

1. Introduction

- 1.1 This Environmental Statement (ES) accompanies an outline planning application submitted on behalf of the Sandwell and West Birmingham NHS Hospital Trust (SWBHT) for the redevelopment of land at Grove Lane, Smethwick to provide a new acute hospital, administration and research building and car parking. The application site covers an area of 6.76 ha (16.7 acres) located in north Smethwick in the Metropolitan Borough of Sandwell. The application site boundary is shown edged red on the site location plan (Figure 1). The site is currently in multiple ownership, none of which is NHS.

Form and Content of the Application

- 1.2 The application is submitted in outline form, with all matters except access reserved for subsequent determination. However, in accordance with the requirements of the Town and Country Planning (General Development Procedure) (Amendment) (England) Order 2006, the following information has been provided:

- Approximate location of buildings, routes and open spaces;
- Upper limits for height, width and length of each building; and
- Location of the access points to the development.

- 1.3 In addition to this ES, the planning application is accompanied by a number of supporting documents, which together form the application package, as listed below:

- Duly completed application form and ownership certificate;
- Planning Statement;
- Transport Assessment and Green Travel Plan;
- Design and Access Statement;
- Statement of Community Involvement;
- Flood Risk Assessment; and

- Application plans (core and supplementary).

1.4 The new hospital will be delivered by a PFI partner following a competitive tendering process.

Environmental Statement

1.5 SWBHT have not submitted a Screening Application to Sandwell Metropolitan Borough Council (SMBC) in order to establish whether an Environmental Impact Assessment of the proposals is required. Instead, following initial considerations of the potential environmental impacts of the scheme, a voluntary Environmental Statement has been prepared in accordance with the provisions of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999.

1.6 In accordance with the afore mentioned regulations a Scoping Application was submitted to SMBC on the 4th December 2007. The Scoping Opinion was provided by SMBC on 7th January 2008 (Appendix 1.1) and confirmed that the Environmental Impact Assessment should include the details set out in the Scoping Report. One consultation response from Natural England was received during the statutory consultation process. Subsequently correspondence from Severn Trent and the Environment Agency was sent to Sandwell MBC and forwarded for consideration. This ES addresses all points which have been raised by the consultees and the ES has been prepared in accordance with the agreed Scoping Report.

Context

1.7 The SWBHT is working with other NHS organisations and the two local authorities in Sandwell and Birmingham as partners in “Towards 2010”. The programme plans to invest up to £750 million in improving health and social care services and facilities in Sandwell and west Birmingham. A key component of this programme will be to significantly improve acute facilities. The extent to which these facilities are devolved locally will determine the shape of the wider community provision required.

1.8 Sandwell and West Birmingham have some of the highest levels of deprivation in the country. The local health and social care services face very challenging health needs. The need for major investment to develop and improve health and social care services to address these needs was formally recognised in the Strategic Outline Case (SOC) prepared by the ‘Towards 2010 Programme’ team in 2003/4. The SOC set out a clear direction of travel to deliver a vision of improved physical, mental and social well being for the population of this area and described the need to redesign the whole health and social care system by creating a major step change in service provision. The SOC outlined the requirement to transfer care into the

community and to provide facilities closer to home. The SOC was approved by the Department of Health in 2004.

- 1.9 The provision of a new acute hospital is a key facet of Towards 2010 and an outline business case is currently being prepared. The Grove Lane area has been identified as the preferred location for the development of a new hospital following an option appraisal exercise. This area has been selected because of its central location; its accessibility to patients and emergency vehicles and because of the considerable regeneration and economic benefits that the scheme will bring to this area. It will also help to retain key employment locally (with over 5,000 jobs) as well as complementing other local regeneration initiatives in the Regeneration Zone and Housing Market Pathfinder area.

2. Method Statement

Background to the Project

- 2.1 The Sandwell and West Birmingham Hospitals NHS Trust have instructed a technical team of consultants to prepare an outline planning application for the proposed development of a new acute hospital on the Grove Lane site. The consultancy team appointed to undertake the EIA are summarised in Table 2.1 below:

Table 2.1: Consultancy Team

Company	Specialism
GVA Grimley Ltd	Property Planning Consultants and Lead Consultant for OPA <i>Planning Policy and Socio-Economic Impacts</i>
AEDAS	Architect and Masterplanners <i>Townscape and Visual Character</i>
Halcrow	Environment and Transport <i>Archaeology and Cultural Heritage; Ecology; Water Resources; Transport; Air Quality; Noise and Vibration; Soils, Geology, and Contamination; and Waste.</i>

Objectives, Approach and Scope of Assessment

- 2.2 The general approach to the production of this ES follows best practice guidance and covers those areas referred to in Schedule 4 'Information for Inclusion in Environmental Statements' of the Town and Country Planning (EIA) (England and Wales) Regulations, 1999, which includes the following:
- Method Statement (Chapter 2);
 - Description of the proposed development and existing environmental conditions within and surrounding the application site (Chapter 3);
 - Statement of key environmental issues, providing a summary of main constraints to be considered (Chapter 4);
 - Assessment of policies and plans relevant to the proposed development (Chapter 5);

- Description of the aspects of the environment likely to be significantly affected by the proposed development including, in particular:
 - Socio-economic (Chapter 6);
 - Air Quality (Chapter 7);
 - Noise and Vibration (Chapter 8);
 - Soils, Geology and Contamination (Chapter 9);
 - Water Resources (Chapter 10);
 - Ecology (Chapter 11);
 - Townscape and Visual Character (Chapter 12);
 - Archaeology and Cultural Heritage (Chapter 13)
 - Waste Management (Chapter 14);
 - Transport (Chapter 15).
- 2.3 An indication of the interaction of factors and cumulative effects (Chapter 16), with a summary of predicted impacts tabled in Chapter 17 (Summary and Conclusions).
- 2.4 The main objective of producing this ES is to provide a systematic analysis of potential environmental effects, which may occur as a consequence of the proposed development on the Grove Lane site in Smethwick. The overall approach taken is broken down as follows:

Existing Baseline Conditions

- 2.5 Baseline studies have been carried out by the relevant specialists to examine the environmental character of the area which might be affected by the proposed development. Natural and man-made processes which currently exist and may already be altering, and may continue to alter the character of the site in the future, have been identified, where applicable.

Predicted Impacts

- 2.6 The interaction of the proposed development with these existing baseline conditions, and potential future site conditions, are then considered and the likely effects predicted. As discussed below, an assessment has been made as to the significance of the likely effects in terms of nature, extent and magnitude for each stage of the Proposed Development (site clearance/preparation, construction and commissioning, and operation).

Scope for Mitigation/Enhancement Measures

- 2.7 Appropriate mitigation measures, incorporating design and operational measures, to seek to minimise effects of adverse impacts and enhance beneficial or positive impacts are proposed. A 'Statement of the Significance' of the resultant impacts is provided in relation to each aspect of the environment considered.

Specialist Surveys

- 2.8 Following initial work undertaken on the baseline surveys, including consultation with various bodies, additional specialist surveys were identified as being required and have been undertaken as part of this ES as listed below:

- Noise monitoring;
- Traffic surveys;
- Bat survey;
- Black Redstart survey; and
- Water Vole survey.

Consultations

- 2.9 Whilst there is no specific requirement upon an applicant to consult about the information to be included with an ES (Circular 02/99, paragraph 87), as a matter of good practice, the consultant team has consulted with the following organisations:

- Sandwell Metropolitan Borough Council;
- Birmingham City Council
- Department of Health;
- CABI;
- Environment Agency;
- Natural England;
- Centro;
- Travel West Midlands;
- Health and Safety Executive and
- Severn Trent.

- 2.10 The initial responses were used to define the scope of this ES; identify the main environmental issues (direct and indirect) requiring assessment in detail; and identify available baseline data and any further surveys required.

Approach to Evaluation of Scale and Significance of Impacts

- 2.11 For each environmental topic area of this ES, existing baseline conditions have been established. Then, a number of criteria have been used to determine the significance of likely effects against the baseline conditions as outlined in the subsequent chapters.
- 2.12 Primary or direct impacts can be defined as those effects caused by an action, which generally occur at the same time and place as the action. They are generally associated with the construction, operation, or maintenance of a facility or activity and are obvious or quantifiable. Secondary or indirect impacts of an action are defined as induced changes in the environment, population, economy, and land use, and other environmental effects resulting from changes in the environment, land use or population of an area. These changes generally occur later in time or in a different place. Impacts can be short or long term depending on their persistence or duration.
- 2.13 Effects have been assessed quantitatively, where possible and the significance of effects has been assessed using one or more of the following criteria:
- International, national, regional and local standards;
 - Relationship with planning policy;
 - Sensitivity of receiving environment;
 - Reversibility of effect;
 - Duration of effect; and
 - Inter-relationship between effects.
- 2.14 The likely significant effects of the proposed development, compared to baseline conditions and prior to the implementation of mitigation measures, have been identified in this ES. Pre-mitigation effects have been identified as being of high, medium or low significance. The residual effects, that is impacts (beneficial or negative) remaining after mitigation measures have been implemented, are also discussed.

- 2.15 A summary matrix of the key environmental issues, potential mitigation measures and residual effects is provided in Chapter 17 (Summary and Conclusions). A distinction between direct and indirect; short, medium, and long term; permanent and temporary; primary and secondary; cumulative; and positive and negative effects has been made within this summary chapter.

Consideration of Alternative Development Proposals

- 2.16 The approach to alternative development proposals and selection of the preferred option is discussed in Chapter 3 (Description of Site and Proposed Development).

Guidelines, Methods and Techniques Used

- 2.17 This Environmental Statement has been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 and the Department of Environment, Transport and Regions Circular 02/99 *Environmental Impact Assessment*, 12th March 1999. Reference has been made to the DETR's *Good Practice Guide for Environmental Assessment* (1995) and the *Environmental Impact Assessment Handbook* 2002. All relevant British standards are referred to where relevant. Additional guidelines, methods and techniques are considered under appropriate environmental topic areas.

17. Summary and Conclusions

17.1 The proposed development is for a new acute hospital, new education, research and administration centre, and associated uses. Given the scale of the proposed development, a comprehensive evaluation of the potential environmental effects has been undertaken, and appropriate mitigation measures proposed. A summary of this analysis is contained in Table 17.1.

Table 17.1: Summary and Conclusions

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
CHAPTER 6 SOCIO-ECONOMIC						
6.1	Potential impact on employment	D	LT/IR	Moderate	<ul style="list-style-type: none"> Majority of jobs will be transferred rather than new job creation. New temporary construction job creation could be beneficial to local community area. Impact of induced and indirect employment is likely to benefit the local economy. 	
6.2	Potential impact on community	L	LT/IR	Moderate	<ul style="list-style-type: none"> Range of local facilities in the local area, Dudley Road and Cape Hill. Facilities provided on site (including gym, crèche and restaurant and café) and potentially other uses as part of the regeneration of the wider Grove lane area (small scale retail). 	
6.3	Changes in movement and travel patterns	D	LT/IR	Moderate	<ul style="list-style-type: none"> A number of sustainable transportation measures are proposed as part of the Travel Plan measures. 	

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
CHAPTER 7 AIR QUALITY						
7.1	Construction dust	L	ST	Minor negative	<ul style="list-style-type: none"> Adoption of industry best practice and best practicable means (BPM) These measures are likely to include techniques such as: <ul style="list-style-type: none"> all plant and equipment to be maintained in accordance with appropriate legislation or manufacturers recommendations to ensure emissions to atmosphere are minimised; engines of plant and machinery and lorries to be turned off at all times when not in use; no burning of material to take place on site; ensure adequate water supply on site; ensure run-off water from dust suppression activities is disposed of in accordance with appropriate legal requirement; wheel washing at the exits from construction areas where there is a potential for dust and mud to be carried on to the highway; 	Adoption of BPM will provide a defence in law against prosecution for Statutory Nuisance

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
					<ul style="list-style-type: none"> regular visual monitoring of construction activities to identify any significant dust sources; location of potentially significant dust sources away from construction site boundaries wherever possible; water suppression in dry conditions to reduce dust emissions (use mobile bowzers or fixed sprayers as appropriate); a speed limit applied to all construction vehicles working on the construction site; minimising heights for any stockpiles and tipping operations; avoid double handling of excavated material wherever practicable; seal or re-vegetate completed earthworks as soon as reasonably practicable after completion; use of solid hoardings around the site boundary and dust generating activities; sheeting of loads during transport of dusty/friable material; and ensure deliveries of bulk cement and other similar powder materials are in enclosed tankers and stored in suitable 	

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
					<p>silos with emission control systems to prevent escape of material and overfilling during delivery.</p> <p>Where construction activities are close to potentially sensitive receptors, additional dust control procedures should be adopted as appropriate.</p> <p>These may include:</p> <ul style="list-style-type: none"> ▪ avoiding earthworks during dry weather or provision of additional suppression equipment to control dust; ▪ ensure mixing of cement, grout and other similar materials takes place in locations remote from sensitive receptors or is totally enclosed; and ▪ use increased hording heights around sensitive receptors. ▪ 	
7.2	Traffic related emissions during operational phase	R	R	insignificant	<ul style="list-style-type: none"> ▪ Adoption of appropriate Travel Plan measures and SMBC Air Quality Action Plan measures 	There is expected to be a reduction in pollutant concentrations over time due to improved vehicle echnology.

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No.	Description of Impact	Level of Importance	Nature	Significance	Mitigation	Comments
Chapter 8 Noise and Vibration						
8.1	Construction Noise	L	ST	Low	Adoption of Best Practical Means as defined in the Control of Pollution Act 1974. A range of generic mitigation measures have been suggested, as set out in BS 5228 Noise and vibration control on construction and open sites.	The impact of construction noise will be temporary. Generic mitigation measures may reduce noise levels by approximately 5-10dB(A)
8.2	Construction vibration	L	ST	Low	No specific mitigation measures have been identified.	No specific mitigation measures have been identified at this stage due to the uncertainty of the piling method and the exact location. It is unlikely that perceptible levels of vibration will occur off site. However it is important that vibration from impact piling be reconsidered in more detail at the detailed design stage.
8.3	Road Traffic Noise	L	LT	Low	No specific mitigation	Changes in road traffic noise at sensitive properties adjacent to the local road network will be barely perceptible
8.4	Operational Noise	L	LT	Low	Providing that any noise limits set for fixed plant items are complied with no further mitigation measures will be considered necessary.	Where there are to be fixed items of plant, for example air handling units or chillers associated with the proposed development, full consideration will be given to the application of suitable noise limits.

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
CHAPTER 9 SOILS, GEOLOGY AND CONTAMINATION						
9.1	Risk of encountering Alluvium.	L	ST	Medium	<ul style="list-style-type: none"> Where the Alluvium is present piled foundations may be required. 	No further comments
9.2	Risk of encountering elevated chemicals and ground gas within the Made Ground	L	LT	Medium	<ul style="list-style-type: none"> Remediation or removal of any significant contamination encountered will be required. 	Protection of construction against sulphates, ground gas etc. to be undertaken in accordance with normal practices.
9.3	Risk of the Glacial Till having a continuous 'granular' pathway for any contaminants present reaching the underlying aquifer.	D	LT	Low	<ul style="list-style-type: none"> Where further deep exploratory investigation or piling is required suitable aquifer protection measures may be required. 	Environmental Agency published guidance to be followed, where relevant.
9.4	Risk of encountering obstructions (i.e. concrete floors, relict foundations, buried & backfilled canal) during future investigations and during construction.	L	ST	Medium	<ul style="list-style-type: none"> Selective removal of obstructions may be required in order to enable further investigations and/or construction to be undertaken. 	No further comments
Impact No.	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
Chapter 10 Water Resources						
10.1	Pollution and dewatering of underlying major aquifer (ground protection zone) from mobilisation of contaminants through construction of foundations, earth	R	LT/IR	Minor	<p>The following mitigation measures should be specified in the CEMP:</p> <ul style="list-style-type: none"> A temporary site drainage system should be installed to intercept site runoff, particularly in vehicle wash down 	If mitigation measures, as outlined in the ES, are adhered to there should be negligible impact on the water quality and resource availability of the underlying aquifer.

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
	movement or spillages.				<p>areas.</p> <ul style="list-style-type: none"> All fuel and chemicals should be stored in a dedicated, bunded area in water tight containers. Plant should be regularly inspected for leaks and stored on drip trays Site compound should be secured against illegal entry. Appropriate piling techniques will be adopted and agreed with the EA. Construction methods will ensure that localised contamination spots are not mobilised. Piles of earth should be stored on impermeable liners if not carted from site. Abstraction of ground water should be closely monitored during the construction phase through the use of boreholes to observe changes in water levels. If abstracted water is to be used for any other use than to solely prevent interference with building operations at a rate >20m3 then an abstraction licence is required from the EA. A discharge licence may be required from the EA if silty/contaminated water is to be disposed of. An emergency response plan should be established in the event of a spillage/accident & a spillage kit available. 	

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
					<ul style="list-style-type: none"> Further information available at www.netregs.gov.uk 	
10.2	Foul flooding – loss of foul sewer connections/service through demolition & earth movement activities during construction to public sewers and third party drainage systems crossing the site.	L	ST/R	Negligible	<ul style="list-style-type: none"> A full drainage survey should be undertaken prior to demolition of any buildings on site to identify third party assets and all surface water and foul sewerage connections. 	Severn Trent's assets in the locality have been identified. There are no public sewers crossing the site. However private third party sewers may be present. A CCTV investigation of the existing drainage system at the site should be undertaken as part of the drainage strategy.
10.3	Canal Feeder & Boundary Brook Culvert – structural stability/collapse through excavation and movement of earth adjacent to these structures.	D	LT/R	Minor	<ul style="list-style-type: none"> There will be no buildings (inc. fences and walls) within 5m of the edge of the Boundary Brook culvert. Works adjacent to the canal feeder should be undertaken in accordance with British Waterways Code of Practice for Works Affecting British Waterways. 	
10.4	Deterioration of surface water, groundwater quality and increased flood risk from surface water runoff and interruption of groundwater flows.	R	LT/IR	Minor	<ul style="list-style-type: none"> A detailed drainage strategy adopting SuDS techniques will be undertaken in consultation with the EA to establish design criteria. SuD systems proposed for the site should not include soakaway techniques due to contamination present and underlying protected groundwater. The rate of surface water runoff will match existing and provide betterment (attenuation measures) to reduce the risk of flooding. Sud systems should be protected from surface water runoff that may be 	If there is an increase in foul flows from the site, consultation with the sewage undertaker should be carried out to determine whether the public sewerage system has the capacity for additional loads.

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
					contaminated during construction.	

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
CHAPTER 11 ECOLOGY						
Construction Phase						
11.1	Infilling of the Southern end of the Cape Arm Canal Key impacts on habitat, bat and bird foraging and bat commuting	L	Negative LT & IR	Not Significant	<ul style="list-style-type: none"> CEMP Fish rescue Enhancement of retained habitat 	The length of canal to be infilled shortens the Wildlife Corridor and does not sever it. Enhancement to the retained canal results in an overall negative impact but mitigates the significance, since integrity of the retained habitat is greater than that pre-construction.
11.2	Pollution incidents to adjacent canal habitat	L	Negative ST & R	Not Significant	<ul style="list-style-type: none"> Pollution prevention measures Dust control measures 	Integrity of habitats will not be reduced by pollution following implementation of mitigation.
11.3	Pollution incidents to designated canal sites at a distance from the site	M	Negative ST & R	Not Significant	<ul style="list-style-type: none"> CEMP Pollution prevention measures 	Mitigation for impact 2 will also mitigate for impact 3.
11.4	Removal of vegetation during site clearance	L	Negative ST & R	Not Significant	<ul style="list-style-type: none"> Use of local species and species rich mixes in landscape scheme 	The operational re-development scheme will create a greater extent of landscaped vegetation on the site than exists prior to construction.
11.5	Demolition of buildings and subsequent loss of roosting opportunities for	L	Negative LT & IR	Not Significant	<ul style="list-style-type: none"> Pre-construction checks for bats 	Alternative bat roosting opportunities should be located close to the canal.

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
	bats				<ul style="list-style-type: none"> • EPS license and closure of bat roosts if necessary • Provision of alternative bat boxes 	
11.6	Construction noise impacts on nearby roosting bats	L	Negative ST & R	Not Significant	<ul style="list-style-type: none"> • Noise and disturbance control measures 	Impact depends on the presence of local bat roosts close to the site.
11.7	Construction lighting impacts on foraging bats	L	Positive ST & R	Not Significant	<ul style="list-style-type: none"> • None required 	Soprano pipistrelles are attracted to lighting to feed.
11.8	Construction lighting impacts on commuting bats	L	Negative ST & R	Not Significant	<ul style="list-style-type: none"> • Restrictions on night working and light spillage 	Lighting only to be installed and used where and when strictly necessary, since soprano pipistrelles avoid lighted flight paths.
11.9	Loss of nesting and foraging opportunities for birds in landscaped vegetation due to clearance	L	Negative ST & R	Not Significant	<ul style="list-style-type: none"> • Breeding bird checks • Use of local species and species rich mixes in landscape scheme 	The operational re-development scheme will create a greater extent of suitable habitat for passerine birds on the site than exists prior to construction.
11.10	Loss of rubble habitats for foraging black redstart	B	Negative LT & R	Not Significant	<ul style="list-style-type: none"> • Continued black redstart monitoring • Include black redstart suitable habitat in design 	<p>Black redstart are not confirmed on site, however monitoring should continue since the demolition phase could increase the attractiveness of the site to the species.</p> <p>As a BBCBAP species the suitable habitat on the site should be mitigated for even if the species is not confirmed on site before or during construction.</p>

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
11.11	Loss of vertical structures for black redstart nesting	B	Negative LT & R	Not Significant	<ul style="list-style-type: none"> Pre-construction checks for breeding birds Provision of alternative nesting opportunities 	See above, impact 10.
Operational Phase						
11.12	Pollution incidents affecting canal adjacent to application site (runoff)	L	ST & R	Not Significant	<ul style="list-style-type: none"> See chapter 10. 	Runoff from hard surfaces in the development are likely to be less polluting than pre-construction industrial contaminants.
11.13	Changes to canal edge habitat along pedestrian routeway	L	ST & R	Not Significant	<ul style="list-style-type: none"> Enhancement of retained canal habitat 	Increased soft banks and vegetation compensate for any losses in refuges within gaps in brick banks.
11.14	Disturbance to aquatic fauna from pedestrian routeway	L	Negative LT & R	Not Significant	<ul style="list-style-type: none"> None required 	The level of disturbance to the canal by pedestrians is not considered sufficient to be significant.
11.15	Planting in landscape scheme	L	Positive LT & R	Not Significant	<ul style="list-style-type: none"> See mitigation for impact 4 	See comments for impact 4.
11.16	Street lighting impacts on foraging bats	L	Positive LT & R	Not Significant	<ul style="list-style-type: none"> None required 	See comments for impact 7.
11.17	Street lighting impacts on commuting bats	L	Negative LT & R	Not Significant	<ul style="list-style-type: none"> Bat sensitive lighting design especially close to canal 	Lighting only to be installed and used where and when strictly necessary. See comments for impact 8.
11.18	Impact of landscape planting on passerine bird foraging and breeding	L	Positive LT & R	Not Significant	<ul style="list-style-type: none"> None required 	See comments for impact 4.

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
CHAPTER 12 LANDSCAPE, TOWNSCAPE AND VISUAL IMPACTS						
Impact No	Description of Impact	Level of Importance	Nature	Significance	Mitigation	Comments
12.1	Replace existing industrial buildings and infrastructure with new hospital, associated buildings, infrastructure and landscape setting.	D	LT	Significant	<ul style="list-style-type: none"> The proposed landscaped setting including tree planting, canal side walks and hard & soft public realm open spaces. 	

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
CHAPTER 13 ARCHAEOLOGY AND CULTURAL HERITAGE						
13.1	Demolition of historic industrial buildings within the application site	D	IR	No significant effect	<ul style="list-style-type: none"> Standing building recording carried out to a scope determined by the Sandwell Borough Archaeologist 	Buildings should be subject to a standing buildings assessment in the first instance, in order to inform a final mitigation strategy
13.2	Clearance of buildings alongside Cape Arm Canal side area	D	IR	No significant effect	<ul style="list-style-type: none"> Mitigation through design – green open space adjacent to Canal may improve setting of the Canal 	
13.3	Alteration of area abutting Conservation Area	D	IR	No significant effect	<ul style="list-style-type: none"> Landscaped green open space adjacent to Canal will enhance setting of Conservation Area 	
13.4	Disturbance, destruction and/or truncation of buried archaeology	Unknown	IR	Unknown	<ul style="list-style-type: none"> No mitigation strategy can be provided at this stage. Recommend intrusive archaeological trial trenching investigation to determine the character, extent and level of survival of buried archaeology. This programme of works will inform a robust mitigation strategy 	Intrusive investigation will possibly be requested as a condition of planning consent. The earlier this is conducted, the less potential the issues surrounding potential buried archaeology have of impacting on construction programmes
Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
CHAPTER 14 Waste Management (after mitigation)						
14.1	Demolition materials	R	ST	No significant effect		
14.2	Construction and site preparations – construction	D	ST	Minor significant (adverse)		

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
	and excavation waste.					
14.3	Operational – domestic and commercial waste.	D/R	LT	No significant effect		
Impact No.	Description of Impact	Level of Importance	Nature	Significance	Mitigation	Comments
Chapter 15 Transport						
15.1	Increased volume of construction traffic on local roads during hospital development	L	ST	Low	Phased construction to reduce severity of traffic impact. Agree routing and hours of operation with SMBC and BCC.	The impact of construction is temporary.
15.2	Construction traffic car parking on localised roads	L	ST	Low	Sufficient parking provision to cater for demand, particularly during construction if hospital opening is 'phased'. There is enough land to accommodate all parking within development land	The impact of associated parking with construction is temporary and there will be adequate land available to allow temporary parking on development land. It is intended to ensure contractor staff car share to reduce the requirement for land. On-site parking to be agreed with SMBC and BCC.
15.3	Increase in vehicle trips on immediate road network and HGV's in the long term	L	LT	Med	Travel demand to proposed facility needs to be assessed against demand from existing development site. Staff Travel Plan will also seek to reduce impact from private car use.	Staff and patient trips to new facility are likely to be 'transferred' from other facilities. There is likely to be an increase in trips on local junctions. Total traffic impact to be established as part of Transport Assessment. In the long-term, localised movements of HGVs will reduce due to the site's land-use change from an industrial character.
15.4	Possible overspill parking onto adjacent roads	L	LT	Med	Adequate parking provision has been allowed on hospital grounds. A parking model has been developed based on existing demand and change in hospital activities.	The parking provision needs to be agreed by SMBC and BCC. It is essential that adequate parking provision is allowed to minimise the risk of overspill parking onto adjacent roads.

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible

Impact No	Description of Impact	Level of Importance	Nature	Significance (with mitigation in place)	Mitigation	Comments
15.5	Road Safety/ Severance	L	LT	Med	None required.	The introduction of traffic signals would reduce road speeds and assist pedestrians to cross giving rise to improved safety of users. The signals reduce
15.6	Accessibility for pedestrians, cyclists and public transport users	L	LT	Med	Site development plans to safeguard site permeability for pedestrians and cyclists to avoid long detours. New bus routes diverted past the site.	Discussions with Centro, SMBC and public transport operators to continue to further improve accessibility of the site. The development of the site improves permeability of the site for pedestrians and cyclists.

Level of Importance: I = International, N = National, R = Regional, D = District/Borough, L = Local

Nature: ST = short term, LT = long term, R = reversible, IR = Irreversible