

## CHAPTER 7 - RISK ANALYSIS

### 7.1 Introduction

This chapter contains an assessment of the risks associated with the development, both quantifiable and non-quantifiable. The assessment has been made on the assumption the scheme will be procured through the PFI. The NPV and EAC analysis has been undertaken in accordance with the 'Green Book'.

### 7.2 Methodology

The risk analysis undertaken in this chapter is based on the method and format described in the NHS Executive PFI Guidance and the Treasury Taskforce technical Note on how to construct a public sector comparator.

### 7.3 Risk Matrix

Using the NHS PFI guidance, the key risks of the project have been identified. There is nothing special about the project that indicates a need to vary the risk profile therefore the allocation is based on the risk profile for a typical PFI scheme.

There is insufficient information available at present to undertake further analysis work. However, a high-level risk assessment has been made in Chapter 4 section 9 and in Appendix J. Details of the risk assessment undertaken for assessing the planning contingencies for the capital cost build-up are contained in section 7.4 and Appendix G.

A full risk analysis will be undertaken at the FBC stage.

#### 7.3.1 Design Risks

No	Risk Heading	Allocation		
		Trust	SPV	Shared
1.1	Failure to design to brief		✓	
1.2	Continuing development of design		✓	
1.3	Change in requirements of the trust	✓		
1.4	Change in design required by SPV		✓	
1.5	Change in design required due to external influences specific to the NHS	✓		
1.6	Failure to build to design		✓	

### 7.3.2 Construction and Development Risks

No	Risk Heading	Allocation		
		Trust	SPV	Shared
2.1	Incorrect time estimate		✓	
2.2	Unforeseen ground or site conditions		✓	
2.3	Unforeseen ground conditions under the existing	✓		
2.4	Delay in gaining access to the site			✓
2.5	Responsibility for maintaining on-site security		✓	
2.6	Responsibility for maintaining site safety		✓	
2.7	Third party claims		✓	
2.8	Compensation Events	✓		
2.9	Delay Events			✓
2.10	Force Majeure			✓
2.11	Termination due to Force Majeure			✓
2.12	Legislative/ regulatory change: NHS specific	✓		
2.13	Legislative/ regulatory change: non-NHS specific		✓	
2.14	Changes in taxation		✓	
2.15	Changes in the rate of VAT	✓		
2.16	Other changes to VAT	✓		
2.17	Contractor default		✓	
2.18	Poor project management		✓	
2.19	Contractor/sub-contractor industrial action		✓	
2.20	Protester action			✓
2.21	Incorrect time and cost estimates for decanting from existing buildings	✓		
2.22	Incorrect time and cost estimate for commissioning the new building		✓	

### 7.3.3 Availability and Performance Risks

No	Risk Heading	Allocation		
		Trust	SPV	Shared
3.1	Latent defects in new build		✓	
3.2	Change in specification initiated by the trust	✓		
3.3	Performance of sub-contractors		✓	
3.4	Default by contractor or sub-contractor		✓	
3.5	Industrial action		✓	
3.6	Failure to meet performance standards		✓	
3.7	Availability of facilities		✓	
3.8	"Relief Events"			✓
3.9	Force Majeure			✓
3.10	Termination due to force majeure			✓

### 7.3.4 Operating Cost Risks

No	Risk Heading	Allocation		
		Trust	SPV	Shared
4.1	Incorrect estimated cost of providing soft services under the contract: within market testing periods		✓	
4.2	Incorrect estimated cost of providing soft services under the contract: at the point of market testing	✓		
4.3	Legislative/regulatory change having capital cost consequences: NHS specific	✓		
4.4	Legislative/regulatory change having capital cost consequences: non-NHS specific			✓
4.5	Changes in taxation		✓	
4.6	Changes in VAT		✓	
4.7	Incorrect estimate of the cost of providing clinical services	✓		
4.8	Incorrect estimated cost of maintenance		✓	
4.9	Incorrect estimated cost of energy usage		✓	
4.10	Patient infection caused by poor facilities management			✓
4.11	Patient infection - other	✓		
4.12	Estimated cost of transferring the employment of staff to new employer is incorrect			✓
4.13	Estimated cost of restructuring the workforce providing services under the contract		✓	

### 7.3.5 Variability of Revenue Risk

No	Risk Heading	Allocation		
		Trust	SPV	Shared
5.1	Non-performance of services		✓	
5.2	Poor performance of services		✓	
5.3	Changes in the size of the allocation of resources for the provision of health care	✓		
5.4	Changes in the volume of demand for patient services	✓		
5.5	Unexpected changes in medical technology	✓		
5.6	Unexpected changes in the epidemiology of the people in the catchment area	✓		
5.7	Unexpected sudden increases in demand, due to major incident			✓
5.8	Estimated income from income generation schemes is incorrect		✓	

### 7.3.6 Termination Risk

No	Risk Heading	Allocation		
		Trust	SPV	Shared
6.1	Termination due to default by the trust	✓		
6.2	Default by SPV leading to step-in by financiers		✓	
6.3	Termination due to default by SPV		✓	

### 7.3.7 Technology and Obsolescence Risk

No	Risk Heading	Allocation		
		Trust	SPV	Shared
7.1	Asset obsolescence		✓	
7.2	Technological changes	✓		

### 7.3.8 Control Risk

No	Risk Heading	Allocation		
		Trust	SPV	Shared
8.1	Control of clinical services	✓		
8.2	Control of services provided under the PFI contract		✓	

### 7.3.9 Residual Value Risk

No	Risk Heading	Allocation		
		Trust	SPV	Shared
9.1	Trust no longer requires assets at end of contract or residual value less than expected		✓	

### 7.3.10 Other Project Risks

No	Risk Heading	Allocation		
		Trust	SPV	Shared
10.1	Incorrect cost estimates for planning approval		✓	
10.2	Delayed planning approval			✓
10.3	Land sale receipts		✓	

## 7.4 Risk Costs (Planning Contingency)

The planning contingency risk cost has been calculated including all construction risks, client changes, regulatory changes, pricing risks and design issues. Full details of the risk assessments and calculations for each option are contained in Appendix G. The estimated risk cost (planning contingency) for each option is given in Table 16.

Table 16 Estimated Risk Costs for each Option

Option	Risk Cost (Planning Contingency)	% of Works Cost
Do Minimum	£ 2.0 m	12.5%
Fenland Wing & New Build	£ 2.0 m	12.5%
New Build ECH	£2.7 m	12.5%

## 7.5 Non-quantifiable Risks

The only non-quantifiable risk identified is Trust reputation particularly in relation to the quality of the clinical services. This would have an impact on staff morale, recruitment and retention.

## 7.6 Retained Risks

Under a PFI procured solution, the Trust would retain the following risks:

- Changes to Trust and/or NHS requirements
- Unforeseen ground conditions
- Compensation events
- Change in Law NHS specific
- Change in VAT
- Decanting
- Changes to operating costs from market testing
- Clinical service costs
- Patient infections (non FM related)
- Changes in healthcare resources, demand and technology
- Trust default
- Management and performance of clinical services