
Public / SBU / FOUO

Comment Report: All Comments

Project: Fargo Moorhead Metro - Reach 4 Design by MVK

Review: 95% FTR - ATR

Displaying 66 comments for the criteria specified in this report.

| Id | Discipline | DocType | Spec | Sheet | Detail |
|-----------|-------------------|-----------------|-------------|--------------|---------------|
| 5338121 | Structural | Plans and Specs | n/a | n/a | n/a |

Comment Classification: **For Official Use Only (FOUO)**

I have reviewed the structural design aspects of the 95% submittal. All of my comments on the 65% submittal have been resolved satisfactorily, and I have no additional comments.

Submitted By: [Lyle Peterson](#) (402-995-2161). Submitted On: Aug 30 2013

1-0 Evaluation Concurred

Comment noted. Thank you for your review.

Submitted By: [Marneshia Richard](#) (601-631-7055) Submitted On: Sep 30 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------|-----------|-----------------------------------|-----|-----|-----|
| 5346555 | Hydrology | Design Memorandum or Report | n/a | n/a | n/a |
|---------|-----------|-----------------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

Coordinating Discipline(s): Environmental

Appendix K - Please remove Preliminary Engineering Report in the header and update field for the FTR.

Submitted By: [Ron Beyer](#) (402-995-2339). Submitted On: Sep 09 2013

Revised Sep 09 2013.

Evaluation not conducted

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|---------|-----------|-----------------------------------|-----|------|-----|
| 5346579 | Hydrology | Design Memorandum or Report | n/a | C-15 | n/a |
|---------|-----------|-----------------------------------|-----|------|-----|

Comment Classification: **For Official Use Only (FOUO)**

([Document Reference: Appendix C](#))

Coordinating Discipline(s): General

Update field "reference not found..." to direct to, presumably, Figure C-5.

Submitted By: [Ron Beyer](#) (402-995-2339). Submitted On: Sep 09 2013

1-0 Evaluation Concurred

The field has been corrected.

Submitted By: [Raymond Wilson](#) (601-631-5738) Submitted On: Oct 31 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------|--------------------|-----------------------------|-----|-------------------------|-----|
| 5349470 | Project Management | Design Memorandum or Report | n/a | Sect. 1.2, 2nd sentence | n/a |
|---------|--------------------|-----------------------------|-----|-------------------------|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: [DDR, p.1](#))

Coordinating Discipline(s): Hydraulics

Wasn't flood stage exceeded in 2013? Recommend mentioning that 2013 flooding be mentioned to add just one more justification for project.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

The text was changed to the following:

The Red River of the North has exceeded the National Weather Service flood stage of 18 feet in 50 of the past 112 years (1902 through 2013), and recently every year from 1993 through 2011 and in 2013.

Submitted By: [Raymond Wilson](#) (601-631-5738) Submitted On: Sep 27 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|--------------------|-----------------------------|-----|-----------|-----|
| 5349505 | Project Management | Design Memorandum or Report | n/a | Sect. 1.5 | n/a |
|---------|--------------------|-----------------------------|-----|-----------|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: [DDR, p.3, first full paragraph, second sentence](#))

Coordinating Discipline(s): Hydraulics

Please clarify - Previous submittals (at least prior to PER) have not made mention of the diversion inlet structure being gated. Is this a design change? What are the operating parameters? What is the structure size now? Who will operate and when? When will gated structure be reviewed?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

Revised Sep 11 2013.

1-0 Evaluation Check and Resolve

Yes, the gated diversion inlet structure is a design change. The change has been made so that more control is available to prevent allowing large flows in the diversion at the time when the Maple River is reaching the peak of its hydrograph. A detailed study of the project operating plan, including the operation of the diversion inlet gates, is just getting started.

The proposed gated structure has three 45' wide x 25' high gates, and will have a similar superstructure, hoist system, operating bridge, heating elements, and controls as the Red River control structure. The change from a weir structure to a gated structure has not increased the design flows in the diversion up through the 0.2-percent chance event (timing of flows has been checked and peak flow, if anything, is lower). Flow in the diversion when peak tributary flows occur is different than it would be with a weir inlet. The Rush River structure has been designed assuming only the Rush River is contributing flow to the diversion (a condition that would exist prior to construction of the upstream portion of the diversion) so the Rush River structure design is sufficiently conservative. The riprap downstream of the pipe inlet structure was sized based on un-submerged conditions at the exit of the energy dissipation chamber so its erosion protection is also sufficiently conservative.

A technical memorandum concerning the gated diversion inlet structure is attached. At this time the ATR for the gated diversion inlet structure has not been scheduled.

Submitted By: [Aaron Buesing](#) (651-290-5627) Submitted On: Nov 12 2013 (Attachment: [Fi Final_TM_-_Diversion_Inlet_Gates_1-10-2013.pdf](#))

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------|--------------------|-----------------------------|-----|--------|-----|
| 5349608 | Project Management | Design Memorandum or Report | n/a | Fig. 5 | n/a |
|---------|--------------------|-----------------------------|-----|--------|-----|

Comment Classification: **For Official Use Only (FOUO)**

([Document Reference: DDR, p.17](#))

Coordinating Discipline(s): Hydraulics

Please clarify intent of highlighted text in figure caption - is the figure to be revised, and if so, for what purpose is revision needed?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation For Information Only

The station limits for Reach 4 have been revised since the image was generated. The revised limits are station 350+00 to 521+00. The revised image show the limits extending to station 521+00.

Submitted By: [Jonathan Boone](#) (601-631-5502) Submitted On: Nov 07 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------|--------------------|-----------------------------|-----|-----|-----|
| 5349689 | Project Management | Design Memorandum or Report | n/a | n/a | n/a |
|---------|--------------------|-----------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

Coordinating Discipline(s): Hydraulics

Document does not discuss uncertainty or risk; EM 1110-2-1619 would indicate that we should have a discussion in all design reports, please include.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Check and Resolve

At this time we are unable to provide a specific level of assurance since the size of the diversion upstream of the Maple River has not been set and the exact operation of the diversion inlet gates is not known. As stated in the DDR, we are certain that the conservative assumptions made in the design will result in greater than 90% assurance of containing the 1% event.

Submitted By: [Raymond Wilson](#) (601-631-5738) Submitted On: Nov 13 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------|------------|-----------------------------|-----|-----|-----|
| 5349779 | Hydraulics | Design Memorandum or Report | n/a | n/a | n/a |
|---------|------------|-----------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: [App. C, Sect. C.1.2.3, p. C-7](#))

Coordinating Discipline(s): Hydraulics

We state that the levee must contain the 1% flood with at least 90% assurance to satisfy FEMA accreditation issues, but we never specify what level of assurance the levee profile provides for the 1% flood. Please include discussion.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Check and Resolve

Is the concern any different than what was stated in comment 5119080 of the DTR - ATR 65% review? Please review the response and backcheck of that comment and clarify any unresolved issues.

At this time we are unable to provide a specific level of assurance since the size of the diversion upstream of the Maple River has not been set and the exact operation of the diversion inlet gates is not known. As stated in the DDR, we are certain that the conservative assumptions made in the design will result in greater than 90% assurance of

containing the 1% event.

Submitted By: [Aaron Buesing](#) (651-290-5627) Submitted On: Sep 24 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------|------------|-----------------------------------|-----|-----|-----|
| 5349813 | Hydraulics | Design Memorandum or Report | n/a | n/a | n/a |
|---------|------------|-----------------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: [App. C, Sect. C.1.2.4, p. C-8](#))

Coordinating Discipline(s): Hydraulics

An Attachment 01 and Attachment 03 are referenced; however, in reviewing files we have been provided, we have not seen Attachment 03 (HEC-RAS sediment transport modeling). The index indicates a 2012 date for DRAFT; is this available yet?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

Instead of including the referenced documents as Attachments, they have been provided in Appendix M and the reader has been referred to Appendix M where appropriate. The sediment transport analysis (HEC-RAS sediment transport modeling) is available and has also been included in Appendix M.

Submitted By: [Raymond Wilson](#) (601-631-5738) Submitted On: Sep 27 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------|------------|-----------------------------------|-----|-----|-----|
| 5349883 | Hydraulics | Design Memorandum or Report | n/a | n/a | n/a |
|---------|------------|-----------------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: [App. C, Sect. C.1.2.10, p. C-12](#))

Coordinating Discipline(s): Hydraulics

An Attachment 04 is referenced here; however, this Attachment is not listed in index. Could you please provide the name of the attachment, as well as provide for review?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

That reference was in error. It should have been Attachment 03 (HEC-RAS sediment transport modeling). However, that document has now been provided in Appendix M and the text has been edited to refer the reader to Appendix M.

Submitted By: [Raymond Wilson](#) (601-631-5738) Submitted On: Sep 27 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------|------------|-----------------------------------|-----|-----|-----|
| 5349911 | Hydraulics | Design Memorandum or Report | n/a | n/a | n/a |
|---------|------------|-----------------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: [App. C, Sect. C.2.1.1, p. C-12, second paragraph, first sentence](#))

Coordinating Discipline(s): Hydraulics

Please clarify - text infers that the segments between Sta. 403+47 to 413+47 and 413+47 to 456+00 are not part of Reach 4. Text in main DDR would indicate that these are still part of Reach 4, even though designed by others.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

That text has been edited to read as follows:

Reach 4 of the diversion is located between stations 350+00 and station 521+00. The design responsibilities will be divided among the local sponsor, the St. Louis District, and the Vicksburg District. The section between station 403+47 and 413+47 is the section within which the County Road 32 bridge will be constructed. The local sponsor is responsible for that section. The Rush River Inlet Structure lies between station 413+47 and 456+00 and it is being designed by the St. Louis District. The remainder of the reach is being designed by the Vicksburg District. A Map of Reach 4 with design features is included as Figure 4.

Submitted By: [Raymond Wilson](#) (601-631-5738) Submitted On: Sep 27 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|------------|-----------------------------------|-----|-----|-----|
| 5349942 | Hydraulics | Design Memorandum or Report | n/a | n/a | n/a |
|---------|------------|-----------------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: [App. C, Fig. C.7 and C.9](#))

Coordinating Discipline(s): Hydraulics

FYI - Stage duration is more typically plotted on arithmetic scale, not probability scale. Plotting on probability scale distorts plot compared to what most technical people would expect.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Check and Resolve

We are not opposed to making this change for future reaches, but a probability scale was also used for Reach 1. We prefer not changing these figures for Reach 4.

Submitted By: [Aaron Buesing](#) (651-290-5627) Submitted On: Sep 23 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5349954 Hydraulics Plans and Specs n/a n/a n/a

Comment Classification: **Sensitive But Unclassified (SBU)**
([Document Reference: Flow Duration and Rating Curve sheets](#))

Coordinating Discipline(s): Hydraulics

The flow duration and rating curve sheets should include a representation of uncertainty. For instance, the rating curve could include the 5% and 95% bands. Also, flow duration may not adequately express Contractor risk, perhaps annual frequency events should be provided as well?

Submitted By: [Dan Pridal](#) ((402)995-2336). Submitted On: Sep 11 2013

Evaluation not conducted

5349964 Hydraulics Design
Memorandum or n/a n/a n/a
Report

Comment Classification: **For Official Use Only (FOUO)**
([Document Reference: App. C, Table C-8](#))

Coordinating Discipline(s): Hydraulics

Please clarify - is there a drop associated with either the 10-yr or 500-yr event? If so, please include, as the headwater and tailwater conditions would seem to indicate.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation For Information Only

Table C-8 has been edited to remove the line for the 500-yr event since the Reach 4 drainage structure is only designed to pass the 100-yr event. The 200 foot wide lowered EMB section immediately downstream of the structure is provided to pass flow during a 500-yr event.

Submitted By: [Raymond Wilson](#) (601-631-5738) Submitted On: Nov 13 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5350042 Hydraulics Design
Memorandum or n/a n/a n/a
Report

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: App. C, p. C-25)

Coordinating Discipline(s): Hydraulics

In table 'Discharge Channel Downstream of Stilling Basins', could you please specify what discharge and n-value you are using? With a 2% slope, I believe you are going to be very close to critical depth, and you may have an undular water surface in this discharge channel, which may produce some undesirable flow characteristics when there is little tailwater from other drains/streams into the diversion.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation For Information Only

The design discharge is 520 cfs. The n-value used was .0273 for riprap lined channel (see response to 65% ATR comment no. 5119411). The computed depth is theoretically critical, Froude number = 1.3. However, the calculated values assume a channel with an impermeable surface which is not the case. With a riprap lined channel, a portion of the flow will be over and between the individual stones (interstitial flow) which, in my engineering judgement, will break up any undesirable flow patterns and, at the same time, decrease the flow depth above the top of the riprap layer. Based on the computed channel velocity and the computed acceptable D50 velocity for the riprap gradation chosen, no displacement of the riprap is expected. An additional section has been added to the appendix to address the basis for the riprap gradation chosen.

Submitted By: [Raymond Wilson](#) (601-631-5738) Submitted On: Sep 27 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------|------------|-----------------------------|-----|-----|-----|
| 5350089 | Hydraulics | Design Memorandum or Report | n/a | n/a | n/a |
|---------|------------|-----------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: App. C, p. C-33)

Coordinating Discipline(s): Hydraulics

Should the 'shaded' lines be labelled as they are in Fig. C.20?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

Figure updated to include labels.

Submitted By: [Donald Duncan](#) (314-331-8809) Submitted On: Nov 04 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|------------|-----------------|-----|-----|-----|
| 5350185 | Hydraulics | Plans and Specs | n/a | n/a | n/a |
|---------|------------|-----------------|-----|-----|-----|

Comment Classification: **Sensitive But Unclassified (SBU)**

(Document Reference: [VOI 1 Sheet CS503, 504](#))

Coordinating Discipline(s): Hydraulics

Note 1, if x is 2 ft or less no riprap is required. Recommend to require an erosion blanket even though the slope is 5H on 1V.

Suggest adding "See Note 1" to the detail by "X".

A cross section in the opposite direction as "A" on either the channel centerline or opposite bank is required. How does the rock tie into existing grade? Is the rock cut into the slope and grades matched? The dashed line on the detail would indicated the opposite bank slope is below grade by 3 ft min.

The detail shows a multiple view with rock from both the invert and the 2H:1V slope. A simple cross section cut may be preferred. If not, add the remaining "hidden" cut lines to the section. The detail would imply the edge of rock is 0.5 ft below existing while the plan view does not.

Submitted By: [Dan Pridal](#) ((402)995-2336). Submitted On: Sep 11 2013

Revised Sep 11 2013.

Evaluation not conducted

| | | | | |
|--------------------|-----------------|-----|-----|-----|
| 5350203 Hydraulics | Plans and Specs | n/a | n/a | n/a |
|--------------------|-----------------|-----|-----|-----|

Comment Classification: **Sensitive But Unclassified (SBU)**

(Document Reference: [VOI 1 Sheet CS505, Vol 2 cs 504](#))

Coordinating Discipline(s): Hydraulics

Recommend deleting the top soil layer from the low flow channel 4H:1V side slope, this would likely fall into the channel invert or be easily transported by flow. Also will be difficult to construct / compact. Revise excavation quantities if necessary.

Submitted By: [Dan Pridal](#) ((402)995-2336). Submitted On: Sep 11 2013

Revised Sep 11 2013.

1-0 Evaluation Non-concurred

The topsoiling of the low-flow channel side slopes was evaluated by MVP while developing the requirements of the vegetation within the diversion channel. It was determined that the low-flow channel side sides would be topsoiled and seeded after excavation to minimize growth of unwanted species. It was recognized that if large flows are passed through the low-flow channel before the vegetation is established, that the topsoil will likely be washed away. It is unknown when large flows are expected to pass through the low-flow channel so it was decided that topsoil the low-flow channel slopes was the better than not trying to establish any vegetation.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Nov 07 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5350205 Civil Plans n/a n/a n/a

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: Vol. I: CD101 and CD102)

Coordinating Discipline(s): Hydraulics

Are the contours shown on the right (looking downstream) to be part of the removal plan, or will this have already been graded prior to removal? If so, what set of plans will that grading be done under?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

Revised Sep 11 2013.

1-0 Evaluation For Information Only

The contours on the right bank are part of the proposed grading plan for reach 3. They will be in place prior to the execution of this contract.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 29 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5350210 Hydraulics Plans and Specs n/a n/a n/a

Comment Classification: **Sensitive But Unclassified (SBU)**

(Document Reference: Vol 1, 2 Sheet CS501, Vol 2 CS 300's)

Coordinating Discipline(s): Hydraulics

The sheet and the cross sections show the low flow channel as V notch but information for elevation difference or slope from the bank toe to the centerline is not consistent. in Vol 2, some sheets have 2% labeled, CS324 has a 6% label. Vol 2 CS501 has 2% on typical. Recommend to specify consistently on both 501 and 300 sheets in all volumes.

Submitted By: [Dan Pridal](#) ((402)995-2336). Submitted On: Sep 11 2013

Revised Sep 11 2013.

1-0 Evaluation Non-concurred

Slopes for the bottom of the diversion low flow channel are consistently labeled as 2%. Cross sections on CS324 with slopes labeled as 6% are not for the diversion low flow channel, they are for the Rush River drop structure. Throughout the cross sections, all typical slopes are labeled. However, as indicated in Note 3, skewed/non-typical slopes due to transitions or cross sections oriented perpendicular to the main channel control line are not labeled.

Submitted By: [Michael Hanks](#) (314-331-8252) Submitted On: Oct 04 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5350235 Civil Plans n/a n/a n/a

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: Vol I: CS501, Detail 3)

Coordinating Discipline(s): Hydraulics

Please clarify - notes on either side of low-flow channel at top of channel indicate 'VAR.'
Presumably, this is VARIES, but it is unclear what is varied? I thought the slope of the diversion channel bottom was 2% on either side of the low-flow channel?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation For Information Only

The slope on the diversion channel is 2%. However, this section is not cut perpendicular to the diversion channel: it is cut perpendicular to the low flow channel. When the low flow channel is not parallel to the diversion channel, the slopes do not measure 2%. Therefore, the slope varies with respect to this cross section as the low flow channel meanders back and forth.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 29 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5350273 Hydraulics Plans and Specs n/a n/a n/a

Comment Classification: **Sensitive But Unclassified (SBU)**

(Document Reference: VOL 1 Sheet CS300 sheets)

Coordinating Discipline(s): Hydraulics

Legend indicates "proposed work by others" for the second levee shown on the right bank that is still within the project zone. How is this accomplished? If concurrent it will impact the COE Contractor. It could also reduce quantities if before the COE contractor.

Submitted By: [Dan Pridal](#) ((402)995-2336). Submitted On: Sep 11 2013

Revised Sep 11 2013.

1-0 Evaluation For Information Only

That work is proposed in the Reach 3 plans. It will be executed under a separate contract prior to the start of construction.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 29 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5350338 Real Estate Plans n/a n/a n/a

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: [Vol I: RR101](#))

Coordinating Discipline(s): Hydraulics

The legend in the lower right has two line types for the same feature (Design Footprint) - please clarify (same comment applies to RR102).

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

The legend has been revised on RR101 and RR102. The legend now has the following entries: construction limit, construction easement, and design footprint.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 29 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------------|-------|-----|-----|-----|
| 5350377 Civil | Plans | n/a | n/a | n/a |
|---------------|-------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: [Vol II: C-102](#))

Coordinating Discipline(s): Hydraulics

In sizing the staging areas 1 and 2, were you assuming that all riprap and boulders for the rock ramp would be delivered prior to construction and require staging on-site, or was it assumed that the riprap and boulders would be brought in phases, so only a portion would be staged at one time? If the latter, will Staging Area 2 be used for riprap and boulders?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation For Information Only

The layout of the County Road 32 relocation and Diversion Channel projects leaves remnant pieces of land within the existing parcels. These remnant pieces of land are being used for staging areas. Both areas will be accessible from County Road 32 and will provide areas for the contractor to stage necessary equipment and materials on either side of the diversion channel. My assumption is that the rock will be brought on-site in phases as it is being placed. Staging Area 2 would not necessarily have to be used for riprap or boulders, but it could be if desired by the Contractor. Also rock materials could be stockpiled in other completed or partially completed work areas closer to where it will be permanently placed. The desired stockpile/placement sequencing will be left up to the means and methods developed by the contractor.

Submitted By: [Michael Hanks](#) (314-331-8252) Submitted On: Oct 04 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------------|-------|-----|-----|-----|
| 5350400 Civil | Plans | n/a | n/a | n/a |
|---------------|-------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: Vol II: CS201)

Coordinating Discipline(s): Hydraulics

Why is there an adverse slope to the top of channel profile between Sta. 413+47 and 416+00?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation For Information Only

The adverse slope is a transition from the top of channel profile within the Rush River reach to the top of channel profile with the CR32 bridge reach.

For the top of channel profile within the Rush River reach, the distance above the main channel invert was determined to best fit the daylight elevations of the 1:7 slopes and the existing ground. The longitudinal slopes for the top of channel profile were kept the same as those for the main channel invert in order to produce a consistent channel. This requires a transition to meet the top of channel profile determined for the CR32 Bridge reach. Note, the post-90% CR32 Bridge plans revised their top of channel elevation at Sta. 413+47 from 889.40 to 889.23, making the transition slope less adverse.

Submitted By: [Michael Hanks](#) (314-331-8252) Submitted On: Oct 04 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------|-------|-------|-----|-----|-----|
| 5350408 | Civil | Plans | n/a | n/a | n/a |
|---------|-------|-------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: Vol II: CS501)

Coordinating Discipline(s): Hydraulics

Detail 1 shows the center of the low-flow channel coinciding with the main channel control line - shouldn't this be labelled low flow channel control line instead?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

Labels in Detail 1 have been changed from "Main Channel Control Line" to "Low Flow Meander Control Line".

Submitted By: [Michael Hanks](#) (314-331-8252) Submitted On: Oct 04 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------|-------|-------|-----|-----|-----|
| 5350486 | Civil | Plans | n/a | n/a | n/a |
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Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: Vol III: CD102)

Coordinating Discipline(s): Hydraulics

Arrow leader for Project Grading Limits is not pointing to anything; it appears the grading limits for the project are not shown on this drawing.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

The grading limits have been turned on for sheet CD102 in Volume 3.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 29 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

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|---------------|-------|-----|-----|-----|
| 5350509 Civil | Plans | n/a | n/a | n/a |
|---------------|-------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: Vol III: CS301 and CS302)

Coordinating Discipline(s): Hydraulics

Typical Section at bottom of CS301 is same as at top of CS302; both are labelled as 'C'. Should the bottom Typical Section on CS301 be 'B' and be a different section?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

The label for typical section C on CS301 has been changed to "B". The section on CS302 has been replaced with the correct section C.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Nov 08 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | |
|---------------|-------|-----|-----|-----|
| 5350510 Civil | Plans | n/a | n/a | n/a |
|---------------|-------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

(Document Reference: Vol III: CS301 and CS302)

Coordinating Discipline(s): Hydraulics

Typical Section at bottom of CS301 is same as at top of CS302; both are labelled as 'C'. Should the bottom Typical Section on CS301 be 'B' and be a different section?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

The label for typical section C on CS301 has been changed to "B". The section on CS302 has been replaced with the correct section C.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Nov 08 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5350534 Civil Plans n/a n/a n/a

Comment Classification: **For Official Use Only (FOUO)**

([Document Reference: Vol III: CS302](#))

Coordinating Discipline(s): Hydraulics

Note on Typical Section D indicates that for Max. El. to see Note X. Please specify which note number is referred to here.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

The note has been corrected to read "MAX EL. (SEE NOTE 8)."

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Nov 08 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5350558 Civil Plans n/a n/a n/a

Comment Classification: **For Official Use Only (FOUO)**

([Document Reference: Vol III: CS320-321](#))

Coordinating Discipline(s): Hydraulics

Please clarify - is lower height of left bank EMB to act as an overflow for flood flows from left bank streams? Or to provide relief from diversion flows approaching top of levee? Or both? If intended to let flow from exterior into the diversion, shouldn't there be some slope protection below the low point where flow would go into the diversion?

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation For Information Only

The purpose of the lower section of the left bank EMB is to allow flow from the exterior into the diversion channel during exterior flood events. Specifically, it is to minimize impacts for a 0.2 percent event. The question of whether slope protection would be needed was discussed and it was decided that it would not be provided. That decision was based on the infrequency of events that would result in flow over the section and the likelihood that during those events the water level in the diversion channel would be high, limiting the amount of slope exposed to flow. It is expected that following such an event some minor repairs will be needed and that was considered acceptable.

Submitted By: [Raymond Wilson](#) (601-631-5738) Submitted On: Oct 04 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5350575 Structural Plans n/a n/a n/a

Comment Classification: **For Official Use Only (FOUO)**

([Document Reference: Vol III: S-100](#))

Coordinating Discipline(s): Hydraulics

Drawing appears to indicate in profile that top of riprap is higher than the top of slab at the end of slab. Please be sure riprap is no higher than top of slab at end of slab.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation For Information Only

The riprap does not extend above the top of the slab. There is a cross section show on S-504 that clarifies the riprap shown in the profile view.

Submitted By: [Marneshia Richard](#) (601-631-7055) Submitted On: Sep 30 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5350583 Real Estate Plans n/a n/a n/a

Comment Classification: **For Official Use Only (FOUO)**

([Document Reference: Vol III: RR101](#))

Coordinating Discipline(s): Hydraulics

Legend in bottom right has two different line types for the same item (Design Footprint), please correct. (same applies to RR102)

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

The legend on the real estate sheets has been corrected. "Design footprint" has been changed to "construction easement".

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 29 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5350590 Real Estate Plans n/a n/a n/a

Comment Classification: **For Official Use Only (FOUO)**

([Document Reference: Vol III: RR101](#))

Coordinating Discipline(s): Hydraulics

Arrows for Fee Title appear to have been extended too far (pointing to outer limits of temporary easement, rather than inner limits of temporary easement).

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

The fee title arrows have been corrected such that they are no longer pointing to the outer limits of the temporary easement.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 29 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | |
|-------------------|-----------------------------------|-----|-----|-----|
| 5350932 Economics | Design Memorandum or Report | n/a | n/a | n/a |
|-------------------|-----------------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**
([Document Reference: Appendix E, Table E-1](#))

If the utility lines are located within legal easements, suggest changing "Encroachments" to "Locations" in the title of Table E-1.

Submitted By: [Elizabeth Peake](#) (402-995-2686). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

You are correct: "Encroachments" is not the correct word to use. However, to be consistent with reach 1, the table has been renamed to "Utilities Reach 4." Although "Encroachments" was not changed to "Locations," the change should still resolve the issue.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Nov 06 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | |
|-------------------|-----------------------------------|-----|-----|-----|
| 5350935 Economics | Design Memorandum or Report | n/a | n/a | n/a |
|-------------------|-----------------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**
([Document Reference: Design Documentation Report - List of Acronyms](#))

On pages 42 and 43, the "E" in EC, EM, ER, and perhaps ETL stands for "Engineer", not "Engineering".

Submitted By: [Elizabeth Peake](#) (402-995-2686). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

The corrections have been made on sheet 41 and 42.

Submitted By: [Jonathan Boone](#) (601-631-5502) Submitted On: Sep 17 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | |
|-------------------|-----------------------------------|-----|-----|-----|
| 5350941 Economics | Design Memorandum or Report | n/a | n/a | n/a |
|-------------------|-----------------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**
(Document Reference: [Design Documentation Report](#))

All the editorial comments I submitted as an attached Word file in the September 2012 PER ATR on Reach 4 were either incorporated in the August 2013 version of the documents or were made moot due to revisions in wording. The expanded discussion of recreation in the August 2013 DDR was much appreciated and was handled in an acceptable manner.

Submitted By: [Elizabeth Peake](#) (402-995-2686). Submitted On: Sep 11 2013

1-0 Evaluation Concurred

Thank you for reviewing the documents.

Submitted By: [Jonathan Boone](#) (601-631-5502) Submitted On: Sep 17 2013

1-1 Backcheck Recommendation Close Comment

I have updated my ATR backchecks regarding my editorial comments for the PER documents for the Reach 4 ATR and Rush River ATR to state that I agree with the way my editorial comments were handled in the FTR documents that combined Reach 4 and Rush River.

Submitted By: [Elizabeth Peake](#) (402-995-2686) Submitted On: Sep 23 2013

Current Comment Status: **Comment Closed**

| | | | | |
|-------------------|-----------------------------------|-----|-----|-----|
| 5350964 Economics | Design Memorandum or Report | n/a | n/a | n/a |
|-------------------|-----------------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**
(Document Reference: [Appendix L](#))

Although Reach 4 Diversion Channel and Rush River Inlet/Drop Structure are both included in the title of the FTR Appendix L submitted for ATR, I could not find my two Sep 2012 Dr Checks comments on the Rush River Inlet/Drop Structure in the current Appendix L.

Submitted By: [Elizabeth Peake](#) (402-995-2686). Submitted On: Sep 11 2013

Revised Sep 12 2013.

Evaluation not conducted

5351148 Geotechnical Plans and Specs n/a n/a n/a

Comment Classification: **Public (Public)**

15 ft wide maintenance roads will only accomodate directional traffic. Consider constructing intermittent turnouts to permit vehicles to pass.

Submitted By: [David Sobczyk](#) ((402) 995-2249). Submitted On: Sep 12 2013

1-0 Evaluation For Information Only

MVP has been advised of this issue. Currently a recomendation paper for Reaches 1-5 is being drafted by MVP that will be presented to the sponsor for acceptance.

Submitted By: [Jonathan Boone](#) (601-631-5502) Submitted On: Nov 07 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5351162 Geotechnical Plans and Specs n/a n/a Details 1 and 2, Sheet CS501

Comment Classification: **Public (Public)**

Geotextile should extend laterally and be buried a minimum distance (typically at least 3 feet) outside any potential wheel path for adequate anchorage.

Submitted By: [David Sobczyk](#) ((402) 995-2249). Submitted On: Sep 12 2013

1-0 Evaluation Non-concurred

The Geotextile beneath the gravel is adequate without anchoring it. To anchor the Geotextile as suggested, a trench would be required, which is additional effort and not necessary for the maintenance road that will have low volume, infrequent use.

Submitted By: [Heather Sibley](#) (601-631-5917) Submitted On: Oct 07 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5351202 Geotechnical Plans and Specs n/a n/a n/a

Comment Classification: **Public (Public)**

NDDOT requirements for base materials permit the use of gravel materials with little to no plasticity and minimal fractured faces. It may be nearly impossible to maintain the smoothness requiremnts in the specs if certain gravels are used. Excessive rutting of the surface will also reduce the separation between wheel loads and the underlying geotextile, potentailly compromising the geotextile. Might consider eliminating the geotextile and thickening the granular materials, and/or specifying a suitable gradation of crushed, quarried rock. gradation.

Submitted By: [David Sobczyk](#) ((402) 995-2249). Submitted On: Sep 12 2013

1-0 Evaluation Non-concurred

The smoothness requirements are from standard language. Local experience has indicated that these requirements can be met. The design section of 8 inches of aggregate over Geotextile is based on local practices in the area and was reviewed against the design method for unpaved roads and is adequate for the purpose of the maintenance road.

Submitted By: [Heather Sibley](#) (601-631-5917) Submitted On: Oct 07 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5351650 Real Estate Plans and Specs n/a Sheet 1 of 2 n/a

Comment Classification: **For Official Use Only (FOUO)**
([Document Reference: Volume 3 ROW Drawings](#))

The areas for fee acquisition extend beyond the limits of fee and into the temporary easement area.

Submitted By: [Rick Noel](#) (402-995-2832). Submitted On: Sep 12 2013

1-0 Evaluation Concurred

The fee title arrows have been corrected on sheet RR101.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 29 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5351654 Construction Management Design Memorandum or Report Appendix E, E.2 n/a n/a

Comment Classification: **Public (Public)**

This section needs to be updated to reflect that a Phase II is needed for the property with equipment shed and storage tanks.

Submitted By: [Kathleen Englert](#) (402-995-2038). Submitted On: Sep 12 2013

1-0 Evaluation Concurred

The following has been added to paragraph E.2: "A Phase II ESA will also be required for this property."

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Nov 06 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5351656 Construction Management Design Memorandum or Report Appendix E, E.2 n/a n/a

Comment Classification: **Public (Public)**

Clarify capping of wells. The wells need to be properly abandoned to prevent any future conduit within the diversion.

Submitted By: [Kathleen Englert](#) (402-995-2038). Submitted On: Sep 12 2013

1-0 Evaluation For Information Only

Section 02 41 00, Para 3.1.2.4 "Abandoned Wells" has been updated to include the following information.

The Contractor shall not be responsible to seal any existing abandoned wells. If any wells are encountered that are not indicated on the drawings, the Contracting Officer shall be notified prior to any further work in that area and the well(s) have been properly abandoned and sealed.

Appendix E, E.2 has been updated to reflect the change.

Submitted By: [Jonathan Boone](#) (601-631-5502) Submitted On: Nov 07 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|-------------|------------------|-----|----------------------------|-----|
| 5351659 | Real Estate | Technical Report | n/a | Section E.9.1 Easements | n/a |
|---------|-------------|------------------|-----|----------------------------|-----|

Comment Classification: **For Official Use Only (FOUO)**
([Document Reference: Appendix E: Civil Site](#))

First sentence refers to both permanent and temporary easements. The ROW drawings seem to only show temporary easements. Please clarify by either changing this reference or revising ROW drawings to show the permanent easements.

Submitted By: [Rick Noel](#) (402-995-2832). Submitted On: Sep 12 2013

1-0 Evaluation Non-concurred

The ROW drawings show 2 types of easement: Fee Title and Temporary. The fee title is permanent easement. Due to another comment, the "Permanent easement" in the first sentence of Section E.9.1 has been changed to "Fee title."

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Nov 08 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|----------------------------|-----------------------------------|--------------------|-----|-----|
| 5351664 | Construction Management | Design Memorandum or Report | Appendix E, E.6 | n/a | n/a |
|---------|----------------------------|-----------------------------------|--------------------|-----|-----|

Comment Classification: **Public (Public)**

Clarify any temporary access roads and parking areas or will all access be by permanent roads and bridges that are to be constructed/diverted prior to the construction of the project. See also Appendix D, Section D.11.2.

Submitted By: [Kathleen Englert](#) (402-995-2038). Submitted On: Sep 12 2013

1-0 Evaluation Concurred

The following has been added: "Site access during construction will be provided by permanent roads already in place: County Road 169th Avenue SE, Co. Rd. 32, 168th Avenue SE, and 29th Street SE."

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Nov 06 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|-------------|-------|-----|-----|-----|
| 5351671 | Real Estate | Plans | n/a | n/a | n/a |
|---------|-------------|-------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**

I do not see that a RE Plan been prepared. At what point will it be completed?

Submitted By: [Rick Noel](#) (402-995-2832). Submitted On: Sep 12 2013

1-0 Evaluation Concurred

The real estate plan for the Fargo/Moorhead Project was done for the entire project dated August 2011. The REP was part of the feasibility report for the entire FMM project. No separate REP was necessary for each reach once the entire project was deemed feasible.

Submitted By: [Jonathan Boone](#) (601-631-5502) Submitted On: Nov 06 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|-------------------------|-----------------------------|-----------------------------|-----|-----|
| 5351676 | Construction Management | Design Memorandum or Report | Appendix E, E.9.1 and E.9.2 | n/a | n/a |
|---------|-------------------------|-----------------------------|-----------------------------|-----|-----|

Comment Classification: **Public (Public)**

E.9.1 addresses Reach 1. Clarify. The terminology for easements in the text need to reflect that on the plans. Currently the ROW plans use different terms than what is on the Design plans. For consistency and clarity, all of the types of easements and areas of construction (limits of work, design limits, construction easement; use one term for each area), etc. need to use the same terminology.

Submitted By: [Kathleen Englert](#) (402-995-2038). Submitted On: Sep 12 2013

1-0 Evaluation Concurred

Paragraph E.9.1 has been revised to clarify the terminology used in the DDR and rectify it with what is shown in the plans.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Nov 06 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|-------------------------|-----------------------------|-------------------|-----|-----|
| 5351679 | Construction Management | Design Memorandum or Report | Appendix E, E.9.2 | n/a | n/a |
|---------|-------------------------|-----------------------------|-------------------|-----|-----|

Comment Classification: **Public (Public)**

Assume all access road weight restrictions will be met by this project.

Submitted By: [Kathleen Englert](#) (402-995-2038). Submitted On: Sep 12 2013

Evaluation not conducted

| | | | | | |
|---------|-------------------------|-----------------------------|----------------|-----|-----|
| 5351682 | Construction Management | Design Memorandum or Report | Appendix K.2.4 | n/a | n/a |
|---------|-------------------------|-----------------------------|----------------|-----|-----|

Comment Classification: **Public (Public)**

Include the required mitigation acres and the number of acres currently under design to meet this number.

Submitted By: [Kathleen Englert](#) (402-995-2038). Submitted On: Sep 12 2013

Evaluation not conducted

| | | | | | |
|---------|-------------------------|-----------------------------|------------|-----|-----|
| 5351695 | Construction Management | Design Memorandum or Report | Appendix D | n/a | n/a |
|---------|-------------------------|-----------------------------|------------|-----|-----|

Comment Classification: **Public (Public)**

Provide clarification for the different water levels used for the various design assumption. Indicate why 7.5 - 10, 10, 5-20 feet, etc. was used for each particular parameter, i.e., excavations, seepage, stability, etc.

Submitted By: [Kathleen Englert](#) (402-995-2038). Submitted On: Sep 12 2013

Evaluation not conducted

| | | | | | |
|---------|-------------------------|-----------------------------|----------------------|-----|-----|
| 5351712 | Construction Management | Design Memorandum or Report | Appendix D, D.11.1.2 | n/a | n/a |
|---------|-------------------------|-----------------------------|----------------------|-----|-----|

Comment Classification: **Public (Public)**

Indicate if the the capacities of the materials to support construction will be determined prior to award or reference where this information may be in the design, plans or specifications.

Submitted By: [Kathleen Englert](#) (402-995-2038). Submitted On: Sep 12 2013

1-0 Evaluation Non-concurred

The excavation issue has been discussed both during Industry Days and the Constructability VE. Out of this, a test excavation was recommended to be pursued after construction is authorized. Until there is authorization, no additional information can be added.

Submitted By: [Heather Sibley](#) (601-631-5917) Submitted On: Oct 07 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|-------------------------|-----------------------------|-------------|-----|-----|
| 5351734 | Construction Management | Design Memorandum or Report | Phase I ESA | n/a | n/a |
|---------|-------------------------|-----------------------------|-------------|-----|-----|

Comment Classification: **Public (Public)**

General. The project text indicates Breimer as the property with the bins and farm building. However, the plans show this property as a different owner. Clarify. In addition, has this property been aquired. Indication is that the Phase II would be completed before aquisition.

Submitted By: [Kathleen Englert](#) (402-995-2038). Submitted On: Sep 12 2013

Evaluation not conducted

| | | | | | |
|---------|-------------|-----------------------------|-----|----------------------|-----|
| 5351843 | Real Estate | Design Memorandum or Report | n/a | Section 3.1, page 16 | n/a |
|---------|-------------|-----------------------------|-----|----------------------|-----|

Comment Classification: **For Official Use Only (FOUO)**
(**Document Reference: Design Documentation Report**)

I believe the reference in first sentence should be to Figure 5, not 2.

Submitted By: [Rick Noel](#) (402-995-2832). Submitted On: Sep 12 2013

1-0 Evaluation Concurred

The reference has been changed to "Figure 5".

Submitted By: [Jonathan Boone](#) (601-631-5502) Submitted On: Nov 04 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|--------------------|-----------------------------|-----|-----|-----|
| 5351867 | Project Management | Design Memorandum or Report | n/a | n/a | n/a |
|---------|--------------------|-----------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**
(Document Reference: [App. N](#))

Coordinating Discipline(s): Hydraulics

Sections N.2, N.3, N.4.1, N.4.3, N.6.1.1, N.6.2, N.6.5 contain no text. Additionally, the table of contents shows Sections N.8.1, N.8.1.1, and N.8.2, none of which are in the report. Recommend either taking these sections out or adding appropriate text in and resubmit for review.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 12 2013

Revised Sep 12 2013.

Evaluation not conducted

| | | | | | |
|---------|------------------------|-----------------------------|--------------|-----|-----|
| 5351876 | Landscape Architecture | Design Memorandum or Report | Paragraph 4. | n/a | n/a |
|---------|------------------------|-----------------------------|--------------|-----|-----|

Comment Classification: **Public (Public)**
(Document Reference: [Appendix K Attachment K-1 Planting Plan.pdf](#))

Expand discussion on what type of wildlife is desired and that which is not. Burrowing animals are not, especially around levees.

Submitted By: [Michael Jerina](#) (402-995-2202). Submitted On: Sep 12 2013

Evaluation not conducted

| | | | | | |
|---------|------------|-----------------------------|-----|-----|-----|
| 5352019 | Structural | Design Memorandum or Report | n/a | n/a | n/a |
|---------|------------|-----------------------------|-----|-----|-----|

Comment Classification: **For Official Use Only (FOUO)**
(Document Reference: [Vol. III, Sheet S-301](#))

Coordinating Discipline(s): Hydraulics

I would recommend giving consideration to lowering the downstream slab to the same elevation as the bottom of the impact basin, so that the drainage holes can drain the entire impact basin; otherwise over 18-inches of water will always pond in this structure, leading to prime mosquito breeding habitat in most years.

Submitted By: [Roger Kay](#) (402-995-2342). Submitted On: Sep 12 2013

1-0 Evaluation Non-concurred

The purpose of the sill is to slow the water. No drain holes are included in Bureau of Reclamation design standard.

With the standard design and state it is understood that water will pond in the structure. The structure will have no access for the public and any concern about water freezing in the basin has been addressed and designed for.

There is no concern for lowering the slab; this modified design of the Bureau of Reclamation design standard has been coordinated with H&H.

Submitted By: [Marneshia Richard](#) (601-631-7055) Submitted On: Oct 02 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|---------------------------|-----------------------------------|----------------------------|-----|-----|
| 5352043 | Landscape Architecture | Design Memorandum or Report | Grass List page 6 of 13 | n/a | n/a |
|---------|---------------------------|-----------------------------------|----------------------------|-----|-----|

Comment Classification: **Public (Public)**
([Document Reference: Appendix K Attachment K-1 Planting Plan.pdf](#))

Switchgrass is spelled wrong.

Submitted By: [Michael Jerina](#) (402-995-2202). Submitted On: Sep 12 2013

Evaluation not conducted

| | | | | | |
|---------|---------------------------|-----------------------------------|---------------|-----|-----|
| 5352135 | Landscape Architecture | Design Memorandum or Report | Page 11 of 13 | n/a | n/a |
|---------|---------------------------|-----------------------------------|---------------|-----|-----|

Comment Classification: **Public (Public)**
([Document Reference: Appendix K Attachment K-1 Planting Plan.pdf](#))

Include Western Wheat grass in zone 3 seed mixture
It can stand inundation for longer periods of time than Switchgrass, Wildrye, or Big Bluestem.

Submitted By: [Michael Jerina](#) (402-995-2202). Submitted On: Sep 12 2013

Evaluation not conducted

| | | | | | |
|---------|---------------------------|-----------------------------------|---|-----|-----|
| 5352208 | Landscape Architecture | Design Memorandum or Report | 32 92 19 for all volumes, Para. 3.8.1 | n/a | n/a |
|---------|---------------------------|-----------------------------------|---|-----|-----|

Comment Classification: **Public (Public)**

(Document Reference: [Appendix K Attachment K-1 Planting Plan.pdf](#))

Says in this paragraph that only 1 grass plant per square foot is acceptable. Is that acceptable? Seems awfully low. Then why are we seeding at about the rate of 36 seeds per square foot for only the wheatgrass and wildrye, not counting the oats or wheat. Shouldn't we be looking for an establishment rate of close to 10 plants per square foot minimum?

Submitted By: [Michael Jerina](#) (402-995-2202). Submitted On: Sep 12 2013

Evaluation not conducted

| | | | | | |
|---------|---------------|-----------------------------|-----|-----|-----|
| 5352270 | Environmental | Design Memorandum or Report | n/a | n/a | n/a |
|---------|---------------|-----------------------------|-----|-----|-----|

Comment Classification: **Public (Public)**

I have completed my review and have no comments.

thanks,

Aaron

Submitted By: [Aaron Quinn](#) (402-995-2669). Submitted On: Sep 12 2013

1-0 Evaluation Concurred

Thank you for your review.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 29 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | | |
|---------|--------------|-----------------|-----|-----|--|
| 5352793 | Geotechnical | Plans and Specs | n/a | n/a | Right Ditch Profile; Sheet CS202 vol 2 |
|---------|--------------|-----------------|-----|-----|--|

Comment Classification: **Public (Public)**

Has the need for riprap been evaluated for the drop from RDS station 0+00 into the former Rush River Channel.

Submitted By: [David Sobczyk](#) ((402) 995-2249). Submitted On: Sep 12 2013

1-0 Evaluation Check and Resolve

There is essentially no drop where the right ditch enters the former Rush River channel. Riprap protection is not required.

Submitted By: [Aaron Buesing](#) (651-290-5627) Submitted On: Nov 13 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5352794 Geotechnical Plans and Specs n/a n/a Sheet CS203 vol 3

Comment Classification: **Public (Public)**

Both profiles appear to be mislabeled as the left bank ditch.

Submitted By: [David Sobczyk](#) ((402) 995-2249). Submitted On: Sep 12 2013

1-0 Evaluation Concurred

Both profiles have been relabeled as "Right Bank Ditch".

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 29 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5352795 Geotechnical Plans and Specs n/a n/a Typical Sections Sheets CS301 and CS302; vol 3

Comment Classification: **Public (Public)**

Typical Section B on sheet CS 301 appears to be mislabeled as section C. Please verify size and location of left bank EMB shown in section C. on sheet CS 302.

Submitted By: [David Sobczyk](#) ((402) 995-2249). Submitted On: Sep 12 2013

1-0 Evaluation Concurred

Section B on CS301 has been relabeled correctly as section B. The typical section shown on CS302 has been replaced with the correct Section C.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Nov 08 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

5352802 Geotechnical Plans and Specs n/a n/a vol 3 Sheets CS405 through CS407.

Comment Classification: **Public (Public)**

Riprap around the inlet and outlet is called out as both R200 and R45. Please clarify.

Submitted By: [David Sobczyk](#) ((402) 995-2249). Submitted On: Sep 12 2013

1-0 Evaluation Concurred

The R200 callouts have been changed to read R45.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 29 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

| | | | | |
|----------------------|-----------------|-----|-----|----------------------|
| 5352805 Geotechnical | Plans and Specs | n/a | n/a | vol 3 Sheets S503 |
|----------------------|-----------------|-----|-----|----------------------|

Comment Classification: **Public (Public)**

Details A and B both depict structural backfill placed along the sides of the select granular fill and CLSM flowable fill, respectively. Detail will be difficult to construct and unnecessary. Clarify if intent is to place these materials within the sides of individual trenches.

Submitted By: [David Sobczyk](#) ((402) 995-2249). Submitted On: Sep 12 2013

1-0 Evaluation For Information Only

Yes, these details will be difficult to construct; but, due to the soils and the rebound/settlement anticipated the design team believes these details are necessary. Avoiding a seepage path along the pipes is a big concern.

It will be up to the contractor to determine the best placement method to meet the minimum shown in the details.

Submitted By: [Marneshia Richard](#) (601-631-7055) Submitted On: Oct 02 2013

Backcheck not conducted

Current Comment Status: **Comment Open**

Public / SBU / FOUO

Patent 11/892,984 [ProjNet](#) property of ERDC since 2004.
