

**EPSC PLAN NARRATIVE**

**1.1 PROJECT DESCRIPTION**

THIS PROJECT INVOLVES THE REMOVAL OF THE TEMPORARY FERRY ACCESS ROAD CONSTRUCTED WHEN THE LAKE CHAMPLAIN BRIDGE WAS CLOSED IN THE TOWN OF ADDISON. THIS PROJECT ALSO INCLUDES THE RESURFACING OF VERMONT ROUTE 17 AND VERMONT ROUTE 125, THE RECONSTRUCTION OF THE CHIMNEY POINT DRIVEWAY TO PRE-CONSTRUCTION CONDITION, THE CONSTRUCTION OF THREE PEDESTRIAN PATHS, REGRADING LOWER PARKING LOT AND THE CONSTRUCTION OF A NEW PARKING LOT.

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 PLAN IS APPROXIMATELY 2.2 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

**1.2 SITE INVENTORY**

**1.2.1 TOPOGRAPHY**

THE TOPOGRAPHY OF THE PROJECT AREA CONSISTS PRIMARILY OF LEVEL TERRAIN SITUATED ON A POINT KNOWN AS CHIMNEY POINT ALONG THE EASTERN SHORE OF LAKE CHAMPLAIN. THERE ARE SEVERAL AREAS OF ACTIVE FARMLAND ADJACENT TO THE PROJECT AREA ALONG WITH THE CHIMNEY POINT HISTORICAL SITE LOCATED ON THE NORTH SIDE OF THE PROJECT AREA.

**1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES**

THE PROJECT AREA IS ADJACENT TO LAKE CHAMPLAIN AND IS THE ONLY WATER SOURCE WITHIN THE PROJECT SITE. THIS PARTICULAR SECTION OF LAKE CHAMPLAIN IS LISTED ON THE 2008 STATE OF VERMONT 303(d) LIST FOR IMPAIRED WATERS DUE TO ELEVATED LEVELS OF PCB'S IN LAKE TROUT. THE EXISTING DRAINAGE PATTERNS WITHIN THE ROADWAY AND ADJACENT ROADWAY AREAS FLOW OVERLAND INTO THE LAKE. THE PROPOSED PROJECT WILL MAINTAIN THE SAME GENERAL DRAINAGE PATTERNS ASSOCIATED WITH THE EXISTING AREA.

**1.2.3 VEGETATION**

THE VEGETATION IN THE PROJECT AREA PRIMARILY CONSISTS OF LAWN AREAS WITH ISOLATED AREAS OF HARDWOOD TREES AND UNDERGROWTH. IMPACTS TO THE EXISTING VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY THE CONSTRUCTION OF PARKING LOTS, PEDESTRIAN PATHS AND REMOVAL OF THE FERRY ACCESS ROAD. UPON PROJECT COMPLETION, THE BANKS WILL BE ARMORED WITH STONE FILL AS NECESSARY AND DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

**1.2.4 SOILS**

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF ADDISON, VERMONT.

MAP UNIT	DESCRIPTION	SLOPES	K-VALUE
MrA	MELROSE FINE SANDY LOAM	0-3%	0.28
W	WATER		

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

**1.2.5 SENSITIVE RESOURCE AREAS**

CRITICAL HABITATS: NO  
 HISTORICAL OR ARCHEOLOGICAL AREAS: YES, CHIMNEY POINT HISTORICAL SITE  
 PRIME AGRICULTURAL LAND: THE PROJECT LIES ENTIRELY WITHIN AREA CLASSIFIED AS PRIME AGRICULTURAL LAND.  
 THREATENED AND ENDANGERED SPECIES: INDIANA BAT HABITAT  
 WATER RESOURCE: LAKE CHAMPLAIN  
 WETLANDS: YES, AREA ADJACENT LAKE CHAMPLAIN

**1.3 RISK EVALUATION**

THIS PROJECT FALLS UNDER THE JURISDICTION OF 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.

**1.4 EROSION PREVENTION AND SEDIMENT CONTROL**

THE EROSION CONTROL 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.

EROSION CONTROL MEASURES MUST BE COORDINATED WITH VTRANS' ARCHAEOLOGY OFFICER DUE TO THE ARCHAEOLOGICAL SIGNIFICANCE OF THIS SITE AREA.

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.

**1.4.1 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).

**1.4.2 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. THIS CAN LIMIT 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 AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

**1.4.3 SITE ENTRANCE/EXIT STABILIZATION**

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

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

**1.4.4 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.

EROSION LOGS WILL BE INSTALLED AS PROPOSED ON EPSC PLANS, AT A MINIMUM.

FILTER CURTAIN WILL BE INSTALLED AS PROPOSED ON EPSC PLAN, AT A MINIMUM.

FILTER FABRIC DROP INLET PROTECTION WILL BE INSTALLED AS PROPOSED ON EPSC PLAN, AT A MINIMUM.

PIPE INLET PROTECTION WILL BE INSTALLED AS PROPOSED ON EPSC PLAN, AT A MINIMUM.

**1.4.5 DIVERT UPLAND RUNOFF**

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

**1.4.6 SLOW DOWN CHANNELIZED RUNOFF**

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSION POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

STONE CHECK DAMS WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN, AT A MINIMUM.

**1.4.7 CONSTRUCT PERMANENT CONTROLS**

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS.

**1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION**

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

**1.4.9 WINTER STABILIZATION**

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

**1.4.10 STABILIZE SOIL AT FINAL GRADE**

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

**1.4.11 DE-WATERING ACTIVITIES**

NO DE-WATERING ACTIVITIES ARE ANTICIPATED ON THE LAKE CHAMPLAIN SITE RESTORATION PROJECT.

**1.4.12 INSPECT YOUR SITE**

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

**1.5 SEQUENCE AND STAGING**

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

**1.5.1 CONSTRUCTION SEQUENCE**

**1.5.2 OFF-SITE ACTIVITIES**

IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

**1.5.3 UPDATES**

<b>EROSION PREVENTION AND SEDIMENT CONTROL NOTES</b>	PROJECT NAME: LAKE CHAMPLAIN SITE RESTORATION
	PROJECT NUMBER: STP 032-118)
	FILE NAME: z12E008_epsc_01.dgn
	PLOT DATE: 7/12/2012
	DRAWN BY: W.G.P.
	DESIGNED BY: B.T.H.
	CHECKED BY: D.E.G.
	DWG. NO.: EPN-1
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