

City of Green – NEXUS Environmental Observations

Date: 07/27/2018

Environmental Inspector(s): Jim G. Ad. Feb

Weather & Soil Conditions: Sun and Clouds; 78°F; 5-10 mph winds; dry soils

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

Item/Location	BMPs	Y	N	N/A	Notes
Street Cleaning	Street Cleaning Evident	X			Regular Street cleaning evident. Street cleaning was active on Mayfair Rd during the site walk-through.
	No Tracking Observed	X			
	Street Cleaning Equipment Staged	X			
Rock Entrances	Properly Topdressed	X			
	Check Dams in Ditchline	X			
Sediment Control Devices	Properly Installed	X			Maintenance of erosion/sediment control devices ongoing (*see notes for details). Nexus EIs notified by Randy Burke (Nexus) during site walk-through and maintenance was ongoing the same day.
	Functional	X			
	No Maintenance Recommended		X		
	No Additional SCD Recommended	X			
Stabilization Timeframes	No Areas Idle >14 Days	X			
	No Areas Near S and W Idle	X			
	No Additional TS Recommended	X			
Equipment Bridges	Fabric and Sideboards Intact	X			Crew installing new filter sock equipment gates at Stream and Wetland crossings between W Koons and Arlington during the site visit.
	Equipment Gates Installed	X			
	Free of Sediment	X			
	No Maintenance Recommended	X			
Streams and Wetlands	Equipment Bridge Installed (S)	X			Sheet piling installation appears completed within all Wetlands. Wetland Crossings in progress during the site visit at A15-71 near the RR Tracks and a portion of C15-104 west of Max Rd. Wetland Crossings completed at A15-91 just west of I-77 and in the portion of C15-104 north of Greensburg Rd. (*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			
	No Additional SCD Recommended	X			
	No Turbidity or Sedimentation	X			
Maintained R/W Restrictions	X				
General R/W	Good Housekeeping	X			Dewatering activity was occurring through filter bags, straw bale/filter fabric structures, and sprinkler systems throughout the entire City of Green. Pumps and fuel cans were stored in secondary containment near environmental resources. Waterbars, sumps, and J-hooks were installed and functioning. Signage remained installed and was properly visible.
	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				
Mainline Trenching And Lowering In	S&W Impacts Avoided	X			Mainline trenching was observed within the City of Green between Mayfair Rd and Nimisila Reservoir except for areas awaiting tie-in activity (streams and wetlands, driveways, utilities, etc.) Pipe had been installed in upland areas and the trench mostly backfilled in the Agricultural field west of I-77, and from Greensburg to the western Koons Rd crossing. No trenching was observed west of Christman Rd.
	Timber Matting Utilized	X			
	Entrances Topdressed	X			
	Street Cleaning Evident	X			
	Soil Stored Separate from Topsoil	X			
Trench Plugs Installed	X				
Nimisila Reservoir HDD	No Inadvertent Returns	X			HDD pullback had been completed. No inadvertent returns visible or reported.

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 Root 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. Several wetland crossings were in progress during the walk-through and several had been completed prior to the walk-through. 2. Erosion and sediment control maintenance required at a few locations throughout the City of Green.

Notes:

A full site walk-through was performed with Randy Burke (Nexus). The entire project area within the City of Green was observed.

The mainline trench had been excavated along a majority of the upland ROW between Mayfair Rd and Nimisila Reservoir. Areas awaiting trenching included the upland ROW east of Mayfair Rd, the upland ROW west of Christman Rd, and tie-in areas such as stream and wetland crossings, utility crossings, driveway crossings, etc.

- Trench soil was stored separately from topsoil
- No impacts to streams or wetlands related to mainline trenching observed.

Mainline pipe had been lowered in within the Agricultural field west of I-77 and along the ROW between Greensburg Rd and the western Koons Rd crossing.

- Trench awaiting backfill near tie-in activity so the pipe remains accessible.
- Several foam trench breakers were observed where the trench was awaiting backfill.
- Topsoil remained separate and no soil mixing was observed.

1. Pipe lowering in was in progress in Wetland A15-71 at Mile Post 34.3 east of the rail road tracks during the site visit.

- Impacts to Wetland remained within restricted ROW limits.
- Topsoil segregated and stored separately.
- Activity occurring off timber matting.

• Wetland A15-91 crossing west of I-77 had been completed. (Mile Post 35.9)

- Topsoil segregated and backfilled as topmost layer.
- Work occurred off timber matting.
- Silt fence perimeter sediment controls reinstalled.
- Impacts remained within restricted ROW limits.

• Pipe was installed and being surveyed in Wetland C15-104 at Mile Post 36.2 during the site visit.

- Impacts remained within restricted ROW limits
- Topsoil segregated and stored on plastic to prevent mixing.
- Activity was occurring off timber matting.
- River weights were being hauled in for installation.
- Foam trench breaker installation ongoing at Wetland boundaries.

• Wetland C15-104 crossing near Mile Post 36.5 recently completed.

- Impacts remained within restricted ROW limits.
- Work had occurred off timber matting.
- Topsoil segregated and backfilled as topmost layer.
- Silt fence re-installation at Wetland boundaries in progress, trench had been excavated for silt fence.

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No additional stream or wetland crossings were observed. All impacts to remaining streams and wetlands were minimal.

- No impacts to streams or wetlands related to mainline trenching activity or trench soil storage were observed.
- Sediment control devices remained installed and functional along stream and wetland boundaries as needed.
- Sheet piling installation in wetlands and streams appeared completed as needed within the City of Green.
- Topsoil will be segregated in wetlands and streams during tie-in activity to limit the duration of disturbance.
- Impacts to Wetland A14-112 near Arlington Rd remained minimal upon completion of the road bore activity. Topsoil had been segregated and stored separately.
- Equipment bridges and timber matting continues to be utilized for equipment travel through wetlands and streams with equipment gates installed or staged for re-installation as needed.
- Good containment and cleanup of sandblast material noted. Additional/as needed cleanup will occur prior to ROW cleanup per Randy Burke.

The road bore under I-77 was in progress during the site walk-through.

- Dewatering was occurring into a filter bag and straw bale/filter fabric dewatering structure.
- No impacts to Wetland A15-90 west of I-77 observed.

An additional well-point system had been installed along the ROW at Mile Post 34.7 since the last site walk-through.

- Dewatering was occurring near the pond A15-70-WB1 using a filter bag and straw bale dewatering structure and a sprinkler dewatering system.
- Water was running clear and free of sediment.

Dewatering was ongoing via well-point systems east and west of the rail road tracks near Mayfair Rd, and west of Arlington Rd. Dewatering in these areas was occurring into filter bag and a straw bale dewatering structures.

- Dewatering was active at the I-77 road bore entrance (east of I-77) into a filter bag and straw bale structure. The dewatering sprinkler system was idle at the I-77 bore exit pit.
- Evidence of dewatering into a filter bag observed east of Thursby Road and north of the east Koons Road crossing.
- Straw bale dewatering structure and filter bag observed along Comet in the extra work space.
- Fuel cans and pumps for all dewatering were stored in secondary containment near environmental resources.

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The Nimisila Reservoir HDD had been completed and the drill rig had been demobilized.

- No inadvertent returns were observed.
- Frac-Tanks remained onsite.
- Hydrotest of the bore pipe had been completed. Water had been released (approximately 120,000 gallons) through a filter bag and straw bale structure in the upland work space off Comet Rd with no issues per Randy Burke (Nexus).

2. Sediment control maintenance was required at several locations throughout the City of Green following trenching activity and other activity occurring on the ROW. Randy Burke notified Nexus Els during the site walk-through and maintenance was ongoing the same day.

- Trench soil had overtopped the silt fence perimeter near Mile Post 34.3.
 - Wetland C15-104 crossing north of Greensburg Rd was awaiting silt fence reinstallation (Mile Post 36.5).
 - Silt fence had been damaged along the south boundary of C15-106 north of Greensburg Rd (Mile Post 36.7).
 - Trench soil had overtopped the silt fence perimeter along the slope near Mile Post 40.5.
- Sediment control maintenance had been completed as expected at all areas documented during the 07/06/2018 walk-through.
 - A sump and straw bale reinforced silt fence had been installed near Mile Post 41.4 to prevent additional sediment loss off ROW.
 - Straw bale reinforced silt fence check dams had been installed near Mile Post 41.6 off Comet Rd due to the steep topography.
 - Active sediment control maintenance was observed during the site walk-through.
 - Crew active near Mile Post 38.9 removing built up sediment from silt fence.
 - Crew between the Western Koons Rd crossing and S Arlington installing new filter sock equipment gates at equipment bridges.

Water bars and drivable berms remained installed as needed along slopes and at stream and wetland boundaries as needed.

- Sumps and silt fence j-hooks remained installed at the low end of the water bars to treat stormwater prior to it leaving the ROW. Sumps and j-hooks were mostly functional and maintenance was ongoing as needed.

Turtle Exclusion Fencing remained installed in Spotted Turtle Exclusion Areas.

- Wire fencing was utilized in areas of water flow to prevent flooding issues.
- Silt fencing had proper ground contact as needed.
- No turtles were found during Turtle Exclusion Surveys per Randy Burke (Nexus)

Regular street cleaning was evident throughout the entire City of Green. Street cleaning was in progress on Mayfair Rd during the walk-through.

General environmental observations from the site visit:

- Trenching had occurred along a majority of the ROW between Mayfair Rd and Nimisila Reservoir.
- Pipe had been lowered in and backfill of trench had occurred between Greensburg Rd and the western Koons Rd Crossing.
- Several wetland crossings were in progress and several had been completed. Proper Wetland crossing methods were observed.
- The Nimisila Reservoir HDD had been completed. No inadvertent returns were observed. Hydrotest water was released in the temporary work space near Comet Rd.
- I-77 Road bore remained in progress.
- Several well-point systems remained active with dewatering occurring into filter bags, dewatering structures, and sprinkler systems.
- Sediment control maintenance was required in a few locations along the ROW and Nexus EIs were notified same day.
- Regular street cleaning was evident.
- 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 as visible from roadways. Temporary equipment gates were observed at stream and wetland crossings. Signage also remained installed at the wetlands and streams which included refueling guidance due to the presence of environmental resources.
- Trench breaker installation was observed sporadically along the ROW. Permanent trench breakers are barriers installed in the open trench around the pipe and are intended to slow subsurface water flow and erosion along the trench and around the pipe in sloping terrain.

Overall, our observations were satisfactory related to industry standards.