U.S. Department
of Transportation
Federal Highway
Administration

LTPP Seasonal Monitoring Program

Site Monitoring Suspension
Status Report
Section 501002, New Haven
Vermont

Report No. FHWA-TS-95-50-01 **December 1995**

SMP SITE MONITORING SUSPENSION STATUS REPORT
VERMONT SECTION 501002

I. INTRODUCTION

The seasonal site 501002 near New Haven, Vermont was installed on October 06 - October 07, 1993. Seasonal data was collected continuously from November 08, 1993 to June 28, 1995. On June 28, 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 501002.

II. SUSPENSION PREPARATION ACTIVITIES

The suspension preparation activities at 501002 were conducted during the final three site visits. A manual distress survey was conducted on April 28, 1995. The PK nails were reconfirmed and replaced as required on May 31, 1995. The site paint markings were refreshed at this time. June 28, 1995 was the last day of activity at the site. On this day three 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. Two sets of TDR and resistance voltages were extracted by the mobile datalogger. The instrument hole, trench, and surface temperature probe slot areas were reground 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-corrosion compound and sealed in an air tight bag with desiccant 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 ensure that they were labeled. The TDR cables, resistivity cable, and the MRC lead wires were sprayed with anti-corrosion compounds and sealed with desiccant 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 May 18, 1995.

All the necessary suspension activities were completed by June 28, 1995. The dismantled equipment was removed from the site. The suspended site contains all the under ground 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.

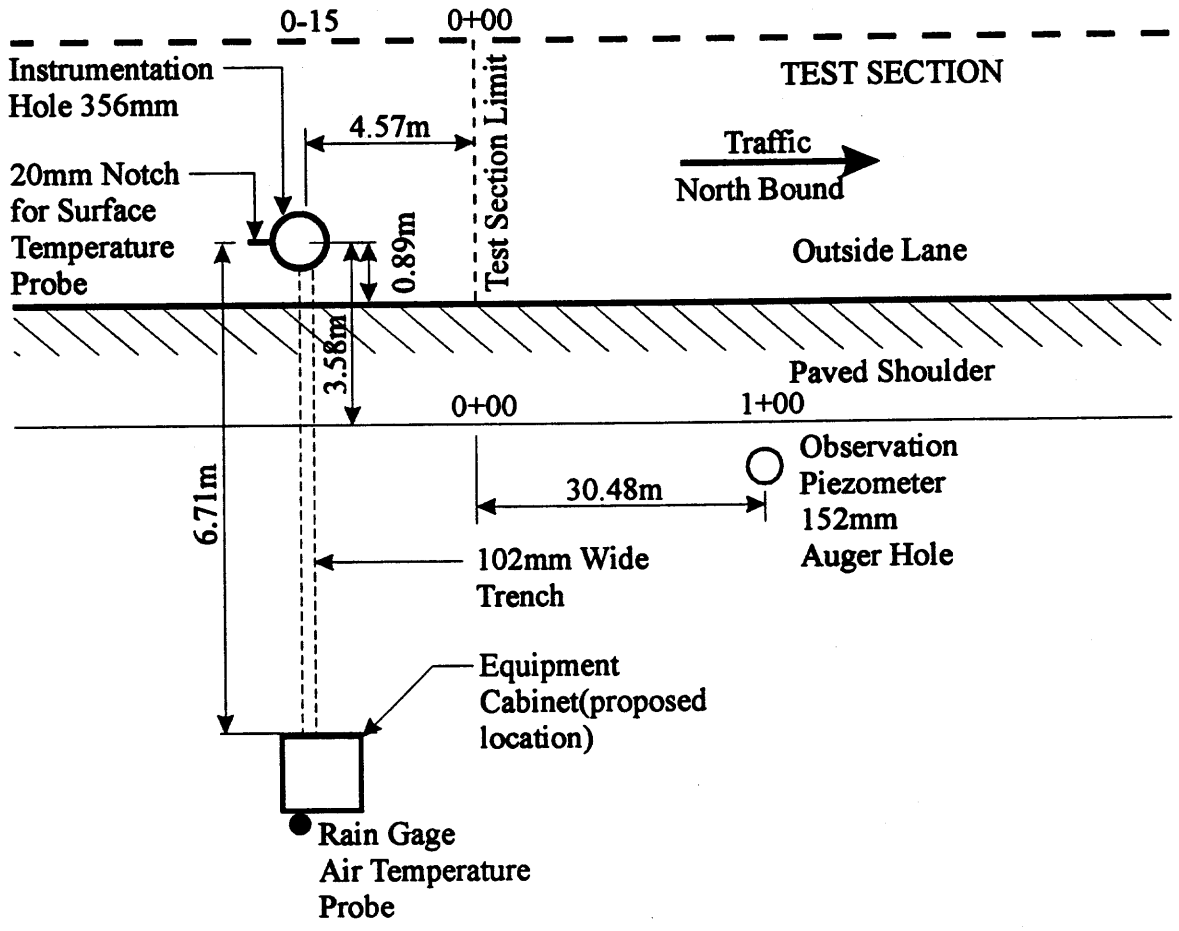
III. SPECIAL SITE CONDITIONS

The installation of site 501002 generally followed the "LTPP Seasonal Monitoring Program: Instrumentation Installation and Data Collection Guidelines". The two instances where the guide was not followed was one, in the placement of the equipment cabinet and two, the placement of the air temperature and rain gauge pole. The equipment cabinet was placed on the inside ledge of the ditch and the weather pole was placed to a depth of 0.66m in the granular base for the cabinet. There were no outstanding problems with any of the sensors at the time of suspension. The State of Vermont has seasonal monitoring instrumentation installed at the 5+00 end of the site. There will be ongoing data collection at this location during the closeout of the core instrumentation.

IV. SUPPLEMENTAL INFORMATION

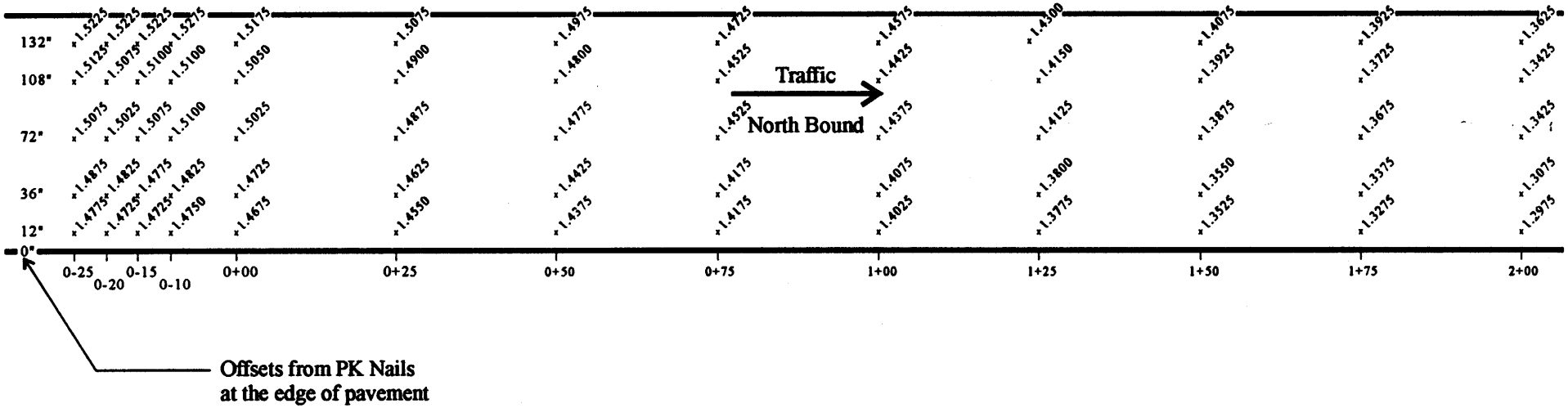
Figure 1 shows the locations of the installed instrumentation at the site. The instrumentation hole is at station 0-15 and the piezometer is at station 1+00. Figure 2 gives the plan view of the portion of test section 501002 that was used for elevation measurements. All offsets are from the PK nails 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: 4.88m
- Distance of Piezometer Below Ground Level: 102mm

Figure 1.- Location for Seasonal Monitoring Instrumentation at GPS 501002



NOTE:

- All offsets are measured from the PK nails at the pavement edge.
- All elevations provided are from the June 28, 1995 survey with the top of the piezometer pipe set at 1.000m.
- Instrument hole is located at station 0-15

Figure 2. - Location for Elevation Measurements at GPS 501002

SUMMARY OF SMP DATA COLLECTION TO DATE

Agency Code (5 0)
LTPP Section I.D. (1 0 0 2)
Location New Haven, Vermont

Test Date dd/mmm/yy	Visit Ident./ Code	ONSITE Data			MOBILE Data		Manual Data								FWD Data				Distress Data		Profile Data		Comments
		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.	No. of Cycles/Visit OWP	ML	PE	Manual	PASCO	Profiler	Dipstick	
07-Oct-93	A				X				X	X		X				3	3						Mobile resistivity error
08-Nov-93	B				X				X						X	2	2						On-site datalogger failure
20-Dec-93	C	X	X	X				X	X		X					2	2						On-site data only
12-Jan-94	A	X	X	X	X	X			X		X	X			X	1	1						
09-Feb-94	B	X	X	X																	18-Feb-94		On-site data only
02-Mar-94	C	X	X	X	X	X		X	X	X	X				X	1	1						
22-Mar-94	D	X	X	X		X		X			X				X	1	1						Mobile TDR error
13-Apr-94	E	X	X	X	X	X		X	X	X	X	X			X	2	2				12-Apr-94		
04-May-94	F	X	X	X				X	X		X				X	3	3						On-site data only
25-May-94	G	X	X	X	X	X					X				X	3	3					X	
22-Jun-94	H	X	X	X	X	X			X		X				X	4	4						
20-Jul-94	I	X	X	X	X	X			X	X	X	X			X	4	4				25-Jul-94		
17-Aug-94	J	X	X	X	X	X			X		X	X			X	4	4		X			X	
21-Sep-94	K	X	X	X	X	X			X		X				X	3	3						
19-Oct-94	L	X	X	X	X	X			X	X	X	X			X	2	2				23-Oct-94		
16-Nov-94	M	X	X	X	X	X					X				X	3	3						
14-Dec-94	N	X	X	X	X	X					X				X	2	2						
19-Jan-95	A	X	X	X	X	X			X	X	X	X			X	2	2				06-Jan-95		
16-Feb-95	B	X	X	X	X	X			X	X	X										21-Feb-95		
17-Mar-95	C	X	X	X	X	X					X												FWD not functioning
31-Mar-95	D	X	X	X	X	X					X				X	3	3						
13-Apr-95	E	X	X	X	X	X					X				X	3	3						
28-Apr-95	F	X	X	X	X	X			X	X	X	X			X	3	3		X			X	
31-May-95	G	X	X	X	X	X			X	X	X	X			X	3	3				18-May-95		possible faulty generator setting
28-Jun-95	H	X	X	X	X	X			X	X	X	X			X	?	?						close-out

Instrumentation Hole, Seasonal Site 501002 VT, June 1995, During Suspension Preparation Activities

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