

GEOTECHNICAL UNIT FIELD SCOUR REPORT

PROJECT: 33335.1.1 ID: B-3899 COUNTY: ROCKINGHAM

DESCRIPTION(1): BRIDGE # 21 ON SR 1001 (WOOLEN STORE RD) OVER TROUBLESOME CREEK

INFORMATION ON EXISTING BRIDGES Information obtained from: x field inspection, microfilm(Reel: Pos: ), other hydro report

COUNTY BRIDGE NO. 21 BRIDGE LENGTH 140 NO. BENTS IN: CHANNEL 2 FLOOD PLAIN 6

FOUNDATION TYPE: TIMBER PILES, WOODEN AND STEEL BEAM, CONCRETE DECK, DRIVEN H-PILES

EVIDENCE OF SCOUR(2):

ABUTMENTS OR END BENT SLOPES: NO SCOUR EVIDENT

INTERIOR BENTS: SCOUR EVIDENT ON EXISTING B2, B3, B5, MOSTLY ON UPSTREAM SIDE

CHANNEL BED: NONE VISIBLE

CHANNEL BANKS: BANKS STABLE, ONLY EVIDENT DOWNSTREAM OF BENTS IN CHANNEL

EXISTING SCOUR PROTECTION:

TYPE(3): RIP RAP AND CONCRETE AT ENDBENTS

EXTENT(4): ONLY AROUND ENDBENT SLOPE

EFFECTIVENESS(5): EFFECTIVE, BUT NOT FREQUENTLY IMPACTED

OBSTRUCTIONS(6) (DAMS,DEBRIS,ETC.): TREE IN CHANNEL APPROX. 50' UPSTREAM OF PROPOSED SITE

DESIGN INFORMATION

CHANNEL BED MATERIAL(7) (SAMPLE RESULTS ATTACHED): SAND WITH SILT

CHANNEL BANK MATERIAL(8) (SAMPLE RESULTS ATTACHED): SANDY SILT AND CLAYS

FOUNDATION BEARING MATERIAL(9): WEATHERED ROCK, SCHIST AND GNEISS

CHANNEL BANK COVER(10): GRASS, SHRUBS AND MODERATE TO OLD TREES

FLOOD PLAIN WIDTH(11): APPROXIMATELY 300 FT

FLOOD PLAIN COVER(12): GRASS AND MODERATE TO OLD GROWTH TREES

DESIGN INFORMATION CONT.

STREAM IS x DEGRADING AGGRADING (13)

OTHER OBSERVATIONS AND COMMENTS: NEARBY RESIDENT REPORTED SEVERAL BEAVER

DAMS UPSTREAM OF SITE

CHANNEL MIGRATION TENDENCY (14): TO THE NORTH

REPORTED BY: [Signature] DATE: 1/5/2005 TIERRA, INC

GEOTECHNICALLY ADJUSTED SCOUR ELEVATION (15):

Table with 3 columns: BORING, 100 Year Elevation, 500 Year Elevation. Rows include B1-A, B1-B, B2-A, B2-B with corresponding elevation values.

REPORTED BY: [Signature] DATE: 2/15/05 NCDOT GEOTECHNICAL UNIT

INSTRUCTIONS

- (1) GIVE THE DESCRIPTION OF THE SPECIFIC SITE GIVING ROUTE NUMBER AND BODY OF WATER CROSSED. (2) NOTE ANY EVIDENCE OF SCOUR AT THE EXISTING END BENTS OR ABUTMENTS (UNDERMINING, SLOUGHING, SCOUR LOCATIONS, DEGRADATIONS, ETC.)