

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

**Location:** 00+20 **Date Surveyed:** 3/10/2005  
Rt. 40 at Patapsco Bridge **Surveyed by:** AC/MJ  
**T/S #:** 1 **Contract #:** 8-W  
**T/S Type:** ST w/ Anode **Pipe Size:** 24"

**Was Test Station located? YES/NO** Yes

**TEST STATION CONDITION**

**Test Box :** Buried Under Soil  
**Terminal Board :** Good  
**Wires :** Good  
**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	Black	-1.143	-0.981	-1.104	-0.957	518.0
2) #10 AWG	Red	-1.164	-1.608	-1.125	-1.586	
3) #10 AWG	Black	-1.060	-0.976	-1.025	-0.957	
4) #10 AWG	Red	-1.143	-1.379	-1.106	-1.586	
5) #8 AWG	Black	-0.024	-0.006			
6)						
7)						

P/Cu-CuSO<sub>4</sub> = Pipe to Copper - Copper Sulfate Reference Cell  
P/Zn = Pipe to Zinc Permanent Reference Cell  
"On" = Reading with Anode(s) connected  
"Off" = Reading with Anode(s) disconnected  
I Anode = Current output of anodes

**REPAIRS MADE**

**Test Box:** Cleared Soil  
**Terminal Board:** \_\_\_\_\_  
**Wires:** \_\_\_\_\_  
**Other:** \_\_\_\_\_  
**Additional Comments/Recommendations:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS CORROSION CONTROL TEST STATION FIELD DATA SURVEY FORM						
<b>Location:</b>		<u>00+21</u> <u>Rt. 40 at Patapsco Bridge</u>		<b>Date Surveyed:</b>		<u>3/10/2005</u>
<b>T/S #:</b>		<u>2</u>		<b>Surveyed by:</b>		<u>AC/MJ</u>
<b>T/S Type:</b>		<u>IJ w/ Anode</u>		<b>Contract #:</b>		<u>8-W</u>
				<b>Pipe Size:</b>		<u>24"</u>
<b>Was Test Station located? YES/NO</b> <u>Yes</u>						
<b>TEST STATION CONDITION</b>						
<b>Test Box :</b>		<u>Buried Under Soil</u>				
<b>Terminal Board :</b>		<u>Good</u>				
<b>Wires :</b>		<u>Good</u>				
<b>Other :</b>		_____				
<b>SURVEY DATA</b>						
Test Wire Size/Description	Color	P/Cu-CuSO <sub>4</sub> (V)		P/Zn (V)		Anode (mA)
		"On"	"Off"	"On"	"Off"	
1) #10 AWG	Red	-1.648	-1.620	-1.426	-1.434	0.000
2) #10 AWG	Red	-1.689	-0.663	-0.47	-0.482	
3) #10 AWG	Green	-1.649	-1.140	-1.427	-0.902	
4) #8 AWG	Black	-0.215	-0.169			
5) #10 AWG	Black	-1.062	-1.016	-0.844	-0.839	
6) #10 AWG	Green	-0.710	-0.682	-0.549	-0.532	
7) #10 AWG	Black	-1.060	-1.010	-0.843	-0.839	
P/Cu-CuSO <sub>4</sub> = Pipe to Copper - Copper Sulfate Reference Cell P/Zn = Pipe to Zinc Permanent Reference Cell "On" = Reading with Anode(s) connected "Off" = Reading with Anode(s) disconnected I Anode = Current output of anodes						
<b>TESTING THE EFFECTIVENESS OF INSULATING JOINTS</b>						
GROUND BED: CONNECTED TO (B/W):						
CURRENT	(A)	VOLTAGE	(V)	RESISTANCE (ohms):	7.27	
ON:	0.0011	ON:	0.3			
OFF:	0	OFF:	0.29			
DELTA:	0.0011	DELTA:	0.01			
<b>REPAIRS MADE</b>						
<b>Test Box:</b>		<u>Cleared Soil.</u>				
<b>Terminal Board:</b>		_____				
<b>Wires:</b>		_____				
<b>Other:</b>		_____				
<b>Additional Comments/Recommendations:</b> _____						
_____						
_____						



**Figure 71 - Location of Test Stations on contract 8W**



**Figure 72 - Test Station 8W-1 close-up**