

FINAL REPORT

Summary Development Assessment Broomilees, Melrose



Report 3

Ironsides **Farrar**
with


Economic and Social Development

Edwin
Thompson



February 2013
7908

CONTENTS**EXECUTIVE SUMMARY**

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	Scope of Works	3
2.2	Previous Reports	3
2.3	Site Details	3
3.0	SITE ISSUES	5
3.1	Site Description	5
3.2	Topography	5
3.3	Site History	5
3.4	Archaeological Assessment	5
3.5	Environmental Setting	6
3.6	Summary Environmental Risk Assessment and Geotechnical Assessment	6
3.7	Landscape Appraisal	6
3.8	Outline Landscape Strategy	7
3.9	Access and Accessibility	7
3.10	Proposed Access Arrangements	7
4.0	UTILITIES	9
4.1	Telecommunications	9
4.2	Electricity	9
4.3	Water	9
4.4	Gas	9
4.5	Surface Water Drainage	9
4.6	Foul Drainage	10
4.7	Petrochemical Pipelines	10
4.8	Proposed Utilities and Drainage	10
5.0	DEVELOPMENT OPTION	11
6.0	OUTLINE COST APPRAISAL	13
7.0	CONCLUSIONS	15

LIST OF FIGURES

Figure 1	National Context
Figure 2	Study Area
Figure 3	Aerial Photograph
Figure 4	Potential Development Option

EXECUTIVE SUMMARY

General

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 a site at Broomilees.

Site Details

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.

Study Approach

Previous assessment as part of the Market and Economic Assessment Report suggested that demand for development space was unlikely to be required at Broomilees in the short to medium term. A summary assessment of site development issues was therefore undertaken.

Key Findings

Based on the assessment undertaken it is considered that the majority of technical issues at the site are suitable to allow development to proceed, should the demand arise. It is considered that development can take place within a “reasonable” budget and timescale. Two issues critical to development of the site however include:

- Potential landscape and visual impacts have the potential to prevent development occurring at the site and are known to generate strong interest/opposition from local residents and statutory organisations.
- The requirement for a new roundabout on the A6091 to provide road access to the site and the Borders General Hospital which would be relatively expensive relative to the size of the proposed development and would require consultation, design and a Transport Assessment to determine its suitability.

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 at Tweedbank. This report comprises one of four reports prepared on behalf of SBC and SE and provides a summary assessment for land at Broomilees, Melrose.

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 (Report 1), 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, with current vacant plot and offering opportunity to create a high quality employment environment at a key location for the new station was proposed to be taken through the full technical study and development layout brief. SE/SBC would then be in position to consider potential funding mechanisms/timescales and potential public sector input.
- 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.

This report comprises the Summary Assessment for Broomilees.

2.0 SCOPE OF WORKS/ METHODOLOGY

2.1 Scope of Works

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

The following methodology has been used during this report.

- Site walkover;
- Review of previous reports.
- Production of indicative development option
- Production of costed development option.

Table 1 presents a list of consultees.

Table 1 – List of Consultees

Consultation Name	Type of Information
Scottish Borders Council	Previous reporting
Scottish Enterprise	Comments regarding development considerations.

Previous reporting by Ironside Farrar Ltd in 2006 (see Section 2.2) undertook assessment for a 19.6ha site at Broomilees. The findings of these reports form a key part of the assessment for this current report, which has been modified to reflect a smaller scale of development.

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.

- “Design Strategy and Landscape/ Environmental Appraisal”, Proposed Business Park, Broomilees. Ironside Farrar Ltd, October 2006.
- “Utilities Appraisal”, Proposed Business Park, Broomilees. Ironside Farrar Ltd, October 2006.
- “Summary Environmental Audit and Preliminaries Ground Conditions Assessment”, Proposed Business Park, Broomilees. Ironside Farrar Ltd, October 2006.
- “Access Appraisal”, Proposed Business Park, Broomilees. Ironside Farrar Ltd, October 2006.

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 6.5 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.

This study focuses on the Broomilees site.

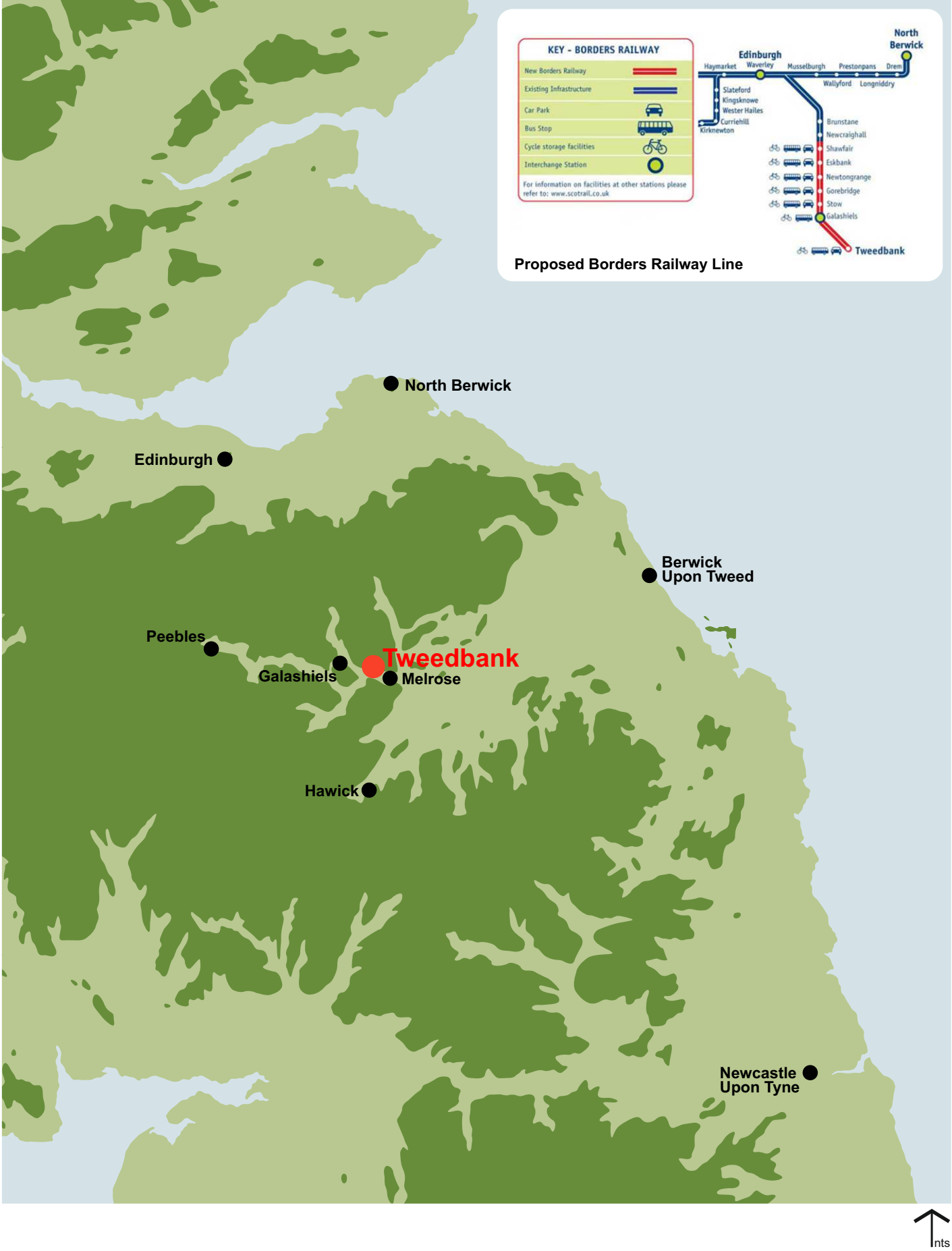


Figure 1
National Context

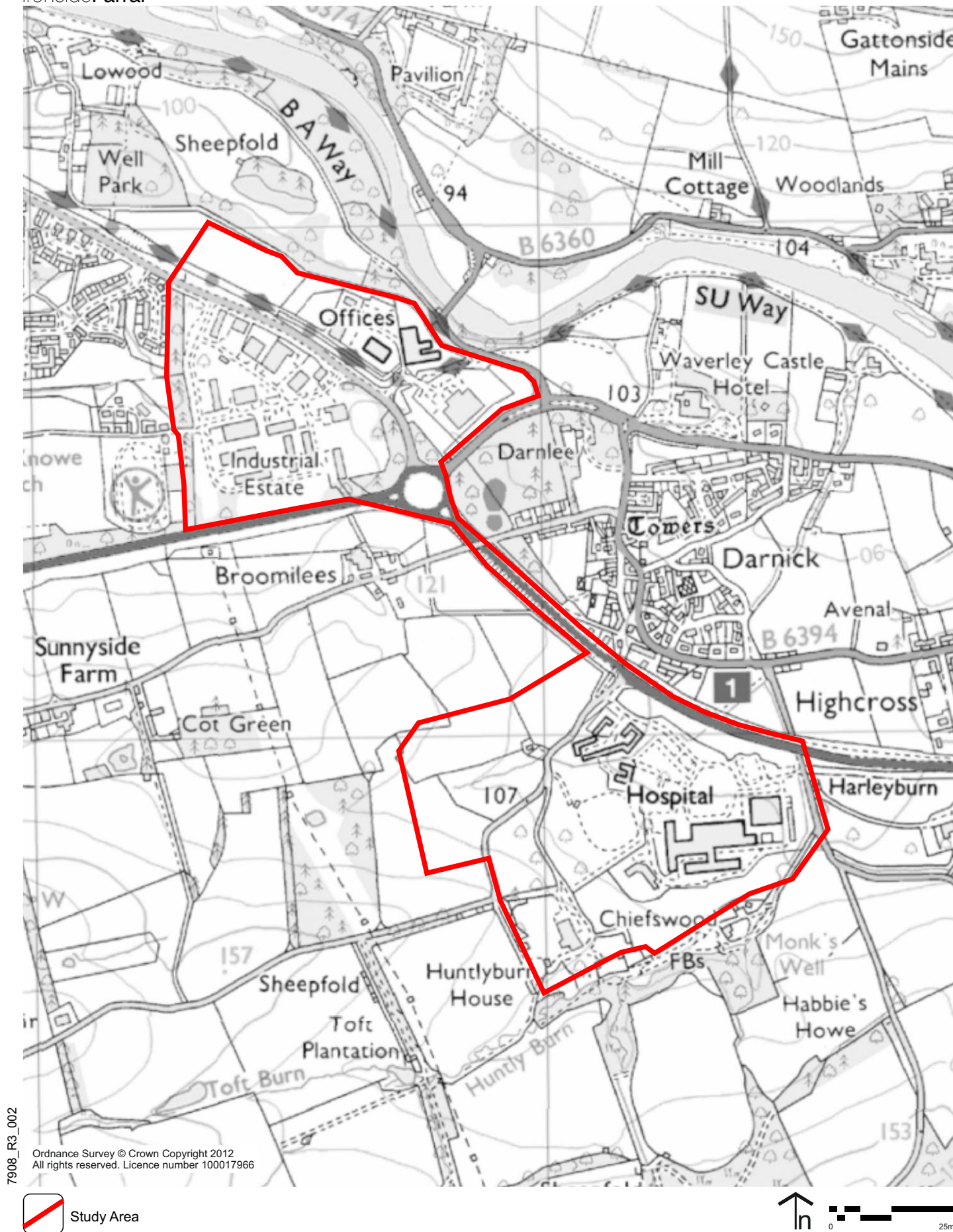


Figure 2
Study Area



Figure 3
Aerial Photograph

3.0 SITE ISSUES

3.1 Site Description

The general site setting can be considered to be rural with the site itself used for arable crops/ grazing.

A watercourse (Coat Burn) flows to the east through the central areas of the site. This feature is culverted in the western part of the study area and re-surfaces in the central site area. The watercourse continues to flow east within a shallow valley from this point until it re-enters a culvert on the eastern site boundary under the minor access road and continues through the Borders General Hospital site to the east.

3.2 Topography

The site topographical survey shows the site to undulate with topographically higher areas in the northern western and southern eastern corners. Site levels fall to the south east and east to the north of the water course and fall to the east and north east to the south of the watercourse, with the watercourse itself following the base of a shallow valley. A localised flatter area is located near to the eastern boundary north of the Coat Burn.

The topography generally provides no significant constraints to development although moderate earthworks platforming operations, by individual site developers, may be required to create level development platforms for buildings;

3.3 Site History

The site has been in use as agricultural land since prior to 1863, the area comprising a number of fields with hedgerows and the Coat Burn flowing to the east. With the exception of field boundary changes on more recent historical plans, the study area has remained predominantly unchanged, however, between 1963 and 1983 a small unidentified building was noted to exist near to the south eastern boundary.

The site surrounds have been a mixture of agricultural land and progressive development generally to the east of the site. A railway line and gravel pit existed on the north eastern boundary prior to 1863, although the gravel pit became disused by 1924. Both these features remained up until between 1967 and 1983, when they were re-developed and in-filled respectively to create the A6091 Melrose Bypass and to give access to the Borders General Hospital, which was developed on the south eastern boundary prior to 1993.

3.4 Archaeological Assessment

During consultation as part of the 2006 assessments by Ironside Farrar, SBC reported that their Sites and Monuments Records highlighted an archaeological feature within the eastern part of the study area defined by a cropmark.

An evaluation was undertaken by Headland Archaeology. Although no evidence of the primary feature (a semi-circular cropmark) was found, a prehistoric cremation burial was discovered which might represent part of a larger cremation cemetery.

From the findings of the archaeological assessment, it was recommended that any future development works be subject to topsoil stripping and monitoring under archaeological supervision, which has been endorsed by the archaeological officer of the planning authority.

3.5 Environmental Setting

The site is underlain by glacial till and glacio-marine deposits, although localised made ground cannot be discounted coincident with previous localised development and the culvert.

Bedrock is recorded as Silurian greywacke and an igneous intrusion in the south of the site. The bedrock is considered moderately permeable.

The Environmental Health Section of Scottish Borders Council and the Scottish Environmental Protection Agency were both contacted as part of the 2006 assessments and requested to provide pertinent environmental information on the site. Information supplied by both bodies did not highlight any significant environmental issues with the site.

3.6 Summary Environmental Risk Assessment and Geotechnical Assessment

Findings of the 2006 desk study did not identify any potentially significant contamination issues at the Broomilees site. Although there is a potential for localised made ground deposits to exist within the study area and off site sources have been identified on the eastern boundary in the form of a former railway and gravel pit, issues relating to these features, if any, are unlikely to provide a constraint to the development and would be readily managed during site development.

Published ground conditions indicate that the majority of the study area is underlain by glacial till (boulder clay) with glacio-meltwater deposits (sand and gravel) recorded in the eastern margins. The superficial soils would be considered appropriate ground conditions for the proposed development. However, dependant on their engineering nature, localised enhanced foundation solutions may be required coincident with the granular soils (e.g. trench fill/ ground improvement etc.) although this would not be considered a significant development constraint.

No other constraints such as mining/ quarrying issues were identified and environmental data and Local Authority responses received in 2006 did not identified a flooding issue within the study area.

3.7 Landscape Appraisal

The 2006 assessments recorded that development of the Broomilees site will lead to landscape and visual impacts through the loss of farmland and a slight change in the balance of settlement and countryside in the Tweed Valley between Galashiels and the Eildon Hills. Whilst the changes will be locally significant (i.e. to the site and immediate surroundings), viewed within the context of the wider landscape character they will not be significantly adverse. Furthermore, careful selection of the site boundaries, extensive landscape structure planting proposals and a specific design brief for the development, will limit the degree of landscape change and the potential visibility of the site, and will further reduce impacts as the planting matures. Impacts on the Eildon and Leaderfoot NSA and the Abbotsford Designed landscape will be indirect and will not be significant.

The current site being considered is approximately 25% of the size of the site previously considered and is located in the lowest topographical part of the previous site. Hence impacts would be anticipated to be less than previously considered. Nonetheless, landscape related impacts were one of the significant factors in the rejection of the previous Broomilees site for inclusion in the Local Plan. It is anticipated that they play a significant role in any future development at the site,

potentially creating local opposition to the scheme. Whilst not directly comparable, it should be noted that a recent planning application by the Scottish Ambulance Service at the BGH was rejected on the grounds of Visual Impact on a National Scenic Area.

3.8 Outline Landscape Strategy

A series of landscape measures will be required to mitigate the potential impacts of the development as a business park. Some of the measures are integral to the site and selection of boundaries, others are design measures intended to screen and integrate the development with its surroundings. Potential measures include:

- New structure planting and amenity planting to a planned new roundabout on the A6091(T) (see section 3.10);
- Entrance feature/ landscaping;
- Structure planting tree belts around much of the periphery. These will be at least 10m in width and will reflect locally prevalent native species and a proportion of evergreens to ensure screening is maintained in winter;
- Central open space based around the Coat Burn containing existing and new tree clumps and SUDS water body;
- Avenue tree planting along access roads;
- Tree avenues and belts across the site between building plots;
- Tree planting to car parks.

3.9 Access and Accessibility

Existing Roads Infrastructure

The main strategic link in the area is the A6091(T) Melrose By-pass. This link road provides through access from the A7 to the A68, bypassing the towns of Melrose, and Tweedbank and Darnick villages.

The local network in the area is made up of a number of smaller roads, the major link being Chiefswood Road, linking Darnick and Melrose to Dingleton. Broomilees Road runs across the A6091(T) to the north of the study area linking Darnick with Broomilees Farm and other farms in the area.

A priority junction, off the A6091(T), is currently utilised to access the Borders General Hospital and the minor road which runs along the southern boundary of the site. Various improvements to this access were completed in 2003 and 2011 due to poor accident statistics at the junction.

A pedestrian underpass leads from Melrose on the eastern side of the A6091 (T) to the south eastern corner of the site and footpath links extend northwards along the site's eastern boundary and south to the Borders General Hospital to promote sustainable access.

3.10 Proposed Access Arrangements

It was noted by Transport Scotland (TS) as part of the 2006 assessment that the existing access to the Borders General Hospital would be unsatisfactory as it currently stood for use to access the proposed Broomilees Site. TS commented that they would not want to see any intensification on the junction as it is currently configured. It was further noted by TS that a signal operated junction at this location would not be acceptable for the proposed development.

Two potential future access arrangements for the Broomilees Site were discussed as being an upgrade to the existing access to the BGH or an additional leg from the Melrose roundabout to the north east of the site (the latter option had potential topography issues which would require to be addressed).

No support or comment on the potential or principle for the use of either of these locations was given by TS in 2006 however neither was either access explicitly ruled out.

A preliminary strategy was discussed which involved progressing a Transportation Assessment of the site and the wider area to assess the new development. Following this assessment TS would provide comment on access arrangements and potential detailed design could then progress.

No further discussions or contact has been made with TS as part of this current assessment. Given TS's previous comments however, it is considered that a roundabout solution on the A6091 would be required, even given the smaller scale of development currently being considered.

It is likely that a period of the order of a year would be required to consult and conduct a Transportation Assessment and a further year to design and construct the roundabout. Shorter timescales may be possible although it would be prudent to build this period into any development programme.

A potential preliminary access arrangement for the site has been identified on the Development Option (Figure 4) which identifies a roundabout located at the position of the existing junction. The roundabout would provide access to both the proposed Broomilees Site and the BGH. The existing underpass would be extended to provide continuity of pedestrian access.

4.0 UTILITIES

4.1 Telecommunications

The following telecom ducting and cabling is located within and around the site.

- BT present along the north east side of the A6091(T). BT present along the farm access road adjacent to the A6091(T) that leads to Broomilees Road. This BT runs through the north west area of the site.
- BT runs along Broomilees Road. BT present along the farm access road running from the south west corner of the site to the junction on the A6091(T). This BT line runs through the south east corner of the site.
- Thus have recorded that they own ducting which runs on the north side of the A6091(T).

4.2 Electricity

The following electrical cabling owned by Scottish Power is located within and adjacent to the site:

- High voltage (11kV) cables run outwith the western site boundary. High voltage (11kV) overhead cables are present running from the south to northwest regions of the site.
- A 132kV Transmission Line is present outwith the western boundary of the site.

4.3 Water

Scottish Water has advised they own the following mains in and around the site:

A 180mm diameter surface water distribution main runs along the north side of the A6091(T). It is also present along Broomilees Road from the A6091(T) to the farm buildings just north of the site.

4.4 Gas

Scotland Gas Networks (formerly Transco) own the following gas mains in the immediate vicinity of the site:

- 125mm diameter Medium pressure and an Intermediate Pressure gas mains run along the south side of the A6091(T).
- A 63mm diameter Medium pressure gas main cuts through the east corner of the site and runs along the minor road adjacent to the Borders General Hospital.

4.5 Surface Water Drainage

No surface water drainage is indicated on or in close proximity to the study area and there are no Scottish Water surface water sewers within or in the vicinity of the study area.

The area appears reasonably well drained and it is envisaged that a field drainage system discharging to the Coat Burn currently exists.

The natural soils in the area would be expected to offer poor to variable drainage characteristics in the clays and gravels and high ground water levels can be anticipated in the vicinity of the Coat Burn.

4.6 Foul Drainage

The nearest existing foul sewer drainage infrastructure is a 150mm diameter rising main from the Borders General Hospital.

This runs along the western verge of the A6091(T), crossing over the A6091(T) at its roundabout junction with Tweedbank Drive and the B6360. Thereafter the rising main proceeds into Tweedbank Industrial Estate where it changes to a gravity system and flows towards Tweedbank village.

At Tweedbank, the system still under gravity, crosses under the River Tweed via a twin pipe crossing. The system then converts back to a pumped system to lift the foul flows into Galashiels Waste Water Treatment Works (WwTw), which is located at the confluence of the River Tweed and the Gala Water.

The rising main has a pumping station within the Hospital Site. The rising main and its pumping station are both private infrastructure under the responsibility of the Borders General Hospital.

There is also combined sewer infrastructure (surface & foul) within and around the settlement of Darnick, to the north of the A6091(T) and the Borders General Hospital. Flows from this system are conveyed, via a combination of gravity and pumped systems, to Melrose WwTw.

4.7 Petrochemical Pipelines

BP and Shell have confirmed that they do not have any cross country pipelines/apparatus which would be affected by any development within the site area.

4.8 Proposed Utilities and Drainage

Based on the study work undertaken to date it is considered that there are no insurmountable servicing issues associated with the proposed development site. Further detailed study work will be required in due course to determine the exact position with respect to water and foul drainage provision.

5.0 DEVELOPMENT OPTION

A potential development layout has been prepared (Figure 4) for the purposes of identifying how development could be configured at the site and in order to allow budget costs to be assessed.

Key features of the option include:

- New roundabout on A6091 to service the site/ BGH.
- Robust landscape screening and separation from adjacent rural areas.
- Site and roads configured to work with natural topography.
- Cultural corridor around Coat Burn retained for amenities & SUDS.
- Low density development.

Ordnance Survey © Crown Copyright 2012
All rights reserved. Licence number 100017966



Figure 4
Potential
Development
Layout

6.0 OUTLINE COST APPRAISAL

A high level cost assessments has been undertaken as part of the study. The development option previously discussed has been budget costed in the table below.

BUDGET COST APPRAISAL				
Broomilees Development Option				
Gross Development Area: 6.47ha				
				Jan-13
Item	Unit	Qty	Cost/ Unit	Cost
SITE PREPARATION WORKS				
Topographic survey	sum			3,000.00
Site Investigation Works	sum			35,000.00
Site Clearance and Demolition				
Site Clearance	m ²	64,650	0.25	16,162.50
Landscaping Works				
Structure planting to site - assumed to periphery of site area and subdividing plots.	m ²	12,229	10.00	122,290.00
Earthworks				
Earthworks allowance.	sum			20,000.00
<i>Sub Total for Site Preparation Works</i>				196,452.50
ACCESS WORKS				
New Roads	m	395	1,750.00	691,250.00
New Roundabout at A6091 junction	sum			750,000.00
New Footpath to link site to existing footpath at underpass	m	90	350.00	31,500.00
General allowance for upgrade to existing roads.	m	88	750.00	66,000.00
<i>Sub Total for Access Works</i>				1,538,750.00
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	593	100.00	59,300.00
Foul water drain to plots (main carrier drain including associated manholes).	m	626	100.00	62,600.00
Pumping system to rising main	sum			75,000.00
SUDS basin for road drainage (including 2 no. Headwalls, outlet structure and associated pipework).	sum			40,000.00
<i>Sub Total for Drainage</i>				236,900.00

PUBLIC UTILITY WORKS					
Street Lighting					
Street lighting ducting and cabling including columns at 30m centres along new roads and footways.	m	395	50.00	19,750.00	
Provision of street lighting upgrade along existing roads.	m	88	50.00	4,400.00	
Control pillar and connection to existing system.	sum			3,500.00	
Electricity Supply					
Allowance for and reinforcement to the existing network.	sum			150,000.00	
HV/ LV cabling (from existing supply point to substation and along new roads).	m	843	40.00	33,720.00	
Water Supply					
Water supply from existing supply point and along road including road crossings.	m	606	55.00	33,330.00	
Telecoms Provision					
BT ducts and draw cord from existing supply point and along road including road crossings including BT boxes.	m	325	55.00	17,875.00	
Gas Supply					
Gas pipework from existing supply point and along road including road crossings.	m	325	50.00	16,250.00	
<i>Sub Total for Public Utility Works</i>				278,825.00	
Professional Fees, Preliminaries and Contingencies					
Professional Fees @ 10% of all above works.				225,092.75	
Contingencies @ 10% of all above works.				225,092.75	
Preliminaries (including site set up, general site clearance, provisional sums) @ 17.5% of all other items).	sum			393,912.31	
<i>Sub total of Professional Fees, Preliminaries & Contingencies</i>				844,097.81	
TOTAL - ALL WORKS				3,095,025.31	
Notes:					
<i>Landscaping and visual issues assumes high quality and high proportion of landscaped areas required.</i>					
<i>Costs for new roundabout may vary considerably.</i>					
<i>No costs for earthworks platforming to plots allowed as per SBC instructions.</i>					

7.0 CONCLUSIONS

Previous assessment as part of the Market and Economic Assessment Report suggested that demand for development space was unlikely to be required at Broomilees in the short to medium term. A summary assessment of site development issues was therefore proposed:

Based on the assessment undertaken as part of this report it is considered that the majority of technical issues at the site are suitable to allow development to proceed, should the demand arise. It is considered that development can take place within a “reasonable” budget and timescale. Two issues critical to development of the site however include:

- Potential landscape and visual impacts have the potential to prevent development occurring at the site and are known to generate strong interest/opposition from local residents and statutory organisations.
- The requirement for a new roundabout on the A6091 to provide road access to the site and the Borders General Hospital which would be relatively expensive relative to the size of the proposed development and would require consultation, design and a Transport Assessment to determine its suitability.