



Ground Investigation



SCOTTISH EXECUTIVE



in association with



Further information can be also be obtained by contacting: AWPR Managing Agent, Aberdeen Business Centre,
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Aberdeen Western Peripheral Route

www.awpr.co.uk

Ground Investigation

The ground investigation for the proposed 30-kilometre long Aberdeen Western Peripheral Route will start in early 2004. It is expected to take six to nine months to complete.

A specialist contractor will carry out the investigation, using boring and drilling rigs along with excavators to take soil and rock samples.



Why the work must be done

The work, which is normal for any major construction project, is essential to:

- Help confirm the most suitable line for the road, and
- Check the ground condition and its engineering properties

What the investigation will look for

The investigation will allow a geological profile of the route to be determined. This will include information about the ability of the ground to support road bridges and embankments, as well as the drainage properties of the soil.

How the investigation will be carried out

Boring rigs, up to 4.5 metres high, will sink boreholes at pre-determined intervals along the route. Soil samples will be obtained by 'percussion' boring – a hollow tube being hammered into the ground and then extracted with the soil sample inside. These recovered soil samples will then be tested in off-site laboratories to establish their engineering properties, to enable safe and economic design of the road bridges, embankments and drainage. The samples will also be tested for any contamination.

Drilling rigs will be used to extract rock cores for strength testing. The information obtained will then be used to assess stability of the ground and permit appropriate design of the bridge foundations.

Excavators will dig trial pits to provide soil samples at shallow depths for testing.

Noise of plant and machinery will be kept to a minimum by strict enforcement of permitted noise levels. These noise levels will be agreed with the Environmental Services of Aberdeen and Aberdeenshire Councils as appropriate.

When investigations at each site are complete, boreholes and trial pits will be carefully backfilled and the surface re-instated.

Access to sites and compensation

Land owners will be contacted by the Scottish Executive through its Managing Agent, to arrange for access to the site. The Managing Agent will write to each land owner before entry is required explaining the procedure for entering property and any compensation that may be payable.

Health and Safety precautions

The health and safety of the public, site workers and communities along the route is paramount. An Environmental Management Plan giving the highest priority to health and safety will be prepared.

The plan will require the specialist contractor to:

- *Strictly observe health and safety and environmental legislation*
- *Adopt measures to address key issues such as control of noise and dust*
- *Ensure appropriate management of all site operations*

The plan will also lay down strict controls for safe working. These will include excluding the public from investigation sites, safe handling and disposal of all materials and use of appropriate protective clothing for site workers.

Geotechnical and environmental engineers, geologists and chemists will direct the site works at all times. All soil and rock samples will be carefully recovered and sealed, and sent to specialist laboratories for testing.