



THE HIGHWAYS AGENCY



THE SCOTTISH OFFICE DEVELOPMENT DEPARTMENT



**THE WELSH OFFICE
Y SWYDDFA GYMREIG**



**THE DEPARTMENT OF THE ENVIRONMENT FOR
NORTHERN IRELAND**

Notes for Guidance on the Specification for Geodetic Surveying Services

Summary: This part of Section 1 of Volume 5 of the MCHW provides Notes for Guidance on the Specification for Geodetic Surveying Services.

REGISTRATION OF AMENDMENTS

Amend No	Page No	Signature & Date of incorporation of amendments	Amend No	Page No	Signature & Date of incorporation of amendments

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**VOLUME 5 CONTRACT
DOCUMENTS FOR
SPECIALIST
ACTIVITIES**

**SECTION 1 GEODETIC
SURVEYS**

PART 3

**NOTES FOR GUIDANCE ON THE
SPECIFICATION FOR GEODETIC
SURVEYING SERVICES**

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1. Introduction
2. Notes for Guidance on the specification

1. INTRODUCTION

1.1 This part of Section 1 of Volume 5 of the MCHW provides Notes for Guidance on the Specification for Geodetic Surveying Services.

2. NOTES FOR GUIDANCE ON THE SPECIFICATION

NG 2. PURPOSE AND SCOPE

This Section shall give a brief description of the Survey. General requirements are covered in Clause 3 and detailed project requirements are covered in Clauses 4-14.

NG 2.1 Location

This shall include the road number, geographical locations of scheme limits sufficient to identify on a 1:250,000 or other suitable scale plan, nearest town and the county in which the scheme is located.

NG 2.2 Aim of the Project for which the Survey is Required

This shall be a statement of the overall objective of the project: eg, to upgrade the existing road to dual 2 lane carriageway by means of an on line improvement, to provide a new road to bypass an urban area, etc.

NG 2.3 Aim of the Survey

This may be to provide topographical information for use in feasibility studies, outline design, detailed design, Contract Documents, etc.

NG 2.4 Brief Description of Survey Area

Give approximate length and average breadth of the survey area. State whether area is predominantly rural or urban, briefly describe the terrain, vegetation cover, use of buildings. Highlight any areas of special significance eg nature reserves, sites of special scientific interest and the like, MOD land etc and other areas with restricted access, major traffic management requirements, sensitivity of the scheme.

NG 2.5 Use of the Survey Information

This should state the purposes for which the survey information will be used, particularly any unusual or special purposes. These may include the following.

- a. The identification of preliminary horizontal and vertical alignments for alternative routes on 1:10,000 scale mapping to provide outline information on earthworks required, construction costs, and the broad effects of the route on property, landscape and the environment.
- b. The preparation of outline engineering layout and landscaping plans at 1:2500 scale.
- c. The preparation and publication of order plans under the Highways Act, Roads (Scotland) Act, compulsory purchase order plans, land reference plans.
- d. Base plans for the display of material at public exhibitions.
- e. Base plans for use with the design of the engineering detail of the scheme including Contract Documents.
- f. To provide information for noise calculations.
- g. To provide a digital ground model for the calculation of earthworks quantities.
- h. To provide detailed geometric information on existing structures.
- i. To provide information for ground investigation purposes.

NG 3. GENERAL REQUIREMENTS

This section remains standard for all contracts.

Survey Advisor should inform tenderers of abnormal safety considerations of the works.

NG 6. REVISION OR UPGRADING OF EXISTING MAPPING

Authorities, including restricted working hours etc. shall be stated in the special requirements.

NG 6.7 Additional Details

The list of features to be surveyed should include those features required which do not normally appear on the original base map, such as high tension power lines with double poles.

NG APPENDIX D - ACCESS REQUIREMENTS

Information relating to access routes, times of access, identification of personnel etc. shall be given.

NG 9. SURVEYS FOR NOISE EVALUATION

The Survey Advisor or Design Organisation should try to arrange block groupings of similar buildings on similar ground levels wherever possible to simplify the Survey.

NG APPENDIX E - RESTRICTIONS TO THE SURVEY PROGRAMME

Information on events such as county shows, pageants, events on other major works, land which cannot be accessed etc. shall be given.

In the case of non residential buildings, such as garages, churches, offices etc. the eaves level can be omitted provided that the eaves levels of residential buildings in the block are represented.

NG APPENDIX F - SCHEDULE OF CONTACTS

This Appendix shall include contacts in private and public utility service companies and other statutory authorities serving the locality including:-

NG APPENDIX A - SCHEDULE OF LANDOWNERS AND OCCUPIERS

This Appendix should make it clear whether landowners and occupiers have already been notified of the period in which access is likely to be required and their permission for entry obtained by the Design Organisation or Survey Advisor. If the Survey Contractor is required to obtain such permissions, this should be clearly stated.

British Rail, Police and Highway Authorities, Electricity, Gas, Telephone, Water, Oil pipelines, River Drainage Boards etc.

The "Status" shall state whether it is the "owner, occupier, Survey Advisor, Design Organisation etc"

NG APPENDIX G - SCHEDULE OF EXISTING INFORMATION ON UNDERGROUND SERVICES

This Appendix should contain a schedule of all information available on the location of public and private services and supplies. This should include the service, the name, address, telephone and fax number of the contact, and the title, reference number, scale and date of the source data.

NG APPENDIX B - TABLE OF FEATURE SYMBOLS

This Appendix should contain details of the feature symbols to be used on all mapping.

NG APPENDIX H - SCHEDULE OF CONTRACT DRAWINGS

Shall give details of all drawings included in the Contract Documents.

NG APPENDIX C - REQUIREMENTS FOR TRAFFIC SAFETY AND MANAGEMENT

This Appendix should contain details of all traffic safety and management requirements, with which the Survey Contractor is required to comply. Details of relevant general statutory regulations should also be included.

NG APPENDIX J - CONSTRUCTION OF PERMANENT GROUND MARKERS

This Appendix should give details of the construction requirements for permanent ground markers, including illustrations where appropriate.

Any requirements made known in pre-survey discussions between the Design Organisation or Survey Advisor and the Highway and Police

NG APPENDIX K - LOCATION OF PERMANENT GROUND MARKERS

This Appendix should contain a pro-forma location diagram for use by the Survey Contractor to record the

location of all permanent ground markers used on the Contract.

**NG APPENDIX L - CONSTRUCTION OF
PERMANENT BENCH MARKS**

This Appendix should give details of the construction requirements for permanent bench marks, including illustrations where appropriate.

**NG APPENDIX M - LOCATION OF
PERMANENT BENCH MARKS**

This Appendix should contain a pro-forma location diagram for use by the Survey Contractor to record the location of all permanent bench marks used on the Contract.

**NG APPENDIX N - FLIGHT PLAN FOR
AERIAL PHOTOGRAPHY**

Where the Design Organisation or Survey Advisor is responsible for compiling the flight plan, details should be given in this Appendix.

**NG APPENDIX P - REPRESENTATION OF
UNDERGROUND SERVICES**

This Appendix shall contain details of the conventions, abbreviations, line types and other representational features to be used by the Survey Contractor on drawings of underground services.

**NG APPENDIX R - SCHEDULE OF FINAL
DRAWINGS**

This Appendix should contain a schedule of the scales and sheet sizes to be used for the final drawings.