Appendix 1
Site Analysis
20. SITE ANALYSIS

20.1. North Field comprises some 74 hectares of previously developed land situated between Filton Airfield, which remains operational, and the established Town of Patchway (see Figure 26). The overall requirement is for a major mixed-use scheme than can be successfully integrated within the Town of Patchway, as well as complimenting the Airfield and other land uses in the area.

Site description

20.2. Filton Airfield is situated on the northern fringe of Bristol, some five miles from the city centre. The site, which is situated to the north of the operational runway, is a redundant part of the airfield. On the northern boundary of the site lies Highwood Road, a dual carriageway road that links the A38 with junction 17 of the M5 motorway, via Cribbs Causeway Regional Shopping Centre and the Patchway Trading Estate. Both of these developments are situated to the north-west of the site. To the north and north-west of the site is the Town of Patchway, and to the east is the A38. The Royal Mail West of England Mail Centre is situated immediately to the south-east of the site, adjacent to the A38.

20.3. The majority of the existing built development at Filton Airfield, including: hangars; car parking facilities; industrial units; and office blocks, is located to the south of the operational runway. This is where the existing manufacturing industry, mainly associated with aviation, takes place.

20.4. The North Field site is broadly divided into two character areas. The western part of the site contains the remnants of a former RAF base, including officer accommodation blocks. It also contains the remnants of pre-airfield settlement. This part of the site has significant vegetation, some of which reflects the pattern of pre-airfield settlement. The eastern part of the site is much more open and mainly grassed. It contains a crosswind runway, running roughly north to south, which is no longer in use for take-off or landing. In recent years it has been used for aircraft dispersal and storage.
THE SURROUNDING AREA.

Airfield infrastructure

20.5. One of the key objectives in relation to the retained airfield is to ensure its continued operation and safeguard the potential for its future success. This includes the retention of the ability to secure Ministry of Defence contracts. The landowners BAE SYSTEMS appointed specialist aviation consultants to consider:

- the protection of safeguarded landing, take-off and transitional flying surfaces;
- navigation aids and communications equipment;
- use of aprons/areas of hardstanding for aircraft parking; and
- airfield related infrastructure.

20.6. The most sensitive area of the site, in terms of building height restrictions, is the south-west edge. Here careful consideration must be given to the heights of buildings and structures. Overall, however, there are opportunities for medium-rise development whilst ensuring the maintenance of the CAA obstacle limitation for safeguarded surfaces.

20.7. Four existing aerial installations, associated with the operation of the airfield, currently impinge on the site. The CAA and the MoD have approved a solution that involves the relocation of three of these installations. Two would be relocated to suitable sites within the retained airfield. A third would be co-located with the installation that will remain undisturbed. The proposed development areas will not restrict coverage, or cause interference to the operational glide-paths.

20.8. Some 7,900 square metres of new hardstanding would be required within the retained airfield, to replace hardstanding that would be lost as a result of the North Field development. It is proposed that this should be located to the rear of the Royal Mail building. This location would meet the operational requirement of the airfield.

20.9. A number of elements of airfield related infrastructure are currently sited within North Field. In order to safeguard the ongoing operation of the airfield, acceptable alternative locations for this infrastructure would be found within the retained airfield.

Highwood Road

20.10. The function of Highwood Road as a principal distributor, is a major impediment to the objective of integrating development on North Field with the existing Town of Patchway. As well as acting as a physical barrier to integration, Highwood Road generates issues of noise and pollution.

20.11. Highwood Road is a poor quality environment for pedestrians and cyclists, not only because of the volume of traffic that uses the road, but also because of the lack of enclosure, and lack of properties fronting onto the space and therefore the lack of ‘natural surveillance’.

20.12. The proposed development at North Field presents opportunities to:

- close Highwood Road to private through traffic;
- traffic calm;
- improve the space with new hard and soft landscaping;
- deliver new buildings that will create enclosure and natural surveillance;
- redesign the space as a public transport priority route; and
- improve pedestrian and cycle facilities.

Patchway Town Centre

20.13. The main retail and commercial heart of Patchway is located just to the north-east of the North Field site. The area incorporates a variety of uses and includes a number of convenience stores, small offices, hairdressers, agencies, takeaway, a Public House, and community uses. These include: a library; a health facility; a fire station; the Town Council offices; a community hall; and a British Legion Club. The quality of some of these local facilities has been raised recently in the context of the Patchway Town Centre Working Group.

20.14. The proposed development at North Field presents an opportunity to create new townscape around the existing centre, to give focus to its role as the heart of the community. There is potential for:

- a landmark building within North Field, opposite the existing Town Centre, visually emphasising its role as the focal point of the community; and
- new facilities, including a community centre and local shops on the north-eastern edge of the North Field site.
THE SITE

Land ownership

20.15. BAE SYSTEMS own Filton Airfield and retain responsibility for its ongoing operation, which Airbus UK is responsible for most of the ongoing industrial activity. At present a number of buildings, hardstanding and aerials remain within the North Field site. Where necessary, relocation of these facilities has been agreed with the Civil Aviation Authority. The landowners have access to the Standing Stone roundabout on Highwood Road, as well as having access to Highwood Road itself and the A38.

Topography

20.16. The landform is dominated by a gentle slope from north-west to south-east (see Figure 27). The site occupies the northern side of a shallow bowl, and falls from 80m AOD at the Highwood Road boundary to 60m AOD at the runway boundary.

20.17. North Field lies within the urban area designation in the Forest of Avon Plan, which was approved by the Government in 1995. A revised Forest of Avon Plan was published in 2001, and the Council has resolved to support the revised plan as a basis for the future implementation of the Forest of Avon landscape design strategy. Supplementary Planning Guidance is being prepared to provide more detail on the implementation of this strategy.

20.18. In the context of the South Gloucestershire Landscape Character Assessment, North Field lies within Landscape Character Area 15 – Patchway and Filton. This character area extends from the administrative boundary with Bristol City Council in the south, to the M4 and M5 motorways in the north. The area is characterised by zones of commercial, industrial and residential development of various ages, styles and materials. An urban framework of settlement and major infrastructure largely dominates the landscape, which includes some diverse green spaces.
**Significant vegetation**

20.19. The western part of the site has a substantial number of trees and extensive areas of other vegetation, the majority relating to boundaries and tracks.

20.20. Significant vegetation on the site has been ranked into three categories of importance. These are:

- **key importance** – where a tree, tree group or hedgerow forms a principal landscape feature, is visually prominent, and/or intrinsic to an area of ecological/landscape designation;
- **considerable importance** – where a hedge significantly contributes to the character of the site, pattern of field vegetation, and/or screening of views; and
- **some importance** – comprising reasonable quality trees or hedgerows that form part of the general vegetation pattern.

**Site of Nature Conservation Interest**

20.21. Filton Airfield Wood is a Site of Nature Conservation Interest. It covers an area of some 1.35 hectares, and lies within the south-western part of the site. The wood was examined in some detail during surveys in 1999 and 2001. It appears to be ancient woodland, at least in parts, though the trees are not of great antiquity. Nevertheless, there is a rich woodland ground flora in parts, with a predominance of bluebell in most areas. There is a better structure towards the edges, where there is also more botanical variety in the ground flora. The wood grades into scrub and then species-rich grassland along the western boundary, and to a lesser extent, the eastern boundary.

**Avenue trees**

20.22. Much of the road network associated with the former buildings is lined with avenues of mature specimen trees, mainly sycamore, horse chestnut, lime and sweet chestnut. Much of this network is rectilinear in form, sub-dividing the site into a series of small scale development areas. In some cases these trees have been planted as clusters or groups rather than as avenues. Of particular prominence is the mature avenue around the former RAF parade ground, consisting principally of lime and sycamore.

**Other trees**

20.23. Groups of ornamental and semi-ornamental trees and shrubs abound within the site, particularly associated with former gardens. There are also a number of single trees that have established in open ground. Most noticeable are a number of conifers, including a Wellingtonia to the south-west of the parade ground. The top of this tree is already clearly distinguishable above the surrounding canopies.

20.24. There are also several groups of trees that are noticeably taller than the surrounding tree canopy and are thus more visually prominent. These include two groups of white poplar, two groups (and a number of single specimens) of Lombardy poplar, and one group of lime trees adjacent to the southern boundary.

**Relic lanes and associated hedgerows**

20.25. There is extensive vegetation associated with the two lane alignments. That related to Hayes Lane forms tall, overgrown hedgerows with occasional trees. The hedgerow to the southern side of Hayes Lane is species-rich for much of its length. The last remnant of Highwood Lane also includes a length of species-rich hedgerow.

**Field hedgerows and ditches**

20.26. A substantial former agricultural hedgerow runs across the site from the north-eastern corner towards Filton Airfield wood. This hedgerow is believed to accommodate a deep drainage ditch and support a number of isolated and grouped mature trees. It is a visually prominent feature of the site.

**Visual quality**

20.27. Filton Airfield with its grassland corridor, small woodland and dispersed light coloured hangars forms a distinct open area in the landscape, contrasting greatly with the urban edges to the north and to the south.

20.28. There are important long range views out of the site, to the south and south-east, across to the Mendip Hills.
Ecology

20.29. The site comprises three general habitat types:
  
  • regularly mown grassland around taxiways and apron areas;
  
  • previously developed land with specimen trees, demolished buildings, hardstandings, and developing scrub; and
  
  • relicts of past agricultural land, including unmanaged improved pastures and hedgerows, woodland and a remnant lane.

20.30. The open grassland area supports very little wildlife of interest and is considered to be of negligible nature conservation importance.

20.31. The previously developed land is a complex matrix of vegetation types. The road and pathway system is lined with specimen trees of various sorts, some native species and others ornamental. Scrub, including bramble, elder, hawthorn, elm, sycamore and privet is invading considerable areas. This complex area supports a good diversity of largely common species and overall it is considered to be of negligible to low importance for nature conservation.

20.32. The remaining area could be described as relict farmland, in that it retains the previous field patterns with hedgerows and small copses and a country lane. Several of the plants found in the main copse are considered to be good indicators of ancient woodland, such as wood sedge and yellow archangel. Other areas of woodland are more recent. Some of the woodland and hedgerows support a good variety of woodland plants, and are considered to be of medium importance for nature conservation.

20.33. The relict farmland and parts of the previously developed area create a large area of scrub and woodland edge habitat that is attractive to common nesting birds, including some that may be considered unusual in the urban context. These include buzzard, green woodpecker and whitethroat.

20.34. Rabbits are common throughout the site, with fox and roe deer activity also evident. Badgers are also occasionally observed. As ecologically there are complex interactions between the faunal communities present, it is important to consider the sensitivity and importance of the western part of the site as a whole for fauna. There are no rare or scarce species present, but several are considered to be unusual and therefore of interest in a largely urban context.

20.35. The following detailed surveys have been undertaken:
  
  • A phase 1 habitat survey (1999 and 2002 - Terence O’Rourke plc);
  
  • Interim baseline survey of reptiles (September and October 2002 - Michael Woods Associates);
  
  • Interim baseline survey of bats (September and October 2002 - Michael Woods Associates);
  
  • Badger Survey (February and March 2003 – Michael Woods Associates)
Listed buildings and archaeology

20.36. Filton Airfield does provide a source of interest in relation to wartime structures and aviation history, including structures and buildings from pre World War I, inter-war, World War II, The Cold War and the construction of Concorde. Two hangars (General Service Shed 1 and the 1913 Hangar) on the airfield, located just south of the North Field site, and have been designated Grade II buildings, following a review of airfield sites by English Heritage. Whilst the North Field site itself was visited as part of this review, none of the structures on the site were thought to be of national importance or recommended for listing.

20.37. In terms of archaeology it should be noted that the Historic Environment Record (HER), identifies two sites of late Medieval or Post Medieval date. Other sites mainly of C20 date are also noted on the HER. The Sites and Monuments Record identifies a number of locations within the site of potential archaeological interest.

20.38. Both the Listed Buildings and Medieval and Post-Medieval HER sites are shown on Figure 28.

20.39. A further assessment of archaeological potential will be required so that any potential interest can be safeguarded or recorded, as appropriate.

Noise

20.40. The site is adjacent to an operational runway and two busy roads: the A38 and Highwood Road, both of which have an impact on ambient levels of noise. A preliminary noise assessment of the site indicates that while there are relatively small pockets of land within the site subject to noise levels that require mitigation (under the provisions of PPG 24), much of the site is not subject to noise constraints.

20.41. Given the context of the site, and the potential for noise to be generated from the development itself, a more detailed noise survey will be carried out in support of an outline planning application.

Contamination

20.42. The site is previously developed land and has been affected by both wartime and industrial activities, from which contamination may have resulted.

20.43. Pollution resulting from contaminated land is addressed by the Environmental Protection Act 1990, Part IIA, and associated Contaminated Land (England) Regulations 2000, which came into force on the 1 April 2000. The statutory guidance underpinning Part IIA is set out in Circular 02/2000. Other related legislation exists in the Water Resources Act 1995. PPG 23 provides planning policy guidance on how local planning authorities should deal with pollution issues.

A preliminary contamination assessment of the site was carried out in 1999 which indicated that, in principle, contamination does not present a constraint to the development of North Field. Some further site investigation will be required to support an outline planning application, and further investigation will be required in support of subsequent ‘reserved matters’ applications.

Movement

20.44. The site is well located for public transport links. The Cribbs Causeway Regional Shopping Centre is a major hub for bus services, and the A38 is a key bus route into Bristol. Patchway Railway Station, which is located just to the east of the site, also offers commuter links with Bristol City Centre. Bristol Parkway, which is located just over a mile to the south-east of the site, provides a rail links to Bristol, London, Birmingham and Cardiff. The area around North Field also has an expanding network of cycle routes.
20.45. The site analysis is summarised in the Constraints and Opportunities Plan (see figure 29).