



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday June 19, 2019

Agenda Item

Item 4. D. - Eden Prairie Area #3 Inclinometer Readings

Prepared By

Linda Loomis, Administrator

Summary

There is a reach of the Minnesota River (RMP 19) that the city of Eden Prairie asked the LMRWD to assess. A residential neighborhood sits atop a bluff that appears to have had significant slope failures in the past. In fact, you can see the river has a bend that is moving down the river valley (see Wenck 2010 report). In 2010, the LMRWD requested Wenck Environmental Consulting & Engineering to study the area and propose options to stabilize the slope. A report [Minnesota River Bank and Bluff Stabilization, Eden Prairie, Minnesota](#), was prepared. In order to monitor movement of the bluff, the LMRWD placed inclinometers in the slope. Braun Intertech has been taking readings from the Inclinometers annually since they were installed.

Readings were attempted in February 2019. However, one of the inclinometers had an ice plug in it preventing measurements from being taken. Braun Intertech went out again in April and they were able to take readings in both inclinometers. Movement was noticed in both inclinometers. Braun has recommended that reading be taken again in a couple of weeks. The LMRWD authorized additional readings. The readings have been shared with the city of Eden Prairie.

Staff met with Phil Solseng and Len Kremer of Barr Engineering to discuss the significance of the movement. Staff will check the data for Quality Assurance/Quality Control (QA/QC). Staff also expects to conduct a field inspection of the toe of the slope once the water level of the river recedes enough to make an inspection safe. Staff will bring its findings to the Board for consideration of possible actions.

Attachments

Inclinometer readings

Recommended Action

No action recommended

Inclinometers in Eden Prairie

Ripp, Bryan <BRipp@braunintertec.com>
To: Linda Loomis <naiadconsulting@gmail.com>

Fri, Mar 22, 2019 at 7:01 PM

Linda

We went out about a month ago and one of the inclinometers had an ice plug in it such that we could not lower the probe. Hopefully the ground will thaw sufficiently over the next few weeks such that we can get readings. Of the one we could read, little or no movement was measured.



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MN River Inclinometers

Ripp, Bryan <BRipp@braunintertec.com>
To: Linda Loomis <naiadconsulting@gmail.com>

Wed, May 29, 2019 at 11:27 AM

Linda

Attached are the most recent plots. We are starting to see more movement in both inclinometers. As I wrote to you earlier there was ice in ST-4 inclinometer for the reading on February 14. However, as you can see, the readings for ST-3 on February 14 and April 22 are essentially identical. I recommend that we take another set of readings soon, say within the next couple of weeks to see if the movement has calmed down.







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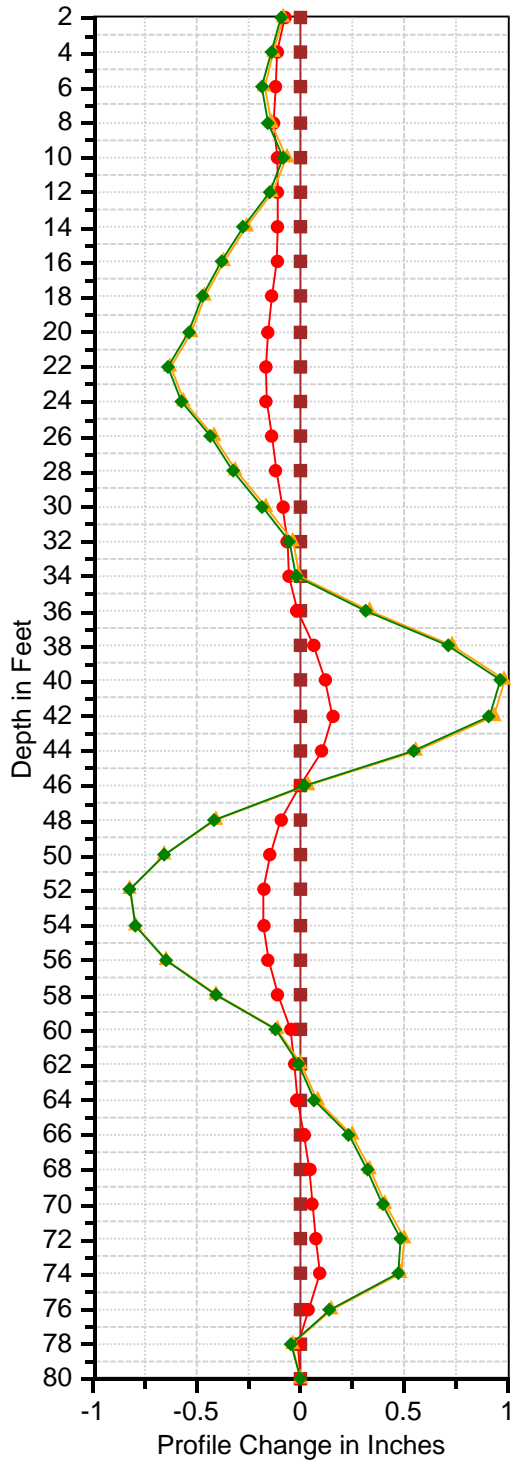
braunintertec.com | [Twitter: Braun Intertec](#) | [LinkedIn: Braun Intertec](#)

4 attachments

-  **ST-4 CD 5_3_2019.pdf**
230K
-  **ST-4 ID 5_3_2019.pdf**
226K
-  **ST-3 CD 5_3_2019.pdf**
230K
-  **ST-3 ID 5_3_2019.pdf**
228K

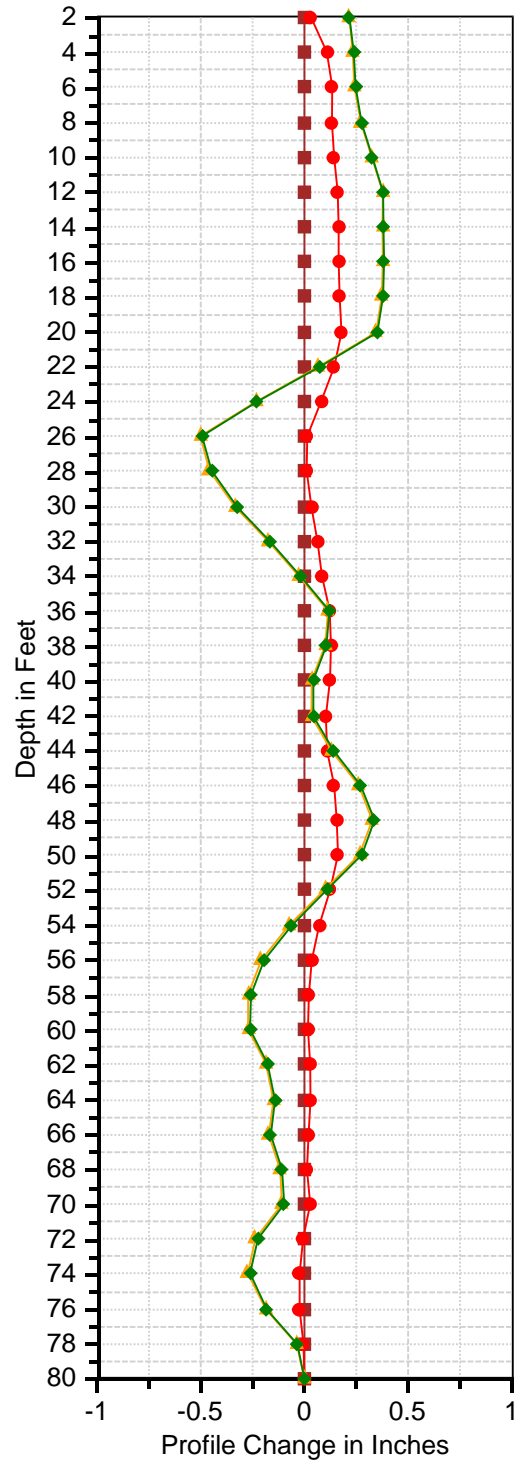
MNRIV ST_3 A

10/22/2010 11/21/2017
2/14/2019 4/22/2019



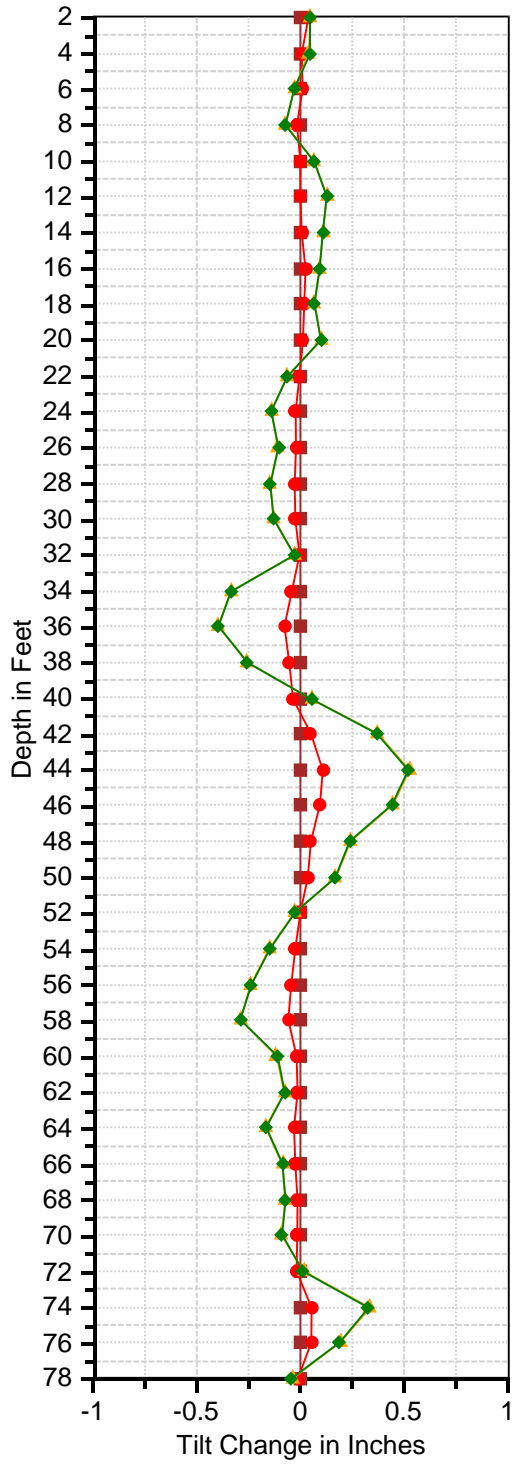
MNRIV ST_3 B

10/22/2010 11/21/2017
2/14/2019 4/22/2019



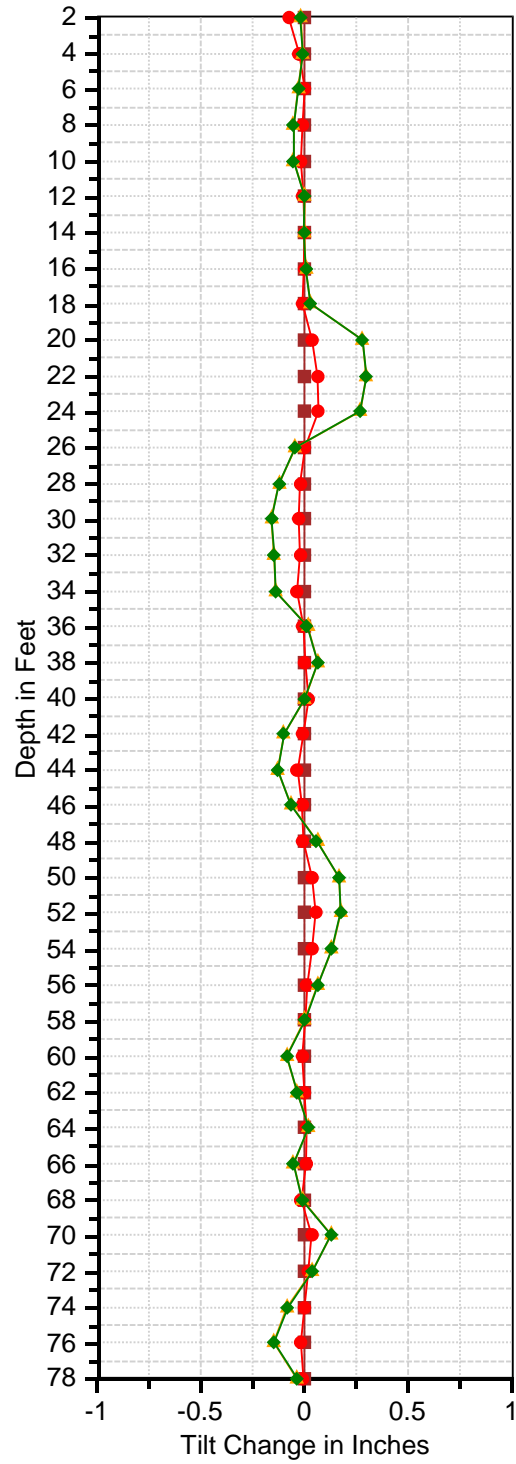
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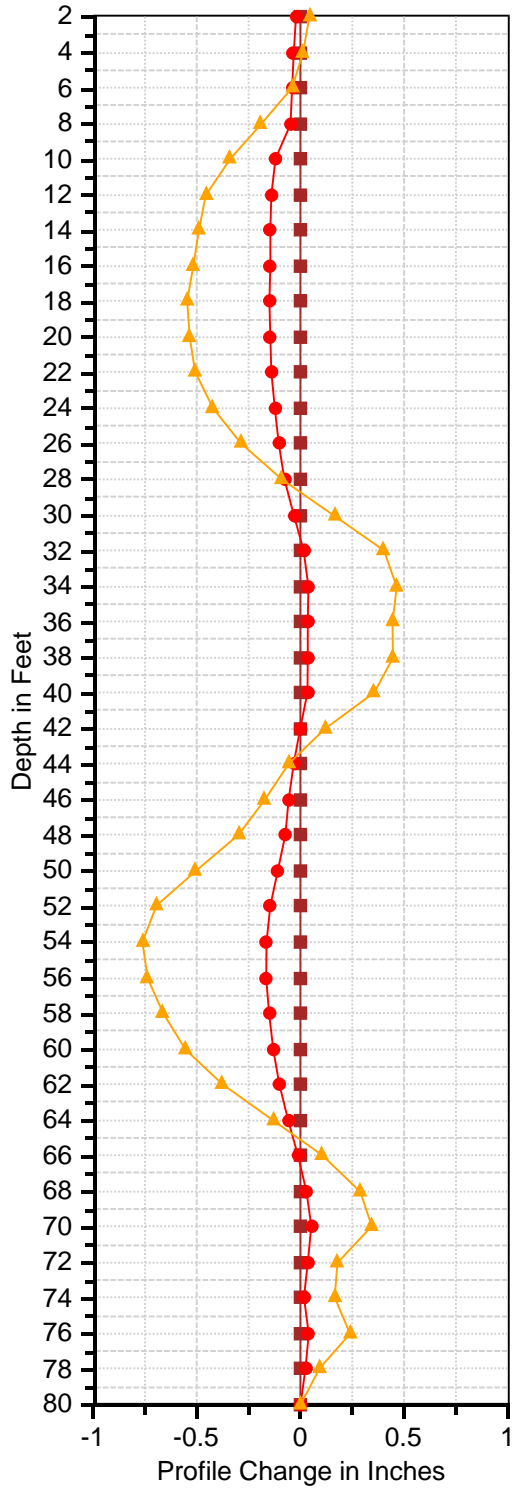
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10/22/2010 11/21/2017
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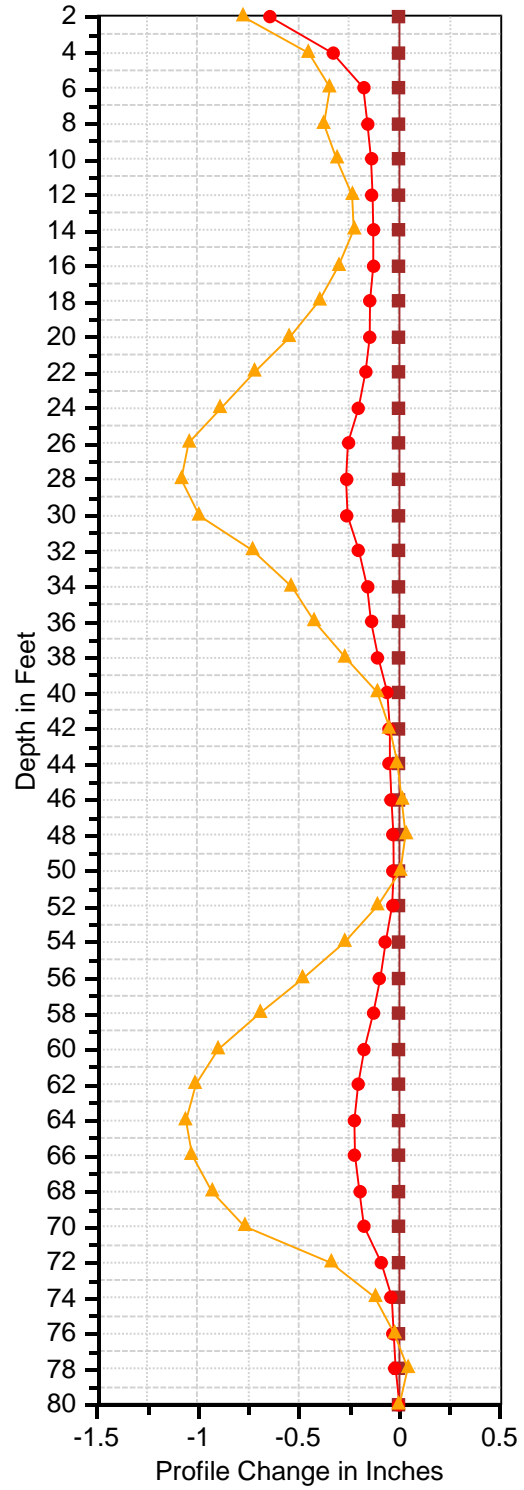
MNRIV ST_4 A

10/22/2010 11/21/2017 4/22/2019



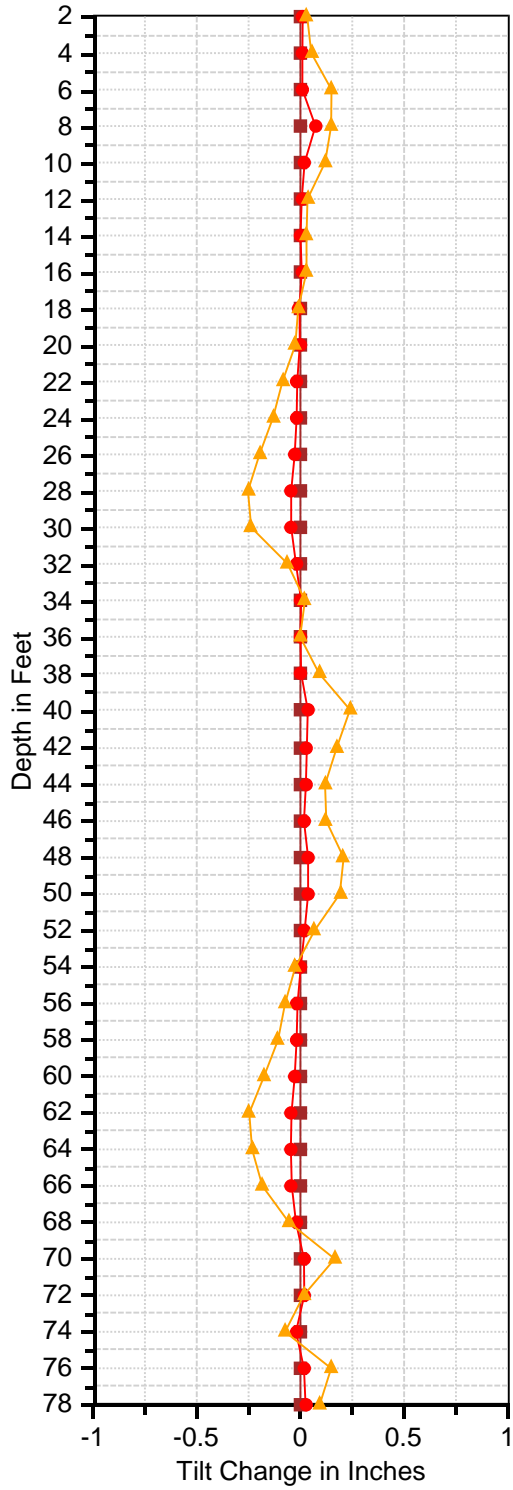
MNRIV ST_4 B

10/22/2010 11/21/2017 4/22/2019



MNRIV ST_4 A

10/22/2010 11/21/2017 4/22/2019



MNRIV ST_4 B

10/22/2010 11/21/2017 4/22/2019

