

HVS-Nordic tests 2003



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- Unbound Base Material Test 1
- Unbound Base Material Test 2
- Structural Design Test
- Crushed Sub Base Material Test
- Cement Stabilized Base Layer Test
(Denmark)

After the tests in Poland

- The machine was taken back to Finland and completion of the interrupted tests there.
- In late December 2002 it was moved to Sweden and one test with two different unbound bases was carried out, natural gravel and crushed aggregate.

After the tests in Poland, cont.

- In the spring time 2003 the HVS was taken to a test site close to the construction site of the E6 Motorway in the western part of Sweden and accelerated loading of 8 test sections

The objective of test 1-4 is to investigate the bearing capacity effect of different mica content in the unbound base.

The objective of test 5-7 is to study the effect of different thickness of unbound base on light weight clay aggregate and test 8 the effect of a cement stabilized and reinforced expanded clay aggregate slab on the LWA

Each test section was loaded by 100.000 loadings during one week and the test load was 80 kN dual wheel load and 1000 kPa tire pressure.

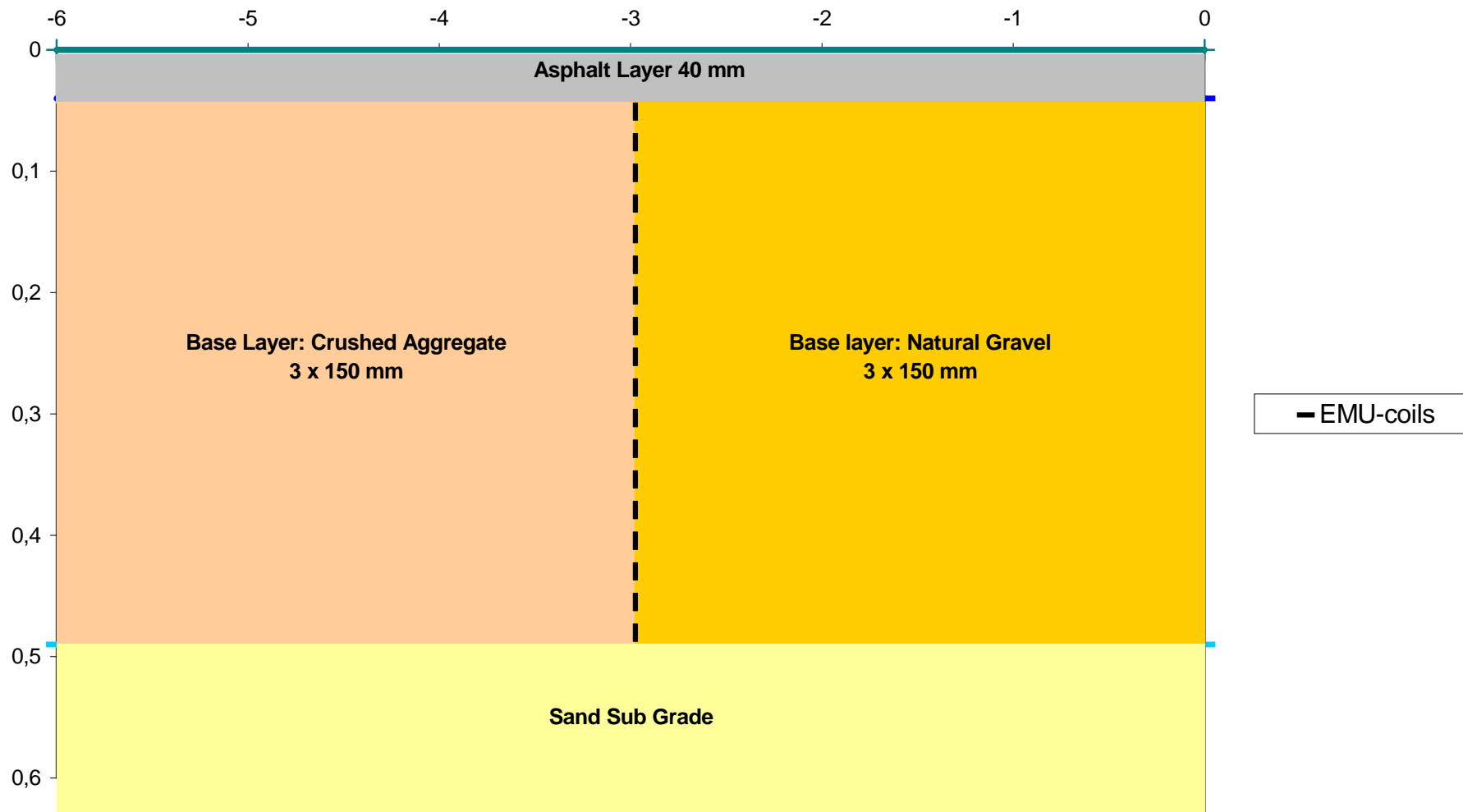
After the tests in Poland, cont.

- Today the machine is running test on a construction site on E4 Motorway in the south of Sweden.

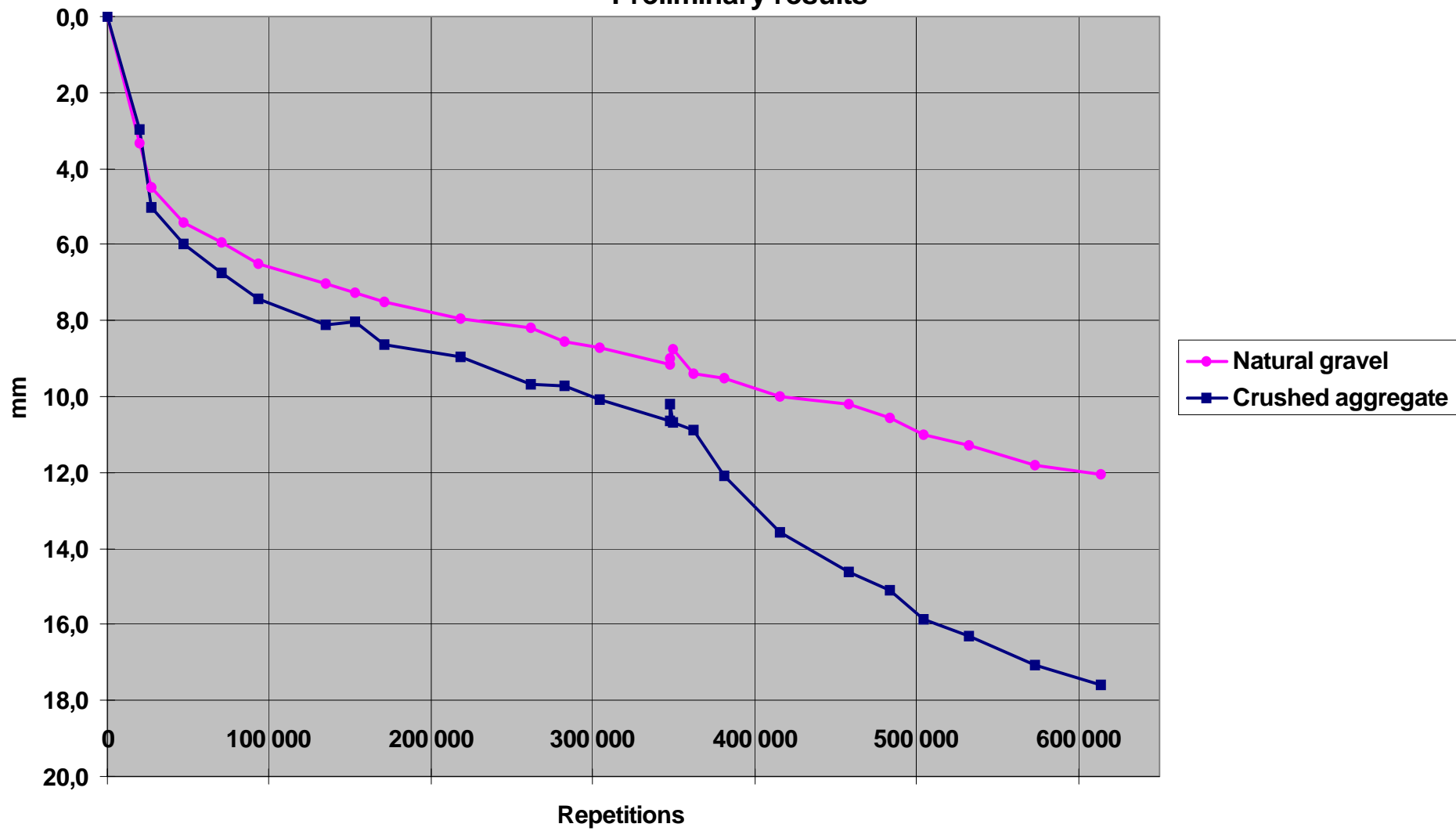
A. Three different crushed sub bases.
Max aggregate sizes 300 mm, 150 and 120.

B. For our Danish colleagues test on different quality of cement stabilized bases.

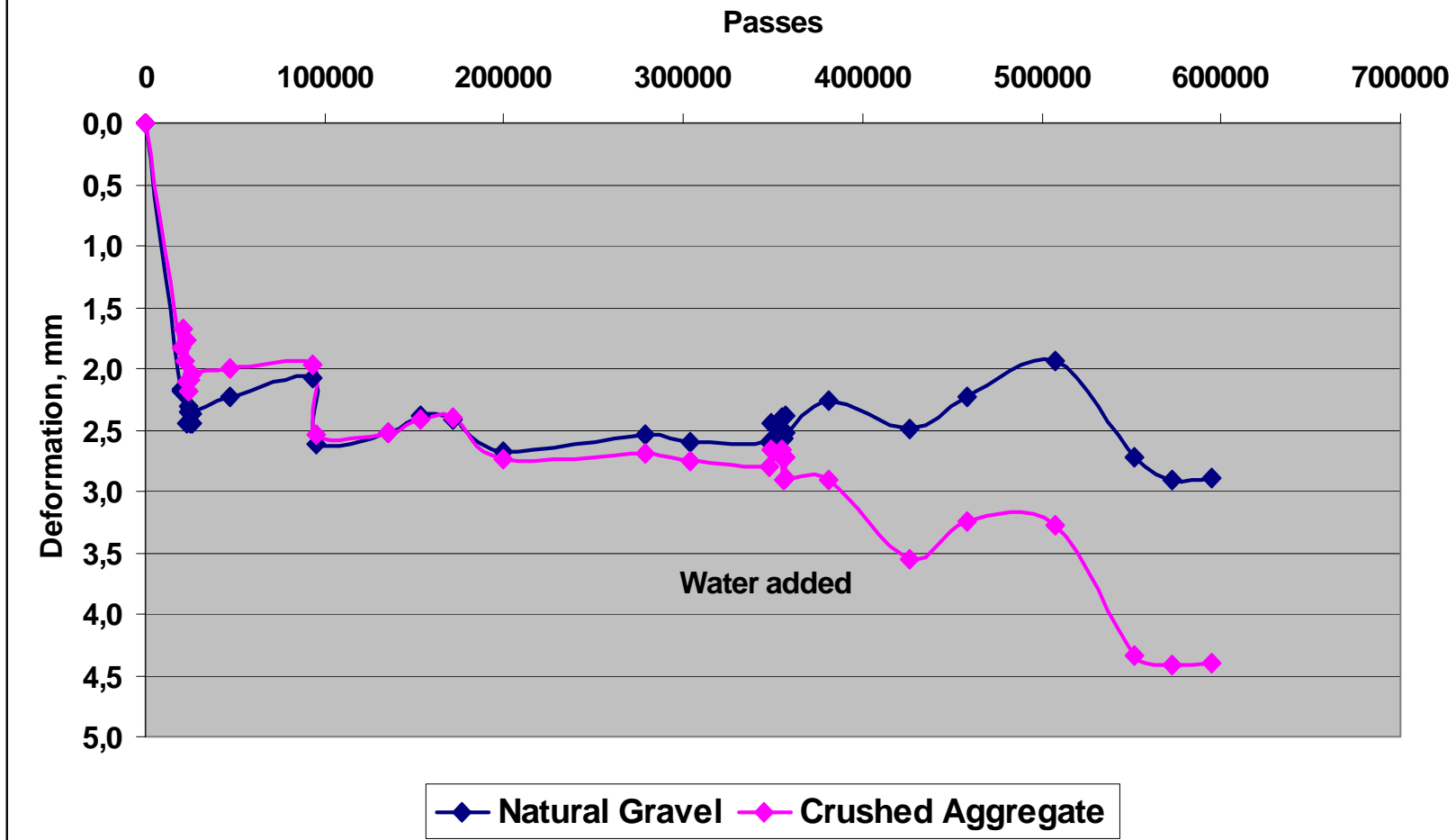
Base Layer Material Test, SE05



SE05, Surface Mean Rut depth, mm
Preliminary results

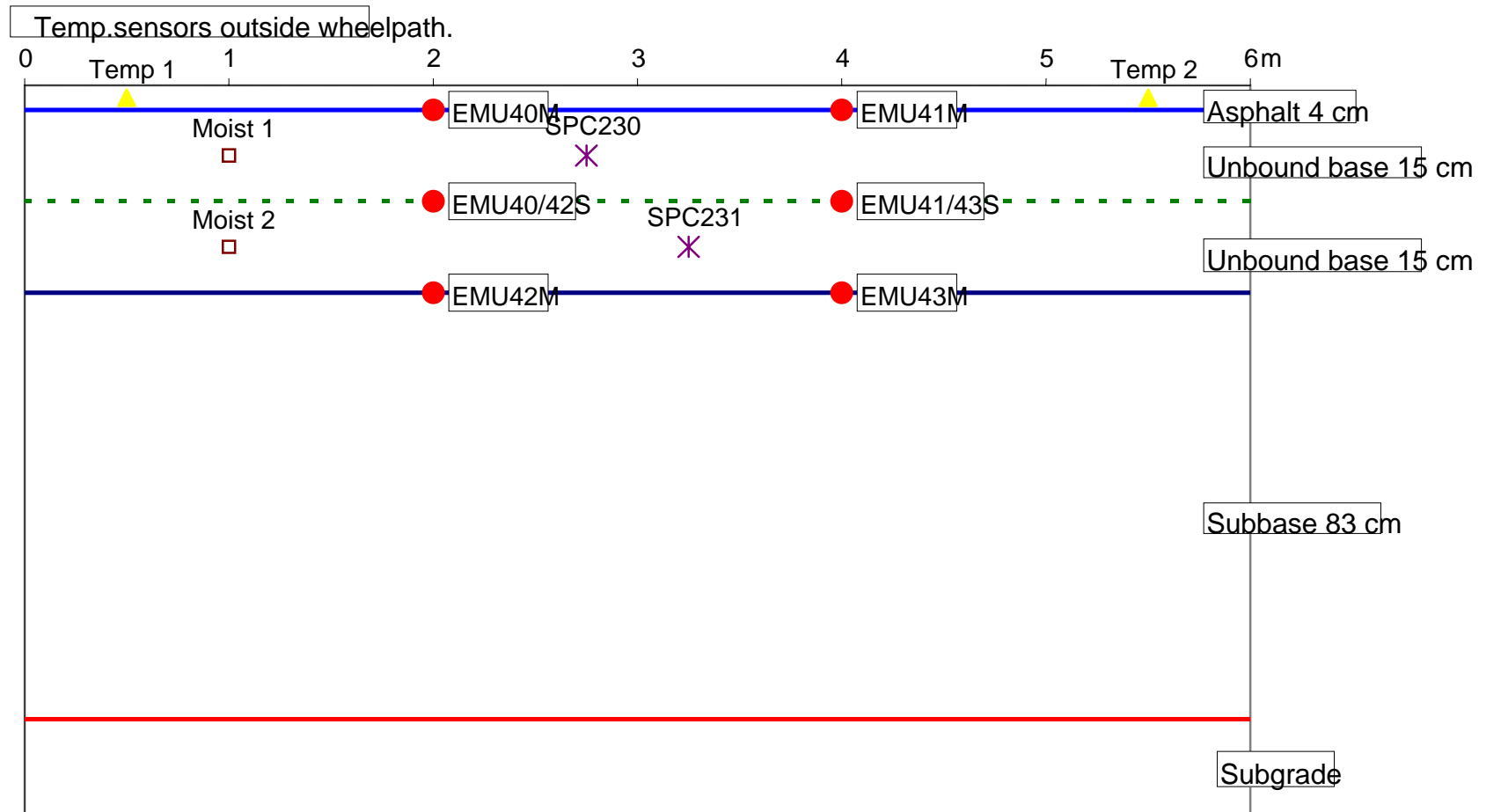


EMU-coils SE05, Base Layer 0-150 mm



HVS Test section, Uddevalla Sweden

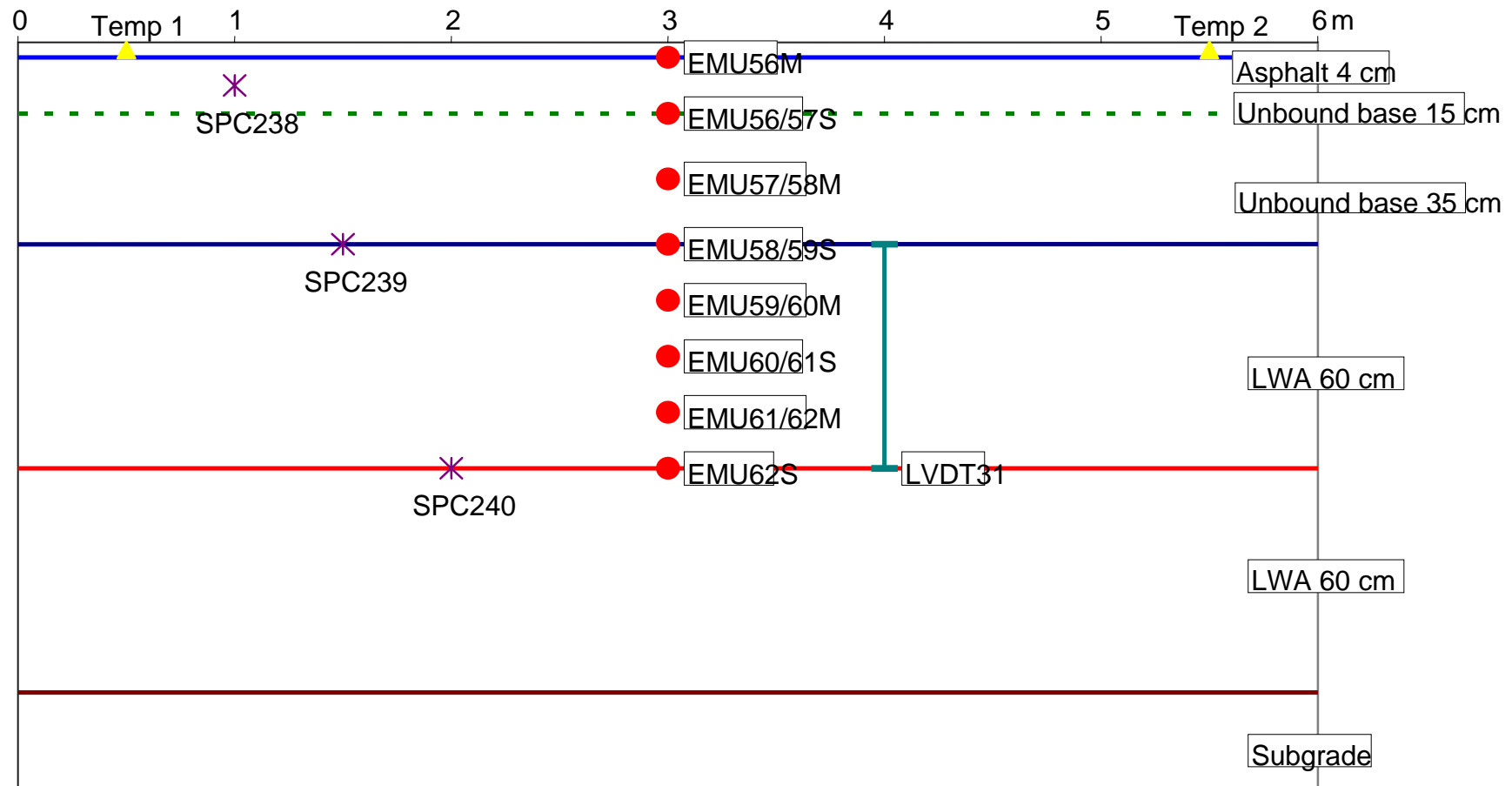
Instrumentation of section 1 with micaceous unbound base layer



HVS Test section, Uddevalla Sweden

Instrumentation of section 5 with Light Weight clay Aggregate subbase

Temp.sensors outside wheelpath.





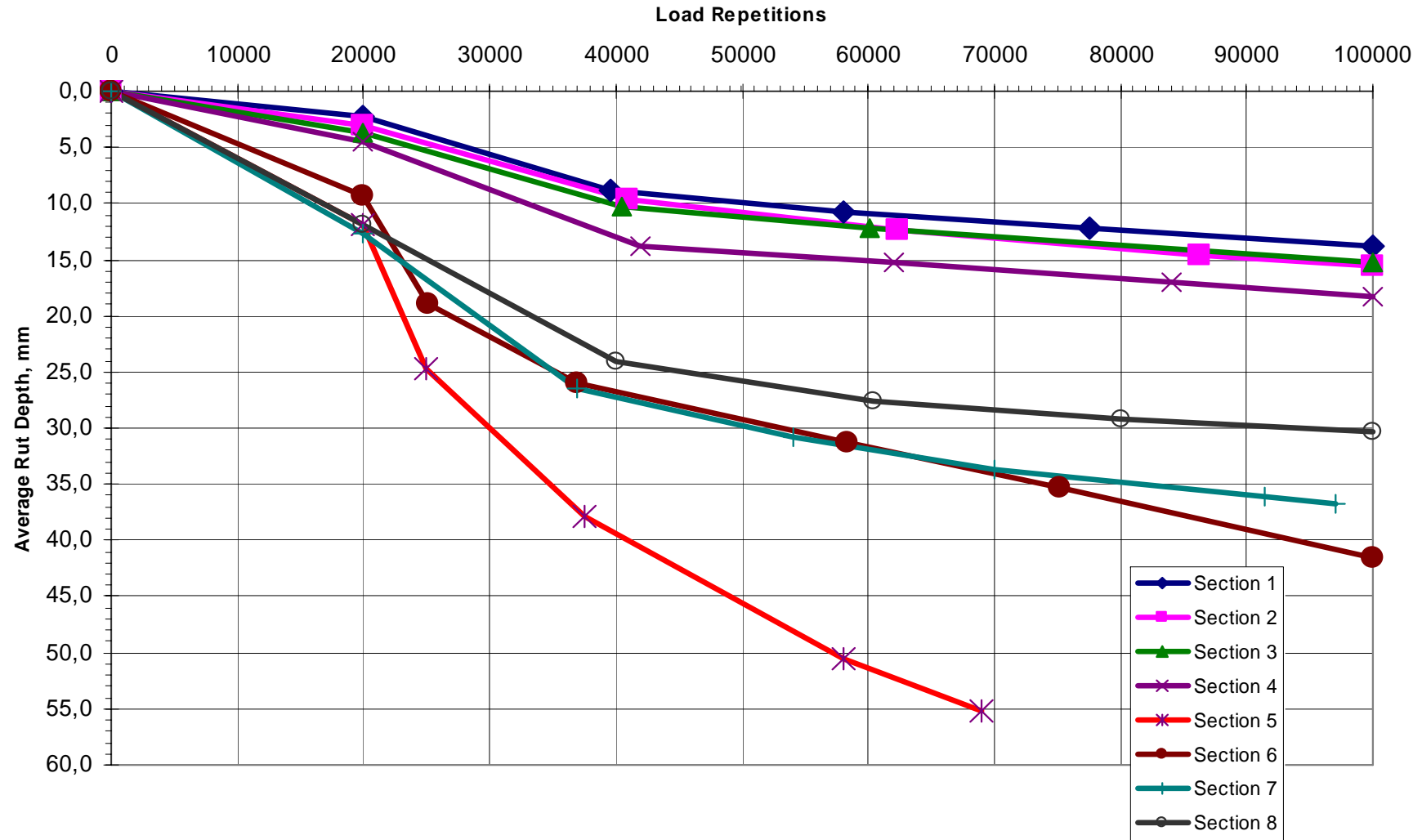
LVDT

EMU-coil

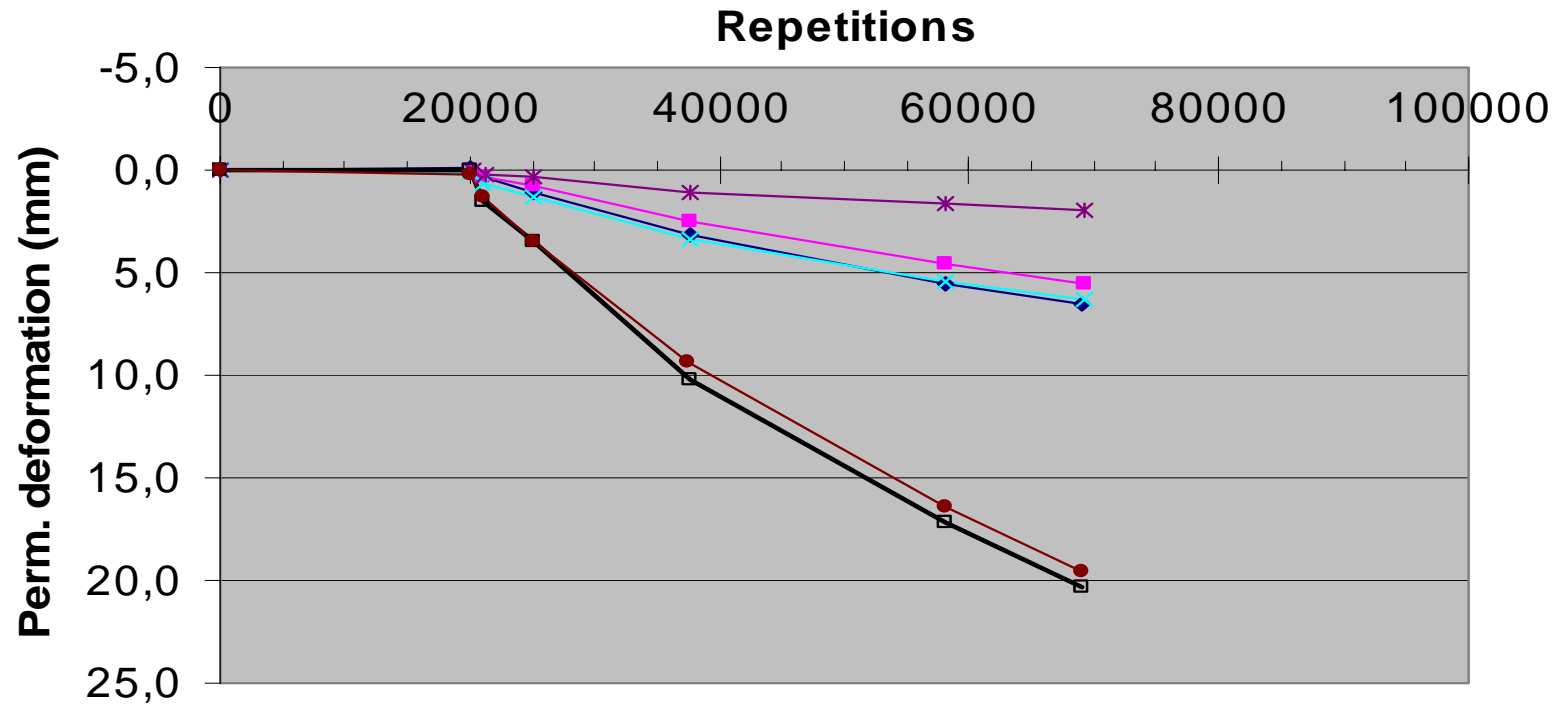


HVS Bearing Capacity Test SE07

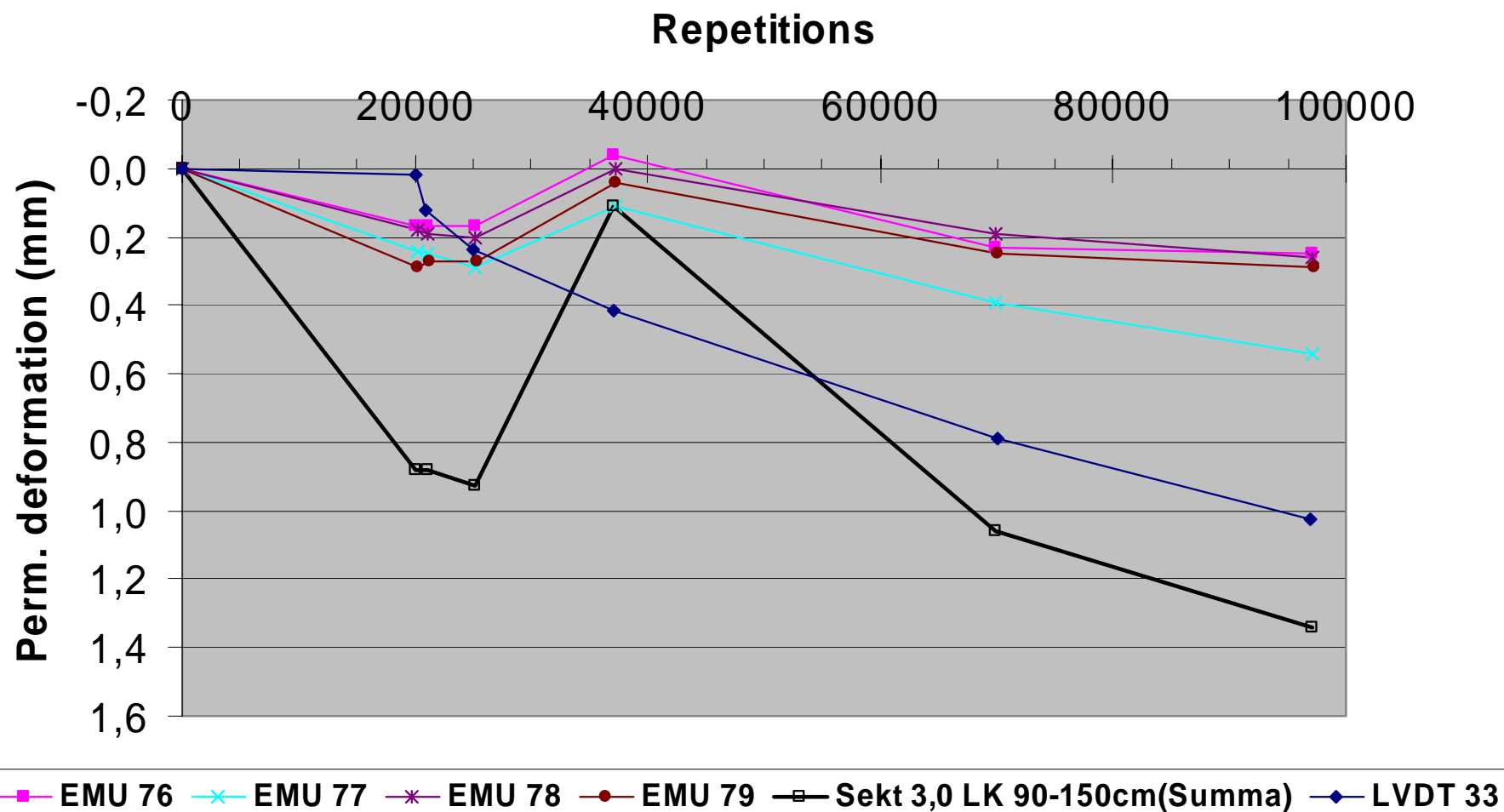
Average Profile Deformation



Test SE07, Section 5, EMU/LVDT



Test SE07, Section 7, EMU/LVDT



”Floating” coils

