

## 2022 Morton County Phase 3 Project Summary

**Earthwork Contractor:** Wilson Construction, Inc. of Scranton ND

**Subcontractor:** Thomas & Sons Construction of Driscoll, ND

**Contract Number:** AM-866-22

**Contract Cost:** \$239,636.00

**Tree Removal Contractor:** Advanced Tree Service, Inc. of Bismarck ND

**Contract Number:** AM-862-22

**Contract Cost:** \$41,750.00

**Total Project Costs:** \$239,636 + \$41,750 + \$1,259 (Abstract and Newspaper Notice) = **\$282,645**

**Location:** The site is located approximately six miles northwest of New Salem in Morton County.

Legal Description: Section 19, T140N R85W

2022 eAMLIS Project Information							
Project	Problem Area Number & Name	Project Start Date	Project End Date	Working Days	Project Cost	Estimated Population Impacted	Reclamation Success
Surface/Highwalls	ND000100/North New Salem	6/20/2022	8/10/2022	38	\$239,636.00	19, census data	3,390 ft of Highwall Reclaimed
Tree Removal	ND000100/North New Salem	3/15/2022	3/29/2022	10	\$41,750.00	19, census data	68 Trees Removed

## Background

The Public Service Commission administers the Abandoned Mine Lands (AML) Program on behalf of the State of North Dakota. The State AML Program was approved by the U.S. Department of the Interior in 1981 under the authority of the Surface Mining Control and Reclamation Act of 1977 (P.L. 95-87, Title IV). Program funding comes from a federal reclamation fee on coal that has been mined in the United States since the late 1970's. These fees are placed into the AML fund and the money that North Dakota receives from this fund is used to eliminate existing and potential public hazards resulting from abandoned surface and underground coal mines.

Historic records documented in the *1983 Centennial History of New Salem* indicate the mine operated from the 1900s until the early 1950s. A small surface mine is visible in a 1938 aerial photo (**Figure 1**). Mining had been completed by 1957, which is evident by comparing current aerial imagery to the 1957 aerial imagery (**Figure 2**). In 1990 the AML Division conducted a small reclamation project to reclaim the most dangerous highwalls at this site. The entire area could not be addressed due to limited funding.

## Tree Removal

The Youngtown Mine contained numerous large trees that would have inhibited dirt-moving operations. Tree removal in AML projects is conducted during winter months to limit the potential impact to raptors and the threatened Northern Long-Eared Bat. On February 28, 2022, the Commission executed Contract AM-862-22 with Advanced Tree Service, Inc. Tree removal began on March 15, 2022, and all trees were felled and removed by March 29, 2022. (**Figures 3 and 4**).

A total of 68 trees were removed from the site with 55 of the trees having trunks greater than eight inches in diameter. All trees were hauled off-site (**Figure 5**) and disposed of in the New Salem landfill. The total cost of the tree removal contract was \$41,750.

## West Youngtown Tract

Construction started in late June with the installation of the floating turbidity curtain to protect the pond that developed in the final pit (**Figure 6**). A total of 1,225 feet of silt fencing was installed to control sediment. A safety barrier mesh was also used to protect the landowner's pet cemetery.

A map shows the pre-reclamation topography along with the north borrow site, south fill site, and pet cemetery (**Figure 7**). The original plan was to complete the reclamation of this site first and then move to the East Youngtown Site. However, there were delays in the delivery of gravel and the site received five inches of rain between July 2 and July 9. In late July the proposed haul road area was still saturated from the recent rains. The project manager and contractor decided that topsoil would be used to bridge the saturated section of the haul road. The topsoil stockpile bridge was completed by July 26 (**Figure 8**). Additionally, a gravel road was constructed (**Figure 9**) and it tied into the topsoil bridge. It was used to haul spoil from the north highwall to the two southern pits (**Figure 10**). Moving spoil from the north borrow area went as planned with dozers leveling the scraper dumps and they also pushed spoil material up to the highwall.

After excavating approximately 15 feet of spoil on the north highwall native topsoil was uncovered and salvaged (**Figure 11**). On August 2, all excavation and backfilling activities were complete and the topsoil used to bridge the saturated area was removed and respread on the site (**Figure 12**). Additional manure was hauled to the West Youngtown Site and incorporated into the topsoil. On August 5, all earthwork was completed (**Figure 13**).

Discing, native grass seeding, and mulching of the site were then completed. Erosion control measures included the installation of 352 feet of wattles along the slope of the former highwall and 180 feet of erosion control blanket was installed in the bottom of the disturbed drainway. The turbidity curtain and remaining silt fences were then removed from the site.

## East Youngtown Tract

The map (**Figure 14**) shows the pre-reclamation topography at the East Youngtown Tract. Construction started at the East Youngtown Tract with the installation of a temporary fence used to keep cattle out of the project area and still allow grazing of the undisturbed portion of the site. The fence was completed on July 8. By July 13, 2,366 feet of silt fence had been installed to reduce sediment leaving the construction site. On July 14, construction began with stripping topsoil.

Once the topsoil was removed and stockpiled (**Figure 15**), the backfilling and backsloping of the highwall commenced. During the excavation process, a layer of buried native topsoil was discovered and salvaged. The final pits next to the county road were then filled using excavated spoil. A large, unexpected rock layer was also encountered during excavation and needed to be buried on site (**Figure 16**). On July 28, all spoil had been moved and Wilson Construction started resspreading topsoil and hauling manure. On August 2, Thomas & Sons Construction began discing and seeding the resspread area (**Figure 17**). Seeding and mulching were completed by August 3, and then 1,909 feet of wattles and 960 feet of erosion control blanket were installed. Installation of a permanent fence was completed on August 5 and is used to keep livestock off the reclaimed area. At the request of the landowner, two of the silt fences were left intact to control erosion from the reseeded areas.

### Project Statistics:

- 3,390 feet of highwall were reclaimed
- 45,903 cubic yards of spoil were excavated
- 7,916 cubic yards of topsoil salvaged and respread
- 1,240 cubic yards of manure were used as a soil amendment
- 68 trees were removed



**Figure 1:** A 1938 aerial photo shows initial mining activity at the Youngtown Mine.



**Figure 2:** A 1957 Photo shows mining completed at Youngtown Mine.



**Figure 3:** *Trees felled along the East Youngtown highwall.*



**Figure 4:** Tree removal operations in the East Youngtown's pit.



**Figure 5:** All trees were strapped before being hauled to the landfill.



**Figure 6:** A turbidity curtain was installed in the pit pond along the north highwall.



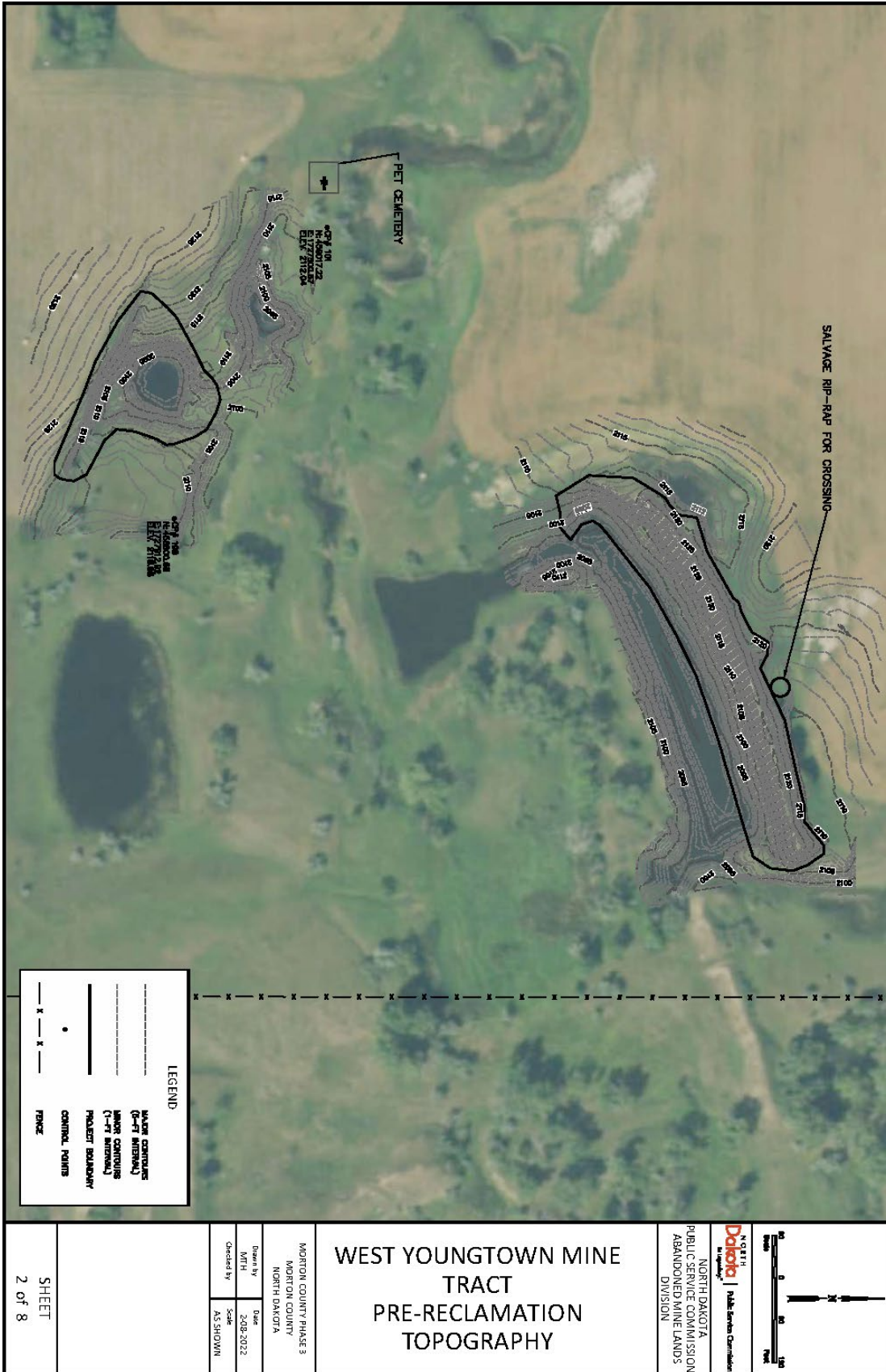


Figure 7: Map showing the West Youngtown Tract's topography prior to reclamation.



**Figure 8:** A temporary topsoil bridge was constructed in a saturated portion of the mine.



**Figure 9:** Constructing the temporary haul road/topsoil bridge in the West Youngtown Tract.



**Figure 10:** *The West Youngtown Tract's southeast highwall and final pit before reclamation.*



**Figure 11:** Original topsoil was exposed and salvaged along the north highwall in the West Youngtown Tract.



**Figure 12:** The contractor is using a scraper to haul topsoil in the West Youngtown Tract.



Pre-Reclamation  
Highwall



Post-Reclamation  
Highwall

**Figure 13:** Before and after reclamation of the north highwall in the West Youngtown Tract.



Figure 14: Map showing the East Youngtown Tract’s topography prior to reclamation.





**Figure 15:** Topsoil stockpile and silt fence in the East Youngtown Tract.



**Figure 16:** *Dozing the excavated rock ledge in the East Youngtown Tract.*



**Figure 17:** Seeding the reclaimed highwall with a native grass mix in the East Youngtown Tract.