NPDES PERMITS ASSOCIATED WITH THIS PROJECT:

M TIR40 PERMIT NO. 0493

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 CATHERED 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.

PRINT NAME

DEPUTY DIRECTOR OF HIGHWAYS

IL DEPT. OF TRANSPORTATION AGENCY

REGION FIVE ENGINEER

I. SITE DESCRIPTION:

A. THE FOLLOWING IS A DESCRIPTION OF THE PROJECT LOCATION: THE PROJECT CONSISTS OF THE PROPOSED IMPROVEMENTS OF 4.27 MILES OF IL ROUTE 158, SPECIFICALLY

IL ROUTE 158 FROM JUST EAST OF IL 3 IN COLUMBIA TO M&O STATION ROAD IN MILLSTADT.

B. THE FOLLOWING IS A DESCRIPTION OF THE CONSTRUCTION ACTIVITY WHICH IS THE SUBJECT OF THIS PLAN:

CONSTRUCTION WILL INCLUDE PAVEMENT REMOVAL, HMA WIDENING, SHOULDER WIDENING (HMA & AGGREGATE). DRAINAGE IMPROVEMENTS, EROSION CONTROL FACILITIES, TRAFFIC CONTROL AND PROTECTION, PAVEMENT MARKING, AND ALL OTHER COLLATERAL WORK NECESSARY TO COMPLETE THE WORK CONSISTENT WITH THE

C. 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 GRUBBING, EXCAVATION AND GRADING:

DESCRIPTION OF INTENDED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:

STAGE 1: PAVEMENT REMOVAL, EXCAVATION, AND EMBANKMENT,

STAGE 2: BOX AND PIPE CULVERT EXTENSIONS.

STAGE 3: HMA WIDENING, HMA SHOULDER AND AGGREGATE WIDENING.

STAGE 4: PLACEMENT OF FROSION CONTROL FACILITIES.

STAGE 5: FINAL GRADING, AND OTHER MISCELLANEOUS

D. THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE _49_ ACRES.

THE TOTAL AREA OF THE SITE THAT IS ESTIMATED WILL BE DISTURBED BY EXCAVATION, GRADING OR OTHER ACTIVITIES IS _37_ ACRES.

- E. THE FOLLOWING IS A WEIGHTED AVERAGE OF THE RUNOFF COEFFICIENT FOR THIS PROJECT AFTER CONSTRUCTION
- F. THE FOLLOWING IS A DESCRIPTION OF THE SOIL TYPES FOUND AT THE PROJECT SITE FOLLOWED BY INFORMATION REGARDING THEIR EROSIVITY:

SEVERAL SOIL TYPES ARE LOCATED WITHIN THE PROJECT AREA OF IL ROUTE 158 FROM JUST EAST OF IL 3 TO M&O STATION ROAD IN MILLSTADT. THESE ARE:

WAKELAND SILT LOAM - NEARLY LEVEL SOIL ON RELATIVELY NARROW BOTTOM LANDS. THIS SOIL HAS A SLIGHT SUSCEPTIBILITY TO WATER AND WIND EROSION WITH SLOPES BETWEEN ZERO TO ONE PERCENT.

IVA SILT LOAM - GENTLY SLOPING SOIL MAINLY ASSOCIATED WITH THE UPPER PART OF WATERCOURSES AND ARE RELATIVELY SMALL. THIS SOIL HAS A SLIGHT SUSCEPTIBILITY TO WATER AND WIND EROSION WITH SLOPES BETWEEN TWO TO FOUR PERCENT.

ALFORD SOILS, KARST - STRONGLY SLOPING SOILS MAINLY ON THE SIDES OF SINKHOLES. USUALLY LOCATED IN AREAS WHERE SINKHOLES ARE TO COMMON TO MAP, THE POTENTIAL FOR EROSION MODERATELY SEVERE TO SEVERE WITH SLOPES BETWEEN SEVEN TO FIFTEEN PERCENT.

ALFORD SILT LOAM - GENTLY SLOPING SOIL ON MAINLY RIDGETOPS AND AROUND WATERCOURSES, RELATIVELY LARGE AREAS UNIFORM IN NATURE. RUNGER IS MEDIUM, AND THE HAZARD OF EROSION SLIGHT.

G. THE FOLLOWING IS A DESCRIPTION OF POTENTIALLY EROSIVE AREAS ASSOCIATED WITH THIS PROJECT:

THERE ARE SIX POTENTIALLY CRITICAL EROSIVE AREAS DUE TO STEEP SLOPES. THE AREAS ARE STA. 150+00 LT TO STA. 154+00 LT, STA. 177+00 RT TO STA. 179+00 RT, STA. 200+75 RT TO STA. 202+25 RT, STA. 208+75 RT TO 210+50 RT, STA. 219+50 RT TO STA. 222+50 RT, AND FINALLY STA. 228+50 RT TO STA. 229+50 RT.

H. THE FOLLOWING IS A DESCRIPTION OF SOIL DISTURBING ACTIVITIES, THEIR LOCATIONS, AND THEIR EROSIVE FACTORS (E.G. STEEPNESS OF SLOPES, LENGTH OF SLOPES, ETC):

THE NATURE AND PURPOSE OF LAND DISTURBING ACTIVITIES ON THIS PROJECT IS TO REMOVE EXISTING SHOULDERS AND EXCAVATE NEW DITCHES TO ACCOMMODATE SHOULDER AND PAVEMENT WIDENING, THERE ARE NO OFF-SITE LAND DISTURBING ACTIVITIES PLANNED.

THE ALFORD SOIL GROUP HAS EROSIVE CHARACTERISTICS DUE TO THE STEEP SLOPES ASSOCIATED WITH THE KARST

- I. SEE THE EROSION CONTROL PLANS AND/OR DRAINAGE PLANS FOR THIS CONTRACT FOR INFORMATION REGARDING DRAINAGE PATTERNS, APPROXIMATE SLOPES ANTICIPATED BEFORE AND AFTER MAJOR GRADING ACTIVITIES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AND CONTROLS TO PREVENT OFF SITE SEDIMENT TRACKING (TO BE ADDED AFTER CONTRACTOR IDENTIFIES LOCATIONS, AREAS OF SOIL DISTURBANCE, THE LOCATION OF MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS IDENTIFIED IN THE PLAN, THE LOCATION OF AREAS WHERE STABILIZATION PRACTICES ARE EXPECTED TO OCCUR, SURFACE WATERS (INCLUDING WETLANDS) AND LOCATIONS WHERE STORM WATER IS DISCHARGED TO SURFACE WATER INCLUDING WETLANDS.
- J. THE FOLLOWING IS A LIST OF RECEIVING WATER(S) AND THE ULTIMATE RECEIVING WATER(S), AND AERIAL EXTENT OF WETLAND ACREAGE AT THE SITE. THE LOCATION OF THE RECEIVING WATERS CAN BE FOUND ON THE EROSION AND SEDIMENT CONTROL PLANS:

TRIBUTARY OF CARR CREEK WEST FORK OF RICHLAND CREEK DOUGLAS CREEK

SINKING CREEK NATURE PRESERVE

K. THE FOLLOWING POLLUTANTS OF CONCERN WILL BE ASSOCIATED WITH THIS CONSTRUCTION PROJECT: (CHECK ALL THAT APPLY)

SOIL SEDIMENT ☑ PETROLEUM (GAS, DIESEL, OIL, KEROSENE, HYDRAULIC OIL/FLUIDS) ☑ CONCRETE M ANTIEREFZE / COOLANTS M CONCRETE TRUCK WASTE ☑ WASTE WATER FROM CLEANING CONSTRUCTION EQUIPMENT ☑ CONCRETE CURING COMPOUNDS [] OTHER (SPECIFY). ☑ SOLID WASTE DEBRIS OTHER (SPECIFY)_____ OTHER (SPECIFY)____ [] PAINTS ☐ SOLVENTS [] OTHER (SPECIFY) FERTILIZERS / PESTICIDES

II. CONTROLS

THIS SECTION OF THE PLAN ADDRESSES THE CONTROLS THAT WILL BE IMPLEMENTED FOR EACH OF THE MAJOR CONSTRUCTION ACTIVITIES DESCRIBED IN I.C. ABOVE AND FOR ALL USE AREAS, BORROW SITES, AND WASTE SITES. FOR EACH MEASURE DISCUSSED, THE CONTRACTOR WILL BE RESPONSIBLE FOR ITS IMPLEMENTATION AS INDICATED. THE CONTRACTOR SHALL PROVIDE TO THE RESIDENT ENGINEER A PLAN FOR THE IMPLEMENTATION OF THE MEASURES INDICATED. THE CONTRACTOR AND SUBCONTRACTORS, WILL NOTIFY THE RESIDENT ENGINEER OF ANY PROPOSED CHANGES, MAINTENANCE, OR MODIFICATIONS TO KEEP CONSTRUCTION ACTIVITIES COMPLIANT WITH THE PERMIT. EACH SUCH CONTRACTOR HAS SIGNED THE REQUIRED CERTIFICATION ON FORMS WHICH WILL BE PROVIDED AT THE PRE-CONSTRUCTION CONFERENCE, AND ARE A PART OF, THIS PLAN:

A. FROSION AND SEDIMENT CONTROL

- 1. STABILIZED PRACTICES: PROVIDED BELOW IS A DESCRIPTION OF INTERIM AND PERMANENT STABILIZATION PRACTICES. INCLUDING SITE SPECIFIC SCHEDULING OF THE IMPLEMENTATION OF THE PRACTICES. SITE PLANS WILL ENSURE THAT EXISTING VECETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED.
 STABILIZATION PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, GEOTEXTILES, SODDING, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, PRESERVATION OF MATURE VEGETATION, AND OTHER APPROPRIATE MEASURES. EXCEPT AS PROVIDED BELOW IN II(A)(1)(d) AND II(A)(3), STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASES ON ALL DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION WILL NOT OCCUR FOR A PERIOD OF 21 OR MORE CALENDAR DAYS.
- g. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE THEREAFTER.

THE FOLLOWING STABILIZATION PRACTICES WILL BE USED FOR THIS PROJECT: (CHECK ALL THAT APPLY)

□ PRESERVATION OF MATURE VEGETATION

☐ VEGETATED BUFFER STRIPS □ PROTECTION OF TREES

□ TEMPORARY EROSION CONTROL SEEDING

☐ TEMPORARY TURF (SEEDING, CLASS 7)

☑ TEMPORARY MULCHING

M PERMANENT SEEDING

☑ EROSION CONTROL BLANKET / MULCHING

☐ SODDING

☐ GEOTEXTILES

☐ OTHER (SPECIFY)___ OTHER (SPECIFY)

☐ OTHER (SPECIFY)_____

DESCRIBE HOW THE STABILIZATION PRACTICES LISTED ABOVE WILL BE UTILIZED:

1. TEMPORARY EROSION CONTROL SEEDING - THIS ITEM WILL BE APPLIED TO ALL BARE AREAS EVERY 809 U33,1340R5-4,135R5-5 ST. CLAIR, MONROE 252 SEVEN DAYS TO MINIMIZE THE AMOUNT OF EXPOSED SURFACE AREAS.

TO STA, 155+00 STA. 140+00

SECTION

CONTRACT NO. 76408

SHEETS

COUNTY

EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FED. ROAD DIST. NO. . ILLINOIS FED. AID PROJECT

WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN LINDISTURBED LINTIL ELLL SCALE CONSTRUCTION IS LINDERWAY TO PREVENT UNNECESSARY SOIL EROSION.

BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDED AT THE BEGINNING OF CONSTRUCTION WHERE NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN 7 DAYS.

- 2. PERMANENT SEEDING SEEDING, CLASS 2 WILL BE INSTALLED PER IDOT SPECIFICATIONS.
- 3. EROSION CONTROL BLANKETS/MULCHING EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES AND IN HIGH VELOCITY AREAS (I.E. DITCHES) THAT HAVE BEEN BROUGHT TO FINAL GRADE AND SEEDED TO PROTECT SLOPES FROM EROSION AND ALLOW SEEDS TO GERMINATE. MULCH, METHOD 2 WILL BE APPLIED IN RELATIVELY FLAT AREAS TO PROTECT THE DISTURBED AREAS AND PREVENT FURTHER EROSION.

MULCH AS APPLIED TO TEMPORARY EROSION CONTROL SEEDING SHALL BE BY THE METHOD SPECIFIED IN THE CONTRACT AND AT THE DIRECTION OF THE ENGINEER. MULCH WILL BE PAID SEPARATELY AND SHALL CONFORM TO SECTION 251 OF THE STANDARD SPECIFICATIONS.

PERMANENT STABILIZATION - ALL AREAS DISTURBED BY CONSTRUCTION WILL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING THE FINISHED GRADING. EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT THE SLOPES FROM RILL AND GULLY EROSION AND ALLOW SEED TO GERMINATE PROPERLY. MULCH, METHOD 2 WILL BE USED ON RELATIVELY FLAT AREAS.

2. 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. SUCH PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: PERIMETER EROSION BARRIER, EARTH DIKES, DRAINAGE SWALES, SEDIMENT TRAPS, DITCH CHECKS, SUBSURFACE DRAINS, PIPE SLOPE DRAINS, LEVEL SPREADERS, STORM DRAIN INLET PROTECTION, ROCK OUTLET PROTECTION, REINFORCED SOIL RETAINING SYSTEMS, GABIONS, AND TEMPORARY OR PERMANENT SEDIMENT BASINS. THE INSTALLATION OF THESE DEVICES MAY BE SUBJECT TO SECTION 404 OF THE CLEAN WATER ACT.

THE FOLLOWING STRUCTURAL PRACTICES WILL BE USED FOR THIS PROJECT: CHECK ALL THAT APPLY)

☑ PERIMETER EROSION BARRIER ☐ ROCK OUTLET PROTECTION ☑ TEMPORARY DITCH CHECK ☑ RIPRAP STORM DRAIN INLET PROTECTION ☐ GABIONS □ SEDIMENT TRAP CL SLOPE MATTRESS ☐ TEMPORARY PIPE SLOPE DRAIN TI RETAINING WALLS TEMPORARY SEDIMENT BASIN ☐ SLOPE WALLS ☐ TEMPORARY STREAM CROSSING CONCRETE REVETMENT MATS ☐ STABILIZED CONSTRUCTION EXITS ☐ LEVEL SPREADERS CLITURE REINFORCEMENT MATS CLOTHER (SPECIEY) ☐ PERMANENT CHECK DAMS OTHER (SPECIFY)_

☐ PERMANENT SEDIMENT BASIN OTHER (SPECIEY) AGGREGATE DITCH ☐ OTHER (SPECIFY)___ I PAVED DITCH □ OTHER (SPECIFY)

DESCRIBE HOW THE STRUCTURAL PRACTICES LISTED ABOVE WILL BE UTILIZED:

1. PERIMETER EROSION BARRIER - SILT FENCES WILL BE PLACED ALONG TOE OF VARIOUS STEEP SLOPES AND AT SOME BOX CULVERTS IN AN EFFORT TO CONTAIN SILT AND RUNOFF FROM LEAVING THE SITE.

CONSTRUCT AT BEGINNING OF CONSTRUCTION, REMOVE AT END OF CONSTRUCTION.

- 2. STORM DRAIN INLET PROTECTION INLET AND PIPE PROTECTION WILL BE PROVIDED FOR STORM SEWERS AND CULVERTS. SEDIMENT FILTERS WILL BE PLACED IN ALL INLETS, CATCH BASINS AND MANHOLES DURING CONSTRUCTION AND WILL BE CLEANED ON A REGULAR BASIS.
- 3. TEMPORARY DITCH CHECKS DITCH CHECKS WILL BE PLACED IN SWALES WHERE RUNOFF VELOCITY IS HIGH. ALL STRUCTURAL PRACTICES ARE SHOWN IN DETAIL ON THE EROSION CONTROL PLANS.

TEMPORARY DITCH CHECKS SHALL BE LOCATED AT EVERY _2_ FT. FALL/RISE IN DITCH GRADE.

TEMPORARY DITCH CHECKS, AGGREGATE USES GRADING NO. 3- REMOVE AT END OF CONSTRUCTION.

STRAW BALES, HAY BALES, PERIMETER EROSION BARRIER AND SILT FENCE WILL NOT BE PERMITTED FOR TEMPORARY OR PERMANENT DITCH CHECKS. DITCH CHECKS SHALL BE COMPOSED OF AGGREGATE (IF SPECIFIED), ENVIROBERM, TRIANGULAR SILT DIKES, GEORIDGE AND ROLLED EXCELSIOR.

4. RIPRAP - STONE RIPRAP WITH FILTER FABRIC WILL BE USED AS PROTECTION AT THE DISCHARGE END OF ALL CULVERT END SECTIONS AND AS INLET/OUTLET PROTECTION TO PREVENT SCOURING AT THE END OF PIPES AND PREVENT DOWNSTREAM EROSION.

AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY DITCH CHECKS, INLET AND PIPE PROTECTION, AND PERIMETER EROSION BARRIER SHALL BE INSTALLED AS CALLED OUT IN THIS PLAN AND DIRECTED BY THE ENGINEER.

ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

BDE 2342 (REV. 06/07)

ILLINOIS DEPARTMENT OF TRANSPORTATION STORM WATER POLLUTION REVISIONS PREVENTION PLAN FAP ROUTE 809 (IL 158) SECTION (133,134)RS-4, 135RS-5 ST. CLAIR / MONROE COUNTIES DRAWN BY