

City of Green – NEXUS Environmental Observations

Date: 07/10/2019

Environmental Inspector(s): Jesse Good

Weather & Soil Conditions: Sunny; 88°F; 5-10 mph winds; dry and wet soils

Observed from: Road R/W Within NEXUS R/W

Item/Location	BMPs	Y	N	N/A	Notes
Street Cleaning	Street Cleaning Evident	X			Street cleaning was observed with a power broom on Killinger Rd during the walkthrough.
	No Tracking Observed	X			
	Street Cleaning Equipment Staged	X			
Rock Entrances	Properly Topdressed	X			Rock entrances had been removed at S Main, Comet, Christman, and S Arlington since the last walk-through. Rock entrances remain at Comet, Killinger, Koons (East and west), and Thursby Rd.
	Check Dams in Ditchline	X			
Sediment Control Devices	Properly Installed	X			Maintenance of erosion/sediment control devices evident and ongoing (*see notes for details).
	Functional	X			
	No Maintenance Recommended		X		
	No Additional SCD Recommended	X			
Stabilization Timeframes	No Areas Idle >14 Days	X			Straw mulch stabilization is being applied immediately once final grading is complete and seed applied.
	No Areas Near S and W Idle	X			
	No Additional TS Recommended	X			
Equipment Bridges	Fabric and Sideboards Intact	X			Equipment bridges had been removed at several streams and wetlands since the last walkthrough, however, several remain installed west of the eastern Koons Rd crossing for use during restoration activity.
	Equipment Gates Installed	X			
	Free of Sediment	X			
	No Maintenance Recommended	X			
Streams and Wetlands	Equipment Bridge Installed (S)	X			Final restoration had been performed at several stream and wetland crossings since the last site walk-through. A few stream and wetland crossings are awaiting final restoration. (*see notes for details).
	Filter Fabric and Sideboards	X			
	Timber Mats Utilized (W)	X			
	Equipment Gates Re-installed	X			
	E/SCDs Installed and Functional	X			
	SCD Reinstalled After Crossing	X			
	No Turbidity or Sedimentation	X			
Maintained R/W Restrictions	X				
General R/W	Good Housekeeping	X			Pumps and fuel cans along the R/W were stored in secondary containment, however no active dewatering was observed at the time of the walkthrough. Waterbars, sumps, and J-hooks were installed and functioning.
	Topsoil Segregated	X			
	E/SCD Functional	X			
	No SCD Maintenance Needed		X		
	Proper Dewatering			X	
	Water Bars Installed	X			
	RUMA Signage Installed			X	
	S&W Signage Installed			X	
Refueling Signage Installed			X		
Restoration & Winterization	Topsoil Topmost Layer	X			Final restoration was in progress in the City of Green between the eastern Koons Rd crossing and Comet Rd.
	Adequate Mulch Cover	X			
	E/SCDs Reinstalled	X			
	No Areas Idle >14 Days	X			

BMP: Best Management Practice CWC: Concrete Wash Containment DB: Drivable Berm EB: Equipment Bridge ECM: Erosion Control Matting EG: Equipment Gate E/SCD: Erosion/Sediment Control Device FS: Filter Sock GH: Good Housekeeping GR: General Recommendation H/SR: Hard/Soft Restoration IP: Inlet Protection MD: Minimized Disturbance PRT: Potential Roost Tree RCE: Rock Construction Entrance S: Stream SB: Straw Bale SF: Silt Fence TM: Timber Mat TP: Trench Plug TS: Temporary Stabilization VB: Vegetated Buffer W: Wetland WB: Water Bar WSC: Wet-saw Slurry Containment

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Key Observations: 1. Erosion and sediment control device maintenance and reinstallation was required at a few locations within the City of Green. 2. Minor settling within roadway had not worsened at the Comet Rd crossing. 3. Minor slip had not worsened on the slope west of Comet Rd.

Notes:

A full site walk-through was performed with Randy Burke (Nexus). The ROW east of Mayfair Rd and west of I-77 was observed.

Restoration was previously completed within the City of Green east of Mile Post (MP) 37.8 (the eastern Koons Rd crossing) and west of Comet Rd. The ROW in these sections achieved >80% vegetation levels (FERC requirement) since the last walkthrough; erosion and sediment control removal is scheduled to take place soon per Randy Burke. Topsoil had been replaced from MP 37.1 to 37.3 and the area had been returned to agricultural use. Some minor areas of patchy growth were observed between MPs 35.9 and 36.8; touch up restoration in these areas was added to Nexus' restoration punchlist during the walkthrough.

Final restoration was in progress throughout the City of Green from Koons Rd to Comet Rd (MP 37.9 to 41.5). In areas where final restoration has been completed, all sheet piling and timber matting had been removed, topsoil replaced, seed applied, straw mulch and erosion control matting applied to upland areas, and sediment controls re-installed. An adequate amount of straw mulch was observed.

- Disking had occurred from MP 37.9 to 38.3 in preparation for grading activity.
- Crews were working on subgrade activity from MP 38.3 to 38.8; topsoil will be replaced immediately upon finishing subgrade work.
- Topsoil had been replaced from MP 38.8 to 39 (Cleveland Museum of Natural History property); the landowner has taken over restoration in this area, no seed or straw is to be applied by Nexus per Randy Burke.
- Final restoration had been completed from MP 39 to 39.4.
- Topsoil had been replaced from MP 39.4 to 39.5; the landowner has taken over restoration in this area, no seed or straw is to be applied by Nexus per Randy Burke.
- Repair of a gravel driveway was in progress just west of MP 39.5 during the walkthrough.
- The ROW from S Arlington to Killinger Rd (MP 39.8 to 40.2) was idle during the visit; area remains winter stabilized while awaiting final restoration.
- Crews were working on subgrade activity from MP 40.2 to 40.6.
- Final restoration had been completed from MP 40.7 to 41.4.
- Crews were working on subgrade activity from MP 41.4 to 41.5 near Comet Rd.

Restoration and final cleanup had been completed in streams and wetlands east of MP 37.8, from MP 39.2 to 39.8, and west of MP 40.6.

- Topsoil was segregated and backfilled as topmost layer.
 - Timber matting and bridges removed.
 - Sediment control devices remained installed and functional along stream and wetland boundaries as needed.
 - Earthen berms were installed where timber matting was recently removed at some stream and wetland crossings in lieu of silt fence.
 - Wetland seed (Annual Rye per FERC) applied. Erosion Control Matting (ECM) installed along stream banks.
 - Good germination observed in wetlands and on stream banks.
- The following stream and wetland crossings had been properly restored following tie-in completion and are awaiting timber mat removal and final cleanup.
 - C15-123 (MP 38)
 - A17-5 S&W Complex (MP 38.3)
 - C15-113 (MP 38.7)
 - A14-112 S&W Complex (MP 39.9)
 - B15-128 (MP 40)

1. Erosion and sediment control maintenance should be considered at several locations within the City of Green. There are no current environmental issues; sediment control devices downslope of all items were functional and regular maintenance was evident along the entire ROW. Removal of some erosion and sediment control devices is necessary during final restoration to ensure the ROW is returned to pre-construction grade; re-installation of E/SCDs is expected upon reaching final grade per Randy Burke.

- Minor settling should be repaired for residential quality at MP 34.6
- Minor erosion rills should be repaired for residential quality at MP 35.
- Patchy growth along the travel lane between I-77 and Greensburg Rd (MP 35.6 – 36.8) may need touch up restoration or overseeding to achieve >80% vegetation levels (additional restoration likely per Randy Burke).
- Additional restoration expected east of Massillon Rd at MP 37.4.
- Minor washout on banks of Stream C15-120-S1 and within the Wetland should be monitored and repaired as needed at MP 37.4.
- Minor erosion rills in agricultural field should be monitored and repaired as needed near MP 37.6.
- Sumps and J-Hooks at the end of waterbars were filled with sediment between MP 38.3 and 38.8, restoration was in progress in this area and maintenance is expected as work progresses.
- Low lying areas at MP 39.1 and 39.3 were inundated with water and final restoration could not yet be completed.
- Minor erosion rills should be repaired for residential quality near MP 39.3.
- Sediment control devices should be reinstalled near MP 41.5.
- Minor slumping on slope and sedimentation at MP 41.6.
- Water bar overtopped and minor erosion rill on slope at MP 41.6.

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- Additional items below were observed during the walkthrough and should be addressed prior to project completion. All items are on Nexus' cleanup punchlist per Randy Burke.
 - Skids remain in Wetland A15-71 near MP 34.5.
 - Timber matting remains installed along access Rd near MP 35.6 (Wise Rd).
 - Small soil pile remains south of Greensburg Rd at MP 36.8.
 - Sand bag remains in Stream C15-122 near MP 37.1.
 - Silt fence remains in wetland and sand bag remains in creek at C15-120 S&W Complex near MP 37.4.
 - Construction debris/trash remains in Wetland A14-112 at MP 39.9.

- The following erosion and sediment control maintenance items from the 04/08/2019 walkthrough had been addressed as needed.
 - Grade activity in progress where minor erosion rill was observed at MP 38.1.
 - Grade activity in progress where minor erosion rills were observed on slopes near MP 38.7.
 - Final restoration complete and water bar removed where erosion rill and overtopped water bar were observed at MP 39.1.
 - Additional grading and temporary stabilization applied where minor erosion rill was observed at MP 40.1.
 - Grade activity in progress where erosion rills were observed and water bars overtopped at MP 40.6
 - Grade activity in progress where erosion rills were observed and water bar overtopped at MP 41.5.

2. No changes to the minor settling in the roadway at the Comet Rd crossing were observed (MP 41.5). There are no current environmental issues as silt fence remains installed along the toe of the slope above the roadway and inlet protection remains at the nearby catch basin. Cold weather seed had been applied along the ROW upslope of the roadway and some germination was observed.

3. The minor slips (migration of soil down the slope) on the slope just west of Comet Rd had not significantly worsened since the last walk-through (MP 41.6). There are no current environmental issues as the slope had largely revegetated, erosion control matting, silt fence, and water bars remained installed, and no sedimentation issues were observed off ROW or within a wetland or stream at this location. This area will continue to be monitored during site walkthroughs. Touch-up restoration may be needed to establish soil stability if the slip worsens. Overseeding of the area is expected during final restoration per Randy Burke.

De-couplers had been installed at Mile Posts 34.6, 34.8, 35, 35.1, 35.2, 35.4, 35.5, 35.6, 36, 36.3, 36.4, 36.5, 36.8, 36.9, 41.4, 41.5, 41.6, and 42.1.

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Waterbars and drivable berms remained installed along slopes and at stream and wetland boundaries as needed. Water bars are expected to be removed in agricultural and residential areas during final restoration while permanent water bars will be installed along the remaining ROW.

- Sumps and silt fence J-hooks remained installed at the low end of the waterbars to treat stormwater prior to it leaving the ROW. Sumps and J-hooks were functional and regular maintenance was evident or expected soon.

The wash station had been re-installed at the western Koons Rd crossing for use prior to equipment entering the Cleveland Museum of Natural History Property.

Non-Nexus rutting was observed near Mile Posts 34.5, 34.9, 35, 37.9, 39.7, 40.9, and 41.4.

General environmental observations from the site visit:

- Final restoration was in progress throughout the previously winterized portion of the ROW.
- Final restoration will be taken over by the landowners at several properties within the City of Green; no seed or straw will be applied by Nexus in these areas.
- Regular sediment control maintenance and repair was evident along the entire R/W.
- Sediment control device maintenance should be considered at several locations along the ROW, however there are no current environmental issues.
- The ROW was largely revegetated where restoration had previously been completed; sediment control device removal is expected soon.
- Several areas where restoration had previously been completed may need touch up restoration for residential quality purposes.
- Silt fence and/or Belted Silt Retention Fence (reinforced silt fence) remained installed and functional along wetland and stream boundaries, within residential areas, and downslope of several agricultural fields.
- Timber mats remain installed at the equipment crossing locations of streams and wetlands where final restoration is in progress. Final cleanup had occurred at several stream and wetland crossings since the last walkthrough.

Overall, our observations were satisfactory related to industry standards.