SEASONAL MONITORING PROGRAM
DISMANTLE REPORT
SITE 041024, FLAGSTAFF, ARIZONA

March 1999

NICHOLS CONSULTING ENGINEERS, Chtd.

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MEMORANDUM

TO: Mr. Aramis Lopez, Jr. FILE: 800.17.1
Long-Term Pavement Performance Division
FROM: Srikanth S. Holikatti and Douglas J. Frith (DJF)
DATE: March 16, 1999
SUBJECT: Suspension of SMP Site Monitoring Activities, Site 041024

This memo will serve as the SMP Site Monitoring Suspension Status Report for Site 041024 (04SC) near Flagstaff, Arizona. This report narrates the activities associated with the suspension of SMP site monitoring.

The site was last monitored on November 19, 1998 and de-installation occurred at this time. The following activities were performed before suspension of SMP monitoring activities and dismantling of SMP instrumentation:

- FWD testing of the section
- Tranverse profile by dipstick
- Elevation measurements
- Ground water table measurements
- Automated mobile data collection
- Downloading of Onsite data before dismantling the CR10 datalogger
- Recording of manual TDR traces

Longitudinal profile measurements were performed on October 28, 1998 using a KJ Law profilometer.

The following pre-dismantle and dismantle activities were performed:

- The observation well and cap threads were thoroughly cleaned and lubricated (greased) before the well was sealed.

- The air temperature probe and rain gauge were disconnected from the steel pole and the pole was removed from the bottom joint. The pole stub, embedded in the ground, was cleaned and lubricated before capping.

- The instrumentation hole and access trench were both closely inspected and the joints were sealed with silicone sealant wherever necessary. No further patching was required.

- All TDR probes, thermistor temperature sensor unit cables and wiring were disconnected from the CR10 datalogger. These were carefully checked and labeled. Labels on each cable were scotch taped to ensure they would remain in place.

- A coat of electronics grade anti-corrosive compound was applied to all the cables and wiring connections to protect against corrosion of contact points. The cables were then put in a heavy duty plastic bag and were taped to keep out the elements and were then secured inside the equipment cabinet.

- The instrument panel board containing the CR10 datalogger, the relay, and the terminal strip was removed.

- The equipment cabinet was checked and adequate drainage was ensured in case of heavy precipitation.

- The equipment cabinet lock was lubricated with graphite lubricant, the lock was taped to keep out the natural elements.

- At the elevation measurement and FWD test locations, the markings were spray painted white for easy identification.

- A layout sketch of the section indicating the location of the instrumentation hole, observation well, equipment cabinet, FWD test points, and elevation measurement points was drawn so that the site can be re-established easily upon return.

The instrumentation hole is located in the outside lane at a distance of 157.04m from the section beginning, in the outer wheelpath. The equipment cabinet is located 9.0m to the right of the lane edge and the pole is 0.6m behind the equipment cabinet. The observation well/piezometer is located at a distance of 121.95m from the start of the section, 5.2m away from the lane edge. Please refer to the site layout schematic for the testing and monitoring locations within the test section.

The following are enclosed with this brief report:

- A summary table of SMP measurements over the preceding data collection cycle following the standard format.
- Section layout schematic clearly showing the location of the instrument hole, observation well, equipment cabinet, FWD, and elevation measurement locations.
- Copies of photographs taken during the suspension and dismantle activities
- TDR traces obtained just before the instrument panel board was dismantled.

The data collection summary table for this site indicates manual 2 point contact resistance, 4 point resistivity, depth of water table, and FWD data collection was precluded due to heavy snow and poor visibility during one data collection visit to the site. FWD data for another month was not collected due to FWD van breakdown. Review of pavement temperature profile indicates consistent malfunctioning of pavement temperature sensors #1 and #3. Other than this, all installed equipment appeared functional at the time of de-installation.

No unusual or non-standard equipment or wiring was utilized on this site. Information in this report and its attachments are provided to document the SMP suspension and dismantle activities. Any further information about suspension/dismantle activities can be obtained by calling Nichols Consulting Engineers, Chtd. at (775) 329-4955.

SSH/rkp
Attachments

cc: Gonzalo Rada

Agency Code: 04, Arizona.

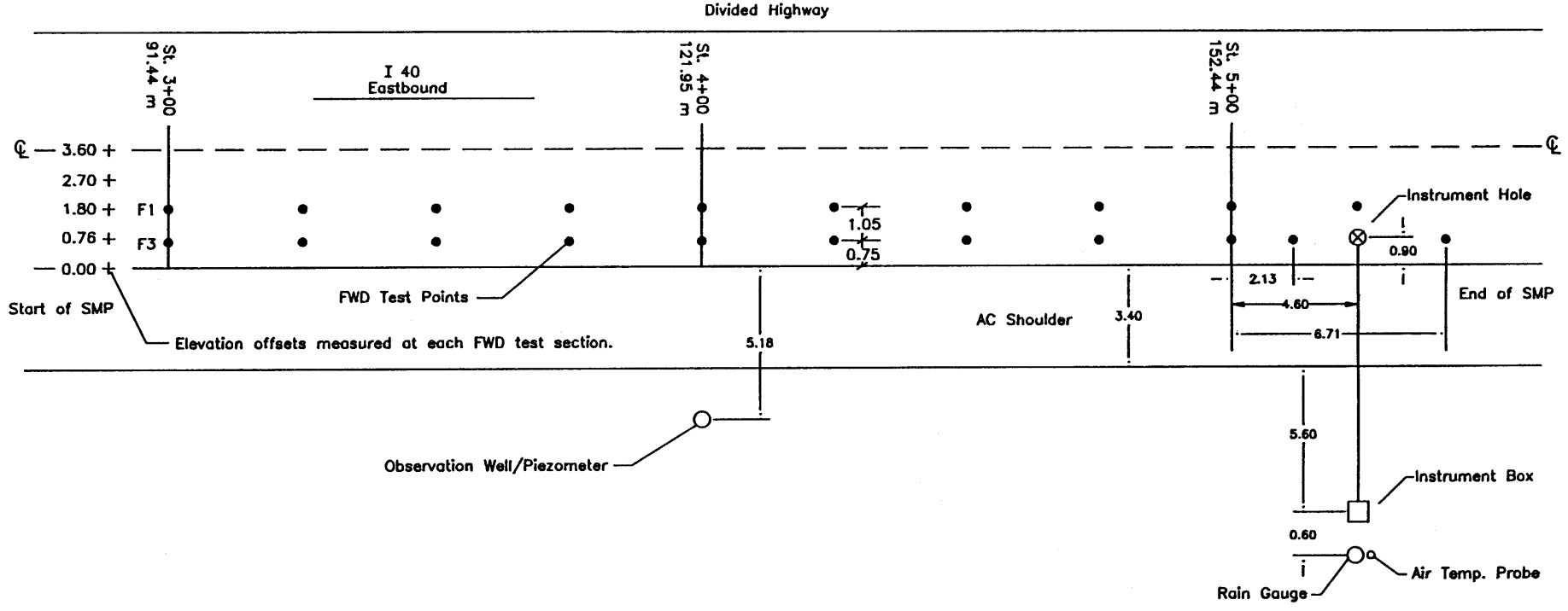
LTPP Section Code:1024.

Location: Flagstaff.

Pavement type: Asphalt concrete

Test Date dd/mm/yy	Visit Identity \ Code	Onsite Data			Mobile Data.		Manual Data						FWD Data			Distress Data		Profile Data		Comments
		Pav Temp	Ambient Temp	Precptn.	Subsurface Moisture (TDR)	Frost Depth 2-Point	Backup Pav Temp	Backup Moisture (TDR)	Frost Depth 2-Point.	Frost Depth 4-Point.	Water Table.	Surface Elev.	Surface Layer Temp.	No. of Cycles/Visit OWP	ML	Manual	PASCO	Profiler	Dipstick	
05-Nov-97	NA	X	X	X	X	X		X	X	X	X									Reinstallation.
08-Dec-98	A	X	X	X	X	X			X	X	X		X	3	3					MRC Sensors, #1 & #3 Malfunctioning
15-Jan-98	A	X	X	X	X	X			X	X	X	X	X	3	3	X		X	X	MRC Sensors, #1 & #3 Malfunctioning
20-Feb-98	B	X	X	X	X	X														Snow and poor visibility precluded data collection
27-Mar-98	C	X	X	X	X	X			X	X	X		X	3	3					
22-Apr-98	D	X	X	X	X	X			X	X	X	X	X	3	3	X		X	X	
19-May-98	E	X	X	X	X	X			X	X	X		X	3	3					
15-Jun-98	F	X	X	X	X	X			X	X	X	X	X	3	3	X			X	
15-Jul-98	G	X	X	X	X	X			X	X	X		X	3	3			X		
06-Aug-98	H	X	X	X	X	X			X	X	X		X	3	3					
28-Sep-98	I	X	X	X	X	X			X	X	X									FWD Van Breakdown
26-Oct-98	J	X	X	X	X	X			X	X	X	X	X	3	3	X		X	X	
19-Nov-98	K	X	X	X	X	X		X	X	X	X	X	X	3	3	X			X	Deinstall.

SECTION 041024
Flagstaff, AZ



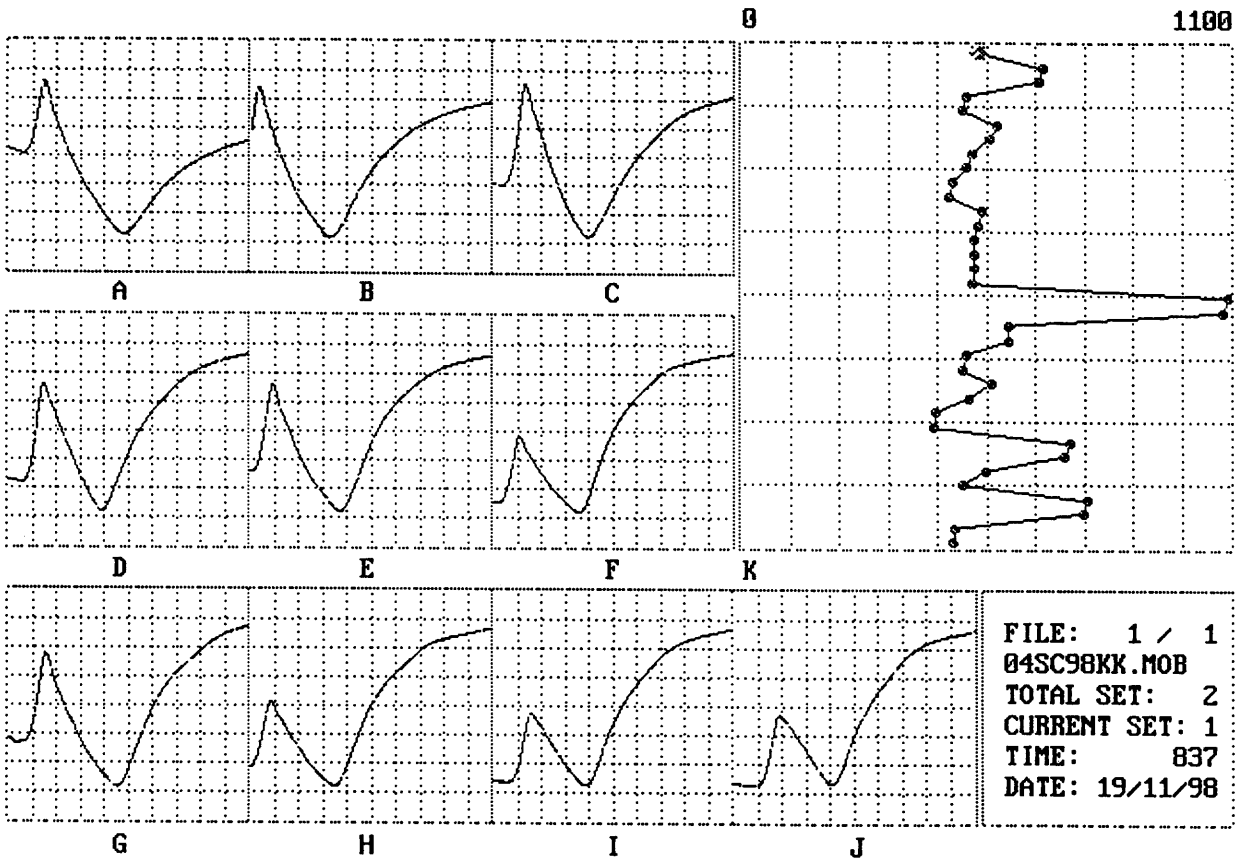
Note: All dimensions are in meters.

Photo 1. Last set of data collection in progress.

Photo 2. Tied, taped sensor cable ends in the instrumentation box.

Photo 3. Instrumentation hole and access trench.

Photo 4. Observation well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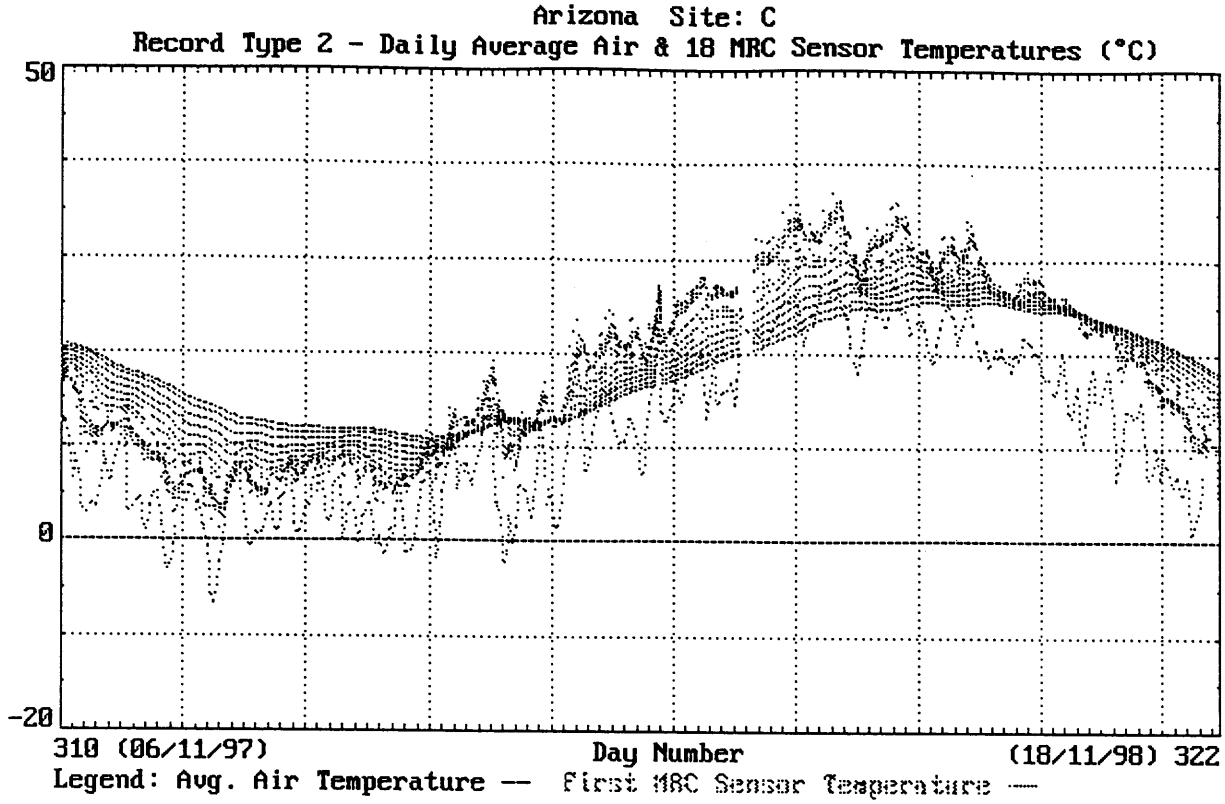
DATE: 19/11/98


Arizona Site: C
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50
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-20
310 (06/11/97)
Day Number
(18/11/98) 322
Legend: Avg. Air Temperature -- First MRC Sensor Temperature --