STORM WATER POLLUTION PREVENTION PLAN

Project: RR-19-4501 Misc. Drainage & Grading Improvements MP 65.5 to MP 136.4

1. Site Description.

The following is a description of the construction activity which is the subject of this plan:

a. Project Location

The project is located on the Reagan Memorial Tollway (I-88) between mile posts 45.5 and 136.4. There are 18 individual sites identified by their OMS Task ID Numbers, spread out over 17 individual mile post locations along the Reagan Memorial Tollway. The sites can be found at Mile Post 45.5, 65.1, 65.5, 66.6, 67.1, 67.3, 67.7, 69.5, 69.8, 71.8, 73.1, 76.2, 113.4, 128.2, 129.7, 132.4 & 136.4. The sites are located in Ogle, Lee, Kane and DuPage Counties.

b. Description of the Construction Activity

The construction activities will differ at each individual site based on the repairs and improvements required for each situation. The anticipated repairs at each site are as follows:

- MP 45.5: Removal of several trees in the existing ditch line and replacement of some damaged right of way fence.
- MP 65.1: Clean out of multiple clogged underdrains, regrading of three ditch backslopes, and the excavation and replacement of saturated soil at a specified location.
- MP 65.5: Removal of flared end section and reconnection of drain tiles to existing storm sewer. Storm sewers will also be cleaned out.
- MP 66.6: Replacement of tile drain section with pipe drain which will reconnect to existing clay tile. Various storm sewers and adjacent risers will also be cleaned.
- MP 67.1: Manhole lid replacement along with the cleaning of various storm sewers and adjacent risers. A box culvert in this location will be cleaned out and evaluated with television inspection.
- MP 67.3: Installation of new embankment to restore an existing berm along with ditch regrading.
- MP 67.7: Regrading of an existing embankment and ditch to repair erosion and drainage issues. In addition, revetment matting and a concrete flume will be installed at this location.
- MP 69.5: Culvert wingwall erosion repairs along Beach Creek.
- MP 69.8: Two existing drain tiles will be repaired and reconfigured with new outfalls, allowing for the restoration of the existing ground line around the existing drain tile discharge points. Twin storm sewers will be cleaned out to remove sediment built up in them from erosion off of Tollway right of way. Placement of new revetment matting, regrading of existing embankment and ditches, cleaning of existing underdrains, and replacement of damaged / undermined right of way fence will also be performed.
- MP 71.8: Cleanout of multiple storm sewers in conjunction with other isolated improvements including drain tile reconnection and riser replacement.
- MP 73.1: Removal and replacement of two existing culverts and associated headwalls draining from roadside ditches into Beach Creek. Some damaged right of way fence will also be replaced as a part of this and settlement in berms along Beach Creek resulting from failed culverts will be restored. In addition, several existing underdrains will be cleaned out and some new ACBRS will be installed.

- MP 76.2: Removal of some existing ACBRS which is not functioning properly and replacement with new ACBRS installed per the Tollway requirements. MP 113.4: Removal and replacement of an existing culvert and associated headwalls draining from a roadside ditch into Lake Run Creek. Some damaged right of way fence will also be replaced as a part of this.
- MP 113.4: Removal and replacement of an existing culvert and associated headwalls draining from a roadside ditch into Lake Run Creek. Some damaged right of way fence will also be replaced as a part of this.
- MP 128.2: Installation of stone riprap at existing culvert outfall to prevent scour and future erosion.
- MP 129.7: Reattachment of culvert end section which has separated from the pipe and the installation of new stone rip rap to prevent future scour at the outfall.
- MP 132.4: Ditch cleaning and selective removal of brush along with the relocation of the right of way fence. A permanent rock check dam will also be installed at this location.
- MP 136.4: Filling in of eroded embankment zone to restore original conditions.

In addition to these repairs at each site, erosion control measures and final restoration / landscaping will be performed at each site to restore the sites to pre-construction conditions.

c. Sequence of Major Earth Disturbing Construction Activities

The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as clearing, excavation, grading and on-site or off-site stockpiling of soils or storage of materials:

1. Installation of all necessary erosion control measures.
2. Removal of existing storm sewers, drain tiles and culverts and installation of proposed storm sewers, drain tiles and culverts.
3. Grading, ditch cleaning, embankment placement and installation of topsoil.
4. Cleaning of existing storm sewer and culverts.
5. Removal of temporary erosion control measures and restoration of impacted areas.

This general sequence outlined above is anticipated to be applied to all the sites included under this contract. Generally speaking, this is the sequence that all the work will be performed. However, not every site will require all the work activities noted in the above sequence of major activities.

The aforementioned general description of construction staging will be modified by the Contractor's Progress Schedule that will be part of the SWPPP. The Contractor shall revise the Suggested Progress Schedule which will be maintained and updated as necessary and made part of the SWPPP.

Additional details regarding the progress schedule and erosion and sediment control sequencing are shown on Sheet SCH-1 "Suggested Progress Schedule", Sheets EC-1 to EC-25 "Erosion and Sediment Control Plan", and Sheets LP-1 to LP-24 "Landscape Plan" and shall be made part of the SWPPP. Where deviations from those drawings are required due to field conditions, the Engineer shall document and maintain a record of the changes as part of this SWPPP.

d. Total Construction Area and Total Area of Earth Disturbance

The total area of the construction sites is estimated to be 4 acres (including on-site or off-site stockpiling of soils or storage of materials).

The total project area of the site that it is estimated to be disturbed by excavation, grading, or other earth disturbing activities is approximately 3.6 acres.

e. Runoff Coefficients

The following estimates are provided for the construction site:

Percentage impervious area before construction: The percent impervious area varies across sites but is estimated to be, on average, approximately 35%. This estimate is based off the area from the right of way to the median of the roadway for typical sites. Despite the inclusion of the roadway in the calculation, the work at each site will occur outside the pavement limits. Runoff coefficient before construction: The runoff coefficients vary across the project but are estimated to be approximately between 0.24 to 0.60 which is the TR-55 range for dense grass to a medium underbrush.

Percentage impervious area after construction: The percent impervious area is not expected to change as a result of this project and can be estimated around the same 35% mark as preconstruction. In general, most of the sites included in this project do not add any new impervious surface and do not change the existing land cover conditions. Some sites do include more the implementation of ACBRS, riprap and paved flumes but any added impervious area resulting from the implementation of these is negligible by comparison to the existing conditions. In addition, impervious increases such as the revetment matting will have gaps (open cell ACBRS is proposed for use) in the matting along with seeding.

Runoff coefficient after construction: The runoff coefficients are expected to remain the same at 0.24 to 0.60 as the project will not be changing the existing land cover conditions.

f. Soil Characteristics

A description of the existing soil conditions at the construction site including soil types, slopes and slope lengths, drainage patterns, and other topographic features that might affect erosion and sediment control are summarized below:

- MP 45.5: The primary soils at this site are Waukee Loam (727A) with a slope of 0 to 2 percent, Orthents (802A), with a slope of 0 to 2 percent, and Dickinson Sandy Loam (87B) with a slope of 2 to 5 percent. These soils are all well drained, low runoff classes, and are nonhydric. This site has a soil erodibility factor (K) of 0.28 for the Waukee Loam, 0.32 for the Orthents and 0.20 for the Dickinson Sandy Loam, indicating a low to moderate susceptibility of soil erosion. This site is anticipated to disturb a total of 0.3 Acres.
- MP 65.1 & 65.5: The primary soils at this site are Drummer Silty Clay Loam (152A) with a slope of 0 to 2 percent, Muscatune Silt Loam (51A) with a slope of 0 to 2 percent, and Sable Silty Clay Loam (68A) with a slope of 2 to 5 percent. These soils are all poorly drained and nonhydric. These sites have a soil erodibility factor (K) of 0.24 for the Drummer Silty Clay Loam and 0.32 for the Muscatune Silt Loam, indicating a moderate susceptibility of soil erosion. These sites are anticipated to disturb a total of 0.4 and 0.1 Acres respectively.

- MP 66.6 & 67.1: The primary soils at these sites are Denny Silt Loam (45A) with a slope of 0 to 2 percent and Muscatune Silt Loam (51A) with a slope of 0 to 2 percent. The Denny Silt Loam is a hydric soil while the Muscatune Silt Loam is not. They are both poorly drained. These sites have a soil erodibility factor (K) of 0.43 for the Denny Silt Loam and 0.32 for the Muscatune Silt Loam, indicating a moderate to high susceptibility of soil erosion. These sites are anticipated to disturb a total of 0.2 and 0.0 Acres respectively.
- MP 67.3: The primary soils at this site are Blackberry Silt Loam (679B) at a slope of 0 to 2 percent and Elburn Silt Loam (198A) at a slope of 0 to 2 percent. The Blackberry silt loam is somewhat poorly drained while the Elburn Silt Loam is moderately well drained. Neither are hydric soils. This site has a soil erodibility factor (K) of 0.32 for the Blackberry Silt Loam and 0.28 for the Elburn Silt Loam, indicating a moderate susceptibility of soil erosion. This site is anticipated to disturb a total of 0.1 Acres.
- MP 67.7: The primary soil at this site is the Drummer Silty Clay Loam (152A) with a slope of 0 to 2 percent. The soil is poorly drained and nonhydric. This site has soil erodibility factor (K) of 0.24 for the Drummer Silty Clay, indicating a low to moderate susceptibility of soil erosion. This site is anticipated to disturb a total of 0.2 Acres.
- MP 69.5 & 69.8: The primary soil at this site is the Selma Loam(125A) with a slope of 0 to 2 percent. This soil is hydric and poorly drained. These sites have soil erodibility factor (K) of 0.24 for the Selma Loam, indicating a low to moderate susceptibility of soil erosion. These sites are anticipated to disturb a total of 0.1 and 0.1Acres respectively.
- MP 71.8: The primary soils at this site is Drummer Silty Clay (152A) with a slope of 0 to 2 percent and Elburn Silt Loam (198A) with a slope of 0 to 2 percent. Both soils are nonhydric and the Drummer Silty Clay is poorly drained with the Elburn Silt Loam is moderately well drained. This site has a soil erodibility factor (K) of 0.24 for the Drummer Silty Clay and 0.28 for the Elburn Silt Loam, indicating a low to moderate susceptibility of soil erosion. This site is anticipated to disturb a total of 0.2 Acres.
- MP 73.1: The primary soil at this site is Fella Silty Clay (8499A) with a slope of 0 to 2 percent. This soil is poorly drained and hydric. This site has soil erodibility factor (K) of 0.28 for the Fella Silty Clay, indicating low to moderate susceptibility of soil erosion. This site is anticipated to disturb a total of 0.7 Acres.
- MP 76.2: The primary soil at this site is Hooppole Loam (488A) with a slope of 0 to 2 percent. It is a poorly drained and hydric soil. This site has soil erodibility factor (K) of 0.17 for the Hooppole Loam, indicating low susceptibility of soil erosion. This site is anticipated to disturb a total of 0.1 Acres.
- MP 113.4: The primary soils at this site are Drummer Silty Clay (152A) with a slope of 0 to 2 percent and Orthents, Loamy (802B) with a slope of 1 to 6 percent. The Drummer Silty Clay is poorly drained while the Loamy Orthents is well drained. Neither are hydric soils. This site has soil erodibility factor (K) of 0.24 for the Drummer Silty Clay and 0.37 for the Orthents, Loamy, indicating moderate susceptibility of soil erosion. This site is anticipated to disturb a total of 0.2 Acres.
- MP 128.2: The primary soils at this site are Thorp Silt Loam (206A) with a slope of 0 to 2 percent and Clayey Orthents (805B) with a slope of 1 to 6 percent. The Thorp Silt Loam is a poorly drained hydric soil while the Clayey Othents is a moderately well drained nonhydric soil. This site has soil erodibility factor (K) of 0.37 for the Thorp Silt Loam and 0.32 for the Orthents, Clayey, indicating moderate susceptibility of soil erosion. This site is anticipated to disturb a total of 0.1 Acres.

- MP 129.7: The primary soil at this site is a Sawmill Silty Clay Loam (3107A) with a slope of 0 to 2 percent. The soil is poorly drained and hydric. This site has soil erodibility factor (K) of 0.28 for the erosion. This site is anticipated to disturb a total of 0.1 Acres.
- MP 132.4: The primary soils at this site are Clayey Orthents (805B) with a slope of 1 to 6 percent, Ashkum Silty Clay Loam (232A) with a slope of 0 to 2 percent, and Ozaukee Silt Loam (530D2) with a
- slope of 6 to 12 percent. The Ozaukee Silt Loam and the Clayey Orthents are moderately well drained soils while the Ashkum Silty Clay Loam is a poorly drained soil. The Ashkum Silty Clay Loam and Clayey Orthents are hydric soils while the Ozaukee Silt Loam is nonhydric. This site has soil erodibility factor (K) of 0.20 for the Ashkum Silty Clay Loam, 0.43 for the Ozaukee Silt Loam and 0.32 for the Orthents, Clayey, indicating moderate susceptibility of soil erosion. This site is anticipated to disturb a total of 0.6 Acres.
- MP 136.4: The primary soils at this site are Ozaukee Silt Loam (530B) with a slope of 2 to 4 percent and Clayey Orthents (805B) with a slope of 1 to 6 percent. Both are moderately well drained and nonhydric. This site has soil erodibility factor (K) of 0.43 for the Ozaukee Silt Loam and 0.32 for the Orthents, Clayey, indicating moderate susceptibility of soil erosion. This site is anticipated to disturb a total of 0.1 Acres.

g. Topography and Drainage

The majority of the project area is stabilized with turf grasses. There are small portions of the project area that include invasive trees and shrubs. This includes the existing channel along the ramp at MP 76.2 and MP 132.4. At both locations, the invasive species have been or will be removed and treatment will be implemented to deter their reestablishment at those locations. In addition, some of the proposed work is being performed in areas that are currently used for agricultural purposes.

The topography across the project is generally flat with ditch profile slopes between 0-2% and roadway foreslopes varying from 6:1 to 2:1.

The existing drainage is conveyed by ditch flow. Culverts are there to convey drainage under ramps, through berms and under other pavement. The existing culverts are a mixture of reinforced concrete pipe (RCP) and corrugated metal pipe (CMP). All new culverts to be installed will be RCP. The slopes of the new culverts, in general, match the slopes (generally less than 1% in slope) and inverts of the existing culverts.

In the vicinity of Beach Creek and Lake Run Creek, existing berms are along the creek banks, separating the creek flow from the adjacent farm fields and roadside ditches. These berms vary in height, with culverts that pass through them to drain the roadside ditches into the creeks.

There are no lengthy slopes within the project limits that represent areas of increased erosion potential.

The proposed project does not change any existing drainage patterns, flows or configurations.

During dewatering operations required for work in and around the various streams and wetlands that are at several of the project locations, stormwater will be filtered through a sediment bag before being discharged back to the adjacent creeks, rivers or wetlands. In addition, flotation booms as shown on ESC plans will be installed in rivers and creeks to control turbidity encountered during construction activities.

h. Drainage System Ownership

The drainage systems which receive stormwater discharge from the project are owned by:

- The Illinois Tollway
- IDOT

There are several sites which include work to repair existing drain tiles which are located outside the Tollway right of way. These field tiles are owned and managed by the adjacent property owners for those associated field tiles.

i. Site Maps

The plan documents identified below, hereby incorporated by reference, contain site map(s) indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of major soil disturbance, location(s) of proposed soil stockpiles or material storage locations, the location of major structural and nonstructural erosion and sediment controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where stormwater is discharged from the project to a surface water. These include:

Schedule of Quantities	SCH-1
Proposed Plans	PRO-1 through PRO-22
Drainage Details	PRO-23
Erosion and Sediment Control	EC-1 through EC-25
Landscape Plans	LP-1 through LP-24
Construction Details	STR-1

j. Receiving Waters and Wetland Acreage

The primary streams and/or tributaries which receive runoff from the site are:

toward the railroad.

- The site at MP 45.5 drains east along I-88 in the roadside ditch toward the railroad. Ultimately, this site drains into tributaries to the Rock River.
- The site at MP 65.1 drains out of the project site in roadside ditches, generally flowing west along I-88. Ultimately, the runoff makes its way into an unnamed tributary to Franklin Creek.
- The site at MP 65.5 drains out of the project site in roadside ditches, generally flowing east along I-88. Ultimately, the runoff makes its way into an unnamed tributary to Franklin Creek.
- The site at MP 66.6 drains out of the project limits, generally flowing east along I-88 in the roadside ditches. Some runoff is transported in a network of existing drain tiles. Ultimately, the runoff from this site flows into Beach Creek or unnamed tributaries to Beach Creek.
- The site at MP 67.1 drains out of the project limits, generally flowing east along I-88 in the roadside ditches. Some runoff is transported in a network of existing drain tiles. Ultimately, the runoff from this site flows into Beach Creek or unnamed tributaries to Beach Creek.
- The site at MP 67.3 drains out of the project limits, generally flowing south out of the Tollway right of way along Midway Road in roadside ditches. Ultimately, the runoff from this site flows into Beach Creek or unnamed tributaries to Beach Creek.

- The site at MP 67.7 drains out of the project limits, generally flowing east along I-88 in the roadside ditches. Some runoff is transported in a network of existing drain tiles. Ultimately, the runoff from this site flows into Beach Creek or unnamed tributaries to Beach Creek.
- The site at MP 69.5 drains directly into Beach Creek. Beach Creek is a tributary to the Kyte River and is identified as WOUS.
- The site at MP 69.8 drains directly into an unnamed tributary to Beach Creek at a point that is approximately 550' north of the confluence with Beach Creek. This unnamed tributary is listed as WOUS.
- The site at MP 71.8 generally flows to the east out of the project site in roadside ditches. Some of the site is also drained by field tiles which flow to the south out of the Tollway right of way. Ultimately, the runoff from this site flows into Beach Creek or Grubin Ditch, which ultimately flows into Beach Creek.
- The site at MP 73.1 drains directly into Beach Creek, which is identified as WOUS. It then flows to the north in Beach Creek to the Kyte River. The confluence with the Kyte River is approximately 6,000' north of the project site. The section of the Kyte River just up-stream of the confluence with Beach Creek is listed as a Biologically Significant Stream per IDNR. However, Beach Creek has not been listed as-such.
- The site at MP 76.2 drains in a roadside channel from the project site to the east along the I-88 eastbound on-ramp from IL-251. This man-made channel then passes under the ramp in a culvert, flows to the north off-site toward I-88. It then turns and flows west along I-88 approximately 7,200' and ultimately discharges to the Kyte River. This channel, within and immediately adjacent to the project site within the IL-251 interchange is not identified as WOUS but is instead identified as a constructed drainage feature.
- The site at MP 113.4 discharges directly into Lake Run Creek, which is identified as WOUS. Lake Run Creek ultimately drains into Blackberry Creek approximately 1.5 miles to the south.
- The site at MP 128.2 drains directly into Rott Creek, which drains south away from the Tollway and the project site and is classified as WOUS.
- The site at MP 129.7 drains directly into the East Branch of the DuPage River, which is classified as WOUS.
- The site at MP 132.4 drains into roadside ditches along I-88. These roadside ditches drain into an existing grate along the roadway. From there, the drainage is conveyed through existing piping, ultimately discharging and draining out of the Tollway right of way.
- The site at MP 136.4 drains into an existing storm sewer system that flows out of the project limits to the east along I-88.

Other than those specifically noted above, none of the other receiving waters for these project sites are listed as being Biologically Significant Streams per IDNR.

Wetlands and Waters of the United States (WOUS) were identified through a formal Wetland Delineation at the following sites: 66.6, 67.1, 69.5, 69.8, 71.8, 73.1, 113.4, 128.2, and MP 129.7. These include agricultural / farmed wetlands, streams and rivers classified as WOUS, and other wetlands. The sites at MP 69.8, 113.4 and 129.7 all have permanent impacts while the sites at MP 66.6, 69.8, 71.8, 73.1, 113.4 and 129.7 all have temporary impacts. The remaining sites have no temporary or permanent wetland impacts.

k. 303(d) Listed Receiving Waters

Beach Creek segment IL_PLB-C1 is listed on the 2018 IEPA 303 (d) list as impaired for the following:

- Aquatic Life: Dissolved Oxygen
- Aquatic Life: Sedimentation Siltation
- Aquatic Life: Total Phosphorus

This creek is located just north of I-88 leading up to the site at MP 69.5.

Beach Creek segment IL_PLB-C3 and IL_PLBA is listed on the 2018 IEPA 303 (d) list as impaired for the following:

- Aquatic Life: Cause Unknown

These sections of Beach Creek are located just south of I-88 leading up to the site at MP 69.5 and at the receiving end of the unnamed tributary to Beach Creek that drains through the site at MP 69.8.

East Branch of the Du Page River (segments IL_GBL-05) is listed on the 2018 IEPA 303 (d) list as impaired for the following:

- Aquatic Life: Total Suspended Solids (TSS)
- Aquatic Life: Phosphorus (Total)
- Fish Consumption: Polychlorinated Biphenyls

East Branch of the Du Page River (segments IL_GBL-10) is listed on the 2018 IEPA 303 (d) list as impaired for the following:

- Aquatic Life: Arsenic
- Aquatic Life: Dieldrin
- Aquatic Life: Hexachlorobenzene
- Aquatic Life: Methoxychlor
- Aquatic Life: Phosphorus (Total)
- Fish Consumption: Polychlorinated Biphenyls
- Primary Contact Recreation: Fecal Coliform

The site at MP 128.2 drains into Rott Creek, which is a tributary of the East Branch of the DuPage River. This creek is not on the list of impaired waters but does drain into an impaired waterway. The site at MP 129.7 drains directly into an impaired waterway (the East Branch of the DuPage River).

Lacey Creek (segments IL_GBLC) is listed on the 2018 IEPA 303 (d) list as impaired for the following:

- Aquatic Life: Bottom Deposits
- Aquatic Life: Chloride
- Aquatic Life: Sedimentation Siltation

The site at MP 132.4 drains into Lacey Creek, which ultimately drains into the East Branch of the DuPage River.

Rock River (segments IL_P-06 and IL_P-21) are listed on the 2018 IEPA 303 (d) list as impaired for the following:

- Fish Consumption: Mercury
- Fish Consumption: Polychlorinated Biphenyls

The site at MP 45.5 is closest to this section of river but this site drains into tributaries to the Rock River which are not on the list of impaired waterways.

The erosion and sediment control practices as described in the following section and as shown on the Erosion and Sediment Control Drawings have been designed based on a 25-year, 24-hour rainfall event. The Contractor will install and maintain all erosion and sediment control practices throughout the period of construction as shown in the plans and as directed by the Engineer. If necessary, instruction will be given to the Contractor to provide additional erosion and sediment control practices. The potential of construction activities impacting receiving water bodies is reduced to the maximum extent practical by the construction BMPs (perimeter erosion barrier, temporary ditch checks, rectangular inlet protection, stabilized construction entrances, temporary seeding with erosion control blanket, sediment filter bags and flotation booms) in this plan.

To prevent further fecal coliform impairment due to the project, portable restroom facilities will not be placed within 50 feet of the banks of the receiving water bodies nor will the facilities be placed near catch basins or other drainage structures.

Other aquatic life and fish consumption impairments will not be affected by the work completed at the sites.

The design and implementation of dewatering systems as needed to construct facilities included in this contract are the responsibility of the Contractor. Prior to the start of construction, the Contractor is required to submit a Dewatering Plan which will include, in part, a description and location of dewatering discharges. The Dewatering Plan shall be incorporated by reference into the SWPPP for the project.

The above BMPs will be implemented by the Contractor to prevent further degradation of the receiving water bodies for sedimentation and fecal coliform.

l. Receiving Waters with Total Maximum Daily Load (TMDL)

There is one IEPA-established or approved TMDL within the project limits which receives runoff from our proposed project sites. This is the East Branch of the DuPage River, which receives runoff from the site at Mile Post 129.7. The total land disturbance at this site which drains into the impaired waterway is 0.1 Ac. The IEPA has documented that the TMDL impairments include the following:

- Total Dissolved Solids / Conductivity
- Dissolved Oxygen
- Chloride

Total Dissolved Solids / Conductivity is noted as being an impairment for river section GBL-05 and Dissolved Oxygen and Chloride are noted as being impairments for river sections GBL-05 and GBL-10.

The project site drains into GBL-10 but the transition from GBL-10 to GBL-05 happens just downstream of our project site at MP 129.7.

In addition, there are multiple water bodies are listed for impairment of the aquatic life, fish consumption and primary contact recreation.

An implementation plan has been developed for the affected watersheds which outlines the actions necessary to achieve the goals. The plan includes recommended best management practices (BMPs) for nonpoint sources including the use of sediment filter bags and flotation booms. The sediment filter bags and flotation booms shall be provided and maintained throughout the duration of construction. The Contractor shall visually monitor the discharge from the sediment filter bag and behind the floatation boom to ensure the discharge remains clear of suspended sediments and is of equal or greater clarity than the accepting waterway.

m. Site Features and Sensitive Areas to be Protected

Sensitive environmental resources or site features on or adjacent to the project site that will have the potential to be impacted by the proposed construction and are to be protected and/or remain undisturbed are identified below. These may include but are not limited to steep slopes, highly erodible soils, wetlands, streams and other waterways, existing natural buffers, specimen trees, natural and mature vegetation, nature preserves, floodplains, bioswales, threatened or endangered species, and historic/archaeological resources.

Tree removals at the mile post 45.5 site may only take place between November 1 and March 31 to prevent any impacts to threatened and endangered bat species.

Wetlands and Waters of the US (WOUS) have been identified around and within multiple project sites. These areas have been clearly identified and shown on the plans, along with any anticipated impacts to these features, both temporary and permanent.

All unimpacted wetlands and WOUS within the ROW and wetlands and WOUS located adjacent to the ROW are to be protected during construction. Super Silt Fence will be provided at the boundary of the wetland areas to be protected and serve to designate the “No Intrusion Area”. Flotation Booms are to be provided in the WOUS to help isolate the project sites from adjacent waters and to contain any sediment that might get into the waters around the work area. See the plans for specific locations for these items.

Temporary and permanent impacts to the wetlands and the WOUS at the can be found at multiple sites within this contract. The locations of these impacts are clearly called and shown on the erosion control plans (EC-2 thru EC-23). These have been permitted through the Section 404 permits, one for the Rock Island District and one for the Chicago District. The permanent impacts can be found at MP 69.8, 113.4 and 129.7 from the installation of new culvert headwalls and from Articulated Concrete Block Revetment Mat and riprap installations to prevent scour and erosion.

Temporary impacts can be seen at numerous other sites within the project limits as identified on the plans to perform drainage and erosion repairs and improvements. The contractor shall minimize all impacts to these wetlands/waterways and the areas immediately surrounding the waterways to the

maximum extent practicable. All areas within or adjacent to these locations not shown as being impacted on the project plans shall be protected and remain undisturbed.

n. Pollutants and Pollutant Sources

The following pollutants and pollutant sources are anticipated to be associated with the project:

☒ Soils and Sediment
☒ Demolition Waste
☒ Paving Operation Materials and Waste
☒ Cleaning Products
☒ Joint and Patching Compounds
☒ Concrete Curing Compounds
☐ Painting Products and Wastes
☐ Sandblasting Materials and Waste Products
☒ Landscaping Materials and Wastes
☒ Soil Amendments and Stabilization Products
☐ Building Construction Materials and Wastes
☒ Vehicle and Equipment Fluids
☒ Portable Toilet Wastes
☒ Litter and Miscellaneous Solid Waste
☒ Glues, Adhesives, and Sealants
☐ Contaminated Soils
☒ Dust Palliative Products

o. Applicable Federal, State or Local Requirements

Procedures and requirements specified in applicable sediment and erosion control site plans or storm water management plans approved by local officials, or are required by Federal or State regulatory agencies are described below:

- The management practices, controls, and other provisions contained in this plan will be in accordance with the Illinois Tollway Supplemental Specifications and Standard Drawings, which are at least as protective as the requirements contained in the Illinois Urban Manual standards and specifications.
- Two separate Section 404 permits are required for this project; one from the Chicago District and one from the Rock Island District. Each permit will have different requirements and will apply to different sites included in the project plans. The project is subject to all requirements of the approved Section 404 permits issued by the USACE. This includes the use of non-erodible cofferdams, filtering of dewatering operations, timber/work mats and the use of low ground pressure equipment for work in wetlands (where practical). The Contractor is required to abide by all conditions of the Section 404 permit during construction.
- The project is not entirely located within the existing Illinois Tollway ROW. The work at Mile Post 66.6, 69.8, and 71.8 all have proposed improvements located on private property adjacent to the Illinois Tollway. However, the communities that each of these sites are located in (Ashton

and Reynolds Township) are not listed as MS4 communities on the IEPA website. Another site at Mile Post 132.4, located in Downers Grove (an MS4 community) requires access across private property to perform the work but no improvements are proposed on private property at this location. The remaining sites in this project are all entirely located within Illinois Tollway Right of Way. As a result, there are no local Municipal Separate Storm Sewer System (MS4) requirements applicable.

- Several of the proposed work sites are located outside the Illinois Tollway right of way on private property or require access to the site from private property. These include proposed work at Mile Post 66.6, 69.8, 71.8 and 132.4. The Contractor is required to comply with all agreements between the Illinois Tollway and adjacent property owners regarding access and the proposed work to be performed.
- The State of Illinois procedures and standards for urban soil erosion and sediment that are applicable to protecting surface waters, upon submittal of the Notice of Intent to authorize discharges under the ILR10 permit, are incorporated by reference and are enforceable under the permit even if they are not specifically included in the plan. Any additional BMPs which are required beyond those specified herein and/or shown on the Erosion and Sediment Control Plans shall also meet the requirements of the Illinois Urban Manual.

2. Controls.

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b. above. For each measure discussed, the contractor that will be responsible for its implementation as indicated. Each such contractor has signed the required certification on forms which are attached to, and are part of, this plan.

The Erosion Control Plan Drawings EC-1 to EC-25 included in the Contract Documents define the size and location of the measures to be installed during the construction of this project.

a. Stabilization Practices

Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavation or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization of disturbed areas must be initiated within 1 working day of permanent or temporary cessation of earth disturbing activities and shall be completed as soon as possible but not later than 14 days from the initiation of stabilization work in an area. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.

Where shown on the Contract Plans, Same-Day Stabilization shall be utilized to reduce the movement of soils once they are exposed by the Contractor’s operations. Same-Day Stabilization is to be implemented after the initial perimeter controls are in place and concurrently with the Contractor’s daily operations. In this case, the work zone must be left in such condition that the grading areas disturbed that day are stabilized, and measures are in place to control sediment laden stormwater.

The Engineer may also direct the Contractor to provide Same-Day Stabilization to critical disturbed areas where there is a risk that sediment laden runoff may occur. When directed by the Engineer, Same-Day Stabilization of specified areas shall commence the same day as directed and shall be completed no later than 24 hours after receipt of such direction.

Same-Day Stabilization may consist of either temporary erosion control measures or the permanent landscaping indicated on the Contract Plans. When permanent landscaping is not possible, due either to construction staging or site constraints, Same-Day Stabilization shall consist of temporary erosion control measures.

Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices and the locations for use. Site plans should ensure that existing vegetation is preserved where practicable and disturbed portions of the site are stabilized.

The following stabilization practices will be used for this project:

☐ Temporary Stabilization with Straw Mulch
☒ Same-Day Stabilization
☒ Erosion Control Blanket
☒ Temporary Seeding
☒ Permanent Seeding
☐ Tree Protection Fence
☐ Mulching
☐ Geotextiles
☐ Sod
☐ Vegetative Buffer
☐ Staged or Staggered Development
☒ Dust Control Watering
☐ Dust Suppression Agents
☒ Soil Stockpile Management

Description of Interim Stabilization Practices:

- Existing vegetation shall be maintained to the maximum extent possible. Stripping of existing vegetation and topsoil and all grading operations will be conducted in a manner that limits the amount of exposed area at any one time.
- Erosion Control Blanket: Applied to protect exposed soil surfaces against erosion due to rainfall or flowing water. Erosion control blankets with permanent seeding will be used to permanently stabilize all disturbed areas inside the limits of construction. These locations, along with the type of seeding and erosion control blankets to be used at each location, are referenced in the plan set.
- Temporary Seeding: This shall be applied with erosion control blankets at locations where permanent seeding cannot be immediately installed.

- Same-Day Stabilization: Same-Day Stabilization may consist of either temporary erosion control measures or the permanent landscaping on the Contract Plans. When permanent landscaping is not possible, due to either construction staging or site constraints, Same-Day Stabilization shall consist of temporary erosion control measures. The Contractor shall provide Same-Day Stabilization for all disturbed areas within 100 feet of wetlands or Waters of the US as indicated on the plans, and at other work locations as directed by the Engineer throughout the contract duration. When directed by the Engineer, Same-Day Stabilization of specified areas shall commence the same day as directed and shall be completed no later than 24 hours after receipt of such direction. A nominal quantity has been included to be used as directed by the Engineer.
- Dust Control Watering: Implemented using a spray application of water as necessary to control fugitive dust emissions. Repetitive treatment will be applied as needed to accomplish dust control when temporary dust control measures are used. A water truck will be present on site (or available) for sprinkling/irrigation to limit the amount of dust leaving the site. Watering will be applied daily (or more frequently) to be effective. If field observations indicate that additional protection (in addition to, or in place of watering) is necessary, alternative dust suppressant controls will be implemented at the discretion and approval of the Engineer.
- Soil Storage Pile Protection: Soil storage piles containing more than 10 cubic yards of material shall not be located within 25 feet of a roadway or drainage channel. Filter barriers, consisting of silt fence or equivalent, shall be installed immediately on the downslope side of the piles.
- Additional protective measures shall be installed as required and as directed by the Engineer.

Description of Final Stabilization Practices:

- Permanent Seeding: Once grading is completed, erosion control blanket and permanent seeding will be applied to all disturbed areas. Refer to the Landscape Plans for details.

The Engineer and Contractor shall maintain records of the dates when major grading activities occur, when construction activities have temporarily or permanently ceased on a portion of the site, and when stabilization measures area initiated.

b. Structural Practices

Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Included in the description is the site-specific scheduling of the implementation of the practices and the locations for their use.

The following structural practices will be used for this project:

☒ Silt Fence
☒ Super Silt Fence
☒ Temporary Ditch Checks
☐ Temporary Rock Check Dams
☐ Filter Fabric Inlet Protection, Basket Type
☐ Filter Fabric Inlet Protection, Cover Type
☒ Rectangular Inlet Protection

☒ Culvert Inlet Protection Fence
☒ Culvert Inlet Protection Stone☐ Sediment Traps
☐ Sediment Basins
☐ Temporary Pipe Slope Drains
☐ Temporary Stream Crossings
☒ Stabilized Construction Entrances
☐ Temporary Riprap
☐ Temporary Swales
☐ Temporary Channel Diversion
☐ Diversion Dike
☒ Sediment Filter Bag
☐ Dewatering Basin
☒ Flotation Boom
☐ Other (specify):

Description of Structural Practices:

- Silt Fence: Shall be installed at the locations indicated on the Erosion and Sediment Control Plans and other locations where it is deemed necessary to filter sediment from storm runoff. The fence is designed to retain sediment-laden water to allow settlement of suspended soils before filtering through the mesh fabric for discharge downstream. Perimeter silt fence shall be installed prior to the initiation of earth disturbing construction activities. Silt fence will be installed around temporary topsoil stockpiles and will be installed prior to beginning stockpiling activities.
- Super Silt Fence: Shall be installed at the locations indicated on the Erosion and Sediment Control Plans and other locations where it is deemed necessary to protect wetlands and other environmentally sensitive areas within and adjacent to the project. Super Silt Fence shall be constructed along the contour lines. Super Silt Fence shall be installed prior to the initiation of earth disturbing construction activities.
- Temporary Ditch Check: Shall be installed across a drainage ditches at the locations indicated on the Erosion and Sediment Control Plans and other locations as directed by the Engineer. The temporary ditch checks are to be used to slow water velocity in a ditch while permanent vegetation is being established.
- Fabric Inlet Protection: Will be provided at existing drainage structures as shown on the Erosion and Sediment Control Plans and at other locations as directed by the engineer that will be receiving flow within the construction limits. The primary function is to place controls in the path of flow sufficient to slow sediment laden water to allow settlement of suspended soils before discharging into the storm sewer system. Fabric inlet protection will consist of manufactured filter baskets in paved areas and rectangular inlet protections in unpaved areas.
- Culvert Inlet Protection Fence and Culvert Inlet Protection Stone BMPs shall be used at locations specified in the Erosion and Sediment Control Plans. This is installed around the up stream side of a culvert inlet to trap sediment and debris and prevent it from entering the culvert or storm sewer system. The type of culvert inlet protection has been selected based on site conditions, size of the contributing drainage areas and the anticipated flow characteristics.

- Stabilized Construction Entrances: Vehicles and equipment will access the construction site at the designated stabilized construction entrances to control offsite tracking of sediments at locations shown on the plans or as directed by the Engineer.
- Stabilized construction entrance(s) shall be constructed in conformance with the Illinois Tollway Supplemental Specifications and Standard Design Details. The rough texture of the stone helps to remove clumps of soil adhering to construction vehicle tires through the action of vibration and jarring over the rough surface and the friction of the stone matrix against soils attached to vehicle tires. Any track-out that occurs beyond the stabilized construction entrance shall be removed by wet sweeping no later than the end of the day in which the track-out occurs, or more frequently as directed by the Engineer.
- Sediment Filter Bag: Shall be used to filter discharge water originating from dewatering operations as-needed at the various project sites or as-directed by the Engineer. It is expected that this will be needed for work adjacent to the wetlands at various sites and for the proposed work in and along Beach Creek, Lake Run Creek, Rott Creek and the DuPage River. Discharge water is filtered through the bag wall, and the sediment is retained in the bag for disposal. This item shall be used where dewatering pumps are employed. A nominal quantity has been included to be used as directed by the Engineer.
- Flotation Boom: Shall be used, as shown on the Erosion and Sediment Control Plans, to contain and control the dispersion of turbidity and silt in a water body caused by during construction when working in or adjacent to the various creeks within theproject limits, including Beach Creek, Lake Run Creek, Rott Creek, and the DuPage River. Floatation boom shall be reerected along the shore to provide additional erosion and sediment control measure.

c. Treatment Chemicals

Provided below is a description of the planned use of polymer flocculants or treatment chemicals at the site. The location, use, and application technique, along with an explanation of need for their use is provided.

- The use of treatment chemicals to treat stormwater runoff or prevent erosion is not anticipated.

d. Permanent Storm Water Management Controls

Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

Permanent storm water management controls to be installed as part of the project are as follows:

- Articulated Concrete Block Revetment Systems will be employed along channel banks and at other locations as indicated on the plans near MP 67.7, 69.8, 73.1, and 76.2 to prevent scour and erosion at outfall points, within channels and on channel banks at critical locations.

- Riprap will be installed at the culvert outfalls at MP 128.2 and 129.7 to prevent erosion and to help dissipate the flow velocity. The riprap at MP 128.2 will extend up to but not be placed within the WOUS limits along Rott Creek. The riprap placed at MP 129.7 will extend into the WOUS limits identified for the East Branch of the DuPage River.
- Proposed Rock Dam will be installed at MP 132.4 to slow the flow of water, allow for infiltration up-stream and allow for the settlement of any sediments that may be transported by runoff from upstream.

e. Pollution Prevention

The following pollution prevention measures will be implemented to minimize the exposure of products or materials to precipitation and stormwater and minimize the discharge of pollutants on the project site:

- Vehicle/Equipment Storage, Cleaning and Maintenance. Construction vehicles will be inspected frequently to identify any leaks, which will be repaired immediately, or the vehicle will be removed from site. If minor vehicle/equipment maintenance must occur on site, repairs and maintenance will be made within an approved staging or storage area, or other approved location, to prevent the migration of mechanical fluids to watercourses, wetlands or storm drains. Spill response equipment shall be readily available when performing any vehicle or equipment maintenance. When not in use, vehicles and equipment utilized for construction operations will be staged outside of the regulatory floodplain and away from any natural or created watercourses, ponds, drainageways or storm drains.
- Cleaning of vehicles and equipment is discouraged and will be performed only when necessary to perform repairs or maintenance. Cleaning of vehicles and equipment with soap, solvents or steam shall not occur on the project. Vehicle and equipment wash water shall be contained for percolation or evaporative drying away from storm drain inlets or watercourses.
- Prohibited Discharges. The following non-storm water discharges are prohibited: concrete and wastewater from washout of concrete (unless managed by an appropriate control), wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps, solvents, or detergents, toxic or hazardous substances from a spill or other release, or any other pollutant that could cause or tend to cause water pollution.
- Material Delivery and Storage. The following procedures and practices for the proper handling, delivery, and storage of products and construction materials will be followed to reduce the risk of spills or other accidental exposure of materials and substances to
- stormwater runoff:
    - Fuel, oils, hydraulic fluids, and other petroleum products shall be stored under cover or in a containment area.
    - Locate chemical and material storage areas away from low elevation areas, drainage areas, and stream banks, and outside the 100-year floodplain.
    - Provide readily available Safety Data Sheets for all materials used or stored on the project site.

- Ensure access is available to storage areas to allow for spill clean-up and emergency response.
- Maintain temporary containment facilities in a condition free of accumulated rainwater and spills.
- Store materials in their original containers and maintain theoriginal product labels in place and in a legible condition.Replace damaged or otherwise illegible labels immediately.
- Keep ample supply of appropriate spill clean-up material near storage areas.
- Minimize the material inventory stored on-site to the extent practical.
- All materials stored on site will be stored in a neat, orderly manner in their appropriate containers.
- Substances will not be mixed with others unless recommended by the manufacturer.
- The Contractor will inspect storage areas daily to ensure proper use and disposal of materials on-site.
- Whenever possible, all product will be used before disposing of the container.
- Manufacturer's recommendations for proper use and disposal will be followed.
- If surplus product must be disposed of, manufacturer's or local and state recommended methods for proper disposal will be followed.
- Keep an accurate, up-to-date inventory of material delivered and stored onsite.
- Have employees trained in emergency spill clean-up procedures present when dangerous materials or liquid chemicals are unloaded.
- Repair or replace perimeter controls, containment structures, covers, and liners as needed to maintain proper function.

- Spill Response. The following practices will be followed to minimize, control and respond to spilled material:
  - The Contractor shall prepare and implement a Spill Prevention and Control Plan.
  - Manufacturer's recommended methods for spill cleanup will be clearly posted, and site personnel will be made aware of the procedures and location of the information and cleanup supplies.
  - Materials and equipment necessary for spill cleanup will be kept in the material storage area(s) and shall be appropriate for the materials stored. Equipment and materials will include, but not be limited to, brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, saw dust, and plastic and metal trash containers specially for this purpose.
  - All spills will be cleaned up immediately after discovery.
  - The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with hazardous substances.
  - The Contractor will dispose of used clean-up materials, contaminated materials, and recovered spill material that is no

longer suitable for the intended purpose, in accordance with all applicable laws, rules, and regulations.

- Spills of toxic or hazardous material will be reported to the appropriate state or local government agency, regardless of size.
- In the event of any spills, the Spill Prevention and Control Plan will be adjusted to include additional measures to prevent the type of spill from recurring. A description of the spill, what caused it and the cleanup measures will also be included.
- The Contractor shall be responsible for day-to-day operations and will designate a Spill Prevention and Cleanup Coordinator (Coordinator). The Coordinator will designate at least two (2) other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel, listed below, will be posted in the material storage area and in the office trailer onsite.

Spill Prevention and Cleanup Coordinator:

Deepi Ahuja	Enlight Contracting, LLC
Printed Name	Contractor Name

Additional Trained Spill Prevention and Response Personnel:

Lance Metzger	Enlight Contracting, LLC
Printed Name	Contractor Name
Printed Name	Contractor Name

f. Other Controls

Practices to prevent the discharge of pollutants to the storm drain system or to watercourses as a result of the creation, collection, and disposal of wastes are as follows:

- Solid Wastes. No solid materials, including building materials, shall be discharged into Waters of the U.S., except as authorized by a Section 404 permit. Solid waste storage areas shall be located at least 50 feet from drainage facilities and watercourses and outside of areas prone to flooding or ponding. Designate waste storage areas and provide dumpsters of sufficient size and numbers with lids to contain the solid waste generated by the project. In addition, provide trash receptacles in laydown yards, field trailer areas or at locations where workers congregate for lunch and break periods. Non-salvageable solid waste shall be disposed in accordance with all laws, rules, and applicable regulations.

- Sanitary Waste Materials. The Contractor shall not create or allow unsanitary conditions. All personnel involved with construction activities must comply with state and local sanitary or septic system regulations. Temporary sanitary facilities will be provided at the site throughout the construction phase. They must be utilized by all construction personnel and serviced by a commercial operator to maintain function and prevent unsanitary conditions. Portable toilets must be securely anchored and are not allowed within 30 feet of stormwater inlets or within 50' of a Water of the U.S.
- Concrete Wastes: Concrete washout and slurries generated from saw-cutting, coring, grinding, milling, grooving, or similar construction activities are required to be contained and are prohibited from entering storm drains or watercourses. Concrete waste management and disposal shall conform to Article 280.28 of the Illinois Tollway Supplemental Specifications.
- Hazardous Material Spill Response Wastes. The Contractor shall include as part of their Spill Prevention and Control Plan a description of the procedures for the storage and disposal of regulated hazardous or toxic waste, spill response procedures, and provisions for reporting if there are releases in excess of reportable quantities.

g. Natural Buffers

Due to the nature of the repair and improvement work that is being proposed as a part of this project, 50 foot natural buffers will not be able to be maintained for the various wetlands and waterways along the project.

There are multiple existing wetlands that will have maintenance work performed within them resulting in temporary impacts. Silt fence and Super Silt Fence will be utilized to protect adjacent wetland areas which are not proposed to be temporarily impacted.

There are also four individual waterways that are along the project limits. These include Beach Creek, Lake Run Creek, Rott Creek and the East Branch of the DuPage River. Natural Buffers are not possible to any of these waterways. The proposed work at each of these locations include culvert repairs, culvert replacements or riprap and outfall protection to prevent scour, all of which are immediately adjacent to the WOUS limits or require some amount of work within the WOUS limits. However, prior to the start of any earth disturbing activities at these sites various protective measures shall be implemented, many in tandem, at these locations including flotation booms, silt fence, and super silt fence.

In addition, same day stabilization quantities have been incorporated into the project for use at the Engineer's discretion. This shall be utilized for all disturbed areas within 100' of Waters of the US (WOUS) and Wetlands shown on the plans and at any other locations as directed by the Engineer to help provide additional protection should there be any evidence of sediment migrating into the adjacent wetlands and waterways.

3. Maintenance.

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan:

- Erosion and Sediment Control Manager (ESCM): The Contractor shall assign an ESCM to the project. This person is required to have taken an approved sediment and erosion control training course. The ESCM will be responsible for supervising the maintenance of erosion & sediment control measures and implementation of this plan.
- Protection of Existing Vegetation: Replace damaged vegetation with similar species as directed by the Engineer. Restore areas disturbed, disrupted or damaged by the Contractor to pre-construction conditions or better at no additional expense to the contract. Trim any cuts, skins, scrapes or bruises to the bark of the vegetation and utilize local nursery accepted procedures to seal damaged bark. Prune all tree branches broken, severed or damaged during construction. Cut all limbs and branches, one-half inch or greater in diameter, at the base of the damage, flush with the adjacent limb or tree trunk. Provide smooth cuts perpendicular to the root, all cut, broken, or severed, during construction, roots 1-inch or greater in diameter. Cover roots exposed during excavation with moist earth and/or backfill immediately to prevent roots from drying.
- Fabric Inlet Protection: Remove sediment from inlet filter baskets when basket is 25% full or 50% of the fabric pores are covered with silt. Clean filter if standing water is present longer than one hour after a rain event. When there is evidence of sediment accumulation adjacent to the inlet protection, the deposited sediment shall be removed by the end of the day in which it was found or by the end of the following day if removal by the end of the same business day is not feasible. Remove trash accumulated around or on top of inlet protection device. When filter is removed for cleaning, replace fabric if any tear is present.
- Outlet Protection/Temporary Riprap: Restore dislodged protection and correct erosion that may occur. Remedy deficient areas prone to increased erosion immediately to prevent greater deficiencies.
- Temporary Ditch Checks: Remove sediment from upstream side of ditch checks when sediment has reached 50% of height of structure. Repair or replace ditch checks whenever tears, splits, unraveling or compressed excelsior is apparent. Replace torn fabric mat that may allow water to undermine ditch check. Remove debris (garbage, crop residue, etc.) when observed. Reestablish the flow over the center of the ditch check. Water or sediment going around the ditch check indicates incorrect installation, device needs lengthening, or the selected device is inappropriate for site conditions. Remove ditch checks once all upslope areas are stabilized and seed or otherwise stabilize temporary ditch check areas.
- Temporary Erosion Control Seeding: Reapply seed if stabilization hasn't been achieved. Apply temporary mulch to hold seed in place if seed has been washed away or found to be concentrated in ditch bottoms. Restore rills as quickly as possible on slopes steeper than 1:4(V:H) to prevent sheet-flow from becoming concentrated flow patterns. Mow, if necessary, to promote seed soil contact when excessive weed development occurs (a common indication of ineffective temporary seeding). Supplement seed if weather conditions (extreme heat or cold) are not conducive to germination.
- Silt Fence: Repair tears, gaps or undermining. Restore leaning silt fence and ensure taut. Repair or replace any missing or broken stakes immediately. Clean fence line if sediment reaches one-third height of barrier. Remove fence once final stabilization is established. Repair fence if undermining occurs anywhere along its entire length.

- Temporary Stabilized Construction Entrances: Replenish stone or replace exit if vehicles continue to track sediment onto the roadway from the construction site. Sweep sediment on roadway from construction activities immediately. Ensure culverts (if provided) are free from damage and repair or replace as needed.
- Mulch: Repair straw if blown or washed away, or if hydraulic mulch washes away. Place tackifier or an Erosion Control Blanket if mulch does not control erosion.
- Stockpile Management: Repair and/or replace perimeter controls and stabilization measures when stockpile material has potential to be discharged or leave the limits of the protection. Remove all off-tracked material by sweeping or other methods. Update the SWPPP any time a stockpile location has been removed, relocated, added or required maintenance. During summer months, stockpiles should be watered to maintain the cover crop.
- Erosion Control Blanket: Repair damage due to water running beneath the blanket and restore blanket when displacement occurs. Reseeding may be necessary. Replace all displaced blanket and restaple.
- Flotation Boom: Inspect the flotation device, fabric, load line, anchors, and buoys, as well as the location and functionality. Additionally, the bottom of the silt curtain shall be inspected for folds and accumulated silt, which may pull the silt curtain under the water. Repairs or replacement of the flotation boom shall occur immediately following discovery. Follow manufacturer's recommendations for fabric and material repair. Accumulated sediment shall be removed per manufacturers' direction.
- Dewatering: Ensure proper operation and compliance with permits or water quality standards. Remove accumulated sediment from the flow area. Dispose of sediment in accordance with all applicable laws and regulations. Remove and replace dewatering bags when half full of sediment or when discharge rate is impractical. Immediately stop discharge if receiving areas show signs of cloudy water, erosion, or sediment accumulation.
- Temporary Concrete Washout: Do not discharge wastewater into the environment (Note: acidity, not particulates, is environmentally detrimental). Facilitate evaporation of low volume washout water. Clean and remove any discharges within 24 hours of discovery. If effluent cannot be removed prior to anticipated rainfall event, place and secure a noncollapsing, non-water collecting cover over the washout facility to prevent accumulation and precipitation overflow. Replace damaged liner immediately. Remove washout when no longer needed and restore disturbed areas to original condition. Properly dispose of solidified concrete waste.
- Material Delivery & Storage: Document the various types of materials delivered and their storage locations in the SWPPP. Update the SWPPP any time significant changes occur to material storage or handling locations and when they have been removed. Cleanup spills immediately. Remove empty containers.
- Solid Waste Management: Designate a waste collection area(s) and identify them in the SWPPP. Inspect inlets, outfalls and drainageways for litter, debris, containers, etc. Observe the construction site for improper waste disposal. Update the SWPPP any time the solid waste management plan significantly changes. Collect items discarded outside of designated areas.
- Vehicle and Equipment Fueling, Cleaning and Maintenance: Cleanup spills immediately. Contractor must provide documentation that spills were cleaned, materials disposed of, and

impacts mitigated. Update the SWPPP when designated location has been removed, relocated, added or requires maintenance. In the event of a spill into a storm drain, waterway or onto a paved surface, the owner of the fuel must immediately act to contain the spill. Once contained, clean up the spill. As an initial step this may involve collecting any bulk material and placing it in a secure container for later disposal. Follow-up cleaning will also be required to remove residues from paved or other hard surfaces.

- Portable Restroom Facilities: Maintain in accordance with applicable laws to prevent unsanitary conditions. Check for leaks and remove and replace as needed.

4. Inspections and Corrective Actions.

The Engineer will be responsible for conducting inspections along with the Contractor's ESCM. A maintenance inspection report will be completed after each inspection. A copy of the report form will be completed by the Engineer and Contractor and will be maintained on site.

Qualified personnel shall inspect disturbed areas of the construction site which have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site. Such inspection shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm or by the end of the following business or work day that is 0.5 inches or greater or the equivalent snowfall. Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections shall recommence when construction activities are resumed, or if there is a 0.50 inches or greater rain event, or a discharge due to snowmelt occurs.

a. Disturbed areas and areas used for storage of wastes, equipment, and materials shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. All locations where stabilization measures have been implemented shall be observed to ensure that they are still stabilized. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking. If repair is necessary, it will be initiated within 24 hours of the completion of the inspection report.

If the inspections determine concrete fines are discharging as a result of roadway reconstruction, the Contractor must ensure that the discharge does not exit the right-of-way. The Engineer will immediately test the pH levels of the affected discharge runoff to determine the average pH levels. Where pH levels exceed 9.0, the Engineer will recommend remediation strategy to reduce the alkalinity to acceptable levels before allowing to exit the right-of-way or discharge to environmentally sensitive locations.

b. Based on the results of the inspection, the description of potential pollutant sources identified in Section 1 above, and pollution prevention measures identified in Section 2 above, the Storm Water Pollution Prevention Plan shall be revised as appropriate as soon as practicable after such inspection to minimize discharges. Any changes to this plan resulting from the required inspections shall be implemented within seven (7) calendar days following the inspection.

c. A report summarizing the scope of the inspection, name(s), qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this Storm Water Pollution Prevention Plan, and actions taken in accordance with Section 4.b. above shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed by the Contractor and the Engineer.

d. For any violation of the SWPPP observed during any inspection conducted, including those not required by the plan, and any illicit discharge (defined as any discharge that is not composed entirely of storm water) exiting the right-of-way or to receiving waters, the Engineer will immediately report the incident to the Illinois Tollway Environmental Unit and shall be submitted electronically on the Incidence of Non-Compliance (ION) forms provided by IEPA within 12 hours.

Reports of violations of the SWPPP or illicit discharges shall be reported to the Illinois Tollway Environmental Unit at environment@getipass.com. For Environmental Unit will coordinate any potential violations directly with the IEPA. In addition, the Engineer will provide a written submission to the Illinois Tollway Environmental Unit and the project files within 5 days summarizing the incident(s) and actions taken.

e. Corrective action shall be taken to address any of the following conditions if identified at the site: a stormwater control needs repair or replacement; a stormwater control necessary to comply with the requirements of this permit was never installed or was installed incorrectly; or discharges are causing an exceedance of applicable water quality standards; or a prohibited discharge has occurred.

Corrective actions shall be completed as soon as possible and documented within 7 days of the non-compliance in an inspection report. If it is infeasible to complete the installation or repair within seven (7) calendar days, the inspection report(s) will describe the conditions contributing to the infeasibility to complete the installation or repair within the 7-day timeframe and document the schedule for installing the stormwater control(s) and making them operational as soon as feasible after the 7-day timeframe.

5. Non-Storm Water Discharges.

The following allowable non-stormwater discharges may combine with stormwater discharges that are treated by the measures included in this plan and are anticipated on the project:

Allowable Non-Stormwater Discharges	**Likely to be Present on site**	
	Yes	**No**
Waters used to wash vehicles where detergents are not used		X
Waters used to control dust	X	
Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed) and where detergents are not used		X
Landscape irrigation drainages		X
Uncontaminated groundwater or spring water	X	

Foundation or footing drains where flows are not contaminated with process materials, such as solvents		X
Potable water sources including uncontaminated water main or fire hydrant flushing water		X
Discharges from dewatering of trenches and excavations if managed by appropriate controls	X	

For each allowable non-stormwater discharge anticipated on the project, the measures which will be used to eliminate or reduce the non-stormwater component of the discharge are described below:

- Discharges from Dewatering: Discharges from dewatering operations must be directed through an appropriate pollution prevention/treatment measure, such as a sediment filter bag, sediment trap or sediment basin prior to being discharged from the site or into Waters of the U.S. Under no circumstances are discharges from dewatering operations to be discharged directly into streams, rivers, lakes or other areas beyond the permitted project area. Likewise, discharges into storm sewer systems that do not drain to a suitable on- site treatment facility, such as a basin, are also prohibited. To the extent feasible, vegetated areas of the site shall be used to infiltrate dewatering water before discharge.
- Discharges from dewatering operations shall be conducted in a manner sufficient to prevent erosion and minimize sediment from the discharge to the maximum extent practical. Dewatering discharges shall also be treated or controlled to minimize discharges of pollutants and shall not include visible floating solids or foam, oil, grease, or other similar products.
- Discharge from dewatering shall be a stable surface using an aggregate leveling pad and secondary containment in accordance with Illinois Tollway standards. Discharge shall be no more turbid that the receiving water and will be immediately stopped if the receiving water shows signs of cloudy water, erosion, or sediment accumulation.
- Waters used to control dust: A water truck will be present on site (or available) for sprinkling/irrigation to limit the amount of dust leaving the site. When this is found to be necessary, watering will be applied daily (or more frequently) to be effective. Caution will be used not to overwater, as that may cause erosion. If field observations indicate that additional protection is necessary, alterative dust suppressant controls will be implemented at the discretion and approval of the Engineer.
- Uncontaminated groundwater or spring water may be encountered during the course of this work. Should this be found, the water flowing from this source is to be isolated from the work areas to prevent the mixing of construction site stormwater runoff with the clean spring or groundwater discharges. At the direction of the Engineer, additional silt fence or other erosion control measures are to be placed to adequately protect any clean water sources.

6. Contractor Inventory of Hazardous Materials and Substances.

The materials or substances listed below are expected to be present on site during construction (use additional pages, as necessary). **To be filled in by Contractor.**

7. Contractor Required Submittals.

The Contractor and any subcontractor responsible for compliance with the provisions of the SWPPP shall provide, as an attachment to their signed Contractor Certification Statement, a narrative description of how they will comply with the requirements of the SWPPP with regard to the following items:

- Stabilized Construction Entrances: Identify the location(s) of stabilized construction entrances to be used and provide a description of how they will be maintained. Indicate if any changes to the suggested locations (if any) shown on the plans are proposed.
- Material Delivery, Storage and Use: Discuss where and how materials, including chemicals, concrete curing compounds, petroleum products, etc. will be stored to prevent spills.
- Solid Waste Management and Disposal: Discuss the procedures to be used to contain, and the method of disposal, for construction waste and litter.
- Sanitary Waste: Discuss how sanitary wastes will be contained and disposed along with the locations of portable restroom facilities. A schedule of maintenance shall be provided.
- Spill Response and Control: Provide a Spill Prevention and Control Plan describing the steps that will be taken to respond to, control, and report chemical or petroleum spills which may occur. Procedures to address spills in excess of RCRA reportable quantities must be provided.
- Concrete Residuals and Washout Wastes: Discuss the location and type of concrete washout facilities to be used on this project and how they will be identified and maintained.
- Vehicle and Equipment Cleaning and Maintenance: Discuss where vehicle and equipment cleaning and maintenance will be performed and the BMPs that will be used for spill containment and spill prevention, containment, and treatment of wash waters.
- Dewatering: Provide a Dewatering Work Plan for excavation activities that encounter groundwater or other water that needs to be removed from the construction area. The plan must detail a system that will remove sediments and other pollutants (if present) from the water prior to discharge. The plan shall be submitted and approved prior to the commencement of dewatering activities.
- Polymer Use: If the use of polymers or other treatment chemicals are specified for use, a Polymer Treatment Work Plan shall be submitted for approval to the Engineer, covering the use of all polymer flocculants or treatment chemicals at the site. Dosage of treatment chemicals shall be identified, Safety Data Sheets shall be provided, procedures for storage and use of the treatment chemical must be described, and staff responsible for use/application must be identified. Documentation of training for the individuals who will

be applying the polymers/treatment chemicals shall be provided. The polymer treatment system must be designed by a Certified Professional in Erosion and Sediment Control (CPESC).

In addition to the above, the Contractor is required to provide the following submittals to demonstrate compliance with the Illinois Tollway Supplemental Specifications and any federal or state environmental permits:

- Dust Control Plan pursuant to Article 107.36 of the Illinois Tollway Supplemental Specifications. The plan shall be submitted and approved prior to commencement of earth disturbing work activities.
- Erosion and Sediment Control Schedule pursuant to Article 280.02 of the Illinois Tollway Supplemental Specifications. The schedule shall be submitted and approved prior to commencement of earth disturbing work activities.
- Proposed Borrow, Use, and Waste Area approval pursuant to Article 107.22 of the Illinois Tollway Supplemental Specifications. The Contractor shall provide a written request to the Engineer using an A-50 Form for any proposed alternative use of the Illinois Tollway ROW. The A-50 Form shall be approved prior to any such use by the Contractor and approval of such requests shall not be assumed.
- In-Stream Work Plan which meets the requirements of the USACE pursuant to conditions of the Section 404 permit issued by the USACE. The plan shall be submitted and approved prior to the commencement of work subject to the Section 404 permit.

The above submittals shall be incorporated by reference and become part of the SWPPP.

ILLINOIS TOLLWAY CERTIFICATION STATEMENT

This certification statement is a part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR10, issued by the Illinois Environmental Protection Agency.

Project Information:

Route Reagan Memorial Tollway Marked I-88

Section Mile Post 45.5 to 136.4 Project No. RR-19-4501

County Lee, Ogle, Kane, DuPage

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Prepared By: M Squared Engineering
DESIGN SECTION ENGINEER

By: David Bachhuber, P.E. Senior Engineer
Name/Title

Dated: January 3, 2020

OWNER: ILLINOIS STATE TOLL HIGHWAY AUTHORITY

Signed:  Senior Engineer
Name/Title

CONTRACTOR CERTIFICATION STATEMENT

This certification statement is a part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR10, issued by the Illinois Environmental Protection Agency.

Project Information:

Route _Reagan Memorial Tollway_____ Marked _____I-88_____
Section _Mile Post 45.5 to 136.4_____ Project No___RR-19-4501_____
County _Lee, Ogle, Kane, DuPage_____

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit No. ILR10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification: That I agree to comply therewith; and that I will ensure that all Subcontractors working on the subject project understand and comply with said permit.

4/30/20

Signature Date

Managing Partner

Title

Enlight Contracting, LLC

Name of Firm

645 N Kingsbury St. Unit 1208

Street Address

Chicago IL 60654

City State Zip Code

847-312-2337

Telephone

ATTACHMENT _____

Note: CONTRACTOR TO COMPLETE

Prepare additional signature pages as needed if the responsibilities of the Storm Water Pollution Prevention Plan are split between contractors - specify which item(s) these subcontractors assume responsibility for.