

BORING LOG		Boring No.:	B-07B																																																																																																
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<p><b>GEODESIGN INCORPORATED</b>            Geotechnical Engineers-Environmental Consultants-Construction Engineers            P.O. Box 699 Windsor, VT 05089 Phone: 802-674-2033 Fax: 802-674-5943            1233 Shelburne Rd, Suite 300 South Burlington, VT 05403 Phone: 802-652-5140</p>																																																																																																			
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Remarks: Split spoon refusal at 1 foot below grade (B-7A); moved boring approximately 5 feet toward boring B-08; observed outcrop about 40 feet toward road. Split spoon refusal at 2.7 feet below grade; moved boring again 5 feet toward B-08 and attempted to advance using HSA (B-7C; auger refusal at 1.5 feet below grade.																																																																																																			
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  - 4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; and = 35-50%
  - 5) Stratification lines represent approximate boundary between material types, transitions may be gradual.
  - 6) Bedrock cores collected at locations c-1, c-2, and c-3 typically consist of gray, soft, moderately weathered phyllite bedrock of very poor to fair quality, the rock was fissile and crumbled with moderate finger pressure. Fractures were typically noted along the fissile planes between approximately 60 and 70 degrees (measured from the horizontal). Rock quality designation (RQD) values ranged between 0 and 55%. The rock type was consistent with mapping data published on the Confidential Geologic Map of Vermont (dall, 1981) and a rock outcrop located approximately 500 feet north of the site (along Airport Road).
  - 7) Bedrock removal for this project can be accomplished using conventional mechanical equipment. Mechanical removal methods can include excavating, ripping, hoe-ramping and spitting. A alternative method of removal is blasting.
  - 8) The effort and difficulty of rock removal will generally increase with the depth once the upper, more weathered rock has been penetrated (estimated up to between 5 and 10 feet deep).
  - 9) Rock Reuse Potential - the type and condition of rock anticipated for removal will be poor aggregate for use in the base course below new pavements.

**Hoyle, Tanner & Associates, Inc.**  
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PROJECT NAME: E. F. KNAPP STATE AIRPORT  
 A.I.P. 3-50-0001-011-2009  
 PROJECT NUMBER: BERLIN AIR 04-3216  
 FILE NAME: z05h378shf.br 1.dgn  
 PROJECT LEADER: S. FORTNEY  
 DESIGNED BY: S. BOUCHARD  
 BORING LOGS B07B-B09  
 PLOT DATE: 11/22/2011  
 DRAWN BY: D. STANDISH  
 CHECKED BY: J. DOWNAR  
 SHEET 157 OF 173