

Comment Report: All Comments

Project: Fargo Moorhead Metro - Reach 4 Design by MVK

Review: PER - Sponsor Review

Displaying 12 comments for the criteria specified in this report.

<b>Id</b>	<b>Discipline</b>	<b>DocType</b>	<b>Spec</b>	<b>Sheet</b>	<b>Detail</b>
4840670	Design Team Leader	Plans	n/a	n/a	n/a

Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Civil

Rick Carson (204-478-3237), Drawings of Channel for Reach 4 vs Reach 5: The drawings of the channel are quite different in the format and detail. Although there seem not to be technical issues with the data and geometries shown, would it not be appropriate to coordinate the drawing formats to be consistent? For example, the fonts and line weights are quite different between the reaches, the Reach 4 drawings only include typical cross sections whereas the Reach 5 drawings include cross sections at a variety of locations, the channel cross sections for reach 4 do not show the levee section embedded in the EMB and the Reach 5 drawings do show that detail, longitudinal slopes of the channel are given in the drawings for Reach 4 but not Reach 5. This is not a big issue and it may be prudent to address the inconsistencies at the 65% level of completion.

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

**1-0 Evaluation Concurred**

Detailed consistency guidance has been coming from MVP over the past few weeks. Unfortunately, the plan set that was presented with this review was developed prior to some of the guidance. Consistency is a goal among all of the districts that are developing plan sets, and the plan set presented with the 65% package will address many of the issues mentioned in your comment: the reach 4 65% plan set will include cross sections cut every 100 ft that will include the embedded levee section. The reach 5 team plans to include longitudinal slopes in their next submittal as well.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 01 2012

**1-1 Backcheck Recommendation Close Comment**

Rick Carson (204-478-3237) responded: Good. Thanks  
RWC

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Apr 15 2013

Current Comment Status: **Comment Closed**

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4840676	Civil	Plans	n/a	S-105	n/a
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Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Civil

Rick Carson (204-478-3237): Will this intake possibly have to function with water levels above the crown of the pipe? If so, could negative pressure develop within the inlet pipe, as it becomes submerged? Is the pipe designed for the differential pressures that may develop due to that phenomenon? Vertical vent pipe(s) are often included in a design of this type to avoid negative pressures and excessive loads on the upper part of the pipe. Also, riprap is a normal detail around the pipe entrance to protect against the erosive effects of vorticity (especially directly above the pipe entrance). Has that been considered and should it be part of the next level of design detail?

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

**1-0 Evaluation For Information Only**

Structural damage due to flow surging/pulsing is not an issue and the potential loss of conveyance is relatively small for these rural culverts. Therefore it has been determined that venting is not necessary for the culverts inlets discharging into the diversion. More details regarding the energy dissipation design will be presented in the next submittal.

Submitted By: [Jonathan Boone](#) (601-631-5502) Submitted On: Oct 22 2012

**1-1 Backcheck Recommendation Close Comment**

Rick Carson (204-478-3237)responded: ok

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Apr 15 2013

Current Comment Status: **Comment Closed**

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4840680	Civil	Plans	n/a	S-105	n/a
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Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Civil

Rick Carson (204-478-3237): A minor detail, but it is not clear how the handrail is terminated at each end of the structure to prevent the public from getting close to the dangerous intake area at water level. Also, it is not clear how the public will be restricted from access at the outlet area. It could be expected that the Local Sponsor will insist that public safety must be a prime consideration at these structures.

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

**1-0 Evaluation For Information Only**

The structure now has wingwalls at its ends. The wingwalls slope down to meet natural ground. Handrails will be provided along the headwall, will continue along the wingwalls and terminate at natural ground. Access restriction at the outlet area is being considered and will be addressed in future submittals.

Submitted By: [Marneshia Richard](#) (601-631-7055) Submitted On: Oct 01 2012

**1-1 Backcheck Recommendation Close Comment**

Rick Carson (204-478-3237) responded: ok

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Apr 15 2013

Current Comment Status: **Comment Closed**

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4840684 Civil Plans n/a C101 n/a

Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Civil

Kyle Volk (701-499-5861): Main Channel Elevation – Unclear if this is the elevation of the main channel toe or the intersection of the low flow channel with the main diversion channel bottom. Need to coordinate elevations between reaches.

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

Revised Sep 26 2012.

**1-0 Evaluation Concurred**

The elevation shown in the profile represents the theoretical convergence of the 2% cross slopes along the bottom of the main channel (in the dead center of the diversion). This will be clarified on C-301 in the next submittal.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 01 2012

**1-1 Backcheck Recommendation Open Comment**

Still Unclear, recommend adding labels to profile lines and update notes with comment evaluation

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Jun 24 2013

**1-2 Backcheck Recommendation Close Comment**

Kyle Volk (701-499-5861):

Comment response is acceptable and has been verified.

Submitted By: [John Glatzmaier](#) (651-365-8526) Submitted On: Oct 25 2013

**2-0 Evaluation Concurred**

Labels have been added to the profiles. Also, a dotted line has been added to the typical sections showing the theoretical convergence of the 2% cross slopes along the bottom of the main channel with an annotation calling out the main channel invert elevation.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Aug 22 2013

*Backcheck not conducted*

Current Comment Status: **Comment Closed**

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4840687 Civil Plans n/a C301 n/a

Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Civil

Kyle Volk (701-499-5861): Typical Section – Section appears to be from preliminary section documents and not based off of MFR-001.

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

**1-0 Evaluation Concurred**

The berms shown were developed using initial documentation. The cross sections shown with the 65% submittal will represent the EMB section discussed in MFR-001, and it will incorporate the 250' crown width for recreation as well as the 21' max height view shed constraint.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 01 2012

**1-1 Backcheck Recommendation Close Comment**

OK Thanks

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Jun 24 2013

Current Comment Status: **Comment Closed**

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4840690	Civil	Plans	n/a	C301	n/a
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Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Civil

Kyle Volk (701-499-5861): Typical Section – No exterior ditching.

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

**1-0 Evaluation Concurred**

The 65% submittal will include the exterior ditching detailed in the most recent edition of the local drainage report.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 01 2012

**1-1 Backcheck Recommendation Close Comment**

OK Thanks

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Jun 24 2013

Current Comment Status: **Comment Closed**

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4840696	Civil	Plans	n/a	C-102	n/a
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Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Civil

John Glatzmaier (651-365-8526): Provide excavation transition detail at station 403+47 for transition to CR-32 construction package.

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

**1-0 Evaluation Concurred**

Transition details will be included in the 65% submittal for the transtions at stations 325+00, 403+47, 456+00, and 521+00.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 01 2012

**1-1 Backcheck Recommendation Close Comment**

John Glatzmaier (651-365-8526)responded:

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Apr 15 2013

Current Comment Status: **Comment Closed**

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4840700	Civil	Plans	n/a	C-105, cross section	n/a
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Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Civil

John Glatzmaier (651-365-8526): Provide excavation transition detail at station 521+00 for transition to CR-32 construction package.

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

**1-0 Evaluation Concurred**

Transition details will be included in the 65% submittal for the transtions at stations 325+00, 403+47, 456+00, and 521+00.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 01 2012

**1-1 Backcheck Recommendation Close Comment**

John Glatzmaier (651-365-8526)responded:

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Apr 15 2013

Current Comment Status: **Comment Closed**

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4840704	Design Team Leader	Plans	n/a	n/a	n/a
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Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Design Team Leader

Bruce Spiller (719-338-1484), General comment: Is the EMB surface ready for undulation design by the Local Sponsor or are there know or expected changes?

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

### 1-0 Evaluation For Information Only

Guidance regarding the undulation design as well as the view shed analysis was provided while these documents were already under review. There will be changes prior to the 65% submittal in order to accommodate the crown width required for undulation design as well as the view shed maximum height.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 01 2012

### 1-1 Backcheck Recommendation Close Comment

Bruce Spiller (719-338-1484) responded: ok

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Apr 15 2013

Current Comment Status: **Comment Closed**

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4840706	Design Team Leader	Plans	n/a	n/a	n/a
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Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Civil

Bruce Spiller (719-338-1484), General comment: Are the Main Channel Profile and Low Flow Profile Control Line layouts consistent with what was agreed to for the Reach 1 DTR?

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

Revised Sep 26 2012.

### 1-0 Evaluation For Information Only

The control lines and layouts were provided in an .alg file from the USACE St. Paul District, and the profiles shown were developed using that unaltered file. The only difference between the profiles shown in the reach 1 documents and the reach 4 documents is a difference in line style (which will be addressed by the 65% submittal) and the elevation annotations at the edge of the profile (reach 4 included them, reach 1 didn't). If I misunderstood the comment, please don't hesitate to contact me directly at (601) 631-5327.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 01 2012

### 1-1 Backcheck Recommendation Close Comment

Bruce Spiller (719-338-1484) responded: ok

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Apr 15 2013

Current Comment Status: **Comment Closed**

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4840710	Design Team Leader	Plans	n/a	Plans and Profile Sheets	n/a
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Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Civil

Bruce Spiller (719-338-1484), Plans and Profile Sheets: The Low Flow Channel appears to be outside the 200 foot meander belt width.

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

Revised Sep 26 2012.

**1-0 Evaluation Concurred**

The low flow does violate the 200' belt width in a few locations. It will be resolved as the low flow is refined further. However, these incidents are isolated and the violations are minimal (on the order of a few feet). They will be addressed by increasing the curve radii at the low flow PIs where the violations occur.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 01 2012

**1-1 Backcheck Recommendation Close Comment**

Bruce Spiller (719-338-1484) responded: ok

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Apr 15 2013

Current Comment Status: **Comment Closed**

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4840714	Design Team Leader	Plans	n/a	Plans and Profile Sheets	n/a
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Comment Classification: **Public (Public)**

**Coordinating Discipline(s):** Civil

Bruce Spiller (719-338-1484), Plans and Profile Sheets: Why is the Low Flow Channel layout "angular", shouldn't the layout be consistent with the other Reaches?

Submitted By: [John Glatzmaier](#) (651-365-8526). Submitted On: Sep 26 2012

**1-0 Evaluation Concurred**

The alignment used to create the line work on the plan and profile sheets is not angular. The lines representing the low flow top banks and toes appears angular because they are the InRoads-generated features that were created by dropping templates along the non-angular low flow centerline alignment. Because the template drops were placed every 50', the features appear to be angular with line segments approximately 50' long. This issue will be addressed in one of two ways for the 65% submittal: 1) the template drop interval will be reduced to an interval small enough that the angularity of the features is not easily perceived (this method will accurately depict top banks that "skew" properly as the channel winds back and forth, but it will still appear angular if you zoom in close enough) or 2) the non-angular low-flow centerline will be offset an even distance along the centerline of the low-flow (angularity is completely gone, but top banks are not skewed accurately using this method).

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Oct 01 2012

**1-1 Backcheck Recommendation Open Comment**

Bruce Spiller (719-338-1484) responded: Drawings still contains angular layout for low flow channel.

Submitted By: [Matthew Marosek](#) (913-458-9318) Submitted On: Apr 15 2013

**1-2 Backcheck Recommendation Close Comment**

Bruce Spiller (719-338-1484):

Comment response is acceptable and has been verified.

Submitted By: [John Glatzmaier](#) (651-365-8526) Submitted On: Oct 25 2013

**2-0 Evaluation Concurred**

The template drop interval has been decreased to 5'. All lines associated with the low flow channel in the plan view appear smooth and rounded. The alignment of the low flow was determined using the same alignment segments that reach 1 provided, so the layout is nearly identical to other reaches.

Submitted By: [Colby Bankston](#) (601-631-5327) Submitted On: Aug 22 2013

*Backcheck not conducted*

Current Comment Status: **Comment Closed**

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Public / SBU / FOUO

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

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