

NHS Orkney

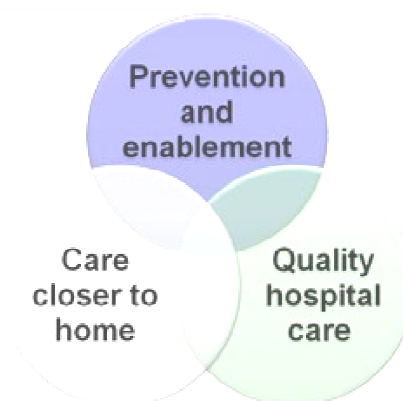
New Hospital and Healthcare Facilities

Outline Business Case

February 2014

Some content redacted to maintain commercial confidentiality during
the procurement process.

Approved by NHSO Board 27th February 2014
Published Version



Our community, we care, you matter.....

Contents

EXECUTIVE SUMMARY	11
Executive Summary	12
The Clinical Service Delivery Model	17
INTRODUCTION	39
1 Introduction	40
1.1 Responsibilities of NHS Orkney	40
1.2 Purpose	40
1.3 Context of the Proposed Investment	40
1.4 Project History	42
1.5 Compliance with National Capital Investment Guidance	43
1.6 Structure of the Outline Business Case Document	43
1.7 Further Information	46
STRATEGIC CASE	47
2. PROFILE OF NHS ORKNEY	48
2.1 Policy Overview	48
2.2 Geography	49
2.3 Existing Hospital Services	49
2.4 Demography	50
2.5 Current Services	51
2.6 Activity and Performance	53
2.7 Conclusion	60
3. STRATEGIC CONTEXT	61
3.1 Overview	61
3.2 National Context	61
3.3 Developing Our Orkney Our Health Transforming Clinical Services Clinical Strategy	62
3.4 Local Context	64
3.5 Conclusion	72
4. BUSINESS CASE OBJECTIVES & SCOPE	74
4.1 Overview	74
4.2 Benefits to be achieved	74
4.3 Key Investment Objectives	75
4.4 Project Scope	75

4.5	Existing Arrangements	75
4.6	The Case for Change	77
4.7	Implications of not providing a new Rural General Hospital and Health Care facilities	84
4.8	Conclusion	85
5	MODEL OF CARE AND SERVICE SPECIFICATION	86
5.1	Overview	86
5.2	Scope of Service Provision	86
5.3	Principles and Process in Developing the Models of Care	86
5.4	Proposed Models of Care	88
5.5	Retrieval Services	96
5.6	Service benefits of the new models of care	97
5.7	Clinical and Design Briefs	98
5.8	Conclusion	98
6	WORKFORCE PLANNING	99
6.1	Overview	99
6.2	Current Staffing Position	100
6.3	Assessing Future Workforce Requirements	100
6.4	Management of Workforce Change	105
6.5	Workforce Development Plans	108
6.6	Organisational Development (OD) Support	108
6.7	Conclusion	109
7	Future Service Requirements	110
7.1	Overview	110
7.2	General Approach to Service Modelling	110
7.3	Service Model Methodology and Assumptions	112
7.4	Summary of Current and Future Requirements	122
7.5	Conclusion	123
	ECONOMIC CASE	125
8	OPTION OVERVIEW	126
8.1	Overview	126
9	OPTION IDENTIFICATION	127
9.1	Overview	127
9.2	Long List of Options	127

10	OPTION APPRAISAL	129
10.1	Overview	129
10.2	Non financial Benefits	129
10.3	Non Financial Appraisal Results	129
10.4	Economic Appraisal	131
10.5	Risk Appraisal for Economic Analysis	133
10.6	Option Appraisal Results	135
11	PREFERRED OPTION	136
11.1	Overview	136
11.2	Sensitivity Testing	136
11.3	Analysis of the Option Appraisal Results	139
11.4	Conclusion	140
	REFERENCE DESIGN	141
12.	REFERENCE DESIGN PROCESS	142
12.1	Summary	142
12.2	Hospital Building and Healthcare Facilities	142
12.3	Wards Layout	144
12.4	Ensuite Single Inpatient Rooms	145
12.5	Access, Parking and Helipad	147
12.6	Clinical Support Services Building	148
12.7	Energy Centre	148
12.8	Landscaping	148
12.9	Sustainable Urban Drainage System	150
12.10	Future Expansion	150
12.11	Design Development	151
12.12	Costing Methodology	152
	COMMERCIAL CASE	155
13	PROCUREMENT ROUTE ASSESSMENT	156
13.1	Overview	156
13.2	Key Features of the Assessment	156
13.3	Proposed Procurement Route	157
13.4	Procurement Strategy and Process	158
13.5	Community Benefits	160
13.6	Conclusion	160

14	OTHER PROCUREMENT ISSUES	162
14.1	Overview	162
14.2	Selection and Acquisition of New Hospital and Healthcare Facilities Site	162
14.3	Partnership Approach to Planning and Other Issues	163
14.4	Site Option Appraisal	164
14.5	Acquisition of Scapa site	165
14.6	Enabling Works on the New Hospital Site	166
14.7	Disposal of Current Hospital Site	166
15	PROPOSED CONTRACTUAL ARRANGEMENTS	167
15.1	Overview	167
15.2	Contractual Issues	167
15.3	Required Services	168
15.4	Proposals for Risk Transfer	168
15.5	Proposed NPD Payment Mechanism	169
15.6	Non NPD Contractual Issues	170
15.7	Personnel Implications	170
15.8	Accountancy Treatment	171
	FINANCIAL CASE	173
16	FINANCIAL APPRAISAL	174
16.1	Overview	174
16.2	NPD Funding Model Overview	175
17	RECURRING REVENUE	177
17.1	Overview	177
17.2	Annual Service Payment	179
17.3	Depreciation	184
17.4	Service Running Costs	185
17.5	Facilities Management Services	187
17.6	Building Running Costs	188
17.7	Other Associated Costs	189
17.8	Summary of Affordability	190
17.9	Conclusion	191
18	Capital	192
18.1	Overview	192
18.2	Site Acquisition	193

18.3	External Enabling Works	193
18.4	Site Clearance Cost	193
18.5	Equipment Group 2 & 3	193
18.6	Capital Cost Summary	194
18.7	Optimism Bias	194
18.8	Summary of Capital Affordability	195
18.9	Conclusion	196
19	NON RECURRING REVENUE EXPENDITURE	197
19.1	Project Running Costs	197
19.2	Commissioning	197
19.3	Building Double Running Costs	197
19.4	Group 4 Equipment	197
19.5	Summary of Non Recurring Revenue Expenditure	198
19.6	Conclusion	198
20	ACCOUNTANCY TREATMENT	199
20.1	Overview	199
20.2	Assets within the scope of NPD contract	199
20.3	Capital Additions	200
20.4	Impairments	200
20.5	Conclusion	201
	MANAGEMENT CASE	203
21	PROJECT MANAGEMENT & PROJECT IMPLEMENTATION TIMETABLE	204
21.1	Overview	204
21.2	Project Management Strategy and Methodology	204
21.3	The Project Framework	205
21.4	Project Roles and Responsibilities	206
21.5	Project Plan	213
21.6	Project Communication and Reporting Arrangements	214
21.7	Key Stage Reviews	214
	MANAGING SUCCESSFUL DELIVERY	216
22.1	Overview	216
22.2	Change Management Plan	216
22.3	Approach to Change Management	219
22.4	Benefits Realisation Planning	219

22.5 Risk Management Plan	220
22.6 Proposals for Post Project Evaluation (PPE)	222
GLOSSARY OF TERMS	225

Table of Figures

Figure 1- 1: Structure of the Outline Business Case	44
Figure 2- 1: Health services across Orkney	50
Figure 2- 2: Inpatient beds available at Balfour Hospital	51
Figure 2- 3: Services provided on Balfour site.....	52
Figure 2- 4: Day Case Activity	53
Figure 2- 5: Board wide activity by occupied bed days (2010 to 2013)	54
Figure 2- 6: Emergency Department (ED) attendances 2010 to 2013	55
Figure 2- 7: Outpatient attendances (2011 to 2012).....	56
Figure 2- 8: Nursing, Midwifery and Allied Health Professions (NMAHP).....	57
Figure 2- 9: Repatriation based on average for the last 3 years (which will increase in response to advances in medicine and technologies).....	58
Figure 2- 10: Compliance with national waiting times targets as at September 2013	59
Figure 2- 11: Board financial performance £000	59
Figure 4 - 1: Key investment objectives.....	75
Figure 4 - 2: Projected percentage change in population (2010-based), by broad age group, Orkney and Scotland, 2010-2035	79
Figure 6- 1: Current recurring establishment.....	100
Figure 7- 1: NHS Orkney Inpatient Activity (2011/12).....	113
Figure 7- 2: Bed Numbers Based on Population Projections for 2020	115
Figure 7- 3: Bed Numbers Based on Population Projections for 2030	116
Figure 7- 4: Planning Assumptions - inpatient and day case.....	117
Figure 7- 5: Planning Assumptions - theatres and endoscopy	118
Figure 7- 6: Planning Assumptions – outpatients	120
Figure 7- 7: Summary of Current and Future Requirements	122
Figure 8- 1: Development of economic case	126
Figure 9- 1: Long list of options (NHS Orkney, IA, 2008)	127
Figure 9- 2: Revised options - March 2013	128
Figure 10- 1: Weighting attributed to Non Financial Criteria.....	129
Figure 10- 2: Un-weighted Non Financial Results of the option appraisal	130
Figure 10- 3: Weighted Non Financial Scores.....	131
Figure 10- 4: Key inputs at Base Date (1st Q 2014).....	132
Figure 10- 5: Results of NPC, pre adjustment for Risk.....	132
Figure 10- 6: Analysis of qualitative risk levels figure	134
Figure 10- 7: Results of NPC adjusted for Risk.....	134
Figure 10- 8: Results of the cost per benefits point	135
Figure 11- 1: Summary of option appraisal rankings.....	136
Figure 15- 1: Contract structure and payments	167
Figure 16- 1: New Hospital and Healthcare Facilities Financial Framework.....	174
Figure 16- 2: NPD Annual Service Payment funding arrangements	176
Figure 17- 1: NHS Orkney Recurring Baseline Budgets.....	177
Figure 17- 2: Affordability cost elements	178
Figure 17- 3: Input costs.....	180
Figure 17- 4: Annual service payment analysis.....	181
Figure 17- 5: Annual service payment sensitivity 1	182

Figure 17- 6: Annual service payment sensitivity 2	182
Figure 17- 7: Depreciation analysis £000	185
Figure 17- 8: Staffing.....	186
Figure 17- 9: FM running costs analysis.....	188
Figure 17- 10: Building running costs analysis	189
Figure 17- 11: Other associated costs analysis.....	189
Figure 17- 12: Revenue cost summary	190
Figure 18- 1: Capital cost elements.....	192
Figure 18- 2: Capital cost requirements	194
Figure 18- 3: Total capital requirements.....	195
Figure 18- 4: Capital cost summary.....	196
Figure 19- 1: Non recurring revenue costs summary	198
Figure 20- 1: Accountancy treatment elements.....	199
Figure 20- 2: Impairments	201
Figure 21- 1: Project Structure	205
Figure 21- 2: Project roles and responsibilities.....	206
Figure 21- 3: Individual roles and responsibilities.....	209
Figure 21- 4: Key project milestones.....	213
Figure 21- 5: NPD procurement journey and KSRs	214
Figure 22- 1: Impact of change	217
Figure 22- 2: The four stages of PPE.....	223

If you require this or any other NHS Orkney publication in an alternative format (large print or computer disk for example) or in another language, please contact the Clinical Safety and Quality Department:

Telephone: (01856) 888283 or

Email: ork-hb.alternativeformats@nhs.net

EXECUTIVE SUMMARY

Executive Summary

Introduction: Project Scope and Background

1. The Outline Business Case (OBC) presents our vision for reshaping and investing in health services across NHS Orkney as part of whole system health and care redesign.

2. The underlying impetus driving this investment is twofold:

Benefits for patients/staff

- Improved patient and staff experience;
- Improved staff recruitment and retention;
- New ways of working and improved performance;
- Repatriations;
- Locality based health and care delivery in partnership with other providers, including the Third Sector;
- Improved adjacencies and environmental ambience; and
- Improved access.

Replacement of buildings (serious business continuity risk) will address:

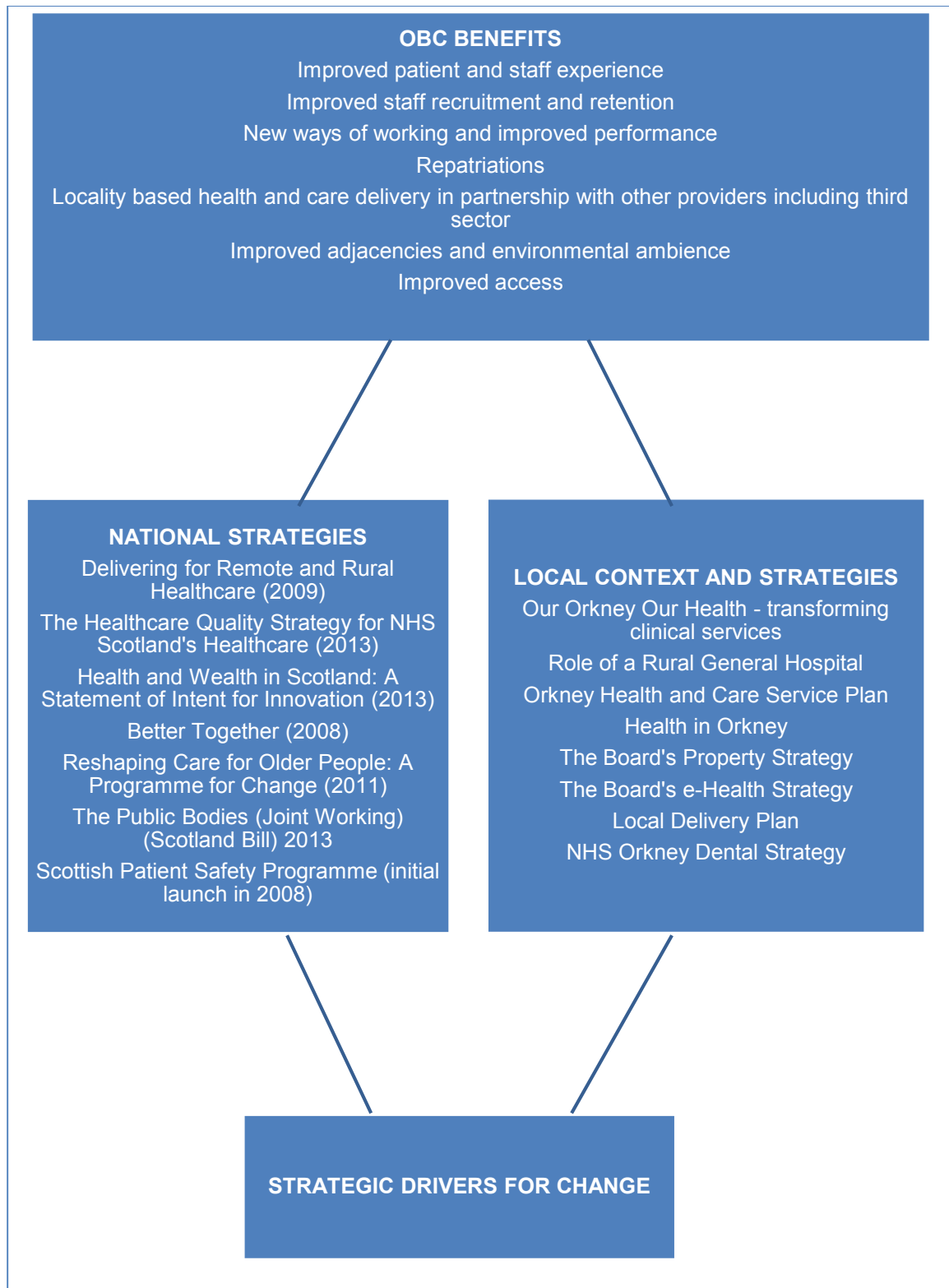
- Overcrowding and lack of storage;
- Poor accommodation and its impact on patient experience (temporary/portable buildings added to increase toilet and wash facilities in clinical areas);
- Infection control including decontamination risks;
- Patient environment and site layout – austere interior and impersonal exterior, outdated space standards with poor clinical adjacencies;
- Deteriorating engineering infrastructure (heating, plant etc) and the risk of ‘business interruption’;
- Significant backlog maintenance; and
- Buildings no longer fit for purpose (care delivery) with high carbon emissions and costly to run.

3. The OBC sets out our clinical service delivery model and proposals for the replacement of our Rural General Hospital and related healthcare facilities in Kirkwall, within a landmark building that supports a positive experience and delivery of person centred, safe and effective health care and services.

4. In Orkney, our changing demographics and the corresponding rise in need, particularly in the changing older population and those with chronic disease(s) will mean that the way health and social care are provided to the local population will need to change.

5. The OBC supports the Board's Clinical Strategy which is in line with the Scottish Government's 2020 vision and our plans for a service within which:
 - There is an emphasis on prevention
 - Resources are directed towards management (including self management) of long term conditions and structured pro-active care;
 - Care and treatment is provided, where clinically appropriate, in ambulatory care, primary care and community care settings;
 - When hospital admission is required, it will be provided, where possible as a day case;
 - When a patient requires a day case or inpatient stay, they will experience timely, person centred, safe and clinically effective care; and
 - There will be an emphasis on discharge to community based services as soon as clinically indicated with support as needed.
6. The Board's ambition is to reshape the way services are provided and the provision of a new Rural General Hospital incorporating an East Hub Primary Care facility, Public Dental Service and an adjoining clinical support services/facility represents one element of a series of system wide changes.
7. The following figure provides an overview of the strategic context from a national, regional and local perspective for the development of health services in Scotland as set out in the policy initiatives summarised in Annex 1.

OBC Benefits

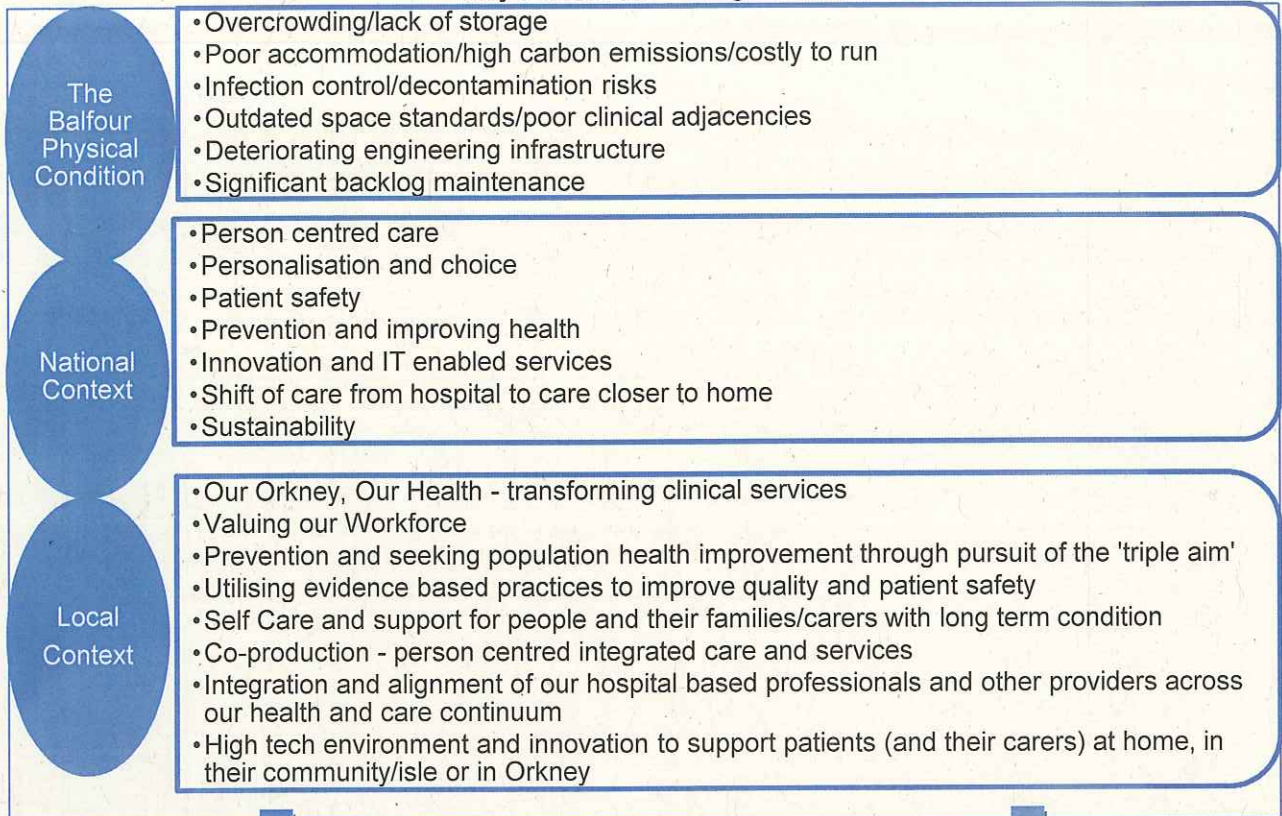


8. The Following figure summarises the key drivers of change and improvements sought. Our Case for Change in this regard is built around four key themes all of which are critical to delivering a successful outcome for the Project. These are:

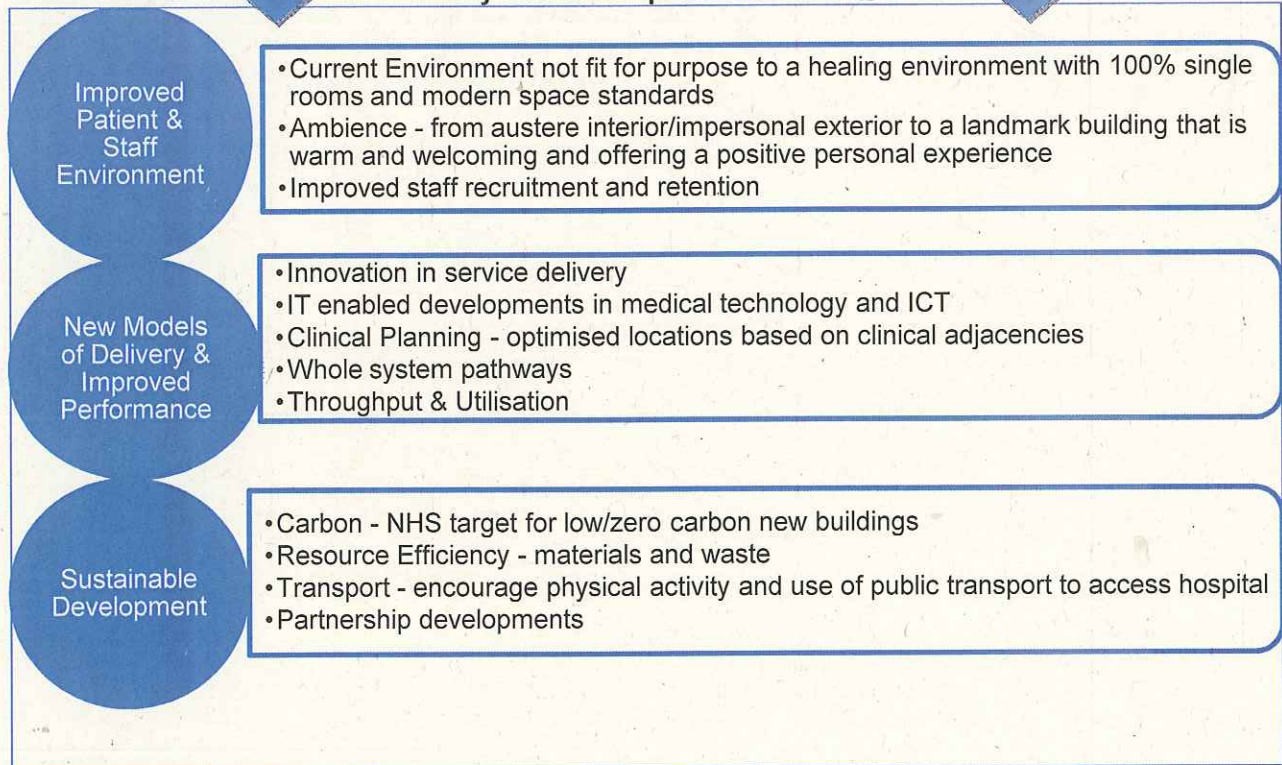
- The need to be able to respond to national Policy such as Reshaping Care for Older People and to facilitate the delivery of local initiatives such as Our Orkney, Our Health – transforming clinical services.
- The need to be able to respond to and manage future demographic change. The demographic change impacts on both the ageing population and their health needs and the available workforce for the future.
- The need to further modernise services, focusing on quality and clinical effectiveness.
- The need to address backlog maintenance and the lack of functional suitability of the current Balfour Hospital facilities, along with the need to improve the patient environment and experience in ways that help us support new ways of working and achieve our corporate objectives and HEAT related targets.

Case for Change

Key Drivers for Change



Key Areas of Improvement



'Care should come to me not the other way round, patients should not move beds unless for clinical necessity and time spent in hospital should be a small part of my journey, my experience because I matter'

The Clinical Service Delivery Model

9. Delivering future care requires us to think differently – to take responsibility for our patient's experience, to communicate appropriately and continually in ways that involve our patients proactively in their care decisions. Our patient testimonies bring to life why this investment is now critical in supporting NHS Orkney deliver its transformational clinical change programme.
10. As part of this Programme we have been exploring how advances and innovation in health care can contribute to our service development and repatriation agenda. To date 'disruptive innovation' and in particular how we use technology to make things simpler, more convenient, accessible and affordable is changing how we will, going forward, deliver safe and effective services here in Orkney. Our co-design work to inform this OBC and in particular our need for future design of hospital services that deliver:
 - safe, effective and compassionate care for all who need an inpatient stay
 - high quality 24/7 sustainable care
 - continuity of care
 - consultant led care in teams that are responsible for high quality patient care and an effective environment in which to educate and train future doctors in training and other clinical staff
 - effective relationships between doctors and other health and social care staff
11. Orkney is an Island Board and therefore our geography, our transport links and the need for our staff to respond to every emergency despite our limited critical mass presents challenges and opportunities for us to think and do things differently. In thinking differently we also need to consider the 'Orkney Factors' – we have one hospital serving the islands we have no scope to redirect or close and so our capacity modelling needs to accommodate our geographical, climate and transport challenges.
12. In co-designing our services we have taken into account our capacity and capability to deliver safe and effective elective services:
 - independently (outpatient, diagnostics, day-case/short stay and inpatient)
 - outreach consultant led IT enabled outpatients and/or diagnostic clinics
 - visiting consultant led outpatient and day-case services
 - 'off island' consultant led outpatient, diagnostics and inpatient care
13. A similar process of co-design informed our capacity and capability to provide safe and effective emergency services. Our thinking in emergency care demanded a different approach given our geography and timely rescue response times when patients present to our services acutely unwell and/or with life threatening conditions. In this regard our hospital consultant led

services will have access to IT enabled clinical decision making infrastructure, an emergency theatre, CT scanning and a fully equipped HDU facility.

14. Hospitals are only one part of the health economy and our plans are based on a multidisciplinary team approach around three areas of core business:
 - Prevention and Enablement – Ambulatory, Community and Primary Care Services focusing on health promotion, self management, screening, prevention and diagnostics to help address the demographic challenges ahead.
 - Primary and Community Care – Focusing on community rehabilitation and care services to support patients to remain in their own homes, to help reduce the number of beds needed in the new hospital through enabling early supported discharge or prevention of admission.
 - Planned and Emergency Hospital Care – provided in collaboration with neighbouring NHS Boards.

The Care and Service Specification

15. The models of care will support the delivery of NHS Orkney's vision of rebalancing care across our whole system in the face of challenging demographic changes.
16. Key areas for redesign have been identified and include:
 - Ambulatory care including diagnostics
 - Emergency Care
 - Inpatient Services
 - Theatres and Day Surgery Unit including multipurpose treatment facility
 - Clinical Support Services and
 - Care of Older People
17. Clinical services, responsive to patient need, will be available over a 24/7 period to support a seamless patient pathway across primary, community and secondary care and to facilitate improved utilisation of the Board's service level agreement with NHS Grampian as well as the wider NHS.
18. Future service requirements have been identified including a range of core planning assumptions about service changes designed to enhance the effectiveness of services provided within the new Rural General Hospital and more widely across NHS Orkney have been identified. Capacity requirements and outputs have been developed for a range of key services across the primary – secondary care interface.

The Financial Context

19. This provides the background for the investment in this OBC to improve the provision of primary, community and hospital services across NHS Orkney. Through this approach the Board is confident that it can secure the delivery of long lasting / sustainable improvements in primary care and clinical services on an affordable basis. The financial case for the investment within the OBC envisages improvements in the use of existing resources.

Property and Asset Management Strategy

20. This supports the programme of service improvement and the delivery of the Board's vision for the future. It envisages that acute services will be provided in modern, fit for purpose facilities which, when taken with changes in the use of other community services, will fully support the proposed models of care. Furthermore it will address the significant, and increasing, backlog maintenance liability as well as reducing property running costs over time. The proposed provision of a new Rural General Hospital associated Healthcare facilities and the clinical support services facility will allow many of the property strategy ambitions to be realised.

EHealth Strategy

21. The successful implementation of this strategy is key to supporting the Board in meeting its strategic objectives. In particular, it is anticipated that key benefits will arise through faster access to relevant information (allowing for improved patient safety and more timely delivery of care) as well as increasing flexibility in the way the Board utilises the workforce.

Business Case Objectives

22. The key SMART Project Investment Objectives are summarised below:

Key SMART Objectives

Ref	OBC – Key Investment Objectives
1	To improve capacity and access to healthcare services – ensuring the health needs of the population are met
2	To provide facilities/services that are <ul style="list-style-type: none">• Fit for purpose• Support safe and effective clinical working• Improve clinical and functional relationships• Enable the provision of modern NHS care• Provide sufficient flexibility for future changes to service provision
3	To ensure that the hospital and services are developed in such a way as to maximise performance and efficiency
4	Maximise benefits of shared facilities
5	Enable innovative ways of working
6	Develop a feasible solution within acceptable limits of overall costs having regard to cost and time taken to acquire and develop NHS premises

23. The Investment Objectives embrace the Quality Ambitions set out in the 2020 Route Map and the benefits to be achieved from the investment along with how these will be measured and when they will be delivered are set out in Annex 2.

24. Some of the headline benefits are set out below:

- One hundred percent availability of theatre for emergency purposes;
- Elimination of bed moves associated with infection control measures;
- One hundred percent single rooms with sufficient size and flexibility to allow provision of a range of care services;
- Reduction in CO₂ emissions; and
- Reduction in energy costs.

Scope of Service Provision

25. The full range of services that are presently delivered from the existing hospital site will be provided from within the new hospital, namely primary and community care and public dental services.

26. In addition an adjoining building will house clinical support services, many of which are presently delivered from within the existing hospital while others are delivered from a range of properties in Kirkwall and Stromness. The cost of leases and travel, including unproductive non patient time will be saved or released and have been built into this overall Project.
27. It is also estimated that the separate 1,500 square metre clinical support services building will be over █████ per square metre cheaper to build than the main hospital building.

Workforce Planning

28. The Board has developed a process for assessing and managing the impact of the changes to staffing brought about by implementing the proposals contained within the OBC. This includes an assessment of the following areas:
 - The factors that affect the workforce plan;
 - How the Board will identify future staffing requirements; and
 - How the change process will be managed.
29. The Board have applied the Skills for Health Workforce Planning Six Steps Model to support its workforce planning processes. This sets out a consistent, practical framework to develop workforce plans.
30. NHS Orkney recognises that staff are its most important and valued resource. Our workforce is crucial to our success and NHS Orkney is aware that excellence in patient care and the provision of high quality and responsive support services depends on ensuring that every individual employee is given the opportunity to contribute to the extent that can be reasonably expected of them.
31. The new hospital will require some changes within the workforce and a reshaping of traditional ways of organising healthcare delivery in modern environments. These new environments will be supported by a different and strengthened relationship between primary and secondary care, as our GP and Dental facilities become part of the new build. Inherent with this new relationship is a requirement for changes in the configuration of skills and roles to enable movement between settings.
32. A planned programme of service improvement initiatives is under development which will improve quality and increase efficiency, this work has commenced in relation to Transforming Outpatient Services. Additionally considerable work is being taken forward in the community, through our integrated partnership: Orkney Health and Care as part of our response to the Public Bodies (Joint Working) (Scotland) Bill and our developing Strategic Plan that will focus very

much on the 2020 vision and supporting people at home for longer.

Economic Appraisal

33. This section of the OBC sets out the options considered as part of the option appraisal process and the resulting preferred option. The primary aim is to demonstrate which option offers best value for money by considering the benefits, costs and risks. The case highlights the preferred option.
34. When reviewing our Property Asset Management Strategy (PAMS) and the early drafts of the Outline Business Case (OBC) for our replacement hospital and related healthcare facilities project considerable scope was identified for introducing new ways of working that would also lead to smarter use of offices and clinical space by incorporating within the development a separate Clinical Support Services Building. This has been introduced as an addition to option 4 and is described as option 4a below.

Option Identification

35. A long list of options was considered and the following short list of options was taken forward.

Option Identification

	Description
1	Do Minimum – Bring current Balfour site to condition B standard through a phased upgrade and re-provision of all Dental services from existing Kirkwall premises.
2	New Build Primary/Community/Dental facility on green field site, Acute facility upgraded as fit for purpose on Balfour site.
3	New build Acute hospital on green field site. Primary/Community/ Dental facilities moved to upgraded fit for purpose building(s) within existing estate – probably existing Balfour hospital site.
4	Single new integrated facility for Acute hospital, General Practice, Community and Dental on green field site.
4a	Single new integrated facility for Acute hospital, General Practice, Community and Dental on green field site, with consideration to separate Non Clinical Support Services Facility.

Economic Appraisal and Option Results

36. The options have been appraised in accordance with the SCIM and Treasury Green Book Guidance.
37. In order to assess the relative value for money position of each option, a comparison of the cost per benefit point has been undertaken. This is calculated by dividing the Net Present Cost (NPC) by the benefit score for each option to provide a comparable cost per benefit point.

Option Appraisal Results

OPTION		Risk Adjusted Real NPC, 30 year	Non Financial Benefit Point	Cost per Benefit Point	Ranking NPC / Benefit Score
		£m			
1	Do minimum backlog maintenance	████	2.22	████	4
2	Refit Balfour and provide GP, Dental and Community New Build	████	2.88	████	5
3	New Build Acute and re-provided GP and Community	████	6.78	████	3
4	New Build (inclusive of retained office space)	████	9.04	████	2
4a	New Build with Support Block	████	9.26	████	1

38. The results show that when comparing the relative costs and benefits of the alternative solutions, Option 4(a) has the lowest overall cost per benefit point indicating this option delivers the best value for money of the short listed options.

Preferred Option

39. The analysis of the short-listed options and associated sensitivities identifies that Option 4(a); a new Rural General Hospital with Primary Care and Public Dental services along with an adjoining clinical support services building on a greenfield site is the preferred option. This solution satisfies the project investment objectives and evidences the best overall value for money. It delivers the proposed models of care, the required capacity and an appropriate clinical and support environment with optimum adjacencies.

40. The key features of the preferred option are:
- A new build Rural General Hospital, East Primary Care Hub and Public Dental Services on a greenfield site located within Kirkwall.
 - Re-provision of all clinical and non-clinical services in fully fit for purpose accommodation with optimal adjacencies.
 - An adjoining building on the site to house a range of clinical support services.
 - An overall construction programme of 2 years and 3 months with construction completion in mid 2018 and, following a period of commissioning and migration, opening of the new facilities in August 2018.

Reference Design

41. The Board has worked with its advisors to develop a reference design for the Project. This includes the following:-
- A new hospital building, of low rise design of no more than two storeys in height, to accommodate some 47 in-patient beds and 2 assessment beds, with an internal floor space of approx 12,900sqm GIA;
 - Formation of new access road, separate dedicated emergency entrance, and secondary goods and services access;
 - 300 car parking spaces and 40 cycle parking spaces;
 - A shared Utilities Building/Energy Centre;
 - A new Clinical Support Services Building (1500sqm GIA);
 - Landscaping, including cut and fill operations to level the site, with retention / re-use of all material;
 - Provision of Sustainable Urban Drainage Scheme; and off-site road infrastructure improvement works; and
 - Future expansion zones.

Outline drawings and adjacencies can be found at Annex 5.

42. The ward layout aims to capture as much natural light and ventilation as possible whilst delivering care efficiently and effectively. The wards will comprise 100% single rooms with ensuite facilities. The single room

accommodation will provide increased privacy and dignity for patients and reduce the risk of acquiring an infection during their stay in hospital. Single rooms also provide the advantage of increased flexibility in the use of beds during periods of peak activity.

43. The reference design has been developed to Royal Institute British Architects Stage C and has been used to inform the estimation of the build cost for the Project. The forecast construction cost has been used within the Financial Case.
44. The Scottish Futures Trust (SFT) undertook their first stage independent design review of the reference design for the project in July 2013 and this was followed up and completed on 31st January 2014.
45. The review is an early step in the value for money assessment introduced for the NPD programme to consider whether the project is addressing “needs not wants” and represents value for money for the public purse.
46. Some of the recommended actions arising from the second stage (SFT) independent design review report received on 11th February have been dealt with and incorporated within the OBC.
47. The remaining recommendations are the subject of discussion between the SFT, advisors and the project team.
48. As agreed with SFT a full response to all of the recommended actions arising from the independent design review report will be prepared and made available to the Capital Investment Group in advance of its consideration of the OBC on the 1st April 2014.

Procurement Strategy

49. As part of the Scottish Government draft budget announcement on 17 November 2010, £2.5bn of revenue funded investment pipeline was identified of which £750m related to NHS Scotland projects. Specific provision was incorporated to support the delivery of the new hospital project through the NPD programme. The project is also incorporated within the Scottish Government Infrastructure Investment Plan published on 4 February 2013.
50. The key factors influencing the selection of this approach are:
 - There will be few if any anticipated derogations required from the standard NPD contract (each for Project-specific reasons);
 - There has been a strong focus on ensuring maximum flexibility as part of the development of clinical requirements;

- A reference design has been prepared. The way it is used during procurement will give bidders ample opportunity to bring further innovation to the project. This is particularly relevant given the unusual nature of this project being a rural general hospital with a significant amount of primary and community healthcare;
 - On 4 February 2014 the Board decided to locate the new hospital and healthcare facility at the site known as “Scapa”. Heads of Terms for the acquisition of the site have been agreed with the owner thus ensuring that site acquisition will not cause a delay to the project or affect market interest;
 - The Board has established a sound governance and management structure for the project;
 - The Board has already appointed experienced health care planning, technical, financial and legal advisers to augment its own resources and has an experienced Interim Project Director in post since June 2013 and has now embarked on the appointment process for a substantive Project Director;
 - The scale of the project ensures that transaction costs will be justifiable;
 - Early indications are that there will be positive market interest in the project.
51. Within the procurement strategy Community Benefits have been emphasised as key evaluation criteria in the selection of a preferred bidder. Bidders will require to submit details of their proposals to actively promote and sustain such benefits, by, for example how their own business and employment policies will promote local employment, training and business opportunities with small and medium sized enterprises (SMEs). Bidders will require to set out their proposals on how they will collaborate with established community benefit initiatives (e.g. existing local authority frameworks, trade associations and other similar organisations operating in Orkney).

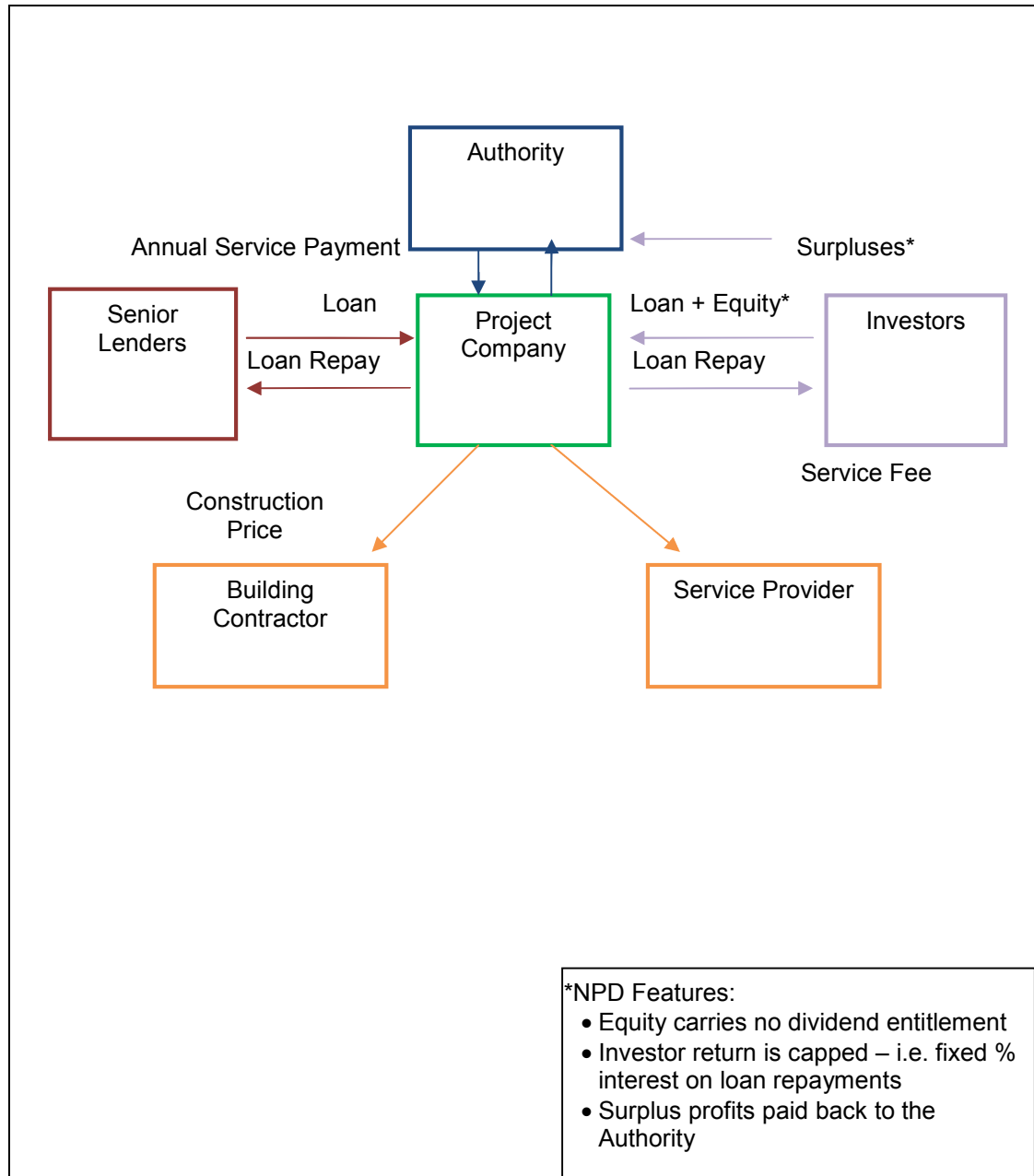
Contractual Arrangements

52. The Board and its advisers have carefully considered the proposed contractual issues relating to both the NPD and non NPD elements of the project which include the following:
- New hospital and healthcare facilities development (NPD);
 - Clinical Support Services Building (NPD);
 - Site acquisition (non NPD);
 - Enabling works for the site (NPD)

NPD Contract

53. A summary of the proposed NPD contract structure and associate payments is provided in the schematic below

NPD Contract Structure and Payments



54. It is proposed that the form of contract will follow the standard form NPD project agreement. The contract will follow a 25 year duration post completion of construction and commissioning. It is intended that there will be no

provision for breaks/review during this period in line with the standard NPD approach.

55. NHS Orkney and Project Co. will have specific roles and responsibilities in relation to the proposed deal, which will follow the standard NPD Contract split whereby Project Co. will design, build, finance and maintain the new hospital and healthcare facilities. In terms of maintenance, whilst Project Co. will assume responsibility for hard FM and lifecycle replacement NHS Orkney will retain responsibility for all soft FM services.

Site Acquisition

56. A significant piece of work to identify, consult on and select suitable sites has been undertaken. The consultation involved a wide range of stakeholders. The final selection followed a formal evaluation that examined both qualitative and quantitative criteria. The Scapa site has been formally agreed as the preferred site for the development.
57. Heads of Terms for the purchase of the site forming 6.46 hectares of land at New Scapa Road was signed on 23rd January 2014 and work is now progressing on finalising the contract for this purchase. The Heads of Terms agreement is attached as Annex 6.

Planning in Principle Application

58. Following the Board approval on the 4th February 2014 of the Scapa site for the new hospital and healthcare development a Planning in Principle application will be submitted to Orkney Island Council in early March 2014 for determination.

Enabling Works

59. The recent offer from Orkney Islands Council to contribute up to £1.5m towards infrastructure costs/works for the project will have a positive bearing on how and when these enabling works are contracted for and funded.
60. The Council plans to provide a link road between the Scapa and Orphir roads including roundabouts at each of the road ends to the south of the Scapa site. This is additional to what the requirements would be for a road purely to provide access to the hospital site.
61. Discussions are underway with the Council to firm up on the specific proposals/arrangements for utilising the £1.5m funding option and to establish how much of a reduction will be possible in the sums presently included for enabling works within the overall estimated project cost of £[REDACTED].

62. The present table for enabling works only contains figures related to the cost for site acquisition, clearance of the existing hospital site in advance of disposal and the cost of equipping the new hospital. For the reasons set out in paragraph 61 above off site enabling works have not been separately identified at this time.

Financial Appraisal of the Preferred Option

63. The section considers the affordability analysis for the preferred option reflecting the procurement and contractual arrangements outlined above. The resulting revenue and capital analysis is set out below.

Recurring Revenue Costs

64. The financial case presents an affordable model for NHS Orkney. However given the significant financial implications of this service change, considerable financial rigour will need to be maintained.
65. The Scottish Government have already identified a share of the NPD revenue budget to support the new build project. The challenge for NHS Orkney will be to continue to test all of the service and physical design elements to ensure that maximum value for money is delivered.
66. As highlighted this project is being taken forward under the Non Profit Distributing funding model; this is a revenue funded scheme unlike the traditional capital funded route most commonly used in recent NHS Orkney projects. The Scottish Government will provide support based on an agreed project scope and a construction cost cap which will be set as part of the OBC approval.

67. A summary of the recurring revenue position is provided in the table below.

Recurring Revenue Cost Analysis

Revenue Costs	Existing		Revised		Movement		NHSO	SGHSCD	Total
	WTE	£000	WTE	£000	WTE	£000	£000	£000	£000
Annual Service Payment	█	█	█	█	█	█	█	█	█
Depreciation	█	█	█	█	█	█	█	█	█
Service running costs	█	█	█	█	█	█	█	█	█
Facilities management	█	█	█	█	█	█	█	█	█
Building running costs	█	█	█	█	█	█	█	█	█
Other costs	█	█	█	█	█	█	█	█	█
Total	█	█	█	█	█	█	█	█	█

68. Based on the information presented above an increase in recurring revenue costs of £█ required to take forward this project; this equates to an additional investment of £█ for NHS Orkney and a £█ contribution from Scottish Government. This is made up of a combination of annual service payment, depreciation, facility and revised service model costs.

69. The estimated additional revenue cost of £█ for NHSO will need to be secured through a dual approach of reducing the identified increased cost areas as described in the revenue section and also by releasing additional funding from the Board’s Five Year Financial Plan. This will be a challenging task; however, the latest iteration of the Board’s Financial Plan has sufficient capacity to fund these additional costs.

70. The Annual Service Payment recurring costs have been based on a construction cost as follows:-

Annual Service Payment inputs

Element	M2	£per m2		
Base Building Costs	12920			
Clinical Support Services Building	1500			
Site Works, Drainage Utilities etc				
Location Adjustment				
Design and Construction Contingency				
Professional Fees				
Risk from Risk Register				
Total cost excluding inflation	14420			
Inflation from Q1 2014 – Q2 2017				
Cost including estimated inflation				
Other Input Information				
Lifecycle Costs for Clinical Support Services(CSS) Building and Hospital (inclusive on inflation to FC 1 st Q 2016) £ for per sqm2 (CSS) and £ per sqm2 (Hosp)				
FM Costs for Clinical Support Services (CSS) and Hospital (inclusive of inflation to FC 1 st Q 2016) £ for per sqm2 (CSS) and £ per sqm2 (Hosp)				
Base Building Cost indexed to current day using Forecast BCIS index (2 nd Q 2014)				
Inflation Mid Point of Construction using Forecast BCIS Index (2 nd Q 2017)				
Construction Start				Jan 2016
Construction Completion				March 2018
Building Handover (financial modelling assumes ASP payment commences after commissioning in July 2018)				May 2018
Source: Prepared from information received from Sweett Group on Outline Design Cost Plan dated 30 January 2014 this is re-presented to show construction cap. Sweett Group Technical Costing as received is included in Annex 14.				
Total cost excludes VAT and Board fees				

71. The build cost highlighted in the previous table is based on the work that has been carried out on the reference design of 6th January 2014.
72. The overall estimated total cost of the project as per the previous table is £ [REDACTED] based on the information contained therein. This is the expected construction cost including the cost of the building, IT infrastructure, Group1 (supply and installation) and 2 (Installation only) equipment and private sector design fees post financial close.
73. Inflation which is included in the figure £ [REDACTED] is an estimate of the price movement from current day prices Q1 2014 to midpoint of construction estimated to be Q2 2017. This has been calculated using the most up to date Building Cost Information Service all-in tender price index. The implied inflation allowance is [REDACTED] giving rise to a current estimate of £ [REDACTED]; however this will continue to be reviewed as the project moves through the procurement process.
74. From the work done to date by advisers the indications at present are that the overall cost figure of £ [REDACTED] is at the maximum level. On that basis there will be scope and opportunities for that figure to reduce as the risks and other adjustment allowances such as contingencies, location factor etc are further refined and firmed up over the next few weeks.
75. The recent offer from OIC to contribute up to £1.5m towards infrastructure costs for the project will also have a positive bearing on the overall cost of the project.

Capital Costs

76. The board has developed a capital model which identifies the likely capital expenditure which is outwith the NPD model. The estimated cost of £ [REDACTED] is anticipated to be funded by Scottish Government as project specific funding.
77. The following table highlights when capital funding is likely to be needed in order to carry out the capital works and the associated funding assumptions

Capital Cost Summary

Anticipated Costs	2014/ 15	2015/ 16	2016/ 17	2017/ 18	2018/ 19	2019/ 20	Total
	£000	£000	£000	£000	£000	£000	£000
Site Acquisition	█	█	█	█	█	█	█
Site Clearance Costs	█	█	█	█	█	█	█
Equipment	█	█	█	█	█	█	█
Total Capital Cost inc VAT & Fees	█	█	█	█	█	█	█

Funding Assumption	2014/ 15	2015/ 16	2016/ 17	2017/ 18	2018/ 19	2019/ 20	Total
	£000	£000	£000	£000	£000	£000	£000
NHS Orkney	█	█	█	█	█	█	█
Scottish Government	█	█	█	█	█	█	█
Capital Cost inc VAT & Fees	█	█	█	█	█	█	█

78. As previously highlighted NHS Orkney do not have sufficient capital formula allocation to support this level of expenditure; it is therefore assumed that project specific funding will be allocated from Scottish Government.

Non Recurring Revenue Costs

79. The following table identifies the anticipated costs and the funding available to support the non recurring revenue requirements.

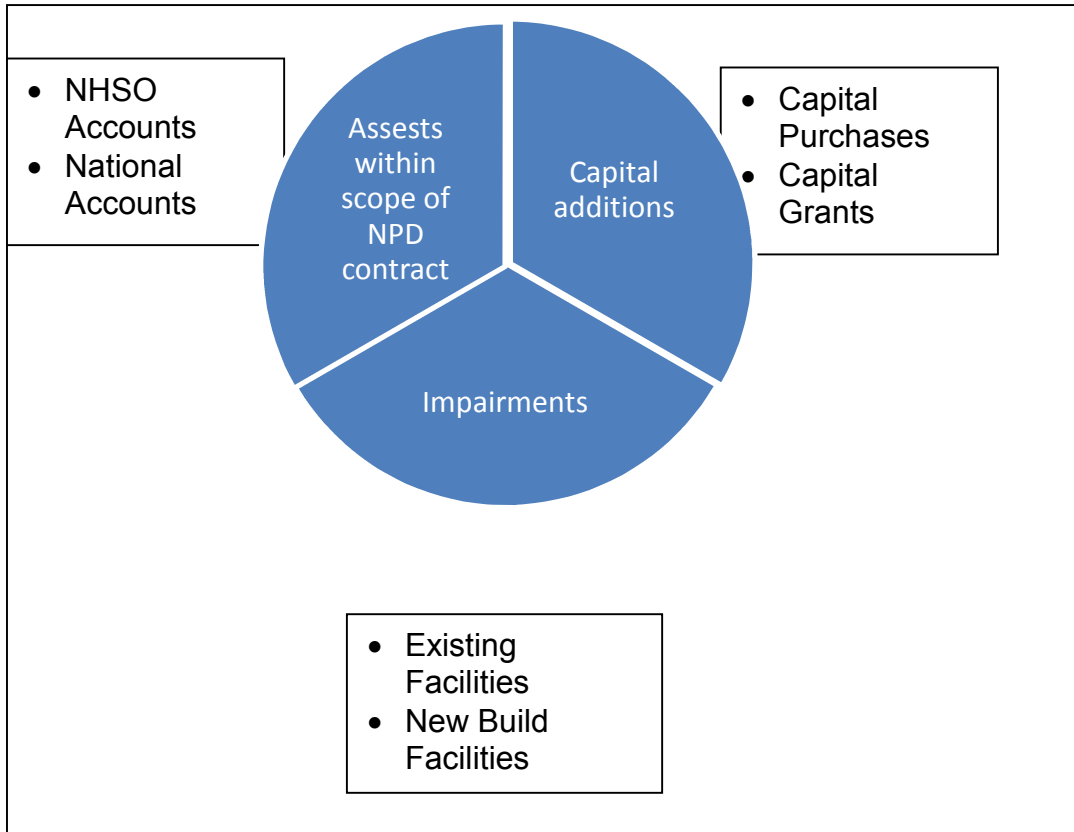
Non Recurring Revenue Cost Analysis

NON RECURRING COSTS	2014/ 15	2015/ 16	2016/ 17	2017/ 18	Between 18/19 & 20/21	Total
	£000	£000	£000	£000	£000	£000
Project Team & External Advisors	█	█	█	█	█	█
All other nonrecurring costs	█	█	█	█	█	█
Total non Recurring Revenue Costs	█	█	█	█	█	█

80. The analysis shows that as a minimum £█ will be required to cover these costs.

Accounting Treatment

81. A number of technical accounting issues arise as part of this project, the table below highlights the areas which need considered:



82. It is assumed that the new hospital and healthcare development will be on balance sheet for NHS Orkney purposes however off balance sheet for national accounting purposes.
83. Capital additions will be capitalised by NHS Orkney in accordance with current guidance.
84. It is anticipated that assets will require to be impaired as part of this process. The table below gives an indicative view on values and the assumptions around funding however these will require to be refined as the external auditor's opinion becomes available and the most current valuations are available.

Values and Assumptions

Impairment	Timing	Financial Year	Estimate £m	Funding Source
Existing Facilities	Financial Close	2015/16	■	SGHSCD as part of Annually Managed Expenditure (AME)
New Facilities	Financial Handover	2018-19	■	SGHSCD as part of Annually Managed Expenditure (AME)

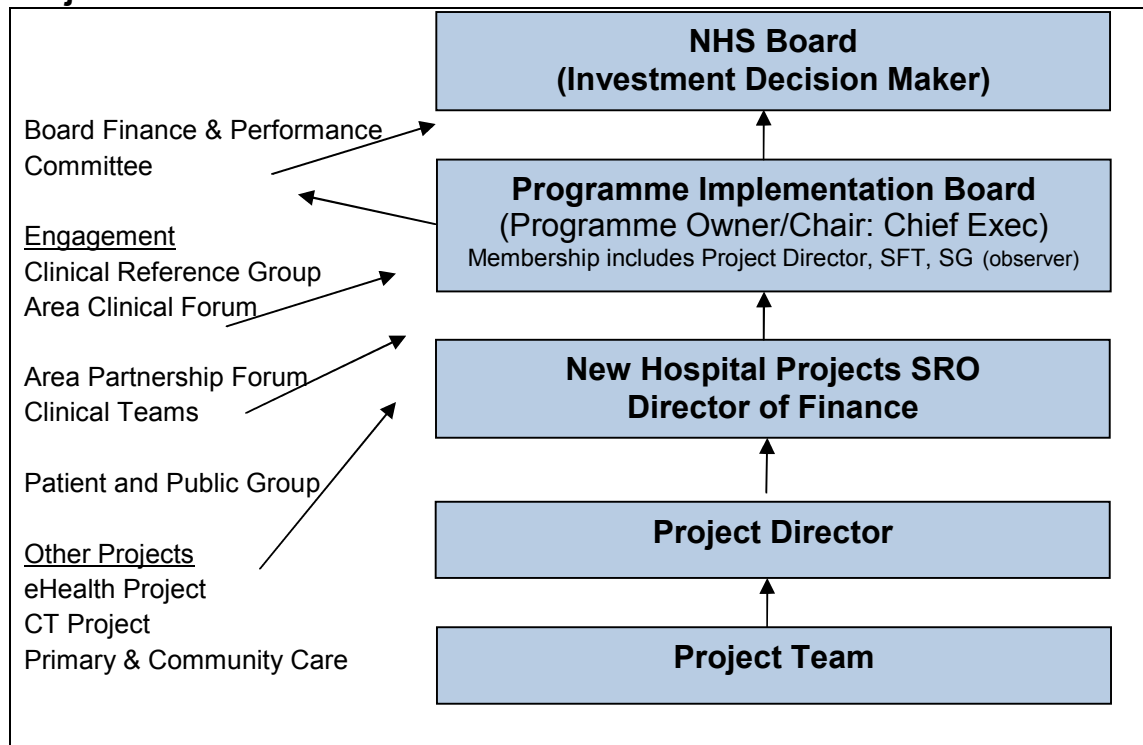
Note: These values require to be firmed up with external audit once further clarity is available

Project Management Arrangements and Timetable

85. This project embraces the principles of project and programme management to ensure that the project is successfully delivered. The new hospital and healthcare facilities project is one of a series of projects within a framework of wider changes to the health system within Orkney. The diagram below sets out:

- The overall project structure;
- How the Project Board and the Project Team fit into this structure;
- The key Project Management roles.

Project Structure



86. The dates detailed in the table below highlight the key milestones for the project.

Project Milestones

Milestones	Expected Date
OBC approved by NHS Orkney Board subject to Planning in Principle	27 th February 2014
OBC submission to SGHSCD Capital Investment Group	4 th March 2014
OBC approved in principle by SGHSCD Capital Investment Group subject to Planning in Principle	1 st April 2014
Planning in Principle application to be considered by Planning Authority	4 th June 2014
NPD OJEU notice published	June 2014
NPD PQQ response evaluated	September 2014
Issue of NPD ITPD	October 2014
Down select from 3 to 2 bidders	March 2015
Conclude NPD Competitive Dialogue	June 2015
Purchase of site	Between April and July 2015
Final tender submission	July 2015
Selection of NPD Preferred Bidder	September 2015
NPD Financial Close	January 2016
New hospital construction start	Jan/Feb 2016
New hospital construction completion	March 2018
New hospital construction commissioning and handover	May 2018
Completion of hospital equipping, commissioning and service migration to new hospital. Assume ASP payments commence	July 2018
Final completion of all service migration to new hospital and first patients at new hospital	August 2018

Conclusion

87. The combined strategic, economic, financial, commercial and management cases within this Outline Business Case (OBC) provides the vision for reshaping health services across NHS Orkney.
88. The OBC sets out how services will be transformed to meet the future health needs of the population against the backdrop of considerable demographic and economic challenges.
89. The preferred option is for a new Rural General Hospital, Healthcare Facilities and Clinical Support Services building on a new site serving the entire Orkney community.
90. This option will enable the most economic and affordable implementation of new models of care that will transform the way in which healthcare will be provided and will address the major deficiencies in the current estate.
91. The development will provide enhanced services and quality for patients and will enable staff to work more efficiently and effectively in modern, accessible, safe and sustainable facilities located in the heart of the community.
92. The significant capital investment is shown to reflect NHS Orkney's Local Delivery Plan and its response to national strategies. The OBC demonstrates with the benefit of a recently completed Independent Design Review that the preferred option represents best value for money and confirms that it is affordable to the Board.
93. The OBC describes the commercial viability of the procurement route chosen. It also describes the management plans and attendant governance structures that are already in place to deliver the project on an affordable basis, monitored at every stage.
94. The OBC confirms the Board's strong commitment to, and approval of, the preferred option and in submitting the OBC the Board is seeking support to move to full procurement through the publication of an OJEU notice for this essential development.

INTRODUCTION

1 Introduction

1.1 Responsibilities of NHS Orkney

1.1 NHS Orkney is responsible for strategic planning and investment in healthcare services to ensure that we meet the needs of our local population and that national targets and directives are implemented. In terms of our core purposes, we assess the state of health of our population and plan and provide services that:

- promote good health and wellbeing;
- prevent ill-health;
- improve health; and
- provide person centred, safe and sustainable services for our patients.

1.2 In doing so, NHS Orkney works in partnership with other NHS organisations, Orkney Islands Council, our Third Sector partners and other agencies to ensure that education, social work, housing, employment and environmental services unite effectively with us in tackling inequalities and underlying health problems within our communities.

1.2 Purpose

1.2.1 The purpose of this Outline Business Case (OBC) is to present proposals and seek approval to begin procurement for the development of a new replacement Rural General Hospital and Healthcare Facilities for Orkney which will support the health system in the delivery of new models of clinical care to better meet the future health needs of the local population.

1.2.2 This section of the OBC provides an overview of:

- The context of the proposed investment;
- The project history;
- Relevant NHS Scotland Capital Investment Guidance; and
- The structure and content of the OBC.

1.3 Context of the Proposed Investment

1.3.1 Demographic projections show that over the next 20 years there will be a steady increase in the number of frail older people and people living with multiple long term conditions, including dementia. For those of pensionable age there will be a 34.5% increase in Orkney compared to 26.2% in Scotland.

Despite the expectation that the ageing population may have on average better health than in the past, there will be substantially greater demands on the health and social care systems locally.

- 1.3.2 However, at the same time, there will be a decreasing number of working age people available to support this growing older population projected to be 0.7% decrease in Orkney compared to 7.1% increase in Scotland and this will be accompanied by continuing financial constraints. The Outline Business Case for this project sits within the overall context of the delivery of a new, future model of health and social care which meets the dual challenge of increasing demand on healthcare resources and is deliverable within a challenging environment, both economically and geographically, as well as from a workforce perspective.
- 1.3.3 NHS Orkney's corporate aims include "delivering excellent care that is "person centred, safe, effective, efficient and reliable". The Board's key change programme "Our Orkney Our Health Transforming Clinical Services" was published in 2009 and refreshed in 2011. It articulates delivery of these aims and identifies a range of areas to be targeted. The key ethos of this programme of work is to ensure the delivery of services and support as close to home as possible and to minimise reliance on hospital based services and unnecessary inpatient episodes of care.
- 1.3.4 The challenging financial outlook for the public sector for the foreseeable future will require fundamental change in the way NHS services are provided and new ways of working to achieve the Board's objectives.
- 1.3.5 The emerging models of care are intended to ensure that patients will only spend the time in an acute hospital environment where this is clinically required and they will transfer from the more active and intense period of acute care to a more appropriate setting as soon as is possible (ideally home with support as necessary) . There will also be an increased focus on day attendances and treatments in line with clinical practice, changes in treatment plans and national direction.
- 1.3.6 This change in emphasis towards reducing avoidable admissions, increasing throughput and further reducing average lengths of stay is essential if NHS Orkney is to continue to meet the demographic challenges highlighted above.
- 1.3.7 Achievement of these ambitions will require significant changes to the way we deliver services within the acute setting which actively supports appropriate throughput of patients. This needs to be supported by a renewed focus on improving pathways of care to minimise lengths of stay and encourage appropriate use of health promotion, self care, anticipatory care and community based support.

1.3.8 In addition, an extensive review of the fabric of the current hospital has indicated that it is beyond its useful economic life and significant backlog maintenance would be required to be addressed in order to sustain services. The current configuration does not support the required models of care. This project will enable the Board to deliver these key service objectives for the benefit of the people of Orkney. The changes in models of care need to be supported by a modern, fit for purpose inpatient, primary care and public dental service facility.

1.4 Project History

1.4.1 The original Initial Agreement approved by the Capital Investment Group in March 2008 provided for the redevelopment of the Balfour Hospital as a single project.

1.4.2 Since that time and in order to respond to national moves towards greater integration of services and to maximise joint use of resources, a range of service delivery models and configurations have been considered and explored with primary care providers, dentistry services, Orkney Islands Council and the third sector.

1.4.3 During 2012, those considerations had led to a preferred integrated care model that combined acute care provision, public dental services, primary and community healthcare with older people's care to create a holistic approach to service delivery on a single site in Kirkwall as an integrated care facility.

1.4.4 Early in 2013, Orkney Island Council made a decision to expand their care home facilities by means of extending an existing facility in Kirkwall, rather than the integrated facility planned within the Care Campus project as they assessed this was more economically viable for them.

1.4.5 The Council decision about where to site its Care Home expansion has not altered the need to provide an integrated solution for the rationalisation and co-ordination of health and social care services across Orkney. This project will continue to focus on delivering that requirement.

1.4.6 The OBC brings together all of the previous and historical work undertaken in developing the acute hospital model, the older people's care blue print and the development of primary care and elements of the Public Dental services all within a single facility.

1.4.7 The proposal also addresses significant and long standing deficits in the facilities within the existing Balfour hospital and the related overall provision of Acute Services.

1.5 Compliance with National Capital Investment Guidance

- 1.5.1 The proposals are presented in the form of an Outline Business Case (OBC) consistent with the requirements of the Scottish Government Health Directorate's Capital Investment Manual issued via CEL 19 (2009) and any supplementary guidance.
- 1.5.2 The OBC framework allows the investment benefits, costs and risks to be identified and evaluated in a systematic way. It ensures that NHS Orkney can demonstrate that the investment is economically sound, financially viable, clinically efficient and deliverable.

1.6 Structure of the Outline Business Case Document

- 1.6.1 The structure reflects the '5 Case' approach as reflected in current Scottish Government Health and Social Care Directorate's guidance and accepted best practice in Business Case development and presentation.

Figure 1- 1: Structure of the Outline Business Case

The Strategic Case	Section 2 – Profile of NHS Orkney: provides an overview of the Board, its current services, purpose and objectives, health status and demography as well as details of current clinical activity and performance.
	Section 3 – Strategic Context: sets out the strategic context within which the changes proposed in this OBC will take place, the national context for healthcare developments in Scotland, and the local context for developing services in NHS Orkney.
	Section 4 – Business Case Objectives and Scope: provides an overview of the key investment objectives and success factors along with a definition of the project scope.
	Section 5 – Model of Care and Service Specification: provides an overview of the current model of care and sets out the scope of service provision together with an overview of the proposed new models of care and sets out the scope of service provision together with an overview of the proposed new models of care, explaining the process by which they were developed.
	Section 6 – Workforce Planning: summarises the workforce planning methodology applied for the proposed service changes, the change management policies and supporting training and development needs.
	Section 7 – Future Service Requirement: sets out the planning assumptions used to derive the associated future capacity and facility requirements and the scale of change from current provision.
The Economic Case	Section 8 – Option Overview: sets out the process for identifying the options to be considered within the OBC and the rationale for arriving at the shortlist.
	Section 9 – Option Identification: sets out the options considered to be taken forward to the short list of options appraised.
	Section 10 – Options Appraisal: summarises the shortlist of options to be appraised. Identifies the benefit criteria used to assess the anticipated non financial benefits and assesses each option against these. Sets out the range of risks considered in relation to the options and the results of the assessment. Presents the economic cost of each of the shortlisted options as well as the overall value for money.
	Section 11 – Preferred Option: sets out the rationale

	for the selection of the preferred option along with its key features and anticipated benefits.
Reference Design	Section 12 – Reference Design: sets out the summary features of the reference design and the work underlying the estimation of the capital construction costs.
The Commercial Case	Section 13 – Procurement Route Assessment: outlines the assessment of the potential procurement routes and sets out the proposed arrangements.
	Section 14 – Other Commercial Issues: sets out the issues and status of commercial issues outwith the project procurement process.
	Section 15 – Proposed Contractual Arrangements: sets out the proposed deal in respect of the preferred way forward.
The Financial Case	Section 16 – Financial Appraisal of Preferred Option: presents a profile of the capital and revenue costs of the preferred option and the associated projected impact on the Board’s income and expenditure as well as a statement on overall affordability.
	Section 17 – Recurring Revenue: presents the overall affordability position of the Board.
	Section 18 – Capital Funding: reviews the capital requirements for the project and the enabling works.
	Section 19 – Non Recurring Revenue: reviews the funding required on a non recurring basis to support the project.
	Section 20 – Accounting Treatment: sets out the technical accounting issues that arise as a result of the project.
The Management Case	Section 21 – Project Management & Project Implementation Timetable: describes how the Board intends to manage the various phases of the project and sets out the proposed timetable and key milestones. Provides details of the governance arrangements and key roles and responsibilities.
	Section 22 – Managing Successful Delivery: establishes proposed arrangements for change management, benefits realisation, risk management and post project evaluation.

1.7 Further Information

1.7.1 For further information about this Outline Business Case please contact:

Mr. Gerry O'Brien
Executive Project Sponsor for the new build
NHS Orkney
Garden House
New Scapa Road
Kirkwall
KW15 1BQ

STRATEGIC CASE

2. PROFILE OF NHS ORKNEY

2.1 Policy Overview

2.1.1 The Scottish Government in December 2007, published the Better Health, Better Care Action Plan. This Plan made a number of commitments to improve the health of the population and to improve the quality of healthcare and healthcare experience. The Quality Strategy (2010) that then followed is a development of Better Health, Better Care and builds upon the key achievements over the last few years and in particular is about three things:

- putting people at the heart of our NHS;
- building on the values of the people working in and with NHS Scotland and their commitment to providing the best possible care and advice compassionately and reliably; and
- making measurable improvement in the aspects of quality of care that patients, their families and carers and those providing healthcare services see as really important.

2.1.2 In summary, the Quality Strategy's overall aim is to be world leader in healthcare quality and in doing so we will focus on 3 key quality ambitions: being person centred whilst providing safe and effective care and services.

2.1.3 The 2020 vision and more recently the Route Map which takes account of many of our national policies, strategies and plans enable us to deliver real whole system transformation in response to the 12 key priority areas. This business case through our investment objectives and expected benefits ensures that we will deliver in line with the 2020 vision and the 12 priority areas.

2.1.4 NHS Orkney's vision is to "offer everyone in Orkney access to an NHS that helps them to keep well and provides them with high quality care when it is needed whilst employing a skilled and committed local workforce who are proud to work for NHS Orkney".

2.1.5 Underpinning this is the work done to update our clinical models to reflect national, regional and local policy direction and in transforming our clinical services we remain committed to achieving four things:

- Improved outcomes for our patients following their care;
- A better experience for our patients when using our services;
- A high quality engaged workforce with opportunities to develop their skills and careers locally; and
- Safe, effective and person centred services that are efficient, sustainable and affordable going forward.

2.1.6 In addition the Board has established a set of corporate objectives which are detailed in the Corporate Plan 2013-14 and are set out below:

- Improve the health of the people of Orkney (including our own staff) whilst addressing inequalities (Prevention and Partnership agenda);
- Improve individual experience of care and/or our services (3 Quality ambitions – person centred, safe and effective care and/or services agenda – this will align with our clinical governance promotion and adherence to evidence based guidelines and practice);
- Develop our people (People/Workforce agenda);
- Make best use of our available resources (Value and service/funding sustainability agenda);
- Achieve national and local targets and/or standards (Performance and governance agenda); and
- Support, encourage and nurture a culture that promotes improvement, integration and innovation (Development and transformational agenda).

2.1.7 The extent to which these objectives are being achieved will be kept under regular review by the Board.

2.2 Geography

2.2.1 NHS Orkney serves a population of 20,500 people dispersed across three distinct regions – the North Isles, the South Isles and the mainland, which collectively consist of 17 inhabited Islands, the largest of which is Mainland.

2.2.2 Approximately 80 percent of the population live on the mainland of Orkney. Kirkwall, with a population of about 7,500 people is the administrative centre of Orkney with the smaller town of Stromness, with a population of about 2,500, situated in the West of the Mainland. To the East with a population of around 1,500, are the islands of South Ronaldsay and Burray. The remote Islands vary in population from 1 person to circa 600.

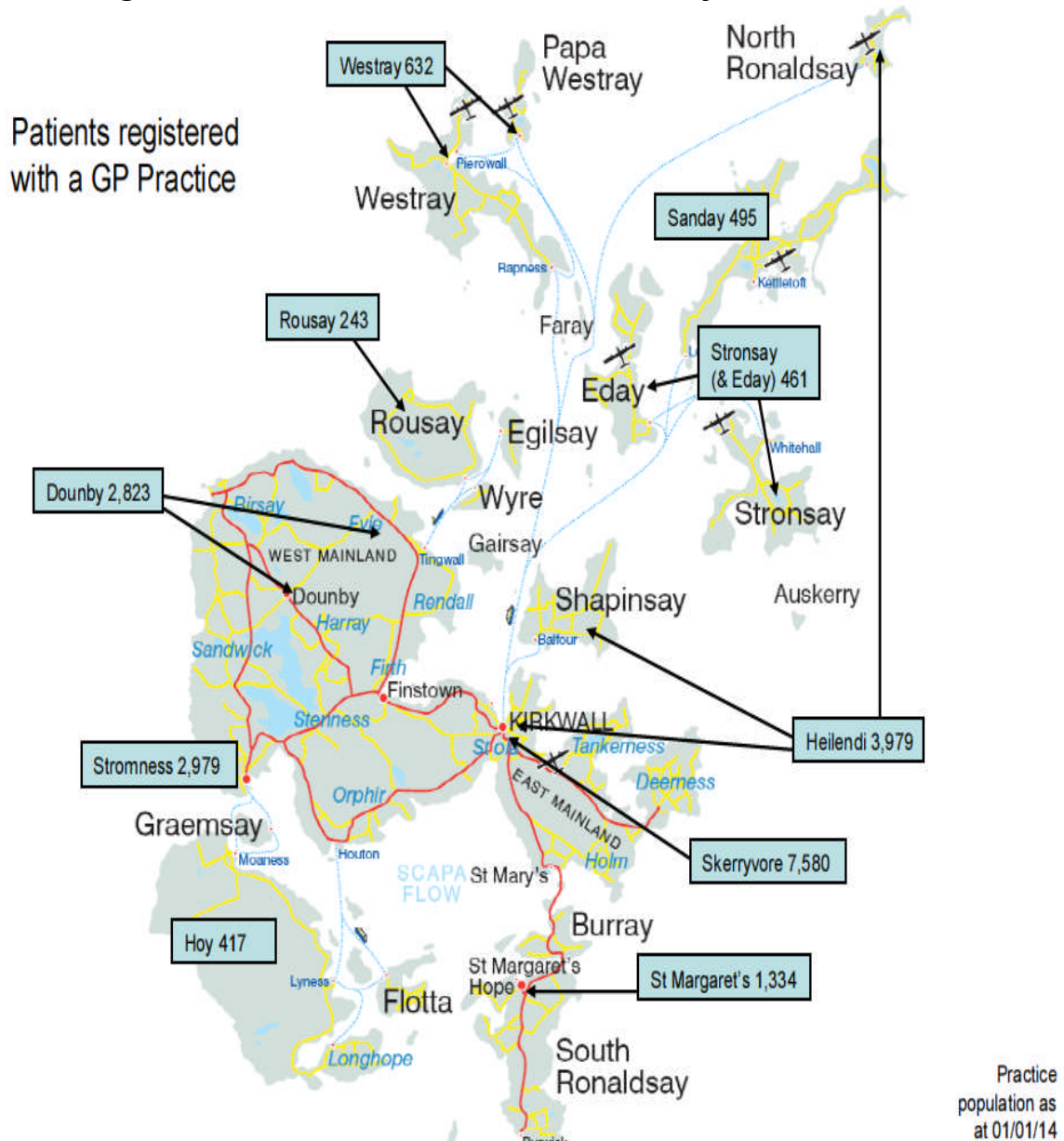
2.3 Existing Hospital Services

2.3.1 In policy terms, Delivering for Remote and Rural Healthcare, defines a Rural General Hospital (RGH) as follows:-

‘The RGH undertakes the management of acute medical and surgical emergencies and is the emergency centre for the community, including the place of safety for mental health emergencies. It is characterised by more advanced levels of diagnostic services than a community hospital and will provide a range of outpatient, day case, inpatient and rehabilitation services’.

2.3.2 There is one hospital in Orkney, currently the Balfour Hospital which is an RGH, serving the local community providing a mix of Medical, Surgical, Anaesthetic, Obstetric, Diagnostic, Nursing, Midwifery and Allied Health Profession (AHP) services on an inpatient, outpatient or day attendance basis.

Figure 2- 1: Health services across Orkney



2.4 Demography

2.4.1 The population in Orkney, like that of the rest of Scotland is ageing. However there are proportionately more older people in Orkney than in Scotland. Furthermore there are proportionately fewer younger people and the effects of the changing population demographics will become more evident over the next 5 – 10 years.

- 2.4.2 The population of Orkney is projected to increase by 4.6% from 2013 to 2035 (20,527 to 21,479 people on 2010 based projection assumptions) and in Scotland by 8.5% (from 5.31m to 5.76m). The projected percentage of the population that is of pensionable age in 2035 (2010 base) will increase by 34.5% in Orkney and 26.2% in Scotland. In contrast the percentage of the population that is of working age will decrease by 0.7% in Orkney and increase by 7.1% in Scotland. In addition, the percentage of the population aged 0-15 years will decrease in Orkney (4.6%) and increase in Scotland (3.2%) by 2035 (2010 base). (Reference [http://www.gro-scotland.gov.uk/statistics /theme/population/projections/sub-national/2010-based/tables.html](http://www.gro-scotland.gov.uk/statistics/theme/population/projections/sub-national/2010-based/tables.html)). Population projection figures based on the 2011 census are awaited.
- 2.4.3 NHS Orkney and Orkney Islands Council are the two major employers within the County and will compete with other organisations to achieve service continuity and appropriate staffing levels. It is essential that clinical and support services are sustainable in the future and that NHS Orkney is able to recruit and retain staff with the necessary skills to deliver the full range of high quality services to the population. Adapting the skills of our workforce to meet the changing healthcare needs will remain a priority.

2.5 Current Services

- 2.5.1 Health services within Orkney are managed in 3 clinical service areas:
- Primary Care Services (whose management arrangements are aligned under Children & Families including Criminal Justice – joint management arrangements with social work services)
 - Community care (whose management arrangements are aligned under Health & Community Care – joint arrangements with social work services); and
 - Hospital Services.
- 2.5.2 Inpatient care is provided across a range of services within the Balfour Hospital as set out in the table below.

Figure 2- 2: Inpatient beds available at Balfour Hospital

	Bed numbers
Acute – including HDU	18
Assessment & Rehabilitation	19
MacMillan	4
Maternity	6
Mental Health Transfer Bed	1
Total number of beds	48

2.5.3 In addition to inpatient facilities the following services are delivered from the Balfour Hospital site.

Figure 2- 3: Services provided on Balfour site

Clinical and Support Services		Professional and support services
Anaesthetics	Oncology	Domestic Services
Audiology	Outpatients	Education & Training
Cardiology	Palliative Care	Estates Maintenance
Community Nursing	Pharmacy	Human Resources
Day Surgery	Physiotherapy	Information Management & Technology
Dental	Podiatry	Laundry Services
Diabetes	Primary Care	Management & Administration
Dietetics	Public Health	Medical Physics Service
Electrocardiogram	Radiology	Medical Records
Emergency Department	School Nursing	Occupational Health
General Medicine	Speech and Language	Portering
General Surgery	Therapy	Sterile Supply & Decontamination
Gynaecology	Theatres	Supplies Procurement
Health Promotion		Stores
Health Visiting		Secretarial Services
Infection Control		Switchboard
Intermediate Care		
Laboratories		
Mental Health		
Neurology/MS		
Obstetrics		
Occupational Therapy		

2.6 Activity and Performance

Clinical activity

2.6.1 The tables below provide an analysis of the Board's clinical activity across Balfour covering:

- Day case and day attender activity
- Inpatient episodes across Acute, MacMillan, Maternity and Assessment & Rehabilitation;
- Emergency Department attendances;
- Outpatient consultations.

Figure 2- 4: Day Case Activity

Area	2010	2011	2012	2013
Acute	13	38	102	82
Macmillan	207	196	247	277
Maternity	0	0	1	1
Day surgery				
No procedure	43	59	70	132
Other procedure	1,172	1,177	1,117	1,065
Endoscopy	574	597	558	515
Renal	1,169	1,202	986	1,113
Total day cases	3,178	3,269	3,081	3,185
Data taken from Topas Episode Table - extracted 14/01/14				

2.6.2 In addition both the Maternity and Macmillan Units have significant day attenders who are seen within their clinical departments

- MacMillan – 710 oncology or palliative care day attendances per year
- Maternity – 12 day attenders to the unit on average per day (4380 per year); 37 episodes of phone support on average per day (13,505 per year)

Figure 2- 5: Board wide activity by occupied bed days (2010 to 2013)

	Ward Name	2010	2011	2012	2013
Elective	A&R	6,338	5,882	5,590	5,228
	Acute	5,108	4,690	4,336	4,753
	HDU	0	0	0	102
	Macmillan	1,232	947	782	954
	Maternity	793	702	716	630
	MHTB	14	11	8	4
	Receiving Area	443	553	558	505
	% occupancy excluding receiving		80	73	68
% occupancy including receiving		71	65	61	61
% occupancy excluding receiving and maternity		86	79	73	74
% occupancy including receiving minus maternity		75	69	64	65

Elective/ Emergency	Inpatient Area	EI %	Em %	EI %	Em %	EI %	Em %	EI %	Em %
	A&R	94	6	92	8	96	4	92	8
	Acute	14	86	17	83	18	82	20	80
	Macmillan	49	51	44	56	52	48	52	48
Data taken from Topas extracted 13/02/2014									

- 2.6.3 Emergency activity accounts for a significant element of inpatient activity but remains relatively static. However the projected demographics of an increasingly ageing population and the associated co-morbidities (chronic disease (s) burden) they will develop is expected to lead to an increase in emergency activity due to the impact of patients having more complex chronic health problems.
- 2.6.4 An increased focus on Anticipatory Care Planning and Electronic Care Summaries will be progressed as a priority to improve the early identification and management of patients with chronic health conditions in order to prevent acute crises occurring which then require hospital admission.
- 2.6.5 Elective activity has been variable over the last three years; this is also true of day case activity which has shown a small increase. Some of the increased activity is as a result of more patients being admitted with shorter length of stay so therefore an increased throughput.

- 2.6.6 Due to the limited opening of the Day Surgery Unit some day cases have had to be admitted to the Acute Ward on an elective basis. The planned extended opening of the Day Unit and development of pre-assessment and day unit services will ensure that patients are increasingly admitted on the day of surgery/procedure which will reduce overall occupied bed days.
- 2.6.7 In addition, it is anticipated that some procedures will move from inpatient to ambulatory care as the facilities required to support them become available.
- 2.6.8 Attendances at the Emergency Department have been relatively static although the data in the table below indicates a significant increase would appear to have taken place in 2013,
- 2.6.9 However this increase is as a result of the much improved data gathering and reporting now in place and an acknowledgement that data gathering was not good due to in part having no IT system or infrastructure to populate data – this is being addressed as part of our transformational change programme.
- 2.6.10 Ongoing work as part of our Local Unscheduled Care programme on patient pathways and improving flow of patients through the service (and wider health and care system) utilising a multidisciplinary approach will ensure we meet our 4 hour A/E target and reduce our emergency admissions and readmissions through redirection and care closer to home.

Figure 2- 6: Emergency Department (ED) attendances 2010 to 2013

Location	Year			
	2010	2011	2012	2013
A&E/MIU	3,594	3,784	3,651	4,263
Emergency Receiving Unit	511	640	600	599
Receiving area average % occupancy of pop up beds	21	21	18	18
Data extracted from Topas Live Episode table on 23/01/2014.				

- 2.6.11 Increased consultant led clinics are being introduced to respond to our new consultant led service model in medicine and obstetrics and gynaecology and the repatriation of services. Repatriation of services will continue to develop when our third general surgeon and physician are appointed later this year. This will result in NHS Orkney being able to provide more service here in Orkney and so improving patient experience and access to services. Similarly IT enabled technology driven consultations will reduce the need for patients to go off island for care

where appropriate and so our visiting services will reduce.

- 2.6.12 However, NHS Orkney will continue to require support in providing Specialist Consultant Clinics through Service Level Agreements with mainland neighbouring NHS Boards. In summary, on-island clinic activity is expected to grow as more specialist local expertise becomes available and through increased use of videoconferencing; collectively these service changes will reduce lengthy journeys to off island providers where clinically appropriate.

Figure 2- 7: Outpatient attendances (2011 to 2012)

Year	New	Return	Grand Total
2010	3,565	6,575	10,140
2011	3,593	6,651	10,244
2012	3,565	6,640	10,205
2013	3,421	7,252	10,673
Booked Consultant Led Outpatient Clinics Based in Outpatients.			
Please note that the figures above do not include clinics based in Day Hospital or Peedie Sea			

Figure 2- 8: Nursing, Midwifery and Allied Health Professions (NMAHP)

Nursing Midwifery and Allied Health Professions activity	2010/11			2011/12			2012/13		
	In- patients	Day Patients	New	In- patients	Day Patients	New	In- patients	Day Patients	New
Clinical Radiology	1045	0	4621	757	0	4670	735	0	5099
Electrocardio graphy	6	0	234	2	0	26	3	0	15
Ultrasound	238	0	2393	203	0	2355	220	0	2613
Clinical Psychology	0	0	12	0	0	298	0	0	296
Podiatry	70	0	9612	76	0	9478	68	0	9516
Physio- therapy	4305	865	8734	4311	1098	8576	4313	551	8124
S<	314	1	2125	188	11	2794	241	8	1998
Audiology	0	0	1158	0	0	1121	0	0	1265
Orthotics	0	0	171	0	0	170	0	0	163
Orthoptics	0	0	395	0	0	341	0	0	357
General Nursing	0	0	38	0	0	43	0	0	44
Occupational Therapy	6118	35	3861	6351	460	3929	5661	645	5612
Dietetics	719	0	1354	282	0	672	325	1	1282
CPN						5870			4142
CAMHs						1394			1600
NMAHP data source CardClass7 annual summaries									
'Day Patients' refers to day hospital and intermediate care team									
'New' refers to Outpatients, Direct Access from GP and others									

2.6.13 In addition, as a result of access to a CT Scanning facility and the successful recruitment of Consultant Physicians and Consultant Obstetricians/Gynaecologist as well as increased Consultant Surgeon numbers, NHS Orkney and NHS Grampian intend to repatriate clinical activity back to NHS Orkney where clinically appropriate. The most significant impact of this will be in day case activity and outpatient attendances.

Figure 2- 9: Repatriation based on average for the last 3 years (which will increase in response to advances in medicine and technologies)

Outpatients repatriation	Referral Type	Average per year
Trauma and orthopaedic surgery	New	43
	Return	69
Urology	New	32
	Return	37
Gynaecology	New	38
	Return	40
Cardiology/Stroke	TIA	100
Inpatient Repatriation		Average total
Orthopaedic	Cases in Theatre	137
	Bed days	275
Urology		50
Gynae	Day Cases	73
	Short Stay	17
	Inpatient	10
	Total	100

2.6.14 CT Scanner

Earlier diagnosis and treatment will reduce patients length of stay so the overall numbers will not have a significant impact.

2.6.15 Cardiology

Our local consultants will be undertaking outpatient clinics instead of the visiting consultant clinics so although the number of clinics might increase the patient activity will not be significantly different from now.

2.6.16 Chemotherapy

We have increased the day treatment area in Macmillan to account for the anticipated increase in chemotherapy procedures which will be undertaken in NHS Orkney in future under shared care protocols developed with the lead consultants in NHS Grampian.

2.6.17 NHS Orkney consistently meets the nationally set targets as can be seen in the following table.

Figure 2- 10: Compliance with national waiting times targets as at September 2013

	Outpatients	TTG	18 week combined	Diagnostic	A&E	Cancer 62 days	Cancer 31 days
National target	100%	100%	90%	100%	98%	95%	95%
June 13	99%	100%	96%	100%	98%	95%	100%
July 13	97%	100%	98%	100%	98%	100%	100%
Aug 13	93%	100%	96%	100%	99%	100%	100%
Sept 13	96%	100%	96%	100%	100%	100%	100%

2.6.18 In addition NHS Orkney has amongst the lowest Did Not Attend (DNA) rate of any NHS Board.

Financial performance

2.6.19 The table below shows the Board's overall financial position for the period 2009/10 through to 2012/13 covering both revenue and capital expenditure.

Figure 2- 11: Board financial performance £000

	2009/10	2010/11	2011/12	2012/13
Clinical Service Costs	43,644	45,678	42,642	43,376
Non Clinical Service Costs	3,065	3,426	5,323	3,667
Net Operating Costs	46,709	49,104	47,965	47,043
Less: FHS Non Discretionary Allocation	2,896	3,102	3,027	3,231
Less: capital grants/profit/loss on disposal of fixed assets/annually managed expenditure	271	0	(59)	(15)
Net Resource Outturn	42,542	46,002	44,997	43,827
Revenue Resource Limit	42,550	46,037	45,114	43,920
Saving against Revenue Resource Limit	8	35	117	93
Capital Expenditure	3,275	2,343	649	511
Capital Resource Limit	3,279	2,368	731	549
Saving against Capital Resource Limit	4	25	82	38

2.6.20 The financial results for NHS Orkney evidence the Board's ability to continue to achieve positive financial outcomes whilst delivering high quality services and increasing activity and improved quality services indicators. The stepped change in financial and projected activity demands will test the ability of the Board to continue to deliver against all of its key performance targets. However, the Board is committed to delivering high quality services and is clear about the relation this has with offsetting expenditure. As a Board we will continue to improve and innovate to deliver increased productivity and efficiency in response to the financial challenges.

2.7 Conclusion

2.7.1 NHS Orkney has a health care system that is delivering against key performance targets – we are committed to the ongoing delivery of good clinical, staff, information and financial governance to help us grow and develop as an organisation.

2.7.2 However, we are not complacent and like all public sector organisations we are facing significant challenges in terms of the future projections of an ageing population who will have a resulting increase in chronic disease profiles. We accept the need to change and through our transforming clinical services programme we will continue to grow and develop our staff alongside a redesign of our services and the facilities.

3. STRATEGIC CONTEXT

3.1 Overview

3.1.1 This section of the OBC sets out the strategic context within which the changes proposed in the OBC will take place, and covers:

- The national context for healthcare developments in Scotland
- The local context for developing services in Orkney

3.2 National Context

3.2.1 The national context for the development of health services in Scotland is set out in a range of policy initiatives, the most relevant of which are:

- Delivering for Remote and Rural Healthcare (2009): The Final Report of the Remote and Rural Workstream;
- The Healthcare Quality Strategy for NHS Scotland (May 2010);
- 2020 Vision Achieving Sustainable Quality in Scotland's Healthcare (2013)
- Health and Wealth in Scotland: A Statement of Intent for Innovation (2012)
- Better Together (2008)
- Reshaping Care for Older People: A Programme for Change (2011);
- The Public Bodies (Joint Working) (Scotland) Bill); 2013;
- New GP Contract (2013);
- Allied Health Professionals National Delivery Plan (2012);
- State of the Estate Report 2012;
- Improving Oral Health and Modernising NHS Dental Services in Scotland (2005);
- Health Promoting Hospital (2012);
- Early Years Framework (2013); and
- Scottish Patient Safety Programme (initial launch in 2008).

3.2.2 Further details of each of these are provided in Annex 1.

3.3 Developing Our Orkney Our Health Transforming Clinical Services Clinical Strategy

3.3.1 In developing its clinical strategy it became apparent to the Board that there were many aspects which impacted on service delivery and sustainability which were in addition to the physical condition of its buildings. These factors include:-

- the need to provide timely accessible emergency services to deal with acute illness or injury, including life threatening conditions;
- the generalist nature of the staffing models in Orkney and the breadth of skills required;
- the rurality and remoteness of Orkney;
- those aspects of services and staffing which have de minimus levels attached to them; and
- due to small numbers of patients (our critical mass), the demand for services fluctuates much more than in larger areas, making the provision of the correct level of resources very challenging including the investment needed to maintain/update the skills of our staff.

3.3.2. Patients requiring specialist intervention, treatment and/or support will always need to be able to access services on mainland Scotland (or further afield depending on specialisation and centralisation of services). However the majority of emergency presentations need local resuscitation, stabilisation and initial management which depending on access to transport is greater than 2 hours and can be as high as 72 hours before they are transferred off island. Our ability to meet the needs of these patients is vital on an island and our investment in our staff, our equipment (CT scanner) and facilities (dedicated HDU) will contribute to the care and recovery of patients prior to transfer

3.3.3 NHS Orkney has a clearly articulated commitment to provide a safe and sustainable level of emergency services involving A&E, Anaesthetics, Trauma, General Medicine, General Surgery, Emergency care of the critically ill or injured adult and/or child, Obstetrics and supporting services.

3.3.4 The Board is also totally committed to the provision of safe and sustainable Primary, Community and Dental Services – both in hours and out of hours.

3.3.5 Having identified the staffing requirements to provide the rotas for emergency

services on a 24/7 basis there is resulting capacity and capability to provide a range of elective services where clinically appropriate as this is considered to have many advantages:

- ease of access for patients, and their relatives, this is required as the age profile of the population of Orkney shows a high and increasing number of older people;
- addresses the reduction in healthcare uptake inequalities (research both locally and nationally has shown decreased uptake of more distant healthcare services by the most deprived or older people groups in society – for example, the repatriation of Ophthalmology from Aberdeen has significantly increased uptake rates in Orkney);
- allows fuller utilisation of facilities and staff who have been employed to ensure effective emergency services;
- addresses capacity issues elsewhere: Initial discussions with potential alternative NHS Boards confirm that little excess capacity exists to arrange for the re-provision of services elsewhere. Indeed discussions are underway to determine what could be repatriated for some services;
- facilitates recruitment and retention of staff: In order to recruit and retain clinical staff to provide emergency services, the local provision of elective services allows us to offer more rewarding and satisfying clinician posts whilst also ensuring skills maintenance and development as a result of increased activity;
- the provision of services locally allows local follow up of acute care episodes;
- scenario planning shows that there is a need for a greater emphasis on the pro-active, structured management of long term conditions, while this is often best delivered by GPs, there is a need for local consultant capacity to support and lead this care and NHS Orkney is addressing this through the recruitment of Consultant Physicians and Obstetricians to enhance the existing Consultant led services;
- supports delivery of an integrated health and care service for all community based services. This has facilitated local staff to readily interact with local authority staff including social work, education, occupational therapy, mental health, children's services etc; and
- advances in telemedicine will make delivery of specialist healthcare more accessible locally if there is appropriate infrastructure in place (in terms of staff, facilities and equipment). We have used this to our advantage to

deliver telemedicine clinics which reduces the need for patients having lengthy journeys travelling to see their clinician both for those travelling to mainland Orkney and/or mainland Scotland. We expect that technology will over time mean that more complex expertise and decision making support can be available locally if we have sufficient skills and capacity to support its use.

- 3.3.6 Having considered the options for changing the nature and volume of healthcare services the Board took an early decision that the preferred position would therefore be the delivery of the same range of services as at present, with repatriation of some services such as non specialist orthopaedics, urology and gynaecology from NHS Grampian. This improves patient access and makes efficient use of local capacity as well as offering extended skills and interests to staff locally in terms of recruitment.
- 3.3.7 Through the development of care pathways, anticipatory care planning and reablement services which support an enhanced primary and community care approach, enabling patients to receive their care in a supportive community environment the focus of non acute care will move from secondary to community and primary care.

3.4 Local Context

- 3.4.1 The local context for the development of services within NHS Orkney responds to the national drivers set out above and also takes into account other strategies that will support the proposals set out within the OBC. The local context is centred on the following:-
- Our Orkney Our Health – transforming clinical services
 - Role of a Rural General Hospital
 - Orkney Health and Care Service Plan
 - Health in Orkney
 - Financial Context
 - The Board’s Property Strategy
 - The Board’s e-Health Strategy
 - Local Delivery Plan
 - NHS Orkney Dental Strategy
- 3.4.2 Delivering Future Care in Orkney – NHS Orkney, in line with the ‘Delivering for Remote and Rural Healthcare’, The Final Report of the Remote and Rural Workstream proposes a team based approach built around 3 service delivery responses that reflect need and clinical urgency: ambulatory care and primary care; community care and rehabilitation and acute hospital. Each level is described below:

- Ambulatory care services and primary care services will continue to have an increased focus on screening, prevention and diagnostics, in particular managing chronic disease and establishing self care and self management with the appropriate levels of support, emergency services are limited to transfer and are coordinated through the local Rural General Hospital (which in Orkney is the Balfour Hospital).
- Community rehabilitation services (including existing residential care facilities) offer ambulatory (as described above) and community care services focused on diagnostic, respite, rehabilitation and end of life care. Emergency care services are organised for urgent care and are coordinated with the Balfour Hospital. The practitioner presence includes the community nursing service supported by a visiting GP service. In Orkney this will include an intermediate care model which uses community and residential care facilities in a similar approach to community hospitals.
- Hospital service with diagnostic capabilities in both general and advanced radiography, as well as ultrasound. General medical and surgical defined inpatient care supported by robust 24 hour clinical decision making support and high dependency capability to support (level 2) simple multi system levels of dependency or complexity of disease. In addition, strong connections to regional providers and Emergency Medical Retrieval Services for trauma and (level 3) stable complex multisystem levels of dependency or complexity of disease and complex unstable conditions requiring immediate emergency retrieval. There will be an increased approach to day care and day case admissions through the Day Unit and Ambulatory Care services which will reduce the need for unnecessary admissions to the acute inpatient area.

3.4.3 All of the above are reliant on good anticipatory care planning, robust communication, effective telehealth infrastructure and access to clinical decision making support and retrieval, both in and out of hours. The Emergency Care Network will provide clinical decision making support to Practitioners at an individual (Isles) primary care and hospital level.

3.4.4 The dental model in Orkney will focus on Public Dental Services delivering its traditional core services such as treatment on referral for oral surgery and orthodontics, Special care patients and vulnerable groups, advanced restorative care, preventative programmes and Dental Public Health including epidemiology. The provision of emergency dental services on 24/7 basis is part of the core service model.

3.4.5 An enhanced level of skills are required to cover services more usually delivered in the Hospital Dental Service (HDS) and the emphasis will continue to be on team working within a network environment.

- 3.4.6 There will be an increased need for therapists to support the enhanced skilled practitioners and deliver preventative programmes; however, the General Dental Service elements of the service will be delivered within the NHS independent practices.
- 3.4.7 There is a commitment to developing the skills within teams and NHSO has participated in the National Dental Inspection Programme skill- mix evaluation to ensure sustainability of services through the range of skills required.
- 3.4.8 Orkney Health and Care is a health and social care partnership between Orkney Islands Council and NHS Orkney which aims to improve outcomes for people by providing consistency in the quality of services, ensuring people are not unnecessarily delayed in hospital and maintaining independence by creating services that allow people to stay safely at home for longer. This is being progressed through:-
- improving the health and wellbeing of local people whilst reducing inequalities;
 - delivering social care and health services that enable people to live full, safe and independent lives;
 - involving local people in the design and delivery of health and social care;
 - ensuring health and social care services for local people reflect what is needed for individuals and the wider community;
 - focusing on improved health and social care outcomes and people's experience of services;
 - promoting and encouraging joint working with our community planning partners, including the third sector; and
 - providing a single, integrated line of accountability for the performance of services managed through Orkney Health and Care.
- 3.4.9 Orkney Islands Council and NHS Orkney have a shared vision and Older Persons Strategy which has led to the development of additional care home beds in the existing St Rognvalds' House Care Home and also in the planned new build at St Peters House in Stromness.
- 3.4.10 Orkney Health and Care is working on a programme of continuous improvement and development to deliver models of service that support preventative work and early intervention, are outcomes and reablement focused, and enable people to live in their own homes or homely settings as far as possible.

3.4.11 The success of this change programme is essential in supporting NHS Orkney to achieve its clinical vision. Significant redesign across our integrated health and social care services has resulted in sustainable models of care which will enable increased community based care, these include:-

- falls pathway embedded in clinical models with integration with SAS underway to ensure referral to appropriate care pathways rather than automatic transfer to A&E;
- integrated working with the Red Cross to provide step up and step down facility to support early discharge;
- the move to a reablement home care services, with evidence that home care hours have reduced as a result;
- move to enhanced promotion of rehabilitation and reablement approach to service delivery which has seen Occupational Therapy (OT) and Intermediate Care integration.

3.4.12 The goal of the above work is to minimise the impact of the demographic challenges of the years ahead whilst still providing safe, efficient and effective care that:

- Makes maximum use of the number of acute beds required;
- Meets the needs of our patients;
- Ensures effective use of our estate;
- Helps maintain “critical mass” in localities, which in turn can support day care, palliative care provision and a range of intermediate and rehabilitation services; and
- Maintains patients in a community setting in the most appropriate setting with the right level of support

3.4.13 In order to minimise any potential difficulties associated with delayed discharges the Council and the Board have developed an Intermediate Care Service which allows for support of patients in the first few weeks of return home as well as supporting early discharge or preventing actual acute hospital admission. We are also currently piloting an enhanced responder service, supported by Change Fund funding that can provide short term additional support to people in their own homes to prevent admission and facilitate timely discharge, working alongside the Intermediate Care Team.

3.4.14 The National Delivery Plan for AHPs sets out the key role AHPs have in

preventative and upstream approaches in enabling people to live well and for as long as possible in their own homes. AHP's locally are redefining their services so they can meet the outcomes set out in the National Delivery Plan, working across acute and community care services to ensure focus on recovery and reablement appropriate to each setting and patient group.

- 3.4.15 This will include developing an increased focus on health and wellbeing approaches to therapy in partnership with community based services such as healthy living centres, care homes and leisure centres.
- 3.4.16 Orkney Health and Care have a clear commitment to delivering appropriate proportionate and timely support and clinical care for children through integrated multiagency intervention as set out in Getting it Right for Every Child and Early Years Framework, linking across health, social care, education and partner agencies and groups.

Partnership Working

- 3.4.17 One of the aspirations is to develop and integrate ambulance service personnel into the healthcare environment through the development of Paramedical staff at various locations across the north, including Orkney.
- 3.4.18 In order to do that there is a requirement to change the traditional way of working and integrate Paramedical staff within the hospital environment. This can be enabled through the provision of a central base adjacent to the Emergency Department of the new hospital build for the provision of accident and emergency and non emergency ambulance services to mainland Orkney.
- 3.4.19 This co-location will also increase the opportunities for integrated working arrangements through the development of Paramedic Practitioner service with the Emergency team supporting the treatment of minor illness and minor injury patients autonomously or those Paramedics with the additional skills base and qualification (currently being offered to staff across Scotland) majors as part of the wider medical team.
- 3.4.20 During the evenings they can perform the same function within the OOH system also. In reality, in the Orkney Isles, this would increase available patient contacts for each paramedic working in the Emergency department as well as support the maintenance of skills and competencies more effectively. However, the paramedic would still be required to function as a part of a 999 crew to meet statutory requirements.
- 3.4.21 Co-location of the NHS 24 hub with the OOH service team will increase the opportunity of cross agency working. NHS 24 currently has a call hub based in the Balfour Hospital and this integrated approach to service provision is intended to be replicated in the new healthcare development.

Financial Context

- 3.4.22 NHS Orkney is committed to ensuring a sustainable future through promoting the values of excellence, improved efficiency, effective team working and clinical improvement allowing it to achieve superior performance and make a distinctive impact over a sustained period of time. The challenging financial outlook for the public sector for the foreseeable future will require fundamental change in the way NHS services are provided and new ways of working to achieve the Board's objectives.
- 3.4.23 The Board's strategy for achieving this is embedded in a number of specific and measurable objectives, many of which are fundamental to the proposals presented in this OBC. These objectives are supported through a number of initiatives designed to deliver higher quality, affordable and sustainable services.

Property Strategy

- 3.4.24 The Board's strategic estate priorities are set out within its Property and Asset Management Strategy (PAMS), covering the period 2012 – 2018.
- 3.4.25 Critical to the development of a robust property strategy is the requirement for this to be driven by the Board's Corporate and Strategic aims. The Board's ambitious programme of service change and modernisation as described in its Clinical Strategy Implementation Plan "Our Orkney, Our Health – Transforming Clinical Services" will require:
- Investing in current buildings that have a role to play in delivering the new models of care so that they effectively and efficiently support service delivery;
 - Investing in new buildings to enable and facilitate the new models of care and service delivery to be fully implemented;
 - Disposing of buildings that are no longer fit for health care purposes and are deemed surplus to requirements;
- 3.4.26 The PAMS details the requirement to develop an integrated health care facility incorporating an acute hospital, supported by community rehabilitation and enablement services as well as the development of primary care hubs in the East and West Mainland and the co location of Kirkwall Dental premises. This is in line with NHS Orkney's 2020 vision to have a modern, fit for purpose estate that is safe and functionally suitable to support the Board's transition towards its new model of care across Orkney, and capable of responding to the future predicted increase in demand on hospital beds and associated services.

- 3.4.27 In addition the Board are acutely aware of the need to address improvements in environmental performance and energy management. Both of which are key enablers in improving the quality of the estate and reducing the revenue costs over time.
- 3.4.28 The Property Strategy is aligned to the Annual State of NHSScotland Assets and Facilities Report. This report sets targets for 2020 for estate performance and the development of the new hospital and health care facility will play a key role in the local achievement of these targets. The KPIs contained within the National Report are reflected through the PAMS and are used to monitor our progress against the targets and to help shape our local investment programme.
- 3.4.29 A new Rural General Hospital and health care facility would enable many of the property strategy ambitions to be realised. Acute services would be provided in modern, fit for purpose facilities which, when taken with changes in the use of other hospital and community services, would fully support the proposed models of care. Furthermore it would address the significant, and increasing, backlog maintenance liability.

Clinical Support Facility

- 3.4.30 When reviewing our Property Asset Management Strategy (PAMS) and the early drafts of the Outline Business Case (OBC) for our replacement hospital and related healthcare facilities project considerable scope was identified for introducing new ways of working that would also lead to smarter use of offices and clinical space by incorporating within the development a separate Clinical Support Services Building.
- 3.4.31 In that context some of the early headline opportunities and benefits arising from the review mentioned above and the provision of a separate building were seen as being:-
- Removing offices from valuable (and expensive) hospital/clinical space;
 - Rationalising the corporate office estate as an aid to new ways of working;
 - Tailoring the specification for that separate building to be more focused on its users needs rather than a secondary requirement within a hospital/clinical setting; and
 - Opening up more flexibility and opportunities for community use/conference facilities outwith the hospital setting.
- 3.4.32 In addition to being more than £[REDACTED] per square metre cheaper to build than equivalent facilities within the new hospital building the separate building will

share car parking and the main energy centre with the hospital.

- 3.4.33 The separate on-site 1,500sqm Clinical Support Services building will incorporate all training and conference room facilities and provide office space for circa 130 staff, with roughly a 50/50 split in terms of static and mobile staff numbers.
- 3.4.34 The range of staff to be accommodated within the Clinical Support Services building are Consultant Surgeons, Anaesthetists, Physicians, Obstetricians, Mental Health, LTC, Public Health, School Nurses, Health Visitors, SLT, Dietetics, HR and L&D, Management and Admin. Some of these staff are presently located at various premises in Kirkwall and Stromness, while others are presently located within the Balfour site. The cost of leases and travel, including unproductive non patient time will be saved or released as a result of this development.
- 3.4.35 In order to arrive at the proposed 1,500 square metre requirement for the clinical services support building a draft schedule of accommodation was prepared taking into account 'typical' office and training room requirements. In overall terms the gross area of 1,500 square metres which includes desk space, circulation, storage, plant etc equates to about 10 square metres per workstation.

E-Health Strategy

- 3.4.36 The eHealth Strategy will bring about transformational change through:
- A single electronic clinical record which will improve patient care by making clinical records instantly available to clinical staff thus improving patient safety, clinician productivity and communication with primary care.
 - Electronic prescribing which will improve patient safety, allow the automatic incorporation of some treatment protocols, increase formulary compliance, streamline discharge processes and make pharmacy ordering more efficient.
 - Electronic ordering of diagnostic tests which will allow rapid access to tests will ensure that all test results are acted on and reduce duplication of tests.
 - Increased use of telehealth – providing out-patient reviews at locations remote from the main hospital without the need for clinician or patient travel.
 - Increased video-conferencing facilities for business and clinical meetings.
 - Enhanced business information to inform real time audit and service planning.

- Increased electronic handling of all aspects of the business will allow an increase in home working.
- Increased use of remote monitoring equipment at patients homes with information accessible by clinicians anywhere.
- Increased use of tele-presence to support remote and rural communities and to provide access to clinical decision making support (internally) to the isles network of care and (externally) from NHS Grampian or other Board areas.

3.4.37 The strategy and its successful implementation which is currently being progressed is key to supporting the Board in modernising clinical services, reducing costs and improving patient experience. In particular it is anticipated that key benefits will arise through faster access to relevant information (allowing for improved patient safety and more timely delivery of care) as well as increasing flexibility in the way the Board utilises its workforce.

3.5 Conclusion

- 3.5.1 The Board's change programme set out in Our Orkney Our Health - Transforming Clinical Services sets out the direction of travel in relation to the provision of services in the future. The focus on partnership working, prevention of admission and support for individuals to remain at home wherever possible is a fundamental requirement of NHS Orkney and Orkney Health and Care's ability to respond to the future financial and demographic challenges.
- 3.5.2 Orkney Health and Care and its focus on reablement and community based services will require to be embedded in the new model of care. Development is underway to ensure that clinical management of patients requiring assessment, intermediate care, rehabilitation and reablement is a priority to ensure patients have treatment in the right place, at the right time by the right people.
- 3.5.3 The challenging financial context means that a significant amount of service redesign is required in order that we continue to deliver against our financial and service targets. Some of the redesign is taking place now while the remainder will be undertaken as a result of the significant investment in a new modern fit for purpose Rural General Hospital healthcare facilities to ensure our services are fit for the future.
- 3.5.4 The PAMS strategy sets out the Board's vision for the next ten years in terms of the efficient utilisation of its estate. The delivery of a new Rural General Hospital and healthcare facilities will significantly improve the Board's overall position with regards to a range of performance indicators.

- 3.5.5 The E-Health strategy will deliver increased productivity by clinical staff, improved safety, better management information and a reduction in the need for medical record storage facilities.

4. BUSINESS CASE OBJECTIVES & SCOPE

4.1 Overview

4.1.1 This section of the OBC sets out the criteria used to confirm the objectives and scope of the project which is set within a defined overall development programme and the case for change.

4.1.2 The content of this section includes:

- Benefits to be achieved;
- The Key Investment Objectives;
- Confirmation of the scope of the project;
- A description of existing arrangements; and
- The case for change.

4.2 Benefits to be achieved

4.2.1 The table in Annex 2 sets out the following:

- The benefits to be achieved from the redevelopment of Hospital, Primary Care and Dental services;
- A description of how these benefits embrace the Quality Ambitions set out in the 2020 route map; and
- The baseline data that will enable measurement of progress and timescale for doing so alongside targets to be achieved through both this development and the resultant service change which it enables.

4.2.2 The targets are set using a range of measures, some adopting the agreed HEAT targets, others using a range of national averages and upper quartile performance. These targets, in addition to a range of local measures, will be further developed over the next few months.

4.2.3 Subsequently the proposed Models of Care as set out in Section 5 of the OBC outlines how the Board aims to reshape service delivery across the health system as a means of setting out the key changes required to support the performance improvements underpinning the main aims of the OBC. It also establishes the anticipated benefits associated with these changes.

4.3 Key Investment Objectives

4.3.1 The investment objectives have been ranked in order of importance and are summarised below.

Figure 4 - 1: Key investment objectives

Ref	OBC – Key Investment Objectives
1	To improve capacity and access to healthcare services – ensuring the health needs of the population are met
2	To provide facilities/services that are <ul style="list-style-type: none">• Fit for purpose• Support safe and effective clinical working• Improve clinical and functional relationships• Enable the provision of modern NHS care• Provide sufficient flexibility for future changes to service provision
3	To ensure that the hospital and services are developed in such a way as to maximise performance and efficiency
4	Maximise benefits of shared facilities
5	Enable innovative ways of working
6	Develop a feasible solution within acceptable limits of overall costs having regard to cost and time taken to acquire and develop NHS premises

4.3.2 The Investment Objectives embrace the Quality Ambitions set out in the 2020 Route Map and the benefits to be achieved from the investment along with how these will be measured and when they will be delivered are set out in Annex 2.

4.4 Project Scope

4.4.1 The full range of services that are presently delivered from the existing hospital site will be provided from within the new hospital, namely primary and community care and public dental services. In addition an adjoining building will house clinical support services, many of which are presently delivered from a range of properties in Kirkwall and Stromness.

4.5 Existing Arrangements

4.5.1 Services provided from the Balfour have changed and developed significantly over the years. That process of change continues to enable improvements in

functional suitability and a wide range of departmental refurbishments have been completed, most notably the development of MacMillan, Theatre, Laboratory, Radiography, Day Surgery, Day Hospital and CDU in 2000.

- 4.5.2 Key changes have included the addition of a Renal Dialysis Unit in 2006 providing on-island dialysis facilities for Orkney patients and the development of an Emergency Receiving Unit in 2010 providing A&E and Minor Injuries/illness services.
- 4.5.3 During this same time the hospital's fabric and infrastructure have been subjected to sustained use. Physical condition survey work indicates that the hospital is no longer fit for purpose and would not support delivery of the required future models of care and the degree of integration and flexibility we require.
- 4.5.4 Primary Care services have also changed over recent years with Heilendi finding their building much too cramped to be able to deliver the comprehensive range of clinical services required of modern day primary care practices.
- 4.5.5 Dental buildings in Orkney are old or run from temporary buildings with little ability to modernise the building layouts to meet decontamination guidance or changing best practice and/or legislative requirements.
- 4.5.6 As the models of service delivery change, with an increased focus on providing person centred, safe and effective healthcare, it is necessary to ensure that the most appropriate treatments, interventions, support and services are provided at the right time to everyone who will benefit.
- 4.5.7 It is therefore essential that the configuration of services supports the optimal patient experience, reduces unnecessary delays and allows resources to be used in the most effective manner. In many instances the current facilities can act as a barrier to ensuring that these requirements are met due to poor layout and less than ideal adjacencies.
- 4.5.8 Demographic forecasts indicate that the number of older people in the local population will continue to rise. In the absence of redesigning the services to address this issue this will put increased pressure on acute services, particularly unscheduled care, including those for older, physically ill patients who also suffer from confusion or dementia, not only at the Balfour Hospital but also in community and primary care settings.
- 4.5.9 As a result of these changes over time, the layout and design of the current hospital ward environment inhibits the opportunity to fully deliver the quality ambitions.

4.5.10 It is the aim of NHS Orkney to provide the highest standard of facilities possible for patients and a significantly improved working environment for staff. The case for change section sets out the key drivers for change and explains the rationale for the development of new hospital and healthcare facilities.

4.6 The Case for Change

4.6.1 NHS Orkney acknowledges the need to ensure that patients who require access to hospital care can be seen, fully investigated and treated and/or stabilised as quickly as possible within a purpose built Remote & Rural General Hospital.

4.6.2 In Orkney, for patients presenting as an emergency there must be access to specialised care of the highest quality, with state of the art investigations and treatment facilities on a 24/7 days a week basis.

4.6.3 It is important to note that the majority of patients will present at our hospital and our response to stabilise and make safe for transfer or to treat requires a highly competent consultant team being available 24/7 days a week – NHS Orkney has invested in a consultant led model to ensure we can provide safe, effective and sustainable services given our geography and the response time (which often exceeds 2 hours) from our partners in Scottish Ambulance Services and the Emergency Medical Retrieval Service.

4.6.4 This investment responds to growing pressures within the health and care systems in Orkney which together provide an overwhelming case for change. In summary the most immediate pressures include, our inability to:

- maximise workforce flexibility and integration due to the layout of our outdated facility;
- accommodate increasing activity in outpatients, day surgery including theatre activity and short stay accommodation due to lack of space and storage;
- respond adequately to the increasing proportion of older people in Orkney and the impact that this has on elective and emergency workload;
- respond to new clinical standards and guidelines to ensure consistency of practice and access locally to services;
- meet increasing public and professional expectations;
- keep up with national policies which emphasise reduced waiting times and improved access to health care professionals;

- meet in full regulation and requirements in regard to infection control and decontamination due to lay out, bed spacing, temporary/portable buildings and ventilation limitations;
- address the significant back log maintenance on a site that is no longer fit for purpose and nearing the end of its lifespan;
- address our deteriorating engineering and plant infrastructure and associated running costs; and
- maximise energy efficiency and meet our carbon reduction target.

4.6.5 The case for change is based on four key issues, namely:

- The ambition to deliver National Policy such as 2020 Vision, the Quality Strategy and Reshaping Care for Older People as well as to facilitate the delivery of local initiatives such Transforming Clinical Services and Orkney Health and Care service objectives.
- The need to be able to respond to, and manage, future demographic change. The demographic change impacts on the ageing population, their health needs and the resulting increased demands (including unscheduled care) being placed on the local health system. In parallel, the demographic change also impacts on the workforce availability for the future.
- Modernisation of services which focus on quality, safety, person centredness and clinical effectiveness is an essential requirement.
- Backlog maintenance and the lack of functional suitability of current Balfour, Primary Care and dental facilities. There is also the need to improve the patient and staff environment in order to be able to modernise service delivery and meet targets and objectives.

4.6.6 Further details and analysis of each of these is provided below.

National Policy

4.6.7 The Board is committed to achieving the goals set out in key national policy initiatives as outlined in Section 3.2. Delivering improvements in the way in which care is provided by implementing new service models will improve the quality of patient care and make more effective use of scarce resources.

4.6.8 In particular the NHS Scotland Healthcare Quality Strategy places significant emphasis on the need to respect individual needs and values which demonstrate compassion, continuity, clear communication and shared decision-making. Furthermore it stresses that there be no avoidable injury or

harm to people from the healthcare they receive, and an appropriate, clean and safe environment will be provided for the delivery of healthcare services, which respects the privacy and dignity of patients at all times.

- 4.6.9 Additionally it emphasises that the most appropriate treatments, interventions, support and services will be provided at the right time to everyone who will benefit, and wasteful or harmful variation will be eradicated. This is further supported by the Scottish Patient Safety Programme which NHS Orkney has a commitment to embed into every clinical service delivery objectives.

Demographic Change

- 4.6.10 As outlined in paragraph 2.3 of the OBC, NHS Orkney is facing some significant challenges in relation to changing demography. Trend data showing anticipated changes in population between 2010 and 2035 from the General Register Office for Scotland (GROS) statistics is shown in the table below. This shows that the over 75 population in Orkney will increase by over 100% by 2035. This rise in older age groups has considerable importance when planning future health services.

Figure 4 - 2: Projected percentage change in population (2010-based), by broad age group, Orkney and Scotland, 2010-2035

Age Group	Orkney	Scotland
0-15	-4.6%	3.2%
Working Age	-0.7%	7.1%
Pensionable Age	34.5%	26.2%
75+	115.0%	81.9%
All ages	6.8%	10.2%
Source: General Register Office for Scotland website. Accessed 27/12/13 http://www.gro-Scotland.gov.uk/statistics/theme/population/projections/sub-national/2010-based/tables.html		

- 4.6.11 A further important impact of the demographic change will be on the working age population. The working age population is projected to decrease. NHS Orkney and Orkney Islands Council are major employers within the region and will compete with other organisations to secure continuity and appropriate staffing levels. It is essential that clinical and support services are sustainable in the future and that we are able to recruit and retain our workforce to deliver the high quality range of services to the population required.
- 4.6.12 Looking at our workforce needs and planning for the future has been a central component in developing this OBC. We have recognised that we need to plan career structures that will enable individuals to progress within their chosen field and that we have innovative approaches to career development in

Orkney. This is covered more fully in Section 6.

Modernising Clinical Services

- 4.6.13 Reviewing the way we deliver clinical services is constantly subject to reassessment and improvement. This recognises the introduction of new methods of treatment, especially drugs, but also the impact that new technology can have in the way healthcare can be delivered.
- 4.6.14 The case for change however, goes beyond the need to respond to new drug regimes or new treatment techniques. It must go to the heart of the population change and the change in the types of care that people will need in the future. It is therefore not appropriate to develop services in a piece meal or incremental fashion but to look at clinical services as a whole and set out a clear strategy for the future.
- 4.6.15 We anticipate an increase in those who develop a long term condition which means that the we must change the focus of services from episodic care delivered in hospital to one of co-ordinated long term care. This involves a move towards integrated care pathways between primary, community and acute care which maximise support for self care, health promotion and self management whilst developing anticipatory care approaches to prevention and management of these long term conditions.
- 4.6.16 This requires a shift from acute rural general hospital care to a greater emphasis on primary and community based care, including into community based services delivered by partner agencies such as Healthy Living Centres and leisure facilities.
- 4.6.17 In addition to acknowledging this shift from episodic care to long term care, it is also important to recognise that those who require inpatient care should receive the best care possible in the most appropriate environment.
- 4.6.18 As part of modernising clinical services there is a clear shift in care provision that supports rehabilitation as locally as possible but allows the experts to work in teams that will support improved outcomes and greater independence for individuals as they return to normal living.
- 4.6.19 This will require both improved acute hospital facilities with effective supporting rehabilitation but also inreach/outreach intermediate care and reablement facilities and services. The rehabilitation and reablement services will be co-located in order to provide a single base for the integrated community care teams who will deliver a range of care and support to individuals in their own home and in their own community.

- 4.6.20 The development of a new Rural General Hospital with integrated Primary and Community care services will enable the Board to implement a number of new models of care for adult acute emergency care and ambulatory care. As part of wider system changes it will also support the shifting of the focus of care from acute into community and primary care settings with particular focus on improving care for older people. Further details regarding these models are provided within Section 5.

Condition of Balfour Estate

- 4.6.21 This section of the case for change focuses specifically on the physical condition, energy efficiency, Disability Discrimination Act compliance, functional suitability, the quality of the environment and space utilisation of the current hospital facilities as well as the additional healthcare facilities which this project will seek to replace.

Physical condition

- 4.6.22 The Balfour Hospital has recently been re-surveyed (May 2013) with the findings that its buildings are all in Condition C.
- 4.6.23 It also found that whilst many of the elements of the buildings' external infrastructure and engineering services currently remain sound, they are showing signs of their age and are past their expected life.
- 4.6.24 In the short term this may not present a major risk to the Board, other than specific back log maintenance however, in the medium to longer term there is need for significant investment to replace major life expired elements of the hospital's buildings.

Functional suitability, quality of the environment and space utilisation

- 4.6.25 Over recent years there has been an increase in the number of services delivered and supported by consultants either on a visiting basis or through locally employed consultants.
- 4.6.26 To accommodate some of these services patients and teams have been accommodated in the existing building in pragmatic ways that, despite best efforts, have not always offered the ideal design or clinical adjacencies in which to undertake clinical practice or deliver streamlined patient pathways.
- 4.6.27 Service development has also affected the use of accommodation. Some services have substantially outstripped the space available leaving them to work in cramped conditions whilst changes in clinical practice have also rendered some working spaces functionally unsuitable.

- 4.6.28 The May 2013 assessment of functional suitability shows that the vast majority of the Balfour Hospital site falls into either category C i.e. not satisfactory (37%) or D i.e. unsatisfactory (32%). Similarly, the Quality Assessment establishes that 36% of the building falls within either Category C or D.
- 4.6.29 In terms of space utilisation, 69% of the building is classed as fully utilised and where under utilisation exists it is generally due to a lack of functional suitability of any available space.
- 4.6.30 As clinical services have modernised and developed, they have often had to find additional accommodation to support the service. In a number of specialties this has further fragmented services and clinical adjacencies have been compromised. For example Emergency Receiving and HDU are co-located in the same area, but not immediately adjacent to the front door of the Hospital.
- 4.6.31 With only one theatre and the inability to add additional theatre space on the Balfour site this remains one of the Board's main risk areas in terms of clinical service delivery. Delays to emergency patients requiring urgent surgical intervention as a result of no available theatre space is a key clinical risk.
- 4.6.32 In terms of primary care facilities, the existing Heilendi building is too small to allow the practice to function in line with its service vision and its ability to expand its range of services is impaired by a physical lack of building capacity. The Skerryvore health centre building lacks space to allow the development of the practice nursing service and does not have the physical capacity to enable the Board to deliver its vision for an East Primary Care Hub as outlined in its clinical strategy implementation plan.

Fragmentation of services

- 4.6.33 Again as clinical services have modernised and developed, they have often had to find additional accommodation to support the service. In a number of specialties this has further fragmented services as the additional space is in a remote location from their current area. This means service provision is fragmented and split between two locations within the hospital. Examples of this include:
- Outpatient Clinic space is no longer able to provide accommodation for all outpatient clinics with Cardiology, Mental Health, Children's Services and telemedicine Clinics all taking place in various locations across the Board.
 - Some Cardiology rehabilitation takes place in the Day Hospital corridor.
- 4.6.34 In addition to departments outgrowing their existing/available accommodation, clinical services have developed and the most appropriate models of care

have changed significantly. Clinical adjacencies are poor in many areas. For example inpatient beds are located in four different areas with pop up beds located in Emergency Receiving. This results in reduced flexibility for managing peaks in capacity and constant movement of patients within Acute in particular in order to meet gender specific accommodation needs, infection control requirements and/or clinical acuity.

- 4.6.35 The provision of single rooms will greatly reduce the need for constant patient movements and this, plus the flexible approach to inpatient areas, will reduce the number of red alerts we experience. Another example of poor physical layout is the distance of the Emergency Receiving Unit from the front door of the hospital.

Appropriate room sizes

- 4.6.36 In addition to the above challenges, a significant proportion of the current estate does not meet minimum Health Building Note (HBN) guidance in terms of recommended minimum room sizes, which means in some areas clinical services are provided in relatively cramped conditions.
- 4.6.37 The wards are all of various age ranging from 1937 to 2000 so do not meet current space standards. There is insufficient space for the use of lifting aids in bedrooms or bathrooms, nor are there adequate single rooms or isolation facilities. Overall there is much less support accommodation than in comparable modern wards; for example, office space is limited as is storage, interview facilities and staff locker space.

Ensuite single inpatient rooms

- 4.6.38 The existing wards were designed with patient bedrooms either organised as four bedded rooms or large Nightingale type ward with bays varying in size with a total of eight single bedrooms across the Hospital (excluding Maternity and MacMillan) resulting in real constraints when patients require to be isolated or when end of life care is needed where a single room is ideal in order to provide privacy and dignity.
- 4.6.39 The single rooms have en-suite facilities, with no showers, and are significantly smaller than current guidance, resulting in operational difficulties, in some areas these are provided in portacabin type buildings.
- 4.6.40 The inpatient bed complement has been reconfigured/ adapted over recent years with additional toilet and bathing/shower facilities provided by the addition of portacabins which are nearing the end of their life.

4.7 Implications of not providing a new Rural General Hospital and Health Care facilities

4.7.1 Modernising health services in Orkney cannot be achieved without investment in a modern facility.

4.7.2 Failure to invest in a new RGH and healthcare facility will lead to an inability to:

- Fully and efficiently implement the new models of care for Emergency Care, Care of Older People, Theatres and Endoscopy and Critical Care;
- Fully provide improved privacy and dignity for inpatients, and the improved management of Healthcare Associated Infection (HAI), by increasing the number of single en-suite inpatient rooms;
- Fully meet the needs of the cognitively impaired;
- Fully provide appropriate, modern primary care and dental facilities which enables the teams to meet the needs of their particular patient groups;
- Address the fragmentation of clinical services; and
- Improve the clinical flow for children who require inpatient or ambulatory care services.
- Fully address the current estate issues of:-
 - The general poor physical condition of the building and engineering services which are at the end of their useful life;
 - Fully complying with the DDA;
 - Improving space utilisation;
 - Improving the functional suitability of accommodation;
 - Improving the quality of the physical environment;
 - Providing improved and more appropriate room sizes for clinical services in line with current and pending future SHPN guidance; and
 - Improving energy efficiency.

4.8 Conclusion

- 4.8.1 The benefits to be achieved from this investment embrace the Quality Ambitions as set out in the 2020 route map and appropriate baseline measures and timescales have been identified to map progress on delivery. Within the case for change, there is a requirement to address both the national policy drivers and the local initiatives combined with a changing demography, a changing disease profile and a planned change to the models of care.
- 4.8.2 The provision of a new RGH and associated Primary Care and Dental facilities will support the Board in the delivery of its Property and Asset Management Strategy and contribute significantly to the achievement of the performance targets set out in the national 'Annual State of NHS Scotland Assets and Facilities Report'.

5 MODEL OF CARE AND SERVICE SPECIFICATION

5.1 Overview

5.1.1 This section of the OBC outlines the work undertaken to develop the proposed models of care developed as part of the project. The areas presented cover the following:

- The scope of service provision;
- The principles and process for developing the models of care; and
- The proposed model of care for key areas.

5.2 Scope of Service Provision

5.2.1 The services that will be provided from the new Rural General Hospital and Healthcare Facilities which incorporates all of the services currently being provided across the Balfour site and other locations across the mainland.

5.3 Principles and Process in Developing the Models of Care

5.3.1 The principles applied in developing the models of care focus on the following:

- Best clinical practice;
- Providing care in the most appropriate setting;
- Co-ordinated delivery of care with partner organisations;
- Providing seamless patient pathways;
- Patient quality and experience; and
- A focus on health improvement and health promotion.

5.3.2 In terms of process, the clinical output specifications (COS) contain the service model information for each area, describing how services are currently delivered, identify service trends, describe future models of care and outline operational requirements. They are critical to the procurement process since they:

- Describe how services are delivered currently, including deficiencies, constraints and future aspirations;
- Identify how services will change between the planning and commissioning

phase of the new facility;

- Describe how services will operate in future (model of care), including changes to workforce requirements;
- Detail the space required to efficiently deliver new services;
- Make assumptions about clinical performance and the revenue implications of redesigned clinical services; and
- Incorporate key information that will inform bidders during Competitive Dialogue.

- 5.3.3 In addition clinical briefing documents/operational policies will be developed for each clinical discipline which will further define the transition from current service model to future service model on an incremental basis.
- 5.3.4 The clinical brief/operational policy documentation for the New Hospital and Healthcare Facility Project was developed through a structure, consisting of work streams and work groups meeting with the Healthcare Planners and members of the Project Team on a regular basis.
- 5.3.5 Ongoing meetings have been held with each area to progress service planning and to ensure that future service needs have been defined and agreed. These will be ongoing as the models are progressed.
- 5.3.6 A clinical services workshop was used to ensure integration of workstream plans. Discussions during the “cross-check” process were used to identify issues that required to be clarified related to facility planning and workforce matters.
- 5.3.7 The development of the Hospital and Healthcare facilities has been an agenda item on departmental team meetings as well as the advisory committees, i.e. Area Medical Committee, Area Clinical Forum, Clinical Reference Group and Corporate Management Team. In addition scrutiny and governance for this development has been provided by Finance and Performance Committee and to the NHS Board.
- 5.3.8 Regular presentations have also been made at workshops, drop in sessions, Partnership Forum and team meetings.
- 5.3.9 Comments and feedback from clinical teams and public partners have been incorporated into the Clinical Output Specifications and the Schedule of accommodation and have shaped the reference design requirements.

5.4 Proposed Models of Care

5.4.1 Analysis of future demographics illustrates that there will be greater demands on the social and healthcare systems. There will also be a potentially reduced workforce to provide the traditional models of care. It is important therefore to establish new models of care to address this challenge.

5.4.2 High impact changes for clinical models of care:

- Improve patient flow by better managing admission and discharge processes which identify if there are clinically suitable alternatives to admission and which support early supported discharge;
- Provide preventions, self management and co-ordinated care approaches to patients with chronic long term conditions;
- Redesign and extend integrated approaches to maximise patient engagement through patient centred pathways;
- Enhance ambulatory care approach to patient care so patients have a wide range of health services provided on an outpatient basis including diagnostics and outpatient services;
- Reduce unnecessary referrals to outpatients through the development of clinical pathways, advice clinics and consultant support to clinicians;
- Day surgery and day medical care will be the norm for elective patients to reduce unnecessary overnight inpatient stays; and
- Integrated rehabilitation and reablement approach to care on an inreach and outreach basis.

5.4.3 Key areas for redesign have been identified and include:

- Emergency Care, including the development of an Assessment Area where short term observation of patients is indicated which will be based in the Acute Ward to support the Emergency Centre;
- Inpatient areas, including Acute, HDU, Macmillan, Rehabilitation and Maternity;
- Theatres / Endoscopy & Multipurpose Unit / Day Unit;
- Ambulatory Care, including Primary Care, Dental and AHP Services; and

- Clinical Support Services, including diagnostics.
- Childrens services being clinical pathway led with local clinicians, supported by Consultant Paediatricians in mainland Boards, delivering the range of emergency and elective care required, with retrieval and transfer once stabilised to Specialist Childrens Hospitals for those with acute care needs.

5.4.4 The overarching principle is to reduce the number of acute emergency hospital admissions while ensuring that those who require admission can be seen, fully investigated and treated as quickly as possible. This is being progressed through anticipatory care initiatives to avoid admission by ensuring appropriate alternative care models are in place. Clinically necessary services will be available over a 24/7 period and must support a seamless patient pathway across primary and secondary care.

5.4.5 To support these aims there is a need to create a step change in health and wellbeing whilst also contributing to a reduction in health inequalities with all clinical staff taking a key role in changing behaviours especially among people most at risk of poor health.

Emergency Care Centre

5.4.6 Currently NHS Orkney's unscheduled care services (i.e. Emergency Receiving Area; Minor Injuries and the GP Out of Hours Service) operate as separate units. Macmillan and Maternity patients are admitted directly to their respective unit in the majority of instances.

5.4.7 Throughput and length of stay within the current Emergency Receiving Area is variable and the layout of the unit and the lack of single rooms does not lend itself to person centred care, particularly at periods of peak activity.

5.4.8 The Consultant input to, and supervision of, the Emergency Receiving Area ensures that there is Surgical, Medical and Anaesthetic expertise available at all times which will improve patient access to relevant care pathways resulting in speedy diagnosis and treatment for minor injury, minor illness and/or the care of the acutely unwell.

5.4.9 The new hospital building will create a cohesive Emergency Care Centre which operates as a "front and back door facility", with a focus on "decide to admit" rather than "admit to decide" as directed in NHS Orkneys Local Unscheduled Care action plan.

5.4.10 There will be an increased focus on an ambulatory care directed clinical review, whether primary, community or secondary care clinician, and rapid access to diagnostics. Therefore it is anticipated that a significant percentage

of presentations at the Emergency Care Centre will not result in the patient requiring admission to the inpatient wards.

- 5.4.11 The assessment/observation area, which will be located in the Acute Ward area, will comprise of bed/chair spaces. The anticipated length of stay within the unit will be less than 12 hours. The availability of senior skilled staff in the Assessment Area will ensure early proactive management of patients which has been shown to reduce average length of stay and improve safety.
- 5.4.12 The integration of the Emergency Care Centre, GP Out of Hours area and NHS 24 Hub, will lend itself to much more flexible team working across the patient pathways. This coupled with clear patient pathways which indicate whether the patient is discharged, remains in ECC, is transferred to the Assessment Area or admitted to an inpatient area will significantly improve patient experience and ensure right treatment, in the right area, by the right staff member/team.
- 5.4.13 Allied Health Professionals and Social Work staff will have significant input to the Emergency Care Centre, to contribute to early assessment and support effective discharge planning.

Pathways of Care through Rehabilitation and Enablement

- 5.4.14 The first priority for rehabilitation and reablement identifies the need for early intervention in terms of early identification of self management opportunities with strong links with anticipatory care. We recognise the pressures that will be created from the rising number of older patients with co-morbidities.
- 5.4.15 The Board in partnership with Orkney Islands Council is using the delivery mechanism of Orkney Health and Care to develop co-ordinated care services to maintain older patients at home whenever possible with a single point of referral to all rehabilitation and reablement services.
- 5.4.16 When admission is required, our aim is to minimise the length of stay as this leads to less functional decline in older patients.
- 5.4.17 Vulnerable frail patients are often admitted to hospital due to lack of adequate alternative services in the community. Orkney continues to develop its Intermediate Care model which both supports the reduction of avoidable admissions and facilitates timely discharge from inpatient settings through a mix of inreach and outreach services.
- 5.4.18 The development of multidisciplinary and multi-agency teams across primary and secondary care, working together to bridge the gap, will ensure that the patient's journey is safe and effective.

- 5.4.19 Population projections predict a significant increase in the proportion of older adults suffering from dementia. Older people with dementia have more functional decline, increased admission to care homes and higher mortality rates. It is also recognised that older people with significant physical disease are at greater risk of co-existent psychiatric morbidity. Future modelling based on population health has begun to guide our service redesign and will continue to do so in the future.
- 5.4.20 Orkney Health and Care reablement teams are currently progressing the development of a single point of contact to a multidisciplinary, multiagency team in order to reduce avoidable admissions to acute services and support earlier discharge. If, on assessment, the individual does not require acute medical care alternative community based services will be provided.
- 5.4.21 The community based services across Orkney will provide a greater role in supporting effective intermediate care by removing the traditional silos that exist across individual professional teams and improving communication. A programme of education and development has been commenced and will support staff to develop new ways of working. This will reduce delays between onward referrals as well as increase patient flow through the inpatient wards in the hospital and deliver care within an environment which is closer to the patients' home.
- 5.4.22 The aim of the inpatient rehabilitation service is to provide a multidisciplinary in-patient rehabilitation service which focuses on maximizing the functional/physical ability of the patient.
- 5.4.23 In addition it will aim to provide medical interventions to diagnose treat and prevent health problems on an individual basis alongside the rehabilitation process. The patient will undergo a full and comprehensive multidisciplinary assessment on admission which identifies the needs/goals of that patient around which the rehabilitation programme and treatment plan will be designed.

Theatres / Endoscopy / Day Unit

- 5.4.24 During the planning for Theatres / Endoscopy & Multipurpose Room / Day Unit services a wide range of factors were identified which will impact on future requirements.
- 5.6.25 These include:
- The impact of the Bowel Screening Programme increasing demand for colonoscopy;
 - The impact of Joint Advisory Group recommendations regarding endoscopy;

- Decontamination Guidelines – need for improved decontamination areas;
- Changes to waiting time regimes/targets;
- Increasing day case and 23 hour care activity;
- Changes/developments in technology and clinical practice;
- Further development of Enhanced Recovery processes after surgery; and
- Repatriation of activity from other hospitals e.g. Orthopaedics, Urology and Gynaecology activity from NHS Grampian.

5.4.26 Theatre and endoscopy services in Orkney are currently delivered using one single theatre which poses significant clinical risk in the event of an emergency requiring urgent transfer to theatre when there is already a procedure underway.

5.4.27 Within the new hospital all day case procedures, will be provided from one location, thereby increasing efficiency and productivity. The only exceptions to this are some cancer treatments and obstetric care where specialist nursing/midwifery staff provide the day case care as part on an integrated model of care in their respective areas. The future Hospital will increase the opportunity to establish safe and more effective services by the establishment of:-

- Main Theatre with second emergency Theatre
- Multipurpose Room hosting Endoscopy (1 suite, with endoscopy decontamination facility) as well as other clinical procedures which do not require actual Theatre space.
- Day Unit

5.4.28 In addition there will be purpose built day treatment areas in Macmillan and Maternity

5.4.29 Theatre, Endoscopy & Multipurpose Room and the Day Unit will be located in immediate proximity to one another to ensure that the overall endoscopy and surgical journey for patients is optimised.

5.4.30 The key principles of our proposed Model of Care are to:

- Improve all surgical and associated journeys through a re-design of processes, services, staffing and accommodation. This will be achieved with improved pre-assessment, admission on day of surgery (AODOS) for a

minimum of 90% of all surgical and endoscopy admissions. Our BADS (British Association of Day Surgery basket of procedures) day case rates are currently 86.4%, against the national BADS score of 82.3% we will be working towards improving this target for all day cases.

- Minimise duplication of effort and resources through improved physical adjacencies.
- Reduction in journey times within the operating department/endoscopy/ support areas and between these and related areas including Acute Ward and HDU.

Inpatient areas, including Acute, HDU, Macmillan, Rehabilitation and Maternity

5.4.31 Inpatient Services at the Balfour Hospital are currently delivered from five locations:

- High Dependency Unit - 2 beds level 2-3, with ability to flex to 3 beds
- Acute – 16 beds for Medical and Surgical patients
- Macmillan – 4 beds
- Assessment & Rehabilitation – 19 beds, plus 1 Mental Health Transfer Bed
- Maternity – currently 6, moving to 4 beds

5.4.32 Level 2 patients are cared for in the High Dependency Units with the requirement to admit, resuscitate and stabilise Level 3 patients until they are either suitable to remain as Level 2 patient in the Orkney HDU, or are transferred off island as to an ICU in a mainland Board. On occasions where retrieval cannot be undertaken for level 3 patients their ongoing care is provided in the HDU.

5.4.33 Having separate inpatient areas with small numbers of beds within NHSO presents challenges in that it reduces the ability to use the beds to their maximum during times of peak activity, reduces nursing flexibility across these areas and is not conducive to team working. Therefore HDU will very much be integrated with the Acute Inpatient area in terms of shared facilities and staff support.

5.4.34 When a Level 3 patient is admitted to HDU the area is staffed to a minimum ratio of 1 nurse to 1 patient throughout the 24 hour period and care is led by Consultant Anaesthetists with intensive care skills.

5.4.35 The key principles of our proposed Model of Care, through a purpose built facility with supporting adjacencies, are to:

- Provide a co-located / combined unit with 22 acute beds accommodating Medical, Surgical, Acute Rehabilitation and HDU resulting in increased productivity and a more flexible staffing model which enables skills maintenance.
- Allow considerable pooling of expertise and economies of scale whilst improving quality. This will also maximise use of a scarce workforce.
- Ensure care is under the management of the anaesthetists in terms of admission, daily management and discharge. This model will be vital to ensure equitable use of beds and to provide medical staff input over the 24-hour period.
- Provide shared support areas.
- Develop an integrated rehabilitation approach which supports inreach and outreach services for patients to help them regain their maximum level of independence and shortest stay in Hospital by providing services in the best way for each individual patient, including at home.
- Provide cancer and palliative care services in a purpose built unit which will play host to inpatient care, specialist day treatments, information and support to cancer patients and their relatives/carers and be the base for the specialist cancer nurses. There will continue to be close involvement with NOSCAN and the specialist cancer centre at NHS Grampian through which shared care protocols and clinical guidelines for the administration of chemotherapy will be developed and shared in accordance with the relevant CELs.
- Maternity services will continue to be delivered through an integrated model which enhances the woman's experience in terms of seamless approach to Obstetric and Midwifery Care across the whole spectrum from pre-conception to post natal. A purpose built modern unit with increased technology infrastructure will support the delivery of safe, effective and person centred care.

Ambulatory Care, including Primary Care and Dental

5.4.36 Outpatient and day attenders services in the Balfour have evolved over recent years with the result that many services are currently delivered from various areas depending on available space which is less than ideal for staff and patients.

- 5.4.37 Reducing inappropriate hospital admissions is, and will remain, a priority for NHS Orkney and Orkney Health and Care and so the development of an ambulatory care approach across the clinical services and agencies which the New Hospital and Healthcare Facilities build will enable is a key priority.
- 5.4.38 For many patients their first, and perhaps only, contact with health services is with Primary Care. NHS Orkney recognises that the projected changes in our population will have significant effects on Primary Care as will changes in technology and treatments. There is a need to modernise services and improve integration with secondary care as well as other community based services in order to create sustainable clinical services.
- 5.4.39 NHS Orkney's vision is to develop an East Hub for Primary Care Services with improved access to diagnostics, assessment, technology and the Out of Hours service/team. The integration of Primary Care into the new build is seen as fundamental in strengthening a multidisciplinary team approach to delivering significant improvements in clinical outcomes and patient experience whilst also delivering more effective anticipatory care planning, management of long term conditions and the promotion of well being to reflect the changing needs of the people of Orkney.
- 5.4.40 In order to develop new systems and new ways of working the Consultant Physicians will take a lead in developing specialist models of care which operate beyond the traditional hospital ward areas, supported by anticipatory care plans and developing a model of community ward appropriate to Orkney. Although already an NHS Orkney priority for Rehabilitation this has been further reinforced in the Royal College of Physicians paper Future Hospital: caring for medical patients.
- 5.4.41 The proposed new model of ambulatory care will bring together our clinical services in a critical mass which strengthens our services to our patients as well as ensuring more effective communication links to improve decision making and reduce waits for patients who need to access another service.
- 5.4.42 The dental model in Orkney will focus on Public Dental Services delivering its traditional core services such as treatment on referral for oral surgery and orthodontics, Special care patients and vulnerable groups, advanced restorative care, preventative programmes and Dental Public Health. The provision of emergency dental services on 24/7 basis is part of the core service model.
- 5.4.43 An enhanced level of skills are required to cover services more usually delivered in the Hospital Dental Service (HDS) and the emphasis will continue to be on team working within a network environment.
- 5.4.44 There will be an increased need for therapists to support the enhanced skilled

practitioners and deliver preventative programmes; however, the General Dental Service elements of the service will be delivered within the NHS Committed Practices.

- 5.4.45 There is a commitment to developing the skills within teams and NHSO has participated in the National Dental Inspection Programme skill- mix evaluation to ensure sustainability of services through the range of skills required.

Clinical Support Services, including diagnostics

- 5.4.46 Demand for clinical support services, Laboratory; Radiography; Pharmacy and Decontamination, has increased over recent years as a result of local and national initiatives and strategy changes including advances in technology and clinical treatments.
- 5.4.47 This pattern is expected to continue to increase and NHS Orkney needs to plan to cope with the impact not only on service redesign but also staffing models to ensure sustainability. Laboratory medicine and radiography require to be provided 24/7 and will be through an on-call system with urgent laboratory tests able to be performed by clinicians through Near Patient Testing (NPT) where clinically safe and appropriate.
- 5.4.48 A range of diagnostic tests and decision making support will be developed across remote primary care locations in order to support the local management of patients and prioritise those who require onward referral and transport to the Hospital diagnostic services, or who require further samples to be processed in the Laboratory which cannot be performed under NPT conditions.
- 5.4.49 The pharmacy will be the hub for providing a modern pharmaceutical service in Orkney. As well as providing medicines and clinical pharmacy in the acute setting, the pharmacy will support the implementation of "Prescription for excellence" and delivery of pharmaceutical care within Orkney Health and Care.
- 5.4.50 Decontamination services are becoming more complex as a result of stricter health planning notes and guidance. NHS Orkney will continue to meet accreditation requirements in order to ensure the safety of its patients and the full traceability of each instrument. It is recognised that this will be an ongoing significant capital and revenue commitment.

5.5 Retrieval Services

- 5.5.1 NHS Orkney will always require the specialist services of mainland hospital teams for patients who will be admitted on an elective or emergency basis. Where emergency admission is required patients are transferred by means of the SAS Air Ambulance or are retrieved by the retrieval teams which currently

exits, i.e. Adult, Paediatric and Neonatal.

- 5.5.2 SAS are currently reviewing the retrieval systems through an initiative called ScotSTAR, which will see the current three transport and retrieval services; the Scottish Neonatal Service (SNTS), the Transport of Critically Ill and Injured Children Service and the Emergency Medical Retrieval Service, brought together into one national specialist service co-ordinated by the Scottish Ambulance Service.
- 5.5.3 NHS Orkney will link into this project so local service need and opportunities for closer working with the retrieval teams are maximised.

5.6 Service benefits of the new models of care

- 5.6.1 The anticipated benefits arising from the proposed new models of care, much of which will depend upon the provision of the new hospital and healthcare facility, include:
- Patients will be cared for in the most appropriate place, which may be their own home, by the most appropriate team;
 - Improved person-centred, quality care for all patients tailored to meet identified, individual need;
 - Integrated and adjacent services which span the patient's pathway and maximise staffing models and expertise;
 - Increased efficiency by maximising the potential of all available resources;
 - Increased resilience to fluctuating demand in different units and on different staffing models;
 - Improved clinical outcomes through standardisation and consistency of practice delivered by dedicated, integrated teams;
 - Patients of all ages will not be admitted to acute beds unless medically necessary as there will be greater utilisation of community based services through the provision of appropriate, proactive, alternative services nearer to, or in, their own homes;
 - Integration of health and social services will ensure that the associated demographic needs, both from a clinical and care perspective are met within the constraints of combined budgets;
 - Reduction in the number of avoidable admissions and an overall reduction in occupied bed days;

- Improved ease of communication across services; and
- The development of near patient testing across diagnostics will ensure patients get timely results and onward referral only as clinically indicated.

5.6.2 We will track the delivery of these benefits by measuring performance against the indicators highlighted in section 4.2.

5.7 Clinical and Design Briefs

5.7.1 Our Orkney, Our Health – Transforming Clinical Services as well as clinical brief/operational policy documentation and the resulting models of care have been used to develop a design brief for the project. This translates the outputs into a set of guidelines that are used to develop the schedule of accommodation and adjacencies for each department.

5.7.2 This ensures that the principles of the models of care are embedded into the developing proposals for the new facility. These are built around the patient pathway and informed by staff, who will be working within the services, thus ensuring that the process is person centred.

5.7.3 Clinical and design briefs are available on request.

5.8 Conclusion

5.8.1 The changes described above will deliver benefits in patient care, safety and clinical productivity. The models of care support the delivery of NHS Orkney's vision of shifting the balance of care working in partnership with the Council and using the delivery mechanism of Orkney Health and Care.

6 WORKFORCE PLANNING

6.1 Overview

- 6.1.1 NHS Orkney applies the 6 Steps to Integrated Workforce Planning process, developed by Skills for Health. This comprehensive process links national objectives with local objectives, integrating service delivery and financial planning to ensure the workforce resources are available, adaptable and affordable.
- 6.1.2 A number of national drivers impact on our approach to workforce planning:
- The 20:20 Vision and Route Map
 - Everyone Matters: 20:20 Workforce Vision
 - The Healthcare Quality Strategy for NHS Scotland (2010)
 - Public Bodies (Joint Working) (Scotland) Bill
 - Final Report of the Remote and Rural Implementation Group
 - Efficiency and Productivity Framework
 - The Staff Governance Standard
- 6.1.3 Other significant factors which will shape the workforce in the future include a number of specific regulatory and policy drivers such as the European Working Time Directive and the impact of Modernising Medical Careers and Reshaping the Medical Workforce Project. The 2009 report, Delivering for Remote and Rural Healthcare, also defines the range of generalist and specialist staffing models which a remote and rural Health Board such as ours will typically require.
- 6.1.4 NHS Orkney recognizes that staff are its most important and valued resource. Our workforce is crucial to our success and NHS Orkney is aware that excellence in patient care and the provision of high quality and responsive support services depends on ensuring that every individual employee is given the opportunity to contribute to the extent that can be reasonably expected of them.
- 6.1.5 The new hospital will require some changes within the workforce and a reshaping of traditional ways of organising healthcare delivery in new non-traditional environments. These new environments will be supported by a different and strengthened relationship between primary and secondary care, as our GP and Dental facilities become part of the new build. Inherent with this new relationship is a requirement for changes in the configuration of skills and roles to enable movement between settings.
- 6.1.6 Our success and long term sustainability can only be achieved through recruiting and retaining a well managed, highly skilled and motivated workforce who have the right opportunities to learn and develop. NHS Orkney has

embarked upon a plan of training and implementation which has already delivered significant improvements in terms of efficiency and new ways of working. This transformational change programme will be implemented further as part of the management approach adopted and taken forward in the OBC.

- 6.1.7 The local demographics for Orkney demonstrate that by 2035 the projected population will be 21,439. The working age population (16-64) will reduce by 12% from 12,678 in 2010 to 11,194 in 2035. Both the NHS and the Orkney Islands Council, as the two largest employers in the region, will be competing for this reduced pool of potential employees alongside private enterprises such as the thriving renewables sector. It is essential that we maintain and improve excellence in patient care, to become the employer of choice as we plan for the new hospital.
- 6.1.8 The integration of Health and Social Care is designed to reduce duplication and make best use of the available workforce skills and capacity. Further consideration will need to be given to further joint appointments as we work towards more collaborative working. This comes with the challenges of working across different cultures and different terms and conditions, but with continuous organisational development, training and workforce development new roles will function effectively and flourish at all levels.

6.2 Current Staffing Position

- 6.2.1 A summary of the in post establishment within NHS Orkney is shown below.

Figure 6- 1: Current recurring establishment

Service Area	WTE Budget
Hospital Services	161.70
Orkney Health and Care	186.85
Pharmacy Services	4.85
Estates and Facilities	57.08
Support Services	73.48
Total	483.96

6.3 Assessing Future Workforce Requirements

- 6.3.1 Future workforce models will be based on the clinical models described in Section 5. The revenue costs of these models are outlined within the financial case.
- 6.3.2 The new hospital has significant implications for the current workforce across the whole system and will require a more integrated workforce. Implementation

of these future models will in some cases involve role redesign and skill mix change with a radical review of which roles deliver specific aspects of care. There is potential for more peripatetic workers, following the patient through the whole care pathway and teams may work more across boundaries.

- 6.3.3 In developing our workforce we are mindful of our patient, staff, systems and partnership based approaches and more importantly our individual behaviours and how they impact on each of us and in the care and services that we provide. Professional training and remote and rural specific education must be increased. Maintaining and updating skills is a fundamental problem in remote and rural settings where exposure rates to practice can be low.
- 6.3.4 Work has begun to identify the learning and development needs of staff in relation to the models of care as per Everyone Matters: Workforce 2020 Vision and the newly developed Learning and Education Strategy.
- 6.3.5 A planned programme of service improvement initiatives is under development which will improve quality and increase efficiency. This work has commenced in relation to Transforming Outpatient Services, such as our Chronic Pain Service. Additionally considerable work is being taken forward in the community, through our Orkney Health and Care Teams to develop our responses with the aim of avoiding unnecessary admission to hospital through, for example, the development of a single point of referral.
- 6.3.6 Considerable work has also been undertaken within our existing Assessment and Rehabilitation Unit where the development of weekly multi disciplinary team planning meetings has contributed to a tangible improvement in length of stay, this has been supported by a newly established SLA with a Consultant Geriatrician from NHS Lanarkshire.
- 6.3.7 Both NHS Orkney and NHS Grampian have a commitment to the ongoing development of Obligate Network arrangements with NHS Grampian to support the local model of care, including recruitment and retention of Consultants who will have peer support and rotation through the larger Consultant Team in NHS Grampian. This will enhance the opportunity for skills maintenance as well as the development of clinical pathways and clinical governance approaches to care.

Nursing, Midwifery and Allied Health Professions (AHPs)

- 6.3.8 Current and future nursing and midwifery workforce modelling has been undertaken and tested against the National Workforce Planning Tools, the Professional Judgment Tool and significant benchmarking and will be in place well in advance of the opening of the new build. Consideration is being given to the national electronic rostering tool, which will support and ensure consistency of practice in the effective deployment of staff.

- 6.3.9 In addition, the implementation of a multi-professional electronic clinical record is being progressed which will reduce duplication of recording and improve communication.
- 6.3.10 The new models of care being implemented now and into the future require significant change to practice and to nursing, midwifery and AHP roles (NMAHPs). A change strategy involving all disciplines will be developed during 2014/15. Engagement and involvement of all staff will be crucial to the change process. Key changes will be identified and prioritised and staff will be fully supported and developed.
- 6.3.11 Changes to current practice will then be planned and implemented through a staged approach. This will be implemented well before the move to the new build; however the pace of change must be commensurate with staff needs and abilities and reflect the generalist nature of NMAHP roles required across NHS Orkney to manage the health of the population.
- 6.3.12 Recognising the complexities of multiple long term conditions, the NHS Board is committed to developing a multidisciplinary, multi-specialty team approach to all patient care and the development of hybrid roles. Work is progressing at present to scope technological opportunities which may be able to assist in improving the co-ordination of care for patients who are chronically ill. Working with our partners at the Digital Health Institute and Scottish Centre for Telehealth and Telecare exploratory work is now taking place with the Maccabi Institute in this regard.
- 6.3.13 Work in developing the Advanced Nurse Practitioner (ANP) workforce to support and enhance the nursing and medical teams is ongoing. A further programme for new and up and coming ANPs and Outreach Nurses is underway based on assessment of need in relation to the changing models of care and reductions in the medical workforce. In order to maximise the potential within all available resources, professional boundaries will be blurred and current staff locations will change to meet identified need.
- 6.3.14 Our future demographic assumptions indicate an increase in the older population and the potential for a significant increase in patients with dementia. In order to meet the needs of these patients and to ensure a safe and appropriate provision of care, Mental Health Nurses and General Registered Nurses will be required to work collaboratively.
- 6.3.15 Future developments will necessitate a greater input into community services from a multidisciplinary/multiagency perspective. Additional training in specific skills has already been given to Community Staff with significant investment in developing our Health Visiting and School Nurse workforce. Current professional roles will not be eroded in terms of assessment and planning of

care, however the delivery and model of care will change and involve with increasing complexity in the Community.

- 6.3.16 The changes in Midwifery training nationally has resulted in an increase in direct entry Midwifery trained staff who do not have general nursing training. This has resulted in a loss of flexible cover between general nursing areas and the Maternity Unit staff so when planning future staffing models this will be taken into account.
- 6.3.17 AHP services will be developed to fully support the emerging models of care. These services have historically been limited to Monday to Friday working; however the expectation to move to a 7 day week service as is recommended in the AHP National Delivery Plan. Existing resources, across primary and secondary care, will be reconfigured to meet future need.
- Patients will be seen at home to prevent admission to hospital where possible. To support this, staff will continue to work between primary and secondary care to follow patients through their care pathway.
 - Patients will be assessed and if admission is not necessary, effective team working and seamless links with primary care will be developed to ensure that the patient can be returned home safely. Timely follow up interventions will be carried out in the community to support the patient to maintain (or improve) their existing level of independence.
 - Seven day a week service will be provided to effectively improve the patient journey and prevent admission or facilitate safe discharge.
 - Flexible working between primary and secondary care, AHPs, social services and occupational therapy will allow efficiencies and improved patient care.
 - Role development and ongoing changes to skill mix will, through increasing available capacity, provide for more responsive patient care as part of multi-disciplinary and multi-agency teams.
- 6.3.18 The impact of the increasing older population will be significant as more responsive AHP services will be required. Increased complexity of case loads requires increased level of intervention and an enhanced focus on re-ablement to keep people independent where possible with the aim to avoid admission to hospital where possible.
- 6.3.19 AHP services, who support the rehabilitation process, are vital to patient care in the field of care for older people. Planning to ensure that AHP services in the future are fit for purpose is directly related to true multi-disciplinary workforce planning. Crucial to this is adopting a person-centred approach

with the individual patient and their family at the centre with teams and services designed around them.

Medical

- 6.3.20 Medical staffing remains a challenging issue for the Board. The changes of Modernising Medical Careers have led to a reduction in numbers of doctors in training. Their service contribution has been limited by the need to comply with the European Working Time Directive and the requirement to have a more structured training programme away from patient care. In addition we have difficulties recruiting to NHS Orkney and frequently have unfilled training posts.
- 6.3.21 At consultant level, the ability to recruit is variable and is dependent on the specialty concerned. We have had a number of recent successful appointments, but there are remaining challenges in some specialties due to the generalist nature required to cover the health and wellbeing of the local population, from neonatal care through to care of the older person. The future availability of consultants in different specialties who have the breadth of generalist skills required is not currently clear and there may be further pressures in the future.
- 6.3.22 NHS Orkney remains committed to providing education and training to medical and dental students as well as junior and middle grade doctors. We have a good reputation as a centre for training which helps the recruitment.
- 6.3.23 NHS Orkney welcomes the Shape of Training review which was led by professor David Greenaway which states that patients and the public need more doctors who are capable of providing general care in broad specialties across a range of different setting. The report goes on to say this is being driven by a growing number of people with multiple co-morbidities, an aging population, health inequalities and increasing patient expectations.

Support Services

- 6.3.24 Support services consists of 2 areas, hard FM and soft FM services (ie catering, cleaning, laundry, security and switchboard). Soft FM services are carried out currently in a “fit for purpose manner” however going forward considerable change will be necessary. New ways of working with 100% single rooms will result in changes in practice and work has been carried out with Health Facilities Scotland and Health Protection Scotland to review cleaning techniques and frequencies appropriate for this new environment and room configurations.
- 6.3.25 Under the NPD model all Soft FM services will be retained by NHS Orkney, efficiencies will therefore have to be driven from within the Board and work is currently underway on developing a new generic healthcare support worker

to work across the soft services. A development programme to support this change agenda is being worked up with the educational lead for support services in Health Facilities Scotland.

6.3.26 The Board have also appraised meal delivery systems and have opted to retain a cook fresh option. This option will require the Board to work with local further education establishments to develop modern apprenticeship opportunities as a means of succession planning and to ensure continuity of staff. This work is currently underway.

6.3.27 Hard FM, or the Estates Team, are responsible for the delivery of various mandatory and statutory duties as well as the maintenance across the Estate. As part of an NPD contract, there would be a requirement that the service provider would take on the delivery of hard FM. The task for NHS Orkney is to separate hard FM from the various other essential tasks carried out by the team. The differentiation between hard FM and other tasks need to be fully understood as well as the risks of transferring staff from NHS Orkneys direct employment to the NPD provider.

Administration

6.3.28 Clinical teams (medical, nursing, AHP) will have access to a workstation adjacent to, or as close to as possible to, their own clinical area; a number of these staff will be required to “share” workstations and this will be supported by the IT infrastructure.

6.3.29 Open-plan office accommodation, including “hot-desks”, will be provided for administrative support to the frontline clinical and non-clinical teams who will require to be located on-site. Flexible working arrangements will be considered in relation to agile working opportunities where possible, and also looking at where staff can work out of hours moving away from the traditional “9-5” model, in order to maximise the utilisation of the allocated spaces.

6.4 Management of Workforce Change

6.4.1 The Boards objective is to ensure a competent workforce is in place, with effective managers and leaders in place to deliver the service for tomorrow in line with our Clinical Strategy. There are a number of important elements that will support the NHS Board to achieve the transition into the new hospital and healthcare facility:

- Human Resource Implications
- Workforce Planning and Development
- Organisational Development

Human Resource Implications

6.4.2 NHS Orkneys workforce vision is set out in its Workforce and Learning and Education Strategies, which set out the challenges and strategic vision for the workforce as we move towards our new hospital and into 2020. In moving forward through the various stages of this process, it will be essential to ensure full compliance with the Staff Governance Standards (4th Edition) issued in July 2012. NHS Orkney will utilise to the benefit of the project the responsibilities that both staff and management have in the application of the standards as follows:

- Well informed;
- Appropriately trained and developed;
- Involved in decisions;
- Treated fairly and consistently, with dignity and respect, in an environment where diversity is valued; and
- Provided with a continuously improving and safe working environment, promoting the health and wellbeing of staff, patients and the wider community

6.4.3 These new standards provide staff with a responsibility to:

- Keep themselves up to date with developments relevant to their job within the organisation;
- Commit to continuous personal and professional development;
- Adherence to the standards set by their regulator bodies;
- Actively participate in discussions on issues that affect them either directly or indirectly or via their trade union / professional organisation;
- Treat all staff and patients with dignity and respect while valuing diversity; and
- Ensure that their actions maintain and promote the health and safety and wellbeing of all staff, patients and carers

6.4.4 In terms of the development of the project, information sessions have been held to inform staff at various stages of the process to date to ensure that they are informed of key decisions that have been taken, prior to public announcement. Staff across many clinical and non clinical services have also been involved in the development of the specifications for their areas ensuring

their operational knowledge has been used to maximum effect within the planning process.

- 6.4.5 Information sessions have also been held during the public consultation period whereby staff have been able to access opportunities to provide their thoughts on the various aspects of the project. Steps are being taken to agree with staff the best methods for keeping them up to date with changes and ensuring that they are involved in contributing their views, ideas and suggestions about proposals as the project goes forward. This is being undertaken as part of a review of NHS Orkneys Communication Strategy which is being supported by the Transforming Clinical Services Communication and Engagement Group. A range of staff have also been involved in value management and site selection workshop events.
- 6.4.6 NHS Orkney is committed to partnership working and staff side colleagues are fully involved in all aspects the project, and have representation on the Programme Implementation Board. In addition, regular project updates are provided to the Area Partnership Forum to inform them of the progress of the project.
- 6.4.7 It is fully envisaged that at the appropriate milestones in the project timetable, staff side colleagues will be fully involved in agreeing processes for the transfer of staff to the new hospital and how that will be facilitated for all staff groups.
- 6.4.8 It will be imperative that these working relationships with staff side colleagues are positive as they will assist with the process of implementing change, supporting staff and ensuring all processes are fair and equitable.
- 6.4.9 The issues that will be addressed in partnership going forward will include the following:
- Providing staff with rewarding and satisfying careers to enable retention and recruitment of staff including the promotion of flexible working practices.
 - Implementing model employment practices in response to changing circumstances and external developments to promote a positive, fair and equitable working environment that is both supportive and developing
 - Developing capacity and capability through staff working differently and achieving a competency based approach to workforce development
 - Managing redeployment and protection costs and excess travel
 - Managing vacancies in order to maximise flexibility and opportunities for change including redeployment

6.5 Workforce Development Plans

- 6.5.1 In order to assess the workforce impact of moving to a new site and changed service models, the Programme Implementation Board will work in partnership with staff side colleagues to develop comprehensive workforce plans for each work stream to ensure that the model of care developed is aligned to the required workforce and the level of change management required to support the team's transition.
- 6.5.2 Detailed workforce plans will be required to identify training and competency needs.
- 6.5.3 Training plans will be required in line with identified 'shadow' structures and staff will need to be prepared for the new models of care and the associated operational policies.

6.6 Organisational Development (OD) Support

- 6.6.1 In order to maximise full potential of this transformational change, we need to understand our organizational need, adopt basic change management techniques and develop processes, systems and structures to gain organizational wide effectiveness and efficiency.
- 6.6.2 We are working with NHS Tayside, who are providing OD support and will assist in the development of a change management plan. OD plans will be developed as we implement i-Matter Staff Experience tool to be launched in April 2014. These plans will be monitored through the Staff Governance Committee.
- 6.6.3 Annual development reviews, will provide the framework for individual discussions around career development and planning. The identification of associated learning and development activity required to achieve personal and professional career goals will be identified. In addition, a number of development opportunities will be made available, which will include:-
 - Clinical Leadership Programmes
 - Teambuilding and Self Awareness Development Sessions
 - Leading Better Care and Releasing Time to Care
 - Releasing Time to Learn and the Effective Practitioner

6.7 Conclusion

6.7.1 The Board has developed a robust process for assessing and managing the impact of the changes to staffing brought about by implementing the proposals contained within the OBC. This includes an assessment of the following areas:

- The factors that affect the workforce plan;
- How the Board will identify future staffing requirements;
- How the change process will be managed.

7 Future Service Requirements

7.1 Overview

7.1.1 This section of the OBC will focus on the future clinical services delivery model (based on 2012 baseline data for this calendar year). The model is intended to provide:

- person centred care;
- safer care through more consultants available 24/7;
- care closer to home through more services based in the community; and
- better care through earlier intervention and support for patients with long term health conditions.

7.2 General Approach to Service Modelling

7.2.1 NHS Orkney commissioned ISD Scotland to undertake the bed modelling exercise. The overall approach to bed modelling and capacity planning is based on a number of key assumptions and improvements to the future models of service delivery across the Board. These include:

- **Demographic growth:** The impact of population change was assessed by applying National Records of Scotland 2010-based population projections for NHS Orkney by age and gender to admitted patient care.
- **Benchmarks:** A review of key performance benchmarks was undertaken to compare a range of measures on service utilisation. Data were drawn from the Information Services Division (ISD) Scotland National Scorecard, Better Quality/Better Value and Navigator indicators.

7.2.2 It is noted that a number of “Orkney Factors” impact on performance metrics and are attributable to specific geographical challenges of delivering services to a dispersed population where the overall healthcare infrastructure and availability/logistics of ferry and air transport has a significant impact on inter-island travel. These include the fact that:

- Kirkwall Hospital is the only acute health facility in Orkney and as such must manage all acute hospital admissions that in other locations on the mainland could be managed in different ways or by different services. These include acute paediatric admissions and acute mental health admissions.
- There are occasions when patients cannot be transferred off the island to specialist services due to bad weather. This is not an infrequent occurrence and involves the management of acutely ill adults and children who may have a medical, surgical or mental health condition.

- Length of stay in the Balfour Hospital is unavoidably extended due to limited or timely access to other care facilities such as a community hospital (step down) or residential care, there is also no independent nursing home care on Island. Partnership working with Orkney Islands Council and the third sector to develop different ways of working to provide care at home or closer to home is being progressed as part of the our Reshaping care for Older People.
- The hospital cannot close for admissions when it reaches capacity. Unlike most mainland Boards, irrespective of demand, Balfour Hospital cannot close to admissions which reflects the need to have operational capacity both in terms of physical resources (beds) and workforce. This is the most significant and unique factor affecting current and future bed capacity requirement.
- As a small NHS Board, NHS Orkney relies on visiting Consultants to support specialist ambulatory care and outpatient activity. The requirement for outpatient capacity reflects the limited control of the Board to determine when specialist clinics are scheduled and therefore there is a need to plan for peak activity and place accommodation requirements on that basis. A review of outpatient services is underway as part of our repatriation and greater IT enabled services. This will influence the number and scheduling of visiting services in future to support improved patient focused booking. Nonetheless visiting services require extensive access to facilities given that the majority operate on a 'one stop' basis whilst the consultant and his/her team are providing services within the hospital.
- Scheduling appointments, admission/discharge time is dependent on air and ferry schedules. Some patient groups (e.g. maternity) may have a longer length of stay due to fixed travel timetables and the logistics of looking after newborn babies located on our outer isles. However, the discharge date should not be influenced by these logistical issues and hotel type accommodation should be utilised.

7.2.3 The potential for service change was assessed using comparative data for small general hospitals or the national standard.

- **Service Integration:** Through 'Older Persons Blueprint' and 'Transforming Clinical Services' there will be significant changes in the way that care is planned and delivered, with more services being delivered out with the acute hospital setting. To reflect the potential impact of these changes it has been assumed that there will be improved utilisation of community based services, supported by multidisciplinary/multiagency integrated care and the implementation of a re-ablement model. Work is well underway to inform our future Strategic Plan (commissioning plan) as part of our integration agenda locally with Council and other key partners and this will

be informed by our approach to reshaping older people's services and lessons learnt from the Change Fund. It is assumed that the alternatives to hospital admission, notably a single point of access for GPs and others, and an integrated response to support people at home both in and out of hours including more timely supported discharge will result in fewer patients requiring a hospital stay of more than 4 weeks.

- **Acute Assessment Area:** As part of the redesign process it was concluded that the incorporation of two assessment beds within the acute inpatient bed area would contribute positively to the reduction of emergency admissions and also provide a locus for early assessment of individuals who may require an alternative to acute hospital admission. It is assumed that the new patient pathway and model of care will assist in reducing overall length of stay and/or prevent hospital admission.
- **High Dependency Care:** The configuration of inpatient beds within the new facility will enable the embedding of High Dependency Beds within the acute inpatient unit. The number of high dependency beds takes account of historical levels of patient acuity (Level 2 & 3 care) and recognises that there may be an increase in the requirement for high dependency care managed on Orkney following the implementation of the new Consultant Led medical model. Whilst the level of clinical intervention is limited by the healthcare infrastructure on Orkney generally, there is a necessity to provide the capability to stabilise, monitor and manage emergency presentations that require level 3 critical care whilst awaiting air ambulance transfer to the mainland for specialist treatment. This is not an uncommon event; during bad weather patients may need to be managed for up to 72 hours until the weather sufficiently improves to allow travel.
- **Pre-operative stay:** The average number of days for elective pre-operative stay was reviewed against Scottish and combined Scottish/English data and whilst there is room for improvement it is acknowledged that NHS Orkney is already delivering efficient surgical services by minimising pre-op bed days. Outpatient clinic capacity assumes that all elective surgical patients will be pre-assessed prior to intervention.
- **Increased Day Case rate:** The current 2012/13 elective inpatient activity was compared to the British Association of Day Surgery (BADS) procedures and our current performance at this period was 86.4% compared to the national BADS score of 82.3%. It is assumed that with repatriation this improvement measure will be maintained.

7.3 Service Model Methodology and Assumptions

- 7.3.1 ISD, through the Board's Director of Public Health, was commissioned to undertake a bed modelling exercise to inform our future bed number

requirements. This exercise was not straightforward given our demographics and small numbers.

7.3.2 The work acknowledged that a large proportion of treatment for Orkney's residents occur in mainland NHS Boards, particularly for elective inpatients. However the focus of this work is to determine the bed model based on the demand of care from a NHS Board treatment perspective and in this regard the activity treated within NHS Orkney.

7.3.3 Activity can be measured in a range of ways:

- Episodes;
- Consecutive continuous inpatient stays (CISs) in Orkney; and
- Non-consecutive continuous in patient stays (CIS) in Orkney.

7.3.4 The difference between consecutive and non consecutive continuous inpatient stays in Orkney is that, in the former, if a patient is transferred from Orkney to another NHS Board and back to Orkney, this would be regarded as two discrete Orkney CISs, whereas under non-consecutive continuous inpatient stays, the two Orkney stays would be conflated into one stay.

7.3.5 The table below shows the activity levels for all inpatient activity under each scenario:

Figure 7- 1: NHS Orkney Inpatient Activity (2011/12)

Currency	Activity	Average Stay (days)
Episodes	1993	5.7
Consecutive CIS	1877	6.1
Non- Consecutive CIS	1825	6.2

7.3.6 One of the main considerations regarding the choice of activity currency relates to determining appropriate benchmark average length of stay performance. This can be significantly affected by internal patient pathways. ISD, however, were not able to determine benchmark lengths of stay because coding and/or case mix classification used is neither sufficiently sensitive nor discriminatory in respect of the care given. Given that there is unlikely to be a material difference between the two CIS approaches it was suggested and supported that the consecutive CIS approach is adopted as the activity currency.

7.3.7 Other key parameters such as the age specific admission (CIS) rates have been calculated separately for medical and surgical recorded activity and also whether a patient was admitted as an emergency or electively. This discrimination is required as these groups of patients differ in age profiles and

lengths of stay. These rates are applied to the population projections and results are combined to provide an overall figure for (non obstetric) activity. In this regard the number of admissions (2011/2012) for whom at least part of the stay was in the Balfour Hospital is as follows:

- 64% of admissions were treated as daycases, 32% were emergency inpatients and 4% were elective inpatients;
- 94% of elective inpatients and 80% of emergency inpatients were single episode stays
- For emergency inpatients, 11% are transferred to another NHS Board but are not readmitted into Orkney, whereas 3% of emergency admissions are subsequently re-admitted into the Balfour hospital

7.3.8 The value of average length of stay (LOS) adopted in the bed model will have a significant bearing on the overall capacity result. ISD compared the LOS with other all other GP other than obstetrics for all general medicine in Scotland and all GP other than obstetrics in Scotland and General Medicine in Orkney, Shetland and Western Isles. All comparisons were case mix adjusted. ISD were not able to find consistent assessment of LOS performance despite the fact the comparisons were case mix adjusted. In reviewing the data further ISD found that there were a number of patients with extreme length of stays and whilst the numbers of patients were not large the number of bed days consumed was considerable. In summary less than 1% of our patients account for more than one quarter of all bed days.

7.3.9 ISD confirmed NHS Orkney's average occupancy in acute specialties ranged between 84 – 95% (average monthly occupied bed rate of 37 to 44 beds) over the past 4 years. A target occupancy value is often specified as 85% but this of course can be influenced by the type of care provided/presented. In this regard it could be argued that if there is a less acute emergency / trauma care higher bed occupancy is tolerable. Obstetric activity with the current 6 beds equated to an average occupancy rate of around 45% during 2011/12. The monthly average occupancy ranges from 36% to 58%.

7.3.10 ISD having taken account of the above developed a bed modelling scenario planning tool to enable us to adjust/predict:

- Future admission rates
- LOS and how that may change with advances in technology, alternatives to hospital and timely supported discharge
- Occupancy - this was initially set at 85% but could be varied as required to reflect local situation
- Change in demand - growth or reduction over and above the effect of age (our demographic change has a big impact on our current service models)

7.3.11 The projections for 2020 and 2030 include the following assumptions:

- 3 year average admission rates
- 85% occupancy
- No additional growth in activity over and above the effect of age (repatriation activity will impact on daycase and outpatient activity)

7.3.12 A number of scenarios were considered for 2020 and 2030 to ensure the bed capacity for inpatient activity was sufficient to meet demand. These scenarios applied:

- Current average LOS (it is predicted that this will reduce in response to advances in technology and medicines and in response to care outside of hospital)
- 5% and 10% reduction in average LOS
- Truncating hospital stays at 90 and 120 days to accommodate the outliers to ensure these extreme cases do not distort or influence our bed modelling results. It is assumed that the future model of service delivery would result in different care pathway for these patients rather than prolonged stays in hospital.

7.3.13 The table below shows the range of bed number estimate under the different scenarios.

Figure 7- 2: Bed Numbers Based on Population Projections for 2020

Based on population projections for 2020	Using current average length of stay (3 year average)	Using 5% reduction in current average length of stay	Using 10% reduction in current average length of stay	Using a truncated length of stay, max 90 days	Using a truncated length of stay, max 120 days
Number of beds for acute inpatient overnight stays	49	47	44	43	45
Potential number of beds for inpatient 0 stays	2	2	2	2	2
Number of obstetric beds (assumed constant of 6)	4	4	4	4	4
Total number of potential beds required	55	53	50	49	51

Figure 7- 3: Bed Numbers Based on Population Projections for 2030

Based on population projections for 2030	Using current average length of stay (3 year average)	Using 5% reduction in current average length of stay	Using 10% reduction in current average length of stay	Using a truncated length of stay, max 90 days	Using a truncated length of stay, max 120 days
Number of beds for acute inpatient overnight stays	58	55	52	50	53
Potential number of beds for inpatient 0 stays	2	2	2	2	2
Number of obstetric beds (assumed constant of 6)	4	4	4	4	4
Total number of potential beds required	64	61	58	56	59

7.3.14 Based on the above scenarios and the work underway to change clinical assumptions/practice we will see a reduction in beds required. This will be due to a shift in inpatient to day case activity made possible by ongoing advancements in medicine and technology, alternatives to admission and care closer to home and supported discharge in the community. These factors together result in a required bed range of 45 to 48 beds. The building is designed and includes future proofing (e.g. – 2 additional assessment beds that are not included in our overall bed assumptions).

7.3.15 The planning assumptions for inpatient and daycase provision are outlined in the table below.

Figure 7- 4: Planning Assumptions - inpatient and day case

Planning Area	Assumptions
Performance	<p>Improved performance based on a review of current metrics benchmarked against comparable peer groups for preoperative stay and day case rates.</p> <p>Improved utilisation of community based services by achieving increased number of patients supported in the community. Work is currently underway to inform our Strategic Plan (commissioning plan) and this considers a single point of contact for GPs and others and a more integrated response in both in hours and out of hours using e.g. - homecare, community responders and Third sector befriending. The Plan will include improvement measurements.</p> <p>The bed modelling spreadsheet used by ISD allows a metric relating to “outliers” to be set. The ISD report highlighted that on average 29 patients were inpatient in hospital (2 months to >1 year), the group of patients who spent more than 3 months in hospital had an associated bed day utilisation of circa 3,000 bed days.</p> <p>A further average of 42 patients was in hospital between 1 and 2 months. This provides an area for focused improvement.</p> <p>Day care patients are assumed to require a trolley/bed for 0.6 of a day. This is based on the Royal College of Surgeons recommendation that each day case trolley/bed would be used, on average, by 1.55 patients per day.</p>
Utilisation / availability	<p>Future capacity planning and bed modelling was based on the following target bed occupancy rate on the assumptions outlined in paragraph 7.3.8</p> <p>Future planning for maternity bed space was based on mixed utilisation of rooms for delivery , daycase and outpatients.</p>

7.3.16 The planning assumptions for theatre and endoscopy/procedure room are outlined in the table below.

Figure 7- 5: Planning Assumptions - theatres and endoscopy

Planning Area	Assumptions
Risk factor	<p>The key risk associated with the current Operating Theatre suite is the reliance on one Operating Theatre to deliver all of the surgical and endoscopic procedures. The absence of a second theatre to enable emergency procedures (including caesarian sections) compromises patient safety. Equally, there is no resilience to allow planned and emergency maintenance. In 2013 the operating theatre was out of commission for over two weeks due to a flood.</p>
Performance	<p>Mainland Operating Theatre metrics are difficult to apply in the context of Orkney because of the small numbers involved. As a minimum two theatres are required to deliver scheduled elective work and to safely manage the emergency workload.</p> <p>Currently, the single Operating Theatre is working at over 90% utilisation. Total activity is limited, in part, by the availability of theatre time. The current utilisation exceeds the national target and creates challenges in planning maintenance.</p> <p>With the recruitment of additional staff to Obstetrics & Gynaecology and a planned third consultant surgeon there will be increasing demand for theatre sessional time. To ensure that there is sufficient capacity to provide an effective service two Operating Theatres and a Multi-Purpose/Endoscopy room have been scheduled. This capacity will deliver all elective activity and emergency activity in separate rooms whilst creating further capacity to meet the increasing demands that the new surgical team will require to allow the repatriation surgery that is currently being managed by mainland</p>

Planning Area	Assumptions																												
	<p>Boards.</p> <p>In addition, the multi-purpose room will be the locus for all elective endoscopic investigations and with its “clean air” environment allow intra-ocular injections and minor gynaecology investigations/procedures to be undertaken in a safe environment. This will allow these procedures to be removed from the outpatient department where they are currently delivered.</p> <p>It is recognised that national screening programmes e.g. Bowel are identifying additional patients who require endoscopic investigation.</p>																												
Utilisation / Availability	<p>In modelling future theatre and multi-purpose/endoscopy room requirements the following assumptions have been identified.</p> <table border="1"> <thead> <tr> <th>Assumptions</th> <th>Theatre 1</th> <th>Theatre 2</th> <th>Multi-Purpose /Endo</th> </tr> </thead> <tbody> <tr> <td>Days per week</td> <td>5</td> <td>7</td> <td>5</td> </tr> <tr> <td>Sessions per day</td> <td>2</td> <td>N/A 24/7</td> <td>2</td> </tr> <tr> <td>Hours per session</td> <td>3.5</td> <td>N/A</td> <td>3.5</td> </tr> <tr> <td>Weeks per year</td> <td>50</td> <td>N/A 24/7</td> <td>50</td> </tr> <tr> <td>Utilisation target</td> <td>85%</td> <td>N/A</td> <td>50%</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Assumptions	Theatre 1	Theatre 2	Multi-Purpose /Endo	Days per week	5	7	5	Sessions per day	2	N/A 24/7	2	Hours per session	3.5	N/A	3.5	Weeks per year	50	N/A 24/7	50	Utilisation target	85%	N/A	50%				
Assumptions	Theatre 1	Theatre 2	Multi-Purpose /Endo																										
Days per week	5	7	5																										
Sessions per day	2	N/A 24/7	2																										
Hours per session	3.5	N/A	3.5																										
Weeks per year	50	N/A 24/7	50																										
Utilisation target	85%	N/A	50%																										

7.3.17 The planning assumptions for outpatient clinic requirements are outlined in the table below.

Figure 7- 6: Planning Assumptions – outpatients

Planning Area	Assumptions														
Performance	<p>Improved performance of new: review ratios.</p> <p>There will be an increase in outpatient pre-assessment activity for all planned inpatient surgical procedures. Increased use of IT enabled clinics will reduce the need for patients to travel to another Health Board for care.</p> <p>Obstetric Clinics will be conducted in the Maternity Unit (staffing model relies on this arrangement) thereby reducing the need for clinic space in the ambulatory care area (outpatients).</p> <p>Efficiency and flexibility of outpatient consultation/examination utilisation will be maximised through co-location with other departments which require similar accommodation e.g. Primary Care Hub, Therapy and Emergency Department.</p> <p>Standardisation of the consultation/ examination room size across all departments will ensure a generic space that can be utilised for different functions as models of care and patient treatments change in future.</p>														
Utilisation / availability	<p>In modelling future outpatient room requirements the following assumptions have been identified.</p> <table border="1"> <thead> <tr> <th>Assumptions</th> <th>Scenario 1</th> </tr> </thead> <tbody> <tr> <td>Days per week</td> <td>5</td> </tr> <tr> <td>Sessions per day</td> <td>2</td> </tr> <tr> <td>Hours per session</td> <td>3.5</td> </tr> <tr> <td>Weeks per year</td> <td>50</td> </tr> <tr> <td>Utilisation target</td> <td>Up to 100%</td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>	Assumptions	Scenario 1	Days per week	5	Sessions per day	2	Hours per session	3.5	Weeks per year	50	Utilisation target	Up to 100%		
Assumptions	Scenario 1														
Days per week	5														
Sessions per day	2														
Hours per session	3.5														
Weeks per year	50														
Utilisation target	Up to 100%														

<p>Clinic requirements</p>	<p>Unlike most other NHS Boards, NHS Orkney relies on a significant volume of specialist Consultant outpatient input via service level agreements with mainland Boards. When planning future capacity, and therefore room requirements, there is a need to review peak activity to ensure that enough rooms are available to deliver the service when visiting consultants and their teams are scheduled to provide a service alongside routine NHS Orkney led outpatient services. Up to 4 consultation/examination rooms are required by visiting staff.</p> <p>A significant driver in planning service adjacencies for the new hospital was to co-locate consultation and examination rooms so that they could be used as flexibly as possible.</p> <p>Given the dispersed population within the Isles it is important to further develop one-stop clinics to reduce the inconvenience to patients of travelling on multiple occasions for health related appointments. The number and configuration of outpatient consulting rooms provides adequate capacity for this to be exploited in future.</p> <p>Whilst utilisation will be up to 100% at peak times of activity, the overall average will below 85%.</p>
----------------------------	--

7.4 Summary of Current and Future Requirements

7.4.1 The table below summaries the current and future capacity available following the commissioning of the new Kirkwall Hospital.

Figure 7- 7: Summary of Current and Future Requirements

Service Area	Current Actual	Actual number provided in new development
Acute Inpatient Beds	16	20
Acute Assessment	0	2
Emergency Unit Receiving/Pop-Up Beds (short stay)	5	0
Critical Care/HDU	2 plus one transfer bed	2
Medical Transfer Bed – Mental Health	1	1
Rehabilitation	19	16
Obstetrics	6	4
MacMillan	4	4
Total Inpatient Beds	53	49
Day Case Unit trolleys/chairs	6	8 plus 10 chairs
Ambulatory Care trolleys/chairs	5 plus portacabin and treatment room	13 rooms
Renal Dialysis Chairs	5	6
Macmillan day treatment area	1/2	4
Maternity Day area		1
Total trolleys/chairs	12/13 plus portacabin and treatment	32 plus 10 chairs

7.5 Conclusion

This chapter provides an overview of the service model methodology and assumptions. In particular it provides the following:

- General approach to modelling the future service requirements
- Capacity planning methodology and assumptions
- Future service requirements - including beds, theatres and outpatient clinic rooms.

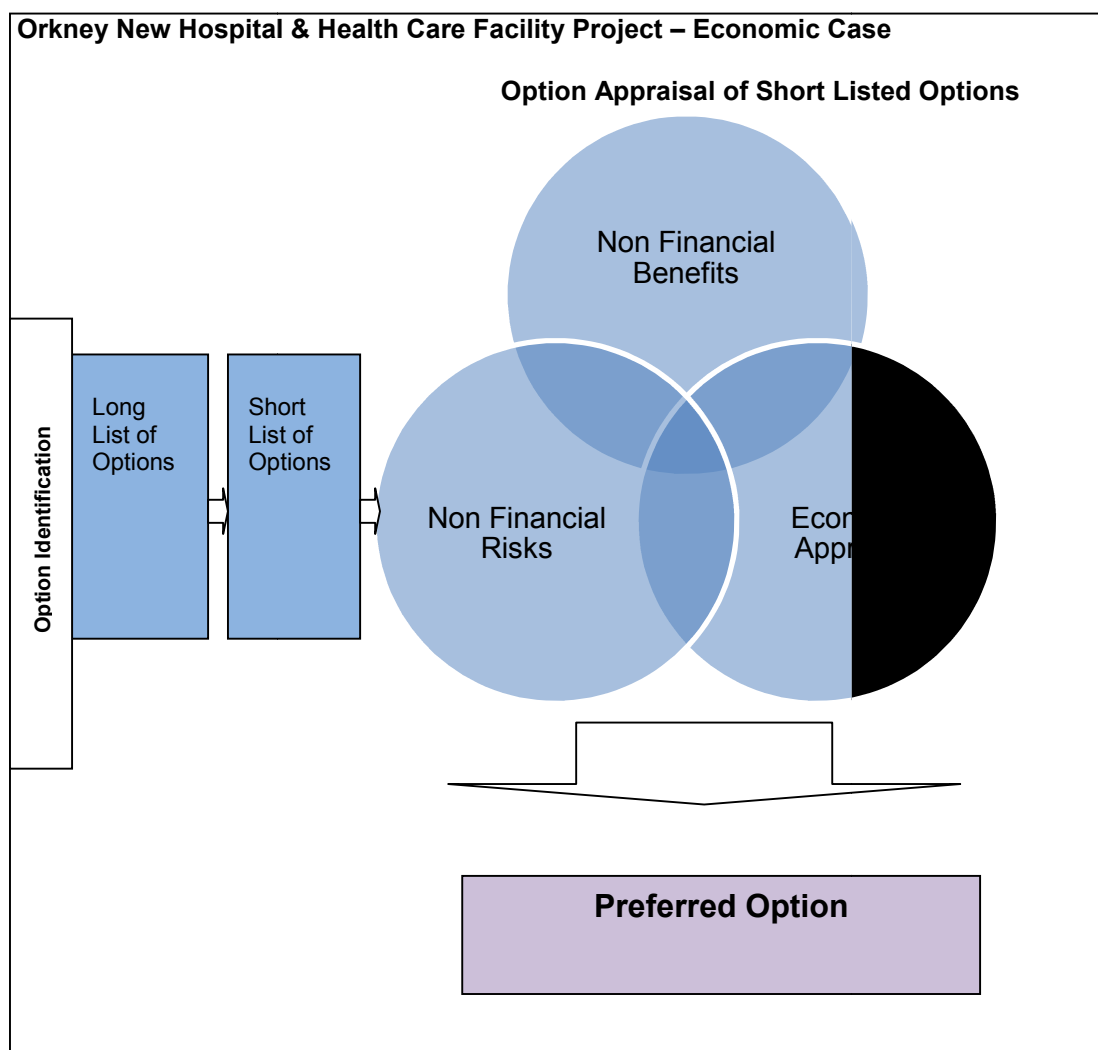
ECONOMIC CASE

8 OPTION OVERVIEW

8.1 Overview

- 8.1.1 This section of the OBC sets out the process for option appraisal. The primary aim is to demonstrate which option offers best value for money by considering the core elements of benefits, costs and risks.
- 8.1.2 The case will clearly highlight the preferred option which can demonstrate the optimal balance across the core elements. The table below highlights the steps taken in reaching the preferred option:

Figure 8- 1: Development of economic case



9 OPTION IDENTIFICATION

9.1 Overview

9.1.1 This section of the OBC sets out the options considered as part of the option appraisal process and describes further the options shortlisted and taken forward to the option appraisal described in the next section.

9.2 Long List of Options

9.2.1 An Initial Agreement (IA) for the Modernisation of Health Facilities in Kirkwall was approved by the Scottish Government in March 2008. The IA related to redevelopment of the Balfour Hospital complex, including primary care and dental services. The list of options taken forward to the Outline Business Case for options appraisal are shown below:

Figure 9- 1: Long list of options (NHS Orkney, IA, 2008)

	Description
1	Do Minimum – Bring current Balfour site to condition B standard through a phased upgrade and re-provision of Dental services from existing Kirkwall premises.
2	Extensive refit/new development on existing Balfour hospital site and re-provision of all General Practice and Dental services from existing Kirkwall premises.
3	New build hospital on existing or proposed public sector site – e.g. utilising Kirkwall Grammar school site and re-provision of all General Practice and dental services from existing Kirkwall premises.
4	New build hospital on a Greenfield site and re-provision of all General Practice and Dental services from existing Kirkwall premises.

9.2.2 The IA 2008 identified four potential solutions to be considered however an internal revision of options, in line with Our Orkney, Our Health – Transforming Clinical Services, the Board’s Clinical Strategy Implementation Plan which was approved in December 2011 and further benefits appraisal work undertaken by Pharos Consulting, resulted in some amendments. The options which were appraised as part of this OBC are therefore provided in Figure 9.2.

Figure 9- 2: Revised options - March 2013

OPTION	DESCRIPTION	VALID NOW?	COMMENTS
Option 1	Do Minimum – Bring current Balfour site to condition B standard through a phased upgrade and re-provision of all Dental services from existing Kirkwall premises.	YES	Required to meet SCIM baseline option requirements within OBC
Option 2	Extensive refit / new development on existing Balfour hospital site and re-provision of all General Practice and Dental services from existing Kirkwall premises.	YES	New build primary / community / dental facility on green field site. Acute facility upgraded as fit for purpose on Balfour site.
Option 3	New build hospital on existing or proposed public sector site -e.g. Utilising Kirkwall Grammar School site and re-provision of all General Practice and Dental services from existing Kirkwall premises.	YES	New build acute hospital on green filed site. Primary / community / dental facilities moved to upgraded fit for purpose building(s) within existing estate – probably existing Balfour hospital site.
Option 4	New build hospital on green field site and re-provision of all General Practice and Dental services from existing Kirkwall premises.	NO	Effectively the same option as Option 3 with simply the definition of the chosen site differing
Revised Option 4	New build facility incorporating hospital with General Practice, Community and Dental services	YES	Single new integrated facility for acute hospital, general practice, community and dental on green field site. Preferred way forward

9.2.3 During the development of the OBC, NHSO advised that serious consideration must also be given to its existing provision of non clinical support facilities throughout Orkney. This direction, led the NHSO team to introduce, a further, more ambitious sub option to option 4 within the business case. Option 4a, was added to allow for the provision of non-clinical support facilities to be provided on the same site. The benefits of this option were considered to be enhanced integration, effective delivery, improved use of assets, flexibility, removal of office space from acute facility into purpose built cost effective accommodation.

10 OPTION APPRAISAL

10.1 Overview

10.1.1 The following section sets out the process followed and the outputs collected for each of the three core elements

- Non financial benefits;
- Risks;
- Economic appraisal (Net Present Value).

10.2 Non financial Benefits

10.2.1 Non financial benefits are those benefits which cannot be measured in monetary terms; they include improvements across services that can be measured using non financial performance indicators.

10.2.2 The Board has developed a range of benefits which will underpin the delivery of the investment objectives set out within the Strategic Case. By assessing each of the short listed options, the strategic alignment can be considered and a differentiation made between alternative solutions.

10.3 Non Financial Appraisal Results

10.3.1 The following tables show the results of the non financial benefits appraisal. The first table shows weights attributed to the benefits criteria, the second shows the un-weighted results and the final figure shows the weighted outcomes of the non financial analysis.

Figure 10- 1: Weighting attributed to Non Financial Criteria

Weighting the Benefit Criteria	
Benefit Criteria /(Theme)	Weight
Wellbeing & Patient Experience	21%
Attract & Retain Staff	18%
Fit for purpose (legislation, standards, accreditation)	18%
Right clinical/non-clinical adjacencies/flows	13%
Access to services (transport, visibility, location)	11%
Provision of Multifunctional Rooms/Spaces	8%
Shared Plant & Facilities	8%
BREEAM & Sustainability	3%
	100%

Figure 10- 2: Un-weighted Non Financial Results of the option appraisal

Benefit Criteria /(Theme)	Option 1	Option 2	Option 3	Option 4	Option 4a
Wellbeing & Patient Experience	2	3	7	8	8
Attract & Retain Staff	1	1	7	9	9
Fit for purpose (legislation, standards, accreditation)	1	2	7	10	10
Right clinical/non-clinical adjacencies /flows	1	1	7	10	10
Access to services (transport, visibility, location)	8	8	8	8	9
Provision of Multifunctional Rooms/Spaces	2	4	5	9	10
Shared Plant & Facilities	3	4	6	10	10
BREEAM & Sustainability	1	2	4	8	9
Total (un-weighted score)	19	25	51	72	75

10.3.2 Each option was scored against the benefit criteria out of 10 (Scores of 0-10 depending on how well the option achieves the benefit – 0=not at all, 10=achieves entirely)

10.3.3 Each of the scores is then multiplied by the weighting to give a non-financial overall appraisal and ranking.

Figure 10- 3: Weighted Non Financial Scores

Weighted Scores					
Benefit Criteria /(Theme)	Option 1	Option 2	Option 3	Option 4	Option 4a
Wellbeing & Patient Experience	0.42	0.63	1.47	1.68	1.68
Attract & Retain Staff	0.18	0.18	1.26	1.62	1.62
Fit for purpose (legislation, standards, accreditation)	0.18	0.36	1.26	1.8	1.8
Right clinical/non-clinical adjacencies/flows	0.13	0.13	0.91	1.3	1.3
Access to services (transport, visibility, location)	0.88	0.88	0.88	0.88	0.99
Provision of Multifunctional Rooms/Spaces	0.16	0.32	0.4	0.72	0.8
Shared Plant & Facilities	0.24	0.32	0.48	0.8	0.8
BREEAM & Sustainability	0.03	0.06	0.12	0.24	0.27
Total (weighted score)	2.22	2.88	6.78	9.04	9.26
Ranking	6	4	3	2	1

10.4 Economic Appraisal

10.4.1 The Board has identified a range of costs which relate to the project over the next 30 years which include both capital and revenue costs. Examples of costs included within this calculation would be capital build costs, refurbishment costs, equipping, facilities management, Life Cycle, other baseline running costs and any additional service running costs identified.

10.4.2 The combined cost is referred to as the Net Present Value (NPV) and is calculated by removing any inflationary cost increases over the 30 year period and presenting the costs at current day prices. In accordance with Treasury Green Book all costs in the analysis are base date (1st Q 2014 costs). Only those costs that are thought to exceed inflation are adjusted, which in this case we have applied additional uplift to energy cost calculations. The key inputs to our modelling (excluding inflation and optimism bias are as follows

Figure 10- 4: Key inputs at Base Date (1st Q 2014)

OPTION - KEY INPUTS		Construction Cost (Ex Inflation & OB)	Equipping & ICT (Ex Inflation & OB)	Land	Total Net Undiscounted Cost
		£m	£m	£m	£m
1	Do Minimum Backlog Maintenance	■	■	■	■
2	Refit Balfour and Provide GP, Dental & Community New	■	■	■	■
3	New Build Acute and Re-provided GP & Community	■	■	■	■
4	New Build (inclusive of retained office space)	■	■	■	■
4a	New Build with Support Block	■	■	■	■

10.4.3 To allow comparability between the options the cost information which has been used to calculate the Net Present Cost (NPC) is based on technical costing provided by external advisors. This information has been reviewed and updated to reflect current pricing information.

10.4.4 The results of the economic appraisal pre adjustment for Optimism bias is as follows:

Figure 10- 5: Results of NPC, pre adjustment for Risk

OPTION – NPC		NPC of Option (£m)	NPC Ranking
		£m	
1	Do Minimum Backlog Maintenance	■	1
2	Refit Balfour and Provide GP, Dental & Community New Build	■	2
3	New Build Acute and Re-provided GP & Community	■	3
4	New Build (inclusive of retained office space)	■	4
4a	New Build with Support Block	■	5

- 10.4.5 The NPC includes operating costs of the facilities, such as Life Cycle, FM, Rates and Energy. The table above indicates that Option 1 has the lowest NPC as it has a very low capital value. This is followed by Option 3, and 2 both of which have lower capital costs.
- 10.4.6 There is a relatively small differential between Option 2 and 3, with the costs of Option 3 only needing to decrease marginally to switch the ranking of these options.
- 10.4.7 There is a relatively small differential between the 100% new build options, Option 4 and 4a, with the costs of Option 4a only needing to decrease marginally to switch the ranking of these options. Option 4a delivers far more (additional non clinical space) than option 4.

10.5 Risk Appraisal for Economic Analysis

- 10.5.1 Action 4.4 of SCIM recommends the use of non-financial risk evaluation of option at Initial Agreement (IA) Stage. Thereafter, apart from low value investments, it is recommended that development and service risks are priced. For this reason, we have chosen to review options against a calculation of the Optimism Bias which should be applied.
- 10.5.2 By assessing each of the short listed options against the level of optimism bias risk a differentiation is easily made between alternatives.
- 10.5.3 During this process we have maintained a risk register for the emerging preferred option, which is analysed quantitatively for the financial appraisal. This risk register reviews risk under three separate headings:
- Non Financial;
 - Development; and
 - Service.
- 10.5.4 Non financial risks are those risks which are likely to have a non financial impact, and while there may also be associated costs, the consideration in this respect are the non financial implications. For example it may include the impact on the service if the building failed to deliver the level of quality anticipated or cannot provide future flexibility or access.
- 10.5.5 The Board has also identified a range of development risks. Development risks are assumed to relate to the design, construction and engineering commissioning phase of the project.
- 10.5.6 The Board has also identified a range of service risks. Service risks relate to the hospital commissioning, equipping and operational phases.

10.5.7 The options are scored on the severity of the consequence and the likelihood of occurrence using a simple 1-5 scoring scale for. The risk was then scored low to very high using the following table:

Figure 10- 6: Analysis of qualitative risk levels figure

Severity of consequence	Likelihood of occurrence					Key
	1 Rare	2 Unlikely	3 Possible	4 Likely	5 Almost certain	
1 Negligible	1	2	3	4	5	1-3 Low
2 Minor	2	4	6	8	10	4 – 9 Medium
3 Moderate	3	6	9	12	15	
4 Major	4	8	12	16	20	10 - 14 High
5 Extreme	5	10	15	20	25	15 - 25 Very High

10.5.8 In accordance with SCIM, Optimism Bias has been applied to the base NPC, and the figure below represents the outcome.

Figure 10- 7: Results of NPC adjusted for Risk

OPTION - Risk Adjusted for OB		NPC of Option (£m)	Optimism Bias %	Risk Assessment (Optimism Bias %)	Risk Adjusted NPC	Risk Adjusted NPC Ranking
		£m		£m	£m	
1	Do Minimum Backlog Maintenance	█	█	█	█	1
2	Refit Balfour and Provide GP, Dental & Community New Build	█	█	█	█	3
3	New Build Acute and Re-provided GP & Community	█	█	█	█	2
4	New Build (inclusive of retained office space)	█	█	█	█	5
4a	New Build with Support Block	█	█	█	█	4

10.6 Option Appraisal Results

10.6.1 To assess the relative value for money a comparison of the Net Present Value per benefit point has been undertaken and is shown below. This is calculated by dividing the NPC by the benefit score for each option to provide a comparable cost per benefit point.

Figure 10- 8: Results of the cost per benefits point

OPTION - Cost per Benefit Point		Risk Adjusted NPC	Non Financial Benefit Score	Cost per Benefit Point	Ranking NPC / Benefit Score
		£m			
1	Do Minimum Backlog Maintenance	████	2.22	████	4
2	Refit Balfour and Provide GP, Dental & Community New Build	████	2.88	████	5
3	New Build Acute and Re-provided Community	████	6.78	████	3
4	New Build (inclusive of retained office space)	████	9.04	████	2
4a	New Build with Support Block	████	9.26	████	1

10.6.2 The results show that when comparing the relative costs and benefits of the alternative solutions, Option 4a has the lowest overall cost per benefit point indicating this option delivers the best value for money of the short listed options.

11 PREFERRED OPTION

11.1 Overview

- 11.1.1 This section describes the preferred option and explains the key factors from the appraisal process that supports its selection.
- 11.1.2 No overriding factor or measure has been used to determine which option is most likely to meet the objectives. The selection of the preferred option has been based on a broad assessment of the outcome of all aspects of the option appraisal which is deemed to offer the optimal balance across its core elements.
- 11.1.3 The table below shows the ranking of each option against the individual elements appraised:

Figure 11- 1: Summary of option appraisal rankings

Option Appraisal Core Measures	Opt 1	Opt 2	Opt 3	Opt 4	Opt 4a
Net Present Cost	1	2	3	4	5
Risk (Optimism Bias)	4	5	3	2	1
Risk Adjusted NPC	1	3	2	5	4
Benefits	5	4	3	2	1
Cost per Benefit Point	4	5	3	2	1

- 11.1.4 The table above highlights that Option 4a single new integrated facility for acute hospital, general practice, and community and dental on green field site with separate clinical support services facility, provides the best ranking across the core elements of the appraisal process.
- 11.1.5 Option 1 ranks highly for the cost elements of the appraisal, however given this is a do minimum position, this was expected and the relative dis-benefits of other appraisal measures far outweigh these rankings. It is important to note that this option has only dealt with addressing the current backlog maintenance, and while some recognition is made of higher Life Cycle, it is very likely that at some point over the analysis period of 30 years the existing Balfour hospital would in all reality require total replacement.

11.2 Sensitivity Testing

- 11.2.1 As a result of the significant reliance that is placed on the outcome of the cost

per benefit point it is important to consider how sensitive the results are to changes in key variables. The sensitivities analysed are as follows:

1. Sensitivity 1 – Benefits Appraisal – Adjusting benefits scores, Option 1 to 3 up by 10% and reducing Option 4 and 4a by 10%.
2. Sensitivity 2 – Reducing Optimism Bias by 20% on all options
3. Sensitivity 3 – Increasing LCC on all options by 20%
4. Sensitivity 4 – Introducing Construction Inflation to mid Construction & LCC and FM Inflation.

11.2.2 The tables below shows that the ranking of the NPC per benefit point does not change with sensitivity modelling which confirms that the original conclusion and chosen option was robust.

SENSITIVITY 1		Risk Adjusted NPC	Non Financial Benefit Score	Cost per Benefit Point	Ranking NPC/ Benefit Score
		£m			
1	Do Minimum Backlog Maintenance	█	2.22	█	4
2	Refit Balfour and Provide GP, Dental & Community New Build	█	2.88	█	5
3	New Build Acute and Re-provided GP & Community	█	6.78	█	3
4	New Build (inclusive of retained office space)	█	9.04	█	2
4a	New Build with Support Block	█	9.26	█	1

SENSITIVITY 2		Risk Adjusted NPC	Non Financial Benefit Score	Cost per Benefit Point	Ranking NPC / Benefit Score
		£m			
1	Do Minimum Backlog Maintenance	█	2.22	█	4
2	Refit Balfour and Provide GP, Dental & Community New Build	█	2.88	█	5
3	New Build Acute and Re-provided GP & Community	█	6.78	█	3
4	New Build (inclusive of retained office space)	█	9.04	█	2
4a	New Build with Support Block	█	9.26	█	1

SENSITIVITY 3		Risk Adjusted NPC	Non Financial Benefit Score	Cost per Benefit Point	Ranking NPC / Benefit Score
		£m			
1	Do Minimum Backlog Maintenance	■	2.22	■	4
2	Refit Balfour and Provide GP, Dental & Community New Build	■	2.88	■	5
3	New Build Acute and Re-provided GP & Community	■	6.78	■	3
4	New Build (inclusive of retained office space)	■	9.04	■	2
4a	New Build with Support Block	■	9.26	■	1

SENSITIVITY 4		Risk Adjusted NPC	Non Financial Benefit Score	Cost per Benefit Point	Ranking NPC / Benefit Score
		£m			
1	Do Minimum Backlog Maintenance	■	2.22	■	4
2	Refit Balfour and Provide GP, Dental & Community New Build	■	2.88	■	5
3	New Build Acute and Re-provided GP & Community	■	6.78	■	3
4	New Build (inclusive of retained office space)	■	9.04	■	2
4a	New Build with Support Block	■	9.26	■	1

Note: SWITCHING POINT - We did note that by changing Sensitivity 1 to a change of 20% up and down switches the outcome to Option 3. However, this is a radical switch in benefits scores with a relative swing of 40% between option 3 and option 4 and 4a.

11.3 Analysis of the Option Appraisal Results

Option 1

- 11.3.1 This option should be discounted as although it addresses the backlog maintenance requirements, it provides no clinical or functional enhancements, it does not support the key requirements of the models of care and required improvements to clinical service delivery.

Option 2

- 11.3.2 This option provides all of the accommodation provided in Option 4 but in a very different way. It has significant amounts of demolition, refurbishment, multiple phasing and thus prolonged programme and extensive decanting and temporary accommodation. Due to the detachment of GP and Community facilities from the main acute building the option scores poorly in the benefits scoring. The facilities greatly compromise the overall value for money with a cost/benefit point 101% higher than Option 4a. This option would seriously compromise existing operations and put at risk clinical processes over a prolonged period.
- 11.3.3 It is evaluated but we would suggest undeliverable without multiple storey development in order to achieve the desired parking. This would be unacceptable to planning.

Option 3

- 11.3.4 Like option 2, this option provides all of the accommodation provided in Option 4 with significant demolitions, new build and some re-provisioning through refurbishment. This will be a phased and prolonged programme, with a requirement for decanting and temporary accommodation. While the significant new build would address a number of benefits as reflected in the scoring, the detachment of GP and Community facilities from the main acute building ensures this option is held at a relatively poor score. The facilities compromise the overall value for money with a cost/benefit point 27% higher than Option 4a.

Option 4

- 11.3.5 This option is the second most expensive in terms of initial investment and scores second best in Benefits Appraisal and joint on Risk Assessment. This Option delivers the full range of clinical requirements and infrastructure enhancements whilst addressing a large part of the backlog maintenance issues associated with the existing site. It does however fail to deliver the additional benefits associated with Option 4a, has the added advantage of being less disruptive than Option 2 which is reflected both in terms of benefits

and risks. The facilities offer overall good value for money with a cost/benefit point only 1% higher than Option 4a.

Option 4a

- 11.3.6 This option is top ranked on the core elements of the economic analysis. Option 4a has the highest level of capital investments and the highest NPC. It is however the highest ranked in value for money terms, ranking above all other options in terms of cost/benefit point. This Option delivers the full range of clinical requirements and infrastructure enhancements, addresses all of the backlog maintenance issues associated with the existing site and goes further to resolve a non clinical support position that no other option does.

11.4 Conclusion

- 11.4.1 For the reasons outlined above, Option 4a single new integrated facility for acute hospital, general practice, and community and dental on green field site with separate clinical support services facility, is the option that will be taken forward and included in the reference design process.

REFERENCE DESIGN

12. REFERENCE DESIGN PROCESS

12.1 Summary

12.1.1 The Board has, in conjunction with our experienced advisors, undertaken a significant amount of work to develop a reference design for the project. A planning in principle application will be lodged with Orkney Islands Council Planning Department in early March 2014.

12.1.2 The reference design includes the following:-

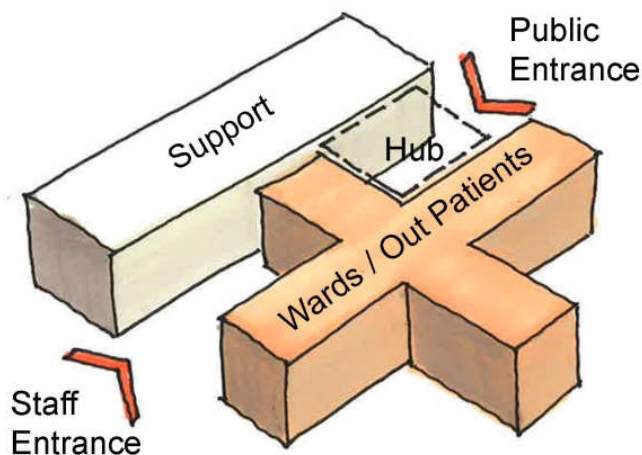
- A new hospital building, of low rise design of no more than two storeys in height, to accommodate some 47 in-patient beds, with an internal floor space of approx 12,900sqm GIA;
- Formation of new access road, separate dedicated emergency entrance, and secondary goods and services access;
- 300 car parking spaces and 40 cycle parking spaces;
- A shared Utilities Building/Energy Centre;
- A new Clinical Support Services Building (1500sqm GIA);
- Landscaping, including cut and fill operations to level the site, with retention / re-use of all material;
- Provision of Sustainable Urban Drainage scheme; and off-site road infrastructure improvement works;
- Identifies future expansions; and
- Outline drawings and adjacencies can be found at Annex 5.

12.2 Hospital Building and Healthcare Facilities

12.2.1 The proposed building will contain the following key departments; A&E, GP Practices, Out-Patients Department, Renal Unit, Imaging, Dental Unit, Labs, Macmillan Unit, Short Stay Unit, Day Patient Unit, Theatres and Endoscopy, Critical Care Unit and Women's Services (containing Maternity, Birthing, etc).

12.2.2 The reference design of the building has been reached as a result of the individual department floor space requirements and the clinical adjacencies of foot print key zones or elements. The building has been designed to provide a simple legible layout conducive to easy way finding while ensuring key clinical adjacencies are maintained and enhanced.

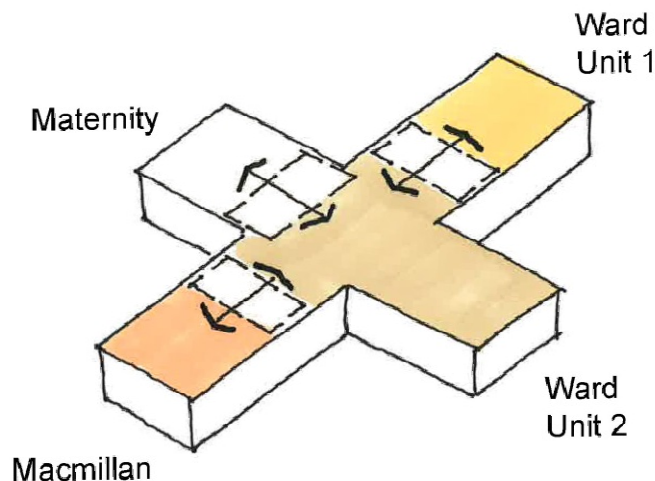
- 12.2.3 The building is organised into 2 main strings of accommodation, one containing the ambulatory care related uses on the ground floor with wards above and the other containing support accommodation and specialist clinical spaces such as theatres.
- 12.2.4 Linking the 2 strands is radiology and maternity and the main vertical circulation including clinical service and public lifts.
- 12.2.5 All three elements are arranged around an entrance atrium which is the main social hub for the building. Adjacent to the main entrance is a drum structure containing the main reception and admin points.
- 12.2.6 The building is mostly 2 storey with pitched roof with the exception of the FM/stores area which is single storey. The main accommodation blocks are approximately 18m to 20m wide to maximise opportunities for natural daylight and ventilation while the entrance atrium, which is also 2 storey's high, is top lit and side lit to bring natural daylight and views to the outside even to the most "deep plan" parts of the building.
- 12.2.7 The main blocks are linear in plan to reflect the nature of the adjacencies and to maximise "flexing" between departments. The building generally is assumed to be 14.5 to 15m in height (to roof ridge).



Blocks Concept

12.3 Wards Layout

- 12.3.1 The layout of the wards aims to provide as much natural light and ventilation as possible whilst delivering care efficiently and effectively.
- 12.3.2 The wards are organised into 2 corridors separating 2 outer zones from a central zone. The outer zones mostly containing single rooms have natural daylight, views and possibilities for natural ventilation while the inner central zone accommodated support functions.
- 12.3.3 The linear block is cranked at both ends to avoid long “institutional” corridors but also to loosely define the 3 main wards groupings of Macmillan, Inpatients Ward units 2 and 1. There is a small outshot centrally placed in Inpatient ward unit 2 containing the HDU element of this unit. Housed in the upper level of the entrance drum, adjacent to both Ward Units 1 and 2, are a suite of therapy and group rooms providing the main ward social space.
- 12.3.4 All single rooms have a full height window out to the surrounding countryside with views primarily out towards Scapa Bay with the rest back to Kirkwall. There will be large glass panels to the corridor providing both a high level of observation into the room and enabling the patient to observe and feel part of the general ward activity.
- 12.3.5 Staff bases will be decentralised with multidisciplinary, touchdown areas positioned throughout the ward enabling and maximising observation and interaction with patients.



Ward Flexing

- 12.3.6 The linear nature of the ward blocks mean that wards can instantly be reallocated from one ward unit to an adjacent and this will maximise ward flexibility and anticipates any local variation from time to time in numbers required for specific units.
- 12.3.7 The Maternity ward is located adjacent to the main wards, allowing flexing to occur primarily from Maternity into Unit 2, or for some surgical/gynae patients to be admitted into the single rooms.
- 12.3.8 Benchmarking other hospitals with single rooms has shown that when a separate room for socialising is provided this is rarely used. However there is evidence to support the fact that an open plan socialising area is used by patients. The generic ward has socialising areas centrally placed between ward units 1 which gives equal access for all patients. Hence the socialization areas are centrally placed and have both external windows and windows overlooking the main hospital atrium where patients can feel included and “part of things”.
- 12.3.9 Isolation has been cited as a potential negative outcome from the introduction of single rooms. The following key points will ensure that patients do not feel isolated:
- Staff will actively promote the socialising area.
 - Flexible visiting with the potential for overnight stay will ensure that patients have the optimum support from family and friends (allowance for relatives bed in each single room).
 - Large glazed areas into and out of the room enables the occupant to interact with staff, other people and their environment.
 - Touchdown areas will ensure that staff are positioned throughout the ward.
 - Improved technology will improve enhanced communication for patients.

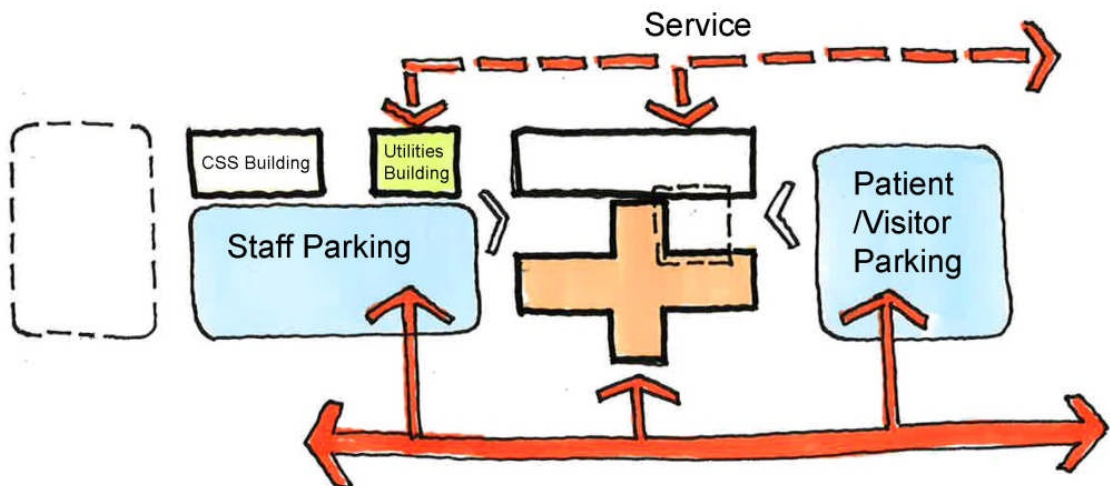
12.4 Ensuite Single Inpatient Rooms

- 12.4.1 When considering the room sizing's for inpatient rooms the Board have taken into account the current review of Scottish Health Planning Note (SHPN) guidance as set out in SHPN 04/01 (October 2010).
- 12.4.2 They have ensured that the clinical room sizes adopted are as a minimum in line with the recommended SHPN sizing's and that all rooms will provide an appropriate environment for the single inpatient rooms as well as the five discrete activity zones you would expect to see:
- Core bed space;

- Bed head services;
 - Sanitary facilities;
 - Clinical support; and
 - Family support.
- 12.4.3 As a result of significant research nationally, new guidance contained in CEL 27 (2010) regarding the minimal acceptable levels of single inpatient rooms has been issued, requiring that there should be a presumption of 100% inpatient single room provision in future hospital development.
- 12.4.4 100% single room's provision will greatly enhance privacy, dignity and confidentiality for patients. The majority of care will be delivered within the patient's own room and discussions with Health Professionals will take place in private.
- 12.4.5 Single room provision lessens the risk of cross infection from airborne viruses. Patients with unrecognised infection or carriers of infection are separable from other patients on admission.
- 12.4.6 All single rooms will be generic and able to manage any specialist function. Exceptions will be Critical Care, Day Unit etc. Generic single rooms enables flexibility to meet peaks in activity.
- 12.4.7 Private toilet facilities are more effective in containing C Diff and Norovirus. In addition the generic ward layout means that sections of the ward can be segregated during an outbreak rather than the whole ward.
- 12.4.8 Movement of patients within the ward will be greatly reduced, as the need to make a four bedded room gender specific will be removed.
- 12.4.9 Single rooms will facilitate flexible visiting, thereby enabling relatives to play a more supportive role in the patient's care. The size of the single room will enable relatives to stay overnight with the patient where appropriate. In addition, communication between relatives and the multidisciplinary team will be improved with close relatives able to, for example, be with the patient during ward rounds.
- 12.4.10 Noise will be greatly reduced from the patient's perspective and they will not be disturbed during the night whilst staff are attending to other patient's care. The good night's sleep aids recovery and improves wellbeing.
- 12.4.11 In summary, by providing single rooms, patients will have increased privacy and dignity and a reduced risk of acquiring an infection during their stay in hospital. There will also be an added advantage of increased flexibility of use in beds to reflect changes in gender mix and peaks in demand.

12.5 Access, Parking and Helipad

- 12.5.1 The site will be accessed primarily via a new 4 arm roundabout at the junction of New Scapa Road (A963) and the Holm Branch Road. This new access road (off which the visitor, staff and A&E in turn are accessed) will form the first part of a proposed link road between the A963 and the Orphir Road to the west. The service access for the site will also be accessed off the A963 further to the north via a new T junction.
- 12.5.2 Patient and Visitor Parking and bus/taxi drop off points will be located immediately to the front of the main entrance, where there will be a controlled link connecting through to the service access point to allow buses to loop through the site without having to turn within the main visitor parking area.
- 12.5.3 The main staff parking is located at the staff entrance end of the building thus ensuring that patient/visitor parking remains dedicated. Off the main staff parking are small dedicated parking areas associated with A&E Renal and Macmillan. All parking and entrance areas will link through to both the site access points to provide emergency access.
- 12.5.4 There is no provision within the site for a dedicated Helipad as the clinical plan does not require one.



Site Organisation

12.6 Clinical Support Services Building

- 12.6.1 The proposals include a separate 1500sqm GIA support building which includes office, meeting and conference space for clinical and non clinical NHSO staff.
- 12.6.2 The separate building will allow a building to be tailored specifically for these needs which will be less onerous and therefore more cost effective than locating within the main hospital building. This will better enable community use of the meeting and conferencing facilities if desired.
- 12.6.3 The building will be located close to the staff entrance of the hospital and will share the staff parking for the main hospital. To maximise efficiency the building will also share the main energy centre with the hospital.
- 12.6.4 It is envisaged the Clinical Support Services Building will be 2 storeys and rectangular in plan with the toilet/stair/lift core being located off centre creating a 1/3, 2/3rds floor plate split for maximum flexibility. The building will be a maximum of 15m deep to maximise natural light and ventilation with a clear floor to ceiling of 2.750m.
- 12.6.5 It is assumed the building will be based on a 1500mm space planning module and fenestration/ceiling grids to reflect this. The building will comply with BCO best practice.

12.7 Energy Centre

- 12.7.1 The development will be served by a stand-alone energy centre, to be located to the west of the main Hospital building and near to the above Clinical Support Services Building. The building will be serviced from and adjacent to the proposed secondary service access.
- 12.7.2 While the details haven't been developed as much as the hospital plans it is envisaged that the internal clear height would be a minimum of 6m and that any chimney (assuming Biomass fuel) would have to be 8m higher than any building within a radius of 30m i.e. approximately 20m high.

12.8 Landscaping

- 12.8.1 The site consists of a number of distinctive zones. These are:
- Main entrance area including visitor/patient parking, bus, taxi drop off, cycle parking and signage cairn with complimentary hard and soft quality landscaping. This area should be laid out in a clear and legible way emphasizing the main entrance. The parking areas should be defined and softened by good quality soft landscaping.

- Southern edge, will be largely overlooked by wards and outpatients and will also form a prominent front to the proposed ring road. This area should be largely soft informal meadow and shrub/tree planting to enhance both views out and into the site. Any suds requirements in this area should be treated in a naturalistic manner to form an attractive water feature.
- Garden, located around the multi faith room adjacent to the staff entrance, this space should be calm, sheltered and introspective providing a garden feel for patients, staff and relatives to reflect and contemplate.
- The Macmillan, using re-contouring of the ground the Macmillan will have its own dedicated entrance, gardens and some parking. This contouring will need careful consideration to look as naturalistic as possible and to create an attractive and useable garden area that will be directly accessible from the single rooms and shared space. The garden area must be designed to provide interest all year round and to encourage birdlife.
- Staff Parking, this is a shared parking area for both hospital and shared resources building. It should be of a similar specification to the visitor parking and softened by soft landscaping to avoid the feeling of a “sea of parking”. A strong visual and footpath link needs to be provided to link the shared resources building with the hospital staff entrance. The layout should have provision for future vehicular access into the future expansion area to the west end of the site.
- Servicing areas, should be sized to minimize/eliminate the need to reverse and should be screened from adjacent properties and public roads. Public footpaths should avoid these areas. Ancillary functions such as waste and refuse should be accommodated in covered and screened shelters to avoid service yards looking cluttered.
- North Edge, this edge of the site must be designed to maximise the amenity of adjacent properties to Scapa Court without compromising the site layout. Consideration should be given to soft landscaping and earth modelling to enhance screening. External lighting/light pollution and potential sources of noise will need to be given careful consideration and measures taken to mitigate/eliminate. The building design should avoid any potential overlooking issues.

12.8.2 The existing site is located on the south edge of Kirkwall with open views to Scapa Flow approx. 1 mile to the south. It is characterised topographically as comparatively rolling pasture and will be defined to the south by a proposed new public road. The site is bounded to the north by existing single storey

residential properties and to the east by New Scapa Road, one of the main arteries into and out of Kirkwall.

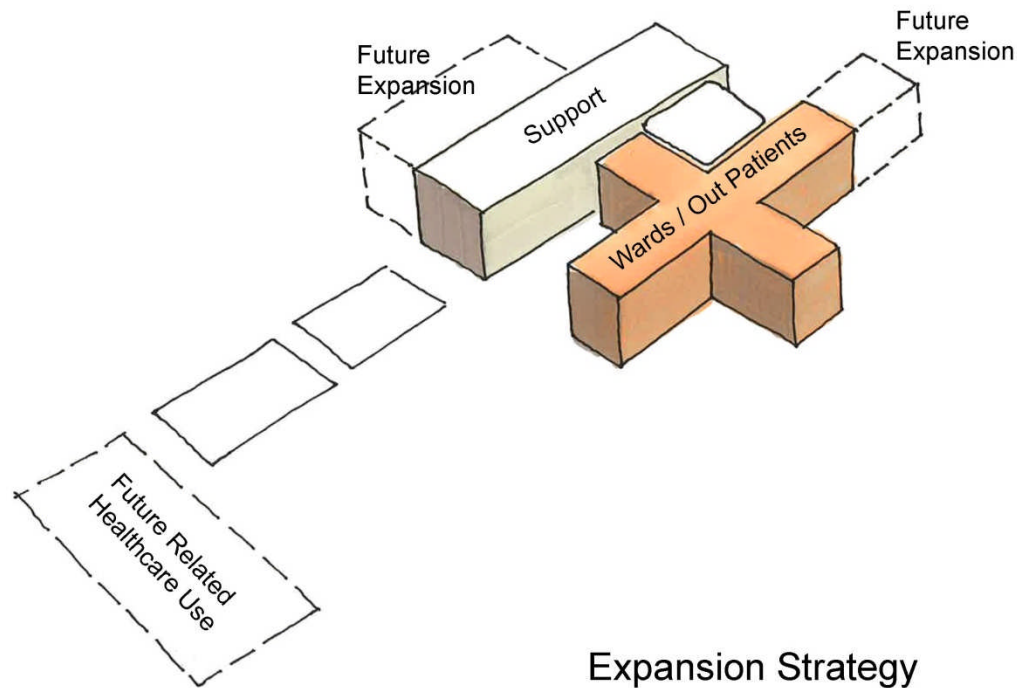
- 12.8.3 The main entrance and visitor/patient parking will be located at the east of the site and will be apparent and legible from the New Scapa Road.
- 12.8.4 Edge treatment will be important especially to the north edge where amenity landscaping and screen planting is envisaged. Generally planting to use indigenous Orcadian tree and shrub species and follow the advice as outlined by the Orkney Woodland Group. Existing dry stone boundary walls should be retained and repaired wherever possible.
- 12.8.5 Footpath and cycle way networks are to be provided linking and enhancing the existing network especially the link to and from Scapa Court and the bridle path to Scapa beach. Footpaths will be as close to desire lines as possible. Where possible the landscape should encourage exercise and a healthy lifestyle and should include a fitness trail.

12.9 Sustainable Urban Drainage System

- 12.9.1 Indicative SUDS ponds are proposed to the perimeter of the site and care should be taken to ensure these look naturalistic and attractive especially any adjacent to the North boundary and the ring road.

12.10 Future Expansion

- 12.10.1 Future change and expansion is allowed for within the reference design.
- 12.10.2 To aid and anticipate future change and adaption it has been assumed that the building structure will be a frame and floor slab type and all internal partitions will be non load bearing. On the ground floor, an offset central column line is proposed thereby giving a choice of column free space while the upper floor is anticipated to be column free.
- 12.10.3 Expansion of the main building is anticipated in 2 key zones the wards, where there is a provision to extend the building to the SE and in the support block where there is provision to extend to the NW.
- 12.10.4 In addition there are expansion sites to the west of the clinical support building for any future healthcare related buildings. Future car parking provision is also identified on the site.



12.11 Design Development

12.11.1 The reference design has been progressed to RIBA Plan of Work 2013 stage 2 Concept Design and incorporates the following:

- Design concept diagrams;
- Site layout plans;
- 1:500 Departmental plans and sections;
- 1:250 Plans;
- Site sections;
- 3D computer generated visuals;
- Whole project ADB room data sheets covering all areas;
- Standard 1:50 room layout drawings;
- Planning and stakeholder consultation statements;
- AEDET report and design vision statement;
- ACOP 2007 CDM hazard identification; and
- Design reports relating to architectural and engineering elements.

12.12 Costing Methodology

12.12.1 The reference design information has informed the estimation of the build cost for the project. The following paragraphs set out the methodology adopted.

12.12.2 The Schedule of Accommodation has been priced on a room by room and a department by department basis. The individual rooms within each department were allocated to one of three Functional Area Types:

- Public;
- Staff; and
- Clinical/Delivery.

12.12.3 The Health Planning Cost Guides (HPCG) identifies a rate to apply to each of the Functional Area Types and these rates vary on a department by department basis. The rates also include a 5% contingency to deal with design risk given that the rates are being applied to costs associated with a project that is not fully designed at this stage.

12.12.4 The Schedule of Accommodation also identifies the gross floor area included within each department, including space occupied by internal partitions etc. A copy of the Schedule of Accommodation 6 and 10 are attached as Annex 7.

12.12.5 In addition to pricing the Schedule of Accommodation, the technical advisers also assessed the cost impact of the unique items and Site/Design Premiums associated with the Reference Design. This process of cost adjustment and their incorporation within the Technical Cost assists in developing a budget which more appropriately reflects the specific design proposals for the development.

12.12.6 Technical Cost 3, on which the financial case is based, reflects the key design features of the Reference Design proposed for the new hospital, these include:

- Wall to floor ratios associated with the hub and spoke design;
- The incorporation of light wells in ward blocks;
- The requirement for 19m² single occupancy bedrooms;
- Proposed roof details, including the provision of “Green roof”; and
- Site specific works associated with ground conditions and topography;

12.12.7 In recognition that there are aspects of the Reference Design which are departures from the benchmark data used to formulate the HPCG departmental rates, the advisers incorporated Site/Design Premiums within Technical Cost 3.

12.12.8 The site/design premiums include the following:

- Piled Hybrid Foundations;
- Cut & Fill;
- Increased lifts allowance;
- Contemplation space design; and
- Roof and Canopies.

12.12.9 The above has resulted in a forecast construction cost that is outlined further in the Financial Section.

COMMERCIAL CASE

13 PROCUREMENT ROUTE ASSESSMENT

13.1 Overview

- 13.1 As part of the Scottish Government budget announcement on 17 November 2010, £2.5bn of revenue funded investment pipeline was identified of which £750m related to NHS Scotland projects. Specific provision was incorporated to support the delivery of the Orkney hospital and healthcare facilities project utilising the Non Profit Distributing (NPD) programme supported by the Scottish Futures Trust (SFT). The project is also incorporated within the Scottish Government Infrastructure Investment Plan published on 4 February 2013.
- 13.1.2 The Board has worked closely with SFT during the OBC development stage of the project so that it can clearly understand their requirements in considering the merits and practicalities of an NPD procurement. SFT are represented on the Project Implementation Board and the Interim Project Director is on secondment from SFT.
- 13.1.3 Other aspects of the project procurement process are outlined in the next section of the OBC.

13.2 Key Features of the Assessment

- 13.2.1 The guidance sets out a 3 stage process covering:
- Stage 1 – Programme Level Assessment;
 - Stage 2 – Project Level Assessment; and
 - Stage 3 – Procurement Level Assessment.
- 13.2.2 For the projects identified as revenue funded at Scottish Government level, a quantitative comparison of value for money between traditional capital procurement (i.e. using the Conventionally Procured Assessment Model) and revenue funding routes is no longer required.
- 13.2.3 For health projects at OBC stage the guidance specifically requires Boards to qualitatively consider procurement options, and as part of this evaluation, complete the VFM checklist set out within Annex 9.

13.3 Proposed Procurement Route

13.3.1 Having considered the requirements of the SFT guidance and completed the qualitative evaluation, the Board considers that the Non Profit Distributing (NPD) procurement route is the appropriate procurement approach for the project.

13.3.2 The key factors influencing the selection of this approach are:

- Optimises risk allocation via the use of performance based payment incentives enshrined in the project agreement;
- There will be few if any anticipated derogations required from the standard NPD contract (each for Project-specific reasons);
- There has been a strong focus on ensuring adequate flexibility as part of the development of clinical requirements;
- A reference design has been prepared. The way it is used during procurement will give bidders ample opportunity to bring further innovation to the project. This is particularly relevant given the unusual nature of this project being a Rural General Hospital with a significant amount of primary and community healthcare.
- On 4th February 2014 the Board decided to locate the new hospital and healthcare facility at the site known as “Scapa”. Heads of Terms for the acquisition of the site are now in place ensuring that site purchase will not cause a delay to the project or affect market interest;
- The Board has established a sound governance and management structure for the project;
- The Board has already appointed experienced health care planning, technical, financial and legal advisors to augment its own resources and has had an experienced Interim Project Director in post since June 2013 and has now embarked on the appointment process for a substantive Project Director;
- The scale of the project ensures that transaction costs will be justifiable;
- It is anticipated that there will be significant market interest in the project.

13.4 Procurement Strategy and Process

13.4.1 The draft procurement strategy has been developed in conjunction with the Commercial Workstream which includes inputs from the Board's Technical Advisors, Legal Advisors and Financial Advisors. A full copy of the draft strategy is provided at Annex 10.

13.4.2 The key aims of the procurement strategy are to:

- Ensure that the Board follows a procurement law compliant process in selecting its private sector partner;
- Demonstrate, as a condition for success, adherence to UK best practice combined in ISO10845 and BS 8534 to the need for cost effectiveness of the process; competition between bidders; transparency of process and equitability of evaluation;
- Enable the Board to identify three bidders that can be shortlisted and taken through the Competitive Dialogue stage of the procurement;
- Ensure the maximisation of benefits associated with having a well developed reference design for the new facility;
- Allow the Board to identify as Preferred Bidder the organization that submits the most economically advantageous tender;
- Set out clear timelines for each stage of the procurement which are as short as they can be whilst remaining achievable; and
- Promote community benefits.

13.4.3 The document covers the key stages associated with the procurement process including:

- Use of a Prior Information Notice (PIN);
- Publication of OJEU notice;
- Development and application of Pre-Qualification Questionnaire (PQQ) and associated Information Memorandum (IM);
- Development and application of Invitation to Participate in Dialogue (ITPD) and associated tender documents;
- Tender evaluation to select preferred bidder; and

- Activity to achieve financial close.

13.4.4 The main requirements identified within the procurement strategy are:

- The initial pre-qualification process should shortlist 3 bidders for the Competitive Dialogue (CD) process. This is in line with recognised practice as noted in the document;
- All shortlisted bidders will be provided with the final tender template as part of the Invitation to Participate in Dialogue pack. This will confirm evaluation criteria and will be used to inform discussions throughout the CD process to help bidders shape compliant tenders;
- The CD process will consist of five rounds of dialogue although it is recognized that a further round may be required;
- At the end of dialogue round three bidders will make an interim bid submission which will be evaluated and used to down select one of the bidders.
- At the end of dialogue round four the remaining bidders will prepare and submit a draft of their final tenders. This will be reviewed for compliance by the Board's evaluation team whilst dialogue is still open. Bidders will also give a presentation of their draft final tenders (for information purposes);
- Dialogue will formally close when the evaluation team is satisfied that all bidders are in a position to submit fully compliant tenders. Only then will bidders be invited to submit their final tenders; and
- Sets of evaluation criteria are being developed by the project team and the Board's advisors taking into account available SFT and other guidance. Details of these evaluation criteria will be set out in the ITPD documentation. Particular attention will be given to the evaluation of community benefits.

13.4.5 The procurement process formally commences with publication of the OJEU notice a draft copy of which is provided at Annex 11. At this point the fully developed PQQ and IM documents will be provided to organisations applying to participate.

13.4.6 The ITPD is also in preparation. The timing of OJEU publication is driven by approval of planning in principle (PiP) and approval of the Outline Business Case by CIG. It is hoped that PiP approval will be granted by Orkney Islands Council on 4 June 2014. The publication of the OJEU notice is therefore planned for week commencing 9 June 2014.

13.4.7 A bidders' day is being planned for June and will be held in Orkney.

13.5 Community Benefits

13.5.1 NHS Orkney seeks to maximise potential Community Benefits arising from the new hospital and healthcare facility project. Throughout the procurement Community Benefits will be emphasised as an important bidder evaluation criteria at the interim and final bid evaluation stages.

13.5.2 Bidders will be required to submit details of their proposals to actively promote and sustain identified community benefits by, for example how their own business and employment policies will promote local employment, training and business opportunities with small and medium sized enterprises (SMEs).

13.5.3 Underpinning such initiatives, the Board will seek to incorporate 'social clauses', compliant with current EU procurement legislation, in the form of contract performance conditions into the Project Agreement with the bidders in relation to jobs, training and business opportunities.

13.5.4 This approach, described as 'targeted recruitment and training' (TRT) will be actively used by the Board to monitor the bidder's performance in realising such benefits post award of the contract and during the construction and operational phases. At the prequalification stage, bidders past performance in the area of using and engaging with SMEs will be scrutinised and evaluated.

13.5.5 The weighting given to Community Benefits in the evaluation will be carefully considered to ensure that bidders treat community benefits as a meaningful evaluation criteria.

13.5.6 Community benefits will also feature in the evaluation of bidders interim and final proposals as an important consideration in the assessment of the most economically advantageous tender.

13.5.7 The Board will also seek to promote the profile and awareness of community benefits by engaging with capacity building intermediaries such as the Construction Skills Council to obtain advice on communications, setting of targets and training and development schemes.

13.6 Conclusion

13.6.1 The NPD model has been identified as the preferred procurement route for the project in the Scottish Government's document 'Scottish Spending Plans and Draft Budget 2011-12'. This is supported by the VFM assessment and by a number of key factors such as an encouraging level of market interest that the Board are therefore confident that the project is viable and that it has

identified the resources and strategy necessary for a successful procurement.

14 OTHER PROCUREMENT ISSUES

14.1 Overview

14.1.1 In addition to evaluating the merits and practicalities of the NPD procurement, the Board has also spent time considering a range of other commercial issues associated with the project, but falling outwith the scope of the NPD arrangements, these include:

- Acquisition of the new hospital and healthcare facilities site;
- Enabling works on the new site; and
- Demolition of the existing hospital and disposal of the remaining site.

14.1.2 The current status and commercial considerations for each is outlined below.

14.2 Selection and Acquisition of New Hospital and Healthcare Facilities Site

14.2.1 In recognising that the preferred solution for the provision of a new Rural General Hospital and Healthcare Facility proposed an offsite solution, the Board undertook an exercise to identify an alternative site in Kirkwall and thereafter enter into negotiations to acquire the most suitable site.

14.2.2 The project was originally planned to include a care home for Orkney Islands Council with that element of the project being funded by the council. Site selection therefore was for a site large enough to allow the development of the hospital and healthcare facility co-located with the care home.

14.2.3 The health board and council jointly decided in September 2012 that the preferred site for this development was the site known as Corse West.

14.2.4 Subsequently, in March 2013, the council decided to withdraw from the development and instead to refurbish an existing care home.

14.2.5 In May 2013 the Board, assisted by external advisers, re-evaluated the sites and as a result reconfirmed their decision that Corse West should remain as the Preferred Site. The Board then at the end of May 2013 published a Planning Application Notice for their intended development at Corse West. This process required 12 weeks of formal public consultation.

14.2.6 It became apparent quite early in the 12 week period that there was significant public opposition to the development taking place at Corse West. At the same time two other sites which had been ruled out early in the evaluation due to planning issues came back into the picture as viable due to changes in the emphasis of planning guidance offered by the council. These

sites are known as Meadows and Scapa. Taken together with Grainbank, which had scored second behind Corse West and had remained viable, this meant that four sites were now available for consideration.

The process followed to arrive at the preferred site for the project involved four key stages as detailed below.

- **Stage 1:** Strategic assessment of potential sites - this involved undertaking a detailed site search within the agreed geographical boundary and provided a list of sites with information in terms of ownership, planning use, infrastructure information, as well as technical and environmental considerations. This produced the four potential sites identified above.
- **Stage 2:** Initial site evaluation and short listing – the Board used a scoring matrix to evaluate the four sites identified in the initial search. The Board then met in public on 24 October 2013 at which time it eliminated the Meadows site from further consideration. At the same time the Board decided to publish PAN notices for the remaining three sites (Corse West, Grainbank and Scapa). A 12 week public consultation period then followed.
- **Stage 3:** Negotiations with land owners – During the 12 week PAN consultation period the Board entered in to Heads of Terms negotiations with the owners of each site.
- **Stage 4** – The Board met in public on 4 February 2014 to consider a report on the qualitative and quantitative criteria associated with each site. Board members were also made aware of the responses received from the public following the PAN consultation. Advisers were on hand to answer Board members' questions. The Board accepted the recommendation contained in the report that the Scapa site be identified as the site for the new hospital and healthcare development.

14.3 Partnership Approach to Planning and Other Issues

- 14.3.1 NHS Orkney works closely with their Public Sector partner Orkney Islands Council in many aspects of delivering island wide services.
- 14.3.2 In relation to progressing the Planning in Principle application for the Scapa site a planning partnership protocol is being prepared by the Planning authority setting out roles, responsibilities and a programme for submitting the PiP application.
- 14.3.3 Throughout the site selection process planning officials, up to and including the Head of Planning and Director of Infrastructure advised on the planning implications of each site. This cooperation included advice on the planning

status of the sites within the current and emerging Local Development Plans.

14.3.4 There is a close professional working relationship between the Council planning staff and the project team thereby ensuring that the Planning in Principle process runs smoothly and that the PiP application is considered by the Planning Committee at their meeting on 4th June 2014.

14.4 Site Option Appraisal

14.4.1 In May 2013 NHS Orkney published a PAN for the Corse West site and commenced 12 weeks of statutory public consultation on this site.

14.4.2 In October 2013 the Board of NHS Orkney considered a report on the outcome of that consultation. At the same time the Board was informed that the planning position of the Grainbank, Scapa and Meadows site had changed and that each was now viable as a site for the new hospital and healthcare facility.

14.4.3 The October report provided the Board with the outcome of qualitative and quantitative analysis of each site. The Board felt unable to select a single site to identify as a preferred site and instead instructed that PAN notices be published for Corse West, Grainbank and Scapa. The Meadows site was discounted from this point forward.

14.4.4 Between November 2012 and January 2013, NHS Orkney carried out a public engagement process on its plans to build a new acute hospital on one of the three sites for which PAN notices had been published. This engagement exercise was also used as an opportunity to ask members of the public what matters to them about their health services and what NHS Orkney could have done better when engaging with them.

14.4.5 Extensive public consultation on the suitability of the sites was undertaken with 5009 responses received. The Scottish Health Council was consulted on the design of the site selection communication and engagement plan, and provided input and support, throughout the process.

14.4.6 A variety of methods were used to engage and consult with the population of Orkney including;

- An information leaflet in the local press at the start and midway point of the 12 week consultation exercise;
- 14 drop-in sessions held in locations across the county in both the mainland and outer isles (attended by 200 people);

- A letter sent to all households in Orkney including a freepost reply envelope and a response form; and
 - Advertising via posters, press advertisements, website (online survey) Facebook and Twitter.
- 14.4.7 Selecting a preferred site involved both a qualitative and a quantitative assessment. The method chosen to identify the Preferred Site was to agree a number of Benefit Criteria, to agree the weighting to be given to each Benefit Criteria and then to score the Benefit Criteria. This approach covered the qualitative element of the overall assessment.
- 14.4.8 The quantitative element of the assessment included the likely purchase price of the site, estimated enabling costs such as road alterations and utility provision.
- 14.4.9 At its 4th February 2014 meeting the Project Board confirmed that the qualitative criteria should account for 75% of the score and the quantitative criteria for the remaining 25%. This significant difference reflects the fact that the cost of site purchase and enabling works, although estimated to be several million pounds, is a small proportion of the overall project cost. Therefore, and taking into account the long term and strategic nature of the requirement, the Board felt that it did not wish the choice of site to be heavily influenced by cost. This approach has been adopted on at least one other NHS NPD project.
- 14.4.10 The three sites were scored by the project's technical advisers lead by Sweett Group. Jones Lang La Salle input scoring for the planning criteria.
- 14.4.11 The Scapa site scored highest on the qualitative and quantitative criteria though the margin over Grainbank was small. Corse West consistently scored third. At its meeting on 4th February the Board approved the Scapa site for the new hospital and healthcare facility development. The Board also instructed that a Planning in Principle application be submitted to Orkney Islands Council in early March 2014.

14.5 Acquisition of Scapa site

- 14.5.1 In advance of the Board deciding to identify Scapa as its Preferred Site, Heads of Terms had been negotiated and signed with the owners.
- 14.5.2 The land at Scapa extends to 6.46 hectares (15.96 acres). Negotiations are now underway to agree missives for the purchase. It is hoped that missives can be agreed in advance of the proposed OJEU date in June 2014.

14.5.3 The Heads of Terms includes a number of suspensive conditions and a target period for settlement. A copy of the Heads of Terms is attached as Annex 6.

14.6 Enabling Works on the New Hospital Site

14.6.1 The recent offer from OIC to contribute up to £1.5m towards infrastructure costs/works for the project will have a bearing on how and when these enabling works are contracted for and funded.

14.6.2 The Council plans to provide a link road between the Scapa and Orphir roads including roundabouts at each of the road ends to the south of the Scapa site as opposed to what the road requirements would be for the Scapa site alone.

14.6.3 Discussions are underway with the Council to firm up on the specific proposals/arrangements for accessing the £1.5m funding option and to establish how much of a reduction will be possible in the sums presently included for enabling works within the overall estimated project cost of £ [REDACTED]

14.7 Disposal of Current Hospital Site

14.7.1 The current Balfour site will be surplus to NHS requirements once the new hospital is fully operational. The site will therefore be disposed of. This is expected to be during financial year 2019/20.

14.7.2 Nearer the time of disposal The Scottish Futures Trust will be asked to advise the Board on the best options for the site disposal.

15 PROPOSED CONTRACTUAL ARRANGEMENTS

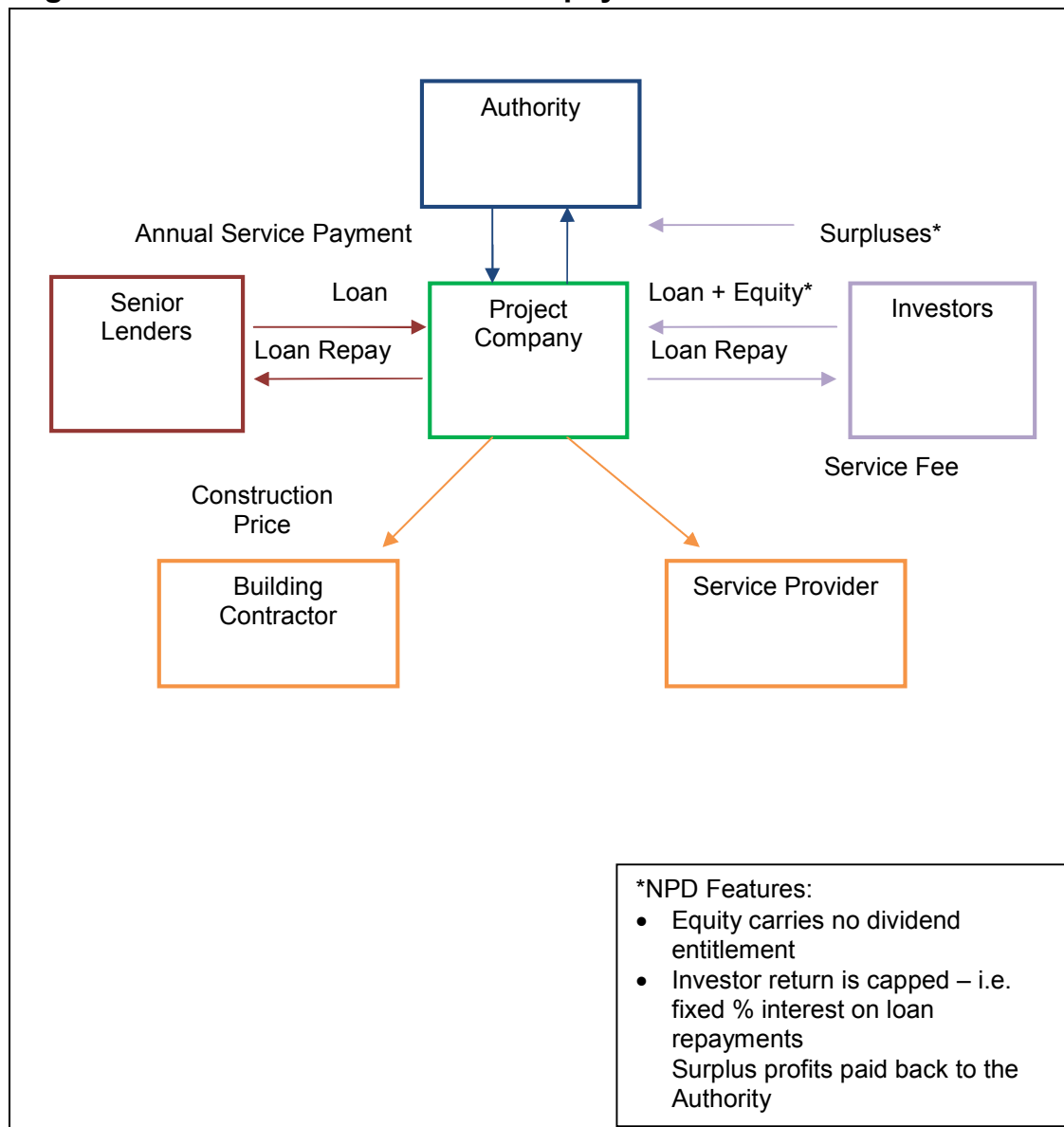
15.1 Overview

15.1.1 This section of the OBC outlines the proposed contractual arrangements in respect of procurement as outlined in the Commercial Case and covers both the NPD and non-NPD elements of the procurement.

15.2 Contractual Issues

15.2.1 A summary of the proposed NPD contract structure and associated payments is provided in the schematic below.

Figure 15- 1: Contract structure and payments



- 15.2.2 It is proposed that the form of contract will follow the standard NPD project agreement with only the minimum necessary derogations as agreed with SFT. The contract will have a 25 year duration post completion of construction and commissioning. It is intended that there will be no provision for breaks/review during this period, in line with the standard NPD approach.
- 15.2.3 NHS Orkney and Project Co. will have specific roles and responsibilities in relation to the proposed deal, which will follow the standard NPD Contract split whereby Project Co. will design, build, finance and maintain the new hospital and healthcare facilities. In terms of maintenance, whilst Project Co. will assume responsibility for hard FM and lifecycle replacement NHS Orkney will retain responsibility for all soft FM services.
- 15.2.4 Any disputes under the contract (other than those expressly excepted) may be referred to a detailed dispute resolution procedure.
- 15.2.5 At the end of the contract the facility will be handed back in accordance with the contract's comprehensive Handback Procedure. This covers the condition of the facilities at the end of the contract, with provision for inspection and completion of any subsequent works required.

15.3 Required Services

- 15.3.1 A summary of the technical scope of works associated with the design, construction and maintenance of the proposed new facilities is provided at Annex 12. It describes the split of the works that will be delivered through the NPD contract and those that will be delivered outwith the NPD contract.

15.4 Proposals for Risk Transfer

- 15.4.1 As part of the risk workshops undertaken during the OBC stage, a risk register has been prepared covering all risks relevant to the project. This outlines the proposed allocation of risks between NHS Orkney and the private sector.
- 15.4.2 The standard PPP Risk Allocation Matrix within the SCIM was used to determine which risks were potentially acceptable to transfer and which were likely to be retained by the Board.
- 15.4.3 Risks associated with the NPD procurement aspects of the project will follow the standard allocation for an NPD project.
- 15.4.4 NHS Orkney will, via the Project Agreement, transfer the relevant risks to the private sector. As part of the ITPD documentation, potential bidders will be required to confirm their agreement to the proposed risk allocation.

15.4.5 A copy of the project risk register is included as Annex 13. Details of the proposals to manage risks are outlined within the Project Management Case.

15.5 Proposed NPD Payment Mechanism

15.5.1 This section describes the charging mechanism that will govern the payments made by NHS Orkney to the NPD operator.

15.5.2 Such arrangements are controlled under NPD and similar projects by a payment mechanism that forms part of the contractual documentation. SFT have provided a standard form payment mechanism, the use of which will form part of the conditions of the provision of revenue support for NPD projects. The NPD Standard will, therefore, form the basis of the mechanism to be used in this project. However, the NPD Standard has been designed on a generic basis for any type of accommodation project and will need to be amended for use in an acute health project such as the Orkney project.

15.5.3 The mechanism calculates the amount per month that will be paid to the operator, based on the annual service payment, indexed as agreed in the contract, converted to a monthly sum from which various deductions may be made if applicable.

15.5.4 Deductions are made where the NPD operator fails to perform services as specified in the contract documents, these being a fixed amount per failure based on the severity of the failure.

15.5.5 Deductions are made where an area of the facility is deemed to be unavailable, or unsuitable for use in terms of, for example, temperature, health and safety or lighting. The size of the deduction is dependent on the importance placed on the area in question, with the facility being divided up into areas each of which is given its own weighting.

15.5.6 The operator is given a period of time to rectify the problem before a deduction is made, and deductions escalate if there is a repeated occurrence.

15.5.7 The NPD mechanism differs in two key areas to those used in previous NHS mechanisms.

- The NPD standard assumes that the Facilities will not be required to be available 24/7 and operates Deductions on the basis of whole days rather than several sessions within a day. This is unlikely to be workable in an operational hospital that is in use constantly;
- In the NHS Standard, the mechanism uses a concept of 'gearing' that increases the value of a calculated deduction by a factor of, for example, three in order to ensure that the deduction acts as sufficient incentive to

restore availability as quickly as possible.

- 15.5.8 It is proposed that the NPD Standard be amended to address the above issues. Such amendments have been agreed with SFT on other NHS NPD projects and so should form acceptable derogations from the NPD Standard. Amendments proposed for the Orkney project will have to reflect the fact that the project, whilst primarily for an acute hospital, also has a significant community element.

15.6 Non NPD Contractual Issues

- 15.6.1 The contractual issues relating to the elements of the project to be procured outwith the main NPD contract includes:

- Site acquisition;
- Enabling works (new site).

Site Acquisition

- 15.6.2 The agreed Heads of Terms are subject to a number of suspensive conditions.

Enabling works

- 15.6.3 The recent offer from OIC to contribute up to £1.5m towards infrastructure costs/works for the project will have a bearing on how and when these enabling works are contracted for and funded.

- 14.6.4 The Council plans to provide a link road between the Scapa and Orphir roads including roundabouts at each of the road ends to the south of the Scapa site as opposed to what the road requirements would be for the Scapa site alone.

- 14.6.5 Discussions are underway with the Council to firm up on the specific proposals/arrangements for accessing the £1.5m funding option and to establish how much of a reduction will be possible in the sums presently included for enabling works within the overall estimated project cost of £[REDACTED].

15.7 Personnel Implications

- 15.7.1 For hard FM services to be delivered by the NPD contractor there will be an opportunity for relevant NHS Orkney staff to transfer under the TUPE regulations. Staff in these services who choose to remain employed by NHS Orkney will be treated in accordance with employment and organisational change policies.

15.7.2 Where staff do not wish to TUPE, redeployment within NHS Orkney would be supported.

15.8 Accountancy Treatment

15.8.1 Further details of the proposed accountancy treatment associated with the project is provided within the Financial Case.

FINANCIAL CASE

16 FINANCIAL APPRAISAL

16.1 Overview

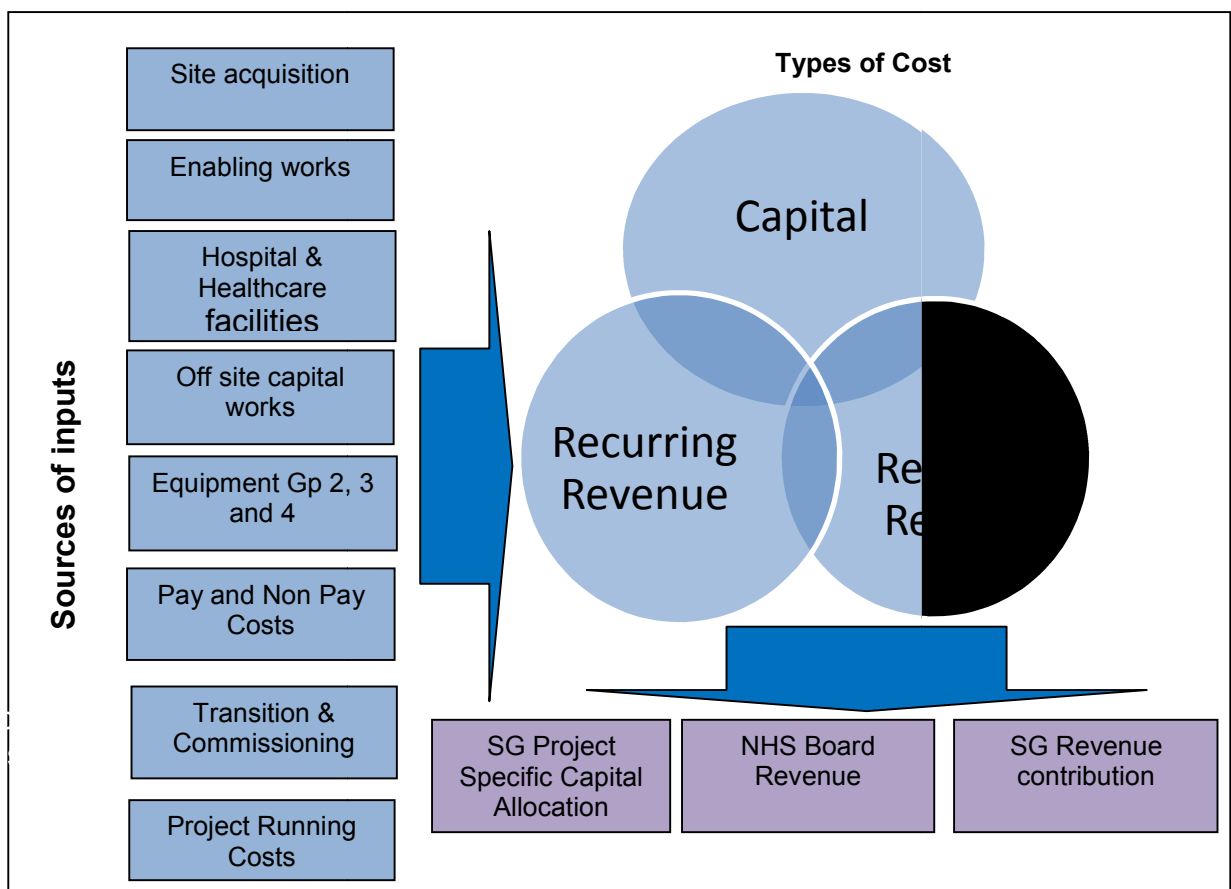
16.1.1 This section of the OBC sets out the financial impact of the preferred option. The primary aim is to demonstrate the overall affordability position for both NHS Orkney and Scottish Government.

16.1.2 The case will highlight the impact of the following:

- Recurring revenue costs;
- Capital costs;
- Non-recurring costs;
- The associated accountancy treatment.

16.1.3 The following case will describe where additional costs are expected, what type of costs these are classified as, clarity on the source of funding and ultimately demonstrate affordability, the diagram below demonstrates these matters:-.

Figure 16- 1: New Hospital and Healthcare Facilities Financial Framework



- 16.1.4 All costs have been identified and generated utilising planning assumptions from the NHS Orkney management team and expert input from external advisors.
- 16.1.5 The cost models described will continue to be reviewed and refined as further detailed work is undertaken.

16.2 NPD Funding Model Overview

- 16.2.1 This project is being taken forward under the Non Profit Distributing funding model (NPD); this is a revenue funded scheme unlike the traditional capital funded route most commonly used in recent NHS Orkney projects.
- 16.2.2 The NPD model was developed and introduced as an alternative to, and has since superseded, the traditional Private Finance Initiative (PFI) model in Scotland.
- 16.2.3 The NPD model is defined by the following broad principles:
- No dividends are payable to shareholders;
 - Capped private sector returns;
 - Surpluses are returned to the public sector;
 - Enhanced stakeholder involvement in the management of projects.
- 16.2.4 The NPD model aims to cap equity returns and limit these returns to a reasonable rate set through competition. The NPD model is not a “not for profit” model – contractors and lenders are expected to earn a normal market rate of return. It aims to retain the benefits of equity-based Public Private Partnership (PPP) structures such as:
- Optimum risk allocation;
 - Whole-life costing;
 - Maximised design efficiencies;
 - Robust programme of lifecycle maintenance and facilities management;
 - Performance-based payments to the private sector;
 - Single point delivery system; and
 - Improved service provision.
- 16.2.5 In practice this means that instead of paying at point of construction for the building, NHS Orkney will enter a contract with an NPD provider who will

design, build, finance and maintain the building for a period of 25 years. Once the building has formally been handed over to NHS Orkney a monthly fee becomes chargeable; this is referred to as the annual service payment and is subject to deductions for availability and performance failures on a monthly basis. No charge is payable until the building is handed over unlike in a traditional capital construction where payments are being made through the duration of the construction phase.

- 16.2.6 At the end of the 25 year contract the building ownership is retained in full by NHS Orkney and the annual service payment is no longer payable. The Board would then be required to make a decision about the continued maintenance of that building.
- 16.2.7 In terms of the funding arrangements set out in a letter from Derek Feeley, Director-General Health and Social Care and Chief Executive NHS Scotland dated 22nd March 2011 the agreed levels of revenue support which will be made available towards the annual service payment, are as follows.

Figure 16- 2: NPD Annual Service Payment funding arrangements

Cost Element	Conditions	SG	NHS Orkney
Construction costs	Subject to agreed scope of project and a construction cost cap which will be set at OBC stage	100%	0%
Private Sector Development costs	Subject to an agreed cap	100%	0%
Financing Interest	At prevailing Financial Close rate	100%	0%
Financing Fees	At prevailing Financial Close rate	100%	0%
Running costs for the SPV during construction	Subject to VFM assessment	100%	0%
Running costs for the SPV during operations	Subject to VFM assessment	100%	0%
Lifecycle maintenance costs		50%	50%
Hard facilities maintenance costs		0%	100%

- 16.2.8 The conditions attached to the funding include amongst other elements the construction cost cap that will apply to the project. This is the expected construction cost including the cost of the buildings, IT infrastructure, Group1 (supply and installation) and 2 (Installation only) equipment and private sector design fees post financial close that the project must deliver within. The Board is expected to deliver the project within the project scope presented.

17 RECURRING REVENUE

17.1 Overview

17.1.1 Recurring revenue expenditure are those costs which NHS Orkney incurs on an ongoing basis to provide health services. They continue to recur year on year until a change is instigated which will remove or reallocate these costs. These are unlike non-recurring costs which are one off and are discussed later in the case.

17.1.2 When considering the recurring revenue implications of this project it is useful to understand the financial context within which it sits. The following table sets out NHS Orkney baseline budget for 2014/2015 at March 2014 prices.

Figure 17- 1a: NHS Orkney Recurring Baseline Budgets

Service Area	£000	WTE Budget
Hospital Services		171.26
Orkney Health and Care		204.32
Pharmacy Services		5.81
Non Discretionary Services		0
Externally Commissioned Services		1.61
Estates and Facilities		60.3
Support Services		68.61
Capital Charges		0
		511.91

17.1.3 The following table sets out from the baseline budgets the services that will be within the scope of the new facilities.

Figure 17- 1b: NHS Orkney Recurring Baseline Budgets: Services in Scope of New Facilities

Service Area	£000	WTE Budget
Hospital Services		171.26
Orkney Health and Care		109.48
Pharmacy Services		5.81
Non Discretionary Services		0
Externally Commissioned Services		1.61
Estates and Facilities		60.16
Support Services		68.61
Capital Charges		0
		416.93

- 17.1.4 The recurring revenue section will focus on the areas where the most significant additional costs are anticipated.
- 17.1.5 The underlying starting assumption is that overall budgets for all areas will be sufficient to allow any service redesign which is required as well as continuing to deliver Cash Releasing Efficiency Savings (CRES).
- 17.1.6 Any changes to this assumption will require to be supported by future financial plans.
- 17.1.7 As will be seen the recurring revenue implications for the project are largely attributable to the NPD annual service payment however there are a number of other costs elements which need considered as part of the overall affordability of the project. These are illustrated below.

Figure 17- 2: Affordability cost elements



- 17.1.8 The areas identified will now be considered in turn identifying the additional investment required and the sources of funding available to deliver this.

17.2 Annual Service Payment

17.2.1 The annual service payment is the estimated monthly cost which will be payable for the design, build, finance and maintenance of the new hospital over the life of the contract.

17.2.2 The Board's appointed financial advisors prepared a Shadow Bid Model. This is a model which aims to estimate the annual service payment that would be agreed with the private sector provider as a result the competitive dialogue procurement.

17.2.3 The following information has been used to produce this model:

- Estimated capital construction costs from Outline Design Cost Plan dated 30 January 2014 which has been produced by the Technical Advisors (Annex 14);
- Estimated lifecycle and hard facilities management costs also identified by our Technical Advisors;
- The value of risks which the NPD bidders may include in their submission prior to mitigation which was calculated as part of the quantification of the risk register at [REDACTED];
- Programme information as currently forecast reflected in the Management Case.
- Funding assumptions as per Annex 15.

17.2.4 The table below shows the key input costs used in the model.

Figure 17- 3: Input costs

Model Input				
Element	M2	£per m2	% rate	Indicative Cost
Base Building Costs	12920	■		■
Clinical Support Services Building	1500	■		■
Site Works, Drainage Utilities etc		■		■
Location Adjustment		■	■	■
Design and Construction Contingency		■	■	■
Professional Fees		■	■	■
Risk from Risk Register		■	■	■
Total cost excluding inflation	14420	■		■
Inflation from Q1 2014 – Q2 2017		■	■	■
Cost including estimated inflation		■		■
Other Input Information				
Lifecycle Costs for Clinical Support Services(CSS) Building and Hospital (inclusive on inflation to FC 1 st Q 2016) £■ for per sqm2 (CSS) and ■ per sqm2 (Hosp)				£■ pa (CSS) £■ pa (Hosp)
FM Costs for Clinical Support Services (CSS) and Hospital (inclusive of inflation to FC 1 st Q 2016) £■ for per sqm2 (CSS) and £■ per sqm2 (Hosp)				£■ pa (CSS) £■ a (Hosp)
Base Building Cost indexed to current day using Forecast BCIS index (2 nd Q 2014)				■
Inflation Mid Point of Construction using Forecast BCIS Index (2 nd Q 2017)				■
Construction Start				Jan 2016
Construction Completion				March 2018
Building Handover (financial modelling assumes ASP payment commences after commissioning in July 2018)				May 2018
Source: Prepared from information received from Sweett Group on Outline Design Cost Plan dated 30 January 2014 this is re-presented to show construction cap. Sweett Group Technical Costing as received is included in Annex 14.				
Total cost excludes VAT and Board fees				

- 17.2.5 The overall estimated total cost of the project is £ [REDACTED] based on the information presented in Figure 17.3. This is the expected construction cost including the cost of the building, IT infrastructure, Group1 (supply and installation) and 2 (Installation only) equipment and private sector design fees post financial close.
- 17.2.6 Inflation which is included in the figure £ [REDACTED] is an estimate of the price movement from current day prices Q1 2014 to midpoint of construction estimated to be Q2 2017. This has been calculated using the most up to date Building Cost Information Service all-in tender price index. The implied inflation allowance is [REDACTED] giving rise to a current estimate of £ [REDACTED] however this will continue to be reviewed as the project moves through the procurement process.
- 17.2.7 Using the inputs and assumptions described, the model produces a base annual service payment of £ [REDACTED] (Q1 2016 prices). This equates to a full first year nominal annual service payment to 31st March 2020 of £ [REDACTED] rising to an estimated £ [REDACTED] in 2043, giving a total nominal cost of £ [REDACTED] over the lifetime of the contract. Using the HM treasury nominal discount rate of 6.09% the net present value (NPV) or cost at Q1 2016 values is £ [REDACTED]
- 17.2.8 The annual service payment rises year on year because the maintenance elements (lifecycle and facilities management costs) as well as the NPD provider's operational running costs are increased annually based on the Retail Price Index (RPI). The balance of the charge remains flat throughout the duration.
- 17.2.9 Further detail on the annual service payment estimate per annum is included in Annex 16.
- 17.2.10 The following table shows the annual service payment and anticipated funding assumptions at current day prices.

Figure 17- 4: Annual service payment analysis

Anticipated Cost	£000
Annual Service Payment (2016 prices)	[REDACTED]
Funding Assumption	
NHS Orkney	[REDACTED]
Scottish Government	[REDACTED]

- 17.2.11 Given the importance being placed on the annual service payment value to identify both the funding that NHS Orkney will receive to support this project and the funding NHS Orkney will require to identify to support this development it is important that the level of variability and therefore inherent

risk within these figures is carefully considered.

17.2.12 A range of sensitivities have been applied to the annual service payment model by the external advisors some of which would present an additional cost to NHS Orkney, some as an additional cost to Scottish Government and some cost to both parties. Annex 17 sets out the sensitivities that have been run.

17.2.13 The table below identifies the key variables that would have most significant impact on NHS Orkney recurring revenue consequences.

Figure 17- 5: Annual service payment sensitivity 1

Change	Sensitivity	Base ASP Impact per annum
Lifecycle and Hard FM rates are more or less than current estimate	+ 10%/-10%	+£ [REDACTED] /-£ [REDACTED] (NHS Orkney share circa £ [REDACTED])
Increase in construction costs as a direct result of a Board change of scope or project delay resulting in timetable impact (this does not include the potential increase in lifecycle and hard FM costs)	+ 10%	+£ [REDACTED]

17.2.14 A number of key variables have a direct impact on the amount of funding which the Scottish Government will be required to support; the table below identifies the key variables that would have most significant impact on Scottish Government recurring revenue consequences.

Figure 17- 6: Annual service payment sensitivity 2

Change	Sensitivity	SGHSCD Impact
Swap rate is different to anticipated at financial close	+ 1%/-1%	+£ [REDACTED] /-£ [REDACTED]
Change in inflation forecast	e.g. +£1m increase	+£ [REDACTED]

- 17.2.15 The challenge for NHS Orkney will be to continue to test all of the design elements to ensure that maximum value for money is delivered for both NHS Orkney and Scottish Government as the sensitivities highlighted above are of significant financial risk to both parties.
- 17.2.16 The input costs per Figure 17.3 are based on the Outline Design Cost Plan dated 30 January 2014 which itself was worked up from the SOA version 6 produced as at 11th December 2013 (see Annex 7.1).
- 17.2.17 Since that time further refinements have taken place to the SOA and version 10 as at 14th February 2014 is now available (see Annex 7.2) and was approved by the Finance and Performance Committee on 18th February 2014 on behalf of the Board.
- 17.2.18 In overall terms the square metre difference in SOA version 10 compared to the metrage in Figure 17.3 is a reduction of 48 square metres area equivalent to a cost reduction circa £ [REDACTED].
- 17.2.19 The refinements to the SOA version 10 have also introduced some redesign features and changes to the adjacencies. All of these are being picked up in revised 1:250 scale reference design drawings which will be available for the Board meeting on 27th February. The 1:250 scale reference design drawings at Annexes 5.1.3 and 5.1.4 are based on SOA version 6.
- 17.2.20 The SFT undertook their first stage independent design review of the reference design for the project in July 2013 and this was followed up by their second stage review on 31st January 2014.
- 17.2.21 The review is an early step in the value for money assessment introduced for the NPD programme to consider whether the project is addressing “needs not wants” and represents value for money for the public purse. The executive summary including the recommendations from the January 2014 review, which was received on 11th February, is attached as Annex 7.3.
- 17.2.22 Within the limited time available it has been possible to include within the OBC certain information which addresses some of the recommendations while others continue to be the subject of discussion between SFT, advisors and the project team.
- 17.2.23 These discussions continue and a full response to the recommendations will be made available to the Capital Investment Group when it considers the OBC on 1st April 2014.
- 17.2.24 In the meantime specific attention is being given to the cost inputs included within Figure 17.3 which identifies the total cost of the project as being £ [REDACTED] including inflation. That total figure also includes a costed risk figure of

£[REDACTED]. Work is ongoing to further refine and firm up the quantification of the risks presently identified.

17.2.25 From the work done to date by advisers the indications at present are that the overall cost figure of £[REDACTED] is at the maximum level. On that basis there will be scope and opportunities for that figure to reduce as the risks and other adjustment allowances such as contingencies, location factor etc are further refined and firmed up over the next few weeks.

17.2.26 The recent offer from OIC to contribute up to £1.5m towards infrastructure costs for the project will also have a positive bearing on the overall cost of the project.

17.2.27 At present the cost inputs in Figure 17.3 provide for certain off-site works which could well be more attributable to the Councils plans to provide a link road between the Scapa and Orphir roads including roundabouts at each of the road ends to the south of the Scapa site as opposed to what the road requirements would be for the Scapa site alone.

17.2.28 Discussions are underway with the Council to firm up on the specific proposals/arrangements for accessing the recent funding offer of £1.5m. This will establish how much of a reduction will be possible in the overall cost figure of £[REDACTED] for the project as a result of reaching agreement with the Council on the cost sharing for the development of the link road arrangements as set out in paragraph 17.2.28 above.

17.2.29 As with the discussions with SFT on the costed risk register etc the discussions with the Council will continue so that the overall cost inputs in Figure 17.3 are further refined and firmed up at a reduced level for consideration by the CIG on 1st April 2014.

17.3 Depreciation

17.3.1 Depreciation reflects the impact of capital expenditure over its useful life.

17.3.2 The costs described in the later capital section will require to be recorded as assets and therefore the depreciation impact of each requires to be considered.

17.3.3 In addition, the accounting treatment described later highlights that NHS Orkney will be required to record the NPD asset constructed on its balance sheet. Depreciation will therefore be chargeable on this asset also.

17.3.4 The current assumptions being used for depreciation are shown below.

Figure 17- 7: Depreciation analysis £000

Future Anticipated Charges	Current	Revised	Change
Existing - Buildings	■	■	■
Capital Costs - Site Acquisition	■	■	■
Capital Costs - Site Clearance Costs	■	■	■
Capital Costs - Equipment Group 2&3	■	■	■
Accounting Treatment - NPD On B/Sheet	■	■	■
TOTAL INCREASE IN DEPRECIATION	■	■	■
Funding Assumption			
NHS Orkney	■	■	■
Scottish Government	■	■	■
TOTAL FUNDING CHANGES	■	■	■
Notes			
1. No depreciation charges are assumed for the following capital works:			
a. Site Acquisition - no depreciation charged on land			
b. External Enabling Works - assumed to be either land enhancement or paid as a capital grant therefore no depreciation chargeable			
c. Site Clearance Costs - no depreciation charged on costs incurred on asset being prepared for sale			
2. The revised equipment estimate is based on an average 8.5 year life			
3. NPD On balance sheet is estimated to have a post impairment value of £■ depreciation estimate based on design life of 60 years.			

17.3.5 As highlighted in the capital section of this case further work is required on the values in relation to equipment. The final value chargeable for depreciation will depend on two elements: the value of equipment finally procured and the life that is considered appropriate to be applied to that asset. This variable is important, by increasing the average life by 1 year on current estimates would reduce costs by £■ however reducing the life by 1 year can increase costs £■. This is therefore a risk that the Board require to be aware of and this will continue to be reviewed as further certainty around the equipment programme becomes available.

17.4 Service Running Costs

17.4.1 The finance work stream, including service managers, have reviewed the staffing implications as a result of the new models of care described within the OBC. The key areas which have been reviewed in this section are:

- Emergency Care Centre;
- High Dependency/Acute/Macmillan;
- Theatres including endoscopy and day surgery;
- Impact of single rooms in the wards;

- Ambulatory care including renal;
- Obstetrics; and
- Rehabilitation/Intermediate Care.

17.4.2 The table below shows the level of investment which is required to deliver the proposed models of care. The only direct additional investment required in staffing terms relates to additional staff for the multi-purpose surgical facility.

17.4.3 Detailed reviews for all other areas have demonstrated that existing establishment levels are sufficient to deliver the revised models of care within existing numbers, although there may be changes to the underlying skills mix within individual departments. Equally the revised floor layouts will allow efficiencies to be delivered, particularly at night when compared with the existing staffing levels.

Figure 17- 8: Staffing

Anticipated Costs	Existing		Revised		Movement	
	WTE	£000	WTE	£000	WTE	£000
Surgical Team	4.84	█	4.84	█	0.00	█
Medical Team	10.00	█	10.00	█	0.00	█
Anaesthetic Team	3.00	█	3.00	█	0.00	█
Obsterics and Gynaecology	2.20	█	2.20	█	0.00	█
Acute Wards	25.86	█	25.86	█	0.00	█
Receiving Unit	12.20	█	12.20	█	0.00	█
HDU	11.20	█	11.20	█	0.00	█
Theatre	16.21	█	19.41	█	3.20	█
Outpatients	0.90	█	0.90	█	0.00	█
Assessment and Rehabilitation	26.52	█	26.52	█	0.00	█
Renal	3.50	█	3.50	█	0.00	█
Maternity	13.82	█	13.82	█	0.00	█
Macmillan	16.29	█	16.29	█	0.00	█
CDU	5.06	█	5.06	█	0.00	█
Pharmacy	5.81	█	5.81	█	0.00	█
Total	157.41	█	160.61	█	3.20	█
Funding Assumption						
NHS Orkney	157.41	█	160.61	█	3.2	█

17.4.4 Not all areas have been reviewed in detail as part of this business case as they are not directly linked to the move to the new facility but they will need to be considered by the Board in the wider context and are likely to present some financial risk. These include:

- Medical Staffing recruitment challenges;
- AHP changes to models of care as a result of National Delivery Plan;
- Changes in working hours and on call arrangements across all professions;
- Impact of Health & Social Care Integration;
- Impact of service redesign through TCS programme and strategic change programme;
- Changes required in community services; and
- Local workforce demographics.

17.4.5 The challenges set out above will be addressed over the 4 years up to the opening of the new hospital, with most, if not all, of the issues identified being resolved through the planning processes including the Local Delivery Plans from 2014 – 2018.

17.5 Facilities Management Services

17.5.1 A matrix of all FM services has been developed by the project's FM work stream. In terms of maintenance, whilst Project Co. will assume responsibility for hard FM and lifecycle replacement NHS Orkney will retain responsibility for all soft FM services.

17.5.2 As a result of the increased floor area and provision of single rooms at the new facility costs are anticipated to increase for domestic services. An additional cost has been calculated using current average costs and assumptions on estimated cleaned area. Further innovative solutions are anticipated in this area as work progresses which are likely to reduce the anticipated costs currently identified of £[REDACTED].

17.5.3 No increase in running costs for the provision of catering are anticipated at this time.

17.5.4 The service delivery model for porters, laundry services and mail room services are being reviewed however costs are not expected to increase.

- 17.5.5 Hard FM services will be carried out by the Project Co. and charged as part of the annual service payment fee. The current budgets associated with providing some elements of these services can be released.
- 17.5.6 There are a number of services which can fall within the scope of either hard or soft FM such as grounds maintenance, landscaping, floor coverings and wall decoration, the current assumption is that these will be retained by NHS Orkney therefore a budget to provide these services requires to be retained.

Figure 17- 9: FM running costs analysis

Anticipated Costs	Existing		Revised		Movement	
	WTE	£000	WTE	£000	WTE	£000
Maintenance including PPM and Grounds	7.00	█	4.50	█	-2.50	█
Domestics	20.88	█	26.00	█	5.12	█
Catering	9.19	█	9.19	█	0	█
Portering	8.47	█	8.47	█	0	█
Laundry	4.00	█	4.00	█	0	█
Clinical Waste Disposal	0	█	0	█	0	█
Telephone Switchboard	5.50	█	5.50	█	0	█
Total	55.04	█	57.66	█	2.62	█
Funding Assumption						
NHS Orkney	55.04	█	57.66	█	2.62	█

17.6 Building Running Costs

- 17.6.1 There are also a number of building related costs which will continue to be payable by NHS Orkney. For the purposes of the OBC traditional solutions have been used as the baseline, as alternative solutions are considered further efficiencies are expected to be generated.
- 17.6.2 Utilities will be delivered through the NPD provider with access to the national negotiated NHS tariffs. The costs will then flow back to NHS Orkney as a pass through arrangement. As it is intended to include this as part of the contractual agreement a VAT saving has been identified as a result of the different procurement route for these services.
- 17.6.3 The existing budget for utilities is releasable to offset the cost of the new facility. At this time the assumption for electric and biomass is that the increased consumption as a direct result of the building footprint will be offset by the much increased efficiency of a new build.

17.6.4 Water consumption is anticipated to increase as a result of flushing requirement associated with the increased number of bathrooms. Indicative costs have been established with input from our Estates and Facilities Department.

17.6.5 Rates for a modern fit for purpose single bedroom building are higher than the current building which receives relief elements for age and functional obsolescence. For the purposes of the OBC indicative costs have been provided by the local valuation office, these will require to be refined as the reference design develops. The £[redacted] increase is significant and falls directly to NHS Orkney.

Figure 17- 10: Building running costs analysis

Anticipated Costs	Existing	Anticipating	Movement
	£000	£000	£000
Rates	[redacted]	[redacted]	[redacted]
Water	[redacted]	[redacted]	[redacted]
Energy	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]
Funding Assumption			
NHS Orkney	[redacted]	[redacted]	[redacted]

17.7 Other Associated Costs

17.7.1 To provide a bus service into the new hospital site a diversion to an existing service will be required. It is considered that a subsidy may therefore be required to make this happen. This issue will be discussed with OIC in the hope that this cost can be avoided however to be prudent at this stage a cost has been included and is shown in the table below.

Figure 17- 11: Other associated costs analysis

Anticipated Costs	Existing	Anticipating	Movement
	£000	£000	£000
Subsidised Bus Route	[redacted]	[redacted]	[redacted]
Funding Assumption			
NHS Orkney	[redacted]	[redacted]	[redacted]

17.8 Summary of Affordability

17.8.1 As described earlier the Scottish Government will be required to support the majority of the annual service payment subject to a number of conditions. NHS Orkney are therefore required to support all the other additional costs.

17.8.2 The Board's commitment to a sustainable future has been mirrored in the pro active approach to financial planning over the last number of years. In anticipation for the change in service delivery the financial plan has recognised the need to release funding on a recurring basis to support the transformation in services and to maintain a balanced budget going forward.

17.8.3 The future financial plans will address any recurring costs. This will also be reviewed for annual uplifts to match inflationary movements.

17.8.4 The following table sets out the total overall source and application of revenue.

Figure 17- 12: Revenue cost summary

Revenue Costs	Existing		Revised		Movement		NHSO £000	SGHSCD £000	Total £000
	WTE	£000	WTE	£000	WTE	£000			
Annual Service Payment	0	█	0	█	0	█	█	█	█
Depreciation	0	█	0	█	0	█	█	█	█
Service running costs	157.41	█	160.61	█	3.20	█	█	█	█
Facilities management	55.04	█	57.66	█	2.62	█	█	█	█
Building running costs	0	█	0	█	0	█	█	█	█
Other costs	0	█	0	█	0	█	█	█	█
Total	212.45	█	218.27	█	5.82	█	█	█	█

17.8.5 The above table indicates that the recurring cost to NHS Orkney will be £█ which is made up of a combination of annual service payment, depreciation, facility and revised service model costs. The estimated revenue gap of £█ will need to be secured through a dual approach of reducing the identified increased cost areas as described in the revenue section and also by releasing additional funding from the Board's Five Year Financial Plan. This will be a challenging task; however, the latest iteration of the Board's Financial Plan has sufficient capacity to fund this gap.

17.9 Conclusion

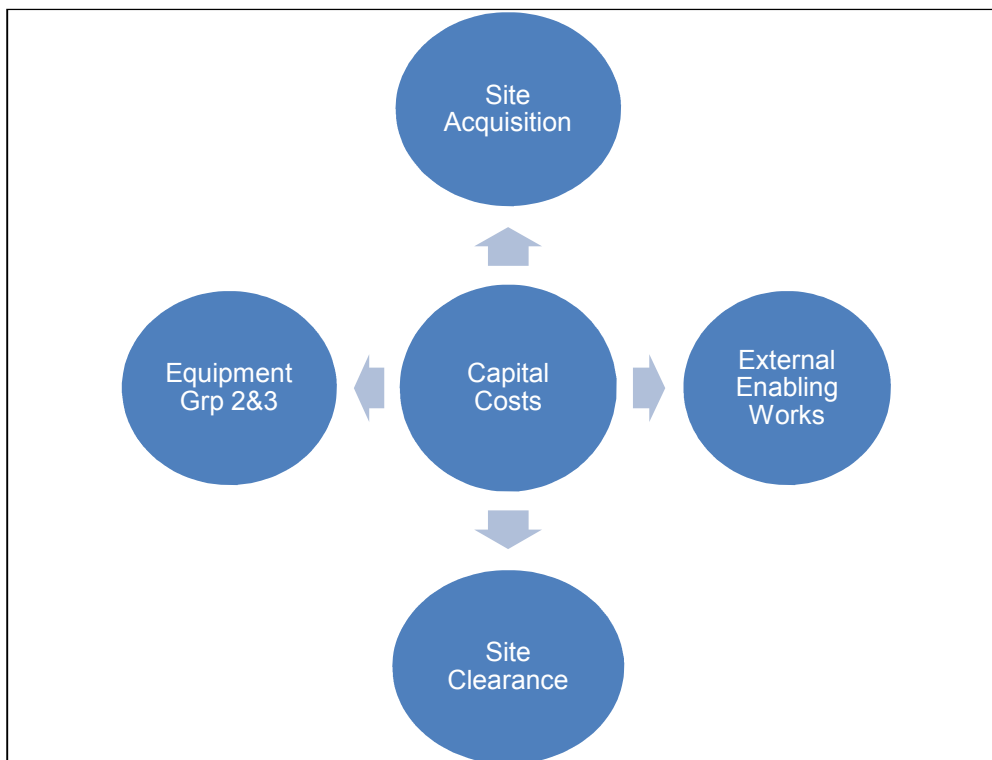
- 17.9.1 The Board has a strong commitment to supporting the development of a new Hospital and related Healthcare facilities for the population of Orkney and has support from both the Scottish Government and community planning partners including the Orkney Islands Council.
- 17.9.2 Based on the information presented above an increase of £[REDACTED] at current day prices is required to take forward this project, this equates to an additional investment of £[REDACTED] for NHS Orkney and £[REDACTED] contribution from Scottish Government.
- 17.9.3 The financial case presents an affordable model for NHS Orkney however given the significant financial implications of this service change considerable financial rigour will need to be maintained to ensure the level of review and challenge continues to close the recurring revenue gap.
- 17.9.4 The Scottish Government have already identified a share of the NPD revenue budget to support the new build project. The challenge for NHS Orkney will be to continue to test all of the service and physical design elements to ensure that maximum value for money is delivered.

18 Capital

18.1 Overview

- 18.1.1 NHS Orkney will receive a formula allocation from Scottish Government of £[REDACTED] for 2013-14 rising to £[REDACTED] in 2014-15. This is used to support rolling programmes in statutory compliance, equipment and IT; in addition this fund also supports the Boards overall estates and property strategy.
- 18.1.2 As demonstrated in the revenue case earlier the substantial part of this project is covered by the revenue financing model however there are a number of different capital works which will require to be completed to deliver the project that sit outwith the scope of the NPD model. Given the limited level of capital funding available locally support is required from the SGHSCD to fund these capital elements.
- 18.1.3 The following section sets out the various elements which require capital funding to complete the project, the timeline of investment required and the anticipated funding source.
- 18.1.4 The total estimated capital requirement is £[REDACTED] and further details of the individual elements are set out below.

Figure 18- 1: Capital cost elements



18.2 Site Acquisition

18.2.1 The site purchase includes the agreed sum payable for the main project site.

18.3 External Enabling Works

18.3.1 New site enabling works relating to services will be secured through contractual arrangements. Road and access improvements will be secured through the NPD contractual arrangements. There may be scope to consider some enabling, but this detail will be agreed during the approvals process.

18.4 Site Clearance Cost

18.4.1 The current working assumption is that the existing site will be cleared and disposed off.

18.5 Equipment Group 2 & 3

18.5.1 Group 2 equipment is normally equipment which is fixed to the building fabric and/or attached to or forming part of the building services, kitchen equipment, laboratory refrigerators for example. Group 3 equipment tends to be free standing and/or mobile equipment, e.g. ventilators and anaesthetics machines.

18.5.2 The current planning assumption for equipment is based on 20% of capital construction costs; this assumes that Group 1 equipment is included within the NPD cost model. Where practical and feasible all moveable equipment, medical and non medical which has not reached the end of its useful life will be transferred.

18.5.3 An initial review carried out by Health Facilities Scotland (HFS) indicates a similar value of equipment purchases however a fully costed model will be developed with HFS along with the designated work streams, the service managers, and the local Medical Equipment Group Capital Investment Group supported by the project team to further refine the actual equipment needs.

18.5.4 This will also take account of transfers envisaged and any impact of managed service contracts and lease arrangements. Further consideration of subsequent revenue implications on capital charges, service contracts, consumables and staffing will be considered in the revenue case.

18.6 Capital Cost Summary

18.6.1 A summary of the total non NPD capital requirements is shown below.

Figure 18- 2: Capital cost requirements

CAPITAL COSTS	TOTAL ESTIMATE £000
Site Acquisition	
External Enabling Works	
Site Clearance Costs	
Equipment New Build: Group 2 & 3 Equipment	
Total Capital Cost including indexation, fees & VAT	

18.6.2 The estimated costs of external enabling works has been set at zero in this table at present for the reasons explained in paragraph 15.6.3.

18.6.3 Capital costs have been prepared at current day prices (Quarter 1 2014) however as these works will not be carried out until future years the baseline costs have been adjusted to recognise the anticipated movement in prices to this time. The Building Cost Information Services (BCIS) forecast indices are the recognised indices used in preparing business cases of this nature. It is important to highlight that these are forecast indices for the purposes of modelling and are likely to change as work packages are tendered for actual delivered prices nearer the time.

18.6.4 VAT at 20% has been included on all elements with the exception of the land purchase where it is not applicable and professional fees where it is currently recoverable.

18.6.5 Professional fees have also been included where appropriate.

18.6.6 The full schedule of capital costs which includes indexation, fee and VAT rates applied to the individual elements along with underlying assumptions is included in Annex 18.

18.7 Optimism Bias

18.7.1 Optimism bias refers to the tendency when evaluating publicly funded projects to overestimate the benefits and underestimate the costs. Evidence indicates

that public sector procurement options typically suffer from optimistic bias in the estimation of costs and benefits.

18.7.2 Given the differing levels of cost certainty at this point in the project, optimism bias has been applied to all capital costs described above excluding site acquisition.

18.7.3 A summary of the total capital requirements including Optimism Bias is shown in the table below.

Figure 18- 3: Total capital requirements

CAPITAL COSTS	Capital Costs inc VAT & Fees	Optimism Bias % applied	Optimism Bias	Capital Cost inc VAT, Fees & OB
	£000		£000	£000
Site Acquisition	██████	██████	██████	██████
Site Clearance Costs	██████	██████	██████	██████
Equipment	██████	██████	██████	██████
Total Capital Cost inc VAT & Fees	██████		██████	██████

18.8 Summary of Capital Affordability

18.8.1 The table below highlights when capital funding is likely to be needed in order to carry out the capital works and the associated funding assumptions.

18.8.2 As previously highlighted NHS Orkney do not have sufficient capital formula allocation to support this level of expenditure it is therefore assumed that project specific funding will be allocated from Scottish Government. This assumption will be reflected in the Board’s five year capital plan which will be submitted as part of the LDP process.

Figure 18- 4: Capital cost summary

Anticipated Costs	2014/ 15	2015/ 16	2016/ 17	2017/ 18	2018/ 19	2019/ 20	Total
	£000	£000	£000	£000	£000	£000	£000
Site Acquisition	█	█	█	█	█	█	█
Site Clearance Costs	█	█	█	█	█	█	█
Equipment	█	█	█	█	█	█	█
Total Capital Cost inc VAT & Fees	█	█	█	█	█	█	█

Funding Assumption	2014/ 15	2015/ 16	2016/ 17	2017/ 18	2018/ 19	2019/ 20	Total
	£000	£000	£000	£000	£000	£000	£000
NHS Orkney	█	█	█	█	█	█	█
Scottish Government	█	█	█	█	█	█	█
Capital Cost inc VAT & Fees	█	█	█	█	█	█	█

18.8.3 A capital receipt from the sale of the existing site has not been included in the capital costs as an offset.

18.8.4 Under the current accounting treatment the receipt would be returned centrally, this is estimated for receipt in 2019/20 or thereafter. Further work is required to firm up on this value for FBC.

18.9 Conclusion

18.9.1 The Board has developed a capital model which identifies all likely capital expenditure which is outwith the NPD model. The estimated cost of £█ is anticipated to be funded by Scottish Government as project specific funding.

19 NON RECURRING REVENUE EXPENDITURE

19.1 Project Running Costs

19.1.1 Costs associated with the in house project team have been included and also professional fees including technical, legal and financial advisors which cannot be capitalised. These costs have been estimated through to the operational phase.

19.2 Commissioning

19.2.1 Non recurring expenditure will be incurred as the new building is commissioned; services transferred and become fully operational. This will include initial cleaning costs, removal and transport costs, patient transport and double running for staff familiarisation, induction and equipment training as well as double running for staff as services operate on a dual site while the transfer is in operation.

19.3 Building Double Running Costs

19.3.1 During the commissioning period essentially two buildings will be operating, charges for rates, biomass, electric, water and depreciation for example will be payable on two sites for this period of time.

19.3.2 Further cost will be incurred on the decommissioning of the existing site once all services have been relocated in preparation for the site disposal this will include security.

19.4 Group 4 Equipment

19.4.1 It is recognised that some of the equipment required for the new hospital will be below the capital threshold of £5k. The current assumption within the OBC is that the capital sum identified includes all equipment including those items less than £5k. When room schedules are developed further an appropriate split of capital and revenue will be more readily identifiable.

19.5 Summary of Non Recurring Revenue Expenditure

19.5.1 The following table identifies the anticipated costs involved.

Figure 19- 1: Non recurring revenue costs summary

NON RECURRING COSTS	2014/ 15	2015/ 16	2016/ 17	2017/ 18	Between 18/19 & 20/21	Total
	£000	£000	£000	£000	£000	£000
Project Team & External Advisors	■	■	■	■	■	■
All other nonrecurring costs	■	■	■	■	■	■
Total non Recurring Revenue Costs	■	■	■	■	■	■

19.5.2 As indicated much more detailed work is required to assess total cost requirements however at this stage early indications show at least £ ■ will be required.

19.5.3 The Board will be seeking to have these costs funded centrally.

19.6 Conclusion

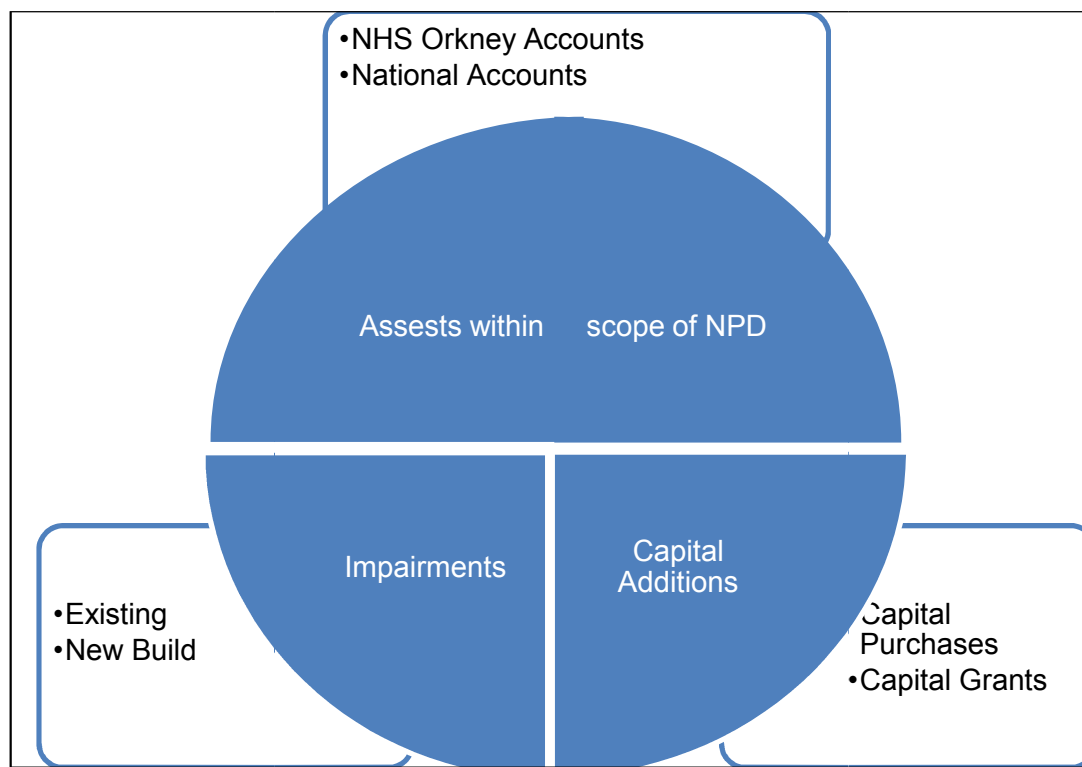
19.6.1 A high level review of non recurring costs has been carried out which indicates that as a minimum £ ■ will be required to cover these costs. The Board will be seeking to have these costs funded centrally.

20 ACCOUNTANCY TREATMENT

20.1 Overview

20.1.1 This section of the OBC sets out the technical accounting issues that arise as a result of this project. The table below highlights the areas which need considered as part of this case:

Figure 20- 1: Accountancy treatment elements



20.1.2 A summary of each element is provided below. Work is ongoing with the Boards appointed external auditors to confirm the assumptions included.

20.2 Assets within the scope of NPD contract

20.2.1 As highlighted earlier within the financial case this project is being taken forward under the Non Profit Distributing funding model (NPD), this is a revenue funded scheme unlike the traditional capital funded route most commonly used in recent NHS Orkney projects. As a result of this the accounting treatment for both NHS Orkney and Scottish Government requires to be considered closely.

NHS Orkney Accounts

- 20.2.2 NHS Orkney is required to prepare annual accounts based on International Financial Reporting Standards (IFRS). An NPD funded project specifically requires to be tested against the guidance set out on Service Concessions (IFRIC12).
- 20.2.3 Having considered the guidance the current assumption is that the new hospital will need to be treated as a service concession. This means that the Board will be required to record this as an asset on the balance sheet.

National Accounts

- 20.2.4 Scottish Government is required to prepare annual accounts based on National Accounting Standards as set out in the Manual of Government Deficit and Debt (MGDD). An NPD funded project specifically requires to be tested against the guidance to consider if the hospital would require to be treated as a Government asset.
- 20.2.5 Having considered the guidance the current assumption is that the new hospital will not be treated as a Government asset and would be considered as similar to an operating lease. This means that the Scottish Government will not be required to record this as an asset on the government balance sheet.

20.3 Capital Additions

- 20.3.1 As described in the capital section of the Finance Case a number of different capital costs will be incurred to support the project.
- 20.3.2 NHS Orkney will be required to record these on the balance sheet as assets with the exception of any expenditure which is to be treated as a capital grant. For example the purchase of land and equipment will be recorded as an asset on Board's balance sheet.

20.4 Impairments

- 20.4.1 Under IFRS an asset must be impaired in the Boards accounts if the value it is recorded at is higher than it is now valued to be worth. The current assumption is that the following impairments will require to be recognised:
- The existing Hospital and Healthcare Facilities;
 - The new Hospital and Healthcare Facilities.

20.4.2 The table below gives an indicative view on values and the assumptions around funding however these will require to be refined as the external auditors' opinion becomes available and the most current valuations are available.

Figure 20- 2: Impairments

Impairment	Timing	Financial Year	Estimate £m	Funding Source
Existing Facilities	Financial Close	2015/16	■	SGHSCD as part of Annually Managed Expenditure (AME)
New Facilities	Financial Handover	2018-19	■	SGHSCD as part of Annually Managed Expenditure (AME)
Note: These values require to be firmed up with external audit once further clarity is available				

20.5 Conclusion

The accounting treatment contains a number of working assumptions which are currently being considered by the Boards external auditors.

It is assumed that the new hospital and healthcare facilities will be on balance sheet for NHS Orkney purposes however off balance sheet for national accounting purposes.

Further work with external auditors and independent valuers is required to firm up values and timing of impairments.

MANAGEMENT CASE

21 PROJECT MANAGEMENT & PROJECT IMPLEMENTATION TIMETABLE

21.1 Overview

21.1.1 This section of the OBC sets out the arrangements in place to manage the project to successful delivery. The areas covered include:

- Project management strategy and methodology;
- The project framework;
- Project roles and responsibilities;
- The project plan, showing the high level timetable for the project;
- Project communication and reporting arrangements; and
- Arrangements for independent project assurance through the Key Stage Review process.

21.2 Project Management Strategy and Methodology

21.2.1 This project supports the principles of project and programme management to ensure that the project is successfully delivered. The New Hospital and Healthcare Facilities Project sits within a range of wider changes to the health system within Orkney, under the banner of NHS Orkney's service redesign programme, Transforming Clinical Services. Reflecting this, and the Board's small management team, The New Hospital and Healthcare Facility Project, eHealth project, CT scanner project and a range of other services redesigns are brought together in one Programme Implementation Board.

21.2.2 Clear and appropriate project governance arrangements are fundamental to the success of the project. The governance arrangements adopted, taken together with the procurement strategy and the resources deployed to support the project, must ensure that NHS Orkney is able to procure the new hospital and healthcare facilities in an efficient and effective manner, whilst also allowing adequate scrutiny at key decision points.

21.2.3 It is the responsibility of the Board of NHS Orkney to ensure that an appropriate and robust governance structure is put in place for the project. Project governance arrangements have recently been reviewed within the wider context of the Board's overall governance framework to ensure that they are fully aligned to the proposed procurement strategy.

21.2.4 The governance structure must be fully reflective of the revenue financed NPD procurement route being followed in relation to the new hospital and should also recognise that the Board will be identifying a private sector partner with which it will engage on a daily basis for the next 25 years as a minimum. The Board's Scheme of Delegation has now been formally changed to ensure clarity of decision making authority at key points in an NPD project.

21.3 The Project Framework

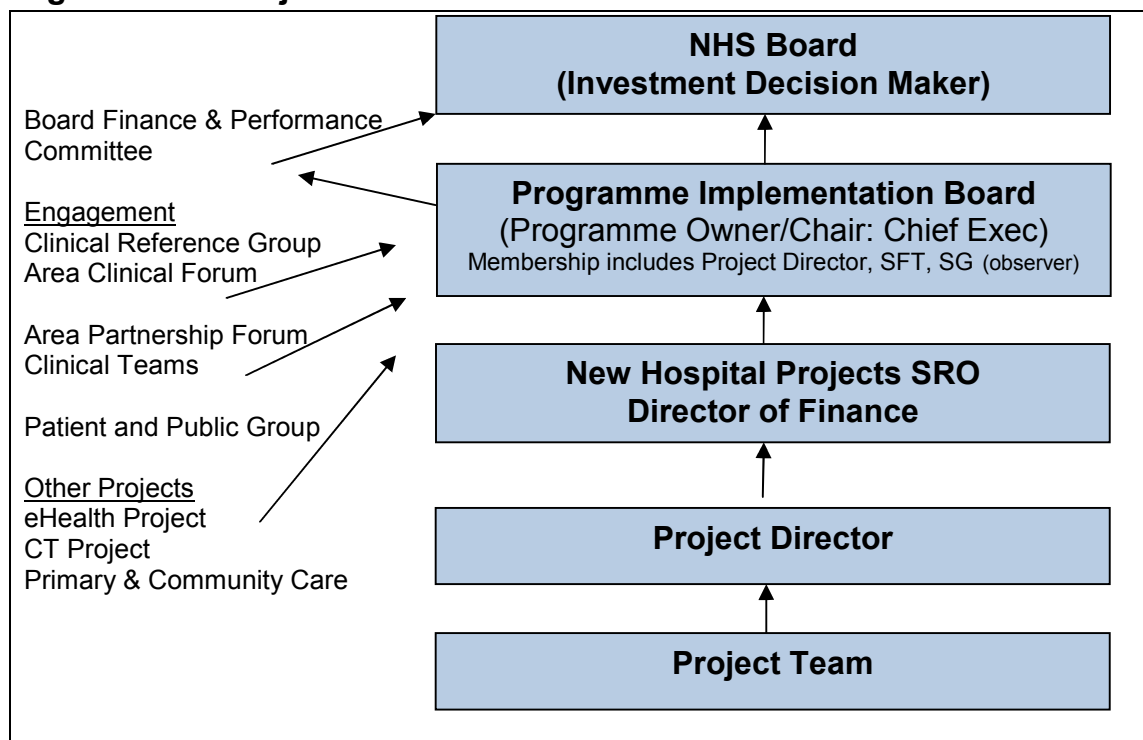
21.3.1 This project is governed through the Transforming Clinical Services Programme Implementation Board (PIB) which reports to the Board of NHS Orkney which has overall responsibility for this project as Investment Decision Maker

21.3.2 The Finance and Performance Committee performs a scrutiny role in support of the Board

21.3.3 The diagram below sets out:

- The overall programme structure;
- How the Programme Implementation Board and the Project Team for the new Hospital and Health Care Facilities Project fit into this structure;
- The key roles for the new Hospital and Healthcare Facilities Project including the Project Sponsor and Project Director; and
- The key supporting mechanisms.

Figure 21- 1: Project Structure



21.4 Project Roles and Responsibilities

21.4.1 The detailed roles and responsibilities within the project structure are set out below covering:

- Structures within the project;
- Individual roles within the project structure; and
- External advisers.

Structures within the Project

21.4.2 The detailed roles and responsibilities of the Boards and Teams within the project structure are set out in the table below.

Figure 21- 2: Project roles and responsibilities

Team or Group	Role and Responsibilities
<p>Orkney NHS Board – The Investment Decision Maker (IDM)</p>	<p>It is essential that there is a clearly identified body with responsibility for approving the investment. The NHS Orkney Board is the Investment Decision Maker (IDM) for the project and as part of this is responsible for deciding what financial and other resources to invest in the project. The Board considers whether the project fits with the strategic direction that it is developing.</p> <p>The Board also needs to be satisfied that the project is affordable throughout its life. The Board should also be satisfied that the project represents value for money in the context of the available funding. Ultimately the Board is accountable for the successful delivery of this project. The Board ensures that an appropriate governance structure is put in place, and that adequate resources have been deployed including appointing the Project Sponsor.</p> <p>The Board has approved a formal Scheme of Delegation that will allow certain of its responsibilities to be exercised at other levels within the organisation. The Scheme of Delegation has been drawn up for this project and therefore reflects the NPD procurement process and the key decision making points that are required.</p> <p>A vital part of the Board’s role as Investment Decision maker, and which will not be delegated, will be to approve the selection of the Private Sector Partner at the</p>

Team or Group	Role and Responsibilities
	<p>conclusion of the bidding exercise. The Private Sector Partner will be responsible for the design (to completion), construction, finance, maintenance and life cycle replacement of the new hospital building over a period of at least 25 years.</p>
<p>Finance and Performance Committee</p>	<p>Whilst the NHS Board is the Investment Decision Maker and as such retains responsibility for the most major decisions, more detailed scrutiny is undertaken by the Board's Finance and Performance Committee. The committee makes recommendations to the Board on key issues such as the appointment of a Preferred Bidder and the approval of the Project Agreement. The Scheme of Delegation makes clear what authority is being delegated to the committee.</p> <p>This arrangement also limits the time needed for detailed project scrutiny at NHS Board meetings and therefore allows the normal business of the Board to continue without the meetings being dominated by discussion about the project. Detailed scrutiny of issues at the Finance and Performance Committee also gives the full NHS Orkney Board confidence in the progress of the project.</p> <p>The Executive Project Sponsor is a key member of the Finance and Performance Committee.</p> <p>The frequency and timing of Finance and Performance (F&P) Committee meetings normally be matches that of Board meetings. On occasions, however, the procurement timescale of the project requires that meetings are held more frequently and additional meetings are therefore very likely to have to be called at crucial stages in the project and possibly at short notice.</p>
<p>Programme Implementation Board (PIB)</p>	<p>The PIB takes decisions in areas delegated to it through the Scheme of Delegation, and will make recommendations to the Board or F&P committee, on other issues where it does not have delegated authority.</p> <p>PIB membership has been agreed by the Project Sponsor and includes the Project Director.</p>

Team or Group	Role and Responsibilities
	<p>The PIB has a wide range of senior membership from a variety of stakeholders in the new hospital and healthcare facilities building project, including management with responsibility for the services and clinicians providing the services.</p> <p>The Scottish Government is represented as an observer. The Scottish Futures Trust is represented on the PIB.</p> <p>The PIB is responsible for reviewing the risk register at regular meetings taking due consideration of the red risks highlighted along with the proposed mitigating actions.</p> <p>The Project Director brings a high level report on project progress to each meeting. This report identifies issues where decisions are required and those issues that are delaying progress on the project.</p> <p>The PIB ensures that the role of external advisers is clear and that their involvement in the project is appropriate and complementary to that of the Board's own staff resources, whilst recognizing that the Board's staff resources are limited.</p> <p>The PIB will also ensure that the involvement of the advisers stops short of them taking on a leadership role.</p> <p>The remit of the PIB covers the entire range of issues that needs to be addressed in the project.</p> <p>The PIB is chaired by the Project Owner and meets monthly with more frequent meeting where required.</p>
Project Team	<p>The Project Team is a small group of individuals who work largely full time on the project and their role is to ensure that the New Hospital and Healthcare Facilities Project is managed successfully throughout all stages of the project so that all project objectives are met and all benefits are realised. The Project Team is further supported by key individuals whose particular expertise and knowledge is essential to the project.</p> <p>The Project Team is led by the Project Director. In addition</p>

Team or Group	Role and Responsibilities
	<p>to their specific functional roles and specialism members of the Project Team have an overarching responsibility to ensure that all relevant stakeholders are fully engaged in the project through the delivery of change plans and an agreed strategy for:</p> <ul style="list-style-type: none"> • Communication; • Risk management; • Change control; • Quality assurance; • Planning; • Business case development; • Programming; • Design; • Procurement; • Construction; • Commissioning and • Post occupancy evaluation activities. <p>The Project Director and the project team attend all PIB meetings.</p>

Individual roles within the Project Structure

21.4.3 The detailed roles and responsibilities of the key individuals within the project structure are set out in the table below.

Figure 21- 3: Individual roles and responsibilities

Individual	Role and Responsibility
Project Owner	<p>The Project Owner represents the NHS Orkney Board and has responsibility at a strategic level for the successful delivery of the project. The Project Owner has delegated authority in some areas. The Project Owner provides direction and strategic leadership for the project and as such is accountable to the NHS Orkney Board.</p> <p>The Project Owner's involvement in the project, whilst not on a full time basis, is not be split or shared amongst a number of</p>

Individual	Role and Responsibility
	<p>individuals. There is no ambiguity about who is fulfilling the role of Project Owner.</p> <p>The Project Owner ensures that the Board receives regular reports on project progress and is alerted to issues that risk blowing the project off course. The Project Owner is responsible for alerting the Board if the project is likely to be delayed or has other major difficulties, such as additional demands on NHS Orkney finance. The Project Owner also chairs the PIB.</p> <p>Notwithstanding the involvement of others at a senior level in the project, the Project Owner retains personal responsibility for the success of the project. It is the responsibility of the Project Owner to appoint a suitably senior and named individual as a Project Sponsor.</p> <p>Owing to the project's importance and scale, the Board's Chief Executive has been identified as the Project Owner for the project. The Chief Executive is also the overall Executive Sponsor for the Transforming Clinical Services Programme.</p>
Project Sponsor	<p>Recognising the importance, scale and complexity of this project it requires a Project Sponsor, who is appointed by and reports direct to the Project Owner. The Project Sponsor provides more direct input to the project than can be expected of the Project Owner and ensures that the project is sufficiently resourced.</p> <p>While the input of the Project Sponsor is on a part time basis, an important responsibility of the Project Sponsor is to provide support and direction to the Project Director.</p> <p>The Project Sponsor role is not split or shared between individuals.</p> <p>The Board's Director of Finance has been identified as the Project Sponsor.</p>
Project Director	<p>Appointed by the Project Sponsor this is a full time role with a considerable degree of authority and responsibility for driving the project forward on a day to day basis by providing the project with visible leadership.</p>

Individual	Role and Responsibility
	<p>In light of the proposed procurement arrangements for the project the Project Director must have experience of procuring revenue funded projects i.e. PPP/PFI/NPD. It is very important that NPD skills are not provided exclusively by advisers.</p> <p>The Project Director is the senior individual working on the project on a full time basis and has support from a team of individuals working on the project either on a full-time or part-time basis.</p> <p>The Project Director brings reports on project progress and issues requiring decision to the Project Board and is accountable to the Project Sponsor.</p> <p>The position of Project Director is currently fulfilled by an interim appointee on secondment from the Scottish Futures Trust. The Board has embarked on the process of making a substantive appointment to the post.</p>

External Advisers

- 21.4.4 The Project team is supported by external advisers providing technical, financial, healthcare planning and legal advice to the project.
- 21.4.5 Following formal procurement processes the following appointments have been made from SFT frameworks or, with respect to Health Care Planners, from the Health Facilities Scotland framework
- Technical advisers – Sweett Group;
 - Financial advisers – Caledonian Economics;
 - Legal advisers – MacRoberts;
 - Healthcare planning advisers – Buchan and Associates.
- 21.4.6 Sweett Groups role is initially focused on assisting with the preparation of the reference design but will also provide support throughout the NPD procurement process.
- 21.4.7 In undertaking this role they have a Technical Advisory Team covering the following roles and responsibilities through to financial close:

- Client and lead Technical Adviser;
- Architectural and Design Services;
- M&E / C&S Engineering;
- Traffic and Transportation Issues;
- Cost Consultants; and
- Business Case Support.

21.4.8 Caledonian Economics are the Board's financial advisers, responsible for the preparation of the shadow bid model, financial modelling and project finance advice up to and including financial close.

21.4.9 MacRoberts are the Boards legal advisers, responsible for legal advice in relation to the NPD procurement up to and financial including close. The Central Legal Office are responsible for title checks on the Scapa site and for concluding missives for the purchase of the site. MacRoberts and the CLO are in direct contact where this is required.

21.4.10 Buchan and Associates are the Board's healthcare planning advisers responsible for finalising clinical output specifications, the related schedule of accommodation and adjacencies. They will also liaise with the architects preparing the reference design who are Archial part of the Sweett Group technical adviser team, Buchan and Associates will also support the project throughout the PQQ evaluation and competitive dialogue stages of procurement

21.4.11 As noted earlier in the OBC the Board are working in partnership with Orkney Islands Council to ensure that all planning issues are considered and addressed at an early stage. The planning application notice procedure and consultation has been completed and a Planning in Principle application is expected to be submitted in early March 2014.

21.5 Project Plan

21.5.1 A summary of the key milestones for the project is provided in the table covering the period from OBC submission through to commissioning and operation of the new hospital. A full programme is provided at Annex 19.

Figure 21- 4: Key project milestones

Milestones	Expected Date
OBC approved by NHS Orkney Board subject to Planning in Principle	27 th February 2014
OBC submission to SGHSCD Capital Investment Group	4 th March 2014
OBC approved in principle by SGHSCD Capital Investment Group subject to Planning in Principle	1 st April 2014
Planning in Principle application to be considered by Planning Authority	4 th June 2014
NPD OJEU notice published	June 2014
NPD PQQ response evaluated	September 2014
Issue of NPD ITPD	October 2014
Down select from 3 to 2 bidders	March 2015
Conclude NPD Competitive Dialogue	June 2015
Purchase of site	Between April and July 2015
Final tender submission	July 2015
Selection of NPD Preferred Bidder	September 2015
NPD Financial Close	January 2016
New hospital construction start	Jan/Feb 2016
New hospital construction completion	March 2018
New hospital construction commissioning and handover	May 2018
Completion of hospital equipping, commissioning and service migration to new hospital. Assume ASP payments commence	July 2018
Final completion of all service migration to new hospital and first patients at new hospital	August 2018

21.6 Project Communication and Reporting Arrangements

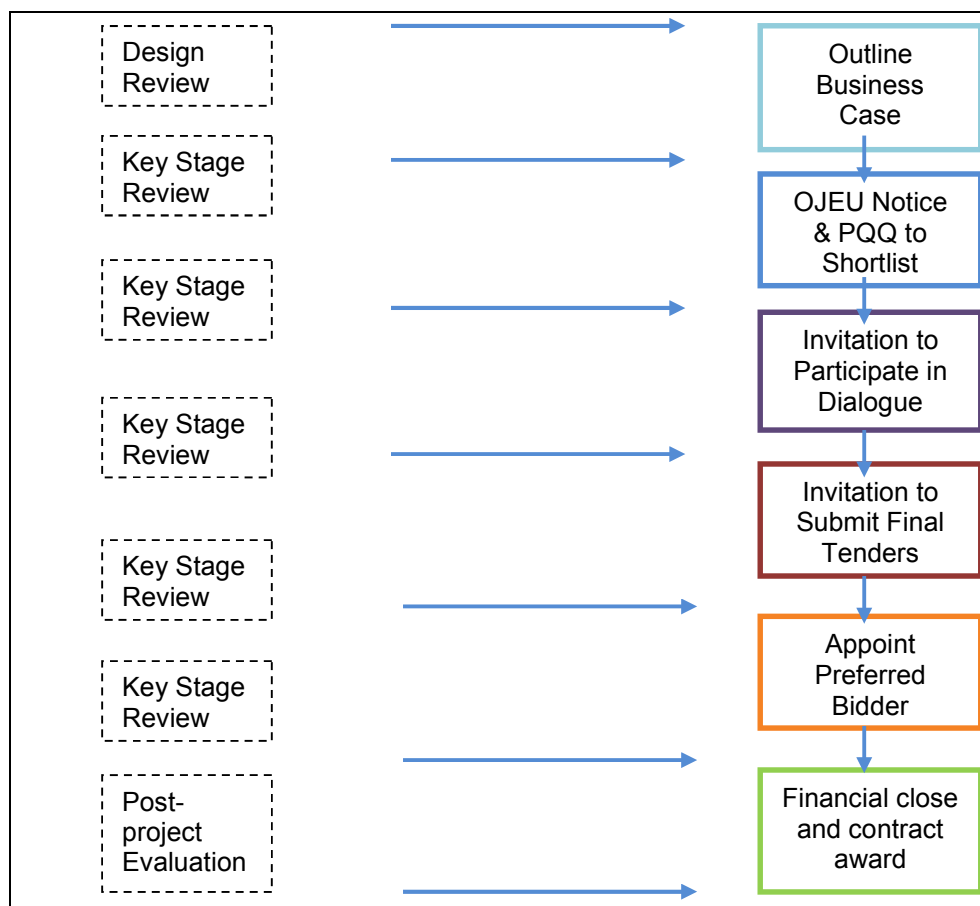
21.6.1 The Board has developed a formal Communication Strategy which sets out the New Hospital and Healthcare Facilities Project's aims and objectives for all aspects of communications, both internal and external and key actions to achieve these. A copy of the strategy is provided at Annex 20.

21.7 Key Stage Reviews

21.7.1 In line with the Scottish Government communication issued on 6 July 2012 for projects being delivered either through the hub Initiative or via NPD the Key Stage Review (KSR) processes will be used to assess these projects going forward.

21.7.2 All projects in the revenue funded programme are, in addition to any existing project approvals processes, externally validated by the Scottish Futures Trust (SFT). SFT undertakes validation by carrying out Key Stage Reviews (KSRs) of projects at key stages of the procurement. A summary of the review process is provided in the diagram below.

Figure 21- 5: NPD procurement journey and KSRs



21.7.3 The Key Stage Review process requires five standard reviews at the following stages:

- KSR1 – Pre-issue of OJEU;
- KSR2 – Pre-issue of ITPD;
- KSR3 – Pre-Invitation to Submit Final Tenders;
- KSR4 – Pre-Appointment of Preferred Bidder; and
- KSR5 – Pre-Financial Close and Contract Award.

21.7.4 In addition to the formal KSR's, in advance of OBC approval a Design Review has been undertaken to establish the value for money offered through the reference design for the project. In line with the requirements of the Scottish Capital Investment Manual (SCIM), formal Post Project Evaluation will also be required (further details are provided within Section 22 of the OBC).

MANAGING SUCCESSFUL DELIVERY

22.1 Overview

22.1.1 This section of the OBC is primarily focused on demonstrating how the Board anticipates managing the successful delivery of the New Hospital and Healthcare Facilities project. Specifically it outlines the strategy, framework and plans relating to:

- Proposals for the management of change
- Benefits realisation planning
- Proposals for managing key project risks
- Arrangements for post project evaluation

22.2 Change Management Plan

Change Management Philosophy

22.2.1 The delivery of a new Rural General Hospital for Orkney will be the final step in delivering a transformed care delivery model, which will meet the needs of our population in the years to come. In its Clinical Implementation Plan “Transforming Clinical Services”, the Board outlined its service redesign plans to enable care to be delivered closer to home, and ensure a shift in the balance of care from acute to community services. The change to the physical infrastructure is simply an enabler to a more fundamental change in the way that healthcare services will be delivered across NHS Orkney. The Board is committed to ensuring that the new hospital embodies new ways of working that put the patient at the centre of care and break down departmental barriers where these exist.

22.2.2 The impact of the change will be fundamental. The following table summarises some of the main impacts of the changes across four areas.

Figure 22- 1: Impact of change

Area	Impact
Culture	The Board's Clinical Change strategy 'Our Orkney Our Health' is intended to shift the balance of care from a focus on acute services to the development of seamless patient pathways which span the spectrum of prevention, primary care, acute care and social care services. This will be supported by increased multi disciplinary working facilitated by the correct clinical adjacencies and co-location of a range of staff groups. Additionally, a focus on building productive relationships with patients, the community and partner agencies such as those in the third sector will be central to creating a successful model of care in the new facility.
Systems	Systems will be more responsive and geared to supporting the new models of care, both within the hospital and across acute and community/primary care. In particular more emphasis will be placed on electronic forms of communication and effective handover between acute and community/primary care to make the patient experience seamless. There will be a fully electronic patient record within the new facility, supported by electronic self check in for patients and a community platform within interfaces into acute and primary care to enable the co-ordination of care by a lead individual. Communications will also be in place to support the swift transfer of information relating to laboratory and radiology results to aid clinical decision making.
Processes	The proposed models of care will introduce new clinical processes such as the repatriation of some services that the current infrastructure does not allow due to current limitations in Theatre time and the unsuitability of available spaces. The new physical environment will facilitate improvements in the patient experience which cannot be achieved within the existing building in particular in relation to privacy and dignity and the single room complement will by and large eliminate the requirement for bed moves.
People	There will be changes to roles and responsibilities, particularly for clinical staff where the clinical adjacencies allow more efficient and effective integrated working. Some of this will arise from the changes in clinical processes within the hospital and healthcare facility, whereas other changes in roles will come from the way the

Area	Impact
	<p>focus of care will shift to pathway based care. The new facility and improved working environment will undoubtedly have a positive effect on the workforce and indeed the morale of the workforce, however the challenge of facilitating a move from one facility to another should not be underestimated. In order to prepare for this move there are a number of critical service redesigns and improvements which need to be achieved. This range of improvements will be programme managed and supported by the Transforming Clinical Services team, with input from the HR, Health Intelligence and Clinical Governance departments as appropriate.</p>

22.2.3 In light of the impact of these changes, the Board’s change management philosophy is to:

- Recognise the significance of the change;
- Take the opportunity to improve the quality of healthcare; and
- Implement the change in a structured and well managed way through an already established programme of work.

Change Management Principles

22.2.4 The Board is developing a series of principles that will underpin the change process.

22.2.5 The principles established to date are to:

- Recognise the need to work with patients and staff to ensure service changes reflect future need, are sustainable and maximise the benefits achieved.
- Take a staged approach to implementing the change programme, building the skills and capacity of the organisation to support continuous improvement, recognising that improving the quality of healthcare will be of ongoing long term importance way beyond the move to a new facility.
- Identify and pilot new ways of working where possible, using improvement methodologies to undertake small tests of change, informed by measurement and feedback from patients and staff.
- Implementing changes which can be achieved within the existing facility

ahead of the move to a new building ensuring new behaviours and ways of working are well established.

- Work in partnership with staff and other stakeholders both within and outside the hospital to inform, engage and involve all those involved in the delivery of care in the change process, learning from their feedback and focusing on prioritizing what matters to them.
- Focus on staff skills and development required to support the Quality Ambitions and 2020 Vision for Health and Social Care ensuring staff are both capable and empowered to deliver healthcare effectively and to a high quality standard in the new facility through new models of care and continuous improvement.

22.3 Approach to Change Management

22.3.1 The process of whole system change will be led by Transforming Clinical Services Programme Implementation Board, under the banner of the Transforming Clinical Services Programme. The TCS Programme Manager will be responsible for leading, managing and implementing the Change Management Programme on a day to day basis supported at a strategic level through the Chief Executive who is the Programme Sponsor.

22.3.2 The Programme Plan will be updated on a monthly basis and reported to the PIB for monitoring purposes supported by the high level Programme risk and issue logs.

22.3.3 Management of stakeholders throughout the change management process will be carried out in accordance with the Programme Communication and Engagement Plan which will be subject to quarterly review.

22.4 Benefits Realisation Planning

22.4.1 Benefits management is the overarching process which incorporates the Benefits Realisation Plan (BRP) as part of a process of continuous improvement. It takes due account of changes in the project during the delivery phase which impact on, or alter the anticipated benefits.

22.4.2 In developing the BRP the Board has sought to ensure that stakeholders are at the centre of the benefits realisation process. In this regard members of the Project Team have engaged with wider clinical and non-clinical stakeholders to identify the benefits which will be realised through this project. These are provided in Annex 2.

22.4.3 As part of the further development of BRP the Board will agree baseline measures reflecting the current status of each benefit area and the timeline for

attaining the anticipated full realisation of the benefits. This will also be linked to the Change Management Plan to provide assurance on delivery.

22.5 Risk Management Plan

22.5.1 This section of the OBC sets out Orkney's approach to the management of risks associated with the project incorporating:

- Risk management philosophy;
- Risk identification and quantification; and
- The approach to risk management.

Risk Management Philosophy

22.5.2 The Board's philosophy for managing risks considers effective risk management to be a positive way of achieving the project's wider aims, rather than a mechanistic exercise, to comply with guidance. Inadequate risk management would reduce the potential benefits to be gained from the project.

22.5.3 The Board recognises the value of an effective risk management framework to systematically identify, actively manage and minimise the impact of risk. This is done by:

- Having, clear governance arrangements, strong decision making processes supported by a clear and effective framework of risk analysis and evaluation;
- Identifying possible risks before they crystallise and putting processes in place to minimise the likelihood of them materialising with adverse effects on the project;
- Putting in place robust processes to monitor risks and report on the impact of planned mitigating actions; and
- Implement the right level of control to address the adverse consequences of the risks if they materialise.

Risk Identification and Quantification

22.5.4 A series of risk workshops were undertaken incorporating, members of the Project Team, the external advisers as well as a cross section of NHS Orkney staff.

22.5.5 The initial activities focused on establishing a range of project risks reflecting the scope of the project as well as the likely procurement route. Primary risks were identified across a range of categories incorporating:

- Clinical risks;
- Contractual risks;
- Design risks;
- Enabling works risks;
- Equipping risks;
- FM risks;
- Land acquisition risks;
- Legal risks;
- Procurement risks; and
- Project management risks.

22.5.6 These risks were further allocated across a range of categories depending on where these risks would apply within the overall structure of the project. These include:

- The phase of the project to which they apply;
- Those that would have a major impact on the cost of the project; and
- The ownership of the risks including those which can be transferred to the NPD contractor.

22.5.7 Each risk has subsequently been assessed for its probability and impact, and where relevant its expected value. Where risks have been valued this has resulted in the following key outputs:

- A risk value of £[REDACTED] is attached to risks transferred to the NPD operator via the standard form NPD contract. These risks will be priced by the bidders involved in the procurement process and would form part of their overall financial proposals. This value is included, therefore, within the input costs used to derive the shadow annual service payment as described within the Financial Case.
- A risk value of £[REDACTED] is attached to risks retained by the public sector a proportion of which would result in an increased cost of the project.

22.5.8 The risk register is maintained as a dynamic document and updated at key milestones or as the need arises with the risk profile for the project kept under constant review. The top risks are reported to the Project Board on a bi-monthly basis and to the Audit Committee every six months.

22.5.9 A copy of the full Risk Register is provided at Annex 13.

Risk Management

22.5.10 The risk register incorporates details of risk owners and appropriate counter measures to manage the Board's exposure to the risks and this will be maintained and updated throughout the procurement process.

22.5.11 A risk sub-group has been established with responsibility for the management of the risk process including ongoing assessment and quantification of risks. The group will also review and develop the management strategies associated with the risks. This group comprises members of the Project Team as well as the Board's Technical and Financial Advisors.

22.6 Proposals for Post Project Evaluation (PPE)

22.6.1 The Board is committed to ensuring that a thorough and robust post-project evaluation is undertaken at key stages in the process to ensure that positive lessons can be learnt from the project.

22.6.2 Scottish Government has published guidance on PPE, which supplements that incorporated within the Scottish Capital Investment Manual (SCIM). The key stages applicable for this project are set out in the table below:

Figure 22- 2: The four stages of PPE

Stage	Evaluation Undertaken	When Undertaken
1	Plan and cost the scope of the PPE work at the project appraisal stage. This should be summarised in an Evaluation Plan	Plan at OBC, fully costed at FBC stage
2	Monitor progress and evaluate the project outputs	On completion of the facility
3	Initial post-project and evaluate the project outputs	Six months after the facility has been commissioned
4	Follow up post-project evaluation (<i>or post occupancy evaluation – POE</i>) to assess longer-term service outcomes after the facility has been commissioned. Beyond this period, outcomes should continue to be monitored. It may be appropriate to draw on this monitoring information to undertake further evaluation after each market testing or benchmarking exercise	Two years after the facilities have been commissioned

22.6.3 Within each stage, the following issues will be considered:

- The extent to which relevant project objectives have been achieved;
- The extent to which the project has progressed against plan;
- Where the plan was not followed, what were the reasons; and
- Where relevant how plans for the future project should be adjusted.

22.6.4 The Project Owner will be responsible for ensuring that the arrangements have all been put in place and that the requirements for PPE are fully delivered. The Project Director will be responsible for day to day oversight of the PPE process, reporting to the Project Owner and Project Implementation Board.

22.6.5 The Project Owner and the Project Director will set up an Evaluation Steering Group (ESG), which will:

- Represent interests of all relevant stakeholders;
- Have access to, professional advisers who have appropriate expertise for advising on all aspects of the project.

22.6.6 The Project Director will coordinate and oversee the evaluation. Their key principle is that the evaluation is objective.

22.6.7 The Evaluation Team will be multi-disciplinary and include the following professional groups, although the list is not exhaustive:

- Clinicians, including consultants, nursing staff, clinical support staff and Allied Health Professionals;
- Healthcare Planners, Estates professionals and other specialists that have an expertise on facilities;
- Accountants and finance specialists, IM&T professionals, plus representatives from any other relevant technical or professional grouping; and
- Patients and/or representatives from patient and public group.

GLOSSARY OF TERMS

24/7	Twenty four hours a day seven hours a week
A&E	Accident & Emergency
AHP	Allied Health Professional
ANP	Advanced Nurse Practitioner
ASP	Annual Service Payment
BADS	British Association of Day Surgery
BEAM	Building Environment Assessment Methodology
BREEAM	Building Research Establishment Environmental Assessment Method
BRP	Benefits Realisation Plan
CD	Competitive Dialogue
CDM	Construction (Design & Management) Regulations
CEL	Chief Executive Letter
CIG	Capital Investment Group
COSHH	Control of Substances Hazardous to Health
COUNCIL	Orkney Islands Council
CRES	Cash Releasing Efficiency Savings
DDA	Disability Discrimination Act 2005
DNA	Did Not Attend
FBC	Full Business Case
FM	Facilities Management
GP	General Practitioner
GROS	General Registrars of Scotland
HAI	Healthcare Associated Infection
HDU	High Dependency Unit
HEAT	Health, Efficiency Access and Treatment
HFS	Health Facilities Scotland
HSE	Health & Safety Executive
IA	Initial Agreement
ICU	Intensive Care Unit
IFRS	International Financial Reporting Standards
IM	Information Memorandum
IM&T	Information Management & Technology
ISD	Information Services Division (of Scottish Government)
IT	Information Technology
ITPD	Invitation to Participate in Dialogue
KPI	Key Performance Indicator
LAN	Local Area Network
LDP	Local Development Plan
MRI	Magnetic Resonance Imaging
NHSO	NHS Orkney

NPC	Net Present Cost
NPD	Non Profit Distributing
NPV	Net Present Value
OBC	Outline Business Case
OD	Organisational Development
OJEU	Official Journal of the European Union
OOH	Out of Hours
OPD	Outpatient Department
PAMS	Property and Asset Management Strategy
PFI	Private Finance Initiative
PIN	Prior Information Notice
PPE	Post Project Evaluation
PPM	Planned Preventative Maintenance
PPP	Public Private Partnership
PQQ	Pre-Qualification Questionnaire
RDS	Room Data Sheets
RPI	Retail Price Index
RTT	Referral to Treatment
SoA	Schedule of Accommodation
SCIM	Scottish Government Capital Investment Manual
SEPA	Scottish Environment Protection Agency
SFT	Scottish Futures Trust
SGHSCD	Scottish Government Health & Social Care Directorate
SHPN	Scottish Health Planning Notes
SMART	Specific, Measurable, Achievable, Realistic, Timely
SRO	Senior Responsible Owner
SUDS	Sustainable Urban Drainage System
TUPE	Transfer of Undertakings (Protection of Employment) Regulations
VFM	Value for Money
WTE	Whole Time Equivalent

COMMERCIAL IN CONFIDENCE



NHS Orkney
New Hospital and
Healthcare Facilities
Outline Business Case
Annexes
February 2014



Our community, we care, you matter.....

List of Annexes

1. Summary of National Context
2. Benefit Criteria Key Features
3. Non Financial Risk Scoring
4. Economic Appraisal Schedule
 - 4.1 Option 1
 - 4.2 Option 2
 - 4.3 Option 3
 - 4.4 Option 4
 - 4.5 Option 4a
5. Site Plans, Photos and Adjacencies
 - 5.1.1 New Scapa Road
 - 5.1.2 Site Layout Plan
 - 5.1.3 Ground Floor Plan
 - 5.1.4 First Floor Plan
 - 5.2 Site Photo
 - 5.3 Adjacency Matrix
6. Heads of Terms
7. Schedule of Accommodation/Independent Design Review
 - 7.1 SOA Version 6
 - 7.2 SOA Version 10
 - 7.3 Stage 2 – Independent Design Review Executive Summary
8. Clinical Output Specifications
 - 8.1 Theatres
 - 8.2 Emergency Care (to follow)
9. Value for Money Checklist
10. Procurement Strategy
11. Draft OJEU
12. NPD Scope
13. Risk Register
14. Cost Summary
15. Financial Modelling Assumptions
16. Annual Service Payment Schedule
17. Annual Service Payment Model Sensitivities
18. Capital Costs
19. Project Plan
20. Communication Strategy

ANNEX 1

Summary of National Context

Summary of National Context

Policy Initiative	Contextual Overview
<p>2020 Vision “Achieving sustainable quality in Scotland’s healthcare” (September 2011)</p>	<p>The aim is that by 2020 everyone is able to live longer healthier lives at home, or in a homely setting. This will be achieved through having a healthcare system where there is integrated health and social care, a focus on prevention, anticipation and supported self management.</p> <p>When hospital treatment is required, and cannot be provided in a community setting, day case treatment will be the norm. Whatever the setting, care will be provided to the highest standards of quality and safety, with the person at the centre of all decisions.</p> <p>There will be a focus on ensuring that people get back into their home or community environment as soon as appropriate, with minimal risk of re-admission. Mutually beneficial partnerships between patients, their families and those delivering healthcare services which respect individual needs and values and which demonstrate compassion, continuity, clear communication and shared decision-making</p> <p>The key actions required to deliver the vision include:</p> <ul style="list-style-type: none"> • shared understanding with everyone involved in delivering healthcare services which sets out what they should expect in terms of support, involvement and reward alongside their commitment to strong visible and effective engagement and leadership which ensures a real shared ownership of the challenges and solutions. • shared understanding with the people of Scotland which sets out what they should expect in terms of high quality healthcare services alongside their shared responsibility for prevention, anticipation, self management and appropriate use of both planned and unscheduled/emergency healthcare services, ensuring

	<p>that they are able to stay healthy, at home, or in a community setting as long as possible and appropriate.</p> <ul style="list-style-type: none"> • integrated working between health and social care, and more effective working with other agencies and with the 3rd and Independent Sectors. • prioritise anticipatory care and preventative spend e.g. support for parenting and early years. • prioritise support for people to stay at home/in a homely setting as long as this is appropriate, and avoid the need for unplanned or emergency admission to hospital wherever possible. • make sure people are admitted to hospital only when it is not possible or appropriate to treat them in the community - and where someone does have to go to hospital, it should be as a day case where possible. • Caring for more people in the community and doing more procedures as day cases where appropriate will result in a shift from acute to community-based care. This shift will be recognised as a positive improvement in the quality of our healthcare services, progress towards our vision and therefore the kind of service change we expect to see.
<p>The Healthcare Quality Strategy for NHS Scotland (May 2010)</p>	<p>The ultimate aim of The Healthcare Quality Strategy for NHS Scotland is to deliver the highest quality healthcare services to people in Scotland, and through this to ensure that NHS Scotland is recognised by the people of Scotland as a world leader in healthcare quality.</p> <p>The Quality Strategy reflects and encompasses many of the themes of previous policy and builds on these foundations. It is principally about three things, namely:</p> <ul style="list-style-type: none"> • Putting people at the heart of our NHS. It will mean that our NHS will listen to people's views, gather information about their perceptions and personal experience of care and use that information to further improve care. • Building on the values of the people working in and with NHS Scotland and their

	<p>commitment to providing the best possible care and advice compassionately and reliably by making the right thing easier to do for every person, every time.</p> <ul style="list-style-type: none"> • Making measurable improvement in the aspects of quality of care that patients, their families and carers and those providing healthcare services see as really important. <p>Underpinning the strategy is a series of drivers, quality ambitions and specific improvement initiatives. These include:</p> <ul style="list-style-type: none"> • Patient centred - mutually beneficial partnerships between patients, their families and those delivering healthcare services which respect individual needs and values and which demonstrate compassion, continuity, clear communication and shared decision-making. • Safe – there will be no avoidable injury or harm to people from healthcare they receive, and an appropriate, clean and safe environment will be provided for the delivery of healthcare services at all times. • Effective – the most appropriate treatments, interventions, support and services will be provided at the right time to everyone who will benefit, and wasteful or harmful variation will be eradicated. <p>Pursuit of the three Quality Ambitions will make significant and positive impacts on efficiency and productivity, which will sustain the unprecedented improvements made in waiting times and in access to primary, secondary and emergency healthcare services.</p> <p>NHS Orkney will also strive to ensure that the high quality health services delivered are provided on the basis of their ongoing commitment to equality of experience and outcomes - to everyone in Scotland, no matter who they are, or where they live.</p>
<p>Reshaping Care for Older People: A Programme for Change (2011)</p>	<p>The Scottish Government' vision that 'Older people are valued as an asset, their voices are heard and they are supported to enjoy full and positive lives in their own home or in a homely setting' was a key driver of the re-shaping care agenda.</p>

The 'Programme for Change', published in 2011 set out the reasons for change in the approach to care for older people and what has been seen as the key actions required to achieve this change. Some of the key messages which need to frame the development and delivery of the Reshaping Care programme include:

- Older people are an asset not a burden
- We need to shift in philosophy, attitudes and approaches
- We are adding healthy years to life
- Supporting and caring for older people is not just a health or social work responsibility
- Services should be outcome focussed
- We need to accelerate the pace of sharing good practice
- It is important to align partnership resources to achieve our goals
- Additional funding is needed for care

The Programme for Change also outlined the main messages from stakeholders about the preferences of older people:

- People want to stay in their own homes for as long as possible
- People want a greater degree of personalisation and choice
- People want more joined up working – less needless bureaucracy
- People want to avoid prolonged hospital stays
- People want greater support for unpaid carers
- People want funding and support for pensioner networks of community groups
- People want a consistency of paid workers
- People want regular health and well being check ups
- People want more specialist services for people with dementia
- People want appropriate housing and timely installation of equipment and adaptations
- People want information

Underpinning the Programme for Change is the creation of a Change Fund which provides bridging finance to enable health and social care partners to implement local plans for making

	<p>better use of their combined resources for older people's services by shifting care towards anticipatory care and preventative spend.</p> <p>Orkney Health and Care are progressing a complex programme of change to deliver models of service that support preventative work, support early intervention and are outcome and reablement focused.</p>
<p>State of the estate 2012</p>	<p>The state of the estate in 2012 reports on progress made during the year in improving the efficiency and sustainability of the Governments Civil estate, as required under the Climate Change Act 2008.</p> <p>Key targets have been set for Boards to:-</p> <ul style="list-style-type: none"> • Reduce the size of the Estate • Deliver Efficiency – both in terms of cost of space but also the efficient use of space • Making the estate more sustainable • Maximising future gains • Data collection
<p>Health Promoting Hospital CEL 01 (2012)</p>	<p>As well as treating illness hospitals can create a step change in health and well-being, whilst also contributing to a reduction in health inequalities, through promoting health and enabling wellbeing in patients, their families, visitors and staff.</p> <p>Performance Measures</p> <ul style="list-style-type: none"> • Smoking – ensure dedicated specialist smoking cessation support available • Alcohol – opportunistically screen patients attending A&E and wider acute settings. For patients identified with harmful or hazardous drinking offer and deliver brief intervention in accordance with SIGN 74. • Breastfeeding – continue to implement UNICEF Baby Friendly Initiative in the Maternity Unit • Food and Health –develop a consistent approach to healthy eating for all food providers across the NHS. Caterers will follow Healthy Living Award Criteria. • Healthy Working Lives: continue to work to attain healthy working lives awards for all acute services, including working towards the Gold Award and attainment of the Healthy Working Lives Mental Health Commendation Award.

	<ul style="list-style-type: none"> • Sexual Health – ensure that, prior to discharge from Maternity Unit, all women aged 16-50 are advised of their contraception options. • Physical Activity – increase opportunities for staff, visitors and patients to be physically active, providing advice on the importance and benefits of physical activity. • Active Travel – encourage staff and visitors to make more active, green travel choices.
<p>The Scottish Patient Safety Programme (SPSP)</p>	<p>The Scottish Patient Safety Programme is a national initiative aimed to drive improvements across the whole of NHS Scotland. Key activities are being progressed in 5 key work streams which NHS Orkney have embraced as key clinical priorities.</p> <p><u>Acute Adult</u> - the key objective being to steadily improve the safety of hospital care. This will be achieved by using evidence-based tools and techniques to improve the reliability and safety of everyday health care systems and processes. Real-time data will be gathered unit-by-unit, and the staff caring directly for patients will lead the changes required to achieve the aims of the Programme.</p> <p><u>Sepsis</u> - To improve the recognition and timely management of Sepsis in acute hospitals</p> <p><u>Maternity and Children's Quality Improvement Collaborative</u>, The Paediatric and Neonatal programme strands, along with Maternity Care come together to form the Maternity and Children's Quality Improvement Collaborative (MCQIC) which has an overall aim to improve outcomes and reduce inequalities.</p> <p><u>Mental Health</u> is a four year programme with an overall aim of reducing the harm experienced by individuals in receipt of care from mental health services, with a focus on adult psychiatric inpatient units including admission and discharge processes.</p> <p><u>Primary Care (PC)</u>: There are three strands to the PC SPSP programme</p> <ul style="list-style-type: none"> • Safety Culture: improving patient safety through the use of trigger tools (structured case note reviews) and safety climate surveys.

	<ul style="list-style-type: none"> • Safer Medicines: including the prescribing and monitoring of high risk medications, such as warfarin and disease-modifying anti-rheumatic drugs (DMARDs) and developing reliable systems for medication reconciliation in the community. • Safety at the Interface: by focusing on developing reliable systems for handling written and electronic communication and implementing measures to ensure reliable care for patients.
<p>Allied Health Professionals (AHPs) National Delivery Plan</p>	<p>The National Delivery Plan applies to AHPs from across Health and Social Care and provides a strategic platform for future AHP activity, demonstrating the contribution and impact that AHPs can and do have on the delivery of national policy. It sets out a range of actions which require AHPs to be more visible, accountable, and demonstrate impact to the organisation and communities they serve.</p> <p>This National Delivery Plan will help to maximise AHPs' contribution and effectiveness by:</p> <ul style="list-style-type: none"> • empowering strong professional leadership • enabling the development of integrated teams across health and social care services to support continuous improvement • developing innovative new models of care and fully utilising innovation in health technology • creating added value beyond health and delivering excellent outcomes for people who use services, their families and carers • providing effective, efficient solutions to the challenges of delivering national policies within a reducing financial envelope • strengthening partnerships with the third and independent sectors and other agencies. <p>The Delivery Plan will be particularly important as the new health and social care partnerships emerge, which includes the active engagement of the third sector in the consultation process, signalling their wish to develop strategic alliances with AHPs,</p>

	<p>working in partnership with us towards a common purpose.</p> <p>The Delivery Plan focuses on the period 2012-2015 and provides a strategic platform for future AHP activity whilst demonstrating the contribution AHPs can make and the impact they can have on the delivery of national policy, on the experiences of people who use services, their families and carers, and on outcomes across health and social care sectors. It makes explicit the alignment of AHP leadership and practice towards the delivery of the nationally agreed outcomes for integration of health and social care services and shows how better value can be extracted from AHP expertise from strategic to frontline levels, demonstrating the added value of preventative, upstream approaches in enabling people to live well and for as long as possible in their own homes and communities.</p> <p>Fundamentally, the Delivery Plan defines the future vision for AHPs and the services they deliver. In doing this, it focuses specifically on a number of high-level outcomes that AHP services will effect, with key actions defined.</p>
<p>The Public Bodies (Joint Working) (Scotland) Bill); 2013</p>	<p>The Bill proposes to require health boards and local authorities to create an integration plan for the local authority area. This will be required for adult services but other services may also be included.</p> <p>Integration is viewed as a way of tackling a number of problems such as unscheduled admissions to acute care, delayed discharges, budgetary battles between bodies, delays in accessing care and duplication of efforts. It is also seen as a way of 'shifting the balance of care' from the expensive acute sector, to care in less expensive community settings.</p> <p>Under the Bill the integration plan must detail the functions which are to be delegated and, where the lead agency model is being used, the functions of the person who it is being delegated to. The plan must also set out the method by which payments will be made for the funding of the integrated services. The Bill requires partners to delegate appropriate resources to ensure the effective delivery of those functions that have been included.</p>

	<p>The Bill also requires integration authorities (which may take the form of integration joint boards where the 'body corporate' model is adopted, or, Health Boards and / or local authorities, whichever is acting in the capacity of a 'lead agency' where that model is adopted), to prepare a strategic plan for the area. The strategic plan is effectively a Joint Commissioning Strategy. The strategic plan must set out how the partnership will meet both locally and nationally agreed outcomes and the integration authority is required to involve a range of partners in the development of the plan and consult widely, taking into account any views expressed.</p> <p>In addition, the integration authority will be required to make suitable arrangements to plan locally for the needs of its population, ensuring the involvement of a range of partners, including clinicians and care professionals, in the development and implementation of local planning arrangements.</p> <p>The Bill delivers opportunities for more effective use of public services and resources by allowing for Health Boards to be able to contract on behalf of other Health Boards for contracts which involve providing facilities, and to form joint ventures/structures to collaborate effectively with local authorities and enable a joint approach to asset management and disposal.</p> <p>The Bill provides for the extension of NHS Scotland's ability to deliver shared services to Scottish public bodies including local authorities. It is planned that the Bill will be enacted on 1 April 2015, once established, each integration authority is required to develop, consult on and publish a strategic plan. The plan is required to be a minimum of a three year plan.</p> <p>Orkney Health and Care is our health and social care partnership between Orkney Islands Council and NHS Orkney which aims to improve outcomes for people through integrated working which can create and maintain services which support people to stay safely in the community longer. Orkney Health and Care's programme of continuous improvement and development is focused on delivery models of service which support preventative work and early intervention.</p>
--	--

<p>Delivering for Remote and Rural Healthcare –</p>	<p>This report identified that the provision of emergency surgery within a hospital was the single differentiating factor between an enhanced community hospital and a rural General Hospital (RGH) and defined an RGH as follows:- “The RGH undertake management of acute medical and surgical emergencies and is the emergency centre for the community, including pace of safety for mental health emergencies. It is characterised by more advanced level of diagnostic services than a community hospital and will provide a range of outpatient, day case, inpatient and rehabilitation services.</p> <p>The table below summarises the services identified as minimum to be provided in an RGH: Balfour Hospital is classified as a RGH</p> <table border="1"> <thead> <tr> <th>Unscheduled</th> <th>Planned</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Nurse led Urgent Care service managing minor injury and minor illness • Ability to resuscitate patients • Ability to manage acute surgical and medical admissions • Initial fracture management and manipulation of joints • Midwifery led maternity service • Neonatal resuscitation • Capability to diagnose and initially manage acutely ill or injured child • Capability to manage patents requiring a higher dependency of care before transfer • Clear and appropriate retrieval and transfer arrangements </td> <td> <ul style="list-style-type: none"> • Management of patients with stroke • Rehabilitation and step down • Post-op step down, rehabilitation and follow up • Management of patients with long term conditions, including haemodialysis, and cancer care as part of a network • Ambulatory care for children within the locality • Routine elective surgery • Visiting services </td> </tr> </tbody> </table>	Unscheduled	Planned	<ul style="list-style-type: none"> • Nurse led Urgent Care service managing minor injury and minor illness • Ability to resuscitate patients • Ability to manage acute surgical and medical admissions • Initial fracture management and manipulation of joints • Midwifery led maternity service • Neonatal resuscitation • Capability to diagnose and initially manage acutely ill or injured child • Capability to manage patents requiring a higher dependency of care before transfer • Clear and appropriate retrieval and transfer arrangements 	<ul style="list-style-type: none"> • Management of patients with stroke • Rehabilitation and step down • Post-op step down, rehabilitation and follow up • Management of patients with long term conditions, including haemodialysis, and cancer care as part of a network • Ambulatory care for children within the locality • Routine elective surgery • Visiting services
Unscheduled	Planned				
<ul style="list-style-type: none"> • Nurse led Urgent Care service managing minor injury and minor illness • Ability to resuscitate patients • Ability to manage acute surgical and medical admissions • Initial fracture management and manipulation of joints • Midwifery led maternity service • Neonatal resuscitation • Capability to diagnose and initially manage acutely ill or injured child • Capability to manage patents requiring a higher dependency of care before transfer • Clear and appropriate retrieval and transfer arrangements 	<ul style="list-style-type: none"> • Management of patients with stroke • Rehabilitation and step down • Post-op step down, rehabilitation and follow up • Management of patients with long term conditions, including haemodialysis, and cancer care as part of a network • Ambulatory care for children within the locality • Routine elective surgery • Visiting services 				

	<p>Diagnostic</p> <ul style="list-style-type: none"> • Diagnostic capability including:- <ul style="list-style-type: none"> - Imaging: Digitised Image Capture, Ultrasound and CT scanning • Laboratories:- <ul style="list-style-type: none"> - Limited range of Biochemistry, Haematology and cross match blood • Endoscopy:_ upper and lower GI, cystoscopy surgical intervention • Cardiac Investigation including:- <ul style="list-style-type: none"> - Stress testing and echocardiography 	<p>Support</p> <ul style="list-style-type: none"> • Clinical decision making support via e-health links to other centres • Pharmacy support
<p>New GP Contract</p> <p>GP Practices – and moving towards the 2020 Vision</p>	<p>In addition there is an expectation that the RGH would be part of obligate networks with larger centres, particularly for core services of medicine, surgery, anaesthesia and for child health, mental health, Laboratory services and radiology.</p> <p>The Scottish Government has set out their Vision that by 2020 everyone will be able to live longer healthier lives at home or in a homely setting. It is envisaged that our healthcare system will move towards integrated health and social care focussing on prevention, anticipation, and supporting self management of conditions. When hospital admissions are required and cannot be provided in a community setting day case treatment should be the norm. There will be a focus on ensuring that people get back into their home or community environment as soon as appropriate with minimal risk of re-admission.</p> <p>There will need to be a shift in resource to achieve this shift in the balance of care as Primary Care will have an increasing role.</p> <p>The GP contracts for 13/14 and 14/15 were altered to help practices prepare for this. Practices have been encouraged to look at their admission patterns and to meet and discuss this with their peers to see and discuss trends and to also review pathways which could reduce the need for admissions.</p>	

	<p>It has been recognised nationally that there is high Out of Hours (OOH) period. To help reduce admissions an Electronic key information summary (Ekis) programme was developed where practices record relevant data and anticipatory care planning. This is shared with the out of hour's team to help give them the additional information which could mean the patient can remain in their own home where possible. The GP contract was updated to ensure GP practices worked towards achieving a target number of anticipatory care plans and this target will be increased by the same number this year. This should be viewed by ambulance staff, OOH team, A&E staff and admission clerks as it holds all relevant past medical history, ACP, further notes from the GP, medicines, whether they have capacity etc.</p> <p>Patient safety came into the contract during 2013/14. Practices have been encouraged to complete trigger tools and patient safety climate surveys to ensure safe working within their practices is occurring. There are also additional care bundles which have been produced and which boards are incorporating into their enhanced service programmes. These include looking at Medicine Reconciliation, Warfarin Monitoring, and Near patient testing. NHS Orkney has started with an enhanced service for Medicine Reconciliation which ensures that patients are discharged from the Balfour Hospital on appropriate medication by following up and discussing with patients post discharge. We hope to move to include the warfarin care bundle in 2014/15.</p>
--	---

ANNEX 2

Benefit Criteria Key Features

NEW HOSPITAL & HEALTHCARE FACILITY PROJECT OBJECTIVES – FINAL

19th February 2014

2020 Vision Priority Areas	Investment Objective	Benefit	Measure	Timescale
Person centred care	To improve capacity and access to healthcare services – ensuring the health needs of the population are met	Wellbeing and patient experience Access to services (transport, visibility, location)	<p>Evidence of a reduction in readmission rates moving all specialities to no worse than the Scottish Average</p> <p>Evidence of a reduction in LOS in all specialties moving all to no worse than the Scottish Average</p> <p>Continue achievement of A&E 4 hour standard</p> <p>Continue achievement of cancer 31/62 days standard, RTT 18 weeks standard, TTG 12 week standard</p> <p>Evidence of a reduction in outpatient new/review rates targeting the Scottish Average</p> <p>Continue achievement of national HEAT target in relation to delayed discharges</p> <p>Improved ability to admit stroke patients to designated 'stroke' bed on day of admission – in line with HEAT target</p>	<p>1 year post commissioning</p> <p>1 year post commissioning</p> <p>3 months post commissioning</p> <p>3 months post commissioning</p> <p>6 months post commissioning</p> <p>6 months post commissioning</p> <p>3 months post commissioning</p>

			<p>Enhanced access to VC through enabling of all clinical areas</p> <p>Reduction in DNA rate to Scottish Average in all specialties</p> <p>Appropriate reduction in off island travel associated with repatriated services (Target?)</p> <p>Elimination of complaints regarding noise and other environmental factors</p>	<p>On handover</p> <p>6 months post commissioning</p> <p>1 year post commissioning</p> <p>1 year post commissioning</p>
Safe care	<p>To provide facilities/services that are:</p> <ol style="list-style-type: none"> 1. 'fit for purpose' 2. support safe and effective clinical working 3. improve clinical and functional relationships 4. Enable the provision of modern NHS care 5. Provide sufficient flexibility for future changes to service provision 	Attract and retain staff	<p>100% of hospital and healthcare facility classed as category A for functional and physical functionality in PAMS</p> <p>Statutory compliance – HAI, DDA, compliance with National Cleaning Standards</p> <p>Clear direction and easy wayfinding via aural, visual and tactile contrasts as well as clear signage (Ref: NHSO Design Statement, June 2013)</p> <p>Waiting areas within 20m of the consult/treatment area and must be comfortable (Ref: NHSO</p>	<p>Handover</p> <p>Handover</p> <p>Handover</p> <p>6 months post commissioning</p>

			Design Statement, June 2013)	6 months post commissioning
			Improved security – ability to lock down whole and parts of the facility	Handover
			Reduction in number of entry and exit points and ability to manage all doors	3 months post commissioning
			Elimination of Datix incidents in relation to environment classifications associated with hospital and healthcare facility	Handover
			Elimination of risks on corporate risk register in relation to hospital estate, security and environmental factors	Handover
			Elimination in bed moves associated with infection control measures	Handover
			100% availability of second theatre for emergency purposes	Handover
			100% Single room with sufficient size and flexibility to allow provision of a range of care services	Handover
			100% access to electronic patient information through an	Handover

			<p>electronic patient record to support diagnosis and commencement of treatments and continuity of care</p> <p>Utilisation of electronic self check in (90%)</p> <p>All rooms occupied by staff for more than 2 hours per day continuously at one time have access to daylight and a view (Ref: NHSO Design Statement, June 2013)</p> <p>Access to staff facilities and rest room within 10 minutes walk of all departments</p> <p>Flexibility in use of inpatient beds</p> <p>Standardisation of room types and sizes to provide future opportunity for change</p>	<p>3 months post commissioning</p> <p>Handover</p> <p>Handover</p> <p>Handover</p> <p>Handover</p>
Effective: Quality of care and population health	To ensure that the hospital and services are developed in such a way as to maximise performance and efficiency	Right clinical/non clinical adjacencies and flows	<p>Aim to improve on, but as a minimum maintain existing rates of admission on day of surgery/procedure (Baseline: 63% of admissions are treated as day cases and 94% of elective inpatients are single day episodes.)</p> <p>Reduction in number of</p>	<p>6 months post commissioning</p> <p>6 months post</p>

			<p>admissions from A&E (%) – achievement of Scottish Average admission rate per 1,000 people</p> <p>Increases in day case and/or OPD procedures (%) – achievement of national targets for specific interventions in line with BADS</p> <p>Reduction in CO2 emissions and achievement of HEAT target</p> <p>50% Reduction in energy costs</p> <p>Decrease in cost per sq m of soft FM services - ability to meet national averages as minimum for catering, portering, laundry</p>	<p>commissioning</p> <p>6 months post commissioning</p> <p>2 years post commissioning</p> <p>2 years post commissioning</p> <p>3 months post commissioning</p>
Effective: Value and sustainability (efficiency and productivity)	Maximise benefits of shared facilities	<p>Multifunctional rooms and spaces</p> <p>Shared plant and facilities</p>	<p>Improved patient experience</p> <p>Improved satisfaction with physical working environment – staff</p> <p>Reduction in staff travel associated with services being located within site which are not currently eg Community Mental Health Team</p>	<p>6 months post commissioning</p> <p>3 months post commissioning</p> <p>3 months post commissioning</p>
Effective:	Enable innovative ways of working	Attract and retain staff	Increased frequency of utilisation	6 months post

Value and sustainability (Innovation and Workforce)			<p>of clinical decision making support – measured through VC usage rates in clinical areas</p> <p>100% access to wifi and IT networks throughout facility</p> <p>Increased workforce agility in relation to hot desking and working from home – Measured by cost per sq m per desk and achievement of the national average</p>	<p>commissioning</p> <p>Handover</p> <p>6 months post commissioning</p>
Effective: Value and sustainability	Develop a feasible solution within acceptable limits of overall costs and the cost and time taken to acquire and develop NHS premises	<p>Delivery of a reference design within the tolerances of the agreed capital allocation and ongoing revenue availability</p> <p>Development and implementation of an affordable and appropriate workforce model to support the new facility</p> <p>Enable the Orkney supply chain of small and medium enterprises to provide services during construction and operation</p> <p>Development and implementation of an affordable and appropriate facilities management model to support the new facility</p>	<p>Achievement of BREEAM very good rating as a minimum</p> <p>Community benefits from use of non clinical support spaces – measurement via facility usage rates.</p>	<p>6 months post commissioning</p> <p>1 year post commissioning</p>

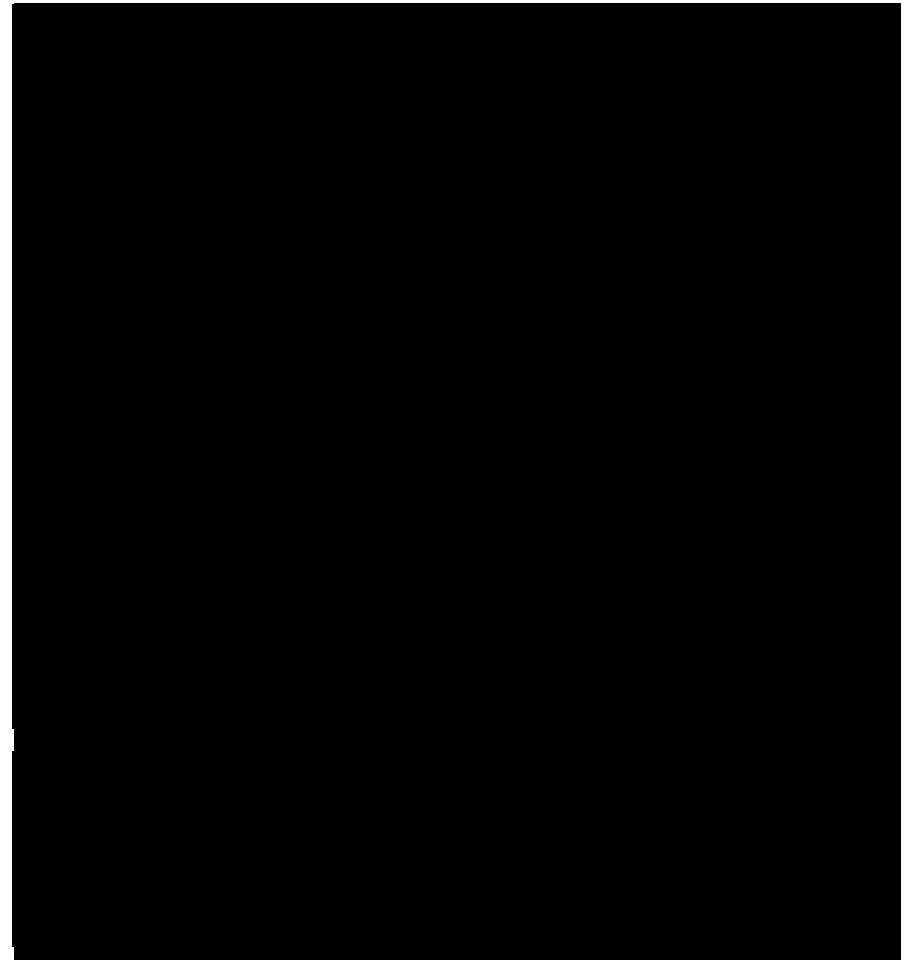
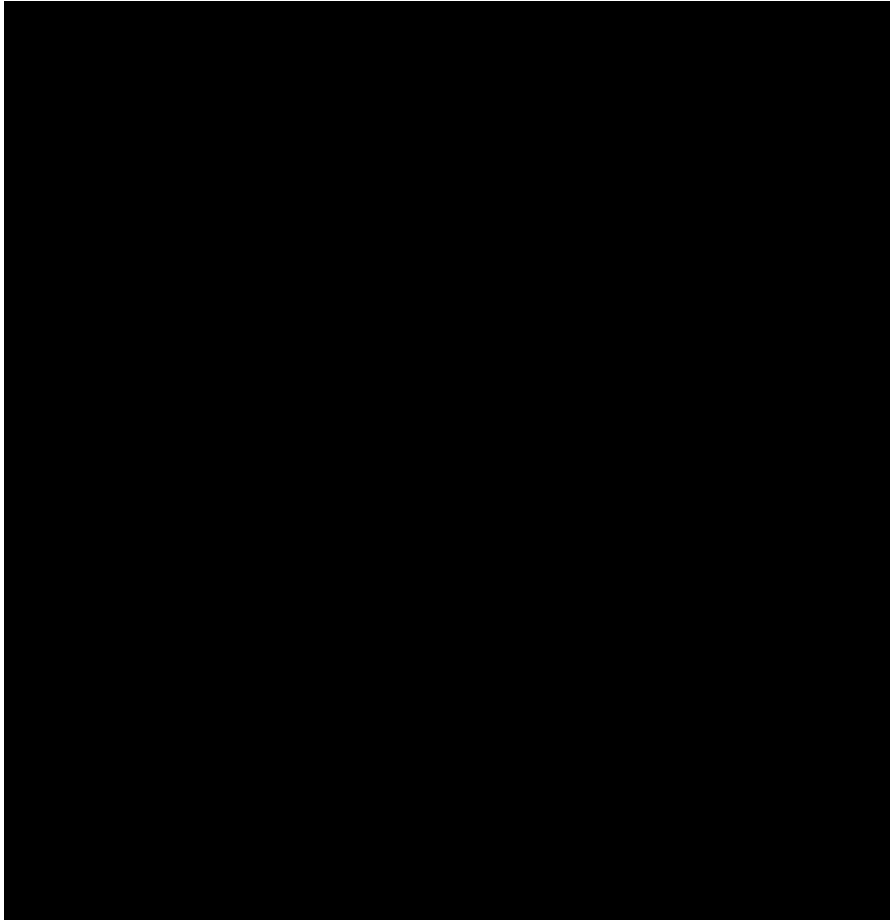
ANNEX 3

Non Financial Risk Scoring

OPTION 1

Do Minimum Backlog Maintenance

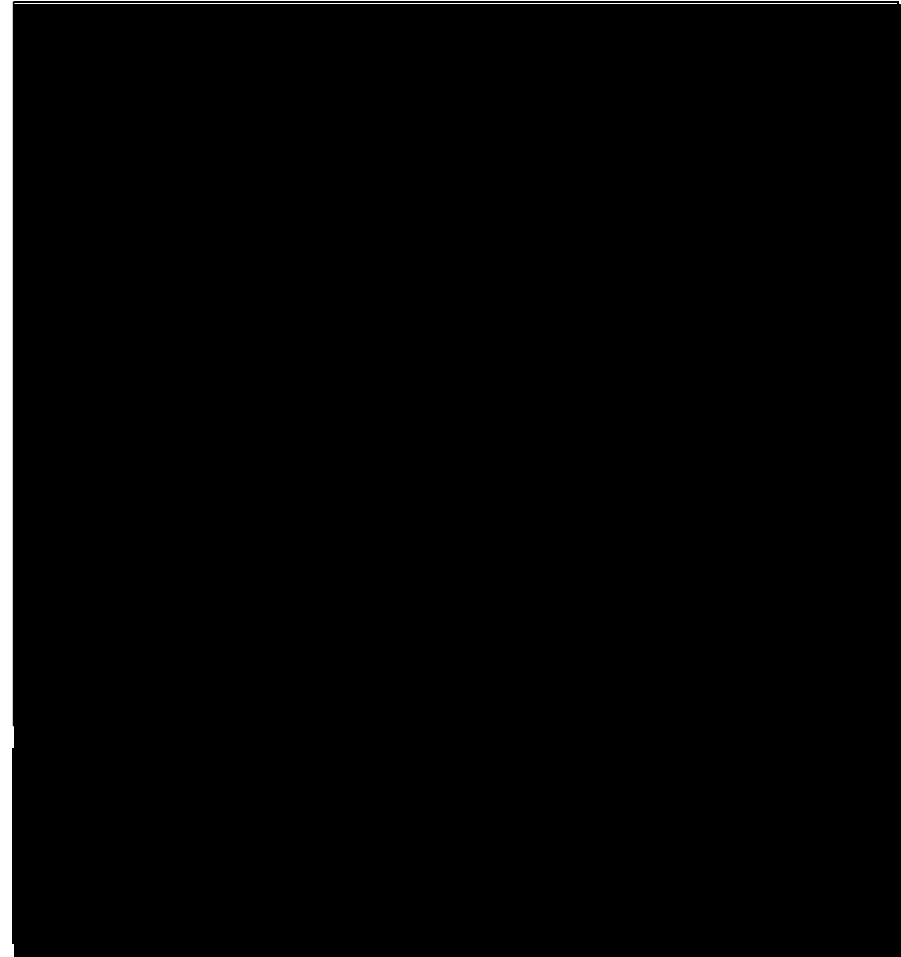
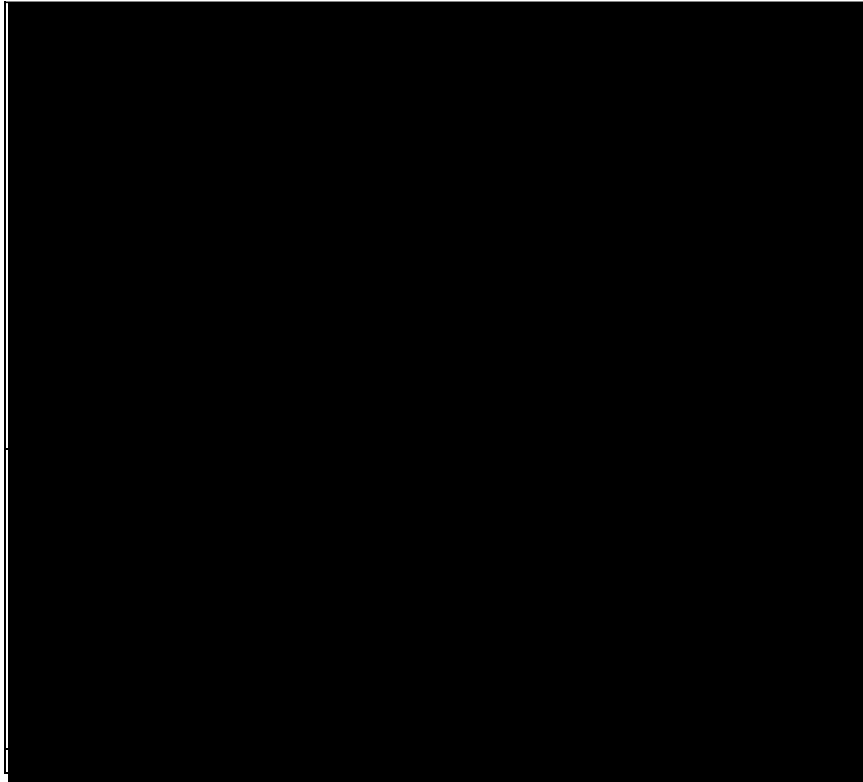
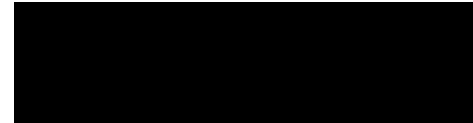
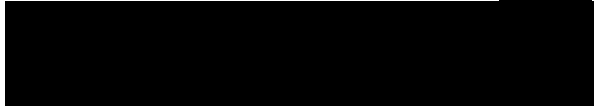
Optimism Bias - Upper Bound Calculation for Build



OPTION 2

Refit Balfour and Provide GP, Dental & Community New Build

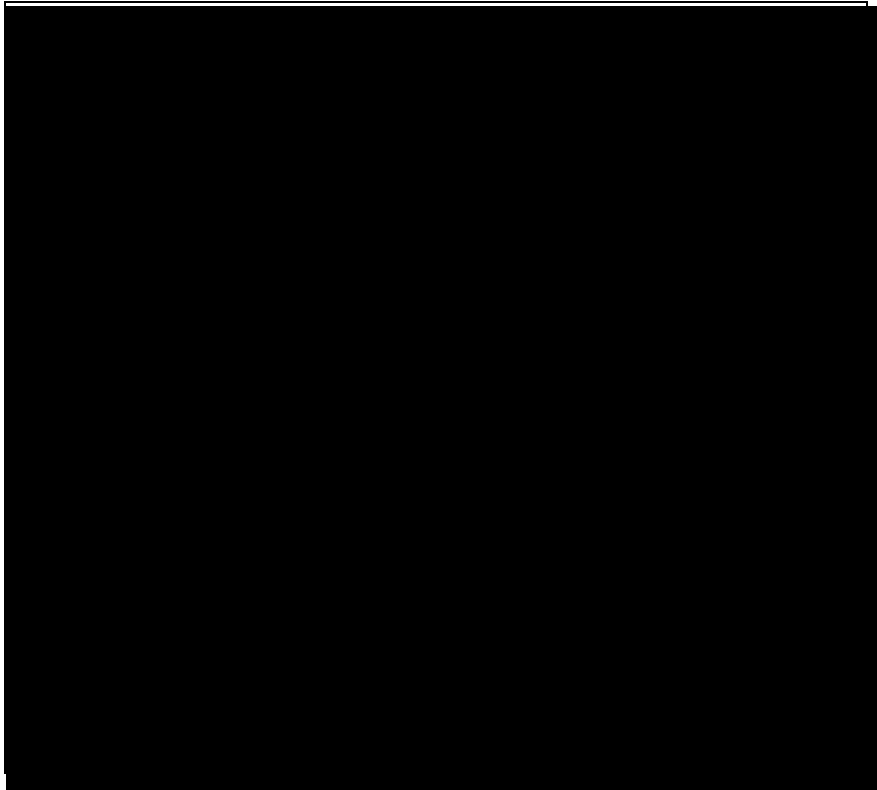
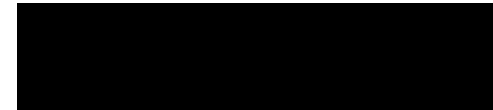
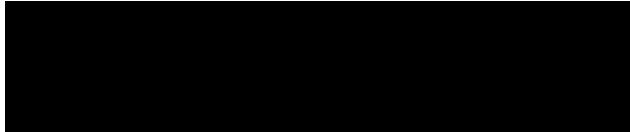
Optimism Bias - Upper Bound Calculation for Build



OPTION 3

New Build Acute and Re-provided GP & Community

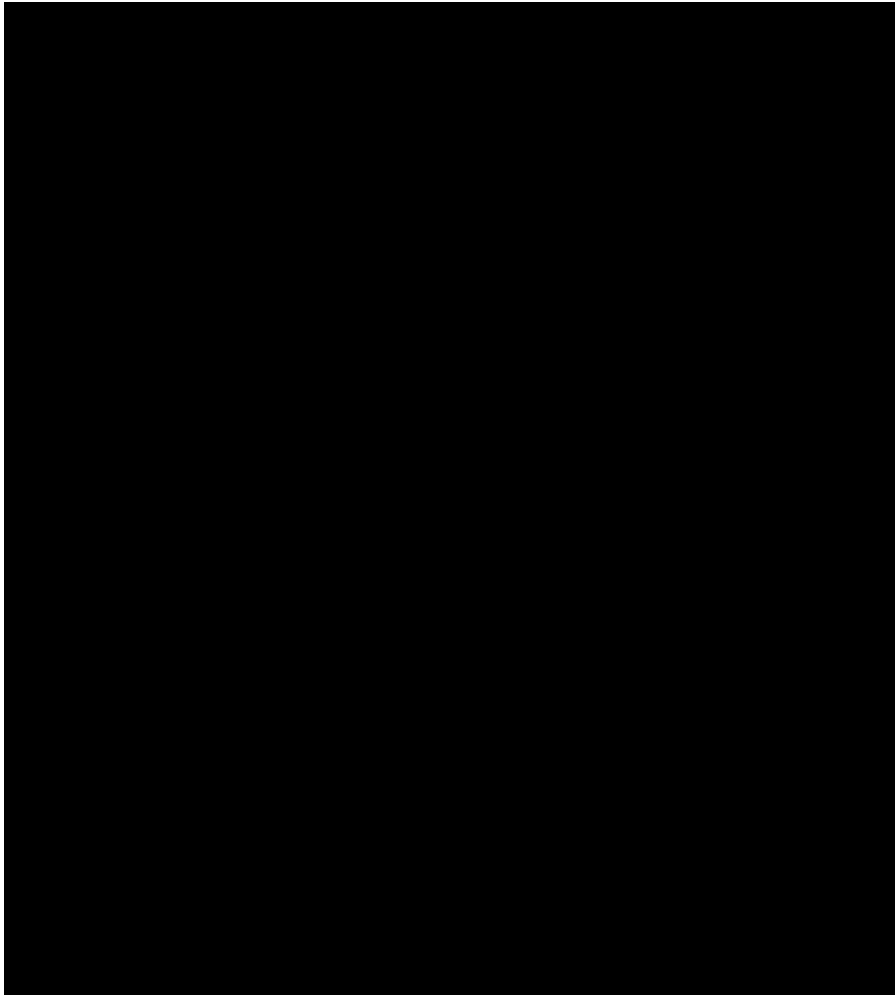
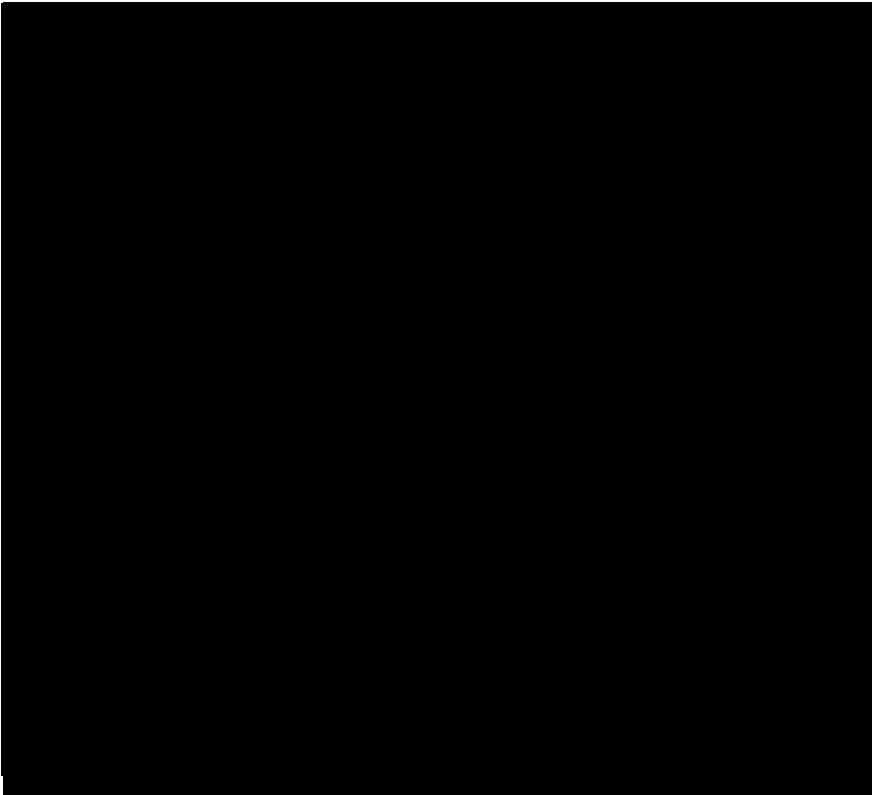
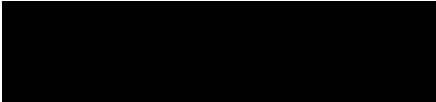
Optimism Bias - Upper Bound Calculation for Build



OPTION 4

New Build (inclusive of retained office space)

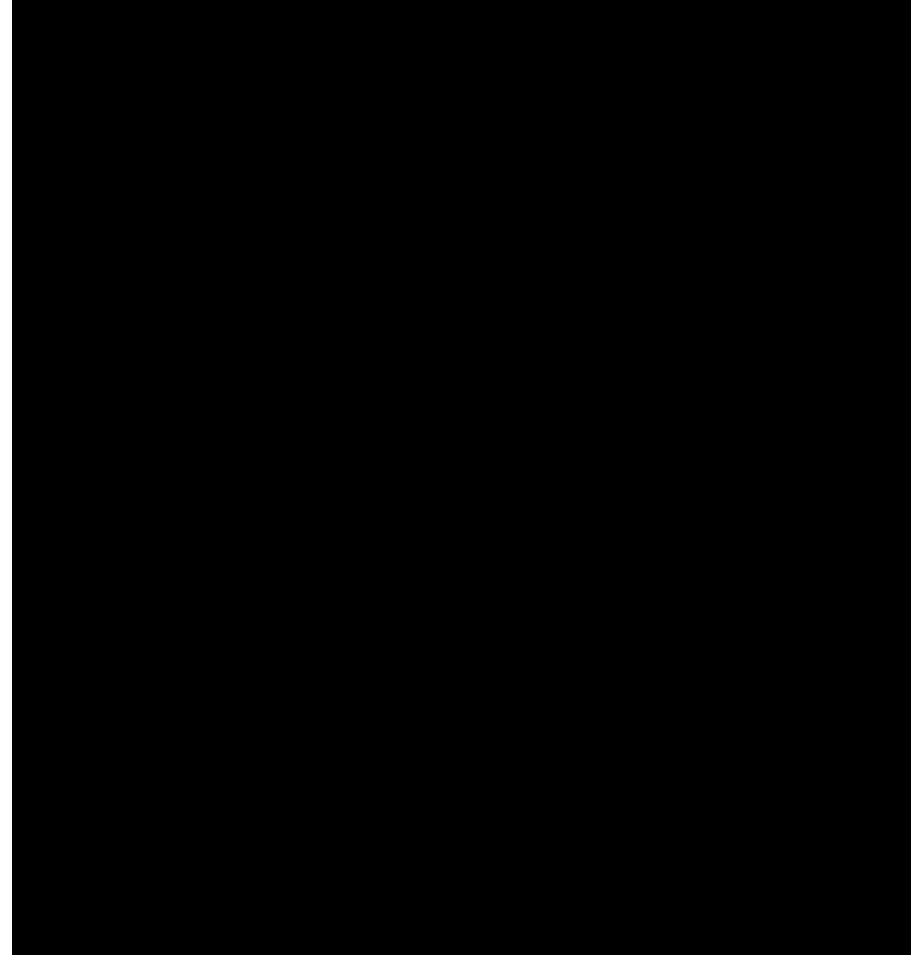
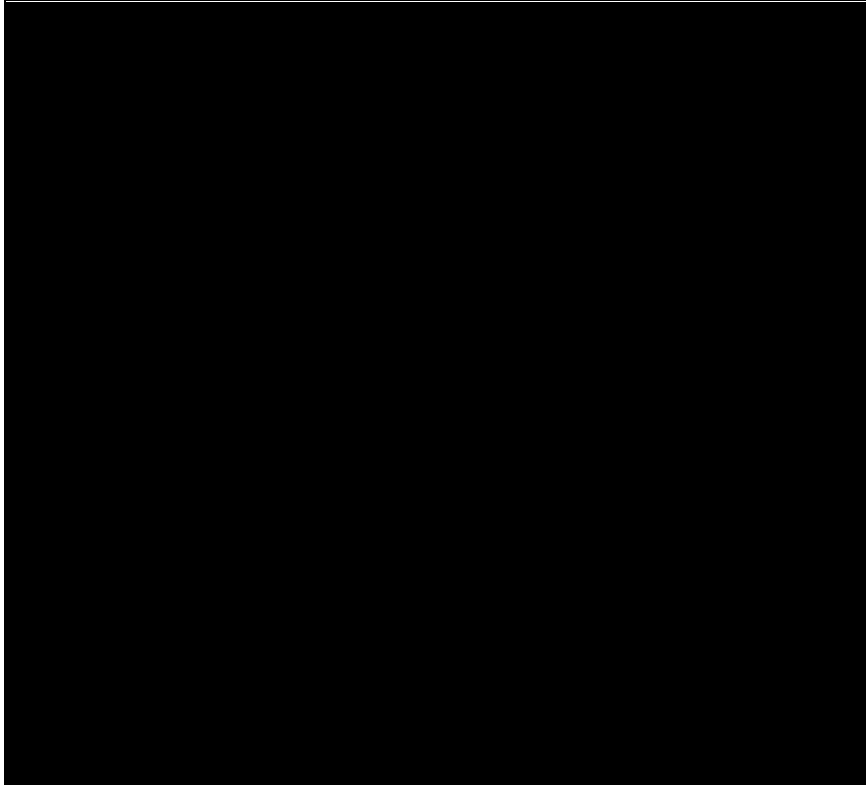
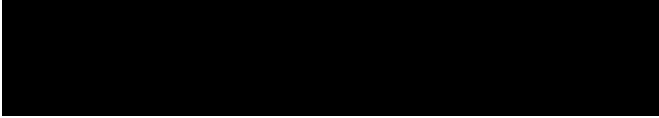
Optimism Bias - Upper Bound Calculation for Build



OPTION 4a

New Build with non clinical Support Block

Optimism Bias - Upper Bound Calculation for Build

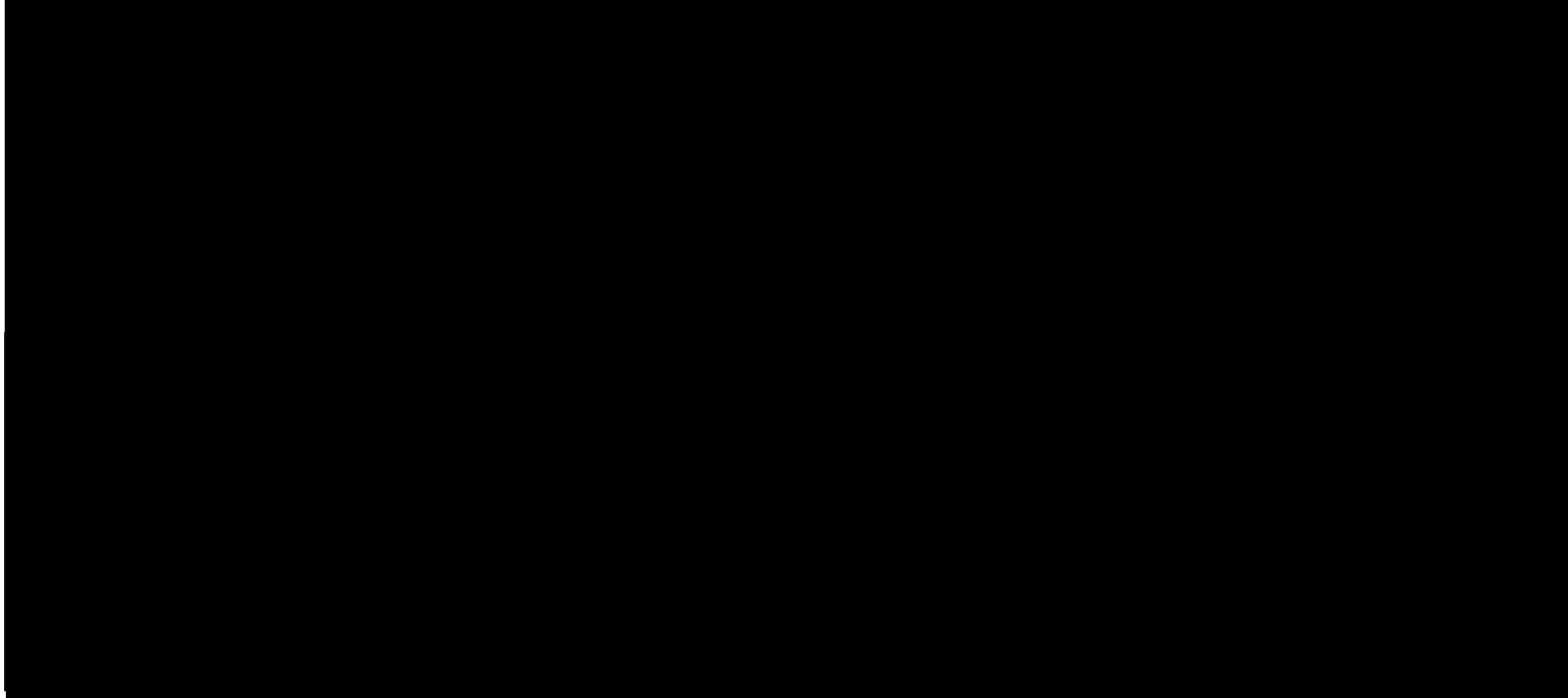


ANNEX 4.1

Economic Appraisal Option 1

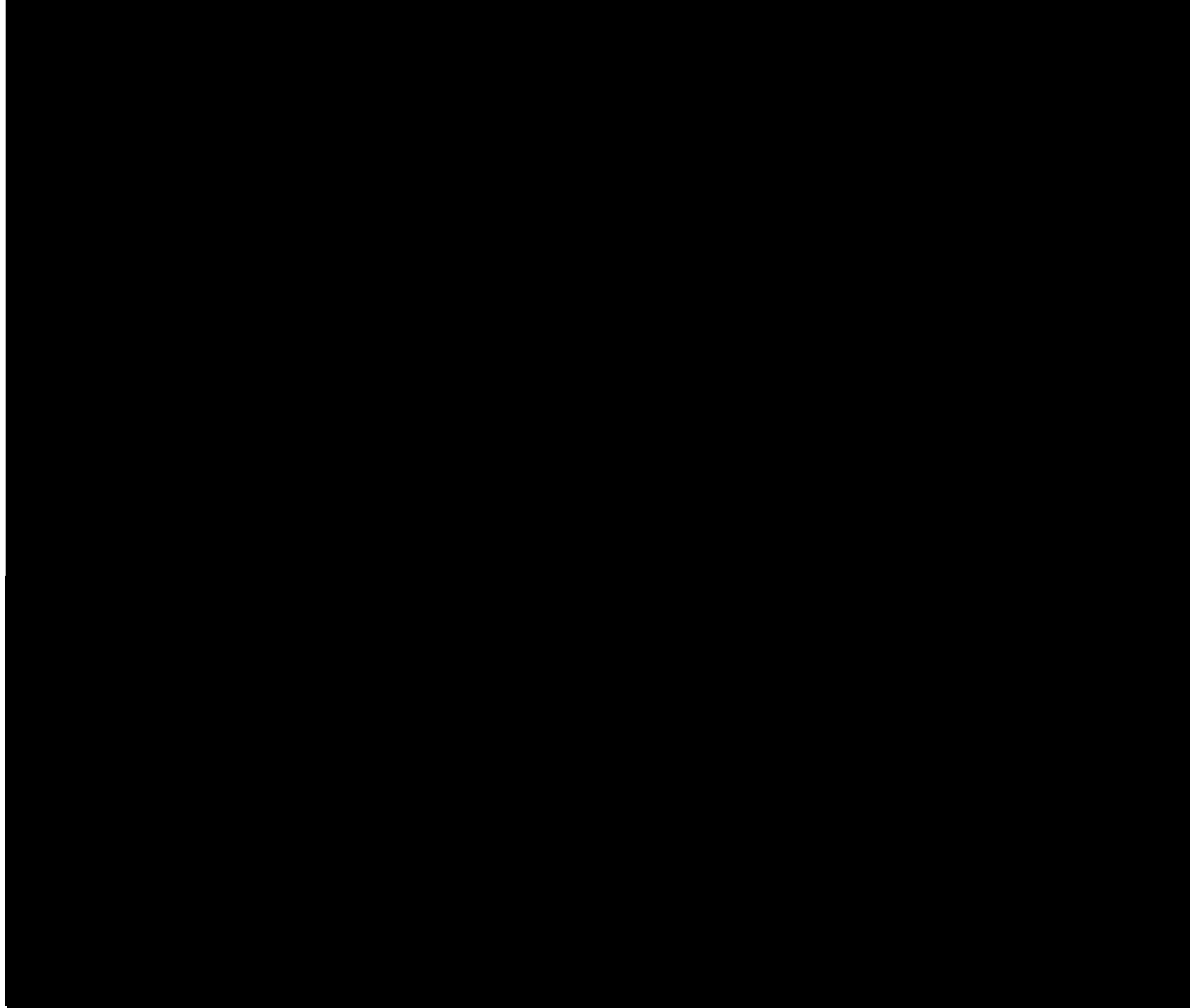


Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28





Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	TOTAL
---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	-------



ANNEX 4.2

Economic Appraisal Option 2

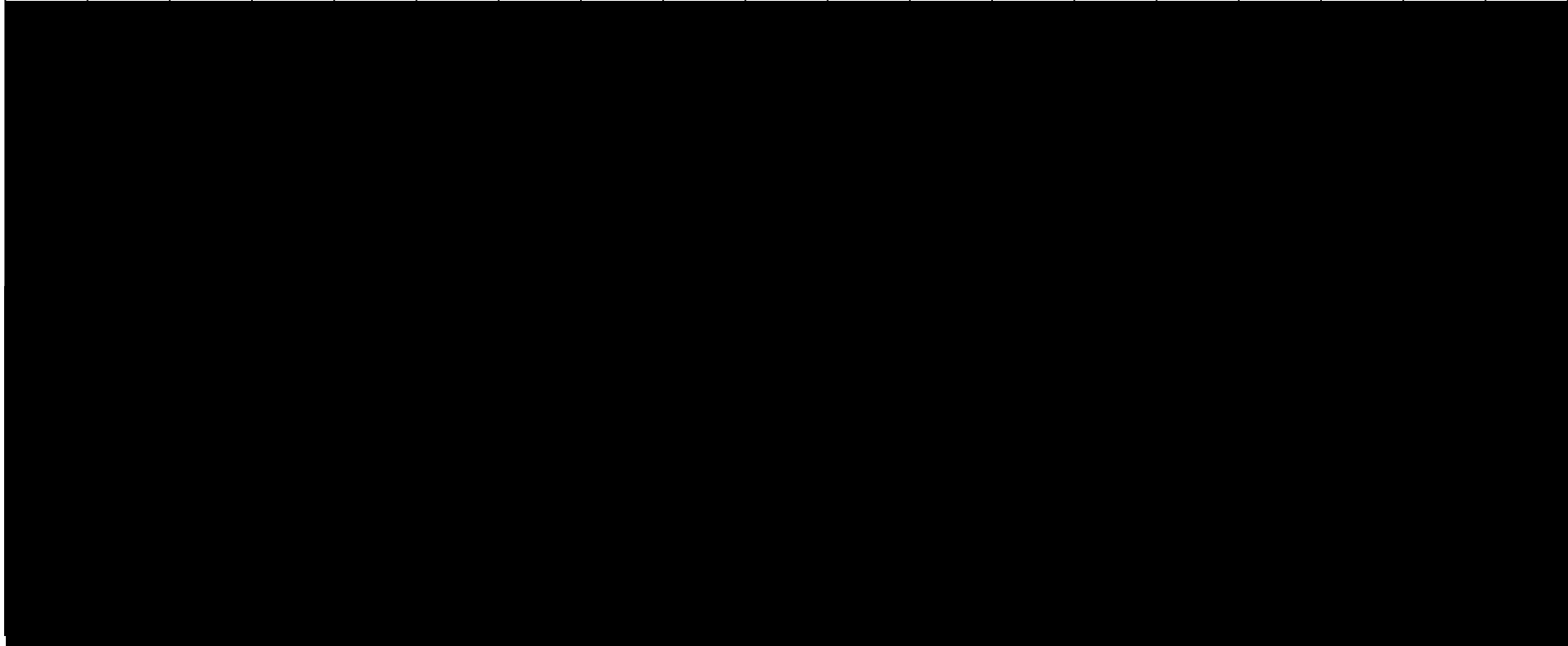
[Redacted]

YEAR : Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 | Year 12 | Year 13 | Year 14

[Redacted]



Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Year 31	Year 32	Year 33
---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------



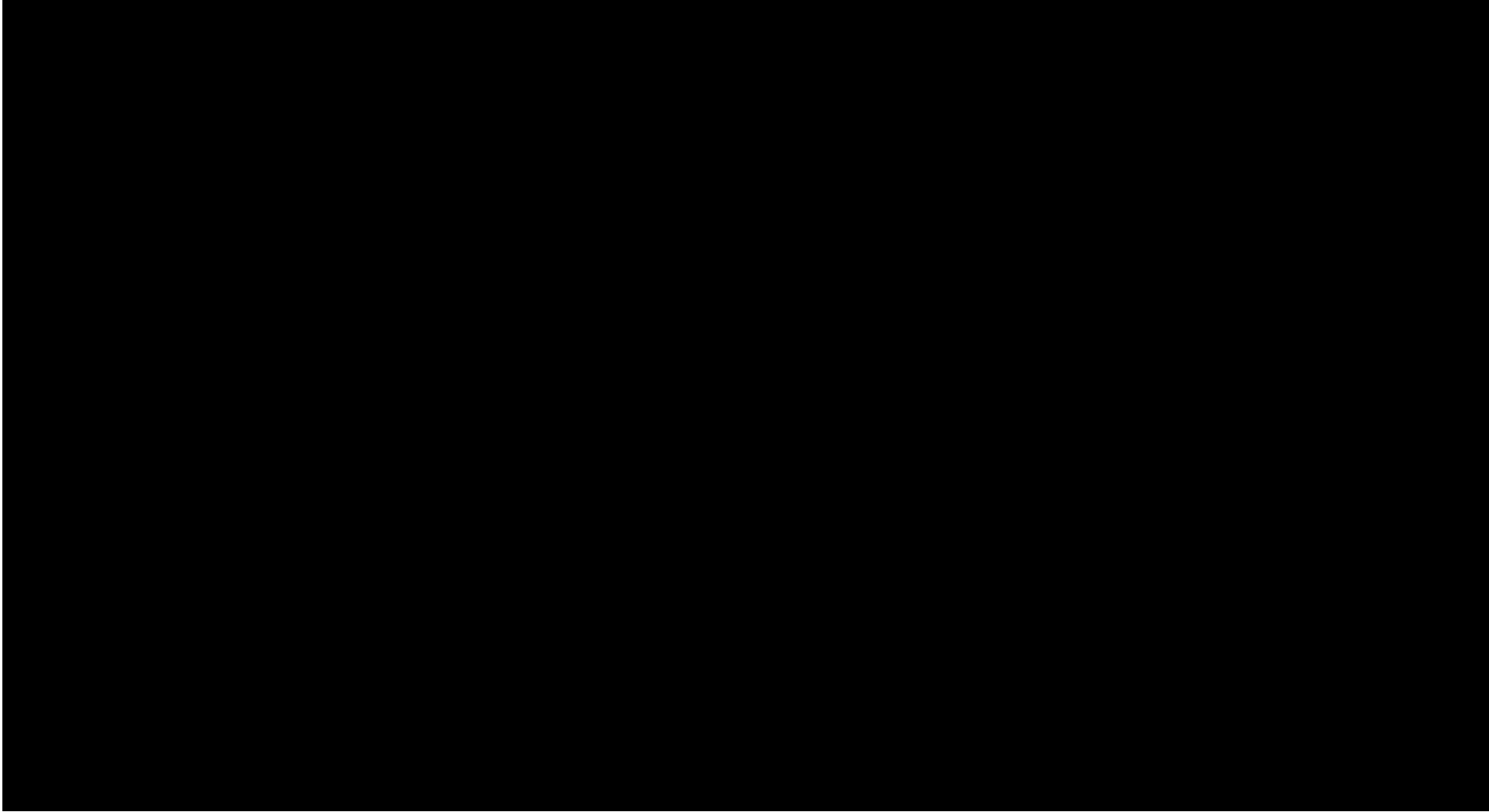
ANNEX 4.3

Economic Appraisal Option 3

YEAR : Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 | Year 12 | Year 13

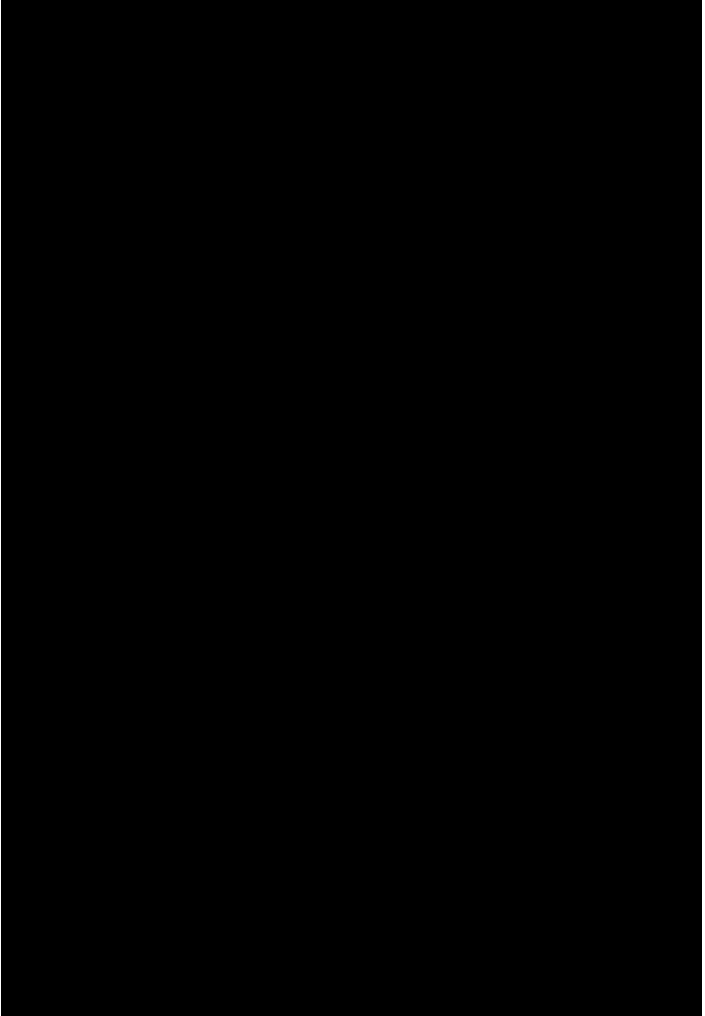


Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Year 31	Year 32
---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------





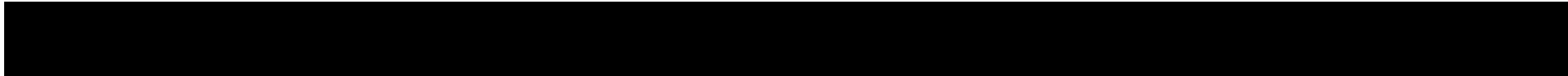
Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	TOTAL
---------	---------	---------	---------	---------	---------	-------



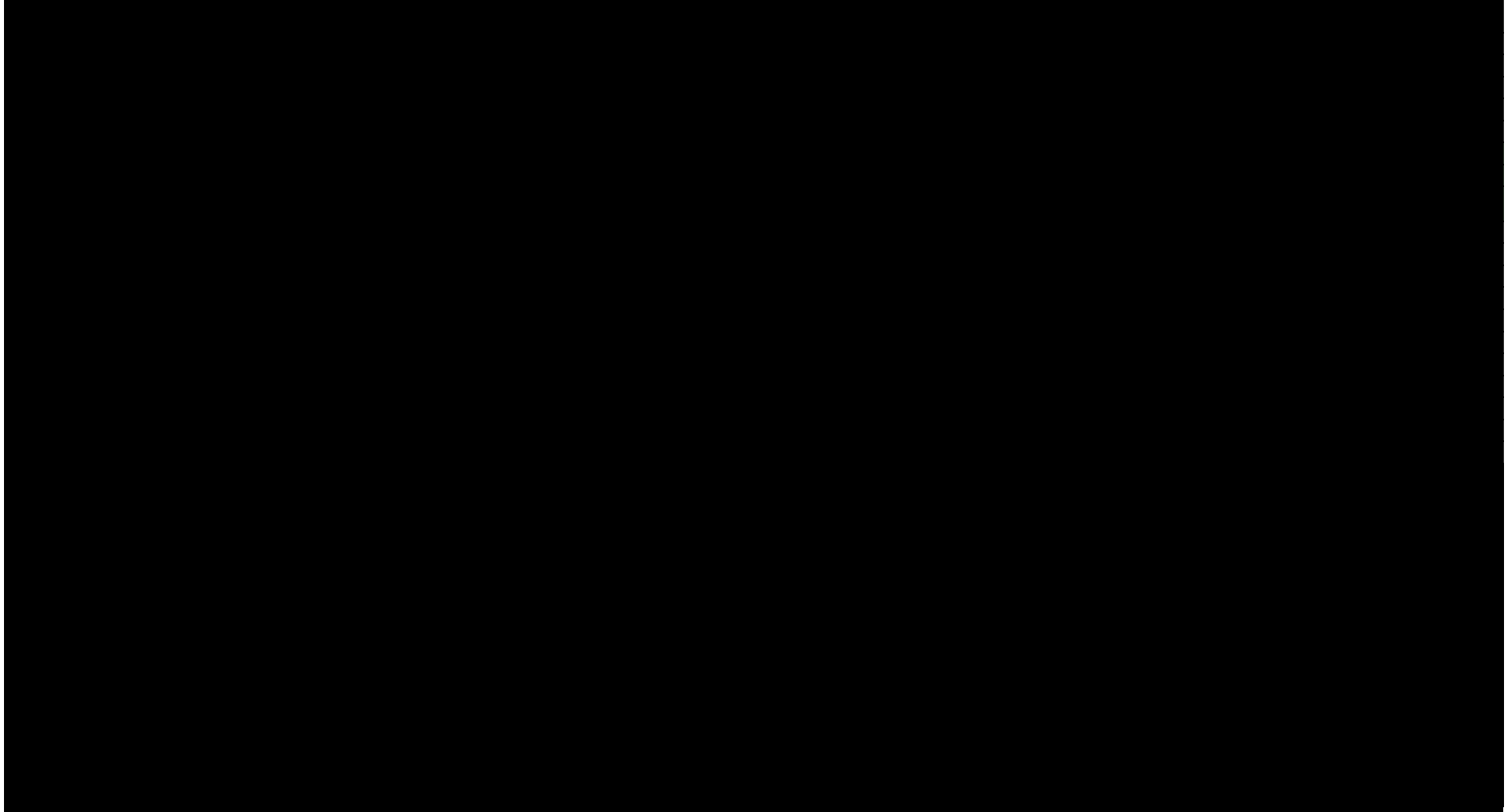
ANNEX 4.4

Economic Appraisal Option 4

YEAR :	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------	---------



Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28
---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------



[Redacted]										
Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	TOTAL
[Redacted]										

ANNEX 4.5

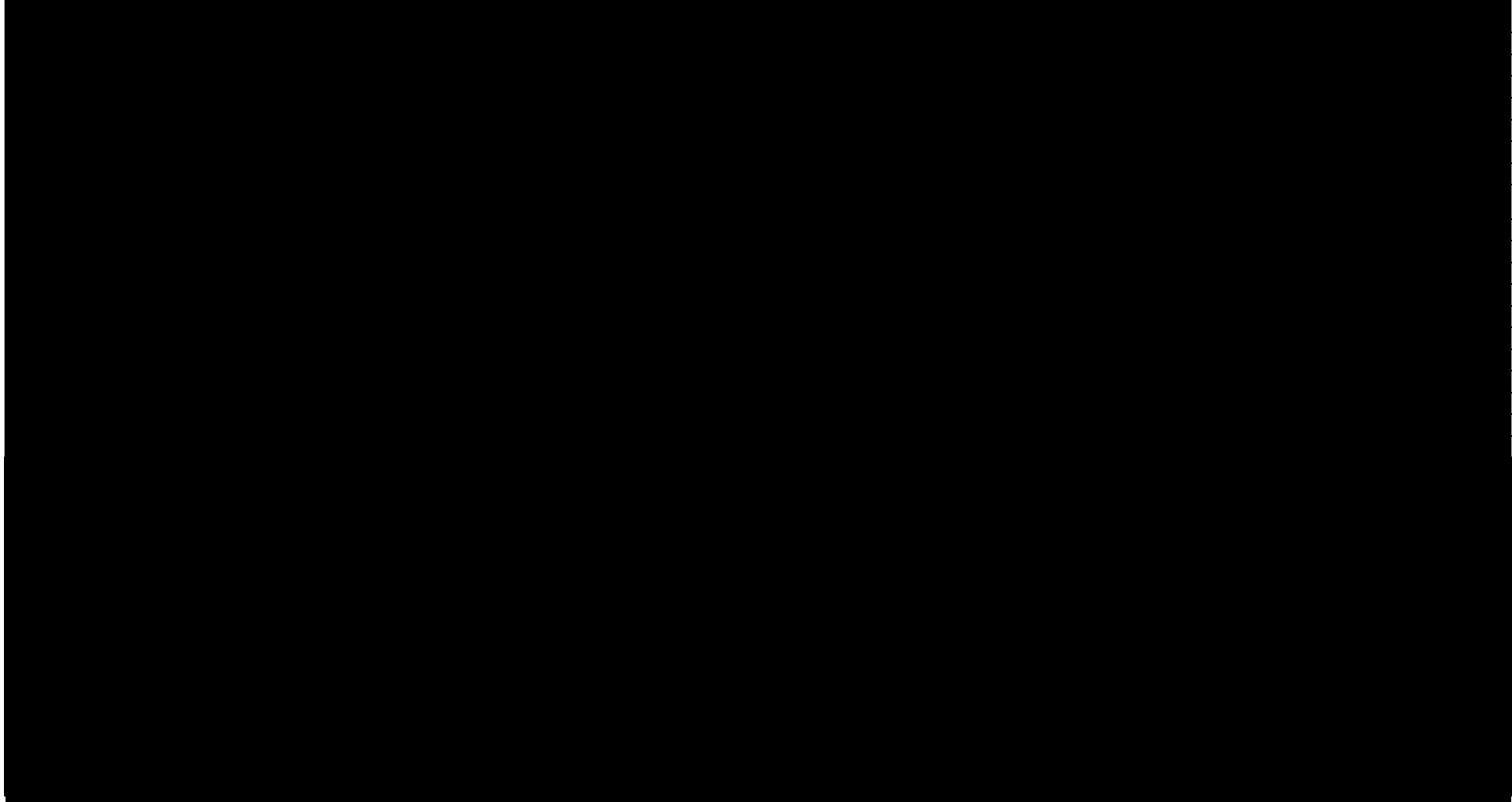
Economic Appraisal

Option 4a

YEAR : Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10



Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27
---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------





Year 28	Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	TOTAL
---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	-------

[Redacted content]											
--------------------	--	--	--	--	--	--	--	--	--	--	--

ANNEX

5.1.1

New Scapa Road

New Hospital and
Healthcare Facility

New Scapa Road



ANNEX

5.1.2

Site Layout Plan



A	21/1/14	Clinical Support Building relocated & service road pulled back from north boundary		
Rev.	Date	Details	Drawn	Checked
Issued for:				
PRELIMINARY				
Project/Client:		Project No:		
NEW HOSPITAL & HEALTHCARE FACILITY ORKNEY		120083		
Dwg No:		AL(0)020		
Rev:				
Drawing:		Scale:		
SITE LAYOUT PLAN		1:750 @A1		
NEW SCAPA ROAD OPTION		Drawn By: Date:		
Checked By: Date:				

ARCHIAL | NORR

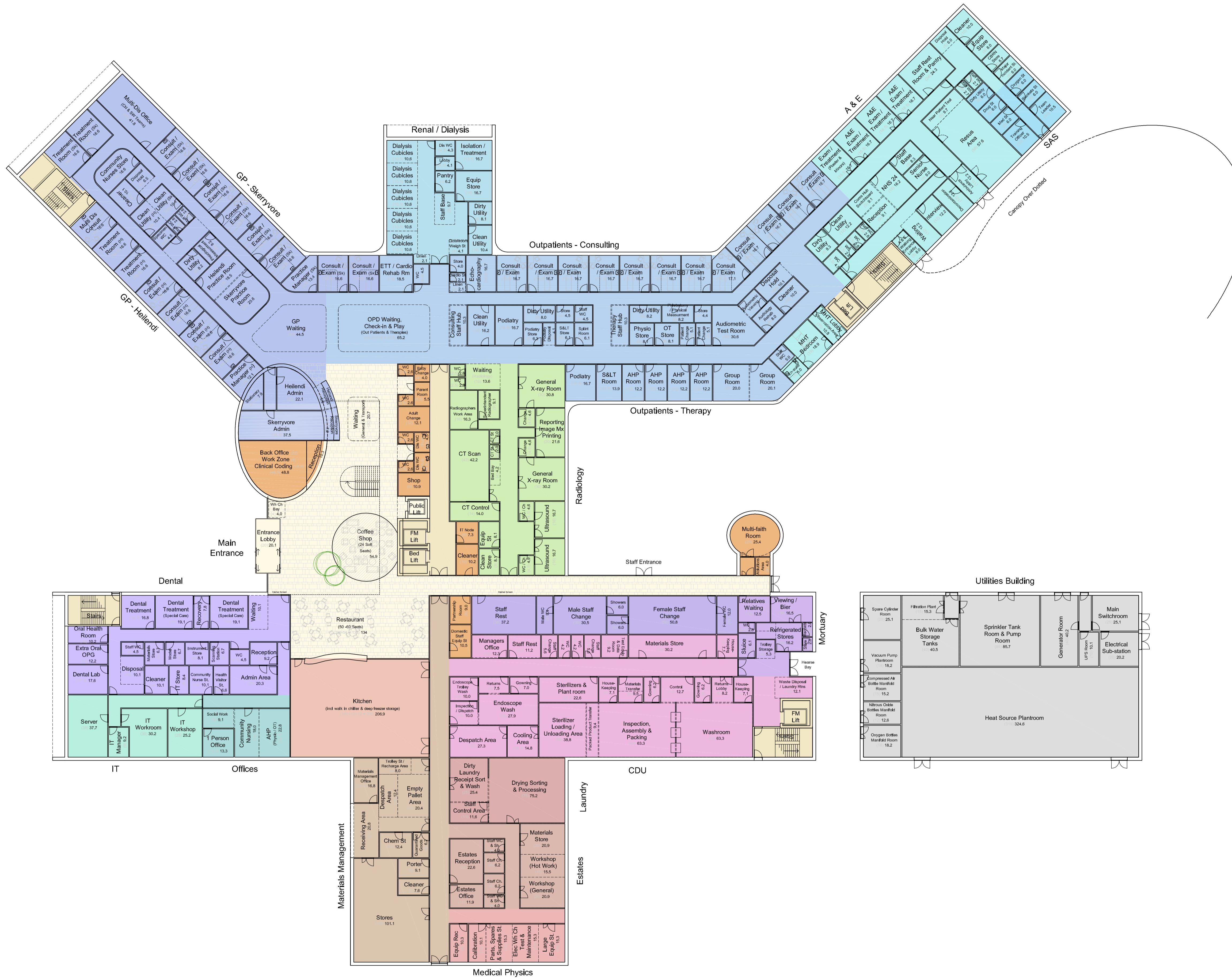
5 Longman Road, Inverness, IV1 1RY
 T: +44 (0)146 372 9307 F: +44 (0)146 322 5284
 www.archialnorr.com

Contractors must work only to figured dimensions which are to be checked on site.
 © INGENIUM ARCHIAL LIMITED, An Ingenium International Company

ANNEX

5.1.3

Ground Floor Plan



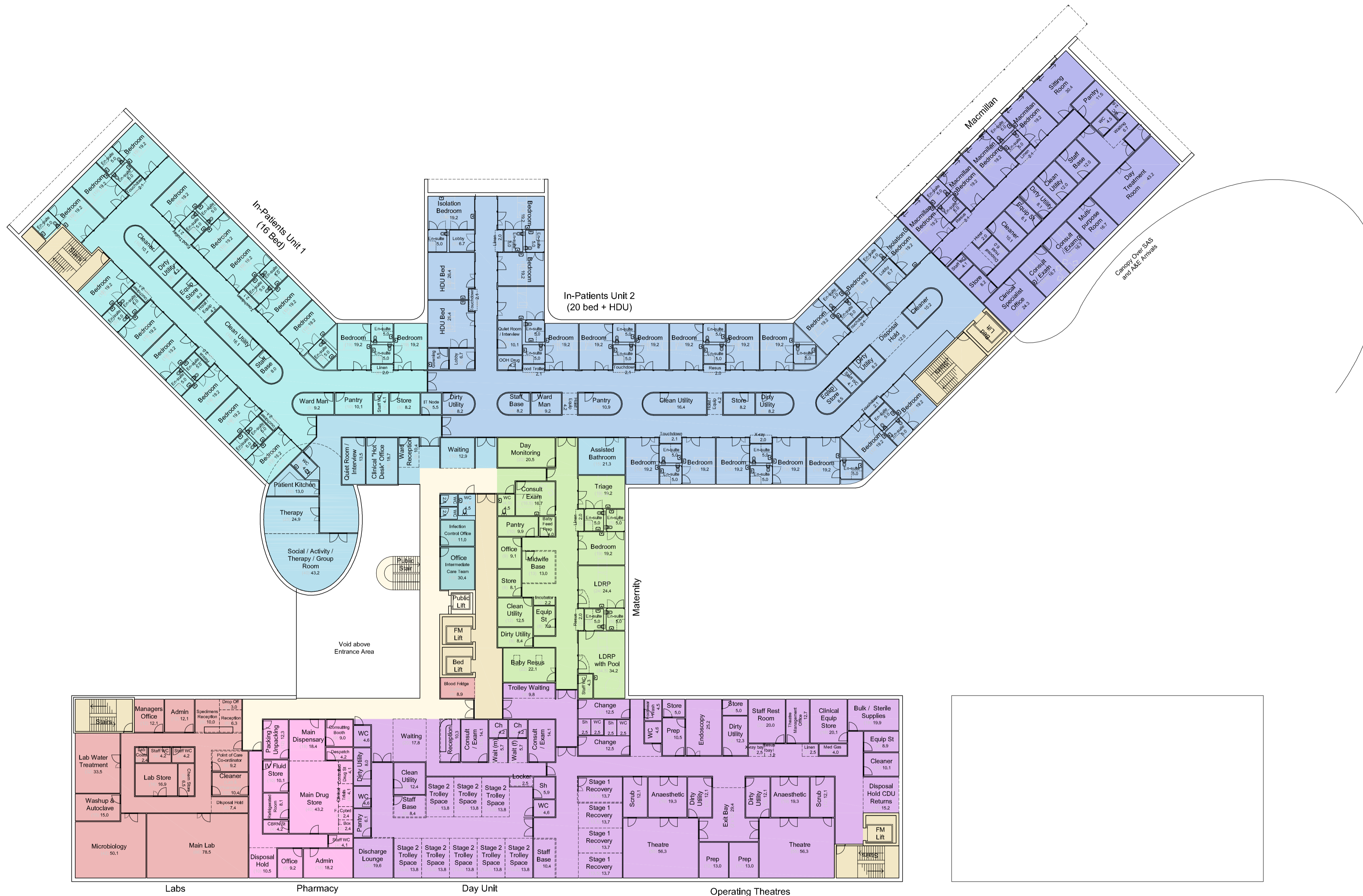
Rev.	Date	Details	Drawn	Checked
K	06/01/14	Minor amendments & department colours added		
J	20/12/13	Re-designed to suit revised SOA		
H	03/07/13	Various minor alterations, as per client comments		
G	02/07/13	Layout revised to SOA v 4		
F	10/06/13	Skew deleted		
E	23/05/13	Assessment room added adjacent to Place of Safety Relatives overnight room added adjacent to Macmillan		
D	10/05/13	Layout updated as per client comments Geometry of skew adjusted		
C	09/05/13	Physio relocated, Intermediate Care & OPD updated as per client comments		
B	25/04/13	Amended as revised SOA		
A	02/04/13	Amended as per client comments Care Facility deleted		

FOR INFORMATION				
Project/Client:	NEW HOSPITAL AND HEALTHCARE FACILITY ORKNEY	Project No:	IAIV 120083	
Drawn:	HOSPITAL	Scale:	1:250 @A1	
Drawn By:	BPW	Date:		
Checked By:		Date:		

ANNEX

5.1.4

First Floor Plan



K	06/01/14	Minor amendments & department colours added		
J	20/12/13	Re-designed to suit revised SOA		
H	03/07/13	Various minor alterations, as per client comments		
G	02/07/13	Layout revised to SOA v 4		
F	10/06/13	Skew deleted		
E	23/05/13	Maternity replanned as per client comments. East end of acute wards & L&D amended		
D	10/05/13	Intermediate beds moved upstairs. Geometry adjusted to re-introduce skew		
C	25/04/13	Amended as per revised SOA		
B	02/04/13	Updated as per client comments		
A	08/03/13	Acute Wards amended to be linear. Renal relocated to suit		
Rev.	Date	Details	Drawn	Checked

FOR INFORMATION			
Project/Client:	NEW HOSPITAL AND HEALTHCARE FACILITY ORNKEY	Project No:	IAIV 120083
Dwg No:	AL(0)200	Rev:	-
Scale:	1:250 @A1	Drawn By:	BPW
Drawn:	HOSPITAL	Date:	
Checked:	FIRST FLOOR PLAN	Date:	

ANNEX

5.2

Site Photograph



ANNEX

5.3

Adjacency Matrix

NHS Orkney New Hospital Adjacency Matrix 6th February 2014

	Emergency Department	GP OOH	Outpatients	Inpatient Unit 1	Inpatient Unit 2 + HDU	Inpatient Therapy	MacMillan Unit	Operating Theatres & Multipurpose area	Maternity Unit	Day Unit	Imaging	Laboratories	Pharmacy	Outpatient Therapy Dept	Renal Dialysis	GP Practice's	Community Staff Offices	Dental Service	Main Entrance	Restaurant	Medical Physics	CDU	Mortuary	Laundry	Materials Management	Stores/Supplies	Catering
Emergency Department	X	1	1	3	2	0	3	2	2	0	1	2	3	0	0	0	0	3	2	3	0	0	3	0	0	2	2
GP OOH	1	X	1	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	2	3	0	0	0	0	0	0	0
Outpatients	1	1	X	0	3	3	3	3	0	0	1	3	3	1	1	2	0	0	1	2	0	3	0	0	0	2	0
Inpatient Unit 1	3	0	0	X	1	1	2	2	0	0	2	3	2	0	0	0	3	0	2	3	0	0	2	0	0	2	2
Inpatient Unit 2 + HDU	2	0	3	1	X	2	1	2	2	2	2	2	2	0	3	0	0	0	2	3	2	3	2	0	0	2	2
Inpatient Therapy	0	0	3	1	2	X	3	0	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0	2	0
MacMillan Unit	3	0	3	2	1	3	X	0	0	0	2	2	3	0	0	0	0	0	2	3	0	0	2	0	0	2	2
Operating Theatres & Multipurpose Area	2	0	3	2	2	0	0	X	1	1	3	2	3	0	0	0	0	0	3	3	2	2	3	0	3	2	0
Maternity Unit	2	0	0	0	2	0	0	1	X	0	2	2	2	0	0	0	0	0	2	3	3	3	3	0	0	2	2
Day Unit	0	0	0	0	2	0	0	1	0	X	3	0	3	0	0	0	0	0	2	3	3	3	0	0	0	2	2
Imaging	1	1	1	2	2	0	2	3	2	3	X	0	3	3	3	3	0	3	2	3	3	0	0	0	0	2	0
Laboratories	2	0	3	3	2	0	2	2	2	0	0	X	0	0	2	3	0	0	0	3	0	0	0	0	3	3	0
Pharmacy	3	3	3	2	2	0	3	2	3	3	3	0	X	0	2	0	0	0	0	3	0	0	0	0	3	0	0
Outpatient Therapy Department	0	0	1	0	0	3	0	0	0	0	3	0	0	X	0	0	0	0	1	2	0	0	0	0	0	3	0
Renal Dialysis	0	0	1	0	3	0	0	0	0	0	3	2	2	0	X	3	0	0	1	2	3	0	0	0	0	2	2
GP Practice's	0	0	2	0	0	0	0	0	0	0	3	3	0	0	3	X	2	0	1	3	0	3	0	0	0	2	0
Community Staff Office	0	0	0	3	0	0	0	0	0	0	0	0	0	0	2	X	0	0	3	3	0	0	0	0	0	0	0
Dental Service	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	X	1	3	3	2	0	0	0	2	0
Main Entrance	2	2	1	2	2	0	2	3	2	2	2	0	0	1	1	1	3	1	X	1	0	0	3	0	0	3	0
Restaurant	3	3	2	3	3	3	3	3	3	3	3	3	3	2	2	3	3	3	1	X	3	3	0	0	3	2	1
Medical Physics	0	0	0	0	2	0	0	2	3	3	3	0	0	0	3	0	0	3	0	3	X	3	0	0	0	3	0
CDU	0	0	3	0	3	0	0	2	3	3	0	0	0	0	3	3	0	2	0	3	3	X	0	0	3	2	0
Mortuary	3	0	0	2	2	0	2	3	3	0	0	0	0	0	0	0	0	0	3	0	0	0	X	0	0	2	0
Laundry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	X	2	2	0
Materials Management	0	0	0	0	0	0	0	3	0	0	0	3	3	0	0	0	0	0	0	3	0	3	0	2	X	2	3
Stores/Supplies	2	0	2	2	2	2	2	2	2	2	2	3	0	3	2	2	0	2	3	2	3	2	2	2	2	X	3
Catering	2	0	0	2	2	0	2	0	2	2	0	0	0	0	2	0	0	0	0	1	0	0	0	0	3		X
SAS	1	2	0	0	2	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Estates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0

- 0 No direct relationship
- 1 Immediate adjacency
- 2 Easily accessible
- 3 Some access required.

ANNEX 6

Heads of Terms



GERALDEVE

Our Ref: KRT/SAM
NHS Orkney offer for land at New Scapa Road
22nd January 2014

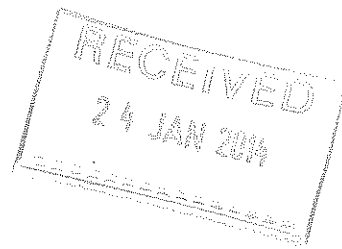
Heads of Terms Proposal

in respect

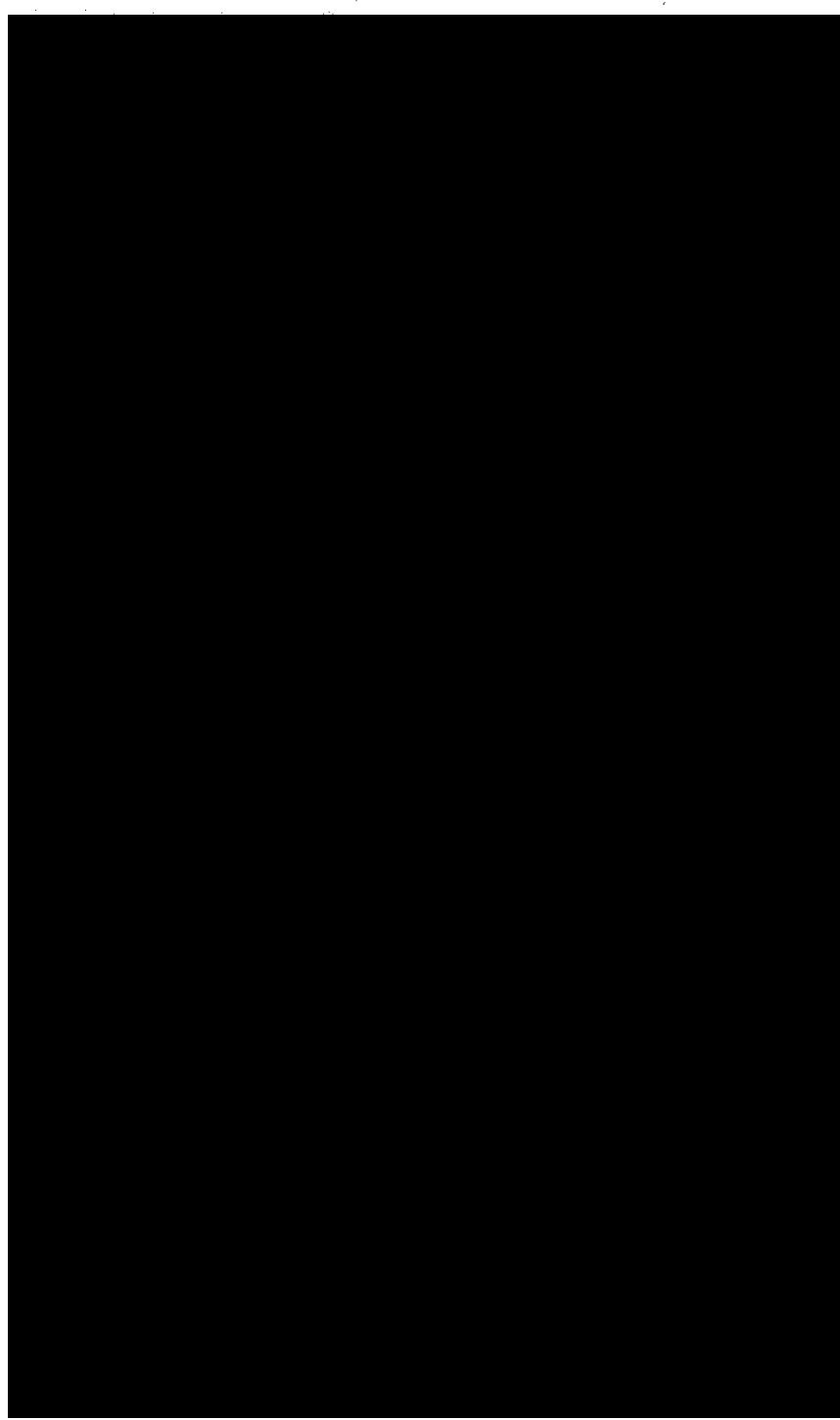
of

Land at New Scapa Road, Orkney

22nd January 2014



- 1. Seller:**
- 2. Seller's Agents:**
- 3. Seller's Solicitors:**
- 4. Purchaser:**
- 5. Purchaser's Agents:**
- 6. Purchaser's Solicitors:**
- 7. Subjects:**
- 8. Off-Site Works Compound:**
- 9. Price:**





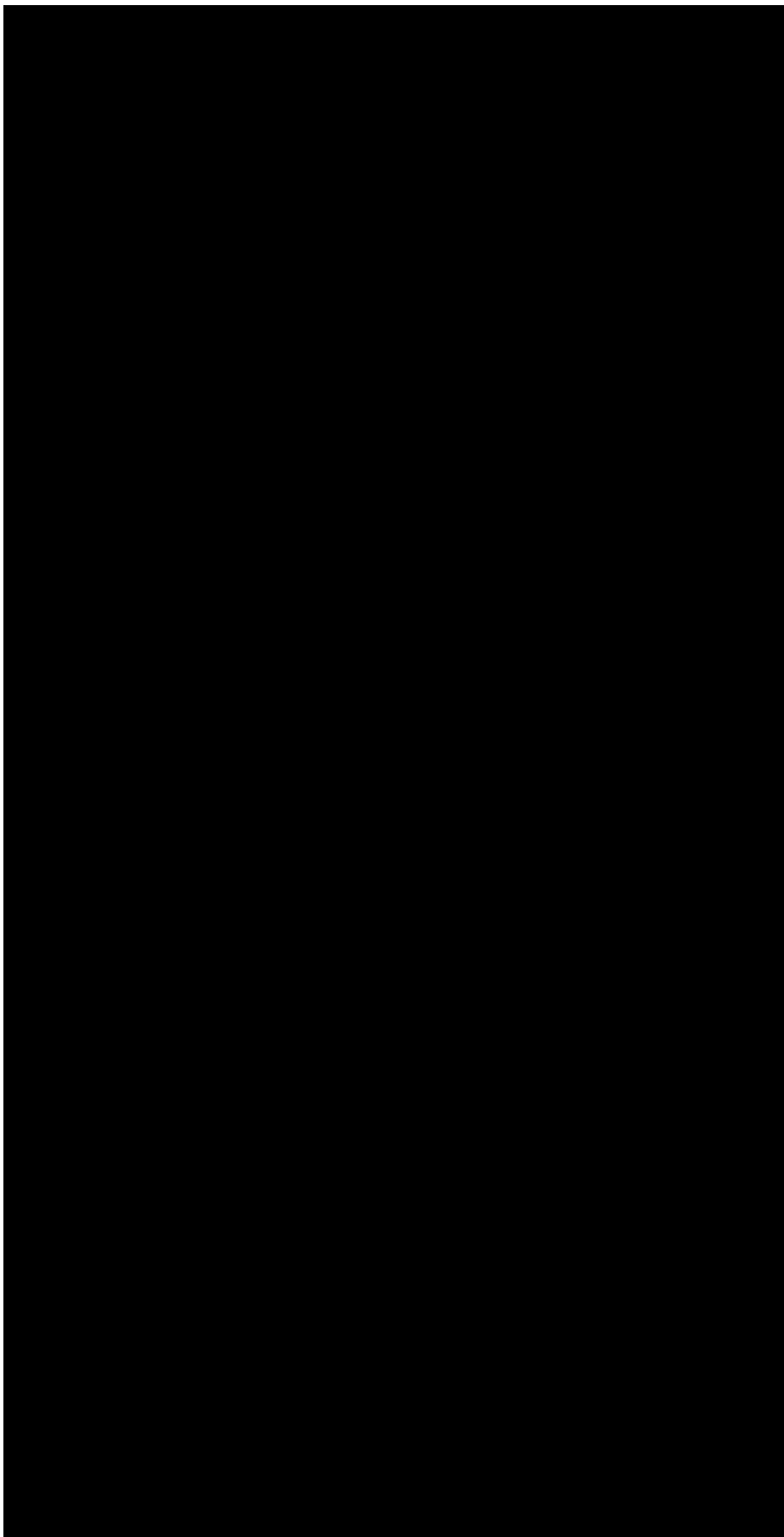
Our Ref: KRT/SAM
NHS Orkney offer for land at New Scapa Road
22nd January 2014

GERALDEVE

10. Minimum Price:

11. Date of Entry:

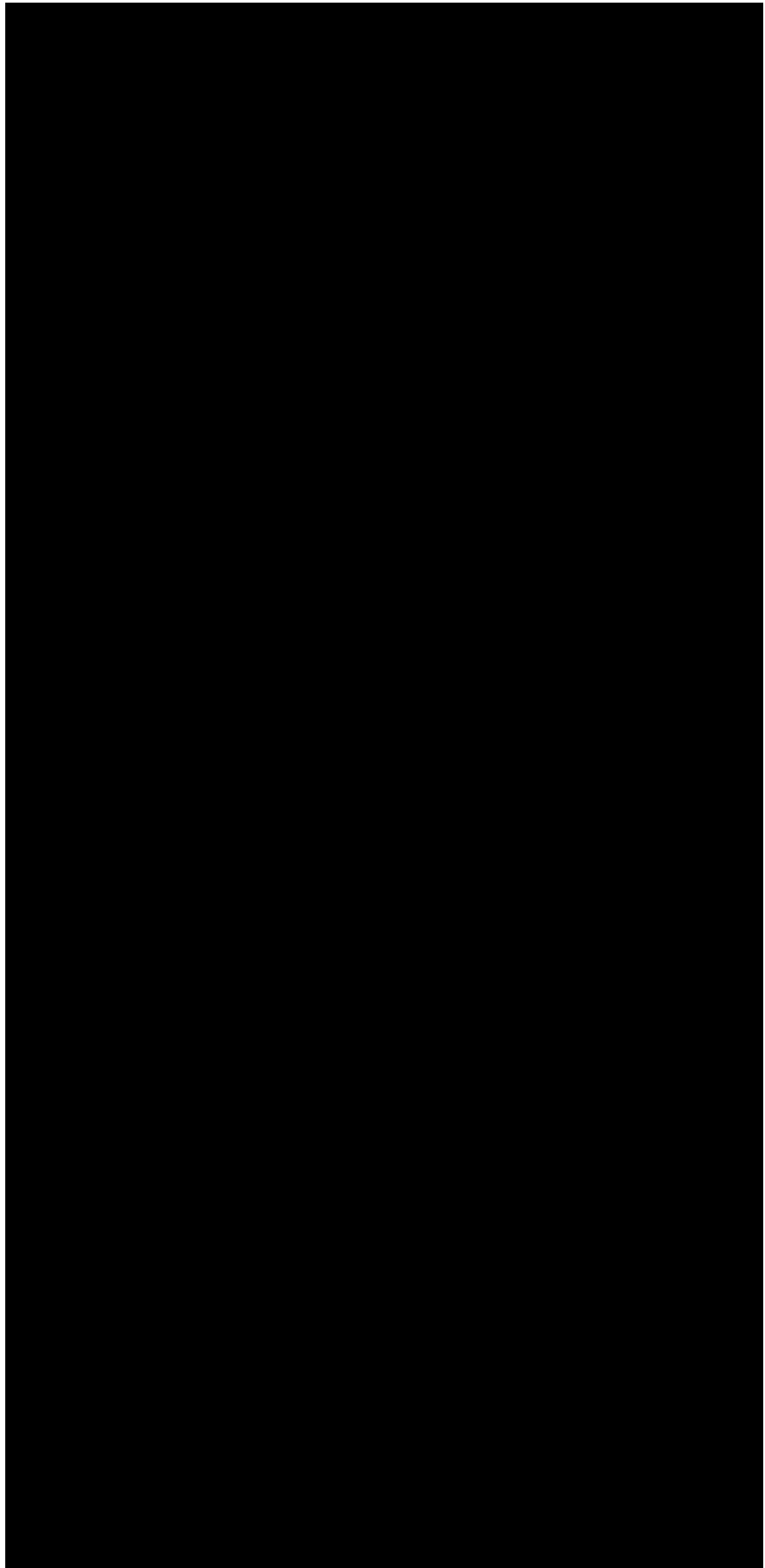
**12. Suspensive
Conditions of Offer:**



Our Ref: KRT/SAM
NHS Orkney offer for land at New Scapa Road
22nd January 2014



GERALDIVE



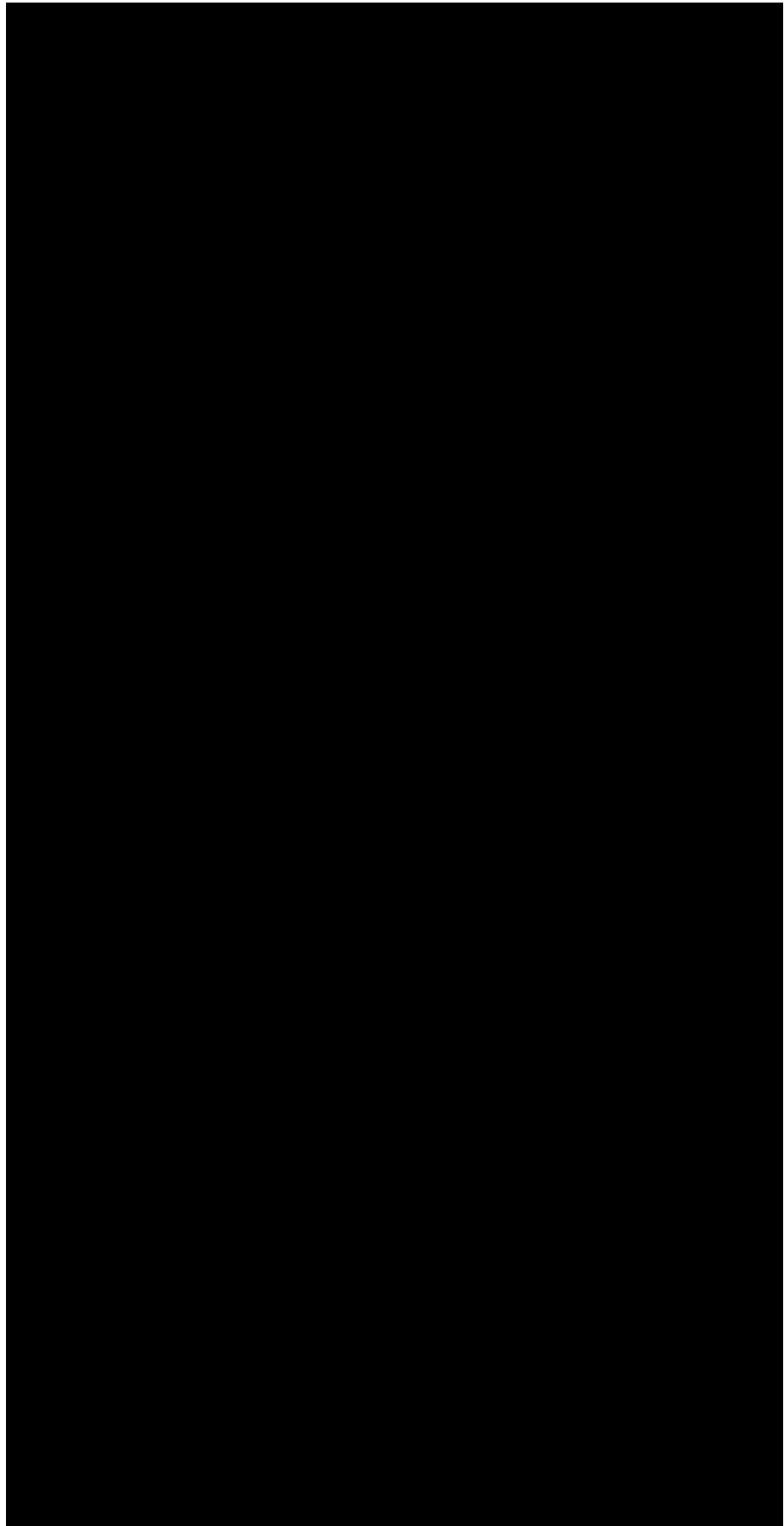


**13. Calculation of Price
Payable:**

**14. Contribution to
Abortive Fees:**

15. Costs:

**16. Requirements of
Writing (Scotland) Act
1995:**

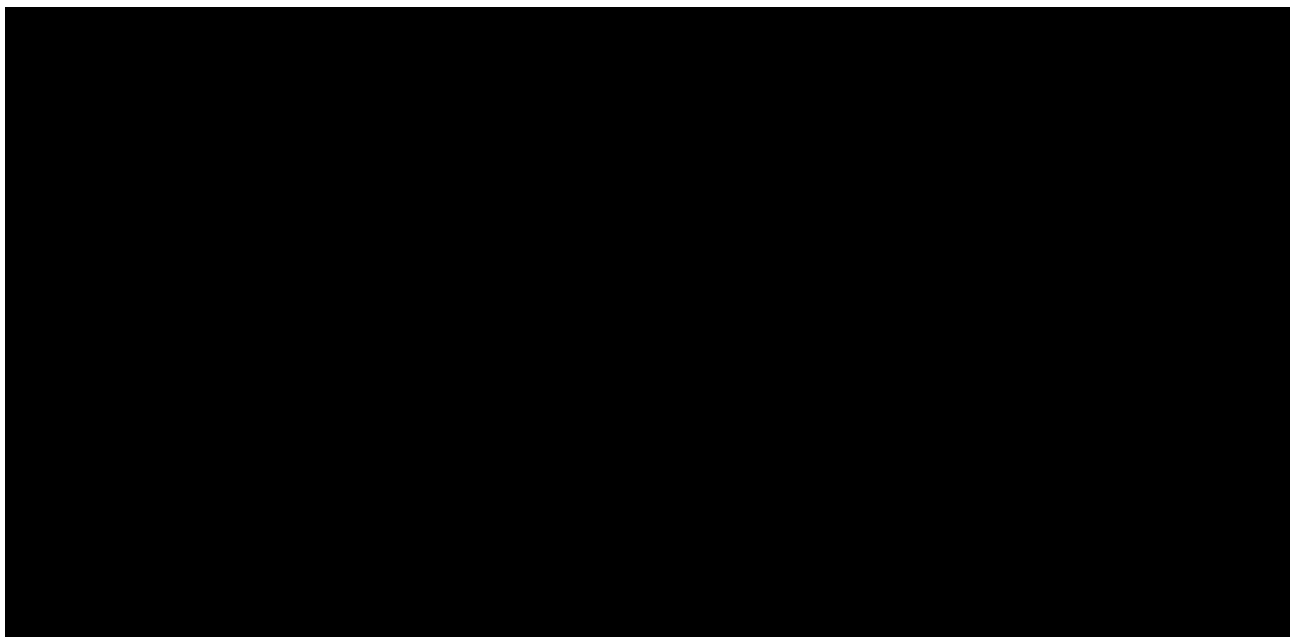




Our Ref: KRT/SAM
NHS Orkney offer for land at New Scapa Road
22nd January 2014

GERALDEVE

We certify that the above terms are agreed:-



ANNEX 7.1

SOA Version 6

NHS Orkney: Draft New Facility "Shadow" S of A

B U C H A N
ASSOCIATES



Schedule of Accommodation

MASTER SHEET

Accommodation	Type	Net m ²	Gross m ²	Comments
Main Entrance Hub		198	276.5	
Out-patient & Therapies		637.5	890.3	
GP Areas (Skerryvore & Heilendi)		567.5	792.5	
A&E/OOH (Incl NHS 24)		335.5	479.1	
Dental		195	272.3	
Radiology		249	347.7	
In-patient Area		1386	2008.3	
Macmillan Unit		321	465.1	
Maternity Unit		280.5	406.4	
Day Unit, Theatres & Endoscopy		774	1040.3	
Renal Dialysis		123	171.8	
CDU		444	596.7	
Pharmacy		168	225.8	
Mortuary		60	83.8	
Laboratory		227	305.1	
IT		119	159.9	
L&D and Offices		108	145.2	
Staff Changing		185	248.6	
FM		915.5	1230.4	
SAS		50	67.2	
Total		7343.5	10213.1	

ADD PLANT (ASSUME 10%) 1021.3

ADD COMMUNICATIONS (ASSUME 15%) 1532.0

TOTAL 12766.4

Version 3: Reflecting outturns of time-limited Healthcare Planning Review

Notes:

Planning, engineering and circulation allowances included are indicative only

B+A have not reviewed central FM areas including staff changing

B+A have not reviewed CDU

Main area/descriptor amendments are highlighted in red

B+A (11 Dec 2013)

Main Entrance	No	Area m2	Total Area m2	Comments
---------------	----	---------	---------------	----------

Reception, Clinical Administration and Waiting				
Entrance Foyer/Draft Lobby	1	20	20	
Wheelchair Bay	1.0	4.0	4	
Waiting - General & Transport	1.0	20.0	20	
Reception/volunteers area	1.0	10.0	10	Supporting all NHSO Services and including 2 x reception locations (1 high, 1 low)
Reception back office/medical record staff	1.0	22.0	22	Assumes 4 x desks (Current total MR head count 8)
Clinical Coding/Quiet Work Zone	1.0	16.5	16.5	Assumes 3 x desks
1 Person Work Zone - Scanning, etc.	1.0	8.0	8	Could be glazed-in area off main medical records staff office
Sub Total			100.5	

Sanitary Facilities				
WC - Ambulant	4.0	2.5	10.0	Design dependent - may require some distribution
WC - Accessible	2	4.5	9.0	
Parents room/baby feed	1.0	5.5	5.5	
Baby Changing/WC	1.0	4.0	4.0	
Adult Changing/WC (Disabled)	1.0	12.0	12.0	
Sub Total			40.5	

Whole Hospital Support Areas (Associated with the Main Entrance)				
Quiet Reflective/Multi-faith Room	1.0	25.0	25.0	
Ablutions Area Including Foot Wash	1.0	4.0	4.0	Associated with multi-faith room
Shop	1	9	9.0	Assumes shop bulk storage scheduled elsewhere?
1:1 Meeting Room: Partnership	1.0	9.0	9.0	
DSR/Cleaners Room	1.0	10.0	10.0	
			57.0	

Total Net			198.0	
Planning	5%		9.9	
			207.9	
Engineering	3%		6.2	
Circulation	30%		62.4	
Total			276.5	

Notes

Many areas amended
Waiting area sizes need checked based on anticipated numbers
Adult change added (legislative requirement)
Ablutions area added (SGHD guidance)
Shop bulk storage not included
Chaplain's office not included

Outpatients and Therapies

Outpatients and Therapies	Area		Total	Comments
	No	m2	Area m2	

Reception, Clinical Administration and Waiting				
"Check-in Area" (Within waiting area)	1	6	6.0	Assumes electronic "Check-in"
Shared Waiting Area: 30 persons incl. 3 wheelchair spaces	1.0	49.5	49.5	Assumes max. of circa. 1.5 people waiting per "primary delivery location", e.g. Consult room, tx space, specialist room, etc.
Child play	1.0	8.0	8.0	Located adjacent to SLT and Outpatients
WC - Accessible	2.0	4.5	9.0	
Sub Total			72.5	

Consulting "Zone"				
Staff Hub	1.0	10.0	10.0	
Phlebotomy/physical measurement	1.0	8.0	8.0	Includes walk on bariatric scales
Consulting/examination room	12.0	16.5	198.0	For all flexible generic consulting activity. Also supporting A&E "overflow" consulting as required.
Store cupboard	3.0	4.0	12.0	Adjacent to consulting/exam rooms to support absolute flexibility in use
ETT/Cardiac Rehab Room	1.0	18.0	18.0	With ETT eqpt and exercise bike. (Also acts as base for specialist nurse)
Echocardiography Room	1.0	16.5	16.5	
Store cupboard: Cardiology	1.0	2.0	2.0	Adjacent to echocardiography room for mobile echocardiography eqpt.
Sub Total			264.5	

Therapy "Zone"				
Staff Hub	1.0	10.0	10.0	
Group room/spaces (Bookable)	2.0	20.0	40.0	10 Person; 2 rooms adjacent incorporating a movable partition to facilitate expansion to 40m2 for "gym" type activities
Audiometric Test Room	1.0	30.0	30.0	Sound proof room with separate viewing area
Audiology rehab/hearing aid fitting/adult booth	1.0	8.0	8.0	Workshop and admin space (Contiguous with viewing area to reduce overall space requirement) As per Gilbert Bain Hospital
S< Room	1.0	13.5	13.5	With small table and chairs
Podiatry treatment room	2.0	16.5	33.0	
AHP treatment rooms	4.0	12.0	48.0	
Splint room	1.0	6.0	6.0	Adjacent to one or more AHP treatment rooms
Patient changing and shower/WC	2.0	5.0	10.0	Supporting whole area if required
Store Dietetics	1.0	8.0	8.0	
Store: Physio	1.0	8.0	8.0	
Store: OT	1.0	8.0	8.0	
Store: Speech & Language therapy	1.0	6.0	6.0	
Store: Podiatry (Clean)	1.0	6.0	6.0	
Disposal hold/instrument collection for podiatry	1.0	4.0	4.0	
Sub Total			238.5	

Shared Support/Utility Areas				
Clean utility	1.0	16.0	16.0	Primarily associated with "Consulting Zone"
Dirty utility	2.0	8.0	16.0	Primarily associated with "Consulting Zone"
Store: linen	1.0	2.0	2.0	Assumes exchange trolley
Staff WC's/cube lockers	2.0	4.0	8.0	
Disposal hold/recycling	1.0	10.0	10.0	
Cleaners room	1.0	10.0	10.0	
Sub Total			62.0	

Total Net				
Planning	5%		31.9	
			669.4	
Engineering	3%		20.1	
Circulation	30%		200.8	
Total			890.3	

Notes

All rooms include tele-medicine functionality

Intended to be as flexible as possible

GP Areas

GP Areas	No	Area m2	Total Area m2	Comments
----------	----	---------	---------------	----------

Shared Accommodation				
Waiting				
Waiting - patient	1.0	40.0	40.0	25 person including 2 wheelchairs
Patient amenities in hub	0.0	0.0	0.0	
Multi-disciplinary consulting	1.0	15.0	15.0	What function/activity is associated with this room?
Pneumatic tube point	0.0	0.0	0.0	Assume no pneumatic tube
Utility Rooms				
WC - patient, specimen collection	1.0	4.5	4.5	Only 1 for GP area
Dirty utility	1.0	8.0	8.0	Standard size across facility
Disposal hold/recycling	1.0	6.0	6.0	
Cleaners room	1.0	10.0	10.0	
Staff WC's - no cube lockers	2.0	2.5	5.0	
Office - Multi-disciplinary - CN's and SW teams	1.0	42.0	42.0	Is this accommodation to be provided within the project?
Sub Total			130.5	

Skerryvore Requirements				
Reception and Admin				
Reception	1.0	7.5	7.5	Co-located with Heilendi with partition
Administration area	1.0	38.5	38.5	Located behind reception area; assume 8/9 staff?
1:1 and small group meeting - practice manager	1.0	12.0	12.0	Area as per SHPN 36
Practice room	1.0	25.0	25.0	Confirm function. To have the ability to expand into Heilendi Practice room to form one space with acoustic partition
Consulting/Examination rooms				
Consulting examination rooms	8.0	16.5	132.0	Standardised room area for flexibility - Reduced from 10 to 8 (27 Nov 13)
Treatment rooms	2.0	16.5	33.0	Standardised room area for flexibility - 1 x treatment room, 1 x "Nurses" room
Physiological Measurement Room	1.0	8.0	8.0	Replaced 1 x treatment room (27 Nov 13)
Storage				
Records - interim	0.0	15.0	0.0	Assume not required (EPR) - assume all paper notes scanned (clarify assumption)
Store - stationery	1.0	2.0	2.0	Co-located with Heilendi with separate spaces
Store - clean utility	1.0	10.0	10.0	Co-located with Heilendi with partition/separate spaces
Sub Total			268.0	

Heilendi Requirements				
Reception and Admin				
Reception	1.0	6.0	6.0	Co-located with Skerryvore with
Administration area	1.0	22.0	22.0	Located behind reception area; assume 4/5 staff?
1:1 and small group meeting - practice manager	1.0	12.0	12.0	Area as per SHPN 36
Practice room	1.0	18.0	18.0	Confirm function. To have the ability to expand into Skerryvore Practice room to form one space with acoustic partition
Consulting/Examination rooms				
Consulting examination rooms	4.0	16.5	66.0	Standardised room area for flexibility
Treatment rooms	2.0	16.5	33.0	Standardised room area for flexibility - clarify need for 2 full size rooms
Storage				
Records - interim	0.0	15.0	0.0	Assume not required (EPR) - assume all paper notes scanned (clarify assumption)
Store - stationery	1.0	2.0	2.0	Co-located with Heilendi with separate spaces
Store - clean utility	1.0	10.0	10.0	Co-located with Heilendi with partition/separate spaces
Sub Total			169.0	

Total Net			567.5	
Planning	5%		28.4	

			595.9	
Engineering	3%		17.9	
Circulation	30%		178.8	
Total			792.5	

A&E and Out of Hours

A&E and Out of Hours	No	Area m2	Total Area m2	Comments
----------------------	----	------------	------------------	----------

Entrances, reception, waiting, WC's				
Ambulance draught lobby	1.0	11.0	11.0	
Walking entrance draught lobby	1.0	8.0	8.0	
Reception - admin 1 staff	1.0	9.0	9.0	
Hand wash station	1.0	1.5	1.5	Added (1 Dec 13)
Communications hub/switchboard/24 hr. manned	1.0	9.0	9.0	Emergency Department entrance will be main entrance out-of-hours
NHS 24 Operational base	1.0	16.0	16.0	Clarify number of staff
WC - Ambulant	1.0	2.5	2.5	Immediately adjacent to switchboard/NHS 24 area.
Waiting	1.0	12.0	12.0	8 person; including 2 wheelchair users
WC - Assisted	1.0	4.5	4.5	
WC - Ambulant	2.0	2.5	5.0	
Wheelchair bay	1.0	2.0	2.0	3 wheelchairs
Sub Total			80.5	

Clinical room spaces				
Resuscitation area; 2 place	1.0	56.0	56.0	Movable partition and medical gas outlets to allow treatment of 3 patients. One space to be set up for paediatrics
Examination/treatment - general	3.0	16.5	49.5	One room equipped as Ophthalmic room. Includes GP OOH activity.
Examination/treatment - plaster and minors	1.0	16.5	16.5	Shared with out-patients.
Interview room/relatives room	1.0	11.0	11.0	Area as per SHPN 22
Decontamination room	1.0	12.0	12.0	
Sub Total			145.0	

Staff facilities				
Staff base	1.0	8.0	8.0	
Near patient test facility	1.0	9.0	9.0	Is this required if relatively close to HDU? What equipment?
Clean utility	1.0	12.0	12.0	
Dirty utility	1.0	8.0	8.0	
Senior Charge Nurse Office: 1 Person	1.0	9.0	9.0	
Store - equipment	1.0	8.0	8.0	
Store - major incident	1.0	6.0	6.0	
Store - CBRN eqpt	1.0	4.0	4.0	
Bay - mobile X-ray	1.0	2.0	2.0	
Staff rest room and pantry (shared SAS)	1.0	24.0	24.0	How many people? Shared with SAS
Staff WC/cube lockers	2.0	2.0	4.0	
Cleaners room	1.0	10.0	10.0	
Disposal holding/recycling	1.0	6.0	6.0	
Sub Total			110.0	

Total Net				
Planning	5%		16.8	
			352.3	
Engineering	3%		10.6	
Circulation	33%		116.3	
Total			479.1	

Notes

Includes NHS 24 Accommodation
Assume Switchgear, Battery & UPS room in Plant allocation
No body viewing room scheduled

Check mental health patient pathway
Assume central staff changing

Dental

Dental	No	Area m2	Total Area m2	Comments
--------	----	------------	------------------	----------

Entrances, waiting, WC's, reception and admin				
Reception - dental	1.0	9.0	9.0	Including 2 x reception locations (1 high, 1 low)
Administration area	1.0	20.0	20.0	Assumes 2 x desks plus 2 x "hot desks"
Shared Waiting Area: 6 persons incl. 1 wheelchair space	1.0	10.0	10.0	
WC - wheelchair accessible	1.0	4.5	4.5	
Sub Total			43.5	

Dental services				
Dental treatment room - special care	2.0	19.0	38.0	Also suit bariatric
Dental treatment room	1.0	16.5	16.5	
Oral health room	1.0	10.0	10.0	No chair required
Recovery room	1.0	7.5	7.5	1 place
Extra oral - OPG	1.0	12.0	12.0	
Dental lab	1.0	17.5	17.5	Casting models, making simple retainers
Scanning station	1.0	6.0	6.0	Digitising of X-ray plates
Sub Total			107.5	

Storage				
Model store	1.0	6.0	6.0	Classed as clinical records, retain 11 yrs; assume archive elsewhere
Store - clean instruments	1.0	8.0	8.0	
Store - materials	1.0	6.0	6.0	Assumes storage also in main store area
Sub Total			20.0	

Utility				
Staff WC/cube lockers	1.0	4.0	4.0	
Cleaners room	1.0	10.0	10.0	
Disposal hold/dirty instrument store	1.0	10.0	10.0	
Sub Total			24.0	

Total Net				
Planning	5%		9.8	
			204.8	
Engineering	3%		6.1	
Circulation	30%		61.4	
Total			272.3	

Notes

Assumes public dental service and immediate support staff only (All numbers unsubstantiated at this

Radiology

Radiology	No	Area m2	Total Area m2	Comments
-----------	----	------------	------------------	----------

Entrances, waiting, WC's				
Sub-wait/"Check-in"	1.0	10.0	10.0	(If required - dependent on design)
Bed/trolley wheelchair bay	1.0	4.0	4.0	(Supporting in-patients arriving in Radiology) Locate in private location close to exam rooms
WC - Ambulant	2.0	2.5	5.0	(If required - dependent on design)
Sub Total			19.0	

General x-ray imaging facilities				
Disabled/wheelchair patients pass through changing cubicle	2	4.5	9	
General computed radiography x-ray room incl. control	2	30	60	
Sub Total			69	

Ultrasound				
General and obstetrics ultrasound exam room	2.0	16.0	32.0	Must allow access for a bed
WC/Change - Assisted	1.0	4.5	4.5	
Sub Total			36.5	

CT Suite				
CT control room	1.0	14.0	14.0	
CT scanner room	1.0	42.0	42.0	
WC/Change - Assisted	1.0	4.5	4.5	
CT storage cupboards: consumables, linen	2.0	2.0	4.0	
Sub Total			64.5	

Reporting and Staff Areas				
Radiographer's work area/cube lockers	1.0	15.0	15.0	Assumes 3-4 x work stations
1:1 superintendent radiographer	1.0	9.0	9.0	
Reporting, Image Mx, Printing	1.0	20.0	20.0	
Sub Total			44.0	

Support Areas				
Store: Clean Supplies	1.0	8.0	8.0	
Store: Eqpt.	1.0	8.0	8.0	
Sub Total			16.0	

Total Net				
Planning	5%		12.5	
			261.5	
Engineering	3%		7.8	
Circulation	30%		78.4	
Total			347.7	

Notes

Does not currently include DEXA scanner
Assumes dirty utility, disposal hold, cleaners room and other support spaces can be shared with A&E

In-patient Area

In-patient Area	No	Area m2	Total Area m2	Comments
-----------------	----	------------	------------------	----------

Shared Admin/Reception/Support (At Entrance to In-patient Area)				
Relatives waiting area	1.0	10.0	10.0	
WC - Ambulant	2.0	2.5	5.0	
WC - Accessible	1.0	4.5	4.5	
Reception/ward clerk	1.0	9.0	9.0	
Single Person Office: Ward Managers	2.0	9.0	18.0	
Clinical "hot desk" room	1.0	18.0	18.0	4 x spaces
Hand wash station	2.0	1.5	3.0	At entrance to both "units"
Sub Total			67.5	

Relatives over-night stay (Close to In-patient Area)				
Relatives over night stay bedroom	1.0	12.0	12.0	
En-suite for over night stay room	1.0	4.0	4.0	
Sub Total			16.0	

Shared Clinical, Social & Therapy Support (Central to In-patient Area)				
Social/Activity/Therapy/Group Room	1.0	40.0	40.0	Mix of "hard" and "soft" furnishings
				Also used for ADL assessment; adjacent to "hard area" of Social/Activity/Therapy/ Group Room
Shared patient kitchen	1.0	10.0	10.0	With parallel bars and neuro plinth
In-patient Therapy Area	1.0	25.0	25.0	
Quiet/interview Room	1	10	10.0	
Bathroom - assisted	1.0	15.0	15.0	Is this required?
WC - Accessible	1.0	4.5	4.5	
Emergency OOH drug cupboard	1	4	4.0	Managed by Pharmacy
Parking Bay: Mobile X-ray	1.0	2.0	2.0	
Disposal Hold/Re-Cycling	1.0	12.0	12.0	
Sub Total			122.5	

"Unit 1"	No	Area m2	Total Area m2	Comments
----------	----	------------	------------------	----------

Clinical spaces, bedroom and sanitary				
				Intermediate Care
Acute single bedroom (incl family & clinical support space)	16.0	19.0	304.0	
En-suite WC, basin, shower as per HBN04	16.0	5.0	80.0	
Sub Total			384.0	

"Mental Health Transfer" Bedroom				
Acute single bedroom (incl family & clinical support space)	1.0	19.0	19.0	Anti-ligature and anti-barricade
En-suite WC/shower (MH type)	1.0	5.0	5.0	
Lobby/observation area	1.0	10.0	10.0	Secondary function as mental health "hot desk"
Sub Total			34.0	

Patient support facilities				
Resuscitation trolley parking bay: 1	1	2	2	
Pantry/Beverage making area	1	10	10	
Ward Food trolley parking bay	1	1.5	1.5	
Staff base	1	8	8	
Touch Down Spaces	4	2	8	(as per HBN 04-01)
Sub-Total			29.5	

Utility and stores				
Clean utility/medicines storage	1.0	16.0	16.0	
Dirty utility	2.0	8.0	16.0	
Store: linen	1.0	2.0	2.0	Assumes exchange trolley system
Store: consumables	1.0	8.0	8.0	
Store: equipment	1.0	8.0	8.0	
Parking bay: hoist(s) and mobile equipment	1.0	4.0	4.0	
WC staff + cube lockers	1.0	4.0	4.0	
Cleaners room	1.0	10.0	10.0	
Sub Total			68.0	

"Unit 2"	No	Area m2	Total Area m2	Comments
----------	----	------------	------------------	----------

Clinical spaces; bedroom and sanitary				
				Acute Ward
Acute single bedroom (incl family & clinical support space)	20.0	19.0	380.0	
En-suite WC, basin, shower as per HE	20.0	5.0	100.0	

Isolation lobby	2.0	5.0	10.0	
Sub Total			490.0	

HDU zone (Central to Overall In-patient Area)				
HDU bed space inc 1 isolation bed	2.0	26.0	52.0	May expand into adjacent rooms as required
Isolation lobby (HDU)	1.0	5.0	5.0	
Gowning lobby (HDU)	1.0	4.0	4.0	
Touch Down Space	1	2	2	(as per HBN 04-01)
Quiet/interview Room	1	10	10	
Sub Total			73.0	

Patient support facilities				
Resuscitation trolley parking bay: 1	1	2	2	
Pantry/Beverage making area	1	10	10	
Ward Food trolley parking bay	1	1.5	1.5	
Staff base	1	8	8	
Touch Down Spaces	4	2	8	(as per HBN 04-01)
Sub-Total			29.5	

Utility and stores				
Clean utility/medicines storage	1.0	16.0	16.0	
Dirty utility	2.0	8.0	16.0	
Store: linen	1.0	2.0	2.0	Assumes exchange trolley system
Store: consumables	1.0	8.0	8.0	
Store: equipment	1.0	8.0	8.0	
Parking bay: hoist(s) and mobile equipment	2.0	4.0	8.0	
WC - staff/cube lockers	1.0	4.0	4.0	
Cleaners room	1.0	10.0	10.0	
Sub Total			72.0	

Total Net				
Planning	5%		69.3	
			1455.3	
Engineering	3%		43.7	
Circulation	35%		509.4	
Total			2008.3	

Notes

Sees in-patient beds as 2 x "notional" but contiguous areas to support clinical management and redundancy
 See's shared spaced "pooled" to ensure flexibility and efficiency

Macmillan Unit

Macmillan Unit	No	Area m2	Total Area m2	Comments
----------------	----	---------	---------------	----------

General waiting and WC's				
Waiting for relatives	1.0	4.0	4.0	
WC - relatives/visitors	1.0	2.5	2.5	
Hand wash station	1.0	1.5	3.0	Added. Located at entrance to unit
Sub Total			9.5	

Clinical spaces: bedroom and sanitary: day space				
Single bed room - standard adult	4.0	19.0	76.0	Assume reclining chair/room
En-suite WC, basin, shower as per HBN04	4.0	5.0	20.0	Increased to enable dual assist
Sitting room/visiting room	1.0	20.0	20.0	Size reduced following discussion (26 Dec 13)
Sub Total			116.0	

Outpatient and day treatments				
Consulting/examining room	2.0	16.5	33.0	Size standardised. Require clarity re activity
Day treatment rooms - chemo etc.	1.0	36.0	36.0	NB - views out important
Multi-purpose room	1.0	16.0	16.0	? Required. VC, interview, over night stay in other spaces?
WC - wheelchair/assistance	1.0	4.5	4.5	Day patients
Sub Total			89.5	

Support facilities				
Staff base (enclosed with glazing)	1.0	12.0	12.0	
Clinical specialists/clinical co-ordinator	1.0	22.0	22.0	4 person office
Pantry/Beverage making area	1	10	10	Size increased
Sub Total			44.0	

Utility and stores				
Clean utility/medicines storage and preparation	1.0	12.0	12.0	
Dirty utility	1.0	8.0	8.0	Standardised area across facility
Store: linen	1.0	2.0	2.0	
Store: consumables	1.0	8.0	8.0	
Store: equipment	1.0	8.0	8.0	
Parking bay: resus trolley/emergency equipment	1.0	2.0	2.0	
Parking bay: hoist(s) and mobile equipment	1.0	2.0	2.0	
WC - staff/cube lockers	1.0	4.0	4.0	
Cleaners room	1.0	10.0	10.0	
Disposal hold/recycling	1.0	6.0	6.0	
Sub Total			62.0	

Total Net				
Planning	5%		16.1	
			337.1	
Engineering	3%		10.1	
Circulation	35%		118.0	
Total			465.1	

Notes

Maternity

Maternity		Area	Total	Comments
	No	m2	Area m2	

Ante-natal and day patients				
Consulting/examination room	1.0	16.5	16.5	Standardised area
Day monitoring/sitting room	1.0	20.0	20.0	CMT reduction; groups in shared space; beverage making facilities
Patient WC - day areas	1.0	4.5	4.5	Use for specimen collection
Sub Total			41.0	

Triage and LDRP rooms				
Triage room/bereavement room/back up delivery room	1.0	19.0	19.0	
Single bedroom - maternity	2.0	19.0	38.0	
LDRP room	1.0	24.0	24.0	HBN 09-02
LDRP room with pool	1.0	34.5	34.5	HBN 09-02
En-suite WC, basin, shower as per HBN04	4.0	5.0	20.0	
Baby resus/infant examination/paeds storage	1.0	22.0	22.0	Requires further review of area; check activity/equipment
Sub Total			157.5	

Staff offices				
Midwives base: records	1.0	13.0	13.0	Area reduced, assume no requirement for records storage
Single Person Office: Senior/Charge Midwife	1.0	9.0	9.0	Single person office
Sub Total			22.0	

220.5

Utility and stores				
Pantry/Beverage making area	1.0	10.0	10.0	Could this be shared with adjacent ward if beverage making facilities are provided in the day monitoring/sitting room?
Baby feed/prep and store	1.0	4.0	4.0	
Clean utility/medicines storage	1.0	12.0	12.0	
Dirty utility/sluice	1.0	8.0	8.0	Could this be shared with adjacent ward?
Store: linen trolley bay	1.0	2.0	2.0	
Store: consumables	1.0	8.0	8.0	
Store: equipment: LDR rooms	1.0	8.0	8.0	
Parking bay: resus trolley/emergency equipment	1.0	2.0	2.0	Increased area to reflect guidance
Parking bay: incubator	1.0	2.0	2.0	
WC - staff/cube lockers	1.0	4.0	4.0	
Cleaners room	0.0	10.0	0.0	Assume cleaners room is shared with adjacent ward
Sub Total			60.0	

Total Net			280.5	
Planning	5%		14.0	
			294.5	
Engineering	3%		8.8	
Circulation	35%		103.1	
Total			406.4	

Notes

Ante-natal waiting space to be identified (new bookings), or technology solution

Day Unit & Operating Theatres

Day Unit & Operating Theatres	No	Area m2	Total Area m2	Comments
-------------------------------	----	---------	---------------	----------

Entrance, reception & waiting facilities				
Reception area (Open) With up to 2 staff	1	10	10.0	
Waiting room/lounge (10 places)	1	20	20.0	To support AODOS (Should be subdividable to separate patient groups as required, e.g. Endoscopy)
WC & hand wash: accessible, wheelchair assisted	1	4.5	4.5	
			34.5	

Day Unit Facilities				
Staff Base	1	8	8.0	
Hand wash station	1.0	1.5	1.5	
Changing rooms	2	4	8.0	To support AODOS and day case activity (En-suite to secondary Male/Female waiting areas)
Locker Bay: Patient Clothing	1	2	2.0	
Consulting room/Examination	2	13.5	27.0	To support AODOS (2 people with trolley for examination)
Secondary Waiting Areas: 2-3 Persons	2	5	10.0	Split Male/Female
Trolley waiting area	1	8	8.0	To support in-patients arriving on beds/trolleys
Trolley Spaces (Stage 2 Day Case Trolleys)	8	13.5	108.0	(Trolleys supporting day case activity)
Clean utility	1.0	12.0	12.0	Shared with renal
Dirty utility	1.0	8.0	8.0	Shared with renal
WC & hand wash: accessible, wheelchair assisted	2	4.5	9.0	
Shower - assisted patient	1.0	6.0	6.0	
Discharge lounge (10 places)	1	20	20.0	May be contiguous with admission lounge but pre/post op flow must remain separated
Pantry	1	6	6.0	Shared with renal, en-suite to lounge areas
			233.5	

Operating theatre suites facilities				
Operating theatre: ultra clean	2	55	110.0	1 x "Ultra clean"
Anaesthetic room	2	19	38.0	
Scrub-up & gowning room: 3 places	2	12	24.0	May be shared between 2 theatres (But same space required per theatre) This area should include identified "dictation space" with IT access
Preparation room (Daily Use Store)	2	12	24.0	
Exit/parking bay: theatre, 1 bed/ trolley	2	12	24.0	May be shared between 2 theatres (But same space required per theatre)
Store: equipment, local to theatre	1	8	8.0	Shared between 2 theatres
Dirty utility	2	12	24.0	
Sub-Total			252.0	

Endoscopy/Minors Room				
Endoscopy/procedure Rooms	1	25	25	(SHPN 52 standard 22m2)
Preparation room (Daily Use Store)	1	10	10	
Dirty Utility	1	12	12	
Store: scope storage	1.0	4.0	4	
General Store	1	4	4	Specific to endoscopy
Sub-Total			55	

Stage 1 Recovery				
Reception/Recovery bay 1 place	4	13.5	54	Assumes 2 spaces/theatre - ideally immediately adjacent to DSU spaces to allow flexibility
			54.0	

Support facilities				
Theatre Management Offices: 2 staff	1	12	12.0	
Parking bay: mobile x-ray & ultrasound unit	1	2.5	2.5	
Parking bay: emergency/resuscitation trolley	1	1	1.0	
Store: bulk/sterile supplies	1	18	18.0	Utilising mechanical storage system to optimise storage space
Store: clinical equipment	1	18	18.0	Utilising mechanical storage system to optimise storage space
Store: linen	1	2	2.0	Assumes linen exchange trolley
Store: ready to use medical gas cylinders	1	4	4.0	
Hold: disposal and CDU Returns	1	15	15.0	
Cleaners (Housekeeping) room	1	10	10.0	
Sub-Total			82.5	

Staff Support Facilities				
Rest & dining room with beverage & snack preparation bay: 10 staff	1	20	20.0	
Staff changing room including boot change: 10 places	1	12	12.0	Male staff (Split to be confirmed)
Staff changing room including boot change: 10 places	1	12	12.0	Female staff (Split to be confirmed)
Utility: footwear washing	1	4	4.0	1 For Male staff, 1 For Female staff
WC Wheelchair user & changing / shower	1	4.5	4.5	1 For Male staff, 1 For Female staff
WC & wash: ambulant	2	2.5	5.0	Actual number to be confirmed
Shower: ambulant (non patient)	2	2.5	5.0	
Sub Total			62.5	

Total Net				
Planning	5%		38.7	

			812.7
Engineering	3%		24.4
Circulation	25%		203.2
Total			1040.3

Notes

Renal Dialysis

Renal dialysis		Area	Total	Comments
	No	m2	Area m2	

General waiting and WC's				
Waiting/WC's shared with day patients	0.0	0.0	0.0	
Sub Total			0.0	

Clinical spaces				
Dialysis cubicles	5.0	10.5	52.5	
Isolation treatment room dialysis	1.0	13.5	13.5	Multi-use as treatment room
Isolation gowning lobby with clinical WHB	1.0	4.5	4.5	
Physiological measurement area	1.0	4.0	4.0	Within main dialysis area
WC - independent user	1.0	4.5	4.5	
Sub Total			79.0	

Support facilities				
Staff base controlling dialysis stations	1.0	9.0	9.0	
Sub Total			9.0	

Utility and stores				
Clean Utility	1.0	10.0	10.0	
Dirty utility	1.0	8.0	8.0	
Store: linen	1.0	2.0	2.0	
Store: small equipment/consumables	1.0	15.0	15.0	
Pantry	0.0	6.0	0.0	Requires review once adjacency confirmed
Parking bay: resus trolley/emergency equipment	0.0	0.0	0.0	Assume provided in adjacent area
			0.0	
Sub Total			35.0	

Technical				
Bulk storage of dialysate	0.0	0.0	0.0	In main stores area??
			0.0	
Sub Total			0.0	

Total Net				
Planning	5%		6.2	
			129.2	
Engineering	3%		3.9	
Circulation	30%		38.7	
Total			171.8	

Notes

88.0

CDU

CDU		Area	Total	Comments
	No	m2	Area m2	

Endoscope re-processing				
Endoscope contaminated returns lobby and holding area	1.0	4.0	4.0	Pass through hatch to endoscope wash/re-processing
Endoscope wash/re-processing room	1.0	28.0	28.0	Pass through EWD's to endoscope storage and despatch
Endoscope inspection, storage and despatch	1.0	10.0	10.0	Requires easy access out of hours by theatre staff
Endoscope trolley wash area	1.0	10.0	10.0	
Sub Total			52.0	

Main CDU returns and wash room				
Contaminated returns lobby and holding area	1.0	8.0	8.0	
Wash room inc 3 single chamber (15 din baskets) washer/disinfectors	1.0	63.0	63.0	See calcs sheet: as HFS minus endo allowance
Gowning room: 2 places (wash room)	1.0	6.0	6.0	
Housekeeping/DSR wash room	1.0	7.0	7.0	
Control room, operational base	1.0	12.0	12.0	Glazed screen to both wash and IAP rooms
Sub Total			96.0	

IAP area				
Inspection, assembly and packing room (IAP)	1.0	63.0	63.0	See calcs sheet: as HFS
Packed product transfer facility (pass through hatches)	1.0	9.0	9.0	Between IAP and sterilisers
Gowning room: 2 places (IAP room)	1.0	6.0	6.0	
Materials transfer room: based upon divided room with dual access	1.0	9.0	9.0	Supplies IAP
Housekeeping/DSR for IAP room	1.0	7.0	7.0	
Sub Total			94.0	

Sterilisers and despatch				
Steriliser loading/unloading area: 3 x 0.6m ³ sterilisers	1.0	38.0	38.0	As HFS
Steriliser plant room: 3 x 0.6m ³ sterilisers 22.5	1.0	22.5	22.5	As HFS
Steriliser cooling area: 3 bays 14.5	1.0	14.5	14.5	As HFS
Despatch area for processed goods	1.0	27.0	27.0	HFS advised area - check if over provision
Sub Total			102.0	

Stores, waste collection, DSR, test				
Raw materials store	1.0	30.0	30.0	HFS advised area - check if over provision
General waste disposal/laundry returns	1.0	12.0	12.0	
Housekeeping/DSR for general room	1.0	7.0	7.0	
Test equipment and data room	1.0	9.0	9.0	
Sub Total			58.0	

Staff changing, WC's, restroom				
Staff changing with lockers	2.0	5.5	11.0	Consider male/female use but also economy of provision
Staff WC/shower	2.0	4.0	8.0	Access to in which within reasonable distance
Staff restroom with beverage bay: 5 places Para 4.210	1.0	11.0	11.0	
Sub Total			30.0	

Offices				
1:1 meeting room: CDU manager	1.0	12.0	12.0	
Sub Total			12.0	

Total Net				
Planning	5%		22.2	
			466.2	
Engineering	3%		14.0	
Circulation	25%		116.6	
Total			596.7	

Notes

This area has not been reviewed/amended by B+A

242.0

Pharmacy

Pharmacy		Area	Total	Comments
	No	m2	Area m2	

Consulting Booth				
Consulting booth	1.0	9.0	9.0	Assumes pharmacy has a dispensing role. Ideally with separate doors from dispensary and public corridor.
Sub Total			9.0	

Dispensary				
Main dispensary area	1.0	18.0	18.0	With 2 separate dispensing benches. May just be notional space within the main dispensary area. Requires sink area and drainage.(Existing equivalent area 10m2)
Main drug storage area	1.0	40.0	40.0	May just be notional space within the main dispensary area. (Existing equivalent area 20m2)
Controlled drug storage/dispensing	1.0	4.0	4.0	With controlled drugs cupboards, bench space and PC (May just be notional space within main dispensary area)
Clinical trials area	1.0	4.0	4.0	Assumes clinical trials may be conducted in future. With secured cupboards and bench space. May just be notional space within the main dispensary area.
Despatch area	1.0	4.0	4.0	
Sub Total			70.0	

Bulk/Specialist Storage				
Packing/unpacking area	1.0	12.0	12.0	
IV bulk fluid store	1.0	10.0	10.0	Reflects requirement for 18m2 of linear shelf space as available in existing central stores area
Refrigerated room	1.0	8.0	8.0	
CBRN Store	1.0	4.0	4.0	
Emergency box	1.0	2.0	2.0	With bench and cupboard
Flammable cupboard	1.0	2.0	2.0	
Sub Total			38.0	

Staff areas				
Office: 1 person	1.0	9.0	9.0	Principal pharmacist and 1-1 discussions
Staff workstation area: 3 place	1.0	18.0	18.0	Current establishment 7 wte
WC and staff - cube lockers	1.0	4.0	4.0	WC may be omitted if facility available nearby
Cleaners room	1.0	10.0	10.0	Access required, need not be dedicated
Waste collection/disposal hold	1.0	10.0	10.0	
Sub Total			51.0	

Total Net				
Planning	5%		8.4	
			176.4	
Engineering	3%		5.3	
Circulation	25%		44.1	
Total			225.8	

Notes

Emergency top up drug storage scheduled within in-patient area at 4m2
 CBRN eqpt storage scheduled within A&E at 4m2

Mortuary

Mortuary		Area	Total	Comments
	No	m2	Area m2	

Relatives facilities				
Relatives waiting/interview room	1.0	12.0	12.0	
WC - visitor type	1.0	2.5	2.5	
Viewing/bier room	1.0	16.0	16.0	
Sub Total			30.5	

Body store area				
Refrigerated stores (no freezers) 8 cabinets and transfer area	1.0	15.0	15.0	
Trolley storage zone - mortuary trolley & collection trolley	1.0	4.0	4.0	
Protective clothing storage	1.0	2.0	2.0	
Sluice/cleaning materials	1.0	6.0	6.0	
Records cupboard/writing surface	1.0	2.5	2.5	
Sub Total			29.5	

Total Net			60.0	
Planning	5%		3.0	
			63.0	
Engineering	3%		1.9	
Circulation	30%		18.9	
Total			83.8	

Notes

Laboratory

Laboratory		Area	Total	Comments
	No	m2	Area m2	

Accessed out of hours - located adjacent to clinical facilities				
Blood issue fridge	1.0	6.0	6.0	Location adjacent to theatre/HDU conv A&E
Specimen drop off	1.0	2.0	2.0	
Sub Total			8.0	

Reception and specimen reception				
Reception/enquiries/results and despatch	1.0	6.0	6.0	Bench space
Specimen reception	1.0	9.0	9.0	
Sub Total			15.0	

Main lab				
Automated lab area	1.0	30.0	30.0	
Biochem test bench	1.0	8.0	8.0	
Haematology test bench	1.0	4.0	4.0	
Blood transfusion zone	1.0	10.0	10.0	Separate from main lab - could be glazed in area
Freezers	1.0	2.0	2.0	
Staff PC workstations	4.0	2.0	8.0	
Cold room	1.0	4.0	4.0	SEPARATE ROOM
Sub Total			66.0	

Microbiology				
Automation area	1.0	12.0	12.0	
Sample processing, plate reading	1.0	6.0	6.0	
Staff PC workstation	1.0	2.0	2.0	
Incubators	1.0	2.0	2.0	
Fridges	1.0	2.0	2.0	
Microscopy (darkroom)	1.0	6.0	6.0	Dark room
Cat II lab with Cat 1 safety=safety cabinet	1.0	12.0	12.0	
Sub Total			42.0	

Support and stores				
Wash up and autoclave	1.0	15.0	15.0	1 autoclave
Store: consumables/bulk supplies	1.0	16.0	16.0	
Store: reagents, chemicals	1.0	6.0	6.0	
Cleaner	1.0	10.0	10.0	
Disposal hold/recycling	1.0	6.0	6.0	
Sub Total			53.0	

Staff areas				
Lab coat storage	1.0	2.0	2.0	
Staff WC/cube lockers	2.0	4.0	8.0	
Office: lab administration	1.0	12.0	12.0	Lab admin, senior BMS's x 3
Office: 2p lab manager and quality manager	1.0	12.0	12.0	Joint post
1:1 meeting: Point of Care co-ordinator	1.0	9.0	9.0	Pending appt. point of care VC enabled
Sub Total			43.0	

Total Net				
Planning	5%		11.4	
			238.4	
Engineering	3%		7.2	
Circulation	25%		59.6	
Total			305.1	

Notes

HBN Guidance is of little use in developing the requirements for this lab area due to its unique size/operation

89.0

IT

IT		Area	Total	Comments
	No	m2	Area m2	

Management & work areas				
1:1 meeting: manager	1.0	9.0	9.0	
IT workroom: support team	1.0	30.0	30.0	3 staff non standard workstation
Workshop/build room	1.0	25.0	25.0	Deep benching
Store: equipment	1.0	8.0	8.0	
Sub Total			72.0	

Servers and hubs				
Server room	1.0	35.0	35.0	shape of room important requires additional fire exit
Node cabinets - 1 per floor	2.0	6.0	12.0	Locate appropriately
Sub Total			47.0	

Total Net				
Planning	5%		6.0	
			125.0	
Engineering	3%		3.7	
Circulation	25%		31.2	
Total			159.9	

Notes

This area has not been reviewed/amended by B+A

Learning & Development

Learning & Development	No	Area m2	Total Area m2	Comments
------------------------	----	------------	------------------	----------

Learning & Development centre				
IT training room, e-learning and library	1.0	30.0	0.0	
Conference room/emergency response centre	1.0	80.0	0.0	Seat 50 theatre style: emergency response centre and secure storage of equipment: divisible by screen into 2 areas, smaller areas to be suitable for manual handling training
Store: beds, mannekins, hoist, white boards etc.	1.0	16.0	0.0	
Meeting room/digital classroom (20 persons)	1.0	25.0	0.0	BA Version SoA3
Meeting room/digital classroom (8-10 persons)	1.0	18.0	0.0	
Cleaners room	1.0	10.0	0.0	Provided centrally
Staff WC's/cubicles/wash	2.0	10.0	0.0	Use adjacent
Disposal/recycling	1.0	6.0	0.0	
Sub Total			0.0	

Office allowance (Notional allocations only)				
1 Person Office With Meeting Space	1.0	13.5	13.5	Hospital Manager
Infection Control Team	2.0	5.5	11.0	Assumes primary role is administrative
Health Intelligence & Clinical Governance	8.0	5.5	0.0	Assumes primary role is administrative
OHAC, PC & Admin	6.0	5.5	0.0	Assumes primary role is administrative
HR, L&D and Occ Health	8.0	5.5	0.0	Assumes primary role is administrative
Health Visitors	2.0	4.5	0.0	Assumes primary role is clinical
Community Nursing	4.0	4.5	18.0	Assumes primary role is clinical
Social Work	2.0	4.5	9.0	Assumes primary role is clinical
LTC Nurses	3.0	4.5	0.0	Assumes primary role is clinical
AHP's (Physio/OT)	5.0	4.5	22.5	Assumes primary role is clinical
S<	2.0	4.5	0.0	Assumes primary role is clinical
Intermediate care team	4.0	4.5	18.0	Assumes primary role is clinical
Dietetics	2.0	4.5	0.0	Assumes primary role is clinical
Medical Secretaries & Clinical Admin	4.0	5.5	0.0	Assumes primary role is administrative
Consultant Surgeons & Gynae	5.0	4.5	0.0	Assumes primary role is clinical
Consultant Anaesthetists	4.0	4.5	0.0	Assumes primary role is clinical
Consultant Physicians	4.0	4.5	0.0	Assumes primary role is clinical
Sub Total			92.0	

Additional Storage Space (Not included elsewhere)				
Community/LTC Nurses Store	1.0	10.0	10.0	
Health Visitor's Store	1.0	6.0	6.0	
AHP Loan Eqpt Store	1.0	10.0	0.0	
Sub Total			16.0	

Total Net			108.0	
Planning	5%		5.4	
			113.4	
Engineering	3%		3.4	
Circulation	25%		28.4	
Total			145.2	

Notes

Assumes all administrative accommodation is as flexible as possible and that individual allocations are "notional" only
 Allows 4.5m2 per flexible desk area and 5.5m2 per "permanent" desk area
 Attempts to differentiate desk requirements based on need for access to a flexible or permanent desk space
 Must reflect efficiencies anticipated from bringing people/services together
 Assumes estates offices within Estates Dept
 Assumes GP offices within GP areas
 Assumes IT Offices in IT
 Assumes Medical Records Offices in Main Hub
 Assumes specialist clinical offices/location specific admin areas in relevant wards/departments
 Requires review by NHS Orkney

Staff Changing

Staff Changing		Area	Total	Comments
	No	m2	Area m2	

Staff change				
Female staff change	1.0	50.0	50.0	Numbers not confirmed
Female staff WC	1.0	12.0	12.0	
Male staff change	1.0	30.0	30.0	Numbers not confirmed
Male staff WC	1.0	9.0	9.0	
Staff showers	2.0	6.0	12.0	
Cleaners room	0.0	0.0	0.0	Use adjacent
Sub Total			113.0	

Staff restroom				
Staff lounge/rest room with pantry	2	36	72.0	
Sub Total			72.0	

Total Net			185.0	
Planning	5%		9.3	
			194.3	
Engineering	3%		5.8	
Circulation	25%		48.6	
Total			248.6	

Notes

This area has not been reviewed/amended by B+A

FM

FM		Area	Total	Comments
	No	m2	Area m2	

Estates				
Office:4 persons and reception	1.0	22.0	22.0	2 admin staff and??
Office:2 persons	1.0	11.0	11.0	Estates supervisor, estates officer
Staff changing	2.0	6.0	12.0	20 persons: estates; portering and security: Requirement to be separate from main staff changing
Staff WC and shower	2.0	4.0	8.0	
Estates workshop - general area	1.0	20.0	20.0	Maintenance/repair: beds, trolleys, hoists etc. as per NHSO Nov 2011
Estates workshop - hot area	1.0	15.0	15.0	Welding etc.
Parts, spares & materials store	1.0	20.0	20.0	
Sub Total			108.0	

Medical physics				
Equipment reception area	1.0	8.0	8.0	
Checking, testing, calibration	1.0	10.0	10.0	
Parts, spares and supplies store	1.0	15.0	15.0	
Electric wheelchair test and maintenance	1.0	15.0	15.0	
Large equipment store	1.0	15.0	15.0	E.g. - air mattresses
Sub Total			63.0	

Materials management/stores				
Office - 3 persons	1.0	16.5	16.5	Materials management administration
Porters base	1.0	9.0	9.0	PC point
Receiving area	1.0	20.0	20.0	NHSO Nov 2011
Store	1.0	100.0	100.0	Telecon SS/CB 29/01/13
Chemical store	1.0	12.0	12.0	Catering and domestic - NHSO Nov 2011
Quarantined goods holding area	1.0	6.0	6.0	NHSO Nov 2011
Despatch area	1.0	12.0	12.0	Goods for outer isles etc.
Empty pallet and waste area	1.0	20.0	20.0	NHSO Nov 2011
Trolley/tug store and recharge area	1.0	8.0	8.0	NHSO Nov 2011
Cleaners room	1.0	7.0	7.0	
Store: community nurses	1.0	16.0	16.0	
Sub Total			226.5	

Catering				
Coffee shop, restaurant, servery, vending	1.0	189.0	189.0	Request for 270 sqm Gross area for 80-100 meals; restaurant seating 50-60;soft seating24;benchmarked Invergordon (100 meals/160 sqm; Lochgilphead 60-120 sqm)
Kitchen production area; office; staff changing/WC's; deliveries; store; cleaner	1.0	182.0	182.0	Request for 240 sqm Gross area for 120 patient meals: benchmarked Lochgilphead 120+/170 sqm)
Walk in chiller and deep freeze storage	2.0	12.0	24.0	Request for 26 sqm
Sub Total			395.0	

Laundry				
Dirty laundry receipt, sort and wash	1.0	25.0	25.0	2 domestic (personal clothes) + 2 commercial washers.
Drying, sorting and processing	1.0	75.0	75.0	2 domestic, 2 commercial, tunnel master (uniforms), roller for flat sheets, press, sorting, final sort, trolley storage
Clean trolley store, goods out	0.0	0.0	0.0	Included in above
Staff control area	1.0	11.0	11.0	2 persons
Sub Total			111.0	

Domestic staff				
Chemical storage	0.0	0.0	0.0	In materials management area
Central equipment store	1.0	12.0	12.0	
Sub Total			12.0	

Total Net				
Planning	5%		45.8	
			961.3	
Engineering	3%		28.8	
Circulation	25%		240.3	
Total			1230.4	

External areas - estates and materials management				
Vehicle servicing, charging points and wash bay.NHS fleet pool cars and vans			0.0	
Medical gas manifolds			0.0	
Medical gas cylinder storage			0.0	
Clinical waste transfer and storage			0.0	
Waste transfer, recycling and storage compounds			0.0	
Grounds equipment storage, garage and charging			0.0	
Central delivery point and loading bays			0.0	
SAS Garage	1.0	40.0	40.0	
SAS Parking	4.0	18.0	72.0	4 spaces at 18m2
SAS Parking for Training Van	1.0	12.5	12.5	

SAS External Wash Bay	1.0	18.0	18.0
			0.0
			0.0
			0.0
			0.0
Sub Total			0.0

Notes

This area has not been reviewed/challenged by B+A

397.5

SAS

Scottish Ambulance Service		Area	Total	Comments
	No	m2	Area m2	

SAS				
Office: team leader	1.0	10.0	10.0	
Office: training officer	1.0	10.0	10.0	
Store: medical consumables	1.0	6.0	6.0	
Store: Drugs	1.0	4.0	6.0	As per controlled drug storage requirements
Store: blankets	1.0	6.0	6.0	
Store: O2 cylinders	1.0	6.0	6.0	
Sluice/dirty utility room	1.0	6.0	6.0	Should be adjacent to external vehicle wash area
Sub Total			50.0	

Total Net			50.0	
Planning	5%		2.5	
			52.5	
Engineering	3%		1.6	
Circulation	25%		13.1	
Total			67.2	

Notes

Assumes SAS staff will use shared staff dining facilities
 Assumes SAS staff will have access to 14 lockers and associated space in changing areas

Assumes SAS staff will use main laundry facilities
 Assumes SAS staff will be able to access shared training areas

ANNEX 7.2

SOA Version 10

NHS Orkney: New Hospital and Healthcare Facility Development



Schedule of Accommodation

MASTER SHEET

Accommodation	Type	Net m ²	Gross as drawn m ²	Comments
Main Entrance Hub		222.5	310.7	
Out-patient & Therapies		664.5	928.0	
GP Areas (Skerryvore & Heilendi)		571.5	798.1	
A&E/OOH (Incl NHS 24)		361	515.5	
Dental		218.5	305.1	
Radiology		238.5	333.1	
In-patient Area		1440.5	2087.3	
Macmillan Unit		324.5	470.2	
Maternity Unit		292	423.1	
Day Unit, Theatres & Multipurpose Room		789	1060.4	
Renal Dialysis		150.5	210.2	
CDU		368.5	495.3	
Pharmacy		164	220.4	
Mortuary		60	83.8	
Laboratory		227	305.1	
IT		119	159.9	
L&D and Offices		0	0.0	
Staff Changing		185	248.6	
FM		915.5	1230.4	
SAS		84	112.9	
Total		7396	10298.1	

ADD PLANT (ASSUME 10%) 1029.8

ADD COMMUNICATIONS (ASSUME 15%) 1544.7

TOTAL 12872.7

Version 10

Notes:

Planning, engineering and circulation allowances included are indicative only
B+A have not reviewed central FM areas including staff changing

Main Entrance	No	Area m2	Total scheduled Area m2	As drawn	Comments
---------------	----	------------	-------------------------------	----------	----------

Reception, Clinical Administration and Waiting					
Entrance Foyer/Draft Lobby	1	20	20.0		
Wheelchair Bay	1	4.0	4.0		
Waiting - General & Transport	1	20.0	20.0		
Reception/volunteers area	1	10.0	10.0		Supporting all NHSO Services and including 2 x reception locations (1 high, 1 low)
Reception back office/medical record staff	1	22.0	22.0		Assumes 4 x desks (Current total MR head count 8)
Clinical Coding/Quiet Work Zone	1	16.5	16.5		Assumes 3 x desks
1 Person Work Zone - Scanning, etc.	1	8.0	8.0		Could be glazed-in area off main medical records staff office
Sub Total			100.5		

Sanitary Facilities					
WC - Ambulant	4	2.5	10.0		Design dependent - may require some distribution
WC - Accessible	2	4.5	9.0		
Parents room/baby feed	1	5.5	5.5		
Baby Changing/WC	1	4.0	4.0		
Adult Changing/WC (Disabled)	1	12.0	12.0		
Sub Total			40.5		

Whole Hospital Support Areas (Associated with the Main Entrance)					
Quiet Reflective/Multi-faith Room	1	25.0	25.0		
Chaplains Office	1	9.0	9.0		Added 17th December 2013
Ablutions Area Including Foot Wash	1	4.0	4.0		Associated with multi-faith room
Shop	1	9	9.0		shop storage in catering area
Infection Control Office	1	11	11.0		moved from L&D/Office SOA
Hospital Managers Office	1	13.5	13.5		moved from L&D/Office SOA
DSR	1	10.0	10.0		
			81.5		

Total Net			222.5		
Planning	5%		11.1		
			233.6		
Engineering	3%		7.0		
Circulation	30%		70.1		
Total			310.7		

Outpatients and Therapies

Outpatients and Therapies	No	Area m2	Total Scheduled Area m2	As Drawn	Comments
---------------------------	----	---------	-------------------------	----------	----------

Reception, Clinical Administration and Waiting					
"Check-in Area" (Within waiting area)	1	6	6.0		Assumes electronic "Check-in"
Shared Waiting Area: 30 persons incl. 3 wheelchair spaces	1	49.5	49.5		Assumes max. of circa. 1.5 people waiting per "primary delivery location", e.g. Consult room, tx space, specialist room, etc.
Child play	1	8.0	8.0		Located adjacent to SLT and Outpatients
WC - Accessible	2	4.5	9.0		
Sub Total			72.5		

Consulting "Zone"					
Staff Hub	1	10.0	10.0		see 05/02/2015 change record for requested changes
Phlebotomy/physical measurement	1	8.0	8.0		Includes walk on bariatric scales
Consulting/examination room	12	16.5	198.0		For all flexible generic consulting activity. Also supporting A&E "overflow" consulting as required. See 05/02/2015 change record for requested changes
Store cupboard	3	4.0	12.0		Adjacent to consulting/exam rooms to support absolute flexibility in use
ETT/Cardiac Rehab Room	1	18.0	18.0		With ETT eqpt and exercise bike. (Also acts as base for specialist nurse). see 05/02/2015 change record for requested changes
Echocardiography Room	1	16.5	16.5		
Store cupboard: Cardiology	1	2.0	2.0		Adjacent to echocardiography room for mobile echocardiography eqpt.
Sub Total			264.5		

Therapy "Zone"					
AHP Staff Hub	1	10.0	10.0		
Group room/spaces (Bookable)	3	20.0	60.0		10 Person adjacent rooms incorporating movable partitions to facilitate expansion to 60m2 for large group/space intensive activities
Group room Combined Storage Area	1	10.0	10.0		Added 5th Feb
Audiometric Test Room	1	30.0	30.0		Sound proof room with separate viewing area. See 05/02/2015 change record for requested changes
Audiology rehab/hearing aid fitting/adult booth	1	8.0	8.0		Workshop and admin space
S< Room	1	13.5	13.5		With small table and chairs
Podiatry treatment room	2	16.5	33.0		
AHP treatment rooms	4	12.0	48.0		
Splint room	1	6.0	6.0		Adjacent to one or more AHP treatment rooms
Patient changing and shower/WC	2	5.0	10.0		Supporting whole area if required
Store: AHP	2	16.5	33.0		Also soft expansion space for consultation rooms
Disposal hold/instrument collection for podiatry	1	4.0	4.0		
Sub Total			265.5		

Shared Support/Utility Areas					
Clean utility	1	16.0	16.0		Primarily associated with "Consulting Zone"
Dirty utility	2	8.0	16.0		Primarily associated with "Consulting Zone"
Store: linen	1	2.0	2.0		Assumes exchange trolley
Staff WC's/cube lockers	2	4.0	8.0		
Disposal hold/recycling	1	10.0	10.0		
DSR	1	10.0	10.0		
Sub Total			62.0		

Total Net					
Planning	5%		33.2		
			697.7		
Engineering	3%		20.9		
Circulation	30%		209.3		
Total			928.0		

GP Areas

GP Areas	No	Area m2	Total scheduled Area m2	as drawn	Comments
----------	----	---------	-------------------------	----------	----------

Shared Accommodation					
Waiting					
Waiting - patient	1	40.0	40.0		25 person including 2 wheelchairs
Multi-disciplinary consulting	1	15.0	15.0		See 05/02/2015 change record for requested changes
Utility Rooms			0.0		
WC - patient, specimen collection	1	4.5	4.5		Only 1 for GP area
Dirty utility	1	8.0	8.0		Standard size across facility
Disposal hold/recycling	1	6.0	6.0		
DSR	1	10.0	10.0		
Staff WC's - no cube lockers	2	2.5	5.0		
One to one room for senior nurse	1	9.0	9.0		added 5th Feb
CN Store	1	10.0	10.0		moved from L&D SOA, needs access to door for transport pick up of equipment
Office - Multi-disciplinary - CN's and SW teams	1	27.0	27.0		
Sub Total			134.5		

Skerryvore Requirements					
Reception and Admin					
Reception	1	7.5	7.5		Co-located with Heilendi with partition; See 05/02/2015 change record for requested changes
Administration area	1	38.5	38.5		Located behind reception area; assume 8/9 staff?
1:1 and small group meeting - practice manager	1	12.0	12.0		Area as per SHPN 36
Practice room	1	25.0	25.0		Confirm function. To have the ability to expand into Heilendi Practice room to form one space with acoustic partition
Consulting/Examination rooms			0.0		
Consulting examination rooms	8	16.5	132.0		Standardised room area for flexibility - Reduced from 10 to 8 (27 Nov 13)
Treatment rooms	2	16.5	33.0		Standardised room area for flexibility - 1 x treatment room, 1 x "Nurses" room
Physiological Measurement Room	1	8.0	8.0		Replaced 1 x treatment room (27 Nov 13)
Storage			0.0		
Store - stationery	1	2.0	2.0		Co-located with Heilendi with separate spaces
Store - clean utility	1	10.0	10.0		Co-located with Heilendi with partition/separate spaces
Sub Total			268.0		

Heilendi Requirements					
Reception and Admin					
Reception	1	6.0	6.0		Co-located with Skerryvore with partition; See 05/02/2015 change record for requested changes
Administration area	1	22.0	22.0		Located behind reception area; assume 4/5 staff?
1:1 and small group meeting - practice manager	1	12.0	12.0		Area as per SHPN 36
Practice room	1	18.0	18.0		Confirm function. To have the ability to expand into Skerryvore Practice room to form one space with acoustic partition
Consulting/Examination rooms			0.0		
Consulting examination rooms	4	16.5	66.0		Standardised room area for flexibility
Treatment rooms	2	16.5	33.0		Standardised room area for flexibility - clarify need for 2 full size rooms
Storage			0.0		
Store - stationery	1	2.0	2.0		Co-located with Heilendi with separate spaces
Store - clean utility	1	10.0	10.0		Co-located with Heilendi with partition/separate spaces
Sub Total			169.0		

Total Net			571.5		
Planning	5%		28.6		
			600.1		
Engineering	3%		18.0		
Circulation	30%		180.0		
Total			798.1		

A&E and Out of Hours

A&E and Out of Hours	No	Area m2	Total scheduled Area m2	Comments
----------------------	----	---------	-------------------------	----------

Entrances, reception, waiting, WC's				
Ambulance draught lobby	1	11.0	11.0	
Walking entrance draught lobby	1	8.0	8.0	
Reception - admin 1 staff	1	9.0	9.0	See 05/02/2015 change record for requested changes
Hand wash station	1	1.5	1.5	Added (1 Dec 13)
Communications hub/switchboard/24 hr. manned	1	9.0	9.0	Emergency Department entrance will be main entrance out-of-hours once visiting over
NHS 24 Operational base	1	16.0	16.0	Clarify number of staff. See 05/02/2015 change record for requested changes
WC - Ambulant	1	2.5	2.5	Immediately adjacent to switchboard/NHS 24 area. See 05/02/2015 change record for requested changes
Waiting	1	12.0	12.0	8 person; including 2 wheelchair users. See 05/02/2015 change record for requested changes
WC - Assisted	1	4.5	4.5	
WC - Ambulant	2	2.5	5.0	See 05/02/2015 change record for requested changes
Wheelchair bay	1	2.0	2.0	3 wheelchairs
Sub Total			80.5	

Clinical room spaces				
Resuscitation area; 2 place	1	56.0	56.0	Movable partition and medical gas outlets to allow treatment of 3 patients. One space to be set up for paediatrics, desk top lab analyser
Examination/treatment - general	3	16.5	49.5	One room equipped as Ophthalmic room.
GP OOH Consultant/Exam room	1	16.5	16.5	used flexibly during in hours period
Examination/treatment - plaster and minors	1	16.5	16.5	Shared with out-patients.
Interview room/relatives room	1	11.0	11.0	Area as per SHPN 22
Sub Total			149.5	

"Mental Health Transfer" Bedroom				
Acute single bedroom (incl family & clinical support space)	1	19.0	19.0	Anti-ligature and anti-barricade
En-suite WC/shower (MH type)	1	5.0	5.0	
Lobby/observation area	1	10.0	10.0	Secondary function as mental health "hot desk"
Sub Total			34.0	

Staff facilities				
Staff base	1	8.0	8.0	See 05/02/2015 change record for requested changes
Clean utility	1	12.0	12.0	
Dirty utility	1	8.0	8.0	
Senior Charge Nurse Office: 1 Person	1	9.0	9.0	
Store - equipment	1	8.0	8.0	
Store - major incident	1	6.0	6.0	share with SAS
Store - CBRN eqpt	1	4.0	4.0	share with SAS
Bay - mobile X-ray	1	2.0	2.0	
Staff rest room and pantry (shared SAS)	1	20.0	20.0	Includes pantry
Staff WC/cube lockers	2	2.0	4.0	
DSR	1	10.0	10.0	
Disposal holding/recycling	1	6.0	6.0	
Sub Total			97.0	

Total Net				
Planning	5%		18.1	
			379.1	
Engineering	3%		11.4	
Circulation	33%		125.1	
Total			515.5	

Notes

Includes NHS 24 Accommodation
 Assumes Switchgear, Battery & UPS room in Plant allocation
 Assumes decontamination area is portable

Dental

Dental	No	Area m2	Total scheduled Area m2	Comments
--------	----	------------	-------------------------------	----------

Entrances, waiting, WC's, reception and admin				
Reception - dental	1	9.0	9.0	Including 2 x reception locations (1 high, 1 low)
Administration area	1	20.0	20.0	Assumes 2 x desks plus 2 x "hot desks"
Shared Waiting Area: 6 persons incl. 1 wheelchair space	1	10.0	10.0	See 05/02/2015 change record for requested changes
WC - wheelchair accessible	1	4.5	4.5	
Sub Total			43.5	

Dental services				
Dental treatment room - special care	2	19.0	38.0	Also suit bariatric. See 05/02/2015 change record for requested changes
Dental treatment room	1	16.5	16.5	
Oral Hygienist Room	2	16.5	33.0	Added 5th Feb - Final review of PDS model will confirm
Oral health room	1	10.0	10.0	No chair required. See 05/02/2015 change record for requested changes
Recovery room	1	7.5	7.5	1 place
Extra oral - OPG	1	12.0	12.0	See 05/02/2015 change record for requested changes
Dental lab	1	8.0	8.0	Casting models, making simple retainers. See 05/02/2015 change record for requested changes
Scanning station	1	6.0	6.0	Digitising of X-ray plates
Sub Total			131.0	

Storage				
Model store	1	6.0	6.0	Classed as clinical records, retain 11 yrs; assume archive elsewhere
Store - clean instruments	1	8.0	8.0	
Store - materials	1	6.0	6.0	Assumes storage also in main store area
Sub Total			20.0	

Utility				
Staff WC/cube lockers	1	4.0	4.0	
DSR	1	10.0	10.0	
Disposal hold/dirty instrument store	1	10.0	10.0	
Sub Total			24.0	

Total Net				
Planning	5%		10.9	
			229.4	
Engineering	3%		6.9	
Circulation	30%		68.8	
Total			305.1	

Notes

Assumes public dental service and immediate support staff only
Does not include specific "central" and "local" plant associated with dental compressors, etc.

Radiology

Radiology	No	Area m2	Total scheduled Area m2	Comments
-----------	----	------------	-------------------------------	----------

Entrances, waiting, WC's				
Sub-wait	1	10.0	10.0	Only if design requires
Bed/trolley wheelchair bay	1	4.0	4.0	(Supporting in-patients arriving in Radiology) Locate in private location close to exam rooms
WC - Ambulant	1	2.5	2.5	(If required - dependent on design)
Sub Total			16.5	

General x-ray imaging facilities				
Disabled/wheelchair patients pass through changing cubicle	2	4.5	9	
General computed radiography x-ray room incl. control	2	30	60	sized checked and is compliant. See 05/02/2015 change record for requested changes.
Sub Total			69	

Ultrasound				
General and obstetrics ultrasound exam room	2	16.0	32.0	Must allow access for a bed. See 05/02/2015 change record for requested changes.
WC/Change - Assisted	1	4.5	4.5	no pass through
Sub Total			36.5	

CT Suite				
CT control room	1	14.0	14.0	
CT scanner room	1	42.0	42.0	See 05/02/2015 change record for requested changes.
WC/Change - Assisted	1	4.5	4.5	no pass through
CT storage cupboards: consumables, linen	2	2.0	4.0	
Sub Total			64.5	

Reporting and Staff Areas				
Radiographer's work area/cube lockers	1	15.0	15.0	Assumes 3-4 x work stations
1:1 superintendent radiographer	1	9.0	9.0	
Reporting, Image Mx, Printing	1	12.0	12.0	See 05/02/2015 change record for requested changes.
Sub Total			36.0	

Support Areas				
Store: Clean Supplies	1	8.0	8.0	
Store: Eqpt.	1	8.0	8.0	
Sub Total			16.0	

Total Net			238.5	
Planning	5%		11.9	
			250.4	
Engineering	3%		7.5	
Circulation	30%		75.1	
Total			333.1	

Notes

Assumes dirty utility, disposal hold, cleaners room and other support spaces can be shared with A&E
 Assumes patients wait in CT room for observation following contrast

In-patient Area

In-patient Area	No	Area m2	Total scheduled Area m2	Comments
Shared Admin/Reception/Support (At Entrance to In-patient Area)				
Relatives waiting area	1	10.0	10.0	
WC - Ambulant	2	2.5	5.0	
WC - Accessible	1	4.5	4.5	
Reception/ward clerk	1	9.0	9.0	
Single Person Office: Ward Managers	2	9.0	18.0	
ICT office	1	18.0	18.0	moved from L&D SOA
Physio and OT Office	1	22.5	22.5	Moved from L&D SOA
Clinical "hot desk" room	1	18.0	18.0	4 x spaces
Hand wash station	2	1.5	3.0	At entrance to both "units"
Sub Total			108.0	
Relatives over-night stay (Close to In-patient Area)				
Relatives over night stay bedroom	1	12.0	12.0	See 05/02/2015 change record for requested changes
En-suite for over night stay room	1	4.0	4.0	
Sub Total			16.0	
Shared Clinical, Social & Therapy Support (Central to In-patient Area)				
Social/Activity/Therapy/Group Room	1	40.0	40.0	Mix of "hard" and "soft" furnishings
Shared patient kitchen	1	16.0	16.0	Also used for ADL assessment; adjacent to "hard area" of Social/Activity/Therapy/ Group Room
In-patient Therapy Area	1	30.0	30.0	With parallel bars, neuro plinth, tilt table, steps
Storage area for rehab equipment	1	5.0	5.0	
Quiet/interview Room	1	10.0	10.0	
Bathroom - assisted	1	15.0	15.0	
WC - Accessible	1	4.5	4.5	
Emergency OOH drug cupboard	1	4.0	4.0	Managed by Pharmacy
Parking Bay: Mobile X-ray	1	2.0	2.0	
Disposal Hold/Re-Cycling	1	12.0	12.0	
Sub Total			138.5	
"Unit 1"				
	No	Area m2	Total Area m2	Comments
Clinical spaces, bedroom and sanitary				
Acute single bedroom (incl family & clinical support space)	16	19.0	304.0	Intermediate Care
En-suite WC, basin, shower as per HBN04	16	5.0	80.0	
Sub Total			384.0	
Patient support facilities				
Resuscitation trolley parking bay: 1	1	2	2	
Finishing Kitchen	1	10	10	
Ward Food trolley parking bay	1	1.5	1.5	
Staff base	1	8	8	
Touch Down Spaces	4	2	8	(as per HBN 04-01)
Sub-Total			29.5	
Utility and stores				
Clean utility/medicines storage	1	16.0	16.0	
Dirty utility	2	8.0	16.0	
Store: linen	1	2.0	2.0	Assumes exchange trolley system
Store: consumables	1	8.0	8.0	
Store: equipment	1	8.0	8.0	
Parking bay: hoist(s) and mobile equipment	2	4.0	8.0	
WC staff + cube lockers	1	4.0	4.0	
DSR	1	10.0	10.0	
Sub Total			72.0	
"Unit 2"				
	No	Area m2	Total Area m2	Comments
Acute Assessment Unit				
	No	Area m2	Total Area m2	Comments
Acute Assessment Room	2	16.5	33.0	Added 5th Feb, in Unit 2 with easy access for Unit 1. Close to WC
Sub total			33.0	
Clinical spaces; bedroom and sanitary				
Acute single bedroom (incl family & clinical support space)	20	19.0	380.0	Acute Ward
En-suite WC, basin, shower as per HBN04	20	5.0	100.0	
Isolation lobby to negative pressure room	2	5.0	10.0	
Sub Total			490.0	
HDU zone (Central to Overall In-patient Area)				
HDU bed space	2	26.0	52.0	will expand into 2 adjacent rooms - 1 an isolation room - as required so adjacencies must be optimum .
Touch Down Space	1	2	2.0	(as per HBN 04-01)
Nurses station with central monitoring display	1	8	8.0	Added 5th Feb
Quiet/interview Room	1	10	10.0	
Sub Total			72.0	
Patient support facilities				
Resuscitation trolley parking bay: 1	1	2	2.0	
Finishing Kitchen	1	10	10.0	
Ward Food trolley parking bay	1	1.5	1.5	
Staff base	1	8	8.0	
Touch Down Spaces	4	2	8.0	(as per HBN 04-01)
Sub-Total			29.5	
Utility and stores				
Clean utility/medicines storage	1	16.0	16.0	
Dirty utility	2	8.0	16.0	
Store: linen	1	2.0	2.0	Assumes exchange trolley system
Store: consumables	1	8.0	8.0	
Store: equipment	1	8.0	8.0	
Parking bay: hoist(s) and mobile equipment	1	4.0	4.0	
WC - staff/cube lockers	1	4.0	4.0	
DSR	1	10.0	10.0	
Sub Total			68.0	
Total Net				
Planning	5%		72.0	
Engineering	3%		45.4	
Circulation	35%		529.4	
Total			2087.3	

Notes

Sees in-patient beds as 2 x "notional" but contiguous areas to support clinical management and redundancy
 See's shared spaced "pooled" to ensure flexibility and efficiency

Macmillan Unit

Macmillan Unit	No	Area m2	Total scheduled Area m2	Comments
----------------	----	------------	-------------------------------	----------

General waiting and WC's				
Waiting for relatives	1	4.0	4.0	See 05/02/2015 change record for requested changes
WC - relatives/visitors	1	2.5	2.5	
Hand wash station	1	1.5	1.5	Added. Located at entrance to unit
Sub Total			8.0	

Clinical spaces: bedroom and sanitary: day space				
Single bed room - standard adult	4	19.0	76.0	Assume reclining chair/room
En-suite WC, basin, shower as per HBN04	4	5.0	20.0	Increased to enable dual assist
Sitting room	1	12.0	12.0	See 05/02/2015 change record for requested changes
Quiet Room	1	12.0	12.0	See 05/02/2015 change record for requested changes
Sub Total			120.0	

Outpatient and day treatments				
Consulting/examining room	2	16.5	33.0	Size standardised. Require clarity re activity
Day treatment rooms - chemo etc.	1	36.0	36.0	NB - views out important
Senior Charge Nurse Office	1	9.0	9.0	See 05/02/2015 change record for requested changes
WC - wheelchair/assistance	1	4.5	4.5	Day patients
Sub Total			82.5	

Support facilities				
Staff base (enclosed with glazing)	1	12.0	12.0	
Clinical specialists/clinical co-ordinator	1	22.0	22.0	4 person office
Patient/relatives pantry	1	8.0	8.0	
Finishing Kitchen	1	10	10.0	Size increased
Sub Total			52.0	

Utility and stores				
Clean utility/medicines storage and preparation	1	12.0	12.0	
Dirty utility	1	8.0	8.0	Standardised area across facility
Store: linen	1	2.0	2.0	
Store: consumables	1	8.0	8.0	
Store: equipment	1	8.0	8.0	
Parking bay: resus trolley/emergency equipment	1	2.0	2.0	
Parking bay: hoist(s) and mobile equipment	1	2.0	2.0	
WC - staff/cube lockers	1	4.0	4.0	
DSR	1	10.0	10.0	
Disposal hold/recycling	1	6.0	6.0	
Sub Total			62.0	

Total Net			324.5	
Planning	5%		16.2	
			340.7	
Engineering	3%		10.2	
Circulation	35%		119.3	
Total			470.2	

Notes

Maternity

Maternity	No	Area m2	Total scheduled Area m2	Comments
-----------	----	---------	-------------------------	----------

Ante-natal and day patients				
Consulting/examination room	1	16.5	16.5	Standardised area
Day monitoring/sitting room	1	20.0	20.0	CMT reduction; groups in shared space; beverage making facilities. See 05/02/2015 change record for requested changes
Patient WC - day areas	1	4.5	4.5	Use for specimen collection, those in triage room
Hand wash station	1	1.5	1.5	At entrance to unit"
Sub Total			42.5	

Triage and LDRP rooms				
Triage room	1	19.0	19.0	
Single bedroom - maternity	2	19.0	38.0	
LDRP room	1	24.0	24.0	HBN 09-02
LDRP room with pool	1	34.5	34.5	HBN 09-02
En-suite WC, basin, shower as per HBN04	4	5.0	20.0	
Baby resus/infant examination/paeds storage	1	22.0	22.0	Requires further review of area; check activity/equipment
Sub Total			157.5	

Staff offices				
Midwives base	1	13.0	13.0	Area reduced, assume no requirement for records storage
Single Person Office: Senior/Charge Midwife	1	9.0	9.0	Single person office
Sub Total			22.0	

Utility and stores				
Finishing Kitchen	1	10.0	10.0	Could this be shared with adjacent ward if beverage making facilities are provided in the day monitoring/sitting room?
Baby feed/prep and store	1	4.0	4.0	
Clean utility/medicines storage	1	12.0	12.0	
Dirty utility/sluice	1	8.0	8.0	Could this be shared with adjacent ward?
Store: linen trolley bay	1	2.0	2.0	
Store: consumables	1	8.0	8.0	
Store: equipment: LDR rooms	1	8.0	8.0	
Parking bay: resus trolley/emergency equipment	1	2.0	2.0	Increased area to reflect guidance
Parking bay: incubator	1	2.0	2.0	
WC - staff/cube lockers	1	4.0	4.0	use staff changing & showers in Theatre
DSR	1	10.0	10.0	HFS recommend including
Sub Total			70.0	

Total Net			292.0	
Planning	5%		14.6	
			306.6	
Engineering	3%		9.2	
Circulation	35%		107.3	
Total			423.1	

Notes

Day Unit & Operating Theatres

Day Unit & Operating Theatres	No	Area m2	Total scheduled Area m2		Comments

Entrance, reception & waiting facilities					
Reception area (Open) With up to 2 staff	1	10	10.0		
Waiting room/lounge (10 places)	1	20	20.0		To support AODOS (Should be subdividable to separate patient groups as required, e.g. Endoscopy)
WC & hand wash: accessible, wheelchair assisted	1	4.5	4.5		
			34.5		

Day Unit Facilities					
Staff Base	1	8	8.0		
Hand wash station	1	1.5	1.5		
Changing rooms	2	4	8.0		To support AODOS and day case activity (En-suite to secondary Male/Female waiting areas) . See 05/02/2015 change record for requested changes
Locker Bay: Patient Clothing	1	2	2.0		
Consulting room/Examination	2	13.5	27.0		To support AODOS (2 people with trolley for examination) required adjacent to one consulting room - bowel prep etc. added 5th Feb
Ensuite	1	5	5.0		
Secondary Waiting Areas: 2-3 Persons	2	5	10.0		Split Male/Female
Trolley waiting area	1	8	8.0		To support in-patients arriving on beds/trolleys
Trolley Spaces (Stage 2 Day Case Trolleys)	8	13.5	108.0		(Trolleys supporting day case activity)
Clean utility	1	12.0	12.0		See 05/02/2015 change record for requested changes
Dirty utility	1	8.0	8.0		See 05/02/2015 change record for requested changes
DSR	1	10.0	10.0		HFS recommend
WC & hand wash: accessible, wheelchair assisted	2	4.5	9.0		
Shower - assisted patient	1	6.0	6.0		
Discharge lounge (10 places)	1	20	20.0		May be contiguous with admission lounge but pre/post op flow must remain separated. See 05/02/2015 change record for requested changes
Finishing Kitchen	1	6	6.0		
			248.5		

Operating theatre suites facilities					
Operating theatre: ultra clean	2	55	110.0		1 x "Ultra clean"
Anaesthetic room	2	19	38.0		
Scrub-up & gowning room: 3 places	2	12	24.0		May be shared between 2 theatres (But same space required per theatre) This area should include identified "dictation space" with IT access
Preparation room (Daily Use Store)	2	12	24.0		See 05/02/2015 change record for requested changes
Exit/parking bay: theatre, 1 bed/ trolley	2	12	24.0		May be shared between 2 theatres (But same space required per theatre)
Store: equipment, local to theatre	1	8	8.0		Shared between 2 theatres
Dirty utility	2	12	24.0		See 05/02/2015 change record for requested changes
Sub-Total			252.0		

Multipurpose Minor Procedure Room					
Multipurpose Minor Procedure/Endoscopy Room	1	25	25		(SHPN 52 standard 22m2) . See 05/02/2015 change record for requested changes
Preparation room (Daily Use Store)	1	10	10		
Dirty Utility	1	12	12		
Store: scope storage	1	4.0	4		
General Store	1	4	4		Specific to endoscopy
			55		

Stage 1 Recovery					
Reception/Recovery bay 1 place	4	13.5	54		Assumes 2 spaces/theatre - ideally immediately adjacent to DSU spaces to allow flexibility. See 05/02/2015 change record for requested changes
			54.0		

Support facilities					
Theatre Management Offices: 2 staff	1	12	12.0		
Parking bay: mobile x-ray & ultrasound unit	1	2.5	2.5		
Parking bay: emergency/resuscitation trolley	1	1	1.0		
Store: bulk/sterile supplies	1	18	18.0		Utilising mechanical storage system to optimise storage space
Store: clinical equipment	1	18	18.0		Utilising mechanical storage system to optimise storage space
Store: linen	1	2	2.0		Assumes linen exchange trolley
Store: ready to use medical gas cylinders	1	4	4.0		
Hold: disposal and CDU Returns	1	15	15.0		
DSR	1	10	10.0		
Sub-Total			82.5		

Staff Support Facilities					
Rest & dining room with beverage & snack preparation bay: 10 staff	1	20	20.0		
Staff changing room including boot change: 10 places	1	12	12.0		Male staff (Split to be confirmed)
Staff changing room including boot change: 10 places	1	12	12.0		Female staff (Split to be confirmed)
Utility: footwear washing	1	4	4.0		1 For Male staff, 1 For Female staff
WC Wheelchair user & changing / shower	1	4.5	4.5		1 For Male staff, 1 For Female staff
WC & wash: ambulant	2	2.5	5.0		Actual number to be confirmed
Shower: ambulant (non patient)	2	2.5	5.0		
Sub Total			62.5		

Total Net					
Planning	5%		39.5		
			828.5		
Engineering	3%		24.9		
Circulation	25%		207.1		
Total			1060.4		

Notes

Renal Dialysis

Renal dialysis	No	Area m2	Total scheduled Area m2	Comments
General waiting and WC's				
Hand wash station	1	1.5	1.5	
Sub Total			1.5	
Clinical spaces				
Dialysis cubicles	5	10.5	52.5	
Isolation treatment room dialysis	1	13.5	13.5	Multi-use as treatment room
WC - Accessible	1	4.5	4.5	En-suite to Isolation treatment room
Physiological measurement area	1	4.0	4.0	Within main dialysis area
WC - independent user	1	4.5	4.5	
Sub Total			79.0	
Support facilities				
Staff base controlling dialysis stations	1	9.0	9.0	
Finishing Kitchen	1	10.0	10.0	
Sub Total			19.0	
Utility and stores				
Clean Utility	1	10.0	10.0	
Dirty utility	1	8.0	8.0	
Store: linen	1	2.0	2.0	
Store: small equipment/consumables	1	15.0	15.0	
DSR	1	10.0	10.0	HFS advise
Sub Total			45.0	
Technical				
Local storage of dialysate	1	6.0	6.0	
Sub Total			6.0	
Total Net				
Planning	5%		7.5	
			158.0	
Engineering	3%		4.7	
Circulation	30%		47.4	
Total			210.2	

Notes

Assumes waiting/WC's and emergency trolley shared with OPD or adjacent area
 Assumes bulk fluid storage is in main stores area

CDU

CDU	No	Area m2	Total scheduled Area m2	Comments
-----	----	------------	-------------------------------	----------

Endoscope re-processing				
Endoscope contaminated returns lobby and holding area	1	4.0	4.0	Pass through hatch to endoscope wash/re-processing
Endoscope wash/re-processing room	1	28.0	28.0	Pass through EWD's to endoscope storage and despatch
Endoscope inspection, storage and despatch	1	10.0	10.0	Requires easy access out of hours by theatre staff
Endoscope trolley wash area	1	10.0	10.0	
Sub Total			52.0	

Main CDU returns and wash room				
Contaminated returns lobby and holding area	1	8.0	8.0	
Wash room inc 3 single chamber (15 din baskets) washer/disinfectors	1	42.0	42.0	See calcs sheet: as HFS minus endo allowance; 2 washer/disinfectors - size revised 5th Feb
Gowning room: 2 places (wash room)	1	6.0	6.0	
DSR	1	7.0	7.0	
Control room, operational base	1	12.0	12.0	Glazed screen to both wash and IAP rooms. Can this be Manager office?
Sub Total			75.0	

IAP area				
Inspection, assembly and packing room (IAP)	1	42.0	42.0	See calcs sheet: as HFS; size revised 5th Feb
Packed product transfer facility (pass through hatches)	1	9.0	9.0	Between IAP and sterilisers
Gowning room: 2 places (IAP room)	1	6.0	6.0	
Materials transfer room: based upon divided room with dual access	1	9.0	9.0	Supplies IAP
DSR for IAP room	1	7.0	7.0	
Sub Total			73.0	

Sterilisers and despatch				
Steriliser loading/unloading area: 3 x 0.6m ³ sterilisers	1	26.0	26.0	2 sterilisers - size revised 5th Feb
Steriliser plant room: 3 x 0.6m ³ sterilisers 22.5	1	22.5	22.5	2 sterilisers, plant room to remain same size due to heat generated
Steriliser cooling area: 3 bays 14.5	1	10.0	10.0	2 bays
Despatch area for processed goods	1	18.0	18.0	revised 5th feb
Sub Total			76.5	

Stores, waste collection, DSR, test				
Raw materials store	1	25.0	25.0	revised 5th Feb
General waste disposal/laundry returns	1	12.0	12.0	
Housekeeping/DSR for general room	1	7.0	7.0	
Test equipment and data room	1	9.0	9.0	
Sub Total			53.0	

Staff changing, WC's, restroom				
Staff changing with lockers	2	5.5	11.0	Consider male/female use but also economy of provision
Staff WC/shower	2	4.0	8.0	Access to in which within reasonable distance
Staff restroom with beverage bay: 5 places Para 4.210	1	11.0	11.0	
Sub Total			30.0	

Offices				
1:1 meeting room: CDU manager	1	9.0	9.0	revised 5th feb
Sub Total			9.0	

Total Net				
Planning	5%		18.4	
			386.9	
Engineering	3%		11.6	
Circulation	25%		96.7	
Total			495.3	

Notes

This area has not been reviewed/amended by B+A
Main corridor must be dedicated part of CDU

Pharmacy

Pharmacy	No	Area m2	Total scheduled Area m2	Comments
----------	----	------------	-------------------------------	----------

Consulting Booth				
Consulting booth	1	9.0	9.0	Assumes pharmacy has a dispensing role. Ideally with separate doors from dispensary and public corridor. See 05/02/2015 change record for requested changes
Sub Total			9.0	

Dispensary				
Main dispensary area	1	18.0	18.0	With 2 separate dispensing benches. May just be notional space within the main dispensary area. Requires sink area and drainage.(Existing equivalent area 10m2)
Main drug storage area	1	40.0	40.0	May just be notional space within the main dispensary area. (Existing equivalent area 20m2)
Controlled drug storage/dispensing	1	4.0	4.0	With controlled drugs cupboards, bench space and PC. See 05/02/2015 change record for requested changes
Clinical trials area	1	4.0	4.0	Assumes clinical trials may be conducted in future. With secured cupboards and bench space. May just be notional space within the main dispensary area.
Despatch area	1	4.0	4.0	See 05/02/2015 change record for requested changes
Sub Total			70.0	

Bulk/Specialist Storage				
Packing/unpacking area	1	12.0	12.0	See 05/02/2015 change record for requested changes
IV bulk fluid store	1	10.0	10.0	Reflects requirement for 18m2 of linear shelf space as available in existing central stores area
Refrigerated room	1	8.0	8.0	
Emergency box	1	2.0	2.0	With bench and cupboard
Flammable cupboard	1	2.0	2.0	
Sub Total			34.0	

Staff areas				
Office: 1 person	1	9.0	9.0	Principal pharmacist and 1-1 discussions
Staff workstation area: 3 place	1	18.0	18.0	Current establishment 7 wte
WC and staff - cube lockers	1	4.0	4.0	WC may be omitted if facility available nearby
DSR	1	10.0	10.0	
Waste collection/disposal hold	1	10.0	10.0	
Sub Total			51.0	

Total Net				
Planning	5%		8.2	
			172.2	
Engineering	3%		5.2	
Circulation	25%		43.1	
Total			220.4	

Notes

Emergency top up drug storage scheduled within in-patient area at 4m2
 CBRN eqpt storage scheduled within A&E at 4m2

Mortuary

Mortuary		Area	Total scheduled		Comments
	No	m2	Area m2		

Relatives facilities					
Relatives waiting/interview room	1	12.0	12.0		
WC - visitor type	1	2.5	2.5		
Viewing/bier room	1	16.0	16.0		
Sub Total			30.5		

Body store area					
Refrigerated stores (no freezers) 8 cabinets and transfer area	1	15.0	15.0		
Trolley storage zone - mortuary trolley & collection trolley	1	4.0	4.0		
Protective clothing storage	1	2.0	2.0		
Sluice/Waste Disposal	1	6.0	6.0		
Records cupboard/writing surface	1	2.5	2.5		
Sub Total			29.5		

Total Net			60.0		
Planning	5%		3.0		
			63.0		
Engineering	3%		1.9		
Circulation	30%		18.9		
Total			83.8		

Notes

Laboratory

Laboratory	No	Area m2	Total scheduled Area m2	Comments
------------	----	------------	-------------------------------	----------

Accessed out of hours - located adjacent to clinical facilities				
Blood issue fridge	1	6.0	6.0	Location adjacent to theatre/HDU conv A&E
Specimen drop off	1	2.0	2.0	
Sub Total			8.0	

Reception and specimen reception				
Reception/enquiries/results and despatch	1	6.0	6.0	See 05/02/2015 change record for requested changes
Specimen reception	1	9.0	9.0	
Sub Total			15.0	

Main lab				
Automated lab area	1	30.0	30.0	See 05/02/2015 change record for requested changes
Biochem test bench	1	8.0	8.0	
Haematology test bench	1	4.0	4.0	
Blood transfusion zone	1	10.0	10.0	Separate from main lab - could be glazed in area
Freezers	1	2.0	2.0	
Staff PC workstations	4	2.0	8.0	
Cold room	1	4.0	4.0	SEPARATE ROOM
Sub Total			66.0	

Microbiology				
Automation area	1	12.0	12.0	See 05/02/2015 change record for requested changes
Sample processing, plate reading	1	6.0	6.0	
Staff PC workstation	1	2.0	2.0	
Incubators	1	2.0	2.0	
Fridges	1	2.0	2.0	
Microscopy (darkroom)	1	6.0	6.0	Dark room
Cat II lab with Cat 1 safety=safety cabinet	1	12.0	12.0	
Sub Total			42.0	

Support and stores				
Wash up and autoclave	1	15.0	15.0	1 autoclave. See 05/02/2015 change record for requested changes
Store: consumables/bulk supplies	1	16.0	16.0	
Store: reagents, chemicals	1	6.0	6.0	
Cleaner	1	10.0	10.0	
Disposal hold/recycling	1	6.0	6.0	
Sub Total			53.0	

Staff areas				
Lab coat storage	1	2.0	2.0	See 05/02/2015 change record for requested changes
Staff WC/cube lockers	2	4.0	8.0	
Office: lab administration	1	12.0	12.0	Lab admin, senior BMS's x 3
Office: 2p lab manager and quality manager	1	12.0	12.0	Joint post
1:1 meeting: Point of Care co-ordinator	1	9.0	9.0	Pending appt. point of care VC enabled
Sub Total			43.0	

Total Net			227.0	
Planning	5%		11.4	
			238.4	
Engineering	3%		7.2	
Circulation	25%		59.6	
Total			305.1	

Notes

HBN Guidance is of little use in developing the requirements for this lab area due to its unique size/operation

IT

IT		Area	Total scheduled		Comments
	No	m2	Area m2		See 05/02/2015 change record for requested changes

Management & work areas					
1:1 meeting: manager	1.0	9.0	9.0		
IT workroom: support team	1.0	30.0	30.0		3 staff non standard workstation
Workshop/build room	1.0	25.0	25.0		Deep benching
Store: equipment	1.0	8.0	8.0		
Sub Total			72.0		

Servers and hubs					
Server room	1.0	35.0	35.0		shape of room important requires additional fire exit
Node cabinets - 1 per floor	2.0	6.0	12.0		Locate appropriately
Sub Total			47.0		

Total Net			119.0		
Planning	5%		6.0		
			125.0		
Engineering	3%		3.7		
Circulation	25%		31.2		
Total			159.9		

Notes

This area has not been reviewed/amended by B+A

Learning & Development

Learning & Development			Area	Total scheduled		Comments
		No	m2	Area m2		

Learning & Development centre						
IT training room, e-learning and library	1	0	30.0	0.0		
Conference room/emergency response centre	1	0	80.0	0.0		Seat 50 theatre style: emergency response centre and secure storage of equipment: divisible by screen into 2 areas, smaller areas to be suitable for manual handling training
Store: beds, mannekins, hoist, white boards etc.	1	0	16.0	0.0		
Meeting room/digital classroom (20 persons)	1	0	25.0	0.0		BA Version SoA3
Meeting room/digital classroom (8-10 persons)	1	0	18.0	0.0		
Cleaners room	1	0	10.0	0.0		Provided centrally
Staff WC's/cubicles/wash	2	0	10.0	0.0		Use adjacent
Disposal/recycling	1	0	6.0	0.0		
Sub Total				0.0		

Office allowance (Notional allocations only)						
1 Person Office With Meeting Space	1	0	13.5	0.0		Hospital Manager
Infection Control Team	2	0	5.5	0.0		Assumes primary role is administrative
Health Intelligence & Clinical Governance	8	0	5.5	0.0		located in main entrance SOA
OHAC, PC & Admin	6	0	5.5	0.0		located in Clinical Accommodation Facility
HR, L&D and Occ Health	8	0	5.5	0.0		located in Clinical Accommodation Facility
Health Visitors	2	0	4.5	0.0		located in Clinical Accommodation Facility
Community Nursing	4	0	4.5	0.0		located in GP wing
Social Work	2	0	4.5	0.0		located in GP wing
LTC Nurses	3	0	4.5	0.0		located in Clinical Accommodation Facility
AHP's (Physio/OT)	5	0	4.5	0.0		located adjacent to rehab area
S<	2	0	4.5	0.0		located in Clinical Accommodation Facility
Intermediate care team	4	0	4.5	0.0		located adjacent to rehab area
Dietetics	2	0	4.5	0.0		located in Clinical Accommodation Facility
Medical Secretaries & Clinical Admin	4	0	5.5	0.0		located in Clinical Accommodation Facility
Consultant Surgeons & Gynae	5	0	4.5	0.0		located in Clinical Accommodation Facility
Consultant Anaesthetists	4	0	4.5	0.0		located in Clinical Accommodation Facility
Consultant Physicians	4	0	4.5	0.0		located in Clinical Accommodation Facility
Sub Total				0.0		

Additional Storage Space (Not included elsewhere)						
Community/LTC Nurses Store	1	0	10.0	0.0		
Health Visitor's Store	1	0	0.0	0.0		located with HV office accommodation
AHP Loan Eqpt Store	1	0	10.0	0.0		
Sub Total				0.0		

Total Net						
Planning	5%			0.0		
				0.0		
Engineering	3%			0.0		
Circulation	25%			0.0		
Total				0.0		

Notes

Assumes all administrative accommodation is as flexible as possible and that individual allocations are "notional" only
 Allows 4.5m2 per flexible desk area and 5.5m2 per "permanent" desk area
 Attempts to differentiate desk requirements based on need for access to a flexible or permanent desk space
 Must reflect efficiencies anticipated from bringing people/services together
 Assumes estates offices within Estates Dept
 Assumes GP offices within GP areas
 Assumes IT Offices in IT
 Assumes Medical Records Offices in Main Hub
 Assumes specialist clinical offices/location specific admin areas in relevant wards/departments
 Requires review by NHS Orkney

Staff Changing

Staff Changing		Area	Total scheduled		Comments
	No	m2	Area m2		

Staff change					
Female staff change	1	50.0	50.0		Numbers not confirmed
Female staff WC	1	12.0	12.0		
Male staff change	1	30.0	30.0		Numbers not confirmed
Male staff WC	1	9.0	9.0		
Staff showers	2	6.0	12.0		
Cleaners room	0	0.0	0.0		Use adjacent
Sub Total			113.0		

Staff restroom					
Staff lounge/rest room with pantry	2	36	72.0		
Sub Total			72.0		

Total Net			185.0		
Planning	5%		9.3		
			194.3		
Engineering	3%		5.8		
Circulation	25%		48.6		
Total			248.6		

Notes

This area has not been reviewed/amended by B+A

FM

FM	No	Area m2	Total scheduled Area m2	Comments
				See 05/02/2015 change record for requested changes

Estates				
Office:4 persons and reception	1	22.0	22.0	2 admin staff and??
Office:2 persons	1	11.0	11.0	Estates supervisor, estates officer
Staff changing	2	6.0	12.0	20 persons: estates; portering and security:? Requirement to be separate from main staff changing
Staff WC and shower	2	4.0	8.0	
Estates workshop - general area	1	20.0	20.0	Maintenance/repair: beds, trolleys, hoists etc. as per NHSO Nov 2011
Estates workshop - hot area	1	15.0	15.0	Welding etc.
Parts, spares & materials store	1	20.0	20.0	
Sub Total			108.0	

Medical physics				
Equipment reception area	1	8.0	8.0	
Checking, testing, calibration	1	10.0	10.0	
Parts, spares and supplies store	1	15.0	15.0	
Electric wheelchair test and maintenance	1	15.0	15.0	
Large equipment store	1	15.0	15.0	E.g. - air mattresses
Sub Total			63.0	

Materials management/stores				
Office - 3 persons	1	16.5	16.5	Materials management administration
Porters base	1	9.0	9.0	PC point
Receiving area	1	20.0	20.0	NHSO Nov 2011
Store	1	100.0	100.0	Telecon SS/CB 29/01/13
Chemical store	1	12.0	12.0	Catering and domestic - NHSO Nov 2011
Quarantined goods holding area	1	6.0	6.0	NHSO Nov 2011
Despatch area	1	12.0	12.0	Goods for outer isles etc.
Empty pallet and waste area	1	20.0	20.0	NHSO Nov 2011
Trolley/tug store and recharge area	1	8.0	8.0	NHSO Nov 2011
Cleaners room	1	7.0	7.0	
Store: community nurses	1	16.0	16.0	
Sub Total			226.5	

397.5

Catering				
Coffee shop, restaurant, servery, vending	1	189.0	189.0	Request for 270 sqm Gross area for 80-100 meals; restaurant seating 50-60;soft seating24;benchmarked Invergordon (100 meals/160 sqm; Lochgilphead 60-120 sqm)
Kitchen production area; office; staff changing/WC's; deliveries; store; cleaner	1	182.0	182.0	Request for 240 sqm Gross area for 120 patient meals: benchmarked Lochgilphead 120+/170 sqm)
Walk in chiller and deep freeze storage	2	12.0	24.0	Request for 26 sqm
Sub Total			395.0	

Laundry				
Dirty laundry receipt, sort and wash	1	25.0	25.0	2 domestic (personal clothes) + 2 commercial washers.
Drying, sorting and processing	1	75.0	75.0	2 domestic, 2 commercial, tunnel master (uniforms), roller for flat sheets, press, sorting, final sort, trolley storage
Clean trolley store, goods out	0	0.0	0.0	Included in above
Staff control area	1	11.0	11.0	2 persons
Sub Total			111.0	

Domestic staff				
Chemical storage	0	0.0	0.0	In materials management area
Central equipment store	1	12.0	12.0	
Sub Total			12.0	

Total Net				
Planning	5%		45.8	
			961.3	
Engineering	3%		28.8	
Circulation	25%		240.3	
Total			1230.4	

External areas - estates and materials management				
Vehicle servicing, charging points and wash bay.NHS fleet pool cars and vans			0.0	
Medical gas manifolds			0.0	
Medical gas cylinder storage			0.0	
Clinical waste transfer and storage			0.0	
Waste transfer, recycling and storage compounds			0.0	
Grounds equipment storage, garage and charging			0.0	
Central delivery point and loading bays			0.0	
SAS Garage	1	40.0	40.0	
SAS Parking	4	18.0	72.0	4 spaces at 18m2
SAS Parking for Training Van	1	12.5	12.5	
SAS External Wash Bay	1	18.0	18.0	
			0.0	
			0.0	
			0.0	
Sub Total			0.0	

Notes

This area has not been reviewed/challenged by B+A

SAS

Scottish Ambulance Service		Area	Total scheduled		Comments
	No	m2	Area m2		

SAS					
Office: team leader	1	10.0	10.0		
Office: training officer	1	10.0	10.0		
Staff work area	1	18.0	18.0		added 5th Feb
Store: medical consumables	1	6.0	6.0		
Store: Drugs	1	6.0	6.0		As per controlled drug storage requirements
Store: blankets	1	6.0	6.0		
Store: O2 cylinders	1	6.0	6.0		
Male/Female WC & Showers	2	5.0	10.0		added 5th Feb
Locker Storage	1	6.0	6.0		dedicated lockers for PPE, added 5th Feb
Sluice/dirty utility room	1	6.0	6.0		Should be adjacent to external vehicle wash area
Sub Total			84.0		

Total Net			84.0		
Planning	5%		4.2		
			88.2		
Engineering	3%		2.6		
Circulation	25%		22.1		
Total			112.9		

Notes

- Assumes SAS staff will use shared staff dining facilities
- Assumes SAS staff will use main laundry facilities
- Assumes SAS staff will be able to access shared training areas
- Assumes areas used by the SAS will be funded by the SAS

Compatibility Report for NHS Orkney SoA v 8 (05022014).xls
Run on 05/02/2014 15:39

The following features in this workbook are not supported by earlier versions of Excel. These features may be lost or degraded when you save this workbook in an earlier file format.

Minor loss of fidelity

of occurrences

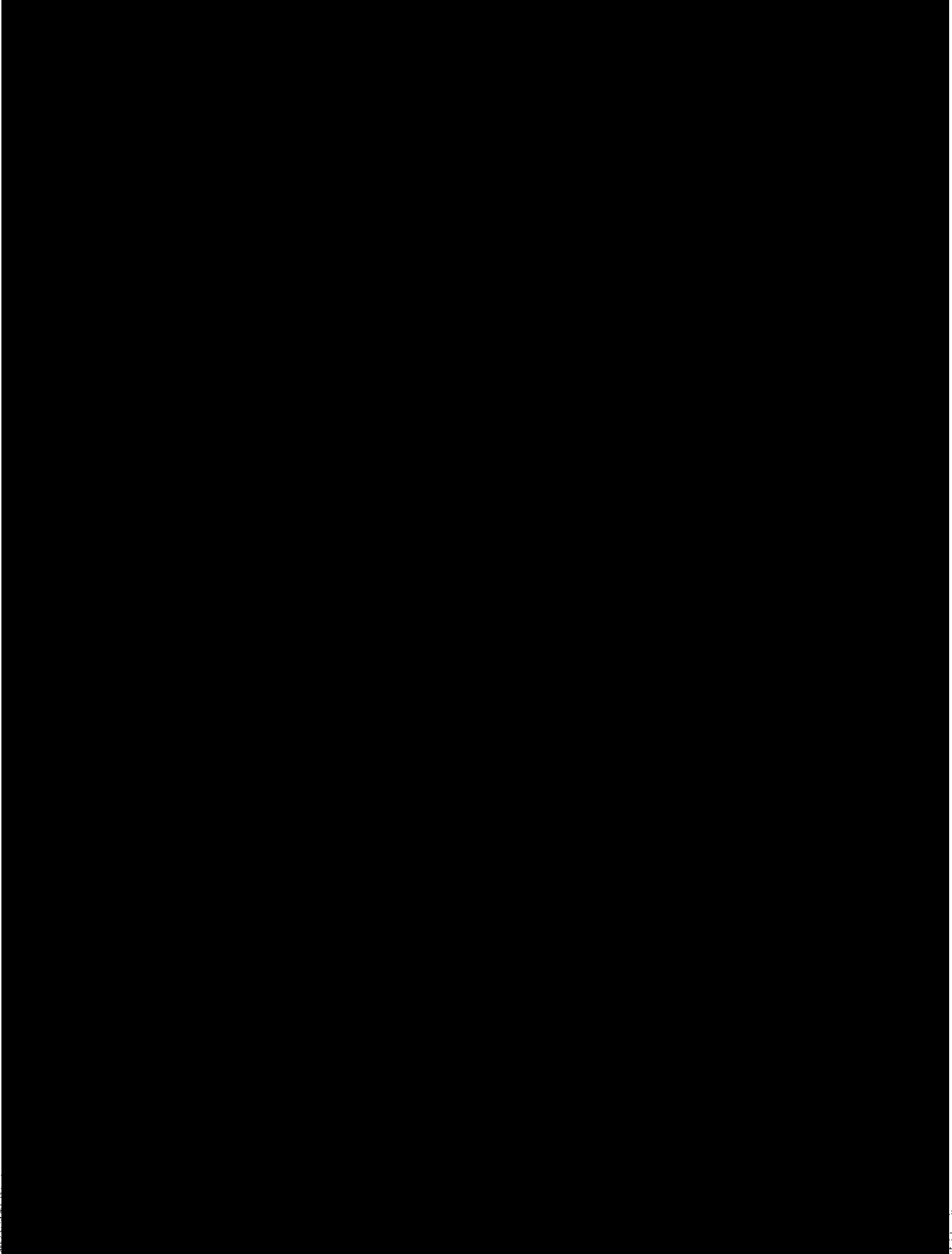
Some cells or styles in this workbook contain formatting that is not supported by the selected file format. These formats will be converted to the closest format available.	22
--	----

ANNEX 7.3

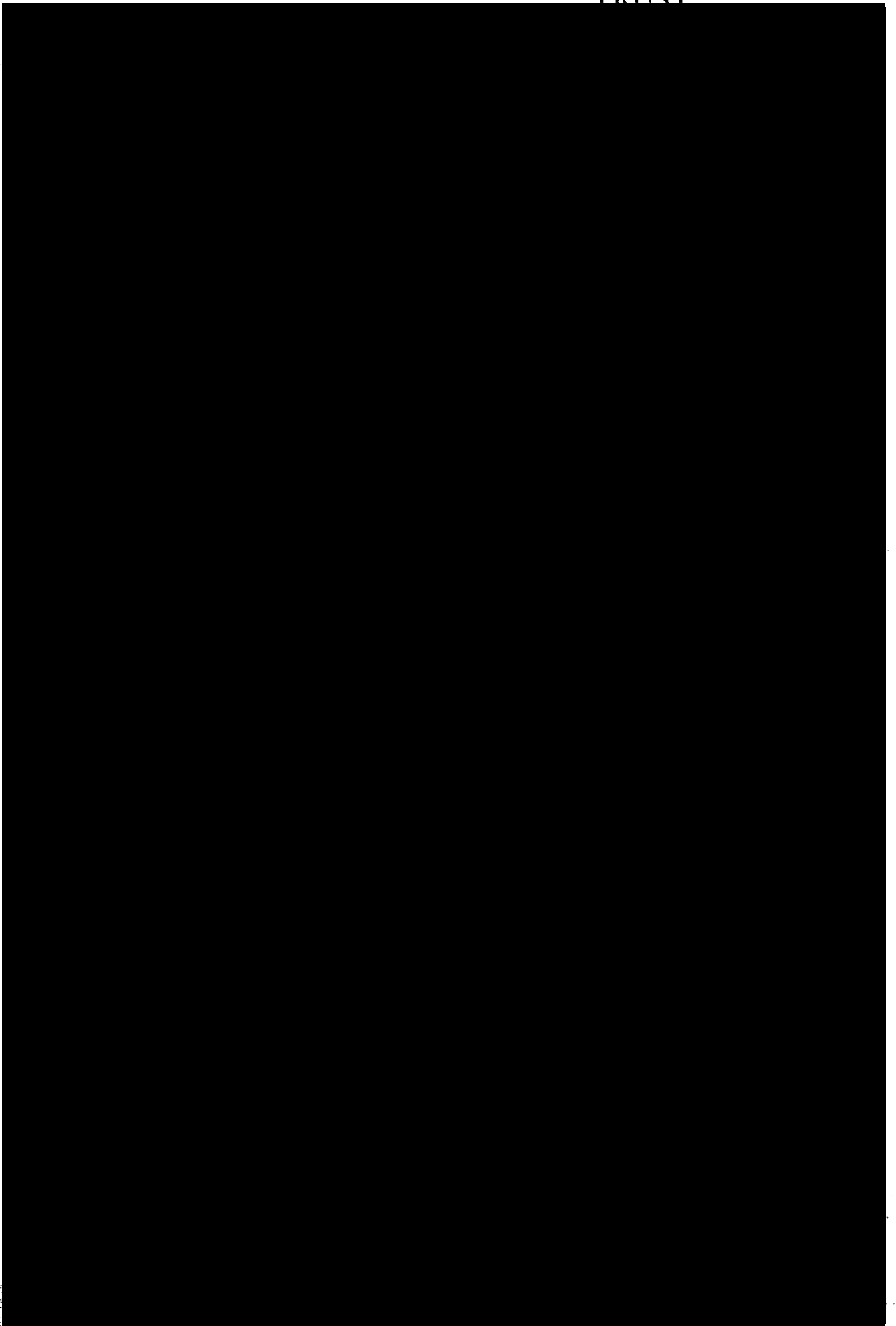
Stage 2 – Independent Design Review Executive Summary

NHS Orkney
New Hospital and Healthcare Facility
Independent Design Review

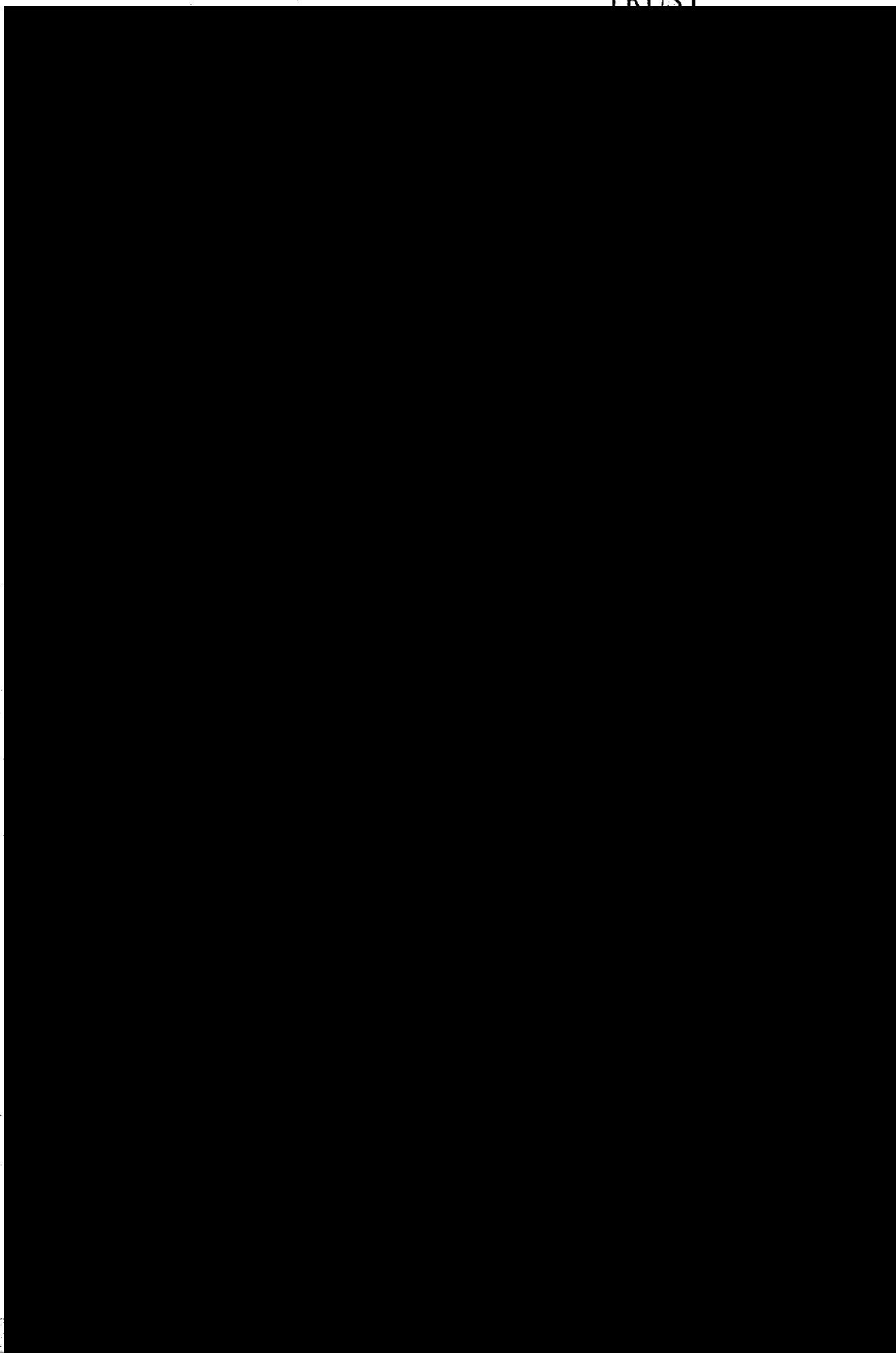
11 February 2014



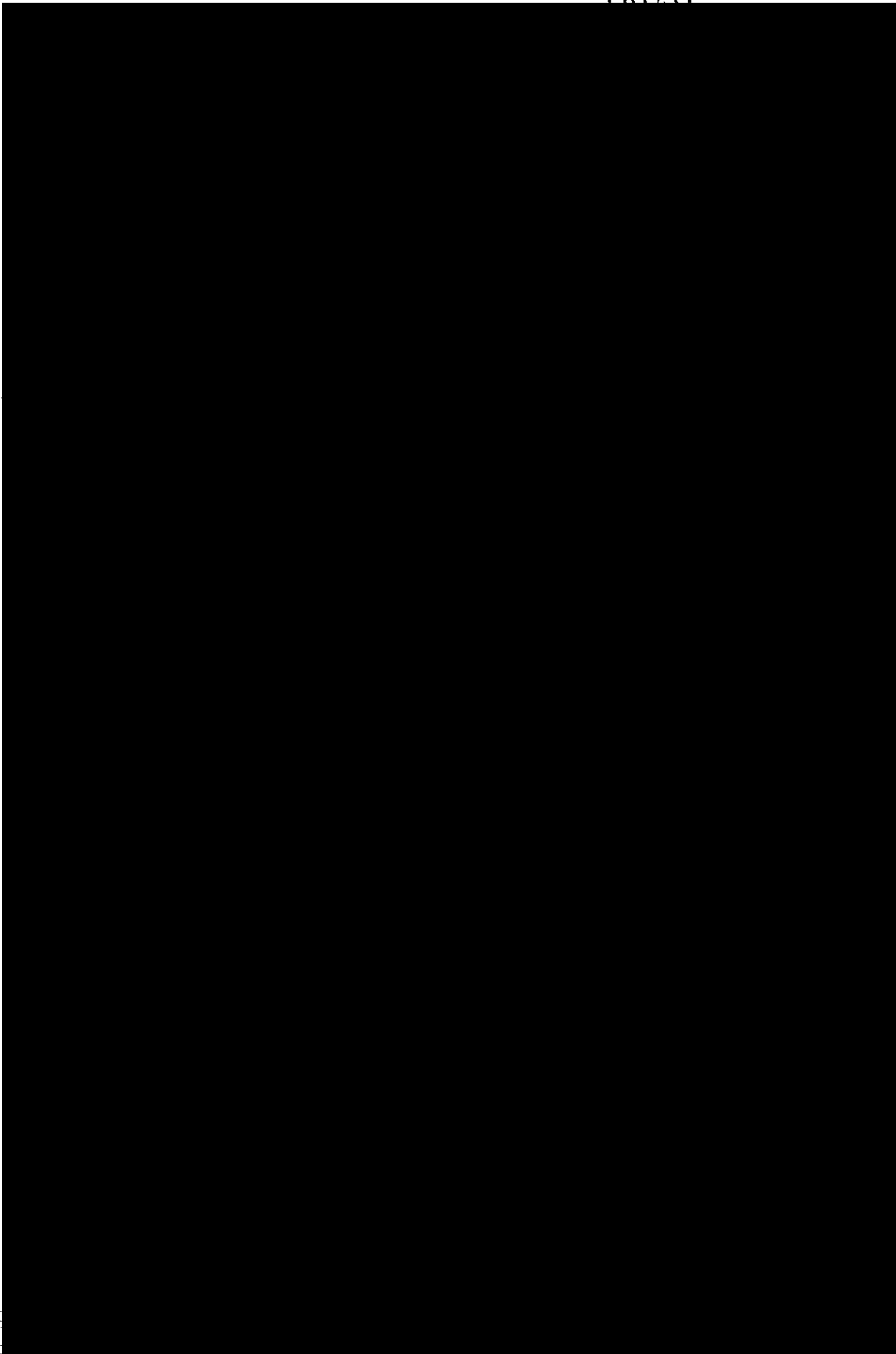
SCOTTISH
FUTURES
TRUST



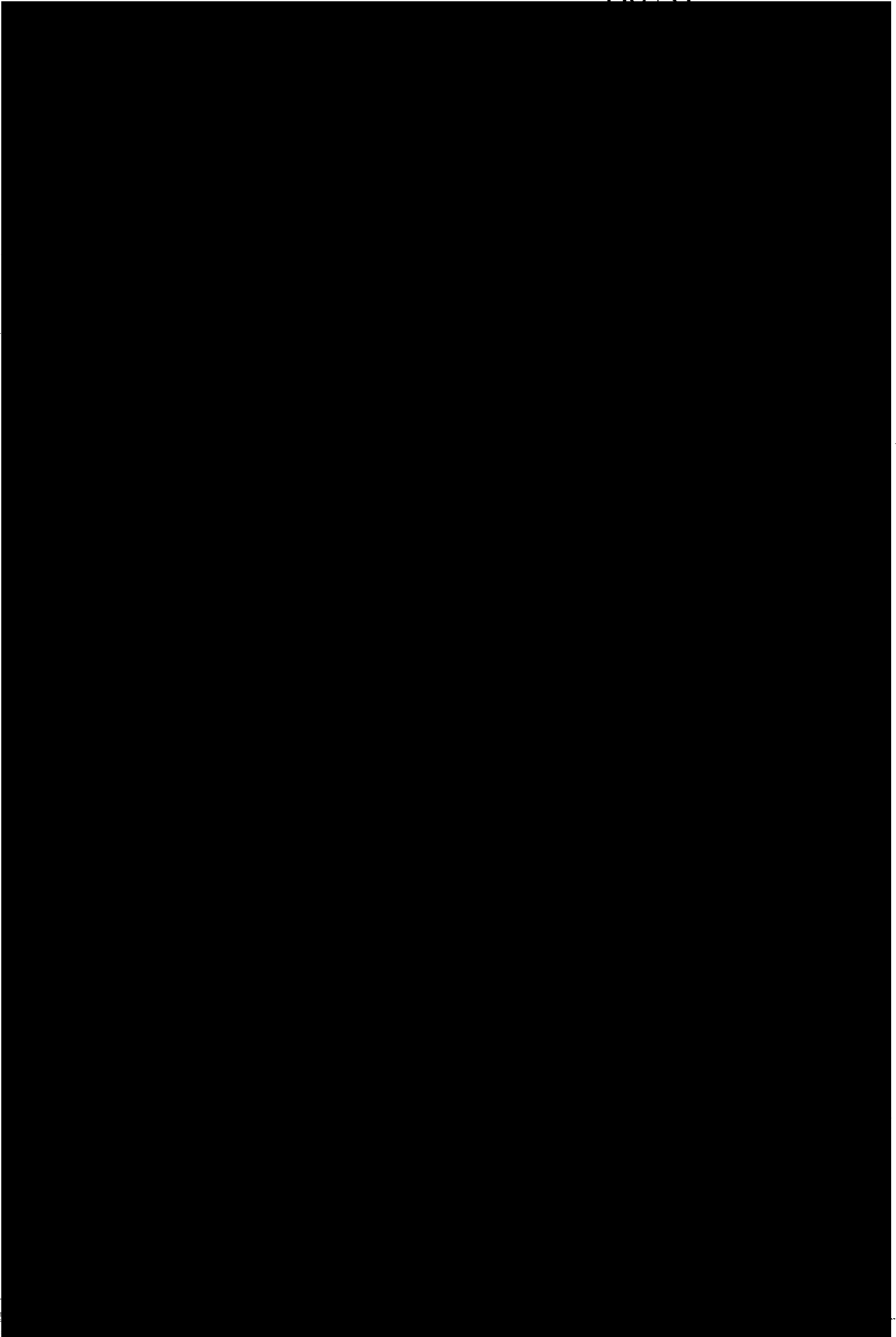
SCOTTISH
FUTURES
TRUST



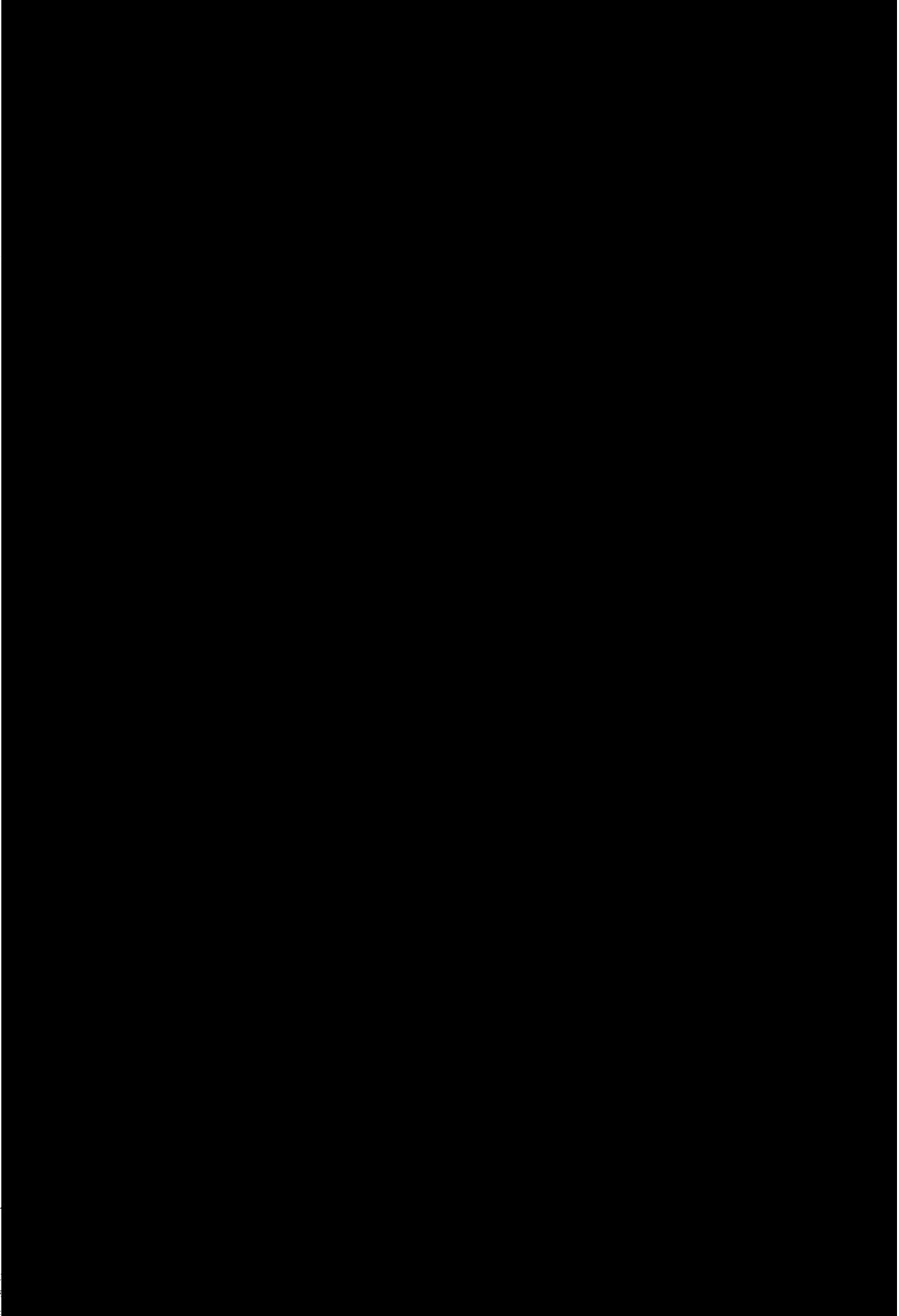
SCOTTISH
FUTURES
TRUST



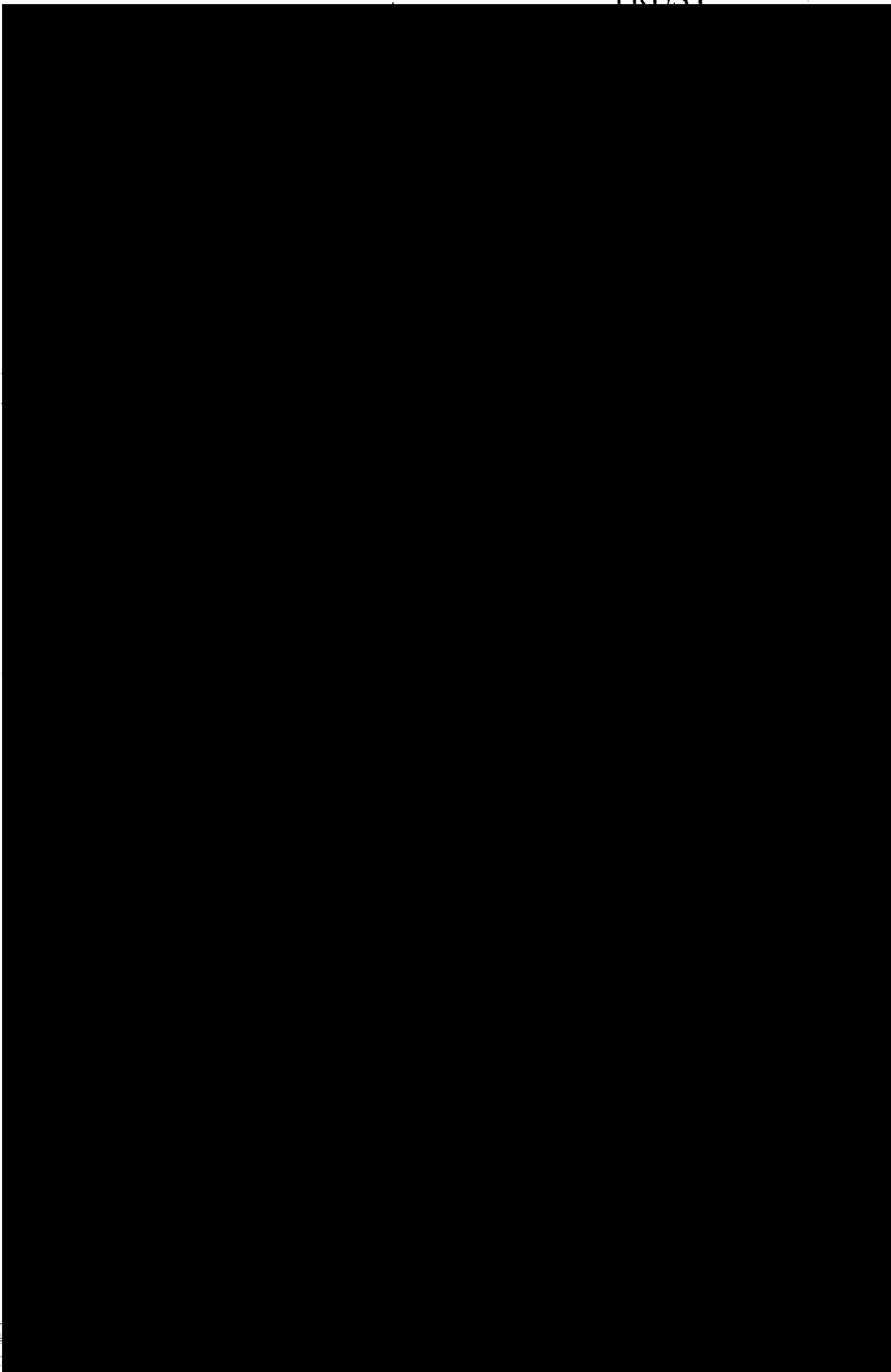
SCOTTISH
FUTURES
TRUST



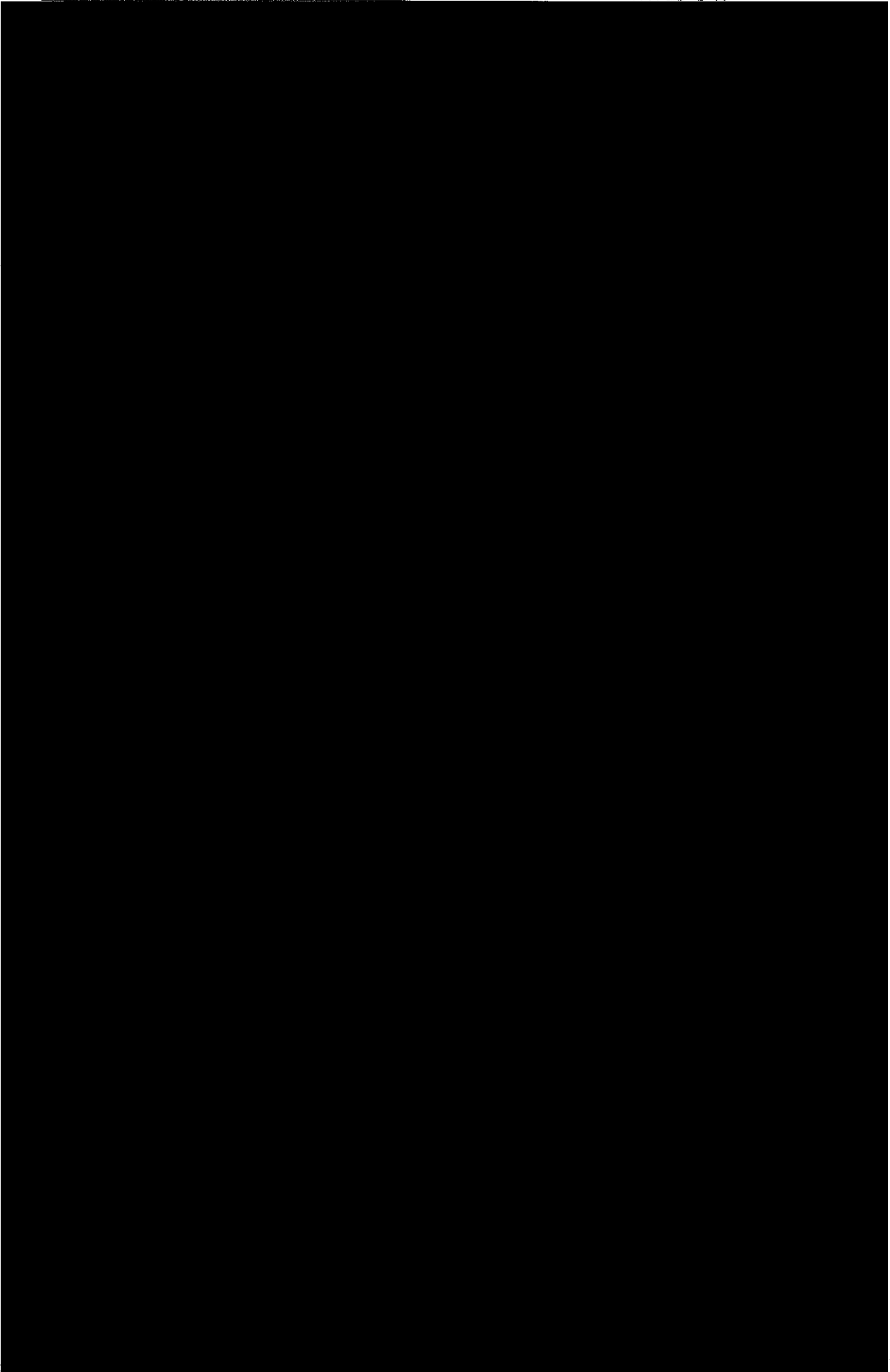
SCOTTISH
FUTURES
TRUST



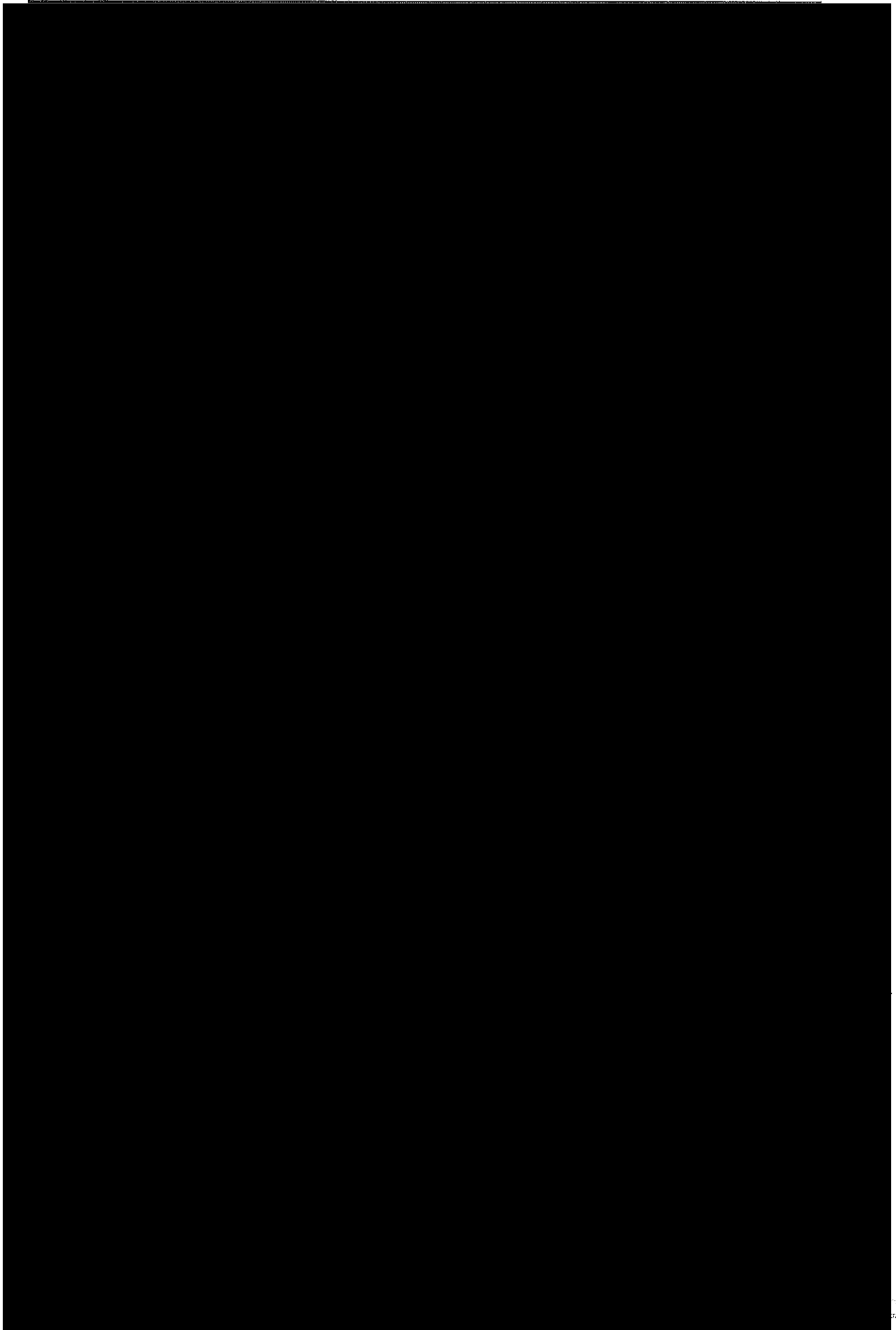
SCOTTISH
FUTURES
TRUST



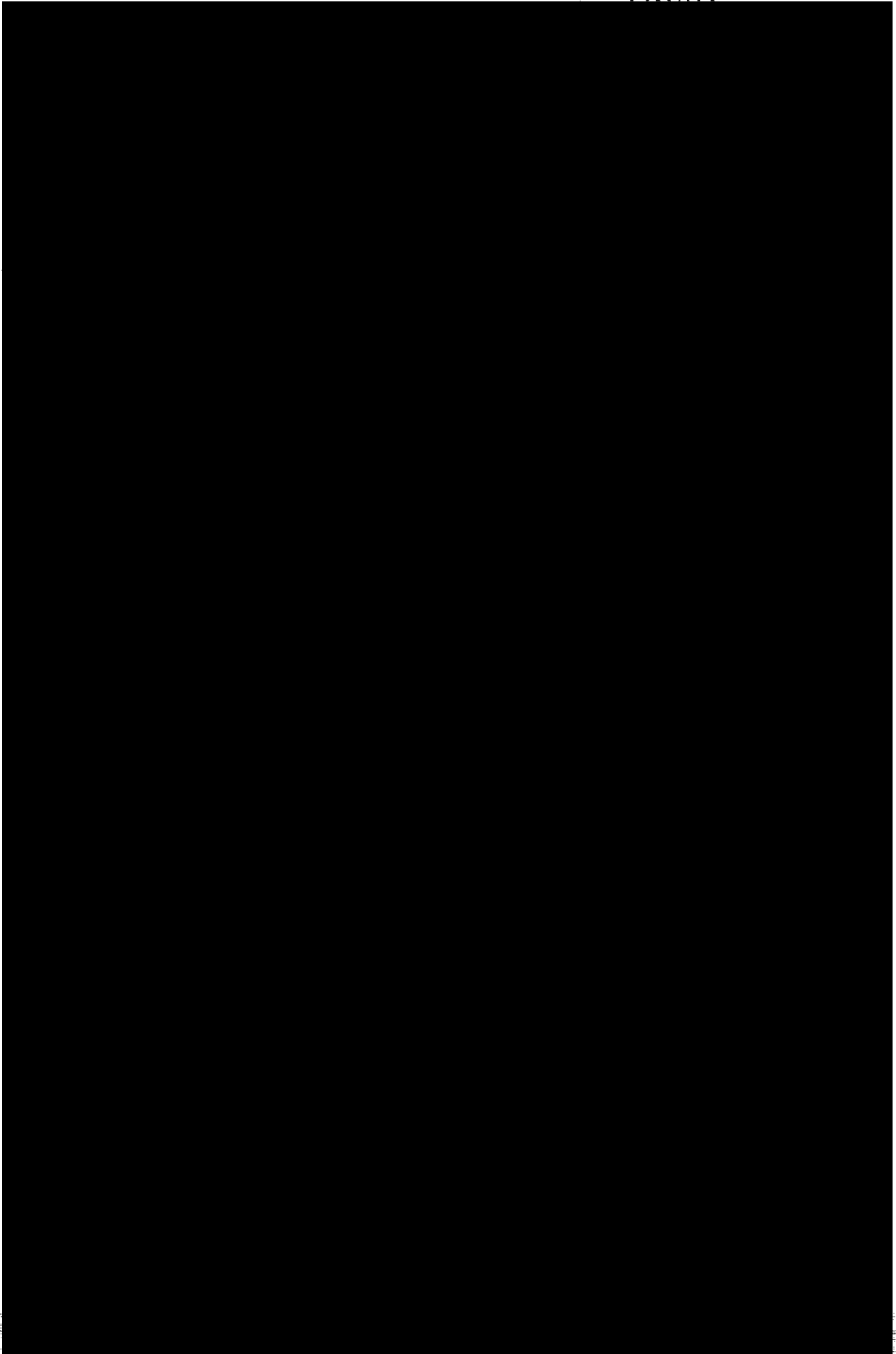
SCOTTISH
FUTURES
TRUST



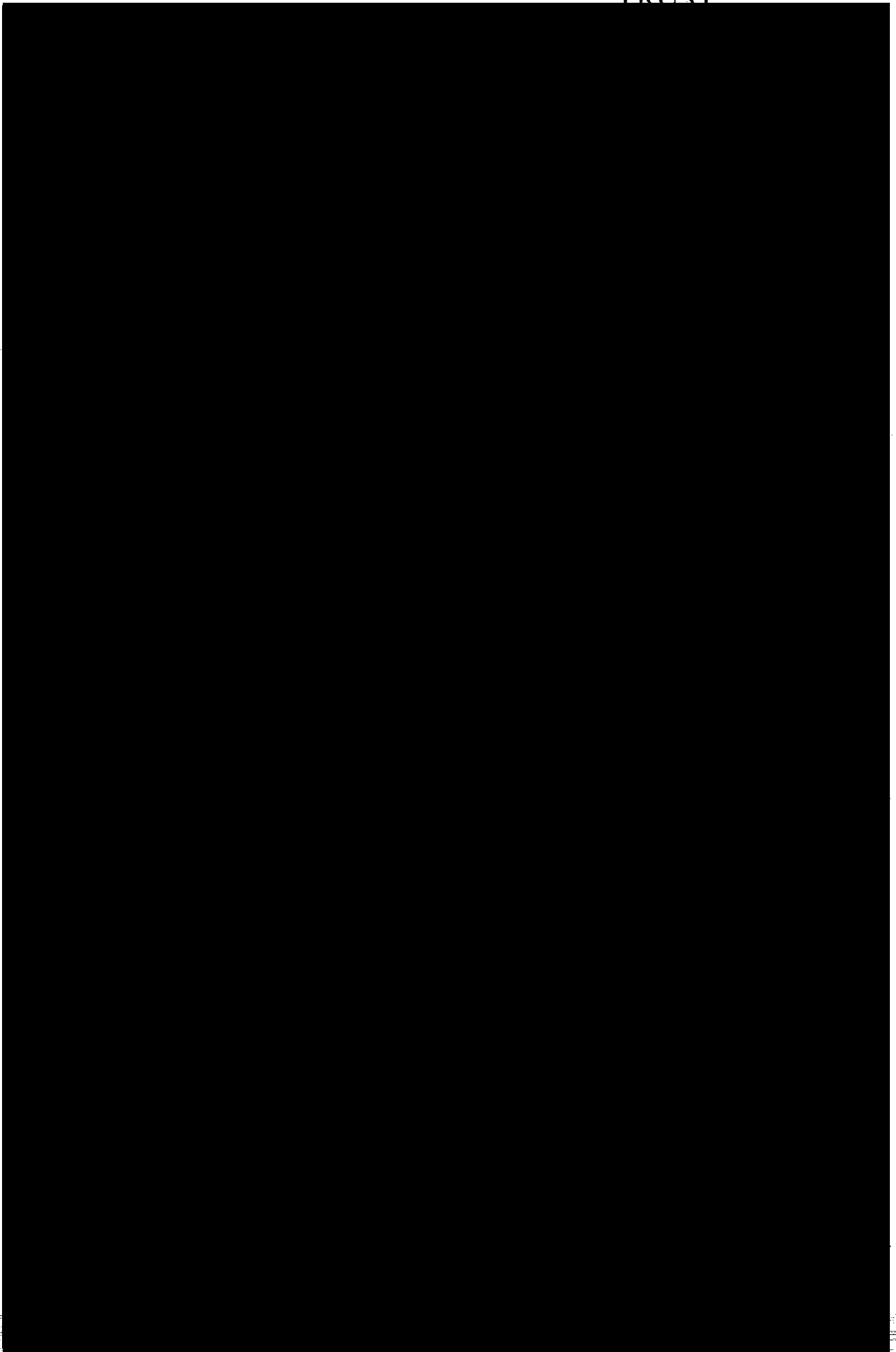
SCOTTISH
FUTURES
TRUST



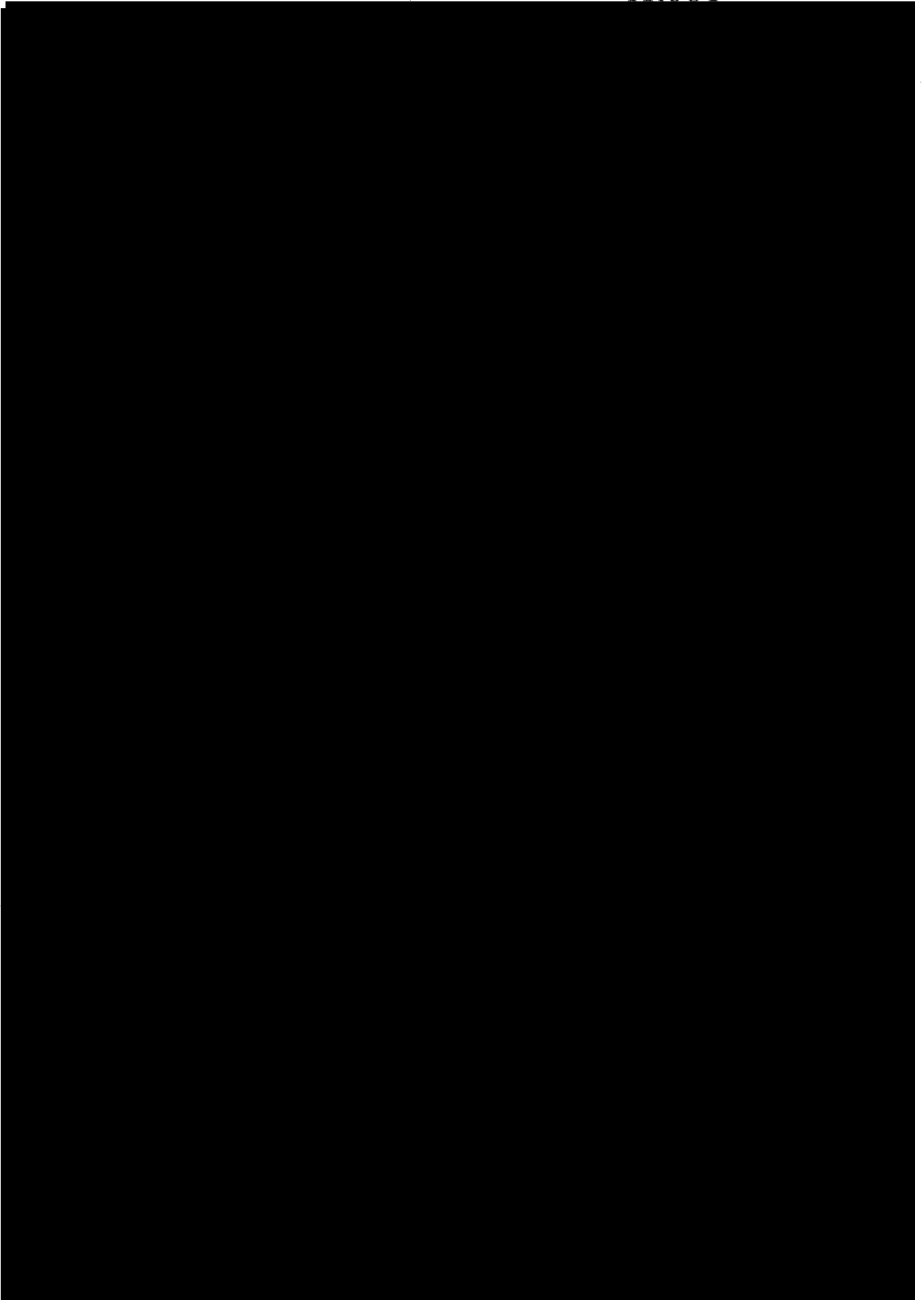
SCOTTISH
FUTURES
TRUST



SCOTTISH
FUTURES
TRUST



SCOTTISH
FUTURES
TRUST



ANNEX 8.1

COS - Theatres



New Hospital & Healthcare Development

Clinical Output Based Specification

Theatres, Endoscopy and Day Unit

Document History			
Version	Date	Author	Comments
Initial Draft	Dec 2012	C A Craig	Highlight areas still to complete
Rev1	05/12/12	C A Craig	Updated for discussions at meeting on 05/12/12
Rev 2	14/1/13	A E Walker	Updated following meeting 10/1/13
Rev 3	28/01/13	C Bichan A Walker	Additions in light of areas in yellow
Rev 4	19/03/13	R Walker	Removal of Day Surgery Unit functions into separate COS
Rev 5	May 13	R Walker	Inclusion of data and comments to reflect discussions
Rev 6	2 nd July 13	R Walker	Updated data included
Rev 7	5 th July 13	Eleanor Binnie Mcleod	
Rev 8	9 th July	A Walker	Final review

Rev 9	20 th Aug	R Walker C Bichan	Clinical Team input Revised following feedback from 1 st meeting of IDR process for discussion at PIB
Rev 10	Sept 13	R Walker C Bichan	Updated to incorporate new template and expand to include Day Unit
Rev 11	October 13	R Walker	Amended following HCP feedback
Rev 12	6 th Feb 2013	N Sutherland	B+A edit following meetings with theatre team
Rev 13	20 th Feb 2013	N Sutherland	B+A edit reflecting feedback from R Walker

1.0 INTRODUCTION AND OUTLINE OF SERVICES

1.1 Departmental Function

This clinical output specification refers to the area within the schedule of accommodation referred to as: “Day Unit, Theatres & Endoscopy”.

The function of these areas is:

- To build upon effective pre-admission assessment, which is a cornerstone of the overall surgical model, by supporting admission on day of surgery (AODOS) for upwards of 95% of all admissions for endoscopy, surgery and other investigations under anaesthesia
- To ensure that patients attending for elective or emergency surgery, endoscopy or other procedures planned to take place within the unit are appropriately prepared prior to the procedure
- To provide safe intra and post-operative care including stage 1 recovery for all patients
- To provide stage 2 recovery up to and including discharge for short stay patients managed within the day unit
- To support patients requiring procedures that demand access to a bed/trolley/chair but not necessarily surgical intervention, e.g. Specific IV medication administration
- To provide a discharge area for patients discharged from other parts of the hospital awaiting transport
- To provide an additional emergency function as a component of the overall facilities emergency management plan. (Essentially to provide an additional emergency triage/bedded area in the event of major incident)

The operating theatres component of the unit will support all emergency, elective, and obstetric intra-operative activity and stage 1 recovery. It will manage both adults and children across a wide range of sub specialties that include; Obstetrics, Orthopaedics, Ear, Nose and Throat, Ophthalmology, Oral/Maxillo-Facial, General Surgery, Pain Management, Gynaecology (future provision); and Urology (future provision)

In addition, the Day Unit will; provide all admission, recovery and discharge services associated with elective medical and surgical day case procedures and support a “discharge lounge function” for all discharged patients waiting for drugs/transport or discharge drugs having been discharged from inpatient areas.

It is essential that the day unit and theatre/multi purpose/endoscopy area be located immediately adjacent to each other and that both be close to the bedded unit in order to optimise the overall endoscopy/surgical journey for the majority of patients and staffing model.

The Remote and Rural Implementation Group and the Viking Surgeons have defined both the elective and emergency procedures which a Rural General Hospital needs to be able to undertake, and which our Theatres and patient areas must have the capacity to accommodate.

1.2 Specialist/Tertiary Services

No specialist or tertiary services are currently delivered from the unit, although it does support a wide range of surgical and medical sub-specialties.

1.3 Current Service Configuration

1.3.1 Bed/Treatment Area Numbers

NHS Orkney currently has only one Theatre which has to cover all elective and emergency procedures. This is over utilized and represents a significant clinical risk – particularly relating to the management of emergency procedures.

The current Day Surgery has limited opening hours resulting in patients either being admitted to the Acute Ward for their stay or having to be transferred there to complete their recovery prior to discharge if the unit has to close.

Endoscopy procedures are currently undertaken in the Main Theatre which severely limits the availability of Theatre for more appropriate procedures and emergencies.

As with all areas of the existing facility, adjacencies are poor.

1.3.2 Access to Imaging & Laboratories

It is often necessary to undertake imaging activity within the operating department both intra and post-operatively. Imaging activity is supported by staff from the imaging department using dedicated mobile x-ray machines and an image intensifier which are kept within the operating theatre department area.

Whilst post-operative imaging is generally restricted to mobile plain film activity, e.g. to assess the correct location of central lines, prior to transfer to ward/critical care areas, etc, intra-operative imaging includes the extensive use of image intensifiers.

Consequently, it must be assumed that image intensifiers may be used in any theatre and the multi-purpose/endoscopy room. In addition, at least one theatre will be a designated laser theatre and should be appropriately equipped with screens, protection and “laser in use” warning lights, etc.

Whilst effective pre-assessment and “surgical work-up” will mean that all patients requiring elective surgery arrive appropriately prepared – including having had all relevant laboratory tests performed – it is sometimes necessary to undertake additional laboratory tests as part of the overall theatre journey. This is particularly true during emergency procedures.

Blood and blood products are currently located within a single fridge that is monitored/managed by the laboratory area and again this continues to be the preferred model for future, albeit with the fridge notionally located within the emergency dept..

1.3.3 Specialist Technical Infrastructure Requirements

It should be noted that operating theatre areas and associated recovery spaces are some of the most technically demanding infrastructure within any acute hospital build.

Specific technical infrastructure requirements are identified both within this document and the whole hospital technical brief.

1.4 Capacity For Investigation/Treatment & Activity

As noted previously, existing capacity is insufficient to accommodate current needs but is also not sufficient to meet minimum quality standards – particularly relating to access to emergency procedures.

Area of Activity	Year: 2011/12
All theatre procedures	2087
Emergency procedures	254
Elective in-patient (including day surgery)	1830
Day surgery	1532
Endoscopy	731

Table 1: Current Activity

Table 1 highlights theatre/endoscopy activity as performed during 2011/12.

It is important to underline how the existing theatre complex is the only surgical facility on the Orkney Islands and, as such, it must support all elective and emergency activity (including general and obstetric emergency activity).

Consequently, whilst there is a very strong argument for two theatres from a capacity perspective, the additional clinical risk element confirms two operating theatres as the minimal acceptable capacity in future.

1.5 Effect Of System Redesign/Balance of Care/National Strategy

A wide range of factors have been identified that are likely to have an impact on current and future operating theatre, minor procedure/endoscopy and associated capacity. These include but are not restricted to:

- The impact of screening Programmes – impact on scope numbers
- The impact of JAG recommendations
- Decontamination Guidelines – need for improved decontamination areas
- British Society of Gastroenterology Guidelines
- Changes to waiting time regimes/targets
- Increasing day case and 23 hour care activity
- Changes/developments in technology and clinical practice
- Re-patriation of activity/services from other hospitals/areas back to the island, e.g. Gynaecology and other surgical activity from NHS Grampian

1.6 Impact Of Current Location/Configuration On The Running Of The Service

1.6.1 Positive

Include, in no particular order:

- Proximity of scope washer/disinfectors to main suite and endoscopy
- Good overall operating theatre layout/configuration within the existing single theatre

1.6.2 Negative

Include, in no particular order:

- Single operating theatre is insufficient from a capacity perspective
- Single theatre is unsafe from a qualitative perspective
- Single theatre does not allow any redundancy
- Capacity to realise waiting times/support re-patriation is constrained
- Lack of privacy in key areas
- Lack of support areas, e.g. Toilets and showers
- Poor flows, e.g. Mixing of pre and post-operative patients
- Lack of private rooms for obtaining consent, etc

1.7 Current Service Risks

Current identified service risks include, in no particular order:

- Access to an emergency theatre when required
- Access to sufficient capacity to support service needs and appropriately manage waiting times
- The recruitment and retention of suitably experienced staff
- The provision of a 24 hour emergency surgical service with minimal staffing that necessitates high “on call” levels
- Failing to meet JAG requirements in endoscopy
- The limitations relating to what is possible/safe to deliver on Orkney with subsequent impact on “off island transfers” and clinical risk mitigation

2. SERVICE TRENDS

A detailed analysis of current and future operating theatre and endoscopy capacity has confirmed the requirement for at least 2 theatres within the new facility as well as a separate multi-purpose room on quantitative as well as qualitative grounds.

This is contained within the overall capacity projections for the new facility. It is also highlighted in Appendix 1 which, as well as presenting proposed future flows, also highlights operational capacity requirements by area based on future assumptions of activity that have been translated into the schedule of accommodation.

These arguments are further underpinned by the essential need for redundancy, given the facilities requirement to conduct emergency general and obstetric procedures as well as elective activity.

In short, this is deemed the minimum capacity required to deliver future services safely but also allows sufficient space to deliver a greatly expanded range of elective procedures as required.

Elements included within future projections include:

- The re-patriation of patients who currently go “off island” for surgery, e.g. Elements of gynaecology, urology, orthopaedics and obstetrics
- The recruitment of new Surgical, Medical & Obstetric Consultants with a subsequent increase in “on island” capability and expertise
- The desire of visiting consultants to offer a wider range of interventional procedures on the island
- Improving minimally invasive techniques and treatment regimes that mean more can be delivered locally
- A need to move some procedures from out-patient to operating theatre/procedure room based, e.g. Specific eye interventions
- An overall desire to move to a more ambulatory care focused model
- An ageing and expanding Orkney population
- A requirement to increase throughput to achieve waiting time targets.
- There will be increased workload from the national bowel screening programme
- Increased major gastrointestinal surgery procedures through obligate network arrangement with visiting surgeon supporting local surgeons

In addition a range of service re-design elements have been identified that are also considered within the future model of care that include:

- Improved theatre scheduling through OPERA system to ensure maximum use of available sessions.
- The introduction of LANQUIP.
- The implementation of “Productive Theatres”.
- Closer integration with CDU to maximise the use of resources and reduce waste.
- Further development of the pre-assessment service.
- Increased admission on day of surgery.

- Development of the Day Unit as a focus for both medical and surgical patients.
- Introduction of an electronic patient record system to enhance the flow of clinical communication.
- A review of all minor procedures undertaken to determine those which can be undertaken in outwith an operating theatre.
- An on-going review of performance against BADS targets.

3. CLINICAL/SERVICE MODEL & PHILOSOPHY OF CARE

3.1 Philosophy of Care

Our philosophy of care is that changes to day unit/theatre/minor procedures/endoscopy services within the new hospital build will result in:

- Improved, and enhanced medical, surgical and associated journeys through a whole scale review and redesign of processes, services, staffing and accommodation.
- Ensuring that patients are always cared for in the most appropriate locations by the most appropriate staff groups.
- Minimising non-value adding process steps through ensuring patients only access staff, services and process elements if they will benefit from them.
- Minimising duplication of effort and resources whilst ensuring longer-term sustainability through optimising and consolidating physical accommodation.
- Further reduced journey times through optimising physical adjacencies within the operating department /endoscopy / support areas and between these and related areas including in-patient beds and HDU.

3.2 Model of Care Delivery (Pathway & Patient Flows)

The anticipated flow through the operating theatre/endoscopy department is as shown in Appendix 1. This represents the optimal flows that the Board wish to achieve and should be reflected in any subsequent design of the scheduled areas.

Aside from the flow described through the operating department/endoscopy and associated recovery areas there will be two primary care pathways – relating to emergency (unscheduled) and elective (scheduled) activity.

3.2.1 Emergency (Unscheduled) Care

Patients presenting for emergency surgery will primarily do so via the Emergency Dept. where they will be assessed and the need and timing for emergency intervention determined.

Those deemed to require an immediate procedure will be transferred directly to the appropriate theatre and, post recovery, from there either back to a Ward or HDU.

Other patients requiring intervention may be admitted to a bed in the first instance for further tests and assessments that may be required, prior to surgery. They will then follow the same path as that described above.

Some patients may require elective intervention following additional surgical 'workup'. This group of patients may be admitted to an appropriate inpatient bed or be discharged home (depending on the diagnosis, co-morbidities, etc.) for re-admission at a later date. Alternatively, they may be referred for day surgery.

A number of patients may also follow the unscheduled route via in-patient wards and critical care.

On occasions it may be necessary to transport very sick patients into theatre who are in an extremely distressed state and require immediate life-saving surgery.

It is important that these patients do not have an adverse effect on others who may be waiting for surgery and it would clearly be preferred that they could access an operating theatre without being seen/heard by routine elective or other emergency patients through a direct route.

3.2.2 Elective (Scheduled) Care

Patients undergoing elective surgery will have been seen either as an outpatient or will have come onto the pathway through the emergency model as described above.

Patients will require detailed 'work-up' prior to surgery with the necessary tests, treatments and medication defined and ordered at presentation and/or upon pre-admission assessment based on an increasing range of protocol-driven referral pathways.

A key element in all referral pathways will be pre-admission assessment, which is seen as an essential component of the surgical journey in order to:

- Optimise admission on day of surgery
- Prevent patient cancellation
- Optimise session utilisation
- Reduce length of stay
- Improve patient preparation and overall outcomes

It is consequently planned that all elective patients will be supported through pre-assessment, building upon an existing established model.

NB. The primary accommodation associated with pre-admission assessment is scheduled within the out-patient area although the pre-admission model is likely to make use of a wide range of staff/resources in different areas dependent upon clinical need.

Following effective pre-admission assessment and scheduling for surgery/endoscopy/other treatment, patients will be admitted on day of surgery, unless there are clinical reasons not to do so, through the Day Unit.

Patients will arrive at the Day Unit reception in their outdoor clothing where they will be administratively "clerked in". They will then initially wait in a shared lounge area until they are seen by nursing and medical staff as appropriate in the consultation rooms provided where any essential additional pre-operative activity will be undertaken, e.g. Physical examination, marking of limbs, etc. Pre-operative consent will also be confirmed at this time. At an appropriate time in the process (dependent upon their clinical and social needs) they will be asked to change into theatre attire (where necessary).

Once changed into theatre attire, it is not appropriate for Male and Female patients to be in the same waiting area so they will have access to gender-specific waiting areas thereafter. They will then be escorted either directly to the anaesthetic room or onto a trolley/chair to await transfer to the anaesthetic room.

Patients accessing theatres from wards, i.e. in-patients not admitted via the AODOS area will normally arrive on either a bed or a trolley, being received into the theatre area in the in-patient trolley waiting area. This is also where patients who are admitted on day of surgery but require transfer to theatre on a trolley will be transferred onto a trolley, e.g. Those who have been administered a “pre-med”.

It is also within this area that a transfer from chair to theatre trolley or bed to theatre trolley will be conducted as necessary.

3.2.3 Patient / Process Flow Within Theatres/Endoscopy

Once the relevant information and details have been checked and confirmed by theatre staff, patients will leave the relevant pre-operative waiting area (trolley or seated waiting area) and flow through the department in broadly similar ways, regardless of their method of presentation and diagnosis.

Most accompanying relatives/carers will not go further into the theatre complex, although where this differs, e.g. Birthing partners, parents, nurse escorts, etc the relevant theatre policy will be followed regarding process and dress/attire.

The patient will be escorted to an anaesthetic room (walking or on a trolley as required) where they will be received by their allocated anaesthetist. Consent and comprehension will be ascertained, final pre-operative checks will be undertaken and they will be attached to the relevant monitoring equipment which will include ECG, BP and SpO2 as a minimum.

In addition, either before or after anaesthesia is induced the patient may be attached to additional monitoring whilst still within the anaesthetic room that may include invasive procedures, e.g. The insertion of CVP lines, arterial pressure monitoring, Swann-Ganz catheter, etc.

These procedures will require the preparation of instrument trays and associated equipment and should be thought of as surgical interventions in their own rite – requiring anaesthetists and other staff supporting them access to hand washing/gowning facilities as appropriate. These facilities may be shared with the OR but should also allow anaesthetic staff a clear view of the patient and monitoring equipment at all times as well as immediate rapid access to the patient as required. (Less than 10 seconds)

Once anaesthesia is induced and any additional preparatory interventions are completed, the patient will be moved through connecting doors into the operating room.

NB In some circumstances – particularly serious emergencies or where the patient has been transferred directly from Critical Care – they may move directly into theatre, by-passing the anaesthetic room completely.

The surgical procedure will be carried out by a surgeon, supported by a team of staff, including nursing and other healthcare professionals. It will also frequently provide opportunities for teaching (medical and other staff).

Once the surgical procedure is complete, the patient will be transferred to the recovery area.

All patients requiring stage 1 recovery will receive this in the 4 bed stage 1 recovery area. In addition, short stay patients will receive stage 2 recovery within the additional bed/trolley/chair spaces in the day unit.

Transfer to all wards and departments will be by portering staff, accompanied by a nurse (and doctor as necessary).

Transfer to HDU may involve a team of staff including anaesthetic, portering and nursing staff. In this case the patient will be transferred on a level 3 bed, not a trolley and the design must allow for this. Specifically, as noted elsewhere, the minimum size to be accommodated is the equivalent of a fully laden bariatric bed with up to 5 attendant staff.

It is to be noted that:

- Patients may flow from the in-patient unit/HDU to the operating room and back on one or more occasions during their episode of care – indicating a key design challenge.
- An increasing number of patients may be given a local or regional anaesthetic block rather than/along with general anaesthesia. (Where this is the case, anaesthetic staff will again require access to hand-washing/gowning facilities as identified above)

Key principles of the intra-operative journey include that:

- no one will enter the operating dept unless they need to
- no one will spend any longer in the operating dept than they need to
- no one will access an area unless they require to, e.g. patients not requiring stage 1 recovery will move immediately to stage 2 recovery or the discharge lounge
- no one will travel any further into the operating department than they have to, e.g. the multi-purpose/endoscopy room should be located closest to pre-operative areas

Endoscopy patients will follow broadly the same pathway, although they will not normally undergo general anaesthesia and not therefore require access to stage 1 recovery.

Recognising the wide range of procedures being conducted within the theatre/multi purpose/endoscopy area, a key design will be structuring all facilities such that they can manage widely differing turnovers.

3.2.4 Specific Patient Group Journey Issues

Whilst there is a distinct advantage in consolidating theatre staffing, capacity and accommodation into a single operating department – and this is seen as an essential component of the overall strategic re-design of operating theatre services - the differing needs of the wide range of patient groups who must journey through a single operating department requires careful consideration and planning to ensure that they are not disadvantaged by such a model.

Examples of these patient groups include, but are not restricted to:

- Children

- Pregnant women and their birthing partners
- Children

It is not possible within NHSO to deliver exclusive paediatric operating sessions or even lists, primarily due to the numbers of cases involved. Consequently it will be essential to manage children passing through the operating department at the same time as adult patients whilst adhering to all good practice guidelines relating to the care of children in hospitals.

In order to minimise time within the operating department and ensure that children can remain separate – with appropriate adults where necessary – all children are normally admitted first thing in the morning. This allows them to make use of available spaces before adult patients are present in number and supports optimal separation. It also allows them to be recovered in a stage 1 recovery area without adults prior to transfer back to a single room in the IP unit or discharge as soon as possible.

This process requires separate waiting areas (although these need not be exclusively for children); ready access to theatres from waiting areas; divisions within stage 1 recovery areas that allow different patient group separation (including single rooms); minimal travel distances to/from the IP unit; and careful consideration to “child-friendly” design in all areas that may be used by children.

- Pregnant women and their birthing partners

Despite an obstetric model that actively promotes normality and the natural process of childbirth, it is occasionally necessary for pregnant and recently pregnant women to undergo both elective and emergency surgical procedures. In extreme circumstances these require rapid transfer to an operating theatre for life-saving surgical interventions.

It is consequently essential to ensure that the theatre journey – particularly into a shared operating department - does not impact negatively on the overall experience of child birth or treat pregnant women as “patients”. Specifically, obstetric journeys should be managed such pregnant women and their birthing partners spend the minimum amount of time both in transit and within the common theatre area, not mixing with surgical and/or endoscopy patients as far as possible.

This process requires ready access to the designated theatre from the relevant wards/clinical areas and divisions within stage 1 recovery areas that allow different patient group separation. (Specifically the single recovery room)

4.0 FUNCTIONAL CONTENT

4.1 The Proposed Facilities/Accommodation Overview (What is included?)

The proposed facilities and accommodation required to deliver the planned services are as described in the relevant section of the schedule of accommodation.

4.2 Clinical Facility Requirements (How will it work)

4.2.1 Configuration

The unit as scheduled will be located on a single floor that should also be the same level as the in-patient unit and all associated beds.

In outline it will consist of 4 distinct “zones” as identified in Appendix 1 which is also indicative of the proposed flows and configuration required. These zones will contain a range of rooms/areas as specified within the schedule of accommodation.

There should be well defined routes within the department and to other areas for staff, patients and FM services. It should also be capable of maintaining appropriate flow separations including:

- Clean and dirty eqpt separation (Including sterile supplies)
- Pre/post-operative patient separation
- Patient sub-group separation (as discussed previously)
- Clinical/FM transport route separation

The unit should also:

- Have strictly controlled access at all times (e.g. card entry system and CCTV/video entry that is consistent with the whole hospital security strategy)
- Comply with the NHSO operating dept protocol which identifies; dress code; patient journey issues; control areas; etc)
- Be configured such that unnecessary movement of staff to/from and within the department is avoided. (Thus changing, rest, beverage, essential office and post anaesthetic recovery accommodation must be integral to the department)
- Be configured such that it is possible to call staff to any theatre from anywhere within the operating suite in less than 2 minutes.
- Be configured such that it is possible to alert staff within the adjacent operating theatre/multi-disciplinary room to any event that may require their assistance utilising an emergency call system/buzzer or alternative.
- Have access to natural light wherever possible – in particular, all bedrooms or areas where patients will be present for more than 2 hours, e.g. Stage 2 recovery will require windows/natural light as will staff rest areas or any areas deemed a permanent place of work.

Functionally, the department should provide a single block of 2 x operating theatres and 1 x multi-purpose/endoscopy room. It is important that all rooms are serviced by a single reception and separate post-anaesthetic recovery area with beds and appropriate supporting utilities.

If appropriate pre and post-operative patient separation can be maintained it may be possible to combine these areas to a certain extent in order to provide improved

space utilisation, e.g. Make use of the discharge lounge/recovery space to support AODOS activity first thing in the morning and/or make use of the admission lounge/AODOS space to support recovery activity later in the day.

4.2.2 AODOS

A component of the central support core/patient reception area is the support of admission on day of surgery (AODOS) for patients who have attended pre-admission assessment clinics and who will undertake an anaesthetic/surgical and/or minor procedure/endoscopy before being transferred to a bed in a ward.

4.2.3 Operating Rooms

Each Operating Room and the multi-purpose/endoscopy room should have stand-alone ventilation and air management systems that conform to infection control and Scottish Govt. legislation. In addition they should be supported/serviced by a range of central support facilities including:

- Staff support facilities such as changing areas with shower/WCs, rest, food and beverage preparation and dining areas
- Clinical support facilities including storage for bulk and other supplies (including pharmacy)
- Endoscopy/Scope/other storage area
- Recovery areas

Each individual operating room will:

- Be served by an anaesthetic room
- Have an adjacent preparation room (Ideally the prep rooms associated with individual theatres will be immediately adjacent to each other and if possible have an adjoining door)
- Have a three place scrub-up and gowning room
- Lead into an exit bay that should also be equipped with a single person “stand-up” workstation (NB this may be a larger space shared between two OR’s but should still include the same floor area)
- Have a dedicated dirty utility area
- Have access to a shared supplies storage area

In addition:

- 1 theatre will be designated as “ultra-clean”, which will be used by specialties such as orthopaedics/trauma. This will be equipped with a laminar flow cabinet and all associated engineering/ventilation.

4.2.4 Multi-purpose/Endoscopy Room

This room may be used for endoscopy activity or to support other minor surgical procedures that do not require general anaesthesia but that benefit from either the facilities or opportunities associated with the combined theatre/Day unit/endoscopy model. This room will:

- Include a scrub sink within the room
- Have an operating light

- Be equipped with piped gases that enable the use of an anaesthetic machine if required (Oxygen, Nitrous Oxide, Vacuum, gas scavenging and medical air)
- Have access to a shared dirty utility room, prep area, scope storage area and store

4.2.5 Endoscopy/Scope Cleaning/Support

The cleaning and disinfection of all scopes will be undertaken within the separate CDU facility however a local “wash through” of all equipment will be required prior to transfer for formal cleaning and space is required for the storage of clean scopes in a hepa-filter cabinet.

The wash through of scopes prior to transfer to CDU will take place in dirty utility rooms whilst hepa-filter cabinet will be located in the scope storage area. This should be readily accessible to all theatres as well as the multi-purpose room.

4.2.6 Internal relationships/adjacencies

For this compact day unit/theatre facility to realise its full potential, both operating rooms and the multi-purpose room must be configured around the central core reception/recovery areas with internal journey times kept to a minimum.

Patients flow into, through and out of the department will follow the process identified in Appendix 1 and described in more detail elsewhere in this document.

4.3 Functional Relationships

Functional relationships are as described in the whole hospital adjacency matrix.

4.4 Access Requirements

Patient access to the Operating Department should ideally be through a single secure entrance (after AODOS and in-patient streams have met) to support effective controls, although this may require re-consideration in light of the specific patient sub-group considerations identified previously.

The accommodation must conform to the requirements of the Disability Discrimination Act 2005 (as pertaining to staff and visitors). Entrances and exits to and from the complex must be strictly controlled to prevent all unauthorised access.

The facility to move patients rapidly from the Emergency Dept. to and from the IP unit and HDU is essential. Routes and lifts (numbers and size) must allow for this when horizontal transfer is not possible and similarly, rapid access routes for staff to and from these areas must be identified.

The bulk transfer of sterile instrument packs and supplies from the external loading bay and CDU must also be facilitated.

It is essential that routes to and from the admin/anaesthetic facilities and critical care areas are kept to a minimum in order that staff can return rapidly to the theatre complex in case of emergency. This also applies to the rest and dining facilities within the operating department.

4.5 Opening Times (When will it work)

Theatres and endoscopy/procedures rooms engaged in routine elective surgical work will operate between approximately 8am and 6pm Mon-Fri, although pre and post operative areas are likely to open earlier and close later. Elective facilities will normally “lock down” around 10.00pm, although the designated emergency theatre will be available 24/7 based on an “on-call” staffing model.

4.6 Specific Design Considerations

A number of specific design considerations/challenges have been identified associated with the Day Unit, Theatres & Multi purpose/Endoscopy Area. These include:

- Delivering a design for a small unit that is sufficiently flexible to maintain appropriate patient/clinical flows without increasing scheduled space beyond that demanded by capacity requirements
- Minimising the number of staff areas/observation points in recognition of the low number of theatres/staff employed
- Allowing spaces to “flex” between a pre and post-operative function in order to make the best use of all space available without compromising flows
- Allowing stage 1 and stage 2 recovery areas to “merge” as required in order to support additional flexibility
- Supporting admission on day of surgery – and in particular the peaks in demand associated with patient preparation
- Delivering additionality through recognising further opportunities to make use of the available space positively, e.g. The ability to deliver “see and treat” lists
- Locating the unit appropriately, recognising its essential adjacencies to HDU, the in-patient unit, maternity and CDU

4.7 Design Guidance

In general, design guidance is given in an overarching section of the Output Specification relating to the whole development. However, the guidance below is specific to the Operating Department:

The technological nature of the operating department has the potential to cause distress to patients and their relatives. It is important, therefore, that when designing these facilities the patient experience is taken into account together with that of their relatives and carers. The emphasis should be on providing a pleasant but safe environment for patients paying particular attention to areas such as reception, anaesthetic rooms and recovery where the patient is conscious. However, as a number of patients may remain conscious throughout their journey, it is vital that all areas are designed with this in mind. It is also essential to consider the needs of staff and the impact that the working environment has on job satisfaction, recruitment and retention.

The design must be flexible enough to cater for all cultures and ethnicity. It should create an environment that will allow patients and their carers to feel at ease whilst contributing to efficient staff working and morale. Manual handling regulations and the requirements of the Disability Discrimination Act must be factored into the design.

Protecting the patient's privacy and dignity at all stages of the process is of paramount importance. In addition infection control, decontamination, laser and radiological protection guidance must be taken into consideration when designing finishes and surfaces within the department.

Key technical guidance is as identified in the relevant whole hospital documentation.

4.8 Environmental and Services Requirements

There must be separate lifts and routes for visitors and relatives; these lifts should also be accessible to staff. There must also be separate well-defined routes for pre and post procedure patients with no crossover.

Direct access from CDU and the main loading bay should be possible to facilitate the transfer of bulk sterile supplies in and used instruments and waste out. Specifically, the transfer distance for used instruments from the relevant dirty utility – holding area – CDU should be kept to an absolute minimum.

Natural light in patient areas and staff office and training accommodation is essential. In the operating rooms, availability of natural light is not essential, however if provided, there must be blackout capability.

Each light in the recovery area should be dimmable from the patient's bedside. Additionally adequate arrangements should be made for the illumination of anaesthetic machines and monitors.

The operating and anaesthetic rooms must conform to radiological and laser protection specifications where designated. All areas in which anaesthetic gases are inhaled or exhaled must be provided with active gas scavenging systems. Air management systems must conform to relevant HBN, HTM and Infection Control guidance and standards.

All floor, wall and ceiling surfaces must be washable and seamless and able to withstand frequent deep cleaning processes and chlorine based decontamination.

Storage should be off floor on metal racking (or similar) mobile units with innovative storage solutions, including moveable racks, employed to optimise all scheduled storage spaces.

4.9.1 Schedule of Accommodation

The current SofA is attached and should be considered the primary reference document regarding all areas to be provided. It may be possible to rationalise areas through the design process and every opportunity should be taken to realise such savings where they are clinically and operationally appropriate.

The additional information provided in this section is intended to provide a brief description of key areas only and in so doing aid design development. These areas are considered in the order that they appear in the SofA, which in turn reflects intended flow as far as possible.

4.10 Entrance, reception & external waiting areas

This area is best thought of as “the front end” of the Day Unit.

Reception area

This area will be the administrative centre for all patients arriving for admission on day of surgery at the Operating Department and as such must be able to support administrative “clerking in”. It should be accessible separate from the main “in-patient” entrance to theatres, supporting patients walking in with their outdoor clothes on. The clerking process is likely to become increasing patient-led with more requirement to access IT systems and less traditional administration desks.

The area may need to be separated into 2 different reception points in order to support both operational management and patient confidentiality on a sessional basis.

Waiting Room/Lounge (10 places)

This area should provide seating/waiting space for patients being admitted on day of surgery (walking in) and their relatives.

It should be located adjacent to the reception area and be configured informally to present a low-stress and relaxing environment.

It will also ideally be immediately adjacent (but screened from) the discharge lounge in order to support the flexible use of space described earlier – particularly relating to “flexing” space dependent upon the time of day.

4.11 Day Unit Facilities

Although immediately adjacent to the operating theatre area, the Day Unit can effectively be thought of as a ward, servicing the immediate admission and post-op recovery needs of day case and short stay patients.

Operationally, it is highly likely that it is the same staff group who will manage this area as supporting AODOS so this should be reflected in the design.

It must be capable of supporting the transition period from when patients arrive at the Operating department (either from other areas within the hospital or elsewhere, still dressed in their outdoor clothes) until they have been fully prepared for theatre as well as their immediate post-operative recovery and – where appropriate – discharge. Consequently it includes a mixture of waiting, consultation, bed/trolley/chair and support spaces.

Staff Base

Ideally the same staff group will look after the whole “transitional zone” (see Appendix 1) so this must be located centrally, ideally with an optimal view of all other areas.

Changing room

Although primarily intended for changing, these small spaces should include 2 x stacking chairs to also allow their dual use as separate/confidential discussion areas, e.g. to support consenting during very busy admission periods.

Consulting/Examination.

These rooms are intended to primarily provide a confidential location for pre-operative consultation and physical examination. As well as a desk and 3 chairs they will include a surgical examination trolley.

At different times they may be used by surgeons, anaesthetists and members of the nursing team to support all elements of the admission process and should be specified in the same manner as a conventional outpatient type consultation room. In addition, 1 of these rooms will require an en-suite toilet to support bowel preparation where required and should also have piped oxygen and suction.

When not in use to support AODOS assessment they may also be used as additional consulting space for appropriate services, e.g. They could provide an additional base for pre-assessment staff.

Locker Bay: Patient Clothing Bay

The AODOS model requires patients to change from their outdoor clothing into theatre attire before surgery is conducted and they are transferred to a ward for longer-term post-operative recovery. This model will mean that there is a requirement to securely store patient's personal belongings in the short-term prior to transfer to the stage 2 recovery area or their discharge from the day unit.

The preferred model is a "pass through" one that allows access to locked space from both the pre and post-operative stage of the patient journey.

Secondary Waiting Areas

Secondary waiting areas are provided simply to support gender specific waiting once patients are in theatre attire. Areas should be configured as normal waiting areas and should be supervisable from the staff base.

Trolley Waiting Area

A trolley waiting area is provided for patients who arrive in beds or those who need to be transferred to theatre on a trolley or bed, e.g. Following a pre-med.

This is also the area where someone arriving on a bed would be transferred direct to a theatre trolley if required.

Trolley Spaces (Stage 2 Day Case Trolleys)

These spaces are where stage 2 day patient recovery will take place but also where other patients may be admitted for specific non-surgical procedures requiring access to clinical supervision. At different times these spaces may locate trolleys or chairs dependent upon patient mix.

Their design should be flexible enough to support ease of observation but also maintenance of privacy – particularly relating to gender separation. Consequently, some of these "spaces" may ultimately be designated as rooms with solid partition walls. They should also be contiguous with stage 1 recovery spaces to provide optimum flexibility.

Each space should be equipped with O2, suction and electrical points.

This area is supported by a range of support accommodation that includes clean utility, dirty utility, WC's and a patient shower.

Although identified here, these spaces would normally only be accessed following a surgical procedure or endoscopy.

Discharge Lounge (10 places)

This area should provide seating/waiting space for both patients awaiting discharge from the day unit and their relatives as well as those already discharged from the IP unit who are awaiting transport.

It should be located adjacent to the admission lounge for reasons of flexibility (as noted earlier) and should also be configured informally to present a low-stress and relaxing environment.

Ideally both the admission and discharge lounge will be observable from the main reception area.

4.12 Operating Room Suite

Anaesthetic room (19m²) (1 per OR)

Complex clinical procedures are carried out in the anaesthetic room; each room should be configured identically and not be 'handed'. The room should contain worktop and storage units for accessories, sterile supplies, pumps that require electrical charging, infusion fluids, etc. It should also be piped for gases and feature an anaesthetic machine. A lockable cupboard is required for controlled drugs. A clinical HWB must be provided.

The patient must be accessible from all sides of the trolley when in the anaesthetic room.

Operating theatre: General

Patients will normally access the operating theatre through the anaesthetic room. It should be approximately square with the patient and surgical team centrally positioned. The operating table will be electrically operated and will have attachments requiring storage or to be in theatre ready for attachment. The actual method of transfer onto the theatre table will be a procurement decision based upon operating table and trolley configuration.

The circulating theatre team will record all instruments by type and number through a tracking system. In addition whiteboards will be used for counts and patient safety information and will be large enough to allow scrub staff to see written information whilst scrubbed during a procedure.

Theatre staff will also be required to enter patient information electronically into both theatre management system and the electronic patient record. It will also be necessary to view radiological images simultaneously as data is entered. As

additional supplementary consumables are required the circulating team, will obtain them. Consumable items that are required to be immediately at hand or anticipated to be, should be stored on/in mobile trolleys, which can be removed from the area for cleaning and restocking purposes and moved to suit the Theatre orientation.

Each theatre should have identical ceiling suspended units capable of being positioned around 360 degrees to allow staff to move equipment and position it as required for:

- Full patient monitoring.
- Correct placement of Anaesthetic and surgical systems providing gas outlets for N20, O2, Air 4 bar, Air 7 bar, electric sockets x 10, vacuum X 2, AGSS x2, data x 6, telephone.
- Infusion, add on monitoring, fluid administration, warming and other devices all connected to the patient.

The ceiling suspended systems should be identical, rather than differentiate between Surgeon and Anaesthetic units. This allows total flexibility and any table orientation. This will allow staff to move the pendants so they can be positioned at the head or the foot of the table depending on the theatre case, ensuring that after movement there is sufficient clear space between equipment and doors as well as routes of movement around the theatre.

An above table articulated operating light is also essential.

A minimum clear height of 3000mm between the finished floor level and ceiling is required to allow unrestricted adjustment of the operating luminaire and other ceiling mounted equipment. The structure should be capable of supporting ceiling mounted medical supply unit, if installed. This permits unrestricted access to the patient and allows staff of all heights to operate them easily.

Doors through which beds or trolleys will pass should allow for easy passage. All doors should be fitted with vision panels capable of being obscured and have laser proof blinds in designated laser theatres. All doors should close quietly.

Video recording / output may be required from the theatre.

Each theatre will be utilised for a variety of procedures. All specialities will require the use of electro surgery which again should be capable of being mounted on the ceiling suspended units in order to reduce trailing wires and cables. Other procedures, which will be undertaken, will necessitate the positioning of patients in Lloyd-Davies orientation using a legmatic system on the operating table to reduce risk through manual handling. There should be the ability to allow C arm access. The ability to extract laser/diathermy plume separate from either the AGSS or vacuum is necessary. Each theatre should be capable of being made "laser safe" and should meet Radiation guidelines to allow for the use of laser and x-rays if necessary.

In addition, babies will be delivered in theatre, meaning that an ambient temperature of 26 degrees or greater is required.

The neonatal resuscitaire will be moved to Theatre from Maternity for any delivery although neonates may also be resuscitated in the Maternity Unit in the fully equipped Neonatal resuscitation area.

Operating theatre: Ultra Clean (55m²)

One Theatre will require an ultraclean (laminar flow) system. The laminar flow canopy area should be large enough to cover the area within which the table and surgical trolleys will be positioned and should be clearly demarcated on the theatre floor.

Scrub-up & gowning room: 3 places

The scrub up and gowning space, sized for 3 persons, should lead straight in to theatre. A view of the theatre should be possible from this room. The height of the scrub sink should be 1000mm to rim from floor level, with non-touch taps, scrub solution and nail brush dispensers. Shelving is required for storage of gown packs. Ideally this room should also have a view to the anaesthetic room in order that it can be used by anaesthetic staff as required in preparation for invasive, pre-operative procedures.

The taps for the scrub sinks should be elbow operated, with the sink at the correct height to prevent splashing of clothing before dressing in sterile protective clothing prior to entering the operating room.

Once scrubbed, gloved and gowned staff will then require to access the theatre from the scrub room unimpeded.

Preparation room (Daily Use Store)

The preparation room will have sterile instrument trays, lotions, suturing material and supplementary packs on appropriate shelving and in storage cupboards, topped up for each day's operating lists. Sterile fluids will also be stored here as will a fluid warming cabinet. Instrument trolleys are laid-up therefore adequate space is required to open packs and maintain a sterile field. This room opens into the theatre and if it requires doors these should be wide enough for a trolley to pass through undisturbed. Additionally direct access is ideally required from this room to the corridor to allow re-stocking of shelves without travel through theatre.

In recognition of the anticipated use of the two planned theatres it would be advantageous if the 2 x prep rooms supplied were adjoining, with a connecting door or even combined – so long as this did not affect the independent functioning and redundancy of each individual theatre.

Exit/parking bay: theatre, 1 bed/trolley

The exit bay, apart from providing double door exit from the theatre should also be able to park a bed or trolley as this may be used as a holding area for the bed/trolley the patient arrived on or is to be transferred to post-operatively. (This may be a "special bed" from a critical care area and adequate space will be required for also

storing the equipment required to transfer the patient there safely, e.g. Mobile ventilator, transport monitor, pumps, infusions, etc)

NB exit/parking bays may be combined to support 2 adjacent OR's although the same space will be required per OR.

Store: equipment, local to theatre

Large items of equipment will be stored here. Some of the equipment may need charging and thus at least 6 power outlets should be supplied. Access to this area should be from the corridor between the operating rooms without the need to penetrate into the operating rooms.

Dirty utility room

Staff will dispose of all waste and contaminated equipment from the operating room into a dirty utility room dedicated to each theatre. The theatre team will undertake segregation of household, clinical, special and incinerated waste in this area as well as the cleaning of trolleys. After cleaning equipment and instrument trolleys and removing protective clothing staff will require washing facilities for their hands.

The room must have a will have a fluid disposal area as well as a bucket sink and storage for mops and buckets. Shelving to hold disposal bags and specimen containers is also required.

A door directly to the corridor with a suitably short route to the disposal hold is essential as no eqpt or rubbish will be held in this area.

Multi-purpose/Endoscopy/procedure room

This room will be used both as an endoscopy and procedure room, supporting activity such as pacemaker insertion, "lumps and bumps" surgery, etc. It should be thought of as small but "largely self-contained" operating room with shared access to support spaces such as prep room and dirty utility.

It will include a scrub sink within the room and be equipped with an operating light, gases and equipment such that general anaesthesia can be safely induced.

As it is not associated with an anaesthetic room or "air-lock" care should be taken that it is not possible to see what is being undertaken within this room if/when the door is opened during a procedure.

Recovery bay: 1 place

The recovery area will serve all operating rooms as well as endoscopy patients requiring stage 1 recovery.

The area will consist of recovery spaces and at least 1 recovery room (of the same area) that will be serviced by a single staff base.

Natural daylight is highly desirable within this area and artificial lights should be dimmable. Each space requires medical gases and vacuum, nurse call, power, monitoring, patient record data entry, exam lamp etc. These services can be rail

mounted to provide greater flexibility. Each space will have a clinical hand wash basin with sensor taps.

The single rooms will be glazed and used to source isolate patients requiring this level of care and or separation for specific clinical or other reasons. There will be an audio link to the staff base; it will otherwise be equipped as for a recovery space. An emergency call system and intercom should be supplied.

As noted elsewhere in this schedule it would be advantageous if the spaces and rooms within this area could flex between both a stage 1 and stage 2 (Day Unit) recovery function in order to meet changing daily demands whilst being capable of maintaining appropriate patient separation. It would also be advantageous if this area could be located immediately adjacent to trolley waiting areas to make better use of available staffing.

4.13 Support Facilities (Theatres)

Parking bay: mobile x-ray & ultrasound unit

For the storage of mobile imaging equipment. This bay should be equipped with electrical outlets that will support the charging of mobile eqpt when parked/overnight

Parking bay: resuscitation trolley

For the storage of resuscitation trolleys and other emergency eqpt as appropriate, e.g. Difficult intubation, lines insertion trolley.

Store: bulk/sterile supplies

This block storage allowance includes an area for consumables but must also have a separate segregated area for CDU eqpt, trays, etc. It should be accessible from out with theatres for deliveries and within to allow theatre usage.

It is noted that, in order to make optimum use of the space provided that mechanical storage solutions should be a feature of this space.

It is also the base for a store person and should include a fixed desk area with IT access.

Store: clinical equipment

Equipment including ultrasound and monitoring will be stored here, preferably off-floor to facilitate cleaning and dust control. Shelving should be supplied to enable smaller items to be stored; electrical power sockets must be provide around the walls to allow equipment to be charged. Access from recovery and to the equipment service room is required.

Note that all storage and supplies areas must be equipped with power sockets.

It is also noted that, in order to make optimum use of the space provided, mechanical storage solutions should be a feature of this space.

Store: Ready to use medical gas cylinders

Piped medical gases will be provided but ready-use cylinder storage will be required adjacent to theatres and recovery areas for transfer and emergency purposes.

Specifically Oxygen, air and CO2 cylinders will require to be stored in small quantities.

Hold: Disposal and CDU Returns

As all CDU and endoscope cleaning activity will take place in an adjacent department this area is provided in order to hold used/dirty trays/instruments prior to their transfer to CDU.

It should be located as close to the theatre dirty utility rooms as possible to minimize down time between cases and travel distances for dirty instruments. In addition it should be readily accessible from outside theatres in order to support the ready return of used instruments to CDU without further travel through the theatre environment.

4.17 Staff Support Facilities

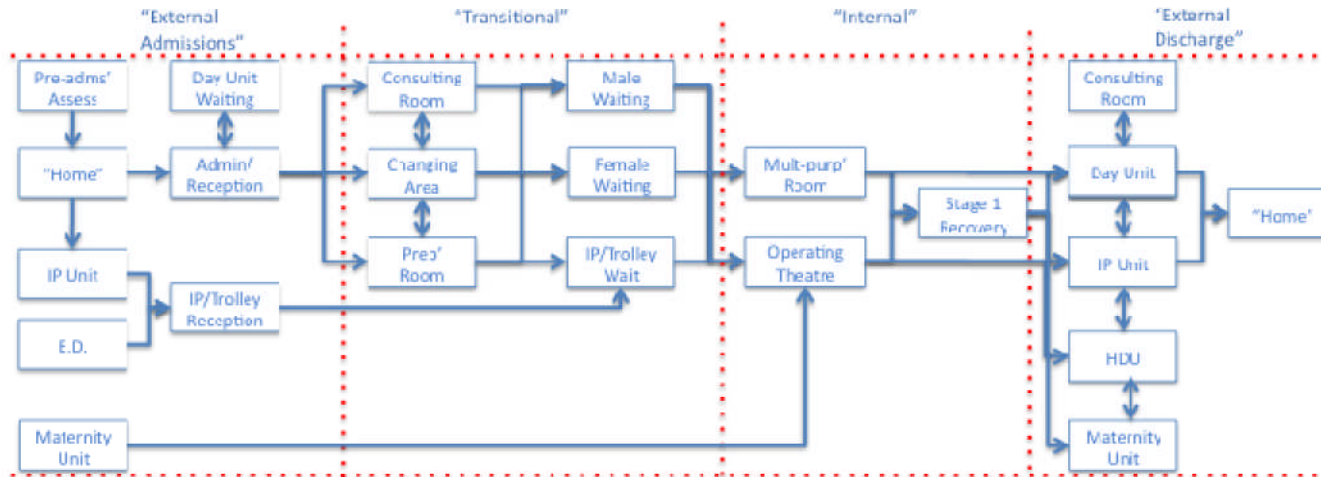
Rest & dining room with beverage & snack preparation bay: 10 staff

This room should have natural light, a window, a telephone and be comfortably furnished. It should be within easy reach of the operating rooms. Dining tables and chairs should be provided in addition to easy chairs and a coffee table.

Brief Ends

APPENDIX 1

NHS Orkney: Proposed Flow of a Combined Operating Theatre & Endoscopy Facility Overview



Peak Capacity Planning (Per Zone/Session)

Admissions			
	ft	Vs	Total
Home			
IP	4	4	8
ED	0	0	0
Total			8
Cap'			10

Prep		Trolley Wait	
	Total		Total
Endo	3	Male	2
Th	3	Female	2
Prep		IP/Trol	1
Total	6	Child'	0
Cap'	4	Total	5
		Cap'	7

Theatre/Tx		Stage 1a	
	Total		Total
Endo	1	Th	3
Tx	-	Endo	1
Th	4	Total	4
Total	5	Cap'	4
Cap'	6		

Day Unit	
	Total
D/C	5
Other	5
Total	10
Cap'	10

Planning Assumptions

- 1 visitor/pt on average
- Minimal staggering of admission times
- Peak = 50% of total session pts and visitors
- Need to management operational pt group separator on a daily basis, e.g. endoscopy
- Patients move to stage 2 or prep areas if lounge is full

- 1 x Prep' room requires en-suite toilet
- Children will be admitted primarily via DSU
- IP/Trolley wait and stage 1 recovery must be flexible enough to deal with different requirements, e.g. obstetrics
- Changing areas can also be used for 1:1 discussion, consenting, etc

- Pts will go directly to the most appropriate recovery area,
- Op flexibility is required to cope with male/female/ paed split in all stages of recovery

- No routine requirement to wait for clinical staff/prescriptions in discharge area
- Area will link with admissions lounge/main entrance
- Max of 5 (non theatre) pts need seats whilst waiting on transport

ANNEX 8.2

**COS – Emergency Care
(To Follow)**

ANNEX 9

Value for Money Checklist

SGHD Value for Money Assessment Guidance; Capital – Project Level Assessment for Orkney Hospital		Rev No	1
Value for Money Checklist		Date Revised	06/02/2014
Stage 2 - Project Level Assessment			
Requirement	Details Assessed	Undertaken / Comment / Action	Notes
Qualitative Assessment of NPD – project level	1. Review, confirm and complete applicable pro-forma relating to		
	<ul style="list-style-type: none"> Desirability of project 	√	
	<ul style="list-style-type: none"> Achievability of project (in particular market capacity and likely bid competition / market interest to be reviewed) 	√	
	2. Consider wider VfM factors and generic VfM factors	√	
	3. Review proposed Project Timetable	√	
	4. Confirm proposed risk allocation (as per standard form NPD/hub DBFM contract, where applicable)	√	
	5. Confirm benefit assessment and deliverability	√	
	6. Support evaluation and decision with evidence from previous projects.	√	
	Report findings should include the results of the assessment of the viability, desirability and achievability of revenue financed procurement. (This should include the pro-forma assessment tables and the results of the workshops which assessed these.)	√	
Review of Affordability—to determine if the project can continue	Confirm project is affordable / supportable to the procuring authority based upon forecast scope and delivery timescales. The affordability implications (including the affordability envelope under a range of sensitivities) should be signed off required. The affordability assumptions and implications should be detailed within the report.	√	Per Financial Case Section of OBC
Review of Balance Sheet Status	The accounting implications of the project should be assessed and recorded within the report.	√	Per Financial Case Section of OBC (Requires confirmation)
Issue	Questions	Response	
Viability			
Project level objectives and outputs	Is the Procuring Authority satisfied that a long term, operable contract could be constructed for the project?	Yes	Designs taken to new RIBA Stage 2 by technical advisers
	Confirm that the proposed contract describes / will describe service requirements in clear, objective,	Yes	Clinical and Non Clinical Output Specifications are drafted. Project will use standard NPD

	output-based terms over a long term period (in accordance with the standard NPD / hub DBFM contract and guidance, where applicable).		contract and all ITPD documentation will be best practice documentation
	Confirm that the contract will support assessments of whether the service has been delivered to an agreed standard (in accordance with the standard NPD / hub DBFM contract and guidance, where applicable).	Yes	Standard SLS in accordance with NPD Standard Form. Payment mechanism will be developed with ITPD. Provision for Independent Tester
	Confirm that the proposed project outcomes will meet the project objectives and address the need.	Yes	Required outcomes align with strategic intent of the Board
	Will there be significant levels of investment in the new capital assets and related services?	Yes	Capital Sum £58m including Inflation. £64.7m including Quantified Risk/Optimism Bias.
	Confirm that any interfaces with other projects or programmes are clear and manageable.	Yes	There is no current intent to have a capital enabling works package, but consideration may be given to moving forward with some site infrastructure should this be VfM.
	Confirm that the services to be provided as part of the project do not require the essential involvement of Procuring Authority personnel. To what extent does any involvement negate the risk transfer that is needed for VfM?	Yes	Hard Fm will be provided by Project Co
	Will the private sector have control / ownership of the intellectual property rights associated with the performance / design / development of the assets for the new service? Confirm that the standard form NPD / hub DBFM contract provisions relating to intellectual property rights will (where applicable) be adopted.	Yes	Standard NPD contract will be used
Operational flexibility	Is the Procuring Authority satisfied that operational flexibility is likely to be maintained over the lifetime of the contract at an acceptable cost?	Yes	ITPD and PA will require Bidders to provide unit costs for small and large change requests. The design as developed allows for flexibility in use around Primary Care and Outpatients, running all single rooms together, centralising waiting, standardising room sizes and no room designations to allow for multi use..
	Is there a practical balance between the degree of operational flexibility that is desired and long term contracting based on up-front capital investment in projects?	Yes	We have tried to achieve the optimal balance by thorough evaluation of CoS and NCoS.
	What is the likelihood of large contract variations being required during the life of a typical contract?	Medium	Contract will be for 25 -30 years and variations will be required to meet changing medical technologies as yet unidentified

Equity, efficiency and accountability	Does the scope of the project services allow the private sector to have control of all the relevant functional processes? Do the services have clear boundaries?	Yes	Utilities will be brought up to red-line boundary. All within the boundary will be for the private sector to manage
	Are there regulatory or legal restrictions that require project services to be provided directly	TBA	Estates are looking into the cross over and relationship of statutory requirements that may sit outwith the NPD contract - to give the ITPD clarity and inform potential around TUPE provision and resilience of retained Estates staff for the whole Island.
	Will the private sector be able to exploit economies of scale through the provision, operation or maintenance of other similar services to other customers?	Yes	Only experienced contractors will be used and PQQ will be used to address suitability
	Does the private sector have greater experience / expertise than the Procuring Authority in delivery of the project services? Are the services in the project non-core to the Procuring Authority?	Yes	
	Is the project likely to deliver improved value for money to the Procuring Authority as a whole?	Yes	The preferred option is Demonstrated in the Economic Section of the OBC as delivering the best cost/benefit point and is the best value for money option.
OVERALL VIABILITY	Is the relevant Accountable Officer satisfied that operable contracts with built in flexibility can be constructed across the project, and that strategic and regulatory issues can be overcome?	Yes	Can we be specific as to what is intended by strategic or regulatory issues? As far as I am aware there are no show stoppers with regard to our proposals
Desirability			
Risk management	Does the project involve the purchase of significant capital assets, where the risks of cost and time over-runs are likely to be significant?	Yes	Mitigated through risk management strategy. The majority of site risk have been mitigated by undertaking site analysis, ground investigations, DIA, FRA, TA, Ecology study and Archaeology.
	Is the private sector likely to be able to manage the generic risks associated with the project more effectively than the Procuring Authority?	Yes	Specific location factors will require careful consideration through to the development of the ITPD. However, we expect all normal risk transfer to apply
	Bearing in mind the relevant risks that need to be managed for the project, what is the ability of the private sector to price and manage these risks?	Yes	This will be tested through PQQ and selection process for Dialogue phase, ensuring companies with appropriate skills, experience and methodologies to accept and manage risks are core.

	Can envisaged standardised payment mechanisms and contract terms incentivise good risk management within the project (as per standard form NPD / hub DBFM contract, where applicable)?	Yes	As above, plus, Standard NPD contract will be applied. A draft payment mechanism shall be issued with the ITPD, establishing the GSU for each clinical and non clinical area. Through this process we will seek to ensure performance measures and management measures incentivise operational risk management.
Innovation	Does a preliminary assessment indicate that there is likely to be scope for innovation on a project basis?	Yes	The Board is considering mandating the following aspects of the reference design: CoSs, Non CoS, SoA, clinical adjacencies, interlocking bed model, 100% single bedrooms, two storey solution, McMillan Ward with ground floor access, McMillan Garden, other planning conditions to ensure protection of neighbouring properties. The bidders will have the opportunity to innovate
	Does some degree of flexibility remain in the nature of the technical solutions / services and / or the scope of the project?	Yes	The scope is fixed in terms of the SoA, bidders will seek efficiency and innovation to minimise circulation, improve travel distances etc. There will be some opportunity to derogate from SHTMs where these are agreed by the technical team and the Board.
	Can solutions be adequately free from the constraints imposed by the Procuring Authority, legal requirements and / or technical standards?	Yes	Aspects mandated will not be open for discussion, bidders will be encouraged to deliver the most effective and innovative solution.
	To what extent will the individual project's scope, specification and operation be pre-set or open to negotiation with the private sector?	Part	Some parts of the reference design to be mandated as discussed above
	Could the private sector improve the level of utilisation of the assets underpinning the project (e.g. through selling, licensing, commercially developing for third party usage etc)?	Yes	This is unlikely but will be explored through the competitive dialogue process
Service provision	In relation to the project, are there good strategic / service delivery reasons not to retain soft service provision in-house? What are the relative advantages and disadvantages of this approach?	No	Only Hard Fm will be provided by bidders. There are no current plans to extend this to soft FM. The catering, laundry, cleaning, portering services are retained in-house in line with many if not all other NPD projects.
Incentive and monitoring	<i>EITHER</i>		

	Confirm that the standard form NPD / hub DBFM contract provisions relating to monitoring and incentivising service delivery will be adopted.	Yes	Standard NPD contract will be used
	<i>OR (where standard form NPD / hub DBFM monitoring and incentivising service delivery are not applicable – e.g. acute health / transport projects)</i>		
	(a) Can the outcomes or outputs of the project be described in contractual terms which would be unambiguous and measurable?		
	(b) Can the project services be assessed against an agreed standard?		
	(c) Would incentives on service levels be enhanced through the standard contract and payment mechanism?		
Lifecycle costs/ residual value?	Is it possible to integrate the design, build and operation of the project?	Yes	
	Is a lengthy contract envisaged?	Yes	As per NPD contract -25 years+
	Will long-term contractual relationships be suitable (or advantageous) for the service?	Yes	
	Are there constraints on the status of the assets at contract end?	No	Assets will revert to NHS ownership
	Are there significant ongoing operating costs and maintenance requirements across the project? Are these likely to be sensitive to the type of construction?	Yes	Energy costs will be a pass through, with strict control through the PA relating to energy targets, volume etc. Retained Life Cycle aspects will be as per the Scope of the NPD PA.
OVERALL DESIRABILITY	Overall, is the relevant Accountable Officer satisfied that the project and its procurement approach would bring sufficient benefits?	Yes	
Achievability			
Transaction costs and client capacity	Does the Procuring Authority have an appropriate governance and management structure in place for progressing the procurement of the project?	Yes	Project is supported by a dedicated Project Team together with external resource provided by experienced advisors as advised in the Management Case of the OBC
	Is there sufficient Procuring Authority capability and capacity to manage the procurement process and appraise the ongoing performance against agreed outputs?	Yes	Team in place for FBC, NPD Dialogue and Financial Close. Post FC managements structure is advised and individuals named for the currency of the opertaional phase to be named in FBC.
	Can an appropriately skilled and experienced procurement team, with appropriate external advisory support, be assembled in good time?	Yes	Majority of the team are in place with Insurance and CDMC to be appointed.
	Will the project be feasible within the required timescale?	Yes	Project schedule has been discussed with SFT and is within expected timescales

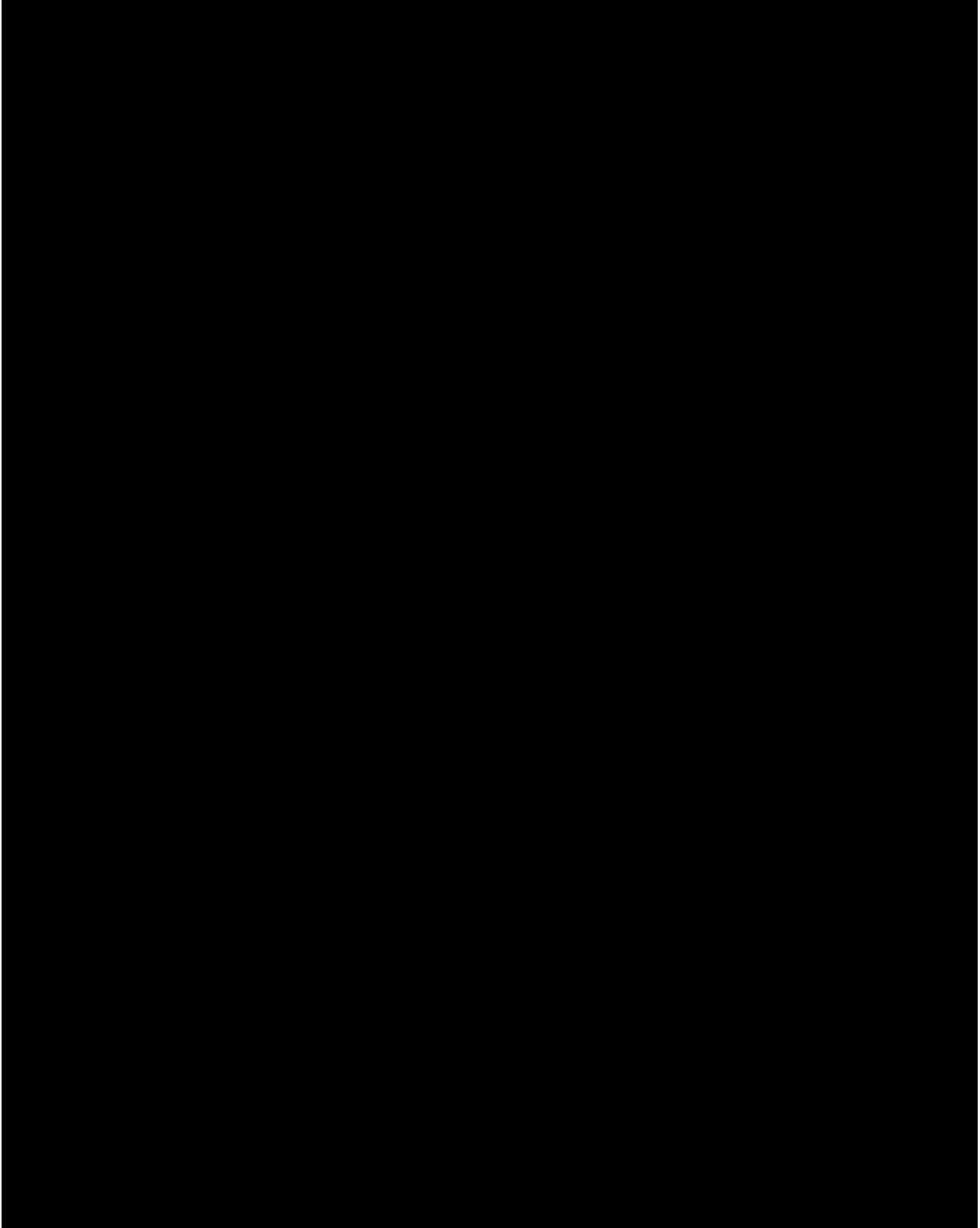
	Is there sufficient time for resolution of key Procuring Authority issues?	Yes	Time has been allowed in the programme to obtain Planning in Principle
	Does the size of the project justify the transaction costs	Yes	Circa £60m capital is suitably large to justify the cost.
Competition / Market Interest	Is there evidence that the private sector is capable of delivering the required outcomes for the project?	Yes	Only experienced PPP companies will be chosen
	Have any similar projects been tendered to market?	Yes	4 other health NPDs in progress, with numerous DBFMs closed and progressing.
	Is there likely to be sufficient market appetite for the project in the timetable currently anticipated?	Yes	Positive soft market testing suggested interest
	Has this been tested robustly? Is there any evidence of market failure for similar projects?	Yes	Kirkwall Grammar school was successfully procured on the Island.
	Has the Procuring Authority's commitment to a revenue financed solution for this type of project been demonstrated	Yes	
	Do the nature of the investment and / or the strategic importance of the work and / or the prospect for further business suggest that it will be seen by the market as a potentially profitable project?	Yes	Part of Infrastructure investment Programme.with real interest in the market place.
OVERALL ACHIEVABILITY	Overall is the relevant Accountable Officer satisfied that the project is achievable, that appropriate governance and management arrangements are in place, that the project team is sufficiently resourced and the project is attractive to the market?	Yes	

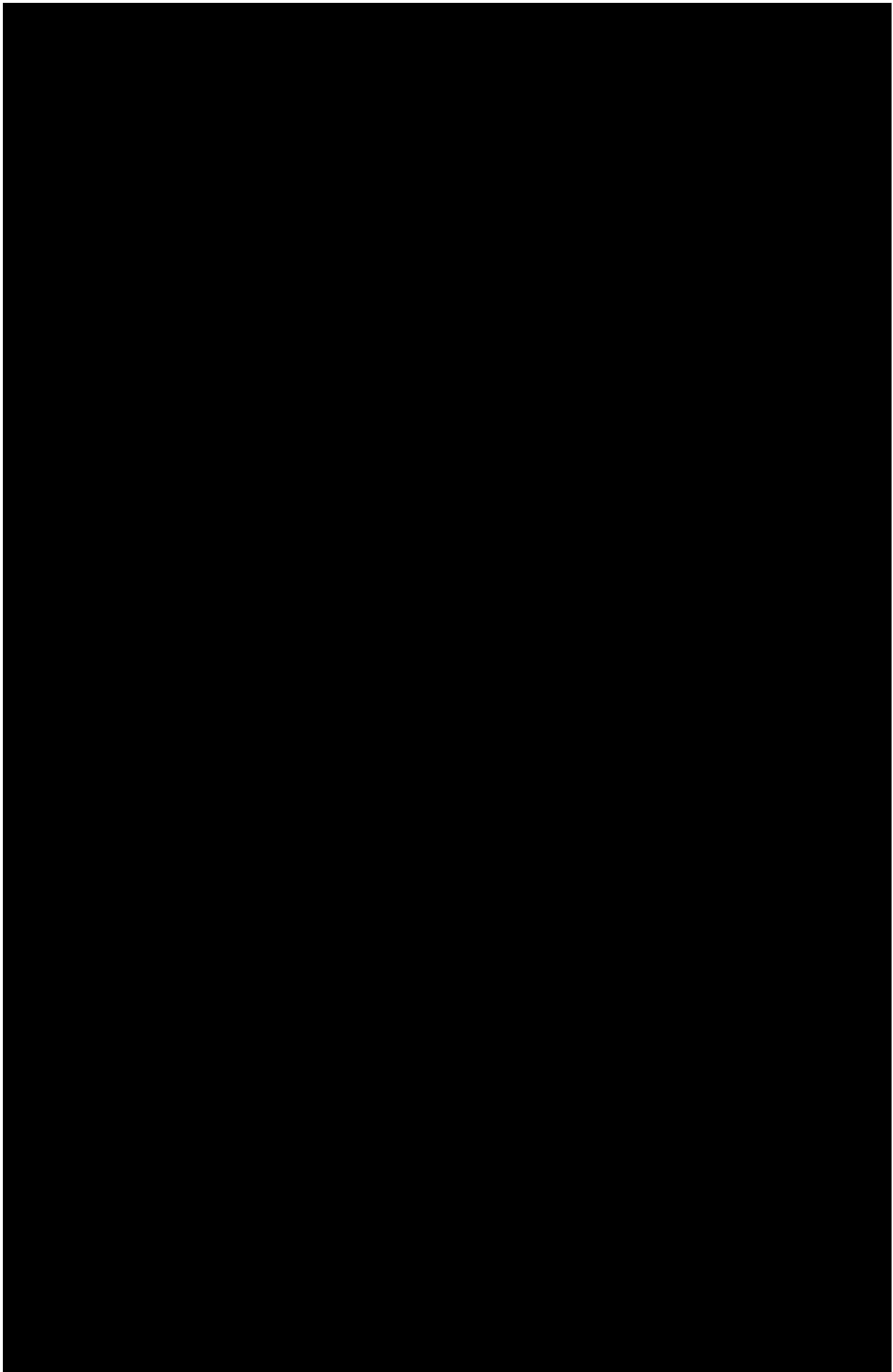
ANNEX 10

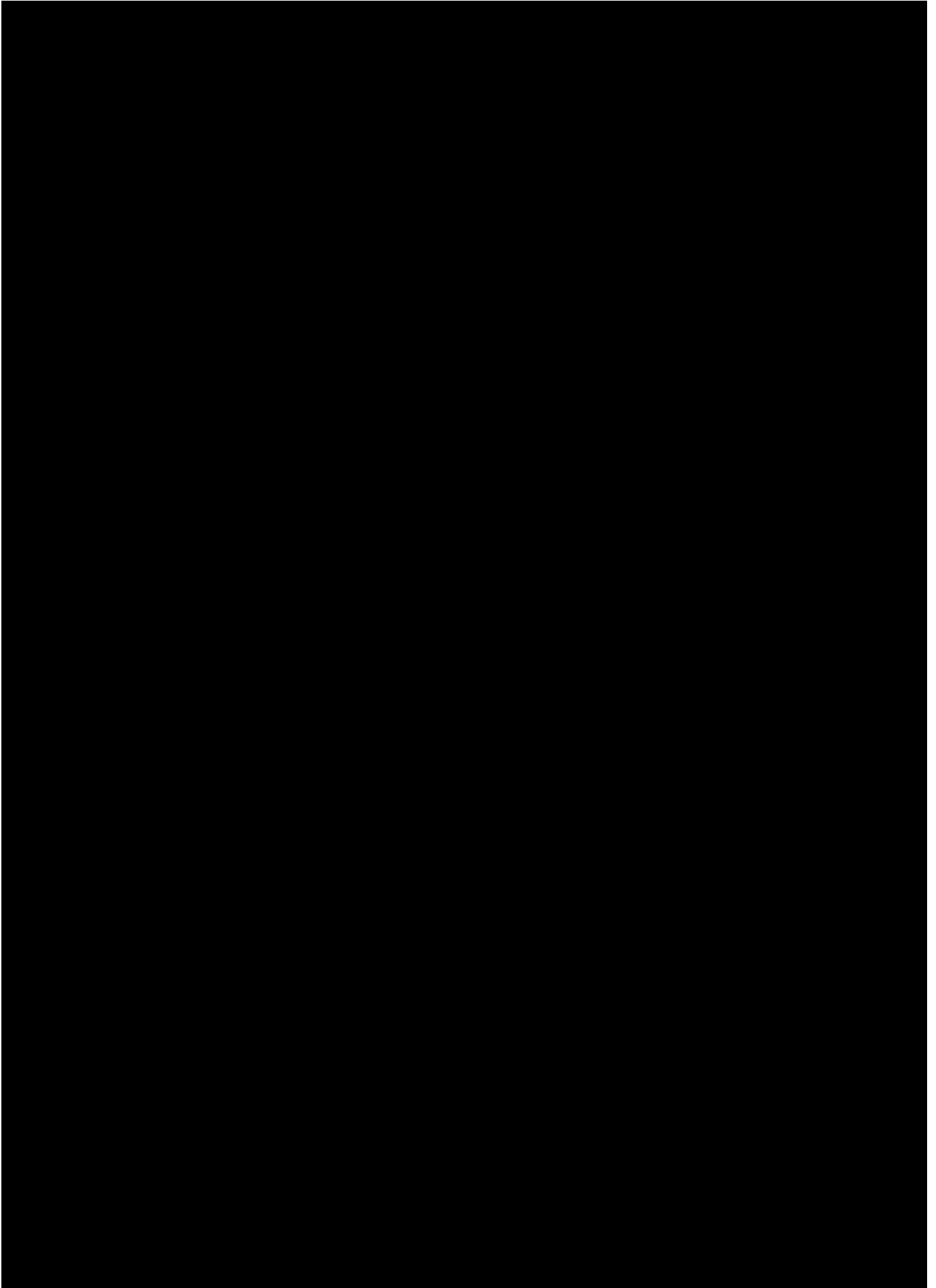
Draft Procurement Strategy

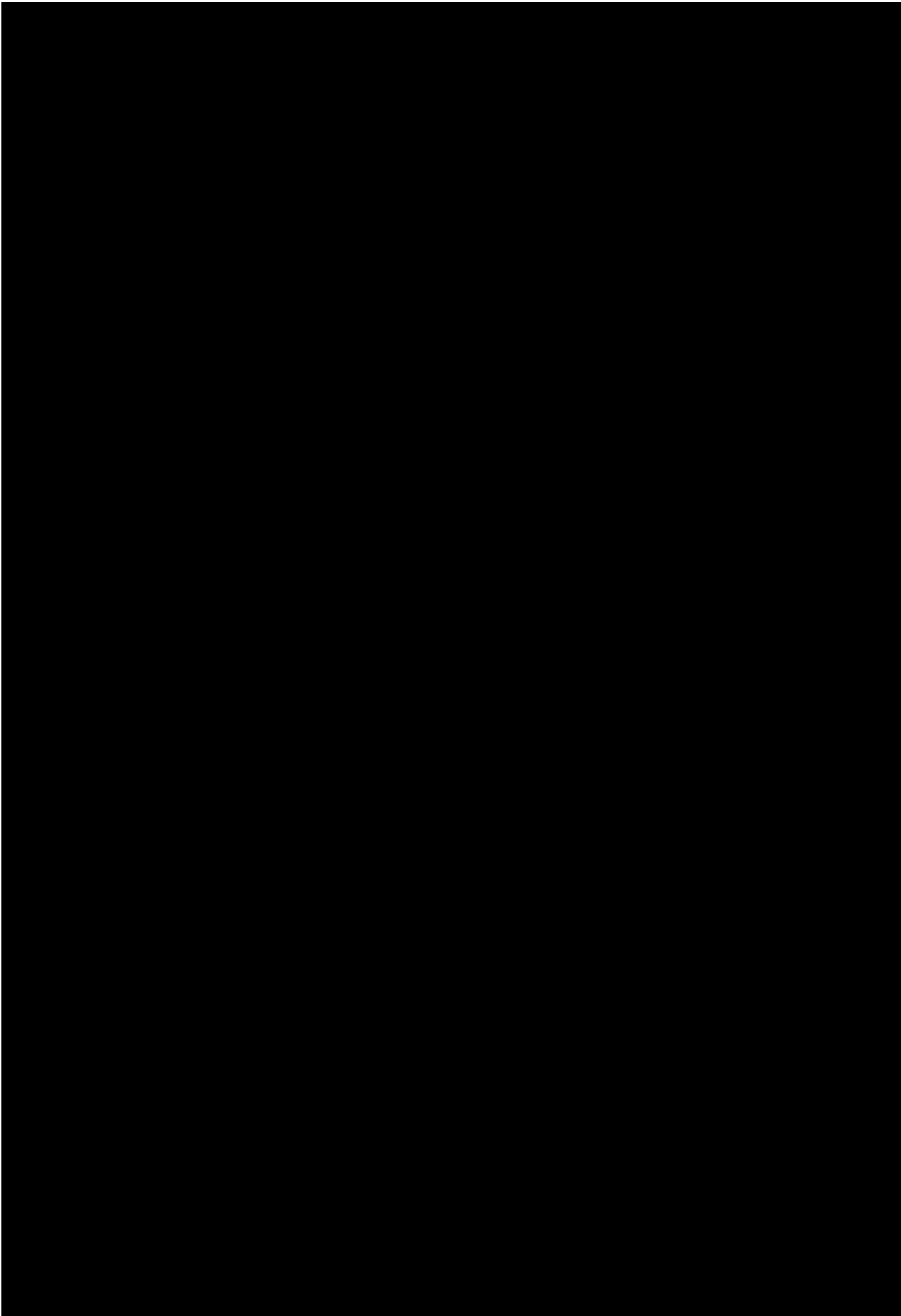
NHS Orkney – Draft Procurement Strategy

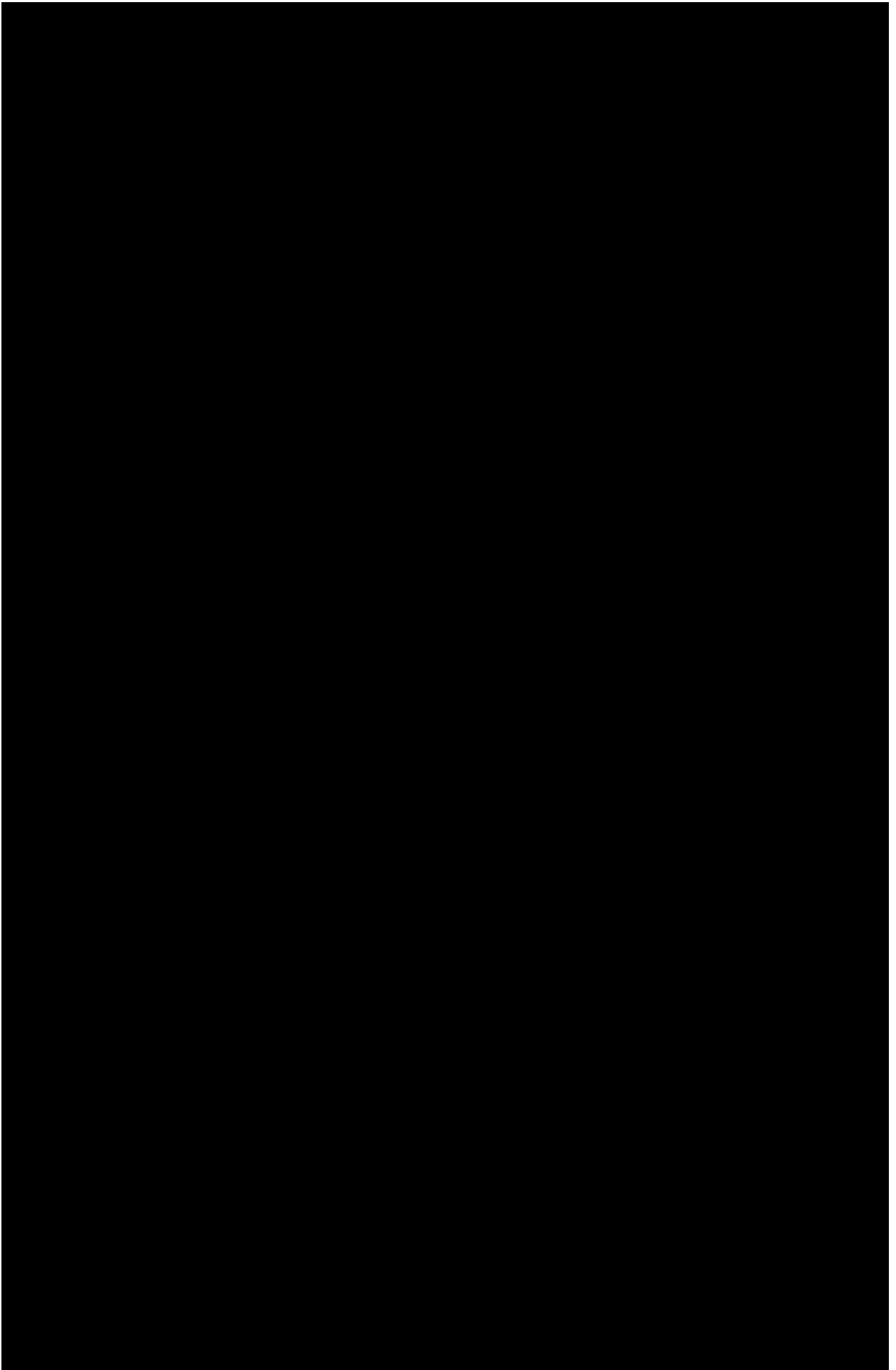
NPD New Hospital and Healthcare Facility Project

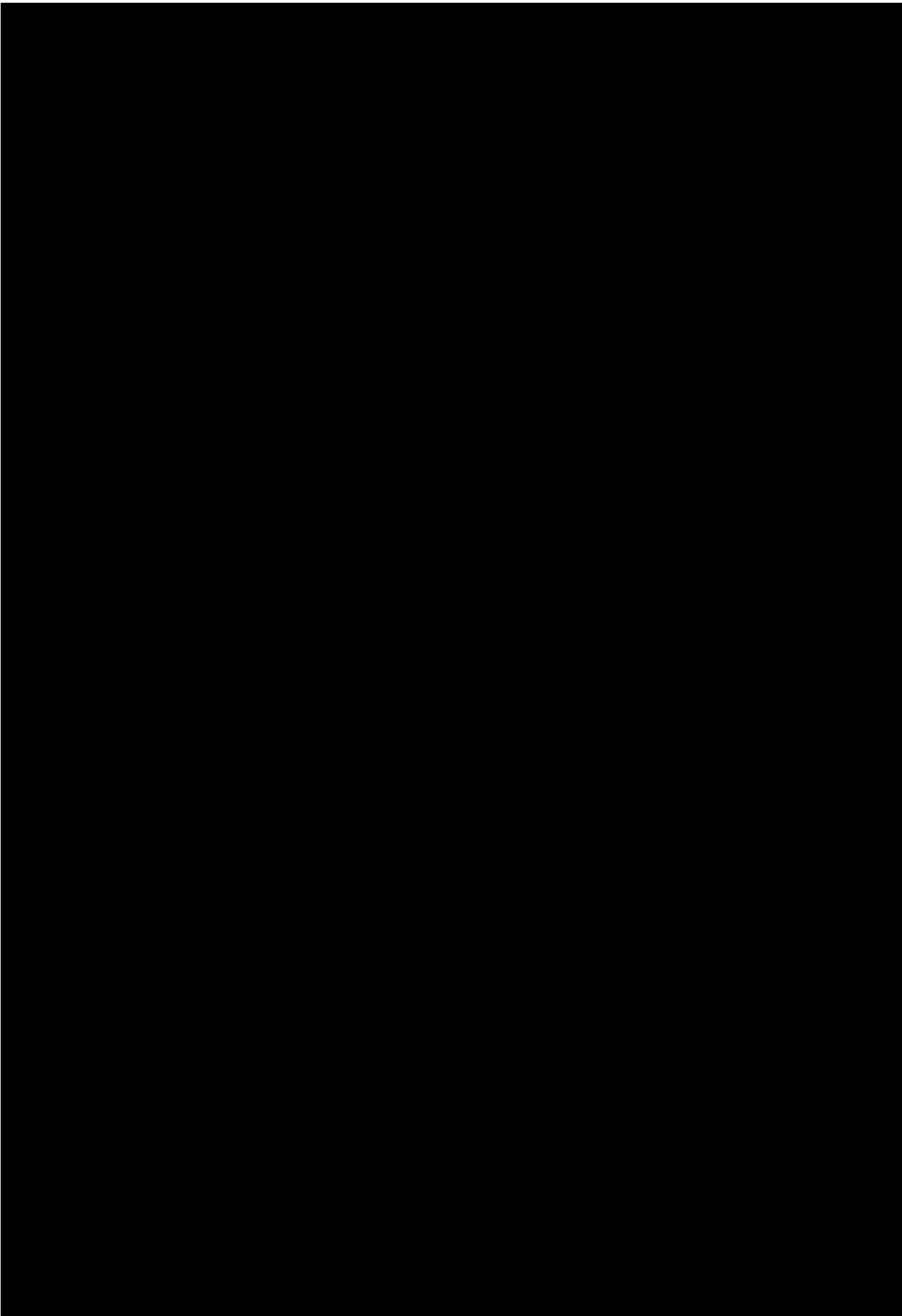


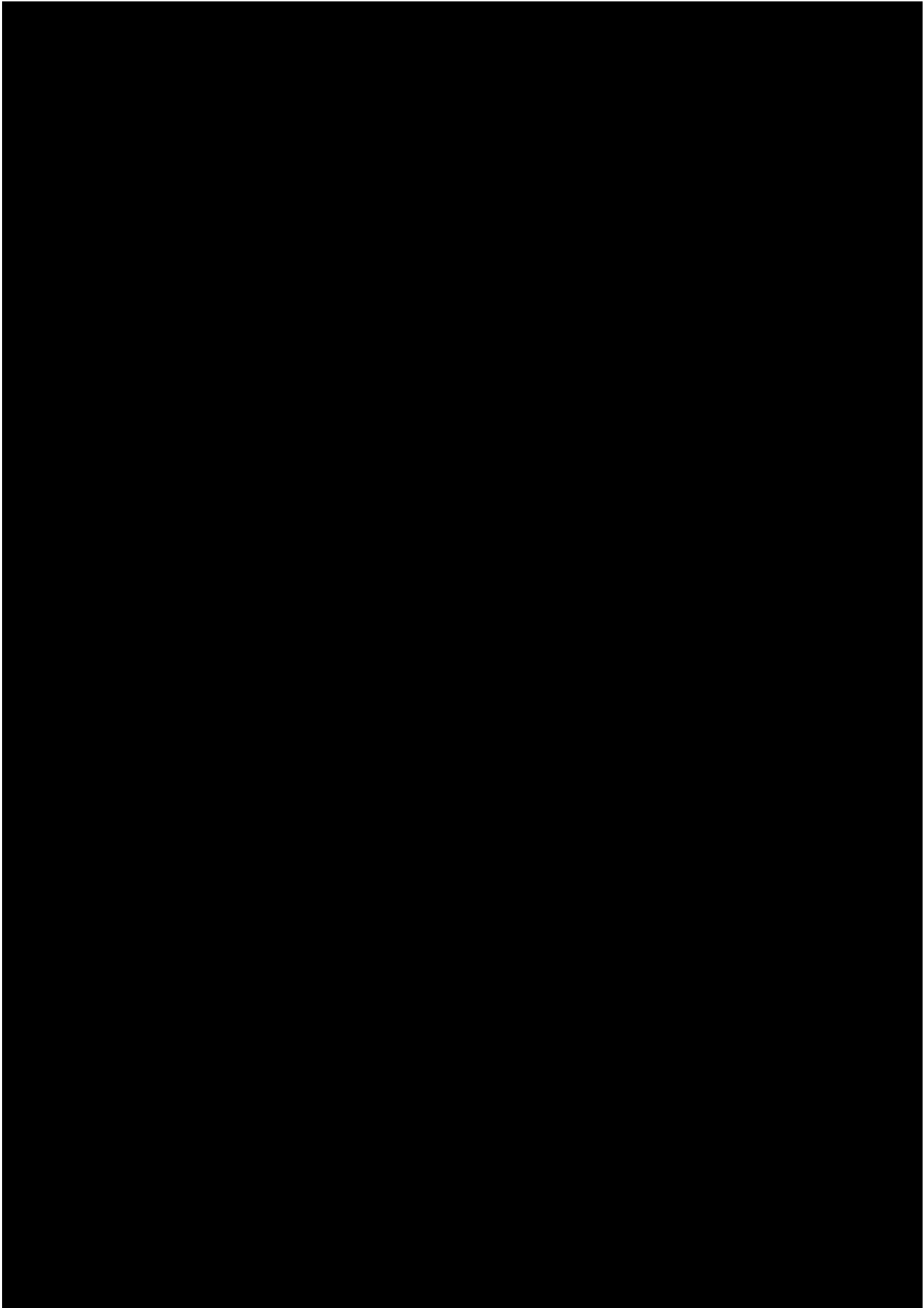


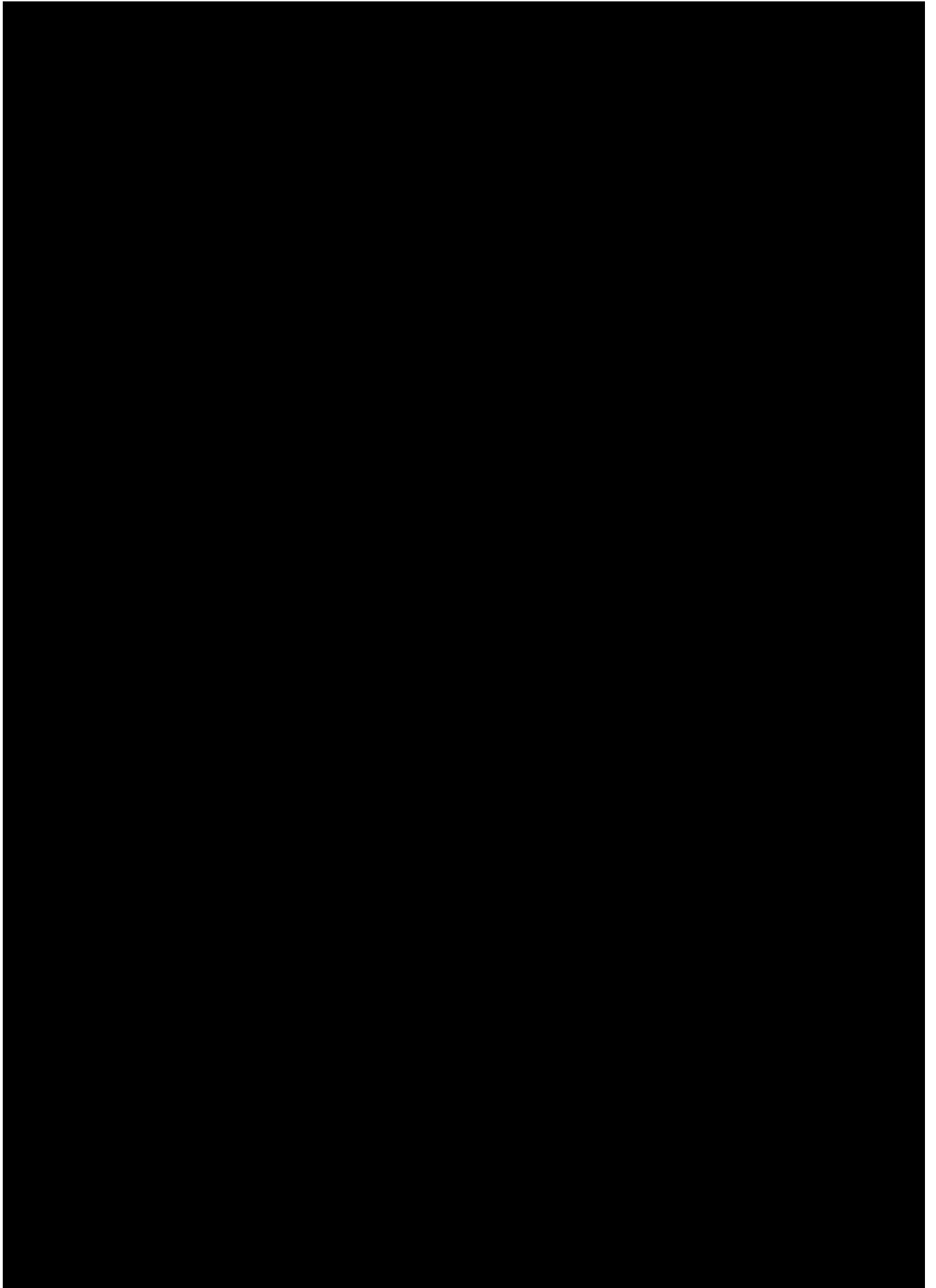


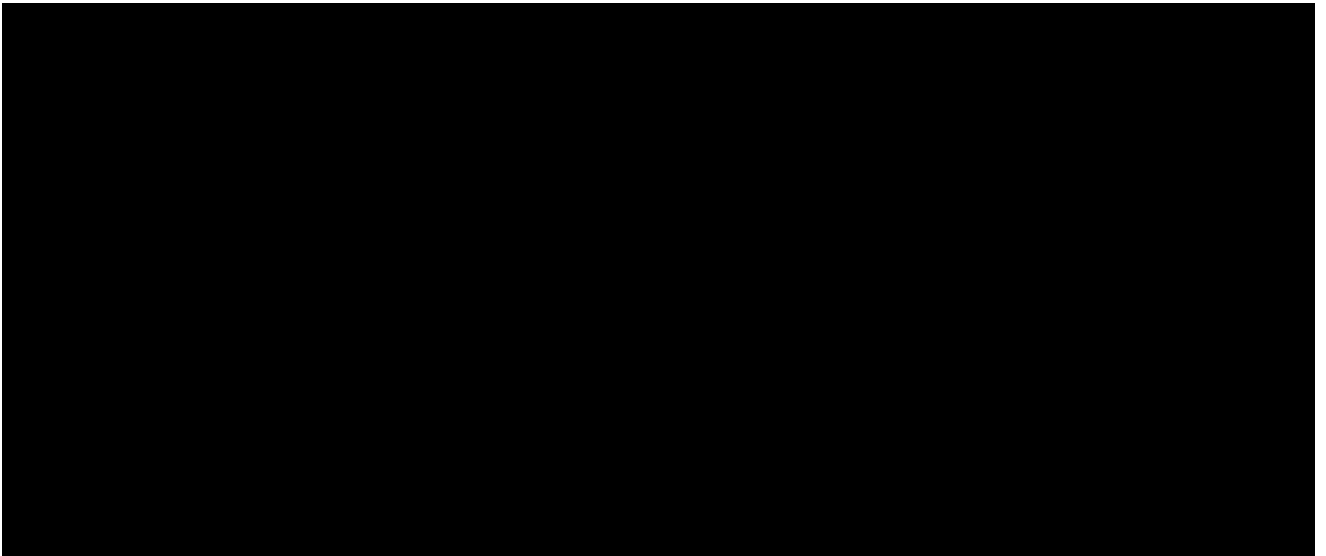


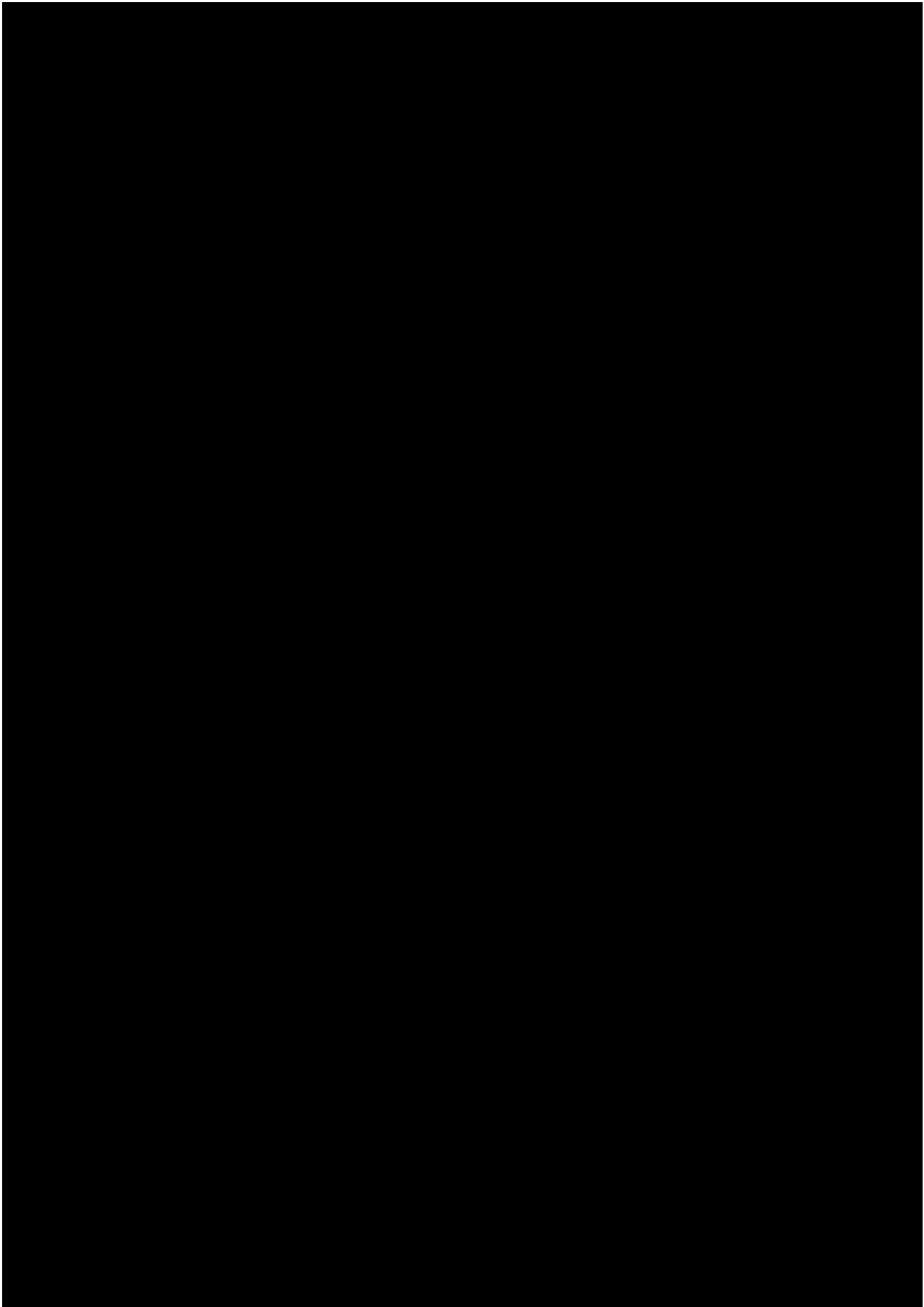


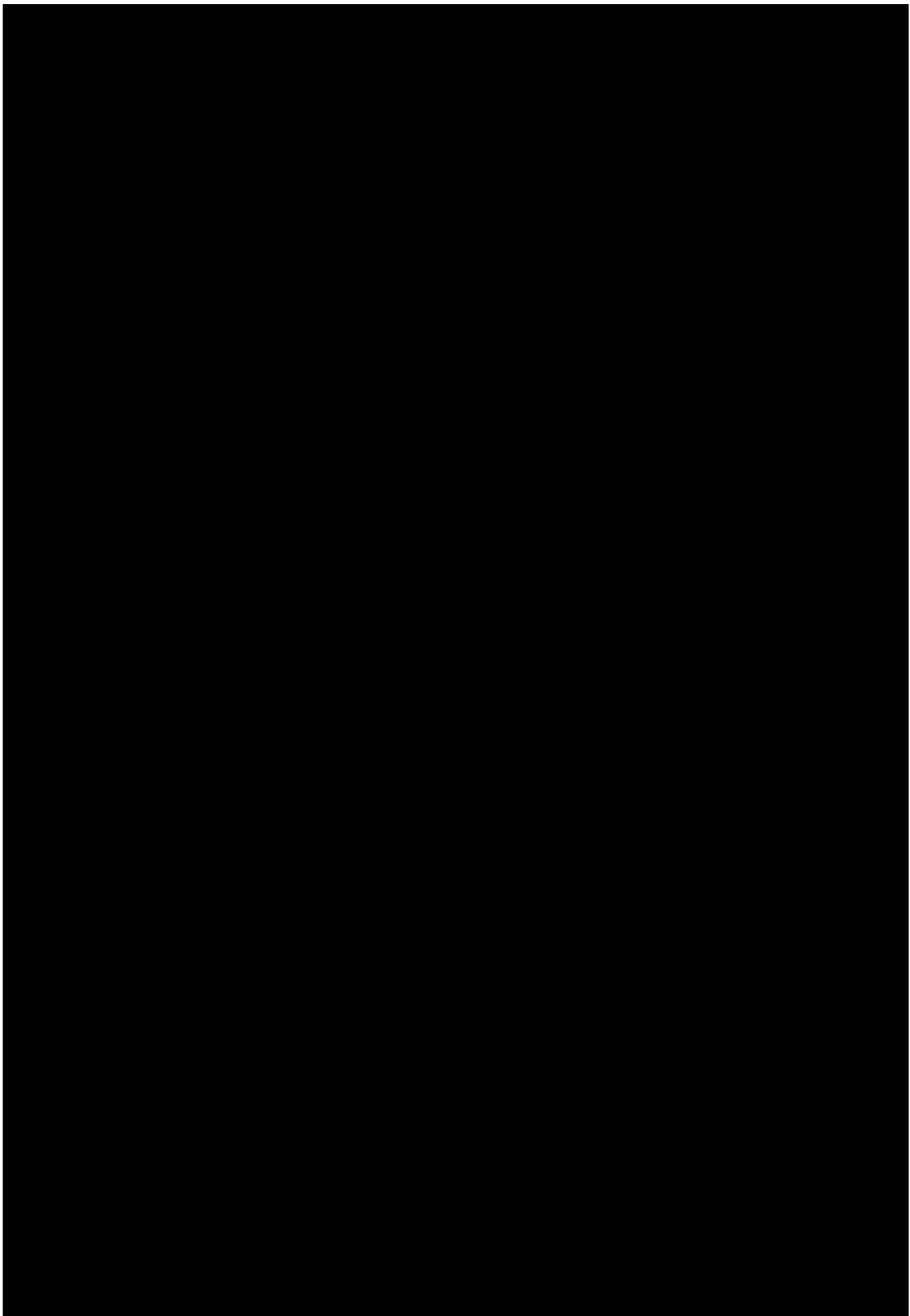


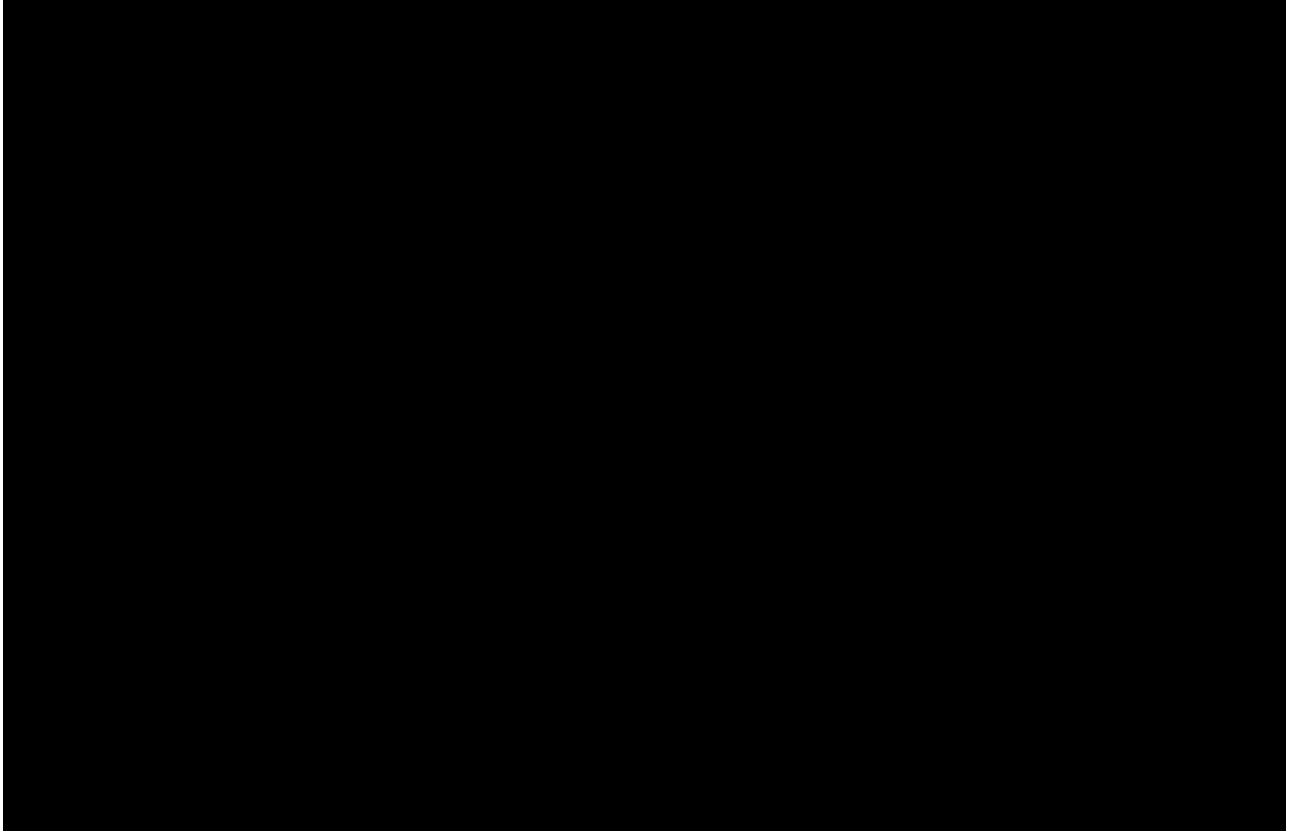


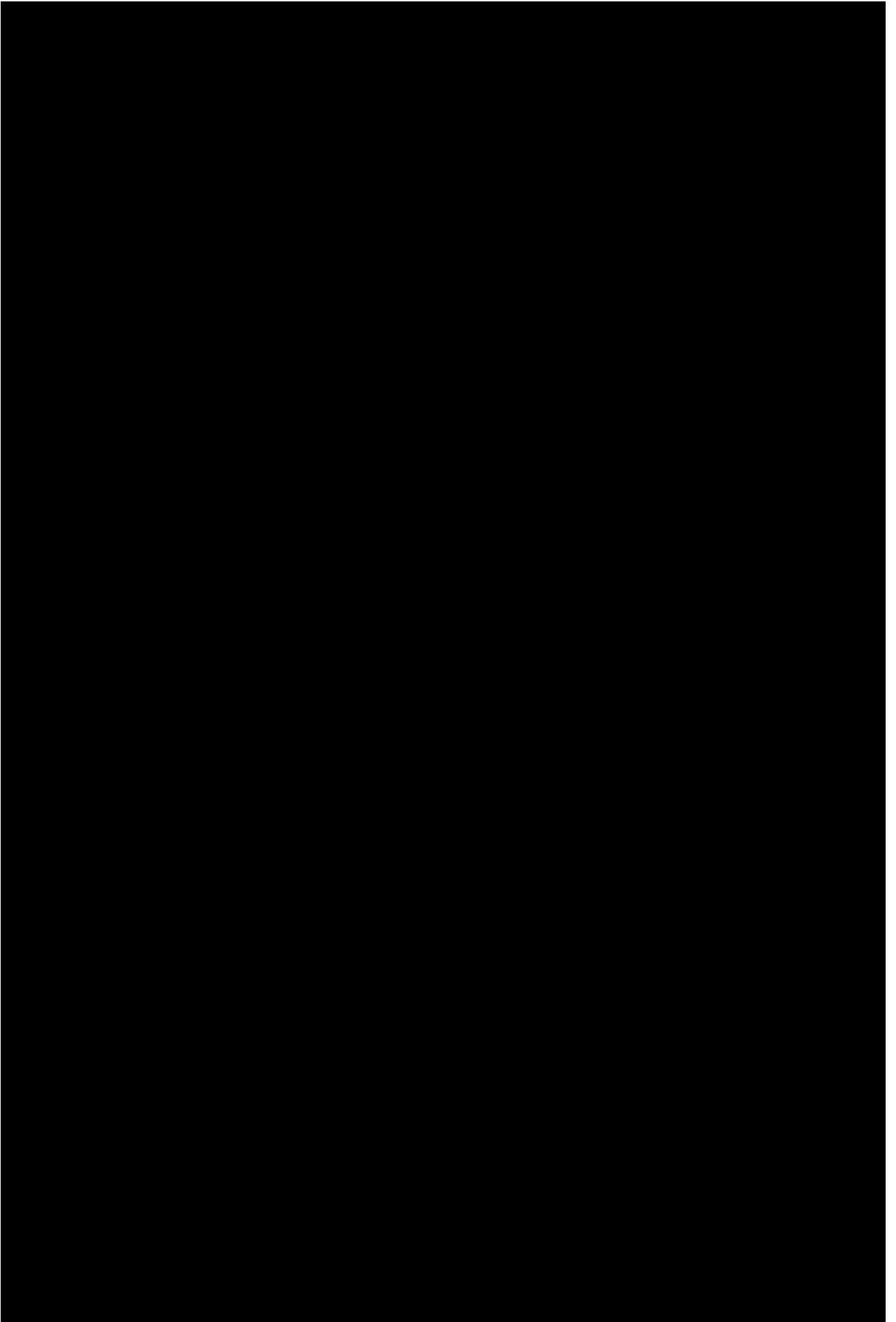


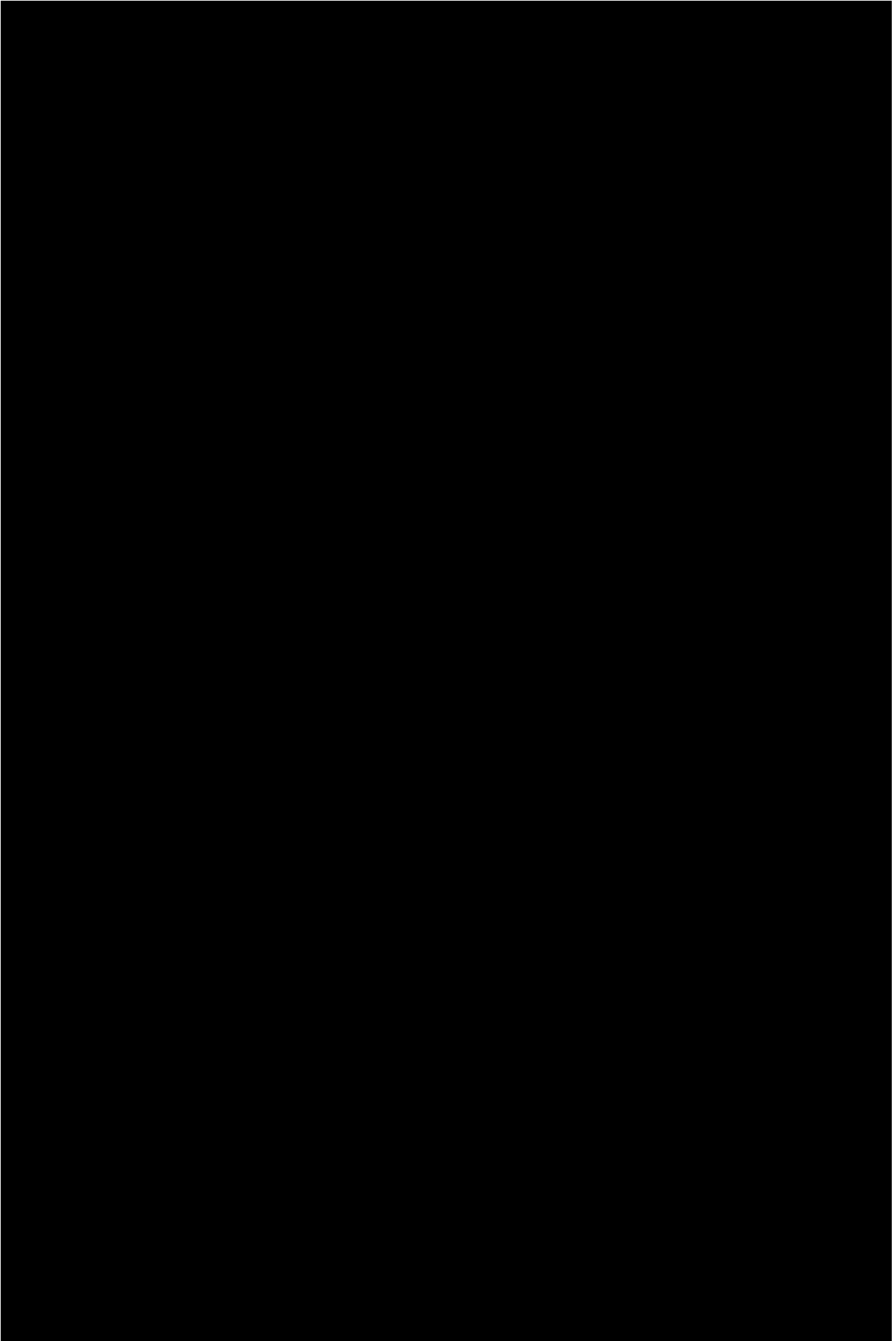












Dialogue Meeting	Commercial
1	<ul style="list-style-type: none"> • Affordability and construction cost cap • Funding Approach • Senior funding long-list • Bidders top 10 commercial issues within the NPD Project Agreement • Community Benefits
2	<ul style="list-style-type: none"> • Affordability and construction cost cap • Payment Mechanism • Funding Approach • Bidders top 10 commercial issues within the NPD Project Agreement • Community Benefits
3	<ul style="list-style-type: none"> • Affordability and construction cost cap • Payment Mechanism • Senior Lender Term Sheets • Draft Financial Model • Review of Bidders commercial issues
4	<ul style="list-style-type: none"> • Review of Interim Tender • Affordability and construction cost cap • Financial Model Progress • Draft Final Tender Arrangements – financial • Funding Terms • Draft sub-contracts • Review of bidders commentary table on NPD Project Agreement
5	<ul style="list-style-type: none"> • Affordability and construction cost cap • Preparation for Final Tender • Review of final mark up of NPD Project Agreement

ANNEX 11

Draft OJEU



European Union

Publication of Supplement to the Official Journal of the European Union

2, rue Mercier, 2985 Luxembourg, Luxembourg Fax: +352 29 29 42 670

E-mail: ojs@publications.europa.eu

Info & on-line forms: <http://simap.europa.eu>

Contract notice
(Directive 2004/18/EC)

Section I : Contracting authority

I.1) Name, addresses and contact point(s):

Official name: [NHS Orkney](#)

National ID: *(if known)*

Postal address: [Garden House, New Scapa Road, Kirkwall, Orkney](#)

Town: [Orkney](#)

Postal code: [KW15 1BQ](#)

Country: [United Kingdom \(UK\)](#)

Contact point(s): [Gordon Shirreff](#)

Telephone: [+44 1856888902](#)

For the attention of:

E-mail: gordon.shirreff@nhs.net

Fax:

Internet address(es): *(if applicable)*

General address of the contracting authority/entity: *(URL)* <http://www.ohb.scot.nhs.uk/>

Address of the buyer profile: *(URL)* http://www.publiccontractsscotland.gov.uk/search/Search_AuthProfile.aspx?ID=AA00368

Electronic access to information: *(URL)*

Electronic submission of tenders and requests to participate: *(URL)*

Further information can be obtained from

- The above mentioned contact point(s) Other (please complete Annex A.I)

Specifications and additional documents (including documents for competitive dialogue and a dynamic purchasing system) can be obtained from

- The above mentioned contact point(s) Other (please complete Annex A.II)

Tenders or requests to participate must be sent to

- The above mentioned contact point(s) Other (please complete Annex A.III)

I.2) Type of the contracting authority

- Ministry or any other national or federal authority, including their regional or local sub-divisions
- National or federal agency/office
- Regional or local authority
- Regional or local agency/office
- Body governed by public law
- European institution/agency or international organisation
- Other: *(please specify)*

I.3) Main activity

- General public services

- Defence
- Public order and safety
- Environment
- Economic and financial affairs
- Health
- Housing and community amenities
- Social protection
- Recreation, culture and religion
- Education
- Other: *(please specify)*

I.4) Contract award on behalf of other contracting authorities

The contracting authority is purchasing on behalf of other contracting authorities:

yes no

information on those contracting authorities can be provided in Annex A

Section II : Object of the contract

II.1) Description :

II.1.1) Title attributed to the contract by the contracting authority :

New Orkney Hospital and Healthcare Facilities

II.1.2) Type of contract and location of works, place of delivery or of performance :

choose one category only – works, supplies or services – which corresponds most to the specific object of your contract or purchase(s)

- | | | |
|---|---|--|
| <input checked="" type="radio"/> Works | <input type="radio"/> Supplies | <input type="radio"/> Services |
| <input type="checkbox"/> Execution | <input type="checkbox"/> Purchase | Service category No: |
| <input type="checkbox"/> Design and execution | <input type="checkbox"/> Lease | Please see Annex C1 for service categories |
| <input type="checkbox"/> Realisation, by whatever means of work, corresponding to the requirements specified by the contracting authorities | <input type="checkbox"/> Rental | |
| | <input type="checkbox"/> Hire purchase | |
| | <input type="checkbox"/> A combination of these | |

Main site or location of works, place of delivery or of performance :

The new Orkney Hospital and Health Care Facility will be constructed on a site at New Scapa Road, Orkney. The contract is for the design, build, finance and maintenance of a new Hospital and Health Care Facility.

NUTS code:

II.1.3) Information about a public contract, a framework agreement or a dynamic purchasing system (DPS):

- The notice involves a public contract
- The notice involves the establishment of a framework agreement
- The notice involves the setting up of a dynamic purchasing system (DPS)

II.1.4) Information on framework agreement : (if applicable)

- Framework agreement with several operators
- Framework agreement with a single operator

Number :

or

(if applicable) maximum number : of participants to the framework agreement envisaged

Duration of the framework agreement

Duration in years : or in months :

Justification for a framework agreement, the duration of which exceeds four years :

Estimated total value of purchases for the entire duration of the framework agreement (if applicable, give figures only)

Estimated value excluding VAT : Currency :

or

Range: between : : and : : Currency :

Frequency and value of the contracts to be awarded : (if known)

II.1.5) Short description of the contract or purchase(s) :

NHS Orkney are seeking a Private Sector Partner to participate and invest in a new Orkney Hospital and Healthcare Facility ("the Project") The Project will involve the design, build, finance and maintenance of a new hospital on a site in Orkney with an estimated cost range of between [£180m and £220m] over a 25 year operational period. This is to be delivered under the Scottish Futures Trust's Non-Profit Distributing (NPD) model which is in the form of public-private partnership preferred by the Scottish Government. The objective of the Project is to provide NHS Orkney with a new hospital and health care facility to service the needs of patients in the Orkney area. Further information will be provided in the ITPD and contract documents.

II.1.6) Common procurement vocabulary (CPV) :

	Main vocabulary	Supplementary vocabulary (if applicable)
Main object	45215100	
Additional object(s)	98341000	
	79993000	
	31625200	
	32520000	
	35120000	
	45314300	
	50330000	
	50700000	
	51410000	
	66515200	
	71314200	
	72253000	
	77314000	
	90911300	
	90922000	

II.1.7) Information about Government Procurement Agreement (GPA) :

The contract is covered by the Government Procurement Agreement (GPA) : yes no

II.1.8) Lots: (for information about lots, use Annex B as many times as there are lots)

This contract is divided into lots: yes no

(if yes) Tenders may be submitted for

one lot only

one or more lots

all lots

II.1.9) Information about variants:

Variants will be accepted : yes no

II.2) Quantity or scope of the contract :

II.2.1) Total quantity or scope : (including all lots, renewals and options, if applicable)

(if applicable, give figures only)

Estimated value excluding VAT : Currency :
or
Range: between : 180000000.00 : and : 220000000.00 : Currency : GBP

II.2.2) Information about options : *(if applicable)*

Options : yes no
(if yes) Description of these options :

(if known) Provisional timetable for recourse to these options :
in months : or in days : (from the award of the contract)

II.2.3) Information about renewals : *(if applicable)*

This contract is subject to renewal: yes no
Number of possible renewals: *(if known)* or Range: between : and:
(if known) In the case of renewable supplies or service contracts, estimated timeframe for subsequent contracts:
in months: or in days: (from the award of the contract)

II.3) Duration of the contract or time limit for completion:

Duration in months : 324 or in days: (from the award of the contract)
or
Starting: (dd/mm/yyyy)
Completion: (dd/mm/yyyy)

Section III : Legal, economic, financial and technical information

III.1) Conditions relating to the contract:

III.1.1) Deposits and guarantees required: *(if applicable)*

Parent company or other guarantees may be required in certain circumstances. Full details to be set out in the information Memorandum/Pre-Qualification Questionnaire.

III.1.2) Main financing conditions and payment arrangements and/or reference to the relevant provisions governing them:

Finance to be provided by the Private Sector Partner in accordance with the Scottish Government's NPD Initiative. Full details to be set out in the ITPD and contract documents. The contracting authority reserves the right to consider alternative funding, financing and/or contractual arrangements to support the delivery of the Project.

III.1.3) Legal form to be taken by the group of economic operators to whom the contract is to be awarded: *(if applicable)*

An NPD company as per the Scottish Government's NPD Initiative. Full details to be set out in the ITPD and contract documents.

III.1.4) Other particular conditions: *(if applicable)*

The performance of the contract is subject to particular conditions : yes no

(if yes) Description of particular conditions:

The successful Private Sector Partner may be required to actively participate in the achievement of social and/or environmental objectives in the delivery of the Project. Accordingly, contract performance conditions may relate in particular, to social, environmental or other corporate social responsibility considerations. Further details of any conditions or specific requirements will be set out in the ITPD and contract documents.

III.2) Conditions for participation:

III.2.1) Personal situation of economic operators, including requirements relating to enrolment on professional or trade registers:

Information and formalities necessary for evaluating if the requirements are met:

Full details to be set out in the Information Memorandum / Pre-Qualification Questionnaire.

III.2.2) Economic and financial ability:

Information and formalities necessary for evaluating if the requirements are met:

Parties expressing an interest in the Project will be required to complete a Pre-Qualification Questionnaire to evaluate and verify financial standing and professional and technical capacity in accordance with Regulations 23 to 26 of the Public Contracts (Scotland) Regulations 2012. Full details to be set out in the information Memorandum / Pre-Qualification Questionnaire.

Minimum level(s) of standards possibly required: *(if applicable)*

Certain minimum standards will apply. Full details set out in the Information Memorandum / Pre-Qualification Questionnaire.

III.2.3) Technical capacity:

Information and formalities necessary for evaluating if the requirements are met:

Parties expressing an interest in the Project will be required to complete a Pre-Qualification Questionnaire to evaluate and verify financial standing and professional and technical capacity in accordance with Regulations 23 to 26 of the Public Contracts (Scotland) Regulations 2012. Full details to be set out in the information Memorandum / Pre-Qualification Questionnaire.

Minimum level(s) of standards possibly required: *(if applicable)*

Certain minimum standards will apply. Full details set out in the Information Memorandum / Pre-Qualification Questionnaire.

III.2.4) Information about reserved contracts: *(if applicable)*

- The contract is restricted to sheltered workshops
- The execution of the contract is restricted to the framework of sheltered employment programmes

III.3) Conditions specific to services contracts:

III.3.1) Information about a particular profession:

Execution of the service is reserved to a particular profession: yes no
(if yes) Reference to the relevant law, regulation or administrative provision :

III.3.2) Staff responsible for the execution of the service:

Legal persons should indicate the names and professional qualifications of the staff responsible for the execution of the service: yes no

Section IV : Procedure

IV.1) Type of procedure:

IV.1.1) Type of procedure:

Open

Restricted

Accelerated restricted

Justification for the choice of accelerated procedure:

Negotiated

Some candidates have already been selected (if appropriate under certain types of negotiated procedures) : yes no
(if yes, provide names and addresses of economic operators already selected under Section VI.3 Additional information)

Accelerated negotiated

Justification for the choice of accelerated procedure:

Competitive dialogue

IV.1.2) Limitations on the number of operators who will be invited to tender or to participate: (restricted and negotiated procedures, competitive dialogue)

Envisaged number of operators: 3

or

Envisaged minimum number: and (if applicable) maximum number

Objective criteria for choosing the limited number of candidates:

IV.1.3) Reduction of the number of operators during the negotiation or dialogue: (negotiated procedure, competitive dialogue)

Recourse to staged procedure to gradually reduce the number of solutions to be discussed or tenders to be negotiated : yes no

IV.2) Award criteria

IV.2.1) Award criteria (please tick the relevant box(es))

Lowest price

or

The most economically advantageous tender in terms of

the criteria stated below (the award criteria should be given with their weighting or in descending order of importance where weighting is not possible for demonstrable reasons)

the criteria stated in the specifications, in the invitation to tender or to negotiate or in the descriptive document

Criteria	Weighting	Criteria	Weighting
1.		6.	
2.		7.	
3.		8.	
4.		9.	

Criteria	Weighting	Criteria	Weighting
5.		10.	

IV.2.2) Information about electronic auction

An electronic auction will be used yes no

(if yes, if appropriate) Additional information about electronic auction:

IV.3) Administrative information:

IV.3.1) File reference number attributed by the contracting authority: (if applicable)

IV.3.2) Previous publication(s) concerning the same contract:

yes no

(if yes)

Prior information notice Notice on a buyer profile

Notice number in the OJEU: of: (dd/mm/yyyy)

Other previous publications (if applicable)

IV.3.3) Conditions for obtaining specifications and additional documents or descriptive document: (in the case of a competitive dialogue)

Time limit for receipt of requests for documents or for accessing documents

Date: 27/07/2015 Time: 12:00

Payable documents yes no

(if yes, give figures only) Price: Currency:

Terms and method of payment:

IV.3.4) Time limit for receipt of tenders or requests to participate:

Date: Time:

IV.3.5) Date of dispatch of invitations to tender or to participate to selected candidates: (if known, in the case of restricted and negotiated procedures, and competitive dialogue)

Date:

IV.3.6) Language(s) in which tenders or requests to participate may be drawn up:

Any EU official language

Official EU language(s):

EN

Other:

IV.3.7) Minimum time frame during which the tenderer must maintain the tender:

until: :

or

Duration in months : or in days : (from the date stated for receipt of tender)

IV.3.8) Conditions for opening of tenders:

Date : (dd/mm/yyyy) Time

(if applicable) Place:

Persons authorised to be present at the opening of tenders *(if applicable)* :

yes no

(if yes) Additional information about authorised persons and opening procedure:

Section VI: Complementary information

VI.1) Information about recurrence: *(if applicable)*

This is a recurrent procurement : yes no

(if yes) Estimated timing for further notices to be published:

VI.2) Information about European Union funds:

The contract is related to a project and/or programme financed by European Union funds : yes no

(if yes) Reference to project(s) and/or programme(s):

VI.3) Additional information: *(if applicable)*

- Interested parties should express interest, receive and submit Pre-Qualification Questionnaire submissions via the contracting authority in line with the details contained in the Information Memorandum/ Pre-Qualification Questionnaire documentation.
- NHS Orkney will hold a Bidders' Open Day on [24.6.2013] for those parties interested in the Project. The Bidders' Open Day will be held in Orkney. Interested parties wishing to attend the Bidders' Open Day should register as soon as possible to attend this event by either emailing [] at E-mail: [], or by writing to Project Office, NHS Orkney, Balfour Hospital, New Scapa Road, Kirkwall, Orkney, KW15 1BH. All correspondence should be clearly marked - NHS Orkney New Hospital and Healthcare Facilities Attendance at Bidders' Open Day. All correspondence should also confirm if the parties wish to request a short private meeting on the day. Private meetings will be restricted to consortia only, and NHS Orkney reserves the right to limit the duration of private meetings.
Further details will be provided upon registration.
- Further to Section II.3 the anticipated duration shall be 300 months (or 25 years) operational plus the period of construction. The total anticipated duration is therefore 324 months (or circa 27 years) from the award of the contract.
- Further to Section II.1.9 variants may be accepted by the contracting authority. However, interested parties should note that the contracting authority will seek to limit or restrict the requirements on which variants will be accepted and evaluated. Full details will be set out in the ITPD and contract documents.
- Further to Section IV.1.3 the process is detailed in the Information Memorandum/ Pre-Qualification Questionnaire. This will be updated in the ITPD and contract documents.
- Further to Section IV.3.3 the Information Memorandum/ Pre-Qualification Questionnaire available from the contracting authority describes the process for obtaining specifications and additional documents.

VI.4) Procedures for appeal:

VI.4.1) Body responsible for appeal procedures:

Official name: NHS Orkney

Postal address: Balfour Hospital, New Scapa Road, Kirkwall,

Town: Orkney

Postal code: KW15 1BH

Country: United Kingdom (UK)

Telephone: +44 1856888902

E-mail: gordon.shirreff@nhs.net

Fax:

Internet address: (URL) <http://www.ohb.scot.nhs.uk/>

Body responsible for mediation procedures *(if applicable)*

Official name:

Postal address:

Town:

Postal code:

Country:

Telephone:

E-mail:

Fax:

Internet address: *(URL)*

VI.4.2) Lodging of appeals: *(please fill in heading VI.4.2 or if need be, heading VI.4.3)*

The contracting authority will incorporate a minimum of a 10 calendar day standstill period at the point information on the award of the contract is communicated to tenderers. This period allows unsuccessful tenderers to seek further debriefing from the contracting authority before the contract is entered into. Applicants can make a written request for de-brief information and this information must be provided within 15 days of this written request being received. Such additional information should be requested from the address in I.1. If an appeal regarding the award of a contract has not been successfully resolved, The Public Contracts (Scotland) Regulations 2012 (SSI 2012/88) provide for aggrieved parties who have been harmed or are at risk of harm by breach of the rules to take action in the Sheriff Court or Court of Session. Any such action must be brought promptly (generally within 30 days).

VI.4.3) Service from which information about the lodging of appeals may be obtained:

Official name:

Postal address:

Town:

Postal code:

Country:

Telephone:

E-mail:

Fax:

Internet address: *(URL)*

VI.5) Date of dispatch of this notice:

Annex A
Additional addresses and contact points

I) Addresses and contact points from which further information can be obtained

Official name: National ID: *(if known)*
Postal address:
Town: Postal code: Country:
Contact point(s): Telephone:
For the attention of:
E-mail: Fax:
Internet address: *(URL)*

II) Addresses and contact points from which specifications and additional documents can be obtained

Official name: National ID: *(if known)*
Postal address:
Town: Postal code: Country:
Contact point(s): Telephone:
For the attention of:
E-mail: Fax:
Internet address: *(URL)*

III) Addresses and contact points to which tenders/requests to participate must be sent

Official name: National ID: *(if known)*
Postal address:
Town: Postal code: Country:
Contact point(s): Telephone:
For the attention of:
E-mail: Fax:
Internet address: *(URL)*

IV) Address of the other contracting authority on behalf of which the contracting authority is purchasing

Official name National ID (if known):
Postal address:
Town Postal code
Country

----- (Use Annex A Section IV as many times as needed) -----

Annex B
Information about lots

Title attributed to the contract by the contracting authority

Lot No : **Lot title :**

1) Short description:

2) Common procurement vocabulary (CPV):

Main vocabulary:

3) Quantity or scope:

(if known, give figures only) Estimated cost excluding VAT:

Currency:

or

Range: between :

and:

Currency:

4) Indication about different date for duration of contract or starting/completion: (if applicable)

Duration in months : or in days : (from the award of the contract)

or

Starting: (dd/mm/yyyy)

Completion: (dd/mm/yyyy)

5) Additional information about lots:

Annex C1 – General procurement
Service categories referred to in Section II: Object of the contract
Directive 2004/18/EC

Category No [1]	Subject
1	Maintenance and repair services
2	Land transport services [2], including armoured car services, and courier services, except transport of mail
3	Air transport services of passengers and freight, except transport of mail
4	Transport of mail by land [3] and by air
5	Telecommunications services
6	Financial services: a) Insurances services b) Banking and investment services [4]
7	Computer and related services
8	Research and development services [5]
9	Accounting, auditing and bookkeeping services
10	Market research and public opinion polling services
11	Management consulting services [6] and related services
12	Architectural services; engineering services and integrated engineering services; urban planning and landscape engineering services; related scientific and technical consulting services; technical testing and analysis services
13	Advertising services
14	Building-cleaning services and property management services
15	Publishing and printing services on a fee or contract basis
16	Sewage and refuse disposal services; sanitation and similar services
Category No [7]	Subject
17	Hotel and restaurant services
18	Rail transport services
19	Water transport services
20	Supporting and auxiliary transport services
21	Legal services
22	Personnel placement and supply services [8]
23	Investigation and security services, except armoured car services
24	Education and vocational education services
25	Health and social services
26	Recreational, cultural and sporting services [9]
27	Other services

1 Service categories within the meaning of Article 20 and Annex IIA to Directive 2004/18/EC.

2 Except for rail transport services covered by category 18.

3 Except for rail transport services covered by category 18.

4 Except financial services in connection with the issue, sale, purchase or transfer of securities or other financial instruments, and central bank services. The following are also excluded: services involving the acquisition or rental, by whatever financial means, of land, existing buildings or other immovable property or concerning rights thereon. However, financial service contracts concluded at the same time as, before or after the contract of acquisition or rental, in whatever form, shall be subject to the Directive.

- 5 Except research and development services other than those where the benefits accrue exclusively to the contracting authority for its use in the conduct of its own affairs on condition that the service provided is wholly remunerated by the contracting authority.
- 6 Except arbitration and conciliation services.
- 7 Service categories within the meaning of Article 21 and Annex IIB of Directive 2004/18/EC.
- 8 Except employment contracts.
- 9 Except contracts for the acquisition, development, production or co-production of program material by broadcasters and contracts for broadcasting time.

ANNEX 12

NPD Scope

1. NPD Inclusions and Exclusions

The following table sets out a summary of the technical scope of works and service activities associated with the design, construction and maintenance of the new hospital facilities at the Scapa site. It shows the split of that scope between those elements that will be delivered through the NPD contract and those that will be delivered outwith the NPD contract and it reflects the contractual risk allocation under the Standard NPD Project Agreement save as indicated. In a small number of cases responsibility remains to be confirmed. This is important to have identified both in terms of the development of the procurement and contract documents, for costing purposes and the planning and delivery of the non NPD works by the Board.

Element Description	Item	Sub Item	Responsibility			Comments
			NPD Co	NHS	TBC	
1A. and Construction within the Red Line Boundary	Design & Construction of new Hospital Building		•			
	Design & Construction of Clinical Support Building		•			
	Design, Construction and fit out of kitchen including supply and installation of group 1 equipment. Installation of all group 2 equipment		•			
	All necessary hard/soft landscaping works		•			
	Design and construction of Internal Road network including car parks, pedestrian/cycle ways and public transport/blue light access /traffic management		•			

Element Description	Item	Sub Item	Responsibility			Comments
			NPD Co	NHS	TBC	
	All on site earthworks		•			
	All on site drainage infrastructure, including construction of SUDS ponds		•			
	All necessary site Investigation works		•	•		NHS Orkney will carry out SI as necessary to support planning application and allow development of reference design. Bidders will carry out further SI as part of due-diligence process and to inform approach to design /construction
1B. Design and Construction Outside the Red Line Boundary	Road and roundabout works. Public footpath and cycleway works.		•			
1C. Utility connections to the Site						
	Provision of Electricity Supply to site boundary		•			
	Provision of Water Supply to site boundary edge of the site		•			

Element Description	Item	Sub Item	Responsibility			Comments
			NPD Co	NHS	TBC	
	and new connection					
	Provision of Foul Water connection		•			
	Provision of Surface Water Drainage connection		•			
	Provision of Telecoms infrastructure to the site		•			
	Extension of existing NHS Orkney Fibre Optic network to connect the new Hospital site				•	
1D. Utilities from Point of Connection to Building						
	Final connection of Electricity Supply from Sub-station		•			
	Final Water supply connections to the new facility		•			
	Final Foul Water connections to the new facility		•			
	Final Surface Water Drainage connections to the new facility		•			
	Final Telecoms connections to the new facility		•			
	Final ICT/Fibre optic connections to the new facility		•			
2. Equipment	Group 1 Equipment		•			

Element Description	Item	Sub Item	Responsibility			Comments
			NPD Co	NHS	TBC	
(including ICT, Telecom and specialist group 1 equipment)						
	Group 2 Equipment		•	•		
	Group 3 Equipment			•		
3A. Hard Facilities Management	Helpdesk	Receives, records, actions and monitors requests for service provision/notification of faults	•			Consideration to be given to other functions the helpdesk could perform on behalf of NHS Orkney
	Estates	Air Conditioning Maintenance	•			
		BMS Maintenance	•			
		Electrical & Mechanical Services Maintenance	•			
		External Fabric Maintenance	•			
		Internal Fabric maintenance – General Decoration		•		
		Internal fabric maintenance – Specialist Decoration	•			Derrogation from standard form will be required. To be

Element Description	Item	Sub Item	Responsibility			Comments
			NPD Co	NHS	TBC	
						agreed with SFT
		Internal fabric maintenance – Floor coverings		•		Position to be further discussed with SFT
		Fire Fighting and Detection System	•			
		Drainage Surveys & Maintenance	•			
		Data Cabling Infrastructure Maintenance	•			
		Access and Security System	•			
		Lift Maintenance	•			
		Telephone handsets and system hardware		•		
		Wireless System	•			
		Telephone System Infrastructure	•			
	Grounds Maintenance	Hard Landscaping	•			
		Soft Landscaping		•		
	Energy and Utilities	Monitoring & Procurement, Management & continuity of supply	•			
		Performance	•			

Element Description	Item	Sub Item	Responsibility			Comments
			NPD Co	NHS	TBC	
	Pest Control	Pest Control		•		
	Wall Washing	Planned		•		
		Control of Infection cleans		•		
	Window Cleaning	Planned		•		
	Contract Auditing/ Monitoring	Board Monitoring and management		•		
	Contract Management	Contract Management	•			
3B. Soft Facilities Management	Cleaning	Internal		•		
		External (Litter picking etc)		•		
		External (Building fabric)	•			
	Waste Management	General Waste		•		
		Clinical Waste		•		
	Security Service	System Hardware and maintenance		•		
	Car Parking and Traffic Management	System Hardware and maintenance Management	•			
		Management of car parking		•		
	Portering	Movement of items and patients around the facility		•		
	VIE/Gas	Performance/Infrastructure	•			
		Monitoring/Management		•		
	Materials Management	Handling of all NHSO materials & supplies on site including the movement of		•		

Element Description	Item	Sub Item	Responsibility			Comments
			NPD Co	NHS	TBC	
		items from the main store on site to the ward/department for storage				
		Management/Procurement of NHSO Materials to include the purchase of disposables and goods		•		
	Reception	Manned Reception (front of House)		•		
	Linen	Disposable linen provision, provision and laundering of re- useable linen		•		
	Sterile Services	Procurement and production of Sterile Packs and instrumentation procurement and decontamination of instruments		•		
	Catering	equipment maintenance	•			
		Patient/Staff/Visitor/Catering service		•		

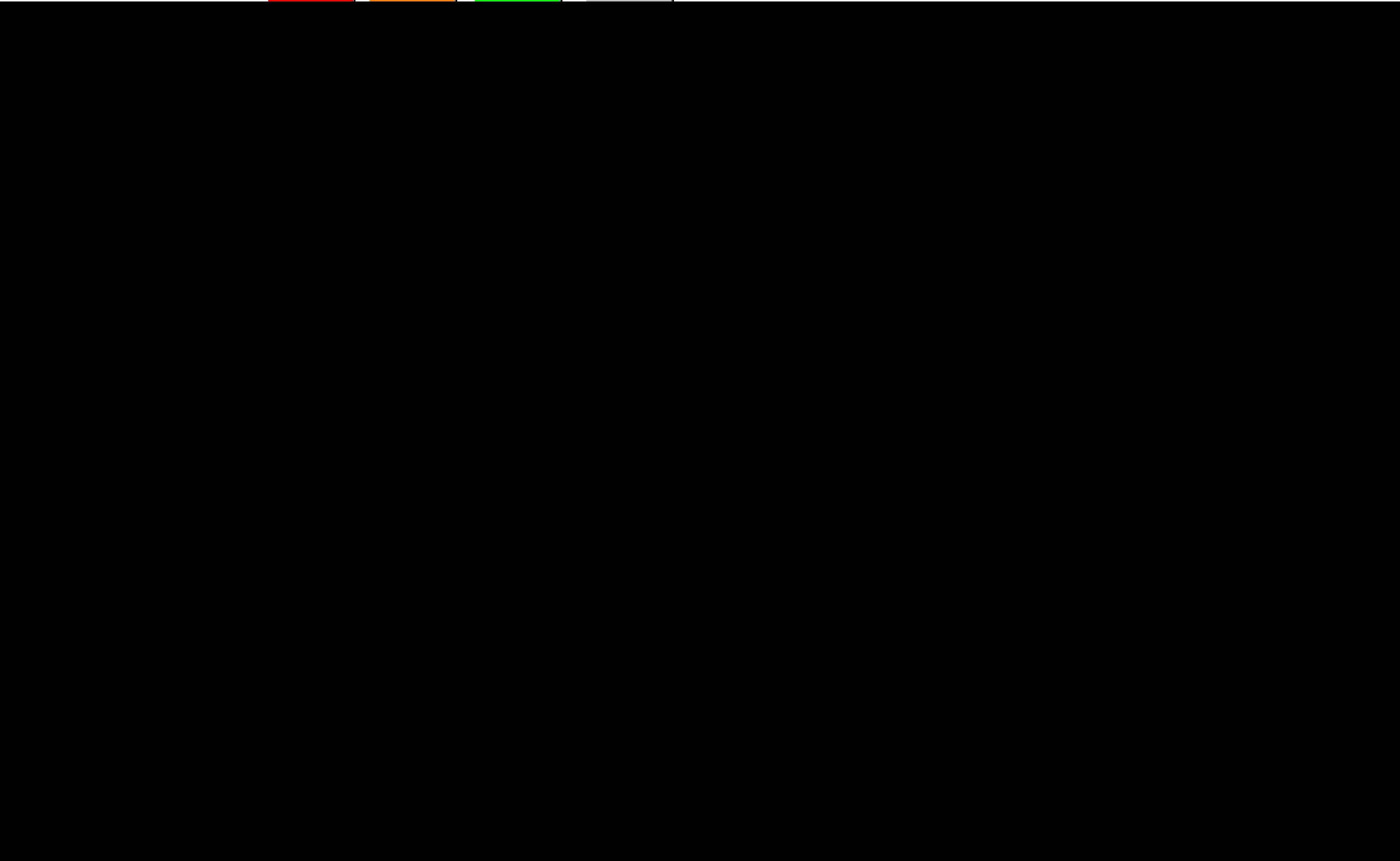
ANNEX 13

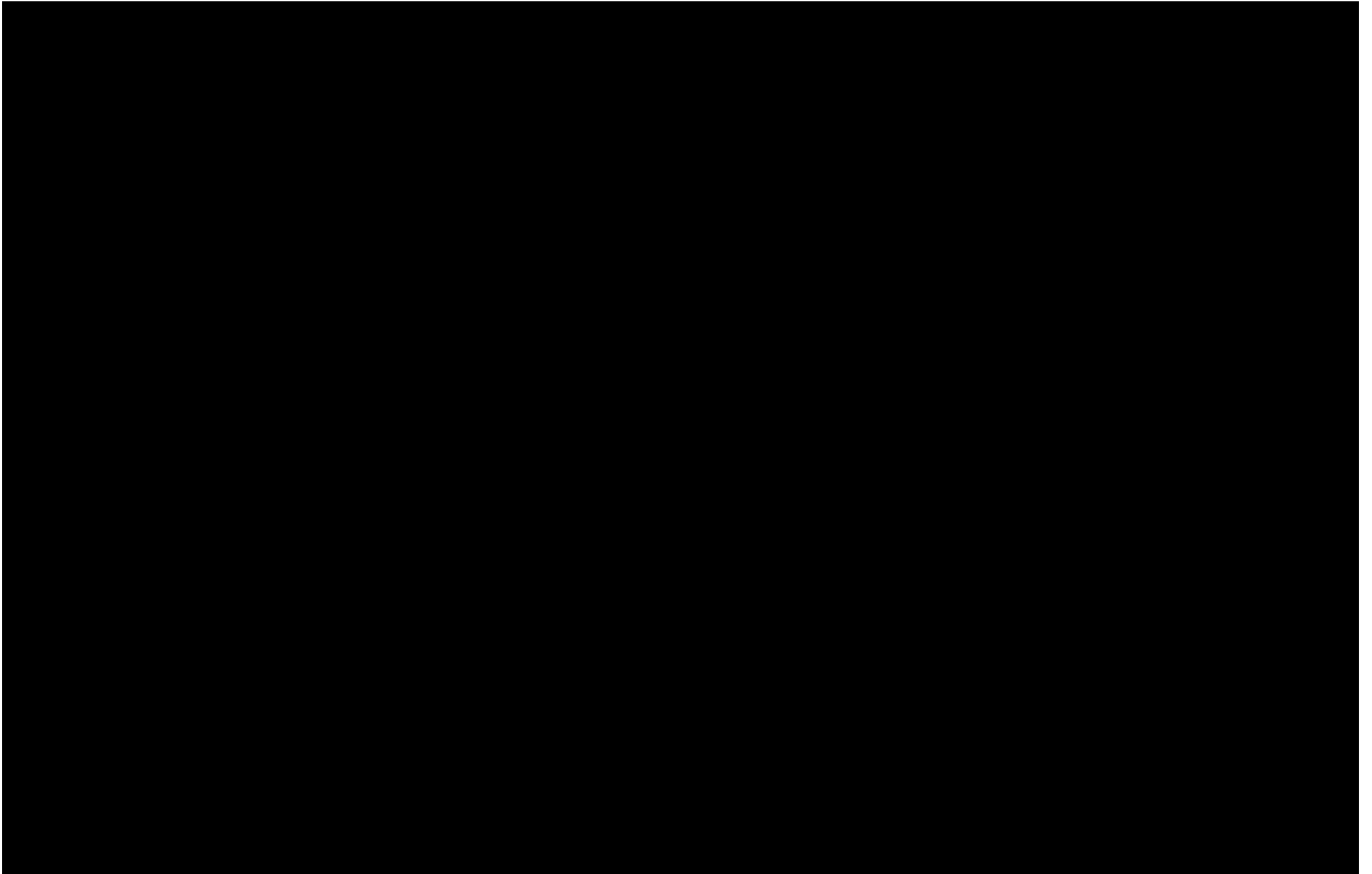
Risk Register

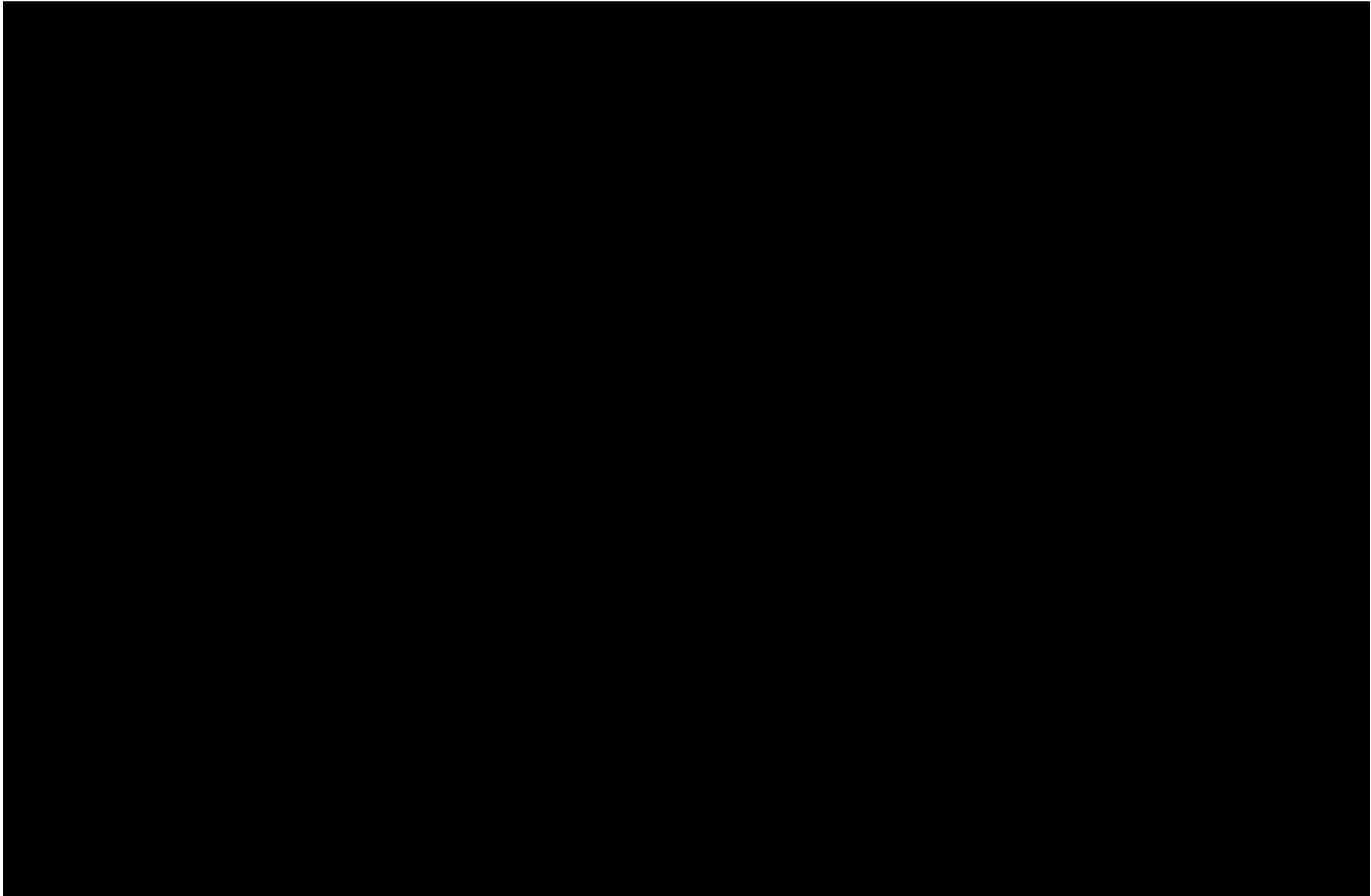
RISK REGISTER

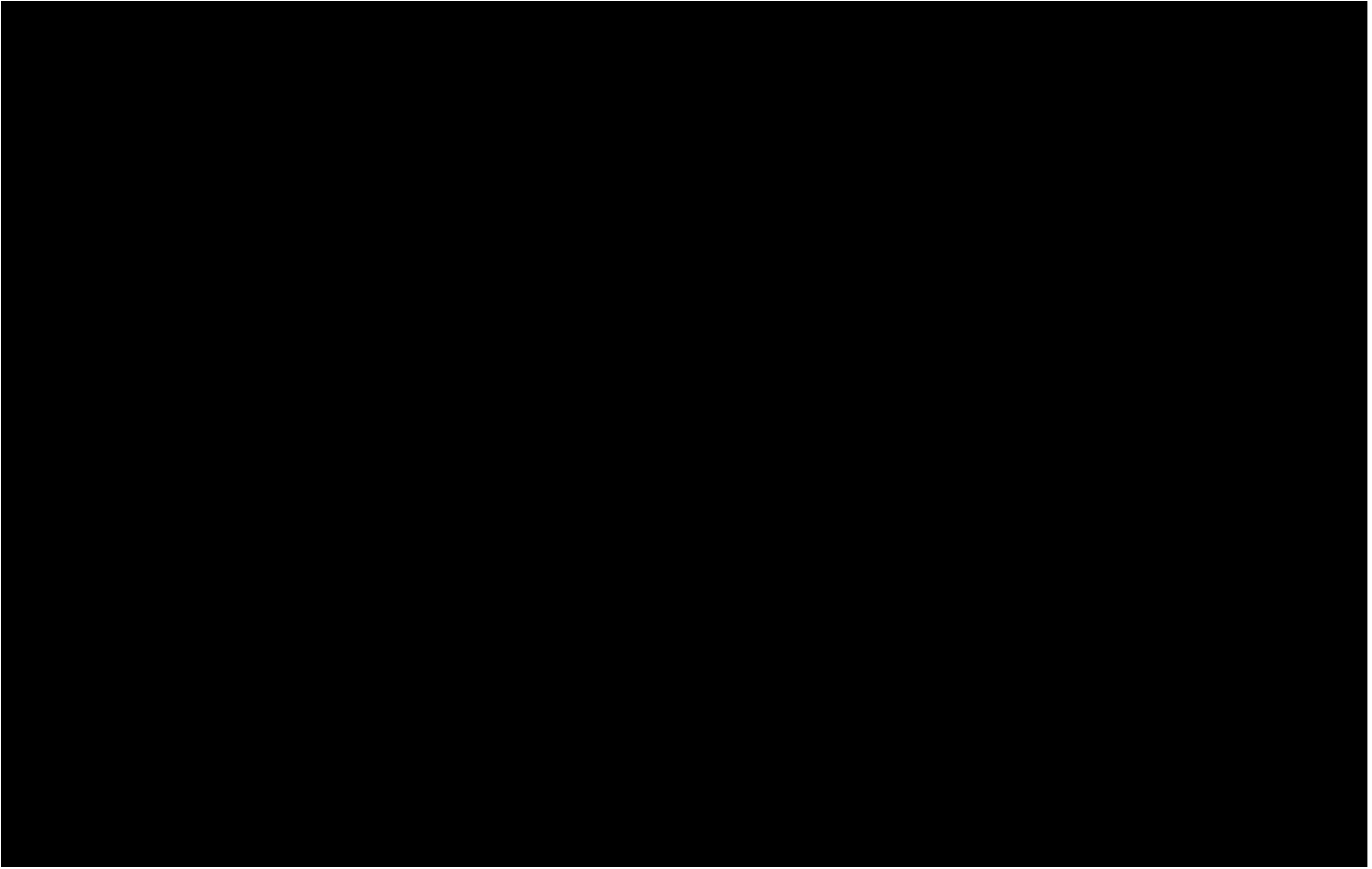
Project Title:	Orkney Integrated Care Campus	Risk Champion							
Date Register First Created:	01/04/2013	Date Updated:	17/02/2014	Revision Number:	12	Updated by:	Sweett Group	Current Stage:	RIBA Stage C

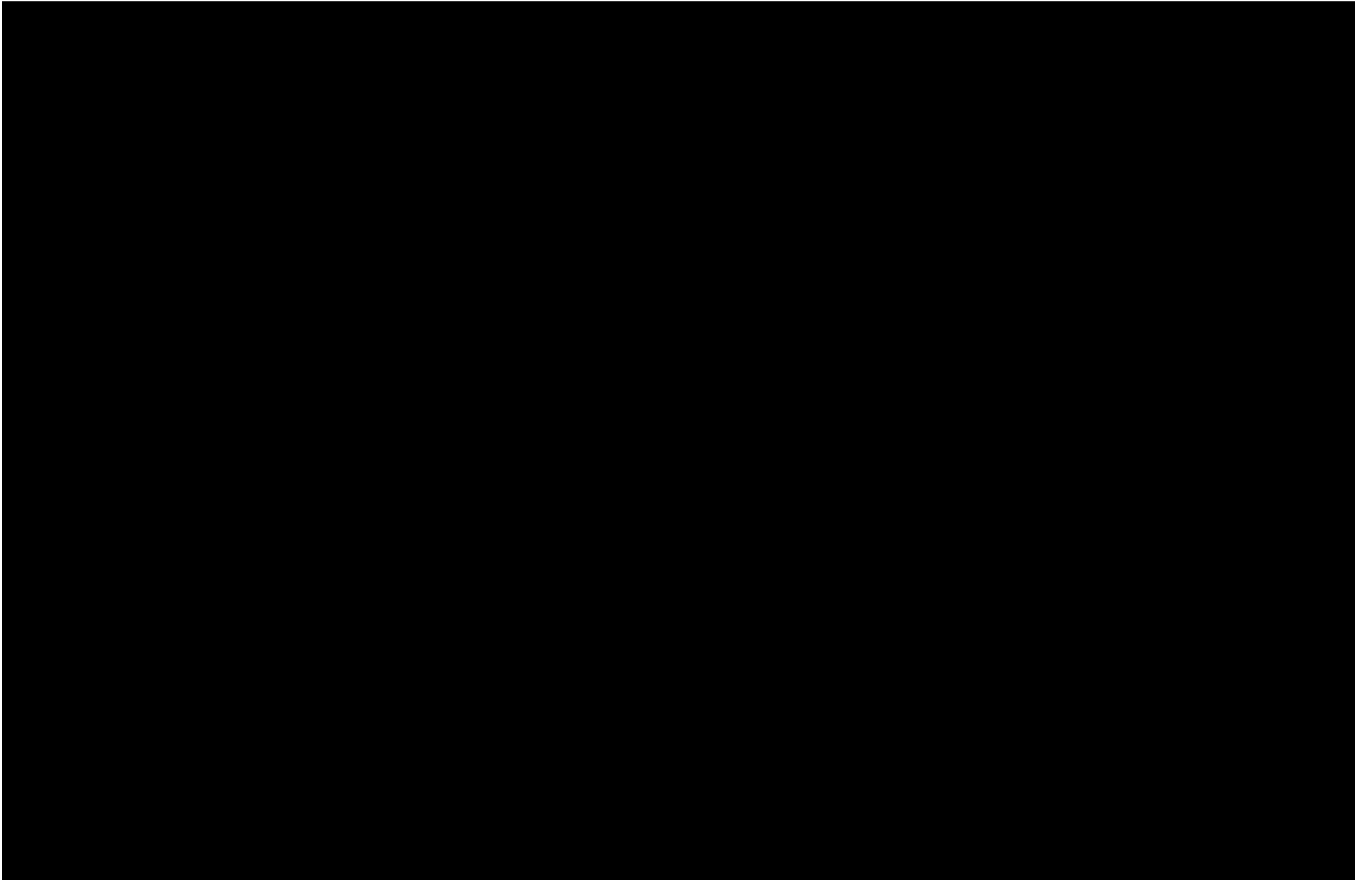
- High Risks
- Medium Risks
- Low Risks
- Active Risks

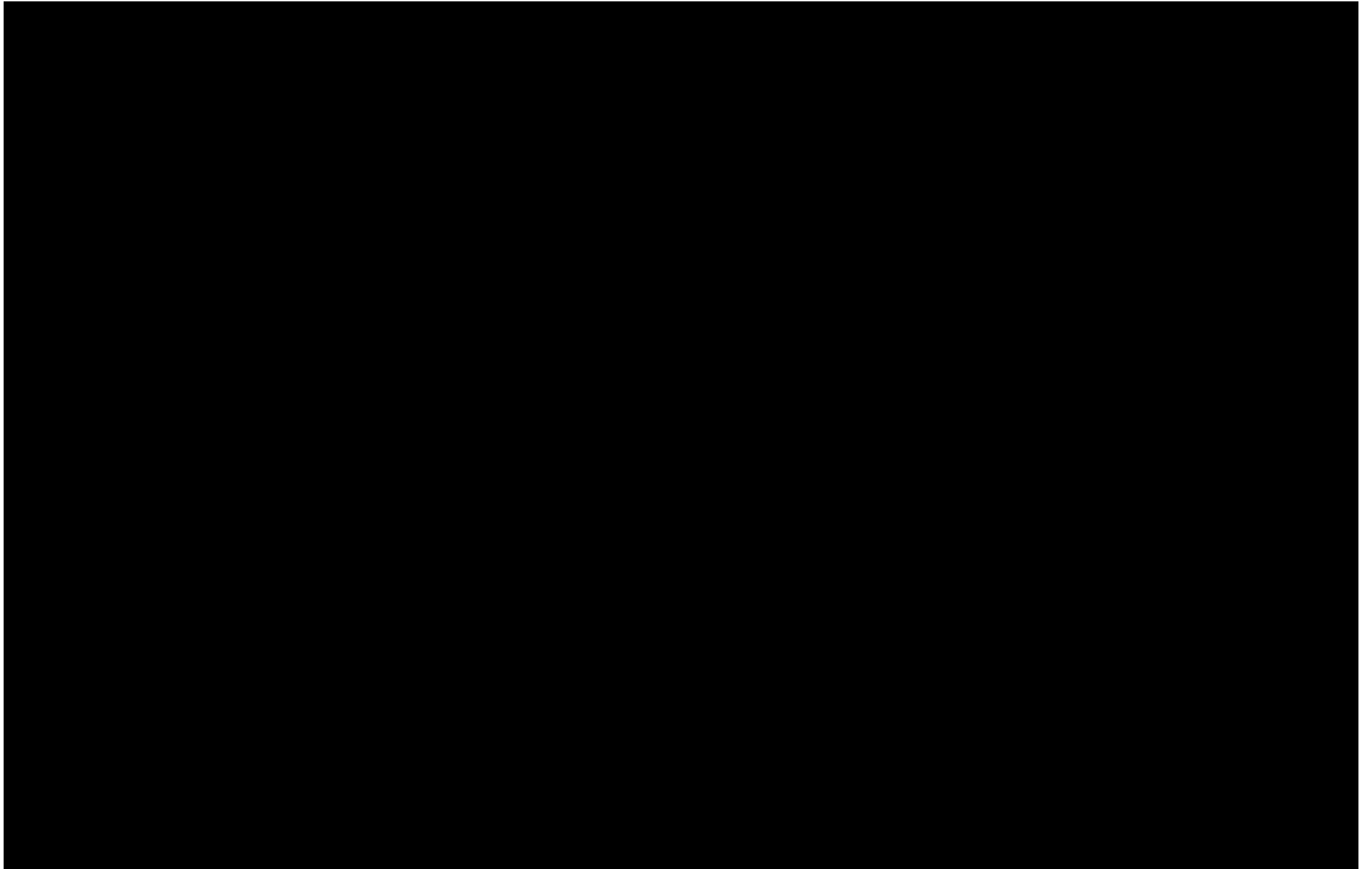












ANNEX 14

Cost Summary

NHS Orkney

NHS Hospital & Healthcare Facility Orkney

Outline Design Cost Plan

30 January 2014

Job number: 103233-13

Originated by: Liam Anthony
Approved by: Simon Brooke
Reviewed by: Simon Brooke

Version: 1

Status: Draft

Contact details

Liam Anthony, Associate Director

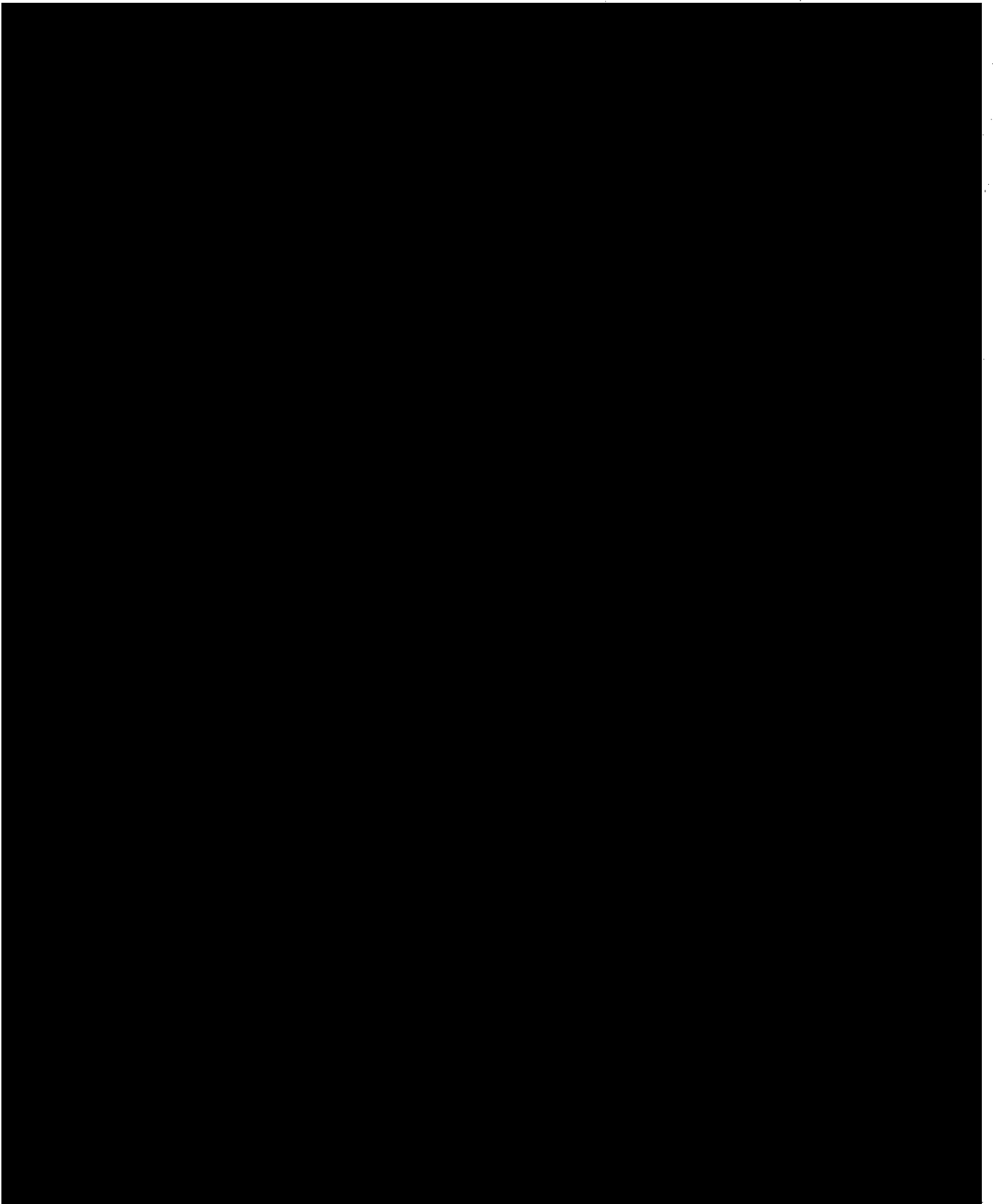
D 0131 313 7823
M 07775 777610
E liam.anthony@sweettgroup.com

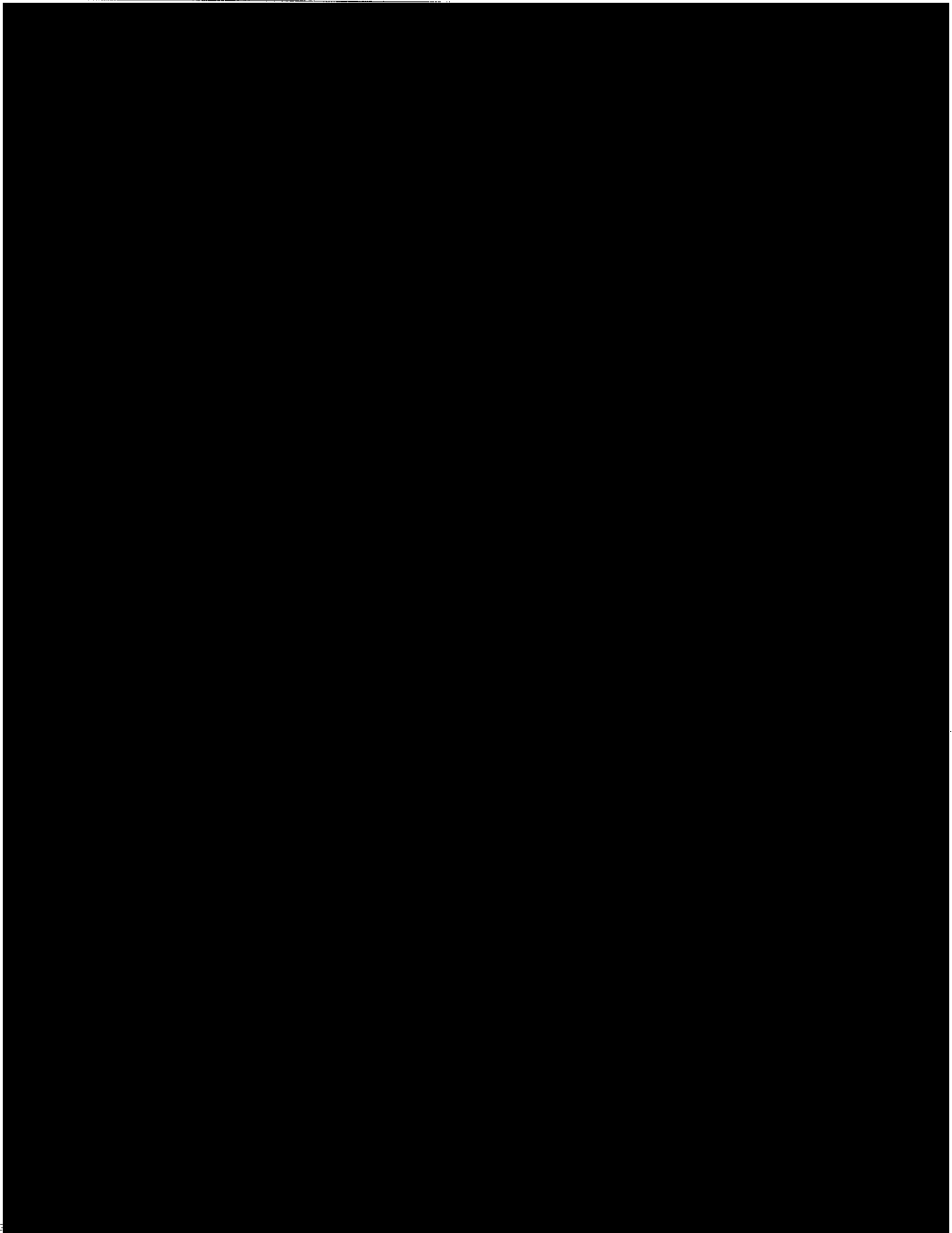
Sweett (UK) Limited
Apex 3
95 Haymarket Terrace
Edinburgh
EH12 5LQ
T 0131 313 7810

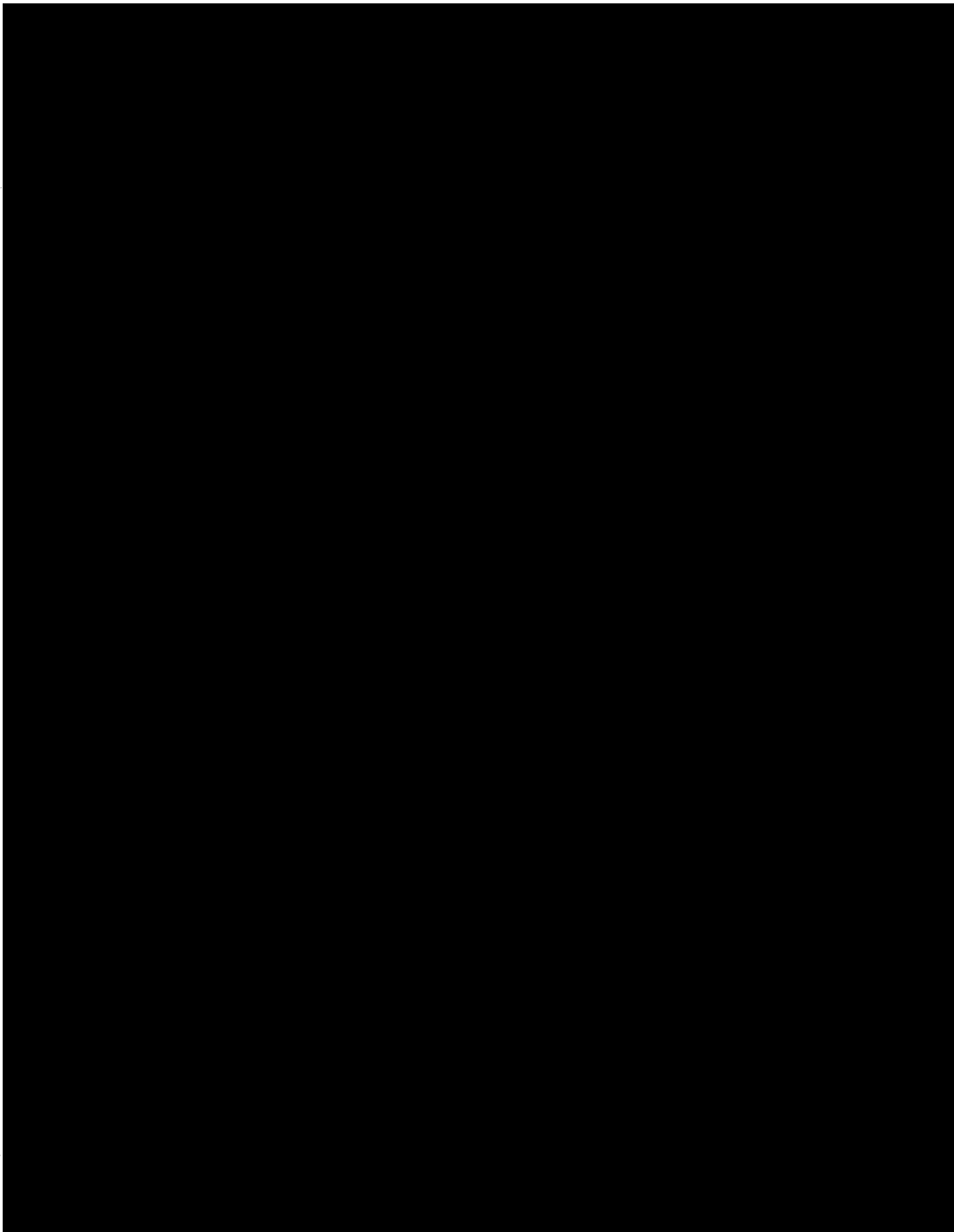
Simon Brooke, Project Director

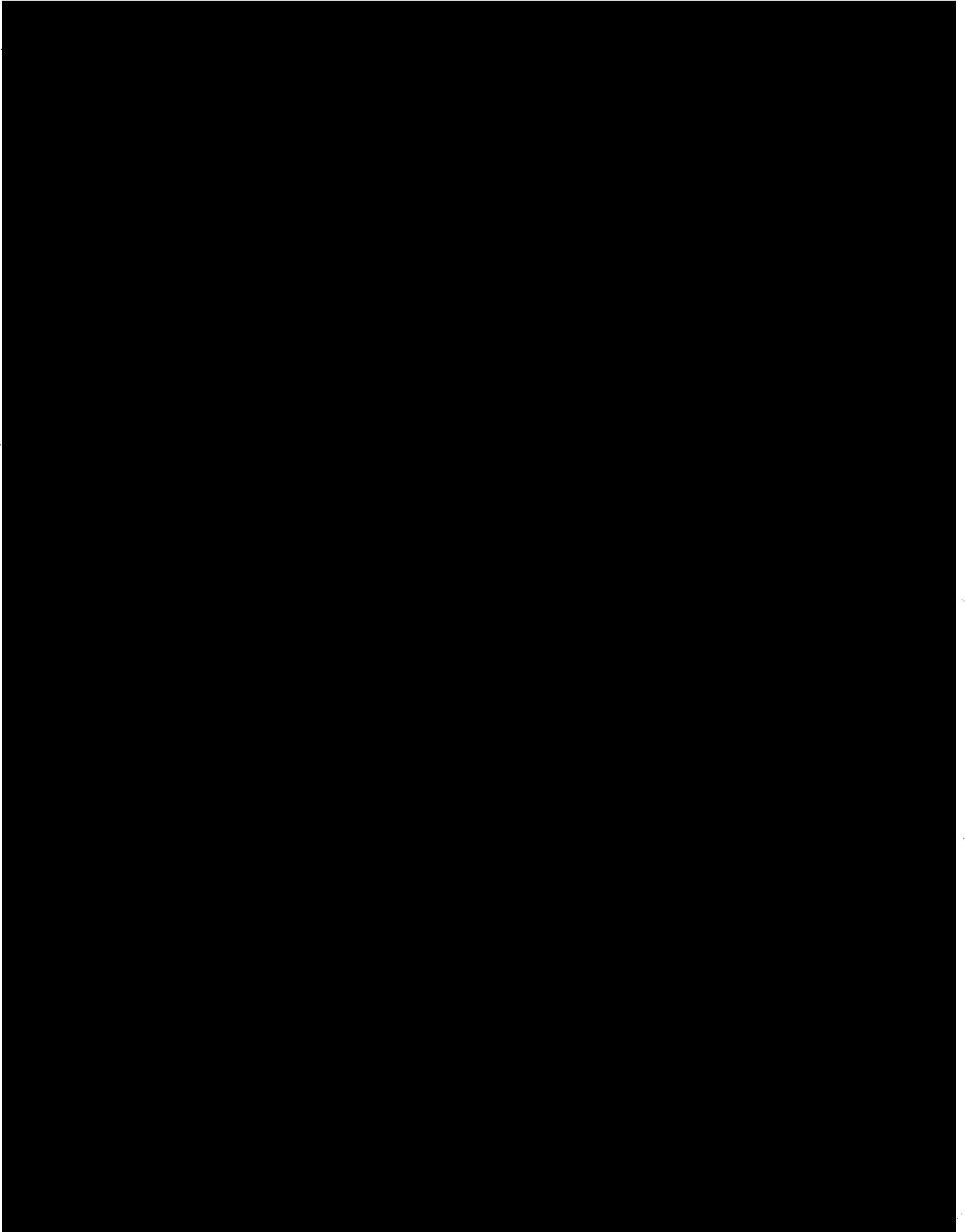
D 0131 313 7810
M 07799 890638
E simon.brooke@sweettgroup.com

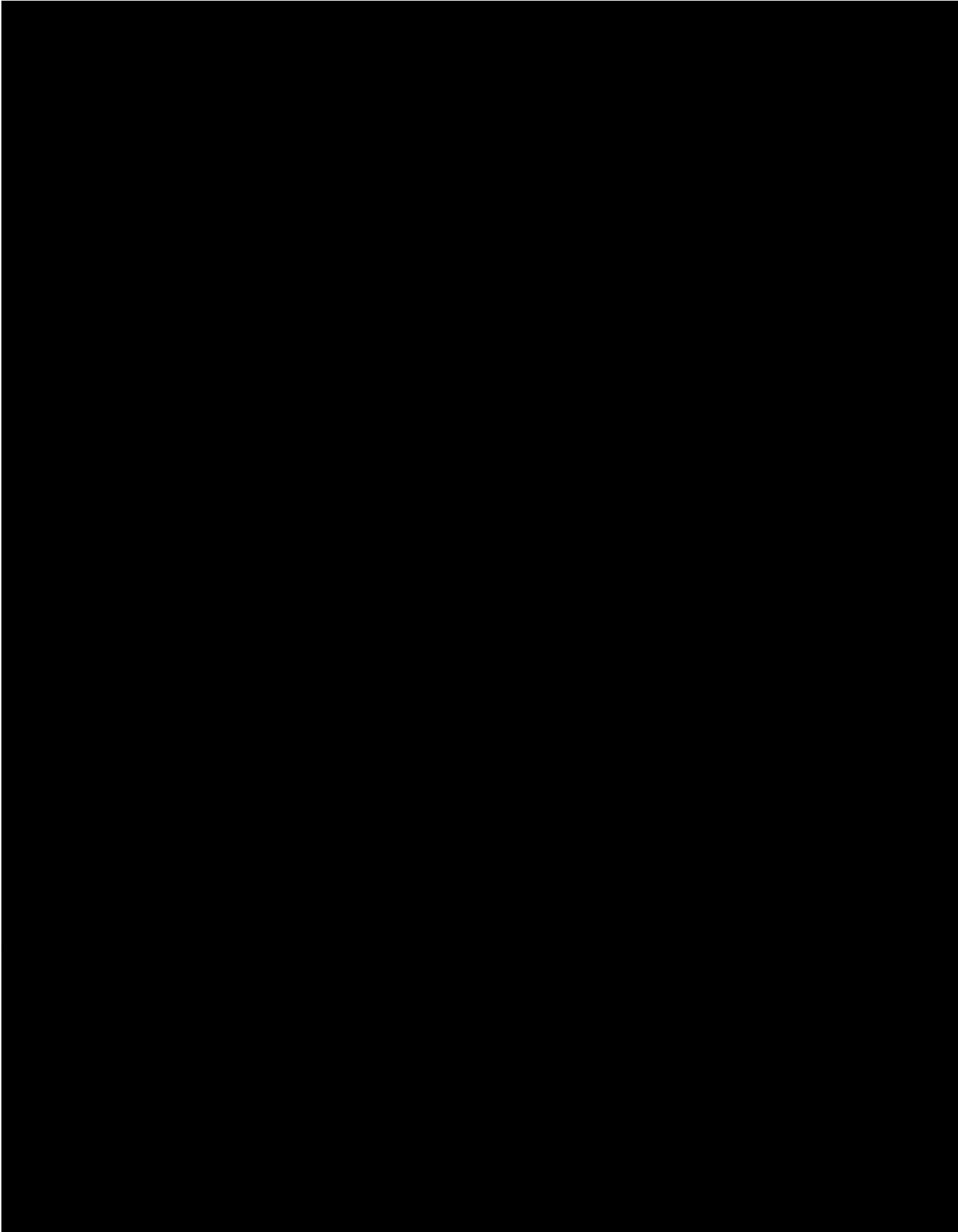
Sweett (UK) Limited
Apex 3
95 Haymarket Terrace
Edinburgh
EH12 5LQ
T 0131 313 7810

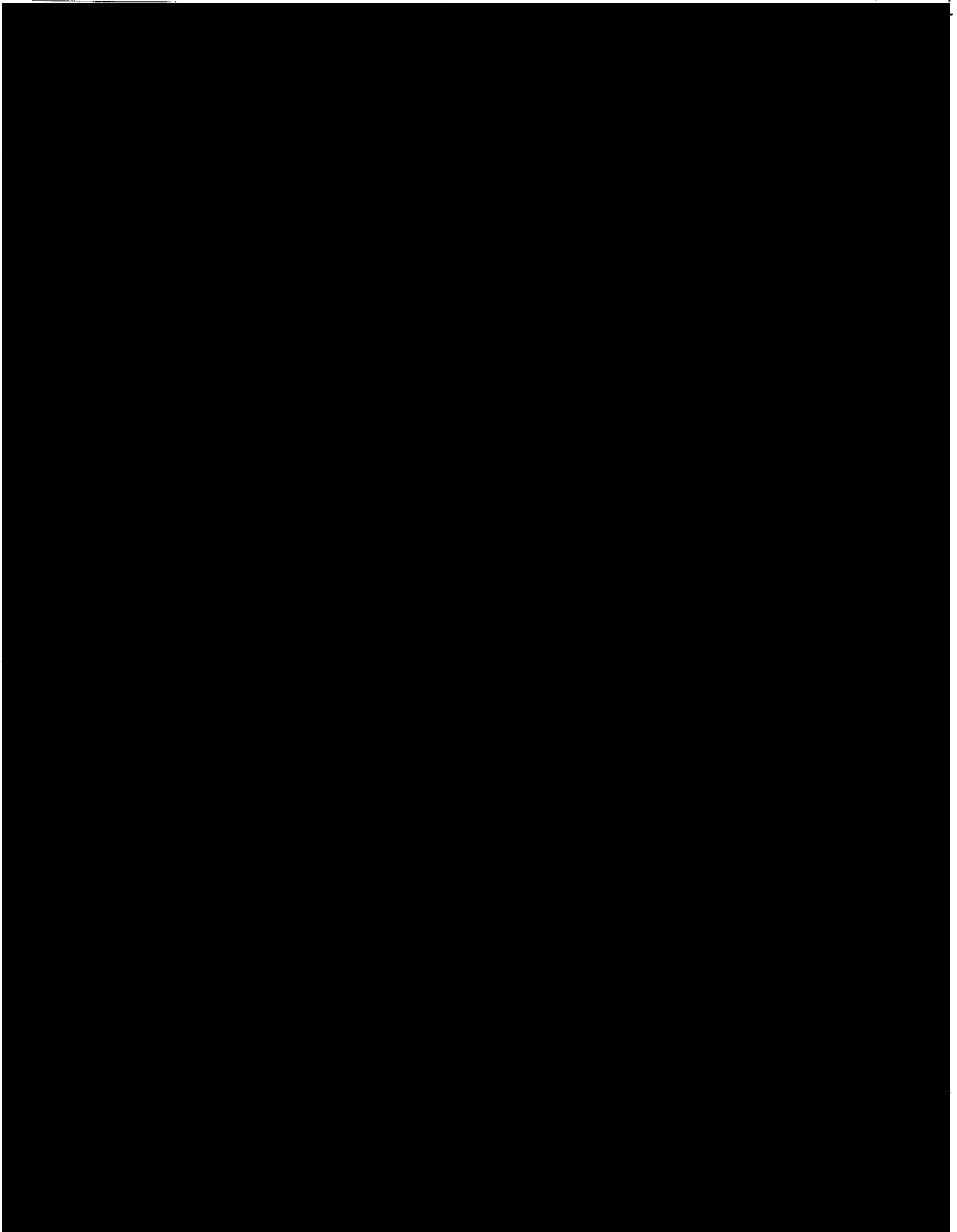


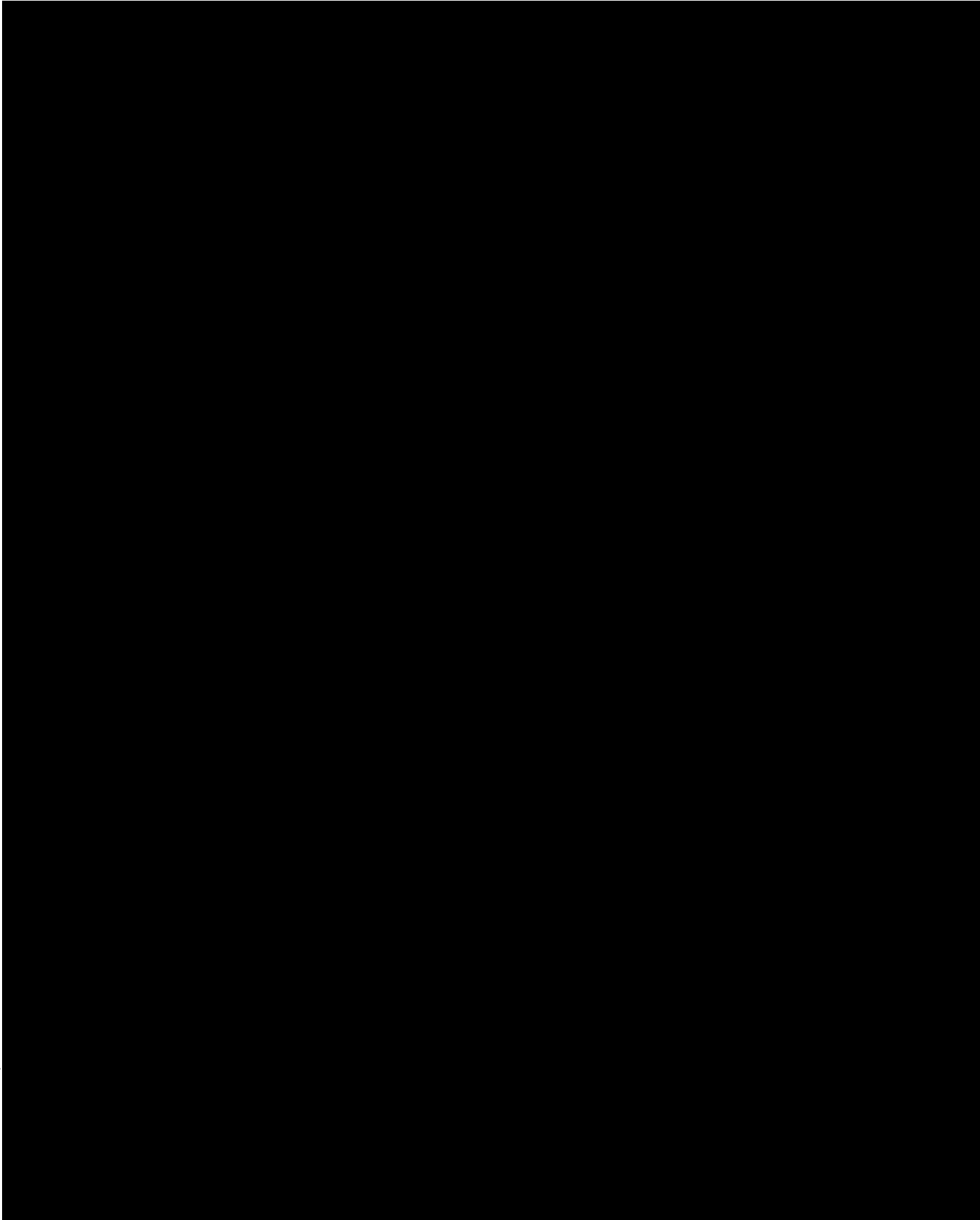








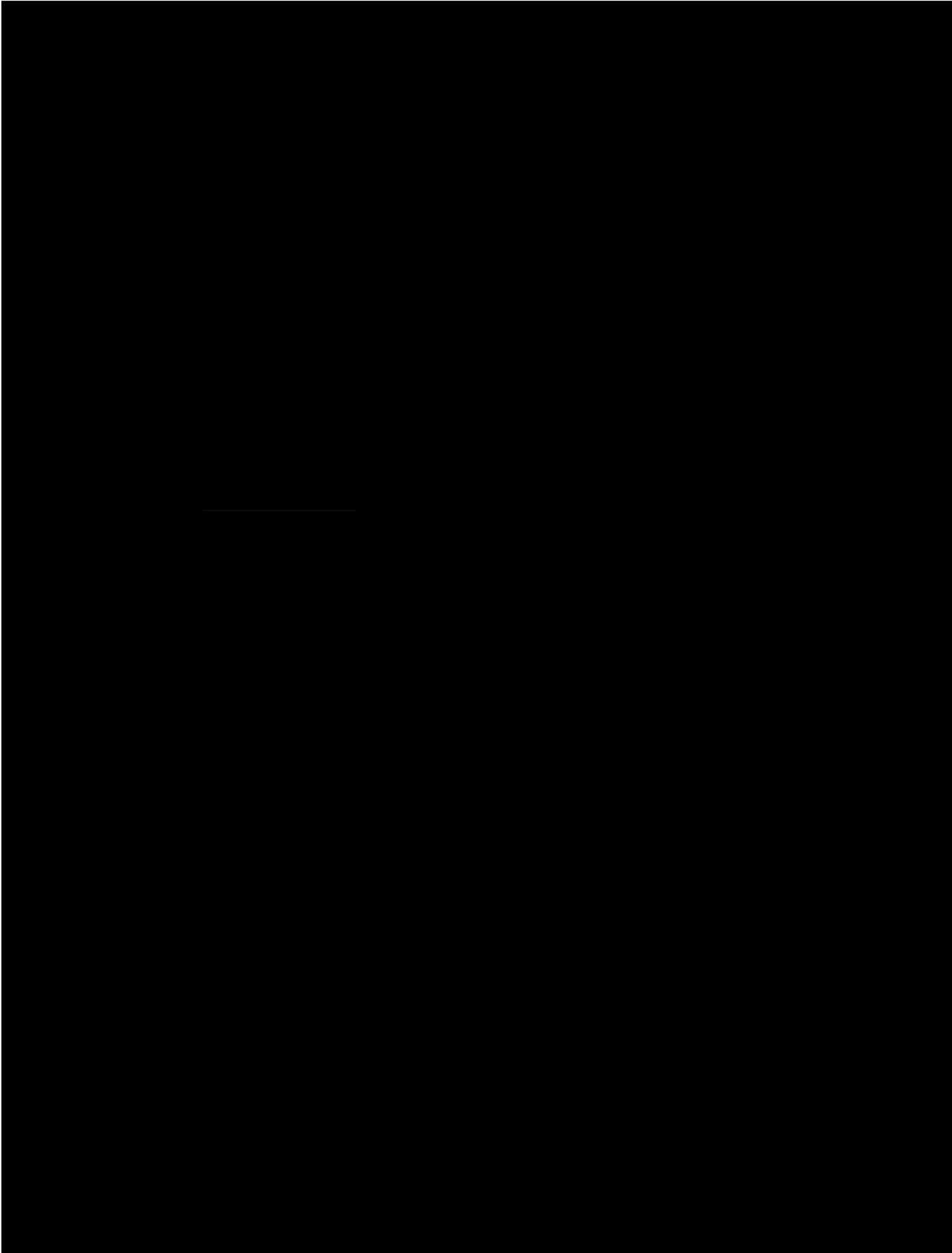




ANNEX 15

Financial Modelling Assumptions

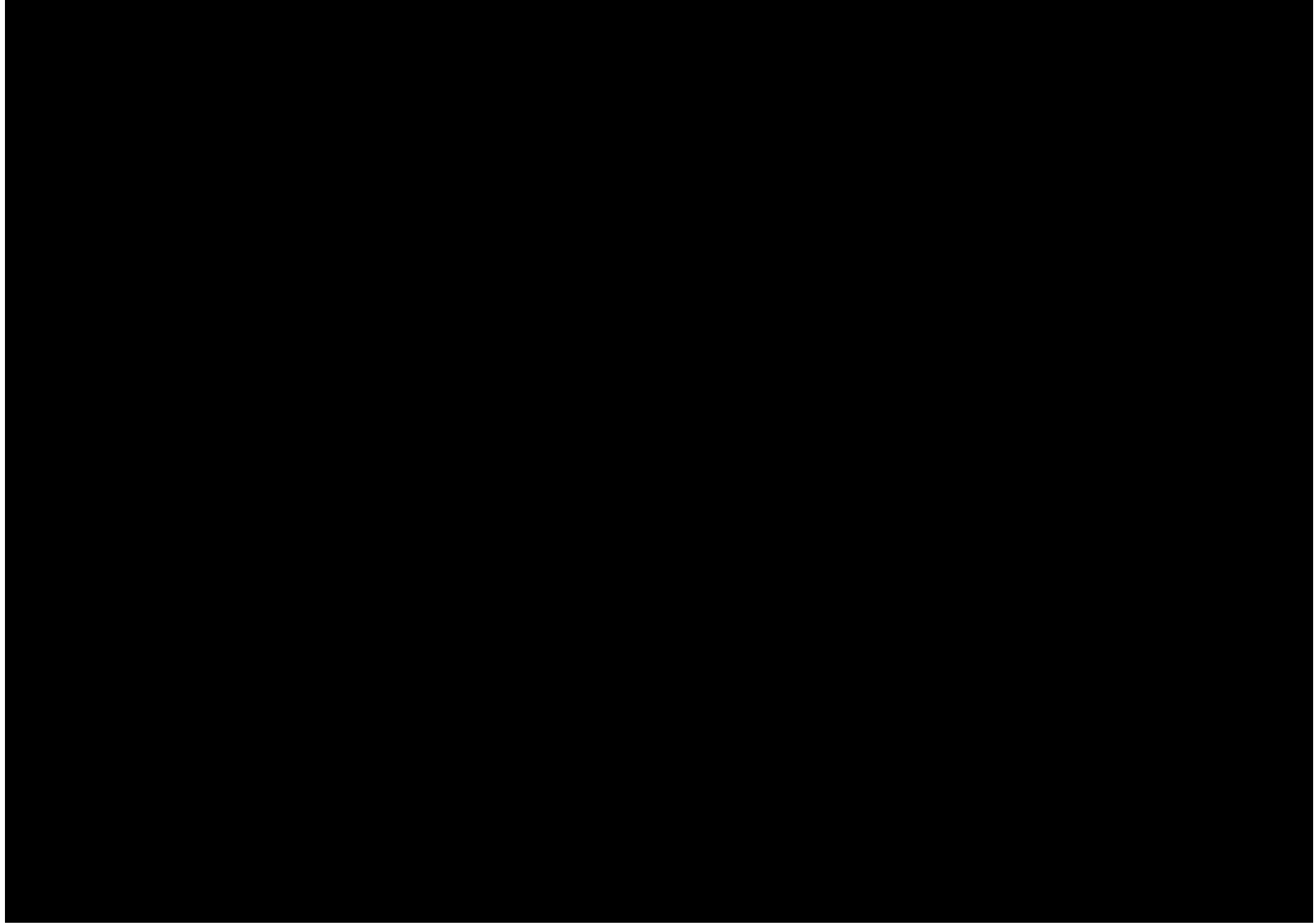
FINANCIAL MODELLING ASSUMPTIONS



ANNEX 16

Annual Service Payment Schedule

Unitary Charge	First Full Year Payment (£m)	Year One UC	% UC subject to	Nominal Total UC	NPV of Total UC	Surpluses	Shareholder	Senior	Concession	

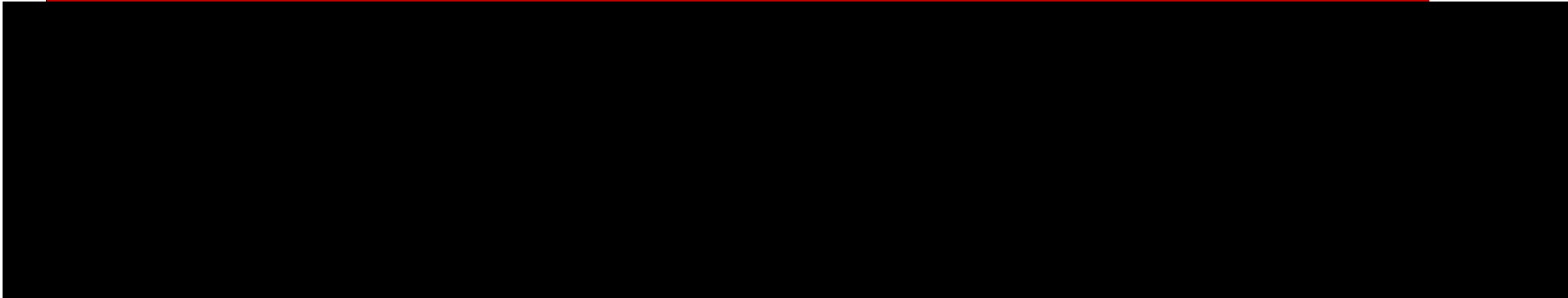


ANNEX 17

Annual Service Payment Model Sensitivities

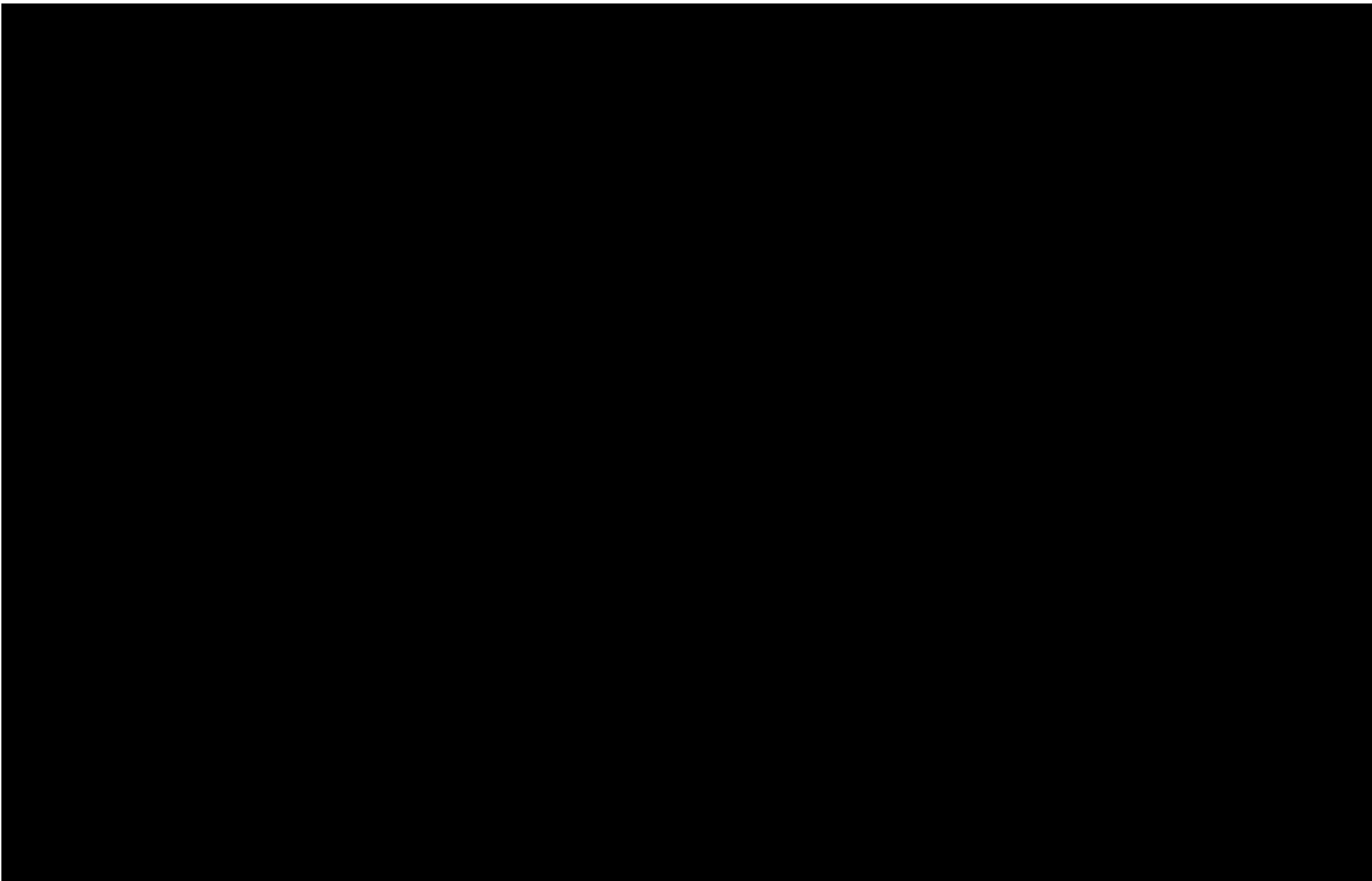
First Full Year Payment

% UC subject to



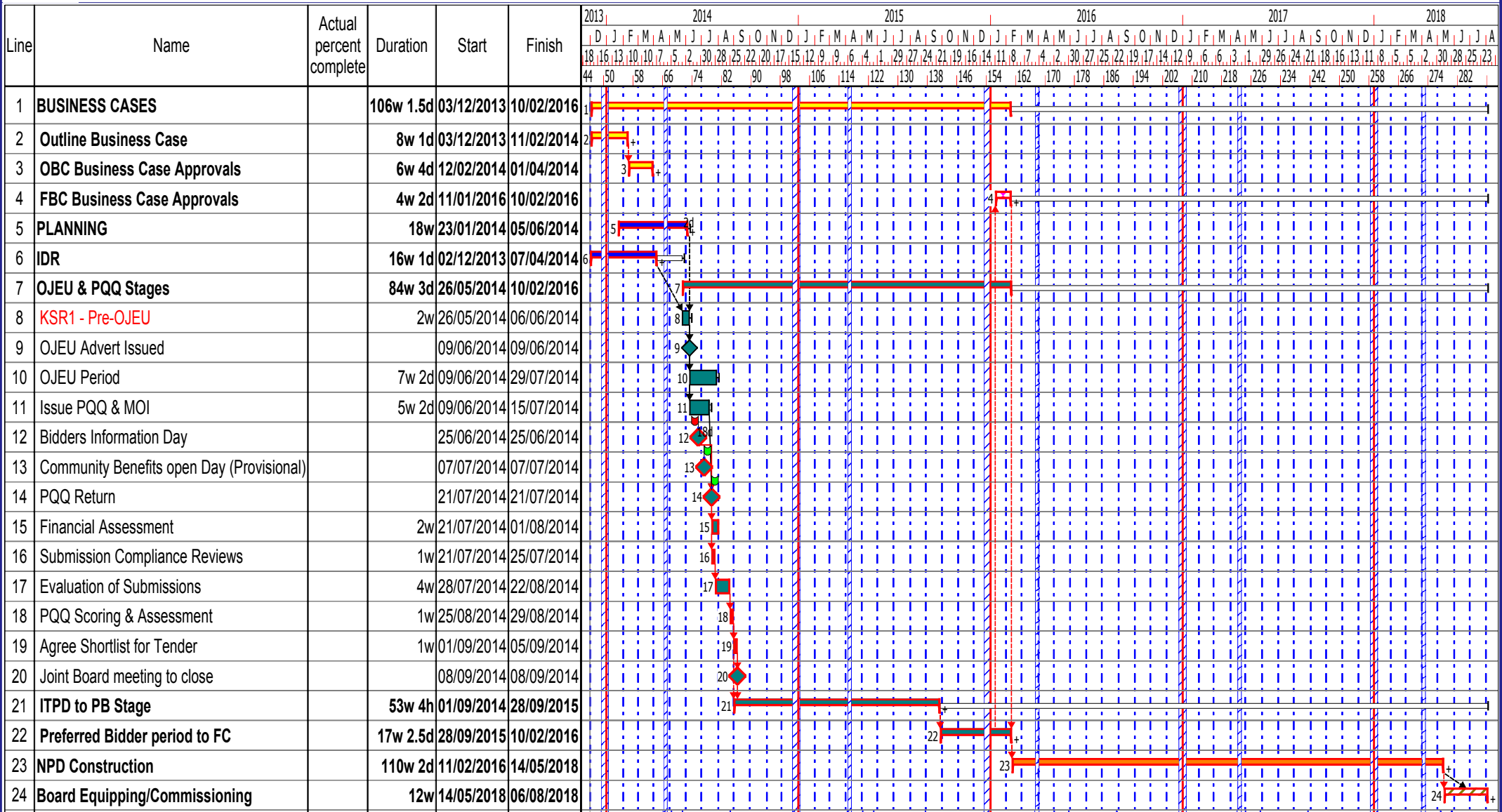
ANNEX 18

Capital Costs



ANNEX 19

Project Plan



Procurement Stages



Path: T:\Jobs\103232 Kirkwall Campus\7.0 Programmes\7.1 Master\Kirkwall Care Campus NPD Programme Rev H.ppt

ANNEX 20

Communication Strategy

‘Our Orkney, Our Health – Transforming Clinical Services Programme’
New Hospital Project
Engagement and Communication Plan



Our community, we care, you matter.....

1. Purpose

- To specify the type, method, frequency and owner for the engagement and communications activities required to deliver the New Hospital and Healthcare (NH&HC) facility project in line with the Communication Strategy's of NHS Orkney.
- The plan is also to determine mechanisms for monitoring delivery of the plan and its effectiveness.

2. Introduction

- 2.1 The Engagement and Communication Plan has been developed by the Programme Manager and sets out the actions required to deliver the communications element of the NH&HC project in line with NHS Orkney's Communication Strategy and Chief Executives Letter (CEL) 4 (2010) – Informing, Engaging and Consulting with People in Developing Health and Community Care Services.
- 2.2 The “audiences” identified in the plan are derived from an initial stakeholder mapping and analysis exercise undertaken by the Programme Manager however, it is recognised that this may evolve as the project progresses. As part of the stakeholder analysis audiences were grouped and their communication responses planned, according to their perceived level of influence and interest at this point in time using a standard communications planning tool. These groups are set out as follows:
- High influence, highly interested people: these are the people you must fully engage with, and make the greatest efforts to satisfy.
 - Low influence, highly interested people: these people can often be very helpful with the detail of the programme and need to be kept adequately informed to ensure that no major issues are arising. They also need to be supported to ensure their influence can be developed to become proportionate with their interest.
 - High influence, less interested people: There are people who need enough involvement to keep them satisfied, but not so much that they become bored with your message.
 - Low influence, less interested people: A wider range of people with more diverse interests. Their information needs should be monitored, but care must be taken not to bore them with excessive communication. It is also important to recognise their right to participate if their level of interest rises and this must be facilitated.
- 2.3 This plan, which will be subject to bi-monthly review, is organised along the above lines, so that the greatest level of activity is set against the audiences with the greatest communication and involvement need.

2.4 The identification of activity relevant to each stakeholder group has been informed by the sample stakeholder matrix which is given in Appendix 1 and can be used as a guide to identifying the style of stakeholder management required.

2.5 As part of the Transforming Clinical Services programme an Engagement and Communication Group has been formed and led by the Programme Manager to implement and further develop communication plans for all projects as the programme progresses, linking to the other communication activities of the Board as appropriate to ensure a joined up approach.

3.0 Engagement and Communication Activities

3.1 High Influence/High Interest Groups

Audience	What (Information/ Involvement Required)	Frequency	Method	Responsible Person	Monitoring Arrangement
Project Sponsor	High level progress reports Highlight and exception reports Escalation of any risks/issues impacting on progress Assurances on governance, quality and stakeholder engagement	Weekly As necessary	Face to face meetings and/or written update reports	Programme Manager Project Director	Direct reporting to PIB via Project Sponsor
PIB members	High level progress reports	Bi-monthly	Update papers at Project Board	Programme Manager	Bi-monthly Communications

Audience	What (Information/ Involvement Required)	Frequency	Method	Responsible Person	Monitoring Arrangement
	<p>Highlight and exception reports</p> <p>Escalation of any risks/issues impacting on progress</p> <p>Assurances on governance, quality and stakeholder engagement</p>		<p>meetings</p> <p>Written briefings and additional face to face meetings on request</p>	Project Director	progress update to Project Board
Scottish Government – Health Directorate	<p>High level progress reports</p> <p>Assurances on governance and adherence to PRINCE2 project management principles</p> <p>Details of costs and benefits</p>	Bi-monthly	<p>Written updates as and when required</p> <p>Attendance at PIB meetings</p>	<p>Project Sponsor</p> <p>Programme Manager</p> <p>Project Director</p>	Direct reporting to PIB via Project Sponsor
Corporate Management Team	Definitions and scope of programme, Perceived benefits, Information about processes and timetable, Progress updates, Involvement in	Monthly	Verbal updates and/or written papers to be provided at CMT meetings	Programme Manager	Bi-monthly Communications progress update to PIB

Audience	What (Information/ Involvement Required)	Frequency	Method	Responsible Person	Monitoring Arrangement
	reviewing and developing plans, layouts, service specifications & operational policies				
Transforming Clinical Services Public Patient Reference Group	Definitions and scope of project Perceived benefits Information about processes and timetable Progress updates Involvement in service reviews and redesign Consultation on shape of future service provision	Minimum of Quarterly	Two way verbal and/or written communication with Project Board Update papers from Programme Manager Regular meetings, workshops and focus groups as necessary	Chair of Clinical Services Public Patient Reference Group Programme Manager	Bi-monthly update from Public Patient Reference Group Chair to PIB
Transforming Clinical Services Clinical Reference Group	Definitions and scope of project Perceived benefits Information about processes and timetable Progress updates Involvement in service reviews and redesign Consultation on shape of future service provision	Monthly	Two way verbal and/or written communication with Project Board Update papers from Programme Manager Regular meetings, workshops and	Chair of Clinical Reference Group Clinical Programme Lead Programme Manager	Bi-monthly update from Clinical Reference Group Chair to PIB

Audience	What (Information/ Involvement Required)	Frequency	Method	Responsible Person	Monitoring Arrangement
			focus groups as necessary		
Non executive Board members	Definitions and scope of programme Perceived benefits Progress & timescales Guarantees around delivery, quality, cost, staff involvement and consultation	Bi-monthly	Verbal and/or written reports submitted to NHS Orkney Board meetings Regular update meetings	Chief Executive/ Project Sponsor	Direct reporting to PIB via Project Sponsor
Professional committees such as Area Clinical Forum, Area Partnership Forum, AMC & NAMAC	Definitions and scope of project Perceived benefits Information about processes and timetable Progress updates Involvement in service reviews and redesign Consultation on shape of future service provision Involvement in forming recommendations for Project Board relating to clinical matters	Monthly	Two way verbal communication with Clinical Reference Group Representation on Clinical Reference Group	Chair of Clinical Reference Group Clinical Programme Lead	Bi-monthly update from Clinical Reference Group Chair to PIB
Scottish Health	Definitions and scope of	Monthly and on	2 way verbal	Chair of the	Bi-monthly update

Audience	What (Information/ Involvement Required)	Frequency	Method	Responsible Person	Monitoring Arrangement
Council	project Perceived benefits Information about processes and timetable Progress updates Involvement in service reviews and redesign Consultation on shape of future service provision	request	communication Face to face meetings	Patient Public Reference Group Programme Manager	from Public Patient Reference Group to PIB
PPF & PFPI	Definitions and scope of project Expected benefits Clarity and timetable of process Progress updates Involvement in service reviews and redesign Consultation on shape of future service provision	Quarterly and on request	2 way verbal communication with Public Patient Reference Group Regular updates at Public Partnership Forum meetings by Programme Manager as requested Representation on Public Patient Reference Group Regular meetings, workshops and focus groups as	Chair of the Public Patient Reference Group PPRG members Programme Manager	Bi-monthly Communications progress update to PIB

Audience	What (Information/ Involvement Required)	Frequency	Method	Responsible Person	Monitoring Arrangement
			necessary		
Community Councils	Underpinning principles and expected benefits Progress & successes Assurances Details of any impact on front-line service provision Timescales	As and when appropriate	Programme team attendance at community council meetings Verbal and/or written updates Representation on Public Patient Reference Group	Programme Manager	Bi-monthly Communications progress update to Project Board
Patients/Public	Details of any impact on front-line service provision	At key project milestones	Development of press releases/patient information leaflets/posters as required	Programme Manager	Bi-monthly Communications progress update to PIB

3.2 Low Influence/High Interest Groups

Audience	What (Information/ Involvement Required)	Frequency	Method	Responsible Person	Monitoring Arrangement
Team leads	Definitions and scope of project Perceived benefits Information about processes and timetable Progress updates & timescales Involvement in shaping future service provision and contributing to service reviews Consultation on shape of future service provision	Monthly and on request	TCS Programme update to be standing item on Team Orkney Communication meeting agendas with verbal and/or written updates provided Face to face meetings with programme team members Transforming Clinical Services BLOG page; Programme update in quarterly Keyhole magazine	Engagement and Communication Group Programme Manager	Bi-monthly Communications progress update to PIB
Staff working in areas relevant to scope of project	Definitions and scope of project Perceived benefits Information about	Quarterly and on request	Identify teams within scope of programme and provide:	Programme Manager Heads of	Bi-monthly Communications progress update to PIB

Audience	What (Information/ Involvement Required)	Frequency	Method	Responsible Person	Monitoring Arrangement
	<p>processes and timetable How to raise queries and concerns</p>		<p>Face to face visits by members of programme team;</p> <p>Transforming Clinical Services BLOG page;</p> <p>Project update in quarterly Keyhole magazine</p> <p>Project Briefings open to all staff members at key milestones</p>	<p>Departments</p> <p>Team Leads</p> <p>Engagement and Communication Group</p>	
Press/Media	<p>Impact of changes on patient care/front line services</p> <p>Costs or savings to public purse</p> <p>Project over-runs or problems caused by changes</p>	At key project milestones and on request	<p>Press releases</p> <p>Features</p> <p>Community events</p>	<p>Programme Manager</p> <p>Communications Dept – NHS Grampian</p> <p>Engagement and Communication Group</p>	Bi-monthly Communications progress update to PIB

3.3 High Influence/Less Interested Groups

Audience	What (Information/Involvement Required)	Frequency	Method	Responsible Person	Monitoring Arrangement
Local MSP	What's going to change Underpinning principles and expected benefits Link with policy, strategy and Public sector efficiency drive Progress & successes Assurances Timescales	On request	High level briefing on key principles and shape of change	Project Sponsor Programme Manager	Bi-monthly Communications progress update to PIB

3.4 Low Influence/Less Interested Groups

Audience	What (Information/Involvement Required)	Frequency	Method	Responsible Person	Monitoring Arrangement
Future potential partners/employees	Updates on work of project and scope for changes to future ways of working	On request	Explore scope to provide project information through NHS Orkney website	Programme Manager Engagement and Communication Group	Bi-monthly Communications progress update to PIB
Some suppliers	Impact on services currently being provided	As and when appropriate	Direct written contact	Manager of department	Via feedback to Programme

	What will change and when			supplied	Manager
Staff working in areas out with the scope of the Project	Scope of project and perceived benefits Impact on their own work areas Impact on other work areas	As and when appropriate	Programme update in quarterly Keyhole magazine Transforming Clinical Services BLOG page Programme Briefings open to all staff members at key programme milestones	Heads of Departments Team Leads Programme Manager Engagement and Communication Group	Bi-monthly Communications progress update to PIB

Appendix 1 Sample Stakeholder Engagement Matrix

