STATE OF VERMONT
AGENCY OF TRANSPORTATION

EROSION CONTROL NARRATIVE

DESCRIPTION OF PROJECT

This project will involve the following:

Construct, Mark and Sign a new Aircraft Parking Apron (3,600 SY) for light aircraft. The new aircraft parking apron will provide 3 aircraft tiedowns. In addition, this project will also consist of constructing a connecting taxiway G from the new apron (30 feet wide) to taxiway B-West, and the placement of excavated spoil material in a designated waste area.

The total area of disturbance = 3.5 Acres
(Apron Construction Area = 2.0 Acres; Waste Area = 1.25 Acres; Other Disturbed Area = 0.25 Acres)

SITE INVENTORY AND ANALYSIS

SITE DRAINAGE CHARACTERISTICS:

The property surrounding the apron site consists of well established vegetation with moderate slopes of various grasses, shrubs and trees. Storm water is generally collected through a series of open ditches and closed drainage and conveyed to a detention pond located between the new apron and taxiway B-west in the northwest quadrant of the airfield. The storm water is then discharged through a series of ditches and drainage pipe to an inlet of an existing 15" RCP under Route 7B.

The proposed waste area is presently open meadow grassland adjacent to the primary runway. The area slopes from the edge of the runway safety area at slopes of 1:2. The area drains northerly to a 6' culvert under Rte. 103.

DRAINAGE, WATERWAYS, BODIES OR WATER:

There are a total of 18 wetlands located on the Rutland State Airport property. The area of the Northwest apron has no jurisdictional wetlands located within the vicinity however, there is a pond that provides detention to stormwater runoff that is eventually discharged into Otter Creek by means of open channels, culverts and pipes. The area designated as 'Proposed Waste Material Disposal Area' is located at the northerly end of the airfield west of Runway 19 safety area. There are Wet Meadow type wetlands located within the vicinity of the proposed waste area.

TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES:

The proposed apron area is located in open flat grassland area adjacent to an existing aircraft apron and hangar area. An aircraft hangar (2,500 to 4,000 SF) is adjacent to the proposed apron area.

Both the proposed apron and the proposed waste material disposal sites are presently open grasslands adjacent to active aircraft movement areas. There are several aircraft hangers ranging from 2500 to 4000 square feet that are located adjacent to the new aircraft parking apron.

VEGETATION:

The airfield generally consists of open meadow grasslands that is routinely mowed.

The area of the proposed apron is currently open grassland.

SOILS:

The Soil Survey of Rutland County, Vermont (1984) identifies the soil at the proposed apron area as Paxton fine sandy loam, 2 to 8 percent slopes, and Galway-Nellis-Farmington Complex, 3 to 8 percent slopes.

The erodability factor = 0.32

SENSITIVE RESOURCE AREAS:

There are no rare, threatened, or endangered species located within the proposed apron project area. However, the VANR recommends that the airport delay grass mowing and construction during the nesting season for the grasshopper sparrow, a State listed threatened species. The Vermont Agency of Transportation intends to mow both the proposed apron area and the waste area beginning in May to discourage these grassland birds from nesting in the project area. (Per the memorandum of understanding between VTRANS and VANR).

In addition, there are no floodplains, or historic, architectural, cultural, and archaeological resources within the proposed project area.

There is a small 'wet meadow' type wetland (class 3 wetland) located in the vicinity of the waste area. Work within and adjacent to this wetland has been approved under permits obtained from the U.S. Army Corps of Engineers (#200202661) and the VT Agency of Natural Resources (CUD # 2003-473)

Surrounding area meadows have been designated as habitat for grassland birds. VT ANR/ DEC and the Department of Fish and Wildlife requires that both the project and waste areas be mowed from May 1, to completion of construction. Grass in the mowed areas to be kept less than 4" in height.

PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES:

The apron is located north of a stormwater detention pond and drainage swale, which carries stormwater off Airport, eventually flowing to the Otter Creek.

TEMPORARY EROSION PREVENTION & SEDIMENT CONTROL

'Project Demarcation Fencing,' denoted -PDF- on the plans, will be placed to delineate the limits the contractor can access with construction equipment. This measure limits the area that can be exposed to erosion.

Seeding, mulching and biodegradable erosion control matting, or an equivalent product, will be utilized on all slopes steeper than 1:3 that are not lined with stone fill. Areas at the end of Runway 19 will require this technique. These slopes shall be stabilized within 48 hours of reaching final grade or during intermittent phases of construction activity.

All exposed slopes shall be temporarily mulched. Any slopes to be exposed for several days prior to final grading shall be mulched. The forecast of rainfall events shall also trigger protection of exposed slopes.

Temporary measures to control sediment transport include:

Silt fence will be installed as shown on the plans to prevent sediment transport to down gradient areas. Each line of silt fence will be placed with the ends turned slightly uphill to create a ponding effect should water try to run along the fencing and around the ends. The maximum slope length beween separate runs of silt fence is (100'). Silt fence shall be installed prior to any upslope earthwork.

Temporary measures such as silt fence shall be checked regularly for accumulation of sediment. Sediment build-up shall be removed when the level of sediment reaches one-half the height of the control measure. Sediments shall be disposed of in an approved area such that they will not be subject to erosion or impact other resource areas.

A stabilized construction entrance to the project site and staging area may be required as determined by the Engineer. The minimum size of a stabilized construction entrance is (12'x50'). See typical detail on 'Erosion & Sediment Control Details' sheet 26 for materials and construction method to be utilized when constructing a stabilized entrance.

PERMANENT EROSION CONTROL MEASURES

Permanent erosion control measures to be utilized include:

Grass, or other suitable ground cover will be established outside of the roadway limits where stone lining has not been specified. All disturbed areas are to be seeded and mulched promptly upon achieving final grade using the seeding formula for rural areas.

GENERAL EROSION & SEDIMENT CONTROL GUIDELINES

The Erosion Control Plans are meant as a guideline for preventing erosion and controlling sediment transport. The work outlined in this narrative consists of applying measures throughout the life of the project to control erosion and minimize the sedimentation of receiving waters. The measures include stabilization and structural practices, storm water controls and other pollution prevention controls.

Coordinate the installation, use, and removal of erosion and sediment control measures with construction activities to ensure economical, effective and continuous erosion and sediment control. Employ temporary stabilization practices in incremental stages as construction proceeds. The contractor will use additional erosion control measures as necessitated by the sequence of construction and as directed by the engineer. See section 105.23 of the Vermont AOT Standard Specifications for Construction, dated 2001 and Section 652 of the Special Provisions.

Install all erosion and sediment control measures as shown in the Erosion Control Plan or as directed by the Engineer. Do not modify the type, size or location of any control or practice without approval from the Engineer. Any changes shall be noted on the plans, in a weekly inspection report, and reported to the appropriate authority in a timely manner. Inspect all control measures weekly and after each rainfall event. Make repairs as necessary or as directed by the Engineer.

Preventing initial soil erosion is much more effective than treating eroded sediment. Therefore, stabilize all disturbed areas promptly after construction activity has temporarily or permanently ceased. Temporary vegetation shall be established if the area is to be without construction activity for a period of 14 days. Perimeter control measures shall be installed following clearing, but prior the start of any grubbing or grading activity, install other temporary controls in incremental stages as construction proceeds.

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.

Control only sediment-laden runoff generated by the project site. Collect and route clean off site runoff around or through the project site using diversion berms, diversion channels, culverts and/or temporary pipes.

Do not allow construction equipment to operate on the down slope side of perimeter control measures.

FINAL CONDITIONS SITE PLAN

Refer to sheets 9 of 27 and 16 of 27 for final conditions plans. All silt fence and temporary erosion cotrol measures to be removed prior to acceptance of the project.

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83

STATE OF VERMONT · GERALD W. D'AMICO · No. 3873 · REGISTERED PROFESSIONAL ENGINEER

AIP 3-50-0015

SHEET NAME: EROSION CONTROL NARRATIVE

PROJECT NAME: **CLARENDON**
PROJECT NUMBER: **AIR 04-3172-C2**

FILE NAME: 38397036sheet19	PLOT DATE: 2/16/2006
PROJECT LEADER: G. D'AMICO	DRAWN BY: R. DEWEY
DESIGNED BY: R. DEWEY	CHECKED BY: G. D'AMICO
EROSION PREVENTION & SEDIMENT CONTROL	SHEET 19 OF 27

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