U.S. Department
of Transportation
Federal Highway
Administration

LTPP Seasonal Monitoring Program

Site Monitoring Suspension
Status Report
Section 251002, Chicopee
Massachusetts

Report No. FHWA-TS-95-25-01 **December 1995**

SMP SITE MONITORING SUSPENSION STATUS REPORT MASSACHUSETTS SECTION 251002

I. INTRODUCTION

The seasonal site 251002 near Chicopee, Massachusetts was installed on August 31 - September 1, 1993. Seasonal data was collected continuously from October 15, 1993 to June 21, 1995. On June 21, 1995, all site suspension activities were completed at this site according to LTPP directive SM-8 "Suspension of SMP Site Monitoring Activities". The site will remain out of operation until the next round of testing which is tentatively scheduled for September 1996.

This report entitled "SMP Site Monitoring Suspension Status Report" details the suspension preparation activities, site specific conditions, and provides information pertinent to the seasonal site 251002.

II. SUSPENSION PREPARATION ACTIVITIES

The suspension preparation activities at 251002 were conducted during the final two site visits. A manual distress survey of the entire section and transverse Dipstick® surveys were conducted on the May 24, 1995 site visit. PK nails were reconfirmed and replaced as required. The site paint markings were refreshed at this time. June 21, 1995 was the last day of activity at the site. On this day two sets of FWD tests, one set of elevations, and a distress survey of the instrumentation area were conducted. The water table measurements and the manual resistivity measurements (2 and 4 point) were performed in the morning and afternoon. The onsite datalogger was downloaded before being dismantled. Three sets of TDR and resistance voltages were extracted by the mobile datalogger. The instrument hole, trench, and surface temperature probe slot areas were cleaned and sealed as needed.

The air temperature probe, tipping bucket, and the upper part of the support pole were dismantled. The lead wires from the air temperature probe and the tipping bucket were sprayed with an anti-corrosive compound and sealed in an air tight bag with dessicant packs. A galvanized wire fished through the pipe and conduit, will be used to pull the instrumentation wires back on the re-initiation of data collection at the site. The bottom part of the support pole was cleaned and lubricated prior to installing the end cap.

After all the wires were disconnected from the control panel, the panel was detached from the equipment cabinet with the CR10 datalogger, terminal strip, and the battery pack attached to it. The TDR cables were checked to make sure that they were labeled. The TDR cables, resistivity cable, and the MRC lead wires were sprayed with anti-corrosion compounds and sealed with dessicant packs in air tight bags. All cables were hung up

high inside the equipment cabinet. After the last piezometer reading was recorded the pipe was cleaned and sealed with grease. The access cover and seat were cleaned and lubricated before being covered and brought up to grade with native soil.

The Profilometer survey corresponding to the closeout was conducted on June 14, 1995.

All the necessary suspension activities were completed by June 21, 1995. The dismantled equipment was removed from the site. The suspended site contained all the underground instrumentation and equipment, and an equipment cabinet with all the cables. The equipment cabinet was locked before leaving the site. The site was cleaned and left in a condition such that the instrumentation could be easily accessed when and if site monitoring activities should resume.

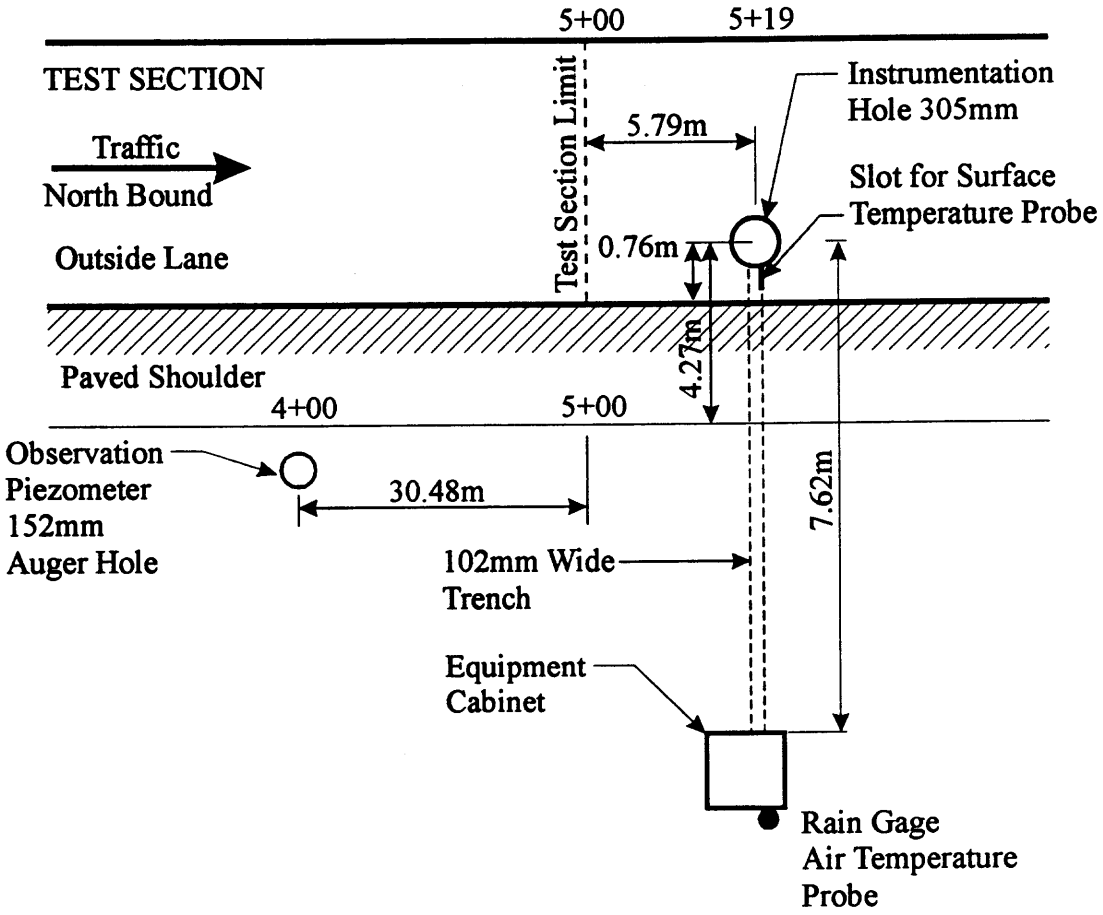
III. SPECIAL SITE CONDITIONS

The installation of site 251002 followed the "LTPP Seasonal Monitoring Program: Instrumentation Installation and Data Collection Guidelines" closely. There were no irregularities associated with the installation of this site. The MRC#1 sensor was reading slightly high temperature values at the time of suspension. All other sensors were working properly. The equipment cabinet needs replacement. Due to extensive slight cracking (sealed) this site has been included in Massachusetts Pavement Management System overlay program. It is expected this site will be overlaid in 1996

IV. SUPPLEMENTAL INFORMATION

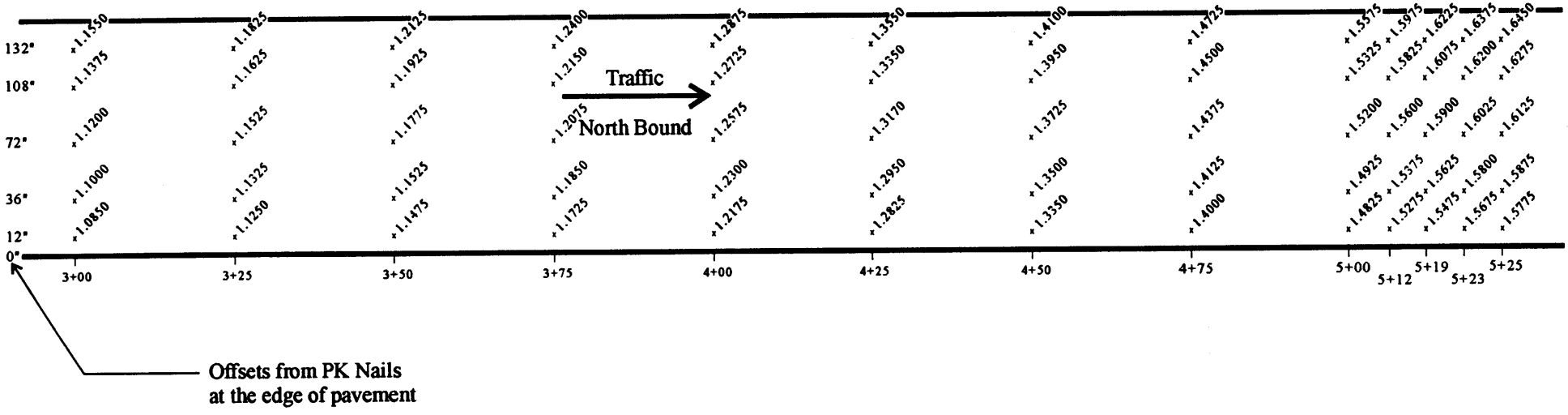
Figure 1 shows the locations of the installed instrumentation at the site. The instrumentation hole is at station 5+19 and the piezometer is at station 4+00. Figure 2 gives the plan view of the portion of test section 251002 that was used for elevation measurements. All offsets are from the PK nails found at the outside pavement edge.

At the time of suspension of the site there were no unresolved problems with any of the sensors. The plots from ONSFIELD, MOBFIELD, and SMPCHECK follow expected trends and produce expected values.



- Total Depth of Piezometer: 4.29m
- Distance of Piezometer Below Ground Level: 184mm

Figure 1. Location for Seasonal Monitoring Instrumentation Installed at GPS 251002



NOTE:

- All offsets are measured from the PK nails at the pavement edge.
- All elevations provided are from the June 21, 1995 survey with the top of the piezometer pipe set at 1.000m.
- Instrument hole is located at station 5+19

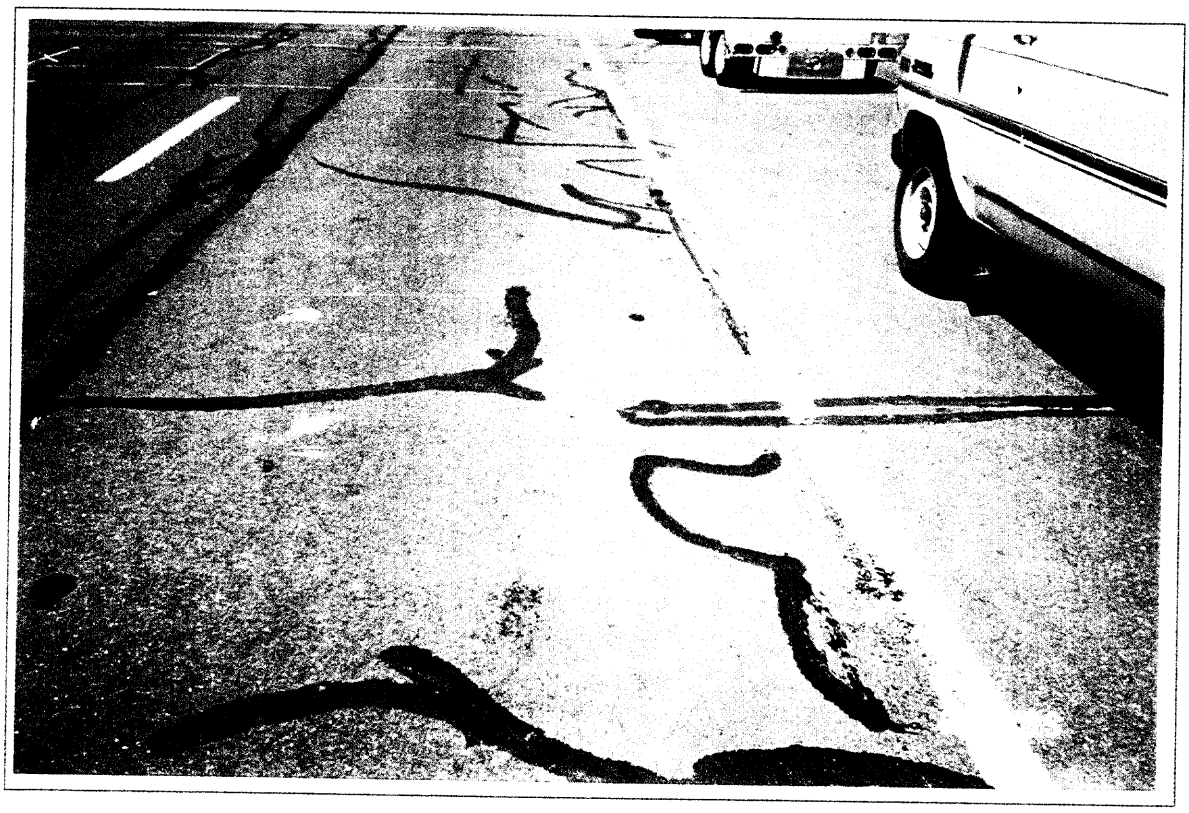
Figure 2. - Location for Elevation Measurements at GPS 251002

SUMMARY OF SMP DATA COLLECTION TO DATE

Agency Code [2 5]
LTPP Section I.D. [1 0 0 2]
Location Chicopee, Massachusetts

Test Date dd/mmm/yy	Visit Ident./ Code	ONSITE Data			MOBILE Data		Manual Data								FWD Data				Distress Data		Profile Data		Comments
																No. of Cycles/Visit							
		Pav Temp.	Ambient Temp.	Rainfall	Moisture (TDR)	Frost Depth (Resist.)	Backup Pav. Temp.	Backup Moisture (TDR)	Frost Depth 2 - point	Frost Depth 4 - point	Water Table	Surface Elev.	Joint Open.	Joint Fault.	Surface Layer Temp.	OWP	ML	PE	Manual	PASCO	Profiler	Dipstick	
01-Sep-93	A	X	X	X	X	X			X	X		X				3	3						
15-Oct-93	B																						
16-Nov-93	C	X	X	X	X	X			X		X					3	3						
23-Dec-93	D	X	X					X	X		X				X	3	3						On-site data only
18-Jan-94	A	X	X																		20-Jan-94		On-site data only
16-Feb-94	B	X	X	X	X	X			X		X	X			X	3	3				22-Feb-94		
09-Mar-94	C	X	X	X	X	X		X	X	X	X				X	1	1						
29-Mar-94	D	X	X	X	X	X		X			X				X	4	4						
20-Apr-94	E	X	X	X		X		X	X	X	X	X			X	4	4				15-Apr-94		Mobile TDR error
11-May-94	F	X	X	X				X	X		X				X	4	4		X			X	On-site data only
08-Jun-94	G	X	X	X	X	X			X		X				X	4	4						
29-Jun-94	H	X	X	X	X	X			X		X				X	4	4						
27-Jul-94	I	X	X	X	X	X			X	X	X	X			X	4	4						
24-Aug-94	J	X	X	X	X	X			X		X	X			X	4	4		X			X	
28-Sep-94	K	X	X	X	X	X					X				X	1	1				08-Sep-94		
16-Oct-94	L	X	X	X	X	X			X	X	X	X			X	3	3				24-Oct-94		
29-Nov-94	M	X	X	X	X	X					X				X	1	1						
04-Jan-95	A	X	X	X	X	X					X				X	3	3				10-Jan-95		FWD floppy drive problem
01-Feb-95	B				X	X			X	X	X	X			X	3	3						On-site datalogger failure
01-Mar-95	C	X	X	X	X	X			X	X	X	X			X	3	3				23-Feb-95		
14-Mar-95	D	X	X	X	X	X					X				X	3	3						
28-Mar-95	E	X	X	X	X	X					X				X	2	2						
11-Apr-95	F	X	X	X	X	X					X				X	3	3						
25-Apr-95	G	X	X	X	X	X					X				X	3	3						
24-May-95	H	X	X	X	X	X			X	X	X	X			X	4	4		X			X	
21-Jun-95	I	X	X	X	X	X			X	X	X	X			X	?	?				14-Jun-95		Close-out

Instrumentation Hole. Seasonal Site 251002 MA. May 1995. Prior to Suspension Preparation Activities



Instrumentation Hole. Seasonal Site 251002 MA. June 1995. During Suspension Preparation Activities