

EPSC PLAN NARRATIVE

I.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REMOVAL AND REPLACEMENT OF BRIDGE NO. 17 (RUTLAND CITY BR 3000 (19)) CARRYING TOWN HIGHWAY (TH) 10 (RIPLEY ROAD/DORR DRIVE) OVER OTTER CREEK. THE PROJECT BEGINS APPROXIMATELY 500 FEET SOUTH OF THE INTERSECTION OF TH 10 AND U.S. BUSINESS ROUTE 4 AND ENDS APPROXIMATELY 400 FEET EAST OF THE INTERSECTION OF TH 10 AND CLEMENT ROAD. THE PROJECT ALSO INCLUDES SIDE ROAD WORK ON CLEMENT ROAD, EXTENDING SOUTH APPROXIMATELY 250 FEET FROM THE INTERSECTION OF TH 10 AND CLEMENT ROAD AND CONSTRUCTION OF NEW SIDEWALK. BRIDGE NO. 17 WILL BE REPLACED WITH A PREFABRICATED STEEL PONY TRUSS STRUCTURE, SPANNING 210 FEET OVER OTTER CREEK, ON A NEW ALIGNMENT, APPROXIMATELY 50 FEET DOWNSTREAM OF THE EXISTING STRUCTURE. THE SUBJECT BRIDGE IS LOCATED IN THE CITY OF RUTLAND, ON TH 10, APPROXIMATELY AT THE INTERSECTION OF TH 10 AND CLEMENT ROAD. TRAFFIC IS TO BE MAINTAINED ON THE EXISTING STRUCTURE DURING CONSTRUCTION. FOLLOWING COMPLETION OF THE NEW BRIDGE, THE EXISTING STRUCTURE WILL BE REMOVED, AND TRAFFIC WILL BE ROUTED OVER THE NEW STRUCTURE.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, AS WELL AS WASTE, BORROW AND STAGING AREAS, AND OTHER EARTH DISTURBING ACTIVITIES WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS AS SHOWN ON THE ATTACHED EPSC PLAN.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLANS IS APPROXIMATELY 1.90 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST TWO CONSTRUCTION SEASONS.

I.2 SITE INVENTORY

I.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS FAIRLY FLAT WITH STEEP SLOPES APPROACHING THE RIVER BANK. THE PROJECT AREA IS A MIX OF UPLAND MEADOW/MOWED AREAS, FORESTED UPLANDS, AN EMERGENT FORESTED WETLAND, INTERMITTENT STREAM, AND OTTER CREEK. CLEMENT ROAD AND TH 10 BOTH EXTEND THROUGH THE PROJECT LIMITS. DEVELOPMENT ALONG THE WEST SIDE OF OTTER CREEK IS PRIMARILY INDUSTRIAL WITH LARGE PAVED PARKING AREAS. THE EAST SIDE OF OTTER CREEK CONTAINS THE CAMPUS FOR THE COLLEGE OF ST. JOSEPH'S AND A NUMBER OF HOUSES, ALL SEPARATED FROM TH 10 BY A GRASSED BUFFER AREA. THERE IS A SMALL VEGETATED ISLAND LOCATED IN OTTER CREEK, ON WHICH THE PIER FOR THE NEW STRUCTURE WILL BE CONSTRUCTED.

I.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

DRAINAGE THROUGH THE PROJECT AREA IS LIMITED TO 2 DROP INLETS ON THE EAST SIDE OF OTTER CREEK. THE INLETS DRAIN INTO THE WETLAND AREA (WETLAND A) NORTH OF TH 10, WHICH DRAINS INTO OTTER CREEK. IT IS ASSUMED WETLAND A IS CLASS III WETLAND.

OTTER CREEK IS A PERENNIAL PERMANENT WATER, AND A TRIBUTARY OF LAKE CHAMPLAIN, THAT FLOWS SOUTHWEST IN THE VICINITY OF THE PROJECT. THE STREAM BED APPEARS TO CONSIST OF SOME COBBLE, BOULDERS, SILT, AND SAND. THE 100-YEAR FLOODPLAIN OF OTTER CREEK CONTAINS SOME RESIDENCES WITHIN IT. THE HYDRAULIC CAPACITY OF OTTER CREEK WILL NOT BE LIMITED BY THIS PROJECT. OTTER CREEK HAS NOT BEEN DESIGNATED AS AN OUTSTANDING RESOURCE WATER.

STREAM A IS AN INTERMITTENT, NON-RELATIVELY PERMANENT WATER, WHICH FLOWS INTO OTTER CREEK. STREAM A IS FED BY STORMWATER AND ROADSIDE DRAINAGE AND PASSES THROUGH A CULVERT UNDER CLEMENT ROAD. PORTIONS OF STREAM A ARE ROCKY, AND MOVEMENT OF WATER WAS SLOW TO NONEXISTENT DURING ANALYSIS. THIS PROJECT DOES NOT INCLUDE IMPACTS TO STREAM A.

I.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF UPLAND MEADOW/MOWED AREAS, UPLAND FOREST, AND AN EMERGENT/FORESTED WETLAND. UPON PROJECT COMPLETION, STEEP SLOPES (1-2 OR STEEPER) WILL BE PROTECTED WITH TYPE II OR TYPE III STONE FILL. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES, WITH PERMANENT EROSION CONTROL MATTING PROVIDED IN AREAS WHERE THE SLOPE IS BETWEEN 1-2 AND 1-3.

I.2.4 SOILS

ALL SOIL DATA CAME FROM THE NATURAL RESOURCES CONSERVATION SERVICE SOIL SURVEY FOR RUTLAND COUNTY. SOILS ON THE PROJECT SITE ARE WINDSOR LOAMY SAND (MAP UNIT 18B), WITH 3% TO 8% SLOPES, K-VALUE: 0.17, AND UDIPSAMMENTS, NEARLY LEVEL (MAP UNIT 96), K-VALUE: 0.10.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:
 0.0-0.23 = LOW EROSION POTENTIAL
 0.24-0.36 = MODERATE EROSION POTENTIAL
 0.37 AND HIGHER = HIGH EROSION POTENTIAL

I.2.5 SENSITIVE RESOURCE AREAS.

CRITICAL HABITATS: NO
 HISTORICAL OR ARCHAEOLOGICAL AREAS: THE EXISTING TH 10 BRIDGE NO. 17 OVER OTTER CREEK, INCLUDING ABUTMENTS IS CLASSIFIED AS A HISTORIC RESOURCE. THE EXISTING RETAINING WALL EXTENDING NORTH FROM THE EXISTING BRIDGE ON THE WEST SIDE OF OTTER CREEK IS CLASSIFIED AS A HISTORIC RESOURCE. NO ARCHAEOLOGICAL AREAS HAVE BEEN DENOTED.
 HAZARDOUS MATERIALS: SOILS POTENTIALLY IMPACTED, MOST LIKELY BY PETROLEUM COMPOUNDS, MAY BE ENCOUNTERED IN THE VICINITY OF THE PARCEL REPUTEDLY OWNED BY RUTLAND PLYWOOD MARIAH GROUP LLC. THE CONTRACTOR SHOULD SCREEN THE SOILS FOR VISUAL AND/OR OLFACTORY EVIDENCE OF CONTAMINATION. IF MATERIALS EXHIBITING FIELD EVIDENCE OF CONTAMINATION ARE ENCOUNTERED, THEY SHOULD BE SEGREGATED AND STOCKPILED ON PLASTIC SHEETING UNTIL APPROPRIATELY CHARACTERIZED AND DISPOSED. POTENTIALLY CONTAMINATED MATERIALS MAY ALSO BE ENCOUNTERED IN THE VICINITY OF THE UNDERGROUND FUEL TANK ON THE PARCEL REPUTEDLY OWNED BY LEONARD KNAPMILLER. IT IS NOT ANTICIPATED THAT THESE MATERIALS WILL BE DISTURBED BY THIS PROJECT.
 PRIME AGRICULTURAL LAND: NO
 THREATENED AND ENDANGERED SPECIES: NO
 WATER RESOURCE: OTTER CREEK, STREAM A
 WETLANDS: WETLAND A

I.3 RISK EVALUATION

THIS PROJECT FALLS UNDER THE JURISDICTION OF CONSTRUCTION GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR LOW RISK PROJECTS. ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

I.4 EROSION PREVENTION AND SEDIMENT CONTROL (EPSC)

THE EPSC PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

I.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED. PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC).

I.4.2 LIMIT DISTURBANCE AREA

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY, THUS LIMITING THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS, OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION PREVENTION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

I.4.3 SITE ENTRANCE/EXIT STABILIZATION

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE SHALL COINCIDE WITH THE CONTRACTOR'S PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND WHERE ANY EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

I.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, WOVEN WIRE REINFORCED SILT FENCE SHALL BE USED INSTEAD OF SILT FENCE WITHIN 100 FEET UP SLOPE OF A WATER RESOURCE.

FILTER CURTAIN SHALL BE INSTALLED IN STAGES DURING THE CONSTRUCTION AND REMOVAL OF THE TEMPORARY CAUSEWAY TO MINIMIZE STREAM DISTURBANCE. FILTER CURTAIN WILL BE USED AROUND THE ISLAND AND RIVER BANKS TO CAPTURE ANY SEDIMENT THAT REACHES THE RIVER. FILTER CURTAIN SHALL BE DESIGNED TO FUNCTION UNDER THE HYDRAULIC REQUIREMENTS OF OTTER CREEK, SHOWN ON SHEET 19.

FILTER BAG SHALL BE USED TO FILTER WATER FROM DE-WATERING OPERATIONS. WATER MUST RUN CLEAR PRIOR TO BEING DISCHARGED INTO OTTER CREEK. LOCATION SHOWN ON THE PLANS IS APPROXIMATE.

FILTER FABRIC DROP INLET PROTECTION SHALL BE USED TO FILTER SEDIMENT FROM INCOMING STORMWATER IN OFF ROADWAY LOCATIONS.

STONE & BLOCK DROP INLET PROTECTION SHALL BE USED TO FILTER SEDIMENT FROM INCOMING STORMWATER FOR PROPOSED DROP INLETS WITHIN THE ROADWAY.

EROSION PREVENTION AND SEDIMENT CONTROL NOTES #1	PROJECT NAME: RUTLAND CITY	PLOT DATE: 6/30/2014
	PROJECT NUMBER: BR 3000 (19)	
	PROJECT LEADER: M.D.S.	DRAWN BY: C.R.H.
	DESIGNED BY: C.R.H.	CHECKED BY: D.E.G.
	DWG. NO.: ERONOTES-1	SHEET 99 OF 245

