



November 30, 2015

Julie Prescott  
North Dakota Public Service Commission  
600 East Boulevard Avenue, Dept. 408  
Bismarck, ND 58505-0480

Dear Mrs. Prescott:

Carlson McCain, Inc. (CMI) conducted an onsite inspection of the Vantage West Spur Lateral Pipeline Project (Case No. PU-15-142) on November 23, 2015, on behalf of the North Dakota Public Service Commission (PSC). The project consists of installing 47.8 miles of pipelines, which will connect the Stateline II Gas Processing Plant to the existing Vantage ethane pipeline system near Stady, North Dakota.

CMI Inspector Sean Garry met with David Goodspeed, Pembina, Safety Manager, and Garrett Pletcher, Pembina, Construction Manager at the Project Management field office to review construction progress of the project. Tomahawk Pipeline Construction, Inc (Tomahawk) is the contracted pipeline installer.

Construction progress outlined in weekly reports submitted since project construction commenced the week of September 14<sup>th</sup>, 2015, was reviewed and discussed. In the latest construction progress report ending November 22, 2015, Pembina reported 100% of the ROW has been cleared and graded, and 89% of the pipeline has been installed and backfilled, with the ROW reclaimed up to 69<sup>th</sup> St. Between 8 and 12 inches of topsoil was reported to have been stripped during the clearing of the ROW. Mr. Pletcher said that regular inspections for the Storm Water Pollution Prevention Plan (SWPPP) have been occurring after each rainfall and they are on file. Mr. Goodspeed discussed the safety practices being implemented on the site.

Mr. Goodspeed and Mr. Garry proceeded to the ROW to view safety practices, construction, and verification of avoidance areas being protected. Robert Garay, Pembina Safety Inspector, was met along the ROW and was also consulted on the progress of construction. Inspection notes and photos taken along the ROW are attached to this letter.

#### Field Review

Weather conditions at the time of the field visit were sunny, 40 degrees, with light wind. ROW soil surfaces were dry. As noted in the weekly progress reports, multiple phases of construction were underway.

Locations of roadway and stream crossing of horizontal directional drill (HDD) were observed. Test Lead cathode protection was in place for the bored pipe. Potholing near the OneOK pipeline running parallel to where the new pipe was being installed was also observed.

The ROW width going through a windbreak and under a couple wetland/stream areas were minimized to only the necessary crossing with of construction equipment. Wooden matting was appropriately placed within the wetland/stream area to minimize compaction and additional surface disturbance. There was one wooden mat that had some broken timbers. This was brought to the attention of Mr. Garay and then to the Tomahawk crew to be fixed.

Silt fence was established in appropriate areas along the ROW. However, where they were currently working there were some damaged erosion control devices (ECDs) that need some maintenance. The area in question was pointed out to and discussed with Mr. Goodspeed and Mr. Garay. They agreed and contacted the Tomahawk maintenance crew to address the issue. Neither this area nor other areas along the project site had any soil erosion or sediment transfer into sensitive areas outside of the staked ROW.

Construction procedures appeared to be in compliance with the siting laws and rules, and the applicable Findings of Fact, Conclusions of Law, and Order.

Please contact me at 701-595-7008 if you have any questions or comments.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Sean Garry". The signature is written in a cursive, somewhat stylized font.

Sean Garry  
Project Engineer

cc: Mr. Garrett Pletcher – Construction Manager, Pembina  
Mr. David Goodspeed – Safety Manager, Pembina

Attachments: Figures, notes and correspondence



Figure 1. Photo taken of ROW looking north from 69<sup>th</sup> Street NW. The test lead for cathode protection and reclamation are visible.



Figure 2. Overhead protection in place while working around the powerlines and preparing to bore under the road.



Figure 3. Potholing done parallel to pipeline installation. Proper indicators and safety practices in place.



Figure 4. Clearing in windrow made for boring underneath road. ROW reduced to the width of equipment being able to safely proceed with construction while reducing the area disturbed.



Figure 5. Open trench fenced off. Final coatings on the welds still needed after the tie-ins are made.



Figure 6. ROW reduced to the width of equipment crossing a wetland on a wooden mat bridge. Geotextile fabric is placed underneath the mat to prevent subsoils from mixing into the topsoil in the wetland.



Figure 7. Silt fencing around boring area to prevent soils from entering the ROW.



Figure 8. Photo of the shaker machine separating rocks from subgrade soil.



Figure 9. Photo of pipe being lowered into the trench.



Figure 70. Photo of ditch construction along wetland boundary and silt fencing damaged. The Tomahawk maintenance crew was notified to repair the fence.