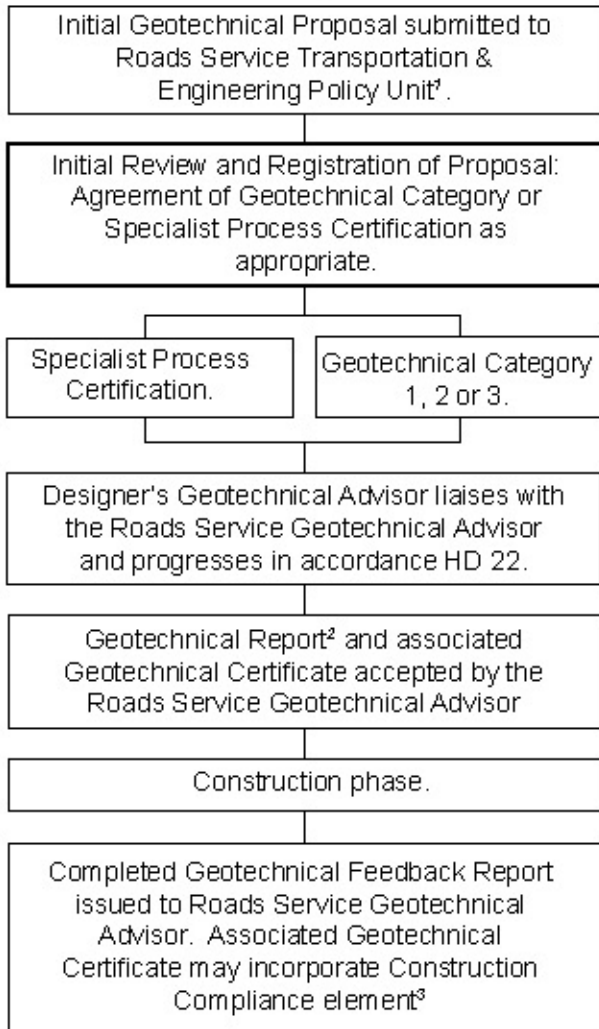


Summary of Geotechnical Certification procedures



Notes:

1. Through appropriate Roads Service Divisional Office.
2. Including relevant Form A to D / SEAF etc as appropriate.
3. Construction Compliance Certification; mandatory for private developments proposed for adoption.



Eastern Division

Hydebank
4 Hospital Road
BELFAST BT8 8JL
Tel No: 0300 200 7893
Fax No: (028) 9025 3220
E-mail: roads.eastern@drdni.gov.uk

Northern Division

County Hall
Castlerock Road
COLERAINE BT51 3HS
Tel No: 0300 200 7891
Fax No: (028) 7034 1442
E-mail: roads.northern@drdni.gov.uk

Southern Division

Marlborough House
Central Way
CRAIGAVON BT64 1AD
Tel No: 0300 200 7892
Fax No: (028) 3834 1867
E-mail: roads.southern@drdni.gov.uk

Western Division

County Hall
Drumagh Avenue
OMAGH BT79 7AF
Tel No: 0300 200 7894
Fax No: (028) 8225 4010
E-mail: roads.western@drdni.gov.uk

**Geotechnical Certification
Managing Geotechnical Risk**



**Information for
Developers and their
Designers**



Department for
**Regional
Development**
www.drdni.gov.uk



INVESTOR IN PEOPLE

Requests for this leaflet to be made available in accessible formats such as Braille, Audiotape, large print, minority ethnic language etc should be directed to the relevant address above.

Managing Geotechnical Risk

The purpose of this leaflet is to provide guidance to developers (private developers and others) and their Designers on procedures Roads Service has in place to Manage Geotechnical Risk – Geotechnical Certification.

The objectives of the Geotechnical Certification procedures are to ensure, as far as reasonably practicable, that geotechnical assets are safe and serviceable in use and fit for their intended function. The procedures apply to geotechnical assets associated with developments proposed for adoption or which affect public roads.

Roads Service Geotechnical Certification procedures are detailed in HD 22 Managing Geotechnical Risk. The current version, is contained in the Design Manual for Roads and Bridges (DMRB)¹ Volume 4.

Definitions

Designers Geotechnical Advisor (DGA) – The Geotechnical Engineer appointed by the scheme promoter. The DGA shall have experience appropriate to the project being undertaken.

Transportation and Engineering Policy Unit (T&EPU) – The Roads Service HQ section responsible for managing the Geotechnical Certification procedures.

Geotechnical Advisor (GA) – The Geotechnical Engineer appointed by Roads Service.

Geotechnical Certification Procedures

Geotechnical Certification procedures entail a review of the proposals by the GA. The professional responsibility for design and certification rests with the DGA.

The procedures outlined in this leaflet should cover most types of developer promoted schemes. This leaflet must be read in conjunction with HD 22 which implements the procedures in four key stages.

Key Stage 1: Initial Review

The scheme promoter shall submit the initial geotechnical proposal to T&EPU via the appropriate Roads Service Divisional Office (see reverse side of leaflet). The submission shall include a brief report describing the works, the complexity of the proposal and the

geotechnical activities involved. A Location Plan and an Initial Geotechnical Risk Register identifying potential hazards shall also be included.

Based on the information provided T&EPU shall register and categorise the Proposals; Category 1, 2, 3 or Specialist Process Certification according to criteria in HD 22. Chart 2 of HD 22 Part 1 provides guidance on the Initial Review process and Categories.

Following the Initial Review the DGA shall liaise directly with the GA.

Henceforth all formal geotechnical submissions i.e. those highlighted in bold shall be copied to T&EPU and the Roads Service Divisional Office. A Geotechnical Certificate signed by the DGA shall accompany these. All drawings submitted must be project specific and relevant.

Key Stage 2: Preliminary Certification

This stage applies only to Geotechnical Category 2 and 3 proposals. HD 22 Part 1 Appendix D refers.

The Designer shall submit the **Statement of Intent** to the GA for agreement. Subsequently the Designer shall submit the **Preliminary Sources Study**.

Key Stage 3: Geotechnical Design and Construction Certification

- **Category 1 Proposals:**
On completion of the Initial Review the shortened procedures defined in HD 22 Part 1 Appendix E are followed. This includes the ground investigation and the submission of the **Geotechnical Report**.
- **Category 2 and 3 Proposals:**
This stage includes the ground investigation(s), the preparation of the Design and **Geotechnical Report**. The procedures shall be based on HD 22 Part 1, Appendix F.
- **Specialist Process Certification:**
 - (i) **Structures:**
Ground investigation required for the design or assessment of highway structures subject to Technical Approval to BD 2², refer to HD 22 Part 1 Appendix H. Such proposals are often identified via Technical Approval procedures.

(ii) Strengthened Earthworks:

These require the Designer to complete a **Strengthened Earthworks Appraisal Form (SEAF)**, which is appended to the **Geotechnical Report**. Refer to HD 22 Part 1 Appendix J.

Key Stage 4: Geotechnical Feedback Report

Following completion of construction the Designer shall produce a **Geotechnical Feedback Report** for all schemes. Refer to HD 22 Part 2, Appendix D.

For all private developments proposed for adoption Roads Service requires the Geotechnical Certificate accompanying the Geotechnical Feedback Report to incorporate **Construction Compliance Certification**. This requires the DGA and Contractor to certify that the works has been built in accordance with the certified design. A Construction Compliance Certificate may be required for other schemes at the discretion of Roads Service.

General

The design and construction of geotechnical assets shall generally comply with the relevant technical requirements, standards and advice notes in the DMRB and the Specification for Highway Works (SHW)¹. Other standards etc. shall be agreed with the GA through the certification process.

Further Information

General queries should be directed to the Roads Service Divisional Office responsible for the area of the proposed geotechnical asset, see reverse side of this leaflet.

Further information including a template Geotechnical Certificate can be downloaded from the Road Service website.

www.drndi.gov.uk/index/roadsni/content-newpage-4.htm

Notes:

1. DMRB and SHW are published by The Stationery Office (TSO).
2. BD 2, DMRB Volume 1 published by The Stationery Office (TSO).