/16/2016

Facilitator: Wade Salyards/Kathy Harris

Time: 1:00 - 4:00 PM

# Meeting Minutes - Swan River Bridge SC #6

Date: 11/16/2016

Time: 1:00 PM

Facilitator: Wade Salyards / Kathy Harris

Minutes CC: Steering Committee, KLJ attendees,  
Wade Salyards

## Attending:

Name	Organization	Phone Number	E-Mail
Wade Salyards	MDT Consultant Design	406-444-0451	<a href="mailto:wsalyards@mt.gov">wsalyards@mt.gov</a>
Shane Stack	MDT Missoula	406-523-5830	<a href="mailto:sstack@mt.gov">sstack@mt.gov</a>
Chris Hardan	MDT Bridge	406-444-9221	<a href="mailto:chardan@mt.gov">chardan@mt.gov</a>
Bob Vosen	MDT Missoula	406-751-2020	<a href="mailto:rvosen@mt.gov">rvosen@mt.gov</a>
Vicki Crnich	MDT Planning	406-444-7653	<a href="mailto:vcrnich@mt.gov">vcrnich@mt.gov</a>
Pam Holmquist	Flathead Co Commissioner	406-758-5508	<a href="mailto:pholmquist@flathead.mt.gov">pholmquist@flathead.mt.gov</a>
Dave Prunty	Flathead Co Public Works	406-758-5790	<a href="mailto:dprunty@flathead.mt.gov">dprunty@flathead.mt.gov</a>
Jed Fisher	Flathead Co Parks & Rec	406-758-5805	<a href="mailto:jedfisher@flathead.mt.gov">jedfisher@flathead.mt.gov</a>
Walter Kuhn	Citizen Representative	406-837-4550	<a href="mailto:wkuhn@k-mmi.com">wkuhn@k-mmi.com</a>
Paul Mutascio	CFBB, Citizen Representative	406-261-1049	<a href="mailto:pmutascio@centurytel.net">pmutascio@centurytel.net</a>
Susan Hansen	Citizen Representative	406-250-4685	<a href="mailto:btrfly@montanasky.net">btrfly@montanasky.net</a>
Kathy Harris	KLJ	406-441-5784	<a href="mailto:kathy.harris@kljeng.com">kathy.harris@kljeng.com</a>
Brady Lassila	KLJ	406-452-8600	<a href="mailto:brady.lassila@kljeng.com">brady.lassila@kljeng.com</a>
Steve Grabill	KLJ	406-441-5783	<a href="mailto:Steve.grabill@kljeng.com">Steve.grabill@kljeng.com</a>

Note: Action Items are shown below in italics.

## Agenda Topics

The sixth Steering Committee (SC) meeting was held on November 16, 2016 at 1:00 in the Kalispell Montana Department of Transportation (MDT) office to summarize the public input received since Public Meeting #2 and discuss next steps in the study process.

- 1) **Welcome and Introductions.** Wade Salyards opened the meeting with self-introductions.
- 2) **Additional Comments from the Public**
  - a) Walter Kuhn mentioned Bill Meyers request for more analysis of a two-lane bridge (letter discussed at SC Meeting #5).
  - b) Paul Mutascio spoke with fire district officials who defer to the experts on bridge design (separate letter received by Fire District).
  - c) The SC concluded that the two-lane option has been thoughtfully addressed and has not changed the positions of the SC.
- 3) **Old Business**
  - a) **Review SC Meeting #5 Minutes:** There were no comments or changes to the meeting minutes.

- b) **Review Resource Agency Meeting Outcome:** No unknown issues were identified and environmental issues were confirmed as typical for MDT construction.

#### 4) New Business

- a) **Review Draft Bridge Memo #2:** Bridge Memo #2 addresses MDT's risk management process and provided additional cost information.
  - i) The risk management was used to develop larger contingencies for unknown or unusual items. After discussion, the risk management results are technical in nature and not critical for the general public.
  - ii) Project costs have been updated to address all project costs and contingency ranges. Discussion noted:
    - (1) Costs reflect all project costs whereas previous estimates addressed bridge costs only.
    - (2) Higher contingencies were applied to higher risk potentials.
    - (3) Bob noted a concern over the bridge demolition impact on overhead utilities, especially transmission lines. Discussion noted if the bridge could be removed in pieces, smaller equipment could be used and impacts to utilities could be lessened.
    - (4) Dave noted that utility costs within in county right-of-way are typically incurred by the utility.
    - (5) The cost table was reviewed and no further changes requested.
- b) **Review Draft Final Feasibility Report:** A draft of the Final Feasibility Report will be available for public viewing via an internet link prior to the Public Meeting. After discussion, the Committee supported the Draft Final Report including an Executive Summary with the rankings for the options and a Conclusion section that justified the rankings. Discussion included:
  - i) It was restated the County Commission, as the elected representatives, will take the next step and decide what, if any, option should seek MDT support/funding. Dave and Pam restated that the County is not able to fix the bridge under current funding. Pam noted that the County Commission will need to hear the justification of the SC rankings and conclusions. The SC can provide recommendations to the Commission, based upon their knowledge and effort throughout the Study.
  - ii) The three Bigfork representatives indicated they were ready to rank the bridge options and other SC members concurred (see below).
  - iii) SC members noted minor report edits.
- c) **Bridge Options Rankings:** After considerable discussion on how the bridge options should be presented to the public and if options should be prioritized, the SC ranked the bridge options by consensus, with Pam Holmquist abstaining and with Jed Fischer absent for this portion of the meeting.

The SC decided that the bridge options should be ranked based on the screening criteria, costs and public input received to date. The discussion focused on defining the least-

preferable option and why other options would better reflect the community (public support), be fundable and serve the traveling public. These rankings align with the previously-developed screen criteria ratings. After the meeting, the top two rankings were changed to have equal ranking and which will be discussed after Public Meeting and at next Steering Committee meeting.

*Steering Committee Bridge Ranking*

Original #	Description	Public Support?	Costs (in millions of 2016 dollars)	Ranking
1	No-Build	None	\$ 0	7
2	New, 1-Lane, Pony Truss	No Support	\$ 1.40 to 2.00	4
3	New, 1-Lane, Steel Girder w/ Arch Truss	Yes	\$ 1.50 to 2.20	1
4	New, 1-Lane, Concrete Girder	No Support and Strong Opposition	\$ 1.20 to 1.70	6
5	Rehab, w/ Integral Walkway	Yes	\$ 1.50 to 2.70	3
6	New, 2-Lane, Concrete Girder w/ Arch Truss	Very Little Support and Very Strong Opposition	\$ 2.70 to 3.60	5
7	New, 1-Lane, Through Truss	Yes	\$ 1.60 to 2.40	1

- d) **Public Meeting:** A public meeting is scheduled for December 1, 2016 and will present rankings of the bridge options by the SC. Vicki noted that we are asking the public for their opinion, not for a vote. The SC recommended:
- Presenting planning-level cost ranges
  - Not presenting risk issue
  - The Bigfork community should be informed of the construction disruption. It will likely consume one season although efforts could be made to focus outside the busiest months of June through mid-September. Opinions varied if missing this busy period would justify additional time and money for construction.
  - The top two bridge options should be presented equally to the public, with focus on their differences.

- END -

**Next Meeting Information: SC #7 (if needed)**

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**Date:** 1/25/2017

**Facilitator:** Wade Salyards/Kathy Harris

**Time:** 1:00 - 4:00 PM



# Meeting Minutes - Swan River Bridge SC #7

**Date:** 1/25/2017

**Time:** 1:00 PM

**Facilitator:** Wade Salyards / Kathy Harris

**Minutes CC:** Steering Committee, attendees, S. Grabill, J. Davis

## Attending:

Name	Organization	Phone Number	E-Mail
Wade Salyards	MDT Consultant Design	406-444-0451	<a href="mailto:wsalyards@mt.gov">wsalyards@mt.gov</a>
Ed Toavs	MDT Missoula	406-523-5802	<a href="mailto:etoavs@mt.gov">etoavs@mt.gov</a>
Shane Stack	MDT Missoula	406-523-5830	<a href="mailto:sstack@mt.gov">sstack@mt.gov</a>
Chris Hardan	MDT Bridge	406-444-9221	<a href="mailto:chardan@mt.gov">chardan@mt.gov</a>
Bob Vosen	MDT Missoula	406-751-2020	<a href="mailto:rvosen@mt.gov">rvosen@mt.gov</a>
Vicki Crnich	MDT Planning	406-444-7653	<a href="mailto:vcrnich@mt.gov">vcrnich@mt.gov</a>
Pam Holmquist	Flathead Co Commissioner	406-758-5508	<a href="mailto:pholmquist@flathead.mt.gov">pholmquist@flathead.mt.gov</a>
Dave Prunty	Flathead Co Public Works	406-758-5790	<a href="mailto:dprunty@flathead.mt.gov">dprunty@flathead.mt.gov</a>
Walter Kuhn	Citizen Representative	406-837-4550	<a href="mailto:wkuhn@k-mmi.com">wkuhn@k-mmi.com</a>
Paul Mutascio	CFBB, Citizen Representative	406-261-1049	<a href="mailto:pmutascio@centurytel.net">pmutascio@centurytel.net</a>
Susan Hansen	Citizen Representative	406-250-4685	<a href="mailto:btrfly@montanasky.net">btrfly@montanasky.net</a>
Kathy Harris	KLJ	406-441-5784	<a href="mailto:kathy.harris@kljeng.com">kathy.harris@kljeng.com</a>
Brady Lassila	KLJ	406-452-8600	<a href="mailto:brady.lassila@kljeng.com">brady.lassila@kljeng.com</a>

Note: Action Items are shown below in italics.

## Agenda Topics

The seventh Steering Committee (SC) meeting was held on January 25, 2017 at 1:00 in the Kalispell Montana Department of Transportation (MDT) office to summarize the public input received since Public Meeting #3 and finalize the SC input for the feasibility study.

- 1) **Welcome and Introductions.** Wade Salyards opened the meeting with self-introductions.
- 2) **Old Business**
  - a) **Review SC Meeting #6 Minutes:** There were no comments or changes to the meeting minutes.
  - b) **Review Public Meeting #3-Draft Memo:** Kathy Harris summarized input received during and since the December 1, 2016 meeting. The meeting packet included a draft memo summarizing:
    - i) Attendance and comments received.
    - ii) The public comments reflected a preference for an overhead truss. Option 7 received the most support with Option 3 also being acceptable. The SC agreed that the public input did not change or redirect the SC conclusions.
    - iii) KLJ will make the following minor changes to the meeting summary:
      - (1) Page 4, Comment #11. Note that a copy of the original bridge plans has been found.

(2) Page 5, Comment Bullets will reflect that all public comments (but one) support the overhead truss type and that the percentages of individual options is a sub-heading.

**3) New Business**

- a) Revised Cost Ranges: KLJ and MDT used additional unit costing information to adjust the cost ranges of the Options 2-7. After extensive discussion, the SC agreed that the revised costs do not change the qualitative cost comparison or the SC conclusions.
  - b) Funding Issues: MDT will hold an internal meeting to confirm that the minor conceptual cost differences would not affect the bridge funding or participation of the Off-System Bridge funds. MDT's funding direction will be relayed to the County Commission with the final report.
  - c) SC Recommendation: The SC members reached a consensus that Option 7 is the recommended option but noted that Option 3 is acceptable. This will be incorporated into the Feasibility Study. The SC requested an opportunity to review the changes (to the Feasibility Study) within one week and prior to presenting to the County Commission.
  - d) Next Steps:
    - i) MDT will schedule its internal meeting to discuss funding status.
    - ii) KLJ will revise the Feasibility Report to
      - (1) Incorporate the SC recommendation for Option 7
      - (2) Include summary of the third public meeting
      - (3) Submit updated Feasibility Report to the SC for review
      - (4) Submit Feasibility Report to County Commission and request presentation time on Commission agenda. KLJ will coordinate this through Dave Prunty.
- 4) A heartfelt thanks was extended to the Steering Committee for their participation, time, and effort.

- END -