City of York

Employment Land Review

Stage 1 Final Report : Current Situation
and Future Economic Prospects

Contents

Contact:	Richard Summers	Tel:	01223-209400	email:	rjsummers@sqw.co.uk
Approved by:	Richard Hindle Director	Date:	27 June 2007		

Preface

1. This report presents the results of the first part of an Employment Land Review (ELR) which is being undertaken for the City of York Council by SQW Limited. It includes an assessment of the "Current Situation and Future Economic Prospects" for employment land provision in York and forms the basis for the second part of the ELR which will include the "Employment Sites Portfolio and Recommendations".

2. The City of York Council will consider the ELR study and may then decide to undertake a further "Employment Land Review Assessment". This would assess the employment sites and other recommendations of this ELR study in the context of wider spatial planning and other issues in order to develop the economic strategy and employment land elements of the forthcoming York Local Development Framework (LDF).

1: Introduction

1.1 This report presents the findings and recommendations of the first stage of the York Employment Land Review (ELR). The study was undertaken for the City of York Council by SQW Limited with support from Cambridge Econometrics and Savills. The ELR provides an analysis of the supply and demand for employment land from an economic development and spatial planning perspective and will offer conclusions and recommendations for consideration in the preparation of a more broadly based spatial plan, the York Local Development Framework (LDF), and an Economic Development Strategy for York. We began the study in July 2006, the draft report was prepared in February 2007 and the Stage 1 Final Report was completed in June 2007.

Tender brief

1.2 The Tender Brief for the study called for a comprehensive and robust evidence base to underpin the approach to employment land provision to 2021, to help achieve local economic objectives and to contribute to the preparation of the Regional Spatial Strategy (see Annex A). The work was to include both quantitative and qualitative assessments of future employment land requirements and existing employment land supply and to reach conclusions on the broad location and type of future employment land supply that will be required to meet demand for business class uses. The Tender Brief referred to the differences between the current York Local Plan and the emerging Yorkshire & Humber Plan, the public consultation draft of the Regional Spatial Strategy (RSS).

1.3 A wide-ranging study was therefore required taking an objective view of and significantly extending SQW's earlier work on the employment land and premises requirements of the Science City York initiative. The work reviewed the regional context, which is particularly important for York in view of the city's status in the draft RSS, and then followed the three stage process outlined in the Employment Land Review Guidance (ODPM 2004): an assessment of existing supply, an assessment of demand and potential needs and then the possibilities for future supply. Conclusions will then be drawn for employment land policy, monitoring and review and inputs to the York Local Development Framework (LDF) and Economic Development Strategy (EDS) as the key output of Stage 2 of the study.

1.4 SQW's previous work for the City of York Council (CYC) and Science City York (SCY), the City Council's partnership with the University of York, includes two major studies specifically addressed the implications of SCY growth for the provision of sites and premises was undertaken in 1999 and 2001 and updates of the position followed in 2002 and 2003.

- "Science City York : Future Land Requirements", September 1999
- "Science City York : Employment Land to 2021", January 2001
- "The Short Term Quality Sites Constraint and its Impact on the York Economy", June 2002
- "Update on Quality Sites for Science City York", October 2003.

Study method

1.5 The study method followed the three-stage approach in the Employment Land Review (ELR) Guidance. It began with an inception meeting to clarify the scope of the work which was immediately followed by a literature review. Baseline econometric forecasts were prepared by Cambridge Econometrics. We undertook a visual survey of all allocated and potential employment sites and we were advised by Savills on recent trends and current expectations in the local market. We also examined the implications of changing working patterns and recent trends in the SCY growth sector and its clusters (information technology, bioscience and creative industries) which provided the basis for the preparation of Cambridge Econometrics' "customised" employment forecasts.

1.6 A workshop was held with professional staff from CYC in September 2006 to review the progress of the study and to brief CYC representative at the then forthcoming RSS Examination in Public (EIP). As envisaged at the outset, our brief was extended to include specialist support to CYC in its representations to the EIP. Following the workshop and the EIP discussions, we estimated the employment land requirements for the York area from 2006 to 2021 on the basis of the "customised" econometric forecasts and assessed the suitability of various allocated and potential sites to meet this need and both current and anticipated property market demand.

1.7 We held a second workshop with professional staff of CYC in January 2007 to review the progress of the study and to discuss a draft note on the "rationale" of the suggested employment land allocations. This provided a basis for outlining the scope of a local policy approach to employment land provision and a constructive review of the ways in which the York ELR could be developed as part of the York LDF. It also provided an opportunity to discuss key issues before the preparation of this report including the continued need to bring forward high quality sites and promote excellence in urban design and the effect of recent uncertainties within the local economy which have led to the formation of the high-level "Future York" Task Group. Following general and detailed comments from the Steering Group, the Future York Group report was submitted to the Council in June 2007.

Report structure

1.8 The structure of this report of the first part of the study reflects the technical and consultative processes we undertook for the York ELR and the work stages we followed.

Section 2 : Regional context

Section 3 : Existing land supply

Section 4 : Employment land demand.

1.9 The second stage of the study will also include an assessment of future land supply, recommendations on a future employment sites portfolio and our overall conclusions.

1.10 The main report is underpinned by the detailed working set out in a series of annexes which we refer to at relevant points in the text. The annexes comprise :

Annex A : Tender brief

Annex B : Policy context reviews

Annex C : Forecast comparisons

Annex D : Employment site survey

Annex E : Property market demand

Annex F : Econometric forecasts.

1.11 The full report of the York ELR study will include a further annex, Annex G : Employment land requirements.

2: Regional and local context

2.1 In this section of the report, we review the regional and local context, exploring the relationships between the various strategies and plans with development implications for York and the region of which it is part. The ELR study was commissioned at a time when the revised Regional Economic Strategy for Yorkshire & Humber had recently been finalised, the Draft Regional Spatial Strategy (RSS) had been published prior to the Examination in Public (EIP) and the Leeds City Region Development Plan was also at an advanced stage of preparation.

2.2 At the district level, the City of York Draft Local Plan, following earlier consultations and changes, is currently a relevant document for the purpose of development control. Under the new statutory spatial planning system, Local Development Documents are being prepared to constitute the Local Development Framework (LDF) within the wider framework of the RSS. The 'Core Strategy Issues and Options' paper for York was published in June 2006. The RSS Examination in Public was held in September 2006 and we understand that the Panel report, which will guide its finalisation, was expected to be published in Spring 2007.

2.3 Planning policies and estimates that affect employment land provision in the York area are summarised in the following paragraphs and detailed in Annexes B and C. The content of the City of York Council's contribution to the RSS EIP and the apparent implications of the EIP discussion for the York ELR and York LDF are also included in this section.

York's role in the Yorkshire & Humber region

2.4 In recent years, it has been increasingly recognised that, despite its relatively small size, the City of York plays a key role in the Yorkshire & Humber region as an important centre for business, higher education, the visitor economy and public services, including health, education and government. York's economic development strategy has in recent years featured knowledge-based development, through the Science City York (SCY) initiative, as one of two main priorities for support. The second of these priorities is the visitor economy, where of course York already has a strong international image and presence.

2.5 SCY is perceived in the region and nationally as an innovative approach, which is proving to be a dynamic driver of the new knowledge-based economy, stimulating new enterprise and encouraging the development of high technology research-based growth. York continues to play on its traditional strengths, based on its location as a service centre, rail engineering and food production, but the SCY initiative has helped the continuing shift away from manufacturing industries to new service and administrative activities and growing knowledge based industries. Indeed, SCY has been driving further change in the local, the subregional and also the regional economies.[1]

[1] The form and role of these growth sectors was summarised in an earlier report by SQW Limited to the City of York Council and Yorkshire Forward: 'The City of York as regional and sub-regional economic driver', April 2003.

2.6 These structural changes in the city economy are reflected in complex shifts and adjustments in market demand for employment space and the supply of employment land. The York ELR faces the challenge of helping to realise economic development objectives at both regional and local levels and providing this support through a clear but flexible input into the formulation and implementation of the forthcoming York LDF.

2.7 The relationships between property market demand, forecast growth in employment, the provision of employment land and the take-up of development opportunities by the private sector are indirect and in many ways beyond the direct control of the planning system at the regional and local levels. The objectives of the Regional Economic Strategy (RES) and the draft Regional Spatial Strategy (RSS) need to be translated into local assessments of employment land need and guidance on new employment land allocations and potential changes of use for existing outmoded employment sites for the City of York. The regional context is clearly crucial.

Regional Economic Strategy

2.8 The Yorkshire & Humber Regional Economic Strategy (RES) promotes an economic vision for a region that will be a great place to live, work and do business and that fully benefits from a prosperous and sustainable economy (see Annex B). This will be achieved by realising the potential of the region's people, by growing existing and new businesses and by protecting, enhancing and utilising the region's environment. The region has a £70 billion economy and aims to close the productivity gap between the northern and southern regions of the UK. The regional priorities identified by the RES include implementing key transport improvements, delivering high quality physical development, maintaining full employment, helping businesses to innovate new products and processes, encouraging businesses to collaborate with universities and making the most of priority clusters.

2.9 The RES is based on regional economic and employment forecasts produced by the Yorkshire Futures regional economic model which is built on national-level assumptions. Yorkshire Forward provided revised regional economic and employment forecasts for the Examination in Public (EIP) of the draft Regional Spatial Strategy (RSS) in September 2006 which corresponded very closely with the employment forecasts that had been prepared for the City of York as part of this ELR study earlier in the year. The Draft RSS notes that the aims of the RES are aligned with the aims of the Draft RSS to support sustainable development and to integrate the achievement of economic, social and environmental goals. The RES also focuses investment in the region's cities and major towns and emphasises the role of public transport to enhance accessibility and reduce road congestion. Both strategies support the growth and expansion of new and existing businesses, including priority sectors and clusters, recognise the role of universities and promote the regeneration of declining local economies.

Regional Spatial Strategy

2.10 The draft Yorkshire & Humber Plan, the Regional Spatial Strategy (RSS), sets out a spatial planning strategy for the region and for seven subareas (the Leeds City Region overlaps the York subarea). The core approach is to manage growth and change across the region including the diversification of urban and rural economies and helping to retain, attract and create more and better jobs (see Annex B). The strategic approach to the allocation of employment land is to minimise greenfield development and the need to travel. It adopts a sequential approach to locate development within urban areas or otherwise to integrate employment, housing and transport in sustainable urban extensions within local reviews of Green Belt boundaries. York is defined as a subregional centre (this category is second only to the regional centres of Leeds and Sheffield) as a focus for of the majority of new development in the York subarea. It has a local Green Belt.

2.11 The Draft RSS is founded on an overall policy for the location of development (YH8) which aims to concentrate new development and redevelopment on the regional and subregional centres and to adopt a sequential approach to development. The economic policies of the Draft RSS aim to create a successful and competitive regional economy (Policy E1), strengthen the role of town centres (Policy E2), provide land and premises for economic development (Policy E3), support regional priority sectors and clusters (Policy E4) and safeguard the supply of employment land (Policy E5) as well as promoting tourism (Policy E6) and supporting the rural economy (Policy E7). As a whole, these policies provide a strong basis for spatial planning across the region to help to secure the aims and objectives of the RES in managing structural change in the economy, promote economic growth and support economic regeneration. They also reflect the Regional Employment Land Study (RELS), 2003, which drew attention to the need for Local Planning Authorities to review their local employment land portfolios in the context of structural changes in the economy.

2.12 A high level of growth is proposed for the Leeds City Region in the Draft RSS but it is apparent that a significantly lower level of growth is planned for the City of York (as noted in the Tender Brief for this study). The regional forecasts for full time equivalent (FTE) employment in the Draft RSS (*Draft RSS, Table 14.7*) anticipated employment growth in York from 88,253 in 2005/06 to 88,400 – 90,900 in 2010 and 87,300 – 93,700 in 2016. The projected employment growth of 5,447 for the higher growth scenario is substantially lower than the revised employment forecasts provided to the RSS EIP by Yorkshire Forward, which indicated employment growing in York by 12,620 from 88,253 in 2005/06 to 100,873 in 2016. This higher figure is much closer to the "customised" econometric forecasts prepared for the ELR study, which foresaw employment in York rising by 10,400 from 90,400 in 2006 to 100,800 in 2016 (including 5% per year growth in Science City York activities).

2.13 The Draft RSS translated its (lower) employment forecasts into estimates of net change in employment land in use in the region and in York between 2006 and 2016 *(Draft RSS, Table 14.6)*. It foresaw a net growth of 5 to 12 hectares in B1(a) office uses which were assumed to occupy town centre locations. It also anticipated a net change between minus 11 hectares and plus 9 hectares in the business use classes for B1(b) high technology, B1(c) light industry, B2 general industry and B8 warehousing, activities which were assumed to occupy other urban locations. This amounted to an overall net change between minus 6 hectares and plus 21 hectares between 2006 and 2016 for these employment land uses which are the subject of RSS and LDF planning policies and ELRs. It did not include employment in various other non-business use activities such as retail, health and education.

2.14 A comparison of the various employment forecasts, undertaken as part of this study, included the estimates prepared for City of York Council by the University-based York Research

Group in 2001 (see Annex C). The annual percentage employment growth rates in the City of York Draft Local Plan took the low trajectory from this forecast (0.97% per year). This was broadly in line with the trend over the preceding decade when the medium and high trajectories were 1.34% and 1.52% per year respectively. The Cambridge Econometrics baseline forecast, prepared in 2006 for this study (explained in Section 4 of this report) indicated a 0.84% per year growth rate for York which was slightly lower than that used in the Draft Local Plan. In comparison, the high scenario, "transformational change", forecast for York within the Regional Employment Model (REM), which was used as a background for the RES and a basis for the Draft RSS, was only 0.61% per year and was well below the long term employment growth trend for the city (0.84%).

2.15 The Cambridge Econometrics customised employment forecasts for the period 1996 to 2021 took into account the continued growth in the Science City York sectors at approaching the average achieved annual rate for 1999-2006. At 0.90% per year, this trajectory was slightly below the earlier forecast used for the City of York Draft Local Plan (0.97% per year). The Cambridge Econometrics "customised" forecast for the period 2006 to 2016 indicated average growth in employment of 1.09% per year, which was substantially above the REM high scenario, "transformational change" forecast (0.61% per year).

2.16 The Draft RSS notes for the York subarea (*Draft RSS Table 14.8*) that :

> *A full range of sites, including a significant supply of (high) quality land suitable for B1 uses, over forecast trend will be required. The (local Employment Land) Reviews need to support the needs of developing initiatives such as York Science City and the role of York as a key component of both the York and Leeds City Region Subarea approaches.*

2.17 The Draft RSS places the York subarea at the "centre of the region" and notes the significant growth in the size and diversity of its economy in the last 20 years. The York subarea policy (Policy Y1) requires all plans, strategies, investment decisions and programmes *inter alia* to support the role of the subarea in the region, develop York as a key driver of the regional economy, protect the quality of the environment, improve transport connections, focus development on the City of York, develop the subarea economy and promote partnership working for economic diversification. The context diagram for the York subarea shows York as a subregional centre in relation to Leeds as a regional centre. The key linkages and rail connections and the key regeneration and investment opportunities are in York Central and York city centre, the York University expansion and the Science City York initiative which is increasingly significant in York and beyond. The large-scale European Spallation Source, for which land at Burn Airfield, Selby, has been put forward as a possible location, is also shown in the York subarea context diagram.

Draft RSS Examination in Public

2.18 The case for additional employment growth to accommodate knowledge based sectors in the regional interest was put forward by CYC at the EIP and was generally well-received in discussion. As noted earlier, this case was supported by Yorkshire Forward's revised employment forecasts which were presented to the Panel while the EIP was in session. SQW believes that the revised figures put forward by Yorkshire Forward and the "customised" econometric forecasts prepared for the ELR study are consistent with the role of York as a driver of economic growth within the region and also with the overall growth projections for Leeds City Region.

2.19 There was also an explicit recognition by the Yorkshire & Humber Assembly (YHA) and others during the EIP discussion of the need for flexibility in planning for employment that would enable CYC to continue with its Local ELR, to adapt the RSS Subarea guidance to the local situation and to follow it through in the plan, monitor and manage approach advocated by the Draft RSS. YHA noted in oral evidence to the EIP that the various economic forecasts would need to be picked up in the "plan, monitor and manage" process and in the preparation of local ELRs.

2.20 CYC supported the regional employment policies (Policies E1 to E7) and the subarea summary for York in Table 4.18 (York Subarea) of the Draft RSS but commented that Table 4.16 (Estimated Net Change in Employment Land) and Table 4.17 (Regional Employment Forecasts) were not consistent with that approach. CYC was supported by several other participants at the EIP in commenting that the term "net employment land requirement" (Table 4.16) and the accompanying text were unclear and did not result in a reliable figure. CYC held that the figure of 20 hectares for York was far too low if used to guide what would, in effect, be all additional employment land allocations.

2.21 The Yorkshire & Humber Assembly noted the general problem of over-provision across the region and the need for a "huge" readjustment of employment land provision to adapt to sectoral change. The overprovision of employment land is less marked in the York subarea than in other subareas of the region but national planning policy guidance (PPG3 and PPG4) nonetheless provides a basis for identifying surplus employment land which could be reallocated for alternative uses (often residential). YHA went on to argue that economic forecasts and estimated land requirements in the Draft RSS are too complicated to be expressed as regional and subarea policies and that the uncertainties and the local needs and circumstances should be handled through monitoring and local ELRs.

2.22 Following the Examination in Public of the Draft RSS, the Yorkshire & Humber Assembly has confirmed that Local Authorities should undertake local ELRs with local employment forecasts to fine-tune and succeed the regional forecasts exactly as the City of York has done in commissioning this report. Local ELRs should propose a clear local economic strategy and show a rational process of identifying new modern sites as well as reducing the overhang of obsolete historic sites. Proposed allocations of employment sites should show the right "direction of travel" in restructuring the "amount, quality and location" of employment land in the proposed portfolio of employment land and premises for the future.

2.23 The Report of the Panel of the Draft RSS Examination in Public (which was published in March 2007 after the technical work on this ELR study was completed) recommended a stronger requirement for local Employment Land Reviews (ELRs) to assess the need to de-allocate existing employment sites that are no longer fit for purpose. In commissioning this local ELR, the City of York Council has already taken the initiative to respond to these issues. The Report of the Panel also envisaged a key partnership role for the Regional Assembly in overseeing the preparation of local ELRs and ensuring conformity of Local Development Frameworks (LDFs) with the RSS.

York Draft Local Plan

2.24 The City of York Draft Local Plan (2005) is the current development plan for the City of York but will soon be replaced by a Local Development Framework (LDF) which is currently being prepared and could take a different strategic approach. The current Local Plan aims to promote the sustainable development of the city centre, movement, homes, business, tourism, recreation and community facilities together with improving urban quality and preserving the Green Belt to protect the historic character of the city. The employment objectives are to stimulate the local economy, to protect and enhance existing jobs and to provide for a wide range of new employment opportunities. The key employment policies include the location strategy (Policy SP6) and the sequential approach to development (Policy SP6), reservation of land for future development (Policy GP24a), development of out of centre premier quality employment sites for knowledge based activities (Policy E1a), development of standard employment allocations (Policy E3a), development of existing and proposed employment sites (Policy E3b), the University of York (Policy ED6), the University Science Park (Policy ED7) and the University of York proposed new campus (Policy ED9). The Local Plan lists the various allocated employment sites.

2.25 The policy for Out-of-Centre Premier Quality Employment Sites (Policy E1a), which may need some adjustment in the York LDF, is supported by a series of guidelines that define Science City York and knowledge-based activities (paragraph 8.12) as follows :

> *'Primary Considerations: Future employers should meet at least two out of the following four primary considerations:*
>
> - *they operate within a high tech sector and/or engage in innovative activities;*
> - *a focus on Research & Development, product or process design, applications engineering, high level technical support or consultancy;*
> - *at least 15% of staff are qualified scientists, technologists and engineers;*
> - *established or proposed linkages with a research facility such as a university.*
>
> *Other considerations:*
>
> - *firms providing substantial support services to primary uses, including finance, legal and other professional and technical services, occupying no more than 10% of the total floorspace on sites'.*

2.26 The policy for out-of-centre premier quality employment sites (Policy E1a) also states that :

> *Other B1 uses that fall outside these guidelines would only be acceptable where they are of an acceptably high quality such as companies in the professional and financial sectors or headquarter functions and it can be demonstrated that no other suitable highly accessible sites could be found, firstly within the city centre, secondly in the York Central area and then thirdly within the rest of the urban area. The scale, layout and design of any proposal will need to contribute to the creation of a high quality commercial environment.*

York Local Development Framework

2.27 The Executive Summary of the "Core Strategy Issues and Options" paper for the City of York Local Development Framework (LDF) 2006, which preceded the completion of this study and was therefore based on the Draft Local Plan 2005 (see above), summarised the key economic and employment issues for the York area and the requirement for additional employment land as follows :

> *York is a growing economy and is located close to Leeds which is one of the fastest growing cities in the UK. The City of York makes an important contribution to the region, acting as an economic generator of real significance in terms of tourism, science related growth and as a key retail centre in the region. The City provides good job opportunities for residents in the area and its surrounding hinterland and has a low unemployment rate with noticeable growth in the service sector and 'Science City' businesses. To sustain York's economic success without compromising wider sustainable development objectives, the creation between 1998 and 2021 of 19,000 additional jobs is considered to be most appropriate by the Council. To help facilitate this, the existing Local Plan provides for 7.6 hectares of employment land per year (5.0 hectares for Premier Employment sites and 2.6 hectares for Standard Employment sites).*

2.28 The York "Local Development Framework Core Strategy : Issues and Options" (June 2006) drew on the Draft City of York Local Plan, which it will replace. It emphasised the role of the Science City York initiative to "stimulate the further growth of clusters of knowledge-based businesses that have grown in the city" and to attract inward investment to ensure economic sustainability. It identified the following Spatial Planning Objectives:

- to ensure the sustainable location, design and construction of development
- to ensure economic wellbeing through sustainable economic growth
- to meet community development needs
- to maintain a quality environment
- to minimise motorised transport and promote sustainable forms of transport.

2.29 The York LDF Core Strategy Issues and Options paper endorsed government guidance (PPS1) that planning should facilitate and promote sustainable and inclusive patterns of development and noted that an urban potential study for the Local Plan had shown that currently vacant or underused land would not meet York's housing and employment requirements. A Housing Land Availability Assessment is currently being undertaken to replace the urban potential study which has now become out-dated. Market requirements had also been taken into account when identifying future employment sites for the Draft Local Plan as it was considered that "if the Council failed to do this there would be a real risk that firms would opt to locate elsewhere".

2.30 The York LDF Core Strategy Issues and Options paper identified some possible options to:

- review the amount and type of employment land (B1 / B2 / B8) required to meet the medium growth option for all types of employment given past take up rates and to reallocate or allocate land accordingly for separate uses
- consider reallocating employment land to accommodate housing requirements in the LDF timescale if not required for employment uses
- incorporate planning policies and guidelines to ensure that emphasis is placed on quality sites which take account of wider sustainability objectives such as reducing dependence on the private car. Measures to ensure that sites are used for their identified purpose (such as for Science City York) could be introduced.

2.31 In responding to these issues, the York ELR will feed directly into the preparation of the York LDF. The York ELR is based on an economic development approach to employment land provision and its recommendations will need to be balanced in the LDF with other factors such as housing provision, commuting patterns, transport infrastructure, community development issues, environmental conservation and existing Green Belt considerations.

Conclusions

2.32 Key issues for the York ELR include the scale and sectoral structure of employment growth and the scale and phasing of employment land provision that will be needed to provide a realistic range in the size, type and particularly the quality of the future portfolio of employment sites across the York area. The implications of these issues and the conclusions and recommendations of the York ELR will need to be taken forward in the forthcoming York LDF alongside other matters arising from the review of the current Draft Local Plan and the outcome of the Draft RSS Examination in Public.

3: Existing land supply

3.1 This section of the report explains the methodology and results of the survey and assessment of allocated and potential employment sites in York (Annex D). The overall supply of employment land is reviewed as a basis for the assessment of demand and future employment land requirements in the next section of the report. Recommendations on a strategy for future employment land supply will be presented in the Stage 2 Final Report.

3.2 SQW's survey of the various existing, allocated and potential employment sites across the City of York area was discussed at the interim workshop with the Steering Group just before the Draft RSS Examination in Public in September 2006. The survey found a substantial area of employment land currently allocated and potentially available for industrial and warehousing activities together with property market indications of significant pressure on land, particularly high quality land, for office and knowledge based activities.

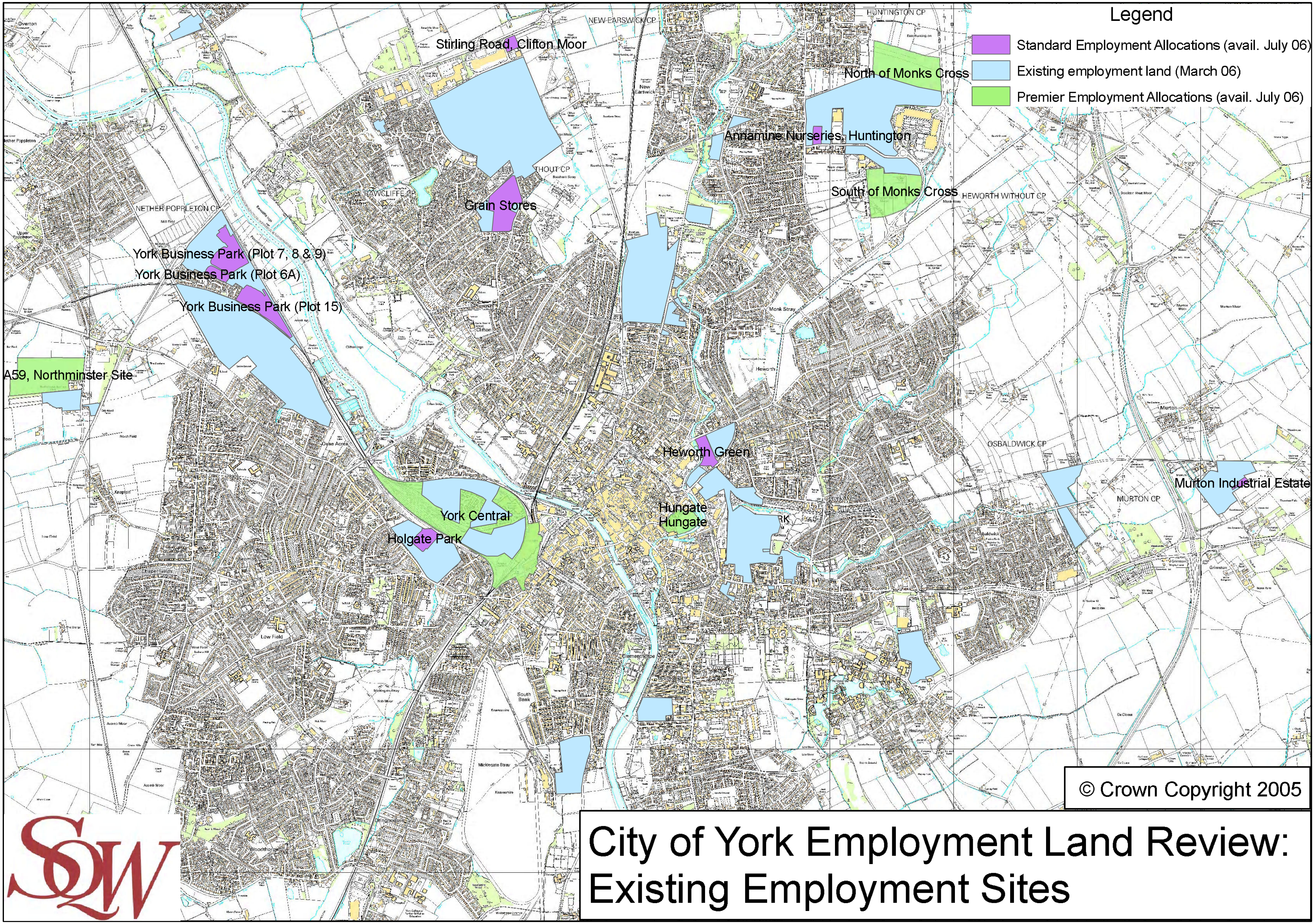
Employment land supply outlined in previous SQW studies

3.3 SQW Limited undertook a series of studies for the City of York Council (CYC) and Science City York (SCY), the City Council's partnership with the University of York, in 1999, 2001, 2002 and 2003 (see Annex E). These studies focused on the supply and demand for high quality sites in York in relation to the actual and potential growth of SCY employment and the scope to meet other demand in this category both from indigenous firms and inward investors. Unlike this ELR, the earlier work did not address the overall provision of office, industrial and warehousing land across the CYC area. Key findings on employment land supply from the SCY-focused studies include:

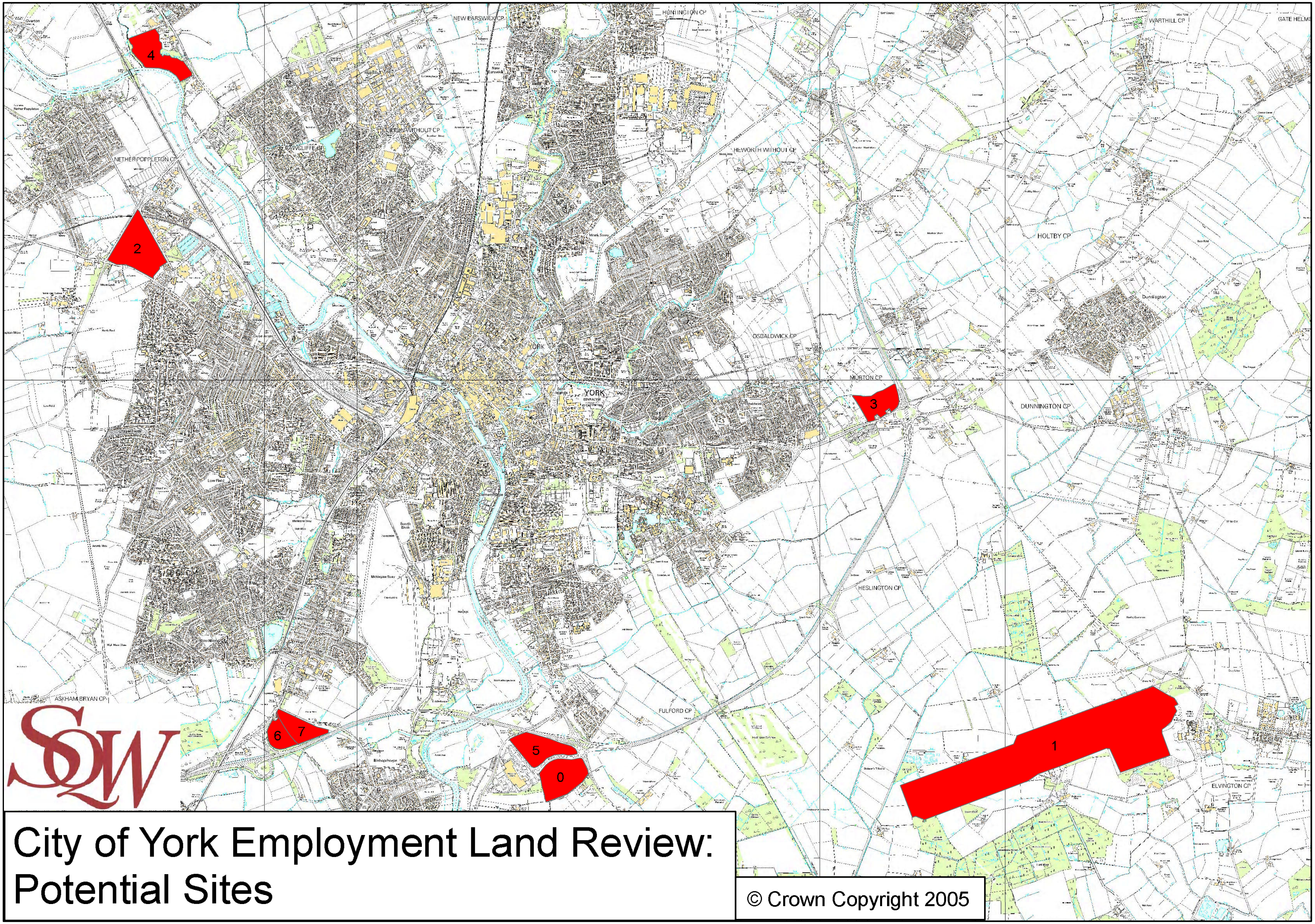
- an identified requirement for around 75 hectares of high quality land to be made available between 2006 and 2021
- a shortage of quality employment land in the York area. The earlier studies found that only the site at Monks Cross South and safeguarded land at Monks Cross North could be brought forward in the short to medium term and that serious obstacles were likely to delay the proposed large-scale mixed-use scheme, including major office development, at York Central.

Site survey

3.4 SQW undertook a visual survey of all 36 currently allocated and potential employment sites and employment areas in the York area in mid-2006 (see maps of Existing Employment Sites and Potential Employment Sites on following pages). We supplemented this survey with available information from CYC and from other published sources, and advice on the local property market and employment land development from Savills. The survey was complicated by on-going adjustments in the employment land supply in the York area to the wider sectoral changes in the local and regional economies and property market conditions. These adjustments included several industrial closures and down-sizing announcements and the preparation of several development and redevelopment proposals.



City of York Employment Land Review: Existing Employment Sites



City of York Employment Land Review: Potential Sites

3.5 The employment sites survey recorded information for a total of 36 currently allocated and potential employment sites on a standard proforma. This included the address, current status, land area and general description of the site (with a site photograph in most cases) together with a scored assessment in relation to 10 site selection criteria (as explained below).

3.6 The employment sites survey indicated a substantial supply of currently allocated employment land (including an "overhang" of old industrial sites), some significant development and redevelopment opportunities and the possibility of additional sites becoming available during the ELR study period (2006 to 2021) where major firms were known to be reconsidering their continuing presence in the York area (see Annex D). Recent changes and uncertainties include the closure of Terry's, the announced closure of the British Sugar refinery, major down-sizing by Axa (Norwich Union insurance), retrenchment by Nestlé Rowntree and further local uncertainty about the continuation of its existing operations in York. These recent and potential closures in traditional manufacturing industries and the down-sizing in labour-intensive service industries (responding to global market changes) are unsettling but they illustrate longer term sectoral shifts in the local and regional economies: they are not unexpected although they have coincided in a relatively short time period.

Site assessment

3.7 The currently allocated and potential employment sites included in the employment sites survey undertaken for this study were assessed against 10 site selection criteria proposed by SQW Limited and agreed with some adjustments with CYC. The site selection criteria are a combination of the ODPM Employment Land Review Guidance (Site Appraisal Criteria Annex E) (ODPM, December 2004) and the ODPM Sustainability Appraisal Guidance (Economic Objectives Appendix 9) (ODPM, April 2005). They have been interpreted to suit the local characteristics of the City of York.

3.8 The site selection criteria extended the property based assessment of employment sites in SQW's previous SCY-focused studies and included both the physical potential for development and the sustainable development potential of the sites. They provided a more balanced assessment of employment site suitability for development in response to the wider scope of the Tender Brief for this study. They were used to assess the suitability of currently allocated and potential employment sites (including premier and standard sites) in the City of York for B1 business use, B2 industrial use, B8 distribution use and, in particular, for the three high technology sectors promoted by the SCY initiative (IT, bioscience and creative industries).

Site selection criteria

site characteristics	• site location • size and shape of site • potential for development
market demand	• strength of local demand in sector • availability of pre-let occupiers • viability of development without intervention
environmental quality	• quality of land, buildings and public realm • green belt, landscape and heritage conservation • quality of surrounding area
site development constraints	• ownership and user restraints • contamination, land stability and flooding • utilities and services
site access and accessibility	• access to main road and rail network • access by walking, cycling & public transport • access to city centre and local facilities
movement and commuting	• impact on area traffic congestion • increase in local area employment • reduction in local and wider area commuting
local regeneration policy	• reduce local community deprivation • assist economic regeneration programmes • support local community development
economic development policy	• maintain and increase local employment • reduce disparities in economic performance • accommodate indigenous and inward investment
sequential development test *(based on PPG3, PPG6 and RSS YH8)*	• urban, urban edge or outer urban location • use of previously developed land (brownfield land) • use of previously undeveloped land (greenfield land)
other policy objectives	• assist local economic diversification • proximity to University and other institutions • enhance area image as a business location

3.9 The employment site selection criteria were applied to each of the sites included in the employment sites survey (see above) and scored accordingly to give an overall score for each site and then an overall ranking of the sites to indicate their physical potential for development and their sustainable development potential. The purpose of this exercise was to identify a range of suitable employment sites for future development that could be related to the forecast scale and composition of employment land needs. It was therefore a ‘long list’ that would need further refinement before it took the form of a definitive list of employment sites for particular business use classes that could be put forward for possible future allocation in the York LDF.

3.10 The employment site survey and scoring framework ranked the 36 currently allocated and potential employment sites according to their suitability for development for employment generating uses. The top ten ranked sites in this assessment were as follows:

- 1 Holgate Park (next to York Central) *(city centre)*
- 2 Accent Optical Technologies *(urban brownfield)*
- 3 Heslington East (University Expansion) *(urban extension)*
- 4 Former Terry's site *(urban brownfield)*
- 5 = York Central *(city centre)*
- 5 = London Bridge (close to York College) *(urban extension)*
- 6 = Vangarde site (Monks Cross South) *(urban extension)*
- 6= The Grainstores (Clifton Moor) *(urban brownfield)*
- 7= Grimston Bar (near University expansion) *(greenfield)*
- 7= Land south of Millfield Lane[2] (near former British Sugar site) *(urban extension)*
- 8 Monks Cross North *(urban extension)*
- 9= Annamine Nurseries (Monks Cross) *(urban brownfield)*
- 9= York Business Park *(urban brownfield)*
- 10 Land adjacent to McArthur Glen (near Naburn) *(greenfield)*.

3.11 These sites were not differentiated at this stage to assess their suitability for particular categories of employment which was considered later. The environmental aspects of sustainable development were included in the assessment of site suitability, but Green Belt designation was not taken into account at this stage in the study. The reason for this was to enable us to take an overview of potential employment land allocations from an economic development perspective that could then be considered in the wider context of the York LDF. Full details of the results of the employment sites survey and the scorings for the various site selection criteria for each employment site are provided in Annex D.

3.12 Overall, the employment sites survey covered a total of 726 hectares and an estimated available site area for employment uses of 374 hectares (the available site area of several of the sites was later revised to clarify inconsistencies in measurement). The "top ten" ranked employment sites (listed above) represented about half of the total number of sites that were scored (not including the like-for-like sites and other omitted sites mentioned below). We also reassessed the scoring for the former British Sugar later in the study when preliminary

[2] Land south of Millfield Lane (Site 35) was identified as a potential site during the site survey but is not part of the Millfield Lane Industrial Estate (Site 25).

ideas for a sustainable development corridor in the north western sector of the city arose from an Action Area planning exercise. However, we found that the score for the former British Sugar site would only be increased marginally in this changing context and that its rank order (13) in the overall assessment remained unchanged.

3.13 It should be noted that a number of existing employment sites that were originally included in the survey were not taken forward for possible future allocation because it was considered that they could only be redeveloped for a similar use on a like-for-like basis and would not therefore contribute to meeting the estimated need for additional employment land in the York area. On this basis, we would expect the like-for-like sites to continue in their existing employment use and that any proposals for redevelopment for employment use would be considered favourably within policies that will need to be included in the forthcoming York Local Development Framework. Other sites that were originally included but were not taken forward included the Nuffield Hospital site because it is not an employment site in planning terms. The Nestlé Rowntree site was excluded as it is in active employment use[3].

Conclusions

3.14 The existing and potential supply of employment land in the York area is substantial even if various existing like-for-like employment sites and various other sites are not included. This results to some extent from the overhang of various industrial sites from York's industrial past and from the lack of fit of these sites with the market demand characteristics typifying the expanding service and knowledge-based industries. The existing land portfolio identified here presents some exciting opportunities for the future development of the York local economy including its existing and potential role at regional level and beyond as a significant driver of high technology and knowledge-based development and in attracting national and regional head office functions.

[3] We understand, as this report was being finalised, that 7.9 hectares is likely to be released from the Nestlé site in York although the remaining factory site will continue in its present use. We also understand that a planning brief for mixed use development is being prepared which could include an element of employment land provision.

4: Employment land demand

4.1 In this section of the report, we review property market demand and set the findings in the wider context of the "customised" employment projections commissioned as part of this study. We then examine the implications of market demand and employment change for changes in employment land needs in the York area. This will provide the basis for a synthesis with employment land supply in Stage 2 of the study. Further detail and basic evidence is provided in the annexes on the assessment of property demand including an overview of the availability, take-up and vacancy rates and outstanding planning permissions (Annex E) and the econometric forecasts (Annex F).

Property market demand

4.2 The current features and future prospects for the employment land and property market in the City of York including industrial and warehousing uses, as well as office and high technology uses, were reviewed by SQW working in conjunction with Savills, a major national firm of property agents and chartered surveyors with offices in York and Leeds. The review of the York property market also included discussions with local property agents, developers active in the York area and leading players in economic development such as York England.

4.3 The previous studies by SQW Limited (noted in the previous section and summarised in Annex E) focused on the supply and demand for high quality sites in York in relation to the actual and potential growth of SCY employment. However, unlike this present ELR study, they did not address the provision of office, industrial and warehousing land. Key findings on employment land demand from these previous SCY-focused studies include :

- demand for around 12,500 to 15,000 sq metres of office space per year, varying in line with economic conditions, but mainly for high quality space
- demand for Science City York clusters accounts for about half of the total 4 to 5 hectares per year required for office development, varying with economic conditions.

4.4 The current and potential supply of high quality sites appeared to have worsened since the last report in 2003 because the safeguarded land at Monks Cross North was refused planning permission on appeal and the York Central scheme appears to have made slow progress despite support from key land owners and Yorkshire Forward and extensive technical studies by the development partners in recent years. However, the potential supply of employment land has also increased with progress on plans for a major scheme at the former Terry's factory site south of the city centre and the imminent availability for redevelopment of the former British Sugar site north of the city centre.

Office market

4.5 Government floorspace figures indicate that 306,000 square metres of office space were available in York in 2003 (DfT floorspace database). Other government figures indicate that

152,950 sq metres (around 50%) were located within the walled city centre in 2003 (DCLG). Savills estimate that around 60,000 sq metres (40%) of the office space in the walled city centre comprised buildings of a reasonably marketable high quality but that most of this was occupied by established organisations such as Defra and Norwich Union and little other high quality office space was available. Outside of the city centre, office space is mainly located around the edge of the urban area particularly at Clifton Moor but much of it is secondary office space. A limited amount of good quality office space has been developed in recent years at Clifton Moor and Monks Cross.

4.6 Savills and other local property agents report that the York office market currently supports demand for around 12,500 to 15,000 sq. metres per year although this falls in some years to 9,000 sq metres and rises in other years to 18,000 sq metres or more. These figures are broadly in line with the information obtained from local property agents for earlier SQW reports. Overall office demand could rise further if more high quality sites and premises were available particularly in the city centre. Most demand is for high quality office space but secondary office space is often taken up because of a shortage of high quality space. Most of the office demand in York is from local and regional firms and there is little demand from other parts of the UK. There is limited demand from SCY firms apart from the IT cluster.

4.7 There is a good demand for high quality office space in the city centre particularly from rail-related companies, professional firms, institutions and government offices. There is a reasonable demand for high quality office space out of centre mainly in smaller units and mainly from local and regional companies. Demand for secondary office space within and outside the city centre is patchy, particularly at Clifton Moor where considerable stock remains available. The market would prefer out of centre office space to be developed on prominent sites close to the ring road on the southern and eastern edges of the city. However, CYC imposes SCY planning conditions for development on high quality sites (see previous section) as well as the sequential test and property specialists report that this makes the marketing and funding of office development schemes extremely difficult.

4.8 There is a shortage of high quality office space in the city centre. Various schemes are under construction or recently completed totalling around 8,000 sq m but around 7,000 sq m of this already appears to be spoken for and a few currently proposed schemes await construction. The York Central mixed use scheme on the fringe of the city centre around the railway station which includes proposals for around 100,000 sq metres of office space will have a significant impact on the York office market over a development period of several years. If it were built out on the scale currently envisaged, York Central would add a further two-thirds to the existing supply of office space in the city centre, complementing the office space available within the walled city centre and forming a new and distinct Central Business District.

4.9 The proposed refurbishment and redevelopment of the former Terry's factory to the south of the city centre is expected to provide a further 30,000 sq metres of office space. A considerable amount of secondary office space is available at Clifton Moor to the northeast of the city centre but agents report that it is not easy to secure lettings as much of this space is standard quality and accessed by the often congested York (northern) ring road. The only high quality office land available is the site at Monks Cross South but its development is subject to SCY planning conditions which, as noted above, are perceived to be onerous by the property industry.

4.10 In summary, local property agents report a strong demand for office space in York particularly in the city centre (see Annex E). The demand is mainly for high quality space which is generally accepted to range between about 100,000 and 200,000 sq ft per year. There is a shortage of high quality office space in the city centre and although four schemes are currently under construction some of the space is already spoken for. The pipeline of supply in relation to demand is therefore limited at present and depends mainly on the refurbishment of existing buildings. However, the substantial amount of high quality office provision proposed within the York Central and Holgate Park schemes would, if developed, transform the city centre office market.

4.11 Outside the city centre, there is moderate demand for both high quality and standard quality office space. Local property agents report that the only high quality office site available is the Vangarde site at Monks Cross South but it is restricted by Science City York planning conditions. Office space at Clifton Moor does not usually meet the quality required by the market, lettings are slow and there is a fair amount of overhang of this secondary office space. The pipeline of supply of high quality sites and office space is therefore thin at present but the high quality office space proposed at the former Terry's site could significantly alter the position in the future.

Industry and warehousing

4.12 Government floorspace figures indicate that there were 739,000 square metres of factories and 306,000 sq metres of warehousing in York in 2003 (DfT floorspace database). Savills report that there is pent-up demand essentially because there is very limited supply. Overall demand for industrial space could be 10,000 sq metres per year but it is difficult to know how long this might continue because of the general decline of the industrial sector. The demand is for a specific type of property - small industrial units - for which no suitable sites are currently being brought forward. There is no demand for large high bay warehouses in the York area. Industrial space and warehouses can therefore be regarded as components of the same market. Demand arises mainly from local companies for units between 100 and 1,000 sq metres mostly at the lower end of the size range.

4.13 The reported acute shortage of industrial and warehouse land and premises in the York area has arisen because several former employment sites have been redeveloped for housing and because developers have found it more profitable to develop employment land for office rather than industrial and warehousing uses. Savills was only aware of new developments at York Business Park, the rear of James Street and various small infill sites in the York area. Other possible sites such as the former Elvington Airfield, which is regarded as poorly located, are now in demand because of the shortfall in supply.

4.14 In summary, local property agents report a pent up demand for industrial and warehousing space in York and some strong demand for small workspace units (see Annex E). In the short term, there is an acute shortage of sites and industrial space and local property agents report little market activity except for minor developments at York Business Park and James Street. The pipeline of supply in relation to demand for industrial and warehousing space is therefore very limited at present although there is some flexibility for recycling employment uses within currently allocated sites and the recently available former British Sugar site.

Conclusions

4.15 The review of the York local property market provides a short-to-medium term view and complements the longer term view taken by the employment forecasts and estimates of employment land need across the 15 year timescale for this study. Property market enquiries indicate a range of companies seeking business accommodation of various types in various possible locations although of course the resulting job creation will also be influenced by a range of national and local economic factors including product market conditions, skills availability and the regulatory environment. The key points from the property market review provide an important insight into employment land need in the York area, pointing to:

- a consistently reported overall demand for about 12,500 to 15,000 sq metres per year of offices in York, most of which is for high quality space
- office demand is strongest for high quality space in the city centre where there is a marked shortage of supply
- price levels are well-below central Leeds but above those in other surrounding areas
- the development of York Central would increase the existing office space in the city centre by around two-thirds and office provision at the Terry's site could also make a significant impact; we believe that it would also create a 'city market' on a scale that would, for the first time, deliver regular and substantial transactions and provide a focus for external interest and investor involvement
- there is also demand for office space outside the centre but the supply of high quality sites is limited and Monks Cross South has SCY planning conditions
- demand both for office and for manufacturing and workshop space from SCY firms is limited, particularly if the IT cluster is excluded from the analysis
- there is a reported demand of around 10,000 sq metres per year of industrial and warehousing space in York, mainly in smaller units, but it is unclear how long this will continue
- some industrial and warehousing sites are being redeveloped for other uses, mainly housing, because industrial values are lower than those of residential and office uses.

Econometric forecasts

4.16 As part of the York ELR study, Cambridge Econometrics prepared "baseline" and "customised" econometric forecasts for the York local economy from 2006 to 2021. The baseline forecasts were essentially trend-based and reflected national econometric projections adjusted to the specific profile of the local economy. The customised forecasts were adjusted from the baseline forecasts to reflect the potential for further growth in the Science City York (SCY) knowledge based activities in the local economy.

Local Economy Forecasting Model (LEFM)

4.17 Cambridge Econometrics' Local Economy Forecasting Model (LEFM) was developed in collaboration with the Institute for Employment Research at the University of Warwick (see Annex F). It is the most detailed European modelling package for regional and local economic forecasting and it is used extensively by UK local authorities and other development agencies. LEFM draws on the structure of the Cambridge Econometrics Multi-sectoral Dynamic Model which forecasts the UK economy. The main outputs of LEFM are value-added and employment by sector (41 sectors) and employment by gender and status, employment by occupation (25 occupations). Disposable income and consumer spending, population and labour force by age and gender, net commuting and implications for qualifications and skills are also available but were not sourced for this study.

4.18 LEFM has been designed to project economic indicators for a local area by explaining the output of local industries through an explicit representation of expenditure flows in the area and their links with the world outside. It differs from other methods of local economy modelling which typically derive local output or employment directly from national or regional output or employment. Other models based on a relatively small set of economic relationships offer little scope for explaining local deviations in performance from national or regional norms or for providing a rationale for forecast variations in the future.. LEFM is also distinguished from other approaches by a finer grain of sectoral analysis which provides a more detailed baseline and involves differences in employment characteristics and growth prospects for the various sectors. This more disaggregated approach allows local knowledge about specific firms, or groups of firms, to be incorporated into the forecast.

Cambridge Econometrics Baseline Forecasts

4.19 The baseline employment forecasts prepared by Cambridge Econometrics for the York ELR are given as full time equivalent (FTE) employment together with changes in FTE employment expressed in relation to a 1981 base (see Table 4-1 and Table 4-2). These figures therefore understate the total number of jobs in the local economy.

Table 4-1: Cambridge Econometric Baseline Forecast : FTE employment ('000s)

	1986	1991	1996	2001	2006	2011	2016	2021
Manufacturing	18.810	18.814	15.522	12.763	9.368	8.974	8.454	7.965
Distribution, hotels and catering	17.530	18.697	19.089	19.387	20.808	22.169	23.298	24.376
Finance and Business Services	7.766	10.812	14.608	15.323	13.310	14.123	15.249	16.460
Other services	18.223	20.942	23.302	24.357	29.222	30.951	32.155	33.185
Construction, Transport and Other Sectors	14.655	13.876	14.301	19.142	17.710	18.246	18.884	19.614
Total	76.984	83.142	86.821	90.973	90.418	94.463	98.039	101.600

Table 4-2: Cambridge Econometrics Baseline Forecast : Change in FTE employment ('000s)

	1986	**1991**	**1996**	**2001**	**2006**	**2011**	**2016**	**2021**
Manufacturing	-2.112	-2.107	-5.399	-8.158	-11.553	-11.948	-12.467	-12.957
Distribution, hotels and catering	0.471	1.638	2.030	2.328	3.749	5.110	6.239	7.317
Finance and Business Services	1.414	4.460	8.256	8.971	6.958	7.772	8.897	10.108
Other services	0.596	3.315	5.675	6.730	11.595	13.324	14.528	15.558
Construction, Transport and Other Sectors	-0.279	-1.058	-0.633	4.208	2.776	3.313	3.950	4.681
Total	0.091	6.249	9.929	14.080	13.526	17.571	21.146	24.707

Note : employment change is cumulative from a 1981 base

Cambridge Econometrics "Customised" Forecasts

4.20 The "customised" econometric forecasts prepared by Cambridge Econometrics provide adjustments to the baseline forecasts (above) to reflect the expected effects of the growth in the Science City York sectors (IT digital, bioscience and cultural & creative industries). It is assumed that employment in the portions of the industrial sectors representing the SCY growth sectors will grow at 5% per year (explained in the next subsection) rather than using the "whole sector" baseline growth rates adopted in the LEFM econometric model. The forecasts are given again in full time equivalent (FTE) employment together with changes in FTE employment (see Table 4-3 and Table 4-4).

4.21 The econometric forecasts illustrate the complex pattern of structural change which is occurring within the local economy with a decline in the traditional industrial activities and an increase in knowledge based and service sector activities. As noted in Section 2 of the report, the "customised" econometric forecasts reflect the potential for further growth in knowledge based activities in York and closely correspond with the employment forecasts for York which Yorkshire Forward presented at the Examination in Public of the Draft Regional Spatial Strategy.

Table 4-3: Cambridge Econometric "Customised" Forecast : FTE employment ('000s) including SCY growth assumptions

	1986	**1991**	**1996**	**2001**	**2006**	**2011**	**2016**	**2021**
Manufacturing	18.810	18.814	15.522	12.763	9.368	9.096	8.715	8.405
Distribution, hotels and catering	17.530	18.697	19.089	19.387	20.808	22.168	23.296	24.373
Other services	18.223	20.942	23.302	24.357	29.222	31.454	33.399	35.433
Finance and Business Services	7.766	10.812	14.608	15.323	13.310	14.625	16.236	18.071
Construction, Transport and Other Sectors	14.655	13.876	14.301	19.142	17.710	18.378	19.189	20.141
Total	76.984	83.142	86.821	90.973	90.418	95.721	100.835	106.424

Table 4-4: Cambridge Econometrics "Customised" Forecast : Change in FTE employment ('000s) including SCY growth assumptions

	1986	1991	1996	2001	2006	2011	2016	2021
Manufacturing	-2.112	-2.107	-5.399	-8.158	-11.553	-11.826	-12.206	-12.516
Distribution, hotels and catering	0.471	1.638	2.030	2.328	3.749	5.109	6.237	7.314
Other services	0.596	3.315	5.675	6.730	11.595	13.827	15.772	17.806
Finance and Business Services	1.414	4.460	8.256	8.971	6.958	8.274	9.884	11.719
Construction, Transport and Other Sectors	-0.279	-1.058	-0.633	4.208	2.776	3.444	4.256	5.207
Total	0.091	6.249	9.929	14.080	13.526	18.828	23.943	29.531

Note : employment change is cumulative from a 1981 base

Employment land needs

4.22 The employment figures from the "customised" econometric forecasts were translated into estimates of employment land need for the York area using a series of assumptions about the property requirements and employment densities of different economic activities which drew on other research and assumptions used in other studies (see Annex G). These estimates were prepared within a framework of five employment land categories which we devised to provide an informative basis for the York ELR and its inputs into the York LDF. The estimates also provided a cross-dimensional analysis to indicate the SCY components of the total employment land requirements for the York area.

Assumptions

4.23 The assumptions we adopted in translating the "customised" econometric forecasts into the employment land requirements for the York area recognised that the relationships between employment change and employment land provision are not linear, and that there is no simple formula to estimate the requirements for employment sites and premises of various types, qualities and locations. Flexible working patterns which have been developing over recent decades mean that, while there are more economically-active people in the labour force, a higher proportion are working part-time and more of them work from home. Changes in business organisation which have been developing alongside the sectoral shifts within the economy mean that more non-core activities are being out-sourced both nationally and internationally and supply chains are becoming increasingly complex. More than about half of the economically active people who have a place of work outside the home are engaged in activities such as retail, health and education that are not included in the list of standard B1, B2 and B8 business use classes directly controlled by statutory spatial planning and development management.

4.24 The five employment land categories we devised as a framework for preparing the employment land requirements from the "customised" econometric forecasts distinguished between office and high technology activities (B1(a) and B1(B)) and industrial and warehousing activities (B1(c), B2 and B8) in recognition of the principal employment land and premises property markets in the York area. They also distinguished between high quality and standard quality sites and between city centre and out of centre locations which again reflect the particular needs and circumstances of the York area.

4.25 Activities requiring high quality sites were identified in disaggregating the "customised" econometric forecasts (explained above) and they were later matched to high quality sites which were identified in the assessment of currently allocated and potential sites for employment development (explained in the previous section). The city centre location was defined from a property market perspective to include major sites within and immediately surrounding the walled city centre (specifically including York Central and Holgate Park) and the estimated employment land requirements were split between city centre and out of centre locations in the rest of the York area (explained below). However, we recognise that York Central and Holgate Park could be classified as "edge of centre" in planning terms.

4.26 The five employment land categories used for the York ELR are :

A : Office and high technology *[B1(a) / B1(b)]* high quality, city centre	*Activities seeking high quality sites in and around the walled city centre*
B : Office and high technology *[B1(a) / B1(b)]* high quality, out of centre	*Activities seeking high quality sites outside the wider city centre*
C : Office and high technology *[B1(a) / B1(b)]* standard quality, city centre	*Activities seeking standard quality sites in and around the walled city centre*
D : Office and high technology *[B1(a) / B1(b)]* standard quality, out of centre	*Activities seeking standard quality sites outside the wider city centre*
E : Industry and warehousing *[B1(c) / B2 / B8]* standard quality, in / out of centre	*Activities seeking standard quality sites anywhere in the York area*
Total employment land needs	*All activities within statutory planning control seeking sites in the York area*

4.27 We converted the constituent sectors of the "customised" econometric forecasts into the corresponding business use classes drawing on the assumptions used in the Draft Yorkshire & Humber RSS, Halcrow's recent ELR for Bedford Borough Council and the ODPM ELR Guidance. The proportions of employment in the LEFM sectors in each of the business use classes and the cross-cutting SCY cluster components were allocated to the business use class component of total employment in Business Use Classes B1, B2 and B8 (54% in the York area) and are shown in the three tables in Annex G. The allocation of LEFM sectors to office and high technology use classes drew on other studies and partly on our knowledge of the York local economy : 100% of employment in financial & business services and public administration & defence, 50% of employment in construction and transport & communication, 33% of miscellaneous services and 5% of employment in education and health. All manufacturing and industrial employment was allocated to B1(c) light industry, B2 general industry and all (non-retail) distribution activities were allocated to B8 warehousing.

4.28 The assumptions we used to convert FTE employment into employment land requirements drew on the standard worker density assumptions adopted in working papers by English Partnerships, Regional Development Agencies and Office of Project Appraisal Training (OffPAT) and in SQW project experience elsewhere. We also drew on the plot ratio and vacancy rate assumptions in the Draft Yorkshire & Humber RSS and the ODPM ELR Guidance and as used elsewhere, for example, in the Bedford ELR.

4.29 There is considerable agreement on worker density, vacancy rate and plot ratio assumptions between these sources. We concluded that, at least for some types of employment, countervailing trends affecting employment densities are, at present, cancelling each other out. As noted earlier in this section, ‘office work’ may increasingly be organised to provide greater business and personal flexibility. Downward pressure on individual workspace, together with increasing property costs and “hot-desking” by part-time or occasional employees, is largely offset by the need for more meeting space and informal break-out space.

4.30 The conversion factors which were applied to the employment change categories in each sector were derived by multiplying out the assumptions for each factor (see Table 4-5) in order to calculate an employment land requirement expressed in hectares. We believe that the assumptions adopted for these estimates are reasonable for the purposes of this long term Employment Land Review but they may need to be refined for further more detailed land allocation and site planning work and as circumstances change.

Table 4-5: Density, plot ratio and vacancy rate assumptions

	Space per head (sq m)	**Plot ratio (%)**	**Vacancy rate (%)**	**Comment**	**Conversion factor – jobs to has**
City centre offices	15	100	5	Higher density and plot ratios than for edge of city / business parks	0.001575
Business and technology parks	20	40	5	Mid-range assumption	0.00525
Industry	30	40	5	Mid-range assumption	0.007875
Warehousing	50	50	5	Low end of range, reflecting York mix – few large or ‘large bay’ warehouses	0.00105

Source : SQW, based on EP, RDAs, other sources,

Method

4.31 The employment land need estimates for the York ELR were developed in a series of spreadsheets (see Annex G). In the first table in this annex, the “customised” econometric forecasts of employment by sector from 2001 to 2021 were converted into employment land requirements in hectares using the plot ratio, worker density and vacancy rate assumptions for the office and high technology category and for the industry and warehousing category (see Table 4.7 above). The results were then subdivided between high quality and standard quality sites and between city centre and out of centre sites. In the second table in Annex G, the SCY components of the overall employment land requirements were calculated in relation to the five employment land categories. No attempt was made to assess the land requirements of the three SCY clusters (IT, bioscience and creative industries) separately. There have already been some marked shifts in growth over time and the balance across these clusters can be expected to change further in the period covered by the LDR and, indeed, new clusters may also emerge over this timescale.

4.32 The distribution of office and high technology land requirements between city centre and out of centre locations was determined using a 75:25 split for 2006 reflecting the information available in the DCLG hereditament data and our local knowledge of York (the second table in Annex G). This split was assumed to shift over time to 65:35 by 2016 as edge of city business parks become more important before stabilising to 2021 as the major office development proposed at York Central is completed and occupied. This reflects the likely pattern and sequence of development. The policy issues this raises are being addressed in Stage 2 of the study.

4.33 The distribution between high quality and standard quality high technology and office sites was determined using information from previous SQW studies and the data set used by DTZ in their publicly available evidence to the Heslington East / University of York expansion Local Planning Inquiry in May 2006. We have used an initial estimate of 15% for high quality city centre sites within the overall estimate of high quality sites and assumed this will rise to 40% by 2021 as York Central is developed in the later years. Similarly, we have used an initial estimate of 55% for high quality out of centre sites rising to 70% by 2021.

4.34 The cross-cutting analysis of SCY activities amongst the overall employment land needs in the five categories (the third table in Annex G) is based on the initial estimates of the sectors where SCY clusters would boost the baseline econometric forecasts. We allocated the employment in the various SCY sectors to the five main categories on a percentage basis, splitting sectors between categories where appropriate, and this was assumed not to change over the period to 2021. We have assumed that most SCY employment would require office and high technology space but that some would require industrial and warehousing space (as in our previous studies) and that worker densities, plot ratios and vacancy rates would be the same as shown in Table 4.7 (above). The combined assumptions were then used to derive detailed employment estimates and employment land requirements.

Results : whole local economy

4.35 The headline result of these assumptions and calculations is that total net employment land requirements will increase in the York area by 22.5 hectares from a stock of about 204 hectares in 2006 to about 226 hectares in 2021 with a relatively fast rate of increase between 2006 and 2016 before stabilising to 2021. This relatively small net change in overall employment land requirements disguises the expectation for significant shifts in the various employment land categories as substantial changes continue in the sectoral structure of the local economy.

4.36 About 37 hectares of high quality employment land will be required for office and high technology uses within and out of the city centre (two thirds of it out of centre) while there will be a net reduction in the need for standard quality sites within the city centre and an increase of about 3 hectares out of centre. A net reduction of about 9 hectares in industrial and warehousing land all on standard quality sites is expected with a steady rate of decrease to 2021 (see Table 4-6 below).

Table 4-6: Estimated employment land needs, 2006-2021 (hectares)

	2006	2011	2016	2021	2006-21
A : B1(a) / (b) high quality, city centre	5.6	7.5	11.6	15.9	10.3
B : B1(a) / (b) high quality, out of centre	23.0	32.1	45.0	49.8	26.8
C : B1(a) / (b) standard quality, city centre	32.0	29.9	27.0	23.8	- 8.2
D : B1(a) / (b) standard quality, out of centre	18.8	21.4	24.2	21.3	2.5
E : B1(c) / B2 / B8 standard quality, in / out of centre	124.3	122.7	119.0	115.4	- 8.9
Total employment land needs	**203.7**	**213.6**	**226.8**	**226.2**	**22.5**

4.37 These estimates of overall net land requirements are aggregate calculations that are based on translating forecasts of employment growth through standard density assumptions into the required development land 'take'. However, they do not explicitly take into account property market imperfections, such as the perceived shortage of small industrial and warehouse units, which was picked up in the property market review. Similar discontinuities of particular types of property coming onto the market can be expected in the future. Also, as these calculations are worked through from forecast overall changes in 'net employment' they do not show the "churn" in adjustments between declining and growing sectors in the local economy. This will include different types of businesses looking for property solutions in the local market, the onus on the property market to offer developer and occupier choice and the need to take account of implementation problems in realising development on specific sites.

4.38 We have estimated a need for about 31 hectares of net additional land for office and high technology activities and a net reduction of about 9 hectares of land for industry and warehousing between 2006 and 2021. Within this, there is likely to be a net overall additional need for about 2 hectares of high and standard quality sites within the wider city centre (including York Central) and about 29 hectares out of centre although this is influenced to some extent by the current shortage of sites in the city centre which is reflected through our assumptions (see above). Cut another way, there is likely to be a need for a net increase of about 37 hectares of high quality land and a net decrease of about 14 hectares of standard quality land. We believe this is consistent with recent trends in the local property market, current demand and expected shifts in broad patterns of economic activity which is supported by evidence of a take-up of 2.6 hectares per year of standard quality sites from City if York Council employment land monitoring. It is also consistent with the specific opportunities that are open to York to attract new inward investment into high quality physical development projects that will protect and enhance the special distinctiveness of the city.

Results : SCY clusters

4.39 Employment in the SCY clusters is already growing strongly and, although there will be shifts and setbacks, this overall momentum is expected to be maintained in the future. We expect that, although recent growth in SCY clusters has not been converted into a corresponding demand for space, future growth will be increasingly translated into demand for property. We also expect that this growth will be underpinned by York's growing profile as a national Science City exemplar and by the shared ambition of Yorkshire Forward, the City of York Council, the University of York and other partners to realise this distinctive potential for the region and particularly for the Leeds city region.

4.40 Our findings on the potential for employment growth and corresponding property development to meet the expansion of the Science City York clusters differ from our earlier studies (see para 4.3) because the York property market has shifted in recent years to include a broader spectrum of business, office and high technology activities particularly on high quality sites. At the same time, there has been an increase in development densities for office uses and a growing awareness of the need for sustainable development that is located to reduce the need for travel and to make better use of public transport.

4.41 We estimate that Science City York activities, which include a substantial and growing proportion of the city's overall growth in professional and business services, will make up about 26 hectares of the total net employment land requirement between 2006 and 2021 (see Table 4-7). This represents an SCY "churn" within the overall employment land "churn" as employment land uses adjust to shifts in the structure of the local economy. It is likely to comprise about 13 hectares of high quality sites (4 hectares within the city centre) and 12 hectares of standard quality sites (4 hectares within the city centre). The industrial and warehousing elements of Science City York activities could require about another 2 hectares.

Table 4-7: Science City York components of employment land needs, 2006-2021 (hectares)

	2006	**2011**	**2016**	**2021**	**2006-21**	**SCY % of total needs 2006-01**
A : B1(a) / (b) high quality, city centre	3.4	4.4	5.6	7.2	3.8	36.9
B : B1(a) / (b) high quality, out of centre	8.2	11.0	13.4	17.0	8.8	32.8
C : B1(a) / (b) standard quality, city centre	3.2	3.8	5.2	6.7	3.5	n/a
D : B1(a) / (b) standard quality, out of centre	7.9	10.4	13.0	16.4	8.5	340.0
E : B1(c) / B2 / B8 standard quality, in / out of centre	1.7	2.1	2.3	3.4	1.7	n/a
SCY total land needs	**24.4**	**31.7**	**39.5**	**50.7**	**26.3**	**116.9**
SCY % of total needs	**12.0%**	**14.8%**	**17.4%**	**22.4%**	**-**	**-**

Notes : *SCY % of total needs 2006-01 is not applicable where there is a negative total need (n/a) and the overall SCY % of total needs 2006-01 indicates additional churn within SCY activities*

4.42 The implication of our estimates for Science City York activities is an average "additional land take" of about 0.8 hectares per year of high quality sites and premises within the overall requirement of about 1.8 hectares per year for SCY uses. This is less than the 2 hectares per year for SCY uses put forward in previous SQW reports for high quality sites for SCY uses. It reflects the higher density assumptions used in this study, the differences in definition (ie previous estimates included provision for developer and occupier choice), revised employment estimates (based on the "customised" econometric forecasts) and the more detailed calculations to disaggregate the employment sector estimates in business use class and business property types.

Conclusions

4.43 We have reviewed the current features and future prospects for the employment sites and premises market in the City of York. The review has shown that there is currently a strong demand for industrial and warehousing space, although it is not clear how long this will continue, and a particularly significant market need for small workspace units. We found only limited demand for "pure" Science City York activities but a clear demand for "generic" high quality office space particularly in the city centre.

4.44 The econometric forecasts illustrate the complex pattern of structural change which is occurring within the local economy with a decline in the traditional industrial activities and an increase in knowledge based and service sector activities. This is evident in the recent industrial closures and other down-sizing which, together with other employment losses, prompted the formation of the high-level "Future York Group" to debate the city's economic role, formulate a vision for the future and identify what is needed to realise it.

4.45 The results of our estimates are that total employment land requirements will increase in the York area by 22.5 hectares from a stock of about 204 hectares in 2006 to about 226 hectares in 2021 with a relatively fast rate of increase between 2006 and 2016 stabilising to 2021. The underlying expectation is for significant shifts in the sectoral structure of the local economy which will create substantial demands for specific types of sites and premises although the net change in overall employment land requirements will be relatively small.