

**HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
CORROSION CONTROL TEST STATION  
FIELD DATA SURVEY FORM**

Location: 41+38 Date Surveyed: 05/31/2007  
Bridge, Old Columbia Rd Surveyed by: AS/MJ  
 T/S #: 05 Contract #: 44-3868  
 T/S Type: IJ w/Anode Pipe Size: 16"  
 Was the T/S located? YES / NO YES

**TEST STATION CONDITION**

Test Box:	<u>Good</u>
Terminal Board:	<u>Good</u>
Wires:	<u>Good</u>
Other:	

**SURVEY DATA**

Test Wire Size/Description	Color	P/Cu-CuSO <sub>4</sub> (V)		P/Zn (V)		Anode (mA)
		"On"	"Off"	"On"	"Off"	
1. #10 AWG	Blue	-1.624	-1.680	-1.561	-1.394	10.4
2. #10 AWG	Black	-1.642	-1.642	-1.562	-1.602	
3. #6 AWG	Black	-1.630	-1.467	-1.038	-1.393	
4. #8 AWG	Black	-0.084	-0.081			
5. #10 AWG	Blk/Wht	-1.344	-1.207	-1.139	-1.146	
6.						
7.						
8.						

P/Cu-CuSO<sub>4</sub> = Pipe to Copper-Copper Sulfate Reference Electrode

P/Zn = Pipe to Zinc Reference Electrode

"On" = Reading with Anode(s) connected

"Off" = Reading with Anode(s) disconnected

Anode = Current output Anode(s)

**TESTING THE EFFECTIVENESS OF INSULATING JOINTS**

Groundbed:			
Connected to (B/W):			
	Current (A)	Voltage (V)	Resistance (ohms)
ON:	1.85	-10.9	5.67
OFF:	0.00	-0.415	
DELTA:	1.85	-10.485	

**TESTING IR DROP**

IR Drop Calibrations	I (A)	E (mV)	$K = \frac{\Delta I \text{ (mA)}}{\Delta E \text{ (mV)}}$	Between Terminals	Resistance (ohms)
INITIAL:					
FINAL:					
DELTA:					
			Direction:		

**REPAIRS MADE**

Test Box:	
Terminal Board:	
Wires:	
Other:	
Comments/Recommendations:	



Figure 82 – Location of Test Station 5 - Old Columbia Road and Middle Patuxent River



Figure 83 – Test Station 5 close up