U.S. Department
of Transportation
Federal Highway
Administration

LTPP Seasonal Monitoring Program

Site Monitoring Suspension
Status Report
Section 360801, Hamlin
New York

Report No. FHWA-TS-96-36-04 **November 1996**

SMP SITE MONITORING SUSPENSION STATUS REPORT
NEW YORK SECTION 360801

I. INTRODUCTION

The seasonal site 360801 near Hamlin, New York was installed on August 22 - August 23, 1995. Seasonal data was collected continuously from August 23, 1995 to September 17, 1996 (Table one summarizes the data collected). On September 17, 1996, 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 1997.

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 360801.

II. SUSPENSION PREPARATION ACTIVITIES

The suspension preparation activities at site 360801 were conducted during the final site visit on September 17, 1996. A manual distress survey and transverse Dipstick® surveys of the entire section were conducted at this time. PK nails were reconfirmed and replaced as required. The site paint marking did not need to be refreshed. On this day one set 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 traces 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. Prior to dismantling, it was determined that the tipping bucket was plugged as it contained a substantial amount of water. The bucket was unplugged and the water was allowed to pass through. This will require edits and comments during data processing. The lead wires from the air temperature probe and the tipping bucket were pulled out of the cabinet and sprayed with an anti-corrosive compound. The above ground conduit from the pole to the equipment cabinet was removed and the resulting hole in the back of the cabinet sealed. 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, resistivity cable and MRC lead wires were sprayed with anti-corrosion compounds and sealed with desiccant packs in airtight 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 close-out was conducted on August 19, 1996.

All the necessary suspension activities were completed on September 17, 1996. The dismantled equipment was removed from the site. The suspended site contains all the under-ground instrumentation, 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 site monitoring activities resume.

III. SPECIAL SITE CONDITIONS

The installation of site 360801 followed the "LTPP Seasonal Monitoring Program: Instrumentation Installation and Data Collection Guidelines" closely. At the time of installation of the top TDR probes it was necessary to use aggregate material from the trench as the material taken from the instrument hole was saturated with the saw cutting water. At the time of suspension TDR Sensors number 5 to 10 produced traces that are indicative of high moisture contents.

IV. SUPPLEMENTAL INFORMATION

Figure 1 shows the locations of the installed instrumentation at the site. The instrumentation hole is at station 0-12 and the piezometer is at station 1+00. Table 2 gives elevations of the portion of test section 360801 that was used for elevation measurements. All offsets are from the PK nails found at the outside pavement edge.

TDR sensor numbers 5 to 10 produced traces that are indicative of highly conductive soils (as shown in figure 2). This is to be expected because of the high water table. Other than the plugged tipping-bucket, at the time of suspension, all instrumentation was working well. All plots from ONSFIELD, MOBFIELD, and SMPCHECK follow expected trends and expected values.

Table 1

SUMMARY OF ROUND TWO SMP DATA COLLECTION TO DATE

Agency Code [3 6]
LTPP Section I.D. [0 8 0 1]
Location Brockport, New York

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	
23-Aug-95	A	X	X	X	X	X			X	X	X	X			X	5	5		X			X	
26-Sep-95	B	X	X	X	X	X			X	X	X				X	1	1						
10-Oct-95	C	X	X	X	X	X			X	X	X	X			X	3	3						
06-Nov-95	D	X	X	X	X	X					X				X	3	3						
05-Dec-95	E	X	X	X	X	X					X	X			X	3	3						
09-Jan-96	A	X	X	X	X	X			X	X	X	X			X	1	1				12-Jan-96		
08-Feb-96	B	X	X	X	X	X			X	X	X	X			X	2	2					X	
11-Mar-96	C	X	X	X	X	X															12-Mar-96		
26-Mar-96	D	X	X	X	X	X					X				X	3	3				08-Apr-96		
09-Apr-96	E	X	X	X	X	X			X	X	X	X			X	2	2		X			X	
30-Apr-96	F	X	X	X	X	X					X				X	3	3						
21-May-96	G	X	X	X	X	X			X	X	X				X	2	2						
09-Jul-96	H	X	X	X	X	X					X				X	3	3						
06-Aug-96	I	X	X	X	X	X					X				X	4	4				19-Aug-96		
17-Sep-96	J	X	X	X	X	X			X	X	X	X			X	1	1		X			X	Close-out

Table 2. Surface Elevation Measurements

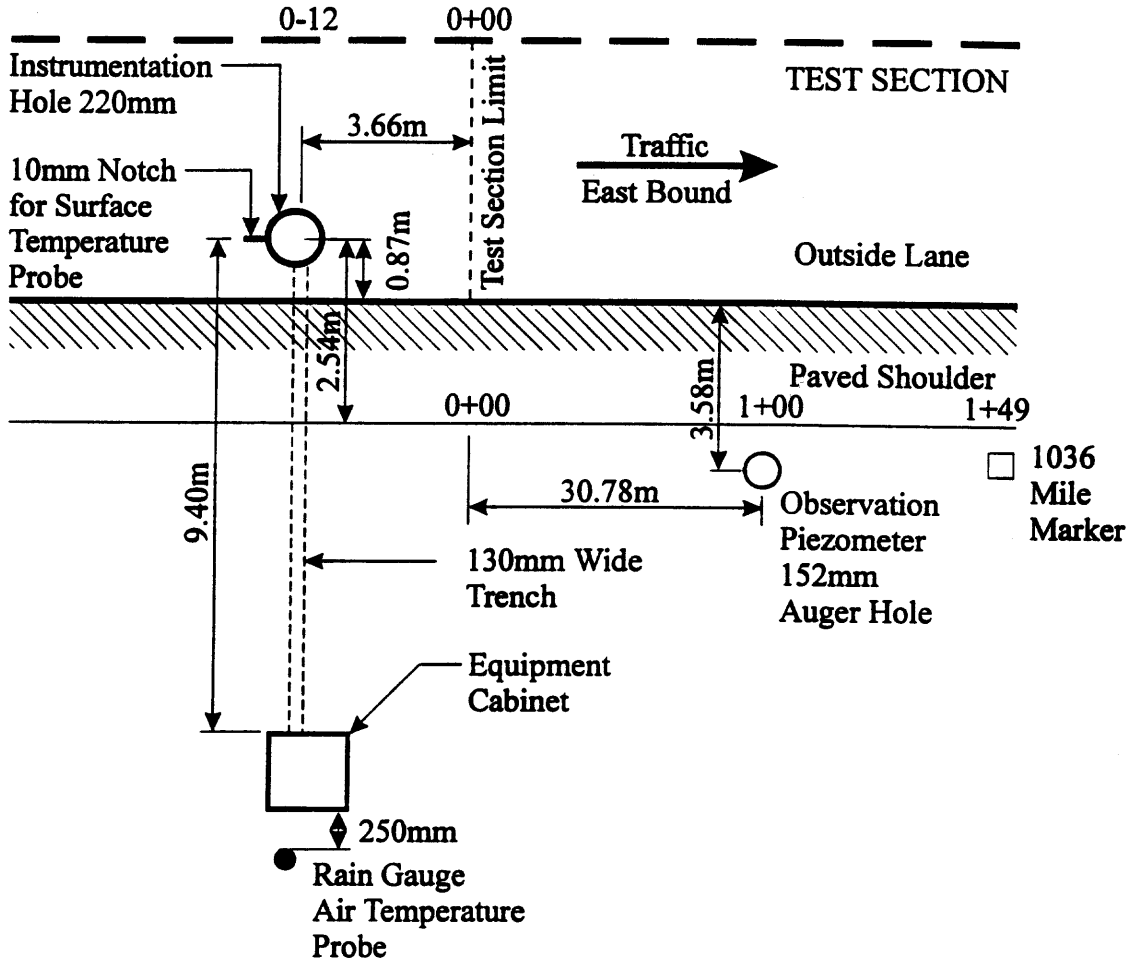
LTPP Seasonal Monitoring Study	State Code	[36]
Surface Elevation Measurements	Test Section Number	[0801]

Survey Date	September 17, 1996
Surveyed By	AL/EL
Surface Type	AC
Benchmark	Observation Piezometer - 1.000 meters - assumed

STATION	PE m offset 0.30m	OWP m offset 0.91m	ML m offset 1.83m	IWP m offset 2.74m	ILE m offset 3.35m
0-17	1.2900	1.3000	1.3200	1.3350	1.3450
0-12	1.2700	1.2900	1.3100	1.3300	1.3400
0-07	1.2750	1.2900	1.3100	1.3250	1.3350
0+00	1.2700	1.2900	1.3050	1.3200	1.3300
0+25	1.2600	1.2700	1.2950	1.3100	1.3250
0+50	1.2600	1.2750	1.2950	1.3100	1.3200
0+75	1.2650	1.2800	1.3000	1.3150	1.3250
1+00	1.3000	1.3150	1.3250	1.3450	1.3550
1+25	1.3100	1.3300	1.3450	1.3600	1.3700
1+50	1.3100	1.3250	1.3400	1.3550	1.3650
1+75	1.3000	1.3150	1.3350	1.3500	1.3650
2+00	1.3000	1.3150	1.3350	1.3500	1.3600

PE	Pavement Edge
OWP	Outer Wheel Path
ML	Mid Lane
IWP	Inner Wheel Path
ILE	Inner Lane Edge

Note: Offsets are measured from the PK nails at the outside of the pavement stripe at the pavement edge.



- Height of Air Temperature Probe: 2.82m
- Height of Tipping Bucket Rain Gauge: 2.85m
- Depth of Piezometer: 4.28m

Figure 1. Location of Seasonal Monitoring Instrumentation Installed at SPS 360801

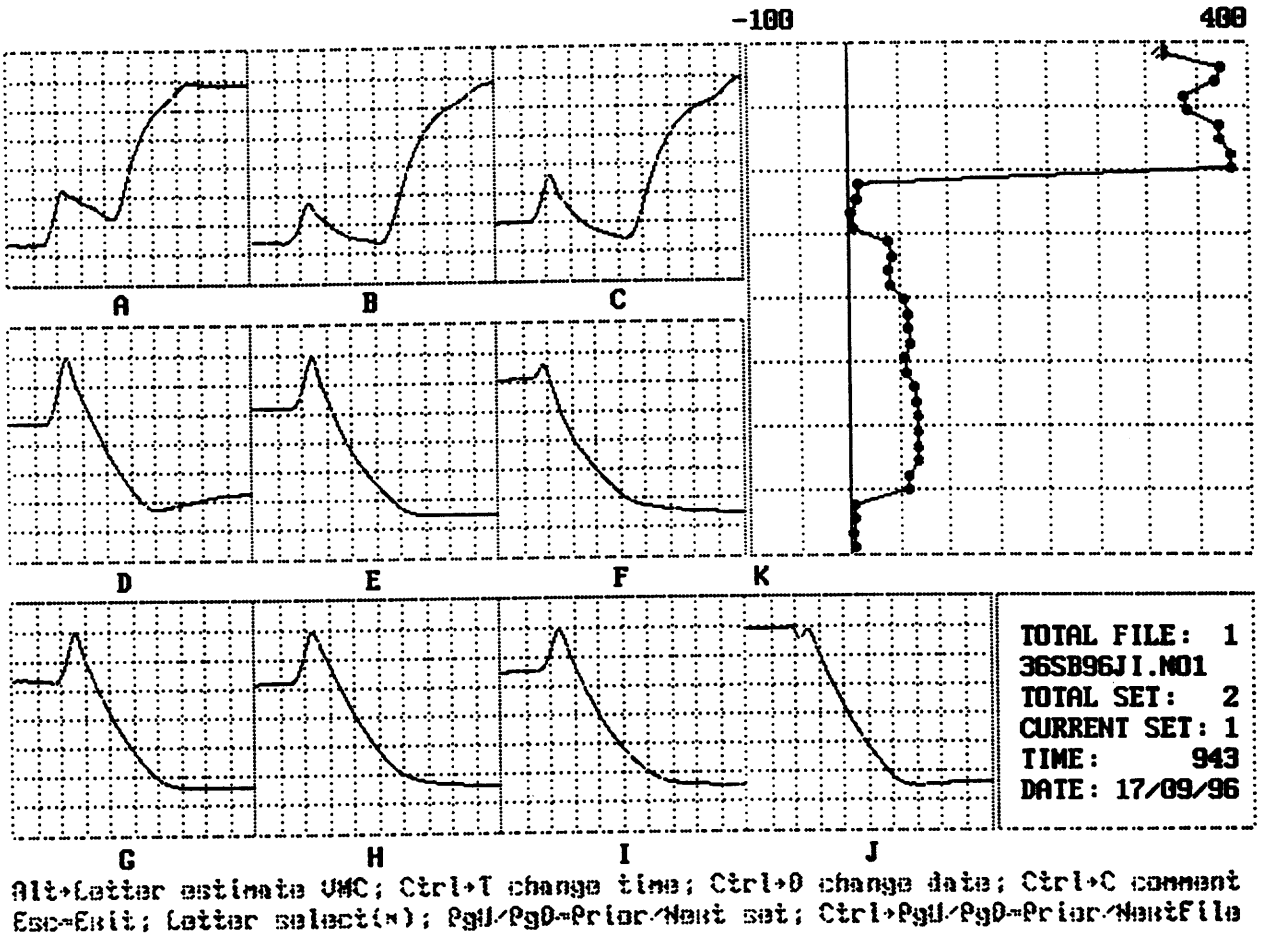


Figure 2. Mobile Data Collectection Set #1 - September 17, 1996

Instrument Hole, Seasonal Site 360801, September 1996, After Suspension Activities

Instrument Hole and Trench Area, Seasonal Site 360801, September 1996, After Suspension Activities