

FINAL REPORT

Technical and Development Assessment

Tweedbank / Tweedside Park, Melrose



Report 2

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with

ekos
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CONTENTS

EXECUTIVE SUMMARY	i
1.0 INTRODUCTION	1
1.1 General	1
1.2 Background	1
1.3 Objectives	1
1.4 Reporting Format	2
2.0 SCOPE OF WORKS/ METHODOLOGY	3
2.1 Methodology and Consultations	3
2.2 Previous Reports	4
2.3 Site Details	5
3.0 LANDSCAPE APPRAISAL	7
3.1 Existing Conditions	7
3.2 Landscape Character and Setting	8
3.3 Designations	9
3.4 Visual Impacts	9
3.5 Landscape Opportunities	10
4.0 PHYSICAL ISSUES	11
4.1 Topography	11
4.2 Geology	11
4.3 Subsoil Conditions/ Site Investigation	11
4.4 Access and Accessibility	12
5.0 UTILITIES	13
5.1 Water Supply	13
5.2 Electricity Supply	13
5.3 Telecommunications Supply	13
5.4 Gas Supply	13
5.5 Drainage	14
5.6 Proposed Utilities	14
5.7 Proposed Drainage	15
6.0 ENVIRONMENTAL & SUSTAINABILITY APPRAISAL	17
6.1 Environmental Appraisal	17
6.2 Environmental Baseline Information	17
6.3 Environmental Risk Assessment	18
6.4 Sustainability Appraisal	22
6.5 Sustainability Policy – Scotland	22
6.6 Sustainability Criteria	23

7.0	DEVELOPMENT STRATEGY AND OPTIONS	27
7.1	Existing Conditions	27
7.2	Aggmore Ltd	27
7.3	Existing Context	28
7.4	Design Strategy	29
7.5	Landscape Strategy	30
7.6	Development Options	32
7.7	Potential Phasing Arrangement	43
7.8	Potential Zoning	43
8.0	OUTLINE COST APPRAISAL	45
9.0	CONCLUSIONS	47

LIST OF FIGURES

Figure 1	National Context
Figure 2	Study Area
Figure 3	Aerial Photograph
Figure 4	Tweedbank/ Tweedside Park Available Development Space/ Vacant Building
Figure 5	Existing Contours
Figure 6	Slope Band analysis
Figure 7	Height Band analysis
Figure 8	Existing Utilities: Scottish Water Sewers & Mains
Figure 9	Existing Utilities: Scottish Power Apparatus
Figure 10	Existing Utilities: SGN Gas mains & BT cables
Figure 13	Design Strategy
Figure 12	Landscape & Visual Context
Figure 11	Existing Movement Connections
Figure 14	Landscape Design Strategy
Figure 15	Option 1: Western Extension to Business Park
Figure 16	Option 2: Southern Industrial & Commercial Development
Figure 17	Option 3: Business Park Extension to Southern Site
Figure 18	Option 4: Long Term Redevelopment
Figure 19	Option 5: Redevelopment of Aggmore Land
Figure 20	Option 6: Redevelopment of Aggmore Land with exception of Plots 9 & 10
Figure 21	Option 4: Photomontage
Figure 22	Option 4: 3D Oblique View 1
Figure 23	Option 4: 3D Oblique View 2
Figure 24	Option 4: 3D Oblique View 3
Figure 25	Option 4: View from A6091
Figure 26	Potential Phasing Plan
Figure 27	Potential Zoning Plan

LIST OF APPENDICES

Appendix A	Budget Cost Assessments
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EXECUTIVE SUMMARY

On the instruction of Scottish Borders Council (SBC) and Scottish Enterprise (SE), Ironside Farrar Limited has undertaken a Technical and Development Assessment for new business space in the vicinity of the Borders Railway Terminal in Melrose. This report comprises one of four technical reports prepared on behalf of SBC and SE.

The purpose of the report is to inform potential development of sites at Tweedbank Industrial Estate and Tweedside Park.

Study Approach

The approach comprised a mainly desk study based approach together with meetings and site walkovers. Following the findings of the previous Market and Economic Assessment Report, a phased strategy was recommended with respect to development of the sites. Additional development options have also been included within the report to assess potential opportunities that arose during the study.

Site Details

Tweedside Park was constructed in 1989 and is a strategic employment site designed on a high amenity basis. It has one area of undeveloped land and is located adjacent to the proposed Borders Railway Terminal.

The existing Tweedbank Industrial Estate was initially developed in the mid 1970's and generally consists of manufacturing and commercial uses.

Access and Accessibility

Tweedbank has good road access and is adjacent to and accessed from the A6091 Trunk Road Network. Public transport provision is in the form of a bus service and a bus stop is located adjacent to the site on Tweedbank Drive. The site is well serviced for pedestrians by both Core Paths and Promoted paths.

There are currently no railway stations or freight services in the Borders Region, however the Borders Railway is currently under construction and is anticipated to be completed in 2015, with the terminal being located adjacent to Tweedside Park.

Utilities

All main utilities currently exist within the two sites. Given that the area is currently developed, it is not anticipated that future utilities provision would be problematic for modest expansion to the estate or for redevelopment of existing elements over the short to medium term.

Proposed Drainage

It is anticipated the existing foul drainage system would be maintained and utilised where possible to service new development. There may be a requirement to survey and potentially upgrade elements of existing infrastructure to ensure it was suitable to service a modern development.

Any new development or redevelopment of the site would require an appropriate SUDS system to be installed to treat surface water drainage. It would probably be appropriate to utilise the existing surface water drainage carrier system in a redevelopment scenario. However attenuation and treatment would be required. The existing system would require to be checked and potentially repaired/ upgraded.

Sustainability Appraisal

A sustainability appraisal has been undertaken as part of the study. The concept of sustainable development recognises the need for development to take account of the use of natural

resources and the generation of waste, and acknowledges the equal importance of development's social, environmental and economic dimensions, at both global and local levels. The SPP encourages the planning system to support the achievement of sustainable development through its influence on the location, layout and design of new development.

Enhancement and further development of the Tweedbank Industrial Estate/ Tweedside Park offers the potential to impact positively on several sustainable development criteria. Key opportunities may relate to refurbishment of existing inefficient buildings to include new cladding which will have long term benefits in terms of reduced levels of energy consumption and emissions. Any new buildings proposed will be designed to incorporate low carbon and low energy features.

Landform, Environment and Visual Impact

The topography of most of the industrial estate is fairly level, with a more noticeable slope rising from the eastern estate road to the eastern boundary, although this is less than 1 in 20 slope at its steepest, so not a major constraint to development. The steepest areas within Tweedside Park have already been developed as part of the Scottish Public Pensions Agency site. The undeveloped part of the site is a gentle north-facing slope, with small undulations to the north.

The industrial estate forms a visible public frontage on to Tweedbank Drive. Elsewhere generous woodland planting ensures that both sites are relatively well screened from Tweedbank Drive, the strategic road network, the Special Landscape Area to the south, the National Scenic Area to the East and the River Tweed Special Area of Conservation and SSSI to the north of Tweedside Park. A few small gaps in the screening allow for intermittent narrow views through into the sites, most notably along the A6091 to the south.

There are a number of TPOs placed upon established groups or individual trees within the industrial estate. These include parts of the southern edge screening vegetation.

Views of the Eildon Hills are notable at certain points within both sites. The hills to the north and south also form attractive rural backdrops and sense of enclosure frequently visible as one moves through the sites. The most prominent building positions are located at the two entrances to the industrial estate. Following development of the railway station and clearing of vegetation to allow for the vehicular access, any building within the western corner of the business park site will also be rendered highly visible.

Aggmore Ltd

FT Linden are managing agents for Aggmore Ltd, who own the majority of the Tweedbank Industrial Estate. They noted that the estate was well located within the central Borders had good transport links and the potential to capitalise on the Borders Railway/ Terminal. FT Linden noted that there were issues associated with the estate that currently made it difficult to let units.

FT Linden noted that the estate was not commercially profitable for Aggmore in the current market conditions. As Tweedbank was Aggmore's only holding in Scotland and of a smaller scale/ nature to their other assets, Aggmore were looking to sell their holdings in the estate as soon as they were able/ achieved a realistic offer.

FT Linden stated that Aggmore were not currently interested in a potential joint or sole venture in the future to upgrade or reconfigure the estate under any foreseeable conditions.

The position taken by Aggmore Ltd offers the potential opportunity to acquire and redevelop parts of the estate. Without intervention, the possibility/ probability exists that maintaining the status quo at Tweedbank will lead to a further slow decline in the building stock and use of the estate, with the attendant issues that this may lead to.

Design Strategy

A broad design strategy to guide development towards achieving positive design, viability and sustainability objectives has been prepared and illustrated diagrammatically to convey the need for a flexible approach able to respond to changing markets and other circumstances.

- (i) **A Clear Urban Structure** : The new rail station will create an important entrance to the area and a key node in the movement network since both sites will gain access from the newly formed junction. Development should respond to this by creating welcoming public facades and a positive sense of enclosure which attracts pedestrian movement from the station in to the development. From here the existing road and path networks form an effective structure for any new development, forming secondary nodes at the junctions of Core Paths, site entrances and main roads.

The layout of the industrial estate should follow the principles of the perimeter block, whereby buildings are orientated to front on to the road and hide the more operational or car parking areas, which tend to be more visually-intrusive, to the rear of buildings in the internal part of the block. This also creates a more comfortable pedestrian environment with well defined streets, more public entrances and windows overlooking the streets. Corner buildings should seek to positively address both street frontages.

- (ii) **Protecting Sensitive Landscape and Neighbouring Communities** : The visual impact of development on the surrounding sensitive landscape areas can be limited by restricting the scale and massing of buildings. Buildings within the business park and the southern and eastern parts of the industrial estate should be kept relatively low and small in terms of massing - no more than two storeys in height. Where larger buildings are proposed these could be accommodated towards the northern part of the industrial estate, particularly where they can contribute towards a strong and continuous frontage along Tweedbank Drive.

Views of the development sites can be further restricted through careful planting of vegetation to complement the already established planting around and within each site. Development should also seek to retain and protect as far as possible trees which contribute positively to the character of the area, in particular those with TPO status.

It will also be important to maintain the existing woodland planting along the western edge of the industrial estate which screens neighbouring homes from the noise and visual intrusion of industrial activities and vehicular movements.

- (iii) **Landscape Strategy** : Through the development of a robust palette (e.g. selected to include appropriate variety/ mix/ nature) of materials and landscape treatments future developments will emerge with consistency through approach and execution that will provide cohesion through the varying stages of development improving the identity of the Industrial estate.

Development Options

A series of potential development options have been prepared. The options identify a development on the vacant plot at Tweedside Park as well as a series of potential options within Tweedbank IE. Some of the options considered involve larger scale development than envisaged as being required by the Market and Economic Assessment Report in order to review potential opportunities resulting from comments made by the existing estate owners.

Potential plans have been prepared that identify how redevelopment of the wider site might be phased and zoned.

Outline Cost Appraisal

A series of outline cost assessments have been undertaken as part of the study. These allocate the budget costs for infrastructure provision for the various development options considered.

The costs assessments indicate that costs to redevelop parts of the existing industrial estate compare favourably with development of Greenfield land. This is primarily due to the existing utilities and infrastructure currently present on the site which would be retained where possible in a redevelopment scenario.

1.0 INTRODUCTION

1.1 General

On the instruction of Scottish Borders Council (SBC) and Scottish Enterprise (SE), Ironside Farrar Limited has undertaken a Technical Assessment and Development Assessment for new business space in the vicinity of the Borders Railway Terminal in Tweedbank. This report comprises one of four reports prepared on behalf of SBC and SE and assesses land at Tweedbank Industrial Estate and Tweedside Park.

1.2 Background

The Waverley Railway (Scotland) Bill received Royal Assent in July 2006. It proposed the re-establishment of a railway connecting the Central Borders and Midlothian to the national network at Edinburgh. Now known as the 'Borders Railway', works are currently in progress. The railway is currently programmed to be operational by 2015.

At well over £200m the Borders Railway represents the largest single investment in the transport infrastructure of both Midlothian and the Borders for a considerable period of time. In the longer term the improvement in public transport connectivity and reduction in the perceived peripherality of the Central Borders it will bring about should have significant net beneficial economic impacts. Some of these will happen without further public sector intervention, but there are also opportunities to create additionality by preparing or taking action now to enhance the economic development benefits that the railway can bring. Amongst these are the possibility of creating or enabling business land and/or property development in strategic locations in the railway corridor and so encouraging future business development in the Central Borders.

This current project is about identifying and planning how to capitalise on such an opportunity.

1.3 Objectives

Scottish Enterprise (SE) and Scottish Borders Council (SBC) have identified the need to investigate development options and infrastructure provision to encourage future business development in the Central Borders.

As part of their remit to provide or assist in the provision of development sites for business, SE and SBC have commissioned this feasibility study in the area around the proposed Tweedbank Railway Station and up to the Borders General Hospital (BGH) at Huntlyburn. This study will initially be about assessing whether or not an economic development opportunity exists in this area, and subsequently about planning how such an opportunity can best be realised. The outcome of the study will provide the basis for the business development land/ property proposals to be incorporated into the Local Development Plan. The principal aim of the study is to set the grounds for maximising the economic development potential of the Borders Railway by forming the basis of:

- an ambitious, proactive and credible development strategy for providing modern, environmentally efficient business property in the area, agreed with planning and other statutory authorities, and based on a realistic appreciation of the potential market and of the impact of the rail reopening;
- planning guidance, that may be incorporated into the Scottish Borders Local Development Plan, compilation of which is currently underway through publication of the Main Issues Report;

- site development options and development briefs with indicative costings, and a phased implementation programme;

1.4 Reporting Format

Given the findings of the Market and Economic Assessment Report, a phased strategy was recommended with respect to development of the three sites and towards the technical studies included as part of the brief:

- Tweedside Park: This site has a current vacant plot and offers opportunity to create a high quality employment environment at a key location for the new station. It was therefore proposed to take this site through the full technical study and development layout brief.
- Tweedbank offers both existing vacant plots and buildings together with close proximity to the railway terminal and offers opportunity for low cost immediate availability as well as potential for development over available vacant sites should the demand arise. It is proposed that this site should also progress to the full technical/development layout brief.
- The Market/ Economic study suggested that there is no current short term demand for development land at Broomilees and with medium/long term trends difficult to predict, significant input to the site at this stage was unlikely to be required. A short high level study only was proposed which would identify and summarise key issues/ costs and development timescales. This would allow SE/SBC to be prepared for development of the Broomilees site, should demand arise in the future. The Broomilees site is reported separately.

During the process of this current study and following a meeting with representatives of the landowners, Aggmore Ltd, potential opportunities for wider development of the Tweedbank site arose. On the instructions of SE/ SBC, additional development options were then included within this study to assess these potential opportunities.

This report comprises the Technical and Development Assessment for Tweedbank Industrial Estate and Tweedside Park.

The two sites effectively form part of a single development area set within a broadly similar context and sharing access, utilities, infrastructure and landscape/ environmental setting. A single report has therefore been produced to cover both sites with subdivisions where required to provide individual comments on the two sites.

2.0 SCOPE OF WORKS/ METHODOLOGY

The following outlines the scope of works undertaken as part of this assessment:

A development strategy for restructuring of the existing Tweedbank industrial estate.

- Collect, collate information and report on current utility services infrastructure.
- Review vehicular and pedestrian access and public transport issues.
- Consultation with the site owners and commissioning parties.
- Preparation of a development strategy, associated report and masterplan for the overall site.
- Assess the landscape issues raised by the development.
- Preparation of a set of design guidelines for the development of the site, aimed at implementing the development strategy and sketches indicating how the site might appear when developed, including plans and 3D visualisations.
- Preparation of an outline environmental appraisal, summarising the expected environmental and sustainable development costs and benefits of the proposal, and how the design guidelines will optimise the former and minimise the latter.
- Preparation and review of a series of potential development options including outline cost appraisals (added as an extension to the initial brief following a meeting with the site owner's representative).

A layout plan for the extension of Tweedside Park Estate

- Analysis of the topography of the site and its landscape setting and character.
- Collect, collate information and report on current utility services.
- Review vehicular and pedestrian access and public transport issues.
- Consultation with SEPA, SNH and any other appropriate statutory authorities.
- Consultation with the commissioning partners and other interested parties.
- Preparation of a development strategy and masterplan for the site that is responsive to the issues raised during the consultation and to the requirements of the brief, including a detailed report on information obtained;
- Preparation of sketch proposals, including plans and 3D visualisations, illustrating how the strategy could be implemented in practice, demonstrating the net developable area, practicable means of access; sympathetic landscape design, links to surrounding areas, and budget costs.

2.1 Methodology and Consultations

The following methodology has been used during this report, further details of which are included in individual sections where appropriate.

- Collation/ review of background information.
- Site walkover and survey.
- Review of previous reports.
- Collation of topographic data and slope analysis.
- Consultations with relevant organisations.

- Review of existing access and utilities.
- Environmental, landscape and sustainability appraisals.
- Meeting with FT Linden, managing agents for Aggmore owned assets.
- Production of costed redevelopment options.
- Masterplanning and production of development planning guidelines.
- Production of photomontage views of a selected development option.

Table 1 presents a list of consultees.

Table 1 – List of Consultees

Consultation Name	Type of Information
Scottish Borders Council	Previous reporting, planning information, landscape information.
Scottish Enterprise	Comments regarding development considerations.
FT Linden	Information relative to development of the Aggmore owned assets within Tweedbank IE.
SEPA	Review of available website data on Environmental Issues.
SNH	Review of ecological data.
Utilities providers	Information on existing services.
British Geological Survey	Information on ground conditions.
RCHAMS	Information on cultural/ historical interest.

2.2 Previous Reports

As part of this study the following previous desk study and reporting information has been reviewed to provide pertinent details on the site.

- Nominal land ownership information.
- A list of Buildings at Tweedbank and Tweedside Park including owners and tenants, referenced from the valuation roll.
- Report from the Scottish Government Reporters unit on the issues raised by B&Q at Tweedbank IE.
- Ryden Property market studies for the Scottish Borders.
- Scottish Borders Local Plan.
- Scottish Borders Local Development Plan: Main Issues Report.
- Scottish Borders Council Annual Employment Land Audit.
- Tweedside Park Tweedbank, Preliminary Technical Appraisal, Summary Report, Ironside Farrar, March 1999.

2.3 Site Details

The overall study is centred around the proposed Borders Railway Terminal at Tweedbank. The study area comprises existing zoned employment land comprising main sites:

- Tweedside Park
- Tweedbank industrial Estate
- Broomilees

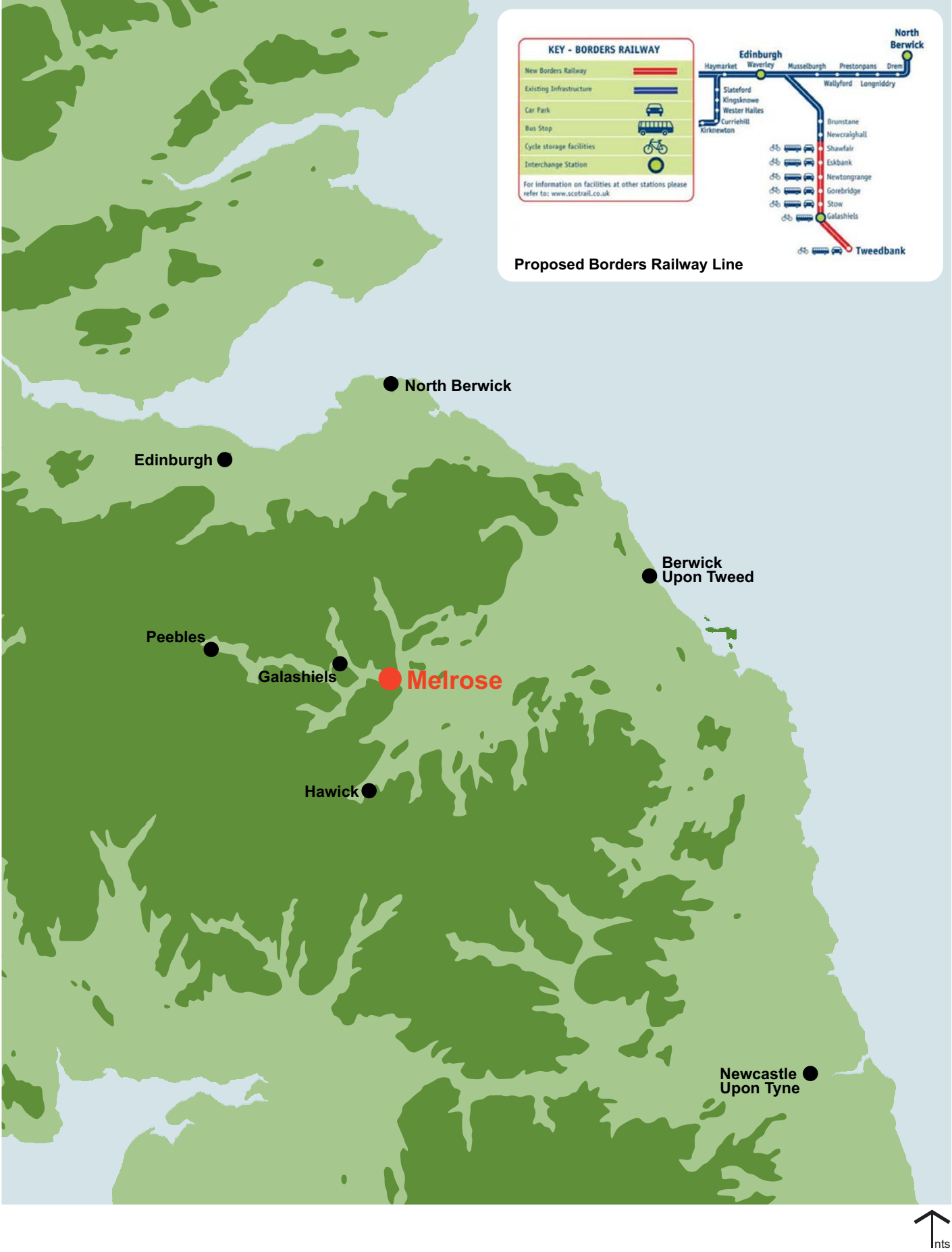
Tweedside Park was constructed in 1989 and is a strategic employment site designed on a high amenity basis. It has one undeveloped plot and is located adjacent to the proposed Borders Railway Terminal.

The existing Tweedbank Industrial Estate was initially developed in the mid 1970's and generally consists of manufacturing and commercial uses.

The Broomilees site is located approximately 2km west of Melrose Town Centre and directly to the south and west of the A6091(T) trunk road. The site covers an area of up to approximately 5 hectares and predominantly comprises agricultural land that generally falls to the east.

Figure 1 shows the study area in a national context with Figures 2 and 3 identifying the local area and an aerial photograph respectively. Figure 4 identifies available development space/ Vacant Buildings.

This study focuses on the Tweedbank Industrial Estate and Tweedside Park sites.



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Figure 1
National Context

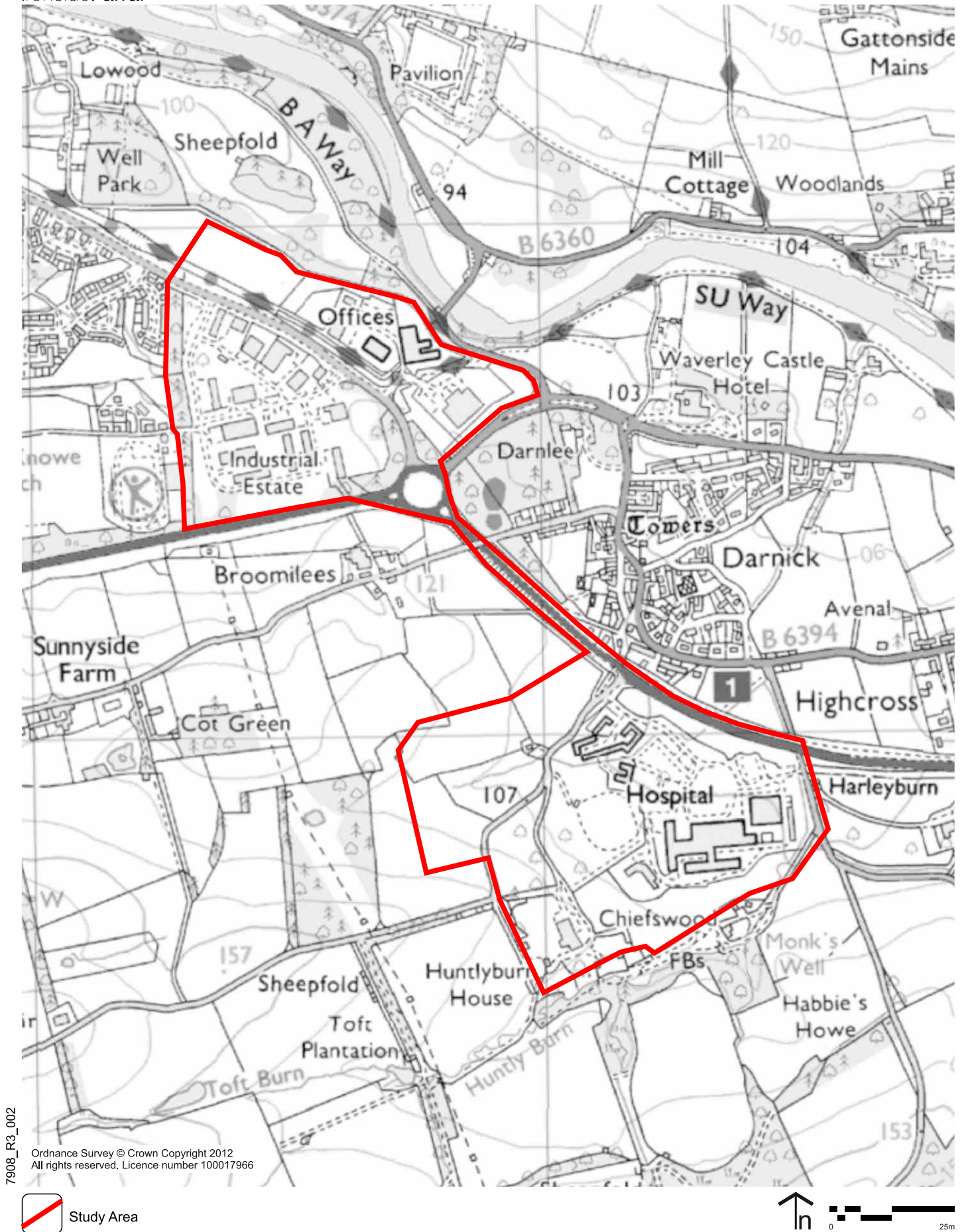








Figure 2
Study Area



Figure 3
Aerial Photograph

-  Study Area Boundary
 -  Available Development Plots = 5.49ha
 -  Vacant Buildings = 4250m²
 -  Trees & Planting = 2.02ha
 -  Tweedbank Building Numbers
 -  Tweedside Park Plot Numbers
- Note:**
Areas provided are approximate

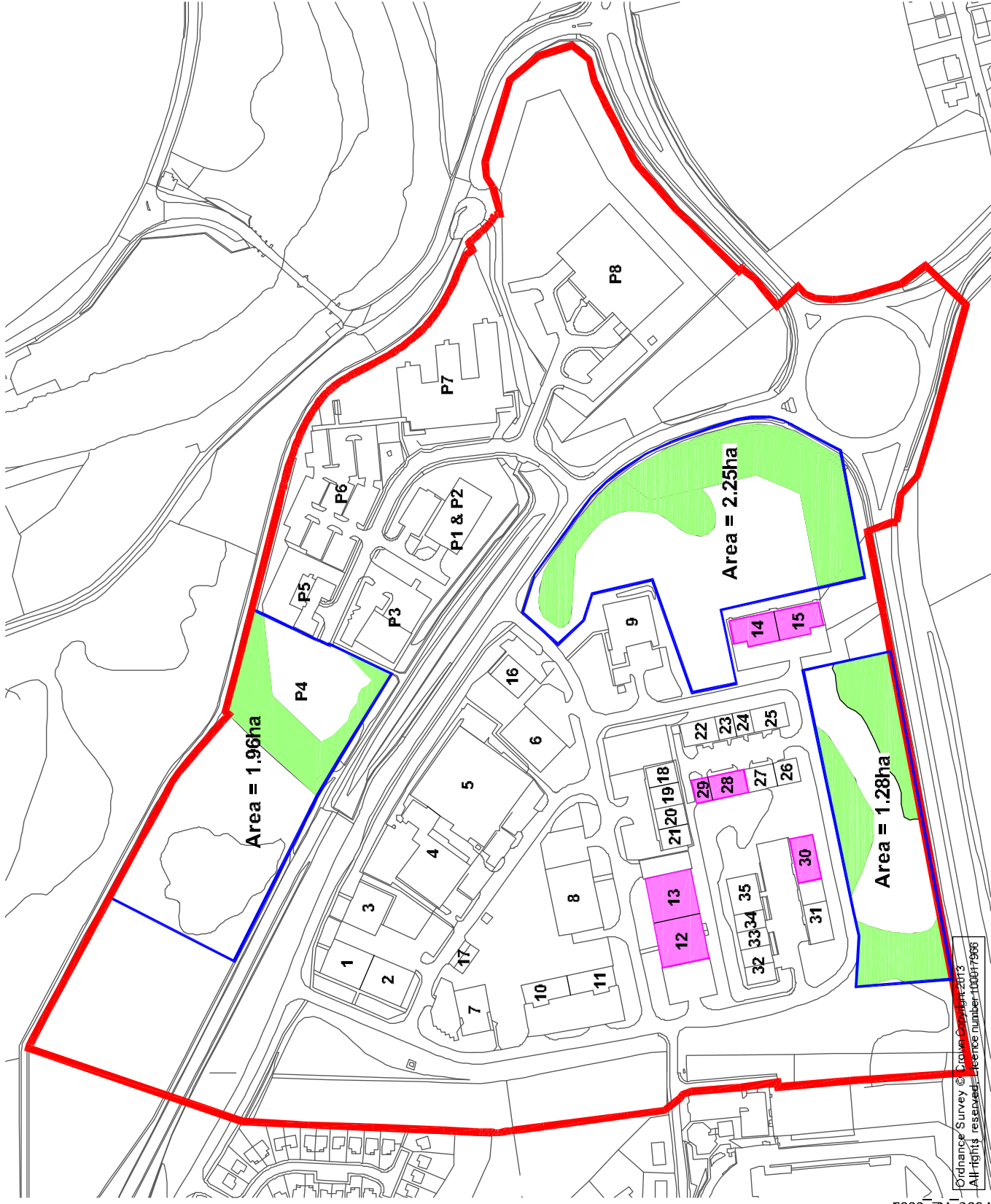


Figure 4
Tweedbank /
Tweedside Park
Available
Development
Space / Vacant
Buildings

3.0 LANDSCAPE APPRAISAL

3.1 Existing Conditions

Tweedside Park

The Tweedside Park estate was developed in 1989 and is located to the north of the A6091/ B6360 Melrose Roundabout, it is accessed from Tweedbank Drive that forms the south western boundary of Tweedside Park. The park comprises 8 development plots that are currently enclosed by established mixed woodland belts.

Out of the eight plots, one contains a car park and one is currently undeveloped, this undeveloped plot is currently maintained as amenity grassland. A 7.3m wide road provides access into The Park from Tweedbank Drive.

A 3m wide unclassified road passes along the north boundary of the site, this joins the B6360 from a minor junction to the north eastern area of the site. This road leads to the Lowood Farmstead and Plant Nursery.

The Southern Uplands Way and National Cycle Route 1 travels along the southern section of The Park along the route of the former Waverley Railway, this route is enclosed by established vegetation and mixed woodlands. These routes enter the site, cross the access road within the site and pass between plots 7 & 8 within a wooded tree belt dividing the plots.

Development within The Park is comprised mainly of commercial buildings and industrial units 1-2 stories in height. Heights of development units do not exceed the existing tree heights, thus reducing the visual impacts of the business park.

Tweedbank Industrial Estate

Tweedbank Industrial Estate was developed in the mid 1970's. The industrial estate is located in the wedge of land located between the Tweedbank Drive and the A6091 to the east of the residential area of Tweedbank and the Tweedbank Outdoor Sports Complex.

The Industrial estate is accessed via two junctions from Tweedbank Road that divides Tweedside Business Park from Tweedbank Industrial Estate. These enter the site creating two loops, access is extended from the industrial estate through the established bank of trees to the Tweedbank Outdoor Sports Complex and the Tweedbank residential area. There is an ad hoc appearance of footpaths alongside the internal network.

There is a fragmented development pattern with no consistency in approach between the scale, design or form between the developed units or the industrial estate as a whole. As a result of this the estate has a piecemeal development characteristic with large areas of open grassland awaiting development. Currently these undeveloped areas add to the disorganised, undeveloped and fragmented appearance of the estate.

The established woodland planting to the north, east, south and western boundaries does provide containment and visual screening of the estate and as with the Tweedside Park, development has not breached the height of vegetation and is maintained at 1-2 storeys high.

3.2 Landscape Character and Setting

Tweedside Park

Currently the Tweedside Park is enclosed by established mixed woodland in dense belts along Tweedbank Drive to the south western boundary, at the Melrose Roundabout and along the B6360 to the south east. There is also an established woodland belt to the northern edge between the unclassified single track road and the River Tweed.

The access road from Tweedbank Drive passes through the established dense mixed woodland planting. Beyond the small circular shaped clearance feature at the entrance there are established broadleaved trees planted in an avenue with beech hedges underneath either side of the road between plot 7 and plot 1 & 2. Plot 8 is surrounded by dense mixed woodland belts is a self contained, almost isolated from the rest of The Park. There are openings to this woodland belt on the northern edge of this plot where an access road into this plot joins the main access road in the business park.

A maintained and overgrown hedge without trees is continuous along the northern side of the access road within The Park along plots 6 and 5 providing open views into plots 6 and 5. On the opposite southern side of the road along plots 3 and plots 1 & 2 there is a maintained beech hedge. Plot 3 has established avenue tree planting with the hedge below whereas the development that occupies plot 1 & 2 has a broken section of beech hedge with a section of established tree planting, ornamental shrub planting at the entrance into the plot and a section where there is no hedge, tree planting or shrub planting and the boundary to this plot is marked out by a post and wire fence.

Currently the access road terminates abruptly at the undeveloped Plot 4 which is currently enclosed to the north, west and south by established woodland, the plot is currently an open area of maintained grassland.

Between plots 4 and 3 there is a footpath linking the business park to the Southern Upland Way, this path is fairly wide and has a grass verge either side of the path framed by maintained beech hedges and tree planting.

Internally each plot has its own individual character with different styles of building and landscaping. This fairly consistent landscape treatment along the main access route with beech hedges and established deciduous avenue tree planting provides consistency to landscape design throughout the business park.

Tweedbank Industrial Estate

The Tweedbank Industrial Estate also has established woodlands, albeit broken at certain locations to all boundaries. Mixed woodland planting to the northern boundary along Tweedbank Drive is less dense and less wide than other locations around the estate, however this still provides a strong visual and physical boundary to the estate. The mixed woodland to the north eastern to south eastern boundary is dense and fairly wide, this screens the estate from the Melrose Roundabout. Along the A6091 there are dense areas of mixed woodlands with designed openings allowing transient partial views into the estate framed by the woodlands. The western boundary is a wide and dense established belt of mixed woodlands that separate the estate from the residential development at Tweedbank.

Internally the estate has a wooded enclosed contained character, created by the dense and established mixed woodlands to the boundaries of the estate. There is no overriding landscape structure providing consistency. Landscape planting, as with built development, has an ad hoc and inconsistent appearance. There are however areas of dense and established woodland and established tree planting that creates an informal landscape structure internally. The majority of these trees are mature and have an attractive form that visually adds interest and a natural element to an otherwise industrial collection of buildings and visually derelict land. Alongside the access roads there are

intermittent sections of footpaths, there is no consistent pedestrian access through the estate. Access roads have grass verges, woodland planting or overgrown shrub planting only.

The landscape setting of the Tweedbank Industrial Estate is ad hoc with no overall structure, however it is, at locations established and provides an informal woodland character.

3.3 Designations

Tweedside Park

Within the site there are no environmental designations, however the Southern Uplands Way and NCN route 1 pass through The Park. Trees within this section are not covered by a TPO and this is not a conservation area. However immediately to the east there is an Area of Great Landscape Value that is soon to be replaced by the Special Landscape Area, a National Scenic Area is also to the east. The River Tweed to the north is also a Special Area of Conservation and a SSSI. There will be no direct landscape impacts on these designations, impacts will be indirect and on views only. These impacts are discussed in the Visual Impacts section below.

Tweedbank Industrial Estate

With the exception of a small section of woodland planting along the northern boundary all established woodland planting to the boundaries of the industrial estate are protected by a TPO. This TPO extends to the wooded areas and individual trees within the Industrial estate. To the south of this site there is an area of Great Landscape Value and Special Landscape Area.

The established woodland boundary covered by the TPO to the industrial and business park creates a strong physical and visual edge to the settlements and should be maintained, and potentially added too. This will prevent further physical and visual coalescence between settlements.

3.4 Visual Impacts

Tweedside Park

There are no views from Tweedbank Drive, Melrose Roundabout or the B6360 into The Park, except where the access road from The Park joins the Tweedbank Drive.

Tweedside Park will be visible from the summits of the Eildon Hills to the south east and Buckholm Hill to the north west. Impacts from these high points will be limited to visual impacts and be negligible due to distance of receptor and no significant change in views currently experienced. Visual impacts of the development will be limited by the established vegetation that forms the boundary to the business park.

Due to the established dense mixed woodland belts around The Park there are limited immediate views to and from the Area of Great Landscape Value (AGLV) to the east and south, the National Scenic Area to the east – south east and the proposed Special Landscape Area (SLA) to the south.

Tweedbank Industrial Estate

There are transient partial views into the industrial estate from the A6091 to the south. These views are permitted through designed openings in the established mixed woodland planting to the southern boundary of the industrial estate. Currently there are two views from this busy main road; one looks north west to buildings within the estate framed by

vegetation, this view extends to the long distance focal point of Buckholm Hill north of Galashiels. The view from the A6091 to the north east into the industrial estate is towards industrial buildings with the low rolling hills to the north of Melrose in the background. These views are transient and will experience impacts as redevelopment progresses.

There are partially screened views of the Tweedbank Industrial estate from Tweedbank Drive to the north east of the estate, views are afforded into the site from points where the access track enters the site. These views will change as redevelopment of the industrial estate progresses, however the views will not experience substantial impacts or substantial changes.

Views to the industrial estate will be afforded from the high points in the Eildon Hills to the south east of the estate. From this receptor there will be views of the redevelopment of the estate, however the views will not experience significant impacts due to the distance of the receptor and there will be no significant change in views currently experienced from the high points to the existing industrial estate.

Currently there are very limited views from points within the SLA and AGLV to the south of the industrial estate, these views are screened by existing vegetation to the boundaries of the estate.

It is anticipated that there will be no significant visual impacts resulting from development within the Business or Industrial estate.

3.5 Landscape Opportunities

- Build upon the formal landscape structure within the Tweedside Park estate.
- Maintain the structure boundary planting to each area and particularly along the A6091, Melrose Roundabout and B6360 reducing visual impacts of future developments.
- Utilise the existing mature specimen trees within the Industrial Estate to create a high level of visual amenity.
- Create a landscape structure throughout the future development along key routes to provide consistency and cohesion between development plots.
- Development of a palette of landscape treatments that can be executed throughout as development progresses to reinforce the consistent approach to produce a high quality and robust landscape structure.
- Maximise the transient partial views into the site from the A6091 with a sensitive approach and quality design.
- Maintain and enhance the setting of Core Path 7 within the Tweedbank Industrial Estate.
- Select thinning of tree groups within the industrial estate to maximise passive surveillance and improve visual amenity.

4.0 PHYSICAL ISSUES

4.1 Topography (Figures 5, 6, & 7)

Tweedside Park

The study area lies at an elevation of around 106m AoD. The agricultural field within the western portion of the study area contains undulating topography. The hollowed area of the infilled former sand and gravel quarry which measures around 40m in diameter with 1:6-10 side slopes and a level base of depth around 5m. The agricultural field falls from around 108m AOD to 105m AOD west to east and has a slight north facing aspect. The serviced land falls from around 107.5m AOD to 102.5m AOD south to north. Slopes are generally less than 2.5% although steepen to 10% in an area towards the north.

Tweedbank

The Tweedbank industrial estate lies at an elevation of 110m AoD to the south east falling gradually to approximately 105m AoD at the western boundary. Slopes are generally less than 2.5%, with a maximum of 5% within the developable area of the southern side of the site.

4.2 Geology

Tweedside Park & Tweedbank

Drift Geology

The natural superficial (drift) deposits are expected to consist mostly of glacial sands and gravels with cobbles and occasional boulders. These deposits are probably underlain by glacial till (boulder clay), which is typically a firm to very stiff, sandy or silty clay containing pebble to boulder size rock clasts.

Sands and gravels were previously quarried within the Tweedside Park site. There is no record of any other past mining beneath or close to the site and the presence of undocumented underground mine workings in the vicinity is unlikely.

The depth to rockhead (bedrock) at the site is not known for certain but is expected to be at least 10 metres, and it may be as much as 20 or more metres. The site is thought to be underlain by the buried (drift filled) channel of the River Tweed. The glacial sands and gravels may be up to 10 or more metres thick in places.

Solid Geology

The underlying solid rocks belong to the Gala Group of the Silurian and are likely to consist of interbedded greywackes and shales. In general, the greywackes are thickly bedded, hard impure sandstones and the shales are thinly bedded, fissile siltstones and mudstones. The strata in the Tweedbank area are steeply inclined with dips of up to 65 or more degrees, mainly towards the north west.

4.3 Subsoil Conditions/ Site Investigation

Tweedside Park

A site investigation, "Ground Investigation, Tweedside Park – Galashiels (Ref No.777) " was carried out by Holequest Ltd for the Scottish Development Agency within the serviced land prior to development in November 1986. A Site Investigation, "Site Investigation Works, Tweedside Park – Phase II (Ref No. 995)", was also undertaken for the Scottish Development Agency, following partial development in June 1989. Reporting is summarised below:

The Holequest reporting broadly describes the underlying subsoil material as, *"varying between gravel and a sandy gravelly clay of low plasticity with occasional bands and lenses of loose silty fine to medium sand"*. The report indicates that *"high allowable bearing pressures are attainable and in general normal strip footings and pad foundations would be appropriate for a single storey factory or office accommodation. It is noted however that if loose silty fine to medium sand is encountered it should be removed and foundations constructed on the good quality parent material"*.

"Trial pitting encountered water seepage at relatively shallow depths ranging from around 1-2m below the surface. Ground water levels are expected to vary seasonally and annually however would be highest in the Spring and lowest in the Autumn. In general the moisture contents obtained were relatively low, but it should be noted that the silty granular materials would be susceptible to rapid deterioration if exposed to an increase in moisture content from whatever source. Construction in wet weather could therefore prove problematic hence excavations for foundations should not be left open during wet weather".

The subsoil conditions within the unserviced land are not expected to be dissimilar however preliminary site investigation works would confirm this together with the nature and extent of the former quarry area. The quarry would have to be infilled with suitable material during an earthworks cut and fill exercise to achieve a suitable building platform.

4.4 Access and Accessibility

By Road

Tweedbank is adjacent to and accessed from the A6091 Trunk Road Network and the City of Edinburgh is accessible in around one hour's drive time. Public transport provision is in the form of a bus service and a bus stop is located adjacent to the site on Tweedbank Drive.

By Rail

There are currently no railway stations or rail freight services in the Borders region, however the Borders Railway is currently under construction and is anticipated to be completed in 2015, with the terminal being located adjacent to Tweedside Park.

By Sea

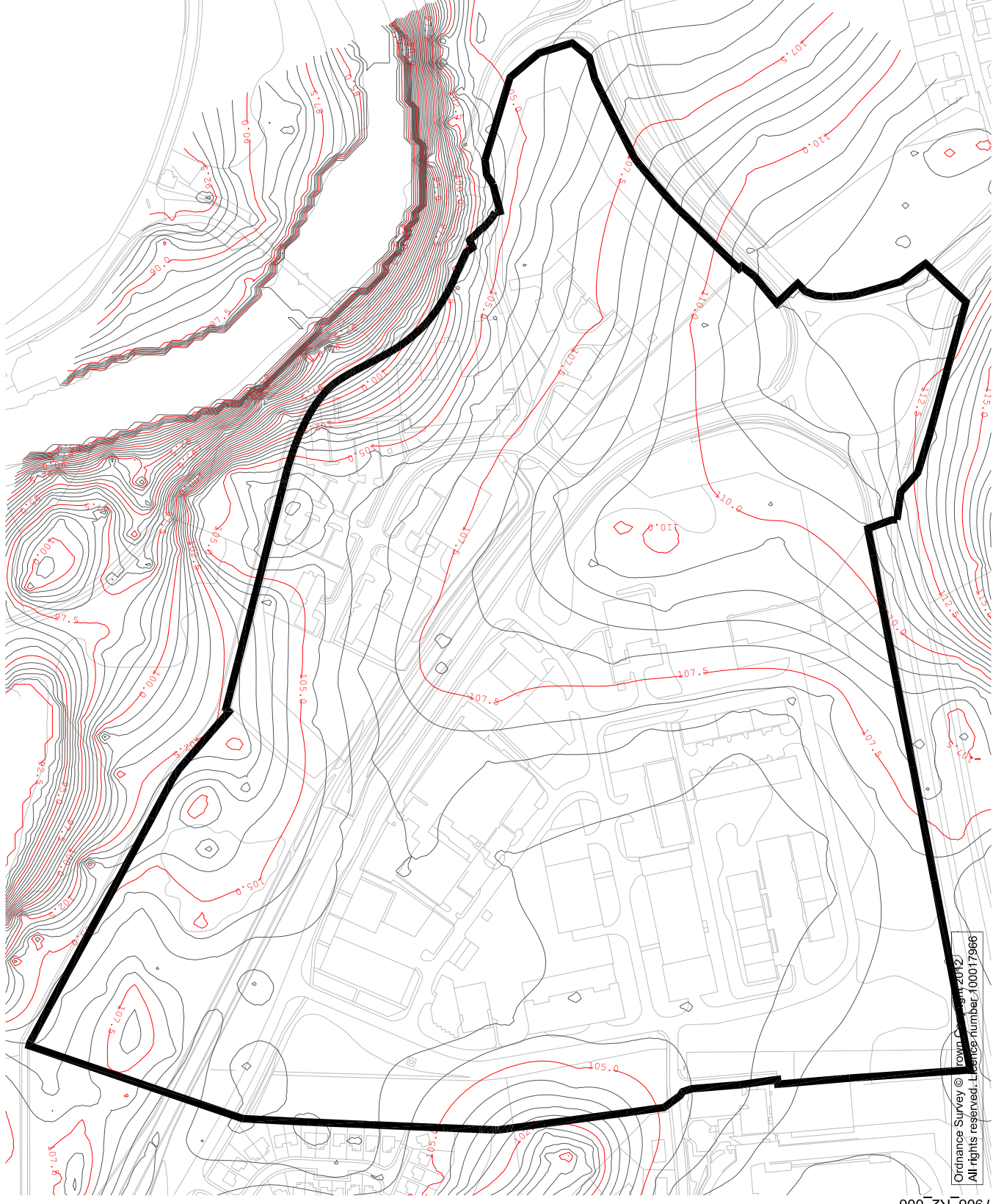
Leith Docks offers freight facilities via the North Sea to northern European countries and roll-on-roll-off terminals at Ardrossan and Grangemouth provide docking facilities on the west coast.

By Air

Edinburgh, Glasgow, Prestwick and Newcastle International Airports all have regular, frequent services to other domestic airports and provide various international and transatlantic passenger and freight onward connections.

By Foot/ Cycle

The site is well serviced by both Core Paths and Promoted paths which allow access by foot/ cycle from the surrounding areas and with links to the wider cycle network. There is no adopted footpath network within Tweedbank Industrial Estate. Foot/ cycle networks are identified on Figure II and also discussed in Section 7.3.



 Study Area Boundary



Figure 5
Existing Contours

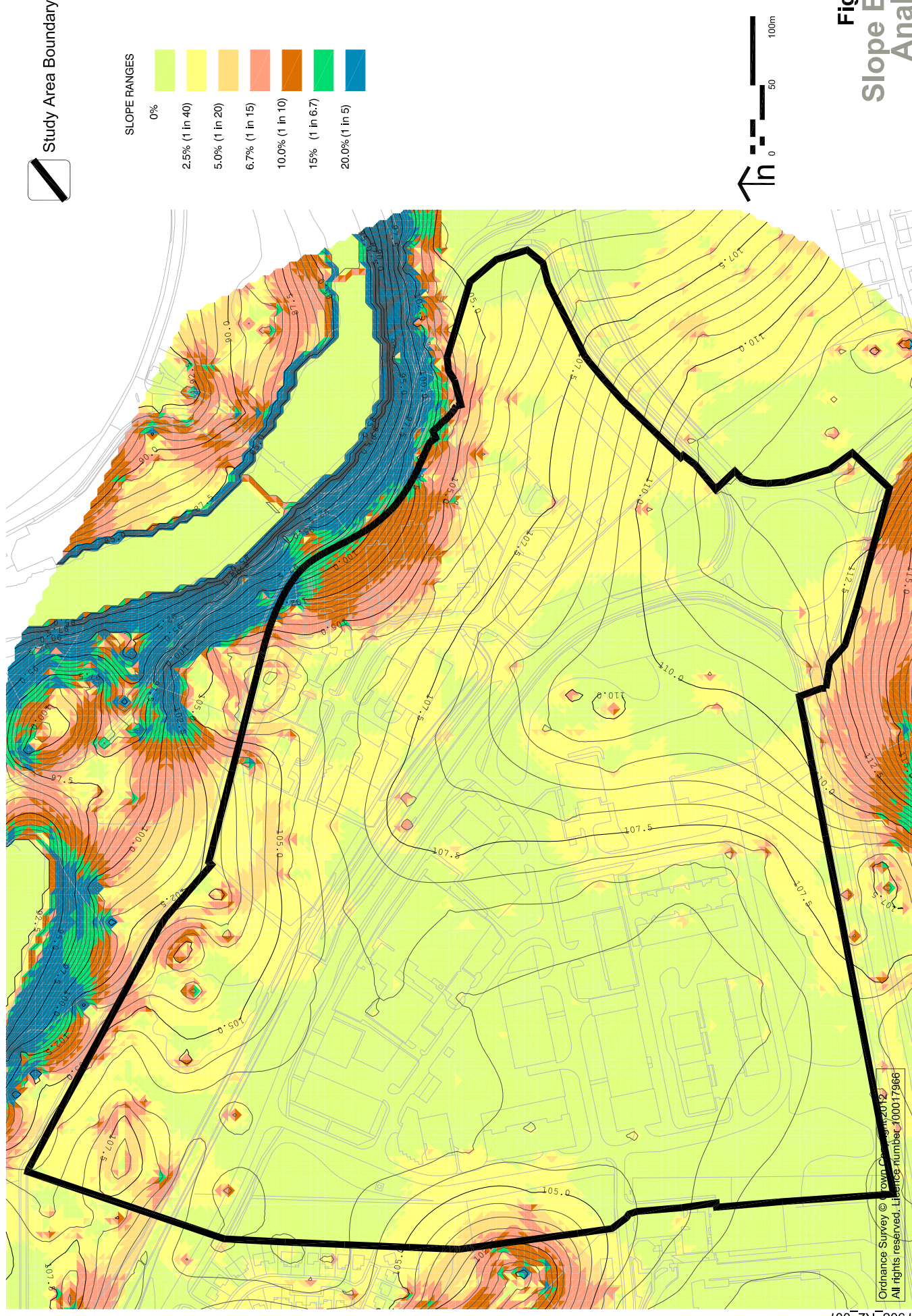


Figure 6
Slope Band
Analysis

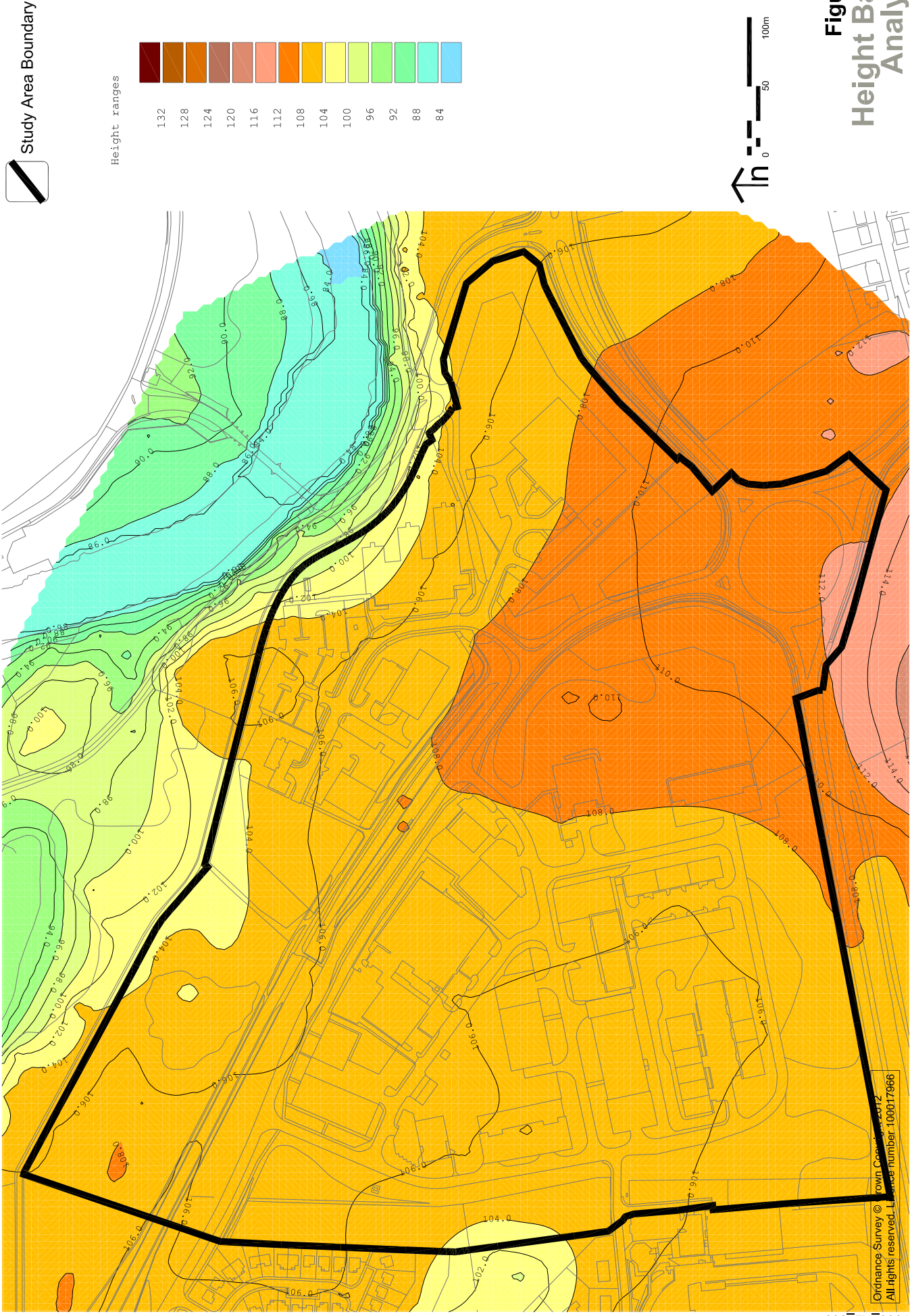


Figure 7
Height Band
Analysis

5.0 UTILITIES

5.1 Water Supply (Figure 8)

Tweedside Park

Scottish Water have confirmed that the serviced land is supplied from a distribution water main which passes along the verge of the site access road and supplies the existing business premises for domestic usage. This main is supplied from a ductile iron main flowing east to west along Tweedbank Drive.

Tweedbank

Scottish Water have confirmed the serviced land is supplied from distribution water mains running down the verge of both access roads. This main is supplied from the same ductile iron main flowing east to west along Tweedbank Drive.

5.2 Electricity Supply (Figure 9)

Tweedside Park

Scottish Power have confirmed that the serviced land is supplied from 1 no Low Voltage (LV) underground cable and 1 no 11kV underground cable. Both pass along the access road on the right hand side, with the LV cable passing under the road and travelling further up to supply the business at the end of the road. Scottish Power also confirms the presence of a 132kV underground cable that travels along Tweedbank drive.

Tweedbank

Scottish Power have confirmed 1 x 132kV underground cable & 1 x 33kV underground cable running down the verge of the western access road north to south from Tweedbank Drive. The serviced area is supplied by 1 x LV underground cable and 1 x 11kV underground cable entering the eastern access road passing over Tweedbank Drive.

5.3 Telecommunications Supply (Figure 10)

Tweedside Park

British Telecom (BT) have confirmed that underground telecom cabling passes along the verge of site access road to supply the existing business premises.

Tweedbank

British Telecom (BT) have confirmed that underground telecom cabling passes along the southern boundary of the site with services running along all roads within the estate.

5.4 Gas Supply (Figure 10)

Tweedside Park

Scottish Gas Network have confirmed that a medium pressure gas main passes along the verge of Tweedbank Drive. A low pressure gas main is located within the verge of the site access road and currently supplies development within the serviced land.

Tweedbank

Scottish Gas Network have confirmed that a medium pressure gas main passes under Tweedbank drive to the western access road connecting to a gas governor halfway down the access road. A low pressure gas main is located within the verge of the sites western access road and currently supplies development within the serviced land.

5.5 Drainage (Figure 8)

Separate Surface Water and Foul Water drainage exists on both sites and there are no combined Foul/ Surface Water Drains.

Tweedside Park

Scottish Water have confirmed that a concrete surface water sewer accommodates flow from the serviced land. The sewer flows east to west through the plot 7/8 boundary then along the verge of the site access road.

Scottish Water have confirmed that a foul water sewer accommodates current development flows from the serviced land. The foul sewer infrastructure flows from the eastern extent of the site through the Plot 7/8 boundary then along the north verge of the site access road to the provisional drop kerb access to Plot 1 then southwards and outwith the site.

Tweedbank

Scottish Water have confirmed that a surface water sewer accommodates flow from the serviced land. The sewer flows north to south from Tweedbank drive along the verge of the western access road fed into three separate points throughout the serviced area.

A Scottish Water Foul Sewer accommodates flow from the serviced land; it flows from the north of the site at Tweedbank Drive, along the verge of the western access road. Three pipes flow in at points from the existing businesses as it flows southwards and outwith the study area.

5.6 Proposed Utilities

All main utilities currently exist within the two sites. No contact has been made with utilities providers as part of this study. However, given that the area is currently developed it is not anticipated that future utilities provision would be problematic for modest expansion to the estate or for redevelopment of existing elements over the short to medium term.

It is possible that development within the wider area may reduce available spare capacity over the timescale for redevelopment at the site. However, it is also possible that planned expenditure by the utilities providers will increase available capacity, for example by an upgrade to the Water Treatment Works (WTW). Neither of those possibilities can sensibly be identified at this stage but will required to be reviewed when development plans become further advanced.

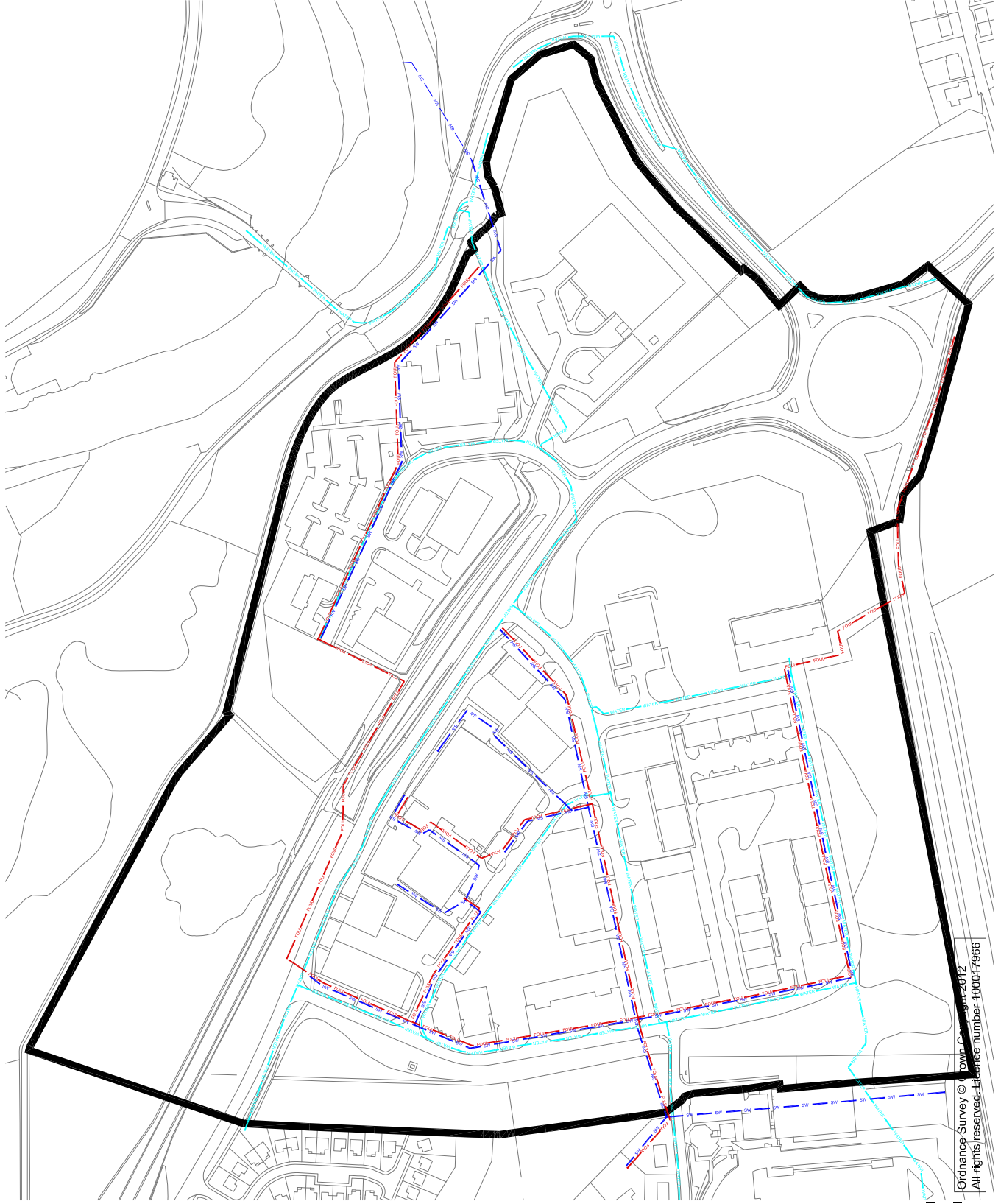
5.7 Proposed Drainage

Foul Drainage

It is anticipated the existing foul drainage system would be maintained and utilised where possible to service new development. There may be a requirement to survey and potentially upgrade elements of existing infrastructure to ensure it was suitable to service a modern development.

Surface Water Drainage

Any new development or redevelopment of the site would require an appropriate SUDS system to be installed. It would probably be appropriate to utilise the existing surface water drainage system running along the roads/ discharging to watercourse (flows from Tweedside Park) and Waste Water Treatment Works (flows from Tweedbank IE) in any redevelopment scenario. However attenuation and treatment would be required prior or potentially post discharge to this system. The opportunity to integrate permanent water bodies (attenuation ponds) into the development to enhance the area should be explored, in addition to use of attenuation basins. The existing system would require to be checked and potentially repaired / upgraded. Any High Risk areas from new development e.g. chemical storage may require to be on a separate system.



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Figure 8
Existing Utilities
Scottish Water
Sewers & Mains

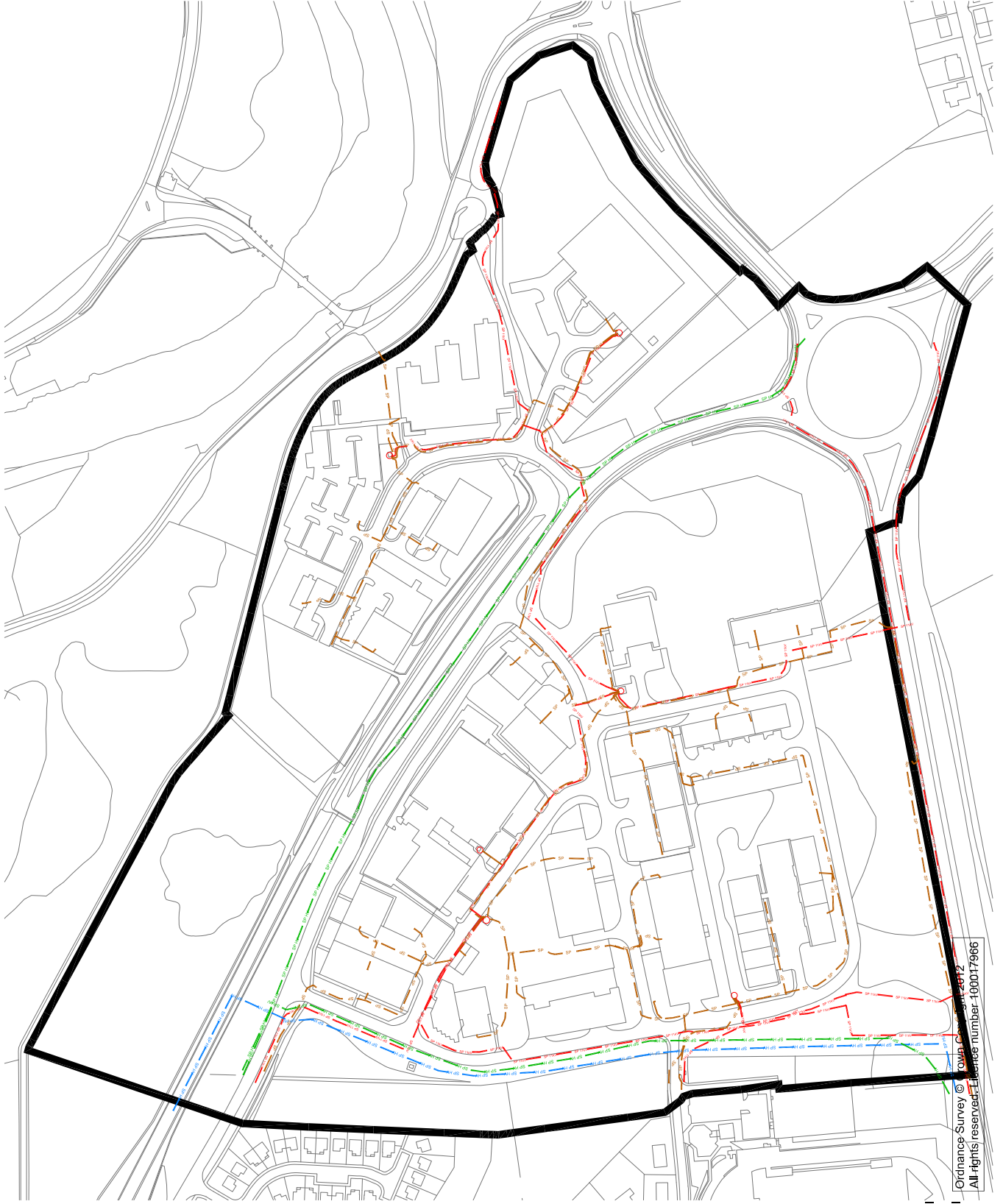


Figure 9
Existing Utilities
Scottish Power
Apparatus

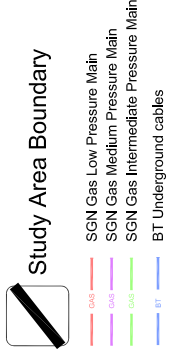
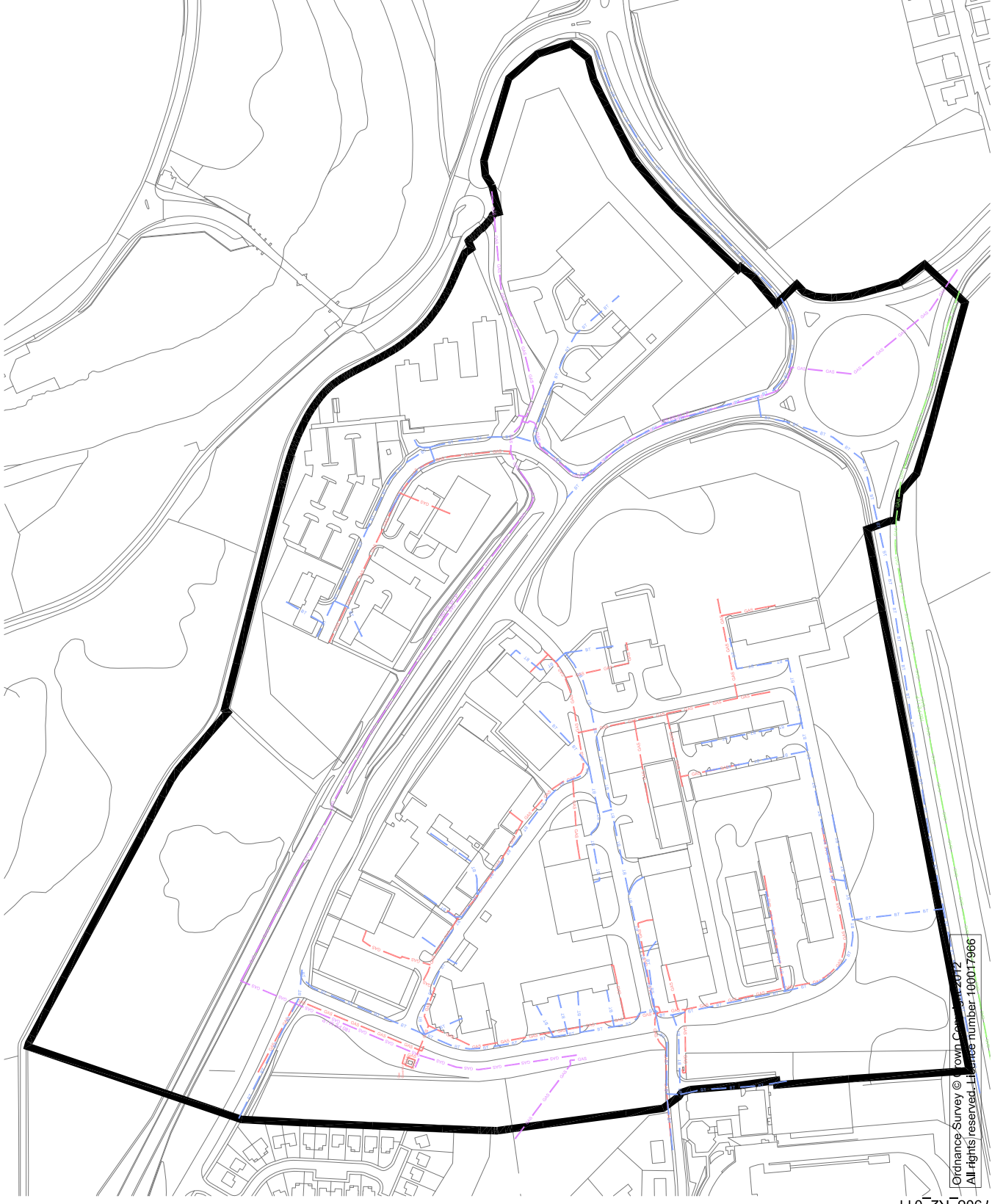


Figure 10
Existing Utilities
SGN Gas Mains &
BT Cables



6.0 ENVIRONMENTAL & SUSTAINABILITY APPRAISAL

6.1 Environmental Appraisal

As part of the study, an environmental risk assessment/ environmental appraisal of the site at Tweedbank Industrial Estate/ Tweedside Park has been undertaken.

The key tasks were as follows:

- Collate and review the environmental information available for the site
- Undertake initial Environmental walkover to establish wider environmental opportunities and constraints and including review of site context and environmental receptors – natural heritage, water environment, land uses, known sensitivities, cultural heritage etc
- Provide an initial independent environmental audit of the Tweedbank Industrial Estate/ Tweedside Park site in order to describe the environmental resource that exists and any potential environmental constraints and opportunities for future development of the site.
- Provide advice on initial outline measures/ strategies envisaged to prevent, reduce and where possible offset any likely significant adverse effects on the environment as part of a future development proposal.

No detailed technical assessment has been undertaken at this stage – this exercise seeks to provide environmental advice based on available baseline information.

Community /environmental issues are often a key determining factor – addressing environment within the early design stage benefits future development proposals/ statutory planning and reduces planning risk.

6.2 Environmental Baseline Information

In preparing the following Environmental Audit and Baseline information in respect of the land at Tweedbank Industrial Estate/ Tweedside Park, the following sources have been reviewed:

- Review of published information including past planning history, Scottish Borders Local Plan (2011) (including Local Plan Mapping), and Local Biodiversity Action Plan.
- Scottish Borders Structure Plan 2009.
- Scottish Borders Landscape Character Assessment 1998.
- RCHAMS Pastmap information to identify points of cultural interest.
- SNH/ SEPA web based information to identify environmental sensitivities e.g. designated sites, potential for flooding etc.
- British Geological Survey Data Map to identify Boreholes, geology, groundwater, soils type.
- Scottish Borders Core Paths Plan.

6.3 Environmental Risk Assessment

The Environmental Impact and Risk Matrix summarises the likely level of impact and environmental risk for each environmental topic and actions recommended in progressing the proposed development through planning.

Topic	Level of Impact			Env Risk (Low, Med, High)	Comments	Actions/ Key Considerations
	N	R	L			
Geology & Soils			●	Low	<ul style="list-style-type: none"> There are no features of geological interest within the proposed development site or in the vicinity. Overall, anticipated risk is assessed as being Low. 	<ul style="list-style-type: none"> Further consultation with SBC relative to any ground condition testing requirements associated with the proposed site redevelopment.
Land Use & Infrastructure			●	Low	<ul style="list-style-type: none"> Much of site currently used for offices/business/industrial purposes – proposed development represents an upgrade and restructuring of existing industrial park. Potential land use change from vacant plot (currently unkempt grassland) to office within Tweedside Park. Therefore the risk is assessed as Low. 	<ul style="list-style-type: none"> Adherence to principles of the Design Brief Adherence to the relevant policies in the Scottish Borders Structure Plan (altered 2009) and the Scottish Borders Local Plan (amended 2010).
Water Environment			●	Low	<ul style="list-style-type: none"> Need to ensure that any surface water issues are adequately addressed. The River Tweed runs to the north and northeast of the site outwith the northern boundary – River Tweed is a designated SAC and SSSI Land immediately to the northeast of site potentially at risk of flooding – SEPA Flood Map shows an estimate of the areas of Scotland with a 0.5% (1:200) or greater probability of being flooded in any given year. No major alterations being undertaken on the land surface which are likely to affect drainage or run-off, therefore anticipated risk is assessed as being Low. 	<ul style="list-style-type: none"> Protecting and enhancing existing water environment and drainage and design of proposed drainage/SUDS will be important considerations within any future development framework. Establish best practice SUDS management in order to control and treat surface water runoff (PAN 61 and PAN 79). Recommended further consultation with the Roads Department regarding flooding and further guidance on SUDS management – existing SUDS may require retrofitting.

Topic	Level of Impact			Env Risk (Low, Med, High)	Comments	Actions/ Key Considerations
	N	R	L			
Ecology			●	Low	<ul style="list-style-type: none"> The River Tweed Special Area of Conservation (qualifying features are Atlantic Salmon and Otter) and Site of Special Scientific Interest located immediately to the north and northeast of the proposed site. Existing woodland forms western site boundary as well as sections of the northern, eastern and southern boundaries Some of the existing woodland is protected under Tree Preservation Orders – Tweedbank TPO. Risk with appropriate mitigation if required is assessed at being Low. 	<ul style="list-style-type: none"> Consult with SNH with regard to any requirement for ecological survey to inform proposed development e.g. otter survey. Adhere to policies in the Scottish Borders Local Biodiversity Action Plan. Protection and enhancement of biodiversity capital on the site e.g. tree belts, hedgerows, existing woodland and habitat relative to ecological interest and landscape features. Any mature trees to be removed should be checked for bats and SNH consulted for advice before any felling is undertaken. Tree felling should be undertaken outwith bird nesting season (March to end August)
Cultural Heritage			●	Low	<ul style="list-style-type: none"> There are no listed buildings, scheduled ancient monuments or special areas of architectural conservation within the site. Melrose Bridge Category B Listed building is located immediately to the northeast of the site, while Abbotsford Historic Garden and Designed Landscape is located approx. 600m to the south. The Site of The Battle of Skirmish Hill is identified to the East of the B6374 on an information board on Core Path 1 – confirm whether any potential impact on the Easter Side of Tweedbank Park. Therefore the risk associated with the proposed development is assessed as being Low. 	<ul style="list-style-type: none"> Historic Scotland and SBC will be consulted immediately if any unknown historic artefacts are discovered. Confirm any impacts associated with the Battle of Skirmish Hill.
Landscape & Visual			●	Low	<ul style="list-style-type: none"> Eildon and Leaderford National Scenic Area located immediately to the east of the site. AGLV located to the south of the site. 	<ul style="list-style-type: none"> Retention of existing woodland of landscape and environmental value. Development of a Landscape Strategy

Topic	Level of Impact			Env Risk (Low, Med, High)	Comments	Actions/ Key Considerations
	N	R	L			
					<ul style="list-style-type: none"> The proposed site is located to the west of Melrose and to the east of Galashiels and Abbotsford. With sensitive re-development in line with existing heights and massings, there are no anticipated issues, therefore risk is assessed as being Low. 	
Pedestrians Cyclists and Community Effects			●	Low	<ul style="list-style-type: none"> The site benefits from current infrastructure which caters for pedestrians including existing footpaths – Core Path 7 crosses the site from east to west, (although note requires walking on public road after Tweedbank Drive), Core Path 189 crosses the site alongside Tweedbank Drive. Core Path 1 forms a small section of the northern site boundary. Two 'promoted paths' are located just outwith the site boundary to the west and northeast. Proposed development is in close proximity to community facilities including existing housing and a recreational area both of which are located to the west of the site. Retaining and enhancing the existing path and cycle network is important. Expansion of existing path network would enhance site – current path network limited to certain areas. Overall, the risk is assessed as being Low 	<ul style="list-style-type: none"> Adhere to open and green space requirements for new developments. Planning and development proposals will address circulation both within the site and wider links to the surrounding area, as illustrated in the Design Brief. There is provision to provide further pedestrian links to the site which will encourage both cycling and walking. Consider proposed railway station and rail line development – creating pedestrian and cycle links between the two sites. Provide dedicated safe route through the site and construct new footpaths.
Noise & Vibration			●	Low	<ul style="list-style-type: none"> Potential for noise impacts during construction and demolition of site. Need for noise impact assessment to determine potential issues and suitable mitigation measures to be integrated into the design. Overall, the risk is assessed as being Low 	<ul style="list-style-type: none"> Guidance should be sought from SBC Environmental Health and Planning on any requirement for noise assessment. Adherence to best practice construction methods.
Air Quality			●	Low	<ul style="list-style-type: none"> There are no Air Quality Management Areas covering the site although there is a need to ensure that any excess traffic generation as a result of the residential proposals does not have wider impacts. It is unlikely that the new development will result in any significant impacts on air quality or neighbourhood amenity. 	<ul style="list-style-type: none"> Liaison with SBC Transport Department on access, circulation and links between future rail station and pedestrian and cycle routes Adherence to best practice construction

Topic	Level of Impact			Env Risk (Low, Med, High)	Comments	Actions/ Key Considerations
	N	R	L			
					<ul style="list-style-type: none"> Overall, the risk as assessed as being Low. 	methods.
Traffic & Transport			●	Low	<ul style="list-style-type: none"> The A6091 forms the southern boundary of the site, the B6360 for part of the eastern boundary, while the remainder and the northern boundary are formed by an un-named road. Tweedbank Drive bisects the site from southeast to northwest. Any requirement for traffic assessment would need to be agreed with Scottish Borders Council. Overall, the risk as assessed as being Low. 	<ul style="list-style-type: none"> Consider any road alterations proposed as part of train station/railway development. Consult SBC/Network Rail
Disruption due to Construction			●	Low	<ul style="list-style-type: none"> It is anticipated that the construction phase will cause minimal disruption to the local public and the amenity of the surrounding area. Any disruption will be short-term. Overall, the risk as assessed as being Low. 	<ul style="list-style-type: none"> Ensure adequate and effective controls on construction are implemented. Adherence to best practice construction methods.

6.4 Sustainability Appraisal

The concept of sustainable development recognises the need for development to take account of the use of natural resources and the generation of waste, and acknowledges the equal importance of development's social, environmental and economic dimensions, at both global and local levels. It promotes the pursuit of economic growth in a way that limits harm to the environment through minimal use of, and occasionally enhancement to, natural resources on which we depend. It also seeks to distribute the wealth it creates to enhance standards of living and reduce levels of poverty.

A qualitative assessment based on a review of potential future development against appropriate aspects of sustainable development and changes to the existing sustainability status of the development site and environs has been produced.

6.5 Sustainability Policy – Scotland

The study reviewed available legislation, policy and guidance relevant to Sustainable Development:

- Climate Change (Scotland) Act 2009
- Scottish Planning Policy (2010)
- Scottish Borders Council's Local Plan (2011)
- Scottish Borders Council Supplementary Planning Guidance (SPG)
- Agenda 21 (1992)
- Scotland's National Waste Strategy – Zero Waste Plan

Scottish Planning Policy sets out the Scottish Government's policy on nationally important land use planning matters and the government supports the five guiding principles of sustainable development set out in the UK shared framework for sustainable development. The five principles are:

- **living within environmental limits** – respecting the limits of the planet's environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations.
- **ensuring a strong, healthy and just society** – meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity,
- **achieving a sustainable economy** – building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (polluter pays), and efficient resource use is incentivised,
- **promoting good governance** – actively promoting effective participative systems of governance in all levels of society – engaging people's creativity, energy and diversity, and
- **using sound science responsibly** – ensuring policy is developed and implemented on the basis of strong scientific evidence, whilst taking into account scientific uncertainty (through precautionary principle) as well as public attitudes and values.

The SPP encourages the planning system to support the achievement of sustainable development through its influence on the location, layout and design of new development. The following factors are set out within the SPP as targets and guidance topics against which all development proposals are appraised.

- Their contribution to the reduction of greenhouse gas emissions in line with the commitment to reduce emissions by 42% by 2020 and 80% by 2050, contribute to

reducing energy consumption and to the development of renewable energy generation opportunities,

- support the achievement of Zero Waste objectives, including the provision of the required waste management installations,
- protect and enhance the cultural heritage,
- protect and enhance the natural environment, including biodiversity and the landscape,
- maintain, enhance and promote access to open space and recreation opportunities,
- take into account the implications of development for water, air and soil quality, and
- support healthier living by improving the quality of the built environment, by increasing access to amenities, services and active travel opportunities, and by addressing environmental problems affecting communities.

Scottish Borders Council's Local Plan (2011) is 'founded upon the basic premise of supporting and encouraging sustainable development'.

PRINCIPLE 1 Sustainability

In determining planning applications and preparing development briefs, the Council will have regard to the following sustainability principles which underpin all the Plan's policies and which developers will be expected to incorporate into their developments:

1. *The long term sustainable use and management of land.*
2. *The preservation of air and water quality.*
3. *The protection of natural resources, landscapes, habitats and species.*
4. *The protection of built and cultural resources.*
5. *The efficient use of energy and resources, particularly non-renewable resources.*
6. *The minimisation of waste, including waste water and encouragement to its sustainable management.*
7. *The encouragement of walking, cycling and public transport in preference to the private car.*
8. *The minimisation of light pollution.*
9. *The protection of public health and safety*
10. *The support of community services and facilities.*
11. *The provision of new jobs and support to the local economy.*
12. *The involvement of the local community in the design, management and improvement of their environment.*

6.6 Sustainability Criteria

Enhancement and further development of the Tweedbank Industrial Estate/ Tweedside Park offers the potential to impact positively on several sustainable development criteria.

Key opportunities may relate to refurbishment of existing efficient buildings to include new cladding which will have long term benefits in terms of reduced levels of energy consumption and emissions. Any new buildings proposed will be designed to incorporate low carbon and low energy features.

There are socio-economic benefits for both the local and wider borders area associated with maintaining and enhancing an economic environment which will provide appropriate support and guidance to future businesses and individuals.

Opportunities to Implement and Enhance Key Sustainability Criteria

Criteria	Comment
Land Use	Appropriate use of land, buildings and infrastructure Future proposals should seek to incorporate sustainable design principles including a landscape strategy to ensure development takes advantage of the existing topography and aspects and relationship to surrounding land uses and local transport infrastructure.
Transport	Safety for all road and transport users Public access and recreation has been considered within the Development Framework and includes internal road and path networks promoting wider connectivity and separate/ shared cycle lanes have been integrated in accordance with Designing Streets Principles (2010).
	Dependence on the private car Both parts of the site are considered to be accessible to public transport and links to the new station should be provided. Access and Circulation by all modes has been considered within draft site layouts.
	Encouragement of walking and cycling Opportunity to link to existing path/cycle network which circulates the site and connects site with wider area including designated core paths. Review secure bike storage facilities to encourage travel by bike.
Natural Environment/ Pollution	Protection enhancement of areas for informal recreation Future proposals should seek to provide a coherent green network of open space and habitat with connected path networks.
	Protection / enhancement of air, land and water quality Surveys have been undertaken to assess the need to upgrade the existing drainage on site – retrofitting of existing SUDS may be undertaken. SEPA best practice guidelines will be complied with at all times, including during the construction period. A landscape strategy has informed the Masterplan proposals. Retentions of existing woodland of ecological and landscape value and clear structure planting to major site boundaries including roads will be encouraged to minimise adverse landscape quality impacts. There is a commitment to sustainable infrastructure and measures to address good and best practice will be addressed further at the detailed design and construction stages.
	Protection/ enhancement of diversity plants and habitats Landscape and ecological considerations have played an important role in the development of the Development Assessment Report. This input ensures appropriate mitigation is implemented to avoid adverse impacts to European Protected Species and biodiversity in general. Specific habitat enhancement measures have also been recommended to improve the biodiversity and ecological assets on and surrounding the site e.g. native planting, SUDS solution, protection of the watercourses on the site using appropriate buffers to development.
Cultural Heritage	Conservation of important historic and cultural assets A cultural heritage assessment has been undertaken in the form of a desk-based study/site walkover and found no known historical interest associated with the site.
Use of Resources	Energy efficiency in development layout and design Key principles of sustainable design have been integrated within the Masterplan and will be detailed as the development process progresses to ensure that there is an appropriate response to sustainability within the design proposals brought forward to detailed design and planning.
	Prudent use of natural resources/ waste minimisation and sustainable procurement Material for construction should be sourced locally where possible and any waste recycled or re-used. Waste management facilities including for recycling should be provided.
Socio-economics	Wider benefit to people and communities Improved pedestrian and cycle movement on and surrounding site will benefit the local community. New railway station/Edinburgh-Borders railway line has potential to

Opportunities to Implement and Enhance Key Sustainability Criteria

Criteria	Comment
	boost local economy.
	Employment opportunities and diversity Redeveloping site will attract new businesses to the area – creating employment opportunities and benefiting the local community/economy through local job creation.
Public Awareness/ Environmental Responsibility	Business sectors in Scottish Borders with environmental management systems The implementation of energy saving, sustainability, recycling, transport etc measures by business's located on site should be encouraged. Businesses which can demonstrate their commitment to the principles of sustainability through the use of environmental management systems should also be encouraged.

7.0 DEVELOPMENT STRATEGY AND OPTIONS

7.1 Existing Conditions

Tweedbank Industrial Estate

Tweedbank is an established Industrial Estate. A significant proportion of the estate is within the ownership of Aggmore, a Real Estate Fund Manager. The remainder comprises a mix of owner occupied units and a number of tenanted units owned by Scottish Borders Council.

The specification of the buildings varies, although they predominantly comprise single storey steel portal frame units.

The Aggmore units predominantly date to the early 1980s. They are generally of steel portal frame construction with low level brick/ blockwork perimeter walls externally clad in box profile sheeting (largely single skin) under pitched roofs clad in box profile sheeting, mainly metal, part fibre cement (presumed Asbestos).

A number of these units are now dated and would benefit from refurbishment/ re-cladding with insulated composite panelling.

Whilst sizes vary, in the main the Aggmore units cater for the larger warehouse sector of the market with only a limited number of smaller units. A table identifying the units, their sizes and current uses is included in the Economic and Market Assessment Report.

The table below provides a summary of the occupiers, areas and type of units making up the estate.

Tweedside Park

The composition of units at Tweedside Park differs to Tweedbank Industrial Estate. This portion of Tweedbank would appear to have been developed as individual serviced sites which have been sold off and privately developed providing a mix of standalone units and offices.

The Economic and Market Assessment Report provides a summary of the occupiers, areas and mix of unit types at Tweedside Park. The completed units are of a relatively high specification, which includes offices let to the Scottish Government Pensions Agency. To the west of Tweedside Park there is an undeveloped site.

7.2 Aggmore Ltd

As previously noted Aggmore Ltd own the majority of the Tweedbank Industrial Estate.

As part of this study, a meeting was held with Aggmore's managing agent's for the site, FT Linden Ltd. The meeting was to inform Aggmore of the study and to understand their views and proposals for the estate in the short to medium term.

Part of the discussion within the meeting may be considered as commercially sensitive, however the following provides a summary of non sensitive key issues arising from the discussions:

FT Linden noted that the estate was well located within the central Borders and with good transport links and the potential to capitalise on the Borders Railway/ Terminal.

FT Linden noted that there were issues associated with the estate that currently made it difficult to let units:

- The primary issue is that the units of a size which is unattractive to current market requirements. Many units are too large, incapable of effective subdivision and some are too narrow
- Units are now outdated, tired and eave heights too low
- Yard areas are too small in some locations
- The estate would benefit from secure yard areas and more of a sense of identity

FT Linden noted that the estate was not commercially profitable for Aggmore in the current market conditions. As Tweedbank was Aggmore's only holding in Scotland and of a smaller scale/ nature to their other assets, Aggmore were looking to sell their holdings in the estate as soon as they were able/ achieved a realistic offer.

FT Linden stated that Aggmore were not currently interested in a potential joint or sole venture in the future to upgrade or reconfigure the estate under any foreseeable conditions.

The position taken by Aggmore Ltd offers the potential opportunity to acquire and redevelop parts of the estate. Without intervention, the possibility/ probability exists that maintaining the status quo at Tweedbank will lead to a further slow decline in the building stock and use of the estate, with the attendant issues that this may lead to.

7.3 Existing Context

Movement and Connectivity

The two sites lie on, and are accessed from, opposite sides of Tweedbank Drive, which forms the main artery through the settlement of Tweedbank. This connects via a large roundabout to the A6091, which in turn runs along the southern boundary of Tweedbank Industrial Estate.

Core Path 189 runs in a south-easterly direction along the route of the dismantled railway, between Tweedbank Drive and the southern edge of the Tweedside Park site. At the main (vehicular) entrance to the park the path crosses eastward through the site to join Core Path 1 which runs along the River Tweed. Core Path 7 also connects to Core Path 189 at the main entrance, crossing Tweedbank Drive and following the east/west axis road through the industrial estate, past Tweedbank Outdoor Sports Complex and beyond. These, together with a number of 'Promoted Paths' and existing bus stop locations, are shown on Figure 11.

Landform, Vegetation and Views

Most of the industrial estate is fairly level, with a more noticeable slope rising from the eastern estate road to the eastern boundary - although this is less than 1 in 20 slope at its steepest, so not a major constraint to development. The steepest areas within Tweedside Park have already been developed as part of the Scottish Public Pensions Agency site. The undeveloped part of the site is a gentle north-facing slope, with small undulations to the north. The slopes and contours are illustrated in Figure 12.

The industrial estate forms a visible public frontage on to Tweedbank Drive. Elsewhere generous woodland planting ensures that both sites are relatively well screened from Tweedbank Drive, the strategic road network, the Special Landscape Area to the south, the National Scenic Area to the East and the River Tweed Special Area of Conservation



Figure 11
Existing Movement
Connections



- Site boundary
- Visible street frontage
- Woodland screening
- Visually prominent location
- Future prominent location
- Screening 'gaps' allowing roadside views in to site
- View to Eildon Hills
- Important existing or potential streetscape views
- TPO group of trees
- TPO woodland
- Existing buildings



Figure 12
Landscape &
Visual Content

and SSSI to the north of Tweedside Park. A few small gaps in the screening allow for intermittent narrow views through into the sites, most notably along the A6091 to the south.

There are a number of TPOs placed upon established groups or individual trees within the industrial estate. These include parts of the southern edge screening vegetation.

Views of the Eildon Hills are notable at certain points within both sites. The hills to the north and south also form attractive rural backdrops and sense of enclosure frequently visible as one moves through the sites. The most prominent building positions are located at the two entrances to the industrial estate. Following development of the railway station and clearing of vegetation to allow for the vehicular access, any building within the western corner of the business park site will also be rendered highly visible.

Vegetation and visibility aspects are illustrated in Figure 12.

Utilities

The locations of existing utilities are shown in Figures 8, 9 & 10. These principally run along the existing road network, with corridors also running the length of the western green edge and crossing through the southern green edge to the A6091. See section 5 above for more details.

7.4 Design Strategy

Development Options

Design Strategy

Figure 13 presents a broad design strategy to guide development towards achieving positive design, viability and sustainability objectives. It is illustrated diagrammatically to convey the need for a flexible approach able to respond to changing markets and other circumstances. However, should development proposals seek to significantly depart from this strategy, they should clearly demonstrate how they continue to meet the design principles illustrated through the strategy.

A Clear Urban Structure

The new rail station will create an important entrance to the area and a key node in the movement network since both sites will gain access from the newly formed junction. Development should respond to this by creating welcoming public facades and a positive sense of enclosure which attracts pedestrian movement from the station in to the development. From here the existing road and path networks form an effective structure for any new development, forming secondary nodes at the junctions of Core Paths, site entrances and main roads.

Development of Tweedside Park should seek to continue the existing block structure with a central road connecting to the station access. This allows for direct pedestrian access from the station in to the business park. Buildings should sit to the front of their plots, with clear public frontages, including entrances, on to this central street.

Blocks would back on to the northern edge of the site, on to the un-named rural road (or 'Promoted Path') which is again screened to the north by adjacent woodland. Development should demonstrate sensitivity towards this rural road/'Promoted Path' through layout and elevation design, providing opportunities for natural surveillance.

The layout of the industrial estate should follow the principles of the perimeter block, whereby buildings are orientated to front on to the road and hide the more operational or

car parking areas, which tend to be more visually-intrusive, to the rear of buildings in the internal part of the block. This also creates a more comfortable pedestrian environment with well defined streets, more public entrances and windows overlooking the streets. Corner buildings should seek to positively address both street frontages.

Protecting Sensitive Landscape and Neighbouring Communities

The visual impact of development on the surrounding sensitive landscape areas can be limited by restricting the scale and massing of buildings. Buildings within the business park and the southern and eastern parts of the industrial estate should be kept relatively low and small in terms of massing - no more than two storeys in height. Where larger buildings are proposed these could be accommodated towards the northern part of the industrial estate, particularly where they can contribute towards a strong and continuous frontage along Tweedbank Drive.

Views of the development sites can be further restricted through careful planting of vegetation to complement the already established planting around and within each site. In particular a strengthening of the structure planting along the southern boundary would reduce visual impacts. Development should also seek to retain and protect as far as possible trees which contribute positively to the character of the area, in particular those with TPO status.

It will also be important to maintain the existing woodland planting along the western edge of the industrial estate which screens neighbouring homes from the noise and visual intrusion of industrial activities and vehicular movements. Informal recreational uses such as dog walking are well established on this area of land, and this should be encouraged further by ensuring connections to wider footpath and greenspace networks.

A connected Footpath and Greenspace Network

Reducing car travel to work and within the sites themselves relies on creating an attractive and convenient footpath network which integrates with the public transport network. Maintaining and enhancing connections also to the wider footpath and greenspace networks helps to promote recreational walking in the wider countryside for local communities and visitors alike.

A central route is formed across the sites through the convergence of Core Paths 7 and 189 which in turn links to the northeast to Core Path 1. This represents an opportunity to create a central greenspace corridor, adding amenity value to the site, contributing to sustainable surface water drainage and also lending further definition to the overall place structure, important in terms of local legibility.

A further connection from this central corridor could be made to Tweedbank Drive to link the centre of the industrial estate more directly to bus stops and the rail station, and to connect to an enhanced greenspace and footpath network within Tweedside Park linking to the rural road/'Promoted Path'.

An Integrated Sustainable Drainage Infrastructure

Each development block should be designed to store and attenuate its surface water run-off. This should form part of an overall SUDS which is fully integrated with the overall landscape strategy and the existing surface water drainage system.

7.5 Landscape Strategy

Through the development of a robust palette (e.g. selected to include appropriate variety/ mix/ nature) of materials and landscape treatments future developments will emerge with consistency through approach and execution that will provide cohesion through the

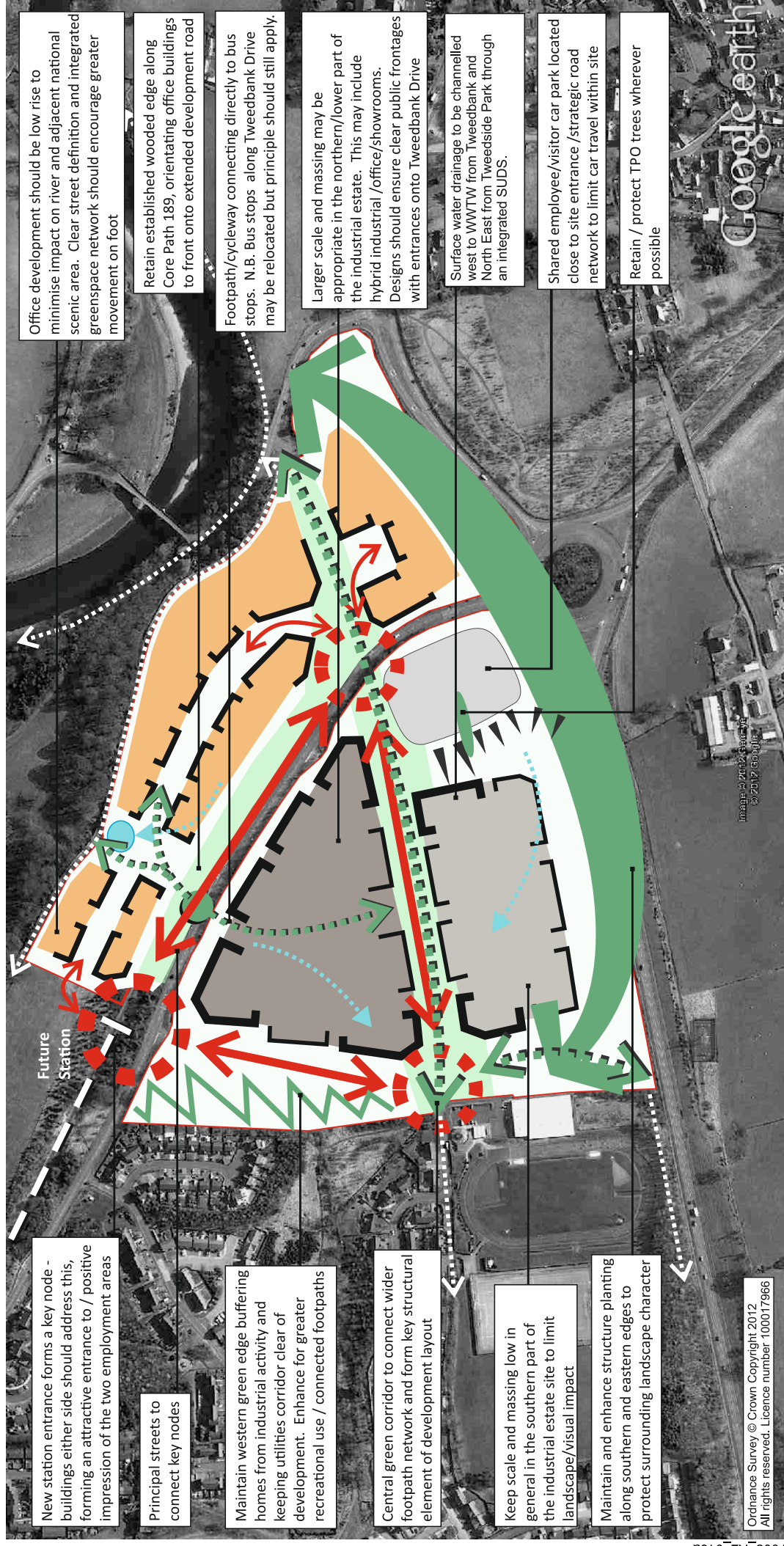
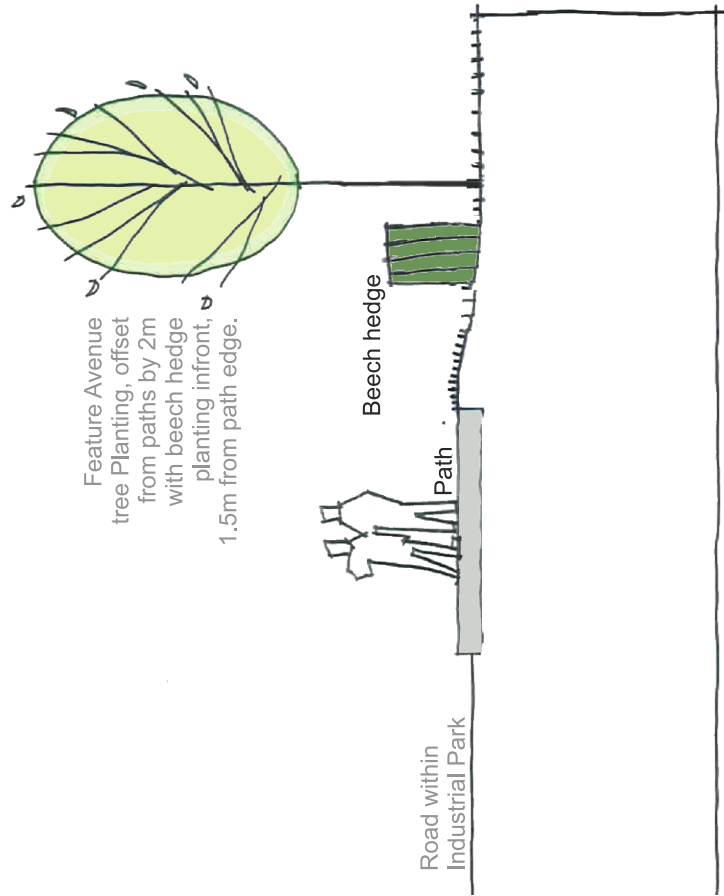
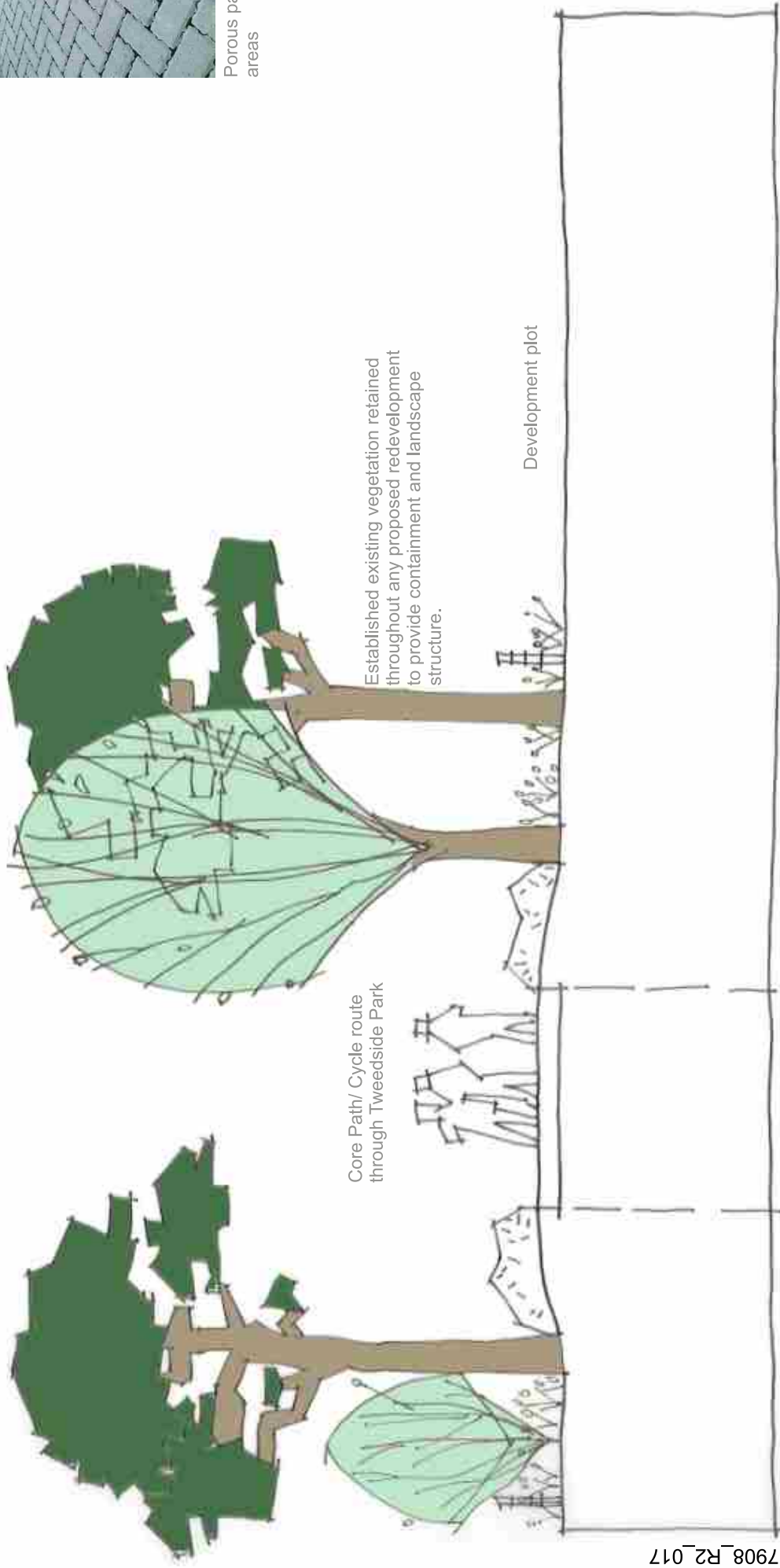


Figure 13
Design Strategy

Road/ Footpath arrangement for Primary and Secondary Routes



Existing core paths/ cycle routes within site



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Feature avenue tree planting



Beech hedges with feature avenue trees

Potential avenue tree species



Quercus robur

Acer campestre

Tilia cordata

Materials Pallet



Porous paving to car parking areas

Hot rolled asphalt with tactile slabs at road crossings

Figure 14
Landscape Strategy

varying stages of development improving the identity of the Industrial estate. Key aspects of the landscape Strategy are illustrated in Figure 14.

Footpaths

Access routes are to be fully accessible to pedestrians and disabled people, paths alongside vehicular routes in the site are to be a minimum of 1.8m wide to allow two people to comfortably pass. The surface should be a hard wearing robust and efficient surface such as hot rolled asphalt that will also create a high quality finish throughout the industrial estate.

Car Parking areas

Within development plots there will be necessary car parking areas. To promote sustainability these should be surfaced with a permeable block paving system, this surface delineation will also enable a hierarchy of spaces to be created. Blocks of car parking should be divided by shrub planting or hedges with trees and ground cover, where possible safe illuminated pedestrian access should be incorporated.

Street Lighting

All pedestrian areas are to be illuminated with a low energy white light source to improve the feeling of security during the hours of darkness.

Hedge Planting

Along primary routes within the industrial estate and set back from the footpath by a grass verge will be beech hedges, maintained at a maximum height of 1.2m to create a simple but strong landscape structure that can be extended into new developments.

On secondary and core path/ cycle routes, mixed native species hedges should be used. These hedges should be offset by at least 1.5m from the footpath edge with a grass verge between the footpath and the hedge to maintain a sense of openness maximising passive surveillance.

Tree Planting

Specimen avenue tree planting should be planted along all routes with different species selected on primary routes to secondary routes. Trees selected should have a clear stem of at least 2m to maximise passive surveillance, a minimum girth of 25-30cm to inhibit vandalism, have an underground anchor system and be a suitable species for this sensitive location. Trees should be native species and potentially provide year round interest.

Suitable tree species on primary routes will include: *Quercus robur*, *Acer campestre*, *Tilia cordata*.

Suitable tree species on secondary routes include: *Carpinus betulus*, *Prunus padus*, *Sorbus aria*, *Tilia cordata*,

Woodland Planting

Woodland planting within the site could be used to reinforce the structural boundary planting, a matrix of suitable species similar to the existing woodland areas will complement the existing woodland.

Suitable tree species for the planting matrix will include: *Quercus robur*, *Betula pendula*, *Crataegus monogyna*, *Fagus sylvatica*, *Prunus avium*, *Salix capraea*, *Sorbus aucuparia*, *Pinus sylvestris*, *larix decidua*.

Shrub planting

A consistent approach to shrub planting within the individual plots will create a pleasing coherence throughout the development. Suitable shrub species should be evergreen, provide year round interest, be low maintenance and low growing. To maximise passive surveillance shrubs should not exceed 1m in height (with the exception of any specimen feature shrubs within plots).

Suitable species include but should not be limited to: *Hedera helix*, *Cotoneaster dammeri*, *Ajuga reptans*, *Bergenia cordifolia*, *Polystichum setiferum*, *viburnum davidii*, *Vinca major*.

7.6 Development Options

The development options considered include some of those larger than envisaged as being required by the Market and Economic Assessment. However the meeting with Aggmore Ltd presented a potential opportunity for land purchase and SE / SBC modified the brief to include a review of the options.

Option 1: Western extension to Tweedside Park (Figure 15)

The first option would be to develop the land adjacent to the western edge of Tweedside Park without necessitating any changes to the existing business park or industrial estate. This would be for speculative office use, based on potential market demand for 'professional services' once the new railway and station are operating.

- Benefit from close proximity to the new Tweedbank Station - sustainable option and attractive to office market
- Development road to extend from existing business park to join the proposed new station access road from Tweedbank Drive
- Create six or seven development plots to accommodate two-storey office buildings
- Building depths of no more than 13m to provide naturally lit and ventilated space
- Provide dedicated parking areas in accordance with best practice
- Amenity landscaped corridor to cross site along the line of a footpath linking Core Path 189 to the south with the rural road/'Promoted Path' to the north. Corridor to incorporate a SUDS feature attenuation pond at the lowest point of the site.
- Western-most building(s) should be designed to create a clear and attractive 'entrance' to the business park as viewed from the station.

Option 2: Southern Industrial and Commercial Redevelopment (Figure 16)

This option would involve the demolition of a single building towards the southern edge of Tweedbank Industrial Estate which houses three small industrial units all of which are currently vacant, and the construction of two buildings, one large commercial and one small/ medium industrial.

- Utilises previously undeveloped parcels of land, including land previously set aside as a landscape buffer to the south.
- Southern Site is outwith settlement boundary – requires modification to Local Plan or seek Planning Permission.

- Plant a screening woodland (15 metre deep to be effective) within planting gaps along the southern edge, excluding areas through which utilities corridors run, to mitigate visual impact of the units on the Special Landscape Area to the south.
- Given the proposed uses, pressure is likely to arise for greater building heights the visual impacts of which would be difficult to mitigate. Note also recent planning decision to refuse commercial use proposal in this site.
- Option would necessitate the removal of a TPO group of trees along the southern estate road and part of a TPO group within the eastern part of the site.
- Commercial use is likely to require a greater area of car parking than industrial use - implications also for greater levels of surface water run-off.

Option 3: Business Park extension to Southern Site (Figure 17)

Should a greater demand for office development arise, one option would be to redevelop the less developed part of the industrial estate as an extension of the business park.

- Demolish the two existing buildings within the eastern part of the estate
- Create a new access along Tweedbank Drive opposite the existing business park access so that they share a junction which would be signal controlled to promote pedestrian and cycle movement. This would require tree removal to ensure an adequate visibility splay.
- A new road would be required to serve part of the development
- Office buildings to be arranged in a perimeter block layout with buildings fronting on to the street and car parking located to the rear of buildings within the internal part of the block so that the streetscape is not car-dominated.
- Building depths of no more than 13m to provide naturally lit and ventilated space
- Provide dedicated parking areas in accordance with best practice
- Plant a screening woodland (15 metre deep to be effective) within planting gaps along the southern edge, excluding areas through which utilities corridors run, to mitigate visual impact of the units on the Special Landscape Area to the south.
- Southern Site outwith settlement boundary – comments apply as per Option 2.
- The interface between business and industrial would need to be carefully managed, including the need for a degree of visual screening through landscaping/ planting.

Option 4: Long-term Redevelopment (Figure 18)

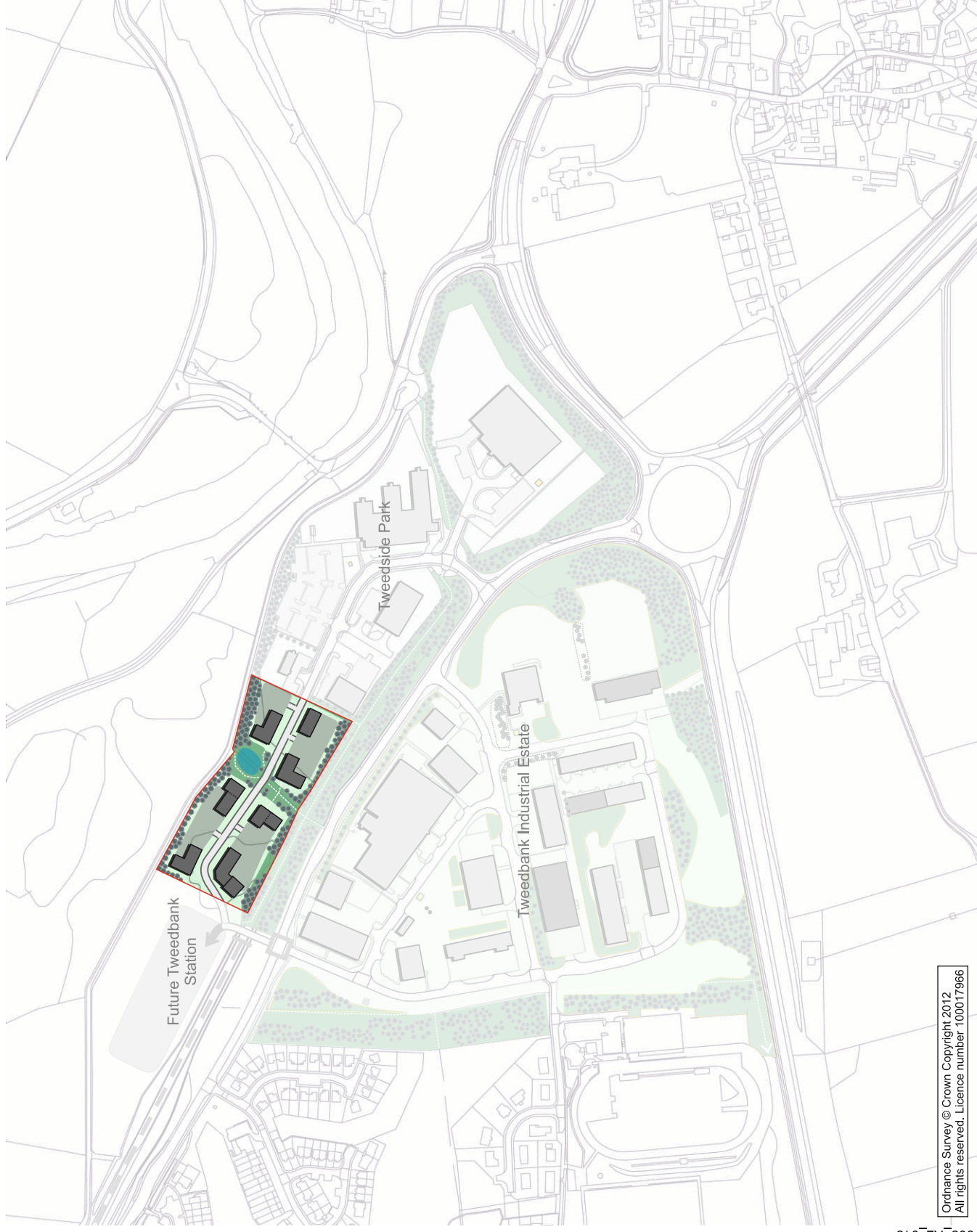
Over the long-term it would be reasonable to assume that most of the business park and industrial estate units will become redundant due to a combination of ageing and increasingly outdated buildings, substandard layouts and potentially market conditions. It is therefore important to plan for a phased redevelopment of both sites.

- Provide a mix of unit sizes, including small 'incubator' industrial units and 'professional service' office accommodation for which there appears to be current demand.
- Continue the perimeter block arrangement where possible to ensure clear street definition and overlooked paths to maximise passive surveillance.
- Create a narrow greenspace/ pedestrian corridor within the industrial estate linking to public transport services and to a northern greenspace corridor as detailed in Option 1.
- Landscape the central east-west estate road to create a green pedestrian corridor to improve the experience along this section of Core Path 7.
- Provide dedicated car parking and service yard areas in accordance with best practice.
- Provide SUDS attenuation ponds for each development block at the lowest points and ensure that these are fully integrated with both the existing surface water drainage and the existing/ proposed landscaping.

Option 5: Redevelopment of Aggmore Land (Figure 19)

Should Aggmore Ltd look to sell their entire land holding in Tweedbank Industrial Estate, redevelopment for small to medium-scale industrial uses may be a viable option.

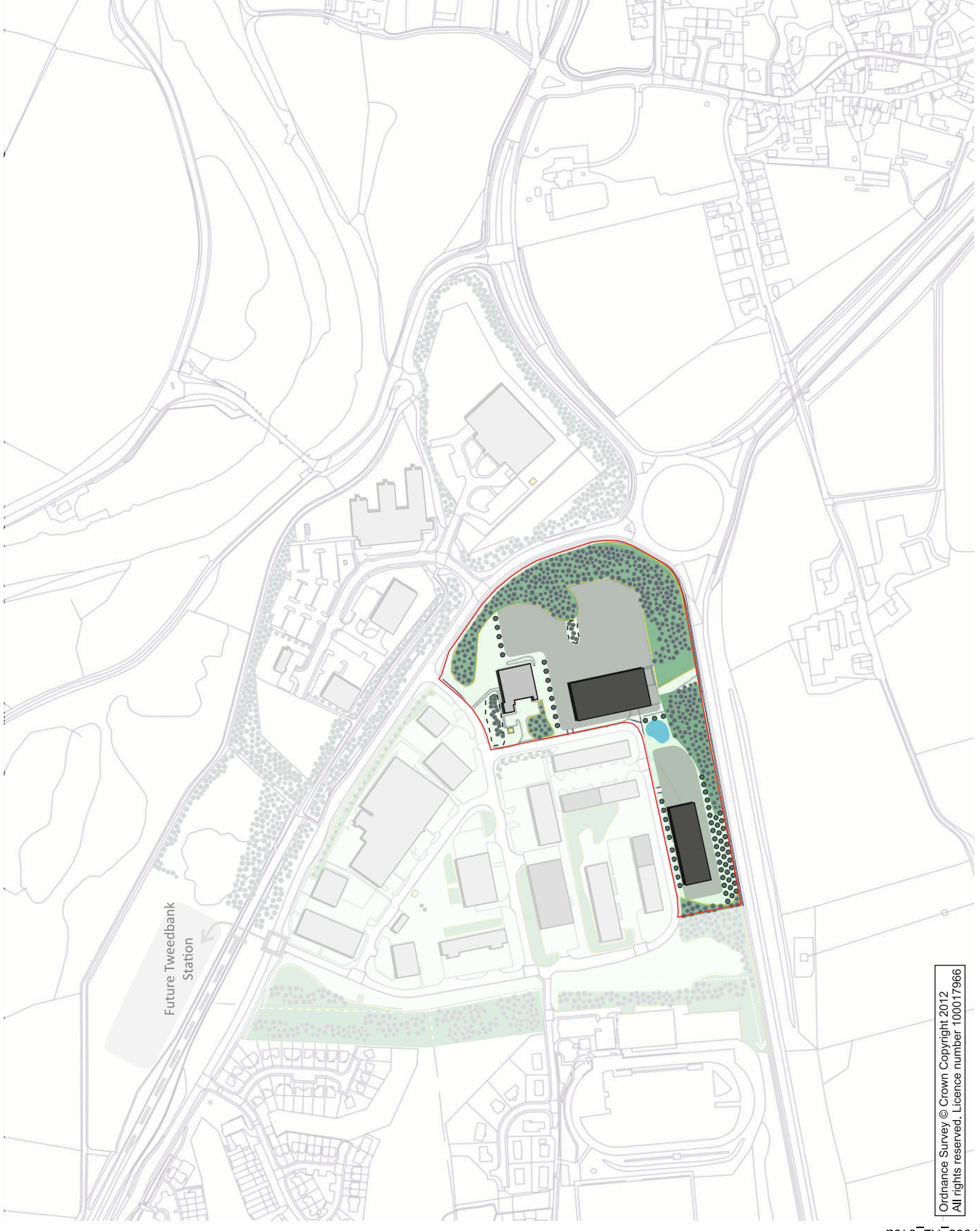
- Estate roads, block sizes and landscape buffer zones to remain unchanged - unlike Option 4, the service road parallel to Tweedbank Drive would be retained.
 - Perimeter block layouts with some small buildings sited within shared service yards internal to the block
 - Landscape the central east-west estate road to create a green pedestrian corridor to improve the experience along this section of Core Path 7.
 - Provide dedicated car parking and service yard areas in accordance with best practice.
 - Smaller unit sizes, with service yards more partitioned by existing and new planting
 - Provide SUDS attenuation ponds for each development block at the lowest points and ensure that these are fully integrated with both the existing surface water drainage and the existing/ proposed landscaping.
- **Option 6: Redevelopment of Aggmore Land with the exception of Plots 9 & 10
(Figure 20)**
 - Option 5 may be amended to omit plots 9 and 10 which are in current use and may be subject to a separate purchase. The above points made in relation to Option 5 also apply here to Option 6.



- Retain existing business park and industrial estate buildings/plots.
- Extend existing development road west to connect with future station access road.
- Create six/seven development plots to accommodate two-storey office buildings
- Amenity landscaped corridor to cross site, incorporating SUDS feature attenuation pond and footpath connecting Core Path 189 to 'Promoted' path to north.
- Provide dedicated parking areas in accordance with best practice.
- Building depths should be no more than 13m to provide naturally lit and ventilated space.
- Western-most building should be designed to create clear and attractive 'entrance' to business park as viewed from station.

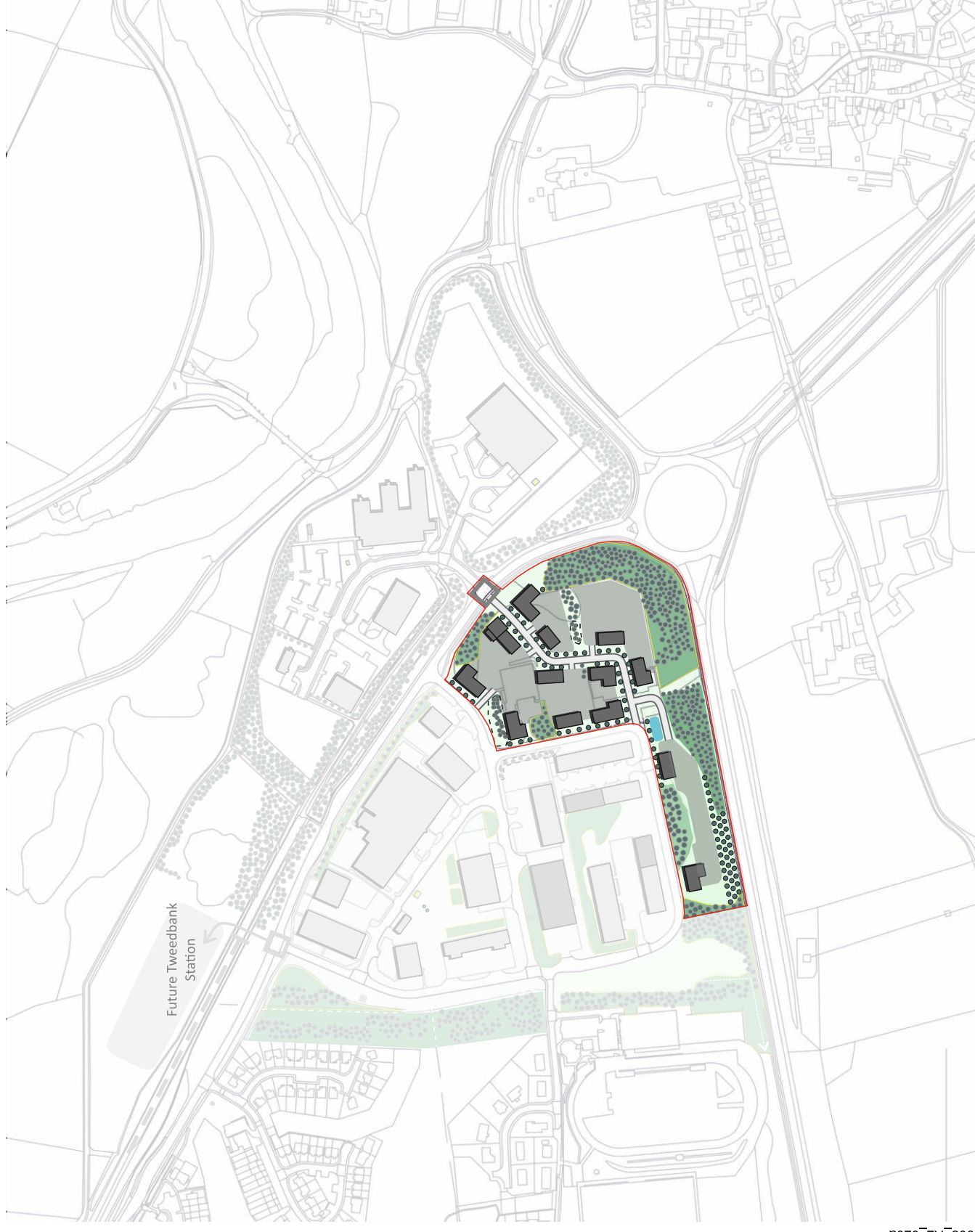


Figure 15
Option 1:
Western Extension
to Business Park



- Demolish existing industrial unit within southeast corner of the site
- Develop two units to south and east of southern access road; one small/medium industrial and one large commercial with associated car parking
- Plant a screening woodland (15 metre deep) within planting gaps along the southern edge (note: utility corridors) to mitigate visual impact on Special Landscape Area to the south.
- Would necessitate removal of TPO group of trees along southern access road and part of group within eastern part of the site.
- Southern site is outwith settlement boundary - requires modification to Local Plan or seek Planning Permission.

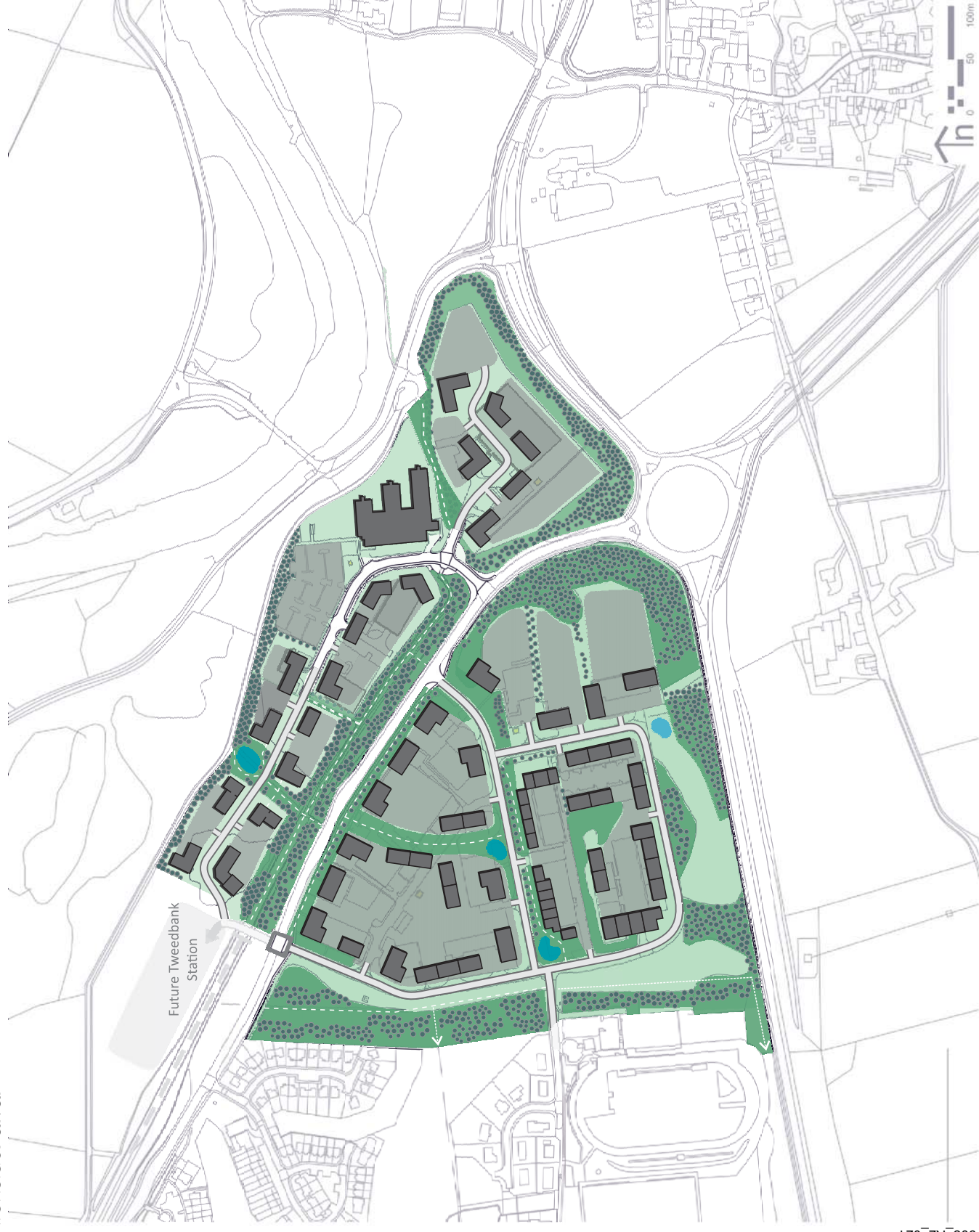
Figure 16
Option 2:
Southern Industrial
& Commercial
Redevelopment



- Demolish existing units within eastern part of the site. Create new junction along Tweedbank Drive opposite existing northern junction (require tree removal to ensure visibility splay)
- Perimeter block arrangement of office buildings, with car parking to the rear/internal part of the block
- Buildings should be no more than two storeys to limit impact on Special Landscape Area
- Building depths should be no more than 13m to provide naturally lit and ventilated space. Plant a screening woodland (15 metre deep) within planting gaps along the southern edge (note: utility corridors) to mitigate visual impact on Special Landscape Area to the south.
- Southern site is outwith settlement boundary - requires modification to Local Plan or seek Planning Permission.

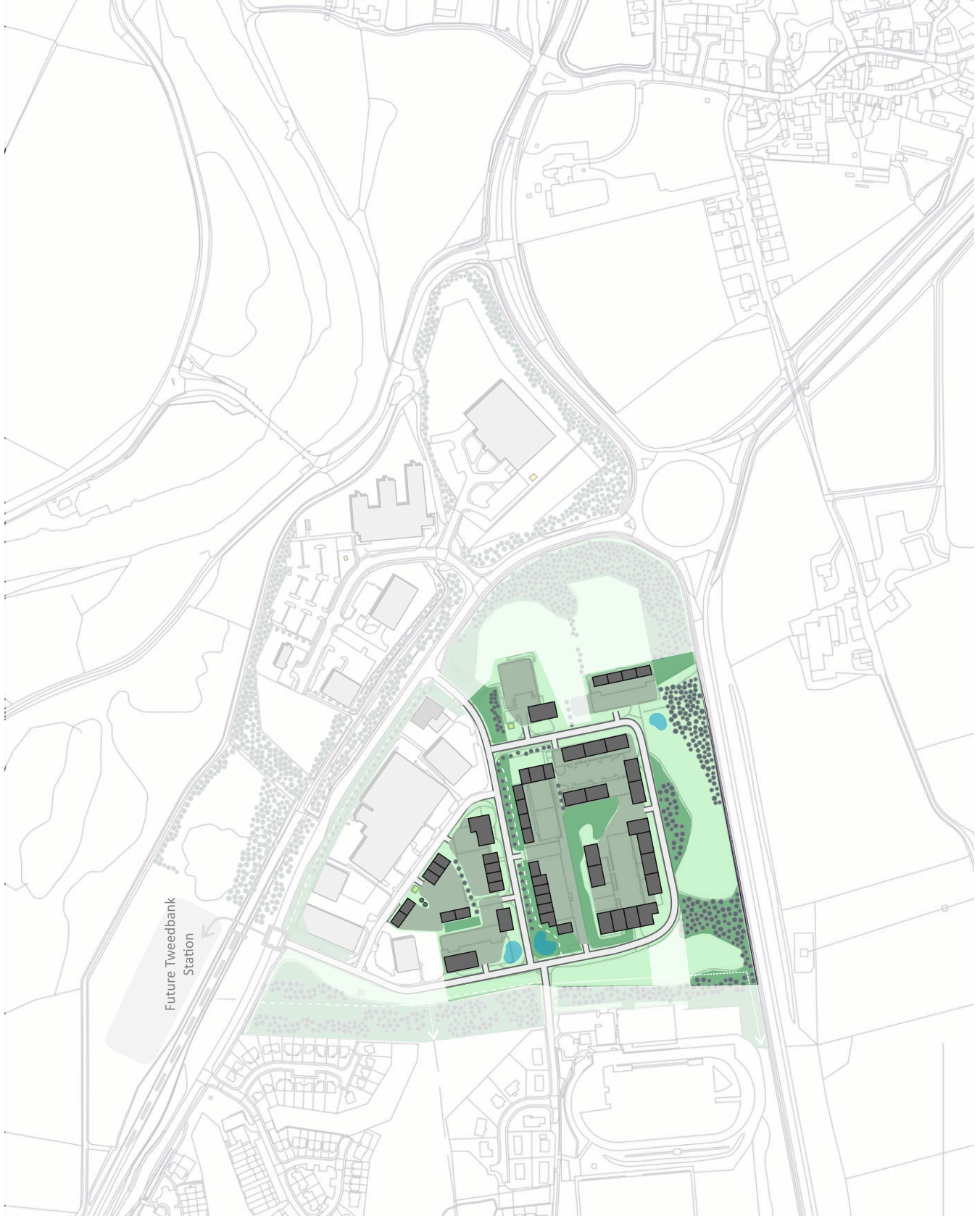


Figure 17
Option 3:
Business Park
Extension to
Southern Site



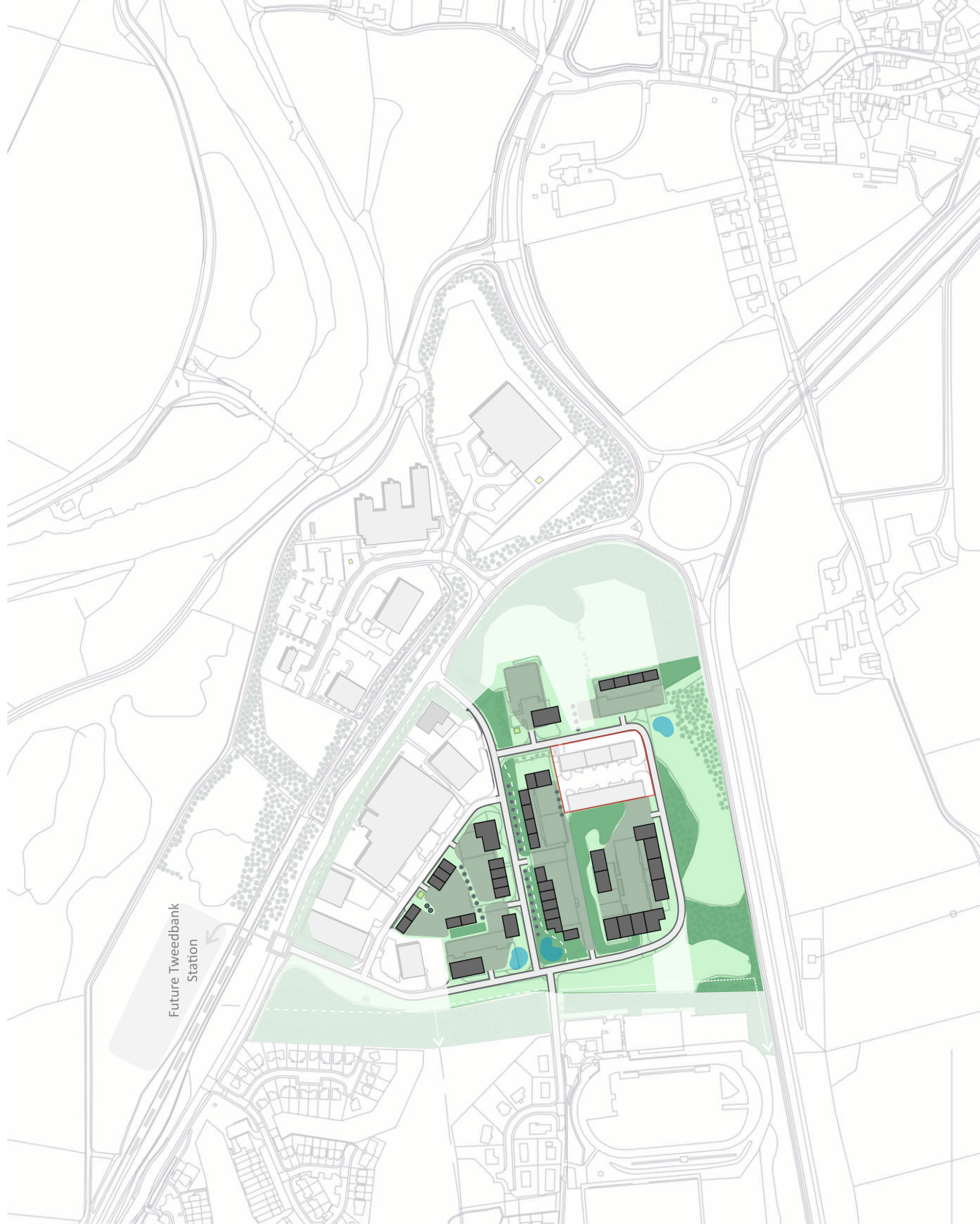
- Long-term future scenario could be implemented in phased approach as an when plots become available
- Continues perimeter block arrangement where possible to ensure clear street definition and overlooked paths to maximise passive surveillance
- Green/pedestrian corridor within industrial estate linking to northern corridor and public transport
- Provides mix of industrial/employment units including small/incubator industrial units and 'professional service' office accommodation.

Figure 18
Option 4:
Long Term
Re-development



- Estate roads, block sizes and landscape buffer zones to remain unchanged - unlike Option 4, the service road parallel to Tweedbank Drive would be retained.
- Perimeter block layouts with some small buildings sited within shared service yards internal to the block
- Landscape the central east-west estate road to create a green pedestrian corridor to improve the experience along this section of Core Path 7.
- Provide dedicated parking areas in accordance with best practice.
- Smaller unit sizes, with service yards more partitioned by existing and new planting
- Provide SUDS attenuation ponds for each development block at the lowest points and ensure that these are fully integrated with both the existing surface water drainage and the existing/proposed landscaping.

Figure 19
Option 5:
Re-development
of Aggmore Land



Option 5 may be amended to omit plots 9 and 10 which are in current use and may be subject to a separate purchase. The points made in relation to Option 5 also apply to Option 6.

- Estate roads, block sizes and landscape buffer zones to remain unchanged - unlike Option 4, the service road parallel to Tweedbank Drive would be retained.
- Perimeter block layouts with some small buildings sited within shared service yards internal to the block
- Landscape the central east-west estate road to create a green pedestrian corridor to improve the experience along this section of Core Path 7.
- Provide dedicated parking areas in accordance with best practice.
- Smaller unit sizes, with service yards more partitioned by existing and new planting
- Provide SUDS attenuation ponds for each development block at the lowest points and ensure that these are fully integrated with both the existing surface water drainage and the existing/proposed landscaping.

Figure 20
Option 6:
Re-development
of Aggmore Land
with Exception of
Plot 9 & 10





Figure 22
Option 4:
3D Oblique View



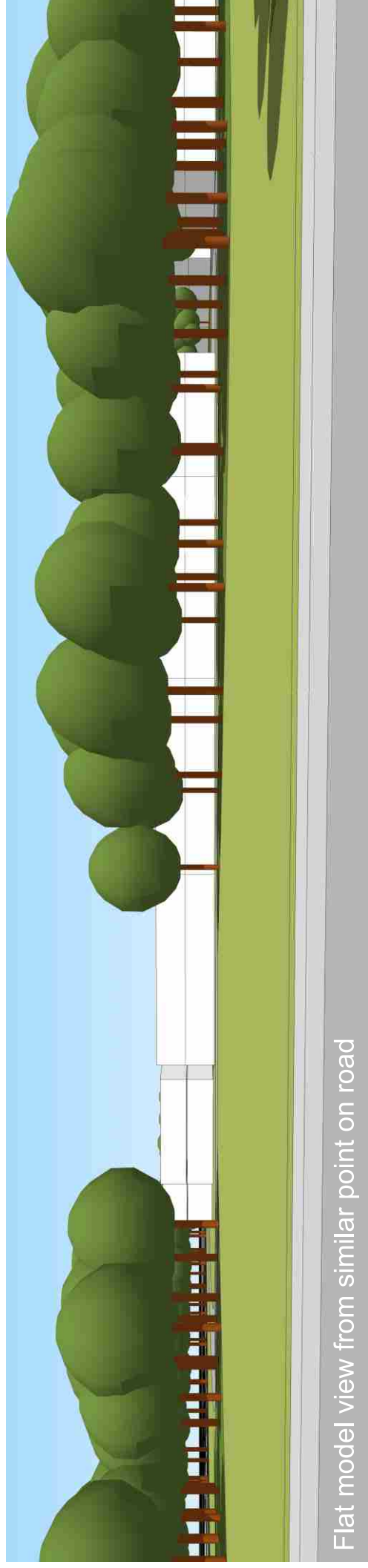
Figure 23
Option 4:
3D Oblique View 2



Figure 24
Option 4:
3D Oblique View 3



Google Streetview capture



Flat model view from similar point on road

7.7 Potential Phasing Arrangement Figure 26

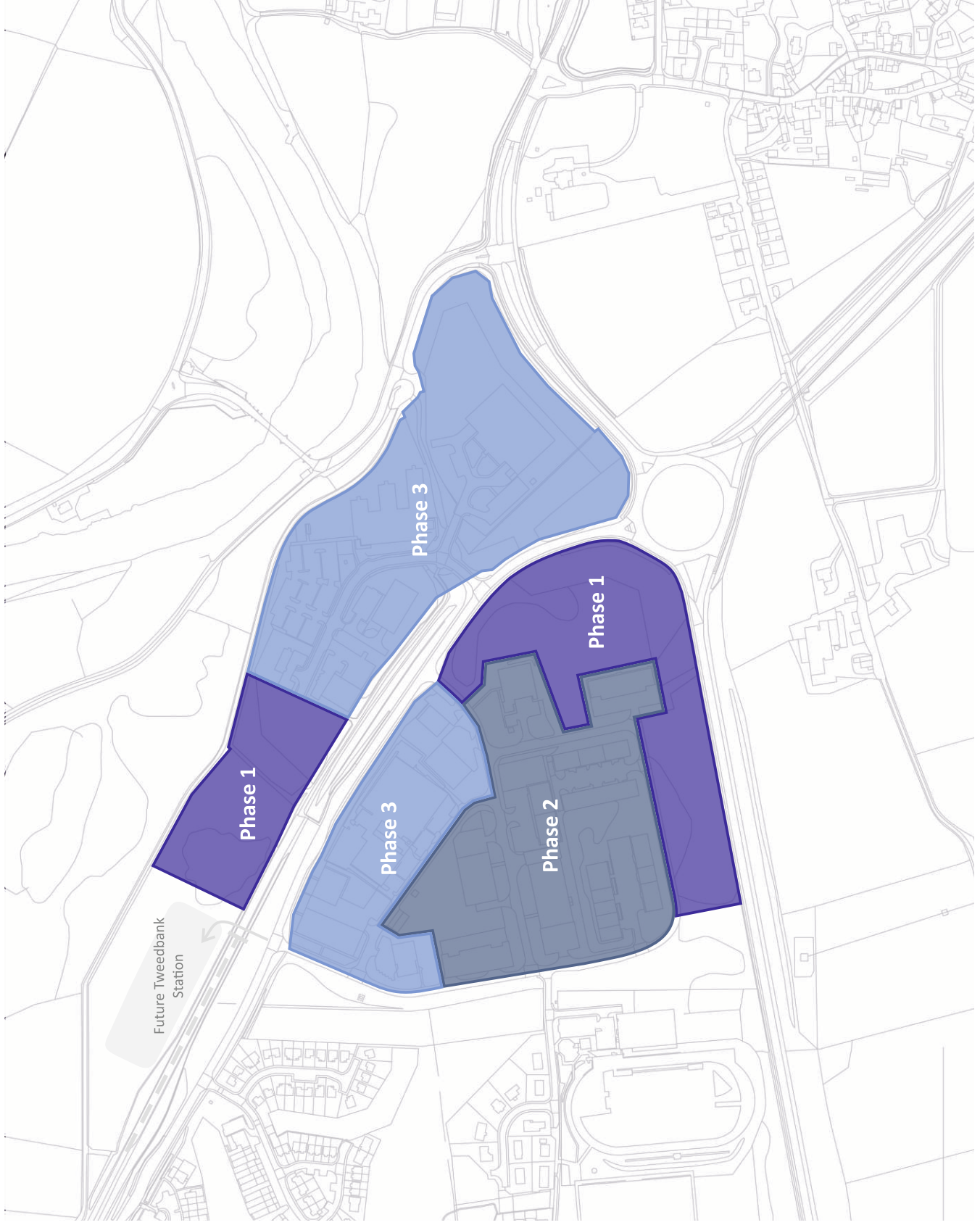
Figure 26 shows a potential phasing plan for the site with key features:

- Phase 1 - Short term development on plots currently vacant
- Phase 2 - Works on land which would require land acquisition, demolition and redevelopment (Aggmore land).
- Phase 3 - Longer term development on plots currently functioning well/ adequately. Develop as and when plots/ buildings become vacant and as the market demands.

7.8 Potential Zoning Figure 27

Figure 27 shows a potential zoning plan for the whole redevelopment site with key features:

- Locate support services, including potential Support Services Hub with retail and services at key node adjacent to station.
- Safeguard strategic employment development site at prominent and accessible location.
- Maintain and enhance high amenity business park.
- Provide mix of smaller scale industrial units within existing Tweedbank Estate.
- Consider potential for hotel/motel on main road frontage – not shown as location may not attract enough demand. Alternative uses also include a local car hire business, although again not shown as more likely to be located in a town centre for convenience. However both planning policy should retain flexibility should demand for such uses become apparent.



- Phase 1 - Short-term development on current vacant plots
- Phase 2 - Land acquisition, demolition and redevelopment
- Phase 3 - Longer-term gradual redevelopment as and when the market requires it.



- Locate support services, including potential local centre retail and services, at key node adjacent to station.
- Safeguard strategic employment and development site at prominent and accessible location.
- Maintain and enhance high amenity business park.
- Provide mix of smaller-scale industrial units within existing Tweedbank Estate.

8.0 OUTLINE COST APPRAISAL

A series of outline infrastructure cost assessments have been undertaken as part of the study. These allocate the budget costs to the options considered in Section 7.0. Cost assessments are included in the Appendices and are summarised in the table below together with land purchase and other developments costs.

Summary of Infrastructure, Land Purchase and Other Development Costs

Option	Description	Area/ ha	Potential Building Footprint/ m ²	Infrastructure Costs			Other Development Costs		
				Budget Infrastructure Costs/ £	Total per hectare/ £	Total per acre/ £	Land Purchase Costs/ £'s	Building Costs/ £'s	Car Parking/ Yard Areas Costs/ £'s
1	Western extension to Tweedside Park	1.67	3,340	900,000	550,000	225,000	300,000	2,000,000	835,000
2	Southern industrial & commercial redevelopment (Low Cost)	4.38	8,760	925,000	200,000	75,000	750,000	5,250,000	2,200,000
3	Business Park Extension to Southern Site	4.38	8,760	1,400,000	325,000	125,000	750,000	5,250,000	2,200,000
4	Long Term Redevelopment	23.48	46,960	7,425,000	325,000	125,000	4,050,000	28,175,000	11,750,000
5	Redevelopment of Aggmore Land	7.66	15,320	2,575,000	325,000	125,000	1,325,000	9,200,000	3,825,000
6	Redevelopment of Aggmore Land minus Plots 9 & 10	7.12	14,240	2,325,000	325,000	125,000	1,225,000	8,550,000	3,550,000

Notes:

- Area provided is the area within the red line boundary on the Option Layout.
- Potential development building footprint estimated at 20% of Area.
- Costs exclude legal fees and internal plot landscaping.
- Options 5 & 6 include land owned by Aggmore which is not currently shown to be redevelopment and so costs per hectare not considered on quite the same basis as other options.
- Serviced land purchase costs estimated at £65,000 to £75,000 per acre for Tweedbank and assumed at £70,000 for cost table.
- Building Costs estimated at £350/m²→£850/m² dependant on building type. Assumed at £600/m² for cost table.
- Car parking/ Yard Area Costs :assumed at £125/m² over 40% of plot area.
- Costs rounded to nearest £25,000.

Development costs for the various options as provided in the table as indicative at this stage and have been provided in order to provide an initial assessment of the relative merits of each option.

The following is relevant:

- **Option 1.** The cost calculated per hectare is broadly in line with costs associated for “typical” Greenfield land development.
- **Option 2.** This option was selected as it offered a potential “low” cost development option, maximising existing infrastructure and vacant plots.
- **Options 3-6.** Costs per hectare are similar for all options. Further assessment of the majority of costs would be required in order to be confident in the costs however this assessment indicates that redevelopment of the existing estate offers good value in relation to Greenfield development. This is primarily due to the assumed reuse of existing infrastructure such as roads, underground services and landscaping.

Costs presented are indicative only at this stage and have been prepared to allow SE/ SBC a comparison of the various options and versus typical green field infrastructure costs (which may be of the order of £250,000/ acre or £600,00/ hectare.)

The costs assessments and table are self exploratory but indicate that costs to redevelop parts of the existing industrial estate compare favourably with development of Greenfield land. This is primarily due to the existing utilities and infrastructure on the site which would be retained where possible in a redevelopment scenario.

9.0 CONCLUSIONS

The following summarises the key points of the study:

Study Approach

Following the findings of the Market and Economic Assessment Report, a phased strategy was recommended with respect to development of the sites. Additional development options have also been included within the report to assess potential opportunities that arose during the study.

Site Details

Tweedside Park was constructed in 1989 and is a strategic employment site designed on a high amenity basis. It has one area of undeveloped land and is located adjacent to the proposed Borders Railway Terminal.

The existing Tweedbank Industrial Estate was initially developed in the mid 1970's and generally consists of manufacturing and commercial uses.

Access and Accessibility

Tweedbank has good road access and is adjacent to and accessed from the A6091 Trunk Road Network. Public transport provision is in the form of a bus service and a bus stop is located adjacent to the site on Tweedbank Drive. The site is well serviced for pedestrians by both Core Paths and Promoted paths.

There are currently no railway stations or freight services in the Borders Region, however the Borders Railway is currently under construction and is anticipated to be completed in 2015, with the terminal being located adjacent to Tweedside Park.

Utilities

All main utilities currently exist within the two sites. Given that the area is currently developed, it is not anticipated that future utilities provision would be problematic for modest expansion to the estate or for redevelopment of existing elements over the short to medium term.

Proposed Drainage

It is anticipated the existing foul drainage system would be maintained and utilised where possible to service new development. There may be a requirement to survey and potentially upgrade elements of existing infrastructure to ensure it was suitable to service a modern development.

Any new development or redevelopment of the site would require an appropriate SUDS system to be installed to treat surface water drainage. It would probably be appropriate to utilise the existing surface water drainage carrier system in a redevelopment scenario. However attenuation and treatment would be required. The existing system would require to be checked and potentially repaired / upgraded.

Sustainability Appraisal

A sustainability appraisal has been undertaken as part of the study. The concept of sustainable development recognises the need for development to take account of the use of natural resources and the generation of waste, and acknowledges the equal importance of development's social, environmental and economic dimensions, at both global and local levels. The SPP encourages the planning system to support the achievement of sustainable development through its influence on the location, layout and design of new development.

Enhancement and further development of the Tweedbank Industrial Estate/ Tweedside Park offers the potential to impact positively on several sustainable development criteria. Key opportunities may relate to refurbishment of existing inefficient buildings to include new cladding which will have long term benefits in terms of reduced levels of energy consumption and emissions. Any new buildings proposed will be designed to incorporate low carbon and low energy features.

Landform, Environment and Visual Impact

The topography of most of the industrial estate is fairly level, with a more noticeable slope rising from the eastern estate road to the eastern boundary, although this is less than 1 in 20 slope at its steepest, so not a major constraint to development. The steepest areas within Tweedside Park have already been developed as part of the Scottish Public Pensions Agency site. The undeveloped part of the site is a gentle north-facing slope, with small undulations to the north.

The industrial estate forms a visible public frontage on to Tweedbank Drive. Elsewhere generous woodland planting ensures that both sites are relatively well screened from Tweedbank Drive, the strategic road network, the Special Landscape Area to the south, the National Scenic Area to the East and the River Tweed Special Area of Conservation and SSSI to the north of Tweedside Park. A few small gaps in the screening allow for intermittent narrow views through into the sites, most notably along the A6091 to the south.

There are a number of TPOs placed upon established groups or individual trees within the industrial estate. These include parts of the southern edge screening vegetation.

Views of the Eildon Hills are notable at certain points within both sites. The hills to the north and south also form attractive rural backdrops and sense of enclosure frequently visible as one moves through the sites. The most prominent building positions are located at the two entrances to the industrial estate. Following development of the railway station and clearing of vegetation to allow for the vehicular access, any building within the western corner of the business park site will also be rendered highly visible.

Aggmore Ltd

FT Linden are managing agents for Aggmore Ltd, who own the majority of the Tweedbank Industrial Estate. They noted that the estate was well located within the central Borders had good transport links and the potential to capitalise on the Borders Railway/ Terminal. FT Linden noted that there were issues associated with the estate that currently made it difficult to let units.

FT Linden noted that the estate was not commercially profitable for Aggmore in the current market conditions. As Tweedbank was Aggmore's only holding in Scotland and of a smaller scale/ nature to their other assets, Aggmore were looking to sell their holdings in the estate as soon as they were able/ achieved a realistic offer.

FT Linden stated that Aggmore were not currently interested in a potential joint or sole venture in the future to upgrade or reconfigure the estate under any foreseeable conditions.

The position taken by Aggmore Ltd offers the potential opportunity to acquire and redevelop parts of the estate. Without intervention, the possibility/ probability exists that maintaining the status quo at Tweedbank will lead to a further slow decline in the building stock and use of the estate, with the attendant issues that this may lead to.

Design Strategy

A broad design strategy to guide development towards achieving positive design, viability and sustainability objectives has been prepared and illustrated diagrammatically to convey the need for a flexible approach able to respond to changing markets and other circumstances.

(i) A Clear Urban Structure : The new rail station will create an important entrance to the area and a key node in the movement network since both sites will gain access from the newly formed junction. Development should respond to this by creating welcoming public facades and a positive sense of enclosure which attracts pedestrian movement from the station in to the development. From here the existing road and path networks form an effective structure for any new development, forming secondary nodes at the junctions of Core Paths, site entrances and main roads.

The layout of the industrial estate should follow the principles of the perimeter block, whereby buildings are orientated to front on to the road and hide the more operational or car parking areas, which tend to be more visually-intrusive, to the rear of buildings in the internal part of the block. This also creates a more comfortable pedestrian environment with well defined streets, more public entrances and windows overlooking the streets. Corner buildings should seek to positively address both street frontages.

(ii) Protecting Sensitive Landscape and Neighbouring Communities : The visual impact of development on the surrounding sensitive landscape areas can be limited by restricting the scale and massing of buildings. Buildings within the business park and the southern and eastern parts of the industrial estate should be kept relatively low and small in terms of massing - no more than two storeys in height. Where larger buildings are proposed these could be accommodated towards the northern part of the industrial estate, particularly where they can contribute towards a strong and continuous frontage along Tweedbank Drive.

Views of the development sites can be further restricted through careful planting of vegetation to complement the already established planting around and within each site. Development should also seek to retain and protect as far as possible trees which contribute positively to the character of the area, in particular those with TPO status.

It will also be important to maintain the existing woodland planting along the western edge of the industrial estate which screens neighbouring homes from the noise and visual intrusion of industrial activities and vehicular movements.

(iii) Landscape Strategy : Through the development of a robust palette (e.g. selected to include appropriate variety/ mix/ nature) of materials and landscape treatments future developments will emerge with consistency through approach and execution that will provide cohesion through the varying stages of development improving the identity of the Industrial estate.

Development Options

A series of potential development options have been prepared. The options identify a development on the vacant land at Tweedside Park as well as a series of potential options within Tweedbank IE. Some of the options considered involve larger scale development than envisaged as being required by the Market and Economic Assessment Report in order to review potential opportunities resulting from comments made by the existing estate owners.

Potential plans have been prepared that identify how redevelopment of the wider site might be phased and zoned.

Outline Cost Appraisal

A series of outline cost assessments have been undertaken as part of the study. These allocate the budget costs for infrastructure provision for the various development options considered.

The costs assessments indicate that costs to redevelop parts of the existing industrial estate compare favourably with development of Greenfield land. This is primarily due to the existing utilities and infrastructure for the site which would be retained where possible in a redevelopment scenario.

APPENDIX A

Budget Cost Assessments

BUDGET COST APPRAISAL**OPTION NO: 1****Gross Development Area: 1.67 ha**

Nov-12

Item	Unit	Qty	Cost/ Unit	Cost
SITE PREPARATION WORKS				
Topographic survey	sum			1,500.00
Site Investigation Works	sum			20,000.00
Site Clearance and Demolition				
Site Clearance	m ²	16867.75	2.00	33,735.50
Demolition of Existing Buildings	m ²	0	30.00	0.00
Grub up handstanding/ roads etc.	m ²	0	7.50	0.00
Landscaping Works				
Structure planting to site - assumed at 10% of site area.	m ²	1686.775	10.00	16,867.75
Earthworks				
Works to existing quarry	sum			35,000.00
Earthworks allowance for small amount of regrading, blading over topsoil strip etc.	m ²	16868	2.00	33,736.00
<i>Sub Total for Site Preparation Works</i>				140,839.25
ACCESS WORKS				
New Roads	m	205	1,750.00	358,750.00
New footways/ Footpaths	m	75	350.00	26,250.00
<i>Sub Total for Access Works</i>				385,000.00
Drainage to Plots				
Surface water drain to plots (main carrier drain providing one level of SUDS treatment). Assumed as filter type drain and includes manholes.	m	215	100.00	21,500.00
Connection to existing drainage network.	sum			2,500.00
SUDS basin for road drainage (including 2 no. Headwalls, outlet structure and associated pipework	sum			20,000.00
Foul water drain to plots (main carrier drain including associated manholes).	m	170	100.00	17,000.00
Allowance for capping/ local diversion/ protection of existing sewers and road crossings (FW & SW).	sum			0.00
<i>Sub Total for Drainage</i>				61,000.00

Item	Unit	Qty	Cost/ Unit	Cost
PUBLIC UTILITY WORKS				
Street Lighting				
Street lighting ducting and cabling including columns at 30m centres along new roads and footways.	m	205	50.00	10,250.00
Control pillar and connection to existing system.	sum			3,500.00
Electricity Supply				
Allowance for modification to Electricity substation.	sum			20,000.00
HV/ LV cabling (from existing supply point to substation and along new roads).	m	170	40.00	6,800.00
Water Supply				
Water supply from existing supply point and along road including road crossings.	m	170	55.00	9,350.00
Telecoms Provision				
BT ducts and draw cord from existing supply point and along road including road crossings including BT boxes.	m	170	55.00	9,350.00
Gas Supply				
Gas pipework from existing supply point and along road including road crossings.	m	170	50.00	8,500.00
Utility Diversions				
Allowance for diversion of existing gas/ BT/ electricity/ water infrastructure.	m	0	150.00	0.00
Allowance for local diversion/ protection/ lowering of utilities.	sum			0.00
<i>Sub Total for Public Utility Works</i>				67,750.00
Professional Fees, Preliminaries and Contingencies				
Professional Fees @ 10% of all above works.				65,458.93
Contingencies @ 10% of all above works.				65,458.93
Preliminaries (including site set up, general site clearance, provisional sums) @ 17.5% of all other items).	sum			114,553.12
<i>Sub total of Professional Fees, Preliminaries & Contingencies</i>				245,470.97
TOTAL - ALL WORKS				900,060.22

Notes:

All utilities assumed to be connected or extended at end of existing tweed side road.

BUDGET COST APPRAISAL

OPTION NO: 2

Gross Development Area: 4.38 ha

Nov-12

Item	Unit	Qty	Cost/ Unit	Cost
SITE PREPARATION WORKS				
Topographic survey	sum			2,500.00
Site Investigation Works	sum			30,000.00
Site Clearance and Demolition				
Site Clearance	m ²	43,828	2.00	87,656.70
Demolition of Existing Buildings	m ²	2,238	30.00	67,149.00
Grub up hardstanding/ roads etc.	m ²	875	7.50	6,562.50
Landscaping Works				
Structure planting to site - assumed at 10% of site area	m ²	4,383	10.00	43,828.35
Earthworks				
Earthworks allowance for small amount of regrading, blading over topsoil strip etc.	m ²	23,486	2.00	46,972.00
<i>Sub Total for Site Preparation Works</i>				284,668.55
ACCESS WORKS				
New Roads	m	0	1,750.00	0.00
New footways/ Footpaths	m	375	350.00	131,250.00
General allowance for upgrade to existing roads.	m	375	150.00	56,250.00
<i>Sub Total for Access Works</i>				187,500.00
Drainage to Plots				
Surface water drain to plots (main carrier drain providing one level of SUDS treatment). Assumed as filter type drain and includes manholes.	m	110	100.00	11,000.00
Connection to existing drainage network.	sum			2,500.00
Foul water drain to plots (main carrier drain including associated manholes).	m	110	100.00	11,000.00
SUDS basin for road drainage (including 2 no. Headwalls, outlet structure and associated pipework). Assumed as required as contribution to SUDS retrofit of it of roads estate generally.	sum			20,000.00
Allowance for local diversion/ protection of existing sewers and road crossings (FW & SW). Include allowance for general repair and upgrade.	sum			50,000.00
<i>Sub Total for Drainage</i>				94,500.00

Item	Unit	Qty	Cost/ Unit	Cost
PUBLIC UTILITY WORKS				
Street Lighting				
Street lighting ducting and cabling including columns at 30m centres along new roads and footways.	m	0	50.00	0.00
Provision of street lighting upgrade along existing roads.	m	375	50.00	18,750.00
Control pillar and connection to existing system.	sum			3,500.00
Electricity Supply				
Allowance for modification to Electricity substation.	sum			40,000.00
HV/ LV cabling (from existing supply point to substation and along new roads).	m	20	40.00	800.00
Water Supply				
Water supply from existing supply point and along road including road crossings.	m	20	55.00	1,100.00
Telecoms Provision				
BT ducts and draw cord from existing supply point and along road including road crossings including BT boxes.	m	20	55.00	1,100.00
Gas Supply				
Gas pipework from existing supply point and along road including road crossings.	m	20	50.00	1,000.00
Utility Diversions				
Allowance for diversion of existing gas/ BT/ electricity/ water infrastructure.	m	0	150.00	0.00
Allowance for capping/ local diversion/ protection/ lowering of utilities.	sum			40,000.00
<i>Sub Total for Public Utility Works</i>				106,250.00
Professional Fees, Preliminaries and Contingencies				
Professional Fees @ 10% of all above works.				67,291.86
Contingencies @ 10% of all above works.				67,291.86
Preliminaries (including site set up, general site clearance, provisional sums) @ 17.5% of all other items).	sum			117,760.75
<i>Sub total of Professional Fees, Preliminaries & Contingencies</i>				252,344.46
TOTAL - ALL WORKS				925,263.01

Notes:

Price of option one not included in price

BUDGET COST APPRAISAL**OPTION NO: 3****Gross Development Area: 4.38 ha**

Nov 12

Item	Unit	Qty	Cost/ Unit	Cost
SITE PREPARATION WORKS				
Topographic survey	sum			2,500.00
				30,000.00
Site Investigation Works	sum			
Site Clearance and Demolition				
Site Clearance	m ²	43,828.35	2.00	87,656.70
Demolition of Existing Buildings	m ²	2,421.00	30.00	72,630.00
Grub up handstanding/ roads etc.	m ²	2,208.00	7.50	16,560.00
Landscaping Works				
Structure planting to site - assumed at 10% of site area	m ²	4,382.84	10.00	43,828.35
Earthworks				
Earthworks allowance for small amount of regrading, blading over topsoil strip etc.	m ²	23,486.00	2.00	46,972.00
<i>Sub Total for Site Preparation Works</i>				300,147.05
ACCESS WORKS				
New Roads	m	260.00	1,750.00	455,000.00
New footways/ Footpaths <i>(Note - no allowance assumed to upgrade existing estate roads as site works as standalone option).</i>	m	0.00	350.00	0.00
<i>Sub Total for Access Works</i>				455,000.00
Drainage to Plots				
Surface water drain to plots (main carrier drain providing one level of SUDS treatment). Assumed as filter type drain and includes manholes.	m	260.00	100.00	26,000.00
Connection to existing drainage network.	sum			2,500.00
Foul water drain to plots (main carrier drain including associated manholes).	m	260.00	100.00	26,000.00
SUDS basin for road drainage (including 2 no. Headwalls, outlet structure and associated pipework)	sum			20,000.00
Allowance for capping/ local diversion/ protection of existing sewers and road crossings (FW & SW). Include allowance for general repair and upgrade.	sum			50,000.00
<i>Sub Total for Drainage</i>				124,500.00

Item	Unit	Qty	Cost/ Unit	Cost
PUBLIC UTILITY WORKS				
Street Lighting				
Street lighting ducting and cabling including columns at 30m centres along new roads and footways.	m	260.00	50.00	13,000.00
Control pillar and connection to existing system.	sum			3,500.00
Electricity Supply				
Allowance for modification to Electricity substation.	sum			40,000.00
HV/LV cabling (from existing supply point to substation and along new roads).	m	260.00	40.00	10,400.00
Water Supply				
Water supply from existing supply point and along road including road crossings.	m	260.00	55.00	14,300.00
Telecoms Provision				
BT ducts and draw cord from existing supply point and along road including road crossings including BT boxes.	m	260.00	55.00	14,300.00
Gas Supply				
Gas pipework from existing supply point and along road including road crossings.	m	260.00	50.00	13,000.00
Utility Diversions				
Allowance for diversion of existing gas/ BT/ electricity/ water infrastructure.	m	0.00	150.00	0.00
Allowance for local diversion/ protection/ lowering of utilities.	sum			20,000.00
<i>Sub Total for Public Utility Works</i>				128,500.00
Professional Fees. Preliminaries and Contingencies				
Professional Fees @ 10% of all above works.				100,814.71
Contingencies @ 10% of all above works.				100,814.71
Preliminaries (including site set up, general site clearance, provisional sums) @ 17.5% of all other items).	sum			176,425.73
<i>Sub total of Professional Fees, Preliminaries & Contingencies</i>				378,055.14
TOTAL - ALL WORKS				1,386,202.19

BUDGET COST APPRAISAL
OPTION NO: 4
Gross Development Area: 23.48 ha

Nov-12

Item	Unit	Qty	Cost/ Unit	Cost
SITE PREPARATION WORKS				
Topographic survey	sum			10,000.00
Site Investigation Works	sum			150,000.00
Site Clearance and Demolition				
Site Clearance	m ²	234885	2.00	469,770.00
Demolition of Existing Buildings	m ²	31163	30.00	934,890.00
Grub up handstanding/ roads etc.	m ²	29022	7.50	217,665.00
Landscaping Works				
Structure planting to site - assumed at 10% of site area	m ²	23488.5	10.00	234,885.00
Earthworks				
Works to existing quarry	sum			35,000.00
Earthworks allowance for small amount of regrading, blading over topsoil strip etc.	m ²	144997	2.00	289,994.00
<i>Sub Total for Site Preparation Works</i>				2,342,204.00
ACCESS WORKS				
New Roads	m	425	1,750.00	743,750.00
New footways/ Footpaths	m	1875	350.00	656,250.00
General allowance for upgrade to existing, estate roads.	m	1700	150.00	255,000.00
Allowance for new pedestrian crossing, for station - planning gain	sum			50,000.00
<i>Sub Total for Access Works</i>				1,705,000.00
Drainage to Plots				
Surface water drain to plots (main carrier drain providing one level of SUDS treatment). Assumed as filter type drain and includes manholes.	m	1125	100.00	112,500.00
Connection to existing drainage network.	sum			10,000.00
Foul water drain to plots (main carrier drain including associated manholes).	m	500	100.00	50,000.00
SUDS basin for road drainage (including 2 no. Headwalls, outlet structure and associated pipework) allowance for 4 No.	sum			100,000.00
Allowance for capping/ local diversion/protection of existing sewers and road crossings (FW & SW). Include allowance for general repair and upgrade.	sum			250,000.00
<i>Sub Total for Drainage</i>				522,500.00

Item	Unit	Qty	Cost/ Unit	Cost
PUBLIC UTILITY WORKS				
Street Lighting				
Street lighting ducting and cabling including columns at 30m centres along new roads and footways.	m	425	50.00	21,250.00
Provision of street lighting upgrade along existing roads.	m	1700	50.00	85,000.00
Control pillars and connection to existing system.	sum			20,000.00
Electricity Supply				
Allowance for modification to Electricity substations.	sum			200,000.00
HV/LV cabling (from existing supply point to substation and along new roads).	m	425	40.00	17,000.00
Water Supply				
Water supply from existing supply point and along road including road crossings.	m	425	55.00	23,375.00
Telecoms Provision				
BT ducts and draw cord from existing supply point and along road including road crossings including BT boxes.	m	425	55.00	23,375.00
Gas Supply				
Gas pipework from existing supply point and along road including road crossings.	m	425	50.00	21,250.00
Utility Diversions				
Allowance for diversion of existing gas/ BT/ electricity/ water infrastructure.	m	1500	150.00	225,000.00
Allowance for local diversion/ protection/ lowering of utilities.	sum			200,000.00
<i>Sub Total for Public Utility Works</i>				836,250.00
Professional Fees, Preliminaries and Contingencies				
Professional Fees @ 10% of all above works.				540,595.40
Contingencies @ 10% of all above works.				540,595.40
Preliminaries (including site set up, general site clearance, provisional sums) @ 17.5% of all other items).	sum			946,041.95
<i>Sub total of Professional Fees, Preliminaries & Contingencies</i>				2,027,232.75
TOTAL - ALL WORKS				7,433,186.75

BUDGET COST APPRAISAL

OPTION NO: 5

Gross Development Area: 7.66ha

Nov-12

Item	Unit	Qty	Cost/ Unit	Cost
SITE PREPARATION WORKS				
Topographic survey	sum			3,500.00
Site Investigation Works	sum			50,000.00
Site Clearance and Demolition				
Site Clearance	m ²	76,617	2.00	153,234.00
Demolition of Existing Buildings	m ²	12,657	30.00	379,710.00
Grub up hardstanding/ roads etc.	m ²	10,340	7.50	77,550.00
Landscaping Works				
Structure planting to site - assumed at 10% of site area	m ²	7,662	10.00	76,617.00
Earthworks				
Earthworks allowance for small amount of regrading, blading over topsoil strip etc.	m ²	47,908	2.00	95,816.00
<i>Sub Total for Site Preparation Works</i>				836,427.00
ACCESS WORKS				
New Roads	m	0	1,750.00	0.00
New footways/ Footpaths	m	1,236	350.00	432,600.00
General allowance for upgrade to existing roads.	m	828	150.00	124,200.00
<i>Sub Total for Access Works</i>				556,800.00
Drainage to Plots				
Surface water drain to plots (main carrier drain providing one level of SUDS treatment). Assumed as filter type drain and includes manholes.	m	437	100.00	43,700.00
Connection to existing drainage network.	sum			2,500.00
Foul water drain to plots (main carrier drain including associated manholes).	m	124	100.00	12,400.00
SUDS basin for road drainage (including 2 no. Headwalls, outlet structure and associated pipework). Assumed as required as contribution to SUDS retrofit of it of roads estate generally. Allowance for 3 no.	sum			60,000.00
Allowance for local diversion/ protection of existing sewers and road crossings (FW & SW). Include allowance for general repair and upgrade.	sum			75,000.00
<i>Sub Total for Drainage</i>				193,600.00

Item	Unit	Qty	Cost/ Unit	Cost
PUBLIC UTILITY WORKS				
Street Lighting				
Street lighting ducting and cabling including columns at 30m centres along new roads and footways.	m	0	50.00	0.00
Provision of street lighting upgrade along existing roads.	m	828	50.00	41,400.00
Control pillar and connection to existing system.	sum			3,500.00
Electricity Supply				
Allowance for modification to Electricity substations.	sum			80,000.00
HV/ LV cabling (from existing supply point to substation and along new roads).	m	20	40.00	800.00
Water Supply				
Water supply from existing supply point and along road including road crossings.	m	20	55.00	1,100.00
Telecoms Provision				
BT ducts and draw cord from existing supply point and along road including road crossings including BT boxes.	m	20	55.00	1,100.00
Gas Supply				
Gas pipework from existing supply point and along road including road crossings.	m	20	50.00	1,000.00
Utility Diversions				
Allowance for diversion of existing gas/ BT/ electricity/ water infrastructure.	m	500	150.00	75,000.00
Allowance for capping/ local diversion/ protection/ lowering of utilities.	sum			75,000.00
<i>Sub Total for Public Utility Works</i>				278,900.00
Professional Fees, Preliminaries and Contingencies				
Professional Fees @ 10% of all above works.				186,572.70
Contingencies @ 10% of all above works.				186,572.70
Preliminaries (including site set up, general site clearance, provisional sums) @ 17.5% of all other items).	sum			326,502.23
<i>Sub total of Professional Fees, Preliminaries & Contingencies</i>				699,647.63
TOTAL - ALL WORKS				2,565,374.63

BUDGET COST APPRAISAL

OPTION NO: 6

Gross Development Area: 7.12ha

Nov-12

Item	Unit	Qty	Cost/ Unit	Cost
SITE PREPARATION WORKS				
Topographic survey	sum			3,500.00
Site Investigation Works	sum			50,000.00
Site Clearance and Demolition				
Site Clearance	m ²	71,221	2.00	142,442.00
Demolition of Existing Buildings	m ²	10,445	30.00	313,350.00
Grub up hardstanding/ roads etc.	m ²	8,628	7.50	64,710.00
Landscaping Works				
Structure planting to site - assumed at 10% of site area	m ²	7,122	10.00	71,221.00
Earthworks				
Earthworks allowance for small amount of regrading, blading over topsoil strip etc.	m ²	42,512	2.00	85,024.00
<i>Sub Total for Site Preparation Works</i>				730,247.00
ACCESS WORKS				
New Roads	m	0	1,750.00	0.00
New footways/ Footpaths	m	1,236	350.00	432,600.00
General allowance for upgrade to existing roads.	m	828	150.00	124,200.00
<i>Sub Total for Access Works</i>				556,800.00
Drainage to Plots				
Surface water drain to plots (main carrier drain providing one level of SUDS treatment). Assumed as filter type drain and includes manholes.	m	437	100.00	43,700.00
Connection to existing drainage network.	sum			2,500.00
Foul water drain to plots (main carrier drain including associated manholes).	m	124	100.00	12,400.00
SUDS basin for road drainage (including 2 no. Headwalls, outlet structure and associated pipework). Assumed as required as contribution to SUDS retrofit of it of roads estate generally. Allowance for 3 no.	sum			60,000.00
Allowance for local diversion/ protection of existing sewers and road crossings (FW & SW). Include allowance for general repair and upgrade.	sum			75,000.00
<i>Sub Total for Drainage</i>				193,600.00

Item	Unit	Qty	Cost/ Unit	Cost
PUBLIC UTILITY WORKS				
Street Lighting				
Street lighting ducting and cabling including columns at 30m centres along new roads and footways.	m	0	50.00	0.00
Provision of street lighting upgrade along existing roads.	m	828	50.00	41,400.00
Control pillar and connection to existing system.	sum			3,500.00
Electricity Supply				
Allowance for modification to Electricity substations.	sum			80,000.00
HV/ LV cabling (from existing supply point to substation and along new roads).	m	20	40.00	800.00
Water Supply				
Water supply from existing supply point and along road including road crossings.	m	20	55.00	1,100.00
Telecoms Provision				
BT ducts and draw cord from existing supply point and along road including road crossings including BT boxes.	m	20	55.00	1,100.00
Gas Supply				
Gas pipework from existing supply point and along road including road crossings.	m	20	50.00	1,000.00
Utility Diversions				
Allowance for diversion of existing gas/ BT/ electricity/ water infrastructure.	m	500	150.00	75,000.00
Allowance for capping/ local diversion/ protection/ lowering of utilities.	sum			40,000.00
<i>Sub Total for Public Utility Works</i>				243,900.00
Professional Fees, Preliminaries and Contingencies				
Professional Fees @ 10% of all above works.				172,454.70
Contingencies @ 10% of all above works.				172,454.70
Preliminaries (including site set up, general site clearance, provisional sums) @ 17.5% of all other items).	sum			265,045.73
<i>Sub total of Professional Fees, Preliminaries & Contingencies</i>				609,955.13
TOTAL - ALL WORKS				2,334,502.13

Notes:

Price of option one not included in price