



EDIGROUP



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new brunstane

Proposed residential development (including class 8 residential institutions, class 9 houses and sui generis flats), primary school (class 10 non-residential institutions), local centre (including class 1 retail, class 2 financial and professional services, class 3 food and drink, class 10 non-residential institutions and class 11 assembly and leisure), green network, means of access and transport links, infrastructure, and associated ancillary works at land north of Newcraighall Road and south of Milton Road East, Edinburgh.

environmental statement non-technical summary



The Environmental Statement was completed in August 2016 to accompany the PPP Application

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1. INTRODUCTION

1.1 List of Figures

- Figure 1 Site Location;
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- Figure 3 Technical and Environmental Constraints;
- Figure 4 Strategic Landscape Framework;
- Figure 5 Strategic Movement Framework;
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- Figure 7 Indicative Development Phasing.

1.2 Overview

EDI Group Ltd. is applying for planning permission in principle for a proposed development at Brunstane, south-east Edinburgh which will include houses, a new primary school, a new local centre which may include shops, business and community facilities, parkland, and associated infrastructure. The location of the site is shown on Figure 1. A masterplan has been developed for the site which will guide the development of high-quality buildings, planting, open space, roads and paths that are sensitive to the site and its environment.

IKM Consulting Ltd. (IKM) was appointed by EDI to undertake an Environmental Impact Assessment (EIA) of the proposed development. This is a legal requirement for certain developments. An Environmental Statement (ES) reports the findings of the EIA and has been prepared as part of a suite of documents to accompany the application for planning permission. This Non-Technical Summary (NTS) presents a brief summary of the findings of the full EIA in non-technical language.

1.3 Structure and Content of the Environmental Statement

The EIA technical assessments presented in the ES, and which are summarised in this NTS, are:

- Ecology, Biodiversity and Nature Conservation (ES Chapter 6);
- Landscape, Townscape and Visual Impacts (ES Chapter 7);
- Historic Environment (ES Chapter 8);
- Water Resources, Hydrology, Flood Risk and Drainage (ES Chapter 9);
- Ground Conditions, Hydrogeology, Geology and Soils (ES Chapter 10);
- Traffic, Transportation and Access (ES Chapter 11);
- Air Quality (ES Chapter 12);
- Noise and Vibration (ES Chapter 13);
- Socioeconomic (ES Chapter 14).

Concluding chapters describe the methodology that was used to undertake Cumulative Effects Assessment (ES Chapter 15) and a Schedule of Mitigation (ES Chapter 16) presenting all of the mitigation measures proposed in the chapters.

1.4 Environmental Impact Assessment and the Environmental Statement

EIA is the systematic process of assessing, predicting, mitigating and evaluating the potential significant environmental effects of the construction and operation of a proposed development. The ES reports on the methods used to identify these impacts and, where relevant, sets out any mitigation measures that will be undertaken in order to prevent, reduce or offset significant adverse environmental effects and maximise the beneficial impacts of the development. An assessment of significant residual effects, which are the effects that will still occur when mitigation is taken into account, is then presented.

The main findings and conclusions of the EIA are summarised in non-technical language for the benefit of all readers in an accompanying Non-Technical Summary (NTS). This is a requirement of the EIA Regulations. The main purpose of the NTS is to ensure that all interested parties have access to relevant information on the likely significant environmental effects of the proposed development without a need to understand the technical methods and language employed in the detailed assessments.

The EIA has played an important role in the process of developing a detailed understanding of the site and its potential environmental and other sensitivities, and informing how the masterplan has evolved with a view to avoiding significant effects by changing the proposals or building in actions to become part of the scheme. The site, the proposed development, and the process of design evolution is discussed further in Chapter 2 and Chapter 3 of the ES.

1.5 Disclaimer

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2. THE SITE

2.1 Site Description

The site, referred to as New Brunstane, is located within the urban area to the south-east of Edinburgh, in the City of Edinburgh Council (CEC) area. The eastern edge of the site is on the boundary with the East Lothian Council (ELC) area. The total area of the site enclosed by the planning redline boundary is 54.6 hectares.

The site is allocated green belt within the adopted Edinburgh City Local Plan, but is identified in the draft replacement Edinburgh Local Development Plan for removal from the green belt and allocation for housing-led development with a notional capacity of 950 to 1,330 units. Although not yet adopted, this is therefore considered to be the settled view of CEC that the site is appropriate for housing-led development.

The location and proposed site boundary is identified on Figure 1. The eastern edge of the site is bordered by the designed landscape of Newhailes House and mature woodland, marked by a brick wall enclosing the grounds. The Brunstane Burn defines the northern edge of the site, and its northern bank is populated by housing at Daiches Braes, Edinburgh College: Milton Road Campus, the Milton Road Cemetery and Milton Glen Golf Course. The John Muir Way footpath runs parallel to the Brunstane Burn, crossing to the south bank at the East Coast Main Line (ECML) railway line and adjoining the northern edge of the eastern field. National Cycle Route 1 (NCR 1) runs along part of the south western boundary of the site.

2.2 Environmental Designations

There are a number of designations within or immediately adjacent to the site which are illustrated in Figure 4 Technical and Environmental Constraints, in particular:

- Historic Environment:
 - Brunstane Moated Site Scheduled Monument within the site boundary at the western edge of the site;
 - Brunstane Enclosure Scheduled Monument within the site boundary in the western field;

- Category A listed Brunstane House and walled garden and Category B listed steading and farm cottages to the south of Brunstane House, on the western boundary of the site;
 - Category C listed Newhailes Policies, Wanton Walls Farmhouse and Steading on the southern boundary of the site;
 - Various Category A, B and C listed buildings associated with Newhailes House on the eastern boundary of the site;
 - Newhailes Garden and Designed Landscape on the eastern boundary of the site.
- Nature Conservation:
 - The Brunstane Burn and its banks are identified as a Local Nature Conservation Site (LNCS) in the Edinburgh City Local Plan (ECLP) (2010) and Edinburgh Local Development Plan (ELDP) (2014);
 - The line of the former railway and adjacent areas along the south western boundary of the site are identified as a Local Nature Conservation Site (LNCS) in the ECLP and ELDP.
- Access and Recreation:
 - Part of Core Path CEC5 Innocent Railway runs adjacent to the Brunstane Burn Core Path to the north of the site. This section of the Core Path also reflects part of the route of the John Muir Way, a long distance route from Helensburgh on the west coast of Scotland to Dunbar on the east coast;
 - Part of Core Path CEC5 Innocent Railway also forms the south western boundary of the site with the adjacent Newcraighall North housing site. This section of the Core Path also reflects part of the route of National Cycle Network (NCN) 1.

2.3 Existing Utilities and Services

There are proposed utilities and services within the site boundary which have been taken into account in the masterplanning process. The existing 33kV overhead power distribution line approximately parallel to the railway, supported by three steel towers within the site, has been confirmed as no longer in use and are soon to be removed. A replacement underground cable route is located parallel to the embankment to the south of the site and this will be protected from the proposed development. A 275kV transmission line is also located close to the southern site boundary, running parallel with the existing cycle path, which forms the boundary between the Brunstane and Newcraighall North development sites. This will be protected with appropriate clearance distances agreed with Scottish Power.

Other services within the site include a rising main, which would be diverted within the site boundary, and a combined surface and foul water sewer, as well as electricity and gas services within or adjacent to the existing footpath on the southern edge of Milton Road East, which will be precisely located during detailed design, and protected during construction.

2.4 Contamination and Mining Legacy

The site has largely been in farming use, but historical site uses have included railway lines and mining and as a result it is possible some form of localised contamination is present. There is also a possibility of unstable ground overlying old, shallow mine workings. Mineral investigations in the area have been undertaken, and further investigations will be carried out during detailed design and to assist with phasing the proposed development. All of the mining data has been collated and used to produce a detailed, 3-D computer model of the ground beneath the site. The findings of the investigations undertaken to date have concluded that most of the site is safe to build on. A small portion of the site may require stabilisation by grouting. The details of any remedial works that may be required will be confirmed during further phases of intrusive investigation.

3. THE PROPOSED DEVELOPMENT

3.1 The Proposed Development

The residential-led mixed-use masterplan incorporates a range of land uses and related development, including:

- Up to 1,330 residential units in a mix of housing types and sizes, with 25% of the units being affordable;
- A new primary school;
- A new local centre including retail, commercial and community uses;
- The formation of three new site accesses, one from the north and two from the south, as well as a network of internal roads and paths, a replacement bridge over the East Coast Main Line (ECML) railway and other associated infrastructure;
- A green network, including open space, parkland, planting buffers to the railway and existing services within the site, and protection for the setting of listed buildings and the on-site Scheduled Monuments;
- Other structural and amenity landscaping and planting.

3.2 Site Selection and Alternatives

3.2.1 Site Allocation

The site has been proposed as a new housing allocation, 'Brunstane HSG29,' within the emerging Edinburgh Local Development Plan (Second Proposed Plan) (ELDP) (2014). A strategic masterplan has been developed to respond to the allocation, and to the specific features, characteristics and constraints of the site.

3.2.2 Need for the Project

Through the LDP process, Edinburgh's requirement for housing has been established as 27,640 homes across the period of the plan. To determine which sites should be allocated to meet this requirement, CEC has undertaken a comprehensive assessment of all sites promoted by developers. As part of this process, the site at Brunstane has been allocated for between 950 and 1330 new homes in the proposed ELDP.

The proposed development will therefore contribute to delivering much needed housing within Edinburgh to assist CEC in achieving housing requirements across the plan period.

3.2.3 Alternatives Considered

As part of CEC's site allocation process, an assessment of all potential sites was undertaken and the most appropriate sites allocated for housing. The assessment of sites is required to follow a consistent process of consideration by CEC against a variety of criteria. For this reason, no specific alternative sites were considered by the applicant. The ELDP process completed the required assessment to determine that the site is suitable for residential development.

3.3 Design Evolution

3.3.1 Aspects Influencing the Masterplan Evolution

The masterplan for the site has evolved to respond to a range of aspects of the site, including site topography, the possibility of mining legacy and localised contamination, the existing movement around the site and the need to protect and enhance routes for walking, cycling and public transport, and the need to protect existing utilities and services.

The historic environment of the site has also been an important factor influencing the proposals. In particular:

- Brunstane House (a Category A Listed Building) sits within a small area of two adjoining walled gardens. The masterplan proposes a park to the east of Brunstane House to enhance its setting and safeguard the Scheduled Monument (SM10580) located adjacent to the garden wall. Research has identified the importance of a view valued by the Duke of Lauderdale, who owned Brunstane House in the late C17th. Originally, views to the sea and Fife were afforded from the 'great chamber', on the north-east elevation. This is now considerably altered and impaired by modern development to the north of Brunstane Burn, Joppa, and mature planting along the burn. However, a view corridor has been identified and the masterplan proposed to retain this vista for the new community as a whole.

- Brunstane Enclosure (a Scheduled Monument), a circular feature and the second SM within the site, has been part of the worked agricultural land. Although it cannot now be seen on site it is visible as a crop mark on aerial photographs. An open space of c100m diameter, 'Brunstane Green' has been incorporated into the masterplan to safeguard this SM.
- To the east, the site shares a boundary with Newhailes. Newhailes includes an Inventory Garden and Designed Landscape, Newhailes House (a Category A Listed Building) and Shell Grotto (a Category B Listed Building). Views to Arthur's Seat from both Newhailes House and the Shell Grotto were considered important and have been retained through the inclusion of view corridors within the strategic masterplan. In response to feedback from Historic Environment Scotland (HES), Scottish Natural Heritage (SNH) and CEC, a landscape buffer alongside the boundary wall to Newhailes has also been included within the strategic masterplan.

The importance of the landscape, open space and views has also been recognised in the strategic masterplan. Arthur's Seat can be seen from various locations on the site. There are also views to the sea, North Berwick Law and the Pentlands. An aim of the masterplan design is to retain these views where possible through strategic locations of open space or street alignments. However, despite its notable size the site itself is screened from view from many of the principal surrounding routes. There is a significant amount of existing planting and trees around the site boundary which contributes to this.

The site cannot currently be described as accessible 'open space' as it is in private arable farming use. However, there are elements of the Green Space Network within the site boundary which the masterplan has sought to protect and enhance where possible, linked with the green corridor to be enhanced along the John Muir Way and Brunstane Burn. A series of landscape buffers, parkland and swales create habitat corridors and enhance biodiversity. These areas include the Burnside edge along the northern boundary, the landscape buffer to Newhailes, the south-western edge boundary with Newcraighall North and the edge to the north of Wanton Walls.

The strategic masterplan is illustrated in Figure 6.

4. ECOLOGY, BIODIVERSITY AND NATURE CONSERVATION (ES CHAPTER 6)

IKM Consulting undertook an assessment of the potential impacts of the proposed development on ecology, biodiversity and nature conservation. This includes plants, animals and habitats on the site. Surveys identified the location and nature of the existing habitats on the site, and recorded any field signs or suitable habitat for protected species. This included considering terrestrial (land based) and aquatic (water based) ecology, Invasive Non-Native Species (INNS). The work was undertaken in line with the requirements of the Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland (CIEEM, 2016).

The site consists mainly of two intensively managed large fields sloping gently to the north-east. These fields are used for growing arable crops, most recently wheat during 2015. Elsewhere within the boundary are small areas of semi-improved neutral grassland, and the northern access corridor is currently a mosaic of tall ruderal vegetation and dense scrub. Just outside the boundary, are areas of broadleaved semi-natural woodland (including within Newhailes Estate) and broadleaved plantation woodland.

There are no statutory nature conservation designations within the site. The closest is the Firth of Forth Special Protection Area (SPA), Ramsar site and a Site of Special Scientific Interest (SSSI), which is approximately 400m north of the site, and which is designated predominantly due to its importance for wetland birds. The assessment concludes that there will be no significant adverse effects on the Firth of Forth as a result of the proposed development.

The site supports a variety of breeding birds including some with red list conservation status and listed on the UKBAP such as House Sparrow, Linnet, Song Thrush, Skylark, Starling and Yellowhammer. Barn owls were also confirmed as breeding in the adjacent walled garden at Newhailes and Dippers nest in the culvert which carries the Brunstane Burn under the ECML railway.

There are trees and buildings likely to be suitable for roosting bats within and adjacent to the site, and there is evidence of Soprano pipistrelle bats using bat boxes erected by others in trees on the southern boundary of Newhailes. Due to the timing of the optimal survey season, further bat survey work is to be undertaken in Summer 2016 and will be reported in an Addendum to the ES.

There is evidence of otter using the Brunstane Burn upstream of the culvert passing under the ECML. The assessment concludes that, for a variety of reasons, the site is unlikely to support amphibians and reptiles, water voles or red squirrels, and there was no evidence of badgers using the site found during any of the surveys. There are stands of Japanese knotweed and Giant hogweed along the Brunstane Burn corridor and around the headland of the eastern field which will require to be addressed ahead of construction.

Without mitigation measures, potential impacts associated with the proposed development may include loss or fragmentation of habitats, disturbance and physical barriers caused by road and building construction, and death or behavioural changes of animals, pollution or sediment loading of watercourses, and visual and light pollution caused by lighting.

A comprehensive suite of mitigation measures has been proposed in order to avoid or reduce the potential effects of the proposed development on ecology, biodiversity and nature conservation. These include, for example, requirements for further pre-construction surveys, the development of planting prescriptions for inclusion in the landscaping scheme, and undertaking site clearance outside of the main bird breeding season, where possible. More specific measures include the development of an offsetting scheme for barn owls, climbing and inspecting trees with bat roost potential if they are to be felled, and the use of otter fencing and mammal ledges within the design of the northern access corridor.

The proposed barn owl offsetting scheme is predicted to reduce the negative effects on barn owl to a minor level. There is also predicted to be some negative effects of fragmenting linear habitats with the access roads, as well as noise and light disturbance from neighbouring properties and the predation of wildlife by domestic cats. However, these are offset by the creation of new semi-natural habitats through the proposed development including woodlands, grasslands, wetlands, wildflower meadows, orchards and allotments, and the creation of new nesting and roosting opportunities for birds and bats. Together with the delivery of a strategy to tackle INNS on the site, these will be positive effects on the site. Overall, it is predicted that the proposed development would not result in significant effects on ecology, biodiversity and nature conservation.

5. LANDSCAPE, TOWNSCAPE AND VISUAL IMPACTS (ES CHAPTER 7)

WSP|Parsons Brinkerhoff undertook an assessment of the potential impacts of the proposed development on landscape, townscape and visual. The assessment considers likely effects on landscape character and resources, as well as potential effects of the proposed development on views and visual amenity within the study area. It describes and analyses the existing landscape of the area that may be affected and considers the sensitivity of the landscape to the development. It also defines how visible the proposals would be and illustrates and analyses some examples of how the development might look to give a clear picture of what the development may look like. The assessment was undertaken in accordance with the Guidelines for Landscape and Visual Impact Assessment (Landscape Institute and IEMA, 2013).

There is some overlap between this chapter and Chapter 8 of the ES (Historic Environment), which assesses impacts on the setting of Listed Buildings and Scheduled Monuments (SM) and the effects of the proposed development on Inventory Gardens and Designed Landscapes (GDL).

The first step in the assessment was to establish what the Zone of Theoretical Visibility (ZTV) for the development is. This is produced by computer modelling, and enables the assessor to identify, in theory, where the development will be visible from taking into account terrain and physical features that may block a view. The ZTV extends to approximately 3km from the site. Observation in the field indicates that beyond this distance, even where the development may be visible, it is not likely to be noticeable.

The site is located in the south east of the city of Edinburgh, and comprises nearly flat, undeveloped land which slopes from a high point on the western edge gently down to the north east - towards the sea and, along the northern boundary, more steeply towards the incised valley of the Brunstane Burn. The site is surrounded on three sides by existing built development. From within the site there are some extended views out to the Firth of Forth and Fife, and to Arthur's Seat, but there are limited views into the site from the surrounding areas. Newhailes Garden and Designed Landscape (GDL) is located to the east of the site.

There are no landscape designations covering the site or close enough to have the potential to be indirectly affected. The site is currently part of the Edinburgh Green Belt as defined in the Edinburgh City Local Plan (ECLP) 2010, but has been allocated for housing in the Edinburgh Local Development Plan - Second Proposed Plan (ELDP). Due to its predominantly agricultural use the site itself does not provide any public open space role. The site is adjacent to Newhailes House, an A-Listed neo-Palladian villa that sits in an extensive walled Garden and Designed Landscape (GDL). The mature woodland framework to the designed landscape effectively isolates the house from the surrounding area. It is understood that there would originally have been a clear view towards Arthur's Seat from the House, as well as a designed view towards Arthur's Seat from the Shell Grotto that is today rather lost within the boundary woodland.

The masterplan proposed has been designed to respond sympathetically to the landscape and historic character and context of the site and its surroundings. This includes, for example, a large open space around Brunstane House to retain an open aspect, and a broad landscape strip separating the proposed development from Newhailes. Development along this edge will also be lower density and generally gable end on to provide an interesting low-rise frontage.

Broad streets to act as 'view corridors' have been introduced to retain historic views from Brunstane House towards the Firth of Forth and from Newhailes towards Arthur's Seat, and a visual connection has been created between the open space around the Scheduled Monument and Brunstane House. These would be lined with street trees to enhance and accentuate the views, and building heights would not exceed three storeys along these corridors. Streets will be designed to maximise views out to the wider landscape e.g. Berwick Law and to the sea.

The site is a landlocked pocket of fields and visibility of the proposed development beyond the area immediately abutting the site is very restricted. Significant adverse visual effects would therefore be limited to: a narrow strip on the north side of the Brunstane Burn where some 40 houses and a similar number of new flats currently experience a rural aspect across the site; Brunstane House; a short section of the Brunstane Burn path, the John Muir Way (about 500m), and; a short section of the NCR 1 the old railway path along the south edge of the site (about 400m). This is considered to be a remarkably small number of visual impacts given the size of the proposed development.

The character of the site itself would obviously be fundamentally changed by the proposed development. There would be no adverse effects on any areas of the adjacent townscape and significant landscape effects would be limited to a small area of the Brunstane Burn valley east of the ECML railway. Importantly, there would be no significant adverse effect on the present-day character of the Newhailes House designed landscape. Development would change the setting of Brunstane House, but the retention of a reasonable landscape buffer to the house can be considered to provide an acceptable new setting.

Development of the site would be almost unnoticeable from the main road approaches to the city and briefly glimpsed from the main rail approach. The only real clear view of the site in the context of the city is that from Arthur's Seat.

6. HISTORIC ENVIRONMENT (ES CHAPTER 8)

CFA Archaeology undertook an assessment of the potential impacts of the proposed development on the Historic Environment. The assessment was conducted in accordance with the Chartered Institute for Archaeologists' 'Code of Conduct' (2014) and 'Standard and Guidance for Historic Environment Desk-Based Assessment' (2014).

The study area for the assessment comprised of two distinct parts: the Inner Study Area (the site itself) and the Outer Study Area (up to 1km from the site). Desk study research was undertaken to identify the known locations of all historic environment assets, sites and features within the study area. This was supplemented by field surveys and a geophysical survey to gain an understanding of the present layout of the site, locate and characterise anomalies of possible archaeological interest, and to assess the potential impacts of the proposed development. Visits to heritage assets in the wider area were also undertaken, in order to assess their baseline settings and inform the assessment of potential impacts on their settings.

As well as direct physical impacts, the assessment considers the potential for effects on the setting of historic environment features. Historic Environment Scotland guidance defines setting as *"the way in which the surroundings of a historic asset or place contribute to how it is experienced, understood and appreciated."* It also notes that that just because a visual impact will occur does not necessarily mean this is unacceptable, but rather the assessment needs to consider *"whether the proposed change would dominate or detract in a way that affects our ability to understand and appreciate the historic asset"* (Historic Scotland, 2010).

The assessment concludes that there is no evidence for prehistoric activity within the Inner Study Area. There are two Scheduled Monuments within the site: one is considered to have been misinterpreted as a prehistoric enclosure, and should instead be understood as an element of the gardens formerly associated with the Category A Listed Brunstane House, and the other is a cropmark believed to indicate the location of part of a medieval moat. The site has formed part of the Brunstane Estate since at least the mid-17th century, with the south-western part of the site originally comprising gardens associated with the house. A number of features identified within the site are believed to relate to coal mining activities within the area.

Mining activity is likely to have caused disturbance to any buried archaeological deposits which may have been present. The geophysical survey identified features previously recorded by the desk-based assessment work, but recorded few other clearly identifiable features, with the exception of some possible ditch and enclosure features. The geophysical survey does not suggest that any buried archaeological remains of more than local significance will be found within the proposed development area. Newhailes House Category A Listed Building and its surrounding Inventory Garden and Designed Landscape are situated to the immediate east of the proposed development area.

A total of two Scheduled Monuments, three Category A Listed Buildings, one Inventory Garden and Designed Landscape, one Inventory Historic Battlefield, 24 Category B Listed Buildings, one Conservation Area and 18 Category C Listed Buildings are located within the Outer Study Area. Taking into account screening from mature trees and intervening existing buildings, the assessment demonstrates that there will be limited visibility of the proposed development from these locations.

A detailed, design-led mitigation strategy has been adopted which seeks to avoid impacts and favours the preservation of archaeology in situ where possible. The two Scheduled Monuments in particular will be preserved in situ, within areas of parkland / open-space within the proposed masterplan. The view from Brunstane House towards the sea, from Newhailes House across the flower garden (currently being restored), and towards Edinburgh and Arthur's Seat in the distance, and from Newhailes Shell Grotto are all considered to be of historical significance and have been protected and enhanced as part of the masterplan using, for example, a linear park and road alignments.

In addition to the above design-led mitigation, a programme of archaeological recording work will be agreed with the CEC Archaeologist. This is likely to include archaeological trial trenching evaluation, and either archaeological excavation, archaeological monitoring and recording (watching briefs), post-excavation analyses and publication of the results of the work may also be required.

The assessment concludes that the only potential significant adverse effect of the proposed development on the historic environment is in relation to Brunstane House. However, taking into account the significant design-led mitigation proposed to protect the House and its setting as far as practicable, this is predicted to be of minor magnitude and of no greater than moderate significance. Other impacts, such as on the setting of the two Scheduled Monuments, on the setting of Newhailes House, Gardens, and Shell Grotto, and the potential physical disturbance of buried archaeology, are not considered to be significant taking into account the mitigation measures proposed.

7. WATER RESOURCES, HYDROLOGY, FLOOD RISK AND DRAINAGE (ES CHAPTER 9)

Kaya Consulting undertook an assessment of the potential impacts of the proposed development on water resources, hydrology, flood risk and drainage, supported by the engineering team from IKM Consulting. A Flood Risk Assessment (FRA) report was also prepared by Kaya Consulting and an outline drainage strategy for the site was prepared by IKM Consulting to support the assessment.

There are two watercourses within and close to the site. The Brunstane Burn flows adjacent to the northern site boundary in an easterly direction and enters the Firth of Forth around 450m downstream of the site. Brunstane Burn was classified by SEPA in 2013 as having an overall status of Moderate ecological potential. The Magdalene Burn is a tributary of the Brunstane Burn, and is culverted through the site, entering the site at its south-western corner and then flowing through the southern part of the site in a circular culvert 1500mm in diameter. A CCTV survey of the culverted section of the burn was carried out to inform the assessment. The Magdalene Burn is not classified by SEPA. The site drains in several directions with the northern part of the site draining towards the Brunstane Burn, the eastern part of the site draining towards the Magdalene Burn and the southern part of the site draining towards a low point in the south-east of the site, close to the culverted section of Magdalene Burn. The groundwater body underlying the site was classified by SEPA in 2013 as Poor. Approximately 450m downstream of the site is the Firth of Forth.

The flood risk assessment and modelling has demonstrated that the proposed development does not lie within the within the 200-year floodplain of the Brunstane Burn, and is not considered at risk of flooding from the Magdalene Burn during a 200-year or 1 in 200-year + climate change event, assuming the culvert is unblocked. Parts of the site are shown to lie within the SEPA flood maps of the area for surface water flooding, although the local topography indicates that flooding is mostly due to runoff from rainfall falling within the site. Once the development has been constructed, this runoff will be captured within the site drainage system and flood risk to areas identified in the SEPA maps will be reduced or removed.

There are no records of any private water supplies (PWS), Scottish Water drinking water catchments or water abstraction sources on or near the site. There are two licenced abstractions from the Brunstane Burn for agriculture, a combined sewer overflow to Brunstane Burn, and a septic tank effluent (STE) to soakaway at Gate Lodge, Newhailes, which are located close to the site boundary.

The greatest potential impact on the water environment would be during construction of the proposed development. These could include, for example, introducing contaminants and sediment into the water environment, altering the amount of hard standing which can increase runoff rates and alter the natural flow paths of the water, and the potential effects of construction works to enable the access road to cross the Brunstane Burn. Construction effects on the water environment will be mitigated by use of good practice stipulated in a Construction Environment Management Plan (CEMP). This will include a wide range of measures including the need to minimise exposed soil slopes adjacent to watercourses, safe storage of fuel and materials away from watercourses, and limiting discharge of attenuated surface water runoff from the construction site into the watercourses to greenfield runoff rates entering each watercourse from the site at present.

Once completed, the proposed development will result in an increase in impermeable hard standing areas (i.e. driveways, roads, parking spaces, paths, rooftops etc.), which, without mitigation measures in place, would result in effects such as reduced infiltration, increased sediment/pollution runoff, increased surface water runoff and increased flood risk. The additional flows generated by the proposed development will be managed on-site and site surface water drainage systems, including sustainable urban drainage systems (SuDS), have been incorporated into the development design to mitigate these effects. These will need to include mitigation for the possible increase in hydrocarbons which can result from vehicles driven by occupants and users of the development. In accordance with the Risk Framework of Scottish Planning Policy, the area of proposed development within the site boundary has been located outside of the predicted 200-year floodplain of the Brunstane Burn and Magdalene Burn.

The new crossing on the Brunstane Burn could change the characteristics of the burn and any existing flood risk. Any new crossing would need to comply with SEPA licensing requirements and also be able to convey the 200-year flood flow without increasing flood to others. To minimise effects of the crossing on the burn, the opportunity to use bridging solutions, or bottomless or arched culverts, that minimise any effects on the bed and banks of the watercourse will be explored at the detailed design stage.

A drainage strategy has been developed for the site and the masterplan incorporates six SuDS basins/ponds located outside the predicted 200-year floodplain, with appropriate levels of treatment incorporated to mitigate the risk of watercourse pollution. It is proposed that all foul water discharge from the development shall be discharged to the existing foul sewerage network.

Taking into account all of the mitigation proposed, the assessment concludes that the potential effects of the proposed development on the water environment and flood risk will be minor at worst and not significant.

8. GROUND CONDITIONS, HYDROGEOLOGY, GEOLOGY AND SOILS (ES CHAPTER 10)

IKM Consulting undertook an assessment of the potential impacts of the proposed development on ground conditions, hydrogeology, geology and soils. The assessment also considers potential sources of ground contamination and ground gas that will need to be assessed and incorporated into the design of the proposed development.

A geo-environmental Baseline Summary Report, incorporating the findings of an earlier Phase 1 Desk Study Report, has been used to establish the potential for soil and groundwater contamination at the site and the likely contamination risk posed to a range of sensitive receptors including humans and the water environment. The findings of this report have been used to inform the qualitative assessment of likely significant impacts from any potential contamination that may exist at the site. A digital 3D ground model was also developed for the site in order to assess the impact of historical mining, and identify any knowledge gaps that may require further ground investigation.

Since the earliest available published map of 1852, the site has largely been used for agricultural purposes. Other site uses have included railway lines, mining, a small quarry and an isolated area of worked or potentially infilled ground. The soil is classified as prime agricultural land. There is also a history of mining at the site, and British Geological Survey (BGS) maps indicated that up to 18 coal seams sub-crop beneath the site. A review of the mine abandonment plans indicated that several coal seams were mined at depth beneath the site and the surrounding area. Some areas of shallow workings may be present. Coal may also still be present beneath the site. Other potentially contaminative historical land uses include the railway, and possible infill of minor depressions with unknown material.

During construction, there are a number of possible risks in relation to ground conditions, hydrogeology, geology and soils such as the collapse of shallow mining or mine entries, exposing workers to the risk of ground gas or other contamination at the site, or creating new contamination through spills from plant and machinery. The design has sought to minimise the need for material to be removed from site, by maximising the opportunity for it to be reused on site as far as possible. If any of this material is contaminated and unsuitable to remain on site this will be removed from site and treated or safely disposed of as appropriate.

A Construction Environment Management Plan (CEMP) will be used to specify best practice construction practices that will ensure that the works are appropriately managed. These will include, for example, a plan for handling excavation arisings and groundwater, controlling airborne dust emissions and ensuring the health and safety of site users and the general public. The CEMP will also include detailed plans to minimise the potential for contamination of the underlying soils and groundwater and the adjacent Brunstane and Magdalene burns through procedures for the storage and management of materials, spillage clean-up, use of best practice construction methods and monitoring.

Once the development is operational, potential risks include contamination affecting private garden areas, communal garden areas and areas of soft landscaping. There is longer term potential for ground gas generation to migrate and accumulate within confined spaces and buildings, and so a targeted intrusive investigation followed by a programme of ground gas monitoring will be required. It may be necessary to incorporate ground gas mitigation measures into the design of future buildings. There may also be a risk of localised surface instability due to mine workings beneath the site.

Further detailed, intrusive environmental, geotechnical and mineral-stability investigations will be carried out in a phased approach prior to the commencement of construction at the site in order to quantify the risk and develop remediation, grouting and earthworks strategies for the site, if required.

The assessment concludes that, taking into account the mitigation measures proposed, the residual effects during both construction and operational phases of the development will be negligible, with the exception of land quality in terms of the loss of agricultural soils which is considered to be of moderate significance due to their prime classification. It may also be the case that, for some potential risks, the mitigation works may reduce risks below those that are presented by the current condition of the site, resulting in a minor beneficial effect.

9. TRAFFIC, TRANSPORTATION AND ACCESS (ES CHAPTER 11)

Transport Planning undertook an assessment of the potential impacts of the proposed development on traffic, transportation and access, including the surrounding road network, public transport, cyclists and pedestrians. It is based on a Transport Assessment (TA) submitted as part of the suite of documents relating to the planning application. It has been written in accordance with the Institution of Highways and Transportation (IHT): 'Guidelines for Traffic Impact Assessment', October 1994 ('the IHT Guidelines'), and the Institute of Environmental Assessment (IEA): 'Guidelines for the Environmental Assessment of Road Traffic' 1993, (the IEA Guidelines) (updated 2003).

The guidelines required the effects of traffic on severance, driver delay, pedestrian delay, pedestrian amenity, and accidents and safety are considered, as well as possible effects on particular groups and special interests including, but not limited to: people at home and in work places, sensitive groups including children, elderly and disabled, sensitive locations such as hospital, churches, schools, historical buildings, and people walking and cycling.

The assessment identified the potential impacts of additional traffic generated by the proposed development during the construction and operational phases by establishing baseline traffic patterns and projecting these traffic into the future using standard growth factors, then estimating the likely traffic associated with the proposed development to consider the significance of the percentage changes in traffic in both 'with' and 'without' development scenarios. Current guidance on assessing significance indicated that both the percentage increase and available capacity of the road network should be considered. In general, the assessment should consider links where traffic flows will increase by more than 30% in the opening year as a result of development traffic, and any other sensitive areas affected by traffic increases of at least 10%, or similar changes in HGV movements. This is supplemented by a detailed knowledge of the specific local characteristics of the road network, using professional judgement and experience of similar developments.

In line with best practice, the calculation of existing and future traffic flows in the vicinity of the site includes a number of 'committed developments', comprising the nearby housing proposals at Newcraighall North and Newcraighall East. Additional development in and around the area is accounted for by applying National Road Traffic Forecast 'High' growth factors to surveyed traffic.

The site will connect into the approved housing roads (and hence Newcraighall Road) currently under construction to the southwest of the site as part of Newcraighall North. Additionally, a new access link is proposed to Milton Road East, emerging from the site alongside the eastern side of the existing cemetery.

The proposed development will result in a change in the volume and composition of traffic accessing the site parcel(s), which may result in disruption during both the construction and operational phases.

It is not considered that the increased levels of construction traffic will have a significant impact upon pedestrian severance or pedestrian delay nor on driver delay. Construction traffic levels are low when considered against background traffic flows, and it is not anticipated that any roads will require temporary closure. A Construction Traffic Management Plan (CTMP) will assist in the control of traffic during construction, and will include but not be limited to: measures such as routing of vehicles to consider origin / destination and seek access to strategic road network (A1 / A720) by direct routes, hours of working for operational traffic, policy for vehicle reversing if turning is not possible (use of banksmen), HGVs to only move in a forward direction onto the public road, and measures to protect vulnerable road users, including cyclists and pedestrians.

The assessment demonstrates that the percentage increase in traffic between the final year (2025) base plus committed and total traffic scenarios on all modelled road-links would be of negligible magnitude according to the IEA Guidelines (i.e. less than 30%). In line with good practice, a 'Travel Pack' will be provided to new residents of the proposed development in order to encourage more sustainable travel choices.

The Travel Pack will include information on alternative travel options (e.g. public transport), car sharing, the health benefits of 'active travel' (e.g. walking and cycling) etc. A number of sustainable travel initiatives will also be developed through the site, including the incorporation into the development of new directional signage to identify key walking and cycling routes / linkages, as well as the development of main spine road and bridge link which will permit future bus access to the site.

The assessment concludes that the potential construction impacts of traffic will be temporary and can be managed using a Construction Traffic Management Plan (CTMP). No significant environmental impacts are likely as a direct result of construction vehicles (e.g. HGVs) accessing the site, and the CTMP will provide a mechanism to manage the works and enforce appropriate control measures. Once the proposed development is operational, there are predicted to be no significant impacts on the surrounding road network. Furthermore, no significant impacts are likely in terms of accidents and safety, disruption and driver delay, fear, intimidation and pedestrian / cyclist amenity, or severance during both the construction and operational phases of the proposed development.

10. AIR QUALITY (ES CHAPTER 12)

Ricardo undertook an assessment of the potential impacts of the proposed development on air quality. It quantifies the existing and future baseline air quality at the proposed development to establish whether locating residential properties within the proposed development could introduce new human exposure to locations where there is poor air quality, it describes and assesses the potential air quality impacts associated with the increased road traffic attributable to the proposed development, and assesses the risk of fine particulate/dust emissions during the construction phases of the proposed development to human health or amenity.

The assessment focuses attention on the atmospheric pollutants Nitrogen Dioxide (NO₂) and fine particulates (PM₁₀). The current and future baseline air quality and the impact of increased road traffic emissions on concentrations of NO₂ and PM₁₀ were quantified using atmospheric dispersion modelling of road traffic emissions.

The Transport Assessment (TA) indicates that the proposed development will result in an increase in traffic predominantly on the surrounding roads to the south of the site at Newcraighall Road west of the site towards the A1.

Dust during construction could potentially affect nearby residents. A suite of mitigation measures is proposed which would result in no significant adverse effects due to construction dust. These are likely to take the form of a Dust Management Plan incorporated into the proposed Construction Environmental Management (CEMP) for the project. Measures are likely to include, but will not be limited to, regular site inspections and monitoring of weather and dust levels with remedial actions agreed in advance, damping down of stockpiles during dry weather, and planning site activities with dust generating potential away from sensitive receptors.

The scheme also has a number of mitigation measures relevant to the management of air quality impacts built in. These are largely related to the mitigation of traffic impacts, and include measures relating to public transport, provision of electric charging points, and car parking provision. Additionally, research, development and regulation to reduce vehicle emissions is ongoing. Although recent developments have highlighted problems with the testing and regulation of emissions, the long-term picture remains a consistent reduction in emissions from vehicle exhausts.

Air quality at the new sensitive properties within the proposed development is predicted to comply with the Scottish air quality standards, and therefore locating residential properties would not result in the introduction of new human exposure into an area with poor air quality.

The predicted impact of the proposed development on NO₂ levels would be negligible at all existing residential properties. The predicted impact of the proposed development on PM₁₀ levels would be negligible at all existing residential properties, with the exception of a small number of properties in Musselburgh High Street. At these properties, the impact would be moderate due to the elevated baseline levels of PM₁₀ already affecting this location. The proposed development would not however have any detectable effect on air quality at these properties.

11. NOISE AND VIBRATION (ES CHAPTER 13)

IKM Consulting undertook an assessment of the potential impacts of the proposed development on noise and vibration, including on the existing local acoustic climate, and on local noise sensitive receptors (NSRs). Consideration is also given to the potential impact of existing local noise sources on future residents of the proposed development. The assessment was undertaken with reference to the guidance set out in PAN 1/2011 and Technical Advice Note (TAN) 1, 2011, as well as the IEMA Guidelines for Environmental Noise Impact Assessment, GENIA (IEMA, 2014).

The greatest potential for impacts of the proposed development on the acoustic environment is during construction, potentially affecting both existing and new receptors. A suite of mitigation measures has been proposed to address the issue of construction noise adopting the principles of Best Practicable Means. Such mitigation measures will be incorporated into a Construction Environmental Management Plan (CEMP) and will include, but will not necessarily be limited to: selecting the most appropriate well-maintained site plant, and where appropriate inherently quiet site plant, or the use of silencers, to minimise noise levels at source, positioning of ancillary site plant, such as generators, compressors and pumps, at the furthest possible distance from receptors, and adopting a considerate and neighbourly approach to relations with local residents, e.g. construction works not undertaken outside normal working hours to be agreed with CEC.

Once operational, there is the potential for noise and vibration from transportation sources (road and rail) to affect existing and new noise sensitive receptors including the new primary school. This has been modelled in the assessment and all receptor locations predicted to experience negligible noise and vibration impacts from transportation noise sources.

Consideration has been given to incorporating mitigation measures into the design to aid noise mitigation. These include construction of a 1.8m close-board noise barrier to separate the proposed development from the rail corridor. This is expected to result in a nominal 5dB reduction in noise levels for ground floor façades of receptor buildings within the proposed development. In addition, internal room layouts for residential and commercial units within the proposed development will be considered at detailed design in order to orientate more sensitive habitable spaces away from the rail corridor.

If considered necessary however, further acoustic attenuation can be afforded through the use of double glazing and for alternative ventilation solutions, such as trickle ventilators. Where such measures are implemented, this would likely reduce the impact of L_{Amax} noise levels to minor to negligible. Such additional measures will be considered, on the basis of detailed development layouts and building specifications, at the detailed design stage.

Taking into account all of the mitigation proposed, the assessment concludes that the effects of the construction phase of the proposed development on the acoustic environment will be negligible. All acoustic impacts likely to result from transportation sources are predicted to result in a negligible effect on existing and new noise sensitive receptors other than as a result of peak L_{Amax} noise events attributable to rail traffic noise. However, with the appropriate acoustic mitigation in place the predicted impact is predicted to reduce to, at worst, of minor significance.

12. SOCIOECONOMIC (ES CHAPTER 14)

GVA James Barr undertook an assessment of the potential socioeconomic impacts of the proposed development. The key socioeconomic issues that are included within the assessment are population numbers and structure, housing requirements, employment, healthcare and education provision.

The proposed development is predicted to increase the local construction sector activity by a higher degree particularly if a proportion of jobs can be sourced locally through various initiatives. At the local level, the development would have a temporary, minor beneficial impact on the local construction employment market. A Gross Value Added (GVA) injection of some £71m into the construction sector by construction of the proposed development is considered to have a temporary, moderate beneficial impact at the regional level. Whilst it is not possible to accurately assess the significance of this at the local level, it is considered likely this would result in a positive effect.

The proposed development makes provision for a local centre which will include a new primary school. Subject to further discussions with CEC, on the assumption that it is required, it will mitigate the effect of the development on existing primary school infrastructure. Similarly, potential local adverse effects have been identified in respect of increased pressure on local healthcare provision due to the additional population generated by the development. Provision can be made within the proposed development for a new standalone facility within the local centre if required.

The increase in population as a result of the proposed development would have a negligible impact on the regional area and a permanent, minor beneficial impact at the local level through increased levels of income, investment, and expenditure. The new population would support and encourage new businesses, as well as support the sustainability of existing local services such as community, health and education. New Council Tax revenues are also expected to have a permanent, minor beneficial impact at the regional level at which Council Tax is collected.

13. CUMULATIVE EFFECTS ASSESSMENT (ES CHAPTER 15)

As well as assessing the potential impacts of a proposed development on its own, the EIA Regulations also require applicants to consider if there is the possibility of cumulative effects. These are effects which may result from lots of small changes which might on their own be deemed acceptable but taken together could result in an unacceptable effect. These can be one of two types:

- Type 1 Cumulative Effects, which are combined effects of different assessment topics (such as noise, dust and visual impacts) on an individual or a group of receptors;
- Type 2 Cumulative Effects, which are the combined impacts of several development proposals considered together.

The aim of assessment is to highlight where a risk of significant cumulative effects exists. Cumulative effects, where relevant, are identified in the individual chapters of the ES. However, Chapter 15 of the ES highlights the process that was followed for identifying other development proposals that may need to be considered further for cumulative effects.

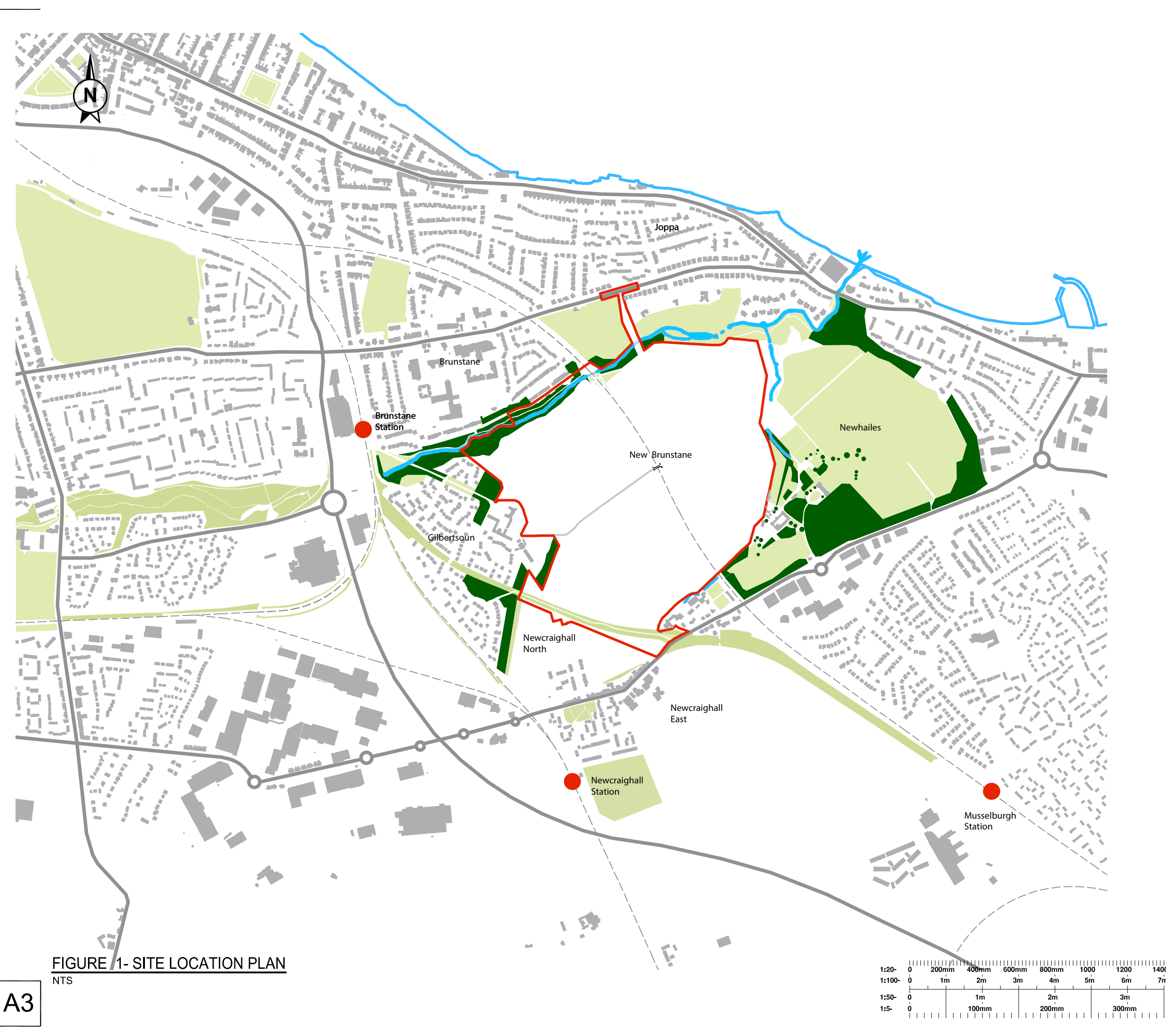
This process included a longlist of potential sites, a shortlist based on a number of factors such as their proximity to New Brunstane and the nature and scale of development, gathering information about the four adjacent sites which were to be considered in more detail (Newcraighall North, Newcraighall East, Brunstane Steadings and Wanton Walls) and then sharing this information with the specialist EIA topic authors. All four shortlisted sites are housing proposals adjacent to New Brunstane, two of which are currently under construction. However, as there was no definitive information available on whether those developments will be completed before construction would start at New Brunstane (in which case effects arising from them are considered as part of the baseline) it has been assumed they would not and have therefore been included in the cumulative effects assessment.

The assessment of both Type 1 and Type 2 cumulative effects, where relevant, has been incorporated into the technical chapters of the ES. All chapters have concluded that there are not predicted to be any additional significant cumulative effects over and above those which have already been identified in relation to the proposed development.

14. SCHEDULE OF MITIGATION (ES CHAPTER 16)

The Environmental Statement concludes with a summary of all of the mitigation measures proposed across the technical chapters. It also reaffirms the commitment that a Construction Environmental Management Plan (CEMP) will be agreed and in place prior to the commencement of construction works.

Figure 1
Site Location



LEGEND:

RED LINE BOUNDARY

AREA LICENCE No. 100017780
BASED ON AREA DRAWING NB-P-01

STATUS				PPP	
0	15.08.16	EM	GG	ISSUED FOR INFORMATION	
REV	DATE	BY	CHKD	DESCRIPTION	
CLIENT		THE EDI GROUP			
PROJECT		NEW BRUNSTANE			
DRAWING		SITE LOCATION PLAN			

DRAWING. No.	REV
FIGURE 1	0



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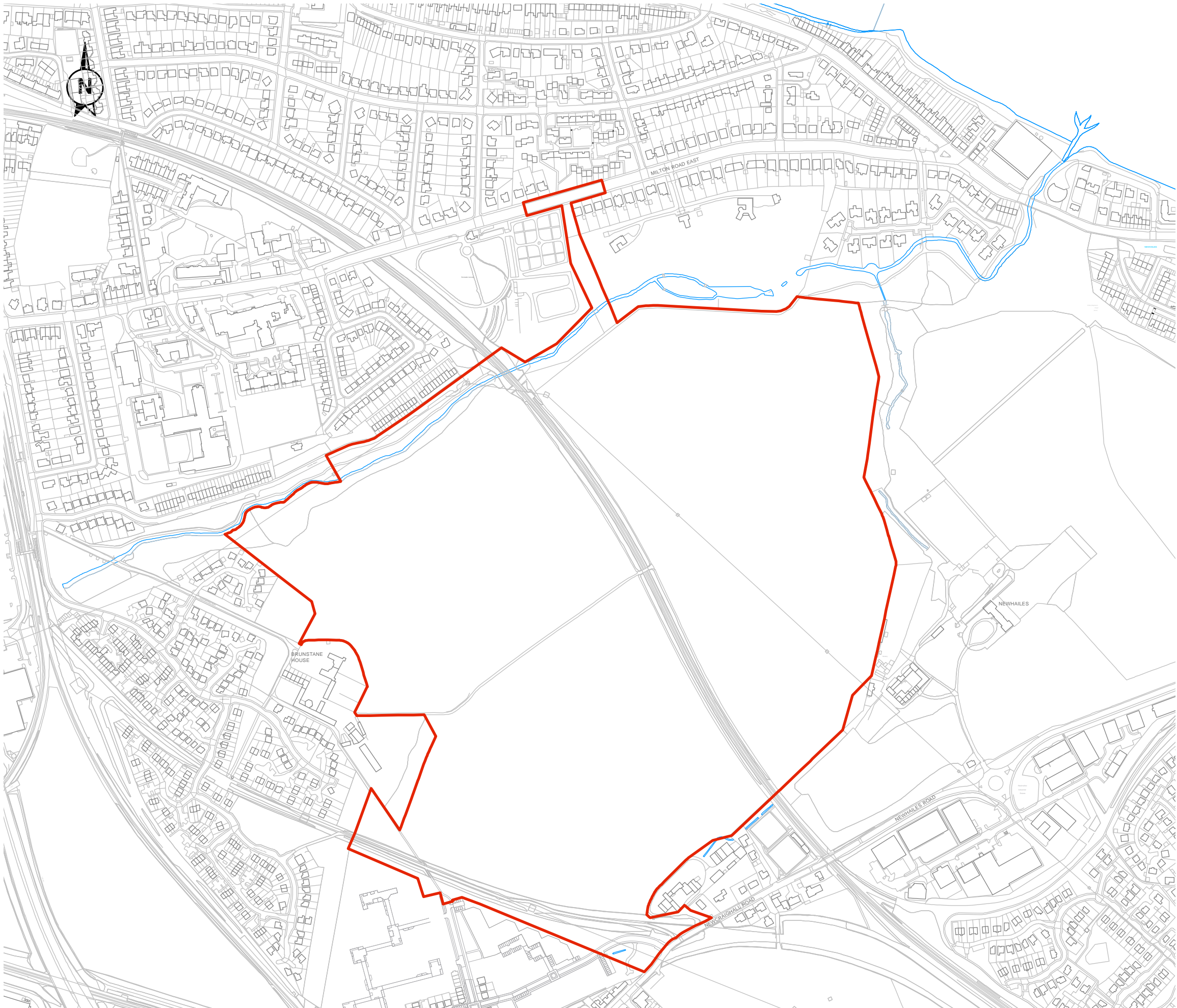
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FIGURE 1- SITE LOCATION PLAN
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Figure 2
Site Boundary



LEGEND:

RED LINE BOUNDARY

AREA LICENCE No. 100017780 BASED ON AREA DRAWING NB-P-02				
STATUS		PPP		
0	15.08.16	EM	GG	ISSUED FOR INFORMATION
REV	DATE	BY	CHKD	DESCRIPTION
CLIENT		THE EDI GROUP		
PROJECT		NEW BRUNSTANE		
DRAWING		SITE BOUNDARY (PAN BOUNDARY)		

DRAWING. No.	REV
FIGURE 2	0



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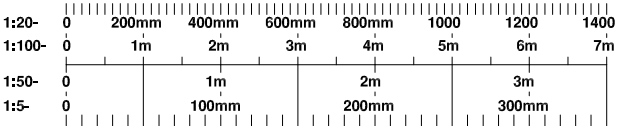
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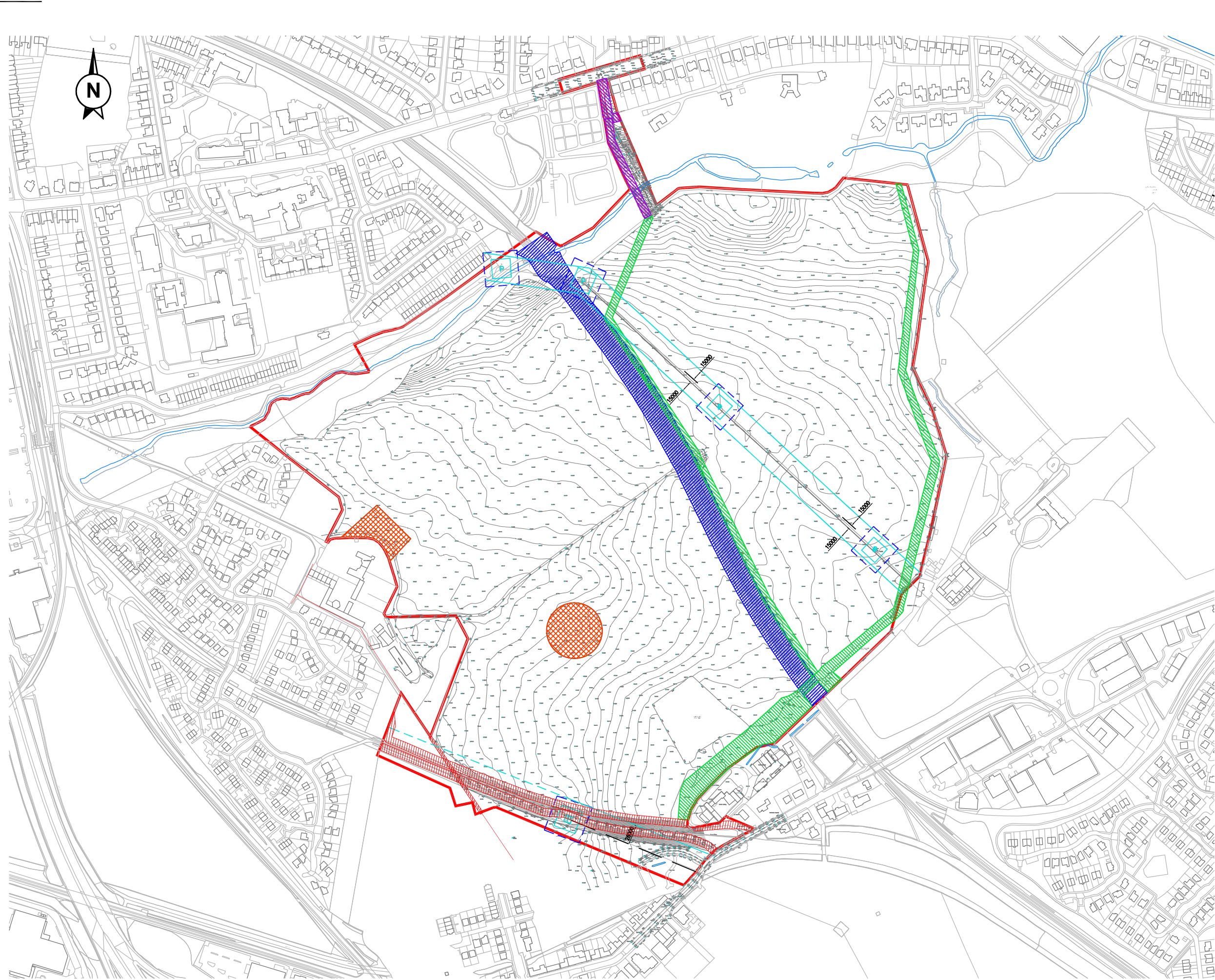
FIGURE 2- SITE BOUNDARY (PAN BOUNDARY)

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Figure 3
Technical and Environmental Constraints



LEGEND:

- RED LINE BOUNDARY
- EXISTING SCHEDULED MONUMENTS
- BOUNDARY ZONE AT EXISTING NETWORK RAIL (3m FROM NETWORK RAIL BOUNDARY FENCE)
- BOUNDARY ZONE AT EXISTING SCOTTISH WATER SEWERS
- BOUNDARY ZONE AT EXISTING SCOTTISH WATER SEWERS. AREA REQUIRING DIVERSION PRIOR TO CONSTRUCTION OF ACCESS WORKS. ALL FUTURE DIVERSIONS ARE SUBJECT TO REVIEW AND APPROVAL BY SCOTTISH WATER
- EXISTING SCOTTISH POWER CABLE
- BOUNDARY ZONE AT OVERHEAD PYLONS LINES (DASHED AREAS TBC BY SURVEY)
- 20m BOUNDARY ZONE AT PYLONS, ANY WORKS WITHIN THIS AREA TO BE DISCUSSED WITH SP ENERGY NETWORKS

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BASED UPON IKM DRG No. 15105-1001-4

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PROJECT	NEW BRUNSTANE
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DRAWING	TECHNICAL AND ENVIRONMENTAL CONSTRAINTS PLAN
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DRAWING. No.	FIGURE 3
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REV	0
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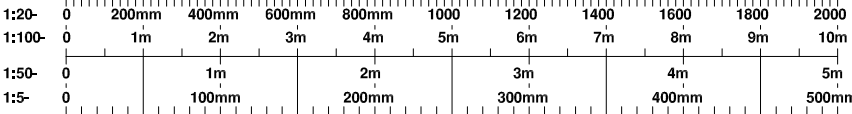


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FIGURE 3 - TECHNICAL AND ENVIRONMENTAL CONSTRAINTS PLAN

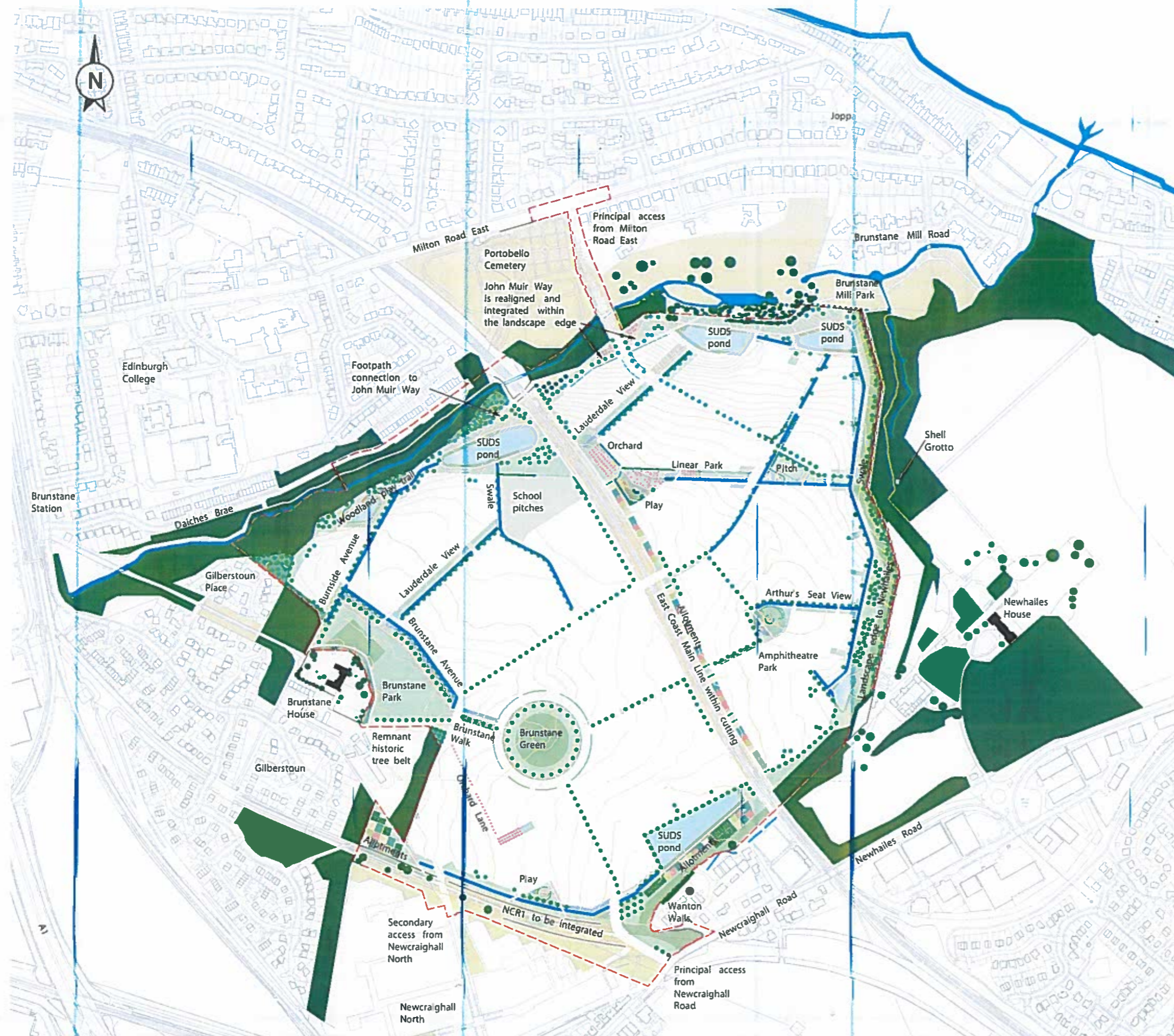
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Figure 4
Strategic Landscape Framework



- LEGEND**
- RED LINE BOUNDARY
 - EXISTING GREENSPACE
 - EXISTING WOODLAND
 - PROPOSED PARKS AND SOFT LANDSCAPE
 - PROPOSED WOODLAND
 - PROPOSED SUDS POND
 - PROPOSED AQUATIC MARGIN
 - PROPOSED SWALE
 - PROPOSED INDIVIDUAL TREES
 - PROPOSED FOOTPATHS
 - PROPOSED ALLOTMENTS & ORCHARDS
 - 0.5M CONTOURS

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CLIENT	THE EDI GROUP
PROJECT	NEW BRUNSTANE
DRAWING	STRATEGIC LANDSCAPE FRAMEWORK

DRAWING No.	REV
FIGURE 4	0

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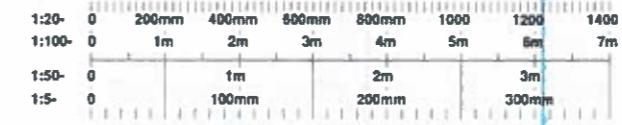
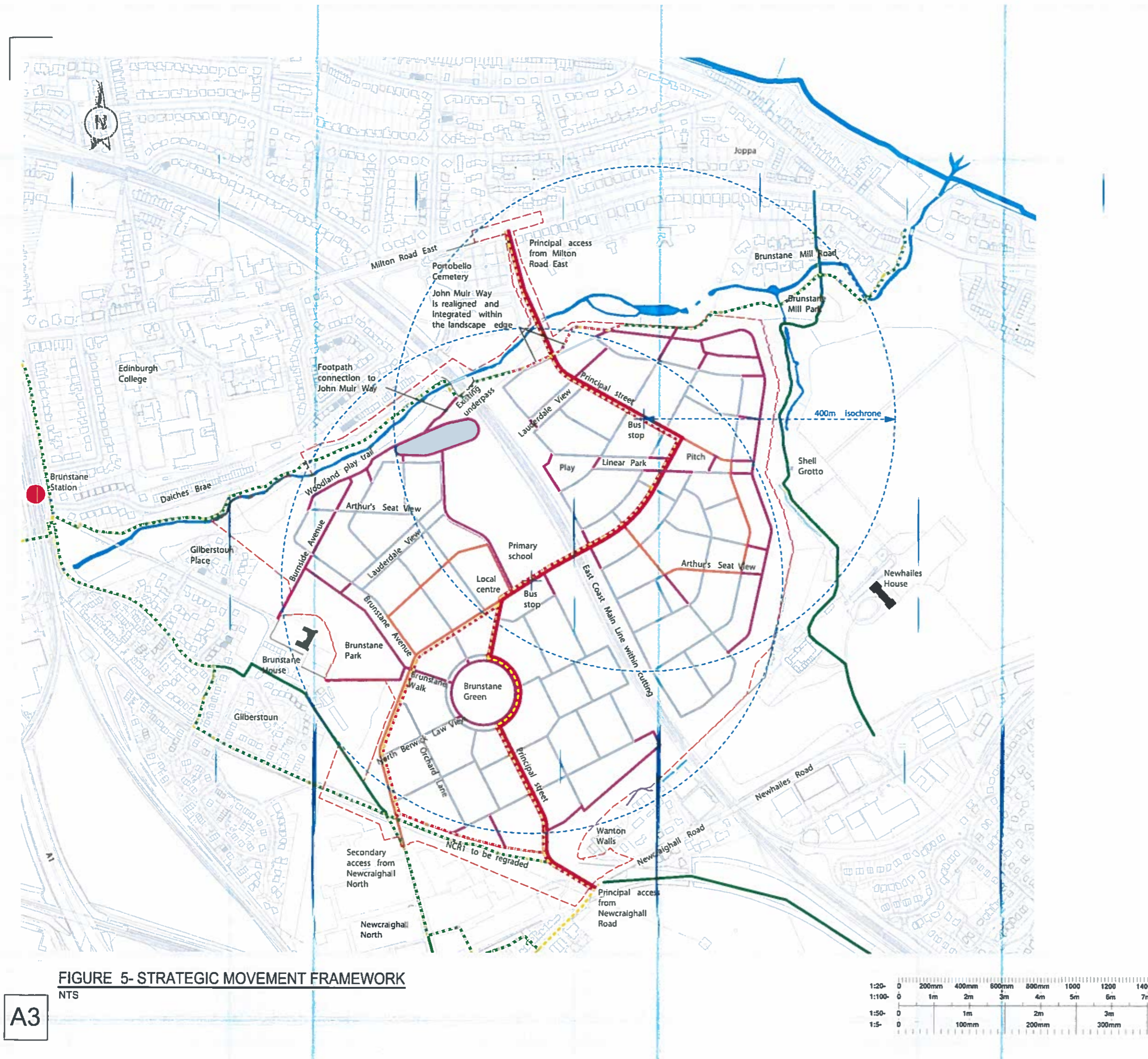


FIGURE 4- STRATEGIC LANDSCAPE FRAMEWORK

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Figure 5
Strategic Movement Framework



- LEGEND:**
- RED LINE BOUNDARY
 - PROPOSED PRINCIPAL STREET
 - PROPOSED SECONDARY STREET
 - PROPOSED SHARED SPACE
 - PROPOSED FOOTPATH
 - PROPOSED 3M COMBINED FOOT & CYCLE PATH
 - EXISTING FOOT & CYCLE PATH
 - EXISTING CORE PATHS

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PROJECT	NEW BRUNSTANE
DRAWING	STRATEGIC MOVEMENT FRAMEWORK
DRAWING No.	FIGURE 5
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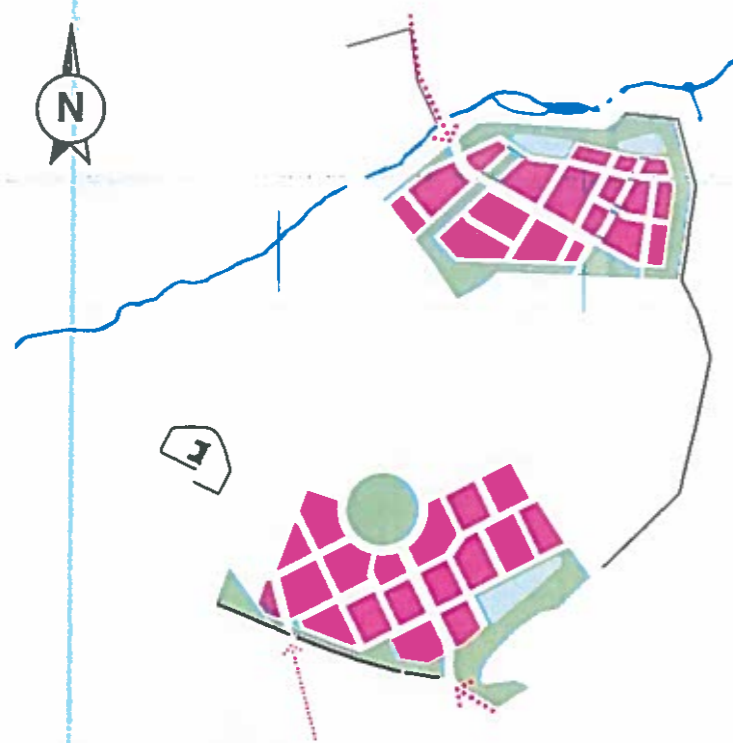
FIGURE 5- STRATEGIC MOVEMENT FRAMEWORK
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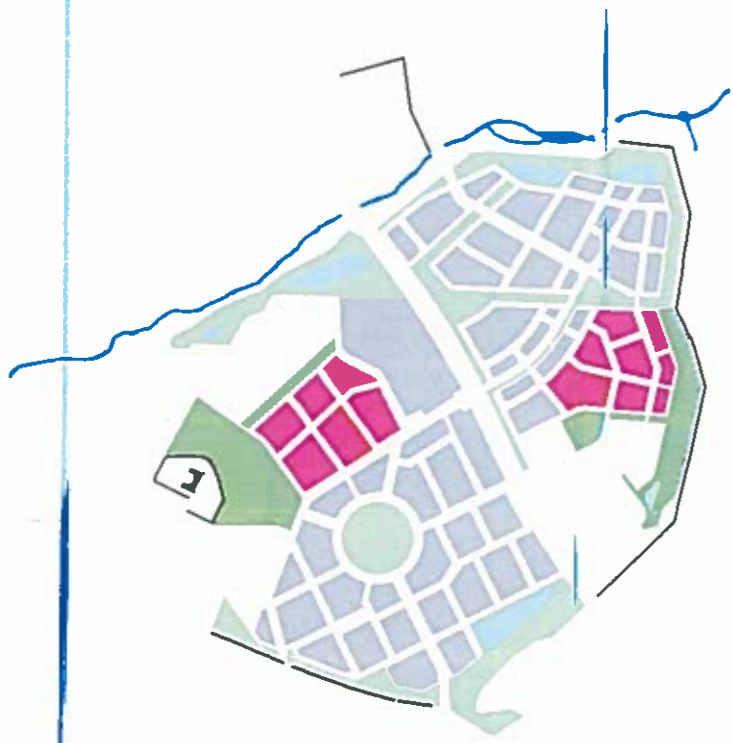
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Figure 6
Strategic Masterplan

Figure 7
Indicative Development Phasing



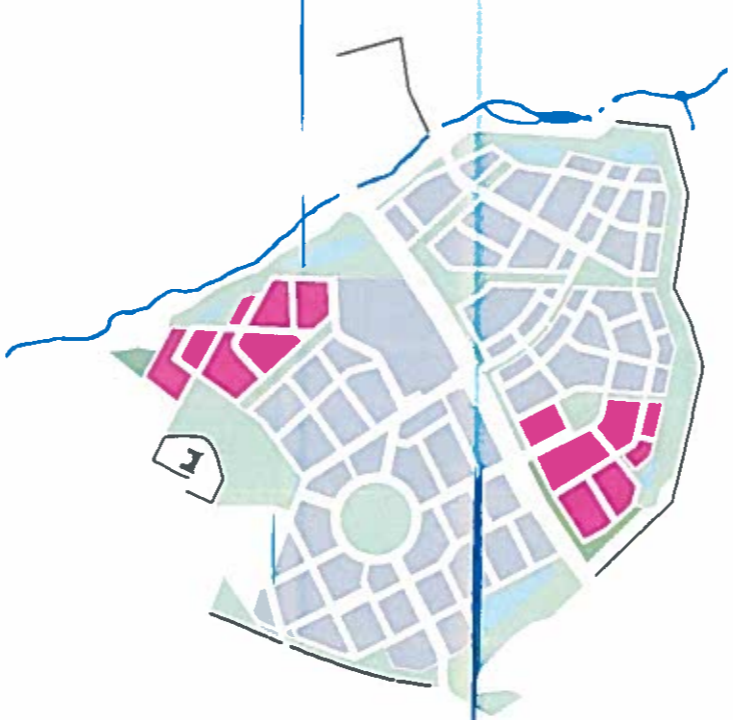
PHASE 1 WEST : Residential units
 Adjacent to Newcraighall North. Brunstane Green and SUDS basin formed.
PHASE 1 EAST : Residential units and Milton Road bridge access
 Linear Park, burnside landscape and SUDS basins formed.



PHASE 3 WEST : Residential units plus local centre
 Frontage buildings to Brunstane Park and Lauderdale View. Completion of local centre opposite school. Landscape to Brunstane Park and Lauderdale View completed.
PHASE 3 EAST : Residential units
 Buffer to Newhailes and park completed.



PHASE 2 WEST : Residential units, primary school and bridge over ECML
 Completes the circus and defines the southern edge to the principal street. Local centre and school. SUDS ponds formed, Brunstane Park planted.
PHASE 2 EAST : Residential units
 The principal street leading to the bridge are completed.

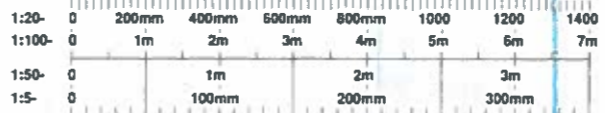


PHASE 4 WEST : Residential units
 Completes frontage to Brunstane Park and Lauderdale View.
PHASE 4 EAST : Residential units
 Completes the frontage to Newhailes.

FIGURE 7- INDICATIVE PHASING

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PROJECT	NEW BRUNSTANE
DRAWING	INDICATIVE DEVELOPMENT PHASING
DRAWING No.	FIGURE 7
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