

**VOLUME 1 HIGHWAY
STRUCTURES:
APPROVAL
PROCEDURES AND
GENERAL DESIGN
SECTION 0 PUBLICATION
PROCEDURE**

PART 2

**DESIGN MANUAL FOR ROADS AND
BRIDGES: VOLUME CONTENTS
PAGES AND ALPHA-NUMERIC
INDEX**

SUMMARY

This document contains a current set of Volume Contents Pages and a current Alpha-Numeric Index that supersedes the Design Manual for Roads and Bridges: Volume Contents Pages and Alpha-Numeric Index dated February 2007. Updated lists of Addenda for Northern Ireland and Scotland, and a list of current Scottish Office Memoranda not included in the DMRB, are included with this Index for information.

INSTRUCTIONS FOR USE

1. Remove the existing Contents Pages from each Volume and archive as appropriate. Insert the new Contents Pages into each Volume.
2. Remove the existing Alpha-Numeric Index dated February 2007 and archive as appropriate. Insert the new Alpha-Numeric Index in Volume 1, Section 0, Part 2.
3. Archive this sheet as appropriate.

Note: DMRB documents are now issued quarterly in February, May, August and November. A current set of Volume Contents Pages and an Index will be issued at the same time and will be available separately from The Stationery Office.

**Design Manual for Roads and
Bridges:**

**Volume Contents Pages and
Alpha-Numeric Index**

**VOLUME 1 HIGHWAY
STRUCTURES:
APPROVAL
PROCEDURES AND
GENERAL DESIGN
SECTION 0 PUBLICATION
PROCEDURE**

PART 2

**DESIGN MANUAL FOR ROADS AND
BRIDGES: VOLUME CONTENTS
PAGES AND ALPHA-NUMERIC
INDEX**

Contents

1. Set of Volume Contents Pages
2. Alpha-Numeric Index

**In addition the following are attached to the
Alpha-Numeric Index for Information:**

- a) List of Scottish Addenda
- b) List of Current Scottish Office Memoranda
not included in the DMRB
- c) List of Welsh Addenda
- d) List of Northern Irish Addenda

**Design Manual for Roads and
Bridges:
Volume Contents Pages**

VOLUME 1 (with Continuation Binder 1a)

HIGHWAY STRUCTURES: APPROVAL PROCEDURES AND GENERAL DESIGN

Section 0 Publication Procedure

- Part 1 Introduction to the Design Manual for Roads and Bridges (DMRB)
- Part 2 Design Manual for Roads and Bridges: Volume Contents Pages and Alpha-Numeric Index
[Supersedes the Design Manual for Roads and Bridges: Volume Contents Pages and Alpha-Numeric Index dated February 2007]

Section 1 Approval Procedures

- BD 2/05 Technical Approval of Highway Structures

Section 2 Other Procedural Documents

- Part 1 BD 36/92 Evaluation of Maintenance Costs in Comparing Alternative Designs for Highway Structures
- Part 2 BA 28/92 Evaluation of Maintenance Costs in Comparing Alternative Designs for Highway Structures

Section 3 General Design

- Part 1 BD 24/92 The Design of Concrete Highway Bridges and Structures. Use of BS 5400: Part 4: 1990
- Part 2 BD 15/92 General Principles for the Design and Construction of Bridges. Use of BS 5400: Part 1: 1988
- Part 3 BD 49/01 Design Rules for Aerodynamic Effects on Bridges
- Part 4 BA 40/93 Tack Welding of Reinforcing Bars
- Part 5 BD 60/04 Design of Highway Bridges for Vehicle Collision Loads
- Part 6 BA 59/94 Design of Highway Bridges for Hydraulic Action
- Part 7 BD 57/01 Design for Durability
- Part 8 BA 57/01 Design for Durability
- Part 9 BD 58/94 Design of Bridges and Concrete Structures with External and Unbonded Prestressing
- Part 10 BA 58/94 Design of Bridges and Concrete Structures with External and Unbonded Prestressing
- Part 11 BA 41/98 The Design and Appearance of Bridges
- Part 12 BA 42/96 The Design of Integral Bridges [Incorporating Amendment No.1 dated May 2003]
- Part 13 BA 53/94 Bracing Systems and the Use of U-Frames in Steel Highway Bridges
- Part 14 BD 10/97 Design of Highway Structures in Areas of Mining Subsidence
- BD 9/81 Implementation of BS 5400: Part 10: 1980 - Code of Practice for Fatigue
- BD 13/06 Design of Steel Bridges. Use of BS 5400-3:2000
- BD 16/82 Design of Composite Bridges. Use of BS 5400: Part 5: 1979
[Incorporating Amendment No.1 dated December 1987]
- BD 28/87 Early Thermal Cracking of Concrete
[Incorporating Amendment No.1 dated August 1989]
- BD 37/01 Loads for Highway Bridges
- BA 9/81 The Use of BS 5400 Part 10: 1980 - Code of Practice for Fatigue
[Incorporating Amendment No.1 dated November 1983]
- BA 19/85 The Use of BS 5400: Part 3: 1982

(VOLUME 1 continued)

- | | | |
|---------|----------|--|
| | BA 24/87 | Early Thermal Cracking of Concrete
[Incorporating Amendment No.1 dated August 1989] |
| Part 15 | BA 84/02 | Use of Stainless Steel Reinforcement in Highway Structures |
| Part 16 | BD 84/02 | Strengthening of Concrete Bridge Supports for Vehicle Impact Using Fibre Reinforced Polymers |
| Part 17 | BD 90/05 | Design of FRP Bridges and Highway Structures |
- Note. The application of the following Technical Memoranda (Bridges) to particular structures should be agreed with the TAA (see BD 2/02):
- | | | |
|--|---------|---|
| | BE 23 | Shear Key Decks
[Incorporating Amendment No.1 to Annex dated June 1971] |
| | BE 5/75 | Rules for the Design and Use of Freyssinet Concrete Hinges in Highway Structures
<i>Scottish Addendum applicable for use in Scotland</i> |

VOLUME 2 (with Continuation Binder 2a)
HIGHWAY STRUCTURES: DESIGN (SUBSTRUCTURES AND SPECIAL STRUCTURES)
MATERIALS

Section 1 Substructures

Part 1	BD 41/97	Reinforced Clay Brickwork Retaining Walls of Pocket-Type and Grouted-Cavity Type Construction Use of BS 5628: Part 2: 1995
Part 2	BD 42/00	Design of Embedded Retaining Walls and Bridge Abutments
Part 3	BD 68/97	Crib Retaining Walls
Part 4	BA 68/97	Crib Retaining Walls
Part 5	BD 70/03	Strengthened/Reinforced Soils and other Fills for Retaining Walls and Bridge Abutments Use of BS 8006: 1995, incorporating Amendment No.1 (Issue 2 March 1999)
	BD 30/87	Backfilled Retaining Walls and Bridge Abutments
Part 6	Not yet in use	
Part 7	BA 80/99	Use of Rock Bolts
Part 8	BD 74/00	Foundations

Section 2 Special Structures

Part 1	BD 94/07	Design of Minor Structures
Part 2	Not In Use	
Part 3	Not In Use	
Part 4	BD 51/98	Portal and Cantilever Signs/Signal Gantries
Part 5	BD 65/97	Design Criteria for Collision Protection Beams
Part 6	BD 12/01	Design of Corrugated Steel Buried Structures with Spans Greater than 0.9 Metres and up to 8.0 Metres
Part 7	BD 67/96	Enclosure of Bridges
Part 8	BA 67/96	Enclosure of Bridges
	BD 29/04	Design Criteria for Footbridges
	BE 7/04	Departmental Standard (Interim) Motorway Sign/Signal Gantries <i>Not applicable for use in Scotland</i> <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	TD 19/06	Requirement for Road Restraint Systems
Part 9	BD 78/99	Design of Road Tunnels
Part 10	BD 82/00	Design of Buried Rigid Pipes
Part 11	Not In Use	
Part 12	BD 31/01	The Design of Buried Concrete Box and Portal Frame Structures
Part 13	Not In Use	
Part 14	BD 91/04	Unreinforced Masonry Arch Bridges

(VOLUME 2 continued)

Section 3 Materials and Components

Part 1	BD 20/92	Bridge Bearings. Use of BS 5400: Part 9: 1983
Part 2	BA 37/92	Priority Ranking of Existing Parapets
Part 3	Not In Use	
Part 4	BD 47/99	Waterproofing and Surfacing of Concrete Bridge Decks
Part 5	BA 47/99	Waterproofing and Surfacing Concrete Bridge Decks
Part 6	BD 33/94	Expansion Joints for Use in Highway Bridge Decks
Part 7	BA 26/94	Expansion Joints for Use in Highway Bridge Decks
	BA 36/90	The Use of Permanent Formwork
	BA 82/00	Formation of Continuity Joints in Bridge Decks
Part 8	BD 7/01	Weathering Steel for Highway Structures
Part 9	BA 92/07	The Use of Recycled Concrete Aggregates in Structural Concrete

Section 4 Paints and other Protective Coatings

Part 1	BD 35/06	Quality Assurance Scheme for Paints and Similar Protective Coatings
Part 2	BD 43/03	The Impregnation of Reinforced and Prestressed Concrete Highway Structures using Hydrophobic Pore-Lining Impregnants
Part 3	BA 85/04	Coatings for Concrete Highway Structures & Ancillary Structures

VOLUME 3 (with Continuation Binders 3a and 3b)
HIGHWAY STRUCTURES: INSPECTION AND MAINTENANCE

Section 1 Inspection

Part 1	BD 45/93	Identification Marking of Highway Structures <i>Not applicable for use in Scotland</i> <i>Not applicable in Northern Ireland</i>
Part 2	BD 54/93	Post-tensioned Concrete Bridges. Prioritisation of Special Inspections.
Part 3	BA 50/93	Post-tensioned Concrete Bridges: Planning, Organisation and Methods for Carrying Out Special Inspections
Part 4	BD 63/07	Inspection of Highway Structures
Part 5	Not In Use	
Part 6	BD 53/95	Inspection and Records for Road Tunnels
Part 7	BA 86/06	Advice Notes on the Non-destructive Testing of Highway Structures

Section 2 Maintenance

Part 1	BD 62/07	As Built, Operational and Maintenance Records for Highway Structures
Part 2	BD 87/05	Maintenance Painting of Steelwork
Part 3	BA 72/03	Maintenance of Road Tunnels
Part 4	BD 89/03	The Conservation of Highway Structures <i>English Addendum applicable for use in England</i> <i>Northern Ireland Addendum applicable for use in Northern Ireland</i> <i>Scottish Addendum applicable for use in Scotland</i> <i>Welsh Addendum applicable for use in Wales</i>

Section 3 Repair

Part 1	BA 30/94	Strengthening of Concrete Highway Structures Using Externally Bonded Plates
Part 2	BA 43/94	Strengthening, Repair and Monitoring of Post-tensioned Concrete Bridge Decks
	BD 27/86	Materials for the Repair of Concrete Highway Structures <i>Not applicable for use in Scotland</i>
	BA 35/90	Inspection and Repair of Concrete Highway Structures <i>Not applicable for use in Scotland</i> <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
Part 3	BA 83/02	Cathodic Protection for Use in Reinforced Concrete Highway Structures
Part 4	BA 87/04	Management of Corrugated Steel Buried Structures
Part 5	BA 88/04	Management of Buried Concrete Box Structures

Section 4 Assessment

Part 1	BD 46/92	Technical Requirements for the Assessment and Strengthening Programme for Highway Structures [Stage 2 – Modern Short Span Bridges]
Part 2	BD 50/92	Technical Requirements for the Assessment and Strengthening Programme for Highway Structures Stage 3 - Long Span Bridges
Part 3	BD 21/01	The Assessment of Highway Bridges and Structures
Part 4	BA 16/97	The Assessment of Highway Bridges and Structures [Incorporating Amendment No. 1 dated November 1997 and Amendment No.2 dated November 2001]
Part 5	BA 38/93	Assessment of the Fatigue Life of Corroded or Damaged Reinforcing Bars

(VOLUME 3 continued)

Part 6	BA 39/93	Assessment of Reinforced Concrete Half-joints
Part 7	BD 48/93	The Assessment and Strengthening of Highway Bridge Supports
Part 8	BA 54/94	Load Testing for Bridge Assessment
Part 9	BA 55/06	The Assessment of Bridge Substructures and Foundations, Retaining Walls and Buried Structures
Part 10	BA 52/94	The Assessment of Concrete Structures Affected by Alkali Silica Reaction
Part 11	BD 56/96	The Assessment of Steel Highway Bridges and Structures
Part 12	BA 56/96	The Assessment of Steel Highway Bridges and Structures
Part 13	BA 51/95	The Assessment of Concrete Structures Affected by Steel Corrosion
Part 14	BD 44/95	The Assessment of Concrete Highway Bridges and Structures
Part 15	BA 44/96	The Assessment of Concrete Highway Bridges and Structures
Part 16	BD 61/96	The Assessment of Composite Highway Bridges and Structures
Part 17	BA 61/96	The Assessment of Composite Highway Bridges and Structures
	BD 34/90	Technical Requirements for the Assessment and Strengthening Programme for Highway Structures <i>Scottish Addendum applicable for use in Scotland</i> <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	BA 34/90	Technical Requirements for the Assessment and Strengthening Programme for Highway Structures <i>Scottish Addendum applicable for use in Scotland</i> <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	BE 13	Fatigue Risk in Bailey Bridges
Part 18	BD 79/06	The Management of Sub-standard Highway Structures
Part 19	BD 86/04	The Assessment of Highway Bridges and Structures For The Effects of Special Types General Order (STGO) and Special Order (SO) Vehicles
Part 20	BD 81/02	Use of Compressive Membrane Action in Bridge Decks
Part 21	BA 74/06	Assessment of Scour at Highway Bridges

**VOLUME 4 (with Continuation Binder 4a)
GEOTECHNICS AND DRAINAGE**

Section 1 Earthworks

Part 1	HA 44/91	Design and Preparation of Contract Documents [Paragraph 3.5 is superseded by paragraph 2.22 of SA 3/93 (MCHW 0.3.3)] [Incorporating Amendment No. 1 dated April 1995] <i>Scottish Addendum applicable for use in Scotland</i> <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
Part 2	HD 22/02	Managing Geotechnical Risk
Part 3	HD 41/03	Maintenance of Highway Geotechnical Assets
Part 4	HA 68/94	Design Methods for the Reinforcement of Highway Slopes by Reinforced Soil and Soil Nailing Techniques
Part 5	HA 70/94	Construction of Highway Earthworks
Part 6	HA 74/07	Treatment of Fill and Capping Materials Using Either Lime or Cement or Both
Part 7	HA 73/95	Site Investigation for Highway Works on Contaminated Land
	HA 43/91	Geotechnical Considerations and Techniques for Widening Highway Earthworks
	SH 7/83	Specification for Road and Bridge Works: Soil Suitability for Earthworking - Use of the Moisture Condition Apparatus [Incorporating Amendment No. 1 dated February 1989] <i>For use in Scotland only</i>
	SH 3/84	Model Contract Document for Topographical Surveys <i>For use in Scotland only</i>
	SH 4/89	Geotechnical Certification Procedures: Trunk Road Ground Investigations [Incorporating Amendment No. 1 dated March 1990] <i>For use in Scotland only</i>
	SH 5/89	Topographical Surveys: Certification Procedures [Incorporating Amendment No. 1 dated November 1989] <i>For use in Scotland only</i>
Part 8	HA 120/07	Guidance on Trenchless Installation of Services

Section 2 Drainage

Part 1	HA 71/06	The Effects on Flooding of Highway Construction on Flood Plains
	HA 78/96	Design of Outfalls for Surface Water Channels
	HA 39/98	Edge of Pavement Details
	HA 103/06	Vegetative Treatment Systems for Highway Runoff
	HA 106/04	Drainage of Runoff from Natural Catchments
Part 2	TA 80/99	Surface Drainage of Wide Carriageways
Part 3	HD 33/06	Surface and Sub-surface Drainage Systems for Highways
	HA 102/00	Spacing of Road Gullies
	HA 105/04	Sumpless Gullies
Part 4	HA 79/97	Edge of Pavement Details for Porous Asphalt Surface Courses
	HA 37/97	Hydraulic Design of Road-Edge Surface Water Channels
	HA 41/90	A Permeameter for Road Drainage Layers
	HA 83/99	Safety Aspects of Road Edge Drainage Features
	HD 43/04	Drainage Data Management System for Highways Agency

(VOLUME 4 continued)

Part 5	HA 40/01	Determination of Pipe and Bedding Combinations for Drainage Works
	HA 104/02	Chamber Tops and Gully Tops for Road Drainage and Services: Installation and Maintenance
Part 6	HA 113/05	Combined Channel and Pipe System for Surface Water Drainage
Part 7	HA 107/04	Design of Outfall and Culvert Details
Part 8	HA 118/06	Design of Soakaways
Part 9	HA 119/06	Grassed Surface Water Channels for Highway Runoff

VOLUME 5
ASSESSMENT AND PREPARATION OF ROAD SCHEMES

Section 1 Assessment of Road Schemes

Part 1	TA 44/92	Capacities, Queues, Delays and Accidents at Road Junctions Computer Programs ARCADY/3 and PICADY/3 (TRLL)
Part 2	TD 37/93	Scheme Assessment Reporting
Part 3	TA 46/97	Traffic Flow Ranges for Use in the Assessment of New Rural Roads
	TA 79/99	Traffic Capacity of Urban Roads [Incorporating Amendment No.1 dated May 1999]
Part 4	SH 1/97	The Traffic and Economic Assessment of Road Schemes in Scotland
	TA 11/81	Traffic Surveys by Roadside Interview [Clauses 6.1, 6.2, 6.5 and Figures 1 to 5 are superseded by Ch. 8 of TSM] <i>Scottish Addendum applicable for use in Scotland</i> <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	TA 22/81	Vehicle Speed Measurement on All Purpose Roads
	TD 11/82	Use of Certain Departmental Standards in the Design and Assessment of Trunk Road Schemes <i>Scottish Addendum applicable for use in Scotland</i>
	TA 30/82	Choice between Options for Trunk Road Schemes <i>Scottish Addendum applicable for use in Scotland</i>
	SH 4/91	Lane Rental <i>For use in Scotland only</i>

Section 2 Preparation and Implementation

Part 1	HD 46/05	Quality Management Systems for Highway Design
Part 2	HD 19/03	Road Safety Audits
Part 3	Not In Use	
Part 4	HA 12/81	Management of Contractual Claims <i>Not applicable to Northern Ireland</i>
	HA 13/81	The Planting of Trees and Shrubs <i>Not applicable for use in Scotland</i> <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	HA 19/82	Engineer/Contractor Relationship on Trunk Road Contracts <i>Not applicable to Northern Ireland</i>
	TA 91/05	Provision for Non-Motorised Users
Part 5	HD 42/05	Non-Motorised User Audits

Section 3 The Quality Control Reporting System

Part 1	HD 34/03	Implementation and Use of the Standards Improvement System
--------	----------	--

**VOLUME 6
ROAD GEOMETRY**

Section 1 Links

Part 1	TD 9/93	Highway Link Design [Incorporating Amendment No. 1 dated February 2002]
Part 2	TD 27/05	Cross-Sections and Headrooms
Part 3	TA 85/01	Guidance on Minor Improvements to Existing Roads

Section 2 Junctions

Part 1	TD 22/06	Layout of Grade Separated Junctions
Part 2		Not in use
Part 3	TD 16/93	Geometric Design of Roundabouts
	TA 78/97	Design of Road Markings at Roundabouts
	TD 50/04	The Geometric Layout of Signal-Controlled Junctions and Signalised Roundabouts
Part 4	TD 39/94	The Design of Major Interchanges
Part 5	TD 40/94	Layout of Compact Grade Separated Junctions
Part 6	TD 42/95	Geometric Design of Major/Minor Priority Junctions
Part 7	TD 41/95	Vehicular Access to All Purpose Trunk Roads
	TA 23/81	Junctions and Accesses: Determination of Size of Roundabouts and Major/Minor Junctions <i>Scottish Addendum applicable for use in Scotland</i>
Part 8	TA 86/03	Layout of Large Signal Controlled Junctions

Section 3 Highway Features

Part 1	TD 36/93	Subways for Pedestrians and Pedal Cyclists. Layout and Dimensions
Part 2	TA 66/95	Police Observation Platforms on Motorways
Part 3	TA 69/96	The Location and Layout of Lay-bys
	TA 57/87	Roadside Features [Chapter 2 is superseded by TA 69/96] <i>Scottish Addendum applicable for use in Scotland</i> <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
Part 4	TA 81/99	Coloured Surfacing in Road Layout (Excluding Traffic Claming)
Part 5	TD 51/03	Segregated Left Turn Lanes and Subsidiary Deflection Islands at Roundabouts
	TA 87/04	Trunk Road Traffic Calming
	TA 90/05	The Geometric Design of Pedestrian, Cycle and Equestrian Routes

VOLUME 7
PAVEMENT DESIGN AND MAINTENANCE

Section 1 Preamble

- Part 1 HD 23/99 General Information
Part 2 HD 35/04 Conservation and The Use of Secondary and Recycled Materials

Section 2 Pavement Design and Construction

- Part 1 HD 24/06 Traffic Assessment
[Incorporating Correction No.1 dated November 2006]
Part 2 HD 25/94 Foundations
Part 3 HD 26/06 Pavement Design
Part 4 HD 27/04 Pavement Construction Methods
Part 5 HD 39/01 Footway Design

Section 3 Pavement Maintenance Assessment

- Part 1 HD 28/04 Skidding Resistance
Part 2 HD 29/94 Structural Assessment Methods
[Incorporating Amendment No. 1 dated November 1996, Amendment No.2 dated May 1999, Amendment No. 3 dated November 1999 and Amendment No.4 dated February 2001]
Part 3 HD 30/99 Maintenance Assessment Procedure

Section 4 Pavement Maintenance Methods

- Part 1 HD 31/94 Maintenance of Bituminous Roads
[Incorporating Amendment No. 1 dated March 1995 and Amendment No. 2 dated February 1998]
Part 2 HD 32/94 Maintenance of Concrete Roads
SH 4/86 Scottish Routine Maintenance Management System
For use in Scotland only
Part 3 HD 40/01 Footway Maintenance

Section 5 Surfacing and Surfacing Materials

- Part 1 HD 36/06 Surfacing Materials for New and Maintenance Construction
Part 2 HD 37/99 Bituminous Surfacing Materials and Techniques
[Incorporating Amendment No.1 dated May 1999]
Part 3 HD 38/97 Concrete Surfacing and Materials
[Incorporating Amendment No.1 dated February 1999]

**VOLUME 8
TRAFFIC SIGNS AND LIGHTING**

Section 1 Traffic Signals and Control Equipment

Part 1	TD 35/06	All Purpose Trunk Roads MOVA System of Traffic Control at Signals
	TA 12/07	Traffic Signals on High Speed Roads <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	TA 15/07	Pedestrian Facilities at Traffic Signal Installations <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	TA 16/07	General Principles of Control by Traffic Signals <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	TD 24/97	All-Purpose Trunk Roads Inspection and Maintenance of Traffic Signals and Associated Equipment
	TD 7/07	Statutory Approval of Traffic Control Equipment <i>Not applicable to Northern Ireland</i>
	SH 6/73	Criteria for Traffic Light Signals at Junctions <i>For use in Scotland only</i>
	TA 82/99	The Installation of Traffic Signals and Associated Equipment
Part 2	TA 84/06	Code of Practice for Traffic Control and Information Systems for All-Purpose Roads [Incorporating Correction dated February 2007]

**Section 2 Traffic Signs and Road Markings
(see also Ch. 8 of the TSM)**

Part 1	TA 58/92	Traffic Signs and Road Markings for Lane Gains and Lane Drops on All Purpose Dual Carriageways and Motorway Trunk Roads [Incorporating Amendment No.1 dated April 1994]
Part 2	TA 61/94	Currency of the Traffic Signs Manual
	TA 8/80	Carriageway Markings: Markings for Right-Turning Movements at Cross-Road Junctions <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	TA 19/81	Reflectorisation of Traffic Signs [Clauses 7.6 and 7.7 are superseded by Ch.8 of TSM] <i>Scottish Addendum applicable for use in Scotland</i> <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	TD 25/01	Inspection and Maintenance of Traffic Signs on Motorway and All-Purpose Trunk Roads
	TD 26/07	Inspection and Maintenance of Road Markings and Road Studs on Motorways and All-Purpose Trunk Roads
	TD 33/05	The Use of Variable Message Signs on All-Purpose and Motorway Trunk Roads <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	TA 56/87	Hazardous Cattle Crossings: Use of Flashing Amber Lamps <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	TA 60/90	The Use of Variable Message Signs on All-Purpose and Motorway Trunk Roads <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>
	SH 5/77	Implementation of Bus Priorities <i>For use in Scotland only</i>
	SH 5/88	Damage to Bridges by Road Vehicles Traffic Signs at Bridges <i>For use in Scotland only</i>

(VOLUME 8 continued)

Part 2	TA 89/05	Use of Passively Safe Signposts, Lighting Columns and Traffic Signal Posts to BS EN 12767
Part 3	TA 93/04	Traffic Signs to Tourist Attractions in England: Guidance for Tourist Signing – General Introduction
Part 4	TD 52/04	Traffic Signs to Tourist Attractions in England: Tourist Signing – Trunk Roads
Part 5	TA 94/04	Traffic Signs to Tourist Attractions in England: Guidance for Tourist Signing – Local Roads
Part 6	TD 53/05	Traffic Signs to Retail Destinations and Exhibition Centres in England & Wales – Trunk Roads

Section 3 Lighting

TD 23/99	Trunk Roads and Trunk Road Motorways Inspection and Maintenance of Road Lighting
----------	--

Section 4 Traffic Management at Roadworks

Part 3	TA 64/94	Narrow Lane and Tidal Flow Operations at Roads Works on Motorways and Dual Carriageway Trunk Roads with Full Width Hard Shoulders
Part 4	Not In Use	
Part 5	Not In Use	
Part 6	TA 92/03	Crossover and Changeover Design

Section 5 Pedestrian Crossings

Part 1	TA 68/96	The Assessment and Design of Pedestrian Crossings
--------	----------	---

VOLUME 9 (with Continuation Binders 9a and 9b)
NETWORK – TRAFFIC CONTROL AND COMMUNICATIONS

Section 1 Communications – Standards of Provision

Part 1	TD 46/05	Motorway Signalling
Part 2	TD 45/94	Motorway Incident Detection and Automatic Signalling (MIDAS)
	TD 18/85	Criteria for the Use of Gantries for Traffic Signs and Matrix Traffic Signals on Trunk Roads and Trunk Road Motorways <i>Scottish Addendum applicable for use in Scotland</i> <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>

Section 2 Communications – Design Guide

Part 1	TA 70/97	Motorways. Introduction <i>Welsh Addendum applicable for use in Wales</i>
--------	----------	--

Section 3 Traffic Control and Surveillance – Standards of Provision

Part 1*	HD 20/05	Detector Loops for Motorways
Part 1	TA 71/97	Motorways. Overview <i>Welsh Addendum applicable for use in Wales</i>
	TD 17/85	Criteria for the Provision of Closed Circuit Television on Motorways <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>

Section 4 Systems Design

Part 1	TA 72/97	National Motorway Communications Systems (NMCS) <i>Welsh Addendum applicable for use in Wales</i>
Part 2	TA 73/97	Motorway Emergency Telephones <i>Welsh Addendum applicable for use in Wales</i>
Part 3	TA 74/05	Motorway Signalling <i>Welsh Addendum applicable for use in Wales</i>
Part 4	TA 75/97	Motorway Transmission Design <i>Welsh Addendum applicable for use in Wales</i>
Part 5	TA 76/97	Motorway Control Offices <i>Welsh Addendum applicable for use in Wales</i>
Part 6	TA 83/05	Guide to the Use of Variable Message Signs for Strategic Traffic Management on Trunk Roads and Trunk Road Motorways <i>Scottish, Welsh and Northern Ireland Addenda applicable for use in Scotland, Wales and Northern Ireland.</i>

Section 5 Infrastructure Design

Part 1	TA 77/97	Motorways <i>Welsh Addendum applicable for use in Wales</i>
--------	----------	--

2) *The intention is that all documents in this Volume will become TA or TD documents*

VOLUME 10 (with Continuation Binder 10a)
ENVIRONMENTAL DESIGN AND MANAGEMENT

Section 0 Environmental Objectives

General Preface to the Volume 10 Series of Advice Notes

- Part 1 HA 86/01 Principles and Guidance
- Part 2 HA 87/01 Environmental Functions
- Part 3 HA 88/01 Landscape Elements
- Part 4 HA 89/01 Environmental Elements
- Part 5 HA 90/01 Planning and Policy Features
- Part 6 HA 91/01 Environmental Database System
- Part 7 HA 92/01 Scheme Development, Implementation and Management
- Part 8 HA 93/01 Contract Performance Requirements
- Part 9 HA 94/01 Glossary of Terms

Section 1 New Roads

- Part 1 HA 55/92 New Roads Landform and Alignment
- Part 2 HA 56/92 New Roads Planting, Vegetation and Soils
- Part 3 HA 57/92 New Roads Integration with Rural Landscapes
- Part 4 HA 58/92 New Roads The Road Corridor
[Incorporating Amendment No.1 Retaining Walls (Chapter 3) dated February 1997]
- Part 5 HA 60/92 New Roads Heritage

Section 2 Improving Existing Roads

- Part 1 HA 85/01 Road Improvement within Limited Land Take
- Part 2 HA 63/92 Improving Existing Roads Improvement Techniques

Section 3 Landscape Management

- Part 1 HA 67/93 The Wildflower Handbook
- Part 2 HA 108/04 The Landscape Management Handbook
- Part 3 HA 115/05 The Establishment of An Herbaceous Plant Layer In Roadside Woodland

Section 4 Nature Conservation

- Part 1 HA 84/01 Nature Conservation and Biodiversity
[Supersedes HA59/92 (Nature Conservation section only)]
- Part 2 HA 59/92 Mitigating Against Effects on Badgers
- Part 3 HA 80/99 Nature Conservation Advice in Relation to Bats
- Part 4 HA 81/99 Nature Conservation Advice in Relation to Otters
- Part 5 HA 97/01 Nature Conservation Management Advice in Relation to Dormice
- Part 6 HA 98/01 Nature Conservation Management Advice in Relation to Amphibians
- Part 7 HA 116/05 Nature Conservation Advice in Relation to Reptiles and Roads

Section 5 Environmental Barriers

- Part 1 HA 65/94 Design Guide for Environmental Barriers
- Part 2 HA 66/95 Environmental Barriers Technical Requirements

(VOLUME 10 continued)

Section 6 Archaeology

Part 1 HA 75/01 Trunk Roads and Archaeological Mitigation

Section 7 Guidance Documents

Part 1 HA 99/01 Policy and Guidance

VOLUME 11
ENVIRONMENTAL ASSESSMENT

Section 1 Introduction

- Part 1 The Application of the Advice Note
 [Incorporating Amendment No.1 dated August 1994]

Section 2 General Principles of Environmental Assessment

- Part 1 The Aims and Objectives of Environmental Assessment
 and How its Results are Reported
- Part 2 The Scope of Environmental Assessment
- Part 3 Mitigation

Section 3 Environmental Assessment Techniques

- Part 1 HA207/07 Air Quality
- Part 2 Cultural Heritage
- Part 3 Disruption Due to Construction
- Part 4 Ecology and Nature Conservation
- Part 5 Landscape Effects
- Part 6 Land Use
 [Incorporating Amendment No.1 dated August 2001]
- Part 7 Traffic Noise and Vibration
- Part 8 Pedestrians, Cyclists, Equestrians and Community Effects
- Part 9 Vehicle Travellers
- Part 10 HA 216/06 Road Drainage and the Water Environment
- Part 11 Geology and Soils
- Part 12 Impact of Road Schemes on Policies and Plans

Section 4 Reporting the Environmental Assessment

- Part 1 Preparation of the Environmental Information for the Stage 1 Report
- Part 2 Preparation of the Environmental Information for the Stage 2 Report
- Part 3 Preparation of the Environmental Statement
- Part 4 Environmental Impacts Tables
- Part 5 Illustrative Mapping Examples

VOLUME 12 (with Continuation Binder 12a)
TRAFFIC APPRAISAL OF ROADS SCHEMES

Section 1 Traffic Appraisal Manual

Part 1 The Application of Traffic Appraisal to Trunk Road Schemes
 [Incorporating Amendment No.1 dated November 1997]

Section 2 Traffic Appraisal Advice

Part 1 Traffic Appraisal in Urban Areas
Part 2 Induced Traffic Appraisal
Part 3 The National Trip End Model

VOLUME 13
ECONOMIC ASSESSMENT OF ROAD SCHEMES

Users of this guide for the computer program COBA (Cost Benefit Analysis) should refer to the Department of Transport website for a version of this document that is updated at more regular intervals. Please click on the following hyperlink;

http://www.dft.gov.uk/stellent/groups/dft_control/documents/contentservertemplate/dft_index.hcst?n=11303&l=2

VOLUME 14
ECONOMIC ASSESSMENT OF ROAD MAINTENANCE

Users of this guide for the computer program QUADRO (QUEues And DELays at ROADworks) should refer to the Department of Transport website for a version of this document that is updated at more regular intervals. Please click on the following hyperlink;

http://www.dft.gov.uk/stellent/groups/dft_control/documents/contentservertemplate/dft_index.hcst?n=11307&l=2

VOLUME 15
ECONOMIC ASSESSMENT OF ROAD SCHEMES IN SCOTLAND

Users of the NESA (Network Evaluation from Surveys and Assignments) should refer to the NESA website for a version of this document that is updated at more regular intervals. Please click on the following hyperlink;

<http://www.scot-tag.org.uk/nesa/index.html>

**Design Manual for Roads and
Bridges:
Alpha-Numeric Index**

ALPHA-NUMERIC INDEX

This Index lists, in alpha-numeric order, the documents in the DMRB, their references and date of issue. All information is current at August 2006.

Series

- BA Advice Notes – Bridges and Structures
- BD Standards – Bridges and Structures
- BE Technical Memoranda – Bridges
- HA Advice Notes – Highways
- HD Standards – Highways
- IM Interim Memoranda – Bridges
- SB Scottish Technical Memoranda – Bridges
- SH Scottish Technical Memoranda – Highways
- TA Advice Notes – Traffic Engineering and Control
- TD Standards – Traffic Engineering and Control

Volume 11 – Environmental Assessment

Volume 12 – Traffic Appraisal of Roads Schemes

Volume 13 – Economic Assessment of Road Schemes

Volume 14 – Economic Assessment of Road Maintenance

Volume 15 – Economic Assessment of Road Schemes in Scotland

Note: a) Part Numbers: Standards and Advice Notes issued before the compilation of the DMRB do not have Part numbers. They are identified by Volume and Section and are kept at the end of the relevant Section. All Standards and Advice Notes issued from 1992 onwards have Volume, Section and Part Numbers.

2) The following documents have been published since the issue of the previous Design Manual for Roads and Bridges: Alpha-Numeric Index dated February 2007.

Design Manual for Roads and Bridges: Volume Contents Pages and Alpha-Numeric Index [May 2007]

BA 92/07 – The Use of Recycled Concrete Aggregates in Structural Concrete

BD 81/02 – (Correction 2) Use of Compressive Membrane Action in Bridge Decks

HA 74/07 – Treatment of Fill & Capping Material Using Either Lime, Cement or Both

HA 120/07 – Guidance on Trenchless Installation of Services

HA 207/07 – Air Quality

TA 12/07 – Traffic Signals on High Speed Roads

TA 15/07 – Pedestrian Facilities at Signal Installations

TA 16/07 – General Principles of Control by Traffic Signals

TD 7/07 – Statutory Approval of Traffic Control Equipment

TD 26/07 – Inspection & Maintenance of Road Markings & Road Studs on Motorways & All Purpose Trunk Roads

STANDARDS AND ADVICE NOTES WITHDRAWN SINCE FEBRUARY 2007

Document Reference	Title	Date of Issue	Decimal Reference
	Design Manual for Roads & Bridges: Volume Contents Pages & Alpha-Numeric Index	Feb 2007	1.0.2
HA 74/00	Treatment of Fill & Capping Material Using Either Lime, Cement or Both	Nov 2000	4.1.6
TA 12/81	Traffic Signals on High Speed Roads	Apr 1981	8.1.1
TA 15/81	Pedestrian Facilities at Signal Installations	Jul 1981	8.1.1
TA 16/81	General Principles of Control by Traffic Signals	Sep 1981	8.1.1
TA 49/86	Appraisal of New & Replacement Lighting on Trunk Roads & Trunk Road Motorways	Jul 1986	8.3.0
TD 7/80	Type Approval of Traffic Control Equipment	Feb 1980	8.1.1
TD 26/05	Inspection & Maintenance of Road Markings & Road Studs on Motorways & All Purpose Trunk Roads	Nov 2005	8.2.2
TD 30/87	Design of Road Lighting for All Purpose Trunk Roads	Nov 1987	8.3.0
TD 34/91	Design of Road Lighting for Motorway Trunk Roads	Jan 1991	8.3.0

STANDARDS AND ADVICE NOTES ISSUED SINCE FEBRUARY 2007

Document Reference	Title	Date of Issue	Decimal Reference
	Design Manual for Roads & Bridges: Volume Contents Pages & Alpha-Numeric Index	May 2007	1.0.2
BA 92/07	The Use of Recycled Concrete Aggregates in Structural Concrete	May 2007	2.3.9
BD 81/02 Correction 2	Use of Compressive Membrane Action in Bridge Decks	May 2007	3.4.20
HA 74/07	Treatment of Fill & Capping Material Using Either Lime, Cement or Both	May 2007	4.1.6
HA 120/07	Guidance on Trenchless Installation of Services	May 2007	4.1.8
HA 207/07	Air Quality	May 2007	11.3.1
TA 12/07	Traffic Signals on High Speed Roads	May 2007	8.1.1
TA 15/07	Pedestrian Facilities at Signal Installations	May 2007	8.1.1
TA 16/07	General Principles of Control by Traffic Signals	May 2007	8.1.1
TD 7/07	Statutory Approval of Traffic Control Equipment	May 2007	8.1.1
TD 26/07	Inspection & Maintenance of Road Markings & Road Studs on Motorways & All Purpose Trunk Roads	May 2007	8.2.2

ADVICE NOTES - BRIDGES AND STRUCTURES (BA SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
BA 9/81	The Use of BS 5400: Part 10: 1980. Code of Practice for Fatigue Amendment No. 1	Dec 1981 Nov 1983	1.3
BA 16/97	The Assessment of Highway Bridges and Structures. Amendment No. 1 Amendment No.2	May 1997 Nov 1997 Nov 2001	3.4.4
BA 19/85	The Use of BS 5400: Part 3: 1982	Jan 1985	1.3
BA 24/87	Early Thermal Cracking of Concrete Amendment No. 1	Jul 1987 Aug 1989	1.3
BA 26/94	Expansion Joints for Use in Highway Bridge Decks	Nov 1994	2.3.7
BA 28/92	Evaluation of Maintenance Costs in Comparing Alternative Designs for Highway Structures	Aug 1992	1.2.2
BA 30/94	Strengthening of Concrete Highway Structures Using Externally Bonded Plates	Feb 1994	3.3.1
BA 34/90	Technical Requirements for the Assessment and Strengthening Programme for Highway Structures	Sep 1990	3.4
BA 35/90	Inspection and Repair of Concrete Highway Structures	Jun 1990	3.3
BA 36/90	The Use of Permanent Formwork	Feb 1991	2.3
BA 37/92	Priority Ranking of Existing Parapets	Oct 1992	2.3.2
BA 38/93	Assessment of the Fatigue Life of Corroded or Damaged Reinforcing Bars	Oct 1990	3.4.5
BA 39/93	Assessment of Reinforced Concrete Half-joints	Apr 1993	3.4.6
BA 40/93	Tack Welding of Reinforcing Bars	Apr 1993	1.3.4
BA 41/98	The Design and Appearance of Bridges	Feb 1998	1.3.11
BA 42/96	The Design of Integral Bridges [Incorporating Amendment No.1 dated May 2003]	Nov 1996	1.3.12
BA 43/94	Strengthening, Repair and Monitoring of Post-tensioned Concrete Bridge Decks	Dec 1994	3.3.2
BA 44/96	Assessment of Concrete Highway Bridge and Structures	Nov 1996	3.4.15
BA 47/99	Waterproofing and Surfacing Concrete Bridge Decks	Aug 1999	2.3.5

ADVICE NOTES - BRIDGES AND STRUCTURES (BA SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
BA 50/93	Post-tensioned Concrete Bridges: Planning, Organisation and Methods for Carrying Out Special Inspections	Jul 1993	3.1.3
BA 51/95	The Assessment of Concrete Structures Affected by Steel Corrosion	Feb 1995	3.4.13
BA 52/94	The Assessment of Concrete Highway Structures Affected by Alkali Silica Reaction	Nov 1994	3.4.10
BA 53/94	Bracing Systems and the Use of U-Frames in Steel Highway Bridges	Dec 1994	1.3.13
BA 54/94	Load Testing for Bridge Assessment	Apr 1994	3.4.8
BA 55/06	The Assessment of Bridge Substructures and Foundations, Retaining Walls and Buried Structures	May 2006	3.4.9
BA 56/96	The Assessment of Steel Highway Bridges and Structures	Nov 1996	3.4.12
BA 57/01	Design for Durability	Aug 2001	1.3.8
BA 58/94	Design of Bridges and Concrete Structures with External Unbonded Prestressing	Nov 1994	1.3.10
BA 59/94	Design of Highway Bridges for Hydraulic Action	May 1994	1.3.6
BA 61/96	The Assessment of Composite Highway Bridges	Nov 1996	3.4.17
BA 67/96	Enclosure of Bridges	Aug 1996	2.2.8
BA 68/97	Crib Retaining Walls	Feb 1997	2.1.4
BA 72/03	Maintenance of Road Tunnels	May 2003	3.2.3
BA 74/06	Assessment of Scour at Highway Bridges	Aug 2006	3.4.21
BA 80/99	Use of Rock Bolts	Feb 1999	2.1.7
BA 82/00	Formation of Continuity Joints in Bridge Decks	Nov 2000	2.3.7
BA 83/02	Cathodic Protection for Use in Reinforced Concrete Highway Structures	Feb 2002	3.3.3
BA 84/02	Use of Stainless Steel Reinforced in Highway Structures	Feb 2002	1.3.15

ADVICE NOTES - BRIDGES AND STRUCTURES (BA SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
BA 85/04	Coatings for Concrete Highway Structures & Ancillary Structures	May 2004	2.4.3
BA 86/06	Advice Notes on the Non-destructive Testing of Highway Structures	August 2006	3.1.7
BA 87/04	Management of Corrugated Steel Buried Structures Correction No.1	August 2004 Feb 2006	3.3.4
BA 88/04	Management of Buried Concrete Box Structures	August 2004	3.3.5
BA 92/07	The Use of Recycled Concrete Aggregates in Structural Concrete	May 2007	2.3.9

STANDARDS - BRIDGES AND STRUCTURES (BD SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
BD 2/05	Technical Approval of Highway Structures	August 2005	1.1.1
BD 7/01	Weathering Steel for Highway Structures	Nov 2001	2.3.8
BD 9/81	Implementation of BS 5400: Part 10: 1980. Code of Practice for Fatigue	Dec 1981	1.3
BD 10/97	Design of Highway Structures in Areas of Mining Subsidence	May 1997	1.3.14
BD 12/01	Design of Corrugated Steel Buried Structures with Spans Greater than 0.9 Metres and up to 8.0 Metres	Nov 2001	2.2.6
BD 13/06	Design of Steel Bridges. Use of BS 5400-3: 2000	May 2006	1.3.14
BD 15/92	General Principles for the Design and Construction of Bridges. Use of BS 5400: Part 1: 1988	Dec 1992	1.3.2
BD 16/82	Design of Composite Bridges. Use of BS 5400: Part 5:1979 Amendment No.1	Nov 1982 Dec 1987	1.3
BD 20/92	Bridge Bearings. Use of BS 5400: Part 9: 1983	Oct 1992	2.3.1
BD 21/01	The Assessment of Highway Bridges and Structures	May 2001	3.4.3
BD 24/92	Design of Concrete Bridges. Use of BS 5400: Part 4:1990	Nov 1992	1.3.1
BD 27/86	Materials for the Repair of Concrete Highway Structures	Nov 1986	3.3
BD 28/87	Early Thermal Cracking of Concrete Amendment No. 1	Jul 1987 Aug 1989	1.3
BD 29/04	Design Criteria for Footbridges	Aug 2004	2.2.8
BD 30/87	Backfilled Retaining Walls and Bridge Abutments	Aug 1987	2.1
BD 31/01	The Design of Buried Concrete Box and Portal Frame Structures	Nov 2001	2.2.12
BD 33/94	Expansion Joints for Use in Highway Bridge Decks	Nov 1994	2.3.6
BD 34/90	Technical Requirements for the Assessment and Strengthening Programme for Highway Structures	Sep 1990	3.4
BD 35/06	Quality Assurance Scheme for Paints and Similar Protective Coatings	May 2006	2.4.1
BD 36/92	Evaluation of Maintenance Costs in Comparing Alternative Designs for Highway Structures	Aug 1992	1.2.1

STANDARDS - BRIDGES AND STRUCTURES (BD SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
BD 37/01	Loads for Highway Bridges	Aug 2001	1.3.14
BD 41/97	Reinforced Clay Brickwork Retaining Walls of Pocket Type and Grouted Cavity type Construction Use of BS 5628: Part 2: 1995	May 1997	2.1.1
BD 42/00	Design of Embedded Retaining Walls and Bridge Abutments	May 2000	2.1.2
BD 43/03	The Impregnation of Reinforced and Prestressed Concrete Highway Structures using Hydrophobic Pore-Lining Impregnants	Feb 2003	2.4.2
BD 44/95	The Assessment of Concrete Highway Bridges and Structures	Jan 1995	3.4.14
BD 45/93	Identification Marking of Highway Structures	Aug 1993	3.1.1
BD 46/92	Technical Requirements for the Assessment and Strengthening Programme for Highway Structures [Stage 2 - Modern Short Span Bridges]	Aug 1992	3.4.1
BD 47/99	Waterproofing and Surfacing of Concrete Bridge Decks	Aug 1999	2.3.4
BD 48/93	The Assessment and Strengthening of Highway Bridge Supports	Jun 1993	3.4.7
BD 49/01	Design Rules for Aerodynamic Effects on Bridges	May 2001	1.3.3
BD 50/92	Technical Requirements for the Assessment and Strengthening Programme for Highway Structures Stage 3 - Long Span Bridges	Dec 1992	3.4.2
BD 51/98	Portal and Cantilever Signs/Signal Gantries	May 1998	2.2.4
BD 53/95	Inspection and Records for Road Tunnels	Jul 1995	3.1.6
BD 54/93	Post-tensioned Concrete Bridges Prioritisation of Special Inspections	Apr 1993	3.1.2
BD 56/96	The Assessment of Steel Highway Bridges and Structures	Nov 1996	3.4.11
BD 57/01	Design for Durability	Aug 2001	1.3.7
BD 58/94	The Design of Concrete Highway Bridges and Structures with External and Unbonded Prestressing	Nov 1994	1.3.9
BD 60/04	Design of Highway Bridges for Vehicle Collision Loads	May 2004	1.3.5
BD 61/96	The Assessment of Composite Highway Bridges	Nov 1996	3.4.16

STANDARDS - BRIDGES AND STRUCTURES (BD SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
BD 62/07	As Built, Operational and Maintenance Records for Highway Structures	Feb 2007	3.2.1
BD 63/07	Inspection of Highway Structures	Feb 2007	3.1.4
BD 65/97	Design Criteria for Collision Protector Beams	Feb 1997	2.2.5
BD 67/96	Enclosure of Bridges	Aug 1996	2.2.7
BD 68/97	Crib Retaining Walls	Feb 1997	2.1.3
BD 70/03	Strengthened/Reinforced Soils and Other Fills for Retaining Walls and Bridge Abutments Use of BS8006: 1995, incorporating Amendment No.1 (Issue 2 March 1999)	May. 2003	2.1.5
BD 74/00	Foundations	May 2000	2.1.8
BD 78/99	Design of Road Tunnels	Aug 1999	2.2.9
BD 79/06	The Management of Sub-standard Highway Structures	Aug 2006	3.4.18
BD 81/02	Use of Compressive Membrane Action in Bridge Decks	May 2002	3.4.20
BD 82/00	Design of Buried Rigid Pipes	Aug 2000	2.2.10
BD 84/02	Strengthening of Concrete Bridge Supports Vehicle Impact Using Fibre Reinforced Polymers	Aug 2002	1.3.16
BD 86/04	The Assessment of Highway Bridges and Structures For The Effects of Special Types General Order (STGO) and Special Order (SO) Vehicles	Nov 2004	3.4.19
BD 87/05	Maintenance Painting of Steelwork	May 2005	3.2.2
BD 89/03	The Conservation of Highway Structures	Nov 2003	3.2.4
BD 90/05	Design of FRP Bridges and Highway Structures	May 2005	1.3.17
BD 91/04	Unreinforced Masonry Arch Bridges	Nov 2004	2.2.14
BD 94/07	Design of Minor Structures	Feb 2007	2.2.1

TECHNICAL MEMORANDA - BRIDGES (BE SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
BE 13	Fatigue Risk in Bailey Bridges	Apr 1968	3.4
BE 23	Shear Key Decks Amendment No. 1 to Annex	Nov 1970 Jun 1971	1.3
BE 5/75	Rules for the Design and Use of Freyssinet Concrete Hinges in Highway Structures	Mar 1975	1.3
BE 7/04	Departmental Standard (Interim) Motorway Sign/Signal Gantries	Aug 2004	2.2

ADVICE NOTES - HIGHWAYS (HA SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
HA 12/81	Management of Contractual Claims	Jan 1981	5.2
HA 13/81	The Planting of Trees and Shrubs	Feb 1981	5.2
HA 19/82	Engineer/Contractor Relationship on Trunk Road Contracts	Sep 1982	5.2
HA 37/97	Hydraulic Design of Road Edge Surface Water Channels	Aug 1997	4.2
HA 39/98	Edge of Pavement Details	Aug 1998	4.2
HA 40/01	Determination of Pipe and Bedding Combinations for Drainage Works	Nov 2001	4.2.5
HA 41/90	A Permeameter for Road Drainage Layers	Apr 1990	4.2
HA 43/91	Geotechnical Considerations and Techniques for Widening Highway Earthworks	Feb 1991	4.1
HA 44/91	Design and Preparation of Contract Documents Amendment No. 1	Jun 1991 Apr 1995	4.1.1
HA 55/92	New Roads Landform and Alignment	Dec 1992	10.1.1
HA 56/92	New Roads Planting, Vegetation and Soils	Dec 1992	10.1.2
HA 57/92	New Roads Integration with Rural Landscapes	Dec 1992	10.1.3
HA 58/92	New Roads The Road Corridor Amendment No.1	Dec 1992 Feb 1997	10.1.4
HA 59/92	Mitigating Against Effects on Badgers	Feb 1997	10.4.2
HA 60/92	New Roads Heritage	Dec 1992	10.1.5
HA 63/92	Improving Existing Roads Improvement Techniques	Dec 1992	10.2.2
HA 65/94	Design Guide for Environmental Barriers	Jul 1994	10.5.1
HA 66/95	Environmental Barriers Technical Requirements	Sep 1995	10.5.2
HA 67/93	The Wildflower Handbook	Jun 1993	10.3.1
HA 68/94	Design Methods for the Reinforcement of Highway Slopes by Reinforced Soil and Soil Nailing Techniques	Feb 1994	4.1.4
HA 70/94	Construction of Highway Earthworks	Dec 1994	4.1.5
HA 71/06	The Effects on Flooding of Highway Construction On Flood Plains	May 2006	4.2.1

ADVICE NOTES - HIGHWAYS (HA SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
HA 73/95	Site Investigation for Highway Works on Contaminated Land	May 1995	4.1.7
HA 74/07	Treatment of Fill and Capping Materials Using Either Lime or Cement or Both	May 2007	4.1.6
HA 75/01	Trunk Roads and Archaeological Mitigation	Feb 2001	10.6.1
HA 78/96	Design of Outfalls for Surface Water Channels	Jan 1996	4.2.2
HA 79/97	Edge of Pavement Details for Porous Asphalt Surface Cones	Feb 1997	4.2.4
HA 80/99	Nature Conservation Advice in Relation to Bats	May 1999	10.4.3
HA 81/99	Nature Conservation Advice in Relation to Otters	May 1999	10.4.4
HA 83/99	Safety Aspects of Road Edge Drainage Features	Nov 1999	4.2.4
HA 84/01 (1)	Nature Conservation and Biodiversity	Feb 2001	10.4.1
HA 85/01	Road Improvement within Limited Land Take	Feb 2001	10.2.1
HA 86/01	Principles and Guidance	Feb 2001	10.0.1
HA 87/01	Environmental Functions	Feb 2001	10.0.2
HA 88/01	Landscape Elements	Feb 2001	10.0.3
HA 89/01	Environmental Elements	Feb 2001	10.0.4
HA 90/01	Planning and Policy Features	Feb 2001	10.0.5
HA 91/01	Environmental Database System	Feb 2001	10.0.6
HA 92/01	Scheme Development, Implementation and Management	Feb 2001	10.0.7
HA 93/01	Contract Performance Requirements	Feb 2001	10.0.8
HA 94/01	Glossary of Terms	Feb 2001	10.0.9
HA 97/01	Nature Conservation Management Advice in Relation to Dormice	Feb 2001	10.4.5
HA 98/01	Nature Conservation Management Advice in Relation to Amphibians	Feb 2001	10.4.6

(4) Supersedes the section in HA59/92 (Nature Conservation). Mitigating Against Effects on Badgers is extant in 10.4.2

ADVICE NOTES – HIGHWAYS (HA SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
HA 99/01	Policy and Guidance	Feb 2001	10.7.1
HA 102/00	Spacing of Road Gullies	Nov 2000	4.2.3
HA 103/06	Vegetative Treatment Systems for Highway Runoff	May 2006	4.2.1
HA 104/02	Chamber Tops and Gully Tops for Road Drainage and Services: Installation and Maintenance	Aug 2002	4.2.5
HA 105/04	Sumpleless Gullies	Feb 2004	4.2.3
HA 106/04	Drainage of Runoff from Natural Catchments	Feb 2004	4.2.1
HA 107/04	Design of Outfall and Culvert Details	Nov 2004	4.2.7
HA 108/04	The Landscape Management Handbook	Nov 2004	10.3.2
HA 113/05	Combined Channel and Pipe System for Surface Water Drainage	Feb 2005	4.2.6
HA 115/05	The Establishment of An Herbaceous Plant Layer In Roadside Woodland	Feb 2005	10.3.3
HA 116/05	Nature Conservation Advice in Relation to Reptiles and Roads	May 2005	10.4.7
HA 118/06	Design of Soakaways	May 2006	4.2.8
HA 119/06	Grassed Surface Water Channels for Highway Runoff	May 2006	4.2.9
HA 120/07	Guidance on Trenchless Installation of Services	May 2007	4.1.8
HA 207/07	Air Quality	May 2007	11.3.1
HA 216/06	Road Drainage & The Water Environment	May 2006	11.3.10

STANDARDS - HIGHWAYS (HD SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
HD 19/03	Road Safety Audits	Nov 2003	5.2.2
HD 20/05	Detector Loops for Motorways	Nov 2005	9.3.1
HD 22/02	Managing Geotechnical Risk	May 2002	4.1.2
HD 23/99	General Information	Feb 1999	7.1.1
HD 24/06	Traffic Assessment Correction No.1	Feb 2006 Nov 2006	7.2.1
HD 25/94	Foundations	Jan 1994	7.2.2
HD 26/06	Pavement Design	Feb 2006	7.2.3
HD 27/04	Pavement Construction Methods	Feb 2004	7.2.4
HD 28/04	Skidding Resistance	Aug 2004	7.3.1
HD 29/94	Structural Assessment Methods Amendment No. 1 Amendment No. 2 Amendment No. 3 Amendment No. 4	Jan 1994 Nov 1996 May 1999 Nov 1999 Feb 2001	7.3.2
HD 30/99	Maintenance Assessment Procedure	May 1999	7.3.3
HD 31/94	Maintenance of Bituminous Roads Amendment No. 1 Amendment No. 2	Jan 1994 Mar 1995 Feb 1998	7.4.1
HD 32/94	Maintenance of Concrete Roads	Jan 1994	7.4.2
HD 33/06	Surface and Sub-surface Drainage Systems for Highways	May 2006	4.2.3
HD 34/03	Implementation and Use of the Standards Improvement System	Nov 2003	5.3.1
HD 35/04	Conservation and The Use of Secondary and Recycled Materials	Nov 2004	7.1.2
HD 36/06	Surfacing Materials for New and Maintenance Construction	Nov 2006	7.5.1
HD 37/99	Bituminous Surfacing Materials and Techniques Amendment No.1	Feb 1999 May 1999	7.5.2
HD 38/97	Concrete Surfacing and Materials Amendment No.1	Aug 1997 Feb 1999	7.5.3

STANDARDS - HIGHWAYS (HD SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
HD 39/01	Footway Design	May 2001	7.2.5
HD 40/01	Footway Maintenance	May 2001	7.4.3
HD 41/03	Maintenance of Highway Geotechnical Assets	Feb 2003	4.1.3
HD 42/05	Non-Motorised User Audits	Feb.2005	5.2.5
HD 43/04	Drainage Data Management System for Highways	Nov 2004	4.2.4
HD 46/05	Quality Management Systems for Highway Design	Nov 2005	5.2.1

SCOTTISH TECHNICAL MEMORANDA - HIGHWAYS (SH SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
SH 6/73	Criteria for Traffic Light Signals at Junctions	Jul 1973	8.1
SH 5/77	Implementation of Bus Priorities	May 1977	8.2
SH 7/83	Specification for Road and Bridge Works Soil Suitability for Earthworking Use of the Moisture Condition Apparatus Amendment No. 1	Dec 1983 Feb 1989	4.1
SH 3/84	Model Contract Document for Topographical Surveys	Oct 1984	4.1
SH 4/86	Scottish Routine Maintenance Management System	May 1986	7.4
SH 5/88	Damage to Bridges by Road Vehicles Traffic Signs at Bridges	Nov 1988	8.2
SH 4/89	Geotechnical Certification Procedures: Trunk Road Ground Investigations Amendment No. 1	Oct 1989 Mar 1990	4.1
SH 5/89	Topographical Surveys - Certification Procedures Amendment No. 1	1989 Nov 1989	4.1
SH 4/91	Lane Rental	Feb 1991	5.1.4
SH 1/97	The Traffic and Economic Assessment of Road Schemes in Scotland	May 1997	5.1.4

ADVICE NOTES - TRAFFIC ENGINEERING AND CONTROL (TA SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
TA 8/80	Carriageway Markings: Markings for Right-Turning Movements at Cross-Road Junctions	Sep 1980	8.2
TA 11/81	Traffic Surveys by Roadside Interview	May 1981	5.1
TA 12/07	Traffic Signals on High Speed Roads	May 2007	8.1.1
TA 15/07	Pedestrian Facilities at Traffic Signal Installations	May 2007	8.1.1
TA 16/07	General Principles of Control by Traffic Signals	May 2007	8.1.1
TA 19/81	Reflectorisation of Traffic Signs	Sep 1981	8.2
TA 22/81	Vehicle Speed Measurement on All-Purpose Roads	Nov 1981	5.1
TA 23/81	Junctions and Accesses Determination of Size of Roundabouts and Major/Minor Junctions	Dec 1981	6.2
TA 30/82	Choice Between Options for Trunk Road Schemes	Jul 1982	5.1
TA 44/92	Capacities, Queues, Delays and Accidents at Road Junctions Computer Programs ARCADY/3 and PICADY/3 (TRLL)	Jul 1992	5.1.1
TA 46/97	Traffic Flows Ranges for Use in the Assessment of New Rural Roads	Feb 1997	5.1.3
TA 56/87	Hazardous Cattle Crossings: Use of Flashing Amber Lamps	Nov 1987	8.2
TA 57/87	Roadside Features [Chapter 2 superseded by TA 69/96]	Jan 1989	6.3
TA 58/92	Traffic Signs and Road Markings for Lane Gains and Lane Drops on All Purpose Dual Carriageways and Motorway Trunk Roads	Jun 1992	8.2.1
TA 60/90	The Use of Variable Message Signs on All-Purpose and Motorway Trunk Roads	Aug 1990	8.2
TA 61/94	Currency of the Traffic Signs Manual	Feb 1994	8.2.2
TA 64/94	Narrow Lanes and Tidal Flow Operations at Roadworks on Motorways and Dual Carriageway Trunk Roads with Full Width Hard Shoulders	Apr 1994	8.4.3

ADVICE NOTES - TRAFFIC ENGINEERING AND CONTROL (TA SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
TA 66/95	Police Observation Platforms on Motorways	Jan 1995	6.3.2
TA 68/96	The Assessment and Design of Pedestrian Crossings	Nov 1996	8.5.1
TA 69/96	The Location and Layout of Laybys	Aug 1996	6.3.3
*TA 70/97	Motorways. Introduction	Feb 1997	9.2.1
*TA 71/97	Motorways. Overview	Feb 1997	9.3.1
*TA 72/97	National Motorway Communications Systems (NMCS)	Feb 1997	9.4.1
*TA 73/97	Motorway Emergency Telephones	Feb 1997	9.4.2
*TA 74/05	Motorway Signalling	Nov 2005	9.4.3
*TA 75/97	Motorway Transmission Design	Feb 1997	9.4.4
*TA 76/97	Motorway Control Offices	Feb 1997	9.4.5
*TA 77/97	Motorways	May 1997	9.5.1
TA 78/97	Design of Road Markings at Roundabouts	Nov 1997	6.2.3
TA 79/99	Traffic Capacity of Urban Roads Amendment No.1	Feb 1999 May 1999	5.1.3
TA 80/99	Surface Drainage of Wide Carriageways	Feb 1999	4.2.2
TA 81/99	Coloured Surfacing in Road Layout (Excluding Traffic Calming)	Feb 1999	6.3.4
TA 82/99	The Installation of Traffic Signals and Associated Equipment	May 1999	8.1.1
TA 83/05	Guide to the Use of Variable Message Signs for Strategic Traffic Management on Trunk Roads and Trunk Road Motorways	Nov 2005	9.4.6
TA 84/06	Code of Practice for Traffic Control and Information Systems for All-Purpose Roads [Incorporates Correction dated Feb 2007]	May 2006	8.1.2
TA 85/01	Guidance on Minor Improvements to Existing Roads	Nov 2001	6.1.3
TA 86/03	Layout of Large Signal Controlled Junctions	Feb 2003	6.2.8
TA 87/04	Trunk Road Traffic Calming	Feb 2004	6.3.5
TA 89/05	Use of Passively Safe Signposts, Lighting Columns & Traffic Signal Posts to BS EN 12767	Nov 2005	8.2.2
TA 90/05	The Geometric Design of Pedestrian, Cycle and Equestrian Routes	Feb 2005	6.3.5

ADVICE NOTES - TRAFFIC ENGINEERING AND CONTROL (TA SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
TA 91/05	Provision for Non-Motorised Users	Feb 2005	5.2.4
TA 92/03	Crossover and Changeover Design	Nov 2003	8.4.6
TA 93/04	Traffic Signs to Tourist Attractions and Facilities in England: Guidance for Tourist Signing – General Introduction	Feb 2004	8.2.3
TA 94/04	Traffic Signs to Tourist Attractions and Facilities in England: Guidance for Tourist Signing – Local Roads	Feb 2004	8.2.5

*TA 70/97 to TA 73/97 and TA 75/97 to TA 76/97 include Annex A, which is specific to England

TA 74/05 includes Annex A, which is specific to England and Northern Ireland

TA 77/97 includes Annex A, which is specific to England, Annex C which is specific to Wales and Annex D which is specific to Northern Ireland

STANDARDS - TRAFFIC ENGINEERING AND CONTROL (TD SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
TD 7/07	Statutory Approval of Traffic Control Equipment	May 2007	8.1.1
TD 9/93	Highway Link Design Amendment No.1	Jun 1993 Feb 2002	6.1.1
TD 11/82	Use of Certain Departmental Standards in the Design and Assessment of Trunk Road Schemes	Jul 1982	5.1
TD 16/93	Geometric Design of Roundabouts	Sep 1993	6.2.3
TD 17/85	Criteria for the Provision of Closed Circuit. Television on Motorways	May 1985	9.3
TD 18/85	Criteria for the Use of Gantries for Traffic Signs and Matrix Traffic Signals on Trunk Roads and Trunk Road Motorways	Jul 1985	9.1
TD 19/06	Requirement for Road Restraint Systems	Aug 2006	2.2.8
TD 22/06	Layout of Grade Separated Junctions	Feb 2006	6.2.1
TD 23/99	Trunk Roads and Trunk Road Motorways Inspection and Maintenance of Road Lighting	Nov 1999	8.3
TD 24/97	All-Purpose Trunk Roads Inspection and Maintenance of Traffic Signals and Associated Equipment	Aug 1997	8.1
TD 25/01	Inspection and Maintenance of Traffic Signs on Motorway and All-Purpose Trunk Roads	Feb 2001	8.2.2
TD 26/07	Inspection and Maintenance of Road Markings and Road Studs on Motorways and All Purpose Trunk Roads	May 2007	8.2.2
TD 27/05	Cross-Sections and Headrooms	Feb.2005	6.1.2
TD 33/05	The Use of Variable Message Signs on All-Purpose and Motorway Trunk Roads	Nov 2005	8.2.2
TD 35/06	All Purpose Trunk Roads MOVA System of Traffic Control at Signals	May 2006	8.1.1
TD 36/93	Subways for Pedestrians and Pedal Cyclists Layout and Dimensions	July 1993	6.3.1
TD 37/93	Scheme Assessment Reporting	Aug 1993	5.1.2
TD 39/94	The Design of Major Interchanges	Apr 1994	6.2.4
TD 40/94	The Layout of Compact Grade Separated Junctions	July 1994	6.2.5
TD 41/95	Vehicular Access to All Purpose Trunk Roads	Mar 1995	6.2.7
TD 42/95	Geometric design of Major/Minor Priority Junctions	Jan 1995	6.2.6

STANDARDS - TRAFFIC ENGINEERING AND CONTROL (TD SERIES)

Document Reference	Title	Date of Issue	Decimal Reference
TD 45/94	Motorway Incident Detection and Automatic Signalling (MIDAS)	Dec 1994	9.1.2
TD 46/05	Motorway Signalling	Nov 2005	9.1.1
TD 50/04	The Geometric Layout of Signal-Controlled Junctions and Signalised Roundabouts	Nov 2004	6.2.3
TD 51/03	Segregated Left Turn Lanes and Subsidiary Deflection Islands at Roundabouts	Nov 2003	6.3.5
TD 52/04	Traffic Signs to Tourist Attractions and Facilities in England: Tourist Signing – Trunk Roads	Feb 2004	8.2.4
TD 53/05	Traffic Signs to Retail Destinations and Exhibition Centres in England and Wales – Trunk Roads	Feb 2005	8.2.6

OTHER DOCUMENTS IN THE DMRB

Document Reference	Title	Date of Issue	Decimal Reference
Volume 11	Environmental Assessment Amended	Jun 1993 Aug 1994	11.1 - 11.4
	Land Use Amendment No. 1	Jun 1993 Aug 2001	11.3.6
Volume 12	The Traffic Appraisal Manual (TAM)	Aug 1991	12.1.1
	The Application of Traffic Appraisal to Road Schemes Amendment No. 1	May 1996 Nov 1997	12.1.1
	Traffic Appraisal in Urban Areas	May 1996	12.2.1
	Induced Traffic Appraisal	Feb 1997	12.2.2
	The National Trip End Model	Nov 1997	12.2.3

SCOTTISH ADDENDA

A set of Scottish Addenda to the following Departmental Standards and Advice Notes is published separately and is available from The Stationery Office Ltd:

BA 34/90	TA 11/91	TD 11/82
	TA 19/81	TD 18/85
	TA 23/81	
BD 34/90	TA 30/82	TD 23/86
	TA 46/85	TD 25/86
BE 5/75	TA 49/86	TD 30/87
	TA 57/87	TD 34/91
HA 44/91	TA 83/99	
	TA 83/99 Amendment No.1	

ADDITIONAL CURRENT SCOTTISH OFFICE MEMORANDA NOT CONTAINED IN THE DMRB

Additional Current Scottish Office Technical Memoranda is published separately and is available from The Stationery Office Ltd:

SH 6/75	Certification of Highway Design Construction Standards [Incorporating Amendment No. 2 dated February 1987]
SH 3/76	Use of Salt in removing Ice and Snow from Roads
SH 10/82	Scottish Housing Handbook: Part 3
SH 11/82	Health and Safety at Work etc Act 1974. Short Duration Stops on Trunk Roads (including Motorways for Inspection Purposes - Traffic Hazards)
SH 3/91	Trunk Roads Schemes Under Construction - Display Signs

WELSH ADDENDA

A set of Welsh Addenda to the following Departmental Advice Notes is published separately and is available from The Stationery Office Ltd:

TA 70/97

TA 71/97

TA 72/97

TA 73/97

TA 74/05

TA 75/97

TA 76/97

TA 77/97

TA 83/05

NORTHERN IRELAND ADDENDA

A set of Northern Ireland Addenda to the following Departmental Standards and Advice Notes is published separately and is available from The Stationery Office Ltd:

BA 34/90	TA 8/80	TD 17/85
BA 35/90	TA 11/81	TD 18/85
	TA 12/81	TD 25/05
BD 34/90	TA 15/81	TD 26/05
	TA 16/81	TD 33/05
BE 7/04	TA 19/81	
	TA 56/87	
HA 13/81	TA 57/87	
HA 44/91	TA 60/90	
	TA 83/05	