#### University Hospitals of Leicester NHS Trust TRUST BOARD

Title of the report:         Multi Storey Car Park Business Case		
Date of the meeting:	4 June 2015	
Report by:	Darryn Kerr/Richard Kinnersley/Paul Gowdridge	
Presented by:	Darryn Kerr/Richard Kinnersley	

#### CONTEXT

Limited public car parking capacity at the LRI site contributes to severe congestion to peripheral roads, in particular Havelock Street and results in a poor perception of the publics' experience of the LRI and views the Trust as a "bad neighbour". This business case sets out the case for investment to improve both issues.

#### QUESTIONS

- 1. Will investment in a Multi Storey Car Park for public use address these issues?
- 2. How have the options been appraised to identify a preferred option?
- 3. What are the revenue and capital consequences of this investment?

#### CONCLUSION

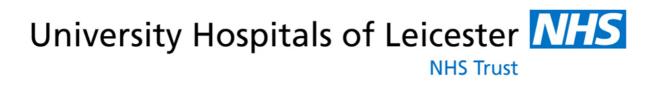
- 1. We believe that the business case makes a sound case for investment, supports the Trust strategy within the context of the Development Control Plan and addresses issues identified above.
- 2. We have explored the options for the provision of a multi-storey car park and concluded which site and construction method is the most practical and financially viable.
- 3. £4.5m capital investment, via external Interest Bearing Debt (IBD), is required to fund the case which has a small revenue income loss during construction before moving into revenue surplus from year 2 onwards.

Base case financial modelling which assumes  $\pounds3,000$  income per space per annum shows a return on investment of 14.6% and payback period of 6 years 2 months. In order for the proposal to break even a minimum of  $\pounds2,178$  per space per year will need to be achieved.

#### **INPUT SOUGHT**

We would like the Trust Board:

- to approve the preferred option;
- to approve the net increase of 359 parking spaces;
- to approve the £4.5m capital investment.



# **Full Business Case** LRI Multi-Storey Car Park May 2015

Version Draft 1.06 Issue date 22<sup>nd</sup> May 2015

Building Caring at its best

# **Document Quality Management**

- Title Leicester Royal Infirmary Multi-Storey Car Park
- Date 22<sup>nd</sup> May 2015
- Prepared by Peter Dudley, Partner, Holbrow Brookes
- Checked by Richard Kinnersley, Major Projects Technical Director, UHL
- Authorised by Darryn Kerr, Director of Estates and Facilities, Facilities, UHL

# **Document History**

Version	Date Issued	Brief Summary of Change	Author
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1.07			
1.08			
1.09			
1.10			

# **Glossary of Terms**

Abbreviation	Full Heading	
Trust	University Hospitals of Leicester NHS Trust	
LRI	Leicester Royal Infirmary	
OBC	Outline Business Case	
FBC	Full Business Case	
MSCP	Multi-Storey Car Park	
GMP	Guaranteed Maximum Price	
LCC	Leicester City Council	

Abbreviation	Full Heading
VFM	Value for Money

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# 1 | Executive Summary

## 1.1 Introduction

This business case sets out proposals to deliver a Multi Storey Car Park (MSCP) on the Leicester Royal Infirmary site by the end of December 2015/beginning of January 2016 and within a budget of £4,500,000.

The delivery of the MSCP will enhance the patient and visitor experience on the site whilst also alleviating significant localised traffic problems whilst patients and visitors attempt to access the LRI site. Those traffic problems are seen as the Trusts problem and create the impression of the Trust being a bad neighbour.

## 1.2 Strategic Case

University Hospitals Leicester NHS Trusts first Travel Plan was published in 2001. Comparison between this and the new Travel Plan 2013 indicates that the Trust has made excellent progress in encouraging staff to travel to work via sustainable modes of transport. The use of public transport in particular has increased.

The 2013 Patient and Visitor Survey identified that 75% of patients and / or visitors travel to site by private car, with living too far from the hospital sites given as the main reason given for this.

An independent survey of car parks at all three main UHL sites was undertaken in 2013. This showed that car parking at both Leicester General Hospital and Glenfield Hospital are broadly appropriate for demand on those sites.

At Leicester Royal Infirmary, however, it was identified that significant difficulties were experienced daily, with up to 80 cars queuing on Havelock Street, a residential street, whilst waiting to gain access to LRI's main visitor car park. This is leading to the Trust being considered a bad neighbour.

The existing main car park provides 297 spaces. It is anticipated that an increase to 600 spaces is necessary to solve the current issues.

The following benefit criteria for the development of additional car parking were identified as:

- Delivered within a December 2015 completion;
- Mitigates congestion to Havelock Street and surrounding road networks;
- Achieves net increase of 300 450 car park spaces;
- Minimal planning impact on local residents;
- Interim solution as enabling works to reduce congestion;
- Revenue generation of £3,000 per space per annum;

- Maximise return on investment with capital threshold set at £4.5m.
- Achieve circulation within the site
- Optimise solution for access and egress

## 1.3 Economic Case

Three options for redevelopment of car parking on site at LRI were identified:

- Option 1 New car park to be provided within the existing patient and visitor car park at the corner of Havelock Street and Walnut Street;
- Option 2 New car park to be provided within the existing patient and visitor car parkon Walnut Street aspect;
- Option 3 New car park to be provided within the existing patient and visitor car parkonAylestone Road (A594) aspect.

These three options have been subjected to evaluation in order to identify the preferred option. Option 3 has been identified as the preferred option which, when combined with enhancements to the existing surface car park and entrance will provide improvements to the Trusts neighbour relations and provide a long-term benefits for the patient and visitor experience.

## 1.4 Commercial Case

The considered the procurement strategy at OBC stage and established that the Trust fund and develop approach provided the greatest opportunity and certainty on delivery. The scheme will see Interserve Construction and their supply chain deliver the MSCP via the LOT 2 Framework utilising a NEC form of contract. The Trust has appointed its own project manager, cost adviser and CDM Co-ordinator to manage the construction elements on its behalf.

A project team is in place to manage the project on behalf of the Trust Board.

## 1.5 Financial Case

The scheme is to be delivered within an overall capital budget of £4,500,000 inclusive of the works cost GMP, consultant fees and risk. VAT has been deemed 100% recoverable for this project.

The paid public and patient car parking at the LRI currently generates  $\pounds$ 3,229 income per space per year. The base case for this proposal assumes that post completion the car parking at the LRI will generate  $\pounds$ 3,000 per space per year. With a net increase of 359 spaces the base case demonstrates that payback of the investment will be 6

years, 2 months with a return on investment of nearly 15%. Income per space will need to be a minimum of £2,178 per space for the proposal to break-even over the asset life.

The revenue income and expenditure impact demonstrates the case is therefore affordable to the Trust; in fact it generates surplus income over costs of £866k per annum. There is a small revenue loss identified in 2014/15 (£118k) due to the loss of car parking provision during the building of the new car park.

The capital requirement (£4.5m) is not affordable within Trust resources though due to the pressures on internally generated capital funding and the immediate need to address this issue. As a result the financial analysis of this scheme assumes the use of Interest Bearing Debt (IBD) for which the Trust will be required to seek approval from the Independent Trust Financing Facility (ITFF) nationally. Progressing the application for the IBD will require support from the Trust Development Authority (TDA) and the Trust is liaising with colleagues from the TDA to facilitate this.

## 1.6 Management Case

A detailed GMP has been developed by Interserve Construction and evaluated by the Trust's cost adviser and determined to be both affordable and value for money. The GMP sits within the Trusts overall budget of £4,500,000 and is considered to represent value for money when benchmarked against recent similar projects in Stratford and Wolverhampton.

Subject to approval of this FBC and the construction programme the project can be delivered by the end of December 2015/beginning of January 2016 as required.

# 1.7 Stakeholder Support

The Trust has had positive support from a range of organisations and groups as follows:

- Leicester City Council (LCC) Planning Department who engaged fully with the Trust in consultation over options and design in advance of a formal planning application and with detailed meetings and support during the planning determination period;
- LCC Councillors were engaged as part of the early consultation process and extremely supportive of the proposals;
- The local neighbourhood residents association were engaged and were again supportive of proposals;
- The Trust presented to the Castle Ward Councillors meeting were proposals were generally supported;
- The local neighbourhood are supportive of the proposals which are evidenced by the fact that the planning application received no objections.

# 1.8 Recommendation

The Trust Board is recommended to approve this business case.

Senior Responsible Owner Project Team

# 2 | The Strategic Case

## 2.1. Structure & Content of the Document

This business case has been prepared using the agreed standards and format for business cases, as set out in DH guidance and HM Treasury Green Book. The case comprises the following key components:

The Strategic Case This sets out the strategic context and the case for change, together with the supporting investment objectives for the scheme

The Economic Case | This demonstrates that the organisation has selected the choice for investment which best meets the existing and future needs of the service and optimises value for money (VFM)

The **Commercial Case** | This outlines the content and structure of the proposed deal

The **Financial Case** |This confirms funding arrangements and affordability and explains any impact on the balance sheet of the organisation

The Management Case |This demonstrates that the scheme is achievable and can be delivered successfully to cost, time and quality

# 2.2 Introduction

This section is divided into two sections:

The **Strategic Context**, which provides an overview of the Trust and its strategic objectives, and to set the context for this business case.

The **Case for Change**, which outlines the difficulties being experienced and sets out the strategic case for change.

2

# Part A: The Strategic Context

# 2.3 Introduction

This section provides an overview of the context in which the Trust provides its services and the strategic guiding principles, directives and policies that ensure quality standards are met. The intention is to provide an overview of the Trust and its strategic objectives, and to set the context for this business case.

# 2.4 Organisational Overview & Background

### 2.4.1 University Hospitals of Leicester NHS Trust

The University Hospital of Leicester NHS Trust ('The Trust') is one of the three largest healthcare providers in the UK. Across the three sites (Leicester General Hospital, Glenfield Hospital and Leicester Royal Infirmary) the Trust treats over 1 million patients a year and employs around 12,000 staff. The Trusts catchment area includes Leicester, Leicestershire and Rutland, and also receives referrals from the surrounding counties, resulting in significant travel to all three sites.

### 2.4.2 Activity

The Trust has identified the parking space need for patients and visitors to be a minimum of 600 spaces as detailed in the table below:

	Car Park Activity (Spaces)
Existing Parking provision on Havelock Street	297
Queueing vehicles on Havelock Street	80
Parking spaces currently accessed on Granby Halls	200
Growth	23
Minimum Requirement	600

#### Table 1: Car Parking Need

# 2.5 The Leicester Royal Infirmary Site

The Trust has for some considerable time suffered with a shortage of patient and visitor parking spaces on the Leicester Royal Infirmary site. This is compounded by a number of factors:

- Being landlocked on all sides by the local road system;
- Already being a dense high rise site;
- Access to the main patient and visitor car park being off a residential street (Havelock Street);
- Congestion with vehicles regularly queuing for extended periods along Havelock Street, and often as far back as Jarrom Street, making the Trust a bad neighbour.

The Trust therefore reached the conclusion that additional on-site car parking on the LRI site is essential in order to improve access to the site for patients and visitors, improve the Trusts reputation as a good neighbour and generally improve the patient and visitor experience.

## 2.5.1 Site Ownership

The Leicester Royal Infirmary site is owned by University Hospitals of Leicester NHS Trust.

# 2.6 Site Specific Constraints

The LRI site is bordered on all sides by the local road system, so site expansion is not possible, and it is already densely populated with high rise buildings all of which are explained in detail in the Estates Annex.

# 2.7 Background to the Redevelopment Requirement

### 2.7.1 Travel Plan 2013

The first UHL Travel Plan was published in 2001.

The 2001 Travel Plan set a target of a 15% reduction in single occupancy car use at each UHL site from 2001 levels. Table 2 below identifies that the single occupancy car travel target has been achieved:

LC	GH	L	LRI		Н
2001 Target	2013 Survey	2001 2013 Target Survey		2001 Target	2013 Survey
61%	61.7%	43%	42.5%	66%	64.2%

Table 2:	2001	<b>TP Single</b>	Occupancy	Car Use	e Targets
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In order to provide a direct public transport link between the three UHL sites, a shuttle bus service was established in May 2006, branded the 'Hospital Hopper'. Initial predicted usage was 5,000 passenger journeys per week. This target was reached within the first month, and by 2013 around 12,000 passengers were using the Hospital Hopper when travelling to or between the hospitals every week. Surveys undertaken in 2001 found that most members of staff listed single occupancy car journeys as their main trip to work, and therefore it is assumed that a significant number of these 12,000 journeys would have otherwise been single occupancy car trips.

### 2.7.2 Site Audits

In order to fully understand the travel opportunities and constraints facing the Trust, site visits were undertaken all three UHL sites as part of the 2013 Travel Plan. These looked at the following modes of travel:

- Pedestrian accessibility;
- Cycle accessibility; and
- Public transport accessibility.

The site surveys concluded that all three sites were conducive to pedestrian, cycle and public transport routes, although some amendments to each site could further improve access for both visitors and staff

## 2.7.3 Staff Travel Surveys

Comparison between the 2001 and 2013 indicated that the Trust have made excellent progress in encouraging staff to travel to work via sustainable modes of transport at UHL. Public transport in particular has increased, which may be due to the success of the Hospital Hopper service.

### 2.7.4 Patient & Visitor Travel Surveys

The 2013 Patient & Visitor Surveys indicated that 75% of patients and / or visitors travelled to site by private car. Living too far from the hospital was the main reason given for this, with convenience and to save time being lesser contributing factors.

## 2.7.5 Car Park Surveys

In order to provide an understanding of the existing car parking supply at each UHL site, and the level of occupancy at each car park, manual car park surveys were undertaken by an independent company during March 2013. The outcomes are summarised below:

#### Leicester General Hospital

The surveys showed that, with effective management there is sufficient car parking provision for staff, patients and visitors.

#### **Glenfield Hospital**

The surveys showed that the provision of parking is likely to be at an approximately appropriate level to satisfy existing demand, while potentially encouraging travel by sustainable modes.

#### Leicester Royal Infirmary

The surveys showed that overall staff parking provision at LRI was sufficient to accommodate existing demand. The patient and visitor parking were found to be running overall at almost full capacity. However, significant difficulties were identified with the primary patient & visitor car park at LRI located to the south of the site and accessed off a residential street named Havelock Street. Significant queuing was regularly observed on Havelock Street, caused by vehicles waiting to enter the car park. In particular, between the hours of 10.00 – 12.00 and again at around 14.00 hours queues of up to 80 cars were present on Havelock Street.

### 2.7.6 Delivery Management Plan

Along with the measures to influence the travel habits of individuals through influencing their travel habits, it was recognised that there is scope to deliver benefits to a site through minimising the impact on the local highway network at peak times.

# 2.8 Existing Arrangements

## 2.8.1 Current Situation

#### Staff Parking

The current staff parking provision for LRI is shown in Table 3 below:

#### Table 3: Staff Car Parking Provision – Leicester Royal Infirmary

Name	Number of Spaces		Comments
	Off Site	On Site	
Winifred Street		18	Currently being modified for Occ. Health and disabled
Maternity		10	
Boiler House		20	Not in use
Multi-Storey Car Park		440	
Serco (VIE)		6	
1771 (Jarvis)		8	
Filbert Street	693		
NCP (Welford Road)	600		1,000 access cards
Odeon Cinema	78		
Staff Totals:	1,371	502	

#### **Patient and Visitor Parking**

The current patient and visitor parking provision for LRI are shown in Table 4:

#### Table 4: Patient & Visitor Car Parking Provision – Leicester Royal Infirmary

	Number of Spaces		
Name	Visitors	Disabled	Comments
Havelock Street	274	23	Charges apply for Disabled spaces
Front of A&E	30		
Front of A&E (Disabled)		11	Free of Charge
Sandringham (Disabled)		1	Free of Charge
Physiotherapy (Disabled)		10	Free of Charge

Tank Tops		8	Free of Charge
Patient & Visitor Totals:	304	53	

As shown above, there is currently a total of 2,230 car parking spaces provided between on-site and off-site provision. All patient and visitor spaces are provided on site.

The provision of patient and visitor space is considered inadequate, predicated upon the problems currently experienced on Havelock Street, where between 50 and 80 vehicles are consistently found to be queuing between 10.00 and 12.00 hours and 13.00 – 15.00 hours on weekdays to access the Havelock Street car park.

In addition, the NCP operated Granby Hall Car Park provides for 200 car park spaces which are in the main off site spaces utilised by the public to access the LRI Hospital site. This car park is owned by the City Council and is subject to future redevelopment which will worsen the existing situation.

#### Car Park Tariffs - Staff

Staff car parking tariffs are calculated dependent upon the individual staff member's annual earnings. Table 5 below shows the current car park tariffs applicable to staff members:

Relevant Annual Earnings	Monthly Charge
Up to £9,999.99	£6.40
£10,000 - £19,999.99	£12.80
£20,000 - £29,999.99	£19.00
£30,000 - £39,999.99	£25.20
£40,000 - £70,000	£28.20
Over £70,000	£33.80

#### Table 5: Current Car Park Tariffs – Staff

#### Car Park Tariffs at LRI – Patient & Visitor

Table 6 shows the current car park tariffs applied to patients and visitors attending LRI. There is no charge applied to those who enter and exit the car parks within 30 minutes on the LRI site.

It should be noted that as part of the planning conditions for the new MSCP the Trust is required to review their current Patient & Visitor tariff within a 12 month period of opening.

Time	Tariff			
Exit within 30 minutes	No charge			
30 minutes to 1 hour	£1.50			
1 to 2 hours	£2.50			
2 to 3 hours	£3.00			
3 to 4 hours	£4.00			
4 to 8 hours	£6.00			
8 to 12 hours	£10.00			
12 to 24 hours	£12.00			
Night tariff (20.00 – 06.00 hours) maximum charge	£2.00			
Patient & Primary Carer Saver Tickets				
Daily	£5.50			
Weekly	£15.00			
Monthly	£50.00			
Saver (provides £50.00 of parking credits)	£25.00			

Table 6.	Current	Car Park	Tariffs -	Patient	& Visitor
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### 2.8.2 Trust's Risk Register

The car parking experience for patients and visitors at Leicester Royal Infirmary, and for the Trusts neighbours in the surrounding area, particularly Havelock Street, has been a serious cause for concern for several years.

With insufficient on site spaces it is common for up to 80 cars to be queuing along Havelock Street waiting to enter the car park on a one out, one in basis. Not only does this impact on local residents with the constant congestion but it also seriously impacts on patients and visitors, and consequently the Trust, with missed appointments and delayed visits.

Both the Trust and the City Council have the resolution/mitigation of this risk high on their agendas and corporate risk registers. From the Trusts perspective this is clearly a high priority as evidenced by its commitment to divert hard pressed capital resources to a non-clinical activity.

### 2.8.6 Trust Strategic Objectives

Underpinning the vision and purpose are the strategic objectives of the Trust, these are:

- High quality care for all patient safety, improve outcomes & patient experience;
- Quality Commitment save lives, reduce harm, patient centred care;
- 7 day a week consultant delivered services;
- Optimising clinical service adjacencies to reduce avoidable deaths;
- Reducing time patients avoidably spend in hospital;
- Care closer to home through better integration with Community services;
- Providing high quality services in a financially affordable & sustainable way;
- Understand potential impact of alliances of care at local, regional & national levels.

## 2.8.7 Trust's Five Year Estate Strategy June 2014

The Trust has undertaken an exercise to review the strategic future of its estate, with a view to creating a development control plan that looks twenty years ahead. "The quality and fitness for purpose of the NHS Estate and the services that maintain it are integral to delivering high quality, safe and efficient care". It is also an area of significant spend; the budget for Estates and FM Services across the Trust in 2013/14 was £31m.

The Trust's estate strategy identifies the need for flexibility to move property from being a constraint to an enabler for change. UHL is developing a Hospitals Estate Transformation Plan which is based on a strategy that consolidates the estate, develops new facilities, disposes of surplus land and buildings and encourages third party partnerships that will raise income for the Trust. This will be a cornerstone of service reconfiguration and improved utilisation of the Trust's estate. This must be balanced by organisational and public expectations about the provision of highly specialised services alongside local access to primary and secondary care, in the context of high levels of public support for the associated hospitals. It is in this context that the opportunity for significant and far reaching estate transformation will be determined.

The Transformation Plan will;

- Underpin the strategic direction;
- Support the clinical strategy to improve patient pathways and improve quality of care;
- Support the strategic outline case for the whole site reconfiguration;
- Show a clear implementation programme over five years for transformation with tangible benefits;
- Improve the patient and staff built environment, investing in improved facilities and infrastructure; greatly aiding recruitment and retention;

Identify capital development to unlock the embedded value of Trust assets and support its ability to deliver clinical transformation and achieve QIPP efficiency savings.

Efficient estate solutions will improve frontline service provision as well as achieving improved utilisation of the estate and unlocking its embedded value. This is possible by delivering a high quality clinical and working environment for patients and staff, resulting in better levels of productivity, flexibility and patient satisfaction. This will also support cross-CMG strategies that maximise optimisation of the estate resources across UHL. This strategy is relevant to this business case; the Estates Transformation Plan will set out detailed strategies for its three main hospital sites.

The MSCP development sits within the context of the Trusts Development Control Plan (DCP) for the LRI site.

# Part B: The Case for Change

# 2.9 Introduction

The purpose of this section of the business case is to outline the strategic case for change.

The case for change for the Leicester Royal Infirmary Multi-Storey Car Park has been summarised below:

# 2.10 Drivers for Change

### 2.10.1 Patient and Visitor experience

The delay in accessing the site due to extended queues along Havelock Street, the resultant frustration and stress in terms of possibly missing an appointment or simply cutting into the available visiting time all add to a poor patient and visitor experience

### 2.10.2 Insufficient car parking spaces at Leicester Royal Infirmary

There are currently insufficient car parking spaces on the LRI site.

# 2.10.3 Unacceptable Levels of off-site queuing of visitors waiting access to the LRI site and car parks

At peak visiting times the poor access to car parking spaces leads to queues of up to 80 cars along Havelock Street. This causes inconvenience to the visitors, bad publicity for the Trust and severe inconvenience to local residents.

### 2.10.4 The Trust as a bad neighbour

The inconvenience to local residents manifests itself in the Trust being seen as a bad neighbour and therefore the Trust wants to resolve this at the earliest opportunity, therefore, a realistic timeframe of Dec 2015 completion has been established.

## 2.11 Current Activity & Demand

As already highlighted, the travel survey in 2013 identified that during peak times up to 80 cars are queuing to gain access to the LRI site and car parks.

## 2.12 Investment Objectives& Benefits Criteria

### 2.12.1 Investment Objectives

The investment objectives of this development are:

- ► To significantly increase the parking numbers on the LRI site;
- To improve access into the hospital off Havelock Street in order to reduce the off highway stacking of cars awaiting access to the on to the campus at the busy periods;
- To meet the requirements the users, the nearby residents and satisfy LCC Planning Authority.

### 2.12.2 Benefit Criteria

The benefit criteria for the development were identified as:

- Delivered within a end of December 2015/beginning of January completion;
- Mitigates congestion to Havelock Street and surrounding road networks;
- Achieves net increase of 300 450 car park spaces;
- Minimal planning impact on local residents;
- Interim solution as enabling works to reduce congestion;
- Revenue generation of £3,000 per space per annum;
- Maximise return on investment with capital threshold set at £4.5m;
- Achieve circulation within the site;
- Optimise solution for access and egress.

## 2.13 Benefits Realisation

A benefits realisation plan is not directly appropriate in the context of this development and will instead be measured through a Post Project Evaluation exercise.

## 2.14 Design Quality & Philosophy

### 2.14.1 Future Flexibility

Activity demands across the LRI site is expected to continue to increase over coming years and this is likely to impact on the Trusts total parking need at Leicester Royal Infirmary.

Translating activity levels to bed numbers and clinics, and then to parking needs for staff, patients and visitors is not a precise science. Whilst there is some subjective

guidance available it is by its nature generic and of little value in planning sense. This development has been designed on the following basis:

- To maximise the number of spaces within the available funds, and;
- To optimise the capital cost per space by utilising the most economic design to deliver the most spaces per floor, and across complete/whole floors i.e. not designing part floors to deliver to a precise number.

The Multi Storey Car Park proposal within this Business Case delivers a net increase of 359 spaces upon completion and a total of 657 spaces from the Havelock Street entrance with the original assessed minimum requirement being 600 spaces. The current proposal therefore delivers flexibility to match future demand by:

- Delivering as part of this project 57 spaces over and above the minimum requirement, and
- The design proposal, and resultant capital cost within this business case, incorporates additional capital funds to construct now the car park foundations that will facilitate adding an additional car park level in the future. That additional car park level would have the following impact:
  - Deliver additional spaces, currently estimated to be circa 74 spaces;
  - At an additional cost estimated to be in the order of £750,000;
  - During construction as a subsequent second phase there is however the risk that to complete the works the whole Multi Storey Car Park, and some adjacent spaces, would need to be temporarily decommissioned. This could be in the order of 460 spaces with the loss of an assessed month on month income of circa £115,000 (based on £3,000 per space per annum);
  - The additional floor would require a secondary planning application
  - To add the additional floor as part of this contract would cost £650k, however, it must be noted that this would delay the completion date of Dec 2015

An option for only one additional floor has been developed as to add additional floors over and above this would:

- Be unlikely to receive planning approval on grounds of massing and overshadowing adjacent buildings, notably Sandringham and Osborne, and;
- Having to "beef up" the above ground structure in terms of columns and beams now at considerable additional cost.
- Take the structure into the realms of dedicated firefighting lifts.

## 2.14.2 Due Regard

The MSCP has been designed to acknowledge it is a functional structure and that in order to maximise the number of additional parking spaces within the affordability envelope then not all normal standards in terms of Health Building Notes (HBN's) and Health Technical Memorandums (HTM's) need apply. The car park does however deliver quality in key areas, examples being:

- 21 disabled parking spaces, all at ground level;
- A staircase at either end of the facility;
- Two 8 person lifts (N.B. reduced size enabled by all disabled spaces at ground floor);
- Lift cars to disability standards in terms of contrasting materials, height of controls etc.;
- Green wall to Aylestone Road elevation;
- CCTV coverage;
- Enhanced provision for cyclists within the development.
- Mesh screens at each level to mitigate the risk of attracting "jumpers".

## 2.15 Main Risks

There are no clinical risks with the construction of a MSCP however there are commercial and economic risks such as:

- The provision of the additional spaces does not alleviate the problems of cars queuing along Havelock Street;
- That bad publicity continues in the context of the Trust being a bad neighbour;
- That further investment is required to provide even further spaces;
- Future clinical and estates reconfiguration plans increase the demands for patient and visitor car parking on the LRI site;
- That the construction project is delayed and in turn defers the commencement of the income stream;
- That the approved scheme cost is exceeded putting the capital programme under pressure and extending the revenue payback period;
- That the Trust changes the use of this car park from that to benefit the patient experience to use for staff;
- That the Trust changes the planning basis of the business case in that the management of the new MSCP will be executed by UHL and not IFM;
- Conversely the scheme over provides in terms of available spaces and the Trust experiences significant periods of empty spaces with consequential reductions in revenue.

# 2.16 Constraints & Dependencies

The main constraints on the development are:

- Constructing a multi-level structure on a congested site;
- Provision of alternative/sufficient car parking spaces during the construction period;
- Impact on the public and in particular pedestrians accessing the site from Aylestone Road;
- Operational interface between Trust services in the area;
- ▶ Third party interfaces such as the University who have facilities in the vicinity;
- Deliveries to Sandringham and Osborne generally;
- Pathology deliveries to Sandringham;
- Access to generators for refuelling.

# 3 | The Economic Case

# 3.1 Introduction

In accordance with the Capital Investment Manual and requirements of HM Treasury's Green Book (A Guide to Investment Appraisal in the Public Sector), this section of the FBC reaffirms the preferred option highlighted in the OBC. It reviews the changes in capital and revenue costs from the OBC and identifies reasons why the changes have happened and their impact on the position of the preferred option.

3

3.10

## 3.2 Estates Annex

The Estates Annex to this Full Business Case provides details of the Scope of Works, Programme, Construction Health & Safety and Commercial Information.

Based on the Trust providing Full Instruction / Orders by no later than 18<sup>th</sup> May 2015, the current programme gives a completion handover date of the end of December 2015/beginning of January 2016.

## 3.3 Site Appraisal

The nature of the LRI site already being highly developed, and of a high rise nature, means that all available areas of the site are already developed and in use.

To deliver a significant increase in parking numbers can realistically only be achieved on site through the development of an MSCP.

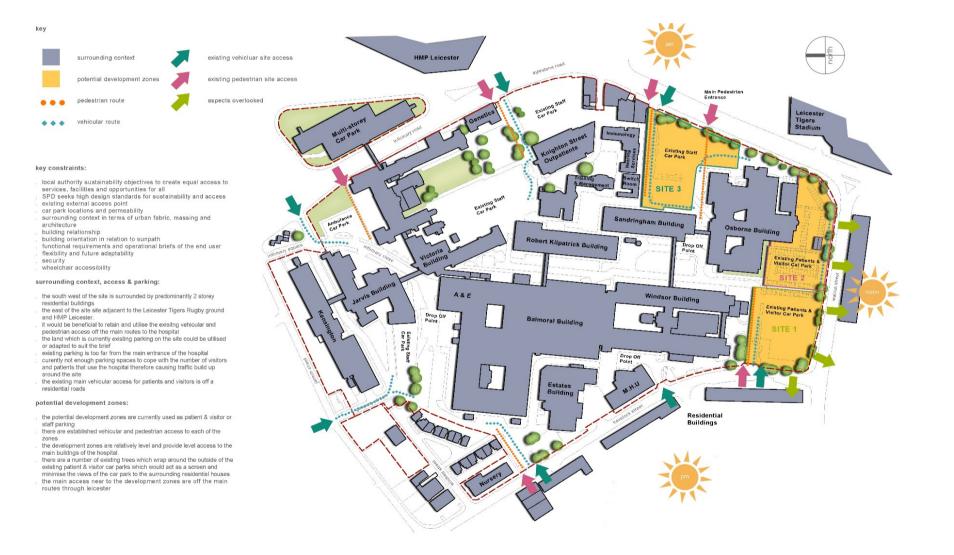
A feasibility study was undertaken in 2014 to identify the constraints of the hospital site and opportunities to improve the car parking and traffic situation. This feasibility study is given in the Estates Annex.

The figure below identifies three practical locations for a possible MSCP at the location of the existing visitor parking bounded by Havelock Street, Walnut Street and the Aylestone Road.

The site is considered in the context of:

- Key constraints;
- Surrounding context, access and parking;
- Potential development zones.

## Building Caring at its best



- 3.11
- 3.12
- 3.13

# 3.4 Options Appraisal

An options appraisal was undertaken in 2014 to inform the OBC process. This section identifies the process and outcome of the non-financial appraisal.

### 3.4.1 Benefit Criteria

The benefit criteria for the development were identified as:

- Delivered within a December 2015/January 2016 completion;
- Mitigates congestion to Havelock Street and surrounding road networks;
- Achieves net increase of 300 450 car park spaces;
- Minimal planning impact on local residents;
- Interim solution as enabling works to reduce congestion;
- Revenue generation of £3,000 per space per annum;
- Maximise return on investment with capital threshold set at £4.5m;
- Achieve circulation within the site;
- Optimise solution for access and egress.

### 3.4.2 Options

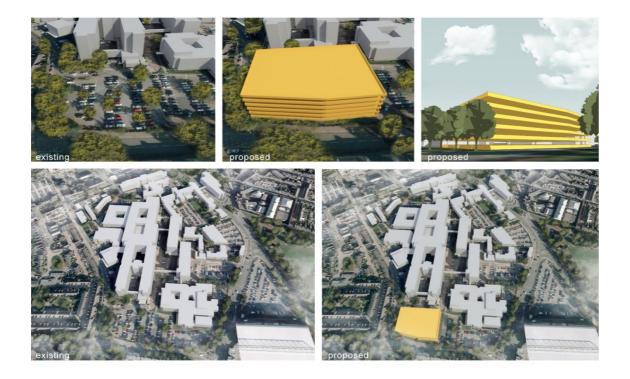
The three potential sites / options identified above were reviewed in terms of:

- A SWOT analysis, looking at each sites strengths, weaknesses, opportunities and threats;
- A photographic survey;
- Individual massing analysis on an option by option basis;
- A description of the resulting advantages and disadvantages of each option.
- **Option 1:** New car park to be provided within the existing patient and visitor car park at the corner of Havelock Street and Walnut Street
- **Option 2:** New car park to be provided within the existing patient and visitor car park on Walnut Street aspect
- **Option 3:** New car park to be provided within the existing patient and visitor car park on Aylestone Road (A594) aspect

# 3.4.3 Option 1: New Car Park within the existing patient and visitor car park on the Corner of Havelock Street and Walnut Street

Option 1 would provide a new MSCP within the existing patient and visitor car park on the corner of Havelock Street and Walnut Street, which would be a minimum of 5 storevs.

Strengths Weaknesses					
<ul> <li>Strengths</li> <li>Existing trees partially screen the site from the surrounding residential buildings</li> <li>The site is relatively level ensuring convenient buildability</li> <li>The site is already established as the main patient and visitor car</li> </ul>	<ul> <li>Weaknesses</li> <li>The site is not in close proximity to the main entrance to the hospital</li> <li>There are currently not enough spaces to cope with the patient and visitor demands of the hospital</li> <li>The lack of parking spaces and the current access route causes congestion off</li> </ul>				
<ul> <li>park</li> <li>Adjacent to established vehicular and pedestrian access</li> </ul>	Havelock Road into the hospital site, which would remain if the car park was situated on this site with car capacity increase				
Opportunities	Threats				
<ul> <li>Reuse and retain existing access into the site</li> <li>Opportunity to reuse and retain</li> </ul>	<ul> <li>Right of light will impact on the adjacent residential properties on Walnut Street and Havelock Street</li> </ul>				
<ul> <li>existing patient and visitor car park</li> <li>Improve overall patient experience</li> </ul>	<ul> <li>The residential properties on the neighbouring streets will be overlooked due to the potential massing of the car park, creating a visual impact for the neighbouring residents</li> </ul>				



#### Advantages:

Additional car parking spaces available on site.

#### Disadvantages:

- The height of the building would significantly impact on the residential properties immediately opposite on both streets;
- The sun path would mean these residential properties would be in shade for large parts of the day as a result of the building;
- This location could still impact on Havelock Street with cars still having to queue to gain access;
- The Trust would become an even worse neighbour;
- During consultation with the Planners this option was not favourably received.

#### 3.4.4 Option 2: New Car Park within the existing patient and visitor car park on Walnut Street aspect

Option 2 would provide a new MSCPwithin the existing patient and visitor car parkon the Walnut Street aspect, which would be a minimum of 6 storeys.

Strengths	Weaknesses
<ul> <li>Existing vegetation offers partial screening from adjacent</li> </ul>	<ul> <li>Close proximity of properties along Walnut Street (overlooking, right of light, overshadowing issues)</li> </ul>



<ul> <li>properties</li> <li>The site is relatively level ensuring convenient buildability</li> <li>Already established patient and visitor car park</li> </ul>	<ul> <li>Urban context and restricted flexibility in terms of scale and massing</li> <li>The site is not in close proximity to the main hospital entrance</li> <li>Narrow site geometry resulting in smaller building footprint and increased height to achieve required parking numbers</li> <li>The lack of parking spaces and the current access route causes congestion off Havelock Street into the hospital site, which would remain if the car park was situated on this site even with car capacity increase.</li> <li>Existing outbuilding located centrally within Site 2</li> <li>Close proximity to Osborne Building restricts building footprint and construction access</li> </ul>
<ul> <li>Opportunities</li> <li>Potential to improve connectivity and provide access links with Site 3 and further towards Aylestone Road</li> <li>Opportunity to address highways implications along Havelock Street (traffic / access etc.)</li> </ul>	<ul> <li>Threats</li> <li>Significant impact on highways and traffic along Havelock Street</li> <li>Significant restriction to potential massing and scale of the development</li> <li>Access issues and considerable impact on site permeability during construction process (incl. accessibility to site 1 parking)</li> <li>Potential impact on Osborne Building during build process</li> </ul>



#### Advantages:

Additional car parking on site.

#### **Disadvantages:**

- This option would need to be a minimum of 6 storeys to provide the required number of spaces. This would significantly impact on the residential properties opposite Walnut Street;
- The sun path would result in the residential properties on Walnut Street being in shade for large parts of the day as a consequence of the development;
- Due to the constrained footprint this option would be likely to include increased circulation and therefore generate an increased m<sup>2</sup> per space when compared to other options;
- The Trust would become an even worse neighbour;
- During consultation with the Planners, this option was not favourably received.

# 3.4.5 Option 3 – New Car Park within the existing patient and visitor car park on Aylestone Road (A594) aspect

This option would provide a new MSCP within the existing patient and visitor car park on Aylestone Road aspect which would be a minimum of 5 storeys.

Strengths		W	eaknesses
<ul> <li>(fl ap)</li> <li>No</li> <li>(la inr</li> <li>Gr</li> <li>Gr</li> <li>Gr</li> <li>ar</li> <li>Gr</li> <li>ar</li> <li>Gr</li> <li>ar</li> <li>Gr</li> <li>ar</li> <li>Gr</li> <li>FI</li> <li>Es</li> <li>Ior</li> <li>No</li> <li>pa</li> <li>FI</li> <li>(o</li> </ul>	o immediate urban context to adhere to lexibility in terms of massing, scale and ppearance) o residential or commercial overlooking ack of overshadowing or right to light npact) food visual exposure off Aylestone Road onvenient highways access onto a major rterial route lexible site geometry lear site and lack of outbuildings asy way finding and access to majority of he hospital facilities stablished sense of arrival at a central location within LRI site o impact on Havelock Street or other arking areas lexibility of traffic flows and permeability one or two way system, potential links ith other parking areas)	•	Retention of established circulation and access points to university facilities. Pathology and Sandringham entrance requirements to incorporate a prominent pedestrian walkway along the site perimeter Slight topographical change Close proximity to dense vegetation along main site frontage

Opportunity to utilise prominent exposure

along Aylestone Road and establish new

**Opportunities** 

•

identity / focal point

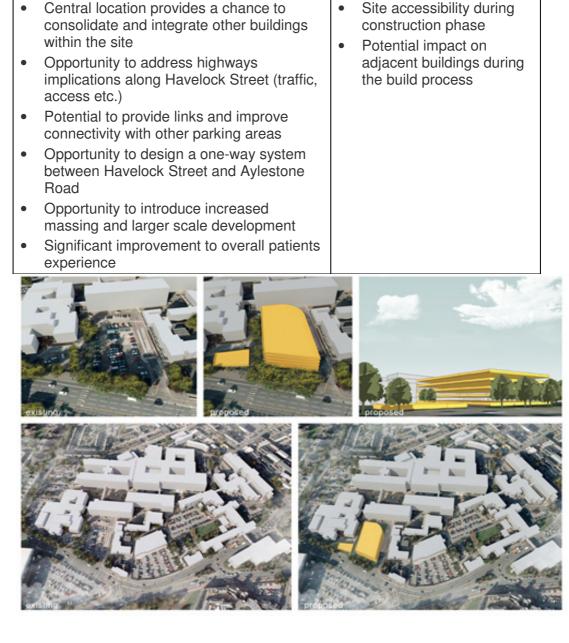
Threats

•

Planning process, in

particular highways

negotiations



#### Advantages:

- Whilst a minimum of 5 storeys, this option would face out onto the A594 Aylestone Road and therefore would not impact on any adjacent properties, be they residential or commercial;
- Traffic would be able to gueue on site, thereby removing the problems of cars queuing on Havelock Street;

- The Trust would become a good neighbour by reducing congestion on local residential roads without overshadowing the neighbours with a multi-storey car park;
- This option was received favourably by Planners during consultation.

#### **Disadvantages:**

Properties on Sandringham and Osborne blocks would have limited views.

#### 3.4.6 Associated Works

Option 3 (and to a lesser extent Option 2) would also provide the opportunity to modify the existing layouts enabling easier access for vehicles to the hospital site by:

- Moving the incoming barrier further into the site
- Directing traffic to a defined perimeter route along Walnut Street and Aylestone Road boundary;
- Circulation routes simplified;
- Each parking area to be off this boundary circulation route;
- General white lining modifications to accommodate the changes;
- Minor changes to kerb lines etc., to facilitate these proposed changes;
- Traffic restrictions elsewhere.

These associated works are considered necessary to maximise the benefits achieved with the additional spaces by simplifying flows within the car parks overall.

### 3.4.7 Option Evaluation

The benefit criteria listed in section 3.5.1 above were weighted to indicate the particular importance of each criterion relative to each other. The weighted benefit criteria are given in Table 7 below:

#### Table 7: Benefit Criteria Weightings



Achieves net increase of 300-450 car park spaces	1	20
Revenue generation of £3,000 per space per annum	2=	15
Maximise return on investment with capital threshold set at $\pounds4.5m$	2=	15
Mitigate congestion to Havelock Street and surrounding road network	4=	10
Minimal planning impact on local residents	4=	10
Achieve circulation within the site	4=	10
Optimise solutions for access and egress	4=	10
Delivered within a December 2015/Jan 2016 completion	8=	5
Interim solution as enabling works to reduce congestion	8=	5
Total:		100

## 3.4.8 Scoring of Options

A 10 point scoring system was used and, following discussion, the attendees agreed to use a consensus scoring rather than individual scoring. The overall scores from the non-financial appraisal were:

#### Table 8: Non-Financial Evaluation Results

		Option 1		Option 2		Option 3	
Benefit Criteria:	Weight		Wt		Wt		Wt
Achieves net increase of 300-450 car park spaces	20	10	200	10	200	10	200
Mitigate congestion to Havelock Street and surrounding road network	10	3	30	3	30	8	80
Minimal planning impact on local residents	10	3	30	3	30	8	80
Achieve circulation within the site	10	3	30	4	40	8	80
Optimise solutions for access and egress	10	3	30	4	40	8	80
Delivered within a December 2015 completion	5	5	25	5	25	10	50
Interim solution as enabling works to reduce congestion	5	5	25	5	25	7	35
Total		370		390		605	
Rank			3 2			1	

Difference		-39%	-36%	0%	
Revenue generation of £3,000 per space per annum	15	It was assumed that this was a financial criterion and was therefore not scored as part o the non-financial evaluation.			
Maximise return on investment with capital threshold set at £4.5m	15		to be the s and there		

It can be seen that the preferred option from the non-financial evaluation was for Option 3 - new car park to be provided on Aylestone Road (A594) aspect.

### 3.4.9 Sensitivity Analysis

The outcome of the non-financial appraisal was also subjected to a sensitivity analysis, to ensure that the outcome was robust.

### a. Equal Weights

The scores were calculated on an equal weight basis as below, to identify whether the result would have been different if weightings had not been applied:

		Opti	ion 1	Opti	ion 2	Opt	ion 3
Benefit Criteria:			Wt		Wt		Wt
Achieves net increase of 300-450 car park spaces		10		10		10	
Mitigate congestion to Havelock Street and surrounding road network		3		3		8	
Minimal planning impact on local residents		3		3		8	
Achieve circulation within the site		3		4		8	
Optimise solutions for access and egress		3		4		8	
Delivered within a December 2015 completion		5		5		10	
Interim solution as enabling works to reduce congestion		5		5		7	
Total		32 34		5	59		

#### Table 9: Equal Weighting

Rank	3	2	1
Difference	-46%	-42%	0%

The application of equal weights did not alter the ranking of options. Option 3 remained the clearly preferred option.

#### b. Reverse Weightings

The scores were calculated with the agreed weightings reversed to identify whether the outcome would have been different had the weightings been agreed differently as shown in Table 10 below:

	Option 1		Opt	ion 2	Option 3		
Benefit Criteria:	Weight		Wt		Wt		Wt
Achieves net increase of 300-450 car park spaces		10	50	10	50	10	50
Mitigate congestion to Havelock Street and surrounding road network	10	3	30	ვ	30	8	80
Minimal planning impact on local residents	10	3	30	3	30	8	80
Achieve circulation within the site	10	3	30	4	40	8	80
Optimise solutions for access and egress	10	3	30	4	40	8	80
Delivered within a December 2015 completion	20	5	100	5	100	10	200
Interim solution as enabling works to reduce congestion	20	5	100	5	100	7	140
Total		370 390		710			
Rank		3		2		1	
Difference		-48%		-4	-45%		%

#### Table 10: Reverse Weightings

The application of reverse weightings did not alter the ranking of the options. Option 3 remained the clearly preferred option.

### 3.4.10 Conclusion to the Non-Financial Appraisal

Through all analysis the preferred option was Option 3 – new car park to be provided on Aylestone Road (A594). There was no scenario where Option 3 was not the preferred option.

## 3.5 Economic Appraisal

### 3.5.1 Introduction

This section provides a description of the changes between OBC and FBC from a revenue and capital perspective. It discusses the impact of these changes on the validity of the OBC preferred option.

### 3.5.2 OBC options appraisal

Costs were not prepared for Options 1 & 2 as, due to the disadvantages of both and the unlikeliness of being supported by the Planners they were in effect discounted options. There was no doubt that Option 2 would have been the most expensive option and, due to site constraints would have provided a less economic layout and additional floor. Option 1 would be have been potentially slightly cheaper than Option 3 but would have been more disruptive during construction and would have an adverse effect on the local residents.

The costs prepared for the preferred option for the OBC are given in Table 11 below:

Works Cost (Target GMP)	£3,800,000
Client Fees	£97,320
Contingencies	£102,680
VAT at 20%	£800,000
VAT Recovery	-£800,000
TOTALS:	£4,000,000

#### Table 11: Works Cost of Preferred Option at OBC Stage

The works cost was heavily dependent upon the final design solution and the number of spaces constructed. Costs at OBC stage were assessed on a cost per space basis utilising published cost data and known schemes such as the recent MSCP constructed at New Cross Hospital, Wolverhampton.

Fees included for Trust side support through to completion for project management, quantity surveying and CDM Co-ordination.

VAT on fees was assessed as 100% recoverable. This is a standard approach on all NHS construction projects.

VAT on the Works Cost was also assessed as 100% recoverable. On standard projects VAT is payable on all the works with some elements being recoverable however in this instance the Trust will be charging for the use of the car park and each parking fee will include for VAT; in this scenario HMRC receives VAT through the long term revenue stream allowing the capital outlay to be VAT recoverable.

- 3.14
- 3.15
- 3.15.1
- 3.15.2
- 3.15.3

### 3.5.3 Changes since the OBC

Since the OBC the plans for the preferred option have been developed in detail. The final design will provide an additional 359 car parking spaces, making a total of 656 spaces. Table 12 below shows the make-up of these spaces:

#### Table 12: Car Parking Provision upon Completion of Multi-Storey Car Park Element No's Description Current spaces available 297 on Havelock Street Loss of spaces in Havelock (9) Lost due to need to change circulation routes Street Additional spaces in 8 Re-provision by creating new spaces from current Havelock Street landscaped areas, whilst retaining 2 large trees based on advice from ecological reports Lost spaces under MSCP (78)footprint New MSCP 438 Total 656 Less existing (297)Net increase 359

### 3.5.4 Guaranteed Maximum Price

The GMP developed by Interserve Construction for the preferred option is  $\pounds4,254,768$  within an overall project budget of  $\pounds4,500,000$ .

### 3.5.5 Risks

Identified below are the key risks identified at OBC stage and the mitigation measures taken:

- The provision of the additional spaces does not alleviate the problems of cars queueing along Havelock Street – the scheme proposed has the flexibility to install an additional floor at a later date;
- That bad publicity continues in the context of the Trust being a bad neighbour the reality of this development is to take patient and visitor parking from an existing compliment of 297 spaces to a new compliment of 656 spaces. This is a net increase of 359 spaces which equates to 121% increase;
- That further investment is required to provide even further spaces again the scheme proposed has the flexibility to install an additional floor at a later date;
- That the construction project is delayed and in turn defers the commencement of the income stream – a robust programme has been developed and if any delays occur they should be minor;
- That the approved scheme cost is exceeded putting the capital programme under pressure and extending the revenue payback period – Interserve Construction have provided a GMP and we have developed a robust risk register;
- Conversely the scheme over provides in terms of available spaces and the Trust experiences significant periods of empty spaces with consequential reductions in revenue – an additional floor was possible in development terms but was not pursued as an option.

### 3.5.6 Revenue Costs

Ultimate responsibility for parking across all Trust sites is with the Trusts Travelwise Manager who is responsible for parking policies and procedures in respect of parking tariffs, eligibility for parking passes etc.

Interserve FM under the LOT 1 Framework are responsible for the day to day management of the car parks and collection of parking fees. Car Park enforcement is provided by Legion as a sub-contractor to Interserve FM.

Income per space has been assessed as an average of £3,000 per annum. The preferred option has increased in size from the initial proposal in the OBC but this has been in an environment where the construction cost per space was falling as the design developed and determined the optimum sized car park.

### 3.5.7 Summary of Position compared to OBC

At OBC stage the development brief was for a multi-storey car park of between 300 - 450 additional car parking spaces, and an estimated cost envelope of £4,000,000 excluding VAT. The OBC determined that within the capital cost of £4,000,000 a 410 space MSCP was deliverable (332 net spaces).

The plans have now been developed fully, and the resulting deliverable scheme will provide a 438 space MSCP delivering a net increase of 359 car parking spaces at a cost of  $\pounds4,500,000$  excluding VAT. Planning approval was granted on 17th April 2015, and based on approval to proceed no later than 18<sup>th</sup> May 2015 the development will be completed by the end of December 2015.

The preferred option as developed delivers an additional 28 spaces, and the flexibility to provide a further 74 spaces.

## 3.6 The Preferred Option

### 3.6.1 Design Strategy

The Trust's brief was to develop a functional MSCP that delivered an optimum solution with a cost per space being a key performance target as a demonstration of VFM.

### 3.6.2 Design Development

The design has been developed and based on the following existing conditions and Trust guidance:

- A regularised square building footprint to take up the existing car park footprint;
- Existing trees on Aylestone Road to be protected. Elevation on this side to be 'squared off' to protect root zones and tree canopies;
- Existing pedestrian covered walkway to remain with new bollards provided for pedestrian safety and vehicular access / egress point;
- All disabled parking is located at Ground Floor level to eliminate the need for wheelchair accessible lifts;
- Elevational treatments are to remain simple on grounds of affordability along with perimeter access restrictions. Metal mesh fence cladding to main structure fixed internally. Solid cladding / concrete to stair cores with mesh infill panels to provide light and ventilation.
- External lighting proposed and co-ordinated with the design;
- Planted climbers to Aylestone Road elevation to provide a 'green' connection with existing trees and public frontage;
- Minimal landscape works required to enhance existing planting;
- Car park design is based on the Huber VCM System and the UK Car Park Design Manual which is best practice advice for car parks and proven on other UK Trust Car Parks;
- The design maximises the number of parking spaces and allows for an additional deck as the VCM is 'sunk' into the existing ground;
- The design allows for efficient use of space as a result of large steel spans;
- The design has a central ramp which allows the users improved clear internal views;
- The design offers the user improved visible way finding routes;
- The decks have variable slopes which allow users to manoeuvre more easily;
- The design accommodates the lifts in a single core next to the common pay machines near to the main foot traffic near the covered walkway and existing buildings;
- ▶ The floor plan from 1<sup>st</sup> floor upwards are common and do not change;

- No dead ends to internal circulatory roadways;
- No internal steel columns within parking bays as there are 16metre clear steel spans creating clean open parking spaces;
- CCTV coverage to thee car park;
- Lifts (2 x 8 person) located near the main exit and stair core / pay station location.

Please refer to the Estates Annex for further information on the design and specifications.

# 4 The Commercial Case

## 4.1 Introduction

This section of the FBC outlines the proposed procurement strategy in relation to the preferred option outlined in the Economic Case.

## 4.2 Procurement Strategy

The Trusts governance arrangements require that any project is procured based on the following key criteria:

- In accordance with relevant EU procurement rules;
- ▶ In accordance with Trust Standing Financial Instructions (SFI's);
- That the scheme is affordable; and
- That the scheme is value for money.

### 4.2.1 EU Procurement

The European Public Contracts Directive (2004/18/EC) applies to public authorities including amongst others, government departments, local authorities and NHS Authorities and Trusts. The European Utilities Contract Directive (2004/17/EC) applies to certain utility companies operating in the energy, water and transport sectors.

The directives set out detailed procedures for the award of contracts whose value equals or exceeds specific thresholds. Details of the thresholds, applying from 1st January 2014 are given in Table 13. Thresholds are net of VAT.

	SUPPLIES	SERVICES	WORKS
Entities listed in	£111,676	£111,676 <sup>2</sup>	£4,322,012 <sup>3</sup>
Schedule 1 <sup>1</sup>	(€134,000)	(€134,000)	(€5,186,000)
Other public sector contracting authorities	£172,514	£172,514	£4,322,012 <sup>3</sup>
	(€207,000)	(€207,000)	(€5,186,000)
Indicative Notices	£625,050	£625,050	£4,322,012
	(€750,000)	(€750,000)	(€5,186,000)
Small lots	£66,672	£66,672	£833,400
	(€80,000)	(€80,000)	(€1,000,000)

### Table 13: Thresholds from 1<sup>st</sup> January 2014

It can be seen from the above table that the construction (Works) cost would need to be  $\pounds4,322,012$  or greater for the EU procurement rules to apply. With an allocated whole project budget of  $\pounds4.0$  million at OBC the works cost would therefore be in the range of  $\pounds3.6$  million to  $\pounds3.9$  million i.e. well below the threshold.

The Trust, as a precautionary measure being mindful of the timescales involved with EU procurement, has issued an EU notice seeking expressions of interest from the market. That exercise has been completed and a long list of interested contractors identified.

Given that the works cost is likely to be significantly lower than the EU threshold this procurement route does not need to be pursued further.

Whilst at FBC the works cost GMP has risen it:

- Still falls below the EU threshold, and;
- Has been procured through the LOT 2 Framework which in itself was tendered via an EU process.

### 4.2.2 Procurement Options

The following procurement options were identified at OBC:

#### Table 14: Procurement Options

Ор	tion	Commentary
1	Traditional Tender	This route requires the Trust to develop the design to a certain point before going to market. This has two principal sub options of a) full design undertaken by a Trust appointed design team, or b) design and build where the Trust's appointed design teams design is more strategic/conceptual leaving the detail to be designed by the successful contractor.
		Under this option the Trust can select a tender list of contractors experienced in Multi Storey Car Parks (with a long list being available from the Trust EU advert) and those firms already having expressed their interest.
		Having evaluated the programme implications of tendering and appointing a contractor this route will not achieve an operational facility until April / May 2016.
2	Procure21+	This is an existing NHS Framework allowing the appointment of a design and build contractor from the appointed panel. Whilst similar to the design and build sub option under the Traditional route these contractors are less likely to have specific MSCP design and construction experience.
3	Procure the scheme through UHL's framework partnership with Interserve Facilities Management (IFM)	Under the bespoke framework, IFM is appointed as prime contractor for the delivery of projects; commercial arrangements and contracts are pre-agreed to cover commissioning of the business case through to final delivery of the asset using an NEC3 Option C (Target Contract with Activity Schedule). Cost savings and overspends are split between the Trust and the Client based on previously agreed splits which will engender a spirit of partnering and collaboration within the Project Team. The risk of cost overrun is transferred to IFM once the GMP has been agreed and construction stage commenced. Due to the elimination of the tendering process and actually developing designs costs and the planning application in
		developing designs, costs and the planning application in this period allows this route to deliver an operational facility by December 2015.

A Lot 2 (construction option) procurement route with Interserve (Number 3 above) was selected as it was determined most likely to deliver the most cost effective and timely solution within this projects particular constraints.

## 4.3 Key Factors Affecting Outcomes

### 4.3.1 Planning Permission

No formal objections to the development were received during the planning process, and therefore the Planning Authority were able to approve the planning application under delegated powers.

Planning Approval was given on 17<sup>th</sup> April 2015.

The Planning Authority have expressed concerns during the consultation process that, once additional spaces are available on the LRI campus, commuters or rugby supporters on match days may choose to use our car parks rather than other local alternatives as they are currently cheaper, thereby blocking spaces for patients and visitors.

The Planning Authority has therefore requested that the Trust reviews its parking charges in the next 12 months and in conjunction with LCC. The Trust does not however wish in principal to increase the parking charges at LRI for the following reasons:

- Trust policy has set parking charges to be the same at all three hospital sites;
- The general public's view of parking at hospitals is that it should be free as the NHS provides a free at the point of delivery service. It continues to be an area of complaints to the Trust that people in times of illness, or visiting loved ones, are forced to pay costs they can ill afford.

The Trust will continue dialogue with the Planning Authority on this matter.

### 4.3.2 Building Research Establishment Environmental Assessment Method (BREEAM)

NHS developments are required to achieve a BREEAM excellent rating for new build and very good refurbishment. Whilst this is an NHS requirement it is often not formally adhered to on many developments as the cost is prohibitive and can often conflict with the primary objectives of projects.

As part of developing the scheme the additional fees in achieving a formal BREEAM excellent accreditation have been evaluated to be in the order of  $\pounds40,000$ . That fee expenditure alone will in effect impact on the project delivering 5 to 6 less parking spaces in capital terms with a consequent recurring loss of income from parking charges of between  $\pounds15,000 - \pounds18,000$  per annum. To achieve a formal BREEAM excellent accreditation is likely to impose design constraints, and potentially capital cost investment in sustainable design, that will further impact on the final number of spaces constructed.

An alternative accreditation process for construction under the Energy Performance certificate (EPC) route has been evaluated and found not to be suitable for this type of development.

It is therefore proposed that the scheme is developed in the spirit of BREEAM whilst not formally seeking full accreditation for the project. This is felt to be an appropriate solution for a car park.

## 4.4 Potential for Risk Transfer

Interserve Construction via the LOT 2 Framework will deliver the MSCP under the NEC Contract and a Guaranteed Maximum Price. In doing so they have given a commitment to deliver their design for the price they have guaranteed, For the Trust this represents a high level of risk transfer as opposed to a more traditional procurement where the design risk remains with the client i.e. the Trust.

Alongside the GMP there is also the Trusts risk register which identifies a range of risks that are better covered by the Trust as they cannot be defined sufficiently for inclusion in a GMP and therefore cannot be costed with any certainty by Interserve Construction.

### 4.5 Procurement Strategy & Implementation Timescales

The scheme is to be procured under an NEC contract through the LOT 2 Framework with Interserve Construction being the main contractor. Enabling works for service diversions are commencing on site week commencing 20<sup>th</sup> April 2015.

An order is required no later than 18<sup>th</sup> May 2015 to enable completion on site prior to the end of December 2015/beginning January 2016.

# 5 The Financial Case

## 5.1 Introduction

The purpose of this section is to set out the forecast financial implications of the preferred options as set out in the Economic Case and the proposed deal (as described in the Commercial Case).

## 5.2 Capital Costs

Capital costs at Feasibility Stage were set at £4,000,000 as an affordability cap however it soon became apparent that to optimise costs in terms of a cost per space a flexible and economic design was required.

That flexibility is essentially delivered through a standardised design, standardised floor layouts and constructing complete as opposed to part floors. During design development it was also determined that there were two distinct design approaches as follows:

- ► A Traditional design approach that delivered a 410 space car park within a scheme budget of £4,554,382 and at a cost per space of £11,108, or;
- ► A Standardised System approach that delivered a 438 space car park within a scheme budget of £4,431,530 and at a cost per space of £10,187.

The system build approach showed clear benefits in delivering an additional 28 spaces whilst at a lower overall capital cost and lower cost per space. With a reducing capital cost per space set against a constant revenue income assessment the system build also offered a reduced payback period. The Trust budget was revised at this point to  $\pounds4,500,000$ . The tables below detail the alternative capital costs for the two design approaches and indicative payback periods:

	C	Fraditional onstruction		System Construction 438 spaces
Enabling	£	75,000	£	75,000
Works Cost - GMP	£	4,179,382	£	4,056,530
Service Diversions	£	100,000	£	100,000
Target GMP	£	4,354,382	£	4,231,530
Trust Direct Fees (budget)	£	100,000	£	100,000
Trust Contingencies	£	100,000	£	100,000
VAT	£	-	£	-
PROJECTED OUTTURN		£4,554,382		£4,431,530
COST PER SPACE		£11,108		£10,187

#### Table 15: Traditional v System construction comparison

The MSCP is to be built on an existing car park with the loss of 78 spaces, plus the net loss of an additional 1 space in the existing car park. The net increase in spaces is therefore:

### Table 16: Net increase in spaces, Traditional v System construction

	Traditional Construction	System Construction
MSCP	410	438
	-79	-79
NET INCREASE IN SPACES	331	359

Based on an assessed annual income per space of £3,000 then the comparison of capital cost and income associated with the two options is:

#### Table 17: Traditional v System construction

		raditional onstruction		System nstruction
Total capital cost	£	4,554,382	£	4,431,530
Income (£3,000/annum/space)	£	993,000	£	1,077,000
<b>PAYBACK</b> (excluding revenue costs & impact of existing income)		4.59		4.11

**Note**: the above payback calculation excludes the loss of revenue income for the spaces lost during the nine month construction period assessed to be in the order £275,000. Similarly, the additional revenue costs (capital charges, loan interest, operating costs and impact on the level of income achieved through existing spaces) has been excluded for this comparison. This is considered in more detail in 5.4Revenue Income and Expenditure.

The design has developed to the point that Interserve Construction who were appointed under the LOT 2 Framework have developed a Guaranteed Maximum Price (GMP) for the 438 system build design selected. The GMP also now includes the additional capital cost to enhance the foundations to facilitate an additional floor at a subsequent date. The table below details the current capital cost proposal:

		terserve GMP 438 Spaces
Enabling		Incl.
Works Costs – MSCP		£ 4,184,768
Future Proofing for additional level		£ 70,000
Service Diversions		Incl.
GMP	£	4,254,768
Project Manager and Cost Adviser	£	83,300
CDM Co-ordinator	£	4,000
Trust Risk Register (Contingency)	£	152,863
VAT		Excl.
PROJECT OUTTURN	£	4,494,931
COST PER SPACE	£	10,333

#### Table 18: Proposed budget

Note:

- A Trust contingency has not been included as the risk register has identified known risks and assessed probable costs;
- VAT has been excluded from the capital costs as VAT is allocated within parking charges.

## 5.3 Revenue income and expenditure

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- 5.1
- 5.2
- 5.3

### 5.3.1 Financial modelling assumptions

In order to model the financial implications of the proposal a series of assumptions have been made, these include:

- Existing LRI paid public and patient car parking provision is 327 spaces, made up of 297 on Havelock Street and 30 in front of ED.
- This proposal delivers a net increase of 359 spaces (110% increase) taking the total to 686 spaces.
- Car park demand is assumed to be at least 600 spaces made up of the existing 297, 80 vehicles queuing, 200 parked at Granby Halls and 23 of growth (as per 2.4.2).
- The expected closure of Granby Halls and consequent impact on demand (200 cars) has been assumed to be effective from January 2016.
- Offsetting some of the optimism in demand assumptions is:
  - No account of the impact of estate reconfiguration has been taken
  - No account of the impact of increased public use of the car park at weekends, due to additional availability, has been taken
  - No account of the patients and public choosing to park elsewhere, or not use a car at all, has been taken
- The car park is not managed or maintained under the terms of the existing Interserve Facilities Management (IFM) contract.
- ▶ UHL receive all income growth for the new spaces, not applying the 50% share Interserve would be entitled to under the current IFM contract.
- Base case modelling assumes car parking income is £3000 per space for 686 spaces; this is a 7% reduction in income per space. More detail on this is included below (5.3.2).
- The base case modelling uses £3000 per space on the assumption that car parking rates will not change as part of this development.
- Operating costs have been applied in line with marginal rates from within the IFM contract to account for management and maintenance.
  - Car park management (including security patrols) costs have been based on the marginal cost within the IFM contract which uses existing staffing per parking space on a pro-rata basis.
  - Car park maintenance costs have been based on £10/m2 and 7000m2 which is within the range of £6/m2 to £12/m2 in the IFM contract.

- Operating costs in respect of utilities and rates have been excluded.
- Life cycle costs have been excluded, though depreciation has been included.
- The use of Interest Bearing Debt (IBD) as source of capital funding has been assumed, using an interest rate of 1.98%
- For accounting purposes, the asset life of the proposal is assumed to be 30 years

### 5.3.2 Financial modelling outputs

Revenue income and expenditure has been assessed on an annual income per space of  $\pounds$ 3,000 with the parameters being:

- Loss of income for up to 100 spaces for the nine month construction period of April to December 2015 inclusive which is assessed as £242k;
- Increase in income for January to March 2016 of £251k;
- ▶ Increased revenue post completion of £1,002k per annum.

The table below summarises the payback period against the capital outlay, further detail is available within appendix 1:

£3,000 Per space	2015/16 £000	2016/17 £000	2017/18 £000	2018/19 £000	2019/20 £000	2020/21 £000	2021/22 £000
Income Loss	(242)						
Income Addition	251	1,002	1,002	1,002	1,002	1,002	1,002
Net income change	8	1,002	1,002	1,002	1,002	1,002	1,002
Operating costs	(34)	(136)	(136)	(136)	(136)	(136)	(136)
Non-operating costs	(92)	(242)	(240)	(237)	(235)	(232)	(230)
Net expenditure change	(126)	(379)	(376)	(373)	(371)	(368)	(366)
Revenue surplus/(deficit)	(118)	623	626	629	631	634	636
Initial Capital Cost	(4,495)	-	-	-	-	-	-
Net cash outflow/(inflow)	(4,521)	866	866	866	866	866	866
Cumulative net cash flow	(4,521)	(3,655)	(2,790)	(1,924)	(1,058)	(193)	673

#### Table 19: Projected payback period

This demonstrates that the undiscounted payback period for the investment is 6 years and 2 months, with a return on investment (ROI) of 14.6%.

#### Notes:

- The assessed annual income per space (£3,000) has been derived by the Trust based upon current activity, but adjusted down (by 7%) to reflect the change in provision. Income for spaces varies across the whole site and this sum is deemed a reasonable assessment taking into account the issues identified in the financial assumptions. It should however be noted that in reality this will vary and could be lower but equally could be higher;
- Total additional income and therefore the payback projection will be subject to availability of spaces. Were the scheme to have over provided spaces, and there be busy hospital periods with empty spaces, then income projections will fall;
- The revenue income is currently collected by Interserve FM as part of the LOT 1 Framework, in line with the assumptions given above it is not assumed that Interserve FM will manage and maintain the multi-storey car park.

### 5.3.3 Sensitivity analysis

The key variable the proposal is most sensitive to is the level of income the Trust will generate post completion of the project. For this reason the impact of income averaging  $\pounds 2,500$  (downside),  $\pounds 2,000$  (worst case) and  $\pounds 3,500$  (upside) has been modelled. A comparison of the scenarios is given below with the detailed financial templates included in appendix 1.

	FYE Additional Annual Income £k	Net present value/(cost) (£k)	ROI	Undiscounted Payback period	Change in income per space
Base Case - £3,000 per space	1,002	8,448	14.6%	6 years 2 months	(7%)
Downside - £2,500 per space	659	3,223	7.5%	9 years 10 months	(23%)
Worst Case - £2,000 per space	316	(2,002)	N/A	N/A	(38%)
Upside - £3,500 per space	1,345	13,673	23.4%	4 years 8 months	8%

#### Table 20: Income scenario analysis

In order for the proposal to achieve break-even the income per space once the multistorey car park is complete will need to be £2,178 per space, this is a 33% reduction on current income levels per space.

## 5.4 VAT Recovery

VAT on the Works Cost is assessed as 100% recoverable. On standard projects VAT is payable on all the works with some elements being recoverable however in this instance the Trust will be charging for the use of the car park and each parking fee will include for VAT; in this scenario HMRC receives VAT through the long term revenue stream allowing the capital outlay to be VAT recoverable

## 5.5 Affordability

The impact of the FBC on revenue and capital income and expenditure has been assessed through the development of the case; this demonstrates the case is affordable to the Trust from a revenue income and expenditure perspective.

There is a small revenue loss identified in 2014/15 due to the loss of car parking provision during the building of the solution. However, this is felt to be inevitable and immaterial making it a manageable consequence of the decision to approve the business case for implementation.

The capital requirement (£4.5m) is not affordable within Trust resources due to the pressures on internally generated capital funding and the immediate need for the solution to be implemented. As a result the financial analysis of this scheme assumes the use of Interest Bearing Debt (IBD) to fund the capital costs for which the Trust will be required to seek approval via the Independent Trust Financing Facility (ITFF). The application for the IBD will require support from the Trust Development Authority (TDA). The Trust is liaising with colleagues from the TDA to understand the process by which the funding can be awarded when, in this case, the scheme does not require their formal review as it is within the Trusts approval threshold.

# 6 The Management Case

## 6.1 Introduction

The Management Case provides a summary of the arrangements which have been put into place for the successful delivery of the proposed multi-storey car park development,

## 6.2 Project Governance Arrangements

The project is being managed under the Trusts Standing Financial Instructions with the following in place:

- A Project Team as outlined below;
- Project Team Meetings held monthly;
- Regular reporting to the Capital Monitoring and Investment Committee;
- Project Sponsor role being fulfilled by Richard Kinnersley, Major Projects Technical Director;
- Trust side consultants being appointed via the West Midlands Alliance Framework;
- Project Manager role being fulfilled by Peter Dudley, Partner, Holbrow Brookes;
- ▶ Interserve Construction appointed via the assignment of the LOT 2 Framework.

## 6.3 Outline Project Roles & Responsibilities

A Project Team reporting to the Trust Capital Programme Board has been established to produce the project from the feasibility study to business case. The team is made up of key individuals required to deliver this high profile project as follows:

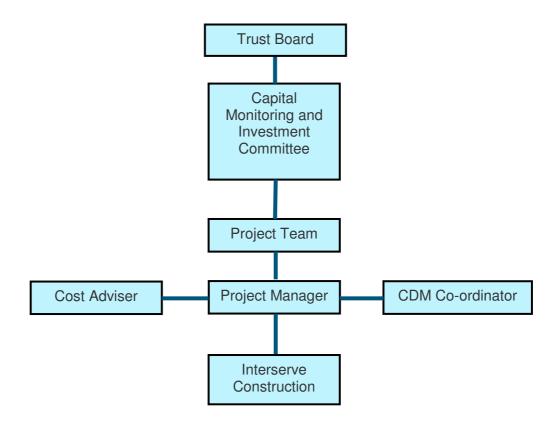
Estates (Chair)	-	Richard Kinnersley (Major Projects Technical Director)
Procurement	-	Richard Pitt
Finance	-	Darryn Kerr, Interim Director of Estates and Facilities, Estates and Facilities Management Consortium
	-	Paul Gowdridge, Finance
Operations	-	Ruth Ward (Travelwise Manager)
Communications & Engagement	-	Laura Mort, Communications Officer
Project Management	-	Peter Dudley (Consultant, Holbrow Brookes)

This project team structure is appropriate to take the scheme forward to delivery.

Following OBC stage Interserve engaged with Huber Car Park Systems to review their system build, Following design meetings, reviews and cost assessments it was agreed

by the Trust to progress with the Huber VCM System Build Car Park which offers 437 spaces on the same site plot. Huber has recently completed car parks for other Trusts, namely Wolverhampton and Stratford upon Avon, and provide significant benefits over a traditional bespoke steel frame or RC concrete solution.

The organogram below identifies the Project delivery structure:



Further design duties and responsibilities are provided in the Estates Annex.

## 6.4 Project Plan

### 6.4.1 Car Parking Provision during Construction

During the construction process there will be a loss of between 90 to 100 available car parking spaces on the LRI site; 78 spaces under the footprint of the new MSCP plus spaces temporarily lost under the contractors' compound which will come back into operation on completion.

To offset this loss the Trust has negotiated with NCP in respect of the Granby Halls Car Park which is adjacent to the Leicester Tigers Rugby Club and across the main Aylestone Road from the hospital. UHL are working in partnership with NCP to provide an overflow parking area for use by hospital patients and visitors during the multi-storey build. Currently the NCP car park has an early bird tariff so that people arriving before a certain time get a beneficial rate for all day parking. This can result in the car park becoming congested with commuter and park and ride users. NCP will be removing this early bird tariff and replacing it with an hourly tariff, which will be more conducive to the hospital users and dissuade commuters from parking for extended periods of time, i.e. all day.

The UHL are currently creating a communications strategy to alert LRI users to the alternative parking. This will include directional banners, advertising banners, fliers, posters and information on the website.

## 6.5 Stakeholder Engagement

As part of the design development for the MSCP both the Trust and Interserve Construction have liaised with a wide range of stakeholders as follows:

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- 7.3
- 7.4
- 7.5

### Internal

- Travelwise Manager for the project brief and day to day operational issues;
- Pathology in the context of their close proximity to the MSCP in Sandringham and associated Pathology deliveries;
- Estates in the context of existing service infrastructure and as built information;
- ► IFM for details of:
  - current CCTV provision;
  - barriers and pay-stations;
- Fire Officer to understand impact on Sandringham and Osborne buildings;
- Communications team to provide for staff, patient and visitor information releases;
- ▶ Impact of construction on the adjacent UHL clinical and operational activity.

### External

- Local Residents;
- Local Residents Association;
- Local Councillors for Castle Ward;
- LCC Planning Department to include Highways;
- Press and Media.

## 6.6 Outline Arrangements for Benefits Realisation

The Trust intends to carry out Post Project Evaluation as identified in 6.7 below.

## 6.7 Outline Arrangements for Post Project Evaluation

The Trust will undertake a post-project evaluation of this development. Once the MSCP is operational the Trust will repeat the Car Park Survey to compare with the 2013 survey described in Section 2.7.5.

Surveys will be undertaken post occupation at:

- 3 months;
- ▶ 6 months, and;
- 12 months

This high level of frequency is planned so the Trust can determine whether or not it wishes to invest further to create the additional floor

## 6.8 Gateway Review Arrangements

A formal Gateway Review process was not initiated as this project is low risk under the Gateway Assessment.

## 6.9 Contingency Plans

The Trust has put in place a range of contingency plans in respect of this project as follows:

- Liaised/negotiated changes to tariffs on Granby Halls with NCP;
- Continuing to be aware of the parking market around LRI in the eventuality that the Trust can access off site facilities if necessary;
- Upgrading of the foundations of the MSCP so that an additional floor with circa 74 additional spaces could be provided;
- Monitoring parking charges in the area so that Trust tariffs do not encourage parking by commuters and match day visitors.

# 7 Appendix 1 – Financial Analysis

## Base case financial appraisal

#### UNIVERSITY HOSPITALS OF LEICESTER

#### MSCP (base case income, £3k per space)

Business Case Financial Summary

	Year 1 2015/16 £k	Year 2 2016/17 £k	Year 3 2017/18 £k	Year 4 2018/19 £k	Year 5 2019/20 £k	Year 6 2020/21 £k	Year 7 2021/22 £k	Year 8 2022/23 £k	Year 9 2023/24 £k	Year 10 2024/25 £k	Years 11 - 30 £k	Total £k
INCOME AND EXPENDITURE												
Patient care income	-	-	-	-	-	-	-	-	-	-		-
Other income Total revenue income	8 8	1,002 1,002		9,026 9,026								
	8	1,002	1,002	1,002	1,002	1,002	1,002	1,002	1,002	1,002		9,020
Operating costs	(34)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)		(1,262)
Cash releasing benefits	-	-	-	-	-	-	-	-	-	-		-
Total operating benefit/(cost)	(34) (92)	(136)	(136)	(136) (237)	(136)	(136)	(136)	(136)	(136) (225)	(136)		(1,262)
Non-operating benefit/(costs) Total revenue benefit/(cost)	(126)	(242) (379)	(240)	(373)	(235) (371)	(232)	(230) (366)	(227) (363)	(225)	(222) (358)		(2,181) (3,442)
	(120)	(373)	(370)	(373)	(371)	(500)	(300)	(303)	(501)	(550)		(3,442)
REVENUE SURPLUS/(DEFICIT) before technical adjustments	(118)	623	626	629	631	634	636	639	641	644		5,584
Add back: Impairments	-	-	-	-	-	-	-	-	-	-		-
REVENUE SURPLUS/(DEFICIT) after technical adjustments	(118)	623	626	629	631	634	636	639	641	644		5,584
CAPITAL EXPENDITURE Capital expenditure Less: capital receipts on disposals	(4,495)	-	-	-	-	-	-	-	-	-		(4,495)
TOTAL CAPITAL EXPENDITURE	(4,495)	-	-	-	-	-	-	-	-	-		(4,495)
Funding source: Internal capital resources (CRL) External funding	4,495 <b>4,495</b>	- -	- -	- - -	- -	- -	- - -	- -	- -			- 4,495 4,495
CASHFLOW Discounted cashflow (NPV) Cumulative discounted cashflow Discounted payback (years)	<b>(4,521)</b> (4,521)	<b>836</b> (3,684)	<b>808</b> (2,876)	<b>781</b> (2,096)	<b>754</b> (1,341)	<b>729</b> (613)	<b>704</b> 92 6.9	<b>680</b> 772	<b>657</b> 1,429	<b>635</b> 2,064	<b>6,384</b> 8,448	<b>8,448</b> 8,448
BENEFITS SUMMARY												
Income Net cash releasing cost benefit	8 (126)	1,002 (379)	1,002 (376)	1,002 (373)	1,002 (371)	1,002 (368)	1,002 (366)	1,002 (363)	1,002 (361)	1,002 (358)		9,026 (3,442)
Non cash releasing	(118)	623	626	629	631	634	636	639	641	644		- 5,584

Workings:



## Downside scenario financial appraisal

#### UNIVERSITY HOSPITALS OF LEICESTER

#### MSCP (down side, £2.5k per space)

Business Case Financial Summary

	Year 1 2015/16 £k	Year 2 2016/17 £k	Year 3 2017/18 £k	Year 4 2018/19 £k	Year 5 2019/20 £k	Year 6 2020/21 £k	Year 7 2021/22 £k	Year 8 2022/23 £k	Year 9 2023/24 £k	Year 10 2024/25 £k	Years 11 - 30 £k	Total £k
INCOME AND EXPENDITURE												
Patient care income	-	-	-	-	-	-	-	-	-	-		-
Other income	(77)	659	659	659	659	659	659	659	659	659		5,854
Total revenue income	(77)	659	659	659	659	659	659	659	659	659		5,854
Operating costs	(34)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)		(1,262)
Cash releasing benefits	-	-	-	-	-	-	-	-	-	-		-
Total operating benefit/(cost)	(34)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)		(1,262)
Non-operating benefit/(costs)	(92)	(242)	(240)	(237)	(235)	(232)	(230)	(227)	(225)	(222)		(2,181)
Total revenue benefit/(cost)	(126)	(379)	(376)	(373)	(371)	(368)	(366)	(363)	(361)	(358)		(3,442)
REVENUE SURPLUS/(DEFICIT) before technical adjustments	(204)	280	283	286	288	291	293	296	298	301		2,411
Add back: Impairments		-	-	-	-	-	-	-	-	-		-
REVENUE SURPLUS/(DEFICIT) after technical adjustments	(204)	280	283	286	288	291	293	296	298	301		2,411
CAPITAL EXPENDITURE Capital expenditure	(4,495)	-	-	-	-	-	-	-	-	-		(4,495)
Less: capital receipts on disposals	-	-	-	-	-	-	-	-	-	-		-
TOTAL CAPITAL EXPENDITURE	(4,495)	-	-	-	-	-	-	-	-	-		(4,495)
Funding source: Internal capital resources (CRL) External funding	- 4,495	-	-	-	-	-	-	-	-	-		- 4,495
	4,495	-	-	-	-	-	-	-	-	-		4,495
	1											
CASHFLOW Discounted cashflow (NPV) Cumulative discounted cashflow Discounted payback (years)	<b>(4,606)</b> (4,606)	<b>505</b> (4,102)	<b>488</b> (3,614)	<b>471</b> (3,142)	<b>455</b> (2,687)	<b>440</b> (2,247)	<b>425</b> (1,822)	<b>411</b> (1,411)	<b>397</b> (1,014)	<b>383</b> (631)	<b>3,854</b> 3,223	<b>3,223</b> 3,223
BENEFITS SUMMARY	1											
DEINEFTTS SUIVIIVIAKY		659	659	659	659	659	659	659	659	659		5,854
Income	(77)				039	059	039	039	039	039		5,054
Income Net cash releasing cost henefit	(77)											12 1121
Income Net cash releasing cost benefit Non cash releasing	(77) (126)		(376)	(373)	(371)	(368)	(366)	(363)	(361)	(358)		(3,442)

Workings:



## Worst case scenario financial appraisal

#### UNIVERSITY HOSPITALS OF LEICESTER

#### MSCP (worse case, £2.0k per space)

Business Case Financial Summary

	Year 1 2015/16 £k	Year 2 2016/17 £k	Year 3 2017/18 £k	Year 4 2018/19 £k	Year 5 2019/20 £k	Year 6 2020/21 £k	Year 7 2021/22 £k	Year 8 2022/23 £k	Year 9 2023/24 £k	Year 10 2024/25 £k	Years 11 - 30 £k	Total £k
INCOME AND EXPENDITURE												
Patient care income	-	-	-	-	-	-	-	-	-	-		-
Other income	(163)	316	316	316	316	316	316	316	316	316		2,681
Total revenue income	(163)	316	316	316	316	316	316	316	316	316		2,681
Operating costs	(34)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)		(1,262)
Cash releasing benefits	-	-	-	-	-	-	-	-	-	-		-
Total operating benefit/(cost)	(34)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)		(1,262)
Non-operating benefit/(costs)	(92)	(242)	(240)	(237)	(235)	(232)	(230)	(227)	(225)	(222)		(2,181)
Total revenue benefit/(cost)	(126)	(379)	(376)	(373)	(371)	(368)	(366)	(363)	(361)	(358)		(3,442)
REVENUE SURPLUS/(DEFICIT) before technical adjustments	(289)	(63)	(60)	(57)	(55)	(52)	(50)	(47)	(45)	(42)		(762)
Add back: Impairments	_	_	_	-	_	-	_	_	_	_		-
REVENUE SURPLUS/(DEFICIT) after technical adjustments	(289)	(63)	(60)	(57)	(55)	(52)	(50)	(47)	(45)	(42)		(762)
CAPITAL EXPENDITURE Capital expenditure Less: capital receipts on disposals TOTAL CAPITAL EXPENDITURE	(4,495)  <b>(4,495)</b>	-	-	- -	-	-	- -	-	-	- -		(4,495) - (4,495)
Funding source: Internal capital resources (CRL) External funding	4,495	-	-	-	-	-	-	-	-	-		- 4,495
	4,495	-	-	-	-	-	-	-	-	-		4,495
CASHFLOW												
Discounted cashflow (NPV) Cumulative discounted cashflow	<b>(4,692)</b> (4,692)	<b>174</b> (4,519)	<b>168</b> (4,351)	<b>162</b> (4,189)	<b>156</b> (4,033)	<b>151</b> (3,881)	<b>146</b> (3,735)	<b>141</b> (3,594)	<b>136</b> (3,458)	<b>132</b> (3,326)	<b>1,324</b> (2,002)	<b>(2,002)</b> (2,002)
Discounted payback (years)												
BENEFITS SUMMARY												
Income Net cash releasing cost benefit	(163) (126)	316 (379)	316 (376)	316 (373)	316 (371)	316 (368)	316 (366)	316 (363)	316 (361)	316 (358)		2,681 (3,442)
Non cash releasing	-					-						-
	(289)	(63)	(60)	(57)	(55)	(52)	(50)	(47)	(45)	(42)		(762)

Workings:



## Upside scenario financial appraisal

#### UNIVERSITY HOSPITALS OF LEICESTER

#### MSCP (upside, £3.5k per space)

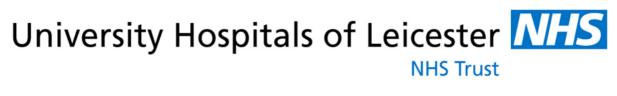
Business Case Financial Summary

	Year 1 2015/16 £k	Year 2 2016/17 £k	Year 3 2017/18 £k	Year 4 2018/19 £k	Year 5 2019/20 £k	Year 6 2020/21 £k	Year 7 2021/22 £k	Year 8 2022/23 £k	Year 9 2023/24 £k	Year 10 2024/25 £k	Years 11 - 30 £k	Total £k
INCOME AND EXPENDITURE												
Patient care income	-	-	-	-	-	-	-	-	-	-		-
Other income	94	1,345	1,345	1,345	1,345	1,345	1,345	1,345	1,345	1,345		12,199
Total revenue income	94	1,345	1,345	1,345	1,345	1,345	1,345	1,345	1,345	1,345		12,199
Operating costs Cash releasing benefits	(34)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)		(1,262) -
Total operating benefit/(cost)	(34)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)	(136)		(1,262)
Non-operating benefit/(costs)	(92)	(242)	(240)	(237)	(235)	(232)	(230)	(227)	(225)	(222)		(2,181)
Total revenue benefit/(cost)	(126)	(379)	(376)	(373)	(371)	(368)	(366)	(363)	(361)	(358)		(3,442)
REVENUE SURPLUS/(DEFICIT) before technical adjustments	(32)	966	969	972	974	977	979	982	984	987		8,757
Add back: Impairments REVENUE SURPLUS/(DEFICIT)	-	-	-	-	-	-	-	-	-	-		-
after technical adjustments	(32)	966	969	972	974	977	979	982	984	987		8,757
CAPITAL EXPENDITURE												
Capital expenditure Less: capital receipts on disposals	(4,495)	-	-	-	-	-	-	-	-	-		(4,495)
TOTAL CAPITAL EXPENDITURE	(4,495)	-	-	-	-	-	-	-	-	-		- (4,495)
Funding source: Internal capital resources (CRL)	-	-	-	-	-	-	-	-	-	-		-
External funding	4,495	-	-	-	-	-	-	-	-	-		4,495
	4,495	-	-	-	-	-	-	-	-	-		4,495
CASHFLOW Discounted cashflow (NPV)	(4,435)	1,168	1,128	1,090	1,053	1,018	983	950	918	887	8,913	13,673
Cumulative discounted cashflow	(4,435)	(3,267)	(2,139)	(1,049)	1,053	1,018	2,005	2,955	3,873	4,760	13,673	13,673 13,673
Discounted payback (years)	(4,433)	(3,207)	(2,135)	(1,045)	5.0	1,022	2,003	2,555	5,675	4,700	13,075	13,075
BENEFITS SUMMARY												
Income	94	1,345	1,345	1,345	1,345	1,345	1,345	1,345	1,345	1,345		12,199
Net cash releasing cost benefit	(126)	(379)	(376)	(373)	(371)	(368)	(366)	(363)	(361)	(358)		(3,442)
Non cash releasing	-	-	-	-	-	-	-	-	-	-		-
	(32)	966	969	972	974	977	979	982	984	987		8,757

Workings:



financial template v2.



Building Caring at its best

Full Business Case | LRI Multi-Storey Car Park