GEOTECHNICAL UNIT FIELD SCOUR REPORT

	PROJECT: 8.1620101	ID: <u>B-4096</u>	WBS Element:	33454.1.1	COUNTY: Davidson						
	F.A. Number:	BRSTP-29(20)	nicorang maganga nicosa da da kalanga								
	DESCRIPTION(1):	Bridge No. 140 over Ri	ch Fork Creek on US 29	9-70/I-85 Business							
	INFORMATION ON E	XISTING BRIDGES I	nformation obtained f	microt X other	ilm(Reel: Pos:) Bridge Survey and Hydraulic						
	COUNTY BRIDGE NO.	140 BRIDGE LENGTI	H_213'_ NO. BENTS IN		Design Report FLOOD PLAIN 4						
	FOUNDATION TYPE:		ed by concrete girders was upported footings at the		ts; reinforced post and web						
	EVIDENCE OF SCC)UR(2):	200726 Pela derusakk Barket yezitégélégé ésépények kéréleményerin departusuk számasa desaresa szere en								
	ABUTMENTS OR END	BENT SLOPES:	Flood scour pockets be slopes	etween Bents 1 and 4	and toes of adjacent end bent						
-	INTERIOR BENTS:				ehind Bents 2 and 3 but hasn't Bents 2 and 3						
	CHANNEL BED:	Scour pockets on upstr	eam side of Bents 2 and	13							
	CHANNEL BANKS:	the bank.	being undermined by th	e stream, and tree roo	its have been exposed along						
	EXISTING SCOUR	EXISTING SCOUR PROTECTION:									
	TYPE(3): Rip rap on e	end bent slopes									
-	EXTENT(4): Face and si	des of end bent embank	ments		POTENTIAL CONTRACTOR OF THE STATE OF THE STA						
	EFFECTIVENESS(5):	Appears to be effective	except at toe of embanl	ments where flood so	our is present.						
_	OBSTRUCTIONS(6) (DA	MS,DEBRIS,ETC.):	Minor limbs and debri	s caught on wood pilin	gs in stream from previous						
	DESIGN INFORMAT	<u> </u>									
-	CHANNEL BED MATER	IAL(7) (SAMPLE RESUL	TS ATTACHED):	Two grab samples of	material close to the bank						
	were obtained, one dowr	nstream and one upstrea	m of the existing bridge	this material consists	of silty, coarse to fine						
-	SAND (A-2-4) with some	gravel on the downstrea	am side								
	CHANNEL BANK MATE	RIAL(8) (SAMPLE RESL	JLTS ATTACHED):	Clayey, fine sandy SI	LT (A-4); clayey, silty,						
	coarse to fine SAND (A-2-4); and silty, fine sandy CLAY (A-6)										
	CHANNEL BANK COVE	R(9): Hardwood, brush,	and grass/weeds								
	FLOOD PLAIN WIDTH(1	0): Approximately 45	0 feet								
-	FLOOD PLAIN COVER(11): <u>Hardwood, brush,</u>	and grass/weeds								

DE	SIGN INFO	ORMA	TION CONT.					•	PAGE 2		
STI	REAM IS	×	DEGRADING	NG (12)			4				
						udaya balah	ma(a) ana ma				
O I	HER UDSE	EKVA	TIONS AND COMMEN	a i S. w <u>ood piiin</u>	gs irom pre	vious prio	ge(s) are pro	esent across (<u>cnannei;</u>		
gra	vel bar is pre	esent c	on north side of stream a	pproximately 80	upstream	of existing	bridge.	The state of the s	***************************************		
	ARIRIEI RAI	CDAT	ION TENDENCY (13)	* Microtion	etential en	naara ta h	towards F.	nd Donald	No. Para de la companya de la compa		
Un	WIAIAET INII	GRAI	ION TENDENCY (13)	, <u>iviigration p</u>	otentiai ap	pears to be	e towards E	na Bent-1.			
distributories que		***************************************	ρω						PERSONAL PROPERTY OF THE PERSONAL PROPERTY OF		
	REPORT	ED BY	Trigon Engineering C	opposition to a		Majanaj yan graanska yan kan shahala ka mag	_DATE:	3/22/2004			
			Ingon Engineering C	onsultants, inc.							
GE	OTECHNIC	CALLY	'ADJUSTED SCOUR	ELEVATION (14):	MANAGAN			n de la decembra de la composición del composición de la composici		
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Commonment	**************************************			9 4 0							
CONTRACTOR			Boring I.D.	<u>B1-A</u>	<u>B1-B</u>	B2-A	B2-B				
	·		100 year scour	641.9'	640.7'	647.6'	643.9'				
Chetamoreogen	Office Specialists in a new company of the Special Spe				and many sections that he change of some section controls	and the second s			H*************************************		
-								MONTH DISCHARGE STREET, CO.			
								I = I			
	REPORTE	ED BY	(: Clad m well NCDOT	<u>Y</u>	13.1199		DATE:	4/14/04			
			NCDOT	/ GEOTECHNICAL L RUCTIONS	JNIT		* * *				
(1)	GIVE THE D	ESCRIB	TION OF THE SPECIFIC SITI		IIIMBER AND	BODY OF W	ATER CROSS	SED			
(2)			CE OF SCOUR AT THE EXIS					/ has lee/ to			
()			JR LOCATIONS, DEGRADAT				· · · · · · · · · · · · · · · · · · ·				
(3)			G SCOUR PROTECTION (RIF	•	* *						
(4)											
(5)	DESCRIBE	WHETH	ER OR NOT THE SCOUR PR	OTECTION APPEA	RS TO BE WO	ORKING.					
(6)											
(7) DESCRIBE THE CHANNEL BED MATERIAL: A SAMPLE SHOULD BE TAKEN FOR GRAIN SIZE DISTRIBUTION,											
	ATTACH LAB RESULTS.										
(8) DESCRIBE THE CHANNEL BANK MATERIAL: A SAMPLE SHOULD BE TAKEN FOR GRAIN SIZE											
(0)		•	TACH LAB RESULTS.	TO DID DAD MONE							
(9)			IK COVERING (GRASS, TREE		., E I C.						
(10)			IMATE FLOOD PLAIN WIDTH	•	e etc i						
(11)											
(12)											
(13)			MATELY 100 YEARS).	TVELLET TO IVIIGION	: - I V^\-	. DOMING		1 Show			
(14)	•		CHNICALLY ADJUSTED SCOL	JR ELEVATION EXF	PECTED OVE	R THE LIFE	OF THE BRIDG	GE			
,			100 YEARS). THIS CAN BE O								
			ASIS WHERE VARIATIONS E								

THEORETICAL SCOUR AND THE GEOTECHNICALLY ADJUSTED SCOUR ELEVATION. THE GEOTECHNICALLY ADJUSTED SCOUR ELEVATION IS BASED ON THE ERODABILITY OF MATERIALS WITH CONSIDERATION FOR JOINTING, FOLIATION, BEDDING ORIENTATION AND FREQUENCY; CORE RECOVERY PERCENTAGE; PERCENTAGE RQD; DIFFERENTIAL WEATHERING, SHEAR STRENGTH; OBSERVATIONS AT EXISTING STRUCTURES; OTHER TESTS DEEMED APPROPRIATE; AND OVERALL GEOLOGIC CONDITIONS AT THE SITE.