

### PROJECT DESCRIPTION

THE VERMONT AGENCY OF TRANSPORTATION IS PROPOSING SEVERAL IMPROVEMENTS TO THE EXISTING NEWPORT STATE AIRPORT. THE EXPANSION CONSISTS OF INSTALLING AN AIRCRAFT TIE-DOWN APRON, ADJACENT TAXILANES, AND ASSOCIATED DRAINAGE FEATURES. THE TOTAL PROJECT AREA IS APPROXIMATELY 9.4 ACRES.

FUTURE PLANS FOR THE NEWPORT STATE AIRPORT INCLUDE THREE NEW HANGARS, WHICH WOULD BE LOCATED WITHIN THE CURRENT PROJECT AREA. FOR THE PURPOSES OF THIS EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLAN AND PERMIT APPLICATION, CONSTRUCTION OF THE PROPOSED HANGARS IS NOT INCLUDED IN THE SCHEDULE OR SEQUENCING.

### SITE INVENTORY AND ANALYSIS

THE AIRPORT IS SITUATED ON A GENERALLY OPEN PLATEAU AREA THAT FORMS THE WATERSHED BOUNDARY BETWEEN THE BLACK AND BARTON RIVERS. THE WATERSHED OF THE RECEIVING WATER AT THE POINT OF DISCHARGE IS 179 ACRES. THE PRIMARY LAND USE OF THIS WATERSHED IS THE AIRPORT, WHICH CONSISTS OF A MIX OF IMPERVIOUS RUNWAYS, TAXIWAYS AND BUILDINGS, ALONG WITH GRASSED AREAS WITH SOME WOODED AREAS.

SLOPES WITHIN THE WATERSHED AREA ARE GENERALLY LESS THAN 5%, AS SHOWN ON THE EXISTING CONDITIONS MAP. THE PROJECT SITE REPRESENTS ONLY A PORTION OF THE AIRPORT. WITHIN THE PROJECT LIMITS, THERE ARE SEVERAL EXISTING BUILDINGS AND AIRCRAFT HANGARS. AND A PAVED AIRCRAFT APRON. THE REMAINING AREA WITHIN THE PROJECT IS OPEN AND GRASS. A WETLAND AREA (APPROXIMATELY 16,000 SQUARE FEET) HAS BEEN IDENTIFIED JUST TO THE NORTHEAST OF THE PROJECT AREA. THE SOILS WITHIN THE PROJECT AREA ARE CLASSIFIED AS CL-ML, WHICH IS DESCRIBED AS BROWN SANDY SILTY CLAY.

THE EXISTING RUNOFF FROM A PORTION OF THE PROJECT SITE IS COLLECTED IN THE EXISTING CLOSED DRAINAGE SYSTEM. THE REMAINDER OF THE SITE SHEET FLOWS ACROSS THE PVIOUS LAWN AREA AND IS EVENTUALLY COLLECTING IN SWALE, WHICH IS LOCATED IN THE SOUTHEAST CORNER OF THE PROJECT AREA. STORMWATER DRAINING FROM THE SWALE CONTINUES OVERLAND IN AN EASTERLY DIRECTION PRIOR TO REACHING THE UNNAMED TRIBUTARY OF THE BARTON RIVER.

THE EXISTING DRAINAGE SYSTEM IS CONFIGURED IN A MANNER THAT EFFECTIVELY SEPARATES THE OFF-SITE STORMWATER FROM THE PROJECT AREA, THE OUTLET FOR WHICH IS BELOW THE PROJECT AREA'S DISCHARGE POINT. A PORTION OF PROJECT AREA ALSO DRAINS INTO THE CLOSED DRAINAGE SYSTEM.

### GRADING PLAN AND TIMETABLE

THE ENTIRE PROJECT IS EXPECTED TO BE CONSTRUCTED IN APPROXIMATELY 90 DAYS AND WILL TAKE PLACE BETWEEN JUNE AND SEPTEMBER 2005. NO SPECIAL WINTER STABILIZATION METHODS HAVE BEEN SPECIFIED, AS THE PROPOSED WORK WILL BE COMPLETED DURING THE REGULAR CONSTRUCTION SEASON OF MAY 1ST TO OCTOBER 15TH.

CONSTRUCTION WILL BE ACCOMPLISHED IN TWO PHASES. THE FIRST PHASE WILL CONSIST OF THE CONSTRUCTION OF THE NEW APRON AREA AND THE ADJACENT TAXIWAY CONNECTOR. A SECTION OF THE EXISTING APRON LOCATED NEXT TO THE EXISTING HANGARS WILL REMAIN OPEN DURING THIS PHASE. THE SECOND PHASE OF CONSTRUCTION WILL CONSIST OF THE RECONSTRUCTION OF THE REMAINING SECTION OF APRON THAT WAS CLOSED DURING PHASE ONE.

THE MAJORITY OF THE SITE GRADING WILL BE ACCOMPLISHED DURING THE FIRST PHASE. IN PARTICULAR, THE PERMANENT STORMWATER DETENTION POND WILL BE CONSTRUCTED DURING THE INITIAL STAGES OF CONSTRUCTION. THE REMAINDER OF THE SITE WORK WILL BE SHAPED IN SUCH A MANNER, TO THE EXTENT POSSIBLE, THAT RUNOFF WILL BE DIRECTED TO THE POND, WHICH WILL EFFECTIVELY BE ACTING AS A SEDIMENTATION BASIN DURING CONSTRUCTION. ONCE CONSTRUCTION OF THE PROJECT HAS BEEN COMPLETED, ACCUMULATED SEDIMENTS WILL BE REMOVED FROM THE POND AND DISPOSED OF IN THE APPROVED WASTE AREA.

### EROSION PREVENTION AND SEDIMENT CONTROL PLAN

A GRADING, DRAINAGE, AND EROSION CONTROL PLAN HAS BEEN PREPARED FOR THE PROJECT AND IS INCLUDED AS PART OF THIS EPSC PLAN. MEASURES TO BE USED DURING CONSTRUCTION INCLUDE THE USE OF STONE CHECK DAMS IN THE DRAINAGE CHANNELS, WHICH WILL DECREASE RUNOFF VELOCITIES AND THEREBY PREVENT SEDIMENT TRANSPORT. THE METHOD TO PROTECT THE CATCH BASIN INLETS WILL ALSO BE TO SURROUND THE INLET OPENING WITH A STONE CHECK DAM AND FILTER FABRIC. THE INSTALLATION OF THIS PROTECTION METHOD WILL FOLLOW THE VTRANS STANDARD DETAILS. SILT FENCING WILL BE PLACED ALONG THE TOE OF WASTE AREAS AND SOIL STOCKPILES, WHICH WILL ALSO PREVENT SEDIMENT TRANSPORT BY DECREASING RUNOFF VELOCITIES. GEOTEXTILE MATTING WILL BE USED IN THE DRAINAGE CHANNELS TO PREVENT EROSION.

THE LIMITS OF DISTURBANCE WILL ALSO BE IDENTIFIED IN THE FIELD, AND TEMPORARILY STABILIZING THOSE AREAS THAT ARE NOT ACTIVELY BEING WORKED WITH SEED, MULCH, OR EROSION CONTROL MATTING. THE PROJECT LIMITS WILL BE IDENTIFIED WITH PROJECT DEMARCATION FENCE, WHICH CONSISTS OF 4" WIDE TAPE THAT IS ATTACHED TO STAKES, SPACED AT REGULAR INTERVALS. SNOW FENCING WILL BE USED TO INDICATE THE LIMITS OF DISTURBANCE ALONG THE TOE OF THE DISPOSAL AREA. THE WETLAND NEAR THE NORTHEAST CORNER OF THE PROJECT AREA WILL BE PROTECTED WITH A 50 FOOT BUFFER. SNOW FENCE, REPRESENTING THE LIMITS OF DISTURBANCE IN THIS AREA, WILL BE LOCATED OUTSIDE OF THE BUFFER.

SOIL STOCKPILES AND DISTURBED AREAS THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS WILL BE TEMPORARILY STABILIZED WITH MULCH WITHIN 48 HOURS. AREAS THAT WILL NOT BE ACTIVELY WORKED FOR 30 DAYS OR MORE WILL BE SEEDED AND MULCHED WITHIN 48 HOURS. TOGETHER, THESE MEASURES WILL PREVENT EROSION BY LIMITING THE AMOUNT OF DISTURBED AREAS.

AN ADDITIONAL MEASURE WILL BE TO USE THE PERMANENT STORMWATER DETENTION BASIN AS A SEDIMENTATION BASIN DURING CONSTRUCTION. DURING CONSTRUCTION, THE OUTLET CONTROL STRUCTURE WILL BE SURROUNDED WITH FILTER FABRIC AND STONE CHECK DAMS. AFTER THE DRAINAGE AREA CONTRIBUTING RUNOFF TO THE BASIN HAS BEEN STABILIZED, ACCUMULATED SEDIMENT WILL BE CLEANED OUT OF THE BASIN AND THE TEMPORARY MEASURES WILL BE REMOVED.

THE TOTAL VOLUME OF THE SEDIMENTATION BASIN IS APPROXIMATELY 33,000 FT<sup>3</sup>, AND THE TOTAL SITE DRAINAGE AREA IS 6.5 ACRES. DIVIDING THE BASIN VOLUME BY THE DRAINAGE AREA YIELDS 5,077 FT<sup>3</sup>/ACRE, WHICH IS GREATER THAN THE RECOMMENDED 3,600 FT<sup>3</sup>/ACRE. THEREFORE, THE SEDIMENTATION BASIN IS ADEQUATELY SIZED TO HANDLE THE STORMWATER RUNOFF FROM THE CONSTRUCTION PHASE OF THE PROJECT.

ALL DISTURBED AREAS THAT ARE NOT PAVED WILL BE PERMANENTLY STABILIZED WITH SEED AND MULCH OR MATTING (FOR ANY SLOPE GREATER THAN 1:3). SEED TO BE USED FOR THIS PROJECT WILL BE THE STANDARD VTRANS RURAL FORMULA MIX. APPLICATION RATES AND METHODS FOR THE SEED, FERTILIZER, AND LIMESTONE WILL FOLLOW THE VTRANS STANDARD SPECIFICATIONS. HAY MULCH WILL ALSO BE APPLIED AT THE VTRANS STANDARD RATE OF 2 TONS PER ACRE.

THE ON-SITE PLAN COORDINATOR (OSPC) FOR THIS PROJECT HAS NOT YET BEEN DETERMINED. IN ACCORDANCE WITH COP 3-900(2003) AND VADOT STANDARD SPECIFICATION 652.06, THE OSPC WILL GENERALLY BE ON SITE ON A DAILY BASIS DURING ACTIVE CONSTRUCTION AND WILL HAVE THE AUTHORITY TO STOP OR MODIFY CONSTRUCTION ACTIVITIES AS NECESSARY TO COMPLY WITH THE PLAN AND PERMIT. THE OSPC WILL ALSO BE RESPONSIBLE FOR INSPECTIONS, RECORD KEEPING AND OTHERWISE OVERSEEING THE EPSC PLAN FOR THE PROJECT. CONTACT INFORMATION FOR THE OSPC WILL BE SUBMITTED IN WRITING PRIOR TO THE START OF CONSTRUCTION.

INSPECTIONS OF THE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES WILL BE CONDUCTED AS FOLLOWS:

#### 1. DAILY INSPECTIONS

DAILY INSPECTION OF THE EROSION CONTROL MEASURES WILL BE PERFORMED BY THE CONTRACTOR AND OVERSEEN BY THE VTRANS ON-SITE COORDINATOR OR REPRESENTATIVE OF THE RESIDENT ENGINEER. A CHECKLIST HAS BEEN PREPARED FOR THIS TASK AND INCLUDED AT THE END OF THIS SECTION. COPIES OF THESE DAILY REPORTS WILL BE MAINTAINED AT THE PROJECT'S FIELD OFFICE.

#### 2. WEEKLY INSPECTIONS

WEEKLY INSPECTIONS OF THE EROSION CONTROL MEASURES WILL ALSO BE PERFORMED BY THE ON-SITE COORDINATOR AND WILL INCLUDE DOCUMENTATION OF DISTURBED AREAS, CONSTRUCTION SCHEDULE STATUS, AND STABILIZED AREAS, TEMPORARY OR PERMANENT, SINCE THE PREVIOUS REPORT. THE FORMS TO BE USED FOR THE WEEKLY INSPECTIONS ARE ATTACHED.

#### 3. OTHER INSPECTIONS

INSPECTIONS WILL ALSO BE MADE AS SOON AS POSSIBLE, BUT WITHIN 24 HOURS, AFTER ANY STORM EVENT GENERATES A DISCHARGE OF STORMWATER RUNOFF FROM THE CONSTRUCTION SITE.

WHILE CONSTRUCTION IS SUSPENDED DURING THE WINTER, THE EROSION CONTROL MEASURES WILL BE INSPECTED BI-WEEKLY AND FOLLOWING ANY RAINFALL EVENT THAT PRODUCES A DISCHARGE OF STORMWATER RUNOFF FROM THE CONSTRUCTION SITE.

SHOULD A PROBLEM OCCUR WITH RESPECT TO THE CONTROL OF STORMWATER/EROSION DURING CONSTRUCTION, THE FOLLOWING PROTOCOL WILL BE FOLLOWED:

- ANR WATER QUALITY DIVISION WILL BE NOTIFIED IMMEDIATELY OF THE DISCHARGE. WITHIN 24 HOURS, NOTIFICATION WILL BE SENT VIA EMAIL THAT IDENTIFIES THE NATURE OF THE PROBLEM, THE IMMEDIATE CORRECTIVE ACTION TAKEN, AND THE PROPOSED ACTION TO BE TAKEN TO PREVENT THE PROBLEM FROM REOCCURRING.
- PHOTOGRAPHS, ALONG WITH THE INSPECTOR'S FIELD REPORT, WILL SERVE TO DOCUMENT THE INCIDENT AND ACTIONS TAKEN. A COPY OF THESE DOCUMENTS WILL BE FORWARDED TO ANR AND THE ORIGINALS WILL BE MAINTAINED AT THE VTRANS FIELD OFFICE.

PROJECT NAME: COVENTRY  
PROJECT NUMBER: AIR 04-3173

FILE NAME: PLOT DATE: 04/06/2005  
PROJECT LEADER: JAA DRAWN BY: PGJ  
DESIGNED BY: JDR CHECKED BY: JWT  
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