

# Appendix L

## Assessment of Cultural Heritage Baseline Resource





**BAA Archaeology Framework  
Heathrow Airport Limited**

**Enabling works to allow implementation of full runway  
alternation during easterly operations  
Heathrow Airport  
London Borough of Hillingdon**

**ASSESSMENT OF CULTURAL HERITAGE BASELINE RESOURCE**

REF 93020.785.xx  
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May 2011

# **Enabling works to allow implementation of full runway alternation during easterly operations Heathrow Airport London Borough of Hillingdon**

## **ASSESSMENT OF CULTURAL HERITAGE BASELINE RESOURCE**

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# **Enabling works to allow implementation of full runway alternation during easterly operations Heathrow Airport London Borough of Hillingdon**

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## **ASSESSMENT OF CULTURAL HERITAGE BASELINE RESOURCE**

### **1 INTRODUCTION**

#### **1.1 Project Background**

- 1.1.1 In accordance with the current legislation and planning policy, the setting of a heritage asset may contribute greatly to its value and any changes to that setting resulting from development are required to sustain or enhance their heritage values.
- 1.1.2 As a result of the ending of the Cranford Agreement there will be changes in the distribution of noise from aircraft in the environment surrounding Heathrow Airport. In some areas these changes will result in a significant increase in noise from aircraft, whereas in others a significant reduction in noise will result.
- 1.1.3 In 2010 Framework Archaeology was commissioned by Heathrow Airport Ltd to provide a high level heritage statement assessing the likelihood of significant effects to the heritage resource as a result of changes to the use of the runways following the removal of the Cranford Agreement.
- 1.1.4 The 2010 report concluded that there existed the possibility that a significant increase or decrease of noise from aircraft within the area surrounding the airport could result in a significant effect (positive or negative) to the setting of heritage assets, where the value of the heritage asset was sensitive to changes in, and informed by, its aural setting.
- 1.1.5 The initial study in 2010 concluded that there was insufficient information available relating to the likely changes to the duration, frequency and decibel level of aircraft noise to enable the definition of the baseline resource that was likely to be affected and the magnitude of any effects.
- 1.1.6 As a result of further studies undertaken to inform the scoping report and the forthcoming EIA the required level of detail relating to a) the physical extent of changes in air noise and b) the predicted significance of changes in air noise are now available. Using this information to set the parameters of the study.

#### **1.2 Aims and objectives**

- 1.2.1 The ultimate aim of this study is to enable the assessment within the EIA of the likely significant effects to the aural setting of heritage assets as a result of changes to level of air noise from overflying aircraft operating from Heathrow Airport without the Cranford Agreement in place.
- 1.2.2 The objectives of this current report are as follows:

- To establish the maximum extent and general characteristics of the baseline heritage resource that could be effected by the proposals
- Summarise the predicted changes and the nature of the likely effects to the heritage resource
- Define criteria by which heritage assets are selected as sensitive to the predicted changes
- Select the heritage assets with settings sensitive to the predicted changes
- Provide an assessment of the relationship between the setting of each identified sensitive heritage asset and their value/significance

## **2 METHODOLOGY**

### **2.1 Introduction**

- 2.1.1 There is no published methodology specifically designed for the assessment of the effects to the heritage resource associated with noise from overflying aircraft.
- 2.1.2 For the purposes of this assessment the view is taken that the contribution to the significance of a heritage asset made by its setting will vary according to the nature of each heritage asset and the extent to which that defined setting is sensitive to noise.
- 2.1.3 The assessment has been informed by a number of policy documents and guidance including:
- Planning Policy Statement 5 (PPS5): Planning for the Historic Environment<sup>1</sup>;
  - PPS5 Historic Environment Planning Practice Guide<sup>2</sup>;
  - The setting of heritage assets – consultation draft (English Heritage 2010) (Draft Setting Guidance); and
  - Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment (CPPG; English Heritage 2008).

### **2.2 Study Area**

- 2.2.1 The Study Area within which the baseline resource is defined by the 55db noise contour set as the boundary for the assessment of the effects of changes in air noise. It covers an area reaching from Windsor in the west to the London Borough of Lambeth in the east.

### **2.3 Sources**

- 2.3.1 Whilst it is acknowledged that all heritage assets, whether designated or not (PPS5), have a ‘setting’ it is also understood that the system of heritage designations is devised to identify and protect the most significant examples of archaeological sites, historic buildings, historic landscapes etc. Given the vast area covered by this study (see below) the designated heritage resource (including the non-statutory designation of Conservation Areas) is deemed a sufficient resource for identify the heritage assets that are most sensitive to the effects of the proposed scheme and it is no intention of this study to carry out any primary research to identify and/or define any undesignated heritage assets which may have settings sensitive to changes in air noise from overflying aircraft.
- 2.3.2 Information pertaining to the following statutory designations within the Study Area

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<sup>1</sup> On 23<sup>rd</sup> March 2010 PPS5 and its associated practical guide replaced PPG15 and PPG16.

<sup>2</sup> Published by English Heritage to accompany the new Planning Policy Statement.

were obtained from English Heritage and held in a Geographical Information System (GIS):

- World Heritage Site;
- Scheduled Monuments;
- Listed Buildings;
- Registered Parks and Gardens; and
- Historic Battlefields

2.3.3 In addition the locations of all Conservation Areas were obtained from the websites of the following local authorities:

District Councils	South Buckinghamshire; Runnymede and Spelthorne
London Boroughs	Hounslow; Ealing; Hillingdon; Lambeth; Southwark; Richmond upon Thames; Wandsworth; Hammersmith and Fulham and Kensington and Chelsea
Unitary Authorities	Bracknell Forest; Slough and Windsor and Maidenhead

2.3.4 Where available Conservation Area Appraisals were also obtained to inform on the general characteristics of each area.

## 2.4 *Defining the scope of the assessment*

2.4.1 Within the Study Area there are thousands of designated heritage assets ranging from Grade II listed private residential houses ubiquitous in the Victorian suburbs of West London to the UNESCO World Heritage Site of Kew Botanical Gardens.

2.4.2 The following table provides a summary of the designated heritage assets located within the Study Area.

Group designation	Total number
<b>Scheduled Monuments</b>	20
<b>Listed Buildings</b>	Grade I - 71 Grade II* - 204 Grade II - 2426
<b>Registered Parks and Gardens</b>	Grade I - 10 Grade II* - 5 Grade II - 15
<b>Conservation Areas</b>	c.150

<b>World Heritage Sites</b>	1

2.4.3 However as the environmental assessment of the project has advanced more information regarding the scale of the likely changes to the distribution of air noise around the airport have been produced and refined. The data provided by the air noise assessment topic since the 2010 report sets out the 55db contour and the areas within it where noise from aircraft will change. This averaged data is presented in 1db increments. The Air Noise topic specialists have set the threshold for when a human receptor will notice a significant increase or decrease in noise from, in this case overflying aircraft, at 3db.

2.4.4 The Air Noise topic has identified physical areas where significant (i.e. greater than 3db) changes in noise from overflying aircraft will occur. Beyond these areas of 3db change the increases and decreases are not assessed as significant and therefore within these areas no significant change to the setting of the heritage assets within can be assessed.

## 2.5 Defining setting and heritage values

2.5.1 Planning Policy Statement 5: Planning for the Historic Environment defines setting as:

*‘The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral’.*

2.5.2 The Historic Environment Planning Practice Guide supporting PPS5 goes on to qualify that:

*The extent and importance of setting is often expressed by reference to visual consideration. Although views of or from an asset will play an important part, the way in which we experience an asset in its setting is also influenced by other environmental factors such as noise, dust and vibration....’(para 114)*

2.5.3 The extent to which non-visual sensory influences contribute to the setting of a heritage asset is key to understanding the extent to which that setting will be sensitive to a significant increase or decrease in noise from overflying aircraft.

2.5.4 To define/understand how non-visual sensory influences contribute to the setting of a heritage asset it is necessary to consider the key heritage values of an asset. Heritage values are defined by English Heritage (2008) as follows:

- **Evidential value:** the potential of a place to yield new evidence about past human activity
- **Historical value:** the ways in which past people, event and aspects of life can be connected through a place to the present
- **Aesthetic value:** the ways in which people draw sensory and intellectual stimulation from a place; and
- **Communal value:** the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory



- 2.5.5 In the context of this assessment it is considered that non-visual sensory influences (i.e. noise) are most relevant to the *aesthetic* and *communal* values as defined above.
- 2.5.6 These effects would be most prevalent where the historical, architectural or archaeological components of the heritage assets are actively experienced by the community. Examples of this would be within a Conservation Area or within a historic parkland or garden. The heritage value of these areas is derived in part from sensory and intellectual stimulation from a place (aesthetic) and from the meaning of the place for the people who relate to it (communal). Equally, the significance of an individual Listed Building or Scheduled Monument could be particularly sensitive to increased aural intrusion if their aesthetic or communal values are considered to make a large contribution to their significance.
- 2.5.7 Noise could be an inherent/appropriate part of the setting of a heritage asset, for example the sound of steam engines in a working Victorian engine shed. Equally the absence of anthropogenic sound could be important to the experience and value of a designed parkland landscape where tranquillity, peacefulness and the sound of nature were part of its original design and function as a place of relaxation and pleasure.
- 2.5.8 The baseline data within the Study Area will be identify heritage assets where non-visual sensory influences (aural setting) inform its key heritage values and significance. This cannot be a mechanistic process and will be carried out using, in a qualitative way, professional judgement on a site by site basis with reference to the guidance cited above.
- 2.5.9 Where sensitive heritage assets with sensitive aural settings are identified a short summary detailing their location, physical description, historic development and the values and factors which inform the aural setting/significance of the heritage assets will be provided.

### **3 RESOURCE ASSESSMENT**

#### **3.1 Introduction**

- 3.1.1 To the east of the airport there is an area stretching from Cranford to Ealing where a significant increase in noise from overflying aircraft is predicted. This is a fairly dense urban area incorporates the settlements of Heston, Norwood Green, Southall and the western side of Ealing.
- 3.1.2 Within this area there are the following designated heritage assets: one Scheduled Monuments, nine Listed Buildings, one Registered Park and Garden and four Conservation Areas.
- 3.1.3 The historic cores of settlement such as Heston and Norwood Green are Conservation Areas containing Listed Buildings of predominantly Grade II, with some Grade II\* Listed Buildings contributing to their character.
- 3.1.4 To the east of Norwood Green and on the edge of the Northern Overflying Zone is the Grade I Listed Osterley Park house, an 18<sup>th</sup> century designed landscape which is a Grade II\* Registered Park and Garden. The property is owned by the National Trust and is open to the public.
- 3.1.5 The importance of this area in the development of commercial aviation is represented by the surviving buildings of Heston Aerodrome which are Grade II Listed. Another key component of the modern landscape is the Grand Union Canal. The corridor of the canal is a Conservation Area with a number of listed structures including bridges and locks along this length. Some more substantial examples of surviving lock mechanisms to the south of Ealing Hospital are designated as a Scheduled Monument, as is Windmill Bridges which incorporates three bridges designed by Brunel to carry the railway and canal.
- 3.1.6 The following section provides a description of each designated heritage asset within the area where significant changes to air noise are predicted. Each description includes a statement on whether the significance of that asset is informed an aural setting which is sensitive to the predicted changes.
- 3.1.7 For the purposes of this assessment where area-based designations such as Registered Parks and Gardens or Conservation Areas contain individual designated heritage assets (e.g. Listed Buildings, Scheduled Monuments) all the designated heritage assets within that larger area are considered and assed as a single entity on the basis of their combine group value.
- 3.1.8 This should ensure that double counting of designated assets such as component parts of designed parkland is avoided and that the resource is assessed holistically. Where individual heritage assets lie outside the larger area based designations then these will be assessed individually on their own merit to establish how/if they are sensitive.

#### Hangar at Heston Air Parks (No. 1393114)

##### Location

Grade II Listed Hangar at Air Parks (No. 1393114) is located in Aerodrome Way, Heston, London Borough of Hounslow, c.7.4km to the north-east of Heathrow Airport. The Hangar is centred on NGR 511381 177632.

##### Description

The Hangar was designed by L.M. Austin and H.F. Murrel and constructed by A. Jackamann & Sons Ltd of Slough in 1929. A single storey extension to the west was built c.1935 in an Art Deco style. Late 20th century alterations and extensions are also present. The Hangar is one of the original airfield buildings and one of four hangars, distinguished from them by its unusual design.

The rectangular hangar measured approximately 30m west-east by 24m north-south and was made of reinforced concrete, corrugated roof material and metal windows. It was the first all-concrete aircraft hangar built in Britain, different from contemporary civilian and military hangars. Its reinforced concrete frame had a highly distinctive, elegant curved profile. A single large modern roller shutter door, providing access to main hangar, were located to the south. The Hangar was designated in 2009.

#### Stansfield House, Cranford (No. 1080305)

##### Location

Grade II Listed Building, Stansfield House (No. 1080305) is located to the north-west of High Street, Cranford, London Borough of Hounslow, c.3.4km to the north-east of Heathrow Airport and is centred on NGR 510568 177264. It lies within the Cranford Village Conservation Area, designated in 1991.

##### Description

Stansfield House lies to the back of a property surrounded by mature trees and its façade faces the street to the south-east. It is a large 18th century two-storey brown brick building with a hipped Welsh slate roof and a slight projection of centre. The windows comprise double-hung sashes in plain surrounds and yellow brick flat arches. Three stone steps lead to door surrounded by fluted Roman Doric pilasters. Office wings are located to north and south of main building. The property's gate piers of brown brick include elaborately carved stone vases. It was designated in 1951.

#### The Rectory, Cranford (No. 1240696)

##### Location

Grade II Listed Building, the Rectory (No. 1240696) is located at number 1, Church Road, Cranford, London Borough of Hounslow, c.3.8km to the north-east of Heathrow Airport and is centred on NGR 510698 177983.

##### Description

The north facing Rectory building is located in the centre of a property enclosed by mature trees. It is an 18th century brick house of two and a half storeys, with a Victorian front, but its core structure has been dated to the 17th century. The building has a steep tiled roof over the central part, which runs into the taller cross roof of the western wing and is hipped over the roof of the eastern wing. Two stacks with tall diagonal chimneys are located to the west of the centre of the building. The building is at present occupied by a nursery school. It was designated in 1980.

### Cranford Park Bridge (No. 1080159)

#### Location

Cranford Park Bridge is a Grade II Listed Building located within London Borough of Hillingdon and Hounslow (No. 1080159). It lies within the Cranford Park Conservation Area, c.3.6km to the north-east of Heathrow Airport, and is centred on NGR 510336 177108.

#### Description

Cranford Park Bridge over the River Crane is a road bridge carrying an unnamed road off The Parkway. It is a red brick bridge of late 18th century date, with 20th century render. It is characterised by a central segmental arch with key block, flanked by panelled piers on semi-circular plinths. It has swept parapet walls with two panelled sections separated by a panelled pier. The bridge was designated in 1974.

### Cranford Park and Village Conservation Area

#### Location

Cranford Park Conservation Area is located in London Borough of Hillingdon and is centred on NGR 510065 177810. It is bound to the north by the M4 Motorway, to the east by the River Crane and the Cranford Village Conservation Area, to the south by Bath Road and to the west by Cranford Lane and Frogs Ditch. It was designated in early 1900s.

Cranford Village Conservation Area is located in London Borough of Hounslow and is centred on NGR 510500 177150. It is bounded to the west by the River Crane and the Cranford Park Conservation Area, to the north by the M4 Motorway, to the east by The Parkway and to the south by Bath Road. It was designated in 1991.

Both Conservation Areas lie c.2.9km to the north-east of Heathrow Airport.

#### Description

Cranford Park Conservation Area occupies a sub-rectangular plot of land of approximately 42ha, while the Park, partially located within London Borough of Hounslow, lies within 58ha of land. The Park comprises the surviving remains of the former Berkeley family country estate and the River Crane flows through the Park along a north-south alignment. The natural areas in the Park include woodlands, wildflower meadows and wetlands that comprise marshland, ditches and ponds. Several important historic features of the 18th century country house and park have been preserved in the northern part of the Park and are listed at Grade II. The cellars (No. 1285115) are the only surviving part of the Cranford House, which was demolished by 1945. The Stables (No. 1080157), a rectangular building, are located to the north of the cellars and are the only preserved building of the former estate. Numerous garden and park features survive within the northern part of the Park and these include garden and boundary walls (Nos. 1080158, 1181206, 1358387-88) and ha ha walls (No. 1285085). Two bridges above the River Crane are also located within the Park (Nos. 1080159 and 1080149).

The Grade II\* medieval St. Dunstan's church is located within the northern part of the Cranford Park Conservation Area. The church has a 15<sup>th</sup> century tower and a nave and chancel under pitched roofs. The collection of 17th century monuments and 14th century wall paintings inside the church are of high importance.

Cranford Village is located alongside the northeast-southwest aligned High Street, where the Grade II Listed buildings are situated. At the southern end of the High Street, in a straggling lane, a small building of the 1838 Village Lock-Up (No. 1080306) is located. The building, known as the Round-House, was made of brick and was used to imprison people caught on Hounslow Heath. Stansfield House, located to the north-east of High Street, is a large 18th Century brown brick house set back from the road. The remainder of the village is occupied by 20th century buildings, of which the 1930s Hotel and matching buildings at the junction of The Avenue and Bath Road, were built modestly in the Scottish Baronial style.

## Cranford Park and Village Conservation Area

### Historic Development

Before the Second World War, Cranford village comprised a great house in a park, with the parish church in the vicinity, and the village to the east.

Cranford is of early medieval origin and was mentioned in the Domesday Survey (1086) as Cranforde. Before the Conquest the manor was held by Thurstan, a thane of King Edward and in 1086 passed to William Fitz Ansculf. His descendants acquired the barony of Dudley and Cranford belonged to the barony at least until the end of 13th century. The manor was eventually bought by Lady Berkeley in 1618. The 18th century Cranford House, the former mansion within the Park, was demolished by 1945 due to its appalling state, and the only surviving elements of the house are the cellars. The estate's lands were sold between 1916 and 1935 and the Cranford House and Park were then acquired by the Hayes and Harlington Urban District Council.

It is likely that an earlier church stood on the site of St Dunstan's church, as the Domesday Survey mentions a pre-Conquest priest at Cranford. The present church dates back to the 13th century, with a 15th century tower and an 18th century nave.

Cranford village developed to the south-east of the estate alongside the present High Street. Only a few original 18th century buildings, such as Stansfield House and The Village Lock-Up remain in the village, and the Conservation Area is predominantly occupied by 20th century structures. The Hotel, located at the junction of The Avenue and Bath Road is from 1930 and was built in a modest form of the Scottish Baronial style. In The Avenue and Firs Drive, well maintained houses built in the 1930s are located.

The historical entity of Cranford estate and village has been severed by the Borough boundary, locating the majority of the Park and church in Hillingdon and the village in Hounslow.

## Norwood Green Conservation Area

### Location

Norwood Green Conservation Area, designated in 1969, is located within the London Borough of Ealing, c.6.3km to the north-east of Heathrow Airport, and is centred on NGR 513310 178620. It occupies an irregular parcel of land of approximately 31ha located alongside the northwest-southeast aligned Norwood Road and the northeast-southwest aligned Tentelow Lane and is bounded to the south-east by Osterley Park.

### Description

Norwood Green partially retained the rural character of the village and the widely spaced properties are located around The Green, the church of St Mary and along Tentelow Lane. The triangular Green, defined by Tentelow Lane, Norwood Road and Norwood Green Road, forms the centre of the village, where the major buildings are situated. The open layout of the village is characterised by The Green, which creates a large open space, surrounded by mature trees.

There are seven Listed Buildings within the Conservation Area. Five of them, including the Grade II\* Church of St Mary (No. 1189501) and Former Norwood Free School (No.1079381), are located to the north-east of The Green. The church, largely restored in the 19th century, is of medieval origin. The school is an 18th century building with a unique painting. The remaining Grade II Listed Buildings in the area comprise The Plough Public House (No. 1189507), Robins Memorial (No.1358800) and the 19th century Norwood Hall (No. 1079330).

Two further Grade II Listed Buildings are located in Norwood Green Road (Friars Lawn The Grange, No. 1189378) and in Norwood Road (building, No. 1079397).

## Norwood Green Conservation Area

### Historic Development

The name Norwood suggests Saxon origins and it is considered that a settlement has been located around a church since at least the 12th century. The present church of St Mary was built on the site of the previous structure. In 1859 the former precinct of the parish of Hayes became an independent parish.

The 1754 map shows that the village developed along The Green and Tentelow Lane. The late 18th century village is known to have been located within an arable landscape and little change appeared until the introduction in the mid-19th century of industries alongside the Grand Union Canal. The brick making industries required clay, which was quarried from fields in the Norwood Green parish. The 19th century residential development of the village introduced a number of villas, however, only a few of these structures survived the war and later demolitions. In the early 20th century, further residential estates were built alongside Tentelow Lane and Norwood Road.

## 4 CONCLUSIONS

- 4.1.1 The following table summarises the heritage assets and the sensitivity of their aural settings within the areas where significant change to Ground and Air noise are predicted.

Name	Sensitivity of aural setting
Hangar at Heston Air Parks Grade II Listed Building (No. 1393114)	Not sensitive
The Rectory, Cranford Grade II Listed Building (No. 1240696)	Not sensitive
Stansfield House	Not sensitive
Round House	Not sensitive
Cranford Park Bridge	Not sensitive
Bridge over the River Crane	Not sensitive
Cranford Park and Village Conservation Area	<b>Sensitive</b>
Norwood Green Conservation Area	<b>Sensitive</b>

- 4.1.2 It is clear that heritage assets such as historic parks or gardens or Conservation Areas are the heritage assets with sensitive aural settings within the context of this study.
- 4.1.3 This information will inform an impact assessment taking into account the duration, frequency and decibel level of the aircraft noise within the area of significant change and the severity of any resulting effect judged accordingly.

## **5      *BIBLIOGRAPHY AND REFERENCES***

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### **Other Sources**

*BAA Engineering Information Centre, Heathrow*

*English Heritage*