

10. Cultural Heritage

This chapter assesses the potential impact of the Proposed Scheme on cultural heritage assets including below ground archaeological resources, built heritage and the historic landscape.

The study area extends to 2km from the Proposed Scheme for Listed Buildings (Category A), Gardens and Designed Landscapes, Historic Battlefields and Conservations Areas. A small study area has been assessed for Category B and C listed buildings (1km) and a 500m study area of non-designated assets. Baseline conditions were established through desk-based research, site walkovers, historic maps and archaeological monitoring of ground investigations. A total of 117 cultural heritage assets were identified of which 50 are archaeological sites, 63 represent built heritage and four are designed landscapes.

Slight adverse effects have been identified on three non-designated heritage assets, an unlisted stone boundary wall and three listed buildings during construction. The Proposed Scheme will have a slight adverse effect on an unlisted stone bridge over the Dean Burn during operation due to its removal.

Mitigation is considered for the assets that may be physically affected. It is considered that the likely adverse effects arising from the construction of the Proposed Scheme can be mitigated through a proportionate programme of archaeological investigation within the Proposed Scheme Extents.

There are no heritage assets that are expected to have moderate to significant residual effects following mitigation.

10.1. Introduction

- 10.1.1 This chapter of the ES reports the findings of an assessment of the likely significant effects on cultural heritage (archaeology, historic landscapes, and built heritage) as a result of the proposed A720 Sheriffhall Roundabout Scheme (hereafter referred to as the 'Proposed Scheme').
- 10.1.2 This chapter identifies the location, type and value (heritage significance) of known heritage assets within the Proposed Scheme and the surrounding study area that may be impacted by the Proposed Scheme. Where appropriate, it considers the contribution that the setting of heritage assets makes to their heritage significance. It reports on the predicted impacts of the Proposed Development on cultural heritage and the likely classification and significance of any effects. Where necessary, the chapter identifies and proposes measures to address the potential impacts and effects of the Proposed Scheme upon cultural heritage.
- 10.1.3 Cultural heritage in this context means buildings, monuments, sites, places, areas or landscapes identified as having a degree of significance meriting consideration in planning decisions, because of their heritage interest. These include archaeological remains; historic monuments, historic groups of buildings and/or historic sites; landscapes of historical, cultural or archaeological significance; and any other elements which may contribute to the cultural heritage of the area.
- 10.1.4 This chapter of the ES has been prepared by competent experts with relevant and appropriate experience. The technical lead for the Cultural Heritage assessment has 15 years of relevant work experience and is an associate member of Chartered Institute for Archaeologists. Further details are provided in Appendix 1.2 – Table of Expert Competencies.

10.2. Approach and Methodology

Approach

- 10.2.1 This assessment has been undertaken in accordance with the Design Manual for Roads and Bridges (DMRB) LA 104 Environmental assessment and monitoring (Highways England et al, 2019), DMRB LA 106 Cultural heritage assessment (Highways England et al, 2019). Work was undertaken in accordance with the Chartered Institute for Archaeologists Code of Conduct (CIfA, 2019) and the Standard and Guidance for Historic Environment Desk-based Assessment (CIfA, 2017), and Historic Environment Scotland's Managing Change in the Historic Environment: Setting document (HES, 2016a).
- 10.2.2 In accordance with DMRB LA 104 (Environmental assessment and monitoring) (Highways England, 2019) there are three levels of assessment; Scoping, Simple Assessment and Detailed Assessment. The detail of the assessment depends on the stage in scheme delivery, and nature of information required at a particular stage in the design process. For the purposes of this Environmental Statement, a 'Detailed' Assessment was deemed the most appropriate level of assessment and the results of this are as set out in this chapter.
- 10.2.3 The purpose of this assessment is to:
- Identify the known and potential cultural heritage resource, including both designated and non-designated assets;
 - Establish the value of the affected heritage assets and assess the potential effects of the Proposed Scheme upon the cultural heritage resource of the area; and
 - To determine the need for mitigation measures or enable the need for mitigation to be discounted.
- 10.2.4 Data sources consulted, collected and assessed for this chapter include:
- Historic Environment Scotland (HES) for information of designated sites consisting of World Heritage Sites, scheduled monuments, listed buildings, Conservation Areas, sites recorded on the Inventory of Gardens and Designed Landscapes and those in the Inventory of Historic Battlefields;
 - East Lothian and Midlothian Historic Environment Record (HER);
 - Historic Maps and plans held by the National Library of Scotland;
 - Aerial photographs held by the National Collection of Aerial Photographs (NCAP) archive, Edinburgh; and
 - The previous, DMRB Stage 2 report of the site written by AECOM in 2017 has been consulted for the baseline section. (Appendix 10.1 - Cultural Heritage Extract of DMRB Stage 2 Report)
- 10.2.5 A search of the Edinburgh HER was proposed to be undertaken, however the Edinburgh City Archaeologist confirmed that a data search was not possible as the HER is currently out of commission.

Methodology

Study Area

- 10.2.6 The study area has been determined with reference to DMRB Section 3 Environmental Assessment Techniques Part 2, LA 106 Cultural heritage assessment, paragraphs 3.5-3.7. The study area has been defined in three bands to accurately encompass potential impacts to cultural heritage assets commensurate with their level of significance. The study areas were used to identify both assets which may experience a physical impact from the proposals, and those which may experience an impact upon their setting. Study areas were measured from the farthest extent of the Proposed Scheme.

- 2km study area: For designated assets such as scheduled monuments, listed buildings (Category A), entries on the Inventory of Gardens and Designed Landscapes and Inventory of Historic Battlefields, and conservation area boundaries.
- 1km study area: A 1km buffer was used to identify Category B and C listed buildings and Historic Land use Assessment (HLA) Data.
- 500m study area: For non-designated assets including archaeological sites and findspots, locally significant buildings and locally significant historic landscapes.

10.2.7 In order to place any affected remains in their local context, and to predict the potential for unknown archaeological remains for the Preferred Scheme, archaeological information from a wider surrounding area was also considered. The study area of 500m for non-designated assets was adopted. A wider study area was adopted for designated heritage assets to ensure that designated assets have been identified to a sufficient distance to anticipate or identify any likely setting impacts.

10.2.8 These study areas were agreed in consultation with the City of Edinburgh (CEC) Archaeologist and the East Lothian Council (ELC) Archaeology Service.

Impact Assessment Methodology

10.2.9 The assessment methodology follows guidance set out in DMRB LA 104 Environmental assessment and monitoring, paragraphs 3.8 to 3.9 (Highways England, 2019). The value and magnitude of effects on heritage assets have been judged in accordance with the factors described in DMRB. The magnitude of impact is first assessed without reference to the value of the feature. The findings of this assessment are then cross-referenced with the value rating of the feature to derive the significance of effect that is likely to result from the Proposed Scheme firstly prior to mitigation measures being imposed, then again taking into account the mitigation proposals to establish the residual effect. Both stages are calculated using a matrix, as shown in Table 10-1 'Matrix for Determination of Significance of Effect'.

Table 10-1 Matrix for Determination of Significance of Effect

Environmental value (sensitivity)	Magnitude of Impact (degree of change)				
	No change	Negligible	Minor	Moderate	Major
Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
Medium	Neutral	Neutral or slight	Slight Moderate	Moderate	Moderate or large
Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

Source: *Design Manual for Roads and Bridges, LA 104, Table 3.8.1 Significance Matrix (Highways England, 2019)*

Assigning Value

10.2.10 The value of a structure, area, site or landscape reflects its significance or importance as a historic asset and, therefore, its sensitivity to change. For the purposes of this report, value has been assessed in accordance with DMRB Volume 11, Section 3, Part 4 LA 104 (Highways England et al., 2019). The value of archaeological remains, historic buildings and historic landscapes is assessed by reference to the criteria outlined in DMRB Table 3.2N Environmental value (sensitivity) and descriptions of DMRB LA 104 'Environmental assessment and monitoring'.

10.2.11 HES has outlined a number of principles which contribute to an asset's value, including artistic, archaeological, architectural, historic, traditional, aesthetic, scientific and social value (HES 2016b, Annex 1). Non-designated assets may exhibit equivalent values to those which have been granted statutory protection and have been assessed accordingly.

10.2.12 The significance of any remains that are compromised by poor preservation or truncation is assessed as very low. The significance of any previously unknown remains that may survive within the Proposed Scheme Extent would derive from their evidential value and their potential to contribute to our understanding of past human activity guided by local, regional and national research priorities.

Table 10-2 Environmental value (sensitivity) and descriptions for Cultural Heritage

Value (sensitivity) of receptor	Archaeological Assets	Historic Buildings	Historic Landscape Character
Very High	<ul style="list-style-type: none"> World Heritage Sites (including nominated sites). Assets of acknowledged international importance. Assets that can contribute significantly to acknowledged international research objectives. 	<ul style="list-style-type: none"> Structures inscribed as of universal importance as World Heritage Sites. Other buildings of recognised international importance. 	<ul style="list-style-type: none"> World Heritage Sites inscribed for their historic landscape qualities. Historic landscapes of international value, whether designated or not. Extremely well-preserved historic landscapes with exceptional coherence, time-depth, or other critical factor(s).
High	<ul style="list-style-type: none"> Scheduled Monuments (including proposed sites). Undesignated assets of schedulable quality and importance. Assets that can contribute significantly to acknowledged national research objectives. 	<ul style="list-style-type: none"> Scheduled Monuments with standing remains. Category A listed buildings. Other listed buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the listing grade. Conservation areas containing very important buildings. Undesignated structures of clear national importance 	<ul style="list-style-type: none"> Designated historic landscapes of outstanding interest. Undesignated landscapes of outstanding interest. Undesignated landscapes of high quality and importance, and of demonstrable national value. Well preserved historic landscapes, exhibiting considerable coherence, time-depth or other critical factor(s).
Medium	<ul style="list-style-type: none"> Designated or undesignated assets that contribute to regional research objectives. 	<ul style="list-style-type: none"> Category B listed buildings. Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical associations. Conservation areas containing buildings that contribute significantly to its historic character. Historic Townscape or built-up areas with important historic integrity in their buildings or built settings (e.g. including street furniture etc.). 	<ul style="list-style-type: none"> Designated special historic landscapes. Undesignated historic landscapes that would justify special historic landscape designation, landscapes of regional value. Averagely well-preserved historic landscapes with reasonable coherence, time-depth or other critical factor(s).
Low	<ul style="list-style-type: none"> Designated and undesignated assets of local importance. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives. 	<ul style="list-style-type: none"> Category C listed buildings 'Locally Listed' buildings. Historic (unlisted) buildings of modest quality in their fabric or historical association. Historic Townscape or built-up areas of limited historic integrity in their buildings or built settings (e.g. including street furniture etc.). 	<ul style="list-style-type: none"> Robust undesignated historic landscapes. Historic landscapes with importance to local interest groups. Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations.
Negligible	<ul style="list-style-type: none"> Assets with very little or no surviving archaeological interest. 	<ul style="list-style-type: none"> Buildings of no architectural or historical note; buildings of an intrusive character. 	<ul style="list-style-type: none"> Landscapes with little or no significant historical interest.
Unknown	<ul style="list-style-type: none"> The importance of the resource has not been ascertained. 	<ul style="list-style-type: none"> Buildings with some hidden (i.e. n/a inaccessible) potential for historic significance. 	

Assessing Magnitude of Impact

- 10.2.13 Impacts of the Proposed Scheme upon cultural heritage assets can be positive or negative; direct or indirect; long term or temporary and/or cumulative.
- 10.2.14 Direct impacts are those that arise as straightforward consequences of the Proposed Scheme. For archaeological remains and historic structures, this can mean physical damage to, or physical improvement of, the fabric or the setting of cultural heritage assets. An indirect impact is an impact arising from the Proposed Scheme where the connection between the Proposed Scheme and the impact is complicated, unpredictable or remote.
- 10.2.15 Long-term impacts can be related to either the construction or the operation of the Proposed Scheme. Long-term construction impacts include damage caused by topsoil stripping, geotechnical investigations, hedgerow removal, excavations for borrow pits, drainage and communications, the movement and installation of heavy machinery and plant, and mitigation works in connection with other environmental topics. Long-term operational impacts are those that would arise from the use of the road once built, for example new lighting, noise, dust, vibration, and visual intrusion by traffic or planting.
- 10.2.16 Temporary impacts are mainly related to the construction of the Proposed Scheme. These include noise, dust, visual intrusion and disruption of access during construction. Temporary impacts arising from the operation of the Proposed Scheme may be the result of noise caused by traffic diverted during predictable maintenance or other traffic management operations.
- 10.2.17 Setting is a material consideration in Scottish planning and guidance relating to archaeological remains, historic buildings and designed landscapes and should be assessed as part of the Assessment process. HES have published specific guidance relating to the setting of heritage assets (HES, 2016a). It states that "*Setting is the way the surroundings of a historic asset or place contribute to how it is understood, appreciated and experienced*" (Pg.6). In managing change within the historic environment, HES Policy Statement June 2016 emphasises the need to maintain an appropriate setting for a heritage asset.
- 10.2.18 Cumulative impacts can arise from the multiple effects of the same Proposed Scheme on a single asset, different multiple effects of the Proposed Scheme and other sources on the same asset, or incremental effects arising from a number of small actions over time. Interactions may arise from activities related to other topics, such as drainage schemes, endangered species relocation, sound attenuation measures or access arrangements, taken together with any cultural heritage impacts.
- 10.2.19 The magnitude of a potential impact on the cultural heritage features has been evaluated using the criteria provided in Table 10-3 Guidance Factors in Assigning the Magnitude of Impacts on Heritage Assets 'Guidance Factors in Assigning the Magnitude of Impacts on Heritage Assets' below. These follow the descriptions for magnitude of impact outlined in Table 3.4N of DMRB LA 104 Environmental assessment and monitoring. Impacts can be adverse or beneficial.

Table 10-3 Guidance Factors in Assigning the Magnitude of Impacts on Heritage Assets

Magnitude of impact (change)	Impact
Major	<ul style="list-style-type: none"> Change to most or all key heritage elements, such that the resource is totally altered Comprehensive changes to setting Change to most or all key historic landscape elements, parcels or components; extreme visual effects; gross change of noise or change to sound quality; fundamental changes to use or access; resulting in total change to historic landscape character unit.
Moderate	<ul style="list-style-type: none"> Changes to many key heritage elements, such that the resource is clearly modified Considerable changes to setting that affect the character of the asset Changes to many key historic landscape elements, parcels or components, visual change to many key aspects of the historic landscape, noticeable differences in noise or sound quality, considerable changes to use or access; resulting in moderate changes to historic landscape character.
Minor	<ul style="list-style-type: none"> Changes to key heritage elements, such that the asset is slightly altered Slight changes to setting Changes to few key historic landscape elements, parcels or components, slight visual changes to few aspects of historic landscape, limited changes to noise levels or sound quality; slight changes to use or access: resulting in limited changes to historic landscape character.
Negligible	<ul style="list-style-type: none"> Very minor changes to elements or setting. Very minor changes to key historic landscape elements, parcels or components, virtually unchanged visual effects, very slight changes in noise levels or sound quality; very slight changes to use or access; resulting in a very small change to historic landscape character.
No change	<ul style="list-style-type: none"> No loss or alteration of characteristics, features or elements; no observable impact in either direction. No change to elements, parcels or components, no visual or audible changes; no changes arising from in amenity or community factors

Limitations to the Assessment

- 10.2.20 It is likely that the Proposed Scheme will be procured by means of a Design and Build (D&B) type contract. Under the terms of this contract type, the Contractor will undertake both the detailed design and construction of the Proposed Scheme
- 10.2.21 It is expected that the construction work would take place within the Scheme Extents as shown on Figure 1.2 'The Proposed Scheme'. The Scheme Extents have informed the land take calculations undertaken for assessment purposes in this ES. The land within the Scheme Extents will be purchased under a CPO.
- 10.2.22 It is possible that the Contractor may require construction compounds to be located out with land identified in the CPO. Should construction compounds be located out with the Scheme Extents it will be the responsibility of the Contractor to assess the environmental impacts of the construction compounds and seek to mitigate these where possible.
- 10.2.23 The construction assessment is based on the construction information that is currently available, with advice being provided by the Highway Design Team. As with all construction assessments, the exact details of construction activities would not be fully known before a specific contractor is appointed to complete the works who would determine their exact construction methods and programme during the detailed design stage.
- 10.2.24 As the Proposed Scheme is developed at detailed design any refinements to the design should be subject to environmental review to ensure that the residual effects would not be greater (or significantly different) than those reported in this ES. The findings of any such review should be subject to approval by Transport Scotland (TS) and where necessary opinions should be sought from the statutory bodies.

10.3. Legislative and Policy Framework

National Policy and Legislation

- 10.3.1 There are a number of statutory instruments and policies governing the approach to cultural heritage. The main pieces of legislation are:
- Historic Environment Scotland Act 2014 (Scottish Parliament, 2014);
 - Historic Environment (Amendment) (Scotland) Act 2011 (Scottish Parliament, 2011);
 - Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 (Scottish Parliament, 1997);
 - Roads (Scotland) Act 1984 (as amended by the Environmental Impact Assessment (Scotland) Regulations 1999 and 2006 (Scottish Parliament, 1984), and,
 - Ancient Monuments and Archaeological Areas Act 1979 (UK Statutory Instrument, 1979).
- 10.3.2 The principal elements of policy and guidance comprise:
- Historic Environment Scotland Policy Statement, June 2016 (HES, 2016b);
 - Historic Environment Circular 1. Historic Environment Scotland, 2016 (HES, 2016c);
 - Scottish Planning Policy (SPP) Paragraphs 135-151: Valuing the Historic Environment, 2014 (Scottish Government, 2014a);
 - Our Place in Time - The Historic Environment Strategy for Scotland, 2014 (Scottish Government, 2014b);
 - Planning Advice Note 2/2011 – Planning and Archaeology (Scottish Government, 2011);
 - Planning Advice Note 71 – Conservation Area Management (Scottish Government, 2004); and
 - The 'Managing Change in the Historic Environment' series of guidance notes (HES, 2016).
- 10.3.3 Historic Environment Scotland Policy Statement June 2016 (HES, 2016b), SPP (Scottish Government, 2014a), Historic Environment Circular 1 (HES, 2016c) and HES' Managing Change in the Historic Environment guidance note series are the documents to which planning authorities are directed in their consideration of applications for conservation area consent, listed building consent and their consideration of planning applications affecting the historic environment and the setting of individual elements of the historic environment. The most significant for this appraisal is Managing Change in the Historic Environment: Setting. It sets out the principles that apply to developments which affect the setting of a historic asset. It clarifies what is meant by 'setting' (page 6), considers what contributes to setting (pages 6-7), discusses the stages of assessing the impact of change (pages 8-11), and discusses methods of mitigating impacts and enhancing setting (page 12).
- 10.3.4 Scheduled monuments are of national or international importance and are protected under the Ancient Monuments and Archaeological Areas Act 1979 and the Historic Environment (Amendment) (Scotland) Act 2011.
- 10.3.5 Listing of a building or structure with special architectural or historic interest is provided through legislation and the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997. HES are responsible for listing buildings of historical or architectural merit. Buildings are assigned to one of three categories according to their relative importance. All listed buildings receive equal legal protection, which applies to the interior and exterior of the building, regardless of its category.
- Category A: buildings of national or international importance, either architectural, historical, or fine, little altered examples of a particular period, style or building type.

- Category B: buildings of regional (or more than local) importance, or major examples of a particular period, style or building type, which may have been altered.
- Category C: buildings of local importance, lesser examples of any period, style or building type, as originally constructed or moderately altered, and simple traditional buildings that group well with others in categories A and B.

- 10.3.6 The Historic Environment (Amendment) Scotland Act (2011) made it a statutory duty for HES to compile and maintain an Inventory of Gardens and Designed Landscapes in Scotland. Sites on the inventory of Historic Gardens and Designed Landscapes are of national importance and should be considered during the planning process.
- 10.3.7 Conservation Areas are described by the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 "as areas of special architectural or historic interest, the character of which it is desirable to preserve or enhance". Local planning authorities are required to determine which parts of their area should be safeguarded due to their architectural or historic interest, to ensure that any new development pays respect to or enhances their character.
- 10.3.8 HES compiles the Battlefield Inventory which is the first dedicated designation for nationally important battlefields in Scotland. Additional protection of battlefield features is provided through existing legislation for scheduled monuments, listed buildings, gardens and designed landscapes, and conservation areas through the Historic Environment Scotland Act 2014. HES works closely with planning authorities and relevant public bodies to ensure that Inventory sites are taken into account in their plans, policies and decision-making processes.
- 10.3.9 Most of the historic environment is not covered by statutory designation and therefore is not afforded national protection from development. Protection of these assets of local interest is covered by individual local authorities and recorded on the Historic Environment Record (HER).
- 10.3.10 The importance placed on cultural heritage is set out in Our Place in Time – The Historic Environment Strategy for Scotland, 2014 (Scottish Government, 2014b), which sets out a 10-year strategy for protecting and managing heritage assets.

Regional Policy

South East Scotland Strategic Development Plan (SDP) (SESplan, 2013)

- 10.3.11 Policy 1B – The Spatial Strategy: Development Principles of the SDP is the most relevant to cultural heritage aspects of the Proposed Scheme. Policy 1B sets out protection against significant adverse impacts on the integrity of international and national built or cultural heritage sites in particular World Heritage Sites, Scheduled Ancient Monuments, Listed Buildings, Royal Parks and Sites listed in the Inventory of Gardens and Designed Landscapes. This policy also recognises the importance of conserving and enhancing the natural and built environment to help improve quality of life in local communities and in creating healthy and attractive places to live.

Proposed South East Scotland Strategic Development Plan (SDP2) (SESplan, 2016)

- 10.3.12 The Proposed Strategic Development Plan (SDP2) (SESplan, 2016) sets out the vision for the city region for the next 20 years. When approved it will replace the current Strategic Development Plan and will inform the next set of Local Development Plans.
- 10.3.13 The plan identifies the importance of heritage and culture assets in place making and local identity (Pg. 6) and recommends that sustainable growth should be achieved by "*managing those assets that provide the most benefits and by making well designed, successful places where people thrive*" (Pg. 8).
- 10.3.14 As discussed in Chapter 2 - Need for the Scheme, the Proposed SDP was rejected by the Scottish Ministers on 16 May 2019; however, the proposed plan has still been considered within this ES as a draft plan.

Local Policy

Edinburgh Local Development Plan (City of Edinburgh Council, 2016)

- 10.3.15 TheCEC Local Development Plan (LDP) sets out cultural heritage policies in Section 3; Caring for the Environment. This notes that *“Protection of the historic and natural environment for the benefit of future generations is an important role of the planning system”*.
- 10.3.16 Policy Env 3 – Listed Buildings – Setting
“Development within the curtilage or affecting the setting of a listed building will be permitted only if not detrimental to the architectural character, appearance or historic interest of the building, or to its setting.”
- 10.3.17 Policy Env 6 – Conservation Areas – Development
“Development within a conservation area or affecting its setting will be permitted which:
a) preserves or enhances the special character or appearance of the conservation area and is consistent with the relevant conservation area character appraisal
b) preserves trees, hedges, boundary walls, railings, paving and other features which contribute positively to the character of the area and
c) demonstrates high standards of design and utilises materials appropriate to the historic environment.
Planning applications should be submitted in a sufficiently detailed form for the effect of the development proposal on the character and appearance of the area to be assessed.”
- 10.3.18 Policy Env 7 – Historic Gardens and Designed Landscapes
“Development will only be permitted where there is no detrimental impact on the character of a site recorded in the Inventory of Gardens and Designed Landscapes, adverse effects on its setting or upon component features which contribute to its value. Elsewhere, adverse effects on historic landscape features should be minimised. Restoration of Inventory sites and other historic landscape features is encouraged.”
- 10.3.19 Policy Env 8 – Protection of Important Remains
“Development will not be permitted which would:
a) adversely affect a scheduled monument or other nationally important archaeological remains, or the integrity of their setting
b) damage or destroy non-designated archaeological remains which the Council considers should be preserved in situ.”
- 10.3.20 Policy Env 9 – Development of Sites of Archaeological Significance
“Planning permission will be granted for development on sites of known or suspected archaeological significance if it can be concluded from information derived from a desk-based assessment and, if requested by the Council, a field evaluation, that either:
a) no significant archaeological features are likely to be affected by the development or
b) any significant archaeological features will be preserved in situ and, if necessary, in an appropriate setting with provision for public access and interpretation or

c) the benefits of allowing the proposed development outweigh the importance of preserving the remains in situ. The applicant will then be required to make provision for archaeological excavation, recording, and analysis, and publication of the results before development starts, all to be in accordance with a programme of works agreed with the Council”.

10.3.21 *“The objective of the above policies is to protect and enhance archaeological remains, where possible by preservation in situ in an appropriate setting. In some cases, depending on the nature of the remains and character of the site, the Council may require provision for public access and interpretation as part of the proposed development. When preservation in situ is not possible, recording and/or excavation followed by analysis and publication of the results will be required. Developers should seek early advice from the Council’s Archaeologist for sites where historic remains are known or thought likely to exist. Where a development may affect a scheduled monument or its setting, early contact should be made with Historic Environment Scotland”.*

Midlothian Local Development Plan (Midlothian Council, 2017)

10.3.22 The Midlothian Local Development Plan outlines the cultural heritage policies in section 5.2. There are seven policies relating to cultural heritage.

10.3.23 Policy ENV19 – Conservation Areas

“Within or adjacent to a Conservation Area, development will not be permitted which would have any adverse effect on its character and appearance. In assessing proposals, regard will be had to any relevant Conservation Area Character Appraisal.

In the selection of site, scale, choice of materials and design, new buildings, and extensions and alterations to existing buildings, must preserve or enhance the character and appearance of the Conservation Area.

Demolition to facilitate new development of part or all of a building or structure that makes a positive contribution to a Conservation Area will only be permitted where it can be shown that:

- A. the structural condition of the building is such that it cannot be adapted without material loss to its character to accommodate the proposal; and*
- B. the Conservation Area will be enhanced as a result of the redevelopment of the site; and*
- C. there is no alternative location physically capable of accommodating the proposed development.*

Where demolition of any building or other structure within a Conservation Area is proposed, it must be demonstrated that there are acceptable proposals for the immediate future use of the site which enhance the character or appearance of the Conservation Area.”

10.3.24 Policy ENV20 – Nationally Important Gardens and Designed Landscapes

“Development should protect, and where appropriate enhance, gardens and designed landscapes. Development will not be permitted which would harm the character, appearance and/or setting of a garden or designed landscape as identified in the Inventory of Historic Gardens and Designed Landscapes.”

10.3.25 Policy ENV21 – Nationally Important Historic Battlefields

“Development within a site listed in the Inventory of Historic Battlefields will not be permitted where it would have an adverse effect on the key landscape characteristics and special qualities of the battlefield.”

10.3.26 Policy ENV22 – Listed buildings

“Development will not be permitted which would adversely affect the character or appearance of a listed building, its setting or any feature of special architectural or historic interest.

Development within the curtilage of a listed building or its setting will only be permitted where it complements its special architectural or historical character.

New development used to fund the restoration of a listed building may be acceptable where:

- *A. the proposed development is in the vicinity of the listed building whose restoration it is proposed to enable; and*
- *B. it is demonstrated that such development is the only means of retaining the listed building and other options for funding have been exhausted; and*
- *C. it is demonstrated that the scale of the proposed development represents the minimum necessary to enable the listed building’s conservation and reuse (with independent verification of the development costs*); and*
- *D. the resulting development is of a high-quality design that respects the listed building and its setting.*

Demolition will only be permitted in exceptional circumstances where:

- *A. the proposed demolition is of an addition to the building which is of little architectural or historic value and its removal would result in an improvement to the quality of the original building; or*
- *B. there is an overriding requirement in the public interest to allow the redevelopment of the site, the proposed use cannot physically be accommodated elsewhere, and the listed building is incapable of adaptation without material loss to its character or appearance; or*
- *C. it is demonstrated to the Council's satisfaction that the repair of the building is not economically viable and that every effort has been made to find a party with the willingness and means to acquire and restore the building*; and, in any of these cases;*
- *D. there are approved plans for the future development of the site and agreement has been reached on the timescale for demolition and redevelopment.*

Proposals for extensions and/or alterations to a listed building will only be permitted where their siting, scale, design, materials and detailing do not detract from, and wherever appropriate enhance, the original character of the building.

The change of use of a listed building will only be permitted where it can be shown that the proposed use and any necessary alteration can be achieved without detriment to the character, appearance and setting of the building.

** In circumstances involving proposed demolition or enabling development where financial viability is an issue, it is the responsibility of the applicant/developer to bring to the attention of the Council any issue that they consider relevant. The Council reserves the right to base its decision on satisfactory evidence to that effect through an open book process.”*

10.3.27 Policy ENV23 – Scheduled Monuments

“Development which could have an adverse effect on a scheduled monument, or the integrity of its setting, will not be permitted.”

10.3.28 Policy ENV24 – Other Important Archaeological or Historical Sites

“Development will not be permitted where it could adversely affect an identified regionally or locally important archaeological or historic site, or its setting, unless the applicant can show that:

- *A. there is a public interest to be gained from the proposed development which outweighs the archaeological and historic importance of the site; and*
- *B. there is no alternative location for the proposal; and*

- *C. the proposal has been sited and designed to minimise damage to archaeological and historic interest.”*

10.3.29 Policy ENV25 – Site Assessment, Evaluation and Recording

“Where development could affect an identified site of archaeological importance, the applicant will be required to provide an assessment of the archaeological value of the site and of the likely impact of the proposal on the archaeological resource.

Unless the Council is satisfied to the contrary, such an assessment will require a field evaluation of the site to determine:

- *A. the character and extent of the archaeological remains;*
- *B. the likely impact of the proposed development on the features of archaeological interest; and*
- *C. ways in which the proposed development can be designed to preserve the archaeological interest.*

Where the development is considered to be acceptable and it is not possible to preserve the archaeological resource in situ, the developer will be required to make arrangements for an archaeological investigation.”

10.4. Consultations

- 10.4.1 A review of consultation undertaken as part of the DMRB Stage 1 and Stage 2 assessments is covered in the Stage 2 report (AECOM, 2017). All consultations carried out during the DMRB Stage 2 assessment are summarised in Chapter 7 – Consultation and Scoping and copies of all consultations are included in Appendix 7.1 - Copies of Consultation Responses.
- 10.4.2 Consultation undertaken as part of the Stage 3 process has included discussions with both the CEC Archaeologist and the ELC Archaeology Service in relation to the Proposed Scheme and possible mitigation. The results of the consultation with the CEC Archaeologist confirmed that no new or updated HER data was available for the study area due to the HER system being upgraded. However, it was confirmed that no significant archaeological remains or heritage assets were believed to exist in the small area of the Proposed Scheme Extents that falls within the CEC boundary, with potential remains focusing on mining/industrial assets. Consultation also confirmed that mitigation would initially consist of metal detector survey and field walking which would be followed by evaluation trenching (10%). This data would then be used to formulate a plan for further mitigation, if required.
- 10.4.3 Consultation with the ELC Archaeology Service, who act as archaeological advisors and manage the Historic Environment Record for both East and Midlothian, who act as archaeological advisors and manage the Historic Environment Record for both East and Midlothian, confirmed that areas under the current Sheriffhall Roundabout and surroundings roads were assumed to have been cleared of archaeology as a result of development. However, it was noted that there was the potential for archaeological remains to survive in areas outside of the existing road/embankments, with the area to the south of the roundabout having the most potential based on remains discovered during the construction of the new A7 and the nearby Dobbie's Garden Centre. Evaluation would initially include archaeological trenching (at least 5%) with an additional programme of mitigation works based on the evaluation results.
- 10.4.4 Consultation with the ELC Archaeology Service also confirmed that they did not have concerns about impacts on the setting of designated assets in the immediate surroundings.
- 10.4.5 Additional consultation was also undertaken with HES to confirm that the comments made during previous phases of consultation remained valid.

10.5. Baseline Conditions

- 10.5.1 A study area of 500m from the Proposed Scheme extents has been used in order to record any non-designated heritage assets which may be affected by the development. This study area was 1km and 2km for designated heritage assets as discussed in Paragraph 10.2.6. This baseline section consists of information from the East Lothian HER as well as information collected to support the Stage 2 assessment of the Proposed Scheme which contains a full historic background of the site and is reproduced in Appendix 10.1 'Cultural Heritage Extract of DMRB Stage 2 Report'.
- 10.5.2 A total of 117 assets were identified within the 500m, 1km and 2km study areas, of which 50 are archaeological sites, 63 represent built heritage, and four are designed landscapes. A full list of these sites can be found in the Known Heritage Assets Table (Appendix 10.2 - Known Heritage Assets).

Designated Assets

- 10.5.3 A 2km search area from the furthest extents of the Scheme was used to identify designated assets of high and very high heritage value. This identified:
- 13 scheduled monuments;
 - 20 Category A listed buildings;
 - Four gardens and parks on the Inventory of Gardens and Designed Landscapes; and
 - Six Conservation Areas.
- 10.5.4 There were no World Heritage Sites or Historic Battlefields recorded within the study area.
- 10.5.5 There were also an additional 14 Category B and 16 Category C listed buildings recorded within a 1km study area of the Proposed Scheme.
- 10.5.6 All cultural heritage assets are shown on Figure 10.1 'Location of Cultural Heritage Assets (1:20,000)' and Figure 10.2 'Location of Cultural Heritage Assets (1:8,000)'. MEL references relate to assets recorded on the HER, while Scheduled Monuments, Listed Buildings, Designed Landscapes and Conservation Areas have SM, LB, GDL and CA prefixes respectively.
- 10.5.7 The sections below describe the Cultural Heritage, both designated and non-designated, with assets separated in to one of three categories for ease of reference: Archaeological Remains, Historic Buildings, and Historic Landscapes.

Archaeological Remains

- 10.5.8 A total of 50 archaeological assets have been recorded within the 500m study area and represent remains dating from the prehistoric period onwards. Of these assets, thirteen are designed scheduled monuments due to their archaeological importance.

Prehistoric

- 10.5.9 There are eight scheduled monuments and six non-designated assets of prehistoric date recorded within the study area. The earliest dated asset within the 500m study area is a find of Mesolithic flints recovered from beneath the rampart of the Roman fort (**MEL8404**). The Mesolithic period is characterised by hunter-gatherers exploiting the landscape on a seasonal basis, with landscapes such as that found in the study area providing a good source for resources such as fish and meat. However, the temporary nature of the settlements linked to these transient people means that traces are often limited to scatters of flint due to the intensive agriculture that developed in later periods.

- 10.5.10 The Neolithic period marked a change in settlement and land use with people becoming more sedentary and settling rather than exploiting areas on a seasonal basis. This change is defined by a change in archaeological remains with evidence for settlements, as well as monuments linked to burial and ritual activities recorded, although no remains dating to the Neolithic have been recorded in the 500m study area.
- 10.5.11 The development of settlement continues into the Bronze Age, alongside the introduction bronze and metalworking. Evidence of activity dating to the Bronze Age within the 500m study area is limited to the discovery of a number of items, including a beaker, during excavations at Elginhaugh Roman fort (**MEL8405**).
- 10.5.12 As with earlier periods, the intensive agriculture that has taken place within the study area has no doubt resulted in the loss of archaeological remains, although evidence from the wider landscape suggested that the landscape of the South Esk and North Esk rivers and their confluence was relatively well settled during the Late Bronze Age and Iron Age (Raisen & Rees, 1995).
- 10.5.13 This increase in activity during the Iron Age is also evident with the majority of prehistoric remains within the 500m study area dating to this period. Assets dating to the Iron Age include the designated homestead and pit alignments at Melville Grange (**SM4592**). Other non-designated assets include remains of settlement activity including a cropmarks of a palisaded homestead (**MEL8401**), located to the south-west of the Proposed Scheme. It measured approximately 50m by 40m with an entrance on the south-east side and a ring ditch in the centre of the interior. Also, within the 500m study area were features including possible hut foundations (**MEL8403**), a possible ring-ditch to the north-west of the junction (**MEL9377**), and two pits and a possible ditch (**MEL10901**), suggesting a landscape that was widely settled and farmed by the Iron Age period.
- 10.5.14 A further seven scheduled monuments dating to the prehistoric period were also recorded within the wider 1km and 2km study area. These sites are not dated to a specific phase of the prehistoric period but include a series of prehistoric pit alignments (**SM5704**, **SM5705**, **SM5706**, **SM5729**) at Newton and Castle Steads, and prehistoric ring ditches, probably indicating a settlement (**SM5707**). There are also two prehistoric enclosures (**SM6203**; **SM6335**) representing the remains of enclosed settlements, recorded by cropmarks visible on aerial photography.

Roman

- 10.5.15 There are seven assets of Roman date within the 500m study area, two of which are scheduled monuments. The majority of the Roman remains are linked to Elginhaugh roman fort and include the scheduled fort (**SM6202**) and its associated annex and bathhouse (**SM5684**). Non-designated features linked to the fort include a further annexe of a series of ditches and a post-built gateway (**MEL9897**), and a field system thought to be related to the post-military use of the fort (**MEL9564**). Another possible Roman temporary camp (**MEL8383**) was recorded to the north of the Proposed Scheme, although there are no visible remains. The remaining two Roman assets are both possible roads. A section of a Roman road was identified during excavation along with finds of sherds of course pottery as well as fragments of charcoal and burned daub (**MEL8643**) and a further possible roadway was identified through fragments of cobble metalling during evaluation associated with a ring ditch (**MEL8327**).

Early Medieval and Medieval

- 10.5.16 There are no assets of early medieval date recorded within the study area, but four non-designated assets of medieval date have been recorded within the 500m study area, with a further two designated assets in the wider 2km study area. These assets are linked to settlement and agriculture and include the site of a possible medieval settlement (**MEL5919**), located to the south of Sheriffhall Roundabout. This was identified through field survey, with traces of a settlement recorded along with a range of medieval ceramics including unglazed tile fragments and a single sherd of pottery thought to represent settlement activity. The other three assets of this date are remains of ridge and furrow

recorded in Deanhead Park and Westgate Park, to the east of Sheriffhall Roundabout (**MEL5080**; **MEL5081**) and at Lugton Bogs to the south-west of the Junction (**MEL10014**).

- 10.5.17 The remaining two designed assets in the wider 2km study area are both linked to the religious life of the population and consist Lasswade Old Parish Church originally built in the 13th century (**SM5673**), and the Church of St Nicholas, including the ruins of the choir (**SM1188**).
- 10.5.18 Although assets dating to the medieval period are limited, documentary sources record the name of Sheriffhall as early as the mid-15th century when James Gifford of Sheriffhall is recorded as acting on behalf of his brother¹. Towards the end of the 15th century the same James Gifford, Laird of Sheriffhall, is recorded as being charged with treason for siding with the English, although the estate was not confiscated and was instead passed down to his son (*ibid*).

Post-Medieval

- 10.5.19 There are 10 post-medieval assets recorded within the 500m study area, with two assets that have been dated to the post-medieval and modern period. A single scheduled monument (**SM5441**) dating to the post-medieval period has been recorded in the wider 2km study area. Early mapping of the area suggests that the land within the 500m study area remained in use as agricultural land, with several large parklands in the surrounding landscape including parklands associated with Dalkeith Palace to the south, Drum to the north and Melville Castle to the south-west.
- 10.5.20 Surveys from the 17th century onwards record a large house at Sheriffhall, with the 1682 John Adair map of Midlothian depicting *Shyrifhal*, with an associated small amount of parkland. The Roy Survey of 1752-55 also marks buildings at Sheriffhall, although it does not name the holding, and shows the landscape of the 500m study area being used for agriculture.
- 10.5.21 The dominance of agriculture appears to have continued until the late 18th/early 19th century when coal mining commenced, and the majority of post-medieval archaeological assets are linked to this industrial process. These include colliery remains at Kaim Plantation consisting of three circular coal-filled features (**MEL9063**), along with two mine shafts to the north-east of the junction (**MEL11109**), and a further shaft to the north-west of the junction at Summerside (**001**). The site of a quarry has also been recorded (**MEL11110**).
- 10.5.22 Further post-medieval assets relate to the region's infrastructure, and particularly that of the railway. The Edinburgh and Dalkeith railway runs roughly north-south through the study area (**MEL5225**), along with the Edinburgh to Harwick Branch Line (**MEL9472**). Remains of concrete fittings possibly have also been recorded on this latter railway line (**MEL11111**), although they may date to the modern period.
- 10.5.23 Other assets recorded on historic mapping include a possible trackway (**MEL8346**), a linear trackway (**MEL10899**), a linear bank (**MEL10898**), and a well (**MEL10900**), while a further possible trackway and drainage ditch was identified during excavation along with a section of a field drain (**MEL10902**).
- 10.5.24 The single scheduled monument in the wider 2km study area consist the remains of Newton Church (**SM5441**).
- 10.5.25 The first detailed mapping of the area dates to the mid-19th century with the first edition of Ordnance Survey map, published in 1854. This survey recorded the key assets that survive, or partially survive, in the landscape including Sheriffhall immediately to the east of Old Dalkeith Road, with the complex of buildings including a 'Pigeon House' and 'Lady Well'. Other surrounding farmsteads are also depicted including Summerside Farmhouse (**LB14186**) and Campend House (**LB47735**) to the north-west along the A7, Old Dalkeith Road, while the Hawick Branch of the North British Railway is recorded on the eastern side (**MEL9472**).

¹ <http://www.southedinburgh.net/history/greater-liberton-heritage-project/sheriffhall>

10.5.26 Although land-use is not well recorded, the majority of the land appears to have been used for agriculture with pockets of mining visible with pits and old pits recorded (**001**). The area remained largely unchanged on the second edition survey of 1895 although some of the mine shafts, including that near Summerside (**001**), are recorded as 'old shaft' on this later survey.

Modern

10.5.27 There is one asset that is solely dated to the modern period as well as two assets that are post-medieval or modern. The post-medieval/modern assets consist of a possible quarry site (**MEL11110**) and concrete railway fittings (**MEL11111**), while the modern asset is the site of a trackway recorded on the 3rd edition OS map (**MEL6535**).

Unknown Date

10.5.28 There are nine archaeological assets of unknown date recorded within the 500m study area. There are four sites of enclosures, three recorded as cropmarks (**MEL7046**; **MEL8396**; **MEL8634**) and one as upstanding remains (**MEL10897**). Further assets of unknown date are recorded as cropmarks consisting of a trackway (**MEL5082**), pit alignment and quarry (**MEL10015**) and probable field drains (**MEL8406**). Also recorded in the study area are subsurface remains of ditch sections with cobbles present at its base (**MEL10903**) and a well head recorded at Melville Castle (**MEL5636**).

Historic Buildings

10.5.29 There are 63 historic buildings within the study area, 13 of which fall within the 500m study area. The 13 that fall within the 500m study area include six undesignated assets and seven listed buildings, while elements of one Conservation Area also lie within the 500m area.

10.5.30 The built heritage of the area is dominated by structures dating to the post-medieval period, with the majority of the buildings recorded representing vernacular architecture including houses, farmhouses, and workers' cottages. Other elements of built heritage include ecclesiastical structures as well as large houses and their associated gate lodges and walls, and structures linked to the area's infrastructure including road and rail bridges.

10.5.31 Agricultural buildings represent the most dominant style of built heritage within the 500m study area, with a number concentrated around Sheriffhall Roundabout. These include Summerside Farm with associated workers' cottages (**LB14186**) and Sheriffhall Farm (**LB14183**), with its associated dovecot (**LB19674**), all of which are Category B listed. This latter feature is the last remaining element of the earlier Jacobean manor house of the Gifford family, and originally formed a stair tower (Watson 1941, 213). Although the date of the feature is uncertain, documentary evidence notes that James Gifford had a castle or Fortalice at Sheriffhall in the late 16th century (Ross 1899, 158). Restoration work undertaken on Sheriffhall Farm in the 1930s also revealed masonry suggesting that the building had originally been an outbuilding for the manor house, while evidence of stone from an earlier structure was also evident in the byre (Watson 1941, 213).

10.5.32 Other designated built heritage assets in the 500m study area include the Category C listed Campend House (**LB7735**), and the Category B listed Elginhaugh Farm and workers' cottages (**LB12941**).

10.5.33 The final two designated assets within the 500m study area are both linked to the designed landscapes. The first is the Category A listed King's Gate and wall, along with the gate lodge located within the walls on the western side of Dalkeith Park (**LB1437**). The second is the Category B listed east lodge of Meville Castle (**LB12934**).

10.5.34 Non-designated assets within the 500m study area are largely linked to the infrastructure of the area and include a railway bridge (**MEL5216**) and a road bridge (**003**), as well as features linked to the railway including a linesman's hut (**MEL9473**), and a storage box structure (**MEL11112**).

- 10.5.35 The remaining two non-designated built heritage assets consist of a farmhouse and associated buildings known as Sheriffhall Mains (**MEL5775**), and a section of estate boundary wall surviving on the Dean Burn (**002**).
- 10.5.36 The designated assets that form the built heritage elements of the 1km and 2km study areas follow the same pattern as those encountered within the 500m study area and include agricultural buildings, such as farms and workers' houses, as well as examples of polite houses that form elements of the designed landscape. Examples of this latter form include the Category A listed Dalkeith House (**LB1411**) with its associated stables and coachhouse (**LB1441**), and chapel (**LB1441**). Further examples of this form also include Melville Castle to the south-west (**LB7394**) and Drum to the north-west (**LB28052**), both of which are also Category A listed buildings.
- 10.5.37 The remaining listed buildings within the 1km and 2km study areas largely represent farms and domestic houses, with a large concentration to the south-east in Dalkeith. Many are located in the old town and fall within the Eskbank and Ironmills Conservation Area (**CA348**) and the urban fringe for the Dalkeith House and Park Conservation Area (**CA347**).
- 10.5.38 Further details relating to the built heritage can be found in Appendix 10.2 - Known Heritage Assets.

Historic Landscapes

- 10.5.39 Four historic landscapes have been identified within the 2km study area, all of which are landscapes that are recorded on the Inventory of Gardens and Designed Landscapes, and two of these fall within the 500m study area. The two that fall within the 500m study area are Dalkeith House which is located to the south-east of the proposed development (**GDL00128**), and Melville Castle which is located to the south-west (**GDL00282**).
- 10.5.40 The Dalkeith House estate contains Dalkeith House as well as the ruins of Dalkeith Castle which was the stronghold of the Douglases of Dalkeith. There are some designed views within the estate, particularly from the house south, towards the Pentland Hills. The estate contains a large number of listed structures including the Category A listed Dalkeith House (**LB1411**) and Montagu Bridge (**LB1440**), designed by Robert Adam. Rich in historical association, the design composition of architecture, gardens, parkland, river terraces and woodland is still attractive today and provides a valuable wildlife refuge, as well as the setting for a Category A listed building.
- 10.5.41 Melville Castle estate is located on the northern slope of the River Esk North valley. The lawns, parkland and woodland still provide the setting for a Category A listed house, but the 18th century design has been badly eroded. The setting of the estate is defined by its boundaries. The surrounding landscape has been eroded by later mining activity and encroaching commercial and residential development which do not contribute towards the understanding of the asset.
- 10.5.42 The remaining two designed landscapes that fall within the wider 2km study area are Drum Estate to the north-west of the Proposed Scheme (**GDL00356**) and Newbattle Abbey to the south-east (**GDL00295**).
- 10.5.43 The Drum forms the focus of the Drum Estate and is a good example of William Adam's formal style of landscape design carried out in the 18th century with the structure still relatively intact today. The parkland avenues provide an impressive setting for the category A listed Drum House, and with key views to the north-west.
- 10.5.44 Newbattle Abbey is set in the valley of the River South Esk, at the confluence of a number of tributaries. This multi-period landscape was an early monastic site developed as a country house after the Reformation, set within a formal landscape from the mid-16th century. This formed the basis of an 18th century landscape park, extended further in the 19th century, and developed with formal gardens, an extensive circuit of picturesque walks and rides.

Walkover Survey

- 10.5.45 An archaeological walkover survey of the land within the scheme extents (see Figure 10.2 'Location of Cultural Heritage Assets (1:8,000)') was undertaken on the 4th February 2019 to examine previously recorded heritage assets as well as assess the site for previously unrecorded assets. The weather conditions were fine and dry, with clear ground conditions.
- 10.5.46 A number of new assets were recorded during the walkover survey, with most linked to land management and infrastructure of the area. To the south-west of the existing junction a short section of estate wall was observed adjacent to the Dean Burn (**002**) (Appendix 10.3 - Site Photography (Plate 10.1) and Figure 10.2 'Location of Cultural Heritage Assets (1:8,000)'). This well constructed wall survives up to c. 1.5m in height and is topped with roughed out coping stones.
- 10.5.47 Further east along the Dean Burn and to the south east of the existing Sheriffhall Roundabout, a bridge was observed carrying the A6106 South (Old Dalkeith Road) over the Dean Burn (**003**) (Photo 10.2). This bridge appears to be relatively early, with the existing road running surface some height above the original bridge height as a result of later road improvements.
- 10.5.48 All fields examined were under grass or had not been subject to ploughing, with the exception of one. This field located between the A7 South and the A6106 South had been recently ploughed and large quantities of 19th and early 20th century pottery and glass was observed in the plough soil.
- 10.5.49 Traces of a possible trackway running along a ridge were also observed immediately to the north of the existing junction (**004**). This track is marked on the first edition Ordnance Survey plan as "The Kaim ancient way" and seems to follow the ridge of high ground before continuing north where it is recorded on the HER as asset MEL 8346. The ridge on which the track sits is natural glacial ridge known as an esker.

Aerial Photographs

- 10.5.50 A review of aerial photographs held by the National Collection of Aerial Photographs (NCAP) archive in Edinburgh was undertaken on the 14th February 2019, during which the following images, in Table 10-4 'Aerial Photographs viewed at the NCAP Archive, Edinburgh', were viewed.

Table 10-4 Aerial Photographs viewed at the NCAP Archive, Edinburgh

Sortie	Frame	Date	Vertical/Oblique
106G/Scot/UK/0011	6088-6092	15/04/1946	V
541/A/0393	3315-3319	18/05/1948	V
541/A/0393	4339-4341	18/05/1948	V
OS/75/0292	40-45 & 68-72	28/06/1975	V
OS/88/0254	9, 10, 37 & 38	15/09/1988	V
ASS/61089	174-176	05/05/1989	V
OS/95/0694	014-020 & 034-036 & 005-008	15/04/1992	V

- 10.5.51 No new features were observed on the images reviewed, although a number of features previously recorded appeared to be visible. These included the old trackway along the ridge (**MEL8346**), while a circular feature possibly relating to the mineshaft south of Summerside was also visible on a number of the early flights, and up to sortie OS/75/0292. However, it appears to be under the line of the A720 Edinburgh City Bypass ('the A720') on sortie OS/88/0254 which shows the A720 under construction.

- 10.5.52 The images taken as part of sortie OS/88/0254 also show the location of construction compounds or areas of works associated with the construction of the Sheriffhall roundabout. This includes significant disturbance to the field on the north-east of the roundabout where the A6106 North (Millerhill Road) was realigned during construction of the roundabout, as well as land directly to the west of Sheriffhall farm which is currently under embankment.
- 10.5.53 Possible traces of an earlier boundary leading from the A6106 South to Sheriffhall Farm were also identified on aerial photos taken as part of sorties OS/75/0292 and ASS/61089. This linear boundary is depicted on the first edition Ordnance Survey plan as a line of tress, but the width and slightly raised nature of the feature suggests that it might represent an earlier entrance track or road joining Sheriffhall to A6106 South.

Ground Investigation Monitoring

- 10.5.54 Archaeological monitoring of Ground Investigation works undertaken between March and June 2018 by AOC Archaeology Group (AOC Archaeology Group 2018). Although this work covered all trial holes, the main focus was a series of large exploration areas, named Mine Entry Investigation Areas (MEIA), stripped in an attempt to locate former mine shafts.
- 10.5.55 Six of the eight MEIAs contained no archaeological features, although two areas contained possible mine shafts.
- 10.5.56 No additional archaeological features were recorded, with features revealed during stripping limited to agricultural features and services. The works did, however, identify extensive disturbance resulting from the construction of the A720 located to the south of the A720 and to the east of the Borders Railway, see Figure 10.3 'Areas of Previous Disturbance and GI Works Monitored by an Archaeologist'.

Potential for previously unrecorded archaeology

Prehistoric

- 10.5.57 There are significant remains dating to the prehistoric period within the 500m and 2km study areas. These include Melville Grange, a scheduled palisaded homestead (**SM4592**), as well as enclosures (**SM6203** and **SM6335**), pit alignments (**SM5704**, **SM5705**, **SM5706** and **SM5729**) and ring ditches (**SM5707**), indicating possible settlements, as well as a further non-designated palisaded site (**MEL8401**) and remains of hut foundations at the site of the Roman fort (**MEL8403**). There are also several other features and find spots recorded around the study area. This evidence indicates that the landscape was in use during the prehistoric with evidence across the study area and thus it is possible for further evidence of settlement activity to remain in the area. There is also potential for palaeo-environmental remains to survive to the southern side of the western road alignment of the Proposed Scheme, around Dean Burn waterway. The potential for further previously unrecorded remains of prehistoric date is medium. Should any remains be identified they would be considered to be of low sensitivity (heritage value) due to the relatively large quantities of prehistoric material recorded in the area, and the limited additional information additional prehistoric finds would add to the archaeological record.

Roman

- 10.5.58 The Roman period is represented by military presence consisting of the scheduled Elginhaugh Fort (**SM5684**) and associated annex (**SM8414**) as well as temporary camps (**SM6202** and **MEL8383**) and associated field systems (**MEL9564**) and possible roads (**MEL8643**). The highest concentration of remains lies to the south of the Proposed Scheme, however the possible camp to the north of the Proposed Scheme indicates an extension of the Roman landscape across the study area and highlights that evidence of this occupation may survive around the site. The potential for previously unrecorded archaeological remains of this date are therefore medium. Should any remains be identified they would be considered to be of low significance (heritage value) due to the relatively large quantities

of Roman material recorded in the area, and the limited additional information additional roman finds would add to the archaeological record.

Early Medieval to Medieval

10.5.59 There are two upstanding buildings of medieval date, a scheduled church (**SM5673**) and a Category A listed church (**LB24377**). There are also remains of a possible medieval settlement within the 500m study area to the south of the Proposed Scheme (**MEL5919**) as well as several sites of ridge and furrow to the east and south-west of the Proposed Scheme (**MEL5080** and **MEL5081**). The evidence indicates the landscape was predominately agricultural during the medieval period and any remains of this date found are likely to be associated with these practices. The potential for further remains of this date are low. Should any remains be identified they would be considered to be of low sensitivity (heritage value).

Post-Medieval

10.5.60 The post-medieval assets within the study area mostly consist of upstanding buildings and features recorded on historic mapping. Due to the well-recorded nature of this period, the potential for previously unrecorded remains of this date being recorded are low. Should any remains be identified they would be considered to be of low sensitivity (heritage value).

10.6. Potential Impacts

10.6.1 An effect is defined as a change resulting from a development on the sensitivity of a heritage asset. The following could have effects on heritage assets:

- Physical impacts upon archaeological features and historic landscapes; and
- Changes to the setting of heritage assets that affect their character and importance.

10.6.2 The cultural heritage baseline of the study area has been assessed against the Proposed Scheme to determine likely significant effects. Only those heritage assets which have the potential to be affected, either by physical impacts or through changes to setting, are considered below. All other assets are considered to be unaffected by the Proposed Scheme.

Construction

Archaeological Remains

10.6.3 There are potential physical impacts to the following ten assets: a group of archaeological remains at Sheriffhall (**MEL8350**, **MEL10899**, **MEL10900**), oval enclosure cropmarks (**MEL8396**); possible trackway (**MEL6535**); enclosure cropmarks (**MEL8634**); railway remains (**MEL5225** and **MEL9472**); cropmarks of a palisaded enclosure (**MEL8401**) and a pit alignment (**MEL10015**); cropmarks of ridge and furrow (**MEL10014**); Old mine shaft (001); and, Elginhaugh Roman Fort (**SM5684**). These impacts are further discussed below.

Group of archaeological remains at Sheriffhall (**MEL8350**, **MEL10899**, **MEL10900**)

10.6.4 The complex of standing buildings at Sheriffhall Farmhouse and farmsteading contain remains dating to the late-16th to early-17th centuries, possibly associated with the Jacobean mansion house that used to be located at Sheriffhall. Part of the Jacobean mansion still survives partially as a Category B listed dovecot (asset **LB19674** discussed in Section 10.6.24). Twelve archaeological evaluation trenches were excavated on land to the south of the building complex in advance of the construction of the railway in 2012 (**EEL883**). The evaluation revealed remains of an

undated rectilinear enclosure (MEL10897), prehistoric pits (MEL10901), a post-medieval trackway (MEL10902), a 19th century trackway (MEL10899), a 19th century well (MEL10900), and a number of sections of an undated ditch with cobbles in its base (MEL10903).

- 10.6.5 The event polygon recorded on the East Lothian HER for the archaeological evaluation trenching (EEL883) extends into the redline boundary of the Proposed Scheme to the south of Sheriffhall farmstead where a suds pond is proposed. The recorded remains of a 19th century trackway (MEL10899) and well (MEL10900) extend into this area. Analysis of historical GoogleEarth™ imagery shows that some borrow pits for the construction of the railway were located within the evaluated area, but the borrow pits do not appear to extend as far as the area within the redline boundary. Therefore, there remains the potential for the Proposed Scheme to impact upon buried archaeological remains from the prehistoric and post-medieval periods in the area to the south of Sheriffhall farmstead, as well as remains potentially associated with the former Jacobean mansion house, such as access, parkland and garden features. These potential remains are considered to be of low sensitivity (heritage value). The Proposed Scheme would result in the partial loss of archaeological features that form part of a wider area of archaeological assets located to the south of Sheriffhall farmstead. The partial loss will result in a moderate magnitude of impact, to assets of low value. This results in a **slight adverse** effect.

Oval Enclosure Cropmarks (MEL8396)

- 10.6.6 Cropmarks of an oval enclosure of unknown date measuring 30m by 25m overall are located within the site of the current roundabout, which is believed to have destroyed the feature. Therefore, there this results in a **neutral** effect on the asset.

Possible Trackway (MEL6535)

- 10.6.7 The site of a possible trackway, recorded on the 3rd edition OS map, is located just west of the north-eastern exit to the junction, and is believed to continue into the Proposed Scheme Any remains that might survive have limited archaeological and historic significance for their potential to provide evidence linked to trackway. As a recent type of asset common in the Scottish landscape that contain very little archaeological value, it is considered to be of very low heritage value, resulting in an assignment of a negligible sensitivity (heritage value).
- 10.6.8 The Proposed Scheme would result in the partial loss of all this feature which continues outside of the proposed development site, and therefore the magnitude of impact is considered to be minor. On assets of negligible value this will result in a **slight adverse** effect.

Enclosure Cropmarks (MEL8634)

- 10.6.9 Cropmarks of an enclosure at Sheriffhall are located to the west of the south-eastern exit road from the junction, located on the site of proposed SuDs pond. The enclosure has archaeological and historic significance for its potential to provide evidence linked to the date and form of the feature which is currently undated. As an undated cropmark it currently represents a type of asset common in the Scottish landscape that contain limited archaeological value, resulting in an assignment of a low sensitivity (heritage value).
- 10.6.10 The construction of the Proposed Scheme would physically impact this enclosure, with the complete loss of the feature (assuming its full extents are within the Proposed Scheme Extents). The magnitude of impact would be major, which to an asset of low sensitivity would result in a **slight adverse** effect.

Railway Remains (MEL5225 and MEL9472)

- 10.6.11 The route of the former Edinburgh to Hawick Branch Railway (Millerhill Station to Dalhousie Station Section) and the Edinburgh and Dalkeith Railway is located on the eastern edge of the proposed development. The line survives as a partial earthwork and has archaeological and historic significance for its potential to provide evidence linked to the development of the railways in this part of Scotland. As an asset that is common and well documented in the Scottish landscape, and that has limited archaeological and historical value, it is of low sensitivity (heritage value).
- 10.6.12 As a railway line, the asset represents a long linear feature with only a small element falling into the proposed development site. Furthermore, the route of the railway in this area follows the line of the current road alignment, and any remains that would be impacted will be limited to land take for embankment construction, with most remains of the line in this area already destroyed by the construction of the current A720. As a result of this limited loss the magnitude of impact is considered to be negligible, which to an asset of low sensitivity result in a **slight adverse** effect.

Cropmarks of a Palisaded Enclosure (MEL8401) and a Pit Alignment (MEL10015)

- 10.6.13 The remains of a possible palisaded enclosure (MEL8401) and a pit alignment (MEL10015) have been recorded as a cropmark to the south-west of the proposed development. Although not visible as earthworks, any remains that might survive will have archaeological and historic significance for their potential to provide evidence linked to date of the asset as well as the development of settlement activity and land-use in the local area. As currently undated assets that are relatively common in the Scottish landscape, they are of low sensitivity (heritage value) level.
- 10.6.14 Small elements of both assets fall within an area of narrow widening on the line of the A7. This road was constructed in the late 20th century/early 21st century and as a result element of these assets have already been disturbed in the route corridor. As a result, the magnitude of impact is minor. On assets of low value this will result in a **slight adverse** effect.

Cropmarks of Ridge and Furrow (MEL10014)

- 10.6.15 Traces of ridge and furrow cultivation have been recorded as a cropmark to the south-west of the proposed development. Any remains that might survive will have limited evidential and historical significance for their potential to provide evidence linked to medieval farming and cultivation as well as the development of the landscape. As an asset that is common in the Scottish landscape, and which survives in better condition as earthworks elsewhere, they are considered to be of negligible sensitivity (heritage value) level.
- 10.6.16 Small elements of the cropmark fall within an area of narrow widening on the line of the A7. This road was constructed in the late 20th century/early 21st century and, as a result, elements of the ridge and furrow has already been disturbed in the route corridor. As a result, the magnitude of impact is negligible. On assets of negligible value this will result in a **neutral** effect.

Old Mine Shaft (001)

- 10.6.17 The site of a mine shaft identified on Ordnance Survey mapping is believed to be located under the existing A720 (001). As a result, it is assumed that this asset has been destroyed and no further effects are predicted. As there is no change predicted on an asset of negligible sensitivity, this results in a **neutral** effect.

Elginhaugh Roman Fort (SM5684)

- 10.6.18 Potential impacts on the scheduled Elginhaugh Roman Fort (SM5684) were highlighted by HES during early consultation. However, as the asset falls outside of the Proposed Scheme Extents no physical impacts are predicted.

Furthermore, the site survives as sub-surface features with all surface remains ploughed out. Originally it would have represented a significant complex commanding views over the surrounding landscape, although the key reason for the location of the fort seems to have been to control traffic on Dere Street crossing the River North Esk to the south. Therefore, the setting of the fort, overlooking the River North Esk, contributes to its significance. The relationship between the fort and its landscape setting overlooking Dere Street will not be altered by the Proposed Scheme, and therefore no impacts on setting are predicted. As there is no change predicated on an asset of low sensitivity, this results in a **neutral** effect.

Historic Buildings

10.6.19 The Proposed Scheme also has the potential to impact on five built heritage assets: stone estate boundary wall (002); bridge carrying Old Dalkeith Road (003); Sheriffhall Farm and Dovecot (LB14183 and LB19674); Summerside Farm (LB14186); and, Campend House and Steadings (LB47735 and LB47736). These impacts are further discussed below.

Stone Estate Boundary Wall (002)

10.6.20 A section of a stone boundary wall was recorded during the archaeological walkover survey near the Dean Burn (002). This substantial wall appears to be an estate boundary and also lies on the parish boundary formed by the Dean Burn. The wall is of historical significance linked to its role in the demarcation of an estate and the parish and has some limited architectural and historic significance as it represents the only surviving wall of this style in the immediate environs of the proposed development site. As a non-designated asset that is relatively common in the Scottish landscape it considered to be of negligible sensitivity (heritage value).

10.6.21 The Proposed Scheme will result in the total loss of sections the wall during the construction period. The removed sections will be rebuilt following completion of site works. As a result, the magnitude of impact is moderate. On assets of negligible value this will result in a **slight adverse** effect.

Bridge carrying Old Dalkeith Road (003)

10.6.22 A bridge carrying the A6106 South over the Dean Burn was recorded during the walkover survey (003). The bridge appears to date to at least the mid-19th century and is recorded on the first edition Ordnance Survey plan, and the bridge seems to have survived various stages of road upgrade with the modern road deck much higher than the original bridge. The bridge is of historical significance linked to its role in the earlier road infrastructure of the area and has some limited architectural significance as it represents an early bridge surviving in use. However, as a non-designated asset that is relatively common in the Scottish landscape it considered to be of low sensitivity (heritage value).

10.6.23 The proposed development will result in the total loss of the bridge. As a result, the magnitude of impact is major. On assets of low value this will result in a **slight adverse** effect.

Sheriffhall Farm and Dovecot (LB14183 and LB19674)

10.6.24 Sheriffhall Farm and Dovecot are Category B listed buildings located between 100m and 200m south-east of the proposed development. The listing designation covers the farmstead, walled garden, farmhouse and dovecot, now labelled as 'Old Sheriffhall Farmhouse' on modern OS maps. 'Sherriffhall House', to the north of the 'Old Sheriffhall Farmhouse' complex does not form part of the listing.

10.6.25 The listed buildings at 'Old Sheriffhall Farmhouse' are of historical and architectural significance, with the farmhouse possessing aesthetic and historic value and as example of an 18th century, two storey, rubble-built house with an

adjoining walled garden and an associated linear range of farm buildings to its north-west side. The latter are no longer in use as a farmstead. The dovecot also possesses aesthetic and historical value, as well as evidential value as a remnant of the former Jacobean Sheriffhall Manor House, adapted for a new use after the remainder of that building was demolished in 1830. The structure of the Dovecot was originally the stair tower of the Jacobean Manor House, while the farmstead buildings also contain earlier masonry indicating that they may have originally formed outbuildings to the Jacobean manor house. Prior to the Jacobean manor house, documentary references also point to an earlier building on the site, which was set in the lands that were originally held by the Abbey of Dunfermline and later passed to the Buccleuch family, via the Giffords, in 1642. This continuity of settlement and interplay between potential archaeological remains, ruined and repurposed buildings, and standing buildings, forms part of the associative setting of the listed buildings contributing to their significance. The later 'Sheriffhall House' to the north of the complex, is shown on the first edition OS map and forms part of this associated setting, as part of the continued development of this land parcel.

- 10.6.26 The 'Old Sheriffhall Farmhouse' complex is considered to represent a well-preserved example of a pre-improvement farmstead. The buildings that form the complex are of medium sensitivity (heritage value) due to their Category B listed status and their historical and architectural value, including their development and reuse over time.
- 10.6.27 The rural farmland setting of the buildings has been considerably altered during the 20th and early 21st century through the construction of the A720 and Sheriffhall Roundabout immediately to the north and north-west, and the construction of the Borders Railway to the east of the building complex, which runs in proximity to the dovecot. Furthermore, the A6106 South, which lies to the south-west of the complex, has been widened and realigned over the last 60 years. The development of the A720 has severed the complex from the parish of Newton, in which it was located, while the addition of the railway has partially severed it from Dalkeith to the south, leaving the building complex set within a roughly-triangular land parcel, physically and visually severed from its wider landscape setting and with traffic and rail noise to all sides. This does not reflect its original farmland setting, or the setting of the former Jacobean and earlier manor house on the site which would have had a pleasant, minor parkland garden. This element of the setting detracts from the asset's significance by eroding understanding of the former relationship between the farm and its farmland and between the buildings and their associated parish and grounds. In closer proximity to the listed buildings, the walled garden sits to the south-west side of the farmhouse and forms part of its setting, as well as being part of the listing. The farmhouse's front elevation is to the south-east, with the farmstead range to its rear, north-west side, and the dovecot to its north-east side. Access to the complex is via a single-width trackway from the A6106 South to the west. Despite the encroachments of infrastructure development, the building complex retains strong group value and historic value with each element of the complex contributing to the setting and significance of the other, within its now-constrained land parcel. The key building within the complex is the dovecot which elevates the historic and aesthetic value of the complex beyond the level of a simple, common, farmstead, to a complex of note in architectural and historic terms.
- 10.6.28 The farmhouse, steading and dovecot are currently screened from Sheriffhall Roundabout by a pocket of mature woodland to the north-west and mature trees on its access road and around the later, non-designated, Sheriffhall House. There is no screening to the south-east side of the complex, between the principal elevation of the farmhouse and the Borders Railway, truncates views from that side of the building. Historic OS maps show footpaths and some linear tree-planted rows in this area that are no longer present.
- 10.6.29 In the vicinity of the 'Old Sheriffhall Farmhouse' complex, the Proposed Development will include the creation of an embanked slip to the north of 'Sheriffhall House', the elevation of the A720 on embankment and overbridge, to the same side, the retention of the woodland screening to the north-west of the complex as far as possible, the partial realignment of the access road to the 'Old Sheriffhall Farmhouse' complex and the enhancement of this tree-lined

lane, and the creation of a suds pond to the south of the complex with screening planting to its north side. With the exception of the suds pond, the proposed alterations take place within areas already altered considerably with the introduction of intrusive infrastructure developments. The alterations bring this detracting form of development physically closer to the listed building and more prominent in its surroundings, but this does not result in considerable changes to the character of the asset, which is already much altered through this same type of development. The introduction of the suds pond to the south of the farmhouse further constricts the land parcel that the listed buildings occupy, but it is otherwise not considered to adversely alter the asset's setting.

- 10.6.30 The construction of the Proposed Scheme is assessed as resulting in a minor magnitude of impact to these listed buildings of medium heritage value, leading to a **slight adverse** effect.

Summerside Farm (LB14186)

- 10.6.31 Summerside Farmhouse, stables and cottage range are late 18th century, and a Category B listed building. The buildings possess architectural and historic significance as examples of a post-medieval farmhouse and farmstead. The house is a two-storey, three-bay building of rubble with roughly tooled dressings and a harled south gable. The drawing room wing was added in the early 19th century and there have been two subsequent additions. The range of cottages and stables are located at right angles to the house, consisting of a single storey and a loft range, with two cart openings, and a two-stall stable and tack room. The cottage has been gutted and the windows are blocked up. They are of medium sensitivity (heritage value) due to their Category B listed status and their historical and architectural value.

- 10.6.32 The house and outbuildings are set within an area of immediate grounds, bounded by a stone wall and vegetation. This screens views of Sheriffhall Roundabout and the associated road network from the house. Surrounding this is an area of agricultural fields to the south and west with an additional cottage and outbuildings just north and west of the listed Summerside structures. The complex is partially severed from its surrounding fields through the construction of the A720 in the 1980s. The buildings are located close to the proposed route but will be screened from any works by existing vegetation, and the proposed development will not result in any additional severance of the complex from its surrounding fields. As a result, the magnitude of impact is considered to be negligible on these assets of medium heritage value. This results in a **slight adverse** effect.

Campend House and Steadings (LB47735 and LB47736)

- 10.6.33 Campend House and Steadings lie to the north of the junction and are both Category C listed buildings. They both possess architectural and historical significance as examples of an early 19th century farmhouse and steading. The two buildings representing a well-preserved example of improvement farm buildings with architectural elements including a crow-stepped gable to the steading. They also possess historic significance as well-preserved post-medieval farm buildings, and the name 'Campend' is also related to the potential Roman fort thought to be located near the site. They are of low sensitivity (heritage value) due to their Category C listed status and their historical and architectural value

- 10.6.34 The setting of the buildings consists of a walled garden and the nearby farm out-buildings and workers' cottages which are built using similar stone, and in a similar crow-stepped style. The construction of the northern end of the Proposed Scheme may be visible from the buildings, although the road is not a significant factor in their setting, and so the magnitude of impact would be negligible. Given the buildings are of low sensitivity, this would result in a **neutral** effect.

Historic Landscape Types

Dalkeith House (Palace) Park/Gardens (GDL00128)

- 10.6.35 Dalkeith House (Palace) Gardens surrounds the 18th century Dalkeith House, a category A listed building. The parkland was first enclosed as a deer park by 1637 with various architectural and landscaping additions added throughout the 18th and 19th centuries. The Gardens is made up of large areas of woodland, parkland, ornamental gardens, and a walled kitchen garden, as well as various listed buildings located within the park. Some of the parkland is now in arable use although much of the land is maintained as pasture with extensive woodland along its northern side nearest the proposed development. The park also possesses outstanding architectural and historical value for its association with Dalkeith House. There have been a number of significant inhabitants of Dalkeith House, including the Duke of Albemarle who planned the restoration of the monarchy from the house, and the first Duke of Buccleuch was the Duke of Monmouth, the natural son of Charles II. They are considered to be of high sensitivity (heritage value) as an example of a well-preserved historic landscape and its associated Category A and B listed features.
- 10.6.36 The setting of the gardens is the 18th and 19th century landscape of Dalkeith House and associated buildings. The edges of the gardens are defined by dense woodland which screens the parkland and building from views from outside. The woodland and the western boundary wall screen views of the park from the Proposed Scheme; additionally, the scale and extent of the Proposed Scheme would not change the setting of the park or affect its character and importance. The impact of the Proposed Scheme on the gardens is assessed to be no change, on an asset of high sensitivity (heritage value), resulting on a **neutral** effect.

Operational

Archaeological

- 10.6.37 As the physical impacts during construction will result in the loss of assets within the Scheme Extents, no additional impacts are predicted during the operational phase.

Historic Buildings

- 10.6.38 No additional impacts to the setting and significance of historic buildings have been identified as a result of the operation of the proposed scheme, since it takes place within a landscape that is already characterised by road and rail traffic noise and lighting.
- 10.6.39 The construction phase setting impacts of the Proposed Scheme at the Category B listed Sheriffhall Farmhouse and Dovecot (**LB14183** and **LB19674**) will lessen over time as the landscape planting around the scheme matures. However, this is not considered to reduce the impact to such a degree as to reduce the **slight adverse** effect.
- 10.6.40 The construction phase setting impacts of the Proposed Scheme at the Category B listed Summerside Farm (**LB14186**) will lessen over time as the landscape planting around the scheme matures. However, this is not considered to reduce the impact to such a degree as to reduce the **slight adverse** effect.

Historic Landscape Types

- 10.6.41 The construction phase physical effect of the Proposed Scheme on the Stone Boundary Wall (**002**) will lessen during operation when the removed sections of the wall are rebuilt following construction. This will reduce the magnitude of impact to minor and result in a **neutral** effect.
- 10.6.42 The construction phase setting impacts of the Proposed Scheme at the Dalkeith House (Palace) Park and Garden (**GDL00128**) will lessen over time as the landscape planting around the scheme matures. This will embed the

remodelled junction into the landscape, such that its negligible impact on the setting of Dalkeith House (Palace) Park and Garden (**GDL00128**) will reduce to no change and a **neutral** effect.

Summary of Impacts prior to Mitigation

10.6.43 All presently known heritage assets potentially affected by the Proposed Scheme are listed in Table 10-5 'Cultural Heritage Sites Potentially Affected by the Proposed Scheme' below, with an assessment of their sensitivity, the magnitude of impact and the resulting potential significance of the effect on them.

Table 10-5 Cultural Heritage Sites Potentially Affected by the Proposed Scheme

Reference number	Asset name, brief description and designation	Sensitivity of the Receptor	Magnitude of Impact	Significance of Effect
Construction				
Archaeological (Non-Designated)				
MEL8350, MEL10899, MEL10900	Group of Archaeological Remains at Sheriffhall	Low	Moderate	Slight Adverse
MEL8396	Somerside, cropmarks of an oval enclosure. Beneath current roundabout.	Negligible (destroyed)	No change	Neutral
MEL6535	Campend, site of trackway.	Negligible	Minor	Slight Adverse
MEL8634	Sheriffhall, cropmarks of enclosure.	Low	Major	Slight Adverse
MEL9472	Edinburgh to Hawick Branch Railway, Millerhill Station to Dalhousie Station Section.	Low	Negligible	Slight Adverse
MEL5225	Edinburgh and Dalkeith Railway.	Low	Negligible	Slight Adverse
MEL8401	Possible palisaded enclosure (cropmark).	Low	Minor	Slight Adverse
MEL10015	Pit alignment (cropmark).	Low	Minor	Slight Adverse
MEL10014	Cropmark ridge and furrow	Negligible	Negligible	Neutral
001	Old mine shaft	Negligible (destroyed)	No change	Neutral
Historic Buildings				
002	Stone boundary wall	Negligible	Moderate	Slight Adverse
SM5684	Elginhaugh Roman Fort	Low	No Change	Neutral
003	Bridge over Dean Burn	Low	Major	Slight Adverse
LB14183	Sheriffhall Farmhouse including Steading and Walled Garden. Category B listed building.	Medium	Minor	Slight Adverse
LB19674	Sheriffhall Dovecot. Former staircase to Sheriffhall. Category B listed building.	Medium	Minor	Slight Adverse
LB14186	Summerside Farmhouse, Stables and Cottage Range. Category B listed building.	Medium	Negligible	Slight Adverse
LB47736	Old Dalkeith Road, Campend Steading. Category C listed building.	Low	Negligible	Neutral
LB47735	Old Dalkeith Road, Campend House, Boundary Walls, Gatepiers and Gates. Category C listed building.	Low	Negligible	Neutral
Historic Landscapes				
GDL00128	Dalkeith House (Palace), Inventory of Gardens and Designed Landscapes.	High	No Change	Neutral
Operation				
Historic Buildings				

Reference number	Asset name, brief description and designation	Sensitivity of the Receptor	Magnitude of Impact	Significance of Effect
002	Stone boundary wall	Negligible	Minor	Neutral
Historic Landscapes				
GDL00128	Dalkeith House (Palace), Inventory of Gardens and Designed Landscapes.	High	No change	Neutral

Cumulative Impacts

10.6.44 There have been no cumulative impacts identified within this topic assessment. Chapter 19 - Cumulative Assessment assesses the potential for cumulative impacts resulting from the combination of impacts which have been identified as part of this ES which are likely to result in new or different likely significant effects, or an effect of greater significance than any one of the impacts on their own. It also considers impacts which in combination within impacts associated with other proposed development, are likely to result in an effect of greater significance, or a new or different likely significant effect, that the Proposed Scheme in isolation.

10.7. Mitigation

- 10.7.1 Mitigation is considered for the assets that may be physically affected (see Table 10-5 'Cultural Heritage Sites Potentially Affected by the Proposed Scheme'). To define a proportionate programme of archaeological mitigation, a staged programme of evaluation will be adopted, comprising either metal detector survey or geophysical survey followed by targeted trial trenching. The results of the evaluation will define the scope of archaeological mitigation and will be agreed in consultation with the archaeological advisors for CEC and Midlothian Council (MLC). This will be particularly to identify the significance of the enclosure cropmarks to the west of the south-eastern exit and to attempt to locate the possible Roman camp. Should any significant features be identified, a programme of trial trenching may be required to establish the nature and extent of the archaeological deposits, and this may in turn be followed by full excavation if required. Areas that have been identified as disturbed on aerial photographs, or where no archaeological remains were encountered during stripping as part of the GI works will not be subject to further evaluation or mitigation. These areas can be viewed on Figure 10.3 'Areas of Previous Disturbance and GI Works Monitored by an Archaeologist'.
- 10.7.2 Mitigation within the CEC area should be informed by an initial phase of evaluation, comprising a metal detector survey, followed by targeted evaluation trenches.
- 10.7.3 Mitigation within the MLC area would be informed by an initial phase of trial trench evaluation covering at least 5% of the impacted area. The following mitigation strategy might include full excavation, if archaeological remains were identified during evaluation, or archaeological monitoring during construction.
- 10.7.4 Mitigation in relation to the partial demolition of the Stone Boundary Wall (**002**) and the demolition of the Bridge over Dean Burn (**003**) can be achieved through a programme of historic building recording in advance of demolition.
- 10.7.5 Archaeological site monitoring will also be undertaken during site works by an appointed Archaeological Clerk of Works (ACoW).
- 10.7.6 No additional mitigation is proposed in relation to the setting of historic buildings and historic landscape features. For further details of landscape mitigation see Chapter 8 – Landscape and Visual Effects.

The following table, Table 10-6 'Summary of Cultural Heritage Mitigation Measures', provides a summary of the mitigation measures proposed. This table is also included within Chapter 20 – Schedule of Environmental Commitments which will be used to inform the commitments in the contract document.

Table 10-6 Summary of Cultural Heritage Mitigation Measures

Mitigation Item	Location/ Approximate Chainage	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required	Potential Monitoring Requirements
CH-1	Throughout Proposed Scheme	Design and Construction	<p>Programme of evaluation, to include evaluation trenching, to inform mitigation strategy which may comprise excavation and/or archaeological watching brief. To be agreed with respective Council archaeologists.</p> <p>Mitigation within the City of Edinburgh Council (CEC) area should be informed by an initial phase of evaluation which may include a metal detector survey, followed by targeted evaluation trenches.</p> <p>Mitigation within the Midlothian Council (MLC) area would be informed by an initial phase of trial trench evaluation covering at least 5% of the impacted area. The following mitigation strategy might include full excavation, if archaeological remains were identified during evaluation, or archaeological monitoring during construction.</p>	To mitigate any physical impacts on heritage assets resulting from the scheme.	CEC and MLC	Archaeological monitoring
CH-2	Throughout Proposed Scheme	Construction	A programme of historic building recording should be undertaken for any required partial demolition of the Stone Boundary Wall (002) and the Bridge over the Dean Burn (003).	To mitigate any physical impacts on heritage assets resulting from the scheme.	CEC and MLC	None

10.8. Residual Effects

10.8.1 The following table, Table 10-7 'Potential Cultural Heritage Construction and Operation Impacts and Residual Effects' provides a summary of the pre-mitigation construction and operation impacts, mitigation measures and residual effects that have been described within this chapter. Significant effects typically comprise residual effects that are within the moderate, large or very large categories.

Table 10-7 Potential Cultural Heritage Construction and Operation Impact and Residual Effects

Receptor	Predicted Impacts	Magnitude of Predicted Impact	Sensitivity of Receptor	Significance of Effect	Mitigation Measures	Residual Effects
MEL8350, MEL10899, MEL10900 Group of Archaeological Remains at Sheriffhall						
Construction	Archaeological remains of prehistoric and post-medieval date uncovered during evaluation in advance of construction of the Border Railway. Potential for archaeological remains associated with earlier iterations of Sherrifhall House and its parkland garden. This located within the area of a proposed suds pond. Any subsurface remains may be physically impacted by the construction of the pond and access road.	Moderate	Low	Slight Adverse	Geophysical survey of the area would be used to identify whether any the extent of surviving archaeological remains on the land required for the Proposed Scheme. Possibly followed by evaluation excavation and/or excavation/monitoring	Neutral
MEL8396 Somerside, cropmarks of an oval enclosure. Beneath current roundabout						
Construction	Site of cropmark now thought to be under junction so destroyed.	No Change	Negligible	Neutral	None required as asset lost	Neutral
MEL6535 Campend, site of trackway.						
Construction	The site of a possible trackway, recorded on the 3rd edition OS map, located just west of the north-eastern exit to the junction. This is located within a field and any subsurface remains may be physically impacted by the construction of the road.	Minor	Negligible	Slight Adverse	Geophysical survey of the area would be used to identify whether any remains of the trackway survive on the land required for the Proposed Scheme. Possibly followed by evaluation excavation and/or excavation/monitoring.	Neutral
MEL8634 Sheriffhall, cropmarks of enclosure						
Construction	Cropmarks of an enclosure at Sheriffhall are located to the west of the south-eastern exit road from the junction, located on the site of proposed suds pond. The construction of the Proposed Scheme would physically impact this enclosure.	Major	Low	Slight Adverse	Geophysical survey to record the extent of the enclosure and any associated remains can be used to decide whether excavation of the remains is necessary before construction.	Slight Adverse
MEL9472 Edinburgh to Hawick Branch Railway, Millerhill Station to Dalhousie Station Section						
Construction	Section of former railway line surviving near A720, and partially lost under A720. This is located within a field and any subsurface remains may be physically impacted by the construction of the road.	Negligible	Low	Slight Adverse	Geophysical survey of the area would be used to identify whether any remains of the trackway survive on the land required for the Proposed Scheme. Possibly followed by archaeological monitoring/recording.	Neutral
MEL5225 Edinburgh and Dalkeith Railway						
Construction	Section of former railway line surviving near A720, and partially lost under A720. This is located within a field and any subsurface remains may be physically impacted by the construction of the road.	Negligible	Low	Slight Adverse	Geophysical survey of the area would be used to identify whether any remains of the trackway survive on the land required for the Proposed Scheme. Possibly followed by archaeological monitoring/recording.	Neutral
MEL8401 Possible palisaded enclosure (cropmark)						

Receptor	Predicted Impacts	Magnitude of Predicted Impact	Sensitivity of Receptor	Significance of Effect	Mitigation Measures	Residual Effects
Construction	The site of a possible enclosure recorded by aerial photography. This is located within a field and any subsurface remains may be physically impacted by the construction of the road.	Minor	Low	Slight Adverse	Geophysical survey of the area would be used to identify whether any remains of the trackway survive on the land required for the Proposed Scheme. Possibly followed by evaluation excavation and/or excavation/monitoring.	Slight Adverse
MEL10015 Pit alignment						
Construction	The site of a possible pit alignment recorded by aerial photography. This is located within a field and any subsurface remains may be physically impacted by the construction of the road.	Minor	Low	Slight Adverse	Geophysical survey of the area would be used to identify whether any remains of the trackway survive on the land required for the Proposed Scheme. Possibly followed by evaluation excavation and/or excavation/monitoring.	Slight Adverse
MEL10014 Cropmarks of ridge and furrow						
Construction	The ridge and furrow recorded by aerial photography. This is located within a field and any subsurface remains may be physically impacted by the construction of the road.	Negligible	Negligible	Neutral	Archaeological monitoring during topsoil strip.	Neutral
001 Old mine shaft						
Construction	Record of an old mine shaft recorded on Ordnance Survey mapping. Now thought to be under existing A720.	No Change	Negligible	Neutral	None required as asset lost.	Neutral
SM5684 Elginhaugh Roman Fort						
Construction	Roman fort and associate annex and bath house	No Change	Low	Neutral	None required as no impact on setting.	Neutral
002 Stone boundary wall						
Construction	Loss of sections of the wall during construction.	Moderate	Negligible	Slight adverse	Building Recording of the wall prior to alteration	Slight adverse
Operation	The removed sections of wall will be rebuilt following construction activities	Minor	Negligible	Neutral	No additional mitigation proposed	Neutral
003 Bridge over Dean Burn						
Construction & Operation	Total loss.	Major	Low	Slight Adverse	Building Recording of the bridge prior to alteration	Slight adverse
LB14183 Sheriffhall Farmhouse including Steading and Walled Garden. Category B listed building & LB19674 Sheriffhall Dovecot. Former staircase to Sheriffhall. Category B listed building						
Construction & Operation	There would be further erosion of the rural landscape to the north of the farm where the eastern exit of the junction is extended. This brings detracting features of the assets' settings' physically closer to the assets and more prominent in their surroundings.	Minor	Medium	Slight Adverse	No additional mitigation proposed	Slight Adverse

Receptor	Predicted Impacts	Magnitude of Predicted Impact	Sensitivity of Receptor	Significance of Effect	Mitigation Measures	Residual Effects
LB14186 Summerside Farmhouse, Stables and Cottage Range. Category B listed building						
Construction & Operation	The setting of the house and outbuildings will be impacted through the Proposed Scheme bringing detracting features of the asset' settings physically closer to the assets and more prominent in its surroundings.	Negligible	Medium	Slight Adverse	No additional mitigation proposed	Slight Adverse
Old Dalkeith Road, Campend Steading. Category C listed building (LB47736) and Campend House (LB47735)						
Construction	Impacts on setting resulting from removal of mature vegetation around the junction and the presence of construction activities.	Negligible	Low	Slight Adverse	No additional mitigation proposed	Slight Adverse
Operation	Maturation of vegetation planting will lessen the impact over time, embedding the junction within the landscape and reducing the impact of the Proposed Scheme	No change	Low	Neutral	No additional mitigation proposed	Neutral
Dalkeith House Garden and Designed Landscape (GDL00128)						
Construction	Impacts on setting of Garden and Designed Landscape	No change	High	Neutral	No additional mitigation proposed	Neutral

10.9. Compliance with Policies and Plans

1.1.1 An assessment of the compliance of the Proposed Scheme in relation to the policies and plans previously set out in Section 10.3 is summarised below.

Policies Regarding Designated Assets

10.9.1 All designed assets including scheduled monuments, listed buildings, and designed landscapes and gardens have been fully assessed in-line with policies and guidance. This assessment includes both potential physical impacts as well as impacts caused by changes to setting.

Policies Regarding Non-Designated Assets

10.9.2 Potential impacts on non-designated assets have also been assessed in line with national and regional policies and guidance. Mitigation has also been considered, and will continue to be developed, in consultation with local planning authorities in line with local policy to ensure sites that are lost (both in whole and in part) are fully recorded and published.

10.10. Statement of Significance

10.10.1 There are no heritage assets that are expected to have moderate to significant residual impacts following mitigation.

10.11. Monitoring

10.11.1 No significant cultural heritage effects are predicted. On that basis, no monitoring of significant effects is proposed.

10.11.2 However, as indicated in Section 10.7, a staged programme of evaluation will be adopted, comprising either metal detector survey or geophysical survey followed by targeted trial trenching. Following this a mitigation strategy will be developed which might include full excavation, if archaeological remains are identified, or archaeological monitoring during construction.

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