



Technical specification framework for works on the properties in the care of Scottish Ministers and associated collections

Purpose and Scope

This document sets out the internal technical specification framework which will be developed in support of our Conservation Principles and Standards during 2015 /16.

These specifications should be clearly regarded as a standard for the work that Historic Environment Scotland carries out at its own hand rather than specifications for the wider historic environment.

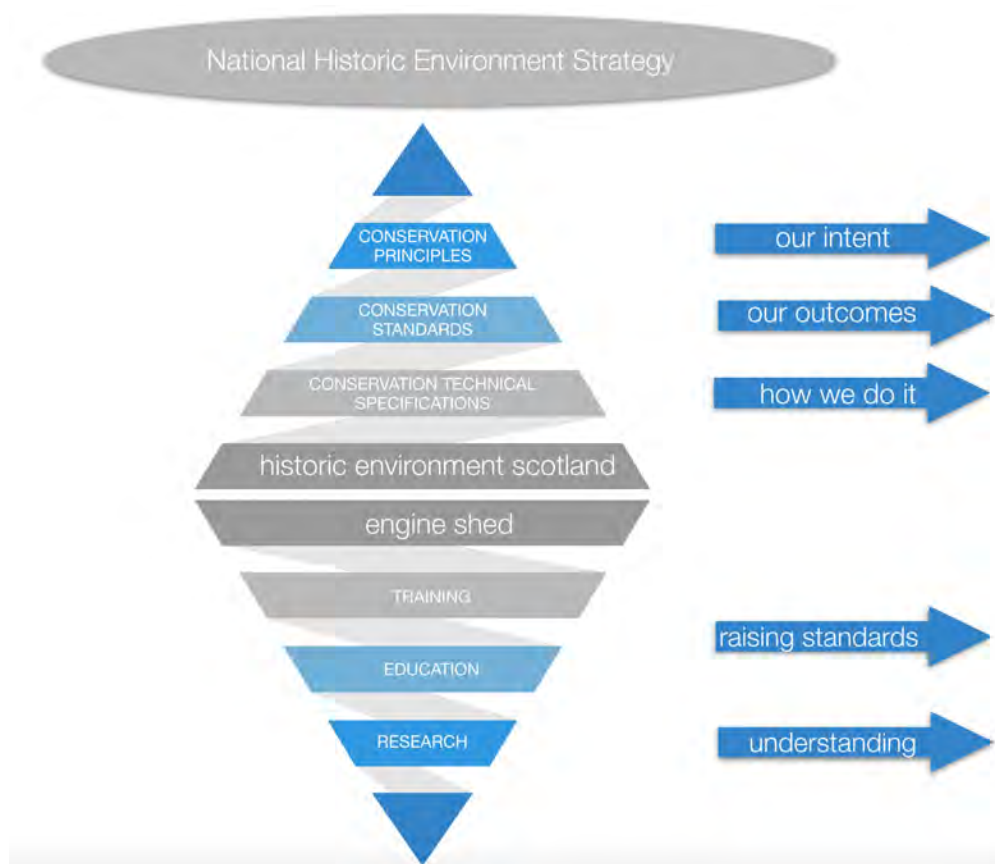
1.0 Purpose

This document outlines the Technical Specifications that will be developed in supporting the work on Scottish Minister's Estates, and where appropriate their collections. This forms part of a suite of guidance developed in support of the Scheme of Delegation to HES to provide assurance that the assets of Ministers are being appropriately cared for. The schedule is not exhaustive and we expect alterations and additions as the project develops.

These Specifications are intended for application internally. Much of the content is equally applicable in other situations but that is not the purpose of this work. Knowledge and understanding does of course move on and Specifications will be updated and altered on an ongoing basis.

2.0 Positioning

Our Principles, Standards, and Specifications are designed to read across to our Technical Research Framework and our Technical Conservation Education framework and course design delivered through the Engine Shed to the broader sector and our own staff to fulfil our broader obligations to raise standards across the broader sector.



3.0 Technical Specification Framework

The majority of our specifications can use or build on the content and structure of the industry-standard National Building Specification (NBS). NBS is built upon the common Uniclass construction classification and, looking to future, has been designed with BIM at its centre. It also matches the UK Government Construction Strategy.

Typical activities in our conservation and facilities management operations are listed here. For some activities, however, we will develop our own specifications to reflect our specialist needs. The format will reflect the NBS style and could in time be available for wider use.

A sample list is provided for reference.

Classification	Specification
Documentation and analysis	Spatial survey
	Recording
	Thermography
	Dendochronology
	XRF / XRD
Site establishment and preparatory works	Siting, ground preparation,
	Welfare
	Disposals
	Storage & security
	Site survey and investigation
	Temporary protection
	Taking down & shoring
Masonry - Stone	Petrographic analysis and stone matching
	Specification of natural stone
	Natural stone rubble walling
	Natural stone/ ashlar walling/ dressings
	Raking out & pointing
	Stone repairs
	Drystone masonry
	Grouting
	Masonry consolidation
	Wallhead capping
Masonry - Fired Earth	Brick walling
	Brick specification
	Conservation and repair
	Terracotta, faience and cast stone
Masonry - Unfired Earth	Mass clay
	Clay & bool
	Wattle & daub
	Rammed earth
	Conservation repair techniques
	Analytical techniques
Groundwork	Excavating and filling
	Retaining walls
	Soil nailing

Classification	Specification
	Underpinning
Limes and Cements - Mortars, Plasters and Renders	Mortar analysis
	Mortar specification
	Mortar analysis
	Plaster specification
	Render analysis
	Render specification
	Limewash
Limes and Cements - Historic / new cement and concrete	Analysis
	Conservation repair techniques
	Cement specification
	Concrete specification
	Lime concrete
	Cathodic protection
Metals - Ferrous	Cast iron specification
	Wrought iron specification
	Mild steel specification
	Corrugated iron specification
	Stainless Steel specification
	Materials identification and analysis
	Conservation and repair of architectural cast iron
	Conservation and repair of architectural wrought iron and steel
	Conservation and repair of corrugated iron
Metals - Non Ferrous	Bronze specification
	Brass specification
	Zinc specification
	Lead specification
	Electro plated metals
	Cast iron specification
	Materials identification and analysis
	Conservation and repair of Bronze, Brass and Copper
	Conservation and repair of Zinc
	Conservation and repair of Lead

Classification	Specification
Finishes - Glass and Glazing	Specification of plain glass
	Specification of stained, painted and etched glass
	Specification of specialist glazing
	Conservation and repair of historic glass and glazing
	Conservation and repair of stained, painted and etched glass
Finishes - Surface Finishes	Analytical techniques for surface finishes
	Specification of traditional linseed oil paints
	Specification of traditional alkyd oil paints
	Specification of traditional distemper and limewash
	Specification of traditional stains and varnishes
	Specification of gilding, bronzing
	Specification of scumbling and graining
	Specification of stencilling
	Specification of paper hanging
	Specification of water based paints
	Specification of synthetic coatings - epoxies, vinyl, petroleum based products
	Conservation and repair of historic finishes
	Cork, Lino and Carpet
Timber	Analytical techniques
	Specification of timber and wood products
	Manufacture of structural timber
	Manufacture of key joinery elements
	Management of wet and dry rot
	Management of pests
	Conservation and repair of historic timber and joinery
	Adaptation of joinery for fire safety and thermal improvement purposes
Roofing	Analytical techniques for natural stone roofing material, clay tiles. thatch
	Specification for natural stone roofing
	Specification for clay tiles
	Specification for thatch
	Timber weatherboarding
	Lead sheet coverings/ flashings

Classification	Specification
	Aluminium strip/ sheet coverings/ flashings
	Copper strip/ sheet coverings/ flashings
	Zinc strip/ sheet coverings/ flashings
	Repair and conservation of chimneys and flues
Waterproofing	Mastic asphalt roofing & damp proofing
	Liquid applied waterproof coatings
	Flexible sheet waterproofing
	Single layer polymeric sheet roof coverings
	Sheet linings for pools & waterways
Linings/ Sheathing/ Dry partitioning	Plasterboard partitions/ ceilings
	Rigid sheet (ply, chipboard etc) linings and panelling
	Timber flooring/ sarking/ linings
	Panel partitions / cubicles
Furniture/ Equipment	Sanitary appliances and fittings
	Fire and safety signage systems
	Bird and vermin control systems
	Portable fire fighting systems
Building fabric sundries	Sundry insulation/ proofing work
	Fire stopping systems
	Door/ Window ironmongery
	Trenches, pipeways and pits for buried engineering services
	Holes, chases, covers and supports for services
Paving/ Planting/ Fencing/ Site furniture	Granular sub-bases and asphalt to roads/ pavings
	Gravel/Slab/ Horonizing/Sett pavings and edgings
	Interlocking brick/ block roads pavings
	Topsoil and growing media
	Seeding/ Turfing
	External planting
	Landscape maintenance
	Green roofs
	Fencing
	Barriers/ Guardrails
	Site furniture

Classification	Specification
	External boardwalks
	Biodiversity protection & enhancement
	Historic planting & layouts
Disposal systems	Rainwater & below-ground & land drainage & lade systems
	Above ground foul drainage systems
	Soakaway, septic tank and sewage treatment units
Services	Hot and cold water supply
	Sprinkler systems
	Heating systems - domestic
	General ventilation - domestic
	Electrical systems
Mechanical and Electrical Systems	

For further information please contact ;

Historic Environment Scotland
 Longmore House
 Edinburgh
 EH9 1SH

Historic Environment Scotland is a registered Scottish Charity.
 Scottish Charity No. SC045925