



# STORMWATER MANAGEMENT PLAN/ EROSION AND STORMWATER QUALITY CONTROL PLAN

Project: WWSD Upper West to East  
Transmission Line

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## **I. Site and Project Description:**

1.1 *Project Description and Site History.* The project consists of a linear underground utility replacement. New 24" water main pipe including hydrants and all appurtenances will be constructed. The site has been previously developed and the presence of existing utilities and residences are evident on the project plans. The project will occur along several streets adjacent to residential area and along Fontaine Boulevard, paved right of way for the town of Fountain within open space roadside areas. This construction project will include construction of a gravel maintenance access/trail along this open space area north of Fontaine Boulevard.

1.2 *Construction Activity.* Construction activity includes removal of asphalt and concrete, or sod and topsoil, excavation, and installation of new pipe for the water main infrastructure, to include all appurtenances and associated infrastructure to ensure a complete and efficient installation. This construction project will specifically include excavation, abandoning in place/grouting of existing pipe, installing of new pipe, backfill, and repaving or reseeding, pouring concrete for restoration of sidewalk and curb and gutter as final stabilization. The construction activity is further illustrated in the engineered project specifications and drawings (plans) found in Appendix C.

1.3 *Progression of Significant Activities.* Once control measures (CMs) are in place and have been approved by inspection from El Paso County Stormwater, construction will commence utilizing phasing to minimize stormwater and erosion impact. The construction of the project will be broken down into 3 main phases. Once all necessary permits have been obtained, proper CMs have been put into place, and approved by the County Inspector the construction activities will begin. Site excavation will begin approximately September 26, 2022, and be completed April 30, 2023. Please see attached Construction Schedule/Phasing (Appendix B) for further description of the sequence of events.

1.4 *Area of Site and Area to be Impacted.* The estimated total area of the site is 5 acres. The export/import of material will be greater than 500 cy. The estimated area to be disturbed will be approximately 2.5 acres. The disturbed area will be permanently stabilized with asphalt and concrete or reseeding and revegetation to 70% or greater of pre-disturbance vegetative density upon completion. Existing contours will match post construction contours. The areas adjacent to the construction will be residential houses to the north, east and south, and open space to the north of Fontaine Boulevard.

El Paso County

1.5 *Existing Site Conditions.* The site is vegetated or an asphalt right-of-way for the City of Colorado Springs consisting of mainly residential and commercial areas. The street is bounded by concrete sidewalk, commercial landscaping, and concrete curb and gutter.

1.6 *Soils and Site Reports.* A web soil survey was conducted using USDA Natural Resources Conservation Service. The soils within the project site consists of five types; Fort Collins loam, 3 to 8 percent slopes, Hydrologic Soil Group ; Wiley silt loam, 3 to 9 percent slopes, Hydrologic

Soil Group B; Nelson-Tassel fine sandy loams, 3 to 18 percent slopes, Hydrologic Soil Groups B-D; Stoneham sandy loam, 3 to 8 percent slopes, Hydrologic Soil Group B; and Truckton sandy loam, 3 to 9 percent slopes, Hydrologic Soil Group A. Group A soils have low runoff potential and high infiltration rates even when thoroughly wet. They are typically sand, loamy sand, or sandy loam types of soils. They consist mostly of deep, well to excessively drained sands or gravels with a high rate of water transmission. Group B soils have moderately low runoff potential and a moderate infiltration rate when thoroughly wet. They typically consist of silt loam or loam soils of moderately fine to moderately coarse textures. Group C soils have low infiltration rates and a layer that hinders downward infiltration of water when thoroughly wet. The soils contain moderately fine to fine structure. Group D soils have the highest runoff potential. They have very low infiltration rates, a high swelling potential, and contain a layer at or near the surface that is nearly impervious and prevents infiltration when thoroughly wetted. The soils in this group are mainly clay loam, silty clay loam, sandy clay, silty clay, or clay. This soil data was collected using Web Soil Survey; Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. A FEMA Floodplain map was created for the project site and none of the project is located within a 100-year flood zone. These reports are in Appendix C. The project site is not located within or near Preble Jumping Mouse habitat, City of Colorado Springs Streamside, or Hillside Zones.

1.7 *Current Vegetative Conditions.* There is no vegetation within the roadway and sidewalk. There is grass and trees along the sidewalks and in the median, and the residences and commercial areas have various landscaping. These areas are outside the project boundary and will not be disturbed. The pre-disturbance ground cover for that area has 0% vegetation since it consists of concrete and asphalt. The vegetation along the open area north of Fontaine Boulevard pre-disturbance is 70% vegetative density consisting of native grasses.

1.8 *Identified, Potential Pollutant Sources.* Construction activities produce many different pollutants which may cause stormwater contamination. Grading and excavation activities remove ground cover, rocks, vegetation, and other erosion control surfaces, resulting in the exposure of underlying soil (a pollutant) to the elements. These construction activities leave the soil surface unprotected, and soil or sand particles are more easily picked up by wind and washed away by rain or other water sources. Additional materials and activities at the project site that may have an impact on stormwater include the following: excavation, exposed soil, sediment, trash & debris, sanitary waste, hauling of materials, heavy equipment, concrete waste and asphalt paving. The on-site construction equipment, their vehicular traffic, fueling, and maintenance operations also present the potential for spills and leaks. These potential pollutants include hydraulic oil, engine grease, diesel fuel, gasoline, and anti-freeze (ethylene glycol). Any use of portable toilet facilities will also be a potential source of pollution.

1.9 *Non-stormwater Discharge.* There may be potential for landscaping irrigation due to the proximity of residences and commercial landscaping. There will also be concrete wastewater discharged to a proper concrete washout area or the concrete trucks will return to their origin.

Item 16. Please add a note about any stream crossings or add a statement that no streams cross the project area.

There will be no concrete wastewater onsite. The Contractor may utilize concrete trucks and equipment with their own contained wash systems. The new water line will be flushed in accordance with the CDPHE Low-Risk Discharge of Potable Water. Should groundwater or other discharge be encountered the proper permit compliance will be adhered to, stormwater management measures will be taken, and the discharge information will be contained in the Dewatering Discharge Log. Please refer to sections I.1.8 and for further description of discharge. There are no additional non-stormwater discharge sources that have been observed or are anticipated at this project site.

1.10 *Receiving Waters.* Stormwater runoff from the site will enter the existing Town of Fountain's storm sewer system where the construction activity will be occurring within the street. There are several inlets within the project limits or near vicinity, as well as curb and gutter. The project will also discharge to the immediate and ultimate receiving waters of Carp Lake or Jimmy Camp Creek. There is no TMDL or WLA required for these waterways that will be involved with our construction activity. The contractor is still aware of the need to prevent impact to the water quality due to their construction activity.

1.11 *Site Map.* A site map is included in the form of project engineered plans and maps and identifies the following: construction site boundaries; all areas of ground surface disturbance; areas of cut and fill; areas used for storage of building materials, equipment, soil, or waste; locations of dedicated asphalt or concrete batch plants; locations of all structural CMs; locations of non-structural CMs as applicable; flow arrows and locations of springs, streams, wetlands, and other surface waters. Please see Appendix A.

## **II. Stormwater Management Controls**

2.1 *SWMP/ESQCP Administrator/Qualified Stormwater Manager.* Emily Chamberlain, President and Chief Environmental Consultant for Era Environmental. This individual is responsible for developing, implementing, maintaining, and revising the SWMP. A representative for Era Environmental may also conduct inspections, in addition to update and make minor field changes to the SWMP/ESQCP. Please see Appendix F for relevant certifications. Operator or Operator's representative will also be responsible for site inspections, control measures maintenance, and necessary revisions.

2.2 *Identification of Potential Pollutant Sources.* The following potential pollutant sources, including materials and activities, have been evaluated for the potential to contribute pollutants to stormwater discharges at this project site and will be addressed with best management practices in the next section.

2.2.1 All disturbed and stored soils- During excavation, utility installation, and backfill there will be disturbed soils on the project site. These exposed soils will be located below grade and surrounded by asphalt or concrete within the roadway alignment. It is

not anticipated that the exposed soil will become a pollutant introduced as sediment into runoff. Stored soils and their potential to become a pollutant are possible.

2.2.2 Vehicle tracking of sediment- Heavy equipment (i.e., excavators, haul trucks, loaders) will be used for this project and vehicle tracking is to be expected for this project site.

2.2.3 Management of contaminated soils- There is no anticipation of contaminated soils within this project area. If contaminated soils are encountered the SWMP will be amended to reflect how this would be addressed.

2.2.4 Loading and unloading operations- Construction materials will need to be loaded and unloaded at the site.

2.2.5 Outdoor storage activities (building materials, fertilizers, chemicals, etc.)- Construction building materials (pipe, fittings, etc.) will be stored outdoors at the project site.

2.2.6 Vehicle and equipment maintenance and fueling- All vehicle and equipment maintenance will take place off-site. Fueling will be done minimally onsite.

2.2.7 Significant dust or particulate generating processes- Dust from exposed soils is to be expected during construction activities.

2.2.8 Routine maintenance activities involving pesticides, detergents, fuels, solvents, oils, etc. - There are no routine maintenance activities involving pesticides, detergents, fuels, solvents, oils, etc. Should this be required, it will take place off site.

2.2.9 On-site waste management practices (waste piles, liquid wastes, dumpsters, etc.)- There are no on-site wastes besides those addressed in items 2.2.10 and 2.2.12.

2.2.10 Concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment- Concrete truck/equipment washing is anticipated to be present for this project.

2.2.11 Dedicated asphalt and concrete batch plants- There will be no dedicated asphalt or concrete batch plants for this project.

2.2.12 Non-industrial waste sources such as worker trash and portable toilets- Worker trash and portable toilets will be a potential pollutant source for this project site.

2.2.13 Other areas or procedures where potential spills can occur- Flushing of the new waterline will create additional procedures where potential spills can occur.

### **III. Control Measures (CMs) for Stormwater Pollution Prevention**

3.1 *CMs Overview.* The following narratives will address the identified potential sources of pollution at the project site and the best management practices that will be used to prevent migration of pollution offsite. All CMs detail plans are in Appendix G. Specific locations of CMs are detailed on the site map (Appendix A) and will be updated and revised as needed or as the project progresses.

3.1.1 *CMs for Disturbed Soil/Sediment.* Ground disturbing activities associated with excavation and backfill at the project site have the potential to introduce sediment into the curb/flow line and inlets for existing stormwater management belonging to the municipal stormwater system. Excavation of soils will occur below grade reducing the risk of soil erosion, detachment, and sedimentation. The vegetated area of the open space will be addressed with sediment control logs and/or silt fence, minimizing of disturbance, and may add compacted berming as perimeter control. Phasing for the project will minimize the amount of exposed soils at a given time. Disturbed areas will be kept to a minimum. Attempts will be made to close trenches prior to inclement weather, if feasible, and at the end of each day. Where consistent with safety and space considerations, excavated material will be placed on the upgradient side of trenches. Additionally, curb socks, inlet protection, and silt fence and/or sediment control logs will be utilized as a CM treatment train to prevent sediment from the project site to impact the storm sewer system. When possible, vegetative areas will be undisturbed, creating infiltration and buffer. Rock socks will be placed in the curb and gutter and inlet protection will be installed at every inlet within the immediate vicinity and within the vicinity in downgradient conditions.

3.1.2 *CMs for Stored Materials.* Stockpiles of excavated materials aren't anticipated due to daily soil replacement returned to excavated areas or being hauled off site. Should it be necessary, stockpiles of sedimentary materials will be located clear of any water flow paths, within the project boundary, and kept to a minimum in size by project phasing. Erosion control devices will be installed as needed around the base of stockpiles to prevent the migration of soil. However, stockpiling of dirt should not be needed on site. The retained topsoil may be utilized as a compacted berm for perimeter control between construction activity and the open space perimeter. Soil stockpiles and disturbed portions of the site where construction temporarily ceases for at least 14 days will be temporarily stabilized.

3.1.3 *CMs for Vehicle Tracking and Loading/Unloading.* Inspection, sweeping, and any necessary cleaning of tracking will be performed daily while construction work continues. Due to the nature of this project, a linear underground utility replacement, there will be no need for a stabilized staging area. The work area will move along the linear project daily, working at approximately 200-300 feet of disturbance at a time per



work crew thus eliminating the need for a vehicle tracking pad. Any access from the staging areas to the roadway (Fontaine Boulevard) WILL require installation of vehicle tracking controls and downgradient controls in the curb and gutter.

3.1.4 *CMs for Dust.* Wind erosion and dust control will be necessary to prevent sediment pollution. Daily inspections will occur for areas experiencing excessive winds, vehicle traffic, or precipitation events while the potential exists for fugitive dust. Water trucks will spray dusty areas on the project site as needed taking care not to impact adjacent properties or overwater causing muddying of the surface and sediment transportation.

3.1.5 *CMs for Construction Materials Storage.* Outdoor storage of construction materials will be located clear of any water flow paths, within the project boundary, and within the work area. This area will move with the small area of disturbance daily and be cleaned of all debris and sediment daily. Fuel, grease, oil, paint, or any material classified as hazardous will be stored with secondary containment in the form of a utility trailer, approved containment system, or truck bed. A fuel truck or truck with fuel tank will be brought in daily for all equipment, to keep fuel storage onsite as minimal as possible. Subcontractors are responsible for hazardous waste removal back to their own facilities for ultimate transportation, storage, and disposal. All hazardous waste materials will be disposed of in accordance with federal, state, and municipal regulations. All site wastes will be properly maintained to prevent potential pollution of State waters. There will be no on-site waste disposal. Two staging areas will be established. One in the open space off Fontaine Boulevard west of Fountain Mesa Road and another at Jersey Lane.

3.1.6 *CMs for Concrete Waste.* Should ready-mix concrete be installed onsite, all equipment and vehicles that are involved in making and transporting concrete mixes are equipped with an integral washout system used onboard the trucks. Concrete waste will not be dumped onsite. No concrete waste dumping or washing will be permitted near or in the storm drainage line.

3.1.7 *CMs for Non-industrial Waste.* Good house-keeping practices will be implemented to maintain a project site free of trash and debris. Trash receptacles will be inspected regularly to ensure they are disposed of properly when full and that debris stays contained within the receptacle. Worker sanitary services (portable toilets) will be contained within the construction material storage or staging area, out of the curb flow line, and/or anchored or fastened to a trailer to prevent tipping. The area will be inspected regularly to ensure any waste stays contained. All site waste will be properly managed to prevent potential pollution of State waters. There will be no on-site waste disposal.

3.1.8 *CMs for Equipment Staging and Maintenance.* Store and maintain equipment in the designated work area, to be moved daily along this linear underground utility replacement project. When possible, substitute non-hazardous or less hazardous materials. Use secondary containment, like a drain pan, to catch spills when working with fluids like oil, grease, and fuel. Use proper equipment like pumps and funnels when transferring these fluids. Transfer waste fluids, oil filters, etc. to designated waste drum immediately after maintenance or repairs. Inspect equipment routinely for leaks and spills. Repair or remedy these immediately.

3.2 *Phasing of CMs.* Installations of structural and non-structural CMs will be used for erosion control and stormwater management prior to commencement and during construction activities. The Operator/Permittee is committed to installing the CMs as listed, maintaining them as needed, and revising or adding to this plan as construction phasing or plans evolve. See Appendix G for CM installation detail, if necessary.

3.2.1 *CMs Prior to Construction Commencement.* Sediment control CMs (rock/curb socks/inlet protection/berm/sediment control logs/possible vehicle tracking controls) will be installed prior to any ground disturbing activities, remain in place and maintained during excavation, utility installation, backfill, and paving or reseeding/sodding and removed once the construction phase is completed in that area and the potential pollutant has been eliminated. These CMs will need regular maintenance in the form of sediment and debris removal when build-up is visible. Multiple curb socks will be placed along the curb and gutter within the construction area and inlet protection will be installed at every inlet within the construction area and downgrade vicinity. Please see installation location detail on map in Appendix A.

3.2.2 *CMs During Construction.* To continue with control of potential pollution-laden stormwater run-off, ongoing CMs will be applied and maintained during the construction phase of the project. Rock socks in the curb flow line, additional inlet protection as work progresses, dust control with water, waste management, vehicle tracking control, spill measures, good housekeeping, and soil stabilization will be addressed or applied during active construction. CMs maintenance will be needed as previously stated. Restoration activities will be completed throughout the project. Rock socks and inlet protection will remain in place along the roadway for all phases until the construction activities have reached the point of pavement patch finish. Rock socks and inlet protection will be installed prior to work beginning on each portion, and then remain in place until construction activities have reached the point of pavement patch finish. Once that occurs the CMs will be removed.

3.2.3 *CMs for Final Stabilization, Re-Vegetation, and Long-Term Stormwater Management.* Final Stabilization measures, upon completion of construction activities, where potential pollutants are no longer a risk, and once surfaces have been replaced to asphalt or concrete or restoration areas, will be initiated. Temporary CMs that are

SWMP Checklist Item 26 - state that the project does not rely on any control measures owned or operated by another entity.

regarded as unnecessary and no longer functional will be removed (rock socks and inlet protection), the site will be stabilized by permanent surfaces (concrete and asphalt), and good-housekeeping measures will be used to ensure a clean and complete project site. The area of the open space will be stabilized with the gravel trail/maintenance road and reseeded and mulched. The temporary CMs will remain in the areas of ground disturbance until final stabilization is achieved. The restored areas will not reach final stabilization until 70% of the pre-disturbance vegetative density is reached.

3.3 *Materials Handling and Spill Prevention.* To minimize potential for procedures or significant materials to contribute pollutants to runoff the project site superintendent will act as the point of contact for any spill that occurs. They will be responsible for implementing prevention practices, spill containment and cleanup, worker training, reporting, and completing documentation and updating the SWMP if a spill occurs. The storage and handling of any construction materials will be managed according to company mandated procedures and policies and as detailed in the SWMP. These policies will be communicated to all contractors, subcontractors, and vendors for proper adherence. The potential for spill pollution occurs where materials are stored, from equipment leaks, maintenance, or fueling procedures, from waste materials, or other chemicals. Additional CMs (addressed in 3.1.1 through 3.1.1.9) will be utilized to prevent or eliminate spills before they can occur.

3.3.1 *Spill Containment Methods.* Should a spill occur from equipment in the form of fuel, grease, hydraulic oil, etc. the hazardous material will be contained within a secondary spill containment cell (drip/drain pan) and disposed of properly in an approved receptacle. Any undetected leak from equipment will be cleaned immediately upon detection. The contaminated soil from such a leak will be removed with hand shovels and placed in an approved receptacle (fuel/oil waste disposal drum). A leak or spill that occurs on impervious surface (asphalt, concrete, rock, etc.) will be contained using fuel absorbent pads or absorbent litter and once allowed to absorb the spill will be removed to an approved fuel/oil waste disposal receptacle. These used spill materials and contaminated soils will be disposed of offsite at an approved hazardous waste facility. The material storage trailer will have a spill kit to be used for containment.

3.3.2 *Spill Countermeasures.* Should a hazardous spill occur, which may endanger health or the environment, cause pollution of the waters of the state, or may cause and exceedance of a water quality standard, the following procedures will take place:

Stop the spill, unless it is too hazardous, or the spill involves any biohazards.

Notify the Owner and/or the Owner's representative (Operator, Project Site Superintendent). The Owner or the Owner's representative will be onsite during the construction activities and will be able to respond immediately. Once the responsible parties have been notified, a determination will be made by the Owner or the Owner's representative whether the nature of the spill warrants

the notification of additional authorities. As required by the Stormwater Discharges Associated with Construction Activity permit (Appendix I) the Colorado Department of Health and Environment will be notified by the following procedures for spills meeting the above criteria in 3.3.2.

For non-hazardous materials: Contact CDPHE Environmental Emergency Spill Reporting Line (1-877-518-5608) within 24 hours of the spill event. A written notification to CDPHE is also required within 5 days.

For hazardous materials: Contact local emergency response team by calling 911. Then Contact the CDPHE Environmental Emergency Spill Reporting Line (1-877-518-5608) within 24 hours of the spill event. A written notification to CDPHE is also required within 5 days.

Advance preparations will be initiated by the permittee to ensure a prompt and effective response to any spills. These preparations include an action plan to stop/control further leakage, containment of the spill with absorbent materials, or an earthen berm, and clean up and removal of residual pollutants and contaminated materials.

#### **IV. Project Control Measures Inspections, Maintenance, and Record Keeping**

4.1 *Site Inspections.* Inspections of the project site will be conducted as required by the Colorado Department of Public Health and Environment (CDPHE)- Water Quality Control Division permit, Stormwater Discharges Associated with Construction Activity. This document is included in Appendix I. This permit will be the guiding document for field and administrative requirements during the life of the permit for this project. Therefore, the permittee or the permittee's representative will execute the required inspections of site conditions and installed BMPs for impact and/or required maintenance. The SWMP is a living document and will be updated and revised, when necessary, including documentation of inspections. Inspections will occur at least every 7 calendar days and conducted as follows:

- All disturbed areas will be inspected for any existing or potential for erosion or transportation of sediment across or off the project site. All access points will be inspected for off-site tracking.
- All physical CMs will be inspected to ensure they are installed as detailed in the SWMP (see Appendix G) and effective in their quantity, size, and location. They will additionally be inspected to determine whether maintenance, repairs, cleaning, replacement, or modifications are needed.
- All site inlets and outlets and/or discharge points will be inspected for evidence of blockages, sediment buildup, and contaminating pollutants.

-All materials handling, storage, waste areas, and equipment will be inspected for evidence of leaks, spills, containment or procedure adherence, and/or contamination.

-Updating and revising of this SWMP will be assessed and applied collaborating with changing site conditions and construction phases.

-A written report will be generated documenting the inspection, findings, and necessary actions. This report will be stored in the SWMP Appendix H.

4.2 *CM Maintenance Procedures.* In addition to regularly scheduled inspections, any required maintenance, replacement, modifications, or cleaning of physical CMs will be completed proactively before stormwater pollution occurs. Any contaminants or pollutants that are cleaned and/or removed from installed CM features will be disposed of properly.

4.3 *Record Keeping Procedures.* This Stormwater Management Plan is a living document and will be developed, implemented, maintained, and revised as construction progresses at this project site from Pre-construction to Final Stabilization. An on-site log in this SWMP will be maintained with records of inspections, maintenance activities, spills leaks or illicit discharges, training and any other known documents affecting stormwater management or erosion control for this project site.

SWMP Checklist Item 25 - state that a signature is required on inspection logs.

## **V. Non-Stormwater Discharge**

4.1 *Anticipated Discharges.* There are no non-stormwater discharge sources that have been observed or are anticipated at this project site other than the allowable non-stormwater discharges covered in this section. The concrete waste will be contained within the trucks/equipment and the contractor utilizes concrete trucks that contain all wash water, removed off-site. No concrete waste will remain or be dumped onsite, in any drainage way, or storm sewer. The flushing of the new waterline will be conducted in accordance with the CDPHE Low-Risk Discharges of Potable Water.

## **V. Effluent Limitations (not covered in previous narrative)**

6.1 *Requirements for Control Measures Used to Meet Effluent Limitations.* These effluent limitations are not numerical but rather intended to address the minimization of discharge of pollutants from all potential pollutant sources at the site. Control measures for erosion and sediment control, structural and non-structural, will be implemented to effectively minimize erosion, sediment transport, and the release of other pollutants related to the construction

activity at this site. The subsequent list of specific control measures will be implemented to meet the requirements below or explanation will follow.

6.1.1 Vehicle Tracking Controls will be implemented to minimize vehicle tracking of sediment from disturbed areas, or areas where vehicle tracking occurs will meet the following requirement. This project will utilize daily sweeping and keep staging and traffic within the asphalt roadways. Ingress/Egress from any dirt area to asphalt roadway will utilize vehicle tracking controls and downgradient curb checks and/or inlet protection as needed.

6.1.2 Stormwater runoff from all disturbed areas and soil storage areas that have not been permanent or temporarily stabilized will flow to at least one control measure to minimize sediment in the discharge. This project will occur with most disturbance below grade and trench disturbance will be stabilized at the end of each day. Stockpiles are being removed offsite or backfilled at the end of the day and import materials will not be stored onsite. The immediate areas in vicinity of the disturbance will have inlet protection and curb checks during disturbance and construction activity. The areas of the open space will have sediment control logs and/or silt fence or compacted earthen berms to ensure stormwater runoff will occur in a compliant manner.

6.1.3 Outlets that withdraw water from or near the surface shall be installed when discharging from basins and impoundments, unless feasible. However, this project will not have any basins or impoundments.

6.1.4 Maintain pre-existing vegetation or equivalent control measures that are within 50 horizontal feet of receiving waters as defined by this permit, unless infeasible. This will be feasible for this linear underground utility installation within the existing roadway and roadside areas.

6.1.5 Soil compaction must be minimized for areas where infiltration control measures will occur or where final stabilization will be achieved through vegetative cover. This project will require revegetation or the disturbance within the open space area. The areas to be revegetated will be ripped and prepped for seeding and mulching. The construction disturbance within asphalt and concrete and will be returned to asphalt and concrete upon completion.

6.1.6 Unless infeasible, topsoil shall be preserved for those areas of a site that will utilize vegetative final stabilization. This project will preserve topsoil in the open space area. This topsoil may be retained offsite or utilized as a compacted berm until replaced prior to restoration.

6.1.7 Minimize the amount of soil exposed during construction activity, including the disturbance of steep slopes. This project will have 200-400 linear feet of exposed soil each day with paving of the disturbance at the end of each construction phase. There are no steep slopes for this project. The vegetative disturbance areas for the open space will have final stabilization procedures initiated (installation of seed and mulch) as soon as feasible.

6.1.8 Bulk storage, 55 gallons or greater, for petroleum products and other liquid chemicals must have secondary containment, or equivalent protection, to contain spills and to prevent spilled material from entering state waters. There will be no bulk stored fuels besides fuels trucks within truck beds.

6.1.9 Control measures for washout, in addition to what was previously stated, will have buffering capacity prior to reaching groundwater and not located near natural drainages, springs, or wetlands. There will be no concrete washout waste left on the construction site. The trucks will utilize onboard washout containment. Should concrete washout area be needed onsite it will be lined with material to ensure it won't reach the shallow groundwater.

6.2 *Discharges to an Impaired Waterbody.* Total Maximum Daily Load (TMDL) will be addressed if the permittee's discharge flows to or could be expected to flow to any water body for which a TMDL has been approved, and stormwater discharges associated with construction activity were assigned a pollutant specific Wasteload Allocation (WLA) under the TMDL, the division may have additional oversight and requirements. There has been no TMDL approved for the receiving waters associated with this construction project and no WLA assigned.

6.3 *General Requirements.* Discharges authorized by this permit shall not cause, have the reasonable potential to cause, or measurably contribute to an exceedance of any applicable water quality standard, including narrative standards for water quality. The Qualified Stormwater Manager and the Contractor have created this SWMP in order to comply with prevention of pollution and degradation of state waters.